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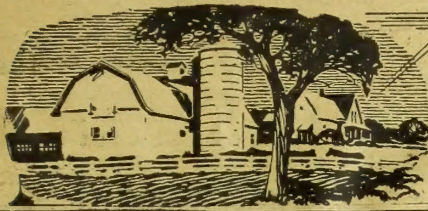
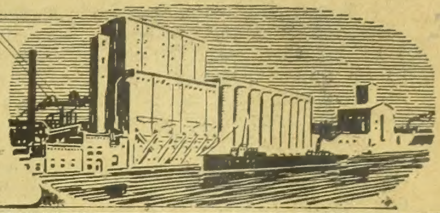
The Michigan
BUSINESS FARMER



An Independent
Farmer's Weekly Owned and
Edited in Michigan



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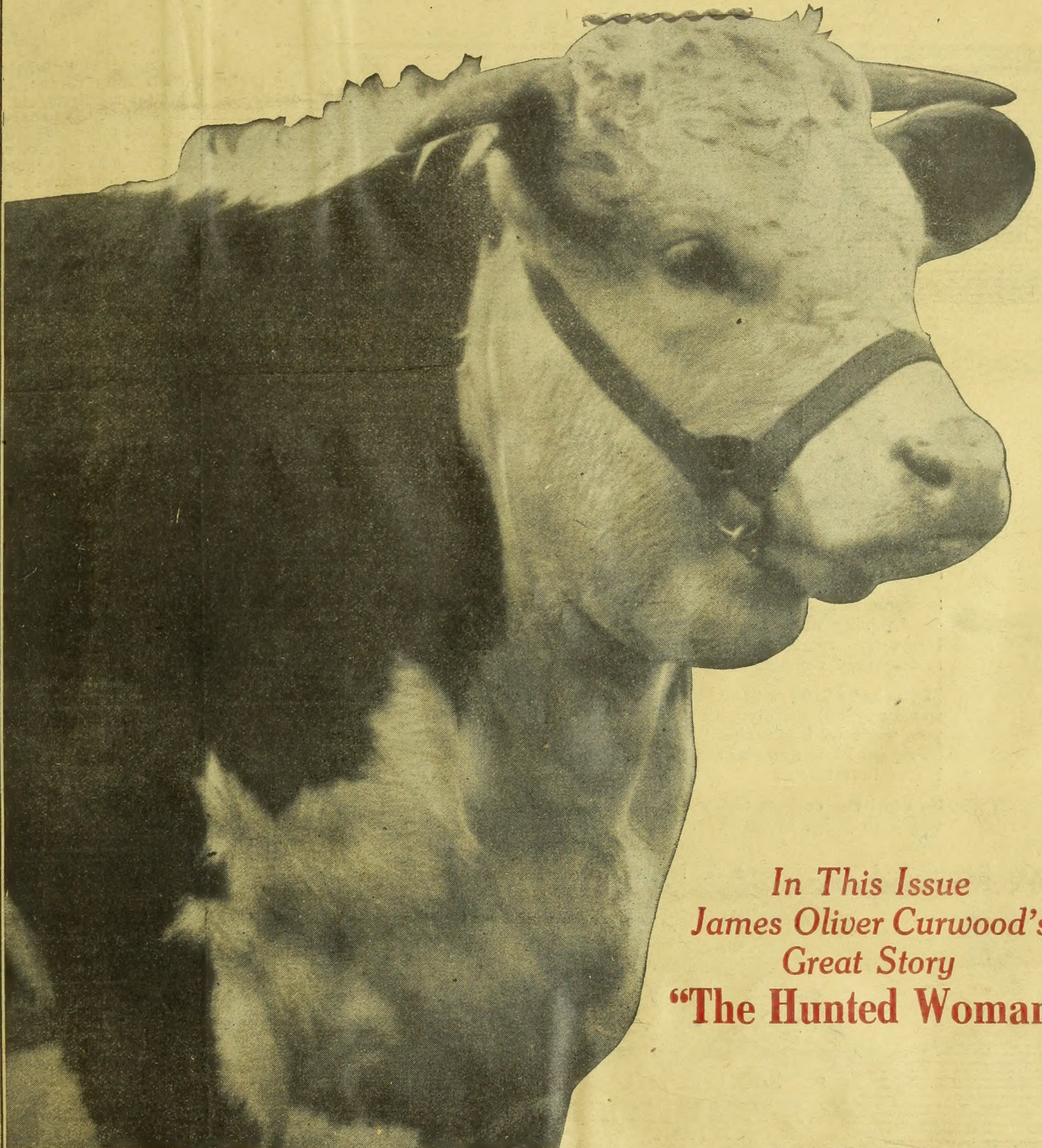


In This Issue
James Oliver Curwood's
Great Story
"The Hunted Woman"

A Blue Ribbon Winner of His Breed

Michigan State Fair, Detroit, September 1st. to 10th., 1922.

Current Agricultural News

REDUCED R. R. RATES TO DAIRY SHOW

PRE-WAR railroad rates have been granted by the Western Passenger association for the National Dairy Exposition, October 7-14, at the Twin Cities, according to an announcement today by Eben E. MacLeod, chairman of that association. There will be an open rate of one and one-third fares from the northern peninsula of Michigan, Wisconsin, Minnesota, North Dakota, eastern Montana, South Dakota, east of the Missouri and Iowa, on and north of the C. & N. W. Ry., Clinton to Missouri Valley.

Tickets at this rate are to be sold October 5th to 13th, inclusive final return limit October 16th. The minimum excursion fare is one dollar, and half fare applies to children, Mr. MacLeod advised.

From the balance of the United States the association has decided a rate of one and one-half fare on the regular certificate plan authorized for the convenience of the members of the National Dairy Association, International Milk Dealers' Association, American Dairy Science Association, International Association of Dairy and Milk Inspectors, National Creamery Buttermakers' Association, National Cheese Association, National Dairy Council, American Jersey Cattle Club, American Guernsey Cattle Club, Holstein Friesian Association of America, Brown Swiss Cattle Breeders' Association and Ayrshire Breeders' Association.

ILLINOIS "CO-OP" BUTTER TO CUBA

THE Stephenson County Milk Marketing Company, of Freeport, Ill., has extended its business on its special "Vita Gold" brand of butter to Cuba. The first shipment was made last month, packed in tins.

"This is to our knowledge the first shipment of butter made in a co-operative creamery of this country to be exported by farmers," say officials of the company.

OHIO HEADS STATES IN BETTER-STOCK CAMPAIGN

OHIO now heads the list of States taking part in the "Better Sires—Better Stock" campaign being carried on by the United States Department of Agriculture and the States to induce farmers to get rid of all sires except those that are pure bred. In the 3 months ending July 1, of 954 live-stock owners enrolling 537 were Ohioans, bringing that State into the lead in number of farmers having Federal-State certificates, in number of animals and in number of poultry listed. The total of persons in Ohio enrolled is now 1,970. They own 75,025 head of all kinds of farm animals and 185,595 poultry. Virginia is now second after having been in the lead since the campaign for pure-bred sires started in 1919.

SWISS CHEESE COMING BACK

CHEESE is once again forging to the front among Switzerland's industries after such a period of demoralization extending over the four years, 1917 to 1920, as would prove fatal to anything but a cheese. The troublesome food restrictions have been abolished, milk animals have steadily increased, and the main causes of the four-year slump have been almost completely removed, says Vice Consul Wilkinson, Zurich, in a report to the Foodstuffs Division of the Department of Commerce. In fact the cheese industry was one of the very few Swiss industries to show any material improvement in 1921. Exports have increased and the total export for 1922 is estimated at nearly $8,000,000. Last year this country shipped over $60,000 worth of American Swiss cheese to Switzerland but there is no record of any cheese from the United States going into the cheese country at all during 1922.

FARM BUREAU SUPPORT ASKED

CONTINUED support of the state and county farm bureaus by the Michigan Bankers' Association is urged in a bulletin just issued by the agricultural commission of the annual report.

The report embodies the activities of the commission during the past year, as described at the annual meeting in East Lansing in May and also outlines the working program of the organization for the ensuing year.

This program is divided into 10 parts, and according to the bulletin, "careful study . . . . . will no doubt suggest a line of activities which each member can follow out during the year."

The program calls for:

Continued active assistance in boys' and girls' club work.

Co-operation with the Farm Bureau in its program for the betterment of agricultural conditions.

Organization of Federal Farm Loan associations with bank officers in charge of all counties where there is need of long term financing based upon real estate securitiy which the banks are not in position to take care of fully.

Careful study of the needs of each community to the end that all essential requirements for loans shall be anticipated and cared for.

Legislation to safeguard the interests of agriculture.

Consolidated schools.

Better marketing conditions.

Good roads.

FRANCE GOES BACK TO WAR BREAD

POOR wheat crops in France and an estimated shortage in the next wheat harvest of about 2,000,000 tons have resulted in the passage of a law authorizing the baking and sale of "war bread," says Consul Sample B. Forbus, Paris, in a report to the Foodstuffs Division of the Department of Commerce. The law specifying the use of substitutes for wheat flour in bread making was passed July 15.

PRODUCTION OF GRAIN IN ENGLAND AND WALES LESS THAN LAST YEAR

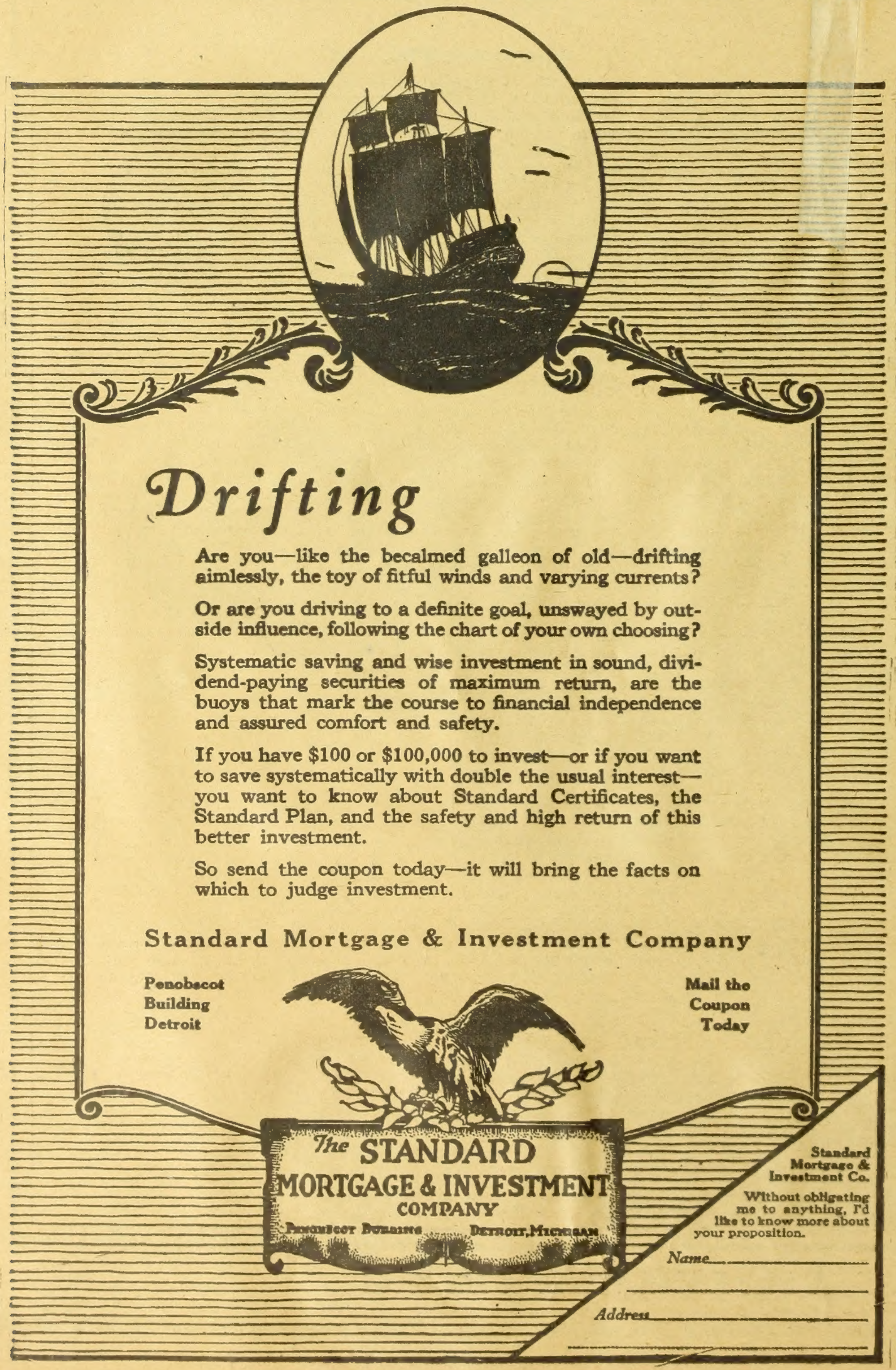
THE production of wheat in England and Wales for 1922 is estimated by the British Ministry of Agriculture to be 63,040,000 bushels from an area of 1,969,000 acres, according to a recent cablegram from the London representative of the United States Department of Agriculture. This estimate is 6,736,000 bushels less than the estimated production last year.

The area sown to barley was reported as 1,362,000 acres and the yield as 40,720,000 bushels, compared with 42,472,000 bushels last year. The oats area was given as 2,161,000 acres and oats production as 74,320,000 bushels, compared with 80,264,000 bushels last year.

IRELAND PREFERS AMERICAN FOODSTUFFS

IRELAND is now endeavoring to import directly through Belfast and other large Irish cities and to encourage the larger consumers to import direct in cargo or part cargo lots, says Vive Consul Barringer, Belfast, in a report to the Foodstuffs Division of the Department of Commerce.

At the present time there is a good market for American flour in Belfast and if the large bakeries can be prevailed upon to import their flour direct from American sources, this market will increase. Some of the flour connections, through middlemen located in Great Britain, extend for a period of more than thirty years and now the Irish wish to do their own buying. The Consul believes that it would "certainly pay for American flour exporters to thoroughly investigate the Belfast field at the present time."



Drifting

Are you—like the becalmed galleon of old—drifting aimlessly, the toy of fitful winds and varying currents?

Or are you driving to a definite goal, unswayed by outside influence, following the chart of your own choosing?

Systematic saving and wise investment in sound, dividend-paying securities of maximum return, are the buoys that mark the course to financial independence and assured comfort and safety.

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Volume X
Nunmber 1

The Michigan
BUSINESS FARMER

September 2,
1922

The Hunted Woman

By James Oliver Curwood

Michigan's Own and America's Formost Author of the Great Northwest.

A TALE of the end of the line—that indefinite, evermoving outpost of the railroad far off in the wilderness of Northwestern Canada. It was here in the midst of the "Horde"—the rough lawless band who were joining the end of the last transcontinental line, that Joanne Gray came on her great search and found, not the one she had dreaded, but John Aldous, author and back-woodsman.

The story of Aldous's struggles to save Joanne from Rann and Quade, of their escape from the dynamite tunnel, and the great fight in the "valley of gold" is a tale of quickly mounting climax and excitement.

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CHAPTER I

IT was all new—most of it singularly dramatic and even appalling to the woman who sat with the pearl-gray veil drawn closely about her face. For eighteen hours she had been a keenly attentive, wide-eyed and partly frightened bit of humanity in this onrush of "the horde." She had heard a voice behind her speak of it as "the horde"—a deep, thick, gruff voice which she knew without looking had filtered its way through a beard. She agreed with the voice. It was the Horde—that horde which has always beaten the trails ahead for civilization and made of its own flesh and blood the foundation of nations. For months it had been pouring steadily into the mountains—always in and never out, a laughing, shouting, singing, blaspheming Horde, every ounce of it toughened sinew and red brawn, except the Straying Angles. One of these sat opposite her, a dark-eyed girl with over-red lips and hollowed cheeks, and she heard the bearded man say something to his companions about "dizzy dolls" and the little angel in the other seat." This same voice, gruffened in its beard, had told her that ten thousand of the Horde had gone up ahead of them. Then it whispered something that made her hands suddenly tighten and a hot flush sweep through her. She lifted her veil and rose slowly from her seat, as if to rearrange her dress. Casually she looked straight into the faces of the bearded man and his companion in the seat behind. They stared. After that she heard nothing more of the Straying Angels, but only a widely mysterious confabulation about "rock hogs," and "coyotes" that blew up whole mountains, and a hundred and one things about the "rail end." She learned that it was taking five hundred steers a week to feed the Horde that lay along the Grand Trunk Pacific between Hogan's Camp and the sea, and that there were two thousand souls at Tete Jaune Cache, which until a few months before had slumbered in a century-old quiet broken only by the Indian and his trade. Then the train stopped in its twisting trail, and the bearded man and his companion left the car. As they passed her they glanced down. Again the veil was drawn close. A shimmering tress of hair had escaped its bondage; that was all they saw.

The veiled woman drew a deeper breath when they were gone. She saw that most of the others were getting off. In her end of the car the hollow-cheeked girl and she were alone. Even in their aloneness these two women had not dared to speak until now. The one raised her veil again, and their eyes met across the aisle. For a moment the big, dark, sick-looking eyes of the "angel" stared. Like the bearded man and his companion, she, too, understood, and an embarrassed flush added to the color of the rouge on her cheeks. The eyes that looked across at her were blue—deep, quiet, beautiful. The lifted veil had disclosed to her a face that she could not associate with the Horde. The lips smiled at her—the wonderful eyes softened with a look of understanding, and then the veil was lowered again. The flush in the girl's cheek died out, and she smiled back.

"You are going to Tete Jaune?" she asked.

Yes. May I sit with you for a few minutes? I want to ask questions—so many!"

The hollow-cheeked girl made room for her at her side.

"You are new?"

"Quite new—to this."

The words, and the manner in which they were spoken, made the other glance quickly at her companion.

"It is a strange place to go—Tete Jaune," she said. "It is a terrible place for a woman."

"And yet you are going?"

"I have friends there. Have you?"

"No."

The girl stared at her in amazement. Her voice and her eyes were bolder now.

"And without friends you are going—there?" she cried. "You have no husband—no brother——"

"What place is this? interrupted the other, raising her veil so that she could look steadily into the other's face. "Would you mind telling me?"

"It is Miette," replied the girl, the flush reddening her cheeks again. "There's one of the big camps of the railroad builders down on the Flats. You can see it through the window. That river is the Athabasca."

"Will the train stop here very long?"

The Little Angel shrugged her thin shoulders despairingly.

"Long enough to get me into The Cache mighty late tonight," she complained. "We won't move for two hours."

"I'd be so glad if you could tell me where I can go for a bath and something to eat. I'm not very hungry—but I'm terribly dusty. I want to change some clothes, too. Is there a hotel here?"

Her companion found the question very funny. She had a giggling fit before she answered.

"You're sure new," she explained. "We don't have hotels up here. We have bed-houses, chuck-tents, and bunk-shacks. You ask for Bill's Shack down there on the Flats. It's pretty good. They'll give you a room, plenty of water, and a looking-glass—an' charge you a dollar. I'd go with you, but I'm expecting a friend a little later, and if I move I may lose him. Anybody will tell you where Bill's place is. It's a red and white striped tent—and it's respectable."

The stranger girl thanked her, and turned for her bag. As she left the car, the Little Angel's eyes followed her with a malicious gleam that gave them the strange glow of candles in a sepulchral cavern. The colors which she unfurled to all seeking eyes were not secret, and yet she was filled with an inward antagonism that this stranger with the wonderful blue eyes had dared to see them and recognize them. She stared after the retreating form—a tall, slim, equisitely poised figure that filled her with envy and a dull sort of hatred. A hand fell familiarly on her shoulder, and a coarse voice laughed something in her ear that made her jump up with an artificial little shriek of pleasure. The man nodded toward the end of the now empty car.

"Who's your new friend?" he asked.

"She's no friend of mine," snapped the girl. "She's another one of them Dolly Dimples come out to save the world. She's that innocent she wonders why Tete Jaune ain't a nice place for ladies without escort. I thought I'd help eggicate her a little an' so I sent her to Bill's place. Oh, my Lord, I told her it was respectable!"

She doubled over in the seat in a fit of merriment, and her companion seized the opportunity to look out of the window.

The tall, blue-eyed stranger had paused for a moment on the last step of the car to pin up her veil, fully revealing her face. Then she stepped lightly to the ground, and found herself facing the sunlight and the mountains. She drew in a slow, deep breath between her parted lips, and turned wonderingly, for a moment forgetful. It was the first time she had left the train since entering the mountains, and she understood now why someone in the coach had spoken of the Miette Plain as Sunshine Pool. Wherever she looked the mountains fronted her, with their splendid green sloopes reaching up to their bald caps of gray shale and reddish rock gleaming summits of snow. Into this "pool"—this pocket in the mountains—the sun descended in a wonderful flood. It stirred her blood like a tonic. She breathed more quickly; a soft glow colored her cheeks; her eyes grew more deeply violet as they caught the reflection of the blue sky. A gentle wind fretted the loose tendrils of brown hair about her face. And the bearded man, staring through the car window, saw her thus, and for an hour after that the hollow-cheeked girl wondered at the strange change in him.

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THIS IS OUR SECOND CURWOOD STORY

and we are proud to be able to offer it to the readers of The Business Farmer, who made friends with Neewa and Miki, in the former story "Nomads of the North," which was by far the most popular serial we ever ran.

DON'T MISS THESE OPENING CHAPTERS

and get other members of your family to read them with you. This is a clean, wholesome, red-blooded story of romance, adventure and the land where men are men!

The train stopped at the edge of the big fill overlooking the Flats. It was a heavy train, and a train that was helping to make history—a combination of freight, passenger, and "cattle." It had averaged eight miles an hour on its climb toward Yellowhead Pass and the end of steel. The "cattle" had already surged from their stifling and foul-smelling cars in a noisy inundation of curiously mixed humanity. They were of a dozen different nationalities, and as the girl looked at them it was not with revulsion or scorn but with a sudden quickening of heart-beat and a little laugh that had in it something both of wonder and pride. This was Horde, that crude, monstrous thing of primitive strength and passions that was overturning mountains in its fight to link the new Grand Trunk Pacific with the seaport of the Pacific. In that Horde, gathered in little groups, shifting, sweeping slowly toward her and past her, she saw something as omnipotent as the mountains themselves. They could not know defeat. She sensed it without ever having seen them before. For her the Horde now had a heart and a soul. These were the builders of empire—the man-beasts who made it possible for Civilization to creep warily and without peril into new places and new worlds. With a curious shock she thought of the half-dozen lonely little wooden crosses she had seen though the car window at odd places along the line of rail.

And now she sought her way back toward the Flats. To do this she had to climb over a track that was waiting for ballast. A car shunted past her, and on its side she saw the big, warning red placards—Dynamite. That one word seemed to breathe to her the spirit of the wonderful energy that was expending itself all about her. From farther on in the mountains came the deep, sullen detonaions of the "little black giant" that had been rumbling past her in the car. It came again and again, like the thunderous voice of the mountains themselves calling out in protest and defiance. And each time she felt a curious thrill under her feet and the palpitant touch of something that was like a gentle breath in her ears. She found another track on her way, and other cars slipped past her crunchingly. Beyond this second track she came to a beaten road that led down into the Flats, and she began to descend.

Tents shone through the trees on the bottom. The rattle of the cars grew more distant, and she heard the hum and laughter of voices and jargon of a phonograph. At the bottom of the slope she stepped aside to allow a team and wagon to pass. The wagon was loaded with boxes that rattled and crashed about as the wheels bumped over stones and roots. The driver of the team did not look at her. He was holding back with his whole weight; his eyes bulged a little; he was sweating, in his face was a comedy of expression that made the girl start in spite of herself. Then she saw one of the bobbing boxes and the smile froze into a look of horror. On it was painted that ominous word—Dynamite!

Two men were coming behind her.

"Six horses, a wagon an' old Fritz—blown to hell 'an not a splinter to tell the story," one of them was saying. "I was there three minutes after the explosion and ther wasn't even a ravelling or a horsehair left. This dynamite's a dam' funny thing.

(Continued on page 17)

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Elections Strengthen Hands of Farm Bloc

Defeat of Old Guard Candidates Insure Continuance and Increased Power for Group of Farmer Legislators

By O. M. KILE

(Special to the Michigan Business Farmer)

NO matter whether the election returns this fall show up democratic or republican, the farmer will have little to worry about Apparently, the country has gone "Farm Bloc". It was farm bloc principles and farm bloc support that upset the stand-pat reactionaries in Indiana and Pennsylvania, Nebraska, Iowa and other mid-western primaries.

A year ago one of the leading manufacturers and bankers on the Pacific Coast received a letter from a big eastern banking house which read in substance as follows:

"We bankers are getting up a fund to fight the farm 'bloc' which seems to be developing dangerous strength in congress. Please subscribe liberally."

This manufacturer-banker being an independent sort of individual declined in the following language: "I am opposed to 'bloc' movement of all kinds, therefore cannot subscribe to your fund".

This outcry against the farm bloc received strong impetus, however, and for a time even many of its friends had strong misgivings and doubts as to the desirability of such a group in this democratic country. The metropolitan press with but few notable exceptions, vigorously denounced the bloc as a menace to democratic government. President Harding and Secretary Weeks both berated the bloc in no uncertain terms.

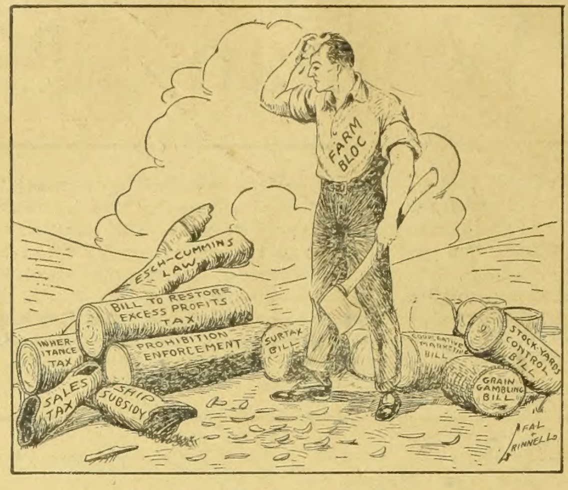
Now one of the biggest financial institutions of the East, comes out with a lengthy statement which amounts to a virtual endorsement of the farm bloc. Their statement says:

"The Farm Bloc is essentially based upon an economic idea. That idea can be simply stated in a few words:

"The farmer believes that he does not receive a large enough price for his products. He insists that what he is compelled to buy has decreased far less in price since the war than the thing he sells. His contention is that he is unable to borrow money as advantageously as those engaged in other great industries—Hence the Farm Bloc in Congress".

It is true that the spokesman for this financial institution goes on to point out the possible evils of group action and he takes particular pains to show that many of the farmer's problems cannot be solved by legislation—all of which is quite true—but he finds nothing to condemn and much to commend in the farm bloc as it exists today.

More and more of the larger newspapers have accepted the bloc as an expression of public opinion rather than as a mere selfish group grab. They now realize that this bloc is something different. It is not seeking to merely put across some special concession or privilege. They may still question whether all the measures proposed by the bloc are sound and give promise of proving effective, but they recognize it as an expression of the desires and needs of a very large number, perhaps a majority, of the people.



More Work Yet To Do.

The fact that this expression may be actually voiced by only a relatively small group of leaders, does not change the situation. If this small group does not correctly interpret the desires of the many they soon cease to be leaders and the program fails. Recent developments indicate that these leaders have properly interpreted the desires and needs of the many.

The particular thing the farm bloc can take most credit for, from the public viewpoint, is the fact that it furnished the rallying point around which other progressive elements could group themselves and force a general progressive movement. Many a member of congress has for years wanted to do just the independent, progressive sort of things he is doing today but he did not dare open his mouth or raise a finger so long as the boss' whip was held over him. But once the break was made by the farm bloc bunch others were anxious to take up the fight. It is the reflection of this spirit of independence that is sweeping the country.

Bernard M. Baruch was one of the first among the big business leaders to recognize the desirability and the true significance of the farm bloc in congress. At the time of the agricultural conference at Washington last February Mr. Branch expressed his approval of this bloc in the following words:

"This is the first time that the farmers have been organized like other pursuits, so that their voice is potent in the houses of congress. The movement is but an emphatic expression of the dire necessities of a third of our population, producing at least a third of our national wealth and creating half of our commerce, and a determined effort to modernize themselves on an equal footing, with other businesses. If legislators friendly to the farmers had not united in the so-called agricultural bloc, how much attention do you think would have been given to the desperate plight of agriculture? The formation of the bloc and its militancy are but an evidence of its necessity. Why not concern ourselves with the necessity, rather than with the manner of its expression?"

During the sixteen months that the agricultural bloc has been in existence, it has won the confidence of the public—the city consumer as well as the farmer producer. The legislative measures proposed have all been in the public interest, when considered from a broad viewpoint, and support or lack of support of the farm bloc has come to be the measure of a man's progressiveness along legislative and business lines.

A mid-western congressman stood up on the floor of the House and said: "I am a member of no bloc." Immediately he was flooded with telegrams and letters from the farmers of his district asking, "Why not?" It took that congressman several months to explain to the satisfaction of his constituents that what he meant was that he didn't believe in blind group action but that he voted regularly with the farm bloc.

A candidate for congress from Kansas wrote in to Washington: "Give me the record of Congressman Blank's vote on all farm bloc questions. I am going to run against him." Congressman Blank, judging from the primary returns, evidently had an interesting time trying to explain to the folks back home just why he failed to work with the farm bloc.

"Is my name written there?" was the question on the lips of a hundred congressmen when it became known, this summer, that the American Farm Bureau Federation was making up a list of those whose records showed them entitled to be considered consistent supporters of agricultural legislation. Some who had been a little late in seeing the light felt nervous until they knew the verdict. And in truth it was a serious matter; it meant either reelection or defeat—without question—in dozens of cases.

The seriousness of the situation placed a special responsibility upon the Farm Bureau in compiling this list and it was decided to make the votes on four bills the test. These four bills were, the stockyards and packer control bill, and the amendment to a bill retaining the fifty per cent surtax on large incomes. These bills were selected because it was on these that special pressure had been exerted by both sides. The man who stuck with the farmers on these bills could be counted on in most any legislative emergency. A few modifications of the list had to be made to take care of special sets of circumstances but the final count showed twenty-three members in the Senate, and in the less definitely organized House, ninety-four men entitled to be called consistent supporters of agricultural legislation. In addition there were sixty-eight members of the House who while not quite solid supporters, could usually be counted on.

Now that the power and (Continued on page 16)

Commissioner of Agriculture Proposes Law to Curb Commission Firms

JOHN A. DOELLE, State Commissioner of Agriculture, has submitted to the Business Farmer the outline of a law which he hopes to have passed by the next legislature which will provide farmers with a greater degree of protection than the present commission license law affords from unscrupulous commission firms.

The state law, as it now stands, provides that every firm or individual doing a commission business in farm produce, shall procure a license which is his authority to conduct such a business. This license may be revoked at any time upon the submission of conclusive evidence that the licensee has been guilty of unfair or dishonest practices. Experience has shown that the law holds no terror for the "fly-by-night" commission firms, who set up in business only long enough to enable them to make a single killing. They rent a "hole in the wall," send out alluring circulars through the mail offering higher prices than the market will stand, receive and sell produce from farmers, and pocket the proceeds.

A lot of farmers under these circumstances write a few threatening letters and then give up in disgust. If there be any who insist on making a fuss the commission firm succeeds in getting out of business before it is caught. Of course, it may lose its license, but what of that? It takes out another license under a new name and starts up again.

But the law which Commissioner Doelle has in mind is based on the principle of locking the barn before the horse is stolen. It is a counterpart of the New York law which compels everyone applying for a license to do a commission business to put up a bond in the sum of $3,000, which remains in the custody of the department of state having jurisdiction over the commission business, and the proceeds of which may be used to indemnify all those who may sustain losses through the dishonesty of the licensee. Here is how it works.

Sammy Sammerstein wants to set up in the commission business. He applies to the State Department of Agriculture for a license. The Department makes an investigation to ascertain, (1) if a money judgment has ever been issued against the applicant and upon which execution has been returned unsatisfied; (2) if false charges have ever been imposed by the applicant for handling or services rendered; (3) if there has been a failure to account promptly and properly or to make settlements; (4) if there have been any false statement or statements as to condition, quality or quantity of goods received or held for sale on commission when the same might be known on reasonable inspection; (5) if there has been any false or misleading statements as to market conditions or service rendered; (6) if the applicant has ever directly or indirectly purchased goods for his own account without prior authority therefor or without notifying consignor thereof.

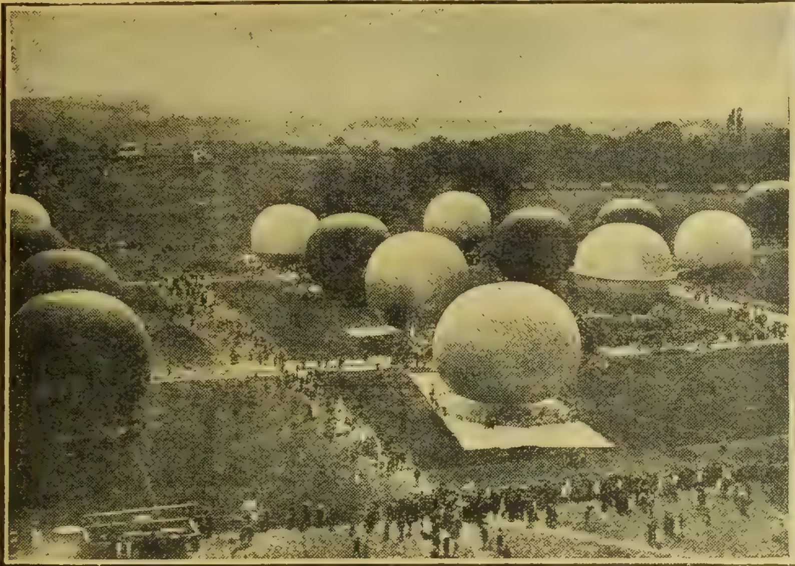
If the investigation discloses that the applicant has been guilty of any of the above transgressions the commissioner may refuse to grant a license. Similarly he may revoke any license for any of the practices stated above.

If the investigation discloses that Sammy is a fit person to engage in the commission business, the commissioner requires that he file a fidelity bond in the sum of $3,000. When the bond is filed, Sammy gets his license and sets up in business.

A few months later Sammy becomes a little hard up for cash and "forgets" to make returns to Farmer Jones on a shipment of poultry. Farmer Jones immediately appeals to the State Department of Agriculture which orders Sammy to appear and show cause why his bond should not be forfeited. If Sammy fails to do so or does not make restitution to the aggrieved farmer, the commissioner executes the bonds and pays over to Farmer Jones and any others who have been defrauded the amounts which are due them, up to the full value of the bond.

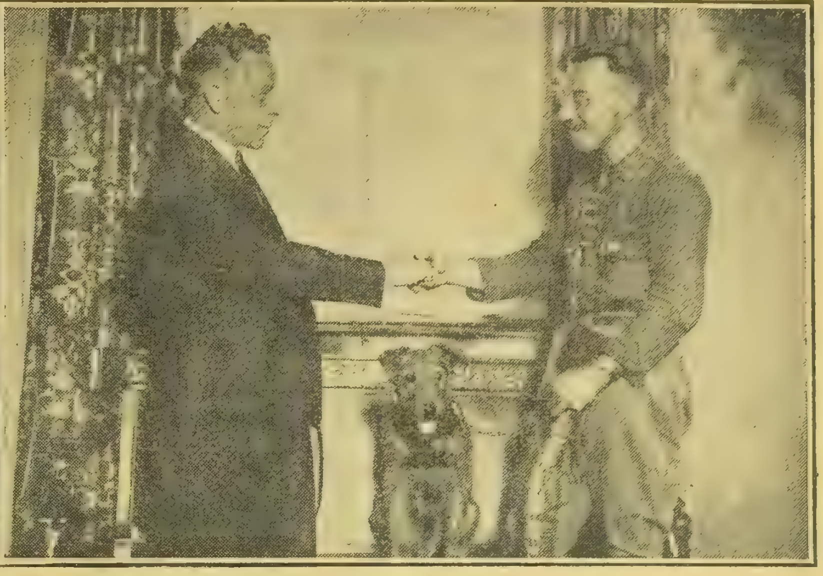
The Business Farmer believes that such a law is needed here in Michigan and would not only save farmers thousands of dollars a year, but would encourage a greater number of farmers to cultivate the city trade. The Business Farmer has pledged Commissioner Doelle its support in securing the adoption of such a law at the next session of the legislature.

PICTURES FROM FAR AND NEAR



GIANT AIR BAGS—BEFORE THEIR FLIGHT—A spectacular view of the start of the Gordon-Bennett Ballon Race, at Switzerland. The result of this race is still hazy, and the winner has not yet been declared, but according to reports, De Muyster, the Belgian balloonist has evidently won, having flown as far as Ocnitza, Roumania, a distance of 1,300 kilometers. His balloon disappeared at this point.

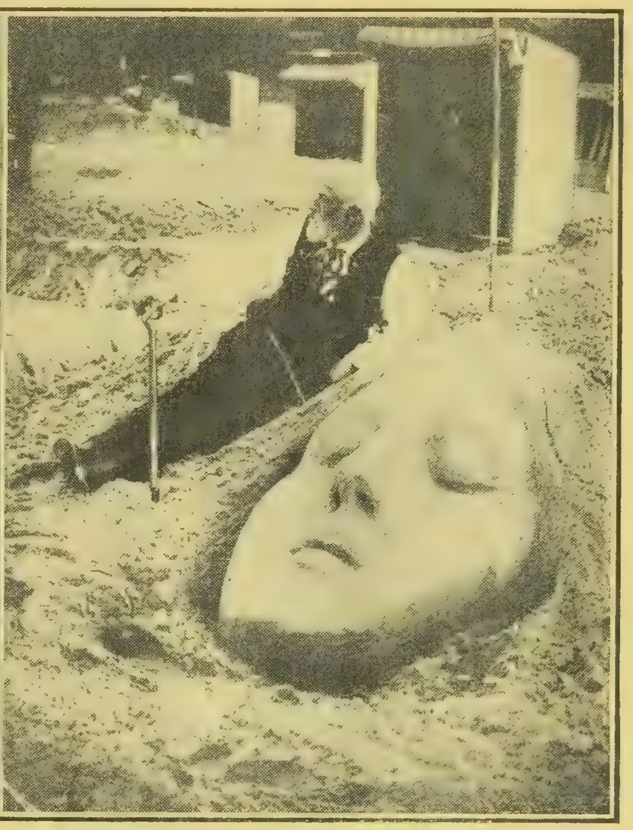
The man who came in second, H. E. Honeywell, representing the American Navy, (shown in foreground) landed at Tapio-Tyortye, Hungary, where his balloon too disappeared. Third comes O. Westover, of the American Army.



COMPLETES HALF OF 10,500 MILE HIKE—Leonard Day (right) of San Francisco, California, being congratulated by A. W. Baylitts, manager of a big New York hotel, on his arrival there after completing 5,250 miles of a 10,500 mile hike, which he has undertaken to prove that a man can travel thruout the United States without a cent in his pocket, and that American generosity and hospitality will carry him thru. So he started out from San Francisco on November 20 last and hiked his way to New York City with his trusty airdale pup "Kenwyn Radio."

RESCUE WORK ON THE WILTSHIRE WRECK—The Federal steamer Wiltshire was stranded on the Great Barrier Island off New Zealand, Australia, and during a storm was broken in half. The wireless apparatus was disabled and the only communication with the rescuers possible was through the semaphore signals. It was forty hours before the entire crew were finally brought ashore.

ENGLAND'S GREATEST WOMAN SWIMMER HERE FOR COMPETION—Miss Hilda James of Garston, Liverpool, champion woman swimmer of Europe snapped in swimming togs aboard the SS. Aquitania.



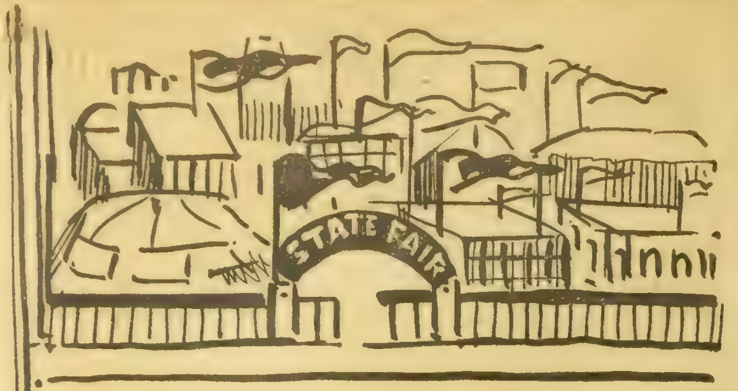
THE FACE OF HIS OWN TRUE LOVE—At least old Fritz Hankelschmidtz so moulded her face in the sands of Westerland Beach, Germany. But like footprints in the sands of time, the next tide came pounding in and the day-dream of Fritz's handiwork, faded away like her picture in the smoke-rings from his long pipe.

ANNE MORGAN HERSELF GREETS MISS BRONKAN—In a recent contest held in Michigan for the Devastated France Commission of which Miss Anne Morgan, daughter of J. Pierpont Morgan, is the active head, Miss Jean Bronkan, was nominated by the Michigan State Fair and the Gleaners farm organization, as their candidate. She is here shown in the railway station at Paris (second from left) one of the party being greeted by Miss Morgan (under X). Detroit lead every city in America in the amount of money raised for this worthy charity.

RREIA
ESTA
UNIDO

"SAMPIO CORREIA" HOPS OFF FOR BRAZIL—-In this giant seaplane, five men have started for the Centennial Exposition at Rio de Janerio, Brazil, South America. The distance is 8,500 miles, but at a speed in excess of 100 miles per hour, barring mis-hap they may be at the front gate of the exposition before this copy of the Business Farmer reaches your hands. Left to right: J. Thomas Baltzell, George T. Bye, Lt. Walter Hinton, Dr. E. Pinto Martins; John Wilshusen—waving good-bye to crowd watching their departure from the Hudson River.

(Copyright Keystone View Company)



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Take your time and go through the entire store—Please consider this your personal invitation.

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IF YOU'RE DRIVING YOUR OWN CAR—Follow Woodward avenue south clear into the city. Turn left at Grand River, one square, then right two squares, to the store.

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You can meet your friends at the Waiting Room and lunch at our Soda Grill.

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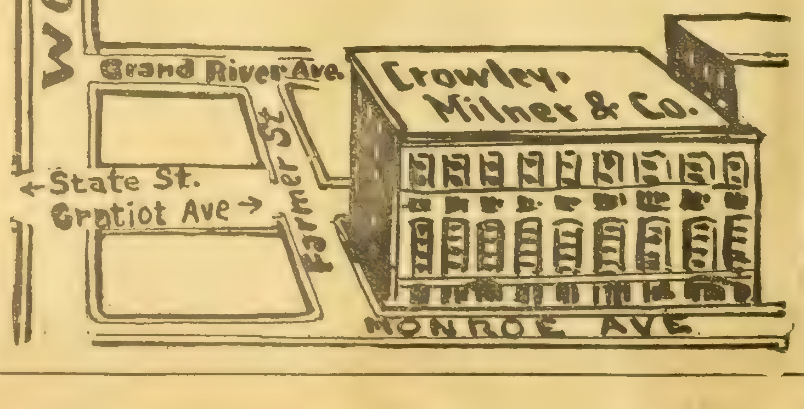

What the Neighbors Say

SIGN YOUR NAME

THERE are many subscribers to the Business Farmer who have written letters to this department and the letters not appearing in print they have wondered. Undoubted the reason was, they did not sign their names to their letters. If a letter is worth writing it is worth signing. We will withhold your name if you desire but your name and address must be received with your letter. —Editor.

WHO IS THY NEIGHBOR?

ENCLOSED find clippings from one of my last week's papers, which as you will note tells how the farmers down in Texas are sympathizing with the striking union men and are carrying food to their suffering families. I wish to ask which is the best policy, to turn the machine guns on the strikers or do as the farmers did in Texas.

Have not the railroad corporations and coal kings, stript of their sheep's clothing, showed themselves to be raving wolves? Have not the farmers and the laborer produced their ill-gotten millions, and still they are asking for more.

Gov. Blaine of Wisconsin shows in official figures that 25 per cent of Wisconsin's soldier boys are in prison. Why? Have the millionaires achieved their aim? Is autocracy safe at last and democracy destroyed? They agree with Vanderbilt, "the people be damned", and not one for soldier bonus. Gov. Blaine states the general charge against all these soldier boys was stealing something to eat or wear. Must we not feel proud, this richest nation on earth, and our president is determined to veto the bonus bill if it should pass.

Who is to be blamed for all this, the millionaires or the government? Who are the men who yield to the will and wishes of the heartless profiteers? Our representatives who believe in Newberryism and supported Newberry is the only kind which is recognized by Wall Street.

The primary election is at hand. Voters, be sure to register, and be sure to vote for men who condemn Newberryism. Our own good old Michigan will land the Newberry bunch where North Dakota landed McCumber.—C. H. A., Iosco County, Mich.

You've painted the picture a little strong, we think, but conditions are such as to warrant strong thoughts and words. The eyes of the whole nation will be upon Michigan, in the coming primary election. What verdict will the verdict be? Shall Newberryism be vindicated and defended, or shall it be smote "hip and thigh?" The verdict rests with Michigan. —Editor.

MODERN DRESS A SERIOUS SUBJECT

I BEG to disagree with you when you call this discussion of styles quarreling and haggling about the length of woman's dress. It is one of the greatest and most vital questions of the day for it concerns the morals of our women and our men. The present day feminine garb is not conducive to good morals.

The old saying is, "The hand that rocks the cradle rules the world," and tho it is no longer fashionable to rock the cradle, woman, indirectly, rules the world and doubtless always will.

A nation is judged by the dress and mannerisms of its women at home and abroad. There are many dear, good women, and beautiful girls who always modify the fashions to meet good taste and their innate sense of modesty and refinement. All honor to them. And may their number increase. But there are many, many more, thru ignorance, indifference to criticism, indecency and a desire to attract the male sex, who not only follow the extreme fashion but make it more extreme as does the despised woman of the underworld.

Mothers who dress modestly, themselves, allow their daughters to go out upon the streets and to places of public amusement, only half clad. Indeed, they begin the undressing process nowadays, when these girls are mere tots, so that by the time they are sixteen, "modesty" is not in their vocabulary.

Girls do not wander about in the fields holding pieces of embroidery in front of them, it is true, Mrs. Copeland. No doubt if they had to hold the embroidery they'd drop it rather than be hampered. But come down thru old Gratiot—the best place on the globe—and see what you shall see. I think you might wish as I do that some of the commonplace street sights were banished to secluded fields, in other words that some of the girls were turned out to pasture.

Put a rubber draw-string around the "free neck," please, so said neck is not free to the "unrestricted" waist line, and make the skirts long enough to prevent a vulgar display of leg and that part of the anatomy which is uncomely, when these innocents stoop over, go up or down stairs, or sit cross-kneed, or keep them in the back-yard for we all have eyes and can not help seeing what is so obviously intended we should see.

A show was unloading and setting up tents on large grounds near the outskirts of a certain city. People were standing along the fence, also walking about the place watching operations. One girl in modern dress found it convenient to put her foot upon the fence a few inches from the ground, regardless of the fact that the ground had a downward slope, toward the crowd, for a short distance from where she was standing, and the wind was blowing quite hard. Her unmentionables were observed to be short as to length and ample as to breadth—I leave you to imagine the rest, yet to all appearances she was a so-called nice girl; only very, very thoughtless. Better turn her out to pasture.

As for future styles, why let Paris design them? Hasn't America enough brains and ingenuity, artistic taste and common sense, within her borders, to create dresses suitable for her own women? Are not women intelligent and independent enough to modify extremes? Don't bury your talent. Develope it for your own good and for the good of the generations to come.—Mrs. Bessie O. Roberts, Gratiot County.

As people become accustomed to the manner of dress which is criticised so freely today, don't you think, Mrs. Roberts, that the criticism will gradually subside and that people will find they have made much ado about nothing? I am not talking about the extremes of fashion now nor the exceptional cases of misconduct, but of the prevoiling fashions and the general deportment of our girls and women. It is well known to all of us that the extremes of dress in nearly every generation have been the accepted dress in the following. How shocked and horrified many good women were only a few years ago when the high collar was discarded for the moderately low-neck-dress and the long untidy sleeve was succeeded by the elbow-length. Those simple changes were looked upon then as radical departures and the moral break-down of our girls was freely predicted. How many of you mothers who are reading this were guilty of such extremes in dressing? And speaking of "unmentionables," they used to wear 'em to their shoe tops with a few inches exposed. After all, is there actual harm to the morals of youth in present day dress, or do we only think there are?—Editor.

LET THE FARMER THINK FOR HIMSELF

THERE is a general opinion among farmers, and I think with reason, that they are not getting a square deal as compared with other industries. That they get too little for what they sell and pay too much for what they buy and that they bear too large a proportion of the public burden.

This feeling is shown by the advocacy of all kinds of schemers from the inflation of the currency and the enacting of new laws and the repeal of old ones to the starting of all kinds of new activities to which the farmer is expected to subscribe if he is only told it will benefit the farming class.

Conditions in foreign countries to a large extent determine the price we get for our produce such as their competition with us in what we export and their need and ability to buy, but there are conditions in this country that operate to widen the gap between the producer and the consumer.

It behoves every farmer to do some clear thinking along these lines and ask everyone who advances a new scheme just what his personal interest is in it.

In a recent article I said an income tax would do us no good as plans for spending the money would be made before we received anything from the tax. The recent announcement by Prof. Friday that he would ask the legislature for an appropriation of $2,000,000 for research work verifies my statement much sooner than I expected. He says it will only amount to about $10 for each farm, but I wish to point out that the direct tax is only a small part of the tax that the farmer must pay. The retailer must add his part of the tax to the goods he sells and the man who buys and ships your produce must deduct his part of the tax from the price he pays you for what you sell.

The farmer is hit both coming and going.

Cost of transportation is a contributing cause of the wide gap between the producer and the consumer and the farmer who backs the Labor Unions in maintaining wartime wages and unreasonable working rules and tieing up of industry on the slightest pretext must expect to pay in the lessened price for his produce and the increased cost of what he buys. A clause in the Declaration of Independence reads: "He (the King) has erected a multitude of officers, to harass our people and eat out their substance." What we went to war with England for we have imposed on ourselves.

We have much too many officers and are paying them much too high salaries.

If the statement is true that the members of the State Board of Administration are using cars furnished by the State at a cost of $4,000 each, that alone should be sufficient to defeat everyone of them for reelection.

It is estimated we must soon provide $5,000,000 per year to maintain highways and provide for retiring $5,000,000 of road bonds and when the farmers protested such a large road building program they received very scant attention.

I don't wish to be understood as opposed to good roads or good schools or good government but I think all of these activities are much overdone and to the direct deteriment of the farmers.

Retrenchment all along the line should be the demand of the farmer before everything else.

The farmer is the prey of the demogog, the agitator and the visionary on the one hand and the exploiter on the other. It is time he did some thinking for himself.—K. S. Wood, Charlevoix County, Mich.

There's a good deal of sound sense in what you have to say, friend Wood, though I cannot understand why you attack working men wanting decent wages and organizing to get them, and let the profits of industy go free of censure. High wages for honest service rendered do not hurt the farmer. They help him. They increase the buying power of the wage earners. The farmer is never more prosperous than when wages are high and never so poor as when wages are low. Let's not object to a decent wage for an honest day's work, but do let's go after the fellows who are wringing huge profits from the public on watered stock, and charging high prices from unnecessary services.—Editor.

"WE LABOR NOT IN VAIN"

I WANT to add my appreciation of your splendid paper with the thousands who have already expressed themselves. Above all other farm papers I ever saw, I think your greatest merit is your clean advertising. Many farm papers only seem to publish farm news as a means to flaunt impossible advertisements. Every article I find in your paper I am able to believe.

In a recent issue I notice you have told a subscriber you would send him a set of plans for the construction of a poultry house if he would send his name. May I also receive a set of those plans? I intend to build my second poultry house this fall. My first does not seem very convenient. —E. K., Tower, Mich.

That's a pretty fine compliment. Thank you for it. The M. B. F. is not all we would like it to be all we expect it to be some day, but we feel that we are on the right road. The plans have been sent to you under separate cover, thanks to the courtesy of Prof. Foreman of the M. A. C.—Editor

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Pioneers Together
—the staunch builders of this great country—and Montgomery Ward & Co., who first supplied their needs by mail.
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Practically every order that comes to Montgomery Ward & Co. this season will actually be shipped and on its way to you in less than 48 hours.

Lower prices, better merchandise, and now a new service. True it is indeed that: "Montgomery Ward & Co., the oldest Mail Order House, is Today the Most Progressive."

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When You Come
to the Michigan State Fair

This is a wonderful week for the citizens of Michigan. Our State Fair gives us an opportunity to see what our great State has accomplished in the past year.

Also, it gives us all an opportunity to get acquainted with our neighbors and what our neighbors have done toward the common good.

Every Farmer within reach of Detroit should come to the State Fair. And while you are in Detroit, make it a point to—

Visit the Michigan State Automobile School

If possible, we want every Farmer in Michigan to know and appreciate what this institution stands for. It is one of the best friends the farmer boy has. Thousands of boys from the farm have found this school their first and biggest step to Success.

Bring Your Boys

Go through the school with them. See for yourself what we teach—and how. Look into every nook and corner of our great institution and notice the completeness of our equipment; the thoroughness of our instruction. Then notice the type of young men who come here to be helped on the road to Success.

Here we are teaching hundreds upon hundreds of young men how to care for and handle all kinds of mechanical equipment properly—autos, trucks, tractors, lighting plants, gas engines, etc. It is one of the most complete and comprehensive courses of instruction to be found in a trade school.

Come Any Day

School is open to visitors from 8 a. m. to 9 p. m. Class hours are 8:30 to 5:00, also evening classes Monday, Wednesday, Friday, 7:15 to 9:45. Take Woodward Avenue car at Fair Grounds and get off at Parsons Avenue right in front of our School. Interesting booklet free to every visitor from the farm.

Come! It's worth a special trip. And bring the boys. We've helped thousands of them, and we can help yours.

Michigan State Automobile School
A. G. ZELLER, President
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An Invitation

WE respectfully extend an invitation to the business farmers of Michigan, their wives and families, to visit our plant and the departments now in operation during your visit to the

Michigan State Fair
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WE shall look forward to your coming to inspect the results of our sincere efforts to give the livestock growers of Michigan a modern, efficient packing plant equal to the best in the United States.

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Take Fort Street car from City Hall to Springwells Ave.

MICHIGAN CROPS

PLOW AND SEED AT RIGHT TIME; DELAY CUTS CROP

TIME is a bigger element today in farm life than ever before. Few realize its place in the ploying and seeding of crops for the biggest yields. The Central Experimental Farm of the Dominion of Canada, at Ottawa, Canada; and the Oklahoma Experiment Station have both gathered some figures that are startling and conclusive in bringing home to farmers the necessity of being so equipped with power and machinery that the work can be done when it should be done and in the shortest possible space of time. A month's delay will cut the wheat crop over half, while on barley and oats the loss is nearly as great, the Canadian experiments show in the following table:

No. weeks delay in seeding	Wheat decrease	Barley decrease	Oats decrease
One	20%	24%	15%
Two	40%	28%	22%
Three	50%	40%	32%
Four	58%	46%	46%

At the Oklahoma station, plowing was done at three different dates: July 19, when the ground was in the proper state of moisture; August 15 when it was hard and lumpy, and September 11, when it was dry and cloddy. Each plot was seeded September 15. The yields were: July 19 plot, 31.3 bushels of wheat; August 15, 23.5 bushels; September 11, 15.3 bushels. The station concludes that "early plowing for wheat is profitable; and if wheat follows oats, the soil should be plowed immediately after the oat crop is harvested. Generally it is best to work down the soil well as soon as it is plowed, and harrow or drag it after each rain. In this way, weeds may be kept down and the soil moisture conserved."

In other words, the farm needs more than ever a reserve of power that can be thrown into the stubble fields immediately after the grain is off for early plowing and preparation of a seed bed to get a 100 per cent foundation for his fall wheat crop. This kind of work, to bring best results, must be done at a time when the farm labor supply is carrying a "peak load," and when it is the hottest time of the year on the farm. Farmers equipped with tractors are fortunate in being able to meet these "peak demands" of farm work that brings seed-bed preparation close on the heels of small grain harvest.

FIVE IMPORTANT WINTER WHEAT REMINDERS

WHILE the Hessian fly is by no means the only problem in the growing of winter wheat, he is of so much importance that nowadays the entire winter wheat program is mapped out with him especially in mind.

There are five points which require special attention, i. e., early plowing, good seed, a well-prepared seedbed, delayed seeding, liberal fertilization.

Hundreds of farmers follow such a system and find that it is very profitable to do so. Time and time again, it has been demonstrated that early and thorough preparation of the seedbed, alone, is responsible for increases in yields of from five to ten bushels.

When seeding is delayed until after the fly-free date, Hessan fly damage is greatly reduced. The adult fly lives only a few days after it emerges and if it does not find the leaves of the young wheat plants upon which it can lay its eggs, it is unable to propagate the new brood which does the damage to the crop. However, when seeding is delayed, the crop must move along rapidly after seeding, in order that it shall pass through the winter successfully. From two to three hundred pounds of high-analysis fertilizer applied at seeding will insure the crop against injury and give it a good start the following spring.

WHAT GRAINS SHALL I SOW?

I would like your opinion on winter grains, also on what spring grains you think advisable to sow. I was planning on putting in twenty acres of fall wheat. —T. S., Hillsdale, Mich.

The type of soil, crops now on the land, and condition of the land, determine the winter and spring grains which will prove best adapted. On fertile loam, silt loam or clay loam, from which a cultivated crop will be removed before mid-September in southern or central Michigan, or which is now being summer fallowed, or which was in oats and can be plowed and fitted, would prove best adapted to wheat. Light soils and lands which are hard worn, or fields from which a cultivated crop cannot be removed until late September, will do best with rye.

Oats are best adapted to loams, silt loams, and clay soils, commonly called heavy lands, which are well supplied with organic matter and hold moisture throughout the season.

The use of two hundred and fifty pounds of acid phosphate per acre almost invariably pays a good profit with any of the above grain crops. It is also advisable to plant on a clean, well compacted seed bed at the proper date.—J. F. Cox, Professor of Farm Crops, M. A. C.

ALFALFA WITH RYE

We bought a 19-acre farm this spring and found an 8-acre field of rye, or rather there was an 8-acre field of rye last year. It must have been over-ripe when cut last year as there is quite a small crop this year and no one planted it again last fall, so it must be a volunteer crop. It is not worth having harvested. we are told there would be over 50 bushels of rye on the piece and to have it cut and cared for, threshed, hauled to the market, etc., would not be worth while, so our advisors tell us to let it go back this year, drag it thoroughly in and next spring drag it and sow to alfalfa. Cut the rye when ripe and we will have a fine alfalfa field.—A. E. G., Gladwin, Mich.

I do not think it would be advisable to make an alfalfa seeding for the first time on ground which is now in its second year with rye, and which will come into its third year next spring. June or Quack grass cannot help but be taking hold of the ground to a considerable extent on a field which has been allowed to volunteer two years straight with rye. I would suggest planting a cultivated crop such as corn or beans, turning under the rye ground in late April or early May next spring, devoting a season to a cultivated crop in order to clean up the grass and planting alfalfa the following year.

If it does not fit in with the management of your farm to plant a cultivated crop, I would suggest sweet clover as a better crop to plant under the conditions you describe than alfalfa. I would recommend seeding at as early a date as possible in the spring, using twelve pounds per acre of scarified seed, and inoculating seed at time of planting.

Rye must be properly planted at the right time in order to give paying results. Volunteer rye rapidly reverts and will not pay for the handling.—J. F. Cox, Professor of Farm Crops, M. A. C.

FRUIT and ORCHARD
EDITED BY FRANK D. WELLS

UNPROFITABLE APPLE TREES

My apple trees do not bear. They are fifteen years old and healthy, but produce nothing but wood. Can anything be done? This year there were blossoms but no fruit.—B. V., Monroe County.

There are so many reasons for sterility that to answer this question is like shooting in the dark. The soil in Monroe county is mostly good for apples and there are some fine orchards. The unfavorable weather at the time of blossoming is probably responsible for the failure this year, but if the trees are growing too much wood they need treatment to correct this habit, for such it is.

If the orchard is in sod, plow it thoroughly next spring, then work the ground till mid-summer. Prune some, too, which is easy to say but most difficult to instruct definitely. Better prune too little than too much. Consult some neighbor who is an apple grower in regard to the amount of top that should be removed. Such treatment should bring results the following year.

CHERRY LEAF RUST

What causes cherry leaves to turn brown after the fruit is picked?—P. P., Middlepoint, Ohio.

There are several diseases affecting the leaves of cherries, the most common being the shot-hole fungus. But whatever the cause, the treatment is much the same and should be a preventive rather than a cure.

Since the spores of diseases pass the winter on the bark, much good should come from a spray in the fall after the leaves have fallen. This is a treatment which has not received much attention as it should. A weak solution of copper sulphate may then be used, one pound to 50 gallons of water. Use no lime. If left till spring the weather may be unfavorable or the work may be neglected. It may be applied at any time when there is no foliage and the weather is not cold enough to freeze the spray on the trees.

Lime-sulphur, dormant strength, thoroughly applied before the buds begin to open, should control the fungus diseases.

Following this dormant application with the regular sprays as advised for cherries should give the desired results.

RENTING APPLE ORCHARD

What would be a fair share rental for a 10-12 year old apple and cherry orchard, renter to furnish everything except the orchard?—Reader, Eaton County.

The condition of the individual orchard as regards fruitfulness, vigor, varieties, cultural system, etc., the acreage of the orchard and the number and condition of the buildings accompanying the orchard, would have considerable bearing upon the rate of rental. Where there are poor on no buildings and equipment in connection with an orchard and where the orchard is in rather poor condition, it is customary for the owner of the orchard to receive from one-third to two-fifths of the crop. Where the orchard is in good condition and a considerable number of suitable buildings in good repair to go with the orchard, the owner may take one-half the crop.—Roy E. Marshall, Assoc. Professor of Horticulture, M. A. C.

It came hard to lose the cherry crop last year, but some good resulted from it. The insects which have received such a large proportion of the fruit in other years have been scarce this summer. There being so little fruit the adult insects had no place to lay their eggs. So the curcuio crop was very short, likewise the cherry maggot. That beat spraying by many times, but does not make it unnecessary in the future. The insects will come back, but it should be possible to control them by spraying for several years to come.

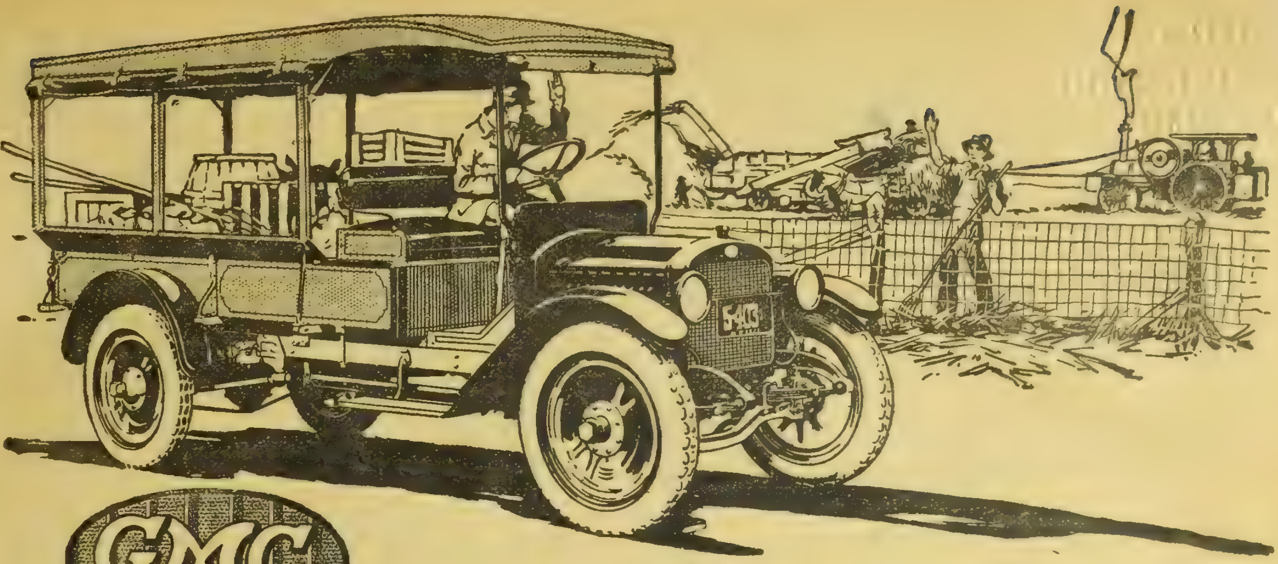
Why is the wild blackberry of better favor than the cultivated varieties? For one reason, the varieties have resulted from a selection of fruit for size and productivity. Go back to the wild plant. Improve it by selecting for quality rather than quantity and the result will soon be evident. Size may be sacrificed, also productivity, but the delicious flavor of the wild berry can be retained, perhaps improved.

HORSESHOE TOURNAMENT

COUNTY CHAMPIONS TO COMPETE IN STATE MEET

THE county horseshoe pitching tournaments which have held throughout Michigan this year in conjunction with farmers' picnics, have proven to be the leading drawing card, to the almost total exclusion in some cases of other events on the programs. It is expected that at least 25 counties will send their champions to Detroit to compete in the state meet, to be held at the Michigan State Fair, beginning Tuesday, Sept. 5th.

Counties which have reported their winners to the Business Farmer are St. Joseph, Hillsdale, Van Buren, Muskegon, Calhoun, Wayne, Macomb, Ottawa. The winner in St. Joseph was Lyle Scott of Centerville, the winning team in Hillsdale were Milton Fisher and Jesse Fenstermaker, of Hillsdale; in Ottawa, Wm. Lowing and C. VanCovering, both of Jenison; in Muskegon, Corniel Oudsema and S. D. McNutt; both of Ravenna; in Calhoun, Carl Boehlke, of Marshall and A. J. Russell, of Battle Creek; in Wayne, Ray McIntyre of Wayne and Ed. Gotts of Plymouth. The three high men in the Van Buren tournament were Ben Seel and A. Elgas of Watervliet and E. C. Virkus of Benton Harbor. The champion team of Macomb comes from Washington and their names are Art Robertoy and Chas. Schocke. It is expected that all of the above champion teams will participate in the state meet.



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32x4	13.95	1.45	36x4½	24.20	2.00
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34x4	15.95	1.60	35x5	27.50	2.25
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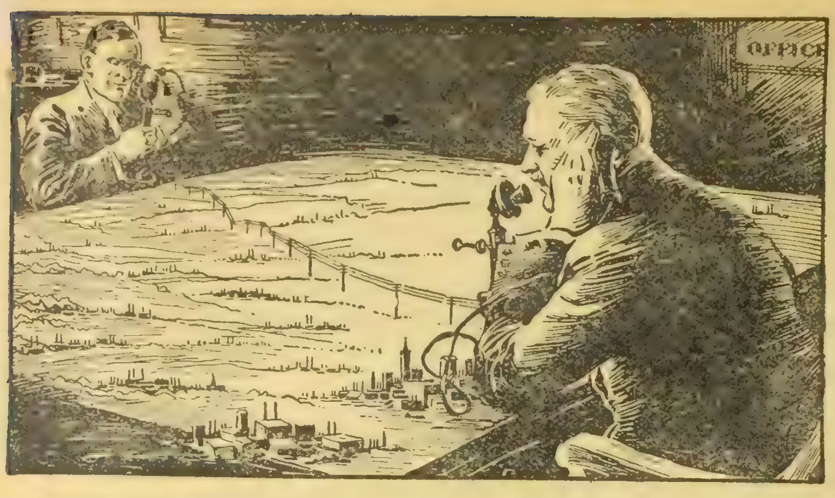

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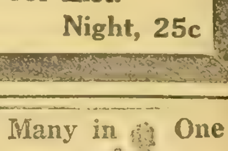

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Farmers Service Bureau

(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full name and address. Name not used if so requested.)

THAT LINE FENCE

Will you kindly inform me through your valuable paper, which is the lawful line fence and also what part belongs to each farm? I am a renter, and the fence on the right side facing the fence is of woven wire, and the fence on the left side is two strands of barb wire, which allows my neighbors' unruly cattle to destroy my crops. They say the fence on the left belongs to this farm and will not try to keep their cattle off. Have I the right to shut up their stock and hold them for damage to crops?—Mrs. P. S., Middleville, Mich.

Line fences are divided by agreement of owners and may be the right or left half. There is nothing that I can call to mind in the law that designates which part either is to take. If the owners cannot agree they may call in the fence viewers and their determination which part each is to take shall be binding.

If your neighbor's cattle get onto your premises through the fence that is the duty of your neighbor to build or keep in repair then you may shut them up, if you follow the provisions of the law for such purpose, and require him to pay the damage and penalty for the same before delivery back to him. If the cattle get onto your premises through the fence you should build or keep in repair then you would not be justified in shutting them up as you would make yourself liable for the costs of proceedings to retake them. The question may be tested in such a proceeding to determine which should build the fence. The division of the line fence may be agreed upon and filed in the town clerk's office. You may find in his office which one is to build each half of the fence. —Legal Editor.

MUCK SHOES

Will you please inform me where I can buy muck shoes?—C. E. B., Alpena, Mich.

The muck shoes are usually made by a local blacksmith in the muck regions of the state.

A Mr. Brigham of Decatur manufactures muck shoes in small quantities. I do not have at the present time his first initials but I am sure you could get them by writing to Dr. Bope of Decatur. If this does not get results write again and I will make further effort to get in touch with the proper party.—Ezra Levin, Director Bureau of Agricultural Development.

PAYING TUITION

Will you please tell me if I remove from the district I am now residing in during August which district must pay the tuition of a boy attending High School, or must I pay it myself, the said boy being 17 years of age?—Reader, Roscommon, Mich.

The district where the parent or legal guardian resides at the time of making written application, which is on or before the fourth Monday of June, is the district that must pay high school tuition for the school year following, if the child holds a county eighth grade diploma or has completed eight grades in a graded school and the parent or legal guardian has made written application for the payment of tuition on or before said fourth Monday of June. The fact that the parent or legal guardian may move out of the district after filing application does not release the district where the application was filed for the payment of tuition for that year, unless the child becomes a legal resident of a district that maintains a high school and he attends that high school.—W. L. Coffey, Dept. of Public Instruction.

DISPUTE OVER SPRING

A and B own joining land. A has a spring of water about 6 rods from the line between A and B. The water does not flow onto B's land. B's deed calls for the water but A's deed says nothing about it. Can B go on to A's land and build a reservoir and take the water without A's consent.—A. E. S., Lowell, Mich.

If B's deed was from A or from someone who owned the spring then he is entitled to what his deed called for but if B's deed is from someone who had no right to convey any interest in the spring, then the mere fact that he had a deed naming the right to the spring it would give him no right thereto. If B's deed did convey some right to the spring B must exercise that right in accordance with the right as given in the deed. Without it he would have no right to go upon the land of A and by so doing he would become a trespasser.—Legal Editor.

CANNOT KILL QUACK GRASS BY PLOWING DEEP

Is it possible to plow deep enough to bury and kill quack grass on gravelly soil?—C. L., Traverse City, Mich.

It is not possible to plow deep enough to bury and kill quack grass on gravelly soil. Thorough cultivation is the only reliable method for the complete eradication of this pest. Very shallow plowing in the fall or early spring followed by deep plowing and then thorough cultivation will succeed if weather conditions are favorable.—R. S. Hudson, Dept. of Farm and Horses, M. A. C.

DEBT OUTLAWS IN SIX YEARS

Does a debt made for goods of any kind outlaw? If so, how long before it is outlawed?—F. C., St. Charles, Mich.

Just an ordinary debt would outlaw in six years from the date it is due or six years after the last payment thereon. A debt evidenced by a judgment in Justice Court would also be six years but a debt evidenced by a judgment in circuit court would be ten years. There are a large number of cases enumerated in the statute having different times fixed by law as a time when they outlaw.—Legal Editor.

PAGE MRS. RUSSELL!

I have some information for Mrs. Wm. H. Russell or her near relatives. I am sure that her people or herself would be very glad to know. Her father lives around Shytown or a name similar to that. It is around Owosso and Bancroft. Send all information about their address to a friend of her son, George.—Mrs. P. Brown, Rhodes, Mich.

WHERE TO PLACE MAIL BOX

Is there a law compelling one to put their mail box on the right side of the road? We live on a state trunk line 36 and were requested to do so. I wrote the Postmaster General for information some two or three weeks ago and have failed to get a reply. But instead he wrote our postmaster at town and sent him my letter also. Why can't we have R. F. D. now in years to come as in years gone by? A mail carrier is in no more danger on the road than we or our children who go to the box for mail. Thanking you in advance for whatever information you may be able to give me.—Mrs. F. B., Oxford, Mich.

I have to inform you that under the provisions of Section 827, Postal Laws and Regulations, each box on a rural route shall, if practicable, be erected on the righthand side of the road regularly traveled by a rural carrier and in such a position as to be easily and safely accessible for the delivery and collection of mail by the carrier without leaving his conveyance.

It is required by the Department when, because of traffic conditions, to travel from side to side of the road would endanger the life of the carrier and the safety of the mails, or would be in violation of state or local ordinances in respect to the use of the highways, that all boxes be erected on the righthand side of the road as regularly traveled by the carrier.—Fourth Assistant Postmaster General.

SALE OF FARM DOES NOT INVALIDATE LEASE

A farm is rented to three parties: one renting fields, one the orchard and the other the house and garden. The farm is for sale, and if sold could the one renting house and garden be made to move and leave the garden, an acre of potatoes and vegetables, if you have no rent paid in advance?—Mrs. J. C., Orion, Mich.

Each one who rents a piece of land would be entitled to hold according to his lease. The selling of the land does not terminate the lease. If the lease is verbal it can be made only for year or less. Not so with writing unless the right to sell is reserved in the lease the sale does not affect the lease. If one rentd subject to sale and agreed to leave upon sale his renting terminates upon sale. The payment of rent is not an absolute requirement to the validity of a lease. A lease may be made that would be perfectly valid without the payment of any rent in advance.—Legal Editor.

The Collection Box

ONE of the most popular "skin games" of the day is the tire game. It is now possible to make a tire by machinery which to all outward appearances is as good as any tire ever made, and requires an expert to detect its flaws. There have sprung up throughout the country scores of concerns which make this type of tire, and advertise it through the mails, offering to send a set of them as an "introductory" offer, and guaranteeing them to run a far greater number of miles than some of the best makes can do. Their literature is appealing, their argument strong, their price attractive, and their "guarantee" convincing. Farmers are their favorite victims. They "bite" like fish after a summer shower. And usually they get "hooked." The tires never run their guaranteed mileage. Usually they go to pieces within a few hundred miles.

Out of the thousands of claims referred to this department scores are against this type of tire concern, and in the great many cases, we find too late that the crooks have "flown the coop." They have sold enough "introductory" tires to make a "killing," and never expect to receive a repeat order. So they fade away and spring into existence again some other place.

Mr. B., of Jackson county ordered a set of "guaranteed" tires and tubes from the Service Corporation of Kansas City, Mo. He drove them a few thousand miles and they went all to pieces. He wrote the company. The company told him to send them in for readjustment. He did. A month later we wrote to them. The letter came back marked "Service Corporation out of business." And Mr. B. is minus both tires and money.

At that Mr. B fared better than Mr. A. S., of Imlay City who answered an ad of the Webster Tire Corporation which he saw in the Household magazine. With a faith akin to that of a child Mr. S. sent his hard-earned cash to a firm he had never of before advertising in a paper that does not guarantee the reliability of its advertisers. Mr. S. might as well have dropped his money into Lake Huron. He never saw it again and he never received the tires. We wrote the firm for him, but our letter came back. It had pocketed his money and probably the money of thousands of others. And the postal authorities are still looking for the rascals. There is a moral to all these stories. Better learn it and follow it.

VETERANS MUST FILE CLAIMS FIVE YEARS

LITTLE attention has been paid up to the present time to that section of the War Risk Insurance Act (Section 309)which deals with the time limit for making claim for disability incurred in the United States services. Under this Section of the Act it specifically states "That no compensation shall be payable unless a claim therefore be filed, in case of disability, within five (5) years after discharge, or, resignation from the service."

In plain language this means that any man who has a disability which is due to his service in the United States armed forces must file a claim for that disability within five (5) years after date of his discharge. Any man discharged from the service between April 6, 1917 and October 6, 1917, as an optional right, can either apply to the Pension Bureau or to the Veterans' Bureau. Any person discharged after October 6, 1917 must apply to the Veterans' Bureau for his disability claim and must do so within the five years period. An example of this is: A man discharged from the navy December 1, 1917, on a disability discharge, files a claim with the Veterans' Bureau at Chicago District Office on December 10, 1922. His claim must necessarily be disallowed because he has not applied for compensation within the five (5) year period.

All claims and information concerning same may be taken up with the District Office, U. S. Veterans' Bureau, 111 N. Canal street, Chicago, Ill., or with the Sub-District Office of the U. S. Veterans' Bureau at the Krolik Building, Jefferson and Randolph streets, Detroit, Mich.

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An Independent
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Edited in Michigan

SATURDAY, SEPTEMBER 2, 1922

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FORREST A. LORD .... EDITOR
ASSOCIATES:
Wm. W. Slocum, Jr. .... Business Manager
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"The Farm Paper of Service"

The State Fair Is On

IT is predicted that the State Fair this year will attract the largest number of farmers in it's history. There are several reasons for this. One of them is that the entertainment and the exhibits have been planned to make a special appeal to the farmer. Then, too, the tourist camp will bring many who like to travel by auto and do not care to brave the traffic of Detroit's congested thoroughfares But probably the largest single event which makes a special appeal to the farmers this year is the horseshoe pitching contest which will attract the devotees of the game from all over Michigan. It is understood that delegations of farmers will accompany champions from several counties to witness the big tournament at the Fair.

Every effort has been made to make the farmers and their families feel right at home this year and to provide for their comfort and welfare . The State Fair is on. All roads lead to Detroit.

Bankers Back Farm Bureau

SOME critics will be sure to look askance upon the recent report of the agricultural committee of the Michigan Bankers' Ass'n, asking the continued support of the banks to the Michigan State Farm Bureau program. It is not unreasonable to suppose, of course, that the banking fraternity would like to dominate the policies of the farm bureau and other farm organizations. Indeed, it is heard in some quarters that the banks do now control these policies. To a limited extent and in certain instances this may be true, but we don't believe that the statement applies to the Michigan State Farm Bureau or any of its locals. There was a time when the State Bureau stood in danger of such domination, but it was warned in time and has struck aside the chains of all entangling alliances.

We prefer to believe that the banks of Michigan are actuated by the most honorable motives in pledging its support to the Farm Bureau program. Bankers as a rule are shrewd men. It has not taken them long to learn that their prosperity is indelibly linked up with the farmers' prosperity and that it is to their selfish interest to aid the farmer to carry out his economic program.

Friday Shatters Farmers' Hopes

THE hopes of farmers that prices of farm products are due for a come-back were shattered by Pres. Friday of the M. A. C. in a speech he recently made before the Michigan Potato Growers' Exchange at Cadillac. Dr. Friday has gathered statistics to show that the net value of manufactured and agricultural products have been almost equal for a period extending over 25 years. When the value of one has been greatly inflated the value of the other soon follows suit. He points out that while agricultural prices are still 35 per cent above the pre-war level — prices of manufactured articles are 65 per cent above. In the process of economic readjustment agricultural products must go up or manufactured articles must come down. Because of the world conditions affecting agriculture he does not expect prices of farm products to reach a very much higher level than they are today. Hence — the conclusion is that the prices of other goods must come down. And he says that is what will happen.

We believe Dr. Friday has a correct understanding of the situation. Grain prices will probably be some higher but the general average will not be far out of line the next year or two from what it is today. This is discouraging prophecy, but if it is correct prophecy, it might far better be anticipated now than to have it suddenly realized without any warning.

Dr. Friday makes the very excellent point that in a period of low prices such as the farmers are probably now facing, it is a question of the survival of the fittest. The inefficient farmer cannot survive. And the efficient farmer can only make money by being more efficient than he is today and employing every economy in the production of his crops. "Fewer acres, but more per acre," is Dr. Friday's doctrine, a doctrine which we have been preaching in these columns for some time past.

The ray of hope in the situation at least for the farmer of Michigan is the promise of Dr. Friday that the agricultural college is making a special study of the situation with a view to rendering the farmers assistance that will enable them to produce slightly more economically than the farmers of other states, to produce a higher quality of crops, to pack them a little better and get them to market a little cheaper than the farmers of the other states can do.. It may be that the slight advantage which the college may work out for the farmer in the production and marketing of his crops may mean the difference between success and failure.

Be on your guard. If ever in your life you ought to be a business farmer and practice business methods it is now.

The Profits of Industry

SECRETARY of Agriculture Wallace has made some interesting "discoveries." He has discovered that the wages of coal miners and railway employees are still in excess of the pre-war level as measured by their purchasing power. For instance:

> "In 1913 the average wage received by the coal miner for mining a ton of coal would buy 1.1 bushels of corn in Iowa; in 1921 it would buy 2.5 bushels of corn in Iowa. In 1913 the ton wage would buy .7 of a bushel of wheat in North Dakota; in 1921, .9 of a bushel. In 1913 it would buy 4.7 pounds of cotton in Texas; in 1921, 8.5 pounds. In 1913, 7 pounds of hog in Nebraska; in 1921, 14 pounds. In 1913, .8 of a bushel of potatoes in New York; in 1921, 1.2 bushels. In 1913, 11 pounds of sheep in Wyoming in 1921, 18 pounds. In 1913, 1.6 bushels of oats in Illinois; in 1921, 3.1 bushels. In 1913, 2.4 pounds of butter in Missouri; in 1921, 3.2 pounds."

Interesting, of course, but what do they prove? Secretary Wallace wants us to believe they prove that wages have not been deflated enough. But do they? To our mind they prove that agriculture has been deflated too much. And so as a piece of propaganda put out by the U. S. Department of Agriculture to arouse the farmer against the laboring man the report is a rank failure.

Need we some times wonder why laboring men go to extremes to protect their rights and maintain their wages at a level where they can clothe and feed their families? Isn't it often because they know that every effort is made by those who profit by low wages to deceive the mass of people and make them believe that laboring men are seeking an unreasonable, exorbitant wage? Who wouldn't under such circumstances, with a job that is none too certain and want only a few days away if the job is lost, fight to the last bitter ditch for their bread and butter?

But Secretary Wallace, drawing $18,000 a year isn't worrying about the jobs and the wages of men who are working for 30 cents an hour. Why should he? He is in a position where he can slap the laboring man on the wrist and preach a sermon at the same time.

"Why don't you do as the farmers have done?" asks Mr. Wallace. "Despite their heavy losses they have not struck. They have kept on producing etc. etc. If other groups would do as the farmer has done, our economic troubles would soon be over, etc., etc."

Would the good Secretary make the nation believe that the farmers have accepted the consequences of the Federal Reserve Board's deflation policy because they wanted to? Does he really believe the farmers are as big chumps as that? The farmers took their losses and went on producing because there wasn't anything else for them to do. They wanted to strike, they wanted to protest against the cruelty and injustice of that deflation edict, but they couldn't. They weren't organized enough and besides you can't strike for a few days in the farming business. You've got to strike for a whole year.

These are the hard brutal facts which Secretary Wallace knows as well as any living man. Why paint the farmer in any other colors than he ought to be painted even for the sake of making an invidious comparison with labor. The farmer is human and he has neither forgotten nor forgiven the offense that has been committed against his industry.

If the Secretary of Agriculture is to make a fair comparison between the purchasing powers of different vocations as before and after the war he must include them all. He compares the PROFITS of agriculture with the WAGES of industry instead of with the PROFITS of industry. We are not so greatly alarmed over the efforts of millions of workers to secure a wage that will permit them to buy of the farmer the food to feed their families. Experience has taught us that the farmers prices are never better than when wages are high and never worse than when wages are low.

What we would like to know is what the purchasing power of the PROFITS of industry are as compared to the pre-war days. If Secretary Wallace has any figures along this line we shall be glad to receive them.

To Improve Potato Statistics

A MEETING was held in Buffalo a few weeks ago to discuss methods for improving the crop reporting service of the U. S. Department of Agriculture. As is usually the case with such gatherings the conference was made up of about ten dealers and government officials to one farmer.

Most everyone will agree that the potato estimates of the Department can be improved. And we say this without prejudice. Despite all the alibis that have been put out by the Department to prove the contrary we maintain and so does nearly every spud grower that the government was way off on its estimate last year. A few more errors of that kind and the Department's estimates will be about as worthless as a pair of earmuffs in Honolulu.

We are not unmindful nor ungrateful for the great strides the government has taken along crop reporting lines. Considering the magnitude of the job its estimates on grain are remarkably correct. But it has failed to attain so high a degree of accuracy in its reports on the perishable crops. It should by all means improve its methods of collecting potato statistics or discontinue the service altogether and leave the gathering of crop information to farm organizations where we believe it properly belongs and will some day rest.

NOTICE TO SUBSCRIBERS

Rather than issue incomplete summer numbers, omitting important departments, as most farm papers have been forced to, the past few months, The Business Farmer has preferred to issue a complete number every other Saturday. Each issue thus "missed" has been credited to the expiration date of every subscription, so that in the end, no subscriber will miss a single copy for which he has paid.

What State Dept. of Agriculture Is Doing

By JOHN A. DOELLE, Commissioner

IT has been my thought for some time that the public should be better advised upon the powers and duties of their State Department of Agriculture so that they might avail themselves of the services that the Department is equipped to render.

The Michigan Agricultural College, Agricultural Publications, The State Grange, The Gleaners, The Farm Bureau and the Farmers' Clubs have all rendered valuable services and have been great mediums through which information to the individual has been disseminated. The great work done by the Michigan Agricultural College never has been, and I doubt if it ever will be, fully appreciated due to the fact that but few of the citizens of Michigan realize the splendid service which she has rendered and is rendering to the State and Nation.

The State Department of Agriculture, being somewhat new in its organization, I feel that as a matter of good citizenship it is my duty to inform the public as best I can of the service that this Department can render so that those who contribute to its support can avail themselves of those services.

FOREWORD

THE 1921 legislature created the State Department of Agriculture for the purpose of centralizing all state activities along agricultural lines under a single head. Although this department is supposed to serve the farmers and does, few know the nature of its duties. The following article is one of several to be written by Mr. Doelle, the commissioner, describing the work of the Department, to be published in the M. B. F., and other papers of general circulation. Questions and criticisms concerning the work of the department are invited.—Editor.

IT is well understood that where departments of government are properly organized, they will be clothed with authority and embrace all the activities necessary in order properly to function.

It is also a fact that in order to have an efficient and economical government, there should be no duplication of work or conflict of authority in its different departments.

These facts were recognized by the Legislature of Michigan during its last session. It enacted a law creating the Department of Agriculture, and transferred to this Department matters pertaining to animal industry, the state food and drug commissioner's department, work heretofore performed by the Veterinarian Board and Commissioner of Immigration. It also transferred and placed in this Department the inspection and regulation of orchards, vineyards and nurseries, inspection and regulation of apiaries, testing of agricultural seeds, analyses of commercial stock foods, investigation and improvement of market conditions, and matters pertaining to State and county agricultural fairs.

It is the work of the Commissioner of Agriculture to co-ordinate and correlate the work of all these Bureaus and agencies so as best to serve the agricultural interests of this commonwealth.

In order properly to determine what line of action to pursue, the first thing to do is to ascertain the facts. This is done by gathering statistics in regard to all matters ertaining to Agriculture. Statistics should be obtained by those who understand their value and who know best how to compile them when they are gathered.

Reliable information obtained in regard to conditions affecting one branch of Agriculture often has a bearing upon matters pertaining to other branches of agriculture. By having the different Bureaus in one department, all of the information obtained by them is available for all.

Perhaps one of the most far-reaching provisions in the Act creating this department is the one which provides as follows:

"It shall be the duty of the State Department of Agriculture to foster and promote in every possible way the agricultural interests of the State of Michigan; to cooperate with agricultural agencies in the different counties of the State and of the Federal government; to foster direct trading between the producer and the consumer; and to prevent and assist in preventing by all available means authorized by law, the sale of unimproved lands and lands not suitable for agricultural development within the State by fraud, misrepresentation or deceit and the publication of false or misleading statements or advertising matters designed to effect such sales."

By the authority vested in the Commissioner of Agriculture by the first part of this section, he is able to foster and promote all movements that tend to better agricultural conditions in the State. He is always in a position to extend a helping hand. In short, he is able to "keep the home fires burning" where all those interested in bettering agricultural conditions can gather around and be sure of assistance, encouragement and a welcome. By the authority vested in him by the last part, he is able to put the State stamp of disapproval upon misdirected or injurious activities, and evoke the strong arm of the law where fraud or deceit is practiced.

A majority of the activities of this department are of the preventative nature rather than the curative. I think I could safely say that 80 per cent of the activities of this department are along preventative lines and that 90 per cent of the benefits that accrue to the State of Michigan by virtues of the operation of these Bureaus come from the work done along those lines.

The Legislature from time to time has proceeded under their police power to enact laws for the protection and safeguarding of the interest of the individual. Judge Cooley says, the police power of a State "embraces its whole system of internal regulation, by which the State seeks not only to preserve the public order and to prevent offense against the State, but also to establish for the intercourse of citizens with citizens those rules of good manners and good neighborhood which are calculated to prevent a conflict of rights and to insure to each the uninterupted enjoyment of his own so far as is reasonably consistent with a like enjoyment of rights by others. * * * It comprises that portion of the sovereignty of the State which was not surrendered by the terms of the federal constitution to the central government. * * * Finally, it has been said that by means of this power the Legisuature exercises a supervision over matters which involve the common weal, and enforces the observance, by each individual member of society, of the duties which he owes to others and to the community at large."

It is under and by virtue of legislative authority, under the police power of the State, that a great deal of the work of this department is being carrried on. It may be truly said that we are honestly endeavoring "to insure to each, the uninterrupted enjoyment of the rights of others." At the same time, we seek to "enforce the observance by each

(Continued on page 23)

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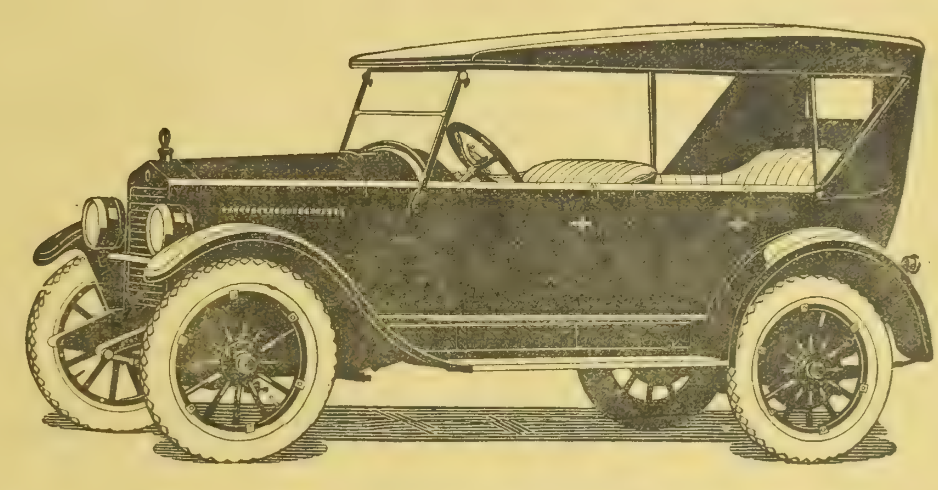

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You have no appreciation of what this price buys until you examine and drive it.

To all that made Essex such a wonderful value in the past are added refinements and comforts never before offered in a car of its price class. Roomier seating, wider doors and greater riding ease, contribute something new in personal comfort.

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Back of the new Essex is all we learned in building 70,000 earlier Essex cars. Finer precision standards have resulted and Essex smoothness is even more pronounced. You will instantly note its greater beauty. Its care and attention are easier, cleaner, more convenient.

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Old owners tell you of a car so enduringly designed and built that its performance improves for thousands of miles.

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Freight and Tax Extra

ESSEX MOTORS, Detroit, Michigan

WOMEN ARE DRY

YOU will be interested to read below a few opinions expressed by prominent women, of the country, on the wet and dry issue. I would be glad to hear from readers of this page on the subject. We need not become excited or angry, in fact, it is the cool head that convinces. We have a right to differ from one another. That is what makes human nature so interesting. If you want my opinion, here it is: I believe we must conform to any plan that brings "The Greatest Good to the Greatest Number."

"Women are dry, and don't you forget," proclaimed Mrs. Harriet Taylor Upton, head of the Republican women. "They will stand united a solid bulwark against attacks on prohibition and will defend the eighteenth amendment with every available resource."

"The mothers of the nation are no more likely to wipe out the eighteenth amendment than they are to demand the cultivation of typhoid germs in the water which science has purified."

Thus Mrs. Maud Wood Parke, president of the National League of Women voters voiced the nation-wide opposition to any relaxation in the prohibition regulations by the women of the country.

Both Republican and Democratic leaders of women stand united on the one issue of prohibition and are constantly urging the women to work for its upholding within their own parties.

"The women vote is becoming more powerful every year. It is already strong enough to be a powerful obstacle to the ambitions of the wet forces. Women have the welfare of the family too much at heart not to realize the speciousness of the arguments advanced by the wets."—Mrs. Newell Blair, Democratic committee women in Washington.

In Missouri, Texas, Ohio and in Utah, the liquor interests are standing with one foot in the grave and the other on a banana peel.

"In England," Mrs. Parke explains, "there is a general feeling that the United States adopted prohibition not out of sentiment nor because of altruistic motives, but out of a shrewd, cold blooded Yankee conviction that a prohibition country will outstrip drinking nations in health, wealth, efficiency and power. My personal opinion is that this is wholly true and that continuance of prohibition is assured because it lays a sound economic foundation on which permanent national well being can be built."

ON FREE SUGAR

(Not a discussion of the tariff)

IN a very interesting article written by Dr. K. R. Gibson, who is director of the Bureau of Dentistry and Oral Hygiene, a new light is thrown upon the use of free sugar in the diet of children. He says, that

"The feeding of sugar is warned against whether cooked in foods or used upon cereals. This will no doubt occasion comment, as many people believe that free sugar is a food and that more or less is necessary to satisfy bodily requirements. Nature has, however, furnished all the sugar that the body needs in foods such as milk, fruits and some of the vegetables, beside providing that foods such as bread, potatoes and rice be changed into sugar in the digestive process.

Aside from free sugar, the frequent eating of fresh white bread, soft crackers and light foods should be avoided. These require very little effort in their mastication and tend to form in sticky particles about the teeth providing the most ideal conditions for the beginning of dental decay. In their place should be substituted the hard whole wheat breads, toast, zwieback and foods, which not only in themselves have a cleansing and massaging effect upon the teeth and gums, but which stimulate the normal development of the jaws and face, at the same time stimulating an active flow of saliva to begin digestion where nature intended—in the mouth.

Calcium salt is the very foundation of tooth structure; whether the enamel of the tooth is to be hard and dense or relatively soft and porous is regulated by the amount of calcium available. During the time of the development of the temporary and permanent teeth special emphasis should be placed upon foods that are high in their calcium content. Some of the more important of these foods are milk, buttermilk, cheese, spinach, string beans, kidney beans, celery, turnips, carrots, cabbage and cauliflower.

That the contagious skin diseases contracted during childhood bear a direct influence upon the enamel of the teeth is not generally known. Such is the case however. The enamel of the teeth and skin are formed from similar cells, any eruption of the skin is likely to affect the formation of the enamel. From the standpoint of sound teeth, if for no other reason, parents should take every measure to prevent the child from contracting measles, chicken pox, scarlet fever, etc., during the enamel forming period of the two sets of teeth—that is from birth to 17 years of age.

The Farm Home
A Department for the Women

Edited by MRS. GRACE NELLIS JENN

Dear Readers—I have an announcement to make today that I know will interest you very much. It is this, we have been able to secure the services of Dr. T. N. Rogers, of this city, who has a hospital here and who is a man of high standing in his profession to answer, without charge to you, all inquiries in regard to any ailment which you or any member of your family may have.

Your letters will receive most considerate attention and I believe you will derive much benefit from the doctor's advice. From letters which I receive constantly I know that this service will fill a long-felt want.

CORRESPONDENTS' COLUMN

Mrs. R. D.—One teaspoonful of Chlorozene powder to a pint of luke warm water makes a strong solution. If the part to be bathed is inflamed or very sensitive use one teaspoonful to one quart of water.

A. B. C.—In canning elderberries use just an ordinary amount of sugar, in other words, sweeten to taste. I have kept elderberries for two years and have simply been careful to have jars, rubbers and tops perfectly clean and to seal them while hot.

Subscriber—I am sorry that we cannot publish "The Raggedy Man" by Riley, it would take up more of our page than we can spare.

A. V. H.—Do not worry at all about the condition you describe, nor take any medicine. Nature will probably take care of the matter in due time, if not, then consult a reputable physician. More harm than good will result from tampering with it yourself.

Lemon Pie Recipe

1 cup of granulated sugar, juice and rind of 1 large lemon, 3 eggs, 2 rounding tablespoons flour, 2-3 cups of water. Beat eggs and sugar and flour together; grate yellow rind of lemon, squeeze juice and pulp, throw away white rind. Mix all together and bake in a nice crust—bake slowly.—Subscriber.

Gertrude's Cream Puffs

1 cup boiling water, 1-2 cup butter, 1 cup flour, 4 eggs. Boil water, add the butter, when it is melted stir in unbeaten eggs. Drop on buttered tins and when done fill with whipped cream or custard.—Mrs. R. H., Kent County.

Experience With Seedling Geranums

I have been a reader of M. B. F. for several years. I have had lots of help from the Farm Home department and am glad to add my mite, as I can send the words to the song "Little Dale." This was an old favorite with my mother and I have always loved it.

Will someone write about what experience they have had with seedling geraniums? I raised four this year, two of which are white and double and one is a beautiful pink. Seed was from a white one.—Subscriber.

Jelly Roll Cake

Not long ago I saw a request in the M. B. F. for a jelly roll cake. I am enclosing my recipe for same, also a recipe for orange marmalade, and too a delicious way to cook chicken.

3 eggs, 1 cupful sugar, 2-3 cupful milk, 1 1-2 cupfuls flour, 2 teaspoonfuls baking powder, 1-4 teaspoonful salt, 1-2 teaspoonful vanilla.

This batter should be quite thin. Bake in a dripping pan in a moderate oven. When done remove from pan onto a dampened towel, spread with jelly and roll carefully by picking up the end of the towel and rolling the cake small at first. After the cake is rolled leave the towel over it a few minutes so it will steam together and stay in place.

Orange Marmalade

Three large thin skin oranges and one lemon sliced crosswise through rind, the juice of another lemon and eleven glasses of water. Let this stand twenty-four hours then boil one hour. Let it stand again twenty-four hours then add four pounds of sugar and boil one and one-fourth hours. Put this in glasses and wax on top the same as jelly. This makes a nice spread and will keep the same as jelly.

A Delicious Way to Cook Chicken

Melt some lard and butter in a pan. Wrap the pieces of chicken in flour, place in the pan and salt and pepper it. Pour over this some water and place in the oven. Bake from two to two and a half hours, browning on one side and then on the other. Remove the chicken and make gravy in the same pan.—Mrs. H. D. M.

A Few Helps

This page I have enjoyed for over two years now and though many times I could have helped some one I always left it to others. When one is so busy and happy they sometimes grow too self centered so if any of the following recipes can be of use to the inquirers they are most welcome.

Has L. M. P. S. tried butter-scotch pie? 1 cup brown sugar, 3 tablespoons water, 3 tablespoons flour, yolks of 2 eggs, 1 1-2 cups sweet milk, vanilla. Fill baked crust.

I never bought beet relish but this is good: 1 quart of cabbage chopped, 2 teacups of sugar, 1 tablespoon salt, 1 teaspoon pepper, 1-4 teaspoon red pepper, or 2 or 3 green peppers, 1 teacup horseradish 1 quart cooked chopped beets, 1 quart vinegar.

And to can pumpkin I slice and peel pumpkins, cut into cubes, pack sterilized cans tight then fill with hot water and process in the boiler 2 hours. Simply pour off water when you use it. I dry it off on the stove when I mash it.

The following is a recipe for peanut butter cookies taken from Rural New Yorker. Perhaps B. V. S. would like to try it:

One-fourth cup peanut butter blended with 1-2 cup melted shortening, 1-4 cup sour milk, 1 cup syrup, 1 small teaspoon soda, about 3 cups flour. Roll thin.

Our recipe for buns is: Save a cup of dough when making bread. About four o'clock add 1-2 cup of sugar, lard size of an egg, 1 cup of warm water and mix into a loaf. Mold into biscuits with plenty of space between, about bedtime. Bake in the morning in a quick oven. Makes about twenty.

Perhaps this is recipes enough for one letter and when I want some help I know where to go for this and Rural New Yorker family are two friendly circles.

Will close, hoping I have helped someone. Yours for a better page.—Mrs. Fred F. Handley.

Magazines to Exchange

I have magazines I would like to exchange for others; have the American, Woman's Home Companion, Youth's Companion, Woman's World. I would especially like back numbers Ladies' Home Journal. I have Ladies' Home Journal up to Dec., 1920. Please write before sending. Hoping this will help some other out for winter's reading as well as myself.—Mrs. S. J. Sumner, Oak Grove, Mich.

Sweet Violet

I am writing this especially to you. To thank you for making our Home Department so interesting. I enjoy it all very much. But most of all, your talk at the head of the page. You always say something good. That makes me feel glad all day.

In compliance with your request I am sending you a little verse of my own composing:

Oh sweet violet perfume,
My allegiance I pledge to you.
Flowers gathered from the mossy dell,
Sparkling with the morning dew.
Oh give me the scent of the violet,
It's the perfume I love the best.
It's a joy to me forever.
My favorite of all the rest.

—Violet Fields, Elm Dale Farm

BETTER HEALTH

Questions answered by

DR. T. N. ROGERS

HIVES

What can one use for hives? They are quite troublesome to my little girl. Can you give me a simple home remedy?—A. R. B.

Always keep in the house Epsom salts, Carbolic acid and tincture of iodine. Apply iodine to cuts, sores and swellings. It also makes a good mouth wash. 10 drops in a glass of water. A good application for hives, bites of insects and flies is one teaspoonful carbolic acid, four tablespoons Epsom salts in one quart of hot water. Use freely.

It is a well-known fact that the right and left sides of our bodies are never exactly the same.

AIDS TO GOOD DRESSING

For Simplicity, Service and Style

Patterns 12c, New Fashion Books 15c: Address orders to Mrs. Jenney, Pattern Dept., M. B. F.

Here we have a group of pretty school dresses for fall and winter wear.

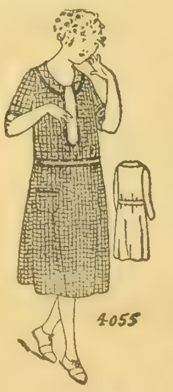
4055 would be a splendid style for heavy wash fabric or warm woolen goods for cold weather use.

4026. Here is a more dressy model nice for party wear or church affairs.

3966. This style is servicable for using up remnants and for making over old dresses.

4057 is a good general model that could be developed in almost any material. These styles are exceptionally good and absolutely up-to-date. Also they are easy to construct. A survey of the shops tells us that lines are to be straight, simple and rather narrow.

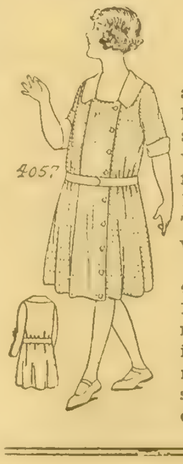
The commercial pattern is another thing that has changed the life and the appearance of the farm woman. You can go into an audience today that is made up of both town and country women and you cannot tell them apart, while twenty years ago you could have very easily told.



A Popular Style

4055. Charming in its simplicity is this one piece model. As here developed gingham and linene are combined with bands of a contrasting color. The sleeve may be finished in wrist or elbow length.

The pattern is cut in 3 sizes: 12, 14 and 16 years. A 14 year size requires 4 yards of 32 inch material. The width of the skirt at the foot is 2 1-4 yards.



A Good School Dress

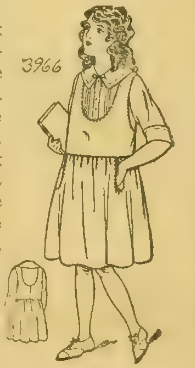
4057. Dotted percale and white linene are here combined. This style is nice for all wash fabrics and also for serge, tricotine, homespun, or taffeta. The sleeve may be in wrist or elbow length.

The pattern is cut in 4 sizes: 8, 10, 12 and 14 years. A 10 year size requires 4 yards of 32 inch material. The dress may be finished in coat style as the closing indicates.

A Good School Dress

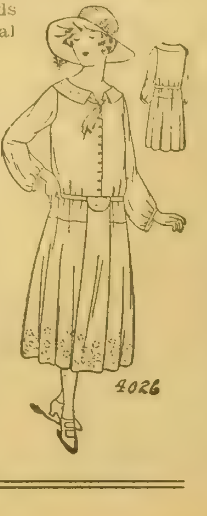
3966. Here is a frock with graceful and popular lines. The guimpe is finished separately. A new feature is the style of the pocket. Blue linen with rick rack braid or taffeta with stitching could be used for this dress. The guimpe may be of crepe, batiste or voile.

This pattern is cut in 4 sizes: 6, 8, 10 and 12 years. A 10 year size requires 2 years for the guimpe and 2 3-4 yards for the dress of material 27 inches wide.

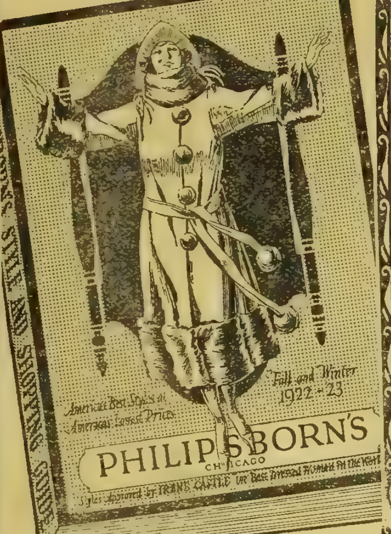


A Pretty, Simple Frock

The pattern is cut in 3 sizes: 16, 18 and 20 years. An 18 year size will require 5 1-2 yards of 32 inch material. The width of the skirt at the foot is 2 5-8 yards.



Save with Safety!


STYLE AND SHOPPING GUIDE
Fall and Winter 1922-23
America's Best Styles at America's Lowest Prices
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The Children's Hour

DEAR Nieces and Nephews: I had a pleasant vacation but am glad to be back at work. Many times I am so busy and get so tired that I wish I was wealthy and did not have to work but when I take off two or three days I am always ready to return and thankful to know that I am one of the little cogs in the great machinery of the nation, instead of being as sand in its gears. The United States is like a giant beehive and I am glad to be one of the workers instead of a drone. The man without a task to perform can not be as happy as the worker, nor will the future look as bright. I am sure my nieces and nephews are going to be workers instead of drones.

Have you a pet? Will you write and tell us about it, or if you have several write about them all? I have 2 or 3 such letters written by my nieces and nephews, and I am publishing one in this issue. Read this over and see if you can then write a story about your pet or pets.—UNCLE NED.

OUR BOYS AND GIRLS

Dear Uncle Ned—I wish to thank you very much for the needle book you sent me. I am sure it will be a very handy thing to have.—Laura Lake, R. 4, Homer, Mich.

Dear Uncle Ned—Please may I join your merry circle? My father takes the M. B. F. and likes it very well. I enjoy reading it, especially the Children's Hour. I live on a two hundred acre farm of which my father works eighty acres, the rest is rented. I go two miles to school, I will be in the eighth grade this fall. We had about thirty-six scholars on the roll last year. We have a Dodge touring car which my sister and I both drive. I am taking music lesssons this summer. I am nearly through my first book. I have had quite a few instrumental pieces. The one which I have now is "Dance of the Hours." Last fall on my vacation my father drove to West Branch which is two hundred and ten miles from our home. We enjoyed the trip very much. On the way we saw about five acres of sunflowers which looked very curious, farther on we saw a field of corn which the army worms or something had taken all the leaves off and left the bare stalks standing. We had good roads all the way except about 6 miles. We stopped one-half hour in Bay City for our dinner. We left our home at 7:10 a. m. and got to my aunt's south and west of West Branch eight miles, at supper time. We had a lovely time while there. We went fishing on a small lake called Tea Lake. The country is very hilly. After eight days we returned home and found everybody all O. K. This year we are planning on going to Detroit for the fair and from there to Pontiac. I was to Pontiac three weeks ago Sunday. We took my grandmother to my uncle's cottage 10 miles west of Pontiac at Union Lake.

I wish some of the older boys and girls would write to me. I will close, hoping to hear from some of the cousins.—Miss Mattie Erb, Yale, Mich., R. 4.

Our Cat

I am going to write about a handsome tiger cat of which we were the proud owners for about six years.

As a kitten he was the most playful little fellow imaginable. He delighted in hiding and suddenly springing out at the feet of anyone walking past his place of concealment. When we boys were barefooted he made us jump.

He was an exceedingly well behaved cat, never meowing for any reason. He would sit patiently by the door in mute appeal to be let out. In the summer if the screen was not hooked, he would let himself out simply by pushing it open with his head. He would also let himself in by placing his front paws high up on the screen and pulling it outward when he would quickly drop to his feet and dodge in, which was quite a feat on account of the stiff spring.

He never tried to steal any food even when it was left on the table and he was unintentionally shut in the house. At meal time he would sit by my mother's side and watch until impatient for a morsel to be dropped. Then he would place his front paws upon the side of her lap and again wait. If she still took no notice he would reach up and gently touch her arm with one paw.

Sometimes my father, for mischief, would reach across her lap and snap at the cat's nose with his thumb and finger. Teddy resented this and would lay back his ears and cuff at those fingers but always with claws concealed, altho looking very fierce.

When we boys were outside and my mother would call to us Teddy would go to the window and put his paws upon the sill and watch for us.

When we wanted to make a raid on the mice in the granary we took Teddy with us, routed out the rodents and he would do the catching. I have seen him with two in his mouth and one under each front paw.

He often hid some food which he was not ready to eat, covering it up as a dog would. One day a dumpy hen was killed. He ate part of it and dragged the rest across the barn yard to a fence where he covered it with straw. He afterwards uncovered it, ate some more and again carefully covered it.

He was a very affectionate and intelligent pet, a great fighter and a skillful mouser and we were all very sorry when he came up missing one winter day.—Cecil A. Roberts, Breckenridge, Mich., Age 15.

HUDSON'S

41st Anniversary Sale

Begins Tuesday, Sept. 5th

No matter what you need for this fall and winter make preparations now to attend this sale, because in every instance you are assured of Hudson Quality at remarkably low prices.

Hudson's 41st Anniversary Sale, coming at the time of the State Fair, offers double inducement to those who will come to Detroit to see this wonderful agricultural exhibit.

A great store wide event and one of the most important Hudson Sales of the entire year.

Don't miss it!

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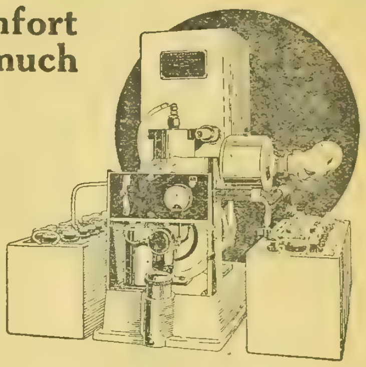

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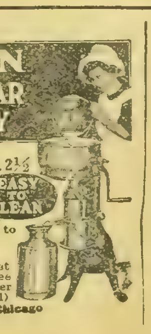

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Light, tender biscuits, raised to just the proper height, browned over until they actually invite, are but ordinary products of this superfine flour. The color and the flavor are beyond comparison and the taste—delicious from the first bite to the last.

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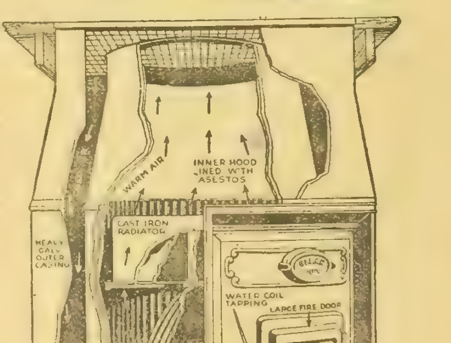

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FARM MECHANICS

HARD FACTS ABOUT CONCRETE

DO you know—That no other single factor has so great an effect upon the strength of concrete as has the amount of water used?

Thousands of tests conducted at the Structural Materials Research Laboratory, Lewis Institute, Chicago, prove that a direct relation exists between the quantity of water used in mixing concrete and the strength of the resulting concrete. These tests mean money to the builder because strength is what he is after.

A variation of ten per cent above or below the correct amount of mixing water may reduce the strength of the concrete by thirty per cent or more. The very wet, sloppy mixtures that are sometimes used in building construction result in a loss in many instances of from fifty to sixty per cent of the possible strength of the building.

Within the range of plastic mixtures, the strength falls off rapidly with the addition of a small amount of superfluous water; in a one-bag batch the addition of even one pint of water more than is necessary to give a workable mix results in the same loss of strength as if from two or three pounds of cement were left out of the mixture. That's money out of the pocket for the builder.

The exact amount of water required for any particular mixture of aggregates to obtain the greatest strength in the concrete can be determined, only by actual test. Workability of the mixture is important and must not be sacrificed. As a basis for trial with well-graded aggregates up to 1 1-2 inches in size, and a 1:2:4 mix, use 6 to 6 1-2 gallons of water per sack of cement. For a 1:2:3 mix begin with 5 3-4 to 6 gallons, and for a 1:1 1-2:3 mix, 5 1-2 to 6 gallons. Remember: Use the least amount of water that will give a workable mixture.

THE EXPERIENCE POOL

Bring your everyday problems in and get the experience of other farmers. Questions addressed to this department are published here and answered by you, our readers, who are graduates of the School of Hard Knocks and who have their diplomas from the College of Experience. If you don't want our editor's advice or an expert's advice, but just plain, everyday business farmers' advice, send in your question here. We will publish one each week. If you can answer the other fellow's question, please do so, he may answer one of yours some day! Address Experience Pool, care The Business Farmer, Mt. Clemens, Mich.

HOW I TEMPER A STONE HAMMER

Hello, there, Mr. A. W. R. I see your inquiry about tempering stone hammers in the Business Farmer. Well, here goes. Of course, you dress up the hammer first; get it just as you want it and be sure and not over heat it. Make a good clean fire and heat your hammer slowly and evenly clear through to a good red. Take a tin pail and punch a 3-8 inch hole in bottom, fill with clear cold water. Take your hammer and hold so the stream of water will hit exactly in center of face; hold until cold. Now polish the hardened surface, and heat slowly until it will scorch or turn brown a white piece of paper. Then souse it in cold water until cold. And say you might put in a double handful of salt in the water you use to harden it in. Just try it—F. A. W. Dowagica, Mich.

ELECTIONS STRENGTHEN HANDS OF FARM BLOC

Continued from page 4)

solidity of the farm bloc has become thoroughly recognized the leaders find themselves amazed at the number of unexpected friends the bloc seems to have. All sorts of interests have suddenly discovered very close bonds of friendship and interrelationship with agriculture. Nothing is too good for the farmers' representatives nowadays

The President has them in to lunch, the United States chamber of commerce invites them to speak, the railway presidents ask the privilege of calling a conference to talk matters over with them, the fertilizer manufacturers send emissaries to assure them of their willingness to co-operate, and a hundred and one special groups ask their assistance in furthering some legislation or administrative measure. There is no denying it the farmer is at the top of the heap at Washington these days.

And the farm leaders welcome them all. They have been waiting for this chance for years. They feel that there are a lot of things they could talk over to advantage. And now that these other interests lend an attentive ear, the farmers are able to make them see their side of the case a little clearer. These other interests have had to admit that maybe the grain exchanges and the stockyards did need regulating, and maybe our credit and banking system wasn't suited to the needs of agriculture and possibly there was an inequality in the taxation system and that after all there was no good reason why the anti-trust law should be allowed to stand in the way of cooperative marketing.

And when they have admitted these things one after another, and realize that these are the very things the farmer has been asking to have remedied for years, they begin to see the why and the wherefore of the agricultural bloc and the organization of farmers that stands behind it. They have a new respect for agriculture and for its leaders who have thus arisen and shaken off the shackles that have heretofore held them back.

And all this is going to have another effect too — a far-reaching effect. It is going to cause the keener-visioned business man to see that he must trim his sails and steer his course a little differently from that of the past if he expects to retain the farmers' confidence and business. He must cut out a lot of the inefficiencies of distribution that have grown up in the easy going years of past decades and get his goods to the farmer at less cost. Already a few of the most progressive of the large concerns are putting more direct methods into operation. Some of these inefficiencies can be corrected only by close cooperation on the part of the farmer himself. So there is every reason why the farmer and the business man should get closer together and talk things over to their mutual benefit. But in the future the business man who supplies the farmers' wants must think of himself more nearly as a servant than as an autocratic master, as he has too often been the case in the past.

GUERNSEY BREEDERS TO HOLD SALE

The Michigan Guernsey Breeders' Ass'n will hold a sale of purebred Guernsey heifers and bulls from 4 to 6 months old on September 27 at the Saginaw County Fair Grounds, Saginaw, Mich. Seventy-five head of the finest Guernseys in the state, all tuberculin tested, will go under the hammer at this annual event. The grounds open at 9 a. m. the day of the sale and the first animal will be brought into the ring and bids asked for at 10:30 sharp. Luncheon will be served on the grounds. Further information can be secured by writing Mr. George J. Hicks, chairman sales committee, Saginaw, W. S., Mich.

Wake Up

Nobody ever has any desire to have his nightmares come true.—Louisville Courier-Journal.

NEW LAMP BURNS 94% AIR

Beats Electric or Gas

A new oil lamp that gives an amazingly brilliant, soft, white light, even better than gas or electricity, has been tested by the U. S. Government and 35 leading universities and found to be superior to 10 ordinary oil lamps. It burns without odor, smoke or noise—no pumping up, is simple, clean, safe. Burns 94 per cent air and 6 per cent common kerosene (coal-oil).

The inventor, A. R. Johnson, 609 W. Lake St., Chicago, is offering to send a lamp on 10 days' FREE trial, or even to give one FREE to the first user in each locality who will help him introduce it. Write him today for full particulars. Also ask him to explain how you can get the agency, and without experience or money make $250 to $500 per month.

THE HUNTED WOMAN

(Continued from page 3)

I wouln't be a rock-hog for a million!"

"I'd rather be a rock-hog than Joe—drivin' down this hill a dozen times a day," replied the other.

The girl had paused again, and the two men stared at her as they were about to pass. The explosion of Joe's dynamite could not have startled them more than the beauty of the face that was turned to them in a quietly appealing inquiry.

"I am looking for a place called —Bill's Shack," she said, speaking the Little Sister's words hesitatingly. "Can you direct me to it, please?"

The younger of the two men looked at his companion without speaking. The other, old enough to regard feminine beauty as a trap and an illusion, turned aside to empty his mouth of a quid of tobacco, bent over, and pointed under the trees.

"Can't miss it—third tent-house on your right, with canvass striped like a barber-pole. That phonnygraff you hear is at Bill's."

"Thank you."

She went on.

Behind her, the two men stood where she had left them. They did not move. The younger man seemed scarcely to breathe.

"Bill's place!" he gasped then. "I've a notion to tell her. I can't believe————"

"Shucks!" interjected the other.

"But I don't. She isn't that sort. She looked like a Madonna—with the heart clean gone. I never saw anything so white an' so beautiful. You call me a fool if you want to—I'm goin' on to Bill's!"

He strode ahead, chivalry in his young and palpitating heart. Quickly the older man was at his side, clutching his arm.

"Come along, you cotton-head!" he cried. "You ain't old enough or big enough in this camp to mix in with Bill. Besides,' he lied, seeing the wavering light in the youth's eyes, "I know her. She's going to the right place."

At Bill's place men were holding their breath and staring. They were not accustomed to women. But such a one as this vision that walked calmly and undisturbed in among them they had never seen. There were half a dozen lounging there, smoking and listening to the phonograph, which some one now stopped that they might hear every word that was spoken. The girl's head was high. She was beginning to understand that it would have been less embarrassing to have gone hungry and dusty. But she had come this far, and she was determined to get what she wanted—if it was to be had. The color shone a little more vividly through the pure whiteness of her skin as she faced Bill, leaning over his little counter. In him she recognized the Brute. It was blazoned in his face, in the hungry, seeking look of his eyes—in the heavy pouches and thick crinkles of his neck and cheeks. For once Bill Quade himself was at a loss.

"I understand that you have rooms for rent," she said unemotionally. "May I hire one until the train leaves for Tete Jaune Cache?"

The listeners behind her stiffened and leaned forward. One of them grinned at Quade. This gave him the confidence he needed to offset the fearless questioning in the blue eyes. None of them noticed a newcomer in the door. Quade stepped from behind his shelter and faced her.

"This way," he said, and turned to the drawn curtains beyond them.

She followed. As the curtains closed after them a chuckling laugh broke the silence of the on-looking group. The newcomer in the doorway emptied the bowl of his pipe, and thrust the pipe into the breast-pocket of his flannel shirt. He was bareheaded. His hair was blond, shot a little with gray. He was perhaps thirty-eight, no taller than the girl herself, slim-waisted, with trim, athletic shoulders. His eyes, as they rested on the still-fluttering curtains, were a cold and steady gray. His face was thin and bronzed, his nose a trifle prominent. He was a man far from handsome, and yet there was something of fascination and strength about him. He did not be-

(Continued on page 23)

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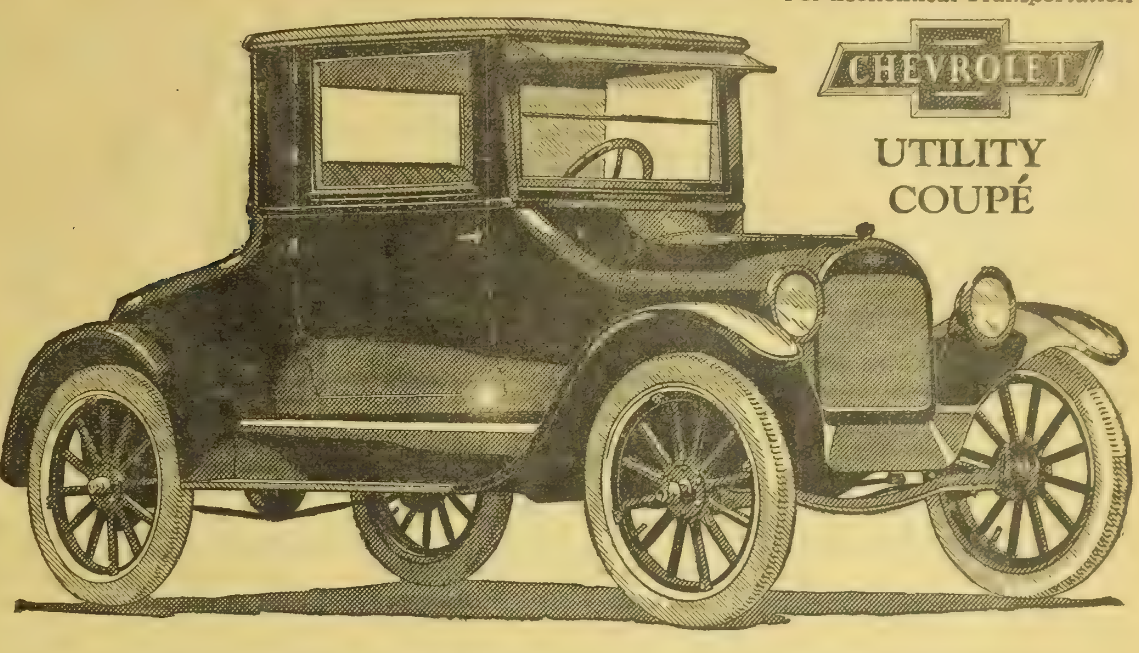

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FOR SALE—120 ACRE FARM, 2 1-2 miles north of Bellaire, Antrim county, 1-2 mile from trunk line highway. 60 acres under cultivation, balance second growth hardwood, good pasture. Seven acres orchard. Large house and barn, both in good condition. Silo, 800 rods good fences Price for quick sale, $3,500 cash. D. J. BEDELL, Route No. 2, Bellaire, Mich.

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BUY A FARM NEAR ANN ARBOR AND educate the boys in the University. Write for our farm bargains. JEROME PROBST, Ann Arbor, Mich.

FOR SALE—NOT ABLE TO FARM, WILL sell my fine farm, 3 miles from Lansing. Good buildings, best of soil, 122 acres. S. W. HEMPY, Lansing, Mich, R. 7.

80 ACRES—40 WITH BUILDINGS, TWO twenties joining, 70 imp. Sell all or part. Write for particulars. E. C. HAGERMAN, West Branch, Mich.

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CLAIM YOUR SALE DATE

To avoid conflicting dates we will without cost, list the date of any live stock sale in Michigan. If you are considering a sale advise us at once and we will claim the date for you. Address, Live Stock Editor, M. B. F., Mt. Clemens

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J. E. Mack, Ft. Atkinson, Wisconsin
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Everything guaranteed, write me your wants or come and see them.
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Choice of Herd of Registered
Holstein Cows
FOR SALE
Warner Dairy Co., Farmington, Mich.

SOLD AGAIN
Bull calf last advertised sold but have 2 more that are mostly white. They are nice straight fellows, sired by a son of King Ona. One is from a 17 lb. 2 yr. old dam and the other is from a 20 lb. Jr. 3 yr. old dam, she is by a son of Friend Hengerveld De Kol Butter Boy, one of the great bulls.
JAMES HOPSON JR., Owosso, Mich., R 2.

HOLSTEIN BULL BARGAINS
Sired by Segis Korndyke De Nijlander, a 32 lb. son of a twice Michigan ribbon winner ,her dam, 29 1-2 lbs. Dams are daughters of King Segis Pontiac, a 37 lb. son of King Segis. Records up to 30 lbs. Priced at $100 up. Federally tested. Write for list.
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FOR QUICK SALE WE ARE OFFERING your choice of nearly 50 purebred Holsteins. Nearly all cows and heifers. Bred well, yearly records, free from t. b. Priced right. Breeder since 1913. Write us your wants.
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Sire, Sir Maplecrest Pietertje Doris; Dam, Korndyke Emporia Netherland. Best breeding and marking. Will trade for bull of equal quality or sell reasonable.
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We have two splendid white yearling bulls by Imp. Newton Champion, also some young cows and heifers that we are offering for sale. Write for particulars to

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INHERITED SHORTHORN QUALITY
Our pedigrees show a judicious mixture of the best blood lines known to the breed. Write to
JOHN LESSITER'S SONS,
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Registered stock of all ages and both sex. Herd headed by the imported bull, Kelmscott Viscount 25th, 648,563. Prices reasonable.
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SHORTHORNS and POLAND CHINAS. We are now offering two ten-months-old bulls, one bred heifer, and two ten-months-old heifers.
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WE HAVE SOME FINE YOUNG ANGUS BULLS from International Grand Champion Stock at reasonable prices. E. H. KERR & CO., Addison, Mich.

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FOR SALE—FOUR YEAR OLD REGISTERED Brown Swiss cow, coming in soon; also yearling daughter of above cow. Priced for quick sale.
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WANT TO SELL
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DO IT

DAIRY and LIVESTOCK

COWS THAT FRESHEN IN FALL ARE BEST MILK PRODUCERS

THERE are varying opinions as to the best time to have cows freshen, but after a thorough study of the records of 10,870 cows in 64 testing associations the United States Department of Agriculture has found that cows dropping calves in the fall produce more milk and butterfat. In the 64 associations fall freshening ranked first 29 times in average milk production; winter freshening ranked first 18 times; summer freshening 10 times; and spring freshening 7 times. In butterfat production fall freshening was first 38 times, winter 13 times, summer 8 times, and spring 7 times. The tabulated results and detailed explanations have just been published in Department Bulletin 1071, Influence of season of Freshening on Production and Income from Dairy Cows, by J. C. McDowell.

On an average the cows that freshened in the fall, September, October, and November, produced 6,689 pounds of milk, while those that freshened in the winter, summer, and spring produced 6,439, 5,941, and 5,842 pounds, respectively. These fall cows produced on an average, 268 pounds of butterfat. Those that calved in winter, summer and spring made, in order, 258, 236, and 236 pounds. In spite of higher feed cost, the fall-freshened cows made more income over feed cost. The winter ones were second, spring third, and summer fourth.

On the basis of individual months, the largest income over feed cost was made by cows freshening in December, with October second, November third, and January fourth. The cows calving in October ranked first in both milk and butterfat production.

Although the evidence shows conclusively that fall or early winter freshening is desirable in most parts of the country, there are exceptions to the rule. The dairyman who has a steady market for milk at fair prices during all seasons of the year will usually find it to his advantage to keep the supply fairly uniform from month to month. The percentage of cows that should freshen each month in the year will vary to some extent in different localities and on different farms in the same locality At present in market milk districts there is usually a surplus of milk in the late spring and early summer, and more cows should be allowed to freshen in the fall.

The bulletin should prove to be a valuable guide for solving the freshening problem on any farm. It may be obtained free by addressing the Department of Agriculture, Washington, D. C.

WHOLE MILK AND EARLY MATURITY

A REVOLUTION in feeding methods that involves not only the all important economic problem of early maturity of market poultry and pigs, but even the question of reproduction and prolificacy is indicated in the results of a series of experiments just announced by Prof. T. J. Newbill of the National Dairy Council.

Prof. Newbill's work with pigs, chickens, puppies and rats follows closely the work he has been doing the past few years at Washington State College with the United States Department of Agriculture, and later with Johns Hopkins University in co-operation with Prof. McCollum in their finding of the "vitamins" and their place in nutrition of both animals and man. Not only can such diseases as beri-beri, scurvy, pellegra and opthalmia be done away with in the human race by an understanding of these vitamins and their place in such cheap and available foods as whole milk, fruits, greens and grasses, but the placing of the Sunday chicken dinner within reach of the average family is seen as an immediate and practical result that will quickly be assured by the introduction of whole milk into the cereal diet of chicks.

The results of these experiments begun by the National Dairy Council, in the suburbs of Chicago, last winter, is being shown at the Chicago Pageant of Progress where the growing pigs, chickens, puppies and rats are exhibited in cages to show the differences in growth of animals from the same litters fed under exactly similar conditions, side by side, with and without milk in their diets. Those getting milk are three to four times as big as those receiving milkless rations.

"With chicks," Prof. Newbill explains, "Chicago could have saved and grown to maturity 1,800,000 Sunday chicken dinners out of the 2,000,000 baby chicks bought this past season if they had been fed a small amount of whole milk with their cereal feed. As it was, not a million of these chicks were alive a month after bought. Commercial feed manufacturers have been watching our experiments, and are now beginning to balance up these standard cereal rations somewhat by added tankage and whole milk. This will mean a mature fried chicken fully three weeks earlier with a cheaper growth of said chicken, as these younger gains are put on cheaper."

Director Guy H. Hall of the National Institute of Progressive Farming, who is in close touch with the live stock situation and the feeding experiments carried on by Prof. Newbill, states that the development of earlier maturing pigs for market, especially in the dairy districts is assured. Canny herdsmen of both cattle and hogs have long known the value of whole milk for getting early and quick growth for their show herds, and the use of "nurse cows" in show herds to develop big calves has been a standard practice from time immemorial," he says, "while the feeding of whole milk is not practical in beef production past the weaning stage, it is certain that the findings of Prof. Newbill will stimulate the development of heavier milking strains of even the strictly beef breeds in order to get the earlier development of baby beef for the market.

"Runts in pig families will be eliminated and larger families of pigs developed, thus giving the consumer and producer added gains from these findings," explained Mr. Hall. "When it is understood that the average number of pigs raised per mother hog is less than 5, while many properly fed animals produce and raise 10 or 12, the great possibilities are seen for the balancing of the feed of both mother pig and the little fellows at weaning time. It is the all-corn diet that cuts down the size of litters and brings weak 'runts' into the hog family circle to cut the income per hog in half."

SILAGE SPOILS NEXT TO SILO WALL

We bought a second hand silo and when putting it together we painted all the grooves with tar to seal it and draw it up tight, but when I came to take the silage out there were 8 inches spoiled around the outside. The next year the sam thing occurred. Also the doors are not tight, all there is to hold them is a groove to set in and of course I have a lining for them to lean against. Can you tell me of some way to fasten and draw them up against the silo?—J. F., Traverse City, Mich.

The essential features for a silo to preserve ensilage are: That it be air tight, that the walls be smooth and perpendicular, and that it be strong enough to stand the spreading pressure.

The ensilage spoiling next to the silo wall would indicate that the wall is not air tight. Although you have not stated, I judge that the silo is a wooden one, and it is difficult to advise how to make it air tight without seeing it.

The doors might be made air tight by putting wooden bars across the outside of the door ways and keeping the doors tight to the frame by the use of bolts and thumbnuts. —F. E. Fogle, Assistant Professor of Farm Mechanics, M. A. C.

A New Yorker was spending a night at a "hotel" in a southern town, and told the colored porter that he wanted to be called early.

The porter replied: "Say, boss, I reckon yo' ain't familiar with these heah modern inventions. When yo' wants to be called in de mownin' all yo' has to do is jest to press de button at de head of yo' bed. Den we comes up and calls you."

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Write for these booklets.

Animal Industry Department

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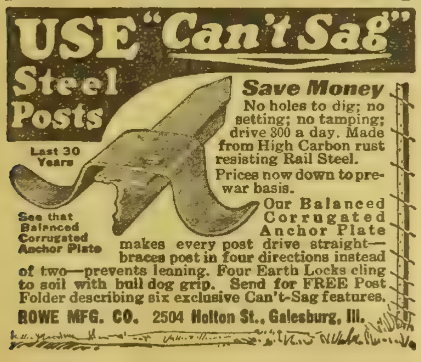
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This service is free to the live stock industry in Michigan to avoid conflicting sale dates.

LET "THE BUSINESS FARMER" CLAIM YOUR DATE!

VETERINARY DEPARTMENT

LEAKS MILK FROM REAR TEATS

I have a cow that leaks milk out of her hind teats, would like to know if there is any way to stop it.—O. F., Coleman, Mich.

If this case is not too bad I would advise you to let well enough alone, however, in extremly bad cases a red hot stillett is inserted in the teat, when the cow is dry. When the wound heals the opening is usually smaller. An old fashioned knitting needle makes a very satisfactory instrument for the operation.

A SERIOUS OPERATION

I have a nice Jersey heifer calf that will be two years old in February. This calf has two teats that are together as per enclosed sketch. Would like to know whether I could cut an incision between the teats and if so, what should I use and how should I go about it? There is no veterinarian in this locality, hence my reason for undertaking it myself. Any information will be appreciated.—E. J. L., Luzerne, Mich.

I would suggest that you do not attempt to perform this operation yourself. It is quite a serious operation and requires the skill of a good veterinarian to perform it successfully.—John P. Hutton, Assoc. Prof. of Surg. and Med., M. A. C.

RUNNING SORE ON JAW

I have a 5-year-old horse that has a running sore on the point of the lower jaw, about half way back. It has been running for 5 months and smells bad. Do you think it is caused from a tooth or broken bone? He can eat corn good.—W. B., Carleton, Mich.

This is due to a bad tooth or injury to periosteum covering the bone. In either case it would be necessary to have a veterinarian examine this horse.

HORSE SWEENEYED

Please advise me in regard to my horse, He was sweeneyed some time ago and I want to know if there is any cure for him. and also how and when to use it.—Subscriber, Alcona county, Mich.

The conditions can be cured in most cases. The treatment, however, would be rather difficult and unsafe for the owner to apply himself. I would suggest that you take your horse to a competent veterinarian for treatment and I believe he will bring the horse out all right for you in the course of two or three months. —John P. Hutton, Assoc. Prof. of Surg. and Med., M. A. C.

NOSE DISCHARGES

My mare is eleven year old, and her nose runs yellow pus. I took her to a veterinary here and he treated her for about six weeks. This didn't seem to do any good, and I used ten drops of carbolic acid to four ounces of water and sprayed her nose with this three times a day for about four weeks, which didn't do any good. Her nose bleeds some after every spraying, otherwise she is in good flesh and has a good appetite. This veterinary says her teeth are in good condition. Will you please tell me what to do for her nose?—B. E. D., Antrim County, Mich.

If the discharge from the nose has an offensive odor and runs from only one nostril, it is very symptomatic of a decayed tooth.

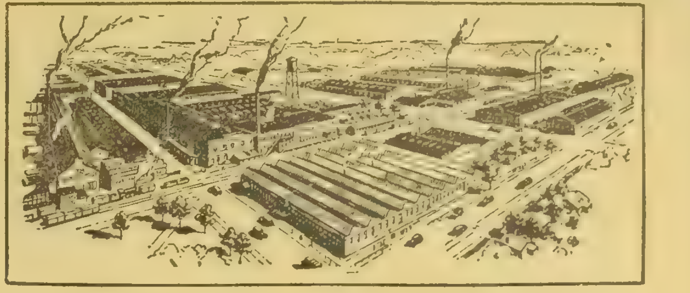
If, on the other hand, the discharge is from both nostrils, it is no doubt caused by catarrhal condition of the muccus membrane, and in this case you will find a very satisfactory treatment, and in fact a permanent cure can usually be accomplished by one dram each of dried sulphate of iron and powdered nux vomica twice daily. This treatment must be continued until results are obtained.

GOVERNMENT BULLETINS OF INTEREST IN SEPTEMBER

A small list of Farmers' Bulletins and Circulars of general interest during September is given below. Copies may be obtained free by addressing the Division of Publications, United States Department of Agriculture, Washington, D. C. Specify number and name and whether Farmers' Bulletin or Department Circular.

Farmers' Bulletin 474, Use of Paint on the Farm; 574, Poultry House Construction; 753, Handling, Grading, and Marketing Potatoes; 872, The Bollworm or Corn Earworm; 889. Backyard Poultry Keeping; 900, Homemade Fruit Butters; 903, Evaporation and Drying of Fruits; 991, Efficient Operation of Threshing Machines; 1046, The European Corn Borer; 1049, Bailing Hay; 1069, Tuberculosis in Live Stock; 1075, Unfermented Grape Juice—How to Make It; 1080, Preparation of Barreled Apples for Market; 1113, Poultry Houses; 1175, Better Seed Corn.

Department Circular 25, Points for Egg Buyers; 74 Points for Egg Breakers: How to Break Eggs for Freezing; 98, The Installation of Dust-Collecting Fans on Thrashing Machines for Prevention of Explosions and Fires and Grain Cleaning.



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You would not have to know all about high-grade materials and production methods to see where the Earl gets the endurance, economy, beauty and flexible power which make it the most comfortable, dependable and economical motor car sold at the moderate price of $1095.

From the huge hammers forging crank shafts and forty other units out of five kinds of white-hot steel—through acres of automatic machines—to the paint shop with its sixteen finishing operations—your factory tour would impress Earl quality and craftsmanship on you at every step.

Backing up the car's striking beauty, astonishing road performance and economy, this visible, built-in quality and durability are responsible for the enthusiasm of Earl owners and the overwhelming demand which has kept the factory working three shifts of men in many departments.

The Earl is on display in some near-by city. If you can't come to Jackson, go in and size it up. Ride in it. Take the wheel yourself. I *know* it is the kind of motor car you can afford to own and drive.
Write me for an illustrated catalogue and the name of the nearest Earl dealer.

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President and Gen'l Mgr.

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Touring Car, $1095
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OF MAY ROSE AND GLENWOOD BREEDING. No abortion, clean federal inspected. Their sires dam made 19,460.20 milk, 909.05 fat. Their mother's sire's dam made 15,109.10 milk 778.80 fat. Can spare 3 cows, 2 heifers and a beautiful lot of young bulls.
T. V. HICKS, R 1, Battle Creek, Mich.

AYRSHIRES

FOR SALE—REGISTERED AYRSHIRE bulls and bull calves, heifers and heifer calves. Also some choice cows.
FINDLAY BROS., R 5, Vassar, Mich.

JERSEYS

FIVE PINE FARM JERSEY'S ARE MAJESTY bred. We offer two 6 mo. old bull calves out of high testing Rof M. dams. Prices reasonable.
H. S. WELBORN, Kalamazoo Mich., R. 1.

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ANNUAL SALE

Large Type Poland China Swine

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P. P. POPE
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Spring pigs at above prices Top fall gilts bred for summer farrow, priced right.
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Address **F. T. Hart, St. Louis, Mich**

Big Type P. C. Boar Pigs, they can't be beat in Michigan. Sired by Big Bob Mastoden and Peter A. Pan a son 1,075 Peter Pan. C. E GARNANT, Eaton Rapids, Mich.

LARGE TYPE POLAND CHINA SPRING PIGS sired by C's Clansman, now ready to ship. Write for particulars.
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PURE-BRED DUROC JERSEY HOGS
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2 years old. No. 182429, Masterpiece Orion King 4th. Also some May pigs at reasonable prices. Write **W. H. CRANE, Lupton, Mich.**

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Spotted Poland China. Montdales Marvel, Reg. 51139, at service. Orders booked for fall pigs.
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WE OFFER A FEW WELL-BRED SELECT- [illegible] Duroc Boars, also bred sows and Gilts in season. Call or write **McNAUGHTON & FORDYCE, St. Louis, Mich.**

BOAR PIGS BY FANNIE'S JOE ORION AND Pathfinder Orion. Priced to sell. Satisfaction guaranteed. Write, H. E. LIVERMORE & SON, Romeo, Mich.

FOR SALE—SEPTEMBER GILTS—OPEN OR bred, sired by A. Mo[illegible] Orion King. Call or write. **CHAS. F. RICHARDSON, Blanchard, Mich.**

DUROC JERSEYS—Bred Sows and Gilts Bred for Aug. and Sept. farrow. A few choice ready for service boars. Shipped on approval. Satisfaction guaranteed. **F. J. Drodt, Monroe, Mich. R1**

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HAMPSHIRE AND SHORTHORNS—MARCH and April pigs weighing 100 to 150. Price $20 to $25 each. One red and one white bull 4 months old. Price $40. Each registered. Write or call **GUS THOMAS, New Lathrop, Mich**

Hampshires—A few choice Bred Gilts with boar pig no kin to gilts. **John W. Snyder, St. Johns, Mich.**

O. I. C.

O. I. C. TRUE TO NAME, PROLIFIC STRAIN, open gilts bred gilts, booking orders for September boar and sow pigs; we ship C. O. D. Ask for description and weight. the price will be right. **Maple Valley Stock Farm, North Adams, Mich.**

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Knowing from terrible experience the suffering caused by rheumatism, Mrs. J. E. Hurst, who lives at 508 E. Olive St., B-363, Bloomington, Ill., is so thankful at having cured herself that out of pure gratitude she is anxious to tell all other suffers just how to get rid of their torture by a simple way at home.

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Read the advertising and you open the door to countless comforts and conveniences you otherwise would miss. For advertising will spread before you the product of fields, looms and factories the world over—things that make life easier, happier, more interesting and more fruitful for you and your family. There is no questioning the real benefits that come from regular and systematic reading of the advertising columns. No other one thing will give you such economy and keen satisfaction in buying. Advertising is far too important to be overlooked.

Read it.

It is a profitable practice.

If you have poultry for sale
put an ad in
The MICHIGAN
BUSINESS FARMER
You'll get Results!

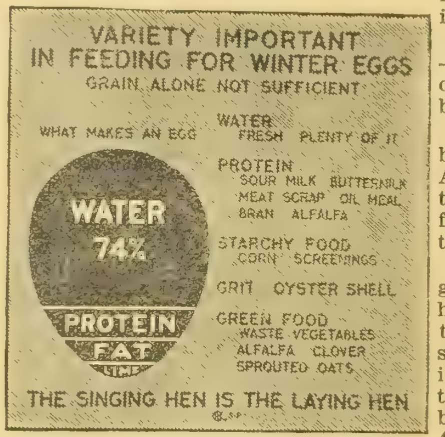
Poultry for Profit

IS THERE MONEY IN HENS?

THE Michigan Business Farmer will pay $1 each for the five best letters in answer to the question, "Is there money in hens?" and the reasons for the answer. Some people make money, or think they do, raising eggs and poultry. Others frankly admit that they either lose money or the profits are too small for the labor involved. What has been YOUR experience? Are you making or losing money in the poultry game, and why. Let's have an exchange of letters on the subject. Who will be the first to tell his or her experience?—Editor.

RATION FOR WINTER EGGS

IF you want winter eggs, duplicate spring conditions. Variety is important in the winter ration. Eggs cannot be produced unless the feed contains the material from which eggs are made. An egg is about 10 per cent fat, 15 per cent protein, 74 per cent water, and 1 per cent ash, chiefly lime.



Grain, especially corn, furnishes the carbon and starch—the heat and fat-making foods; mill feeds, with milk or beef scrap furnish the protein. Some green food is necessary in winter to furnish succulence and bulk.

Give the hens all the water they will drink; warm it, if possible. Furnish grit to grind the food, oyster shell for making the egg shell, and charcoal as an aid to digestion.

Everybody gets eggs in the spring. Why? Because spring is the natural laying season. If we want eggs at other times of the year we must "fool" the hen by duplicating spring conditions as nearly as possible.

Variety Important—Variety is important in the winter ration. A hen craves and seeks different kinds of food. In the spring and summer when she ranges on the farm she when there is no grass or clover, no bugs or worms, when the water is frozen over, when the snow is on the ground so that she cannot pick up bits of gravel and sand, these things must be furnished in her feed.

A hen is different from most animals. She will balance her own ration if given an opportunity. If the following feeds or suitable substitutes are always within reach of your hens, you can rest assured that you are giving them the best possible winter ration:

Grain—Corn is the best poultry feed there is. It is so good that too many feed nothing but corn. That is the trouble. A recent Indiana investigation showed that one-half of the farmers of that state feed corn alone.

About 10 per cent of an egg is fat. Corn contains carbon and starch—the heat and fat-making foods. Feed corn—the hens need it, both for body maintenance and for egg production, but bear in mind that corn alone does not contain all the food elements necessary to produce eggs.

For the sake of variety it is a good plan to feed wheat and oats with the corn—that is, if these grains are not too expensive in your section of the country. Equal parts by measure, of corn, wheat and oats make a good grain mixture.

These grains should be mixed and scattered in a deep litter so that the hens will have to scratch for it. In planning a laying ration, exercise is as important a factor as food. The busy hen is the laying hen.

Don't give too much grain in the morning. Keep the hens hungry—then they will be busy all day. Late in the afternoon give all the grain the hens will eat. A hen's crop should be full when she goes to roost. Eggs cannot be produced unless plenty of feed is given. One hundred and twenty eggs weigh 15 pounds. Considerable raw material must be furnished to make 15 pounds of finished product.

Mill Feed with Milk or Beef Scrap—The winter laying ration should contain mill feed with either milk or beef scrap.

These contain the protein — the bone and tissue building feeds. About 15 per cent of an egg is protein. You can't get eggs unless you furnish in the hen's feed, the materials from which eggs are made.

An experiment at the West Virginia station showed that a flock of hens fed a carbonaceous or corn ration produced only 9,780 eggs in seven months, while an exactly similar flock fed a nitrogenous ration—that is, a ration containing bran with beef scrap or milk—produced 17,459 eggs.

The various mill feeds are rich in protein and are easily digested. Equal parts, by measure, of bran, shorts and corn meal make a good mixture. Put your beef scrap with this, if you are feeding beef scrap instead of milk.

This food group is so important that we discuss it in the chart following.

Green Feed—During the winter the hens need some substitute for the grass and clover and other green food which they get in the summer.

Alfalfa leaves, either dry or steamed, make as good a substitute as you can find. Feed stores catering to commercial poultrymen charge from $18 to $25 for chopped alfalfa. This is not as good as alfalfa leaves alone, for both the stems and leaves are used in making the chop feed.

Clover leaves may take the place of alfalfa. The Ontario Experiment Station says that "One hundred hens will eat from a peck to a bushel of alfalfa or clover leaves a day."

Cabbages, beets, kale or turnips—any of the root stocks—are good green feed for your hens. If you have a surplus of these in the fall, store them, and feed them to your hens in the winter.

Water -About 74 per cent of an egg is water. Often the single fact that your hens do not have enough water in the winter is responsible for your getting no eggs.

It is difficult to furnish plenty of water when the temperature is below freezing. If you give buttermilk, skim milk, or steamed alfalfa or clover hay it will help out on the water proposition. At any rate, some way or other, hens should be provided with all the water they can drink—if it can be warmed a little, so much the better.

Grit, Oyster Shell and Charcoal—Keep a supply of grit, oyster shell and charcoal before the fowls in the winter. The more you can coax your hens to eat and to assimilate, the more material they will have to turn into eggs. If we want our hens to lay, we must not only nourish the body, but they must have enough material left over for egg production.

Grit helps to grind the food; oyster shell furnishes the lime for the egg shells; charcoal furnishes no nourishment but aids digestion and helps keep the bowels in good condition. You feed charcoal to your hogs. Don't forget that a little of it will be good for your hens.

POULTRY BREEDERS' DIRECTORY

Advertisements inserted under this heading at 25 cents per line, per issue. Write out what you have to offer and send it in. We will put it in type, send proof and quote rates by return mail. Address The Michigan Business Farmer, Advertising Department, Mt. Clemens, Michigan.

BABY CHICKS

CHICKS! CHICKS!

It will pay you to look over these low prices for June and July delivery. Better chicks at real bargain prices. Pure S. C. W. Leghorns, $5.25 for 50; $10 for 100; $47.50 for 500. Pure Barron Eng. Leghorns, $5.75 for 50; $11 for $11 for 100; $52.50 for 500 100; $52.50 for 500. Pure S. C. Anconas, $5.75 for 50 Hatch every Tuesday in June and July. Order direct from ad. Prompt shipment by insured Parcel Post prepaid to your door. Full count strong lively chicks on arrival. For quick service and an entirely satisfactory dea send us your order. Fourteen years reliable dealings. Fine instructive catalog free.

HOLLAND HATCHERY
R. 7, Holland, Mich.

Baby Chicks

Build up your flock with pure bred chicks that lay early and often, best quality. Leghorns, Rocks Reds, Wyandottes, Anconas, Minorcas, Orpingtons. Silver Spangled Hamburg Eggs $2.00 per setting. We deliver at your door. Get our price list and free catalog.

J. G. PHILPOTT
R. 1, Box 74 Port Huron, Mich.

NABOB JUST-RITE Baby Chicks

A Hatch every week all year

POSTAGE PAID 95% live arrival guaranteed. MONTH'S FEED FREE with each order. 40 Breeds chicks, 4 breeds ducklings, select and exhibition grades. Catalog free stamps appreciated.
NABOB HATCHERY, Dept. 30, GAMBIER, O.

JULY, AUGUST AND SEPTEMBER CHIX— Order now. Barred or White Plymouth Rocks, R. I. Reds, Black Minorcas, White Leghorns or Anconas $14.00 per 100, prepaid. 16c each in 25 or 50 lots. 100 percent live delivery guaranteed. Order our 12 year producing chix that please. Order direct from this ad. **GREEN LAWN POULTRY FARM, R. 3, Fenton, Mich.**

BABY CHICKS

S C Buff Leghorns, one of the largest flocks in Michigan My price is in reach of all, only $15 00 per hundred. Detroit winners, none better.
LAPHAM FARMS, Pinckney, Mich

Day Old Chicks. Standard Varieties. Make your selections. Catalogue and price list now ready.
H. H. PIERCE, Jerome, Mich.

POULTRY

PULLETS

We have pullets in the following breeds ready for shipment now. In most of these breeds we have 4 months pullets that we are still selling at the 3 months price.
White Leghorns; Anconas; White and Barred Rocks; White Wyandottes; White and Buff Orpingtons; Rhode Island Reds.
STATE FARMS ASSOCIATION
Kalamazoo, Mich.

BARRED ROCK COCKERELS—PARKS STRAIN $3 and $4 each.. White Wyandotte cockerels, Utility, 8 and 10 weeks old. $1 and $1.50 each. **V. NORTON, Charlevoix, Mich., R. 3, Box 98.**

PLYMOUTH ROCK

BUFF ROCKS—Bronze Turkeys—For 20 years, by J C. Clipp & Sons, Bx. M, Saltillo, Ind.

LEGHORNS

POUND PULLETS (S. C. W. L.) HATCHED MARCH 20th. $1.20 for May 15th delivery. Finest lot we ever raised. No sickness. No crowding. Satisfaction or money back. Will lay in August and all through the fall season when eggs are the highest.
MORSE LEGHORN FARM, Belding, Michigan

LEGHORNS

Single Comb Buff Leghorns, 1000 Chicks for April first delivery. It will cost you just 2 cents to find out my plan how to get 10 Baby Chicks FREE
LAPHAM FARMS, Pinckney, Mich.

BUFF LEGHORNS—SINGLE COMB. Early Hatched Cockerels.
J W. WEBSTER, Bath, Michigan

RHODE ISLAND REDS

RHODE ISLAND REDS, TOMPKINS STRAIN Both combs. Stock for sale after September 15th. **WM. H. FROHM, New Baltimore, Mich R. 1.**

WHITTAKER'S R. I. REDS, 200 SINGLE comb red pullets at $2.50 to $5.00 each. Also both Rose and Single Comb cocks and cockerels. Write for calatog. Interlakes Farm, Box 4, Lawrence, Mich.

ROSE COMB RHODE ISLAND REDS. Hatching Eggs reduced to $1 per setting. MRS. ALBERT HARWOOD, R. 4, Charlevoix, Mich. (P)

ORPINGTONS

ORPINGTONS BUFF, WHITE, BLACK Hatching eggs in season.
AUGUST GRABOWSKE
Merrill, Mich., Route 4, Box 41.

Uncle Rube Spinach Says

WE NEVER BOOST

SAY do you know it sometimes makes me sick, purty nigh, to hear fellers boostin' their home town? Now, I don't b'lieve in that kind of stuff a'tall. Modesty ort to prevail when we speak of our own home town an' with me it always does, 'course I've always known that Battle Creek wuz jest 'bout the best ol' town in the world. I don't ever brag 'bout this though—if I wanted to I could tell a lot of things. I could tell of all our splendid factories, of the fact that durin' the business depression most everybody here had work.

I could tell of our splendid (?) Chamber of Commerce. We don't know what it's for but we've got it, an' our drinkin' water which lots of us use; I could tell of our movin' pictur' shows, an' there ain't any better any place. Our merchants an' everybody are jest the best in the world. Our restaurants, most all run by Greeks, are purty good. Our city, run by Mayor Green an' Police Chief Ralph Day, an' a few politicians seems to be all right; it's a great town an' I could brag 'bout it if I wanted to—fact is, Battle Creek is jest 'bout the best town in the world but I ain't sayin' nothin'. We all know this but we don't ever brag 'bout it. We have the finest men, the nicest lookin' women, of any town in the state. More automobiles are owned by our people, more work is done, there's less crime, more morality, more churches, better citizenship, everything that makes a city great an yet I don't tell nobody 'bout it. I don't have to 'cause the town speaks for itself, an' that in large numbers.

But, folks, ' an I mean OUR folks 'at live near Battle Creek, my farmer friends, I'm talkin' to you, do you know 'at we've got jest 'bout the best farm bureau here in Battle Creek that's ever been known? Now I can't tell you much 'bout this place. Jest wish I could! You know some of us has been wonderin' if we wuzn't payin' these fellers too much money? Well I say we are! Say the feller that runs the business here ain't got a blame thing to do but work?

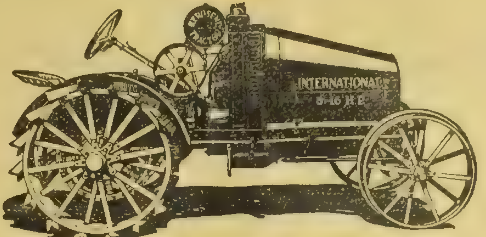
I went in to the place today an' told him I'd like jest a few statistics—he said jest wait a minute. Men kept comin' in, he'd come back an' mebbe say a word or two an' then "jest wait a minute." Why folks he wuz jest 'bout the busiest man I ever knew. I couldn't get nothin' out of him, but I did slip in an' look at their books an' this is what I diskivered: "The Battle Creek Farm Bureau is a purely business affair. Organized by our farmers, financed by farmer members, patronized by most everybody, 'at knows it's here. It's one of the branches of the great state Farm Bureau, but do you know you'd be surprised to learn how many farmers right 'round Battle Creek, don't even know we've got a Farm Bureau?

Why this little, big concern, closed their first year jest last May 31st, with a business to their credit of $147,000. Friends 'at's a lot of money ain't it? Now the farmers right 'round here finance this proposition an' the thing pays. Well last year it paid 7 per cent an' a nice little balance of 1 3-4 per cent to put in your sox.

Now the fellers 'at run the business are elected by the members of the association. 'Course they ain't much to brag 'bout, still they do the work an' here's the names of 'em: W. S. Fruin, president; F. B. Garrat, vice-president, an' H. H. Sanford, secretary-treasurer 'an manager. Now the first two fellers don't git anything for their work. Mr. Sanford gits jest 'bout what a ordinary street sweeper gits an' yet, folks he's done more work 'an a hundred street sweepers. He's the busiest man in Battle Creek today—Mebbe some of the Farm Bureau fellers shirk, but not Mr. Sanford.

Oh, yes! I kinda forgot to say that the Battle Creek Farm Bureau handles most everything 'at us farmers'll ever need.

Now folks is you didn't know that Battle Creek had a Farm Bureau, you know it now. Call an' see 'em. Cordially—UNCLE RUBE.



International 8-16 - - - - - $670
Titan 10-20 - - - - - - - - - $700
With Free P & O Plow
(Tractor and Plow f.o.b.Chicago)

Greatest Farm Power Values—Bar None

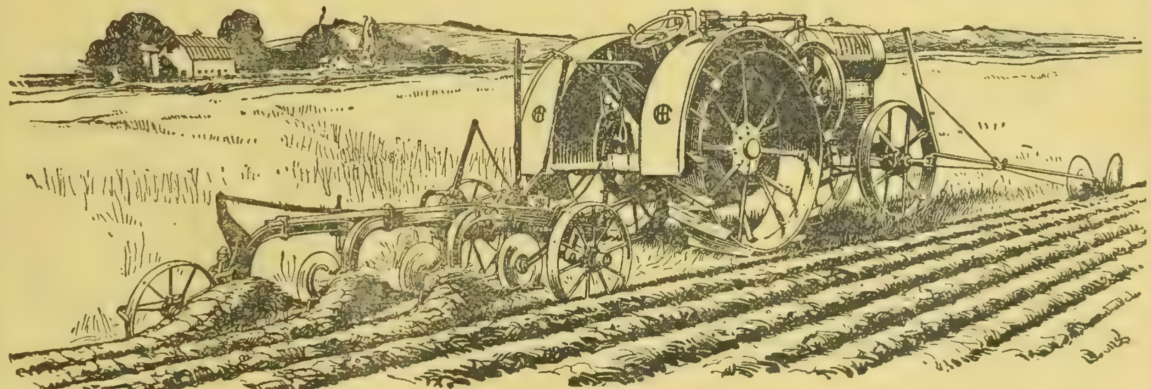
REMEMBER that these are not stripped tractors, pared down to make low prices. Titan at $700 and International 8-16 at $670 include all essential equipment—belt pulley, fenders, platform, throttle governor, adjustable drawbar, angle lugs, brakes. This equipment for each is worth more than $100, and is necessary on any tractor to make it serviceable and safe. And above all, the prices include P & O Tractor Plows—2-bottom with the International 8-16 and 3-bottom with the Titan 10-20.

THIS is a time for investment in Titan 10-20 or International 8-16 tractor power. Make your choice and get the complete outfit from the McCormick-Deering dealer. Every day, keep this efficient power at work at your fall plowing and other drawbar work, and tie it up to all sorts of belt machines. By winter time you will be enthusiastic about the all-around usefulness and economy of International Harvester tractors.

These tractors have enormous reserve power, as every owner knows. They pull their plows in all soils with the greatest ease, and they have extra belt power in proportion. They are famous for long life. As the seasons go on you will find them outlasting smaller, inferior tractors, actually by several years. You will find also that they do their best work on kerosene and that the expense of repair and upkeep is remarkably low.

These are the greatest of all power farming values—bar none. Nearly a hundred thousand owners are proving it. Be guided by their judgment. See the McCormick-Deering dealer.

INTERNATIONAL HARVESTER COMPANY
of America
Chicago (Incorporated) USA
93 Branch Houses and 15,000 Dealers in the United States



ATTEND THE
NATIONAL DAIRY EXPOSITION

Whether you specialize in dairying or run a general farm, you will have a good time and learn many valuable lessons about profitable dairying. Get up a party and make it a real trip.

Great displays of world's finest dairy cattle, pure-bred and grades—miles of machinery exhibits—U. S. Government and state exhibits—boys' and girls' club demonstrations—National Dairy Council's Healthland Show and Milk Fairies Play—Good, clean entertainment of value—all of this will be there to see.

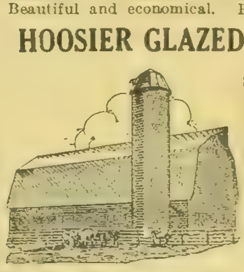
Every live, up-to-date farmer should plan to attend the

NATIONAL DAIRY EXPOSITION,
St. Paul—Minneapolis October 7-14
Reduced Rates on all Railroads
"PROSPERITY FOLLOWS THE DAIRY COW"

Hoosier
Hollow
Building Tile

For permanence, build with HOOSIER TILE. Strongest and best material for all types of buildings. No repairs, no painting, no upkeep. Beautiful and economical. Pre-war prices.

HOOSIER GLAZED TILE SILO



Saves a late corn crop. Saves high-priced mill feeds, increases milk production, promotes growth of young live-stock. Pays for itself in one season. Proof against fire, frost, vermin and moisture. Purchase now saves money.

Meet our representative at the Michigan Fair, Detroit, Sept. 1st to 10th.

If you don't go to the Fair, write for free literature and estimates of cost. Get our special agents' proposition.

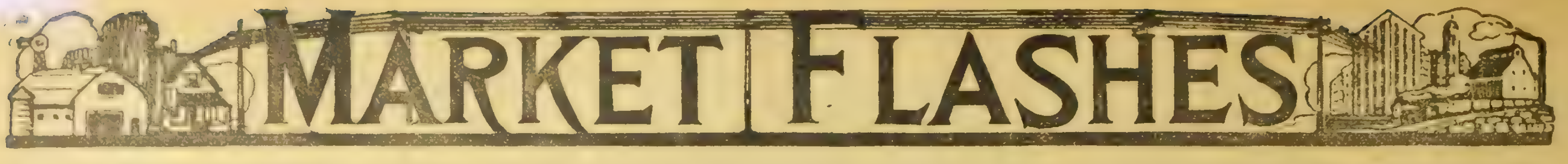
* * *

HOOSIER
SILO COMPANY
Dept. MB-56
Albany, Ind.

$24.95 Upward American CREAM SEPARATOR
On trial. Easy running, easily cleaned. Skims warm or cold milk. Different from picture which shows larger capacity machines. Get our plan of easy
MONTHLY PAYMENTS
and handsome free catalog. Whether dairy is large or small, write today.
AMERICAN SEPARATOR CO.
Box 7067 Bainbridge, N. Y.

JOHN CLAY & COMPANY
LIVE STOCK COMMISSION——AT TEN MARKETS
BUFFALO, N. Y.
CHICAGO, ILL. So. ST. JOSEPH, MO. SO. ST. PAUL, MINN.
OMAHA, NEB. DENVER, COLO. EL PASO, TEXAS
KANSAS CITY, MO. SIOUX CITY, IA. E. ST. LOUIS, ILL.

PLEASE MENTION THE MICHIGAN BUSINESS FARMER
WHEN WRITING TO ITS ADVERITSERS



MARKET FLASHES

MARKET SUMMARY

Healthy undertone to wheat market. Corn, oats and rye quiet. Beans steady. Butter firm. Eggs in demand. Poultry unchanged with business fair. Fruit plentiful and market easy. Cattle trade slow to steady. Calves in demand. Hogs and sheep active to higher.

(Note: The above summarized information was received **AFTER** the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press —Editor.)

TRADE AND MARKET REVIEW

THERE is no use concealing the fact that the immediate future looks mighty dark to most people. The partial settlement of the coal difficulties have cleared the atmosphere a little, but the public is to be charged with the consequences of the strike through the increased price of coal, and many industries are threatening to shut down rather than pay the exhorbitant prices which the operators are asking.

The agricultural outlook is equally discouraging. Prices have dropped all along the line the last two weeks, but seemed to have found bottom again. The downward rush of wheat prices which started about three weeks ago seems to have been checked, and the tendency is again upward.

As discussed editorially in this issue, Dr. Friday, M. A. C. president, predicts that farm product prices will stabilize on a somewhat lower level than they are today. The reasons are explained in our editorial on page 12. Farmers have suffered severely already from the lower prices and they don't like to think that the situation will get any worse. When this stabilization is to take place Dr. Friday does not say. It may come about within another few months but on the contrary it may be deferred for another year. Personally we shall be very much surprised if the general level of farm prices is as high three months from now as at present. We think wheat prices will recover at least partially and perhaps wholly from the declines of the past six months. We look for lower corn, cheap pork and certainly very cheap potatoes. Beans will, we think, stay up to pretty close to the September option of $5.75, though they may temporarily drop below that figure for a few weeks immediately following the harvesting of the crop. We believe bean growers should watch their marketing very carefully and avoid over-loading the market. We believe Mr. Drees is entirely correct and sincere in his statement published under the bean market in this issue when he cautions the growers against flooding the market. Sugar prices will, we believe, tend upwards. But whether this will happen in time to benefit the farmer on the sliding scale contract we are not in a position to say. Our guess is that any pronounced increase in sugar prices will take place AFTER the period for which the beet price is determined rather than BEFORE.

The great plentitude of farm crops this year is not, singularly enough, hailed by the financial interests as a forerunner of great prosperity. Ordinarily these interests hail large agricultural production as an insurance of prosperity for the farmer, but they have recently learned the fallacy of this theory. Farmers have seen many worse winters than the coming one is likely to be, but they have also seen some better ones. We think that just a good old-fashioned winter, like we used to have before the war which brought us most of our foolish extravagant notions, is just ahead of us.

WHEAT

Wheat actually touched the dollar mark which we predicted it would several weeks back, but both cash and future grain are up a little from the season's low. This is really the one bright ray in the situation. The crop is all harvested in this country and threshing is about completed. The speculators know approximately what the supply is to be and they must realize that it is none too great for the demand. Any stiffening of wheat prices at this particular time is certainly encouraging. Export demand has taken another slump despite the lower prices, and there is plenty of cash grain on the market. The rail strike is about the only bullish factor in the situation and as long as it remains unsettled prices will stay up and may go higher.

Dealers who have contracted to deliver September grain cannot afford to takes chances of not being able to get it and are consequently on the anxious seat and taking grain rather freely. Mills are also buying actively.

Prices

Detroit—No. 2 red, $1.08; No. 2 white and No. 2 mixed, $1.07.

Chicago—No. 3 red, $1.04@$1.05½.

CORN

During the past fortnight prices in the corn market have advanced and declined but the close of last week found them at the same level at Detroit that they were two weeks previous. At Chicago prices were slightly better than they were on August 12th. The market showed a firm tone much of the time the past couple of weeks and offerings were taken about as fast as the grain was put on the market. Receipts were of fair volume. Reports of crop damage come from the corn belt.

Prices

Detroit—No. 2 yellow, 70c; No. 3 yellow, 69c; No. 4 yellow, 68c.

Chicago—No. 2 yellow, 62 3-4@63 1-2c.

OATS

There is simply nothing to say about the oat market except that prices have taken another drop and September sales at Chicago are being made at about 32 1-2 cents a bushel.

Prices

Detroit—No. 2 white, 36c; No. 3 white, 34c; No. 4 white, 31c.

Chicago—No. 2 white, 34 1-2c.

BEANS

As the new crop period approaches the price of beans begins to sag. Prices have dropped nearly $2 per hundred. in the last sixty days. There are no more beans today than then; the public is eating just as many; and still the price is $2 less. We wonder if this seeming phenomenon would have happened just the same if the bean growers controlled the marketing of their product?

A. B. Cook, master of the State Grange, believes that the bean growers can and should control their crop from the fields to the consumer. He thinks that an organization could be perfected among the growers of the six important states which could legally and justly determine a price year in and year out below which none of them would dispose of their crop. It has been tried before with other crops, but without success. Does human nature present unsurmountable difficulties to such control? Right in this connection, Mr. Frank B. Drees, secretary Michigan Bean Jobbers' Ass'n, writes the editor that he does not altogether agree with a statement recently published in these colunms that the bean jobbers can dictate to a certain extent the price of beans. This letter, which follows, is interesting and contains a good deal of the truth. Read and profit thereby:

"I have read the article on beans in your issue of August 19, with a great deal of interest and the sentence, 'The Michigan Bean Jobbers are in a position this year to dictate within a certain wide range what the price of beans shall be,' leads me to take issue with you on that subject.

"This year the bean growers in Michigan are in better position to influence the price of Michigan beans than for years past. If the growers force beans on the elevators faster than the trade will absorb them, it will undoubtedly result in lower prices than would otherwise be necessary.

"The efforts of the farm organizations to control the price of wheat has been unavailing, but the situation in regard to beans is very different as there are only five or six states which raise beans commercially and from all information we can gather from sixty to sixty-five per cent of all the white beans grown in the United States will come from Michigan this year.

"We firmly believe there will be no over production even with Michigan bumper crop, and if the farmers will distribute deliveries through the year, there is no reason why a fair price should not be maintained.

"I have talked with many leading bean jobbers and elevator managers, and they would prefer to handle the crop all through the year, rather than to have to close their picking rooms during several months in summer.

"The high prices which have ruled during the past five months were brought about strictly through law of supply and demand and in no degree through attempted manipulation. The high prices were unfortunate in that they induced the importation of Manchurian beans, even with a $2.00 tariff in effect.

"Farmers will probably receive for beans in September very near the price named by Mr. Cook in his article in the Grange paper, viz, $5.00 per hundred.

"What the prices may be after that date will depend more upon the farmer than upon the elevators."

We would be curious to know the reasons why September beans will be around $5 as predicted by Mr. Drees, instead of $6 or $6.50, or any other price. Who or what determines the September price of beans? Have the bean jobbers sold September futures at so low a price that they must buy from the farmers for $5 or less in order to make their profit? We would gladly receive and publish a statement from Mr. Drees or any other representative of the bean trade containing the answers to these questions.

Prices

Detroit—C. H. P., $6.50 per cwt.

Chicago—C. H. P., $9@$9.25; red kidney, $8.85 per cwt.

POTATOES

Information comes from Kentucky that the tobacco growers are on a strike against low prices. If potatoes take the course which nearly everyone believes they will take the growers of the leading states may have to pursue some such drastic course to save themselves from ruin. We predicted some few weeks ago that the fall potato market would not open above 75 cents. We do not now see how it can open that high in view of the extremely low prices which the early varieties are now bringing. The Detroit jobbing price on New Jersey potatoes is less than $1 per bushel which means that the New Jersey grower did not receive over 75 to 80 cents. The prospects now are for a larger crop of potatoes than the country can profitably use, but that is no reason for the growers stampeding the market and making a bad situation worse. There will be many potato growers as there always have been who will hold their crop or part of it for later marketing, and if all growers would follow the same rule prices could be stabilized and maintained at a fairly uniform level throughout the season. The best way to insure 25 cent potatoes is for all the farmers to rush their spuds to the market shortly after harvest.

Prices

Detroit—$1.80 per cwt.

Chicago—$1.85 per cwt.

WHAT STATE DEPARTMENT OF AGRICULTURE IS DOING

(Continued from page 13)

individual members of society of the duties which he owes to others and to the community at large."

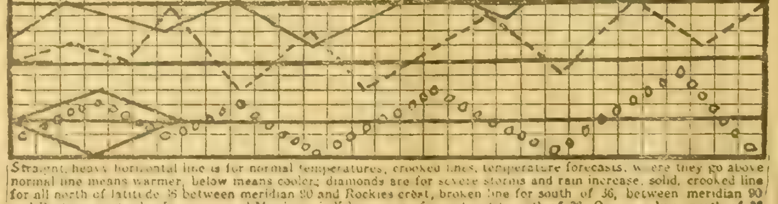
It is only when some individual or corporation violates the law and the department has to go into court in order to protect the rights of the State and the individual, that the general public hears of the work of the department. While this is important, it is but a very small part of our work. For instance, under the law providing for the inspection of commercial fertilizers worth $10.00 or more per ton, and the regulation and sale thereof, we find that when any firm or corporation wishes to dispose of a commercial fertilizer in the State of Michigan, they must first file with this Department the name, brand or trade mark, a certified copy of the analysis, a sealed glass jar containing no less than two pounds of the article thus to be sold or offered for sale, and must then pay a license fee of $20.00.

All commercial fertilizers so registered are sampled once a year or more, to see that they are keeping up to grade, and a copy of the findings is always on file in this department. The samples are taken by the inspector from several different bags and in a manner that will al-

THE WEATHER FOR NEXT WEEK

As Forecasted by W. T. Foster for The Michigan Business Farmer

FOSTER'S WEATHER CHART FOR SEPT. 1922.



Straight, heavy horizontal line is for normal temperatures, crooked lines, temperature forecasts. where they go above normal line means warmer, below means cooler; diamonds are for severe storms and rain increase. solid, crooked line for all north of latitude 36 between meridian 90 and Rockies crest, broken line for south of 36, between meridian 90 and Rockies crest, also Louisiana and Mississippi; X line, east of meridian 90, north of 36. O . . . . line, north of 36 and west of Rockies crest.

WASHINGTON, Sept. 1, 1922—Local forecasts—Lowest temperatures 13 and 18, average below; highest 16 and 20, average normal; total temperatures cooler than usual; highest of the month, 20.

Crop weather of America and Canada will continue near the average of past three months. With few exceptions crop weather will be favorable to sowing winter grain, but this does not indicate what the conditions will be next year. Storms will be moderate for period covered by this bulletin.

WHAT OUR STRAW VOTE SAID

"Straws show which way the wind blows" and if this be true the farmer voters of Michigan are going to vote for Baker by a very large majority, with Kelley as their second choice, Townsend third and Emery fourth. But perhaps, the friends of Kelley, Townsend and Emery will point out that we have received only a small straw vote, compared to the number of farmer voters in Michigan and in this they are quite right. Our business farmer readers are in the midst of harvest, we excuse them for their negligence in voting and present the exact standing of the Straw Vote as at Monday noon, August 28th. which represents the sentiments of a total of 265 votes received:

For United States Senator (Republican Primary)

Baker, 215 Kelley, 21 Emery, 12 Townsend, 17 Total, 265

For Governor State of Michigan

Groesbeck, 143, Fletcher, 55 Joslin, 34 Total, 232

Gasoline Tax

For, 190 Against, 42 Total, 232

Before the September 16th issue of The Business Farmer goes to press the verdict will be rendered and we shall know who probably will represent the state of Michigan in the senate of the United States these coming years. May the man who can serve this state best, win the choice of the people.

Editors Note—The original votes as cast by our readers in this, as in all former "straws" taken by The Business Farmer, will be retained subject to the inspection of any authorized representative of any candidate, until the date of the election, to prove the authenticity of the figures as above published.

MISCELLANEOUS

GENERAL

FOR SALE—25 LB. MIDGET FLOUR, FEED and small product mill; splendid location, equipment new October, 1920; rare opportunity to make good; as public demand is splendid and increasing beyond my financial means; might take in suitable partner or work for future owner, 2, 15 H. P. Electric R. R. facilities, 2 1-2 acres, 7-room house. ROLLER MILL, Topeka, Ind.

LET US TAN YOUR HIDE—COW AND Horse hides for fur coats and Robes. Cow and Steer hides into Harness or Sole Leather. Catalog on request. We repair and remodel worn furs; estimates furnished. THE CROSBY FRISIAN FUR CO., Rochester, N. Y.

CORN HARVESTER CUTS AND PILES ON harvester or winrows. Man and horse cuts and shocks equal Corn Binder sold in every State; only $25 with fodder tieing attachment. Testimonials and Catalog FREE showing picture of harvester. PROCESS HARVESTER CO., Salina, Kansas.

SEED WHEAT—HYBRID NO. 2 WHEAT (white wheat) yielded this year 35 bu. per acre, 60 lb. test, vigorous plant, medium growth straw, offering at $1.50 per bu., bags extra, F. O. B. Vassar, Mich. Sample mailed upon request. Mail orders filled promptly. GEORGE W. RIDGEMAN, Vassar, Michigan, R. D. 1.

BARREL LOTS SLIGHTLY DAMAGED crockery, hotel chinaware, cookingware, aluminumware, etc. Shipped direct from factory to consumer. Write for particulars. E. SWASEY & CO., Portland, Maine.

SALESMAN—ARE YOU LOOKING FOR A product to sell to farmers? Every farmer needs our product. It has a large repeat business. No investment required. No collections to make. V. SMITH CO., Portland, Ind.

MAKE BIG MONEY, SMALL INVESTMENT, legitimate enterprises. Write at once stating amount to invest. Advise free. FINANCIAL EXPERT, 703 Loew's State Bldg., Los Angeles, Calif.

WANTED—POSITION AS FARM MANager or tenant on modern farm. Agricultural College trained and experienced. H. E. HEWITT, Charlevoix, Mich.

PRINTED STATIONERY, 200 SHEETS, 100 envelopes with your name and address on both. $1.00. THE BENTE PRINT SHOP, Kalamazoo, Michigan.

GOVERNMENT NEEDS RAILWAY MAIL clerks, $133 to $192 month. Write for free specimen questions. COLUMBUS INSTITUTE, 0-4, Columbus, Ohio.

WANTED—HOUSEKEEPER, IMMEDIATELY —Middle aged woman preferred. Good home for right woman. BOX 933, Breckenridge, Mich.

SOLE LEATHER—5 LBS. PACKAGE FINE grade oak strips $2.85 postpaid. COCHRAN TANNING CO., Greenville, Mich.

FOR SALE—7,200 EGG CANDEE INCUbator. Good condition, $800. TYRONE POULTRY FARM, Fenton, Mich.

FOR SALE—EXTRACTED HONEY IN 60-lb. cans. WESLEY KOCH, Kingsley, Mich.

TOBACCO

NATURAL LEAF TOBACCO—CHEWING, 5 pounds, $1.75; 15 pounds, $4.00. Smoking, 5 pounds, $1.25; 15 pounds $3.00. Send no money, pay when received. FARMERS' TOBACCO ASSOCIATION, Paducah, Ky.

NATURAL LEAF TOBACCO, CHEWING, 5 pounds, $1.75; 10 pounds, $3.00. Smoking, 5 pounds, $1.25; 10 pounds, $2.00. Send no money. Pay when received. TOBACCO GROWERS' UNION, Paducah, Ky.

KENTUCKY TOBACCO, 3-YEAR-OLD LEAF. Don't send a penny pay for tobacco and postage when received. Extra fine, chewing 10 lbs., $3; smoking 10 lbs., $2.50; medium smoking 10 lbs. $1.25 FARMERS' UNION, Hawesville, Ky.

TOBACCO, KENTUCKY'S NATURAL LEAF, Mild, Mellow smoking 10 lbs. $2.25; Hand selected chewing 3 lbs. $1.00. Free receipt for preparing. WALDROP BROTHERS, Murray, Ky.

TOBACCO. KENTUCY'S NATURAL LEAF. Nice and mellow smoking, 10 lbs., $2; 20 lbs. $3. Hand selected chewing, 10 lbs. $3; 20 lbs. $5. FARMERS' TOBACCO UNION, Sedalia, Ky.

TOBACCO—KENTUCKY'S PRIDE. EXTRA fine chewing, 10 lb., $3.00; smoking 10 lb., $2.00; 20 lb., $3.50. FARMERS' CLUB, Mayfield, Ky.

Please Mention the M. B. F. When writing to Advertisers

low him to get a fair average of the product. If the test is found to be under grade, the matter is taken up with the proper parties, and if a readjustment of prices is not made and a refund to those who have purchased the fertilizer, an embargo is placed upon the product and it is not allowed to be sold in the State.

In the Bureau of Foods and Standards, the Inspectors are continually working to see that the public is not short-weighted, sold goods that are not properly branded or that are injurious to health. While the general public may know or hear little about it, nevertheless their interests are being safe-guarded night and day by their public servants. Figuratively speaking, this department is standing at the gateway of every home in this commonwealth and saying to the dishonest manufacturer and distributor of misbranded, short-weighted or injurious products, "Thou shalt not pass."

THE HUNTED WOMAN

(Continued from page 17)

long to the Horde. Yet he might have been the force behind it, contemptuous of the chuckling group of rough-visaged men, almost arrogant in his posture as he eyed the curtains and waited.

What he expected soon came. It was not the usual giggling, the usual exchange of badinage and coarse jest beyond the closed curtains. Quade did not come out rubbing his huge hands, his face crinkling with a sort of exhultant satisfaction. The girl preceeded him. She flung the curtains aside and stood there for a moment, her face flaming like fire, her blue eyes filled with the flash of lightning. She came down the single step. Quade followed her. He put out a hand.

"Don't take offence, girly," he expostulated. "Look here—ain't it reasonable to s'pose——"

He got no farther. The man in the door had advanced, placing himself at the girl's side. His voice was low and unexcited.

"You have made a mistake?" he said.

She took him in at a glance—his clean-cut strangely attractive face, his slim build, the clear and steady gray of his eyes.

"Yes, I have made a mistake—a terrible mistake!"

"I tell you it ain't fair to take offence," Quade went on. Now look here——"

In his hands was a roll of bills. The girl did not know that a man could strike as quickly and with as terrific effect as the gray-eyed stranger struck then. There was one blow, and Quade went down limply. It was so sudden that he had her outside before she realized what had happened.

"I chanced to see you go in," he explained, without a tremor in his voice. "I thought you were making a mistake. I heard you ask for shelter. If you will come with me I will take you to a friend's"

"If it isn't too much trouble for you, I will go," she said. "And for that—in there—thank you."

(To be continued)

(POLITICAL ADVERTISEMENT)

Stand by the man who has stood by you!

The farmers and farm women can elect H. F. Baker United States Senator. It it to THEIR interest to do so.

DO you want to see a man elected to the United States Senate who is himself a farmer, who knows the problems of farmers, who has fought for twenty years for the farmers, and who can ALWAYS be depended upon to vote and work for measures of benefit to farmers?

DO you want to see a man elected who is pledged to work against the predatory interests which are seeking special favors—and getting them—from the hands of the government, and are trying to shift the burdens of the war from the shoulders of the rich to the backs of the poor?

DO you want to see a man elected who is pledged to work for the reenactment of the excess profits tax which Senator Townsend and Congressman Kelley helped to repeal? **Pres. Friday of the M. A. C. stands with Sen. Baker in his demand for the re-enactment of this law.**

SUCH a man is H. F. Baker—farmer, co-operator, fighter, legislator, statesman, progressive, one of the most ABLE and FEARLESS men who ever sat at Lansing.

THE farmers and the farm women can elect this man. How? First, by VOTING for him; second, by WORKING for him; by helping to FINANCE his campaign.

IT is to YOUR interest and the interests of EVERY farmer that Baker be elected. NO OTHER MAN in the race equals him in character and ability. Better be SAFE than SORRY. Help elect Baker. WILL YOU DO IT?

BAKER is as poor as the people whom he has served these many years. He has no rich friends. He must depend upon his farmer friends to finance the NECESSARY and LEGAL cost of carrying his message to the people. A small sum from every friend of Mr. Baker will meet the expenses of the campaign. Any amount will be appreciated. Send stamps, money order or check.

Stand by the man who has stood by you!

Clip this coupon

Jennie Buell, State Sec'y-Treas.,
Baker-for-Senator Committee,
Gaylord, Mich.

I pledge my support to H. F. Baker for United States Senator.

I will________ see five other voters and urge them to support Mr. Baker.

I will________pass out campaign literature.

I will________use my car to get out the voters at the election.

I enclose herewith $________ to help defray the expenses of the campaign.

Name ____________________

Town ____________________

Street Address or R. F. D.____________________

(This advertisement ordered and paid for by the Baker-for-Senator Committee.)

Protect Your Farm Crops, Orchards and Garden Truck Against

HAIL STORMS

in the State Mutual Hail Insurance Company. We offer a guaranteed policy on the Premium Plan. AGENTS WANTED for writing business. Chas. B. Scully, President, Almont. Matt. L. Stevens, Secy.-Treas., Grand Ledge.

The State Mutual Hail Insurance Company,

Grand Ledge, Michigan

Don't miss the chapters which follow of Curwood's great story,

"The Hunted Woman"

KEEP M. B. F. COMING

To January, 1923	- - -	25c
To January. 1924	- -	One Dollar
To January, 1926	- -	Two Dollars

The Michigan Business Farmer, Mt. Clemens, Mich.

I enclose $________, for my subscription to Jan., 192____

To____________________

P. O.____________________

R. F. D. No.__________ State__________

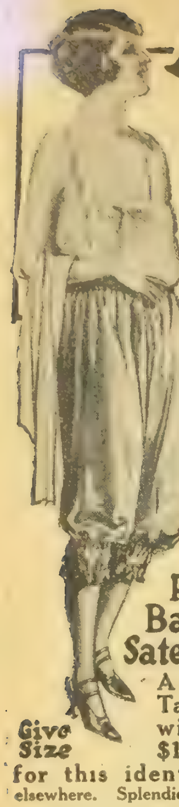
If this is a renewal mark (X) here ☐

—A Sensational Success—Right from the Start!

Yes, right from the opening day this Smashed Price Red Tag Sale has swamped us with orders. And no wonder—when you consider the staggering bargains offered. Just glance at the superb values below. You can order your choice on approval. Let us prove how Chase prices save you money—without your risking a penny.

Don't send us one cent now, and you are not obligated in anyway. Just tell us what to send—give number, size and write your name and address plainly to avoid delay. Pay only our bargain sale price and postage when goods arrive. If not delighted with your saving, return goods and get your money back at once. No arguments or delay.

SMASHED PRICE RED TAG SALE



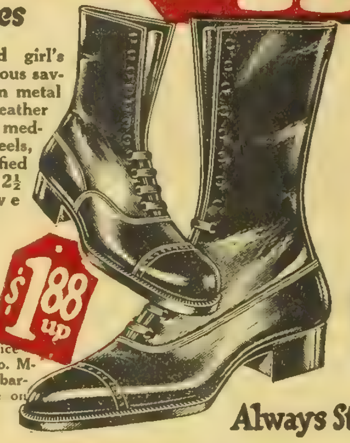
Rousing Bargain in Sateen Bloomer

A wonderful Red Tag Special. You will pay from $1.00 to $1.25 for this identical quality elsewhere. Splendid grade of Copenhagen Blue Sateen with ruffled flounce at bottom and elastic band adjustment, useful pocket for safe keeping valuables. Sizes, 31 to 35. Blue only. Order by No. M-1435. Send no money. Pay 79c and postage on arrival. Money back if not satisfied.

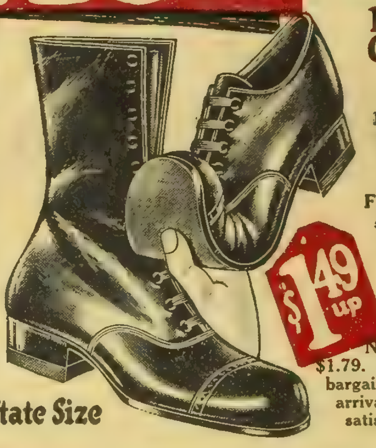
Give Size

Another Cut Price on Walking Shoes

Both women's and girl's models at a tremendous saving. Fine black gun metal or rich tan side leather Sturdy leather soles; medium, low walking heels, women's have modified English toe. Sizes 2½ to 8. Girl's have round toe. Sizes 8½ to 2. Women's black No. M-1460, Price $1.98. Women's Brown No. M-1270, Price $2.49. Girl's Black No. M-3680, Price $1.88. Girl's Brown No. M-3690, Price $1.88. Pay bargain price and postage on arrival.

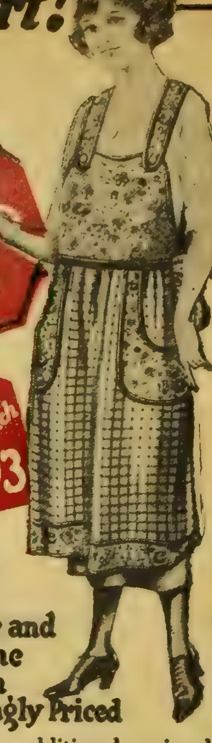


Always State Size



Soft Kid Finished Comfort Shoe or Oxford

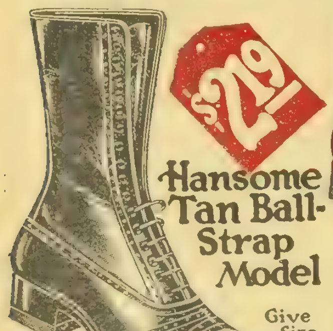
Either style at a smashed price now! Uppers of fine, soft Kid finished leather. Flexible oak leather soles and low rubber heels. Wide roomy shape. Sizes 3 to 8. Order Oxford No. M-5540, Price $1.59. High shoe No. M-6840, Price $1.79. Send no money. Pay bargain price and postage on arrival. Money back if not satisfied.



Give Size

Percale and Cretonne Apron Amazingly Priced

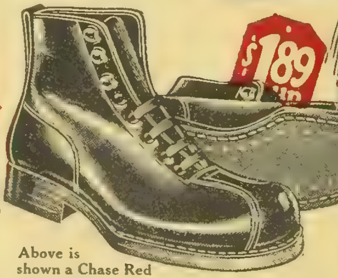
Make the additional saving by ordering 2 of these splendid aprons. Standard grade lavender and white check percale and flowered cretonne. Fancy slash pockets; bow in back. Order No. M-1401. No money now. Pay 49 cents (93 cents for 2) on arrival.



Hansome Tan Ball-Strap Model

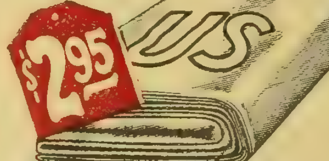
Give Size

Regular $4.00 English walking shoe of rich tan side leather. Fitted with firm leather soles and military rubber heels. Sizes 3 to 8. Order No. M-4500. Send no money. Pay $2.19 and postage on arrival.



Above is shown a Chase Red Tag Bargain you simply must not miss. Sturdy scout model of soft tan grain leather with genuine green chrome soles. Order Men's Sizes 6 to 11 by No. M-9660. Price $1.98. Boy's sizes 1 to 5½ by No. M-9680. Price $1.89. Send no money. Pay bargain price and postage on arrival.

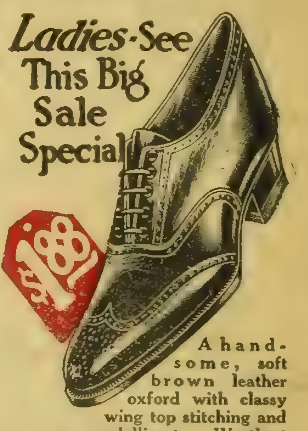
Send No Money
Pay When Goods Arrive



Army Blanket Full Bed Size

Genuine all wool Khaki U. S. Army blanket. Size about 66x84 inches. Each blanket stamped "U. S." Cost government much more than we ask. Order quick—while stock lasts. Order No. M-2005. Send no money. Pay only $2.95 and postage on arrival. Money back if not satisfied.

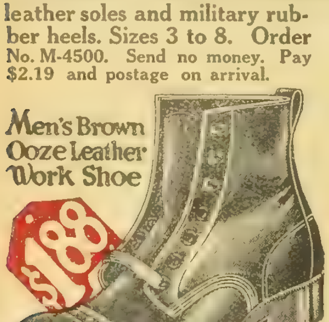
Ladies—See This Big Sale Special



A handsome, soft brown leather oxford with classy wing top stitching and medallion toe. Worth at least $1.00 more than we ask. Firmly soled and rubber military heeled. Roomy last. Sizes 3 to 8.

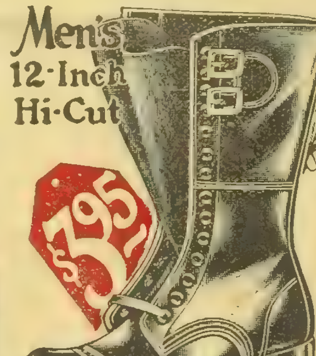
Order No. M-7560. No money now. Pay $1.88 and postage.

Men's Brown Ooze Leather Work Shoe

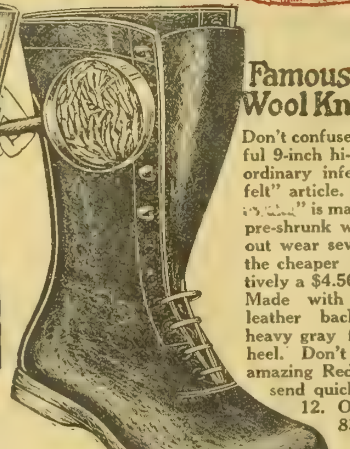


Lowest price in the U. S. for a work shoe of this quality. Round toe Blucher model with sturdiest leather soles and heels. Triple wax thread stitched uppers. Wide roomy last. Sizes 6 to 12. Order No. M-9720. No money now. Pay $1.88 and postage when shoes come. Money back if not satisfied.

Men's 12-Inch Hi-Cut

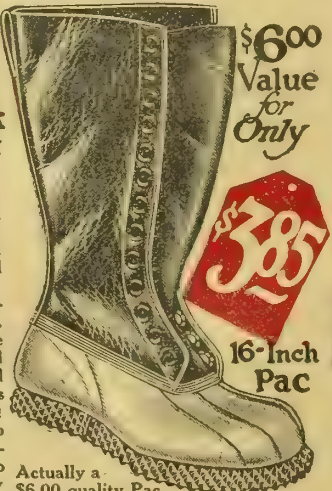


Think of it—only $3.95 for this heavy tan grain leather 12-inch hi-cut! A Chase special for this sale only. Two heavy leather soles; dirt excluding bellows tongue. Sizes 6 to 12. Wide last. Order No. M-9710. No money now. Pay $3.95 and postage on arrival. Money back if not satisfied.



Famous Shrunk Wool Knit Hi-Cut

Don't confuse this wonderful 9-inch hi-cut with the ordinary inferior "pressed felt" article. Our "[illegible]" is made of Knitted pre-shrunk wool that will out wear several pairs of the cheaper grade. Positively a $4.50 retail value. Made with extra wide leather back stay and heavy gray felt sole and heel. Don't pass up this amazing Red Tag special send quick! Sizes 7 to 12. Order No. M-8390. Send no money. Pay only $1.95 and postage Mention size

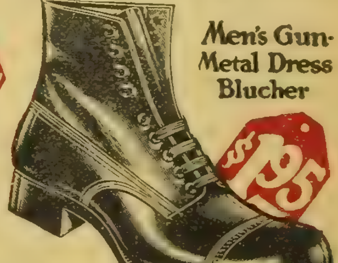


$6.00 Value for Only

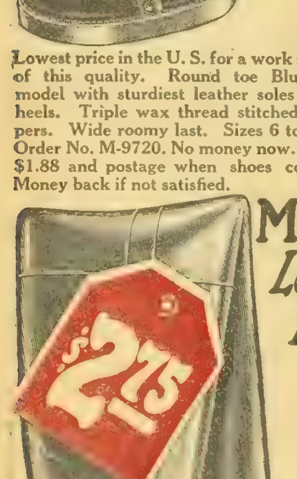
16-Inch Pac

Actually a $6.00 quality Pac reduced just for this sale. Has extra quality special selected full grain leather 16-inch hi-cut uppers. Genuine Gold Seal Brand pure gum ribbed rubber bottoms with rolled soles. Sizes 7 to 11. Order No. M-2420. No money now. Pay $3.85 and postage on arrival. Money back if not satisfied.

Men's Gun-Metal Dress Blucher



You can't beat the Red Tag bargain in a serviceable every day shoe. Durable gun metal uppers. Round toe comfort shape. Good leather sole. Order on approval. Sizes 6 to 11. No. M-600S. Send no money. Pay $1.95 and postage on arrival. Money back if not satisfied.

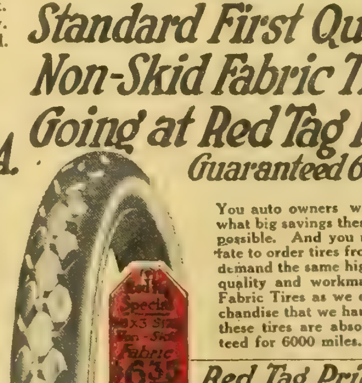


Men—Look Here! Lowest Prices in U.S.A. For Hip Boots

They're pure gum rubber throughout and easily worth $5.50 to $6.00 today. This will give you an idea of the sensational bargain Chase offers you during this great Red Tag Sale event. Our price is unequalled anywhere else in America today—Quality considered. Boots have heavy double soles and are friction lined. Made extra full fitting and guaranteed to withstand hardest wear. Sizes 7 to 11. Let us send them for inspection. No obligation or risk. Order No. M-2750. Don't send one cent. Pay postman only $2.75 and postage when boots arrive. Chase's money back guarantee protects you.

Standard First Quality Non-Skid Fabric Tires Going at Red Tag Prices

Guaranteed 6000 Miles



Red Tag Special 30x3 Size Non-Skid Fabric $6.35
We Do Not Pay Postage on Tires And Tubes

You auto owners will appreciate what big savings these prices make possible. And you need not hesitate to order tires from Chase. We demand the same high standard of quality and workmanship on our Fabric Tires as we do on all merchandise that we handle. Besides, these tires are absolutely guaranteed for 6000 miles. Order quick

Red Tag Price List

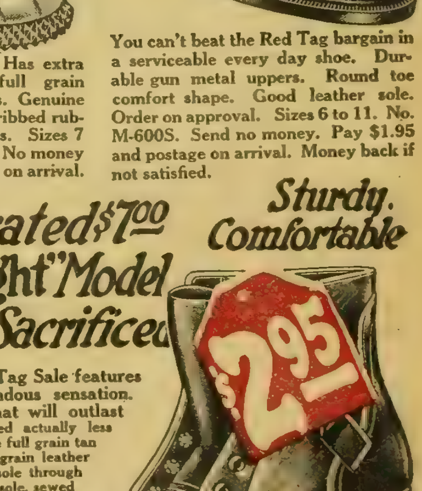
Size	Tread	Price	Size	Tread	Price
30x3	non-skid	$6.35	31x4	non-skid	$10.50
30x3½	non-skid	6.98	32x4	non-skid	12.25
32x3½	non-skid	9.45	33x4	non-skid	12.45

SEND FOR OUR PRICES ON CHASE'S HEAVY DUTY INNER TUBES

Our Celebrated $7.00 "Dreadnaught" Model Work Shoe Sacrificed

Sturdy. Comfortable

Here's one of Chase's Red Tag Sale features that has caused a tremendous sensation. "Dreadnaught"—a shoe that will outlast any three ordinary shoes marked actually less than half price. Has soft pliable full grain tan leather uppers. Unlined, with grain leather insoles, 2 full oak leather outsole through to heel and an extra heavy top sole, sewed and nailed. "Iron-clad" heel reinforced with metal ring all around. Brass eyelets. Grain leather dirt excluding tongue. Double reinforced backstay and outside counter pocket. Sewed throughout with extra heavy linen thread. Wide last; Sizes 6 to 12. Order No. M-1005. Send no money. Pay $2.95 and postage on arrival.



CHASE Shoe Co.

Dept. M

Minneapolis, Minn.

MIC

The Michigan
BUSINESS FARMER

An Independent
Farmer's Weekly Owned and
Edited in Michigan

VOL. X, NO. 2 MT. CLEMENS, SATURDAY, SEPTEMBER 16, 1922 $1 PER YEAR

UNIVERSITY OF ILLINOIS LIBRARY
SEP

Where Farming is a Business

Are you reading "The Hunted Woman," The Business Farmer's new Serial Story?

Current Agricultural News

FARM PRODUCTS GAIN IN VALUE

THIS year's important farm crops will be worth approximately $1,250,000,000 more than their value last year. Production forecasts announced Sept. 8th by the department of agriculture indicate this year's important crops will aggregate approximately $6,600,000,000, calculating their value at September 1 farm prices. Three crops—corn, cotton and hay—will exceed a billion dollars each in value, their aggregate comprising more than one-half of the value of all the important crops.

Present indications are that practically all of this year's crops will be worth more than last year, with the exception of wheat, rye and peanuts. Corn will be worth approximately $496,000,000 more, cotton, $389,000,000; oats, $83,000,000; apples, $64,000,000; hay (tame) $47,000,000 and peaches $36,000,000.

This year's indicated crops will have a value, calculated unofficially and based on September 1 farm prices, as follows:

Wheat, $720,600,000; corn, $1,801,900,000; oats, $404,100,000; barley, $88,500,000; buckwheat, $11,600,000; rye, $50,300,000; potatoes, $385,400,000; sweet potatoes, $116,200,000; hay (tame) $1,037,600,000; hay (wild) $122,600,000; cotton (exclusive of seed) $1,064,400,000; apples, $227,200,000; peaches, $88,100,000; peanuts, $30,400,000; flax seed, $22,100,000 and beans, $49,600,000.

AN ECHO OF THE 1918 WOOL DEAL

DEMURRERS filed by Messrs. Brown & Adams and R. E. Smith, wool dealers of Boston, denying the right of the United States government to collect excess profits on the 1918 wool clip have been overruled by Judge Morton of the United States District Court at Boston. This is the third victory of the government establishing the validity of the 1918 wool regulations. The proceedings instituted against the firm of Brown & Adams involves the collection of nearly $300,000 and the case against R. E. Smith involves the sum of $32,000.

To date the Domestic Wool Section of the Bureau of Agricultural Economics, United States Department of Agriculture, has collected excess profits totalling $620,757.75. Of this amount $327,145.23 has been refunded to wool growers by mailing of 99,446 checks. Of the remaining $845,112 to be collected, 48 cases involving $626,844.16 are in the hands of the Solicitor for the Department for recovery through legal proceedings. It is expected that approximately 10 of these cases will be reached for hearing on demurrer soon after the convening of the fall terms of court in various districts.

BRITISH FOOD MARKETS DEMORALIZED

THE sudden drop in German marks has resulted in flooding the British produce markets with foodstuffs from the Central Empires, according to a report just received by the Bureau of Agricultural Economics, United States Department of Agirculture from its Agricultural Commissioner in London. Despite a large British potato crop, there is an enormous quantity of German potatoes on the London market selling at practically any price buyers care to give. The bottom has fallen out of the price of British potatoes.

Danish butter ships have been deflected from Germany and the Central empires to the British market. Most of this butter, however, is going into cold storage for future use. The butter market at present is considerably demoralized by reason of the unusual supply from Denmark and the increased use of margarine owing to the rise in the price of butter during the past two months.

Apples from Germany, Czecho-Slovakia, Italy, France and Switzerland are coming forward to Great Britain and are expected to break the already overloaded market. There is every indication of a very heavy apple crop in Great Britain this year, although the quality will be decidedly inferior the report states. A shortage of good eating apples in England is in prospect, which will leave the market free for American eating stock as soon as the continental supplies run out.

There is every indication at the present time that all European supplies of any kind whatever will be dumped into the British markets from now on, and American shippers will have to watch carefully for changes in the economic conditions in all European countries as well as in Great Britain.

A noticeable drop in the consumption of all imported foodstuffs in Great Britain is also reported. The long continued hard times, together with heavy taxation and generally unsettled conditions of all Europe, have made English buyers decidedly cautious and the home people are economizing as they have not economized since the war.

WORLD WHEAT PRODUCTION 3,019,526,000 BUSHELS

WORLD production of wheat this year, excluding Russia and Mexico, is estimated by the United States Department of Agriculture at 3,019,526,000 bushels, based on actual estimates from reporting countries and estimates based on condition reports. Production in 1921 was 3,059,596,000 bushels, and for the pre-war 1909-13 average 2,890,353,000 bushels.

Decreases occur in nearly all European countries. Total European production is estimated at 1,100,991,000 bushels, compared with 1,239,256,000 bushels in 1921, and a pre-war 1909-13 average of 1,275,157,000 bushels, British India and Japan will have 392,847,000 bushels, compared with 282,094,000 bushels last year, and 375,827,000 bushels, the pre-war average. Both Canada and the United States show increased production over last year with a combined estimated outturn of 1,125,968,000 bushels, compared with 1,095,751,000 bushels in 1921, and 883,810,000 bushels, the 1909-13 pre-war average.

Russia reports favorable crop conditions, and according to advices from all sources will be able to feed herself this year. Last year Russia imported wheat. Production figures for Mexico are not available, but last year 5,089,000 bushels was produced, according to an unofficial estimate, compared with the 1909-13 average of 9,995,000 bushels. For Africa, a total production of 57,587,000 bushels is estimated, compared with 81,398,000 bushels in 1921, and with the pre-war 1909-13 average of 73,134,000 bushels.

Total production in the Northern Hemisphere, according to actual estimates from reporting countries, will be 2,200,650,000 bushels, compared with 2,143,979,000 bushels in 1921, and with 2,020,276,000 bushels, the pre-war average. Estimates made by the United States Department of Agriculture based on condition reports bring this total up to 2,677,393,000 bushels, compared with 2,697,499,000 bushels in 1921, and with a pre-war average of 2,607,928,000 bushels. Total production in the Southern Hemisphere for the last harvest season is estimated at 342,133,000 bushels, compared with 362,097,000 bushels in 1921, and with 282,425,000 bushels, the 1909-13 pre-war average. The acreage of the growing crop in Argentina is estimated to be larger than that of the crop just harvested.

THE Farmers' Co-operative Creamery recently organized at Fairhope, Ala., by the dairymen of the surrounding territory with the aid of the consumers, is not only giving the people purer and higher test milk than that required by the health department of any large city in the country, but has now entered the ice cream field to use the farmers surplus cream for making a delectable dessert at cost.

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Number 2

The Michigan
BUSINESS FARMER

September 16,
1922

Did Someone Say Farmers Can't Co-operate?

Read What a Philadelphia Bank Has to Say About the Need and Value of Farm Organizations

IF "all dis world am sad and dreary," and you have lost faith in the power of co-operation to solve farmers' problems, read this article. It's one of the best contributions on the subject of co-operation we've read for some time. These are trying times, farmers are discouraged; they can't see any good in co-operation. Some of them even blame the co-operative movement for their troubles, but, of course, they're wrong. Don't let the co-operative movement die; don't let it suffer; stay by it. It will win out in the long run.—Editor.

IN a recent trade letter the Girard Trust Co. of Philadelphia makes the following interesting observations:

"When you buy a carnation to put in your buttonhole, about half the price you pay goes to the man who raised the flower and half to the one who sold it to you. The city cost of distribution seems to equal the greenhouse cost of flower production.

"Northern Pennsylvania farmers who sell milk to New York City firms receive for it no more than a third of the sum which the New York consumer is forced to pay the distributor. To produce milk on a farm, therefore, and to ship it more than 200 miles by rail appear to cost only half as much as to bottle it and deliver it locally."

These instances are representative of many similar situations upon which the Michigan Business Farmer has commented extensively. Financial interests as a rule fight shy of any discussion of the subject for fear of offending their numerous customers engaged in the expensive process of distribution. It is unusual, significant and encouraging to find a great trust company commenting so frankly upon a subject which is a major problem for the farmer and certainly an important one for the consumer.

Formerly little interest was shown by the people of the city in this problem, but now, says the Girard Company, "the whole country has become aroused over this complex question of marketing and distribution. The most vexing economic problem of today is not how to produce more or how to produce at less cost, but how to get what is produced to the man who needs it,for less money.

"The farmer scarcely receives as much for his wheat which goes into a ten cent loaf of bread as the consumer pays simply to get the loaf brought to him after it has left the oven of the big central bakery."

Can anything be done to reduce the high cost of distribution of commodities? After all merchants and small shop keeps are very necessary component parts of any community and they have to make a living like other people.

A start to cheapen distribution has been made in many directions. We see it in the popularizing of chain stores.

It is obvious that 500 grocery stores in one city under one management which can buy in wholesale quantities and distribute systematically can shave down the local charge for getting groceries from the stores to individual kitchens.

So the chain stores as applied to groceries, candy, tobacco and drugs has become a popular trade development in this country.

The five and ten cent store is a branch of the same tree and occupies an important place in our mercantile system.

But the farmers are doing most along the line of more scientific marketing and it must be said also that the farmers as a class had farthest to go in that direction.

As pointed out in the April number of the Girard Letter, the farmer, as a producer, far excels the farmer as a seller. But there are signs that he is becoming aroused and is taking hold of the selling end of agriculture in various parts of the country.

Here is an example. A community of Pennsylvania farmers along the West Branch of the Susquehanna River had been for some years shipping their milk to Brooklyn. Recently the Brooklyn company refused to pay as much as 3½ cents for standard milk and so the farmers built a creamery at Milton.

It is a co-operative affair entirely. The milk is shipped to the creamery and is sold from there in the original shape of milk if possible. What milk cannot be sold in liquid form is converted into butter, cheese or condensed milk.

A farmer who owns a good mixed herd of Holsteins and Jerseys was asked how the new system worked out.

"We expected to lose a little at the start," said he; but we know we are on the right track. Our whole game in future should be to sell and buy at wholesale." What he meant was co-operative plans in selling farm produce and collective buying of what farmers require for their home needs.

* * *

Pennsylvania farmers, however, are still away behind the agriculturists of the Northwest in this new marketing game.

Of Minnesota's 800 creameries, 600 are now co-operative, that is too say creameries owned and operated by the farmers themselves. Moreover, the farmer who once railed at trusts now sees the sense of economy in unity of effort and consolidation of business.

Those 600 Minnesota farmer-owned creameries have been organized into one big association. A soap-box orator would surely call it a creamery trust.

Anyhow, Minnesota farmers are proud of what they have done and they boast more co-operative creameries in that state than in all the other 47 states of the Union combined.

This wholesale method of doing things on the farm set the city people in Minneapolis and St. Paul thinking.

"Why," they asked, "should we not buy our milk wholesale?"

The sequel to that query is a Milk Consumers Association. It buys milk wholesale from the farmers association, and is able to sell it to city consumers for about 9½ cents a quart. That allows for the dividend declared by the Milk Consumers' Association, because it was able to earn a good profit on milk at ten cents.

What also does the consumer get out of this dual milk trust affair? The farmers insist that the quality of their milk has gone up and that Minneapolis gets its milk at the lowest "spread"—which is the difference between the price paid to the farmer and the price paid by the consumer—of any big city in America.

It is a curious fact that the Milk Consumers' Association which works so harmoniously with the Milk Producers' Association was the outcome of a labor union strike. The milk-wagon drivers did it and they are now the very hardest workers in their effort to market the milk of Minnesota at the lowest possible cost.

A great merit of the plan of reducing the selling price of milk to consumers in Minnesota has been a decided increase in the quantity of milk used. That is counted by farmers a great gain.

The official figures show that in eight months, the sale of Minnesota milk in the Twin Cities, due to a decreased price, had risen 60 per cent. Indeed, the farmers have considered an extensive advertising campaign to further still more the consumption of milk.

* * *

Nowhere else has co-operative selling by producers gone farther than in California.

You cannot read any popular magazine today without noticing the advertisements of "Sun-Kissed" or "Sun-Maid" fruits.

Raisin growers, orange growers, walnut growers, lemon, grape fruit and other orchardists are all combined for purposes of salesmanship. They know when it is best to sell and how. Their products are marketed in bulk and not by individuals.

Those California fruit and nut growers have by advertisements popuarized their products and vastly increased their consumption. But they have done most by combining to sell economically what they have produced.

The Fruit Growers' Exchange is almost as much of an institution in California as the Cotton Exchange is in New Orleans.

* * *

There still remains a great new field to be cultivated before we reach a saner state in the matter of city distribution.

Some time in the not remote future you will not see forty different delivery wagons visit a city block in one day, any more than you now see forty different vehicles hauling mail to yourself and your neighbors.

Half a dozen rival bread wagons, as many competing milk wagons; coal wagons, laundry wagons and ice wagons, many of them working at less than capacity, will not pass your door each morning as they likely do today.

The great economic boon which came from railway consolidation was the elimination of duplicate service—covering the same ground two or three times when once is sufficient.

On the original small scale America would now need 10,000 iron and steel mills to supply our demands. What a fearful price the consumer would pay for his steel if we had that vast number of competing little mills doing the work now accomplished by a hundred big ones!

In the matter of production there has been, outside of agriculture, a swift tendency toward bulk in order to obtain economies.

But in the matter of city distribution we are largely today in the primitive state of our great grandfathers except in this—they usually carried home their purchases whereas we now expect ten or a dozen different delivery wagons to fetch them to us.

Our ancestors knew neither the luxury nor the heavy tax entailed when a spool of thread is carried ten miles in a $4,000 delivery truck and placed in the purchaser's hand and probably sent back next day by a similar vehicle and exchanged gratis for another spool of thread.

Cash and carry home is one of the wholesome ways for consumers to reduce their cost of living.

BARUCH ADVISES FARM BLOC ON RURAL FINANCES

"THE most important business before Congress today is to enact legislation that will put the farmers on a acredit equality with other lines of business. It makes little difference what particular rural credit bill you enact to bring that about. Amend it later if need be but enact some credit measure at once that will rescue this fundamental industry before it is too late."

That is the way Bernard M. Baruch concluded his conference last Friday with the finance committee of the Senate farm bloc, which was attended also by a number of other senators. Mr. Baruch was invited to give its members his views regarding rural credits in general, and in particular regarding the Simmons, Norbeck, Capper and Lenroot bills on that subject.

All four of the bills aim at giving agriculture or live stock raising or both access to short time investment funds through the issue of short time notes or debentures with some sort of sanction by the Federal government. The Lenroot bill is supposed to follow the general lines of the recommendation of the Joint Commission on Agricultural Inquiry and provides that the Federal Land Banks shall create commodity loan departments and issue short time debentures to finance its loans. It would appropriate a million dollars for each of the twelve land banks. The Norbeck bill would create a special government corporation with a capital of $200,000,000 to take over the War Finance Corporation. The Simmons Bill would create a similar corporation with a capital of $500,000,000 and the Capper bill would establish livestock loan corporations under the supervision

(Continued on page 19)

Michigan 1922 State Fair Greatest Ever

Ford's $4,000,000 "Evolution of Agriculture" Exhibit and $300,000 Coliseum Among Features Which Drew Fair's Largest Crowd

MORE than 300,000 people thronged the Michigan State Fair grounds September 1-10, and saw what was, without the slightest exaggeration, the greatest exhibition of agricultural and industrial products ever held in Michigan.

In practically every department the exhibits were more numerous and excelled in quality those of other years. Although additional room had been provided for what appeared would be a normal increase in exhibits, even these facilities were taxed to the utmost and necessitated the use of every available foot of space. It was generally predicted that last year's exhibit of livestock, had about reached the limit, both in quantity and quality, but there was an increase in nearly every class of this department this year. Plans that were drawn a few months ago for a new sheep and swine barn must be revised and enlarged providing the number of animals shown this year is any criterion of what may be expected in future years.

As fairs go there is of necessity considerable similarity between one year's exposition and another's. But this year's state fair attracted several remarkable exhibits which had never been shown in Michigan before.

Chief among these was the Henry Ford exhibit showing the "evolution of agriculture," from the stage when much of the farm work was done by hand or with the crudest sort of implements up through the various developments in farm machinery to the efficient, and labor-saving devises of the present age. The Ford exhibit. ccupied several acres of ground and was without doubt the principal feature of the Fair in point of both interest and education.

Entrance to the Ford exhibit was through a higharched portico and passage-way, the walls of which were flanked with paintings done by men employed at the Ford plant and depicting men and women at work in the fields as in the days of long ago when the plough was pulled by oxen and cultivation was done with the hoe, and when grain was cut with a flail. Henry Ford and Geo. W. Dickinson, the Fair manager, threshed out a few grains to show the crowd just how it used to be done.

Chief interest centered about the collection of antique farm implements which was said to be the most complete and valuable collection of its kind in existence. This exhibit contained more than a score of old-fashioned plows, drags, binders, etc. The oldest relic in the group was a mould-board plow built in 1770, and of the type which Geo. Washington undoubtedly used on his Mount Vernon plantation. Other relics included a tread-mill for churning operated by a dog or a horse-driven tread-mill which was used fifty or seventy-five years ago on some farms to create power for divers forms of farm work.

Another interesting display showed the development of the Ford Motor and automobile, including the first machine which Henry Ford ever built that actually ran under its own power. It is a curious-looking vehicle compared with the modern automobile and carries its "one-lung" motor at the rear. Other automobiles were shown which revealed the gradual development of the Ford machine. In connection with this exhibit was the six millionth motor made by the Ford people. Up to Sept. 2nd, 6,479,739 motors had been turned out by this concern.

Scattered about the Ford exhibit were several scores of trucks and tractors performing almost every conceivable kind of labor and a good deal which the average man would never conceive as possible for such machines to perform. Visitors to the exhibit were continually surprised by the new discoveries which a visit to this tent and that revealed in the uses to which a tractor can be put.

Another exhibit in the Ford showing was that of a locomotive which Henry Ford acquired with his purchase of the Detroit, Toledo & Ironton road. This locomotive was rebuilt in the Ford shops at River Rouge and is supposed to be quite the latest in modern locomotives. Visitors were permitted to mount the cab and examine the highly polished mechanism of the giant engine.

Coliseum Wonderful Building

The Coliseum which was built this year at a cost of about a quarter of a million dollars was thrown open to the public on Labor day. The structure has seating capacity for 8,000 people. In the center of the building is a great oval arena which served as the judging stand for the cattle and horses. The annual live-stock parade which was formerly conducted before the grand-stand was put on this year inside the Coliseum and was witnessed by about 5,000 people. Never has the Fair been able to show its live-stock exhibits to such good advantage and the importance of live-stock in the state's agriculture seemed to take on a new significance as the hundreds of prize beauties, were led in single line of march around the arena.

The State Fair Coliseum is one of the finest buildings of its kind in the United States and is certainly a great credit to both the institution and to the state. It is expected that it will be used for all kinds of large gatherings and made entirely self-supporting.

Dairy Exhibits Excel

One of the cleverest pieces of sculptoring ever shown on the Fair grounds was a life-size reproduction of a boy pushing a wheel-barrow, bearing a pumpkin, the entire set done in butter by Sculptor Wallace of Lincoln, Neb. Last year Mr. Wallace's contribution was a life-sized figure of a Jersey cow and milking maid. The cheese exhibit contained 63 specimens of American, Swiss and Italian cheeses, the majority of the offerings being from farm-owned cheese factories in the lower and upper peninsulas. The M. A. C. exhibited one cheese which alone weighed 100 pounds.

Horseshoe Contest

Farmer devotees of horseshoe pitching will be very much chagrined to hear that the Business Farmer cup was won by a city "feller," Mr. L. M. Wilks of Battle Creek. But inasmuch as Mr. Wilks will have to defend his title for three years in succession there is plenty of opportunity for the cup to be wrested from his hands. The State Fair tournament was the first state championship meet to be held in Michigan and was participated in by pitchers from all over Michigan, most of whom were winners in the county farm bureau tournaments. A total of 32, most of them farmers, pitched in the preliminary games. Owing to the lack of facilities on the grounds, it was necessary to hold the tournament on the inside race track which excluded the crowd. Next year, it is announced by the management, a portion of the grounds will be set aside for the horseshoe tournament.

In the finals, Wilks won 19 games and lost one, and Akers duplicated the feat, Wilks winning easily, however, in the play-off between the two. In one game Wilks threw 20 ringers.

Other prize winners in the horseshoe contest were, G. W. Akers, Williamston; Albert DeHaan, Jackson; T. L. Richmond, Detroit; John Howe, Flint; B. D. Tuttle, Walled Lake; Virgil Newman, Leslie; H. L. Opdyke, Royal Oak. Others who took part were: Barney Kortrite, Pontiac; Ben Siel, Watervliet; Walter Marion, North Branch; Mr. Martin, Midland; Ira Knight, Midland; Reuben Lee, Lowell; Royal Ames, Pontiac; W. D. Miner, Battle Creek; Frank Freeman, Lowell; Henry VanKoerering, Jenison; Ed Gotts, Plymouth; R. Molasky, Detroit; Wm. H. Simms, Detroit; Chas. Schweki, Washington; Arthur Robertoy, Washington; Ray Clothier, North Branch; Ed. Coombs, Detroit; Frank Lawcock, Durand; John B. Riegle, Flint; C. Blaser, Lowell; A. V. Blaser, Lowell; Wm. Lowering, Jenison; Ed. Prindle, Redford.

Governor Opens Fair

The State Fair was officially opened by Gov. A. J. Groesbeck who complimented the managements highly upon the excellent exposition and voiced his desire and intention as governor to help make the Michigan State Fair the "greatest in the world". He promised his support to replace the old frame structures on the grounds as time and money permitted with modern buildings, and expressed his belief that other purposes could be discovered for which the grounds and buildings could be used at other times excepting Fair week. In this connection, Mr. Dickinson, secretary-manager, suggests that the fair grounds would make an ideal location for the great zoological park which Wayne County is talking of establishing in that section of the county, and it is entirely likely that some such project will be consummated.

Other speakers at the Fair included Pres. Burton of the U. of M. and Pres. Friday of the M. A. C. In his usual eloquent and convincing style Mr. Burton pleaded for America to forget her "splendid isolation" policy and take her position as a leader in the affairs of the world. Dr. Friday showed why he didn't think prices of farm products would be any higher for a long time to come and expressed his doubt that the middleman was to blame for the farmers' poor returns and the consumers' high prices, which statement precipitated an argument with a farmer in the crowd and enlivened the proceedings somewhat.

Macomb Girl Wins Milking Contest

The milking contest which is always a source of interest and amusement was won by Miss Henrietta Rinke, daughter of Farmer John Rinke, well-known Holstein breeder living near Mount Clemens. Henrietta's sister, Matilda, who is only eleven years old, won the third prize. Miss Henrietta obtained 15.3 lbs. of milk in 7.5 minutes.

The 1922 fair was the second to be conducted under state ownership. The plans for last year's fair were all made before the state assumed control of the institution. Although the fair is under the nominal jurisprudence of the State Department of Agriculture and a board of managers appointed by the governor, active management is still vested in the secretary-treasurer, Geo. W. Dickinson, and much of the credit for the Fair's remarkable success both this and other years should go

(Continued on page 17)

BEST HORSHOE PITCHERS IN MICHIGAN

Left to right—B. D. Tuttle, Walled Lake; A. Robe toy Washington, Mich.; T. L. Richmond, Detroit; L. M. Wilks, Battle Creek, Mich. (the champion); G. W. Akers, Willianmstown, Mich.; V. Newman, Redford; R. H. Clothier, North Branch; Reuben Lee, Lowell; F. Lawcock Durand; Albert DeHaan, Jackson; J. G. Howe, Flint; Roy Ames, Pontiac; I. Knight, Midland; H. L. Opdyke, Royal Oak.

Michigan's Greatest Apple and Potato Show

WHAT will undoubtedly be the greatest apple and potato show ever held in Michigan is being planned under the joint cooperation of the Michigan State Horticultural Society, the Michigan Potato Producers' Association, and the Michigan Potato Exchange, to be held under the auspices of the West Michigan Fair at Grand Rapids, during the week of August 4th.

Cash premiums aggregating nearly $2500 will be offered in the apple show and about $500 in premiums in the potato show. First, second, third and fourth prizes will be offered for the best U. S. standard barrel, best bushel basket, best tray, etc., of each of the following varieties: Duchess, Fameuse, Grimes Greening (Rhode Island), Hyslop, Jonathan, McIntosh, Northern Spy, Steele Red, Wealthy and Wagener. A separate class in each division will be provided for any other variety than above mentioned.

The largest single cash prize in the apple contest will be $200 for the best 50 bushel exhibit, consisting of not less than five nor more than ten bushels of any variety named above.

In the potato contest first, second and third prizes will be offered in the different classes for best exhibits of Russet Rural, Golden Russet, Petoskey Russet, Dibbles Russet, Chief Petoskey, German No. 3, Sir Walter Raleigh, Rural New Yorker No. 2, Million Dollar, Nexall, White Giant, Empire State, German No. 1, Gold Coin, Uncle Sam, State of Maine, White Mountain, Early Dixie, Early Eureka, Early Petoskey, Early Victor, Flour Ball, Potentate, Early Market, Early Six Weeks, Ratekins, Red River Special.

The sweepstakes prize will be $35 to be paid for the best peck of any variety in individual exhibit.

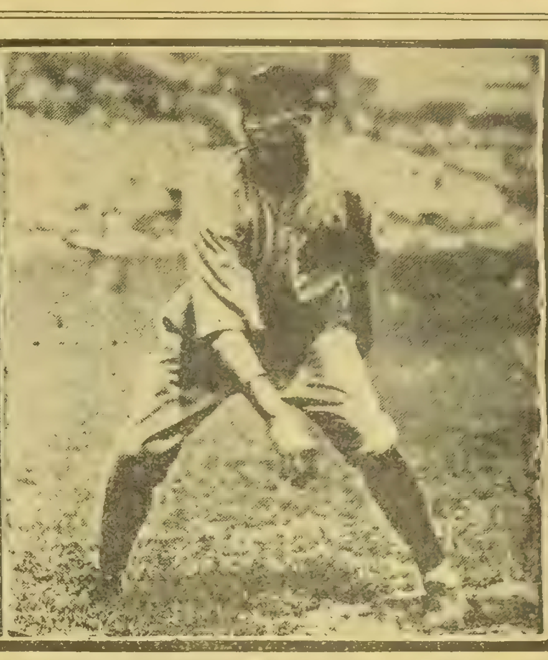
There will be a special class for the exhibits of members of boys' and girls' clubs, with prizes totaling $50.

The usual rules apply to the making of exhibits. No entry fee will be charged, but only members of the Michigan State Horticultural Society can exhibit fruit for competition. Those who desire to exhibit and are not members of the Association should apply for membership at once to Mr. T. A. Farrand, Secretary, East Lansing, Mich.

Exhibitors are requested to send a tentative list of entries to L. A. Lilly, secretary of the show, at once. These entries will not be binding but will be used in determining the amount of space needed.

A complete list of the exhibits and prizes, together with other information will be published in an early issue.

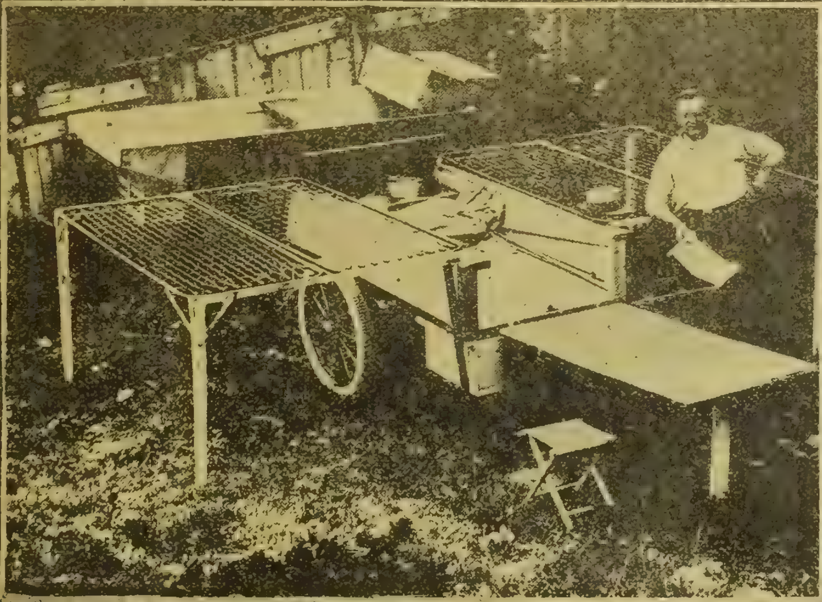
PICTURES FROM FAR AND NEAR



The Old Guard Falters in Washington—The women out in Washington have joined hands with the farmers and labor organizations to defeat Sen. Miles Poindexter and nominate Mrs. Frances Axtell whose picture is shown above. Benjamin C. Marsh, managing director of the Farmers National Council, who was in Michigan last week in behalf of H. F. Baker's candidacy, stumped the state of Washington for Mrs. Axtell.

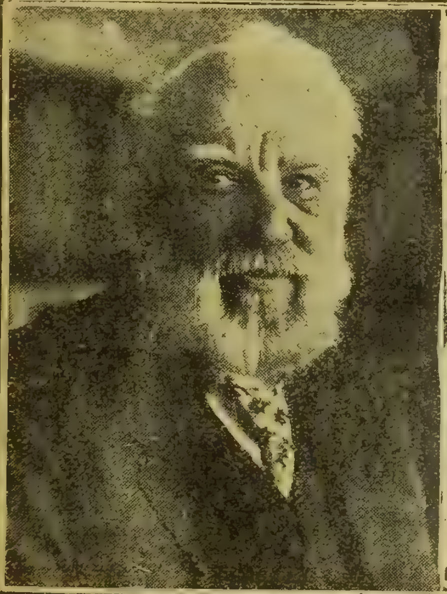
Beauty and the Beef—which do you suppose it was,—the critter or its fair rider which attracted the crowd at the exhibit of the American Meat Packers' Association staged at the Pageant of Progress recently held in Chicago? The young lady is Miss Helen Hartlou. She confessed to her audience that she had never ridden a "cow" before, but said she wasn't a bit afraid, because you see the animal was stuffed!

A "Dark Horse" Comes to Light—Base ball fans will be interested in this snapshot of Herman Pillette in action on Navin Field, Detroit. Ty Cobb considers him one of the greatest twirlers in the game. Like so many other base ball players Pillette leaped into prominence overnight. He was obtained from the Portland, Wash., club in a deal for Johnson for whom Detroit paid a good price. Pillette was as a matter of fact, "thrown in" for good measure.



With this outfit home is wherever Dr. Carroll Behymer of Concinnati builds his camp fire. Sometimes it's beside a rippling brook; sometimes on the crest of a mountain, but wherever the setting may be Dr. Carroll and his family enjoy all the comforts of an apartment house. The trailer is a kitchen, dining room, parlor and bedroom, all in one, and carries chairs, bedding icebox and fireless cooker, to say nothing of a canvas boat with which to navigate the "wet spots".

"No more war" is the clarion cry that has gone 'round the world. Placards inscribed with the slogan in ten different languages were displayed in all the principal cities of the fourteen leading nations a few weeks ago and had their effect in setting people to thinking on the subject as they have never thought before. When men and women in all nations refuse to be driven to war like slaves to the galley and do a little thinking for themselves war may be no more. Let the propaganda against war go on.



Inventor of Telephone dies at Age of 75—Alexander Graham Bell, whose invention of the telephone made him one of the greatest benefactors of the human race, died August 1st, at his home in Baddeck, Cape Breton, Nova Scotia. Mr. Bell's contributions to the field of science and invention were second only to those of Thomas Edison. He was an indefatigable worker and even up to the last few weeks before his death carried on his experiments among the Nova Scotian hills.

They're still in style in Carrara—American farmers delegated the ox-cart to the dump-heap some years ago, but they still use 'em in many parts of Italy and other sections of the old world. This Italian ox driver seems to be a happy-go-lucky sort of fellow. We somtimes wonder if people weren't happier and more contented back in the good old days when life wasn't so swift and one could go to church on an ox-cart without losing his or her social standing in the community. In all old world communities where people still live in blissful ignorance of modern conveniences they go about with a slow, deliberate movement and a plaid countenance which is the envy of the swift and nervous American.

Acclaimed Coney Island's Prettiest Miss—16-year old Elva Lloyd, a dancer at a select New York cabaret, was the winner of the beauty contest staged at Steeplechase Park, Coney Island, New York. She was chosen by the judges in competition with many of the leading stage beauties of the United States, and was awarded a $250 diamond ring by the proprietor of the amusement park. Miss Lloyd has been in the theatrical business since a child of four.

(Copyright Keystone View Company)

Make $13 More Per Cow

Free Book for Dairy Farmers Tells How to Cut Out Waste; Gives Valuable Building Hints

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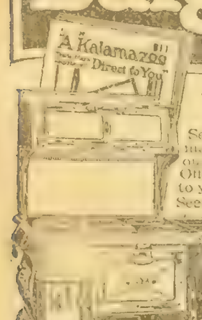

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IS YOUR FARM
FOR SALE?
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WILL SELL IT.

The Hunted Woman

By James Oliver Curwood

Michigan's Own and America's Formost Author of the Great Northwest

THE SYNOPSIS

A WOMAN with a pearl-gray veil drawn closely about her face is one of the many passengers on the train that connects "The Horde" with the civilized world. For eighteen hours she has been riding steadily bound for Tete Jaune Cache, the land of "The Horde," where she has no friends and all will be strange to her. The train stops at a town composed of several tents known as Miette and, as many of the passengers get off and walk about, she inquires of a "Straying Angel" how long the train will stop and is advised it will not move for at least two hours. Desiring food and a bath she asks where she can secure them and is directed to "Bill's Shack". Bill's Shack is owned and operated by Bill Quade, leader of the lawless band of the town. When she steps inside the doorway she recognizes him as a brute but as she has entered and is very hungry and dusty she decides to go through with her plan. Quade says he has a room she can rent and asks her to follow him. As they pass out of the room there appears a newcomer in the doorway opening off the street. The newcomer is not of the kind of men lounging about the room but shows in face and in actions that he is of the wholesome living type. He has seen the girl enter this place and believes she has made a mistake and as he stands in the doorway his eyes rest upon the curtain-covered doorway through which the girl and Quade has just passed. In but a moment the girl steps out, her face flaming like fire and eyes filled with the flash of lightning. Quade follows her apologetically. He starts to offer the girl a roll of money but before he can do so the newcomer steps to the girl's side and strikes Quade with terrific force. The Brute goes down in a heap and the newcomer hurries the girl outside and away from the scene. That's the story to date—now go ahead.

CHAPTER II

THEY passed down an aisle through the tall trees, on each side of which faced the varicolored and many-shaped architecture of the little town. It was chiefly of canvas. Now and then a structure of logs added an appearance of solidity to the whole. The girl did not look too closely. She knew that they passed places in which there were long rows of cots, and that others were devoted to trade. She noticed signs which advertised soft drinks and cigars—always "soft drinks," which sometimes came into camp marked as "dynamite," "salt pork" and "flour." She was conscious that every one stared at them as they passed. She heard clearly the expressions of wonder and curiosity of two women and a girl who were spreading out blankets in front of a rooming-tent. She looked at the man at her side. She appreciated his courtesy in not attempting to force an acquaintanceship. In her eyes was a ripple of amusement.

"This is all strange and new to me—and not at all uninteresting," she said. "I came expecting—everything. And I am finding it. Why do they stare at me so? Am I a curiosity?"

"You are," he answered bluntly. "You are the most beautiful woman they have ever seen."

His eyes encountered hers as he spoke. He had answered her question fairly. There was nothing that was audacious in his manner or his look. She had asked for information, and he had given it. In spite of herself the girl's lips trembled. Her color deepened. She smiled.

"Pardon me," she entreated. "I seldom feel like laughing, but I almost do now. I have encountered so many curious people and have heard so many curious things during the past twenty-four hours. You don't believe in concealing your thoughts out here in the wilderness, do you?"

"I haven't expressed my thoughts," he corrected. "I was telling you what they think."

"Oh-h-h—I beg your pardon again!"

"Not at all," he answered lightly, and now his eyes were laughing frankly into her own. "I don't mind informing you," he went on, "that I am the biggest curiosity you will meet between this side of the mountains and the sea. I am not accustomed to championing women. I allow them to pursue their own course without personal interference on my part. But—I suppose it will give you some satisfaction if I confess it — I followed you into Bill's place because you were more than ordinarily beautiful, and because I wanted to see fair play. I knew you were making a mistake. I knew what would happen."

They had passed the end of the street, and entered a little green plain that was soft as velvet underfoot. On the farther side of this, sheltered among the trees, were two or three tents. The man led the way toward these.

"Now, I suppose I've spoiled it all," he went on, a touch of irony in his voice. "It was really quite heroic of me to follow you into Bill's place, don't you think? You probably want to tell me so, but don't quite dare. And I should play up to my part, shouldn't I? But I cannot—not satisfactorily. I'm really a bit disgusted with myself for having taken as much interest in you as I have. I write books for a living. My name is John Aldous."

With a little cry of amazement, his companion stopped. Without knowing it, her hand had gripped his arm.

"You are John Aldous—who wrote 'Fair Play,' and 'Women!' she gasped.

"Yes," he said, amusement in his face.

"I have read those books—and I have read your plays," she breathed, a mysterious tremble in her voice. "You despise women!"

"Devoutly."

She drew a deep breath. Her hand dropped from his arm.

"This is very, very funny," she mused, gazing off to the sun-capped peaks of the mountains. "You have flayed women alive. You have made them want to mob you. And yet——"

"Millions of them read my books," he chuckled.

"Yes—all of them read your books," she replied, looking straight into his face. "And I guess—in many ways—you have pointed out things that are true."

It was his turn to show surprise.

"You believe that?"

"I do. More than that—I have always thought that I knew your secret—the big, hidden thing under your work, the thing which you do not reveal because you know the world would laugh at you. And so—you despise me!"

"Not you."

"I am a woman."

He laughed. The tan in his cheeks burned a deeper red.

"We are wasting time," he warned her. "In Bill's place I heard you say you were going to leave on the Tete Jaune train. I am going to take you to a real dinner. And now—I should let those good people know your name."

A moment—unflinching and steady—she looked into his face.

"It is Joanne, the name you have made famous as the dreadfulest woman in fiction. Joanne Gray."

"I am sorry," he said, and bowed low. "Come. If I am not mistaken I smell new-baked bread."

As they moved on he suddenly touched her arm. She felt for a moment the firm clasp of his fingers. There was a new light in his eyes, a glow of enthusiasm.

"I have it!" he cried. "You have brought it to me—the idea. I have been wanting a name for her—the woman in my new book. She is to be a tremendous surprise. I haven't found a name, until now—one that fits. I shall call her Ladygray!"

He felt the girl flinch. He was surprised at the sudden startled look that shot into her eyes, the swift ebbing of the color from her cheeks. He drew away his hand at the strange change in her. He noticed how quickly she was breathing—that the fingers of her white hands were clasped tensely.

"You object," he said.

"Not enough to keep you from using it," she replied in a low voice. "I owe you a great deal." He noted, too, how quickly she had recovered herself. Her head was a little higher. She looked toward the tents. "You were not mistaken," she added. "I smell new-made bread!"

"And I shall emphasize the first half of it—Ladygray," said John Aldous, as if speaking to himself. "That diminutizes it, you might say—gives it the touch of sentiment I want. You can imagine a lover saying 'Dear little Ladygray, are you warm and comfy? He wouldn't say Ladygray as if she wore a coronet, would he?"

"Smell-o'-bread—fresh bread!" sniffed Joanne Gray, as if she had not heard him. "It's making me hungry. Will you please hurry me to it, John Aldous?"

They were approaching the first of the three tent-houses, over which was a crudely painted sign which read "Otto Brothers, Guides and Outfitters." It was a large, square tent, with weather-faded red and blue stripes, and from it came the cheerful sound of a woman's laughter. Half a dozen trampish-looking Airdale terriers roused themselves languidly as they drew nearer. One of them stood up and snarled.

"They won't hurt you," assured Aldous. "They belong to Jack Bruce and Clossen Otto— the finest bunch of grizzly dogs in the Rockies." Another moment, and a woman had appeared in the door. "And that is Mrs. Jack Otto," he added under his breath. "If all women were like her I wouldn't have written the things you have read!"

He might have added that she was Scotch. But this was not necessary. The laughter was still in her good-humored face. Aldous looked at his companion, and he found her smiling back. The eyes of the two women had already met.

Briefly Aldous explained what had happened at Quade's, and that the young woman was leaving on the Tete Jaune train. The good-humoured smile left Mrs. Ott's face when he mentioned Quade.

"I've told Jack I'd like to poison that man some day," she cried. "You poor dear, come in. I'll get you a cup of tea."

"What always means dinner in the Otto camp," added Aldous.

"I'm not so hungry, but I'm tired—so tired," he heard the girl say as she went in with Mrs. Otto, and there was a new and strangely pathetic note in her voice. "I want to rest—until the train goes."

He followed them in, and stood for a moment near the door.

"There's a room in there, my dear," said the woman, drawing back a curtain. "Make yourself at home, and lie down on the bed until I have the tea ready."

When the curtain had closed behind her, John Aldous spoke in a low voice to the woman.

"Will you see her safely to the train, Mrs. Otto?" he asked. "It leaves at a quarter after two. I must be going."

He felt that he had sufficiently performed his duty. He left the tent, and paused for a moment outside to touzle affectionately the trampish heads of the bear dogs. Then he turned away, whistling. He had gone a dozen steps when a low voice stopped him. He turned. Joanne had come from the door.

For one moment he stared as if something more wonderful than anything he had ever seen had raisen before him. The girl was bareheaded, and she stood in a sun mellowed by a film of cloud. Her head was piled with lustrous coils of gold-brown hair that her hat and veil had hidden. Never had he looked upon such wonderful hair, crushed and crumpled back from her smooth forehead: nor such marvellous whiteness of skin and pure blue depths of eyes! In her he saw now everything that was strong and splendid in woman. She was not girlishly sweet. She was not a girl. She was a woman—glourious to look at, a soul glowing out of her eyes, a strength that thrilled him in the quiet and beautiful mystery of her face.

"You were going without saying

(Continued on page 21)

Make Farming a Scientific Business

Chart of Recommendations

Trade Name	Motor Oil
Akron	H.
Allis-Chalmers—All Models	H.
Allied	H.
All Work—Both Models	H.
Andrews-Kinkade	E. H.
Appleton	H.
Armington	H.
Aultman-Taylor, 22-45	E. H.
Aultman-Taylor, 30-60	E. H.
Ayltman-Taylor, 15-30	E. H.
Automotive	H.
Avery Model C	H.
Avery, 8-16, 12-25, 25-50, 14-28, 18-36, 40-65	E. H.
Avery Track Runner	H.
Bates	E. H.
Bates Steel Mule—All Models	H.
Bear	H.
Best Tracklayer, 30	E. H.
Best Tracklayer, 60	E. H.
Big Farmer	E. H.
Big Four, E-B	E. H.
Biltwell	H.
Boring	H.
Burnoil	E. H.
Capitol—All Models	E. H.
Case, 10-18 and 15-27	H.
Case, 22-40	E. H.
Case, 20-40	E. H.
Cletrac, 9-16 and 12-20	H.
Coleman	E. H.
Common Sense	H.
Dakota	H.
Dart Blue "J"	H.
Depue	H.
Dill Harvesting	M.H.
Eagle, 12-22 and 16-30	E. H.
E-B, 9-16 and 12-20	H.
E-B, 16-32	H.
Farm Horse	E. H.
Farquhar, 15-25	H.
Farquhar, 18-35 and 25-50	H.
Fordson	H.
Flour City Junior, 20-35	H.
Flour City, 30-50 and 40-70	E. H.
Fox	E. H.
Four Wheel Drive Fitch	E. H.
Frick, 12-20	E. H.
Frick, 15-28	H.
Good Field	H.
Grain Belt	H.
Gray	H.
Great Western	H.
Hart-Parr—All Models	E. H.
Heider—Model "C"	H.
Heider—Model "D"	H.
Holt Caterpillar, T-35	H.
Holt Caterpillar (5 Ton)	H.
Holt Caterpillar (10 Ton)	E. H.
Holt Caterpillar (15 Ton)	E. H.
Huber Light & Super Four	H.
Illinois Super Drive, 18-30 and 22-40	E. H.
Indiana, 5-10	H.
International, 8-16	H.
International, 15-30	H.
J. T.	E. H.
Keck Gonnerman	E. H.
Kinnard	H.
La Cross	H.
Lauson, 12-25 and 15-30	H.
Leader, 18-36	H.
r, 12-18 and 16-32	E. H.
Leader, 18-35	E. H.
Leonard Four Wheel Drive	H.
Liberty	E. H.
Little Giant A. & B.	H.
London Model S, 12-25	H.
Magnet B	H.
Mark VI Once Over	H.
Midwest	E. H.
Minneapolis, 12-25 and 17-30	H.
Minneapolis, 22-44 and 35-70	E. H.
Mogul	H.
Mohawk	H.
Monarch-Industrial	H.
Nilson Junior & Senior	H.
Ohio	H.
Oil Gas, 20-42	E. H.
Oil Gas, 25-50	E. H.
Parrett	H.
Peoria	E. H.
Pioneer, 18-36 and 30-60	E. H.
Plow Man	H.
Porter	H.
Port Huron	H.
Prairie Dog, 10-18 and 15-30	H.
Quadpull	H.
Reed	H.
Reliable	E. H.
Rex	H.
Rumely Oil Pull, 12-20	E. H.
Rumely Oil Pull, 16-30	E. H.
Rumely Oil Pull, 20-40	E. H.
Rumely Oil Pull, 30-60	E. H.
Russell "Big Boss," 20-35	E. H.
Russell "Giant," 30-60	E. H.
Russell "Little Boss," 15-30	H.
Russell "Junior," 12-24	H.
Samson Model M	H.
Savage A.	E. H.
Shawnee, 6-12 and 9-18	H.
Shelby Model C	H.
Shelby Model D	E. H.
Square Turn	E. H.
Stinson Heavy Duty	H.
Titan	H.
Topp-Stewart	H.
Toro	H.
Townsend—All Models	E. H.
Traylor	H.
Triumph	E. H.
Trundaar	H.
Twin City, 12-20 and 20-35	H.
Twin City, 40-65	E. H.
Twin City, 60-90	E. H.
Uncle Sam—All Models	H.
Vim	H.
Wallis	H.
Wallis Cub	H.
Waterloo Boy N.	H.
Wellington, 12-22 and 16-30	E. H.
Wetmore	H.
Western	E. H.
Wheat	E. H.
Whitney	E. H.
Wichita	H.
Wilson	H.
Wisconsin, 16-30 and 22-40	E. H.
Yuba Ball Tread—All Models	H.

KEY

M. L.—Polarine Medium Light.

M. H.—Polarine Medium Heavy.

H.—Polarine Heavy.

E. H.—Polarine Extra Heavy.

N. B. For recommendations of grades to use in automobiles and trucks consult chart at any Standard Oil Co. (Indiana) station.

2660b

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It is made in four grades, one of which will correctly lubricate your machine, seal your pistons against loss of power, and enable you to get a maximum of service from your fuel.

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MICHIGAN CROPS

WHY WINTER WHEAT IS VALUABLE IN THE ROTATION

CORN, oats or barley, winter wheat, clover! Wherever this rotation is practicable it is the basis of the most successful farming. There is a reason for each crop and for its place in the rotation. The plan is scientifically correct and may be made the foundation of profitable agriculture through generations.

Corn usually makes a first-class crop on good clover sod.

Probably there is no better seedbed for oats, than good corn land. On fall-plowed corn land of about medium fertility, oats yield excellently both as to quantity and quality.

The rotation followed up to this point prepares the land perfectly for winter wheat and the last crop in the rotation—clover—rarely fails where seeded with the wheat. Clover is really the key crop. When it succeeds, the other crops are almost bound to do well. Thus the wheat crop is valuable to the entire rotation because of its direct bearing upon the clover crop.

It has been demonstrated repeatedly that in order to obtain the fullest benefits from fertilizers, a correct and suitable rotation is necessary. It is common experience that on good soil, manure gives best results when applied to corn. On poorer soil, it may be advisable to save some manure, if possible, for the wheat or clover. On wheat, a high-analysis fertilizer is profitable not alone because of the increased yields of wheat, but also because of its excellent residual effect on the following crop.

SWEET CLOVER WITH OATS

Will biennial sweet clover sown with oats in the spring furnish much pasture the following year?—M. J., Pigeon, Mich.

Sweet clover makes an excellent pasture crop the second year. In a test conducted at the Michigan Agricultural Experiment Station the past season, sweet clover pasture carried an average of one cow per acre and the cows on sweet clover pasture produced as much milk on the same grain ration and without insilage as cows on June grass pasture receiving grain and insilage.

Cattle should be turned on sweet clover early in the season and before the plants have made a coarse growth. Some cows refuse to eat sweet clover for a day or so but when they receive no other roughage for a day or two, they soon become accustomed to the taste and no further difficulty is experienced. Some of the cows in the test conducted here the past season ate the sweet clover from the start.

In order to secure a high yield of sweet clover the seed bed should be well firmed, the seed inoculated and the soil should contain plenty of lime.—C. R. Megee, Associate in Farm Crops, M. A. C.

SOWING SUDAN GRASS AND SOY BEANS

Would you please tell me if I can broadcast soy beans and Sudan grass for hay? What time should it be cut?—W. K., Omer, Mich.

Sudan grass and soy beans are sometimes sown together and the mixture used for hay. Experiments indicate that there is not usually much increase in the feeding value of the hay.

The following table shows the proportions of protein and ash in Sudan grass when grown alone and when grown with legumes. This test was conducted by the Office of Forage Crops Investigations, U. S. D. A.

Sudan grass (alone) 6.63 per cent protein, 7.46 per cent ash; Sudan grass with soy beans, 7.30 per cent protein, 10.46 per cent ash; Sudan grass and cowpeas, 6.40 per cent protein, 8.6 per cent ash.

The above table would indicate that there was not a very large difference in the feeding value in the mixture and the Sudan grass alone.

When sowing Sudan grass and soy beans together would suggest using 12 pounds of Sudan grass and from 40 to 60 pounds of soy beans per acre. This mixture could probably be sown to the best advantage by broadcasting.

If a grain drill is used, great caution is required to keep the Sudan grass seed and the soy bean seed thoroughly mixed in the drill box. General experience indicates that it is usually more practical to grow the two crops separately.

Sudan grass should be cut for hay just as it starts to head out, while soy beans should be cut for hay when the seed are well formed in the pod and before the lower leaves turn yellow and drop off. The Sudan grass is likely to reach this stage before the soy beans.—C. R. Megee, Associate in Farm Crops, M. A. C.

WHEAT CANNOT TURN TO CHESS

Will you please notify me as soon as possible if wheat will turn to chess? Many farmers say that it will. Will it do to sow wheat after wheat if the ground is manured and plowed good?—R. D., Oakley, Mich.

It is not possible for wheat to turn to chess as it is commonly supposed since wheat and chess belong to different plant species. When chess comes up in a field of wheat, the seed was either in the ground at the time of planting the wheat crop or was planted with the wheat. Conditions that are unfavorable to wheat often do not injure chess which gives rise to the idea that wheat will turn to chess.

It is not a good practice to sow wheat after wheat even though the ground is well manured and plowed owing chiefly that there is much greater danger of loss from insects and diseases which injure wheat. It would be better to follow with oats, barley or rye seeded with clover.—J. F. Cox, Professor of Farm Crops, M. A. C.

FRUIT and ORCHARD

EDITED BY FRANK D. WELLS

THE OUTLOOK FOR ORCHARDS

SHOULD we plant or should we not? This is the question many are now asking.

The advance in nursery stock during recent years has caused many to hesitate about planting and has been largely responsible for the diminishing orchard area. When peach trees could be bought for 10 cents or less each and other fruits in proportion, the outlay for nursery stock was a small matter. If they lived the outlay was small and if they died the loss was not great. Now it is different. The cost of starting an orchard is something to make the most enthusiastic feel doubtful.

Now should we plant? Well, the old trees are fast dying. The population is on the increase. More fruit is eaten per capita than ever before. Whence will come the supply?

To be sure the area of new orchards is on the increase, but not rapidly enough. This is true especially of peaches. They do not live long usually and are fast weakening. Soon there will be a shortage, unless present indications are much at fault.

The outlook for the apple is somewhat better. A limited number of orchards are being planted even with high-priced stock. But then, again, the demand promises to keep ahead of the supply for some time to come. To be sure there are localities in which apples are a drag, but that is chiefly due to imperfect facilities for transportation.

Plums and cherries are being set more in proportion to the general demand for the fruit than are the peach or apple. There is more danger of a surplus of these fruits than of the others.

All things considered, the prospect is encouraging for those who select their location judiciously and care for the trees properly. But these factors were never so important as now. All locations are not equally good and their merits should be carefully considered. Apple, pear, peach, plum, cherry all differ in their requirements, while the varieties do not always succeed equally well under like conditions.

Ought you to plant an orchard? Yes, if you are the right kind of a man, or woman. You must have the right kind of material in yourself. The owner must be able to like trees, to think of them as friends. If he can consider fruit-growing the best work on earth, so much the better. But first "Be sure you're right, then go ahead"—and stick to it.

A MICHIGAN APRICOT ORCHARD

IT was our privilege recently to recently to visit the apricot orchard of William La Male, Strasburg, Monroe County, Michigan. It is not a large orchard containing about 70 bearing trees, but is worthy of notice as being the only apricot orchard we have thus far been able to locate in this state.

The trees are of half a dozen different varieties and are from three to twenty years old. In the beginning the owner had little to guide him in his selection of suitable varieties, so has tried many kinds and is still looking for more. Nearly every year a few trees are planted. Last spring more than 60 trees were set, which should more than double the production of fruit within a few years.

Mr. La Male has faith in the apricot, "There is no reason," he says, "why it should not have a place among Michigan fruits. The first varieties begin to ripen about the tenth of July, which is long enough before the peach to make sure of a market. But it is no trouble to sell our home-grown fruit when the quality is known. It is not and will not be a substitute for the peach, but will always have a place for itself."

For the benefit of those who are interested in the fruit, Mr. La Male has given us the following points regarding apricot culture:

"A good plum soil is best. The apricot needs more moisture than the peach.

"The culture is similar to that for the peach. The ground in a young orchard should be worked till the middle of July, then a cover crop put in.

"The San Jose scale is not troublesome and there are no insects that do any serious injury to the foliage.

"There is a leaf rust that sometimes affects the trees, but neither that nor any other disease has caused trouble.

"The tree is much hardier than the peach. Our tree on the place was planted in 1898 and still shows no signs of old age. The symmetrical top covers a circle more than 30 feet in diameter.

"Apricots will endure neglect. Tree will stand in sod for years and still produce crops. But good care is advised and the trees respond generously.

"The plum cucules is the worst enemy, but it can be controlled by early and thorough spraying with arsenate of lead.

"There has been no failure in a crop since 1912 and some years the production has been heavy. In this respect it has done better than the peach."

In regard to varieties the owner gives us the following information:

Early Golden: Early, productive,

(Continued on page 17)

HEALTH HINTS

OR

HOW TO CURE YOURSELF

BY

DR. T. N. ROGERS

IF you feel you are coming down with a cold or grip or any other old thing, clean up and clean out and keep clean. First take a hot bath and hot drink and go to bed. Take one ounce of castor oil, follow this up with Boneset tea or better still, keep a bottle of the following in the house and use it for many troubles of this nature. Get this at any drug store. Acetanilide 4 drahms, tincture of Aconite 4 drahms, tincture of Gelsiminim 4 drahms, Glycerine 1 ounce, Aqua Camphor to make 4 ounces. Take 1 teaspoonful every half hour for four hours, then every two hours. Keep your head cool and your feet dry and warm and avoil drafts, except bank drafts. Eat little meat, but much fruit, vegetables, cereals and brown or whole wheat bread. Do not drink while eating. Fifty per cent of all sickness should be avoided.

A CO-OPERATIVE FEED BUYING PLAN

The dairyman's biggest expense is his winter feed bill. By organizing a co-operative buying service at this time of the year and finding out what quantities of feed farmers will need this winter, feedstuffs can be bought ahead at favorable prices. Accordingly, we are announcing a

Michigan State Farm Bureau
Co-Operative Feed Buying Service

Whereby farmers may contract now through their local co-operative associtions their winter supply of dairy rations for delivery in equal monthly shipments during the winter at summer feed prices. The Feed Buying Service is on the perfect, 24% protein, open-formula, dairy ration

MICHIGAN FARM BUREAU MILKMAKER

Which is approved by the Michigan Agricultural College Dairy Department. It is one of the best rations for Michigan dairy herds. **Michigan Farm Bureau Milkmaker** is a ration made up entirely from the milk producers' viewpoint—to get the most milk for the least investment in feed and keep the cow in the best of condition.

Public Formula Protects You

Every bag of M. F. B. Milkmaker from the State Farm Bureau's Feed Buying Service will carry on the regular analysis tag the **EXACT** number of pounds of each ingredient in the feed! This is important because it enables you to check up on the price. Here is **EXACTY** what you are paying for in M. F. B. Milkmaker:

ANALYSIS

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Fat (minimum)	5%
Carbohydrates (minimum)	45%
Fiber (maximum)	9%

INGREDIENT FORMULA

200 lbs. Corn Distillers' Grains
500 lbs. Gluten Feed
260 lbs. Cottonseed Meal 43%
240 lbs. O. P. Linseed Oil Meal
200 lbs. Standard Wheat Bran
100 lbs. Stadard Wheat Middlings
160 lbs. Yellow Hominy
100 lbs. Ground Oats
100 lbs. Cane Molasses
100 lbs. Peanut Meal 40%
20 lbs. Salt
20 lbs. Calcium Carbonate

2,000 lbs. of M. F. B. MILKMAKER—all honest feed.

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It is your opportunity to buy your winter supply of dairy rations at summer prices. No cash investment is asked. You contract for a guaranteed feed supply and pay for it monthly as it is delivered. The feed comes fresh and palatable every month. You'll feed your cows this winter one of the very best milk producing ration there is. This better ration will make your milk production more economical. Your milk check will show it.

How to Join the Feed Buying Service

Talk it over with your neighbors and with the manager and directors of your local co-operative association. Arrange with us for a meeting to which we will send our representative to explain all details and to assist you in sharing in the Farm Bureau's Feed Buying Service

Local Co-operative Ass'ns take orders from September 5 to October 20, when Buying Service Closes. Contracts taken for monthly shipments till April 1

This is Farm Bureau Service

For further information, form of contract, etc., write

Michigan State Farm Bureau
Co-Operative Feed Buying Service,
Lansing, Michigan.

Mail us this coupon

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FEED BUYING DEPARTMENT,
Lansing, Michigan

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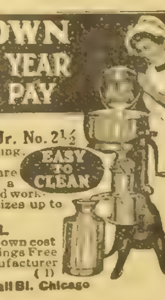

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Farmers Service Bureau

(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full name and address. Name not used if so requested.)

RENTER WANTS TO TERMINATE LEASE

I have rented a farm. Contract calls for three years, to be paid by the year. I gave my note with a backer. Contract reserves the right to work on property for mineral any time. Owner has privilege of selling at any time by paying for my work and at the end of three years I am to leave 20 acres new seeding. Now I want to quit the place this fall. Can I do so without being liable to owner? I have 15 acres new seeding and have done a lot of repairing. I have put up a woven wire fence around the house and garden. Can owner make me leave it as I have it fastened to the line fence or can I take down the fence before my year is up? I have a large quantity of rye, oats and pea straw. Can I sell it before I leave? The contract doesn't mention straw and the man renting before me took it off the place when his year was up. Owner has my note for this year's rent and owes me $20 for labor and board while working on barn built on this place and refuses to pay me. How am I to collect it?—C. H., Iosco County, Mich.

If you contracted to work a farm for three years you would have to do the work according to agreement. If you made any agreement about leaving the premises by giving notice or fixed any way for terminateing the contract you may terminate it by observing the terms of the agreement. Or if you agree with the owner upon the terms of your leaving before the time is up, then this agreement will be binding upon your landlord as well as upon you. If the wire fence was placed on premises for your convenience and you did not make an agreement to build and leave it there then you may take it away if you remove it during the time you are in possession and control of the premises. You have the right to sell any of the products of the farm and rye, oat and pea straw are products of the farm, and can be taken as other products before your time expires unless you make some agreement in the writing with reference to it. You must abide by the agreement if you made one with reference to it. You have the right to deduct from what you owe him the amount he owes you. You better let the note run until after it is due so he can not sell it to an innocent purchaser.—Legal Editor.

CANNOT TAKE DIRT FROM ROAD

Can I take dirt from my neighbor's side of the road and fill in a ditch on my side of the road if the county highway commissioner gives me permission to do it? And if I can't get permission from the county highway commision who has the authority? What is the legal width of a main highway?—S. J., Bronson, Mich.

Please be advised that the property owners would not have a right to remove earth from the highway without the consent of the highway commissioner having jurisdiction over the highway in question as the commissioner is under legal obligation to keep the road in a reasonably safe and fit condition for public travel and should be consulted by an abutting property owner before the removal of earth from the highway as the law also gives the right for taking the material from the highway for making improvements to the same as set forth in Section 19 of Chapter 2 of the General Highway Law.

The above statement also answers your second inquiry. You should get permission from the authorities having jurisdiction over the highway in question. The legal width of a highway in this state is four rods, as specified in Sec. 20, of Chap. 1, of the Highway Law.—State Highway Department.

PRIMARY SCHOOL FUND

Please explain the source of state primary school funds, how obtained, etc. —Miss M., Eaton County, Mich.

The language of the first State Constitution is as follows: "The proceeds of all lands that have been or hereafter may be granted by the United States to this State for the support of schools, which shall hereafter be sold or disposed of, shall be and remain a perpetual fund, the interest of which, together with the rents of all unsold lands, shall be inviolably appropriatetd to the support of schools throughout the State."

The "perpetual" fund above mentioned was later named the Primary School Fund. Later, in 1850, Congress gave hundreds of acres of swamp land to the state and an act passed which placed the swamp land fund upon nearly the same basis as the primary school fund by making the net proceeds of sales a fund upon which the State must pay interest to be used for educational purposes only, the difference being that the fund is not a perpetual one fixed by the Constitution, but a statutory one and may be changed by the legislature.

The State has thus become the debtor to two funds. First—The Primary School Fund, derived from the sale of the sixteenth section in each township, upon which the State pays 7% interest annually, more commonly known as the Seven Per Cent Fund. Second—The Swamp Land Fund derived from a sale of swamp lands, upon which the State pays 5% interest annually, more commonly known as the Five Per Cent Fund.

In addition to these two sources of the Primary School Fund, there is a third that amounts to more than the two together. The Constitution provides that the taxes paid on railroads, telegraph, telephone, and express companies, and a few other corporations, together with the inheritance tax and money received from the interest on escheated estates, shall be used first to pay the interest on educational funds—such as the University, Agricultural College, and Normal School funds—and after these items have been paid, there is still a balance remaining, it is provided that it shall be added to and constitute a part of the primary school interest fund which is distributed annually to the several districts of the State, according to the number of children therein between the ages of five and twenty years, based on the census of the previous year.—Department of Public Instruction, Lansing, Mich.

The one mill tax is obtained by a tax of one mill on the assessable property of the State. Three-eighths of this tax goes to the University of Michigan, one-fifth to the M. A. C. and the rest is expended for local purposes.—Editor.

OWNER'S SHARE OF FARM PROCEEDS

When a farmer rents a large farm to a renter, the renter to furnish everything and give the owner one-third of everything that is sold and one-third of all the increase in stock and the renter sells anything when is the owner's one-third due? Now this man comes on without tools or money and the owner signs with him to get them, can the farmer in any way attach the stuff he has to sell till he makes good to satisfy the signer?—W. H. B., Dansville, Mich.

If the lease does not provide any other time for payment of the owner's third it will be due upon sale of the proceeds. The farmer can arrange with the seller of the goods who holds the notes to put a purchase price lien upon such property as he holds him and take the property to pay the same upon an execution issued upon a judgment for their price.—Legal Editor.

WIDOW'S PENSION

I am a widow. My husband had been sick for a year and eight months and is now dead. I am left with four children, the oldest eight years and the youngest 18 months. I have 60 acres of land and a lot of debts, doctor bills and funeral expenses and so on, and no one to work my farm. Now will you please let me know if I am eligible to a widow's pension and if so, who would be the proper authorities to apply for same?—Reader, Tuscola County, Mich.

Under the circumstances described in your letter you are eligible to draw a mother's pension. Application should be made to the Probate Court of the county of Tuscola, who will cause an investigation to be made, and if he finds that you and your children come within the meaning of the act authoriziing such pension he may declare and fix the amount of money to which he thinks you are entitled in order to properly care for and educate your children.

The court must be satisfied that the mother in the case is a widow, or is unmarried, or has been deserted by her husband or whose husband is in a public institution for the insane, etc., and is too poor to properly care for her children without outside aid before it can authorize the pension. The amount which the court may order paid to said mother will depend upon her needs and the number of children she has. The law says the amount shall not exceed $10 per week, and not less than $2 per week in case the mother has but one child, with an additional sum of $2 per week for each additional child. Additional information will be furnished on request.—Editor.

CAN COLLECT FOR ANIMALS INJURED ON PUBLIC HIGHWAY

If the driver of an automobile runs into a herd of cattle being driven upon the public highway and injures any of the animals, is he liable for the cost of the same?—Reader.

The driver of cattle has the right of passage by his cattle upon the highway as much as the driver of an automobile has the right of passage by auto. If the driver of the auto negligently or carelessly injured cattle being driven on the highway he would be liable for the damage. But if they were injured without the fault of the driver of the auto but by reason of their fright or viciousness then the driver of the auto would not be liable for the damage. —Legal Editor.

MUST PAY TAX ON AMUSEMENTS

Is it compulsary to pay war tax on public dances and if so, why is it not enforced in every county?—B. M., Blanchard, Mich.

The 1921 U. S. Revenue act provides that a tax of 1 cent for each ten cents or fraction thereof of the amount paid for admission to a dance (and certain other places of amusement) shall be paid by the person paying for such admission; but where the amount paid for admission is 10 cents or less no tax shall be imposed. If anyone is conducting a dance hall without collecting and remitting such tax to the government he is violating the law and should be reported to the Internal Revenue office at Detroit. If the proceeds of any such dance or amusement are to be expended wholly for charitable and religious purposes they are exempt from the tax.—Editor.

CUT-OVER LANDS EXEMPT FROM TAXATION

We purchased 80 acres of cut-over land a year ago, moving on about April 1921. Shortly after I saw some articles in the Farmers' Service Bureau Department of your paper, about cut-over land being exempt from taxes. We waited for the supervisor to come to assess but he never came. I have been told he never does as it is rather out of the way, but guesses at the valuation. I wrote to him about getting exempt and he wrote back that I could not be exempt for 1921 taxes as they were turned in on the roll, but to meet the Board next June and he would see what could be done. Now as there is only a branch line running in here and I would have to go out in the afternoon and remain away two nights, with two small children, leaving only a 16-year-old boy and one 11 years at home to milk and care for things, I would like some information if I really have to meet the Board. I gathered from the information in the paper all I would have to do, is speak to the supervisor and he would bring it before the board. We put up a lot of fence, cleared about five acres or more and have a bank barn raised and partly closed in, and some other improvements done this last summer. Hope to do more each year. I would also like to know if there is a certain amount can be taxed on the valuation of property or can they put on what they like. This was valued at $450, and my taxes on it were $32.71. I understand other years they were about $14.—Mrs. E. L., Osier, Mich.

Sec. 4192, of the Compiled Laws, provides for exemption from taxes for 5 years in cut-over lands. It provides that in order to get the exemption application shall be made to the supervisor at the time the assessment is made to be exempt. The supervisor shall put the description on the roll in the usual way and refer the matter to the board of review. If they find all the conditions entitling exemption existing shall write on the roll the proper entry. They shall enter each year the exemption and mark the number of the year that it is exempt. It is not necessary to be present under the law to have a consideration and I think the supervisor might and should have submitted to the board of review upon your written application. They may have marked you exempt and you could find by writing to the supervisor personally or ask some of your neighbors to inquire for you when they get a chance to examine the roll.—Legal Editor.

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BUSINESS FARMER

An Independent
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Edited in Michigan

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FORREST A. LORD ....EDITOR

ASSOCIATES:
[illegible] W. Slocum, Jr. ....Business Manager
[illegible] ....Plant Superintendent
Milon Grinnell ....Managing Editor
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There Are Other Worlds Left Yet to Conquer

HAVING subjected all nations within reach of his iron fist, Alexander the Great lamented that there were no more worlds for him to conquer. And ever since men have pined for larger fields of conquest and of service

Men's visions are usually circumscribed by the sky-line which encircles their horizon. Opportunities for service and success lie by the pathways which all men travel, but they do not see them. Occasionally someone stubs his toe and his eye catches an opportunity by the side of the road, which has lain there unnoticed and untouched for generations. Then other men who have passed that way shake their heads and wonder why they too, weren't born lucky.

There are just as many undiscovered opportunities today as ever before in the history of the world. That may sound like an extravagant statement in view of man's magnificent accomplishments up to the present age but when it is remembered that opportunity is largely the result of changing conditions, it will be seen to be true.

Men who live in small towns and rural communities have the notion that opportunity is confined to the larger centers of populations. But it is not so. There are just as many opportunities in the rural community and upon the farm for making money, for achieving distinction, for being a friend to man and for rendering service as there are in the largest city in the world.

We do not believe that there is any field of endeavor in the world which offers such excellent opportunities in the above respects as in the field of farming. Farming next to hunting is the oldest known vocation. But it is only in the twilight of development. The average man's ignorance of the possibilities of farming is appalling. The soil is not yet producing to its maximum capacity. The road to the consumer is altogether too long. It must be shortened. Existing farm credit machinery is still too often an instrument of extortion instead of benefit. In short, farming as a business, isn't much farther advanced than it was a century ago.

Talk about the worlds to conquer! They are lying at our very doorstep. Where are the men of vision and unselfishness to conquer them for humanity?

The League of Nations After Two Years

THE Atlantic Monthly publishes an informative article by Raymond Fosdick on the League of Nations after two years of operation. Here are a few striking paragraphs:

> "To its enemies in the United States the League of Nations must seem an unconscionable time a-dying. For more than two years it has tenaciously clung to life despite repeated prophecies of approaching demise. Occasionally indeed its actual death has been announced,—once by no less a person than the President of the United States,—and preparations have been begun in high places to celebrate the obsequies.
>
> "But somehow the League still lives. More than that it shows a surprising vitality. In spite of hard treatment and some neglect it seems to gain in strength and purpose. Certainly the League today, with all the manifold activities which it is initiating and guiding, is a far different creature from the feeble offspring which the Treaty of Versailles so laboriously brought into the world. For one thing it has more friends. Only a handful of the larger powers stood sponsor for it at its birth. It was eyed with suspicion by the smaller nations. Today these smaller nations are its warmest supporters, and fifty-one countries are now enrolled under its standard, representing more than four-fifths of the world's population, and nearly three-fourths of its area. The list of absentees among the supporters of the League is more easily called than the roll of its membership. Abyssinia, Afghanistan, Ecuador, Germany, Hungary, Iceland, Mexico, Russia, Turkey and the United States."

The account which Mr. Fosdick gives of what the League has actually accomplished is an inspiring example of co-operating and felicity between the member nations. In no instance had the League sought to bring about peaceful relations between warring nations or nations threatening to war that it has not been successful, and even its enemies have been forced to admit that there "might be something after all" to the notions that nations can settle their disputes without fighting.

Unfortunately, the views of the American people are still very much colored by the propaganda they have read against the League in strong anti-League newspapers and magazines. Many newspapers and politicians still believe that the people voted against the League in 1920. Having, as they thought, fooled the people on the League issue, they must yet to save their face, keep 'em fooled, and that's what they're trying to do. It may take another presidential election or two to bring the anti-League press to its sense but that will be accomplished all in good season.

In the meantime, the United States will go its own sweet way while the rest of the nations sit in harmony together discussing and settling to a remarkable extent some of the world's great problems.

The Evolution of Agriculture

HENRY FORD's exhibit at the State Fair, "the evolution of agriculture," might perhaps have been better termed, the "revolution of agriculture." The term evolution is associated with slow-moving changes throughout countless centuries, such as the development of modern man from the stoop-shouldered ape-visaged Neanderthal of a half million years or so ago. But while man's stature and intellect changed very slowly there was an almost immeasureable space of time when the implements with which he tilled the soil changed not at all. It took him several million years to bring forth the crudest kind of a wooden plow; but the steel plow is a product of but a single century and less. For ages men sowed, harvested and threshed their grain by hand. The seeding machine, the reaper and the threshing machine were all brought out less than 75 years ago So that it may truly be said that the last century has seen a veritable revolution in the methods of farming because of the marvelous inventions of farm machinery.

The most recent contribution to power farming is the tractor, which passed the experimental stage a decade ago and is now recognized as a labor and money-saving device upon the average farm. But the tractor has by no means as yet reached the zenith of its development and there are undoubtedly scores of uses for such machines which the average mind has not yet dreamed of, or had not at least until Mr. Ford staged his exhibit.

The wonders shown in the Ford exhibit call to mind Mr. Ford's "synthetic cow" at which the nation has poked a lot of good-natured ridicule But laugh as we may at Mr. Ford's "notions" we are hushed into silence and seriousness when we perceive the "impossible" things he has done. Ford is a century or so ahead of the rest of us, and he is dreaming, dreaming all the time of a day when man shall be emancipated from slavish labor and the work of the field and the factory will be done by machines which can be operated by the mere touch of the hand.

Mr. Ford's exhibit showed that unbelievable strides have already been taken in the development of power farming, but it also gave a promise that things even more improbable and impossible are yet to be discovered.

The Gasoline Tax

THE most important subject which will probably come before the next legislature is that of taxation. There has always been more or less complaint against taxes, but the dissatisfaction this year has become so great and with such good reason that the legislature must act to either lower taxes or distribute them more evenly.

It has been said time and again that state expenses cannot be lowered greatly, and after a careful investigation of the subject we believe the statement is true. There can be some pruning here and some lopping off there but despite the claims of politicians who are out of office and want to get in, the maximum saying which can be made without actually crippling our institutions will be very small compared to the total. Farmers and other taxpayers who delude themselves or have been deluded by others into believing that the state taxes can be cut even a fourth are due for a shock. State taxes for the next five years will not fall far short of an average of $20,000,000 a year, and will exceed that figure providing any appreciable amount is set aside to retire good roads and bonus bonds, as should be done. The taxpayers might better confine their efforts to preventing a further increase in state expenditures instead of trying to decrease them from their present level, and if they succeed in this, then the revenue from new sources of taxation which have been suggested will automatically reduce taxes or real and personal property.

It is generally believed that the income tax amendment will carry at the fall election, and it is almost certain that the legislature will be asked to levy a tax on gasoline. Opinion upon the gasoline tax is very much devided. The automotive industry is supposed to be a unit against this tax and even the farmers themselves are not altogether sure that it would be a good thing. In the Business Farmer's straw ballot 190 farmers expressed themselves in favor of such a tax and 42 against it. The ballot did not disclose what percentage of those voting owned automobiles or were large users of gasoline

Although as stated, the automotive industry is suppossed to be opposed to a gasoline tax, the various manufacturers either are noncommital or else very guarded in their remarks on the subject. A letter dispatched by the Business Farmer to the various manufacturers in this state failed to reveal a single company which was ready to admit publicly its opposition to the tax. Some merely said they did not care to express an opinion; others that the question of financing road building and maintenance was of such magnitude that they had not yet found an answer to it.

The farmers' taxes must be reduced and it will be up to the next legislature to find the way to do it.

What Was It All About?

THE coal strike has been settled,—for the time being,—and the mines are running again to the limit in an endeavor to make up for the precious time which was lost. The average citizen is still pretty much in the dark as to the causes of the strike and also the basis of settlement The miners went back to work at the same old wages, which is a good thing for the farmer and the country. No matter who won the strike we can't forget that thousands of men were out of employment for many months; that their families suffered for the necessaries of life; that the mine owners lost thousands of dollars in profits; that all industry was slowed up because of either an actual shortage of coal or fear of a shortage. The miners suffered; the mine owners suffered; the public suffered. A strike is like a law-suit, —nobody wins.

There is a tendency to go to sleep in political berths.—San Francisco News.

What the Neighbors Say

THINKS U. S. SPUD ESTIMATE TOO HIGH

HAVE just been reading your editorial on the prospects ahead of us for the spud crop.

In our territory it has been dry now for two weeks and part of the time very hot so it has lowered the prospects for spuds a good many points and has shortened up the possible bean yield fully 30% and perhaps more.

If I am any guesser the government report on the spud crop will read altogether different for October and November 1st than their estimate for August 1st did.

There are a good many spots in the late spud crop territory where spuds have been greatly injured since August 1st by dry weather, wet weather, leaf hoppers, late blight and so on.

Am sending you Snow's 1st of August estimate on the spud crop. You will notice there is a big difference between his estimate and that of the government.

I have always found Snow's report to be the most reliable of any crop report. It is always a hundred million miles ahead of the government's.

What I have written here will correct your reader's ideas of the spud crop. Also of beans if you publish it.—A. A. Lambertson, Montcalm County, Mich.

We surely hope, friend Lambertson, that you and Snow are right. But we recall that you aways predict higher potato prices in spring than fall. Sometimes you are right, but often you are wrong. We quite agree that the October and November 1st estimates will probably be lower than the August. They almost always are. Yet potatoes haven't suffered much in Michigan or any other potato state, except Maine, and we don't believe the September estimate will be very far from the August still we repeat we hope we are wrong and you are right.—Editor.

BACK TO NORMALCY

(An Open Letter to Uncle Rube Spinach)

MY Dear Uncle: I note that in a recent issue of the M. B. F., you ask some questions pertinent to the present industrial and political situation in this Land of the Free.

Sustaining as I do, a more or less intimate relation to our government—by reason of paying taxes—I may be able to give you a little first hand information. First off, I advise you to procure a copy of Behind the Mirrors. No doubt you will be able to get it at your library, and should you never read another thing in your life, you will be a pretty well educated man when you have finished the book. This will give you a line on the situation at Washington.

In the first place you ask if our president has or has not power to settle the strikes that now disturb this country. In his speech to Congress Mr. Harding says he has adequate power and authority to settle both the R. R. and coal strike. "But," he adds, "there is no hurry." You must remember that Rome wasn't built in a day, Uncle Rube. And what can you expect in the way of legislation when we pay our president only a beggarly seventy-five thousand a year, and found while our needy and noble Congressmen have to feather their nests like broody hens, to obtain a mere pittance!

As an afterthought Mr. Harding says he will ask for more power, but I suspect he means more power to drive on the "gawf" course.

Another thing, Mr. Harding has pressing personal duties to engage his attention. Do you realize, Uncle Rube, that Warren Gamaliel Harding has the reputation of being the best dressed man in Washington? And even Abraham Lincoln had no such reputation as that. I doubt if Honest Abe were with us today he could get his face stuck so hard and frequent into the movies as does Mr. Harding, permanent smile 'n everything.

You appear to be worried about the coal strike and ask "are we going to freeze this winter?" No man knoweth that, but I'll say this, Dear Uncle, if you should freeze your nose and all of your toes, yes, even the very marrow in your bones you will not present as frost bitten an appearance as will Warren G. Harding along about two years from next March. Life holds its compensations even for the under dog, Uncle Rube, but should you get a wee bit chilly around the edges this coming winter, you will still have your cosy corner in the M. B. F., where we will still have your pleasant smile to beam at us and your homely words strike a responsive chord in our hearts while all that will be left for Warren G. Harding to do as he packs his grip for the last time in the White House and sings in his mellifluous voice: "My Home Town is a One Horse Town But Its Big Enough for Me," will be to purchase a ticket to Marion, if the trains are running then, and when the curtain rings down for the last time on the Four Years' Farce at Washington, he can hit that one horse town and "Wrap the drapery of his couch about him, and lie down to pleasant dreams"—dead to the world. Fraternally yours.—Rhoda.

Dear "Rhoda"—We won't sign your full name altho you showed your good faith by signing the above in full. You seem to think our Uncle Rube is a Republican, while from reading your open letter no one would suspect you of being a Democrat—or are you just a Progressive? In any event, Rhoda, it is your vote and your sisters' votes that have the old-time politicians guessing these days! Come again!—Editor.

CAUSES OF STRIKES

TWELVE years ago the billionaire mine-owning interests of our country had hired gun-men run armored trains at midnight thru the valleys of West Virginia, firing cannon and machine guns into defenseless tents full of sleeping women and children, killing and crippling scores of these foreign people who had been thrown out of the billioniare-owned shacks that day because they could not pay rent with the mines not running because of strikes.

That rich man's wholesale murder was never tried in court, yet we raise the roof, some of us, because the miners "got the drop" on the gunmen at Herrin, Ill., and got even on W. Va.'s killings.

Is it getting so a Rockefeller bunch of outlaws are to go free in America and only little boys are to be whipped in school for bad behavior?

I am a farmer and I blush for my calling when any farmer writes to our papers trying to whitewash high-up railroad and mining millionaires, drawing more than Harding's salary, which they never offer to reduce, no matter how low the farmer's returns get.

Get wise, Bro. Farmers, and instead of knocking the section hand and coal-digger, whose mining neither you nor I would do for the price of two good farms, let us work for laws keeping these rich outlaws salaries at least as low as Hardings'.—C. H. Merrifield, Van Buren County, Mich.

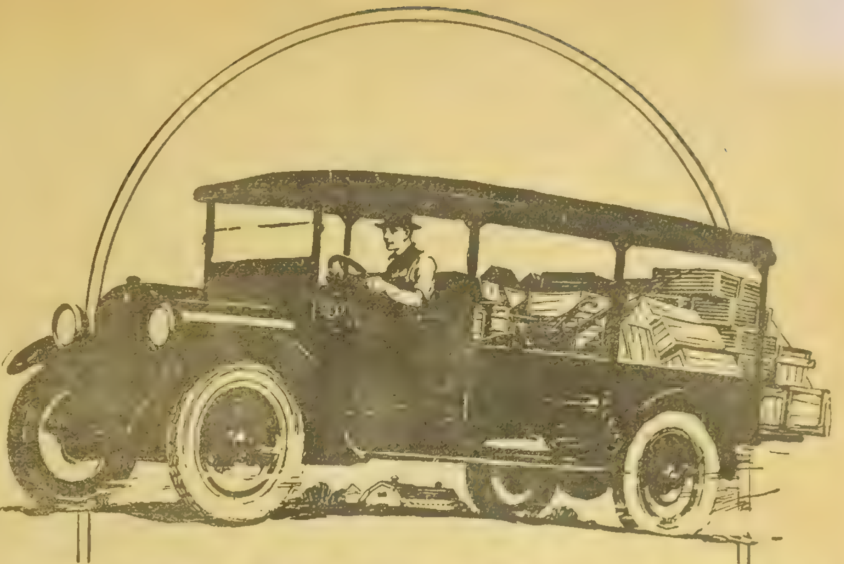
Don't blame farmers for taking the position they do on the strike question. They are the victims of a persistent propaganda the sole purpose of which is to put the employers in a favorable light and the striking employees in an unfavorable light. We cannot countenance all that is done by strikers. Neither should we countenance all that is done by employers. We could judge better the respective positions of the two if the press would give us more facts and less editorial opinion.—Editor.

TIME AIN'T CHANGED MUCH AFTER ALL

DEAR FOLKS—There's been so much in the paper about short skirts and bobbed hair that I jes' sot down and got to thinkin' about it. I 'member when I saw the first one of them short skirts I wuz leetle mite 'sprised and it put me in mind of one time when I wuz a young girl, a show come to our town and the show girls wore bangs an long black ear rings. After they left town Elmiry Smith an' me went to Georgetown and got us some ear rings an cut our hair off in bangs. When we got back home everybody sot up an begin to wag their tongues an' it wasn't no time 'till Elmiry an' me wasn't fit to live.

Then the other girls in town begun to cut off their hair in bangs

(Continued on page 17)



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Speed Wagons are today performing every kind of rural hauling and carrying.

Some one of the seven types of bodies that are now standard will do your work.

No matter whether yours be a general, a stock or grain farm; a commercial orchard, truck garden or chicken ranch—no matter where located, or what the nature of roads or loads—

Still a Speed Wagon will do your work quicker and cheaper.

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Product of eighteen years of successful building of good motor vehicles, this Speed Wagon is the greatest single achievement of this famous organization.

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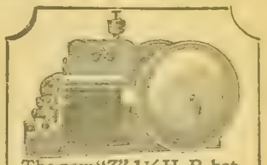

The new "Z" 1½ H. P. battery equipt uses gasoline alone. Has high tension battery ignition, hit and miss governor and balanced safety fly wheels. Control lever gives six speed changes. Carburetor requires no adjusting. A remarkable value

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FAIRBANKS, MORSE & CO.
Manufacturers Chicago

The Farm Home
A Department for the Women

Edited by MRS. GRACE NELLIS JENNEY

DEAR READERS:—Here is a suggestion. Would it not be a good plan to secure a small blank book and paste in it the remedies suggested by Dr. Rogers? In time the book would become of real value to the family and something that could not be replaced or purchased.

You can have a very real interest in it by being responsible for some home remedy suggested for your own benefit. You know this page stands for Better Health, Better Homes and Greater Happiness, which all means getting into harmony with our conditions and making the best of them.

If we are honest with ourselves we may be surprised to find that we are possessed of a fair amount of all three.

VOX POPULI

ONE may pick up the daily paper any day of the week and read of crime in all its lurid details, in all its various expressions, until one's mind is saturated with the unpleasant, the low and the evil. You turn with disgust from all of it and wonder why it is given big headlines and a place of prominence on the front page. A knowledge of facts whether pleasant or unpleasant is necessary for our protection but a simple statement will do as well in that particular as a lurid story written up in Jesse James style.

The rural and county papers print clean news and put crime and social high-life entirely in the background.

Their editors belong to the great middle class, the plain-living, sober-thinking, hard-working middle class, whose judgment must ever be the balance wheel of our civilization.

Any one of these papers, where honestly edited and not controlled by indifferent capital, may be faithfully called Vox Populi (the voice of the people).

MORE ABOUT THE PRESSURE COOKER

FROM the deluge of inquiries I have received since my article about my pressure cooker was printed, I think the readers of the M. B. F. must be very much interested in the subject. I have sat up nights trying to answer all the letters but thought perhaps a few more items about it might be of interest.

A whole meal can be cooked on one burner of the oil stove, as many different kinds of food as can be packed in the cooker. My husband will not taste of cooked cabbage, but is very fond of peas. A few days ago I put my potatoes in the bottom of the cooker with sufficient water to cover them, then placed the peas in an alumium kettle with a little water, then the cabbage in a small pail set in the kettle of peas, and made a custard and poured it into a pound baking powder can, clamped on the cover of the cooker and processed for ten minutes. The peas nor custard had not the slightest taste of the cabbage. In cooking so many different kinds of food at the same time, each must be put in a dish by itself. Onions can be cooked with other food in the cooker and not have the other food flavored by the onion.

At present we are very busy canning vegetables for ourselves and also for our neighbors. My daughter and I have an acre of garden this year as a financial venture and it promises well.

In cold pack canning peas, string beans or corn, we only process forty minutes after the pressure reaches twenty pounds. Some have asked me how long it takes to run the pressure to twenty pounds. That all depends on how much you are cooking at once and how hot the cooker or water are when the cover is put on, but only a few minutes. I use mine on the range during the winter when I have a fire for heat, but I like the oil stove better, as the heat can be regulated better and more evenly. They save a great deal of fuel. I'll gladly answer any questions anyone wishes to ask, but may not be able to answer all very promptly.—Mrs. Claudia Betts.

ADVICE FOR HEARTBROKEN

THE requests in the M. B. F. of August 5th, interested me. I waited to see if others would respond but am sending my contributions to our popular page.

Enclosed find copy of one of the songs requested and some of the recipes.

I have considered the letter by "Heartbroken" carefully and if I were so situated I think I should weigh carefully whether so brutally frank a man was worth winning but having decided in his favor I should try to build a bond of mutual interests. Taking it for granted that the wife possesses and exercises the qualities of cheerfulness, neatness, thrift and industry, all of which are essential, but alone will not hold two together. I should learn the specials interests and hobbies of this man, inform myself of them, that I might sympathize and converse intelligently about them, and if possible gradually interest him in my special delights, for a common liking for the same things, is the basis of genial comradeship, which I should strive to secure, but it would not pay to stoop to unworthiness to hold or please anyone.

Marriage is made a success by all people by learning to acquire new interests and by sacrificing ones own idiosyncracies in part.

But, having given my best for a reasonable length of time without success, I most certainly should not sacrifice my entire life, the world is too rich in opportunity for usefulness and service in congenial conditions for that.

I do very surely believe that lack of proper knowledge and teachings are the cause of so much martial unhappiness.

Knowledge is power, and girls especially are rushed, or allowed to drift into the crucial and decision-making time of life, ignorant and untaught regarding the vital facts, which are essential to understanding and wise choice, and they pay with broken lives.

Buttermilk Pies

Enough for two pies: 2 cups sugar, 2 tablespoons flour, yolks of 3 eggs. Cream together and add 3 cups buttermilk and 1 tablespoon lemon extract. Bake with one crust, using whites of eggs for meringue.

Vinegar Pie

1 quart boiling water. Mix 2 eggs, 1 cup sugar, 1-2 cup vinegar and 1 teaspoon lemon extract. Stir to a smooth batter, add boiling water, pour in baked crust and frost.

Chocolate Pie

Yolks of 2 eggs, 2-3 cup sugar, butter size of walnut, 2 tablespoons flour, 1-2 teaspoon vanilla, 1 cup milk or water. Frost with whites of eggs.

Molasses Pie

Two pies: 1 cup sugar, 3-4 cup butter, 3 cups flour, crumbed together, 1 cup molasses, 1 cup hot water, 1 teaspoon soda. Put liquor in pies, add crumbs.

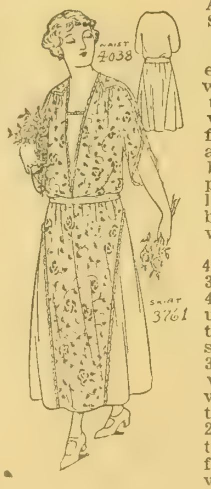
AIDS TO GOOD DRESSING

For Simplicity, Service and Style

FALL FASHIONS

Address Mrs. Jenney—Pattern Department, M. B. F.

Fashion Book Notice—Send 15c in silver or stamps for our up-to-date Fall and Winter 1922-1923 Book of Fashions, showing color plates, and containing 500 designs of Ladies' Misses' and Children's patterns, a Concise and Comprehensive Article on Dressmaking, also some points for the needle (illustrating 30 of the various, simple stitches) all valuable hints to the home dressmaker.



A pleasing Gown for Slender and Mature Figures

4038-3761—Figured and plain foulard with frills of self material or organdy would be attractive for this style. It is also nice for blue or brown moire, with pipings in tan or lighter blue or in black satin with white for trimming.

The Blouse pattern 4038 is cut in 7 sizes: 34, 36, 38, 40, 42 and 46 inches bust measure. The Skirt pattern 3761 is cut in 7 sizes: 24, 26, 28, 30, 32, 34 and 36 inches waist measure. The width of the skirt, at the lower edge is 2 1-2 yards. To make this attractive dress for a medium size will require 4 3-4 yards of figured, and 2 yards of plain material, 32 inches wide.

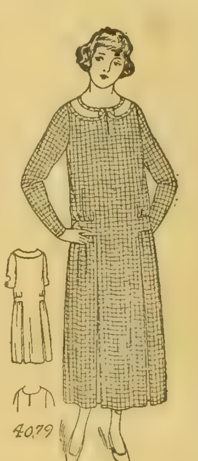
TWO separate patterns mailed to any address on receipt of 10c FOR EACH pattern in silver or stamps.

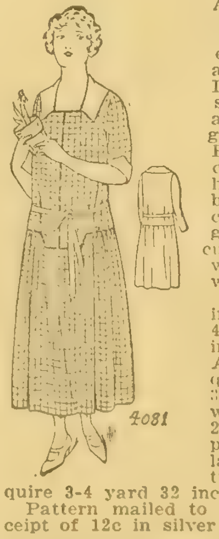
A Youthful Style

4079—Here is a new and very unique version of the one piece dress. Belt portions over which the tab extensions on front and back are fastened hold the fullness gracefully at the sides. Added width is given to the skirt portion by plaits that form a panel over back and front. This is a model for gingham, and also for the new tub silks in check and stripe patterns. Organdy or linen may be seleted for trimming. The sleeve is cool and pretty in the short length, and in wrist length it is the latest style feature.

The pattern is cut in 3 sizes: 16, 18 and 20 years. An 18 year size requires 5 yards of 32 inch material. The width of the dress at the foot with plaits extended is 2 3-4 yards.

Pattern mailed to any address on receipt of 12c in silver or stamps.





A Comfortable House or Home Dress

4081—Long waisted effects still prevail, as this stye shows. It is nice for tub silk, gingham, voile and also for taffeta, garbardine and crepe. Blue and white checked gingham is here portrayed with bandings of blue chambrey and organdy for collar and cuff. The sleeve in wrist length is fitted with a dart.

The pattern is cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38 inch size requires 5 3-4 yards of 32 inch material. The width at the foot is 2 5-8 yards with plaits extended. Collar and cuffs of contrasting material require 3-4 yard 32 inches wide.

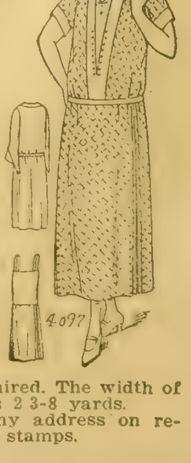
Pattern mailed to any address on receipt of 12c in silver or stamps.

An Up-to-date Attractive Costume

4097—Comfortable and practical is the development of this style. The skirt with its slenderizing plait fullness, is mounted on an underbody The blouse long of line, and with a smart vest finish, may have its sleeve short or in wrist length. This model is excellent for silk, kasha, crepe, and for linen and other wash fabrics.

The pattern is out in 6 sizes: 36, 38, 40, 42, 44 and 46 inches bust measure. A medium size requires 5 1-4 yards of 32 inch material. To make underody, sleeve facings and vest portions of plain material as illustrated 1 1-4 yard 40 inches wide will be required. The width of the skirt at the foot is 2 3-8 yards.

Pattern mailed to any address on receipt of 12c in silver or stamps.



CORRESPONDENCE COLUMN

Mrs. L. J.—There is a preparation on the market called Rust Proof and it is supposed to keep ranges from rusting. If you cannot buy it, send me a stamped, addressed envelope and I will give you the name of the maker, also the name of a firm here who sells candle wicking. The latter I believe you can buy of any hardware dealer.

Mrs. G. M. and Others—There is really no demand for fancy work, crocheted or otherwise. We have letters every week offering such work for sale and there is no market. In the first place that kind of work is not used as much as formerly. Really the necessities of life are in more demand. Most ladies make their own fancy work and do not care to pay someone for it. I wish I could help you. Could you not sell jams and jellies attractively put up?

A subscriber sends us the words to "The Wearing of the Green." I will send them to the person wanting them on receipt of an addressed envelope.

Mrs. H. H.—It will be best to write to Montgomery & Ward about the attachment as they sold you the machine. It will be safe to send the money to the company and if they guarantee the attachment it should be all right. I know that the machines which come on purpose for hemstitching are satisfactory, but quite expensive.

A. L.—The little black ant can be exterminated by sprinkling the powdered root of black flag around the places where ants are seen.

We are in receipt of a number of fine recipes for the buttermilk pie. I appreciate all of them.

MAKING FRIED CAKES

I find so much useful information through the columns of the M. B. F. The recipes have been helpful to many I am sure. I wish to ask some of the farmers' wives who are skilled in making good fried cakes, the reason I cannot always have them smooth instead of cracking open when frying. Occasionally they will be just right. I try not to get them too rich or to mould in too much flour and use plenty of hot lard to fry them in. I will appreciate any suggestion through your column.—K.

When fried cakes crack open and are not smooth it is because the dough was dropped in too hot fat. They cooked on the outside before the inside had a chance to cook. When the heat reached the inside and expanded the dough, it could not expand evenly but cracked the outside crust. The same rule will be found to operate when baking cake or even bread.

DYE FADED GARMENTS

Will you or some of the readers tell me how to dye faded garments succssfully? I have a number of babies' and children's cotton dresses, which are not badly worn but which are too light colored to be serviceable. All that I have ever colored have faded right out.—Mrs. G. C.

There are cotton dyes that are supposed to hold color. The Putnam Dyes for cotton are good. The dye that is sold for wool should not be used for cotton or silk, each has its own peculiar quality. Follow the directions carefully. Rit or Tintex will fade in washing.

DRESS TO THE SHOE TOPS

I will also enlist in Dorothy's company for short skirts. I like them wide enough so one may take an ordinary step comfortably. Not short enough to show the knee, about to the shoe tops is a good length.—Mother of Six.

SPLENDID SPONGE CAKE

Can be made in five minutes. 2 well-eaten eggs, 1 cup of flour, 1 cup of sugar, 1 teaspoon baking powder. Mix, beat well, then 1-2 cup of hot sweet milk. Can be baked for cup cakes if liked.

Johnny Cake

1 cup corn meal, 1 cup flour, 1-2 cup sugar, 2 teaspoons baking powder, a pinch of salt, then add 1 egg, 1 cup of sweet milk, 2 tablespoons melted butter and bake.—W. W. S.

SEEDS APPRECIATED

Will you kindly allow me to thank those who so generously donated the packages of pumpkin seed in response to my request in the M. B. F. of August 19th? Could all who sent them have seen the gladness, mingled with tears in the eyes of the old lady who is eighty years old, they would have been amply repaid. May He who watches over all and rewards, send His blessing to each one whose thoughtfulness helped to place another bright spot in the life of one less fortunate than ourselves.—Lucille Shultz, 1160 Reed Place, Detroit, Mich.

The Children's Hour

Dear Uncle Ned—I thought I would write to you and make a suggestion that I believe would help to make the Children's Hour more interesting to the children who read the Business Farmer.. I suggest that you establish a "Nature Study" department as a part of the Children's Hour. By this I mean a department to which the children may send questions about birds and flowers. There would be a picture and description of one Michigan bird in each issue. I think this would greatly increase interest in the children's department. What do some of the boys and girls think of this plan?—Harold Oatley, Mesick, Mich.

DEAR Nieces and Nephews: What do you think of Harold's suggestion? I think it is very good and would be pleased to follow it were it not for the fact that shortage of space forbids my publishing a picture and description of a Michigan bird in each issue. However, I would be pleased to establish a department to which you could send questions, not only about birds and flowers but about everything, and I would secure answers to them if they were possible to get. There are departments in M. B. F. that your papas and mammas write to when they have questions they wish answered so why shouldn't there be one to which you could send your problems? There should be and as soon as I receive the first question I shall start it. Who will be the first to ask a question?

Harold has given me a new idea for a contest. Here it is. You like birds don't you? Sit down and write to me, putting down the names of all the birds you know, tell which one you like the best and why, describe it, its habits and write anything else about it that you think will be of interest to your cousins and Uncle Ned. There will be two prizes given away. One to a boy and one to a girl. The girl that sends in the longest list of names and most interesting description will receive a needle case containing about 50 needles of various sizes, a very useful article. And the boy sending in the longest list and best description will receive a pencil case containing 4 pencils, a penholder and a pen point. It is just like the ones I gave away in our story contest a couple of months ago and the winners express themselves well pleased so it is worth working for. The contest closes at 12 o'clock noon, September 30, and all letters received after that date will not be counted in the contest.—UNCLE NED.

OUR BOYS AND GIRLS

Dear Uncle Ned:—I am writing this to thank you for the needle case which I received today. It is a nice case and will certainly come in handy. Well, Uncle Ned, what are you doing these hot days? It certainly is nice on the farm now. I live on a farm about 3 1-2 miles from Elsie. I have six brothers and two sisters. Their names are Erma, Blanche, Harold, George, Frank, Earnest, Willis and Kenneth. I am 15 years old and will be a Junior in high school this year. I am taking music lessons now on the piano and am in the fourth grade in music. Thanking you again for the needle case, I am, your loving niece.—Margaret Cook, Elsie, Mich.

Dear Uncle Ned:—I read with interest the story of John O. Roberts' pet crow; had often heard of their antics and wished I had one. Will tell you a few things about my pet pig.

How her name came to be Nathanuel, I just don't remember. About a year ago her mother died and left her one day old. We had a great time learning her to drink milk. She wouldn't drink out of the dish at first, so we would place a little cloth down in the milk. She would suck on that and finally learned to drink. She grew nicely and soon became a real bother around the dooryard. She seemed aways under foot and would come in the house whenever she got half a chance. She was real cute and we all thought so much of her. One day we thought her time had come. She found a crock of milk that my mother had given the chickens and drank so much that she was nearly dead when we found her; she was bloated up and round just about like a ball. My father was away back in the field working, so my mother took a long-necked bottle and put some soda water and peppermint in it and poured it down her throat, and in a few minutes, pig like, was looking for more sour milk. Now although she weighs 260 lbs. and is the proud mother of eight baby pigs, she is no less a pet. Would like to hear from some girl or boy that has tried raising pigs for pets. —Fleeta Burch, age 11, Dryden, Mich.

Dear Boys and Girls:—As I have written before and had you all guess my age and birthday, I thought I would write and tell you, as many did not guess correctly. I am fourteen years old and my birthday is the sixth of December. I also wish to thank the many boys and girls that wrote me such interesting letters. I am sending the names of all who wrote, so look for yours:

Ruth Slack, Madalene Jodloska, Lena Ables, Merril Williams, Carl Arnold, Evelyn Otter, Wilma Olmstead, Eleanor Newman, Helen M. Haviland, Meriam Ross, Herbert Clark, Harry A. Barnes, Frederic Webster, Mrs. Maurice Lenters, Myrtle Bird, Ella Wright, Claude Conklin, Halcetia Currier, Josephine Lednicky, Basil Armstrong, Rose Lorney, Blanche King, Grace L. Fowler, Edna McIntyre, Ruth L. Brown, Berniece Thompson. (I lost your address Berniece and I wish you would send it to me).

Here are the ones that guessed both my age and birthday correct: Frederic Webster, Merril Williams and Claude Conklin. All three will get an individual picture of myself, while the rest will receive one altogether, which I am going to send to Uncle Ned to be put on the Boys' and Girls' page, if he will. I would like to know if Halcetia is still at Algonac. (Please drop me a postal). Everyone may write again, and I am sorry that I could not answer all of those nice letters. I enjoyed them all very much. How many of you passed the eighth grade that took the exams? I did. I have been sick for a couple of weeks, but am feeling fine now. As ever, your friend, Loweta B. Loper, Gregory, Mich., R. R. 1.

Dear Uncle Ned:—May I enter your merry circle? I love to read the letters of the boys and girls of the M. B. F. I like to roam and wander around in the woods and get butterflies and bugs. Did you ever watch the caterpillar make his nest for the winter? It is like a coffin and is called a cocoon. In the spring he comes out a beautiful butterfly or moth. He lives a gay life but only for a few days. Do you boys and girls like to watch nature's wonderful works? How beautiful everything comes out in the spring after its white blanket of snow is laid aside. Fall is very pretty too and I like to watch the leaves change from green to their beautiful colors.

I have lived here in Michigan about four years. I came from the State of Washington, from the wonderful west. We lived about 24 miles from the seashore. It is wonderful to go and see the tide go out and see some of the sunfish that are left behind. They are a very lazy kind of fish. Their mouth grows around to one side because they are too azy to swim straight, and some are left on the shore because they are too lazy to swim out with the tide. There is another kind of fish called Star Fish. It is shaped like a star and its color is brown. It does not look like a fish, you cannot see that they have eyes or a mouth. I cannot explain how they look very well. They can be dried and they will keep a long time. I must close with best wishes for the future success of the M. B. F. Your loving niece. P. S.—I would like to have some of the boys and girls write to me and I will answer all letters I receive.—Ilah Hemminger, Blanchard, Mich., R. 1.

Dear Uncle Ned and Cousins:—May I join your merry circle? I just finished reading the letters from the boys and girls which I like very much. I lived in the State of Washington until about four years ago. The west is a very beautiful country. We lived about a mile from the Skagit River. It is a very large and swift river. It is fed from the mountains and when the Schnook winds blow they melt the snow on the mountains and sometimes cause the river to overflow its banks causing floods that are very destructful to homes. One day we crossed the river on a ferry boat and saw a large kingfisher catching fish. He would fly to a tree with his fish and hit the head of the fish against a knot on the tree to kill it. There are some giant trees there also. Some of the stumps are so large that campers can stay overnight in the ones that have been hollowed out. It is fun to be in a western logging camp and watch the donkey engines pull the big logs to the saw mill. It is fun to go to the beach when the tide is out, and dig clams and find all kinds of curious fish and shells.

There was a mountain near our place that had Washington's hatchet on the very peak. We could see Mt. Baker from where we lived. It had snow on it the year around. It was also a volcanic mountain that smoked most all the time. We had a nice trip coming to Michigan. We crossed the Rocky Mountains, and when we got above the clouds and looked down it looked almost like a lake. There are many wonderful things in Washington but there is just as many wonderful things in Michigan. I could write lots more but I am using so much space. I would like to hear from the boys and girls. I will answer all letters I receive. Your loving niece,—Lelah Bain, Morley, Mich.

Dear Uncle Ned:—I received the prize all O. K. as you promised and I thank you very much. I wish all the other 115 could have received prizes also. I am going to join th next contest. Also I wish to join your merry circle which I have neglected for some time.—Deane Miller, Shepherd, Mich.

Dear Uncle Ned:—May I join your merry circle? I live on a farm of 160 acres. I got through the 8th grade two years ago and all the boys and girls that guess my right age will receive a nice long letter. I must close with love to all. Your loving niece.—Hazel Inman, Fulton, Mich., Route 1.

Dear Uncle Ned:—How are you? I am fine. I am a farmer girl. I went to Sunday school last Sunday. I am eight years old. I have one sister three year's old. With love to Uncle Ned and Cousins.—Leeta Lorne Copeland, Sherwood, Mich.

THE SIGN ROWENA OF QUALITY

Lily White

"The Flour the Best Cooks Use"

Bakes Delicious Breads

HOW TO MAKE MILK BREAD

3 quarts of Lily White Flour, 3 pints of lukewarm milk, 1 cake of Fleischmann's yeast. Set in morning in warm place and rise until light. 3 teaspoons of salt, 1 tablespoon of sugar, 1 tablespoon of melted butter or lard. Mix with Lily White Flour until stiff, or from 20 to 25 minutes. Set in warm place and let rise until light. Make in loaves and work each loaf from six to eight minutes. Set in warm place until light. When light take warm milk and sugar and put over top. Keep good fire and bake slow one hour and when baked wash over again to make nice smooth brown crust.

Look for the ROWENA trade-mark on the sack

All that you hope for in a good flour you will find in Lily White Flour. It bakes delicious bread —bread that is fine of texture, light, very tasty and wholesome.

Bread baked of Lily White Flour is good bread and good to eat.

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This grain is Michigan Red Winter—the best flavored wheat grown in America—properly blended with the choicest grades of hard. The wheat is thoroughly washed, cleaned five times and scoured three times before going to the rolls for the first break. Thus every particle of dirt is eliminated from the grain and doesn't get into the flour or interfere in any way with the color or flavor of the bread.

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VALLEY CITY MILLING COMPANY
GRAND RAPIDS, MICHIGAN

"Millers for Sixty Years"

$1.00 PRIZE FOR YOU!

We will give $1.00 to the woman who receives first prize for the best loaf of bread baked with Lily White Flour at any County or District Fair this fall. Simply write us about your winning.

One of Our Customers Saved $120.00 On His Windsor Pipeless Furnace

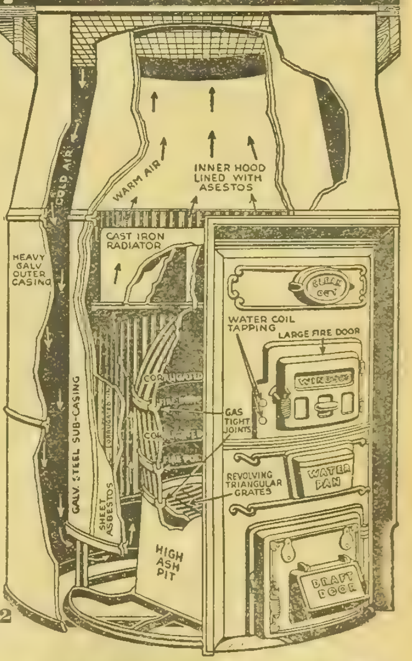
Read this letter from one of the thousands of customers who now have *Windsor Pipeless Furnaces* in their homes:

Improved WINDSOR 69.00 as illustrated

June 11, 1922.

The Windsor Pipeless furnace that I bought of you last December is certainly all you claim for it. In the first place, I saved $120 in price. Second, it gives you all the heat there is in coal. Third, anyone can install it. If I were buying another furnace it would be a Windsor Pipeless. None better that I know of.

I. J. AUGUSTINE,
615 North 17th Street East,
Cedar Rapids, Iowa.



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Send for this FREE Book

Describes and illustrates our complete line of Pipeless Furnaces, Stoves, and other Heating Equipment. High-grade Pipeless Furnaces—only $52.00 and up.

Read about our easy-payment plan. Write for this Book Today.

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The Oldest Mail Order House is Today the Most Progressive

JOHN CLAY & COMPANY
LIVE STOCK COMMISSION — AT TEN MARKETS

CHICAGO, ILL.
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EL PASO, TEXAS
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BUSINESS FARMERS' EXCHANGE

10c A WORD PER ISSUE—Cash should accompany all orders. Count as one word each initial and each group of figures both in body of ad and in address. Copy must be in our hands before Saturday for issue dated following week. The Business Farmer Adv. Dept., Mt. Clemens, Michigan.

FARMS & LANDS

$1,000 SECURES 190 ACRES WITH 10 cows, horses, 15 a. oats, 3 a. corn, 40 a. hay, 2 a. berries, 2 a. potatoes and beans, vegetables, 100 hens, hogs, full implements if taken soon, good neighborhood, schools, churches, markets, 100 acres machine-worked fields, 30-cow pasture, woodlot, 100 apple trees, 10 room house, running spring water, good 60 ft. cement basement barn, 4 poultry houses, insurance $1,000. Owner's business pressing. $4000 takes all, only $1,000 down. Details page 238 Big Bargain Catalog FREE. STROUT FARM AGENCY, 814 B E Ford Bldg., Detroit, Michigan.

STOCK FARM FOR RENT—400 ACRES, Sanilac Co., Mich., 4 miles from Snover; pasture for 70 cattle, flowing well; abundant barn room, fine water; fruit all kinds; ten room house, two smaller houses, school nearby, about 200 tillable acres; good markets. In answering give man and horse power, etc. S. A. CANARY, Bowling Green, Ohio.

CALIFORNIA FARMS—DELIGHTFUL LIVING conditions where farming pays. 10 to 20 acres is plenty, raising fruit, vegetables, poultry, grain, alfalfa, hogs or dairying. Tell us what you want. Write Free Information Dept., CALIFORNIA FARM LANDS BUREAU, Merritt Bldg., Los Angeles Calif.

FOR SALE—"THE LEHNDORFF FARM"— 240 acres, located only three miles from Rogers City, on Main M-10 Dixie Highway. Orchard nine years old, 800 apple and 50 cherry trees. 75 acres well cleared, 50 acres green timber, good water. A. F. LEHNDORFF, Rogers City, Mich.

160A., NEARLY LEVEL, CLAY LOAM, ELM, beech, maple soil. 125 A cleared, 100 A new seeding; 3 horses, 19 cattle, 9 registered Polled Durham, 50 sheep, 2 hogs, tools; for price and terms write A. W. HONEYSETT, R. 3, Evart, Mich.

SELLING ON ACCOUNT OF SICKNESS. Beautiful dairy farm, fully equipped with Jerseys, with or without stock, right price, easy terms. Write at once. GEO. E. WALKER, Burton Heights, Grand Rapids, Mich.

FOR SALE—80-ACRE IMPROVED FARM, good buildings, dark, clay, loam soil, 1-2 mile from school, good roads, mail route and telephone line. Easy terms. for particulars. write owner. JOHN CAMPBELL, Harrisville, Mich.

FOR SALE—CHOICE FARMS WELL LOCATED in Cheboygan County. Good homes. Good roads. Reasonably priced. Write for free list to NELSON R. PETER, Wolverine, Mich.

I WANT FARMS FOR CASH BUYERS. Will deal with owners only. R. A. McNOWN, 308 Wilkinson Bldg., Omaha, Neb.

FOR SALE—80 ACRES, FAIR BUILDINGS, with or without crops, stock, tools. R. A. McMILLEN, Remus, Mich. R. 2.

FOR SALE—10 ACRE TRUCK FARM, GOOD buildings; for particulars write C. H. HOUSE, Mt. Pleasant, Mich.

BEFORE BUYING A FARM GET OUR FREE list of 50 good farms, 10 acres up. DE COURDRES, Bloomingdale, Mich.

FOR SALE—160 A. FARM, 1 1-2 MILES from Onaway, Mich., on State Pike. 125 A. cultivated dark clay soil, no waste, new modern house. Large bank barn. Good dairy farm. Address owner, A. J. BRENISER, Onaway, Mich.

NEAT LITTLE FARM OF 23 ACRES, ONE mile from Charlotte, Mich., on state reward road. Seven room house. Buildings all first class. H. R. MOREHOUSE.

FOR SALE, A GOOD 80-ACRE IMPROVED all under cultivation. Berries, grapes, other fruit. 3 1-2 miles to good town. Inquire H. MORGAN, R. F. D. No. 8, Bad Axe, Mich.

BUY A FARM NEAR ANN ARBOR AND educate the boys in the University. Write for our farm bargains. JEROME PROBST, Ann Arbor, Mich.

80 ACRES—40 WITH BUILDINGS, TWO twenties joining, 70 imp. Sell all or part. Write for particulars. E. C. HAGERMAN, West Branch, Mich.

IF YOUR FARM OR COUNTRY HOME IS for sale. Write us. No commission charged. CLOVERLAND FARM AGENCY, Powers, Mich.

CORD-WOOD SAW FRAMES

BUZZ SAW FRAMES, BLADES MANDRELS, belting, pullies, wood-working machinery, etc., of every description. Low prices, prompt shipments. Catalogue free. Write GEO. M. WETTSCHURACK, La Fayette, Indiana.

BEES AND HONEY

BEE HIVES, SECTIONS, COMB FOUNDATION smokers, etc. Complete outfits for beginners with or without bees. Agents for A. I. Root Co. goods in Michigan. Send for catalog. Beeswax wanted. M. H. HUNT & SON, 508 N. Cedar St., Lansing, Mich.

TOBACCO

NATURAL LEAF TOBACCO—CHEWING, 5 pounds, $1.75; 15 pounds, $4.00. Smoking, 5 pounds, $1.25; 15 pounds $3.00. Send no money, pay when received. FARMERS' TOBACCO ASSOCIATION, Paducah, Ky.

NATURAL LEAF TOBACCO, CHEWING, 5 pounds $1.75, 10 pounds, $3.00. Smoking, 5 pounds, $1.25; 10 pounds, $2.00. Send no money. Pay when received. TOBACCO GROWERS UNION, Paducah, Ky.

KENTUCKY TOBACCO, 3-YEAR-OLD LEAF. Don't send a penny, pay for tobacco and postage when received. Extra fine, chewing 10 lbs., $3; smoking 10 lbs., $2.50; medium smoking 10 lbs. $1.25 FARMERS' UNION, Hawesville, Ky.

TOBACCO, KENTUCKY'S NATURAL LEAF, Mild, Mellow smoking 10 lbs. $2.25; Hand selected chewing 3 lbs. $1.00. Free receipt for preparing. WALDROP BROTHERS, Murray, Ky.

TOBACCO—KENTUCKY'S PRIDE. EXTRA fine chewing, 10 lb., $3.00; smoking 10 lb., $2.00; 20 lb., $3.50. FARMERS' CLUB, Mayfield, Ky.

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"The Farm Paper of Service"
Tell your friends about it

MISCELLANEOUS

GENERAL

FOR SALE—25 LB. MIDGET FLOUR, FEED and small product mill; splendid location, equipment new October, 1920; rare opportunity to make good; as public demand is splendid and increasing beyond my financial means; might take in suitable partner or work for future owner, 2, 15 H. P. Electric R. R. facilities, 2 1-2 acres, 7-room house. ROLLER MILL, Topeka, Ind.

LET US TAN YOUR HIDE—COW AND Horse hides for fur coats and Robes. Cow and Steer hides into Harness or Sole Leather. Catalog on request. We repair and remodel worn furs; estimates furnished. THE CROSBY FRISIAN FUR CO., Rochester, N. Y.

SEED WHEAT—HYBRID NO. 2 WHEAT (white wheat) yielded this year 35 bu. per acre, 60 lb. test, vigorous plant, medium growth straw, offering at $1.50 per bu., bags extra, F. O. B. Vassar, Mich. Sample mailed upon request. Mail orders filled promptly. GEORGE W. RIDGEMAN, Vassar, Michigan, R. D. 1.

BARREL LOTS SLIGHTLY DAMAGED crockery, hotel chinaware, cookingware, aluminumware, etc. Shipped direct from factory to consumer. Write for particulars. E. SWASEY & CO., Portland, Maine.

START BUSINESS FOR YOURSELF. SELL shoes direct to consumer in your own town. Liberal commission. Capital or experince not necessary. TANNERS SHOE MANUFACTURING CO., 495 C Street, Boston, Mass.

SALESMAN—ARE YOU LOOKING FOR A product to sell to farmers? Every farmer needs our product. It has a large repeat business. No investment required. No collections to make. V. SMITH CO., Portland, Ind.

NORMAL, HIGH SCHOOL, BUSINESS LAW, Engineering and College Courses thoroughly taught by mail. Special rates. Address, CARNEGIE COLLEGE, Rogers, Ohio.

SOLE LEATHER—5 LBS. PACKAGE FINE grade oak strips $2.85 postpaid. COCHRAN TANNING CO., Greenville, Mich.

FOR SALE—7,200 EGG CANDEE INCUBATOR. Good condition, $800. TYRONE POULTRY FARM, Fenton, Mich.

WANTED—MARRIED MAN WITHOUT children to work on farm. E. JONES, Custer, Mich., R. 2.

FOR SALE—GOOD 12 H. GAS ENGINE mounted, with magneto and clutch pulley. ALLEN E. EATON, Gr. Ledge, Mich, R. 3.

ONE KALAMAZOO SILO FILLER NEARLY new, size 14. Only filled 18 silos, price $200.00. HAROLD JORS, Fife Lake, Mich.

$24.95 Upward American CREAM SEPARATOR

On trial. Easy running, easily cleaned. Skims warm or cold milk. Different from picture which shows larger capacity machines. Get our plan of easy

MONTHLY PAYMENTS

and handsome free catalog. Whether dairy is large or small, write today.

AMERICAN SEPARATOR CO.
Box 7067 Bainbridge, N. Y.

Keep Pace With Evolution

DARWIN declared that the human race was merely an evolution of the monkey tribe. Some people agree with him. Others do not.

But there is no denying that even within the memory of most of us, there has been considerable of an evolution in the human mode of living. And today, this evolution is buzzing along faster than ever.

There has never been a time when conditions changed so rapidly—when live bettered itself so consistently. New comforts and conveniences are coming in all the time. And the rapidity with which they are invented and put before us vitally affects us all.

To take advantage of these things, you must keep yourself informed. You must know not only what they are, but also how much they cost and where and how to get them. The only way you can know this is to be a regular reader of the advertisements.

Advertisements tell of all that the world is doing to make you more comfortable, your work easier, your methods better, your clothing and food problems less irksome. They tell you how you can save time—and effort—and money in the selection of the things that make life worth while.

Advertisements are interesting, instructive and highly profitable to you.

Keep in touch with modern evolution by reading the advertisements.

THE EXPERIENCE POOL

Bring your everyday problems in and get the experience of other farmers. Questions addressed to this department are published here and answered by you, our readers, who are graduates of the School of Hard Knocks and who have their diplomas from the College of Experience. If you don't want our editor's advice or an expert's advice, but just plain, everyday business farmers' advice, send in your question here. We will publish one each week. If you can answer the other fellow's question, please do so, he may answer one of yours some day! Address Experience Pool, care The Business Farmer, Mt. Clemens, Mich.

CURE FOR SWEENEY

MR. Edward Moser of Mt. Clemens read of the account in the last issue, of the subscriber who told of his horse having been sweeneyed and told the editor of a simple cure which, he says, he and his father before him have performed many times with entire success.

To determine whether a horse is so affected let him step over a piece of limb, if he drags or swings a foot instead of lifting it, he is sweeneyed. Then get a whole skein of white floss, procure a steel needle with an eye long enough to receive the whole skein and with a curved point like an upholsterer's needle. Puncture the breasts of the horse about two inches from the center and draw the skein through, draw out the needle and tie the ends. Leave the ends and in time the wounds will close and the silk drop out. It may take several weeks but a complete cure will have been made. He says he has never known it to fail.

VEAL IS CONDEMNED

Would like to have your opinion about the Detroit Beef Co., commission merchants in regards to honesty. Looks to me they were crooked, will state the case to you as clear as I can. I shipped them 3 dressed veal calves, the first one weighed 101 pounds and I received $11.23 and was satisfied. The second one weighed 84 pounds and I received $6.77. The last one weighed 94 pounds. They sent me a slip from the Department of Health stating it was sour. The slip shows it was delivered the next day and I know of three farmers near here that received slips stating their calves were sour. Am sending the papers and a check for 4 cents for the last calf.—W. J. B., Le Roy, Mich.

The company you mention is one of the most reliable commission firms in Detroit. The fact that they sent you the Department of Health's condemnation slip would seem to be a proof of their honesty. The calves might not have been in prime condition when shipped and might have encountered some hot weather before reaching Detroit. You must remember that weather conditions in Detroit are different than they are in Le Roy, and that it might be very hot in Detroit on the same day it was moderately warm in your section.

The Detroit Health Department has issued some regulations to guide farmers in shipping meat carcasses which it will pay all shippers to observe. They are as follows:

"(a) All trucks, wagon beds, containers, receptacles, wagon covers and food products therein shall be kept clean, sanitary and well protected.

"(b) Carcasses of cattle shall be accompanied by the hearts, livers and lungs and tongues with their glands intact and so numbered or arranged that the parts can be identified with the carcass from which the parts have been removed. This pertains to carcasses brought into the city from the country either by the farmer in person or through the Railway Express.

"(c) Sheep carcasses shall be accompanied by the hearts, livers and lungs attached by their natural attachments. The entire pelt of sheep including skin (stockings) on the extremities shall be removed.

"(d) Calf carcasses shall be accompanied by the hearts, livers and lungs attached by their natural attachments or in separate receptacles and so marked or labeled that they may be identified with the carcasses from which they have been removed. The entire intestinal tract shall be removed and the thoracic cavity well drained, with the umbilical cord intact and the skin shall be absolutely clean. This also pertains to carcasses shipped into the city from the country.

"(e) Swine carcasses shall be accompanied by the hearts, livers, lungs and heads attached by their natural attachments or if the carcasses are split the heads shall be so marked as to be identified with the carcass from which same has been removed, if the carcases is unsplit it shall be entirely opened from "hitch bone" to angle of jaws to facilitate inspection, and this opening so arranged as to be maintained after carcass is chilled. The skin shall be free from all hair and scruff.

"This Department requires the incision in the necks be spread at the time of slaughter in order to facilitate the inspection of heads of chilled and frozen carcasses at market points.

"(f) The removal from any carcass or organ, of tissue that may be diseased, such as abscesses, adhesions or other abnormal or diseased conditions for the purpose of deceiving an inspector will be regarded as a misdemeanor under these regulations and will necessitate the confiscation and condemnation of the entire carcass.

"(g) The State Law provides that all calves shall be at least four weeks of age before being slaughtered for food purposes.

"(h) No retail market is permitted to have in their possession or offer for sale any unstamped or uninspested meats."

Meats are condemned which, when offered for sale are unwholesome, diseased, loathsome or otherwise unfit for human food; or are immature or undeveloped, contaminated by an excessive amount of dirt, manure, etc.

The inspector makes a physical examination of all carcasses and if any of the above conditions are found, condemnation of the entire carcass or parts effected is necessary. If the inspector is in doubt regarding a disease condition, the carcass is retained and a pathological examination in the laboratory is then made.—H. H. Sparhawk, Chief Veterinarian.

THINGS TO BE DONE IN SEPTEMBER

Fill the Silo—When two-thirds of the kernels are dented. Tramp well, seal the doors tightly with paper, cover the top with cut straw or stover and wet down. Keep out of a partially filled silo until after the blower has started. The gas caused by fermentation is dangerous. Start feeding silage immediately if pasture is short.

Pick the Seed Corn—Well dented ears from healthful stalks should be selected. Dry them in the shade with good circulation of air.

Hogging Down Corn—Hogs make faster and more efficient gains when turned into a cornfield to harvest the corn than when it is thrown over the fence to them.

Green Feeds Make Milk—Green corn fodder, alfalfa, Sudan grass or other green crops fed to the milk cows daily will do much to prevent the usual decrease in dairy production at this time of the year. Cows that receive a green succulent ration will produce more milk than those kept on dry feed or short pastures. Some farmers make it a practice to sow certain crops in the spring at such times as to give them continuous and liberal supply of green fresh feed from the fields in late summer and early fall. Try the corn cure for short pastures.

Every man suspects that he can have as much pleasure talking about owning an automobile as having one, and after buying one he knows he has more.—Toledo Bade.

NEW LAMP BURNS 94% AIR

Beats Electric or Gas

A new oil lamp that gives an amazingly brilliant, soft, white light, even better than gas or electricity, has been tested by the U. S. Government and 35 leading universities and found to be superior to 10 ordinary oil lamps. It burns without odor, smoke or noise—no pumping up, is simple, clean, safe. Burns 94 per cent air and 6 per cent common kerosene (coal-oil).

The inventor, A. R. Johnson, 609 W. Lake St., Chicago, is offering to send a lamp on 10 days' FREE trial, or even to give one FREE to the first user in each locality who will help him introduce it. Write him today for full particulars. Also ask him to explain how you can get the agency, and without experience or money make $250 to $500 per month. (Adv.)

MICHIGAN 1922 STATE FAIR GREATEST EVER

(Continued from page 4)

to him. At the same time the state's sponsorship undoubtedly had an effect in advertising the fair and perhaps adding to its popularity among certain classes of people. Fears that were expressed in some quarters that state control would encourage reckless spending and result in an additional burden upon the taxpayers have been quieted. In spite of a reduction of one-third in the price of admission the net profits of the 1922 fair exceed those of 1921 by several thousand dollars, so that instead of being a financial burden to the state the Fair is more likely to prove a financial asset.

State Fair Awards

Judging in the livestock divisions presented a good many difficulties because of the number and excellence of the exhibits. Among the prize winners in the Holstein Frisian classes we note such well-known names as John A. Rinke of Warren; John C. Buth, of Grand Rapids; John H. Winn, of Rochester; Loeb Farms, of Charlevoix; Peter Bogart & Sons, of Munger; W. M. Schoof, Washington; A. R. Black & Sons, Lansing; B. S. Gier, Lansing; Lakefield Farms, Clarkston; E. M. Bayne, and others. The Lenawee county boys' and girls' club and the Milford and Hillsdale calf club ran away with some of the prizes in this division.

In the fat steer division which was added last year and in which Mr. E. A. Beamer of Blissfield took most of the prizes, W. E. Scripps took first prize for fat steer over one year and under two, and the Sanders farm at Eaton Rapids took first on fat steer over six months and under one year. R. Bimber & Co., of Battle Creek was awarded first prize for its carload of 15 steers; Lenawee county boys' and girls' clubs were second; E. R. Porter, Blissfield, third; fourth, Beamer & Porter, Blissfield, T. F. B. Sotham & Sons, St. Clair, fifth.

In the Percheron Horse class we find the first, second and third prize winners to contain the names of Chas. Bray, Okemos; Loeb Farms, Charlevoix; Michigan Agricultural College, Maryvale Farms, Youngstown, O., and Highland Farms, Greensburg, Pa., and Woodside Farms, Sandusky, O., with most of the first and second honors going to the out of staters.

In the Belgian class the Owosso Sugar Company and W. E. Scripps had everything about their own way. The Owosso firm has exhibited thoroughbred Belgians at the State Fair for a number of years and always took away a goodly share of the money. Following last year's show Mr. Scripps went in pretty heavily for Belgians and this is the first year he has shown at the State Fair. Scripps and the Owosso firm just about divided first and second honors in this class, with Loeb Farms at Charlevoix and the M. A. C. dividing third honors.

In the Shropshire sheep contest Armstrong Bros., of Fowlerville, Mich., Herbert E. Powell & Son of Ionia, Mich.; C. Middleton of Clayton, Mich.; O. W. Soper, of Fowlerville and Hamer & Lockwood of Lewiston, O., were the principal contenders with Middleton and Powell taking most of the first and second awards.

In the Hampshire division A. R. Hamilton, of Johnstown, Pa., took nearly all the first prizes and J. B. Welch of Ionia, Mich., and C. L. Mitchell of Lucas, the principal recipients divided the rest of the honors with L. C. Kelley, of Plymouth.

In the American Merino class the out of the state exhibitors had a little stiffer competition from such Michigan breeders as Calhoon Bros., of Bronson; E. E. Nye, of Jonesville, Carl Moeckel, of Munith.

A MICHIGAN APRICOT ORCHARD

(Continued from page 9)

quality good, a favorite for canning, but not large.

Early Montgomery: Large, fine quality, tree ungainly unless carefully and constantly pruned, A showy fruit, desirable for dessert.

Alexis: Similar to Alexander.

Roal: Vigorous, productive tree. The fruit has a delicate skin, should be picked before fully ripe. Good flavor.

Peach: Very large and showy, but sour.

White Beauty: Light colored, flesh and skin nearly white, sweet, best for dessert fruit.

These varieties begin to bear when from five to seven years old, except the Alexander, which waits till about 12. This is the one serious objection to the Alexander, but it is then so productive that it is well worth waiting the extra years.

Mr. La Male's experience has gone far to prove that the apricot can be grown profitably in Monroe County. He has the trees, he has had the fruit and has excellent prospects for the future. The conditions with which he has had to deal are not exceptionally good. Many localities are better protected against late spring frosts and have a soil as well fitted for the purpose.

While this is the only orchard we have found, an occassionally tree is not uncommon. On our farm in Oakland county there are six which have stood for more than 30 years and are still bearing. They are on a hill, when the atmospheric drainage is good. The soil is a heavy clay. These trees the owner says, bear annually, while one season in three there is a heavy crop. Generally, the tree seems to be long-lived and fairly productive if set in the proper kind of a place.

To be sure the wise ones shake their heads and say the apricot is not suited to our climate, but that has happened before. Granted that the tree be too tender for the climate. If it is thirty or forty years in dying and all the time bearing fruit, what more should it do?

Apple maggots or railroad worms are a serious pest in New England. They are not yet common in Michigan, though reported at several places in the state. It tunnels about in the flesh of the fruit, ruining it for food, except for those who can stand it to eat worms and all. The insect stays in the apple till it falls then crawls out and into the ground, when it propates and remains till the following summer. Spraying does no good. The best remedy is to destroy the pest before it has left the fruit, preferably by feeding to animals. Fortunately, it is not easily distributed. It may be limited for years to one tree in an orchard.

TIME AIN'T CHANGED MUCH AFTER ALL

(Continued from page 13)

an wear ear rings an' the gossips begun to wag their tongues harder an say "The gals wasn't so brassy when we wuz young, what's the world comin' to?"

Once in a while some one would remark that girls are about the same from one generation to another but the talk kept right on.

An' then Elmiry an' me got to thinkin'. The ones that had the most to say about bangs an' ear rings had such scraggly hair they couldn't wear bangs 'er else their ears was so big they couldn't wear ear rings. An' if you'll notice it's the same way with short skirts. Them that has the most to say has bow legs or skinny legs an' they have to cover 'em up or git laughed at. An so they watch the pretty young girls with short skirts an' bobbed hair an' they turn green with envy an then they sit down an' write to Mr. Editor about the shameless short skirts. It's like fly time, the buzz don't amount to much if you can keep away from the dirt.

And our girls will keep on wearin' short skirts and bobbin their hair an the ugly flies will keep on buzzin, but I thank goodness most of our girls will be as sweet an good as ever when the flies have winter killed. Love from—Aunt Betsy, St. Louis, Mich.

The Grange Patron republished a cartoon in its last issue from a Chicago paper which well illustrates the point you have made. It showed the daughter of a home being fitted with a new gown, the neck of which reveals a shameless display of the young lady's neck almost as far down as the adam's apple. The other members of the family stand around viewing the dress with critical eyes and commenting upon the neck display. Mother is of the opinion that the neck is too low but the young miss remonstrates, and says that all the girls of her Endeavor class are wearing 'em even lower. And, of course, daughter's argument prevails and thus another step is taken in the evolution of the modern dress.—Editor.

A Partner for the Boys, the Women, and for the Man Who Calls Himself Head of the House

INTERNATIONAL—the popular kerosene engine, is as faithful and willing a helper as you can find in a life-time of searching. One that neither grumbles nor shirks but just chugs away all day and night, if need be, and doesn't ask for over-time pay.

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An engine that the family likes because it saws wood, grinds feed, shells corn, runs the fanning mill, and handles a dozen other jobs. It does these easier, faster, and better than you can do them by hand.

The smaller sizes, the powerful 1½ and 3-horse power engines, are the most popular for many of these jobs. If you need more power, the International 6 or 10 horse power sizes will supply plenty of it.

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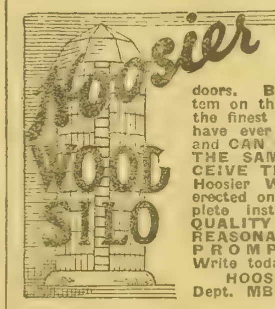

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CLAIM YOUR SALE DATE

To avoid conflicting dates we will without cost, list the date of any live stock sale in Michigan. If you are considering a sale advise us at once and we will claim the date for you. Address, Live Stock Editor, M. B. F., Mt. Clemens

Sept. 27—Guernseys, Mich. Guernsey Breeders' Ass'n, Saginaw, Mich.
Oct. 18—Holsteins, Alexander W. Copland, Birmingham, Mich.
Oct. 19—Howell Sales Co. of Livingston County, Howell, Mich.
Oct. 19—Poland Chinas, F. E. Haynes Hillsdale, Mich.

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Purebred Registered Holstein Heifer Calves

1 month old $50; 6 months old $75-$100

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HOLSTEIN BULL BARGAINS

Sired by Segis Korndyke De Nijlander, a 32 lb. son of a twice Michigan ribbon winner, her dam, 29 1-2 lbs. Dams are daughters of King Segis Pontiac, a 37 lb. son of King Segis. Records up to 30 lbs. Priced at $100 up. Federally tested. Write for list.

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SOME GOOD YOUNG REGISTERED HOLstein cows. Fair size, good color, bred to good bulls and due from July to December. Mostly from A. R. O. stock, prices reasonable and every one guaranteed to be exactly as represented.

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FOR QUICK SALE WE ARE OFFERING your choice of nearly 50 purebred Holsteins. Nearly all cows and heifers. Bred well, yearly records, free from t. b. Priced right. Breeder since 1913. Write us your wants.

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We have two splendid white yearling bulls by imp. Newton Champion, also some young cows and heifers that we are offering for sale. Write for particulars to

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Herd at Prescott, Mich. — Office at Tawas City, Mich.

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Our pedigrees show a judicious mixture of the best blood lines known to the breed. Write to

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Registered stock of all ages and both sex. Herd headed by the imported bull, Kelmscott Viscount 25th, 648,563. Prices reasonable.

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Shropshire, Southdown and Cheviot rams write to

L. C. KELLY & SON, Plymouth, Mich.

SHORTHORNS and POLAND CHINAS. We are now offering two ten-months-old bulls, one bred heifer, and two ten-months-old heifers.

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SHORTHORN CATTLE AND OXFORD DOWN sheep. Both sex for sale.

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FOR SALE—OUR RED POLLED HERD BULL, Cosy Ells Laddie, and a few heifer calves.

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DODDIE FARMS ANGUS of both sex for sale. Herd headed by Bardell 31910. 1920 International Jr. Champion.

Dr. G. R. Martin & Son, North Street, Mich.

WE HAVE SOME FINE YOUNG ANGUS BULLS from International Grand Champion Stock at reasonable prices. **E. H. KERR & CO.**, Addison, Mich.

REGISTERED ABERDEEN-ANGUS—BULLS, Heifers and cows for sale.

Priced to move. Inspection invited.

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At St. Clair; for sale and ready for immediate delivery.

Registered Cows and their Sucking Calves

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FOR SALE, Choice Hereford Bulls, bargain prices. A. L. SMITH, Eckford, Mich. Farm eight miles south of Marshall, Mich. (P)

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GUERNSEYS

OF MAY ROSE AND GLENWOOD BREEDING. No abortion, clean federal inspected. Their sires dam made 19,460.20 milk, 909.05 fat. Their mother's sire's dam made 15,109.10 milk 778.80 fat. Can spare 3 cows, 2 heifers and a beautiful lot of young bulls.

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FOR SALE—REGISTERED AYRSHIRE bulls and bull calves, heifers and heifer calves. Also some choice cows.

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FOR SALE—BEAUTIFUL YOUNG MAJESTY bull 1 1-2 years old. (Jersey) R. of M. dam. Class A.A. Price $150.00. Will sell 20 Jersey heifers from 6 mo. to 1 1-2 years old. Price $50.00 to $150.00. Write **GEORGE E. WALKER**, Burton Heights, Grand Rapids, Mich.

WANT TO SELL
LIVE STOCK?
AN AD IN THE M. B. F. WILL
DO IT

DAIRY and LIVESTOCK

HAVE YOU A SILO?

THE above question, of course, is addressed to the stock-keeper. If given in the negative his answer would show reasons as varied as the country is wide.

There are in round numbers five hundred thousand silos on farms in the United States. They are found in every state in the Union and in nearly every country. This proves that the silo can be used successfully in practically all parts of the country. The man who is keeping live stock can well afford to devote some thought and study to this silo question.

The silo is most numerous in the leading dairy states, but many states and communities are backward in taking advantage of this economic means of feeding cattle. Wisconsin ranks first as a silo state with close to eighty-five thousand on one hundred and ninety thousand farms. New York is second with fifty thousand on about the same number of farms. Still those familiar with conditions in Wisconsin and New York admit that they are less than half supplied, and that even three times more silos could be put into valuable and economic use. Great dairy states like Minnesota, Iowa and Ohio are very short of silos compared with Wisconsin and New York. Then there are many other states east and west, north and south that do not have one where they really need ten.

Silage has been so thoroly tested out from an economic feeding standpoint that most of our Experiment Stations have considered it a closed question. There are few states in the Union that have not printed bulletins and feeding tests all of which show that silage is an economic feed for milk, beef and mutton. As to the amount it saves the feeder, no definite figures can be given, for prices of feed, labor and commodities vary with each year and in every state. It is safe, however, to conclude from the tests that have been made that at least ten cents can be saved on a pound of butter, forty cents on one hundred pounds of milk and one dollar on one hundred pounds of beef. With such a saving surely this subject is a live one for every stock-keeper in this country.

Silage for young stock and growing animals is quite as valuable and important as it is for those that are producing milk or beef. Horses at rest, brood mares, colts and mules can be fed silage with economy. The five hundred thousand silo users of this country are perhaps the best experiment relating to the value and economy of the silo, for they have tested out its worth and know of its value and advantages on the average farm. The dairy industry has prospered during the past few years, and many farmers are increasing their herds. They will find the most expensive part of the business is that invested in the feed bill; in other words, to feed a cow is the most expensive item connected with the business and the silo is one of the first matters to consider for economical production and to give a succulent nutritious ration that can be drawn upon any time during the year.

The silo plays an important part in the process of turning the cheap forages of the farm into condensed marketable produce; and especially at this time of high transportation costs we will do well to engage in a line of farming that will condense our raw materials. We are especially interested in shipping a finished product, especially if the market demand is favorable. The silo has come and is still coming to the farmer who aims to utilize his products to the best advantage, who wishes to get the most from his acres and prevent a waste of roughage which has been so expensive in past years.

The silo is answering the pasture problem, for silage is the cheapest source of pasture. It is a labor-saving device, for it offers at all seasons a supply of forage close at hand. It can be easily and quickly transported to bunk or manger, and is relished by practically all classes of stock. It is rich in carbo-hydrates, it is succulent, and makes a balance for high protein feeds or fodder.

The stock-keeper will do well to figure carefully the answer of the question "Have you a silo?" He can secure plenty of information from silo owners. Our Experiment Stations can furnish him volumes of data, and there are many other sources from which to draw reliable figures. Too often the man who is considering this subject listens to the man who does not own a silo. From an investment standpoint it will figure out close to a hundred per cent under many farm conditions. Even if it figured ten would it not be a wise move?—A. L. Haecker.

JUDGES FOR NATIONAL DAIRY EXPOSITION

Ayrshires—A. H. Tryon, Port Chester, N. Y. judge; J. A. McLean, Chicago, associate judge.

Brown Swiss—George C. Humphery, Madison, Wis., judge; R. E. Caldwell, Waukegan, Ill., associate judge.

Guernseys—Jas. Robertson, Eulestson, Md., judge; W. W. Yapp, Champaign, Ill., associate judge

Holsteins—W. S. Moscrip, Lake Elmo, Minn., judge; H. H. Kildee, Ames, Ia., associate judge.

Jerseys—George W. Sisson Jr., Potsdam, N. Y., judge; Prof. J. B. Fitch, Manhattan, Kan., associate judge.

VETERINARY DEPARTMENT

COW LEAKS MILK

We have a cow that leaks milk from all teats long before milking time, especially when she walks. She can only hold about five quarts in her udder. Is there anything we can do for her to stop this? —F. W. W., Charlevoix, Mich.

It may be advisable to milk the cow three times a day if the quantity of milk that she gives will pay to do this. On the other hand, the matter can be helped considerably by applying a drop of collodion to the tip of each teat after milking. This forms a skin like clot over the end of the teat and will help to hold the milk in the cow's udder. Collodion may be purchased at any drug store.—J. E. Burnett, Associate Professor of Dairy Husbandry, M. A. C.

CALL VETERINARIAN

I have a Holstein cow four and one-half years old that has a cluster of warts on one of her teats, and it started small about the size of a nickle, when we purchased her about five months ago, and now it is the size of a silver dollar and seems to keep her from giving much milk out of the same teat. Also notice a ring of single warts coming around her neck and in line down her back.—R. C. D., Rose City, Mich.

I cannot prescribe a treatment for the above case without seeing the animal and making a thorough examination. I would advise that you call a competent veterinarian to make a diagnosis and take charge of the case.—Edw. K. Sales, Asst. Prof. of Surg. and Med., M. A. C.

RECTUM TROUBLE

I have a three-month-old sow pig which has a portion of the rectum protruding about 2 inches. What may I do to remedy this condition? For some time I have noticed that this pig had considerable difficulty in stooling but gave the matter no serious attention. Have been feeding her plenty of swill with lots of middlings added. The rectum protruding looks very similar to cases of piles in the human where the same symptoms are present. The pig has only been in this condition for four or five days now. Hot weather with flies present are liable to bring infection unless something can be done to return the rectum to its proper place. It is now quite irritated. Am trying to keep pig in a very clean place so as to prevent infection. May I have your advice as to best method of treatment at a very early date?—H. D. G., Burlington, Mich.

This is a very troublesome condition, in recent cases, before the mucous membrane of the gut has become riable and easily torn. The parts should be bathed freely with hot water to which may be added some antiseptic such as Creolin or Chinosel or if exceedingly congested, they may be sprayed with a solution of adrenalin chlorid, one to ten thousand. The gut is then cautiously manipulated with the fingers and the prolapsed portion replaced, the rectum being smoothed out into its normal position with the middle finger. A stitch or two should then be placed across the anus to retain the bowel, or a purse-string suture inserted for the same object. Prolapse of the rectum is very prone to recurrence, and if the above treatment fails, amputation by a qualified veterinary will very likely be necessary to obtain permanent relief.

DRYING MILK CANS STOPS GROWTH OF BACTERIA

BECAUSE bacteria increase in numbers at such an astonishing rate when conditions are favorable, it is necessary not only to kill as many of them as possible in order to keep dairy utensils clean and insure a good product; but utensils must be kept dry, so that the few organisms that are left after sterilization will not multiply greatly. In addition to the proper temperature it is necessary that moisture be present for these germs to grow, but only a very thin film of water is needed.

It is particularly important that milk cans be thoroughly dried and kept dry until used again, says the United States Department of Agriculture. In addition, they must be protected from contamination with dust, other dirt, and flies. Experiments carried on by the department show that in milk cans which were covered before being dried the number of bacteria increased 700 times in 24 hours.

To secure rapid drying the cans must be sterilized with steam or boiling water. If a sterilizer is used the cans may be left in it until time for them to be used again, but there must be some means of ventilation to carry off the moisture. Cans may be set on a rack to dry, but they should be protected from flies and dust, preferably in a well screened milk house.

WHY FOLKS PREFER CLOSED CARS

"THE old De Witt Clinton railroad train had open cars, but who would think of traveling on today's railroads in open cars," according to Colin Campbell, General Sales Manager, Chevrolet Motor Company.

"Closed automobiles are instantly adaptable to changes in weather or to the comfort of the passengers. They are cleaner, have a home-like atmosphere, finer appearance, and in general make the most practical means for passenger transportation.

"Confident that the correction of the price differential would produce the volume to justify it, Chevrolet Motor Company priced its 1922 line accordingly. The results have proved the wisdom of this policy. The proportion of our closed car business to our total sales has been increasing so rapidly, that we anticipate it will represent more than fifty percent within a year."

BARUCH ADVISES FARM BLOC ON RURAL FINANCES

(Continued from page 3)

of the Federal Farm Loan Board to finance cattle feeding and marketing, and all the bills would amend the Federal Reserve Act so that that system would co-operate with the new instrumentality.

Mr. Baruch gave it as his opinion that any of the four bills would give a substantial measure of relief, but was of the opinion that the measure finally decided upon should provide three sorts of loans and correspondingly three sorts of short time debentures from the sale of which would be obtained the funds for carrying the loans, which might amount to a great many times the capital of the proposed institution) viz: (1) Loans for facilitating the marketing of agricultural products in an orderly manner and at discretion, (2) livestock loans, and (3) loans for production purposes. The last, he thought, should be based on the united credit of local associations of farmers, so that all the members of the group would indorse the notes of each. He was confident that there would be a wide and ready market for debentures or notes running from six months to three years because the security would be unsurpassed. Not only would the money centers readily absorb such instruments but he was convinced that there would be a wide market for them in the rural communities themselves. Regarding the proposed Federal Reserve Act amendments Mr. Baruch while favoring some of them said he thought it would be unwise to give farm paper a longer maturity period than six months which is the present limit. Accommodations beyond six months could come from debenture funds.

The trouble with agricultural financing at present, Mr. Baruch told the committee, was that it was so precarious and short-timed that it left the farmer entirely at the mercy of the money lender or credit giver and deprived him of freedom of action in marketing his crops in an orderly and sagacious manner. Adequate storage facilities and impartial grading and inspection were important adjuncts to a suitable credit system; and storage could be provided by public agencies if private agencies did not come forward, which they likely would do once credit was provided. Mr. Baruch also reminded the committee that it was not proposed to do away with any of the present factors in rural financing but merely to create a supplemental financial agency which would assist them to function efficiently and might possibly so influence existing facilities that they would be found sufficient to provide the farmer with ample working capital at reasonable rates of interest and for suitable terms without much activity by the proposed governmental agency. But the main thing was to create some such agency and do it at once.

Complete Dispersion Sale

Birmingham, Mich., Oct. 18, 1922

50 Purebred Holstein Friesian Females 50
21 Daughters of King Korndyke Echo Sylvia 21
5 Daughters of Hardy Pontiac Segis 5
3 Daughters of Aristocratic Pontiac 3
3 Daughters of Segis Cynthia 3

Most of the females bred to a son of a 31.8 lb. cow that milked 742 lbs. Several bred to a son of Sadie Gerben Hengerveld DeKol (First 40 lb. cow under the new rules).

Several bred to King Korndyke Echo Sylvia, who is a son of Avon Pontiac Echo from a 29.11 lb. jr. three year old daughter of Pontiac Korndyke Het Loo.

Sold with usual breeder's guarantee and subject to 60 to 90 day retest.

Terms can be arranged but must be done before the sale.

Alexander W. Copland, Owner,
Birmingham, Mich.

For catalog address,
Albert E. Jenkins, Sale Mgr.
Oscoda, Mich.

Roy Snyder, Studebaker Sales Agent,

Exonerated by Coroner's Jury for Death of Mary June Reed

Roy Snyder, Studebaker Sales Agent of Howell, Michigan, in coming from South Bend with a new car, came through Battle Creek on Thursday, August 10. He was meeting a street car on Maple avenue when Mary June Reed, seven years of age, ran back of the street car directly in the path of the Snyder automobile. He turned his car quickly to the right but as the child was only a foot and a half from the automobile he could not avoid running over her. She lived half an hour without regaining consciousness.

Mr. Snyder went to the police department and asked for an investigation and notified the Howell Insurance Company who had a representative in Battle Creek before eight o'clock. Witnesses were interviewed and the facts presented to the police department so they released Mr. Snyder.

However, an attorney started suit for $25,000 but they did not get service upon Mr. Snyder. The evidence brought was so clear that Mr. Robb and Mr. Howlett concluded that Mr. Snyder was not needed at the inquest and by staying outside of the county he would avoid the service of the summons. On Tuesday, August 15, after listening to seven disinterested witnesses in which it appeared that Roy Snyder was traveling at about eight miles an hour and the child ran in front of his car only about a foot and a half away, the coroner's verdict was an unavoidable accident.

Mr. Snyder was greatly relieved at this verdict and he has expressed his appreciation for the service received from the insurance company. Under the present conditions no one can tell when he will have an accident and even though one is innocent of any blame it requires an investigation and much expense. The insurance company has an organization to assist its policy holders and to give them service that is appreciated when those serious accidents occur.

The regular policy covers not only fire and theft to the value of the car not exceeding $1,000, but it also covers liability, damages not exceeding $5,000. By liability is meant the damage that you do to the property of other people, like running into another automobile or buggy, or breaking a plate glass window, or the injuries that you do to other people, by running them down with your automobile, causing personal injury or death.

Up to date every case that the Howell Company has been interested in has been settled for less than $5,000. All of its agents, adjusters and attorneys are at your command in case of serious accident.

Citizens' Mutual Insurance Co.

WM. E. ROBB, Secretary HOWELL, MICH.

SWINE

POLAND CHINA

ANNUAL SALE

Large Type Poland China Swine

New Stock Pavilion,
Hillsdale County Fair Grounds
Thursday, Oct. 19, 1922

50 Head Spring Boars and Gilts

Better than ever.
"There's a reason."

F. E. HAYNES
Hillsdale Michigan

"Pigs is Pigs"
But Haynes' Pigs is Hogs.

Watch this space for further particulars.

FRANCISCO FARM POLAND CHINAS

Big stretchy spring boars as good as grow. Pairs and trios not akin. Can spare two or three of our good herd sows bred for September.

P. P. POPE
Mt. Pleasant Michigan

L. T. P. C. $15-$20-$25

spring pigs at above prices. Top fall gilts bred for summer farrow, priced right
HART & CLINE
Address F. T. Hart, St. Louis, Mich

Big Type P. C. Boar Pigs, they can't be beat in Michigan. Sired by Big Bob Mastodon and Peter A. Pan a son 1,075 Peter Pan. C. E GARNANT. Eaton Rapids, Mich

LARGE TYPE POLAND CHINA SPRING PIGS sired by C's Clansman, now ready to ship. Write for particulars
W. CALDWELL & SON, Springport, Mich.

DUROCS

FOR SALE OR EXCHANGE DUROC JERSEY BOAR 2 years old. No. 182429, Masterpiece Orion King 4th. Also some May pigs at reasonable prices. Write W. H. CRANE, Lupton, Mich.

WE OFFER A FEW WELL-BRED SELECTed spring Duroc Boars, also bred sows and gilts in season. Call or write
McNAUGHTON & FORDYCE. St. Louis. Mich.

DUROCS—POPULAR BLOOD LINES—SEND your wants to OCEANA CO. DUROC JERSEY HOG ASS'N. V. Lidgard Sec., Hesperia, Michigan.

PURE-BRED DUROC JERSEY HOGS We usually have good boars and sows of all ages for sale. Reasonable prices.
LARRO RESEARCH FARM, Box A North End
Detroit, Michigan.

YOU WANT ONE OF THE BEST DUROC sows obtainable. We have them for sale. Tried sows and fall gilts. Sensation blood predominating. Our herd boar took 2nd aged boar at 1921 Illinois State Fair. Swine Dept. Michigana Farm, Pavillion, Mich.

PURE BRED DUROC-JERSEY BOAR Pigs of April and May farrow, sired by Brookwater Sensation and Model of Orions Masterpiece. Place your order now, prices right. DETROIT CREAMERY HOG FARM, Route 7, Mt. Clemens, Mich.

7 FINE SPRING BOARS Sired by Schabros Top Col. (1st prize spring pig 1921 at Springfield Fair). All our stock double treated for Cholera. $20.00 each, registered in your name. Schaffer Bros., Oxford, Mich., R. 4.

BOAR PIGS BY FANNIE'S JOE ORION AND Pathfinder Orion. Priced to sell. Satisfaction guaranteed. Write, H. E. LIVERMORE & SON, Romeo, Mich.

FOR SALE—SEPTEMBER GILTS—OPEN OR bred, sired by A Model Orion King. Call or write. CHAS. F. RICHARDSON, Blanchard, Mich.

DUROC JERSEYS—Bred Sows and Gilts Bred for Aug. and Sept. farrow. A few choice ready for service boars. Shipped on approal. Satisfaction guaranteed. F. J. Drodt, Monroe, Mich. R1

HILL CREST DUROCS; SOWS AND GILTS, both bred and open, also service boars NEWTON & BLANK. Four miles straight south of Middleton, Gratiot Co., Mich.

BERKSHIRES

FOR SALE—REGISTERED BERKSHIRE boar two years old, $35; also a few open gilts, $2.
E. R. WILSON, Ellsworth, Mich.

BERKSHIRE PIGS

Now is the time to get the boar you will need next November. Grow him out yourself. We have very good ones, farrowed in March, from big productive sows having plenty of quality. Price $20, and $25. BROWN BROS, R. 3, Albion, Mich.

HAMPSHIRES

A CHANCE TO GET SOME REAL HAMPshires. Boar pigs, sired by Gen. Pershing Again, Gilt Edge Tipton, Messenger All Over 10th. Gen. Pershing 2nd., and other great boars. Writes for list and prices. DETROIT CREAMERY HOG FARM, Route 7, Mt. Clemens, Mich.

HAMPSHIRE AND SHORTHORNS—MARCH and April pigs weighing 100 to 150. Price $20 to $25 each. One red and one white bull 4 months old. Price $40. Each registered. Write or call
GUS THOMAS, New Lathrop, Mich

Hampshires—A few choice Bred Gilts with boar pig no kin to gilts. John W. Snyder, St. Johns, Mich.

O. I. C.

BIG TYPE O I C PIGS 8 WEEKS OLD Guaranteed.
E. V. BILYEU, Powhatan, Ohio

O. I. C. TRUE TO NAME, PROLIFIC STRAIN, open gilts, bred gilts, booking orders for September boar and sow pigs. We ship C. O. D. Ask for description and weight the price will be right.
Maple Valley Stock Farm, North Adams, Mich.

SHEEP

HAMPSHIRE SHEEP

A few good yearling rams and some ram lambs left to offer. 25 ewes all ages for sale for fall delivery. Everything guaranteed as represented.
CLARKE U. HAIRE, West Branch, Mich.

17 HAMPSHIRE EWES REGISTERED FOR SALE. Various Ages.
Choice stock at bargain prices.
Grass Valley Farm, Rochester, Mich.

REGISTERED SHROPSHIRE SHEEP, YEARLing rams, ram lambs. Breeding ewes. Ewe lambs. Breeding size, covering, also 100 high grade Shropshire ewes. Flock established 1890.
C. LEMEN, Dexter, Mich.

COTSWOLD

COTSWOLDS RAMS AND EWES, ALL AGES, priced to sell. Come and see them. Also 1 collie pup. A. M. BORTEL, Britton, Mich.

POULTRY

ORPINGTONS

ORPINGTONS BUFF, WHITE, BLACK Hatching eggs in season.
AUGUST GRABOWSKE
Merrill, Mich., Route 4, Box 41.

CORDS @ 1/2 COST of FABRICS

First quality new cord tires fully backed by our ironclad guarantee for 10,000 miles.

	Tires	Tubes		Tires	Tubes
			32x4½	$19.10	$1.75
30x3	$7 25	$1.10	33x4½	20.15	1.80
30x3½	8.95	1.30	34x4½	20.75	1.85
32x3½	11.50	1.35	35x4	21.95	1.90
31x4	12.75	1.40	36x4½	24.20	2.00
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33x4	14.88	1.50	35x5	27.50	2.25
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Made in our factory of the best materials money can buy. These are rugged, sturdy Cords that run many miles over their guarantee.

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SEND NO MONEY. Write and tell us the size of your tires and how many you want. Shipped C. O. D. Section unwrapped for your inspection. West of Rockies, cash with order—money cheerfully refunded if not satisfied.
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CHARLES CORD

7 JEWEL 10 YR. CASE FREE

RUSH your name and we will tell you HOW you can get this handsome 7-jewel 10-year guaranteed gold-filled Bracelet Watch
ABSOLUTELY FREE
Remember, with our plan it won't cost you a cent. Write at once for FREE WATCH PLAN
HOME SUPPLY CO., 116 Nassau St., Dept. 578 N. Y. City

Cured Her Rheumatism

Knowing from terrible experience the suffering caused by rheumatism, Mrs. J. E. Hurst, who lives at 508 E. Olive St., B-363, Bloomington, Ill., is so thankful at having cured herself that out of pure gratitude she is anxious to tell all other sufferers just how to get rid of their torture by a simple way at home.

Mrs. Hurst has nothing to sell. Merely cut out this notice, mail it to her with your own name and address, and she will gladly send you this valuable information entirely free. Write her at once before you forget.

If you have poultry for sale
put an ad in
The MICHIGAN
BUSINESS FARMER
You'll get Results!

Poultry for Profit

IMPROVED METHOD OF PACKING EGGS

A SAVING of from 50 to 75 per cent in damage to eggs in transit amounts to a very large sum in one season, particularly if several hundred cars are involved. When this saving can be created at an additional expense of only a few cents to the case, entirely by proper packing, the egg producers of the country should immediately be interested. Damage to egg shipments is preventable to such a large extent under the best modern conditions that experiment stations, the great shipping companies everywhere and the farmers generally are co-operating with the railroads in a nation-wide effort to shut off the losses which have been a source of so much expense and irritation in the past.

The American Railway Association through its freight claim prevention department believes that the answer to the egg breakage problem has been found in the excelsior pad. This is not a trade name. The pad, as its name indicates, is made of ordinary excelsior but in such a way that it is very nearly perfect in preventing damage as contrasted with loose excelsior. Egg damage and subsequent claims for losses have grown to such proportions that specialists were assigned to provide a remedy. It was determined that the chief cause of breakage of eggs in transit was the loose pack which allowed the fillers to shift and shuffle about in the case, then bending or breaking the tips of the fillers and permitting the eggs to come in contact with the sides and ends of the case. Experiments have shown that six pads used in each case, three in each of the two compartments, produced just enough pressure to hold the eggs firmly in place and relieve the pressure on the filler tips. One produce company in Michigan reports that its damage claims in 1920, while loose excelsior was used for packing, amounted to $600, while in 1921, when the pads were used, these claims were reduced to $23.40.

The excelsior pads cost the shipper about one cent a piece or six cents to the case. Produce companies in all parts of the country are reporting a saving from 25 to 80 and even 100 per cent when the six excelsior pads are used, one at the bottom, one at the top and one under the top layer in each side of the case. Some shippers report handling from one to two hundred cars of eggs without any damage whatever under this system of packing.

To insure against the breakage of eggs in transit the American Express Company and the American Railway Association recommend these simple rules:

(1) Use only new standard fillers. A filler is strong enough for one trip only, hence there is no such thing as a "good" second-hand filler. The use of second-hand fillers is prohibited by both the freight and express regulations.

(2) Use 6 four-ounce excelsior pads to the case, one on top, one on bottom and one under top layer of each side. Best results are obtained by not inserting a flat where a pad is used. Do not use loose excelsior in cushioning eggs. More damage occurs in eggs packed with loose excelsior than with any other method of packing. Six pads give much greater protection than four pads, because the latter do not hold fillers firmly in place.

(3) Use only standard cases (preferably new), making sure center board is exactly in center, and see that cases are carefully nailed in accordance with the requirements.

(4) If eggs are shipped in carloads, baled hay, straw or excelsior should be used as buffing to prevent shifting of cases in transit. If dimensions of car permit, the empty space should be equally divided between ends and center of car, and the buffing material rammed in as tight as possible, just as taken from the machine-pressed bale, and such spaces should be completely filled. This cannot be done satisfactorily after the loading has been finished; the buffing should be applied as the loading progresses.

The railway and express authorities say that the extensive adoption of these methods by farmers and carlot shippers throughout the country is reflected in a reduction of about 50 per cent in claims filed this year, compared with last year, when they exceeded a million dollars.

DAIRY CATTLE AND POULTRY IN DUAL EXPOSITION

ON the steady march toward national prosperity two farm animals are making the journey together.

They are the dairy cow and the hen.

On the small farms the casual rural visitor cannot help but see that the major part of the income supporting the average family comes from the barnyard flocks and a few good dairy cows.

Although profits from dairying are much larger with respect to land, labor, feed and year round production as compared to the farm flock, yet as an incidental farm operation, producing a good return, poultry keeping has become prominent in all sections.

When the National Dairy Exposition opens its gates Oct. 7th on the Minnesota State Fair Grounds, the first National Poultry Exposition will be held at the same time, under the management of the National Dairy Association, with Geo. W. Hackett as managing director.

Poultry fanciers and dairymen will join in a common effort to bring before the American public the message of well bred poultry and dairy cattle at this dual exposition. Hens with high egg production records are being entered from all parts of the United States and Canada. Separate classes are arranged for the principal breeds. More than 3,000 birds will be on display.

The decision to hold this poultry show and make it international in scope was reached after many conferences were held in the Twin Cities between poultry leaders of the industry centering in the Northwest.

Agitation for an international show has been evident for a year, but definite action to unite the different poultry interests of the Northwest remained dormant until the possibility of holding a show in connection with the Dairy Exposition became imminent. After that the great dairy institution was returned to the Twin Cities for 1922.

Boys' and girls' club work will receive special attention under the direction of Prof. T. A. Erickson, Minnesota State club leader, who will have junior club teams demonstrating various phases of their work daily.

The Minnesota State Fair board has placed at the disposal of the National Dairy Association the Agricultural Building on the fair grounds for poultry exhibits. The same low fifty cent admission price will hold for both expositions and in addition will admit visitors to "Healthland," the $10,000 health exhibit occupying one entire building, which is being arranged by the National Dairy Association and the National Dairy Council in co-operation with 12 other national health organizations and government boards.

TO SELL FINE HERD OF HOLSTEINS.

One of the best sales of the season here in Michigan will be held at Birmingham on October 18th when Mr. Alexander W. Copland will disperse his entire herd of over fifty head of pure-bred Holsteins at his farm some three miles north and east of the village.

This herd has been built up with great care and expense by Mr. Copland

POULTRY BREEDERS' DIRECTORY

Advertisements inserted under this heading at 30c per agate line, per issue. Commercial Baby Chick advertisements 45c per agate line. Write out what you have to offer and send it in. We will put it in type, send proof and quote rates by return mail. Address The Michigan Business Farmer, Advertising Department, Mt. Clemens, Michigan.

BABY CHICKS

CHICKS! CHICKS!

It will pay you to look over these low prices for June and July delivery. Better chicks at real bargain prices. Pure S. C. W. Leghorns, $5.25 for 50; $10 for 100; $47.50 for 500. Pure Barron Eng. Leghorns, $5.75 for 50; $11 for $11 for 100; $52.50 for 500 100; $52.50 for 500. Pure S. C. Anconas, $5.75 for 50 Hatch every Tuesday in June and July. Order direct from ad. Prompt shipment by insured Parcel Post prepaid to your door. Full count strong lively chicks on arrival. For quick service and an entirely satisfactory dea send us your order. Fourteen years reliable dealings. Fine instructive catalog free.
HOLLAND HATCHERY
R. 7, Holland, Mich.

Baby Chicks

Build up your flock with pure bred chicks that lay early and often, best quality. Leghorns, Rocks Reds, Wyandottes, Anconas, Minorcas, Orpingtons, Silver Spangled Hamburg Eggs $2 00 per setting. We deliver at your door. Get our price list and free catalog.
J. G. PHILPOTT
R. 1, Box 74 Port Huron, Mich.

NABOB JUST-RITE Baby Chicks

A Hatch every week all year

POSTAGE PAID 95% live arrival guaranteed. MONTH'S FEED FREE with each order. 40 Breeds chicks, 4 breeds ducklings, select and exhibition grades. Catalog free stamps appreciated.
NABOB HATCHERY, Dept. 30, GAMBIER, O.

BABY CHICKS

S C Buff Leghorns, one of the largest flocks in Michigan My price is in reach of all, only $15 00 per hundred. Detroit winners, none better.
LAPHAM FARMS, Pinckney, Mich

Day Old Chicks. Standard Varieties. Make your selections. Catalogue and price list now ready.
H. H. PIERCE, Jerome, Mich.

POULTRY

PULLETS AND COCKERELS
White and Buff Orpingtons; Barred Rocks; Anconas; White Leghorns.
Pullets 4 months old and oldor at the 3 months price.
HIGH EGG PRODUCING LEGHORNS
Some especially highly bred English Leghorn Cocks and Pullets and Cockerels and Hens for mating for high egg production. Some of the very best egg producing Leghorn stock in this state. Let us describe these birds.
STATE FARMS ASSOCIATION
Kalamazoo, Michigan

FOR SALE—150 WHITE WYANDOTTE Cockerels and pullets. All from my prize winning stock of very best American White Wyandottes laying strain. They win for me. They will win for you.
C. W. CASE, Rochester, Michigan

PULLETS—FOUR HUNDRED MAY Hatched S. C. White Leghorn and R. C. Rhode Island Reds, $1.00 and $1.25 each.
Williamston Poultry Farm, Williamston, Mich.

BARRED ROCK COCKERELS—PARKS STRAIN $3 and $4 each.. White Wyandotte cockerels, Utility, 8 and 10 weeks old, $1 and $1.50 each.
V. NORTON, Charlevoix, Mich., R. 3, Box 98.

LEGHORNS

POUND PULLETS (S. C. W. L.) HATCHED MARCH 20th. $1.20 for May 15th delivery. Finest lot we ever raised. No sickness. No crowding. Satisfaction or money back. Will lay in August and all through the fall season when eggs are the highest.
MORSE LEGHORN FARM, Belding, Michigan

LEGHORNS
Single Comb Buff Leghorns, 1000 Chicks for April first delivery. It will cost you just 2 cents to find out my plan how to get 10 Baby Chicks FREE.
LAPHAM FARMS, Pinckney, Mich.

FOR SALE—ALL OF OUR S. C. W. LEGHORN yearling hens to make room for pullets. Excellent winter layers. Healthy, $1.00 each.
WILLOWGROVE FARM, Manchester, Mich.

BUFF LEGHORNS—SINGLE COMB. Early Hatched Cockerels.
J W. WEBSTER, Bath, Michigan

RHODE ISLAND REDS

RHODE ISLAND REDS, TOMPKINS STRAIN Both combs. Stock for sale after September 15th.
WM. H. FROHM, New Baltimore, Mich R. 1.

WHITTAKER'S R. I. REDS, 200 SINGLE comb red pullets at $2.50 to $5.00 each. Also both Rose and Single Comb cocks and cockerels. Write for calatog. Interlakes Farm, Box 4, Lawrence, Mich.

ROSE COMB RHODE ISLAND REDS. Hatching Eggs reduced to $1 per setting. MRS. ALBERT HARWOOD, R. 4, Charlevoix, Mich. (P)

PLYMOUTH ROCK

BUFF ROCKS—Bronze Turkeys—For 20 years, by J C Clipp & Sons, Bx. M, Saltillo, Ind.

during the past few years and I think it will be agreed by those in attendance at this event that he has been eminently successful in bringing together an exceptionally well bred and good individual lot of cattle.

One of the outstanding features of this offering is twenty-one daughters of King Korndyke Echo Sylvia whose sire is Avon Pontiac Echo, whose performance through his daughters needs no repetition to readers, and whose dam is a ir three year old daughter of Pontiac Korndyke Het Loo, one of the most famous sons of his wonderful sire, Pontiac Korndyke. These heifers are from dams with records up to 28 lbs. from well over 600 lbs. milk and are exceptional in their dairy quality.

Included in the breeding females are daughters of such sires as Pontiac Korndyke Het Loo, King Mengerveld Palmyra Fayne, Crown Pontiac Korndyke (with 26 lbs.) Aristocrat Pontiac and Spring Farm King Pontiac 6th with dams up to 32 lbs butter and over 700 lbs. milk. The females are bred to King Korndyke Echo Sylvia described above, to a son of Sadie Gerben Hengerveld DeKol, the first cow to make 40 lbs under the new rules, that took Grand Championship in the 1921 Brentwood Show, or to a son of King Hengerveld Palmyra Fayne from a 31.80 lb. dam that milked 742 lbs. and 3046 lbs. in 30 days.

These cattle which are under State and Federal supervision will be sold with the usual breeders guarantee and with a 60 to 90 day retest privilege as well as with terms suitable to the purchaser, the terms to be arranged before the sale. Anyone desirous of adding to their herd by introducing the best of blood lines and choice individuals is afforded the opportunity of a lifetime in this sale.

THE HUNTED WOMAN

(Continued from page 6)

good-bye," she said. "Won't you let me thank you—a last time?"

Her voice brought him to himself again. A moment he bent over her hand. A moment he felt its warm, firm pressure in his own. The smile that flashed to his lips was hidden from her as he bowed his blond-gray head.

"Pardon me for the omission," he apologized. "Good-bye—and may luck go with you!"

Their eyes met once more. With another bow he had turned, and was continuing his way. At the door Joanne Gray looked back. He was whistling again. His careless, easy stride was filled with a freedom that seemed to come to her in the breath of the mountains. And then she, too, smiled strangely as she re-entered the tent.

CHAPTER III

IF JOHN ALDOUS had betrayed no visible sign of inward vanquishment he at least was feeling its effect. For years his writings had made him the target for a world of women, and many men. The men he had regarded with indifferent toleration. The women were his life—the "frail and ineffective creatures" who gave spice to his great adventure, and made his days anything but monotonous. He was not unchivalrous. Deep down in his heart—and this was his own secret—he did not even despise women. But he had seen their weaknesses and their frailties as perhaps no other man had ever seen them, and he had written of them as no other man had ever written. This had brought him the condemnation of the host, the admiration of the few. His own personal veneer of antagonism against woman was purely artificial, and yet only a few had guessed it. He had built it up about him as a sort of protection. He called himself "an adventurer in the mysteries of feminism," and to be this successfully he had argued that he must destroy in himself the usual heart-emotions of the sex-man and the animal.

How far he had succeeded in this he himself did not know—until these last moments when he had bid good-bye to Joanne Gray. He confessed that she had found a cleft in his armour, and there was an uneasy thrill in his blood. It was not her beauty alone that had affected him. He had trained himself to look at a beautiful woman as he might have looked at a beautiful flower, confident that if he went beyond the mere admiration of it he would find only burned-out ashes. But in her he had seen something that was more than beauty, something that for a flashing moment had set stirring every molecule in his being. He had felt the desire to rest his hand upon her shining hair!

He turned off into a winding path that led into the thick poplars, restraining an inclination to look back in the direction of the Otto camp. He pulled out the pipe he had dropped into his shirt pocket, filled it with fresh tobacco, and began smoking. As he smoked, his lips wore a quizzical smile, for he was honest enough to give Joanne Gray credit for her triumph. She had awakened a new kind of interest in him—only a passing interest, to be sure—but a new kind for all that. The fact amused him. In a large way he was a humourist—few guessing it, and he fully appreciated the humor of the present situation—that he, John Aldous, touted the world over as a woman-hater, wanted to peer out through the poplar foliage and see that wonderful gold-brown head shining in the sun once more!

He wandered more slowly on his way, wondering with fresh interest what his friends, the women, would say when they read his new book. His title for it was "Mothers." It was to be a tremendous surprise.

Suddenly his face became serious. He faced the sound of a distant phonograph. It was not the phonograph in Quade's place, but that of a rival dealer in soft drinks at the end of the "street." For a moment Aldous hesitated. Then he turned in the direction of the camp.

Quade was bolstered up on a stool, his back against the thin partition, when John Aldous sauntered in. There was still a groggy look in his mottled face. His thick bulk hung a bit limply. In his heavy-lidded eyes, under-hung by watery pouches of sin and dissipation, there was a vengeful and beastlike glare. He was surrounded by his friends. One of them was taking a wet cloth from his head. There were a dozen in the canvas-walled room, all with their backs to the door, their eyes upon their fallen and dishonored chief. For a moment John Aldous paused in the door. The cool and insolent smile hovered about his lips again, and little crinkles had gathered at the corners of his eyes.

"Did I hit you pretty hard, Bill?" he asked.

Every head was turned toward him. Bill Quade stared, his mouth open. He staggered to his feet, and stood dizzily.

"You—damn you!" he cried huskily.

Three or four of the men had already begun to move toward the stranger. Their hands were knotted, their faces murderously dark.

"Wait a minute, boys," warned Aldous coolly. "I've got something to say to you—and Bill. Then eat me alive if you want to. Do you want to be square enough to give me a word?"

Quade had settled back sickly on his stool. The others had stooped, waiting. The quiet and insolently confident smile had not left Aldous' lips.

"You'll feel better in a few minutes, Bill," he consoled. "A hard blow on the jaw always makes you sick at the pit of the stomach. That dizziness will pass away shortly. Meanwhile, I'm going to give you and your pals a little verbal and visual demonstration of what you're up against, and warn you to bait no traps for a certain young woman whom you've lately seen. She's going on to Tete Jaune. And I know how your partner plays his game up there. I'm not particularly anxious to butt into your affairs and the business of this pretty bunch that's gathered about you, but I've come to give you a friendly warning for all that. If this young woman is embarrassed up at Tete Jaune you're going to settle with me."

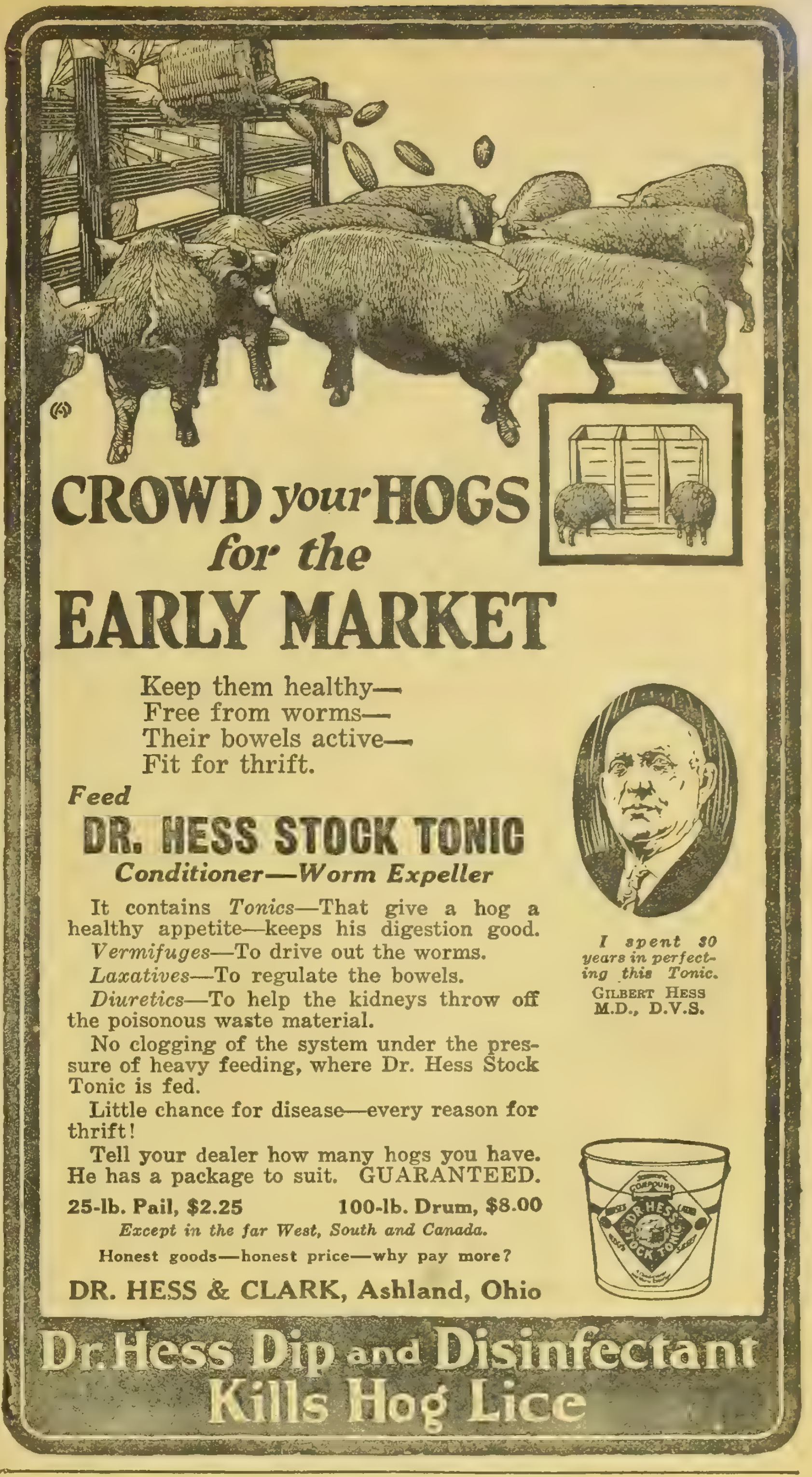
Aldous had spoken without a tremor of excitement in his voice. Not one of the men noticed his speaking lips, his slim hands, or his careless posture as he leaned in the door. They were looking straight into his eyes, strangely scintillating and deadly earnest. In such a man mere bulk did not count.

"That much—for words," he went on. "Now I'm going to give you the visual demonstration. I know your game, Bill. You're already planning what you're going to do. You don't fight fair—because you never have. You've already decided that some morning I'll turn up missing, or be dug out from under a fall of rock, or go peacefully floating down the Athabasca. See! There's nothing in that hand, is there?"

He stretched out an empty hand toward them, palm up.

"And now!"

(To be continued)



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MARKET FLASHES

MARKET SUMMARY

All grains are quiet. Rye advances on Detroit market. Supplies of butter and eggs not sufficient to care for demand. Potatoes in liberal supply and market easy. Poultry inactive. All live stock markets active and prices higher.

(Note: The above summarized information was received **AFTER** the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press —Editor.)

WHEAT

There is very little in the present wheat situation except the lowness of the price to warrant a belief in higher values. The government's last estimate is distinctly bearish, showing as it does that the total world crop is only slightly less than one year ago but still far above th pre-war average. Earlier estimates by both government and private report much larger production, and it begins to look as if someone had undershot the mark by a good many thousand bushels. But now we are suddenly advised that the world's exportable surplus is probably larger than the world's estimated needs. Is there any wonder that farmers are beginning to question all crop estimates? Inasmuch as nearly every estimate issued the last few months has seemed to bring into question the accuracy of the preceeding estimate we know of no reason why the one recently issued should be accepted as correct. Whether or no the crop is too large one thing is perfectly obvious to all, the price is too low, and will cause great financial loss to farmers and everybody concerned. The financial interests and the speculators seem to realize this, and that is one of the reasons why we do not expect to see wheat values drop much further.

Prices

Detroit—No. 2 red, $1.08; No. 2 white and No. 2 mixed, $1.06.

Chicago—No. 3 red, $1.04.

New York—No. 2 red, $1.14½.

Prices one year ago—Detroit, No. 2 red, $1.32; No. 2 white and No. 2 mixed, $1.29.

CORN

In the last issue of the Business Farmer we reported corn quiet and by the time that issue was off the press the market turned weak and prices took a slump. At Detroit the decline amounted to 2 cents but before the week closed the market was back to 68 cents for No. 2 yellow. On the opening day of the week ending Saurday, September 9, corn took the leadership in the grain markets and trading was active with higher prices prevailing. Crop damage complaints stimulated the buying side of the market. Serious losses are reported in many sections of the corn belt due to the hot and dry weather.

Complaints of poorly filled ears and of barren stalks came from most sections and the trade has come to the conclusion that the crop wil be materially lighter than last year. Reports indicated that that best prospects are in Iowa, but even that state will not raise as much corn as last year. There has been heavy consumption of corn in the past year and for this reason the amount carried over at the close of the season will be less than last November. Many of the bulls figure that the amount of corn available at the start of next season, old and new crops, will be at least 400,000,000 bushels smaller than a year ago. The market closed last week at Detroit just one cent below what it was two weeks before and the tone of the market was quiet. At Chicago prices were from 1c to 1¼c higher than two weeks previous and the market was steady.

Prices

Detroit—No. 2 yellow, 68c; No. 3 yellow, 67c; No. 4 yellow, 66c.

Chicago—No. 2 yellow, 64@64½c.

New York—No. 2 yellow and No. 2 white, 83¼c.

Prices one year ago—Detroit No. 2 yellow, 60c; No. 3 yellow, 59c; No. 4 yellow, 56c.

OATS

Oats are behaving a little better than they were and prices are up a few cents from the low of two weeks ago. However, in view of the continued lifelessness in wheat we must adhere to our previous opinion that oat prices will not be materially higher.

Prices

Detroit—No. 2 white, 39c for new, 41c for old; No. 3 white, 37c for new; No. 4 white, 34c for new.

Chicago—No. 2 white, 36½38½c; No. 3 white, 35½@37½c.

New York—No. 2 white, 46½c.

Prices one year ago—Detroit, No. 2 white, 42½c; No. 3 white, 40c; No. 4 white, 37c.

RYE

The rye market was active last week at Detroit and the price of No. 2 went to 74 cents, an advance of 2½ cents for the week. The price on the Chicago market ranged about the same being slightly higher at times.

POTATOES

We may yet expect some surprises in the potato deal before it is over. Our optimistic friend, Mr. A. A. Lambertson of Kent county, says the government is all off on its potato estimate, and while we have expressed our disagreement with him elsewhere in this issue, at this particular writing it begins to appear that he may not be altogether wrong. Reports received by the Business Farmer within just the last few days indicate that the crop has suffered severely in Maine, Minnesota and Colorado. A Minnesota correspondent avers that the crop in the northwest has been over-estimated by 20,000,000 bushels, while a Colorado writer says the crop in many sections will not be one-half of what it was last year. Add to these statements the fact that the far western states are virtually shut out from the big eastern markets by reason of the low prevailing prices and the high freight rates, and the Michigan shipper may yet be able to find some gleam of comfort in the situation. The rate on potatoes from Idaho to Chicago is $1.12 per cwt. The Chicago market closed last week around $1.10 per cwt., or two cents less than the freight. When you add to this cost of bags, handling, etc., it is plain to be seen that the Idaho shipper isn't making any money, or not much, anyway. You cannot exclude the millions of bushels of western potatoes from the eastern markets for a very long period of time without a local shortage developing. For this reason, if no other, we expect to see the potato market stiffen up a bit before very long. Buying of the late varieties has begun in many parts of the state, but the prices offered are ridiculously low. Because of the low opening market it is unlikely that there will be any drastic declines when the bulk of the crop is harvested, which fact, we believe warrants the grower in biding his time and wait for the developments which will take place the next sixty days.

Prices

Detroit—$1.42 per cwt.

Chicago—$1.20 per cwt.

New York—$1.33 per cwt.

Prices one year ago—Detroit, $1.00 per cwt.

BEANS

We would like an intelligent answer to this question:

"Why have beans dropped $4 a hundred in the last sixty days when there hasn't been an increase of a single bean in the supply and the consumption if anything has been larger?" Oh, we know, there is that "prospect" of a fair sized crop, but the prospect isn't any bigger if it is as big as it was 60 days ago. Does anyone thing for a moment that there would have been any such drastic declines in prices if the farmers had control of the marketing of the crop? There was a reason why the bean market should have slumped some from the high of July, and there would be a reason if it should slump a bit at harvest time, especially if the farmers were eager to sell. But there is no sound, legitimate reason why the price should have tumbled 50 per cent nearly 30 days before the threshing of the crop. Isn't the time here, right now, bean growers of Michigan, for a national bean-growers association through which the new crop soon to be harvested can be marketed without let or hindrance from the speculators. The bugaboo of foreign competition has been removed and every Michigan bean should find a market this year at no less than six cents per pound.

Prices

Detroit—C. H. P., $4.75 per cwt.

Chicago—C. H. P., $5.75@$6 per cwt.

Price one year ago—Detroit, C. H. P., $4.75 per cwt.

HAY

Hay markets in general are weak with receipts equal to and in many cases exceeding the demand. Buying seems to be limited to immediate needs. Country offerings are reported to be light but daily offerings are more than the market consumes readily and as a result the market is in a receptive mood to lower prices. Good quality of hay, however, is meeting with a fair demand.

Prices

Detroit—Standard timothy and light clover mixed, $16@$16.50; No. 1 clover, $14@$15 per ton.

Chicago—No. 2 timothy, $14@17; No. 1 light clover mixed, $16@$18; No. 1 clover, $13@$15 per ton.

New York—No. 2 timothy and light clover mixed, $21@$12 per ton.

Prices one year ago—Standard timothy, and No. 1 light clover mixed, $19½$20; No. 1 clover, $14@$15 per ton.

EAST BUFFALO LIVE STOCK MARKET

The receipts of cattle Sept. 11 were 100 cars, including 8 cars left from last week's trade. The market opened 15 to 25c higher on good to choice medium weight and weighty steer cattle, which were in very light supply; good butcher steer and handy weight steers were in very light supply, sold 15 to 25c higher; common, fair and medium butcher steers, were in heavy supply, sold 25c lower; heifers were in good supply, sold steady; bulls were in light supply, sold 15 to 25c higher; fair to medium and good cows sold 25c lower; canners sold 25c higher. There were no shipping cattle on the market. Top was $11.10 for two loads of choice angus long yearling steers, averaging 982 pounds.

Receipts of hogs totaled 11.200. The market opened 15 to 25c lower on the handy weight grades; heavy hogs sold steady. Yorkers, mixed and pigs sold from $10.00 to $10.10; hogs weighing around 250 pounds sold at $9.75; heavy hogs, $9.25; roughs, $7.00; stags, $4.00 to $4.50, with a few light stags up to $5.00.

Receipts of sheep and lambs were 7.400. Choice lambs sold at $14.25, which is 25c higher than last week's close. There was a very strong demand here today. Cull lambs sold from $9.50 to $10.50, which is 50c higher; yearlings, $9.00 to $10.00; wethers, $7.00 to $7.50; ewes, $5.50 to $6.00, with some handy weight western ewes up to $6.50; heavy ewes sold a little better, selling from $3.50 to $4.50. Dealers look for a good trade the balance of the week.

The receipts of calves were 1.600. Choice calves sold from $13.50 to $14.00, which was steady; throwouts, 120 to 140 lbs., $10.00 to $11.00; heavy throwouts, 160 to 190 lbs., $8.00 to $9.00; heavy fat veal calves, $8.00 to $10.00, as to weight and quality. Buyers are discriminating very bitterly against weighty fat and rough calves and this kind is very hard to dispose of at satisfactory prices.

MISCELLANEOUS MARKET QUOTATIONS

Detroit, September 12th

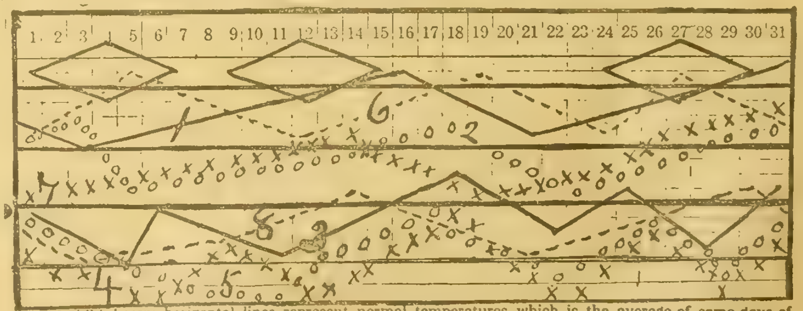
Butter—Best creamery, in tubs, 34@34½c per lb.

Eggs—Fresh current receipts, 29

THE WEATHER FOR NEXT WEEK

As forecasted by W. T. Foster for The Michigan Business Farmer

FOSTER'S WEATHER CHART FOR OCT. 1922



Straight, heavy, horizontal lines represent normal temperatures, which is the average of same days of the year for forty years. Crooked lines above normal lines mean warmer; below, cooler; that marked 1 is for section 1, north of latitude 47, between meridian 90 and Rockies crest—2 for section 2 on my section map is for east of meridian 90, north of latitude 47—3, between latitudes 39 and 47 and between meridian 90 and Rockies crest—4, east of meridian 90, between latitudes 39 and 47—5, south of latitude 39, between meridian 90 and Rockies crest—6, east of meridian 90, south of latitude 39—7, north of latitude 43½, west of Rockies crest—8, south of latitude 43½ to Mexican line and west of Rockies crest.

WASHINGTON, Sept. 14, 1922.—October will be one of the most rainy, disagreeable months of the 12 of which the 16th day will be their center. Temperatures will go to such extremes that the three great cold waves of the last three weeks of that month will demand heat in residences and offices three weeks earlier than usual. That means that heat will be in demand along and north of latitude 40 near and after October 6, and that frosts will be two weeks earlier than usual. The principal reason that three severe storm periods, centering on October 3, 12 and 27, will constantly keep the atmosphere stirred and prevent warm air from accumulating, the results being the reverse of the early September warm wave. But the humidity—moisture in the atmosphere—will continue great east of Rockies; better weather will prevail west of Rockies. October rains are the principal hope for putting the soil in good condition for sowing winter grain, but in large sections it will be cheaper to buy grain now than to produce it in 1923. Hurricane southwest of Liberia near October 20, will drift westward, but I cannot locate its movements.

Forecasts for Michigan.—Lowest temperatures, 23 and 29; highest, 20 and 26; average, warmer than usual; severe storms and increased rains, with lower temperatures first week in October.

@30c; fresh candled and graded, 32 @34c; refrigerator firsts, 27@28c per doz.

Plums—$1@$1.50 per bu.

Grapes—Michigan, 23@25c per 4-quart basket.

Apples—New, $1@$1.50 per bu.

Peaches—Western Michigan Elbertas, $1.50@$2; island peaches, fancy $1.75@$2; AA $1.50@$1.75; A $1.25@$1.50; B75c@$1 per bu.

Pears—Barteletts, $1.25@$1.75 per bu.; Flemish Beauty, $1@$1.50 per bu.

Celery—Michigan, 25@40c per doz.

Honey—Comb, 18@20c lb.

Cabbage—Home-grown, 50@75c per bu.

Popcorn—4½@5c; Little Buster, 7½@8c per lb.

Onions—$2.25@2.75 per sack of 100 lbs.

Tomatoes—Home-grown, 75@$1 per bu.

Dressed Calves—Choice, 15@17c medium, 13@14c; large coarse, 8@11c per lb.

Melons—Watermelons, 40@50c; each; Colorado pink meats, 1.50@$2 per flat; Osage, $1@$2 per bu.; honeydew, $2.50@2.75.

Live Poultry—Best springs, 22@23c; medium springs, 22@23c; leghorns, 18@20c; large fat hens, 24c; medium hens, 22c; small hens, 18c; old roosters, 15c; geese, 13c; large ducks, 22@23c; small ducks, 18@20c; turkeys, 25c per lb.

FEEDING CATTLE

Don't buy too many stock cattle this fall, in other words, do not bite off more than you can masticate. This maxim is worthy of Confusius himself. A year ago it was possible to buy cattle blind without the least danger of losing a dime; two years ago purchase made loss inevitable.

This is a season for caution.

Above all things give heavy cattle a wide berth, as they are a gambling proposition at the best, and the average farmer-feeder cannot afford to gamble with cattle. It is less laborious to speculate on the board of trade. More money has been lost during the past ten years feeding heavy cattle than would have been possible had the same operators speculated in corn.

Buy light cattle and get a growth on them. Calves are a safe proposition if you know how to handle them, but remember they are babies and must be treated in the same manner as a yearling.

Cattle feeding as a speculation is notoriously dangerous, but as a means of converting roughage and corn into marketable product. Buy light cattle, increase the weight 30 to 40 per cent while in your pasture with as little outlay for commercial feeds as possible and give them credit for the manure, always, that beef-making is no short-cut to wealth.—The Round-up.

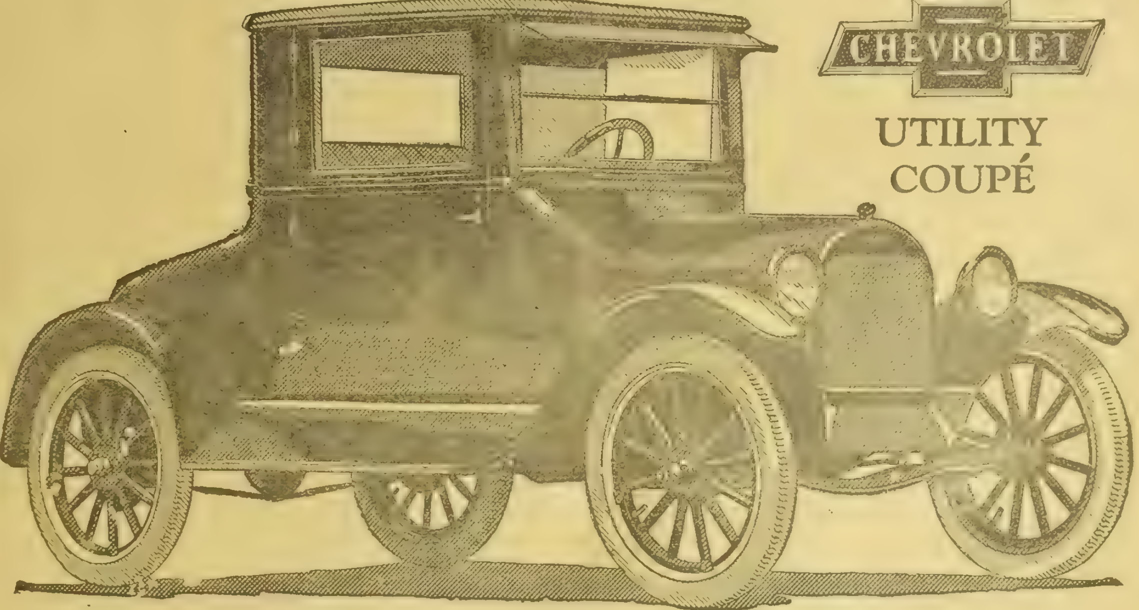
CORN SUPPLY

United States Supply of Corn for the 1922-23 season will be about 400,000,000 bushels less than the previous year based on private estimates as to the crop. The average of the Snow and Goodman estimates is around 2,830,000,000 bushels or 187,000,000 bushels less than the Government August figures. Total crop and carryover last year was 3,381,000,000 bushels, an average carryover being around 100,000,000 bushels. Corn, when everything is considered, cannot be regarded as high. In the first place there is about 15 per cent more hogs to feed than last year and latest Government reports show 6 per cent more cattle on farms on July 1 than was the case on January 1. In addition corn prices with the known certainty of a shortage in supplies as compared with last year, are practically the same as in 1921, so that there is every incentive to feed heavily. We have seen the largest supply in history disappear in the most astonishing manner and this year's supply wil also find a ready demand. The Government September report should confirm the private estimates as they were made up about a week ahead of the Government's data and the latter should show more damage in parts of Kansas, Oklahoma and Nebraska than either Snow or Goodman, which may be offset by improvement in other states where rain fell. The official returns on Indiana claim that a good deal of the late corn in that state will not make grain, and in the past few days sample of corn from some of the best corn districts in Illinois show that the ears there failed to fill properly. In fact, corn cutting is already under way in Illinois for grain purposes. Husking returns alone will reveal the actual crop. Government October par yield per than the September par, the reduction coming mainly in Ohio and Indiana. I find a strong undercurrent of bullish sentiment regarding the future course of the corn market with the disposition to buy on all the breaks. Oats are so low that it seems almost impossible for them to get much lower and about all a buyer at prevailing levels can lose is the carrying charge. During the past 20 years there have been only a few times where May oats bought on breaks during the month of September could not be sold out in the following May at a fair to good profit. Investment buying is being attracted to the oats market.—The Round-up.

What Prompted Him?

One P. M. a gentleman friend was taking supper with us. My small nephew, aged two, was seated in his high chair on the opposite side of the table from our guest.

Nephew regarded him very closely and very solemnly for a few moments. Then to our amazement the child picked up a warm biscuit from the plate close to him and raised his hand high in the air, threw it directly at our friend, hitting him on the chest. It happened so quickly and so unexpectedly we were quite stunned. We never could account for his doing it as he was a very well behaved little chap who had never tried such a stunt before and never did again.—B. R., Breckenridge, Mich.



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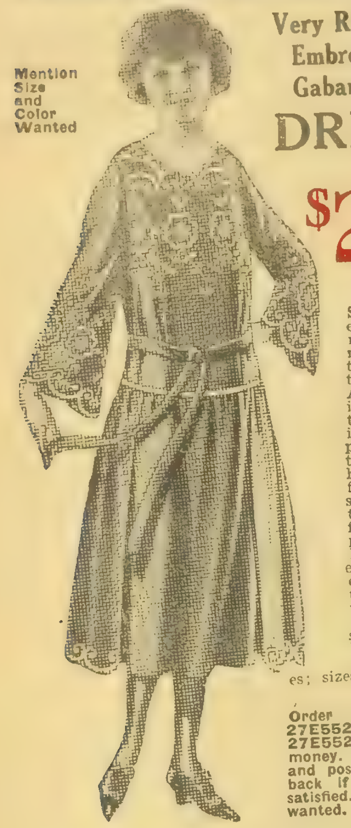

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Sharood especially recommends this pretty model. A becoming style that is going to be popular this Fall. has wide flowing sleeves two new fashion panels. handsomely embroidered at top of waist. and on sleeves. Women's and misses; sizes 16 to 44.

Order Brown No. 27E5521. Navy No. 27E5520. Send no money. Pay $2.98 and postage. Money back if you're not satisfied. State size wanted.

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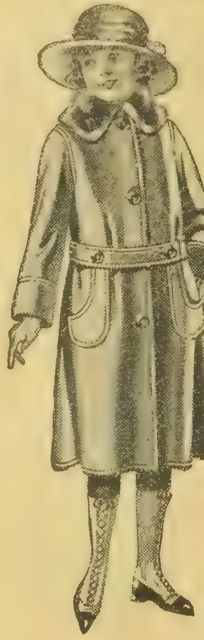

A sensational bargain—a handsome coat of Pressed Velour in Navy Blue or Brown. Regular $7 value. Has collar of genuine kit Coney, which buttons snugly around throat. Belt all around, two novelty pockets and two bdttons at back. Sizes 7 to 14 years. **Order Brown No. 27E-5595. Navy No. 27E-5596. Send no money. Pay $3.98 and postage on arrival. Money back if not satisfied. Always mention size.**

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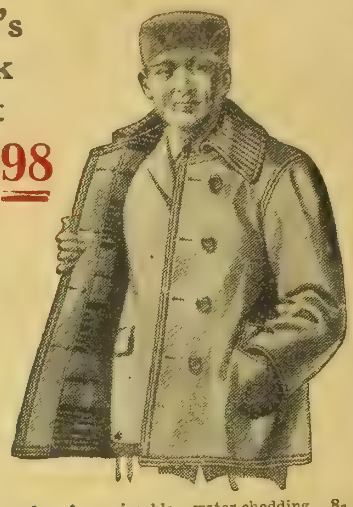
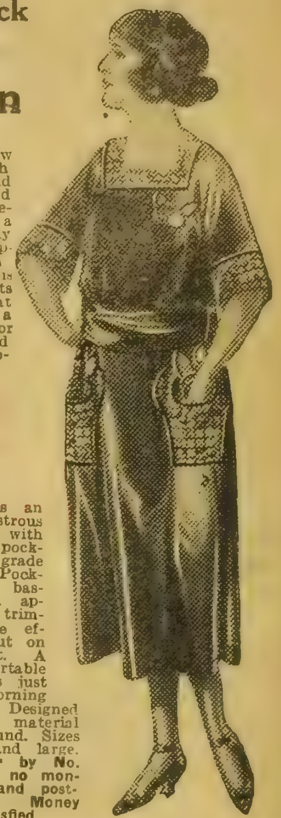


Strongly made of serviceable, water-shedding, 8-ounce brown duck shell, with full body and sleeve lining of heavy plaid blanket cloth, 5½-in. corduroy collar. Two set-in pockets with flaps. Riveted on buttons. All seams double sewed. Comes in one color only. You will know that this is a coat that will give you excellent wear. Sizes 36 to 46 inches chest. Length 32 inches. **Order by No. 27B2314. Send no money. Pay $2.98 and postage on arrival.**

Rich Black Sateen Apron

Amazingly low price for such truly splendid quality. Sharood is proud to recommend such a bargain to any woman who appreciates real value. And this apron represents not only a neat saving but a charming style for housewear. Send for your size today—quick.

$1.79



The material is an excellent soft, lustrous black sateen with collar, cuffs and pockets of good grade fancy cretonne. Pockets are a novelty basket design with applique flower trimming. The same effect is carried out on one side of waist. A full cut, comfortable garment which is just the thing for morning wear at home. Designed with wide self material sash belt all around. Sizes small, medium and large. Big value. **Order by No. 27E5098. Send no money. Pay $1.79 and postage on arrival. Money back if not satisfied.**

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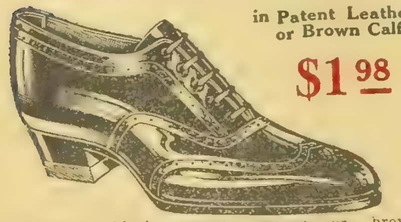

Women's black patent leather or brown kid oxford, with imitation shield tip and medallion, perforated vamp, imitation circular foxing and lace stay perforated. Medium rubber heel and medium narrow toe. Sizes 2½ to 8. **Order patent leather by No. 27A64. Order brown kid by No. 27A65. Send no money. Pay $1.98 and postage on arrival of either size. State size.**

Women's Patent Leather or Brown Calf-finished OXFORDS

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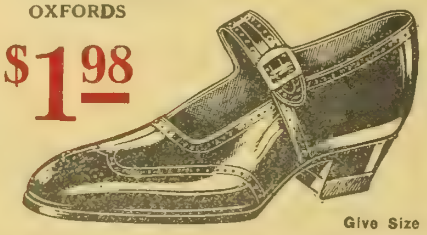
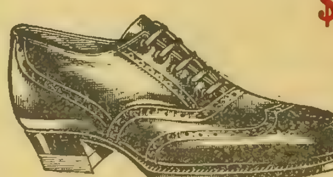


Give Size

This smart pump in sizes 2½ to 8. In black patent leather or brown calf finish—a stunning one-strap model with imitation shield tip and medallion, effectively perforated. Has medium rubber heel. **Order patent leather by No. 27A72. Order Brown calf by No. 27A73. Send no money. Pay $1.98 and postage on arrival.**

Favorite Model Brown Leather Oxfords for Misses

$1.59 UP



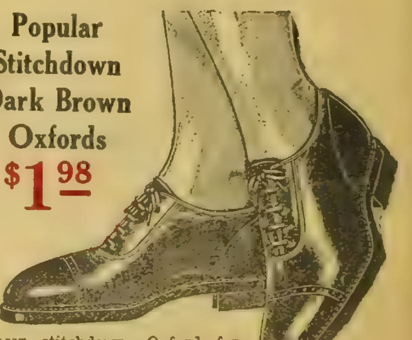
GIVE SIZE

Wing Tip Style

This is the last that every up-to-date young miss prefers. A classy wing tip oxford with medallion tip and perforations around vamp and heel foxings. Made of excellent soft brown leather with sturdy, genuine oak soles. Rubber heels. Wide widths. **Order child's sizes, 8½ to 11 by No. 27A477, $1.59. Order Misses' sizes, 11½ to 2 by No. 27A478. $1.79. Order Big Girls' sizes, 2½ to 8 by No. 27A479, $1.98. Send no money. Pay bargain price and postage on arrival. State Size.**

Popular Stitchdown Dark Brown Oxfords

$1.98

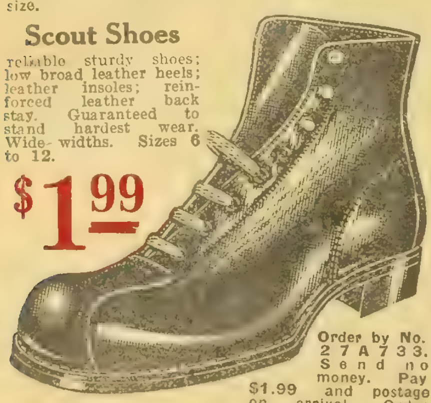


Classy stitchdown, Oxford for women. Wonderfully comfortable and stylish. Uppers of dark mahogany leather. Smooth leather insole. Flexible stitch-down oak outsoles. Low rubber heels. Sizes 2½ to 8. Wide Widths. **Order by No. 27A268. Send no money. Pay only $1.98 and postage on arrival.**

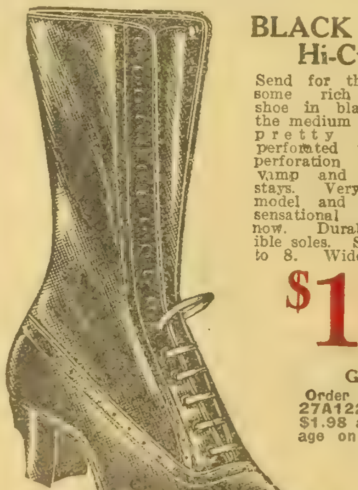
Scout Shoes

reliable sturdy shoes; low broad leather heels; leather insoles; reinforced leather back stay. Guaranteed to stand hardest wear. Wide widths. Sizes 6 to 12.

$1.99



Order by No. 27A733. Send no money. Pay $1.99 and postage on arrival. Order little boys' sizes 9 to 13½ by No. 27-A565. Price $1.79. Order big boys' sizes 1 to 6 by No. 27A564. Price $1.89. Pay bargain price and postage on arrival. State size.



BLACK KID Hi-Cut

Send for this handsome rich kidskin shoe in black. Note the medium toes with pretty imitation perforated tips, the perforation around vamp and on lace stays. Very popular model and really a sensational bargain now. Durable flexible soles. Sizes 2½ to 8. Wide Widths.

$1.98

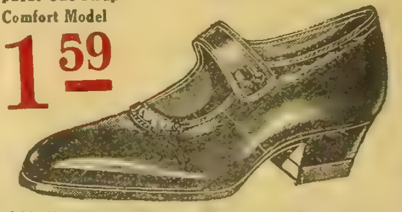
Give Size

Order by No. 27A122. Pay $1.98 and postage on arrival.

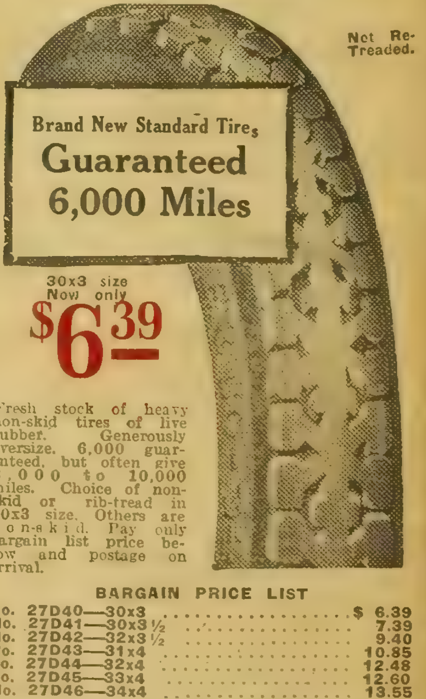
SOFT KID SLIPPER

Popular One Strap Comfort Model

$1.59



Soft kid finished comfort slipper. Stylish one-strap model with two buttons. Medium round toe. Cushion insoles. Medium rubber heels. Solid oak leather soles. A bargain at our slashed price. Sizes 2½ to 8. Wide widths. Black or Brown. **Order Black by No. 27A228. Order Brown by No. 27A229. Pay no money. Pay $1.59 and postage on arrival.**



Not Re-Treaded.

30x3 size Now only

$6.39

Fresh stock of heavy non-skid tires of live rubber. Generously oversize. 6,000 guaranteed, but often give 8,000 to 10,000 miles. Choice of non-skid or rib-tread in 30x3 size. Others are non-skid. Pay only bargain list price below and postage on arrival.

BARGAIN PRICE LIST

No. 27D40—30x3	$ 6.39
No. 27D41—30x3½	7.39
No. 27D42—32x3½	9.40
No. 27D43—31x4	10.85
No. 27D44—32x4	12.48
No. 27D45—33x4	12.60
No. 27D46—34x4	13.55

GUARANTEED INNER TUBES

Now is your chance to buy extra thick, live rubber inner tubes at a big saving. Don't wait for tube prices to go up. **How many shall we send? Give size wanted. No money now. Pay only bargain price and postage on arrival.**

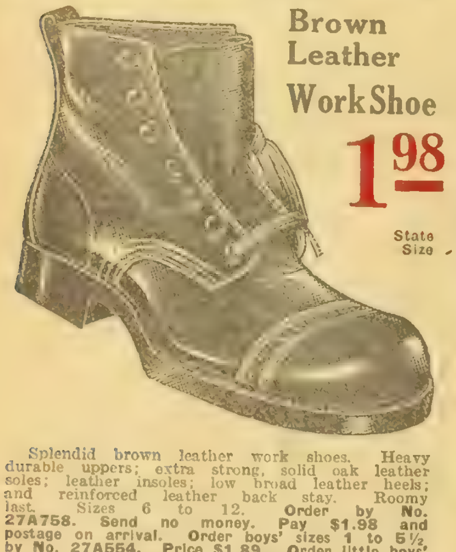
BARGAIN PRICE LIST

No. 27D20—30x3	$1.09
No. 27D21—30x3½	1.33
No. 27D22—32x3½	1.45
No. 27D23—31x4	1.69
No. 27D24—32x4	1.79
No. 27D25—33x4	1.79
No. 27D26—34x4	1.79

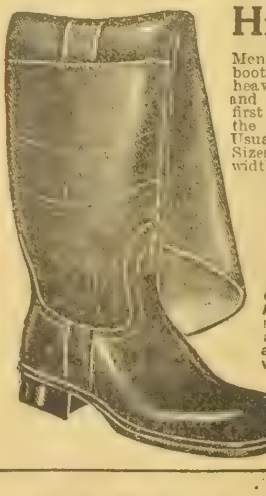
Brown Leather WorkShoe

1.98

State Size



Splendid brown leather work shoes. Heavy durable uppers; extra strong, solid oak leather soles; leather insoles; low broad leather heels; and reinforced leather back stay. Roomy last. Sizes 6 to 12. **Order by No. 27A758. Send no money. Pay $1.98 and postage on arrival. Order boys' sizes 1 to 5½ by No. 27A554. Price $1.89. Order little boys' sizes 9 to 13½ by No. 27A555. Price $1.79 and postage on arrival. Mention size.**



Hip Boots

Men's pure gum hip boots; friction lined; heavy corrugated sole and heel; guaranteed first quality. Made of the very best rubber Usually retailed at $5. Sizes 7 to 12. Wide widths. No half soles.

$2.79

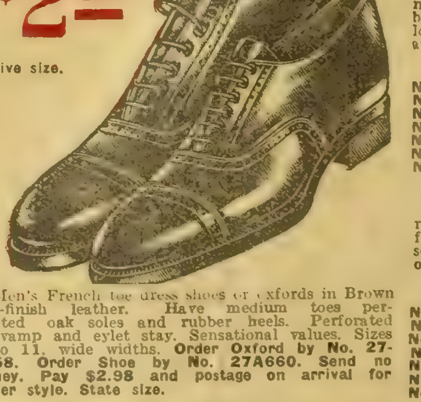
GIVE SIZE

Order by No. 27-A949. Send no money. Pay $2.79 and postage on arrival. State size wanted.

Men's Stylish Dress Shoes

$2.98

Give size.



Men's French toe dress shoes or oxfords in Brown calf-finish leather. Have medium toes perforated oak soles and rubber heels. Perforated on vamp and eylet stay. Sensational values. Sizes 6 to 11. wide widths. **Order Oxford by No. 27-A658. Order Shoe by No. 27A660. Send no money. Pay $2.98 and postage on arrival for either style. State size.**

Be Sure to Mention Sizes, Colors, etc., and Send all Orders from this Page to

SHAROOD CO.

Dept. 27

MINNEAPOLIS, MINN.

The Michigan BUSINESS FARMER

An Independent Farmer's Weekly Owned and Edited in Michigan

X, NO. 3 MT. CLEMENS, SATURDAY, SEPTEMBER 30, 1922 $1 PER YEAR

UNIVERSITY OF ILLINOIS LIBRARY OCT [illegible] 1922

"So sing merrily, merrily, as we gather it in;
We will store it away gladly, in garner and bin."

—*Song of the Harvest, by Henry Stevenson Washburn.*

If you want $500 Cash—Read page 11, this issue, and get in the Game!

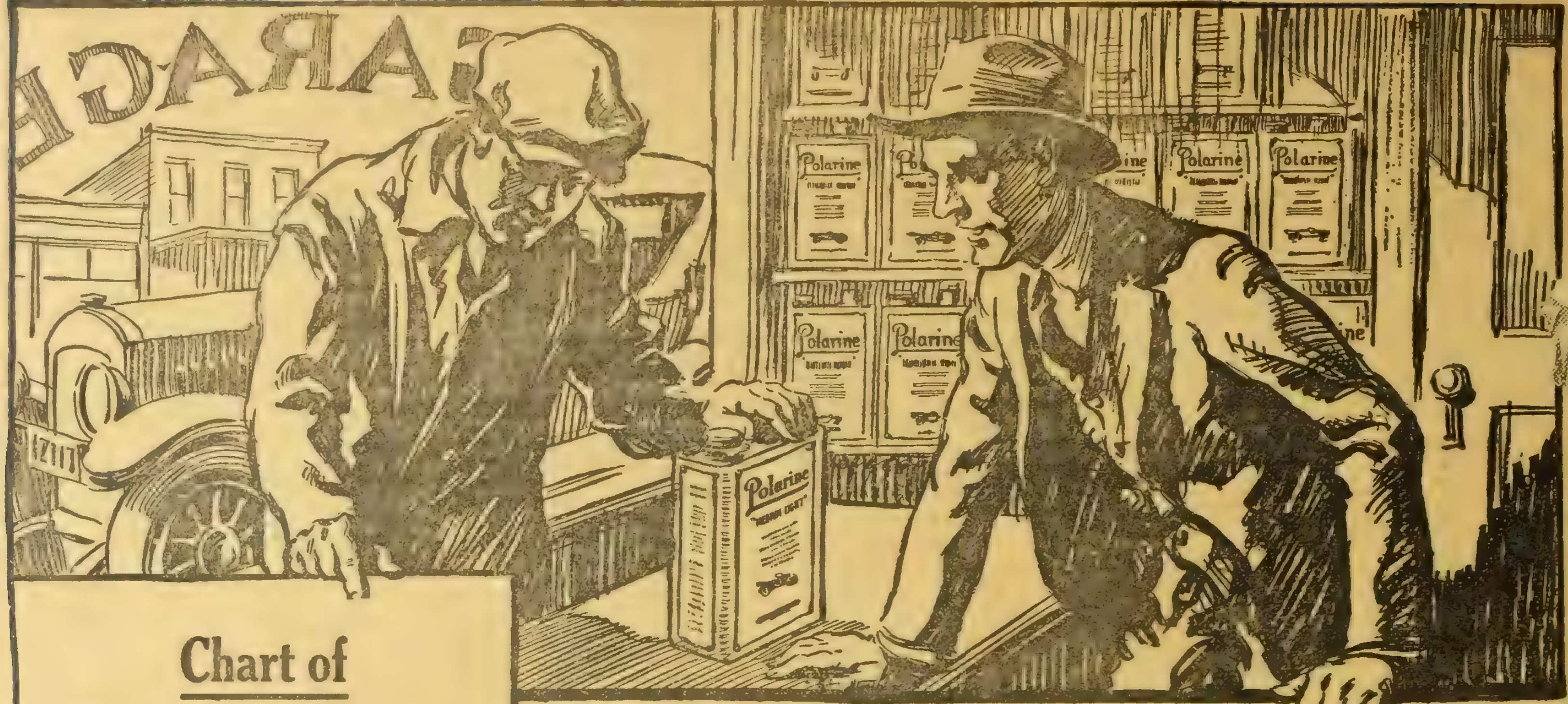


Chart of Recommendations

Name of Car	Motor Oil	Name of Car	Motor Oil
Ace	M. H.	Locomobile	M L.
Allen	M. H.	Lozier	M. H.
Ambassador	H.	Maibohm	M. H.
American Six	M. H.	Marion Handley—	
Anderson	M. L.	(Cont. Motor)	M. H.
Apperson Road'pl	H.	(Knight Motor)	H.
Auburn	M. L.	Marmon 34	H.
Austin H. King	M. H.	Martin Wasp	H.
Bay State	M. L.	Maxwell	M. L.
Beggs	M. L	Mercer	H.
Biddle	M. L.	McFarlan Six	M. H.
Birch	M. H.	Mitchell	M. H.
Bradley	M. L.	Moline Knight	H.
Brewster	M. L.	Monitor	M. L.
Briscoe	M. H.	Monroe	H.
Brook	M. H.	Moon	M. L.
Buick	M. H.	Moore	M. L.
Bush	M. H.	Nash	M. H.
Cadillac	M. H.	National	M. H.
Case	M. L.	Nelson	M. H.
Chalmers	M. H.	Nelson & Le Moon	M. H.
Chandler	M. H.	Northway	M. H.
Chevrolet	M. L.	Oakland	M. H.
Classic	M. H.	Oldsmobile 6	M. H.
Cleveland	M. H.	Oldsmobile 8	M. H.
Cole 8	M. H.	Olympian	M. H.
Colonial	M. H.	Overland	M. L.
Columbia	M. H.	Owen Magnetic	M. H.
Comet	M. L.	Packard	M. H.
Commonwealth	M. L.	Paige	M. H.
Crawford	M. L.	Pan-American	M. H.
Crow-Elkhart	M. H.	Parenti	M. H.
Cunningham	M. H.	Patterson	M. H.
Daniels	M. H.	Peerless	M. H.
Davis	M. L.	Piedmont	M. L.
Dispatch	M. L.	Pierce-Arrow	M. H.
Dixie Flyer	M. H.	Pilot	M. H.
Dodge	M. H.	Premier	H.
Dorris	M. H.	Preston	M. H.
Dort	M. L.	Regal	M. L.
Durant	M. H.	Reo	M. H.
Dusenberg	H.	Revere	H.
Earl	M. H.	Richilieu	H.
Economy	M. L	Rickenbacker	M. H.
Elcar	M. L.	Roamer—	
Elgin	M. H.	(Cont. Motor)	M. H.
Essex	M. H.	(Dusenberg Motor)	H.
Ferris	M. L.	Rolls Royce	M. H.
F. I. A. T.	H.	R. & V. Knight	H.
Ford	M. L.	Saxon	M. H.
Fox	H.	Sayers	M. L.
Franklin	M. H.	Scripps Booth	M. H.
Gardner	M. L.	Sheridan	M. H.
Glide	M. H.	Simplex	H.
Grant	M. H.	Singer	H.
Gray	M. H.	Spacke	E. H.
Hackett	M. H.	Sperling	M. H.
Hal Twelve	M. H.	Standard	M. H.
Halladay	M. H.	Stanwood	M. L.
Handley-Knight	H.	Stearns Knight	H.
Hanson	M. H.	Stephens Six	M. H.
Harroun	M. H.	Stevens	M. H.
Hatfield	M. H.	Stevens Duryea	M. H.
Haynes	M. H.	Sterling Knight	H.
Haynes 75	H.	Studebaker	M. L.
H. C. S.	M. H.	Stutz	H.
Holmes	H.	Sun	H.
Hudson	M. H.	Templar	H.
Huffman	M. L.	Velie	M. H.
Hupmobile	M. H.	Westcott	M. L.
Jackson	M. H.	White	M. H.
Jacquet	H.	Wills St. Claire	H.
Jordan	M. L.	Willys-Knight	H.
Kelsey	M. L.	Winther	M. H.
King	H.	Winton Six	M. H.
Kissel Kar	M. H.		
Kline Kar	M. L.		
Lafayette	M. H.		
Leach	M. L.		
Lexington	M. H.		
Lincoln	M. H.		
Liberty	M. L.		

KEY

M. L.—Polarine Medium Light
M. H.—Polarine Medium Heavy
H.—Polarine Heavy
E. H. — Polarine Extra Heavy

N. B. For recommendation of grades to use in tractors, consult chart in any Standard Oil Co. (Indiana) station

How Your Choice Means Loss or Gain

THE life of your automobile engine depends to an extraordinary extent upon your choice of lubricating oil. Upon how you choose depends whether you lose or gain:

power
economy (in repairs and operation)
saving in fuel

If you needed expert legal advice, and at the same price could choose between the most famous jurist in the United States and an untrained, untried advocate, which would you take? Identical reasoning applies to the choice of a lubricating oil for your car. Hundreds of untested lubricants beg for your attention. For the same or less money you may have the knowledge, experience, and expert attention of the staff of lubricating engineers of the Standard Oil Company (Indiana).

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THE PERFECT MOTOR OIL

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Seals Pistons Against Loss of Power

The grade indicated in the chart to the left as correct for your car has been created especially to meet the working temperature of the bearing surfaces of your particular engine. It has been evolved with reference to the clearance between those particular surfaces to the speed at which the bearing surfaces move, and to the weight of the moving body.

The Standard Oil Company (Indiana) leads the world in its research into the vitally important question of petroleum lubrication. Correct lubrication means life—vastly increased life to all machinery. A great laboratory for improved lubrication is one of the important contributions of the Standard Oil Company (Indiana) to this industrial era in which we live.

Standard Oil Company
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910 So. Michigan Ave., Chicago

2665b

Volume X
Number 3

The Michigan
BUSINESS FARMER

September 30,
1922

Surface Indications Are No Sign of Oil Pools

Don't Let "Wild-catters" Trick You Into Drilling for Oil Where There is None—State Geological Survey Will Gladly Give Facts

Could you inform me whether land that there is oil on, shows any signs of oil on water in ditches, creeks and springs before wells are driven.—W. R. R., Edmore, Mich.

EVERY year the Geological Survey Division of the Department of Conservation receives many reports and samples of "oil." The samples are generally wet sand or bad smelling water, black or reddish mud, and often oil from some discarded bottle of chilblain or dandruff remedy. Unfortunately the inquiring public is not always judicious or particular in its choice of containers for samples, but those retaining pleasant (?) odors are in favor. Prince Albert and Lucky Strike are competitors for first place. The odor of petroleum is pronounced and distinctive, but the smell from some of the bottles puts it beyond the powers of the human nose.

Seepages of oil and gas are the most common signs in Michigan. They are very numerous in the southeastern and northern parts of the Southern Peninsula, where the surface deposits are directly underlain by the oil and gas rocks. Seepages are most common around springs and in water wells. Gas has been struck in a large number of wells in the region northwest of Detroit and around Portage Lake, Manistee county. Many of the farmers in the vicinity of Royal Oak and Warren, Oakland and Macomb counties, have used the gas for heating and lighting their homes. The wells are generally small, but some of them last several years. Others last only a few days or months. Recently a farmer near Warren drilling for water, struck gas, which caught fire and burned up his home. So much gas was struck near Portage Lake that it blew nearly 200 feet of drill rods out of the well and scattered them around in the trees.

Large gas springs occur near Kilmaster, Alcona county, and near Atlanta, Montmorency county. It is said that the Atlanta gas spring, when lighted, would burn indefinitely if it were not blown out by heavy winds.

These are belts of leakage rather than accumulation. Several wells have been drilled on the basis of these seepages but without success. The little oil found in Michigan was in regions where signs were few or absent. Had the promoters known the facts they would not have been so enthusiastic in spending their money.

"Marsh gas," commonly observed in wet, swampy places, is often mistaken for seepages of rock gas. Marsh gas is formed from the decay of plant material in the swamp, consequently it is of no significance. Often films showing rainbow colors occur around springs and in wet or swampy places. Generally these are due to iron oxide and not oil. Most of the samples of water sent to the Survey contain a sediment chiefly of iron oxide and dark organic matter—tell-tale of iron bearing water and a spring. Such waters are abundant in many parts of the state, especially in Jackson and Calhoun counties where there is much iron carbonate in the surface deposits and the underlying rock beds.

A simple test is to stir the water. If the film breaks up and collects in irregular patches which do not spread again after the water is quiet, it is probably iron oxide. If the film streams around on the water and shows a play of rainbow colors it is oil.

Many "wild-catters" of little experience lay great stress on another so-called indication—the "lay of the land." In some states this may be of some importance, but nearly everywhere in Michigan the "lay of the land" is about as useful as the stars for locating oil pools. Some of the old time Pennsylvania wild-catters set great store on the "Forty-five." In Pennsylvania the folds, and likewise the pools, extend in a northesat-southwest direction, or at an angle of 45 degrees from a north-south direction. When these prospectors come into Michigan they look for a valley ridge or stream northeast and southwest. The folding in the two states is entirely different, consequently the "Forty-five" is of no value in Michigan.

There is, however, one sign of importance. That is a fold or anticline in the rock beds. Nearly everywhere the rocks are burried by surface deposits, therefore folds are rarely seen in Michigan. They are more often found by comparing records of deep wells.

Most of the pools of oil and gas in this country are connected with folds of "structures" in the rock beds. This fact makes the discovery of a fold of great importance to an intelligent and experienced oil man. Given a "structure" and a possible oil bearing bed, an oil man considers he has sufficient grounds for a wild-cat test. Numerous wildcat wells have been drilled for oil in Michigan during the past two years. The newspaper accounts of these have contained more or less meaningless jargon about "surface signs," "lay of the land," "structures," and "anticlines." Even some of the standard oil journals have been guilty of repeating some of the nonsense.

In summary, one may say that aside from rock structures, surface signs in Michigan appear to be of little or no importance so far as indicating the presence or absence of oil at a given pace. The Geological Survey Division of the Department of Conservation has a large amount of information concerning surface indications, deep borings, and geological formations, oil structures and possibilities, in the state. Information on any particular locality will be gladly furnished on request to the Department at Lansing.

CLUB WORK TAKES ROOT IN UPPER PENINSULA

SUCCESS attended the Farmers' Round-up which was held at Chatham the middle part of August, under the auspices of the M. A. C. experiment station at that point. Particular interest was shown in the boys' and girls' club camp which had double the enrollment of any previous camp, and the judging contests between the boys and girls. Upper peninsula folks feel that the work which is being done among the farm boys and girls means a great deal to the future of the peninsula's agriculture.

Another feature of the round-up was the huge blasting demonstration when two acres of stumps were shot simultaneously, Pres. Friday of the M. A. C. turning on the switch that did the business. A number of other demonstrations, all under the supervision of M. A. C. department heads, made the ocassion one of considerable instruction as well as entertainment to the more than 2,000 people in attendance.

The M. A. C. as well as Mr. D. L. McMillan, who has charge of the upper peninsula station are to be complimented on what they are doing for the farmers of that region. Agriculture pursuits have been neglected across the straits because farmers have not had a true appreciation of the value of the section as a producer of crops. But the agricultural authorities of the state are demonstrating that the upper peninsula is an extremely valuable field for agricultural exploitation and we may some day look for it to rank among the richest farming sections of the state.

GRADES FOR GRAPES PROMULGATED IN MICHIGAN

STATE grades for grapes have been promulgated by the Michigan Department of Agriculture, Lansing, Mich., under date of September 13, 1922. The rules and regulations governing the packing, branding, and sale of grapes were established in order to encourage the improvement in the quality of grapes sent to market. The grades are known as "Table Grapes," "No. 1 Grapes," and "Unclassified." Table Grapes shall be packed in closed containers of 16 pounds or more capacity. They shall be mature and of one variety. The individual bunches shall be compact, free from immature berries and from damaged fruit. A tolerance of five per cent by weight is allowed in this grade.

No. 1 grapes shall conform to the standard for Table grapes, except for an allowance for less compact bunches, and shall be packed in closed containers of 15 pounds or more capacity. A tolerance, other than compactness of bunches, of ten per cent by weight is allowed.

Unclassified grapes are those packed in closed containers of 16 pounds or larger, which do not comply with either of the foregoing grades and which consist of vineyard run, marketable fruit. This grade allows a tolerance of twenty per cent by weight. All grades must be marked and the containers must also show the name and address of the person or firm under whose authority the grapes are packed, sold, or offered for sale.

Inspectors will be placed at five important shipping points in the State, who, under the direct supervision of the inspector of fruit of the State Bureau of Foods and Standards, will carefully inspect all shipments of grapes. Through this service the growers hope to improve the quality of their pack, and also to educate the buyers in the various markets that Michigan grapes can be depended upon as to quality.

One association of Michigan grape growers is conducting an extensive consumer advertising campaign. Daily papers and posters are being used to educate the public to ask for its brand of grapes.

FARMERS' CLUBS GET BUSY

THE Board of Directors of the State Association of Farmers' Clubs met at the Hotel Wentworth, Lansing, Monday, September 11.

The object of this meeting was to outline a program for the regular annual meeting which will be held in Lansing the first week of December.

Various Farmers' Clubs in the state all co-operate closely with the forces generally for better country life. They meet regularly to study and improve local and general conditions in Agriculture.

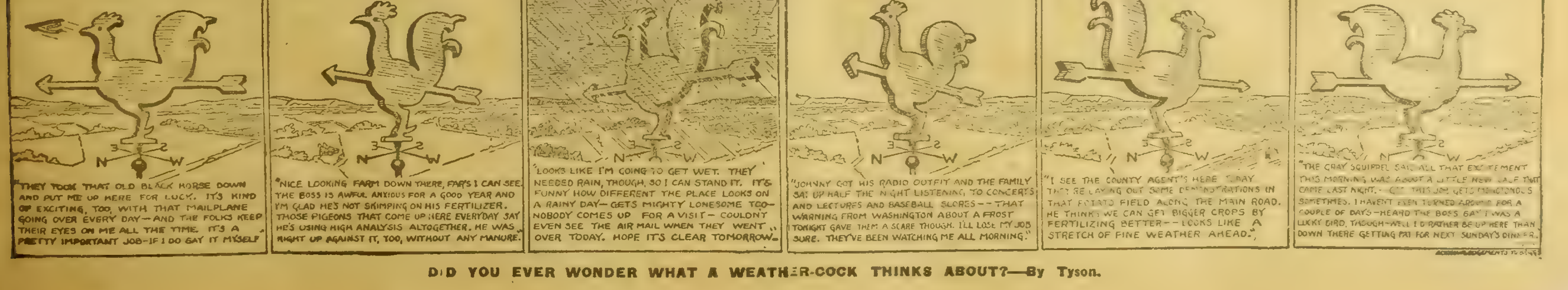
The Directors note that many clubs still have not federated with the State Association. Organization is power.

They propose a policy for the clubs next year that should enlist every progressixe club in the state.

The key to country life now rests in organization and education. The farmer is just the sort of collective being that conditions of late have make agriculture prosperous. A best mind of our day.

The Clubs' great opportunity is an educational campaign for the better things of country life—better business, better homes, and better communities. The farmer alone can make Agriculture prosperous. A fair share of the consumer's dollar is the first essential. With efficient production and other rural conditions to match, agriculture becomes the best business on earth.

In general this is the type of program outlined for the next year. In it they have the co-operation of all forces that stand for American democracy. May the program succeed in this day of crisis agriculture.
—Lee S. Noble, President, Oxford, Mich.


"THEY TOOK THAT OLD BLACK HORSE DOWN AND PUT ME UP HERE FOR LUCK. IT'S KIND OF EXCITING, TOO, WITH THAT MAILPLANE GOING OVER EVERY DAY—AND THE FOLKS KEEP THEIR EYES ON ME ALL THE TIME. IT'S A PRETTY IMPORTANT JOB—IF I DO SAY IT MYSELF"
"NICE LOOKING FARM DOWN THERE, FAR'S I CAN SEE. THE BOSS IS AWFUL ANXIOUS FOR A GOOD YEAR AND I'M GLAD HE'S NOT SKIMPING ON HIS FERTILIZER. THOSE PIGEONS THAT COME UP HERE EVERYDAY SAY HE'S USING HIGH ANALYSIS ALTOGETHER. HE WAS RIGHT UP AGAINST IT, TOO, WITHOUT ANY MANURE."
"LOOKS LIKE I'M GOING TO GET WET. THEY NEEDED RAIN, THOUGH, SO I CAN STAND IT. IT'S FUNNY HOW DIFFERENT THE PLACE LOOKS ON A RAINY DAY—GETS MIGHTY LONESOME TOO—NOBODY COMES UP FOR A VISIT—COULDN'T EVEN SEE THE AIR MAIL WHEN THEY WENT OVER TODAY. HOPE IT'S CLEAR TOMORROW."
"JOHNNY GOT HIS RADIO OUTFIT AND THE FAMILY SAT UP HALF THE NIGHT LISTENING TO CONCERTS AND LECTURES AND BASEBALL SCORES—THAT WARNING FROM WASHINGTON ABOUT A FROST TONIGHT GAVE THEM A SCARE THOUGH. I'LL LOSE MY JOB SURE. THEY'VE BEEN WATCHING ME ALL MORNING."
"I SEE THE COUNTY AGENT'S HERE TODAY THEY'RE LAYING OUT SOME DEMONSTRATIONS IN THAT POTATO FIELD ALONG THE MAIN ROAD. HE THINKS WE CAN GET BIGGER CROPS BY FERTILIZING BETTER—LOOKS LIKE A STRETCH OF FINE WEATHER AHEAD."
"THE GRAY SQUIRREL SAID ALL THAT EXCITEMENT THIS MORNING WAS ABOUT A LITTLE NEW CALF THAT CAME LAST NIGHT.— THIS JOB GETS MONOTONOUS SOMETIMES. I HAVEN'T EVEN TURNED AROUND FOR A COUPLE OF DAYS—HEARD THE BOSS SAY I WAS A LUCKY BIRD, THOUGH—WELL I'D RATHER BE UP HERE THAN DOWN THERE GETTING FAT FOR NEXT SUNDAY'S DINNER.
N
S
W
E
ACKNOWLEDGEMENTS

DID YOU EVER WONDER WHAT A WEATHER-COCK THINKS ABOUT?—By Tyson.

Fox Farming Profitable Side Line

Many Business Farmers Making Small Fortunes in Breeding of Black Foxes

A healthy litter of Silver Black Fox Puppies on the Hendricks Fox Farm

MONEY IN FOXES

ABOUT three years ago the Business Farmer received a letter from Mr. Richard Hendricks of Flint, Mich., asking for information on the breeding and raising of silver black foxes. We sent Mr. Hendricks a number of government bulletins containing complete information on the subject, and gave him the names of reliable breeders from whom he could buy foundation stock. Mr. Hendricks started with three pair of foxes on his 210-acre farm in the fall of 1919, carrying on the business as a side line to his farming. He now has 74 foxes, worth upwards of $50,000, and has rented his farm to devote his entire time to the far more profitable enterprise of fox farming. Mr. Hendricks' success with black foxes reads like a fairy tale but it is no different than the success which hundreds of others have attained in this industry. Given a few thousand dollars to start with, a suitable location, an average knowledge of the habits of foxes which are very similar to those of well-bred dogs, and a little patience and perseverance and an farmer can duplicate what Mr. Hendricks has done. His story, told herewith for the benefit of Business Farmer readers is very interesting. Read it, and learn how you may take up the profitable and facinating side line of breeding fur bearing animals. If you haven't the money to start with foxes, try skunks. Thousands of farmers and farmer boys are making good money raising these much despised and misunderstood little animals. Further information on the raising of foxes and skunks cheerfully given on request.—Editor.

THE Hendricks Silver Fox Farm was started three years ago in the fall of 1919 with three pairs of the highest grade Silver Black Foxes on a 210-acre Farm near Flint, Michigan. The Fox Farm was successfully operated as a side line in connection with the farm until this fall when we rented the farm to enable us to take up the business in better shape.

We now have on our Ranch 74 beautiful black Foxes with a sprinkle of nice clear silver so much in demand now-days, which if figured at the same price the original was bought for, the ranch would be paying over 800 per cent at the end of the breeding season.

Five animals have been added to the ranch so as to imbreed and a number of males have been exchanged with the ranchers. Out of the 41 pups secured this spring we have raised all but one.— This pup got through the fence when very young.

We have had no difficulty in raising these animals. The young, if properly cared for grow very rapidly. We have puppies on our ranch less than five months old that are now larger than their mothers. They usually have a litter when they are a year old, the number ranging from one to nine. Our litters this year range from two to six with an average of four or a little better.

Mating season takes place in February or March and the young are born about 52 days later. Great care must be taken at that time of the season not to get the mother fox frightened as in this case they will often destroy their young by carrying them around hours at a time, and sometimes when they become real nervous they bury them alive. Ranches are generally closed from Jan. Ist. to July Ist. During this time no visitors are allowed in the ranch, and no one except the caretaker is admitted, for they readily look for him when feeding time comes.

Their principal food for summer is cereals of different kinds, bread made of entire wheat, dog biscuits, milk and in fact most anything that a dog will eat. We also feed a small amount of meat during the Summer months. Beef hearts make a good Summer meat. These are bought at wholesale prices at 5c a pound. Owing to extreme high price of the animal the small amount it cost to feed them is hardly recognized. In the winter time a large portion of their diet is horse meat. Old horses that are too old to work bu otherwise sound and healthy are properly slaughtered and fed during the winter months with very good results. Every farmer is glad to get rid of them which makes fox farming still more profitable.

The demand for live foxes is gradually increasing year after year and there is a ready demand for good animals. One can readily understand with the few fur bearing animals that are left in the wild state today it is plainly feasible to take this step and those who will take it in time will reap a large harvest.

I can remember the time when muskrats were selling at 8c to 10c. each. Two years ago when I attended the St. Louis Auction Fur Sales I saw muskrat skins selling as high as $6. This, of course, was the highest price on record paid for furs, when all other things were up in proportion and have since then taken quite a drop with everything else. But prices are gradually pressing back to the higher mark.

Remember that once every lake and pond was covered with Muskrat and our streams lined with mink, otter and beaver, when one could take out the old coon dogs and tree from four to half a dozen before midnight, when foxes were so thick in the woods they would destroy our lambs and pigs and about all the chickens one could raise. But they are gone now, never to come back unless they are raised on fur farms. Our timber has been cut off, our swamps have been dried up by ditching and dredging and their hiding places have been destroyed. The great Hudson Bay Fur Co. who used to ship loads of furs to London are out of existence and trappers are going out to the extreme northern sections and will soon be to the end of the rope.

The United States government has been urging the people of the United States to engage in the new fur farming industry and I want to state right here that the farmer is the man who is adapted to the business as he has had all kinds of experience raising live stock, and furthermore he is situated where he can raise them.

It requires about an acre and a half to ranch fifty pairs of foxes thus allowing you to build the pens about 25 ft. square which we find in our experience is plenty large enough. Fifty pairs of foxes can easily be handled by one caretaker and with ordinary success should produce 150 puppies annually, which if sold as live stock at a very low figure would net $100,000 per year. This may sound too good to be true, never the less such a ranch could be started with a few pairs as a sideline on any farm.

You do not necessarily have to have $1,500 per pair for Foxes which is a very reasonable price, one could raise them at $100 per pair and make money. I never expect to see the time in my days when good silvers will not bring that price.

Every farmer knows that it takes three years to raise a cow and if at that age she is worth $100 she must be a good one and if her board bill was taken out there would be a very small fraction left for the farmer.

The mother fox produces a litter of four on an average every year which are full matured at the age of seven or eight months. She will raise three litters up to maturity while the cow grows up which at the present price of foxes would be worth from $8,000 to $12,000 we can cut this figure in two and then cut in two again and yet have a handsome profit left.

Again, fox farming in a fine job for a retired farmer who does not care to move to town and wishes to have something to drive at for exercise and at the same time lay up more cash than he had been able to dig out of the farm by hard labor in the past 40 years. Having been a farmer myself for the last 30 years, farmed in three different states, fed all kinds of live stock, milked as high as 25 cows, sold the milk at a little less than it cost to produce it, I think I am well able to make this statement.

Panoramic View of the Hendricks Farm near Flint, showing the Method of Housing the Silver Black Foxes

Why Do Not Michigan Potato Growers Raise More to the Acre?

HOW DID YOU DO IT?

AS mentioned in the accompanying article, the average yield per acre of potatoes in certain Michigan counties is less than 100 bushels, while in Aroostook county, Maine, it is 252 bushels. Of course, we know there are lots of farmers in Michigan who are raising more than 100 bushels of potatoes to the acre. But we don't know who they are or where they live. But we would like to know. If you or your neighbor secures an extra big yield of spuds this year we'd like to have you tell us about it, and we'll gladly publish the story, together with a picture of the grower and his potatoes. Help us to find the man who grew the largest number of bushels from a single acre. We'll all be mightily interested in knowing how he did it.—Editor.

THE farmers of Aroostook County raised an average of 252.1 bushels of potatoes to the acre in 1919. Their total production was 21,331,934 bushels, in a single county. That's considerably over one-half as many potatoes as all the farmers of Michigan raise in a normal year.

In the same year the farmers of Montcalm county, which is the leading potato county of Michigan and ranks ninth among all the United States in the number of acres planted to potatoes, produced an average of only 92.8 bushels to the acre, or a total of 1,745,998 bushels.

In the same year the farmers of Kent county which ranks second in Michigan in point of acreage, produced an average yield of 80.7 (or less than a third of the Aroostook yield), and a total of 944,683 bushels from a total acreage of 11,712.

Oakland farmers in the same year produced 1,037,021 bushels from only 11,144 acres.

But Osceola county farmers had an average yield in 1919 of 120.4 bushels to the acre and grew 1,002,240 bushels from 8,321 acres.

Why the Difference?

Why all this discrepency? Why can the farmers of Aroostook, Maine, in the same year and under practically the same conditions, produce over three times as many potatoes to the acre as the farmers of Kent county, Michigan.

Again, why can the farmers of Oakland county, also in the same year and under the same conditions, produce 90,000 MORE potatoes from 600 LESS acres than the farmers of Kent county, a hundred miles away.

Still again, why can the farmers of Osceola county raise nearly 100.-000 MORE potatoes from 3,000 LESS acres than the farmers of Kent who are just a stone's throw away?

And why, instead of Kent farmers producing but 80 bushels to the acre, and Oakland farmers but 93 and Montcalm farmers but 92 and Grand Traverse farmers but 101, aren't they all growing twice as many to the acre?

One more question, "how can the farmers of Michigan, with an average yield of less than 100 bushels to the acre, compete with the farmers of Maine with an average of nearly 200 bushels, when the total crop is big and prices are low like they are this year?"

Maine's Huge Advantage

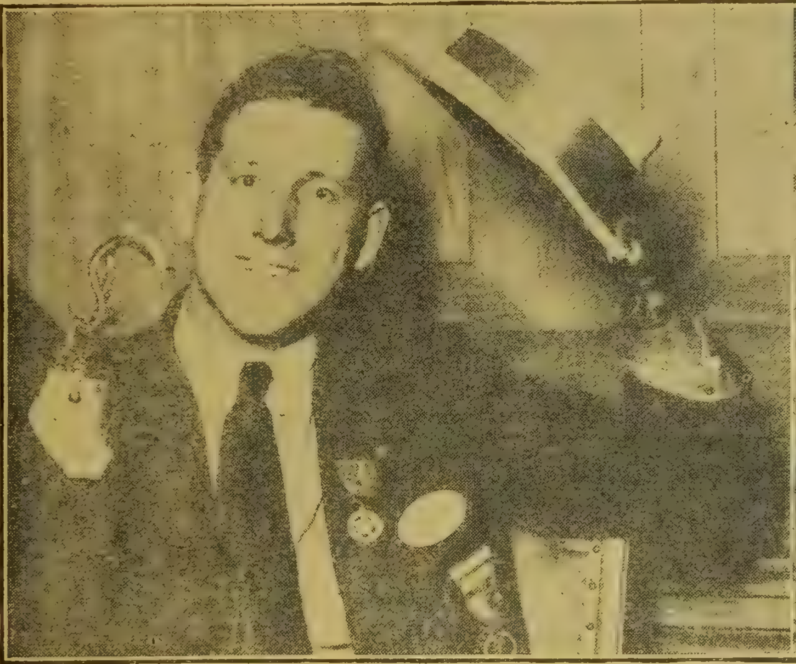
The average value per acre of the Aroostook county crop in 1919 was $517; the average of the Montcalm county crop was $190; of the Grand Traverse, $209 and of the Osceola, $247.

It is to be presumed that it cost the Maine farmer a little more to raise $517 worth of potatoes than it did the Montcalm farmer to raise $190 worth. But could the extra cost have possibly amounted to the difference between the two or $327 to the acre, or to even one-half the difference between the two?

Let us assume that is costs the

(Continued on page 16)

PICTURES FROM FAR AND NEAR



HE "HOOKS" WHAT HE WANTS—In spite of the fact that he lost both arms in the World War C. F. McGonnegal, Grand Forks, North Dakota, finds life sweet.. His artificial arms do the work, and while he politely doffs his hat with one "hand" he holds his cigarette in the other.

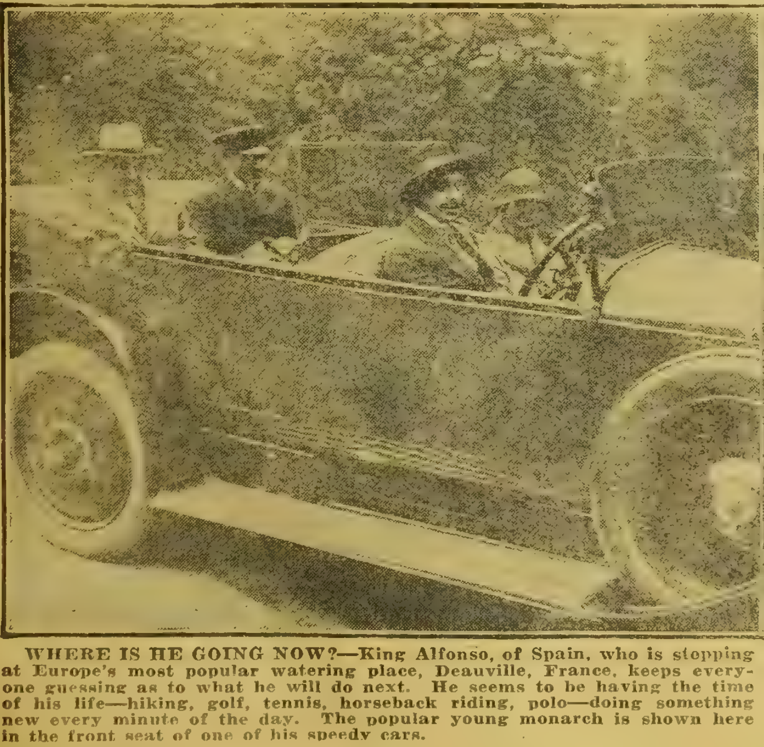
PHEW! SOME JOB!—So this lad found out when he tried to push Mme. Reklaw, hotel proprietress of London, who modestly claims the weight of 27 and a half stone, or 385 lbs. 'Tis said that unlike many "great" people she hasn't a lazy bone in her body.

THE GISH SISTERS—Lillian and Dorothy are known the world over wherever moving pictures are shown and they rank high in the affections of the theater-attending public. What? Yes, the one on the left is Lillian.

ABOVE—Boys' live stock judging team at work during the recent annual round-up held at the Chatham Experiment Station, Upper Peninsula.

Below—Professor Reed of the M. A. C. giving a dairy demonstration on the Station Farm at Chatham.

HE'S NOT DOWNHEARTED—Othias Longfellow, 70-year-old farmer of Elmwood, Ohio, who lost all his fingers 3 years ago, farms 5 acres of land and says he could handle 70.



WHERE IS HE GOING NOW?—King Alfonso, of Spain, who is stopping at Europe's most popular watering place, Deauville, France, keeps everyone guessing as to what he will do next. He seems to be having the time of his life—hiking, golf, tennis, horseback riding, polo—doing something new every minute of the day. The popular young monarch is shown here in the front seat of one of his speedy cars.

HUGHES PARTY SAILS FOR BRAZIL—Secretary of State Charles E. Hughes and members of his party on board ship ready to sail for Brazil to attend the Brazilian exposition at Rio de Janeiro. Reading from left to right we have: General Bullard, representing the navy; Sec'y Hughes, America's official representative; Catherine Hughes; Mrs. Hughes; Dr. Cochrane de Alencar, Brazilian Consul General; Admiral Vogelgesang, chief naval aide.

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The Hunted Woman

By James Oliver Curwood

Michigan's Own and America's Formost Author of the Great Northwest

THE SYNOPSIS

A WOMAN with a pearl-gray veil drawn closely about her face is one of the many passengers on the train that connects "The Horde" with the civilized world. For eighteen hours she has been riding steadily bound for Tete Jaune Cache, the land of "The Horde," where she has no friends and all will be strange to her. The train stops at a town composed of several tents known as Miette and, as many of the passengers get off and walk about, she inquires of a "Straying Angel" how long the train will stop and is advised it will not move for at least two hours. Desiring food and a bath she asks where she can secure them and is directed to "Bill's Shack". Bill's Shack is owned and operated by Bill Quade, leader of the lawless band of the town. When she steps inside the doorway she recognizes him as a brute but as she has entered and is very hungry and dusty she decides to go through with her plan. Quade says he has a room she can rent and asks her to follow him. As they pass out of the room there appears a newcomer in the doorway opening off the street. The newcomer is not of the kind of men lounging about the room but shows in face and in actions that he is of the wholesome living type. He has seen the girl enter this place and believes she has made a mistake and as he stands in the doorway his eyes rest upon the curtain-covered doorway through which the girl and Quade has just passed. In but a moment the girl steps out, her face flaming like fire and eyes filled with the flash of lightning. Quade follows her apologetically. He starts to offer the girl a roll of money but before he can do so the newcomer steps to the girl's side and strikes Quade with terrific force. The Brute goes down in a heap and the newcomer hurries the girl outside and away from the scene. The newcomer, who is John Aldous a novelist and known as a woman hater, learns from the girl that her name is Joanne Gray. He takes her to the home of a friend and returns to Bill's Shack warning Quade to leave the girl alone. That brings the story up to our present installment.

(Continued From Last Issue)

A twist of the wrist so swift their eyes could not follow, a metallic click, and the startled group were staring into the black muzzle of a menacing little automatic.

"That's known as the sleeve trick, boys," explained Aldous with his imperturbable smile. "It's a relic of the old gun-fighting days when the best man was quickest. From now on, especially at night, I shall carry this little friend of mine just inside my wristband. There are eleven shots in it, and I shoot fairly straight. Good-day!"

Before they had recovered from their astonishment he was gone.

He did not follow the road along which Joanne had come a short time before, but turned again into the winding trail that led riverward through the poplars. Where before he had been a little amused at himself, he was now more seriously disgusted. He was not afraid of Quade, who was perhaps the most dangerous man along the line of trail. Neither was he afraid of the lawless men who worked his ends. But he knew that he had made powerful enemies, and all because of an unknown woman whom he had never seen until half an hour before. It was this that disturbed his equanimity—the woman of it, and the knowledge that his interference had been unsolicited and probably unnnecessary. And now that he had gone this far he found it not easy to recover his balance. Who was this Joanne Gray? he asked himself. She was not ordinary — like the hundred other women who had gone on ahead of her to Tete Jaune Cache. If she had been that, he would soon have been in his little shack on the shore of the river, hard at work. He had planned work for himself that afternoon, and he was nettled to discover that his enthusiasm for the grand finale of a certain situation in his novel was gone. Yet for this he did not blame her. He was the fool. Quade and his friends would make him feel that sooner or later.

His trail led him to a partly dry muskeg bottom. Beyond this was a thicker growth of timber, mostly spruce and cedar, from behind which came the rushing sound of water. A few moments more and he stood with the wide tumult of the Athabasca at his feet. He had chosen this spot for his little cabin because the river ran wild here among the rocks, and because pack-outfits going into the southward mountains could not disturb him by fording at this point. Across the river rose the steep embankments that shut in Buffalo Prairie, and still beyond that the mountains, thick with timber rising billow on billow until trees looked like twigs, with gray rock and glistening snow shouldering the clouds above the last purple line. The cabin in which he had lived and worked for many weeks faced the river and the distant Saw Tooth Range, and was partly hidden in a clump of jack-pines. He opened the door and entered. Though the window to the south and west he could see the white face of Mount Geikie, and forty miles away in that wilderness of peaks, the sombre frown of Hardesty; through it the sun came now, flooding his work as he had left it. The last page of manuscript on which he had been working was in his typewriter. He sat down to begin where he had left off in that pivotal situation in his masterpiece.

He read and re-read the last two or three pages of the manuscript, struggling to pick up the threads where he had dropped them. With each reading he became more convinced that his work for that afternoon was spoiled. And by whom? By what? A little fiercely he packed his pipe with fresh tobacco. Then he leaned back, lighted it, and laughed. More and more as the minutes passed he permitted himself to think of the strange young woman whose beauty and personality had literally projected themselves into his workshop. He marvelled at the crudity of the questions which he asked himself, and yet he persisted in asking them. Who was she? What could be her mission at Tete Jaune Cache? She had repeated to him what she had said to the girl in the coach—that at Tete Jaune she had no friends. Beyond that, and her name, she had offered no enlightenment.

In the brief space that he had been with her he had mentally tabulated her age as twenty-eight—no older. Her beauty alone, the purity of her eyes, the freshness of her lips, and the slender girlishness of her figure, might have made him say twenty, but with those things he had found the maturer poise of the woman. It had been a flashlight picture, but one that he was sure of.

Several times during the next hour he turned to his work, and at last gave up his efforts entirely. From a peg in the wall he took down a little rifle. He had found it convenient to do much of his own cooking, and he had broken a few laws The partridges were out of season, but temptingly fat and tender. With a brace of young broilers in mind for supper, he left the cabin and followed the narrow foot-trail up the river. He hunted for half an hour before he stirred a covey of birds. Two of these he shot. Concealing his meat and his gun near the trail he continued toward the ford half a mile farther up, wondering if Stevens, who was due to cross that day, had got his outfit over. Not until then did he look at his watch. He was surprised to find that the Tete Jaune train had been gone three-quarters of an hour. For some unaccountable reason he felt easier. He went on, whistling.

At the ford he found Stevens standing close to the river's edge, twisting one of his long red moustaches in doubt and vexation.

"Damn this river," he growled, as Aldous came up. "You never can tell what it's going to do overnight. Look there! Would you try to cross?"

"I wouldn't," replied Aldous. "It's a foot higher than yesterday. I wouldn't take the chance."

"Not with two guides, a cook, and a horse-wrangler on your pay-roll—and a hospital bill as big as Geikie staring you in the face?" argued Stevens, who had been sick for three months. "I guess you'd pretty near take a chance. I've a notion to."

"I wouldn't," repeated Aldous.

"But I've lost two days already, and I'm taking that bunch of sightseers out for a lump sum, guaranteeing 'em so many days on the trail. This ain't what you might call on the trail. They don't expect to pay for this delay, and that outfit back in the bush is costing me thirty dollars a day. We can get the dunnage and ourselves over in the flat-boat. It'll make our arms crack—but we can do it. I've got twenty-seven horses. I've a notion to chase 'em in. The river won't be any lower tomorrow."

"But you may be a few horses ahead."

Stevens bit off a chunk of tobacco and sat down. For a few moments he looked at the muddy flood with an ugly eye. Then he chuckled and grinned.

"Came through the camp half an hour ago," he said. "Heard you cleaned up on Bill Quade."

"A bit," said Aldous.

Stevens rolled his quid and spat into the water slushing at his feet.

Guess I saw the woman when she got off the train," he went on. "She dropped something. I picked it up, but she was so darned pretty as she stood there looking about I didn't dare go up an' give it to her. If it had been worth anything I'd screwed up my courage. But it wasn't—so I just gawped like the others. It was a piece of paper. Mebby you'd like it as a souvenir, seein' as you laid out Quade for her."

As he spoke, Stevens fished a Aldous had sat down beside him. He pocket and gave it to his companion. crumpled bit of paper from his smoothed the page out on his knee. There was no writing on it, but it was crowded thick wth figures, as if the maker of the numereals had been doing some problem in mathematics. The chief thing that interested him was that wherever monetary symbols were used it was the "'pound" and not the "dollar" sign." The totals of certain columns were rather startling.

"Guess she's a millionaire if that's her own money she's been figgering," said Stevens. "Notice that figger there!" He pointed with a stubby forefinger. "Pretty near a billion, ain't it?"

"Seen hundred and fifty thousand," said Aldous.

He was thinking of the "pound" sign. She had not looked like the folded the slip of paper and put it in his pocket.

Stevens eyed him seriously.

"I was coming over to give you a bit of advice before I left for the Maligne Lake country," he said. "You'd better move. Quade won't want you around after this Besides———"

"What?"

"My kid heard something," continued the packer, edging nearer "You was mighty good to the kid when I was down an' out, Aldous. I ought to tell you. It wasn't an hour ago the kid was behind the tent an' he heard Quade and Slim Barker talking. So far as I can find from the kid, Quade has gone nutty over her. He's ravin'. He told Slim that he'd give ten thousand dollars to get her in his hands. What sent the boy down to me was Quade tellin' Slim that he'd get you first. He told Slim to go on to Tete Jaune—follow the girl!"

"The deuce you say!" cried Aldous, clutching the other's arm suddenly. "He's done that?"

"That's what the kid says."

Aldous rose to his feet slowly. The careless smile was playing about his mouth again. A few men had learned that in those moments John Aldous was dangerous.

"The kid is undoubtedly right," he said, looking down at Stevens. "But I am quite sure the young woman is capable of taking care of herself. Quade has a tremendous amount of nerve, setting Slim to follow her, hasn't he? Slim may run up against a husband or a brother."

Stevens haunched his shoulders.

"It's not the woman I'm thinking about. It's you. I'd sure change my location."

"Why wouldn't it be just as well if I told the police of his threat?" asked Aldous, looking across the river with a glimmer of humour in his eyes

"Oh. well!" was the packer's rejoinder.

Slowly he unwound his long legs and rose to his feet.

"Take my advice—move!" he said, "As for me, I'm going to cross that cussed river this afternoon or know the reason why."

He stalked away in the direction of his outfit, chewing viciously at his quid. For a few moments Aldous stood undecided. He would liked to have joined the half-dozen men he saw lounging restfully a distance beyond the grazing ponies. But Stevens had made him acutely aware of a new danger. He was thinking of his cabin—and the priceless achievement of his last months of work, his manuscript. If Quade should destroy that———

He clenched his hands and walked swiftly towad his camp. To "bun cut" an enemy was one of Quade's favorite methods of retaliation. He had this. He also knew that Quade's work was done so cleverly that the police had been unable to call him to account.

Quade's status had interested Aldous from the beginning. He had discovered that Quade and Culver Rann, his patner at Tete Jaune, were forces to be reckoned with even by the "powers" along the line of rail. They were the two chiefs of the "underground", the men who controlled the most dangerous element from Miette to Fort George. He had once seen Culver Rann, a quiet, keen-eyed emmaclately groomed man of forty—the cleverest scoundrel that had ever drifted into the Canadian west. He had been told that Rann was deally the brain of the combination, and that the two picked up a quarter of a million in various ways. But it was Quade with whom he had to deal now, and he began to thank Stevens for his warning. He was filled with a sense of relief when he reached his cabin and found it as he had left it. He always made a carbon of his work. This copy he now put into a waterproof tin box, and the box he concealed under a log a short distance back in the bush.

"Now go ahead, Quade," he laughed to himself, a curious, almost exultant ring in his voice. "I haven't had real excitement for so long I can't remember, and if you start the fun there's going to be fun!"

He returned to his birds, perched himself behind a bush at the river's edge, and began skinning them. He had almost finished when he heard hoarse shouts from up the river. From his position he could see the stream a hundred yards below the ford. Stevens had driven in his horses. He could see them breasting the first sweep of the current, their heads held high, struggling for the opposite shore. He rose, dropped his birds, and stared.

"Good God, what a fool!" he gasped.

He saw the tragedy almost before it had begun. Still three hundred yards below the swimming horses was the gravelly bar which they must reach on the opposite side. He noted the grayish strip of smooth water that marked the end of the dead-line. Three or four of the stronger animals were forging steadily toward this. The others grouped close together, almost motionless in their last tremendous fight, were left farther and farther behind. Then came the break. A mare and her yearling colt had gone in with the bunch. Aldous saw the colt, with its small head and shoulders high out of the water, sweep down like a chip with the current. A cold chill ran through him as he heard the whinneying scream of the mother—a warning cry that held for him the pathos and the despair of a creature that was human. He knew what it meant. "Wait—I'm coming—I'm coming!" was in that cry. He saw the mare give up and follow resistlessly with the deadly current, her eyes upon her colt. The heads behind her wavered, then turned, and in another moment the herd was sweeping down to its destruction.

Aldous felt like turning his head. But the spectacle fascinated him, and he looked. He did not thing of Stevens and his loss as the first herd plunged in among the rocks. He stood with white face and clenched hands, leaning over the water boiling at his feet, cursing softly in his helplessness. To him came the last terrible cries of the perishing animals. He saw head after head go under. Out of the white spume of a great rock against which the flood split itself with the force of an avalanche he saw one horse pitched bodily, as if thrown from a huge catapaultt. The last animal had disappeared when chance turned his eyes upstream and close in to shore. There flowed a steady current free of rock and down this—head and shoulders still high out of the water—came the colt! What miracle had saved the little fellow thus far Aldous did not stop to ask. Fifty yards below it would meet the fate of the others. Half that distance in the direction of the maelstrom below was the dead trunk of a fallen spruce overhanging the water for fifteen or twenty feet. In a flash Aldous was racing toward it. He climbed out on it, leaned far over, and reached down. His hand touched the water. In the grim excitement of rescue he forgot his own peril. There was one chance in twenty that the colt would come within his reach, and it did. He made a single lunge and caught it by the ear. For a moment after that his heart turned sick. Under the added strain the dead spruce sagged down with a warning crack. But it held, and Aldous hung to his grip on the ear. Foot by foot he worked his way back, until at last he had dragged the little animal ashore.

And then a voice spoke behind him, a voice that he would have recognized among ten thousand, low, sweet, thrilling.

"That was splendid, John Aldous!" it said. "If I were a man I would like to be a man like you!"

He turned. A few steps from him stood Joanne Gray. Her face was as white as the bit of lace at her throat. Her lips were colourless, and her bosom rose and fell swiftly. He knew that she, too, had witnessed the tragedy. And the eyes that looked at him were glorious.

CHAPTER IV

TO JOHN ALDOUS Joanne's appearance at this moment was like an anti-climax. It plunged him headlong for a single moment into what he believed to be the absurdity of a situation. He had a quick mental picture of himself out on the dead spruce, performing a bit of mock-heriosm by dragging in a half-drowned colt by one ear. In another instant this had passed, and he was wondering why Joanne was not on her way to Tete Jaune.

"It was splendid!" she was saying again, her eyes glowing at him. "I know men who would not have risked that for a human!"

"Perhaps they would have been showing good judgment," replied Aldous.

He noticed now that she was holding with one hand the end of a long slender sapling which a week or two before he had cut and trimmed for a fish -pole. He nodded toward it, a half-cynical smile on his lips.

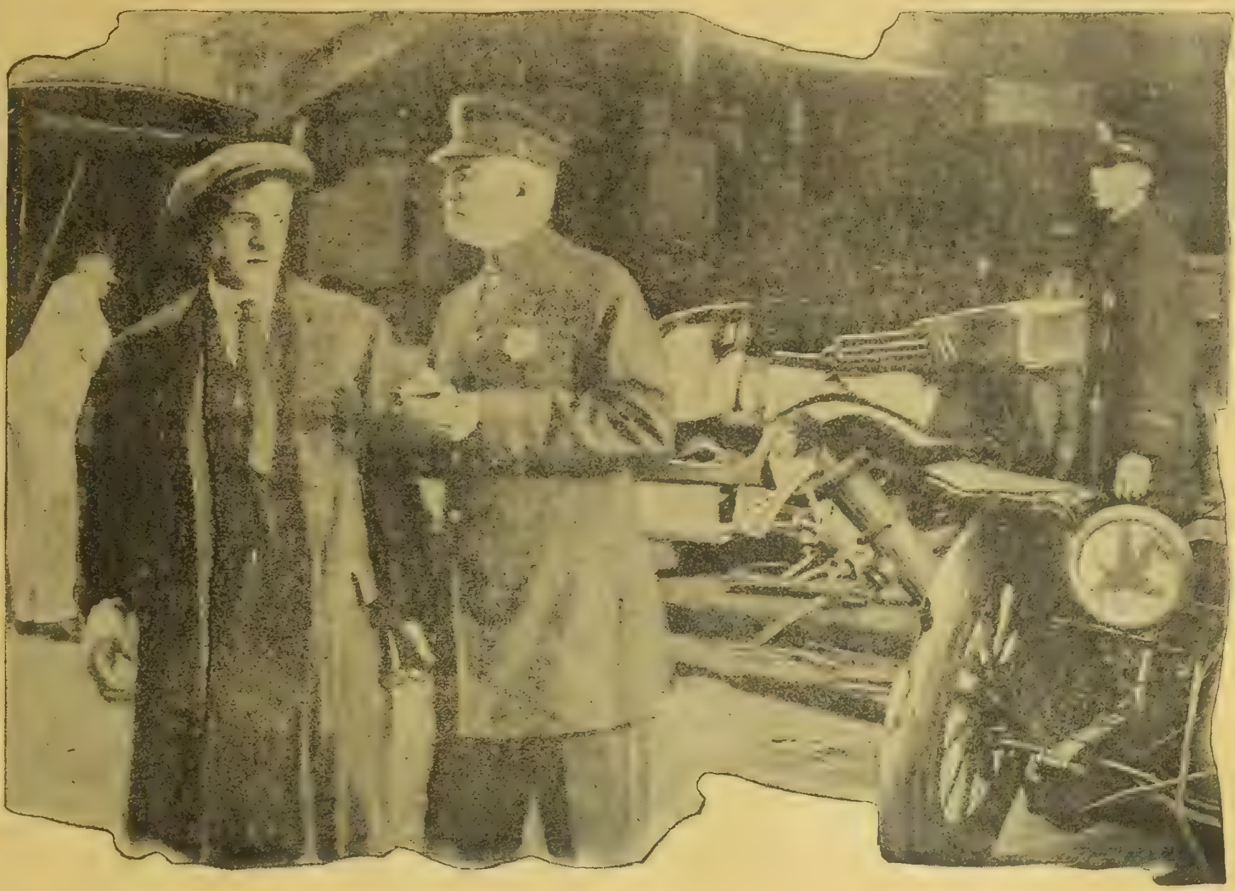
"Were you going to fish me out—or the colt?" he asked.

"You," she replied. "I thought you were in danger." And then she added, "I suppose you are deeply grateful that fate did not compel you to be saved by a woman."

"Not at all. If the spruce had snapped, I would have caught at the end of your sapling like any drowning rat—or man. Allow me to thank you."

She had stepped down to the level strip of sand on which the colt was weakly struggling to rise to its feet. She was breathing quickly. Her face was still pale. She was without a hat, and as she bent for moment over the colt Aldous felt his eyes drawn irresistibly to the soft thick coils of her hair, a glory of color that made him think of the lustrous brown of a ripe wintelberry. She looked

(Continued on page 21)



When Your Collision Comes

YOU will be mighty glad to feel that behind you stands a strong insurance company, ready to protect your interests and "pay-the-piper"!

No matter if to date you have never had an accident, sooner or later if you drive an automobile or truck, you are sure to face it.

When that time comes, will you stand alone—a victim of circumstances or will you feel the powerful assurance which only a strong company carrying your insurance can give you.

YOU CAN INSURE A FORD CAR COVERING FIRE, THEFT AND LIABILITY IN THIS STAUNCH COMPANY FOR $9.60—COLLISION INSURANCE FOR ONLY $2 A HUNDRED ADDTIONAL!

How can any business farmer afford to risk his savings, when the cost of insurance on his automobile or truck is so low?

Don't Take Chances on a Weak Company

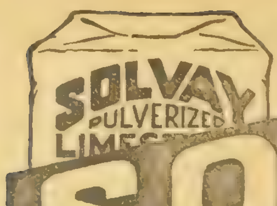
—Compare their Statement with Citizens'!

Total Assets August 31st, 1922:

Cash in Banks and Offices	$200,518.86
Capital	27,727.44
Furniture and Equipment	16,894.83
Accrued Interest	1,716.10
Salvage and Accounts Recivable	11,207.20
Total	$258,064.43

Citizens Mutual Automobile Insurance Company

WM. E. ROBB, Secretary, HOWELL, MICH.



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HAIL STORMS

in the State Mutual Hail Insurance Company. We offer a guaranteed policy on the Premium Plan. AGENTS WANTED for writing business. Chas. B. Scully, President, Almont. Matt. L. Stevens, Secy.-Treas., Grand Ledge.

The State Mutual Hail Insurance Company,

Grand Ledge, Michigan

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A Real Self-Oiling Windmill

Oil an Aermotor once a year and it is always oiled. Every moving part is completely and fully oiled. A constant stream of oil flows on every bearing. The shafts run in oil. The double gears run in oil in a tightly enclosed gear case. Friction and wear are practically eliminated.

Any windmill which does not have the gears running in oil is only half oiled. A modern windmill, like a modern automobile, must have its gears enclosed and run in oil. Dry gears, exposed to dust, wear rapidly. Dry bearings and dry gears cause friction and loss of power. The Aermotor pumps in the lightest breeze because it is correctly designed and well oiled. To get everlasting windmill satisfaction, buy the Aermotor.

A year's supply of oil is sent with every Aermotor
THE AERMOTOR CO. CHICAGO
Aermotor Towers are Towers of Strength

Write today for Circular. AERMOTOR CO. Chicago Kansas City Des Moines Minneapolis Oakland

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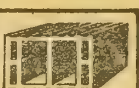

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Kalamazoo GLAZED TILE SILOS AND BUILDINGS make beautiful, modern structures, easily erected, increase the value and appearance of your farm and solve your building problems permanently. Write for interesting booklet on Kalamazoo Glazed Building Tile.
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FARMS & LANDS

Ads under this heading 10c per word

$1,500 GETS LAKE VIEW FARM WITH 1,000 apple trees, big fruit income; good profits; potatoes, alfalfa, 160 acres on improved road, close to fine Michigan town; 100 acres loamy tillage; 30-cow pasture, about 800 cords wood; 1,000 apple trees pears, plums, cherries, etc.; fine 2 story 11-room house overlooking lake; 14-cow barn, poultry house; insurance $3,500. Forced sale includes horses, implements and crops. $5,000, only $1 500 cash, easy terms. Details page 95 Illus. Catalog 1,200 Bargains. FREE. STROUT FARM AGENCY Ford Bldg., Detroit, Mich.

80 ACRES—70 ACRES CLEARED—10 acres beech and ample fuel timber. Good 6-room frame house with basement Good big barn, water at both house and barn. Land lays nearly level. Good clay loam soil, in good condition. Just 2 miles out of Evart on good road. Telephone, free mail delivery and milk route. Good orchard. If sold must be taken before November first. Children can attend Number One High School and Normal from this farm. Price $5,000, $2,000 down, ten years time on remainder. Write W. F. UMPHREY, Evart, Mich.

FOR SALE—"THE LEHNDORFF FARM"—240 acres, located only three miles from Rogers City, on Main M-10 Dixie Highway. Orchard nine years old, 800 apple and 50 cherry trees. 75 acres well cleared, 50 acres green timber, good water. A. F. LEHNDORFF, Rogers City, Mich.

160A., NEARLY LEVEL, CLAY LOAM, ELM, beech, maple soil, 125 A cleared, 100 A new seeding; 3 horses, 19 cattle, 9 registered Polled Durham, 50 sheep, 2 hogs, tools; for price and terms write A. W. HONEYSETT, R. 3, Evart, Mich.

SELLING ON ACCOUNT OF SICKNESS. Beautiful dairy farm, fully equipped with Jerseys, with or without stock, right price, easy terms. Write at once. GEO E WALKER, Burton Heights Grand Rapids Mich.

FOR SALE—80-ACRE IMPROVED FARM, good buildings dark clay loam soil, 1-2 mile from school good roads, mail route and telephone line Easy terms for particulars write owner. JOHN CAMPBELL, Harrisville Mich

FOR SALE—CHOICE FARMS WELL LOCATED in Cheboygan County Good homes. Good roads Reasonably priced Write for free list to NELSON R PETER Wolverine, Mich.

I WANT FARMS FOR CASH BUYERS. Will deal with owners only. R. A. McNOWN, 308 Wilkinson Bldg., Omaha, Neb.

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BEFORE BUYING A FARM GET OUR FREE list of 50 good farms, 10 acres up. DE COURDRES, Bloomingdale, Mich.

BUY A FARM NEAR ANN ARBOR AND educate the boys in the University. Write for our farm bargains. JEROME PROBST, Ann Arbor Mich

120 ACRES NUMBER ONE LAND, BEST of buildings, fruit, timber, one mile to Dixie Highway, station, church, school, 30 miles from Detroit. R. W. ANDERSON, Clarkston, Mich.

A BARGAIN—400 ACRES, HOUSE, BARN stable, near State Auto Park, Cheboygan; fine location to make money. Address 512 BINGHAM. [illegible]

[illegible] ACRES—CROPS, EQUIPMENT AND stock, Alfalfa land partly tiled, 53 acres cleared, easy terms, write WAINE EDDY, Beaverton, Mich.

80 ACRES—40 WITH BUILDINGS, TWO twenties joining, 70 imp. Sell all or part. Write for particulars. E. C. HAGERMAN, West Branch, Mich.

IF YOUR FARM OR COUNTRY HOME IS for sale. Write us. No commission charged. CLOVERLAND FARM AGENCY, Powers, Mich.

TWO 120 ACRES AND ONE 140 ACRES farms for sale by owners. For information write WM. ALBRECHT, Carsonville, Mich.

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MICHIGAN CROPS

DEAL WHEAT

I would like to ask where I could get some Deal wheat for seed.—R. M., Rose City, Mich.

Very likely the Deal Mediterranean wheat is desired I know of no definite source of Deal wheat in Michigan. This wheat has in the past been listed with the S. M. Isbell Company, of Jackson, and I would suggest them as the best possible source. —J. F. Cox, Professor of Farm Crops, M. A. C.

GUMBO SOIL

I am interested in a farm that I am told has Gumbo in one field. Can Gumbo be put to any use? How would you work it and what crops would you put in, if any?—W. V., Climax, Mich.

Gumbo soil can be used for agricultural purposes if it is well drained. Usually corn is one of the best crops to grow on this type of soil. Special care must be exercised in tilling operations on gumbo land or else it will soon become puddled and practically worthless for agricultural purposes.—George M. Grantham, Research Associate, Dept. of Soils, M. A. C.

RED AND ALSIKE CLOVER SEED CROPS LARGER THAN LAST YEAR

THE 1922 crop of red clover seed is estimated to be about one-third larger and the alsike clover seed crop one-sixth larger than last year, according to data obtained by the United States Department of Agriculture. The increased production is due both to a larger acreage and better yield per acre in most of the heavy-producing sections. The weather prior to and at harvest time was generally favorable, but in some regions recent hot, dry weather, sim?ilar to that of last year, has reduced yields considerably.

Prices offered to growers on August 28 for red and alsike clover were $2.80 and $1.65 per 100 pounds, respectively,than on the same date last year and about one-half as much as were paid two years ago.

Almost every important producing section, except southern Wisconsin and southern Minnesota, indicate an increased acreage of red clover ranging from 9 per cent to 61 per cent and almost all sections indicated larger yields per acre. In most sections the spring rains gave the hay crop an excellent start and it was cut early. Rains continued long enough after the hay crop had been removed to give the seed crop a good start. Dry weather at the time the seed was getting further aided in increasing the yield over that of last year. Very little winterkilling was reported except in southeastern Wisconsin, where it was fairly serious, while last year a number of important sections reported varying degrees of damage from that cause.

Harvesting of the crop began in Indiana, Ohio, and Illinois (second crop) about August 20-30, and in Minnesota, Michigan, and Wisconsin, August 25, September 5. Threshing began in scattered localities in each of the sections a week or 10 days after harvest, but the bulk of the crop probably will not be threshed before October 15 or later, depending largely upon the activity of buyers.

Prices paid to growers for country-run seed on August 28, in the most important sections, ranged from $10.25 per 100 pounds in northeastern Missouri to $13.25 in southern Wisconsin and averaged for all sections about $12.20, compared with $15 n the same date last year and $23.65, two years ago. Prices for reclaimed seed, or "basis clean seed," averaged about $1 per 100 pounds more than for country-run seed.

The acreage and yield per acre of alsike clover seed in most sections were larger than last year, but the increases were not so large as in the case of red clover. Increases in acreage over that of last year range from 2 per cent in northern Indiana to 27 per cent in central Illinois; increases in yield per acre range from 3 per cent in northern Indiana to 22 per cent in southeast Iowa. The spring rains helped alsike clover and the crop in most sections made a better growth than last year, when drought and hot weather reduced the yield considerably.

The harvesting of the alsike crop was later in most sections than last year. In Illinois, Indiana, and Ohio harvesting began July 1-15 and followed shortly afterwards in Wisconsin, Minnesota, and Michigan.

Prices paid to growers for country-run alsike seed on August 28 ranged from $10.75 per 100 pounds in northeast Wisconsin to $12.50 in northern Indiana and averaged about $11.40, compared with $13, last year, and $24, two years ago. Prices for reclened seed averaged about $1.40 per 100 pounds more than for country-run seed.

FRUIT and ORCHARD

EDITED BY FRANK D. WELLS

DEVELOPMENT OF THE STRAWBERRY

IT is safe to say that no fruit has been developed during the past 25 years as much as the strawberry. At the beginning of the century the everbearing strawberry was looked upon as a curiosity, or a freak. That it could be made of commercial importance was scarcily thought possible. Now it has a recognized place in the fruit market and its importance is increasing.

The first varieties introduced were shy bearers and made few plants, while the quality of the fruit was inferior, but these defects seem to have been changed for the better. Some of the kinds now grown bear abundantly, make many plants and have a sprightliness that matches that of the spring fruit.

One of the latest varieties has come from a cross with a wild berry as one of the parents. The result is a berry with the much desired 'wild' flavor, the absence of which in cultivated strawberries is so often deplored. Besides this, the fruit is larger than the well-known Progressive, making it a heavy cropper. The plant is vigorous and throws out a plantiful supply of runners. To make it still more attractive, it bears in both spring and fall.

The variety is not yet being distributed and may not be within reach of planters for a season or two more, but when it becomes available it promises to surprise berry growers, unless it develop some weakness not in evidence. Anyhow, if this variety should fail in the final test, which seems improbable, it is a prediction of what may be expected within the near future.

NOTES

Give grape vines room. Plant them in rows eight or ten feet apart. Set them ten or twelve feet apart in the row.

Japanese walnuts are not uncommon and are listed by many nurserymen. The tree is a wonderfully rapid grower, and early and abundant bearer, when planted in a moist place. But the nut is inferior to the common black walnut, both in size and quality. In shape it is midway between the black walnut and the butternut, while the tree looks somewhat like the latter. Some of the claims for it have been rather extravagant, as is always to be expected with anything new. However, it is a valuable tree for those who want something that will begin bearing by the time American walnuts have nicely started at growing.

The Cuthbert is still the queen among raspberries. Miller's red is earlied and better looking, so sells better, but is inferior in flavor. It is grown for market, but the Cuthbert is wanted at home.

The gooseberry has been highly developed in England, while in this country it has been negelected. As a result the fruit there has an important place in the market, while here it is of comparatively small importance. Yet the ripe berry has a pleasing flavor and if it were large might be served more often than it is as a dessert fruit. Here is an opportunity for somebody to do good work by developing a large berry, suitable for serving ripe. The English varieties do not thrive well, our hot summers being unsuited to them. Are any of our readers growing them? If so, what have they found the best method for controlling the blight, mildew and other ailments of the bush?

ANY ONE CAN WIN THE $500 FIRST PRIZE

Read all about our Second big Puzzle Contest, a friendly game for readers of The Business Farmer, on page 11, of this issue.

Farmers Service Bureau

(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full name and address. Name not used if so requested.)

QUALIFICATIONS OF HIGHWAY OVERSEER

Would like to know if any but taxpayers can vote lawfully for a roadmaster. We have a farmer in our district who gets into that office by bringing in the workers from the plaster mills to vote for him.—A Reader, Grand Rapids, Mich.

Concerning the election of a "road master," which I presume is meant for an Overseer, I would call your attention to Sec. 6, Chapter 13 of the General Highway Law, which provides that any resident of the district, who is an elector or any elector of the township having taxable property in the district (but who is not a resident of the district), may vote for such overseer.

If the township in question is operated under the provisions of Chapter 25, of the General Highway Law, the same provisions apply, i. e., any elector may vote for an overseer in his district.—Harry H. Partlow, Legal Adviser, State Highway Department.

THAT ETERNAL LINE FENCE QUESTION

A and B have a dispute over a line between farms. A certain maple tree, the center of which the line was supposed to be by both parties until A claimed the line was over on B, thirty feet south of the maple tree. B suggested they employ a surveyor, which A agreed to; each to pay half of same. When the surveyor arrived, A refused to pay a rent, but agreed before three witnesses if B paid surveying charges, he would accept the established line. One survey was made, the surveyor was unable to set the corner on the east end, on account of lack of time that day, but returned in a few weeks, with new evidence, surveyed same again and established a corner about 18 feet north of said maple. During B's absence A erects a woven wire fence, supposing he has run same on the line B once had a fence, but which B built with his own material and labor for his own benefit, but setting same over on B's own side, also on south side of maple, making A's fence at present about two or three feet on B's side. There never has been any fence on this land before only what B constructed for his own use, but not building same for a line fence or claiming any as sucn.

Can B have sufficient evidence to warrant action in the courts to compel A to remove his fence. A claimed before two or three people the line was 30 feet on B. The surveyor located the witness trees by his field notes to a dot?

Please advise regarding procdure of same and all information you may be able to get on same. Also can B compel A to keep his chickens from trespassing on B's land?

The controversy started in this case was by A wanting to cut the maple tree which was until then supposed to be the line.—S. R., Three Rivers, Mich.

Under the statement I would be of the opinion that B could maintain a right to the land established by the surveyor as the proper line between the two properties. Old fences are good evidence of where the true line is. A very old fence undisputed may be the best evidence of where a true line is but if a fence has not been there in such a way as to establish by agreement where the true line is then I would be of the opinion that the survey would control as to the place the true line should be located.

A verbal contract as to some subjects may be as good as a written one and it may be void and no good as to other subjects—Legal Editor.

THE DIFFICULTIES OF LAW ENFORCEMENT

Would you please tell me the law in regard to arrests for stilling moonshine. Two men went to a place where thy found two other men in a house with a still. They went and tried to get the prosecutor and sheriff but the phone lines were not in order so they then went to a justice of the peace and asked for a search warrant to be served by the deputy sheriff. The justice said he would not have any authority in that case. It had to be done by the sheriff and prosecutors but the deputy sheriff proposed to go anyway, so the three then went. They found one man on guard outside and he got away but there was one man in the house. The still was on the stove, a good hot fire and a can set to catch the liquor. There was about a gallon and three barrels of mash. They took the still and man before the prosecutor and he let him go because the deputy had no search warrant. How with all of this evidence can't there be anything done, or has this got to be let go in this manner because people will not act who have the authority.—L. F., Clare County, Mich.

The difficulties which followed from the state of facts presented in your letter had their first inception in the error committed by the Justice in declining to issue a search warrant when asked for by the Deputy Sheriff. The Deputy Sheriff should have secured a search warrant either from this Justice or some other Justice, or upon order from the Prosecutor, as he certainly under this state of facts was entitled to a search warrant. However, failing to secure a search warrant for the reasons assigned by him did not justify him in making an entry of the premises and a search and seizure of the incriminating evidence. We do not think that the evidence taken under these circumstances could be used in a prosecution. However, we do not see that this would necessarily prevent a prosecution for the manufacture of liquor, for, if the officer, and others, were in the home and saw the still in actual operation and could tell from the odor, or otherwise, that the product was liquor, a prosecution could be sustained upon this evidence without the necessity of using the still or the liquor itself, and we would recommend that the case be presented to the Prosecuting Attorney from that viewpoint.—A. B. Daugherty, Deputy Attorney General.

ANIMAL MISREPRESENTED

I purchased what was supposed to be a three-year old gelding. He proved to be an original as soon as I got him home. I complained to original owners and they said that they knew nothing of it. I can furnish proof that they did know it. Are they liable for return of purchase price?—O. F., Pavilion, Mich.

The return of the animal or damages in the sale will depend upon the warranty made at the sale. If no warranty or representations were made at the sale you will be without any right of action for damages. The seller is only liable for some kind of a warranty or the failure to make some disclosure that he was in duty bound to disclose.—Legal Editor.

SEEDING ROLLING LAWN

We have a rolling lawn and it is sandy soil. What kind of grass would you seed it down with?—Mrs. J. D. L., Pentwater, Mich.

We would recommend a mixture of the following grasses: Chewing's Red Fescue Rhode Island Bent grass and Red Top, mixed in about equal proportions.—C. P. Halligan, M. A. C.

SCHOOL BOARD CANNOT SELL FURNACE

I would like to know if a school board has any right to dispose of a furnace that had been in use two years because one member of the board did not want it and then buy a stove and use it one winter and then it got newsed around that the furnace was gone and up comes a man with a big stick in his hand and says "put back that furnace," and so they did, so the shift has cost the district about 150.00. Can the school board be made to refund this money? The director of the same board could have hired a teacher for $70.00 per month but the teacher would not board with the director so they went and paid $80.00 in order to get the teacher to board there.—H. H., Davison, Mich.

School officers cannot dispose of any school property without a vote of the people.

In regard to buying a stove and using it one winter, we would say that no heating plant can be installed in any school building without the approval of the Superintendent of Public Instructian and a stove without a ventilating system in connection would not be approved by the Department.

I do not understand your reference to a "big stick" nor to the board putting back that furnace, "that furnace" probably being the one referred to above as disposed of by the board, but in answer to your question as to whether the board can install a furnace will say as above, that if the furnace meets the approval of the Superintendent of Public Instruction the board has a right to put it in and spend whatever money is necessary for it.

You ask if the board can be made to refund this money. I would say yes.

You state that the director of the

(Continued on page 19)

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I want every sufferer from any form of muscular and sub-acute (swelling at the joints) rheumatism to try the great value of my improved "Home Treatment" for its remarkable healing power. Don't send a cent; simply mail your name and address, and I will send it free to try. After you have used it, and it has proven itself to be that long-looked for means of getting rid of such forms of rheumatism, you may send the price of it, One Dollar, but understand I do not want your money unless you are perfectly satisfied to send it. Isn't that fair? Why suffer any longer, when relief is thus offered you free. Don't delay. Write today.

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The Children's Hour

DEAR Nieces and Nephews: In my letter in the last issue where I announced the new contest regarding birds I neglected to mention two important things. They were: first, your list of names should contain only the names of Michigan birds and second, you must compose this list without the assistance of any book. Just notice on your way to and from school how many different birds you see and write the names of them down and then in the evening sit down with your notes and write your letter to me.

Because of my error I will not close the contest until midnight, October 7th, so all of you have plenty of time to write if you have not already done so, and if you have you may send another letter and I will count that instead of your first one.

Look on the next page and read about the great contest the Business Farmer is starting. The first prize is $500.00 and you can win it and stand just as good a chance of winning it as anyone. One of the winners in the picture puzzle contest put on by M. B. F. last year was only eleven years old, so you see age doesn't count. Just think what you could do with that much money. And the best part of it all is that it does not cost one cent for you to try. If you do not win first prize remember there are 14 others and M. B. F. is going to give them all away to its friends, and you could use some of the money I know.

Last year you had to find the words beginning with the letter "S" while this time it is the words that begin with "B." But before you start at work be sure to read the directions over carefully and if there is anything you do not understand ask your mothers or fathers to explain it to you. Or you can write direct to the Contest Manager. He will be pleased to answer your questions. Now one thing more: be sure to clip the puzzle picture and send it to the Contest Manager when you send your list of words to him. How many of my nieces and nephews are going to win some of this money, or how many are at least going to try to win some of it? — UNCLE NED.

OUR BOYS AND GIRLS

Dear Uncle Ned — Here are the following birds that I know:

Sparrow, robin, bluebird, blackbird, kingfisher, condor, catbird, thrush, wren, quail, bobolink, bluejay, meadowlark, swallows, parrots, chickadee, stork, hummingbird, canary, snow bird, killdeer, pheobe, doves, pigeon, hawk, crow, owl, yellowbird, kingbird, crane, ground bird, graybird, brown thresher, mudhen, aimless robin, skunk bird, chippy bird, ostrich, woodpecker, vultures, bittern, high holder, mourning dove, nightingale, whip-poor-will, snipe, bat.

The bird that I like best is the robin. It has a red breast and its back is a dark brown. It is about three inches high and about 4 1-2 inches long. It will come early in the spring and build its nest in a barn or apple tree. When it has its nest built it will lay three or four eggs of a pale blue color. Then it will set until their eggs are hatched. We should never harm the robin or any other birds. — Miss Carmen Shook, Reese, Mich., age 12.

Dear Uncle Ned:—Here are the names of birds and the description of the ones I like the best:

Brown thresher, mockingbird, tufted titmouse, golden-crown kinglet, bluejay, blue grosbeak, catbird, snowbird, ruby-throated hummingbird, loggerhead shrike, sparrow, woodpecker, kingfisher, canary, red-winged blackbird, crow, owl, crane, wren, meadowlark, killdeer, eagle, parrot, bluebird, blackbird, condor, oriole, snow bunting, vermillion flycatcher, golden-winged warbler, bullocks oriole, blackburian warbler, myrtle warbler, horned lark, yellow-throated vireo, American crossbill, cedar waxwing, yellow-breasted chat, yellow-bellied sapsucker, redpoll, purple finch, robin.

I like the canary the best because you can have it for a pet and it has a sweet voice. And its sweet voice may make happy hours out of lonely ones. The canary I had was yellow on the back and breast and the head. The wings have a little black on them. Its legs are yellow. The canary will take a bath and it eats seed.—Marian Wyckoff, Sheridan, Mich., R. No. I, Box 13.

Dear Uncle Ned:—I am only 9 years of age and in the sixth grade but I thought I would try to get the prize anyway.

Robin, bluebird, hummingbird, killdeer, pheobe, pigeon, dove, blue heron, kingfisher, blackbird, canary, woodpecker, quail, wren, green heron, crow, hawk, eagle, catbird, mourning dove, owl, sparrow, swallow, lark, parrot, redbird, bluejay, oriole, partridge, peacock, haring gull, sea gull, magpie, thrush, whip-poor-will, stork, marsh hen, cowbird.

The quail is not a very handsome or attractive bird but to me it is a very nice bird. I do not live in the city so I can hear the quails sing. Almost every day I can hear their shrill voices calling out, "Bob white, bob white." I have become so attached to their pretty songs. They build their nests of fine things such as horse hairs. They build them on the ground. The bird is a brownish color. Their eggs are pure white. They are quite large for a bird's egg. The young quails run around soon after they are hatched.—Lois Rensberry, Fenton, Mich., R. F. D. No. 2.

Dear Uncle Ned—I am a girl 10 years old and in the 4th grade. My father takes the M. B. F. and I read the Children's Hour. We live on a 160-acre farm and I like the farm better than the city. We have a dog, four old cats and three little kittens. We have about 100 chickens, 9 pigs, 12 cows, 22 young cattle and 6 horses. I will tell you about my trip to Chicago.

We went on a boat named "Alabama" and it was rough the entire trip. We started from Muskegon, my grandpa, mother, sister, brother and I. There were many animals on board the boat and there was a hospital on the boat for them. There is so much to tell about about Chicago that I cannot tell it all. Write to me.—Ruth C. Nelson, R. 2, Grant, Mich.

Dear Uncle Ned—Here is a poem I composed:

The Three Happy Maids

I'll tell you a story that I'm sure
You'll like quite well,
It's about three maids
Whose names I will not tell.

Their home is the prettiest ever seen,
With a back-ground, oh! so lovely and green,
The porch is covered with roses so bright
It is just a beautiful sight.

The words break forth
From their lips so soft,
And the wonderful voices
Are heard far off.

Early in the morning
They're often seen
Strolling along
The meadows so green.

They've nothing to do
But work and play,
This is the reason
They're happy and gay.

Their love for each other
Can never be told,
It's always increasing
Though they're getting old.

The moon shines down
On the maids so fair,
While their voices softly float
On the evening air.

So now you see
My story's told
And hope you'll like it
As good as gold.
—Iris Arnold, Mt. Clemens, Mich., R4.

"WHAT I THINK OF CALF CLUB WORK"

I RECEIVED my inspiration in become a club member at a mass meeting conducted at the Rogers School, by Mr. George E. Bishop, now Secretary of the Upper Peninsula Development Bureau, and Miss Mary V. Hall, Iron County Club Agent. I was interester in purebred stock so I joined the club. On April 28th, 1921 we held a meeting and organized the Cloverland Calf club. We have had about ten regular meetings and six meetings for preliminary judging, all of which I attended and enjoyed, and can say that there was not a meeting held but that I learned something new. At these meetings we had speakers who taught us how to judge, and how to carry on our club work successfully. Mr. Geerge E. Bishop soon after organization, left for Wisconsin to purchase the pure bred calves for the members of the club. I had chosen the Guernsey type because of the permanent yellow color of its cream, which brings a high market price and because of its hardiness and gentleness and its remarkable dairy qualities. The following week I received word that the calves were to arrive on the 4th day of May. I went to the station to get the calf. Ding! Dong! The train was coming. The train came into the station and switched the stock car to a sidetrack to be unloaded. The calves were carried onto the platform in their crates and were distributed to club members by lot. They were all Guernseys but two which were Holsteins. My calf was small, in fact, one of the smallest of the group, but now she compares favorably with some of those that at first were larger and is gaining in weight wonderfully.

I have fed my calf milk since the day I bought her, and have also fed her grain. She does not care for oil meal alone, but when mixed with ground feed she eats it readily. My calf has not had any sickness, and is strong and healthy. It follows me around and comes readily when called. One day I went across the road to a neighbor and the calf followed me as far as the gate and waited until I came back and then followed me to the house. Every month I lead her one mile to be weighed, and I also led her three miles to the fair at Iron River without much trouble. I am more pleased with my calf now than the day she arrived. My grandfather did not think much of it either at first, but he also has changed his mind.

I am taking as good care of my calf as I know how, brushing and cleaning it every night and when I exhibited her at the county fair as did other members of the club I thought she must be the best calf of the group. The judge, however, decided differently, explaining to us in what respects other calves were superior, and awarded my calf second place out of fifteen exhibited that day, much to my satisfaction. Most of the calves exhibited belonged to club members and I learned that some of the members did not take care of their calf as well as others. We also judged stock that day and three of our members took prizes winning trips to the Livestock Exposition at Chicago. I am planning to take up this work again next year, and am aiming to win first place at the fair this fall instead of second.

More than half of the members of the Cloverland Club attended the Upper Peninsula Club at Chatham and in the stock judging we carried off several prizes. Russell Hartley, Iver Peterson and I won free trips to the State Fair at Detroit while Russell Hartley won in addition a pure bred Holstein calf, and Iver Peterson a pure bred Duroc-Jersey hog.

I believe that the Cloverland Calf Club has made a very creditable record and I hope that more such clubs may be organized. This kind of work should be carried on. The club work has been of great value to me. The project work has given me experience in making records in a business-like way; has taught me to judge with a fair degree of accuracy the various types of cows, sheep and hogs, and has enabled me to learn by practical experience the proper care of calves. But its greatest value probably lies in the fact that it is interesting many boys in agriculture from which will come our future farmers, club leaders or agricultural agents.—Andrew Waite, State Champion, Iron River, Mich.

YOU WIN $500!

FUN FOR THE WHOLE FAMILY

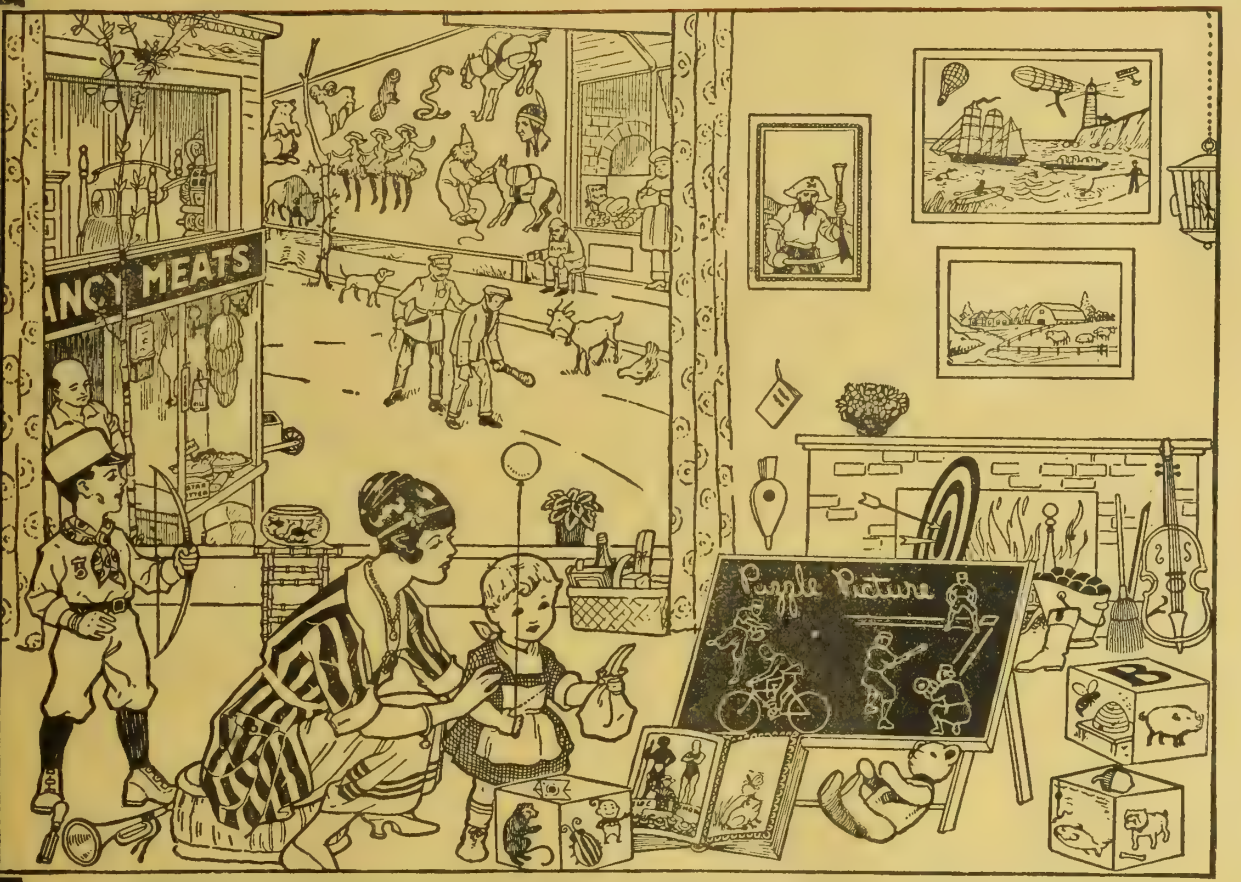
The Michigan Business Farmer's Great $500 Puzzle

COSTS NOTHING TO TRY

"Young folks, old folks, everybody come, join the Business Farmer's Contest, You'll have a lot of fun!"

THE MICHIGAN BUSINESS FARMER is going to give every man, woman and child the chance to have lots of fun at the same time the chance to win any one of fifteen big cash prizes. The whole family can take part in this simple yet amusing fun game. Every object has been drawn plainly so everybody can recognize it. There are no hidden objects. Every one of them is as plain as the nose on your face. You don't have to turn the picture upside down or sideways. Just look at the picture and name the objects, that's all. The person who sends us the largest and most correct list will be awarded First Prize, second largest list Second Prize, and so on. But don't wait to send in your list. Get it in early. We will furnish additional proofs of this Puzzle Picture free. Ask for them.

How Many Objects Can You Find in this Simple Picture that Begin With "B"?



HOW MANY OBJECTS CAN YOU FIND IN THIS PICTURE THAT BEGIN WITH "B"?

Here are a few of the words: BOOK, BEAR, BALL, BEADS, BADGE, etc. Just pick out the words and write them down. We are running the "B" Puzzle Picture to increase the poularity of this paper. It is not a subscription contest and you do not have to send in a single subscription to win a prize. If the judges award your answer the First Prize, you win $20.00; Second Prize, $10.00, etc. But if you want to win more than this, we make you the following offer:

You Can Win $500

If the judges award you First Prize and you have sent in two $1 subscriptions to the Michigan Business Farmer, you will receive $300 instead of $20.00; Second Prize, $150, etc. (See second column of figures in prize list.) But, if you are awarded First Prize and have sent in five $1 subscriptions to the Michigan Business Farmer you will receive $500 instead of $20; Second Prize $250, etc. (See third column of figures in prize list.) It is easy to get subscriptions for the Michigan Business Farmer, all of your friends and neighbors want it; they are only waiting to be asked to subscribe or renew at $1 a year. **Your own subscription or renewal will count for one** and all you have to do is to get the additional new or renewal subscriptions. The subscriptions can start at any time. When sending subscriptions, write order, names and addresses on a separate sheet from your puzzle answer.

SUBSCRIPTION RATES
$1.00 PER YEAR
PAYABLE IN ADVANCE

JUDGES: Ex-Governor Fred M. Warner, A. B. Cook, Pres. Michigan State Grange and G. W. Dickinson, Sec'y-Mgr.. Michigan State Fair, have been asked to act as judges and decide the winners.

Rules of the Contest--Observe Them

1. Any man, woman, boy or girl who is not an employee of the Michigan Business Farmer or a member of employees family, may submit an answer. It costs nothing to try.

2. All answers must be mailed by November 25th., 1922, and sent to the Michigan Business Farmer.

3. All lists of names should be written on one side of the paper only and numbered consecutively, 1, 2, 3, etc. Write your full name, and address on each page in the upper right-hand corner. Do not write subscriber's name or anything else on the same paper with list of words; use separate sheet.

4. Only words found in the Webster's Unabridged Dictionary will be counted. Do not use obsolete words. Use either the singular or plural, but where the plural is used the singular can not be counted, and vice versa. Do not use hyphenated, or compound words, where each word in itself is a separate object. When an object can be correctly called by two or more names, any one of such names will be counted as a word.

5. Words of the same spelling can be used only once, even though used to designate different objects. An object can be named only once; however, any part of the object may also be named.

6. In making the awards each list will be considered solely upon its merits. Every incorrect word counts against the contestant just as much as a correct word counts in the contestant's favor. Therefore it is very important that no incorrect words are included in a list.

7. The answer having the largest and nearest correct list of names of visible objects shown in the picture that begin with the letter "B" will be awarded First Prize etc. Neatness, style, handwriting or the matter of subscriptions sent in have no bearing upon deciding the winners.

8. Candidates may co-operate in answering the puzzle, but only one prize will be awarded to any one household; nor will prizes be awarded to more than one of any group outside of the family where two or more have been working together.

9. In the event of a tie for any prizes offered, the full amount of such prize will be paid to each tied participant.

10. All answers will receive the same consideration regardless of whether or not subscriptions for the Business Farmer are sent in.

11. Ex-Govenor Fred M. Warner, A. B. Cook, Pres. Michigan State Grange and G. W. Dickinson, Secy-Mgr. Michigan State Fair, have been asked to act as judges and decide the winners. They will use Webster's Unabridged Dictionary as reference and participants agree to accept the decision of the judges as final and conclusive.

12. The judges will meet directly following close of the contest and announcement and correct list of words will be published in the Michigan Business Farmer as quickly thereafter as possible.

The Prizes:

Winning Answers Will Receive Cash Prizes as Follows:

15 Grand Prizes	Prizes given if NO Subscriptions are sent	Prizes given if TWO $1 Subscriptions are sent	Prizes given if FIVE $1 Subscriptions are sent
1st Prize	$20.00	$300.00	$500.00
2nd Prize	10.00	150.00	250.00
3rd Prize	5.00	75.00	125.00
4th Prize	5.00	50.00	75.00
5th Prize	5.00	30.00	50.00
6th Prize	3.00	20.00	40.00
7th Prize	3.00	15.00	30.00
8th Prize	3.00	10.00	20.00
9th Prize	2.00	10.00	20.00
10th to 15th	2.00	10.00	15.00

Address All Communications to

CONTEST MANAGER
THE MICHIGAN BUSINESS FARMER,
MT. CLEMENS, MICH.

This is the second great Cash Prize Contest we have conducted. Mrs. A. E. Tanner, Spring Arbor, Mich., was the winner of the First Prize in the 1921 contest. Ask anyone regarding the fair and square way The Business Farmer conducts these great popular contests.

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FORREST A. LORD ....EDITOR
ASSOCIATES:
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"The Farm Paper of Service"

The Farmers Right To Strike

ECONOMISTS hold up their hands in horror at the very idea of the coming to pass by some miracle a "farmers' strike." No one has yet prophesied how it could be brought about, but Secretary Wallace, in his very able talk before the Farm Bureau at Leesburg, Va., brought out the facts comparing farm and labor wages, which are timely in view of the recent upheavals He said in part:

"Take the average wage received by the coal miner for mining a ton of coal. In 1913 the wage per ton would buy 1.1 bushels of corn in Iowa; in 1921 it would buy 2.5 bushels of corn in Iowa. In 1913 the ton wage would buy .7 of a bushel of wheat in North Dakota; in 1921, .9 of a bushel. In 1913 it would buy 4.7 lbs of cotton in Texas; in 1921, 8.5 lbs. In 1913, 7 lbs. of hogs in Nebraska; in 1921, 14 lbs. In 1913, .8 of a bushel of potatoes in New York; in 1921, 1.2 bushels. In 1913, 11 lbs. of sheep in Wyoming; in 1921, 18 lbs. In 1913, 1.6 bushels of oats in Illinois; in 1921, 3.1 bushels. In 1913, 2.4 lbs. of butter in Missouri; in 1921, 3.2 lbs.

"Taking the average yearly earnings of railroad employes, we find that in 1913 the yearly wage would buy 1,492 bushels of corn in Iowa, and in 1921, 4,112 bushels. It would buy 1,028 bushels of wheat in North Dakota in 1913; in 1921, 1,466 bushels. In 1913 it would buy 6,449 lbs. of cotton in Texas, and in 1921, 13,934 lbs. It would buy in 1913, 102 cwt. of hogs in Nebraska, and in 1921, 237 cwt. It would buy 148 cwt. of sheep in Wyoming in 1913, and in 1921, 296 cwt. In 1913 it would buy 1,087 bushels of potatoes in New York; in 1921, 1,916 bushels. In 1913, 2,174 bushels of oats in Illinois; in 1921, 5,109 bushels. In 1913, 3,309 lbs. of butter in Missouri, in 1921, 5,285 lbs.

"The purchasing power of the wages of the railway employe in 1921 was 51 per cent greater than in 1913. The purchasing power of the wages of the coal miner in 1921 was 30 per cent greater than in 1913. The purchasing power of the farm hand who works for wages in 1921 was 4 per cent less than 1913, while the purchasing power of the farmer himself was, on an average, from 25 to 45 per cent less than in 1913.

"In short, the farmers of the country, numbering almost one-third of our entire population, have borne altogether the heaviest burden of deflation. They have endeavored to get relief by all lawful means. They have apealed to the Administration, to Congress and to every other agency which they thought might be able to help them, but while making these efforts to avoid their heavy losses they have not struck. They have not created disorders. They have kept on producing and in the face of extraordinarily low prices have this year grown one of the largest crops in our entire history. The farmer believes in law and order. He believes in government. He believes in fairness in working hard and producing efficiently."

it is strange that labor-leaders cannot see what is plain to all men, that wages cannot rise, while the greater producers of America, the farmers, are forced to accept lowered "wages" in the price paid for the products of their toil. Practically, the farmers of America cannot strike, but it is highly doubtful, if though the way were opened to them, they would. Farmers as a whole are thinkers, they will not be lead far by false prophets and they prefer to believe, as we do, that "right will, in the end triumph."

The State Fair Midway

WHEN Commissioner of Agriculture Doelle sent Ezra Levin, an employee of his own department, to investigate the Michigan State Fair and report personally his own opinion of it, we doubt if Mr. Doelle had in mind that the report would be so pointedly critical or that it would so quickly find first page position in the daily press as an "attack on the fair management".

We cannot view it as such, because Mr. Levins report was really an attack on the "midway", which has always, and will always, be a source of lively discussion, just as placing bets on the horse-races was, until it was permanently abolished from the fair grounds.

In defense of Mr. Dickinson's able management of the fair, it is readily apparent that the "midway" is a source of revenue of first importance. Particularly is this true of the Michigan fair, because of its proximity to Detroit, the fourth largest city in America. No other state fair in the United States is situated so near a city of half Detroit's population. City folks are accustomed to spending their money on "shows", so the question of how greatly the abolition of the "midway" would effect the gate receipts of the fair is one that the fair management will find hard to answer.

If the midway with all its freaks, cheap-shows and games of chance, has been the contributing factor to provide in a large measure, the profit at the close of each fair which has made possible the new Coliseum, the concrete barns and the hundred and one educational improvements which are each year added to the fair, then here indeed is a problem of morality versus finances.

This criticism of the midway and the kindred concessions on the Michigan State Fair grounds is not original with Mr. Levin, we have heard it from visitors often, usually qualified however by some remark regarding the "suckers who wouldn't be satisfied unless they squandered some money at the fair." But there are we believe several successful state fairs in this country where no midway is tolerated, it ought to be easy for Mr. Dickinson to get the facts regarding their experience.

We want to see the Michigan State Fair live up to its opportunities, we want to see it continue under the management of Mr. Dickinson and we cannot believe but what the airing of this midway matter, with the hope of bringing fourth the facts even though they establish its necessity as a profit-producer, will be of genuine benefit.

Alcohol from Potatoes

THE Washtenaw Post says the Business Farmer is mistaken when it claims there are too many potatoes. The problem is not one of regulation, but of utilization, says our critic. "The real fact is," claims the Post writer, "there hasn't been a single potato more raised than could be profitably used if the farmers knew their business, which consists not only in producing potatoes, but in selling them. Not selling them in the form of potatoes, but in the form of alcohol. * * * No, there are not too many potatoes; there is only an absence of common sense on the part of the farmers, in dealing with the problem of an over-supply but which really does not exist."

This editor has suggested nothing new. As a matter of fact the United States government and many individuals—including Henry Ford, have conducted numerous experiments in the hopes of demonstrating that alcohol can be profitably extracted from potatoes. There has never been any question about the possibility of getting alcohol from potatoes, but there has been and still is a good deal of question about the practicability of the operation. For unless it can be done at a profit the scheme is valueless. One might as well suggest that the surplus be sold to the inhabitants of Mars. It is one thing to suggest what the farmers ought to do and another how to do it .

NOTICE TO SUBSCRIBERS.

Rather than curtail departments and print incomplete issues, as some farm papers have been forced to do, we have preferred to issue The Michigan Business Farmer, every-other-week temporarily.

Each issue missed has been credited to the subscriber, so that in the end no one will lose a single issue for which he has paid. We respectfully ask your patience and thank you for your loyalty to

"The Only Farm Weekly Owned and Edited in Michigan!"

At the present value of fuel alcohol not more than 10 or 15 cents can be paid for a bushel of potatoes to be thus utilized. In fact experiments conducted to date give us no reason to expect that the common table variety of potato will ever prove a profitable source of commercial alcohol. Several years ago,—it is said, Henry Ford imported from Germany a larger and coarser variety of potato from which he hoped to secure alcohol in paying quantities. but his failure to do so up to the present time is impressive testimony of the difficulties to be overcome.

It is entirely possible that the United States may some day consume in one form or another all the potatoes which the farmers can raise but that time is not yet. If the farmers are due for any criticism it is because they were so short sighted as to plant so many potatoes and not because they do not know how to market the crop at a profit.

The Tariff is in Effect

THE Fordney-McCumber tariff bill has been signed by the President and is this minute in effect, whether or not you have as yet felt its effect in bringing you greater profits on what you sell or making what you buy cost more. The tariff bill, altho avowedly a Republican measure, was attacked by many progressive members of that party who might have hailed it a few years ago as a "bulwork af protection for our infant industries." But in the year of Our Lord nineteen hundred and twenty-two it praises have a hollow sound.

The infant industries of a few years back are some of the mightiest trusts of the present day. They need the protection of the government about as badly as a pugilist needs a nursing bottle. Anyway, the Fordney-McCumber bill adds a few more tiers to the wall of protection around them to make sure that no competing Europeean product may ever clmb over to the American consumer.

Much has been said of the "recognition" which the bill gives to agriculture but as was pointed out in these columns when the bill was first under discussion, this recognition is more apparent than real. During the few months that have elapsed since the introduction of the bill the thinking men in the agricultural field have come to realize that except in a very few cases the tariff on agricultural products will prove of no value whatever to the farmer. No less a person than Dr. Friday of the M. A. C., speaking before the potato growers at Cadillac, pointed out the fallacy of expecting a benefit from a tariff on products of which the United State produce a surplus.

Michigan Crops In Lead

IT is encouraging to note how the condition of Michigan crops has surpassed those of nearly all other states for every month of the year. The September crop report shows Michigan outdistanced by only four states, two only of which may rightly be termed agricultural. Farmers can stand poor crops when prices are high, but poor crops and poor prices are a combination which will put a mortgage on most any farm. With good crops and in easy reach of the big consuming centers the farmers of Michigan are better able to withstand an era of low prices than are the farmers of almost any other state.

How About The Wood Lot?

POLITICS may be uncertain, but the high coal prices we predicted when the miners of the country were fishing this summer, are here. Sometime ago we conducted a survey among the readers of this weekly, which disclosed the fact that 82 per cent of our readers have wood-lots, averaging 27 acres in size.

What the Neighbors Say

WALL STREET AND THE FARMER

IN an article recently published in the Dearborn Independent, a writer says: "The business farmer is the backbone of civilization."

Gideon was thrashing near the wine press in the vineyard to keep the grain hid from the Midenites who lay in the valley to pounce upon any grain harvested by the Isrealites.

The present day farmer has no hiding place. He threshes his grain. The stock exchange fixes the price and it is "take or leave it," and in too many instances he has to "take it" for he has immediate obligations to meet.

There is a bird known as the "Boob" that is an industrious fisher, there is another bird, the frigate, that is a pirate, who never fishes, but when the "boob" comes in with his pouch loaded with fish the frigate bird pounces upon him and makes him disgorge and he returns home as empty as he went out.

Likewise the farmer produces his grain and the pirates in Wall Street and elsewhere pounce upon him and "eat 'em up" and he frequently comes out at the end of the horn as empty as when he started out at the first of the season.

What's the remedy? Destroy the power of the pirate by letting the government own and control the currency. By some people it may be denied that we have a private owned and controlled currency but the fact remains.

There are some signs of a breaking up along political lines. The nominations that have been made to date. The fusion of parties in New York and other surface indications. Labor is a sleeping giant that may roll over, rub its eyes, shake itself and set up and take notice or cause the candidates to take notice.

Ford has opened the eyes of the industrial and railroad world and demonstrated that labor can be paid living wages.

The chief trouble with corporations is that the "overhead" absorbs the earnings and if there is anything left labor can have it.—T. E. T., Oakland County, Mich.

STRIKES AS THE FARMER STRIKES THEM

THE farmer is more of a laborer than a capitalist, so he does not look at strikes with the eye of a capitalist. He believes in the organization of the laborers in a common cause. He has some organizations himself and is now trying to perfect others. He believes that an important effort of class organization should be to get fair pay for the labor of its members, but he does not believe that should be the only effort. An organization in the eyes of the farmer is not a success unless it makes of its members better workers and better citizens, as well as gets more money for them. The canning club emblem suits him and his organizations. He would have his farmers' club, Farm Bureau or other farm organization train the head, the heart and the hand. He would organize to eliminate waste and in that way would help the consumer as well as himself.

When it comes to the walk-out the farmers emphatically does not believe in that. He believes in planting the crop to fit the market, but not in starving a world to get exorbitant prices. He accents his task as the producer of food and would not organize to stop production to force his point on the rest of the country. He will try the best he can to sell what he grows at a profit, but he who has not the heart to let the old cast-off horse starve or to shoot him and end the feed bill will not use the throttle hold to gain his point. He will not try to get what he thinks he ought to have from the consumer by stopping production and causing misery and starvation among women and children.

Of course he will plan, organize, and try as best he can by up-to-date methods to better his conditions. He believes that he is working his way to a fairer equalization of the burden of feeding the world. He has done it at too great a sacrifice to himself and family, but he will not walk out nor make threats to gain his point. Education and the elimination of unnecessary cost of delivering farm products to consumers are the main lines of action. Of course, planning the crop of the country to fit the probable demand and systematic marketing will enter in, but this will hurt the food speculator and not the consumer.

He does not intend to strike and believes that no body of workers have the moral right to walk out and bring suffering on a whole people. He has no thought of affiliating with the labor organizations and recent actions of some of the unions force the conviction that his ideals and the ideals of the members and leaders of those unions are very far apart.—L. R. Neel, Tennesee.

DOES TARIFF INCREASE CLOTHING COST?

EDITOR:—Well, the tariff has been passed, signed and now the great American people can shoulder their load. Did you read what the head of the wool growers said? Listen:—

"The charge that the proposed duty will add $5 to the retail cost of a suit of clothes is absurd. In the first place, the duty will apply to considerably less than half of the domestic consumption of clothing wools, for in 1921, 262,000,000 pounds were imported as compared with a domestic production of 302,000,000 pounds. Furthermore, in practice the price of domestic wool is never equal to the price of the foreign wools plus the fundamental duty.

Secondly, the average amount of grease wool in a suit of clothes is only 8 pounds. Taking an average and fair general estimate of a 50 per cent shrinkage of the wool, the average suit of clothes contains only about four pounds of wool, which at the duty of 33 cents, would add an outside maximum of $1.33 to the suit of clothes. The fairer figure which we are willing to admit would be possibly as much as $1 a suit that might be added to the retail cost of a suit of clothes by the wool tariff."

Now, watch carefully and you will see the clothing merchants start pulling the $5 out of the "dere publik" all right. How much advantage will the wool growers of Michigan actually get. We shall see what we shall see.—E. B. K., Montcalm County.

SHOULD MAKE IT UP TO SOLDIERS

All our soldiers should have full compensation for their time and risk in the World War. Those who were disabled should have a substantial pension for life. Thousands of the boys came home believing their jobs were waiting for them as had been promised. Only a very few found it so.

Why don't America citizens stand together for the betterment of home and nation and quit whining about the folks across the pond.—W. C. Anderson, Green Forest.

WHEAT PRICES AND MILL PRODUCTS

Who gets the cream? I sold my wheat for $1.03 a bushel I am paying $2 a hundred pounds for shorts, $1.85 a hundred pounds for bran and $1.10 for 24 pounds of flour, grown and milled right here. Is that not as much of a crime as bootlegging?

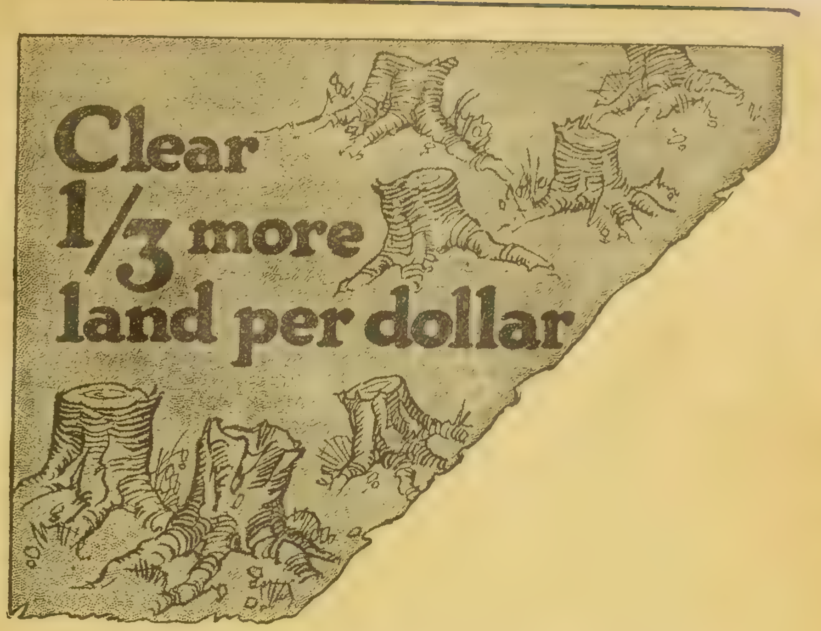
We are paying our attorneys big salaries. They run their legs off after bootleggers, yet leave the big corporations unmolested.— H. G. Myers, Morehouse, Mich.

SOMETHING WORSE

Once a friend of Mark Twain's was conversing with him regarding a terrible affliction of a person known to them both. The friend said,

"Can you imagine anything worse than having diphtheria and scarlet fever at the same time?"

"Yes," replied Mark; "I can easily imagine some things worse than that —for instance, rheumatism and St. Vitus dance."—Everybody's Magazine.


Clear 1/3 more land per dollar

DUMORITE is the *cheapest* of all farm dynamites—it does not give you a headache from handling it......*and,* in addition, it is non-freezing. You can use it right on into winter-time.

Dumorite has approximately the same strength as 40% dynamite, stick for stick, and shoots with the slow heaving action of 20%. A box of 135 to 140 sticks of Dumorite costs the same as 100 sticks of 40%—one-third more dynamite per dollar.

Send for 105-page Farmers' Handbook of Explosives. It's free and gives complete instructions for using dynamite on the farm.

E. I. DU PONT DE NEMOURS & CO., Inc.

McCormick Bldg.,
Chicago, Ill.

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NON-HEADACHE DU PONT NON-FREEZING

DUMORITE

BUSINESS FARMERS' EXCHANGE

10c A WORD PER ISSUE—Cash should accompany all orders. Count as one word each initial and each group of figures, both in body of ad and in address. Copy must be in our hands before Saturday for issue dated following week. The Business Farmer Adv. Dept., Mt. Clemens, Michigan.

CORD-WOOD SAW FRAMES

BUZZ SAW FRAMES, BLADES, MANDRELS, belting, pullies, wood-working machinery, etc., of every description. Low prices, prompt shipments. Catalogue free. Write GEO. M. WETTSCHURACK, La Fayette, Indiana.

TOBACCO

NATURAL LEAF TOBACCO—CHEWING, 5 pounds, $1.75; 15 pounds, $4.00. Smoking, 5 pounds, $1.25; 15 pounds $3.00. Send no money, pay when received. FARMERS' TOBACCO ASSOCIATION, Paducah, Ky.

KENTUCKY TOBACCO, 3-YEAR-OLD LEAF. Don't send a penny pay for tobacco and postage when received. Extra fine, chewing 10 lbs., $3; smoking 10 lbs., $2.50; medium smoking 10 lbs. $1.25 FARMERS' UNION, Hawesville, Ky.

TOBACCO, KENTUCKY'S NATURAL LEAF, Mild, Mellow smoking 10 lbs. $2.25; Hand selected chewing 3 lbs. $1.00. Free receipt for preparing. WALDROP BROTHERS, Murray, Ky.

NATURAL LEAF TOBACCO. CHEWING 5 pounds $1.75; 10 pounds $3. Smoking. 5 pounds $1.25; 10 pounds $2.00. Send no money. Pay when received. TOBACCO GROWERS' UNION, Paducah, Ky.

TOBACCO—KENTUCKY'S PRIDE. EXTRA fine chewing, 10 lb., $3.00; smoking 10 lb., $2.00; 20 lb., $3.50 FARMERS' CLUB, Mayfeld, Ky.

FREE TOBACCO—WRITE FOR SAMPLE OF Kentucky's best smoking tobacco. HAWESVILLE TOBACCO, CO., Hawesville, Ky.

MISCELLANEOUS

GENERAL

BARREL LOTS SLIGHTLY DAMAGED crockery, hotel chinaware, cookingware, aluminumware, etc. Shipped direct from factory to consumer. Write for particulars. E. SWASEY & CO., Portland, Maine.

LET US TAN YOUR HIDE—COW AND Horse hides for fur coats and Robes. Cow and Steer hides into Harness or Sole Leather. Catalog on request. We repair and remodel worn furs; estimates furnished. THE CROSBY FRISIAN FUR CO., Rochester, N. Y.

SAVE MONEY. BUY SILVERFOAM WASHING compound direct from manufacturer in bulk, absolutely softens water, washes clothes without rubbing. Women throw away washboards. Write quick for free package. SILVERFOAM LABORATORIES. 8746 Gratiot Ave., Detroit Mich.

SALESMAN—ARE YOU LOOKING FOR A product to sell to farmers? Every farmer needs our product. It has a large repeat business. No investment required. No collections to make. V. SMITH CO., Portland, Ind.

STANWAR AUTOMATIC FRESH WATER System. No tank required; 300 to 600 gallons hourly guaranteed. Write for information. STANWAR PUMP CO., Imperial Bldg., Chicago.

WANTED—TO GET IN CORRESPONDENCE with party dealing in farm and city property in Illinois, Ohio, Indiana, and Michigan. Write or telegraph FRANK B. RAY, Merrill, Mich.

SOLE LEATHER—5 LBS. PACKAGE FINE grade oak strips $2.85 postpaid. COCHRAN TANNING CO., Greenville, Mich.

FOR SALE—7,200 EGG CANDEE INCUBATOR. Good condition, $800. TYRONE POULTRY FARM, Fenton, Mich.

WANTED—MARRIED MAN WITHOUT children to work on farm. E. JONES, Custer, Mich., R. 2.

ONE KALAMAZOO SILO FILLER NEARLY new, size 14. Only filled 18 silos, price $200.00. HAROLD JORS, Fife Lake, Mich.

HOUNDS, ALL KINDS, BEAGLES, AIREDALES, Rat dogs. Trained dogs on trial. Pups on approval. PETE SLATER, Oconee, Ill.

$300 TAKES NEW ALLIS CHALMERS 10-18 tractor. E. E. MEYER, Lawrence, Mich.

MICHIGAN BUSINESS FARMER
TELL YOUR FRIENDS ABOUT IT

The Farm Home
A Department for the Women

Edited by MRS. GRACE NELLIS JENN

SELF-MASTERY

SELF Mastery, thus auto-suggestion, by Emile Cone, it tells how to cure yourself by calling in the sub-conscious mind as the doctor. The cure-all is very simple, it is just this formula, repeated twenty times each night, aloud as you are drifting off to sleep. "Every day in every way, I am getting better and better," or "Every day in every way, thru God's help, I am getting better."

It is his theory that the sub-conscious mind which governs all our organs, processes of digestion, respiration and circulation, which go on while we sleep, can cure us of almost any ill if we direct it to do so.

We have to admit that our other self manages us in many ways and so relieves our conscious self from much detail, for we say, "I will wake up at a quarter to six to-morrow morning," and at that time we wake from a sound slumber, look at the time, it is a quarter to six. Our sub-conscious mind has taken care of the matter for us and is apt to be very accurate. This happened to me just last week. I made up my mind to waken at just seven o'clock on the following morning, when I wakened I looked at my watch and it read, 7:15! "What, now I said you have played me false"! Just then the seven o'clock whistle blew and I found my watch was fifteen minutes fast but my sub-conscious mind registered central standard exactly. In our waking hours our conscious controls our conscious acts but during sleep control is given over to the sub-conscious. On this principle Dr. Cone's plan works, he puts the sub-conscious mind at the business of repair not only of our physical selves but mental and moral as well.

Dr. Cone is a Frenchman and holds his clinics at Nancy, France, where its is said he makes some wonderful cures. This is somewhat along the line of Christian Science and New Thought and is interesting at least. The air is full today of the general principle that we have powers within ourselves that we little dream of. It is well to keep an open mind. You remember we have many miracles before us continually. Radio is just one of a dozen things we would have called impossible a few years ago. I am often reminded of this saying by Charles Austin Bates.—"It is generally the man who doesn't know better who does the things that can't be done. The fool doesn't know that it can't be done, so be goes ahead and does it."

If that is so any one of us may be glad to be in the fool class.

WHO NEXT?

"If a woman will, she will
You may depend on't.
If she won't she won't
And there's an end on't.

I am another farm woman that will not wear long skirts again and several of my friends say the same. I am going to make mine either six, seven or eight inches from the floor, it depends upon the kind of dress. —Miss Althea L. Masters.

A PATRIOTIC DUTY

IF we do not take the time to get out to the poles and vote at the November elections then we are neglecting to perform a very reasonable duty to our Commonwealth and have no right to complain when public matters are not managed to our liking.

Unless you believe (which you will never admit) that you have not good judgement, then go to the polls and use your vote for the best interests of your country which in the end is nothing more nor less than your own selfish interest. Do not think that how you vote does not matter. It does matter, your vote counts just as much as that of the President himself.

"The man or woman who fails to vote this autumn ought to have a white feather pinned on," says Mrs. Maud Wood Park, president of the National League of Women Voters. "Such a man, such a woman, is a slacker. In time of war there are several ways of betraying the country; in time of peace there is one—failure to cast a conscientious vote. Men and women who will not vote are doing all they can do to destroy democracy for no country in which elections are decided by the votes of the minority, no country with a great body of voters too lazy of mind to take part in elections, is anything but a despotism, the rule of the indifferent many by the selfish few.

CARE FOR THE EARS

IT is extremely dangerous for a mother to use any hard object with which to clean children's ears, such as a tooth-pick or hair-pin. To remove wax use a little warm water and wash the ears very gently. It may not be generally known that any heavy oil as hen's or goose oil is not safe, for it mats the fine hairs which are in the ears for a good purpose and makes them ineffective. A little glycerine may be used for it can be washed out with warm water. Specialists say that the ears are more difficult to treat than almost any organ of the body, even than the eyes, so it behooves us to be careful. Deafness is easy to attain and very hard to cure.

CORRESPONDENCE COLUMN

Any reader having cuttings or combings to be made up into switches may write direct to our subscriber, Mrs. Oscar Adrian Standish, Mich. Rt. 2.

CAN YOU ASSIST?

I am a reader of M. B. F. and like it fine. I have never yet asked the readers for any help, but am now about to do so. Have any of you evso, how were they made? I would be very thankful to any one, that has made them with success, if she would er tried making perfumed beads or any other kind for pin money? If answer through the paper or write me.

In the summer time I raise chickens and garden for pin money, but in the winter time, when one has the most time, I'm undecided what to start at. Some of the readers must have some good pin money ideas for winter, and here's hopeing I hear from some of you please.—Mrs. M. Edict, Norway, Mich.

FRIED CAKES

This fried cake recipe has been taken from the Bakers recipe for a smaller batch. It makes between four and five dozens. They are just fine. The secret of good fried cakes is to have your grease real hot so the dough will not soak the grease.

1 cup sugar, 2 eggs, 1 teaspoon butter, 1-2 teaspoon salt, 2 tps. baking powder, 3 cups flour. Milk enough to wet the dough, about 2 cups, nutmeg seasoning.

CANNING TOMATOES

Since I am a farmer's wife and enjoy the farm paper, I will send in a recipe for canning tomatoes when ripe.

As a rule they are hard to keep for—usually they turn, sour even if they do not work. Canned in my way they will be as nice as if they have been scalded, peeled and cut in were bought at the store. This recipe is tried and true.

Take enough tomatoes so there will be about six quarts after they two. Put on stove and add 1 tps. of baking-soda, this will raise a skum, skim it off and boil until they become clear and the skum does not raise. Then can while boiling, use new rubbers and caps, let them stand a while and tighten the caps, doing this several times while they are still hot. Hoping this will be of help to some one who likes tomatoes as well as I do.—M. T. S., Onaway, Mich.

HELP. PLEASE

I have an oxadized brass bed. It has become tarnished and I wish to ask through your Column where I can get it refinished, or if there is a way I can clean it myself.—Mrs. John R. Kissinger.

RECEIPE WANTED

Will some one please send me, through the columns of the Michigan Business Farmer a recipe for a plain old fashioned English boiled pudding?—L. M. S., Charlevoix County.

DUTCH CAKE

When Mrs. K. B. asked for a recipe for Dutch Cake (Apfel Kuchen), I thought I would send my recipe at once but I neglected to do so, until now. I see three sisters have contributed, but I believe they will relish the flavor of the apples. If I am not too late, enclosed you will find the recipe as follows:

Take 1 pint of bread sponge, add a quarter of a teaspoon of salt, Have 1-4 cup butter and 1-2 cup sugar creamed, add to sponge. Then add 1 well beaten egg, flour, to make soft dough. Knead lightly, let rise. When light roll 1-2 inch thick and place in two well greased shallow pans. Brush with butter, sprinkle with sugar. Pare apples and cut into eighths (if apples are too large, cut smaller) and press into the dough, sprinkle with cinnamon. Cover and let rise about 1-2 hour. Bake 20 minutes. Keep covered with pan first 10 or 15 minutes, in order that the apples may be thoroughly cooked.

I prefer the Northern Spy apple, but any tart apple will do.—Mrs. Stanley Green.

JELLEY-ROLLS

I am a reader of the Michigan Business Farmer and like it very well, I also like the Woman's Page. I noticed that one of the readers wanted a recipe for a jelly-roll, so I will send mine.

3 eggs, 1 cup sugar, 1tbls. water; 1 rounding tps. baking powder, 1 tbls. melted butter, 1 pinch salt. Separate eggs. Beat whites until stiff. Add the sugar to the yolks and butter and beat light then add the hot water and one full cup of flour add whites last, spread a cloth with powdered sugar and salt.

Filling

One cup of raisins ground. Boil one cup of sugar with a little water to make a syrup, add raisins and beat in white of one egg, add pinch of salt.

When cold potatoes boiled with jackets on are hard to peel add boiling water to them.

Vaseline applied every night to corns will cure them.— P. Y. K., Harbor Beach, Mich.

HOME-SPUN

A little turpentine added to starch will prevent the iron from sticking to the clothes.

Scorched spots on clothing may be removed by applying a thick paste made of ordinary starch. Let the paste dry on. More than one application may be necessary.

Turpentine will remove paint stains.

Cold water removes tea-stains but use boiling water for coffee stains.

Rust stains may be removed by soaking in boiling rhubard juice.

For iron rust: Apply salt and lemon juice to the spots and leave in the sunshine until the rust disappears. In obstinate cases two or three such treatments are necessary.

Peach stains: Rub glycerine over the spots two or three days before laundering and they will disappear in the wash.

Most fruit stains: Stretch the material over a bowl with the spot

IF I CAN BE BY HER

I D-D-D-Don't c-c-c-are how the r-r-r-obin sings
[illegible] how the r-r-r-ooster f-f-flaps his wings,
Er whether 't sh-sh-shines, er whether 't pours,
Er how high up the eagle s-s-soars,
If I can b-b-b-be by her.

I don't care if the p-p-p-people s-say,
'At I'm weak-minded every w-way,
An' n-n-never had no cuh-common sense,
I'd c-c-cuh-climb the highest p-picket fence,
If I could b-b-b-be by her.

If I can be by h-h-her, I'll s-s-swim
The r-r-rest of life thro th-th-thick and thin:
I'll throw my overcoat away,
An' s-s-s-stand pat on the c-c-c-coldest day,
If I can b-b-b-be by her.

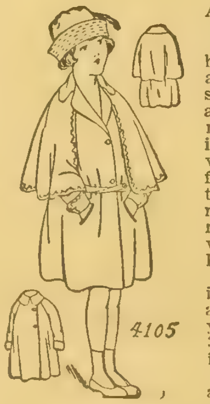
You s-s-see sh-sh-she weighs an awful pile,
B-b-b-but I d-d-d-don't care—
sh-she's just my style,
An' any f-f-fool could p-p-p-plainly see
She'd look well b-b-b-by the side of me;
If I could b-b-b-be by her.

I b-b-b-braced right up, and had the s-s-s-sand
To ask 'er f-f-father f-f-for 'er hand;
He said: "Wh-Wh-What p-p-prospects have you got?"
I said: I gu-gu-guess I've got a lot,
If I can b-b-b-ee by her."

It's all arranged f-f-for Christmas Day,
Fer then we're going to r-r-r-run away,
An then s-s-some th-th-thing that cu-cu-couldn't be
At all b-b-before will then, you s-s-see,
B-b-b-because I'll b-b-b-be by her.

AIDS TO GOOD DRESSING

For Simplicity, Service and Style

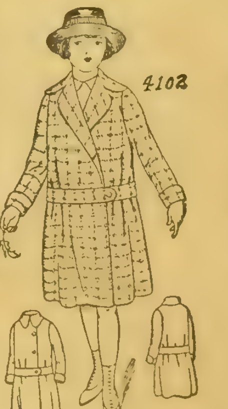


A Stylish Coat for the Growing Girl

4105. Broad cloth, homespun, velours, and duvetyn also silk and pile fabrics are suitable for this model. The sleeve, in raglan style, is very comfortable.The fronts may be buttoned close to the neck with collar rolled high, or, open with the collar rolled low.

The Pattern is cut in 4 Sizes: 6, 8. 10, and 12 years. A 10 year size requires 3 3-4 yards of 44 inch material.

Pattern mailed to any address on receipt of 12c in silver or stamps.

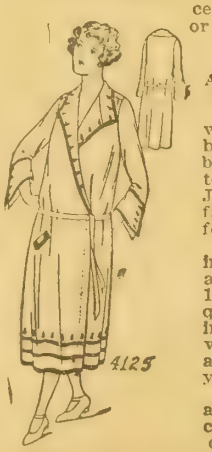


A Comfortable Coat

4102. A Good feature of this style is the convertible collar. It may be rolled high with the coat buttoned close to the neck, or rolled low with the coat fronts open. This is a very popular model, good for all cloakings.

The Pattern is cut in 5 Sizes: 6, 8, 10, 12, and 14 years. A 10 year size requires 4 yards of 44 inch material.

Pattern mailed to any address on receipt of 12c in silver or stamps.

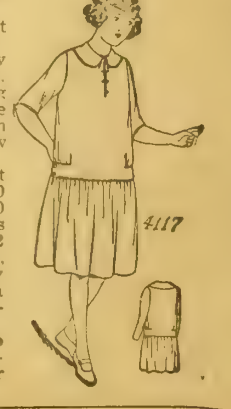


A Splendid Model in Wrap Style

4125. Stylish and very attractive in blue serge with black braid and buttons for trimming. Jersey and knitted fabrics are good also for this design.

The Pattern is cut in 3 Sizes: 16, 18 and 20 years. An 18 year size requires 4 yards of 54 inch material. The width of the dress at the foot is 2 3-8 yards.

Pattern mailed to any adress on receipt of 12c in silver or stamps.



A Simple Frock for a Young Miss

4117. Smart belt extensions on dress, effected by slashes at the sides, and an outstanding style feature. The sleeve may be in wrist or elbow length.

The Pattern is cut in 4 Sizes: 6, 8, 10 and 12 years. A 10 year size requires 3 1-2 yards of 32 inch material. Serge, crepe knit and jersey weaves, also taffeta are attractive materials for this style.

Pattern mailed to any address on receipt of 12c in silver or stamps.

in the center. Pour boiling water through the stain.

Fleas: If a room becomes infested with fleas, the carpet or rugs should be taken out of doors, cleaned; and sprayed with benzine or gasoline. The floor should be washed with soapsuds, secial attention being given to cracks between boards and along baseboards, and rubbed or sprayed with gasoline, benzine, or kerosene.

Ink sots: Remove from white goods by immersing in eroxide, then rinsing three or more times in clear water before drying. The chemical action of soap on the peroxide will eatholes through the fabric.

These spots on colored goods will yield to an application of equal parts of citric acid and cream of tartar melted on a plate. Mix well, rub over the spots and wash the goods thoroughly after they disappear.

Mildew: Rub common soap on the spots, then work in all the starch the soap will absorb.

Blood stains: Soap at once in cold water; the stains will come out in the washing and drying in the sunshine.

Grass stains: Touch the spots with alcohol before washing.

Pitch stains: Grease with lard then use soap and cold water. Turpentine is also good for these.

Wagon or automobile grease stains: Wash the spots well with kerosene before laundering, the sooner this is applied to fresh spots the quicker it works.

Cocoa stains: Wash in cold water first, then pour boiling water through the spots.

FORGET-ME-NOT EDGING

This is a very pretty trimming for curtains, dresser scarfs, pillow slips, runners and table linen of all kinds. Number 30 hard twist crochet cotton worked with a steel hook No. 9 looks especially well.

For the flower, chain (ch) 4, make 2 double trebles (dt) in first stitch and draw out the loop on the hook a little longer because the next ch forms the center of the flower. Ch 4, (4dt, ch 3, (4 dt, ch 3, st st) in center, repeat from * once, then ch 3, 2 dt in center, sl st in starting point to complete flower. For each following flower: * ch 16, 2 dt in 4th ch from hoop (center for new flower) ch 7, take hook from the work and insert in fourth petal of flower just made, draw dropped stitch through, ch 7, sl st in top of last dt, ch 3, sl st) in center, finish flower as before and repeat from * until the desired length has been reached. After the last flower ch 1, 14 d over each chain.

HEALTH HINTS

OR

HOW TO CURE YOURSELF

BY

DR. T. N. ROGERS

HAIR UNDER ARMS

What will remove hair from the arms?—Reader, Merrill, Mich.

Is this a general covering of hair all over the arms or the apilla? Peroxide applied freely is a safe appication. It bleaches the hair and in time destroys the roots.

BED WETTING

Please give remedy to cure a child of bed wetting.—"Mother"

Pin worms often causes it. Treatment: Give very little if anything to drink in the evening. Elevate the foot of the bed after the children go to sleep. Putting it on a chair will do. Give one teaspoonful of the following mixture. Get from your druggist Tinct. Belladonna,, one teaspoonful; Tinct. Rhus. Tox., one teaspoonful; Listria Hydrangae, four ounces. Impress upon the child this will cure and that they will not wet the bet but will wake up. Suggestion counts.

WORMS

What will cure a child of worms?—Subscriber.

Pin worms look like small pieces of white thread and some times are very troublesome. Give turpentine as for round worms and inject into the bowels soapsuds with turpentine, two teaspoonsful to a quart Better inject about 3 teaspoonfuls and have it retained for half an hour 3 times a day. Infusion of quassia chips will answer the same purpose.

CORRECTION FROM LAST ISSUE

Acetanilide 4 drams should read drams 10.

Uncle Rube Spinach SayS

THANKS RHODA

MY dear Rhoda:—Your recent letter in M. B. T. was sure a ripsnorter an' I want to thank you for the suggestions—No I ain't read "Behind the Mirror"—in fact I've never read much of any thing, you see I've been pretty busy most of the time an' most of my knowledge I've got in barber shops, pool rooms an' blind pigs. Wuz you ever in a blind pig or a barber shop Rhoda? You know the knowledge dispensed there is just wonderful! 'Course I've read some books an' the works of great writers—for instance Hosttetters almanac an' Lydia E. Pinkham's complete works an' so you see my dear Rhoda I know there's somethin' wrong with our government but I cant b'lieve its our pres'dent—my shucks isn't he doin' 'bout all any man can do? Gawf is the great National game an' ain't he doin' his best? An' jest think how many times our pres'dent has to change his pants so's to have 'em white an' nice for the next pic'tur, an' then there's Laddie Boy—don't you see Rhoda how he must be looked after 'cause his own pict'ur has to be took every few days so's the papers can let the dear people know how President Harding an' Laddie Boy looks like. Mr. Pres'dent Harding would like more power—really an' truly he needs it Rhoda. You see the Mayflowers or whatever his yachts name is don't go fast enough to take him as far away from his job as he wants to go so he's goin' to ask for more power so's he can get away from all the trouble an' turmoil of his terrible position.

There's lots of things Rhoda in our political atmosphere that any pres'dent wants to get away from. 'Course Pres'dent Harding could prob'ly have settled things up long ago but what wuz the hurry? It wuz warm an' comfortable when the miners wuz out—nobody really needed coal there an' the gawfin wuz real good an' out on the gawf grounds a president's picture looks purty scrumptious an' so he let the strike an' the strikers bother him not, at all. Hostetters wonderful book of knowledge sez—least I've seen an' heard it some where—"work for the man that gives you a job." My dear Rhoda, if, as it has been openly intimated, Wall street gave Warren Gamalier Harding his job why shouldn't the said W. G. H. work for Wall street.

For the nice things you said about me Rhoda I thank you. I am glad there is someone that seems willin' to set me right any ol' time. I ain't goin' to freeze 'cause I ain't a married man any more an' I don't have to buy coal nor worry', bout it—I'm free from that kind of worry an' that's why I talk about our national gawf player. Nero, we're told, fiddled while Rome burned, well our pres'dent with a freshly laundered conscience, plays gawf while the profiteers, operators an' labor combinations fight about—well nobody seems to know what. Any way, my dear Rhoda you must admit that President Harding plays a nice game of gawf an' this bein' true what else matters? Cordially Yours,—UNCLE RUBE.

OUR NEXT SENATOR'S AGE

Will you please tell me the difference in ages between Mr. Townsend and Mr. Ferris? I have heard it argued that Woodbridge N. Ferris is too old to serve out his term as Senator, if elected.—J. U. H., Huron Co.

Senator Charles E. Townsend was born August, 15, 1856 and would therefore be 66 years old. Ex-Governor Woodbridge N. Ferris was born January 6, 1853 and is therefore 69 years old. Neither of these gentlemen are too old to serve their state actively until the end of their six year term as there are several members of the senate near or past eighty years of age, some of whom, are running for re-election on both party tickets this fall.—Editor.

THE SIGN ROWENA OF QUALITY

Lily White

"The Flour the Best Cooks Use"

HOW TO MAKE PARKER HOUSE ROLLS

2 cups scalded milk, 3 tablespoons butter, 2 tablespoons sugar, 1 teaspoon salt, 1 yeast cake dissolved in ¼ cup lukewarm water, Lily White Flour. Add butter, sugar, and salt to milk; when lukewarm, add dissolved yeast cake and three cups of flour. Beat thoroughly, cover, and let rise until light; cut down, and add enough flour to knead (it will take about two and one-half cups). Let rise again, toss on slightly floured board, knead, pat, and roll out to one-third inch thickness. Shape with biscuit-cutter, first dipped in flour. Dip the handle of a case knife in flour, and with it make a crease through the middle of each piece; brush over one-half of each piece with melted butter, fold, and press edges together. Place in greased pan, one inch apart, cover, let rise, and bake in hot oven twelve to fifteen minutes.

Look for the ROWENA trade-mark on the sack

Is Guaranteed To You

So sure are we that LILY WHITE is the best flour you can buy for all around baking that we guarantee every sack to be the best flour you ever used.

LILY WHITE has been used constantly for over three generations, and has never been surpassed for baking wonderful breads. Order a guaranteed sack today.

Why you should use Lily White

REASON No. 3

Because Your Baking Triumphs Will Surprise and Delight You.

Good cooks know LILY WHITE FLOUR is dependable. Even the less experienced soon learn to give LILY WHITE due credit for their baking triumphs. LILY WHITE has the right color and an excellent flavor, good balance and volume, and the uniform granulation insures good-looking baking.

VALLEY CITY MILLING COMPANY
GRAND RAPIDS, MICHIGAN

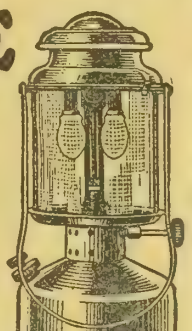
"Millers for Sixty Years"

$1.00 PRIZE FOR YOU!

We will give $1.00 to the woman who receives first prize for the best loaf of bread baked with Lily White Flour at any County or District Fair this fall. Simply write us about your winning.

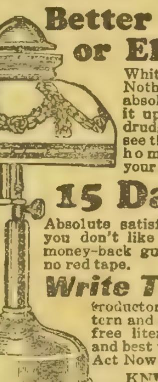
FREE

300 Candle Power Sunray Lantern



As a special introductory offer, a 300 Candle Power SUNRAY Lantern worth $8 50 will be given absolutely Free with the first purchase of a SUNRAY Lamp. Lights up the yard or barn like a search-light. Brighter than sun light—burns 30 hours on a few cents worth of kerosene or gasoline. Lights with match or torch. No wicks to trim—no chimneys—no smoke—no smell. Find out about this great special offer.

Better Than Gas or Electricity



Whitest light ever produced. Nothing to wear—simple—absolutely safe—you can burn it upside down. Get rid of drudgery and poor light—see the SUNRAY—flood your home with light—save your eyes.

No Wicks to Trim

No Smoke

No Smell

15 Days Trial

Absolute satisfaction guaranteed. If you don't like it, send it back. Our money-back guarantee protects you—no red tape.

Write Today Send for special introductory offer on FREE Lantern and agency proposition, also free literature on the cheapest and best way to light the home. Act Now!

KNIGHT LIGHT CO.
Dept. 3308 Chicago, Ill.

TELLER HOSPITAL

For the Treatment of Chronic Diseases by the New Teller Method.

Rheumatism, Neuralgia, Neuritis, Bright's Disease and Diabetes.

OROFICIAL SURGERY

296 S. Gratiot Ave., Mt. Clemens, Mich.

POULTRY RAISERS—TIME TO TONE UP your flocks for winter laying. THOMSTEE EGG TONIC means this. Healthy, busy hens laying more eggs. Send dollar bill today for this proven tonic Receive FREE trial THOMSTEE MICE DESTROYER. DARGON DISTRIBUTING CO., 553 East Hancock St., Detroit, Mich.

CORDS @ ½ COST of FABRICS

CHARLES CORD

Guaranteed 10000 Miles

First quality new cord tires fully backed by our ironclad guarantee for 10,000 miles.

	Tires	Tubes		Tires	Tubes
			32x4½	$19.10	$1.75
30x3	$7 25	$1.10	33x4½	20.15	1.80
30x3½	8.95	1.30	34x4½	20.75	1.85
32x3½	11.50	1.35	35x4	21.95	1.90
31x4	12.75	1.40	36x4½	24.20	2.00
32x4	13.95	1.45	33x5	26.50	2 15
33x4	14.88	1.50	35x5	27.50	2.25
34x4	15.95	1.60	37x5	29.00	2.50

Made in our factory of the best materials money can buy. These are rugged, sturdy Cords that run many miles over their guarantee.

SEND NO MONEY. Write and tell us the size of your tires and how many you want. Shipped C. O. D. Section unwrapped for your inspection. West of Rockies, cash with order—money cheerfully refunded if not satisfied.

CHARLES TIRE CORP., DEPT. 755
2812 WABASH AVE., CHICAGO, ILL.

Cured Her Rheumatism

Knowing from terrible experience the suffering caused by rheumatism, Mrs. J. E. Hurst, who lives at 508 E. Olive St., B-363, Bloomington, Ill., is so thankful at having cured herself that out of pure gratitude she is anxious to tell all other suffers just how to get rid of their torture by a simple way at home.

Mrs. Hurst has nothing to sell. Merely cut out this notice, mail it to her with your own name and address, and she will gladly send you this valuable information entirely free. Write her at once before you forget.

When writing to Advertisers
Please Mention the M. B. F.

SAVE MONEY

By Renewing ALL of your Reading Matter through M.B.F.

WE give here a splendid list of papers and magazines at low rates if taken with the M. B. F. All prices shown include One Years' (new or renewal) subscription to The Michigan Business Farmer. For a longer subscription add $1 for 3 years, or $2 for 5 years. If more than one paper is desired with the M. B. F., deduct $1—The M. B. F. price—from the rate quoted opposite the other paper desired and add the difference to the combination already selected. For example—the combination to include the M. B. F. and the Detroit News is $4.50. If you desire the New York Tri-Weekly World deduct $1.00 from $1.65 quoted opposite "New York World" and add the difference, 65c to $4.50 which makes the price for M. B. F., Detroit News and New York World, $5.15. In this way as many papers and magazines as desired can be ordered, provided they are for the same family and ordered at the same time.

subscribers living where they cannot be served by news dealers, or in towns where the paper has no dealer.

Write us for rates on other publications not included in this list.

(We are not responsible for increases in rates made by other publications.)

DAILIES

Names of other papers	With The M. B. F. Each One Year
Detroit Free Press	$4.50
Detroit News	4.50
Detroit [illegible]	4.50
Grand Rapids Press	4.60
Grand Rapids Herald	4.50
Grand Rapids News	5.00
Lansing Capital News	4.25
Toledo Blade	4.50
Toledo News-Bees	4.50
Toledo Times	3.50
Chicago Herald-Examiner	6.50
Chicago Drovers' Journal	6.00
Jacksnn Citizens' Patriot	4.50
Jackson News	4.50
Battle Creek Enquirer-News	4.50
Battle Creek Moon-Journal	5.00
Saginaw News Courier	5.00
Kalamazoo Gazette	4.50
Flint Journal	5.00
Big Rapids Pioneer	5.00
Port Huron Times-Herald	4.50
Ypsilanti Ypsilantian Press	5.00

WEEKLIES

Kansas City Weekly Journal	1.25
Toledo Blade Weekly	1.50

TRI-WEEKLIES

Atlanta Constitution	2.15
New York World	1.65

MISCELLANEOUS

[illegible]der	1.75
American Fruit Grower	1.25
American Poultry Advocate	1.50
American Sheep Breeder	1.75
American Swineherd	1.75
American Thresherman and Farm Power	1.65
Better Fruit	1.65
Breeder's Gazette	1.50
Chester White Journal	1.70
Everybody's Poultry Magazine	1.40
Fruit Belt	1.35
Gleanings in Bee Culture	1.95
Guernsey Breeder's Journal	2.75
Holstein-Friesian Register	1.85
Hoard's Dairyman	1.75
Horse Review	6.70
Horseman	4.25
Hunter-Trader-Trapper	2.40
Jersey Bulletin	2.60
Market Grower's Journal	2.15
O. K. Poultry Journal	1.30
Poultry Breeder	1.25
Poultry Item	1.65
Poultry Keeper	1.25
Poultry Success	1.70
Poultry Tribune	1.70
Reliable Poultry Journal	1.60
Southern Fruit Grower	1.35
Swine Breeder's Journal	1.35
Tractor & Gas Engine Review	1.75
Trotter and Pacer	3.50

MAGAZINES

Names of other papers	With The M. B. F. Each One Year
Adventure	6.25
Ainslee's	2.70
All Out Doors	3.00
Argosy (All Story Weekly)	4.85
American Boy	2.60
American Cookery	2.15
American Magazine	2.85
American Woman	1.35
Boy's Magazine	1.50
Boy's Life	2.50
Boy's World	1.60
Century Magazine	5.00
Christian Endeavor World	2.90
Christian Herald	2.25
Commoner	1.70
Collier's Weekly	2.75
Current Opinion	4.00
Delineator	2.60
Designer & Woman's Magazine	2.15
Detective Story Magazine	6.40
Etude	2.50
Everybody's Magazine	3.25
Every Child's Magazine	1.75
Forest and Stream	3.70
Garden Magazine	3.00
Gardening	2.85
Gentlewoman	1.10
Girl's oompanion	1.60
Good Stories	1.15
Guide to Nature	2.10
Harpenr's Magazine	4.50
Household Journal	1.25
Illustrated World	3.50
Independent	4.50
Junior Home Magazine	2.75
Judge's Weekly	5.40
Literary Digest	5.00
Little Folks	2.25
McCall's	1.50
McClures Magazine	3.05
Modern Priscilla	2.45
Mother's Magazine	1.15
Motion Picture Magazine	2.85
Motion Picture Classic	2.85
National Sportsman	1.70
Needlecraft	1.25
Outlook	5.50
Outdoor Life	2.65
Outing	4.25
Pathfinder	1.60
People's Favorite	4.50
People's Home Journal	1.75
People's Popular Monthly	1.20
Physical Culture	3.40
Pictorial Review	2.00
Picture Play Magazine	2.70
Popular Magazine	4.50
Popular Science Monthly	3.25
Presbyterian Banner	3.15
Sunset Magazine	2.80
Science and Invention	3.00
Scientific American	4.50
Scribner's Magazine	4.05
Short Stories	5.05
Smith's Magazine	2.70
Student's Art Magazine	1.65
Sunday School Times	2.60
Today's Housewife	1.50
Top Notch Magazine	4.25
Travel	4.05
Violinist	2.50
United Presbyterian	3.35
Western Story Magagzine	6.40
Woman's Home Companion	2.00
Woman's World	1.30
World's Work	4.00
Young People's Weekly	1.85
Youth's Companion	2.90

THE MICHIGAN BUSINESS FARMER, Circulation Department, MT. CLEMENS, MICH.

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The Michigan Business Farmer, Mt. Clemens, Mich.,

Enclosed find$............ in check, money-order or draft for which

renew my subscription to your paper for.............. years and send me the following periodicals for ONE YEAR each:
(Mark those you are renewing with an (R)

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To ....B. F. D. No....

P. O................................State ....

THE EXPERIENCE POOL

Bring your everyday problems in and get the experience of other farmers. Questions addressed to this department are published here and answered by you, our readers, who are graduates of the School of Hard Knocks and who have their diplomas from the College of Experience. If you don't want our editor's advice or an expert's advice, but just plain, everyday business farmers' advice, send in your question here. We will publish one each week. If you can answer the other follow's question, please do so, he may answer one of yours some day! Address Experience Pool, care The Business Farmer, Mt. Clemens, Mich.

CEMENT FENCE POSTS

What experience has some of the subscribers in making cement fence posts?—W. E. S., Michigan.

THRUSH IN FOOT

Clean horse's hoofs. Take one pint of salt, cover with kerosene and then put on horse's hoofs twice daily until cured. —H. S. P.

GETTING RID OF THE PINE STUMPS

The appeal from Mr. B. C., of Kingsley, published in a recent issue, for information on the best and cheapest ways of getting rid of pine stumps on cut-over land had brought forth several interesting replies. Let's have some more of them for cur Experience Pool.—Editor.

TO FRIEND B. O. C.

I HAVE rid some 40 a. g. pine stumps with dynamite but think that where the stumps are thick the Stilyard stump puller is a cheaper way unless you can purchase T. N. T. cheaper than 25c lb. I had good results on clay soil with dynamite but not on sand as it takes nearly twice as much and some times a piece of stump did not come out. Any questions answered cheerfully. —Jas. Dexton, Isabella county.

ANSWERING THE MAIL OF THE STUMP FARMER

I HAVE just been reading in the M. B. F. the wail of the "Stump" farmer and I think he will realize it is some job on 480 acres of land, if they are thick on the land at all. Still if he goes at it right it's not so bad as some jobs after all.

In 1908 I removed on to 80 acres of wild land, not a brush cut on it. I bought one of the best cable stump machines on the market and with the help of one man went to work to clearing the land.

It was in the month of June, we moved on and we did not get any crop in that year, but did raise our potatoes and some corn the second year. It was pretty slow business for a few years trying to stump the land and putting up all buildings one has to have on a farm.

I also worked for neighbors with my stump machine and would get helpback sometimes money which all helped. Now I have my farm all or nearly all stumped. There are not many farmers in this section of the country that are stumped. Have a good 8 room house, barn and feed mill, do custom grinding, sheds and necessary out buildings. If B. O. C., Kingsley, Mich., will write to me I will give him more information.—Frank Seldon.

HOW I RID MY FARM OF STUMPS

I have just read in the M. B. F. what B. O. C. Kingsley, Mich. writes about his troubles with the big pine stumps in his land. Now I have used one of the one-man stump pullers for two years pulling pine and other stumps for other farmers for day wages. I had the K hand power stump puller, manufactured in San Francisco, Cal. I will mention a few advantages of the hand puller, ad if Mr. B. O. C. will send me his full name and a 2 cent stamp I will answer any question he may ask.

The hand power Stump puller can be placed where no horse puller can be worked, because it requires but very little room and it can be worked in wet ground where no horses could work. and can be worked in any position upright and side ways and even upside down where the cable spans over a Slew. I and my boy 16 years of age have pulled pine stump measuring 3 ft. across the top, the machine has power enough to break a 7-8 inch steel cable, but I think it is best to use some dynamite to split the big stumps and then pull the pieces for it is very hard to handle the big stumps after they are pulled. One man can work the puller but two man can do a lot more work. We have pulled from 10 to 25 big stumps a day and smaller ones as many as 50 and over. The stumps pulled were in Oscoda county.—P. B. Movice, Mich.

WHY NOT GROW MORE POTATOES TO THE ACRE?

(Continued from page 4)

Maine grower twice as much to grow potatoes as it does the Michigan grower, although we all know that it doesn't. Let us assume that it cost the Montcalm county grower $46 per acre to raise 92 bushels of potatoes. With potatoes at 80 cents a bushel he breaks even. But if it costs the Aroostook grower twice as much or $92 to grow an acre of potatoes and he raises 252 bushels at 50 cents a bushel he receives 34 cents a bushel more than it cost him to grow them. Therefore, he is making money and as long as he can raise 252 bushels to the acre he will continue to make money with potatoes at 550 cents a bushel, and the Montcalm grower will have to increase his acre-yield or turn to other crops.

There is not a single good reason why the farmers of any of the Michigan counties mentioned or of most of the other counties cannot increase their acre-yield. As a matter of hard fact, they must increase it or go out of the potato game. All indications point to a long era of low potato prices and farmers who cannot raise more than 90 bushels to the acre will have to quit.

At one time the farmers of Montcalm and of Kent counties raised as many bushels to the acre as the farmers of Osecola and Grand Traverse. But that was when their land was newer. The day is coming, unless more scientific methods are adopted, when the farmers of Osceola, Grand Traverse and others of the more northerly counties will drop back into the Montcalm and Kent class and the farmers of these counties will be producing even less than they are today.

Many years ago the farmers of Maine learned the lesson which the farmers of Michigan must some day learn. They exhausted the fertility of the soil just as our farmers in Michigan are doing, and grim necessity forced them to replace some of the fertility which they had taken from the soil. And today, by following scientific methods of conserving and rstoring fertility to the soil, they are prducing far more potatoes to the acre than when their land was virgin.

AS THE JAPANESE DO IT

Listed below are a few of the Japanese sign painters' attempts to solve advertising English. In the Japanese signs are the most sought for virtues of an advertisement—they they attract attention.

"Best resistant wet coat."

"Trunks and bugs."

"Oil for hair and cooking."

"Bes stealing knife."

"Hen and beef met."

"Oxen sold and retailed here."

"Respectable ladies take fits upstairs." (Tailor shop.)

"Kids for brightening the home more than untold gold." (Doll shop.)

"Whale and all his relatives sold here."—Indianapolis News.

NEW LAMP BURNS 94% AIR

Beats Electric or Gas

A new oil lamp that gives an amazingly brilliant, soft, white light, even better than gas or electricity, has been tested by the U. S. Government and 35 leading universities and found to be superior to 10 ordinary oil lamps. It burns without odor, smoke or noise—no pumping up, is simple, clean, safe. Burns 94 per cent air and 6 per cent common kerosene (coal-oil).

The inventor, A. R. Johnson, 609 W. Lake St., Chicago, is offering to send a lamp on 10 days' FREE trial, or even to give one FREE to the first user in each locality who will help him introduce it. Write him today for full particulars. Also ask him to explain how you can get the agency, and without experience or money make $250 to $500 per month. (Adv.)

Current Agricultural News

M. S. F. B. BUYS FEED FOR MEMBERS

MICHIGAN State Farm Bureau members are buying their winter supply of dairy rations through a Co-operative Feed Buying Service organized by the Farm Bureau and which is taking orders through local co-operative associations from September 5 to October 20. The Bureau is purchasing feedstuffs at favorable prices and will deliver them ready mixed in equal monthly shipments during the winter. Members contracting feed are not investing any cash, according to local co-operative associations, but will pay for the feed as it is delivered.

The Farm Bureau Service is on a 25% protein public formula dairy ration developed by the Farm Bureau and called Michigan Farm Bureau Milkmaker. The ration is made up entirely from the milk producers' viewpoint—to get the most money for the least investment in feed. The ration has the approval of the Michigan Agricultural College Dairy Department.

The Farm Bureau's public formula is a new idea in feed marketing. Every bag of the Farm Bureau's feed carries on the regular analysis tag the exact number of pounds of the milk producing ingredients in the feed and shows that the ration carries no filler. This enables the dairyman to tell exactly what he is paying for, says the Farm Bureau.

The Farm Bureau is buying M. F. B. Milkmaker ingredients in quantity at times of low seasonal prices as determined by records of previous years and when in the opinion of the best postetd experts the markets look right.

The State Farm Bureau is offering feed buying service to members on the basis that farmers and their co-operative associations will form local Feed Buying Service Units on their winter dairy feed needs and will sign contracts to buy definite quantities of the Farm Bureeau feed for monthly shipment from October 20 to the following March 20.

Headquarters of Feed Buying Service are at the State Farm Bureau at Lansing. The local Feed Buying service campaign opened September 5 and closes October 20.

SPUD GROWERS WANT LOWER CATTLE FREIGHT RATES

CONTINUATION of efforts to obtain lower freight rates on potatoes to Cincinnati and other points in that territory was discussed at the annual meeting of the Michigan Potato Shippers' association, Sept. 23rd.

Accordng to shippers, Wisconsin has an advantage of five cents in freight rates for a longer haul and this results in keeping Michigan potatoes out of those markets in a considerable degree.

The new tariff, it was stated, adds one cent per 100 yards to cost of sacking material, which ultimately will be absorbed by the farmer. The matter of the freight rates was heard at an interstate Commerce Commission hearing here last February but potato shippers said that while a decision favorable to Michigan was intimated, no action has yet been taken to their knowledge.

NORWEGIAN CO-OPERATORS REPORT REMARKABLE PROGRESS

DESPITE the severe industrial depressions in Northern Europe, the achievements of the Norwegian Cooperative movement during the past year, reported at its recent National Cooperative Congress, indicate a remarkable expansion both of cooperative banking and consumers' cooperative stores.

The two national cooperative bodies in Norway, the Samvirkecentralen, composed of agricultural cooperatives, and the Norges Kooperative Landsforening, founded by the city workers and consumers, now cover over 3,000 local cooperatives with a membership in excess of 130,000 heads of families, reaching nearly half the entire population of the country.

The financial report of the Norwegian Cooperative Union's Wholesale Society shows annual business in excess of 21,000,000 crowns, backed by a reserve fund of half a million crowns and a banking department with deposits in excess of 3,000,000 crowns.

In addition to this large wholesale business, the Norwegian cooperators' retail societies report an annual turnover of 110,000,000 crowns, on which a saving of 12,000,000 crowns, or 11.37 per cent was made for the cooperators.

In addition to their stores and banks, the Norsk cooperators conduct a thriving insurance company, Samvirke, founded in January, 1922. It writes fire, marinefi burglary and liability insurance, and has opened agencies in connection with the cooperative banks throughout Norway. The cooperators also own 71 factories, making their own boots and shoes, meat products, flour, butter, clothing, and knit goods.

Cooperation is a business proposition, but it is something more,—it is a moral ideal asserting the brother hood of man and daring to make a practical application of this ideal in the business world.

CREAMERY MANAGERS ARRESTED FOR LAW VIOLATIONS

WE wonder how many farmers know that there is a law on the Michigan statute books which requires all creameries to pasturize all the skim milk and other milk products sent back to the farmers to be fed to stock. Well, there is. And recently the managers of three Ottawa county creameries were hauled into court for failing to conform to the statute. All three admitted the offense and two of them paid fines and costs, but the third appealed. He based his appeal on the argument that the law is a discrimanation between the creameries that fail to paseutrize their milk and the indvidual who separates his own milk and feeds it to his own cattle. The latter is not required to pasteurize the skim milk and the creamery manager thinks that is discrimination and will test out the law. The creamery manager furthemore claims that pasteurized skim milk rots and that it poisons the cattle.

The purpose of the law? Presumably to help curb the spread of tuberculosis among Michigan cattle. If you have a grievance against your local creamery manager and he's selling skim milk without being pasteurized, here's a way to get even. Have him arrested.

WATER SUPPLY FOR THE KITCHEN

AT a cost of a very few dollars an ingenious arrangement for furnishing running water to the kitchen of the most humble home, may be provided. Three feet above the floor, on the outside of the building, erect a platform against the wall, and on this set a large barrel. It is best to place the barrel where rain water from the down spout can be turned into it. In addition to this supply, provision should be made for filling the barrel by means of a hose attached to the pump spout, if the well is near the house. To insure a plentiful supply it will be found desirable to have two or more barrels, connected by short pieces of pipe near the bottom. These may be set on one long scaffold extending along the outside of the house. It will be necessary to provide the inlet and outlet for only one of the barrels. Pumping the barrel full at one time instead of going to the well for water as it is needed, will usually be found to be a saving of time. The barrels should be kept covered to keep out dust and trash. A short piece of pipe with faucet at the end extends through the wall above the sink.

WHAT WOULD YOU DO WITH $500

There's a chance for you to win it as First Prize in our Second Puzzle Contest announced on page 11 of this issue. Last year we paid our readers who joined this game $931.

MULE-HIDE SHINGLES
THE LEHON COMPANY
MULE HIDE ROOFING SHINGLES
MULE-HIDE Cor-du-roy Panel Strip Shingle

New—Good—Different

LONG wear and good looks combined in a four-unit asphalt shingle, which will put life into the appearance of any roof, and add refinement and dignity to any structure.

So made that they will lie flat on the roof.

Ask a Mule-Hide dealer to show you samples and quote prices.

THE LEHON COMPANY
MANUFACTURERS
44th to 45th St. on Oakley Ave. :: CHICAGO, ILL.

"NOT A KICK IN A MILLION FEET"

SHORTHORN SALE
.....30--HEAD--30.....

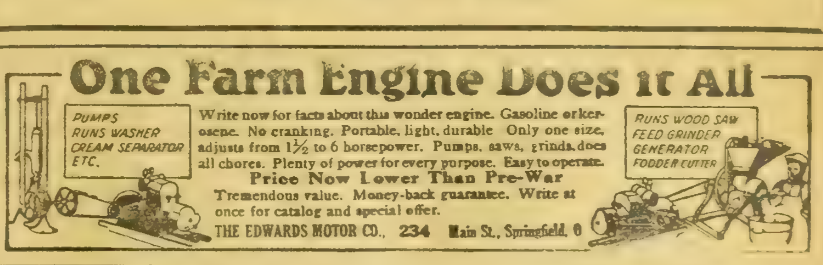
Good, High Class Registered Cows, Heifers and Bulls
Including a few cows of the dual purpose or milking strain.

This sale will be held under the auspices of the Southern Michigan Shorthorn Breeders' Association.

All stock is sold on consignment from members of this Association and is of quality which commands attention.

HILLSDALE, MICH.
FAIR GROUNDS,
Wednesday, Oct. 18, 1922

For particulars and catalog, address W. C. OSIUS, Sec'y, Hillsdale, Mich.
ANDY ADAMS, Sale Manager.



One Farm Engine Does it All

Write now for facts about this wonder engine. Gasoline or kerosene. No cranking. Portable, light, durable Only one size, adjusts from 1½ to 6 horsepower. Pumps, saws, grinds, does all chores. Plenty of power for every purpose. Easy to operate.

Price Now Lower Than Pre-War

Tremendous value. Money-back guarantee. Write at once for catalog and special offer.

THE EDWARDS MOTOR CO., 234 Main St., Springfield, O

THE GREAT BELL OF ATRI

THE village of Atri had a great bell that was rung only in time of need. For years it had been unused, for Atri was prosperous and content. Its rope, covered with green vines, trailed to the ground. One day a starving horse turned out to shift for himself seized the green tendrils in his teeth. The bell above him began to ring, attention was called to the predicament of the poor beast, and he became a well-fed ward of the town.
Manufacturers, who are making something they think you will want are using its clarion notes to attract you to their wares.
Do you read the advertising? Many people do. They are the wise shoppers—the economical buyers—the ones who are strictly up-to-date on the opportunities for saving money or spending it to greatest advantage.
Read the advertisments. They will tell you of many things you need. Read them to save steps—to save money. Read them because they place before your eyes a moving panorama of business progress. Read them to keep yourself informed

BREEDERS DIRECTORY

(SPECIAL ADVERTISING RATES under this heading to honest breeders of live stock and poultry will be sent on request. Better still write out what you have to offer, let us put it in type, show you a proof and tell you what it will cost for 13, 26 or 52 times. You can change size of ad. or copy as often as you wish. Copy or changes must be received one week before date of issue. Breeders' Auction Sales advertised here at special low rates: ask for them. Write today:) BREEDERS' DIRECTORY, THE MICHIGAN BUSINESS FARMER, Mt. Clemens, Michigan.

CLAIM YOUR SALE DATE

To avoid conflicting dates we will without cost, list the date of any live stock sale in Michigan. If you are considering a sale advise us at once and we will claim the date for you. Address, Live Stock Editor, M. B. F., Mt. Clemens

Oct. 18—Holsteins, Alexander W. Copland, Birmingham, Mich.
Oct. 19—Holsteins, Howell Sales Co., of Livingston County, Howell, Mich.
Oct. 19—Poland Chinas, F. E. Haynes, Hillsdale, Mich.

LIVE STOCK AUCTIONEERS

Andy Adams, Litchfield, Mich.
Ed. Bowers, South Whitley, Ind.
R. L. Benjamin, Waukesha, Wisconsin
Porter Colestock, Eaton Rapids, Mich.
Harry A. Eckhardt, Dallas City, Ill.
C. S. Forney, Mt. Pleasant, Mich.
John Hoffman, Hudson, Mich.
John P. Hutton, Lansing, Mich.
I. R. Love, Waukesha, Wisconsin
L. W. Lovewell, So. Lyons, Mich
J. E. Mack, Ft. Atkinson, Wisconsin
D. L. Perry, Columbus, Ohio
J. I. Post, Hillsdale, Mich.
O. A. Ramussen, Greenville, Mich.
J. E. Ruppert, Perry, Mich.
Guy C. Rutherford, Decatur, Mich.
Harry Robinson, Plymouth, Mich.
Wm. Waffle, Coldwater, Mich.
S. T. Wood, Liverpool, N. Y.

LIVE STOCK AUCTIONEERS
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OUR SPECIALTY:
BIG TYPE SPOTTED POLANDS AND DUROC JERSEYS

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U-Need-A Practical Competent Auctioneer to insure your next sale being a success.

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I specialize in selling Polands, Durocs, and Chesters. Let me reserve a 1922 date for you. Write or wire,

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CATTLE

HOLSTEIN-FRIESIAN

TUEBOR STOCK FARM

Breeders of Registered Holstein cattle and Berkshire Hogs.

Everything guaranteed, write me your wants or come and see them.

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—BARGAIN—
Purebred Registered Holstein Heifer Calves
1 month old $50; 6 months old $75-$100
Federally Tested
HOWARD WARNER, Farmington, Mich.

HOLSTEIN BULL BARGAINS
Sired by Segis Korndyke De Nijlander, a 32 lb. son of a twice Michigan ribbon winner, her dam, 29 1-2 lbs. Dams are daughters of King Segis Pontiac, a 37 lb. son of King Segis. Records up to 30 lbs. Priced at $100 up. Federally tested. Write for list.
ALBERT G. WADE, White Pigeon, Mich.

SOME GOOD YOUNG REGISTERED HOLstein cows. Fair size, good color, bred to good bulls and due from July to December. Mostly from A. R. O. stock, prices reasonable and every one guaranteed to be exactly as represented.
M. J. ROCHE
Pinckney, Mich.

TO MAKE ROOM WE OFFER CHOICE YOUNG heifers and bulls of Maplecrest Korndyke Hengervela and King Lyons breeding. Herd clean under Federal Supervision.
WOLVERINE DAIRY FARM
H. G. Booth (prop.) Beaverton, Mich. R. 3.

HOLSTEIN FRIESIAN PURE-BRED BULL calves; tuberculin tested herd. Prices are right.
LARRO RESEARCH FARM, Box A North End, Detroit, Michigan.

WHY PAY MORE? PUREBRED REGIStered Holstein heifer calves, fifty dollars. Circulars free. CONDON'S HOLSTEIN CREST, West Chester, Ohio.

SHORTHORNS

Richland Shorthorns

We have two splendid white yearling bulls by imp. Newton Champion, also some young cows and heifers that we are offering for sale. Write for particulars to

C. H. Prescott & Sons
Herd at Prescott, Mich. Office at Tawas City, Mich.

INHERITED SHORTHORN QUALITY
Our pedigrees show a judicious mixture of the best blood lines known to the breed. Write to
JOHN LESSITER'S SONS,
Clarkston, Mich.

MILKING STRAIN SHORTHORNS
Registered stock of all ages and both sex. Herd headed by the imported bull, Kelmscott Viscount 25th, 648,563. Prices reasonable.
LUNDY BROS., R4. Davison, Mich.

FOR POLLED SHORTHORNS
Shropshire, Southdown and Cheviot rams write to
L. C. KELLY & SON. Plymouth, Mich.

SHORTHORNS and POLAND CHINAS. We are now offering two ten-months-old bulls, one bred heifer, and two ten-months-old heifers.
SONLEY BROS., St. Louis, Mich.

SHORTHORN CATTLE AND OXFORD DOWN sheep Both sex for sale.
J. A DeGARMO, Muir, Mich.

FOR POLLED SHORTHORNS
Federal Accredited Herd.
PAUL QUACK, Sault Ste. Marie, Mich.

RED POLLED

RED POLLED CATTLE—A few choice bulls and heifers for sale.
ROYSTAN STOCK FARM,
Will Cottle, R. R. 1, West Branch Michigan

FOR SALE—OUR RED POLLED HERD BULL, Cosy Ells Laddie, and a few heifer calves.
PIERCE BRO'S., Eaton Rapids, Mich. R. 1.

ANGUS

DODDIE FARMS ANGUS of both sex for sale. Herd headed by Bardell 31910. 1920 International Jr. Champion.
Dr. G. R. Martin & Son, North Street, Mich.

WE HAVE SOME FINE YOUNG ANGUS BULLS from International Grand Champion Stock at reasonable prices. E. H. KERR & CO., Addison, Mich.

REGISTERED ABERDEEN-ANGUS—BULLS, Heifers and cows for sale.
Priced to move. Inspection invited.
RUSSELL BROS., Merrill, Michigan

HEREFORDS

Money-Making HEREFORDS

At St. Clair; for sale and ready for immediate delivery.

Registered Cows and their Sucking Calves

Registered Bred Heifers—Registered Yearling Heifers—Registered Grade Cows—Unregistered and their Sucking Calves—Good Bulls, various ages.

Our Detroit Packing Co., Hereford Baby Beef Contract and the Sotham Hereford Auction System guarantees our customers profitable cash outlet for all increase and we can help finance responsible purchasers. Come, wire or write, right now.

T. F. B. SOTHAM & SONS
(Cattle Business Established 1835)
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GUERNSEYS

GUERNSEYS
OF MAY ROSE AND GLENWOOD BREEDING. No abortion, clean federal inspected. Their sires dam made 19,460.20 milk, 909.05 fat. Their mother's sire's dam made 15,109.10 milk 778.80 fat. Can spare 3 cows, 2 heifers and a beautiful lot of young bulls.
T. V. HICKS, R 1, Battle Creek, Mich.

AYRSHIRES

FOR SALE—REGISTERED AYRSHIRE bulls and bull calves, heifers and heifer calves. Also some choice cows.
FINDLAY BROS., R 5, Vassar, Mich.

JERSEYS

FOR SALE—BEAUTIFUL YOUNG MAJESTY bull 1 1-2 years old. (Jersey) R. of M. dam. Class A.A. Price $150.00. Will sell 20 Jersey heifers from 6 mo. to 1 1-2 years old. Price $50.00 to $150.00. Write GEORGE E. WALKER, Burton Heights, Grand Rapids, Mich.

FOR SALE—JERSEY BULL 3 YEARS OLD Eligible to registration in the American Jersey Cattle Club. E. O. Showerman, Sunfield, Mich.

FOR SALE—YEARLING JERSEY BULLS Shopie 19th Tormentor breeding.
J. E. MORRIS, Farmington, Mich.

DAIRY and LIVESTOCK

WILD CARROTS NOT POISONOUS

Will you please inform me if wild carrots will hurt cows or sheep in hay after it is cured? I have heard say they will while green. — Reader, Petoskey, Mich.

Wild corrots in hay are not poisonous to either cattle or sheep. There are same plants closely resembling the wild carrot which will prove poisonous. If you have much of this material in your hay and are not absolutely sure that it is the wild carrot it would be best for you to send a few samples of the material to Dr. E. A. Bessey of the Botanical Department, Michigan Agricultural College, who will identify the weed present and inform you as to whether or not they are dangerous.—Geo. A. Brown, Prof. of Animal Husbandry, M. A. C.

CARROTS IN SILO

Is it advisable for me to put carrots with my corn fodder in silo, the corn having two ears on a stalk. Would rather put the carrots in the silo than pit them as I am short of cellar room.—G. B., Luzerne, Mich.

Carrots could be preserved by adding them to the corn silage As it is run into the silo only a small proportion should be used, however, as they contain too much moisture to make a good quality of silage. It would also be necessary to exercise considerable care in cleaning the carrots so that there would not be too much dirt get into the silage along with corn, you should have at least three times as much corn, as you have carrots and the carrots should be well distributed through the corn silage. It would not be well to runin alternating loads as in this way the carrots and corn would not be well mixed.—Geo. A. Brown, Prof, of Animal Husbandry, M. A. C.

GRADE COWS TO BE SHOWN AT NATIONAL EXPOSITION

EVIDENCE in the flesh that good cows pay will be the keynote of the National Dairy Exposition to be held at the Twin Cities, October 7-14. Proving the slogan, "Prosperity Follows The Dairy Cow," a score of cow testing associations and scores of individual farmers wll exhibit at the Exposition grade cows with established production records.

For the first time in the history of the National Dairy Exposition, the bars have been let down and grades, if sired by thoroughbred animals will be admitted to the exhibit and the prizes offered will be similar, class by class, to those offered for purebreds. Several of the exhibits will be sold at auction after they are judged.

This innovation, it is pointed out by Col. W. E. Skinner, Secretary and general Manager of the Exposition, "is fundamentally in accord with the high purpose of the Dairy Exposition in attempting to show that profits increase in proportion to the breeding.

"We have been encouraged to do grade cattle among the farmers of the Northwest, following the National Dairy Exposition of 1921, held at St. Paul and Minneapolis. Anticipating an even livelier demand following the 1922 shows some provision must be made so that Show visitors are enabled to see for themselves some of the results obtained from grade cows and thereby be able to judge what they are getting when they buy animals for their own farms."

Wisconsin, Iowa, Minnesota, Michigan and North Dakota already are represented in the exhibitors of grade cattle. The new classification of the Dairy Association provides that all such cows must have cow testing association records and must be sired by pure bred bulls. In the first class will be cows having production records of 500 pounds or more of butter fat a year the second class taking in cows whose records are 350 to 500 pounds.

The third class comprises groups of five cows each, the quintette coming from a single testing association; the fourth includes groups of four cows sired by one registered bull and the award in the fifth class will be made to the champion producing grade cow sired by a thoroughbred and an association test record. Among the Association exhibits sent by the various states will be one consisting of fifty grade cows from Wisconsin demonstrating how the production of doughters over dams have been increased by purebred sires. The Wisconsin exhibit is being arranged by Prof. K. L. Hatch of the University of Wisconsin and will be limited to cows with records of 360 pounds of butterfat produced in one year.

Exhibits from Minnesota will include a dozen grade cows sired by purebred Jerseys, built up on a foundation of ordinary scrub cows by George Christianson of Plainview. The exhibit represents several generations and as the herd has been part of the Plainview Elgin Cow Testing Association for some years, it is accompanied by definite figures on what various animals have earned, together with the cost of production.

This is all in keeping with the efforts now being made by the Northwest to establish itself on a permanent, sound agricultural basis with the dairy cow as the basic unit. Last year, the National Dairy Exposition was taken to the Northwest at the solicitation of agricultural leaders, farmers and business men who believed that it could be made the symbol of renaissance of agriculture in that section of the country. According to members of the various committes on promotion, with headquarters in the Twin Cities, the recognition of the part the grade cow must play in the movement will mean new inspiration to the farmers of the whole territory.

SILO ON THE LIST

PROGRESSIVE farmers who are planning improvements for the coming year will have a silo on the list. We are much behind in our building program both in the city and on the farm, and equipment of all kinds is greatly needed to facilitate proper and economic production.

The stock-keeper, especially the dairyman, has proven again that his business is economic and sure of a profit. He has demonstrated repeatedly that to market grain and forage thru the cow is not only a saving but gives the largest returns for his acres. This has stimulated the silo business, and also supplies for the industry will be in good demand.

In a recent investigation by the Department of Agriculture it was found that the prosperity of a community could largely be determined by the number of cows that they kept. Comparing crop farming sections with dairy communities it was found the bank deposits per capita of the dairy section were nearly twice those of the crop growing. In communities where dairy farming is the leading industry there is little concern over the hard times. People generally have good bank accounts, there is plenty of money for those who wish to borrow, and as the result of a cash paying plan a prosperous condition prevails.

The silo is going to be one of the first buildings considered, for it no longer is an experiment, but has been paying big dividends these many years. The silo comes nearer paying 100 per cent than any other structure on the farm. Many reliable figures are shown where it has paid for itself in a single season, and the experienced feeder would count it a calamity to give up his silo.

So many experiments have been conducted by our stations and colleges that it seems almost useless to quote them, for practically all of them have demonstrated the economy of the silo in all sections of the country. Summing up these experiments, concusions point to the fact that a silo will save a dairy farmer ten cents or more on every pound of butterfat produced and forty cents on one hundred pounds of milk, one dollar on a hundred pounds of beef and one dollar and fifty cents on a hundred pounds of mutton. For growing stock and dry animals the saving will run from five to ten dollars per head per year on the feed bill. It would not be difficult for a stock-keeper to figure what he is losing by delaying the building of a silo.

Many farmers are taking advantage of the War Finance Corporation and securing loans with which they hope to equip their farms so they can derive an income and handle the work in the most economic and productive way. The silo can most wisely be added to their list of improvements, and the more this subject is investigated the more firmly they will be convinced that the silo should head the list.—A. L. Hacker.

VETERINARY DEPARTMENT

NO SUCH DISEASE

Does a cow get hollow-horn? If so, what is the cause, the symptoms, and what should I do to cure it? —C. H. E., Fremont, Mich.

There is no such disease as hollow-horn.—John P. Hotton, Associate Prof. of Surg. and Med., M. A. C.

SORES ON AND BETWEEN TEATS

We have a cow that has sores on teats and between them, especially the two next to you when you are milking. Have been there for over a month, solid scab on two, have to use a milking tube, bleeds when milking. Sometimes milk seems gargelty a little and won't go through tube. Don't see why it doesn't heal. We have put on iodine diluted, a little lard and carbolic acid and peroxide.—Mrs. P. D., Deckerville, Mich.

The cow in question I think is suffering from cow pox. The medicine you have been using, iodine and carbolic acid, is too irritating and no doubt is keeping the wounds from healing. I would suggest that you try sulphur ointment. —John P. Hutton, Assoc. Prof. of Surg. and Med., M. A. C.

PIGS LAME

I have two pigs about 4 months old that have become lame. Their joints are swollen almost like knobs on the first leg joints and these joints seem awful sore. They have dry quarters to sleep in and run in. Would like to know what can be done for them and what the trouble is and cause.—S. L., Bear Lake, Mich.

The pigs may be suffering from rickets or they may have articular rheumatism. From the symptoms you give in your letter it would be almost impossible to tell which they have. I would therefore suggest that if possible you consult your veterinarian and let him see the pigs. It is hard to make a diagnosis of cases of this kind without having an opportunity to examine the patient. —John P. Hutton, Associate Professor of Surg. and Med., M. A. C.

SCHOOL BOARD CANNOT SELL FURNACE

(Continued from page 9)

same board could have hired a teacher for $70.00 per month but the teacher would not board with the director so they went and paid $80.00 in order to get the teacher to board there. A teacher can be legally hired only by a majority of the members of the board at a legal board meeting. If any person in the district believes that any action of the board was fraudulent they should make complaint to the commissioner of schools or prosecuting attorney.—C. A. Rinehart, Division Rural Education, Dept. Public Instruction.

BLACK STINK BUG ON SQUASH PLANTS

Will you please at your earliest possible convenience tell me, if you can, what to do with our squash plants? They have become large, thrifty plants with the squash set, now are being ruined with hundred of black peculiar shaped bugs that eat the stalks and leaves bugs." We have tried almost everything but have not struck the proper thing yet. Will you please reply as soon as you can as I am afraid they will do the same as last year.—O. T. B., Paw Paw, Mich.

The large black stink bug which you describe is not to be controlled by sprays in the ordinary way. The creature sucks its food from beneath the surface and no sprays yet devised seem to be able to kill the adults without injuring the plants.

We, therefore, take advantage of the habit of hiding away and advise the placing of small pieces of board in the vicinity of the vines for the bugs to crawl under for shelter during the cool nights. These bits of board need not be more than a foot square and should simply be thrown on the soil so that there will be space underneath for the reception of the bugs, then early in the morning the trapboard should be examined and the bugs destroyed. The easiest way to do this is to pick up the boards carefully, early before the air warms up, and jar them on the edge of a bucket containing a little water and kerosene. The kerosene will float on the surface of the water and the bugs on being jarred in the bucket will touch the oil and be killed.

Now, the young bugs are more apt to stay around the roots and on the plants themselves. It is possible to kill the young bugs by sprinkling on a coarse spray of nicotine sulphate and soap suds, wetting them down whenever they are found among the roots of the vine. Use 40 per cent nicotine sulphate, one brand of which is black leaf 40, at the rate of one ounce to six gallons of soap suds. —R .H. Pettit, Professor of Entomology, M. A. C.

HUSBAND MAY DEED PROPERTY

Husband and wife own real estate property. This property was clear of debts. There was no will. Deed was in husband's name, and upon his wife's death does he become the sole survivor of the property? Can he deed, will or sell this property without the consent of his heirs? Three heirs were under age at the time of the wife's death. I am a paid-up subscriber of the M. B. F. and like your paper very well.—S. D., Hale, Mich.

If the real estate was in the husband's name at the time of the wife's death the husband's title is complete and he may dispose of it as he pleases. Upon the death of the mother the children do not acquire any title or interest in the real estate of the father during his life. He can deed it, will it or mortgage it at pleasure.—Legal Editor.

NOT OBLIGED TO BUILD BRIDGE

Would you kindly give me some information as to the right of a county drain commissioner? A ditch running through my farm taken over by county drain commissioner made deeper and wider to the extent of 2 feet wide about 18 to 20 feet deep Is the commissioner not supposed to give me a bridge? About 120 rods of fence was taken down, are they not supposed to put the fence back and level off the banks as they are on places 8 to 10 feet high, or is it all left to the farmer to do?—H. K., St. Johns. Mich

There is nothing in the drain law which provides for the construction of a bridge across a drain unless the drain is along the highway adjacent to the property owner's premises. There is nothing to indicate that the drain in question is within the limits of the highway, hence the property owner would have no right to exact a bridge. The Drain Commissioner does not have to level the embankment made by the excavation.— Harry H. Partlow, legal adviser, State Highway Dept.

HEREFORDS AVERAGE NEARLY $200 PER HEAD

The Hereford auction held on September 1st at the fair grounds, Bad Axe, Michigan, under the auspices of T. F. B. Sotham & Sons proved to be very successful in spite of the fact that it began to rain early in the morning and continued throughout the sale. The crowd was large and apparently most of those to attend were there to buy as the bidding was lively and animals were quickly taken up. The average made on the females was nearly $200 with the top sale at $250. Mr. Lee Soper of Bad Axe purchased Berna Fairfax, No. 739798BC, for $250 and later paid the same amount for Star Beauty, No. 643524HC. The bulls sold for from $105 to $155.

EVERY FAMILY MUST JOIN THIS GAME

The Second Annual $500 Puzzle Contest conducted by The Business Farmer is announced on page 11 of this issue. Last year we distributed $931 in cash among our readers who entered the friendly game. All of the family can help find the objects in the picture that begin with "B", but the list must be sent in by one person. You do not need to send in one penny to win a first prize, but if you want to increase your winning, your renewal can count as one subscription.

OCT. 19th — Thursday, Oct. 19th, — OCT. 19th
At Ten O'clock

Howell Sales Company of Livingston County
Will hold their
9th Annual Sale
of
85 Head of Registered Holstein Cattle
at the
Sales Pavilion on the Fair Grounds at
Howell, Michigan

This sale consists of young cows and heifers due to freshen this fall and early winter. Sired by and bred to bulls from dams with records from 30 to 45 pounds; also a few open heifers and several good bulls, including a 31-lbs, 4-year-old, son of Rosie Mercedes Butter Boy, 210357, with a yearly record of nearly 1,000 lbs. of butter; also three sons of King Ona Champion, 257513, from 29-30-32-lbs. dams, mostly from accredited herd with 60-day retest guarantee.

Catalogs October 10th
Auctioneer, J. E. Mack S. T. Wood in the box
Wm. Griffin, Sec'y, Howell, Mich.

SWINE

DUROCS

FOR SALE OR EXCHANGE DUROC JERSEY BOAR 2 years old. No. 182429, Masterpiece Orion King 4th. Also some May pigs at reasonable prices. Write W. H. CRANE, Lupton, Mich.

WE OFFER A FEW WELL-BRED SELECTed spring Duroc Boars, also bred sows and Gilts in season. Call or write McNAUGHTON & FORDYCE. St. Louis. Mich.

DUROCS—POPULAR BLOOD LINES—SEND your wants to OCEANA CO. DUROC JERSEY HOG ASS'N. V. Lidgard Sec., Hesperia. Michigan.

PURE-BRED DUROC JERSEY HOGS We usually have good boars and sows of all ages for sale. Reasonable prices. LARRO RESEARCH FARM, Box A North End Detroit, Michigan.

YOU WANT ONE OF THE BEST DUROC sows obtainable. We have them for sale. Tried sows and fall gilts. Sensation blood predominating. Our herd boar headed 2nd aged herd at 1921 Illinois State Fair. Swine Dept. Michigana Farm, Pavillion, Mich.

PURE BRED DUROC-JERSEY BOAR Pigs of April and May farrow, sired by Brookwater Sensation and Model of Orions Masterpiece. Place your order now, prices right. DETROIT CREAMERY HOG FARM, Route 7, Mt. Clemens, Mich.

7 FINE SPRING BOARS Sired by Schabros Top Col. (1st prize spring pig 1921 at Springfield Fair). All our stock double treated for Cholera. $20.00 each, registered in your name. Schaffer Bros., Oxford, Mich., R. 4.

BOAR PIGS BY FANNIE'S JOE ORION AND Pathfinder Orion. Priced to sell. Satisfaction guaranteed. Write, H. E. LIVERMORE & SON, Romeo, Mich.

FOR SALE—SEPTEMBER GILTS—OPEN OR bred, sired by A. Model Orion King. Call or write. CHAS. F. RICHARDSON, Blanchard, Mich.

HILL CREST DUROCS; SOWS AND GILTS, both bred and open, also service boars. NEWTON & BLANK. Four miles straight south of Middleton, Gratiot Co., Mich.

DUROC JERSEY—WE HAVE A CHOICE LOT of extra good spring boars ready for service; shipped on approval, satisfaction guaranteed. F. J. DRODT, Monroe, Mich., R. 1.

Complete Dispersion Sale
Birmingham, Mich., Oct. 18, 1922

50 Purebred Holstein Friesian Females 50
21 Daughters of King Korndyke Echo Sylvia 21
5 Daughters of Hardy Pontiac Segis 5
3 Daughters of Aristocratic Pontiac 3
3 Daughters of Segis Cynthia 3

Most of the females bred to a son of a 31.8 lb. cow that milked 742 lbs. Several bred to a son of Sadie Gerben Hengerveld DeKol (First 40 lb. cow under the new rules).
Several bred to King Korndyke Echo Sylvia, who is a son of Avon Pontiac Echo from a 29.11 lb. jr. three year old daughter of Pontiac Korndyke Het Loo.
Sold with usual breeder's guarantee and subject to 60 to 90 day retest.
Terms can be arranged but must be done before the sale.

Alexander W. Copland, Owner, Birmingham, Mich.
For catalog address, Albert E. Jenkins, Sale Mgr. Oscoda, Mich.

POLAND CHINA

ANNUAL SALE
Large Type Poland China Swine
New Stock Pavilion,
Hillsdale County Fair Grounds
Thursday, Oct. 19, 1922
50 Head Spring Boars and Gilts
Better than ever.
"There's a reason."
F. E. HAYNES
Hillsdale Michigan
"Pigs is Pigs"
But Haynes' Pigs is Hogs.
Watch this space for further particulars.

FRANCISCO FARM POLAND CHINAS
Big stretchy spring boars as good as grow. Pairs and trios not akin. Can spare two or three of our good herd sows bred for September.
P. P. POPE
Mt. Pleasant Michigan

L. T. P. C. $15-$20-$25
Spring pigs at above prices. Top fall gilts bred for summer farrow, priced right.
HART & CLINE
Address F. T. Hart, St. Louis, Mich

Big Type P. C. Boar Pigs, they can't be beat in Michigan. Sired by Big Bob Mastoden and Peter A. Pan a son 1,075 Peter Pan. C. E GARNANT, Eaton Rapids, Mich.

LARGE TYPE POLAND CHINA SPRING PIGS sired by C's Clansman, now ready to ship. Write for particulars.
W. CALDWELL & SON, Springport, Mich.

BERKSHIRES

FOR SALE—REGISTERED BERKSHIRE boar two years old, $35; also a few open gilts, $2.
E. R. WILSON, Ellsworth, Mich.

HAMPSHIRES

A CHANCE TO GET SOME REAL HAMPshires. Boar pigs, sired by Gen. Pershing Again, Gilt Edge Tipton, Messenger All Over 10th, Gen. Pershing 2nd., and other great boars. Writes for list and prices. DETROIT CREAMERY HOG FARM, Route 7, Mt. Clemens, Mich.

HAMPSHIRE AND SHORTHORNS—MARCH and April pigs weighing 100 to 150. Price $20 to $25 each. One red and one white bull 4 months old. Price $40. Each registered. Write or call
GUS THOMAS, New Lathrop, Mich

Hampshires—A few choice Bred Gilts with boar pig no kin to gilts. John W. Snyder, St. Johns, Mich.

O. I. C.

BIG TYPE O I C PIGS 8 WEEKS OLD Guaranteed.
E. V. BILYEU, Powhatan, Ohio

O I C'S SPECIAL PRICES ON FALL PIGS for Oct. 15th delivery, also spring boars for immediate shipment. I can save you money. Write CLARE V. DORMAN, Snover, Mich.

O. I. C. TRUE TO NAME, PROLIFIC STRAIN, open gilts bred gilts, booking orders for September boar and sow pigs; we ship C. O. D. Ask for description and weight, the price will be right. Maple Valley Stock Farm, North Adams, Mich.

SHEEP

HAMPSHIRE

HAMPSHIRE SHEEP
A few good yearling rams and some ram lambs left to offer. 25 ewes all ages for sale for fall delivery. Everything guaranteed as represented.
CLARKE U. HAIRE, West Branch, Mich.

REGISTERED HAMPSHIRE AND DELAINE Rams; also some good grade rams for sale cheap. Write A. F. LONGPRE, Hardy, Mich.

SHROPSHIRE

REGISTERED SHROPSHIRE SHEEP, YEARLing rams, ram lambs. Breeding ewes. Ewe lambs. Breeding size, covering, also 100 high grade Shropshire ewes. Flock established 1890.
C. LEMEN, Dexter, Mich.

COTSWOLD

COTSWOLDS RAMS AND EWES, ALL AGES, priced to sell. Come and see them. Also 1 collie pup. A. M. BORTEL, Britton, Mich.

OXFORDS

OXFORDS RAMS ALL AGES—GUARANTEED breeders and to please. A few ewes also 10 ewe lambs. Wm. Van Sickle, Deckerville, Mich., R. 2.

FOR SALE—10 THOROUGHBRED OXFORD ewes and 2 thoroughbred Oxford rams.
G. C. KNOWLES, Caro, Mich.

DELAINE

FOR SALE—IMPROVED BLACK TOP DELAINE Merino Rams.
FRANK ROHRABACKER, Laingsburg, Mich.

WANT TO SELL POULTRY?
AN AD IN M. B. F. WILL DO IT

Poultry for Profit

POULTRY TOUR CONDUCTED THIS WEEK

WITH "Buy Michigan Chicks" as their slogan the Michigan Chick Hatcher's Association puts on its first annual tour of southwestern Michigan starting September 27th finishing up on September 29th. The tour starts from the Michigan Agricultural College at East Lansing at noon Wednesday, September 27 and ends at Lakewood Farm, Ottawa County, where the Association holds a meeting and entertainment. The party will visit the largest and best poultry farms and hatcheires in that section.

The members assemble at the College Wednesday at 10:30 where short talks are given by Pres. Friday, Dean Shaw and R. J. Baldwin after which they immediately leave for Charlotte, Battle Creek and Kalamazoo. Three stops are made between East Lansing and Kalamazoo and it is at the later place where the tourists spend the night. They leave Kalamazoo at 7:00 in the morning going to Bangor and after several stops enroute to visit farms they arrive at there in time for dinner. From there they go to South Haven where they spend Thursday night. Friday morning the party starts at 7:00 a. m. on the last day of their tour. On this day their visits cover farms and hatcheries around Jamestown, Zeeland and Holland. As a special feature for those who desire to attend on Saturday morning, September 23, at 9 o'clock Prof. Foreman of the M. A. C. will conduct a poultry culling school at the city hall in Zeeland. This will be done so that each hatchery man can get points on culling so that each can go out and cull the flocks from which eggs are bought. Mr. C. J. DeKoster of Zeeland who is secretary of the Ass'n expects the tour to be a big success in every way. And Mr. DeKoster being the proprietor of one of the largest, poultry farms and hatcheries in this state is in a position to know. A complete report of the tour will be given in our next issue.

DO NOT GRIND WHEAT HALF CHAFF

I have a chance to buy wheat that is half chest Is there any food value in it if ground for poultry? —J.B. L., Davison, Mich.

We would not advise the grinding of wheat that is carrying 50 per cent chaff. While it will have considerable feeding value the high percentage of indigestible fibre would greatly lower the feeding value, decrease the palatability and cause too much bulkiness. If this subscriber desires to use the wheat and chaff as an ingredient in the dry mash I would suggest reducing the bran content and also the ground oats because otherwise the poultry would not relish the mash that is so fibrous. In adding the ground wheat and chaff it would be advisable to mix with corn meal, middlings and meat scraps, equal parts by weight. Grain, however, is so reasonable now that it would be a wiser method to have this wheat sifted.—E. C. Foreman, Associate Professor of Poultry Husbandry. M. A. C.

INCREASING EGG PRODUCTION IN GENERAL-PURPOSE BREEDS

THE best mash for stimulating egg production in hens of general-purpose breeds, such as the Plymouth Rocks and Wyandottes, according to experiments carried on by the United States Department of Agriculture, is one that is not so rich in corn meal and meat scrap as those frequently fed to Leghorns. On the department's poultry farm at Beltsville, Md., the best results with general-purpose hens were obtained with a mash containing only 18 per cent of meat scrap with considerable ground oats and wheat bran. The entire mixture is made up in the proportion of 3 parts of corn meal, 1 part of bran, 1 1-2 parts of meat scrap, 1 part of middlings, 2 parts of ground oats, and 5 per cent of linseed meal. As a result of using this feed the hens produced a good yield of eggs, but did not become overfat and were in good breeding condition.

Leghorns and other breeds of the same type can use a heavier and more stimulating ration without endangering their physical condition and the hatching quality of the eggs. The mash that has been giving the best results with the department's Leghorn flock is made up of 4 parts bran, 4 parts middlings, 66 parts corn meal, and 26 parts of meat scrap. Barred Plymouth Rock pullets fed on this heavy mash laid a few more eggs than pullets of the same breed fed on the first mash, but they suffered in health and their eggs were lower in fertility.

Among the vegetable proteins fed to poultry the department has found that gluten meal seems to be the best, although cotton seed and peanut meal are very satisfactory if supplemented with animal protein in the form of meat scrap, tankage, fish meal, or milk, and with mineral salts. For good results the vegetable proteins should not exceed 10 per cent of the total mash Tests have shown that a good grade of fish meal is practically as good as meat scrap or high-grade tankage.

TURKEY BREEDS

THIRTY-TWO years after Columbus discovered America our native wild turkey was imported into Europe. There it was domesticated, and thence has come our domestic turkey. Wild turkeys are still found in our southern swamps and in Mexico. They are still crossed with domestic stock to restore vigor to the later.

The Bronze turkey is the largest, as well as the most popular, of all breds., and most nearly resembles the wild turkey. The standard adult cock weighs 36 pounds; the young cockerel, 25; the hen, 20; the pullet, 16. Showier specimens far exceed these weights.

The male of this breed should be richly, brilliant, golden bronze as to neck, back, breast and wing surfaces. Wing flights when spread are black, with white barring across each feather, most regular in the better birds. The tail is black, with parallel brown transversing lines, each feathered with white, not with red or rusty tips in the better birds. The hen is like the male in color except for white or gray edging on each feather of the breast, body, wings and back.

The White Holland turkey is a "sport" from the bronze. The cock of standard size weighs 28 pounds; the cockerel, 20; the hen, 18; the pullet, 14. They are reputed the best layers among turkeys, the most docile, and less roving than the bronze, better suited to limited range than that variety. All their plumage is white except the black beard of the male.

Bourbon Reds are a breed of turkeys first noted as wild birds. They are dark red in their upper parts, bordering on brown, with white wings and tails; their under parts are of buff, running out to nearly white. The feathers have a blue sheen when shifted in the sunlight. The standard cock weighs 30 pounds; the cockerel, 22; the hen, 18; the pullet, 14. They are said to be a very hardy breed.

Female turkeys reach full growth at 2 years of age; males at 3. Hens from 2 to 5 years old should be bred to toms from 2 to 3 years of age. Never breed related birds, for the death rate among the pullets will be high. For market birds breed from medium-sized birds, plump but not fat, fine in bone, active, vigorous. For exhibition stock breed from the birds of largest frame. From 10 to 15 hens may be mated to a male.—Washington Farmer.

Read the M. B. F.'s Puzzle Contest on page 11

POULTRY BREEDERS' DIRECTORY

Advertisements inserted under this heading at 30c per agate line, per issue. Commercial Baby Chick advertisements 45c per agate line. Write out what you have to offer and send it in. We will put it in type, send proof and quote rates by return mail. Address The Michigan Business Farmer, Advertising Department, Mt. Clemens, Michigan.

BABY CHICKS

CHICKS! CHICKS!

It will pay you to look over these low prices for June and July delivery. Better chicks at real bargain prices. Pure S. C. W. Leghorns, $5.25 for 50; $10 for 100; $47.50 for 500 Pure Barron Eng. Leghorns, $5.75 for 50; $11 for $11 for 100; $52.50 for 500 100; $52.50 for 500. Pure S. C. Anconas, $5.75 for 50 Hatch every Tuesday in June and July. Order direct from ad. Prompt shipment by insured Parcel Post prepaid to your door. Full count strong lively chicks on arrival. For quick service and an entirely satisfactory dea send us your order. Fourteen years reliable dealings. Fine instructive catalog free.
HOLLAND HATCHERY
R. 7, Holland, Mich.

Baby Chicks
Build up your flock with pure bred chicks that lay early and often, best quality. Leghorns, Rocks Reds, Wyandottes, Anconas, Minorcas, Orpingtons. Silver Spangled Hamburg Eggs $2.00 per setting. We deliver at your door. Get our price list and free catalog.
J. G. PHILPOTT
R. 1, Box 74 Port Huron, Mich.

NABOB JUST-RITE Baby Chicks
A Hatch every week all year
POSTAGE PAID 95% live arrival guaranteed. MONTH'S FEED FREE with each order. 40 Breeds chicks, 4 breeds ducklings, select and exhibition grades. Catalog free stamps appreciated.
NABOB HATCHERY, Dept. 30, GAMBIER, O.

BABY CHICKS
S C Buff Leghorns, one of the largest flocks in Michigan My price is in reach of all, only $15 00 per hundred. Detroit winners, none better.
LAPHAM FARMS, Pinckney. Mich

Day Old Chicks. Standard Varieties. Make your selections Catalogue and price list now ready.
H. H. PIERCE, Jerome, Mich.

POULTRY

PULLETS AND COCKERELS
White and Buff Orpingtons; Barred Rocks; Anconas; White Leghorns.
Pullets 4 months old and older at the 3 months price.
HIGH EGG PRODUCING LEGHORNS
Some especially highly bred English Leghorn Cocks and Pullets and Cockerels and Hens for mating for high egg production. Some of the very best egg producing Leghorn stock in this state. Let us describe these birds.
STATE FARMS ASSOCIATION
Kalamazoo, Michigan

FOR SALE—150 WHITE WYANDOTTE Cockerels and pullets. All from my prize winning stock of very best American White Wyandottes laying strain. They win for me. They will win for you.
C. W. CASE, Rochester, Michigan

LEGHORNS

POUND PULLETS (S. C. W. L.) HATCHED MARCH 20th. $1.20 for May 15th delivery. Finest lot we ever raised. No sickness. No crowding. Satisfaction or money back. Will lay in August and all through the fall season when eggs are the highest.
MORSE LEGHORN FARM, Belding, Michigan

LEGHORNS
Single Comb Buff Leghorns, 1000 Chicks for April first delivery. It will cost you just 2 cents to find out my plan how to get 10 Baby Chicks FREE.
LAPHAM FARMS, Pinckney, Mich.

BUFF LEGHORNS—SINGLE COMB. Early Hatched Cockerels.
J. W. WEBSTER, Bath, Michigan

RHODE ISLAND REDS

RHODE ISLAND REDS, TOMPKINS STRAIN Both combs. Stock for sale after September 15th. WM. H. FROHM, New Baltimore, Mich R. 1.

WHITTAKER'S R. I. REDS, 200 SINGLE comb red pullets at $2.50 to $5.00 each. Also both Rose and Single Comb cocks and cockerels. Write for calatog. Interlakes Farm, Box 4, Lawrence, Mich.

ORPINGTONS

ORPINGTONS BUFF, WHITE, BLACK Hatching eggs in season.
AUGUST GRABOWSKE
Merrill, Mich., Route 4, Box 41.

PLYMOUTH ROCK

BUFF ROCKS—Bronze Turkeys—For 20 years, by J. C. Clipp & Sons, Bx. M, Saltillo, Ind.

TURKEYS

PUREBRED BOURBON REDS, LARGE, VIGOrous [illegible] strain Hens $8, toms $10.
MARY BEACOM, R. 4, Marlette, Mich.

THE HUNTED WOMAN

(Continued from page 7)

up suddenly and caught his eyes upon her.

"I came quite by accident," she explained quickly. "I wanted to be alone, and Mrs. Otto said this path would lead to the river. When I saw you I was about to turn back. And then I saw the other—the horses coming down the stream It was terrible. Are they all drowned?"

"All that you saw It wasn't a pretty sight, was it?" There was a suggestive inquiry in his voice as he added, "If you had gone to Tete Jaune you would have missed the unpleasantness of the spectacle."

"I would have gone, but something happened. They say it was a cave-in, a slide—something like that. The train cannot go on until to-morrow."

"And you are to stay with the Ottos?'

She nodded.

Quick as a flash she had seemed to read his thoughts.

"I am sorry," she added, before he could speak. "I can see that I have annoyed you. I have literally projected myself into your work, and I am afraid that I have caused you trouble. Mrs. Otto has told me of this man they call Quade. She says he is dangerous. And I have made him your enemy."

"I am not afraid of Quade. The incident was nothing more than an agreeable interruption to what was becoming a rather monotonous existence up here. I have always believed, you know, that a certain amount of physical excitement is good oil for our mental machinery. That, perhaps, was why you caught me hauling at His Soltship's ear."

He had spoken stiffly. There was a hard ote in his voice a suggestion of something that was displeasing in his forced laugh. He knew that in these moments he was fighting against his inner self—against his desire to tell her how glad he was that something had held back the Tete Jaune train and how wonderful her hair looked in the afternoon sun. He was struggling to keep himself behind the barriers he had built up and so long maintained in his writings. And yet, as he looked, he felt something crumbling into ruins. He knew that he had hurt her. The hardness of his words, the coldness of his smile, his apparently utter indifference to her had sent something that was almost like a quick, physical pain into her eyes. He drew a step nearer, so that he caught the soft contour of her cheek. Joanne Gray heard him, and lowered her head slightly, so that he could not see. She was a moment too late. On her check Aldous saw a single creeping drop—a tear.

In an instant he was at her side. with a quick movement she brushed the tear away before she faced him.

"I've hurt you, and God knows I'm a brute for doing it. I've treated you as badly as Quade—only in a different way. I know how I've made you feel—that you've been a nuisance, and have got me into trouble, and that I don't want to have anything more to do with you. Have I made you feel that?"

"I am afraid—you have."

He reached out a hand, and almost involuntarily her own came to it. She saw the change in his face, regret, pain, and then that slow-coming, wonderful laughter in his eyes.

"That's just how I set out to make you feel," he confessed, the warmth of her hand sending a thrill through him. "I might as well be frank, don't you think? Until you come I had but one desire, and that was to finish my book. I had planned great work for to-day. And you spoiled it. I couldn't get you out of my mind. And it made me—ugly."

"And that was—all?" she whispered, a tense waiting in her eyes. "You didn't think—"

"What Quade thought," he bit in sharply. The grip of his fingers hurt her hand. "No, not that. My God, I didn't make you think that?"

"I'm a stranger—and they say women don't go to Tete Jaune alone," she answered doubtfully.

"That's true, they don't—not as a general rule. Especially women like you. You're alone, a stranger, and too beautiful. I don't say that to flatter you. You are beautiful, and you undoubtedly know it. To let you go on alone and unprotected among three or four thousand men like most of those up there would be a crime. And the women, too—the Little Sisters. They'd blast you. If you had had a husband, a brother or a father waiting for you it would be different. But you've told me you haven't. You have made me change my mind about my book. You are of more interest to me just now than that. Will you believe me? Will you let me be a friend, if you need a friend?"

To Aldous it seemed that she drew herself up a little proudly. For a moment she seemed taller. A rose-flush of colour spread over her cheeks. She drew her hand from him. And yet, as she looked at him, he could see that she was glad.

"Yes, I believe you," she said. "But I must not accept your offer of friendship. You have done more for me now than I can ever repay. Friendship means service, and to serve me would spoil your plans, for you are in great haste to complete your book."

"If you mean that you need my assistance, the book can wait."

"I shouldn't have said," she cut in quickly, her lips tightening slightly. "It was utterly absurd of me to hint that I might require assistance—that I cannot take care of myself. But I shall be proud of the friendship of John Aldhous."

"Yes, you can take care of yourself, Ladygray," said Aldous softly, looking into her eyes and yet speaking as if to himself. "That is why you have broken so curiously into my life. If that—and not your beauty. I have known beautiful women before. But they were—just women, frail things that might snap under stress. I have always thought there is only one woman in ten thousand who believe you are that one in ten thousand. You can go on to Tete Jaune alone. You can go anywhere alone—and care for yourself."

He was looking at her so strangely that she held her breath, her lips parted, the flush in her cheeks deepening.

"And the strangest part of it all is that I have always known you away back in my imagination," he went on. "You have lived there, and have troubled me. I could not construct you perfectly. It is almost inconceivable that you should have borne the same name—Joanne. Joanne, of 'Fair Play.' "

She gave a little gasp.

"Joanne was — terrible," she cried. "She was bad—bad to the heart and soul of her!"

"She was splendid," replied Aldous, without a change in his quiet voice. "She was splendid—but bad. I racked myself to find a soul for her, and I failed. And yet she was splendid. It was my crime—not hers—that she lacked a soul. She would have been my ideal, but I spoiled her. And by spoiling her I sold half million copies of the book. I did not do it purposely. I would have given her a soul if I could have found one. She went her way."

"And you compare me to—her?"

(To be continued)

DID YOU GET YOUR SHARE LAST YEAR ?

Last year in a contest identical to the one announced on page 11 of this issue, we sent checks to the winners totaling $931. If you did not receive your share last year, don't miss sending in your list of objects this year. Contest closes last week in November.

BOOK FREE TO LAND OWNERS

Have you a copy of Ropp's New Calculator, Mr. Farmer? If you haven't you have heard about it and I'll wager that many times you have thought about it and wished you had one. Maybe your neighbor wanted to buy what there was left in your crib of last year's corn and when you come to measure the crib and the depth of the corn and figure up how much corn the crib contained your neighbor got one answer and you got another. Or maybe you were trying to figure up the interest on several small notes and you were tired and the figures wouldn't add up right. It is just such times as these that Ropp's Calculator proves itself the handiest book you ever owned. To go to the store and buy it would cost 50c but if you will read the ad of the Keystone Steel and Wire Co., published on page 10 of this issue you will find out how you can get it by just sending them a post card. Send for it today because you will find use for it tomorrow.—ADV.

Dr. Hess Poultry Pan-a-ce-a

Help your
MOULTERS
MOULT

If you want your hens to moult naturally—

If you want them back on the egg job promptly—fall and winter laying—

Then you must make sure that your moulters are healthy and hungry.

They must eat lots, and be able to digest what they eat.

That's just what

Dr. Hess Poultry
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does for your moulting flock.

It's a tonic that begins with the appetite—improves a hen's whole system.

It has Iron that keeps the paleness away, makes the combs and wattles red—the blood rich.

Pan-a-ce-a starts the food the egg way as soon as the moult is over.

No time lost.

No dormant egg organs after the moult, where Pan-a-ce-a is fed.

Tell your dealer how many hens you have. There's a right-size package for every flock.

100 hens, the 12-lb. pkg. 200 hens, the 25-lb. pail
60 hens, the 5-lb. pkg. 500 hens, the 100-lb. drum
For fewer hens, there is a smaller package.

GUARANTEED

DR. HESS & CLARK Ashland, O.

I spent 30 years in perfecting Pan-a-ce-a.
GILBERT HESS
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Dr. Hess Instant Louse Killer Kills Lice

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LIVE STOCK COMMISSION——AT TEN MARKETS

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Don't miss the chapters which follow of Curwood's great story,
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MARKET FLASHES

MARKET SUMMARY

Wheat makes small gain. Corn steady. Oats unchanged. Rye declines. Beans firm. Eggs higher and butter firm and higher. Potatoes steady. Poultry inactive. No demand for dressed calves. Receipts of fruit large and market easy. Cattle shows little activity but mostly dull. Hogs steady. Sheep unchanged.

(Note: The above summarized information was received **AFTER** the balance of the market page was set in type. **It contains last minute information up to within one-half hour of** going to press —Editor.)

TRADE AND MARKET REVIEW

THE early part of last week a hundred thousand men, most of them living in Michigan, were facing the prospect of a winter without a job. Henry Ford closed down his gigantic enterprises and announced they would not run again until coal became more plentiful and prices became lower. The shutdown of the Ford plant cast a gloom over the country. It was felt that Mr. Ford was setting a dangerous precedent which other manufacturers might follow in their "strikes" against the profiteering coal mine operators. A general shut-down of manufactories would have been little short of a calamity not only to the workmen but also to the farmers. But the Ford "strike" was short-lived. Ford got his coal at the price he thought he ought to pay and last week Thursday the wheels of his great factories were again set in motion.

Although there is still some unemployment and farmers' prices are very much below the level of other prices the country looks forward to the coming winter with the least apprehension of several years. Automobile manufacturers are months behind with their orders and with some exceptions, they anticipate they will be able to run at full capacity the entire winter. Building has been active all summer long and is still and if the weather permits the building projects the next few months are expected to exceed those of the last three years for the same period.

The partial settlement of the strikes, the President's veto of the soldier bonus bill, and the promise of some slight reduction in state and local taxes have all combined to create a more confident feeling in the future.

The still discouraging feature of the economic situation is the low level of farm product prices, but even these are showing surprising tendencies to advance. We know of nothing that could happen to add more to the general prosperity and contentment of the nation than a 25 to 50 per cent increase in farm commodity prices.

WHEAT

The wheat market had a merry time of it last week due to a general belief that war was imminent between Turkey and England. The memory of what the last great war did to the wheat market is still fresh in the minds of the traders who cleaned up fortunes in that period and the slightest hint of war between European nations causes a considerable flurry in the wheat market. Although as we go to press actual warfare still seems remote, the wheat market is from five to seven cents above the low of the previous week in the primary markets, but there has been little if any effect upon the local markets.

Frankly, the immediate wheat outlook does not look good to us. We do not expect to see a long drawn out war between Turkey and Great Britain, and while a few skirmishes may send up the price of wheat for the time being it will take more than the exchange of a little fire to cause any substantial and permanent changes in the market. We believe a good deal of the activity that took place in wheat last week can be discounted as speculative. Virtually no other influence appeared to warrant the advance in prices.

On the contrary nearly all the news last week and this is of a bearish nature. An English statistician declares there are over a hundred million more bushels of wheat in sight than the world has need of. Even if the statement is true, which we doubt, it offers no occasion for alarm.

The wheat grower must remember that in normal times the various countries of the world carry over several hundred million bushels in their granaries to provide against crop failure. The carry-over was sadly depleted by the war, and very few reserves have been laid up since.

Unless the threatened hostilities between Britain and Turkey reach proportions which we do not anticipate we look for an early drop in wheat prices to be followed by an extended period of even prices. Wheat may again drop to below a dollar a bushel before the next crop, but we doubt it. The rush of wheat to market has been stemmed somewhat by the rising trend of prices and with fewer supplies the market should show a better tone. Wheat prices are considered too low by all concerned and the violent fluctuations of last week show that it doesn't take much to send prices up.

Prices

Detroit—No. 2 red, $1.12; No. 2 white and No. 2 mixed, $1.10.

Chicago—No. 2 red. $1.10 1-2.

New York—No. 2 red, $1.17 3-4.

Prices one year ago — Detroit, No. 2 red, $1.28; No. 2 white and No. 2 mixed, $1.25.

CORN

The corn market has enjoyed a rather healthy tone the past couple of weeks and at the close of last week prices on the Detroit market were higher than they had been for several weeks. Reports from Chicago show a fair amount of corn for exporting was taken from that market last week, shipping sales for the week, including domestic, aggregating 2,500,000 bu. Receipts have been liberal the past fortnight but the movement continued to be restricted by the shortage of cars. Demand has been stimulated by the action of wheat and the war-like news coming from Europe but the talk of peace reaching this country on the opening of the current week caused the market to weaken on the opening day and prices turned lower. The prices on the Detroit market were 1 1-2 cents lower at the close of the day, while the decline at Chicago amounted to only one-half cent.

Regarding the future of corn a market expert in Chicago says that this grain is governed in the end almost entirely by domestic conditions, the amount going abroad being relatively insignificant in comparison with the crops. "We know that the total supply of corn for the country is at least 300,000,000 bushels or more less than last year. The government September report showed 60,500,000 hogs on farms compared with 56,000,000 last year. Here is a factor of greater importance as far as the disappearance of corn is concerned than the export sale of 10,000,000 bushels or more grain." He goes on to say, "A high price for corn never hurt the consumer and simply booms general business."

Reports from cornbelt show the crop in most cases out of danger of frost.

Prices

Detroit—No. 2 yellow, 70c; No. 3 yellow, 69c; No. 4 yellow, 67c.

Chicago—No. 2 yellow, 63 1-4@63 3-4c.

New York—No. 2 yellow and No. 2 white, 81 1-2c.

Prices one year ago—Detroit, No. 2 yellow, 55 1-2c; No. 3 yellow, 54 1-2c; No. 4 yellow, 51 1-2c.

OATS

For the reasons which it is not easy to understand oats have shown some strength the past few weeks and prices are somewhat higher than we anticipated they would be at harvest time. It is apparent that the influence of the enormous crop of 1920 has about run its course and that the demand is now gradually overtaking the supply. War news of a reliable character might very easily send the price of oats up ten cents a bushel in no time.

Prices

Detroit—No. 2 white, 43c for new, 45c for old; No. 3 white, 41c for new; No. 4 white, 38c for new.

Chicago — No. 2 white, 40 1-4@41c; No. 3 white, 39@39 3-4c.

New York — No. 2 white, 49c.

Prices one year ago — Detroit No. 2 white, 40 1-2c; No. 3 white, 38c; No. 4 white, 34c.

RYE

Practically the same tone that has prevailed in the wheat, corn and oat markets during the past fortnight also ruled the rye market. The decline in prices on the opening day of the current week took place in rye as well as other grains. The Detroit market reported a decline of 1c and the prices on the Chicago market dropped from 1 1-2c to 2c.

Prices

Detroit—Cash, No. 2, 75c.

Chicago—Cash, No. 2, 70 1-4c.

Prices one year ago—Detroit, $1.02@$1.04 1-2.

BEANS

A most unusual thing has happened in the bean market. Prices have advanced from 25 to 75 cents per cwt, during the very height of the marketing season, and in the face of one of the biggest crops which Michigan farmers have produced for a long time. The drastic decline in bean prices which was registered from about the first of August to the middle of September was most discouraging to Michigan bean growers who had begun to hope that prices would remain at a fairly high level and enable them to recuperate their losses of the last few years. The efforts to bear down the market was for a time successful, but with every elevator and farm bin empty and farmers not over anxious to contract their new crop, the bears were soon routed and the fact that there was a substantial advance in prices at a time when the change is normally downward gives us good reason to hope that prices on the entire crop will be stabilized at not less than $5 per cwt.

The more reputable jobbers appear to be anxious to do everything they can to help the grower get a good price this year, but of course there are black sheep among the jobbers just as there are among the farmers who will take advantage of a situation for their immediate gain, without thought to the future. If these fellows can be kept in leash, and the farmers will use a little judgement in selling their crop, they will not, we feel, be disappointed in the returns.

Prices

Detroit — C. H. P., $5.25 per cwt.

Chicago—C. H. P., $5.50 1-2@6 per cwt.

Price one year ago — Detroit, C. H. P., $4.50 per cwt.

POTATOES

Wet weather and early frosts have damaged the Michigan potato crop to quite an extent, and we would not be surprised to see the October estimate for Michigan take a drop of several million bushels. The September estimate indicated a crop for Michigan of over 36 million bushels but we hardly think that actual digging will produce that many potatoes. However, the production will still be sufficiently large to warrant some over the final outcome.

Quite contrary to rule potato prices have registered a fair advance the past two weeks. Our readers will recall that we stated our belief two weeks ago that we looked for the market to strengthen "before very long", basing our belief on the probable over-estimation of the crop, and on the prohibitory freight rates which at present prices exclude western potatoes from the eastern markets. We also said in our September 16th issue that "because of the low opening market it is unlikely that there will be any drastic declines when the bulk of the crop is harvested, which fact, we believe warrants the grower in biding his time and waiting for the developments of the next sixty days." Since that was written buyers have advanced their prices to farmers from 7 to 10 cents a bushel throughout the commercial potato growing area. Farmers should not, however, become over-optimistic because of this advance. Potato prices may be a little higher than now but if the final estimate bears out the forecast of Sept. 1st, there will be nearly 100 million more bushels to market than last year, assuring that last year's estimate was correct, which we have reason to question. It seems highly improbable at the present time that farmers will see 75 cents per bushel on their 1922 crop.

Prices

Detroit — $1.50 per cwt.

Chicago — $1.10 per cwt.

New York — $1.30 per cwt.

Prices one year ago — Detroit, $2.84 per cwt.

HAY

Eastern markets were barely steady last week. Arrivals continued heavy as there was lot of hay in transit before the embargo was placed and this will have to be absorbed before there will be a stronger tone shown. Country loadings are reported small, but the demand is limited also. Western markets are firm and steady, due to smaller receipts and a good demand, especially for the better grades.

Prices

Detroit—Standard timothy and light clover mixed $15.50@16; No. 1 clover, $14@14.50 per ton.

Chicago—No. 2 timothy, $20@21; No. 1 clover, $14@16 per ton.

New York — No. 2 timothy and light clover mixed, $19.00@23 per ton.

Prices one year ago — Standard timothy, and No. 1 light clover mixed, $19@20; No. 1 clover, $14@15 per ton.

APPLES

During the past fortnight there was more activity in the apple market than had been expected and buyers have been booking orders rather freely. There seems to be a more optimistic feeling prevalent among the dealers than at any time previous this fall. Prices have ruled firm on all grades on most markets. American apples are constantly gaining in popularity with our foreign neighbors as reports show 41,647 barrels and 21,640 boxes of apples were shipped from the United States and Canada during the week ending September 16th, as compared with 31,852 barrels and 1,199 boxes the same week a year ago. Total exports to date this season aggregate 118,525 barrels and 89,220 boxes.

MISCELLANEOUS MARKET QUOTATIONS

Detroit, Tuesday, Sept. 26.

BUTTER—Best creamery, in tubs, 36@36 1-2 per lb.

EGGS—Best current receipts, 28@30c; fresh candled and graded, 31@34c; refrigerator firsts, 25 1-2@28c per doz.

GRAPES—Michigan, $2@35c per 4-quart basket and $2.50@3 per bu.

APPLES—New, $1@1.50 per bu.

PEACHES— Michigan Elbertas, $1.75@2; island peaches, fancy $2@

2.25. AA $1.75@2. A $1.50@1.75, B $1@1.25 per bu; New York, $1.50 @1.75 per bu.

PEARS—Bartletts, $2.25 @ 2.75 per bu; common, $1.50@2 per bu.

CELERY—Michigan, 20@30c per doz.

MUSHROOMS—Fancy, 50 @ 60c per lb.

GREEN CORN—20@25c per doz.

HONEY—Comb, 22@33c per lb.

CABBAGE—Home grown, 50@ 75c per lb.

POPCORN—4 1-2 @ 5c; Little Buster, 7 1-2@8c per lb.

ONIONS—$1.50@2 per sack of 100 lbs.

TOMATOES——Home grown, 75c @$1 per bu.

DRESSED CALVES—Choice, 18c; medium, 15@16c; large coarse, 8@ 11c per lb.

MELENS—Watermelons, 40 @ 50c each; Colorado pink meats, $1.25@1.50 per flat. Osage, $1.50@ 2 per bu; honeydew, $2@2.25 per case.

LIVE POULTRY—Best springs,22 @23c; leghorns, 19@20c; large fat hens, 25c; medium hens, 22@23c; small hens, 17@18c; old roosters, 15c; geese, 15c; large ducks, 20@ 22c; small ducks, 18@20c; turkeys, 25c per lb.

HIDES—No. 1 cured, 12c; No. 1 green, 10c; No. 1 cured, bulls, 8c; No 1 green bulls, 6c; No 1 cured calf, 17c; No 1 green calf, 15c; No 1 cured kip, 12c; No 1 green kip, 10c; No 1 horsehides, $2.50; No 2 horsehides, $1.50; sheep pelts, 25c@$1; No. 2 horsehide, 1c under No. 1 calf and kip 1 1-2c under No. 1.

CHICAGO BUTTER MARKET

The butter market ruled firm Monday, Sept. 25. Quality of current receipts was better but the demand for fine butter was sufficient to clean up the supply, and some of the more critical buyers were forced to pay a slight premium for goods to suit their needs. Medium grades were a trifle slow and dealers were rather anxious to move these grades, but the supply was not burdensome. Undergrades were scarce and in good demand. Centralized were slow and irregular.

CHICAGO LIVE STOCK MARKET

Widening of the price range featured the beef steer market during last week. Choice and prime steers were scarce as compared with the urgent demand, and values climbed daily until the peak was reached on Friday, when practically all steer of value to sell at $11.00 and better stood 25c to 40c above close of week before last. There was a certain class of steers selling around $10.50, slightly below and sightly above that figure, which was considered about steady with a week previous, but those selling downward from $10.00 showed uneven declines amounting to 25c to 50c generally, cases of 50c or more representing extreme low spots measured with last week's best selling. The best steers were in strong hands and at no time looked weak, except perhaps on Friday, when demand was rather indifferent. Lower grades of natives were adversely influenced by the profusion of western range cattle which came directly in competition with them and after the initial session values slumped almost daily. On the other hand, new higher tops were breaking out every day and prime weighty steers were flirting with the $12 mark after midweek, only to get within 5c of that figure before the week-end.

Chicago's receipts for the week at 72,500 were the largest of any week previous this year and the largest since the week ending Oct. 23 of last year, when 73,580 arrived. With the exception of that week, the past six-day receipts ranked highest since the third week in January, 1921, when 77,601 cattle were marketed, that week being the largest that year. Seven primary markets reported a total of 304,000 cattle for the past six-day period, which is the largest weekly run since the third week of November, 1920, when 355,000 cattle were marketed.

Although offerings of hogs last week were among the smallest of the year, they were slightly above normal for this season at 118,800, being 5,600 smaller than previous week, 3,800 smaller than a year ago, 40,200 larger than two years ago and 13,100 larger than the eleven-year average. Only four corresponding weeks during the past eleven years were credited with more hogs than last week.

The general run of hogs last week was only slightly heavier than previous week, with the estimated average weight of 250 lbs., showing 1 lb. gain as compared with a week ago, 9 lbs. compared with a year ago and 14 lbs. comparing with eleven year average. Last week's average stands third heaviest in over eleven years comparing with corresponding periods.

A good demand together with a scarcity of desirable light hogs, resulted in sharp advances on the latter class after midweek, with top reaching the highest point since early last month. Last week's extreme top at $10.55 paid late in the week shows a 55c gain over previous week's top being $1.80 above corresponding week a year ago, $7.70 below two years ago and within $2.25 of the eleven year average.

Active outside competition on best grades in practically all classes added tone to the trade last week advancing the general average cost during the week to $9.00, being $1.50 above a year ago, and $7.70 lower than two years ago and $2.70 below the eleven year average. Last week's average stands highest since first week of August.

Offerings of sheep last week totaling among the largest of the year at approximately 85,000, are comparatively small for this part of the season, being below any corresponding period in several previous years. Practically half of the receipts arrived from the range, although supply included just a sprinkling of aged stock and only one large shipment of yearlings.

Handy aged sheep met an active demand from country and local buyers, with values largely 25c above previous week's close, best light ewes quoted slightly above $7.00. However, cull and weighty sheep were neglected after midweek and prices fluctuated at the recent gains closing largely on a level within a week previous.

Wethers were consideraby fewer than previous week, with quotations generally 25c higher, while a comparatively liberal supply of range yearlings during midweek sold for feeding purposes at $11.50. A few aged killing wethers brought $8.00, with yearling wethers late selling up to $11.75 for local slaughter.

Lack of aged sheep quality accounted for the 10c drop in the average cost during the week, with last week's average of $6.40, comparing with $6.50 a week ago, $4.10 a year ago and $6.00 two years ago.

Combined offerings at the seven leading western markets last week at 238,000 are the largest thus far this year, but considerably below normal for this season, being smaller than any corresponding week in over eight previous years. Arrivals for the year to date at the same centers are practically the lightest for any same period in over seven years.

WOOL

Actual signing of the tariff law immediately lent a feeling of strength and security to the wool trade, and prices are well maintained, with a good active business. Though price levels remain unchanged, the tone throughout is firm and the volume of wool moving is slightly larger than recently. All grades are sharing in the activity and dealers in the midwest are almost uniformly in a rather optimistic mood.

Quotations on mid-western or so-called "native" wools in large lots — such prices as are obtained by the farmers pools — are as follows: Fine and medium staple, 47 @48c; 1-2 blood staple, 46@47c; 1-2 blood clothing, 34@45c; 5-8 blood wools, 43@45c; 1-4 blood, 40 @42c; low 1-4 blood, 30@32c; braid, 26@28c. Western territory wools sell at prices which range from these levels to 4c lower, for the corresponding grades.

WHEAT AND CORN EXPORTS

Bradstreet's of Sept. 16th says: wheat, including flour, exports from the United States and Canada for the week ending September 14, aggregate 6,945,930 bushels, against 8,713,163 bushels last week and 11,601,497 bushels in the like week a year ago. For the eleven weeks ending September 14 exports are 91,733,299 bushels, against 110,128,664 bushels in the corresponding period a year ago. Corn exports for the week are 1,763,954 bushels, against 1,994,712 bushels last week and 3,737,437 bushels in the same week a year ago. For the eleven weeks ending September 14 corn exports are 28,530,705 bushels, against 25,690,264 bushels a year ago.

1922 LAMB CROP SHORT

Realization of how short the 1922 lamb crop was is now dawning on the trade. Those who knew this early in the season and made lamb contracts at early prices have been substantially rewarded. The highest prices of the season have been recorded recently and still further appreciation is possible, although lamb is always in competition with pork which is actually much cheaper. However, there is an element among consumers that will eat lamb regardless of cost and just as long as that market is not saturated, stability is assured. Native lambs have never been marketed as early as this year, and, except for feeder grades, the end of the Western movement is already in sight. As recuperation of breding flocks will require several seasons, a good market, both for the 1923 lamb crop and wool clip appears assured.—Round-up.

STOCK OF WOOL IN U. S.
479,151,184 POUNDS

Stocks of wool in and afloat to the United States on June 30, 1922, totaled 479,151,184 pounds, grease equivalent, according to the Quarterly Joint Wool Stock Report just released by the Bureau of the Census, United States Department of Commerce, and the Bureau of Agriculture Economics, United States Department of Agriculture. This is the first report issued under a joint arrangement between the two Government departments.

Stocks by condition consisted of 322,332,921 pounds of grease wool, 35,648,032 pounds of scoured wool, 16,629,680 pounds of pulled wool, 23,346,363 pounds of tops, and 8,328,283 pounds of oils. Dealers held 176,857,999 pounds and manfacturers 197,652,634 pounds. Of the total quantity reported, 54.8 per cent was foreign wool, and 45.2 per cent was of domestic production. The supply of 1-2 blood and fine wool is said to compare favorably with that of 1-4 and 3-8 blood.

The distribution by sections of stocks by manufacturers was: New England 116,664,403 pounds, Middle Atlantic 87,099,512 pounds. Pacific Coast 2,773,443 pounds, all other sections 18.544,333 pounds. Holdings of dealers according to markets were: Boston 108,167,907 pounds. Chicago 10,833,492 pounds, New York 6.854,977 pounds, Philadelphia 24,039,626 pounds, Portland 2,849,854 pounds, St. Louis 12,416,061 pounds, San Francisco 1,849.948 pounds, other cities 14,091,633 pounds.

MAINE POTATO GROWERS HOLDING CROP

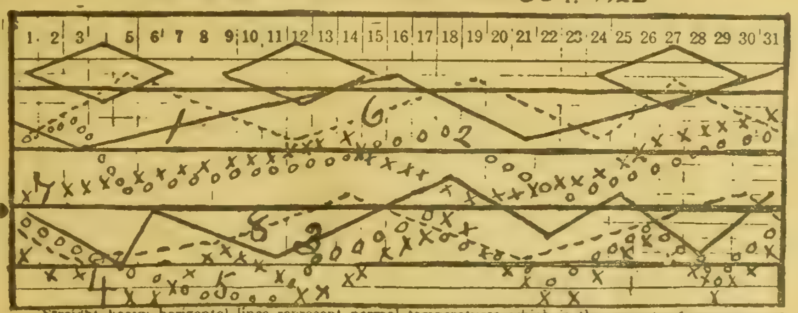
Aroostook county farmers are unwilling to sell their potato crop at present prices as they expect better conditions later in season. Growers are selling just enough potatoes at present to get money enough to pay help for digging. As the crop will average only 60 to 65 barrels per acre, the present price of 90c@$1 per barrel is not sufficient to pay the fertilizer bill and digging expenses.

Digging is nearly half over and there is no doubt that Aroostook county wil harvest a good crop. This fact, together with reports that late blight and rot will reduce the yield in some of the other states which compete with Maine, is the basis for a general feeling that prices will rule better as soon as Long Isand and Jersey commence to sacken up a bit on their present heavy shipments. Shipments from Maine at present are not heavy for the time of the year, averaging only about 50 cars per day. Early Cobblers are all pretty well shipped out. Mountain varieties are now being loaded and the quality of the latter is excellent. The tubers run even size, bright, smooth and sound.

THE WEATHER FOR NEXT WEEK

As forecasted by W. T. Foster for The Michigan Business Farmer

FOSTER'S WEATHER CHART FOR OCT. 1922



Straight, heavy, horizontal lines represent normal temperatures, which is the average of same days of the year for forty years. Crooked lines above normal lines mean warmer; below, cooler; that marked 1 is for section 1, north of latitude 47, between meridian 90 and Rockies crest—2 for section 2 on my section map is for east of meridian 90, north of latitude 47—3, between latitudes 39 and 47 and between meridian 90 and Rockies crest—4, east of meridian 90, between latitudes 39 and 47—5, south of latitude 39, between meridian 90 and Rockies crest—6, east of meridian 90, south of latitude 39—7, north of latitude 43½, west of Rockies crest—8, south of latitude 43½ to Mexican line and west of Rockies crest.

Washington, Sept. 29, 1922.—I advise not to sow winter grain on dry soil. There are many risks before those who are interested in planting and sowing for the crops of 1923 and 1924. With confidence I can say to Mexico a great winter drouth, including four or five months, covering the whole of that country, will begin in October, 1923, and ruin a large part of winter farming products and winter grain. But the drouths that will come to America, Canada and Alaska within those two years will be local, cannot be explained in a general weather bulletin, and therefore must be dealt with privately. Australia and New Zealand have short crops on account of the long foretold shortage of rain—not a drouth—but the great drouth, beginning in October, 1922, will ruin their crops and they should prepare for a famine that will hit them about May, 1923. I am not expecting a drouth in North America this year but—after the general of heavy rains of October—a rapid decrease of rain may be expected where excessive rains have fallen for several months. I will again warn you of great extremes of temperatures in October averaging colder than usual east of the Rockies; better weather west of the Rockies.

Michigan: Highest temperatures 1, 9 and 18; lowest 5 and 12; average much colder than usual; severe storms and most rain during weeks centering on Oct. 6 and 14; cold waves and threatening frosts following 1 and 9.

The cause of the motion and force is the all important question in all the sciences. Further weather cannot be known without understanding that cause. I know that the forces of the solar system are moving inward toward the sun; all other scientists say they are moving outward from the sun. There are three causes of motion that drive the forces toward the sun—pressure from outer ether, condensation of inward moving matter at the sun, the pull of the sun's electromagnetic force. See my explanation of that electro magnetic form and force. Besides these three causes we all know of the incidental energy that comes from compressed matter, not chemically combined, which causes motion when it breaks its bonds.

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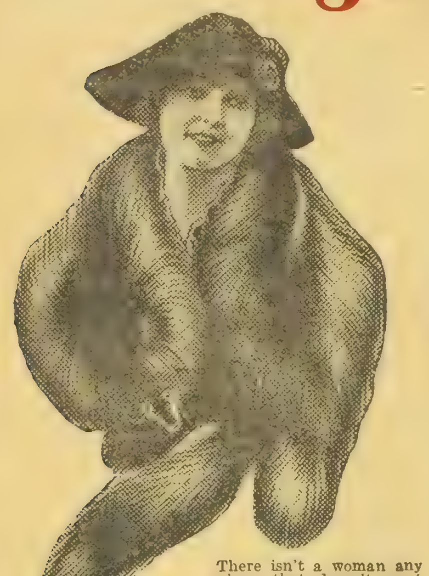
Select the articles you want, send us your order, and pay nothing till the goods arrive. Then pay the smashed bargain price and postage. Send no money now.

PAY ON ARRIVAL

Letter or postcard brings as many bargains as you want. If you are not satisfied when you see how much you have saved, return the goods, and we'll refund your money.

Manchurian Wolf Fur Scarf

$3.98



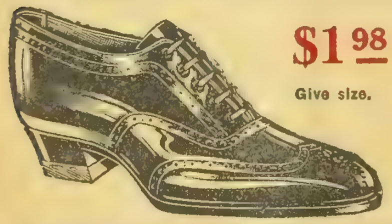
There isn't a woman any where that doesn't want and need a handsome fur scarf. And Sharood offers an unusual value at a price within the reach of everyone. This scarf is about 46 inches long and 12 inches wide. It is stylish as well as warm.

The lining is good quality satin, and there is an extra ruching laid around the neck inside, so as to protect the fur from wearing. Only the most expensive fur scarfs have the features which we offer you at this bargain price. **Order black Manchurian wolf scarf by No. 28E5193. Order brown by No. 28E5194. Send no money. Pay only $3.98 and postage on arrival. If not satisfied your money will be refunded. Be sure to state color wanted.**

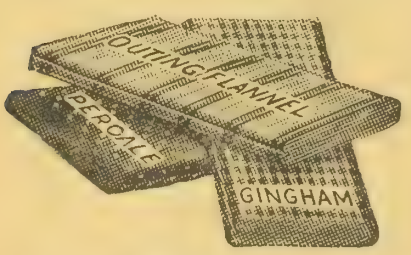
WOMEN'S Calf-Finished Leather Oxfords

$1.98

Give size.



Made with imitation shield tip and medallion-perforated vamp, perforated lace stay and circular foxing. Has medium rubber heel and medium pointed toe. Sizes, 2½ to 8, wide widths. **Order gun metal by No. 28A69. Order Brown by No. 28A70. Send no money. Pay $1.98 and postage on arrival.**



10 Yards Fancy Outing Flannel $1.49

Ideal weight for nightgowns and undergarments. In fancy stripes, checks and plaids, white grounds with pink, blue or tan designs. 27-inch width. State pattern and color. **Order by No. 28F3423 Send no money. Pay $1.49 for 10 yards and pastage on arrival.**

10 Yards 36-inch Percale at $1.39

Very choice patterns in fast colors. In white, gray, Calcutta and Indigo blue with neat stripes. figures or dots. State color and pattern. **Order by No. 28F3406. Send no money. Pay $1.39 for 10 yards and postage on arrival.**

10 Yards 36-in. Challies $1.59

Persian and floral patterns. Predominating colors—navy, pink, red, tan, green or blue grounds. **Order by No. 28F3404. Pay $1.59 and postage for 10 yards on arrival. State color.**

10 Yards Unbleached Muslin 89c

Unbleached muslin of excellent wearing quality—unequaled for domestic uses. 36-in. width. **Order medium weight by No. 28F3630. Send no money. Pay 89c and postage for 10 yards on arrival.**

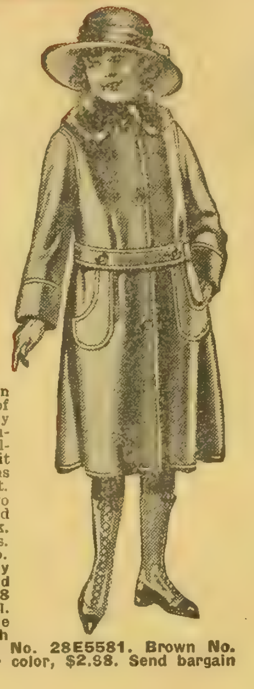
10 Yards Bleached Shaker Flannel $1.39

An extraordinary price for fine quality Shaker Flannel. Ideal for children's winter undergarments. **Order by No. 28F3636. Send no money. Pay $1.39 and postage for 10 yards on arrival.**

Fine Fur Trimmed COAT For Girls

Only

$3.98

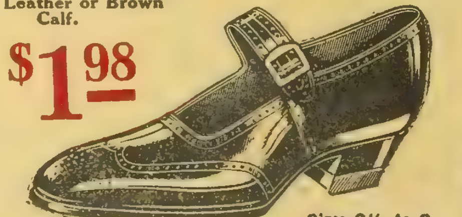


A sensational bargain—a handsome coat of Pressed Velour in Navy Blue or Brown. Regular $7 value. Has collar of genuine Kit Coney, which buttons snugly around throat. Belt all around, two novelty pockets and two buttons at back. Sizes 7 to 14 years. **Order Brown by No. 28E5595. Order Navy by No. 28E5596. Send no money. Pay $3.98 and postage on arrival.**

Order similar style with handsome plush collar. 2 to 6. Black No. 28E5581. Brown No. 28E5582. Price either color, $2.98. Send bargain price and postage.

Rare value Women's Strap Pump, Patent Leather or Brown Calf.

$1.98



Sizes 2½ to 8 Wide widths

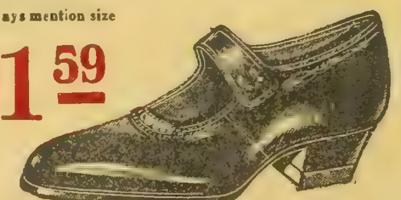
In black patent or brown calf leather. a stunning one-strap model with imitation shield tip and medallion, effectively perforated. Has medium rubber heel. **Order Patent leather by No. 28A-72, $1.98. Order Brown Calf by No. 28A73. Send no money. Pay $1.98 and postage on arrival.**

WOMEN'S KID FINISHED SLIPPER

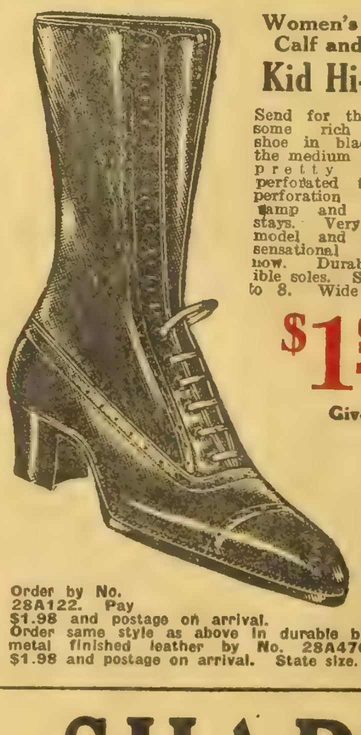
Black or Brown

Always mention size

$1.59



Soft kid slipper. Stylish strap model with two buttons. Medium round toe. Cushion insoles. Medium rubber heels. Solid oak leather soles. Sizes 2½ to 8. Wide widtns. **Order black by No. 28A228. Order brown by No. 28A229. Send no money. Pay $1.59 and postage on arrival.**



Women's Black Calf and Kid Kid Hi-Cut

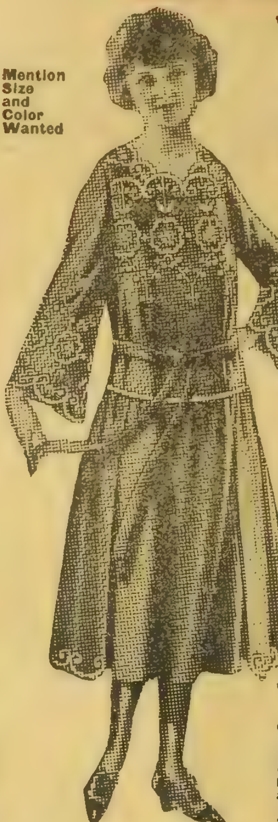
Send for this handsome rich kidskin shoe in black. Note the medium toes with pretty imitation perforated tips, the perforation around vamp and on lace stays. Very popular model and really a sensational bargain now. Durable flexible soles. Sizes 2½ to 8. Wide Widths.

$1.98

Give Size

Order by No. 28A122. Pay $1.98 and postage on arrival. Order same style as above in durable black gun metal finished leather by No. 28A476. Pay $1.98 and postage on arrival. State size.

Mention Size and Color Wanted

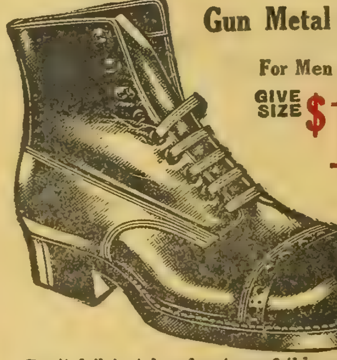


Very Richly Embroidered Gabardine DRESS

$2.98

Sharood especially recommends this pretty model. A becoming style that is going to be popular this Fall. has wide flowing sleeves two new fashion panels. handsomely embroidered at top of waist. and on sleeves. Women's and misses; sizes 16 to 44.

Order Brown by No. 28E5521. Navy by No. 28E-5520. Send no money. Pay $2.98 and postage. Money back if you're not satisfied. State size wanted.



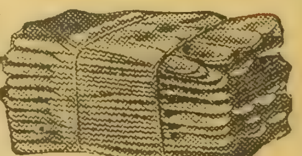
Gun Metal Blucher

For Men and Boys

GIVE SIZE $1.79 UP

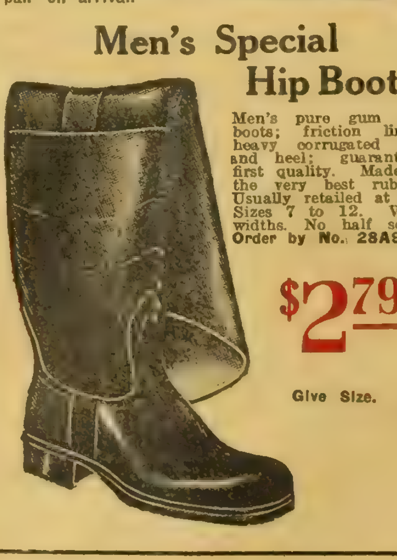
Don't fail to take advantage of this splendid offer in a practical blucher. Sturdy dress shoe for men, boys and little fellows, of heavy, genuine gun metal veal- uppers and solid leather soles. Low, broad heels. Be sure to get your order in at once. Big value. **Order men's sizes 6 to 11 by No. 28A674. Pay $1.99 and postage on arrival. Order little boys' gun metal blucher, sizes 9 to 13½ by No. 28A590. Pay $1.79 and postage on arrival. Order same style for big boys, sizes 1 to 5½ by No. 28A589. Pay $1.89 and postage on arrival. Always mention size.**

1 Doz. Work Gloves, 99c



Regulation stout canvas work gloves with elastic knitted wristlets. Generously sized. **Order by No. 28B2835. No money now. Pay 99c and postage for one dozen pair on arrival.**

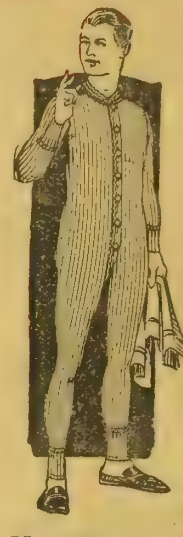
Men's Special Hip Boots



Men's pure gum hip boots; friction lined; heavy corrugated sole and heel; guaranteed first quality. Made of the very best rubber Usually retailed at $5. Sizes 7 to 12. Wide widths. No half soles. **Order by No. 28A949.**

$2.79

Give Size.



Men' Winter Underwear

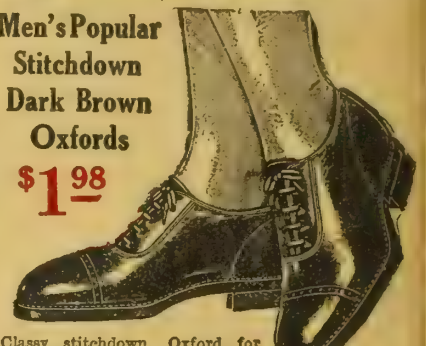
99c

They are the best bargains you'll find at anything near this sale price. Heavy weight flat knit union suits of select long fibre cotton in popular Jaeger or grey Random color. Heavily brushed fleece lining on inside. Wrists and ankles are elastic knit. Sizes, 32 to 46 chest. Buy a year's supply right now—today. **Jaeger color No. 28C1279. Grey Random No. 28C-1280. Send no money. Pay 99c and postage on arrival. State size.**

Boys' Flat Knit Union Suits of fine quality cotton. Sizes 24 to 32 for 3 to 16 years. Order by No. 28C-1358. Price 79c. Pay 79c and postage on arrival.

Men's Popular Stitchdown Dark Brown Oxfords

$1.98

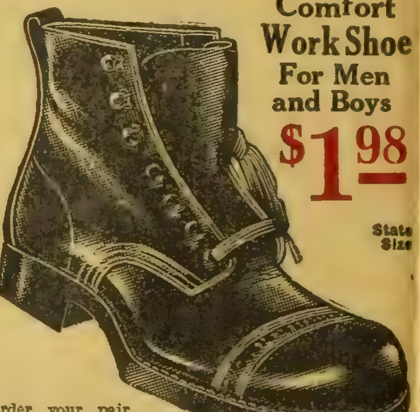


Classy stitchdown, Oxford for women. Wonderfully comfortable and stylish. Uppers of dark mahogany leather. Smooth leather insole. Flexible stitch-down oak outsoles. Low rubber heels. Sizes 2½ to 8. Wide Widths. **Order by No. 28A268. Send no money. Pay only $1.98 and postage on arrival.**

Comfort Work Shoe For Men and Boys

$1.98

State Size

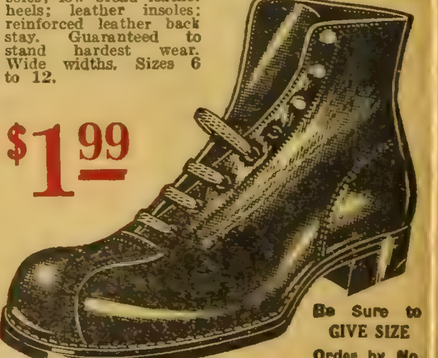


Order your pair quick—while this bargain offer lasts. Wonderful work shoe for men. Has soft, strong uppers that resist barnyard acids. Solid leather insoles. All seams stitch with waxed thread. Strong leather soles. Wide widths. Sizes 6 to 11. **Order by No. 28A758. Send no money. Pay $1.98 and postage on arrival. Order boys' sizes 1 to 5½ by No. 28A552 Price $1.98. Order little gents', sizes 9 to 13½ by No. 28A555. Price $1.79 and postage on arrival. Mention size.**

Men's and Boy's Durable Outing Bal

Fine scout shoe of soft pliable brown leather. Absolutely guarranteed barnyard proof; reliable sturdy soles; low broad leather heels; leather insoles; reinforced leather back stay. Guaranteed to stand hardest wear. Wide widths. Sizes 6 to 12.

$1.99



Be Sure to GIVE SIZE

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MINNEAPOLIS, MINN.

The Michigan BUSINESS FARMER

An Independent Farmer's Weekly Owned and Edited in Michigan

VOL. X, NO. 4 MT. CLEMENS, SATURDAY, OCTOBER 14, 1922 $1 PER YEAR

"Yum, Yum!—My pop grew this!"

Have you joined the friendly object contest?—See page 16

Current Agricultural News

FARMERS TO OWN FIRE FIGHTING EQUIPMENT

UNTIL recently when there was a fire in the rural district about Owosso the farmers would phone the fire department of that city and the fire fighting apparatus would be rushed out to extinguish the blaze but now the city fathers say this can be done no more. They say they pay everything and the farmers nothing and what would become of their property if a fire should break out in town while the trucks were out in the country. This has caused an agitation among the farmers for the purchase by township, of fire trucks, equipped with chemical tanks and small pumps. Efforts are being made by prominent farm leaders to have placed on the ballots at the spring election in the townships, proposals to raise by tax the funds with which to buy three trucks.

Vernon township of this county has had a fire truck of its own for several months. Continued objection on the part of Durand people to the sending of the Durand truck into the country, and a final threat of injunction proceedings, caused the Vernon township voters to authorize the township board to buy a truck. It is kept in the fire station at Durand, and Durand firemen man it. The truck is equipped with several hundred gallons of chemical, hose, roof ladders, and other standard equipment. It has responded to numerous calls and done effective work.

The city commission at Owosso has stated that if the farmers, within a radius of eight miles of Owosso, want to buy a fire truck, it may be kept at Central station there and in case of fire two men from he local department will be sent out.

LIVING COSTS SOAR IN GERMANY

"IF winter comes," has taken on a new significance for the average German workingman with a family. Not a single day passes without the newspaper announcing new increases in the price of bread, potatoes, coal, and other necessaries. Street car fares, newspaper subscriptions, smokes and beer are going up every other day, while shoes and clothing costs are almost "out of sight."

In addition to the cost of living there also is beginning to be noticeable a shortage of potatoes, sugar, and other staples. The mayor of Berlin posted signs throughout the city advising the people to buy their own supplies of potatoes as the city, which heretofore has bought them in large quantities and retailed them at cost price to the residents, can do so no longer as the treasury is empty. The prices of food have gone up so that now they average 343 times the pre-war standard.

1922 ROAD PROGRAM ONLY HALF FINISHED

BECAUSE of a shortage of cement for which the coal strike and the car shortage are responsible about 50 per cent of the road construction mileage for which the State Highway Department awarded contracts since Jan. 1, and which it was expected would be completed before Dec. 31, will have to go over to 1923. This is the report of department officials.

Work on some of the 1922 contracts which can not be completed until next year are in the 16 counties of Calhoun, Clinton, Lenawee, Bay, St. Clair, St. Joseph, Charlevoix, Saginaw, Genesee, Monroe, Sanilac, Macomb, Lapeer, Huron and Tuscola.

Since construction started this year on department contracts, there had been completed in the state, up to Sept. 1, 98 miles of cement roads and 317 miles of all classes of roads.

MARION CO-OPERATIVE CREAMERY SUCCESSFUL

PATRONS of the Marion co-operative creamery are well satisfied with the business done by that concern. It has increased so rapidly of late that it has been found necessary to get an expert accountant to systematize the work and make it possible to operate without increasing the number of employes. This is a home business and has routes leading in all directions from town.—Evart Review.

CHESTER WHITE BREEDERS HAVE STATE ASSOCIATION

A NUMBER of breeders of Chester White Swine held a meeting on the State Fair grounds September 7th and organized a State Association to be known as the Michigan Chester White Swine Breeders Association and elected officers as follows: A. J. Hawkins of Coldwater, president; Fred L. Bodime of Reese, vice-president: F. W. Alexander of Vassar, secretary, treasurer; Andy Adams of Litchfield, Lucian Hill of Tekonsha and Norman Weber of Royal Oak, executive committee.

It is the purpose of the organization to promote the interests of the breed through holding public sales, also in giving support to Boys and Girls pig club work throughout the state. Membership is open to all breeders of Chester Whites in the state and the dues is only $1.00 per year; all money after paying the small office expenses will be used to promote the breed in this state. It is requested that all breeders of the Chesters who believe in boosting the breed, communicate with the secretary at once.

AMERICAN PIGS POPULAR IN CZECHOSLOVAKIA

THE current year will show a record volume of purchases of American lard and fat pork by Czechoslovakia, says Special Agent Dennis, in a cable to the Department of Commerce. The recent rapid trade expansion is due to the scarcity of butter and to the export embargo on Yogoslavian fat hogs, also to the strength of the currency of Czechoslovakia. Whereas before the war little or no fat pork, and less than 2,000 tons of lard were imported annually, the estimated purchases for the present year will exceed 100,000 tons of combined lard and fat pork. American fat pork is being used in increasingly large quantities by laborers in the iron and coal mines, and by the loggers in the Slavian forests. The American lard is underselling that from Hungary, Rumania, and Yugoslavia, and is actually being imported into the latter countries which have heretofore been strong competitors as exporters of this product. Prague importers report difficulty in filling orders for lard. The country's hog industry is unorganized and the native sides deficient in fat. Barring the approaching let up in demand incident to the killing season, traders should work for continued expansion in the American pork products trade.

INDIA NOW THIRD WHEAT PRODUCING COUNTRY

Next to the United States and Canada, this year's wheat corp of India amounting to 9,813,000 tons, places that British Colony as the greatest wheat grower in the world for 1922. Karachi, the leading wheat port of India, is also the chief wheat port of the British empire, says Consul A. M. Warren, Karachi, in a dispatch to the Department of Commerce.

An embargo on the exportation of wheat now exists in India and unless this is removed it is feared that the inevitable surplus on hand will tend to greatly decrease planting next year, thereby risking a country-wide shortage should there be insufficient monsoon.

NORWEGIAN FRUIT FAILURE MAY MEAN BIG IMPORTS

The failure of the Norwegian fruit crop this year will necessitate heavy foreign imports and it is estimated by American Consul George Nicholas Ifft, Bergen, Norway, in a dispatch to the Department of Commerce that double the usual quantity of American apples and other fruits will be required.

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Volume X
Number 4

The Michigan
BUSINESS FARMER

October 14
1922

Successful County Fair Minus Races and Midway

By L. D. TUCKER

WHICH KIND OF FAIR DO YOU PREFER?

ANNUALLY about 100,000 Michigan business farmers and their wives attend the state and county fairs. Why do they go? Is it to see the exhibits, the horse races, the aeroplanes, the midway, —or just the crowd? The bigger fairs still have the midway. The smaller fairs have tried to eliminate them because of the cheap and often fraudulent character of the attractions. The midway at the Michigan State Fair has been under fire for several years, yet at the last fair, it was patronized by many thousands of people. Do the farm folks like the midway? Would they still attend their state and county fair if the midway was done away with? The accompanying article tells about a county fair in the upper peninsula which boasted of neither midway, carnival show, horse races nor aeroplanes, yet people attended in large numbers and were satisfied with what they saw. As Mr. Tucker suggests in his article—you have probably seen both types of fairs. Which do you like the best? A letter to the editor telling what you like best about the state or county fair will be appreciated. —Editor.

YOU'VE seen them both—no doubt. But the fact remains that there exists among the communities today two distinct types of county fairs—one of money-making, with its shows, its aeroplanes and its horse-racing, and the other the agricultural fair, with its wealth of fruits, grains, dairy products and live stock. And after all, it is the latter type which really conveys the purpose of a county agricultural fair.

Not that the agricultural phase is entirely over-looked in the fair which features horse-racing, and hair-raisers on its hand-bills and posters. It can be found, in varying quantities, scattered throughout the grounds, some in this building and some in that, but, as a rule, one has to break away from the amusement-seeking crowd to find it, for, where thrillers and other entertainment are emphasized the mass of ticket buyers are not interested in the pumpkins, watermelons, apples, peaches, pears, cattle, chickens, etc.

Which brings us back to our contention that, after all, will do a more constructive service to that community than any other type. One hundred farmers visiting the fair in search of new ideas, better methods and bigger results, must surely mean more than one thousand so-called city folk seeking amusement and entertainment only.

And that is what impressed us about the fair held over in Ontonagon county recently. It was a real county fair. There wasn't an aeroplane on the grounds, and in fact the only really disturbing element was a powerful tractor which was showing the farmers new ways and methods of plowing and stump pulling, in an adjoining field. There wasn't a show on the ground. You weren't barked at to "Come and see Nemo, the smallest dwarf in the World." There were no games of chance. You couldn't lose your money trying to ring a cane with a ring that wouldn't slide over any one of the canes anyway.

There were no horse races, tight rope walkers, dog and pony shows or, in fact, not a single feature, with the possible exception of a lunch counter or two and, perhaps, a band, which would tend to detract from the big business of the day—the agricultural exhibit.

It is doubtful if many, or any, county fairs throughout the peninsula improved on that agricultural exhibit. It was the result of hours of pains-taking effort on the part of those who had arranged it. In the fruit section alone, 160 plates were neatly arranged, each bearing its burden of some record-breaking specimen of the farmer's art. There were apples, peaches, plums and pears of the finest texture, shape and color and widest variety.

The apples particularly—all grown in Ontonagon county, (considered the most fertile in the upper peninsula of Michigan) showed up strikingly. There were the Duchess and Wealthies, and a half a dozen or more varieties of seedlings, with the great, red Wolf Rivers standing out prominently along the top row. Plums rivalling in size and taste the product of California itself, were there in abundance.

In another section, but within the same building, were the root and grain crops. Everything from the humble bean to the huge, golden pumpkin was neatly arranged in rows, where all might see and admire.

Here was the handiwork, exhibited by the women of that community —needle work and cooking. There was the work of the girls' garment clubs, and, in one corner, samples of the progress achieved by the school boys and girls in penmanship, history and other allied subjects.

In fact it seemed that everyone in the community—from the youngest school child to the oldest individual in the county—was in some way represented in that display. It was, indeed, a real, old-time county fair, and I doubt if any county in the peninsula this fall could boast of an agricultural display which could equal that shown at the Ontonagon fair.

Two days were devoted to Ontonagon's fair. During the time practically every farmer in the community visited the display, and it was not difficult too observe that the majority, and they carefully examined the various specimens, were reaping the maximum of benefit from the things they saw. They came, not to be amused or entertained, entirely, but to learn what their neighbors were doing and how they were doing it.

Other communities could profit by adopting Ontonagon's example. They had a real, honest-to-gosh fair over there.

M. A. C. ANNOUNCES ATTRACTIVE WINTER COURSES

THE Michigan Agricultural College has announced its regular winter short courses to begin this year on October 30th. The advantages of these courses to those who cannot take the full four year course are many, and it is surprising the amount of practical instruction which students receive during the two, four, eight, twelve, or sixteen weeks, depending upon the course selected.

One of the advantages which will appeal to many farm parents this year is that of economy. The full four-year course involves the expenditure of several hundred dollars, while the eight weeks' course can be secured at a total expense of from $80 to $100. Many farm boys who have planned on taking up the regular courses at the M. A. C. this year have been disappointed because of the low farming returns. To such the short courses afford an excellent opportunity for adding materially to their fund of knowledge and giving them the contact with college life and college people which is so helpful in broadening the viewpoint.

The fall term which begins Ocober 30th consists of the following required subjects: Animal feeding, types of livestock, farm crops A, farm engineering, agricultural chemistry, gymnasium. The winter term beginning January 2nd, includes such subjects as: Soils A, study of breeds, drainage, gymnasium. Elective subjects are: Farm dairying and testing, parlimentary law and speaking, farm management, farm accounting, dairy barn and herd management, potato production, horticulture A, shop work, swine breeding and management, bee-keeping.

Special courses are given in dairying, dairy manufactures, marketing milk, ice cream making, horticulture, poultry, truck and tractor manufacture and operation.

All students completing the first year in the 16 weeks' course are required to elect one of 15 different projects which can be carried out during the summer following. These projects include almost every activity on the average farm.

In discussing the short courses, president Friday of the M. A. C., recently said:

"There are twenty thousand farmers in Michigan who should take these short courses during the next five years. There is one vital difference between a large-scale industry like manufacture and agriculture which is still carried on in establishments owned by a single man and employing on the average only one additional worker. Manufacturing in Michigan is conducted by 8,300 establishments, employing 550,000 people. The average manager in this industry supervises almost seventy men.

"The volume of output is great enough in most of these establishments to enable the owner to employ the services of skilled engineers, chemists, accountants and salesmen. These professional men solve the difficult problems which present themselves for the manufacturer.

"The agriculture of Michigan is carried on by 196,000 farms. On the average there are two workers to the farm and one of these is the farmer himself. It is manifest that each of these farmers must decide what he will produce, what methods of production will be followed and how his product shall be marketed. Clearly, in an establishment the size of the average farm it is not economical to hire the service of a technical expert who should analyze and criticize the methods employed, and who shall devise new and improved methods for the conduct of the business. The farmer therefore needs an all-round training in the technical problems relating to his business; for he must solve most of these problems himself when they arise. This is one of the reasons why every wide-awake young farmer should come to the Agriculture College for training in the Short Course. Unless he acquires this technical skill for himself his farm will lose a large portion of the benefit which would result from the utilization of the scientific knowledge concerning agriculture.

There is another reason why the progressive young farmer should spend at least one winter at the Agriculture College. There are many problems of agriculture which are so difficult for anyone but a professional expert to handle. The Agricultural College employs such a corps of experts constantly. Those who are aware of their existence can avail themselves of this special training when it is needed on any particular farm. The man who has taken a short course at the Agricultural College knows exactly what help he may obtain from the institution when he has need for it. It is the function of the Michigan Agricultural College to furnish to its 196,000 farmers just that skilled training which the large manufacturing establishments buys for itself on a commercial basis."

Mr. E. B. Hill assistant to Dean Shaw, is director of the short courses and Mr. A. M. Berridgs, former member of the State Farm Bureau Board and a successful farmer in Montcalm county, is associate director. Complete information on the courses can be obtained by addressing Mr. Hill, care of the College at East Lansing.

PROVES VALUE OF PURE-BRED SIRES IN GRADE HERDS

THE LEER Guernsey Breeders Association of Alpena County, promoted by the American Guernsey Cattle Club are exhibiting at the National Dairy Show held at St. Paul, Minn., October 7-14th.

In the short period of time this Association has made remarkable strides in the work of improvement if dairy cattle by the use of Pure-bred Guernsey sires. One of the outstanding features are that prior to the year 1909 little or no effort had been made to improve the livestock in Leer Community. As a common practice sires were selected from their own herds and by that process of inbreeding of scrub cattle the herds were constantly degenerating, producing as a result a very inferior type of scrub cattle.

Finally on May 22nd, 1909, as a result of the untireing efforts of Mr. W. T. Raven, Dairy Extension Specialast, M. A. C., the Leer Guernsey Breeders Ass'n was organized with twenty charter members who subscribed a total of 130 scrub cows.

A sufficient sum was raised to purchase three registered pure-bred Guernsey sires. Each of the three sires were placed at the head of herds giving a total of not less than forty cows for each group. A breeding fee of $1.00 per head was charged by the association. The funds obtained in that manner were used to defray the expenses of maintaining the sires and to assist in replacing sires as it became necessary to do so. To date the association is gratified of the fact that, small sum so obtained has been found to be sufficient to meet the needs.

The herds of the association members being divided up into groups, each sire is used two years in each group. When the circuit of the group has been made by each sire he is then replaced by another registered pure-bred sire. During the life of the Association to date eleven different sires have been used. Furthermore, each time a new sire was secured for the association only the best obtainable would do.

The good effects of that practice is clearly shown by the desirable confirmation of the offsprings and the attractive prices that have been received for the surplus stock which were sold. As a matter of fact the temptation to sell has been so great —as to threaten the financial affairs of the association, because of the reduced number of cows in the present association.

Moreover, as another influential factor, each year the asociation has an assembly of their Guernseys, this occasion is known as the Leer Guern-

(Continued on page 23)

The Fifty-Fifty Farming Agreement

Not a Lease, But An Ideal Partnership Plan for Land Owner and Land Worker

By **H. A. BEREMAN,** *Farmer and Breeder*

Dr. C. L. Wendt. originator of the modern farm partnership agreement.

SEVERAL years ago an account was published of what was then called "A Partnership Lease" that had been originated and worked out by Dr. C. L. Wendt. The idea has grown since that time, and now promises to revolutionize the vexatious problem of land tenantry in this country where nearly half of the farming land is now operated by renters. Many of these move every year, and on the average all of them move every two and a half years according to statistics of the Census Bureau.

This fifty-fifty idea is so vital to the welfare of the entire Nation, that the writer recently took a little journey to the home of Dr. Wendt at Canton, S. D., and spent some time with him going over his latest experiences and plans, and visiting two of his farms—and incidentally seeing a lot of the fine farming country in Lincoln county. We feel that this modern and wholly American plan of farm partnership is so valuable, that we call special attention to the general scope and details of the plan as worked out by Dr. Wendt in his own experience.

And first, let us state that the Wendt farming agreement is not a lease but a business partnership. The landlord and tenant system has not changed in a thousand years, and this ancient "Master and Servant" relation does not adapt itself to American ideals. A "landlord" is a lord of the land, and we do not have any such in our country. "Tenant" means a temporary occupant and we all know what happens to a rolling stone. As the fifty-fifty plan is based on the idea of permanence, the words "landlord" and "tenant" are considered out of date, and we think our readers will agree that "landowner" and "landworker" more accurately define the relations between farm partners, and that these terms have a more truly American ring.

All great movements and worthwhile ideas require a good deal of time in which to ripen or prove themselves. Dr. Wendt began to think about better ways of farm tenantry a score of years ago. About fourteen years ago he put his partnership plan into effect by entering into an agreement with a young man in his employ—Frank Painter by name. That original agreement stands today on the same footing and promises to remain indefinitely. Young Painter has prospered in the meantime—and is not this fact an eloquent variant on the usual experience of renters? He has now bought a fine farm of his own—but does he live on his own farm? No, he prefers to retain his business connection with Dr. Wendt, for he has learned precisely what this means to him in cold dollars and cents. But he does manage his own farm on the fifty-fifty plan with another man who is also getting along in the world, and who doubtless will invest his accumulated earnings in South Dakota land that he will operate as owner while still another ambitious man takes the part of land worker.

But the idea does not await such slow methods of spreading. In Lincoln county, where all the people can see for themselves just how it works, the farmers are practically all sold on the fifty-fifty plan. No accurate count could be made at the time of our visit, but there are probably more than a score of farms now being operated on the identical contract that Dr. Wendt has developed with so much thought and foresight. You can almost pick out these places in driving about the country in Lincoln county, for they are usually a little more prosperous looking; just a little neater as to farmsteads; just a bit pleasanter and more home-like in the character of the improvements .

One land worker made a net profit of $21,000 in seven years on the partnership plan, and then bought and moved to a farm of his own. That would seem to be about 100 per cent ideal from the standpoint of most farmers. But it is interesting to note that this man would now like to get back to the old system, for he made more money that way than he has since. You can write your own explanation of this apparent inconsistency in human nature, but we suggest that the basis of it is the old adage, "Two heads are better than one."

Partial view of the hog house on the Wendt and Painter farm.

The curse of peasantry as it is known in Europe can not be overemphasized. For many years it has hung over our own free land with its republican form of government, and its absence of titles, landed gentry and the like. Many thoughtful students of history and political economy have foreseen the trend of the times—the rapidly advancing prices of lands; the drift to the cities; the increasing number of farms operated by renters who cared only to make a living; and the growing army of absentee farm owners awaiting buyers at fancy prices. Much time and thought has been put into the devising of better forms of leases—especially leases for long periods—as one solution of the growing tenantry evil of this country.

But we think it can be laid down as a law of human nature and economics that all leases are bad and some are worse. To illustrate this point, we ask any reader whether after signing up a lease—either as "landlord" or "tenant"—he got up from the table feeling the same towards the party of the other part? We never have found a man yet who has not admitted that he didn't feel quite the same; most of them say that each party was trying to get just a little advantage over his opponent.

And that's exactly what we mean when we say that all leases are bad. They nearly always bring men together on terms of mutual hostility. The owner trys to make the tenant pay another half dollar an acre, while the tenant tries also to drive a sharp bargain and to induce the land owner to throw in something over and above the customery usage. The product of the old landlord and tenant system is a feeling of antagonism. There is no deep underlying sentiment of friendliness—and Dr. Wendt states that the element of friendship is the very heart of his form of agreement. Unless men are genuinely friends—trusting each other and co-operating in harmony—neither of them can prosper no matter how much legal talent they employ in writing the lease.

The Wendt system is a business partnership between two men, each of whom puts into the venture the capital he has at hand. The land owner invests his land and the worker invests his labor. The title to the land remains in the name of the original owner as a matter of course, until such time as the worker may wish to make other arrangements.

As a matter of history—covering all those cases investigated by the writer of this article—the partnership plan almost invariably results in more profit to worker and owner than is usually enjoyed by farms operated by their owners. The value of "two heads;" the advantage of consultation between the man on the land and the man in town; the benefits from having a permanent interest in making the land productive instead of robbing the soil or speculating in real estate; the immense value of feeding grain and roughage to high class live stock that are owned equally by both parties—these are the levers whereby profit is pried loose from soils that otherwise might not pay the taxes.

One of the important features of the partnership plan is that accurate books must be kept in which to record operations—purchases, sales, dates of planting, balance sheets, etc. This puts the process of tiling the soil on a business basis; it makes of it a commercial operation that must of necessity develop on the same plane as other industries.

Perhaps the most serious fault with the renter system is that it makes no provision for keeping up the soil's productive power. The renter has no inducements to enrich the land belonging to another, for he may move next year; the owner expects to sell on a rising market—he should worry about soil fertility! The result is that all over this broad domain of ours the soil is steadily growing less productive; acre yields are not increasing although population continues to grow; farming is still a process of soil exploitation and will continue so until land values are measured by productive capacity, and farms are made to pay legitimate dividends on capital and labor invested.

With this serious problem staring the American people in the face; with lands constantly rising in price; and with more farms operated every year by shifting renters, it is high time that farmers adopted a plan that will build up the integrity of our soils and put agriculture on its feet. A study of the partnership plan will show that it is destined to accomplish the desired end, and we urge the co-operation of all earnest people to spread the doctrine of mutuality in farm tenures.

As an illustration of what naturally follows, the Wendt & Painter farm of 160 acres has been greatly improved in the fourteen years it has been operated on the fifty-fifty plan. In that time the average yield of corn has climbed from 30 to 60 bushels an acre, and other crops show similar increases. This fact alone spells profit in the place of loss, for it is one of the corner

(Continued on page 16.)

Treatment of Stinking Smut of Wheat

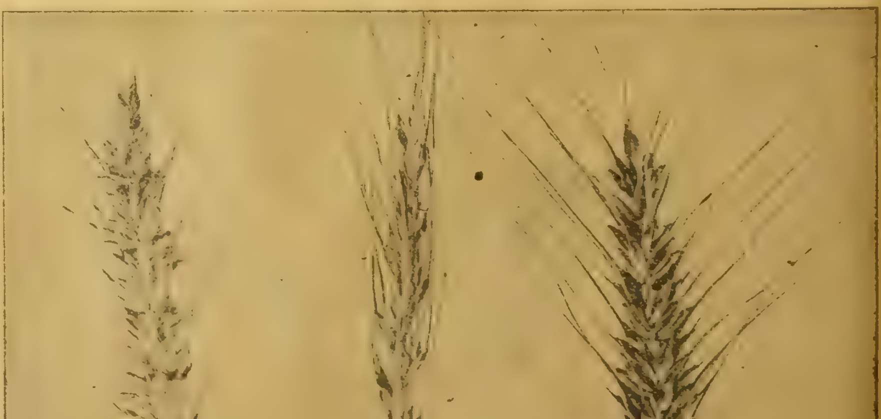
I would like to know how to disinfect smutty wheat so that it will make satisfactory seed. Will you please be so kind as to advise if this can be done, and if it can, will you state how I can go about it?—W. E. H., Fowler, Mich.

WHEAT in many sections of Michigan has been injured by Stinking Smut. This disease may make a field of fine promise produce only a low grade, ill-smelling crop, which without expensive washing and scrubbing is unfit for human food. From an investigation into actual condition in every county in the state, it is found that Stinking Smut wastes at least 5 per cent of the wheat crop of Michigan. Fields with 10, 25, 30, and even 70 per cent of the heads smutted are not uncommon.

As his wheat ripens, the farmer notices certain heads which are of dark-green or slate-green color and which have a shape different from the normal. The kernels in these heads are light and puffy and are filled with a brown black powder. Such diseased stalks are not so tall as the healthy ones and they may be markedly dwarfed,—"Low Stinking Smut." The smutted kernels have a vile odor, like that of rotted fish. Sometimes such a field is so smutty that one can smell it from the road. Threshing such a field is a job no one wants. Smut arises from the thresher in clouds endangering fields—for smut can persist in the soil until seeding time if not longer. It is evident that the thresher having handled smutty grain carries smut with it to the next batch of grain. Similarly the cleaner once loaded with smut becomes a source of contamination.

Although most of the smut balls which are formed in the heads in place of the kernels break in threshing, thus dusting the grain with the

(Continued on page 20.)

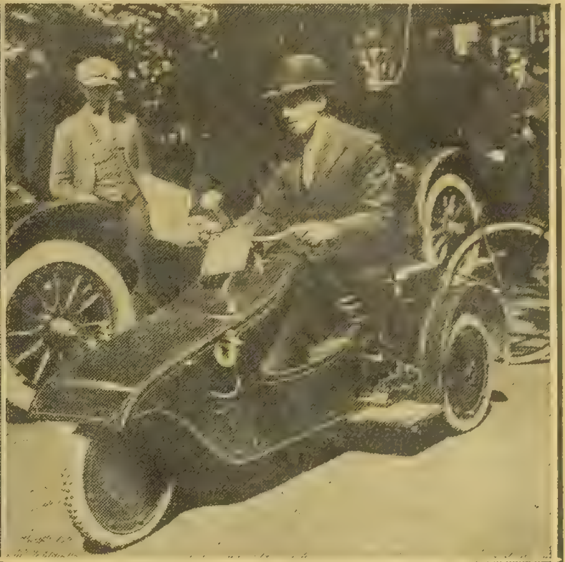


Stinking Smut of winter wheat showing effect on the wheat head and the puffy smut balls filled with smut powder. Healthy head and kernels for comparison.

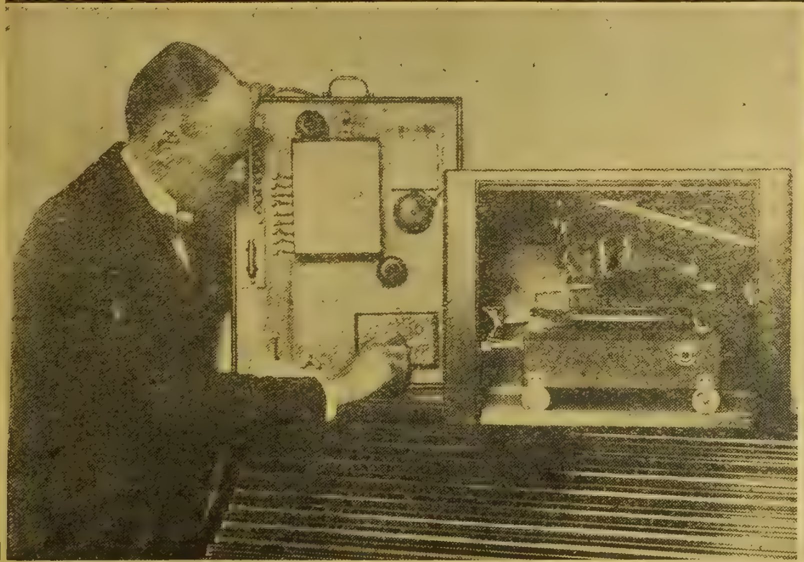
PICTURES FROM FAR AND NEAR

STINNES PLANS STRATEGIC COUP TO AID GERMANY—Hugo Stinnes, Germany's industrial leader, who according to developments in the negotiations between the German government and the Belgian financial delegates over the question of reparation guarantees, may again step in and show himself master of the situation by taking over a large part of the guarantee demanded by Belgium. It is Stinnes' idea to give French and Belgian industries a large share in German industry, thus making it a matter of necessity for those two nations to help rather than hinder the Teutons.

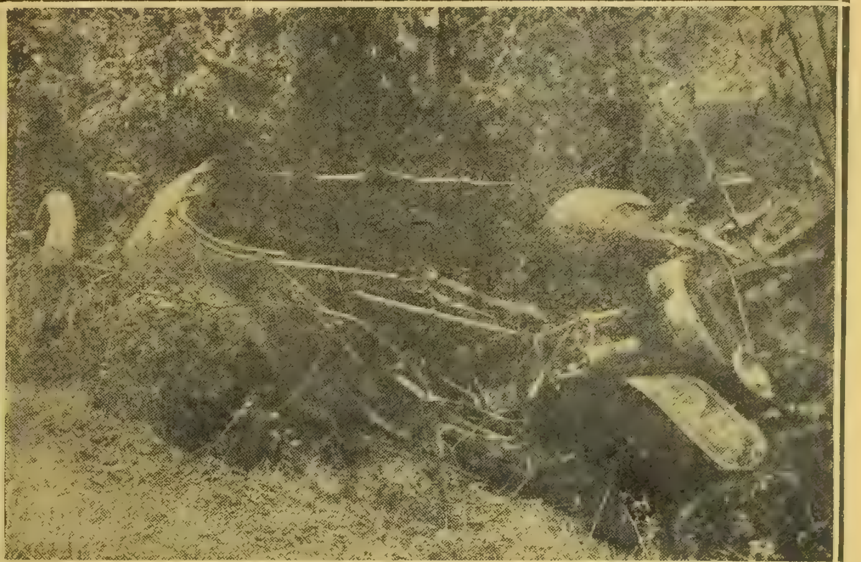
BEATUY CAPTURES TWO CUPS AT THE PAGEANT—Miss Thelma Blossom, or "Miss Indianapolis" as she was known, snapped while in her roller chair at Atlantic City holding the two cups she won at a pageant recently held there. She received one of the cups for being adjudged winner of the roller chair parade and won the other as "America's most beautiful girl in evening dress." Miss Blossom was chosen from 57 beauties represented as many different cities in America. "Miss Detroit," representing Michigan's metropolis was second.



ONE PASSENGER RUNABOUT APPEARS ON STREETS OF LONDON—Traffic jams were to be found on every hand but even the "bobbies" forgot their troubles and smiled when this "automobile" passed down the streets of London, England, recently. Reports have it that these small autos are becoming quite popular in Englaand. Prices range from $300 to $400. It would be dangerous business trying to drive one on the streets of Detroit, or other large American cities, owing to the heavy traffic but one would be handy on the farm—son John could use it to go after the cows.



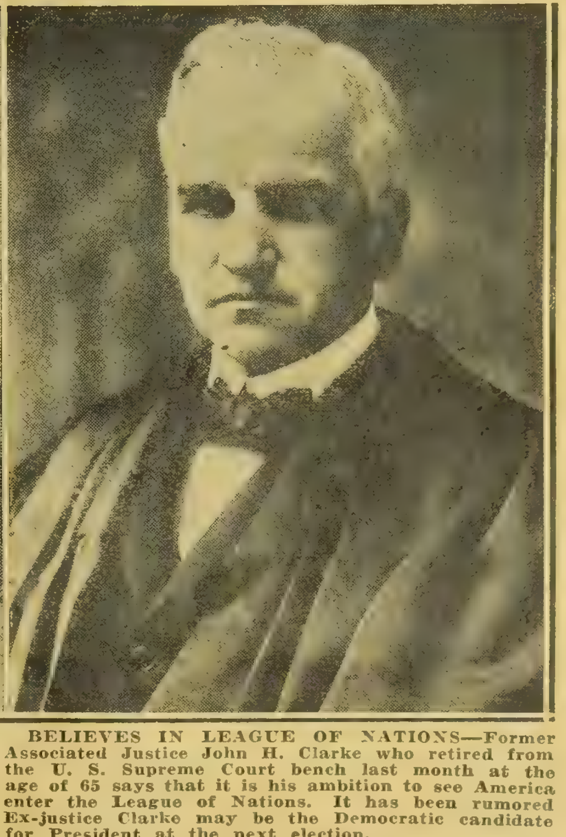
NO PLACE FOR A BURGLAR—The "Telealarm," invented by J. R. Coltman of London, will catch a burglar as well as give alarm at the outbreak of a fire. It consists of a box containing a telephone and a graphophone. The latter is connected with electric wires placed across all doors and windows and when one of the wires is touched it starts the graphophone. At the same time the voice gives the alarm over the telephone which is connected with the exchange. The open circuit on the same record gives warning when fire breaks out. The alarm continues for twenty minutes.



JUST LIKE A MOVIE THRILLER—After this automobile struck a telephone pole, crashed through a wooden fence and plunged down a 200 foot embankment into a deep ravine, the gasoline tank exploding enroute, enveloping the machine in flames, its occupants Mr. and Mrs. George Halland of Cincinnati, Ohio. were extricated from the wreckage without being seriously injured. Policemen who rescued them, say they have a charmed life. We are of the same opinion, what is yours?

NOW, ALL TOGETHER—Bandmaster Ape, a trained ape of Berlin, Germany, in his best conductor's manner, baton raised, hair wildly waving, a la Genius, and eyes concentrated, is endeavoring to get the best results from his band. His imitation is declared by all who have seen him as "wonderful"—so natural and so life-like.

SHOVELING SALT IN A MICHIGAN REFINERY—It looks as though there has been a big snow storm, now doesn't it? But you would find it a bit briny to your taste for it is salt that you see. The above was taken in one of the great salt refineries located at St. Clair, Michigan.



BELIEVES IN LEAGUE OF NATIONS—Former Associated Justice John H. Clarke who retired from the U. S. Supreme Court bench last month at the age of 65 says that it is his ambition to see America enter the League of Nations. It has been rumored Ex-justice Clarke may be the Democratic candidate for President at the next election.

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THE SYNOPSIS

A WOMAN with a pearl-gray veil drawn closely about her face is one of the many passengers on the train that connects "The Horde" with the civilized world. For eighteen hours she has been riding steadily bound for Tete Jaune Cache, the land of "The Horde," where she has no friends and all will be strange to her. The train stops at a town composed of several tents and she inquires how long the train will stop and is advised that it will not move for at least two hours. Desiring food and a bath she asks where she can secure them and is directed to "Bill's Shack". Bill's Shack is owned and operated by Bill Quade, leader of the lawless band of the town. When she steps inside the doorway she recognizes him as a brute but as she has entered and is very hungry and dusty she decides to go through with her plan. Quade says he has a room she can rent and asks her to follow him. As they pass out of the room there appears a newcomer in the doorway opening off the street. The newcomer is not of the kind of men lounging about the room but shows in face and in actions that he is of the wholesome living type. He has seen the girl enter this place and believes she has made a mistake and as he stands in the doorway his eyes rest upon the curtain-covered doorway through which the girl and Quade has just passed. In but a moment the girl steps out, her face flaming like fire and eyes filled with the flash of lightning. Quade follows her apologetically. He starts to offer the girl a roll of money but before he can do so the newcomer steps to the girl's side and strikes Quade with terrific force. The Brute goes down in a heap and the newcomer hurries the girl outside and away from the scene. The newcomer, who is John Aldous a novelist and known as a woman hater, learns from the girl that her name is Joanne Gray. He takes her to the home of a friend and returns to Bill's Shack warning Quade to leave the girl alone. He returns to the girl and asks her to be his guest at supper in his cabin. She accepts.

(Continued From Last Issue)

"YES," said Aldous, deliberately. "You are that Joanne. But you possess what I could not give her. Joanne of 'Fair Play' was splendid without a soul. You have what she lacked. You may not understand, but you have come to perfect what I only partly created."

The colour had slowly ebbed from Joanne's face. There was a mysterious darkness in her eyes.

"If you were not John Aldous I would strike you," she said. "As it is—yes—I want you as a friend."

She held out her hand. For a moment he felt its warmth again in his own. He bowed over it. Her eyes rested steadily on his blond head, and again she noted the sprinkle of premature gray in his hair For a second time she felt almost overwhelmingly the mysterious strength of this man. Perhaps each took three breaths before John Aldous raised his head. In that time something wonderful and complete passed between them. Neither could have told the other what it was. When their eyes met again, it was in their faces.

"I have planned to have supper in my cabin to-night," said Aldous, breaking the tension of that first moment. "Won't you be my guest, Ladygray?"

"Mrs. Otto—" she began.

"I will go to her at once and explain that you are going to eat partridges with me," he interrupted. "Come—let me show you into my workshop and home."

He led her to the cabin and into its one big room.

"You will make yourself at home while I am gone, won't you?" he invited. "If it will give you any pleasure you may peel a fey potatoes. I won't be gone ten minutes."

Not waiting for any protest she might have, Aldous slipped back through the door and took the path up to the Ottos'.

CHAPTER V

AS soon as he had passed from the view of the cabin door Aldous shortened his pace. He knew that never in his life had he needed to readjust himself more than at the present moment. A quarter of an hour had seen a complete and miraculous revolution within him. It was a change so unusual and apparently so impossible that he could not grasp the situation and the fact all at once. But the truth of it swept over him more and more swiftly as he made his way along the dark, narrow trail that led up to the Niette Plain. It was something that not only amazed and thrilled him. First—as in all things—he saw the humour of it. He, John Aldous of all men, had even gone so far as to offer the sacrifice of his most important work. Frankly he had told Joanne that she interested him more just now than his book. Again he repeated to himself that it had not been a surrender—but an obliteration. With a pair of lovely eyes looking quietly into him, he had wiped the slate clean of the things he had preached for ten years and the laws he had made for himself. And as he came in sight of the big Otto tent, he found himself smiling, his breath coming quickly, strange voices singing within him.

He stopped to load and light his pipe before he faced Mrs. Otto, and he clouded himself in as much smoke as possible while he explained to her that he had almost forced Joanne to stop at his cabin and eat partridges with him. He learned that the Tete Jaune train could not go on until the next day, and after Mrs. Otto had made him take a loaf of fresh bread and a can of home-made marmalade as a contribution to their feast, he turned back toward the cabin, trying to whistle in his old careless way.

The questions he had first asked himself about Joanne forced themselves back upon him now with deeper import. Almost unconsciously he had revealed himself to her. He had spread open for her eyes and understanding the page which he had so long hidden. He had as much as confessed to her that she had come to change him—to complete what he had only half created. It had been an almost inconceivable and daring confession, and he believed that she understood him. More than that, she had learned about him. She had read his books. She knew John Aldous—the man.

But what did he know about her beyond the fact that her name was Joanne Gray, and that the on-sweeping Horde had brought her into his life as mysteriously as a storm might have flung him a bit of down from a swan's breast? Where had she come from? And why was she going to Tete Jaune? It must be some important motive was taking her to a place like Tete Jaune, the rail-end, a place of several thousand men, with its crude muscle and brawn and the seven passions of man. It was an impossible place for a young and beautiful woman unprotected. If Joanne had known any one among the engineers orconter of introduction to them, the tense tractors, or had she possessed a letlines would not have gathered so deeply about the corners of Aldous' mouth. But these men whose brains were behind the Horde—the engineers and the contractors—knew what women alone and unprotected meant at Tete Jaune. Such women floated in with the Horde. And Joanne was going in with the Horde. There lay the peril—and the mystery of it.

So engrossed was Aldous in his thoughts that he had come very quietly to the cabin door. It was Joanne's voice that roused him. Sweet and low she was singing a few lines from a song which he had never heard.

She stopped when Aldous appeared at the door. It seemed to him that her eyes were a deeper, more wonderful blue as she looked up at him, and smiled. She had found a towel for an apron, and was peeling potatoes.

"You will have some unusual excuses to make very soon," she greeted him. "We had a visitor while you were gone. I was washing the potatoes when I looked up to find a pair of the fiercest, reddest moustaches I have ever seen, ornamenting the doorway. The man had two eyes that seemed about to fall out when he saw me. He popped away like a rabbit—and—and—there's something he left behind in his haste!"

Joanne's eyes were flooded with laughter as she nodded at the door. On the sill was a huge quid of tobacco.

"Stevens!" Aldous chuckled. "God bless my soul, if you frightened him into giving up a quid of tobacco like that you sure did startle him some!" He kicked Stevene' lost property out with the toe of his boot and turned to Joanne, showing her the fresh bread and marmalade. "Mrs. Otto sent these to you," he said. "And the train won't leave until tomorrow."

In her silence he pulled a chair in front of her, sat down close, and thrust the point of his hunting knife into one of the two remaining potatoes.

"And when it does go I'm going with you," he added.

He expected this announcement would have some effect on her. As she jumped up with the pan of potatoes, leaving the one still speared on the end of his knife, he caught only the corner of a bewitching smile.

"You still believe that I will be unable to take care of myself up at this terrible Tete Jaune?" she asked, bending for a moment over the table. "Do you?"

"No. You can care for yourself anywhere, Ladygray," he repeated. "But I am quite sure that it will be less troublesome for me to see that no insults are offered you than for you to resent those insults when they come. Tete Jaune is full of Quades," he added.

The smile was gone from her face when she turned to him. Her blue eyes were filled with a tense anxiety.

"I had almost forgotten that man," she whispered. "And you mean that you would fight for me—again?"

"A thousand times.'

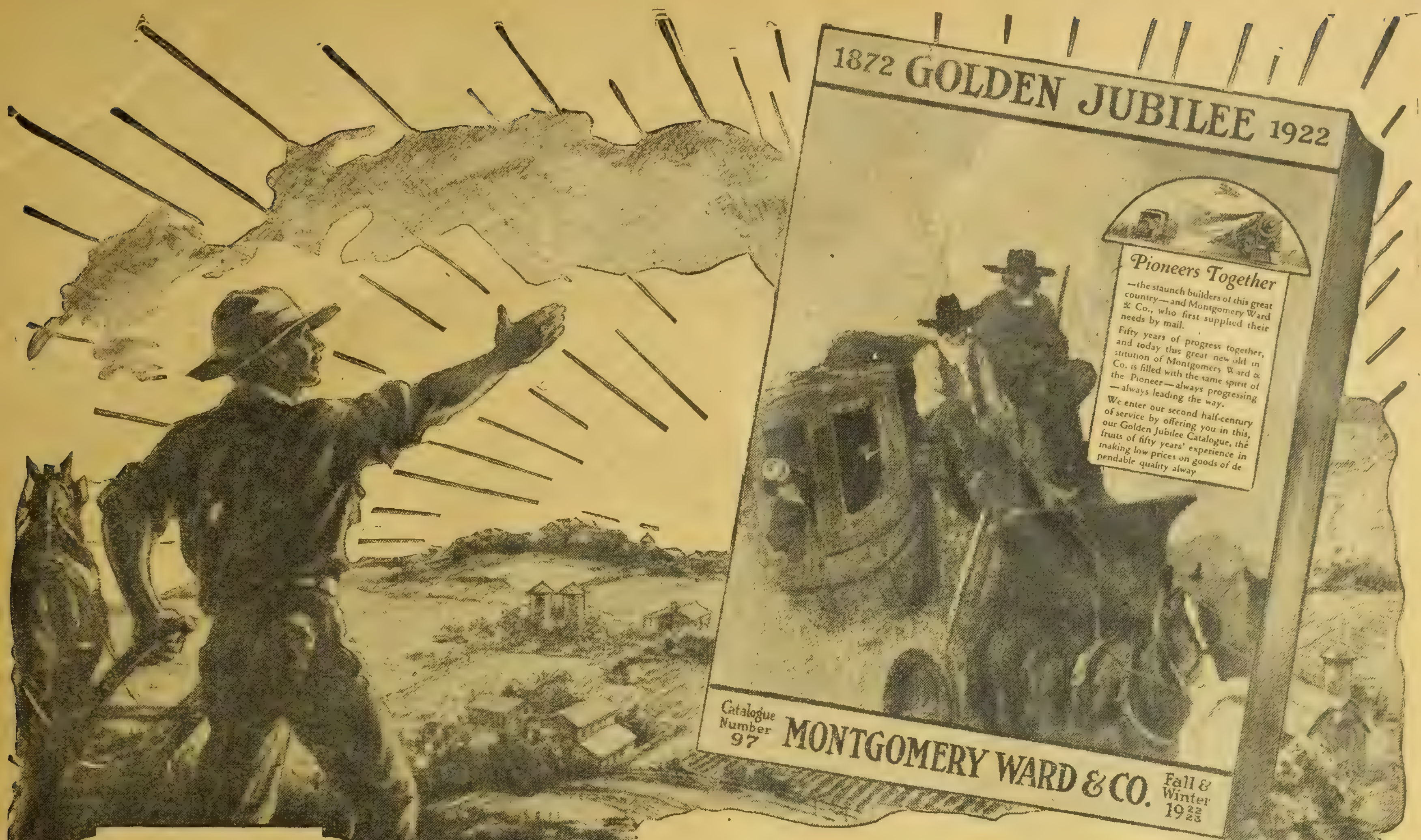
The colour grew deeper in her cheeks. "I read something about you once that I have never forgotten, John Aldous," she said. "It was after you returned from Thibet., It said that you were largely made up of two emotions—your contempt for woman and your love of adventure; that it would be impossible for you not to see a flaw in one, and that for the other—physical excitement—you would go to the ends of the earth. Perhaps it is this—your desire for adventure—that makes you want to go with me to Tete Jaune?"

"I am beginning to believe that it will be the greatest adventure of my life," he replied, and something in his quiet voice held her silent. He rose to his feet, and stood before her. "It is already the Great Adventure," he went on. "I feel it. And I am the one to judge. Until to-day I would have asked my life that no power could have wrung from me the confession I am going to make to you voluntarily I have laughed at the opinion the world has held of me. To me it has all been a colossal joke. I have enjoyed the hundreds of columns aimed at me by excited women through the press. They have all asked the same question: Why do you not write of the good things in women instead of always the bad? I have never given them an answer. But I answer you now—here. I have not picked upon the weaknesses of women because I despise them. Those weaknesses—the destroying frailties of womankind—I have driven over roughshod through the pages of my books because I have always believed that Woman was the one thing which God came nearest to creating perfect. I believe they should be perfect. And because they have not quite that perfection which should be theirs I have driven the cold facts home as hard as I could. I have been a fool and an inconoclast instead of a builder. This confession to you is proof that you have brought me face to face with the greatest adventure of all."

The colour in her cheeks had centred in two bright spots. Her lips formed words which came slowly, strangely.

"I guess—I understand," she said. "Perhaps I, too, would have been that kind of an inconoclast—if I could have put the things I have thought into written words." She

(Continued on page 15.)



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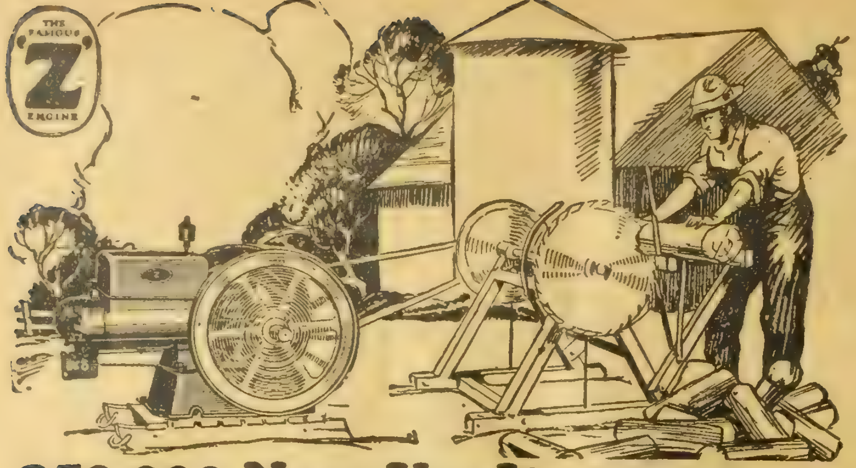

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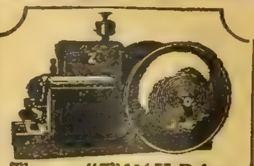

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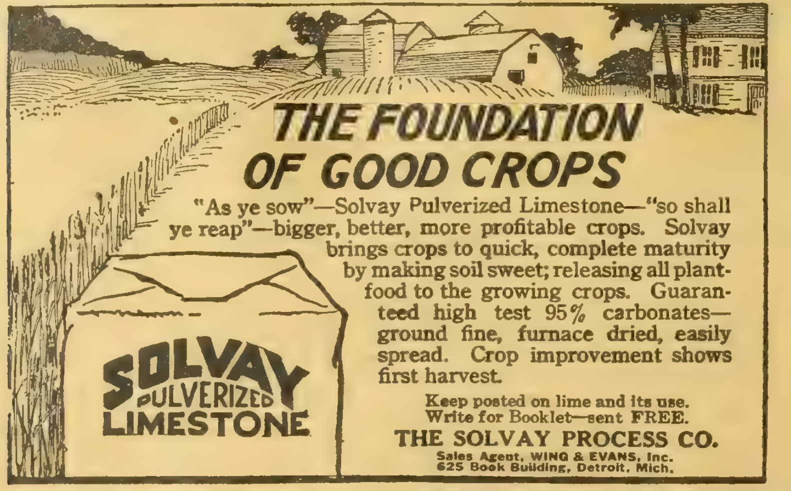

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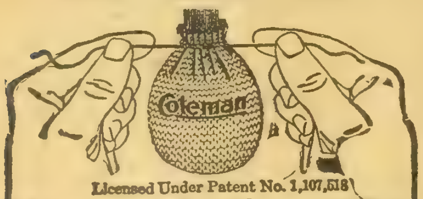

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CLEAR OUT SWALE

Can you thru your Farmers Service Bureau tell me how I can clear out a swale covering one acre, it is covered at present with willow and other small brush, as it is at present it only dries out for about six weeks of the year and then not sufficiently that I can get a horse in to pull them. It is my opinion that if this can be cleared permanently I would be able to get a little pasture, or in some other way use it.—R. F. P., Hastings, Michigan.

—I believe the simplest plan, if the ground is solid enough to hold up a team around the swale, is to use a long rope with the team on solid ground for pulling the willows. Perhaps this will require two men to do the work in addition to the team, but it is a very inexpensive way of handling the proposition.

Another suggestion which might be made is that the possibility of draining this hole should be investigated, if possible to drain it would, of course, be possible to use a team on it at practically any time.—H. H. Musselman, Professor of Farm Mechanics, M. A. C.

CANNOT RECOVER TAX

If a party didn't know whether he had to pay tax on cut-over land or not and had already paid his tax before he found out, would the tax collector be obliged to give it back to the landowner?—Mrs. F. D. A., Edmore, Mich.

—No. The property owners who believes himself entitled to exemption from taxes is supposed to make application for such exemption. If through ignorance of the law or oversight he fails to do so and the tax is levied and paid he cannot recover.—Editor.

MIDLAND MUTUAL INSURANCE COMPANY

An agent of the Midland Mutual Insurance Co., of Columbus, Ohio, states that they have deposited $75,000.00 at Lansing to do business in the state of Michigan. Is this true?—W. R., Hoxeyville, Mich.

The Midland Mutual Life Insurance Company of Columbus, Ohio, has on deposit with the Superintendent of Insurance of the State of Ohio $100,000.00 for the protection of its policyholders. The company is not required to maintain a deposit in Michigan in order to receive license to transact business herein.—H. B. Corell, State Dept. Insurance, Lansing.

LIQUID IN BATTERY MUDDY

We have a 32-volt electric lighting plant that we have had about a year. The batteries consist of 16 glass jars with rubber plates fastened together by bands. At first when fully charged the liquid would foam and become almost milky. Lately after becoming milky the fluid becomes dark and almost muddy, when fully charged. Would overcharging the batteries cause this or is the fluid or acid worn out?—Subscriber, Mich.

—The dark color of the electrolyte would indicate that active material from the plates has been dislodged somewhat, due to the battery being charged at too high a rate. The plates in the cells may have deteriorated, somewhat, so that the battery cannot now be charged at as high a rate as when it was new. You may use lights or other equipment while charging the battery making it charge at a lower rate or have your agent adjust the plant to charge at a lower rate.—F. E. Fogle, Ass't Professor of Farm Mechanics, M. A. C.

RATS GET IN CELLAR

I have trouble with rats getting in my cellar and digging holes. What can I do to kell them? I got a trap set and put rat biscuits in it but they don't touch the biscuits—Mrs. I. E., Grand Junction, Mich.

—It is difficult to rid any place of rats, it will be very hard to rid this place. We have no printed matter but you can get a bulletin entitled, "How to Destroy Rats", by writing the Biological Survey, U. S. Department of Agriculture, Washington, D. C. All we can say is to use any poison which you can make the rats take. There are a dozen kinds on the market most of them contain either arsenic, strychnine or phosphorous. One of the less harmful poisons is Barium Carbonate which kills rats promptly but in small doses is not harmful to most domestic animals. I am giving directions below as given by the Washington Bureau mentioned above. In dealing with rats the main thing is to cut off the food supply. Either make the premises rat-proof or keep the food in rat-proof containers. Rats will not stay where they cannot get food. No one kind of trap will be satisfactory under all conditions, sometimes ten different kinds must be tried in order to catch the last and wisest rat.—Walter B. Barrows, Professor of Zoology, M. A. C.

One of the cheapest and most effective poisons for rats and mice is barium carbonate. This mineral has the advantage of being without taste or smell. It has a corrosive action on the mucous lining of the stomach and is dangerous to larger animals if taken in sufficient quantity. In the small doses fed to rats and mice it would be harmless to domestic animals. Its action upon rats is slow, and if exit is possible they usually leave the premises in search of water. For this reason the poison may frequently, though not always, be used in houses without disagreeable consequences.

Barium carbonate may be fed in the form of dough composed of four parts of meal or flour and one part of the mineral. A more convenient plan is ordinary oatmeal with about one-eighth of its bulk of the mineral, mixed with water into a stiff dough. A third plan is to spread the barium carbonate upon fish, toasted bread (moistened), or ordinary bread and butter. The prepared bait should be placed in rat runs, about a teaspoonful at a place. If a single application of the poison fails to kill or drive away all rats from the premises, it should be repeated with a change of bait.—Farmers Bulletin, No. 369, U. S. Department of Agriculture.

FALLEN TELEPHONE POLES

We have received some complaints from subscribers against telephone companies which have not yet removed poles which were felled by the ice storm last spring, or renewed service on their lines. These complaints have been referred to the Public Utilities Commission which has jurisdiction in the matter. The Commission is now seeking information on such cases in order that it may compel telephone companies to remove their poles and renew service. Subscribers who know of any such condition existing are requested to report the full facts to the Commission at Lansing, stating the name and address of the company, township or townships in which the lines are still unrepaired and subscribers inconvenienced as a result and the extent of such inconvenience.—Editor.

NEED NOT DONATE LAND FOR HIGHWAY

I own a farm that is located on a corner. Three years ago the township had the highway surveyed out and I then built my fence allowing two rods and five inches for the road. Now the township wants me to move my fence back two rods more and threaten to sue me if I do not. The fence has stood there for nearly three years. Can they compel me to move it back? I would much appreciate your opinion upon this matter.—A. L. T., Presque Isle County, Mich.

—You are not obliged to donate any land whatever for highway purposes. If you have enclosed your premises by a fence and the public has never been in possession the township cannot obtain such land except by condemnation proceedings and pay you the full value of the land for farm purposes.—Legal Editor

Rains Improve Crop Outlook in Europe

ALFRED P. DENNIS, special representative of the Department of Commerce, now in Berlin, reports that August weather conditions were favorable to the French wheat harvest, and though the yield will be about 20 per cent short of that of last year, the quality of the new grain is good, being rich in gluten and above the average. Excessive rains affected adversely the harvests in England, Sweden, Denmark, and Germany. The quality of the wheat, however, is much improved.

The protracted hot,rainless spell seriously reduced the corn crop prospects in Italy and Jugoslavia; the deterioration in the latter country being estimated at 30 per cent. The Rumanian corn crop is now estimated at 129,000,000 bushels instead of 184,000,000 bushels as previously reported, based on an average yield of not over 15 bushels per acre, with the surlpus for export estimated at 48,000,000 bushels. It is estimated that the new wheat crop of Rumania will furnish 7,000,000 bushels for exports, all of which will likely be absorbed in the commitments already made to France and Switzerland.

The estimated total yield for Rumania of all cereal crops is 9,000,000 tons, as compared with 6,993,487 tons in 1921. Aside from Rumania, Poland is the only other European country which shows marked gains in the bread-grain crops over last year with official estimates given at 6,558,000 tons this season as compared with 5,412,000 tons in 1921.

Italy Needs 110,000,000 Bu. Wheat

With a poor potato and corn crop and a wheat yield 20 per cent under that of last year, Italy will need to import approximately 110,000,000 bushels of wheat during this cereal year. The French wheat crop is considerably below the crop of 1921, but probable imports are now figured down to 35,000,000 bushels, owing to compulsory long milling, the dilution of flour and the falling off in the per captia consumption of bread.

Germany is reported as carrying 600,000 tons of government stocks of wheat and rye, leaving the total necessary imports of cereals by the state at 1,400,000 tons during the current cereal year. Rye is making a better showing than wheat in all the principal grain producing countries, giving about an average return per acre, but with the exception of Poland the acreage planted in rye this year was less than last season.

Private importations into Germany are dominated by the money stringency, with the stocks of grain in the millers hands running low, and importers are hesitant about making commitments owing to the violent fluctations of the mark. To see the country through the coming winter heavy private importations will be required. American sales might be increased through more liberal credit arrangements on this side, to the effect that grain might be shipped to the big responsible milling associations, such as exist in the lower Rhine region, at a stipulated price in dollars, with payment deferred until the grain actually arrives and has been converted into flour. Knowing the dollar exchange value of the mark on the date the flour is sold a price to the bakers could be made which would be sufficient to cover the cost of the grain and afford secure profits to the importing millers. In general it would not seem advisable for American grains to be pressed for sale on the European markets at this precise time.

Beet and Potato Crops

The population in Northern Europe are assured heavier crops of beet root and potatoes. This increase production of potatoes will be a great help toward meeting the cereal deficiencies. Owing to the big yield of potatoes in England the market is being gluted.

The German potato crop will barely surpass 30,000,000 tons, as compared with 26,000,000 tons last year, while that of Belgium will run 50 per cent above that of last season, and there will be also a marked increase in this crop in Holland and Czechoslovakia. The beet fields in France, Belgium, Holland, Germany, and Czechoslovakia are luxuriant, but unless warm, sunshiny weather sets in, the roots will be deficient in sugar content. The French beets have prospered under ideal growing conditions. Sweden will show a big drop in sugar production, and the Italian beet yield has been seriously hurt by the drouth.

MUSINGS OF A PLAIN FARMER

Sanilac Co. seat is active today. Is it the primaries or the Farm Bureau? Both I believe.

There are groups of F. B. delegates scattered about the streets.

Where do we eat? Seems to be the big question.

That's the fifteenth candidate that has presented himself for my inspection.

Ah! Dinner is ready. Every man for himself here. Our table manners are limited to the length of our arm.

A short smoke for the smokers and then to business.

Order, Credentials.

Resolutions, motions, amendments steam-rollers and what not.

Points more than all the lawyers in Bohemia could handle.

The secretary of the different locals are giving some long figures. They all report a balance on the right side of the ledger. Press forward boys! And may the angels and ministers of grace defend you.

County Agent Irving of Huron is presenting some facts and figures that's getting under my pelt. He is emphazing the importance of the farmers' support in the coming membership drive. I am going to sign up. Though hades itself should gap and threaten to engulf me.

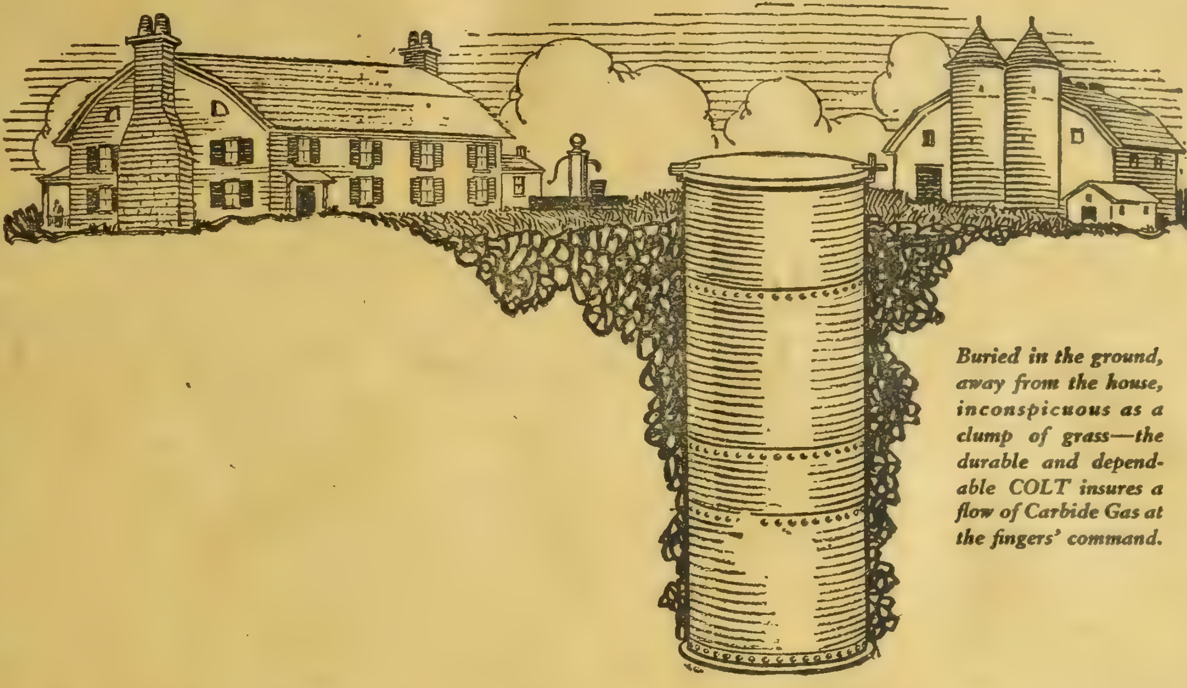
C. V. Ballard of the M. A. C. is giving us a good sound business talk County Agent Martin makes his report. It's accepted with thanks. He forgot to mention the six million questions he answered during the year, and that he helped me get some seed potatoes.

Election of officers. A good line-up from the president down to the janitor.

Adjournment until the picnic when we will meet again.

She was a good meeting. Where O where are those bachelor delegates that came with me? I want to go home.

It will be their business to explain to Mrs. B. when they drop me off at the gate. I must trace up some young ladies that would be willing to co-operate with them.—A. P. Ballard.



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Plant a COLT "Gas Well" on your farm NOW!

The months of short days and long nights are on their way.

Six months of evenings to be passed indoors await you!

Will they be lighted by the dim, eye-straining flame of a lamp—or the soft, friendly brilliance of *real* light—CARBIDE GAS LIGHT?

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They know that any Westclox alarm will call them on the dot; whether it's at 2 A.M. for the dairyman, or later for 'tween season chores.

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It is surprising how often Big Ben gets an inquiring look, and satisfying the way he answers it, day in and day out, demanding almost no attention.

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I. J. AUGUSTINE,
615 North 17th Street East,
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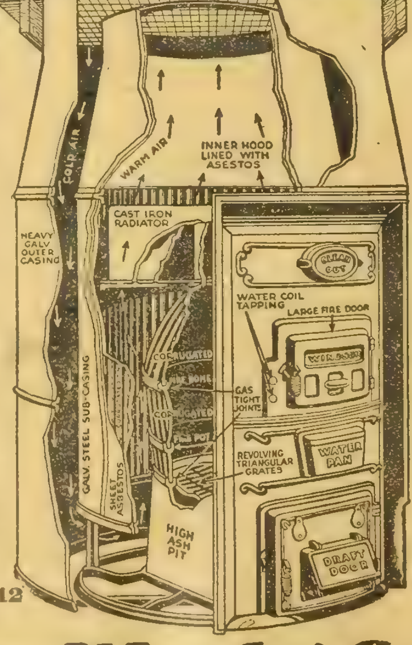

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FRUIT AND ORCHARD

Edited by FRANK D. WELLS

THE STORY OF A PEACH TREE

Would you advise planting three-year-old peach trees? One of my neighbors planted three-year-old trees in 1918, but I can't see that they are any better than an orchard of two-year-old trees planted at the same time.—R. L. A., Oakland County.

—As an answer to this question, let us look up the history of these trees.

In the fall 1919 there was a peach ripening on a tree, somewhere in the mountains of the Carolinas. It was small and white, but when full ripe had a good flavor. A wild tree produced it, consequently it was "natural" fruit.

The peach, like thousands of others was gathered by the mountaineers to dry for winter. The pit was saved and sold to a dealer who shipped it to a northern nursery.

At some time during fall of 1915 that pit was planted. In the spring of 1916 it grew and that summer it was budded. During the next summer it grew into a tree and in the fall it was dug and stored in a nursery cellar, to be sent out for planting in 1918.

The trees were graded and designated according to size as X, XX or XXX. The difference in the growth of peaches is remarkable. A tree may be less than two feet high or more than seven, the growth of a single season.

Such a difference in the size makes it is easy for an agent to claim a difference in the age of his stock. However, the peach trees sent out by nurseries are of one age, regardless of the inequality in size.

In regard to the size for planting, most orchardists prefer a medium grade, claiming that they are more thrifty than larger trees. Some successful growers, however, prefer large stock and have good orchards to prove their claim. Perhaps there is less in the tree itself than in the way it is cared for.

GROWING SEEDLINGS

How are apple, quince, cherry, pear and swamp huckleberries started from seed? How are grape cuttings made and when should they be planted?—W. E. S.

—Apple seeds are mostly obtained from cider pomace by washing. In early spring they are planted like seeds generally in rows far enough apart to admit cultivating. Pear and quince seeds are similar to the apple.

Cherry pits, like other stone fruits are planted in the fall. Planting is similar to that of the apple.

The growing of huckleberries from seed is not a simple matter. It is really something which should be done in a greenhouse, or a hotbed. The seeds are freed from pulp by soaking thoroughly, then kept by mixing in fine moist sand and storing in a cool place. The seeds in a greenhouse may be sown the latter part of winter in boxes containing a mixture of sand and loam, covering slightly. Cover with sphagnum and keep in a temperature between 60 and 65 degrees. The seed is slow to germinate, but if kept moist some of them should show signs of life in a month, though others may remain dormant much longer, even a year. Through the spring and summer they are transplanted three times. By the first of September they should be ready to harden off for winter. Give little water, but protect from frost as late as convenient. Protect through winter with some covering over the cold frame. Air the frames once or twice a month, a few hours at a time as a protection from fungus. The following spring they are planted out in beds of sandy soil and kept well watered. Protection is needed the second winter. After that they are planted out and grown as ordinary nursery stock. This is enough to scare anybody but a hardened hothouse man.

Grape cuttings are made from the hard wood, during the winter or early spring, using the trimmings from the vines. The cuttings are made long enough to include at least two, better three, buds. The butt end is cut straight across. The butt bundles, the cutting are buried in moist sand in a cool cellar. By spring they will have calloused and may be planted out when the weather permits. They should be deep enough so the top bud only is above the surface.

SPRING OR FALL PLANTING?

Would you plant fruit trees in the fall or spring? This is the question that comes up for an answer every year.

In the fall there is time for preparing the ground and planting the trees. The soil becomes settled around the roots. In the spring the trees will be ready to grow with the first warm weather. Nurserymen are not rushed with orders, so that shipping and delivery are subject to less delay than in spring.

But if the winter is severe the trees may be injured seriously, in which case they would fare much better in the storage cellar of the nursery. Fall orders are looked upon with disfavor by nurserymen and some of them charge an extra price for shipping at that season. There is an extra expense attached to handling in the fall, besides the results are liable to be unsatisfactory.

In the spring the weather may be bad, so as to cause delay, the trees may arrive too soon, necessitating extra work in handling. They may be too long on the way, so be injured. But all things considered the spring gives better results than the fall, at least in the latitude of lower Michigan. Farther south, where the winters are less severe, fall planting is in favor.

The objections to fall planting do not hold good in case of forest and ornamental trees generally. They are usually older and can endure the winter better. Fall planting is usually preferred for them. Shrubs are planted in the spring, unless they can be protected when they are set.

NOTES

The Gideon apple has been in disfavor, but that is not so much the fault of the fruit as a misunderstanding of its real character. It has been described by some prominent nurserymen as a winter apple, but those who plant it in Southern Michigan with that in view, will be disappointed. Here it ripens in autumn just about early enough to prevent rotting on the tree. Farther north it ripens later. It originated in Minnesota and is a cold-climate apple.

But the Gideon has much in its favor. The fruit is not of the highest quality, but it is ready for green apple pie about the middle of July and furnishes a supply for this purpose during two months or more. The tree grows vigorously, bears early and often. For tap-working with weaker varieties it is one of the best. But it should be planted for what it is and not for a winter apple.

MICHIGAN CROPS

INCREASING RUST RESISTANCE OF WHEAT

EACT year the disease known as "wheat rust" takes its toll of the crop. Some years the damage is comparatively small but it is always serious enough to be a constant menance .

Wheat rust comes in two stages —first, the summer stage as yellow spots and then the winter stage as black spots. It has long been known that the common barberry bush is an important factor in the propagation of the disease but it is only of late that anything approaching an efficient campaign from its eradication has been attempted.

The spores of the black rust can infect only the common barberry. They cannot, directly infect wheat. In the spring, the spores produce small spots on the barberry leaves. These spots are full of tiny orange cups containing another crop of spores. If black rust cannot find barberry leaves it is rendered quite harmless and the loss of many bushels of wheat per acre prevented.

It has been obvious that much damage could be avoided by hastening the maturity of the crop, for rust is most virulent at the latter end of the growing period. Fertilizers have been used successfully to accomplish that end. They not only nourish the plant so that it is better able to withstand rust, but also ripen the crop earlier.

While phosphoric acid is very effective in this connection, it is probably true that potash and ammonia both have their place. Lack of potash delays the maturity of nearly all crops. Lack of ammonia may delay maturity or may result in an abnormally early ripening and loss of the crop. A well nourished wheat plant will suffer much less from rust and other injury than will an unnourished one.

USE FERTILIZER WITH WHEAT

I have a 5-acre field of some light land and some is mixed with clay and sand. I have had hay in the field for two years and now I want to put wheat in this field. Would it be best to put lime or fertilizer, and what kind of fertilizer would I use? I can get lime at $18 a ton. A. S., Bad Axe, Mich.

—Under the conditions you mention would suggest using a fertilizer with the wheat. It is likely that the use of two hundred pounds of 16% acid phosphate, when the wheat is sown, and a top dressing of from fifty to seventy-five pounds of sodium nitrate in the spring just as growth starts, would give the best results. On light land potash oftentimes pays if a seeding is to be made in the wheat. Light soil is quite likely to be acid and an application of two tons of ground limestone would be found much more economical than hydrated lime at $18 a ton.—C. R. Megee, Research Associate in Farm Crops, M. A. C.

FUR DEPARTMENT

TEMPERING STEEL TRAPS

Would you please inform me as to whether steel traps can be tempered after going thru a fire. We have someblacksmiths here that say the springs cannot be tempered. If they can be please tell me how.—F. C., Swan Creek, Mich.

—If the steel traps springs have been overheated (or "burned" as the blacksmith says) then they are useless, but, if they have not been overheated but have just had their temper drawn through heating, they can be tempered again.

Owing to the springs being likely heated and cooled un-uniformly it is best to anneal them first to relieve all strains and stresses in the steel. The annealing can be done from a heat slightly over the hardening heat. After heating for annealing the springs should be packed in lime, hot sand or ashes and allowed to cool off slowly.

The lowest heat which will give the desired results should always be used in hardening. A simple method for finding the hardening point of to use a magnet. When the magnet "lets go" of the heated steel, you have reached the hardening heat for that particular steel, if it is straight carbon steel.

To harden the steel springs, heat the entire spring in flame of a clear fire until there is just enough heat to harden, on reaching the hardening point, cool off "dead cold" in clean water. Polish the steel bright.

Hold the spring edgeways about two inches high over the fire, do not blow the fire but heat the spring very slowly, moving it back and forth, turning it over to insure even temper. Watch the spring very closely until the color turns to a very pale blue (almost grey color.) Do not cool off in water but lay the spring down where it will be free from draughts of cold air and allow springs to cool off.

When heating springs hold them at the end. If they are held in the center the center will be soft.

Another Method

Anneal and harden as above but to temper, hold spring over fire placing spring in a very dark place, now and again until it shows a very dark red, just visible to the eye, then lay down where it will be free from cold draughts and allow to cool off. —Bert Daugster.

BAD COMPANY

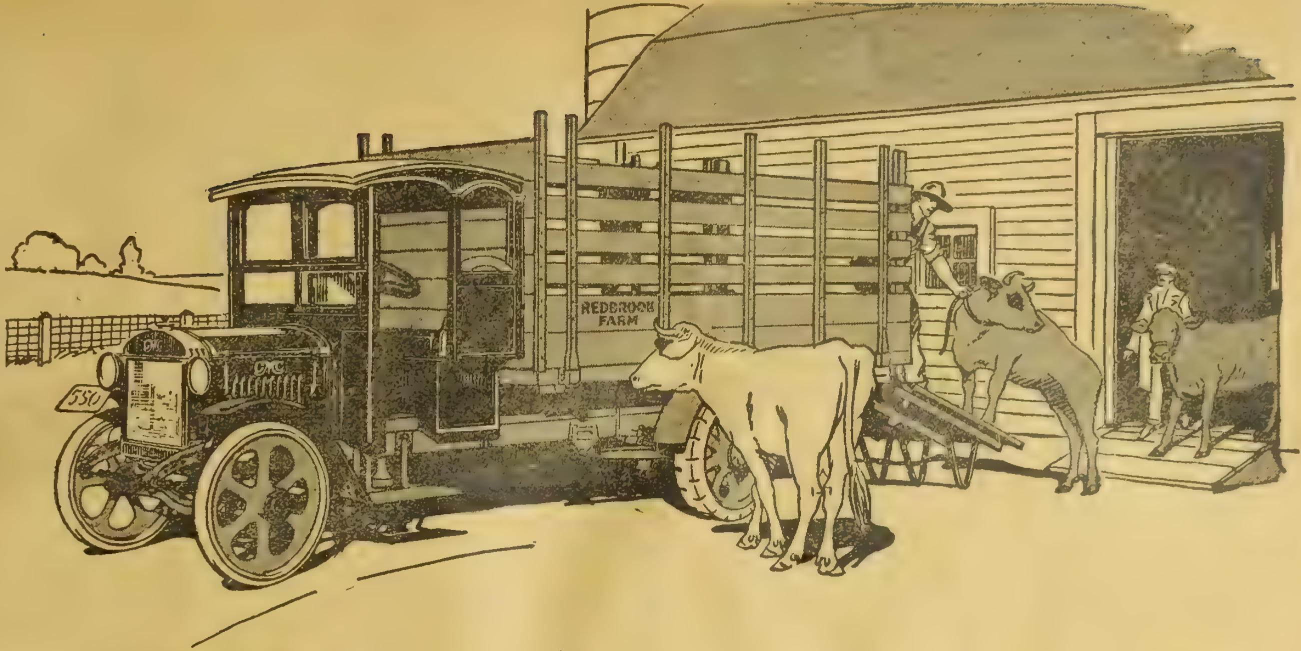
A negro who had an injured head entered a doctor's office.

"Hello Sam! Got cut again, I see."

"Yes, sah. I done got carved up wid a razor."

"Why don't you keep out of bad company?" said the physician, after he had dressed the wound.

"'Deed I'd like to; but ain't got 'nuff money to get a divorce." —Everybody's.



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Like the "Jim-Dandy" one ton GMC, this truck has exclusive improvements that increase operating economy and reduce the time and expense of maintenance. Model K-41 is equipped with the GMC Two-Range Transmission, providing greater pulling power in combination with more road speed—a combination never before accomplished until the development of this distinctive feature by GMC engineers.

The Two-Range transmission has successfully multiplied economical engine power into greater power at the wheels and has opened up new fields for motor truck use, both in the city and on the farm. With this transmission a GMC truck will go anywhere that wheels can get traction and on good roads will speed 18 miles an hour with solid tires.

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GMC Chassis list at factory as follows: One Ton, $1295; Two Ton, $2375; Three and One-half Ton, $3600; Five Ton, $3950; tax to be added

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The Michigan
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An Independent Farmer's Weekly Owned and Edited in Michigan

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ASSOCIATES:
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"The Farm Paper of Service"

Fall Housecleaning

IF you happen to know of anyone who has had trouble getting the Business Farmer regularly, as issued, or whose name has dropped from the list or who has any other complaint regarding our mailing, now is the time to send it in. We are having a fall housecleaning in our mailing department.—Publisher.

So this is Fall

WHAT canvas can portray, what silver-tongued orator can describe, what imagination can picture the glories of the woods which the hand of fall has painted with a thousand colors?

If you would find peace, lose yourself in the woods one of these bright October days. Just lay aside the cares of the farm or household and go down in the woodlot and spend a few hours with the gaily-colored maples, with the birds and chipmunks, and with God who smiles from every sun-lit leaf and twig.

Here for a few brief hours, "the world forgot and by the world forgotten," you can get acquainted with your better self. You can see your faults and your virtues and the faults and virtues of your children and friends and neighbors in their proper light. And that will be a good thing for you and for them. An occassional communion with one's own self works wonders in the forming of noble character. The place to talk things over with yourself is in the solitude of the woods and the time is the glorious fall.

Be on Thy Guard

FARMERS and farmer legislators who have fought for the primary and believe in the primary as a means of keeping the government in the hands of the people should be on their guard. For it is in danger.

The primary robbed the political boss of his power. No longer does he control elections or sell offices to the highest bidder. He is a king without a crown, a Kaiser dethroned and disgraced But, unless signs fail, he is staging a come-back. So watch out.

Only four hundred thousand out of a million voters cast their ballots in Michigan in the recent primary election. The political bosses say that's an indication that the primary is a failure as a means of interesting people in their government and in the men who are chosen to run their government. They never used that argument when nominations were controlled by conventions Because in those "good old days," the town hall couldn't accomodate more than one out of ten of the registered voters, and it took a mighty spirited contest to induce more than one out of twenty to participate in the election of delegates to the county conventions.

But this fact is easily overlooked by those who want to restore the convention system to power. What they are looking for now are excuses to destroy the primary. And they can find plenty of evidence that the primary isn't as popular as it ought to be, and plenty of good men who will help to lay it tenderly on the shelf.

The next legislature will undoubtedly be asked to "amend" the primary law, and there are those who are willing to wager that any amendment which will be satisfactory to the political bosses will in effect be a complete emasculation. If you are against the primary law your fondest hopes may soon be realized. But if you revere it as one of the instruments of representative government be on the alert to save it from its enemies.

Dr. Friday and the Middleman

"This is the first time that I have availed myself of telling you that I am a subscriber and a real reader of your paper. It is said that every man owes a part of his time to the upbuilding of the industry to which he belongs.

"On the fourth page of the September 16th issue I read what President Friday of M. A. C. had to say at the State Fair in regard to the middleman. If he continues such lines of talk in further addresses the farmers of the State of Michigan should petition to have him removed at once. He has already impeached himself.

"It can't be possible that he has read what the Philadelphia bank has to say about the need and value of farm organizations in the same issue. I wonder if he does not think that the producer is entitled to at least fifty per cent of the consumers' dollar? We would be very much pleased to read an editorial in your paper as to what you think of his address at the Fair. You have always appeared to me to be fearless and it is certain the Professor needs information . He furthermore should be closeted with Baruch for a time.—Marvin C. Haight, Van Buren County, Michigan.

IT may as well be confessed, now that you have brought up the subject, that many of President David Friday's best friends were surprised and disappointed with his State Fair address. It was a distinctly un-Friday-like speech. It bristled with the "two blades of grass" theory, and contained no encouragement for the co-operator. It rankled his farmer audience even to the point of heckling, which is bad for any speaker and particularly for the president pear agricultural college. If Pres. Frida startec believes that few if any economies ca cut fected in the marketing of crops, we be admire him for the courage of his admission even though we do not agree with him. It would be bad for progress if our educators should preach a doctrine which they did not believe merely to satisfy the whims of their hearers.

But does Dr. Friday really want us to believe that he sees no hope for bringing producer and consumer closer together? We doubt it. Or is he temporarily disheartened by the failure of the co-operative movement to cope with the problems of co-operation, and prefers to rest his reputation as an educator upon the more popular theory of profits by efficiency in production rather than upon the yet-to-be-proven theory of profits by efficiency in marketing? This sounds more likely.

Men assume a tremendous responsibility when they strike out from the trodden paths and seek to find a better way to market. If they encounter unforseen obstacles, as they often do and the way proves more difficult and costly than the old-travelled road, they must humbly accept the censure which is so often heaped upon them. Even the most ardent believers in co-operative organization are beginning to shrink from the role of leadership in untried marketing experiments.

Shall the President of the Michigan Agricultural College risk his brilliant reputation as an economist by preaching doctrines which he may not be able to prove when there are other theories which he can embrace with perfect safety?

NOTICE TO SUBSCRIBERS.

Rather than curtail departments and print incomplete issues, as some farm papers have been forced to do, we have preferred to issue The Michigan Business Farmer, **every-other-week temporarily.**

Each issue missed has been credited to the subscriber, so that in the end no one will lose a single issue for which he has paid. We respectfully ask your patience and thank you for your loyalty to

"The Only Farm Weekly Owned and Edited in Michigan!"

Cutting State Expenses

TAXPAYERS who have been clamoring about the cost of running the state government and demanding a reduction in state taxes will find a crumb or two of comfort in the comparative tax levies for the years 1921 and 1922.

The 1921 expenditures called for total taxes of $20,441,333.79, while the 1922 but $17,300,843.94. Lest someone may think there is a "nigger in the woodpile" somewhere, it is interesting to compare the principal items in the budgets. There is no special significance to the saving in the state office building expenditure which last year was $1,107,500 and this year is nothing. But there is some significance in a comparison of the regular running expenses of the state as shown by the following table:

Functional Division	August 1921	August 1922	Decrease
Executive .....$	33,550.00	$ 33,550.00	
Administrative	1,064,227.50	855,236.00	208,991.50
Legislative ...	62,000.00	225,000.00	*$163,000.00
Judicial	404,575.00	402,575.00	2,000.00
Regulative	1,115,965.80	945,866.00	170,099.80
Educational...	2,170,346.74	1,546,730.96	623,615.78
Agricultural	585,209.00	445,392.00	139,817.00
Defensive.... .	345,000.00	270,000.00	75,000.00
Penal	685,351.00	677,951.00	7,400.00
Curative	2,765,608.50	2,622,103.98	143,504.52
Correctional and Charitable ..	1,291,474.80	1,216,262.00	75,212.80
Protective	743,641.00	646,677.00	46,964.00
Constructive General	160,643.45	1,000.00	159,634.45
TOTAL	$11,427,583.79	$9,938,343.94	$1,489,239.85
Special:—			
University of Mich. Mill Tax	$3,000,000.00	$3,000,000.00	
Mich. Agr'l Coll. Mill Tax	1,000,000.00	1,000,000.00	
Highway Bond Sinking Fund ..	1,200,000.00	1,500,000.00	*300,000.00
Soldier's Bonus Sinking Fund .	2,456,250.00	1,612,500.00	843,750.00
War Loan 1917 Sinking Fund ..	250,000.00	250,000.00	
State Office Building	1,107,500.00		1,107,500.00
TOTAL ..	$9,013,750.00	$7,362,500.00	$1,651,250.00
Gd Total	$20,441,333.79	$17,300,843.94	$3,140,489.85

*Increase.

After you have digested these figures and secured what comfort you can from them, you might dwell for a moment upon the insignificant sums that have been set aside both years for paying interest on the bonded indebtedness. The taxpayers themselves voted to bond the state for $60,000,000 to build roads and pay the soldier boys a bonus. Most of the money has been spent, but very few of the bonds have been retired. We have here an item of over $3,000,000 or one-fifth of the total tax lexy for interest alone, with not a nickel laid aside to retire the principal itself.

If the reduction in expenditures for the maintenance of the various state departments and institutions represents an actual economy in management it offers cause for congratulation, but common sense tells us that little if any additional saving can be effected in this direction. At the same time it is short-sighted economy to fail to make provision for the annual retirement of a certain number of the state's bonds. This provision must be made soon, and when it is made all ye who look for lower state taxes for the next ten years may as well abandon hope.

Higher Prices for Reactors

THROUGH the offices of the Department of Agriculture the meat packers have been induced to pay higher prices for cattle which react to the tuberculin test. Every farmer who has had his herd tested and his reactors killed knows that the meat buyers have a prejudice against such animals and offer only a third to a half of what they are actually worth. In the large majority of cases reacting cattle are as fit for food as the non-reactor, but cattle buyers are either ignorant of the fact or deliberately take advantage of the owners. If the department has really succeeded in improving the market and price for reactors, it has removed one of the most difficult obstacles in the way of tuberculosis eradication.

Dodge it as he may for a time, sooner or later Pres. Friday is bound to run headlong into the marketing proposition, and when he does, he'll take off his coat, roll up his sleeves and tackle it with his characteristic energy.

WHAT THE NEIGHBORS SAY

BEANS AND SPUDS

WHEN I wrote you last in regard to the future of spuds and beans I had no idea the weather man was coming at "double quick" to help me out in my forecasting. Western Michigan has had more than two weeks of almost constant rain. In the past thirty years we have never had such a rainfall at this time of the year (Sept. 15) more than twice before.

Beans are pulled and have lain out in all this rain. They will run from 50 per cent to total loss. One man had 40 acres just ready to haul in when it commenced to rain, Now part of them lay in water. One man has 20 acres of corn to cut by hand and has got to wear rubber boots and every time he steps he will go into the mud six inches. Part of his beans stand in water and part of his spuds are rotten. I know of several fields which will not be dug.

Spuds that are planted around the tenth of June will not dig over 60 per cent of what they have been estimated on account of being hit with blight. One year ago bean buyers paid the girls 8 cents per pound for picking, the same rate is paid this year. Farmers will get nothing at all for their beans.—A. A. Lambertson, Kent County, Mich.

—Since you wrote the above the bean market has scored a substantial advance and potatoes have taken a further drop. No doubt lots of potatoes were ruined in this and other states by the September rains, blight killing frosts which hit many of the northern counties about the 22nd of the month. On the other hand, many sections report a fine crop and weather the very last of September and the first week of October was ideal for digging. All northern Michigan reports a good crop of excellent quality.—Editor.

WHY INQUIRY HAS BEEN IGNORED

THERE is in our vicinity an exceedingly dangerous electric crossing, the fault lying in the fact that the highway makes a steep descent onto the track with view obstructed on either side by banks; also, to the fact that a short drive parallel with the track which might be used in case of emergency was closed a year ago when the Covert Road was built. This road was accepted by the Road Commissioners not withstanding the hazardous condition of said crossing. Already one fatal accident has occurred at this crossing and others have been narrowly averted. Many people in the community feel that the condition should be remedied but do not know how to go about getting it accomplished.

About the middle of July I addressed a letter to the Attorney General stating the conditions and asking for information as to how to proceed. I received a letter from him bearing the postmark of July 21, stating that he had referred my letter to the Public Utilities Commission and that I would doubtless hear from them in a few days.

Days have lengthened into weeks, and weeks into months and more without any word from the Grosbeck-appointed, Michigan Public Utilities Commission. Let us hope they are busy with more important (?) matters than serving the people who are working and scrimping to secure money with which to pay their salaries.

I am only a woman but my vote counts as much as a man's and I think I voice the sentiment of the other farm women when I say I intend to use it to help secure better returns for the money invested. We farm women know what "strict economy" is and when we use the term we do not mean the Grosbeck nor Harding kind of "economy," but our own peculiar brand with the home-made label.

Any help you may be able to give thru the "Farmers Service Bureau or "What the Neighbors Say" will be greatly appreciated. Yours for a better commonwealth.—Mrs. Chas. Voorhees, Calhoun County. Mich.

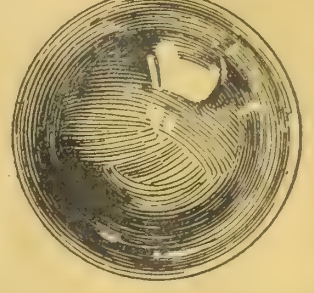
—Of course, we cannot say why your inquiry has been ignored. It may have never reached the hands

(Continued on page 17.)

Now—BALL BEARINGS in the larger PRIMROSES!

The Highest Development in CREAM SEPARATOR Construction

For forty-five years dairymen have struggled with hard-turning cream separators. Excessive friction caused them much trouble in the hand operation of the machines. Now the cream separator engineers of the Harvester Company, with this problem constantly in mind, and the satisfaction of the operator at stake, have designed and constructed a Ball-Bearing Primrose Cream Separator which reduces the power required to operate by approximately 35%.

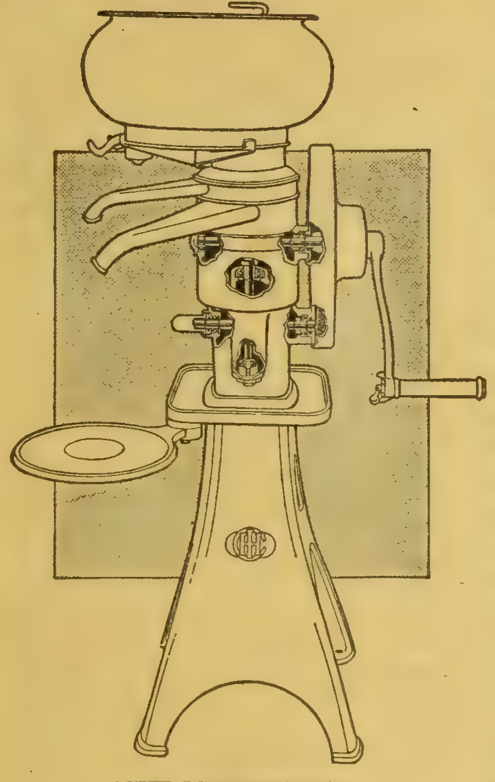


In this latest Primrose, the ball bearings are located at points where the resistance is greatest in the operation of all makes of cream separators.

The Ball-Bearing Primrose is in no sense an experiment. It has been tested and proved a remarkable improvement in the hands of thousands of farmers and dairymen in New York, Wisconsin, California, Minnesota, and other dairy sections of the United States. The unanimous decision of all users is that it represents a development which has long been needed, especially in territory where large machines are in use, and where more would be profitably used were it not for the hard turning of the plain-bearing machines.

The International Harvester Company's broad and liberal guarantee stands solidly behind this product. Primrose deserves its high reputation, not only for its recovery of the greatest amount of butter fat when operated as instructed, but for its ability to do so with less labor.

The Ball-Bearing Primrose is one of the products in the McCormick-Deering line of farm operating equipment. It may be seen and studied at the store of your McCormick-Deering dealer. Write us for catalog if you prefer.



NEW PRIMROSE No. 5

BALL BEARINGS make it easy to operate this big 1,100-lb. capacity Primrose *by hand.* Cut out to show the six ball bearings on crankshaft, on pinion shaft and on spindle.

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Made $400 In 39 Days!

Showing this 300 CANDLE POWER Light in Farm Homes

George Vivian, a Minnesota man, made $400 in 39 days working spare time. One day's effort alone brought him $39. C. E. Hartley, an Ohio man, made over $1000 in few months. James Connelly, of Pennsylvania, made over $300 in 23 days showing The Diamond Light to neighbors.

Burns Kerosene or Gasoline

Hundreds are making from $10 to $40 a day showing this wonderful 300 candle power farm home light. It burns kerosene or gasoline. It is clean, safe, odorless and costs only half as much as an old-style wick lamp to operate.

THE DIAMOND LIGHT

Thousands of users say they don't see how they ever got along without The Diamond Light. There is no fuss nor bother; no wicks to trim; no chimneys to clean. Lights with a match. Its brilliant white light is easy on eyes and makes the room as light as day. Its simplicity and beauty win instant approval wherever shown.

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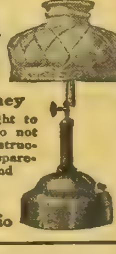

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KENTUCKY TOBACCO, 3-YEAR-OLD LEAF. Don't send a penny pay for tobacco and postage when received. Extra fine, chewing 10 lbs., $3; smoking 10 lbs., $2.50; medium smoking 10 lbs. $1.25 FARMERS' UNION, Hawesville, Ky.

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The Farm Home
A Department for the Women
Edited by MRS. GRACE NELLIS JENNY

THE EYES OF SHCOOL CHILDREN

MORE attention is being paid today to the health of our children than ever before. Throats, teeth, ears and eyes are looked after with more care in both homes and schools. A child can not do good work in school nor be a good, happy child anywhere unless he or she is in good physical condition.

It was recently said by a prominent educator that of the 24,000,000 school children in the United States not more than one third have received eye tests and that many whose eyes have been tested have been found to have been fitted incorrectly. This statement if true is most discouraging for it is doubtless true that 80% of the so-called dull or backward children have defective vision not defective brains and can not be held responsible for their dullness.

The manner in which a room is lighted has some effect upon the eyesight of those living in it. Low shaded lights are not only more artistic but are much easier for the eyes than a high bright light which gives a most unpleasant effect. It is true that a light falling on the book from behind the left shoulder is the best direction for the light to come from altho why it is left instead of right has never to my knowledge been told. Perhaps for the same reason that we must throw salt in that direction to avoid a quarrel.

Cross-Eyed Mary

"With golden curls and rosy cheeks she skipped joyfully to school. It was her first day, the very first that she had ever been away from home. She was six years old now and was going to be a little lady. The rapture she felt as she thought of the other girls she would meet and play with. Her cup of joy was full and over-flowing.

"Reaching the school she formed in line with the other girls who stared at her—some grinned, some smiled, some laughed at her and said "hello, cross eyes". For the first time in her little life she suffered a pang of pain such as she had ever suffered before, for she realized that she was different from the others—she was cross-eyed.

"The day at school dragged on and on. It was so long. It seemed that she would never get away from it. But, when the day ended she hurried home amid the jeers of the boys and girls calling after her—"Cross-eyed Maary". Her dear litheart was broken and all the joy she felt in the morning was turned to tears.

"She persevered at school day after day until she could stand it no longer. Then she went to her mother with big tears in her eyes and told her all her troubles. She begged her mother not to send her back to school because she wasn't the same as other girls.

"And, it was not until those chubby little arms were clasped about her mother's neck, with the big tears rolling thick and fast down her cheeks, that the mother realized the injustice she had done.

"MORAL: Many heart-aches and sorrows can be kept from the dear little ones we love, and many hours of regret from parents, if they watch carefully over their children. Little Mary's eyes should have had attention when the first tendency of trouble became apparent. Many of these cases merely require lenses to correct the defect which causes the eye to cross.—The Eye Sight Conservation Council of America.

CANNING BAKED BEANS

I WONDER how many readers have ever tried canning baked beans? We are very fond of baked beans but during hot weather when the oil stove is used for cooking, it is too expensive to cook them as I like to bake them for two or three hours. When we have a reasonably cool day I bake a couple of pans full and fill three quart cans with the baked pork and beans. Then adjust the rubbers and tighten the tops with the thumb and third finger as for cold pack canning. I then place them in the pressure cooker, process for about 20 minutes. If one has not a pressure cooker I think they would need to be steamed for an hour or more. I have never had the slightest trouble about their keeping when processed 20 minutes altho this was original as there was no receipe given in cook book that comes with the cooker. They are one of the best things we keep on our emergency shelf. I always add about a spoonfull of brown sugar or molasses to a panful of beans, not enough so they will taste sweet but it adds a great deal to their flavor.—Mrs. Claudia Betts.

A SHORT SUMMARY

SKIRTS are coming down, a short distance anyway and if your skirts are too short put a yoke around the top, wear an over blouse to cover the short yoke and no one will be the wiser.

Over blouses are much worn—in shades to match and contrasting colors also.

The white shirt-waist with colored skirts seems to be tabooed this season.

However, women in business will wear what seems to them suitable and useful. Soft clinging materials are again favorites although many taffetas are worn.

Odd and striking combinations of colors are seen everywhere but for the woman of moderate means quiet colors and combinations are best. One does not tire of them as soon and the fact that a dress is worn for several seasons is not so apparent.

I do not believe that the uneven skirt at the bottom will hold in favor very long it has a little untidy, ragged appearance that some hold objectionable, especially for street wear .

It is certainly an extreme of fashion. A recent fashion exhibit clothes for different purposes were shown. For the women of society, for the business women, for the home women and many extremes of style for the young girl, who in all reason should be dressed most inconspicuously and simply.

It all goes to show that if we dress moderately following the general trend of the fashions we will not feel out-of-date nor unusual in almost anything we want to put on.

The sport clothes are very attractive, plain as to line and most comfortable as to cut; made of soft wooly materials that stand hard usage and look well. For dress shoes, patent leather comes first, then satin and suede.

LEAGUE ILLUSTRATES CITIZENSHIP BY PLAYS

THE Massachusetts League of Women Voters is preparing a series of plays for citizenship education. Mrs. Frederick P. Bagley, first Vice-President of the Massachusetts League, has written the first play to be produced—"How Maggie Mac Taggert Became a Citizen." Mrs. Bagley is former chairman of the National League's committee on American Citizenship, and her long experience in this work, both in the League and in the State has given her a great fund of dramatic and colorful stories for these plays. Mrs. Bagley's play was produced under the auspices of the Citizenship Dramatic Club by the Duxbury League of Women Voters and netted them a nice sum for door receipts.

GIFTS FOR CHRISTMAS

IT is not too soon to begin to make plans for our Christmas giving. When one has time to spare most acceptable gifts can be made such as dainty aprons, bags of all kinds, and whoever has enough of them? Pretty underwear, caps and doll dresses also, for the new or old dolly must be dressed up freshly at the holiday time.

Then there are the cunning stuffed animals that all children love so so well.

We have patterns for all these articles pictured in our new catalog.

I can choose them for you if you wish me to but it is really better to have the catalog and make your own choice.

BOILED CHRISTMAS PUDDING

ONE quart seeded rainins, pint currants, half pint citron cut up, quart of apples peeled and chopped, quart of fresh and nicely chopped suet, a heaping quart of stale bread crumbs, 8 eggs beaten, nutmeg, teaspoonfull salt, flour fruit thoroughly from a quart of flour, then mix remainder as follows, in a large bowl or tray, put the eggs with sugar, nutmeg and a cup of milk, stir in the fruit, crumbs and suet one after the other until all are used, adding enough flour to make the fruit stick together which will take about all the quart. Dip pudding cloth in boiling water, dredge on inside a thick coating of flour, put in the pudding and tie tightly, allowing room to swell, and boil from two to three hours in a good sized pot with plenty of water, replenishing as needed from tea-kettle. When done turn in a large flat dsh and send to table with a sprig of holly, or any bit of evergreen with bright berries stuck in the top. Serve with any pudding sauce.;This recipe furnishes enough for twenty people but if the family is small, one-half the quantity may be prepared, or it is equally good warmed over by steaming. For sauce, cream a halfpound sweet butter, stir in three quarters of a pound of brown sugar, and one beaten yoke of an egg, simmer a few minutes over a slow fire, stirring almost constantly. When near boiling add a half pint bottled grape juice, and serve after grating a little nutmeg on the surface.—Mrs. J

COLD PACK CANNING OUTFIT

I NOTICED in a recent issue of M. B. F. a request for information in regard to a cold pack canning outfit. I purchased the "Hall Cold Pack Canner" made in Grand Rapids and I gave it the preference over all others, for the reason that one may can 2 quarts; 1 quart or pint cans all at the same time if one so desires. It is made of heavy galvanized iron and is about two feet high and 12 inches in diameter.

One can can 12 puarts over one burner of an oil stove.

I have canned meat, vegetables, and fruit and never lost a can.

I Will give the readers of this page my recipe for making hard soap: To one can of lye add 2 1-2 pints of soft water (cold), and cool to 80 degrees F. by your thermometer. Melt 5 1-2 lbs. of cleansed grease and cool to 120 degrees. When ready to mix add 1 cup of ammonia and 4 tablespoons full of borax to the lye, pour grease into the lye stirring constantly until the mixture drops from the paddle as thick as honey, and pour into a wooden box lined with heavy paper, and when it sets cut into bars.

The secret of success is not to stir the mixture too long, as it will separate. I have never had a failure and the soap is as white as any you buy when cured.—Mrs. M. M. H.

CANNED FRUIT SPOILS

I am interested in your paper. I am a young girl of seventeen and have kept house for my father for two years.

I have trouble with my fruit spoiling. I use new tops and rubbers some new cans, my daddy turns them tight and I seal them with wax but yet they spoil.

My cellar is very damp, would that cause fruit to spoil? Do cans have to be hot when the fruit is put in? I read in a magazine that if you put a silver knife in the cans, they would not need to be hot. I never break a can that way. I wonder if that would make them spoil. I would like house plant slips if some.—Emily Randall, Brown City, Mich., R 2.

—Wash your cans well with hot soap-suds then scald them with boiling water and turn them upside down to exclude germs from the air which often lodge in the cans and cause perfectly well canned fruit to spoil—then wash in soap suds your tops and rubbers, put them in a pan

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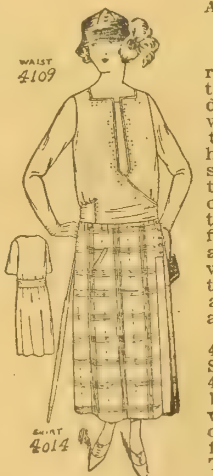
All Patterns 12 Cents

Address orders to Mrs. Jenny, Pattern Department, M. B. F.

A word for our patterns from one of our readers.

We enjoy the M. B. F. in our home very much, and hope it may continue in its good work. I have used the patterns with good success, and am sending for another, Also the Fashion Book. Please send me the 1922-23 Book of Fashions.—Mrs. George Douglas.



A Pleasing Separate Waist and Skirt Style

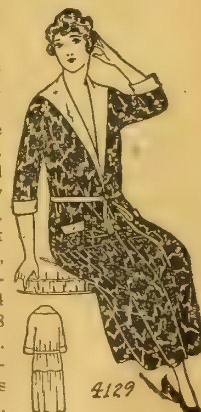
4109-4014. Plaided ratine was used for the skirt, and crepe de chine for the waist here illustrated. One could have both waist and skirt of either material. The surplice closing is becoming to slender and stout figures. The skirt is a two piece model, with plait inserts at the left side, where also the closing is affected.

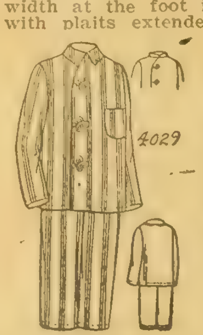
The Waist Pattern 4109 is cut in 7 Sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure It will require 3 yards of 32 inch material for a medium size. The Skirt 4014 is cut in 7 Sizes: 25. 27, 29, 31, 33, 35 and 37 inches waist measure, and will require 2 5-8 yards of 40 inch material for a 29 inch size. The width at the foot is about 2 1-4 yards with plaits extended.

A Unique and Pretty Negligee

4129. This model is attractive in crepe, satin, corduroy, printed crepe de chine, and georgette. Beacon cloth, flannel and eiderdown may also be used for it.

The Pattern is cut in 4 Sizes: Small, 34-36; Medium, 38-40; Large, 42-44 Extra Large, 46-48 inches bust measure. A Medium size requires 6 1-4 yards of 27 inch material.





A Servicable Garment

4029. This is a popular model it is good for muslin, cambric, flannelette, soisette, madras and silk. The neck may be finished with a standing or a turnback collar.

The Pattern is cut in 5 Sizes: 32, 36, 40, 44 and 48 inches breast measure. A 40 inch size requires 7 3-8 yards of 27 inch material.

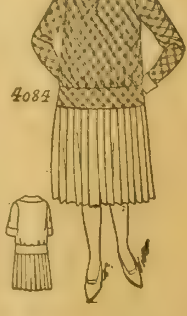
Pattern mailed to any address on receipt of 12c in silver or stamps.

A Popular Style for the Growing Girl

4084. This makes a fine costume for school. Plaid suiting could be used for the blouse and plain serge for the skirt. One may have the sleeve in wrist or elbow length.

The Pattern is cut in 4 Sizes: 8, 10, 12 and 14 years. To make the model illustrated for a 10 year size will require 2 1-8 yards of 32 inch material for the blouse and 2 5-8 yards for the skirt.

Pattern mailed to any address on receipt of 12c in silver or stamps.



and cover with boiling water, leave them in the water until you are ready to use them. When you are ready to fill a jar set it on a plate on which is spread a wet cloth, put one cup of fruit in and let it warm the can then fill the can first having adjusted the rubber and fitted your top so that there is no delay when the can is full. Fill the can to overflowing and put on the top, screwing it down tightly. Boiling fruit can have no germs, if your cans, tops and rubbers are sterile then it looks as if the mischievious germs came from the air.

Of course if you process your fruit the method is a little different but the same general rules hold good. Perhaps you know Emily that soap-suds themselves are a disinfectant and I believe in using plenty of soap whenever it is required. I love to see dishes come out of nice, white, foaming suds, clothes also and last but not least soap-suds is fine for our skins. I take it for granted that you know all this but there are some much older housekeepers than you who do not.

Now in the end do not put any food products in a damp place. I would say better have it a little too warm than damp. You know canned fruit is kept in stores that are always warm without trouble, that is because it was put up sterile (without any germs.) Will be glad to help in any way.—Mrs. J.

SEEDLING GERANIUMS

I saw in your paper recently a request for some one to write their experience with seedling geraniums. In the spring of 1921, I procured a packet of geranium seed from a seed house and planted out of doors. I guess they all grew as they came up very thick and grew fast, but I had to put them in pots as the cut worms began taking them. I kept them all summer and not one of them blossomed though. They grew to be fine specimens. I had something like fifty of them and I kept them around all winter and only two blossomed. They were both single scarlet. This spring I set the whole lot out of doors and they have been full of blooms all summer. Everyone was single but there were several shades of pink and one varigated pink and white but more scarlet than any other color.

Last summer I hand fertilized some of my double geraniums and this spring sowed the seed. Only one grew and is now about a foot high but I expect to have to keep it over winter to see it blossom.

This summer I saved the seed from my seedlings out of doors and will try it again next summer. If "Subscriber" will send her name I will divide with her.

Can anyone tell me how to keep geraniums in the cellar over winter? Will they live if the cellar is dark? Also how much if any moisture do they require.

Does anyone know if a flowering maple should be kept down in the cellar or not in the winter.—"Another Subscriber."

SOUP RECIPES WANTED

I would again like to come to your page for help. I find so many good recipes there, I would like some good recipes for soup, especially one using green and red sweet peppers, also some vegetable soups, am sending my receipe for chowder, those not caring much for ketchup or chili sauce will find this excellent to serve with meats.

Receipe for Chowder

I gallon green tomatoes, measure after chopping fine, 12 onions, 12 sweet peppers, 6 green and 6 red, (remove all seeds.), 1 cup of salt, chop all fine, I use a food chopper, then mix these ingredients together, let stand two hours; then drain off juice; 2 quarts of vinegar, 3 pounds of brown sugar, or half brown and half white, 1 teaspoonful of whole cloves, 1 teaspoonful of whole allspice, 1 teaspoonful of coriander seed, 2 teaspoonful tumeric, 2 teaspoonful of celery seed and 2 teaspoonful of mustard seed, tie all the spices in a piece of cheese cloth, put in vinegar, add sugar, let boil well, then add drained vegetables and boil 1 1-2 to 2 hours until tender.

Ingredients of this chowder will keep their original fresh colors not turning into a dark dirty color that by some recipes chowder seems to. Thanking you all for past favors, I am, Sincerely, Mrs. John Vollmer, Jasper, Michigan, R. 4.

HONEY CAKE

One pound strained honey, one egg, one cup sour cream, one-half teaspoon soda, any kind of seasoning that is desired, and enough flour to make a good stiff batter. Miss Inez Ruth Foutch.

CORRESPONDENCE COLUMN

I will send the name of the company making the pressure cooker to any one sending me a stamped and addressed envelope.

A subscriber asks for information in regard to the Auto Knitter. ill some of our readers who have used the machine write and tell us what success you have had with it and whether the investment paid financially?

Egg Tester Wanted

Would like to know where I could get an egg tester with magnifying glass. I would like to hear thru the Home Department. I know a number of people who would be glad to know where to get one.—Mrs D. C. M.

HOME SPUN

Brown or gray crockery bowls of medium size are very nice for putting away leftovers. They may be put in the oven when you wish to re-heat the food.

Disinfect drains with a solution of 2 oz. of chloride of lime to 1 gal. of water.

Use a strong solution of washing soda in boiling water in the kitchen sink two or three times a week, this keeps it sweet.

Plenty of pulverized borax in the water in which daintily colored dress goods are washed will keep them from fading.

Cayanne pepper is very offensive to mice.

Keep potatoes under water when peeling them this will leave very little stain on the fingers. It applies also to onions.

Use wooden tooth-picks for testing cakes. They are much cleaner than broom straws.

ERRORS!

Two typographical errors in the last issue should be corrected. Dr. Coue' is the name of the French doctor.

The prescription for colds should read—Acitanilide 10 grains not 10 drahms.

THE HUNTED WOMAN

(Continued from page 6)

drew a deep breath, and went on, her eyes full upon him, speaking as if out of a dream. "The Great Adventure—for you. Yes and perhaps for both."

Her hands were drawn tightly to her breast. Something about her as she stood there, her back to the table, drew John Aldous to her side, forced the question from his lips: "Tell me, Ladygray—why are you going to Tete Jaune?"

In that same strange way, as if her lips were framing words beyond their power to control, she answered:

"I am going—to find—my husband."

(To be continued)

NEW LAMP BURNS 94% AIR

Beats Electric or Gas

A new oil lamp that gives an amazingly brilliant, soft, white light, even better than gas or electricity, has been tested by the U. S. Government and 35 leading universities and found to be superior to 10 ordinary oil lamps. It burns without odor, smoke or noise—no pumping up, is simple, clean, safe. Burns 94 per cent air and 6 per cent common kerosene (coal-oil).

The inventor, A. R. Johnson, 609 W. Lake St., Chicago, is offering to send a lamp on 10 days' FREE trial, or even to give one FREE to the first user in each locality who will help him introduce it. Write him today for full particulars. Also ask him to explain how you can get the agency, and without experience or money make $250 to $500 per month. (Adv.)

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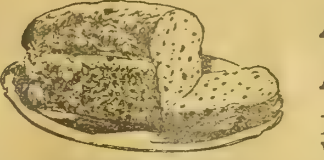

A GOOD RECIPE FOR NUT BREAD

1 egg, 1 cup sugar, 1 cup sweet milk, 1 teaspoon salt, 1 cup nuts, 4½ cups Lily White Flour, 4 level teaspoons baking powder. Mix well and let stand twenty minutes in two pans nine inches long, four and three-quarters inches wide, three inches deep. This amount just fills these two pans. Grease pans and over top of loaves with melted butter; bake in moderate oven until done. (Use one-half cup of flour to knead in soft dough.)

Our Guarantee

We Guarantee you will like Lily White Flour, "the flour the best cooks use" better than any flour you ever used for every requirement of home baking.

If for any reason whatsoever you do not, your dealer will refund the purchase price.---He's so instructed.

Bakes So Evenly

Everything baked with Lily White Flour has an even, firm texture. Loaves of bread are good looking, light, flavory and tender. Biscuits and rolls are delicious—the kind you will enjoy making and everyone enjoys eating. The reason for this is the perfectly uniform granulation and the absolute cleanliness of Lily White.

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REASON No. 6

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Sixty years of milling experience stand behind Lily White Flour. It is milled of the finest wheat grown in America. The grain is cleaned, washed and scoured eight times. It is milled by the six-break system. It is untouched by human hands. Every process to produce a better flour is employed by the Lily White millers and a better flour is the result.

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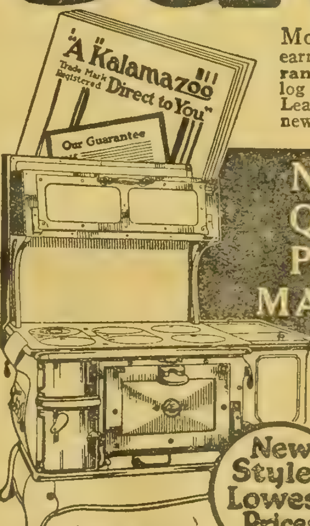

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I want every sufferer from any form of muscular and sub-acute (swelling at the joints) rheumatism to try the great value of my improved "Home Treatment" for its remarkable healing power. Don't send a cent; simply mail your name and address, and I will send it free to try. After you have used it, and it has proven itself to be that long-looked for means of getting rid of such forms of rheumatism, you may send the price of it, One Dollar, but understand I do not want your money unless you are perfectly satisfied to send it. Isn't that fair? Why suffer any longer, when relief is thus offered you free. Don't delay. Write today.

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What Have You to Offer?

The Children's Hour

DEAR Neices and Nephews: As I am writing this two days before our bird contest closes I cannot decide who is the winner but to date a boy is leading and he has written such an interesting letter that it will be hard to beat. The boys seem to be showing more interest than usual in the contest. I have received nealy as many letters from the boys as I have from the girls. Next issue we will know who is the lucky one and I will announce it.

How many of you are out to win some of the prize money M. B. F. is giving away in its picture contest, which I told you about last issue? If you have not entered yet there is still plenty of time. It is just like getting paid for playing so you better enter by using the picture printed at the bottom of this page, or if you want another picture just write to the Contest Manager, Michigan Business Farmer, Mt. Clemens, Mich., and he will send you one by return mail. At the same time ask him any questions you desire answered regarding the contest. I hope some of you win.—UNCLE NED.

OUR BOYS AND GIRLS

Dear Uncle Ned:—How are you these fine days? I hope lovely the same as I. I go to school. We have a nice teacher. I am somewhere in my teens. It might be thirteen, fourteen, fifteen or sixteen. The one who guesses my right age first will receive a good long letter from me, about my pony, kitten and I for we have some great times. I am going to tell you about my trip to Lake Michigan.

One lovely Sunday morning at five o'clock we started for Lake Michigan. We went in two cars. And did not have any car trouble going or coming back. We stopped at two places and got a drink and rested for we got very tired riding. We had thirty miles of paved roads. It was certainly a nice road. But just the same we got tired of riding on it. We reached Muskegon at eleven o'clock and then we went all through a big boat that was anchored to the shore. The boat was two hundred feet long and was just as nice as any house. We took our dinner with us and ate our dinner on the shore. They had a merry-go-round, many other things for children to have fun with. In the afternoon I went in bathing awhile and then rode on the merry go-round. The shores of Lake Michigan are nothing but pure white sand with some beautiful buildings built upon it. The sand is nothing like the sand around here. There were great big sand hills quite a ways out in the lake which looked beautiful. We walked out on a dock for about a half a mile. The light houses were built on it. We walked along the shore for about a half a mile. Then we started for home and when we were coming through Muskegon we saw an auto accident. The auto turned over two or three times. We did not stop to see if anyone was killed. We stopped at a little place coming home and ate our supper and then came on home. We reached home at eight o'clock that night. And were tired and sleepy.—Bernice Lee, Barryton, Mich., R. 2, Box 76.

Dear Uncle Ned:—I was quite interested in this contest, so I thought I would try to win a prize. My birds names are:

Robin, sparrow, wild dove, barn owl, screech owl, wren, woodpecker, swallow, blackbird, raven, nuthatch, crane, stork, vulture, sea gull, eagle, ground bird, quail, oriole, canary, bob-o-link, whip-poor-will, chicken hawk, snowbird, lark, bluebird, bluejay yellowhammer, goldfinch, martin, bat, thrush, magpie, cowbird, catbird, crow, chickadee, hummingbird, pigeon, ostrich, snipe, nightingale, warbler, sapsucker, partridge, peacock, pheobe, cuckoo, kingfisher, mourning dove, condor, flycatcher, and kingbird.

The bird which I like best is the robin, he has a pretty red breast and is quite a tame little fellow. He always lets you know when he is in danger by his song. This summer a father and mother robin decided to build their home in our wagon shed. They were busy every day from early morning until dusk, gathering sticks, straw and clay, with which they built their home, at last their interesting work was completed, and the next time I looked into the nest what do you think I saw? Three little baby robins with wide open mouths calling to their parents for food. My sisters and I sat about five feet away from the nest and watched the proud robins feed their children.—Your loving neice, Jennie Falk, Manistee, Mich., R. No. 1, Box 58.

Dear Uncle Ned:—Here are the birds I know: Sparrow, bluebird, canary, bluejay, catbird, thrush, hummingbird, quail, bob-o-link, black bird, stork, killdeer, robin, wren, meadowlark, mudhen, swallow, chickadee, snowbird, pheobe, woodpecker, hawk, owl, bat, whip-poor-will, mockingbird, kingfisher crane, eagle, oriole, lark, peacock and magpie.

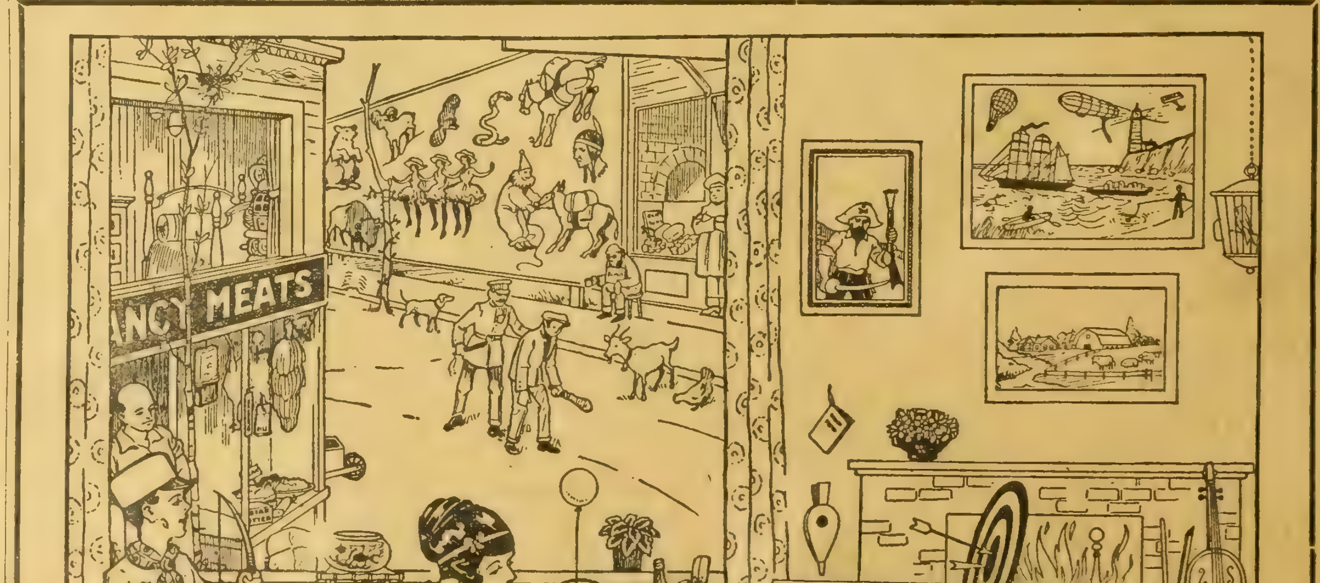
I like a canary best because you can have it for a pet. It is yellow and has black stripes on its wings, it sings very nice. They eat seed and drink water.—Edith Sharpe, Clare, Michigan, R. No. 4.

Dear Uncle Ned—I want to join your merry circle. I like to read the letters in the M. B. F. My father owns 160 acres of land but we aren't living on it. He is working out building roads for the county. My mother cooks for the men that work for him. My occupation is running errands and helping mother wash dishes. We are going to farm next summer, and I'm going to help. I am 15 years old. I have brown hair and brown eyes. My name is Leslie. Now guess which I am, a boy or a girl. Who guesses correctly will receive a long letter. —Leslie Hillard, Cadillac, Mich., R. No. 2.

Dear Uncle Ned:—Here are the names of the birds which I saw to and from school, and the one I like best:

Bluebird, lark, wren, sparrow, partridge, thrush, crow, pigeon, crane, killdeer, quail, catbird, woodpecker, chickadee.

The most beautiful birds I think are the canaries. They are such pretty singers and nice colors, black and yellow. We have some weeping willow trees by our house and the canaries make their nests in them. Early in the morning they flutter about, and look so pretty. Your neice, Beatrice Meyette, Pinconing, Mich., R. 3, Box 108.



HOW MANY OBJECTS CAN YOU FIND IN THIS PICTURE THAT BEGIN WITH "B"?

Look up the September 30th issue of the Michigan Business Farmer and see the full announcement of the great $500 puzzle contest, open to anyone who is not an employee of this paper. If you haven't one handy, make up a list of all the objects in the above picture which begin with "B" for instance "book, bear, ball," etc. SEND IN YOUR LIST AT ONCE and we will mail you at once complete list of prizes and names of judges, etc. Anyone, anywhere or all the folks in your family can help make up the list. Address: CONTEST MANAGER, THE MICHIGAN BUSINESS FARMER, Mount Clemens, Michigan.

THE FIFTY-FIFTY FARMING AGREEMENT

(Continued from page 4.)

stones of farm economics that profit lies in raising bumper crops—or at least crops whose yields per acre are much above the average.

With no community of interest landlord and renter are not concerned in raising pure bred live stock. For this is a process of long years of continuous improvement, and only comes ,as a rule, where men of vision work for a definite pattern of perfection.

On the Wendt & Painter farm—and on the other farms owned by Dr. Wendt—will be found pure bred animals. Frank Painter gives his attention to high class Durocs. On another farm Poland China swine unite with Holstein cows to turn feed into food. With good breeding stock selling at substantial advances above market quotations for common stock, it is easy to see how Mr. Painter made a good living for himself and family and bought a good farm with his profits; and how the other land worker we referred to, actually put away $3,000 a year clear profit for seven years—an almost unheard of procedure—for it must be remembered that the land owner shared equally with his partner in the profits.

The general policy of all the partnership farms we know of, is to sell nothing but live stock—pure bred and market hogs and cattle, dairy and poultry products, étc. When this policy is consistently followed for a number of years, it is easy to see how profits for both partners are likely to exceed those of the average grain farmer.

The Wendt farming agreement is short and simple in form but it represents the most painstaking care in the wording thereof. It is not likely that the lawyer called upon to write a partnership agreement, could or would give to the task as much thought or as much actual experience .

Some have attempted to improve upon the terms of this contract, but nearly always such experiments result in disaster. For the agreement as it stands is based upon absolute justice to land owner and land worker, with the idea of cementing their friendly co-operation for a common purpose. It has been studied from every angle for more than fourteen years and where it has been tried by men willingly to play the game fairly and honestly, it has brought prosperity to the combination .

This suggests that no agreement will succeed where the principal factors there to are not of the right kind; which is the same as saying that partnerships, corporations, government, family life—any form of co-operative effort will fail where all the parties are not in harmony with the central idea of service to the institution.

Dr. Wendt himself is a man of broad human sympathy. His work in his home town is an example of what a man of vision and power can do to make Sinclair Lewis' picture of "Main Street" look ridiculous. He is a substantial member of the community where he has spent his life as a physician. His natural caution is combined with a dream of high ideals of life. His work in that community in building for permanent progress in everything that is worth while, deserves a story all by itself .

It is only natural that a man of this calibre understands the technique of co-operation. He has an instinct for getting along happily with those around him, and this is simply due to his readiness to live by the Golden Rule. He isn't always trying to get the best of the deal. He is willing to make a profit but he knows that he can do so only where his co-laborer also makes a profit.

On the other hand, it takes a man rather above the average in skill, intelligence, and general decency to make a success as the "party of the first part"—the worker who perhaps brings to the partnership only his two strong hands and his thinking brain—an invincible combination, by the way, in any situation in life. The ordinary renter, who merely wishes to strike a shrewd bargain with some one who happens to hold the title to a piece of land, might as well pack up his goods and move on; for that is what he would do anyway—no matter how well-considered the contract that legally bound him to another.

An example of the right kind of man for the job is Frank Painter, who has some original ideas in addition to his training in the details of running a farm. He is smart enough to breed high class Duracs, for instance, and has now a herd of extra good ones that are steadily improving from year to year.

On the very day we were there, Frank said to the Doctor, "Don't you think we should sow some rape in that ten-acre corn field? We can always use more pasture."

"Sure," replied the doctor after a moment's thought. "How much seed do you need and when?"

And right there a little detail in good farm management was disposed of in less than half a minute's time. That's the way it works; two heads are better than one.

Another forward-looking farmer, Mr. B. L. Pruett, is also making good on one of the fine farms in Lincoln County. He added an extra twenty pounds of pork per head to a bunch of hogs by shifting them from field to field as they grew in weight. When they were young and active he pastured them in a distant field; when they got a bit lazy he put them into a field close to the barn; and finally he gave them a three weeks finish in the feed lot where they got practically no exercise. This is a simple matter—but how many hog men have thought of it?

The Wendt farming agreement provides in effect that the land owner is to furnish the land and keep a good set of buildings in proper condition to do business . The worker gives his labor and furnishes his own teams and implements. All the live stock—other than work animals—are bought and owned jointly by the partners and each has an equal share in the increase. No sales or purcheses can be made without mutual consent.

Where a few milk cows are kept, the product is divided equally, but Dr. Wendt is now working on a provision that will permit the worker to own as many cows as he is willing to milk, the feed to be furnished by the partnership, and all of the cream to be sold for the account of the worker—the skim milk to be fed on the farm.

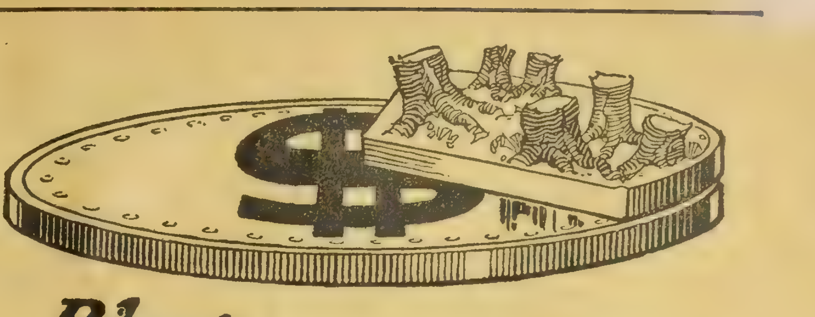
WHY INQUIRY HAS BEEN IGNORED

(Continued from page 13.)

of the Public Utilities Commission, the majority of members of which, by the way, were appointed by Gov. Sleeper and not by Mr. Grosbeck. On the other hand the inquiry may have been referred to a clerk who paid no further attention to it. I have some times thought myself—that men in public positions, especially ones, who consider it beneath the dignity of their office to be bothered with complaints from the ordinary citizen, and the fact that the Business Farmer receives scores of complaints which have been referred to such officials without results, is evidence of the fact. A more active interest in politics by both men and women will help, no doubt to secure greater efficiency and courtesy in public office.—Editor.

A rare opportunity to buy a bargain in a skunk stole from a lady going South. Apt. 4, 1354 Monroe St. (after 6 p. m.)—Washington Evening Star.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912, of the Michigan Business Farmer, published weekly at Mount Clemens, Michigan, for October 1, 1922. 1. That the names and addresses of the publisher, editor, managing editor and the business managers are: Publisher, George M. Slocum, Mt. Clemens, R. F. D. No. 4, Mich. Editor, Forrest A. Lord, Mt. Clemens, Mich. Managing Editor, Milon Grinnell, Mt. Clemens, Mich. Business Manager, W. W. Slocum, Farmington, Mich. That the owners are: (Give names and addresses of individual owners, or, if a corporation, give its name and the names and addresses of stockholders owning or holding 1 per cent or more of the total amount of stock.) The Rural Publishing Company, Incorporated, George M. Slocum, Mabel H. Slocum, Forrest A. Lord, Mt. Clemens; William W. Slocum, Farmington; Cecil Allen, Lake; Aug. H. & Emma Amos, Owosso; L. Edna Ellsworth, Oden; Nellie G. Powell, Oden; Chas J. Pratt, Charlevoix; Jos. Ritzler, Rogers; F. R. Schalck, Chicago; Walter Schriner, Marine City; Andrew Voss, Luther; Ben Wolf, Riggsville; Fred Yost, Bridgeport, Michigan. 3. That the known bondholders, mortgagees and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none so state.) Citizens Savings Bank, Mt. Clemens; R. R. Olds, Detroit, Mich. George M. Slocum, Publisher. Sworn to and subscribed before me this 2nd day of October, 1922. Robert A. Donaldson. My commission expires March 5, 1926 .



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1/3 more stumps per dollar

Blast 1/3 More Stumps, Clear 1/3 More Land this Fall

IN Dumorite, the newest du Pont dynamite, the purchasing power of your dollar has been increased 35 to 40 cents.

Dumorite has approximately the same strength as 40% dynamite, stick for stick, shoots with the slow heaving action of 20% and you get 1/3 more sticks per dollar.

You can use Dumorite right into winter-time without danger of freezing. It is non-headache. Order your Fall supply now from your hardware or general store.

Send for free 105-page Farmers' Handbook of Explosives, giving complete instructions for all kinds of farm blasting work.

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FARMS & LANDS

Ads under this heading 10c per word

FOR SALE—240 ACRES LEVEL CLAY loam land all cleared, good house, large circle roof basement barn, two wells of water and two windmills, large silo, clear creek runs thru one corner of farm. Price $75 per acre; $5,000 of this is covered by Farm Land bank loan payable $180 every six months for 30 years which pays interest and principal, the balance can be handled by paying $5,000 down, with $6,000 mortgage, all the time on the balance you want. The above price includes 57 head of yearling steers, cows and heifers. Good team of work horses. New heavy double harness and third horse harness, new wagon, wide tire, with hay rack. New mowing machine, new plow. New side delivery rake, new drag, disc, cutivator, and all other tools on farm, also about 80 tons of hay, straw, oats, bean pods, silo full of ensilage, etc. The increase on cattle alone will half pay the mortgage in one year. Must sell at once, do not answer unless you have at least $6,000 to pay down. Address THE CITIZENS STATE BANK, Owner, Clare, Mich.

FOR SALE—80-ACRE IMPROVED FARM, good buildings, dark, clay, loam soil, 1-2 mile from school, good roads, mail route and telephone line. Easy terms, for particulars, write owner. JOHN CAMPBELL, Harrisville, Mich.

1,200 BARGAINS! JUST OUT! EQUIPPED farms $600, $50,000; big woodlots; self sustaining homes. The pick of 33 states. Copy free. STROUT FARM AGENCY, 814 BE Ford Bldg., Detroit, Michigan.

FOR SALE—100 ACRE FARM LEVEL, four miles on gravel rooad to Clare, Mich.; big barn, good house, large garage, and other buildings; 25 acres seeded, price $8,000. Half cash, the balance all the time you want. Write MR. JAMES S. BICKNELL, Clare, Mich.

FOR SALE—CHOICE FARMS WELL LOCATED in Cheboygan County. Good homes. Good roads. Reasonably priced. Write for free list to NELSON R. PETER, Wolverine, Mich.

120 ACRES NUMBER ONE LAND, BEST of buildings, fruit, timber, one mile to Dixie Highway, station, church, school, 30 miles from Detroit. R. W. ANDERSON, Clarkston, Mich.

FOR SALE—10 ACRE TRUCK FARM, GOOD buildings; for particulars write C. H. HOUSE, Mt. Pleasant, Mich.

BUY A FARM NEAR ANN ARBOR AND educate the boys in the University. Write for our farm bargains. JEROME PROBST, Ann Arbor, Mich.

A BARGAIN—400 ACRES, HOUSE, BARN stable, near State Auto Park, Cheboygan; fine location to make money. Address 512 BINGHAM, Soo. Mich.

IF YOUR FARM OR COUNTRY HOME IS for sale. Write us. No commission charged. CLOVERLAND FARM AGENCY, Powers, Mich.

TWO 120 ACRES AND ONE 140 ACRES farms for sale by owners. For information write WM. ALBRECHT, Carsonville, Mich.

FARM FOR SALE—160 ACRES—60 CLEAR with good buildings, good well, small orchard and well fenced, 3-4 miles from school; a real bargain. Address FRANK GLAWE, Ocqueoc, Mich.

When the Baby Laughs—

YOU are being advertised to. When the sun shines, when the flowers bloom, when dinner sends out its inviting aroma—when any one of a thousand things happen to attract your attention, you are being advertised to.

The purpose of any advertisement is to attract your attention and arouse your desire; to sell you what is new and good; to guide you to something you ought to have; to make you happier and more comfortable; to save you money and make life easier for you.

So, read advertisements. They will give you the latest ideas and improvements. They will help you to live better and dress better at less cost.

You'll be surprised at the world of interest and the wealth of new ideas that you'll find in reading the advertisements in this publication.

Advertisements are daily records of progress. They are the reports to you of manufacturers who work for you, telling what has been accomplished for your benefit. Take advantage of them.

—: :—

Don't let an issue leave your hands without reading the advertisements.

BREEDERS DIRECTORY

Advertisements inserted under this heading for reputable breeders of Live Stock at special low rates to encourage the growing of pure-breds on the farms of our readers. Our advertising rate is Thirty Cents (30c) per agate line per insertion. Fourteen agate lines to the column inch or $4.20 per inch, less 2% for cash if sent with order or paid on or before the 10th of month following date of insertion. SEND IN YOUR AD AND WE WILL PUT IT IN TYPE FREE, so you can see how many lines it will fill. Address all letters,
BREEDERS DIRECTORY, MICHIGAN BUSINESS FARMER, MT. CLEMENS, MICH.

CLAIM YOUR SALE DATE

To avoid conflicting dates we will without cost, list the date of any live stock sale in Michigan. If you are considering a sale advise us at once and we will claim the date for you. Address, Live Stock Editor, M. B. F., Mt. Clemens

Oct. 18—Holsteins, Alexander W. Copland, Birmingham, Mich.
Oct. 18—Shorthorns, Southern Michigan Shorthorn Breeders' Ass'n, Hillsdale, Mich.
Oct. 18—Holsteins, West Michigan Holstein Breeders' Ass'n, Grand Rapids, Mich
Oct. 19—Holsteins, Howell Sales Co., of Livingston County, Howell, Mich.
Oct. 19—Poland Chinas, F. E. Haynes, Hillsdale, Mich.
Oct. 19—Poland Chinas, W. Brewbaker & Sons, Elsie, Mich.
Oct. 20—Holsteins, Shiawassee County Holstein Breeders' Ass'n, Owosso, Mich.
Oct. 28—Holsteins, Corey J. Spencer, Eaton Rapids, Mich.
Nov. 15—Shorthorns and Poland Chinas, Sonley Bros., St. Louis, Mich.

LIVE STOCK AUCTIONEERS
WAFFLE & HOFFMAN
OUR SPECIALTY:
BIG TYPE SPOTTED POLANDS AND DUROC JERSEYS

We are experienced salesmen, Expert Judges and money getters.
Right prices. Write today for good dates and our terms, address either of us.
WM. WAFFLE, Coldwater, Mich.
JOHN HOFFMAN, Hudson, Mich.

U-Need-A Practical Competent Auctioneer to insure your next sale being a success.
Employ the one Auctioneer who can fill the bill at a price in keeping with prevailing conditions.
Satisfaction GUARANTEED or NO CHARGES MADE. Terms $50.00 and actual expenses per sale. The same price and service to everyone.
I specialize in selling Polands, Durocs, and Chesters. Let me reserve a 1922 date for you. Write or wire,
HARRY A. ECKHARDT, Dallas City, Illinois

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LIVE STOCK AUCTIONEER
ADVANCE DATES SOLICITED.
ADDRESS 113 W. LAPEER ST.
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CATTLE

HOLSTEIN-FRIESIAN

BARGAIN
Purebred Registered Holstein Heifer Calves
1 month old $50; 6 months old $75-$100
Federally Tested
HOWARD WARNER, Farmington, Mich.

OCT. CLEARANCE SALE. WE ARE OFFERING 20 heifers and bulls. Heavy producing dams. Sire has 7 dams averaging nearly 1,100 lbs. on yearly test. Free from T. B., $50.00 and up.
WOLVERINE DAIRY FARM
Prop.—H. G. Booth Gladwin, Mich.

WHY PAY MORE? PUREBRED REGISTERED Holstein heifer calves, fifty dollars. Circulars free. CONDON'S HOLSTEIN CREST, West Chester, Ohio.

SHORTHORNS

MILKING STRAIN SHORTHORNS
Registered stock of all ages and both sex. Herd headed by the imported bull, Kelmscott Viscount 25th, 648,563. Prices reasonable.
LUNDY BROS., R4, Davison, Mich.

Richland Shorthorns
We have two splendid white yearling bulls by Imp. Newton Champion, also some young cows and heifers that we are offering for sale. Write for particulars to
C. H. Prescott & Sons
Herd at Prescott, Mich. Office at Tawas City, Mich.

FOR POLLED SHORTHORNS
Shropshire, Southdown and Cheviot rams write to
L. C. KELLY & SON. Plymouth, Mich.

SHORTHORNS AND POLAND CHINAS—NOTHING for sale at present. Are holding for public sale Nov. 15th. Write for catalogues.
SONLEY BROS., St. Louis, Mich.

SHORTHORN CATTLE AND OXFORD DOWN sheep. Both sex for sale.
J. A. DeGARMO, Muir, Mich.

FOR POLLED SHORTHORNS
Federal Accredited Herd.
PAUL QUACK, Sault Ste. Marie, Mich.

GLADWIN COUNTY SHORTHORN BREEDERS offer the best in beef and milk strains. All ages, both sexes. W. S. HUBER, Sec'y, Gladwin, Mich.

ANGUS

DODDIE FARMS ANGUS of both sex for sale. Herd headed by Bardell 31910. 1920 International Jr. Champion.
Dr. G. R. Martin & Son, North Street, Mich.

WE HAVE SOME FINE YOUNG ANGUS BULLS from International Grand Champion Stock at reasonable prices. E. H. KERR & CO., Addison, Mich.

HEREFORDS

Money - Making
HEREFORDS
At St. Clair; for sale and ready for immediate delivery.
Registered Cows and their Sucking Calves
Registered Bred Heifers—Registered Yearling Heifers—Registered Grade Cows—Unregistered and their Sucking Calves—Good Bulls, various ages.
Our Detroit Packing Co., Hereford Baby Beef Contract and the Sotham Hereford Auction System guarantees our customers profitable cash outlet for all increase and we can help finance responsible purchasers. Come, wire or write, right now.
T. F. B. SOTHAM & SONS
(Cattle Business Established 1835)
Saint Clair, Michigan Phone 250

AYRSHIRES

FOR SALE—REGISTERED AYRSHIRE bulls and bull calves, heifers and heifer calves. Also some choice cows.
FINDLAY BROS., R 5, Vassar, Mich.

GUERNSEYS

FOR SALE—REGISTERED GUERNSEY BULL, 3 years old, of good breeding, gentle.
JAKE DE BOER, R. 3, Marion, Mich.

GUERNSEY BULL Bred Heifer. Yearling Heifer. Heifer calf. Best of breeding. From good producers. Price right. Write G. A. WIGENT, Watervliet, Mich.

RED POLLED

RED POLLED CATTLE—A few choice bulls and heifers for sale.
ROYSTAN STOCK FARM,
Will Cottle, R. R. 1, West Branch Michigan

FOR SALE—OUR RED POLLED HERD BULL, Cosy Ells Laddie, and a few heifer calves.
PIERCE BRO'S., Eaton Rapids, Mich. R. 1.

CONSIGNMENT SALE
OF
Registered Holstein Cattle

WEDNESDAY, OCTOBER 18, 1922 AT THE WEST MICHIGAN STATE FAIR GROUNDS, GRAND RAPIDS, MICHIGAN

This is the Annual October Consignment Sale of The West Michigan Holstein Breeders Association and 69 head of good Registered Holstein Cattle will be sold in this sale.

There will be four thirty pound bulls sold in the sale, several good A. R. O. cows, including a 23.57 lb. four-year-old; fresh cows, and cows and heifers soon due to freshen; yearling daughters and heifer calves out of some of the very best bred Holstein bulls in West Michigan, and several young bulls and bull calves of excellent breeding. Here are a few of our choice offerings:

The 31.72 lb. 3 yr. old bull, Goldmine Korndyke Fayne, sold to avoid in-breeding. A 31.26 lb. yearling bull out of a Junior 4 yr. old dam. A 30.80 lb. yearling bull. A 30.50 lb. 6 months old bull calf. Good A. R. O. cows, fresh cows, and springers. Choice yearlings and two year old heifers out of bulls from dams with A. R. O. records from 30 lbs. up to 34.71 lbs. and bred to high class bulls.

A number of very desirable heifer calves out of 30 lb. bulls, including 9 good heifer calves out of the 32.52 lb. bull, Lenawee Pontiac Calamity King.

Some very desirable heifer calves for foundation stock, for Calf Clubs and for starting new herds.

Remember the time and place, Wednesday, October 18, 1922, at the West Michigan State Fair Grounds, Grand Rapids, Michigan.

If interested, write for a Sale Catalog.

W. R. HARPER, Sale Manager, Middleville, Michigan

DAIRY and LIVESTOCK

FEEDING THE DAIRY COW

TOO many cows are underfed. A cow weighing 1000 pounds needs each day for the maintenance of her body, an amount of food equivalent to that supplied in 8 pounds of clover hay and 20 pounds of good corn silage. She must have that food regardless of whether she produces any milk. Food used for milk production must be in addition to that required to keep the cow's body. A 1000-pound cow producing 20 pounds of 4 per cent milk a day, if properly fed, devotes about half of her feed to maintenance and half to milk production. Obviously when a dairyman has gone to the expense of supplying that half of the food required for maintaining the cow's body, it is poor economy to withhold any of the other half, all of which goes to produce milk. A cow then requires feed in accordance to the amount of milk she is able to produces. The heavy producer needs the most feed.

Farm grown roughages (silage, hay, etc.,) furnish the cheapest food nutrients. However, a good dairy cow cannot eat enough roughage to supply her needs for milk production She must have some grain. Therefore, to feed with the most economy the following rules must be observed, says the University of Missouri College of Agrculture.

1. Feed all the roughage a cow will eat. She will eat more if fed three times a day instead of twice.
2. Feed grain in proportion to the pounds of milk produced. To a Jersey or Guernsey cow feed one pound of grain for each 3 to 3½ pounds of milk produced.

To a Holstein, Ayrshire, or Shorthorn feed one pound of grain for each 4 to 4¼ pounds of milk produced.

THE LIVESTOCK SITUATION IN EUROPE

THE following summary of livestock conditions in Europe has just been received by cable from Alfred P. Dennis, special representative of the Department of Commerce, now in Berlin. Mr. Dennis explains that owing to the lack of official census returns there is liability of error in making too high an estimate of the number of European livestock at this time. Though the figures for some countries are lacking and for others are not reliable, estimates for twenty-three countries in Europe have been made based upon the best available returns.

Cattle

There have been heavy losses in the cattle herds of Belgium, Austria, Hungary, and Germany, but those of Great Britian, France, Italy, and Poland are approaching normal. The drought of 1921 has halted the recovery from the low point of the year 1918, but the industry has recently been revived by the past wet spring and summer which has resulted in abundant pasturage. The present stock of cattle is probably not more than 3 per cent under that of 1913, but the ratio of young, thin, and undersized animals is much higher than in the period prior to the war.

Hogs

The hog industry has suffered acutely more than any other branch of animal husbandry, but the recovery since 1919 has been rapid, except in the case of countries such as Germany, France, Belgium, Austria, and Italy, which are dependent upon imported feed. In Great Britian, Denmark, Sweden, and Poland the production is approaching normal, and the number of hogs in Spain, Rumania, Jugoslavia, Holland,d and Switzerland is greater than before the war. The total number of hogs in European countries is now estimated at 12 per cent below normal.

Sheep and Goats

Sheep depending upon natural pasturage rather than upon arable farming suffered less than cattle and hogs. There is a wide variation in recovery in this industry. In Poland the sheep resources are off 41 per cent compared with the pre-war figures, and in France there is a reduction of 35 per cent. Spain has increased the number of sheep by 50 per cent, and the flocks are well maintained in Switzerland, Italy, and Rumania. An accurate census of the total number of sheep in all European countries would probably show the number has aproached to within 6 or 7 per cent of the pre-war figures.

In all the important countries the stocks of goats are reported as showing gains oyer pre-war stocks except in France. These animals, except where commandered for military purpose and for breeding, are being used in increasing numbers for milk supply in the place of cows. The total number of goats in the countries of Europe is estimated at 18 per cent above the pre-war totals.

Consumption and Trade

Compared with pre-war years the national meat consumption in Europe shows a rise in France, Italy, Rumania, Spain, and Poland. It is fairly well maintained in Great Britian, Holland, and Switzerland. There is a sharp decline in both gross and per capita consumption in Belgium, Austria, and Germany. The European demand for American hog products reached the proportions of a boom during the war and has since receded somewhat, but it is still in excess of the pre-war volume in France,Belgium, Italy, and Great Britian. The needs of Germany for American bacon and animal fats are urgent, but the difficulties attendant upon financial arrangements curtail purchases. There will undoubtedly be a further expansion in the European demand for American lard as the general economic conditions improve.

POWDERY MILDEW ON CLOVER

Please tell me if the mold on Mammoth clover is harmful to cattle or horses. Almost all clover in this section is in the same way—A. S., Bad Axe, Mich.

—The white substance found on the clover is known as powdery mildew. This is a fungus disease and is not known to be poisonous. The hay should be well cured before feeding, or in case partially cured hay is fed, it should be fed in comparatively small amounts. Large quantities of partially cured hay, when fed to livestock that has not been getting hay for sometime, is likely to cause trouble.—C. R. Megee, Research Associate in Farm Crops, M. A. C.

VETERINARY DEPARTMENT

REQUIRES SKILLED VETERINARIAN

I have a cow 6 or 7 years old that was fresh last December and was not once in heat since. Otherwise she is the best cow. What must I feed her to get her in heat?—H. R., Lathrop, Mich.

It is my opinion that the trouble in this case is due to a persistant corpus luteum. This could be dislodged by a veterinarian who is skilled in such work, and the cow then in all probability would come in heat within two or three days.—Edw. K. Sales, Asst. Prof. of Surg. and Med., M. A. C.

PIGS CAN NOT USE HIND LEGS

What ails my pigs? They were all right when I fed them last night, this morning some of them can't walk on their hind legs. They have good quarters to sleep in and a large yard for exercise.—C. M. ., Charlevoix, Mich.

One of several conditions might ail your pigs. The paralytic condition may be due to infection with the Botulinus organism, or it may be due to lack of minerals or vitamins in the feed they have been getting. Occasionally it seems to be a result of constipation. You ought to make sure that the condition is not Cholera as pigs often become very weak and unable to walk during outbreaks.—Edw. K. Sales, Division of Veterinary Medicine, Dept. of Surgery and Clinic, M. A. C.

A bullet from a .38-caliber revolver passed through one of Seller's right hips and entered his abdomen.
—Knoxville, Tenn., Journal-Tribune

SHORTHORN SALE---OCT. 18TH

30---HEAD---30

Good, High Class Registered Cows, Heifers and Bulls

Including a few cows of the dual purpose or milking strain.

This sale will be held under the auspices of the

SOUTHERN MICHIGAN SHORTHORN BREEDERS ASSOCIATION

All stock is sold on consignment from members of this Association and is of quality which commands attention.

HILLSDALE, MICH.

FAIR GROUNDS,

Wednesday, Oct. 18, 1922

For particulars and catalog, address W. C. OSIUS, Sec'y, Hillsdale, Mich.

ANDY ADAMS, Sale Manager.

Complete Dispersion Sale

Birmingham, Mich., Oct. 18, 1922

50	Purebred Holstein Friesian Females	50
21	Daughters of King Korndyke Echo Sylvia	21
5	Daughters of Hardy Pontiac Segis	5
3	Daughters of Aristocratic Pontiac	3
3	Daughters of Segis Cynthia	3

Most of the females bred to a son of a 31.8 lb. cow that milked 742 lbs. Several bred to a son of Sadie Gerben Hengerveld DeKol (First 40 lb. cow under the new rules).

Several bred to King Korndyke Echo Sylvia, who is a son of Avon Pontiac Echo from a 29.11 lb. jr. three year old daughter of Pontiac Korndyke Het Loo.

Sold with usual breeder's guarantee and subject to 60 to 90 day retest. Terms can be arranged but must be done before the sale.

Alexander W. Copland, Owner,
Birmingham, Mich.

For catalog address,
Albert E. Jenkins, Sale Mgr.
Oscoda, Mich.

THE CHOICEST COLLECTION OF BULLS IN MICHIGAN
THE GET OF

Model King Segis Glista

FAMOUS FOR SHOW TYPE AND MILK PRODUCTION

Grand River Stock Farms

EATON RAPIDS MICHIGAN

Sale, Saturday, October 28th

39 Select Registered Holsteins

COMPOSED OF 21 YOUNG BULLS AND 18 FRESH FEMALES
Also 30 Choice Grade Females Bred to Registered Holstein Bulls. All Animals are Tuberculin Tested and Sold Subject to 60-day Retest. Approved Bankable Paper of Nine Months Will be Accepted.

For further details write to OWNER

J. E. MACK
Auctioneer

COREY J. SPENCER
111 East Main Street
Jackson, Michigan

S. T. WOOD
In the Box

Friday, Oct. 20, 1922

AT 12 O'CLOCK (NOON)

Shiawassee County Holstein Breeders Ass'n

WILL HOLD THEIR

2nd Annual Consignment Sale of 75 Head of

Reg. Holstein Cattle

AT THE FAIR GROUNDS AT

OWOSSO, MICHIGAN

This sale consists of heifers and young cows, either fresh or due soon, sired by and bred to 30-lb. bulls of show ring type. Among the offerings are a few extra good young bulls, among them a prize-winning son of King Ona. All herds tested and most of them fully accredited. All animals sold under 60-90 day retest privilege.

COL. D. L. PERRY, Auctioneer.

R. AUSTIN BACKUS, in the box.

SALE COMMITTEE
Earl Vanderkan, Owosso.
J. R. Monroe, Owosso.
C. S. Baldwin, Bennington.

Write to C. S. BALDWIN, Bennington, Michigan, for catalogue.

OCT. 19th

Thursday, Oct. 19th,

At Ten O'clock

OCT. 19th

Howell Sales Company of Livingston County

Will hold their

9th Annual Sale

of

85 Head of Registered Holstein Cattle

at the

Sales Pavilion on the Fair Grounds at Howell, Michigan

This sale consists of young cows and heifers due to freshen this fall and early winter. Sired by and bred to bulls from dams with records from 30 to 45 pounds also a few open heifers and several good bulls, including a 31-lbs, 4-year-old, son of Rosie Mercides Butter Boy, 210357, with a yearly record of nearly 1,000 lbs. of butter; also three sons of King Ona Champion, 257513, from 29-30-32-lbs. dams, mostly from accredited herd with 60-day retest guarantee.

Catalogs October 10th

Auctioneer, J. E. Mack

S. T. Wood in the box

Wm. Griffin, Sec'y, Howell, Mich.

JERSEYS

FOR SALE—JERSEY BULL 3 YEARS OLD Eligible to registration in the American Jersey Cattle Club. **E. O. Showerman, Sunfield, Mich.**

FOR SALE—YEARLING JERSEY BULLS Sophie 19th Tormentor breeding. **J. E. MORRIS, Farmington, Mich.**

FOR SALE—JERSEYS, REGISTERED, MAJesty heifers. Six months to year old. No. T. B. **H. J. & P. H. WALKER, R. 8, Kalamazoo, Mich.**

SWINE

DUROCS

REG. DUROC-JERSEY SWINE

Spring and Fall Boars of quality sired by 1921 Mich. Grand Champion and grandson of Scissors, world's 1917 Grand Champion. Spring, Fall and yearling sows sired by above boars open or breeding privilege to the undefeated boar pig at 1922 Fairs, a son of Unique Sensation, world's 1921 Junior Champion. Personal inspection invited.
F. HEINES & SON, Davison, Mich.

DUROC JERSEYS
REGISTERED SPRING GILTS
A nice assortment to select from at Farm Prices
TWIN BROOK FARM
GEO. DOHM, Mgr. WASHINGTON, MICH.

PURE BRED DUROC-JERSEY BOAR Pigs of April and May farrow, sired by Brookwater Sensation and Model of Orions Masterpiece. Place your order now, prices right. DETROIT CREAMERY HOG FARM, Route 7, Mt. Clemens, Mich.

7 FINE SPRING BOARS Sired by Schabros Top Col. (1st prize spring pig 1921 at Springfield Fair). All our stock double treated for Cholera. $20.00 each, registered in your name. **Schaffer Bros., Oxford, Mich., R. 4.**

DUROC YEARLING AND FEBRUARY AND Spring gilts and boars, sired by Pathfinder Chief son of old Pathfinder; dams are Defender and Fancy Joe Orion 7th. Prices right; get the best. **E. McBAIN, Moscow, Mich.**

BOAR PIGS BY FANNIE'S JOE ORION AND Pathfinder Orion. Priced to sell. Satisfaction guaranteed. Write, H. E. LIVERMORE & SON, Romeo, Mich.

HILL CREST DUROCS; SOWS AND GILTS. both bred and open, also service boars. **NEWTON & BLANK. Four miles straight south of Middleton, Gratiot Co., Mich.**

DUROC JERSEY—WE HAVE A CHOICE LOT of extra good spring boars ready for service; shipped on approval, satisfaction guaranteed. **F. J. DROOT, Monroe, Mich., R. 1.**

A FINE BUNCH OF DUROC BOARS, THE BIG kind, $10.00 and up with pedigree. **T. A. LAMB & SON, Cassopolis, Mich.**

DUROCS—POPULAR BLOOD LINES—SEND your wants to OCEANA CO. DUROC JERSEY HOG ASS'N. V. Lidgard Sec., Hesperia, Michigan.

POLAND CHINA

ANNUAL SALE
Large Type Poland China Swine
New Stock Pavilion,
Hillsdale County Fair Grounds
Thursday, Oct. 19, 1922
50 Head Spring Boars and Gilts
Better than ever.
"There's a reason."
F. E. HAYNES
Hillsdale Michigan
"Pigs is Pigs"
But Haynes' Pigs is Hogs.

ANNUAL SALE
— BIG TYPE —
Poland Chinas
Several tried sows, some with litters of pigs
25 SPRING GILTS 10 SPRING BOARS
All Cholera Immune with double treatment.
On farm 5 miles west of Elsie
Write for catalogue
W. BREWBAKER & SONS
Elsie - - - - Michigan

FRANCISCO FARM POLAND CHINAS
Big stretchy spring boars as good as grow. Pairs and trios not akin. Can spare two or three of our good herd sows bred for September.
P. P. POPE
Mt. Pleasant Michigan

L. T. P. C. $15-$20-$25
Spring pigs at above prices. Top fall gilts bred for summer farrow, priced right.
HART & CLINE
Address F. T. Hart, St. Louis, Mich

LARGE TYPE POLAND CHINA SPRING PIGS sired by C's Clansman, now ready to ship. Write for particulars. **W. CALDWELL & SON, Springport, Mich.**

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FOR SALE—REGISTERED BERKSHIRE boar two years old $35, also a few open gilts, $2. **E. R. WILSON, Ellsworth, Mich.**

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A CHANCE TO GET SOME REAL HAMPshires. Boar pigs, sired by Gen. Pershing Again, Gilt Edge Tipton, Messenger All Over 10th. Gen. Pershing 2nd., and other great boars. Writes for list and prices. DETROIT CREAMERY HOG FARM, Route 7, Mt. Clemens, Mich.

HAMPSHIRE AND SHORTHORNS—MARCH and April pigs weighing 100 to 150. Price $20 to $25 each. One red and one white bull 4 months old. Price $40. Each registered. Write or call **GUS THOMAS, New Lathrop, Mich**

Hampshires—A few choice Bred Gilts with boar pig no kin to gilts. John W. Snyder, St. Johns, Mich.

O. I. C.

O I C'S 25 LAST SPRING BOARS, GILTS not akin; fine big growthy stock. Recorded free. One-half mile west of depot. Citizen Phone. **OTTO B. SCHULZE, Nahsville, Mich.**

O I C'S SPECIAL PRICES ON FALL PIGS for Oct. 15th delivery, also spring boars for immediate shipment. I can save you money. Write **CLARE V. DORMAN, Snover, Mich.**

O. I. C. TRUE TO NAME, PROLIFIC STRAIN, open gilts bred gilts, booking orders for September boar and sow pigs; we ship C. O. D. Ask for description and weight, the price will be right. **Maple Valley Stock Farm, North Adams, Mich.**

BIG TYPE O I C PIGS 8 WEEKS OLD Guaranteed. **E. V. BILYEU, Powhatan, Ohio**

REGISTERED O. I. C. SERVICE BOARS AND Bred Gilts priced to sell. **J. R. VAN ETTEN, Clifford, Mich.**

SHEEP

HAMPSHIRE

REGISTERED Hampshires. Rams all ages. Also some good ewes. Best of breeding. Prices right. **W .W. CASLER, Ovid, Mich.**

REGISTERED HAMPSHIRE AND DELAINE Rams; also some good grade rams for sale cheap. Write **A. F. LONGPRE, Hardy, Mich.**

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SHROPSHIRE RAMS—CHOICE YEARLINGS Ram and Ewe lambs. Write **DAN BOOHER, Evart, Mich., R. 4.**

FOR SALE—SHROPSHIRE, TUNIS, COTSWOLD and Lincoln Rams. Also ewes. All breeds. All recorded. **L. R. KUNEY, Adrian, Mich.**

COTSWOLD

COTSWOLDS RAMS AND EWES, ALL AGES, priced to sell. Come and see them. Also 1 collie pup. **A. M. BORTEL, Britton, Mich.**

OXFORDS

REGISTERED OXFORDS FOR SALE—ENTIRE Flocks (50 head) Rams, Ewe lambs. Also registered Hereford cattle any age. **EARL C. McCARTY, Bad Axe, Huron Co., Mich.**

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FOR SALE—IMPROVED BLACK TOP DELAINE Merino Rams. **FRANK ROHRABACKER, Laingsburg, Mich.**

LARGE WELL COVERED DELAINE SHEEP for sale, both sexes. Rams, Poll or Horned. **F. H. CONLEY & SON, Maple Rapids, Mich.**

RAMBOUILLET

Rambouillet Rams registered yearlings and two year olds, good ones, heavy shearers, best of breeding, priced right. **H. W. Hart, R. 2, Greenville, Mich., Gratton Phone.**

FOR SALE—PURE BRED RAMBOUILLET rams. Good stuff. At farmers' prices. **J. M. EAGER, Howell, Mich., R. F. D. 6.**

Auction Sale
OCTOBER 25th AT 9 O'CLOCK
3½ MILES SOUTH OF BEAVERTON, GLADWIN CO.
Power
Farm Machinery
Wallace Tractor 15-25 H. P., International Tractor 10-20 H. P., Peerless Grain Separator 30 inch with Garden City Feeder, Wind Stacker and Bagger, Milwaukee 4 roll Husker and Shredder, Buckey Sawmill and Port Huron Edger, Planing Mill, Two-ton Reo truck. Also a full line of farm implements including power potato machinery. John Deere 24-inch Grub Breaking Plow.
P. F. HINES, Proprietor

BREEDERS' ATTENTION
If you are planning on a sale this year, write us now and CLAIM THE DATE!
This service is free to the live stock industry in Michigan to avoid conflicting sale dates.
LET "THE BUSINESS FARMER" CLAIM YOUR DATE!

POULTRY

THE FARM HEN PAYS WELL

THAT a farm poultry flock is one of the best paying parts of a farm business is shown by cost and production figures on 39 farms in Lenawee, Jackson and Shiawassee Counties for the twelve months ending March 31, 1922. The figures are taken from records carefully kept by the farmers and supervised and summarized by the Farm Management Section of the Experiment Station, M. A. C.

The flocks on these farms averaged a return of $200.28 above feed and other direct costs. That the figures apply to the ordinary farm flock is shown by the fact that these flocks averaged 118 hens. The average return per hen was $1.70. Thirteen of the flocks show returns below $1.50 per hen, seven above $2.25 per hen, and nineteen fell between the figures.

One of the striking facts of poultry management brought out by the study of these flocks was the effect of protein feeds upon both egg production and net returns per hen.

The average egg production per hen on eleven farms feeding either tankage or skimmed milk was 96.8 eggs per year. The net return per hen in the first case was $2.59 and in the second $1.28.

The accompanying table gives the direct costs and returns in summary form .

Enterprise Record on Poultry

Thirty-nine farms in Lenawee, Jackson, and Shiawassee counties.

Year endings March 31, 1922.

Total number chickens 4,595, raised, 4,528.*

Average number laying hens, 118; raised, 116.

Direct Costs

Items	Average per farm Amount	Cost
Corn	2,568 lbs.	$24.83
Oats	1,056 lbs.	10.50
Wheat	1,064 lbs.	11.96
Barley	354 lbs.	4.51
Misc. Feeds	815 lbs.	11.91
Silage	151 lbs.	.29
Skim Milk	1,132 lbs.	3.00
Poultry, net decrease		11.10
Equipment, net decrease		1.23
Special Labor		1.98
Miscellaneous		2.06
Total Direct Costs		$83.37

*"Poultry raised" means the number of chicks hatched that lived. It does not mean that they were all raised to maturity, for some were sold at early stages for broilers, etc.

Egg-Sales	453 doz.	$125.80
Eggs for home use	213 doz.	56.42
Meat for home use	100 lbs.	22.04
Poultry, net increase		71.47
Manure	3.93 ton	7.86
Miscellaneous		.06
Total Money Yield		$283.65

—H. M. Eliot, Farm Management, M. A. C.

SICILIAN BUTTERCUP CHICKENS

Can you tell me the original markings fo the Sicilian Buttercup chickens? Some of ours are light yellow with a few black spots on their backs, and black tail, they are quite pretty. The others are darker in color and all black from the neck down. My husband thinks those are truest in color, but I think the lighter ones the prettiest. The roosters are quite dark. I would like to know which ones are the best type for I want to take them to the fair as they are a new breed in our neighborhood.—Mrs. T. F., Howell, Mich.

—I might say that the Sicilian Buttercups are not a standard variety and therefore a description of the color pattern of this breed has been ommitted. The darker colored birds are the ones that are usually prefered by the professional judges of exhibition poultry. They are almost an orange yellow color rather than a light yellow. By directing a communication directly to the Reliable Poultry Journal, Quincy, Illinois, care the Question Box Editor, undoubtedly you could secure an expression from one of the judges who specializes in Mediterranean varieties. Although this breed is not described in the Standard of Profection this judge could give his opinion as to type and color to use for either show purposes or in the breeding pens.—E .C. Foreman, Associate Professor of Poultry Husbandry, M. A. C.

GET PULLETS OFF RANGE EARLY

EARLY fall is the time of year above all others when pullets must be nursed carefully along, because winter egg production is largely dependent on the condition of the young stock when it is placed in permanent laying quarters. Too often poultry keepers allow their birds to run on range until cold weather comes. Nature's chicken house is not the right place for a pullet to be roosting on a late October night. Delay in bringing the pullets off the range was the cause of an unusual amount of roup last fall, according to G. W. Hervey of the University of Missouri College of Agriculture. Allowing them to run on range late means added expense to the feed bill. The birds consume more grain and an insufficient amount of dry mash. Feed that is consumed, instead of rounding the pullets in to laying condition, is used simply to maintain energy requirements against exposure. There is no surplus to devote to the building up of tissue for the formation of eggs.

TREATMENT OF STINKING SMUT OF WHEAT

(Continued from page 4.)

sooty, black powder, some persist and can be found in the threshed grain. The amount may vary from a trace to 1, 2, or 5 per cent. The characteristic fishy odor can be detected in such grain. Badly smutted wheat is not bright red or golden color, but dull and oft-times sooty, especially at the "brush" end.

This is Stinking Smut or Bunt which every farmer rightly fears.

Stinking Smut of wheat is caused by a parasitic fungus which enters the grain at sprouting time and grows inside the young plant, keeping pace with its growth, unseen and unsuspected until the wheat begins to head. Then the smut fungus enters the developing kernel and produces in place of the normal grain its own kind of fruit, the black smut powder already mentioned. Under the microscope this powder is seen to be made of minute, spherical grains, so small that one smutted kernel may contain 5,000,000 of them. These are the "seed" of the smut, which, dusted upon the wheat grow when the wheat germinates, bore into the tender sprout and thus start the smut of the next year's crop. This life story is repeated year after year and it is evident that with each crop the smut gets worse. A field with little smut one year may be heavily smutted the next, great is the power of this fungus to increase. It is also clear that the sprouting time is the danger time for the wheat. Poor growing conditions,—cold, wet seasons—which cause the wheat to start slowly, give the smut a greater chance to get in the wheat sprouts.

The Control of Stink Smut

Stinking Smut control is based upon the fact, that the smut enters he wheat at sprouting time. In fighting smut, the attempt is made to kill the smut "seed" on the wheat before it gets into the sprout. For this purpose, a chemical treatment is employed, which when properly applied does not injure the grain but kills the smut bodies. For years, plant pathologists have recommended soaking the grain in tubs of dilute Formaldehyde, 1 pint to 40 gallons of water, skimming off the floating smut balls, covering the grain for 2 hours, drying and planting. This is undoubtedly the best method of ridding wheat of smut. Many farmers have taken advantage of this method and have protected their wheat crop. But we can not deny that the great majority of farmers have felt that this process took too much time and have neglected the treatment. Millers and elevator men have stated that only a few men in a community were treating their grain.

It was found that fairly clean grain, carefully fanned, if sprinkled with Formaldehyde, diluted 1 pint

POULTRY BREEDERS' DIRECTORY

Advertisements inserted under this heading at 30c per agate line, per issue. Commercial Baby Chick advertisements 45c per agate line. Write out what you have to offer and send it in. We will put it in type, send proof and quote rates by return mail. Address The Michigan Business Farmer, Advertising Department, Mt. Clemens, Michigan.

BABY CHICKS

NABOB JUST-RITE Baby Chicks

A Hatch every week all year

POSTAGE PAID 95% live arrival guaranteed. MONTH'S FEED FREE with each order. 40 Breeds chicks, 4 breeds ducklings, select and exhibition grades. Catalog free, stamps appreciated.
NABOB HATCHERY, Dept. 30, GAMBIER, O.

POULTRY

POULTRY

We yet have a few hundred Pullets in Leghorns, Barred Rocks, White Wyandottes and Orpingtons. The most of these Pullets are near laying age and should be put into winter laying quarters soon. If you want a flock of winter layers, write us now.

Also Cockerels, Bronze Turkeys, Toulouse Geese and Pekin Ducks.
STATE FARM ASSOCIATION
Kalamazoo, Mich.

PULLETS, HENS AND COCKERELS

S. C. White Leghorns and S. C. and R. C. Black Minorcas. Must make room before cold weather. About ready to lay.
LAPHAM FARMS, Pinckney, Mich.

FOR SALE—150 WHITE WYANDOTTE Cockerels and pullets. All from my prize winning stock of very best American White Wyandottes laying strain. They win for me. They will win for you.
C. W. CASE, Rochester, Michigan

LEGHORNS

LEGHORNS

S. C. Buff Leghorn Hens, Pullets and Cockerels. Hens and pullets $2.50 each; cockerels $3.00 to $5.00 each. Show birds a matter of correspondence. LAPHAM FARMS, Pinckney, Mich.

BUFF LEGHORNS—SINGLE COMB. Early Hatched Cockerels.
J. W. WEBSTER, Bath, Michigan

RHODE ISLAND REDS

RHODE ISLAND REDS, TOMPKINS STRAIN Both combs. Stock for sale after September 15th. WM. H. FROHM, New Baltimore, Mich R. 1.

WHITTAKER'S R. I. REDS, 200 SINGLE comb red pullets at $2.50 to $5.00 each. Also both Rose and Single Comb cocks and cockerels. Write for catalog. Interlakes Farm, Box 4, Lawrence, Mich.

ORPINGTONS

ORPINGTONS BUFF, WHITE, BLACK Hatching eggs in season.
AUGUST GRABOWSKE
Merrill, Mich., Route 4, Box 41.

PLYMOUTH ROCK

BUFF ROCKS—Bronze Turkeys—For 20 years, by J. C. Clipp & Sons, Bx. M, Saltillo, Ind.

TURKEYS

WHITE HOLLAND TURKEYS—CHOICE PROductive stock, large and vigorous. Beautiful gobblers and hens, priced reasonably. Write me before buying. A. F. STEGENGA, Lyons, Mich., R. 1.

PUREBRED BOURBON REDS, LARGE, VIGOrous. Evans strain. Hens $8, toms $10.
MARY BEACOM, R. 4, Marlette, Mich.

HIGHEST PRICES PAID FOR LIVE POULTRY, All Kinds, Dressed Veal and Fresh Eggs. A square deal always.
C. E. McNEILL & CO.
325 W. So. Water St. Chicago, Illinois

POULTRY RAISERS—TIME TO TONE UP your flocks for winter laying. THOMSTEE EGG TONIC means this. Healthy, busy hens laying more eggs. Send dollar bill today for this proven tonic. Receive FREE trial THOMSTEE MICE DESTROYER. DARGON DISTRIBUTING CO., 556 East Hancock St., Detroit, Mich.

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SALE
IT WILL PAY YOU TO
ADVERTISE IN THE
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When writing to Advertisers
Please Mention the M. B. F.

to 40 gallons of water, covered 2 hours and then dried would give a crop practcially free from smut. This is one of the methods recommended. It is simple, cheap and easy. With cleaned grain it is effective.

Three years ago the farmers of Kent county put into practice a still simpler method for seed treatment. This is the concentrated treatment which had been almost universally adopted in this state for Oat Smut control.

Its great simplicity, however, led some farmers to use the treatment carelessly in 1917 with the consequence that damage to grain resulted. The results this year were directions were followed were satisfactory, no injury to stand being reported. The directions given this year are hedged around with caution in order to impress farmers—not with the danger of treatment—but with the necessity of strict adherence to the rules given for treatment. The world seems too full of people who always double the dose that the doctors order, working on the principle that if a little is good, a whole lot is better. Both methods outlined are as strong as is advisable to use on wheat and safety lies in strict compliance.

Methods for the Control of Smut

Secure clean grain of good variety. Smutty grain is unsafe seed.

Fan thoroughly to remove all light, shrivelled grains and smut balls.

Disinfect the drill with the Formaldehyde solution.

Avoid infection from old sacks.

Treat by one of the following methods and plant at once.

Do not treat more than you can plant in any one day.

Dilute Formaldehyde Method

Sprinkle the grain until thoroughly wet with solution of 1 pint of Formaldehyde to 40 gallons of water.

Cover with blankets or sacks for two hours.

Formaldehyde treatments are necessary for crop protection but they must be given carefully and with scrupulous attention to directions.

Allow for swollen condition of the grain.

Concentrated Formaldehyde Method

The convenience of this method is its chief advantage. Only those who will follow directions carefully should employ it since considerable loss resulted during the cold. wet planting season of 1917 through improper handling.

Apply Formaldehyde, full strength, with hand sprayer while the grain is being shoveled over and over. Use at the rate of one pint to 50 bushels, 1-2 pint to 25 bushels, 1-5 pint to 10 bushels, etc. The proper amount of Formaldehyde may be diluted one or two times with water to aid distribution. A dose is a dose—this is as strong as Formaldehyde can safely be used on wheat.

Cover or sack the grain four hours—absolutely no longer. Then spread to air in a warm, dry place for an hour or two. It is unsafe to leave grain covered or sacked over night. Formaldehyde cannot be thoroughly aired out of grain. Therefore plant at once. Treat no more grain than can be sown on the same day.

THINGS TO THINK ABOUT

34th anniversary of the Great Blizzard—Many remember the Memorial Visitation of the Fluffy Elements.—New Canada, Con., Advertiser.

That afternoon the dead woman visited her home and said she would come back later.— Philadelphia Bulletin.

At the week's end, little Willard Thompson was kicked in the forehead by a horse, which was tied where the youngster was playing.—O'Neill, Neb., Frontier.

Mr. and Mrs. Staley Powers, of Milwaukee, are visiting on the parental roof in this village.—Racine, Wis., Call.

"Willie, give some of the uses of the bones."

"To keep our insides in, and to protect the brain and other cavities."—In an Overton, Nebraska Schoolroom.

Teeth-Cleaning Today— Only—$1.45. Regularly $3.00. No delivery. Union Dental Office, 224 S. Wabash Ave.—Chicago Tribune.

CROWD your HOGS for the EARLY MARKET

Keep them healthy—
Free from worms—
Their bowels active—
Fit for thrift.

Feed

DR. HESS STOCK TONIC

Conditioner—Worm Expeller

I spent 30 years in perfecting this Tonic.
GILBERT HESS M.D., D.V.S.

It contains *Tonics*—That give a hog a healthy appetite—keeps his digestion good.

Vermifuges—To drive out the worms.

Laxatives—To regulate the bowels.

Diuretics—To help the kidneys throw off the poisonous waste material.

No clogging of the system under the pressure of heavy feeding, where Dr. Hess Stock Tonic is fed.

Little chance for disease—every reason for thrift!

Tell your dealer how many hogs you have. He has a package to suit. GUARANTEED.

25-lb. Pail, $2.25 100-lb. Drum, $8.00

Except in the far West, South and Canada.

Honest goods—honest price—why pay more?

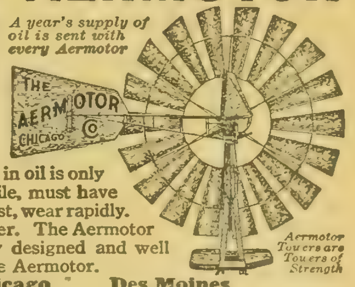
DR. HESS & CLARK, Ashland, Ohio

Dr Hess Dip and Disinfectant Kills Hog Lice

THE AUTO-OILED AERMOTOR

A Real Self-Oiling Windmill

A year's supply of oil is sent with every Aermotor



Oil an Aermotor once a year and it is always oiled. Every moving part is completely and fully oiled. A constant stream of oil flows on every bearing. The shafts run in oil. The double gears run in oil in a tightly enclosed gear case. Friction and wear are practically eliminated.

Any windmill which does not have the gears running in oil is only half oiled. A modern windmill, like a modern automobile, must have its gears enclosed and run in oil. Dry gears, exposed to dust, wear rapidly. Dry bearings and dry gears cause friction and loss of power. The Aermotor pumps in the lightest breeze because it is correctly designed and well oiled. To get everlasting windmill satisfaction, buy the Aermotor.

Aermotor Towers are Towers of Strength

Write today for Circular. AERMOTOR CO. Chicago Kansas City Des Moines Minneapolis Oakland

JOHN CLAY & COMPANY
LIVE STOCK COMMISSION —— AT TEN MARKETS

BUFFALO, N. Y.
CHICAGO, ILL.
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So. ST. JOSEPH, MO.
DENVER, COLO.
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SO. ST. PAUL, MINN
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Fleece Wool Wanted!

Traugott Schmidt & Sons
Detroit, Mich.

Are paying the following prices f. o. b. Cars Detroit

DELAINE	44c
FINE CLOTHING	34c
HALFBLOOD COMBING	40c
THREE-EIGHTHS COMBING	38c
QUARTEBLOOD COMBING	37c
REJECTIONS	30c

Traugott Schmidt & Sons
508 Monroe St., Detroit, Mich.

Cured Her Rheumatism

Knowing from terrible experience the suffering caused by rheumatism, Mrs. J. E. Hurst, who lives at 608 E. Douglas Street, C-489, Bloomington, Ill., is so thankful at having cured herself that out of pure gratitude she is anxious to tell all other sufferers just how to get rid of their torture by a simple way at home.

Mrs. Hurst has nothing to sell. Merely mail your own name and address, and she will gladly send you this valuable information entirely free. Write her at once before you forget.

MICHIGAN BUSINESS FARMER
"The Farm Paper of Service"
TELL YOUR FRIENDS ABOUT IT

MARKET FLASHES

MARKET SUMMARY

Wheat steady. Corn and oats in demand and firm. Rye and beans show no change. Butter and eggs in demand. Poultry steady. Demand for dressed calves. Potatoes active. Apples easy. Cattle range from active to dull and lower. Hogs and sheep show advance.

(Note: The above summarized information was received AFTER the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press —Editor.)

WEEKLY TRADE AND MARKET REVIEW

THE industrial outlook has changed but little since our last issue. If anything it shows improvement. For the first time in a long time there are actually more jobs than men to fill them in certain lines. A few months ago the want columns of the daily newspapers were full of "situation wanted" ads. Now the "help wanted" ads predominate.

Railroad employes are rapidly returning to work under wage agreements with the rail operators, and in most cases without the reduction in wages which was at first threatened. With the assistance of the high freights and a volume of business very close to the maximum ever recorded, the railroads are gradually getting on their feet and their books begin to show some heavy balances for distribution to stockholders. Railroads having bond issues to dispose of are quite extravagant with their claims of large earnings, which seem hardly consistent with the hard luck stories they have been telling the Commerce Commission and the public.

Stocks and bonds are experiencing the usual fall demand and prices are generally upward. There is plenty of money available for investment and speculation at 4 per cent interest in New York and slightly higher rates westward.

Two weeks ago we expressed our conviction that there would be no war between England and Turkey, and that those who were looking for increased prices as a result of the disturbances over there would probably be disappointed. Recent developments seem to substantiate our belief.

The two discouraging factors are the coal shortage and the low price of farm products, both of which bid fair to exert an overshadowing influence before the winter is far advanced. It seems quite possible that we can have a winter of even average prosperity and employment with coal prices so high and farm prices so low. Gov. Groesbeck has called the legislature in special session to consider legislation to regulate the coal supply and keep prices down. Now if he will only exert himself to regulate the flow of farm products and keep their prices up we shall all be very grateful.

WHEAT

The wheat market has shown quite unexpected strength during the past fortnight, due, say the market dopsters to the war clouds across the water. Personally we don't believe that the possibility of war has had very much to do with the changed trend in wheat, but it suffices as an excuse for those who are in control of the market and think the time ripe for higher prices. But no matter what the reason or excuse if the farmers are to secure any benefit from advancing prices let them mount. The higher the better. We still maintain, however, in case war does not actually develop, that prices will react somewhat from their present level and rule steady for a considerable period of time. The past week has not only seen some slowing up in the marketing movement, but also some clearing in the supplies in primary markets, and the general tone of the market is very much better than it has been for some time.

Prices

Detroit—No. 2 red, $1.16; No. 2 white and No. 2 mixed, $1.14.

Chicago—No. 2 hard, $1.09¾.

Prices one year age—Detroit, No. 2 red, $1.28; No. 2 white and No. 2 mixed, $1.25.

CORN

The healthy tone the corn market enjoyed during the middle of last month again prevails in the corn market after several interuptions by news from the war zone of Europe. As a result prices after declining came back and gained over the opening two weeks before. Total gains at Detroit last week aggregated 4 cents. Demand dealers report that they have bids from eastern points but are unable to secure the grain to make the sales. This would indicate that farmers are not anxious to unload their corn on the market at prevailing prices which will go far in establishing higher prices if farmers will continue to hold. By orderly marketing is the only way that farmers can expect to get anywhere near what their products are worth and the sooner they realize it and put it into practice the better it will be for them.

Prices

Detroit—No. 2 yellow, 73c; No. 3 yellow, 72c;No. 4 yellow, 70c.

Chicago—No. 2 yellow, 66½ @ 67½c; No. 3 yellow, 66¾ @ 67¼c.

Prices one year ago—Detroit, No. 2 yellow, 51½c; No. 3 yellow, 50½c; No. 4 yellow, 47½c.

OATS

Oats continue to gain in strength with wheat, advancing to 46 cents on the Detroit market. At present prices oats look like a good buy. Supplies are very close to demand and there are reasons for believing in substantially higher prices before another crop.

Prices

Detroit—No. 2 white, 47c; No. 3 white, 45½c; No. 4 white 42c.

Chicago—No. 2 white, 40½c @ 42½c; No. 2 white, 40½c @ 42¾c.

Prices one year ago—Detroit, No. 2 white, 38½c; No. 3 white, 36c; No. 4 white, 32c.

RYE

After a spell of weakness the early part of the last two weeks the rye market firmed up and prices turned upward along with those of other grains. At the close of last weeks the price at Detroit was 2 cents above that of two weeks ago.

Prices

Detroit—Cash, No. 2, 77c.

Chicago—Cash, No. 2, 72½c.

Prices one year ago—Detroit, 90c.

POTATOES

The potato outlook is very discouraging. Prices have taken a pronounced slump the entire country over. This has had the effect of checking the enormous marketing movement which followed immediately in the wake of digging in the principal potato sections. Only such farmers as absolutely need the cash will sell potatoes at prices ruling the past few days. We look for an abrupt drop in potatoes offerings which should have the effect of taking the slack out of the market and encouraging better prices. Within another fortnight when potato digging will be pretty well completed we shall know considerable more about the size and quality of the crop and prospects for better prices, but at the present stage of the game no one but the most daring speculator would gamble on the future of potatoes.

Prices

Detroit—$1.30 per cwt.

Chicago—90c per cwt.

New York—$1.00 per cwt.

rices one year ago—Detroit, $2.61 per cwt.

BEANS

The trend of the bean market indicates that the farmers are using their heads this year and marketing their product slowly. As stated before it is most unusual for a market to advance as the bean market has during the very height of the normal marketing season. This should be highly encouraging to bean growers, as it indicates still better prices as the season advances.

Prices

Detroit—C. H. P., $5.50 per cwt.

Prices one year ago—Detroit, C. H. P., $4.45 per cwt.

HAY

Market in general are showing a firmer tone. Receipts have been not large during the past couple of week and owing to shortage of cars at loading points they are expected to be still smaller this week. Good hay is in steady demand and a shortage in the supplies of this grade is causing a cleanup of the poor grades which have accumulated on many of the larger markets.

Prices

Detroit—Standard timothy and light clover, $15.50 @ $16; No 1 clover, $14 @$14.50 per ton.

Chicago—No. 2 Timothy, $20 @ $21; No. 1 clover, $14 @ $16 per ton.

Prices one year ago—Stanardd timothy, and No. 1 light clover mixed, $19 @ $20; No. 1 clover, $14 @ $15 per ton.

CHICAGO LIVE STOCK MARKET

Liberal daily runs of cattle met a set of uneven and weak to lower market last week at Chicago. Best long-fed steers and yearlings enjoyed good action most days and top cattle advanced 25@45c during the first four days. Medium grades, which comprised the bulk of receipts, declined almost daily, and, with Thursday's sharp break, values stood unevenly 50c@$1.50 below last week's close. Extreme declines were noticed on pretty good steers and yearlings ,the latter particularly being hit hard, and some of the $10.50 yearlings late looked like $11.50 or higher yearlings week before.

Receipts of cattle for the week at Chicago total 76,600, or around 1,400 more than arrived week before last and largest for any week since the third week in January, 1921, when 77,601 cattle were marketed.

Recent warm weather tended to slacken demand for dressed beef, and with an accumulation of medium grade beef on hand, prices broke after mid-week and suffered sharp declines. Weak to lower dressed markets were evident locally, as well as in eastern centers. Orders were mostly for finished steers, and on late sessions not many orders for anything were present.

An oversupply of light and light butchers resulted in a 25c lower top price last week, with best at $10.45, being $1.75 above a year ago, $5.80 below two years ago and within $1.70 for the eleven-year average.

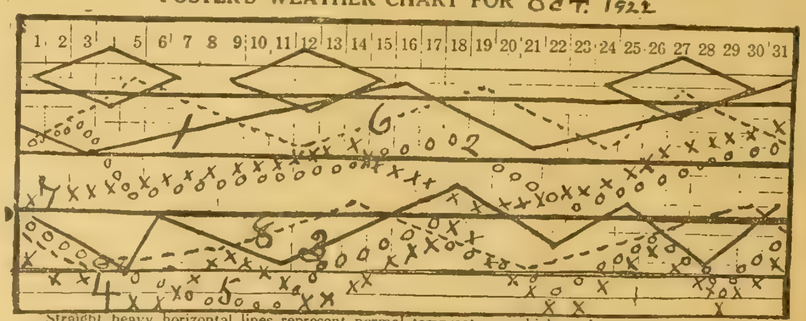
Indifferent outside demand served as an outstanding weakening factor on the local trade, with the week's total shipments being smallest in two years. Shipments at 13,300 show a decrease of 4,990 as compared with a year ago and 7,500 as compared with corresponding week two years ago.

Daily top prices last week in the hog market fluctuated within a 55c "spread," ranging from $9.90 at the extreme close to -10.45 initial day last week, when most classes sold at the highest time of the week. However, the liberal supply of light weights and active buying by local packers of the latter class raised the

THE WEATHER FOR NEXT WEEK

As forecasted by W. T. Foster for The Michigan Business Farmer

FOSTER'S WEATHER CHART FOR OCT. 1922



Straight, heavy, horizontal lines represent normal temperatures, which is the average of same days of the year for forty years. Crooked lines above normal lines mean warmer; below, cooler; that marked 1 is for section 1, north of latitude 47, between meridian 90 and Rockies crest—2 for section 2 on my section map is for east of meridian 90, north of latitude 47—3, between latitudes 39 and 47 and between meridian 90 and Rockies crest—4, east of meridian 90, between latitudes 39 and 47—5, south of latitude 39, between meridian 90 and Rockies crest—6, east of meridian 90, south of latitude 39—7, north of latitude 43½, west of Rockies crest—8, south of latitude 43½ to Mexican line and west of Rockies crest.

Washington, October 14, 1922—The moisture will continue to come from the Caribbean Sea, but it and percipitation will be in decreased amounts in America and Canada, particularly immediately north of Boston and Ozark Mountains and north of the high lands that extend eastward through Tennessee and North Carolina. Further north rain will gradually increase. September rain shortage, north of the high lands of Tennessee and North Carolina, is a good lesson on the effects of high ridges on crop-weather. In other sections much improvement favorable to winter grain for pasture, is expected by the end of October. But I am not now publicly advising about crops for 1923. But I reply to all inquiries from subscribers of this paper. Always address Foster's Weather Bureau, care of Michigan Business Farmer. My public advices about selling grain and cotton have been good. Severe storms are expected to cross continent October 14 to 18, and during that period an increase of moisture.

Forecast for Michigan: Temperatures below on 14, above on 18, normal on 20; average warmer than usual; more rain than average of past month.

The word electricity, when used alone, includes magnitism; they constitute a pair that can never be separated. Electricity, in all cases, passes from the sun to each of the planets. The electricity is matter in motion, does not carry other matter, when static, or not moving, is the same kind of matter but is called the electrosphere and is composed of elecrons, the same as electricity, which is electrons in motion. In all cases in which electricity comes from the sun, magnitism, a finer grade of matter than electricity, passes, in a spiral, around the electric current to the sun. That magnetic spiral carries a fine grade of matter—sun food— to the sun. The electric current from sun to Earth enters at our magnetic north pole, spiral around that incoming electric current tha carries matter from the Earth to sun. The same is true of all the planets.

general average cost on Thursday to $9.15, showing 5c advance over the receipts of the week, due to smaller receipts of heavy packing sows and an uneven gain in this class.

Mid-week prices proved the lowest of the week, when average cost dropped to $8.75. The liberal supply of light weights after mid-week forced top kinds off 55c as compared with a week ago, but served to uphold the general average cost, which closed at $9.05, as against $9.15 previous Saturday.

The second largest week's offerings over two months answered a comparatively indifferent demand, resulting a sharp price reactions, with the week's top and average showing 25c and 30c decline, respectively. Total receipts at 129,600 stand only 1,800 larger than a week ago, but show an increase of 10,500 as compared with a year ago; being 12,300 above the eleven-year average.

Offerings in last week's sheep market totaling about 95,200 head broke values sharply, forcing fat lambs price to the lowest level in over two weeks, while feeders slumped unevenly 50c to $1.00. Although receipts were larger than trade requirements at the present high price level, they show enormous decreases comparing with corresponding periods in recent years, being among the smallest on record for this season of the year.

The improved aged and yearling sheep quality upheld prices in face of several sharp lower sessions, to both packers and country buyers. The latter were large interests of the trade during the fore part of the week, securing several bands of feeding yearlings at 25@50c discount, but neglected practically all classes after midweek. Native and range states contributed more liberally to the sheep trade throughout the week.

Choice aged wethers sold within a range of $600@$7.75, with country buyers securing several strings of feeders at $6.75@$7.00, paying upward to $12.00 for best yearlings. Range yearlings carrying desirable killing flesh moved at $10.60@11.50, with inside prices taking best, at the close. Native ewes cashed downward from $6.75 for local slaughter, with 2 and 3 year old breeding stock selling at $6.00@8.00. Fancy yearling breeding ewes brought $11.50 intial day last week.

MAINE SPUD GROWERS LOOK FOR BETTER PRICES

Bangor, Me., Oct. 7th—The potato situation in Aroostook county as a whole looks brighter and farmers are hopeful for a steady advance in price as the season rolls along. It is estimated by expert authority that the average will be about one-half a crop or a little better than one-half of last season's crop; yet when one realizes that last year's crop was estimated as a crop and ahalf compared with a normal crop it would show that with an estimate of one-half a crop compared with last year, it should tally about three-fourth's crop compared with a normal one.

Some farmers are disappointed over their yield per acre which is far below what they expected. In no place, with possibly a few exceptions, has the yield gone 100 barrels per acre. With the height of the digging season here farmers are busy in getting their tubers out of the soil and well housed. The climatic conditions have been excellent during the past two months and with the digging season here the conditions could not be any better than at the present time. Farmers are housing their crop freely and there is no congestion in the storehouses. On an average from 70 to 80 cars are being shipped out of the state and the price is quoted at $1.00 per barrel. Several days ago the price was 80 cents per barrel and as time goes on farmers are in hopes to have a fair price for what they have to offer. It is said by potato experts that the darkest days have been past they think, and a steady market at a fairly good price will be maintained.

CHICAGO BUTTER MARKET

A firm feeling prevails in the butter market so far this week although business is not active. Offerings are firmly held. Best and medium grades are quickly taken at present prices.

MISCELLANEOUS MARKET QUOTATIONS

Detroit, Tuesday, Oct. 10th.

BUTTER—Best creamery, in tubs, 36@37c per lb.

EGGS—Fresh current receipts, 32@35c; fresh candled and graded, 35@40c; refrigerator firsts, 26½@28½c per dozen.

CABBAGE—Home grown, 50@75c per bushel.

Popcorn—4½@5c; Little Buster, 7½@8c per lb.

ONIONS—$1.75@2 per sack of 100 lbs.

TOMATOES—Home grown, $1@1.50 per bu.

DRESSED CALVES—Choice, 17@18c; medium, 12@14c; large coarse, 5@10c per lb.

LIVE POULTRY—Best springs, 22@23c; leghorns, 18@19c; large fat hens, 25c; medium hens, 22@23c; small hens, 17@18c; old roosters, 15c; geese, 16@17; large ducks, 23@42c; small ducks, 18@20c; turkeys, 25c per lb.

GRAPES—Michigan, 32@35c per 4-quart basket and $2.50@$3 per bu.

APPLES—New, $1@$1.50 per bu.

PEACHES—Utah, $2@2.25 per bu; New York, $1.50@$1.75 per bu.

PEARS—Bartletts, $2.25@$2.75 per bu.

CELERY—Michigan, 20@30c per doz.

HONEY—Comb, 23@25c per lb.

CROP REPORT

The semi-monthly crop notes issued October 4th by John A. Doelle, Commissioner of Agriculture and Verne H. Church, Agricultural Statistician, U. S. Bureau of Agricultural Economics, states that the latter half of September was generally favorable for harvesting crops and the fall seeding of grain.

The greater part of the corn crop has been cut and most of the silos have been filled. Very little damage has been done by frost, except in a few northeastern counties, and the crop is generally good. The yield was shortened somewhat on the lighter soils by dry weather in August.

There has been a tendency in some sections to decrease the acreage of wheat and rye seeded this fall, owing to unsatisfactory prices for these grains. However, the greater part of the large bean acreage has been or will be sown to these crops. The greater part of the seeding has been completed and many fields are showing above ground.

Much damage has been caused by rains during the harvest season in the Saginaw valley, reducing the yield and lowering the quality. Elsewhere the damage has been only local and the crop was secured in good condition. Yields vary widely but will average slightly below normal.

Digging of the late crop of potatoes has commenced. Yields are less than expected in many sections. The tubers are of good size but the set was lessened by dry weather at the critical time. There has been some frost damage, blight and rot in northeastern counties. In other sections the quality is mostly good.

PROVES VALUE OF PURE-BRED SIRES IN GRADE HERDS

(Continued from page 3)

sey Breeders Association Fair. At this time the individuals shown are classified according to age and placed by an expert judge, who likewise gives his reasons for the placings. By this measure the members of the association are constantly up to date and guided in the selection of their breeding stock.

Special effort is now being made and fortunately the plans are nearly completed whereby each of the members is going to be the proud owner of at least one pure-bred Guernsey instead of all high-grades.

Furthermore, the organization of a cow testing association is likewise nearly completed so that production records of each individual may be made.

Unfortunately the only Sixty-third Sixty-fourth blood born to date proved to be a male.

A constant improvement in the cattle is shown by the succeeding generations, and as a result of the efforts of the Leer Guernsey Breeders Association there are now approximately twelve hundred grade Guernseys distributed throughout Alpena county and neighboring counties.—C. O. T. Scheetz, County Agr'l Agent.

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"NOT A KICK IN A MILLION FEET"
ROOFING
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SHINGLES

Costs More --- but Worth a Lot More than the Difference

Why beat about the bush?

We *want* buyers to know that our roofing costs a little more.

We want them to know also that it costs more because we put materials and workmanship into it that make it stronger and last longer.

And the price?

Well, when you compare MULE-HIDE goods and prices with other goods and prices, you'll find that the difference in cost is surprisingly small.

Get MULE-HIDE. Satisfaction for you is wrapped up in every roll and bundle of roofing and shingles bearing the famous old trademark.

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10C A WORD PER ISSUE—Cash should accompany all orders. Count as one word each initial and each group of figures, both in body of ad and in address. Copy must be in our hands before Saturday for issue dated following week. The Business Farmer Adv. Dept., Mt. Clemens, Michigan.

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BUZZ SAW FRAMES, BLADES, MANDRELS, belting, pullies, wood-working machinery, etc., of every description. Low prices, prompt shipments. Catalogue free. Write GEO. M. WETTSCHURACK, La Fayette, Indiana.

MISCELLANEOUS

GENERAL

BARREL LOTS SLIGHTLY DAMAGED crockery, hotel chinaware, cookingware, aluminumware, etc. Shipped direct from factory to consumer. Write for particulars. E. SWASEY & CO., Portland, Maine.

LET US TAN YOUR HIDE—COW AND Horse hides for fur coats and Robes. Cow and Steer hides into Harness or Sole Leather. Catalog on request. We repair and remodel worn furs; estimates furnished. THE CROSBY FRISIAN FUR CO., Rochester, N. Y.

WEBSTER'S NEW INTERNATIONAL DICtionary. Merrian-Webster. Only Webster's fully unabridged. Use to win $500 prize. Greatest educational factor for the home. Buskram binding $16.00 postpaid. Money order. PETERS' BOOK STORE, Petersburg, Mich.

WANTED—TO GET IN CORRESPONDENCE with party dealing in farm and city property in Illinois, Ohio, Indiana, and Michigan. Write or telegraph FRANK B. RAY, Merrill, Mich.

500 30x3½ NON-SKID TIRES. OUR AKRON-De-Luxe. Guaranteed Heavy Tube Free. $6.65. Cash with order. SLADE RUBBER CO., Ithaca, Michigan.

ALL MEN, WOMEN, BOYS, GIRLS 17 TO 60, willing to accept Government Positions, $117 to $190, traveling or stationary. Write MR. OZMENT, 355, St. Louis. Immediately.

FOR SALE—7,200 EGG CANDEE INCUbator. Good condition, $800. TYRONE POULTRY FARM, Fenton, Mich.

ONE KALAMAZOO SILO FILLER NEARLY new, size 14. Only filled 18 silos, price $200.00. HAROLD JORS, Fife Lake, Mich.

HOUNDS, ALL KINDS, BEAGLES, AIREdales, Rat dogs. Trained dogs on trial. Pups on approval. PETE SLATER, Oconee, Ill.

FOR SALE—SAW DUST BLOWER—USED. JOHN ELLSWORTH, 1520 Fairbanks St., Kalamazoo, Mich.

FOR SALE—KIRSTIN HORSE-POWER stump puller, half price. Turning lathe, saw-table, tools. Milch goats. HUDGINS, Birch Run, Mich.

HIDES TANNED OR EXCHANGED, LEATHer sold direct to farmers. COCHRAN TANNING, Greenville, Michigan.

HELP WANTED MALE

EARN $110 TO $250 MONTHLY, EXpenses paid, as Railway Traffic Inspector. Position guaranteed after 3 months' spare time study or money refunded. Excellent opportunities. Write for Free Booklet G-165, STANDARD BUSINESS TRAINING INST., Buffalo, N. Y.

SALESMAN—ARE YOU LOOKING FOR A product to sell to farmers? Every farmer needs our product. It has a large repeat business. No investment required. No collections to make. V. SMITH CO., Portland, Ind.

MEN WITH TEAMS OR AUTOS WANTED to handle S. M Co. Products in vacant territory. For particulars address SAGINAW MEDICINE CO., Saginaw, Mich.

WANTED—MARRIED MAN WITHOUT children to work on farm. E. JONES, Custer, Mich., R. 2.

MARRIED MAN WANTS POSITION BY month or would rent equipped farm. Address AUGUST ZIENENT, Eaton Rapids, Mich.

FARMERS ATTENTION

We are in the market for Red Clover either medium or June. Please send us samples of your offerings. We feel sure we can Quote you an attractive Price.

SIOUX CITY SEED CO.
Millington, Michigan

If you have poultry for sale put an ad in

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See what immense savings you will make on everything that you order from this page. Positively the most sensational price smashing offers in all America—quality considered. No reason to hesitate. Select what articles you want and we will send them all to you on approval. You take absolutely no risk. Money back instantly if not satisfied.

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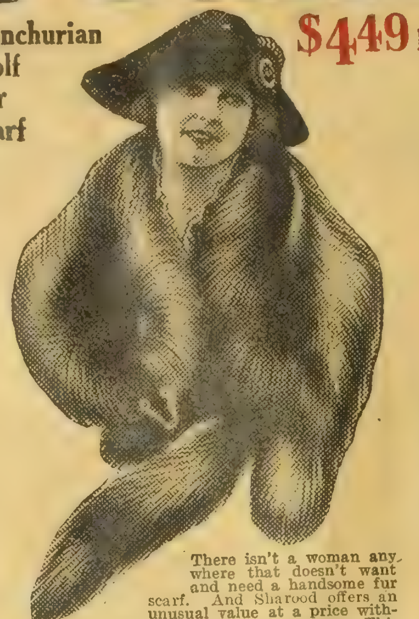
Don't send one cent. Just letter or postcard brings you any of these smashed price bargains. Merely State Size and Write Your Name and Address Plainly to Avoid Delay. Pay nothing till goods arrive—then only the amazing bargain price and postage. Money cheerfully refunded if you wish.

Manchurian Wolf Fur Scarf

$4.49



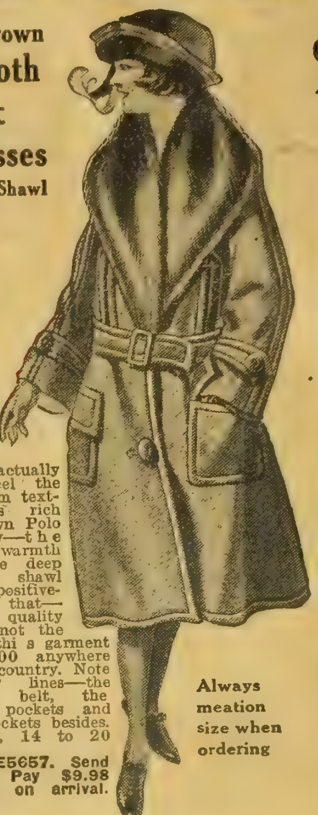
There isn't a woman anywhere that doesn't want and need a handsome fur scarf. And Sharood offers an unusual value at a price within the reach of everyone. This scarf is about 46 inches long and 12 inches wide. It is stylish as well as warm.

The lining is good quality satin, and there is an extra ruching laid around the neck inside, so as to protect the fur from wearing. Only the most expensive fur scarfs have the features which we offer you at this bargain price. **Order black Manchurian wolf scarf by No. 96E5193. Order brown by No. 96E5194. Send no money. Pay only [illegible] and postage on arrival. If not satisfied your money will be refunded. Be sure to state color wanted.**

Heather Brown Polo Cloth Coat for Misses

Coney Fur Shawl Collar

$9.98

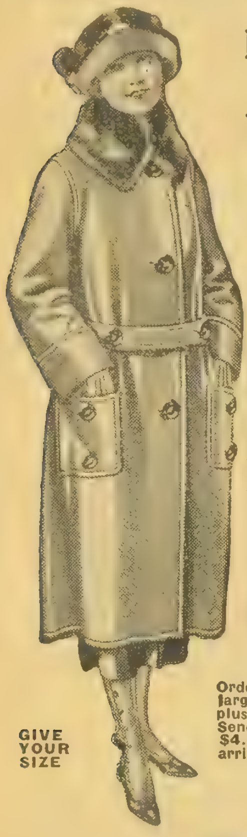


Wait—just wait till you see this snappy coat for misses. Wait till you can actually see and feel the splendid warm texture of its rich heather brown Polo Cloth body—the wonderful warmth of its large deep Coney fur shawl collar. We positively guarantee that—quality for quality—there is not the equal of this garment under $12.00 anywhere else in the country. Note the snappy lines—the self-material belt, the side patch pockets and two muff pockets besides. Misses sizes, 14 to 20 only. **Order No. 96E5657. Send no money. Pay $9.98 and postage on arrival. State size.**

Always mention size when ordering

Fur Collared Pressed Velour Coat BARGAIN Now Only

$5.98



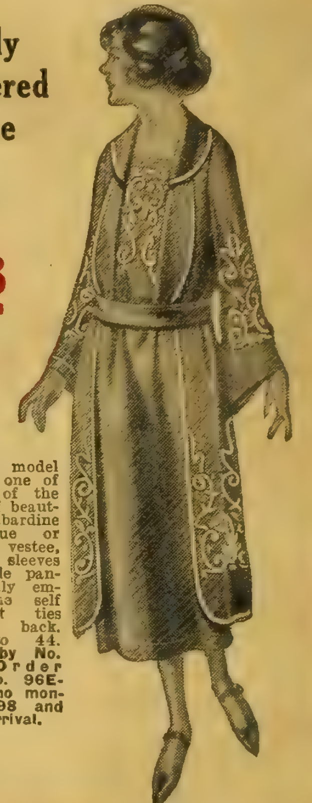
Sharood again proves its claim to "Lowest Prices in America" in presenting this beautiful pressed velour coat. Where else could you find such a coat at this price! A practical and good-looking model of pressed velour with generous collar of real brown Coney fur. All-around belt of self material and button trimming. Sizes 16 to 20 for misses. For women 34 to 46. **Order No. 96E5703. Send no money. Pay only $5.98 and postage on arrival.**

Order similar style with large collar of silk plush by No. 96E5706. Send no money. Pay $4.98 and postage on arrival.

GIVE YOUR SIZE

Exquisitely Embroidered Gabardine Dress

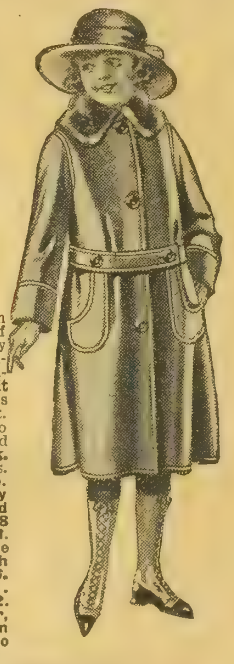
$2.98



This delightful model is sure to be one of the favorites of the season. It is of beautiful cotton gabardine in navy blue or brown. The vestee, smart bell sleeves and fashionable panels are richly embroidered. The self material belt ties gracefully at back. Sizes 16 to 44. **Order Navy by No. 96E5525. Order Brown by No. 96E-5526. Send no money. Pay $2.98 and postage on arrival.**

Fine Fur Trimmed COAT For Girls Only

$3.98

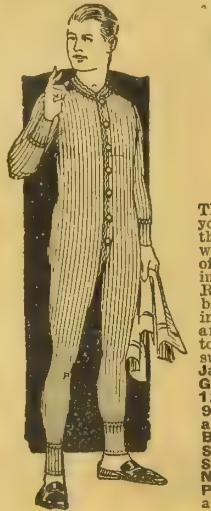


A sensational bargain—a handsome coat of Pressed Velour in Navy Blue or Brown. Regular $7 value. Has collar of genuine Kit Coney, which buttons snugly around throat. Belt all around, two novelty pockets and two buttons at back. Sizes 7 to 14 years. **Order Brown by No. 96E5595. Order Navy by No. 96E5596. Send no money. Pay $3.98 and postage on arrival.**

Order similar style with handsome plush collar, sizes 2 to 6. Black No. 96E5581. Brown No. 96E5582. Price either color, $2.98. Send bargain and postage. Send no money with order.

Men' Winter Underwear

99c

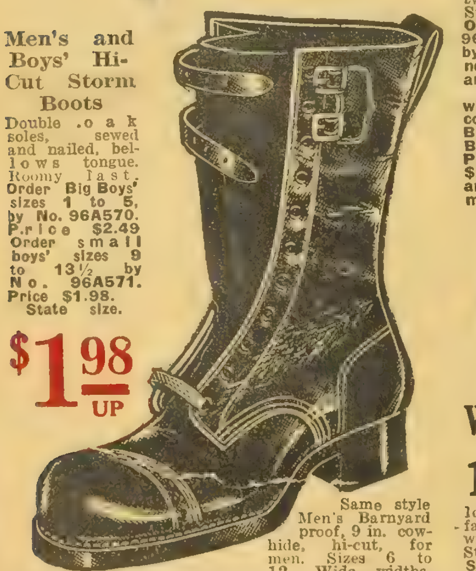


They are the best bargains you'll find at anything near this sale price. Heavy weight flat knit union suits of select long fibre cotton in popular Jaeger or grey Random color. Heavily brushed fleece lining on inside. Wrists and ankles are elastic knit. Sizes, 32 to 46 chest. Buy a year's supply right now—today. **Jaeger color No. 96C1279. Grey Random No. 96C-1280. Send no money. Pay 99c and postage on arrival. State size.**

Boys' Flat Knit Union Suits of fine quality cotton. Sizes 3 to 16. Order by No. 96C1358. Price 79c. Pay 79c and postage on arrival.

Be sure to State Size

Men's and Boys' Hi-Cut Storm Boots



Double oak soles, sewed and nailed, bellows tongue. Roomy last. **Order Big Boys' sizes 1 to 5, by No. 96A570. Price $2.49 Order small boys' sizes 9 to 13½ by No. 96A571. Price $1.98. State size.**

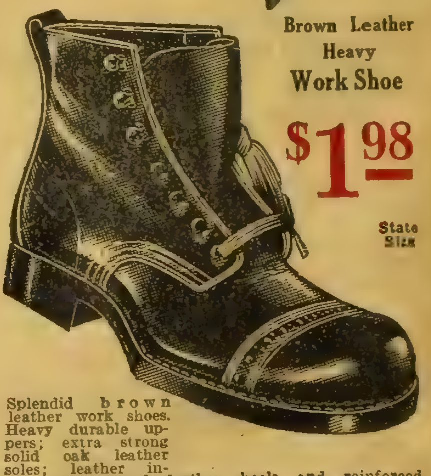
$1.98 UP

Same style Men's Barnyard proof, 9 in. cowhide, hi-cut, for men. Sizes 6 to 12. Wide widths. **Order by No. 96A769. Send no money. Pay $2.98 and postage on arrival. State size.**

Brown Leather Heavy Work Shoe

$1.98

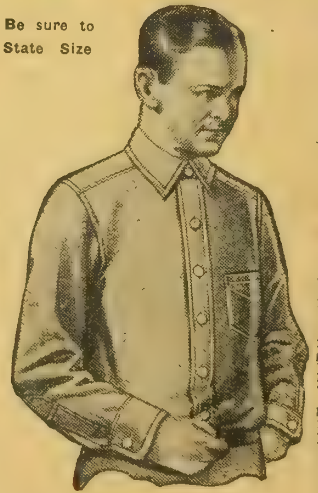
State Size



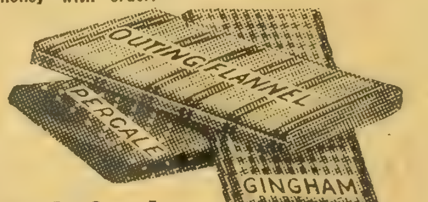
Splendid brown leather work shoes. Heavy durable uppers; extra strong solid oak leather soles; leather insoles; low broad leather heels and reinforced leather back stay. Roomy last. Sizes 6 to 12. **Order by No. 96A758. Send no money. Pay $1.98 and postage on arrival. Order boys' sizes 1 to 5½ by No. 96A554. Price $1.89. Order little boys' sizes 9 to 13½ by No. 96A555. Price $1.79 and postage on arrival. Mention size.**

Men's Cotton Flannel Shirts

89c



Just the shirt that men need in large numbers, and offered at absolutely the lowest price in America! Khaki or grey cotton flannel. One pocket, faced sleeves, reinforced yoke, double stitched seams throughout. Will give the very best kind of wear. Order a year's supply while you can get them at this bargain price. Sizes 14½ to 17 neckband. **Order grey shirt by No. 96-B2475. Order khaki color shirt by No. 96B2476. Send no money. Pay 89c and postage for either color on arrival.**



Wash Goods

10 Yards Fancy Outing Flannel $1.49

Ideal weight for nightgowns and undergarments. In fancy stripes, checks and plaids, white grounds with pink, blue or tan designs. 26-inch width. State pattern and color. **Order by No. 96E3425 Send no money. Pay $1.49 for 10 yards and pastage on arrival.**

10 Yards 36-inch Percale at $1.49

Very choice patterns in fast colors. In white, gray, Calcutta and Indigo blue with neat stripes, figures or dots. State color and pattern. **Order by No. 96F3406. Send no money. Pay $1.49 for 10 yards and postage on arrival.**

10 Yards 36-in. Challies $1.59

Persian and floral patterns. Predominating colors—navy, pink, red, tan, green or blue grounds. **Order by No. 96F3404. Pay $1.59 and postage for 10 yards on arrival. State color.**

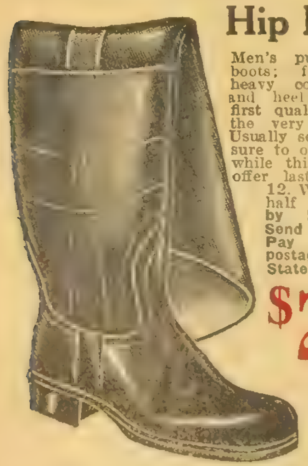
10 Yards Unbleached Muslin 89c

Unbleached muslin of excellent wearing quality—unequaled for domestic uses. 36-in. width. **Order medium weight by No. 96F3630. Send no money. Pay 89c and postage for 10 yards on arrival.**

10 Yards Bleached Shaker Flannel $1.39

An extraordinary price for fine quality Shaker Flannel. Ideal for children's winter undergarments. **Order by No. 96F3636. Send no money. Pay $1.39 and postage for 10 yards on arrival.**

Hip Boots



Men's pure gum hip boots; friction lined; heavy corrugated sole and heel; guaranteed first quality. Made of the very best rubber Usually sells at $5. Be sure to order your pair while this great saving offer lasts. Sizes 7 to 12. Wide widths No half sizes. **Order by No. 97A949. Send no money. Pay $2.79 and postage on arrival. State size.**

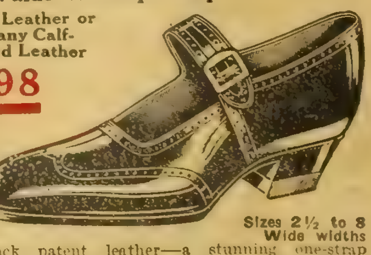
$2.79

GIVE SIZE

Rare Value in Strap Pump

Patent Leather or Mahogany Calf-Finished Leather

$1.98

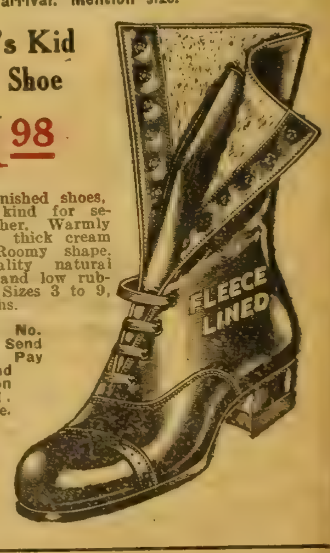


Sizes 2½ to 8 Wide widths

In black patent leather—a stunning one-strap model with imitation shield tip and medallion, effectively perforated. Has medium rubber heel. **Order Patent leather by No. 96A72, $1.98. Order Mahogany by No. 96A73. Send no money. Pay $1.98 and postage on arrival.**

Women's Kid Comfort Shoe

$1.98



Soft, kid-finished shoes, the best kind for severe weather. Warmly lined with thick cream fleece. Roomy shape. Good quality natural oak soles and low rubber heels. Sizes 3 to 9, wide widths.

Order by No. 96A396. Send no money. Pay $1.98 and postage on arrival. State size.

Be Sure to Give Sizes, Colors, etc., and Send all Orders from this Page Direct to

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Edited in Michigan

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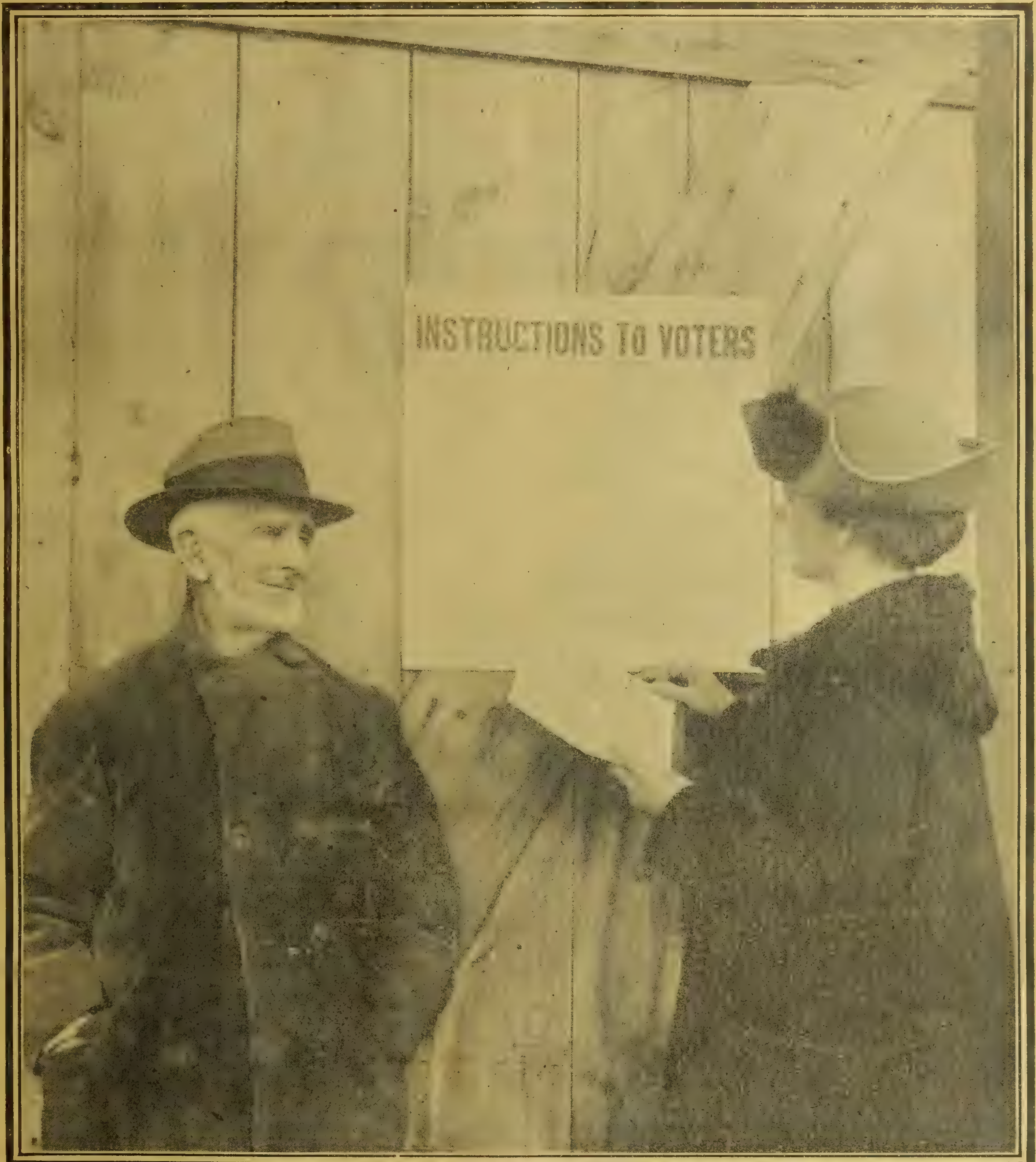

"Trouble is, these wimmin ain't no respecters of party lines!"

Three Important Amendments to be Voted on—Better Read Page 3

Current Agricultural News

WORLD WHEAT SITUATION

THE Commerce Department's Foodstuffs Division in a world wheat survey says that according to the latest available estimates on wheat production, the principle importing countries have produced less wheat this year than last by about 245 million bushels. These same countries imported for the crop year ending August 1, 1922, 647 million bushels, if we add the 245 million bushels shortage, this gives a total of 892 million bushels required to equal last year's average wheat consumption in the importng countries. It is of course, recognized that some European countries are probably living on a lower standard than last year, and are going to conserve wheat consumption not only through milling regulations but also through the substitution of other foodstuffs, such as potatoes. The potato crop is larger this year and generally speaking, can be and is substituted for bread in times of stress.

The exporting countries produced about 213 million bushels more this year than last, which added to the 647 million bushels they exported would indicate an average surplus of 860 million bushels based on last year's crop.

According to the latest figures available the rye production of Europe, exclusive of Russia, is about 53 million bushels less than last year, while the rye crop of Canada and the United States is about 50 million bushels more, indicating no world change in the rye situation.

For the next four months the wheat and rye available for the export trade should be found in North America. If Europe's combined wheat and rye shortage of about 300 million bushels could be met, it would make America a strong market, and it may be said from now on the breadstuffs market will depend entirely on the economic conditions in European countries and their ability to pay cash for grain.

It is probable that there are somewhat more grain and flour stocks in Europe than statistics indicate, since the farmers in a number of countries have been threatened with requisition of part of their crop during the last year and it is generally known when such conditions exist the crop is concealed to some extent. On two or three occasions when restrictions have been raised in past years, supplies have come out in the unusual amount. This probability of some invisible supplies is one of the uncertain factors that makes it difficult to ascertan the real breadstuffs requirements of Europe.

COOPERATION SAVES OREGON FRUIT CROP

A YEAR ago it looked as though the fruit of the Northwest would rot because the canneries would not run, bringing ruin to thousands of growers and a fruit famine for distant consumers. Then the Oregon Growers' Cooperative Association worked out a plan for running the canneries and saving the crops. The cooperators were not interested in big profits. What they wanted was to get their crops to the people and they did it.

During 1920 the Oregon Growers' Cooperative Association sold 12,000,000 pounds of prunes, which cleaned out all the supply and left no carryover for 1921. In 1921 the Association made arrangements for canning a considerable portion of the tonnage. This year, with the biggest prune crop in the history of the United States, the plants of the cooperative have been put into condition to save the supply by evaporation, and in addition the Association has rented and acquired other plants to meet the emergency.

The experience of the past three years has proved to the unorganized fruit growers that cooperation is the only sure way to market their wares, get a fair return for themselves, and insure a stable supply for the consumers.

BIG TOMATO PACK THIS YEAR

MORE than 1,000,000 tons of tomatoes this year will go into cans and be used in various manufactured products such as catsup, pork, and beans, and the like, according to estimates made by the United States Department of Agriculture. The figure, 1,000,010 tons, is 132 per cent more than the quantity used last year, which was 432,756 tons.

Acreage producing the tomato crop for manufacture is estimated at 215,684 acres, as compared with the final estimate of 87, 933 acres in 1921. Estimated yield is 4.6 per acre, compared with 4.9 tons last year. Reports to the department indicate that 9,336,000 cases of No. 3 cans will be packed this year, compared with 5,050,000 cases in 1921.

In volume of production for manufacture, Indiana leads all states with 271,534 tons. California has 173,786 tons, Maryland 111,510, New Jersey 81, 398, New York 63,245, Ohio 56,847, Missouri 37,163, Deleware 31,712, Utah 30,287, and other states smaller quantities.

WORLD RYE CROP ABOUT SAME AS LAST YEAR

TOTAL production of 1922 for eighteen countries for which figures are available is estimated at 770,152,000 bushels by the United States Department of Agriculture. Production in the same countries last year was 770,603,000 bu. Countries for which reports are not available are Russia, Austria, Denmark, Greece, Norway, and most of the countries of the southern hemisphere.

The rye crop of Germany for 1922 is estimated at about 210,580,000 bushels, according to a cablegram from the International Institute of Agriculture at Rome, a decrease of 57,070,000 bushels from production last year. The rye harvest of France is placed at 37,600,000 bushels compared with 44,392,000 bushels in 1921. An unofficial estimate places the rye crop of Jugoslavia at 7,090,000 bushels, an increase over last year's yield of 5,770,000 bushels.

ORGANIZED CELERY SHIPPERS IMPROVE METHODS

IMPROVED methods of celery shipping and distribution and a standard pack are paying extra returns to the newly organized Farm Burean Celery Shippers Association at Kalamazoo. The celery shippers were organized by the Michigan State Farm Bureau Exchange at Detroit and market their celery thru the Farm Bureau organization.

Before the celery growers organized their own sales organization, they marketed their crop through Kalamazoo dealers who shipped to oithed markets by express. The Farm Bureau Exchange caused the celery growers to adopt a standard pack and to label it Kalamazoo Brand. The Farm Bureau ships the celery to such markets as Detroit, Chicago, Kansas City, St. Louis, Pittsburgh, Philadelphia in carlots and under refrigeration. The celery arrives at destination in perfect condition and the consumer gets it in excellent condition. Distributing through one agency, the celery growers now have better control of the distribution of their celery. They report increased returns since they have been marketng their celery cooperatively under standard pack.

FARMERS SET RECORD IN CO-OP. WHEAT MARKETING

GROWING from a pool of 1,000,000 bushels of wheat to 5,000,000 bushels in one year is the record of the Montana Wheat Growers Association, the farmers' cooperative wheat marketing organization of that state. This remarkable growth of next to the youngest cooperative wheat pool in the northwest is largely due to the enormous increase in membership during the same year of from 1500 to 4700 cooperators with constant additions being made each day.

For Your Family's Sake

You owe it to them to provide for their future in so far as possible. This means the putting aside all you can for them; but if you do your full duty, it means investing it profitably and safely in securities that will give them full earnings regularly and certainly.

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Volume X
Number 5

The Michigan
BUSINESS FARMER

October 28,
1922

Growing Michigan's Champion Potato Crop

How Mason Parmalee of Allegan County Grows 360 Bushels to the Acre

By GEORGE IRVINE

WHO raises the highest yielding potato crops in Michigan and how does he do it? Is there a farmer anywhere in our state who under ordinary soil and market conditions is keeping his potato yield per acre up to the point where he is sure of consistent profits?

Many Michigan potato growers are beginning to ask themselves these questions. An average production per acre hovering around 100 bushels, and prospects of a long stretch of low potato prices are responsible for an inquisitive attitude toward this high yield business among the spud raisers.

The numerous farmers who hope to obtain a share of their future bread and butter at the shrine of the potato may well turn for their Mecca of inspiration and guidance to the 160 acres in Allegan county owned and farmed by Mason Parmalee. For on that farm was grown the champion potato crop of Michigan last year. And it was a money maker too. Mr. Parmalee is a "big league" potato grower. He made the state high production record for 1921 with a twelve acre patch averaging 360 bushels per acre.

Cherry Rill Farm, as Mr. Parmalee has named his place, has no unique advantages of location or soil, nor is it the pet hobby of a rich city farmer. Mr. Parmalee inherited the place from his father, who bought the land from the government for ten shillings an acre when Allegan county was pretty much of a wilderness. Mr. Parmalee himself has worked the farm for thirty years, and has never used a cent of outside capital. The farm has paid it's way from the start.

Let us find the reasons why Cherry Rill Farm is turning out some of Michigan's best potato crops. Naturally we turn first to the soil, for that is what really makes a potato crop. The yielding of a farm as a rule varies directly with the fertility of the soil. In the long run, the soil is what the farmer makes it. Mr. Parmalee has doubled the fertility of his soil, and thus it's producing capacity, since he has been on the farm.

Soil fertility is influenced by only three things—the cropping system, fertilization, and drainage. In them, then, lies the solution of the greatest problem of agriculture. That problem, the maintenance of soil fertility, no longer troubles Mr. Parmalee. He has solved too, with remarkable results, by his method of handling the cropping, fertilizing, and drainage factors. Here is the story in his own words:

"We use a three year rotation, grain, followed by an alfalfa-clover mixture, then corn and potatoes, after which we seed again with grain. We grow barley, oats, wheat or rye for grain, and in the spring sow a half-and-half clover and alfalfa mixture, eight pounds of alfalfa and six pounds of red clover seed per acre, with the grain for a nurse crop. We never pasture the new seeding, but clip it once in the fall if it gets too high. We never take anything off the first year. The next summer we make two or three cuttings of hay, and plow under in the fall. We plow quite deep now—nine inches—but reached that depth by working down a half inch deeper every time. We plow once during a rotation, every third year, and disc the other two years. For cultivated crops we grow corn in the fields next to the barn and potatoes on the sandier land to the north."

Cherry Rill's cropping system, a three year rotation with alfalfa, is worthy of a passing glance. The average farmer would cackle heartily at the thought of plowing under a good stand of alfalfa after harvesting only one hay crop. Possibly that's one of the reasons he is an average farmer.

Application of fertilizer is the other big factor in building up the soil. Four varieties are used regularly on Cherry Rill Farm,—manure, acid phosphate, green manure, and lime.

"Manure is one of the most valuable things on the farm," Mr. Parmalee declares. "Farm papers have a lot to say about keeping farm machinery under cover, but I say if you can't cover both, cover the manure and let the machinery stand out. I

(Continued on page 17)

WHAT STATE FARM BUREAU SAYS OF INCOME TAX

ALL Michigan farm organizations are urging their members to endorse the state income tax amendment which will appear on the ballots at the general election Tuesday, November 7. The income tax measure is of great interest to every owner of farm or town property. It intends that the heavy tax burden now carried almost solely by five billion dollars in farm and town real estate shall be shared by five or more billion dollars in stocks and bonds and other intangible property now paying practically no taxes to the state. The State income tax measure would also give wage earners their just share in carrying on the government.

The farm organizations declare that the State income tax proposal cannot be considered as another or an additional tax as it is intended to relieve real property of its excessive tax burdens by more justly distributing the load. It is estimated that a fair and reasonable state income tax would pay the State's annual tax of $20,000,000 and go a long way toward retiring outstanding bond issues. It would cause every wheat producer to share in the taxation program instead of leaving it to owners of farm and town real property.

Here are the Amendments to be Voted On at the November Election

"I wish you would print in your paper the proposed income tax statement and its benefit to farmers. Wishing you much success as we think your paper is fine.—R. E. H., Pierson, Michigan.

Many of us are wondering if you will have space and patience to diagnose the amendments to appear on ballots at the November election? Many, many voters are mislead when amendments appear as they are usually worded to confuse. Looks as though the "excess condemnation act" was reaching for some more of the people's rights. Does this just affect city property owners, or could the power be easily extended to the country? Anyway, it doesn't look like a plausible act, to be passed by the people. What do you know about it and how will it be worded on ballots.—Jacob Copp, Ingham County, Michigan.

THERE are three amendments to be voted on at the fall election, November 7th, excess condemnation amendment, income tax amendment, and giving ports and port districts power to make internal improvements. Four other amendments which are proposed will not be submitted because the required number of signatures were not obtained to the initiatory petitions within the time prescribed by law.

Excess Condemnation

When the voter enters the booth on election day he will be given two ballots. One of them will be the general election ballot on which he votes his choice for county, state and national officers. The other ballot will contain the three amendments mentioned above. The first one on the ballot will be the "excess condemnation" amendment, the object of which is to empower the legislature to authorize municipalities to condemn more land than is necessary for certain public purposes and to issue bonds therefor. The text of the amendment is as follows:

Sec. 5. Subject to this Constitution the legislature may authorize municipalities, subject to reasonable limitations, to condemn and take the fee simple to more land and property than is needed in the acquiring, opening and widening of parks, boulevards, public places, streets, alleys, or for any public use, and after so much land and property has been appropriated for any such needed public purpose, the remainder may be sold or leased with or without such restrictions as may be appropriate to the improvement made. Bonds may be issued to supply the funds to pay in whole or part for the excess property so appropriated, but such bonds shall be a lein only on the property so acquired and they shall not be included in any limitation of the bonded indebtedness of such municipality."

The wording of the amendment is plain. It could NOT be construed as Mr. Copp suggests to apply to rural districts. Only "municipalities", incorporated villages and cities would have the right of excess condemnation, under this provision. The rural voter's interest is only indirectly affected by this amendment.

There are many reasons why this amendment should be adopted. When a city condemns a piece of property for a public improvement, the value of surrounding property instantly rises, and owners of adjoning real estate reap a rich harvest by reason of improvement. The question is, "should a few property owners be enriched by the necessities and tax expenditures of a whole city?" One of the obstacles in the w of public improvements is the cost of condemnation. Since a city pays this cost. it is argued, the city should receive whatever extraordinary benefits arise as a result of the condemnation. The proposed amendment would give cities the right to take at a fair valuation this adjoining property and to bond it or sell it and use the proceeds to apply against the cost of the improvement. Frequently it happens that a city does not condemn as much land as is needed for an improvement, and after work has begun on the improvement it is discovered that more land is needed. The city is then obliged to pay a much higher price for the property than it would have had it been condemned in the first instance.

City real estate owners suffer as much from high taxes as farmers. When their local taxes are high they complain of their state taxes and try through legislation and otherwise to escape their share of state taxation. Excess condemnation should reduce city taxes and make city taxpayers less critical of state taxes. Therefore, indirectly it is to the farmer's advantage to vote for excess condemnation.

The Income Tax

The income tax amendment would amend section 3 of Article ten of the state constitution. The wording is a trifle confusing, but the amendment has been properly drafted and will, if adopted, pave the way for a state income tax. It reads as follows:

"Sec. 3. The legislature shall provide by law a uniform rule of taxation, except on property paying specific taxes, and taxes shall be levied on such property as shall be prescribed by law. ' Provision may be made by law for a tax not to exceed four per centum upon or with respect to the net gains, profits and incomes, from whatever source derived, which tax may be graduated and progressive and which may provide for reasonable exemptions. For the purpose of such a tax, property and persons, firms and corporations upon which such tax may operate may be classified: Provided, that the legislature shall provide by law a uniform rule of taxation for such property, as shall be assessed by the State Board of Assessors, and the rate of taxation on such property shall be the rate which the State Board of Assessors shall ascertain and determine is the average rate leved upon other property upon advalorem taxes are assessed for state, county, township, school and municipal purposes."

The benefit of the income tax to the farmer is perfectly obvious. In the first place, economists declare that the income tax is the most equitable form of taxation ever devised. It forces people to pay taxes in proportion to their ability to pay. under our present taxation system many people pay too much taxes and many do not pay enough. The income tax will equalize this, and reach thousands of salaried individuals who now pay no direct taxes to the state. A state income tax should mean a substantial reduction in taxes on farm property.

Port Rights

The proposed amendment relative to the incorporation of ports and port districts with power to engage in work of internal improvements is merely a further recognition of the home rule rights of local corporate bodies, as are outlined in Article 8 of the Constitution. We can see no possible objection to the adoption of this amendment. It reads as follows:

"Ses. 30. The legislature may provide for the incorporation of ports and port districts and confer power and authority upon them to engage in work of internal improvements in connections therewith." .

A Plan for the Rehabilitation of Agriculture

Co-operative Marketing and Revitalization of U. S. Bureaus Suggested

By GEORGE H. STEVENSON

MANY SCHEMES TO HELP THE FARMER

A FEW years ago folks didn't pay so very much attention to the farmer. He was a sort of good-for-nothing, no-account chap. If he prospered well and good; if he didn't that was his own look out. But times have changed. The American people have learned what a tremendous influence agriculture plays in the economic life of the Nation. They have learned that when the farmer prospers they prosper, too; when he suffers they likewise suffer. So the attitude of non-agricultural groups toward the agricultural group has gone to the other extreme. Instead of being indifferent they are over-zealous if anything and come forward with such an array of palliativies for the farmer that it turns the poor men sick to even look at 'em, and it is doubtful if he could survive the shock of taking them. About two-thirds of the remedies proposed for the relief of agriculture must be discarded as impractical or falling far short of meeting the stiuation. We have here a practical discussion of the farmer's needs and a sensible looking plan for meeting them. Read it and tell us what you think about it.—Editor.

THE question, "What has modern civilization done to the American farmer?" was answered to the best of my ability in the article appearing in the May 27th issue of the Dearborn Independent. A friend remarked, "Everthing you state is absolutely true, but terribly destructive." If telling the truth is destructive of that erroneous impression which many people still hold concerning the status of agriculture, then it was intended that article should be destructive. In this article, however, it is my desire to present a contructive plan for the rehabilitation of agriculture. Agriculture is the basic industry, and if civilization is to endure agriculture must prosper.

In the first place, the field of agriculture falls logically into three divisions: first, economic; second, social; and third, political. I am convinced, however, that the local and political life of the rural community is determined by it economic success. Therefore, the problem of agriculture is essentially a matter of earnings and profits. The improved and modern schools, churches and social organizations of the average rural community may be considered an accurate index of the "dollars and cents" borrowing capacity of the community. Rural pride, however, cannot thrive on husks alone. Far too many rural communities find themselves today mere shells of their former selves, disheartened and impotent.

It is not within the scope of this article to discuss in any detail the intricacies of the organization of the Department of Agriculture, nor of the state institutions. It is my intention, however, to emphasize the recognized fact that the Department of Agriculture has become top-heavy in the administration of regulatory functions; and that it has made available more material along scientific and investigational lines pertaining to the production of farm crops than agriculture, in its present economic plight, is able to make use of.

The Demonstration or Extension organization, consisting of some four thousand county agents, men and women, is the great constructive force, which will prove a vital factor in the readjustment and reconstruction of agriculture. The county agent has the opportunity to become adviser, confident and friend of his constituents. He should and does know the problems of the farmer. Today, however, the county agent, instead of being looked upon as the emissary of the farmer, has become, because of pressure of his superiors, primarily the emissary of a multiplicity of scientific and semi- scientific bureaus desiring to exploit the results of their research, and ofttimes their theories, at the expense of the farmer.

Too much stress is laid upon increased production, but the alert county agent knows, as does the farmer, that the problem of agriculture is not now a question of increased production, but rather a question of marketing at a profit the crops now being produced; likewise, that too often the application of science to farming is not practicable. Science generally increases cost of production, and the market value of an increased quantity does not justify the increased cost.

TOO MUCH SPECIALIST

Science dictates that liberal application of phosphate rock shall be applied to the soil. No one will dispute that increased production follows, but to make the application an expenditure of from $10 to $20 an acre. The average farmer is not in position, being already reavily burdened with debt, to assume this new obligation The Demonstration or Extension Service is the medium through which the Department of Agriculture and state institutions are dishing out to the farmer large

(Continued on page 21.)

Land Clearing Crew Silence the Wail of the Stump Land Farmer

UP in Presque Isle county a week ago a gang of stalwart young men wrestled with dynamite and stump pullers, clearing land of stumps and blasting ditches through swamps. It was the land clearing crew of the M. A. C., which had heard the "wail of the stump land farmer" and sent its picked crew of specialists on a tour through the upper and lower peninsulas to instruct farmers on the cheapest and best ways to clear land.

The tour started in the upper peninsula in the early part of September, worked its way down the Michigan Central to Bay City in the lower peninsula, and then headed back north on the Detroit & Mackinac. In charge of the tour was Mr. Larry F. Livingston—land clearing specialist for the M. A. C., who was accompanied by a corps of men trained in the operation of stump pulling devices and the handling of dynamite. The railroads mentioned co-operated with the M. A. C by furnishing cars and transportation.

Thirty-two schools or demonstratons constituted the tour in the lower peninsula. At convenient points along the rights of way of the co-operating roads, the land clearing train was shunted off on a side track and stump pullers, tractors, dynamite, and last but not least, "Paul Bunyan's" powerful nammer, quickly unloaded and transported to a nearby site where stumps were to be pulled or ditches dug.

A single blast of dynamite tore this perfect ditch through a swamp.

They split 'em like this with dynamite, then yank 'em out with a tractor.

Theory had no place in the operations. Only practical machinery, explosives and home-made devices which are adaptable to conditions found in Northern Michigan were used.

In removing stumps, the land-clearing specialits explained to the farmers who attended the schools why different methods are employed in different cases. Frequently, they say, farmers will use a lot of dynamite in removing a stump which could just as well have been yanked out with a hand puller, while at other times they will waste a good many hours trying to pull a stump with a hand puller which was never meant for such a job when a little explosive would have done the trick much quicker and better.

The same thing is true in the making of ditches. Often it is more practical to employ a dredging machine, but in a great many cases where it is difficult for a dredging machine to work, dynamite is the better agent to use.

In blasting a ditch at Otsego Lake, ten feet wide and three feet deep, 40 per cent nitroglycerine was planted two feet apart in double rows, and the dynamite cap placed near the center of the charge. The concussion resulting from the firing of the single stick of dynamite set off all the others simultaneously and water, mud and debris were blown to a height of 75 or 100 feet, leaving a ditch as clean-cut as though dredged.

Several thousand farmers attended the schools and learned many valuable lessons in the more efficient clearing of land and blasting of ditches.

Boom! If you want to know how the Germans changed the appearance of the European landscape, plant a few sticks of dynamite under the stumps in the back forty, and see them blown to smithereens!

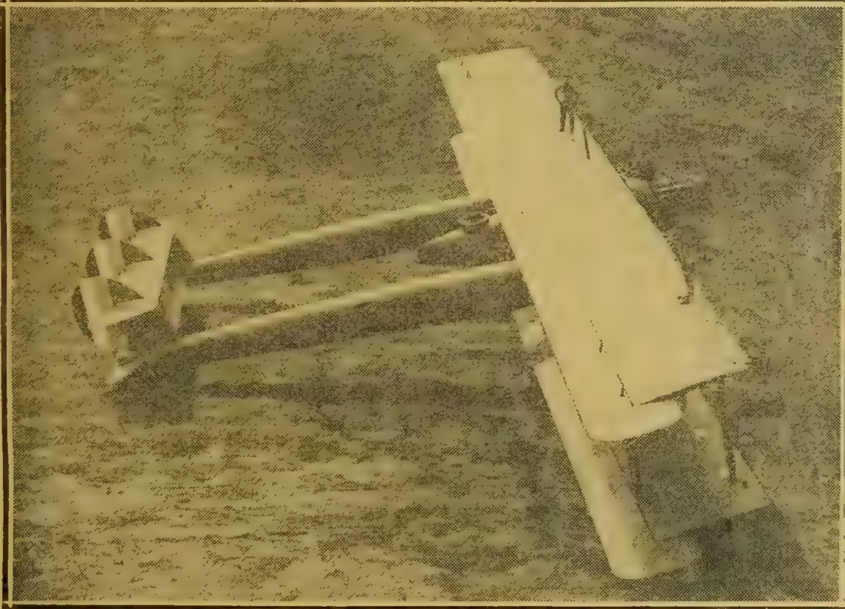
This county agent looks as if he was glad that the removal of stumps was going to give him more work to do in helping the farmers to produce crops on the reclaimed land at a profit.

PICTURES FROM FAR AND NEAR

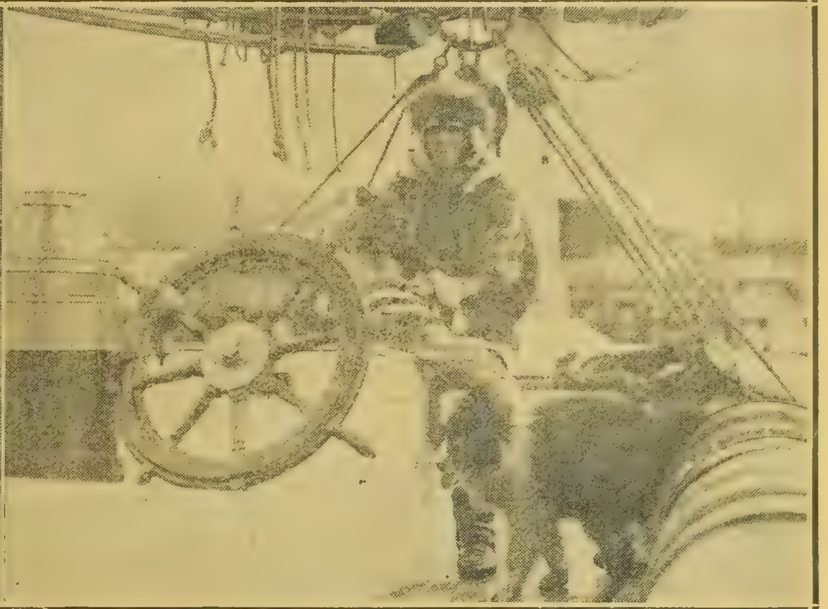
ONE HUNDRED AND TWELVE YEARS YOUNG—Mrs. Peshie Urdang who resides at the Daughters of Israel's home in New York City, recently celebrated her 112th birthday by giving a party at which all attending were over 100 years old. Mrs. Urdang is as active as the average person at sixty and reads without glasses.

UNCLE SAM'S FASTEST MAIL SORTER—This young man, Joseph W. Riley, a clerk in the central post office in Boston, claims the title of the country's speediest sorter of mail. His record is 31,815 outgoing letters sorted in less than 8 hours, which is an average of 66½ a minute, or over one a second. This beats the previous high record by over 11,000.

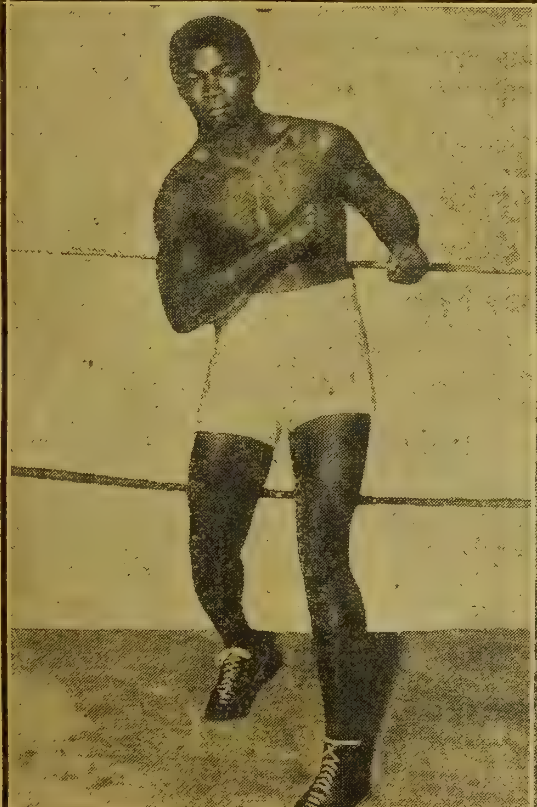
A PROMISING YOUNG POET—Though only seven years old little Josephine Blatt of Brookline, Mass., is writing her way to fame. She began composing poetry at the age of six before she knew how to spell. Josephine was never taught to write verse but grew to love poetry through her mother who was a public reader.



THE AMERICAN "OWL"—The "Owl" in this case is not a feathered bird but the biggest airplane in America. This super-plane carries a 4,000 pound bomb or its equivalent in passengers, has three fuselages, engines and propellers, and each fuselage is equipped with rapid fire guns. The wing spread of the "Owl" is 106 feet from tip to tip.



FROM THE LAND OF ICE AND SNOW—Capt. Donald B. MacMillan who recently returned to America from an expedition to Baffin Land snapped on board ship with two of his dogs. How would you like to own a suit of clothes like the Captain's? Just the thing to keep you warm when doing chores or other work about the farm this winter.

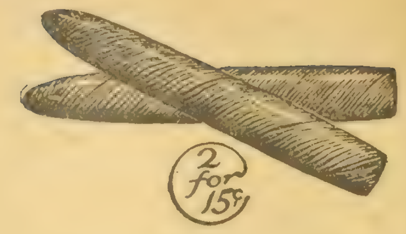


SENSATION OF PUGILISTIC WORLD—Battling Siki, Senegalese fighter, who surprised the world last month by knocking out Georges Carpentier thereby winning the heavyweight championship of Europe. The African battler has signed to meet Joe Beckett, English heavyweight, next month and is trying to land a bout with Jack Dempsey.

FOR-GET-ME-NOT DAY—Walter Ryan was "banged up" at Belleau Woods but he is still "carrying on" with his hands. He is shown above with Florence Fisher, making the tiny blue flowers which will be sold as emblems on For-get-me-not Day, November 4, to raise funds for the disabled American veterans. Miss Fisher is one of the few who have not forgotten.

CAN IT BE TRUE?—This is Iowa's most beautiful girl, Miss Bonnie Murry and she is of the real old-fashioned variety. She doesn't rouge, smoke or care for bobbed hair, and she knows more about cooking than she does flirting. Furthermore, she is not going to spend the $1,000 prize money she won for pretty clothes but to start a college education.

(Copyright Keystone View Company)



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(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full name and address. Name not used if so requested.)

OWNER vs. RENTER

I rented my house last April and during August we had trouble over the lock on my granary. I threshed and put my 200 bushels of wheat in the granary which he claims he rented with the house and which I said he could use until such time as I needed the room. I locked the granary up after the wheat was stored there and he tore the lock off and entirely battered it so it was of no use at all. We had words and I moved the wheat at once and now I want to get him out. When I gave him the receipt for August rent I simply requested him on the bottom of receipt to vacate by September 15th. He did not pay rent in advance, did not have money when he moved in and I thought him honest and I felt sorry for him. I want to get him out right away if I can. What is best for me to do and how. —B. P, Armanda., Mich

—It would be best to consult a competent attorney. You appear to be the victim of misplaced confidence. Your letter does not state how long you rented for. I assume that the lease was not in writing. Your note at the bottom of the receipt may be notice to quit but all such facts should be stated to counsel who will tell you what to do and probably have to ask the aid of the court to remove your tenant if you now have a right to have him removed.—Legal Editor.

BOY'S FATHER MISSING

I am writing to you about a boy who came to our place from Huntington, West Virginia, in search of his father whom he has not seen for nine years. His uncle and grandmother are dead. The boy's name is Clarence Cannoy. His father's name is Rush Cannoy. The last trace of him was at I. Stevenson's logging camp near Gladstone in the upper peninsula. He left there about a year ago. The father used to work for me and the boy came to see if I knew where he was. I did not, so am writing to you to see if we can find him through your paper as others have had such good success.—A. Bert Woodward, Vanderbilt, Mich.

CONTRACTOR MUST PAY MEN TWICE EACH MONTH

Is a contractor doing a road job for the State obliged to pay the men every two weeks. How could a person compel him to pay?—H. F. M., Harrison, Michigan.

—I call your attention to Act 59 of the P. A. of 1913 which is Comp. Sec. 5583-5586 inclusive of the Comp. Laws of 1915, which provides that every contractor engaged in public work shall pay his employees twice each month.

Sec. 3 of the same act provides the penalty for failure to comply with the provision of the act by way of adding 10 per cent of the wages due the employee, which sum may be recovered as liquidated damages for such failure to pay. This of course is subject to the other provision of the law which must be complied with and which you will find contained in the above reference.—State Highway Department.

DESTROY SUMAC

I would like to know the best way to destroy Sumac. Thank you.—R. F. P., Hastings, Mich.

—No experiments have been made recently on the extermination of Sumac, but very extensive experiments were made last year and this year on the extermination of barberry. I think beyond doubt the results of these experiments would apply to Sumac. After trying various sorts of chemicals, the most satisfactory results were obtained, and at least expense, by the use of common salt. For this purpose the coarse sort used by the commercial ice cream manufacturers should be used, not the fine crystals as these dissolve too rapidly. It is best to chop the plants off at or near the level of the ground and put the salt on the cut stubs and around these at a distance which varies with the original size of the shrub. A shrub 2 to 3 feet high would probably be killed by salt spread over a radius of 18 inches from the stem. One 4 to 5 feet high would probably require the salt to be spread for a radius of at least 3 feet. An abundance of salt must be used,—a large plant of the size just mentioned would require about 6 to 10 pounds. If applied in the fall a portion of the salt will remain undissolved until spring so that the action will be gradual but continuous. If fine salt is used it dissolves quickly and soon leeches out. Of course the salt will destroy the usefulness of the land for the following season, but will probably be out of the way by a year after that.

It is probable that in many cases it would be cheaper to pull out the plants by horse labor than to try to salt them out.—E. A. Bessey, Professor of Botany, M. A. C.

WILLING PROPERTY

Can a man will his property to his wife away from his brothers and sisters in Michigan, no children?—M. C. B., Vermontville, Mich.

—A man may will his entire property to his wife and exclude his brothers and sisters if he is mentally competent and no undue influence exits, by complying with the requirements of the law in the execution of the will.—Legal Editor.

MUST KEEP HIGHWAY OPEN

Can a private individual bank logs on the highway? My team became frightened at seeing a pile of logs on the highway and before I could quiet them down again one of them was injured and I wish to know if I can collect damages? Also, if it is against the law to bank logs on the highway I would like to know who to report it to. Thank you.—Reader, Kent County, Mich.

—No private individual or corporation have a legal right to bank logs on a public highway so that they will interfere with public travel. As to whether you could collect damage for injury to your horse this would be a question of facts to be passed upon by a jury after hearing all the evidence in the case. Ordinarily however, I would say that there is an action for damages for such injury. The responsibility of keeping the highway open rests upon the township highway commissioner and chapter 7 of the Highway Law provides the method to be followed by your commissioner to compel the people to remove piles of logs or other matter which may be placed as an encroachment on the public highway.—State Highway Department.

LAW REGARDING HUNTING

A and B each own forty acres adjoining with no fence between. There is a woodlot across one end. A does no hunting and will not allow anyone to hunt on his land, Must he post his land or will a notice published in the county newspaper be sufficient?—L. D. H., Hastings, Mich

The law provided that; "no person shall hunt with firearms or dogs or in any manner in any public park or public game preserve at any time. No person shall hunt with firearms or dogs or in any other manner on enclosed land of another or upon any farm land or farm woodlot connected therewith when notices have been posted on such land by the owner or leasee therein forbidding hunting thereon" If the woodlots are in connection with the farm land and have been posted no one would have a right to hunt thereon. The printing of notices in a public paper is not provided for in the statute. But I am of the opinion that if the person saw the notices in the paper it would be equivalent to the posting on the land.—Legal Editor.

SHARE OF PROPERTY

My stepfather and my mother own real estate. At mothers death, please tell me if I come in for real estate for mother. I claim the property. My stepfather bought the property and owns the deed. Can my stepfather's mother claim my mother's claim? When my mother married my stepfather I was two years old. If I come heir to property for mother's claim and I make my home with them and I am 31 years old and never help him, can he hold mother's claim for my board? —W. H. J., Alpena, Michigan.

—If the real estate is in your mother's name you would inherit it but if in your stepfather's name you would not. Your stepfather's mother, if no other heir nearer, would inherit your stepfather's real estate if he should die before his mother. Unless here was a bargain to pay your board and you lived with your mother you would not be liable for board as it would be presumed ordinarily that you lived with her as a member of the family. There are many questions that would have to be answered before the property rights could be determined from the way you have suggested the property.—Legal Editor.

NOT ENTITLED TO VOTE OR HOLD OFFICE

Can a man vote or hold any office in Michigan who took out his first naturalization papers in another state previous to the 8th of November, 1894?—H. F., Clare, Mich.

—I would be of the opinion that if he was not a resident of the state of Michigan two years and six months before the 8th of November 1894, and had not otherwise completed his citizenship in the United States he would not be entitled to vote and hold office in Michigan.—Legal Editor

MARRIES BEFORE BEING DIVORCED

A certain man married a man under the impression that he was a divorced person, but when the truth was found out, he had not obtained the divorce. Also he married under an assumed name. Would this marrage be held legal in the eyes of the law, or could this girl marry again without going thru any court preceedings? The girl left the man immediately upon finding out she had been deceived. If she should get married should she assume her maiden name or take the name of the man she thought she was marrying? D. E. M., Grand Rapids, Mich.

—You do not state whether the girl left the man before or after he had his divorce. You say she left him as soon as she discovered it but I can not tell whether the discovery was before or after the divorce became operative. It would be dangerous for the girl to act on the theory that she was not lawfully married at the time she left him as there are a number of things to be considered that are not stated in the inquiry. It is advisable for her to ask for a divorce or an anullment of the marriage. If she employs competent counsel he will inform her which to proceed under.—Legal Editor.

LEVYING AGAINST PERSONAL PROPERTY

I am enclosing a notice from the chairman of our township board, and would like to know if there is any such law as he mentioned. Also, why do these roads have to be made when they are not much benefit to farmers, yet the farmer must really what he ought to have and and needs very much to pay for these unnecessary things Am a subscriber to M. B. F.. and sure like it fine, hard to tell which part I like best. —Frank Donaldson, Isabella county,

Resolution of the Millbrook Township Board

"Whereas the funds in our township have become depleted by the return of $6690.00 in the year 1920 and $5300. in 1921, of taxes not paid, and the township being compelled to pay in full on all Covert and Trunk Line Roads, and

"Whereas, under the statue, and the decision of the Supreme Court, it is the duty of the Township Treasurer to levy on personal property of anyone to whom taxes are assessed, if such person has personal property, and sell the same for the taxes and personal tax, and

"Whereas, the Supreme Court has not only held that the Township Treasurer owes a duty to the public

(Continued on page 9.)

THEY HAVE EARNED RE-ELECTION

—all citizens who believe that conscientious service should be rewarded will vote for

CHAS. E. TOWNSEND
For UNITED STATES SENATOR

ALEX. J. GROESBECK
For GOVENOR

Republicans of Michigan Are Proud of Their Records; Let the Facts Speak for Themselves

A RECORD OF ACHIEVEMENT

Sen. Capper, recognized leader of the agricultural bloc, says of Sen. Townsend: During my three years' stay in Washington I have come to regard Sen. Townsend as one of the most INFLUENTIAL and USEFUL members of the Senate. HONEST, COURAGEOUS and ABLE, his influence has increased with the length of his service until he is recognized as one of the leaders on the Republican side of the Chamber.

Among the many measures of benefit to agriculture which Sen. Townsend aided in enacting into law, are the following:

The Co-operative Marketing Law.

Grain Standard Acts.

Federal Farm Loan Act, and many beneficial amendments.

Increased annual appropriation for agricultural experiment stations.

Act to enable secretary of agriculture to investigate and report upon the organization and progress of farmers' institutes and agricultural schools.

Act for acquiring and diffusing among the people of the United States useful information on subjects connected with the marketing and distributing of farm and non-manufactured food products.

Act to make investigation relating to the transportation, storage, preparation, marketing, manufacture and distribution of agricultural food products.

Act directing the War Finance Corporation to take certain action for the relief of the present depression (1921) in agricultural sections of the country.

An act for co-operative agricultural extension work.

Act preventing the manufacture, sale of transportation of adulterated, misbranded, poisonous, or deleterious foods.

Act to provide that there shall be in the year 1925, and once every ten years thereafter, a census of agricultural and live stock which shall show the acreage of farm land, value of domestic animals, etc.

Act providing that labor, agricultural and horticultural organizations shall be exempt from taxation.

AUTHOR NATIONAL HIGHWAY BILL

Of supreme importance to the farmers of Michigan are the efforts of Sen. Townsend to secure Federal aid in the building of trunk line roads in the various states. He is the author of the National Highway Bill which released for Federal Aid Roads the sum of $75,000,000 for the year, 1922. In addition, the postoffice Appropriations Bill largely through Sen. Townsend's influence, provides federal aid to state highways for three years, viz: $50,000,000 for 1923; $65,000,000 for 1924, and $75,000,000 for 1925. This Federal Aid means a great deal to the farmers of Michigan. It brings markets nearer to the producer. It lowers transportation costs. It will make farming more profitable.

FATHER OF DEEP WATERWAYS

Perhaps the greatest service of all which Sen. Townsend has rendered the dear old state is his work in behalf of the Great Lakes to Ocean Deep Waterways project. It was Sen. Townsend who introduced and secured the passage of the bill which authorized the President to enter into agreement with Canada and Great Britain for Joint construction of the waterway, the culmination of which will bring Michigan to the threshold of the world's markets and make the farmers free from their bondage of the railroads and exhorbitant freight rates.

Sen. Townsend's tireless efforts in behalf of the St. Lawrence waterway project entitles him to the thanks and the support of all who will benefit by the project and that means ALL MICHIGAN.

FARMERS, IF YOU WANT TO PROTECT YOUR BEST INTERESTS, BE GUIDED BY SEN. TOWNSEND'S RECORD OF ACHIEVEMENT FOR AGRICULTURE AND HELP TO RE-ELECT HIM ON NOVEMBER 7th.

A BUSINESS ADMINISTRATION

Gov. Groesbeck was elected in 1920 pledged to a program of consolidation of state departments and economy in their management.

As a result of his efforts the State Administrative Board was created and given wide powers over the various state departments. Hitherto every State Department was a separate government unto itself. It was responsible to no central authority. It was about like your farm would be if you divided it up according to its different branches of dairying, fruit growing, hog raising, etc., and putting a man in charge of each branch who was his own boss and not accountable to you or anybody else.

Gov. Groesbeck thought that some one individual,—and that individual the Governor who is elected by all the people,—should know how the people's business was being carried on in the several branches of state government.

That is the purpose of the State Administrative Board which consists of the Governor and the heads of the departments. They meet at regular periods and indulge in a round-table discussion of the needs and plans of the different departments. Thus, the Governor learns all about what is going on in each department and each department head learns whats is going on in every other department.

Result: There is now co-ordination in place of division; order instead of confusion; economy in purchasing and administration where there was often extravagance and duplication.

THE STATE OF MICHIGAN IS BEING RUN ON THE BEST BUSINESS BASIS IN ITS HISTORY, AND GOVERNOR GROESBECK IS ENTITLED TO THE CREDIT.

GOV. GROESBECK NOT RESPONSIBLE FOR HIGH TAXES

Gov. Groesbeck's political enemies charge him with extravagance and blame him for high taxes. AGAIN, LET THE FACTS SPEAK FOR THEMSELVES.

The State Tax Levy for 1922 is the LOWEST since 1918.

The general tax levy for

1919	was	$17,430,895.73
1920	”	17,378,328.35
1921	”	20,441,333.79
1922	”	17,300,843.94

The increase for 1921 was due to an interest item of nearly two and a half million dollars for interest on Soldier Bonus bonds which the people voted; to a deficit of nearly a quarter of a million dollars in Normal School appropriations; an increase in the operating expenses of the University and the M. A. C., requiring the levying of higher mill rates.

As a result of Gov. Groesbeck's economy program which was put into effect AS SOON AS HUMANLY POSSIBLE after his election, there has been a NET DECREASE in administration and operation expenditures of $1,839,617.63, a DIRECT SAVING to the taxpayers.

The savings in administration and operation under the simplified governmental machinery provided by the Legislature in 1921, apply to almost every state agency. As an instance, in 1920-21 the state oil inspection cost $82,000, and the fees collected were nearly $81,000. This year the fees were $100,166.30 and the cost of inspection was only $18,000. AND SO IT HAS BEEN ALL THE WAY DOWN THE LINE.

Will you, Mr. Taxpayer, believe the stories of Gov. Groesbeck's political enemies WITHOUT INVESTIGATION, or WILL YOU BE GUIDED BY THE FACTS?

Vote for Chas. E. Townsend for United States Senator and Alex. J. Groesbeck for Governor, on the Republican Ticket on November 7th. They Have Earned Re-election.

What the Neighbors Say

THE GASOLINE TAX

Editor's Note:—The proposal to put a tax on gasoline is one in which every user of the fuel should, of course, be interested. Such views as we have been able to get from our readers indicate that the majority of them favor such a tax, but probably not all who favor the tax own automobiles or other gasoline burning devices. The automobile associations are opposed to the tax, and the following communication from Mrs. Sidney D. Waldron, president of the Detroit Automobile Association, contains the reasons. We should like to have a thorough discussion of the subject in these columns and invite letters from our readers. All communications will be published without comment except as may be necessary to correct a misstatement of facts.—Editor.

I TAKE pleasure in sending you, under separate cover, marked copies of the Detroit Motor News, setting forth our reasons for oppos-the addition of a gasoline tax, on top of the present $7,000,000.00 paid by the motorist in license fees, etc. These articles explain themselves. I would particularly call your attention to the article setting forth the fair market value of all motor vehicles in the State of Michigan, as of December 31st, 1921. This is the first time this data has ever been worked out, and the conclusions are worthy of recognition in your publication.

The Detroit Automobile Club believes that the part of road building, which is permanent—that is, subgrade, drainage, ditches, bridges, etc., etc.,—or in fact all of the road except the surface, is an integral asset to the community, county, state and nation. We believe that the cost of this permanent construction should be spread over the community, county, state and Federal Government, as their respective interest may be determined.

We believe that hard-surfaced roads, such as are today being laid down by the Michigan State Highway Department, may, under proper conditions of maintenance, be considered as permanent and the expense pro-rated accordingly over quite a long period.

We believe there is a great difference between the use of a road, and the wear of a road. We have a great many miles of concrete roads in Michigan. A million Fords a month may run over these roads, and use them to their full capacity with no appreciable wear, except to the Fords. A single vehicle, loaded to the fifteen ton limit allowed by our state law, would in a single trip subject the road to infinitely greater stresses and destruction than these Fords in a generation. The consumption of gasoline bears practically no relation at all to the destruction of roads. It is a measure of use, not a measure of wear.

We believe that the present law is the best law. It reaches every man whose motor vehicle uses the highway. It imposes a tax burden in proportion to horsepower and weight. It is true that since this law was enacted the use of heavy motor vehicles upon our state highways has developed and increased to a point where the law may perhaps require an amendment to enable it to properly fit present conditions.

There is no condition, however, that will be met by the proposed gasoline tax, that cannot be better met by amending the existing statute.

For quotation in brief the above is summed up as follows:

1. Road construction may be divided into the sub-grade, sub-grade ditching, bridges, culverts, etc., which are permanent, and the road surface, which may or may not be premanent.

2. All that part of road construction which is permanent, and consequently is an integral asset to the community, state and nation that it serves, should be paid for by each in proportion as their interest is determined. Maintenance of the road is an expense that should be paid for by those who make the maintenance necessary.

Road wear may accompany road use, but road use does not necessarily mean road wear. A million Fords passing over Woodward Avenue between Pontiac and Detroit would represent enormous use, but no wear, except to the Fords. A single trip of a fifteen-ton load, as allowed by our State law would represent a dozen times more injury to the road than could be done by all the Fords in existence.

4. Measurement of gasoline consumed bears no relation at all to highway destruction.

5. Our present law is an excellent law in principle. Anything that can be done with the gasoline tax law can be done with our present law. If our present system, which reaches the vehicle itself, is not at present spreading the burden fairly where it belongs, then it should be amended to work fairly and uniformly, but we cannot endorse a new source of revenue.

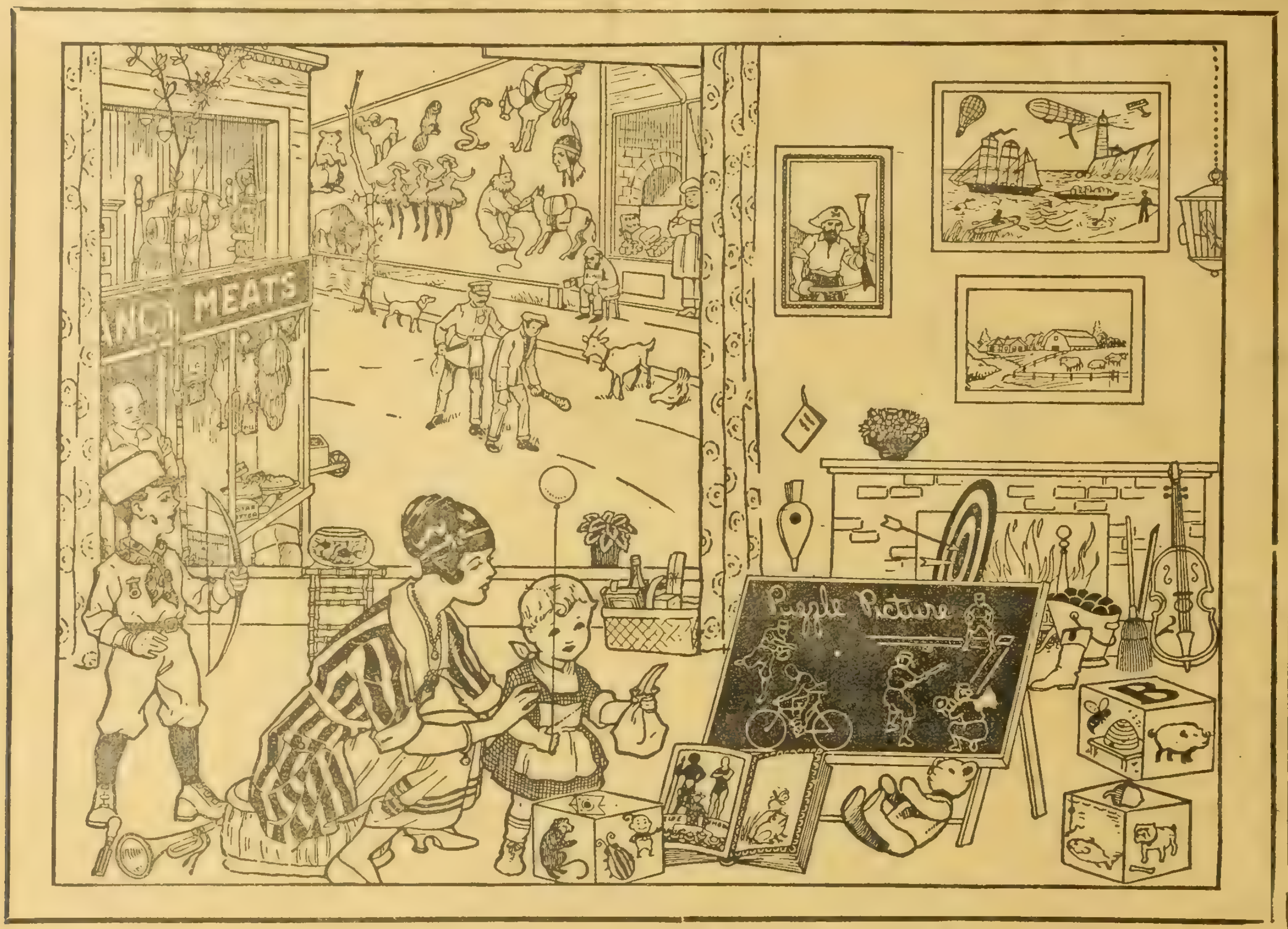
6. Motor vehicles in Michigan at the present time are putting into the State Treasury, in license fees, etc., 5.1 per cent of the fair market value of these motor vehicles. This is at present more than sufficient to meet and does provide a considerable sum to be applied against new construction.—Sidney D. Waldon, President, Detroit Motor Club.

THE MONEY QUESTION

I NEVER had a chance to go to college or even to patronize the little school house very much, so would like to ask your opinion on a few things.

I claim the Civil war debt was never paid. It was fought on a cheap dollar and paid on a dear one. If I borrow 20 bushels of wheat of you and you said when I got it last harvest wheat was $3, but now it is only $1 or less, then I will have to pay back three bushels for each one I borrowed. In other words if I borrow $100 for any length of time and the lenders juggle the debt so that I am paying back two dollars for one, what extra money they get from my note or mortgage belongs to me, and I and my heirs will be paying as long as the world stands. I am just trying to tell why the debt from the world war will never be paid. It was fought on a 25-cent dollar and the debt must be paid with a 100-cent dollar.—B. W. B., Fergus, Mich.

—We try not to think too much about this money question. It's hard on the brain. Causes night



HOW MANY OBJECTS CAN YOU FIND IN THIS PICTURE THAT BEGIN WITH "B"?

You and the Family take tonight off and find all the objects in this picture that begin with "B"!

Can YOU find a Book, a Bear, a Ball, a Badge in this Puzzle Picture? If you can, you can find all of the correct objects and if you do, you will be in line for one of the many CASH prizes The Michigan Business Farmer will distribute after November 25th., 1922.

Thats the way to get started in this friendly contest, in which the prizes run up to a First Prize of $500.00 in cash!

Every member of your family can help you, but the list must be sent in by one person. If you did not read the announcement on page 11, of the September 30th., 1922 issue of The Michigan Business Farmer, look it up or write a postal today for a copy of all the rules and prizes—sent free on request.

Don't send in your list of objects, until you have read all the rules.

But you can start tonight, even if you haven't all the rules, to write down the names of the objects which appear in the picture and correct your list before you send it in, after you have read the rules.

YOU DO NOT HAVE TO SPEND A PENNY OR DO ANYTHING EXCEPT FIND THE MOST CORRECT LIST OF OBJECTS BEGINNING WITH THE LETTER "B" TO WIN A FIRST PRIZE!

But look up the September 30th. issue or send for a proof of the full page announcement which appeared in that issue, which we will gladly send you free.

THIS IS OUR SECOND
PUZZLE CONTEST

$500
FIRST
PRIZE

Last year Mrs. A. E., Tannar Spring Harbor, Michigan, was a First Prize winner, in a contest exactly similar to this one—read what she wrote us after she received the prize money:

"Spring Harbor, Mich., Jan. 29, 1922. Mr. G. Slocum, Mt. Clemens, Mich. Dear Sir—I am pleased to answer your questions concerning my method of winning first prize in 'S' contest, and hope it will be of benefit to others in answering similar puzzles.

So many have congratulated me on my good luck that I have wondered if it was just that I would like to think the time and thought I put on it had some effect.

I have had letters from people asking me how I arranged my list and the number of words it contained, I had no special arrangement except as it was most convenient for myself. I divided the picture into groups and wrote down the words accordingly. We are farmers trying to pay for our farm on contract and this year has been discouraging, so you may know the prize money was most acceptable. It at least gave us courage to keep working. I have wanted a piano ever since leaving home but haven't felt that we could buy one until we are sure of our home. I didn't want to 'fiddle while Rome burned' so I have no piano yet but have a lovely slip of paper which says something about one year from date and interest at five per cent, so I am consoled.

Most people have the opinion that the puzzle contests are not conducted honestly so I would like to assure those interested that I am entirely a stranger to the staff of the Business Farmer and that they were most courteous and did exactly as the rules promised. With many thanks, Yours truly, Mrs. A. E. Tannar.

All you have to do to get in line for the prize money is to find all of the objects in the above picture that begin with "B"—start right away and if you cannot find the September 30th, issue in which the full announcement appeared, write to-day to CONTEST MANAGER, OF THE MICHIGAN BUSINESS FARMER, MT. CLEMENS, MICHIGAN.

mare, lands people in the insane asylum etc. There are no doubt among our readers any number of folks who have made a study of such financial knots as this and will be glad to throw some additional light on the subject. The question is, "Will the world war debt ever be paid? If not, why not?"—Editor.

"LET'S FIX OUR PRICE," SAYS EATON FARMER

HERE'S a theory I have been thinking about and would like to see discussed in M. B. F. Every farmer would have to help make the plan work, but why not set a price on our stuff and no one sell for any less? The details of the scheme would be as follows:

1. The price would, of course, be a profitable one, based on the average cost of production, interest, taxes, unavoidable losses over a period of years, management, etc.
2. Every farmer equipped to store about two years' crops,—letting them on to the market only so fast as the market would absorb them at the set price. Every man would get his share, not some men all and others none.
3. An organization strong enough to hold every farmer to the agreement.
4. Tariff just high enough so that no goods could be sold at less than farmers' price.
5. In case of a bumper crop,—store it. Sell part this year, some more the next, just enough to supply the trade. Let the farms rest, fix the fences, etc., go camping, anything you want to, you still have the stuff to sell and at a profit. When your supply gets low, raise some more. The country will always have a surplus in times of need or disaster or crop shortage which cannot harm the farmer. The farmer would be in a position to take advantage of big crops instead of ruining his market. If a man could not produce a crop at the set price let him raise something else.
6. An arrangement to get the stuff to the consumer at a reasonable commission and transportation charge. Abolish speculation and gambling.
7. Changing conditions might make it necessary to change the price after each period of years, 5 or 10, taking into consideration the supply on hand and the changed cost of production.
8. Nothing but best quality of goods would be put on the market.
9. The surplus of all perishable goods would be preserved to be marketed in years of scarcity. There would be a larger consumption as prices would never be beyond the reach of anyone. It would be up to the farmer to keep their cost of production below the set price. I believe a family as fast as able ought to stock up with about a years supply of food and other things so as to be supplied in case of disasters of an kind.

This plan needs much perfecting I know and will be glad to explain or add to upon request so far as possible. Others perhaps could improve it more than I. Let me know what you think of it at least. No big money concern to go broke, just our dues to keep the organization to direct the affairs—Luman Klink, Eaton county, Mich.

—It's a great idea. I can see but one objection to it. It won't work. It would be a wonderful thing for the farmer,—for the country,—if your theory could be put into practice, for it would insure continuous prosperity to agriculture, and to all. But there are several reasons why we don't believe the scheme would work. One of them is this: Necessity is the first law of nature. There are plenty of farmers who can afford to hold their crops until they want to sell them—or until the consumer is willing to pay the price they want for them. But just think of the hundreds of thousands who can't wait Think of the loans that have to be paid, the interest on mortgages that must be taken care of, clothing for the children, supplies for the farm,—a score of demands upon the farmer's purse which must be met just as soon as the crops can be harvested and sold. So then, I think, the necessity of the many would force them to sell often at prices below that agreed upon as the fair and profitable price. Experience has taught us that it is hard to make sacrifices to gain a desired end. How much harder it would be to keep them together when immediate wants seemed more important than ultimate gain? Another reason why the scheme would probably fail is because few farmers can agree on the cost of production. The level at which the majority of farmers can produce a crop at a profit is too low for many and too high for others. While a set price would automatically eliminate those whose costs are higher what will you do with those whose costs are lower? What possible inducement can you offer a man to hold a crop for a set price which he may never receive if he can secure a profit at a less price of which he is sure? Variations of the ideal marketing plan of which you and others have dreamed will some day be seen but they will be accomplished by education and the willing co-operation of the majority instead of by any hard and fast rules which may work a hardship on many. We would like to hear from other readers on this subject. —Editor.

LEVYING AGAINST PERSONAL PROPERTY

(Continued from page 6.)

to collect all taxes assessed on his roll if possible, but if he neglects to do so, where he can levy and collect, he is liable to damages to any person who might have a claim against that particular piece of land, therefore

"Be it Resolved by the Board of Millbrook Township, Mecosta County, Michigan, that we expect the Treasurer to collect all the taxes assessed on the roll for 1922 and therefore we will hold him responsible for all taxes where he could have levied on any personal property. The cost of levy and sale coming from the property so attached.—M. J. Lambert, Chairman of Millbrook Township Board.

—Yes, the law provides that in case of failure of a land-holder to pay his taxes within the prescribed time, the treasurer may levy against his personal property. The tax problem has reaches serious proportions. Farmers must have relief and soon. The Covert Road law is blamed for about 90 per cent of the high taxes and there is a concerted movement afoot to bring about its repeal at the next session of the legislature. The State Highway Commissioner is opposed to its repeal, and he exerts a powerful influence in legislation on road affairs. However, he has announced himself in favor of amending the law to reduce the burden on property owners who are assessed for benefits, and it is probable that steps will be taken at the next session to bring farmers relief. Likewise additional sources of revenue will be sought and likely secured for financing the construction and maintenance of trunk line roads As you say, the benefit of trunk line roads to farmers is questionable, and legislation will be introduced to make the automobile pay a much larger share of the cost of these roads than it is now doing.—Editor

IS ELIGBLE FOR WIDOW'S PENSION

I am writing you in regard to the widow's pension. I am not a widow, but the father has deserted the children and I am not well enough to work out much, and have to depend on other people and what washing I can get to do. I have two girls. One is 14 years and the other 6. The oldest is not strong, and has to be in school. She is only in the sixth grade. The little girl needs doctor's care now on account of kidney trouble but I am not able to hire a doctor No ones knows where their father is. Will you please let me know if I am eligible to a pension and if so who would be the proper authorities to apply to?—Mrs. C. W. Wexford County, Mich.

—From the facts given I am of the opinion that you are entitled to the so-called "widow's pension." Go to the Judge of Probate at Cadillac, your county seat, and relate the facts to him. If you can convince him that you come within the act mentioned he is authorized to grant you a pension of not exceeding $2 a week for each of your children.—Editor.

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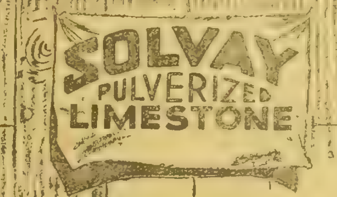

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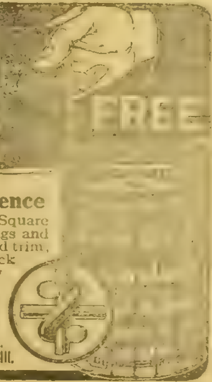

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SYNOPSIS

JOANNE GRAY is one of the passengers on the train that connects "The Horde" with the civilized world. For eighteen hours she has been riding steadily bound for Tete Jaune Cache, the home of "The Horde", where she has no friends and all will be strange to her. The train stops at a town composed of several tents and learning that the train will not leave for two hours she goes in search of food and a bath. She is directed to "Bill's Shack" and it is here where she meets Bill Quade, who not only owns and operates "Bill's Shack" but is also leader of the lawless men of the town. Quade says he has a room she can rent and that he will show it to her. As they pass of the room a newcomer enters the doorway leading off the street. The newcomer is John Aldous, a well known novelist. He sees the strange girl enter the place and believes she has made a mistake and as he stands in the doorway his eyes rest upon the curtained doorway through which the girl and Quade have passed. In but a moment the girl steps out her face flaming and eyes flashing. Quade follows her apologetically. He starts to offer the girl some money but before he can do so Aldous steps to the girls side and floors Quade with a terrific blow. Aldous hurries the girl away from the scene to the home of friends. He then asks the girl to be his guest at supper in his cabin. She accepts.

CHAPTER VI

SILENT, his head bowed a little, John Aldous stood before her after these words. A slight noise outside gave him the pretext to turn to the door. She was going to Tete Jaune—to find her husband! He had not expected that. For a breath, as he looked toward the bush, his mind was in a strange daze. A dozen times she had given him to understand there was no husband, father, or brother waiting for her at the rail-end. She told him that she was alone—without friends. And now, like a confession, those words had come strangely from his lips.

What he had heard was one of Otto's pack-horses coming down to drink. He turned toward her again.

Joanne stood with her back still to the table. She had slipped a hand into the front of her dress and had drawn forth a long thick envelope. As she opened it, Aldous saw that it contained banknotes. From among these she picked out a bit of paper and offered it to him.

"That will explain-partly," she said.

It was a newspaper clipping, worn and faded, with a date two years old. It had apparently been cut from an English paper, told briefly of the tragic death of Mortimer FitzHugh, son of a prominent Devonshire family, who had lost his life while on a hunting trip in the British Columbia Wilds.

"He was my husband," said Joanne, as Aldous finished. "Until six months ago I had no reason to believe that the statement in the paper was not true. Then—an acquaintance came out here hunting. He returned with a strange story. He declared that he had seen Mr. FitzHugh alive. Now you know why I am here. I had not meant to tell you. It places me in a light which I do not think I can explain away—just now. I have come to prove or disprove his death. If he is alive—"

For the first time she betrayed the struggle she was making against some powerful emotion which she was fighting to repress. Her face had paled. She stopped herself with a quick breath, as if knowing that she had already gone too far.

"I guess I understand," said Aldous. "For some reason your anxiety is not that you find him dead, Ladygray, but that you may find him alive."

"Yes—yes, that is it. But you must not urge me farther. It is a terrible thing to say. You will think I am not a woman, but a fiend. And I am your guest. You have invited me to supper. And—the potatoes are ready, and there is no fire!"

She had forced a smile back to her lips. John Aldous whirled toward the door.

"I will have the partridges in two seconds!" he cried. "I dropped them when the horses went through the rapids."

The oppressive and crushing effect of Joanne's first mention of a husband was gone. He made no effort to explain or analyze the two sudden changes that swept over him. He accepted them as facts, and that was all. Where a few moments before there had been the leaden grip of something that seemed to be physically choking him, there was now again the strange buoyancy with which he had gone to the Otto tent. He began to whistle as he went to the river's edge. He was whistling when he returned, the two birds in his hand. Joanne was waiting for him in the door Again her face was a faintly tinted vision of tranquil lovliness her eyes were again like the wonderful blue pools over the sunit mountains. She smiled as he came up. He was amazed—not that she had recovered so completely from the emotional excitement that had racked her, but because she betrayed in no way a sign of grief—of suspense or of anxiety. A few minutes ago he had heard her singing. He could almost believe that her lips might break into song again as she stood there

From that moment until the sun sank behind the mountains and gray shadows began to creep in where the light had been, there was no other reference to the things that had been said since Joanne's arrival. For the first time in years John Aldous completely forgot his work. He was lost in Joanne With the tremendous reaction that was working out in him she became more and more wonderful to him with each breath that he drew. He made no effort to control the change that was sweeping through him. His one effort was to keep it from being too apparent to her.

The way in which Joanne had taken his invitation was as delightful as it was new to him. She had become both guest and hostess. With her lovely arms bared halfway to the shoulders she rolled out a batch of biscuits. "Hot biscuits go so well with marmalade," she told him. He built a fire. Beyond that, and bringing in the water, she gave him to understand that his duties were at an end, and that he could smoke while she prepared the supper. With the beginning of dusk he closed the cabin door that he might have an excuse for lighting the big hanging lamp a little earlier. He had imagined how its warm glow would flood down upon the thick soft coils of her shining hair.

Every fibre in him throbbed with a keen and exquisite satisfaction as he sat down opposite her. During the meal he looked into the quiet, velvety blue of her eyes a hundred times. He found it a delightful sensation to talk to her and look into those eyes at the same time. He told her more about himself than he had ever told another soul. It was she who spoke first of the manuscript upon which he was working. He had spoken of certain adventures that had led up to the writing of one of his books.

"And this last last book you are writing, which you call 'Mothers,'" she said. "Is it to be like 'Fair Play?'"

"It was to have been the last of the triology. But it won't be now, Ladygray. I've changed my mind."

"But it is so nearly finished, you say?"

"I would have completed it this week. I was rushing it to an end at fever heat when—you came."

He saw the troubled look in her eyes, and hastened to add:

"Lets us no talk about that manuscript, Ladygray. Some day I will let you read it. At first I was unreasonably disturbed because I thought that I must finish it within a week from to-day. I start out on a new adventure then—a strange adventure, into the North."

"That means—the wild country?" she asked. "Up there in the North—there are no people?"

"An occasional Indian, perhaps a prospector now and then," he said. "Last year I travelled a hundred and twenty-seven days without seeing a human face except that of my Cree companion."

She had leaned a little over the table, and was looking at him intently, her eyes shining.

"That is why I have understood you, and read between the printed lines in your books," she said. "If I had been a man, I would have been a great deal like you. I love those things—lonliness, emptiness, the great spaces where you hear only the whisperings of the winds and the fall of no other feet but your own. Oh, I should have been a man! It was born in me. And I loved it—loved it."

A poignant grief had shot into her eyes. Her voice broke almost in a sob. Amazed, he looked at her in silence across the table.

"You have lived that life, Ladygray?" he said after a moment. "You have seen it?"

"Yes," she nodded, clasping and unclasping her slim white hands. "For years and years, perhaps even more than you, John Aldous." I was born in it. And it was my life for a long time—until my father died." She paused, and he saw her struggling to subdue the quivering throb in her throat. "We were inseparable," she went on, her voice becoming suddenly strange and quiet. "He was father, mother—everything to me. It was too wonderful. Together we hunted out the mysteries and the strange things in the out-of-the-way places of the earth. It was his passion. He had given birth to it in me. I was always with him, everywhere. And then he died, soon after his discovery of that wonderful buried city of Mindano, in the heart of Africa. Perhaps you have read——"

"Good God," breathed Aldous, so low that his voice did not rise above a whisper. "Joanne— Ladygray—you are not speaking of Daniel Gray—Sir Daniel Gray, the Egyptologist, the antiquarian who uncovered the secrets of an ancient and wonderful civilization in the heart of darkest Africa?"

"Yes."

She bowed her head.

Like one in a dream John Aldous rose from his chair and went to her. He seized her hands and drew her up so that they stood face to face. Again that strange and beautiful calmness filled her eyes.

"Our trials have strangely crossed, Lady Joanne," he said. "They have been crossing—for years. While Sir Daniel was at Murja, on the eve of his great discovery, I was at St. Louis on the Sengal coast. I slept in that little Cape Verde hotel, in the low whitewashed room overlooking the sea. The proprietor told me that Sir Daniel had occupied it before me, and I found a broken fountain pen in the drawer of that black teakwood desk, with the carved serpent's head. And I was at Gampola another time, headed for the interion of Ceylon when I learned that I was travelling again one of Sir Daniel's trails. And you were with him!"

"Always," said Joanne.

For a few moments they looked steadily into each other's eyes. Swiftly, strangely, the world was bridging itself for them. Their minds swept back swiftly as the fire in a thunder sky. They were no longer friends of a day. The grip of Aldous' hand tightened. A hundred things sprang to his lips. Before he could speak, he saw a sudden, startled change leap into Joanne's face. She had turned her face a little, so that she was looking toward the window. A frightened cry broke from her lips. Aldous whirled about. There was nothing there. He looked at Joanne again. She was white and trembling. Her hands were clutched at her breast. Her eyes, big and dark and staring, were still fixed on the window.

"That man!" she panted. "His face was there—against the glass—like a devil's!"

"Quade's!"

"Yes."

She caught his arm as he sprang toward the door.

"Stop!" she cried. "You mustn't go out——"

For a moment he turned at the door. We was as she had seen him in Quade's place, terribly cool, a strange smile on his lips. His eyes were gray, smiling steel.

"Close the door after me and lock it until I return," he said. "You are the first woman guest I ever had, Ladygray. I cannot allow you to be insulted!"

As he went out she saw him slip something from his pocket. She caught a glitter of it in the lamp-glow.

CHAPTER VII

It was in the blood of John Aldous to kill Quade. He ran with the quickness of a hare around the end of the cabin, past the window, and then stopped to listen, his automatic in his hand, his eye piercing the gloom for some moving shadow. He had not counted on an instant's hesitation. He would shoot Quade, for he knew why the mottled beast had been at the window. Steven's boy had been right. Quade was after Joanne. His ugly soul was disrupted with a desire to possess her, and Aldous knew that when roused by passion he was more like a devil-fish than a man—a creeping, slimy, and night-seeking creature who had not only the power of the underworld back of him, but wealth as well. He did not think of him as a man as he stood listening, but as a beast. He was ready to shoot. But he saw nothing. He heard no sound that could have been made by a stumbling foot or a moving body. An hour later, the moon would have been up, but it was dark now except for the stars. He heard the hoot of an owl a hundred yards away. Out in the river something splashed. From the timber beyond Buffalo Prairie came the yapping of a coyote. For five minutes he stood as silent as one of the rocks behind him. He realized that to go on—to seek blindly for Quade in the darkness, would be folly. He went back, tapped at the door, and re-entered the cabin when Joanne threw back the lock.

She was still pale. Her eyes were bright.

"I was coming—in a moment," she said. "I was beginning to fear that—"

"—he had struck me down in the dark?" added Aldous, as she hesitated. "Well, he would like to do just that, Joanne." Unconsciously her name had slipped from him. It seemed the most natural thing in the world for him to call her Joanne now. "Is it necessary for me to tell you what this man Quade is—why he was looking through the window?"

She shuddered.

"No—no—I understand!"

"Only partly," continued Aldous, his face white and set. "It is necessary that you should know more than you have guessed, for your own protection. If you were like most other women I wouldn't tell you the truth, but would try to shield you from it. As it is you should know. There is only one other man in the Rocky Mountains more dangerous that Bill Quade. He is Culver Rann, up at Tete Jaune. They are partners—partners in crime, in sin, in everything that is bad and that brings them gold. Their influence among the rougher elements along the line of rail is complete. They are so strongly entrenched that they have put contractors out of business because they would not submit to blackmail. The few harmless police we have following the steel have been unable to touch them. They have cleaned up hundreds of thousands, chiefly in three things—blackmail, whisky, and women. Quade is the viler of the two. He is like a horrible beast. Culver Rann makes me think of a sleek and shining serpent. But it is this man Quade—"

He found it almost impossible to go on with Joanne's blue eyes gazing so steadily into his.

—"whom we have made our enemy," she finished for him.

"Yes—and more than that," he said, partly turning his head away. "You cannot go to Tete Jaune alone, Joanne. You must go nowhere alone. If you do——"

"What will happen?"

"I don't know. Perhaps nothing would happen. But you cannot go alone. I am going to take you back to Mrs. Otto now. And tomorrow I shall go on to Tete Jaune with you. It is fortunate that I have a place up there to which I can take you and where you will be safe."

As they were preparing to go, Joanne glanced ruefully at the table.

"I am ashamed to leave the dishes in that mess," she said.

He laughed, and tucked her hand under his arm as they went through the door. When they had passed through the little clearing, and the darkness of the spruce and balsam walls shut them in, he took her hand.

"It is dark and you may stumble," he apologized. "This isn't much like the shell plaza in front of the Cape Verde, is it?"

"No. Did you pick up any of the little red bloodshells? I did, and they made me shiver. There were strange stories associated with them."

He knew that she was staring ahead into the blank wall of gloom as she spoke, and that it was not thought of the bloodshells, but of Quade, that made her fingers close more tightly about his own. His right hand was gripping the butt of his automatic. Every nerve in him was on the alert, yet she could detect nothing of caution or preparedness in his careless voice.

"The bloodstones didn't trouble me," he answered. "I can't remember anything that upsets me more than the snakes. I am a terrible coward when it comes to anything that crawls without feet. I will run from a snake no longer than your little finger—in fact, I'm just as scared of a little grass snake as I am of a python. It's the thing, and not the size, that horrifies me. Once I jumped out of a boat into ten feet of water because my companions caught an eel on his line, and perssted in the argument that it was a fish. Thank Heaven we don't have snakes up here. I've seen only three of four in all my experience in the Northland."

"She laughed softly in spite of the uneasy thrill the night held for her.

"It is hard for me to imagine you being afraid,' she aid. "And yet if you are afraid I know it would be of just some little thing like that. My father was one of the bravest men in the world, and a hundred times I have seen him show horror at sight of a spider. If you were afraid of snakes, why did you go up the Gampola, in Ceylon?"

"I didn't know the snakes were there," he chuckled. "I hadn't dreamed there were a half so many snakes in the whole world as there were along that confounded river. I slept sitting up, dressed in rubber wading boots that come to my waste, and wore thick leather gloves. I got out of the country at the earliest possible moment."

When they enterend the edge of the Miette clearing and saw the glow of lights ahead of them, Aldous caught the sudden upturn of his companion's face, laughing at him in the starlight.

"Kind' thoughtful John Aldous!" she whispered as if to herself. "How nice of you it was to talk of such pleasant things while we were coming through that black dreadful swamp—with a Bill Quade waiting for us on the side!"

A low ripple of laughter broke from her lips, and he stopped dead in his tracks, forgetting to put the automatic back in his pocket. At sight of it the amusement died in her face. She caught his arm, and one of her hands siezed the cold steel of the pistol.

"Would he—dare?" she demanded.

"You can't tell," replied Aldous, putting the gun in his pocket. "And that was a creepy sort of conversation to load you down with, wasn't it, Ladygray? I imagine you'll catch me in all sorts of blunders like that." He pointed ahead. "There's Mrs. Otto now. She's looking this way and wondering with all her big heart if you ought not to be at home and in bed."

The door of the Otto home was wide open, and silhouetted in the flood of light was the good-natured Scotch-woman. Aldous gave the whistling signal which she and her menfolk always recognized, and hurrie d on with Joanne.

Before they had quite reached the tent-house, Joanne put a detaining hand on his arm.

"I don't want you to go back to the cabin tonight," she said. "The face at the window—was terrible. I am afraid. I don't want you to be there alone."

(To be continued.)

FUR DEPARTMENT

Edited by A. R. HARDING, America's Foremost Author and Trapper

QUESTIONS INVITED

NEW YORK FUR SALES

QUANTITIES of some of the staple fur offered at the auction held in New York last week in in September was as follows: Muskrat, 260,000; wolf, 10,750: otter, 4,150; skunk, 98,000; badger, 8,250; cross fox, 340; silver fox, 348; red fox, 21,550: gray fox, 9,700; lynx, 7,700; beaver, 10,900; opossum, 167,000; mink, 55,000; civet cat, 12,500; wild cat, 21,000; raccoon, 31,000.

Results compared with April, when last previous sale was held were as follows:

Wolf, northern, 20 per cent higher; wolf, southern, 10 per cent higher; marten, 20 per cent higher; muskrat, northern, 10 per cent higher; muskrat, southern 35 per cent higher; ermine, (weasel) 25 per cent higher; mole, 25 per cent higher; wolverine, no change; fisher, 10 per cent higher; bear, black 15 per cent higher, otter, no change; beaver, 5 per cent higher; skunk, 20 per cent higher; red fox, no change; gray fox no change; cross fox, 10 per cent higher; silver fox, best ¼ and ½, 15 per cent higher; silver fox, black silvery and low, no change; house cat, 25 per cent higher; oopssum, 25 per cent higher; badger, 10 per cent higher; lynx, no change.

Present prices being paid for raw furs are high in comparison with hides, wool and many other farm products indicating much hunting and trapping when the season opens November 1.

MICHIGAN FUR LAWS

THE open season on otter, mink, fisher, marten, raccoon, skunk, and muskrat is November 1 to March 31. Bear, wolf, coyote, fox, lynx and wildcat are not protected at any time.

Beaver season is closed until 1925. Houses or dams of fur animals protected at all times. Fur animals, except beaver, may be destroyed under permit from director, on one's own premises to protect property, but hides must be properly cared for and turned over to the director at expiration of permit. Unlawful to trap on State game preserve or to trap beaver, badger or muskrat, in and within 2 miles of any city public park containing over 200 acres, of which 150 acres or more are woodland.

Unlawful to use spears, explosives, chemicals, mechanical devices, or smokers to drive animals from their holes or homes; to destroy, disturb, or molest any beaver, skunk, or muskrat houses or holes; to shoot muskrat except with a .22 caliber rifle, or not to set a trap within 6 feet of a muskrat house or hole.

Resident license, $1.00; non-resident, $10.00; issued by county clerk. A hunting icense also permits the holder to trap fur animals, except beaver. Minor children under 17 years of age may hunt or trap during open season on the inclosed lands of their parents upon which they live, without a license. License to hunt or trap on other lands issued to minors over 12 years and under 17 on application of parents or guardian, but such licensed minors while hunting or trapping must be accompanied by parent or guardian. Aliens prohibited from hunting or taking any wild animals in state.

Possession of the carcass or skin of fur animals killed in closed season prohibited. No restriction on skins legally taken, possessed, or tagged.

Annual license required to engage in raising fur animals, price $5.00. Live animals and skins raised in captivity must be tagged (fee 5 cents for each tag.)

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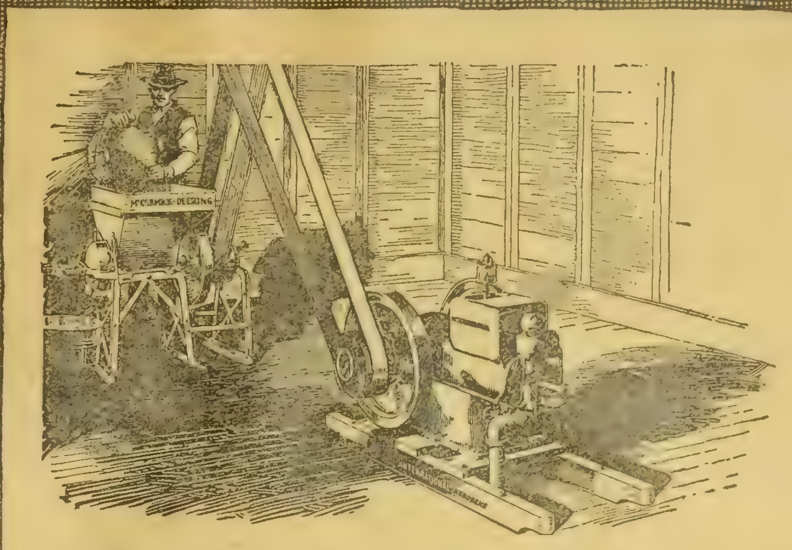

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We will not knowingly accept the advertising of any person or firm who we do not believe to be thoroughly honest and reliable. Should any reader have any cause for complaint against any advertiser in these columns, the publisher would appreciate an immediate letter bringing all facts to light. In every case when writing say: "I saw your advertisement in The Michigan Business Farmer!" It will guarantee honest dealing.

Entered as second-class matter, at post-office, Mt. Clemens, Mich.

"The Farm Paper of Service"

That Soil Survey

THERE is in progress today in Charlevoix county a survey of soils which is about the last word in government interference with private rights. A corps of "experts" started in that county on June 17th to examine the soil and report to the state the best purposes for which they THINK it is adapted. These findings will be published under the official seal of the state and will be the final authority on the character and availibility of those lands.

Providing the theorists who are responsible for the survey do not meet with too much opposition they intend to carry it into every county of Michigan, and will not rest until a description of every section of land is tabulated and filed.

In the future a man who desires to buy either improved or unimproved land in Michigan will not have to go to the bother of looking at the land. He will simply send to Lansing and sooner or later will receive a history of the identical piece of land he is interested in. And if the information says the land is no good for agricultural purposes, of course he will not buy and the farmer who has been raising good crops on the land for twenty or thirty years will lose his sale.

If the idea is a good one, why stop with farm lands? Why not extend it to the commodities we buy, to the farmers' live stock, to the business locations in every city, and even to human beings?

Think of the people who have bought spavined horses and cows with crippled udders. The state ought to put a stop to it. Let all live stock be examined for flaws, numbered and registered with the state. Then when John Jones wants to buy a cow of Sam Smith all he does is to write to Lansing and gets a report on cow No. 1,234,567. The report says the cow has a scar two inches long on the inside of her left hind leg. And so Jones is saved from being swindled.

And think of the unsuspecting swains who marry maids with glass eyes and bow-legs. It's an outrage. Let the state step in. Then when the love-lorn youth desires the hand of a young women he writes to Lansing for a report on her markings and pedigree. Horrors! "No. 7,654,321 has web feet and a mole on right knee. Great, great granduncle once arrested for stealing a pig."

There are other advantages to the scheme which are quite too numerous to mention, and most splendid of all the "cost isn't much." The "experts" up in Charlevoix county have figured out that a soil survey of all Michigan will not cost to exceed 10 cents per acre or $3,681,900 for the entire state. And the cost of registering animals and people ought to be done for even less, say 5 cents a head, which really makes the whole thing quite reasonable, considering the large number of people to whom the scheme would give employment. In fact, it is possible that the thing could be carried to such an extent as to provide a job for everyone at state expense.

Returning to the serious aspects of the soil survey it may have some value, but in the main it appears impractical and altogether too costly for the limited benefits to be derived. The desire of the state to protect prospective buyers of farm lands from being swindled is a worthy object, but can be attained without any such elaborate survey as has been undertaken.

There is no need for the purchaser of any lands in Michigan to be deceived as to what he is getting. The ordinary intelligent man can tell by a visit to the locality at the season of the year when vegetation is in bloom whether the land is good for anything. If he buys without seeing the land or when it is covered with a blanket of snow he has no one but himself to blame if he is swindled.

Consider Poor Europe

IF we think we have a hard time of it with coal and rail strikes and low prices on our commodities, think of poor Europe. Dr. Gray of the Department of Agriculture, who has recently returned from there, tells some harrowing tales of the misfortunes of the people and the unpromising winter before them. Austria, he says, will scarcely survive the beginnings of cold weather and Germany faces the certainty that if her process of currency inflation is continued she will soon be a recognized bankrupt.

Nearly all hotter countries are equally as unfortunately situated. Many crops are a drug on the market, due either to vast over-production or inability of the people to buy. In England and Scotland potato prices are too low to even pay the expense of shipment to market.

Whatever may happen in America her people are reasonably sure of enough to eat and to wear and to keep the hearthstones warm. Our greatest national disturbances do not at the worst more than inconvenience our people. We make a great ado about them, but after all they do not amount to much, and seem so trivial beside the disasters which have visited our neighbors across the seas.

Misery is always fond of company, and no matter how discouraging our own outlook may become, we can always get a crumb of comfort from the sadder plight of the people of Europe.

T. B. Eradication

COUNTY after county is appropriating funds to aid the state and national departments of agriculture to eradicate bovine tuberculosis in this state. In some respects Michigan is far ahead of the other states in this work, and the only drawback now is lack of funds. Were sufficient funds available or in sight Michigan could be completely rid of bovine tuberculosis within the next five years, thereby putting her in the front rank as a producer of tuberculosis-free cattle. That would mean a great deal to the Michigan dairy and livestock industry. Up until the past few months testing of cattle for tuberculosis was not compulsory except that various city ordinances have made it a condition of the sale of milk within their confines. Last summer, however, the attorney general of Michigan rendered an opinion making the testing compulsory. The opinion was predicted on the assumption that all cattle must be suspected of being tuberculous until a test had proven them otherwise. Under this ruling the State Department may as a matter of public health quarantine the herd of any cattle owner who refuses to permit a test being made. Through this power the submission of cattle to the test is virtually compulsory when the state department of agriculture so rules.

NOTICE TO SUBSCRIBERS.

Rather than curtail departments and print incomplete issues, as some farm papers have been forced to do, we have preferred to issue The Michigan Business Farmer, every-other-week temporarily.

Each issue missed has been credited to the subscriber, so that in the end no one will lose a single issue for which he has paid. We respectfully ask your patience and thank you for your loyalty to

"The Only Farm Weekly Owned and Edited in Michigan!"

Waste

THE American farmer is the greatest waster in the world. He wastes his soil. By constant cropping and unscientific methods of farming he dissipates its fertility. He wastes his labor. He spends as much effort in raising 25 bushels of grain to the acre as is required to raise 50 bushels.

"Of every 100 bushels of corn that farmers set out to grow", says the Department of Agculture, "only 64 bushels are realized, Were it not for the elements that tend to reduce the size of the crop the average for the 13-year period would have been about 4,374,000,000 bushels instead of 2,805,000,000."

What are these elements? Weather conditions, defective seed, plant diseases, and devastations by insect and animal pests. All of these elements, excepting the weather, are controllable. And even the weather man can often be outdone by judicious planting and cultivating.

The same crops which were raised this year could have been raised from two-thirds of the acreage. The other third represents gigantic, and in a measure inexcusable, waste. It is this waste of effort and money that keeps so many farmers only two jumps ahead of a mortgage foreclosure and causes such hardship in years of poor crops or low prices.

The Income Tax

ON November 7th the farmers of Michigan will be given a weapon to strike away the bonds of oppressive taxation which have fettered them so long. It will be an amendment to the state constitution instructing the legislature to enact a tax on profits on net income.

Should the farmers vote for it? Yes. For two reasons. First, on the broad general grounds of principle. The income tax is the only form of taxation which can never burden those who have to pay it. If the farmer's crops are a failure and he has no net income at the end of the year, he pays no tax. If the business man has a bad year and his losses eat up his profits he pays no tax. The present system of taxing land is no respector of one's ability to pay. The tax must be paid in bad years as well as good.

Second, for a purely selfish reason, the farmer should vote for the income tax. It would lower his state taxes. The farmer who now pays a federal income tax will probably have to pay the state income tax. If his net income is not large enough to bring him within the federal tax, he will probably not be taxable under the state income tax. This conclusion is mere conjecture as the amount of the exemptions and the size of the tax are left entirely to the legislature. It is supposed, however, by the friends of the income tax that the legislature will be guided by the federal income tax in these respects.

Pres. Friday of the M. A. C. estimates that a 4 per cent tax on net income will raise $20,000,000 in poor years and twice as much in good years. In that case a tax levy against real and personal property for state purposes can probably be entirely done away with. If the farmers will consult their last tax receipt and compare their state tax with what they would have to pay at 4 per cent on all net income above exemptions of $2,400 for married men and $400 additional for each child, they can soon tell whether it would be to their advantage to vote for the income tax. We again assume, of course, that the legislature will adopt the provisions of the federal law.

When agriculture is properly taught in the rural schools nine out of ten farmer boys will stay on the farm. You couldn't coax them to take up any other profession. Early in life they will learn that farming is a great business and a great science combined.—Farm and Ranch.

An investment in a purebred sire yields dividends with every calf.—California Cultivator.

Uncle Rube Spinach Says

I'M SORRY LUCILE BUT—?

YOU know that ev'ry once in a while, an' some times oftener, I get a letter from some of my friends—some agree and some don't—no matter, I'm glad to get the letters just the same. An' just recently I got a nice little letter from a reader of M. B. F., a friend I hope, that kinda raised my hair an' set me to thinkin' where I was at.

Now I'm not givin' the lady's name, only the first name which seems to be Lucile or somethin' like that. Well, anyway, Lucile intimates that I'm purty nigh a degenerate an' unless I mend my ways I'll be down shovelin' coal in the next world an' I must change my ways or go beggin' in the life to come.

Now my dear Lucile, I know better'n you can tell me all my short comin's. I know I'm bad—have always been bad. I 'member onct when I purty nigh kicked the life out of a cat 'cause he was eatin' up chickens I'd spent weeks to hatch. An' later on in life, when I wuz a young man an' I thought I wuz purty cute, I kicked a hole in a mirror jest 'cause it showed a villainous face where my face or't to be.

An' only jest in the last year or two I've busted a feller in the beezer fer beatin' up a little kid an' then found out afterwards that the kid wuz his own.

Yes my dear Lucille, I am jest as bad as you painted me—I wish I could be diff'runt but you see I'm old and habits seem to be strong an' I may go on my crooked way—mebbe to the end.

Lucile you took me to task jest 'cause I said that clothes does not make a woman. I take from your letter that you think clothes does make the woman. Alright then, I don't care to argue the question with you but will say this much—if clothes makes the woman then clothes must make the man an' if I'm nicely dressed I'm a man no matter what I do or what I say. Now dear Lucile, I wear all my clothes long—longer 'an most of the fellers wear 'em an' yet you tell me I'm lackin' in grace that I must be born ag'in an' a lot of things like that an' yet you know absolutely nothin' about me—you only guess that I'm bad 'cause I wrote a little article kinda stickin' up fer women wearin' short skirts.

I am glad Lucile that you're livin' the right life. There are hundreds of thousands of women doin' the same thing an' we love 'em all. God created women to be loved—he never intended them to be censors of their brother. I don't jest remember whether I read this or if some one told it to me, but any way I think you'll find it in the book yor speak of so often—"Judge not lest ye be Judged!"

My dear Lucile, I sure enjoyed your letter—you commenced about women's dress and ended with an exoneration for me to give my heart to God. Long years ago Lucile, I gave my heart to a girl, she has had it in her keeping since that time an' it is not mine to give at the present time. You commenced your letter in a funny way—to the "so called Rube Spinach"—Why the "so called" Lucile? I've used the name for a long time an' nobody has ever claimed it from me so why ain't it mine? An' now my dear Lucile jest read the good book you've quoted so freely to me an' 'specially that part of it 'at speaks of charity—you know in speakin' of the 3 graces it sez the greatest of these is charity. Charity does not mean givin' pennies to the blind entirely, more 'an all it means to overlook the short comin's of our neighbors—those with whom we come in contact from day to day. Yes Lucile I am bad an' I feel my weakness but I don't believe that God will condemn me for what I said 'bout womens clothes. Cordially.—UNCLE RUBE.

Sense and Nonsense

Hans Schmidt was reported to be the meanest man in the neighborhood. He died. His body was placed in the grave, and according to an old Pennsylvania German custom the people stood around the open grave, waiting for some one to say some good thing about the deceased before filling the grave. After a long wait, Gustave Schultze said: "Well, I can say joost one goot thing about Hans; he wasn't always as mean as he was sometimes."

BACK IN 1890

The world's most famous automobile manufacturer was working in a bicycle shop.

A millionaire hotel owner was hopping bells.

America's steel king was stoking a blast furnace.

An international banker was firing a locomotive.

A President of the United States was running a printing press.

A great merchant was carrying a pack on his back.

A railroad president was pounding a telegraph key.

There's always room at the top—where'll you be in 1954?—Ad points.

ONE WAY TO GET YOUR PICTURE PUBLISHED

A young school teacher had just arrived at the home of a country school director where she was to board. The director desired to make his importance known.

"You probably seed my pitcher in this here county's paper, ain't you?" he began.

"I believe I have," replied the young woman. "I think you were among the political candidates, were you not?"

"Naw; I been takin' Dr. Pain's Cureall."—Everybody's.

Hiram came out of the general store and deposited an suspicious looking package at the feet of his wife in the buggy.

"What's in that?" she asked with some asperity.

"Never mind, it won't hurt you, replied Hiram.

"Hiram, that's a box of dynamite," said his wife, excitedly.

"Well, what if it is? It won't do any harm unless it explodes."

"Hiram," shrilled the woman, "if you think I'm going to ride six miles in a buggy with fifty pounds of dynamite at my feet you're a bigger fool than I thought you were! You take that stuff right out and put it in the back part of the buggy under the seat!"

IT CAN'T BE DONE

Cholly—Do you think it would be foolish for me to marry a girl who was my intellectual inferior?

Dolly—More than foolish—impossible!

GOVERNMENT BULLETINS OF INTEREST IN NOVEMBER

THE following list of Farmers' Bulletins and Circulars are of general interest during November. Copies may be obtained free by addressing the Division of Publications, United States Department of Agriculture, Washington, D. C. Specify number and name and whether Farmers' Bulletin or Department Circular.

Farmers' Bulletin 735, Handling Grading and Marketing Potatoes; 828, Farm Reservoirs; 847, Potato Storage and Storage Houses; 88? Irrigation of Orchards; 927, Farm House Conveniences; 970, Sweet Potato Storage; 1096, Frost and the Preventon of Damage from It; 110 Cooperative Marketing, Woodland Products; 1923, Laws Relating to Fur Animals, 1922.

Department Circular 64, How Lumber is Graded; 148, The Farm Woman's Problem.

COLLECTION BOX

The purpose of this department is to protect our subscribers from fraudulent dealings or unfair treatment by persons or concerns at a distance.

In every case we will do our best to make a satisfactory settlement or force action, for which no charge for our services will ever be made, providing:

1.—The claim is made by a paid-up subscriber to The Business Farmer.

2.—The claim is not more than 6 mos. old.

3.—The claim is not local or between people within easy distance of one another. These should be settled at first hand and not attempted by mail.

Address all letters, giving full particulars, amounts, dates, etc., enclosing also your address label from the front cover of any issue to prove that you are a paid-up subscriber.

THE BUSINESS FARMER. Collection Box
Mt. Clemens, Mich.

Report Ending October 20, 1922

Total number of claims filed	1013
Amount involved	$19,565.[illegible]4
Number of claims settled	604
Amount secured	$10,435.23

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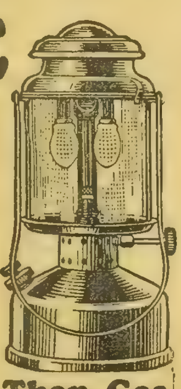

FREE

300 Candle Power Sunray Lantern

As a special introductory offer, a 300 Candle Power SUNRAY Lantern worth $8.50 will be given absolutely Free with the first purchase of a SUNRAY Lamp. Lights up the yard or barn like a search-light. Brighter than sun light—burns 30 hours on a few cents worth of kerosene or gasoline. Lights with match or torch. No wicks to trim — no chimneys — no smoke — no smell. Find out about this great special offer.

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Whitest light ever produced. Nothing to wear—simple—absolutely safe—you can burn it upside down. Get rid of drudgery and poor light—see the SUNRAY—flood your home with light—save your eyes.

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FARMS & LANDS

Ads under this heading 10c per word

FOR SALE—240 ACRES LEVEL CLAY loam land all cleared, good house, large circle roof basement barn, two wells of water and two windmills, large silo, clear creek runs thru one corner of farm. Price $75 per acre; $6,000 of this is covered by Farm Land bank loan payable $180 every six months for 30 years which pays interest and principal, the balance can be handled by paying $6,000 down, with $6,000 mortgage, all the time on the balance you want. The above price includes 57 head of yearling steers, cows and heifers. Good team of work horses. New heavy double harness and third horse harness, new wagon, wide tire, with hay rack. New mowing machine, new plow. New side delivery rake, new drag, disc, cutivator, and all other tools on farm, also about 80 tons of hay, straw, oats, bean pods, silo full of ensilage, etc. The increase on cattle alone will half pay the mortgage in one year. Must sell at once, do not answer unless you have at least $6,000 to pay down. Address THE CITIZENS STATE BANK, Owner, Clare, Mich.

$1,000 SECURES SO. MICHIGAN FARM 80 acres with 3 horses, 3 cows, brood sow, poultry, vehicles, tools, cream separators, hay, grain, fodder, rye, etc.; on improved road, handy advantages, city markets; 68 acres machine worked fields; pasture, woodland, 50 fruit trees; 2 story house, 50-foot basement barn. Owner unable to operate. [illegible]500 takes all, only $1,000 needed. Details page 68 New Illus. Catalog 1,200 Bargains Free. STROUT FARM AGENCY, 814 Ford Bldg., Detroit, Michigan.

120 ACRES NUMBER ONE LAND, BEST of buildings, fruit, timber, one mile to Dixie Highway, station, church, school, 30 miles from Detroit. R. W. ANDERSON, Clarkston, Mich.

BUY A FARM NEAR ANN ARBOR AND educate the boys in the University. Write for our farm bargains. JEROME PROBST, Ann Arbor, Mich.

A BARGAIN—40 ACRES, HOUSE, BARN stable, near State Auto Park Cheboygan, fine location to make money Address 512 BINGHAM, Soo. Mich.

IF YOUR FARM OR COUNTRY HOME IS for sale. Write us. No commission charged. CLOVERLAND FARM AGENCY, Powers, Mich.

TWO 120 ACRES AND ONE 140 ACRES farms for sale by owners. For information write WM. ALBRECHT, Carsonville, Mich.

I WANT FARMS FOR CASH BUYERS. WILL deal with owners only. R. A. McNOWN, 308 Wilkinson Bldg., Omaha, Neb.

BEST BARGAIN IN VAN BUREN COUNTY; 80 acres, good house, basement barn, silo only $6,500. DE COUDRES, Bloomingdale, Mich.

FLORIDA LAND FRAUD PROTECTED IN Florida courts, exposed in a book sent upon receipt of 25c in coin. H. WEEKE, 428 S. Halsted St., Chicago, Ill.

THE POTENTIAL CURE

Then one of them, which was a lawyer, asked Him a question tempting Him, and saying:

"Master which is the great commandment in the law?"

Jesus said unto him, "Thou shalt love the Lord thy God with all thy heart and will all thy soul and with all thy mind. This is the first and great commandment. And the second is like unto it, Thou shalt love th neighbor as thyself. On these two commandments hang all the law and all the prophets."

ON these two commandments hang also the peace of the world, as between individuals, as between organizations and as between nations. Force was long the ruling power but in the late war, it was shown that it could not claim a victory; in a civilized world the compelling power of force has its limits. Law, the other governing power must have behind it a respected authority, the government you say. Correct, we must then have respect for that government for lack of it means anarchy and disruption. History shows that governments become corrupt and pass away. What quality then is it that makes for stability in governments?

Recognition of God, there is no getting away from that fact. In a world of materialism we must return to spiritual values. Let me quote, "Who said, 'I am the Light of the world?" Remember a beacon guides, it does not compel. If nations walk by that Light, they will be in the way of Peace, if not—look at the world today."

THE SEVENTH OF NOVEMBER

CHILDREN will be taught young that it is the part of every patriotic citizen to vote, if an elderly lady in Texas can have her way. She has sent a small sum of money to the National League of Women Voters to to be awarded as a prize for the best nursery rhyme inculcating a conscientious and patriotic attitude toward the exercise of the franchise. She suggests that suitable verses be insered in future editions of Mother Goose and in kindergarten and primary songbooks so that the boys and girls will grow up knowing their duty to their country. Incidently, she has given the eague, which has not yet received the report of the committee on the selection of the twelve greatest living Amreican women, another question to decide and the headquarters staff is to decide it. Verses are already beginning to come in for the competition and the first received read, paraphrasing Mother Goose:

Remember, remember the seventh of November,
A date that must not be forgot,
Non-voting is treason
And that is the reason
Good people must be on the spot.

BEET SUGAR TO THE FRONT

There has been some discussion among women as to whether beet sugar is as good a preservative for use in canning as cane sugar. Having used both indiscriminately with equally good results I have felt that it made no difference but to satisfy useveral readers who have asked me about the matter I will pubilsh the following communication from Mr. Robert Tweed, Bacteriologist, Mich. Agricultural College.

—In regard to beet sugar we wish to advise you that it makes no difference whether the sugar is beet or cane. If your fruit is properly sterilized it will keep regardless of whether you have used cane sugar or beet. Trusting this gives you the information you desire, I am Robt. L. Tweed, Res. Asst. in Bacterology.

THE SCHOOL LUNCH

Planning the school lunch. Many mothers are faced with the problem of preparing school lunches every day during winter, and it is hard to prevent sameness from creeping into the menu. Besides, many foods which children enjoy cannot be carried in a lunch basket. The metal container, with ventilation holes, is best for carrying to school because it can be scalded daily. Parafin paper should be used for wrapping moist foods, as cake and sandwiches. Ice cream containers are useful for packing salads, baked beans or baked apple.

These suggestions, made by home economic experts, are suitable and appetizing lunches for school children: Sandwiches with sliced meat filling, baked apple, cookies or a few pieces of candy. A crisp roll hollowed out and filled with chopped meat or salmon, and orange, cookies and a few dates. Hard boiled or deviled eggs with brown bread and jam, apple sauce and pices of cake. Nut or cheese sandwich with piece of maple sugar and fruit. Baked bean sandwich, sweet pickle, handful of raisins and a nougat bar. All these combinations are tasty and healthful, especially if a small thermos bottle with milk is provided for each lunch.—South Dakota Agricultural College.

The Farm Home
A Department for the Women

Edited by MRS. GRACE NELLIS JENNEY

DEAR READERS—One of our subscribers is in need, this winter, of some of the things which some of us may be able to spare. I will name the articles and if you can help out just drop me a line asking for her address, then you may communicate with her direct. She will willingly pay all delivery charges.

She has a large family; one little boy has tuberculosis, he is only 2 years and seven months old. For him she needs a cot, a mattress and some old blankets.—Children's clothes would be gladly received and also a rug for a bed-room floor. We have never yet failed to help one another and I am sure we will not this time. If you could read her letters, you would surely feel that you would find something to send.

FERNS NOT DOING WELL

I have a large Boston Fern and do not seem to be able to make any success in rearing it. The leaves grow about 18 to 20 inches long and then die on the ends, also a few of the peals will die. Does smoking hurt it? It is in a window facing the west; also I watered it with rain water every other day. I have been told that tobacco tea is good for it. Will be glad of your advice. —A Reader of M. B. F.

—Examine your Boston Fern to ascertain whether there are any insects on it, if so would throw it away before it infects other plants. If it is clean, follow this method. Dip a whisk broom in luke warm soft water and sprinkle the fronds well, laying the plant on it's side so that the water will reach all sides of the leaves, clip off all dead ends and loosen the soil on the top of the crock so that it will ventilate. Water the fern about once a week by standing the crock in a basin of water for half an hour. Ferns do not stand hot or direct sunshine. Their nature is to require a moist cool atmosphere. As for soil they prefer a soft black muck mixed with good garden soil. Cared for after this method any healthy fern will do well.

CROCHETS TAMS

I am a regular reader of the M. B. F. About a year ago I told the readers of this nice little paper, I'd crochet tams of the best wool at $2 00 each. I had quite a number of orders last winter and will make the tams for the same price this year if any of the readers would like a tam, also truck caps from $1.50 to $2.00 according to age. Thanking Mrs. Jenney kindly my address is Mrs. Tony Motz, R. 1, St. Johns. Mich.

ATTENTION MRS. HAYNES

I have received a pattern order from Mrs. F. E. Haynes but cannot send the pattern to her because she failed to give me her address. If she will write at once I will be pleased to forward the pattern to her.

SEND SAMPLES

Will someone kindly send me samples of crochet edgings? I'll send some if they ask for them. I have several but I've made them over and over. None of my friends know how to crochet.—Mrs. J. Hanisek, Ramsay, Mich, Box 215.

TO KEEP GERANIUMS

Will you please tell "Another Subscriber" that I always pull my geraniums from the ground before frost and hang them up by the roots in the cellar.

This way they need no water. In the earl spring about March I take them down, cover the rootsy in dirt in a small basket and keep them slightly moistened until warm enough to set in the beds out of doors, of course they will have to be trimmed and cut back a little but the keep nicely.—Mrs. A. J. B.

SOUPS

A reader in the last issue asked for recipes for soups. These I found in a recent Deleniator and publish them for the benefit of those interested.

Alwas have a soup-pot going. Never throw out the bone from the steak or ham. Never thown out the end of beef that is tough or the left-over chop. Put them into the soup-pot and add the water from boiled potatoes, cabbage, boiled onions and from every vegetable that you use except spinach and beet-tops.

The backs of chicken or any kind of game should go into the soup-pot. Add plenty of pepper to the pot when you hae game in it, and another bay leaf and little more onion than usual. Let our pot simmer, but don't boil, as boiling destroys the flavor of your soup foundation.

About once in three days empty the soup-pot. To keep it simmering longer than three days will make it sour. Don't hesitate to put the smallest bit of stuff in it when you start it again. A spoon of gravy will help; a few peas will add their flavor; a small bone will give strength.

To your soup foundation add a handful of rice and thicken with flour and milk; or chop up some watercress or spinach, cook for thirty minutes and slightly thicken with flour and milk; or use rice and the green and the thickening.

In one cup of your stock and four cups of water cook four good-sized potatoes. When they are done, mash them through a colander and return them to the same pot. Add six peeled and shredded leeks, and cook for fifteen minutes. A lump of butter the size of a walnut and half a cup of milk complets an appetizing and nourishing soup.

A variation of this soup is made by substituting a pinch of garlic for the leeks and serving with croutons. night and cooked with a ham-bone or with a quarter of a pound of bacon make a good plain soup. Half an onion, added in thin rings half an hour before the meal, or the onion

L'ENVOI

When Earths last picture is painted, and the tubes are twisted and dried,
When the oldest colors have faded, and the youngest critic has died,
We shall rest and faith, we shall need it, lie down for an aeon or two.
Till the Master of All Good Workmen shall set us to work anew.
All those who were good shall be happy, they shall sit in a golden chair
They shall splash at a golden canvas with brushes of comets hair.
They shall find real saints to draw from * * * Magdalene, Peter and Paul.
They shall work for an age at a sitting and never get tired at all.
And only the Master shall praise us, and only the Master shall blame.
And no one shall work for money, and no one shall work for fame,
But each for the joy of the working, and each in his separate star.
Shall draw the Thing as he sees It for the God of things as they are.

—RUDYARD KIPLING.

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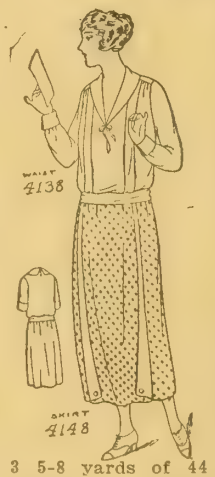


A Stylish "Waist and Skirt" Combination

4138-4148. Very desirable for business or sports' wear is this costume. The waist. may. be. of linen, crepe or silk, and the skirt of sports' material, serge or prunella. The panel on skirt may be omitted.

The Waist Pattern 4138 is cut in 7 Sizes: 36. 38. 40. 42. 44. 46 and 48 inches bust measure. It requires 2 3-8 yards of 40 inch material for a 38 inch size. The Skirt Pattern 4148 is cut in 6 Sizes 25. 27, 29. 31. 31. and 35 inches waist measure. A medium size requires 3 5-8 yards of 44 inch material. The width of the skirt at the foot is 2 3-8 yards. To make a girdle and the facings on the panel of contrasting material will require 1 1-4 yard 40 inches wide.

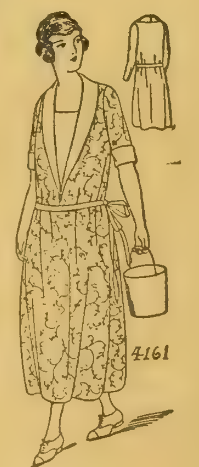
TWO separate patterns mailed to any address on receipt of 12c FOR EACH pattern in silver or stamps.

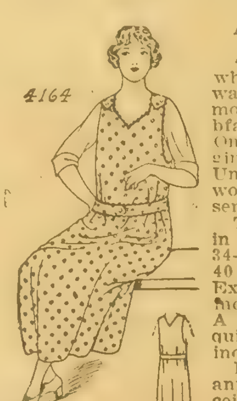
For Porch or Kitchen Wear

4161. Trim and neat is the style here portrayed. The development and adjustment are equally simple. Figured percale was used in this instance. combined with white linine.

The Pattern is cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38 inch size requires 5 yards of 40 inch material. To make vest. collar and cuffs of contrasting material requires 1¼ yard. The width at the foot is 2¼ yards.

Pattern mailed to any address on receipt of 10c in silver or stamps.





A Simple Apron Model

4164. Percale in white and brown was chosen for this model. with rickrack braid for trimming. One could have gingham. or cambric. Unbleached muslin would be strong and servicable.

The Pattern is cut in 4 Sizes: Small 34-36: Medium 38-40: Large 42-44: Extra Large 46-48: inch bust measure. A Medium size requires 4 yards of 36 inch material.

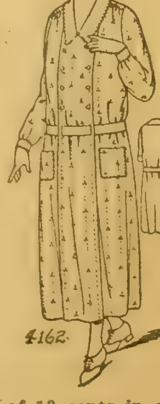
Pattern mailed to any address on receipt of 12c in silver or stamps.

A Good Service Dress for Slender or Stout Figures

4162. Comfortable fulness and slenderizing lines mark this desirable model. The back extends over the fronts to form yoke sections to which the fronts are gathered. This is a good style for percale, gingham. gabardine, and flannelette. The sleeve may be in wrist length or short. as illustrated.

The Pattern is cut in 7 Sizes: 36. 38. 40. 42. 44. 46 and 48 inches bust measure. A 38 inch size requires 6 1-8 yards of 32 inch material. The width at the foot is 2 3-8 yards.

Pattern mailed to any address on receipt of 12 cents in silver of stamps.



and a couple of carrots, or a sprinkle of chili pepper, or shredded lamb or pork, add an interest to this soup.

Nourishing barley soup can be made from any "bone" stock. Add two chopped onions, a sprig of parsley, one stalk of celery and a cotrot. Cook one cup of barley to two quarts of liquid.

For tomato soup, use the juice and the soft parts of canned tomatoes to be stewed. On a foundation of a bone or two, an onion and a bay-leaf, you can make a vegetable soup with one carrot, one celery stalk, a little tomato left from dinner and a sprig of parsley.

Onions, cut and simmered in a stock for half an hour, can be thickened with flour and water or milk. Or add to the stock a small dish of lefe-over peas, a few dried potatoes, mashed, a little baked macaroni, mashed, and ashredded chop. This makes a very good soup.

shank from your roast lamb, simmer it for an hour and then add a pound of dried Lima beans soaked overnight. Cook all day, mashing the beans through a colander when you are almost ready for dinner.

HALLOWE'EN PARTY

The rooms or rooms in which most of the games are to be played should be decorated as grotesquely as possible with Jack-o'-lanterns made from apples, cucumbers, squash, pumpkins, etc., with incisions made for eyes, nose and mouth and a lighted candle placed within.

Jack-o'-lanterns for the gas jets may be made of paste board boxes about the size of a shoe box. Cut holes in all four sides of the box and cover the holes with red or green tissue paper. A black box with the openings covered with red tissue paper or vice verse or white and green make good combinations.

Cut a hole in the botton of the box just large enough to fit over the gas jet, turning the gas low enough to not burn the box.

In addition to this Jack-o'-lantern made from pumpkins, etc., should be placed around an tables, mantles, corners, etc.

A skull and cross bones placed over the door entering the house would be very appropriate. The hall should be in total darkness except for the light coming from the Jack-o'-lanterns of all shapes and sizes in various places.

Autumn leaves, green branches, apples, tomatoes and corn should also play an important part in the decorations. Black and yellow cheese cloth or crepe paper makes very effective and inexpensive decorations.

The dining-room should be decorated with autumn leaves, golden rod, yellow chrysanthemums, strings of cranberries, etc. For a table center piece a large pumpkin could be used with the top cut off and partly filled with water in which a large bunch of yellow chrysanthemums or golden rod could be placed. Bay leaves can be scattered over the table

Another idea for a center piece is a large pumpkin Jack-o'-lantern, the top cut in large points with small chocolate mice in the notches and scampering down the sides of the pumpkin (held in place by long pins or a little glue) and over the table.

Place cards representing pumpkins, black cats, witches' hats, witches brownies, etc., are appropriate

If one is not an artist in water color painting, some of the cards could be cut from colored bristol board or heavy paper. The witches' hats of black or brown paper with a red ribbon band; the cats of black paper showing a back view may have a red or yellow ribbon necktie; the pumpkins of yellow paper with the sections traced in ink or notched a trifle and black thread drawn between the notches.

Any of these designs could be used for an invitation for a children's party, by writing on the revesre side: "Will you please come to my party on Wednesday, October 31st" with the name and address of the little host or hostess, using white ink on black paper.

The dining-room should be in total darkness, except for the light given by the Jack-o'-lanterns, until the guests are seated, when they should unmask. The supper could be served in this dim light or the lights turned up and the room made brilliant. After the supper is over and while the guests are still seated a splendid idea would be to extinguish all the lights and to have one or more of the party tell ghost stories.

Have a large pumpkin on a stand or table from which hang as many ribbons as there are guests. Have one end of the ribbon attached to a small card in the pumpkin on which may be a little water color sketch of pumpkin, apples, witch, ghost or other appropriate design together with corresponding number. Have red ribbon for the girls and yellow ribbon for the boys, with corresponding numbers. Let each guest draw a ribbon from the pumpkin and find their partner by number.

Another suggestion is to have the hall totally dark with the door ajar and no one in sight to welcome the guests. As they step in they are surprised by some one dressed as a ghost who extends his hand which is covered with wet salt.

PERPLEXING HUNT

In this game the seeker for a prize is guided from place to place by doggerels as the following, and is started on his hunt with this rhyme:

"Perhaps you'll find it in the air;
If not, look underneath your chair."

Beneath his chair he finds the following:

"No, you will not find it here;
Search the clock and have no fear."

Under the clock he finds:

"You will have to try once more;
Look behind the parlor door."

Tied to the door-knob he discovers:

"If it's not out in the stable
Seek beneath the kitchen table."

Under the kitchen table he finds another note, which reads:

"If your quest remains uncertain,
You will find it 'neath a curtain."

And here his quest is rewarded by finding the prize.

ACTING RHYMES

For this game, half of the players go outside the door, whilst those who stay in the room choose a word of one syllable, which should not be too difficult. For instance, suppose the word chosen be "flat," those who are out of the room are informed that a word has been thought of that rhymes with "cat," and they have to act, without speaking, all the words they can think of that rhyme with "cat." Supposing their first idea be "bat," they come into the room and play an imaginary game of cricket. This not being correct, they would be hissed for their pains, and they must then hurry outside again. They might next try "rat," most of them going into the room on their hands and feet, whilst the others might pretend to be frightened. Again they are hissed. At last the boys go in and fall flat on thier faces, while the girls pretend to use flat-irons upon their backs. Tre loud clapping that follows tells them they are right at last. They then change places with the audience, who, in turn, become the actors.

An asbestos mat may be used for toasting bread.

Grind your coffee yourself for the best results.

HEALTH HINTS

OR

HOW TO CURE YOURSELF

BY

DR. T. N. ROGERS

TOOTH POWDER

Please tell me what to use to make a good tooth powder.

—Chalk percipitated, 2 drams; Orris root, powdered, 2 drams; white sugar, 4 drams; oil of gloves, 5 drops; oil of lemon, 8 drops. Mix well in a mortor.

BOY COUGHS CONTINUALLY

What can be done for a boy two years and seen months old that coughs continually?

—You should have this child examined thoroughly. Cough does not always mean T. B. but keep the child out-of-doors as much as possible, give lots of good nourishing food and give the following: Oil of Eucalyptus, 5 drams; Emulsion of Petrolium, 8 ounces. Give one teaspoonful every 4 hours. Give this for 3 months. Have the throat examined.

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1½ cups Lily White Flour, 2 teaspoons baking powder, 1 tablespoon melted butter or fat, ¼ cup of corn starch, 1 cup rich milk, 3 beaten eggs. Sift dry ingredients together. Beat eggs, add milk and stir in flour. Add butter. Cook in hot greased irons and serve.

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There is a difference in waffles just as there is a difference in breads, because there is a difference in flours. Waffles made with Lily White Flour are crisp, tender, wholesome and delicious. But when a flour of quality such as Lily White is used for all general bread-making, baking successes are not accidents. The results of one trial will convince you of its superiority.

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I want every sufferer from any form of muscular and sub-acute (swelling at the joints) rheumatism to try the great value of my improved "Home Treatment" for its remarkable healing power. Don't send a cent; simply mail your name and address, and I will send it free to try. After you have used it, and it has proven itself to be that long-looked for means of getting rid of such forms of rheumatism, you may send the price of it, One Dollar, but understand I do not want your money unless you are perfectly satisfied to send it. Isn't that fair? Why suffer any longer, when relief is thus offered you free. Don't delay. Write today.

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What Have You to Offer?

The Children's Hour

DEAR Nieces and Nephews: Last isssue I told you a boy was leading in our bird contest. Well he continued to lead and when the final reading took place his letter was chosen as the best and he was declared winner of the prize, a leatherette pencil case containing four pencil, a penholder and point. The name and address of the winner is Harold Pernie, Ossineke, Mich. The prize was mailed last week and undoubtedly by this time Harold is putting the pencils and pen to very good use.

All seemed to be interested in the bird contest and many showed they knew more about their feathered friends than I thought they did, so I am going to tell several things about birds. Some of you may know many of these interesting facts but I'll bet most of you do not.

Of course all of you know that most of the birds are great destroyers of injurious insects and that hardly an agricultural pest escapes them. But do you know that the alfalfa weevil has 45 different bird enemies? Or that the wireworm is anxiously sought by 168 different kinds of birds. Other bugs and insects are constantly pestered by the birds. 42 different birds are enemies of the army worm; the cinch bug is killed by 24 different birds; codling moth by 36; cutworm, 98; horseflies, 49; seven year locust, 38; potato bug, 25; white grubs, 67; clover-root borer, 85 and clover weevil, 25.

You have heard and talked about the robin and other birds going south in the fall but did you ever wonder how far they flew south? The average robin migrates 3,000 miles southward, taking about 78 days for the trip. Another bird that winters a long distance from Michigan is the bobolink. He spends his winters in southern Brazil.

Some birds are called half-migrating, because, while they usually spend their summers with us and their winters in the south, sometimes they remain with us all winter, especially in sections where food is plentiful during the winter. The robin can be mentioned in this class. Also the bluebird, meadowlark, nuthatch, woodpecker, chickadee, goldfinch and certain of the sparrows. The average person may not observe them but the bird lover often discovers one of our feathered friends who failed to take the annual trip south. Keep your eyes open this winter and see how many of these birds you can find. Where you find them scatter food because many times it is very hard for them to find enough to eat during the winter months when the ground is all covered with snow. They will repay you when spring comes with their pretty songs. Also they will protect our next winter's supply of food by killing the insects that attack crops.

Although I am unable to publish all the letters I received regarding the bird contest I am printing parts of some of the letters. Some wrote such interesting letters about their favorite birds that I feel space should be spared for the publishing of them.—UNCLE NED

OUR BOYS AND GIRLS

Dear Uncle Ned—Please may I join your new contest. I think it is a very good idea to learn about the different kinds of birds.

I am interested in studying the value and the uses of the bird. I am writing a description of one of the Michigan birds which I like very much, and am also sending a list of birds which I have often noticed on my way to school and other places around the school. Here are the following birds that I have noticed.

Sparrow, crow, eagle, robin, snowbird, swallow, bluejay, whip-poor-will, nightingale swallow, owl, blackbird, honeybird, thrush, pigeon, partrich, chickens, geese, ducks, turkey, cuckoo, dove, bobwhite, canary, parrot, meadow lark, snipe, woodpecker, bob-o-link, peacock, chickadee, kingfisher, killdeer, wood cock, turtle dove, goldfinch, quail, sea fowl, cherry picker, seagull, wren, water thrush, ring dove, night hawk, wild geese, chicken hawk, wild duck, mourning dove, yellowbird, bluebird, red wing and the bird hawk.

The bird that I like best of all the birds is the sky lark for he can sing so beautiful, and he is a pretty color. His back is brown, edged with bronish white, and is streaked with black, brown and cream colors. And he has a beautiful black crescent upon his breast and dark brown lines on his head. Larks usually build their nests on the ground and they make them from grass only. The eggs in the nest are beautiful oval eggs they are about an inch long and a beautiful rosy white color, speckled with reddish brown spots. Larks eat many different worms and insects which is a great help to the farmers, that is why I like the lark the best. For the good of all, do not destroy the birds.—Master Harold Pernie, Ossineke, Mich.

Dear Uncle Ned and Cousins—I am sending a list of birds that I know. They are as follows:

Eagle, nightingale, snowbird, peacock, meadow lark, canary, robin, crow, hawk, dove, condor, stork, thrush, pigeon, pheobe, owl, kingbird, bat, sparrow, kingfisher, blackbird, ostrich, woodpecker, chickadee, crane, quail, bluejay, swallow, catbird, blue heron, green heron, bluebird, hummingbird, wren, groundbird, killdeer, mudhen, parrot, magpie bob-o-link, bittern, snipe, graybird, mourning dove, yellowbird , skungbird, highholder, aimless robin, cowbird, whip-poor-will, and the bird of paradise.

I like the bird of paradise best because it is the colors of the rainbow. I think it is the prettiest bird there is. I am thirteen now. I wish some of the girls around my age would write to me. Your niece.—Eleanor D. L. Stovel, Hubbard Lake, Mich.

Dear Uncle Ned—Here is a list of the birds that I know of and a description of the one I like best:

Robin, sparrow, hawk, crow, wren, canary, bluebird, blackbird, bob-o-link, whip-poor-will, killdeer, brown thrush, bat, mourning dove, bob-white, bluejay, sea-gull, owl, woodpecker, oriole, chickadee, catbird, crane, stork, swallow, pigeon, meadow lark, ring-neck pheasant, ground bird, pheobe, parrot, hummingbird, snipe, partridge, swan, sap-sucker, snowbird, kingfisher.

The best bird that I like is the robin. It's breast is a pretty red, with a pretty brown back. It is about four inches long and about two and one half inches high. After the long winter the first signs of spring is the robin, and how happy it makes everyone feel. You hear the old and young say "The robins are here." I take some crumbs and throw them on the porch and then watch them come and eat their breakfast. These make their nest in the lilac bush beside our house. It is made of lint, feathers, and hairs and they lay from three to five light blue eggs. I am your little niece—Berl McKenzie, Emmett, Mich.

Dear Uncle Ned—Here are the names of the birds and the description of the one I like best:

Thrush, catbird, mourning dove, mudhen- canary, bluebird, quail, partridge, pigeon, sparrow, swallow, stork, whip-poor-will, dove, king bird, owl, hawk, crow, cowbird, turkey, sand-piper, goose, duck, hummingbird, eagle, wood-pecker, robin, oriole, kingfisher, snowbird, chickadee, yellow-throated vireo, meadow lark, killdees, brown thresher, mockingbird, crane, bat, groundbird, bob-o-link, golden-winged warbler, marsh hen, pheasant.

I like the robin the best of all of them because every year one comes and builds its nest in our apple tree. We always look for it in the spring to come back and sing a very sweet song. It lays pale blue eggs. It is about five inches long. It has a nest about three inches wide. It has three or four eggs in its nest. It has a red breast and the rest a very dark brown, under its wings are white. We should never take the bird eggs because the bird would cry.—Miss Goldie Leukel, R. F. D. 1, Fostoria, Mich.

Dear Uncle Ned—As I had a few moments of spare time I thought I would drop a few lines to Uncle Ned. I am a girl 13 years old and in the eighth grade at school. I live on a farm of eighty acres one and one-fourth miles east of the town. I am also going to try my luck in the picture puzzle.—Mary Arens, R. 3, Fowler, Mich.

Dear Uncle Ned—The bird I like the best is the quail. This bird is very pretty. The color of it is light brown and on the top of its head the feathers resemble a cap and it is striped with white. On a still summer night you can hear them calling "Bob-white" for some distance. I'm sure that if I were a hunter I never would kill them. They destroy insects that are enemies to the farmer. I think that they ought to be called the "Farmers' Friends." Just now there is a flock of them here in our yard. They nested beside the driveway in front of the house this year. One day when papa was mowing hay beside the road he mowed right over a nest with eight eggs in it. It frightened the little bird so that she did not come back again, and I have seen several places where they had nested. I forgot to tell you about there nest. Most of them are in the most delightful places you ever saw. They are in the tall grass where it is warm and snug and are made out of dead grass.

In the winter time they will scamper across the yard and sometimes eat with the chickens, and if you throw out grain they will come and eat. They are about eight inches tall and are always very plump and fat. If some of the little boys and girls try to tame them like I said they may have a flock to stay at their home.—Violet Hopkins, Stockbridge, Mich.

Dear Uncle Ned—The whip-poor-will is my favorite bird. Perhaps you will guess why I like this bird. I love to hear his cry on summer evenings; and he also sings early in the morning. He is of a brown color, with some white and black spots. He is about ten inches long, and has long wings, he flys with the same flapping motion as pigeons or hawks do. He has a beak formed somewhat like a hawk's, very slightly bent. He has a short neck end head something like a hawk's. There is nothing very nice in the color of his plumage, but his cry, in the night when there are no other sounds, how sweet it rings, echoing among the hills and trees

He feeds on flying insects, and is a very harmless bird. He does not build a nest like other birds, he selects a place on the ground similar to a nest, a kind of small low place. Their eggs are a brownish color, to match the earth and leaves around them.

During the day whip-poor-wills retire to the darkest woods, until the sun sinks behind the hills, and then again, "whip-poor-will, whip-poor-will," we can hear. Sometimes we see him at the top of our house, sometimes he is on a tree, stump, or the ground, sitting in a stooping position while singing. Whip-poor-wills are related to the night-hawks.

Good-luck to Uncle Ned and cousins, I remain.—Miss Milda Baravyx, R. 2, Branch, Mich.

Dear Uncle Ned—I am sending you a description of my favorite bird.. The pigeon is my favorite bird.. I have one caged up that I caught and tamed. The color of pigeons is blue, dark blue, white, red, black and white, red and white, and blue and white. Mine is pink and white. They eat corn, oats, worms and bugs. Their nests are made of hay and straw. Their eggs are white. Your nephew.—Kenneth Mercy, R. 3, Wheeler, Mich.

VACUUM CLEANER AT CIRCUS

Johnny came back from the circus very much excited.

"Oh, mamma," he cried, as soon as he got in the house, "Kate spilled some peanuts, and what do you think the elephant did? He picked them all up with his vacuum cleaner."—Everybody's Magazine.

FRUIT and ORCHARD

EDITED BY FRANK D. WELLS

MICHIGAN ORCHARDIST BELIEVES IN SPRAYING

"I HAVE found spraying and fertilization to be the most important factors in fruit growing," says Robert Anderson, a successful orchardist of Covert, Michigan. Without spraying, you might as well give up, for no other practises will make up for spraying. After spraying comes fertilizers. You must feed the trees if you want big crops. A lot of orchards don't pay because they are half starved."

"How about pruning?" was a question put to Mr. Anderson. "Isn't that one of the most important factors?"

"I don't want to minimize pruning," was the answer, "but I feel that it is often overdone in the effort to make up for the omission of other practises. The success of pruning is not measured by the amount of wood you remove, but the amount you can properly leave. I can illustrate this by the fraction, six over two, in which six represents the trees and branches, and two the productive power of the soil. It's no use to have more wood than the soil will support to produce the fruit, so you take four away from six by pruning, and have the fraction two over two. But another way is to add four to the two below by fertilizing, and then you have six over six—more fruit because you have the wood and the plantfood to make the fruit. That's the system I practise.

Mr. Anderson has a sixteen acre peach orchard on which he has applied 375 pounds of ammonium sulfate and 400 pounds of acid phosphate or bone meal per acre for the last three years. Also in 1921 he applied in addition 500 pounds of a 10-10 fertilizer per acre (10% phosphoric acid and 10% potash). Rye is seeded each fall and plowed under in the spring, by which system the organic matter in the soil is increased.

GROWING MICHIGAN'S CHAMPION POTATO CROP

(Continued from page 3)

would far rather leave my machinery out the year around than my manure. We don't waste a bit of manure here. Come down to the barn." A visit to the Parmalee barn is a revelation in efficient manure handling. A section of the barn nearly as large as the stable is devoted to manure storage. Overhead tracks conduct the litter carrier from the stable to all parts of the room. A smooth concrete floor makes cleaning easy.

Back of the barn is a small yard for the cattle to exercise in—they are never pastured.

"Doesn't look very filthy, does it?" Mr. Parmalee inquired. "All the cows have run in that little lot for thirteen years."

It was as clean as a dooryard!

"We clean it every night same as the stable." Mr. Parmalee explained.

Foolish? Perhaps, but remember Cherry Rill Farm is producing money-making potato crops every year.

"I put on all the manure as a top dressing while preparing the seed bed." Mr. Parmalee continued. "We spread the manure at the rate of five tons per acre, and at the same time put on acid phosphate with a fertilizer distributor set at 300 pounds per acre. That is disced in just before planting!"

Green manure, as everyone knows, is a crop, preferably a legume, plowed under in the interest of soil improvement. Possibly some farmers think it is a stunt often talked about, but never actually done. They would know better after looking over Mr. Parmalee's next year's potato ground.

"I don't know just how to handle this crop." Mr. Parmalee admitted. as we walked into a knee-deep field of alfalfa-clover mixture. "I want to turn it all back, as I have enough hay without it. Selling hay is a poor policy, I think. In my opinion, a dairy farmer should never buy or sell hay. But to get back to this field, I think I'll try cutting once but take nothing off and if the second crop starts to smother, go over it with a hay tedder. I hope then it will turn under in fair shape in the fall. I want to turn under a hay crop every year to fit the land for some record potato crops. I can easily raise the yield way above last year's."

The last, yet by no means the least, of the soil amendments for Cherry Rill Farm is lime. Mr. Parmalee gives it full credit for the nearly perfect catch of clover and alfalfa which he is reasonably certain to get every year. One and one-half tons of finely ground limestone an acre is applied at the time of seeding down.

Once upon a time lime was not used on Cherry Rill Farm. The complete failure of a twenty acre seeding of alfalfa was the bitter experience which taught the lesson of lime. It will never happen again.

Good drainage was the last straw needed to break the back of the poor crops camel on the Parmalee farm. After several years of "spare time" spent in ditch digging, Mr. Parmalee has realized his ambition of a farm tiled throughout.

While the soil is the prime factor in the production of record potato crops, methods are quite important. Mr. Parmalee still selects his seed potatoes. From the potatoes thus obained, he again picks the choicest for a seed plot, and uses the rest for the regular planting. All seed is treated in formaldehyde solution for scab.

Early Petosky potatoes, planted 17 inches apart in 34 inch rows produced in 1921 top-notch Michigan potato crop. One piece, averaging wo eyes, was placed in a hill. The field was spike-toothed after plantng, gone over with the weeder just after the spuds were up, and cultivated four times later on. One day of hand work kept the rows free of weeds. The crop was sprayed eight times during the summer with 5-5-50 Bordeaux (5 pounds of lime and 5 of copper sulphate to 50 gallons of water.

True, it was consderable bother, but it paid. Two thousand bushels of the crop brought $1.53 a bushel as certified seed, and the rest were sold around 90 cents. Big league prices, you see, go along with big league potato growing.

A few other features of Cherry Rill Farm are well worth mentioning. Probably they are not factors in raising money-making potato crops, but then, maybe they are. Labor troubles are almost unknown at Cherry Rill, and there's a reason.

"I pay all my hired help by the hour, have for eighteen years" Mr. Parmalee explained. "All Sunday work and overtime is paid for. I keep two men the year around, and have extra help in the summer. The men seldom leave, so there is little trouble in getting labor."

The farm is the home of the farmer and his family, as well as their place of business. Electric lights and running water make life worth living on the Cherry Rill Farm. The neat house with wide lawns, nestling behind gigantic maples, reminds you of the country estate of some millionaire. A plentiful supply of farm papers keeps Mr. Parmalee on the latest wrinkles of the farming game, and he gleans many a hint from college extension men and the county agent, who are frequent visitors.

NEW LAMP BURNS 94% AIR

Beats Electric or Gas

A new oil lamp that gives an amazingly brilliant, soft, white light, even better than gas or electricity, has been tested by the U. S. Government and 35 leading universities and found to be superior to 10 ordinary oil lamps. It burns without odor, smoke or noise—no pumping up, is simple, clean, safe. Burns 94 per cent air and 6 per cent common kerosene (coal-oil).

The inventor, A. R. Johnson, 609 W. Lake St., Chicago, is offering to send a lamp on 10 days' FREE trial, or even to give one FREE to the first user in each locality who will help him introduce it. Write him today for full particulars. Also ask him to explain how you can get the agency, and without experience or money make $250 to $500 per month. (Adv.)

Every Housewife

Should Know These Facts About Baking Powder

—that a big can at a low cost many times results in bakings that are unfit for food.

—that lack of proper leavening strength means failure and disappointment on bake-day.

—that one cent's worth of inferior Baking Powder many times ruins one dollar's worth of other ingredients.

—that millions depend on

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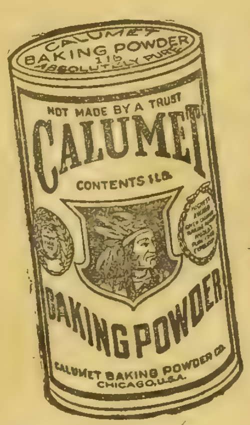
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BAKING POWDER
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not because of quantity but on account of quality—not because of price but by reason of results.

That is why the sale of Calumet is 2½ times as much as that of any other baking powder.

Buy it—try it—never fail to use it.

A pound can of Calumet contains full 16 ounces. Some baking powders come in 12 ounce instead of 16 ounce cans. Be sure you get a pound when you want it.

BEST BY TEST

THE WORLD'S GREATEST BAKING POWDER

BIG DOLL FREE!

17 Inches Tall.

Big, beautiful, smiling "Mary Ann" with the wonderful hair and real eyes that open and close. SHE IS YOURS ABSOLUTELY FREE if you can solve the Dolly Puzzle and will devote just a little of your spare time to help boost our paper.

This is a new and unusual FREE OFFER, and you will be surprised how easy it will be to get this big 17-inch Mary Ann Doll.

First see if you can find the funny faces hidden in the picture of the big Mary Ann Doll. Some are in plain sight while others are hidden in the folds of her dress. If you can find as many as four (4) of the faces, mark them with an X and send the picture with the coupon.

Then we will tell you how to get Mary Ann. Send your answer to the Dolly Puzzle right away. —AUNT MARTHA...

Write your name and address below and mail this ad to Aunt Martha.

Rural Weekly. Dept. 20, St. Paul, Minn.

Name ....

City .... Rfd. .... State ....

TOBACCO

KENTUCKY TOBACCO, 3-YEAR-OLD LEAF. Don't send a penny pay for tobacco and postage when received. Extra fine, chewing 10 lbs., $3; smoking 10 lbs., $2.50; medium smoking 10 lbs. $1.25 FARMERS' UNION, Hawesville, Ky.

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FREE TOBACCO—WRITE FOR SAMPLE OF Kentucky's best smoking tobacco. HAWESVILLE TOBACCO, CO., Hawesville, Ky.

TOBACCO, KENTUCKY'S NATURAL LEAF, Mild. Mellow smoking 10 lbs. $2.25, Hand selected chewing 3 lbs. $1.00. Free receipt for preparing. WALDROP BROTHERS, Murray, Ky.

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IS YOUR FARM FOR SALE?
AN AD IN M. B. F.
WILL SELL IT.

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Advertisements inserted under this heading for reputable breeders of Live Stock at special low rates to encourage the growing of pure-breds on the farms of our readers. Our advertising rate is Thirty Cents (30c) per agate line per insertion. Fourteen agate lines to the column inch or $4.20 per inch, less 2% for cash if sent with order or paid on or before the 10th of month following date of insertion. **SEND IN YOUR AD AND WE WILL PUT IT IN TYPE FREE**, so you can see how many lines it will fill. Address all letters,

BREEDERS DIRECTORY, MICHIGAN BUSINESS FARMER, MT. CLEMENS, MICH.

CLAIM YOUR SALE DATE

To avoid conflicting dates we will without cost, list the date of any live stock sale in Michigan. If you are considering a sale advise us at once and we will claim the date for you. Address, Live Stock Editor. M. B. F., Mt. Clemens

Oct. 28—Holsteins, Corey J. Spencer, Eaton Rapids, Mich.
Nov. 1—Shorthorns, Eaton County Shorthorn Breeders Ass'n, Charlotte, Mich.
Nov. 1—Shorthorns, Geo. Hulliberger, Saranac, Mich.
Nov. 15—Shorthorns and Poland Chinas, Sonley Bros., St. Louis, Mich.

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Right prices. Write today for good dates and our terms, address either of us.

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CATTLE

WANTED—ONE CAR OF FEEDING CATTLE and one car of feeding lambs.
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—BARGAIN—

Purebred Registered Holstein Heifer Calves

1 month old $50; 6 months old $75-$100

Federally Tested

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OCT. CLEARANCE SALE. WE ARE OFFERING 20 heifers and bulls. Heavy producing dams. Sire has 7 dams averaging nearly 1,100 lbs. on yearly test. Free from T. B., $50.00 and up.
WOLVERINE DAIRY FARM
Prop.—H. G. Booth Gladwin, Mich.

WHY PAY MORE? PUREBRED REGISTERED Holstein heifer calves, fifty dollars. Circulars free. CONDON'S HOLSTEIN CREST, West Chester. Ohio

FOR SALE—FULL BLOODED HOLSTEIN bull 16 months old from good breeding. $100 if sold soon. **RALPH VAN LOTON, Stanton, Mich.**

SHORTHORNS

DISPERSION SALE

Saranac, Mich., Nov. 1, 1922
At 1 o'clock

20—HEAD—20
REGISTERED

Shorthorn Cattle

18 Cows and Heifers
1 Bull, 3 yrs. old, 1 Bull Calf

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Richland Shorthorns

We have two splendid white yearling bulls by Imp. Newton Champion, also some young cows and heifers that we are offering for sale. Write for particulars to

C. H. Prescott & Sons

Herd at Prescott, Mich.
Office at Tawas City, Mich.

SHORTHORN CATTLE AND OXFORD DOWN sheep. Both sex for sale.
J. A. DeGARMO, Muir, Mich.

THE ESTATE OF THE LATE S. E. BOOTH is offering for sale some fine Shorthorn heifers sired by or bred to a son of Avondale. Prices very reasonable. Address
BOOTH PLACE, Owosso, Mich.

FOR SALE—REGISTERED SHORTHORNS Eighteen head cows, heifers and bulls.
FRANK ROHRABACKER, Laingsburg, Mich.

MILKING STRAIN SHORTHORNS

Registered stock of all ages and both sex. Herd headed by the imported bull, Kelmscott Viscount 25th, 648,563. Prices reasonable.
LUNDY BROS., R4. Davison, Mich.

SHORTHORNS AND POLAND CHINAS—NOTHing for sale at present. Are holding for public sale Nov. 15th. Write for catalogues.
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FOR POLLED SHORTHORNS
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PAUL QUACK, Sault Ste. Marie, Mich.

FOR POLLED SHORTHORNS
Shropshire, Southdown and Cheviot rams write to
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GLADWIN COUNTY SHORTHORN BREEDERS offer the best in beef and milk strains. All ages, both sexes. **W. S. HUBER, Sec'y, Gladwin, Mich.**

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DODDIE FARMS ANGUS of both sex for sale. Herd headed by Bardell 31910. 1920 International Jr. Champion.
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WE HAVE SOME FINE YOUNG ANGUS BULLS from International Grand Champion Stock at reasonable prices. **E. H. KERR & CO., Addison, Mich.**

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WHAT ARE YOU GOING TO FEED THIS WINTER?

EARLIRIPE HEREFORD BEEF PRODUCTION has proven very profitable to scores of producers as it will to you once you undertake it.

IF YOU ARE FIGURING ON feeding cattle this winter it will be to your interest to consider the three different ways of making a start toward "Earliripe Hereford Beef Production."

IF IT IS YOUR DESIRE to feed better cattle and increase the returns from your farm we cordially invite your most careful investigation of the Earliripe Hereford Beef System of marketing thru the Detroit Packing Company and Sotham Auction Sale plan. A system that gives better benefits from producer to consumer. Write for Earliripe Hereford Beef Booklet.

Registered Hereford Bulls and cows with calves, also grade Hereford cows with calves for sale at reasonable prices. Terms to responsible purchasers.

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FOR SALE—HEREFORDS—A FEW CHOICE bull calves. Sired by Wyoming 9th. International Winner. Write or come at once. We are the oldest breeders of Herefords in the U. S.
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FOR SALE—REGISTERED AYRSHIRE bulls and bull calves, heifers and heifer calves. Also some choice cows.
FINDLAY BROS., R 5, Vassar, Mich.

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FOR SALE—REGISTERED GUERNSEY HEIFers at reasonable prices, also choice bull calves of May Rose breeding.
H. W. WIGMAN, Lansing, Mich., Box 52.

SECURE YOUR NEXT BULL FROM ONE with both A. R. Sire and Dam. I have what you want. I also offer a few choice females.
A. M. SMITH, Lake City, Mich.

FOR SALE—REGISTERED GUERNSEY BULL, 3 years old, of good breeding, gentle.
JAKE DE BOER, R. 3, Marion, Mich.

GUERNSEY BULL Bre Heifer. Yearling Heif . Heifer calf. Best of breeding. From good producers. Price right. Write **G. A. WIGENT, Watervliet, Mich.**

RED POLLED

RED POLLED CATTLE—A few choice bulls and heifers for sale.
ROYSTAN STOCK FARM,
Will Cottle, R. R. 1, West Branch Michigan

FOR SALE—OUR RED POLLED HERD BULL, Cosy Ells Laddie, and a few heifer calves.
PIERCE BRO'S., Eaton Rapids, Mich. R. 1.

JERSEYS

FOR SALE—YEARLING JERSEY BULLS Shopie 19th Tormentor breeding.
J. E. MORRIS, Farmington, Mich.

FOR SALE—JERSEYS, REGISTERED, MAJesty heifers. Six months to year old. No. T. B.
H. J. & P. H. WALKER, R. 8, Kalamazoo, Mich.

SWINE

DUROCS

REG. DUROC-JERSEY SWINE

Spring and Fall Boars of quality sired by 1921 Mich. Grand Champion and grandson of Scissors, world's 1917 Grand Champion. Spring, Fall and yearling sows sired by above boars open or breeding privilege to the undefeated boar pig at 1922 Fairs, a son of Unique Sensation, world's 1921 Junior Champion. Personal inspection invited.
F. HEIMS & SON, Davison, Mich.

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REGISTERED SPRING GILTS
A nice assortment to select from at Farm Prices
TWIN BROOK FARM
GEO. DOHM, Mgr. WASHINGTON, MICH.

DUROC JERSEY BOARS READY FOR SERvice. Sired by Fannie's Joe Orion $25 each. Will ship C. O. D. Write us now.
H. E. LIVERMORE & SON, Romeo, Mich.

DAIRY and LIVESTOCK

LARGE INCREASE IN NUMBER OF PUREBRED FEMALE ANIMALS

When farmers adopt purebred sires to head their herds and flocks it is not long before the percentage of purebred females increases noticeably. This encouraging tendency toward more rapid improvement of live stock has been brought out by the United States Department of Agriculture in the Better Stock campaign. Of a total of more than 300,000 female animals listed by farmers who have agreed to keep nothing but purebred sires, more than 35 per cent are of pure breeding. On these farms scrubs have practically disappeared. For the larger animals the reports show that only 2.4 per cent of the females are scrubs and, of course, the males are of pure blood as that is the basis on which the farms are listed.

The poultry flocks owned by these farmers are particularly well bred, only 1.3 per cent of the female birds listed as scrubs. More than 68 per cent of a total of 610,000 birds are entered on the list as standardbred. Among the herds of swine there are very few scrub sows—only 1.1 per cent. Nearly two-thirds of them are purebred.

This Federal-State effort to improve the livestock and poultry of the country has now brought in a membership campaign that represents nearly a million head of animals and poultry. Farmers who have become members have sent in interesting accounts of their experiences in improving their animals and their bank accounts. Other farmers who are taking part in the work are invited by the department to send in their individual experiences as well as those of community organizations engaged in the improvement of live stock. Definite facts and figures should be included whenever possible.

COOLING TANKS

Every farmer who milks a few cows should have a cooling tank of some kind. It makes little difference whether he patronize a creamery, cheese factory, sells milk or keeps it for his own use: a cooling tank is a necessity.

Why not capitalize the great store house of cold which lies in the ground! This can be done by simply passing the water designed for live stock first thru a tank which will serve as a refrigerator for all products which need chilling. Well or spring water in most of the dairy states has a temperature varying from 55 degrees to 65 degrees F. This is about as cold as the average domestic refrigerator. By utilizing this cold water to chill down the milk, cream or other products we are getting refrigeration at the lowest possible cost.

Millions of dollars are lost annually to the cow-keepers of this country purely on account of the neglect of milk and cream while it is held at the farm. Butter and cheeses would be greatly improved if every patron used a cooling tank. As a matter of convenience it is worth while for every farmer to be thus equipped, for it is necessary to have a place to keep the milk and cream, and where a refrigerator can is put into use the housewife will find it very efficient and convenient.

A cooling tank is needed in both winter and summer, in winter to prevent freezing and to retain the cream or milk at the uniform and favorable temperature, while in summer it is needed to prevent extreme souring and the development of undesirable flavors. Cold is a wonderful preservative. We are told that the prehistoric mammoth has been preserved in the ices of the Polar region for fifty thousand years. When dairy products or perishable foods are kept at a low temperature, decomposition is retarded, and with dairy products this means much in the way of better quality and price. A can of cream kept in a good cooling tank is worth a dollar more than the same can kept outside and exposed to the heat of average summer weather. The producer is more interested in this dollar than anyone else. He may not feel that he is losing the dollar simply because he gets the same price for his product, but this is only a temporary condition; the industry is losing the dollar and he is the most important and biggest part of the industry. As a matter of satisfaction it should be worth while to turn out a good product when it is nearly as easy to do so.

The grading of cream and paying a differential for quality is rapidly coming into general use. In a little while the cream producers will either have to get cooling tanks or suffer a big loss due to producing second grade cream. The cooling tank is sound, sensible, economical, and demanded by decent and progressive farming methods, and we should all be for anything that has so much merit.—A. L. Haecker.

GOOD DEMAND FOR SHROPSHIRES

Dan Booher of the Brookside Farm, the "Home of the Shropshire Sheep," was in our office Saturday to arrange for some printing. Mr. Booher is one of the celebrated breeders of Shropshire sheep, and has in his flock ninety-seven registered animals, headed by an imported sire, and no better specimen of the breed are to be found anywhere. He has been in the business about ten years, careful attention to breeding has been his constant aim, and he has sheep where wool is grown on all parts of the body except on the "tip of the nose and on the hoofs." During the past year he has sold and shipped to various farmers and breeders in Michigan and Wisconsin, over sixty animals, and the demand is constant and increasing.—Evart Review.

VETERINARY DEPARTMENT

TREATMENT FOR COW GIVING BLOODY MILK

Can you tell me what to give a cow that gives bloody milk? Only one teat is affected. She has not been hurt that I know of.—E. B., Frankfort, Michigan.

—Undoubtedly the reason the cow is giving bloody milk out of one quarter of her udder is that she has injured this quarter at some time or other. She may have stepped over something that was too high and the udder dragged over some rough object or she might have hurt herself when she laid down or in some other way. We usually find that a small blood vessel in the udder has bursted. After the first few days you will notice that the first part of the milk is not bloody, but the last part of the milk is, showing that the wound is partially healed but as the milking progressed and the stripping process began the wound was reopened and therefore the last part of the milk was bloody.—O. E. Reed, Professor of Dairy Husbandry, M. A. C.

FEED SOWS SCORCHED CORN

I have two sows that do not come in heat and would like to know what to give them. They had their litters last June. They are in fair condition and well cared for.—S. M., Charlotte, Michigan.

—A young sow that had her first litter last June might not have come in heat since without there being anything wrong with her. Unless one has conditions for handling pigs in real cold weather, it would not be advisable to breed these sows before late in November.

If they do not show a heat period withn the next two or three weeks, it would be well to feed them on scorched corn for a few days, giving them all they will eat. This often proves effective in bringing sows in season. When this fails, we have used a preparation known as Vetol, put out by the Lehn & Fink, 124 Willams Street, New York, which proves effective.—Geo. A. Brown, Professor of Animal Husbandry. M. A. C.

FARM MECHANICS

YOU BET, I COULD USE A WELDING TORCH!

THE editor received a large number of interesting and instructive letters in reply to his query about the need on the farm for a cheap and practical welding torch. The information thus received is going to help pave the way for the introduction of such a torch in the near future at a price which almost any farmer can afford to pay. We are learning day by day that we must produce more economically if we are going to make any money out of farming. That means that we must constantly guard against loss of time during the busy season and too rapid depreciation of farm machinery. According to our readers a welding torch would save many a trip to town at times when it is costly business to leave the work in hand.

The letters which we considered gave the best variety of uses for which a torch could be used was from Mr. E. Eaton of Ingham county, and to him will be awarded the torch.

AMOUNT OF DYNAMITE NEEDED TO BREAK BOULDERS

EVERYONE admits that large rocks in fields that are cultivated are bad from every standpoint. Yet we see big boulders on farms wherever we go.

"How much dynamite would it take to break up that rock?" (pointing out a stone in one of his fields), is a question often asked by a farmer of someone he thinks has had experience in blasting.

This is a question that can be answered with some degree of accuracy. Different kinds of rock are of varying degrees of hardness. The shape of a boulder also has a bearing on the subject. For instance, a smooth, round stone is harder to break than a flat one.

There are three methods employed by practical blasters to break boulders: Mudcapping, which means laying the explosive on the stone and covering it compactly with stiff mud; snakeholing, meaning to tunnel or bore under the boulder, loading the charge in the dirt up against the under side of it and blockholding, which means drilling into the stone itself and loading the charges in the hole.

Mudcapping requires the least labor, but the most dynamite; blockholding, vice versa. Snakeholing is the 50-50 method as betwen labor and dynamite.

As a general rule, it may be stated that a boulder of average hardness, 1 1-2 ft. in diameter, may be broken with a pound of 50 per cent straight N. G. dynamite, if mudcapped; with 1-2 pound in a snakehole or with 1-8 pound in a block hole. A 2 ft. boulder could be snakeholed or blockholed as economically as the 1 1-2 ft. stone, but it would probably take 1-2 pound more dynamite to mudcap it. A 3 ft. stone would take about 2 pounds for a mudcap, 3-4 pound for a snakehole or 1-4 pound for a blockhole. A 4 ft. rock is usually too big to break with a single mudcap shot, and will take about 2 pounds of dynamite or a snakehole blast or 3-8 of a pound for a blockhole. A 5 ft. boulder would need about 3 pounds for a snakehole shot and 1-2 pound for blockholing.

It is best for a "green hand" at boulder blasting to make trial shots. For instance, try a stone with the charges suggested above. Watch the result. It may show it is necessary to increase the charge somewhat or may be that less dynamite can be used.

Tamping is the important feature of boulder blasting. If the tamping is compact, the minimum amount of dynamite will be necessary and the work is most certain to be successful in every way.

PAINT AND KEEP YOUR CREDIT GOOD.

A PROMINENT banker makes the statement that he is influenced in lending money to people by the appearance of their property. If their houses, barns, and other buildings are painted as often as necessary in order to give them a spick and span appearance, he feels that they are a better risk than those who do not paint their buildings and let them go to rack and ruin through neglect.

It is a condition in most all mortgages on buildings that the buildings shall be insured, for the protection of the lender, against fire. Some lenders make the stipulation also that the buildings shall be kept painted at regular intervals. This is a wise precaution, as a building can deteriorate from lack of paint so as to lose a large part of its value in just a few years. In a way, paint is also a fire protection, since it is the slow combustion of oxygen and other elements in the air that causes the decay of building material.

Besides, of for any reason it is desired to sell a property, the prospective purchaser can easily be induced to pay a higher price for a well painted house than for a shabby one. A good buyer looking over a shabby property is quick to assume that the owner is bankrupt or badly in need of money if his property has a run down appearance and makes his offer accordingly. If it is neatly painted, however, he assumes that the owner is prosperous and hesitates to make an under-value bid. In short, in case of a sale a coat of paint will bring a price for a house enough higher than could be obtained for an unpainted building to more than cover the cost of painting.

Therefore, any way we look at it, painting is a good investment for a property.

HARD FACTS ABOUT CONCRETE

THERE is a right and a wrong way to handle concrete. Used rightly it is one of the most useful and economical of available building materials. But handled wrongly it is a source of trouble and expense. There is scarcely a farmer who has not had occasion to use concrete in one or more of the multitudinous forms it can be employed on the farm. But the average farmer's knowledge of the chemical properties of concrete, correct mixture, etc., is somewhat meagre. With this issue we innaugurate a series of articles under the heading, "Hard Facts about Concrete," which will anticipate and answer most of the question with which the farmer is bothered when he works in concrete. The articles are written by one of the foremost concrete authorities in the country, and will, we believe prove of value to all who employ cement in any form. Any question which readers may desire to ask about cement and concrete will be gladly answered.—Editor.

THE EXPERIENCE POOL

Bring your everyday problems in and get the experience of other farmers. Questions addressed to this department are published here and answered by you, our readers, who are graduates of the School of Hard Knocks and who have their diplomas from the College of Experience. If you don't want our editor's advice or an expert's advice, but just plain, everyday business farmers' advice, send in your question here. We will publish one each week. If you can answer the other fellow's question, please do so, he may answer one of yours some day! Address Experience Pool, care The Business Farmer, Mt. Clemens, Mich.

REMEDY FOR WARTS ON COW'S TEATS

IN your issue of Sept. 16th I read where Mr. R. C. D. of Rose City asked for a remedy for warts on cow's teats. Here is what I have used for nearly forty years and never knew it to fail. Some warts are harder to remove than others but it will remove them all in time. Some will come off in a few weeks, seed warts take more time.

Take fresh hog lard and apply freely every day after milking. Rub in well.—David A. Bennett, Dewitt, Mich.

A boy of 12 years, dining at his uncle's ate such a good dinner that his aunt observed:

"Johnny, you appear to eat well."

"Yes," replied the urchin, "I've been practicing all my life."

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Scotch - Scotch Topped - Milking

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Wednesday, Nov. 1, 1922

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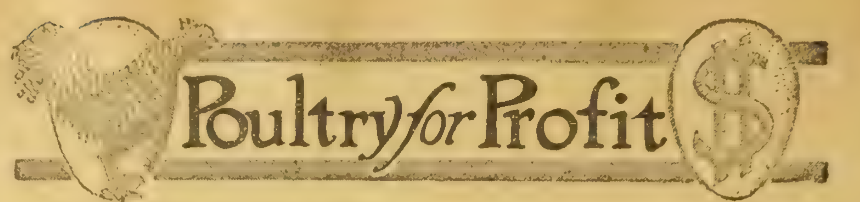

Poultry for Profit

MY POULTRY EXPERIENCE

In response to the invitation extended some time ago in these columns to readers to contribute stories of their experiences with poultry, a number of interesting them and profit by what others have learned about the successful raising of poultry.—Editor.

IS THERE MONEY IN HENS?

I CHOOSE chickens as my hobby as I found the work pleasant and profitable.

I am just a farm woman. I started on February 12, 1920 with 210 birds. I made a net profit, during the year of $544.90. Then I had 230 birds, had sold $785.20 worth of eggs and birds, and spent for feed and numerous small things $240.30. the difference of $544.90 and $240.30 was the pay for my labor.

I began keeping complete records. I wanted to know how to take better care of my chickens as I realized better care meant more profit.

We have to keep records of cost of feed also number of eggs laid, sold and consumed and chickens sold or consumed.

I have found out that the proper housing of chickens is important. Do not keep more chickens than you have room for. If overcrowded it will mean disease and loss.

Ventilation must be so arranged that there wlil be no draught on the chickens. Every house should have a system of ventilation so the chickens will receive the benefit of the fresh air.

Too many chickens in your house will lower the vitality of the flock.

Having had my flock culled I know and feel it has been a factor in making a profit. Give the well-housed, vigorous hen proper food and a full egg basket is the reward. We keep a dry mash before the chickens the year around. 100 lbs. of ground corn and 200 lbs. ground oats and 100 lbs. meat scraps.

Scratch grain is fed in litter, oats and wheat in morning and corn at night. Through the winter I give green food for variety. I plan to have green food that is most easily raised. Pumpkins are the main green food as long as they keep. In feeding pumpkins, cut them in halves, remove the seeds and the chickens will do the rest. Cabbage and potatoes are also good used in this way.

My experience has been that eggs are the most profitable part of the poultry raising business. In order to have pullets lay in winter I hatch early. Good healthy vigorous stock with cleanliness and proper feeding and housing will bring pleasing results. In my opinion there is money in chickens.—Mrs. Charles Everts, Kalamazoo County, Mich.

A PLEAURE AS WELL A PROFIT

POULTRY raising is a pleasure to to me as well as profit. It seems to me there is nothing better than a flock of poultry to eliminate waste on the farm.

My chicks have free range as soon as old enough. I add to their feed as they grow. I find a feed that will make a young pullet grow and make her lay. A grain mixture that will make a chick grow will make a plump brioler. The chick will be healthy if given a good mixture, liberal feeding and exercise.

There is no economy in feeding poultry to be sold beyond the time when they weigh 2 to 3 pounds. If they have been well fed from the time they are hatched, the broilers will be plump and juicy and bring the best price at the least expense. The best plan, I find in caring for the flock, large or small, is to select the pullets and cockerels you want to keep and sell the rest as soon as they are ready.

I always aim to keep down the cost. My hens have free range all summer and get most of the green feed they need. I give lettuce, onion tops, waste from the kitchen, anything I have with a little grain, sour milk and plenty of water to drink. We have to house poultry early, as it is cold here. We live between lakes. Hens like a change of rations.

In winter I give scratch feed in deep litter, which consists of a change of grain, corn, wheat, oats and barley, as much as they will clean up, oyster shell, grit made from pounded stone and charcoal. This is kept by them all the time with plenty of sour milk and water to drink. At noon they are fed a mash feed such as they feed cattle, with cheese made from sour milk. Every few days in cold weather I give the mash moist with a little cayenne pepper. They have vegetables for green feed, cabbage, beets, boiled potatoes, celery tops, and occasionally apples for a relish. In the evening they get a good feed of grain, going to bed with full crops. I have lots of eggs to sell all winter when the prices are good.

I only aim to keep two breeds, the Plymouth Rock for meat and White Leghorns for eggs.

My surroundings for poultry raising are far from ideal, I have no nice coops, patent feed hoppers, drinking fountains, or trap nests. Just troughs for feeding and drinking, boxes for nests, and a box of ashes for dusting. This is so arranged it takes little time and labor to care for them. My methods are not the best, but I get results.

To me it is not a question whether poultry pays but how could we get along without. I think there is no better meat than a nice juicy broiler, and the eggs play an important part in our meals being of high nutrative value. Care, management, selection, breeding, culling and proper feeding methods mean success or failure in the poultry business.

Much has been said of the cow, the pig and the hen being kept on the farm for profit. I think all things considered the hen ranks first. Hens do a business each year large enough to be rated among the big industries of the world, yet some people speak of poultry raising as the "woman's end of farming." It is said the fowls kept on American farms number nearly three hundred millions; the eggs they produce nearly two billion dozens. When it comes to poultry raising I am enthusiastic and will continue to praise the hen.—Mrs. A. J. B., Presque Isle County, Mich.

IMPROVE YOUR FLOCK

IMPROVE your flock—it will pay. We don't mean by this that you should spend money for a lot of standard-bred poultry and then give it the kind of treatment some of you are now giving your hens. Standard-bred poultry couldn't stand it—they aren't used to it. You'd better keep what you have.

But if you are really in earnest about getting the best profit from your hens, if you are willing to give a little attention to housing them, feeding them, and caring for them, then it will pay you to think about the kind of hens you have, and to take steps to improve your flock as soon as possible.

Cull—Get rid of the poor stuff. Weed out the weak, sickly, undeveloped hens that never lay at all, the old hens that lay only two or three dozen eggs in the spring, and the surplus roosters that are star boarders all the year around. Why feed these when they are producing little or nothing? Get rid of them —the sooner, the better. Culling is the basis of a good flock. Cull, and keep continually culling.

Begin now to build a better flock. Don't put it off until next year or some other time. Start now, even though you start in a very small way.

Eight or 10 hens will produce all the eggs you need for hatching. Select the very best hens you have and mate them with the best cockerel on the place.

In order to do this you will have to make some arrangement for keeping the breeding stock separate from the rest of the flock for three or four months during the breeding season.

If you have no shed which will do the breeding stock, a pen can be built for $5 or $10. In the summer this pen can be used as a brooding house for young chicks. in the fall as a fattening pen for cockerels. It is one of the best investments you can make on the farm.

You go to a little trouble and expense to get the best seed corn there is. Why not take the same pains with your chickens?

The male is half of the flock. If you can spend a little money on improving your flock it will pay you to buy a well-bred male. You know that the quickest way to improve your dairy herd is to put a good male at the head. The same is true of chickens—only you get results quicker. Mate a good male with the best hens you have and in two or three years you can grade up your flock to quite a degree of perfection.

Results will be more quickly attained if you buy a setting of good eggs. Keep the best pullets hatched from these eggs and mate them with a well-bred male, and you will have a standard-bred flock in a short time.

The quickest way to get a good flock is to buy two or three good hens and mate them with a well-bred male. Two or three hens will produce enough eggs in one season to give you quite a stock of chicks. Breed from the best of these the next year. In two years' time you will have a good-sized thoroughbred flock.

In buying eggs or breeding stock buy from some one who trap-nests his hens. The trap-nest gives you a record of the number of eggs each hen lays in a year. It is to the poultry industry what the Babcock tester is to the dairy industry. You haven't time to "fool" with trapnesting our hens, but if you are going to spend some of your hard-earned money for breeding stock insist on having the best there is. The trap-nest is positively the only test there is of the laying quality of any strain of chickens.

Finally keep one breed only. A mongrel flock cannot be as profitable as the pure-bred flock, provided both are given the same care and attention.

A thoroughbred flock is more profitable because the products are uniform. The eggs are the same size, shape, color and texture of shell. The chickens are more uniform in shape and size of body, and in color of skin and shanks.

You will take pride in a pure-bred flock and give it better care than you would a flock made up of any old kind of chickens. Your flock is more attractive in appearance. Your neighbors will notice it and will want to buy eggs and breeding stock from you. It is good for you to know that you have the best there is. It stimulates an interest in our work, and the man who is interested and satisfied is the man who is getting the most out of life.

ON RAISING GOSLINGS

I HAVE raised goslings with success. I started with 6 eggs and hatched 5, the other was infertile, I kept over 2 hens, and bought a pure-bred gander. The main thing in poultry of any kind is good breedstock. Get the best at any price, it is cheaper in the end, also get unrelated stock. I have raised 35 this year. After they are 48 hours old I feed hard boiled eggs (sparingly) mixed with poultry tonic, and dandelion blossoms. They prefer the blossom to the eggs I find. I also put a few grains of Permangnate of Potash in the drinking water from the start and feed sour milk. Never let young goslings get into water. I keep them penned up for one week cleaning the runs and sleeping quarters daily.

Second week I allow them out a little every day; third week I let them run at large and have no trouble.

Second week I feed brand and do so till they mature. I find this very essential. Change the feed to bread rung out of sour milk, a little cat meat, dutch cheese, and some small grains, and some Statrite. I find a change of feed daily keeps their appetite in good shape.

The only fault with geese is that if you have any corn planted near you will never harvest the corn, they will run it right down.—Wm. B. B. Smatts, Charlevoix county, Mich.

A PLAN FOR THE REHABILITATION OF AGRICULTURE

(Continued from page 4)

quantities of rich dessert, when, as a matter of fact, the "average farmer" is starving for substantial food. It is a case of "too much" specialist, and not enough constructive, practical, nation-wide vision.

An analysis of the last annual appropriation for the Extension Service will show that the Department of Agriculture is spending more on overhead and specialists than it is on county agents, both men and women. The total allotment of all extension funds for the current year was $18,497,360, including appropriations from the Federal government, state governments and from county authoritites. When the county wants an agent it is required to put up at least half the money. The salaries and the expenses of the more than 4,000 county agents total $11,740,657, of which one-half is provided by the Federal and state governments.

When the Bureau of Markets of the Department of Agriculture was established nine years ago, it was hoped that the bureau would work out a comprehensible national marketing policy. But no comprehensive program has been envolved.

The farmers' isolation, the necessity for independent or family unit production, the wide variety of products grow upon the average farm, the seasonable production and marketing of staple crops, resulting in market gluts, and the uncertainity of income, are the factors, taken together, which constitute the inherent weakness of agriculture.

Generally speaking, I do not advocate the entrance of government into private business. In agriculture, I believe that the time has come when the government should provide machinery on a nation-wide scale, through which farmer co-operative marketing associations may organize and function.

Taken through a series of years, the American farmer does not, and need not fear the normal functioning of the law of supply and demand, but for many years this law has not been permitted to function normally. The more compact and cohesive tendencies of urban peoples has made possible a system of middlmen, so thoroughly intrenched that they now maintain themselves in open defiance of the laws of supply and demand.

It would seem on its face, that the carrying out of a program of sufficient magnitude to effect the results I suggest would prove a tremendous undertaking. It would impose the test of sincerity and statesmanship upon Congress. However, I am convinced that the most drastic action is justified.

The principal points of my plan involve:

1. A reorganization of the Federal and state co-operotive demonstrative service, affecting principally the character of work expected of the county agent. (The Extention Service should in its entirety be adminstered directly by an assistant secretary of agriculture.)

2. A reorganization of the Bureau of Economics (formerly the Bureau of Markets)' leaving a portion of the work of the present organization under the Department of Agrirculture, placing the balance under the control and direction of an independent board to be kown as the "Federal Board of Co-operative Farm Marketing and Finance."

The reorganization suggested will be more particularly a matter of revitalizing the organization, and diecting its course back into the channels originally outlined by its founder, the late Dr. Seaman A. Knapp, to wit:

(a) Economic production.
(b) Standardization of products.
(d) Stimulation of co-operative effort among farmers
(d) Application of demonstration principles to rural homes.
(e) And of vital importance, encouraging the production upon the farm of as much as may be possible of the food consumed thereon.

Following the above general outline, assuming that it would be administered with due regard to varying conditions, the personal of this organization, if once more imbued with the idealism and inspiration of the original workers when headed by Dr. Knapp, will accomplish their full part.

COUNTY AGENTS HAMPERED

It should be said for the Co-operative Demonstration Service, as now constituted, that it is doing much in an unofficial way to aid the farmers in their attempts at organization long co-operative marketing lines. The county agent in extending this aid, however, is placed in a class with the "lawbreaker", for he is under instructions from headquarters not to participate actively in this work, as it is contrary to the interpretation given the organic law establishing the Demonstration Service. I would recommend the establishment of this new agency under the name of the "Federal Board of Co-operative Farm Marketing and Finance," under a board of practical men, representing the marketing interests of co-operative associations, organized along commodity lines, two representatives for each group, namely: grains, cotton, tobacco, live stock, dairy products and perishables, with the Secretaries of Agriculture and Commerce members ex officio of the board.

I would suggest that all market work, together with the administration of the Warehouse Act be transferred to the board as above outlined, leaving in the present Bureau of Economics all economic investigations, and crop and live stock statistical work. A part of the regulatory work since the first of July has been placed directly under the Secretary of Agriculture, and should remain there.

The functions of the Federal Board of Co-operative Farm Marketing and Finance should be separated into two divisions—first, the Division o fCo-operative Farm Organizations, and second, the Division of Finance. The Division of Co-operative Farm Organizations would be that contructive force in the organization and operation of farm organizations.

THE FINANCING PLAN

Under the Finance Division would be established a corporation, the operating capital to be provided from the Federal Treasury, through the issuance of long-term government bonds, these bonds to be sold, in os far as may be practical, in the rural sections. The sale of these bonds should be made through national farm loan associations, country banks and farm organizations. This corporation should be empowered with the authority to purchase build, lease or license warehouses, elevators and cold storage plants in all primary and export centers where available facilities are either inadequate or controlled by interests which operate same on a basis discriminatory to the co-operative commodity associations seeking to do business with them. Warehouse receipts should be issued for produce stored as provided for under the Warehouse Act, said certificates to be acceptable as collateral security for advances to the co-operative association controlling the product for which the certificate is issued. It is contemplated that a large part of the capital of the finance coporation would be available as a revolving fund which may be supplemented by collateral loans from the Federal Reserve System. In fact, the finance corporation should be a member of the Reserve System, authorized by law to do business direct with any one of the 12 Reserve banks. Be it understood, that the finance corporation should seek in every way possible, through cash advances and the providing of storage facilities, to bring about an orderly marketing of crops, seeking by these means to maintain prices against the serious and ofttimes runious breaks resulting under the present system from the periodical market gluts and from market manipulation.

The country as a whole has come to recognize that the complexities of the present-day civilization, considering the interpendent relationship existing as between industries, render it unthinkable for our government to permit the disintergration and failure of any fundamental industry. I insist that the plight of agriculture is the concern of the whole nation, and that action along fundamental lines is justified and imperative.—Reprinted courtesy of Dearborn Independent.

Dr HESS POULTRY PANACEA

Help your MOULTERS MOULT

If you want your hens to moult naturally—

If you want them back on the egg job promptly—fall and winter laying—

Then you must make sure that your moulters are healthy and hungry.

They must eat lots, and be able to digest what they eat.

That's just what

Dr. Hess Poultry

PAN-A-CE-A

does for your moulting flock.

It's a tonic that begins with the appetite—improves a hen's whole system.

It has Iron that keeps the paleness away, makes the combs and wattles red—the blood rich.

Pan-a-ce-a starts the food the egg way as soon as the moult is over.

No time lost.

No dormant egg organs after the moult, where Pan-a-ce-a is fed.

Tell your dealer how many hens you have. There's a right-size package for every flock.

100 hens, the 12-lb. pkg. 200 hens, the 25-lb. pail
60 hens, the 5-lb. pkg. 500 hens, the 100-lb. drum

For fewer hens, there is a smaller package.

GUARANTEED

I spent 30 years in perfecting Pan-a-ce-a.
GILBERT HESS
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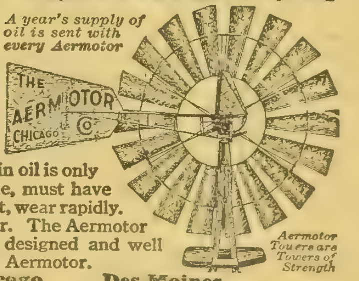
Dr. Hess Instant Louse Killer Kills Lice



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Any windmill which does not have the gears running in oil is only half oiled. A modern windmill, like a modern automobile, must have its gears enclosed and run in oil. Dry gears, exposed to dust, wear rapidly. Dry bearings and dry gears cause friction and loss of power. The Aermotor pumps in the lightest breeze because it is correctly designed and well oiled. To get everlasting windmill satisfaction, buy the Aermotor.

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MARKET FLASHES

MARKET SUMMARY

Wheat quiet to strong. Corn and oats firm. Rye steady. Beans active. Potatoes easy to lower. Butter and eggs in demand. Poultry not wanted. Cattle active and higher. Hogs higher. Sheep easy. Provisions follow trend of hog market.

(Note: The above summarized information was received AFTER the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press.—Editor.)

TRADE AND MARKET REVIEW

THE approach of winter finds business in a generally prosperous and optimistic mood. The increased movement of coal, under government direction, has gone a long way to alleviate the fear of the large industries that they would have to close down for lack of it and because of their inability to pay the exorbitant prices charged. Employment is at high tide. People are not skimping on their purchases to puite the extent they did two years and a year ago. Yet, caution and good sense are being used.

Perhaps the greatest single influence in the upturn of business is the gradually ascending of prices on farm products. Certainly this factor has given the farmers new hope despite the fact that a considerable part of their grain has gone to market at lower prices. Farmers who still hold their grain are looking forward with a good deal more encouragement than they have felt for a long time. The low price of potatoes and milk is still a discouraging factor, but the production of the latter has taken a great slump and there is a tendency toward better prices. The future of potatoes, however, is still very problematical

The foreign situation does not greatly improve and the great swing of public sentiment in this country against the proposal to cancel the war debts has plunged the European countries still further into the slough of despond, though they have never really received any encouragement here in their fond hope that America would cancel her obligations aganst them.

The Turkish situation has improved, and although the danger of hostilities has not been entirely removed, there is little liklihood now that war will eventuate. France seems blind to her duty in the crisis and refuses to be drawn into the comprising position. A goodly number of people of the United States, incensed at the Turks' treatment of the Armeninas, are quite ready to take up arms against this notorious disturber of the world's peace and wipe him and his race from the map. Strange to say, among these who would avenge the wrongs of the Armenians, we find a considerable number of the very same folks who said that the United States should not belong to the League of Nations and had no business to assume a mandate over Armenia. They must be blind, indeed, if they cannot perceive such a mandate, established at the close of the World War would have been a constant and effective warning to Turkey to behave herself. We cannot help but feel that the refusal of the United States o perform her duty at that time, has been a contributing influence in bringing about the present situation.

Despite the predictions to the contrary Europe continues to buy large quantities of goods in this country and is apparently having no difficulty in financing her purchases. France, Italy, Spain and Great Britain are apprently bringing their financial problems to a slow solution and will continue good patrons of the United States, but Austria, and Germany are rapidly approaching the verge of economic downfall, and sooner or later must disappear from the list of America's customers.

WHEAT

We are frank to confess that we have under estimated the strength of the bull movement in wheat which began the latter part of September and is still in full swing. Where and when it will end no man can say. That it will go on for some time to come and that prices will continue to improve now seems certain. The action of this market the last six weeks once more illustrates what very little control the average farmer has over his maket. The first of September no man dared to predict that within another sixty days wheat would advance nearly twenty cents a bushel. It was the wrong time for an advance, if natural factors were the only influence. The movement of wheat from farms was at its height. Farmers were anxious to sell.

Reports from other countries indicated good crops. But in the face of all these bearish factors the market suddenly took on life and started briskly upward. Those who grope in the dark for the reasons for the ups and downs of the market can only conclude that the speculators forced the price of wheat down and bought it cheap and are now forcing it up to make their profits, using the war scare as their excuse. This theorie is supported by the fact that the removal of the responsibility of the war never caused a flicker in the market.

Last reports from other wheat growing countries are to the effect that the total crop is short about 200,000,000 bushels. If these figures are correct then we may expect very much higher prices on wheat. As we go to press the eastern sections find themselves low on wheat, with elevators and farm bins in the west still bulging. Movement is slow from west to east because of the freight tie-up resulting from the strike and should winter arrive a little ahead of his usual time it might take considerable time to bring about a balance between the east's demands and the west's supply.

Most of the export business is being done by Canada who is offering her wheat freely and at somewhat lower prices than the United States. Canada has encountered no difficulty with transporation and the wheat crop of the Northwest has moved steadily and in volume to the eastern sea-board.

Mr. Foster, the M. B. F. weather man, predicted some time ago that we would see $1.50 wheat by Jan. 1. If wheat values continue to gain as they have the last thrty days he won't be far fom the mark. But that's a doggoned big "if."

Prices

Detroit—No. 2 red, $1.22; No. 2 white and No. 2 mixed, $1.20

Chicago—No. 2 red, $1.17@$1.17½; No. 2 hard, $1.15 @$1.16.

New York—No. 2 red and No. 2 hard, $1.26.

Prices one year ago—Detroit—No. 2 red, $1.24; No. 2 white, and No. 2 mixed, $1.21.

CORN

Corn followed the trend of wheat the greater part of the past couple of weeks prices for the former grain being more sensitive to changes working for higher prices than in the latter grain. Total gains at Detroit during the two weeks amounted to 7c at the close on Saturday of last week while at Chicago the advance aggregated slightly less. Demand has been good and trading active. Chicago reports there has been considerable investment buying of the grain at that point because of acive demand for cash corn and belief that supplies next season will be in good demand. Receipts are fair and buyers say if it were not for the shortage of cars receipts would be large as farmers seem to be willing to sell at least a part of their holdings, at the present price levels. Export business is not as good as it was a year ago. Receipts at Chicago last week amounted to 3,780,000 bushels, while 3,365,000 bushels were shipped.

Prices

Detroit—No. 2 yellow, 78½c; No. 2 yellow, 77½c; No. 4 yellow, 76½c.

Chicago—No. 2 yellow, 70¼@71¾c.

New York—No. 2 yellow, [illegible] No. 2 white, 91c; No. 2 mixed, 92½c.

Prices one year ago—Detroit, No. 2 yellow, 52c; No. 3 yellow, 51c; No. 4 yellow, 48c

OATS

Best grade of oats at Detroit as we go to press readily bring 48 to 50 cents per bushel which is quite an advance over the September 1st. price. Oats have shown little independent strength despite the growing scarcity, acting almost entirely in sympathy with wheat. We have been bullish on oats from the start and still are. Prices have not, in our belief, reached their zenith for the season.

Prices

Detroit—No. 2 white, 49c; No. 3 white, 47½c; No. 4 white, 45c.

Chicago—No. 2 white, 42¾@45c; No. 3 white, 41¾@43½c.

New York—No. 2 white, 56@57c.

Prices one year ago—Detroit, No. 2 white, 39c; No. 3 white, 36c; No. 4 white, 33c.

RYE

Rye continues upward the price advancing 6c at Detroit during the fortnight ending Saturday, October 21. The price on the Chicago market advanced about same amount. The grain seems to be in a strong position at the present time and possibilities of higher prices in the near future are good.

Detroit—Cash, No. 2, 84c.

Chicago—Cash, No. 2, 78¾@79c.

Prices one year ago—Detroit, 85c.

POTATOES

The black sheep in the crop family this year are potatoes. The October 1st estimate shows a drop of 5,000,000 bushels from the September, but that means nothing. As long as the estimate remains over 4,000,000 bushels prices must remain low. However, several factors enter the situation, which if unhampered will mean better prices to Michigan growers. Many thousands of acres have not been dug. We believe that this fact alone will knock at least 10,000,000 more bushels off the latest estimate. Also, there are thousands of farmers who swear they will never sell potatoes for 30 cents a bushel. And they mean it. Farmers of the western states won't get a chance, because it costs them more to ship to their market than the market is paying. Chicago potatoes can go to $1.50 per cwt., which would mean 50 or 60 cents a bushel for Michigan spuds, before the competition of the far western states will be seriously felt. Daily shipments took a slump about the middle of the month resulting temporarily in a slight strengthening of the market, but with little improvement in price. However, it goes without saying that supplies cannot be held back for very long without higher prices at consuming points. But prices have got to be considerable higher at consuming points before the local buyers will raise their prices, as none of them care to chance a sudden drop in price which would follow the release of any considerable number of potatoes. Prices are abnormally low notwithstanding the size of the crop, and we have the feeling that farmers who can afford to hang tight have more to gain than they have to lose.

Prices

Detroit—$1.20 per cwt.

Chicago—$1.10 per cwt.

Prices one year ago—Detroit, $2.28.

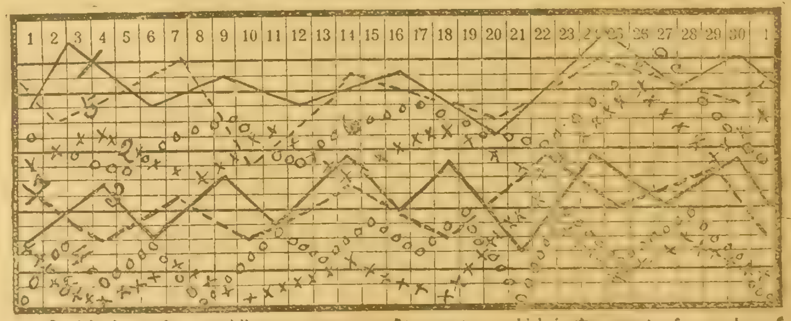
BEANS

The bean market continues very active and substantial price advances are registered every other day or so. The Detroit market on beans, for instance, advanced 75 cents per cwt., from Oct. 12th to Oct 23rd. While we have believed all along that beans would bring substantially higher prices before the winter was over, we hardly expected to see so great an improvement in such a short period of time or in that particular period in which they have advanced. We know now that the efforts of

THE WEATHER FOR NEXT WEEK

As forecasted by W. T. Foster for The Michigan Business Farmer

FOSTER'S WEATHER CHART FOR Nov. 1922.



Straight, heavy, horizontal lines represent normal temperature which is the average of same days of the year for forty years. Crooked lines above normal lines mean warmer; below, cooler; that marked 1 is for section 1, north of latitude 47, between meridian 90 and Rockies crest—2 for section 2 on my section map is for east of meridian 90, north of latitude 47—3, between latitudes 39 and 47 and between meridian 90 and Rockies crest—4, east of meridian 90, between latitudes 39 and 47—5, south of latitude 39, between meridian 90 and Rockies crest—6, east of meridian 90, south of latitude 39—7, north of latitude 43½, west of Rockies crest—8, south of latitude 43½ to Mexican line and west of Rockies crest.

Washington, October 27, 1922.—A very important feature of cropweather is the severity of the storms. I class that feature as moderate, severe and very severe. The latter includes dangerous stoms. I am making good on these. Cropweather forecasts are the very best kind for all purposes; they cover everything that is useful; they are long in advance, called long range; all other forecasts are only a few days in advance and are called short range. The former are scientific, based on well-known causes and mathematically calculated. All the short range forecasts are mere guesses, no [illegible] in them. The authors of the short ra[illegible] the weather is in all parts of the co[illegible] be tomorrow. Official science calls i[illegible] two systems have their separate spheres. [illegible] petes nor interferes with the other; [illegible] is room for improvements in both; the long [illegible] the short range does not.

The last storms of the October center on 27, in the middle northwest, classed as severe; next will be moderate and center on November 12. That has the appearance of two weeks' shortage of percipitation and warmer than usual, covering first half of November.

certain bean jobbers te bear the price that they might be safe on future contracts met with failure. We also know that the damage which the crops suffered from heavy rains during the height of the marketing season has cut the yield. But perhaps the greatest factor in the strength of the market haa been careful manner in which the growers have done their marketing. They have wisely acted upon the advice of the Business Farmer and others and at no time since the harvesting have the elevators been offered more beans than the market could really absorb. We do not believe that bean prices have reached their crest for the season.

Prices

Detroit—C H. P., $6.60 per cwt.

Prices one year ago—Detroit, C. H P., $4.55.

HAY

In general hay markets are in a strong position due to the car shortage which has curtailed shipment so that receipts are very light at all terminals. The quality of hay on the market seems to be improving.

Prices

Detroit—Standard timothy and light clover, $16.50@$17; No. 1. clover, $15@$16.50 per ton.

Chicago—No. 2 timothy, $20@$21; No. 1 clover, $16@$18.

New York—No 2 timothy, $24@$25; No. 1 clover, $23@$24.

Pittsburg—No. 2 timothy, $16@$17; No. 1 clover $17.50@$18.

Prices one year ago—Standard timothy $19@$20 per ton; No. 1 clover, $14@$15; No. 1 clover, mixed $15@$16 per ton.

CHICAGO LIVE STOCK MARKET

A series of strong to higher markets elevated cattle prices in general last week. Advances in the beef class amounted to from 25c to 50c. General improvement in industrial conditions, including healthy markets for the dressed products as well as higher prices for hides and leather, aided in boosting the market last week at Chicago. Receipts at 73,700 were approximately 10,400 larger than the week previous and practically the same as compared with the corresponding week last year. Included in the daily receipts were several loads of long-fed cattle, some of which had been culled out of herds being prepared for the fat stock show next month. Half-fat cattle, warmed up with a 60 to 90 days' feed, predominated in the run. The largest run of western steers for the year to date helped swell the offerings of steers. Higher prices for prime beef reflectd a scarcity of finished steers on the live market. Strength was noted on all grades, but the better kinds advanced sharply at some of the eastern markets.

Total arrival of hogs at Chicago last week at approximately 127,700 were comparatively small for this season of the year, being smaller than seven of the corresponding weeks during the past eleven years. Last week's supply shows a decrease of 7, 900 as compared with a week ago, 8,200 as compared with a year ago, being 9,600 larger than two years ago and 12,500 below eleven-year average. Although offerings were very small comparing with corresponding periods, they were second largest for any week since the middle of August. Shippers absorbed nearly a fourth of the week's supply, taking about 33,000 head, the largest number during any one week since July.

Average weight last week, estimated at 239 lbs, equals the lightest average weight since first week in March, being 1 lb. lighter than previous week, 4lbs. heavier than a year ago, 2 lbs heavier than two years ago and 11 lbs heavier than the eleven-year average. Although compared with recent weeks the average weight last week seemed light, in reality it was heavier than normal for this season of the year, being above any corresponding week's average weight in over eleven years.

There was a slight price reaction after midweek, which forced top to the highest point of the week $9.70. During the past two weeks top hogs have slumped 75c, being 40c below previous week's high time, 85c above a year ago, $6.05 below two years ago and within $1.15 of the eleven year average.

Barring the week ending October 14th, offerings last week in the sheep market exceeded any one week's supply this year, with the past two week's totals being the only weeks passing the 100,000 mark since week ending Jan. 15. 1921. Receipts last week at approximately 105,700 show a decrease of 14,500 as compared with the previous week, being 48,200 smaller than a year ago and 10,700 larger than corresponding period two years ago. Although arrivals from both the native and range states during the past two weeks passed general expectations, supply was below local trade requirements on practically every session, forcing all fat classes to the highest level in some time. Aged and yearling sheep reflected the extreme advance, with choice light native ewes selling at the highest level since Aug. 25 at $7.50. Only a few were offered, carrying desirable enough quality to reach that figure. Receipts from the west carried a liberal proportion of fat aged and yearlings wethers. Several bands of choice handy weight fat Montana aged wethers during the week cashed at $8.00, while fancy killing yearlings ranged upward to $12.75. Sheep values ruled on an upward trend throughout the week, with gains at the close, comparing with a week ago, ranging unevenly 50c to $1.00.

WOOL

Strength continues in the midwestern wool markets, with a recent 1c advance scored in quarter blood wools and sales made at top prices in several other grades, notably 3-8 blood wools. The market is strong and active, with dealers able to dispose of about all the wool they care to sell. The tendency is upward, not only in the midwest but in the east as well, several advances of 1c having been chalked up on the Boston market week before last.

Quotations on midwestern or so-called "native" wools in large lots—such prices as are obtained by the farmers' pools—are as follows: (f. o. b. Chicago): Fine and medium staple, 52@53c; ½ blood staple, 49@51c; ½ blood clothing, 46@47c; low ¼ blood, 33@34c; braid, 29c. Western ("territory") wools sell mostly 2@3c below these levels, Chicago basis.

MICHIGAN CROPS

SEVERAL CHANGES IN NAMES OF SOYBEANS

AT a recent meeting of the National Soybean Growers Association the duplication of variety names of soybeans was carefully considered and several changes made. The changes effect the Ito San, Midwest, Wisconsin Black, Ebony and Peking. The first three varieties are early to medium in maturity and are grown in Michigan.

At the meeting it was shown that the Mongol Medium Yellow, Roosevelt and Hollybrook (northern) were the same varieties and should be known by one name only. Since none of the old names were entirely satisfactory a new name "Midwest" was suggested and adopted.

Also the Early Yellow, Medium Early Yellow and the Ito San are the same variety and will be known as Ito San. The Wisconsin Black, Wisconsin Early Black, Wisconsin Pedigreed Black and the Early Wisconsin Black are the same and shall be known as the Wisconsin Black. Further announcements at the meeting were that the Ebony and Black Beauty varieties would be known hereafter as the Ebony variety, and grouped under the name of Peking would be the Peking, Sable and Essex.—C. R. Megee, Associate in Farm Crops, M. A. C.

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"Conservative Investment" is the title of a booklet that tells how to make your money work for you, with safety. We recommend its reading to every man or woman with any amount of money seeking investment. The First Mortgage Bond Co., Farwell Building, Detroit, Michigan, will send you it free any reader of The Business Farmer who mentions this paper or sends the coupon from their announcement on page 2 of this issue.

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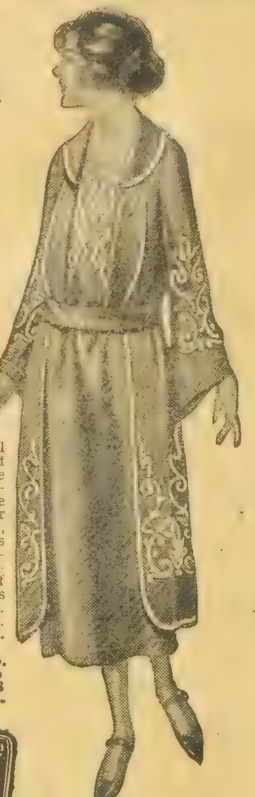
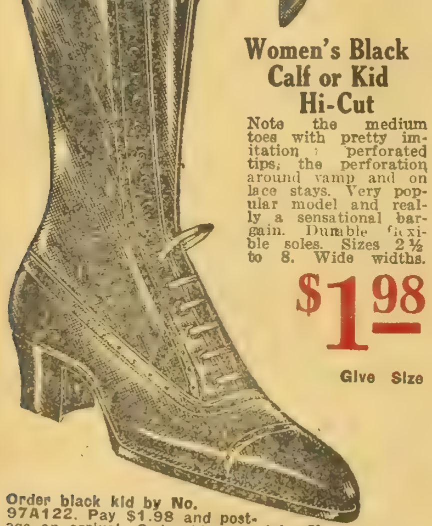


This delightful model is sure to be one of the favorites of the season. It is of beautiful cotton gabardine in navy blue or brown. The vestee, smart bell sleeves and fashionable panels are richly embroidered. The self material belt ties gracefully at back. Sizes 16 to 44. Order Navy by No. 97E5525. Order brown by No. 97E5526. Send no money. Pay $2.98 and postage on arrival.



Women's Black Calf or Kid Hi-Cut

Note the medium toes with pretty imitation perforated tips; the perforation around vamp and on lace stays. Very popular model and really a sensational bargain. Durable flexible soles. Sizes 2½ to 8. Wide widths.

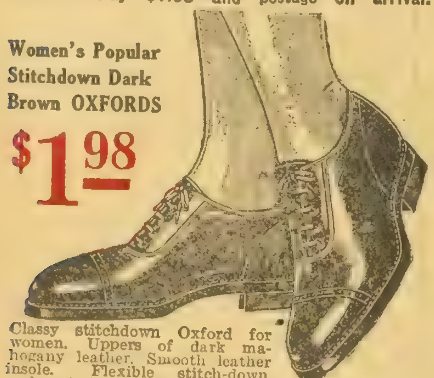
$1.98

Give Size

Order black kid by No. 97A122. Pay $1.98 and postage on arrival. Order black calf by No. 97A476. Pay $1.98 and postage on arrival.

Women's Popular Stitchdown Dark Brown OXFORDS

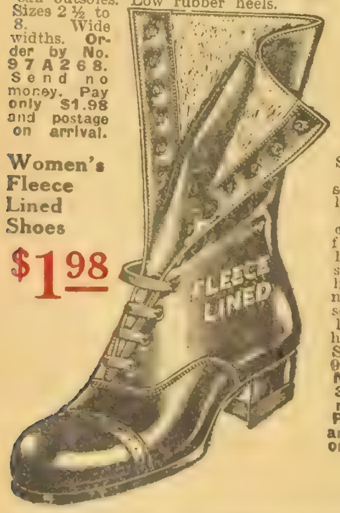
$1.98



Classy stitchdown Oxford for women. Uppers of dark mahogany leather. Smooth leather insole. Flexible stitch-down oak outsoles. Low rubber heels. Sizes 2½ to 8. Wide widths. Order by No. 97A268. Send no money. Pay only $1.98 and postage on arrival.

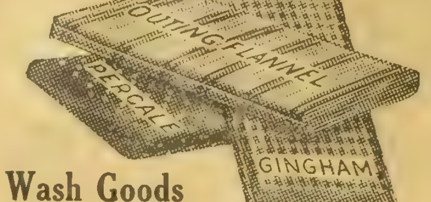
Women's Fleece Lined Shoes

$1.98



Soft kid-finished shoes, warmly lined with thick cream fleece. Roomy shape, heavy natural oak soles and low rubber heeled. Sizes 3 to 9. Order by No. 97A-396. Send no money. Pay $1.98 and postage on arrival.

Wash Goods



10 Yards Fancy Outing Flannel $1.49

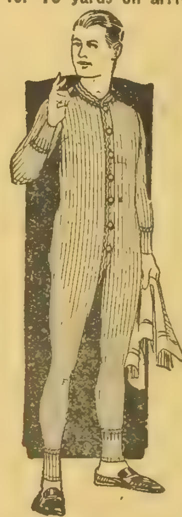
Ideal weight for nightgowns and undergarments. In fancy stripes, checks and plaids, white grounds with pink, blue or tan designs. 27-inch width. State pattern and color. Order by No. 97F3423 Send no money. Pay $1.49 for 10 yards and postage on arrival.

10 Yards 36-inch Percale at $1.39

Very choice patterns in fast colors. In white, gray, Calcutta and Indigo blue with neat stripes, figures or dots. State color and pattern. Order by No. 97F3406. Send no money. Pay $1.39 for 10 yards and postage on arrival.

10 Yards 36-in. Challis $1.59

Persian and floral patterns. Predominating colors —navy, pink, red, tan, green or blue grounds. Order by No. 97F3404. Pay $1.59 and postage for 10 yards on arrival. State color.



Men's Winter Underwear

99c

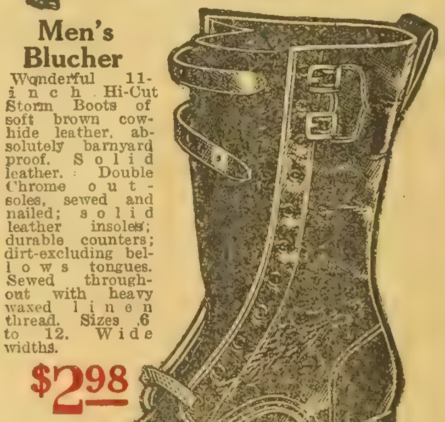
Heavy weight flat knit union suits of select long fibre cotton in popular Jaeger or grey Random color. Heavily brushed fleece lining on inside. Wrists and ankles are elastic knit. Sizes 32 to 46 chest. Jaeger color No. 97C1279. Grey Random No. 97C1280. Send no money. Pay 99c and postage on arrival. State size.

Boys' Flat Knit Union Suits of fine quality cotton. Sizes 24 to 32 for 3 to 16 years. Order by No. 97C-1358. Price 79c. Pay 79c and postage on arrival.

Men's Blucher

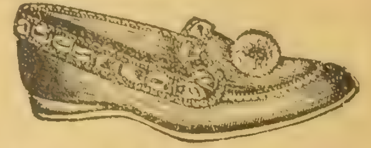
Wonderful 11-inch Hi-Cut Storm Boots of soft brown cowhide leather, absolutely barnyard proof. Solid leather. Double Chrome outsoles, sewed and nailed; solid leather insoles; durable counters; dirt-excluding bellows tongues. Sewed throughout with heavy waxed linen thread. Sizes 6 to 12. Wide widths.

$2.98



Order by No. 97A769. Send no money. Pay $2.98 and postage on arrival. State size. Order boys' sizes 1 to 5½ by No. 97E570. Price $2.48. Order little boys' sizes, 9 to 13½, by No. 97E-571. Price $1.98. Send no money. Pay bargain price and postage on arrival.

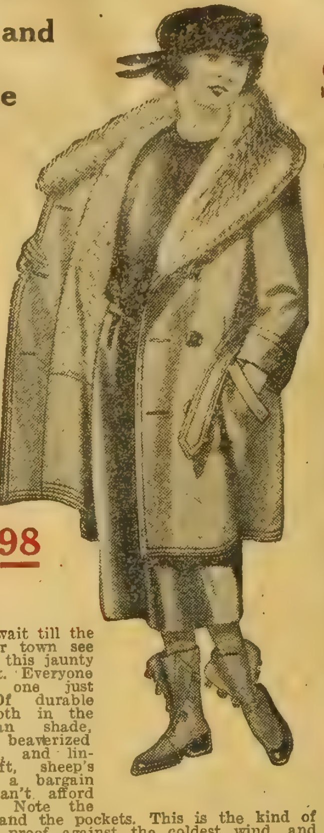
Women's Felt Moccasins, ribbon trim'd 98c



Fine grade wool felt in A—American Beauty and Fawn combination. B—Copen and Fawn. C—Lavender and Fawn. Sizes 3 to 8. Order A by No. 97A389. B by No. 97A390. C by No. 97A-391. Send no money. Pay 98c for any color. State size.

Misses and Girl's Chappie Coat

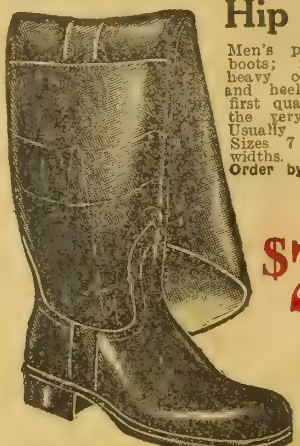
Sheep Lined



$9.98

Wait—just wait till the girls in your town see you wearing this jaunty Chappie coat. Everyone will want one just like it! Of durable moleskin cloth in the popular tan shade, with huge beaverized sheep collar, and lining of soft, sheep's wool. It's a bargain that you can't afford to miss. Note the snappy belt and the pockets. This is the kind of coat that is proof against the coldest wind, and is smart and dressy, too. Sizes 12 to 18. Order by No. 97E5608. Send no money. Pay $9.98 and postage upon arrival.

Hip Boots

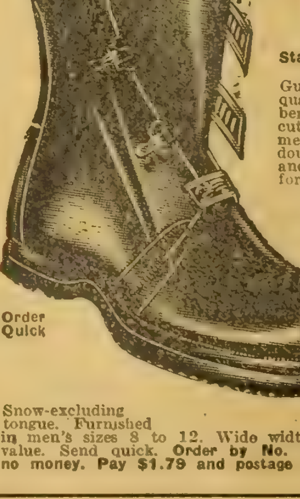


Men's pure gum hip boots; friction lined; heavy corrugated sole and heel; guaranteed first quality. Made of the very best rubber Usually retail at $5. Sizes 7 to 12. Wide widths. No half soles. Order by No. 97A949.

$2.79

GIVE SIZE

Men's Four Buckle All Rubber Arctics



$1.79

State Size

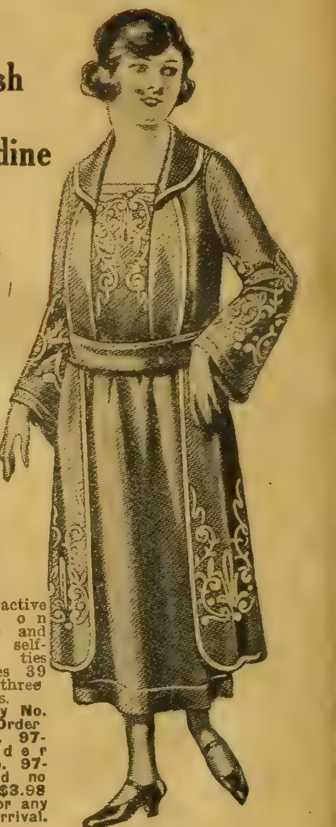
Guaranteed best quality all rubber 4-buckle hi-cut arctic for men. Made with double thick soles and seams reinforced.

Order Quick

Snow-excluding tongue. Furnished in men's sizes 8 to 12. Wide widths. Sensational value. Send quick. Order by No. 97A990. Send no money. Pay $1.79 and postage on arrival.

"Stylish Stout" Gabardine Dress

$3.98

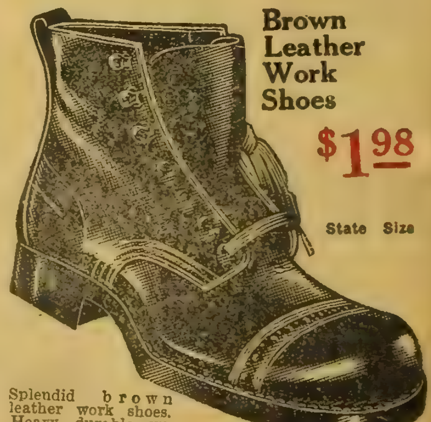


Women of large figure will see in this new model their ideal dress. This is a special design, planned to give long slendering line to stout figures. Note how the collar, revers and panels carry out the long effect. Note too, the attractive embroidery on sleeves, vestee and panels. The self-material belt ties at back. Sizes 39 to 53. In three popular shades. Order Navy by No. 97E5470. Order Black by No. 97-E5471. Order Brown by No. 97-E5472. Send no money. Pay $3.98 and postage for any color on arrival. State size.

Brown Leather Work Shoes

$1.98

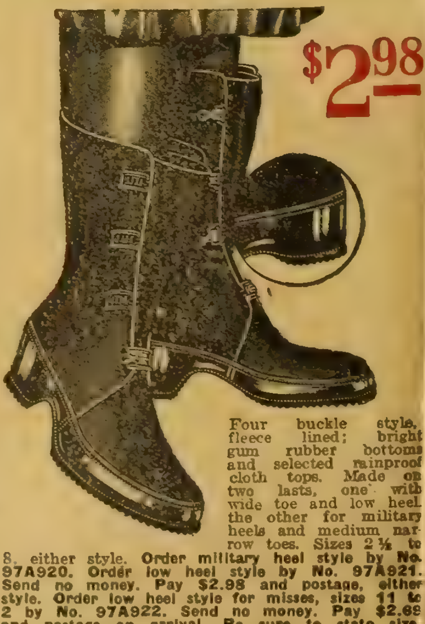
State Size



Splendid brown leather work shoes. Heavy durable uppers; extra strong solid oak leather soles; leather insoles; low broad leather heels and reinforced leather back stay. Roomy last. Sizes 6 to 12. Order by No. 97A753. Send no money. Pay $1.98 and postage on arrival. Order boys' sizes 1 to 5½ by No. 97A554. Price $1.89 Order little boys' sizes 9 to 13½ by No. 97A555. Price $1.79 and postage on arrival. Mention size.

Women's Arctics now

$2.98



Four buckle style, fleece lined; bright gum rubber bottoms and selected rainproof cloth tops. Made on two lasts, one with wide toe and low heel the other for military heels and medium narrow toes. Sizes 2½ to 8, either style. Order military heel style by No. 97A920. Order low heel style by No. 97A921. Send no money. Pay $2.98 and postage, either style. Order low heel style for misses, sizes 11 to 2 by No. 97A922. Send no money. Pay $2.69 and postage on arrival. Be sure to state size.

Be Sure to Mention Sizes, Colors, etc., and Send all Orders from this Page Direct to

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MINNEAPOLIS, MINN.

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The Michigan BUSINESS FARMER

An Independent
Farmer's Weekly Owned and
Edited in Michigan

VOL. X, NO. 6 MT. CLEMENS, SATURDAY, NOVEMBER 11, 1922 $1 PER YEAR

"They're sure dandies, maybe they'll be worth more by spring!"

Read: Michigan Cow Wins Honors as Producer, page 4—Are Railroads Managed Economically?—Secretary Wallace Says Farmer is Coming Into His Own, page 3.

Current Agricultural News

THE STORY OF A SUCCESSFUL COW-TESTING ASSOCIATION

THE first cow-testing association in the United States was organized at Fremont, Michigan, in 1906. The association engaged in active testing for a period of 12 consecutive years or until 1918 when it was temporarily disbanded. It was reorganized January 1st, 1922, with eighteen members which later increased to twenty-six. An average of 260 cows have been tested each month since the reorganization.

Hoyt D. Shisler, well known Oceana county farmer, is the official tester of the association, qualifying for the position after a short course at the M. A. C. Clair Taylor, county agricultural agent, has played an important part in bringing about the reorganization of the association and is now working on plans for a second association. The majority of dairymen belonging to the association express themselves as highly pleased with the result and will undoubtedly continue the work for another year.

Concrete evidence of the value of cow-testing was shown at a recent horticultural exhibit at Fremont, when Mr. Shisler put on an exhibit illustrative of cow-testing results.

One of the exhibits showed 581 pounds of butter produced by a Guernsey from the herd of Herman Zerlaut, which showed a profit of $107.33 above the feed cost of $71.63. Another display was of 172 pounds of butter produced by a grade Holstein at a loss of $22.96. Both cows from Zerlaut's herd.

Exhibits of different kinds of feed showed the differences between balanced and unbalanced rations, the latter costing almost as much as the former.

Photos were exhibited of two cows, showing where the poorest cow in the herd, but not the most unprofitable, was the mother of the best cow and also the highest cow in the Association at the present time. Likewise two heifers that had just freshened. Both are of like parentage, but No. 2 refused to eat grain and drink skim milk as long as No. 1. No. 1 produced 55.9 pounds of fat in her first month while No. 2 produced only 30.7 pounds.

GRAIN SHOW AT BRECKENRIDGE

FARMERS in the neighborhood of Breckenridge, Gratiot county, are busy preparing for the grain show to be held in the basement of a church at Breckenridge on November 20th. The show will include 10 ears of corn of each variety shown by each exhibitor, 3 quarts of wheat, oats, barley. Judging will be by a M. A. C. representative on afternoon of November 20th.

ANNUAL MEETING OF FARMERS CLUBS

THE annual meeting of Michigan State Association of Farmers' Clubs will be held in the Assembly Room of the State Office and Library Building, Lansing, on Tuesday and Wednesday, December 5-6.

A program that will discuss from every angle the betterment of Agriculture is being prepared and every one interested is invited to be present.

Every club in the state is asked to send delegates to this meeting and become a member of the Association. A great work has been done by our Association and a much greater work could be done if every club in the state would become affiliated with us.

We must educate, we must agitate and we must organize if we will have agriculture take its rightful place among the industries of our country.

Let every club member become a part of this organization and work for the betterment of agriculture.

That the Association may get in touch with every club in the state not affiliated already with us, it is asked that the name of the club and also the name of the secretary of the same be sent to the associational secretary at once.—Mrs. I. R. Johnson, Secretary and Treasurer, Rushton, Michigan.

GLADWIN FARMERS' SHIPPING ASSOCIATION MEETS

THE annual meeting of the Farmers' Shipping Association Gladwin, held Saturday, October 28, was attended by 100 of the 600 members. After reading and revising the by-laws the following directors were elected: George Roy, Roy Foor, Rufus Card, L. W. Easton, and J. E. Willford.

EMPHASIZES VALUE OF GOOD ROADS

C. J. GILPIN, economist in charge of Rural Life studies of the Bureau of Agricultural Economics, was one of the principal speakers at the recent Highway Transport Education Conference held in Washington. Dr. Galpin emphasized the value and necessity of roads to take the elements required to maintain a satisfactory standard of living to the farmer, as compared with the value of the roads to haul produce away from the farms. Roads to haul produce, decrease costs to the consumers while roads to bring social, educational, religious benefits and food and clothing to the farms mean better and happier people on the farms. He emphasized the need of terminal towns, adequately connected with proper roads to all the farms surrounding such towns.

WET WEATHER HURTS EUROPEAN CROPS

REPORTS from the Government's representatives in Europe indicate that wet weather has considerably injured the quality of the crops in many of the countries. In Poland large amounts of rye are reported as being used for cattle feed. In Austria, wet weather during the harvest did considerable damage to the grain. The same kind of report is received from Denmark and Sweden. In the latter country some of the grain contains as much as 20 per cent moisture. Reports from France indicate a similar condition of the crops. On the other hand the corn crop of Rumania has been almost ruined by the long dry spell prevailing during July and August in nearly every section of the country.

ONLY ENOUGH FOOD FOR NEEDS

AGRICULTURE in Central Europe is changing from a commercial basis to one of producing food to meet individual needs, according to Dr. L. C. Gray, of the U. S. Dept. of Agriculture, just returned from Europe. The new land policies in the Balkan States of cutting up large estates into small farms is having the effect of reducing surplus food production at least temporarily.

PRODUCERS OPEN NEW COMMISSION COMPANIES

TWO new producer-owned and controlled co-operative live stock commissioin companies were opened on November 1—one at Buffalo and the other at Fort Worth. This makes six companies operating as units of the National Live Stock Producers Association, set up by the Farm Bureau to improve the marketing of live stock.

The Producers Co-operative Commission Association, 965 Williams Street, East Buffalo, N. Y., has employed "Ernie" Prentiss, of the Buffalo yards, as cattle salesman; P. C. Flournoy, of St. Joseph, Mo., as hog salesman, and "Joe" Quinn, of South St. Paul, as calf and sheep salesman.

General Manager F. M. Simpson of the National Live Stock Producers Association is in East Buffalo to assist in starting the new company.

The new "Producers" company at East Buffalo is supported by the New York Farm Bureau Federation, the Michigan Live Stock Exchange, the Michigan State Farm Bureau, the Ohio Live Stock Shipping Association, the Ohio Farm Bureau Federation, and the Indiana Federation of Farmers' Association.

The Cattle Raisers and Producers' Commission Company at Fort Worth, Texas, is sponsered by the Texas & Southwestern Cattle Raisers' Association, one of the oldest live stock associations in the United States, starting in 1847 to protect honest cattlemen from thieves. Co-operating in the establishment of the producer-owned and controlled company are the Texas Farm Bureau Federation, the Texas Swine Breeders' Association, the Texas Sheep and Goat Raisers' Association, and others. The Fort Worth co-operative has taken over Hamm Bros., the biggest old-line commission firm on that market.

COUNTY AGENTS MEET DEC. 6

THE annual meeting of the National Association of County Agricultural Agents will be held during the week of the International Live Stock Exposition in December. The general meeting of the county agents will be held on Wednesday, December 6, with a morning and afternoon session, in the rooms of the Saddle and Sirloin Club at Union Stock Yards. The headquarters of the National Association of County Agents will be the Atlantic Hotel on Wednesday evening, December 6. There will be a preliminary meeting of the National Association on Tuesday afternoon, December 5, at two o'clock, at which time all the delegates from the various state associations are requested to be in attendance. H. C. McWilliams, of Ebensburg, Pa., is secretary-treasurer of the National Association of County agents.

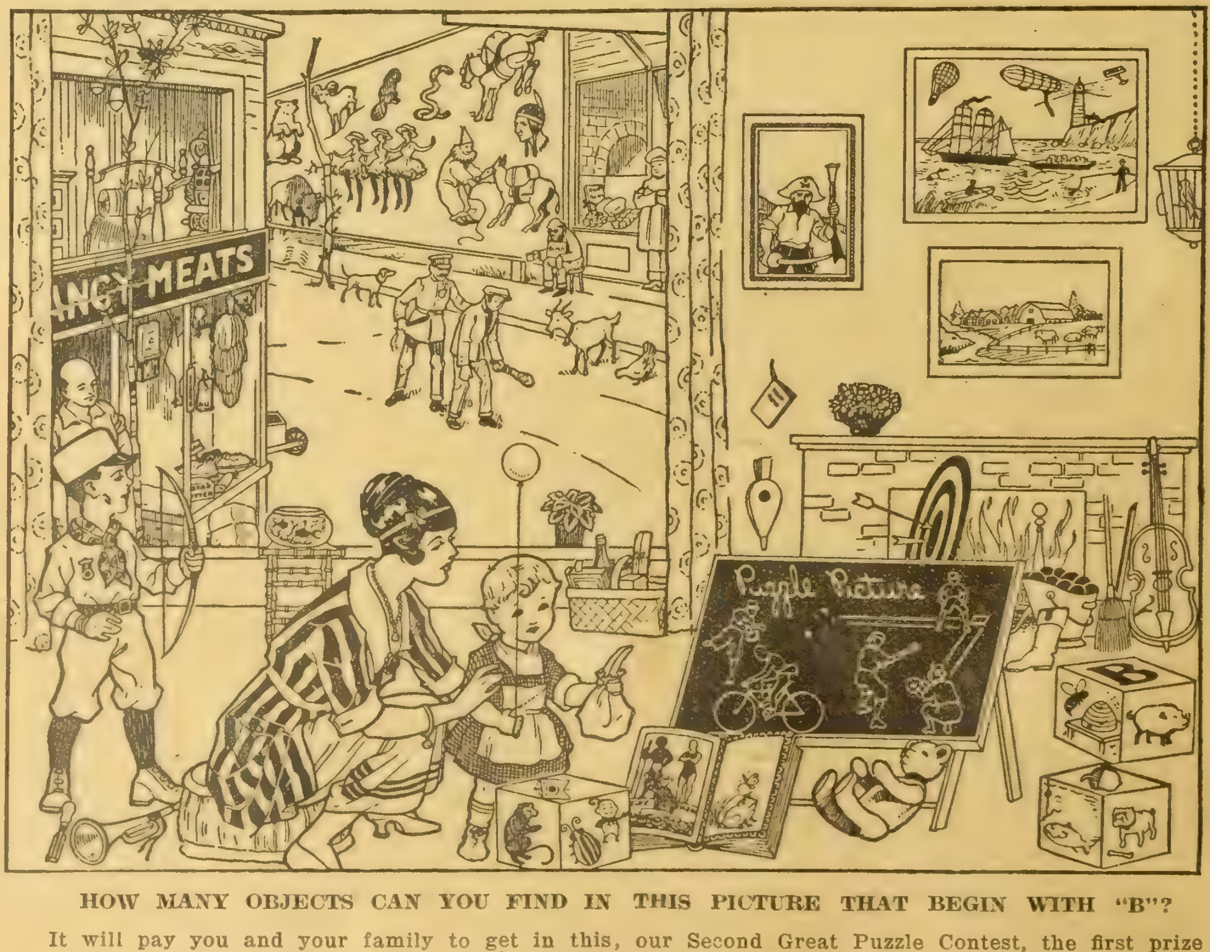
County agents attending their annual meeting may travel to Chicago on special rates, good for both the International and the annual meeting of the American Farm Bureau Federation the week following.

PLAN FUEL WOOD POOL

The Minnesota Farm Bureau is pooling orders for fuel wood. Farm Bureau township units are grouping orders so that farmers in the northern section of the state can ship carloads direct.

Only 15 Days Before the Great $500 Contest Closes

All Lists must be mailed by November 25th, 1922.



HOW MANY OBJECTS CAN YOU FIND IN THIS PICTURE THAT BEGIN WITH "B"?

It will pay you and your family to get in this, our Second Great Puzzle Contest, the first prize in which is $500 in cash! If you have not read our full announcement of this contest, which appeared in the September 30th. issue, look it up or write us a postal today for a copy of it, which we will gladly send Free! But you need not wait, start looking up the objects in the picture above right away. Your family and friends can help find them, but each list must be sent by one person. Still plenty of time, 15 days, but you should read the full announcement before you send in your list. Write: Contest Manager, The Michigan Business Farmer, Mt. Clemens, Mich.

Volume X
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The Michigan BUSINESS FARMER

Number 6
1922

Are the Railroads Managed Economically?

Can Economies be Effected in Management Which Would Permit Reduction of Rates?

BY RICHARD OWEN

MANY charges have been made that the railroads are mismanaged. The railway workers charge it and witnesses before congressional investigations have repeated the charge. The rail heads, natural to say, generally deny it, and claim that for a business of such magnitude it is conducted with remarkable efficiency. Here we have a writer who re-opens the question and cites to specific instances coming to his attention which seemed to show that proper regard is not given to many minor details of operation which in the aggregate cost the railway companies large sums of money. Of course the farmer is interested. His annual freight bill is a mighty big item. This year it is so big in comparison that it costs more to ship stuff to market than the market will pay. The railroad question is still uppermost and the accompanying article contains food for serious thought for the man who patronizes the railroads—Editor.

ONE morning a few months ago a passenger train was speeding over one of the railroads which crosses Michigan. The big Pacific type engine was making about forty-five miles per hour when something gave way on one side of the drivers. Almost instantly a side-rod snapped and plunged into the roadbed, a spring-hanger broke and the engine lurched over to one side, but still clung to the rails. At the first indication of trouble the engineer applied the air brakes and a few seconds later the train came to a standstill, a country woodland on one side of the track and a wheatfield on the other. The engineer whistled out the flagman and with the fireman rapidly descended from the cab and inspected the damaged engine. In addition to the broken side-rod and spring-hanger they found the connecting-rod pins were snapped off and the eccentric demolished. A few minutes later the conductor and baggageman walked up to the disabled locomotive.

"She's stripped herself," announced the engineer. "Can't go any farther with her. Got to have another engine."

"Can you get her to the next siding?" asked the conductor.

The engineer shook his head. "No. I'd be afraid to try it in the shape she's in. Only working on one side—and with that broken spring-hanger she's liable to climb the rail any second."

"Jack," said the conductor to the baggageman, "get the portable telephone out of the baggage car."

When the baggageman returned with the phone the conductor "plugged in" at a phone connection on a telegraph pole and called the train dispatcher.

"Engine 5342 on No. 74 is disabled," he told the dispatcher, "and we've got to have another engine before we can go any farther. She's stripped herself on the left side. We can't move our train—and we'll have to be shoved to the next siding. Better send out some mechanics to take the side-rods down on the 5342 and get her in shape to be towed back to the shops."

An hour later a light engine came up behind the standing train and slowly shoved it to the next siding. Two mechanics and the roundhouse foreman were on the engine besides the engineer and fireman who brought the engine out. The engine crews changed places on the engines, the disabled engine was uncoupled from the train and the relief engine coupled on and the train proceeded one hour and thirty minutes late.

The two mechanics and the roundhouse foreman examined the disabled engine and announced that they would take down the broken side-rod; make temporary repairs on the broken spring-hanger and would be ready to leave with it in tow of some other engine within an hour and a half. When they imparted this information to the train dispatcher he informed them that an extra would be along within an hour and if the 5342 was ready to move when it came the engine would be moved. Otherwise they would have to stay with the engine until the next extra came along as the first extra would not be held a half an hour for the purpose of towing the disabled 5342 in to the shops.

The roundhouse foreman and his two mechanics worked as rapidly as possible but before they could finish the job the freight which might have towed the disabled engine to the division terminal had passed.

Now note what happened: The engineer and fireman, the two mechanics and the roundhouse foreman waited from 9:30 a. m., until 7:30 p. m., for a train to pick them up with the engine and take them to the terminal. Eventually they were picked up but were not relaesed until nearly midnight and all of them except the roundhouse foreman drew pay with time and one-half for all hours after the first eight—until they were back to the terminal.

In other words the officials of the road would not hold the first extra train half an hour so that it could pick up the disabled engine and the five employees, the company paid out approximately 14 or 18 hours extra time to each mechanic and engineman—a total of at least 68 hours.

At this time the mechanics rates were 77 cents per hour. The enginemen's rate was figured in mileage and was ever higher.

Which brings us to the question: Are the railroads managed in an extravagant manner?

During one of the hearings in Chicago before the Labor Wage Board the labor unions purported to set forth possible economies in railroad management. The railroads replied that while the economies were possible it would cost so much to put them into effect that they could not afford them. In other words, they were too poor to be economical in the way the unions suggested. But in the instance just related there was no necessity of any expenditure of capital to save the cost of 68 hours of labor. And this only one of innumerable instances where money has needlessly been expended in operation.

In the maintenance departments of the railroads much the same condition prevails. Take the matter of fencing. Along one stretch of ten miles of track the right of way fences are so poorly maintained that within the past four days over a dozen valuable farm animals have been killed by trains after straying on the tracks through the railroad company's fences. The toll included over six horses, a calf, a dog, and a pure-bred bull which was said to be worth nearly one thousand dollars. In some instances law suits resulted because of differences in the valuation placed on the animals by the farmers and the railroad company.

"What is the company's policy regarding fencing?" was asked the roadmaster one day after a 200 pound hog had been killed by a train.

"They have no policy," he replied somewhat disgustedly.

"But their trains are killing farm animals every month," it was pointed out. "It is costing them more to pay for cattle and horses than new fencing would cost—many times over."

"I konw it," he answered. "But they won't give me the fence so I can do nothing about it."

What the roadmaster said concerning fencing is illuminating. In very many instances subordinate officers recognize defects in the policies of the management but because their superiors will not or possibly cannot give them assistance in cor-

(Continued on page 15.)

Secretary Wallace Says Farmer is Coming Into His Own

BY C. E. JOHNSON

(SPECIAL CORRESPONDENT MICHIGAN BUSINESS FARMER.)

WITH Secretary of Agriculture Henry C. Wallace as the principal speaker, the business of the day, the cornerstone laying for two new buildings under construction at East Lansing, Tuesday, October 31, was the largest Gala Day at the Michigan Agricultural College since President Roosevelt's visit there in 1907. The corner stone for the New Home Economics and Library buildings were laid in the morning and Secretary Wallace addressed one of the largest crowds assembled in the College Gymnasium for sometime.

"We have come to the time when equal attention must be given to the marketing end of farming as well as the production phase of the business" declared the Secretary of Agriculture. "The financial reward offered the farmer must be fairly comparable with that offered men of the same intelligence and abilities in other walks of life," he went on to say.

"A breakdown in civilization, the same as has followed similar periods in the past, is inevitable unless something is done to equalize conditions," Mr. Wallace declared.

Then he went on to show what the Department of Agriculture has been doing to meet these demands. First, the bureaus of the department have been reorganized and their work co-ordinated to form the Bureau of Agricultural Economics. "The statistical work, the backbone of a good knowledge of conditions throughout the country and the world, has been materially strengthened. Seventy thousand dollars are being added to the livestock work this year alone, in order that the Department may be able to tell the number of livestock on the farms twice a year."

"More is being done to keep track of what other countries are going to do so far as planting crops and how the crops are to be sold. Foreign demand and how much of a salable surplus of American products the other countries will need will be closely watched.'

"The Department of Agriculture should place itself in the position of a man owning all the farms in the country and then study how to make all pay out well' asserted Secretary Wallace. "Colleges must give more attention to the economics of agriculture; economy in procduction and the business side of farming."

Wallace reviewed some of the achievements of the nation in bringing agriculture out of the worst depression that this country has ever witnessed. The Emergency Tariff Act and the extending of the War Finance Corporation Act to its present scope were named as two of the most important measures enacted to put agriculture back on its feet. In speaking of the War Finance Corporation Act, Secretary Wallace said that "it was recognized by aall as a wise piece of emergency legislation."

Doubling the capital of the farm land banks, which "were not functioning properly before," until today a million dollars a day is loaned through these banks, was the third piece of legislation put into effect to aid the former. Allowing joint stock land banks to increase the rate of interest on bonds but not on loans came in for its share of praise.

In speaking of these four acts, Mr. Wallace stated "these are the four most powerful forces which finally stopped the downward trend in prices and started them on an upward movement."

New acts of a constructive character are those regulating the packers and stock yards and those regulating the grain exchanges. The Secretary is given full power to make a complete investigation of each of these and make such changes as he deems best. "This," declared Secretary Wallace is the greatest authority given any government agency except in times of war."

The act placing a farmer on the Federal Reserve Board was mentioned by Mr. Wallace as a forward step.

In concluding the Secretary said, "If there is going to be a prosperous nation, there must be a symetrical building up of all industries; the nation must organize as a city fire department where all pull together. The day of cheap land is past and agriculture must be put on a sound business basis year after year."

Governor Alex J. Groesbeck laid the first corner stone of the New Library Building, the first of the two stones to be put in place. The college cadet corps escorted the members of the State Board of Agriculture, Secretary of Agriculture H. C. Wallace and other dignitaries of the day, to the site and assisted in the ceremonies of the day. L. Whitney Watkins, Chairman of the State Board of Agriculture presided at the Library corner stone laying, while Mrs. Dora H. Stockman, the woman member of the board, was in charge when the stone was set for the New Home Economics Building.

The honor of laying the second stone was given to Secretary Wallace. The ceremonies were marked by their simplicity and every thing passed off with the greatest smoothness.

Michigan Cow Wins World Honors as Producer

Holstein in Northern Michigan is Second Highest Yearly Milk Producer in the World.

ON the twenty-sixth of last month a new honor came to Michigan and particularly to Loeb Farms of Charlevoix. This day marked the close of a 365 days' test for butter and milk production of the Holstein-Friesian cow, Kolrain Marion Finderne, owned by Loeb Farms and the establishing of a record showing this cow to be the highest yearly milk cow east of the Rockies and second highest in the world. Her total production for the year was 35,339.7 pounds of milk containing 1,278.58 pounds of butter. During the 365 days there were 178 in which Marion produced over 100 pounds of milk per day. During the test no less than 15 state supervisors officiated.

This great cow is a beauty, almost all white in color and is royally bred, being sired by Finderne Pride Payne, dam Kolrain Eleanor Pontiac Korndyke. She weighs 1,680 pounds and was seven years old on the 16th of last September. This is her second full year on test. She made on her previous test as a "4½ year old" 28,851.8 pounds of milk containing 1,036.3 pounds of butter.

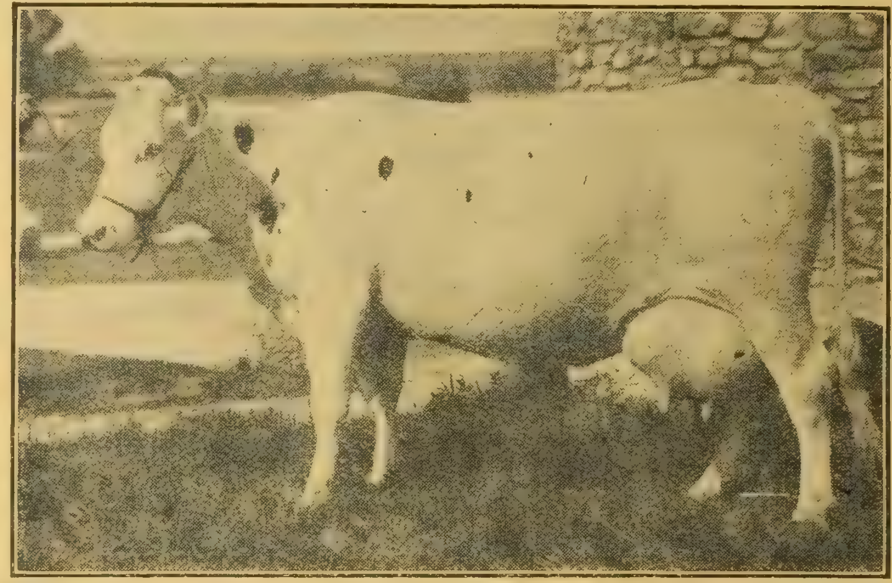
When their great Holstein cow, Kolrain Marion Finderne, completed her year's production record October 26th at Charlevoix, Michigan, Mr. and Mrs. A. H. Loeb, owners of Loeb Farms, saw the beginning of the realization of their plans for a model farm in Northern Michigan.

Early in 1917 Mr. Loeb saw the possibilities that Northern Michigan offered the dairy industry. On his trips to Charlevoix he had become familiar with stump land and vast cut over tracts, but his forecasting eye saw beyond these. A tract of 1,600 acres three miles South of Charlevoix, picturesquely located on the shore of Pine Lake, was purchased. The idea was to build a model farm, breeding cattle, Belgian horses and Duroc-Jersey hogs.

RECORD OF KOLRAIN MARION FINDERNE

Month	Days	Test	Milk	Fat	Butter
Oct.	5	3.25	385.0	12.513	15.64
Nov.	30	3.25	2675.0	86.938	108.67
Dec.	31	2.91	3299.2	96.013	120.02
Jan.	31	2.65	3188.7	84.585	105.73
Feb.	28	2.49	2964.5	73.816	92.27
Mar.	31	2.75	3377.0	92.892	116.12
Apr.	30	2.97	3125.8	92.836	116.05
May	31	3.04	3127.2	95.067	118.83
June	30	2.98	2919.3	86.995	108.74
July	31	2.80	2971.4	83.199	104.00
Aug.	31	2.836	2775.4	78.716	98.40
Sept.	30	3.104	2540.8	78.872	98.59
Oct.	26	3.035	1990.4	60.418	75.52
	365		35,339.7	1,022.86	1,278.58

Much of the land couldn't grow corn two feet high. Fields were cleared of stone, which were used in the construction of all buildings, stumps blasted and sod broken. The soil included clay, muck, sandy loam and sand, but even the lightest soil under fertilization is now producing heavily. About 750 acres are now under cultivation.


Kolrain Marion Finderne of Loeb Farms, the 7-year-old Holstein cow that has brought a world record to Michigan.

In 1918 five head of Holsteins were purchased, all of the famous Finderne strain, and also a son of the greatest of all Holstein bulls, Sir Pieterje Ormsby Mercedes. This wonderful foundation quintet of cows included Kolrain Marion Finderne, who produced this year 35,339.7 pounds of milk containing 1,278.58 pounds of butter, the marvelous record making Marion the highest yearly producer east of the Rocky Mountains and the second highest producer in the world. On her last test before making this wonderful record, she made 28,851.8 pounds of milk containing 1,036.3 pounds of butter. Combining these two records gives her a total for two consecutive years production of 64,191.5 pounds of milk containing 2,314.88 pounds of butter, which is the world's second highest combination two-year record.

Corn, rye, buckwheat, alfalfa, timothy, clover and all root crops, apples, pears, cherries, plums, berries and garden truck grow well in Northern Michigan. The winters are long and there is usually considerable snow, but the air is dry. Holstein cattle in particular do well in this climate.

At the recent state fairs at Columbus, Ohio, Detroit, Grand Rapids, and at Bay City and Saginaw, Michigan, Loeb Farms won $2,500.00 in cash and 275 ribbons on Holstein cattle, Belgian horses and Duroc-Jersey swine.

And now while farmers are undergoing troublous times financially, and farm products are low the organization of Loeb Farms in continually improving its stock and looking hopefully to a bright future, firmly believing the American farmer as the provider for a hungry world will come back into his own.

More Money For Farmer Who Slaughters and Cures His Own Meat

"THE progressive farmer can make meat production one of his most profitable activities," says E. H. Wright, an authority on the home slaughtering and curing meats. "He can save money by producing meat for market. Hams and breakfast bacon equal or superior to the best packing house products can be produced by the farmer easily and at little expense. There is a large and rapidly growing demand for these and other farmer-prepared meat products. Reflect just a minute about the difference between the price you get for meat animals on the hoof and the price the consumer pays for dressed or cured meat. Then you will perceive some of the possibilities in the production of meat on the farm—possibilities that have hardly been touched. The farmer receives too little for his meat. The consumer pays too much. He is more than ready to buy your products. All you need to do is let him know you have them." The accompanying article describes briefly the best ways for slaughtering animals on the farm. Additional information on the home dressing and curing of meats will be supplied free upon request.—Editor.

ANIMALS should be kept off feed 18 to 24 hours before slaughtering, but should have plenty of clean water to drink. There are two reasons for this. One is that it empties the intestines, making it easier to clean the carcass and prepare casings for sausage. The other is that if the animal is slaughtered when gorged with feed, the small blood vessels will not drain readily and the meat, consequently, will be darker and more likely to spoil. Keep feed away from your meat animals 18 to 24 hours before killing—but don't forget the water.

When ready for the slaughtering, handle the animals carefully. See that they are not whipped, kicked, chased or overheated. The carcass of an animal killed when excited or overheated is difficult to cool and the meat is inclined to sour or decay. Bruise marks will show in the meat and hasten spoiling. Do not overlook the importance of cautious handling if you wish to produce the finest quality of meat.

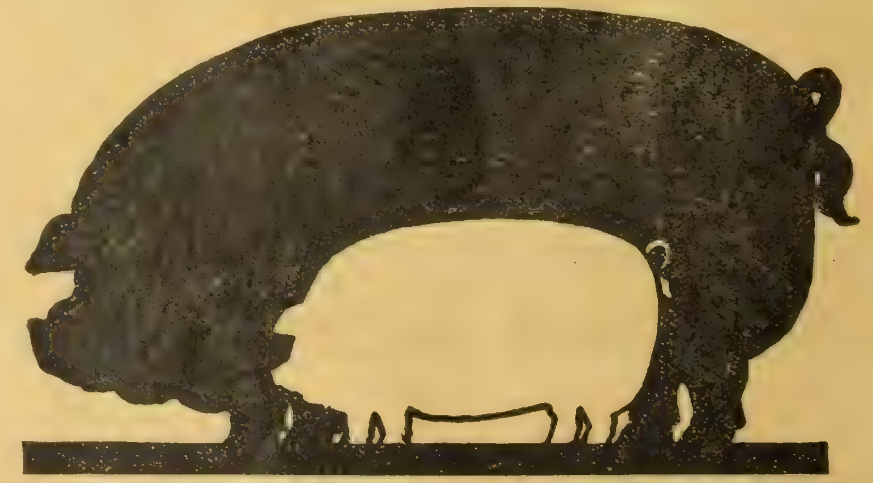
Be prepared before you start killing. See that all necessary supplies are at hand. Above all else, be certain that your killing methods are quick and effective. Half measures are dangerous to the slaughterer and may result in a poor grade of meat. Take every possible precaution so that first shot or blow will make the animal helpless and the bleeding can be immediate and complete. If a rifle is used, it should be handled by a good marksman. If an ax or sledge is used, care should be taken to place the blow properly. The practice of sticking animals without first stunning them is an abominable and unnecessary cruelty. A stunned animal can be bled perfectly if handled promptly and properly.

Carcasses should be cooled as rapidly as possible. Large ones should be split immediately and the halves cut up without delay. The meat, however, should not be permitted to freeze. The best results are obtained by chilling meat 36 to 48 hours at a temperature of more than 32 degrees and less than 40 degrees, Fahrenheit.

Pork and Pork Products

The hogs most suitable for meat are those from 8 to 12 months old. The meat of hogs less than three months of age is likely to be somewhat watery and lacking in flavor, while that of old hogs, as a rule, is tough. In the latter case, the difficulty can be overcome to some extent by fattening the animals heavily, preferably on corn, just before slaughtering.

How fat should a hog be when slaughtered? On this point, experts disagree. It's the old story of Jack Spratt and his wife. Some persons "can eat no fat;" some can't get too much of it. A certain amount of fat is necessary to make meat juicy and give it flavor. An excess of it, however is not desirable. The pork in favor is that well-marbled, fat and lean being blended in "the happy medium"—plenty of each and not too much of either. Such meat when properly cured, commands the highest price in any market and pays the producer a maximum profit.


When you sell animals on the hoof, you get only part of their value, represented by the white hog in this picture. When you sell them as meat, you get their full value, represented by the black hog.

The ideal meat hog is the smooth-bodied, rather small-boned animal of medium condition but gaining weight rapidly. Never kill a hog—or any other animal—that is losing weight. This rule is observed strictly by all producers who cater to a select market.

Slaughtering

Be ready before you start, because speed is important. Have all necessary implements at hand, and a plentiful supply of hot water for scalding. If possible, there should be a block and tackle or other device for hoisting the animals so they will bleed freely.

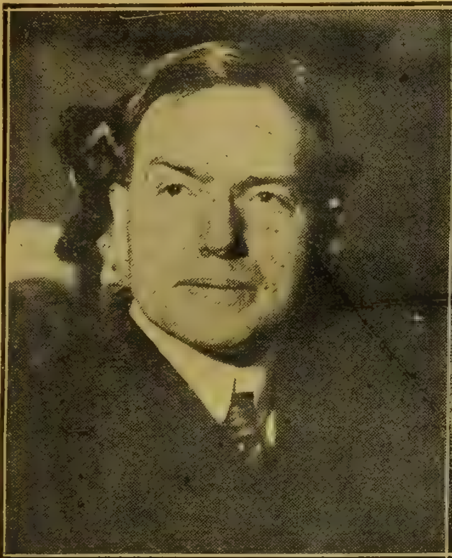
In general, it will be found more satisfactory to shoot or stun the animals before sticking. When this is practicable, perform the sticking operation as follows, two men being required:

Place the hog squarely on his back. One man stands astride the hog's body with his legs just back of the hog's shoulders, grasps the hog's forelegs firmly by the first joint and draws them backward and downward. A hog thus held is helpless. The other man, using a narrow, straight-bladed knife eight or ten inches long, makes a thrust directly in front of the hog's breastbone, pointing the blade exactly in line with the backbone toward the root of the tail.

The knife should be held perfectly straight until the cut is completed.

(Continued on page 19.)

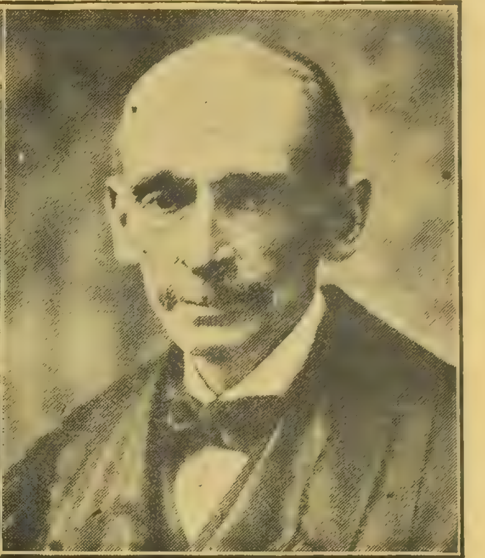
PICTURES FROM FAR AND NEAR



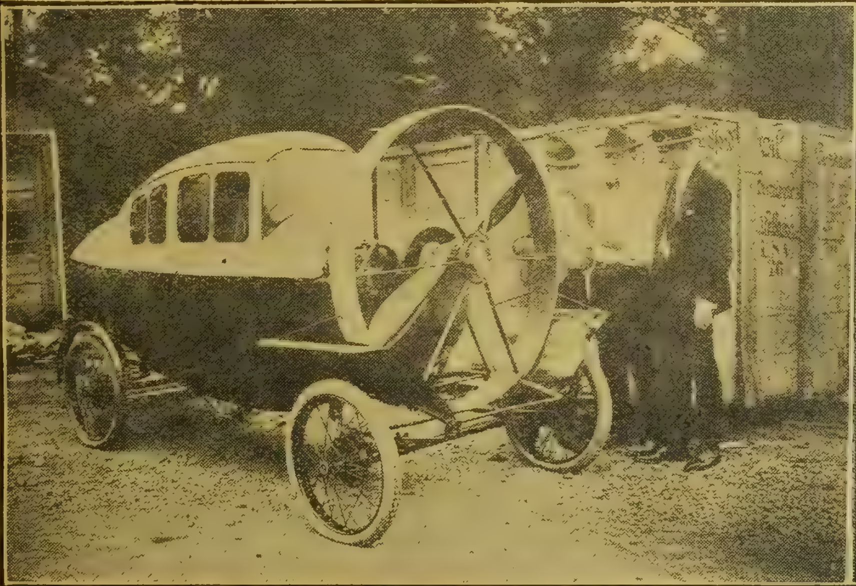
No wonder John D. Rockefeller, Jr., looks pleasant for the camera. We would too if we owned several hundred shares of Standard Oil Company stock for the past couple of years. Recently the company declared a 400 per cent dividend for the past year and Rockefeller's holdings increased in common shares alone, slightly more than $52,000,000 in value. Last year shares were worth $125, on October 11th this year they were $241.

¢ LB.
ROASTING VEAL 10

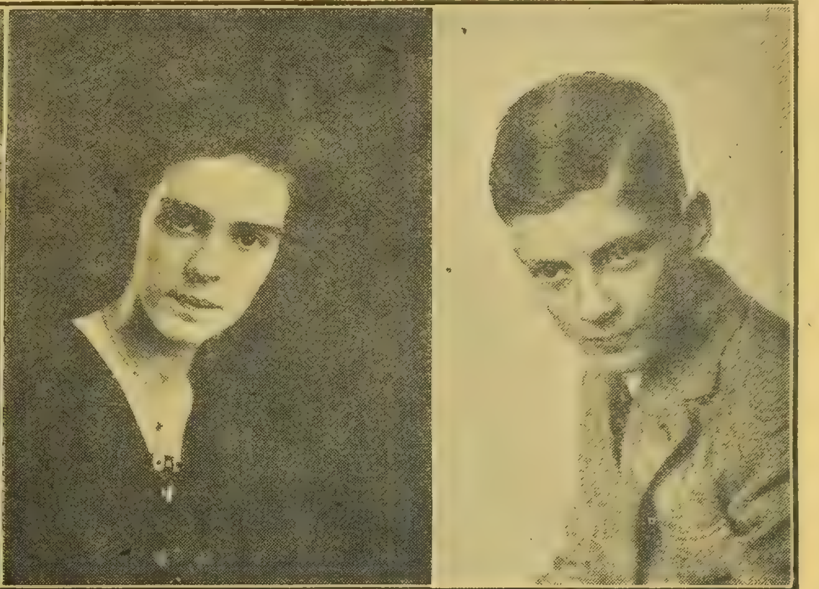
"John, stop at the 5 and 10 cent store on your way home from work this afternoon and get some meat for supper." That is what housewives in Brooklyn, New York, are saying since a new butcher store opened in that city where prices range from 5 cents to 15 cents, no higher. When asked how they could sell meat at such cheap prices the manager replied that a chain of 50 similar stores would be opened shortly, and the meat thus bought in such quantities can be sold cheaper than any individual butcher shop, with almost as much profit. Another reason for the cheapness is the fact that women butchers will be in attendance.



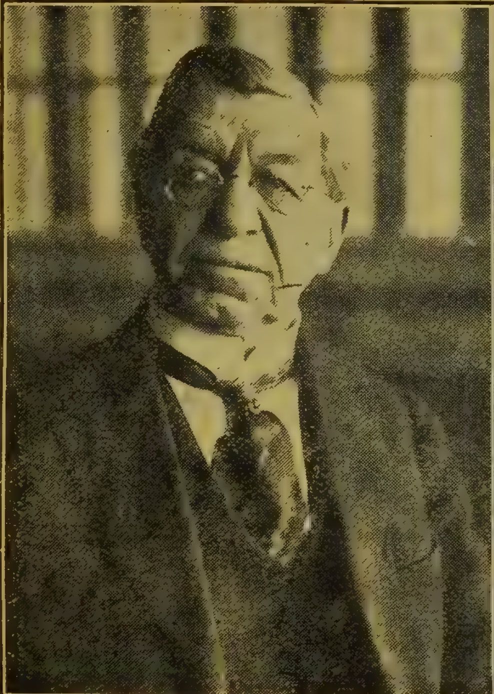
Associate Justice William B. Day, who has resigned as a member of the Supreme Court. He is over seventy years old and has served for more than ten years. This places him automatically on the retired list, and his salary of $14,500 continues during life. He will devote his attention to serving as arbitrator on the German-American Claims Commission at a yearly salary of $15,000.



Are you looking for the latest thing in automobiles? This car is a propeller-pulled two passenger auto and has just been imported by an oil company in Birmingham, Ala., from abroad. The car carries a two cylinder motor, two blade propeller, metal chassis, torpedo body and four-wheel brakes. It has steam-line body and cozy cabin and carries two passngers in comfort at the speed of 55 miles per hour.



Here are two prodigies from one family. Lois A. De Vore (left) and Henry B. De Vore, children of Mr. and Mrs. H. C. De Vore of Monongahela, Penn., are the youngest girl and the youngest boy ever admitted to the Pennsylvania state college. Henry owns up to 14 years and 8 months while Lois has reached the mature age of 16. Henry is studying natural science and his sister is taking up the more classical courses.



"General" Jacob S. Coxey wants to again march to Washington, but this time he wants to go, not as the head of his "Commonweal Army" but as a member of the House of Representatives. He is an independent candidate for Congress from the 18th Congressional District of Ohio, at Clairsville.

The "Miracle Man" from the Orient. Prof. Narukichi Nakemura recently arrived in New York City and his presence brings hopes to thousands of nearly hopeless cripples. He calls himself a "masseur". His method is a cross between Jiu Jitsu and massages of the nerve centers, and he has cured thousands. He wants to aid the poor that cannot afford to pay for cures.

This American beauty decided that being famous at home as a beauty was not enough so she started out to conquer new worlds. Her first victory was at Carlsbad, Austria, famed European watering place, where she recently won first prize. Her name is Miss Ada Johnson and she lives in St. Louis. Mo.

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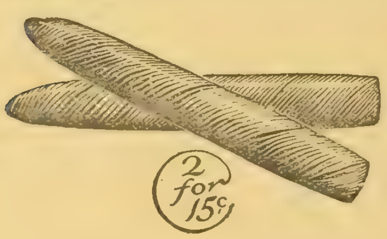

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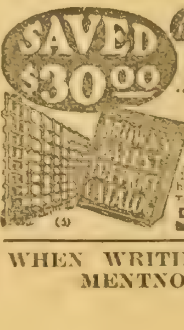
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WHEN WRITING ADVERTISERS MENTNON M. B. F.

Farmers Service Bureau

(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full name and address. Name not used if so requested.)

TENANT HAS NO FURTHER INTEREST IN PLACE

I wish to know if I rent my farm for three years and give a contract for the same and the renter notifies me in July that he will not keep the farm, he has had the farm two years, but will not keep it the third year and he leaves in July and goes to No. Dakota and leaves a man on the farm to work it and now writes to the man he will keep it and for him to go and plough and put in rye. Can I take the farm from him? He is a bachelor and I have been offering the farm to others to rent. Can he stay on the farm?

This same man had my sheep on shares for three years and he gave them up and gave me his contract. He got the sheep the 15th day of April. Can I make him leave hay enough to winter the sheep, providing I sell the sheep, can I get the amount of hay they would have eaten, providing I had kept them? He wrote he would be back next week. —J. W. F., Glennie, Mich.

—I would be of the opinion from your statement that the offer of tenant to surrender the lease and your acceptance of the offer would terminate any interest or right he had in the premises. That you would not be obliged to accept his choice of tenant nor allow the previous one to retake the premises. If you did not bargain with him about hay you would have no right to lay claim to hay you did not bargain for.—Legal Editor.

LOST RELATIVES

I am writing to you to ask you if you can find my relatives. My father's name is John Sullivan and my mother's name is Lillian Sullivan. I have two brothers and one sister. My brothers' names are Ira and Frank and my sister's name is Roilte. I was taken from home when eight years old and I am now thirty-eight. I was born in Bay City.—Mrs. Maud Walker, R. 1, Ellsworth, Mich.

MAY REMOVE PROPERTY

I rented a farm for cash and took my stalks and straw and made manure and when I went to move it off the party forbid me. It is mine, it did not grow on the rented land, only what the cattle made in the yard from the pasture they ate on the rented farm, but my stable manure I made with my own bedding brought to the rented farm.—C. F. F., Swan Creek, Mich.

—You do not ask what you want to know from your statement of the facts. I belive the manure formed as you describe is your property and that you might remove it as you please.—Legal Editor.

CAN VEGETABLES BE EATEN?

Will you please advise if the disease of the cucumbers and watermelons would affect the vegetables any to eat them?—W. L. G., Emmet County, Mich.

—There is probably no disease of the cucumbers and watermelons which affects the fruits in such a manner as to make them dangerous or injurious to eat them. Usually the fruits from diseased plants do not ripen or mature properly on the plant so that they are very unpalatable and therefore seldom eaten.—R. E. Loree, Department of Horticulture, M. A. C.

MUST HE DO THE THRESHING?

I went to see a thresher who was threshing for my neighbor and asked the engineer who was contracting the jobs, and he said he was the man who contracted for the jobs and I asked if he would come and thresh for me and my nearest neighbor and he said he would. He did thresh for my neighbor and when he finished I asked him to come to my place and he said no, that he was running the machine for another man who claimed I owed him for threshing. I only had that man thresh for me once and that was about eight years ago and the man's brother told me to pay the bill at the First State Bank at Gladwin and I did as he ordered me and got a recipt for it. After this thresher who promised to thresh refused I offered him the cash for threshing just as soon as he was through with the job, yet he said he would not do it unless I paid the other man's bill that he claims I owe. What I want to know is there a state law to compel a thresher to come in and do your threshing when he is offered the cash as soon as the job is done or can he do all the other jobs of my neighbors and pull out, leaving mine?—J. R. H., Gladwin, Mich.

—I do not know of any statue requiring a thresher of grain to accept every job offered him. However I believe that if the agent of the owner of the machine accepted an offered job a contract was formed to do the work and the failure of the man to do the threshing would make him liable to breach of contract.—Legal Editor.

MUST FURNISH WATER SUPPLY FOR SCHOOL

If a school takes water from the farm does the Board of Education pay for it?—T. I., Saline, Mich.

—I would say that 5681, Sec. 14 of the 1915 Compiled Laws, provides that the school board, or boards of education of a school district must furnish a water supply to the school. Further, the law provides that the school board shall vote a tax sufficient for furnishing the water supply. In general, the board would be expected to have the well right on the school grounds. However, they must have a supply of water on the school grounds. If they can make satisfactory arrangements with the farmer for supplying this water they have legal authority to do so. Of course, no farmer could be compelled to furnish the water supply without compensation if he saw fit to ask compensation.—Dept. of Public Instruction, Lansing.

DEPENDS UPON AGREEMENT

I rented a farm for three years and I have broken the contract by notifying the owner I leave the place by the first of December and he has agreed to have me leave. I have tried to rent different places this winter but cannot on account of wild mustard being in my corn fodder and straw. Now the owner wants me to leave straw to feed his cattle this winter but I have but enough for my own stock. Could owner take any straw off the place and would I have to pay him rent for the time I am on the place after the first of December? The straw was not mentioned in our contract. —C. H., Harrisville, Mich.

—If it was agreed at the time you leased the farm that the owner should have part of the straw he would be entitled to his share. When you agreed to leave if you also agreed to leave part of the straw he would be entitled to the amount agreed upon. If you paid money rent for the farm you would be entitled to all of the straw. This would be the case whether you stay on the place or move away. As you have agreed to terminate your lease and the landlord has accepted the agreement you have no right to possession after the first of December you may be removed at any time thereafter. If you stay after the first of December you are liable for rent for whatever the rent is reasonably worth if you do not agree upon the price. If you desire to stay and not be removed you should make an agreement with the landlord as time and amount of rent to be paid. A verbal bargain if for less than one year would be binding; but witnesses of the agreement should be had. —Legal Editor.

CANNOT WEAR SCOUT UNIFORM

If a boy joins the Boy Scouts, buys a uniform and then drops out, could he wear the uniform or is there a law against his wearing it if he is not a member of the Scouts? —A Reader, Evart, Mich.

—The national constitution and by-laws of the Boy Scouts of America states that only boys registered in good standing at headquarters in New York City are eligible to wear the official uniform of the organization. The Boy Scouts of America are incorporated under an act of Congress and the wearing of the uniform by non-scouts is a violation of the federal law. Any boy who ceases to become a member of the Scouts should dispose of his uniform to some other member.—Editor.

INSTALLING HEATING SYSTEM IN SCHOOL

Will you please advise me at once if the State Board of Education can compel a school district to buy a stove or heating system at their direction? Would like to know if the State Board of Education has the authority to demand where such heating system shall be purchased, and if they have a right to reject a system purchased by a school district.—F. T., Alma, Mich.

—The State Board of Education cannot compel a school district to buy a stove nor have they any authority to demand where such heating plant shall be purchased nor reject any heating system purchased by said district. The law provides that before a heating plant can be purchased or installed, plans and specifications must be submitted to the Superintendent of Public Instruction and approved by him. The Superintendent of Public Instruction has no authority and never makes any attempt demanding where such heating plants are purchased. The superintendent cannot approve a system that does not meet with the requirements of the state code.—Dept. of Public Instruction, Lansing.

NO CLAIM ON A

A purchased a team of pure bred mares from B for which he gave two property notes, one for $200 for one year and one for $300 for two years. One of the mares had a fistula about a year privious to this transaction. It broke out when the mare was two and a half years old and before she had been worked. B cured this and worked her lightly, selling her to A when three and a half years old. A knew that this mare had had a fistula and asked B if this trouble would return. B said it would not but there was no written guarantee to this effect. A purchased her as a perfect animal and gave property note for $200 at 6 per cent payable in one year. Before the year was up a fistula broke out on this mare in the same place as the former one. A does not feel that this could have been due to any neglect on his part as he had given the mare very good care. He had used the same collar on her that B had worked her in. She had not been worked for a month previous to this and in fact had been out to pasture the entire week privious. When the bunch was first noticed a local veterinary was called. A bad fistula developed and the mare was under the care of the veterinary for nearly four months during which time she required daily treatment from A. She was unable to do any work for about two months longer and has been favored during the entire summer. When the $200 note for this mare was due, $100 and interest was paid and the balance extended for one year. The remainder will soon be due. A feels that he is entitled to an adjustment of $100 on the price of this mare which would mean that the first note would be cancelled. He bases his claim on the facts given above, big veterinary bill, cost of keeping and extra care given mare during sickness and the fact that the mare is not now a salable animal and was not a perfect animal when he purchased her. The fistula is apparently cured and she seems to be in good condition but A would not sell her as a perfect animal for fear this trouble might some time return. The second mare was a larger animal and imported. The note for $300 will be due at the same time that the remainder of the first note is due. She has a colt 6 months old, bred, reared and registered while owned by A. Now, when these notes come due, A will ask B for $100 reduction in price. If B refuses this and takes the mares back could he lawfully claim any other property owned by A? Could he hold any claims on the colt? Could he start suit against A? Do you consider A entitled to this adjustment and if so is this the best method of procedure?—F. M., Caledonia, Mich.

—The purchase of the mare by B with knowledge of the fistula and the absence of a warranty of soundness puts B upon his guard and if he wanted to protect himself from loss in case of return of disease he should have required a warranty. While he might have purchased the animal as a perfect animal and A might have stated that the fistula would not return it was the expression of opinion only and for which A would not be liable. If the title note calls for the mare and her colt it would hold them both. If it only calls for the mare then the colt would not be included in the title. In the usual form of title clause notes the owner of the note may waive his title clause and sue upon the note. As if the mare died the purchaser would still be liable for the purchase price even though the holder of the note could get nothing from the dead body. B would have the right to sell the mare afflicted with fistula by disclosing to the prospective purchaser all the facts; and, if he believes so he would have the right to say to such prospective purchaser that he believes that it will not return. In order to make himself liable for damages by its return he must warrant that it will not return. As the contract appears to have been made open and above board, without any deceit, I can not see where B could claim any moral or legal right to a reduction in the price. Had the price of either of the horses greatly increased during the time of his ownership there would be no moral nor legal right for A to ask B an increased price above what was agreed upon.—Legal Editor.

RABBITS AND WOODCHUCKS EAT CABBAGE PLANTS

Is there anything that might be put on cauliflower and cabbage so that the rabbits and woodchucks would not eat them up?—R. F. P., Hastings, Mich.

—There is absolutely nothing known which will protect these plants short of covering them with wire netting which, of course, is out of the question on account of the expense. The simplest thing is to kill the rabbits and woodchucks before they do any damage.—W. B. Barrows, Professor of Zoology, M. A. C.

Waiter—"Sir, when you eat here, you need not dust off the plate."
Customer—"Beg pardon, force of habit. I' an umpire."—Lemon Punch.

Will Your Child Be Next?

Here are some startling facts:

"The New York State Health Department," says a leading national farm journal, "has found that twenty-one percent of the country school children have defective vision as compared with five percent of city children."

Four times MORE eye trouble in the country than in the city—*WHY?*

The farm journal gives its own conclusion: POOR LIGHT IN MANY COUNTRY HOMES!

Install a Colt "Gas Well" and Get Sunlight After Dark

How is your home lighted? Preserve good vision by installing a COLT "Gas Well." Live, work and read indoors under sunlight!

The COLT generates carbide gas which gives a clear, steady light exactly the color of sunlight. A *white* light—not a *yellow* one. A light that rests and soothes the eyes instead of taxing and straining them—"Artificial Sunlight."

Goes on at the twist of fingers, too—no matches.

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Use the gas also for cooking—a city refinement brought to the country home.

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Poor eyesight is a lifelong handicap. Don't burden yourself and children with it—*install Carbide gaslight NOW, before Winter with its long nights sets in.* Easy and quick to do. Dependable and preferable—a half million in rural communities, use it. Just drop us a postcard and we'll give you full particulars.

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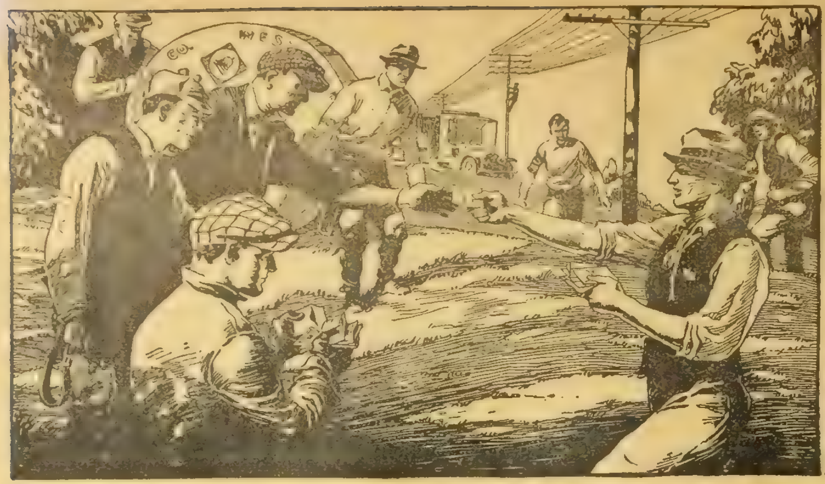

The Dollar

The daily actions of most of us are influenced by the messages received over the telephone, and yet few of us stop to think of the men and women, and the mechanisms, which help to make that daily service possible.

Maintenance, repairs, and the work of handling calls, must constantly be carried on in good times or in bad, and they must be paid for, in order that your telephone service may be continued.

The average dollar will buy to-day less than two-thirds of what it would buy before the war. This means that it costs, on the average, half as much again to buy most of the things that are necessary for keeping the country going; but the advance in telephone rates is far less than this average.

In fact, gauged by the present purchasing power of the dollar, telephone service in the country as a whole is costing the subscriber less than it did in 1914.

The Bell System generally has been able to meet higher commodity prices and increased wages by means of new economies in operation and the increased efficiency of loyal employees.

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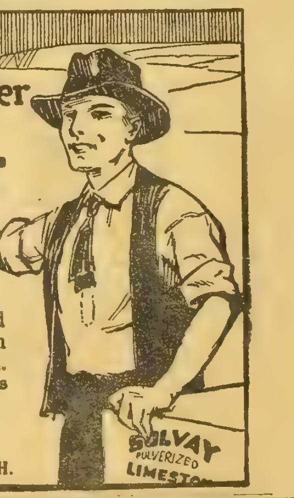

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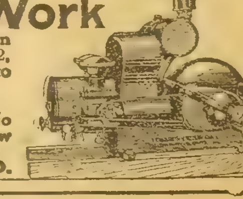

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Runs Washer, Pump, Saw, Grinder, Etc.
Busiest machine on the farm—Kerosene or gasoline—Starts easy—No cranking—Durable, Reliable, Guaranteed—Thousands used. Write now for description and bargain factory price of this wonderful farm engine.
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CARBOLA A white paint and disinfectant in one. Comes as fine powder. Simply mix with water. In 5 minutes you have a smooth-flowing paint and disinfectant that is **much better than whitewash**. Will not clog sprayer. Does not peel or flake. Ten lbs. covers 2,000 sq. ft. Used for years by leading dairy and poultry farms. Saves time, labor and money. Ask your dealer, or send $1.25 direct for 10 lbs. Add 25% for Rocky Mt. States. Carbola Chemical Co., 310 Ely Avenue, Long Island City, N. Y.

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MICHIGAN CROPS

RUSSIAN VETCH

How much Russian vetch should one sow to the acre? When is the best time to sow Hubam clover and how much to the acre? Can it be sown in March?—C. W. C., Custer, Mich.

—Russian vetch, commonly called hairy vetch, when grown with rye to be plowed under or for soil improvement is usually sown at the rate of from eighteen to twenty pounds of seed per acre. If hairy vetch has been grown on the land previously and the crop is to be used for seed, from ten to twelve pounds of seed is sufficient.

Vetch may be sown either during the late summer or early spring. Best results are secured by sowing during August. If sown after the first of September considerable winter killing. If sown during the spring, the yield of seed is so great as from August seedings. However, good yields are usually secured. Vetch is a viney, weak stemmed plant, and should be sown with a cereal crop such as rye or oats.

The Michigan Agricultural College has just issued a bulletin on "Hairy Vetch," which can be secured from the Director of the Experiment Station, East Lansing, Mich.

Hubam clover or annual white sweet clover should be sown during the early spring. If the seed can be covered, March is none too early. Better results are usually secured, however, by waiting until the seed can be covered with a light application of spike tooth harrow, or the Hubam seeded with a grass and clover seed drill. Late spring and summer seedings do not usually produce a satisfactory growth.

In tests conducted at the Agricultural Experiment Station, the biennial white sweet clover and Hubam sown on the same day have given practically the same yields of dry matter per acre when the biennial sweet clover was harvested the first of the season. The Hubam being an annual would not last over the second season.

The same cultural methods apply to Hubam as to the biennial white sweet clover. Both are quite sensitive to soil acidity should be inoculated, if neither sweet clover nor alfalfa have been grown on the soil previously, and should be seeded only on a well firmed seed bed.

It is impossible to distinguish between the seed of the Hubam and the white biennial sweet clover, so that seed of Hubam should be secured from a reliable source.—C. R. Megee, Farm Crops Department, M. A. C.

IS CHESS INJURED WHEAT?

Will you please tell me if chess is injured wheat? If not, where does it come from?—R. B.

—Chess is a weed and grows from seed the same way that many other weeds are spread by seed. Chess is usually much more prevalent when wheat has been injured by winter killing, tramping, poor germination, etc. This poor stand of wheat gives the chess a chance to grow or in other words the chess comes in to replace the missing wheat plants. Wheat never turns to chess. While chess seed and shrunken wheat kernels resemble each other slightly upon first observation a very marked difference will be noticed if the two are examined carefully.—C. R. Megee, Farm Crop Dept., M. A. C.

FACTS ABOUT FALL PLOWING

SEVERAL reasons recommend fall plowing to the experienced farmer and on a great many farms it is desirable to plow at least part of the corn ground in the fall. While fall plowing is not to be recommended on land that is subject to washing, it is however, advantageous on most of the level prairie lands and gently rolling areas, according to P. F. Schowengerdt, soils extension specialist of the Missouri College of Agriculture.

There are several advantages to fall plowing. It gives a better distribution of farm work, relieving the spring rush. Soils that are inclined to be wet and cold will warm up and be ready for working earlier in the spring if fall plowed. Where sod, coarse litter or a heavy growth of vegetation is to be turned under the material will partly decompose during the winter, thus making it possible to prepare a better seed bed in the spring. Fall plowing also helps destroy certain insects. Soils that are heavy and inclined to be cloddy will often improve in tilth with fall plowing.

Where it is desired to deepen the seed bed slightly by plowing somewhat deeper than usual fall plowing will allow the weathering of any new sub-soil that may be turned up.

Fall plowed land should be left rough in practically all cases. If is not desirable to disk or harrow it down until spring because this would tend to make it pack or run together too much.

NO DANGER IN PASTURING SUDAN GRASS

Could you advise me as to the danger of pasturing Sudan grass. I was planning to sow some next summer but have heard that it is poisonous for cattle.—R. G., Washtenew County.

—There is very little danger in pasturing Sudan grass; in fact, the only cases of poisoning from Sudan grass have been reported from the dry regions of the western states. No cases have ever been reported from the humid region east of the Mississippi River. The poison develops only when Sudan is severely injured by drought. When cured and made into hay the injurious effect is practically done away with. Sudan is a good emergency crop to sow when pasture and hay are short. It is an annual and will not live over the second season.—C. R. Megee, Farm Crops Dept., M. A. C.

FARM MECHANICS

AIR CHAMBER IN BUILT-IN REFRIGERATOR

Can you tell me where the air chamber should be in a built-in refrigerator, size 8 ft. 9 inches long by 7 ft. high and 42 inches wide inside, 4 inch air space all around, about 1 inch covering of cement in top and front and cement floor. Where should the ice be placed in a refrigerator of this kind, and also air chamber? Should latter run outdoors? We are having trouble keeping it cool with a great deal of ice.—L. S., Winters, Mich.

I would suggest that it does not make any material differences about where the air chamber or chambers are located in the wall of this refrigerator, which I suppose is being built up of several layers of material.

It is not necessary to use a 4 inch thickness of air chamber as an air chamber of one inch will answer practically the same requirements because it does not allow as much circulation of air as the 4 inch air chamber. However, if the 4 inch air space is filled with some material such as shavings or charcoal its value as an insulator would be increased. This air space or chamber should surround the entire refrigerator as fully as possible as should the insulation which is used with it.

I might also suggest that one layer of flax fibre or cork will aid very materially in the insulating properties of the wall. For example,—if the space of 4 inches thickness between the studding is filled with granulated cork with two thickness of seven-eighths inch board with tar paper between on each side it will transmit less than one-half as much heat as four thicknesses of board and two of tar paper.

Another modification is to use several thicknesses of hair quilts or deadening felt with about two thicknesses of board with tar paper between on each side of this hair quilt.

A cement covering could, of course, be put both outside of the refrigerator and inside in construction of this kind, which would serve to keep the materials dry. In any refrigerator the ice is usually put near the top so that heat circulating over it will allow the cold air coming

(Continued on page 19)

PUBLISHER'S DESK

"Some time ago you entered a puzzle contest. We are glad to inform you that the same is now closed, and you are one of the successful ones selected. Your prize consists of a most elegant eight piece Im. Silver Set, or an (Im. Egyptian Diamond apparently worth $10.00 in Jewelry stores.) Either prize belongs to you, and upon receipt of 98c in cash or money order (no checks) to cover all costs mailing, packing, etc, we shall be glad to forward your prize at once. Kindly return this card to us with the required amount within 15 days so we can have the prize shipped to you promptly from the U. S. A. factory. Be sure to remit charges direct to us. Congratulating you on your good fortune, we beg to remain, very faithfully yours, Canadian Silverware Co."

A reader from Holton, who sent this card, evidently will not be trapped by these slick Candian grafters who are just outside the jurisdiction of the U. S. Postoffice Department, but I am reprinting it here with the hope that I can save others from losing their "98c in cash or money order, no checks." I do not doubt but what if our reader has sent the amount required she would have received an "elegant eight piece imitation silver set or an imitation Egyptian diamond" but on the other hand, I am equally sure she would be able to duplicate either of these articles in any five and ten cent store.

It is a safe rule to follow not to send money by mail to any house which is not advertised in good reliable publications. The Business Farmer could be filled from cover to cover with cheap catch-penny schemes to trap our readers, but we try to investigate any questionable advertiser, and no one gets in our columns with whom we could not do business ourselves.

FRUIT and ORCHARD

EDITED BY FRANK D. WELLS

THE RASPBERRY SITUATION

DISEASES among raspberries are of a more serious nature than is commonly supposed. Reports from the important berry growing sections prove that leaf curl and mosaic among the reds, blue-stem among the blacks and root-gall among both have already destroyed a high percentage of canes.

These diseases are not easily described so as to be detected with certainty. A little field work however, with one who understands them will unable one to recognize diseased plants.

Leaf-curl is seen on the new canes. Few or no branches, and dark colored wood; leaves along the canes dark green, more or less crinkled and curling downward, are signs to look for. The younger growth at the end of the canes is lighter colored, but small, crinkly and curled, a condition especially noticable on the sprouts.

Mosaic is similar to leaf-curl. It has not yet been determined that the two are not the same under different conditions.

Fruit on infected plants is small, crinkly and of little value. Pickers avoid such plants and usually the fruit is a loss.

Blue-stem attacks black raspberries. It shows itself in small, puffed and mottled leaves near the base of the canes, where the wood has a dark, unhealthy color.

Root or crown-gall is sometimes seen at the base of the cane, but is more often out of sight on the roots. It kills the roots, so starves the plants. Weak, sickly, unproductive canes are to be expected where there is root-gall.

Now what is to be done? So far as a cure is concerned there is none. Dependence must be upon preventive measures.

First of all is the soil. Plants should be set where no raspberries have been grown for at least one, better two, years. Since the roots are infected as well as the tops in case of all three diseases, the ground becomes full of spurs which may inoculate new plants. So to dig out a diseased plant and set in a new one, though it may be healthy, is labor for nothing.

Next in importance is the plant. It should be taken from a healthy cane, since the disease is transmitted from the parent stock.

A plant showing signs of leaf-curl or blue-stem should be dug out. Even though there be only a single stalk or shoot, the whole plant, root and top is inoculated. This, if rigidly followed out; will aid in keeping the disease from spreading.

All weak, sickly plants should be dug out. They are unprofitable anyhow and sooner or later become the prey of some disease, unless they die to save themselves.

The present is not cheerful to many fruit growers, but the one who wins is the one who stays in the game. Considering the recent prices for raspberries and the shortage promised for the immediate future, it would seem as though those who have soil and location in their favor could do no better than to prepare for growing the fruit. Plant next spring.

NOTES AND COMMENTS

What will be better than an old-fashioned Russet, pitted this fall and taken out next spring? The public is finding it out, too. Orchard owners who not long ago could find no better use for Russet than for cider now say they have no difficulty to dispose of all they have by keeping them in pits till March or April.

* * *

If the high-bush cranberry had to be imported from China or Australia or South Africa, it might be ranked among the chicest of fruits. As it a native its excellent qualities are known to few. It is really not a cranberry at all, but one of the viburmums. A jelly may be made from it that once eaten is no soon forgotten.

* * *

The cherry trees shed their leaves before their time. The foliage turned yellow in mid-summer. Now the crop will be cut short next year and the trees are not well prepared to meet the winter. Timely spraying would have prevented it. No, fruit growing does not pay in such cases. Early cherries may ripen their fruit before the fungus gets in its work, but the late varieties suffer, the fruit being poor in quality, or may not be of any use at all.

* * *

Peter Gideon grew more than a thousand apple seedlings toproduce one variety of value, but that was the Wealthy. How much this variety has added to the apple production of the country is not to be estimated. It is a fitting monument to a worthy man.

* * *

Wild grape juice makes good jelly, but it does not appeal to many as a beverage. Mixed with elderberry, however, it seems to have a place in public favor. The acid flavor of the grape is toned down and the strong elderberry flavor is neutralized. The proportions are one of the grape to three of the berry.

"There is a story in this paper of a woman who used a telephone for the first time in eighty-three years."

"She must be on a party line."

GMC

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Model K-16, One Ton

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Chassis only—at the factory

The Best Truck for the Farm

For general farm use, on hard roads or in rough fields, the Model K-16 one ton GMC provides more pulling power, more speed, and more economy than other trucks of the same capacity.

Moreover, this "Jim-Dandy" truck is built from truck parts exclusively—no passenger car parts used. Consequently it has the sturdiness and enduring performance that is demanded for hauling over all kinds of roads and in all kinds of weather.

The exclusive features of GMC construction, developed from more than ten years of successful truck building, have provided this truck with more continuous performance and lower operating and maintenance costs. Due to its advanced design there is not a single wearing part in this truck that cannot be replaced. Such refinements as Removable Cylinder Walls, Removable Valve Lifter Assemblies, Pressure Lubrication, and Instantaneous Governor action all give to this truck the dependability that is so vital in farm trucking.

In every detail of construction the Model K-16 has been built according to the most approved and most advanced practices.

Magneto ignition, electric lights and starter with conduit wiring entirely separate from the ignition wiring, radius rods, thermo-syphon cooling, oversized brake drums, interchangeable brake rods, complete instrument board, pressure chassis lubrication, cord tires—

All these are universally accepted as the best for motor truck use—all these are standard in this GMC.

Measured by any standard this one ton truck has no superiors—and its cost, considering its quality, is much lower.

Write for an illustrated booklet, "Motor Trucks on the Farm."

GMC Chassis list at factory as follows: One Ton, $1295; Two Ton, $2375; Three and One-half Ton, $3600; Five Ton, $3950; tax to be added

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Dealers and Service in Most Communities

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A Remarkable Home Treatment Given by One Who Had It

In the year 1893 I was attacked by Muscular and Sub-Acute Rheumatism. I suffered as only those who are thus afflicted know for over three years. I tried remedy after remedy, but such relief as I obtained was only temporary. Finally, I found a treatment that cured me completely and such a pitiful condition has never returned. I have given it to a number who were terribly afflicted, even bedridden, some of them seventy to eighty years old, and the results were the same as in my own case.

I want every sufferer from any form of muscular and sub-acute (swelling at the joints) rheumatism to try the great value of my improved "Home Treatment" for its remarkable healing power. Don't send a cent; simply mail your name and address, and I will send it free to try. After you have used it, and it has proven itself to be that long-looked for means of getting rid of such forms of rheumatism, you may send the price of it, One Dollar, but understand I do not want your money unless you are perfectly satisfied to send it. Isn't that fair? Why suffer any longer, when relief is thus offered you free. Don't delay. Write today.

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The Hunted Woman

By James Oliver Curwood

Michigan's Own and America's Formost Author of the Great Northwest

SYNOPSIS

JOANNE GRAY is one of the passengers on the train that connects "The Horde" with the civilized world. For eighteen hours she has been riding steadily bound for Tete Jaune Cache, the home of "The Horde", where she has no friends and all will be strange to her. The train stops at a town composed of several tents and learning that the train will not leave for two hours she goes in search of food and a bath. She is directed to "Bill's Shack" and it is here where she meets Bill Quade, who not only owns and operates "Bill's Shack" but is also leader of the lawless men of the town. Quade says he has a room she can rent and that he will show it to her. As they pass of the room a newcomer enters the doorway leading off the street. The newcomer is John Aldous, a well known novelist. He sees the strange girl enter the place and believes she has made a mistake and as he stands in the doorway his eyes rest upon the curtained doorway through which the girl and Quade have passed. In but a moment the girl steps out her face flaming and eyes flashing. Quade follows her apologetically. He starts to offer the girl some money but before he can do so Aldous steps to the girls side and floors Quade with a terrific blow. Aldous hurries the girl away from the scene to the home of friends. He then asks the girl to be his guest at supper in his cabin. She accepts. Joanne tells Aldous she is going to Tete Jaune to find her husband, Mortimer FitzHugh. Aldous decides to go with her to protect her from Quade and his partner at Tete Jaune, Culver Rann.

(Continued from last issue,)

HER words sent a warm glow through him.

"Nothing will happen," he assured her. "Quade will not come back."

"I don't want you to return to the cabin," she persisted. "Is there no other place where you can stay?"

"I might go down and console Stevens, and borrow a couple of his horse blankets for a bed if that will please you."

"It will," she cried quickly. "If you don't return to the cabin you may go to Tete Jaune with me tomorrow. Is it a bargain?"

"It is!" he accepted eagerly. "I don't like to be chased out, but I'll promise not to sleep in the cabin tonight."

Mrs. Otto was advancing to meet them. At the door he bade them good-night, and walked on in the direction of the lighted avenue of tents and shacks under the trees. He caught a last look in Joanne's eyes of anxiety and fear. Glancing back out of the darkness that swallowed him up, he saw her pause for a moment in the lighted doorway, and look in his direction. His heart beat faster. Joyously he laughed under his breath. It was strangely new and pleasing to have some one think of him in that way.

He had not intended to go openly into the lighted avenue. From the moment he had plunged out into the night after Quade, his fighting blood was roused. He had subdued it while with Joanne, but his determination to find Quade and have a settlement with him had grown no less. He told himself that he was one of the few men along the line whom it would be difficult for Quade to harm in other than a physical way. He had no business that could be destroyed by other's underground methods, and he had no job to lose. Until he had seen Joanne enter the scoundrel's red-and-white- striped tent he had never hated a man as he now hated Quade. He had loathed him before, and had evaded him because the sight of him was unpleasant; now he wanted to grip his fingers around his thick red throat. He had meant to come up behind Quade's tent, but changed his mind and walked into the lighted trail between the two rows of tents and shacks, his hands thrust carelessly into his trousers pockets. The night carnival of the railroad builders was on. Coarse laughter, snatches of song, the click of pool balls and the chink of glasses mingled with the thrumming of three or four musical instruments along the lighted way. The phonograph in Quade's place was going incessantly. Half a dozen times Aldous paused to greet men whom he knew. He noted that there was nothing different in their manner toward him. If they had heard of his trouble with Quade, he was certain they would have spoken of it, or at least would have betrayed some sign. For several minutes he stopped to talk with MacVeigh, a young Scotch surveyor. MacVeigh hated Quade, but he made no mention of him. Purposely he passed Quade's tent and walked to the end of the street, nodding and looking closely at those whom he knew. It was becoming more and more evident to him that Quade and his pals were keeping the affair of the afternoon as quiet as possible. Stevens had heard of it. He wondered how.

Aldous retraced his steps. As though nothing had happened, he entered Quade's place. There were a dozen men inside, and among them he recognized three who had been there that afternoon. He nodded to them. Slim Barker was in Quade's place behind the counter. Barker was Quade's right-hand man at Miette, and there was a glitter in his rat-like eyes as Aldous leaned over the glass case at the end of the counter and asked for cigars. He fumbled a bit as he picked out a half dollar's worth from the box. His eyes met Slim's.

"Where is Quade?" he asked casually.

Barker shrugged his shoulders.

"Busy to-night," he answered. "Want to see him?"

"No, not particularly. Only—I don't want him to hold a grudge."

Barker replaced the box in the case and turned away. After lighting a cigar Aldous went out. He was sure that Quade had not returned from the river. Was he lying in wait for him near the cabin? The thought sent a sudden thrill through him. In the same breath it was gone. With a half dozen men ready to do his work, Aldous knew that Quade would not redden his own hands or place himself in any conspicuous risk. During the next hour he visited the places where Quade was most frequently seen. He had made up his mind to walk over to the engineer's camp, when a small figure darted after him out of the gloom of the trees.

It was the Stevens' boy.

"Dad wants to see you down at the camp," he whispered excitedly. "He says right away—an' for no one to see you. He said not to let any one see me. I've been waiting for you to come out in the dark."

"Skip back and tell him I'll come," replied Aldous quickly. "Be sure you mind what he says—and don't let any one see you!"

The boy disappeared like a rabbit. Aldous looked back, and ahead, and then dived into the darkness after him.

A quarter of an hour he came out on the river close to Stevens' camp. A little nearer he saw Stevens squatted close to a smouldering fire about which he was drying some clothes. The boy was huddled in a disconsolate heap near him. Aldous called softly, and Stevens slowly rose and stretched himself. The packer advanced to where he had screened himself behind a clump of brush. His first look at the other assured him that he was alright in using caution. The moon had risen, and the light of it fell in the packer's face. It was a dead stonelike gray. His cheeks seemed thinner than when Aldous had seen him a few hours before and here was despair in the droop of his shoulders. His eyes were what startled Aldous. They were like coals of fire, and shifted swifty from point to point in the bush. For a moment they stood silent.

"Sit down," Stevens then said "Get out of the moonlight. I've got something to tell you."

They crouched behind the bush.

"You know what happened," Stevens said, in a low voice. "I lost my outfit."

"Yes, I saw what happened, Stevens."

The packer hesitated for a moment. One of his big hands reached out and gripped John Aldous by the arm.

"Let me ask you something before I go on," he whispered. "You won't take offence—because its necessary. She looked like an angel when I say her up at the train. But you know. Is she good, or—— You know what we think of women who come in here alone. That's why I ask."

"She's what you thought she was, Stevens," replied Aldous. "As pure and as sweet as she looks. The kind we like to fight for."

"I was sure of it, Aldous. That's why I sent the kid for you. I saw her in your cabin—after the outfit went to hell. When I come back to the camp, Quade was here. I was pretty well broken up. Didn't talk to him much. But he seen I had lost everything. Then he went down to your place. He told me later. But I guessed it as soon as he come back. I never saw him look like he did then. I'll cut it short. He's mad—loon mad—over that girl. I played the sympathy act, thinkin' of you—n' her. He hinted at some easy money. I let him understand that at the present writin' I'd be willing to take money most any way, and that I didn't have any particular likin' for you Then it come out. He made me a proposition."

Stevens lowered his voice, and stopped to peer again about the bush.

"Go on," urged Aldous. "We're alone."

Stevens bent so near that his tobacco-laden breath swept his companion's cheek.

"He said he'd replace my lost outfit if I'd put you out of the way some time day after tomorrow!"

"Kill me?"

"Yes."

For a few moments there was a silence broken only by their tense breathing. Aldous had found the packer's hand. He was gripping it hard.

"Thank you, old man," he said. "And he believes you will do it?"

"I told him I would—day after tomorrow—an' throw your body in the Athabasca."

"Splendid, Stevens! You've got Sherlock Holmes beat by a mile! And does he want you to do this pretty job because I gave him a crack on the jaw?"

"Not a bit of it!" exclaimed Stevens quickly. "He knows the girl is a stranger and alone, she won't be missed. Dammit, man, don't you know his system. And, if he ever wanted anything in his life he wants her. She's turned that poison-blood of his into fire. He raved about her here. He'll go the limit. He'll do anything to get her. He's so crazy I believe he'd give every dollar he's got. There's just one thing for you to do. Send the girl back where she come from. Then you get out. As for myself—I'm going to emigrate. Ain't got a dollar now, so I might as well hit for the prairies an' get a job on a ranch. Next winter I guess me'n the kid will trap up the Parsnip River."

"You're wrong—clean wrong," said Aldous quietly. "When I saw your outfit going down among the rocks I had already made up my mind to help you. What you've told me to-night hasn't made any difference. I would have helped you anyway, Stevens. I've got more money than I know what to do with right now. Roper has a thirty-horse outfit for sale. Buy it to-morrow. I'll pay for it, and you needn't consider yourself a dollar in debt. Some day I'll have you take me on a long trip, and that will make up for it. As for the girl and myself—we're going to Tete Juane to-morrow."

Aldous could see the amazed packer staring at him in the gloom. "You don't think I'm sellin' myself, do you' Aldous?" he asked huskily. "That ain't why you're doin' this—for me 'n the kid—is it?"

"I had made up my mind to do it before I saw you to-night," repeated Aldous. I've got lots of money, and I don't use but a little of it. It sometimes accumulates so fast that it bothers me. Besides, I've promised to accept payment for the outfit in trips. I'm going to take a good many trips before I die."

"Not if you go on to Tete Jaune, you ain't," replied Stevens, biting a huge quid from a black plug.

Aldous had risen to his feet. Stevens stood up beside him.

"If you go on to Tete Juane you are a bigger fool than I was in tryin' to swim the outfit across the river to-day," he added. "Listen!" He leaned toward Aldous, his eyes gleaming. "In the last six months there's been forty dead men dragged out of the Frazer between Tete Jaune an' Fort George. You know that. The papers have called 'em accidents—the 'toll of the railroad building.' Mebby a part of it is. Mebby a half of them forty died by accident. The other half didn't. They were sent down by Culver Rann and Bill Quade. Once you go floating down the Frazer there ain't no questions asked. Somebody sees you an' puts you under a little sand a bit later. If it's a white man he does likewise. There ain't no time to investigate floaters over-particular in the wilderness. Besides, you git so beat up in the rocks you don't look like much of anything. I know because I worked on the scows three months, an' helped bury four of 'em. An' there wasn't anything, not even a scrap of paper, in the pockets of two of 'em! Is that suspicious, or ain't it? It don't pay to talk too much along the Frazer. Men keep their mouths shut. But I'll tell you this: Culver Rann an' Bill Quade know a lot."

"And you think I'll go in the Frazer?"

"Egzactly. Quade would rather have you in there than in the Athabasca. And then——"

"Well?"

Stevens spat into the bush, and shrugged his shoulders. "This beautiful lady you've taken an interest in will turn up missing, Aldous She'll disappear off the face of the map—just like Stimson's wife did. You remember Stimson?"

"He was found in the Frazer," said Aldous, gripping the other's arm in the darkness.

"Egzactly. An' that pretty wife of his dissappeared a little later. Up there everybody's too busy to ask where other people go. Culver Rann an' Bill Quade know what happened to Stimson an' they know what happened to Stimson's wife. You don't want to let her go. I know what I'm talking about. Because——"

There fell a moment's silence. Aldous waited. Stevens spat again, and finished in a whisper:

"Quade went to Tete Jaune to-night on a hand-car. He's got something he wants to tell Culver Rann that he don't dare telephone or telegraph. An' he wants to get that something to him ahead of to-morrow's train. Understand?"

CHAPTER VIII

John Aldous confessed to himself that he did not quite understand, in spite of the effort Stevens had made to impress upon him the importance of not going to Tete Jaune. He was bewildered over a number of things, and felt that he needed to be alone for a time and clear his mind. He left Stevens, promising to return later to share a couple of blankets and a part of his tepee, for he was determined to keep his promise to Joanne, and not return to his own cabin, even though Quade had left Miette. He followed a moonlit trail along the river to an abandoned surveyors' camp, knowing that he would meet no one, and that in this direction he would have plenty of unbroken quiet in which to get some sort of order out of the choatic tangle of events through which he had passed that day.

Aldous had employed a certain amount of caution, but until he had talked with Stevens he had not believed that Quade, in his twofold desire to avenge himself and possess Joanne, would go to the extraordinary ends predicted by the packer. His point of view was now entirely changed. He believed Stevens. He knew that the man was not excitable. He was one of the coolest heads in the mountains. And he had abundant nerve. Thought of Stimson and Stimson's wife had sent the hot blood through Aldous like fire. Was Stevens right in that detail? And was Quade actually planning the same end for him and Joanne? Why had Quade stolen on ahead to Tete Jaune? Why had he not waited for to-morrow's train?

He found himself walking swiftly along the road, where he had intended to walk slowly—a hundred questions pounding through his brain. Suddenly a though to him that stopped him in the trail, his unseeing eyes staring down into the dark chasm of the river. After all, was it so strange that Quade would do these things? Into his own life Joanne had come like a wonderful dream-creature transformed into flesh and blood. He no longer tried to evade the fact that he could not think without thinking of Joanne. She had become a part of him. She had made him forget everything but her, and in a few hours had sent into the dust of ruin his cynicism and aloneness of a lifetime. If Joanne had come to him like this, making him forget his work, filling him more and more with the thrilling desire to fight for her, was it so very strange that a beast like Quade would fight—in another way?

He went on down the trail, his hands clenched tightly. After all, it was not fear of Quade or of what he might attempt that filled him with uneasiness. It was Joanne herself, her strange quest, its final outcome. With the thought that she was seeking for the man who as her husband, a leaden hand seemed gripping at his heart. He tried to shake it off, but it was like a sickness. To believe that she had been the wife of another man or that she could ever belong to any other man than himself seemed like shutting his eyes forever to the sun. And yet she had told him. She had belonged to another man; she might belong to him even now. She had come to find if he was alive—or dead.

And if alive? Aldous stopped again, and looked down into the dark pit through which the river was rushing a hundred feet below him. It tore in frothing maelstroms through a thousand rocks, filling the night with a low thunder. To John Aldous the sound of it might have been a thousand miles away. He did not hear. His eye saw nothing in the blackness. For a few moments the question he had asked himself obliterated everything. If they found Joanne's husband alive at Tete Jaune—what then? He turned back, retracing his steps over the trail, a feeling of resentment—of hatred for the man he had never seen—slowly taking the place of the oppressive thing that had turned his heart sick within him. Then, in a flash, came the memory of Joanne's words—words in which, white-faced and trembling, she had confessed that her anxiety was not that she would find him dead, but that she would find him alive. A joyous thrill shot through him as he remembered that. Whoever this man was, whatever he might have been to her once, or was to her now, Joanne did not want to find him alive! He laughed softly to himself as he quickened his pace. The tense grip of his fingers loosened. The grim, almost ghastly part of it did not occur to him—that fact that deep in his soul he was wishing a man dead and in his grave.

He did not return at once to the scenes about Quade's place, but went to the station, three quarters of a mile farther up the track. Here in a casual way, he learned from the little pink-faced Cockney Englishman who watched the office at night that Stevens had been correct in his information. Quade had gone to Tete Jaune. Although it was eleven o'clock, Aldous proceeded in the direction of the engineer's camp, still another quarter of a mile deeper in the bush. He was restless. He did not feel that he could sleep that night. The engineers' camp he expected to find in darkness, and he was surprised when he saw a light burning brightly in Keller's cabin.

Keller was the assistant divisional engineer, and they had become good friends. It was Keller who had set the first surveyor's line at Tete Jaune, and it was he who had reported it as the strategic point from which to push forward the fight against mountain and wilderness, both by river and rail. He was, in a way, accountable for the exstence of Tete Jaune just where it did exist, and he knew more about it than any other man in the employ of the Grand Trunk Pacific. For this reason Aldous was glad that Keller had not gone to bed. He knocked at the door and entered without waiting for an invitation.

(Continued on page 17.)

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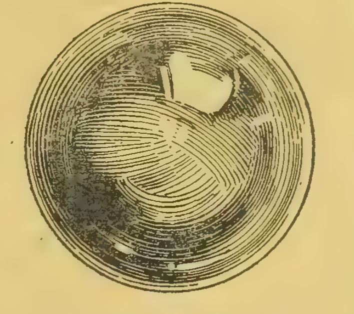

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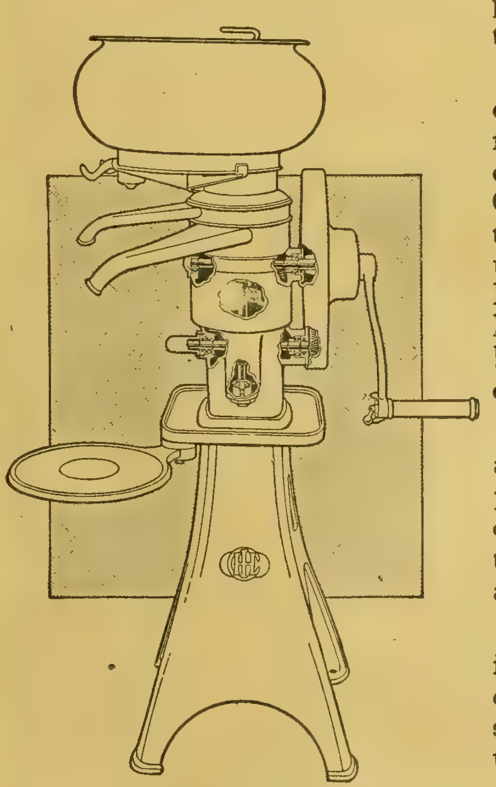
The Ball-Bearing Primrose is one of the products in the McCormick-Deering line of farm operating equipment. It may be seen and studied at the store of your McCormick-Deering dealer. Write us for catalog if you prefer.



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GEORGE M. SLOCUM .... PUBLISHER
FORREST A. LORD .... EDITOR

ASSOCIATES:
m. W. Slocum, Jr. .... Business Manager
Henry F. Hipkins .... Plant Superintendent
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"The Farm Paper of Service"

HENRY FORD SAYS:

"THE chief injustice sustained by the farmer today is that, being the greatest producer he is prevented from being also the greatest merchandiser, because he is compelled to sell to those who put his products into merchantable form. If he could change his grain into flour, his cattle into beef and his hogs into hams and bacon, not only would he receive the fuller profit of his product, but he would render his nearby communities more independent of railway exigencies, and thereby improve the transportation system by relieving it of the burden of his unfinished product. The thing is not only reasonable and practicable, but is becoming absolutely necessary."—McClures, October, 1922.

THE FIFTY-FIFTY PLAN

SINCE the publication of Dr. Wendt's experience with the 50-50 partnership, we have had a large number of requests for copies of the contract blanks, and many inquiries concerning the operation of this plan of co-operation between land owner and farm worker.

> The following from one of our subscribers is a typical case: "Am writing you in regard to what would be right in a partnership deal. We rented here last spring. The landlord said, 'As you haven't anything, I will furnish feed, seed and everything. You take one-third of the increase on everything except the chickens and cream. I'll give you half on that.' We agreed to that, but after harvest the landlord insisted that we pay our share of the threshing and twine bills. That was the first he had even mentioned threshing or twine. He also furnished an incubator and some insect powder, and some feed of coarse, and now he wants to charge that up to the chickens and then take half. Our hogs needed a little attention by a veterinarian, and now the landlord is charging that up against the hogs with the first cost. We have no written contract, just verbal, but we have proof of it. Now if you will send us an answer and tell us what is right in that kind of a deal, we will appreciate it very much."

The fundamental trouble here is the lack of a written agreement. A verbal contract is not sufficient in real estate deals. The important thing is for owner and worker to get together in the beginning with a perfect understanding of every detail concerning each other's rights and obligations. "Have your quarrels before you sign up," is our advice in most cases of this kind. If you will do that you won't need to have any misunderstandings after you have begun operations.

In this particular case we feel that where the worker gets one-third of the crop or income, all the expenses should be paid by the landlord. One-third is simply wages for the laborer. This the rule and the landlord in the above case should in justice pay the threshing twine and veterinary bills. With that part of the fam operations where the worker gets one-half, he should also pay one-half of the expense.

The peculiar advantage of a definite written agreement is that it creates in the minds of the parties a feeling of mutual interest. They then become in fact and in spirit equal partners. Each is interested in the other's welfare. No sensible person would try to take advantage—even if he could do so for one year—for he knows that in the long run he would lose out. In brief, the prosperity of the individual is based upon the success of the "company."

In the above case, the wasteful feature is that while the landlord may gain a little advantage this year, he is likely to lose a good man who, if encouraged, would perhaps put the farm on a paying basis for years to come.

THE "LIVING WAGE"

> "The workman's lowest wage must be enough for comfort, enough to make his house a home, enough to insure that the struggle for existence shall not crowd out the things worth existing for."

PRESIDENT Harding said this to a group of organized labor leaders recently in Washington. They had come to complain of the proposed lowering of their wages. Most of them were representatives of the powerful railroad labor unions. They represent a class who have no money invested, work shorter hours and earn more money than the farm owners of any state through which their trains move.

Now we call upon President Harding to say—and where not only Wall Street, but the labor unions can hear him, plainly and positively:

> **"The lowest prices paid the farmer for his products, must be the cost of production plus enough for comfort, enough to make his house a home, enough to insure that the struggle for existence shall not crowd out the the things worth existing on an isolated farm for!"**

And this message must be born home to the congressmen who are blunder-busing with so-called Farm Blocs, which seem only to arouse the antagonism of the non-farming classes, (because class-legislation is not and never can be American) and therefore actually do "block" the urgent relief needed.

The farmers of America do not expect pampering, they are not looking for a soft place to lay their heads, but they do feel that they have waited about long enough for a re-adjustment of freight-rates and commodity prices which are directly reflected in the inflated prices still demanded by labor.

Selfishly perhaps, but nevertheless, Big Business, so-called, shows active signs lately of wanting to bring Bigger Business (which is the farming business) back to normal, but Labor Leaders have become so enamoured with "44 hour weeks," and "dollar-an-hour" wages, that they have failed to notice that oats are now worth 40c and wheat $1.10 per bushel on the farm.

"ALL BOUND 'ROUND WITH A WOOLEN STRING"

HENRY C. TAYLOR, Chief of the newly formed Bureau of Economics of the U. S. Department of Agriculture, defines the duties of the County Agent.

"It is not a part of their official duties to perform for individual farmers or for organizations the actual operation of production, marketing, or the various activities necessary to the proper conduct of business or social organizations. They may not properly act as organizers for farmers' associations; conduct membership campaigns; edit organization publications; manage co-operative business enterprises; engage in commercial activities; act as financial or business agents, nor take part in any of the work of farmers' organizations, or of an individual farmer, which is outside of their duties as defined by the law and by the approved projects governing their work.'

In other words the county agents may not do the very things which they have been doing most here in Michigan. They may still pass a farmer on the street, providing they do not rub elbows with him.

As we have said before, and say again, the county agent is an almighty useful individual when he's his own boss or takes his orders from the farmer, but he's no good if he's got to be tied to the apron string of the Department of Agriculture. And most of the county agents know it themselves.

BACK TO EVERY WEEK!

YOU, can help The Business Farmer get back on an every-week basis, by sending in your renewal NOW! One dollar means 52 issues, whether they come in one year or not, every subscriber who has paid for this weekly at our regular rates will get every single copy for which he has paid or pays now.

We prefer to get out a good, honest, independent farm paper every-other-Saturday, OWNED AND EDITED IN MICHIGAN, than get out every week at a financial loss which sooner or later would put control of this paper in the hands of out-of-state politicians or special interests.

As soon as we can afford to get out a complete paper retaining every department, we will publish every week and your renewal right now, will help hasten that day! In the meantime remember, every subscriber will receive every copy for which he or she has paid.—George M. Slocum, Publisher.

OUTWITTING THE MIDDLEMAN

THERE is no excuse for the middleman unless he can perform the functions of distributing products better and more cheaply than the manufacturer or producer of those products. When a farmer turns his products over to another to finish or carry to the consumer it is a confession that he prefers to pay for the service instead of doing it himself. Now there are probably times when it pays the farmer to do this. If he can make a fair profit out of what he grows at the price the middleman is willing to pay, he doesn't care to assume the risks of marketing for the sake of a little higher profit. But in years when prices are low and do not compensate for the cost of production, then it is probably to the farmer's advantage to finish and sell his products himself

Of all the branches of agriculture the opportunity for increasing profits is probably the greatest in the livestock history. In no other is there so large a spread between what the farmer receives and what the consumer pays. The reason is, of coarse, that the product must go through many processes and through many hands before it is ready for the consumer's table.

In other days, before the advent of the great packing houses, the farmers slaughtered and cured their meats. But their knowledge of curing was limited and their methods crude and unsatisfactory. It was a relief to many farmers when the efficient packing plant came into existence and took up the job of finishing their product off their hands. But each year the farmers pay a big price for the service and in years of low prices they pay more than they can afford to.

In quite recent years many farmers with small herds or flocks have shown a disposition to go back to the old way of doing their own slaughter and curing. Some, indeed, have made so marked a success at it that their meats are widely known and command fancy prices. Take, for instance, Jones' farm sausages. They are made on a farm in Wisconsin by an ordinary farmer. Their reputation and demand are nation-wide.

The Business Farmer believes that in many instances, particularly just now when livestock prices are low, that farmers can save money by curing meat for their own tables and make money by selling it out to a selected list of patrons. Many suggestions are available for those who desire to try it and the Business Farmer will gladly lend its counsel upon the subject if desired.

A GREAT COW

THE Loeb farms at Charlevoix, Michigan, have developed what is now the highest producing cow east of the Rocky Mountains and the second highest in the world. Kolrain Marion Finderne is a Holstein cow, seven years of age On official test, completed October 26th, she showed milk production of 35,339.7 pounds and 1,278.58 pounds of butter.

Naturally Michigan is proud to claim the ownership of this wonderful cow. For years Michigan's fame as a breeder of high producing cows has been national. The Loeb achievement will make it international.

The offspring of Michigan dairy herds may be found in nearly every state in the union serving as the foundation stock of other great herds. But the records of none of these, gratifying as they are, can even approach that of Kolrain Marion Finderne. This record stands alone in the annuals of the Holstein industry not only in Michigan but of the entire east as well. It is the culminating crown to Michigan's fame in the dairy world.

The line between failure and success is so fine that we scarcely know when we pass it; so fine that we are often on the line and do not know it. How many a man has thrown up his hands at a time when a little more patience would have achieved success.—Elbert Hubbard.

What the Neighbors Say

We like the Business Farmer very much and look for it to come but two weeks seem a long time. But we like the plan better than to have it cut down.—Mrs. Henry Ha[illegible], Emmet county, Michigan.

PRODUCERS VS. CONSUMERS

SUPERSTITION dies hard, especially when carefully nursed by powerful reactionary interests. It beats all how many otherwise intelligent farmers still hug the delusion that our economic interests conflict with those of organized labor.

You have already shown that each is the other's best customer and that a customer is no good as a customer, unless he is prosperous enough to pay for what he buys. Glenn Plumb, author of the Plumb Plan, goes further and shows that organized labor is as vitally interested in keeping reasonable prices on its products as in keeping wages up.

When the first union got its first boost in wages, says Plumb, their employers simply raised the prices enough to considerably more than cover the increased cost of labor. But the members of their union, buying but a few of their own products, were away ahead of the game. But as the workers in other industries followed their example and their employers in turn raised their prices enough to more than cover the increased cost of labor the time came when so many commodities were affected that the increase in the cost of living exceeded the increase in wages, and further increases in wages only aggravated the trouble.

"And so it went, clear around the circle, new organizations coming into existence until we have about 124 international organizations embracing in their membership over 6,000,000 men, representing over 300,00,000 people engaged in organized, industrial production, one-third of the people of the United States in organized labor, all workers, each one endeavoring to raise his wages. * * *

"For every increase which any one of these organizations gets, the public pays five times that in the price of commodities. * * *

"We have 30 per cent of the people in organized labor. Assume that all of them get a 25 per cent increase in wages. That means that the cost of commodities they produce advances 125 per cent. of the increase in wages, but remember the people in organized labor consume about one third of these commodities, and when the people in organized labor buy that one third they pay 37½ per cent. of the total increase in the cost of living, and they only got 25 per cent. of that increase in wages. They are one half of their increase behind, because the increase has cost them as a body 50 per cent. more than they received. * * *

"Our interest as consumers now exceeds our interest as producers. Your wage is worth to you just what it will buy, and no more. We have been working under a system where every increase which we receive has been added to the price of the commodities which we have to buy, and a profit added to that increase. We have paid no attention to the consumer's interest. When we get our increase we have been content to let the consumer pay it, and we are the consumers. We must find some way that protects our earning power without having an increase added to the price of the commodity we make or the service we render. That is protecting our consumer's interest as well as our producer's interest. If we can find that way, then we have an effectual means of reducing the cost of living, increasing the purchasing power of our wages, and benefiting ourselves and all mankind."

Organized labor knows as well as we do that strikes are a nuisance to all concerned. But before asking him to submit compulsory arbitration let us ask ourselves if we are prepared to let a bunch of corporation lawyers appointed by the President fix the market prices of our products. To fix wholesale commodity prices by an industrial court or commission and let the labor unions fix wages would be just as sensible as to fix wages by such a court or commission and leave the profiteers to fix commoditiy prices. The whole industrial problem, reduced to its lowest terms, is to fix and maintain such a definite, equitable relation between commodity prices and the price of labor that every citizen can afford to pay fair prices for all the commodities he or she can use.—Stacy Brown, Ionia County, Mich.

—And its some problem, isn't it, friend Stacy? With a goodly share of our industrial captains either unconcerned over the problem or opposed to any such equitable theory, a balanced condition between income and outgo seems a long distance away.—Editor.

THE GASOLINE TAX

I THINK there should be a large enough tax on gasoline to keep the highways in repair. At least 3 cents a gallon or 10 cents if necessary. Also have license plates that are good for the entire life of the car. No one would have to go to the bother of getting them every year, and the state would be saved the expense of making them every year. There are a lot of drivers who pay no tax except the license. There are a lot of tourists who never help pay for the roads they use. There are a lot of business men who ride back and forth from some lake to town, lots of busses that wear out the roads from town to town, that do no pay what they ought to for the upkeep of the roads. I am in favor of making the man who uses the road pay for it, and am for a gasoline tax of from 3 to 10 cents a gallon.—H. L. V., Ottowa County, Mich.

—It is an infernal nuisance, all right, getting new license plates every year but if the same license fee were charged as is now charged, it would be pretty expensive for the average man to pay the license at one shot for the life of his car. Anyway, license plates will not last the life of the car. They would have to be renewed occasionally. Sentiment is strong for the principle of making the man pay for the roads who uses them, but don't you think the tax you suggest is pretty stiff?—Editor.

KNICKERS AND BLOUSE

WE can not imagine why defenders of the present system of undress, instead of presenting its good (?) qualities, always hark back to high collars—chin rests which are sometimes useful—wasp waists and trailing skirts. And our editor raises another relic of the past—those nice long nether garments called pantalettes.

We advocated none of these ridiculous fashions. We drew no comparisons. We said nothing about spit curls, bangs or bobbed hair, knock knees, bow legs. or big feet, bony arms, or scrawny necks but since Aunt Betsey mentions those necessary appendages called legs we must say we've always wondered why so many of the fair sex had such a peculiar gait and we were enlightened when short skirts arrived. We have seen more bow-legs the past season than we ever dreamed existed.

If some of these dear deluded would take an inventory of their stock in beauty they would surely require more dry goods.

However, we are not caring about that. If we were to advocate any costume to meet the requirements of modesty and comfort, it would be knickers and blouse, a coat if needed, such as many tourists now wear.

Nothing doing. The long skirt looms close on the horizon and soon Eve's descendants will swish around as did others in days gone by, regardless of health, comfort, or freedom because "they're all the style."
—Mrs. B. O. R., Breckenridge, Mich.

—Wow, you've said it. Knickers and blouse are the sensible—modest, comfortable and withal attractive garb for women. We vote for 'em, without reservations. But will they meet with the approval of all who see any departure from established styles a shameless display of feminine charms?—Editor.

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HEALTH IS A HABIT

It is a fairly common thing for a farm to have its own water system, with running water in both houses and barns, to provide for the scientific disposal of its sewage, to have bathrooms and other facilities for keeping clean, for the farmer has not been slow to learn the fact that rural sanitation applies to the home as well as to the barn, that fresh air is as necessary to the health of his family as it is to the health of his chickens and his milch cows, and that supplying the human engine with plenty of fresh air means both a happier worker and a better one.

Country folks, like city ones, are beginning to learn that health—public as well as individual—is largely a matter, first of education and then of habit. They feel that they have a very decided advantage from the fact that the great essentials of health—fresh air, sunshine, plain nourishing food, and cleanliness—are so freely at their command.

The day of ignorance and carelessness is passing. It is growing less and less common to see farm houses banked up with manure and the windows stuffed with paper or cloth in the winter time, and with it will go one of the favorite jokes of a middle western state health officer:

"No wonder there's lots of fresh air in the country; country folks use so little of it."

Health and Habit

For health is a habit. The Functions of the body, both mental and physical, are rhythmic. Whatever mode of action is accepted today tends to be repeated tomorrow. Right practices, oft repeated, in the long run spell normal function. Personal hygiene sufficiently extended becomes community health. By the same token, rooms that are dark and corners that are musty, personal habits that will not bear repeating and imitation are not mere matters of individual concern. As a small focus of infection soon undermines the whole physical economy, so will an unthinking tolerance of insanitary domestic conditions breed a general indifference to community housekeeping.

When Health Suffers

In the fall of the year the human machins achieves the peak of its efficiency. Not the rigors of winter are its undoing, but indoor diseases, close air, burdensome clothes, and the eating of heavy foods, rich and perhaps too greasy. You will remember the old say, "An apple a day keeps the doctor away." You can finish it yourself, (perhaps).

This also reminds me of the story of the doctor who visited a Sunday school and in his talk to the children said, "Now children what do you do to get to Heaven?" There was a long silence and then the smart little boy said, "Get sick and send for you, doctor."

REMOVING RED INK

As we are subscribers to the Business Farmer and read so many helpful things. I just wondered if anyone had a remedy for removing red ink from silk. It is a new garment that has never been washed. Have tried a great many things but nothing seems to remove it. It is a white gown with dark brown and gold stripes, also a tiny stripe of lavender.—Mrs. B. H. T.

—Milk will often remove ink. It must be renewed from time to time and the article must soak in it for several days—Kerosene will remove ink from wash materials. Salts of lemon 1 tps to a quart of water. This is very poisonous. Care must be taken.

ATTENTION MRS. LEWIS

Mrs. Lewis sends for a pattern but does not give me her full address.

SOUP RECIPES

In the October 14th issue Mrs. John Vollmer of Jasper, Michigan, asks for soup recipes. Here is a tomato soup we like very much:

One-half bushel tomatoes, 14 stalks of celery, leaves and all; 12 stalks of parsley, leaves and all; 8 bay leaves; 12 teaspoon salt; 2 tablespoons mixed spices; ½ teaspoon white pepper; ½ teaspoon red pepper; 1 cup white sugar; boil until tender, then take seven onions fried in 1 cup of butter till tender and add to the mixture.

Then take 1½ cups flour stirred smooth in a little water, add to the whole when thoroughly scalded and put through collander, heat and can.—Mrs. M. L. S.

The Farm Home

A Department for the Women

Edited by MRS. GRACE NELLIS JENNE'

DEAR READERS—Have you a bit of clothing suitable for a baby, that you do not need? I know of a place where such articles would be appreciated very much. The mother is not able to run a sewing machine, not being in good health and needs help just now. Any small articles of clothing that have some wear in them still, will be welcome. If you will send them to me I will send them on their way. Nothing fancy is wished just something plain and durable.

RECIPES WANTED

I am interested in your paper and miss it since it only comes every two weeks

Would like it if someone would give a good bread and fruit cake recipe. We have been having trouble with heavy bread this fall. It seems light and all until it is baked. We have used this old recipe for years and never failed until now, and we wondered if it could be new flour from this fall's wheat. Auy recipes will be greatly appreciated. Thanking you in advance.—Nellie Isles.

HOME SPUN

Plays

For your Clubs and Debating Societies this year why not send to the National League of Women Voters, Peru, Indiana, for Citizenship Plays? One is entitled "How Maggie Taggart Became a Citizen.,, Senate Bill 575, and the Federal Convention are the others. They sell for 25 cents each.

Shoe Trees

If you keep your shoes on shoe trees, they will repay you for care by keeping their shape. Have a pair for each pair of shoes. If you have never used them you will be agreeably surprised to find how much longer your shoes will have that new look we all admire. Patent leather shoes should be kept in a warm place. A shelf in the closet is a most convenient place to keep shoes. Most of us have found that a pole fastened in the closet, with hangers on it is much more convenient and holds many more clothes than the old arrangement of hanging them around the sides on hooks.

Washing Windows

Never use soap for washing windows, a little ammonia added to the water is a good cleanser. Ammonia also dissolves the oil and grease in combs. Let them stand for a short time in water which a little ammonia has been added then brush well with a soapy nail brush. A hair brush is easy to clean, just soap and water and plenty of sunshine to dry it. Brushes and combs should be washed once a week, it only takes a few minutes.

These latter comments are all for the young housekeeper. We older ones "know it all" at least we won't admit it if we do not.

For the Boys and Girls

Brush the teeth four times a day. Before breakfast with clear water. After each meal with tooth powder.

The teeth should be free from food before going to bed as most of the decay takes place while we sleep.

Brush the teeth about two minutes that will stimulate the gums, they need brushing almost as much as the teeth.

Use a light fast stroke in brushing.

Arrange the brushes so they will never get mixed as disease germs could easily be carried from one member of the family to another.

Candies, cake, sugar, pastry and even bread will decay on the teeth if on or between the surfaces.

Dental silk is splendid for removing food from between the teeth.

An apple before going to bed is fine for both teeth and the stomach, to say nothing of the palate.

SISTER'S MUSIC LESSON

My sister's taking lessons of a famous music man,
Of course it is her duty to practice all she can.
She has a stack of music, I can't tell just how high—
I notice when pa looks at it he always draws a sigh.
When breakfast time is over sis looks up with a smile
"I'd love to help you mother but I'll practice for a while."
Then goes to the piano and makes what noise she can,
I would much rather listen to her drum upon a pan.
She plays a while on notes above and then on those below,
Sometimes it's going very fast and next it's very slow.
She makes it tinkle tinkle and then go ping, ping, pang,
Now makes the whole house rumble and ends up with a bang!
We could stand it all quite nicely and never want to jaw,
If shee'd play us "Yankee Doodle" or "Turkey in the Straw."
Someday she may be famous and fill us with delight,
But I'd rather sing the good old song than practice day and night.
—Written for our Department by Mrs. Nina Beckey Hall.

HOW TO CARE FOR LINOLEUM FLOORS

Properly treated, a linoleum floor is more easily cleaned than any other kind of floor. Linoleum has a smooth, unbroken surface, without cracks and crevices to catch dirt and germs.

When your new inlaid, jaspe, or plain linoleum floor is first laid, it should be washed immediately with warm water and pure soap. Then before it is "tracked up," wax it with a liquiid floor wax, rubbing the wax in very thoroughly, and polishing it with a weighted brush.

Wax Inlaid, Jaspe, and Pain Linoleum

The daily care of a waxed linoleum floor is simple. Ordinarily, all you need to do is go over it with a mop slightly moistened in liquid wax. At doorways, and where the traffic is greatest, the wax coating will wear away, and should be renewed as often as appearance demands. With this treatment it is necessary to scrub linoleum floors at frequent intervals. In rainy weather muddy footprints may be wiped up with a damp cloth.

Any good liquid floor wax, such as Johnson's Liquid Floor Wax or Old English Linoleum Wax, is suitable for linoleum. Most people prefer the liquid wax because it is easier to apply than paste wax, and permits evener distribution. Whether you use liquid or paste wax, apply it very sparingly and be sure to rub it in thoroughly. Wax used too thickly will not harden properly, and the excess wax will absorb dirt and darken the linoleum. The floor will look greasy and unsightly, and probably will be slippery.

Varnish Printed Linoleum

Printed linoleum usually wear better and holds its original freshness of coloring longer if given an occasional coating of varnish. It is most economical to use only the best-grade water-proof varnish, as the cheaper grades are likely to scratch and turn white. Varnishes such as Valspar are recommended.

For varnishing, linoleum must be clean and dry. The varnish should be applied as evenly as possible and allowed to dry at least twenty-four hours before the floor is used. Two coats should be applied on new linoleum; thereafter the varnish need be renewed but once or twice a year, according to the wear on the floor. Care should be taken in revarnishing to avoid streaked and spotty effects.

Washing Linoleum

In the kitchen, pantry, and bathroom where water is likely to be spilled, washing the linoleum will be necessary more frequently than in other rooms. Warm, sudsy water, made with a mild soap, such as Ivory, will clean linoleum thoroughhly. It is best to wash and dry only about a square yard at a time, rinsing the linoleum with clean water, and drying it carefully. Never flood the surface of the lin-

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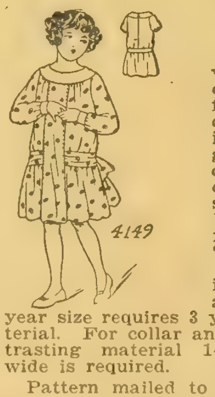


A Pretty Frock For Mothers' Girl

4149. Figured voile and organdy could be combined for this model, or crepe and challie. It is good also for gingham and percale. In crepe de chine or net with self frills or embroidery. It will make a pretty "party" dress.

The Pattern is cut in 4 Sizes: 4, 6, 8 and 10 years. An 8 year size requires 3 yards of 40 inch material. For collar and band cuffs of contrasting material 1-2 yard 32 inches wide is required.

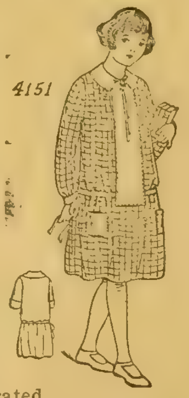
Pattern mailed to any address on receipt of 12c in silver or stamps.

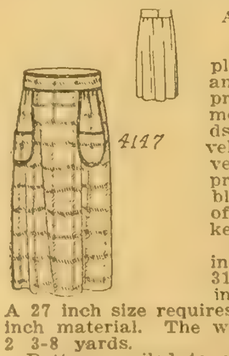
A Simple Dress for School

4151. Checked gingham and white linine is here portrayed This style will be good also for plaid suiting with serge for trimming. It is made to slip on over the head. The sleeve may be in wrist length or short as in the smaller view.

The Pattern is cut in 4 Sizes: 6, 8, 10 and 12 years. A 10 year size requires 3 1-4 yards of 32 inch material. 5-8 yard of contrasting material is required for trimming as illustrated.

Pattern mailed to any address on receipt of 12c in silver or stamps.





A Jaunty Sports' Skirt

4147. Tweed, plaid suiting, serge and prunella are appropriate for this model, which is also dsirable for silk and velvet A practical development would be prunella in brown or blue, with bindings of braid. The pockets may be omitted.

The Pattern is cut in 7 Sizs: 25, 27, 29, 31, 33, 35 and 37 inch waist masure. A 27 inch size requires 2 1-2 yards of 44 inch material. The width at the foot is 2 3-8 yards.

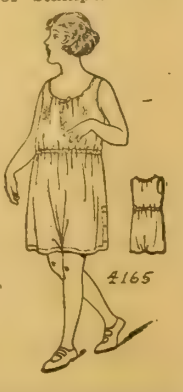
Pattern mailed to any address on receipt of 12c in silver or stamps.

A Comfortable Under Garment

4165. Crepe, long cloth, muslin, voile and crepe de chine could be used for this style. The garment is in "step in" style and the drawers portions have side openings.

The Pattern is cut in 5 Sizes: 4, 6, 8, 10 and 12 years. A 10 year size requires 2 5-8 yards of 27 inch material.

Pattern mailed to any address upon receipt of 12c in silver or stamps.



oleum, nor allow the water to stand around the edges or seams:

Certain advertised cleaning soaps and washing powders are not good to use on linoleum. These cleansers all show an alkaline reaction or contain caustics, and are positively injurious. More harm is done to linoleum by the use of such agents than in any other way. The chemical action of these substances disintegrates the oxidized linseed oil and cork in linoleum, just as it destroys varnish on hard wood.

A good rule is to avoid altogether the use of sodas, lye, or potash cleansing powders and strong scouring soaps.

After it has been washed, inlaid linoleum, particularly, should be polished with a soft cloth or brush. The wax finish may be dulled somewhat by water, but is quickly restored by a brisk rubbing. If the wax has been removed by washing, it should be renewed at once.

FOR A HACKING COUGH

Equal parts lemon juice and strained honey. Take one teaspoonful whenever coughing begins, stirring thoroughly before taking.

Also here is a recipe for the old-fashioned "white linament" for soreness sprains, rheumatism, etc., or to rub on throat for sore throat:

Equal parts sweet oil, ammonia and turpentine. Shake well before using.—C. H. Merrifield, Van Buren County.

HEALTH HINTS

OR

HOW TO CURE YOURSELF

BY

DR. T. N. ROGERS

MAY BE HIVES OR ACNE

What causes red swellings on the body, sometimes white welts appear and eyelids and lips swell?

—Cause the same, auto infection is the cause. Clear out the bowels by Calomel, 5 grains, and baking soda, 15 grains at bedtime. Then 2 teaspoonful of salts in the morning, twice a week. It may be due to too much acid from eating too much acid fruit. If so take one-half teaspoonful of baking soda in cold water 3 times a day.

ARE RAILROADS MANAGED ECONOMICALLY?

(Continued from page 3.)

recting the defects they are powerless to act to stop the leaks.

A section foreman and his gang of five men have been using a modern gasoline-motor car for transporting them over their eight miles of track. These motor cars have been in use for a number of years and so it was somewhat of an innovation to see this foreman and his trackmen slowly pumping an old-fashioned hand-car over their section one morning.

"What has become of your motor car?" he asked.

"I had to lay it up for repairs," he replied. "I've sent for them but they haven't come yet."

Five weeks passed and again the old-time hand-car passed over the track, the men straining at the handles to propel it.

"Isn't that motor car repaired yet?" he was asked by his astonished acquaintance.

"No. Haven't got the parts yet," the foreman answered. "You see its like this: The company has five different makes of motor cars in use on this division—and they can't afford to keep repair parts for all of them, so they figure. And so when anything goes wrong with a car they have to send for parts to the manufacturer through the different departments—purchasing agent, etc.—and it takes a long time. But it is an expensive way to manage. It takes myself and five men over two hours to pump this old hand-car over the section. With the motor car we could make it in 4 minutes—20 minutes each way. Every day the six of us put in around five or six hours extra time just pumping the hand car—and if we have to buck a head wind we're pretty well tired before we get to where we are to start to work on the track."

Which indicates another trouble with the railroads. They have no system, in many cases, for any standardization of material used. The result is that when repair parts are wanted either a large stock of parts must be kept on hand—or else they must be sent for directly from the manufacturer. When the red tape is all unwound a long delay with much unnecessary expense has resulted.

Right recently when the shopmen were on a strike a great many trainmen were seen packing hot boxes on cars; taking down brake rigging, etc. But even before the strike this was common enough. Almost everyone has witnessed a freight train stopping while a brakeman throws water on a blazing journal, digs the "dope" or packing out of it and then re-packs it with new "dope." The remainder of the train-crew—four men—are forced to lay at their posts in idleness waiting until the hot journal is again in condition to operate. Again they all wait while one man takes down a brake beam—or brake rigging. The trouble is that the system of train inspection at terminals is not rigid enough to detect and repair these defects before the trains start on their journeys. And after the trains are out in the country somewhere four men wait while one man works repairing the equipment. The net result is needless expense and unnecessary delay to train movement. Of course some journals are bound to run hot even under the best inspection—but the number can be greatly reduced if the railroads wish to reduce this defect.

Many other instances of extravagant management might be cited in the operating and maintenance departments of the railroads and, in fact, most other departments. But the foregoing incidents will be sufficient to indicate to some extent the trouble in the present railroad managements. There seems to be a decided lack of cooperation on the part of the "higher-up" officials to adopt suggestions from the minor officers who are nearest to the rank and file of employees. A suggestion from an ordinary employee is quite likely to be disregarded entirely and possibly the employee reprimanded as being presumptive.

Another phase of management wherein many unnecessary expenditures are made is shown in the maintenance of city ticket offices with high rentals and unnecessary employees; by the employment of innumerable "district freight and passenger agents" and other solicitors due to competition between the different railroad companies. And again in the unnecessarily long hauls made in an effort to keep freight on the rails of one line as long as possible. Another phase is the duplication of passenger train service between most of our larger cities. Usually the number could be reduced by one quarter or in some instances even one half without any inconvenience to the public and still afford ample accomodation for the number of passengers wishing to travel.

But perhaps you are wondering what all this has to do with the farmer. Why should he care if the railroads wish to squander their money? Simply because the farmer must, in the final analysis, pay a very big share of the money squandered when he moves his products and buys his supplies. Whether he wishes to concern himself with the management of the railroads or not he is compelled to foot the bills—and he ought to take a very great interest in the doings of the transportation agents of his state. Remember this: When the railroads wish an increase in freight rates they show their net earnings to the Interstate Commerce Commission—and that their net earnings depend in a large measure upon their operating, maintenance and other expenses. If extravagant management reduces their net earnings to a point where the railroads feel justified in asking for an increase in freight rates remember that the farmer is going to pay a big share of any increase in rates that may be granted. And so every farmer may well ask the question: "Are the railroads managed economically?" He is as vitally concerned as any other citizen—and more than most citizens.

Mr. Gotham—"I see the smallest cows in the world are found in the Samoan Islands. The average weight does not exceed 150 pounds. They are about the size of a merino sheep."

Mrs. Gotham—"Do you suppose, dear, that is where they get the condensed milk?"

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1½ pounds Lily White flour, 5 ounces lard, 1½ teaspoons salt, 2 teaspoons sugar (dissolve the sugar in water), 1 cup water. Blend with flour, lard and salt. Mix into a stiff dough with water in which sugar has been dissolved. Work well. Beat or roll until dough blisters. Bake in moderate oven until light brown.

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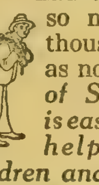

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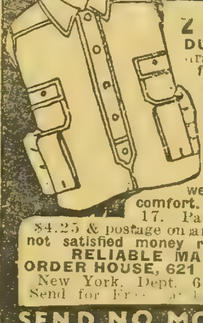

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The Children's Hour

DEAR Nieces and Nephews:—I am going to conduct another contest. La Verdee Adolph of Union City, a winner of a needle case in the story contest we held last summer, suggests a contest that should be interesting to you all. The contest she suggests will be something different than all the others we have held—but I am not going to tell you all about it, just read La Verdee's letter on this page and then put your "thinker" to work. Be sure to explain everything in your letters so that others will readily understand what you mean. And the prize will be a Christmas present. I will not say what it will be, but I know, and to the one who guess what it will be I will send a duplicate of it. When you send in your letters just write at the bottom, "I think the prize you are giving away in this contest is" and then write what you think it is.

We have some very interesting letters this week, one from a niece and cousin that lives in Florida. Come on girls and boys, this is your department, the more interesting your letters are the more readers our page will have. Who can write a good Christmas story? I would like to have one of the nieces or nephews write one for our page. Who will do this?

Almost Thanksgiving, isn't it? If you give a party, attend one or go visiting write and tell me about it. —UNCLE NED.

OUR BOYS AND GIRLS

Dear Uncle Ned—I do hope that you believe in the old saying "better late than never" for I have never told you how much I appreciated my lovely needle case, though I think of it every time I use one from it.

Just after I received my package of needles we started for Jonesboro, Arkansas. We started on Saturday morning and arrived at my uncle's Tuesday afternoon. We had a fine time while there.

We passed through Williamson county, the heart of the coal strike. One morning we started out very early on what we thought was the right road which seemed to lead out past a coal mine, when we got quite near the mine our road began to turn back and we discovered we were on a race track.

Before entering Missouri we were warned by other tourists we met to be careful about pigs and cattle in the road. In Michigan we fence our live stock in but in Missouri they fence them out. You have to dodge pigs, chickens, cows and goats grazing on the side of the main roads or taking a nap in the center. We hit one pig. It was a common sight to see pigs on the main streets and sidewalks of good-sized towns and there was nothing to prevent them entering stores.

Just after we crossed the Mississippi River it started raining and rained most of the way back. It was raining when we entered Michigan.

Are we going to write Thanksgiving stories? I hops so. The issues between Thanksgiving and Christmas, why could not those who wish to have a contest send in the best group, say, of five Christmas presents that we could make? Illustrating them and giving a very short description of how to make them. Let the plainness, simpleness and cheapness count as much as the beauty of the article. I have several in mind, I am sure many other members have also. In this way we could get new and clever ideas for Christmas gifts.

I have received several excellent letters from M. B. F. boys and girls and hope to receive more.

I thank you again for the needle case. Your friend.—La Vendee Adolph, Union City, Mich.

Dear Uncle Ned—We take the M. B. F. I am sending you a picture of Hallow'en night. I drew it with a pencil. I have written to you before, but I did not see my letter in print. For pets I have 4 cats and a dog.

"Leslie," I believe is a girl. Don't you think so?

I have brown eyes and hair. I am 10 years and weigh more than 84 pounds. I am in the 6th grade. We had exams yesterday and the day before. I do not know yet whether I passed or not. Goodbye. Your neice.—Edna Wilkie, R. F. D. No. 2, Brown City, Mich., in care of Geo. Wilkie.

Dear Uncle Ned—I would have liked to joined in the bird contest but I did not have the time. I am 13 years old and live on a farm of 80 acres. I like to live on a farm.

The best of the birds I have seen is the robin. It has a red breast brown back, and is about five inches in length and about three inches high. Its nest is made of mud and grass. It sings a pretty song.

My father takes the M. B. F. and likes it very much. I like to read the children's letters. Good luck to Uncle Ned and all the cousins. From your nephew.—Francis stack, R. F. D. No. 4, Fenton, Mich.

Dear Uncle Ned—Well I am going to write a letter. I have lots of time today. We have a big farm and we raise lots of ducks. One morning my mother went out to the barn, where there was an old hen sitting on some duck's eggs, and what do you think she found? She found a duck with four legs. And we were so surprised we did not know what to say. We raised about 150 ducks this year.—Esther Mann, Mt. Clemens, Mich., R. F. D. 1.

Dear Uncle Ned—I am a new writer. I have wished to write to you a long time. I like to read the children's letters in the M. B. F. I will write a riddle and the one that guesses it will receive a letter. This is the riddle:

Guess a riddle now you must. Stone is fire and fire is dust, black is red and red is white, come view this wonderous sight. From your friend.—Francis, Fenton, Mich., R. F. D. 3.

Dear Uncle Ned—I would like to join your pleasant circle. I like to read the letters in the M. B. F. I live in Florida but I was born in Grand Rapids, Mich., but I do not remember it for we moved to Duluth, Minn., and lived there until I was nine years old when my father died and we then moved to Kalamazoo, Mich. We lived there until just recently when we moved down here. I like it alright but some way it isn't just like Michigan or Minnesota. We live about forty miles from Palm Beach, Fla., and about three miles from Lake Okeechobee. The land here is black and it called muck; it is rich, in fact almost too rich.

I have brown hair, blue eyes, freckles, I am four feet elven and a half inches tall. I am eleven years old and in the eighth grade. My name is Charlotte.

We enjoy taking the M. B. F. because it gives us valuable information about our crops as well as tells us about our native state.—Charlotte Gibson, Belle Glade, Fla.

GETTING READY TO BE PRESIDENT

WELL, and what do you know about that?" and Don Stuart looked up from the paper he had been readin gfor the last half hour.

"Guess I know all about it, if you will kindly enlighten me as to what you refer," and Rob, his older brother, smiled in the superior way that always vexed Don beyond endurance.

For a minute he did not answer, then he wanted to hear what Rob really would say, he explained.

"Here is an article in the paper, an interview with President Harding by a chap just my age, and what do you think he asked that man? Why, nothing less important than if he had ever been a boy, and if he had ever tied tin cans to dogs' tails? Wasn't that some question to ask a President? Huh!" and he snorted his disgust.

"Well," and Rob drawled as he usually did, when he wanted to be emphatic, "I think that was a pretty good question—a leading question, as the lawyers would say. Pretty smart he was, to think of that, I say," ruling off some lines for work on his tablet.

"Smart? I fail to see what was so wonderful smart about that, What does any trick like that have to do with being President? Tell me that."

"What did President Harding say to the question?" and Rob did what he usually did—answered one question by asking another.

"Why," wrinkling his brow as he looked up the exact words of the answer, "he said, 'Never in by life have I injured knowingly any person or animal.' He is President, but I must say I think he stretched that a bit, or else he has forgotten all about when he was a boy. If he didn't, he never had much fun."

"I guess, by looking at his twinkling eyes, that he had his fun all right, but I don't doubt for a minte, it wasn't what you call fun, the hurting and teasing of helpless dumb animals, or people, either. He is too big for that."

"Oh, of course, you would say that, for you are a regular mollycoddle, always afraid of hurting something or somebody. I believe in a boy being a regular fellow, I do." He straightened in his chair, throwing out his chest as he was sure a regular fellow would do.

"So do I belive in being a regular fellow, but I belive a regular fellow is a regular gentleman, and a gentleman, you know, is just a gentle man. See?" Don looked at him wanting to say something, but just then he lacked words. So Rob went on:

"You wanted to know what his lack of your so-called fun had to do with being President. Well, it had just this much to do with it. You remember the quotation, 'The boy is father to the man,' and right there lies the whole secret. A boy does not change his nature very much when he becomes a man, for usually as in the boy, so is the man, and the boy who finds pleasure in hurting and torturting the helpless, will carry that same spirit into manhood, and he will have the same carelessness for others when he has the greater power to hurt. And one with a cruel, selfish make-up would be a pretty poor specimen to be placed where he is expected to work for the good of others." Rob was very much in earnest, now, for he had begun to think of things that concerned the welfare of his country, as all boys do, sooner or later.

"You see, son, it is a pretty small mind that finds pleasure in things that hurt, and men of such small calibre usually stay down on their own level. It takes somethink different for Presidents, you see. So, I have no doubt whatever that President Harding did not forget, the least little bit, when he made that statement. And no doubt President Wilson could have made the same answer, for one with the desire for world happiness that he has, never could have attained that spirit if he had been given to torturing others. A man is just a boy grown large, you know."

Don still had not found words for argument, and Rob took advantage of his predictment.

"So, now, if you expect to be President, and you may—if I don't beat you to it—just change your ideas of fun, for there is no place in a President's life for acts of cruelty and harshness. So, I think now is a pretty good time to begin to get ready for being big enough to fill a big place. What do you say, son?"

Don answered only with "Huh, huh," but you could see he was doing some thinking.—Florence Jones Hadley.

Abe Martin says: "We often wonder if all the people we see rollin' along are as well fixed for a rainy day as they are fer a blowout?"

"THE HUNTED WOMAN"

(Continued from page 11)

The engineer stood in the middle of the floor, his coat off, his fat, stubby hands thrust into the pockets of his baggy trousers, his red face and bald cranium shining in the lamplight. A strange fury blazed in his eyes as he greeted his visitor. He began pacing back and forth across the room, puffing volumes of smoke from a huge bowled German pipe as he motioned Aldous to a chair.

"What's the matter, Peter?"

"Enough—an' be damned!" growled Peter. "If it wasn't enough do you think I'd be out of bed at this hour of the night?"

"I'm sure it's enough," agreed Aldous. "If it wasn't you'd be in you little trundle over there, sleeping like a baby. I don't know of any one who can sleep quite as sweetly as you, Peter. But what the devil is the trouble?"

"Something that you can't make me feel funny over. You haven't heard—about the bear?"

"Not a word, Peter."

Keller took his hands from his pockets and the big-bowled pipe from his mouth.

"You know what I did with that bear," he said. "More than a year ago I made friends with her up there on the hill instead of killing her. Last summer I got her so she'd eat out of my hands. I fed her a barrel of sugar between July and November. We used to chum it an hour at a time, and I'd pet her like a dog. Hhy, damn it, man, I thought more of that bear than I did of any human in these regions! And she got so fond of me she didn't leave to den up until January. This spring she came out with two cubs, an' as soon as they could waddle she brought 'em out there on the hillside an' waited for me. We were better chums than ever. I've got another half barrel of sugar—lump sugar—on the way from Edmonton. An' now what do you think that damned C. N. R. gang has done?"

"They haven't shot her?"

"No, they havn't shot her. I wish to God they had! They've blown her up!"

The engineer subsided into a chair.

"Do you hear?" he demanded. "They've blown her up! Put a stick of dynamite under some sugar, attached a battery wire to it, an' when she was licking up the sugar touched it off. An' I can't do anything, damn 'em! Bears ain't protected. The government of this province calls 'em 'pests.' Murder 'em on sight, it says. An' those fiends over there think it's a good joke on me—an' the bear!"

Keller was sweating. His fat hands were clenched, and his round, plump body fairly shook with excitement and anger.

"When I went over tonight they laughed at me—the whole bunch," he went on thickly. "I offered to lick every man in the outfit from A to Z, an' I ain't had a fight in twenty years. Instead of fighting like men, a dozen of them grabbed hold of me, chucked me into a blanket, an' bounced me for fifteen minutes straight! What do you think of that, Aldous? Me—assistant divisional engineer of the G. T. P.—bounced in a blanket!"

Peter Keller hopped from his chair and began pacing back and forth across the room again, sucking truculently on his pipe.

"If they were on our road I'd—I'd chase every man of them out of the country. But they're not. They belong to the G. N. R. They're out of my reach." He stopped, suddenly, in front of Aldous. "What can I do?" he demanded.

"Nothing,' said Aldous. "You've had something like this coming to you, Peter. I've been expecting it. All the camps for twenty miles up and down the line know what you thought of that bear. You fired Tibbits because, as you said, he was too thick with Quade. You told him that right before Quade's face. Tibbits is now foreman of that grading gang over there. Two and two make four, you know. Tibbits — Quade — the blown-up bear. Quade doesn't miss an opportunity, no matter how small it is. Tibbits and Quade did this to get even with you. You might report the blanket affair to the contractors of the other road. I don't believe they would stand for it."

Aldous had guessed correctly Quade's name with the affair would be. Keller was one of Quade's deadliest enemies. He sat down close to Aldous again. His eyes burned deep back. It was not Keller's physique, but his brain, and the fearlessness of his spirit, that made him dangerous.

"I guess you're right, Aldous," he said. "Some day—I'll even up on Quade."

"And so shall I, Peter."

The engineer stared into the other's eyes.

"You——"

Aldous nodded.

"Quade left for Tete Jaune tonight, on a hand-car. I follow him tomorrow, on the train. I can't tell you what's up, Peter, but I don't think it will stop this side of death for Quade and Culver Rann—or me. I mean that quite literally. I don't see how more than one side can come out alive. I want to ask you a few questions before I go on to Tete Jaune. You know every mountain and trail about the place, don't you?"

"I've tramped them all, afoot and horseback."

"Then perhaps you can direct me to what I must find—a man's grave."

(To be continued)

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RECEIVES CHECK

I wish to inform you that yesterday's mail brought me a check of $5.49 from Dr. ——. I was rather surprised and also much pleased. Thank you very much. Am sure I would never got it if it had not been for you.—Mrs. G., Clarion, Mich.

THANKS FOR HELP

I wish first to apoligize for my seeming neglect in not writing before but an unexpected influx of visitors prevented my doing so and I am sorry that it made me appear ungrateful for the service you rendered me in securing a settlement for me from Dr. ——. His explanations are plausible enough to satisfy himself but I am confident that without your intervention I would never have received what he owed me and I thank you for your help.

As you do not accept any recomense for your valuable service I can only recommend your paper and continue our subscription and again express my thanks.

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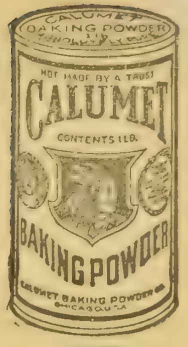

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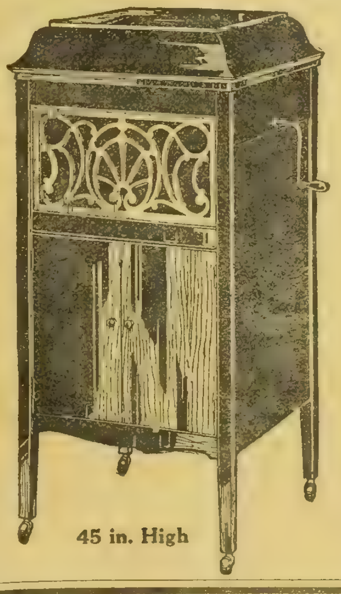

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TOBACCO—KENTUCKY'S PRIDE. EXTRA fine chewing, 10 lb., $3.00; smoking 10 lb., $2.00; 20 lb., $3.50. FARMERS' CLUB, Mayfield, Ky.

WHEN WRITING TO ADVERTISERS MENTION THE M. B. F.

EVERY BREEDER

Can use M. B. F.'s Breeders' Directory to good advantage. Run your ad. and watch the returns come in

What Have You to Offer?

BREEDERS DIRECTORY

Advertisements inserted under this heading for reputable breeders of Live Stock at special low rates to encourage the growing of pure-breds on the farms of our readers. Our advertising rate is Thirty Cents (30c) per agate line per insertion. Fourteen agate lines to the column inch or $4.20 per inch, less 2% for cash if sent with order or paid on or before the 10th of month following date of insertion. **SEND IN YOUR AD AND WE WILL PUT IT IN TYPE FREE**, so you can see how many lines it will fill. Address all letters,
BREEDERS DIRECTORY, MICHIGAN BUSINESS FARMER, MT. CLEMENS, MICH.

CLAIM YOUR SALE DATE

To avoid conflicting dates we will without cost, list the date of any live stock sale in Michigan. If you are considering a sale advise us at once and we will claim the date for you. Address, Live Stock Editor, M. B. F., Mt. Clemens

Nov. 14—Angus, Angusdale Farm, Lewiston, Mich.
Nov. 15—Shorthorns and Poland Chinas, Sonley Bros., St. Louis, Mich.
Nov. 16—Oxford Sheep. The McCartys Bad Axe, Mich.
Nov. 17—Herefords, Stoepels Rochester Farm, Rochester.

LIVE STOCK AUCTIONEERS

WAFFLE & HOFFMAN

OUR SPECIALTY:

BIG TYPE SPOTTED POLANDS AND DUROC JERSEYS

We are experienced salesmen, Expert Judges and money getters.

Right prices. Write today for good dates and our terms, address either of us.
WM. WAFFLE, Coldwater, Mich.
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U-Need-A Practical Competent Auctioneer to insure your next sale being a success.

Employ the one Auctioneer who can fill the bill at a price in keeping with prevailing conditions.

Satisfaction GUARANTEED or NO CHARGES MADE. Terms $50.00 and actual expenses per sale. The same price and service to everyone.

I specialize in selling Polands, Durocs, and Chesters. Let me reserve a 1922 date for you. Write or wire,
HARRY A. ECKHARDT, Dallas City, Illinois

JOHN P. HUTTON
LIVE STOCK AUCTIONEER
ADVANCE DATES SOLICITED.
ADDRESS 113 W. LAPEER ST.
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CATTLE

HOLSTEIN-FRIESIAN

—*BARGAIN*—

Purebred Registered Holstein Heifer Calves

1 month old $50; 6 months old $75-$100

Federally Tested

HOWARD WARNER, Farmington, Mich.

OCT. CLEARANCE SALE. WE ARE OFFERING 20 heifers and bulls. Heavy producing dams. Sire has 7 dams averaging nearly 1,100 lbs. on yearly test. Free from T. B., $50.00 and up.
WOLVERINE DAIRY FARM
Prop.—H. G. Booth **Gladwin, Mich.**

PRICED RIGHT—BRED RIGHT

Purebred Registered Holstein bull calf born April 9, three-fourths white and nicely marked $50. Fine heifer calves $35 and up.
A. F. GIERKE, Grayling, Mich.

HILL CREST FARMS, MUNSON, MICH., ARE offering fresh cows and heifers, best breeding at right prices. Bulls ready for service and bull calves.

WHY PAY MORE? PUREBRED REGIStered Holstein heifer calves, fifty dollars. Circulars free. CONDON'S HOLSTEIN CREST, West Chester. Ohio

BARGAIN—**$45 buys registered Holstein Bull** delivered your station. For particulars address **EARL PETERS, No. Bradley, Mich.**

SHORTHORNS

Richland Shorthorns

We have two splendid white yearling bulls by Imp. Newton Champion, also some young cows and heifers that we are offering for sale. Write for particulars to

C. H. Prescott & Sons

Herd at Prescott, Mich.
Office at Tawas City, Mich.

SHORTHORN CATTLE AND OXFORD DOWN sheep Both sex for sale.
J. A. DeGARMO, Muir, Mich.

THE ESTATE OF THE LATE S. E. BOOTH is offering for sale some fine Shorthorn heifers sired by or bred to a son of Avondale. Prices very reasonable. Address
BOOTH PLACE, Owosso, Mich.

FOR SALE—A GOOD BUNCH OF SCOTCH top Shorthorn cattle and a good bunch of bulls also. All in good flesh; some have calves at side.
R. T. TYRRELL, Oxford Junction, Iowa.

FOR SALE—REGISTERED SHORTHORNS Eighteen head cows, heifers and bulls.
FRANK ROHRABACKER, Laingsburg, Mich.

SHORTHORNS AND POLAND CHINAS—NOTHing for sale at present. Are holding for public sale Nov. 15th. Write for catalogues.
SONLEY BROS., St. Louis, Mich.

FOR POLLED SHORTHORNS
Federal Accredited Herd.
PAUL QUACK, Sault Ste. Marie, Mich.

GLADWIN COUNTY SHORTHORN BREEDERS offer the best in beef and milk strains. All ages, both sexes. **W. S. HUBER, Sec'y, Gladwin, Mich.**

ANGUS

WE HAVE SOME FINE YOUNG ANGUS BULLS from International Grand Champion Stock at reasonable prices. **E. H. KERR & CO., Addison, Mich.**

HEREFORDS

HEREFORD

CORRECTOR 48976

AUCTION

At 12:30 Noon E. T.
☛ Next Friday, Nov. 17th

MR. FRED S. STOEPEL of Detroit having rented his farms, sells entire herd

55 Registered Hereford Cattle

12 Cows with their sucking calves
20 bred heifers and yearlings
10 Yearling Steers

Also the Herd Bull

DALLAS WOODFORD 914487

Sale Under Cover, Rain or Shine at
STOEPELS ROCHESTER FARM

1 mile south and 1 1-4 mile west of Rochester, (Oakland Co.), 1 1-4 mile west of stop on Flint Division D. U. R. R.; 1 1-4 mile east of Dodge Bros. Farm. Automobiles will meet all Michigan Central and Grand Trunk trains also D. U. R. electric cars at Rochester. THESE CATTLE ARE IN MODERATE STOCK CATTLE CONDITION, NOT FAT ENOUGH TO BRING WHAT THEY ARE REALLY WORTH, and therefore are sure to sell all to the buyers advantage and make big profits for buyers who give them better treatment. A year's time may be had on approved notes. Catalogs, giving tabulated pedigrees and other information may be had from **F. S. STOEPEL, 1040 Penobscot Bldg., Detroit, Mich.**, or address

T. F. B. SOTHAM, St. Clair Michigan

BUYING, FEEDING AND SELLING FAT
CATTLE
at present, is too much like
GAMBLING
All experience proves Baby-Beef growing
THE BETTER WAY
GROW HEREFORD BABY BEEVES

Our Contractors are guaranteed top prices by Detroit Packing Co. Commission, yardage, Feed and all other expenses, except transportation—only; are cut out. Our plan opens the way to profitable beef-making, by Michigan Farmers.. In no other way can as much money per cow be earned, with so little labor. If you have no beef-bred cows, we have them on hand or listed.

Study our plan and be convinced. Come, wire or write. Right NOW.

T. F. B. SOTHAM & SONS
(Cattle Business Established 1835)
Phone 250 **Saint Clair, Michigan**

FOR SALE—HEREFORDS—A FEW CHOICE bull calves. Sired by Wyoming 0th. International Winner. Write or come at once. We are the oldest breeders of Herefords in the U. S.
CRAPO FARM, Swartz Creek, Mich.

AYRSHIRES

FOR SALE—REGISTERED AYRSHIRE bulls and bull calves, heifers and heifer calves. Also some choice cows.
FINDLAY BROS., R 5, Vassar, Mich.

GUERNSEYS

FOR SALE—REGISTERED GUERNSEY HEIFers at reasonable prices, also choice bull calves of May Rose breeding.
H. W. WIGMAN, Lansing, Mich., Box 52.

SECURE YOUR NEXT BULL FROM ONE with both A. R. Sire and Dam. I have what you want. I also offer a few choice females.
A. M. SMITH, Lake City, Mich.

FOR SALE—REGISTERED GUERNSEY BULL, 3 years old, of good breeding, gentle.
JAKE DE BOER, R. 3, Marion, Mich.

GUERNSEY BULL Bred Heifer. Yearling Heifer. Heifer calf. Best of breeding. From good producers. Price right. Write **G. A. WIGENT, Watervliet, Mich.**

RED POLLED

RED POLLED CATTLE—A few choice bulls and heifers for sale.
ROYSTAN STOCK FARM,
Will Cottle, R. R. 1, West Branch Michigan

FOR SALE—OUR RED POLLED HERD BULL, Cosy Ells Laddie, and a few heifer calves.
PIERCE BRO'S., Eaton Rapids, Mich. R. 1.

JERSEYS

FOR SALE—**YEARLING JERSEY BULLS** Shopie 19th Tormentor breeding.
J. E. MORRIS, Farmington, Mich.

DAIRY and LIVESTOCK

FEED POTATO CULLS TO LIVE STOCK

POTATOES may be fed to livestock in small amounts in connection with other feeds, suggests the U. S. Dept. of Agriculture to farmers who are interested in methods of utilizing cull potatoes. While they may be sliced and fed raw with dry feeds, it is best to cook them before feeding, as heavy feeding of raw potatoes will cause scouring. Under ordinary farm conditions, boiling or steaming is the most economical method of cooking the potatoes for livestock. Steaming increases their feeding value about 60 percent.

The low protein content of potatoes makes it advisable to feed them in connection with feeds that are relatively high in protein content. Feeding investigations indiacte that when potatoes are fed with other feeds to balance the protein requirements, from 350 to 450 pounds of cooked potatoes have a feeding value equal to about 100 pounds of corn, while from 500 to 600 pounds of raw potatoes are required to equal 100 pounds of corn.

Horses—Potatoes are palatable and well suited for use as a horse feed. It is safe to feed as high as 15 pounds a day to work horses. They are equivalent to about one-third their weight in hay. When potatoes are fed, a legume hay is a desirable supplement. If a grass hay, such as timothy is fed, the ration should contain feeds rich in protein, such as concentrates, legume hay, etc. It is advisable to chop the potatoes to lessen danger of chocking.

Cattle—Cooked potatoes may be fed to cattle at the rate of from 25 to 30 pounds a day per 1,000 lbs. liveweight. The allowance should be lessened somewhat if they are fed raw, on account of their tendency to produce scouring. A heavy allowance of potatoes, however, produces milk and butter of poor flavor.

SCUM FORMS ON MILK

I have a Holstein cow and when I milk her and let the milk stand a few minutes it forms a thick scum at the bottom of pail and when the milk sours it tastes salty. She seems well in other ways, is in good pasture and gets plenty of water and salt.—F. C., Cathro, Mich.

—We are at a loss to know just why the silk should thicken up at the bottom of your pail, but as far as the salty taste is concerned, will say that this is usually caused by the cow being in too good condition and particularly when cows are fed too heavily on grain. There is also danger when one is keeping a family cow and trying to get all the milk possible from her. If you have been feeding the cow quite heavily, I would suggest that you cut the grain down and then drench the cow with a pound of Epson salts, wait three days and give her another pound and repeat after another three days until three doses of Epson salts have been given and then gradually bring her feed back to the amount she ought to get. A pound of grain for each four pounds of milk per day is sufficient for a Holstein.—O. E. Reed, Professor of Dairy Husbandry, M .A. C.

HOLSTEIN SALE AT HOWELL

THE Howell Sales Company of Livingston county held their ninth annual sale, Thursday, October 19th, at Howell where members of the company disposed of over ninety head of choice Holsteins. Many of the animals were not in perfect sale condition and it appears that this was one of the main factors that held the average down to only $144.67. The crowd was there and bidding seemed to be active but most of the bidders apparently were unfamiliar with the history of the animals judging entirely by appearances. Sixty-nine cows were sold at an average of $144 per head with the top at over $300. Two cows sold for $130 each, around $200. Eleven yearling heifers were sold at an average of slightly over $130, with the top above $200. Six calves sold at an average of $85 each. Six herd sires changed owners at the sale. The highest price paid was $400. J. R. Crouse of Howell paid that amount for King Segis Lyons Butter Boy, one of the herd sires consigned by Wm. Griffin of Howell. Another herd sire consigned by Mr. Griffin sold for $350. The average price herd sires brought was $237.50. The auctioneer was Col. J. E. Mack and S. T. Wood was in the box.

DISPERSION SALE AT BIRMINGHAM SUCCESS

MR. ALEXANDER COPLAND, of Strawberry Hill Farm, Birmingham, held a dispersion sale at his farm October 18th that was a success in every way. The animals were led into the sale ring in perfect condition which made it easy for the well known auctioneer, Col. J. E. Mack, to induce the crowd to bid. An everage of $173 per thirty-two cows sold at an everage head was paid for forty-nine animals offered at this sale, while thirty-two cows sold at an average $194 each. The top price at the sale for a single animal was $400. Two animal sold at $400 per head. Eight yearlings were sold at an average of over $130 and eight calves average over $145 per head.

SOUTHERN MICHIGAN SHORTHORN BREEDERS SALE

ON Wednesday, October 18th, the Southern Michigan Shorthorn Breeders Ass'n held an auction sale at Hillsdale, Mich. The sale took place on the fair grounds.

The animals sold at this auction were the cream of the Shorthorn stock owned by the members of the Association and the prices received for them were very low, the top bid being only $255. The offerings were twenty-seven females, many with calves by their side, and six young bulls ready for service. All cattle offered had been tuberculin tested and were guaranteed breeders.

Breeders who consigned cattle at this sale were: W. C. Osius, Hillsdale; E. M. Steinniger, Three Rivers; Jay R. Rogers, Morenci; E. J. Frank, Montgomery; Fred N. Baker & Son, North Adams; G. P. Card, Reading; John Southworth, Allen; Wm. D. McMullen, Adrian; H. M. Maloney, Hudson; Gurn Baker, Jonesville; N. P. Bailey, Camden, Michigan.

Among the list of Michigan purchasers were the following breeders: C. R. Potts, Cadmus; Jay R. Rogers, and C. O. Brott, Morenci; Ed. Randall, Litchfield; F. J. Webb, Paw Paw; Isaac Eldridge, Hillsdale; Kelly & Son, Ypsilanti; Minard Steinniger, Three Rivers; E. C. Wellington, Springport; George Gill & Son Ypsilanti; Clyde Cady, Grass Lake.

Fellow breeders from Ohio were much in evidence at the sale and proved themselves good bidders. That they placed the highest bids in several instances was shown by the fact that numbered among the lucky purchasers were: E. W. York, Ed. J. Fix, and E. N. Bohner, all of Pioneer; and W. G. Weigle, Montpelier, Ohio.

The sale was cried by Col. Andy Adams of Litchfield, Mich.

SCHAFFER BROS. PURCHASE CHOICE HERD BOAR

BREEDERS of Duroc-Jersey swine in Michigan and Canada will no doubt, be pleased to know that the best son of "Marsi" is coming to Michigan. Fred J. Schaaffer of Schaffer Bros., Oxford, Mich., attended the National Swine Show at Peoria, Ill., and selected this pig to head their herd of fine Durocs. "Marsi" won first in the senior yearling class and reserve Grand Champion and his official weight is 779 lbs. "Sensation Marsi" 463703 is a wonderful young Boar. He was farrowed March 14th, 1922 and weighed 252 lbs. Oct. 5th and is a true Sensation type, lots of height and length. Schaffer Bros.' fine herd of Colonel type sows will make an ideal cross with this Sensation boar. They will hold a sale in March 1923 at which time they will offer fifty (50) gilts and sows to farrow early in April.

MORE MONEY FOR FARMER WHO SLAUGHTERS AND CURES MEAT

(Continued from page 4)

Otherwise a shoulder may be stuck, causing a blood clot which will necessitate waste trimming or result in a spot likely to spoil. After the knife has been driven in six or seven inches, it should be turned, which will cut the large arteries in the neck, and then quickly withdrawn. Too deep a thrust may pierce the heart, in which case the blood will not be pumped out.

If a hog is stunned before being stuck, it should be hoisted by the hind legs as soon as the blood stops gushing. This insures perfect drainage of blood. If the animal is not stunned, let it rise to its feet and stand as long as possible.

Scalding and Scraping

Water for scalding should be 145 to 155 degrees, Fahrenheit. Note that this is far below the boiling point. If the water is too hot, it may cause the hair to set, necessitating shaving. For this reason, the hind quarter should always be scalded first as they are easier to shave, if necessary, than the fore parts. If you have no thermometer, stick a finger into the scalding water three times in rapid succession. If it burns, severely the third time, the water is about right.

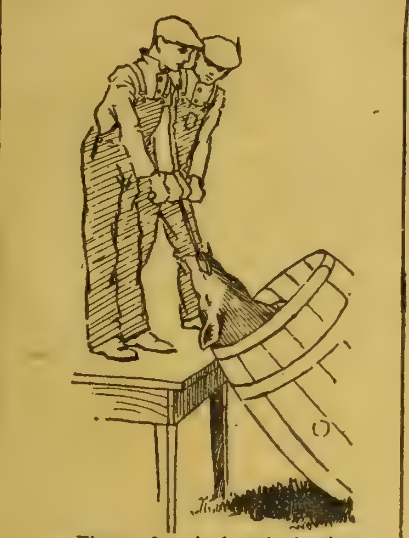


Figure 2. A barrel, leaning against the working platform, affords the best means of scalding.

To each thirty gallons of water add a teaspoonful of concentrated lye, a quantity of soft soap or a small shovelful of wood ashes. This will aid in removing the scurf.

A barrel inclined at an angle of 45 degrees is the best scalding vessel. Very large hogs, however, may be covered with sacks or blankets and hot water poured over them. The cloth will retain the moist heat until the hair is loosened. Uncover a portion occasionally and test the hair. If it does not come off easily, more water may be added, provided care is taken not to "set" the hair by too much heat.

When using a barrel or other vessel for scalding, keep the carcass moving in the water. To hold the carcass while scalding the hind parts, thrust a hog hook through the lower jaw. As soon as the hair slips easily, draw the carcass out to the cleaning platform and remove the hair and scurf from the feet and legs immediately by twisting the legs with both hands. Also take off the dewclaws with the hog hook. A bell-shaped scraper is the best for scraping the remainder of the hind parts, but dull knives may be used.

To hold the carcass while scalding the foreparts, cut slits in the hind legs just below the hocks, loosen the tendons (two in each leg) and insert a gambrel. When the scalding is completed, remove the hair and scurf from the forelegs, head and ears at once as these parts cool quickly. If the hair in any part does not yield easily, cover the part with a cloth and pour hot water over it until the hair slips. After the scraping is completed, shave off any remaining hair with a sharp knife.

Dressing the Carcass

With the carcass hoisted by the hind feet, begin at the top. Cut around the rectum and pull it forward. Then slit the carcass down the midline to the head, forcing the knife through the breastbone to where the cut was made for bleeding the animal. Be careful not to cut the intestines.

First, remove the fat surrounding the stomach. Then, in one operation, take out the gullet, stomach and intestines so their contents will not contaminate other parts. Next, cut away the diaphram (the membrane separating the chest organs from the stomach and bowels) and take out the heart, lungs and windpipe. When all good parts have been removed, prop the jaws open with a stick and wash the inside of the carcass with cold water.

Take out the leaf lard (kidney fat) at once and spread it out on a clean surface, membrane side down. This hastens cooling of the carcass. So does the removal of the head. Make a deep cut entirely around the head about an inch back of the ears. If the cut does not happen to strike the atlas joint of the spine, twist the head slightly and it will come off. Very large carcasses may also be cut in halves by splitting and sawing down the backbone. Do not make any further cuts until the carcass is cool.

As a rule, the carcass should be allowed to cool several hours. A good plan is to do the slaughtering in the evening and let the carcass hang all night in a cellar or cool room. Bear in mind, however, that the meat must not be frozen. Remember, too, that fresh meat absorbs odors readily and, on this account, should not be hung in a room where there is paint, tar, kerosene, gasoline or other substance likely to taint.

AIR CHAMBER IN BUILT-IN RE-REFRIGERATOR

(Continued from page 8)

from the ice to fall to the bottom of the refrigerator. A blue-print can be secured from the M. A. C. of one that was gotten up as a cheap ice box for use during the war. In this box the ice is put in the center of the box—on one side high enough above the bottom to allow articles to be cooled, or if set on the rack near the bottom.—H. H. Musselman, Prof. of Farm Mechanics, M. A. C.

BEAT THE HIGH PRICE OF MACHINERY

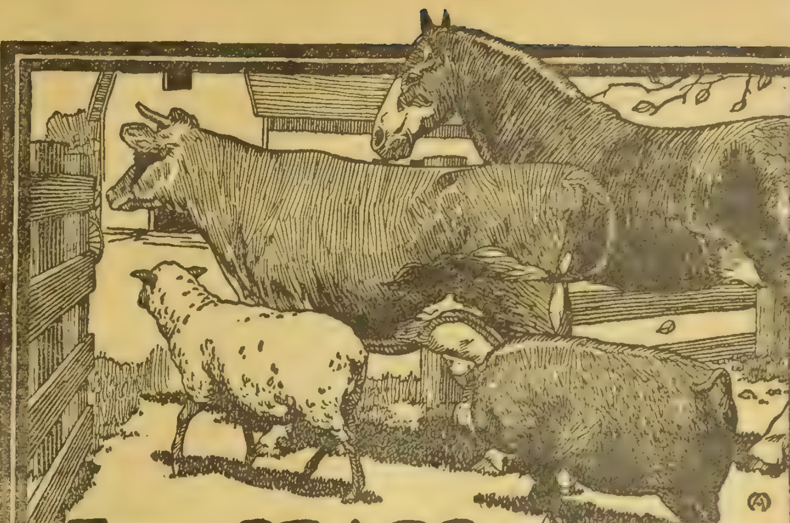
Do you have any machinery out out in the weather?

Drop the work you had planned for today and put it under cover. This part of the equipment for farming costs more today than ever before in history. This makes necessary greater care if we will avoid excessive cost. The machines which we buy today are much more intricate and complicated and thus more damaged by weathering than those of previous years. One-eighth of the total investment saved each year your machinery is properly cared for, is a very conservative estimate.

The added satisfaction and saving in operating tight-fitting, smooth-running machinery needs no argument for its proof. No machine can stand out in the weather and then operate efficiently the following season.

Figure up what a machine shed would be worth to you. Consult your lumber dealer, county agent, or agricultural college on the design and cost of a machine shed. Do it today, and your machinery costs will come back to normal.

PUBLIC SALE
—OF—
Shorthorn Cattle
at farm of
Frank Rohrabacher
Laingsburg, Mich.
Nov. 22, 1922, at 1 o'clock
Farm one-half mile east and one-half mile south of Laingsburg.
Write for catalogue.
18 HEAD
13 Females - 5 Bulls
Frank Rohrabacher
JOHN P. HUTTON, Auctioneer.



From GRASS to DRY FEED

Now, the pasture field and range must give way
—to the stall and manger, the feed lot and self-feeder, the barnyard and fodder rack.

Include

DR. HESS STOCK TONIC
in the ration

You have often noticed stocking of the legs, roughness in the hair, highly colored urine—all on account of the change from grass to dry feed.

Not so where Dr. Hess Stock Tonic is fed. The Tonics, the Laxatives, the Diuretics, take care of all that. No worms; the Vermifuges settle them.

Then you are all set for heavy feeding, a good yield of flesh and milk throughout the winter.

Tell your dealer what stock you have. He has a package to suit. GUARANTEED.

25 lb. Pail $2.25 100 lb. Drum $8.00
Except in the far West, South and Canada.
Honest goods—honest price—why pay more?
DR. HESS & CLARK Ashland, O.

I spent 30 years in perfecting this Tonic.
GILBERT HESS
M.D., D.V.S.

Dr. Hess Dip and Disinfectant
Kills Hog Lice

AUCTION SALE!
OF MY ENTIRE HERD OF CHOICE
ABERDEEN ANGUS CATTLE
TUESDAY, NOVEMBER 14th
At ANGUSDALE FARM
Situated in Montmorency County, Five Miles North of Lewiston and 23 Miles East of Gaylord

This is one of the most famous herds of Pure Bred Angus cattle in all Northern Michigan. From it have sprung the foundation stock of some of the finest herds in the state. Consisting of 33 head of Pure Bred, registered and unregistered stock, an opportunity is given to admirers of the Angus breed to replenish their own herds or get started with pedigreed stock at ridiculously low prices.
Good Auto routes from western Michigan via Gaylord. Good train connections via Grayling to Lewiston. Auto will meet out-of-town buyers at Lewiston.

CEPHAS BUTTLES, Prop.
Angusdale Farm Lewiston, Mich.

SWINE

DUROCS

REG. DUROC-JERSEY SWINE
Spring and Fall Boars of quality sired by 1921 Mich. Grand Champion and grandson of Scissors, world's 1917 Grand Champion. Spring, Fall and yearling sows sired by above boars open or breeding privilege to the undefeated boar pig at 1922 Fairs, a son of Unique Sensation, world's 1921 Junior Champion. Personal inspection invited.
F. HEIMS & SON, Davison, Mich.

DUROC JERSEYS
REGISTERED SPRING GILTS
A nice assortment to select from at Farm Prices
TWIN BROOK FARM
GEO. DOHM, Mgr. WASHINGTON, MICH.

DUROC JERSEY BOARS READY FOR SERvice. Sired by Fannie's Joe Orion $25 each. Will ship C. O. D. Write us now.
H. E. LIVERMORE & SON, Romeo, Mich.

DUROCS—POPULAR BLOOD LINES—SEND your wants to OCEANA CO. DUROC JERSEY HOG ASS'N. V. Lidgard Sec., Hesperia, Michigan.

PURE BRED DUROC-JERSEY BOAR
Pigs of April and May farrow, sired by Brookwater Sensation and Model of Orion's Masterpiece. Place your order now, prices right. DETROIT CREAMERY HOG FARM, Route 7, Mt. Clemens, Mich.

SENSATION MARSI Our new herd boar. Sired by "Marsi" Reserve grand champion National Swine Show 1922. We are taking orders for gilts and sows for spring farrow bred to this wonderful boar.
SCHAFFER BROS., Route 4, Oxford, Mich.

DUROC YEARLING AND FEBRUARY AND Spring gilts and boars, sired by Pathfinder Chief son of old Pathfinder; dams are Defender and Fancy Joe Orion 7th. Prices right; get the best.
E. McBAIN, Moscow, Mich.

PEACH HILL FARM offers choice weanling Duroc pigs, either sex. Priced very reasonable. Write us.
INWOOD BROS., Romeo, Mich.

HILL CREST DUROCS; SOWS AND GILTS, both bred and open, also service boars. NEWTON & BLANK. Four miles straight south of Middleton, Gratiot Co., Mich.

DUROC JERSEY—WE HAVE A CHOICE LOT of extra good spring boars ready for service; shipped on approval, satisfaction guaranteed.
F. J. DRODT, Monroe, Mich., R. 1.

I WILL PAY Express charges, furnish papers registered in buyers name and guarantee satisfaction on my choice April gilts, at $28.00 each.
RAY I. THOMPSON, Charlotte, Mich.

POLAND CHINA

FRANCISCO FARM POLAND CHINAS

Big stretchy spring boars as good as grow. Pairs and trios not akin. Can spare two or three of our good herd sows bred for September.

P. P. POPE
Mt. Pleasant Michigan

L T. P. C. $15-$20-$25

Spring pigs at above prices Top fall gilts bred for summer farrow, priced right
HART & CLINE
Address F. T. Hart, St. Louis, Mich

SELL REGISTERED SPOTTED POLAND China Pigs, 7 months old, Boars $25, Gilts $20. Dr. Erwin Meyer, Drayton Plains, Mich., Box 43.

HAMPSHIRES

A CHANCE TO GET SOME REAL HAMPshires. Boar pigs, sired by Gen. Pershing Again, Gilt Edge Tipton, Messenger All Over 10th. Gen. Pershing 2nd., and other great boars. Writes for list and prices. DETROIT CREAMERY HOG FARM, Route 7, Mt. Clemens, Mich.

HAMPSHIRE AND SHORTHORNS—MARCH and April pigs weighing 100 to 150. Price $20 to $25 each. One red and one white bull 4 months old. Price $40. Each registered. Write or call
GUS THOMAS, New Lathrop, Mich

HAMPSHIRE SPRING BOAR PIGS NOW ready place your order soon. 10 years in business. JOHN W. SNYDER, St. Johns, Mich., R. 4.

O. I. C.

O. I. C. PIGS OF NICE THRIFTY AUG. AND Sept. farrow, 40 lbs. or more; from large Prolific mothers, average 14 pigs to litter. Choice pig either sex, $15.00 C. O. D. Order now. Prompt shipment. Pedigree with each pig. MAPLE VALLEY STOCK FARM, North Adams, Mich.

O I C'S 25 LAST SPRING BOARS, GILTS not akin, fine big growthy stock. Recorded free. One-half mile west of depot. Citizen Phone. OTTO B. SCHULZE, Nashville, Mich.

REGISTERED O. I. C. SERVICE BOARS AND Bred Gilts priced to sell
J. R. VAN ETTEN, Clifford, Mich.

SHEEP

HAMPSHIRE

REGISTERED HAMPSHIRE AND DELAINE Rams; also some good grade rams for sale cheap. Write A. F. LONGPRE, Hardy, Mich.

SHROPSHIRE

REGISTERED SHROPSHIRE YEARLING rams and ram lambs of exceptional quality and size. Priced to sell. Flock established 1890.
C. LEMEN, Dexter, Mich.

SHROPSHIRE RAMS—CHOICE YEARLINGS Ram and Ewe lambs Write
DAN BOOHER, Evart, Mich., R. 4.

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AT McCARTY FARMS

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OXFORDS RAMS ALL AGES—GUARANTEED breeders and to please. A few ewes also 10 ewe lambs. Wm. Van Sickle, Deckerville, Mich., R. 2.

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LARGE WELL COVERED DELAINE SHEEP for sale, both sexes. Rams, Poll or Horned.
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FOR SALE—PURE BRED RAMBOUILLET rams. Good stuff. At farmers' prices.
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PUREBRED SCOTCH COLLIES, SABLE AND white or the beautiful black and white. From heel-drivers. $10 and up.
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FOR SALE—ANGORA GOATS—ONE REGistered yearling buck, one registered yearling doe and doe kid six months old.
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RABBITS REGISTERED AND PEDIGREED Get our prices.
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Poultry for Profit

THREE COMMON ENEMIES

RED mites are like bedbugs—in fact, they belong to the same family. They breed in cracks and crevices of the house, especially in places where filth accumulates. They are about one-twentieth of an inch long and are pale gray in color with dark spots on the back. They suck blood from the hen. After feeding they become reddish in color—hence the name red mites.

Sunlight and cleanliness are the best means of prevention. Don't breed mites. Keep the house so clean that mites cannot make a home there. Whitewash the coop in the spring and in the fall. Once a month, during the spring and summer, paint the roosts and nests with kerosene or kerosene emulsion.

Kerosene, if applied often enough, will keep mites from breeding. Crude oil is better than kerosene because it lasts longer. Kerosene emulsion is more trouble to make, but it pays because an emulsion stays on the job longer and does the work better.

Kerosene emulsion is made as follows: Dissolve one bar of laundry soap in a gallon of hot water, and then add two gallons of kerosene. Stir this with a stick, or churn it with a hand spray until the suds and kerosene are thoroughly mixed and look like thick cream. To this mixture add eight gallons of water and stir well. Apply to the coop with a brush or a common hand spray.

Various species of lice affect poultry, but the only one is common. The common hen louse is pale yellow in color with more or less darker marks on each side of the body. It is about one-twentieth of an inch long and slightly more slender than the chicken mite.

Lice live and reproduce on the body of the hen. They do not suck blood, but live on the scurf of the skin, and the fuff of the feathers.

Spraying will not be effective against lice, for any odor strong enough to reach up through the feathers and kill the lice will be strong enough to injure the hen.

Lice breathe through the pores of the body. Any fine powder or any greasy substance which will close the pores will kill them. You know how hens wallow in the dust. They do this to rid themselves of lice. Have a box of ashes and road dust in the chicken coop so that hens can go to it at any time.

Dust insect powder on the hen. No powder on the market is as cheap and effective as one you can make at home. Take three parts of gasoline and one part strong carbolic acid. Mix these together and add enough plaster paris to take up all the moisture. This makes a dry pinkish-brown powder. Dust this on the hen especially in the feathers under the wing and in the fluff below the vent.

This powder is know as the Cornell Lice Powder. The formula was worked out by Mr. R. C. Lawry, of Pacific, Missouri, when he was a professor in the Poultry Department of Cornell University.

Grease closes the pores as effectively as powder. Equal parts of lard and kerosene can be used. Rub well into the skin at the base of the feathers under the wing and below the vent.

The remedies mentioned will kill all lice, but will not kill the nits or, eggs. In a week or two you will need to repeat the process in order to kill the lice which will have hatched in the meantime.

Blue ointment will kill both nits and lice. It is a poisonous salve that can be purchased at any drug store for 30 or 35 cents an ounce. A small amount about the size of a pea should be rubbed into the skin of the abdomen just below the vent. Professor Phillips, of Purdue University, says that one application of this will remove the lice and keep them off for six months or a year. Be careful not to use too much and do not use it on little chickens or settting hens. It is best to use blue ointment early in the spring before the breeding season commences.

Gape worms are reddish looking, apparently double-headed worms about one-half of an inch long. They do injury by getting into the trachea or windpipe of chickens in such great numbers that the chickens cannot breathe. They never kill old hens, but young chickens often die from this cause.

It is fairly easy to get rid of gape worm if you know their life history. They live in the soil. Their eggs are eaten by chickens or angle worms. In either case the eggs hatch and the young gape worms work their way into the trachea.

It is much easier to prevent gape worms than to get rid of them after the soil once becomes infested. Young chicks should never be raised in the same place year after year. Change location of their coops each spring. If you do this and use lime and ashes on the ground where the chickens run, there will be little danger of gape worms getting a start.

If the land becomes badly infested, it should be plowed and put out to crops for a year or two.

MEETING OF MICHIGAN BABY CHICK ASSOCIATION

A LITTLE over a year ago the leading hatcherymen of Michigan joined together in an association to be known as the Michigan Baby Chick Association. The purpose of the association is to boost Michigan baby chicks and to co-operate with each other. On Sept. 29th at Lakewood Farm, Holland, Mich., they held a meeting and the work done in the past year was gone over. All members were greatly surprised and highly pleased at the rapid progress they had made in twelve months.

At this meeting the members adopted a new constitution and code of ethics. In article 5 of their new constitution they have a code of ethics. In this code they pledge their earnest co-operation with and protection of the public through: Honest, truthful advertising; honest, upright business methods; and honest production and sale of chicks as represented. In taking such a step the association has done much to place the baby chick business in this state on a higher plane and they will profit much by it.

In order to become a member of the association a hatcheryman or commercial egg man must cull the flocks he hatches his eggs from. After this culling is done he notifies the association who has the Extension Department of the M. A. C. approve and rate his flocks. If the M. A. C. man approve the flock then the association issues him a certificate of certification and by paying the membership dues of $10 he becomes a member of the association. All interested should write Mr. C. J. De Koster, Sec.-Treas.

FUR DEPARTMENT

EDITED BY A. R. HARDING

America's Foremost Author and Trapper

QUESTIONS ANSWERED

HARVESTING THE FUR CROP

CONTRARY to the general belief, it is not the valuable furs such as black, silver and cross fox, fisher, marten, etc., that yields greatest sevenue to trappers. True a single skin of those first mentioned may bring hundreds of dollars, but numbers secured are very small compared with the catch of skunk, mink, muskrat, opossum, coon, red fox, civet cat, wolves and weasel.

The annual value of the raw fur catch in North America varies considerably, but at prices ruling the past year means something like $30,000,000 to the catchers—the value of skunk, mink, and muskrat pelts being fully half of the total. Add to this coon, civet cat, opossum,

POULTRY BREEDERS' DIRECTORY

Advertisements inserted under this heading at 30c per agate line, per issue. Commercial Baby Chick advertisements 45c per agate line. Write out what you have to offer and send it in. We will put it in type, send proof and quote rates by return mail. Address The Michigan Business Farmer, Advertising Department, Mt. Clemens, Michigan.

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We yet have a few hundred Pullets in Leghorns, Barred Rocks, White Wyandottes and Orpingtons. The most of these Pullets are near laying age and should be put into winter laying quarters soon. If you want a flock of winter layers, write us now.

Also Cockerels, Bronze Turkeys, Toulouse Geese and Pekin Ducks.

STATE FARM ASSOCIATION
Kalamazoo, Mich.

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S. C. White Leghorns and S. C. and R. C. Black Minorcas. Must make room before cold weather. About ready to lay.
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PURE BRED PARTRIDGE WYANDOTTE Pullets and Cockerels 7 mos. old, $2.50 each. Write C. H. GOODER, Kalamazoo, Mich., R. 3.

LEGHORNS

LEGHORNS

S. C. Buff Leghorn Hens, Pullets and Cockerels. Hens and pullets $2.50 each; cockerels $3.00 to $5.00 each. Show birds a matter of correspondence. LAPHAM FARMS, Pinckney, Mich.

COCKERELS AND PULLETS, S. C. W. LEGhorns, Tom Barron strain, 250 egg utility line, April hatched, $1.35. C. O. D.
CECIL W. BOVEE, North Star, Mich.

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J W. WEBSTER, Bath, Michigan

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SINGLE COMB REDS—BIG BONED DARK rich even colored cockerels $3.00 and $5.00 each. A few pullets of exhibition quality $5.00 and up, good laying strain.
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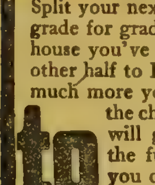

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Box B-31, Keeseville, N. Y.

red and gray fox, coyote and white weasel—all farm caught furs—and more than two thirds or $20,000,000 is caught largely by farmers, their sons and tenants.

Getting a little closer home let us see what the state of Michigan is doing. There are no figures, to my knowledge, giving the catch of each state. Suppose the catch averages $20.00 to the square mile which based on the total number of square miles, 58,915, would mean $1,178,300. This is perhaps much too low and some well posted think the catch last year was well up to $2,000,000.

Michigan for years has been known as one of the best of the fur state—both for quantity and quality. In fact most too well known for of late years the state has been overrun with trappers—far too many. Some years ago when the writer was deer hunting in the Upper Peninsula he met numerous trappers from Illinois, Indiana, Pennsylvania and other states looking up trapping grounds. Most of them after looking the grounds over found nearly all likely localities already occupied. Of recent years far more farmers, tenants, etc., are gathering the "Fur Harvest" themselves as they not only enjoy the "harvesting" but find the crop a paying one.

I have often wondered why land owners so long neglected the fur crop, for if they did not care to harvest it themselves, there are many glad to do so for a share of the "crop." In some localities the revenue from the fur crop is now worth more than any other.

Trappers, with little knowledge of the fur bearers, find it hard to distinguish between dens used by rabbits from other animals. Throughout much of Michigan, especially southern parts, fur animals such as skunk, mink, coon use dens in the ground much more than they do in the extreme northern portions of the Lower Peninsula and all of the Upper Peninsula. Rabbit hairs are short and of a greyish color. Skunk hairs are long—several inches long if out of the tail—and usually black on one end and white on the other, altho they may be all black or all white. There is no more odor at a skunk den, unless the animal has been disturbed, than there is at a rabbit den.

Steel traps are now largely used, being much cheaper than a few years ago, altho a good many home made traps or deadfalls are still used. The No. 1 of the regular spring trap is much used for skunk; other good traps for this animal are the No. 115X triple clutch and the No. 1 coil spring which is an under spring type of trap. There are of course numerous other sizes that are more or less used. Catalogues sent out by fur houses dealing in trappers supplies tell proper size for each animal.

The coil spring and jump traps have been used throughout the east for years. Jump traps of the Blake & Lamb pattern were largely used by muskrat trappers along the Atlantic coast twenty years ago—the others are of more recent make. These traps are so named "jump" from the fact that when sprung they "jump" catching the animal high on the leg. The spring is shorter, in fact do not extend beyond the jaws.

Trappers who use these traps report them very satisfactory, especially in narrow dens, or where space will not conveniently allow the setting of the regular long-spring kind.

The No. 1 trap, of most any make, will hold most any of the small fur animals, if properly fastened. A good fastening is to a bush, say an inch in diameter, and several feet long with numerous branches. The chain can be run through the ring and looped above a branch, or the staple driven near the large end. The animal when caught, cannot get a solid pull—the bush will give with every lunge or pull of the animal so not so apt to get away.

Staking traps, driving a stake through the ring, is one oft the most common mistakes of beginners, when traping land animals. Traps thus fastened allow the game a solid pull and in time are apt to get free. If traps are staked a larger size than No. 1 is best for skunk.

(To be continued)

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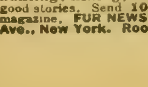

TRAPPERS: New illus. book tells how to trap mink, skunk, muskrat, fox, etc.; make deadfalls, snares and baits; raise skunks and foxes; gather roots and herbs; many other things. **Fur News and Outdoor World,** big illus. magazine, tells about fur markets; trapping; hunting; fishing; woodcraft; dogs; fur farming; lots of good stories. Send 10c for copy of book and sample copy of magazine. **FUR NEWS AND OUTDOOR WORLD, 370 Seventh Ave., New York. Room 392**

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"On the Top of Michigan"

FARMERS ATTENTION

We are in the market for Red Clover either medium or June. Please send us samples of your offerings. We feel sure we can Quote you an attractive Price.

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Millington, Michigan

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MARKET FLASHES

MARKET SUMMARY

Wheat and rye in good demand and firm. Corn and oats steady. Beans unchanged after recent advances. Butter and eggs firm. Poultry inactive. Dressed hogs and calves not wanted. Cattle dull. Hogs and sheep active and prices higher.

(Note: The above summarized information was received **AFTER** the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press —Editor.)

TRADE AND MARKET REVIEW

GENERAL business conditions continue on the up-grade, but coal and transportation still present some problems which may very likely cause a set-back before very long. The most recent cloud on the horizon is the threatening car shortage which promises to assume serious proportions. Orders have gone forth from Washington that all box cars in eastern states belonging to western lines must be shipped back at once to their owners without loading. Furthermore gondola cars must be immediately dispatched to the coal fields. Michigan is greatly concerned over this order which if carried out to the letter will mean a state-wide poverty of cars to move the bumper potato crop and the sugar beet crop. Already potatoes are congesting the local markets for lack of cars, and state authorities are beseeching the railroads to rescind or amend their orders, so that Michigan may have enough left to move her crops. It is said that Minnesota, also a large potato state, has received three times as many cars as Michigan, which if true, gives this state real grounds for complaint.

Prices on all important farm products have an upward trend, with the exception of potatoes. Impoverished as she is Europe continues to buy freely of our grain and many dealers look for sky-rocketing prices before the next harvest.

WHEAT

Wheat prices march steadily upward with only an occasional break. The market news is mostly of a bullish nature. Europe takes a few thousand bushels of wheat and rye every day. The great western crop is being held back because of the car shortage and quite frequently a scarcity of visible grain develops on the eastern markets. Breaks in the market are principally caused by profit-taking. Those who bought wheat at around $1 a bushel see no reason for waiting for higher prices when they can make 15 or 20 per cent on their investments. Few believe that the bull movement in wheat has run its course, and it is freely predicted now that $1.50 wheat is only a few weeks away.

As seems usually to be the case, only a comparatively small percentage of the actual producers of wheat will receive the benefit of the higher prices. The bear movement in late July and August was well engineered and frightened a lot of farmers into disposing of their grain. It is now estimated that over 50 per cent of the 1922 crop has left the farmers' hands and a good deal of that is in the hands of the speculators who are in a position to make huge profits on their purchases.

Prices

Detroit—No. 2 red, $1.31; No. 2 white and No 2 mixed, $1.29.

Chicago—No. 1 hard, $1.17½ @ $1.19¼; No. 2 hard $1.17½ @ $1.19.

New York—No. 2 red and No. 2 hard winter, $1.36½.

Prices one year ago—Detroit, No. 2 red, $2.20; No. 2 white and No. 2 mixed $2.17.

CORN

Trade in this market has been dull and there has not been much action to the market the past week. There has not been much desire to press the selling side, while new buyers were discouraged by the falling off in the demand for cash corn. In general buyers are confining their purchases to grain already on the market and ready for instant delivery. Receipts have not been heavy as country offerings continue to be small due to the car shortage. The quality of the new crop is reported to be fine, although the amount is much less than at the beginning of the 1921 season.

Prices

Detroit—No. 2 yellow, 80c; No. 3 yellow 79c; No. 4. yellow 78c; No. 5 yellow 77c.

Chicago—No. 2 yellow, 70¼c@ 71½c.

New York—No. 2 yellow, and No. 2 white, 89¾c; No. 2 mixed, 89¼c.

Prices one year ago—Detroit, No. 2 yellow, 55c; No. 3 yellow, 53c; No. 4 yellow, 50c.

OATS

The oat market has been very quiet the last week or so. The tone of the market is steady although trading is limited. Receipts from the country continue to be restricted by shortage of cars, but in most cases they are sufficient to take care of local demand. Domestic shipping demand is lighter than one week ago.

Prices

Detroit—No. 2 white, 49c; No. 3 white, 47½c; No. 4 white, 46c.

Chicago—No. 2 white, 43¼ @ 44¾c; No. 3 white, 42¼ @ 43¼c.

New York—No. 2 white, 55 @ 55½c.

Prices one year ago—Detroit, No. 2 white, 38c; No. 3 white, 34½c; No. 4 white, 31c.

RYE

Rye, like other grains, followed the trend of wheat the past couple of weeks and the market is steady at present. The closing days of last week saw the grain unchanged in some cases but prices at the close of the week were nearly four cents higher at Detroit than the close of the week previous. Demand is good for this grain, especially from the seaboard, and we look for considerable higher prices within the next ninety days.

Prices

Detroit—Cash, No. 2, 90c.

Chicago—Cash, No. 2, 85½@86c.

Prices one year ago—Detroit, No. 2 white, 81c.

BEANS

The Michigan bean market slumped rapidly the early part of last week, but near the close gathered new strength and recovered all that it had lost. There appears to be considerable speculation this year in beans and it is evident that the dealers have every confidence in the future of the market. The first year of the slump in the bean market taught the dealers to be cautious and the following two years they showed little if any inclination to speculate. This year, the situation is vastly different. Jobbers and elevators are eager to buy and do not worry greatly if there is no immediate outlet for their purchases. If beans are a good investment for the dealer, they are just as good for the farmer. We advise our readers not to be too hasty in disposing of their crop. We belive bean prices will be very much higher.

Prices

Detroit—C. H. P.,$7.00 per cwt.

Chicago—$5.50 @ $6.00 per cwt.

Prices one year ago—Detroit, C. H. P., $4.25.

POTATOES

The potato market is without life. What few sales were made last week by farmers in this state were at 25 to 35 cents per bushel: Selling by farmers has come to a virtual stand-still, the majority of those who are obliged to sell as soon as potatoes are dug having already dene so. Mild weather has added to the bearishness of the big crop. We do not see how potato prices can go much lower, because farmers will simply not sell at prevailing prices. We anticipate that as soon as cold weather sets in the market will liven up a bit. The car shortage is a factor that must be reckoned with. Should mid-winter find the western potato sections without cars there might be a sharp advance in prices. But no appreciable advance can hold long, If prices do not decline further and we hardly expect that they will, there are very good reasons for believing that winter will usher in slightly better prices than now prevail.

Prices

Detroit—$1.20 per cwt.

Chicago—75 to 90c per cwt.

New York—$1.67 per cwt.

Prices one year ago—Detroit, $2.08.

HAY

A steady advance in hay prices during October is reported by the United States Department of Agriculture. The average price of No. 1 timothy as reported by ten of the larger markets to the United States Department of Agriculture advanced about 75c per ton. Scarcity of cars is given as the principal market factor; the advance on timothy was attributed more to the scarcity of good hay in the markets than by an increased demand. The surplus to be marketed was reported to be larger than last year and the demand from consuming sections less because of the large quantities of local forage available. The marketable surplus of alfalfa was estimated to be less than for the previous year, while the drouth in certain sections of the West and South-west created a demand of sufficient volume to have absorbed already most of the market hay in nearby territory. Emergency rates equal to 50 per cent of the regular rates have been made by certain railroads on hay for Texas and New Mexico. This will make possible the movement of hay from Colorado, Utah, and Wyoming, from which states it has heretofore been almost impossible to move hay because of the high transportation charges, the Department says.

Prices

Detroit—Standard Timothy $16.50; light mixed $16.50 @ $17.50; No. 1 clover $15 @ $15.50.

Chicago—No. 1 Timothy $21 @ $23; No. 1 light clover mixed $20 @ $21.

New York—No. 1 Timothy $27; No. 1 clover mixed $23 @ $25.

Prices one year ago—Detroit, No. 1 clover $14 @ $15; No. clover mixed $15 @ $16.

CHICAGO LIVE STOCK MARKET

Last week was another week of gloom in the cattle market, following the irregular but sharp declines of the week before. It was a case of too many cattle on sale for the immediate needs of the trade. Buyers refused to take cattle except at substantial price reduction. Even the best steers showed weakness, and many choice and near-prime steers sold 25c to 40c lower than the high time two weeks previous.

Short-fed steers, which have been subject to more or less unevenness, whether on advancing or declining markets, suffered most in the last two weeks' slump, uneven declines of $1.00 to $2.00 being general, with extreme spots showing more loss. It was a game of chance at times. Neither buyers nor sellers could agree among themselves as to what these grades of cattle were worth. It was not uncommon for steers of similar quality and flesh condition to sell as much as 50c to $1.00 apart on the same day.

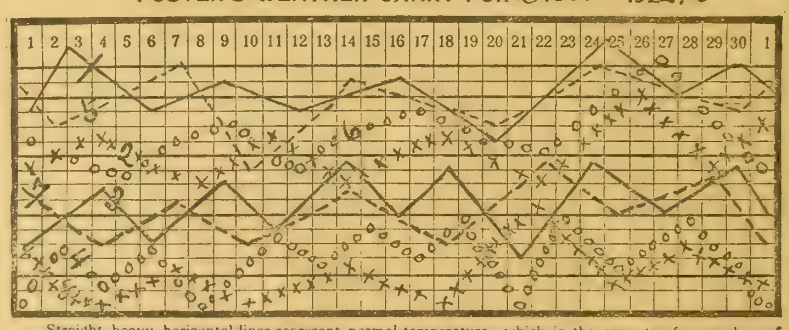
Receipts were liberal every day, and the week's total at 83,100 shows only a slight reduction from the total of the previous week of 84,373, which was the largest weekly run of cattle since the week ending Nov. 20, 1920. Nearly one-third of the receipts consisted of western range cattle, which came in direct competition with short-fed natives.

Chicago receipts of hogs last week at 159,700 stand the largest since week ending July 15, being 25,400 larger than previous week, 11,000 larger than a year ago and 8,500 larger than two years ago, when presidential election curtailed

THE WEATHER FOR NEXT WEEK

As forecasted by W. T. Foster for The Michigan Business Farmer

FOSTER'S WEATHER CHART FOR nov 1922



Straight, heavy, horizontal lines represent normal temperature which is the average of same days of the year for forty years. Crooked lines above normal lines mean warmer; below, cooler; that marked 1 is for section 1, north of latitude 47, between meridian 90 and Rockies crest—2 for section 2 on my section map is for east of meridian 90, north of latitude 47—3, between latitudes 39 and 47 and between meridian 90 and Rockies crest—4, east of meridian 90, between latitudes 39 and 47—5, south of latitude 39, between meridian 90 and Rockies crest—6, east of meridian 90, south of latitude 29—7, north of latitude 43½, west of Rockies crest—8, south of latitude 43½ to Mexican line and west of Rockies crest.

Washington, Nov. 10, 1922.—North American precipitation for the year beginning October 1, 1922 is expected to be less than the ten-year average. Of course some sections will get more, some less; the important thing for the producer to know is what the prospects are for his immediate vicinity so he may know what kind of crop to plant and sow. A shortage of rain means a shortage of crops as a general average and that means good prices for products in 1923. The absence of severe storms for about twenty days of October brought out complaints about dry weather. From near Nov. 10 to 30 sufficient severe storms are indicated to bring a good moisture that will be favorable to winter grain. My information is that the beginning of the next crop season indicates bad crops for Australia, New Zealand and the islands near them only fair crops in South Africa; good crops in Argentina. Shortage of wheat and rye crops in Europe is greater than heretofore reported. World conditions continue to indicate a world shortage of grain for 1923. Some countries will produce above normal crops but more below.

Michigan: East of 90, between latitudes 39 and 47; highest temperatures 11 and 15, lowest, 13 and 17; average much warmer than usual; most severe storms and most precipitation during week centering on 16.

supplies. Receipts were 2,200 above the 11-year average.

Average weight of hogs dropped 6 lbs. near normal for this season of the year, the estimate last week at 236 lbs. being 6 lbs. heavier than a year ago, 10 lbs. heavier than two years ago and 21 lbs. above the 11-year average. Average weight is still considerably "out of line" at 236 lbs., being above any corresponding week's average weight in over 11 years. However, comparing with recent weeks, last week's average weight of hogs stands lightest since the first week of March, showing a loss of 16 lbs. in six weeks' time.

Top price last week slumped off another 70c, now standing at the lowest level since first three weeks this year. Top last week at $9.05 shows a gain of $1.00 as compared with a year ago, being $5.45 below two years ago and within $2.25 of the 11-year average.

Sheep receipts last week at 104,000 were practically second largest of the year, being 16,400 larger than previous week, 6,600 larger than a year ago and 13,500 larger than corresponding week two years ago. Total shipments from Chicago last week at approximately 53,400 were also among the largest of the year, being 16,500 larger than previous week, 24,160 larger than a year ago and 27,700 larger than two years ago.

Practically all shipments of sheep and lambs leaving Chicago during the week carried feeding quality back to the country, very few fat lambs being shipped out recently alive. However, a few eastern orders were filled earlier in the week, buyers competing with city butchers and large local interests for the exceedingly few choice fat lambs available.

Active competition and a scarcity of aged sheep upheld values in this class with closing prices ruling steady to 25c lower than a week ago, while lambs and yearlings reflect sharp discounts. Handy weights sold unevenly comparing with a week ago, although weighty classes showed the decline.

Large country orders for feeding sheep were filled late in the week, a big string of Montana medium to good feeding ewes selling to go back to the country at $5.25@$5.35 mostly. A light "sort" sold for slaughter at $7.00. There was inquiry throughout the week for desirable breeding stock, but very few arrived. One deck of yearling breeding ewes brought $11.50 Monday.

CATTLE REACH HIGH PRICES IN OCTOBER

Receipts of cattle and calves during the first three weeks of October increased nearly 34 per cent over the same period last year, reports shows. Hog shipments were over 191,000 head heavier. Sheep and lamb shipments decreased. A large increase in the movement of stocker and feeder animals back to the country is reported, ranging from 41 per cent on cattle and calves to 110 per cent on hogs. Slaughter of cattle and hogs increased, but of sheep and lambs decreased.

MISCELLANEOUS MARKET QUOTATIONS

Detroit, Monday, November 6th.

BUTTER—Best creamery, in tubs 39@42c per lb.

EGGS—Fresh, current receipts, 38@44c; fresh, candled and graded, 40@48c; refrigerator firsts, 26@28c. per doz.

PEARS—Winter varieties, $1,25@$1.50 per box.

HONEY—Comb, 23@25c per lb.

CELERY—Michigan, 20@30c per doz; square, $1@$1.25.

DRESSED HOGS—90 to 100 lbs, 13c; 130 to 160 lbs, 11@12c, heavy, 6 to 10c per lb.

CHESTNUTS—38@40c per lb.

CABBAGE—Home grown 50@60c per bu.

POP CORN—4½@5c; Little Buster, 7½@8c per lb.

ONIONS—$1.75@$2 per sack of 100 lbs; Spanish $2.15@$2.25 per crate.

DRESSED CALVES—Choice, 14@15c; medium, 11@12c; large coarse, 5@10c per lb.

LIVE POULTRY—Best spring, 20@21c; medium, 19@20c; leghorns, 16@17c; large fat hens, 23@24c; medium hens, 20@22c; small hens, 14c; old roosters, 15c; geese, 20@22c; large ducks, 21@23c; small ducks, 18@20c; turkeys, 34@35c per lb.

WOOL NOTES

The Boston and Philadelphia wool markets may be described as very active. Prices have recently advanced to new levels for this year. There is a demand for all grades but fine wool commands most of the attention.

Sales of fine strictly combing Ohio wool have been made at about $1.35, scoured basis, which is equivalent to about 55c per pound in the grease. Prices of 3-8 strictly combing wool on a scoured basis have advanced about 10c per pound during October. At present there is a spread of 50c per scoured pound between fine and 1-4 blood strictly combing wool in favor of fine.

Recent activity in the wool market has been reflected in an advance by the men's wear manufacturers of from 5 per cent to 12 per cent in prices for next springs finished goods. One outstanding feature in recent developments is the fact that the major portion of the wool recently withdrawn from bond in the United States was for manufacturers' account.

LONDON WOOL MARKETS

Opening prices at the last auction sale in London advanced from 5 to 10 per cent over those prevailing at the close of the previous series. Prices are being maintained easily at the higher levels. Since the effective date of the 1922 Tariff Act purchases of wastes, including sales, in the English markets have been quite large for American account. While stocks of fine wool are limited, advices from commercial sources there indicate an abundant supply of lower grade wools. It is also reported through commercial channels that foreign manufacturers have lowered their prices about 10 per cent on some lines of finished goods suitable for export to this country.

HEAVY MOVEMENTS OF SHEEP AND LAMBS TO FEED LOTS

Despite marked decreases in receipts at markets, movements of sheep and lambs to feed lots have been relatively heavy for some time past, the United States Department of Agriculture reports. Considerable numbers of feeders are reported going into Colorado feed lots by the heavy movement through the Denver market. Feeder shipments from that point during September were almost double those of a year ago, the Department states.

Feeder shipments during the first three weeks of October from 12 important markets totaled 575,664 head compared with 390,853 during the same period in 1921. This is an increase of 184,811 head or 47 per cent. Receipts of sheep and lambs during September at public markets decreased 377,000 head compared with receipts during September 1921, but feeder shipments from these markets decreased only about 30,000. Feeder shipments during the first 9 months of this year increased 355,000 head, or more than 21 per cent, over shipments during the same period decreased 2,206,000 head or nearly 13 per cent.

CHICAGO APPLE MARKET

The market on apples has gone the route of the market on a good many other commodities recently and an easy tone prevails at present under liberal receipts but a moderate demand.

The supply of barreled apples has been liberal and the market was easy under a rather slow movement. Michigan "A" grade Wageners and Baldwins brought $3.25@3.50; Greenings and Snows $4@4.50; Kings and Spies $3.25@$4; New York "A" grade Greenings and Spies $4@$4.25; Baldwins and Hubbardstons $3.50@4; Illinois "A" grade Jonathans $5@6, and Grimes $4.25@4.50. Iowa and Missouri "A" grade Jonathans brought $5.50@6.

The supply of bushels also continued liberal and under an easy market Illinois and Missouri "A" grade Jonathans $1.50@1.75 and other varieties in bushels sold principally around $1, with some unclassified stock selling anywhere from 50 to 75c.

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MISCELLANEOUS

GENERAL

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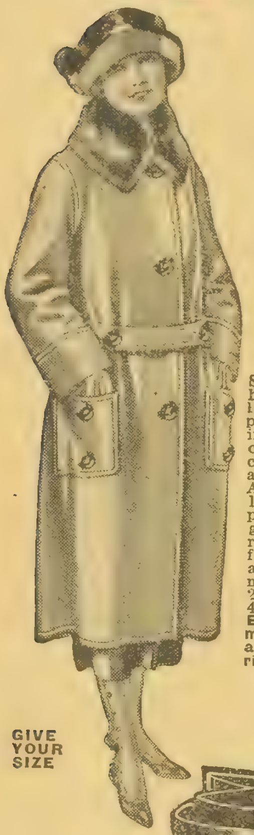

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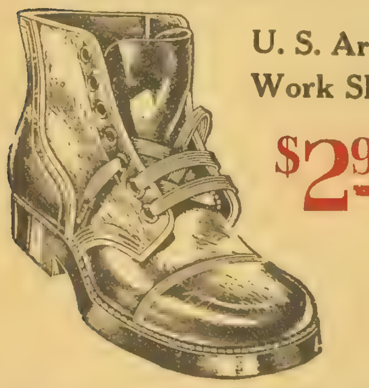

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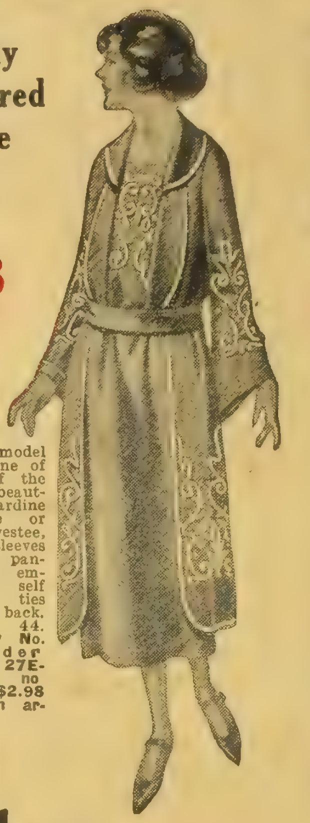

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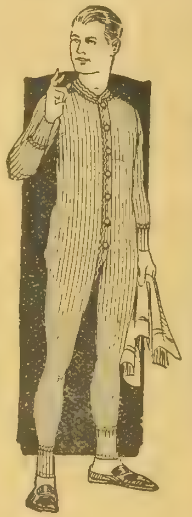

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Heavy weight flat knit union suits of select long fibre cotton in popular Jaeger or grey Random color. Heavily brushed fleece lining. Wrists and ankles are elastic knit. Sizes 34 to 46 chest. **Order Jaeger color by No. 27C1279. Order Random gray by No. 27C1280. Send no money. Pay 99c and postage on arrival. State size.**

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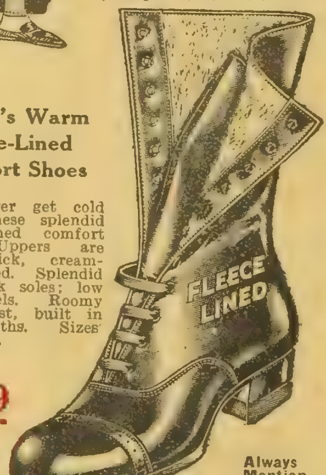

You'll never get cold feet in these splendid gid-finished comfort shoes. Uppers are warm, thick, cream-fleece lined. Splendid natural oak soles; low rubber heels. Roomy comfort last, built in wide widths. Sizes 2½ to 8.

$2.29

Always Mention Size Wanted.

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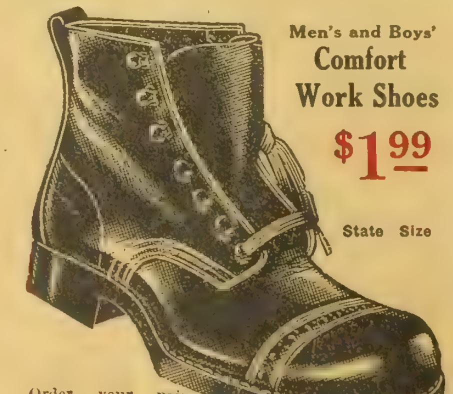

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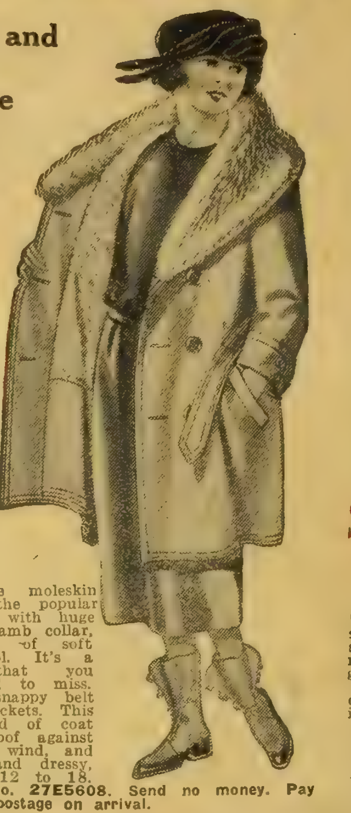

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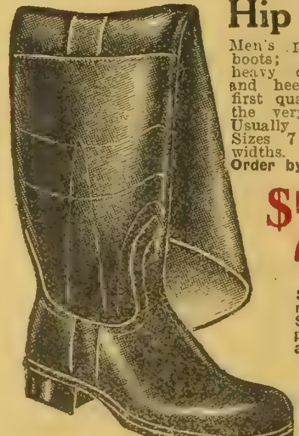

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$2.98

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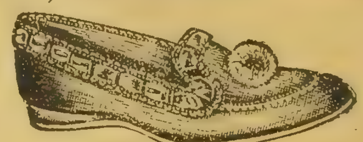
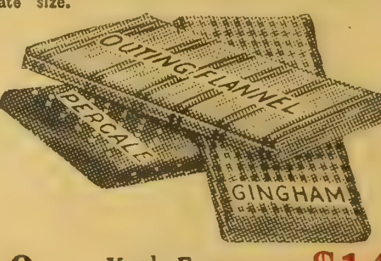


Fine grade wool felt in A—American Beauty and Fawn combination. B—Copen and Fawn. C—Lavender and Fawn. Sizes 3 to 8. **Order A by No. 27A389. B by No. 27A390. C by No. 27A-391. Send no money. Pay 98c for any color. State size.**



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Ideal weight for nightgowns and underwear. Comes in all colors and patterns. 27-inch width. State pattern and color. **Order by No. 27F3423. Send no money. Pay $1.49 for 10 yards and postage on arrival.**

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Very choice patterns in fast colors. In white, gray, Calcutta and Indigo blue with neat stripes. figures or dots. State color and pattern. **Order by No. 27F3406. Send no money. Pay $1.49 for 10 yards and postage on arrival.**

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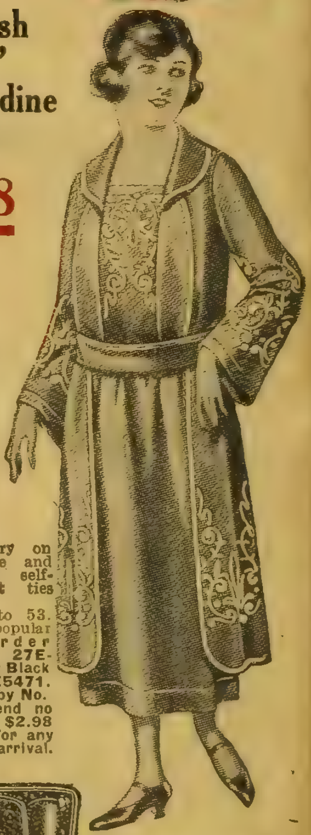
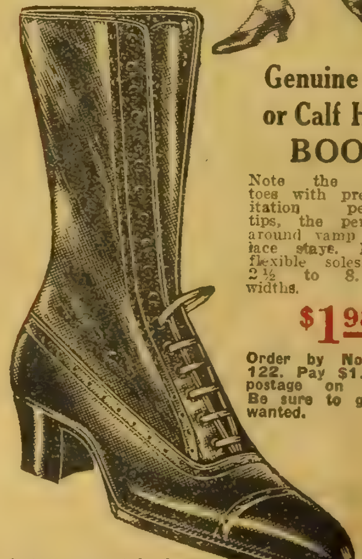


This is a special design, planned to give a long, slenderizing line to stout figures. Note how the collar, revers and panels carry out the long effect. Note, too, the attractive embroidery on sleeves, vestee and panels. The self-material belt ties at back.

Sizes 39 to 53. In three popular shades. **Order Navy by No. 27E-5470. Order Black by No. 27E5471. Order Brown by No. 27E5472. Send no money. Pay $2.98 and postage for any color on arrival. State size.**



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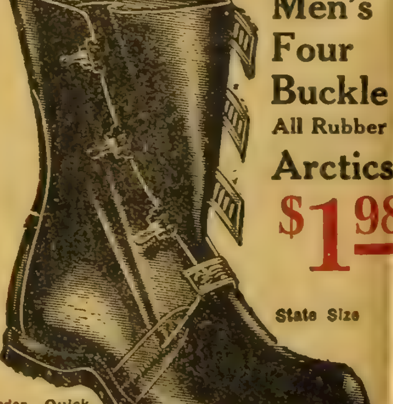

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Order Quick Guaranteed best quality all rubber 4-buckle hi-cut arctic for men. Made with double thick soles and seams reinforced. Snow-excluding tongue. Furnished in men's sizes 8 to 12. Wide widths. Sensational value. Send quick. **Order by No. 27A990. Send no money. Pay $1.98 and postage on arrival.**

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The Michigan
BUSINESS FARMER

An Independent
Farmer's Weekly Owned and
Edited in Michigan

VOL. X, NO. 7 MT. CLEMENS, SATURDAY, NOVEMBER 25, 1922 $1 PER YEAR

One of the Things to be Thankful for!

Be Thankful! Seven out of Ten Leading Michigan Crops are Selling for More than they did this Week Last Year—See Market Section, this issue.

NATIONAL
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Forty Years Ago

the first National Light Kerosene was sold for oil lamps. It gave a steady white, bright light with a clear chimney and clean wick. Almost immediately it lifted itself out of the ordinary Coal Oil class of oils and became famous as a Kerosene with no smoke or odor. People traveled miles out of their way to buy it.

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Current Agricultural News

CHANGE IN MEETING PLACE OF FARMERS' CLUBS

LAST issue you published a notice regarding the annual meeting of Michigan State Association of Farmers' Clubs. Would you kindly note the change in the place of meeting which has been changed from the Assembly Room to the Senate Chamber, Capitol Building. Also would announce that the reunion of the Michigan State Automobile Tourists' Association will be held in connection with the banquet which will be held at the Baptist Church the evening of December 5th.—Mrs. I. R. Johnson, Secretary-Treasurer, Rushton, Michigan.

OTTAWA COUNTY HOLDS SUCCESSFUL FESTIVAL

THE fourth annual Ottawa County Farm Bureau festival held at Coopersville in co-operation with the Grange and the Coopersville Business Men's Association proved the best ever held. The corn show commanded the greatest attention, their being nearly 670 ears on display. Mr. Howard Rather, who judged the exhibit, writing to Mr. Hambleton, local chairman, stated "I wish to congratulate you and Mr. Milham very very much for the exceptionally successful corn and grain show which you had at Coopersville. I have never judged a better corn display of similar nature and I am frank to say that your exhibits were superior to many of those exhibited at larger county or district fairs."

Clyde Hollis from Hudsonville won sweepstakes 10 ears of Pickett Yellow Dent Corn. Frank Hambleton from Coopersville won on white dent corn and Stanley Kurek from Marne won the M. A. C. yellow dent in the amateur division. A number of these exhibits will be seen at the International Livestock Exposition and Grain Show on December 20 in Chicago.

Other exhibits consisted of 13 pecks of potatoes, six displays of fruit, 18 pecks of grain, 8 dozen eggs, 15 loaves of bread, 9 apple pies and many other smaller exhibits.

Interest is growing annually in these exhibits and next year the best winter show in the State outside of Farmers' Week is planned for Ottawa County.

EUROPEAN WHEAT CROP IMPROVES SOME

THE latest revised estimates of the European wheat crop are more favorable than shown by the figures made available a month ago, according to a cable from Alfred P. Dennis, special representative of the Department of Commerce at Vienna. The French 255,000,000 bushels which is 20,000,000 bushels more than was predicted at an earlier date, while the outturn in Spain is 14,000,000 bushels better than was last reported, the production being 126,000,000 bushels. The reports of the Rumanian wheat crop which last month showed a slight decrease as over the previous year, are now indicating an estimated excess of nearly 9,000,000 bushels. The corrected estimates for all Europe, exclusive of Russia, put the wheat crop at 190,000,000 bushels less than last year. Making allowances for economies effected through compulsory long milling, flour dilution with coarser grains, and the widespread substitution of potatoes for bread, together with further impairment of buying power through continued currency derangement, the Department's earlier estimates that Europe will have to import 160,000,000 bushels more wheat this year than last is amply confirmed.

The earlier estimates of the European rye crop must be revised upward to accord with the latest official figures. The shortage over last year's yield is now reckoned at 60,000,000 bushels. Based on estimates of all the principal producing countries, exclusive of Russia, the corn crop of Europe is 80,000,000 bushels short of last season. The harvest outturns are cut by the protracted drought in southern Europe, and approximate losses over last year stated in percentages are: Bulgaria, 52; Spain, 45; Yugoslavia, 35; Italy, 25; Czehoslavia, 5; Hungary, has an increase in its corn crop of 3 per cent, due to an increase of 23 per cent in the yield per acre.

BIG LIVE STOCK SHOW OPENS

THE twenty-fourth annual American Royal, classic of live stock show opens Saturday, November 18th, at Kansas City with premiums amounting to nearly $55,000. The event this year dedicates the new half million dollar exposition building. The new building contains an oval of 26,000 feet of floor space where the champions of more than 20 state fairs will parade and all kings and queens of the livestock world will be crowned.

The exposition opened with the choral society of Lindsburg, Kan., singing "The Messiah." The exposition will continue one week.

Hereford cattle will be one of the attractions. Premiums totaling $11,255 are offered for Herefords this year. This is the largest amount of Hereford prize money ever awarded and is expected to bring together an exceptional showing. In addition to the money prizes for Herefords, silver trophies will be awarded in various classifications.

Other breeds of beef cattle will be represented, with Angus, Shorthorns and Galloways exhibited by the leading producers. Shorthorn prizes total $6,260; Angus, $970; and Galloway, $940. In the carlot classes $5,180 will be distributed. These premiums, together with the $11,255 in Hereford prizes, make a total for beef cattle of $24,605.

In the hog department, $8.125 is offered for Spotted Poland-Chinas, Hampshires, Duroc-Jerseys, Poland-Chinas, grades, cross-breeds and carlots. Sheep premiums total $2,258, divided among Hampshires, Shropshires, Cotswold, Dorsets, Rambouillet, Southdowns, fat sheep and carlots. Premiums for heavy horses and mules amount to $6.805, divided among Percherons, Clydesdales, Belgian, Shires, grade and commercial horses and mules.

Thirteen thousand dollars is offered for saddle and show horses.

PRODUCERS IN FIRST PLACE AT BUFFALO STOCK MARKET

THE Producers Co-operative Commission Association is in first place all the live stock commission firms at the Buffalo market. The week ending November 11th the new company handled 79 cars (135 decks), or 18 per cent of the total receipts at the East Buffalo yards.

The producer owned and controlled co-operative was established at Buffalo on November 1 under the auspices of the National Live Stock Producers' Association. In 2 weeks the farmers' own company has nosed out the other 15 firms on the basis of business done. Live stock shippers in New York, Ohio, Michigan and Indiana are responding eagerly to the instructions from their county, state and national Farm Bureaus, to "say it with cars."

FOOD CARDS LIKELY TO BE RESTORED IN GERMANY

STRICT government control of foods and issuance of wartime food cards is expected momentarily in Germany, according to assistant Commercial Attache Breed, Berlin, in a report to the Department of Commerce. Officials of the Ministry of Food have made public announcement that rationing of bread, meat, and milk may be expected any day owing to the very poor outlook for winter food.

WILL ORGANIZE GRAIN POOL

THE Eastern States Farmers' Exchange is the largest co-operative exchange in New England, with headquarters at Springfield, Mass. It has undertaken to form a great pool of buying orders for grain, similar to the fertilizer pool which it formed last spring. The dairy professors of the agricultural colleges of the New England states and New York have formulated what they regard as an ideal, complete dairy ratior. This is to be sold by the Eastern States Farmers' Exchange under an open formula; that is, not only will the analysis be shown on the bag, but also the actual ingredients and their amounts.

BRITISH RECOVER THEIR APPETITES

GREAT BRITAIN has got back almost to its pre-war normal consumption of foodstuffs, says the Foodstuffs Division of the Department of Commerce in its quarterly analysis of British foodstuff consumption. Its consuption of wheat flour, particularly is, in terms of wheat, practically what it was before the war. Net imports of wheat in nine months of 1921 were 75.86 per cent of the pre-war average; those of the nine months of 1922 were 93.1 per cent of pre-war figures. Wheat flour imports for the nine months ending September 30, 1922, were 127.19 per cent of the average of 1910-14. Imports and consumption of other coarse grains, however, have decreased materially from pre-war figures, and the total importation of all grains and flour in nine months of 1922, (14,798,593,960 lbs.) has been only 85.61 per cent of the average importations of 1910-14.

FRANCE HAS GOOD SUGAR BEET CROP

THE sugar beet crop of France is expected to be very good this year, both with respect to quality and to quantity. M. Saillard, director of the laboratories of the French Syndicate of Sugar Manufacturers estimates that the production of white sugar per hectare (approximately 2 1-2 acres) of beets sown will average this year from 3,500 to 3,600 kilos (a kilo equals 2.2 lbs.) The yield for the period 1904-1913 averaged 3,125 kilos per hectare. The area in France sown in sugar beets this year is estimated by the syndicate of sugar manufacturers at about 125,000 hectares (roughly 312,500 acres), and total production of sugar this year will amount to approximately 475,000 to 500,000 tons according to estimates.

DATES FOR FARMERS' WEEK

FARMERS' Week, the annual winter round-up at the Michigan Agricultural College which has grown during recent years into the state's biggest agricultural conference, will be held from Jan. 29 until Feb. 2 this year, according to announcement made this week by Ashley M. Berridge, chairman of committees in charge.

That last year's record attendance of more than 5,000 for the week's meetings will be surpassed this winter, is the prediction of the college authorities. More state agricultural associations and groups than ever before are scheduling their annual meetings for East Lansing during Farmers' Week, and all signs point to a hugh attendance

New features in the way of entertainment and instruction are being planned, every effort being made to make the occasion one which will appeal as strongly to those who have attended the gatherings before as those who are attending their first Farmers' Week. The old standbys, such as the mile-long agricultural parade, the special farm exhibits, and a speaking program headlining some of the Country's leading agricultural authorities, will, of course, be found on the program again.

The Michigan State Farm Bureau will head the list of farm associations, which will meet during Farmers' Week. A dozen other leading state groups have also scheduled their meetings for the same dates, with more expected to follow suit during the next two months.

M. A. C. MAN HONORED AT SOIL WORKERS MEET

Dr. M. M. McCool, head of the department of soils, M. A C., was elected vice president of the American Association of Soil Survey Workers at the third annual meet in session at Champaign, Illinois, last week.

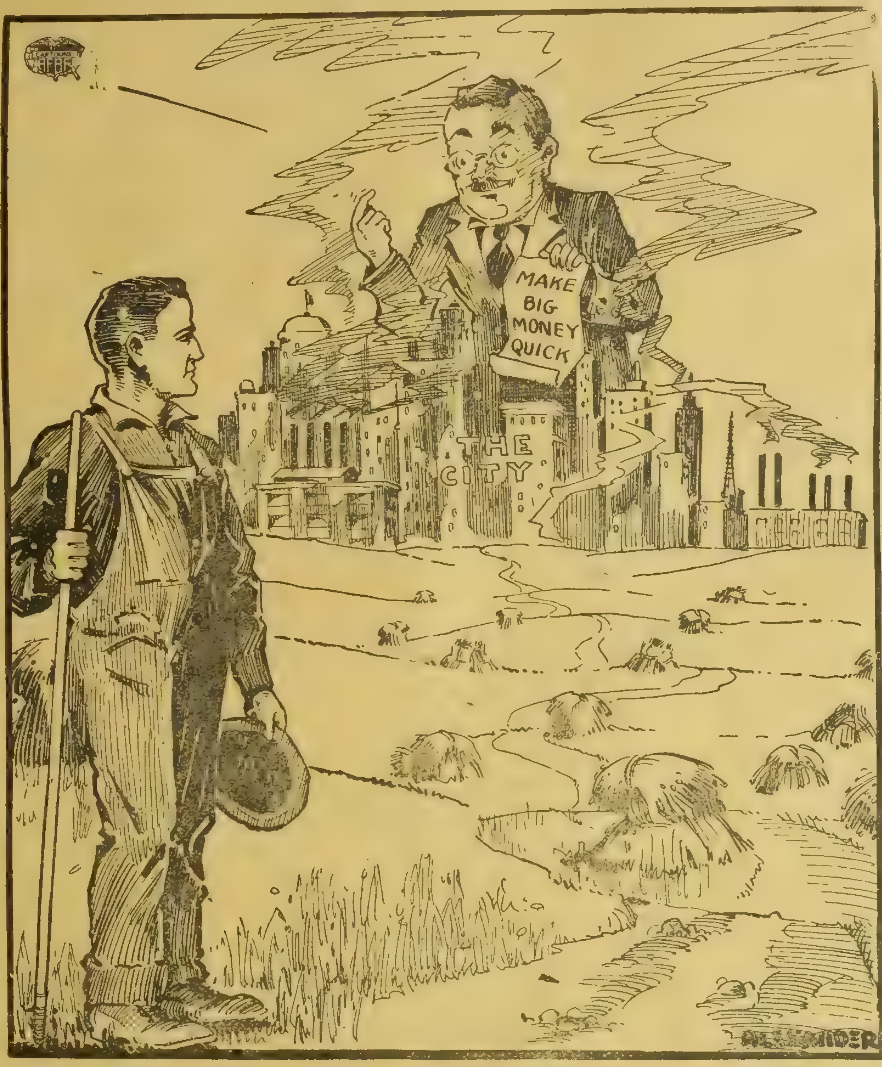
Volume X
November 25,

The Michigan
BUSINESS FARMER

Number 7
1922

Once Again the City Siren Smiles Countryward

Shall the Farmer and the Farmer's Son Leave the Farm to Take up Work in the City Factories?



Shall John Rutledge Leave the Farm?—Read his story here.

JOHN RUTLEDGE is in no way an out of the ordinary individual. He is married, has one child, is midway between the years of thirty and forty. Years that he knows must be devoted to profiting from the experience of the past rather hectic and disconnected years, two of which were spent in the service of his country.

John Rutledge has been renting an eighty in Gratiot County and the past year has in no way encouraged him to go through with the same plans which he and Mollie (as he calls his faithful and chèerful little wife) had made. First, they were to make a payment down from this years earnings and then by hard work and pure-breds, John said the farm would be theirs in five years and perhaps the first payment made on an adjoining forty. That ought to be farm enough, unless—yes, sometimes he had even dreamed about the Burrows farm on the other side of the road, that would make two hundred and forty of "as fine acres as God ever left out of doors" as John would say.

But right now, it is nearly December. It has been a wonderful fall to get in all the crops and they were good ones too. Made some of John's neighbors who had no over-supply of confidence in John's ability as a farmer on his own hook, sit up and take notice. John, too, was pleased and if you could have heard him whistling when he went out to milk his one and only, any bright summer morning, you would have known he was pleased over his wife, his baby, his work and the world in general.

But as I said this is nearly December. John had to sell his stuff as fast as he could get it away from the thresher or out of the ground. Knew it wasn't the thing to do. Knew he ought to hold a part of it for the higher prices that were sure to come, when the glutted market began to get a little hungry again. But John had to sell, that was all there was to it. And then the blow fell! The prices at which he had to sell were John's disillusionment.

John, as you can imagine, altho I have not confirmed your suspicions, was a farmer-boy, born and bred with the smell of growing things in his nostrils. He was the boy-to-many on his father's farm and because the older boys had no ambition to leave the old folks and the old home, down in Lenawee County, John had started out for himself. Two years he had worked in the automobile factory at Flint. Money came pretty easy on pay-day. Lots of over-time at "pay-and-a-half." Of course, it cost a lot to live in Flint, in fact he spent pretty nearly all he made most weeks and a little more than he made some weeks, but that was until he decided to go back home and marry Mollie.

Mollie had taught John how to save and when they got married, thanks to her, he had a little nest-egg that made the first year all that it should be. But the time came when men were laid off in the automobile factories. One by one John saw his "buddies" at the near-by machines get the "blue-ticket" with their pay and go home with heavy hearts and aching heads.

Then winter came and John was laid off just as he had put a lot of coal into the basement of his rented house. He packed up, left Flint, went back home with Mollie and helped (?) the old folks for a while until he felt ashamed to be taking charity. In fact he had a few words with the brothers who had been working the old farm and both of whom showed signs of having prospered; one having married and the other bought a flivver!

So it was that John came north to Gratiot County, rented an eighty from a man who had moved into Alma and settled down determined to make a future for his family, for by now he had little thought for himself or his own comfort or pleasure, "its all for Mollie and the kid!" as he put it.

And there we found John this November on his rented eighty in the heart of Gratiot County, most of his produce sold, not all of his debts paid, with a cellar full of potatoes and probably enough eatables to carry him most of the way through the winter. He is not discouraged with his farming. He knows he has made a good job of it. His crops showed that he knew as much about it as his neighbors and "a lot more than some of them seemed too." But John is a discouraged man because he does not seem able to find the way out of his present dilemma.

Stories come to him now of the factories working overtime in Detroit, Lansing, Flint and the other manufacturing centers. Wages paid are high, though perhaps not what he received back in the year following his return from service. He knows the foreman under whom he worked in Flint and chances are ten to one that he can get his old job back. BUT—

If he goes back to work in Flint, he must give up his lease, move his household effects, and sell his team, cow, tools, poultry and other things he found necessary to buy this summer to get started. He could go to Flint to work and leave Mollie and the baby back on the farm, but is life worth living away from everything that you exist for?

Should John, who wants to farm, go back to factory work? Well, although John puts it in another way, it resolves itself into the question which is burning the minds and hearts of a good many thousand Johns and causing the lines and tears to come into the faces of a good many thousand Mollies in Michigan and every other agricultural state.

The question is: Does the farming business hold out enough inducements for the young man who is willing to sacrifice now, but who wants to know that the future holds a decent living, comforts and an education for his children that will in the end be better than what the city offers, now?

What do you think?

Editors Note:—The case of John Rutledge is typical, he and thousands like him in Michigan are perplexed over this problem. We want the opinions of our readers, particularly the older ones who have seen the markets rise and fall before. Have you a word of encouragement for John and Mollie? Lets have it for the December 9th issue!

Financial Needs of Farmer in Michigan Discussed at U. P. Meeting

THE relation of finance to agriculture as applied to the financial needs of the farmer, was the question given a thorough hearing before a joint meeting of Upper Michigan bankers, agricultural men, and other business men throughout the state, at a Rural Credits Conference held in Marquette, Friday, November 10th. The meeting was called jointly by the Michigan State Department of Agriculture and the Upper Peninsula Development Bureau for the purpose of determining, first whether or not the farmers of Upper Michigan particularly, are in need of more adequate financial assistance, and that being the case, to establish ways and means of effecting such legislation. The session is considered to be the most important meeting as concerns agricultural and industrial welfare of the Upper Peninsula of Michigan which has ever been held in that section, and approximately 150 delegates representing practically every phase of Upper Michigan's varied industrial activity, participated in the day's conference.

Among the notables who attended and addressed the gathering were John Doelle, Commissioner of Agriculture, Lansing; Ezra Levin, Director Bureau of Agricultural Development, Lansing; President David M. Friday of the Michigan Agricultural College, and E. G. Quamme, President of the Federal Land Bank of St. Paul.

Although the meeting was called primarily for the purpose given above, there developed during the day's conference, a variance of opinion as to the existing problems in agriculture today. In fact it seemed that each of the speakers voiced a different version.

Mr. Doelle declared that the solution of the problem rested, largely, with the institution of the long-term note, similar to regulations prevailing in other states where the land-settlement problem is similar to that existing in Upper Michigan. Mr. Doelle held that reduction of the "down payment," and extension of the terms for the balance would permit of an initial investment for live stock and equipment.

Mr. Quamme had another idea. He said that the trouble with the farmer of today was too much credit and lack of price. Mr. Quamme maintained that the price which the farmer receives for his product has not increased correspondingly with the price received for manufactured goods—to much one-way fluctuation, in other words.

President Friday expressed the sentiment that the removal of graft from agriculture would eliminate the problem of farmer—finance for all times. Devise some means for a more economic process of getting the product out of the field, onto the market and to the hands—or mouths—of the consumers, he said, and there you are.

Finally Mr. Levin presented a land settlement policy, as worked out by the state department of agriculture, which suggested considerable possibilities. It involved, first, a certification of all available agricultural lands—a system whereby

Continued on page 17.)

Survey of Wool Market Shows Outlook Good

Decrease in Production Offsets Decline in Consumption Resulting from European Financial Conditions

DID YOU GET YOUR EXCESS WOOL PROFITS?

THE Department of Agriculture requests the Business Farmer to announce that all farmers who believe they are entitled to excess profits on their 1918 wool sales and have not received them, should write to Mr. Wells A. Sherman, specialist in charge Domestic Wool Section of Bureau of Agricultural Economics, United States Department of Agriculture, to that effect. Letter should be accompanied by statement from dealer to whom wool was sold, showing the number of pounds sold and the amount received for the wool. If it is not convenient to secure a statement from the dealer, it will be satisfactory to the Department to have grower send sworn statement, showing the information. It is believed that there are a large number of farmers in Michigan who are entitled to additional profit on their 1918 clip. In one case in particular the government has collected $200 in excess profits from a Michigan dealer, for distribution to growers. In this case the dealer was unable to furnish the names of the growers from whom he bought the wool, so the government must wait until it hears from the growers themselves before refunding these excess profits.—Editor.

THAT the outlook for wool producers is favorable is indicated by a study of the most influential market factors.

1. The domestic clip provides less than 50 per cent of our annual consumptive requirements and has been declining in recent years. Production of fleece wools in 1919 as determined by the last census was 228,795 191 pounds compared with 289,419,977 pounds in 1909, a decline of 21 per cent. In the same period the population, and presumably, the wool consuming capacity of the United States, increased 11 per cent.

Annual production of wool in the United States, including both shorn and pulled wools, together with the net imports, or excess of imports over exports of domestic and foreign wool, and the total retained for consumption in each of the past ten years is given in the table below. The clip of the calendar year is combined with the net imports of the fiscal year in determining the yearly totals for consumption. For example, the clip of 1921 is combined with net imports in the fiscal year from July 1, 1921, to June 30, 1922. As an average of the 10 years, domestic production has been 46.4 per cent and net imports 53.6 per cent of the total.

(In millions of pounds, i. e., 000,000 omitted.)

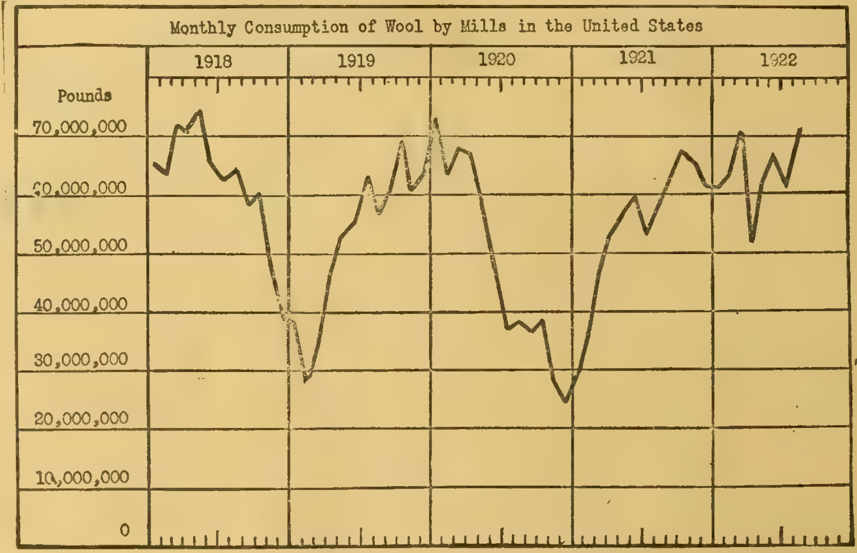
	Production	Net Imports	Retained for Consumption
1912-1913	304	191	495
1913-1914	296	247	543
1914-1915	290	301	591
1915-1916	289	533	822
1916-1917	288	368	657
1917-1918	286	377	663
1918-1919	300	421	736
1919-1920	314	407	710
1920-1921	302	307	580
1921-1922	372	251	524
10-yr average	294	340	635

2. The tariff of 31 cents per scoured pound upon clothing and combing wool and 24 cents per scoured pound upon carpet wools when used for clothing will tend to keep prices to producers in the United States materially above the world level.

3. Wool consumption in the United States is at a fairly high rate. Unfortunately there is some uncertainty over the monthly consumption as a few of the mills, including some of the largest interests, do not furnish data of this kind. Recently the Department of Commerce replaced the Department of Agriculture as the agency for collection of such reports. The complications now being issued are not strictly comparable with those which have gone before as non-reporting firms are excluded. However, assuming that these non-reporting firms have borne the same relation to the total in the last few months as they did before, the amount of wool consumed in the first eight months of 1922 and comparative figures for the corresponding period in the preceding four years all reduced to grease equivalent basis would be as follows:

	Pounds
1922	506,259,000
1921	394,121,000
1920	451,620,000
1919	372,975,000
1918	537,838,000

The accompanying chart shows the fluctuations in wool consumption by months since the beginning of 1918. Manufacturing operations fell off sharply immediately after the armistice, but the later boom brought them up to a high level until early in 1920 when the period of deflation started. Wool was one of the first commodities to be deflated and likewise one of the first to benefit from the industrial revival which increased employment, brought consumers into the market and compelled distributors to restock their shelves. The rate of manufacture in the last few month has been about as high as in either 1918 when war orders were a big factor, or in the post-war boom



Wool is greatly affected by general industrial and financial conditions. If the present revival should be interrupted for any cause, wool consumption would fall and prices would be affected adversely.

4. Stocks of wool, tops and noils in the hands of dealers and manufacturers in the United States on June 30 last as reported jointly by the Departments of Commerce and Agriculture were smaller than for the corresponding date in each of the four preceding years when the data were collected by the Department of Agriculture alone. The totals for earlier years include holdings by the United States Government. Reduced to a grease equivalent basis, the quantities in each year are as follows:

	Pounds
June 30, 1922	406,285,279
June 30, 1921	576,522,000
June 30, 1920	537,272,000
June 30, 1919	671,513,000
June 30, 1918	474,174,000

Presumably foreign wools held in bond on the Atlantic seaboard were not included. These would affect the situation to some extent as they were approximately 90,000,000 pounds at the end of last June, but were negligible or entirely absent in previous years.

Mills are obliged to maintain moderate stocks at all times in order to make proper blends so that manufacturing countries normally have reserves of from three-fourths to a year's supply. This fact is highly important in placing the proper interpretation on reports of wool stocks.

5. Statistics compiled several months ago by the Department of Commerce placed world production of wool in 1921 at 2,608,445,000 pounds compared with an average of

(Continued on page 19.)

Restricted Production Only Sure Key to Successful Agriculture

BY JOHN E. BELL

ANOTHER "SOLUTION"

MR. BELL, Lapeer county farmer takes the same position in his article published here, as the Business Farmer has often expressed. No amount of saving by the co-operative distribution of farm crops can possibly compensate growers for the inevitable losses that accompany over-production. While we are fully aware of the advantages of restricting production to meet probable demands we are also aware of the difficulties to be overcome because of the scope of the farming business and the many different classes of people with whom we have to deal. However, we believe the day will come when production of farm crops will be much more nearly adjusted to compensate than it is at present. Our readers views on the subject are invited.—Editor.

IN relation to the article in Business Farmer, Oct. 28, 1922 by George H. Stevenson, proposing a remedy for the low economic condition in agriculture, I would like to comment that, it can only be classed along with other quack remedies.

The plan is hazy and chimerical to say the least, and the outcome of an attempt to put into effect could only result in further delay, more expense and loss, and greater reduction of the farmers condition.

The Superintendent of the department of farm management, Department of Agriculture, published in the "News Letter" made it clear what should be done to clear up the situation, and remedy matters, when he said that, ninety per cent of the remedy for farmers troubles lay with the farmers themselves, in regulation of production, and that only ten per cent lay in organized co-operative marketing arrangements.

And Secretary Wallace also indicated the same remedy when he told the Chambers of Commerce that the first thing they should do in relation to the agricultural situation was to get out of their heads the notion that it be wrong or immoral for farmers to restrict production. That others were doing it.

The vital intention, and foundation stone of all organized industry and labor is to fix prices by regulation of production and service.

Manufacturers call it, "administration of production," but it means restriction of production. It is a form of strike. Every industry has organized for the chief purpose of restricting production, striking, to get better prices, except the farmers. And all the industries that have organized for regulation of production to fix prices have got what they went after, and they are all joined together to prevent the farmers from doing the same thing they do.

Everybody strikes but the farmers. When prices don't suit the manufacturers they shut down and throw their men out of employment, and although this quiting depresses farm prices, the farmer never retaliates, he goes right on producing and feeding the idle men at reduced prices until they see fit to go back to work again. Under the existing system and standard of morales, if the farmers want a square deal they can only get it by the direct method of the strike. All such proposals as Mr. Stevenson's are only a smoke screen, and deter the farmers from seeing the true course, and postpone the real remedy, and bring more loss and ridicule and laughter on the farmer.

All intelligent people know there is no way by co-operative associations to unload a big surplus at a profitable price. I don't say regulation of production can be worked by farmers, but everybody else has worked it successfully and it the only remedy in sight. It would at least bring the issue to a showdown, which is what is needed.

Sometimes organization, asks too much, in the strike. But labor, for instance would be object slaves without organization.

There are some true friends of agriculture in the Department and scattered about the country, but their voice and efforts are suppressed and sidetracked by the professed friends of the farmer who in fact represent the exploiting class and are bears on farm produce, and can't be depended on to do anything to equalize the exchange conditions.

Mere students of theory and patronized university professors of economics, without practice or experience, are not fit to direct the affairs of men schooled in hard practice and experience. And the farmers will have to get away from this horde of hypocites and make the fight themselves, or lose the game.

The metal, character, and good citizenship of the farmers are going to be put to test in a matter in which the welfare of the whole county is at stake.

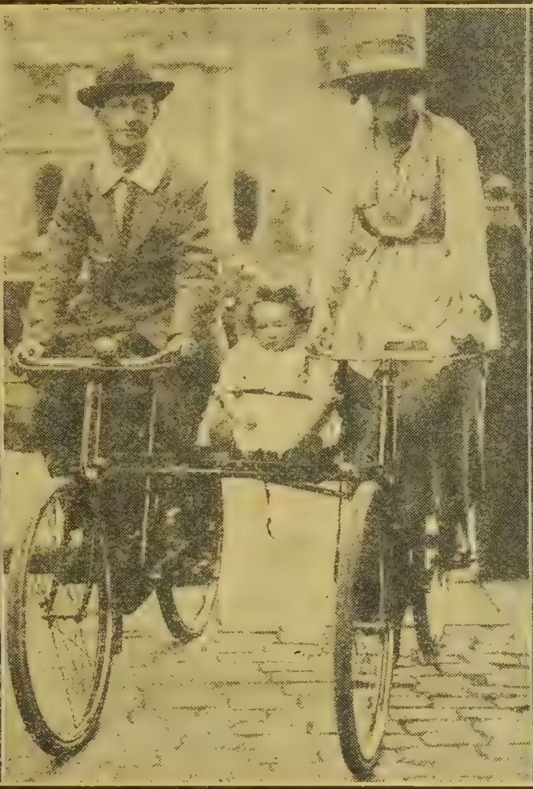
It is the farmers duty to himself, to his country and the future generations to use the means he has to command a square deal. But it must be a farmers' movement. This 50-50 sham mix-up with county agents is only an arrangement to make the farmers pay the cost of their own defeat and subjugation.
—Lapeer County, Mich.

PICTURES FROM FAR AND NEAR

Not a "bull in a china shop" but a bull in a bank. Mr. Corey J. Spencer of Grand River Stock Farms, well known Holstein breeder of Jackson county, recently placed on exhibit in Jackson's oldest bank his wonderful prize bull Spencer Count Segis Corndyke. This wonderful Holstein has as his grandsire Model King Segis Glista, considered one of the greatest sires of his breed, and present head of the Spencer herd.

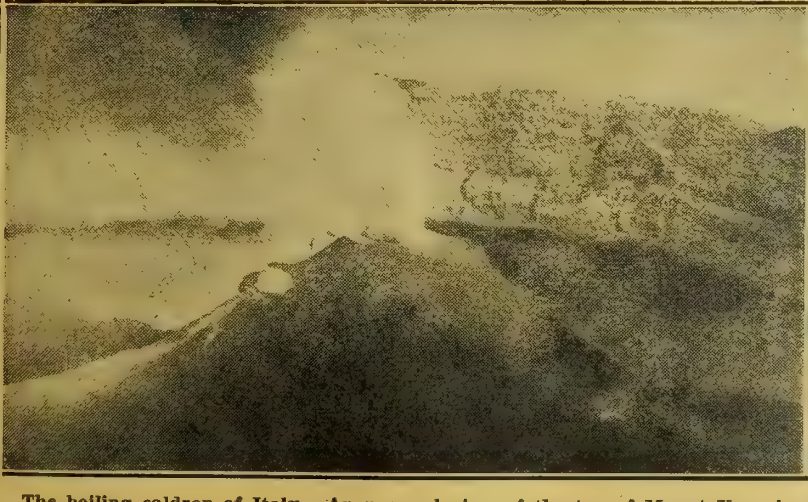
Copperhead snake about to spit poison into a glass. One hundred and twenty drops of poison were recently taken from 24 copperhead snakes in the Bronx Zoological Gardens, New York, as the first step in a process to be completed in Brazil and which will consume nine months for the making of a serum to counteract snake bites. The poison is dried and then shipped to Brazil where the bacteria is removed.

The supreme tramp of the world traveling in Korea. Harry A. Franck, czar of tramps, set out on his graduation from college to go around the world. For equipment he had a knowledge of French and German, a camera and $104. From his home at Munger, Mich., he has made many trips around the globe and often he returns home with more money than he started with, which he earned writing articles about his travels.

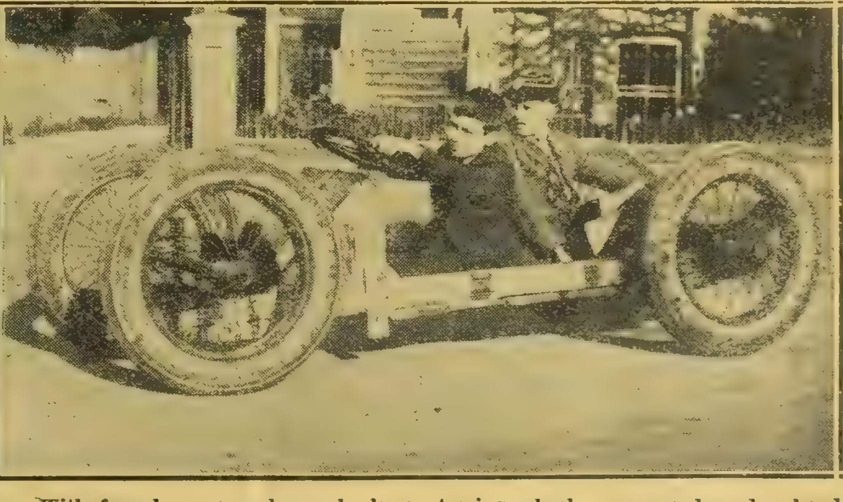


The newest thing in baby carriages. Mr. and Mrs. Diges succombed to an attack of the "wanderlust," but the chief difficulty was what to do with baby Diges, who is only ten months old. This novel method of carrying baby around was evolved. A hammock was firmly placed between the two bicycles and the baby fastened in, swinging to and fro as they cycled along. This picture was snapped in England.

Professor Charles J. Bullock, chairman of the Harvard Committee on economic research, states that the committee does not expect prices to decline much during the next ten years. He also states that the cancellation of all international war debts would obviously help the debtor countries to carry through policies of drastic deflation but would not necessarily mean that such policies would or could be adopted.



The boiling caldron of Italy. An unusual view of the top of Mount Vesuvius taken by a foolhardy photographer who wanted a close-up of Italy's "boiling kettle" that has boiled over so many times costing several thousands of human lives.



With four large aeroplane wheels, a steering wheel, some wood, and a band brake, two youthful motor enthusiasts have constructed a machine that is the "envy and peril" of Epsom, England. The junior speed merchants are shown above ready to start for a ride.

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Farmers Service Bureau

(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full name and address. Name not used if so requested.)

HAVE YOU SEEN THIS BOY'S FATHER?

Will you help me locate my father? His name is Clifford Robb. He was last heard of in Cincinnati. Ohio. I am 16 years old and among strangers and would like to hear from him.—Earl Robb, General Delivery. Jackson, Mich., Care of Marie Brockway.

UNCLE CANNOT MARRY NIECE

Is there any law in the state of Michigan to prohibit an uncle from marrying his niece, and if so what is the penalty? If this girl is a ward of the probate court and she runs away to Canada can she be brought back and punished? If so, in what way. This girl is 17. How long can the court hold her?—B. F. B., Morley, Mich.

—Section 11364 provides that an uncle shall not marry his niece. Section 11362 provides that males that are eighteen and females that are sixteen years of age are capable of contracting marriage if otherwise competent. A penalty of $500 or less may be imposed upon any justice or minister of the gospel for performing any marriage ceremony in violation of the provisions in the chapter cited. There may be found various provisions from section 11362 to 11369. I do not know what you mean by saying that "ward of the probate court." If it simply means she is under guardianship I know of no law prohibiting her marriage if she has the proper consent required by section 11378. If the marriage is not performed in Michigan then the contracting parties must comply with the laws of the state or country where the ceremony is performed.—Legal Editor.

DIVISON OF STOCK

Can you inform me through your paper the correct way to share stock such as this: Renter furnishes two-thirds of feed and owner furnishes enough cattle so as renter can feed all the roughage on the owner's farm.

—From the information furnished it is hard to make a satisfactory answer. Requests such as the above should state all the details of the agreement, the kind of stock, etc. The relation of investment to labor depends largely on the kind of stock kept.

If stock referred to were dairy cattle I would suggest that a fair basis for dividing the returns would be two-thirds to tenant and one-third to landlord ,taking into consideration sales of stock and stock products and stock increases.

So far as costs are concerned, the tenant's time plus two-thirds of feed are equal to about two-thirds of the total cost as against one-third of the landlord's costs which represented investment and risks in stock buildings and one-third feed costs.—F. T. Riddell, Farm Management Demonstrator, M. A. C.

WIFE CAN SELL COW

I wish to know if a wife has a right to sell her cow and use funds for clothes she needs after husband has given mortgage on same without wife's signature. Would it be safe for the buyer of the cow to hold her? Mortgage was given by T to H. Signed by G and wife and in presence of T. That is T signed in place of witness. G. was no doubt justice of peace.—A. E .H., Harrison, Mich.

—A wife has a right to sell her property and use the proceeds as she chooses. Neither has the right to sell the exempt cow without the consent of the other. A chattel mortgage upon a cow if an exempt one signed by the husband alone is void against the wife and she may recover it from any one who takes it under the mortgage. See section 12858 of Compiled Laws of 1915.—Legal Editor.

HAVE SIGNED STATEMENT OF OWNERSHIP

My husband and his brother own a farm in partnership. They go half and half in everything, cattle, machinery, furniture, etc. I have some money in my name and I would like to know if I would take that money to buy furniture with, and there should be any trouble and they should break partnership, how could I prove that that furniture was mine and my husband's? Our postoffice is in Michigan, but we live in Wisconsin, so of course would come under Wisconsin laws.—Mrs. M. E., Norway, Mich.

—As a precaution against change of circumstances or of death or dissolution of partnership it would be proper for you to take a written statement that such pieces of furniture as you buy should be in your name. This statement signed by your husband and his brother would furnish the evidence of the ownership where circumstances might prevent proof otherwise. If you have but a small amount of money in your name let me suggest that the best place is a safe investment in your own name. Old age brings many uses for ready money not thought of in youth and middle age.—Legal Editor.

REMOVING FENCE ALONG STATE ROAD

I would like to know who will have to move fences along a state road. They are building the state road past my place and some places fences will be in the way. The fence has been there for about 25 years. Will I be obliged to move this fence or are they supposed to move it? Any information you can give me will be appreciated.—C. D. K. Maple City, Michigan

—Section 7, Chapter 7 of the General Highway Law prevents property owners from gaining any rights in the highway by encroachment therein with fences, hence if property owner's fence stands in the limits of the highway it is his duty to remove the same back to the highway line within thirty days of receipt of notice by the Highway Commissioner or other person having jurisdiction over the highway in question and in default of removing the fence in accordance with said notice the highway commissioner or other authority having jurisdiction over the highway may remove the same and the expense incurred may be assessed against the property adjacent to where said fence was located and shall be collected as other taxes are levied and collected in accordance with the provisions of Section 12 of Chapter 7 of the General Highway Law.—State Highway Department.

PACKING COMPANY BUYS DIRECT FROM FARMER MEMBERS

Does the Detroit Packing Company buy live stock direct from the farmers if they truck it to the packing plant?

—We are buying lve stock direct from the farmers a great deal being delivered by truck, but this applies only to stockholders of the Detroit Packing Company and not to those who have not affiliated with the company. On such deliveries we are paying full Detroit Stock Yards prices with no charges accruing against the live stock.—Detroit Packing Company, Frank L. Garrison, Vice-President.

CONSULT YOUR ATTORNEY

I live in an incorporated village of about 600, with no town marshall no deputy sheriff, no one to see that the law is enforced, the county seat being 16 miles away. I own ten lots here in town inside the corporation, bought them last fall. Am going into small fruit. Tom, Dick and Harry runs across my lots and uses them as they please. I have three neighbors with just an alley between me and two of them and the street the other one, and they are determined to let their chickens run. I have told them to take care of their chickens and I saw the Prosecutor and he said the state law said they had no right to run at any time and I could shut them up and collect damages. Now they have an ordinance here that after Nov. 1st or about that time to May 1st they can run. The Prosecutor tells me that ordinance is of no effect that the state law rules. If I shut some of these chickens up and notify the owner and they do not appear to claim same, what course will I take?—H. S. W., Morley, Mich.

—I do not know of any law that permits any one to allow any animal or fowl to do damage and not be liable for the damage. The proceedings for impounding animals or fowls are so complicated that is not possible to give instructions in advance what to do. You had better follow the advice of your attorney for your protection.—Legal Editor.

WHERE ARE YOU, TITUS?

I am writng to you to see if you could find my nephew, Titus Chaulklin, whose home address is Ensign, Mich. When I last heard from him he was at Muskegon working for a motor company. That was June 30, 1922. He did not give a retnrn address as he was about to change his residence in that city. We are afraid something has happened to him otherwise he would have written before now. He is 5 feet 5 inches tall, 21 years old and dark complexioned.—Mrs. John Bergman, R. 1, Gulliver, Michigan.

CAN NOT FORECLOSE

My wife and I owned a farm here jointly. I had a chance to trade this farm for a small one valued at $2,000 and I offered to give or take $1,800.00. She backed out and later decided to take the $1,800.00. By that time the deal was off for the small place. There was a $700 mortgage on the farm due November 6th. I gave her a mortgage for $1,800.00 payable on or before five years from April 1st, 1922, and the $700 mortgage was to be paid by April 21st, 1923. Now the way things look I can't make it and don't know but what it will be best to keep what I have and stay as long as I can. How long can I stay after April 1st if I don't pay anything? I have the personal, that we had, but not enough to pay the $700 with interest and interest on $,1800 and taxes.—D. J. D., Lake City, Mich.

—A mortgage sale by advertisement takes about fifteen months from the time proceedings are commenced to the expiration of the equity of redemption. A forclosure in chancery may be shortened a little but most of the foreclosures of mortgages are by advertisement and I presume this is the information. Forclosure can not commence until there has been a default.—Legal Editor.

GO TO PROSECUTING ATTORNEY

I own 80 acres of land in Iosco County. My farm is one mile north of county line. 14 years ago the township commissioner put a ditch past my place to the county line. Next year a forest fire came through and burnt all timber, filling up the ditch, which the township has never cleaned out since, only as far as my place. Can the township run the water as far as my place and leave it? I have notified them but they have taken no action. Can I collect damages for leaving the water on my place and what steps will I have to take to force the township to take this water off?—J. J., Turner, Mich.

—Upon the refusal of the County Drain Commissioner to clean out the drain, the matter should be referred to the Prosecuting Attorney of your county.—Charles J. De Land, Secretary of State.

NOTIFY BANK NOT TO PURCHASE NOTE

On the 13th of Sept. I gave my note to the Peoples Coal Mining Co., of Albion, Mich., to the amount of $500 for stock in the company with a verbal agreement with the vice president that the note was to be used as collateral by the company and that the note was to be renewed by the company every six months until the profits of the stock paid the note without any cash payments made by me. Now I am in receipt of a letter from the company that no subscription would be accepted with an agreement of that kind. Now I have just received a letter from the state bank of F. W. Hubbard & Co., Bad Axe that the vice president wants to sell the note

FARM MECHANICS

SCALES OFF BALANCE 100 POUNDS

A and B have an argument as to how a sugar company scales weigh. A maintains that if the scales weigh 100 pounds they will weigh 100 pounds regardless of how big a load is weighed on them up to their capacity. B says that if they weigh 100 pounds on every ton weighed. For example: B's correct weight of a load should be 4,000 pounds on a wagon weighing 2,000 pounds. B maintains that the scales weight 100 heavier on every ton that he weighs, there 4,000 pounds of two ton would weigh 4,200 pounds plus the wagon weight of 2,000 plus 100 pounds or a total of 6,300 pounds, load and wagon. Now weighing out the empty wagon, whose correct weight is 2,000 pounds, would weigh 2,100, therefore he gains 200 pounds on two ton load. A says that by weighing in 100 pounds his wagon will weigh out 100 pounds on the same scale with nothing gained. Please advise how scales would weigh 100 pounds every whole load or 100 pounds on every ton.—H, E. K., Essexville, Michigan.

—If I understand your question correctly the scales in question show a weight of 100 pounds with no load on the platform, if such is the case and the scales are not broken or out of adjustment, then they should continue to show 100 pounds heavier than the actual weight on the platform of all loads up to the rated capacity of the scales. Thus: a load of 4,000 pounds on the platform would be registered as 4,100 pounds.

I believe that so long as the scales show 100 pounds too great in both cases weighing in and weighing out the net weight is the correct one.

So far as I can see there seems to be no good reason why scales should show 100 pounds with no load. Provision is usually made on the scale beam for balancing the scales so that they read zero with no load on the platform. in case such an adjustment is not provided for, weights could be read on the scale beam with scales balancing as suggested above.—H. H. Musselman, Professor Farm Mechanics, M. A. C.

THE STORAGE BATTERY

IT is the intention of this article to give every auto owner some practical and sound advice concerning his storage battery. We spend a lot of time tinkering with the motor, the driving parts, etc., but unfortunately entirely overlook the storage battery. In too many automobiles it is placed in an out of the way corner, where mud and dirt accumulate, and where it is subjected to much abuse.

There is one general type of battery used, the lead plate battery, for automobile service it is encased in a rubber jar, and for farm lighting plants in glass jar.

Electricity is not stored in a cell as generally supposed, but the flow of current from the charging source, through the cell from the plate to plate performs a certain mount of chemical work. This stored energy in the form of electricity, finds its way out, whenever it is called upon, thru an external circuit.

The solution in a lead cell is a 20 percent solution of dilute sulphuric acid and distilled water. This solution is called electrolyte, and it must be always borne in mind that the acid does not evaporate. If the battery is accidently overturned, or the battery jars teaks, it would then be necessary to readjust the strength of the solution, repair or renew the jar, which should not be attempted by an amateur. Distilled water must always be used or rain water for the reason that they are free from all mineral contents, and when not in use should be kept in a closed jar. Metal receptacles and untisels

(Continued on page 17)

to the bank and they will buy if I have no objections. Will you let me know what I can do to get the note or the agreement in writing?—J. A. S., Austin, Mich.

—You should notify the bank not to purchase the note as the company ill not carry out the agreement of the vice president. You should demand the note of the vice president; and, if he has it to replevin it or file a bill and ask the court for an injunction to prevent his disposing of it before it becomes due to an innocent purchaser.—Legal Editor.

LAND CLEARING SCHOOLS

Please state how much land the M. A. C. Land Clearing Schools has cleared, the cost and who payed the bill. I am a pioneer reader of the M. B. F. Think that I have read a copy of every issue that went over the press.—W. G., Montcalm County, Mich.

—These schools were held at thirty-eight points in the Upper Peninsula and twenty points in the Lower Peninsula. Their object was to acquaint those who have land to clear with the most modern methods of land clearing by means of pullers and explosives. Each school was conducted in a field where from two to four acres were actually piled ready for burning. The expenses of the schools were borne by the counties, the farmer whose field was being cleared, the railroads and the college. The only expense borne by the college was for the salaries and traveling expenses of Mr. Livingston and two of his assistants.

The measure of the value of this effort is not so much shown by the acres actually cleared at each school as in the land clearing done in these areas as a result of this educational campaign. In the Upper Peninsula, data gathered indicates that approximately 50,000 acres have been cleared this season. This acreage is mostly in small additions to farms already established to round out fields and to secure sufficient acreage to make it possible to operate the farm on an efficient basis.—R. J. Baldwin, Extension Director, M. A. C.

COW AT LARGE AT OWNER'S RISK

Some time ago I took a ride with my family in our car and on the road we met a number of cows. I blowed the horn and slowed down to 5 miles an hour. The cows scattered to both sides and when I reached the last cow she swung around and jumped in front of my car. I stopped but hit her with my left fender and broke her leg. Nobody was around so I had to call a child to ask whose cow it was and started back and told the owner I had accidently hit his cow so he came with me and we found the left hind leg broken so we butchered her. I helped him and after we were finished I drove away. A few days after he served papers for damage. Am I liable when the cow was to blame by jumping in front of my car? I drove my car over 11 years and never had an accident before.—W. J., Pequaming, Mich.

—Cows running at large in the highway are at the owner's risk. If you exercised every care that a reasonable man would exercise when you observed the stock in the road to avoid the accident I am of the opinion you are not liable for damages. If you did not exercise the care a prudent man would exercise to avoid the injury then I think you are liable for the damage.—Legal Editor.

ROAD WORK

In changing districts of this township I have been appointed to do my road work two miles from home on a road that none of us travel more than twice a year. Formerly I did my work on the roads around the farm I rent. Has the town board a right to change me into the other district and is there any way I can get changed back? Part of my work I did in this district before they told me of the change. Now I must work out my work in the other district. Can I draw any pay for the work done before I knew of the change?—J. C., Elsie, Mich.

—Section 9 of Chapter 2 of the General Highway confers upon the township board and the Township Highway Commissioner full authority to divide the townships into one or more districts without any limitation as to the division. They would therefore have a right to change the district, placing you in another or different district than the one in which you formerly was located.

You would not be entitled to compensation for work done on the highway which was not authorized by highway commissioner or overseer.—State Highway Dept.

CAN SECURE AID

I am writing you in behalf of my sister-in-law. She is the wife of my brother, a Michigan soldier, and lives in Rochester, New York. He left her three months ago and did the same thing a year ago. She cannot find him. She and others say they think his mind is not right. He was wounded three times and gassed once, and we think that is the reason. When he left she had no money, with which to buy food for herself and babies. She has two, aged three years and five months, so you see she is tied down and unable to do much. She applied to some charitable organization at Rochester, and they allow her three dollars per week for food while another ays her rent. You know that $3.00 will not only half feed one person for a week, let alone taking care of three. She has nothing to do with and not even a stove and what would she do for fuel if she had a stove? The little baby is now ill. Her people are in France and we in-laws are unable to do much for her, although have tried to provide them with clothes through the summer, I am not able to do much as I am a widow myself with two small children and my mother and father have a large family and my mother is not well, so don't feel she can ask them to come there for she is not able to do the work for more and if she did my sister-in-law would work and mother could not stand up under the strain. Will you tell me if anything can be done for her either through the state or government? If she were in Michigan would she be allowed a mother's pension? If the state helped her would she have to come to Michigan. On account of her husband being a Michigan soldier would the state help her?—M. E. J., Ada, Mich.

—I believe the commissioners of the poor or a similar title in Rochester, N. Y., would render aid upon the case being called to their attention. Were your sister-in-law a resident of Michigan I believe the "Mother's Pension Law" would apply and she be entitled to an allowance but I do not believe she would be entitled to such an allowance if she was a resident of N. Y. The name "Mother's Pension Law" is not used in the sense we use the word "pension" for soldiers. It is possible the Federal Government may have some provision for such unfortunate cases. Inquire of Congressman C. E. Mapes, of Grand Rapids. I know him personally and believe he would do or advise anything within his power. If you would send me the names of the parties, the indentity of the soldier, the location of his family, I would be willing to try different sources to see if aid can be procured from some source.—Legal Editor.

FIRE PROTECTION IN SCHOOL

They are building a consolidated school house here and school is in session under crowded conditions in old school house and church without any fire drill. We have one 12-year-old boy attending school and a girl will soon be going. Please tell me the state law on this condition.—H. S. W., Morley, Mich.

—If your inquiry is directed to the want of fire protection for the children in your district, Act 285, of Public Acts of 109 provides that a factory inspector has power to order fire escapes. As to the crowded condition I suggest that this is not unusual in many places. If the public authorities are building as fast as can be done it is good evidence that they are providing for the education of the children as fast as can be done. You can't make improvements all at once.—Legal Editor.

A Practical Reminder for Everyday Farmers

You know your farm like a book. Whether it covers 80 acres or 320 acres, you are perfectly familiar with every corner of every field. You know the lay and contents of the buildings that make up your homestead. With your eyes shut you can tally the livestock and all the items of farm equipment. To be well posted on these things is a matter of pride with you and a matter of careful management besides.

This policy could well be carried a step further. Profitable, economical farming is so largely a matter of modern, improved machines that every good farmer should keep posted also on the equipment on the market so that when occasion arises he may invest to the very best advantage by the purchase of new machines.

We are therefore printing here for your information the list of standard, reliable, most popular farm equipment—

THE McCORMICK-DEERING LINE *of* FARM OPERATING EQUIPMENT

Grain Binders
Threshers
Harvester-Threshers
Headers
Push Binders
Mowers
Hay Rakes
Tedders
Hay Loaders
Side-Delivery Rakes
Sweep Rakes and Stackers
Combined Side Rake and Tedder
Baling Presses
Corn Planters
Listers
Corn Cultivators
Corn Binders
Corn Pickers
Corn Shellers
Ensilage Cutters
Huskers and Shredders
Huskers and Silo Fillers
Beet Seeders
Beet Cultivators
Beet Pullers
Cotton Planters
Grain Drills
Lime Sowers
Broadcast Seeders
Tractor Plows
Walking Plows
Riding Plows
Disk Harrows
Spring-Tooth Harrows
Peg-Tooth Harrows
Tractor Harrows
One-Horse Cultivators
Culti-Packers
Kerosene Engines
Tractors
Motor Trucks
Cream Separators
Manure Spreaders
Stalk Cutters
Feed Grinders
Stone Burr Mills
Cane Mills
Potato Diggers
Wagons
Twine

This equipment is always available for you at the store of the McCormick-Deering dealer. In the list are many items for farming in winter—such as engines, various belt power machines, cream separators, motor trucks, etc. Make the McCormick-Deering dealer's store your headquarters. Use the service for which his establishment is famous. Write us direct for information on any of the above machines.

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(*Incorporated*)
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Pain, Pain

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A strictly hand made smoke—no blending or artificial flavoring—just good old ripe tobacco.

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YOU could sit on the fabled carpet of Bagdad and view the world. In the whisk of an eyelash it would carry you any place you wanted to go. All you had to do was wish.

ADVERTISING is a sort of magic carpet. Read it and in the twinkle of an eye you can review the merchandise of the world, pictured and displayed for your benefit.

The advertisements introduce you to the latest styles—the newest comforts for the home—the best of the world's inventions. They tell you how to buy, where to buy and when to buy. They keep you posted on things necessary to feed and clothe you and your family and make you comfortable and happy. Read the advertisements as a matter of education. Read them to keep abreast of progress.

Read the advertisements regularly.

MICHIGAN CROPS

THE VALUE OF ALFALFA IN MODERN FARMING

THE successful farmer of today is a good business man. Following his vocation primarily for the purpose of making money, he must make every dollar of his investment yield a maximum return. Briefly, his problem is how to increase his net profits per acre. One of his greatest aids in accomplishing this result is the raising of alfalfa.

There is no common farm crop that can begin to compare with alfalfa in producing economical and digestible food for livestock. One ton contains as much digestible protein as 1600 pounds of wheat bran. At the same time, properly grown of course, it fixes and adds to the farm more than twenty dollars worth of nitrogen per year-acre.

Now as every farmer knows, nitrogen abundantly and economically applied, is absolutely essential to the maintenance of fertility. Perhaps the greatest value of alfalfa is its ability to convert atmospheric nitrogen into organic nitrogen. In its roots and successive growths of tops it stores far more nitrogen within a few years than is possible to any other legume. And it may be added that on the average a ton of hay contains more nitrogen than four tons of fresh barnyard manure.

Many farmers have found that the best plan for alfalfa is a six years' rotation with corn and oats. This plan insures a rich sod for the corn. And the manure made from the hay helps to solve the general fertility problem.

All in all alfalfa brings to the farm a large amount of plant food which can be distributed over the land in the manure. In addition the roots and stubble store away enough nitrogen in the ground to feed a successive corn crop and a small grain crop which may follow the corn. Finally, the condition of the soil and the subsoil is greatly improved, having been filled with organic matter by the roots.

The practical dollars-and-cents value of alfalfa is now an accepted fact. But in many parts of the United States great difficulty is experienced in getting good yields of this crop and in maintaining permanent stands. This is true even on the best soils abundantly supplied with phosphorous and lime and inoculated with the proper root organism. The chief difficulty is that the soil lacks sulphur, alfalfa being a plane of very high sulphur requirement. The remedy for this condition is the regular application of a fertilizer of high sulphur contents. In this connection it should be noted that alfalfa is also a great lover of calcium.

Agricultural gypsum supplies sulphur in an immediate available and neutral form. An untreated, ground, natural rock-fertilizer, it is composed mainly of hydrated calcium sulphate. It therefore bears two essential plant foods—calcium and sulphur.

The experience of practical farmers, not only in California, Washington and Oregon, but also in various sections of the great Mississippi Valley, has proved conclusively that the systematic use of agricultural gypsum increases the tonnage of alfalfa several hundred per cent.

The time to apply gypsum is in the early spring, about the time growth begins. It should be used as a top dressing and applications should be repeated every two or three years. Sow gypsum on your alfalfa seeding this spring, leaving a few strips untreated. Then let the comparative results speak for themselves.

LIFE OF GERMINATION OF SEEDS

Will you give me the life of germination of different field seeds and oblige?—A. E.

—The table given below taken from Piper's "Forage Plants and Their Culture" gives the viability of various seeds stored in paper bags in a dry, airy room during eleven years.—C. R. Megee, Farm Crop Department, M. A. C.

Kind of Seed	Percentage of Vitality										
	1 yr.	2 yr.	3 yr.	4 yr.	5 yr.	6 yr.	7 yr.	8 yr.	9 yr.	10 yr.	11 yr.
Red Clover	90	90	88	64	74	68	44	16	10	3	2
White Clover	74	72	63	52	50	50	35	31	26	23	22
Alsike Clover	73	64	51	37	15	7	6	5	3	3	3
Sainfoin	92	92	78	61	54	52	19	18	13	0	*
Serradella	36	32	33	22	14	11	9	6	2	0	0
Alfalfa	94	91	87	75	72	71	68	66	63	59	54
Tall oat-grass	70	66	59	43	24	12	10	2	1	0	0
Italian rye-grass	67	62	61	55	43	39	29	15	8	4	1
English rye-grass	72	70	66	60	42	28	22	9	5	1	0
Tall fescue	83	80	72	68	48	42	35	18	9	1	0
Sweet vernal grass	70	62	57	46	43	37	31	13	9	8	4
Meadow foxtail	13	11	9	7	7	5	3	1	1	0	0
Timothy	95	90	90	88	86	79	66	39	15	1	0
Orchard grass	46	47	44	44	39	29	21	12	8	5	*
Blue grass	28	17	17	17	16	11	8	5	2	0	0
Crested dogstail	46	39	33	29	20	12	6	3	2	1	0
Fiorin	66	61	46	43	37	35	34	31	22	20	*
Sheep fescue	68	67	68	42	21	18	10	4	3	0	0
Hair-grass	37	21	21	17	7	3	0	0	0	0	0
Spurry	85	70	68	59	46	42	37	25	21	8	2

* No seeds for examination, all having been used up in previous years.

"My Experience in Growing Potatoes"

I SAW in a recent issue you want to know who raises a good crop of potatoes. I always sit up and take notice when I see any thing pertaining to potatoes—that's my specialty.

I have just finished harvesting a nine acre field or Late Petoskeys for pedigreed seed—I mean certified seed. This 9 acres produced 2112 bushels, field run. Only a small percentage of culls. The field is mostly clay soil—not an ideal soil for potatoes. Last year it was in clover—mostly sweet clover. I cut it early and took only a part of it in for hay and left the balance on the ground for fertilizer. I let the second growth go down on the ground for fertilizer.

During the winter I covered it all over lightly with stable manure, direct from the stable.

I plowed it early in the spring and drilled broadcast about 450 pounds per acre of 20 per cent phosphoric acid. Planted potatoes last of May. Harrowed it over 2 or 3 times after planting with a spring tooth harrow. Gave it good cultivation and but little hoeing.

Sprayed seven times with Bordeaux, using Kedzie mixture added for bugs. Use a power sprayer, three nozzles to the row—one downward and two upward.

Dug with a 4-horse elevator digger and had the potatoes sorted as they were picked up. I raise the Petoskey potatoes and make a practice of hill selection for seed plot. I believe it pays to plant good seed.—A. L. Dnulap, Lupton, Michigan.

—We are certanly glad to have your experience, Mr. Dunlap, and hope to hear from other growers.—Editor.

Clean, dry potatoes, uninjured and stored in a dry bin do not rot unless disease is present in the tubers.

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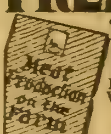
Meat Production on the Farm

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Slaughtering and Curing Meat on the Farm

(Continued from Nov. 9th issue.)

Beef and Beef Products

IN selecting beef animals, be on the lookout for tuberculosis. If glands along neck are enlarged, the indications are that the animal is tubercular. Have an examination made by the veterinarian, or sell the animal on the hoof in order that it may be slaughtered under competent inspection. Slight traces of tuberculosis do not necessarily condemn a carcass as food, but judgment in such cases should be left to experts.

Should an unexpected tubercular condition be revealed in the carcass of a slaughtered animal (in which case the glands in the neck, lungs and intestines may be filled with hard, cheesy or slimy matter), let a competent veterinarian pass upon the fitness of the carcass for food. If possible, a veterinarian's judgment on all animals—particularly beeves and sheep—should be obtained before slaughtering.

Beeves should be completely stunned before bleeding. To do this properly, fasten a rope around the animal's neck, loop it over the nose, and pass it through a ring in a post, close to the ground. Then draw the animal's head down into position to be stunned by a heavy blow with an ax. Strike the point where a line drawn from the left eye to the right horn would intersect a line drawn from the right eye to the left horn. Be sure the animal is thoroughly stunned before the rope is removed from its neck and the animal placed in a position for bleeding.

Bleeding may be done by slashing the throat of the animal just back of the jaw bone, but a far better method is to cut the arteries from the heart just in front of the breastbone. The blood will drain out much more quickly and thoroughly.

To do this, place the back to the animal as shown in Illustration No. 9. Draw the skin of the neck tight by holding back the head with one foot and the forelegs with the other foot. Then insert the knife in front of the brisket, deep enough to lay open the windpipe, and cut toward the throat, striking the vertebrae. This severs the arteries from the heart.

Be careful not to cut too deep too far back or you will puncture the chest cavity, allowing the blood to drain back into it and make a bloody carcass.

Skinning

Begin skinning at the head. Cut from the poll down to the nostrils. Skin down each side as far as possible, leaving the ears on the hide. Split from the chin down to the incision made in bleeding. Skin away the head and cut it off, from back of the jaws to the back of the poll. Cut out the tongue at once.

Roll the carcass on its back and block and prop it up. Split the skin of the foreleg from the dewclaws up to a point three or four inches above the knee. Skin around the knee and the shin. Cut off the leg at the knee, as low down as possible, and skin clear down to the hoof. Do not touch the rest of the leg for the present.

Cut the cord of the hind shin to relax the hind leg. Split the hide from the dew claws up, over the hock, to a point from four to six inches back of the udder. Skin out the hock and shin, removing the leg at the lowest joint of the hock. Be careful not to cut the flesh when skinning over the thigh—lay the knife flat. When the legs are skinned, split the skin straight down the middle from the brisket to the tail.

Now, beginning at the flanks, lay away the skin from each side of the midline. When it is well started, hold the skin in one hand, the knife flat against the carcass in the other, and work down over the sides and rump as far as possible. If any blood is left on the outside of the carcass, wash it off with hot water immediately, but no more water than is necessary.

Removing of Viscera

Next, open the abdominal cavity just back of the breastbone. Hold the knife upright and insert the free hand into the abdominal cavity to prevent cutting the viscera as you cut back toward the tail. Split the breastbone through the middle with the saw. Loosen the windpipe by cutting it away on both sides.

The carcass is now ready to raise. Place an evener or a beef tree between the hind legs, inserting the ends under the tendons. Raise the beef just enough for convenience in removing the hide from the thighs, rump and hips. Then cut loose the rectum and loosen the small intestines, allowing them to drop down over the paunch. Do not disturb the bed fat that lines the pelvis, nor the kidney fat. Cut the intestines away from the liver and separate the paunch by forcing down upon it. Let it all roll out on the ground and pull or cut out the gullet.

Raise the carcass a little higher. Take out the liver and cut away the gall bladder immediately, being careful not to break it. Remove the diaphram, lungs and heart. Then finish skinning.

Open the hide by cutting in a straight line from the center of the brisket to the forearm. Take care here, as a cut made too far back will be considered a hole and make the hide a No. 2.

Wipe off all the blood and dirt from the carcass with a little hot water. Split the carcass in halves with a saw and wash out the inside of the chest cavity, wiping it dry. Trim off all the ragged places and leave the beef to cool before cutting up into quarters.

Spread the hide out on the ground, flesh side up, and allow it to cool. If the weather is warm, sprinkle it with a little salt before rolling it up. Fold in the legs and head, fold the body once each way and roll up from the front. Tie securely with strong cord.

Mutton and Mutton Products

Sheep should be dressed on a platform a few inches above the ground. This allows the head of the sheep to hang over the edge while bleeding and keeps the pelt clean.

In killing sheep it is common practice to simply stick them, because they are easily to handle. However, it is more humane to stun them previous to bleeding.

Care should be taken not to grasp the sheep by the fleece at this time, or a disfiguring bruise will show up on the carcass. Hold it by the nose and at the tail, or by the leg. And remember that much of the sheepy flavor in mutton is due to stomach gases which form quickly after killing. So work fast.

Place the sheep, after stunning, with its head hanging over the edge of the platform, your knee on its fore shoulder and left hand grasping the nose. Stick it just back of the jaw bone aid close to the backbone, forcing the knife clear through to the opposite side and cutting out through the fleshy part of the throat. Put the left hand on the poll at once and, with the right hand on the nose, give a quick twist of the head upward and to the side. This breaks the neck and exposes the spinal cord, which should be cut off at once. Then cut out the tongue.

When animal has bled out, place it on its back and split the pelt over the knee of the foreleg down to the hoof. Then split it upward along the foreleg, meeting the first split at the front of the brisket. This leaves a V-shaped section of the pelt over the brisket that can be easily removed from the flesh. Be careful, in splitting the pelt, not to cut into the flesh.

How to Remove the Pelt

With clean hands, begin "fisting" away the pelt. This is done by grasping the edge of the cut with one hand and with the doubled fist of the other hand working the pelt away from the flesh. In fisting, be careful to work downward over the front quarters and upward and backward over the hind quarters. This prevents tearing the membrane that covers the flesh and making an unsightly appearing carcass.

When you have fisted down over the sides of the fore quarters and back over to the side to the hind quarters, replace the pelt over the fisted portions and open the pelt on the hind quarters. Split down over the back of the hind legs, cutting toward the tail, and skin out the hocks. Remove the toes at the last joint and fist away the pelt from the inside of the thigh and over the

(Continued on page 19)

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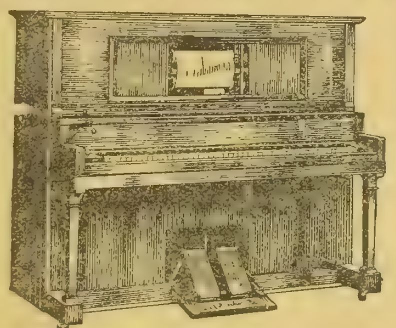

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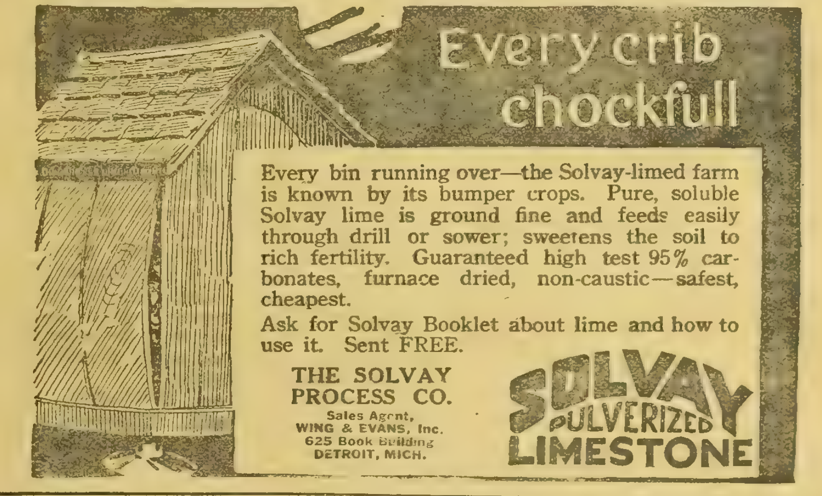

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The Hunted Woman

By James Oliver Curwood

Michigan's Own and America's Formost Author of the Great Northwest

SYNOPSIS

JOANNE GRAY is one of the passengers on the train that connects "The Horde" with the civilized world. For eighteen hours she has been riding steadily bound for Tete Jaune Cache, the home of "The Horde", where she has no friends and all will be strange to her. The train stops at a town composed of several tents and learning that the train will not leave for two hours she goes in search of food and a bath. She is directed to "Bill's Shack" and it is here where she meets Bill Quade, who not only owns and operates "Bill's Shack" but is also leader of the lawless men of the town. Quade says he has a room she can rent and that he will show it to her. As they pass of the room a newcomer enters the doorway leading off the street. The newcomer is John Aldous, a well known novelist. He sees the strange girl enter the place and believes she has made a mistake and as he stands in the doorway his eyes rest upon the curtained doorway through which the girl and Quade have passed. In but a moment the girl steps out her face flaming and eyes flashing. Quade follows her apologetically. He starts to offer the girl some money but before he can do so Aldous steps to the girls side and floors Quade with a terrific blow. Aldous hurries the girl away from the scene to the home of friends. He then asks the girl to be his guest at supper in his cabin. She accepts. Joanne tells Aldous she is going to Tete Jaune to find her husband, Mortimer FitzHugh. Aldous decides to go with her to protect her from Quade and his partner at Tete Jaune, Culver Rann.

(Continued from Nov. 11th issue)

PETER KELLER paused in the act of relighting his pipe. For a moment he stared in amazement.

"There are a great many graves up at Tete Jaune," he said, at last. "A great many graves—and many of them unmarked. If it's a Quade grave you're looking for, Aldous, it will be unmarked."

"I am quite sure that it is marked—or was at one time," said Aldous. "It's the grave of a man who had quite an unusual name, Peter, and you might remember it—Mortimer FitzHugh."

"FitzHugh—FitzHugh," repeated Keller, puffing out fresh volumes of smoke. Mortimer FitzHugh—"

"He died, I believe, before there was a Tete Jaune, or at least before the steel reached there," added Aldous. "He was on a hunting trip, and I reason to think that his death was a violent one."

Keller rose and fell into his old habit of pacing back and forth across the room, a habit that had worn a path in the bare pine boards of the floor.

Theres graves an' graves up there, but not so many that were there before Tete Jaune came," he began, between puffs. "Up on the side of White Knob Mountain there's the grave of a man who was torn to bits by a grizzly. But his name was Humphrey. Old Yellowhead John—Tete Jaune, they called him—died before that, and no one knows where his grave is. We had five men die before the steel came, but there wasn't a FitzHugh among 'em. Crabby—old Crabby Tompkins, a trapper, is buried in the sand on the Frazer. The last flood swept his slab away. There's two unmarked graves in Glacier Canyon, but I guess they're ten years old if a day. Burns was shot. I knew him. Plenty died after the steel came, but before that—"

Suddenly he stopped. He faced Aldous. His breath came in quick jerks.

"By Heaven, I do remember!" he cried. "There's a mountain in the Saw Tooth Range, twelve miles from Tete Jaune—a mountain with the prettiest basin you ever saw at the foot of it, with a lake no bigger than this camp, and an old cabin which Yellowhead himself must have built fifty years ago. There's a blind canyon runs out of it, short an' dark, on the right. We found a grave there. I don't remember the first name on the slab. Mebby it was washed out. But, so 'elp me God, the last name was FtzHugh!"

With a sudden cry, Aldous jumped to his feet and caught Keller's arm.

"You're sure of it, Peter?"

"Positive!"

It was impossible for Aldous to repress his excitment. The engineer stared at him even harder than before.

"What can that grave have to do with Quade?" he asked. "The man died before Quade was known in these regions."

"I can't tell you now, Peter," replied Aldous, pulling the engineer to the table. "But I think you'll know quite soon. For the present, I want you to sketch out a map that will take me to the grave. Will you?"

On the table were pencil and paper. Keller seated himself and drew them toward him.

"I'm damned if I can see what that grave can have to do with Quade," he said; "but I'll tell you how to find it!"

For several minutes they bent low over the table, Peter Keller describing the trail to the Saw Tooth Mountain as he sketched it, step by step, on a sheet of office paper. When it was done, Aldous folded it carefully and placed it in his wallet.

"I can't go wrong, and—thank you, Keller!"

After Aldous had gone, Peter Keller sat for some time in deep thought.

"Now I wonder what the devil there can be about a grave to make him so happy," he grumbled, listening to the whistle that was growing fainter down the trail.

And Aldous, alone, with the moon straight above him as he went back to the Miette Plain, felt, in truth, this night had become brighter for him than any day he had ever known. For he knew that Peter Keller was not a man to make a statement of which he was not sure. Mortimer FitzHugh was dead. His bones lay under the slab up in that little blind canyon in the shadow of the Saw Tooth Mountain. Tomorrow he would tell Joanne. And, blindly, he told himself that she would be glad.

Still whistling, he passed the Chinese laundry shack on the creek, crossed the railroad tracks, and buried himself in the bush beyond. A quarter of an hour later he stole quietly into Stevens' camp and went to bed.

CHAPTER IX

Stevens, dreaming of twenty horses plunging to death among the rocks in the river, slept uneasily. He awoke before it was dawn, but when he dragged himself from his tepee, moving quietly not to awaken his boy, he found John Aldous on his knees before a small fire, slicing thin rashers of bacon into a frying pan. The weight of his loss was in the tired packer's eyes and face and the listless droop of his shoulders. John Aldous, with three hours between the blankets to his credit, was as cheery as the crackling fire itself. He had wanted to whistle for the last half-hour. Seeing Stevens, he began now.

"I wasn't going to rouse you until breakfast was ready," he interrupted himself to say. "I heard you groaning, Stevens. I know you had a bad night. And the kid, too. He couldn't sleep. But I made up my mind you'd have to get up early. I've got a lot of business on to-day, and we'll have to rouse Curly Roper out of bed to buy his pack outfit. Find the coffee, will you? I couldn't."

For a moment Stevens stood over him.

"See here, Aldous, you didn't mean what you said last night, did you? You didn't mean—that?"

"Confound it, yes! Can't you understand plain English, Stevens? Don't you believe a man when he's a gentleman? Buy that outfit! Why, I'd buy twenty outfits to-day, I'm—I'm felling so fine, Stevens!"

For the first time in forty-eight hours Stevens smiled.

"I was wondering if I hadn't been dreaming," he said. "Once a long time ago, I guess I felt just like you do now."

With which cryptic remark he went for the coffee.

Aldous looked up in time to see the boy stagger sleepily out of the tepee. There was something pathetic about the motherlessness of the picture, and he understood a little of what Stevens had meant.

An hour later, with breakfast over, they started for Curly's. Curly was pulling on his boots when they arrived, while his wife was frying the inevitable bacon in the kitchen.

"I hear you have some horses for sale, Curly," said Aldous.

"Hi 'ave."

"Twenty-nine, 'r twenty-eight—mebbe twenty-seven."

"How much?"

Curly looked up from the task of pulling on his second boot.

"H'are you buying 'orses or looking for information?"

"I'm buying, and I'm in a hurry. How much do you want a head?"

"Sixty, 'r six——"

"I'll give you sixty dollars apiece for twenty-eight head, and that's just ten dollars apiece more than they're worth," broke in Aldous, pulling a check-book and a fountain pen from his pocket. "Is it a go?"

A little stupefied by the suddenness of it all, Curly opened his mouth and stared.

"Is it a go?" repeated Aldous. "Including blankets, saddles, pack-saddles, ropes, and canvasses?"

Curly nodded, looking from Aldous to Stevens to see if he could detect anything that looked like a joke.

"Hit's a go," he said.

Aldous handed him a check for sixteen hundred and eighty dollars.

"Make out the bill of sale to Stevens," he said. "I'm paying for them, but they're Stevens' horses. And, look here, Curly, I'm buying them only with your agreement that you'll say nothing about who paid for them. Will you agree to that?"

Curly was joyously looking at the check.

"Gy've me a Bible," he demanded. "Hi'll swear Stevens p'id for them! I give you the word of a Hinglish gentleman!"

Without another word Aldous opened the cabin door and was gone, leaving Stevens quite as much amazed as the little Englishman whom everybody called Curly, because he had no hair.

Aldous went at once to the station, and for the first time inquired into the condition that was holding back the Tete Jaune train. He found that a slide had given way, burying a section of track under gravel and rock. A hundred men were at work clearing it away, and it was probable they would finish by noon. A gang boss, who had come back with telegraphic reports, said that half a dozen men had carried Quade's handcar over the obstruction about midnight.

It was seven o'clock when Aldous left for the Miette bottom. He believed that Joanne would be up. At this season of the year the first glow of day usually found the Ottos at breakfast, and for half an hour the sun had been shining on the top of Pyramid Mountain. He was eager to tell her what had passed between him and Keller. He wanted to see her.

He always liked to come up to the Otto home very early of a morning, or in the dusk of evening. Very frequently he was filled with a desire to stand outside the red-and-white striped walls of the tent-house and listen unseen. Inside there was always cheer: at night the crackle of fire and the glow of light, the happy laughter of the gentle-hearted Scotchwoman, and the effectionate banter of her "big mountain man," who looked more like a brigand than the luckiest and most contented husband in the mountains—the luckiest, quite surely, with the one exception of his brother Clossen, who had, by some occult strategy or other, induced a sweet-faced and aristocratic little woman to look upon his own honest physiognomy as the handsomest and finest in the world. This morning Aldous followed a narrow path that brought him behind the tent-house. He heard no voices. A rew steps more and he emerged upon a scene that stopped him and set his heart thumping

Less than a dozen paces away stood Mrs. Otto and Joanne, their backs toward him. They were gazing silently and anxiously in the direction of the thick, low bush across the clearing, through which led the trail to his cabin. He did not look toward the bush. His eyes were upon Joanne. Her slender figure was full in the golden radiance of the morning sun, and Aldous felt himself under the spell of joyous wonder as he looked at her. For the first time he saw her hair as he had pictured it—as he had given it to her that Joanne in the book he had called "Fair Play." She had been brushing in the sun when he came, but now she stood poised in that tense and waiting attitude—silent—gazing in the direction of the bush, with that marvellous mantle sweeping about her in a shimmering silken flood. He would not have moved, nor would he have spoken, until Joanne herself broke the spell. She turned, and saw him. With a little cry of surprise she flung back her hair. He could not fail to see the swift look of relief and gladness that had come into her eyes. In another instant her face was flushing crimson.

"I beg your pardon for coming up like an eavesdropper," he apoligized. "I thought you would just about be at breakfast, Mrs. Otto."

The Scotchwoman heaved a tremendous sight of relief.

"Goodness gracious but I'm glad to see you!" she exclaimed thankfully. "Jack and Bruce have just gone out to see if they could find your dead body!"

"We thought perhaps something might have happened," said Joanne, who had moved nearer the door. "You will excuse me, won't you, while I finish my hair?"

Without waiting for him to answer, she ran into the tent. No sooner had she disappeared than the good-natured smile left Mrs. Otto's face. There was a note of alarm in her low voice as she whispered:

"Jack and Bruce went to the barn last night, and she slept with me. She tried to be quiet, but I know she didn't sleep much. And she cried. I couldn't hear her, but the pillow was wet. Once my hand touched her cheek, and it was wet. I didn't ask any questions. This morning, at breakfast, she told us everything that happened, all about Quade—and your trouble. She told us about Quaade looking in at the window, and she was so nervous thinking that something might have happened to you last night that the poor dear couldn't even drink her coffee until Jack and Bruce went out to hunt for you. But I don't think that was why she cried!"

"I wish it had been," said Aldous. "It makes me happy to think she was worried about—me."

"Good Lord!" gasped Mrs. Otto.

He looked for a moment into the slow-growing amazement and understanding in her kind eyes.

"You will keep my little secret, won't you, Mrs. Otto?" he asked. "Probably you'll think it's queer. I've only known her a day. But I feel—like that. Somehow I feel that in telling this to you I am confiding in a mother, or a sister. I want you to understand why I'm going on to Tete Jaune with her. That is why she is crying—because of the dread of something up there. I'm going with her. She shouldn't go alone."

Voices interrupter them, and they turned to find that Jack and Bruce Otto had come out of the bush and were quite near. Aldous was sorry that Joanne had spoken of his trouble with Quade. He did not want to discuss the situation, or waste time in listening to further advice. He was anxious to be alone again with Joanne, and tell her what he had learned from Peter Keller. For half an hour he repressed his uneasiness. The brothers then went on to their corral. A few minutes later Joanne was once more at his side, and they were walking slowly over the trail that led to the cabin on the river.

He could see that the night had made a change in her. There were circles under her eyes which were not there yesterday. When she looked at him their velvety blue depths betrayed something which he knew she was struggling desperately to keep from him. It was not altogether fear. It was more a betrayal of pain—a torment of the soul and not of the body. He noticed that in spite of the vivid colouring of her lips her face was strangely pale. The beautiful flush that had come into it when she first saw him was gone.

Then he began to tell her of his visit to Peter Keller. His own heart was beating violently when he came to speak of the grave and the slab over it that bore the name of FitzHugh. He expected that what he had discovered from Keller would create some sort of a sensation. He had even come up to the final fact gradually, so that it would not appear bald and shocking. Joanne's attitude stunned him. She looked straight ahead. When she turned to him he did not see in her eyes what he had expected to see. They were quiet, emotionless, except for that shadow of inward torture which did not leave them.

"Then to-morrow we can go to the grave?" she asked simply

Her voice, too, was quiet and without emotion.

He nodded. "We can leave at sunrise," he said. "I have my own horses at Tete Jaune and there need be no delay. We were to start into the North from there."

"You mean on the adventure you were telling me about?"

She had looked at him quickly.

"Yes. Old Donald, my partner, has been waiting for me a week. That's why I was so deuced anxious to rush the book to an end. I'm behind Donald's schedule and he's growing nervous. It's rather an unusual enterprise that's taking us north this time, and Donald can't understand why I should hang back to write the tail end of a book. He has lived sixty years in the mountains. His full name is Donald McDonald. Sometimes, back in my own mind, I've called him History. He seems like that—as though he'd lived for ages in these mountains instead of sixty years. If I could only write what he has lived—even what one might imagine that he has lived! But I cannot. I have tried three times, and have failed. I think of him as The Last Spirit—a strange wandering ghost of the mighty ranges. His kind passed away a hundred years ago. You will understand—when you see him."

She put her hand on his arm and let it rest there lightly as they walked. Into her eyes had returned some of the old warm glow of yesterday.

"I want you to tell me about this adventure," she entreated softly. "I understand—about the other. You have been good—oh! so good to me! And I should tell you things; you are expecting me to explain. It is only fair and honest that I should. I know what is in your mind, and I only want you to wait—until to-morrow. Will you? And I will tell you then, when we have found the grave."

Involuntarily his hand sought Joanne's. For a single moment he felt the warm, sweet thrill of it in his own as she pressed it more closely to his arm. Then he freed it, looking straight ahead. A soft flush grew in Joanne's cheeks.

"Do you care a great deal for riches?" he asked. "Does the golden pot at the end of the rainbow hold out a lure for you?" He did not realize the strangeness of his question until their eyes met. "Because if you don't," he added, smiling, "this adventure of ours isn't going to look very exciting to you."

She laughed softly.

"No, I don't care for riches," she replied. "I am quite sure that just as great education proves to one how little one knows, so great wealth brings one face to face with the truth of how little one can enjoy. My father used to say that the golden treasure at the end of the rainbow in every human life was happiness, and that is something which you cannot buy. So why crave riches, then? But please don't let my foolish ideas disappoint you. I'll promise to be properly excited."

She saw his face suddenly aflame with enthusiasm.

"By George, but you're a—a brick, Joanne!" he exclaimed. "You are! And I—I——" He was fumbling in his breast pocket. He brought out his wallet and extracted from it the bit of paper Stevens had given him. "You dropped that, and Stevens found it," he explained, giving it to her. "I thought those figures might represent your fortune—or your income. Don't mind telling you I went over 'em carefully. There's a mistake in the third column. Five and four don't make seven. They make nine. In that correction will make you just thirty-two thousand five hundred dollars richer."

"Thanks," said Joanne, lowering her eyes, and beginning to tear the paper into small pieces. "And will it disappoint you, Mr. Aldous, if I tell you that all these figures stand for riches which someone else possesses? And won't you let me remind you that we're getting a long way from what I know—about your trip into the North?"

"That's just it: we're not on the trail," chuckled Aldous, deliberately placing her hand on his arm again. "You don't care for riches. Neither do I. I'm delighted to know we're going tandem in that respect. I've never had any fun with money. It's the money that's had fun with me. I've no use for yachts and diamonds and I'd rather travel afoot with a gun over my shoulder than in a private car. Half the time I'm doing my own cooking, and I haven't worn a white shirt in a year. My publishers persist in shoving more money my way than I know what to do with.

"You see, I pay only ten cents a plug for my smoking tobacco, and other things accordingly. Somebody has said something about the good Lord sitting up in Heaven and laughing at the jokes He plays on men. Well, I'm sitting back and laughing now and then at the tussle between men and money over all creation. There's a whole lot of humour in the way men and women fight and die for money, if you only take time to stand out on the side and look on. There's nothing big or dramatic about it. I may be a heathen, but to my mind the funniest of all things is to see the world wringing its neck for a dollar. And Donald—old History—needs even less money than I. So that puts the big element of humour in this expedition of ours. We don't want money, particularly. Donald wouldn't wear more than four pairs of boats a year if he was a billionaire. And yet——"

He turned to Joanne. The pressure of her hand was warmer on his arm. Her beautiful eyes were glowing, and her red lips parted as she waited breathlessly for him to go on.

"And yet, we're going to a place where you can scoop gold up with a shovel," he finished. "That's the funny part of it"

It isn't funny—it's tremendous!" grasped Joanne. "Think of what a man like you could do with unlimited wealth, the good you might achieve, the splendid endowments you might make——"

"I have already made several endowments," interrupted Aldous. "I believe that I have made a great many people happy, Ladygray—a great many. I am gifted to make endowments, I think, above most people. Not one of the endowments I have made has failed of complete success."

"And may I ask what some of them were?"

"I can't remember them all. There have been a great, great many. Most conspicuous among them were three endowments which I made to some very worthy people at various times for seven salted mines. I suppose you know what a salted mine is, Ladygray? At other times I have endowed railroad stocks which were very much in need of my helping mite, two copper companies, a concern that was supposed to hoist up pure asbestos from the stomach of Popocatapetl, and a steamship company that never steamed. As I said before, they were all very successful endowments."

"And how many of the other kind have you made?" she asked gently, looking down the trail. "Like—Stevens', for instance?"

He turned to her sharply.

"What the deuce—"

"Did you succeed in getting the new outfit from Mr. Curley?" she asked.

"Yes. How did you know?"

(Continued in the Dec. 9th issue)

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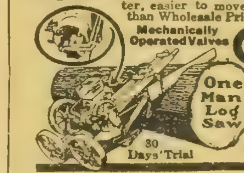

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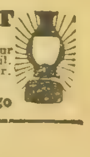

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"The Farm Paper of Service"

FARM PRICES ADVANCE

"THE general trade situation has developed in an orderly manner during the month, without any exciting or disturbing features. The weak spot to which we alluded to a month ago, to wit, the relatively low prices of most agricultural products, has been strengthened by advances in grain, dairy products and cotton, which sentimentally and practically are of great benefit."—National City Bank, New York, "November Review."

POLITICS

IT was not so long ago, was it, that we printed on this page a letter from an earnest friend of The Business Farmer, who said he liked us all but our politics, he "knew we were Democrats." So this week when three letters have come to us, with reference to the paid advertisement which appeared in the last October issue, asking why we supported "Townsend and the Newberry gang", we were perplexed.

We have now been accused of being partisan to both old parties. Will you call it a draw? The facts are of course, that The Business Farmer is true to just one party and that is the farming business of this state of Michigan in particular and the nearby states in general.

We believe in clean politics and sound-thinking statesmen. We believe in the American system of government, that it takes two parties, one to watch the other and one to curb the other from too long a hold on the reins of state. A change of party in control now and then is as valuable as crop rotation and just as necessary.

We will be just as quick to attact a measure we believe unjust to farmers, whether it spring from one side of the house or the other. We will be just as willing to commend safe and sound government, no matter which party is in power. Only by being independent, unhampered and non-partisan can a farm paper best sarve the interests of its constituency.

HAVE WE DONE OUR DUTY?

ON November 11th, the nation commemorated Armistice Day. A trifle over four years, it has been, since Germany laid down arms. In the swiftly flying cycle of time four years are but a footstep. Yet in that brief interval the trials of the human race seem to have undergone some miraculous transformation from the sublime to the sordid.

If anything good can be said of war it is that it brings men closer together and to God. War puts the soldier on a pedestal and nations worship him. In the defense of a greater and common cause, nations forget to quibble. War arouses in men that deep passion for brotherly understanding and comradeship which in the last great conflict melted the barriers of race between American, Briton, Frenchman, Spaniard and Italian, and sent them forward to battle as children of the same household. And finally, war is the great leveler and destroyer of selfishness and pride, the two greatest obstacles to international friendship.

Carnage is not the worst thing about war. For the dead are buried and flowers grow up to hide their graves. And time soon heals the hearts of those who are left to mourn. The hideous ruin of the cities and the devastation of the plain are terrible to look upon, but they, too, are soon restored.

The worst thing about war is its disillusionment. For everyone who dies, ten thousand live. They live to witness the crucifixion of justice upon the cross of selfishness. They live to see the inspiring ideals which held men together in time of war crumble to dust at the feet of peace. The pedestal upon which the soldier stood crashes to earth and the fragments are swept into the gutter. Promises are forgotten, charity is imprisoned and selfishness enthroned; the thin veneer of patriotism rubs off in the scramble for the dollar.

True the dead are cherished; they ask no bread nor bonus. But the living are spurned, or given husks when they ask for grain. It is enough that God permitted them to live.

And nations soon unclasp their hands to grasp each other's throats.

It is well on the anniversary to pause a moment in silent tribute to the dead. Yet they will not sleep the sweeter.

It is better to pause and contemplate our duty to the living.

Have we paid our debt to the disabled soldier?

Is there a solitary ex-service man in all these United States who is left to nurse his wounds alone without the help of the hands that applauded him in battle?

Is there a solitary ex-service man who is out of a job and begging alms or stealing to feed himself and family because he can find no job at a living wage?

If America has failed to do her duty to the ex-service men in any of these respects, then the observance of Armistice Day and ideals associated with it is a sham and mockery.

THEY GAVE IT A BAD NAME

GIVE a dog a bad name, says the Michigan Manufacturer and Financial Record, and the whole neighborhood will throw stones at it. That's how the enemies of the income tax brought about its defeat in the recent election. They gave it a bad name.

'Tis a good way to destroy anything. Give it a bad name. Be careful not to mention any of its good qualities for that might incline some to charity. Just smear it over with odium and the deed is done.

An organization of Detroit capitalists defeated the income tax. They spent thousands of dollars in posters and newspaper advertising urging the people to vote against it. "Beware the dog," said its warning signs, "it is vicious. It will bite."

The people were fooled. They were afraid of the dog. They had bitten so many times before that they didn't want to take another chance. And so those who should have befriended the poor "dog" helped to slay it.

In a post mortem statement, Rep. George Lord, who is chairman of the special tax investigation committee, and supposed to be the best informed man in the state on taxation matters, said:

> "The defeat of the income tax will make it necessary for our committee to revise its program for tax returns. This program was based on the supposition that the income tax amendment would carry. Had it carried, it would have reached HUNDREDS OF MILLIONS OF PERSONAL AND INTANGIBLE PROPERTY IN THE STATE NOW EVADING TAXATION. The committee will now devise methods for getting this hundreds of millions of property in other ways than by an income tax."

This may explain why the wealthy people of the cities, holding millions of dollars of untaxed securities, opposed the income tax. But why, Mr. Farmer, did YOU oppose it?

BACK TO EVERY WEEK!

YOU, can help The Business Farmer get back on an every-week basis, by sending in your renewal NOW! One dollar means 52 issues, whether they come in one year or not, every subscriber who has paid for this weekly at our regular rates will get every single copy for which he has paid or pays now.

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As soon as we can afford to get out a complete paper retaining every department, we will publish every week and your renewal right now, will help hasten that day! In the meantime remember, every subscriber will receive every copy for which he or she has paid.—George M. Slocum, Publisher.

A FIRE IN THE COUNTRY

THE barking of dogs. A glare of red against the black. An excited cry of "fire!" that tumbles everybody out of bed at once. Two thoughts come first: Glad it isn't my place! Wonder whose place it is?

Must be poor Simpkins' barn! Or worse, it may be his home and him with a paralyzed mother! Hurry, bring a kettle of water. this flivver is frozen up tight! Cars from all directions. We are so near now we can hear the crackle and see the flames leap skyward like hungry wolves' tongues between shining teeth. Gee, what a smell! Burning flesh. Makes the goose-flesh creep out all over you. Can it be—no—still it might!

We are there. We shield our faces from the heat. Black hurrying forms silhouetted against the great blaze. The well has gone dry. A man is cursing and a woman is crying. The barns are already down. They are trying to save the house. Blankets are taking the place of water. Here and there a fresh blaze springs up. The front lawn is strewn with household effects. The unimportant things were hauled out first. Now they are throwing good furniture out of the upper windows. No use! The barns are gone. The steel stanchions still white hot glow like incandescent lights. A sorry sight!

And the next morning. Barns gone. Horses gone. Cows gone. Harness gone. Tools gone. Seems like everything Simpkins wanted was burned and what was no longer of use to him was saved. And he was just beginning to see his way out. Black discouragment!

Who is this coming? It is the man from the mutual. Simpkins didn't think very much about it when he renewed his policy last fall. Just another expense when he needed the money. Never had had a fire. Always paying out insurance money, never getting anything back.

But this morning! No man on earth looks so good to him. Makes Simpkins feel like a new man when he goes for the inventory. Mighty glad he made out a list of things in the barns, you bet! Agent hopes to get the insurance check by the end of the week. Go ahead and get some help to clean up! A new lease on life for Simpkins!

* * * *

Either a death, a fire or an accident are bad, but they come. Insurance is man's way of softening the unexpected blows of life. Keep up all of your insurance! Some day you'll be thankful.

REMEMBER THE KIDDIES

ALONG about this time of the year folks in general and kiddies in particular begin to look forward to Christmas. Stories of Santa Claus are revived and the little ones ask all sorts of questions and speculate among themselves about the grey-whiskered old gentleman who drives down from the north behind flying reindeer and steals down the chimneys when good little girls and boys are in bed, to fill their stockings or load their trees with toys and candies.

Santa Claus is a dear old fellow. We all loved him when we where kids. But he has one very bad fault. He is extremely absent-minded and every year misses a lot of folks he has on his list. A peculiar thing about his memory is that he always remembers the children whose daddies are rich or have good jobs. But, oh. so many times, he never sees the flickering lamp in the homes of the poor or the little ragged stockings which eager baby hands have pinned near the chimney to catch his eye the minute he drops in. So we mortals have to help him out. But we, too, some times make a miserable job of it, and the children come trooping down the stairs on Christmas morning with cheeks aglow and their hearts filled with expectancy, only to find their stockings as empty as the night before.

Can there be any sight more pathetic that that of a child examining its stocking on Christmas morning for the gifts that are not there?

If each one who can afford to do so would assume the responsibility of making some little child happy at Christmas time, none need never be forgotten. It costs so little in time and money and it means so much for the little ones who are thus remembered. Look about your community. Think of the ones who have passed through recent hardship or sorrow, and ask yourself what Christmas will mean to them this year, unless kind friends and neighbors remember them. Your own Christmas will be far happier if you have helped to make someone else happy too. Try it and see.

What the Neighbors Say

ANOTHER WAY OF LOOKING AT THE GAS TAX

IN your October 28th issue I read article by Detroit Auto Club, opposing the gasoline tax. The writer seems to forget that the majority of improved Michigan highways are not so-called permanent. There is a stone road by my farm and I notice that in wet weather, it does not take a million Fords to wash it full of holes in a short time. And it cost $700.00 per mile per year to maintain it. On the theory that an automobile does not cause any appreciable damage to a hard surfaced road the members of this club of automobile fans would have the farmers and home owners of this state construct and maintain them without any extra expense to the owners of automobiles. To carry the same theory farther, these automobilists could reasonably expect to ride free on the railway coaches.

These excellent citizens, who evidently enjoy to the fullest extent the improved roads of this state, the tax for which have played a large part in bankrupting many Michigan farmers, would say that measurement of gasoline consumed bears no relation to destruction of the highways. I would reply to them that a large truck causes more wear than a small one, the large one also consumes more gasoline. A truck causes more wear than an auto. The truck consumes more gasoline. To travel one hundred miles with an automobile wears the roads more than to travel one mile and consumes one hundred times as much gasoline. That's the reason the members of the automobile club are opposed to the proposed tax.

The members of this club, who evidently have much time for the enjoyment of the improved roads of the state seem to have no compunction in saddling posterity with insurmountable burdens. The fact that our yearly interest on bonded endebtedness equals the whole state tax of a few years ago, evidently has no weight with them. The farmer's slogan is "pay as you go." The slogan of the automobile enthusiast seems to be "mortgage the future." For some time past and at the present time "mortgage the future" seems to be the popular slogan. If the voice of those who are mortgaging their homes and their farms to pay their taxes is not listened to soon, the day of vengeance will swiftly overtake us.

Our present horse-power tax may be excellent as a flat tax, but it is far from being adequate. It could not be greatly increased without great injustice to those who do not use their cars much. A gasoline tax is just because it measures the extent to which the roads are used.

The Standard Oil Co. may raise the price of gasoline two cents and the wandering members of the automobile club pay it and go their way rejoicing. But let the state propose to add one half cent to help build and maintain the highways for their benefit and we immediately hear from them.—Howard Smith, Saginaw County, Mich.

SUMMING UP AFTER ELECTION

NOW that election is past it seems we might form some idea of just what has happened and what it means.

As far as I can see it was just an expression of vast blind discontent. No issues were involved, no question settled.

The President and Congress have no mandate from the people.

Now the farmers have grievances that can and should be righted and they can get legislation they want provided it is just and reasonable and they go after it as a unit. They can never get anywhere by voting for individuals and not issues.

We have just passed through the most costly war in history. The cost of this war must be paid and every person should know that it entails a certain amount of hardship and that each person should stand his share of the burden. A person who's income hasn't been reduced since the close of the war is as well off and possibly a little bit better off than he was at that time, consequently he isn't helping pay for the war at this time

Now the farmers have suffered a reduction of 50 per cent in their income and are therefore not only bearing their own share of the burden but the other fellows share as well.

The present exorbitantly high tariff was passed for the express purpose of maintaining wartime wages, and prices of manufactured articles throwing the greater part of the burden on the shoulders of the farmers.

The farmers should demand at once, not free trade but a reduction of the tariff to reasonable rates.

A million men were idle, out on strike, nearly all summer with the direct result that prices and wages have increased in nearly everything except what is directly connected with the agricultural industry. Not only that but agriculture has suffered direct loss of millions in interrupted transportation and loss of perishable products.

The farmers have a right to demand continuous operation of essential industries and transportation and at reasonable rates.

Transportation charges are entirely too high but I see but little chance for a reduction while wartime wages are maintained and unreasonable working rules are in force.

One of the grevious burdens the farmer have to bear is the present excessive taxation.

The federal administration has made a fine record for economy but our State administration has done nothing of the kind.

While they claim to have reduced the state levy $3,000,000 they say nothing about the extra $5,000,000 corporation tax.

The fact is from the highest to the lowest administrative unit excessive, extravagant and dishonest expenditure of public money is entirely too common, if not the rule.

The governor has the administration board and the legislature hogtied and seems to care more about building up a political machine than reducing taxes. The only initiative the legislature is capable of is to pull off a petty salary grab.

We have a great economist at the head of the M. A. C. but the best solution he can offer for the former difficulties, while thousands of farmers are being driven from the land by high taxes, is to spend immense sums on research work, a part of which is that fool proposition of a soil survey. A year or so ago the M. A. C. had a scheme to hold schools to learn the farmers bookkeeping, "Ye Gods, what fools these mortals be."—K. S. Wood, Charlevoix County, Michigan.

TAXING AUTOMOBILES

AS a basis for a fair automobile and motor traffic tax to build roads, I would suggest the tax should be based on horse-power, weight, value and amount of travel and speed. To make it as nearly fair as possible I would suggest the license tax be $2.00 plus 10c per each horse-power and each hundred pounds weight and a valuation tax for 5 years, first year 2½% of purchase price, each succeeding year to be ½% less or 7% for the five years after which there would be no valuation tax.

Considering the value of the improved roads for motor traffic 3c per gallon tax on gasoline does not seem too high to be used for road construction and retire state bonds. —Earnest S. Allen.

"NO TAX ON GASOLINE"

The gasoline tax article by the president of the Detroit Automobile Club, printed in your valuable paper on page 8, October 28th is right to the point. I think a tax on gasoline would be unjust and make an added and unnecessary expense in collecting taxes, as the more articles you tax, the more expense in making collections.—V P. Smith, Kalamazoo County, Mich.

Being ignorant is not so much a shame as being unwilling to learn. —Benjamin Franklin.

An investment recommended by these men must be good.

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SAFE AS THE LAND ITSELF

Good First Mortgage Bonds are a better investment than even a good farm mortgage, for the property pledged as security has a steady income from rentals, winter and summer, more than three times as great as the interest charges and retirements on the principle.

We act as trustee for the mortgage, looking after the bond holders interests in every way, and you are never forced to foreclose on a friend and neighbor.

6½%

We all must reach the time when the "End of the Trail" approaches, strength declines, and we can no longer earn as much as in the prime of life.

Will you then have safe investments to carry you along in ease and contentment?

Let us explain how First Mortgage Bonds will provide a steady income and leave you free from worry and inconvenience. Mail the coupon and it will be a pleasure for us to be of service.

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$500
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FIRST MORTGAGE BOND COMPANY INC

Tax Free in Michigan

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Please tell me how I can invest to get 6 1-2% with safety in First Mortgage Bonds.

(3)

FARMS & LANDS

Ads under this heading 10c per word

200-ACRE LAKESIDE FARM, 4 HORSES, 12 cattle, crops, poultry, implements, tools included to settle now; one of the best opportunities in Michigan; schools, stores, churches, good roads, splendid neighbors; 117 acres heavy-cropping fields, muck land for truck, big pasture, woodland; 160 apple trees, 1 3-4 acres berries; excellent 5-room house overlooking lake, barn, with frost-proof basement, silo, poultry houses. Because of family reasons, $7,000 takes all, part cash. Details, this and 40 acres equipped $1,650, page 65 Illus. catalog 1,200 Bargains FREE. STROUT FARM AGENCY, 814B E. Ford Bldg., Detroit, Mich.

FARM, STOCK, TOOLS AND FEED, WITH $4,000 down. 160 acres, 110 cleared, 20 acres timber, good clay soil, nearly level, well drained, big house and barn, close to school, good location, with this place goes: 12 cows, 4 horses, 40 sheep, hay, straw and grain, all farming tools. Price $8,000, $4,000 down and 10 years time on remainder, must act at once. Write W. F. UMPHREY, Evart, Michigan.

BEST BARGAIN IN VAN BUREN COUNTY; 80 acres, good house, basement barn, silo, only $6,500. DE COUDRES, Bloomingdale, Mich.

PRODUCTIVE LANDS—CROP PAYMENTS or easy terms—along the Northern Pacific Ry., in Minnesota, North Dakota, Montana, Idaho, Washington and Oregon. Free literature. Say what state interests you. H. W. BYERLY, 90 Northern Pacific Ry., St. Paul, Minn.

BUY A FARM NEAR ANN ARBOR AND educate the boys in the University. Write for our farm bargains. JEROME PROBST, Ann Arbor Mich.

FOR SALE—THREE FARMS 40, 80 AND 120 acres, good soil and buildings on state road, one mile from town. FLOYD E. LOTT, Howell, Mich.

FARMS—MOST PRODUCTIVE SOIL IN Michigan. Crops nets $75.00 to $175.00 per acre. Many bargains. My list explains all. Write, its free. M. MAYER, Jr., Merrill, Mich.

FOR SALE—SOUTH EASTERN OKLAHOMA farm and ranch lands with oil and miner mineral rights. Write for particulars. Salesman wanted. BLAIR W. GAIR, 139 N. Clark St., Chicago, Ill.

IF YOUR FARM OR COUNTRY HOME IS for sale. Write us. No commission charged. CLOVERLAND FARM AGENCY, Powers, Mich.

I WANT FARMS FOR CASH BUYERS. WILL deal with owners only. R. A. McNOWN, 308 Wilkinson Bldg., Omaha, Neb.

Diogenes Out of a Job

DIOGENES, the Greek cynic and philosopher, was a successful advertiser. He lived in a barrel to advertise himself. At high noon he was wont to light his lantern and stroll about the streets of Athens, "In search," he said, "of an honest man." In this way he advertised one of the prevailing failings of the classic Greeks For among the ancient, the most successful merchant was the biggest skinflint. The cleverest buyer the loudest haggler. There's no room for a cynic in modern advertising. Advertising, today, calls attention to the open-faced honesty of business. It has standardized almost very article you can buy. You know what to expect and what to pay. You don't have to dicker, bargain and haggle to know that you are getting as good as you give.

That is why it pays to read advertisements and buy advertised goods. A product's advertising is the best guarantee of its faithful performance, its lasting usefulness or its definite quality.

If you value constant satisfaction—if you want to get your full money's worth every time—read the advertisements.

To take advantage of an advertisement is to get full value.

THE FIRST THANKSGIVING

THE earliest Thanksgiving in America was kept by the Pilgrim Fathers in 1621:

The previous winter, the first one in the new country had been a hard one, full of privation and suffering, food was not plentiful, their houses or huts illy kept out the vigorous weather and death had been a frequent visitor. Carrying away almost half the little colony—homesickness too had been prevalent and caused almost as much suffering as disease. It took stout hearts and grim determination to carry on the battle against all these foes. The second fall showed a better condition, the barley and corn crops were good, fish had been caught and dried for winter use, wild fowl were quite plentiful and the hearts of the Pilgrims were full of gratitude to a kind Providence who had prospered them. To show this a great feast was made lasting three days, the Indians, Massasoit and his tribe, came bringing with them five deer a not unwelcome addition to the feast.

And thus the first Thanksgiving was celebrated by the first American colony, a God-fearing, law-abiding, sturdy lot of men and women breathing in love of God and Country with every breath of good New England air.

Would that today we were as loyal, patriotic and united a people.

Below you will find the last clause of the first Presidential Thanksgiving Proclamation, had space permitted I would like to have printed it entire.

AND ALSO—that we may unite in most humbly offering our prayers and supplications to the great Lord and Ruler of Nations, and beseech Him to pardon our National and other Transgressions;—to enable us all whether in public or private Stations, to perform our several and relative Duties properly and punctually;—to render our National Government a Blessing to all the people, by constantly being a government of wise, just and Constitutional laws, DIRECTLY and FAITHFULLY OBEYED,—to protect and guide all Soverigns and nations, (especially such as have kindness to us) and to bless them with good government and peace and concord;—To promote the Knowledge and Practice of true religion and Virtue, and to increase of Science among them and us;—and generally to grant unto all mankind such a degree of Temporal Prosperity as He alone knows to be best.

Given under my hand at the city of New York, the third day of October, in the year of our Lord One Thousand Seven Hundred and Eighty Nine.—G. Washington.

BUSINESS INVESMENTS

I was informed to write to you in regards to loaning money on farms, what per cent to ask and what payments to demand. I remain,—Mrs. E. T.

—Use the Revised Committtee Form Mortgage of 1904. It has such provisions in it as will protect your interest. 6% is the usual rate charged on farm mortgages but in some localities 7% is obtainable. You do not need to require any payments, as if interest on taxes are not kept up the whole amount of the mortgage becomes due, that is, according to the form of mortgage recommended. Make the mortgage run for a period of from 3 to 5 years.

Any other questions along this line will be gladly answered. Do not take the word of friend or stranger when it comes to investments. The friend may be mistaken and the stranger unscrupulous. Go to your banker or seek reliable information thru your paper.

CORRESPONDENTS' COLUMN

Who can send me the song entitled "The Battle of Lake Erie"? I want to print it in this column.

Mrs. L. E. T.—the catalog has the patterns for stuffed animals. The book costs 15 cents.

A reader asks for the song called "Beautiful Guardian Angels.

The Farm Home

A Department for the Women

Edited by MRS. GRACE NELLIS JENNE

Children to Board.—Have any of the readers of the Business Farmer small children (up to 12 years of age) that they would care to have boarder in a private home in the country? If so please write to me. —Mrs. J. P. Sumner, Indian Lake Farms, Rt. 2, Linden, Mich.

—Why not write to the Children's Home at St. Joseph, Mich? They often wish to place children in good homes for short periods.

A subscriber writes that she will make sleeveless sweaters for $1.00 each, wool to be sent. If any one wishes her address I will send it.

Mrs. B. L. F.—I do not think the coin you mention would have any more than the face value. Museums are generally glad to accept such coins but as a rule do not pay for them. Write to the Public Library, Woodward Ave., Detroit, Mich., and tell them about your coin. They have a collection.

I would like to know if any readers of the Business Farmer can give me a recipe for dill pickles, one that will prevent their spoiling? Can you tell me why they spoil? My pickles get soft and then hollow and have a bad odor. My recipe is as follows:

Dill Pickles

For 10 gallons—3 3-4 lbs. salt, 2 1-2 lbs. dill, 1-2 pint mixed spices, 2-3 pint of vinegar. Fill up with water.

Is it necessary that the keg in which they are put in be headed up while they are working? Would the disease that has attacked cucumbers the last two years cause them to spoil? Any information on the subject will be gladly received.—Mrs. N. L. Elwell, Mich.

—I would like the experience of several readers on this subject. There would be a very possible danger of letting the pickles work too long. Many housekeepers do not let them work at all but put them in jars and seal them immediately. Any diseases that affect the cucumber would affect the pickles. Please let me hear from some of you.

Attention Mrs. H. E. Hines—There are two patterns on my desk addressed to you. The wrapper says wrong address. Will you please send me the correct one and I will mail them to you immediately.

Who will send me a recipe for liver sausage such as is found in the butcher shops?

English Boiled Pudding

Here is a recipe that my grandmother gave me: 2 cups of beef suet ground fine, 2 cups of raisons, 1 cup of English currants, 2 cups of sugar, 1 tps. cloves, 2 tps. cinnamon, a little candied citron, 2 cups of buttermilk, a rounded spoon of soda and a little salt. Flour a large strong cloth and mix enough flour in to make a good solid loaf and tie in cloth with plenty of room so the batter may swell. Put a small rack in the bottom of a large kettle and fill half full of boiling water and boil steadily for 8 hours, keep well covered. You may put this in the paper if you like. I hope the ladies will have good success as it is very good. —Mrs. Chas. Rust.

COOKIE RECIPES

I will send a few cookie recipes as I have never seen any like them in your paper. It is the best paper I ever get hold of. I get lots of good hints and recipes out of it.

Oatmeal Cookies

1 cup lard, 1 cup butter, 2 cups sugar, 1 white, 1 brown, 1 tps soda put in 8 tbls hot water, 2 eggs, well beaten, ¼ tps salt, 6 cups oatmeal put thru food chopper, 2 cups white flour.

Mix in order given; roll out and fill with the following: 1 pound of raisins put thru chopper, 1 cup sugar about 1½ to 2 cups of water, cook to a jelly.

Hermits

1 cup shortening, 2 cups brown sugar. 1 cup sour milk, 1 tps soda, 2 eggs, 1 cup chopped raisins, 1 cup chopped nut meats 1 tps cinnamon, 1 tps nutmeg, flour to make stiff dough, drop with teaspoon

I like to make these cookies as I can do all my mornings work while I bake them.—Mother of five.

SCHOOL CONSOLIDATION

CONSOLIDATION has proved itself to be one of the best ways of changing very poor schools into very fine ones. It has not yet failed where it has been intelligently planned and worked out. There are 12,000 or more successful consolidated schools, and new ones are being established in considerable numbers every year.

Here is what the consolidated school of the better class may, and in many cases does, offer:

A school term of 180 to 200 days with a considerable amount of interest in the children and his activities maintained during the vacation period. This time element is one of the first and most necessary factors in maintaining an equality in the amount of training given children.

A considerable choice of subjects, in addition to the essential ones, so that the child may follow the lines of his own interests or necessities.

A group of professionally trained, experienced and supervised teachers ith whom he may become acquainted. By the simple mathematical law of chance, if nothing else, he is sure apt to find in a number of teachers than in the individual teacher the things necessary for his growth. There are more minds brought to bear on his problem.

School buildings and grounds designed to safeguard and promote the children's health, supply them with an abundance of mechanical means necessary for work and recreation, and develop in them an idea of the aesthetic. In this respect the consolidated school of the country has many natural advantages over even the best of the city schools. More room for play space, gardens, and outside laboratories may be had for less expense. There is greater freedom from annoying noises and much less danger from traffic.

Acquaintance and companionship for each child with a considerable number of children of his own age and stage of development to train him in ready social adjustment and

THANKSGIVING ODE

Along the hills that Autumn's grace
Hath lit with sudden tints of flame,
One comes, with sweet, unlifted face,
Singing her praises in His name,
Whose hand the ready blessing heap,
Whose endless love a world doth keep.

A spirit of thanksgiving born
Of grateful people, blessed of God,
Whose barns He fills with golden corn;
Whose level fields of lifeless sod,
His sunshine and His fragrant rains,
Have quickened into fruitful plains.

E'en should the angry clouds uplift
Dark faces on the trembling days,
The seeming ill is yet God's gift,
But of shadows lift His praise.
Calm as the child, who smiling, hears,
The footsteps of advancing years.

—Mrs. L. B. Hall.

AIDS TO GOOD DRESSING

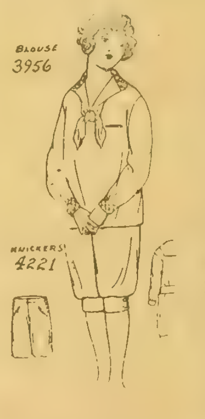
For Simplicity, Service and Style

Address orders to Mrs. Jenney, Pattern Department, M. B. F.

Catalog 15c—Pattern 12c

I am showing this week a pretty "knicker" design for school girls. It was designed for our department at my special request for we have had some requests for such a pattern. One sees them in the stores made up in black and white check and with them are worn middy blouses of scarlet, green or blue. Does it not seem an attractive dress for girls? I like it because it is so neat, comfortable and warm and the girls "just love" the freedom of them. This pattern may also be made up in khaki and your daughter is ready for her Girl Scout Troop.

Our girls are going to be more athletic, they are going to have stronger bodies, brighter eyes, rosier cheeks and larger feet. Let us give them a chance to be rally comfortable.



An Up-To-Date Costume

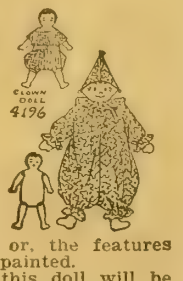
3956-4221, Knicker and bloomer suits appeal to the active girl as much as to "grown ups." This model is ever so servicable and pleasing. It may be worn with or without a skirt. Serge, flannel, jersey cloth and other knitted materials, as well as linen, khaki and gingham are good for its development.

The Blouse Pattern 3956 is cut in 5 Sizes: 8, 10, 12, 14 and 16 years. The Knickers Pattern 4221 is also cut in those sizes. To make the costume for a 14 year size will require 5 yards of 32 inch material.

TWO separate patterns mailed to any address on receipt of 12c FOR EACH pattern in silver or stamps.

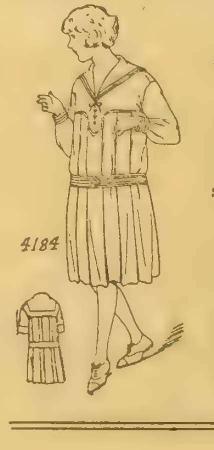
A New Doll Set

4196. The little doll mother maay not only make dolly's clothes but also the doll, from the models supplied herewith. The body may be of drill, unbleached muslin, oil cloth or sanitas, with a stuffing of bran, kopak or cotton. Eyes of shoe buttons, nose and lips of yarn, or, the features may be embroidered or painted.



Dressed as a clown this doll will be very attractive. The suit may be of calico, cretonne or scraps of silk or satin. One or two colors of materials may be used. For the Rompers—cretonne or gingham is pleasing. Dolly will be so glad of the dear little pockets in her rompers, and "Pierrot" the clown will do all sorts of tricks in his comfortable costume, if his arms and legs are fastened so as to be movable.

This Pattern comes in 3 Sizes: 12, 16 and 20 inches.



A Popular Comfortable Dress for the Growing Girl

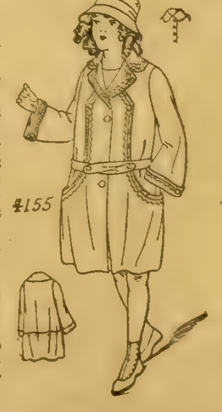
4184. Linen linene, serge, tricolet, homespun and prunella would be good for this style. The sleeve may be wrist or elbow length.....

The pattern is cut in 4 Sizes: 8, 10, 12 and 14 years. To make the dress for a 12 year size, requires 3 1-2 yards of 44 inch material. Pattern mailed to any address on receipt of 12c in silver or stamps.

A Jaunty Coat for the Growing Girl

4155. Velours was used for this model, with fancy braid for decoration. This model has pockets extensions below the belt. The collar is convertible.

The Pattern is cut in 5 Sizes: 6, 8, 10, 12 and 14 years. A 10 year size requires 2 1-2 yards of 54 inch material. Pattern mailed to any address on receipt of 12c in silver or stamps.



give him the confidence that arises from competition with equals.

Contacts for each child with groups of children in the natural stages of development immediately succeeding his own. They rouse his spirit of emulation and furnish incentives to the effort necessary to make him active and self-reliant.

The services of a physician or nurse or both to prevent or stop in its inception any sickness among the children.

Means of interesting the community in the betterment of its own life to keep pace with the ideals set before the children.

Transportation, sanitary and safe, to and from school for all children residing any great distance from the school plant.

These things, characteristic of the better consolidated schools everywhere, are the hall marks of the best schools now known. Consolidation has not yet taken over the psychological clinic. Perhaps the natural freedom of the country makes that to some extent unnecessary. It has adopted much of the best along other lines and developed, because of its inherent advantages, some fine qualities of its own that it may be difficult for the finest of largest city schools to equal or improve upon.

And remember, the consolidated schools, standard in type, is rapidly coming to be counted among the strongest features of our educational system, have all been the result of an attempt to equalize from the bottom up. They have been created by concentrating the wealth and energy of areas that before consolidation dissipated their efforts on a very poor kind of schools. The consolidated schools withdraw nothing from the top of t he system. On the contrary, they have added much to it. They equalize by bringing the poorest up not only to the average but to the best.—Public Instruction Bureau.

LITLE ROSEWOOD CASKET

(Published by request.)

1.
In that little rosewood casket.
That is resting on the stand
Is a package of love letters
Written by a true loves hand.

2.
Will you go and bring them sister,
And do read them o'er to me
For I oft times tried to read them
But for tears I could not see

3.
Now you brought them thank you darling
Will you sit down by my side
And lift gently to your bosom
This poor aching, throbbing head.

4.
Read those blessed words distinctly
So I lose not even one
For the passion hand that penned them
His last words for me is done.

5.
When I'm dead and in my coffin
And my shroud about me wound,
And my little bed is ready
In that pleasant church yard ground

6.
Place the basket and the letters
Both together on my heart
And this little ring he gave me
From my finger never part.

7.
Tell him in the years that follow
And no tidings of him come
Of his absence and his silence
Was I ever the one to blame?

8.
Read them o'er again dear sister
While I gently fall asleep
Fall asleep to wake in Jesus
Gentle sister do not weep.

CHRISTMAS BOOKS FOR OLDER BOYS AND GIRLS

Culliver's Travels—Swift
Chaucer Story Book—Chaucer
Boy's King Arthur
Merry Adventures of Robin Hood—Pyle
Tom Brown's School Days—Hughes
Varmint—Johnson
Orcutt Girls—Vaile
Just Patty—Webster
Romona—Jackson
Little Men—Alcott
Heart of Isabel Carleton—Ashum
Lorna Doone—Blackmore
Johnnie Kelly—Boyer
Understood Betsy—Canfield
Christmas Carol—Dickens
Aztec Treasure House—Janvier
Smugglers Island—Kneeland
Ann of Green Gables—Montgomery
Bird's Christmas Carol—Wiggin
Rebecca of Sunnybrook Farm—Wiggins
Widow O'Callaghan's Boys—Zollinger
Bob, Son of Battle—Ollivant
Arkansaw Bear—Paine
Scouting for Girls
Children's Blue Bird—Maeterlinck
Holiday Plays—Olcott
Joan of Arc—Boutet de Monvel
Peeps at Many Lands, Italy—Finnemore
Oregon Trail—Parkman
Hans Brinker—Dodge
Heidi—Spyri
Guns of Shiloh—Altsheler
Man Without a Country—Hale
Prince and the Pauper—Clemens
Song of Hiawatha—Longfellow
Pilgrims Progress—Bunyan
Riley Child Rhymes—Riley

To make an unusually tasty apple whip, whip the whites of 2 eggs to a stiff froth and add 1 c. sugar and a cup of grated apple.

When anything boils over on the stove, cover it at once with salt; the odor will be killed and the spilled food can be cleaned up easily.

Rub a little melted paraffine on the inside of your screw top can covers when sealing then during the winter when you wish to open them pour hot water over the tops. It melts the wax and the cover unscrews quite easily.

A little salt added to the whites of eggs makes them beat into a froth much more quickly. Beating them in a strong draft or before an electric fan also helps. The latter is most effective but not always at hand.

—HEALTH HINTS—

OR
HOW TO CURE YOURSELF
BY
DR. T. N. ROGERS

The formula for catarrh will be published in the next issue. In the mean time use the following three or four times a day. 2 drahms Darpin (dark). Commonly called Golden Seal. 2 oz. Listerine. 8 oz. H29, which is sterilized water. Put a tbls. in a glass and add same amount of water and use to gargle with. Do this several times a day and watch for your remedy in the next issue.

Plenty of fresh air and cold baths will tone up the system and help to eradicate the catarrh.

FALLING HAIR

You failed to mention the condition of your scalp or your general physical condition. Your health must be good in order to have good hair. If you have a dry scalp with dandruff you will find a hot oil treatment very benficial.

Heat olive oil and rub well into the scalp, wash with water using plenty of castile soap. Keep this treatment up every two or three weeks for several months. Each night massage the scalp with the finger tips, keep the hair well brushed with a soft brush.

Bobbing your hair was a very good thing to do.

Your abscessed tooth was the cause of your headache.

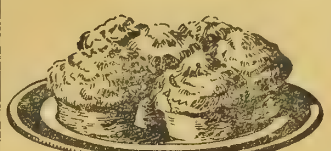
Book Review

(Books reviewed under this heading may be secured through The Michigan Business Farmer, and will be promptly shipped by parcel post on receipt of publisher's price stated.)

Rural Michigan, By L. A. Chase—In a book of over 400 pages, the author who is head of the Department of History, Northern State Normal School, has given us a complete and graphic picture of Rural Michigan, its history, climate, crops and living conditions. That our home state should have been selected as the second in the series by Macmillan following only New York, makes us a little proud. It is a book that should be in the library of every man or woman interested in the farming business in our state. (Macmillan, $2.50)

THE SIGN ROWENA OF QUALITY
For Your Protection

Lily White
"The Flour the Best Cooks Use"



A GOOD RECIPE FOR POPOVERS

1 cup Lily White Flour, 1 cup sweet milk, ½ teaspoon salt, 2 eggs. Mix carefully and pour into greased rings. Bake in hot oven 30 to 35 minutes until crisp and brown.

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Do your Thanksgiving baking this year with "the flour the best cooks use" and be assured of success. Good bread is the foundation of the feast. In Lily White Flour you find the best flour for all general baking. It is clean, wholesome and wonderfully milled. Breads baked with Lily White are firm, light, tender and good to eat. Try Lily White this year and you'll have something to be thankful for.

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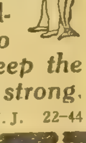

Scott & Bowne, Bloomfield, N. J. 22-44

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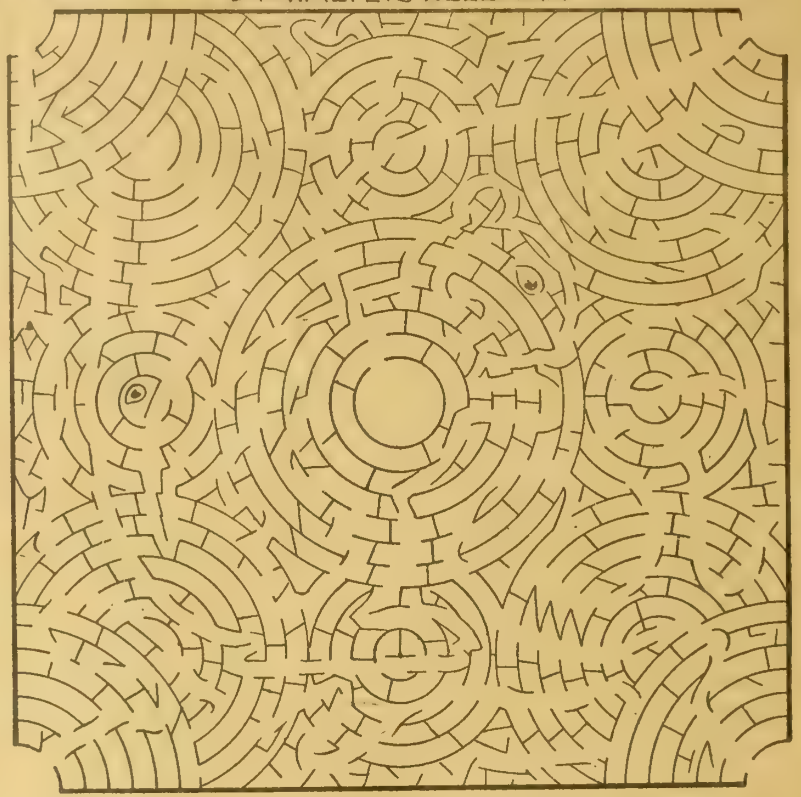
The Children's Hour

WHO ATE THE NUT?

BY WALTER WELLMAN



Bobbie left a nut he'd found, on the window sill. When he next looked for it, it was gone. Who ate it?

A path leads into a maze from each corner. One path leads to the center of the maze. Find this path—then trace it with a soft pencil (colored) preferred. You will have drawn the outline of the culprit.

Pies of pumkin, apple, mince,
Jams and jellies, peaches, quince,
Purple grapes and apples red
Cakes and nuts and ginger bread,
That's Thanksgiving.

Turkey Oh! A great big fellow,
Fruits all ripe and rich and mellow,
Everything, that's good to eat,
More than I can now repeat,
That's Thanksgiving.

Lots and lots of jolly fun,
Games to play and races run,
All as happy as can be,
For this happiness you see,
Makes Thanksgiving.

We must thank the One who gave,
All the good things that we have,
That is why we keep that day,
Set aside our Mammas say
For Thanksgiving.

DEAR Nieces and Nephews—Have you decided what you are to be thankful for on Thanksgiving Day? On that day when you are giving thanks for the many things you have to be thankful for I want you to make a resolution. Resolve that each day from that day on you will take the time from your work and play to give thanks for your many blessings. If you have sisters or brothers try to see who can think up the largest number. It will be fun and you will find that the world looks brighter and better to you each day.

Again one of the members of the Children's Hour has helped me very much. And this member did not know it. You see it was like this: I have been searching high and low and everywhere for a nice poem on Thanksgiving to publish at the head of our page this issue, and, while I found many Thanksgiving poems, none of them seemed to be just what I wanted. and this morning I had just about given up in despair when I opened a letter from Tawas City and in that I found just what I wanted. There was a nice letter from Stanley Rescoe and he enclosed the poem on Thanksgiving published above. (Thank you, Stanley.)—UNCLE NED.

OUR BOYS AND GIRLS

Dear Uncle and Cousins—Rap! Rap! Rap! Oh! excuse me for walking in, but as there was so much ercitement in our corner this week that I thought I would not disturb you.

We have had some snow already, but it is all gone, but again today it is snowing a little, but soon the snow which will last three or four months will be falling and the long winter will come. I do hope that there isn't a bad storm this year like there were last year.

Christmas will soon be here, and we will all have to get busy, or all of our preparing for Christmas will be on us all at once, and all of us have many relatives and friends to think of them.

And Harold Pernie got the prize of the boys? Well he was sure lucky, wasn't he? Which girl got the prize? I never tried, as I knew I wouldn't of been the lucky girl anyway. But I don't suppose I should lose confidence in myself so quick, anyway before I try at least. Should I?

Wonder why Eathel Fay Sharp never writes. I never see any of her letters in the corner, nor I don't hear from her anymore. The last time I heard from her, she said her father was sick, and was in the hospital, and I do hope he gained his health back again.

I used to write to that invalid boy, who was fourteen years old, and Uncle Ned ask us all to send him birthday cards for his birthday, but I lost his name and address, so I don't know where to write to, if anyone knows who I mean and knows his name and address, it will accommodate me very much if I could know his address, as I always like to write an invalid person, who is always still, and never has much joy.

Mr. Ford has a logging camp about three and one-half miles south of Sidnaw, and there is about ninety men, if not more ,working there. It is just like a little town. There are electric lights in the camps and running water which is cold and hot. Early this spring they built three private houses for Mr. and Mrs. Ford, their son and his wife and another man and his wife, but they never came up at all.

I have written many times before, so this time I am only giving my description, and where I live and see if they can guess who I am by my description for I have given my description lots of times before.

Well I am a girl about five feet tall, weigh one hundred and ten pounds, have brown hair, light brown eyes and am light complexioned. Now see if you can guess who I am. Will ring off hoping to hear from some other boys and girls, and those who guess who I am will receive a very long letter from me. So Goodbye. Your niece and cousin.—"Guess," Sidnaw, Mich.

Dear Uncle Ned—Well at last, I did get my letter started. I have been busy, every night studying my lesson. I go to school every day and we are going to have a box social and entertainment the 18th of this month, so we practice every day. Then we don't have every study, but sometimes we have some extra classes the next day. We have a very nice school teacher this year, we all like her very well. I am in the eighth grade. I have one brother and one sister. My brother goes to school every day, he is 8 years old, and is in the second grade.—Esther Mahn, Mt. Clemens, Mich.

Dear Uncle Ned—I am a boy 9 years old. My birthday is the 12th of July. I go to school. I am in the 4th grade. I have a little sister, she is in the 2nd grade at school. She is 7 years old. We live on a 40-acre farm. We have 4 little pigs, 1 big pig, 2 horses, 2 cows, 1 heifer, 1 calf. For pets I have 4 cats and 2 rabbits. We had a Hallowe'en social at our school. For our supper we had coffee, pumpkin pie and sandwiches. We had a witch's well. I got a sack of popcorn and my sister got a holder. The day before Thanksgiving will be my Grandma's birthday and maybe I will go out there. Maybe she will have duck for dinner. Goodbye Uncle Ned.—Carrel Culbert, Jonesville, Mich.

Dear Uncle Ned—I am a farmer boy and I am twelve years old and in the sixth grade at school. For pets I have a cat called "Crook," he is about 18 inches long and about 17 inches high. I live on a forty-acre farm. We have five milking cows and six steers, five heifers, four big pigs and six little pigs. I like farming very much. We also have about one hundred chickens. I am sending in a Thanksgiving poem. Your nephew—Stanley Rescoe, R. 3, Tawas City, Mich.

Dear Uncle Ned—How are you these fine days? It has been nice and rainy here to-day. I live four and one-half miles east of Union City, and four and one-half miles west of Sherwood. I live on a 160-acre farm. It is quite lonesome here in the summer when I am not in school. I go to the Smith school and I am in the 8th grade. We have organized a sewing club and a handicraft club in our school. I wish some of the boys and girls would write to me. You tell them to maybe they would do it quicker for you than they would for me. There are no girls of my age that live near me. The nearest is two miles from here. Last summer I worked in the onion patch so as to keep from getting lonesome. The pets I have are two kittens and one dog. There is 22 pupils in our school. Well I will close with hopes of hearing from somebody before long. From your friend, Wilma Olmstead, Sherwood, Michigan.

P. S.—I hope somebody uses this address before long.

—I am sure you would make many friends through the Childrens Hour, Wilma. Perhaps you will receive so many letters you will not be able to answer them all.—Uncle Ned.

Dear Uncle Ned—I seen your contest in the paper about how to win a Christmas present so I thought I'd try. I think the present will be a school outfit. I will try and write a Christmas story.

It was the night before Christmas. It was very stormy. Everybody was waiting for Santa to come. Mary wanted a dolly, Johnnie wanted a sleigh, and baby wanted a bowl of bread and milk. Soon they heard the sleigh bells jingle.. Everybody was so happy. Soon they heard somebody running up the steps and then down again. Mother opened the door and in fell the toys. Just what they wanted; Mary a doll, John a sleigh, baby a bowl of milk and all kinds of candy. Everybody was very happy. I will close from your niece.—Dorothy Werner, R. No. 1., Fowler, Michigan.

Uncle Rube Spinach Says:

WHAT DO YOU THINK?

YOU know I've been lookin' at this sheet of paper, all white an' clean an' wonderin' why I should blot it up with anything I might think of.

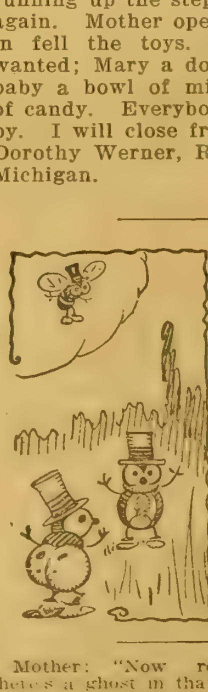
Well, I'm jest wonderin' now 'bout the light wine an' beer stuff—you know its bein' agitated quite a bit. Some of the wets sez we must have our nips now an' then, or oftener—they sez "give us light wine an' beer an' we'll do away with bootleggin'." Nice little theory ain't it now?

Light wine an' beer means goin' back to the old time drunken business. What do you think would happen if any or every driver of an automobile could step in an' have a few drinks of beer or light(?) wines? With accidents running into thousands in this country now what would it be if it was wet? Let's not ever be carried away by anything 'at pretends to put liquor back into our country. Liquor never made a man of anyone. It is the most degradin' thing the world ever knew. It has separated families, parted husbands and wives, stunted children, it has caused more trouble than all the wars this world has ever knew of. An' yet there are some people that would have this damnable thing put back an' have it here in this, our state, the greatest an' best state in the whole world.

An' now who is it 'at's always agitatin' light wine and beer? Yes, who is it? Why my dear friends, don't you know it's the big whisky dealers, the men who would take the shoes off'n your babies to put money in their pockets. It's the men who would rob you an' I of our manhood, take away our families, do anything to get our money. Boys, girls, everybody, look out for this. Light wine and beer H—. It's the open door to the old saloon. It's a step, between an' that's all.'Member the Volstead Act. It's purty good ain't it now? You know we used to have liquor laws, they were in force for more 'n fifty years. Did they reg'late the liquor business? Did they! Not on your life. Just give the Volstead law fifty years an' see what it does. Well, just give it a little time that's all!

But folks remember this: The saddest time an' the most dangerous time you'll ever see is when the Volstead law is changed an' light wine an' beer opens the door for all the damnable stuff that follows.

This letter is getting a little bit long so I'll stop. Cordially yours—UNCLE RUBE.



THEY ALWAYS DO

What happened to Mr. Bug?

He invested in Mr. Bee's honey stock and got stung.

Mother: "Now remember, Johnny, there's a ghost in that dark closet where I keep the cake."

Johnny: "Funny you never blame the ghost when there's any cake missing; it's always me."

THE STORAGE BATTERY

(Continued from page 6)

should be avoided. Keep the water always about one-half inch above the top of the plates. It is a good practice to inspect the battery every week. Avoid the use of hard water. Purchase a hygrometer, expressly made for testing the strength of the electrolyte.

This instrument when properly used will give the correct reading. A fully charged cell should test 1.280 to 1.300. A voltage about 2.8. On the terminal posts of every battery may be found voltage signs. Positive (X) and negative (—). Leads from the generator should always be connected the proper way (X) of the generator to (X) of the battery, (—) of the generator to (—) of the battery. If for any reason you are doubtful of the proper connection when replacing a battery, apply the following test. Immerse the leads from the generator into a glass of strong salt water. The negative (—) lead is readily determined by the bubbles issuing around that terminal.

When charging a battery, charge it at its rate; this may be found on the manufacturer's name plate. With suitable resistance batteries may be charged from lighting circuit. Alternating current may be used only in connection with a rectifier. Always keep battery clean and dry. Don't place tools on a battery, this produces a direct short circuit. The small holes in the vent caps should be always open. Smear lead terminals with vaseline to counteract corrossion. Keep it fully charged at all times. Don't allow impurities to reach the cells. If the gravity of any cell shows a marked falling off relative to the rest of the cells, promptly investigate the cause and correct it. Keep terminals tight. Don't overwork it by too frequent and unnecessary use of the starter. With proper care the battery should last as long as the rest of the equipment.—C. M. Labunski, Macomb County, Mich.

FINANCIAL NEEDS DISCUSSED AT U. P. MEETING

(Continued from page 3.)

every acre of tillable land should be classified according to the adaptability of the soil therein; second, the regulation of land and real estate dealers, to the end that land should be represented and sold "as is," and, third, a strict, practical policy of follow-up for the new settler, assuring him, within reasonable limitations, of the assistance of the various co-operative agencies within the state, after his settlement upon the land.

President Friday again addressed the bankers and agricultural men at the evening meeting held in the Marquette Club, talking on the subject of "costs." Michigan's noted economist reviewed the industrial history of the country for the past several years, emphasizing conditions and situations which have affected prices and caused such wide fluctuations. His talk was received enthusiastically and the discussion which followed, participated in by the bankers, lumbermen, agricultural men, and other business men present, was decidedly instructive and interesting.

Summing up the day's conference, it seemed to be the sense and opinion of the speakers and delegates alike, that although there are instances of misused credit on the part of farmers, the extension of financial assistance on the part of the bankers is, nevertheless, a matter of vital importance in the agricultural development of the state of Michigan particularly as applied to the cutover regions.

During the evening discussion following President Friday's talk, A. M. Anderson, Cashier of the State Bank of Ewen, sighted several instances growing out of his experience in the fertile Ontonagon Valley where credit has been the deciding factor in the success of the farmer, and similar opinions were given by other bankers whose work has brought them in direct touch with rural conditions.

After all, however, the best thing about the Marquette meeting as viewed from the outside, was the fact that there is a live interest and genuine concern in upper Michigan's greatest natural asset—her soils and her climate.

President Friday gave the bankers and business men something to think about when he declared that the farmer not only represents more than 60% of the purchasing power of the nation, but that statistics for the past decade prove conclusively that industry progresses only insofar as does agriculture. There it is again—the relation of producer to consumer—of agriculture to industry.

It's satisfying to note that at last the farmer is coming into his own, and, if the spirit of Marquette's meeting proves out, "his own" should be something decidedly to his advantage.—L. D. Tucker.

SWEDISH INVENTOR HAS NEW OIL LIGHT

Claims Whiter and Much Cheaper Light Than Electric or Gas

Edison enabled us to enjoy the benefits of electric light, Count Welsbach's mantle made it possible to have the incadescent gas light, but it remained for a Swedish engineer named Johnson, now living in Chicago, to devise a lamp that would burn ordinary, everyday kerosene oil and produce a light said by the many scientists who have seen it to be whiter than electric. The lamp is as simple to operate as the old style oil lamp, burns without odor, smoke or noise and is proving a sensation where the oil light is needed.

Mr. Johnson offers to send a lamp on ten days' free trial and will even give one to the first user in each locality who will help introduce it. A letter addressed to F. V. Johnson, 609 W. Lake St., Chicago, will bring full particulars about this wonderful new lamp. He has an interesting offer, too.—(Adv.)

SECOND WEEK INTERNATIONAL EGG LAYING CONTEST

THE second week of the International Egg Laying Contest being conducted at the Michigan Agricultural College, East Lansing, ended November 14th with considerable increase in production. New birds were starting and the others are becoming more acclimated and settling down to more regular laying.

The Leghorns hold first place to date for total production. Mr. Shaw's pen No. 76 has a small lead with 86 eggs, 6 eggs above Mr. Taylor's pen. Pen No. 58 with a total production of 79 eggs. Mr. Keyes, pen No. 62 ties with Alfred TerHaar's pen No 79 with production of 72 eggs.

The heavy breeds are increasing gradually. Mr. Dennison's pen again leads with a total of 58 eggs. Mrs. Finkbiner is again in second place with 39 eggs. Brummer's Poultry Farm is close up with 37. A new breed appears on our list when Mr Smith's White Rocks finished this week with a total of 35 eggs. The Wyandotte section gives first place to Mr. Sinks' pen No. 25, and second to Hollis's Pen No. 28. The Rhode Island Red pens maintain the same order as in last week's report. Five pens still have no eggs to their credit. The contest average is very satisfactory, the production for the week being 28.9 per cent.

Leading pens in the principal breeds are as follows:

Plymouth Rocks

H. E. Dennison, (Barred) East Lansing, Mich., 58 eggs; Mrs. C. D. Finkbiner, (Barred) Clinton, Mich., 39 eggs; Brummer's Poultry Farm, (Barred) Holland, Mich., 37 eggs; Clyde Smith, (White) Niles, Mich.

Wyandottes

F. W. Sinks, Farmington, Mich., 49 eggs; Clyde Hollis, Hudsonville, Mich., 47 eggs.

Anconas

A. R. Van Raatle, Zeeland, Mich., 32 eggs; C. M. Beckwith, Milford, Mich., 38 eggs.

Rhode Island Reds

Leon O. Dunning, Delton, Mich., 51 eggs; Mrs. E. S. Travis, Vicksburg, Mich., 36 eggs.

White Leghorns

Elmer E. Shaw, South Haven, Mich., 86 eggs; E. D. Taylor, Kalamazoo, Mich., 80 eggs; W. A. Down, Washington, Mich., 79; J. W. Keyes, Owosso, Mich., 72; Alfred TeerHaar, Hudsonville, Mich., 72.

(Editor's Note—A report of the first week of the contest is published on page 20 of this issue.)

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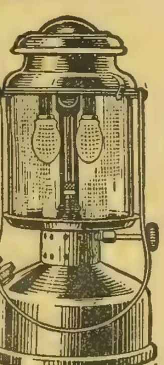

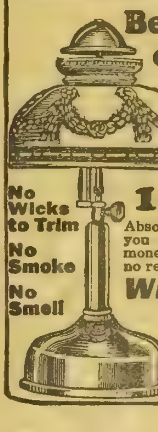

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I want every sufferer from any form of muscular and sub-acute (swelling at the joints) rheumatism to try the great value of my improved "Home Treatment" for its remarkable healing power. Don't send a cent; simply mail your name and address, and I will send it free to try. After you have used it, and it has proven itself to be that long-looked for means of getting rid of such forms of rheumatism, you may send the price of it, One Dollar, but understand I do not want your money unless you are perfectly satisfied to send it. Isn't that fair? Why suffer any longer, when relief is thus offered you free. Don't delay. Write today.

MARK H. JACKSON
265J Durston Bldg., Syracuse, N. Y.
Mr. Jackson is responsible. Above statement true.

CURED HIS RUPTURE

I was badly ruptured while lifting a trunk several years ago. Doctors said my only hope of cure was an operation. Trusses did me no good. Finally I got hold of something that quickly and completely cured me. Years have passed and the rupture has never returned, although I am doing hard work as a carpenter. There was no operation, no lost time, no trouble. I have nothing to sell, but will give full information about how you may find a complete cure without operation, if you write to me, Eugene M. Pullen, Carpenter, 210J Marcellus Avenue, Manasquan, N. J. Better cut out this notice and show it to any others who are ruptured—you may save a life or at least stop the misery of ruture and the worry and danger of an operation.

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U-Need-A Practical Competent Auctioneer to insure your next sale being a success. Employ the one Auctioneer who can fill the bill at a price in keeping with prevailing conditions.

Satisfaction GUARANTEED or NO CHARGES MADE. Terms $50.00 and actual expenses per sale. The same price and service to everyone.

I specialize in selling Polands, Durocs, and Chesters. Let me reserve a 1922 date for you. Write or wire,
HARRY A. ECKHARDT, Dallas City, Illinois

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LIVE STOCK AUCTIONEER
ADVANCE DATES SOLICITED.
ADDRESS 113 W. LAPEER ST.
LANSING, MICH.

CATTLE

HOLSTEIN-FRIESIAN

BARGAIN
Purebred Registered Holstein Heifer Calves
1 month old $50; 6 months old $75-$100
Federally Tested
HOWARD WARNER, Farmington, Mich.

OCT. CLEARANCE SALE. WE ARE OFFERING 20 heifers and bulls. Heavy producing dams. Sire has 7 dams averaging nearly 1,100 lbs. on yearly test. Free from T. B., $50.00 and up.
WOLVERINE DAIRY FARM
Prop.—H. G. Booth Gladwin, Mich.

HILL CREST FARMS, MUNSON, MICH., ARE offering fresh cows and heifers, best breeding at right prices. Bulls ready for service and bull calves.

WHY PAY MORE? PUREBRED REGISTERED Holstein heifer calves, fifty dollars. Circulars free. CONDON'S HOLSTEIN CREST, West Chester. Ohio

BARGAIN—$45 buys registered Holstein Bull delivered your station. For particulars address **EARL PETERS, No. Bradley, Mich.**

SHORTHORNS

Shorthorn Sale
1 mi. North, 2 1-2 East of Lapeer, Mich.
Nov. 28, 1 o'clock
13 Head of good high class registered cows, heifers and yearling bull, Scotch and milking strain.
2 Registered Holstein Cows
6 Good Grade Cows
Hugh Donaldson, Auctioneer
E. W. McGunegle, Owner

Richland Shorthorns

We have two splendid white yearling bulls by imp. Newton Champion, also some young cows and heifers that we are offering for sale. Write for particulars to

C. H. Prescott & Sons
Herd at Prescott, Mich. Office at Tawas City, Mich.

SHORTHORN CATTLE AND OXFORD DOWN sheep. Both sex for sale.
J. A. DeGARMO, Muir, Mich.

FOR SALE—A GOOD BUNCH OF SCOTCH top Shorthorn cattle and a good bunch of bulls also. All in good flesh; some have calves at side.
R. T. TYRRELL, Oxford Junction, Iowa.

SHORTHORNS AND POLAND CHINAS—NOTHING for sale at present. Are holding for public sale Nov. 15th. Write for catalogues.
SONLEY BROS., St. Louis, Mich.

FOR POLLED SHORTHORNS
Federal Accredited Herd.
PAUL QUACK, Sault Ste. Marie, Mich.

GLADWIN COUNTY SHORTHORN BREEDERS offer the best in beef and milk strains. All ages, both sexes. **W. S. HUBER, Sec'y, Gladwin, Mich.**

FOUR SHORTHORN HEIFERS FOR SALE
HENRY GRANZOW, Anchorville, Mich. R. 1.

ANGUS

WE HAVE SOME FINE YOUNG ANGUS BULLS from International Grand Champion Stock at reasonable prices. **E. H. KERR & CO., Addison, Mich.**

HEREFORDS

BUYING, FEEDING AND SELLING FAT
CATTLE
at present, is too much like
GAMBLING
All experience proves Baby-Beef growing
THE BETTER WAY
GROW HEREFORD BABY BEEVES

Our Contractors are guaranteed top prices by Detroit Packing Co. Commission, yardage, Feed and all other expenses, except transportation—only; are cut out. Our plan opens the way to profitable beef-making, by Michigan Farmers. In no other way can as much money per cow be earned, with so little labor. If you have no beef-bred cows, we have them on hand or listed.

Study our plan and be convinced. Come, wire or write. Right NOW.

T. F. B. SOTHAM & SONS
(Cattle Business Established 1835)
Phone 250 Saint Clair, Michigan

FOR SALE—HEREFORDS—A FEW CHOICE bull calves. Sired by Wyoming 9th. International Winner. Write or come at once. We are the oldest breeders of Herefords in the U. S.
CRAPO FARM, Swartz Creek, Mich.

AYRSHIRES

FOR SALE—REGISTERED AYRSHIRE bulls and bull calves, heifers and heifer calves. Also some choice cows.
FINDLAY BROS., R 5, Vassar, Mich.

GUERNSEYS

FOR SALE—REGISTERED GUERNSEY HEIFERS at reasonable prices, also choice bull calves of May Rose breeding.
H. W. WIGMAN, Lansing, Mich., Box 52.

SECURE YOUR NEXT BULL FROM ONE with both A. R. Sire and Dam. I have what you want. I also offer a few choice females.
A. M. SMITH, Lake City, Mich.

GUERNSEY BULL Bred Heifer. Yearling Heifer. Heifer calf. Best of breeding. From good producers. Price right. Write **G. A. WIGENT, Watervliet, Mich.**

RED POLLED

RED POLLED CATTLE—A few choice bulls and heifers for sale.
ROYSTAN STOCK FARM,
Will Cottle, R. R. 1, West Branch Michigan

FOR SALE—OUR RED POLLED HERD BULL, Cosy Ells Laddie, and a few heifer calves.
PIERCE BRO'S., Eaton Rapids, Mich. R. 1.

JERSEYS

FOR SALE—YEARLING JERSEY BULLS Shopie 19th Tormentor breeding.
J. E. MORRIS, Farmington, Mich.

SWINE

DUROCS

REG. DUROC-JERSEY SWINE

Spring and Fall Boars of quality sired by 1921 Mich. Grand Champion and grandson of Scissors, world's 1917 Grand Champion. Spring, Fall and yearling sows sired by above boars open or breeding privilege to the undefeated boar pig at 1922 Fairs, a son of Unique Sensation, world's 1921 Junior Champion. Personal inspection invited.
F. HEIMS & SON, Davison, Mich.

DUROC JERSEYS
REGISTERED SPRING GILTS
A nice assortment to select from at Farm Prices
TWIN BROOK FARM
GEO. DOHM, Mgr. WASHINGTON, MICH.

DUROC JERSEYS
NELLS LITTER; SIRED BY LIVINGSTONS PRIDE farrowed July 24, these pigs cannot be beat. Nell has farrowed 59 pigs in four litters. PRODUCTION is the big word of today, better get a boar out of this litter, and start on production. **LAPHAM FARMS, Pinckney, Mich.**

SENSATION MARSI Our new herd boar. Sired by "Marsi" Reserve grand champion National Swine Show 1922. We are taking orders for gilts and sows for spring farrow bred to this wonderful boar.
SCHAFFER BROS., Route 4, Oxford, Mich.

DUROC JERSEY BOARS READY FOR SERVICE. Sired by Fannie's Joe Orion $25 each. Will ship C. O. D. Write us now.
H. E. LIVERMORE & SON, Romeo, Mich.

DUROCS—POPULAR BLOOD LINES—SEND your wants to OCEANA CO. DUROC JERSEY HOG ASS'N. V. Lidgard Sec., Hesperia, Michigan.

PEACH HILL FARM offers choice weanling Duroc pigs, either sex. Priced very reasonable. Write us.
INWOOD BROS., Romeo, Mich.

HILL CREST DUROCS; SOWS AND GILTS, both bred and open, also service boars. **NEWTON & BLANK.** Four miles straight south of Middleton, Gratiot Co., Mich.

DAIRY and LIVESTOCK

DON'T TRUST THE BULL

FARMERS who keep bulls might learn from tiger trainers a valuable lesson that, if put into practice, would make them better life insurance risks. No man trusts a tiger until it is dead. A bull, although he uses an entirely different method, can do just as much damage as any animal in the zoo or in the jungle. He is more vicious and treacherous than most of them, and with such a reputation no man should trust him for a minute, no matter what his record for good behavior has been. "Mean" bulls perhaps have killed fewer men than those considered safe.

There are few rural neighborhoods without a list of tragedies and near tragedies resulting from putting trust in "perfectly safe" animals. Only a few weeks ago an employee of the United States Department of Agriculture, visiting in New York State, was so badly injured by a dairy bull that he died a short time later. The owner led out the animal, always considered gentle, to have his picture taken. Without warning the animal knocked down his owner and then gored the department employee who had rushed to the man's assistance.

Had this bull been led on a staff attached to the ring in his nose the tragedy could not have happened. Better still, it might have been kept in a pen so arranged that handling would not have been necessary at all. Plans for constructing safe bull pens may be obtained from the Department of Agriculture, Washington, D. C.

Every farmer who owns a bull would do well to put up this warning in his barn: Don't Trust The Bull.

LOW AVERAGE AT WEST MICHIGAN SALE

THE West Michigan Holstein Breeders' Association held its annual October consignment sale the 18th of last month, at the West Michigan Fair grounds, Grand Rapids. Sixty-seven head of high grade Holstein cattle were sold at the sale for a total of $7,611. The high average of the day was $234, this being the average for five bulls, one year or over. The top price was $350. Two bulls sold for this amount each, one a yearling bred by H. E. Rising of Woodland and the other a six-months-old calf from a 30-lb. cow consigned by M. Ossemwarde of Ada. Thirty head of cows averaged over $130 each, 12 yearlings over $88, 16 calves $52, and 4 bull calves $115. Among the consignors at this sale were: Cutler Farms, Wayland; J. B. Gargett, Elm Hall; Edward F. Heft, Sparta; H. L. Smith, Shiloh; W. R. Harper & Sons, Middleville; Clinton Jones, Bradley; O. F. Fischer, Caledonia; F. B. Howard, Ionia; Henry Scholten, Holland; G. C. Allen, Grand Rapids; R. M. & F. Spencer, Caledonia; David Falconer, Stockville; C. Boven, Holland; H. M. Willard & Sons, Grand Rapids; Newton Brothers, Freeport; H. H. Barnum, of Woodland; L. J. Mathews, Hastings; Lewis F. Rush, Clarksville.

IS O. I. C. SWINE ASSOCIATION BREAKING UP?

I understand through a neighbor that the State Boys and Girls Club leader reports the O. I. C. Breeders' Association to be broken up. As I am a breeder of O. I. C. hogs, I want to know if the above report is a fact, and have your answer printed in the M. B. F.—N. R. P., Wolverine, Mich.

—I have had no information to the effect that the O I. C. Swine Breeders' Association was to be broken up. There is no question but what the Chester White and O. I. C. hogs are one and the same breed. In fact, the United States Supreme Court has ruled that they are and, if I understood the matter correctly, there is a court decision restraining the O. I. C. Record Association from advertising the O. I. C. as a separate and distinct breed as compared with the Chester White. There is no question but what the trouble between these two assicoations has done a great deal to retard the development of the white hog and these two associations should certainly be consolidated for the good of the breed and the convenience of the men handling the hogs.

I would not by any means buy an O. I. C. hog without it was eligible to registration in the Chester White Record, nor would I at the present time buy a Chester White hog without it was also eligible to registration in the O. I. C. Record Association.—Geo. A. Brown, Professor of Animal Husbandry, M .A. C.

PLAIN FACTS ABOUT THE JERSEY COW

I AM submitting for your consideration a few "plain facts."

Nearly every occupation of today is well advertised which is very proper.

Please do not confuse the term "advertise." Only a short time ago while witnessing a baptismal service I heard a little boy ask:

"Mama, what are they going to do?"

"They are going to baptize those people," she answered.

The child misunderstanding her put another question:

"Well, when are you going to get advertised?"

I repeat that nearly every walk of life is placed before the public in an interesting manner but there is one side of dairying which is not given as much attention as it should be.

Among the important dairy breeds in this county I find the Guernsey, Holstein and Jersey.

According to the figures of S. P. Sexton, our county cow tester, the high cow for last year was a Holstein.

She, a three-year-old, produced 511.2 lbs. fat in the association year with a feed cost of $89.52. The cow was fed and milked four times daily.

The next high cow belonged to the Jerseys and produced 499 lbs. fat. (in same length of time) costing $74.42. She did this at the age of five years with ordinary farm care and only two milkings daily.

The last of the three highest was a Guernsey of five years. She gave 498.4 lbs. fat which cost $108.32. She also was given common care and milked but twice daily.

A group of 7 Jersey herds, computing 65 cows, shows an average production of 6,290 lbs. of milk and 334 lbs. fat with an average milk test of 5.3%.

This group produced fat at $1.10 per cwt., and in comparison with the high herds of Guernseys and Holsteins they have produced fat more cheaply.

The Jersey breeders of this county have organized under the name "Kalamazoo Jersey Cattle Club" and can furnish more information concerning this breed. If you desire to know address Mrs. L. J. Bradley, Augusta, Mich.

—This is an interesting comparison. We are always pleased to receive the results obtained in cow-testing associations and will publish all such facts which members or testers care to send in.—Editor.

VETERINARY DEPARTMENT

WEANING PIGS

I have four pigs one month old. What is the proper age to wean those pigs? I want to feed them for market and keep the mother for brood sow. What kind of feed would you suggest? Is ground rye better than oats?—A. E., Applegate, Mich.

—Pigs should not be weaned before they are eight weeks of age, unless it is desired to rebreed the sow at once, in which case they must be weaned at from six to seven weeks of age. In either case the pigs should be started on feed in a creep to which the sow does not have access, at about four weeks of age. In this way they will learn to eat and will not obtain any setback at weaning time.

Neither ground rye, nor oats alone would make a satisfactory feed for young pigs, the ground rye not being especially palatable and the oats containing rather too much fibre. A combination of about two-thirds rye and one-third oats with the hulls sifted out of the oats, until the pigs are close to three months of age would make a good grain feed for them. Along with this, about two pounds skim milk should be fed with each pound of the grain to balance the ration. If milk is not available, about one pound of oil meal for each seven pounds of the rye and oats, or one pound of tankage for each twelve pounds of the rye and oats would give a well balanced ration.

After the pigs have reached a weight of around sixty to seventy-five pounds, cooked cull beans could make up half of the ration to excellent advantage.—Geo. A. Brown, Professor of Animal Husbandry, M. A. C.

COW A DANGER TO OTHERS IN HERD

I have a cow which aborted two months early and the veterinarian expects contagious abortion. Is it necessary or advisable to sell her for beef? Is her milk fit for us? Is it dangerous to other cattle to keep her on the farm?—G. M. F., Fowlerville, Michigan.

—If this cow aborted as a result of infectious abcrtion she is a danger to other susceptible cattle in the herd. The time of greatest danger of such an animal is the few days immediately preceding and following abortion, consequenttly it is questionable if the danger would lower at this time by selling her for beef. We have no reason to belive that milk from cattle affected with infectious abortion is unfit for human cousnmption.—E. T. Hollman, Asso. Professor of Animal Path., M. A. C.

TAKE DOG TO VETERINARIAN

—I wish you would advise me as to my hound. He is two years old and for the last month hasn't had much appetite; his eyes are dull, hair is dead looking, and seems to have no tied up.—J. C., Otsego, Mich.

From the little history given it would be impossible for me to make any kind of a diagnosis. The dog may be suffering from any one of several diseases and to try to make a diagnosis without first having had an opportunity to examine the dog would be purely guess work. Better take your dog to a good veterinarian at once and have him prescribe treatment.—John P. Hulton, Associate Professor of Surgery and Medicine, M. A. C.

RATIONS FOR DRAFT HORSES, BROOD MARES AND COLTS

EXPERIMENTAL and demonstration work by the University of Missouri College of Agriculture shows—

That draft horses averaging in weight approximately 1600 pounds and which did 4.8 hours work a day average farm work required an average daily ration of 14.91 of grain and 17.12 pounds of timothy hay.

That brood mares may be used efficiently for farm work but the yearly feed required by them is 26 per cent greater than the cost of reed for a gelding or "dry" mares doing the same work.

That brood mares working and nursing foals required 47 per cent more grain and 32 per cent more hay daily during the suckling period than dry mares.

That foals during the suckling period consumed an average daily ration of 3.85 pounds of grain and 1.35 pounds of hay, in addition to their mother's milk.

That draft colts consumed an average daily ration of 6.68 pounds of grain, 7.42 pounds of hay daily from weaning time until they were turned in pasture in the spring, a period of 219 days, during which time they gained 330 pounds and weighed at the close of the period 836 pounds.

That it required 4.40 pounds of grain and 4.83 pounds of hay to produce one pound of gain on draft colts from weaning time until turned on pasture the next spring.

That in using a grain ration composed of 2 parts corn, 2 parts oats, 1 part bran, it required 10.46 bushels of corn, 18.30 bushels of oats and 292.9 pounds of bran, to keep draft colts in good growing condition from weaning time until they were turned on pasture.

That 15 pounds of corn silage, 8 pounds oat straw, fed with 8 pounds of grain is a satisfactory ration for horses doing light work during the winter months.

SURVEY OF WOOL MARKET SHOWS OUTLOOK GOOD

(Continued from page 4)

3,151,888,000 pounds in the five years 1909 to 1913, a decline of nearly 17 per cent. The reduction is due to a loss in the world sheep population which will take time to build up again. World wool production in 1921 expressed in millions of pounds are given in the compilation referred to compared with the pre-war average is shown in the following table:

	Average 1909-1913	1921
North America	332	249
South America	587	461
Europe	845	694
Asia	273	228
Africa	210	177
Ociana	904	799
Total	3152	2608

According to this table decreases have taken place all over the world.

World wool production in 1922 is still an unknown quantity as only a few trade reports have been made public. These show increases in Australia and in British South Africa, but a decrease in Argentina about as large as the combined increase of the other two countries. The clip in the United States probably was smaller than last year although the latter was the smallest since 1900. Altogether there is nothing to suggest any material increases in world wool production in 1922.

6. Large stocks of wool which accumulated in the southern hemisphere during the war are gradually being distributed. Holdings of the British Australian Wool Realization Association has handled these stocks for Australia and New Zealand were only 1,212,000 bales of 330 pounds each on August 31 compared with 2,708,554 bales a year ago and the amount of free wool in those countries is no larger than on the same date last year. In short, world cousumption has been outrunning production in the last twelve to eighteen months so that supplies nearly everywhere have been reduced. Some of the surplus countries have fairly large holdings but stocks in importing countries are light so that the total is not considered excessive. European manufacturing countries are utilizing wool much more rapidly than they were in 1920 and early 1921 when the rate was below normal. They are buying freely in British and Colonial wool auctions as well as in other primary markets where prices show an upward trend in spite of only moderate purchases by the United States. Altogether, the decrease in world wool production appears to more than offset any decrease in wool consuming capacity resulting from the financial status of Europe. —By Department of Research, American Farm Bureau Federation.

SLAUGHTERING AND CURING MEATS ON THE FARM

(Continued from page 9)

cod to meet the portion first fisted. Split out the tendons between the dew claws and the hock, and tie the two legs together. The sheep is now ready to be hung up.

But first remove the front toes. Cut about an inch above the dew claws and break the front feet back. If it is a lamb, be sure to leave the significant straight joint.

With the sheep hung up, split the pelt from front to rear, through the midline and fist away the pelt, working down over the back toward the neck. It may be necessary to use the knife around the tail. When the neck is reached, cut off the head with the pelt at the atlas joint. Fold up the pelt to keep it clean on the inside.

Begin removing the entrails by cutting around the rectum and letting it drop down inside. Open the carcass by cutting straight down the belly, from cod to breastbone, taking care not to puncture the intestines by running two fingers along the inside as a protective guide.

Remove all the abdominal organs except the kidneys, being sure to get the bladder. Then cut the diaphragm and remove the heart, lungs and diaphragm together. Wipe all arts clean with a cloth wrung out of hot water, double up the front legs and slip a little cord, found by cutting into the fleshy part of the forearm, over the ankle joints.

OVER NINE FEET SNOW FELL IN SIX MONTHS

THE winter of 1879-80 was a mild one, with but little snow falling and the weather permitting farmers to clear land and to plow and drag their fields during every month. The winter of 1880-81 made up for lost time, commencing October 17, 1880, when four inches of snow fell and from that date until April 15th, the last day it snowed, there was 30 days in which it fell, the fall being 13 inches on two days—November 6 and the following January 31st. The total fall for the winter of six months was 116 inches.

The record was kept by Jacob Smith, a boy staying with Samuel Rinehart of plutocratic Porter that winter. It is doubtful if there has been as severe a winter here since. —National Democrat, Cassopolis, Mich.

GOVERNMENT BULLETINS OF INTEERST IN DECEMBER

A SMALL list of Farmers' Bulletins and Circulars of general interest during December are given below. Copies may be obtained free by addressing the Division of publications, United States Department of Agriculture, Washington, D. C. Specify number and name and whether Farmers' Bulletins or Department Circular.

Farmers' Bulletin; 477, Sorghum Sirup Manufacture; 662, Sample Trap Nest for Poultry; 702, Rabbits in Relation to Trees and Crops; 828, Farm Reservoirs; 847, Potato Storage Houses; 970, Sweet Potato Storage; 1100, Co-operative Marketing, Woodland Products; 1114, Common Poultry Diseases; 1116, The Selection and Care of Poultry Breeding Stock; 1288, Game Laws for 1922; 1293, Law Relating to Fur Animals, 1922.

Department Circular; 148, The Farm Woman's Problem; 149, Co-operative Cane-Sirup Canning; Producing Sirup of Uniform Quality.

"I've got to keep step with the times," writes Joe Lear,
"Please credit subscription ahead for a year."

Barren Cows Can Be Made Profitable

Don't send them to the butcher. They can be made to raise calves and produce milk in paying quantity. Barrenness simply means that the cow's genital organs are too weak to function properly.

Kow-Kare, the great cow medicine, acts directly on these organs and the digestion, correcting the serious disorder. D. B. Thomas, Knightville, Utah, writes us:

"I had a valuable Jersey cow eight years old that had had seven calves. Something went wrong with her after her last calf came, so that for two years she failed to become with calf. Fed her some of your Kow-Kare last Jan. and she was all right the first serving, and long before I had given her the whole package of your Kow-Kare that I purchased."

Mrs. Harvey Ray, Homer, Ill., writes: "The registered Shorthorn cow I wrote you about last year, and which I treated for Barrenness, under your directions, dropped a fine Bull calf Jan. 2nd. Less than one can of Kow-Kare did the work."

Hundreds of others tell us every year of making valuable producers from cows that seemed hopelessly barren.

COW BOOK FREE

KOW-KARE
DAIRY ASSOCIATION CO.
THE HOME COW DOCTOR

Kow-Kare is equally valuable in treating Abortion, Retained Afterbirth, Scouring, Bunches. Milk Fever and Lost Appetite. Thousands of dairymen use Kow-Kare one week each month to keep up the milk yield during the winter months.

Let us mail you, free, our valuable 32-page book. "The Home Cow Doctor." Kow-Kare is sold by feed dealers, general stores and druggists. We will send either the $1.25 or 65c size prepaid if your dealer is not supplied.

DAIRY ASSOCIATION CO., INC.
Lyndonville, Vt.

DUROC-JERSEY—WE HAVE A CHOICE LOT of extra good spring boars ready for service; shipped on approval, satisfaction guaranteed.
F. J. DRODT, Monroe, Mich., R. 1.

DUROC BOARS OF SENSATION AND PATH-finder, blood lines including the undefeated under year boar of the state and junior champion of State Fair. **MICHIGANA FARM, Pavilion, Mich.**

POLAND CHINA

BOARS AT HALF PRICE $25.00 From Mich. Pioneer herd of big type Poland Chinas. We have been breeding them big for 30 years. Our hogs represent the blood lines of Giant Buster, The Clansman, Liberator, The Yankee, Big Bob, etc. Write for what you want. **Jno. C. Butler, Portland, Mich.**

SELL REGISTERED SPOTTED POLAND China Pigs, 7 months old, Boars $25, Gilts $20. **Dr. Erwin Meyer, Drayton Plains, Mich., Box 43.**

HAMPSHIRES

A CHANCE TO GET SOME REAL HAMP-shires. Boar pigs, sired by Gen. Pershing Again, Gilt Edge Tipton, Messenger All Over 10th. Gen. Pershing 2nd., and other great boars. Writes for list and prices. DETROIT CREAMERY HOG FARM, Route 7, Mt. Clemens, Mich.

HAMPSHIRE AND SHORTHORNS—MARCH and April pigs weighing 100 to 150. Price $20 to $25 each. One red and one white bull 4 months old. Price $40. Each registered. Write or call
GUS THOMAS, New Lathrop, Mich

HAMPSHIRE SPRING BOAR PIGS NOW ready—place your order soon. 10 years in business. **JOHN W. SNYDER, St. Johns, Mich., R. 4.**

O. I. C.

O. I. C. PIGS OF NICE THRIFTY AUG. AND Sept. farrow, 40 lbs. or more; from large Prolific mothers, average 14 pigs to litter. Choice pig either sex, $15.00 C. O. D. Order now. Prompt shipment. Pedigree with each pig. **MAPLE VALLEY STOCK FARM, North Adams, Mich.**

O I C'S 25 LAST SPRING BOARS, GILTS not akin; fine big-growthy stock. Recorded free. One-half mile west of depot. Citizen Phone. **OTTO B. SCHULZE, Nahsville, Mich.**

REGISTERED O. I. C. SERVICE BOARS AND Bred Gilts, priced to sell.
J. R. VAN ETTEN, Clifford, Mich.

SHEEP

SHROPSHIRE

REGISTERED SHROPSHIRE YEARLING rams and ram lambs of exceptional quality and size. Priced to sell. Flock established 1890.
C. LEMEN, Dexter, Mich.

SHROPSHIRE RAMS AND RAM LAMBS
5 registered ewes. Write
DAN BOOHER, Evart, Mich., R. 4.

STRONG robust one and two yr. old Wool-Mutton Shropshire rams priced right. Tell us what you want. **Maplewood Stock Farm, Allegan, Mich.**

OXFORDS

OXFORDS RAMS ALL AGES—GUARANTEED breeders and to please. A few ewes also 10 ewe lambs. **Wm. Van Sickle, Deckerville, Mich., R. 2.**

RAMBOUILLET

FOR SALE—PURE BRED RAMBOUILLET rams. Good stuff. At farmers' prices.
J. M. EAGER, Howell, Mich., R. F. D. 6.

PET STOCK

PUREBRED SCOTCH COLLIES, SABLE AND white or the beautiful black and white. From heel-drivers. $10 and up.
SILVERCREST KENNELS, Gladwin, Mich.

FOR SALE—ANGORA GOATS—ONE REG-istered yearling buck, one registered yearling doe and doe kid six months old.
M. E. HESS, 111 N. Johnson Ave., Pontiac, Mich.

FERRETS FOR SALE AT $5 EACH
S. H. SHERER, Central Lake, Mich.

FOR SALE ANOTHER LITTER OF HEEL driving collies. They will make good watch dogs as the mother can't be beat. Hurry this time as the last litter advertised received 21 inquiries and enough had money in to take all the pups. Price $5.00 females, $7.00 males.
M. E. BROWN, Jonesville, Mich.

TOO LATE TO CLASSIFY

FOR SALE HOLSTEIN BULL. A LARGE FINE calf, large enough for light service. Born Feb. 17, 1922. A good individual, nearly all white. Dam an A. R. O. heifer. At 2 years 2 months she made 17.62 lbs. butter, 429.7 lbs. milk with absolutely no fitting. The man that buys this calf will get the worth of his money. Sire is a grandson of the $35,000 bull whose 10 nearest dams with one exception averaged 33 lbs. He is some bull and is siring some mighty fine calves. Price $75.00. F. O. B.
M. E BROWN, Jonesville, Mich.

REG. JERSEYS, POGIS 99th OF H. F. AND Majesty breeding. Young stock for sale. Herd fully accredited by State and Federal Government. Write or visit for prices and description.
GUY C. WILBUR, BELDING, Mich.

MICHIGAN BUSINESS FARMER
"The Farm Paper of Service"
TELL YOUR FRIENDS ABOUT IT

POULTRY BREEDERS' DIRECTORY

Advertisements inserted under this heading at 30c per agate line, per issue. Commercial Baby Chick advertisements 45c per agate line. Write out what you have to offer and send it in. We will put it in type, send proof and quote rates by return mail. Address The Michigan Business Farmer, Advertising Department, Mt. Clemens, Michigan.

POULTRY

We yet have a few hundred Pullets in Leghorns, Barred Rocks, White Wyandottes and Orpingtons. The most of these Pullets are near laying age and should be put into winter laying quarters soon. If you want a flock of winter layers, write us now.

Also Cockerels, Bronze Turkeys, Toulouse Geese and Pekin Ducks.

STATE FARM ASSOCIATION
Kalamazoo, Mich.

PULLETS, HENS AND COCKERELS

S. C. White Leghorns and S. C. and R. C. Black Minorcas. Must make room before cold weather. About ready to lay.
LAPHAM FARMS, Pinckney, Mich.

FOR SALE—150 WHITE WYANDOTTE Cockerels and pullets. All from my prize winning stock of very best American White Wyandottes laying strain. They win for me. They will win for you.
C. W. CASE, Rochester, Michigan

S. C. ANCONA COCKERELS HATCHED FROM H. Cecil Sheppards very best. Only a few, order early $3.00 to $5.00.
H. CECIL SMITH, Rapid City, Mich., R. 2.

FOR SALE—A LIMITED NUMBER OF April and June hatched White Wyandotte Cockerels from winter layers at $3.00 and $2.00 respectively. H. L. McLouth, Levering, Mich., R. 2.

CHOICE WHITE WYANDOTTE COCKERELS Pure bred laying strain, April hatch, reasonable
E. M. CONNOR, Jackson, Mich., R. D. 5.

LIGHT BRAHMA COCKERELS—PUREBRED Good strain, thrifty, prize winning. Write
MRS. E. B. WILLITS, Reading, Mich., R. 1.

LEGHORNS

LEGHORNS

S. C. Buff Leghorn Hens, Pullets and Cockerels. Hens and pullets $2.50 each; cockerels $3.00 to $5.00 each. Show birds a matter of correspondence. LAPHAM FARMS, Pinckney, Mich.

COCKERELS AND PULLETS, S. C. W. LEGhorns, Tom Barron strain, 250 egg utility line, April hatched, $1.35. C. O. D.
CECIL W. BOVEE, North Star, Mich.

FOR SALE May hatched S. C. White Leghorn Pullets also Rose and Single Comb Rhode Island Red Pullets. VALLEY RIDGE POULTRY FARM, Bloomingdale, Mich.

S. C. BUFF LEGHORNS AND BUFF ROCK cockerels also a few yearling yearling Brown Leghorn hens at farmers prices
E. B. HOLLENBECK, Athens, Mich.

BUFF LEGHORNS—SINGLE COMB. Early Hatched Cockerels.
J. W. WEBSTER, Bath, Michigan

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RHODE ISLAND REDS, TOMPKINS STRAIN Both combs. Stock for sale after September 15th.
WM. H. FROHM, New Baltimore, Mich R. 1.

R. C. RHODE ISLAND REDS, PULLETS AND cockerels, hatched May 1st.
A. F. GIERKE, Grayling, Mich.

ROSE COMB R. I. REDS, WHITTAKERS strain. Cockerels (April hatch) $2.00. Satisfaction guaranteed. HAMPTON & SONS, Bangor, Mich.

WHITTAKER'S R. I. REDS, 200 SINGLE comb red pullets at $2.50 to $5.00 each. Also both Rose and Single Comb cocks and cockerels. Write for calatog. Interlakes Farm, Box 4, Lawrence, Mich.

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ORPINGTONS BUFF, WHITE, BLACK Hatching eggs in season.
AUGUST GRABOWSKE
Merrill, Mich., Route 4, Box 41.

BLACK ORPINGTON COCKERELS
M. P. HERGERT, Jonesville, Mich.

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THOMAS ROZEBOOM, Muskegon, Mich., R. 4.

PURE BRED MAMMOTH BRONZE TURKEYS Champion strain. Large and vigorous.
MRS. B. SMATTS, East Jordan, Mich., R. 1.

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THOS. G. CALLAGHAN, Fenton, Mich.

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R. W. ROBOTHAM, Hesperia, Mich.

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D. F. MARSHALL, Beulah, Mich.

PUREBRED BOURBON REDS, LARGE VIGOrous. Evans strain. Hens $8. toms $10.
MARY BEACOM, R. 4, Mariette, Mich.

(Poultry continued on page 23.)

Poultry for Profit

COMB OF ANCONAS OR LEGHORN MALE

I wish to know if Ancona and Leghorn roosters have the same number of points on their combs, and what is the number for a thoroughbred.—J. S., Carsonville, Mich.

—The Standard of Perfection requires the comb of the Leghorn or Ancona male bird to have five serrations or points. For an additional point a cut of .5 is made in scoring. In addition to the number of points other things are considered. The comb should not follow the head very closely nor should it be very large and beefy. The comb also should be free from marks which are indentations in the front of the comb.

The novice is liable to place too much emphasis on the comb, sacrificing both body type and color pattern for this minor point.—E. C. Foremad, Associate Professor of Poultry Husbandry, M. A. C.

FEEDING SUNFLOWER SEEDS TO HENS

Please tell me how sunflower seeds should be fed to laying hens and in what amounts.—P. M., Bay Port, Mich.

—I might say that they are an excellent feed for birds during moult and could be fed at that time up to 20 per cent of the scratch feed.—C. M. Ferguson, Extension Specialists, M. A. C.

FATTENING POULTRY ON THE FARM

FATTENING poultry not only increase the size ,but improves the quality of the flesh. There is the same difference between a fattened chicken and an unfattened one as there is between corn-fed steers and range cattle. The market pays from three to seven cents per pound more for fattened poultry than for unfattened. This means a difference of from 15 to 35 cents on a five-pound chicken.

Chickens make best gains when about three or four months old. A cockerel will gain one pound in two weeks. Any of the meat or general purpose breeds makes economical gains.

It is profitable for farmers to fatten the poultry they have to sell, if they make provision for doing it properly and have a good market. Chickens make the best gains if confined in a crate or fattening pen and kept where it is cool and dark.

Equal parts of corn meal and bran mixed to a thin batter with sour milk or buttermilk makes a good fattening ration. Feed three times a day. Give little the first day; after that give all that will be eaten in 20 minutes. It is usually not profitable to keep poultry in the fattening more than two weeks.

EGG LAYING CONTEST UNDER WAY

THE First Annual Michigan International Egg Laying Contest got under way November 1st with 95 pens in place. Pen No. 88 arrived late in the week and four other pens entered have not yet arrived at the Contest grounds. The contest promises to be one of international interest with one pen from each of the following states: New York, Washington, Missouri, Rhode Island, Tennessee, Connecticut, California, Indiana and Ohio. Two pens from Oregon, two from New Jersey and four Canadian pens, three from Ontario and one from Quebec. Michigan poultrymen occupy the remainder with 83 pens entered. The management has been disappointed in the cancellation of two pens from England which would have added interest in the results.

The breeds are well represented with White Leghorns in the majority with 52 pens. Barred Rocks second with 18 pens. White Wyandottes occupy 9; Anconas, 7; Rhode Island Reds, 6; Brown Leghorns, 2, and one pen each of Buff Leghorns, Buff Rocks, Buff Wyandottes, Black Minorcas and Black Orpingtons.

Eighty-five of the pens got into action during the first seven days. Only 4 pens had all ten birds in production. Ten hens in all produced 6 eggs each during the first week.

Shaw's pen from South Haven have a small lead for the week with a production of 43 eggs, 4 eggs over Down's pen. Taylor's pen are close third, being only one egg behind the second pen. TerHaar's pen No. 79 are fourth with 36 eggs.

The Leghorns have a heavier production for the first week. Pens in this section, however, show considerable more maturity than the pens of the heaver breeds.

Leading pens of 10 birds each are as follows:

Plymouth Rocks

H. E. Dennison, (Barred) East Lansing, Michigan. 27 eggs.

Mrs. C. D. Finkbiner, (Barred) Clinton, Michigan, 20 eggs.

Wyandottes

Clyde Hollis, Hudsonville, Michigan. 23 eggs.

F. S. Sinks, Farmington, Michigan, 20 eggs.

Rhode Island Reds

L. O. Dunning, Delton, Michigan, 23 eggs.

Mrs. E. S. Travis, Vicksburg, Michigan, 15 eggs.

White Leghorns

Elmer E. Shaw, South Haven, Michigan, 43 eggs.

W. A. Down, Washington, Michigan, 39 eggs.

E. D. Taylor, Kalamazoo, Michigan, 38 eggs.

Alfred TerHaar, Hudsonville, Michigan, 36 eggs.

HOUSING TURKEYS IN WINTER

FREQUENTLY we hear the question, "How can I house my turkeys in winter?"

In answering this question there are several important things involved:

1. The natural characteristics of the turkey.
2. Other poultry on the farm.
3. Sanitation and disease prevention.

The turkey is not fully domesticated as yet and still holds many of its natural wild characteristics which must be considered. Turkeys have not been raised in confinement except at the expense of vitality and size. They are seclusive and stealthy. They have the power to withstand much cold if dry, clean and healthy, with plenty of fresh air.

Turkeys should not be housed with other poultry; one or the other will suffer, perhaps both. Difference in characteristics, habits, feed, sanitation and disease tendencies are the difficulties. These can all be overcome in one plan.

If turkeys are worth raising, and we know they are when farmers can sell from $400.00 to $1,800.00 worth in a single season, they are worth raising right. A shed closed tight on the north, west and east sides and the south side left open except for a 1-inch wire neting to keep the turkeys in and other birds out is a convenient shelter for turkeys in winter. On the inside it is well to have curtains of muslin or burlap so arranged as to be lowered in extreme weather.

It will be well to have the shed arranged with the low side to the south and with the door preferably at the east end. This plan gives plenty of shelter, will be dry, should be kept clean and sanitary, and will provide plenty of fresh air.

In summer it can be used, if desired for developing growing chicks or even for a summer laying or breeding house.—Dakota Farmer.

The per catia consumption of eggs in the United States, according to the Department of Agriculture, is half an egg each day.

FRUIT and ORCHARD

EDITED BY FRANK D. WELLS

NOTES AND COMMENTS

There is always a call for the old varieties of apples. The Rhode Island Greening is always in demand, so is the Spy. The highly colored Jonathan and King David may catch the eye and go for fancy fruit, but they do not take the place of the kinds that grew in the orchard on the old homestead.

There are never too many apples, but they are never all in the right place. They may not be worth gathering in one place, while in another they are scarcely to be had at all. Auto trucks and good roads are doing much to relieve this condition, but it is only a beginning. The parcel post is helping. But the flying machine will come to the rescue.

* * *

Unsprayed trees are object lessons this year. Their wormy, scabby fruit is in marked contrast to that of orchards which have received proper care. It becomes more evident with every year that it is "spray or surrender."

* * *

One tree in a peach orchard was not sprayed for leaf curl last spring. The leaves soon dropped. The tree was full of blossoms, but did not mature a peach. The sprayed trees kept their foliage and in September were loaded down with fruit. The moral is easly seen.

* * *

The huckleberry looks well for the future, so does the elderberry. In a few years they should have an established place among the cultivated fruits. Now won't somebody take the wild blackberry in hand and give us something with a flavor? This is a question that hundreds of consumers are asking.

* * *

If the raspberries are infected with anthranose, the young canes should be sprayed at least twice during the summer. When they have grown about a foot, spray them with Bordeaux. This should keep the disease in check, unless the canes are badly infected. The disease kills the bark in spots, the result being that the canes are weak and the fruit undersized, perheps ripening prematurely, or drying up. Canes badly affected should not be used for propagation.

* * *

There are several diseases new to Michigan which have recently been brought to the injury of the cane fruit. They should receive attention, as they are a menace to raspberry culture. The fruit has not been plentiful for severl years, and there is anxiety lest it become still more scarce. If your canes look diseased, write at once describing the conditions, to the State Orchard Inspector, Department of Agriculture, Lansing, Michigan. If the diseases are to be checked it is the utmost with the government officials.

COLLECTION BOX

PROMPT SETTLEMENT

I received a letter from — just the day before I received your card stating that they would accept the machine for refund less expressage, which is satisfactory of course, and the machine is now packed and ready for shipment tomorrow morning. As soon as I receive settlement I will let you know and I want you to see the letter they sent me. I can't thank you enough for your kindness in this matter and I am very truly yours, Mae E. Johnson, Kent Co., Mich.

SOON GOT GOODS

I received a card asking if I had come to a settlement with the — Store Co., claim No. 955. It did not take long after the Business Farmer took hold of the matter before I received the goods. I wish to thank you for the aid you gave me. My only regret is that I did not write before.—A. S. W., Tawas City, Mich.

The bin in which potatoes are to be stored should be clean. It should be thoroughly swept and if there has been trouble with rot in it before, it is best to disinfect it.

FUR DEPARTMENT

Edited by A. R. HARDING, America's Foremost Author and Trapper

QUESTIONS INVITED

(Continued from Nov. 11th issue)

HARVESTING THE FUR CROP

THE skunk, as a rule, is a very stupid animal, and traps set without any covering have been known to make a catch. Traps, however, had best be covered for there is no telling what animal may come along and if the trap is properly set and covered a catch is apt to be made. Foxes, mink, coon and other animals have been caught in skunk sets, so it pays to make all sets carefully. Where there is fur bearers, larger than skunk, it is well to use a trap large enough to hold whatever happens to step on the treaddle.

Den sets should be made just far enough in so that dogs will not get caught, and also out of the way of stock, if near residence. Remove enough earth, so that when the trap is carefully covered, will be level with the balance of the surroundings. Place fastening back as far as length of chain will permit. Extension chains, about 27 inches long, and selling at about $1.50 a dozen are now made. Trappers should carry a few to use when regular chain is not of sufficient length. This is done so that when a catch is made it is not apt to get into the den, but will nine times out of ten, pull the fastening away from the den—just as the trapper figured.

If the mouth of the den and immediate surroundings has leaves, cover trap and chain with leaves; if grass use grass. In other words cover with same material so as not to arouse the suspicion of the animal. One of the secrets of trapping is to make a set and leave everything apparently as it was before. Do not get covering to heavy—just enough to conceal the trap. If end, or long-spring style of trap is used, turn the spring to one side so that the animal will not step on spring.

Dens that show hair and dropping signs, are as a rule, splendid places to set. Such signs are more apt to be seen at the beginning of the trapping season than later. If the game is still living there and the nights are favorable for its moving, the chances are good for a catch.

In setting traps as well as looking at them after the set is made, care should be taken and as little sign made as possible. If there is much disturbance, such as ground tracked up, leaves moved, entrance to den partly blocked, etc., the game may become suspicious. If mouth of den is too large it may be lessenend by pushing a stick or two into the earth just beyond the trap. These sets are largely for land animals.

Fox, wolf and wildcat do not frequent dens except when the young are born and are being raised, so that few are trapped at dens when the fur is prime. This is especially true of fox and wolf; wildcat frequent dens somewhat more. These animals are sometimes caught at the carcasses of animals and fowls while others are decoyed to sets or caught at blind sets, which means setting traps in their trails, without bait. Such sets must be carefully placed and skillfully covered.

The "cubby set" is much used throughout Michigan, especially the Northern half of the Lower Peninsula and all of the Upper Peninsula, The "cubby" is made in various ways and sizes. For Mink it is often made by driving stakes close together forming a circle about 18 inches in diameter, with an opening next the water of a few inches, where trap is set. Bait is placed in center and may be rabbit, fowl or any fresh piece of flesh.

Many trappers make or build "cubbies" out of rock and chunks and for mink the size is about fifteen inches deep and six or eight wide with end towards the water open and where trap is set. This type cubby is covered and is not apt to be molested by birds. Fish are also used for bait.

A very good mink set can be made along a small stream where mink are using by driving stakes close together, leaving an opening of a few inches, where trap is placed. Other likely places are under bridges, old roots and overhanging banks. Where the bank is steep with only a few inches between the bank and water, is another good place, especially if there are tracks. If the passage is too wide, a rock, chunk or stakes (old sticks) so driven as to guide the game into the trap adds to the sureness of a catch.

Mink, especially the males, are great wanderers, often traveling several miles in a night. In fact they are on the go from dark to dawn often, and when daylight overtakes them they will hole up for the day. A mink, however, is not apt to go more than a mile or two from where born and raised other than at mating season when they go much farther. Mink seek the outlet of tile ditches and where such empty into streams is an ideal place. Set in about two inches of water. The trap should be covered but if the running water is so swift that this is impossible make the set anyway. A stone is placed a few inches from mouth of the tile will sometimes check swiftness of water so that coverng will stay on.

Dens along the banks of streams ponds and lakes are always good places to set for mink. Muskrat dens and other holes near the water are generally explored by wandering mink and traps set at dens that are evidently not much used, often result in catches. The nature of the mink is to explore all dens. Some trappers, before trapping season, dig dens at the edge of the water, where traps are set when fur primes up. These artificial dens are about 18 inches deep.

Old drift piles along streams are good places to catch mink for they wander and hunt over such pretty thoroughly. Bait here can be used to advantage by placing in a pen or "cubby" as already described. Still another good set can be made by placing two logs about six inches apart and another on top. These should be either near the water or by some drift pile. A trap set at either end may fool some passing mink.

Some years ago when making the rounds with a trapper up in Iron county. I recall that he had a mink at either end of such a set. The two traps were over six feet apart and about the middle the trapper had fastened a bait of fish. Both mink were dead and drowned. The traps had not been looked at for three days. I think the catch was six mink that day and four the following. This trapper had out some forty traps for mink covering a line of more than twenty miles. His catch was about forty mink every season at that time.

Perhaps something more about the mink in the Upper Peninsula will be of interest. I have written to the locality where I was with the old trapper some ten years ago and find that there are far fewer mink there now than then and trappers more plentiful. These mink were not large compared with the Central Ohio mink, they would not be more than medium size, but owing to their dark color and fine fur, they are worth somewhat more than Ohio mink. Few mink of Northern Michigan weigh as much as 3 pounds while Ohio, Indiana, or Illinois weigh 3 1-3 to as much as four pounds.

Michigan long has been one of the good muskrat states but during the past few years, since this fur has become so high, they have been much reduced in numbers in all parts of the state. Dealers and buyers classify this article as spring, winter, fall and kitts. Spring are those caught say from about February 10 to April; winter, December and January; fall, November; kitts are young muskrat—less than half the size of grown.

(Continued in Dec. 9th issue.)

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MARKET FLASHES

TRADE AND MARKET REVIEW

THOSE who expected the election of several Democratic Senators to disturb the even trend of business improvement are doomed to disappointment. In the days of yore Big Business was supposed to be the protecting arms of the Republican party and whenever anything happened to its darling, it flew into a terrible rage, and raised havoc with things in general. But those days have gone, and in their stead has come a more intelligent citizenry and a more intelligent partisanship which seems some good in people and things of a Different political complexion. A change in the political garments of the administration no longer gives business a headache or a fever.

Despite the fact that winter is just outside the door and many coal bins are empty, the nation at large is in a pretty healthy and cheerful condition. Many of them are in bad shape but not as bad as they have been at other times. Dire predictions are made as to what will happen to agriculture unless relief comes soon. Pres. Howard of A. F. B. F. declares farmers are headed straight for the abyss of bankruptcy and the only thing that can save them are more credits. Potato growers are suffering the worst of all because of the general demoralization of their market.

The general trend of commodity prices is upwards. This is true of nearly all farm products with the exception of potatoes. Shoes, clothing and farm utensils show an inclination to advance. Indeed, some goods are higher now than 30 days ago. It begins to appear that the prices of farm products and other commodities will never reach that happy pre-war balance which Prof. Friday was promising us some time ago.

WHEAT

Developments in the wheat market the past fortnight prove our statement of two weeks ago that the bull movement in wheat was not over. As a matter of fact, some people are beginning to wonder if it will be over until another crop is harvested. For the trend is slowly, but surely upward, and nothing seems to stem it. Export business is good, milling demand is brisk, and the speculators are eager to buy. With such a condition prevailing, how can there be lower prices? Every effort of the bears to check the advance has met with failure. We no longer dare to question the accuracy of Mr. Foster's prediction that we would see $1.50 wheat by January 1st, for it surely looks that way.

Prices

Detroit—No. 2 red, $1.36; No. 2 white and No. 2 mixed, $1.34.

Chicago—No. 2 hard, $1.22@ $1.22 7-8; No. 2 red, $1.30 1-2.

Prices one year ago—Detroit, No. 2 red, $1.25; No. 2 white $1.22.

CORN

Corn markets with the exception of Chicago are firm and active although prices in most cases are no higher than they were a week ago. A great deal of feeding is being done throughout the west and the greater part of the grain is rapidly going into consumption. During the past week buyers on the markets have been plentiful with prices at present levels but as soon as there was any movement of prices upward the purchasers disappeared. Receipts are moderate and dealers expect them to be smaller this week owing to unsettled weather. Shipping demand is reported slow.

Prices

Detroit—No. 2 yellow, 79c; No. 3 yellow, 78c; No. 4 yellow 77c; No. 5 yellow 75c.

Chicago—No. 2 mixed 73 1-4@ 73 1-2.

Prices one year ago—Detroit, No. 3 yellow 53c; No. 4 yellow 51c.

MARKET SUMMARY

All grains active after recent advances. Wheat reaches top price of season. Beans firm. Eggs in demand. Poultry higher and active for holiday trade. Hay wanted at better prices. Cattle steady. Hogs weak and lower in some cases. Sheep strong to higher. Provisions higher in sympathy with grains. Market outlook encouraging for farmer.

(Note: The above summarized information was received **AFTER** the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press —Editor.)

OATS

Oats are taking the course we have confidently expected they would in sympathy with wheat. New high points for the season were recorded last week for December and May delivery. Receipts were larger last week at nearly all points.

Prices

Detroit—No. 2 white 49 1-2c; No. 3 white 48c; No. 4 white 46 1-2c.

Chicago—No. 1 white 45 3-4c; No. 2 white 45 1-2 @ 46 1-2c.

Prices one year ago—Detroit, No. 2 white 39c; No. 3 white 36c; No. 4 white 31 1-2c.

RYE

Rye is in big demand for export and advances in price were noted on all markets last week. It looks like we are going to have another opportunity to say, "We told you so." We stated last week we were bullish on rye and expected to see the price go to $1.25 within the next three months. Chicago dealers are all of the opinion that rye will reach $1 in the near future. There is nothing to prevent it from going higher and much that would cause it to. Germany is one of the leading buyers of rye in the market at present and is taking large quantities because of the financial saving compared with wheat. It is freely predicted that the entire surplus of rye will soon be disposed of. Gains in price at Detroit last week amounted to 4c.

Prices

Detroit—Cash No. 2, 93c.

Chicago—Cash No. 2, 92 @ 92½c.

Prices one year ago—Detroit, No. 2, 84c.

POTATOES

We want to weep when we write of the potato market. We wish there were something we could say to comfort the farmers whose soul livlihood is wrapped up in his potato crop. Many have written and asked for a personal opinion on the market, which we cannot give. It looks to us as though potatoes cannot go lower, but it looked the same way thirty days ago when they were 10 to 20 cents higher than they are now. There are two important factors which the potato grower should remember. One of them is, that an enormous amount of potatoes have been taken to market. Farmers who sell at retail to nearby cities have been particularly anxious to get rid of their holdings. Likewise a great number of potatoes have been wasted. Hundreds of thousands of bushels have not been dug. What effect this waste will have on the final reckoning we do not know, but they lend strength to the hope that higher prices may develop before the coming of spring. Those who can afford to hold their crop are holding; most of the others have sold. If a reaction does not develop by midwinter it will be a very strange thing.

Prices

Detroit—$1.05 per cwt.

Prices one year ago—Detroit, $1.-

Chicago—80c @ 95c per cwt.

BEANS

According to the propaganda of the sugar manufacturers the farmers up in the Thumb are cussing themselves for planting more beans this year than sugar beets, for, according to the story, sugar beets are proving a more profitable crop than beans this year. We'd like to hear from some of our bean growers on that subject. The story sounds very fishy. Beans are a better buy today at $6 a cwt., than sugar at $7. The chances are ten to one that beans will go at least 25 per cent higher before another crop, but if sugar advances in any such proportions as that it will be long after the factories have settled with the farmers.

Prices

Detroit, C. H. P., $6.75 per cwt.

Prices one year ago—Detroit, C. H. P. $4.30

HAY

Hay markets are quite firm although some declines in prices took place last week due to heavy receipts and lack of demand. Owing to bad condition of roads country loadings have been restricted at many points and as a result several markets have barely had sufficient hay to take care of the demand. Such a condition existed at Chicago and prices advanced the latter part of the week.

Prices

Detroit—No. 1 Timothy $17 @ $17.50; light standard $16.50; light mixed $16.50 @ $17.

Chicago—No. 1 Timothy $22 @ $24; No. 1 light clover mixed $21 @ $22; No. 1 clover mixed $19 @ $21.

Prices one year ago—Detroit, standard timothy $18 @ $19.

WEEKLY MARKETGRAM

U. S. Bureau Agricultural Economics

Washington, D. C., for the week ending November 18, 1922.

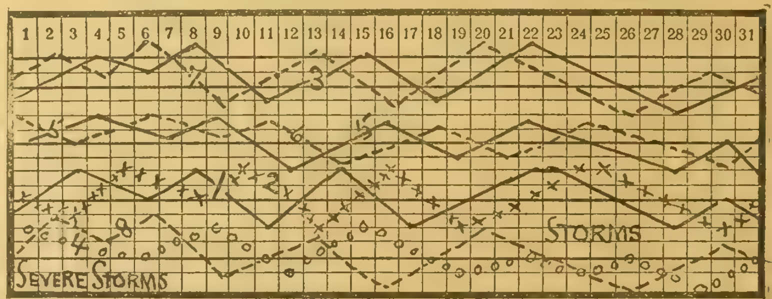
Live Stock and Meats—Compared with a week ago, Chicago hog prices ranged from 20-50 cents lower. Strictly good to prime beef steers steady to strong, others unevenly 25 to 50 cents lower; Better grades beef cows and heifers, stockers and feeders in between grades beef cows and lower grades butcher heifers mostly 25 cents lower; Bulls 10 to 15 cents higher; Veal calves largely $1 lower. Fat Lambs steady to shade lower; Yearlings and feeding lambs steady, sheep strong to, 50 cents higher. On Nov. 18, Chicago hog prices were 5 cents to 10 cents lower than Fridays average. Cattle, sheep and lambs practically unchanged. Nov. 18 Chicago prices: Hogs, top, $8.20. Bulk of sales $7.80-$8.10; Medium and good beef steers $6.90-$11.75; Butcher cows and heifers $3.40-$10.50; Feeder steers $5.25-$5.75; Light and medium weight veal calves $8-$9.75; Fat lambs $13-$14.75; Feeding lambs $12.25-$14.25; Yearlngs $9.75-$13.25; Fat ewes $5.50-$8. Stocker and feeder shipments from 12 important markets during the week ending Nov. 10 were: Cattle and calves 154,735, hogs 12,921; Sheep 173,401. In eastern wholesale fresh meat markets beef was steady with prices of a week ago, veal and mutton firm to $1 higher and lambs $1-$3 higher. Pork loins weak to $1 lower. Nov. 18 prices good grade meats: Beef $14-$18; Veal $13-$16; Lamb $23-$28; Mutton $12-$16; Light pork loins $17-$20, Heavy loins $15-$19.

Dairy Products—Butter markets however ruled steady to firm during the week with prices practically unchanged except at Chicago where

THE WEATHER FOR NEXT WEEK

As forecasted by W. T. Foster for The Michigan Business Farmer

FOSTER'S WEATHER CHART FOR DEC 1922



Straight, heavy, horizontal lines represent normal temperatures, which is the average of same days of the year for forty years. Crooked lines above normal lines mean warmer; below, cooler; that marked 1 is for section 1, north of latitude 47, between meridian 90 and Rockies crest—2 for section 2 on my section map is for east of meridian 90, north of latitude 47—3, between latitudes 39 and 47 and between meridian 90 and Rockies crest—4, east of meridian 90, between latitudes 39 and 47—5, south of latitude 39, between meridian 90 and Rockies crest—6, east of meridian 90, south of latitude 39—7, north of latitude 43½, west of Rockies crest—8, south of latitude 43½ to Mexican line and west of Rockies crest.

Washington, Nov. 24, 1922—One of the greatest storm periods within a year will occur during the week centering on Christmas day. In that great storm all the radical causes—and then some—that terminated in that destructive tornado in the middle southwest Nov. 4, will be combined in the besom of destruction that will sweep the country during the holidays. The principal cause centers on Christmas day, but as there will be five causes from December 23 to 26 the exact date and place where and when the great storm will break cannot be determined. The great destroyers are of the same nature as a thunder storm, with clouds rushing toward a center armed with their thunder bolts. Neither can the kind of storm now be determined; much depends on where it strikes. It may be a blizzard or a flood, a tornado or a hurricane. The season suggests a great winter storm, with the piercing arrows of the blizzard in one section and the balmy days of an autumnal Indian summer in another. But prepare for great weather extremes during the Christmas holidays.

Michigan—Most severe storms and most precipitation near Nov. 29; normal precipitation. Highest temperatures Dec. 1-9; lowest 5.

All indictions are that first week of December will be unusually warm with more than usual rain, followed by very bad, cold, stormy weather, inclined toward blizzards. There are so many great magnets, planets, concerned in that great storm period that I will not be able to get the exact dates. Better get your outdoor affairs arranged before end of November, although you may get some good weather first few days of December. When that great storm breaks you will need some shelter. Some good weather is expected between this great storm period and the bad storms of the Christmas holidays.

Michigan State Farm Bureau

Produce Exchange

"The only produce commission house in Detroit owned and controlled by farmers."

Works for interest of the producer at all times.

Well-trained, experienced salesmen in all departments.

Products Handled

We are handling to advantage, poultry, eggs, apples and other fruits, potatoes, celery, onions, carrots, cabbage, rutabagas, purple top turnips and other vegetables.

Increase Net Returns

By shipping to us through your local Co-op. in carload lots. Carload shipments save you extra charges that go transportation companies on less than carlot shipments. They also enable us to divert when other markets would net more than Detroit's.

We Need Poultry to Supply our Holiday Trade

To get highest available Detroit prices see your local Farm Bureau or Co-op. Manager for particulars on how to make shipments of Chickens, Turkeys, Geese, Ducks, and dressed Veals, Hogs and Eggs.

Sales and returns usually made within 24 hours, thus avoiding shrinkage.

Farm Bureau Produce Exchange

2729-2731 Russell St.,
Detroit, Mich.

Phone Cadillac 2270

Producers who are unable to ship through a Co-op should write us for information on how this service may be obtained.

under a shortage advances amounting to about 2 cents have occurred. Both fresh and storage butter moving freely. Closing prices, 92 score butter: New York 50c; Phila. 51c; Boston 49c; Chicago 50 1-2c. Cheese prices were unsettled during the week with demand slightly improved and a slight gain in prices on some styles. There is more demand for held cheese; Production of fresh cheese decreasing. Cheese prices at Wisconsin primary markets Nov 17: Flats 24 1-2c; Twins 24 1-4c; Daisies and Longhorns 24 1-2c; Square prints 25 1-4c.

MISCELLANEOUS MARKET QUOTATIONS

Detroit, Monday, November 20th.

BUTTER—Best creamery, in tubs, 40@44c per lb.

EGGS—Fresh, current receipts, 40@45c; fresh, candled and graded, 45c@52c; refrigerator firsts, 26@28c per dozen.

HONEY—Comb, 23@25c per lb.

CELERY—Michigan 20@30c per doz; square, $1@$1.25

DRESSED HOGS—90 to 100 lbs., 13c.; 130 to 160 lbs., 11@12c.

CHESTNUTS—33@35c.

CABBAGE—Home grown $12@$16 per ton.

POP CORN—4 1-2@5c; Little Buster, 7 1-2@8c per lb.

ONIONS—$1.65@$1.75 per sack of 100 lbs; Spanish $.215@$2.65 per crate.

DRESSED CALVES—Choice, 14@16c; medium, 12@14c; large coarse, 7@12 per lb.

LIVE POULTRY—Best spring, 22@23c; medium, 19@20c; leghorns, 14@17c; large fat hens, 23@24c; medium hens, 20@22c; small hens, 14c; old roosters, 15c; geese, 22@23c; large ducks 22@24c; small ducks, 18@21c; turkeys, 38@40c per lb.

WOOL—Delaine unwashed, 54@55c; fine unwashed, 48@49c; ½ blood unwashed, 51@52c; 3-8 blood unwashed, 51@52c; 1-4 blood unwashed, 50c.

Chicago

APPLES—Dealers report a fairly active demand for sound and large apples. The unfavorable weather curtailed the movement but, in spite of this, prices were maintained. Heavy supplies were offered of all varieties. Dealers feel that, at present prices, an enormous consumptive demand should develop. They are realizing that the supplies of really high grade apples are not as abundant as was formerly thought. Well posted apple men here feel that, when good, brisk apple-eating weather arrives, an enormous consumptive demand will develop, due to the apple advertising.

Extra fancy Jonathans sold $2.25; Winter Bananas, $2@$2.25; Rome Beauties, $2.25; Delicious, $3@3.25; Wageners, $1; fancy of all varieties, 25c lower; C grade stock, 50@75c lower. In bbls.: Jonathans, @$6; Greenings, $5; Northern Spices, $5@6; Grimes Golden, $5; Kings, $4.50; Michigan 20 oz., $4.50@4.75; Baldwins, $4.25@4.50; orchard run, $1@2 lower. In bulk: Greenings, $1.25@1.50; Ben Davis, $1@1.25; Baldwins, $1.50; hand picked Jonathans, $2.50.

CELERY—Improved demand was noted owing to the approach of Thanksgiving. Better grades were wanted. Kalamazoo, $1; Kalamazoo flats, 50@60c.

CABBAGE—Just fair demand for medium sized heads. Colo., $1.50; fancy, 85c; large crates, $1; fancy home-grown, 50@60c.

ONIONS—Just fair demand. Supplies were plentiful. Indiana yellow, $1.50@1.75; white, $3; Utah yellow, $1.25@1.50; Spanish, $4@4.50; half cases, $2.25@2.50.

WOOL

Duller trade, but steady to firm prices, mark the wool trade in the midwest at present. Stock of native wools are virtually exhausted, so that holders are less inclined to sell and movement is not large. With dwindling stocks, the price tendency is upward, but relatively few sales are reported, on account of the low stocks on hand. On account of small volume of sales, many of the quotations are more or less nominal, but dealers are of the opinion that if they had the wool to sell they could get these or even better prices.

ITALY BUYS GRAIN FROM U. S.

IN reply to questions regarding the use of corn in Italy, the American Consul General at Genoa answers as follows: "In so far as known to the American Consul General at Genoa nothing is being done in Italy by the United States Government or by private agencies to popularize or increase the use of American corn either as a food product for people or grain supply for stock. Since the beginning of the year 1922 the importation of grain has been free from any Government control and at the present time there are no taxes on imported grain so that the prices of the home product and the imported product are very nearly the same. The largest amount of grain imported into Italy originates in the United States."

AMERICAN CORN TO GERMANY

OF the 16,000,00 bushels of corn imported into Germany (January-August), nearly 14,000,000 bushels or 85 per cent had its origin in the United States. During the same time Germany imported 16,500,000 bushels of wheat, 38 per cent of which came from the United States and 50 per cent from Argentina according to a report received from Assistant Trade Commissioner, D. L. Breed, October 7, 1922.

Growers and Shippers of Farm Produce

We have reliable customers in the market every day for carloads of

Potatoes, Apples, Hay, Beans,

Also Hand Picked Beans in Bag Lots

Ship to us and receive the highest market price. Selling charges very reasonable. Wire or write for dependable market information.

CHARLES J. YOKOM & COMPANY

Brokers and Distributors
Twelfth Street Produce Yards
Phone West 2512 DETROIT, MICHIGAN.

Ship Your Poultry, Eggs, Veal, Produce of all kinds to

HENRY T. FRASER,

Western Market, Detroit

Wholesale Commission Merchant

Look us up.

References—
Detroit Produce Association.
Detroit Board of Commerce.

We solicit your inquiries.

Cull Beans, $15.00 per ton
Bean Meal, $20.00 per ton

f. o. b. Michigan. A safer feed than Cotton Seed Meal and cost less than half.
Order today.

PORT HURON STORAGE & BEAN CO.
PORT HURON, MICH.

Cured Her Rheumatism

Knowing from terrible experience the suffering caused by rheumatism, Mrs. J. E. Hurst, who lives at 608 E. Douglas Street, C-489, Bloomington, Ill., is so thankful at having cured herself that out of pure gratitude she is anxious to tell all other sufferers just how to get rid of their torture by a simple way at home.

Mrs. Hurst has nothing to sell. Merely mail your own name and address, and she will gladly send you this valuable information entirely free. Write her at once before you forget.

FARMERS ATTENTION

We are in the market for Red Clover either medium or June. Please send us samples of your offerings. We feel sure we can Quote you an attractive Price.

SIOUX CITY SEED CO.
Millington, Michigan

HELP WANTED MALE

EARN $110 TO $250 MONTHLY, EXpenses paid, as Railway Traffic Inspector. Position guaranteed after 3 months' spare time study or money refunded. Excellent opportunities. Write for Free Booklet G-165, STANDARD BUSINESS TRAINING INST., Buffalo, N. Y.

WANTED—HERDSMAN FOR HERD REGistered Aberdeen Angus. Apply by letter giving references, stating experience, pay expected, if married and family. THE KNEELAND-BIGELOW CO., Lewiston, Mich.

WANTED—MARRIED MAN BY MONTH OR year to work on dairy farm. B. S. MUNN, Salem, Mich.

WANTED SINGLE MAN FOR YEAR. PREfer stock feeding experience, good wages, and good home, position open at once. CHAS. D. HARSCH, Siloam, Mich.

WANTED—MARRIED MAN BY MONTH OR year to work on dairy and general farm. EDD. KING, Sodus, Mich.

POULTRY

CHOICE WHITE HOLLAND TURKEYS FOR sale. May, June and July hatches. Write for prices before buying. **Mrs. E. Hollis, Smiths Creek, Mich.**

MAMMOTH BRONZE TURKEYS. START right by buying strong, vigourous, pure bred stock. Write for prices.
MRS. PERRY STEBBINS, Saranac, Michigan.

WHITE PEKIN DUCKS AND DRAKES $2.00 each. S. C. W. Leghorn cockerels from culled flock $1.50 each. These prices are for immediate delivery F. O. B. Oxford. Also have geese and turkeys. **Mrs. Earl De Lano, R. 1, Oxford, Mich.**

FOR SALE CHOICE WHITE PEKIN DUCKS and drakes and mallards
CEDAR BEND FARM, Okemos, Mich.

WHITE WYANDOTTES—MARTIN STRAIN Michigan State Fair winners, 1922. Cockerels and pullets, $3 to $7.
WAYNE CHIPMAN, Washington, Mich, Route 2.

THOMPSON STRAIN BARRED ROCKS, DARK matings only. Cockerels $3, Pullets $1.50.
MRS. FRED KLOMP, St. Charles, Mich.

Other Poultry ads on page 20

—KEEP M. B. F. COMING—

The Michigan Business Farmer, Mt. Clemens, Mich.

I enclose $........ for my subscription at following rates:

TWENTY-SIX (26 ISSUES........................ 50c ( )
FIFTY-TWO (52) ISSUES........................ $1.00 ( )
ONE HUNDRED FIFTY-SIX (156) ISSUES.... $2.00 ( )

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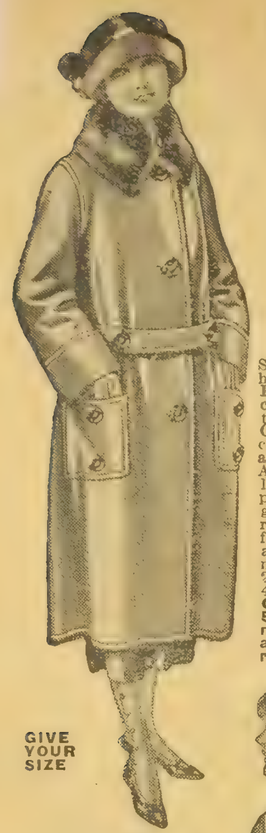
If this is a renewal mark (X) here ☐

Sharood Knocks the Bottom Out of Prices

Here are values absolutely unequaled anywhere else in America. We have fairly "Knocked the bottom out of prices" to make these amazing offers. Judge for yourself. Don't send one cent. Just letter or postcard brings any of these smashed price bargains. Merely give name and number of each article you want. Also state size and write your name and address plainly to avoid delay. Pay nothing till goods arrive—then only the bargain price and postage. If you are not delighted with your bargain, return the goods and your money will be cheerfully refunded. ORDER NOW.

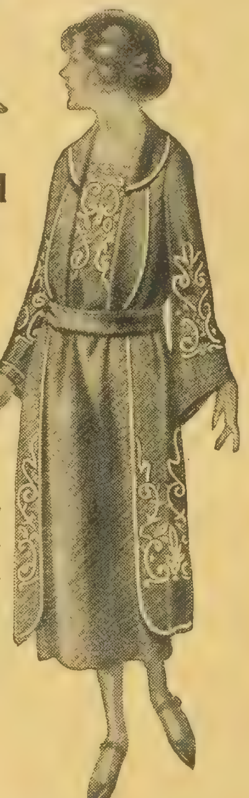


Women's Fur Collared COAT

$5.98

Sharood proves again his claim to "Lowest Prices in America" in presenting this pressed Velour Coat. Where else could you find such a coat at this price! A practical and good-looking model of pressed velour with generous collar of real Brown Coney fur. All-around belt and button trimmings. Sizes 16 to 20, women's 34 to 46.
Order by No. 28E-5703. Send no money. Pay $5.98 and postage on arrival.

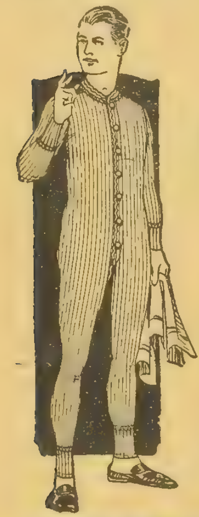
GIVE YOUR SIZE



Embroidered Gabardine Dress

$2.98

This delightful model is sure to be one of the favorites of the season. It is of beautiful cotton garbardine with vestee, smart bell sleeves and fashionable panels richly embroidered. The self material belt ties gracefully at back. Sizes 16 to 44. **Order Navy by No. 28E5525. Order Brown by No. 28E5526. Send no money. Pay $2.98 and postage on arrival.**

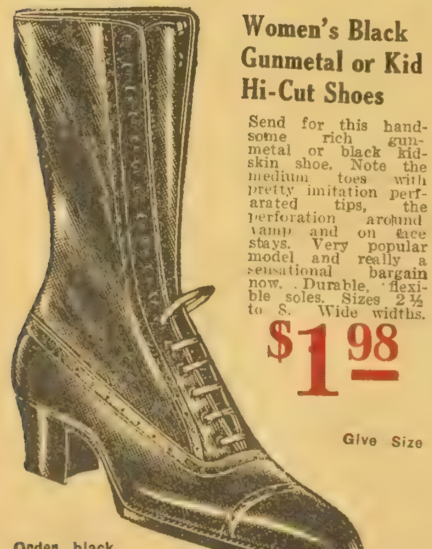


MEN'S WINTER UNDERWEAR

99c

Heavy weight flat knit union suits of long fibre cotton in popular Jaeger or gray Random color. Brushed fleece lining. Wrists and ankles elastic knit. Sizes 34 to 46 chest. **Order Jaeger color by No. 28C1279. Order Random gray by No. 28C1280. Pay 99c and postage on arrival. State size.**

Boys' Flat Knit Union Suits of fine quality cotton. Sizes 22 to 34 for 3 to 16 years. Order by No. 28C1358. Pay 79c and postage on arrival.



Women's Black Gunmetal or Kid Hi-Cut Shoes

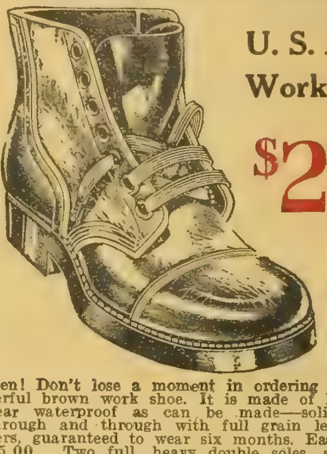
Send for this handsome rich gunmetal or black kidskin shoe. Note the medium toes with pretty imitation perforated tips, the perforation around vamp and on lace stays. Very popular model and really a sensational bargain now. Durable, flexible soles. Sizes 2½ to 8. Wide widths.

$1.98

Give Size

Order black kid by No. 28A122. Order black calf finished. by No. 28A476. Pay $1.98 and postage on arrival.

GUARANTEED! For Six Months' Wear

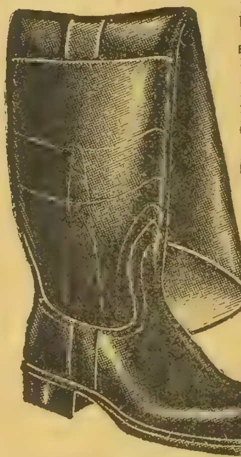


U. S. Army Work Shoe

$2.98

Men! Don't lose a moment in ordering this wonderful brown work shoe. It is made of leather as near waterproof as can be made—solid leather through and through with full grain leather uppers, guaranteed to wear six months. Easily worth $5.00. Two full, heavy double soles, sewed and nailed for greater strength. Extra wide, full leather counter, riveted to prevent ripping. Sizes 6 to 14, wide widths. **Order by No. 28A699. Send no money. Pay $2.98 and postage on arrival.**

Men's Special Hip Boots

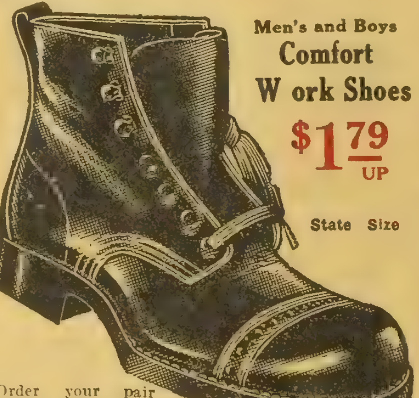


Men's pure gum hip boots; friction lined; heavy corrugated sole and heel; guaranteed first quality. Made of the very best rubber. Usually retailed at $5 Be sure to order your pair while this great saving offer lasts. Sizes 7 to 11. Wide widths. No half sizes. **Order by No. 28A940.**

$2.98

GIVE SIZE

Send no money. Pay $2.98 and postage on arrival.



Men's and Boys Comfort Work Shoes

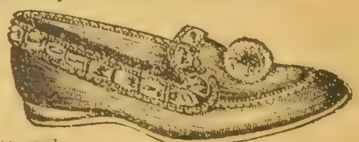
$1.79 UP

State Size

Order your pair quick—while this bargain offer lasts. Wonderful work shoe for men. Has soft, strong uppers that resist barnyard acids. Solid leather insoles. All seams stitched with waxed thread. Strong leather soles. Wide widths. Sizes 6 to 11. **Order by No. 28A-758. Send no money. Pay $1.98 and postage on arrival. Order boys' sizes, 1 to 5½ by No. 28A-554. Price $1.89. Order little gents', sizes 9 to 13½, by No. 28A555. Price $1.79 and postage on arrival. Mention size.**

Women's Felt Moccasins, ribbon trim'd

98c

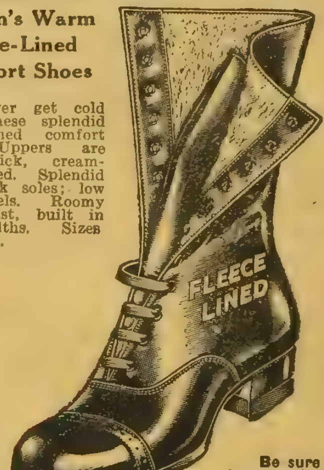


Fine grade wool felt with combination insert of fawn. **Order American Beauty by No. 28A389 Order Copen by No. 28A390. Order Lavender by No. 28A391. Sizes 3 to 8. Send no money. Pay 98c and postage on arrival.**

Women's Warm Fleece-Lined Comfort Shoes

You'll never get cold feet in these splendid kid - finished comfort shoes. Uppers are warm, thick, cream-fleece lined. Splendid natural oak soles; low rubber heels. Roomy comfort last, built in wide widths. Sizes 2½ to 8.

$2.29

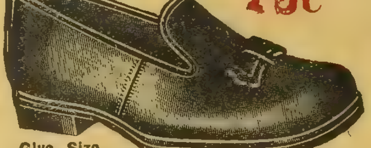


Be sure to mention size.

Order by No. 28A396. Send no money. Pay only $1.98 and postage on arrival. Money back if not satisfied.

Women's Felt Everett

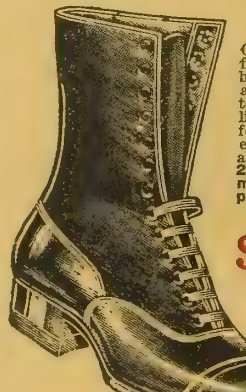
79c



Give Size.

For cold weather wear indoors. Durable felt uppers. Combination soles, outside of natural oak leather and middle soles of warm felt. Pretty bok ornament on toe. Low rubber heels. Sizes 2½ to 8. Wide widths. **Order by No. 28A380. Send no money. Pay 79c and postage on arrival. State size.**

Women's Felt Top Comfort Shoe



Comfort shoes, ideal for cold weather. Soft black kid leather vamp and foxing with tip toe. Black felt tops lined with warm grey felt. Low rubber heels, exceptionally comfortable. **Order by No. 28A407. Send no money. Pay $1.98 and postage on arrival.**

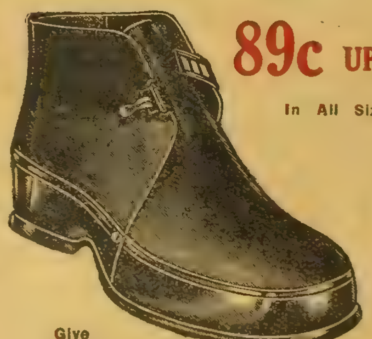
$1.98

Give Size

One-Buckle Arctic

89c UP

In All Sizes.

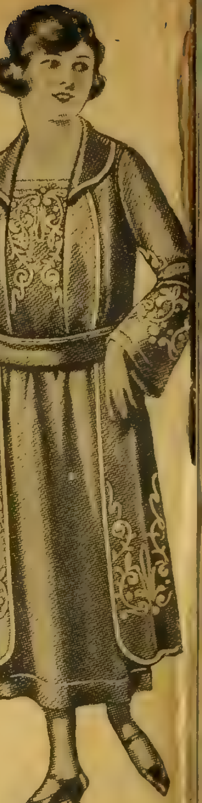


Give Size

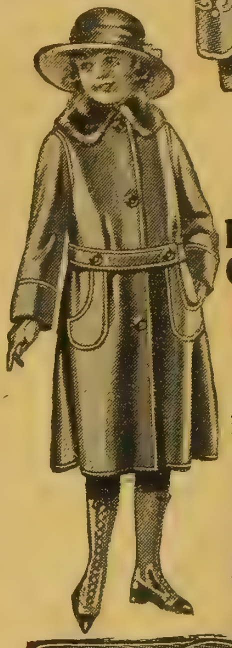
Heavy cashmerette snow-proof top. Genuine gum rubber bottoms with heavy single soles. Full fleece lined. Sizes for all the family. **Child's sizes 5 to 10½, No. 28A971. Price 89c. Misses' sizes 11 to 2, No. 28A970. Price 99c. Women's sizes 2½ to 8, No. 28A969. Price $1.19. Youths' sizes 9 to 13½, No. 28A968. Price $1.19. Boys' sizes 1 to 5½, No. 28A967. Price $1.20. Men's sizes 6 to 12, No. 28A966. Price $1.49. Pay bargain price and postage on arrival. State size.**

"Stylish Stout" Gabardine Dress

$3.98



Women of large figure will see in this new model their ideal dress, planned to give long slendering lines. Note how the collar, revers and panels carry out the long effect. Attractive embroidery on sleeves, vestee and panels. The self-material belt ties at back. Sizes 39 to 53. **Order Navy by No. 28E5470. Black No. 28E5471. Brown No. 28E-5472. Send no money. Pay $3.98 and postage on arrival. State size.**



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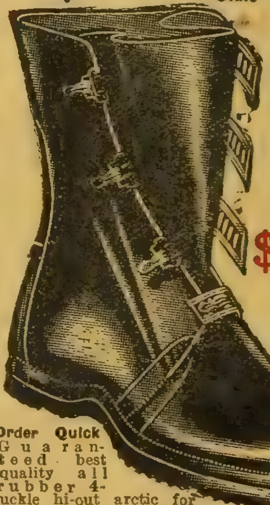

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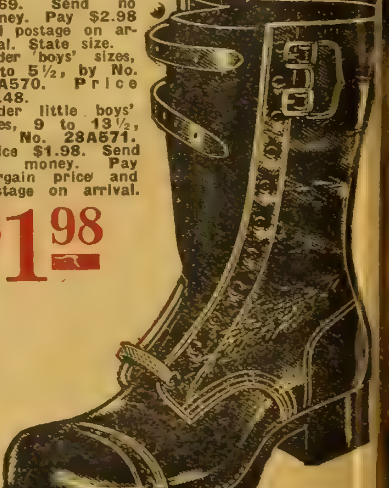

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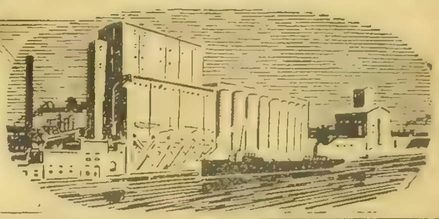

VOL. X, NO. 8 MT. CLEMENS, SATURDAY, DECEMBER 9, 1922 $1 PER YEAR

"Will a Gasoline Tax Solve the Highway Problem," *by Horatio Earle.*

"Creeping Jenny,"
A Complete Christmas Story, by Kate Douglas Wiggins.

"Dr. Friday Sets the Price of Milk at $3 for December."

"Historical Background of Michigan Agriculture," *by L. D. Chase.*

"The Hunted Woman,"
A continuation of the story by James Oliver Curwood.

"Complete Plans for Building a Lime Spreader."

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Volume X
December 9,

The Michigan BUSINESS FARMER

Number 8
1922

(Entered Bi-weekly as Second Class Matter at the Post Office, Mt. Clemens Mich.)

Will Gasoline Tax Solve the Highway Problem?

Horatio S. Earle, "Good-Roads" Earle, the Pioneer Fighter for Improved Highways in Michigan says, "A One Mill Tax on Property is More Equitable"

> **"My pocket book says put 10 cents a gallon tax on gasoline: but my sense of justice says put a one mill tax on my property to maintain the highway budget."—Horatio S. Earle.**

HOW shall we maintain the highway budget? By a one mill tax on all property of the State of Michigan. Then the Highway Department will not have to go to every session of the Legislature and beg for money. We take care of the University of Michigan in that way to educate the rich; and then you propose to exempt the rich from paying taxes on their property to build and repair the roads that make it easy to get to church, school, library, and last, but not least, to your neighbor's sitting room and dinner table.

If there be those who do not want to pay taxes on their property then let them sell or give it away.

Every specific tax is a robbery; it exempts some from paying their share of the cost of running the state, and it robs others to do it for them. The corporation tax robs the small corporation, and to that extent exempts the large corporation. If Henry Ford paid the same rate of corporation tax that the small corporation does, he would pay ten times as much as he now has to pay, so the Legislature that enacted that law was working for Henry Ford, but was not on his payroll.

Toll roads again proposed, instead of collecting at the toll gate, collect at the gasoline tank; going back to pioneer times. One man centuries ago won fame for himself by leading the Israelites out of the wilderness; now we have a plan to lead us back into the toll road woods. There is not one iota of justice in a gasoline tax, for instance: take the man who works for Henry Ford and who will use one gallon a day; he will pay one cent tax, while Henry Ford who will possibly use five gallons per day and pay five cents tax. Yet Henry Ford is worth one million times as much as the man who pays one-fifth as much taxes to maintain the highway budget as does Henry Ford. This is nothing less than class legislation, taxing the poor and exempting the rich.

A gasoline tax collecting department will have to be instituted where scores of poltical proteges, who are not wanted at home will secure positions at the expense of the poor who have to pay them greater salaries than the poor get for their services. I cannot blame those who are working for the gasoline tax, for they know that it will relieve some manufacturers of Michigan and place the burden which they should be willing to share onto the automobile industry. I say this burden would be placed on the industry, because whatever hurts your customer in the end hurts the producer.

I do not say this for my own personal benefit, for I own sufficient property in the State, so that it would be much to the benefit of my own pocketbook to place a tax of ten cents per gallon on gasoline and so reduce the taxes which I have to pay, and which I am willing to pay on my own property. But you say the poor farmer is the one whom we are trying to relieve; that is your excuse, but not the real reason, and you know it. I am a farmer and I own five times as much farm land as does the average farmer, and I pay fifty times as much taxes as the average farmer pays, yet I protest against robbing the poor to relieve me of my just share of the expense of running the State, and I consider the roads as second only to the schools of the State. I do not favor relieving me of my share of the taxes and make the men pay them who work for me. I'll pay my own.

Ninety per cent of the automobiles of the City of Detroit do ninety per cent of their running on Detroit pavements, toward the building and repairing of which the State does not contribute one dollar; yet you propose to tax them for wearing out the roads.

Seventy-five per cent of the truck hauling of the state is done over city pavements; yet you propose to tax them for wearing out the roads. Who is making the most money on the load that is being hauled by the truck, the truckman, or the producer and the consumer?

I am always looking for woodchucks in the affairs of Government, and I can see the railroad woodchuck in this proposition, using the farmer as an excuse to make hauling more expensive so that they can get back the short hauling to do, which they never did and never will handle to the satisfaction of the shippers.

They contend that the roads being built by the taxpayers and given to the truckman over which to haul without cost is a hardship for the poor farmers, when they mean themselves; but they never say a word about how that every town through which their railroad runs bonded for enough to build the railroad thru that town; they think that was so long ago that it has been forgotten. But if they can get exhorbitant taxes levied onto the truck industry, created by robber freight rates, and—"the people be damned" policy of Wm. H. Vanderbilt, that their rates will be satisfactory.

One in every three of the adult population of Michigan owns some kind of an automobile, and let me predict that the old saying "the goblins'll get you if you don't watch out" will be changed to read "the automobile will get you if you enact a gasoline tax," and if you do they will elect the next Legislature and the next Governor, and they will repeal the gasoline tax, and place a one mill tax on the statute books of the State which will give to the State Highway Department six million yearly, and which, with the automobile license money, will be sufficient, with the National aid, which we will get to take care of the highway budget without turmoil every two years about it.

"Let well enough alone," is what I think the State better do, put no more taxes onto the automobileists who are already paying five per cent, or double the tax on anything else except booze, and the bootlegger collects that and invests it in real estate and you propose to exempt him from paying back some of the profits he has made. It would be as sensible to tax the school marms for the expense fo running the schools, as to tax the men who work for me, runnng my businesses, and the truck owner is working for me when he is hauling my product to the consumer.

Who is making the most money,—the truck man or me? Exempt the cement manufacturer and tax the truck owner who hauls the cement to the road. Exempt the gravel producer and tax the truck owner who hauls the gravel to the road. Which of these is the best able to pay the taxes to maintain the highway budget?

Remember that the most costly roads to build are those built of concrete (Portland cement concrete, or asphalt concrete)' and the least expensive to repair; also, that one sharp-shod horse going over these kinds of roads does more damage than one thousand automibiles; yet you say we are going to tax the ones that wear out the roads. In reality you are exempting the horse owner and taxing the city's automobiles, the widow's washing machine, the farmer's pumping system, the farmer's tractor, the clothes-cleaning establishments, motor boats, aeroplanes, and hundreds of other things that never touch the roads.

Away! Away with all this foolishness! Place a one-mill tax on all real estate and personal property of the State and maintain the highway budget. I challenge the gasoline tax advocates to go to the legislature and ask them to submit two propositions to the voters at the April election: One—the gasoline tax. The other,—a one-mill tax on all property of the State to maintain the highway budget, and, as goes election, so goes Earle.

Editor's Note—This is not a "private fight," anyone can get in who will furnish facts. This support of improved highways is a big issue and The Business Farmer will continue to print both sides, so that the farmer may decide for himself.

Dr. Friday Sets the Price of Milk at $3 for December

DR DAVID FRIDAY, president of the Michigan Agricultural College, at East Lansing on last Friday handed down his decision as to the price which distributors in the Detroit area should pay the producer for his milk during the month of December and thus raised the price to the consumer one cent per quart.

Under the ruling made by Dr. Friday, producers will receive an increase of 40c a hundred pounds and distributors are authorized to add the increase to the retail price, advancing the retail price from 13 to 14 cents a quart. The producers who have been receiving $2.60 a hundred pounds, demanded $3.20, and Dr. Friday's decision gives them $3, an increase of 40 cents a hundred pounds.

Offered to Give $2.75

When representatives of the producers and distributors gathered in Detroit last Wednesday to agree on the price, the producers said that increased costs made an advance in the wholesale price necessary, and asked that the price be raised to $3.20. The distributors refused to agree to this demand, and offered to pay $2.75, and not raise the price of milk to the consumer.

The producers rejected the increase offered, insisted upon the $3.20 price, and named a committee composed of N. P. Hull, of Lansing, president of the Michigan Milk Producers' Association, and C. E. Gittins, attorney, of Detroit, to meet with the committee of distributors composed of W. J. Kennedy, of the Detroit Creamery Company, and Lee Henry, of the John Schlaff Creamery Company, Detroit, to settle the controversey.

Dr. Friday Chosen

The two committees could not agree, and Dr. Friday was unanimously chosen as arbiter, with authority to fix the price.

Dr. Friday, in reporting his decision, said that all dairy commodities have increased in price, and cited the fact that the retail price of milk recently has been increased to 14 cents a quart in New York, Cleveland and other large cities. A shortage of milk, which always prevails at this season of the year, was given by Dr. Frday as the chief reason for authorizing the increase.

"There is no question but that the farmers are entitled to more money for the milk," Dr. Friday said. "They have it coming. The question is whether the dealers can pay the increase without raising the retail price.

"They claim they can't. There is no way of knowing whether the spread between their price to the farmer and the price to the consumer is too great wthout an investigation of the business and an examination of their books. Pending such an investigation, I favored the increase. It seemed the only way to give the farmer more money.

"There are 46 quarts in each 100 pounds of milk. The increase of 1 cent will yield 46 cents. Of this the farmer will receive 40 cents, and the driver of the milk wagon 6 cents.

Boost is Justified

"Because of the increase in the Detroit demand. and the normal shortage at this time of the year, the boost in price is justified on strictly economic grounds.

"If the spread between the farmtrs' price and that paid by the consumer is too great, then the increased retail price is unfair. The dealers and farmers plan to investigate this, and Prof. King and myself may do the job. Prof. King, a graduate of the University of Michigan, fixed the milk price for Philadelphia.

"If we do it, and we find the price too high, then it will be decreased the first of the year."

Dr. Friday estimates that the boost of 1 cent a quart will mean $90,000 to the farmers for December.

* * *

The Business Farmer believes that Dr. Friday made a manifestly fair decision in view of the fact that the milk price in other cities of equal magnitude has been set at 14c for the month of December. We assume that he means by this that the producers in the New York, Cleveland and other large city areas are receiving $3 per hundred for their milk which costs the consumer 14c a quart, if not, then there would be just cause for dissatisfaction on the part of our milk producers.

"The Truth About Henry Ford"

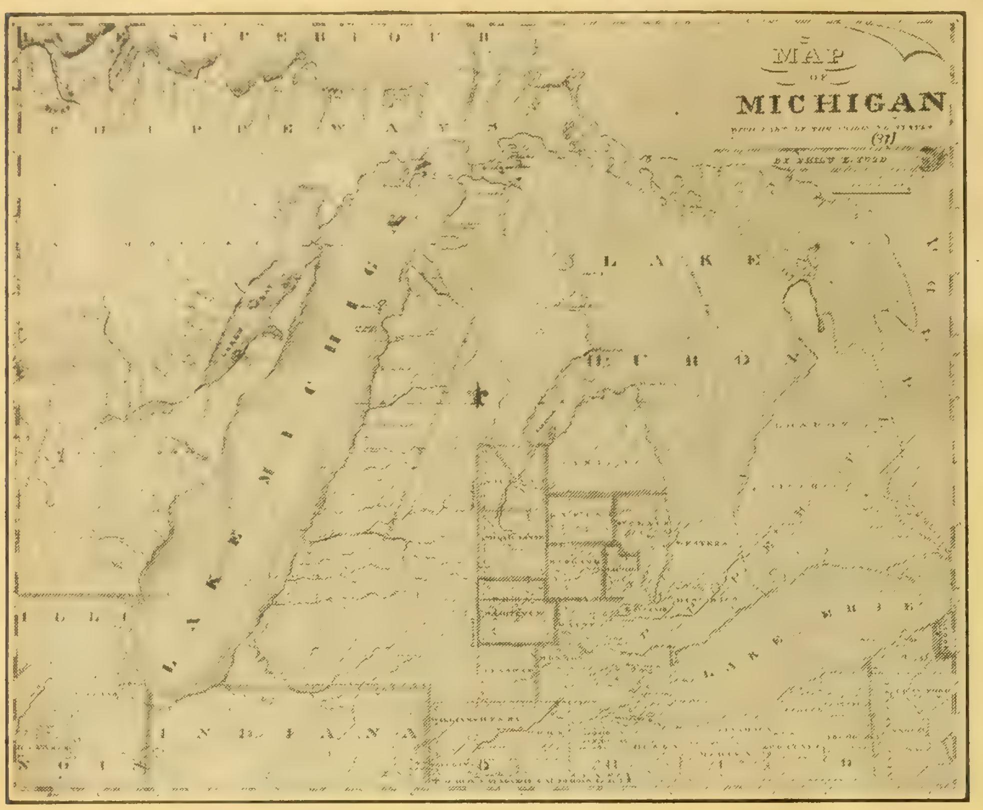
The Complete and Authentic Life History of Michigan's most interesting citizen *begins in our next issue—see page 8.*

Historical Background of Michigan Agriculture

First Publication of a Short, Clean, Historical Outline of Rural Life in Michigan

By PROF. L. A. CHASE

Head of Department of History, Northern State Normal School, Marquette, Michigan.



Reproduction of an old map, of Michigan Territory in 1824, when only the counties of Monroe, Lenawee, Wayne, Washtenaw, Macomb, Oakland, Shiawassee, St. Clair, Lapeer, Saginaw and Sanilac had been surveyed. Note the surveyor's curious conception of the balance of Michigan and Chippeways (the Upper Peninsula.) Photographed at the Michigan State Library, Lansing, especially for the Business Farmer.

MICHIGAN agriculture and rural life began in an environment of forest, lake and stream, of climatic and soil conditions, that have deeply influenced the course of their development from first to last. Much of the southern portion of the state bore a forest cover of hardwoods—beech, maple, elm, oak, hickory, ash and other characteristic trees of this latitude—while to the northward, especially beyond the line of Saginaw Bay and Grand River, was the great pinery of the state, dominating the sandy ridges and occasionally taking possession of areas of clay where, by all rules, the species had no right to be. Still farther north, in the Upper Peninsula, hardwoods and pines alternated and sometimes commingled, even to the Lake Superior shore. The first farmers of the state had the option of taking possession of land on one of the rather numerous small prairies, or "oak openings" which were characteristic features of the South Michigan landscape, due, chiefly, it is believed to the practice among the Indians of periodically burning over considerable tracts to drive out the game. Some settlers, however, were attracted to the areas densely forest-covered, on a theory that, where such a splendid growth of trees had taken place, there the soil must be superior in quality; and after a generation or so, only forested lands were left and must be entered upon and cleared if farms were to replace the forest primeval.

The pioneer fiercely assailed the forest since it stood between him and those products of the soil upon which his existence mainly depended. With axe and flame the warfare was waged year after year, and the forest slowly but surely receded and became only a memory save where the farm woodlot preserved it in miniature for such services as it might render or just for sentiment's sake. The passing of the great forest is not pleasant to think upon, yet the forest had to go if agriculture and a vigorous rural life were to exist in Michigan.

Nevertheless, the pioneer's welfare was closely associated with the forest. The forest yielded building material and fuel. It restrained the fierce blasts of winter. It tempered the heat of summer. It steadied the flow of streams and gave logs and timbers for the construction of mill-dams that would afford power for the operation of grist-mills to grind the farmers grain and saw-mills that turned logs into lumber. Many articles of household use and many implements used on the farm came mainly out of the forest. Short logs, hollowed out, served as sap-buckets and other containers, and longer logs similarly treated made troughs and conduits. two wooden rods joined by a thong made a flail that threashed the farmer's grain, while handles of all sorts were almost ready made on demand. Stools, and tables, beds and whatever furniture the rude conditions of pioneering required, with little fashioning,— were derived from the same source. The farm-house itself, rose log upon log, with floors of puncheons and roofs of shakes, with doors hung on wooden hinges and fastened with a wooden latch, with wooden chimney chinked with clay,—the whole building held together with wooden pegs and pins, without a nail, a bolt or screw or anything else wrought of metal,—the gift of the forest. A little searching in the forest revealed some shape of branch or tree-trunk that, with little improvement, would serve as neck-yoke or whiffle-tree, an "A"-drag or plow-beam, well-pole or sled-runner. A disc cut from the end of a well-rounded log on occasion served as wagon-wheel and the entire log as a land-roller. With some skill, staves for barrels, buckets and kegs, with the hoops that were to bind them together, were wrought at home on winter evenings. The characteristic excellence of each species of tree were known and determined the uses to which each was put. If the forest gave the pioneer farmer of Michigan a battle for existence that the prairie farmer was able to avoid, the forest also rendered many indispensable services, for even the people of the western prairie were glad to import at considerable expense forest products from Michigan, but they lacked the convenience of having a forest close by to draw upon for their necessities.

The forest also provided food in many forms. The sugar maple thrives in all sections of the state—close to Lake Superior and close to the southern boundary and in much of the region between these extremes. The Indians drew largely upon this storehouse of sweetness and the whites were quick to follow their example. In hollow trees colonies of bees laid up great stores of honey, highly appreciated by man and beast alike. Some trees, like tamarack and pines, exuded gums and pitch that were prized for medicinal as well as gustatory qualities. Medicinal herbs of many sorts were procured from the forest. The native fruits were of many kinds: The wild cherry, plum, apple and grape; raspberry, strawberry, huckleberry, cranberry, wintergreen and thimbleberry (properly the "salmon-berry or white-flowered raspberry"), the elderberry; the nuts of the walnut, butternut, beech, hickory and hazel; while the watered areas carried wild rice and mint. Wild animals fit for food, abounded in the forest—even to a greater extent, it is claimed, in the second-growth of the forest than in the forest primeval because of the better cover thereby afforded. The red-deer, the rabbit and squirrel, the partridge, pigeon and wild turkey, water fowl and fish in profusion were available to the frontier settler of Michigan; while his domestic stock got nutriment from the same source. In time of drought the brush was good to browse upon and in winter the tops of felled trees were quite as serviceable. Pigs were fed on the mast of the forest floor, although it is said that they did not always fatten thereon. It used to be said in Lenawee County that these mast-fed pigs were so thin that it became necessary to tie knots in their tails to keep them from slipping out between the rails of the fences. All in all, the forest, vast and lonely, even threatening and appalling as it seemed to be, conferred upon the early farmers of Michigan many favors, if also many days of toil.

Forest Fires of Value

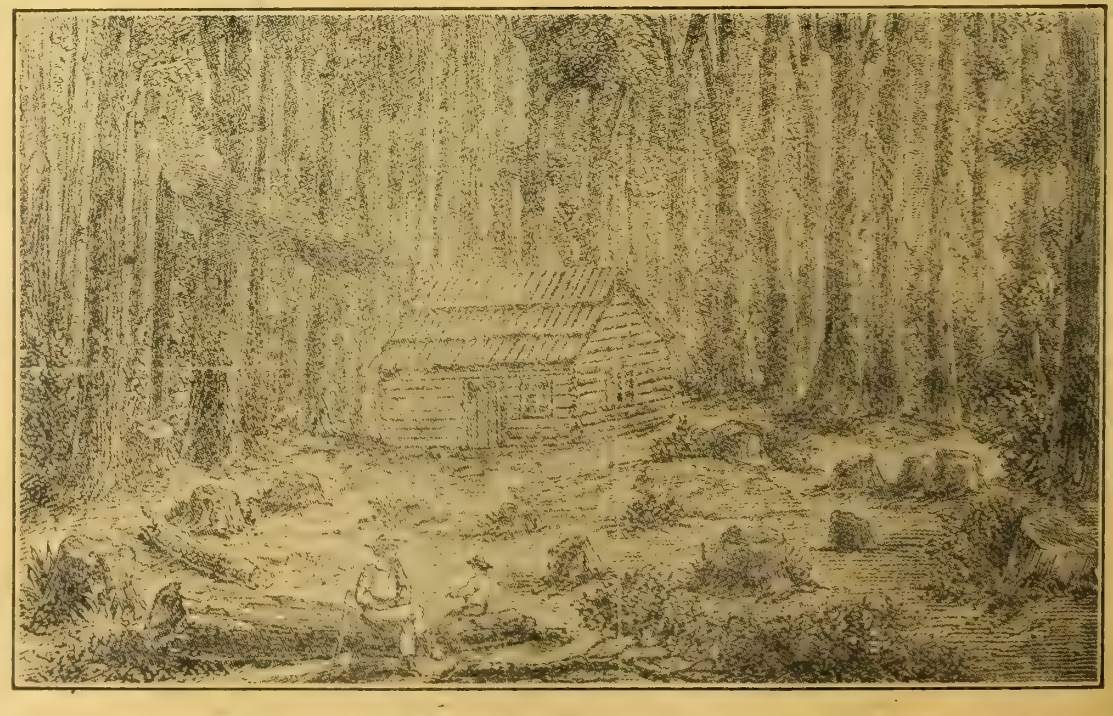
Even in its ashes it bestowed its benefits. They stimulated the productivity of the soil for a time, and they yielded lye and saleratus useful in the manufacture of soap and in cookery. The forest afforded work to part time farmers, needing an immediate money income from employment as a lumberman or from the sale of forest products, and its presence led to the establishment of wood-using factories for the manufacture within the state of agricultural machinery and implements. Between forest and farm in Michigan, there has always been a very intimate relationship. The forest litter deposited on the surface of the land gave humus to the soil, at points otherwise too light and sandy to be favorable to vegetation, and the removal of this litter and humus by fire has been doubtless a potent cause in rendering certain portions of the state unfit for agriculture. The abundant vegetation partly decomposed, collected in the water courses and in the beds of lakes, gave the state those areas of muck and peat lands that have strongly influenced agriculture in particular portions of Michigan.

Natural Waterways

The waterways were also of some importance in early agriculture. There are occassional references to farm products going by river to market in sections where road or railroad transportation was not yet available, and even now there are isolated farming communities along the shores of the Great Lakes, which make use of boats rather than wagon or car for getting their marketable commodities to outside shipping points. In the pioneer period, swamps and marshes often proved formidable obstacles for interior travel and communication, and because of them, we frequently come upon accounts of the manifold trials and tribulations which beset all those whose business would not permit them to remain at home. In distance and in traveling-time mills and markets were usually far away and often the better part of a week was required in making the return journey. Oxen very likely hauled the loads of wheat and flour, of lumber and such human freight as chose to ride under conditions, where to walk or go forward on horseback might be the lesser of the two evils. Streams were for the most part unbridged and fords were worth knowing about.

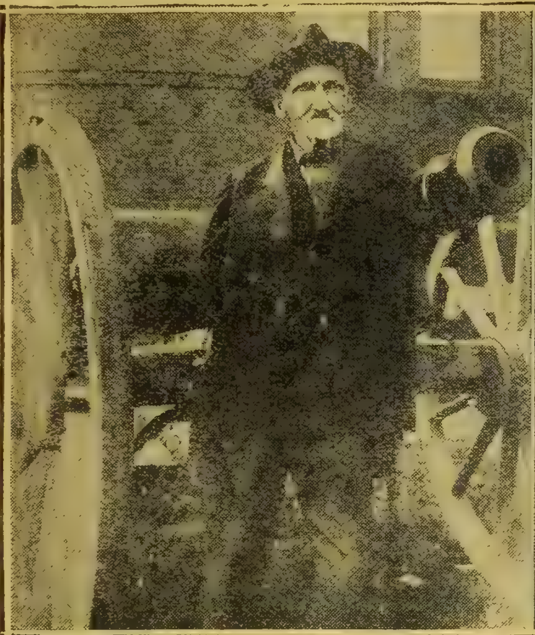
The marshlands begat mosquitoes which were troublesome enough on their own account, but they also

(Continued on page 16)



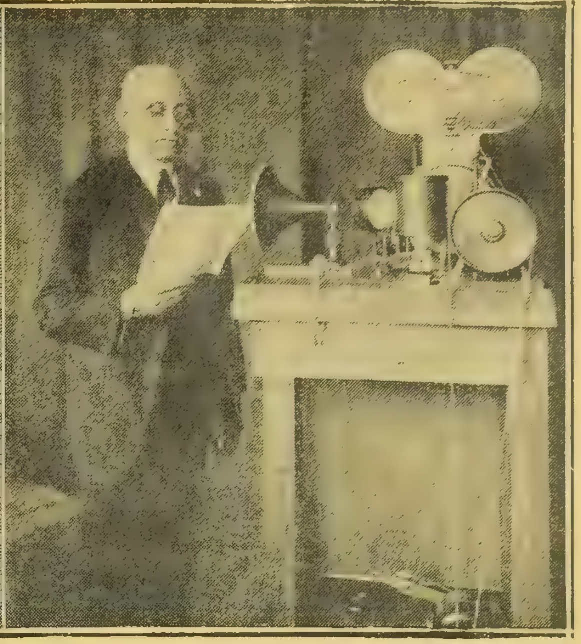
Typical pioneer clearing in heavy timber, 1834. "The farm-house itself, rose log upon log, with floors of puncheons and roofs of shakes, with doors hung on wooden hinges and fastened with a wooden latch, with wooden chimney chinked with clay—the whole building held together with wooden pegs and pins, without a nail, a bolt or screw or anything else wrought of metal,—the gift of the forest." And the house was only a small part of what the pioneer received from the forest.

PICTURES FROM FAR AND NEAR



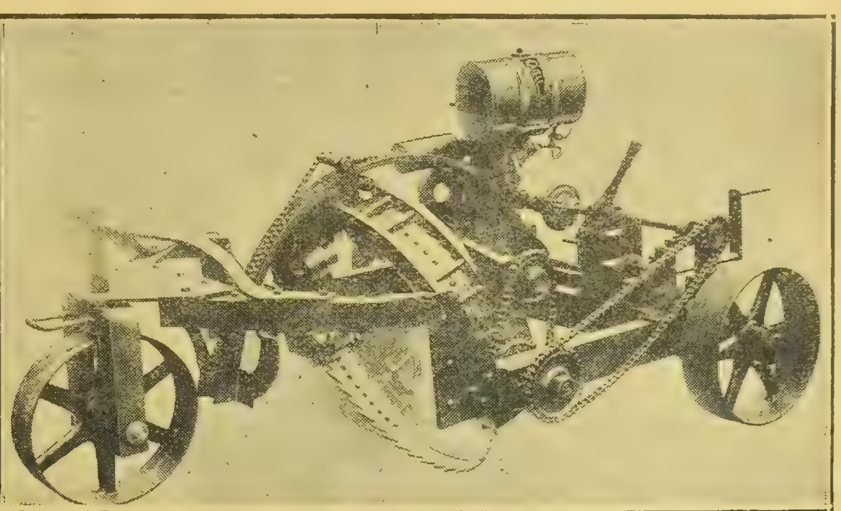
Discovers cannon on which he carved his initials during Civil War. Frederick W. Call of Eastport, Maine, 78 year old Civil veteran, carved his initials on a cannon over 55 years ago. He never expected to see the cannon again but one of the relics of the Rebellion was donated to Eastport and he discovered his initials on it.

The domino lady of Vienna. Every few weeks Vienna offers a new beauty for the world's approval. This time it is Mlle. Anslag who rules society of Vienna with a smile. Mlle. is not only beautiful, her friends declare, but charming and winsome as well. One look at her picture is enough to convince anyone that they are right.



Have your voice photographed. Charles A. Hoxie of the General Electric Co., is shown here with his his new invention with which the human voice can be photographed and reproduced, not as a picture, but as the actual sound of the voice itself. It is known as the Pallo-Photo-Phone and will be used to make talking movies a successful reality.

This lady makes toys from tin cans. Miss Dora Forster of New York City. probably has the world's most curious hobby as well as perhaps the most charming one. A jewelry worker by trade she has applied the skill gained at her delicate work in fashioning queer toys of every imaginable design from clocks to tiny locomotives complete in every particular, out of discarded cans and other receptacles of pliable metal. Her work has been so out of the ordinary that it has caused considerable comment at several large art exhibits. She is making a clock above.



A new idea in plowing. Lytle S. Adams of Webster Groves, Mo., is the inventor of a new tractor-drawn device that stirs the ground to a depth of 16 inches and makes possible its preparation for seeding at an increditable speed. The new type of plow substitutes for the straight cutting movement of the old fashioned plow, the rotary movement of the auger. The difference is comparable to that of trying to pull a circular saw through a log by main strength and letting that saw make its way through easily by revolving and cutting its own path.

War's greatest hero receives $10,000 gift. Through the kindness and charity of the theatre going public in and around New York, Sgt. Samuel Woodfill. greatest hero of the World War, who came to New York to take part in Armistice Day exercises, was presented with a gift of $10,000 in cash, insurance and a paid up mortgage on his home, at the Palace Theatre, New York, where he attended a Memorial service.

"Gen. Blucher" buried with military honors. True he was only a dog, but "Gen. Blucher" was one of the outstanding heroes of the World War. The war veteran survived shot and shell only to die from the scratch of a stick. The dog, a surrendered German, and later a member of the American forces at Verdun, is being mourned by the men of the 27th New York Division as a "friend and soldier." The police dog was the pet of the 106th field Artillery and for four years the companion of Captain Henry G. Montgomery. He was buried with all military honors.

Makes love to image of wife who left him. Louis Vitalo a shoemaker of West End, Boston, Mass., sits all day in his shop, singing and pegging away at his bench, and seated directly opposite him in a chair, fully clothed, is an image of his erring wife, who deserted him seven years ago. On that image which he fashioned with his own hands, he has lavished the love and affection of a devoted husband, hoping that some day she will return.

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"CREEPING JENNY"

BY KATE DOUGLAS WIGGINS

Author of "Rebbecca of Sunnybook Farm"

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Here is a Complete Christmas Short Story

SO good that you ought to read it some evening when the whole family can gather around the hearth and enjoy it together. It will help you to catch step once more with the Christmas Spirit and make you enjoy it more than ever this year.

There are lots of "Creeping Jennies," perhaps not with the same physical misfortune, but with handicaps just as great, hearts just as big and maybe heavier, "right in the corner where you are!"

Let's find a "Creeping Jenny" and give her a Merry Christmas!

JENNY LANE lived in a shabby little farmhouse on the BZack Nippin' Road that led from Riverboro to Moderation Village. The house was small and compact and as neat as wax inside, for there Jenny was Master of her fate and Captain of her soul.

Outside, alas, things were different. There was only the shell of a former stable; the shed was tumbling down, and, when rain descended in anything worse than gentle showers, Jenny's "indoors" looked like asyndicate of milk pans, the leaks were so many and the dripping of water continuous.

It had been that way for three years, ever since the autumn that her mother had died; and her father, who had followed his wife in everything, followed her to the grave a month later.

His last words to his daughter had been: "I'm sorry to leave you alone, Jenny, but I'd feel better if only I'd left you shingled. Your mother and me was laying up and laying up ever since we got married. We bought the house and field, paid off the mortgage and gave you good schooling. We are furnished up as well as most o' the neighbors, but when your mother's health got slim and my strength begun to fail, we couldn't seem to get any farther than meat, drink and clothes for the three of us. The buildings couldn't be kept up, that was the long and short of it."

"I know, I know, Father. Haven't I seen how hard you tried."

"Now I'm on my death-bed," said the old man. "There's money enough in the bank to buy the shingles, but God knows whether you can afford to hire a man to put 'em on, labor's so scarce and so high.

"Don't worry, Father! I don't want your last days troubled with fears about me and the roof. I'm twenty-two and I can earn my living somehow, somewhere!"

" 'Tisn't so easy to earn your living and keep your buildings shingled too!" sigher her father.

"Maybe not, but I'll do it, in the course of time!" said Jenny stoutly. "I've heard enough, all my life, about shingles; also about clapboards and paint. There isn't a young man in the neighborhood that I'd want to go to church with, but if one of them ever chance to ask me to have him, I'd say, 'Shingle the house and I'll say yes!' "

The girl's father smiled in spite of his pain as he whispered: "Don't be too easy when it comes to bargainin, Jenny! Stipulate first quality cedar shingles, him to buy 'em as well as put 'em on! You're worth it!"

"I shall never have a chance to 'stiperlate,' " thought Jenny, as she went to the kitchen to make gruel; and, as a matter of fact, although Jenny was good to look upon, and had an acre of timber land that would bring in something fifteen years later, no lovelorn swain had offered to take her and her leaky house for better, for worse.

Later on there were other reasons why Jenny had no opportunity to "stiperlate." The anxious and dreary months went on relentlessly after her father's death, when new misfortunes descended upon her—an accident—unskillful treatment, too long delayed—finally, the loss of a foot—a crutch—eternal lameness. No wonder, as she dragged herself about the house and little garden before she had had time to accustom herself to her infirmity, that Riverboro sympathetically called her "Creeping Jenny." Her nearest neighbor, Mrs. Day, a widow, lived within easy walking distance (it seemed longer when you limped!), and the village itself was only a quarter of a mile away, so she did not lack of an occasionl call, the offer of an errand or message, and often a drive to church, made wretched by the difficulty of mounting and descending the wagon, with the added mortification of limping into a rear pew.

Still she kept things together, sewing, crocheting, knitting, sending braided and drawn-in rugs to Boston, selling the butter from the one cow's milk and the hay from the eight-acre field.

She got "Pollyanna" from the village library and read it faithfully, but she was rebellious and it did her no good. She allowed to herself grudgingly that if she had lost a hand instead of a foot she couldn't have earned her living; but she never got to the point of being grateful that it was a foot, not a hand; she was unregenerate and wanted both.

* * *

It was late November now, and even at the end of the month there was a hint of Indian summer in the air, though a soft rain had been falling for many hours. Jenny's side door stood open; there was a pale flicker of sun now and then and she was in the pantry wondering if she could venture to take away some of the milk-pans that dotted the kitchen floor, all of them a third full of drippings from the ceiling.

She heard the swinging of the garden gate and a knock made her take her crutch and limp to the kitchen door.

A good-looking young man, fairly well clad, with his left sleeve hanging in a strange sort of stiffness, raised a shabby felt hat with his right hand and asked:

"Is this Miss Jenny Tane?"

"Yes, sir.'

"They told me at the station you were minus a man and might have a few days' work for me."

"Everybody in Riverboro is minus a man, and everybody needs a little help. There's plenty to do her for I live alone, but I have a little money to spend on keeping up the place."

The young man glanced in the door with a boyish sort of informality and asked: "Do you keep a dairy farm?"

Jenny laughed outright, and kept on laughing as she answered: "No wonder you asked, but I shouldn't set milk on the floor and it's water in the pans. It's a water farm!"

The laughter was mutual now, and the audacious youth, moving to the lower step and glancing upward, said: "I see you're a little shy on shingles?"

"Just a trifle, but I'm long on milk pans!"

"They told me you were a first-class farmer, but—er—a little handicapped on the outside work."

Jenny leaned against the doorframe and stroked her crutch with a smile.

"Footicaped would be a better word," she said. "Are you a stranger in Riverboro? Won't you rest a moment? Make your way through the milk pans to the rocking chair. I do need a little help in getting my winter wood in."

"You'll require a lot of wood unless you get a tight roof over your head," said the stranger. "I'm a Western farmer's son, or at least I was; but my mother and father died while I was in France and I'm alone in the world."

"France?" echoed Jenny, with a new glance in her eye and a new tone in her voice.

"Yes, but we'll cut that out! I landed in Boston, and ever since I've been kind of 'adventuring' till I got my peace legs' on."

"You couldn't have come to a worse place than Riverboro. There hasn't been an adventure here in a hundred years."

"I don't know about that! I've only been in town half an hour and I've seen a water farm and a lady that runs it to the Queen's taste!"

Jenny laughed again; the sweetest, most tuneful laugh in the world; one that she seldom used nowadays, but had kept over from her long-ago youth. What a droll stranger! and how much more interesting he would be in the intervals of sawing and spliting wood, than old George Gibson.

It is too ridiculous that you should have seen the milk pans and noticed the shingles. I am going to have the roof fixed next spring if I live. Father saved up money for the stock, but—but, I had to use it in a long illness."

"Yes, yes!" interrupted the stranger. "It beats all how that runs through life! You save up money for shingles and then you can't get enough more to put 'em on."

"I'm nearly ready for the second time," Jenny's tone was cheerful and incisive, "but I don't think I have quite enough to pay for labor. Besides, you couldn't, I mean you wouldn't—shingle—could you?"

"Sure I would, and could! You're strong on the subjunctive, aren't you! You've noticed I'm handicapped (I don't have to invent a word, it's all right for my case!). But just you wait and see what I can do with the substitute presented me by the U. S. A.! I'm going to have something more stylish later on, but I don't believe it will serve me any better; you see it's only my left arm!"

Jenny stopped her ears.

"Don't tell me you've read 'Pollyanna' and are glad it isn't you right!"

"Sure I'm glad! Who wouldn't be? Who's Pollyanna?"

"She's a girl in a book who's always glad that things aren't any worse."

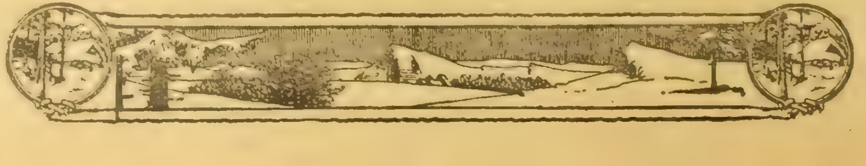
"All right for Polly! More power to her elbow! Now I'm by no means dead broke and I've got back-pay coming to me from Washington, when they get around to it. But I want to train myself to work at anything that comes. If I can't make good I'll go to a vocational school, but I want to harden myself first."

"My roof in November would be a good place for that!" said Jenny contemplatively. "What wages do you ask?"

"Half of what the other men get around here, because I'm not a skilled worker at present Now if you've got a ladder on the premises I can get up and tear off the old shingles while you negotiate for the new ones. Going to buy first quality cedars?"

Jenny grew red and then white, for memory flashed back, and by an odd trick she remembered her father's injunction to "stiperlate," a word that was to be used in far more romantic circumstances.

"Can't manage first quality; seconds will have to do," she said, with some embarrassment.



"O. K. I've had nothing but 'seconds' all my life. Sometimes I wonder I didn't have a second wife."

"Why didn't you?" The question suddenly popped out of Jenny's mouth without any warning.

"Because I never had a first! Ha! ha!" (He certainly was the most unusual man she had ever met and the most informal on the occasion of a first call. She felt as if she'd been to high-school and singing-school and dancing-school with him.)

The stranger rose from his chair. "I'll 'lime' the 'seconds' for you myself to save expense. Want me to get them for you, since I know a shingle when I see it and maybe you don't? I'll go in to the village, get a boarding place, and come back after lunch for a half-day's work."

"Thank you—that will be very kind."

"I'll pick up the milk pans and empty 'em for you, first. Poor old things! They don't know they're going out of business! Let me look at your ladder, please. A man that works with a woman's farming implements ought to carry a big life insurance!"

Jenny laughed again, joyously. Then, entirely forgetting decorum, she wiped her eyes with her apron and said, "If I only knew what your wages were going to be I'd raise them, you are so funny! The ladder is in the shed. I think it's all right."

He looked about the shed in amazement at its cleanliness and order. "Holy Moses!" he thought, "does that little creature sweep and scrub this place and pile up this wood and kindling, skipping about on a crutch? And us great husky lubbers getting 'order of merit' for doing our duty by the country. Wonder if Miss Jenny Lane's had any medals handed out to her? She can have mine when I get well enough acquainted to give it to her."

Jenny followed him out to the shed.

"Is the ladder quite safe?" she asked.

"Safe as a meeting-house."

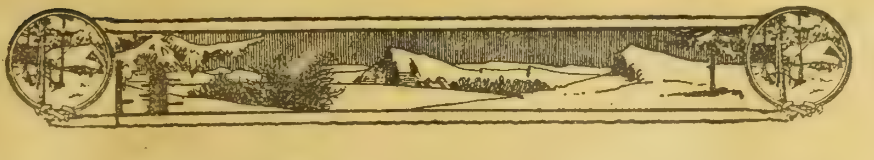
"Then, as you go to the village, you'll see twin boys hanging over the gate at the next house. Mrs. Day's. Ask the red-haired freckled one (his name is Alfinso) if he'll come up this afternoon and help you, for five cent. He'll hold the ladder, pick up the shingles or commit any crime if you just tell him that Jenny'll have fresh doughnuts for you and him at supper-time. Don't ask Alfonso, the dark-haired twin; he doesn't like work and doesn't like doughnuts."

"Well," said the stranger, wiping his hand on a potato sack, "I wasn't in the Salvation Army belt when they were distributing doughnuts to the boys and my mouth is fairly watering for one. My name's Rufus Holt, of Lawrence, Kansas." Here he held out his hand which Jenny took, stunned by the suddenness of his action. "I'm your hired man till this roof is fixed. You look to me like a grand little boss. I'll be back in an hour and I hope I don't get Alfinso and Alfonso mixed!"

* * *

"Creeping Jenny" has a method all its own of making its way upward and onward, silently, smoothly under and over, betwixt and between obstacles. The slender little green vine climbs, not so much with strength, as with swiftness and grace, and accomplishes it growth in a miraculously short space of time. You can leave your garden rake against the barn door some warm night, and next morning Jenny will have crept up to the top of the handle, leaned over and flung down a few fragrant blossoms here and there just to give you a hint of Nature's magic.

By a like process and another sort of magic, Jenny Lane crept into Rufus Holt's heart, which was a big lonesome one, howling with emptiness, at the time he began shingling her house. They came to know more of each other as the days went by. He and she, with Alfinso, ate luncheon together on the shed bench so



that the day's labor need not be delayed by a trip to the village for Rufus. (At least that is what he said, and she said, and Alfinso said, and Mrs. Day said, and nobody doubted it but the post-mistress.)

Alfinso, whose pay had now been increased to ten cents a day, was the most faithful of "gooseberries," but even he sometimes wandered away to the wood-pile to work on a motor that he was constructing, to be used in connection with the power of an old alarm clock.

At such time Rufus and Jenny would walk together before she gathered up the dishes. She allowed him a pipe, and when she attempted to rise and go to the kitchen he would say: "Take your 'nooning,' Miss Jenny, same as the rest of us. The minute you drop your housework you take out your needle."

"I've had to be busy to keep from thinking, these last two years," she said quietly arranging the knives and forks for clearing away. "Now I'm afraid of getting idle, for what with company to lunch, the sound of hammer or saw all day, and the smell of paint all night, it seems as if Boston couldn't be any gayer than my little house."

Rufus liked to watch the dimple come and go in Jenny's cheek, a dimple that had enjoyed little use till lately; he also admired the whiteness of her neck that rose out of the the long eyelashes that too often lay on her cheek and hid her brown eyes. He often tried to say something that would bring a quick upward glance full of fun or understanding. As for his talk, no words can tell what it was to the girl who had spent hundreds of long, silent, lonely days, feeling her youth slipping by, a tragedy without a single witness.

"Where were you last Christmas, Miss Jenny Wren? Rufus asked between pipe-puffs, after lunching gloriously on shoulder-of-motton stew. (He had always called her Miss Jenny Wren after the first week.)

"Here of course!" she said smiling "I was born here, lived here and probably will die here. All the rooms but the kitchen had icicles hanging from the ceilings and window frames. The parlor looked like that famous cave in Kentucky with stalactites in the roof. There had been a bilzzard on the twenty-third and I couldn't go to the church Christmas tree. It was nearly as bad the Christmas before. I've never celebrated Christmas Day, except to plant a little hemlock twig in a flower pot and hang Mother's and Father's pictures on it."

"Jehosophat!" ejaculated Rufus. "It wasn't so bad as that in the trenches where I was. Plenty of company—of one sort and another. I declare women always have the hardest of it in this old world, somehow. Trenches and over-the-tops were exciting compared to what you've gone through. They were life! A man generally has life and adventure with his hard knocks; but women are always saving, scrimping, doing without, suffering, nursing, burying, paying other people's burdens. Rotten luck, being a woman!" and he knocked the ashes from his pipe furiously.

"I never thought of it that way," said Jenny serenely. "I have my one burden, but it's my own, nobody else's!"

"Say, if I'm hereabouts to help, suppose you give a kind of a house-warming this year; some sort of a make-shift Christmas and show off the shingles! Hey?"

"Who would come?" cried Jenny. "And how would I compete with the church Christmas? Besides you are going to Boston."

"I haven't decided about Boston yet." (Jenny's heart leaped in her mouth and stopped her breath.) "As for the company, Mrs. Day could come, Alfinso and Alfonso (hateful little beggar, Alfonso!), Mrs. Strout, who boards me; and there's the station master that advised me to come to you for a job, and the man I bought the shingles of, and the store-keeper we owe for nails—that's quite a good crowd! You put in a few lady friends and I believe we could frame up a party that would make Boston look dull. Whats' the matter with the parson? Why couldn't he come. You're in his parish, aren't you?"

Jenny swayed to and fro with mirth. The point of view was to fresh, so young, so unlike Riverboro. "You don't know how funny you are!" she exclaimed. "The minister calls twice a year, but always in summer."

"Tell him to make it once and come Christmas Eve!" said Rufus, imperturbably. "Tell him your leaks are stopped and you'll show him a wounded soldier who did the shingling. 'Feature' me, don't you know? Tell him you'll have my Medal of Honor on the marble-top table."

"You've never shown it to me," said Jenny, softly.

"It's in Boston with my best clothes. Besides I've told you all about it. There happened to be a lot of fellows about when I was up against a hard job and they told on me. The boys didn't all have that luck or the U. S. A. couldn't have turned out medals enough to go around. Now it's time to work again. You think about that Christmas party before I buy my ticket to Boston. I'm going to patch up that bad place by the chimney," and Rufus went out the shed door and mounted the ladder.

Oh! the terrors of that high ladder and that sloping roof to Jenny, from the very beginning! With a white, knit cape over her shoulders and a white scarf tied around her head, she used to limp to some unseen point of advantage and watch Rufus with her heart in her mouth, lest he should slip and lose his hold. Sometimes he would catch her at her post, and looking down, think that her face looked like a love-apple, all pinky red and creamy white. And the warm glow of having someone down below caring a little whether he slipped—he, Rufus Holt, a down-and-outer!

He never did make a misstep, for he was a very demon of ingenuity and skill in using his one arm.

"Brave, clever, good, big-hearted!" sang Jenny's heart from the ground.

"Plucky, cheery, sweet and sound!" sang the heart of Rufus from the roof—but neither of them said anything in words.

Mrs. Day said considerable, but she liked Jenny Lane and stood up for her when the postmistress said there was more in that shingling business that met the eye.

"I don't see anything wrong in it." Mrs. Day maintained stoutly. "Jenny's roof would have fallen in on her if she hadn't shingled this fall. It looks like Providence to me."

"He's so slow at it that it looks like courting to me," observed the postmistress while scanning the morning's postcards to see if anything interesting was likely to happen in the neighborhood.

"Alfinso thinks the world of Mr. Holt, and he's getting ten cents a day now. It's true Alfonso takes three of it away from him every night. He says five is due to him because he's a twin, but he only takes three cents because he don't do any work."

"Alfonso's goin' to make a good business man when he grows up," said the postmistress.

It was half-past four in the afternoon but in the short December days it was nearly as dark as mid-night.

A cheerful fire snapped in Jenny's highly-polished kitchen stove. . The yellow-painted floor with its braided rugs reflected the light of the kerosene lamp, the cat was asleep in the rocking-chair with the cretonne cushion, and Jenny sat by the table making out a crochet pattern from a magazine in front of her. She had changed into her afternoon dress of brown cashmere with pongee collar and cuffs and apron, so that she looked more than ever like Jenny Wren, Rufus Holt thought, as he came in from the tool-house with a lantern.

"Alfinso is splitting and piling his kindling," he said. "He wants me to wait and go long home with him. Alfonso told him there's a ghost between here and the corner. Gracious! Can any parlor in the world beat a kitchen for comfort when it's rigged out and kept like yours! 'No, puss, I wouldn't have you move for the world, even if you offered to! I'll take a wooden chair!"

"The cat is spoiled," said Jenny. "And you look tired. You ought not to be doing rough work or you won't get to be yourself again."

"I'm myself, right enough: in fact I never was so much myself since I was born. I'm not tired; the sight if you and this kitchen rests me clean through to the bone"

Jenny changed color ,but studied the crochet pattern with renewed care.

"I don't miss my arm any more," Rufus continued, playing with her thread. "I've learned to do without it. I never thought I should, but I have with the help from a lady friend. I never was bitter about it like some. When you come to think of it, Miss Jenny Wren, it's wonderful how Almighty God has given us two of a kind in most things—on the outside, anyway. As to the inside furniture, the doctors have shown us how to get along without most of that. If we'd been started out with one eye, one ear, one arm and one leg, where would we have been nowadays?"

"We've only one nose and one mouth ," objected Jenny.

"And how would we have looked with two?" laughed Rufus. "But that's not to the point. The house is finished, Jenny Wren ,and what would you think of buying a few second-hand boards and letting me make the cow-shed more comfortable for winter?"

This moment had to come. Jenny had been reading it for days, There was a pause, then: "I'm going to sell the cow," she stammered.

Rufus looked surprised. "Are you troubled about the price of feed, or afraid the winter work will be too much for you? That's why I'd like to make a better place for her and patch up the piece of shed you have to walk through to get to her—after I leave. It's a wonderful season but it's the eighteenth of December and snow must be coming along soon."

There was another moment of silence, then Jenny spoke recklessly. "You see, Mr. Holt, we've gone on from one thing to another for three weeks, because the leaky roof ruined the house in so many ways ,and there's never been a man to help, since father died. We've patched the flooring, put in new door sills and weather strips on the windows, papered the sitting-room and plastered the kitchen ceiling—and all the time I've known I was goin too far. I paid you fifteen dollars the first week, but it wasn't half what you earned and you gave me back three for lunches. Then you wouldn't take the last two-weeks' wages because I was buying bricks and lumber and you said we could settle up when the work was finished. . . I can't let it run on, Mr. Holt, I can't! I'm not in want; I've something in the bank and my hay-field more than pays for my winter fuel; but I have to be careful, and the house is so nice and cozy now it would be self-indulgent to do more. I'd better sell the cow. You're as kind and generous as you can be, but you are a stranger after all, and I have no claim on you."

Rufus gave her a long, searching look.

"You honestly feel I'm a stranger, do you?"

"Well, I—I don't exactly feel that you are, I only know it. My mind tells me so."

"It's funny!" said Rufus. "Now—I feel like a partner, not a stranger."

Jenny clutched at the saving word. "You have been the best of partners," she acknowledged, straightforwardly.

"Oh, no! Not the best! I'm capable of being a heap better partner than I have been. Now stop crocheting, listen to me, and don't speak till I get through. . . In the first place, do you like me?"

Jenny flared at this.

"Why do you ask a questin like that? You know that nobody could help liking you! You know you're as sunshiny and thoughtful as you can be, and as for being interesting and funny and unlike anybody else in the world, you know well enough you're that; so why do you ask such foolish questions only to hear yourself praised?"

Rufus made a sudden movement and then subsided again into his chair.

"That's satisfactory, so far as it goes," he said calmly, "Though it doesn't go far enough to suit me. There are things I've got to say to you, and when they're over, we need never speak of them again. I haven't any home, nor any people but a married brother in Kansas, whose wife and four children I've never see. He always worked the farm and it fell to him as was right. I got a little money from my father, earned more at my trade in Chicago and saved it. Then I went across with the other boys. You don't really know anything about me except what I tell you, but I've got a clean record to show the neighbors, and I swear to God there's nothing wrong with me except that I've got one arm instead of two. When I came down this road from the station three weeks ago I took a good look at you, skimming around with your crutch, and swinging your right foot off the ground."

"Don't!" cried Jenny, covering her eyes.

Rufus put his big hand over her little ones and wiped the tears away with her crochet work. "I've got to show how I feel about you, and then I'll ask what you think of me," he explained. "I said to myself that day: 'Here's a chance to help somebody that's had to bear what I have.' They told me at the station you needed some work done, so I just plunged in, made good, and got the job. But I had no idea of falling in love with you, Jenny; that's your fault not mine. I want to marry you but I don't know how you feel about it."

"I don't want to be pitied and married just to be helped," said Jenny stubbornly. "After my accident I just made up my mind I would never marry."

"Why?" asked Rufus.

"You know why," Jenny answered.

"Then the reason you don't want to marry me shows me that I had no right to ask you, isn't that so?"

"No, it isn't; it's different with a woman. Besides, I do want to marry you, but I won't.

Rufus moved a little nearer. "Jenny, we've each got a minus sign against us—there's no getting over that; but Holy Moses! you're hung all over so thick with plus signs that your minus doesn't show up at all! Your face, your eyes, your hair, your voice, your disposition, your spunk, your common sense—all plus! The trouble is with me. There would be times when a girl might blush if she had a one-armed husband!"

"Blush? If she did she ought to be struck by lightning!" and Jenny's eyes flashed.

Rufus caught her hands. "Jenny, Jenny, be true with me, speak straight out! Do I seem a little short of a full man? How do you see me in your secret heart?"

Jenny rose to her feet under a kind of spell that made him rise to meet her. She leaned against him and said: "I see you whole, and strong and precious and splendid, Rufus!"

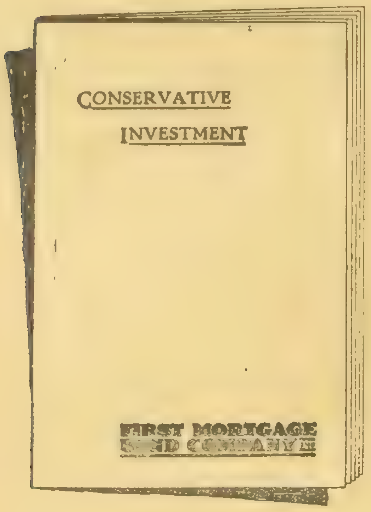
Rufus held her close, drying his secret tears on her hair.

"Oh, you little brick!" he whispered. "You darling, winsome little brick! Would you mind kissing me?"

"Not in the least!" she answered, and was proceeding to do it with all her heart when Alfinso entered with a huge armful of kindling, which he dropped into the woodbox with such force that the house shook.

"Alfinso, you dropped something. I heard you distinctly." Rufus was cool and collected as he put Jenny back in her chair. "Now I've some news for you. Jenny and I are going to be married on Christmas Eve and your family are invited. Will

(Continued on page 23)



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S. T. BUSHNELL

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The Most Talked-About and Authentic Book on Michigan's foremost World-Citizen ever written will appear, beginning in the December 23rd issue of

The Michigan
BUSINESS FARMER
The Only Farm Paper Owned and Edited in Michigan!

Renew now so you will not miss any of this great story!

Current Agricultural News

DOELLE ATTENDS CONFERENCE ON GRAIN RUST

JAMES NICOL of Grand Haven, president of the State Farm Bureau Federation; J. A. Doelle, state commissioner of agriculture, and Walter F. Ruddy, state leader of the federal barberry eradication forces, represented Michigan at the second annual meeting of the Conference for the Prevention of Grain Rust, held on Nov. 14 at St. Paul.

They were among the 75 delegates from thirteen north central states to vote unanimously for the resolution urging Congress to appropriate $500,000 for the continuation of the war on the common barberry bush next year and recommend that the various spring wheat states participate in the campaign in proportion to the seriousness of their individual rust problems.

NEW PLAN FOR SOLVING AGRICULTURAL PROBLEMS

THE Commodity Council Plan is is the name given to a new way of handling certain of the big agricultural problems by the United States Department of Agriculture. In the past different phases of a crop situation, for instance, have been handled separately by the various bureaus and offices. The new plan which recently has been put into operation brings all the various persons interested in the problem together into a council where each may present his views and where a definite inclusive policy may be decided upon.

Already councils have been called to discuss the cotton and potato situations and recommendations have been made for action that would be beneficial in view of present conditions. Department men who are specialists in the culture of the crops, in soils, diseases, pests, grading, and marketing each contributed to the final recommendations. From time other commodity councils will be called to take up problems that are troubling the producers of various other crops and live stock.

CLEMENCEAU TO ADDRESS FARMERS

GEORGES CLEMENCEAU, the "Tiger" of France, will address the opening session of the fourth annual convention of the American Farm Bureau Federation in Chicago on December 11, France's war premier declares that he will arrange his itinerary in order to meet the potent body of public opinion represented in the world's largest body of organized farmers—the American Farm Bureau.

Mr. Clemenceau will speak on the topic, "The Farmer as a World Citizen." It is expected that he will develop the international aspect of the farmer's problems. How the American farmer may develop a freer market for his huge surpluses in the nations of Europe will be explained by the distinguished President of the Peace Conference.

SUGAR CARDS REAPPEAR IN GERMANY

ON December 1, sugar cards, discontinued some two years ago, were reintroduced in Germany and factories deliver sugar only to authorized wholesale dealers who in turn distribute it to the retailers of specified districts. Only the organized wholesale trade and the cooperatively organized consumers will be permitted to traffic in sugar and all dealings are subject to rigid control.

ENDORSE LAND CERTIFICATION

FULL endorsement of the Land Certification of the State Department of Agriculture was given by a conference of real estate dealers, railroad agents, and development bureau secretaries, at a meeting held in Lansing on November 27, where the plan was discussed in detail. The chief elements of the proposed legislation involved the creation of a list of certified dealers. They will agree to deal exclusively in lands surveyed under the direction of the State Department of Agriculture at their own expense and lands will be classified as agricultural and non-agricultural, to be sold on the basis of this survey. The idea of land certification was developed to engender the confidence of the prospective settler in Michigan's good farm lands and to make it difficult to sell what is manifestly non-agricultural land for agricultural purposes. The certification plan involves a penalty of felony for violation.

A COOPERATIVE CREAMERY WITH NEARLY A THOUSAND PATRONS

ONE of the largest cooperative creamery organizations in the United States, is the claim made by J. R. Murphy, Manager of the Danish Creamery Association, Fresno, California, in his last annual report to the stockholders. The association has nearly one thousand patrons scattered over a territory of fifty miles wide by one hundred miles long. Twenty-five trucks are required to haul the cream to the two plants. More than 8,000 pounds of butter made daily and, as every pound brings a premium of one cent because of the "Danish Creamery" brand under which it is sold, the "velvet" amounts to more than $80 a day for a year of 365 days—$30.000 a year. Not only do the Danish Creamery patrons get the one cent a pound premium but they get a royalty of 65c a thousand pounds on high grade butter manufactured by affiliated creameries and sold through a central marketing agency under the Danish creamery brand. The association was organized in 1895 and the same butter maker has been employed for seventeen years.

AUSTRIANS LIKE AMERICAN HONEY

A GOOD market in Austria awaits American exporters of honey, says Consul Foster, Vienna, is the report to the Department of Commerce. The preferred varieties are dark-colored strained honey of acacia and linden flavors, packed in glass jars containing about one quart, one pint, or one-half pint. The Austrian Republic can not produce enough to supply its need. From July 1 the retail price of honey rose from 18 cents per kilogram to 54 cents per kilogram on September 30.

FOURTH WEEK OF EGG LAYING CONTEST

THE first four weekly period of the International Egg Laying Contest at East Lansing ended November 28th, with the White Leghorns finishing in advance but giving the honors for the last week's production to the heavy birds. Several birds are showing some moult particularly among the lighter breeds. Three birds have put in a perfect week's work with 7 eggs each. Mr. Shaw's pen from South Haven had a narrow escape when it topped the list for the first month with a production of 166 eggs with E. D. Taylor's pen from Kalamazoo just one egg behind. Third place is held by Hansen's pen from Oregon with 154 eggs and the Hollywood Poultry Farm from Washington tying with Thompson's pen for fourth place with 144 eggs.

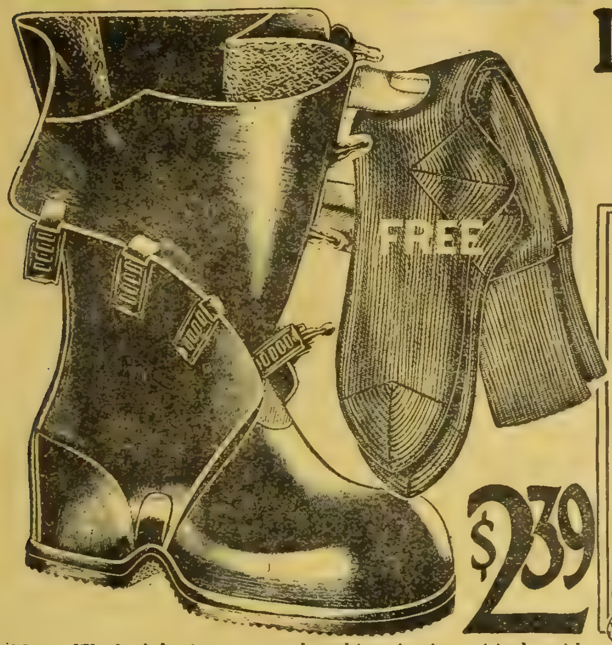
In the Barred Rock class Dennison's pen No. 9 has an easy lead with 133 eggs. Brummer's Poultry Farm is second with 123 and also second for the week with 43 eggs. Kent's pen from New York is only one egg behind Brummer's for the week and is third to date with a total of 114 eggs. Christophel's pen No. 16 is fourth with 110 eggs. In the Wyandotte class Evergreen Poultry Farm finishes one egg ahead of Sinks pen which has been leading up to this week. They also claim the honor for high pen for the week. Murphy's pen is third with 99 eggs and Hollis fourth with 95.

Van Raalte heads the Ancona class with 76 eggs to date. Dunning's Reds have a comfortable lead finishing with 110 eggs to date. The College Reds hold second and Mrs. Travis's pen third with a production of 83 eggs.

OUT THEY GO! Thousands of Pairs of Fine Warm Winter Footwear

Lowest Prices in Years

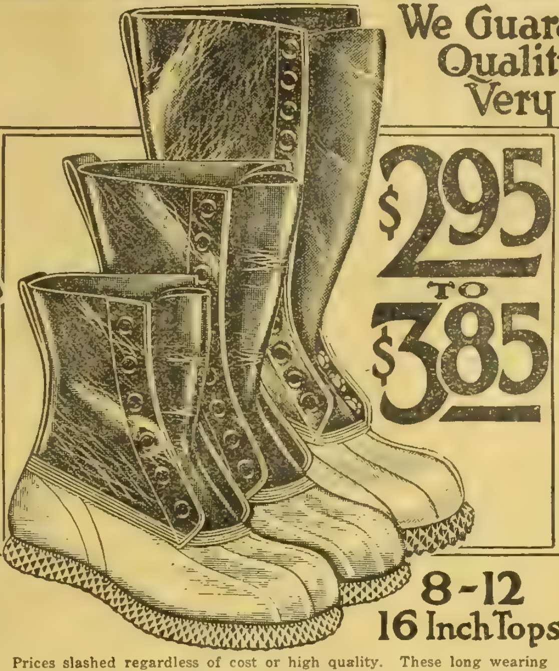
We Guarantee the Quality to the Very Limit



$2.39

Men! We don't hesitate to say that this price is positively without equal. Don't send any money—we will send them to you and you be the judge. If you are not more than satisfied and surprised with the big saving, send them back and you are not out one cent. A post card or letter brings you these wonderful all pure gum rubber arctics. When they arrive pay postman this remarkably low price plus postage.

67-2120—Sizes 8 to 13 (SOCKS FREE) $2.39



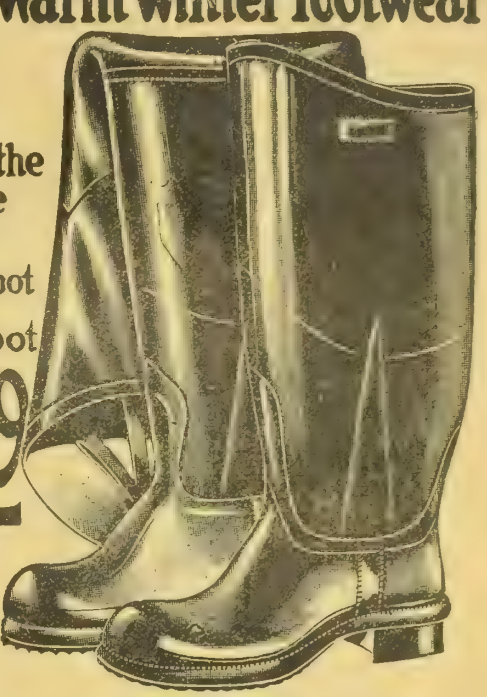
$2.95 TO $3.85

8-12
16 Inch Tops

Prices slashed regardless of cost or high quality. These long wearing leather top overs have soft black full grain leather tops, attached to pure gum rubber overs. Save fully $1 to $1.50. Just send postcard or letter—no money. A great bargain.

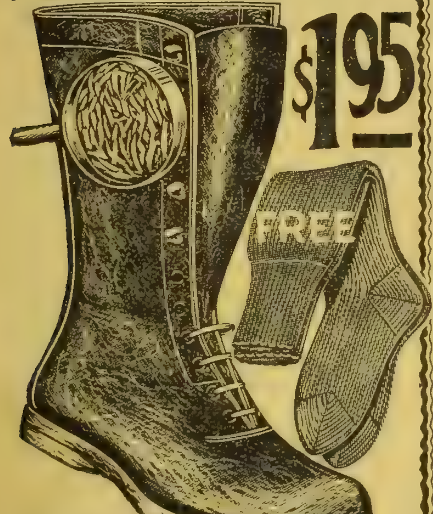
67-246—Men's, 8 inch top, sizes 6 to 12 .... $2.95
67-242—Men's 12 inch top, sizes 6 to 12 .... 3.45
67-243—Men's, 16 inch top, sizes 6 to 12 .... 3.85

Short Boot or Hip Boot
$2.79



Wonderful boots made from pure, fresh gum rubber and easily worth $5.50 to $6 today. This will give you an idea of the sensational bargains which the Chase Shoe Company of Minneapolis, Minn., is giving during this "out they go" clearance sale. This price is unequalled anywhere in America today for this quality. Heavy double soles. Friction lined. Full fitting. Rush your order and don't send a cent.

67-2730—Men's, Short Boot, sizes 6 to 12 . . . . $2.79
67-2750—Men's, Hip Boots, sizes 8 to 12 . . . . 2.79



$1.95

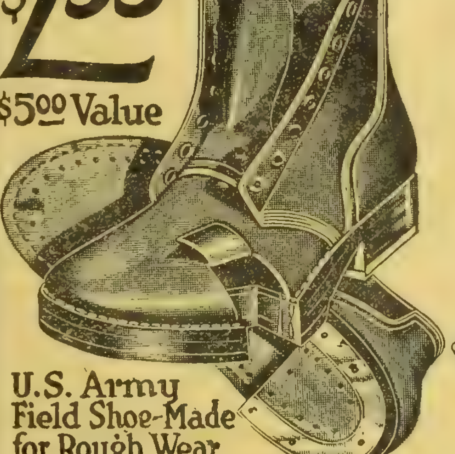
Warm felt

Don't confuse this wonderful 9 inch hi-cut with the ordinary, inferior "pressed felt" shoe. This hi-cut is made from pre-shrunk wool that will outwear several pairs of the cheaper grade. Has extra wide leather back stay and heavy gray felt sole and heel. Absolutely a $4.50 value. SOCKS GIVEN FREE! Send no money. Pay postman $1.95 plus postage.

67-8390—Sizes 7 to 12 (Socks Free) $1.95

Two Astounding Bargains!

$2.95
$5.00 Value

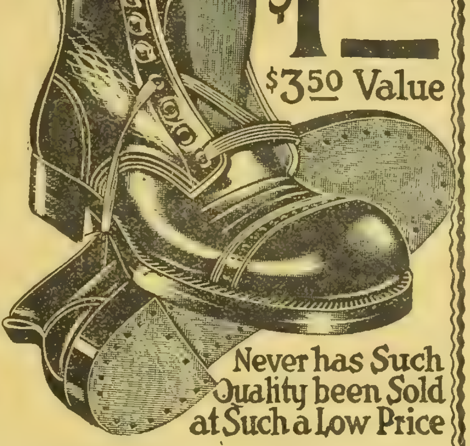


U.S. Army Field Shoe-Made for Rough Wear

Men—if you have ever seen or worn this regular issue U. S. Army shoe you'll know that there isn't another shoe made that can stand half the wear and give more comfort than this shoe will give. It is built as solid as a big city skyscraper. The soles are extra long wearing and the heels have lightweight steel plates. A $6 quality shoe at half price.

67-1005—Sizes 8½ to 12 . . . . $2.95

$1.98
$3.50 Value



Never has Such Quality been Sold at Such a Low Price

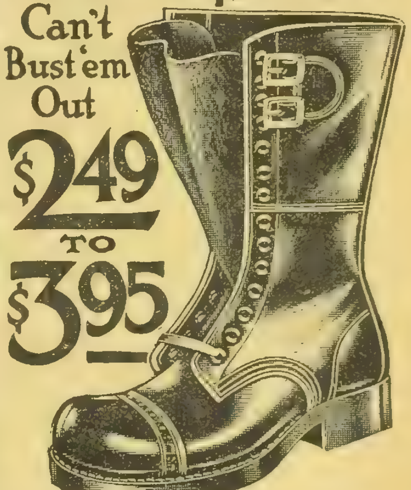
We claim these shoes are not duplicated anywhere else in the country and we are anxious to prove it to you at our own risk. You must actually see and examine them to realize why Chase quality is superior. Blucher style work shoe from heavy, smooth grain finished leather. Solid leather insoles. Double outersole of natural oak leather. Solid leather heels.

67-5000—Sizes 6 to 12 . . . . $1.98

Men! Boys! Save!

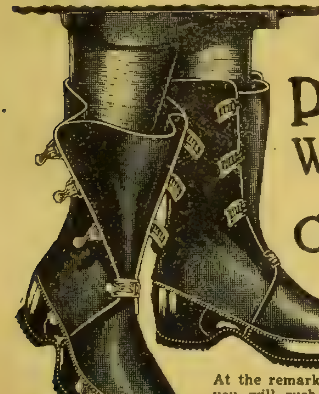
Can't Bust'em Out

$2.49 TO $3.95



Think of it—you can buy these heavy tan grain leather 12 inch hi-cuts at a reduction in price amounting to fully 25%. Have two, full heavy soles. Dirt excluding bellow tongue. Wide roomy last. Send your order—no money—you take no risk.

67-9710—Men's, sizes 6 to 12 .... $3.95
67-8130—Boys', sizes 1 to 5½ 2.98
67-8250—Boys', sizes 9 to 13½ 2.49

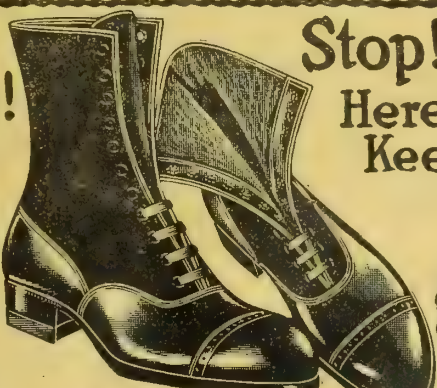


Cut Prices! Women's and Children's

At the remarkably low prices you will rush your order to avoid disappointment. They are the biggest bargain in women's and children's arctics which we have offered in several seasons. Fine, warm cashmerette tops. Stylish four buckle model. Will fit any shoe.

67-2170—Women's sizes 3 to 8 .... $2.89
67-2172—Misses', sizes 11 to 2 .... 2.65
67-2173—Child's, sizes 6 to 10½ 2.35

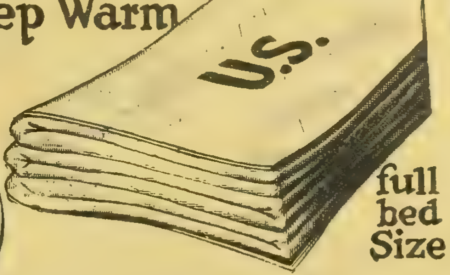
Stop! Look! Buy! Save!



We are offering a limited quantity of these very popular winter shoes for women at this extremely low price. It reminds you of the lowest prices you have ever seen. Soft, smooth black leather vamps. Good wearing felt tops, warm lined. Strong leather soles and low rubber heels. Take advantage of this reduced price. Send your order today, sure.

67-4001—Sizes 3 to 8 .... $1.95

Here's How to Keep Warm

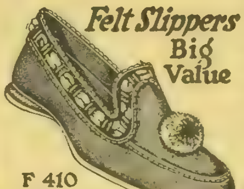


full bed Size

Yes—this price is actually less than half—of course our quantity is limited and to share in this great value we advise you to hurry your order. Genuine all wool Khaki color U. S. Army blankets. Size about 66x84 inches. Each blanket is stamped U.S. Manufacture, to sell for double our price.

67-2005—Each $2.95

Felt Slippers Big Value

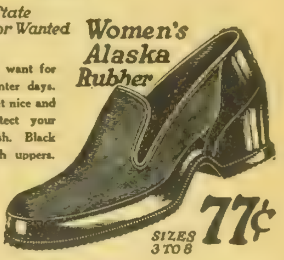


F 410
SIZES 3 to 8
87¢ State Color Wanted

This IS a record low price. Slippers of this quality sell everywhere for 25c to 50c more per pair. Fine, warm felt. Durable, soft cushion leather sole. Silk ribbon trimmed. Silk pompom. A bargain you'll always remember. PURPLE, OLD ROSE, AMERICAN BEAUTY, DARK ORCHARD.

67-410—Sizes 3 to 8 . . 87c

Women's Alaska Rubber



This is the rubber you want for the many cold wet winter days. Besides keeping your feet nice and warm, they will protect your shoes from wet and slush. Black fleece lined Jersey cloth uppers. $1.50 Value. Fit medium and low heel shoes.
(Sizes 3 to 8)

67-2570 77c

SIZES 3 TO 8 77¢

SEND NO MONEY — JUST YOUR ORDER

CHASE SHOE COMPANY,

Dept No. 67 MINNEAPOLIS, MINN.

Aspirin

Say "Bayer" and Insist!

Genuine

… you see the name "Bayer" on package or on tablets you are not getting the genuine Bayer product prescribed by physicians over twenty-two years and proved safe by millions for

Colds Headache
Toothache Lumbago
Earache Rheumatism
Neuralgia Pain, Pain

Accept "Bayer Tablets of Aspirin" only. Each unbroken package contains proper directions. Handy boxes of twelve tablets cost few cents. Druggists also sell bottles of 24 and 100. Aspirin is the trade mark of Bayer Manufacture of Monoaceticacidester of Salicylicacid. (1)

Are you interested

in knowing more about the work done and results obtained by the proper use of commercial fertilizers? Experiment Stations and farmers everywhere have for years been studying the question.

Twenty-five years of this work have given abundant proof that large profit may be obtained from the proper use of nitrogen.

Nitrate of Soda

furnishes this nitrogen in the cheapest and most available form which gives immediate and lasting results.

A new series of Bulletins with valuable information on the growing of all crops is now being issued. They will be published at intervals over a period of a year or more and should be in every farm library. A post card with your address asking for my *Bulletin Service* will bring them to you *Free of Cost.*

Dr. William S. Myers, Director
Chilean Nitrate Committee
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New 300 Candle Power Lamp

THE DIAMOND LIGHT

Make $60 to $100 a Week

Introducing this wonderful new lamp. Gives soft, brilliant light; restful to eyes; ideal illumination. Burns Kerosene or Gasoline Clean, odorless, economical. Burns 96% air, 4% fuel. Absolutely safe. Lights with match. 100 times brighter than wick lamps. Patented. Greatest improvement of age. Table lamps, hanging lamps, lanterns. Work all or spare time. You simply take orders. We deliver by Parcel Post and do collecting. Commissions paid same day you take orders. No experience necessary. Get started at once. Big season now on. Write today for catalog and special agents offer.

THE AKRON LAMP CO.
2012 Lamp Bldg., Akron, O.

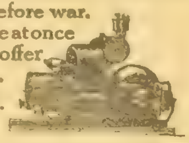
AGENTS FREE Send for Outfit Offer

My Engine Will Do the Work of 6

Write now for facts about this wonder engine. Same engine gives 1⅛ to 6 H.P. Gasoline or kerosene, portable, light and free from vibration. No cranking. Pumps, saws, grinds and does all chores. Plenty of power for every purpose. Easy to operate.

Low Factory Price—Special Offer

Price now lower than before war. Tremendous value. Write at once for catalog and special offer, on this amazing engine.



THE EDWARDS MOTOR CO.
734 Main St., Springfield, O.

AN AD IN THE MICHIGAN BUSINESS FARMER WILL SELL IT!

Farmers Service Bureau

(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full name and address. Name not used if so requested.)

RIGHT OF TEACHER TO PUNISH CHILD

The teacher in our district keeps the children in at recess and noon for offense. To-day she gave them 18 minutes to learn the words of a song. Some of them could not sing it so she gave them no recess and only 25 minutes lunch time. One boy has stayed in since Sept. 28 to Nov. 15 and she said he'll have till the 30th because he would not apologize for some little thing. For whispering they stay in eight days and the same for listening, or talkng to them at recess. Our school director said she has no right to do so. Is this so or not and can she make them stay after school or four o'clock for being tardy?—P. G., Ludington, Michigan.

—The statute remains silent with reference to the type of punishment that may be ministered by the teacher. The law does not give the school board any authority to make and enforce suitable rules governing the external affairs of the school. You will find this provision in section 17 given on page 37 of the General School Laws for 1921. The Supreme Court has rendered a decision that the teacher has delegated perental control over the children while under her jurisdiction and that she has authority to administer any reasonable punishment.

Conditions might arise where in the teacher's judgement the appropriate type of punishment would be to keep a child in at recess or after school. It seems to me that the character of the offenses as well as the temperament of the child should govern in determining the punishment. If a child is tardy on account of having played along the road, it might seem advisable to ask him to stay after school and make up the time. In this case, the child has the alternative of escaping the punishment by being on time.

No teacher would have a right to treat a child in a brutal manner or in such a way as to cause permanent physical injury. The type of punishment that might be adapted to one individual child would not be suited to another, so one must know the individual child and as I see it no general rule can be given with reference to this matter.—B. J. Ford, Department of Public Instruction.

MORTGAGE AGAINST HOGS

A year ago last July or August I bought two hogs. Since then I have killed the hogs and find that there was a mortgage against the hogs. I paid for them and still have in my possession bill of sale signed by the party in the presence of a lawyer. Will you please tell me if I am compelled to pay for the hogs again?—F. C. M., Curran, Michigan.

—If the mortgage was properly filed you would be liable for the value of the hogs not exceeding the amount of the mortgage. You might be able to make the mortgagor pay for selling you the mortgaged property, unless the bill of sale you received contained the statement that the sale was subject to the mortgage.—Legal Editor.

COST OF TILING 160 ACRES OF MUCK

Can you give me some idea of cost of tiling 160 acres of muck land. Have direct outlet into dredge ditch. Muck not deep, eighty acres spotted with clay and sandy loam.—H. A. S. Capac, Michigan.

—Ordinarily, muck land which is underlaid with clay will require practically the same sort of drainage as clay land because after the muck has been drained it will settle and work into the clay so there will be practically not much left after a few years of cultivation. I would suggest that this be drained about 4 rods apart. If, however, you have 2 feet of muck it might be drained 5 rods apart. The tile should be laid at least 3 feet deep and better 3½ feet if you have 2 feet of muck because the muck will settle at least a foot leaving your tile only 2½ feet underground. I am assuming that the tile in this case will be laid in the clay subsoil. If the tile are spaced 4 rods apart it will take approximately 600 tile per acre.

If soft clay tile are used, they will probably cost delivered at your station about $35 per thousand. The glazed tile would cost around $45 per thousand. This would mean that it will cost for tile—$21 to $27 per acre. The digging should be done around 50 cents a rod, which will cost $20 per acre where the tile are spaced 4 rods apart. I am assuming in making these calculations that you wish this farm thoroughly drained so that it will be suitable for nearly all kinds of crops, espcially cultivated crops. If the muck land is merely intended for hay it might be possible to get satisfactory drainage by spacing the tile drains 10 rods apart. The upland will cost practically the same as the low land when tiled 4 rods apart. The drains on high ground, however, should not be put more than 2½ feet deep.—O. E. Robey, Extension Specialist in Drainage, M. A. C.

SECURE COPY OF RULES

I bought a boiler and it had been used. It was a portable boiler but the wheels have been taken off. It is ten miles from where I wish to use it. I have been told I must have the boiler inspected before I move or use it. If so, to whom must I apply for inspection? I wish to run a small saw for cutting lumber on my farm.—E. J. B., Petoskey, Michigan.

—A law was passed in 1917 providing for the appointment of a board of boiler inspectors. I do not know who was appointed. I think that if you would write Hon. C. J. DeLand, Secretary of State, and ask him for the rules of the board authorized by Act 174, of the Public Acts of 1917, he may be able to send it to you or tell you where you can get it.—Legal Editor.

WHAT RENTER MUST DO

If owner of farm rents his farm to B and the owner has all the tools and horses and lets renter use them for nothing, also the feed for horses, and all seed for farm, and this farm rented one half of crops to renter and half to owner, does the owner have to take care of his part? For instance we have to haul our potatoes ourselves, and have to husk and haul corn. We dug and picked our potatoes ourselves. Does the renter have to do this for us?—P. J., Boyne City, Michigan.

—What the renter is to do is usually placed in the lease and if so incorporated it would control; but if the lease simply provides that renter is to do all the work I would be of the opinion he would have to husk the corn, dig potatoes and haul potatoes, and all the work the owner would have to do if he did not rent the farm.—Legal Editor.

CANNOT REMOVE FAMILY FROM NEIGBORHOOD

In our community we have a very undesirable colored family. They uphold their children in all kinds of stealing, window breaking and such. They allow their children to have firearms and threaten other children as they wish. What are the steps necessary to have them move from the country? Who should I go and see? Mrs. A. P., Flushing, Michigan.

—You would have to proceed against them the same as other children. You would need to make a complaint for any of the things you enumerate and if the children are old enough have them punished. If they are not old enough have the police officer, truant officer, or sheriff's office take charge of the matter. The better way would be for such persons as are interested to place the matter before the prosecuting attorney or county agent and ask them to assist you. You would have no right to ask them to be removed from the community. You have no right to unload your burdens upon some other community but endeavor to have them obey the law in your community.—Legal Editor.

SPEED OF TRUCKS ON HIGHWAY

I would like to know the law concerning the speed of loaded and empty trucks.—H. D. B., North Branch, Mich.

—I call your attention to Section 14, of Act 132 of the Public Acts of 1917, which limits the rate of speed of motor trucks according to the size of the tire in the following manner:

2 inch tire, single 20 miles per hour, double 18 miles per hour; 2½ inch tire, single 20 miles per hour, double 18 miles per hour; 3 inch tire, single 20 miles, double 18 miles; 3½ inch tire, single 20 miles, double 16 miles; 4 inch tire, single 18 miles, double 14 miles; 5 inch tire, single 16 miles, double 13 miles; 6 inch tire, single 14 miles, double 12 miles; 7 inch tire, single 12 miles, double 10 miles.

The above is the only specific limitation placed on the rate of speed of trucks and trailers aside from the general limitation of all motor vehicles, which is a maximum speed of 35 miles per hour.—State Highway Dept.

CANCELLED CHECK IS RECEIPT

Six years ago I left Iowa for Michigan, paying all debts except one to a doctor for $6.50. I later paid it and received check back, after that the doctor tried to get another payment through another company. Can he collect it?—H. H., Rudyard, Michigan.

—If you paid the doctor in full by check and have the returned check endorsed by him you would not be obliged to pay the debt again. The cancelled check is evidence of the payment.—Legal Editor.

NEIGHBOR NOT OBLIGED TO DRAIN OFF WATER

In case water drowns out my grain does my neighbor have to take care of the water in case there is no other run for the water but through his farm, and there is lots of fall?—N. N. F., Glennis, Michigan.

—You would be obliged to take all the water that comes upon your farm just as it would come in a state of nature. Your neighbor would have no right to gather the water in ditches and cast it upon your farm in unusual quantities nor at unusual times. Neither would you have the right to ditch your farm and throw the water from your farm onto your neighbor below in unusual quantities or at unusual times. You can fill in any sags on your farm without harm to your neighbor below but you would not have the right to ditch. The only way to get such draining is to have a public ditch constructed into which you may drain your farm and others to the same.—Legal Editor.

WHO PAYS THRESH BILL?

Who should pay the threshing bill in this case? I as second party, rented a farm for one year, first party to furnish everything to carry on farming, and I do all the manual labor and give first party two thirds and the first party keeps all the straw.—F. O., Sherman, Mich.

—I would say that in order to answer the above question more detail should be given, thus making it clear what the status is.

The customary rule is to divide expenses such as threshing in the same proportion as receipts. In this case the landlord would stand two-thirds of the threshing bill. However, as he is securing all the straw there should be an adjustment for his share of the straw. Such items as these should be agreed upon when the contract is made, thus avoiding misunderstandings later.—F. T. Riddell, Farm Management Demonstrator, M. A. C.

HOW TO FILE CLAIM

On July 28th 1922 I had a valuable cow killed by a train two miles north of Homer on Lansing branch of N. Y. Central. She got through the company's fence and was killed on their ground. The section boss filled out a blank and he had me get appraisers to sign it. The station agent said that was all that was necessary. Now I find this was not a claim but simply a report for the section boss to keep. I have just written the Chicago claim agent. Am I on the right course?—E. S. C., Homer, Michigan.

—I would make out a claim for the damage caused you and keep a copy and file a copy with the claim agent of the railroad at your nearest station and if not paid soon I would employ a lawyer to assist me in collecting it. I have known railroad companies to delay and annoy a claimant to discourage the making of claims. It would be fair to allow them some time to investigate their liability but it is unreasonable to take months and even over one year to compensate a person if the company is liable for the damage. The railroad company is not necessarily liable just from the mere fact the cow was killed on their track. I would believe that you would be money ahead if you employed some one who knew how to get the damage if you are entitled to it.—Legal Editor.

MAKING VINEGAR

Would you plase tell me, does any kind of apples make vinegar, or is there anything you put into cider to make good vinegar?—Reader.

—All kinds of apples do not make good cider. However any apple that produces a juice with a sufficient amount of sugar present to make a four per cent alcohol will make vinegar.

We furnish a vinegar yeast culture at the rate of twenty-five cents each for the purpose of starting the alcholic fermentation, the first step of the vinegar making process. We likewise furnish a vinegar bacteria culture for the purpose of controlling the acetic acid fermentation. These cultures are sufficient for one barrel two-thirds full of vinegar stock.—R. L. Tweed, Res. Asst in Bacteriology, M. A. C.

SELL SUBJECT TO MORTGAGE

If C sells his farm to B and takes mortgage on the farm, can B sell it to C and oblige A to leave mortgage on farm without A agreeing to such? Mortgage is due in five years from date.—D. M., Hudsonville, Michigan.

—B may sell the farm at any time subject to the mortgage. A cannot require the payment of the mortgage until it is due regardless of who owns the farm.—Legal Editor.

PURCHASER OF WHEAT LIABLE

My neighbor bought wheat from me a year ago last September. I asked him to pay for same in two weeks. I sold the grain as it was, uncleaned, for the market price then. He has not yet paid me. I also sold it under condition, if I got a higher price for my wheat when I sold the balance I had, he was to pay me that price. Since selling him the wheat the price raised to $1.30, and that is what I sold the balance for. I have no papers to show for any of this. Could I make him pay interest on this money since he agreed to pay me in full?—Mrs. M. B., Merrill, Mich.

—The purchaser of the wheat would be liable for interest if he did not pay for it at the date agreed upon.—Legal Editor.

NOT LIABLE FOR DAMAGES

If a man hired to work on a farm by the day, month, or year should accidentally or through his carelessness be injured, is the man whom he is employed by liable for damages under the Compensation Law of Michigan?—J. W. K., Orleans, Mich.

— Section 5424 of the C. L. 1915 is as follows:

"The provisions of Section 1, shall not apply to actions to recover damages for personal injuries sustained by household domestic servants and farm laborers."—Legal Editor.

MIGHT RECOVER MONEY

If a son sends for his mother to live here and buys half the house and he and she live together, and the mother does the biggest share, furnishes house with almost everything, does all the work, he was to provide help and didn't do so for ten years and now wants to get rid of her after using her money, could he do it and wouldn't he have to pay her for his board and use of things, his washing, mending for ten years. He owes $100 interest on money. Could that be collected, how much could she collect a week if any and could she for ten years?—Mrs. M. H. M., Akron, Mich.

—The mother might recover for anything the son has promised to pay; but services rendered by the mother and son living together is presumed to be gratuitous. The promise to pay or do certain things may be inforced one against another. Section 5191 and following provides that a child may be compelled to support and care for a parent and the poor board may enforce it.—Legal Editor.

DOES FLY BITE?

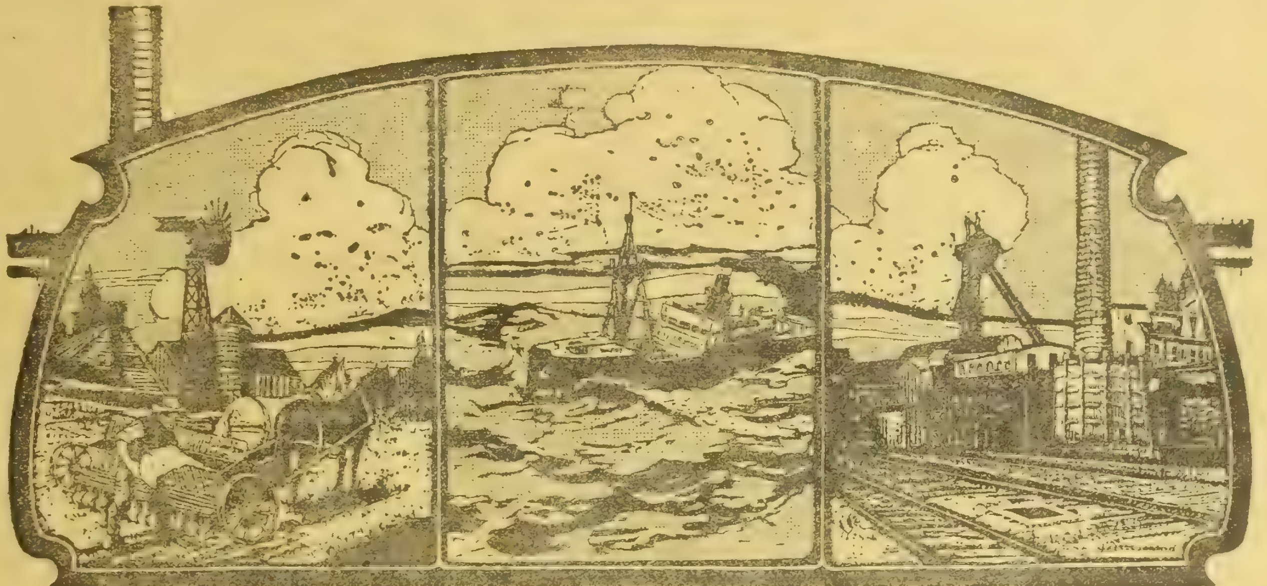
Am writing you in regard to an argument which arose between two persons, as to whether flies (the common house fly) bites or not. I am very anxious to learn what you can tell me on this subject. If they do not bite why does it seem as if they do?—Miss E. G., Kewadin, Mich.

—As to whether the common house fly bites or not, I quote from "Flies and Diseases" by Graham Smith: "The common house fly is called MuscaDomestica. Stomoxys Calcitrans, the stable fly or biting house fly, is about the same size as the house fly and is very frequently mistaken for it. It is more stoutly built and may be distinguished by the appearance of its proboscis which is modified into an awl-like structure adapted for piercing and sucking. It is commonly mistaken for the common house fly which is, therefore, often accused of biting."—Michigan Department of Health.

CHILD WOULD GET NOTHING

I am married and have four nice children. The oldest girl, 8 years old, now, is not my husband's right child. Her father died when she was three weeks old. When she was a year old, I married again. She goes to school now and uses her step father's name. He has no papers to show she can use his name. I and my second husband own a nice farm and have a joint deed. In case I should die, would this child get as much as the rest of them, and has she just as much right as the rest, or would it be better if my husband would adopt her as his own, or doesn't it matter so long as she uses his name?—A. H. M., Saginaw, Michigan.

—If you should die first and the farm is in the joint name of yourself and husband the child by your first husband would inherit nothing from the farm. It would all belong to your husband. He could give the child what he wanted to but the law would give it nothing unless he adopts the child by legal adoption. The mere keeping the child and treating it as his own would give no right of inheritance but if he would adopt the child it would then share equally with the other children in his property as well as yours. It would be better to have a legal adoption made out.—Legal Editor.



ASK FOR POTASH

The present conditions in the business of the farmer and in the fertilizer industry call for serious thought. Both are going through a readjustment period, with its hardships and doubts.

The farmer may well ask whether he is using the most profitable fertilizer. The fertilizer salesman may well inquire whether he is selling the kind that will do the farmer the most good, and lead to larger sales in the future.

During the war America could not get Potash, and the use of acid phosphate increased. Central Europe could not get phosphates, and the use of Potash Salts increased. Today plenty of Potash can be had at less than pre-war prices. Now is the right time to restore the balance by using more Potash in the fertilizer formulas than the average amount used before, 5 to 10 per cent.

Crops take from the soil very much more Potash than phosphoric acid. On any soil where Potash has been profitable it is not unreasonable now to use at least as much Potash as phosphoric acid. Ask the fertilizer agent for prices on this kind of goods, and rebuild your soil while Potash is cheap.

Recently it has been shown that a lack of available magnesia causes serious injury to important crops on some soils. German Kainit and Manure Salts furnish this soluble magnesia without extra cost.

SOIL & CROP SERVICE, POTASH SYNDICATE
H. A. HUSTON, Manager
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Ask for POTASH—Buy POTASH—Use POTASH

POTASH PAYS

The Hunted Woman

By James Oliver Curwood

Michigan's Own and America's Formost Author of the Great Northwest

(Copyright by James Oliver Curwood

SYNOPSIS

JOANNE GRAY is one of the passengers on the train that connects "The Horde" with the civilized world. For eighteen hours she has been riding steadily bound for Tete Jaune Cache, the home of "The Horde", where she has no friends and all will be strange to her. The train stops at a town composed of several tents and learning that the train will not leave for two hours she goes in search of food and a bath. She is directed to "Bill's Shack" and it is here where she meets Bill Quade, who not only owns and operates "Bill's Shack" but is also leader of the lawless men of the town. Quade says he has a room she can rent and that he will show it to her. As they pass of the room a newcomer enters the doorway leading off the street. The newcomer is John Aldous, a well known novelist. He sees the strange girl enter the place and believes she has made a mistake and as he stands in the doorway his eyes rest upon the curtained doorway through which the girl and Quade have passed. In but a moment the girl steps out her face flaming and eyes flashing. Quade follows her apologetically. He starts to offer the girl some money but before he can do so Aldous steps to the girl's side and floors Quade with a terrific blow. Aldous hurries the girl away from the scene to the home of friends. He then asks the girl to be his guest at supper in his cabin. She accepts. Joanne tells Aldous she is going to Tete Jaune to find her husband, Mortimer FitzHugh. Aldous decides to go with her to protect her from Quade and his partner at Tete Juane, Culver Rann. Aldous believes FitzHugh is dead and locates a friend who declares he has seen the grave.

(Continued from Nov. 25 issue)

SHE smiled at the amazement which had gathered in his face. A soft light shone in her eyes.

"I guess Mrs. Otto has been like a mother to that poor little boy," she explained. "When you and Mr. Stevens went up to buy the outfit this morning Jimmy ran over to tell her the news. We were all there—at breakfast. He was so excited he could scarcely breathe. But it came out, and he ran back to camp before you came because he thought you wouldn't want me to know. Wasn't that funny? He told me so when I walked a little way up the path with him."

"The little reprobate!" chuckled Aldous. "He's the best publicity man I ever had, Lady Gray. I did want you to know about this, and I wanted it to come to you in just this way, so that I wouldn't be compelled to tell you myself of the big and noble act I have done. It was my hope and desire that you, thru someone else, would learn of it, and come to understand me more fully what a generous and splendid biped I am. I even plotted to give this child of Stevns' a silver dollar if he would get the news to you in some one of his innocent ways. He's done it. And he couldn't have done it better—even for a dollar. Ah, here we are at the cabin. Will you excuse me while I pick up a few things that I want to take on to Tete Jaune with me?"

Between the two trees close to the cabin he had built a seat, and here he left Joanne. He was gone scarcely five minutes when he reappeared with a small pack-sack over his shoulders, locked the door, and rejoined her.

"You see it isn't much of a task for me to move," he said, as they turned back in the direction of the Ottos'. "I'll wash the dishes when I come back next October."

"Five months!" gasped Joanne, counting on her fingers. "John Aldous, do you mean——"

"I do," he nodded emphatically. "I frequently leave dishes unwashed for quite a spell at a time. That's the one unpleasant thing about this sort of life—washing dishes. It's not so bad in the rainy season, but it's fierce during a dry spell. When it rains I put the dishes out on a flat rock, dirty side up, and the good Lord does the scrubbing."

He looked at Joanne, face and eyes aglow with the happiness that was sweeping in a mighty tumult within him. Half an hour had worked transformation in Joanne. There was no longer a trace of anguish or of fear in her eyes. Their purity and limpid beauty made him think of the rock violets that grew high up in the mountains. Her lips and cheeks were flushed, and the soft pressure of her hand again resting on his arm filled him with the exquisite thrill of possession and joy. He did not speak of Tete Juane again until they reached the Otto tent-house, and then only to assure her that he would call for her half an hour before the train was ready to leave.

As soon as possible after that he went to the telegraph office and sent a long message to McDonald. Among other things he told him to prepare their cabin for a lady guest. He knew this would shock the old mountain wanderer, but he also knew that Donald would follow his instructions in spite of whatever alarm he might have. There were other women at Tete Jaune, the wives of men he knew, to whom he might have taken Joanne. Under the conditions, however, he believed his own cabin would be her best refuge, at least for a day or so. In that time he could take someone into his confidence, probably Blackton and his wife. In fact, as he thought the circumtances over, he saw the necessity of confiding in the Blacktons that very night.

He left the station, growing a bit nervous. Was it right to take Joanne to his cabin at all? He had a tremendous desire to do so, chiefly on account of Quade. The cabin was a quarter of a mile in the bush, and he was positive if Joanne was there that Quade, and perhaps Culver Rann, would come nosing about. This would give him the opportunity of putting into execution a plan which he had already arranged for himself and old McDonald. On the other hand, was this arrangement fair to Joanne, even though it gave him the chance to square up accounts with Quade?

He stopped abruptly, and faced the station. All at once there swept upon him a realization of how blind he had been, and what a fool he had almost made of himself. Blackton was one of the contractors who were working miracles in the mountains. He was a friend who would fight for him if necessary. Mrs. Blackton, who preferred to be on the firing line with her husband than in her luxurious city home, was the leader of all that was decent and womanly in Tete Jaune. Why not have these friends meet them at the train and take Joanne direct to their house? Such recognition and friendship would mean everything to Joanne. To take her to his cabin would mean——

Inwardly he swore at himself as he hurried back to the station, and his face burned hotly as he thought of the chance of such a blunder on his part would have given Quade and Culver Rann to circulate the stories with which they layed their scoundrelly game. He sent another longer telegram. This time it was to Blackton.

He ate dinner with Stevens, who had his new outfit ready for the mountains. It was two o'clock before he brought Joanne to the station. She was dressed now as he had first seen her when she entered Quade's place. A veil covered her face. Through the gray film of it he caught the soft warm glow of her eyes and the shimmer of gold-brown tendrils of her hair. And he knew why she wore that veil. It set his heart beating swiftly—the fact that she was trying to hide from all eyes but his own a beauty so pure and wonderful that it made her uncomfortable when under the staring gaze of the Horde

The hand that rested on his arm pressed closer to his side as they walked up the station platform, and under his breath he laughed softly and joyously as he felt the thrill of it. He spoke no word. Not until they were in their seat in the coach did Joanne look at him after that pressure of her hand, and then she did not speak. But in the veiled glow of her eyes there was something that told him she understood—a light that was wonderfully gentle and sweet. And yet, without words, she asked him to keep within his soul the things that were pounding madly there for speech.

As the train rolled on and the babble of voices about them joined the crunching rumble of the wheels, he wanted to lean close to her and tell her how the few hours had changed the world for him And then, for a moment, her eyes turned to him again, and he knew that it would be a sacrelige to give voice to things he wanted to say. For many minutes he was silent, gazing with her upon the wild panorama of mountain beauty as it drifted past the car window. A loud voice two seats ahead of them proclaimed that they were about to make Templeton's Curve. This man was talking to his companion.

"They shot up a hundred thousand pounds of black powder an' dynamite to make way for two hundred feet of steel on that curve," he explained in a voice heard all over the car. "They say you could hear the explosion fifty miles away. Jack Templeton was near-sighted, an' he didn't see a rock coming down on him that was half as big as a house. I helped scrape up what was left of 'im an' we planted him at this end of the curve. It's been Templeton's Curve ever since. You'll see his grave—with a slab over it!"

It was there almost as he spoke, marked by a white-painted cross in a circle of whitewashed stones. John Aldous felt a sudden shier pass thru his companion. She turned from the window. Through her veil he saw her lips tighten. Until he left the car half an hour later the man in the second seat ahead talked of Templeton's grave and a dozen other graves along the right of way.

He was a rock-hog, and a specialist on the subject of graves. Inwardly Aldous cursed him roundly. He cursed him all the way to Tete Jaune, for to him he attributed the change that had again came over Joanne.

This change she could only partly conceal from him under her veil. She asked him many questions about Tete Jaune and the Blacktons, and tried to take an interest in the scenery they were passing. In spite of this he could see that she was becoming more and more nervous as they progressed toward the end of their journey. He felt the slow dampening of his own joy, the deadening clutch of yesterday at his heart. Twice she lifted her veil for a moment and he saw she was pale and the tense lines had gathered about her mouth again. There was something almost haggard in her look the second time.

In the early dusk of evening they arrived at Tete Jaune. Aldous waited until the car had emptied itself before he rose from his seat. Joanne's hand clutched his arm as they walked down the aisle. He felt the fierce pressure of her fingers in his flesh. On the car platform they paused for a moment, and he felt her throbbing beside him. She had taken her hand from his arm, and he turned suddenly. She had raised her veil. Her face was dead white. And she was staring out over the sea of faces under them in a strange questing way, and her breath came from between her slightly parted lips as if she had been running. Amazed for the moment, John Aldous did not move. Somewhere in that crowd Joanne expected to find a face she knew! The truth struck him dumb—made him inert and lifeless. He, too, stared as if in a trance. And then, suddenly, every drop of blood in his body blazed into fierce life.

In the glow of one of the station lamps stood a group of men. The faces of all were turned toward them. One he recognized—a bloated, leering face grinning devilishly at them. It was Quade!

A low, frightened cry broke from Joanne's lips, and he knew that she too, had seen him. But it was not Quade that she had looked for. It was not his face that she had expected to see nor because of him that she had lifted her veil for the mob!

He stepped down from the car and gave her his hand. Her fingers clutched his convulsively. And they were cold as the fingers of the dead.

CHAPTER X

A moment later some one came through the crowd, and called Aldous by name. It was Blackton. His thin, genial face with its little spiked moustache rose above the sea of heads about him, and as he came he grinned a welcome.

"A beastly mob!" he exclaimed, as he gripped his friend's hand. "I'm sorry I couldn't bring my wife nearer than the back platform."

Aldous turned to Joanne. He was still half in a daze. His heart was choking him with its swift and excited beating. Even as he introduced her to Blackton the voice kept crying in his brain that she had expected to find someone in this crowd whom she knew. For a space it was as if the Joanne whom he had known had slipped away from him. She had told him about the grave, but this other she had kept from him. Something that was almost anger surged up in him. His face bore marks of the strain as he watched her greet Blackton. In an instant, it seemed to him, she had regained a part of her composure. Blackton saw nothing but the haggard lines about her eyes and the deep pallor in her face, which he ascribed to fatigue.

"You're tired, Miss Gray," he said. "It's a killing ride up from Miette these days. If we can get through this mob we'll have supper in fifteen minutes!"

With a word to Aldous he began worming his long, lean body ahead of them. An instant Joanne's face was very close to Aldous' so close that he felt her breath, and a tendril of her hair touched his lips. In that instant her eyes looked into his steadily, and he felt rush over him a sudden shame. If she was seeking and expecting, it was to him more than ever that she was now looking for protection. The haunting trouble in her eyes, their entreaty, their shining faith in him told him that, and he was glad that she had not seen his sudden fear and suspicion. She clung more closely to him as they followed Blackton. Her little fingers held his arm as if she were afraid some force might tear him from her. He saw that she was looking quickly at the faces about them with that same questing mystery in her search.

At the thin outer edge of the crowd Blackton dropped back beside them. A few steps more and they came to the end of the platform, where a buckboard was waiting in the dim light of one of the station lamps. Blackton introduced Joanne, and assisted her into the seat beside his wife.

"We'll leave you ladies to become acquainted while we rustle the baggage," he said. "Got the checks, Aldous?"

Joanne had given Aldous two checks on the train, and he handed them to Blackton. Together they made their way to the baggage-room.

"Thought Miss Gray would have some luggage, so I had one of my men come with another team," he explained. "We won't have to wait. I'll give him the checks."

Before they returned to the buckboard, Aldous halted his friend.

"I couldn't say much in that telegram," he said. "If Miss Gray wasn't tired and unstrung I'd let her explain. I want you to tell Mrs. Blackton that she has come to Tete Jaune on a rather unpleasant mission, old man. Nothing less than to attend to the grave of a—a near relative."

"I regret that—I regret it very much," replied Blackton, flinging away the match he had lighted without touching his cigar. "I had guessed that something was wrong. She's welcome at our place, Aldous—for as long as she remains in Tete Jaune. Perhaps I knew this relative. If I can assist you or—her—"

"He died before the steel came," said Aldous. "FitzHugh was his name. Old Donald and I are going to take her to the grave. Miss Gray is an old friend of mine," he lied boldly. "We want to start at dawn. Will that be too much trouble for you and your wife?"

(Continued on page 23.)

UPPER PENINSULA NOTES

Sound Death Knell for Scrub Cows

A CAMPAIGN to eliminate 3,000 inefficient cows throughout the upper peninsula of Michigan will begin January 1st of next year. The actual work will be carried on largely through the medium of the cow testing association which have already been organized in Dickinson, Gogebic, Iron, Delta and Marquette counties.

The scrubs will be replaced with high-producing grade animals, having an average record of 8,000 pounds of milk annually. The county agents say this is vital, in view of the fact that the average milk production, per cow, in the state of Michigan today is but 4,000 pounds.

* * *

To Place Certified Seed

Another feature of the ensuing year's program will be the placing of 50,000 certified seed potatoes among the farmers of the upper peninsula of Michigan.

Most of the certified tubers will be procured from the upper Michigan territory, and re-distributed to a picked group of farmers. The two types to be emphasized in the campaign are the Petosky Russet and the Green Mountain. J. W. Weston, potato expert for the Michigan Agricultural College, will be directly in charge of this campaign.

"We are going to try to inculcate into the minds of the farmers that it is not more potatoes, but better potatoes, that we want in upper Michigan," Mr. Weston declared.

* * *

Other Features

Poultry culling is another agricultural phase in upper Michigan which will receive the attention of the agriculture college, in the near future. An effort will be made, during the ensuing year, to cull out every non-producing hen in the upper peninsula, replacing the inefficient birds with producers, wherever possible. E. C. Forman, of the Michigan Agrucultural College will direct the work.

Next year's schedule also calls for fruit tree pruning and spraying demonstrations. In addition, crop tests for better varieties will be carried on in every county in the peninsula, and the effort will also be made to promote the more general planting of clover and alfalfa, in place of much of the timothy now grown.

More handicraft, pig and poultry clubs are also included in the program. Considerable interest has already been aroused in this work which has been carried on, among the boys and girls of upper Michigan during the past year, by A. G. Kottunen, leader of boys' and girls' clubs for upper Michigan.

* * *

To Encourage Dairying

It was announced during the county agents meeting that the agricultural college will, in the near future, detail a dairy expert to the upper Michigan territory. It will be his sole duty to encourage advanced dairying, largely through the medium of pure-bred live-stock. His first duty will be the organization of cow-testing associations in the counties which have not, as yet, taken up this work.

LAND CLEARING PROGRAM

A DEFINITE program for the land clearing campaign throughout the Upper Peninsula of Michigan has been arranged by Harry F. Livingston, Land Clearing Specialist for the Michigan Agricultural College, according to a recent announcement from the office of the M. A. C. Extension Department at Marquette.

In order that the peninsula may be more efficiently served in this campaign, Mr. Livingston has divided this section into two districts. A. J. MacAdams, who was in charge of the dynamite work with the land clearing train which conducted thirty eight schools of instruction in upper Michigan this year, will direct the work in the western half of the peninsula. George Amundson, who accompanied Cloverland's Land Clearing Train, will direct the activities in the eastern section of the peninsula.

The winter campaign calls for a series of meetings in both districts with the view of determining the individual problems of each section.

"The fact that this year we will be able to conduct at least ten meetings in every county makes it possible for the land clearing forces to bring their information nearer to the farmer" declared Mr. Livingston in discussing the program for the ensuing year. "The carload system of buying explosives will be discussed at these meetings and it is confidently expected that all explosives which the farmers of upper Michigan will use during the ensuing year will be obtained for them in carload quantity. This means a saving to the farmer of from 25 per cent to 40 per cent of the usual costs for explosives."

Plans for the 1923 land clearing are also under way. According to Mr. Livingston, the schools during the coming year will differ from those held during 1922 in that the train will consist of a caravan of trucks rather than railway trains. This system, it is believed, will be a decided improvement over the railway system, permitting a more ready access to the districts in which the schools will be held, and will eliminate the necessity of the train being limited entirely to the rights of way. Both MacAdams and Amundson are experienced in the land clearing work, the former being a graduate from the University of Wisconsin and. considered one of the best dynamite men in the country; and the latter recognized for his work in Ashland county, Wisconsin, two years ago, where he directed similar activities with remarkable results.

Regarding the actual results achieved this year thus far, with Upper Michigan's land clearing campaign, there is every indication, according to Mr. Livingston, that the 60,000 cleared acres which he predicted at the opening of the session will be achieved.

OREGON MANUFACTURERS BOOST FARM COOPERATIVES

THE Oregon Chamber of Commerce has broken the record for manufacturers' organizations by declaring for cooperative marketing. With the spectacle before them of bankruptcy, starvation, and an actual dwindling of the farm population at an alarming rate, the Chamber of Commerce has established a fund of $150,000 to be used in support of the existing cooperative institutions and to aid in developing others.

The Oregon grain and fruit marketing cooperatives, which are famous throughout the country for their efficient service, have done much to cut out the middleman's profit on grain selling and to give the farmer the benefit of his toil. Prosperous farmers mean a prosperous state, and it is a hopeful sign that the business men of Oregon have at last come to realize that cooperation by safeguarding the interests of the farmer also benefits them.

COURT AGAIN DECLARES M. S. F. B. DUES COLLECTIBLE

MICHIGAN State Farm Bureau membership dues for 1920, 1921 and 1922 have again been declared legally collectible by the courts. Verdict in favor of the State Farm Bureau was given by a jury at Centerville, St. Joseph county, Nov. 13 after 30 minutes deliberatin following a three days battle in Justice Ashley's court, remarkable in the fact that five of Southern Michigan's most prominent attorneys were interested in the case.

The Bureau sued to collect $20 delinquent dues owed by John E. Davis of Constantine. The Farm Bureau attorneys won their case on the straight collectibility of the membership checks and the services rendered by the Farm Bureau in the three year period just closing. The Farm Bureau charged in open court that interests hostile to the Farm Bureau are stirring up delinquent membership dues suits in an effort to discredit the Farm Bureau organization. It is believed that the Centerville case may be appealed. an event which may be regarded as significant of the Farm Bureau charges.

Messers Harry Howard of Kalamazoo, Glenn Cowell of Coldwater and J. P. Sloan of Centerville were the attorneys for the Farm Bureau. Elmer Palmer of Coldwater and Geo. Arnold of Three Rivers represented the defendants.

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RADIO DEPARTMENT

EDITED BY J. HERBERT FERRIS

RADIO EDITOR WILL COME TO YOUR NEIGHBORHOOD

THERE are many farmers who needs radio in their business of being business farmers not only for the financial returns to them but for the really good things they will receive through it, bringing pleasure to their families and to the sick as well as the hired help. It will help keep the family at home, it will ease the burden of caring for the sick and will bring the church, school, state and government departments right to the very door of those that can not or could not go to these very same places.

We know of the interest in radio among the farmers and to assist them and take one more step to prove that we are "The Farm Paper of Service" the radio editor will spend an evening with any group of farmers and their families in the state at their request giving them an evening of entertainment by radio and at the same time demonstrate to them the "workings" of the set. And the only cost to them will be the travelling expenses, board and lodging for the night.

If Grangers, Farm Bureau, Gleaners, Farmers' Clubs or any collective group of farmers will arrange for a hall and will pay the actual traveling expenses and supply him with board and lodging for one night the radio editor will give a demonstration that from the amusement point alone will be worth many times the cost. Please write us at least one month in advance of date you desire to hold the meeting so arrangements can be made. And in case the editor is all ready engaged for some other gathering we will have ample time to advise you. Also give all the information possible in your first letter so that we may give you an intelligent reply at once.—Editor.

REGENERATIVE RECEIVING SET

IN describing a regenerative receiving set, it is well to understand what is meant by regenerative, and what the advantage of such a set really is to the user and whether it is better than a plain receiving set. In describing such a set we will make our language as simple as possible and not technical.

To generate means to make or create and to re-generate means to remake or make over again or create over again that which has already been made or created. Then a regenerative receiving set would be one that made over again the same signal that it first received, and this is exactly what such a set does. In doing this we not only get the original signals that we receive but by having them repeated by the same set into and thru itself we get the signals much louder, and so we can either receive messages from a greater distance or we will receive them louder.

A plain receiving set will operate on a crystal or vacuum tube detector, but a regenerative set requires a vacuum tube detector and unless you intend to make such detector or buy one, do not go to the trouble or expense of making a regenerative set as you will not be able to use it.

The very fact that in this set one re-generates his signals, means that the adjustment is a little more difficult than with an ordinary set, but when patience and a little practice have made you familiar with your set you will get results that you can not possibly get otherwise. Right here let us again emphasize and a good ground.

Mr. Frank H. Jones of Tuinucum, Cuba, has heard 16 different broadcasting stations that were over 1,000 miles away, and 4 of these were over 1,500 miles away, this was done with a vacuum tube detector and a regenerative receiver. This shows what can be done but does not mean that you or I will do just exactly as well, but with care we should do half as well and if we can do half as well as Mr. Jones did we will hear all the news, music and market reports that we wish to hear.

To make a regenerative receiving set the following articles will be needed, the screws binding posts, etc., you can get anywhere and in some cases do without, all depending upon how fancilly you mount your set or whether you just assemble your different parts all on a plain table top where they can all be seen.

One (1) Vario-coupler, having a range between 150 to 500 meters.

Two (2) variometers ,having the same range as the vario-coupler. (The wave length range can vary somewhat as each maker has a slightly different wave length range for his own instrument.)

Ten (10) brass contact points.

One (1) rotary switch lever.)

These two items go with the vario-coupler, and are only needed if you buy the vario-coupler unmounted.

A board to mount them on apanel for looks and a table or shelf to set them on completes the regenerative receiver.

Now to assemble them you must be careful, follow each wire connection thru, and then make the connection. Study the chart of symbols given in one of our articles so that you are sure all connections are corrections are correct and then you will know that you can receive messages from long distances.

One of the variometers we call the "grid variometer" and the other variometer we call the "plate variometer" this is because we use one of these variometers to tune the plate circuit of the vacuum tube detector and the other to tune the grid circuit of the same detector.

In making a drawing we often run our lines which represent wires very close together and very straight, making sharp turns and looking as tho it would be difficult to actually run wires just so. It is better not to have connecting wires run parallell more than necessary, and so far as being straight or turning at right angles the best method is to make all connections as short as possible, letting no wires touch that cross over each other and if possible where connections are shown between 3 or more points using one wire for all and not several wires, leting the wire run from one point to the other, pass under the screw, and on to the next.

One can make the vario-couplers and variometers, but such good ones are now on the market and cost from $3.00 to $6.00 each that much better results can be had with less labor if you will purchase these parts. A complete regenerative receiver(without detector) costs on the market today from $25 to $75 and by buying the three parts one can be made that will do just as good work, for $10 to $20.

Major Armstrong, the inventor of the regenerative circuits has just perfected another circuit which he and with this circuit using 2 vacuum tubes and the necessary parts, he can get signals as loud as can be had on one tube with regenerative receiver and 8 steps of amplifiers. This will mean that in the course of another few years we will be enabled to hear all the stations over the entire world without much difficulty. But don't wait for this to come as you are going to miss much this coming winter and spring that will mean dollars and pleasure to you if you are not listening-in to the many voices in the air right now or as soon as you can make or buy a receiving set.

How to make a variometer and vario-coupler will be described shortly, but first we must cover one and two-step amplifiers, and then we will take up the making of the different items that some will want to make and not buy.

* * *

Right here I want to emphasize the fact that to obtain the most out of radio in our rural communities and in the farm home, it must be done by co-operation.

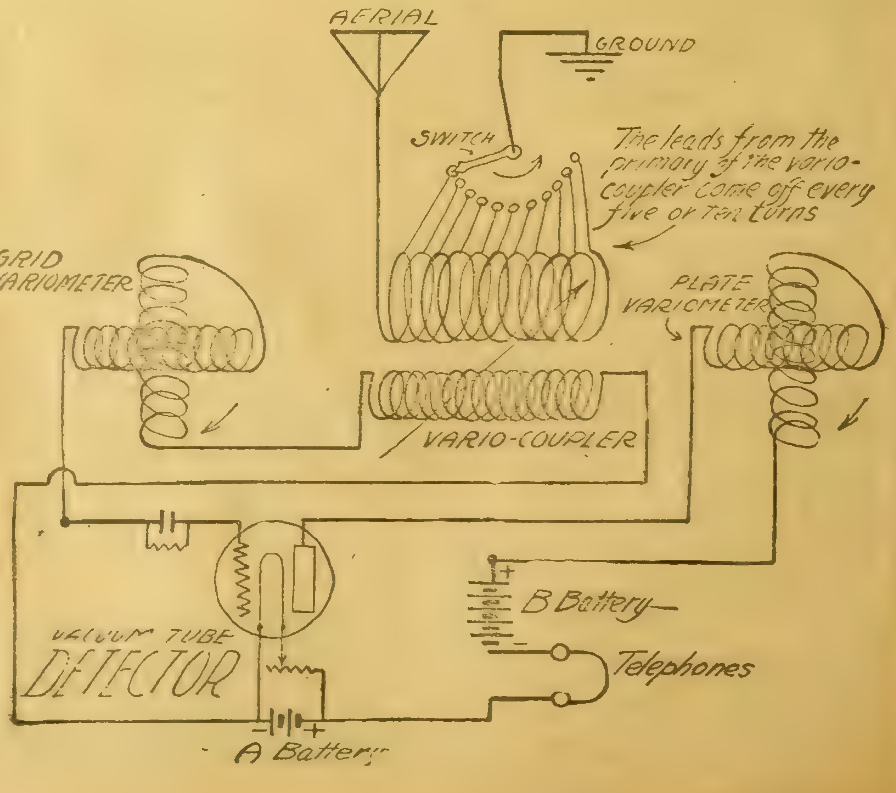
In the home the entire family will wish to hear the music and entertainments and father the market reports ,and to son will be given the "job" of making a receiving set and expect him to produce from some old wire, a wooden box and some odds and ends a dandy receiving set, and if he fails the whole family will say that there is nothing to radio. But if you will help, mother with a little butter and egg money, sister with a little of her berry picking money and brother and father with a little of the pork or potato or corn money you can buy a set that will bring the best of the world's music to you, the latest news, weather and market reports and keep you right in touch with the big things of life. Something that will do you good, entertain you and your friends and keep your children at home.

In the community, the church, the Grange, the Gleaners, the Masons or any organization should get together and get a radio set that will be of benefit to the whole community in this way the expense can be reduced to each individual and yet enjoyed by all. Have you wanted to hear the President of the United States talk to you? Then go to your lodge, club or church and hear him. He talks over the wireless now and then.

Get together in this, you can enjoy it collectively really better than individually and why not share or help share with your neighbor part of the good things that you can have so simply and at such a little expense.

* * *

In shipping some Bartlett pears and Damson plums this fall I watched the Chicago markets as given by KYW, the Westinghouse station at Chicago, and the net profits on two shipments, above what most of my neighbors received, paid for my receiving set. This shows what can be done, not on fruit alone but on live stock, or dressed meats, grain or anything that the farmers raise or ship.



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WHEN WRITING TO ADVERTISERS MENTION THE M. B. F.

FUR DEPARTMENT

EDITED BY A. R. HARDING
America's Foremost Author and Trapper
QUESTIONS ANSWERED

HARVESTING THE FUR CROP

(Continued from Nov. 25th Issue)

MUSKRAT are still the most plentiful of the Michigan fur bearers and at prices ruling the past three seasons value of the catch is much more than that of either skunk or mink. Muskrat breed twice each season—some say three times. Muskrat furs are used imitate seal and other high-priced furs.

Early in the season muskrat are rather easily caught, yet after a few have been taken, they become somewhat shy of uncovered traps. Many trappers use rubber boots, wadeing along the shore, claiming that their tracks scare the rats when conspicuous, in the mud, along the shore. If a boat can be used it is best, as sets can bemade where otherwise they could not.

Traps of the No. 1 and No. 115X, long spring type, and No. 1 of the Blake and Jump, Kangaroo, Oneida and Coil spring, or under spring type, are correct sizes to use. Some experienced trappers, however, use larger traps, claiming that they drown quicker. The trap, regardless of size, should be staked as far out in the water as chain will permit, and the trap set near shore in about two or three inches of water. Where the paths are leading from one lake, pond or swamp to another, or paths, leading up the bank, no bait is required. Bait should be used with sets made where there is but little sign. Corn, apple, potato, pumpkin and parsnip are all muskrat bait. Corn shelled and scattered about the trap or the other baits cut up and placed a foot or so beyond the trap will usually entice the animal to trap.

Bunches of cat tail and other weeds or grass showing where muskrat have been feeding are fair places to set. Boards and logs placed near houses sometimes make good places to set as muskrat enjoy resting and eating on them. Traps baited at such places are pretty sure to catch.

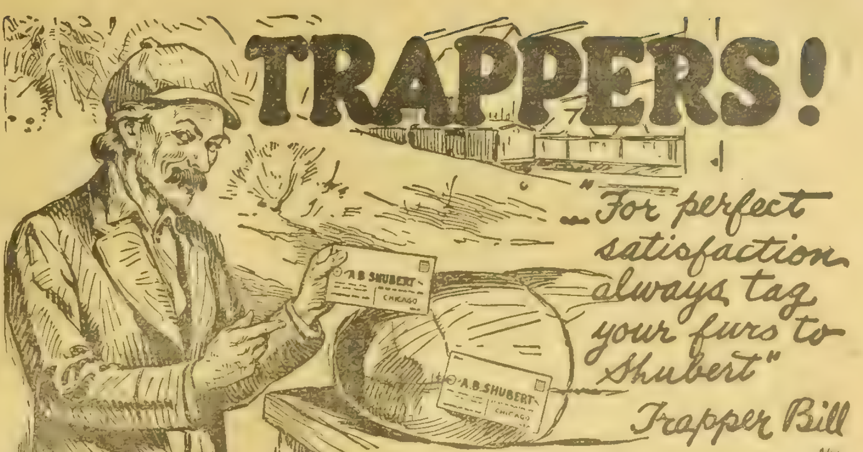
Some believe that muskrat gnaw their feet and legs off when caught. Such is not the case. If caught in a stiff spring trap breaking the bone ,they are very apt to get away by twisting about. The flesh and hide of the front foot and leg is tender. The hind foot and leg is larger and tougher and for this reason it is best to make the catch by the hind leg when possible. It is for this purpose that traps should be set about three or four inches deep. In swimming to shore or feeding places the front feet are apt to pass over the trap.

The weasel which turns white during the winter months for some years has been selling, according to size, from about 25 cents to $1.00 or more for very best, largest and pure white. The smallest size trap will easily hold this animal so that the No. O is much used. Weasel will be found along old stone fences, hedges, brush piles, etc. They are easily trapped and sets at small "cubbies" are probably as good a method for catching as any. They are fond of flesh and the bloodier the better. Keep this in mind when setting and baiting for this animal.

There is no open season on beaver until 1925 so no need to explain methods of trapping this fur bearer. There are now very few marten in the state so that trapping methods about all of the fur bearers, other than otter, has been explained. Otter are now quite scarce throughout the state yet there are some in all of the Upper Pneinsula and an occasional one still in several parts of the Lower Peninsula. Some eight years ago when trout fishing I chanced upon an otter slide in Gogebec County. I wrote a trapper friend, then in that county, and he caught three near and at the slide that season.

Otter are great rovers and may wander from a certain locality ten, fifteen or more miles and be away for weeks. Otter are very shy animals and frequent streams that are brushy and as little used by man

(Continued on page 23)



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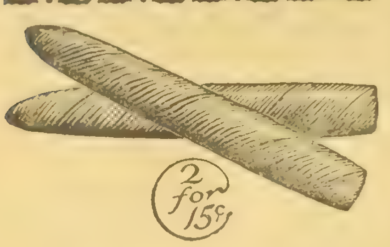

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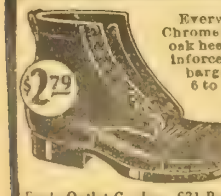

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WHEN WRITING TO ADVERTISERS MENTION THE M. B. F.

HISTORICAL BACKGROUND OF MICHIGAN AGRICULTURE

(Continued from page 4)

conveyed malaria, commonly called the "shakes" or "ague," which none escaped and which sapped the vitality of the pioneer and gave a bad reputation to the country which produced it. The pioneer, untaught by modern science, did not associate malaria with the mosquito, but he was aware that it lurked about the damp, water-soaked low-lands, and he surmised it had something to do with the "miasma' that afflicted the atmosphere in such regions. Early Michigan, because of the conditions that are here described, got a rather bad reputation in the East, and it was early officially declared that very little of the territory was fit for human habitation. The difficulties were exaggerated, but even so, establishing a farming community in the primeval wilderness was hard enough at best. The forest, dense and lofty which crowded round the settler's clearing, impeded air-drainage and hence favored unseasonable frosts, particularly in low places. It isolated farmstead from farmstead and made life lonely in the extreme, so that the settler sought every occassion for breaking away and seeking the company of his fellows even at great distances from home. The battle with the trees, and after them the stumps—some of them enormous in size and well-nigh indestructible, was grueling labor for both man and beast at a time when high explosives, mechanical stump-pullers and tractors were not yet at the disposal of the pioneer, as they are today. If accident or disease prostrated the settler, hospital care did not exist the medical care was difficult to secure—sometimes appalling so. Such amusements as there were, must be also home-made, and were all the more eagerly engaged in for being obtained with difficulty. They were spelling-downs and debating at the school-house, husking and quilting bees, raisings and camp-meetings. They helped to lighten up the hardships and trials of pioneering, but one seldom finds in the recollections of pioneer life by those who shared it, any longing for the return of the "good old days" which did not leave many impressions save those of toil and privation.

The Indians

The first farmers of Michigan were the Indians. A number of Algonquin tribes dwelt within the borders of the territory now comprised in Michigan—Chippewas in the north, with Ottawas and Menominees in close proximity to them, and with the Chippewas and Pottawatomies mainly in the south. The Indian "garden-beds" attracted the notice of the early settlers, although just what these were, is still a matter of some doubt. In Michigan the signs of these "garden-beds" have been mostly obliterated. They are better preserved in the neighboring state of Wisconsin. In a small way Michigan Indians grew Indian or "squaw" corn, with some vegetables, such as pumpkins. This primitive Indian corn—small kernels each surrounded in its own particular husk, clustered together as a small ear, that would now be called a "nubbing"—is still occasionally grown largely for curiousity's sake, although it is thought that it may have some value for breeding purposes because of its quick maturity. As one should expect, Indian agriculture, was unmethodical and of slight importance, as the pioneers testify and as is indicated by the frequent famines from which the Indians suffered. Forest and stream were the normal sources of the Indian's food, and while game was his chief article of diet, he produced maple-sugar in large quantities apparently, although the manner of its manufacture did not recommend it to the nicer palates of the whites. The lakes and marshes carried wild rice in both peninsulas, but this was not very nutritious, and the red man was prone to swap his winter's store for a drink of rum. Even yet implements of stone or copper are occasionally dug up in various portions of the state that presumably once served some agricultural purpose for the Indian, particularly the Indian's squaw. The man of the family was not eager for labor of this sort.

The first white farmers in Michigan were the French. The French also were more at home in the forest or on the water courses than in the tilled field; but their farmsteads did appear close together, chiefly in the southeastern corner of Michigan usually reaching from the waterside of Lake Erie or Lake St. Clair, or the rivers flowing into these lakes, and well back into the country. The water frontage was narrow—often less than sixty rods,—thus bringing these sociable folk into close neighborliness and giving everyone a chance at the watery thoroughfare that abutted on the farm.

These French people were from Canada and presumably were brought hither at first mainly by the fur trade. In this trade Mackinac, Sault Ste. Marie and Detroit were points of major importance, but trading posts appeared at strategic points in the interior, one of the best known being that of Campeau on the Saginaw River. The trade was at times very profitable, and efforts were made to control it as a monopoly both on the part of the French and English. For many years the fur trade was very much more important than agriculture, and its history remains full of interest and romance; and, although it is now carried on in a fashion quite unlike the ways of Henry, of Campeau, of Johnson, of Williams, and other well-remembered traders of the golden age of the trade—French English and American,—the Michigan fur trade is still of considerable importance, the annual catch being still estimated at one million dollars in value or more.

Easterners Come to Mchigan

If the French were the first farmers that settled in the state, they were greatly out-numbered after the completion of the Erie Canal, by the people from New England and New York, who made their way by this new waterway in very large numbers to Michigan. The Erie Canal was finished and opened for traffic in 1825. Five years later there dwelt within the present limits of Michigan less than 30,000 people, which still included a considerable number of French descent. Ten years later there were about 212,000 inhabitants in Michigan,—largely of Yankee stock—aggressive, ambitious, restless, and mainly agricultural. Reaching Michigan mainly by boat, they pushed into the interior. From Detroit, Monroe or Toledo, filling up first the counties of Wayne, Washtenaw and Oakland, and then moving on into the valley of the Grand, the St. Joseph and the Kalamazoo, and other streams, taking up such lands as the surface indications suggested were suitable for farming, and placing their villages where water-power or transportation possiblilities indicated a good site. These New Englanders and New Yorkers were mainly of British descent, were trained in the democracy of the town meeting, were Protestant and Puritanical, while the French were Roman Catholic and not accustomed to self-government or much interested in it. Just as their ancestors in New England and western New York had reared their dwellings on the frontier, exposed to the hardships of pioneering and exposed to the hazards that lurked in the forest close by from the assaults of wild men and wild beasts, so these American pioneers of Michigan built their frontier cabins and cleared their fields without taking much account of trials, dangers or the lonely circumstances of their existence, but they were fit instruments for home-building and commonwealth building. We are not surprised that with their coming came a demand for greater self-government and that this demand carried Michigan into the Union as a state in 1837.

With the influx of eastern Americans, there came shortly immigrants from the old world many of whom took to agriculture. Germans arrived very early apparently chiefly from the Rhineland—industrious, thrifty, hardworking. They began to arrive even before the Revolution of 1848 drove many out in search of greater liberty. Land was dear in Germany and for many, quite unattainable. It was cheap in Michigan and probably better in quality in the southern counties. It would cost perhaps $200 or more per acre in the Fatherland, while such good land in Michigan sold for $1.25 an acre. The raw material for building a wilderness home was cheap, if anything, too abundant. Some of these German farmers settled in religious communities, such as the Mennonites and Moraviaus. Soon the Dutch from Holland in the late '40's sought new homes by the Lake Michigan shore in consequence of religious difficulties which had arisen in the mother country. Then came Scandinavians, Bohemians, and other European stocks—all good material out of which to build a hardy rural life; and there was even a considerable settlement of negro farmers in the south—composed of freed or escaped slaves. Mining attracted Fins to the Lake Superior country, and many of these later became farmers, and as farmers, the Finns constitute one of the most important racial elements in the northern peninsula today. They are not numerous outside of these counties which border on Lake Superior. Scandinavians, Germans, French and other European stocks also have established themselves in the agricultural northland.

The Surveying

The land of Michigan, out of which 196,447 farms of the state have been carved, at the outset belonged to the Indians, who, as we have seen, made very little use of it for agriculture. The United States got possession of this land through treaties with the Indians, such as that in 1807 which ceded territory in the region of Detroit, the treaty of 1819 ceding the Saginaw region, of 1821 ceding the land south of the Grand River, of 1836 ceding the northern portion of the Lower Peninsula and the eastern portion of the Upper Peninsula. Before farms could be located and described, it was necessary to survey them. The surveys were carried out by the General Land Office of the United States. This survey was begun in Michigan in 1826. In accordance with the plan of land surveys adopted by the old Confederation Congress in 1785, a base line and meridian line was run east and west, and north and south throughout the state. Townships were laid out six miles square and numbered with reference to their relationship to the baseline and meridian line. The townships were divided into thirty-six sections and numbered—the section in the northeast corner being number 1. Quarterposts were set eqi-distant from the section corners. Local surveyors could then run the boundry lines of farms being located with reference to their postion in the section (as "the northeast one-fourth," commonly written "NE¼"). It is true that there are not a few farms in Michigan still described by the antiquated and inaccurate method of "meets and bounds," but the official United States Surveys are regarded as the preferable form of description.

When land was surveyed it could be purchased at the United States Land Office of the district. Land offices were located at various points in Michigan, but as much of the land owned by the United States was disposed of, all land office business was eventually centered at Marquette where is now the only U. S. land office in the state, quite capable of handling all the business connected with the some 73,000 acres of land which the United States still holds in Michigan. Considerable tracts of land were also given by the United States to the state, in aid of education and internal improvements—for the construction of canals, roads and railroads; and a part of these grants now form a portion of the farm lands of the state. After the passage of the United States homestead law of 1862, individuals could acquire free lands on homestead entry, and the state itself now holds considerable tracts of land also subject to homestead entry. Much of such lands were acquired by the state because of the failure of owners to pay taxes assessed against them, and presumably these lands are still dear at any price and are not desirable for farming purposes even if acquired without a money payment. It is one of the problems in which the state ought to be interested, just what should be done with the lands which the state and the United States still possess.

(Continued in an early issue.)

MICHIGAN CROPS

SOWING ALFALFA

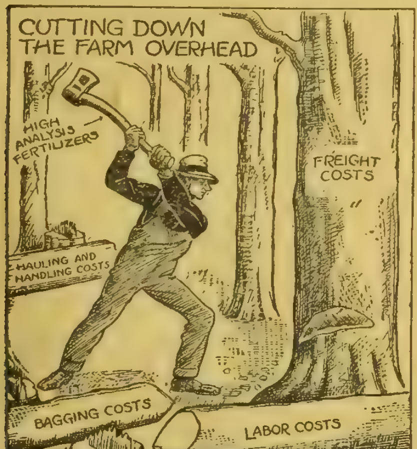
I am thinking about sowing a piece of alfalfa next spring. Have never had any experience with alfalfa but have been advised I can sow with oats. Please give me any information you have regarding the planting of this crop. Also what do you think of orchard grass for pasture? —E. K., Clare County, Mich.

—Alfalfa requires a well prepared seed bed, plentifully supplied with lime and having good drainage. Many farmers are having success sowing alfalfa with oats as a companion crop, although as a rule barley is a better crop to use in place of oats, as it is not so leafy and does not make such a heavy drain on the water content of the soil. In any case you should not use over one bushel of oats or barley to the acre, and if it is the first time alfalfa has been sown it would be better to use only two or three pecks. You should have the land fall plowed for the best success with alfalfa seeded with oats or barley.

The seed bed should be good and firm. If the land is very weedy, or if it has not been fall plowed it would probably be better to cultivate thoroughly until the first of June and then seed the alfalfa alone some time during that month.

For the best success with alfalfa in Michigan a hardy variety such as Grimm, Baltic, or Cossack should be used, and in any case northern-grown seed.

Orchard grass has a wide adaptability but is not to be considered in preference to our other common pasture grasses as a general rule, except on light land or hilly. It grows rather coarse on rich land but on rough infertile land it does not make such a luxuriant growth and it makes a useful mixture for pasture on this type of soil. It is a perennial and I think should be used more on some of our rough land as a part of a permanent pasture mixture.—J. W. N.


CUTTING DOWN THE FARM OVERHEAD
HIGH ANALYSIS FERTILIZERS
FREIGHT COSTS
HAULING AND HANDLING COSTS
BAGGING COSTS
LABOR COSTS
Tyson

PEAT HAS LOW FERTILIZER VALUE

PEAT, in recent years widely advertised as a fertilizer is not to be compared with stable manure or with mineral fertilizers as a means of increasing crop production. This is the essence of a statement that has just been made by the United States Department of Agriculture as a result of many investiagtions on the subject.

Special processes, such as the "bacterization" of peat, occasionally are alleged to give it unusual fertilizing powers, but tests have not substantiated these claims. An English investigator of few years ago reported good results with the use of "bacterized" peat, but experience in this country has not supported his theory. No laboratory process for the "bacterization" of past has been discovered which materially improves it for fertilizer.

The peat or "humus" that has been marketed in this country as a fertilizer or plant stimulant has shown a decided lack of uniformity, but this is to be expected when it is known that peat deposits are the slow accumulations of layers of plant material of different kinds. The rather high percentage of nitrogen occasionally found in peat and muck is due not to the presence of available nitrogen, but the accumulation of nitrogeneous material that is not available for the use of plants, the more suluble substances having been lost. A well decomposed layer of peat has in it very little available plant food of any kind.

Some kinds of peat are very useful for stable litter and for composting. While peat is too bulky and too poor in available plant food to serve as a substitute for manure or mineral fertilizers, certain kinds of peat appear to be suitable in the growing of specialized crops or as potting soil in greenhouses. In the manufacture of mixed fertilizers the use of peat as a conditioner, as well as a filler, appears to have been satisfactory to the mixer. Several varieties of peat and muck soil are farmed, frequently showing high productivity for many kinds of truck crops or as grass land. Any peat deposits, however, are agriculturally unsatisfactory, and some peats contain substances distinctly injurious to plants.

Exports of corn during each of the first three months of 1922 were larger than during any month of 1921 according to the United States Department of Agriculture.

Uncle Rube Spinach Says:

IT'S ALL OVER NOW!

JEST a little bit ago Paris said skirts must go down—they must be longer. For a short time actresses an' a few others wore 'em longer. Some of the young fashion women put 'em down to the shoe bottoms an' reformers an' ol' ladies, ol' maids without any reason for wearin' 'em short, all hollered 'at it wuz good 'an glorious—'at our women would be clothed agin in a proper form. It looked like things wuz goin' to be—but how long did it last? You know it wuz short-lived—very short—our young women who have every good reason for wearin' their skirts short ain't goin 'to hide the reasons by wearin' 'em long.

An' when you stop to think of the comfort of the short ones—no matter what other reasons they may have, then do you blame 'em for wantin' 'em short?

Now you nor I think for a moment that young women wear short skirts to advertize what they've got. We can tell by size'n 'em up 'bout what's there—it's 'cause they want comfort in walkin', in gettin' onto street cars—for a hundred different things—never to let the world know they have nice calves—cause the world knows that already.

But the ol' fogies—the reformers, the ol' maids will continue to holler 'bout the short skirts—they are immodest. disgraceful an' every thing. An' yet did you ever notice that the reformers, ol' maids, widows an' even ol' women follow the styles as closely as the bobbed haired flappers or any other style followers?

An' the young men are no better. Watch 'em an' see—every style—clothes, cut of hair, mustache, eyebrows—anything, you'll find 'em in it. An' if fashion said fer the young men to powder their nose they'd do it—yes they'd powder their face an' wear short pants an' be monkeys if fashion said so.

And do you know it took 'bout a million years 'cordin' to Darwin's theory for man to elevate from the monkey but it takes a woman about three minutes to put him back in the class from which Darwin sez he sprung.

Oh, well, fashion has her victims—women has hers—men, well, I guess they have 'bout what they can get—never gettin' much of any place—jest ploddin' along—an' I guess at's 'bout all. Cordially yours
UNCLE RUBE.

Bigger Yields With Less Work

The Roller-Bearing International Manure Spreader Is a Money Maker

THE BASIS of profitable farming is a fertile soil. In farming, as in other businesses, there are poor years and good ones, but the farmer who keeps up the productivity of his soil will forge ahead.

No method of maintaining soil fertility has proved so efficient as the proper application of barnyard manure. It is a foresighted policy to build up crop yields with an International Roller-Bearing Manure Spreader. Put manure on your fields finely, evenly, uniformly, and economically; the extra fertility will in a short time pay for the International spreader.

Note again these features in International construction: 1. Roller bearings at seven points. 2. Power delivered from both wheels. 3. Double ratchet drive with six feed speeds. 4. Short-turn front axle—no pole whipping. 5. Rear wheels track with front wheels. 6. Tight bottom. 7. Two beaters and wide-spread spiral. 8. All-steel main frame.

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OF AMERICA
CHICAGO USA
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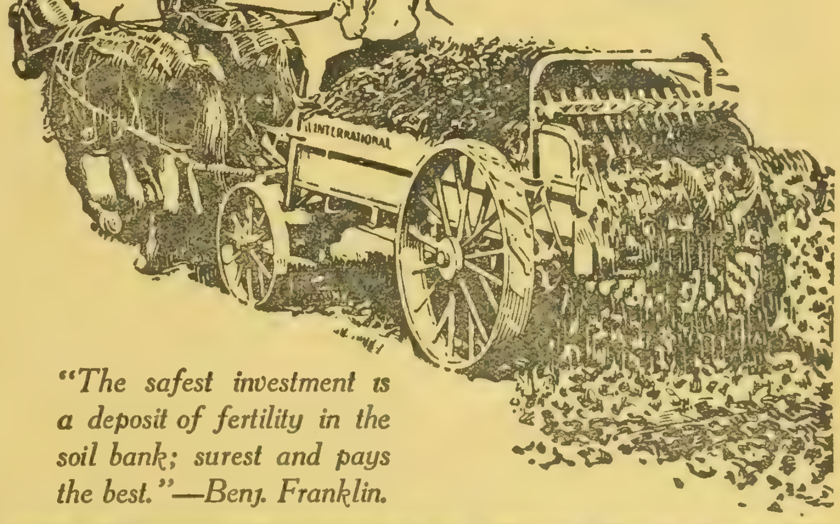
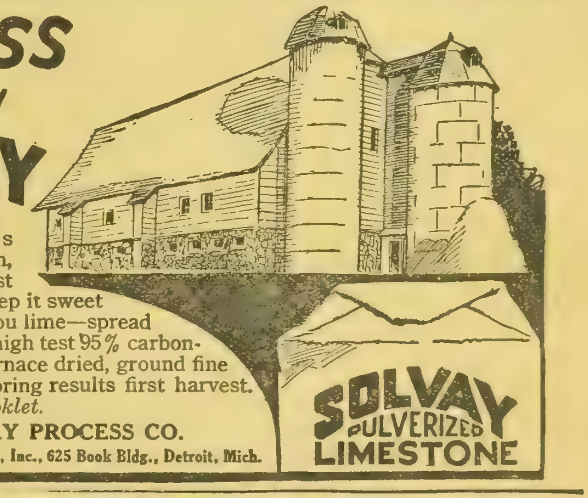


"The safest investment is a deposit of fertility in the soil bank; surest and pays the best."—Benj. Franklin.



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Silo Guide Free

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The Prosperous Farmer today is the one who is milking cows and feeding stock. Good silage is the most economical feed for livestock and dairy cows. It cuts down cost of production and yields greater profits. World's Standard Kalamazoo Silos make 100 per cent perfect silage.

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WHEN WRITING TO ADVERTISERS PLEASE MENTION MICHIGAN BUSINESS FARMER

The Michigan
BUSINESS FARMER
SATURDAY, DECEMBER 9, 1922

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Entered as second-class matter, at post-office. Mt. Clemens, Mich.

"The Farm Paper of Service"

A NEW FEATURE ADDED

THE Business Farmer is proud indeed to present on page 29 of this issue the first complete Agricultural and Business Review in detail, ever to our knowledge printed in an American farm paper. It is presented by special arrangement with the Department of Research of the American Farm Bureau and is but another department of service which that worthy organization is extending to the farming business.

This page summary will be found to contain the comparisons on every line of business or production in which the business farmer is interested. It boils down into the smallest possible space, information which could be spread into volumes. It answers in actual figures and by comparisons with the previous month, previous year and prewar years, practically every conceivable question that may arise in your study of farm markets or market conditions.

We hope every earnest farmer will study this page and thus learn to use it. It will appear regularly in the last issue of every month and will. we believe, further prove that The Business Farmer is what its readers have come to call it: "The Farm Paper of Service!"

A MILK-FED MELON

THE Detroit Creamery Company cut a big fat, juicy melon the other day. It was a melon which the dairymen helped to grow but they didn't share in its distribution. The melon was a 50 per cent stock dividend to all stockholders of record December 8th. Every person who owned ten shares of the stock now has fifteen without the investment of a single additional penny.

To be able to cut a melon in times when so many business enterprises, including farming, are struggling for a bare existence is a distinct tribute to the business sagacity of the melon cutters. It may at the same time be a perfectly legal and moral operation. In this particular case it represents inordinate profits which under more equitaable conditions would have gone in part to the dairymen who produced the milk from the sale of which the profits accrued.

These profits were earned by entirely approved methods. The creamery company paid the farmers the price which had previously been agreed upon. No farmer was coerced into selling his product at thet price and no advantage presumably was taken of him in the matter of weight and test. The milk was sold to the consumer at a price previously advertised, and all presumably containing the legal amount of butter-fat. At no stage in the distribution of this milk was there a single transaction, so far as the average eye is able to percieve, which would not meet with the requirements of the most exacting statutes.

The secret of this company's profit-making lies in the fact that the company controlled every large item of cost entering into the purchase and sale of the product. It told the farmer what it would pay him for his milk. It told its wagon drivers and factory help what it would pay them for their labor. It told the consumer what he would have to pay for the product when set down at his door-step. All the way from cow to consumer that product was virtually under the control of the creamery corporation.

Why? Lack of competition. If there were actual competition in the creamery business in Michigan the Detroit Creamery Company would not be able to pay out a $2,000,000 stock dividend and annual cash dividends of 12 and 14 per cent. They would have to bargain with farmers for their product or the farmers might sell it to their competitors at a better price. But the Detroit Creamery Company has successfully met all competition and therefore controls the supply and the market in the Detroit area and to a certain extent outside that area.

The Business Farmer has always believed that the farmers themselves should furnish the competition so badly needed in the Detroit area. This melon slicing job has not caused us to change our mind.

PAINTING THE LILY

IN discussing the milk price, W. L. Watson, secretary of the Detroit Milk Bottle Exchange, said: "We do not want to raise the price of milk to the public just before Christmas holiday season when it would work a real hardship. A little while ago the farmers flooded us with milk. Now they are a little short with the supply and we think they are holding it back to force an increase in price. We have only the interest of the public at heart. We do not want higher milk prices."

That was a nice little speech to be sure. All who read it in the Detroit daily papers must have instantly said, "Those wicked farmers are trying to starve us with their high prices. If it wasn't for the creamery companies there's no telling where milk prices would go." But the poor ignorant consumer doesn't know that the dairymen haven't declared a dividend in a "dog's age," while the big creamery companies declare 'em every three months.

TAX EXEMPT?

JOHN DUVAL DODGE, son of the late John Dodge, one of the millionaire brothers who built their fortunes in a few years out of the manufacture of automobiles, is protesting against the payment of any personal tax. An amount, said at the time to have been two millions of dollars, was handed the young Dodge just about a year ago and since that time he has been in the public eye more or less frequently. Now he does not claim that he spent the two million, but rather that he has invested it all in tax-exempt bonds and federal certificates of indebtedness.

* * * *

Tax-exempt bonds are just about as fool-proof a form of investment as any one could ever hope to own. It seems a little strange to some of us, however, that industry and sweaty labor should continue to be taxed beyond all reason, when retired capitalists or fat estates can boast of tax-exempt securities, which good year and bad, bring in a golden stream of profit, to their owners. We do not boast of being economists, but we wonder if this seeming injustice is necessary. There must be another way out and the man who finds it need not be called a "radical" either!

OUR NAVAL RESERVE IS THE KEY

RIGHT now the thing that is "rocking-the-boat" at Washington is the ship subsidy. Our experiment in ship-owning has been mighty expensive and now various plans are brought forth to solve the problem. Most everyone agrees, however, that it would be a shame to lose the investment we have made or to see the American flag again a strange sight at sea. There is such a thing as "putting-up-a-good-front," even if it does cost something.

The Business Farmer would like to suggest a plan that, so far, we have seen no sponsors for, yet for the life of us, it seems practical, and economical. It is the coordinaton of the navy with the merchant marine. It would make every man in the pay of the Unted States navy from Admiral to Seaman, second class, a worker on the merchant ships which fly the American flag. Whether the government operated these ships or they were operated by private corporations, on one of the plans suggested, would be imiaterial. The important thing would be that in times of peace we would have a great many thousand navy men actually at sea operating our merchant ships in every port in the world, yet ready for instant call in case of trouble.

It would give every man on an American merchant ship a rating in the Naval Reserve of the United States Navy, and he would be partly paid by the navy. This would equalize the wages paid by the ship operator (whether government or private) in competition with the lower wages paid on English, German and French ships. There are literally hundreds of thousands of young men in this country, between 18 and 25, who would be anxious and willing to serve, say, a two year enlistment in the navy of their country, if they were assured that after a very brief land training, they would go to sea immediately as ordinary seamen, on merchant ships visiting the foreign ports of the world.

A rotation could easily be arranged whereby both officers and men would have certain months of actual naval training on battleships and with guns, but the greater part of their time would be spent at sea and in the actual operation of ships which is, after all, the most important consideration when war comes.

The situation today is; that we have a great "standing" navy, including single battleships with crews of a thousand or more men, "standing-by," like firemen in a firehouse, waiting for the alarm. That is alright, but when war comes, this great body of men is only a skeleton of the number actually needed for naval service. So smooth working organizations are broken up into hundreds of units, while volunteer "gobs" are hurriedly enlisted, most of whom have never felt salt-water under their feet. On the other hand, today, we have a great merchant marine with hundreds of ships of every size, from the giant "Leviathan" down, which some say unless the ship subsidy bill is passed, must lie at their wharves while the commerce of the greatest nation in the world is carried on ships that fly the flags of foreign nations.

Cannot these two great similar propositions be welded into one?

At an actual saving, it would seem possible for the United States of America to make her naval strength greater through efficiency and her merchant marine the envy of the rest of the world.

Can it be that we are the first to suggest this seemingly apparent solution?

WHO CAN AFFORD WAR?

BEFORE the war, the national debt of the United States was $1,038,546,000 and today is is $23,922,000,000, Frances national debt was $6,346,129,000, now it is $23,350,000,000, while Great Britians has increased from $2,485,818,000 before the war to $37,910,000,000 today!

That is the price these nations paid for war.

The total monetary loss, alone, of all the nations in the World War, mounts up to a figure that is simply inconceivable, it staggers even the imagination. Some of this money the winners expect to gouge out of the losers. How much? Your guess is as good as anyone elses. Probably it is going to bring about a combination which will include Russia; they will say, "rather than pay what we cannot pay, we will fight you again!"

It is a shame that wars can be fought on credit. If it were a case of "pay as you enter," there is not a nation on the face of this earth that could get by the conductor.

And that would be a blessing to all people!

"Stop my paper on expiration" says F. C. Lee, Thompsonville, "Potatoes are 15c here!" Yes, friend Lee, and they probably would always be 15c, if it were not for serious minded men and loyal farmers who know that the way to right a wrong is to fight it out. The ostrich sticks its head in the sand when surrounded by danger! The human ostrich among farmers harangues his wife, says all farm organizations are run by grafters and stops his farm paper! Thus having cut off the three sources from which aid would come, he goes back where he belongs, which is not in the farming business.

If you farmers are not satisfied with the appointment of James Couzens, as senator to fill the unexpired term of Truman Newberry, it is because they do not know the man nor his record. We believe that before a year from date the Senator from Michigan will have made an enviable record in the senate and that among his best friends at home will be our farmers.

With 17 out of 24 farm products advanced in price over a month previous, as shown in the Agricultural & Business Situation, on page 29 of this issue, it would appear that the farmer can begin to catch a glimpse of the silver lining, for which we have all been looking, hoping and praying!

You who have wanted to read the Truth about Henry Ford, will be delighted with our announcement in this issue that we have secured the rights to reprint this famous book exclusively in The Business Farmer beginning next issue.

What the Neighbors Say

FOR BETTER ROADS BUT TAXES ARE HIGH ENOUGH NOW

I THINK H. L. V., Ottawa County is right about the gasoline tax as there are a great many men that have cars that do not pay any tax, only their license, and they travel the roads more than the average taxpayer because they have nothing to keep them at home.

The dealers of every county should pay to the county a certain per cent, say 50, to go direct to the county roads and the rest to the state to be divided equally among the counties for the state roads.

I am for better roads but just now the taxes are about high enough. The license is all right as it is.

Most of the tractors and engines sold now use coal oil so the farmer would not be taxed for them. What do you say?—M: B. D., Isabelle County, Michigan.

FORD FOR PRESIDENT

I WANT to write a little verse,
I hope you'll print it too,
And so impress the universe
With us poor farmer's view.
The M. B. F. is everywhere
And everybody reads it
So if a little space you'll spare
To give our views to them as needs it.
We want Mr. Henry Ford
In the Presidential chair
And we'll thank you Business Farmer
If you'll help us put him there.
Now if you think this verse is snappy
Enough to put in print
You'll make us very happy
And we'll say you done your stint.
Next presidential election get out and vote
Ever last woman and man
And please remember you'll get our goat
If you make him an also-ran.
Now Mr. Harding, he's all right
A good man in the chair
But Henry wants to get in the fight
And we want to help him there.
We'll back Mr. Harding right to the end,
He's a mighty good man,I'll swear.
But Henry's been the working man's friend
And we want him in the chair.
—Fred Packer, R. 1, Fosters, Mich.

ARE WE ECONOMICALLY BLIND

IN your issue of October 28th is a communication from Luman Klink, Eaton County, headed "Let's Fix Our Price."

Brother Klink, in common with most farmers reaalize there is something that makes farming unprofitable that is beyond the power of the individual farmer to remedy. In other words the farmers' problem has become social. The Editor's answer to the effect that education and cooperation would eventually solve the farmers' economic difficulties is sound. Cooperation worth while must be preceded by and accompanied with education.

A number sufficiently large to make cooperation powerful enough to emancipate the farmer from economic serfdom must be of one mind. They must know what is wrong; and why it is so; and what it is necessary to do to set it right.

The question naturally arises as to where the farmers are to secure the educational essential to their industrial emancipation. Those who purport to be leaders of thought among the farmers should first secure the information called education; and as a result of that education formulate a program sufficiently extensive, the carrying out of which would enable the farmers to remove every parasite off their backs. And I hereby request the Editor of "The Michigan Business Farmer" to at once start educating himself in economics so that he can outline a program that will solidify the farmers of the nation.

Farmers have been led by the economically blind long enough. How can the farmers whose lives are devoted to physical toil do the necessary mental work incident to a sound program if such mental work is too difficult for the editors of our farm journals and the professors of our agricultural colleges?

Last evening I listened to a lecture by a man with a national reputation as an orator. A portion of his address was devoted to the deplorable condition of the forty per cent of our population engaged in farming, for which condition he attributed high freight rates. Most of us are old enough to remember when freight rates were low and we have not forgotten that the condition of the farmers was relatively the same then as now. Any economist knows that if farm products were carried on the railroads free of all charge that the farmers under existing conditions would not benefit thereby.

Last Labor Day I listened to an address by an M. A. C. professor in which he recommended the improving of the dairy cattle as a means of making farming more profitable. Of course we will agree that the improvement of anything is very desirable; but any economist knows that if every cow in this country was as good as the one now having the highest record, that such a desirable condition would only result in the lowering of the price of butterfat to about the point of production, and would not, under existing conditions, benefit the farmers of the country one farthing.

The study of social economy has taught me that the "fixing" of the price of farm products by the farmer would only result in increasing the cost of other commodities to a point that would more than offset the additional amount the farmer received as a result of his price "fixing."

Farmers are wealth producers who are tricked into surrendering a large portion of their wealth to those who produce nothing of value. The trick consists of making the farmers believe that they can profit by a profit system. Farmers not being economists are unable to see that since they pay more profit on the commodities they buy than they receive on what they sell that the so-called profit they receive is more than wiped out by the profit they pay, hence farmers in general do not on the average make any profit. I am aware that any one who points out that the profit system is what keeps the farmer poor is at once labeled as a socialist. But the only sure test by which one can tell any progressive thinker from a socialist is by asking him to state his remedy.

The socialist will tell you that the remedy lies in voting the socialist ticket. The writer is of the opinion that intellgent cooperation based on an understanding of social economy will emancipate the wealth producers of the nation. If I am right then the Socialist Party is not needed. If I am wrong there are no doubt a number of your numerous readers that can set me right. I am a student of economy that is anxious to get further enlightenment; and for that reason I am anxious to have the Editor and others to point out the faults in my position. Let us have a real educational debate in these columns.

I am working on a program to be based on a scientific understanding of social economy that will point the way to industrial emancipation for the wealth producing class; and I am anxious for the assistance of the Editor and readers of "The Michigan Business Farmer."--Joseph Warnock, Presque Isle, Michigan.

—The editor has an open mind and is anxious to receive all suggestions for the improvement of agriculture. He is conceited enough to believe that he is already qualified to "outline a program" which if carried out would benefit agriculture, but he refrains from offering a guarantee that this program would "solidify the farmers of the nation." Just now there are all kinds of brands of self-styled "farm-leaders," each of whom has his pet solution for the agricultural problem. But there are really few of sound business judgement and versed in economics who are at heart in sympathy with the farmers' problems. It has been my observation that an academic training is of little value unless one's sympathies are with the work which one undertakes. Before we can "solidify" the farmers on any program we must first "solidify" those who think they represent the farmer. And this is not an easy thing to do. For they hold many divergent opinions, and each is jealous of the other. We find too many so-called "economists" disagreeing among themselves as to which is the best way to proceed to raise agriculture to the plane of other lines of business. The great problem today as always is to get the farmers thinking and acting in unison, for as you say any program for improving their status must have their loyal support. You have offered a number of interesting suggestions. Let us hear from you again. —Editor.

Special Announcement!

THE MICHIGAN BUSINESS FARMER will continue to publish every-other Saturday, maintaining all departments and the full editorial service, which has made it invaluable to its readers, until a general readjustment of agricultural conditions is apparent.

We believe there is not an active farmer who will not approve of this policy to protect **the only paper now owned and edited in Michigan.**

During this indefinate period, **we will accept new or renewal subscriptions at One Dollar for Two Years ($1 for 2 years), or $1 for Two One Year subscriptions, one of which must be a new subscriber.** A net saving to our readers of 50%, which will be our contribution to a lowered cost of living for the farmers of Michigan and the nearby states.

You, who have watched The Michigan Business Farmer climb in five years to a position where it reaches nearly 70,000 farm homes, will welcome this opportunity to renew your subscription at a saving and multiply its strength to help you by acquainting your friends and neighbors with this new subscription offer.

Can we count on you to add one more name before the New Year?

Remember, our sole purpose is to be of genuine service, independent of any party, corporation or political aspirants control and the kind of farmers we call Business Farmers, will stand by us, because they cannot be "hood-winked!"

Publisher.

(We acknowledge every remittance received with a receipt by first class mail)

THE MICHIGAN BUSINESS FARMER,
Mt. Clemens, Michigan

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PUBLISHER'S DESK

Dear Mr. Slocum: I am a reader of M. B. F. and have taken it for years and like it better as it grows older. I have 2½ shares of stock in the Whitney Tractor Company and you will see by the enclosed circulars from E. McNeal & Co., stock brokers in Chicago, that they offer me 100 shares of Mid-Continent Development Company stock for payment of $10 conversion costs, plus $2 conversion expense. It is an oil company you will see by the circulars attached. Tell me what to do.—W. V. K., Tuscola County.

—If, as you say the stock in Whitney Tractor Company is no longer of value, then the scheme to get you to convert it into an oil stock by the payment of further cash, is only a trick, and we would not advise you to put any good money after bad.

Mrs. H. E. W., Oakland county, sends me the literature of a company who wants her to paint art-pillows for them at her home and for which they promise to pay her liberally. I have replied to her as follows:

"If the Omaha Tapestry Paint Company, LaGrange, Indiana, have a fair and square proposition they certainly do not indicate it in the guarantee which they make.

"The guarantee on their order blank amounts to nothing, and after they have received your $6.00, we doubt very much if you could get any considerable part of it back were you dissatisfied.

"Any company that was really anxious to get people to work for them at home would be glad to send you the work without cost to you, and it is pretty safe to look carefully into any proposition as a money making scheme for home employment which requires you to send money in advance to get that employment.

"We are giving this company an opportunity to give us the names and addresses of some of their satisfied employees in Michigan."

Although my letter to the company was written November twentieth, **no** reply has been received to date.

"Kindly advise me, if the Auto Knitter Hosiery Co. Inc., of Buffalo, N. Y. is good and reliable, I intend to buy an Auto Knitter from that company for $50.00 spot cash, then they would give me a contract for 5 years for making socks on that machine. They agree to buy all the socks I can make in 5 years and they guarantee to pay $1.50 per dozen pairs of socks, they furnish the yarn. Would you please write me if it would be a good idea to buy this Auto Knitter and work in spare time to make some money?"

—We would advise you to send no money to any knitter company. This matter has been brought up many times and we have yet to find anyone who is satisfactorily making money at home by the method which they advertise.

Until they can prove to us that the plan is practical, we will not allow them to advertise in our columns, and we do not have very much respect for any publication which does.

Recently they sent us the addresses of some users in Michigan to whom we wrote and two out of three offered their machines for sale. If you still want to buy one, we will send you their addresses.

The Farm Home
A Department for the Women

Edited by MRS. GRACE NELLIS JENN

THE BIRTHDAY OF THE MAN JESUS

THE humble birth in a far country, centuries ago, a man called Jesus remains today the most significant event in the history of men. Whatever the measure and shade of one's honest belief, whether or not we must regard his as Messiah—the Christ or the carpenter—we face the inescapable fact that this man in three brief years of active ministry exerted a profounder influence on the subsequent life of the world than any other figure in its records.

Though there be hundreds of thousands little interested in either the practical or abstract affairs of religion, they cannot escape reckoning with the fundamentals of ethics and the basis of Christian behavior. They cannot gainsay the measureless value of character. Surrounded by a "cloud of witnesses" they must recognize the immense significance to the world of Him whom St. Paul called the "author and finisher of our faith." For it was this Nazarene carpenter who taught the world the supremacy of character, who gave to the relationship of men the glorified theory and practice of ethics, who exemplified before the world the idea of sacrifice and service.

By the hard scoffers of his time this man Jesus was accused of having imperialistic ambitions, of having designs upon earthly kingdoms. The world learned later that He sought rather to introduce the kingdom of God to the ungoverned souls of men. He did not seek to drive men into new earthly social and governmental alignments. He sought to realize in us all the latent forces of personality that we might come into the appreciation of a greater kingdom than earth can offer—the kingdom of the soul.

It is our custom to give complete approval to the agencies of human betterment. We accept the immense values of social service, of church, of Red Cross, of school and hospital. These things but exemjlify the philosophy of the man whose birthday we commemorate. We give gifts at Christmas time because the custom is remindful of the life and works of One who gave all for others. Christmas is no mere holiday. It is the day on which we turn to give our most impressive recognition to the great fundamentals of life. Without Christmas and its significance life is a dreary endurance. The illuminating fact of the Gallilean lights up the face of the world. It attaches meaning to an everlasting struggle.

"I am come," said Jesus, "that they might have life and that they might have it abundantly." He came, and life was clothed with new meaning. It was fraught with new abundance.

Whatever good impulse flows from the human heart today and tomorrow and the next day, whatever kindly word is said, whatever God like thing is done, be sure indeed that Jesus of Nasareth is passing this way.—Clipped.

THE TALE OF A CHRISTMAS PUDDING

MY Cousin Mary Agnes told me this sad tale, Mary and John told her, it happened to them personally, (as a friend of mine always says for emphasis) so it is well vouched for Also Mary Agnes tasted the pudding or at least she tried to but that is getting ahead of the tale.

Mary and John earn the butter for their bread and the clothes for their backs by the highly respected but not over-paid art of setting their mental ramblings down on paper and selling what does not reach the waste-basket.

They live in a cosy little apartment and when they do not dine out they dine at home, sometimes alone and often with a member of the Press Club for good company. Each Christmas it had been their custom to go into a bakery and at some expense buy a delicious Christmas puddng with which to induce the proper holiday spirit and to help celebrate the day.

This year of which I speak, Mary saw in a well known Women's or Ladies' Journal a recipe for a wonderful Christmas pudding, it made her mouth water to read about it, just full of candied peels, of sugared plums of nuts and raisins, all galore. A bright idea came to her, why not make the Christmas pudding? It would undoubtedly be bigger and better and cheaper too which was to be considered for many were the demands upon the modest surplus put aside for Christmas giving, as they had hearts that were ever touched by the appeal of those not so well off in worldly comforts as themselves.

The very next day, in high spirits they gathered together all the ingredients for that pudding. To be sure the materials seemed to cost a good deal, just how much they did not care to figure it might detract a little from the pleasure they were going to have. It was borne in upon them that while the pudding might not be cheaper, it must be better and certainly would be bigger anyone with even a grain of sense could see that, so with gay hearts they set about, that evening, after dinner, to put those products of many climes together. Dear inexperienced John was splendid help, if he hadn't been, Mary certainly would have given up in despair, for that pudding like the one on the old women's nose, grew in bulk and weight until, like her, they wanted to wish it away. Certainly it would be BIGGER, it filled every kettle, in it's place, every pot and every pan, they almost requisitioned the coffee-pot for the last sticky bit. At twelve o'clock two exhausted litterateurs sought their beds vowing that they were never born to be bakers.

The day before Christmas Mary Agnes blew in and was coaxed to remain for dinner, they would sample the Pudding and anticipate the joys of tomorrow and of many days to come, by the appearance of the pantry shelf. The simple repast was enjoyed to the utmost, then came the pudding reposing in a wreath of holly, looking as innocent as you please. Ah! appearances are deceiving, even in puddings, for it sat there stolidly and solidly and utterly refused to be divided, one could almost hear it say "In unity there is strength," At last it was decided to remove it to the kitchen where one might vent his feelings on that resistant mass by taking the hatchet to it. The janitor had one and it was sharp, one felt its keen edge with joy. John's prowess at golf came in handily, the cut was made, imagine their consternation when out from that break their flowed a stream, a rich brown sticky fluid carrying with it . . . but why any more painful detail? Now for the soap suds and the mop and for calm and quiet reflection after by the cheerful, blazing hearth. Who wanted the pudding any way?

Said Mary Agnes, "That pudding is like society, it is hard to break thru the upper crust, and when you do, you find little inside but dough."

That is not quite the end of the tale, for Mary and John happened to know the editor of that Journal and they decided to remember him with a bit of Christmas joy in the shape of a pudding. . . . The acknowledgement of the gift came shortly in a letter the terms of which could be best expressed by an eloquent dash or two.

There may be a moral to this tale. It can be said that while writers can produce pi(e)—they would best not tamper with a pudding.

Now if you have ever worked in a printing-office you will understand this reference.

A Christmas Carol

"What means this glory around our feet,"
The magi mused, "more bright than morn?"
And voices chanted clear and sweet,
"Today the Prince of Peace is born!"

"What means that star," the shepherds said,
That brightens through the rocky glen?"
And angels, answering overhead,
Sang, "Peace on earth, good will to men!"

All round about our feet shall shine
A Light like that the Wise Men saw,
If we our loving will incline
To that Sweet Life which is the Law.

So shall we learn to understand
The simple faith of shepherds then,
And, clasping kindly hand in hand,
Sing, "Peace on earth, good will to men!"

And they who do their souls no wrong,
But keep at eve the faith of morn,
Shall daily hear the angel song,
"Today the Prince of Peace is born!"

—James Russell Lowell.

CHRISTMAS CENTER PIECE

A SIMPLE yet effective, centerpiece for the Christmas dinner-table, that will suit the fancy of the season, is arranged on a circular piece of wood. The cover from a large candy-pail is just the right size; this you can get for the asking. Make, near the edge, two small perforations, on on each side. Wind a piece of wire, about twenty inches long, with red ribbon, and then with holly. The artificial kind, which is such a good imitation of the real holly, will do even better, for the wire stems can be easily bent in any way desired. Cover the board with a doily, then shape the decorated wire in the form of an arch, and insert each end in a perforation, bending the wire beneath to hold it firmly in place; hang three Christmas bells at the top; conceal the edges of tho board with a thick wreath of holly, and in the center of this place a small gift for each guest.

To complete the effectiveness of this little scheme of decoration there should be four tall red candles in brass or glass sticks, ornamented with sprays of holly, and if the table is a large round one there might be an individual candle at each place. Have the dinner-cards bell-shape, with sprigs of holly, and the Christmas greeting in red and green, and on each napkin place a crisp dinner roll; fold the napkin over cornucopia-shape and lay a bit of holly on top.

Another delightful centerpiece for the family dinner-table, especially pleasing to the children, is a real Yule cake; the top and sides are covered thickly with a glistening white icing, and there are small red Christmas candies scattered all over it. The cake is placed on a candle-board with a wreath of holly and lighted candles arranged around it. At the end of the meal the candles may be removed, and the cake cut and served with some light frozen dessert.

CHRISTMAS CONTRIBUTIONS FROM OUR FRIENDS

I am a reader of The Business Farmer and recieve lots of help from The Women's Department. I wonder how many of the readers make their Christmas presents. I am making some now. I always begin early so as not to be rushed at the last minute. I think it would be nice for each one of us to send ideas to our page. I am making a cute corset bag of terry-cloth with the lazy-daisy stitch. I outline the stitch in pink. It makes a very useful gift. I am also making some very pretty aprons out of cretonne and linen. One can make gifts so cheaply. I will make Christmas candies for any one who wants to buy. Chocolate fudge at 40 cents a pound, plain fudge at 30 cents and taffy at 25 cents post paid. My letter is getting long so I will close.—Mrs. O. D. Miner, Summit City, Mich.

New Ideas

Buy jewel-cloth and run colored threads, san-silk or silk floss in the open work. It will make a pretty and effective lunch-cloth or bureau scarf or cover for card tables. French gingham in fine checks is much used as borders for guest towels. It may be put on the ends doubled, and hemmed very neatly by hand.—A Reader of your page.

"Aunt Eliza's Fruit Cake

I have enjoyed "our department" so much, but have never contributed to it before altho' I have often wanted to. I'm sure many readers feel the same way, but the duties of the home are many where there are little folks and before we know it the paper has come again and we have forgotten the old request and found a new one. I see that a lady wants a fruit cake recipe and I have a dandy, so will be glad to pass it along. Will watch for the sisters reply to that bread query because I'm having the same trouble and can't locate the cause.

Cream one cup of butter with two cups of sugar, add four well beaten eggs, 1 cup molasses, one cup sour cream, one pound of raisins, seeded and chopped, one half pound of currants, one quarter pound citron, or mixed peel, 1 teaspoon of soda in the flour, spices to taste, and three and one half cups of flour. Bake in a moderate oven. Cream is absolutely essential to the goodness of this cake which when it is good, is good.

It is nice made into loaf tins and kept in a suitable place for Thanksgiving and Christmas.—Mrs. Paul Foster.

Christmas Fruit Cakes

I am sending you a couple of recpes for fruit cakes which we find very good.

Fruit Cake (Christmas)

3 lbs. raisins, 3 lbs. currants, 1 lb. ctron, 1 lb. butter, 1lb brown sugar, 1-2 lb. lemon peel, 3 cups flour, 8 eggs, 1 teacup molasses, 1 teacup coffee clear, 1 wineglass brandy (we always leave out), 2 teaspoons cinnamon, 1 teaspoon cloves, 1 teaspoon alspice, 1-2 teaspoon mace, 1 teaspoon soda disolved in hot water put in last, add 1-2 lb. blanched almonds..

White Fruit Cake

3 eggs beaten separately, 1-4 cup butter, 1-2 cup white sugar, 1-4 cup milk, 1 cup flour, 2 teaspoons baking powder, 1-4 lb. citron peel, 1lb. raisins (not necessary white), 1-2 lb candied cherries, 1-4 lb. blanched almonds, 1 teaspoon vanila extract, 1 teaspoon lemon extract, 1 teaspoon almond extract (less of these will do.)—Canadian Subscriber.

Christmas Hopes

I hope when Christmas comes around,
You'll be there to enjoy it.
And if you have a thot remorse
I hope you'll not employ it.
I hope your gifts will be enjoyed
'Mid laughter gay and jolly,
I hope your heart will lighted be
As in your house with holly,
I hope that many gifts you'll get,
Bedecked with cards and ribbon—
And when that roasted turkey comes
I hope you'll have your bib on.
I hope these joys will fill your heart
Right up from top to bottom.
And if unknoted ropes, I've left
I hope that you will knot 'em.
But pray, my friend, remember Him
To whom is dedicated
This day of joy and gaiety,
This day of hearts inflated.

—By John N. Jenney.

CORRESPONDENTS' COLUMN

Recipe Wanted

Why don't we housewives help make our page interesting by sending in more recipes?

I will give you my favorite cookie recipe.

2 cups granulated sugar, 1 cup of lard, 3 eggs, one cup of sour cream, 1 tps. soda, 1 tps. baking-powder, flour enough to roll out not too stiff.

Now will any one send in a recipe for ginger-snaps like the ones you buy in stores? I have tried several recipes but they are right.

I have a brown silk dress which is stained from perspiration; can the stains be removed? Could it be done successfully? Any help will be much appreciated.—Mrs. J. W.

A teaspoonful of powdered borax dissolved in a pint of hot water and applied with absorbent cotton will remove perspiration stains unless the stains are too deep set. The silk would undoubtedly dye all right but perspiration rots silk and the place where the silk is stained would be very apt to go to pieces. Has any one any suggestions to offer.

Pentecostal Hymn Book Wanted

I like the M. B. F. very much especially the ladies page. Will you kindly ask the readers of our page if any one has the old Pentecostal hymn book No. 1, 2, 3, 4, combined. I will gladly pay for it. Also thinking many would like home-made mittens. I will knit men's for $1.00, ladies for 75 cents and childrens for 50 cents and furnish the yarn. I can have them ready in a week or less. They make nice Christmas presents. Just mark the hand on paper. I knit them on steel needles. I have answered several questions on our page and always try to do my bit. Do you know whether the lady who wanted pumpkin seeds wants any more? I hope I have not asked too much of you.—Celia Brennen.

Bread Made From New Flour

There are many ways to make bread. But new flour must be dried. I always have success by putting a sack by the stove and stirring it often. Take enough for your bread in the morning, put in a dish set in the oven, stir often, do not let heat through but warm until ready to use. To prepare yeast, soak 1 yeast cake in half cup warm water, 1 teaspoon sugar, 1 of salt. When dissolved add warm potato water with some mashed potatoes. Keep your yeast a buzzing in a 2-quart glass can so you may see it work for at least 4 hours. Then it will be ripe enough to make bread, in any way you choose. You may stir in a little flour at night. Let it set until morning. Then set the sponge. Always keep it covered tight and keep it warm. Be sure to let the sponge get good and light, then mix stiff so it will not stick, rub on lard cover tight. When twice its size mix down again. When its twice its size mix in loaves, when twice the size, bake until done. I have baked many barrels of flour. I can give many ways for good bread but the main thing is to have ripe yeast—let it have a good start with good flour you need not worry but your home new flour. It must be dried a little, the more aged the flour is the better.—Cora E. Tracy.

Obstacle in Nose

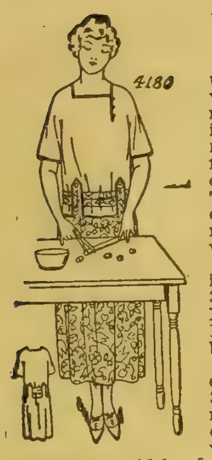
I do enjoy our page and want to tell you something to help out the mothers. I have eight childrens ranging in age from eight months to twenty-one years, and one trouble with small children I have found is their tendency to put foreign articles in their nose. Just place the child's hands tightly over his ears covering them with your own hands. Ask him to open his mouth widely and then blow forcibly into the open mouth. Out comes the offending button, kernel of corn or whatever it may be.—Mrs. Chas. H. Sieb.

AIDS TO GOOD DRESSING

For Simplicity, Service and Style

Address orders to Mrs. Jenney, Pattern Department, M. B. F.

Catalog 15c—Pattern 12c



A Pretty Frock for "Service or "Porch"

4180. Chintz and unbleached muslin were combined to make the style here illustrated. The model is also good for cotton crepe, sateen, and percale. The girdle may be omitted, and the fulness held in place with a girdle or belt.

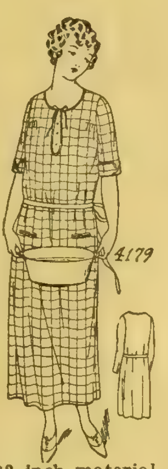
This pattern is cut in 4 Sizes: Small, 34-36, Medium 38-40, Large, 42-44; Extra Large, 46-48 inches bust measure.

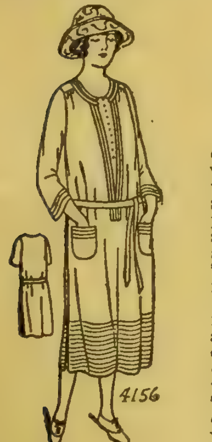
A medium size requires 4 5-8 yards of 32 inch material. To make the waist of contrasting material will require 1 3-4 yard. The width of the skirt at the foot is 2 1-2 yards.

An Ideal ouse Dress

4179. The simplicity of this model is its best feature. The pleasing fulness above the bust, and equally comfortable allowance on the sides at the hips, are practical points that will appeal to the women who likes neatness and comfort in her housedresses. The sleeve in short length is attractive and comfortable. The long sleeve may be turned up for convenience in working.

This pattern is cut in 6 Sixes: 34, 38, 36, 3, 40, 42 and 44 inches bust measure. A 38 inch size requires 4 5-8 yards of 32 inch material. The width at the foot is 2 1-8 yards.





A Smart Version of A Popular Style

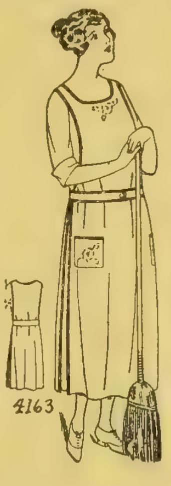
4156. Kasha cloth or Canton crepe would be suitable for this model. It has simple lines. The plait fullness at the sides gives additional width to the skirt. This is a model that is easy to develop.

The pattern is cut in 3 Sizes: 16, 18, and 20 years. It requires 4 1-2 yards of 40 inch material for the 18 eyar Size. The width of the dress at the foot with plaits extended is about 2 1-2 yards.

A Model for Service and Protection

4163. The "easy to make" apron model is nice in unbleached muslin with facings of contrasting material, or, in gangham, chintz or percale. The side seams are free below the hips, but if preferred may be closed their entire length.

The pattern is cut in 4 Sizes: Small 34-36; Medium 38-40; Large 42-44; Extra Large 46-48 inches bust measure. A medium size requires 4 3-4 yards of 27 inch material.



World's Standard Cold Remedy

In disagreeable weather always keep Hill's handy. Standard cold remedy world over for two generations. Safe and dependable. No "head noises," no bad after effects.

Demand red box bearing Mr. Hill's portrait & signature

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CASCARA QUININE
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For Your Protection

Lily White

"The Flour the Best Cooks Use"

A GOOD RECIPE FOR PARKER HOUSE ROLLS

2 cups scalded milk, 3 tablespoons butter, 2 tablespoons sugar, 1 teaspoon salt, 1 yeast cake dissolved in ¼ cup lukewarm water, Lily White Flour. Add butter, sugar, and salt to milk; when lukewarm, add dissolved yeast cake and three cups of flour. Beat thoroughly, cover, and let rise until light; cut down, and add enough flour to knead (it will take about two and one-half cups.) Let rise again, toss on slightly floured board, knead, pat, and roll out to one-third inch thickness. Shape with biscuit-cutter, first dipped in flour. Dip the handle of a case knife in flour, and with it make a crease through the middle of each piece; brush over one-half of each piece with melted butter, fold, and press edges together. Place in greased pan, one inch apart, cover, let rise, and bake in hot oven twelve to fifteen minutes.

Will Satisfy You Better

Lily White Flour is dependable. The best cooks for three generations have found it the best flour for all general baking. Young women with little experience are surprised and pleased with their baking triumphs. Because it is made of the finest wheat, because it is clean and better milled, and because the baking results prove up, Lily White is guaranteed to be better than any other flour you ever used.

Why You Should Use Lily White

REASON No. 15

Proper Balance, Color and Flavor

There is a greater difference in flours than most people realize. Lily White is a quality flour—the highest quality. It has the right balance, color, flavor and granulation. Try Lily White once and know the difference always.

VALLEY CITY MILLING COMPANY
GRAND RAPIDS, MICHIGAN
"Millers for Sixty Years".

Never Let a Cold Get a Start

Break it up overnight

THE quick direct treatment for colds of children and grown-ups too, is an application of Vicks over throat and chest at bedtime. Not only is Vicks absorbed thru the skin, but its healing vapors of camphor, menthol, eucalyptus, turpentine, etc., are breathed all night directly into the affected air passages. Relief usually comes by morning. Just as good, too, for cuts, burns, bruises, stings and itching skin troubles.

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Just send name and this $1.00 Book that tells how to cure all kinds of meat will be sent absolutely Free.

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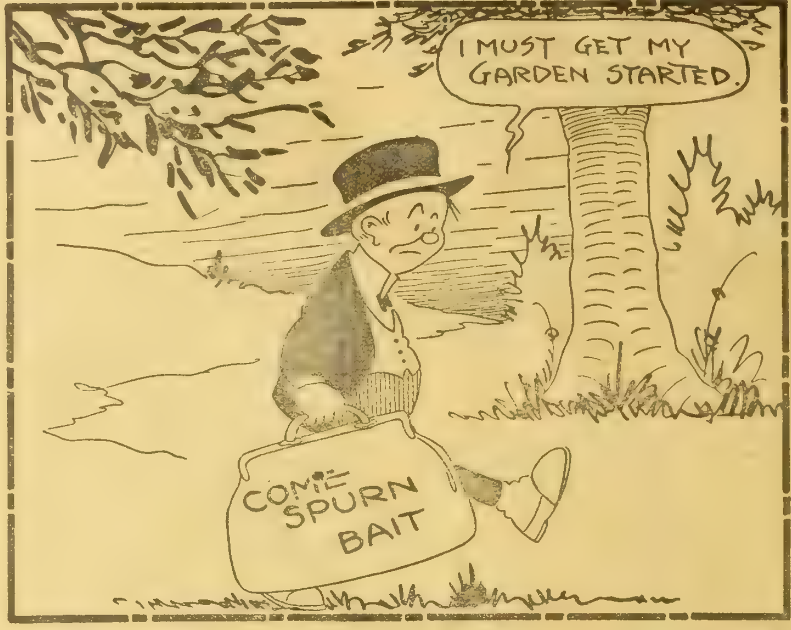
IS YOUR FARM FOR SALE?

AN AD IN M. B. F. WILL SELL IT.

The Children's Hour

GRIP PUZZLE

BY WALTER WELLMAN


I MUST GET MY GARDEN STARTED.
COME SPURN BAIT

Jack has been told that he is late in getting his garden started, and his mother has sent him to the seed store and instructed him to buy every kind of garden seed which can be spelled with the letters on the grip. He is told that he can use a letter more than once, if necessary, in the name of a seed, although no letter appears more than once on the grip. What seeds can he buy?

DEAR Nieces and Nephews:—This issue of the M. B. F. is the Christmas issue and I am using considerable space on our page for a fine Christmas story. It is very interesting and contains a lesson. Let's not be a "Curiosity Carmella." Many times we are and do not know it but if you will watch yourself carefully you can avoid being one. People do not like "Curiosity Carmellas" so if you would have many friends do not pry into other people's business.

We have some stories about Chrismas by our boys and girls for our page and will print more next issue. No one so far has guessed what the prize will be for the best Christmas story.

I once read a quotation that the thoughts of Christmas bring to my mind. It is, "The fact that you remember means more than the gifts you give." Remember all your friends this Christmas. Although you may only send Chritmas cards it will show them that you remember.—UNCLE NED.

OUR BOYS AND GIRLS

Dear Uncle Ned—May I join your merry circle? I enjoy reading the M. B. F. very much. I read about your contest in the paper so I thought I would try to win a Christmas present. I think it is something useful because Uncle Ned would not gve anything that wasn't useful.

It was Christmas night when the sun began to lower that Tommy hung up his stocking to see what Santa would bring him. As his mother and father were poor Tommy didn't expect much. It was 8 o'clock when Tommy went to bed and he was not thinking of his presents but was thinking of his dear mother and father. It was near midnight when Tommy thought he heard footstops out on the roof, and sure enough he heard something coming down the chimney and Tommy heard him by the mantle-piece. Tommy knew then it was dear old Santa and then he heard Santa return to the roof. He did not sleep at all, and at daybreak Tommy went down and to his delight Santa had brought just what Tommy wanted himself and for his dear mama and papa. Then everybody was merry and happy. I will close from your neice, Margaret Mills, R. 1, Herron, Michigan.

Hello Uncle Ned and Cousins—I am a farmer girl and go to school. I am 11 years old and in the fifth grade. I will guess the present will be a school outfit. I will write a Christmas story.

Once upon a time there was a boy who's name was Jean. He had no mother and he lived with his aunt. She was cruel to him. He only had one slice of dry bread to eat. It was just the night before Christmas when Jean went to church and the rich people talked about how they were going to get lots of toys and soon the people were ready to go home and when Jean was going down the church stairs there he saw a little boy. His hair was like gold and he was barefooted. Jean had no stockings only his wooden shoes so he put one of his shoes on his foot. When he got home his aunt said, "Where is your other shoe?" Jean told her all about it. Then his aunt said, "You will only have one shoe if you don't get the other. So Jean went to sleep. In the morning when he awoke he looked at the fireplace and what do you think he saw? Some toys and a pair of new shoes were among the toys.

Good luck to Uncle Ned and cousins. Good-bye.—Margaret Surjan, R. No. 1, Rhodes, Michigan.

Dear Uncle Ned—I am not busy at the present time so I will write you a letter. I received the leatherette pencil case and am thanking you ever so much for it. I am finding it very useful and appreciate it very much. I am nine years old and live on a 120-acre farm. My eyes are blue and my hair is light brown, and I am about four and a half feet tall. I like to go to school and I am in the third grade. I also have a little dog for a pet, named "Toodles. I enjoy hunting and fishing during [illegible] I have a little air gun which I got for my birthday and I shot a squirrel with it the second day after I got it. Well my letter is getting rather long so I will close, thanking you ever so much for the leatherette pencil case, I remain your nephew, Harold Pernie, Ossineke, Michigan.

Dear Uncle Ned—How are you these days? We have had quite bad weather these last few days. We have about ten inches of snow. I am a boy twelve years old and in the fifth grade. We have had a very good fall this year. I wrote to the M. B. F. once before. I wish some of the boys and girls would write to me. We have four horses, fifty-eight head of cattle and some chickens and one dog and four cats. I have three brothers and three sisters. I live about a half a mile from school. We have nine pupils in our school. I live on a four hundred and four acre farm. From your friend John Hann, Franklinville, N. Y.

Dear Uncle Ned—I will write a few lines as I have been reading the children's page in the Business Farmer and like the letters very much. We live on an 80-acre farm and I have for pets a dog, two cats and a rooster. My dog's name is Doodie Bug and my uncle and aunt keep him for me because I live too close to school, he would go with me every day. I am here from Texas and brought my dog with me. I have been here nearly two years and we will make our home in Michigan. I like this place just fine and like to play in the snow. Am in the 4th and 5th grade and like my teacher just fine. As this is my first letter will make it short and hope to hear from some of the other boys and grls as I enjoy reading their letters. Your little neice, Vera Richardson, R. 1, Greenville, Michigan.

CURIOSITY CARMELLA

"DO you know what they used to do to people who are always peeking and prying?" said Carmella's oldest sister Jane. "They'd hang them up by their coat collars under a waterspout in the eaves and let them get good and wet."

She had caught her little sister opening a package from the store. Of course there was nothing special in the package, only a pair of shoes, but this wasn't the first time, and every year around Christmas time when the air was full of secrets, Carmella was at her worst. I blush to say it, but her mother had to have a padlock put on the old sea-chest in which the presents were hidden until the Day. When the postman would blow his whistle Carmella was the first to fly to the door, and My! how she would hang around and crane her neck while people opened their letters! But if a parcel or package came poor Carmella's curiosity would be come almost a frenzy and unless the owner came quick and took the package away, a little hole was apt to appear in a corner, or the string would come loose.

"I hate secrets," Carmella would say. "What's the use in keeping presents until Christmas? I'd rather have mine now."

So one year her mother gave her her presents as they arrived and when Christmas Day came there was no surprise for the little girl and she didn't enjoy herself a bit. Besides it was found that Carmella was just as curious about other people's gifts as about her own.

"Well this year, you're not to have a thing until Christmas Day," said her mother, "and that settles it.'

"If you don't stop nosying into everything," said her father, "you'll get your nose into something hot some day."

But Carmella only smiled to herself and thought: "They don't like it because I'm so clever at finding things out."

And that's what she told her sister Jane.

It had gotten so bad that her next-to-the-oldest sister Betty and her brother Paul asked the postman not to give any parcels to Carmella but to wait and give them to some other member of the family.

"Hah!' thought Carmella. "They think they can keep things from me, but I'll fool them.

One day as Chistmas drew nearer and nearer Carmella heard pounding in the workshop.

"What's that? What's that?" she questioned. "I didn't know anybody was making anything."

She ran down to the shop and tried the door. It was locked and Paul's voice cried: "Please go 'way. this is a private job."

Instead of going, as she should have, knowing that Christmas was coming and the air was full of secrets, Carmella tipped around the workshop and finally found a crack in the boards and there she plastered her eye. What she saw filled her with curiosity. There was Paul making a curious box. It wasn't the kind of box one would ever expect to get as a present. It was made of rough wood and stood on legs and Paul seemed to be making a cover for it.

"It's too small for a woodbox and too large for a sewing box," she thought. "Hum! Here's a mystery. Well, I'll soon find out."

"Carmella," cried a voice behind her. "What are you doing?"

"Nothing, Mother," she replied.

"Well, you come into the house and mind your own business," said mother, with a knowing look. Mother was so hard to fool.

The box puzzled Carmella more and more. She just couldn't figure out what Paul was making it for and she felt she couldn't wait until Christmas, which seemed ages away. So she decided to make up to Paul and coax him to tell her. Paul must have wondered what had got into his small sister that made her so obliging. She helped him do his work and let him use her silver pencil. But when she popped the question about the box Paul only grinned and said:

"Wait and you'll find out, kiddo," and not another word could she get out of him.

"You'd better tell me," warned Carmella, "cause I'll find out any way."

"Help yourself," replied her brother.

"Now, Paul," she coaxed, "won't you tell me this much? Whose it for?'

"For myself," he answered.

"For yourself!" exclaimed Carmella. "That's nice! Giving Christmas presents to yourself."

"Well, old Santa's going to put something inside, see?" he said.

This made it worse than ever, especially as he simply wouldn't say another word, yes or no.

"Well, it can't be rabbits or anything like that,' said Carmella, "there's no opening for them to go in and out and no windows. It isn't a tool box."

She certainly would have grown thin worrying over it if she had stopped eating so much, but unfortunately her appetite was good and so she heard the postman's whistle. Down stairs she raced and was just in time to see Betty receive a small box from him and lay it on the hall table.

Carmella crouched on the stairs and waited until Betty had gone. Then she hurried down and picked up the little package. It was the oddest one she had ever seen. Tiny and light it was and over one end was a bit of wire screening. What in the world could it contain? She shook it and listened. She thought she heard a queer noise.

"I'll just poke the netting and maybe it will move and I can see inside," she said, although she knew the package was addressed to her brother Paul.

She pressed the netting quite hard, and sure enough, it gave way. With a look of triumph she raised the box up and was about to peer inside when something flew out and lit right on the end of her nose. The next instant she was shrieking deafening shrieks. Betty, Jane, Paul and her mother all hastened to her.

"My-nose!" screamed Carmella.

"Stung!" exclaimed Paul. "Look, she's opened the box of bees that man in New York promised to send me to start my hive with. Gee, I hope the Qeen Bee is all right." And he began to cover the box with his handkerchief.

"Ha ha!" cried Betty. "Dad said to stop nosying!"

"Never mind," said mother, "I think Carmella has learned her lesson and it's mean to taunt people."

She gently led the little girl away and put soda on her aching nose, but alas! it was many a day before Carmella cared to show that nose. It swelled and swelled and grew red and purple, and really, although I felt sorry for her when I saw her I could hardly keep from laughing, she looked so comical.

"I-I could of learnt my lesson [illegible] on the nose [illegible] hed.

—HEALTH HINTS—

OR
HOW TO CURE YOURSELF
BY
DR. T. N. ROGERS

NASAL CATARRH

A simple home remedy is a weak solution of common salt in warm water snuffed up the nostrils night and morning. This will cure many cases. A good formula is the following: Baking soda, one-half teaspoonful; powdered borax, same quantity; glycerine, 4 tablespoonsful; listerine, 2 tablespoonsful; water, 6 tablespoonsful. Use with atomizer or snuff up the nostrils 3 times a day. Avoid colds.

Book Review

(Books reviewed under this heading may be secured through The Michigan Business Farmer, and will be promptly shipped by parcel post on receipt of publisher's price stated.)

The Country Beyond, by James Oliver Curwood—The writer of this latest popular selling novel is so well known to our readers who read "Nomads of the North" and are now following "The Hunted Woman," that all we need remark is that the new work sets a high-water mark. The real hero of "The Country Beyond" is an Airedale terrier, but there is enough human romance and adventure to make you want to stay up all the rest of the night to read it as we did! (Cosmopolitan, $2.)

"CREEPING JENNY"

(Continued from page 7)

you take care of the house while I go to Boston and get all my papers and passports and certificates and army records and honorable discharges and pedigrees, and draw my back pay—because I am a stranger in Riverboro and I want to get into society. Why don't you speak? Aren't you surprised?"

"I would 'a' been," said the boy, "'cept that Alfonso and the postmistress both said it would turn out that way; but Mother stood up for Jenny; she said it wouldn't."

"That's what all the women will have said," said Rufus.

"Well, all the men will say I jumped at you, so accounts will be square!" and Jenny smiled triumphantly back at Rufus, all blushes and confusion, her heart beating like a wild bird in her breast. "Go, Rufus, please," she said in a low tone, "and take Alfinso. I want to be alone with myself and get used to—happiness."

He bent over her and kissed her cheek while Alfinso went for his muffler and mittens.

"Good-by! I'll bring back the ring; don't forget the party. We won't stint refreshments. I'll give the twins a dollar to bring you little trees and evergreens for garlands, and we'll make a brave showing of the house. Isn't it lucky there'll be a full moon on the shingles? No doubt about the minister now! He'll have to come in the performance of his duty. Oh! my dear, my dear, God is being very good to me!"

"Good to us," whispered Creeping Jenny, putting her lips softly and shyly against his sleeve.

INVENTS NEW LAMP

Said to be Whiter and Cheaper Light than Electric or Gas

Washington—Patents have been granted by the government to a lighting engineer by the name of Johnson, on a new lamp burning ordinary kerosene oil. This lamp produces a vapor from the oil which makes a blue flame that incandesces a mantle and thus creates a very strong, soft pure white light. As it consumes only 5% oil mixed with 94% air, it is exceedingly economical. Said to be very simple to operate, odorless, noiseless and dangerless.

One of these new lamps may be secured on 10 days free trial by writing to Mr. F. H. Johnson, 609 W. Lake Street, Chicago, Ill. He also wants local distributors and has a very unique selling plan to offer to agents. He is even offering to give one free to the first user in each locality who will help introduce this new light.—Adv.

HARVESTING THE FUR CROP

(Continued from page 15)

and farm animals as possible. If an otter slide, landing or playground can be located you stand a chance of making a catch. Some set at foot of slide in several inches of water. The best place, however, if it can be located, is where the animal leaves the water to go upon the bank. Here the animal is apt to get caught by a front foot, whereas the set is at the foot of the slide, the trap is apt to be knocked off by the body and no secure hold obtained.

It takes a strong trap for this wiry animal. The No. 2, double spring, is strong enough, but there is a special otter trap with teeth and one powerful spring that is really better. This trap does not take so much room, being easier to conceal. A rock or piece of iron should be fastened to one end of a wire, then passed through the ring and staked at edge of water. If the otter is caught it will make for deep water and is apt to be drowned.

Otter are great wanders, as already mentioned, and may pass up or down a stream only a few times during the entire trapping season. Streams where otter traveled previous years are very apt to be used by otter the present season if any within miles—sometimes they travel as much as fifty miles according to old trappers.

If otter are using a small stream, only a few feet wide, drive stakes across only a couple of inches apart, except where the most favorable place for the otter to go through is, leaving about eight inches where the trap is set. This same set can be used on all small streams for mink, coon or muskrat but of course opening should be only about six inches and trap not so large, yet if otter ever frequent the stream it might be advisable to use a good strong trap.

"THE HUNTED WOMAN"

(Continued from page 12)

"No trouble at all," declared Blackton. "We've got a Chinese cook who's more like an owl than a human. How will a four o'clock breakfast suit you?"

"Splendidly!"

As they went on the contractor said:

"I carried your word to McDonald. Hunted him down out in the bush. He is very anxious to see you. He said he would not be at the depot, but that you must not fail him. He's kept strangely under cover of late. Curious old ghosh, isn't he?"

"The strangest man in the mountains," said Aldous "And, when you come to know him, the most lovable. We're going North together."

This time it was Blackton who stopped, with a hand on his companion's arm. A short distance from them they could see the buckboard in the light of the station lamp.

"Has old Donald written you lately?" he asked.

"No. He says he hasn't written a letter in twenty years."

Blackton hesitated.

"Then you havn't heard of his—accident?"

The strange look in the contractor's face as he lighted a cigar made John Aldous catch him sharply by the arm.

"What do you mean?"

"He was shot. I happened to be in Dr. Brady's office when he dragged himself in, late at night. Doc got the bullet out of his shoulder. It wasn't a bad wound. The old man swore it was an accident, and asked us to say nothing about it. We haven't. But I've been wondering. Old Donald said he was careless with his own pistol. But the fact is, Aldous—he was shot from behind!"

"The deuce you say!"

"There was no perforation except from behind. In some way the bullet had spent itself before it reached him. Otherwise it would have killed him."

For a moment Aldous stared in speechless amazement into Blackton's face

"When did this happen?" he asked then.

(Continued in Dec. 23rd issue)

For Sale—A 3-year-old female billie goat. Ralph Avitable, Leberty Street.—New Haven, Conn., Register.

White-of-Egg
in Calumet a Vital Element Most Baking Powders Lack

Don't use a leavener that does not contain white-of-egg. When you do you take chances—you run the risk of spoiling your bakings.

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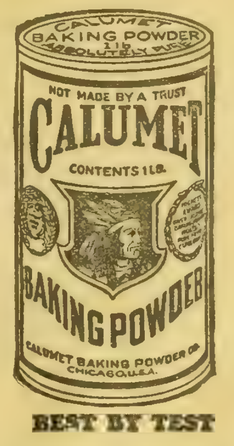
contains a small amount of white-of-egg. This makes it possible for representatives of the company to test it frequently for leavening strength—right on the dealer's counter. Nothing but absolutely fresh stock is permitted to remain on the dealers' shelves. It must always be up to the high Calumet standard.



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I want every sufferer from any form of muscular and sub-acute (swelling at the joints) rheumatism to try the great value of my improved "Home Treatment" for its remarkable healing power. Don't send a cent; simply mail your name and address, and I will send it free to try. After you have used it, and it has proven itself to be that long-looked for means of getting rid of such forms of rheumatism, you may send the price of it, One Dollar, but understand I do not want your money unless you are perfectly satisfied to send it. Isn't that fair? Why suffer any longer, when relief is thus offered you free. Don't delay. Write today.

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FARM MECHANICS

HYDRATED LIME IN MASON WORK

Please inform me as to the use of hydrated lime in building brick chimneys, plastering, stone work, etc., as a substitute for stone lime. Does it form a strong bond with good sand for brick work and endure the heat and cold of chimney tops?—J. E. G., Rapid City, Michigan.

—Wish to say that hydrated lime which is stone lime reduced to a powder by the process of limiting the amount of water which is used generally and using mechanical process to ground the lime and take out the impurities, this being substituted generally for stone lime. It may be used in any work in masonry that stone lime is used. In many ways it is considered more satisfactory principally because it is more standard and does not contain impurities, powdered stone is sometimes slack in the wall causing spots and other defects.

For use in chimney work, the addition of cement to the mortar produces a stronger mortar than lime and I think it is being used generally for this work. Cement alone cannot be used satisfactorly because it works too short and tends to roll up under the trowel, lime gives cement mortar smoothness and also water tightness.—H. H. Musselman, Prof. of Farm Mechanics, M A. C.

HOW TO REDUCE VOLTAGE

Would you please publish in the Business Farmer what material I would need and how to assemble an instrument for reducing an 32 volt direct current to an 6 or 8 volt direct current.—C. L. S., Reed City, Mich.

—The reduction of the voltage can be accomplished by a small transformer in the lamp socket, the transformer although minature in design is constructed a sany other of its kind, and is designed to reduce the current to 6 or 8 volts for pressure. The transformer socket fits into the regular socket feature and the small bulb fits into the transformer socket, the transformer socket can be purchased from practically any manufacturer of lighting equipment.—Floyd E. Fogle, Ass't. Professor of Farm Mechanics, M. A. C.

A NEW LIME SPREADER

A NUMBER of inquiries have come to the Farm Mechanic Section of the Station asking for information on a simple lime spreader. The need for an inexpensive machine of this kind is apparent when it is noted that the use of lime is not general and that many farmers who wish to use it in an experimental way on comparitively small acreages, do not feel that the expenditure for a commercial spreader would be justified.

The spreader which is shown in the accompanying cut and herein described was designed, built, and tried at this Station and has proved of such promise that its use is given over to Michigan farmers. Under the conditions for which it has been tried it has done excellent work. It is possible that some conditions may be found for which it may not be adapted in its present form. It is felt, however, that the publication of plans should not be delayed, and which may be found necessary will suggest themselves as needed.

The machine has been tested with pulverized limestone, both dry and damp. If lumpy material is to be used it should be shoveled through a screen of poultry netting or close mesh fencing placed over the top of the hopper. The mesh of this screen should have not more than 1½-inch openings.

The spreader is designed to be attached to the rear end of the wagon box and operated by a rocker arm dropping from peg to peg on a disc attached to and turning with the rear wheels of the wagon. The rocker arm moves a board under the hopper which serves as an agitator. The jarring action of the rocker arm on the agitator and box serve to feed down the lime. Both wheel disc and hopper are easily detachable from wagon by loosening four nuts and can be transferred from one wagon to another if necessary.

If this is done it is well to have the reach adjustment the same on each. The wagon box should extend about 18 inches back of the rear axle, and when the hopper is hung on the top of the box the height of the top of the box should be from 24 inches to 30 inches above the axle. This rocker arm may be adjusted for different heights of box, but where the spreader is to be used on two wagons it is preferable to have the boxes the same height above and distance back of the rear axle.

Where the soil is firm enough so that a load of lime may be drawn over it, the box may be hung on the loaded wagon and the lime spread by shoveling directly into the spreader. In case the spreading is to be done over plowed ground it will be found impracticable to draw the full load. In this case and where the lime is in storage or piles, only enough is shoveled into the empty wagon carrying the spreader to go once around the field or some other convenient distance.

It will not be found practicable to spread pulverized lime in a high wind. A moderate wind will not greatly affect the evenness of spread.

If extremely hard and lumpy material is to be handled it is suggested that the lower or cutting edges of the hopper sides be faced with a strap of iron or heavy galvanized sheet metal to take the wear. This facing should be wide enough to attach securely to the box and extend below it one-quarter to one-half inch to making a cuting edge.

The construction of the spreader is comparatively easy and should not require more than a day's time. The material needed includes proper sizes of lumber, the agitator hanger, and six bolts. The bolts, which are all alike, may be made by a blacksmith. Or these hanger bolts may be made by cutting the heads from long bolts of the right size angles, which is all that is required. Extreme accuracy is not required in the dimensions, but the side pieces ,and especially the agitator board, should be reasonably straight and true.

Two other points should be noted: that the lower edges of the hopper boards are dressed to a chisel-like edge, the point being about one-quarter inch thick; and that the top of the agitator board is beveled to make an even flow of material over the edge.

To determine amount sown per acre, tests were made with pulverized limestone over different types of ground with finely ground lime. The amount spread is determined by the adjustment of the nuts on the hanger bolts which carry the agitator. In the following table is shown the opening between hopper and agitator board necessary to give approximate amounts shown.

Opening Between Hopper and Board	Weight Spread per Acre	Distance Traveled to Spread 100 Pounds
¾ inches..........	730 lbs.	1793 ft.
1¼ inches........	2,200 lbs.	594 ft.
1½ inches........	3,800 lbs.	344 ft.

For amounts over 3,000 lbs. per acre the flat side of the agitator board should be turned up The calibration figures follow for this adjustment:

Opening Between Hopper and Board	Weight Spread per Acre	Distance Traveled to Spread 100 Pounds
1¾ inches........	2,475 lbs.	527 ft.
2 inches...........	4,770 lbs.	274 ft.
2¼ inches........	6,700 lbs.	195 ft.

The diameter of the wheel on wagon used was 44 inches. Where disc is attached to a wheel of different size the amounts would be less with a larger wheel and more with a smaller wheel.

Probably a more satisfactory way to determine amount spread per acre is to start with hopper level ful and run out a 7-inch depth of lime, with the feed set at some figure selected from above table, say 1¼-inch. A depth of 7-inch spread in a distance of 40 rods would represent closely one ton per acre. At the same rate 10 rods would represent ¼ ton or 500 lbs. per acre. If the same amount were spread in 20 rods double the amount or 2 tons per acre would be the amount sown. Two or three trials will serve to determine the desired setting.

Since the cuts describing this spreader have been made the design has been changed by reducing the length of the hopper to 8 feet 3 inches or ½ rod inside measurements. By cutting in a known amount of lime, say 200 lbs, and noting the distance required to spread this amount, the amount spread per acre can be easily calucu-lated.

Example—Weight of lime put in hopper, 200 lbs.

Distance traveled to spread 200 lbs.—40 rods.

Area spread equals ½ x40 equals 20 sq. rods or ⅛ A.

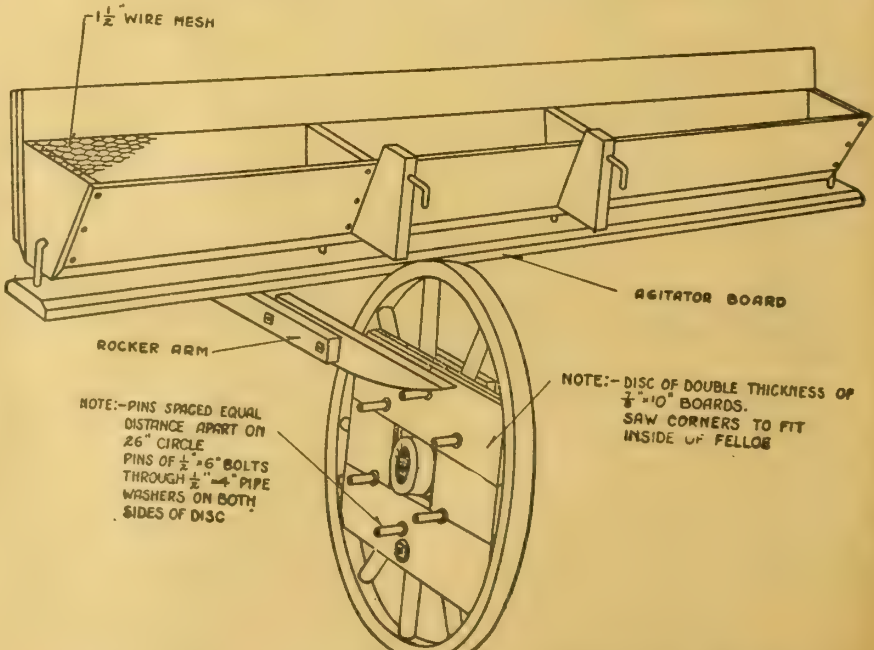
200 lbs. on ⅛ A. equals 1,600 lbs. per A.

Shortening the hopper also requires but one division in the hopper and 3 hangers for the agitator board. It has also been found that if 2-in. x 4-in. blocks having holes for the hanger bolts are fastened to the agitator board the wear of the hanger bolts on the agitator board will be reduced and more positive action of the agitator board will result.—H. H. Musselman, Dept. of Farm Mechanics, M. A. C.

The Netherlands was the largest market, except Canada, for American corn in 1921, having received 17,843,464 bushels, according to the United States Department of Agriculture. The next largest markets, in order of receipts, were United Kingdom, Germany, and Mexico.

Plenty of fresh air during winter is to be desired for the poultry flock, but be sure to avoid drafts.

The friends of Gus Holmgren, the city treasurer, desire to make it known that they wish to secure a second term for Mr. Holmgren for the reason that he is incapacitated for work of any kind and is very much in need of the assistance the position would give him.—Iron Ore.


1½" WIRE MESH
AGITATOR BOARD
ROCKER ARM
NOTE:-PINS SPACED EQUAL DISTANCE APART ON 26" CIRCLE PINS OF ½"×6" BOLTS THROUGH ½"×4" PIPE WASHERS ON BOTH SIDES OF DISC
NOTE:- DISC OF DOUBLE THICKNESS OF ⅞"×10" BOARDS. SAW CORNERS TO FIT INSIDE OF FELLOE

This shows the general plan of hopper and arrangement of rocker arm.

Fruit and Orchard

Edited by
Frank D. Wells

PLANTING AN ORCHARD

THE good prices for fruit have induced many to turn their attention to the orchard. Not only is this true of land owners, but also of city dwellers who wish to retire from their present occupations and are looking to the orchard as an interesting vocation as well as a profitable investment. It is those who are unaccustomed to the soil who are most eagerly searching for information and certainly they need it before undertaking anything as complex as orchard growing. For fruit-growing is by no means a simple matter, though it may look easy enough to plant a tree and wait for it to produce fruit.

In locating an orchard it is of the first importance that drainage be considered. It is not enough that the trees will grow. Apples, for example, will grow on a wet soil, yet never produce fruit enough to pay for the time and labor of cultivation. Wet land and such as has a subsoil of quicksand is not desirable. A clay subsoil may be underdrained, but even then it will hardly be on an equal footing with land well-drained by nature. Better use such land for other purposes.

Atmospheric drainage is another point which should not be overlooked. There are some lands beside bodies of water that are protected against sudden and severe changes of temperature, but such areas are in the aggregate, not large. In the vast interior regions dependence must be placed on elevation. Land should be selected that has a lower area around it. There are thousands of acres of such lands throughout southern Michigan which ought to be covered with orchards, while other thousands of acres of low land now in orchard might better be utilized for other purposes.

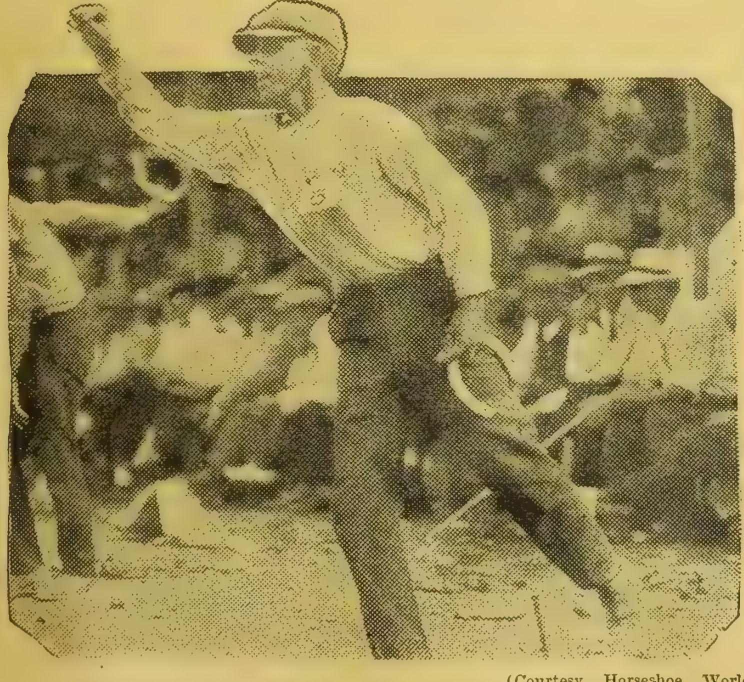
All kinds of soil are not of equal value. Sandy land will grow trees quickly. They will bear at an early age and are soon ready to die. Such orchards do not endure a severe winter as well as those on the heavier soils. Yet such orchards may be profitable for a brief time. The soil also plays an important part in the selection of varieties.

The different kinds of fruits are not equally adopted to soils and locations. Peaches are confined to narrower limitations than any of the other orchard trees. They really belong to the sub-tropical regions and in the district of the Great Lakes they are far north of their native land, though it is here that they reach perfection in quality. They do best in a gravelly loam, but even a heavy clay is good if there is good atmospheric and water drainage. Wet soil the peach will not tolerate. Cherries are adapted to a wide range and so are plums, though the former prefers the lighter soils, while the latter is partial to heavy land. Pears and apples are rather shortlived on light land, though that is not always the case.

In the majority of cases it is safest to trust to a clay loam, when such a choice can be made. However, good results can be obtained from sandy land if it can be kept well fed, while thorough cultivation will do for correcting the natural disadvantage of a heavy clay. Some of the best apple and peach orchards in Southern Michigan are on a soil usually considered too heavy for orchard purposes.

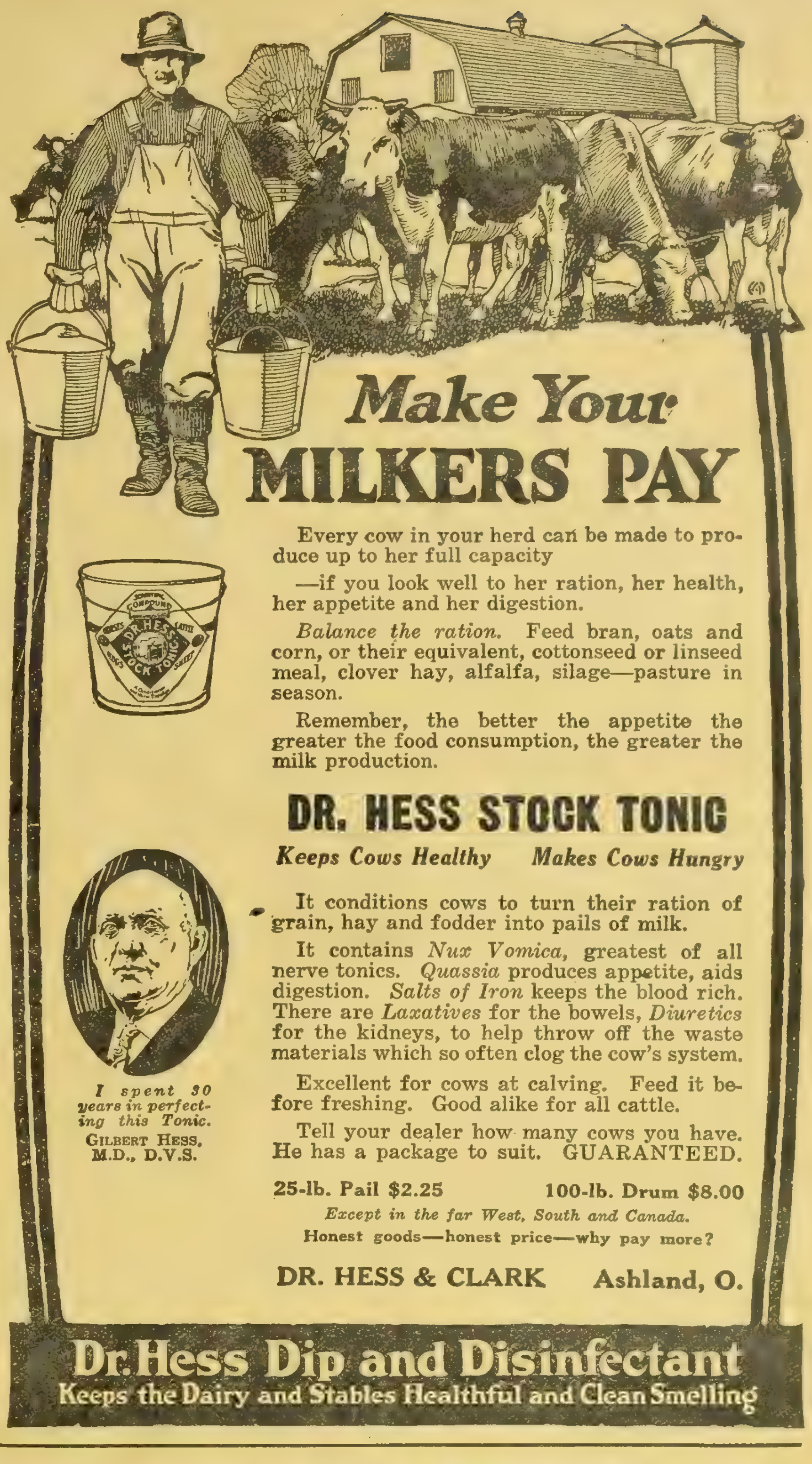
Now comes the market and on this depends the value of the orchard. It is the consumer who ultimately decides what kind of fruit should be grown and the grower who knows what the perspective customers will want, or at least can make a good guess at it, is the one who will succeed. (Cont'd on page 27)

The New World's Champion in Action



(Courtesy Horseshoe World)

GATHER around, brother horseshoe pitchers, and allow us to introduce to you Mr. Frank Lundin, of New London, Iowa, the champion horseshoe pitcher of America. Mr. Lundin won his crown at the 1922 National Tournament at the Iowa State Fair, Des Moines, Iowa, playing one whole week and losing only one game. Mr. Frank Jackson, 1921 champion finished second. The next tournament to be held of national importance will be put on at St. Petersburg, Fla., during the latter part of February. That city is spending $10,000 on new pitching courts and it is expected that the February meet will prove a great success.—Horseshoe Editor.



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Every cow in your herd can be made to produce up to her full capacity

—if you look well to her ration, her health, her appetite and her digestion.

Balance the ration. Feed bran, oats and corn, or their equivalent, cottonseed or linseed meal, clover hay, alfalfa, silage—pasture in season.

Remember, the better the appetite the greater the food consumption, the greater the milk production.

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It conditions cows to turn their ration of grain, hay and fodder into pails of milk.

It contains *Nux Vomica,* greatest of all nerve tonics. *Quassia* produces appetite, aids digestion. *Salts of Iron* keeps the blood rich. There are *Laxatives* for the bowels, *Diuretics* for the kidneys, to help throw off the waste materials which so often clog the cow's system.

Excellent for cows at calving. Feed it before freshing. Good alike for all cattle.

Tell your dealer how many cows you have. He has a package to suit. GUARANTEED.

I spent 30 years in perfecting this Tonic.
GILBERT HESS, M.D., D.V.S.

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The New Improved Walsh No-Buckle Harness

Made in All Styles. Breechingless, Side Backer, Express, etc.

NO BUCKLES TO TEAR
NO RINGS TO WEAR

3-23

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Buckles Weaken and Tear Straps. As an example, a Walsh 1⅛ inch breeching strap holds over 1100 lbs. The same strap with the buckle will break at the buckle at about 350 lbs. pull. Ordinary harness has 68 buckles. Walsh Harness has no buckles—easy to see why Walsh is three times stronger, lasts so much longer without repairs.

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The Walsh cuts harness costs. The price is no more than buckle harness, yet it outlasts two buckle harness, and saves many a dollar in repairs. No patching, no mending, because no rings to wear straps in two, no buckles to weaken and tear straps. Easily adjusted to fit any horse, rust-proof hardware, improved hames, etc. Write today for new reduced prices.

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Balance easy payments, or pay cash after trial if you wish. Selling direct from factory gives you highest quality harness possible to make at lowest prices. Write today for free illustrated book, prices, easy payments and 30 day trial offer, also how to make money showing Walsh Harness to your neighbors.

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OCT. CLEARANCE SALE. WE ARE OFFERING 20 heifers and bulls. Heavy producing dams. Sire has 7 dams averaging nearly 1,100 lbs. on yearly test. Free from T. B., $50.00 and up.
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BARGAIN—$45 buys registered Holstein Bull delivered your station. For particulars address **EARL PETERS, No. Bradley, Mich.**

SHORTHORNS

Richland Shorthorns

We have two splendid white yearling bulls by imp. Newton Champion, also some young cows and heifers that we are offering for sale. Write for particulars to

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Herd at Prescott, Mich. Office at Tawas City, Mich.

POLLED SHORTHORNS. BULLS 4 TO 10 mos. also heifers, O. I. C. and C. W. Swine $15 and up. Write your wants.
FRANK BARTLETT, Dryden, Mich.

SHORTHORNS AND POLAND CHINAS—NOTHing for sale at present. Are holding for public sale Nov. 15th. Write for catalogues.
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A POLLED SHORTHORN HERD BULL 2 years old. Scotch Orangeblossom Family. Fit to head any herd. Younger ones for sale.
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GLADWIN COUNTY SHORTHORN BREEDERS offer the best in beef and milk strains. All ages, both sexes. **W. S. HUBER, Sec'y, Gladwin, Mich.**

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WE HAVE SOME FINE YOUNG ANGUS BULLS from International Grand Champion Stock at reasonable prices. **E. H. KERR & CO., Addison, Mich.**

REGISTERED PUREBRED ANGUS HERD Bull for sale at a reasonable price.
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SPECIAL PRICE ON BULLS, RANGING IN age from 8 to 11 months, until Jan. 1st, 1923.
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FOR SALE—REGISTERED GUERNSEY HEIFers at reasonable prices, also choice bull calves of May Rose breeding.
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SECURE YOUR NEXT BULL FROM ONE with both A. R. Sire and Dam. I have what you want. I also offer a few choice females.
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GUERNSEY BULL Bred Heifer. Yearling Heifer. Heifer calf. Best of breeding. From good producers. Price right. Write **G. A. WIGENT, Watervliet, Mich.**

GUERNSEY BULL GOOD BREEDING. HERD tested for tuberculosis. No reactors.
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at present, is too much like
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RED POLLED CATTLE—A few choice bulls and heifers for sale.
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GUN PLAIN STOCK FARM
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DUROC JERSEYS
REGISTERED SPRING GILTS
A nice assortment to select from at Farm Prices
TWIN BROOK FARM
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DUROC JERSEYS

NELLS LITTER; SIRED BY LIVINGSTONS PRIDE farrowed July 24, these pigs cannot be beat. Nell has farrowed 59 pigs in four litters. PRODUCTION is the big word of today, better get a boar out of this litter, and start on production. **LAPHAM FARMS, Pinckney, Mich.**

SENSATION MARSI Our new herd boar. Sired by "Marsi" Reserve grand champion National Swine Show 1922. We are taking orders for gilts and sows for spring farrow bred to this wonderful boar.
SCHAFFER BROS., Route 4, Oxford, Mich.

DUROC JERSEY BOARS READY FOR SERvice. Sired by Fannie's Joe Orion $25 each. Will ship C. O. D. Write us now.
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PEACH HILL FARM offers choice weanling Duroc pigs, either sex. Priced very reasonable. Write us.
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HILL CREST DUROCS; SOWS AND GILTS, both bred and open, also service boars. **NEWTON & BLANK.** Four miles straight south of Middleton, Gratiot Co., Mich.

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DUROC BOARS OF SENSATION AND PATHfinder, blood lines including the undefeated under year boar of the state and junior champion of State Fair. **MICHIGANA FARM, Pavilion, Mich.**

POLAND CHINA

SELL REGISTERED SPOTTED POLAND China Pigs, 7 months old, Boars $25, Gilts $20. **Dr. Erwin Meyer, Drayton Plains, Mich., Box 43.**

DAIRY and LIVESTOCK

BEEF PRODUCTION COMING BACK

CONDITIONS at Glenwood Farm are similar to those all over the country. Bull sales have been slow for the last couple of years which leaves us at present writing with a great many bulls on hand, even though prices have been greatly reduced.

Tight money caused the Western Cattle men to sell feeders last year at very low figures and farmers who had been raising their own, decided to abandon the plan and buy western cattle instead. Many did not realize that a reaction was bound to come, as soon as money became easier, as tight money had two effects. It made cattle temporarily cheaper because everybody was selling more than his custom, to raise needed cash, and it made cattle scarce in the long run.

By another year if the new Congress carries out the program announced by the progressive Republicans and Democrats for easier money and credits, farmers will be sorry that their grade dairy herds are not bred to Angus bulls, as it will be impossible to buy the feeders at all. Now is the time to buy an Angus bull, while he can be purchased at a reasonable figure and while conditions are such as to assure a heavy demand for his get in nine months.

At Glenwood Farm, besides the pure bred Angus herd, we have a herd of 30 grade dairy cows, mostly Holsteins. This year every one of these cows is being mated with line bred Doddie, as we know from long experience that the calves from this mating, will top the Buffalo market, when sold for prime beef. Some of the pure bred Angus will also be sold for beef, but the grades will make the most money, because they are cheaper to raise. Cross breeding adds vigor and produces rapid growth. The pure bred is stronger than the grade, so we know that the calf will have the tendency to fleshen, inherited from the pure bred sire; while the mother has the tendency to give plenty of milk, also inherited from a pure bred advanced Holstein sire.

Challenger, International Grand Champion Steer, 1903 was the calf of a grade Holstein cow mated with a very beefy line bred bull, such as we are offering the farmers at the present time at very moderate prices.

LIME AND PHOSPHORUS ARE VITAL TO DAIRY ANIMAL

LIME and phosphorus, although they are found in relatively small quantities in feeds, have a great deal to do with milk production and building up the body of the unborn calf. If the cow does not have enough of these elements in her ration she will draw on the supply in her body for a time, and heavy producers commonly do this. Therefore, says the United States Department of Agriculture, it is a good practice to feed cows well when they are running low in milk yield and when they are dry, so that they may store up these elements as well as others in their bodies for use when the large demand is made.

The common view is that cows need only enough feed for maintenance, but experiments carried on by the department show that this is not true. The cow is a milk manufacturing plant, and, like many factories she must have a reserve supply of materials to draw on when heavy demands are made. A cow that has been well fed when dry and has stored up this reserve is able to produce more on full feed than a cow that has given only a maintenance ration during that resting period. In this way a cow can utilize her capacity the year round although she may not be giving milk all the time.

In keeping up the necessary lime and phosphorus supply it is well to keep in mind the fact that certain feeds are richer than others in these elements. The feds which contain the most are the legume hays, which include cowpea, soy bean, the clovers, and some others. Of those mentioned cowpea hay contains the most lime, and the others are named here in order of their richness in lime. The lime content of hay depends to a great extent on its quality. Laefy alfalfa hay contains more lime than coarse stemmy hay, and the same is probably true of other hays.

The common dairy feeds that contain the most phosphorus are wheat bran, cottonseed meal, standard wheat middlings, and linseed meal, in the order given. Less common feeds that are high in phosphorus are, in order, sesame-oil cake, rice polish, buckwheat middlings, rice bran, sunflower-seed cake, rapeseed cake, buckwheat bran, and malt sprouts.

No grain or other concentrates mentioned anywhere near so much lime as the legume hays; and no kind of roughage contains phosphorus in quantities comparable to those found in the concentrates mentioned above. Grasshays, corn silage, and corn products with the possible exception of those made from the germs are low in both lime and phosphorus.

TREATING SHEEP FOR STOMACH WORMS, FEATURE OF UNITED STATES EXHIBIT

"THE Story of the Stomach Worm," is the title of a demonstration and exhibit shown by the United States Department of Agriculture at the International Live Stock Exposition, Chicago, December 2 to 9. For several years the department has been testing methods for the prevention of injury and loss by this parasite, which is one of the most serious pests of farm sheep. Following a careful study of the life history of the stomach worm, a practical and oinexpensive treatment has been found that will prevent stomach-worm injury.

In its exhibit experts of the department demonstrated with a pen of wormy sheep the method of giving this treatment, known as the bluestone treatment. The simple apparatus necessary, and the proper solution to use, was also shown to those interested.

Stomach worms are particularly destructive to young lambs, causing stunted growth and losses sufficient to wipe out all profit from sheep raising. By proper use of the bluestone treatment losses from stomach worms are prevented, at small cost and lambs thrive and reach market size at an early age. If the sheep man will acquaint himself with the principal points in the life of this worm, and apply the bluestone treatment at the proper time, most of the losses caused by the stomach worm will cease.

VETERINARY DEPARTMENT

CHRONIC LAMINITIS

I have a five year old mare, who got in a cornfield and ate too much new corn and now has the founders. Her front legs seem to pain her as she lifts them up all the time. What can I do for her? The local veterinarian did not help her.—M. F., Caro, Michigan.

—From the history given in this case I am of the opinion the mare is suffering from chronic laminitis, a disease that is incurable. Moderate cases can be remedied somewhat by proper shoeing. No doubt your veterinarian did all he could in this case to prevent the disease from becoming chronic, a thing that is liable to happen in any case of laminitis or founders. Better consult your veterinarian as to proper shoeing of the animal if this is advisable. It is necessary to make an examination of the feet before giving advise as to shoeing.—John P. Hutton, Associate Professor of Surgery and Medicine, M. A. C.

WIND PUFF

Is there any cure for wind puff on a horse's leg? The horse is sound in every way, as far as is known. Also have a sow that after calving last spring became poor and stiff in her limbs. She ate fairly well but soon became so poor and helpless we killed her. We did not milk her for three months. On investigating her inwards found them covered with dark spots or lumps. Was the cow diseased or could she have injured herself during calving?—C. F., Conklin, Michigan.

—The term "wind puff" is usually applied to an enlargement of the bursae located at the lateral part and just above the fetlock joint of the horse. If there is no lameness connected with the blemish, it is very questionable if it would be advisable to treat. Rest, absorbent applications and bandages would be indicated. However, when the animal is returned to work the blemish is prone to return. In case of lameness, I would advise securing the services of a qualified, graduate veterinarian.

Regarding the disease of the cow, from the meagre description of conditions found it would be impossible to say what the trouble was but possibly was not caused by injury during freshening.

FROM MICHIGAN BREEDERS

MAKES SEVERAL GOOD SALES

Mr. Wm. C. Dicken, proprietor of Riverview Hereford Farm of Smyrna, Michigan, and breeder of both Polled and Horned Hereford cattle dropped us a friendly letter the other day. In it he advised that he had made several sales during the past year. One was a cow sold to C. W. DeGrew of Belding; another a bull to A. T. Laux and C. E. Bowen, Smyrna; bull to Richard Conzzins, Muir, bull to Seth C. Partridge, Greenville; bull to J. E. Stauffer, Alto, Michigan. Mr. Dicken also advises that Mr. Chas Lampkin of Lowell has just purchased a carload of grade Hereford Calves at Kansas City, Missouri which he will keep to breed. "The first of their kind to be shipped into this section for that purpose." says Mr. Dicken.

REPORTS TWO SALES

"Last week we sold a young bull, 12 months old, weighing 960 pounds, to Guy R. Bill of Snover and also a six-months-old calf, weighing 620 pounds, to R. M. Watts of McIvor, Michigan." writes L. C. Kelley and Son, Shorthorn breeders living near Plymouth, Michigan, in a letter dated November 22.

SOLD FINE BOAR

After having read your article in your issue of November 11th regarding the purchase of the Duroc-Jersey boar by Schaffer Bros., I wish to tell you of a Duroc-Jersey boar that I sold to Miland Young of Wheeler on November 7th. He was farrowed on February 4th 1922, and at the age of 248 days weighed 397 pounds. He was sired by Barnes' Fancy King No. 215475 whose line of breeding runs strongly to both Ira Jackson's and Brookwater's stock.

Mr. Young is the proud owner of 20 spring gilts that he intends to breed to this boar for early spring farrow.—W. U. Barnes, Wheeler, Michigan.

PLANTING AN ORCHARD

(Continued from page 26)

Customers who come to the orchard for fruit are rapidly being educated to prefer flavor to the other qualities. Every year the demand for such fruit is improving and promises to continue to do so. Good roads and automobiles make 50 or 60 miles to an orchard merely a pleasure trip. A location within that distance of a large city may well be considered as within the territory of the home market. Varieties judiciously selected so as to give a succession will enable one to dispose of a large crop.

Perishable fruits that must be sent to a distant market should be chosen for their shipping qualities. which usually requires a sacrifice of flavor. The Elberto peach is a good example. It can be shipped like a rubber ball, so the greater part of the peaches are shipped are of this variety. But would our peach growers ever offer it to another?

Cherries are limited to a few varieties. Besides the Early Richmond for first and the Montmorency to follow, there are not many grown in Southern Michigan for market, though the English Morrilla should receive some attention, since it ripens a month later than the others. In the Traverse Bay region it is a favorite.

Among the plums the Burbank has been extensively planted. It has proved the most satisfactory of the Japenese varieties, but the fruit grower may now ask himself whether or not it is best to set out this tree. It bears early and produces heavy crops. The fruit is ripe before the Domestics, and it is attractive in appearance, but will customers tolerate it if they can get Lombards, Gages or any one of a dozen European varieties? By the time a plum orchard, planted now, begins to bear, will not customers have learned to discriminate?

The pear, what can be said about that? At present the blight makes it about the most uncertain of fruits. As soon as that difficulty is overcome it should be a promising fruit.

The apple is in a class by itself. Near the large cities there is a good demand for summer and fall fruit, picked green, but it is a market depending largely on the good road and the automobile. The outlook for fall fruit which has to be shipped far is poor. Winter fruits should have a good future. Experienced growers advise limiting the planting to four or five varieties and these such as are suitable to the locality. A variety good in one place may be poor in another.

THE CERTIFICATION OF NURSERY STOCK

OWING to the number of fruit trees furnished by nurseries which prove untrue to name, the certification of nursery stock by some trustworthy organization has been suggested, one plan proposed being the examination of bearing trees while in fruit and certifying of the scions to be used in propagating.

This method of certifying the scions would be helpful if the practice could be country wide, but the certification is confined to Michigan, it will not be beneficial since less than ten per cent of the trees planted in this state are grown in Michigan nurseries, and even though planters wish to secure trees grown from certified scions, they will not be able to obtain them. We fear also that the certifying of the scions will not always secure for the planters trees that are true to name. The mistakes made in varieties are either the result of errors made by the honest nurseryman, and of errors or the fraudulent filling of orders by dishonest nurserymen.

Michigan nurserymen as a class compare favorably so far as honesty is concerned with the men in any other line, but we have known of nurserymen in Michigan as well as in other states, who apparently do not hesitate if they do not have the varieties ordered, to put in other kinds of which they have a surplus, labeling them according to the order. These men are not likely to change their methods and would be most active in calling attention to their certified stock. It would be an easy matter for them to secure a few certified scions and their catalog and other literature could be so worded that the public would think that they had certified stock only.

Each year there is an increased tendency for Michigan nurserymen to obtain their fruit trees from nurseries in New York, Connecticut, Pennsylvania, Maryland, Ohio, Indiana, Illinois, Iowa, Missouri and other States and even those who formerly grew large numbers of fruit trees now depend largely upon other nurseries for their supply except perhaps of peach trees, and igve their haps of peach trees, and give their mental trees and shrubs.

In Massachusetts, they have attempted in a small way the actual certification of fruit trees. A metal tag with the name of the variety is fastened to each tree by running a small wire through a branch and sealing it. There is no opportunity for fraud when the individual trees are marked in this way.

It is quite feasible with the most varieties and would be reasonably safe with all sorts if certified scions are used. As carried on in Massachusetts the actual cost of certifying the trees is three cents each. In Michigan the benefit would be limited by the comparatively small number of trees in the nurseries.—L. R. Taft, State Horticulturist.

One Week each Month and note the difference
MORNING
EVENING
KOW-KARE

You CAN get more milk from your cows—now, and all through the winter and spring. Read how—and why—then act.

Late fall, winter and spring months are a severe strain on the milch cow's system. Winter feeds are harder to assimilate and turn into milk than green pasturage. The digestive and milk-making organs become run down. Less milk and lowered vitality results.

BUT—you can easily maintain vitality at summer level and decidedly increase the milk flow by a one-week-a-month use of Kow-Kare. This famous medicine for cows tones up the genital and digestive organs—enables them to throw off disease and make milk faster.

Thousands of dairymen follow this plan and find the very slight cost of the treatment repaid a hundred fold. Only a tablespoonful of Kow-Kare morning and night is required—and only one week out of the month.

If disease does creep into the herd, Kow-Kare goes to this origin of the trouble and acts promptly. For *Barrenness, Retained Afterbirth, Abortion, Scours, Milk Fever, Bunches, Loss of Appetite.* etc., Kow-Kare has been the standard remedy the country over for twenty-five years.

Make a test of this more-milk plan—try it on part of your herd and convince yourself. Your feed dealer, general store or druggist will supply you—large size Kow-Kare $1.25; medium size 65c. If your dealer is not supplied, we mail, postpaid.

Write for valuable free book, "The Home Cow Doctor."

DAIRY ASSOCIATION CO., Inc.
Lyndonville, Vt.

HAMPSHIRES

A CHANCE TO GET SOME REAL HAMPshires Boar pigs, sired by Gen. Pershing Again, Gilt Edge Tipton, Messenger All Over 10th. Gen. Pershing 2nd., and other great boars. Write for list and prices. DETROIT CREAMERY HOG FARM, Route 7, Mt. Clemens, Mich.

HAMPSHIRES—SPRING BOARS AND BRED gilts from 25 sows to select from. Place your order now or you may be to late. 10th year. JOHN W. SNYDER, R. 4, St. Johns, Mich.

O. I. C.

O. I. C. PIGS OF NICE THRIFTY AUG. AND Sept. farrow, 40 lbs. or more; from large Prolific mothers, average 14 pigs to litter. Choice pig either sex, $15.00 C. O. D. Order now. Prompt shipment. Pedigree with each pig. MAPLE VALLEY STOCK FARM, North Adams, Mich.

O I C'S 25 LAST SPRING BOARS, GILTS not akin; fine big growthy stock. Recorded free. One half mile west of depot. Citizen Phone. OTTO B. SHULTZE, Nashville, Mich.

REGISTERED O. I. C. SERVICE BOARS AND Bred Gilts priced to sell
J. R. VAN ETTEN, Clifford, Mich.

SHEEP

REGISTERED SHROPSHIRE YEARLING rams and ram lambs of exceptional quality and size. Priced to sell. Flock established 1890.
C. LEMEN, Dexter, Mich.

SHROPSHIRES—10 REGISTERED EWES. Choice wooly Rams.
DAN BROOHER, Evart, R. 4, Mich.

STRONG robust one and two yr. old Wool-Mutton Shropshire rams priced right. Tell us what you want. Maplewood Stock Farm, Allegan, Mich.

OXFORDS RAMS ALL AGES—GUARANTEED breeders and to please. A few ewes also 10 ewe lambs Wm. Van Sickle, Deckerville, Mich., R. 2.

PET STOCK

FOR SALE—1 YEARLING, 2 SUCKLINGS Shetlend Ponies. Reg. Hampshire, 6 bred ewes. 8 ewe lambs. A bargain. HARRY W. GARMAN, & SONS, Mendon, R. 3, Mich.

PUREBRED SCOTCH COLLIES, SABLE AND white or the beautiful black and white. From heel-drivers $10 and up.
SILVERCREST KENNELS, Gladwin, Mich.

Complete Dispersion Sale of Holstein-Friesian Herd

6 1-2 miles west of Lake Odessa, Mich., Dec. 14, 1922, beginning at 2 p. m.

25-Pure Bred Registered Females-25
2-Pure Bred Registered Males-2

Twin heifer calves whose Dam is a 27lb. cow and their Sire a 30lb. bull. This herd was tested Nov. 13th under State law and passed as free from all infection.

A number of these cows have been recently tested for production records. Following are some of the results of seven day tests:

	Milk	Butter
Cow No. 159575—12 years old	761.2lbs.	26.474lbs.
Cow No. 206121—10 years old	532.2lbs.	24.070lbs.
Cow No. 427844— 6 years old	464.7lbs.	21.105lbs.
Cow No. 506145— 4 years old	623.7lbs.	27.121lbs.
Cow No. 538236— 4 years old	502.2lbs.	23.712lbs.
Cow No. 612617— 2 years old	446.6lbs.	24.155lbs.

Fifteen of these females will be recently freshened at the time of sale.

This is an estate settlement sale and every animal will be sold to the highest bidder. Shelter tent in case of bad weather. The 160 acre farm will also be sold at auction at this sale. A good dairy farm as the records will show.

Terms for stock—Cash or good approved notes with interest at 7%. Notes drawn payable in eleven months.

Terms for farm must be either cash or securities readily converted into cash. For catalogs address, *TONY McCAUL, Clarksville, Mich.*

McCAUL & CHEESEBROUGH, Owners.

POULTRY BREEDERS' DIRECTORY

Advertisements inserted under this heading at 30c per agate line, per issue. Commercial Baby Chick advertisements 45c per agate line. Write out what you have to offer and send it in. We will put it in type, send proof and quote rates by return mail. Address The Michigan Business Farmer, Advertising Department, Mt. Clemens, Michigan.

POULTRY

We yet have a few hundred Pullets in Leghorns, Barred Rocks White Wyandottes and Orpingtons. The most of these Pullets are near laying age and should be put into winter laying quarters soon. If you want a flock of winter layers, write us now.

Also Cockerels, Bronze Turkeys, Toulouse Geese and Pekin Ducks.

STATE FARM ASSOCIATION
Kalamazoo, Mich.

PULLETS, HENS AND COCKERELS

S. C. White Leghorns and S. C. and R. C. Black Minorcas. Must make room before cold weather. About ready to lay.
LAPHAM FARMS, Pinckney, Mich.

S. C. ANCONA COCKERELS HATCHED FROM H. Cecil Sheppards very best. Only a few, order early. $3.00 to $5.00.
H. CECIL SMITH, Rapid City, Mich., R. 2.

S. C. RHODE ISLAND WHITES. THOROUGHbred cockerels and pullets for sale.
JNO. A. HARTGERINK, Zeeland, Mich.

LEGHORNS

LEGHORNS

S. C. Buff Leghorn Hens, Pullets and Cockerels. Hens and pullets $2.50 each; cockerels $3.00 to $5.00 each. Show birds a matter of correspondence. **LAPHAM FARMS, Pinckney, Mich.**

COCKERELS AND PULLETS, S. C. W. LEGhorns, Tom Barron strain, 250 egg utility line, April hatched, $1.35. C. O. D.
CECIL W. BOVEE, North Star, Mich.

FOR SALE May hatched S. C. White Leghorn Pullets also Rose and Single Comb Rhode Island Red Pullets. **VALLEY RIDGE POULTRY FARM, Bloomingdale, Mich.**

S. C. BUFF LEGHORNS AND BUFF ROCK cockerels also a few yearling yearling Brown Leghorn hens at farmers prices.
E. B. HOLLENBECK, Athens, Mich.

FOR SALE—R. C. BROWN LEGHORN cockerels the big kind. These are extra good. $2.00 each, one or more. **E. HIMEBAUGH, 4[illegible] Marshall St., Coldwater, Mich.**

BUFF LEGHORNS—SINGLE COMB. Early Hatched Cockerels.
J W. WEBSTER, Bath, Michigan

RHODE ISLAND REDS

RHODE ISLAND REDS, TOMPKINS STRAIN Both combs. Stock for sale after September 15th.
WM. H. FROHM, New Baltimore, Mich R. 1.

ROSE COMB R. I. REDS, WHITTAKERS strain. Cockerels (April hatch) $2.00. Satisfaction guaranteed. **HAMPTON & SONS, Bangor, Mich.**

WHITTAKER'S R. I. REDS, 200 SINGLE comb red pullets at $2.50 to $5.00 each. Also both Rose and Single Comb cocks and cockerels. Write for calatog. Interlakes Farm, Box 4, Lawrence, Mich.

ORPINGTONS

BLACK ORPINGTON COCKERELS
M. P. HERGERT, Jonesville, Mich.

PLYMOUTH ROCK

BUFF ROCK COCKERELS—BIG HUSKY, healthy, uniform color, the result of years of careful breeding.
J. C. CLIPP & SONS, Box M, Saltillo, Ind.

THOMPSON STRAIN BARRED ROCKS—DARK pullets $1.50. Light and dark cockerels $3.00.
MRS. FRED KLOMP, St. Charles, Mich.

WYANDOTTES

FOR SALE—150 WHITE WYANDOTTE Cockerels and pullets. All from my prize winning stock of very best American White Wyandottes laying strain. They win for me. They will win for you.
C. W. CASE, Rochester, Michigan

CHOICE WHITE WYANDOTTE COCKERELS Pure bred laying strain. April hatch, reasonable.
E. M. CONNOR, Jackson, Mich., R. D. 5.

WHITE WYANDOTTES—MARTIN STRAIN Michigan State Fair winners, 1922. Cockerels and pullets. $3 to $7.
WAYNE CHIPMAN, Washington, Mich, Route 2.

FOR SALE—HIGH GRADE WHITE WYANdotte and R. C. Rhode Island Red cockerels—$3.00 each until January 1.
C. W. HEIMBACH, R. 1, Big Rapids, Mich.

TURKEYS—DUCKS—GEESE

White Holland Turkeys. Large Healthy Stock with size and quality. Grand gobblers $11.00, $14.00. Females $9.00. Order now and get the pick. **A. F. STEGENGA, Lyons, Mich.**

We Specialize in White Holland Turkeys and have birds of best breeding to offer of Northern Grown Stock. Toms $10 to $12. Hens $8 to $9. Birds will be well crated and satisfaction guaranteed. **Foote's Turkey Farm, Garden, Delta Co., Mich.**

NICE LARGE HEALTHY PUREBRED WHITE Holland Turkeys for sale. Write for prices.
MRS. EDNA DRIVER, R. 3, Fowlerville, Mich.

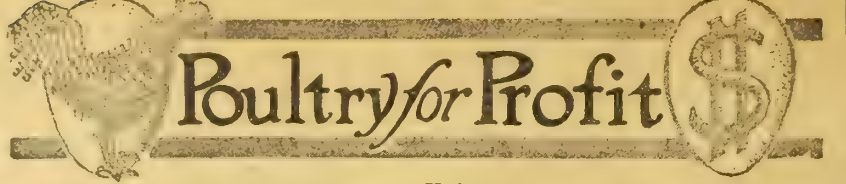
PUREBRED BRONZE TURKEYS FOR SALE
F. E. KINLEY, St. Johns, Mich., R. 2.

BEAUTIFUL PUREBRED MAMMOTH BRONZE Gobblers, large and vigorous. You will make no mistake when buying from me. $10.
THOMAS ROZEBOOM, Muskegon, Mich., R. 4.

BOURBON RED TURKEYS READY FOR shipment, for prices etc., address
R. W. ROBOTHAM, Hesperia, Mich.

FOR SALE—GIANT BRONZE TURKEYS FROM Michigan's best strains. Large healthy birds. **MRS. LAVERNE BROWNELL, R. 1, Belmont, Mich.**

PURE BRED MAMMOTH BRONZE TURKEYS Champion strain. Large and vigorous.
MRS. B. SMATTS, East Jordan, Mich., R. 1.



Poultry for Profit

CHICKEN POX OR ROUP

I have been losing quite a number of chickens. Their heads swell up on one side, and in a few days it breaks open and kills them. This seems to be only in the half grown chickens. Their heads look yellow and pale looking. They have a large well ventilated coop, and are fed corn, oats, buckwheat and sour milk. Would the sick ones hinder my selling the healthy ones?—F. B., Michigan.

—The symptoms described by you would indicate that the chicks are affected with a form of either Chicken Pox or Roup. A postive diagnosis could not be made, however unless the birds were sent to the College and a post mortem made. We have noted this trouble is liable to occur where chicks have been late hatched and over crowded especially when they are not encouraged to roost while young. The other birds in the flock are marketable although in all probabilities they would be rather light in weight if this condition is very prevalent. We would suggest that you eliminate all diseased specimens and feed the balance of the flock a moist mash containing equal parts by weight of bran, middlings, corn meal, and ground oats plus ten per cent meat scrap. This mash should be fed once a day. A scratch feed of cracked corn, and wheat should be given both in the morning and in the evening with a heavier feed at night.—E. C. Foreman, Department of Poultry Husbandry, M. A. C..

EXAMINATION REQUIRED

I have a nice flock of Plymouth Rock chickens, been doing well every year, but this summer, have lost lots of them and keep on losing them. They don't look sick at all that I notice, but find some dead under the roost, I open them, all the same trouble. The liver is spotted yellow and rotten. They have good feed, lots of sour milk and fresh water all of the time. Please tell us what should be done, I am afraid I will lose the rest of them.—J. D. Levering, Michigan.

—The disease spoken of cannot be diagnosed without an examination of a diseased bird or the carcasses of the birds which have recently died. The spotted liver may be found in blackhead, tuberculosis, or even other diseases. The best way of settling this question is to examine some of the fresh tissues from the diseased birds.—H. J. Stafseth, Res. Asso. in Bacteriology, M. A. C.

OVER $45,000,000 LOSS YEARLY FROM BAD EGGS

FEW people understand that eggs are almost as perishable as meat or milk. They belong to the same class of food, but just because they are enclosed in a hard shell, people think they will stand almost any kind of treatment.

Government experts estimate a loss of over $45,000,000 every year from bad eggs. This loss can be largely prevented by better handling and marketing.

Five per cent of the eggs in the United States are lost through shrinkage. The shell of an egg is porous, so that the developing chick can get air during the incubation period.

Seventy-four per cent of an egg is water. Whenever an egg is in a temperature above freezing, this shell. The higher the temperature and the more circulation of air there is, the faster the evaporation takes place. Eggs grow stale in warm poultry houses, in hot kitchens on the farm, or in the cupboards of the consumer. Egg dealers count that three stale eggs are equal to a rotten egg and pay accordingly.

Gather your eggs daily and keep them in a cool place. Market them as often as possible—at least once a week—better twice a week.

Blood rings cause a loss of 5 per cent of the eggs produced in the water is evaporating through the United States. This point was covered in the discussion of the preceeding chart.

Two and one-half per cent of the eggs on the market are rotten. Black rot, the rot caused by fertile eggs, has already been discussed. It is the most common rot and, as suggested before, can be prevented by producing infertile eggs

There are other kinds of rotten eggs. Bacteria gets in to the egg through the porous shell. These bacteria develop, causing various kinds of rot and mold. The tough inner membrane of the egg is practically bacteria proof unless it becomes damp.

Don't let hens nest on the damp ground. Keep the nests clean and dry. Don't wash any eggs you intend to sell. This destroys the inner protective membrane and allows germs to enter. Large egg dealers are sending out printed instructions, "Under no conditions wash eggs."

Two per cent of the eggs produced are broken. Some are broken by you on your way to market, but you are not as responsible as the local packers, the railroads, and the truck drivers of the large cities.

Two per cent of the eggs which come to market are dirty. Customers do not want dirty eggs. The egg dealers count three dirty eggs as the equivalent of one rotten egg, and deduct from the price accordingly.

Keep the nests clean. If eggs get dirty during the muddy weather in the spring, wash them, and use them immediately at home. Washed eggs are as good as any if used at once.

Mold spores enter the egg the same as bacteria. The spores grow and the egg tastes musty and ill flavored. Keep the nests clean and dry, and store the eggs in a cool dry place. Never put them in a musty room or cellar, or pack them in musty cases. There is only a small loss from this cause—one-half of one per cent.

Adding these percentages we find that 17 per cent of all the eggs in the United States are unfit for food. Help to prevent this loss by producing infertile eggs, by keeping the nests clean, by gathering the eggs daily, by storing them in a cool, dry place, and by marketing them often.

HOME PRESERVATION OF EGGS

PRESERVED eggs are as good for nearly all purposes as fresh eggs. If the preservative has been properly made and the eggs are fresh when they are put into it, even experts can hardly distinguish the preserved product from the fresh.

Water glass is one of the best preservatives for home use. Use 1 gallon of water glass to 10 gallons of water. Boil the water, then add the water glass, and mix thoroughly. Use only clean, fresh eggs. Pack in a glass or stone jar, or in a wooden keg. Have at least two inches of the solution above the top layer of eggs. Keep your eggs covered, and store them in the cellar or some other cool place.

Water glass costs from 60 to 75 cents a gallon. One gallon will preserve from 75 to 100 dozen eggs. Do not use the solution a second time.

Lime water can be used instead of water glass. Slake three pints of quick lime in three gallons of water. Add one pint of salt, and stir well. Let the mixture settle and pour off the clear liquid for your preservative.

Preserved eggs must be marked as such, if offered for sale.

"Today we have in the United States one cow for every four people while in Japan there is only one cow to every 1,114 people. Milk is undisputably the most important food in the development and growth of the human body. Without its use we would soon be a nation of people of small and undersized stature."—Jessie Hoover.

A New Discovery Makes Hens Lay

Any poultry raiser can easily and quickly double his profits by doubling his egg yield through the remarkable discovery of M. B. Smith, a Kansas City chemist.

Working along entirely original lines Mr. Smith discovered why hens lay less in winter than in summer, and perfected a formula that turns loafers into layers and profit makers.

Within five or six days this discovery, which is called Ditto Egg Tablets, will rejuvenate your flock. Your hens will go strutting and cackling about with red combs and full of life and pep. Every nest will yield an egg nearly every day in the week, which means a lot, since eggs are certaian to sell for 60 cents or more. This is not guess work as over 100,000 successful poultry raisers testify to the value of Mr. Smith's products.

Although different from anything you ever heard of, Ditto Egg Tablets are easily administered by simply dropping in drinking water.

So confident is Mr. Smith you can double or triple your egg yield, that he offers to send two large $1 packages of Ditto Egg Tablets (enough for a season) to any reader who will write for them. If you are satisfied they cost only $1 on this introductory offer, otherwise, nothing.

Send no money—just your name and address to M. B. Smith, 1260 Coca Cola packages will be mailed immediately.

When they arrive, pay the postman only $1 and postage. Use the tablets 10 days. If you are not getting more eggs or are not satisfied for any reason, simply return unused tablets and your money will be returned immediately without question. A big Kansas City bank guarantees the reliability of this offer. Write today before this introductory offer is withdrawn, as you can sell one package to a friend and thus get your own free.

TURKEYS—DUCKS—GEESE

BOURBON RED TURKEYS—UNRELATED stock. Order early for low prices. Collie pups for sale. Also Buff Wyandotte Cockerels.
THOS. G. CALLAGHAN, Fenton, Mich.

FINE, LARGE, VIGOROUS, THOROUGHBRED Bronze Turkeys. Wish to lessen my flock. For quick sale. Hens $8.00, Toms $10.00
MRS. ROBT. EMERICK, Harrisville, Mich.

MICHIGAN'S BEST GIANT BRONZE TURKEYS Large, vigorous birds of splendid color from world's best strains. Unrelated stock furnished.
N. EVALYN RAMSDELL, Ionia, Mich.

MAMMOTH BRONZE TURKEYS FOR IMMEDIate shipment. Hens $6.00, Toms $8.00.
D. F. MARSHALL, Beulah, Mich.

THOROUGHBRED BOURBON RED—TOMS $10.00, HENS $8.00.
J. B. HUDDLE, Ceresco, Mich.

PUREBRED BOURBON REDS, LARGE VIGOrous. Evans strain. Hens $8 toms $10.
MARY BEACOM, R. 4, Marlette, Mich.

EARLY HATCHED PURE BRED NARRAGANsett Turkeys. Hens $8, Toms $12.
MRS. C. W BEEBE, Adrian, R. 7, Mich.

MAMMOTH BRONZE TURKEYS. START right by buying strong, vigourous, pure bred stock. Write for prices.
MRS. PERRY STEBBINS, Saranac, Michigan.

WHITE PEKIN DUCKS AND DRAKES $2.00 each. S. C. W. Leghorn cockerels from culled flock $1.50 each. These prices are for immediate delivery F. O. B. Oxford. Also have geese and turkeys. **Mrs. Earl De Lano, R. 1, Oxford, Mich.**

W. CHINESE GEESE, PEKIN DUCKS, R. C. Brown Leghorns. Mature and young birds.
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FOR SALE CHOICE WHITE PEKIN DUCKS and drakes and mallards.
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HIGHEST PRICES PAID FOR LIVE AND Dressed Poultry, Veal, Eggs, Rabbits. A square deal always. **C. E. McNEILL & CO., 325 W. So. Water St., Chicago, Ill**

Michigan Apple and Potato Show

Grand Rapids, Michigan,
Klingman Building

December 5, 6, 7, 8, 1922

DAY AND NIGHT

During the Meeting of the

Michigan Horticultural Society and the Michigan Potato Producers' Association

Reduced Fares on all Railroads—ask your agent for application blank.

Admission 25 Cents.

The Agricultural and Business Situation

Revised Monthly by the Department of Research of the American Farm Bureau Federation.

An understanding of the figures on this page as they are revised and preented each month, enables the farmer to see the position of the important factors vhich indicate the trend of business and prices and give a basis for judgment oncerning future agricultural operations.

UMMARY:

The chief elements in the situation are encouraging in all four groups of actors.

. PRODUCTION AND TRADE.

Combined crop output in the United States this year is the third largest ever produced, the production for 1915 and 1920 being slightly in excess of 1922.

Pig iron production has made steady and rapid increase since the low point n July, 1921. The output in October this year registered an advance of 205 per cent over July, 1921.

Bank clearings outside of New York City, for October, show 28 per cent increase over October last year. This is mainly due to big crops and reviving trade but can be partially explained by a 9 per cent advance in the general price level.

II. FOREIGN TRADE.

As shown in last month's review, wheat and pork—two of the major farm exports—were going out of the country in unprecedented volume during the last two fiscal years. The ability of Europe to buy is partly explained by the net imports of gold into the United States, of 946 million dollars during the two years ending July 1, 1922, and of estimated foreign investments by American citizens amounting for the two years to 1,633 million dollars. Net imports of gold cannot and should not continue and are not continuing in this volume. Investments in foreign countries may be expected to keep on and increase if the factor of safety grows. Foreign loans extended by American investors in the fiscal year 1922 were 64 per cent greater than in 1921 indicating increasing confidence in the return of normal conditions abroad.

III. MONEY AND CREDIT.

● At the present stage of the business cycle an increase in interest rates and decline in federal reserve ratio are encouraging for they may signify expanding business activity, bringing greater demand for raw materials and shortly thereafter a larger supply of finished products available for consumption. When such changes come during the crop moving period, they may be reflecting mainly a temporary need for money and credit. Both sets of facts are probably true in the present noteworthy advance in commercial interest rates since last month.

IV. PRICES.

The September, 1922, purchasing power figure, based on prices for the year 1913, was 64, which means that farm products at prevailing prices can buy only 64 per cent as much of other commodities as in 1913. If it were possible to compute the November figure a slight increase would probably be shown but at best the gain is small over 62, the low point in farm purchasing power registered in December, 1921.

When volume of production as well as price is taken into consideration, the situation is more encouraging. A study by the Department of Research in August showed the purchasing power of the 1920 crops, total value basis, namely price multiplied by volume, to be 75; the 1921 crops 61; and the 1922 crops, on August forecasts and July prices, 77. November forecasts and prices might raise this last figure slightly. From this showing, which is more significant than the price relationship alone, farmers are about 25 per cent better off this year than last year but are still over 20 per cent below their 1913 position. It should be remembered that this is the third consecutive year the exchange ratio has been unfavorable.

On November 21, compared with a month previous, 17 out of 24 farm products advanced in price, 6 declined and 1 remained unchanged. Compared with a year ago there are 19 advances and 5 declines.

I. Production and Trade

1. Agriculture:

U. S. Production—000,000 omitted.

	1922 Estimate Preliminary	1921	Average 1916-1920	Preliminary* 1922 Estimate per cent
Corn, bu.	2896	3080	2831	102
Wheat, bu.	810	795	799	101
Oats, bu.	1230	1061	1413	87
Barley, bu.	196	151	197	100
Rye, bu.	80	60	68	118
Buckwheat, bu.	13.6	14	14	95
Potatoes, bu.	434	347	373	116
Sweet Potatoes, bu.	110	99	89	124
Hay, all, tons	109	97	102	107
Cotton, bales	10	8	12	85
Tobacco, lbs.	1330	1075	1378	97
Flaxseed, bu.	12	8	11	110
Rice, bu.	39	37	42	94
Peaches, bu.	56	33	44	129
Pears, bu.	18	11	14	126
Apples, total, bu	206	98	179	115
Apples, com'l, bbls	32	21	27	119
Sugar Beets, tons	5	8	7	75
Kafirs, bu.	81	115	91	89
Cranberries, bbls.	.5	.3	.4	125
Beans, bu.	13.0	9.1	13.3	98
Onions, bu.	20	14	17	122
Cabbage, tons	1.1	.6	.7	156
Sorghum Sirup, gal.	38	46	40	96
Cloverseed, bu.	1.8	1.4	1.5	120
Peanuts, lbs.	691	816	1043	66
Hops, lbs.	31.5	29	32.1	98

*As percentage of average 1916-1920.

World Production—000,000 omitted.

	1922	1921	Average 1909-13
Wheat, bu. (1)	3,012	3,049	2,890
Rye, bu. (2)	770	771	....
Oats, bu. (3)	3,018	2,742	3,008
Barley, bu. (4)	843	814	882
Potatoes, bu. (5)	3,106	2,430	3,066
Cotton, bales (6)	16	14.1	19.6

(1) Russia and Mexico excluded.
(2) 18 countries. (3) 27 countries. (4) 25 countries. (5) 16 countries. (6) 500 pounds net, linters excluded.

2. Mining:

Figures express production as a per cent of normal. In estimating normal production, due allowance is made for seasonal variation and year to year growth.

	Sept., 1922	Aug., 1922	Sept., 1921
Anthracite coal	61	1.9	88
Bituminous coal	71	39	64
Copper	*79	*86	18
Petroleum	*111	112	96

* Preliminary.

3. Manufacturing:

Wheat flour	123	117	119
Meat	*	109	97
Sugar	110	144	76
Cotton	92	97	92
Pig iron	68	61	34
Steel ingot	74	70	38
Lumber	84	98	74
Wood pulp	*	105	73
Gasoline	*	103	91
Cement	123	121	110

* Not available.

4. Building:

	October, 1922	October, 1921	Ten Months 1922	Ten Months 1921
Contracts awarded in 27 States: (F. W. Dodge Co.)				
Number	9,568	8,096	91,479	65,151
Vaue (000,000 omitted)	$ 253	$ 222	$ 2,887	$ 1,969

5. Transportation:

Freight Car Loadings:	Week Ending Nov. 11, 1922	Same Week Month Ago	Same Week Year Ago	Week Ending Nov. 11, 1922*
Total	953,909	983,470	753,046	127
Grain and grain products	52,501	52,492	34,402	153
Livestock	38,001	39,141	34,269	111
Coal	188,312	196,926	152,309	124
Coke	12,273	10,208	6,450	189
Forest products	60,392	59,727	50,661	119
Ore	39,383	46,362	8,658	455
Merchandise	228,050	226,123	215,439	106
Miscellaneous	334,997	352,491	250,858	134

* As percentage of week year ago.

6. Employment:

	September, 1922	August, 1922	July, 1922
Out of 65 industrial centers employment			
Increased over previous month in	48	39	44
Decreased from previous month in	17	26	21

7. Bank Clearings:

Units of $1,000,000,000

	Oct., 1922	Sept., 1922	Oct., 1921
New York City	19.67	17.27	16.03
Outside New York City	16.96	14.78	13.21

8. Mail Order Sales:

	October 1922	October 1921	Ten Months 1922	Ten Months 1921
Montgomery Ward	$10,288,916	$ 7,604,031	$ 69,841,140	$ 60,950,454
Sears Roebuck	19,933,164	17,378,253	141,212,969	144,747,613

II. Foreign Trade

1. Exports:

000 omitted

Commodity.	September 1922	September 1921	Nine Months 1922	Nine Months 1921
Grand total, all exports	$307,451	$318,402	$2,685,124	$3,461,562
Beef and veal, lbs	3,069	3,096	23,138	28,529
Pork, lbs.	57,247	66,405	504,238	617,842
Lard, lbs.	61,120	104,741	559,700	695,659
Neutral lard, lbs	1,598	2,789	14,741	20,515
Butter, lbs.	1,077	371	9,488	6,632
Cheese, lbs.	334	530	4,059	10,443
Hides and skins	226	433	2,899	2,794
Corn, bu.	9,608	18,600	141,206	104,972
Meal and flour, bbls	40	84	493	640
Wheat, bu.	25,987	30,842	126,130	237,445
Flour, bbls.	1,301	1,802	10,458	12,984
Oats, bu.	4,379	224	24,036	2,474
Meal and rolled, lb	9,425	8,719	75,649	79,446
Fruits and nuts	7,301	7,327	43,610	46,171
Veg. oils and fats	1,035	959	9,875	24,203
Sugar, lb.	28,824	79,781	1,808,841	785,984
Leaf tobacco, lb	33,102	33,008	295,814	403,880
Cotton, bale	369	522	3,849	4,311
Wool, lb.	26	80	297	1,607

2. Imports:

Grand total, all imports	$228,795	$179,292	$2 181,386	$1,872,696
Beef and veal, lbs	10,533	2,066	26,998	22,033
Pork, lbs.	76	56	435	582
Butter, lbs.	89	398	2,735	12,173
Cheese, lbs.	3,037	2,571	26,241	15,535
Hides and skins	50,587	32,806	358,765	268,980
Corn, bu.	2	3	97	156
Oats, bu.	37	62	1,271	3,081
Wheat, bu.	782	81	14,321	19,171
Flour, bbl.	42	4	552	780
Fruits and nuts	3,864	5,268	55,489	48,529
Veg. oils and fats	2,990	3,822	44,079	26,474
Sugar, lbs.	390,150	315,999	8,434,011	4,747,517
Leaf tobacco, lbs	2,780	2,600	51,556	36,914
Cotton, lbs.	2,506	3,181	113,724	67,091
Wool, lbs.	27,892	14,592	278,527	288,114

3. Prices of Foreign Drafts:

	Nominal Gold Value or Par of Exchange	Price of Demand Drafts Nov. 20, 1922	Oct. 16, 1922	Nov. 18, 1921
England	$4.87 to 1 £ Sterling	$4.49	$4.43	$3.99
France	19.3c to 1 franc	7.41c	7.52c	7.22c
Germany	23.8c to 1 mark	.01⅝c	.03c	.036c
Belgium	19.3c to 1 franc	6.96c	7.00c	7.00c
Italy	19.3c to 1 lire	4.75c	4.19c	4.16c
Spain	19.3c to 1 peseta	15.38c	15.11c	13.78c
Austria	20.3c to 1 crown	.0014c	.0014c	.037c
Denmark	26.8c to 1 crown	20.18c	19.91c	18.45c
Norway	26.8c to 1 crown	18.33c	18.20c	14.45c
Sweden	26.8c to 1 crown	26.78c	26.72c	23.33c
Holland	40.2c to 1 florin	39.35c	38.93c	35.20c
Argentina	42.5c to 1 peso	36.6c	35.95c	32.87c
Brazil	32.4c to 1 milreis	12.65c	11.55c	12.87c
India	48.7c to 1 rupee	29.95c	28.95c	27.12c
Japan	49.9c to 1 yen	48.35c	48.10c	47.87c
Canada	100 c to 1 dollar	100.00c	100.00c	91.20c

4. Discount Rate of the Bank of England:

Nov. 15, 1922	Month Ago	Year Ago
3%	3%	5%

III. Money and Credit

1. Gold, Currency and Bank Deposits:

000,000 omitted

	Oct. 1, 1922	Sept. 1, 1922	Oct. 1, 1921
Stocks of monetary gold in the United States	$ 3,874	$ 3,859	$ 3,453
Total supply of currency in the United States	4,521	4,394	4,665
	Sept. 15, 1922	June 30, 1922	Sept. 15, 1921
Total deposits in National Banks	$16,599	$16,321	$14,561
	Oct. 1, 1922	Sept. 1, 1922	Oct. 1, 1921
Deposits in New York City Banks	$3,910	$3,900	$3,740

2. Gold Movement:

000 omitted

	September 1922	September 1921	Nine Months 1922	Nine Months 1921
Exports of gold	$ 1,399	$ 2,449	$ 13,143	$ 13,546
Imports of gold	29,316	66,085	561,177	214,408

3. Federal Reserve Ratio:

	Nov. 15, 1922	Oct. 11, 1922	Nov. 16, 1921
Ratio of total reserves to deposit and Federal Reserve note liabilities combined	75.2%	75.7%	71.8%

4. Interest Rates:

	Oct., 1922	Sept., 1922	Oct. 1921
4-6 mo. commercial paper	4.65%	4.41%	5.94%
60-90 day commercial paper	4.42%	4.19%	5.62%

5. Discount Rates of the Federal Reserve Banks:

	Nov., 1922	Oct., 1922	Nov., 1921
Range of rates for the twelve banks on commercial, agricultural and livestock paper	4-4½%	4-4½%	5-6%

6. Stock and Bond Prices:

Average price—	Nov. 10, 1922	Oct. 13, 1922	Nov. 10, 1921
20 Industrial Stocks	97.50	102.60	75.61
20 Railroad Stocks	89.50	92.79	73.51
40 Bonds	89.30	90.63	81.13

7. Business Failures:

	Week Ending Nov. 9, 1922	Oct. 12, 1922	Nov. 10, 1921
Bradstreets	374	366	404
Duns	387	390	364

IV. Prices

1. Wholesale Prices of Farm Commodities:

Quotations at Chicago except as noted.

	Nov. 21, 1922	Month Ago	Year Ago
Fat hogs, cwt., average	$ 7.70	$ 8.85	$ 6.70
Beef steers, good native, cwt., av.	9.85	10.40	7.10
Fat lambs, cwt., average	14,45	13.55	8.70
Fat sheep, cwt., average	7.40	6.10	3.70
Wool, Ohio delaine unwashed, lb. (Boston)	.565	.555	.36
Butter, 92 score, lb	.505	.4425	.445
Cheese, No. 1 twins, lb	.2425	.229	.20
Eggs, fresh firsts, doz	.525	.33	.54
Poultry, hens, lb	.18	.22	.215
Wheat, No. 2 hard, bu	1.20	1.1825	1.025
Corn, No. 2 mixed, bu	.725	.72	.48
Oats, No. 2 white, bu	.4475	.4475	.3575
Rye, No. 2, bu	.89	.8175	.77
Barley, bu.	.67	.635	.575
Kafir, No. 2 white, cwt. (K. C.)	1.89	2.03	.875
Hay, No. 1 Timothy, ton	23.00	22.00	22.00
Flax, No. 1, bu. (Minneapolis)	2.45	2.435	1.735
Cotton, middling, lb. (N. Y.)	.254	.23	.173
Beans, white, cwt. (f.o.b. Mich.)	6.90	6.40	4.45
Potatoes, northern whites, cwt	.95	1.00	1.92
Onions, midwest yellow, cwt	1.90	1.50	4.75
Apples, "A" grade, bbl	5.00	5.25	8.00
Hides, No. 1 native heavy, lb	.23	.225	.155
Sugar, fine granulated, lb. (N. Y.)	.07	.069	.052

2. U. S. Department of Labor Relative Wholesale Prices:

Prices in year 1913 equal 100

	Oct., 1922	Sept., 1922	Oct., 1921
All commodities (Weighted average or General Price Level)	154	153	142
Farm products	138	133	124
Food products	140	138	140
Cloth, clothing, etc.	188	183	180
Fuel and lighting	226	244	189
Metals and metal products	135	134	116
Building materials	183	180	159
Chemicals and drugs	124	124	131
House furnishing goods	176	173	180
Miscellaneous	120	116	118

3. Prices of Farm Products at the Farm Relative to 1913:

Prices in year 1913 equal 100

Commodity.	Sept., 1922	Aug., 1922	Sept., 1921
Cotton	161	170	107
Corn	104	105	127
Wheat	115	112	99
Hay	98	96	104
Potatoes	108	137	115
Beef cattle	92	93	100
Hogs	110	114	102
Eggs	156	118	121
Butter	134	124	102
Wool	188	189	95

4. Relative Purchasing Power of Farm Products:

The quantity of various commodities which a given amount of each farm product would purchase at prices prevailing in 1913 is put equal to 100. The figures given represent the percentage of this quantity which the same amount of farm products would purchase in September, 1922. Prices at the farm are used for agricultural products, and wholesale prices at central markets for other commodities.

	All Commodities	Cloths, etc.	Fuel, etc.	Metals, etc.	Building Mtls.	House Furn'gs
Cotton	105	88	66	120	89	93
Corn	68	57	43	78	58	60
Wheat	75	63	47	86	64	66
Hay	64	54	40	73	54	57
Potatoes	71	59	44	81	60	62
Beef cattle	60	50	38	69	51	53
Hogs	72	60	45	82	61	64
Eggs	102	85	64	116	87	90
Butter	88	73	55	100	74	77
Wool	122	102	77	140	104	108

Average purchasing power of all farm products in terms of all other commodities. Same basis as above table.

1913	100	December, 1921	62
1914	112	January, 1922	65
1915	106	March	76
1916	89	May	73
1917	106	July	69
1918	112	August	64
1919	111	September	64
1920	86		
1921	67		

MARKET FLASHES

MARKET SUMMARY

All grain steady with demand slow. Corn shows indications of bullish tendency in near future. Beans firm. Demand for eggs and butter brisk and supplies small. Potatoes in large supply and easy owing to decrease in demand. Active trade in poultry. Market for turkeys quiet. All live stock active with sheep higher in price.

(Note: The above summarized information was received **AFTER** the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press —Editor.)

TRADE AND MARKET REVIEW

THE latter part of November showed a slight slackening in business activity and considerably less confidence in the grain markets. At the same time car loadings continued heavy in all lines and the car shortage is still acute.

Many of the potato sections of this and other states are reporting a great deal of difficulty getting a sufficient number of suitable cars to ship out big holdings in warehouses and to this fact is attributed part of the blame for the exceedingly low prices.

We do not see how business can continue the same rate of improvement noted the past several months without a corresponding improvement in agricultural circles. Although the prices of most staple crops have advanced the past ninety days, the farmers themselves have received only a small part of the accruing benefit. Much of the grain crops went into the hands of the dealers early in the season and those who were fore-handed enough to hang onto the grain are reaping nice profits. The condition of the grain farmer is no doubt slightly improved because of the advancing prices of wheat, corn and oats, but the potato farmer is having a bad year of it. He represents a considerable number of farmers and all business is bound to suffer some because of the low price of his product.

The prices of most items of hardware, including stoves, of clothing, shoes, etc., have advanced from 5 to 20 per cent the past thirty days. Cotton has almost doubled in price since last spring, with varying increases in the prices of cotton goods. An up-state merchant recently told us that he would have to pay 5 to 20 per cent more for the same goods today than he paid some months ago. Items which have advanced include shoes, rubbers, underwear, clothing, socks, mackinaws, wool and cotton blankets and most of the dress goods.

The blame for the advancing prices is laid by many to the door of the Fordney tariff law. Even so no one would object to higher prices if all in the same proportion at the same time, and wages also keep up to the level. But that does not happen. Too often we see farm product prices going down while the prices of other commodities go up, but very seldom do we see the reverse.

WHEAT

Little change is noted in wheat prices the last fortnight. Both the Detroit and Chicago markets are about one-half under what they were two weeks ago. In that period prices have fluctuated up and down, with the bulls in control one day and the bears the next. However, to casual observers of the market it would appear that the bulls seem to have the situation well in hand and show little fear of lower prices for some time to come.

Wheat has been moving freely for export from both the United States and Canada, the latter country having already moved about 175,000,000 bushels. Little of this wheat is coming to the United States because of the prohibitive tariff, but instead it is taking the place of American wheat on the English market. So far as practical effects are concerned Canadian wheat might just as well come into the United States as not, as both countries have a large exportable surplus which must eventually find its way abroad.

The Argentine wheat crop is nearing the harvesting period, but reports of bad weather conditions, and prospective low yields offset the usual bearish influence of the crop. Europe is desperately in need of wheat but her purchasing power becomes daily less and inevitably it must soon cease altogether unless drastic measures are taken to stabilize the currency. Germany has been a fairly good customer for American food products since the war, but the mark is depreciating at a terrific rate and the cost of American grain [illegible] in Germany is well nigh prohibitive. Before the war a German mark was worth nearly 25 cents in American money. A year and a half ago it was worth one and one-half cents in American money. Today, $50 will buy a quarter of a million marks. The money of nearly all other nations of the Continent has so depreciated that the people cannot afford to buy the products of other countries with it. And yet, millions of bushels of grain are going across the ocean, and is being paid for some way, and millions more will go.

The mills are active bidders for wheat and that helps keep the price up. Just now there seems to be a slight slump in the market, but we rather expect to see renewed interest in wheat within another week, which is likely to be followed by a dull season over the holidays, after which a second bull movement is not unlikely.

Prices

Detroit—No. 2 red, $1.33; No. 2 white and No. 2 mixed, $1.31.

Chicago—No. 2 hard, $1.18¾ @ $1.19¼.

New York—No. 2 red, $1.32¾; No. 2 hard winter, $1.31¾.

Prices one year ago—Detroit, Cash No. 2 red, $1.25; No. 2 mixed and No. 2 white $1.22.

CORN

If there has been any change in the tone of corn it has been in favor of the bear side although it is doubtful if the market changed much in general. The present outlook is that prices will be lower and the market easy in the near future. Expectations of larger receipts are bearing the market and should these expectations be realized undoubtedly prices would decline sharply. Cars were more plentiful last week and farmers showed an inclination to sell freely. Export business has been dull the past fortnight. However there is some demand as houses at seaboard have been disposing of their supplies in spite of reports that Europe was having her needs taken care of by Argentina. Reports have it that Argentina has about sold all of her surplus and that Europe will soon be back in the American market in earnest. If this be true our slump in this market should be short-lived.

Prices

Detroit—No. 2 yellow, 76c; No. 3 yellow, 75c; No. 4 yellow, 74c; No. 5 yellow, 72c.

Chicago—No. 2 mixed, 71½ @ 73c.

New York—No. 2 yellow, 90¼; No. 2 mixed, 89¾c.

Prices one year ago—Detroit, Old Cash No. 2 yellow at 59c; No. 3 yellow 58c; new yellow Cash No. 3, 56c; No 4, 54c.

OATS

There is nothing we can say about this market except what we have said before. There is no feature to the market. Oats will contiue to act in sympathy with wheat. Country offerings are light and domestic shipping demand moderate. On the close of last week Chicago reported sales of 30,000 bushels were made to go in store.

Prices

Detroit—No. 2 white, 49½c; No. 3 white, 48c; No. 4 white, 46½c.

Chicago—No. 2 white, 43¾c@ 45½c.

New York—No. 2 white 53½c.

Prices one year ago—Detroit, No. 2 white, 38c; No. 3 white, 35@36c; No. 4 white, 30½@33½c.

RYE

Rye followed the trend of other grains during the past fortnight and the present price is slightly under that of two weeks ago. Exporters are bidding for rye but they want it for less than prevailing prices. Last week seaboard reported 100,000 bushels sold for export. We believe this decline to be only temporary and that the market will come back strong in the near future.

Prices

Detroit—Cash No. 2, 89c.

Chicago—Cash No. 2, 83½c.

Prices one year ago—Detroit, Cash No. 2, 87c.

BEANS

The bean market rules steady and firm. Dealers are not getting any more beans than they can readily dispose of. Probably the major part of it is still back on the farms, the holders feeling that prices will be very much higher before the next crop. We rather hold to this view ourselves, but do not think it would be good business for any farmer to hold his entire crop on the strength of that belief.

Prices

Detroit—C. H. P. $6.75 cwt.

Chicago—C. H. P. $8.50 cwt

Prices one year ago—Detroit, C. H. P. $4.20 cwt.

POTATOES

No improvement in the potato market. Prices have taken another drop since our last issue and a great many bushels are still offered in excess of what the market can absorb readily. Farmers living in the vicinity of the large cities have been particularly ready sellers, their spuds commanding from 40 to 60 cents a bushel, depending upon the locality and the quality of the offerings. This price looks good to the truck farmer when compared with the 18 to 25 cents per bushel which the farmers up-state are offered.

There are as usual many daring prophets who still talk of dollar potatoes before the coming of spring but they haven't much real fact to back up their argument. It is true that thousands of bushels are still in the ground and thousands more have been fed to stock and otherwise utilized outside the marketing channels, and it not altogether impossible that the wastage has offset the usuable surplus. But that is a far-fetched conclusion. Nothing but the discovery of a serious error in the government report can, we believe, bring about a substantial increase in potato values. On our part we expect to see better prices even in the face of the government estimate, simply bcause the majority of farmers who have held their crop this long will not sell at the prevailing low prices until the last hope for better prices has gone glimmering. Sooner or later there must develop a scarcity of potatoes, and it won't have to be much of a scarcity, either, to influence higher prices. With everybody praying for higher potato prices it doesn't require much of an excuse or effort to bring them about.

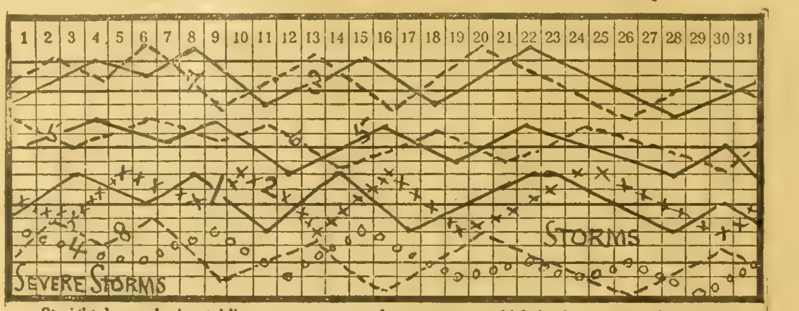
Right in this connection we are sure that our readers will be interested in a letter just received from a subscriber in far-off Colorado. He writes as follows:

"I notice your wail and weeps in your last November issue about potatoes. It is an old Board of Trade saying 'The tail end of a small crop is the big end—while the tail end of a big crop is the small end.' Wouldn't it be a great joke if a big

THE WEATHER FOR NEXT WEEK

As forecasted by W. T. Foster for The Michigan Business Farmer

FOSTER'S WEATHER CHART FOR DEC 1922



Straight, heavy, horizontal lines represent normal temperatures, which is the average of same days of the year for forty years. Crooked lines above normal lines mean warmer; below, cooler; that marked 1 is for section 1, north of latitude 47, between meridian 90 and Rockies crest—2 for section 2 on my section map is for east of meridian 90, north of latitude 47—3, between latitudes 39 and 47 and between meridian 90 and Rockies crest—4, east of meridian 90, between latitudes 39 and 47—5, south of latitude 39, between meridian 90 and Rockies crest—6, east of meridian 90, south of latitude 39—7, north of latitude 43½, west of Rockies crest—8, south of latitude 43½ to Mexican line and west of Rockies crest.

Washington, December 8, 1922.—The cropweather of North America for 1923 will average much less favorable than that of 1922; the good and bad will not be located as in 1922, because the moisture will not come from the same ocean and therefore the same rules about sea level and elevated cannot be applied for two years. In some seasons the moisture floats high, and best crops are above the 1200-foot level; other seasons it floats low, and the best crops are below 1200 feet. When the moisture comes from the gulf stream the summers and winters are warmer; when it comes from far northern oceans they are colder.

Forecast for Michigan: Highest temperatures 9 and 15, lowest 12 and 19; average warmer than usual; not much moisture 9 to 19.

The conflicts of the forces that operate the machinery of the solar system are eternal and fierce; it is not a harmonious family; like the race, it is divided into groups that war on each other, and these wars are brought to our notice, sometimes by unpleasant methods, in our storms and other weather features. It is significantly strange that Homer's writings about the dispositions of planets toward each other. This may be noted in the coming January weather. Saturn will attack earth January 11, and Homer's overlord interferes; that racket in the family will reach our ears through a bad spell of weather. Then January 17, Uranus, to which Homer applied another name, picks a quarrel with Venus, queen of the skies, daughter of the premier of the heavenly host and messenger of peace, between the overlord and the contending armies of Troy. Uranus is very powerful, and before the peace messenger can stop him we will get many a wintry blast as a result of the fierceness of that great family of the milky way.

lot of people in the United States and Europe who do not put away a winter's supply of spuds because there are so many they can't be sold, should be hunting taters at $3 to $5 per cwt. in the spring while now the farmers knowing the taters ain't going to be worth nothin', are feeding them to hogs cattle, sheep, chickens or anything that will eat or nose them out of the barnyard, into a mud-hole or manure heap, any way to get them out of the way. I guess there were more spuds left in the fields of Colorado laying on and on the ground to rot than Michigan raised, and heaps enough to feed your county and Detroit sold at 25 cents a sack for hog feed."

Prices

Detroit—92c cwt.

Chicago—83c cwt.

Prices one year ago—Detroit, $2.04.

HAY

Markets have shown very little activity during the last week and prices in some markets have declined owing to heavy receipts of the poor grades. Good hay is meeting with a steady demand and very little is allowed to accumulate at any of the markets.

Prices

Detroit—No. 1 Timothy $17@$17.50; light standard $16.50; light mixed $16.50@$17.

Chicago—No. 1 light clover mixed $19@$20; No. 1 Timothy $21@$23; No. 1 clover $19@$20.

Prices one year ago—Detroit, No. 1 Timothy at $19@$20; standard and light mixed $18@$19; No. 2 Timothy $17@$18; No. 1 clover mixed $16@$17.

WEEKLY MARKETGRAM

U. S. Bureau of Agricultural Economics

Washington, D. C. for the week ending December 2, 1922.

Live Stock and Meats—Compared with a week ago Chicago hog prices ranged from 10 to 20 cents higher. Native beef steers largely 75 cents higher, western grassers mostly 50 cents higher. Beef cows and heifers steady to 25 cents higher. Canners and cutters weak to 10 cents lower. Bulls strong to 15 cents; Veal calves unevenly 50 cents to $1.25 higher. On December 2 Chicago hog prices were 15 to 20 cents lower than Fridays average. Cattle, sheep and lamb practically unchanged. Dec. 2, Chicago prices: Hogs, top $8.35; Bulk of sales $7.90-$8.25; Medium and good beef steers $7.25-$13.50; Butcher cows and heifers $3.60-$10.75; Feeder steers $5.25-$7.75; Light and medium weight veal calves $8.50-$9.50; Fat lambs $13.25-$15.50 Feeding lambs $12.25-$14.25; Yearlings $9.50-$13.50; Fat Ewes $4.50—$7.75. Stocker and feeder shipments from 12 important markets during the week ending Nov. 24 were: Cattle and calves 138,489; Sheep 135,098. In eastern wholesale fresh meat markets, beef was steady to $2 higher, with lamb steady to $2 lower. Veal steady to $1 higher on better grades; Mutton ranged from $1 lower to $1 higher on better grades with pork loins steady to $1 lower. December prices good grade meats. Beef $14-$17; Veal $13-$17; Lamb $23-$27; Mutton $11-$17; Light pork loins $17-$20; Heavy lions $13-$18.

Feed: Mill feed market inactive; Offerings fair, demand light. Good inquiry from Texas and southeast. High protein feeds weak and offered at $1-$1.50 below mill prices by the sellers. Production good especially of corn feeds. Receipts and movement fair. Supplies in the dealers hands are ample for present need. Quoted December 1, Bran $22.75, Flour middlings $25.50, Rye middlings $21.50 Minneapolis; 36 per cent cottonseed meal $42.75 Memphis, $43.50 Atlanta; White hominy feed $29 St. Louis, $30 Chicago; 34 per cent linseed meal $49.50 Minneapolis, $51 Buffalo; Gluten feed $38.35 Chicago.

Fruits and Vegetables: Potatoes generally steady in consuming markets, steady at eastern shipping points, slightly weaker at northern points. Cabbage still continues to strengthen Danish stock up $4-$9 per ton. New York Baldwin apples firm in city markets and at shipping points. Northwestern boxed stock weaker. Yellow-onions up 25-75 cents per 100 pounds. Prices reported December 2: Eastern round white potatoes sacked and bulk $1.25-$1.50 per 100 pounds in leading markets, 30-95 cents f.o.b. shipping points. Northern stock mostly 90 cents-$1.15 in midwestern cities, 60-70c f.o.b. New York Danish type cabbage $20-$27 per ton bulk in consuming centers, $12-$16 f.o.b. Northern Danish $15-$16 in Chicago. New York Baldwin apples $4.50-$5.50 per barrel in leading markets $3.75-$4 f.o.b. shipping points. New York and Michigan Rhode Island Greenings $5-$5.50 in Chicago. Virginia York Imperials $3.50-$4.25 in eastern markets. Northwestern extra fancy boxed Jonathans $1.50-$2.25. Middlewestern yellow onions $2-$2.75 per 100 pound sack in leading markets, New York stock $2.25-$2.50 in New York City.

Diary Products—Butter markets steady. Supplies light, demand good, but rumors of possible imports partly responsible for unsettled feeling, especially at New York where prices declined ½c on the first. Markets are out of line with each other as Chicago is now higher than New York. Closing prices 92 score butter: New York 53c; Chicago 54c; Boston 52c. Cheese markets steady to firm but trading quiet following sharp advances averaging about 1½c on Wisconsin cheese boards Monday. These advances are supported to some extent by decreasing production and fairly good demand even at the high prices. Cheese prices at Wisconsin Primary markets December 1: Twins 26½c; Daisies 27¼c; Longhorns 26¾c; Square Prints 27½ cents.

MISCELLANEOUS MARKET QUOTATIONS

BUTTER—Best creamery, in tubs, 45@48c per lb.

EGGS—Fresh, current receipts, 48@50c; fresh, candled and graded, 50@53c; refrigerator firsts, 26@30c per doxen.

APPLES—Greenings, $1.25@1.50; Spy, $2@2.50; Jonathan, $1.75@2.25; other varieties, $1@1.50 per bushel; western boxes , $2@3.

POPCORN—4½@5c: Little Buster, 7½@8c per lb.

ONIONS—$2@2.25 per sack of 100 lbs; Spanish, $2.15@2.25 per crate.

DRESSED HOGS—90 to 100 lbs, 11@12c; 130 to 160 lbs, 10c; heavy 6@8c per lb.

DRESSED CALVES—Choice, 15@16c; medium, 12@14c; large, 5@10c per lb.

LIVE POULTRY—Best springs, 29c; leghorns, 15c; large fat hens, 21@22c; medium hens, 18c; small hens, 14c; old roosters, 15c; geese, 20c; large ducks, 20c; small ducks, 17@18c; turkeys, 35@40c per lb.

WOOL MARKET

The slight easiness in fine wools last week was accentuated by the quiet trading recently, the Thanksgiving holiday being a factor, and fine and fine medium wools are quoted 1c off, while the coarser wools, though quiet, maintain a very firm tone at unchanged prices.

Quotations on mid-winter or so-called "native" wools in large lots—such prices as are obtained by the farmers' pools—are as follows(f. o. b. Chicago): Fine and fine medium staple, 52@53c; ½ blood staple, 51@53c; ½ blood clothing, 48@49c; ⅜ blood wool, 47@48c; ⅞ blood 44@45c; low ¼ blood, 35@37c; braid, 30@32c. Western ("territory") wools sell, Chicago basis, as practically these levels.

BUTTER MARKETS

During the week ending Dec. 2nd the butter markets, while equally firm on the surface, began to manifest an undertone of nervousness which did not exist before. This was largely the result of indications that the domestic supply would soon be increased and of the advance of domestic prices to a level where purchases of foreign butter in sizeable quantities were actually made. Many of the trade questioned whether the reduced demand would be able to absorb any material increases in supplies and as a result, though the street stocks of fresh butter were only barely sufficient to satisfy the demand, fewer predicted further advances of any importance.

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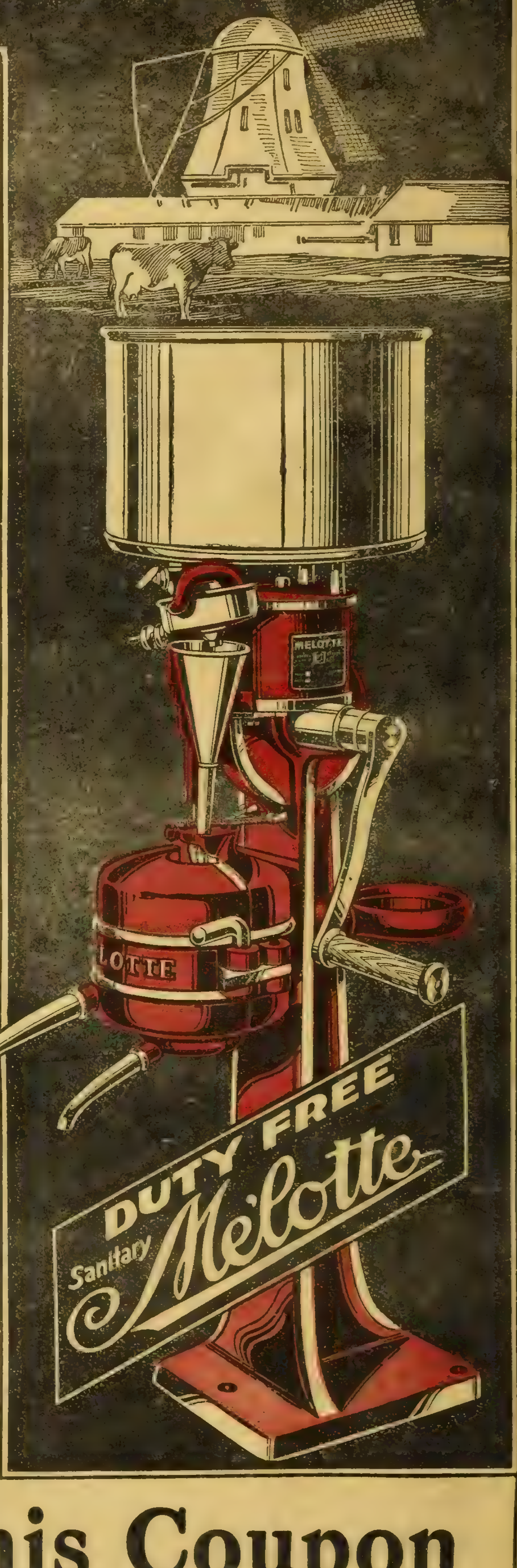
Compare the Melotte separator with any other—test them side by side. Then send your milk to the creamery. Let *them* prove which separator skims the cleanest.



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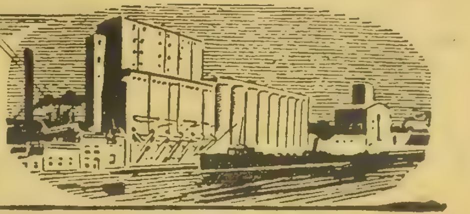

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"THE TRUTH ABOUT HENRY FORD" Starts in this issue

*Also Three Big Farm Organization Meetings Agree—Michigan Leads at International—
Dr. Friday Will Probe Milk Prices—A Complete Short Story and Many Other Features*

Friday Will Probe Milk Prices

Dr. David Friday, president of the Michigan Agricultural College, announced last week that he will investigate the milk business in Detroit to see if it is possible to reduce the price of and still pay the producer more for his milk.

He said he hoped to be able to get it down to 12 cents.

About a month ago farmers producing for the Detroit market demanded more money from the distributors. The distributors refused to accede, on the ground that it would necessitate raising the retail price.

No agreement could be reached, and Nov. 30 the farmers and distributors decided to submit the matter to Dr. Friday. A meeting was held in East Lansing, and Dr. Friday agreed to an increase to the farmers of 40 cents per 100 pounds of milk, making their price $3.

He also agreed to the increase in the retail price form 13 to 14 cents a quart. This increase was on condition that he be permitted to examine the books of the distributors and producers.

These new prices were to hold for December, and after that new prices were to be fixed.

$3.45 Milk Sold for 12 Cents

Since that meeting Dr. Friday has been investigating conditions in other cities. He has found that in Philadelphia milk sells retail for 12 cents a quart, and the farmers receive $3.45 per hundred pounds, 2 cents cheaper for the public and 45 cents more per 100 pounds for the producers.

Milwaukee has milk for 10 cents a quart, and Kalamazoo gets it for 13 cents a quart, with the farmers receiving $3.40 per 100 pounds. The producers' price is $3.20 but a premium for good quality milk makes it practically $3.40, according to Dr. Friday.

"I am going to see if it isn't possible to cut 50 cents per 100 pounds out of the cost of production and 50 cents out of the cost of distribution," said Dr. Friday. "That will permit 12-cent milk."

Resolutions of Farm Organizations

Resolutions adopted by the American Farm Bureau Federation in convention at Chicago, December 11th to 14th. See story on page 3.

RESOLVED: (1) That we urge further progress toward proper marketing of farm products as coordinate with economic production in equalizing the present handicap of the American farmers;

(2) That the American Farm Bureau Federation shall continue to give outstanding attention to the marketing problem and continue the policy of strengthening and encouraging co-operative commodity marketing organizations;

(3) That the American Farm Bureau Federation maintain a division of co-operative marketing, to be managed and directed by capable and experienced co-operative marketing specialists;

(4) That this division shall in every possible way stimulate and promote the co-operative marketing movement in the United States and shall plan and carry out an extensive national educational campaign for co-operating marketing of farm products;

(5) That the American Farm Bureau Federation, acting through this division, shall formulate the fundamental principles of true commodity co-operation as exemplified in the history and experience of successful farmers' co-operatives and give the same wide circulation;

(6) That this division shall tender its services as counselor and advisor to state and district organizations and agencies on questions relating to type and plans of organization, campaign methods, problems of operation and other related subjects;

(7) That this division shall endeavor to unify or co-ordinate all organizations, agencies and interests in behalf of a comprehensive and united program of co-operative marketing in the United States;

(8) That the Farm Bureau Federations, National, State and County, shall be active in educating producers of farm and live stock products to the advantages offered by the co-operative marketing agencies that have been and shall be established, stressing the fact that the success of these agencies depends primarily upon the loyality and patronage of the producers themselves.

Resolutions adopted by the Michigan State Association of Farmers' Clubs, in convention at Lansing, Michigan, December 5th to 6th. See story on page 3.

1. We endorse and approve of the Congressional Farm Bloc in statesmanship, it has broken down sectional lines and has followed the saying of Abraham Lincoln "That He would work with any man for the things which are right."

2. We insist on rural credit measure which will afford farmers access to credit in the same measure as other industries. We also indorse the Norris Bill for an export commission suitably financed by the federal Government to conduct our foreign trade.

3. We ask that the water power of the country remain in control of the whole people or to be developed by the United States Government directly or indirectly.

4. We favor the enforcement of the prohibition law and will support for office only those who are pledged in favor of the 18th amendment and enforcement of same. We are opposed to any weakening of the Volstead Law by permission to manufacture beer or wine.

A motion was made by Hon. A. B. Cook of Owosso that the Association go on record as favoring the most liberal dealing with the boys disabled in the World War. This motion was carried.

Resolutions on State Affairs

The State Association of Farmers' Clubs do hereby endorse a policy of close co-operation with all existing organizations of our state that have for their object a better country life, and that we urge upon every Farmers' Club in our territory the opportunity of developing an educational program that shall reach every phase of country life.

Whereas, the heavy traffic on our roads by busses, trucks and other vehicles used to carry freight or passengers for hire, greatly increase the cost of maintenance, we recommend that the Legislature amend the Motor Vehicle Laws so that a higher tax be placed on such motor vehicles and that the money raised from such increased taxation be used for highway purposes.

Whereas, the real property tax in Michigan has become oppressive and the tax Constitutional Amendment was defeated at the last election on account of lack of a better understanding of merits, and, whereas, relief is necessary in the matter of real taxation immediately, therefore, Be It Resolved, at the State Association of Farmers' Clubs recommend to the coming Legislature the passage of a gasoline tax to be used for the improvement and maintenance of our highways, thereby reducing the amount to be raised by property tax.

Resolved that the Quail be permanently placed on the list with the Michigan song birds, that its protection may become permanent.

Whereas, the State Income Tax has met with untimely defeat and, whereas, the tax system places on real estate a burden wholly out of proportion to its rendered compensation and, Whereas, the old tax system, good in its day is completely outgrown, Be It Resolved, that we reaffirm our faith in the principle that net income be made to bear a fair share of the expense of state government and indebtedness.

Whereas, President Friday has won a National reputation as an economist of first rank and Whereas, his services to the farmers' of Michigan will be beyond compution and Whereas, the proper agricultural alivement is now so difficult to state in the light of diversified interests, Therefore, Be it Resolved, That we extend to our new President at M. A. C., our most hearty co-operation and wish further to reassure him of our faith in his unquestioned ability to deal with the agricultural situation.

The following resolution was presented by Hon. J. N. McBride and adopted: The need of an agricultural conference to establish a working program or better understanding was apparent, Therefore, It Was Resolved, That the president assume the initiative in appointing a committee to provide for a conference of delegates from the various farm organizations and other agricultural bodies, including the College and University heads.

WHY THE APPLE SHOW?

MICHIGAN'S apple show at Grand Rapids this winter was a success, in so far as the display of fruit was concerned, but the attendance was a disappointment. The meeting of the State Horticultural Society was well attended by fruit growers, but the city of Grand Rapids never seemed to awaken to the fact that there was a fine exhibit of a product upon which so much of her prosperity depends.

Yet what was to be expected? Apples are common, they are looked upon as a matter of course, without much thought about how they are produced. If they had to be brought from over seas or the other side of the equator, it would have been different.

What, then, is the apple show for? Is it not to advertise our state's best products? If that is the case it ought to be held, not where the fruit is grown, but where it is not. Instead of Grand Rapids or Detroit, take the display to New York, Philadelphia, Baltimore, Pittsburgh, or to a dozen southern cities, where there are thousands of consumers. No question about the attendance, nor the demand for the fruit that would follow. What good does it do us to claim that our apples are the best that grow, so long as we do not show it to others?

Michigan apple men, you are hiding your light under a bushel. Uncover it, so that others can see. Get together. Next fall be ready with a display that will open the eyes of people in a half a dozen of the large cities outside the state and make the year 1923 famous in the annals of Michigan horticulture. E. E. G., Monroe, Michigan.

—The foregoing is just what many fruit growers have been thinking about of late years. What is now needed is for a leader to take up the idea and develop it to a definite end. It is something that interests not only the fruit producers, but everyboody in the state. When it is considered what the orange growers have done to create a market for their product, the possibilities of the apple seem almost without limit.—Frank D. Wells.

MICHIGAN 7TH ALFALFA STATE

IN alfalfa production, Michigan has stepped into the lead among the states east of the Mississippi River and is now in seventh place among all the states of the Union as a result of the great increase in acreage in the last year. This information was given out by Prof. J. F. Cox, head of the farm crops department of the M. A. C., who has compiled statistics showing the relative position of Michigan.

Not only is the state assuming a place of prominence in alfalfa production, but the rapid increase in the number of acres planted to this crop gives promise of revolutionizing the agriculture of Michigan in an economic sense This state has been and probably will continue to be known for the diversification of its farm products. Increase of alfalfa is not likely to lessen the diversification, but it is bound to have an important effect on the proportions of the various products placed on the market by the Michigan farmers.

A CONSUMERS' COOPERATIVE MILK DISTRIBUTING PLANT

FOR the opening of the No. 2 plant of the Franklin Cooperative Creamery Association of Minneapolis, on October 21, a rather elaborate program, extending through the afternoon and evening, was prepared.

This association is a development in the field of consumer cooperation. It was formed by 350 dairy workers who were on a strike, and by 1650 consumers. A model plant with modern equipment and a capacity of 3,000 quarts per hour was erected. Business began on March 12, 1921. By the close of the calendar year sales amounting to nearly $850,000 has been made, upon which were net earnings amounting to over $37,000. During the first nine months of 1922 the sales were $1,185,630 and the net earnings $83,412.17. The number of consumer patrons is now many times the original 1650.

LARGER COMMERCIAL LATE ONION CROP

Production of commercial late onions is estimated at 24,074 cars of 500 bushels each by the United States Department of Agriculture. Production in 1921 was 18,823 cars. Yield per acre is estimated at 309 bushels compared with 259 bushels last year. As much as 460 bushels were raised in Idaho and 400 bushels in Michigan and Utah. The area of the crop was 38,991 acres compared with 36,381 acres in 1921. Michigan produced 1,386 cars.

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Mt. Clemens, Michigan

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SATURDAY
DECEMBER 23rd,
1922
—
VOL. X, NO. 10
—
Being absolutely independent our columns are open for the discussions of any subject pertaining to the farming business.

"Hew to the line, let the chips fall where they may!"

The Michigan
BUSINESS FARMER

"The Only Farm Magazine Owned and Edited in Michigan"

Published Bi-Weekly
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Three Big Farm Organization Meetings Agree

Farm Bureau, Grange and Farmers' Clubs, in Meetings Held this Month, Practically as One on Big Farm Problems, Both National and Local

TIME was, and not so long ago either, when they said: "Farmers never stick together" or "you'll never find two farmers who think alike, they're always hollerin' like stuck-pigs about something, but never about the same things!"

Let the city-saplings who spilled those lines, prepare to take them back. The resolutions passed by three great farm organizations, represent every faction of the farming business in Michigan at least, are practically in agreement on every vital issue in which the farmer is interested.

During the first two weeks of December have been held the Golden Jubilee convention of the Michigan State Grange at Kalamazoo, the Thirteenth Annual Meeting of the Michigan State Association of Farmers Clubs at Lansing and the Fourth Annual Convention of the National Farm Bureau Organization at Chicago.

MEETING OF FARMERS CLUBS

East Lansing, Dec. 5-6 — The 30th annual meeting of Michigan State Association of Farmers Clubs held in Senate Chamber, Capitol Building, Lansing was attended by over 80 delegates and was one of the most instructive and interesting programs that was ever held by the association.

Professor W. D. Henderson, talking on "Signs of New World" brought to the attention of the delegates the great part that Agriculture had played in the past and the part it must play in the future. In closing Mr. Henderson states that "The world must learn that every man is your brother, all must have goods and these must be supplied by the farmer."

Hale Tennant, Director of Markets, spoke of the diversified lines of Agriculture that had had to be dealt with by the Farm Bureau, also stating a better organization of the farm organizations was needed as no respect would be shown agriculture until there was power, power brings protection. The work of the farm organizations must also be to make life on the farm just as attractive as life in the city and he could see no reason why agriculture could not be just as well protected as labor.

In closing Mr. Tennant said: "Farmers will never get anything without a fight so lets us fight."

Mrs. Louise Campbell, Acting Dean of Home Economics addressed the Association on the proper food for the child and the great need of special attention in the rearing of the child as the children of today will be the men and women of the coming generation.

Mr. J. H. Brown, of the Auto Tour Association showed in moving pictures how tourists camped. The trip the coming year being to Washington, D. C., where a week will be spent in visiting the Capitol City.

The presidents address brought very forcibly the need of discretion in the production of crops. This was discussed by many present, some thinking that the great need was not in discretion in production but lack of knowledge in the time to market crops.

Dr. Eben Mumford spoke on "Farm Organization" and emphasized the great need of the same as only by this can agriculture win. He spoke of Agriculture being at the present time at the lowest possible basis and this was always the case in the past that when this occurred there was a bright cloud ahead, this he suggested as his idea of the outlook for the farming business.

Mrs. Jeanette Lyons, Secretary of the Girls Protective League gave a very able address on the work accomplished in the help of unfortunate girls that is being looked after by the organization.

The session on Wednesday, Dec. 6th, was opened by an address by W. W. Waltman, Secretary of the Anti-Saloon League, in the absence of Grant Hudson. Mr. Waltman in his remarks suggested that every nation was looking to the United States to see what they could do with the liquor question and it was necessary for us to take the proper attitude in this manner as it would govern their decision largely. Much has been given us and much is expected of us.

A report of the Federated Committee was given by Hon. J. N. McBride, who gave in detail the work accomplished the past year by this committee and although not successful in having the Income Tax amendment pass had awakened the people to see the need of the same and in some future time not far away this will be accomplished.

Dr. W. W. Diehl addressed the delegates on Spiritual Values on Country Life very forcibly impressing on all present the great advantages in the country life to that of the city although the wages earned did not compare with that of the city.

Miss Vaughan of M. A. C. gave a short talk on the Boys' and Girls' Club work showing how the club work not only taught how to raise a calf but how to write the story and how to keep accounts to figure the profits.

G. N. Otwell, Supt. of Rural Education gave a talk on the better education for the rural community and showed the great need of this if our children had the same education the city children have.

The following officers were elected for the coming year: President, Lee S. Noble, Oxford; Vice President, W. A. Cutler, Grass Lake; Secretary-Treasurer, Mrs. I. R. Johnson, Rushton; Corresponding Secretary, Sarah O. Broderick, Ithaca. The directors are: G. A. Millispaugh, Oxford and W. J. Brookins, Ovid.

The meeting closed as one of the best ever held and all members went home enthusiastic.

THE GRANGE MEETING

Kalamazoo, Dec. 11-15—The 43,000 members of the Michigan State Grange will ask the thousands of members of other farm organizations to join with them in supporting legislation they consider vital to the farmers.

In the Grange convention, which closed here Friday, the delegates urged the closest co-operation with the State Farm Bureau; indorsed the continuance of the joint legislative committee of all farm organizations, and in speeches and discussions voiced the opinion, time after time, that "the rich man, the city man and the moneyed interests have had their innings—let's have ours."

The farmers will concentrate on three major taxation propositions.

They want an income tax, to be voted on in 1924, which would tax only the person with an income of $5,000 or more. This exemption, they believe, will secure the labor vote which went against the income tax in the last election.

Demand Gasoline Tax

They will demand that the maximum limit of $10,000 in state Corporation Tax Law be removed "to give the state a chance to collect from the big corporation at the same rate as it assesses the small one." They also suggest that the minimum limit be lowered from $50 to $10, and the rate increased from 3 to 4 mills.

If the Legislature refuses to amend the law as suggested, a faction of the Grange prepared, speakers said to initiate an amended corporation tax law.

The farmers' organizations will

(Continued on page 17.)

Michigan Exhibitors Led Field at International Hay and Grain Show

MICHIGAN can be, and is, proud of her many business farmers who exhibited at the Hay and Grain Show at the 1922 International for they not only held their own but won more prizes in farm crops than any other state. And these winnings were made against the stiffest competition ever gathered in America, the products from 38 states being entered.

One of the greatest surprises of the entire show came in the corn judging. For region number 2, which includes the states of Wisconsin, the Dakotas, Iowa, Pennsylvania and New York, Michigan growers of yellow corn walked away with 15 of 25 prizes. In this class, 10-ear exhibit, Michigan winners and positions for the first ten places are: First: L. H. Laylin, Mason; Second, H. W. Mann, Dansville; Third, T. H. Hanna, Dansville; Fourth, A. W. Jewett, Jr., Mason; Sixth, F. M. Mann, Mason; Eighth, Robert Laughlin, Dansville; Ninth, Roy How, Saginaw, W. S.; Tenth, Douglas Bow, Saginaw, W. S. In the exhibit of a single ear of corn Michigan also was a strong contender, winning first, fifth and tenth place in Region 2. The winners are: H. W. Mann, Chas. Laughlin, both of Dansville, and Lester Milham, of Kalamazoo, respectively.

Michigan rye producers were not quite as consistent winners as last year as they won twenty prizes out of thirty this year compared with twenty-five out of thirty at the 1921 show. Also first place escaped from them being won by John W. Lucas, Alberta, Canada. But in spite of the fact that the blue ribbon must be shipped to Canada, Michigan growers feel that after all it is a victor for Michigan to a certain degree as it was won on an exhibit of the Rosen variety, which originated in this state. Last year nine out of the first ten awards came to Michigan while this year the state won eight out of the first ten positions. Wolverine farmers among the first ten winners are: Second, L. H. Laylin, Mason; Third, W. H. Warner, Concord; Fourth, A. W. Jewett, Jr., Mason; Sixth, Lynn Jewell, Leslie; Seventh, Garfield Farley, Albion; Eighth, A. E. Hilliard, Mason; Ninth, Melvin J. Smith, Springport; Tenth, R. F. Jewett, Mason. This class included competition from all of the United States and Canada.

Win Many Prizes on Hay

In the hay classes Michigan got the first six awards on timothy, five out of ten places, including the first three, on red winter clover, six out of fifteen awards on alfalfa, and A. W. Jewett, Jr., of Mason, received the blue ribbon for having the best sample of hay at the show, winning it on a sample of timothy. Wolverine winners and positions in the timothy class are: First, A. W. Jewett, Jr., Mason; Second, L. H. Laylin, Mason; Third, Richard Jewett, Mason; Fourth, R. F. Jewett, Mason; Fifth, A. E. Hilliard, Mason; Sixth, Lynn Jewell, Leslie. Although Michigan was not quite so fortunate in the red clover class, first place was won by Lynn Jewell, Leslie; Second, A. W. Jewett, Jr., Mason; Third A. E. Hilliard, Mason; Sixth, L. H. Laylin, Mason; Eighth, R. F. Jewett, Mason. In the alfalfa class Michigan growers won fourth, fifth, sixth, ninth, tenth, and eleventh prizes. The winners are: L. H. Laylin, Mason; A. W. Jewett, Jr., Mason; R. F. Jewett, Mason; Lynn Jewell, Leslie; A. E. Hilliard, Mason; Richard Jewett, Mason, and they won in the order mentioned.

As a wheat producer Michigan also made a great mark, Wolverines winning thirteen out of twenty-five prizes in the soft red winter wheat and all five places on white winter wheat. In the soft red winter wheat farmers from Michigan took the first five awards in the order named: C. D. Finkbiner, Clifton; A. W. Jewett, Jr., Mason; John W. Vietengruber, Frankenmuth; Lynn Jewell, Leslie; and A. J. Lutz, Saline. In the white winter wheat class A. W. Jewett, of Mason; Lynn Jewell, Leslie; A. E. Hilliard, Mason; R. F. Jewett, Mason; and B. H. Laylin, Mason, carried off the five awards in the order mentioned.

Oats Awards to Michigan

Nineteen of the thirty-five prizes offered on oats in region 2 came to Michigan, and of the first ten places farmers from this state captured five of them. Their names and positions are: A. W. Jewett, Jr., of Mason, won Fourth place; L. H. Laylin, Mason, Sixth; Richard Jewell, Mason, Seventh; Lynn Jewell, Leslie, Eighth; C. D. Dailey, Kalamazoo, Tenth.

Michigan was also out to get her share of the awards on soy beans and in regions 1 and 2 won five of the ten positions. The positions won by Michigan growers are: Fourth, fifth, sixth, seventh, and tenth and the following farmers won the positions in the order named: Albert Jacob, Merrill; J. J. Kraker, Beulah; H. C. Oven, Ovid; A G. Wilson, Mason; and W. O. Skiver, Cedar Run. In the barley class, six rowed, Michigan also had winners. A. W. Jewett, Jr., took Seventh place and R. F. Jewett won Eighth place.

Varieties developed by the farm crops department of M. A. C., under the supervision of Prof. F. A. Spragg, famous plant breeder, were responsible for practically all the state's winnings in crops. The list includes Rosen rye, winner of all 30 places in rye, Red Rock wheat; M. A. C. Duncan corn, developed by Robert Duncan of the college staff; and Wolverine oats.

It was the greatest collection of farm crops exhibits ever gathered in America" says Professor J. F. Cox, head of the M. A. C. farm crops department. "This fact makes the Michigan winnings particularly noteworthy."

John and Mollie Should Stick to the Farm

Our Readers are Almost Unanimous in Their Advice to Young Farmer Torn Between City and Farm

NO sooner than was the issue of The Business Farmer which contained the interesting plight of John and Mollie Rutledge, of Gratiot County, come from the press, than our readers began to take the problem to their hearts. Let it never be said that the farmers of Michigan are not sympathetic. Time and again we have proved that their hearts are as big as mountains and their thought just as deep.

There is a heap of good advice in these letters for all of us particularly for hundreds of other Johns and Mollies, scattered over the farms of not only Michigan, but of all America. These last two years have been full of discouragment and many are those who have been about ready to give up and take what which appeared to them "the easiest way"—into the city sweatshops. But read for yourself in prose and poem how our readers advise John and Mollie:

Stick to the Farm

Real good advice for John Rutledge is stick to the farm. Take an old woman's advice. We have had the same row to hoe and have five children. The farmer is the only one that is always sure of his living. He can not do better in the city. It is true he can get more money but the question is can he save it? I have five boys in the city of Detroit working at $11 per day and not one of them can save a dollar. I do not know whether they will be able to buy their coal this winter. Stick to the farm, it is the best place.—Mrs. Navarre, Livingston County.

Doing Remarkably Well

It appears to that John Rutledge has done remarkably well for a renter. Any man who can go on a rented farm and buy things to farm with and live the first year, although he may not meet all of his debts, has beat the factory worker a long way, as he has the necessary tools to farm the coming year. He does not have to make the purchase of farm tools every year but most of the city workers have to go in the same track; and it leads to nowhere. John's failure this year is in his head not in fact, as he made the mistake of having his debts come due too early in the fall. His experience this year should teach him something, and he can learn each year from his experience on the farm. In the factory he has no chance to cultivate what there is in him and later in life he is nothing but a hired servant spoiled by the lure of big wages and short hours that in a few years will ruin any nation. I had the same beginning largely that John has. I stuck to the farm and it has paid out big. I say stay by the farm, it makes men.—J. C. Haskins, Shiawassee County.

Good Farmer Will Pull Through

I am going to write a few lines for the benefit of John Rutledge. I started without a dollar back in 1879. Sold my first crop of oats at 16 cents, corn at 12 cents a bushel, hogs at $3.00 per hundred pounds. I was like John, I had to sell.

I had a chattel mortgage on my team that had to be paid. I sowed 30 acres of wheat in 1896 on shares, got 30 bushels from what I cut. Lost a colt each year for three years. It took me four years to get out of debt and have $50 ahead.

I think John figured a little too fast in buying a farm the second year, but if he likes to farm he can't do any better than to stay with it.

This changing around don't get a man anywhere. Don't go in debt for a lot of tools that you can do without. Buy a pure bred cow of your choice of breeds. Keep all the sheep that your place will stand, they always pay if you keep them instead of selling them, when they go down. Don't be in too big a hurry to buy a farm, rent is cheaper than interest and taxes around here. It is just a question if a man wants to work for himself or others. If he is a good farmer he will make good!—John S. Lint, Branch County, Mich.

Many Cases Like John's

The case of John Rutledge is similar to a great many other cases in the State of Michigan. The automobile business of which Michigan is the center has for years outstretched their hands to the young men upon the farm. Whether John Rutledge should stay upon his Gratiot county farm or not must be determined largely by how John Rutledge feels in regard to it. If he loves the farm and takes an interest in developing his live stock and the improvement of his soil, and is willing to be patient, he is better off upon his Gratiot county farm than in the big factories of the cities.

The farmers purchase 60% of the manufactured products of the country, and unless the farmers prosper and have a good purchasing power manufacturing industries of the city cannot continue to manufacture. When that time comes, John is better on the farm than in the city.

The agricultural interests are going through trying times. The pendulum so far as they are concerned has swung well to the left, but if I read the signs of the times right, it will soon swing to the right and then John will come into his own on his Gratiot county farm.

A rolling stone gathers but little moss and the shifting from the country to the city and from the city to the country wears away and exhausts our savings. My advise to John would be to sit tight or he may find he has jumped from the frying pan into the fire.—John A. Doelle, Commissioner of Agriculture.

Farming Discouraging at Present

I read your article about the farm and city. I have tried them both and am sure that if farming stays as it has been there will be more than John Rutledge trying the city.

If the farmer buys a plow, wagon, or any piece of farm machinery he pays war prices and if he buys a barrel of flour he has to sell enough wheat to make two barreds of flour to pay for it. Taxes are so high that it is just about like renting to pay for them. A farmer pays about $2.50 an acre a year taxes on the farm he owns.

The average farmer works from 5 A. M. to 8 P. M. If the man in the city would work the hours that the farmer does he would earn and save dollars where the farmer can not make enough to pay his unreasonable taxes.

The average bean crop is about five bushels to the acre this year in this county, wheat and rye about twelve bushels per acre. It costs money to plow, sow, harvest and thresh. Count the cost and what has the farmer left for his work. If it were not for the few cows and hogs that are kept in this county farmers would not have enough money to walk to the city. The hope of doing better next year is what makes the farmer stick to the farm. I am not a kicker but the city people should know more about what the farmer is up against. —H. F. B., Gladwin, Mich.

Many Would Rent Farm

I feel that it is up to some of us to help solve the problem that is puzzling John and Mollie.

You very seldom hear the city man's side of the case—his worries and financial troubles. You see it is not policy to publish them. Our factories must be filled, so that the products may be turned out on schedule time. And the seamy side of a factory man's life is scarcely ever heard of. (Yes, this is from Flint; but it applies to other cities as well.)

It was not many months ago that over the noon-day lunch, many heart to heart talks could be heard among the men. Theirs was the all-absorbing topic of 'how the cut-down wages (in some cases a cut of 50%) could bestretched to cover the family budget.' It was a pretty heavy load to carry—for man and wife; and many had hard work making the grade.

Yes, it is better right now. But remember, the good old days are past when the sky was the limit, as far as work and wages went. You have to work for what you get; and the employment offices are filled with men seeking work—always more men than jobs, especially at this time of the year.

I don't want to discourage any one who is bound to leave the farm and come to town. But remember, the average workman's life is not always a bed of roses. He gets a living, of course, but he practices economy just as carefully as his country brothers.

How do I know? I have lived both as a farmer and as a factory man. A fortunate deal has given me a farm again; and I hope to pass the rest of my days there.

Do many feel as I do? Listen. Unfortunately I was unable to move onto the farm this spring. I inserted a small liner ad in the local paper, and received more than 80 replies—mostly from factory men. I chose one of these as my tenant, and am glad I did so. He and his wife have made good there; and I am proud of them and the place—scarcely a weed on it; and the stock shows excellent care. The tenants themselves are doing well financially, too. And, best of all, they are and wood up from the wood-lot to keep you warm, then I think of a working for themselves. Ask them which they prefer—the present job, or punching a time clock card each day in a factory. They will soon tell you.

There are hundreds here who would be glad of their chance, but the opportunity does not come to all. They might not all make good as Tof and Ida are doing, but they would be glad of the chance to try."—W. L. Buckland, Oakland County.

How Falsely the Siren Smiles

It may be I too stood at the side of Mollie and John as "Flint fell," a slump that took strong men by the throat and drew great scalding tears down the cheeks of women, home makers who had saved and saved, putting every cent in a little home on the "flat" or parks around Flint, the ve"hick"le city of the world. You notice I spell vehicle with a hick! It was a hick town and could not stand the wave of prosperity. Builded on sands and all that.

And what good was a measly little lot and a house contract when a fellow got the blue ticket! Finally "let her go back" couldn't help it. Then back to the farm and farmerish ways, ways less grasping, a friendly hand a laugh now and then, a trip to town on Saturday night. Hard work? I'll say! But how about Sunday? Do you remember the last Sunday dinner you ate in Flint? After the slump? Did you have chicken and biscuits? Or even salt pork and milk gravy, a great delicacy if prepared right. You didn't have little button radishes and green onions, did you? And yellow sweet butter and home-made bread? No, you probably had oleo and baker bread, and for the rest lets just say "canned stuff."

Did you ever stop to think the city is mostly canned stuff? Canned food, canned fun, and a grinding futility of being canned if you can't keep up to the endless chain system, in or out of a factory door.

Your child has all the fresh milk he can drink. In Detroit milk cards are given out to children who come to school undernourished, that they may have one glass of milk in the morning. Look at your child, his bright eye and rosy cheek! Dare you think of going back?

In Detroit and every city are found some wonderful paintings, works of art. Then right now, look out of your kitchen window! Did you ever see a more beautiful picture? Nearly Christmas and the green of the grassy meadow and blue of the sky blends in perfect harmony; like a chameleon, the picture changes with the season, would you in ignorance trade all this for a daub of paint faded with years maybe. Remember the only painting worthy of a second glance is this, the ever changing, unfading one of "The Great Master."

Music! A charm for the soul. What if you haven't a player piano and Victrola. The robins sing in the spring, the snow bird calls and the laughter of children fall on your ear! What singer sends such thrills as these!

Rare perfumes and costly incense just for the taking. The lilacs and the roses blow, apple blossom and berry mingle with the odor of peach and plum, later new mown hay; exquisite smell of baking bread and tasty pie. All these, not chemical compounds at dollars an ounce.

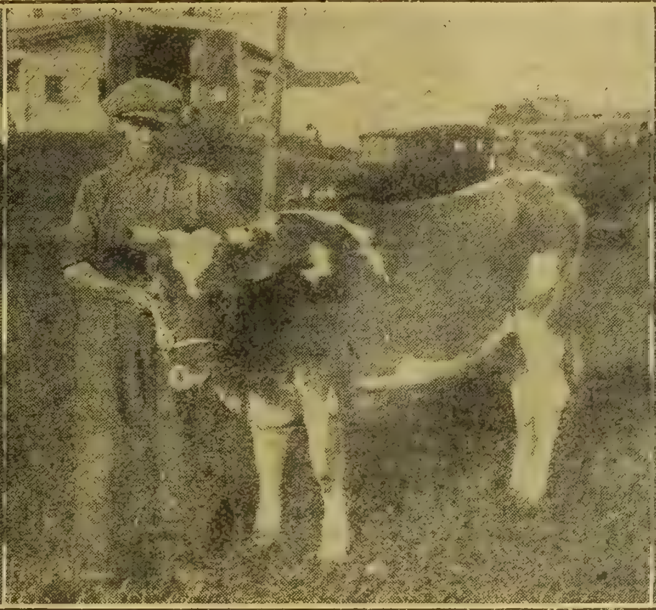
And when the snow has drifted white in field, on fence, just to know you have enough in the cellar to eat poem I wrote long ago while on a visit to my grandfather's farm. In an incidental way I might mention he has just been buried after fifty-four years of successfully trotting double harness on a farm near Lapeer, Michigan. So you see you even live longer on a farm!—Marie F. Haines, Oakland County.

To John and Mollie Rutledge

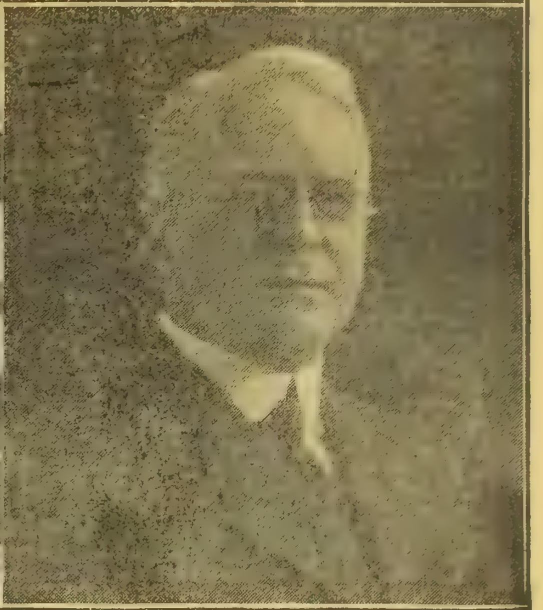
I would build no stately mansion
But in a humble small spot
I'd make me a lowly cottage
The whole of the world forgot.
A path leading up to a vineclad door
Sunbeams dancing, snow white floor
For music I'd have my children's smile
Laughter and glee all the while!
Trees for shade and refreshments there
No crowded street, people to stare
A deep cool well, garden too
I'd work so willing the long day thro'.
A stream idling by in lazy ways
A place to dream, a pleasant haze
But not forgotten, important things
The ideals, realities to make men kings
I would have me a helpmate too
Her eyes should be of a steadfast hue
And all my life I would hold her dear
I would shield her always from a tear
And now I am old, my dream fulfilled
I've done my work as God has willed.
—Marie F. Haines, Oakland County.

PICTURES FROM FAR AND NEAR

The latest photo of Kaiser Wilhelm. Here is a new and exclusive photograph of William Hohenzollern, former ruler of Germany, whose recent marriage to Princess Hermine of Reuss created a storm of protests among his relatives, the wife of the former Crown Prince heading the opposition. His white hair and beard give the former German monarch a dignified and imposing appearance. Until recently he kept himself in seclusion but now he leaves his estate, according to reports, and goes for long walks throughout the surrounding country.

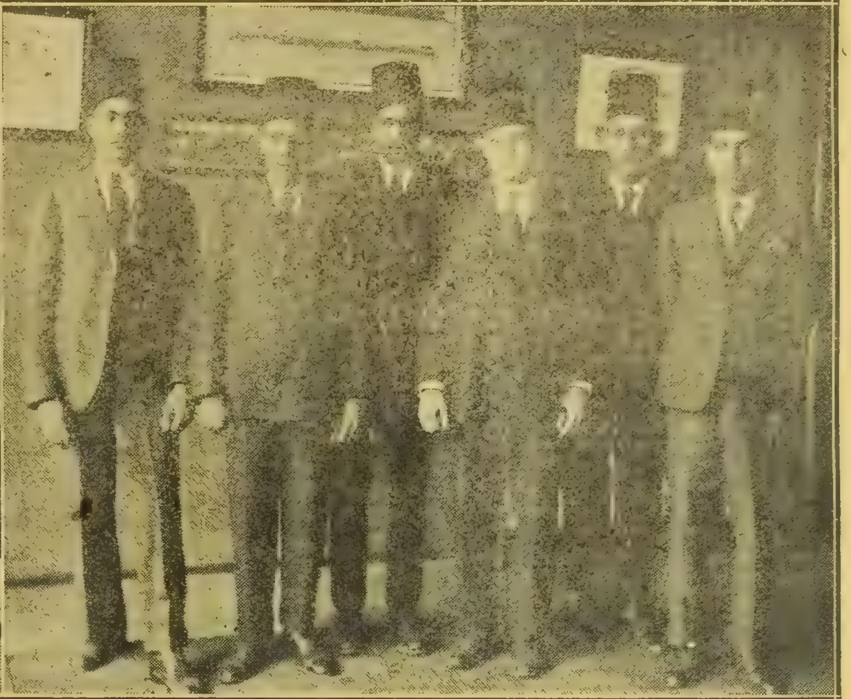


America's champion farmer is a Michigan boy. His name is Andrew White and his age is 17, and he comes from the Upper Peninsula. Residents in and around Iron River, where Andrew lives, are willing to stake him against any one who cares to dispute his right to this championship. Young White has won many prizes in live stock judging and his most recent triumph is the winning of a scholarship to the Michigan Agricultural College. His ambition is to become the owner of the finest herd of pure bred Guernseys in the United States and he already has taken several steps towards the realization of this ambition. At present he owns seven pure blooded animals of this breed which have won many prizes.



James Couzens, Michigan's new senator, was born at Chatham, Ontario, August 26, 1872, married Margaret A. Manning, of Detroit, August 31, 1898. Joined Henry Ford in the pioneer days of that company, 1903, resigning as Vice-President and General Manager. Successively Detroit Police Commissioner, President of the Detroit Board of Commerce, and Mayor of Detroit from 1919 to 1922, during which time he successively won the 50-year fight to oust the D. U. R. and give Detroit municipal-ownership of her street cars. Appointed to fill the unexpired term of Truman Newberry, taking his seat December, 1922.

Harding turkey arrives at White House. For the last three years it has been the annual custom of the Harding Girls Club of Chicago to send the President his holiday dinner but this year, due to the scarcity of large turkeys, one weighing 41 pounds could not be obtained until the last minute, making it too late to be sent by messenger or train. As a result of an appeal to the General Motors Truck company of Pontiac, Mich., to deliver the turkey at the White House, a record non-stop run of 825 miles between Chicago and Washington was made on November 27 and 28. An average speed of 22 miles an hour was made. Snow and ice were encountered for 100 miles through the mountains.



Six Egyptian students here to study auto. They have been sent here to study the automotive industry as accredited representatives of the Ministry of Transport and Communication. They are instructed to spend three years in this country, the entire expense being paid by the Egyptian Government. While in Washington, the Egyptian emissaries personally met President Harding. The first year will be spent at the Michigan State Automobile School, at Detroit, where courses in automobile and tractor mechanics, advanced automotive electricity, oxy-aceteylene welding, tire repairing, battery repairing, and machine shop work, will be taken. During this time, the men will also study the manufacturing and service methods of several of the automobile factories.

Michigan man pays $50,000 for single strawberry plant. Frank E. Beaity, the smiling gentleman under the fedora above, paid Harlow Rockhill, the Luther Burbank of Iowa, $50,000 in cold cash for the strawberry plant shown above, thus bringing another world's record to Michigan. Mr. Rockhill began it away back in 1908, when he introduced to each other two blushing young strawberry blossoms, the flower of two of the best strawberry families in America, and later bound them together in holy wedlock by the simple ceremony of tying a paper bag over them. The fruit of that union was a prodigious strawberry of unexcelled texture, tint and flavor. Year after year the strongest and best plants were selected and cuttings were made from the runners of those producing the largest fruit. But at last the process was complete. It had proved its worth in Iowa, so it was brought to the vicinity of Jackson, Michigan. It stood the test.

She leaps into fame-via parachute. Miss Edna Hayden's leap into fame was a literal one. Recently she made a parachute jump from an airplane 2,000 feet above Burlington, Iowa. She took her first air ride on Sunday, the second on the following Thursday and on Saturday of that week she made her thrilling papachute drop.

(Copyright Keystone View Company)

The Hunted Woman

By James Oliver Curwood

Michigan's Own and America's Formost Author of the Great Northwest

(Copyright by James Oliver Curwood

SYNOPSIS

JOANNE GRAY is one of the passengers on the train that connects "The Horde" with the civilized world. For eighteen hours she has been riding steadily bound for Tete Jaune Cache, the home of "The Horde", where she has no friends and all will be strange to her. The train stops at a town composed of several tents and learning that the train will not leave for two hours she goes in search of food and a bath. She is directed to "Bill's Shack" and it is here where she meets Bill Quade, who not only owns and operates "Bill's Shack" but is also leader of the lawless men of the town. Quade says he has a room she can rent and that he will show it to her. As they pass of the room a newcomer enters the doorway leading off the street. The newcomer is John Aldous, a well known novelist. He sees the strange girl enter the place and believes she has made a mistake and as he stands in the doorway his eyes rest upon the curtained doorway through which the girl and Quade have passed. In but a moment the girl steps out her face flaming and eyes flashing. Quade follows her apologetically. He starts to offer the girl some money but before he can do so Aldous steps to the girl's side and floors Quade with a terrific blow. Aldous hurries the girl away from the scene to the home of friends. He then asks the girl to be his guest at supper in his cabin. She accepts. Joanne tells Aldous she is going to Tete Jaune to find her husband, Mortimer FitzHugh. Aldous decides to go with her to protect her from Quade and his partner at Tete Juane, Culver Rann. Aldous believes FitzHugh is dead and locates a friend who declares he has seen the grave. Upon their arrival at Tete Juane they are met by friends of Aldous at whose place they are to stay during their stop. John is advised his close friend MacDonald has been wounded by a hidden enemy.

(Continued from Dec. 9th Issue)

"Three days ago. Since then I have not seen old Donald until to-night. Almost by accident I met him out there in the timber. I delivered the telegram you sent him. After he had read it I showed him mine. He scribbled something on a bit of paper, folded it, and pinned it with a porcurine quill. I've been mighty curious, but I haven't pulled out that quill. Here it is."

From his pocket he produced the note and gave it to Aldous.

"I'll read it a little later," said Aldous. "The ladies may possibly become anxious about us."

He dropped it in his pocket as he thanked Blackton for the trouble he had taken in finding MacDonald. As he climbed into the front seat of the buckboard his eyes met Joanne's. He was glad that in a large measure she had recovered her self-possession. She smiled at him as they drove off, and there was something in the sweet tremble of her lips that made him almost fancy she was asking his forgiveness for having forgotten herself. Her voice sounded more natural to him as she spoke to Mrs. Blackton. The latter, a plump little blue-eyed woman with dimples and golden hair, was already making her feel at home. She leaned over and placed a hand on her husband's shoulder.

"Let's drive home by way of town, Paul," she suggested. "It's only a little farther, and I'm quite sure Miss Gray will be interested in our Great White Way of the mountains. And I'm crazy to see that bear you were telling me about," she added.

Nothing could have suited Aldous more than this suggestion. He was sure that Quade, following his own and Culver Rann's old methods, had already prepared stories about Joanne, and he not only wanted Quade's friends—but all of Tete Jaune as well—to see Joanne in the company of Mrs. Paul Blackton and her husband. And this was a splendid opportunity, for the night carnival was already beginning.

"The bear is worth seeing," said Blackton, turning his team in the direction of the blazing light of the half-mile street that was the Broadway of Tete Jaune. "And the woman who rides him is worth seeing, too," he chuckled. "He's a big fellow—and she plays the Godiva act. Rides him up and down the street with her hair down collecting dimes and quarters and half dollars as she goes."

A minute later the length of the street swept out ahead of them. It is probable that the world had never before seen a street just like this Broadway in Tete Jaune—the pleasure Mecca of five thousand workers along the line of steel. There had been great "camps" in the building of other railroads, but never a city in the wilderness like this—a place that had sprung up like magic and which, a few months later, was doomed to disappear as quickly. For half a mile it blazed out ahead of them Two garishly lighted rows of shacks, big tents, log buildings and rough board structures, with a rough street between.

To-night Tete Jaune was like a blazing fire against the darkness of the forest and mountain beyond. A hundred sputtering "jacks" sent up columns of yellow flame in front of places already filled with the riot and tumult of the night. A thousand lamps and colored lanterns flashed like fireflies along the way, and under them the crowd had gathered, and was flowing back and forth. It was a weird and fantastic sight—this one strange and almost uncanny street hat was there largely for the play and the excitement of men.

Aldous turned to Joanne. He knew what this town meant. It was the first and the last of its kind, and its history would never be written. The world outside the mountains knew nothing of it. Like the men who made up its transient life it would soon be a forgotten thing of the past. Even the mountains would forget it. But more than once, as he stood a part of it, his blood had warmed at the thought of the things it held secret, the things that would die with it, the big human drama it stood for, its hidden tragedies, its savage romance, its passing comedy. He found something of his own thought in Joanne's eyes

"There isn't much to it," he said, "but to-night, if you made the hunt, you could find men of eighteen or twenty nationalities in that street."

"And a little more besides," laughed Blackton. "If you could write the complete story of how Tete Jaune has broken the law, Aldous, it would fill a volume as big as Peggy's family Bible!"

"And after all, it's funny," said Peggy Blackton, "There!" she cried suddenly. "Isn't that funny?"

The glare and noisy life on both sides of them now. Half a dozen phonographs were going. From up the street came the softer strains of a piano, and from in between the shreiking notes of a bagpipe. Peggy Blackton was pointing to a brilliantly lighted, black-tarpaulined shop. Huge white letters on its front announced the Lady Barbers were within. They could see two of them at work through the big window. And they were pretty. The place was crowded with men. Men were waiting outside.

"Paul says they charge a dollar for a haircut and fifty cents for a shave," explained Peggy Blackton. "And the man over there across the street is going broke because he can't get business at fifteen cents a shave. Isn't it funny?"

As they went Aldous searched the street for Quade. Several times he turned to the back seat, and always he found Joanne's eyes questing in that strange way for the some one whom she expected to see. Mrs. Blackton was pointing out lighted places, and explaining things as they passed, but he knew that in spite of her apparent attention Joanne heard only a part of what she was saying. In that crowd she hoped—or feared—to find a certain face. And again Aldous told himself that it was not Quade's face.

Near the end of the street a crowd was gathering, and here, for a moment, Blackton stopped his team within fifty feet of the objects of attraction. A slim, exquisitely formed woman in shimmering silk was standing beside a huge brown bear. Her sleek black hair, shining as if it had been oiled, fell in curls about her shoulders. Her rouged lips were smiling. Even at that distance her black eyes sparkled like diamonds. She had evidently just finished taking up a collection, for she was fastening the cord of a silken purse about her neck. In another moment she bestrode the bear, the crowd fell apart, and as the onlookers broke into a roar of applause the big beast lumbered slowly up the street with its rider.

"One of Culver Rann's friends," said Blackton sotto voce, as he drove on. "She takes in a hundred a night if she makes a cent!"

Blackton's big log bungalow was close to the engineers' camp half a mile distant from the one lighted street and the hundreds of tents and shacks that made up the residential part of the town. Not until they were inside, and Peggy Blackton had disappeared with Joanne for a few moments, did Aldous take old Donald MacDonald's note from his pocket. He pulled out the quill, unfolded the bit of paper, and read the few crudely written words the mountain man had sent him. Blackton turned in time to catch the sudden amazement in his face. Crushing the note in his hand, Aldous looked at the other, his mouth tightening.

"You must help me make excuses, old man," he said quietly. "It will seem strange to them if I do not stay for supper. But—it is impossible. I must see old Donald as quickly as I can get to him."

His manner more than his words kept Blackton from urging him to remain. The contractor stared at him for a moment, his own eyes growing harder and more direct.

"It's about the shooting," he said, "If you want me to go with you, Aldous——"

"Thanks. That will be unnecessary."

Peggy Blackton and Joanne were returning. Aldous turned toward them as they entered the room. With the note still in his hand he repeated to them what he had told Blackton—that he had received word which made it immediately urgent for him to go to MacDonald. He shook hands with the Blacktons, promising to be on hand for the four o'clock breakfast.

Joanne followed him to the door and went out upon the veranda. For a moment they were alone, and now her eyes were filled with fear as she clasped her hands closely in his own.

"I saw him," she whispered, her fingers tightening convulsively. "I saw that man—Quade—at the station. He followed us up the street. Twice I looked behind—and saw him. I am afraid—afraid to let you go back there. I believe he is somewhere out there now—waiting for you!"

She was frightened, trembling; and her fear for him, the fear in her shining eyes, in her throbbing breath, in the clasp of her fingers, sent through John Aldous a joy that almost made him free her hands and crush her in his arms in the ecstacy of that wonderful moment. Then Peggy Blackton and her husband appeared in the door. He released her hands, and stepped out into the gloom. The cheery good-nights of the Blacktons followed him. And Joanne's good-night was in her eyes—following him until he was gone, filled with the entreaty and their fear.

A hundred yards distant, where the trail split to lead to the camp of the engineers, there was a lantern on a pole. Here Aldous paused, out of sight of the Blackton bungalow, and in the dim light read again MacDonald's note.

In a cramped and almost illegible hand the old wanderer of the mountains had written:

> Don't go to the cabin. Culver Rann waiting to kill you. Don't show yourself in town. Cum to me as soon as you can on trail striking north to Loon Lake. Watch yorself. Be ready with your gun.
>
> Donald MacDonald.

Aldous shoved the note in his pocket and slipped back out of the lantern-glow into deep shadow. For several moments he stood silent and listening.

CHAPTER XI

As John Aldous stood hidden in the darkness, listening for the sound of a footstep, Joanne's words still rang in his ears. "I believe he is out there—waiting for you," she had said; and, chuckling softly in the gloom, he told himself that nothing would give him more satisfaction than an immediate and material proof of her fear. In the present moment he felt a keen desire to confront Quade face to face out there in the lantern-glow, and settle with the mottled beast once and for all. The fact that Quade had seen Joanne as the guest of the Blacktons hardened him in his determination. Quade could no longer be in possible error regarding her. He knew that she had friends, and that she was not of the kind who could be made or induced to play his game and Culver Rann's. If he followed her after this——

Aldous gritted his teeth and stared up and down the black trail. Five minutes passed and he heard nothing that sounded like a footstep, and he saw no moving shadow in the gloom. Slowly he continued along the road until he came to where a narrow pack-trail swung north and east through the thick spruce and balsam in the direction of Loon Lake. Remembering MacDonald's warning, he kept his pistol in his hand. The moon was just beginning to rise over the shoulder of a mountain, and after a little it lighted up the more open spaces ahead of him. Now and then he paused, and turned to listen. As he progressed with slowness and caution, his mind worked swiftly. He knew that Donald MacDonald was the last man in the world to write such a message as he had sent him through Blackton unless there had been a tremendous reason for it. [illegible]ed himself again and again, should Culver Rann want to kill him? Rann knew nothing of Joanne. He had not seen her. And surely Quade had not had time to formulate a plot with his partner before MacDonald wrote his warning. Besides, an attempt had been made to assassinate the old mountaineer! MacDonald had not warned him against Quade. He told him to guard himself against Rann. And what reason could this Culver Rann have for doing him injury? The more he thought of it the more puzzled he became. And then, in a flash, the possible solution of it all came to him.

Had Culver Rann discovered the secret mission on which he and the old mountaineer were going into the North? And was their assassination the first step in a plot to secure possession of the treasure?

The blood in Aldous' veins ran faster. He gripped his pistol harder. More closely he looked into the moonlit gloom of the trail ahead of him. He believed that he had guessed the meaning of MacDonald's warning. It was the gold! More than once thought of the yellow treasure far up in the North had thrilled him, but never as it thrilled him now. Was the old tragedy of it to be lived over again? Was it again to play its part in a terrible drama of men's lives, as it had played more than forty years ago? The gold! The gold that for nearly half a century had lain with the bones of its dead, alone with its terrible secret, alone until Donald MacDonald had found it again! He had not told Joanne the story of it, the appalling and almost unbelieveable tragedy of it. He had meant to do so. But they had talked other things. He had meant to tell her that it was not the gold itself that was luring him far to the north—that it was not the gold alone that was taking Donald MacDonald back to it.

And now, as he stood for a moment listening to the low sweep of the wind in the spruce-tops, it seemed to him that the night was filled with whispering voices of that long-ago—and he shivered, and held his breath. A cloud had drifted under the moon. For a few moments it was pitch dark. The fingers of his hand dug into the rough bark of a spruce. He did not move. It was then that he heard something above the caressing rustle of the wind in the spruce-tops.

It came to him faintly, from full

half a mile deeper in the black forest that reached down to the bank of the Frazer. It was the night call of an owl—one of the big gray owls that turned white as the snow in winter. Mentally he counted the notes in the call. One, two, three, four—and a flood of relief swept over him. It was MacDonald. They had used that signal in their hunting, when they had wished to locate each other without frightenihg game. Always there were three notes in the big gray owl's quavering cry. The forth was human. He put his hands to his mouth and sent back the answer, emphasizing the fourth note. The light breeze had died down for a moment, and Aldous heard the old mountaineer's reply as it floated faintly back to him through the forest. Continuing to hold his pistol, he went on, this time more swiftly.

MacDonald did not signal again. The moon was climbing rapidly into the sky, and with each passing minute the night was becoming lighter. He had gone half a mile when he stopped again and signalled softly. MacDonald's voice answered, so near that for an instant the automatic flashed in the moonlight. Aldous stepped out where the trail had widened into a small open spot. Half a dozen paces from him, in the bright of the moon, stood Donald MacDonald.

The night, the moon-glow, the tense attitude of his waiting added to the weirdness of the picture which the old wanderer of the mountains made as Aldous faced him. MacDonald was tall; some trick of the night made him appear almost unhumanly tall as he stood in the center of that tiny moonlit amphitheatre. His head was bowed a little, for he was old. A thick, shaggy beard fell in a silvery sheen over his breast. His hair, gray as the underwing of the owl whose note he forged, straggled in uncut disarray from under his drooping rim of a battered and weatherworn hat. His coat was of buckskin, and it was short at the sleeves—four inches too short; and the legs of his trousers were cut off between the knees and the ankles, giving him still a greater appearance of height.

In the crook of his arm MacDonald held a rifle, a strange-looking, long barrelled rifle of a type a quarter of a century old. And Donald MacDonald, in the picture he made, was like his gun, old and gray and ghostly, as if he had risen out of some graveyard of the past to warm himself in the yellow splendor of the moon. But in the grayness and gauntness of him there was something that was mightier than the strength of youth. He was alert. In the crook of his arm there was caution. His eyes were as keen as the eyes of an animal. His shoulders spoke of a strength but little impared by the years. Ghostly gray beard, ghostly gray hair, haunting eyes that gleamed, all added to the strange and weird impressiveness of the man as he stood before Aldous. And when he spoke, his voice had in it the deep, low, cavernous note of a partridge's drumming.

"I'm glad you've come, Aldous," he said. "I've been waiting ever since the train come in. I was afraid you'd go to the cabin!"

Aldous stepped forward and gripped the old mountaineer's outstretcher hand. There was intense relief in Donald's eyes

"I got a little camp back here in the bush," he went on, nodding riverward. "It's safer 'n the shack these days. Yo're sure—there ain't no one following?"

"Quite certain," assured Aldous. "Look here, MacDonald—what in the thunder has happened? Don't continue my suspense! Who shot you? Why did you warn me?"

"Same fellow as would have shot you, I guess," he answered. "They made a bad job of it, Johnny, an awful bad job, an' mebby there'd been a better man layin' for you!"

He was pulling Aldous in the bush as he spoke. For ten minutes he dived on ahead through a jungle in which there was no trail. Suddenly he turned, led the way around the edge of a huge mass of rock, and paused a moment later before a small smouldering fire. Against the face of a gigantic boulder was a balsam shelter. A few cooking utensils were scattered about. It was evident that MacDonald had been living here for several days.

"Looks as though I'd run away, don't it Johnny?" he asked, laughing in his curious, chuckling way again. "An' so I did boy. From the mountain up there I've been watching things through my telescope—been keepin' quiet since Doc pulled the bullet out. I've been layin' for the Breed. I want him to think I'd vamoosed. I'm goin' to kill him!"

He squatted down before the fire, his long rifle across his knees, and spoke as quietly as though he was talking of a parridge or a squirrel instead of a human being. He wormed a hand into one of his pockets and produced a small dark object which he handed to Aldous. The other felt an uncanny chill as it touched his fingers. It was a misshaped bullet.

"Doc gave me the lead," continued MacDonald coolly, beginning to slice a pipeful of tobacco from a tar-black plug. "It come from Joe's gun. I've hunted with him enough to know his bullet. He fired through the window of the cabin. If it hadn't been for the broom handle—just the end of it stickin' up"—he shrugged his gaunt shoulders as he stuffed the tobacco into the bowl of his pipe—"I'd been dead!" he finished tersely.

"You mean that Joe——"

"Has sold himself to Culver Rann!" exclaimed MacDonald. He sprang to his feet. For the first time he showed excitement. His eyes blazed with repressed rage. A hand gripped the barrel of his rifle as if to crush it. "He's sold himself to Culver Rann!" he repeated. He's sold him our secret. He's told him where the gold is, Johnny! He's bargained to guide Rann an' his crowd to it! An first—they're goin' to kill us!"

With a low whistle Aldous took off his hat. He ran a hand through his blond-gray hair. Then he replaced his hat and drew two cigars from his pocket. MacDonald accepted one. Aldous' eyes were glittering; his lips were smiling.

"They are, are they, Donald? They are going to try to kill us?"

"They're goin' to try," amended the old hunter, with another curious chuckle in his ghostly beard. "They are goin' to try, Johnny. That's why I told you not to go to the cabin. I wasn't expecting you for a week. Tomorrow I was goin' to start on a hike for Miette. I been watching through my telescope from the mountain up there. I see Quade come in this morning on a hand-car. Twice I see him and Quade together. Then I saw Blackton hike out into the bush. I was worrying about you an' wondered if he had any word. So I laid for him on the trail—an I guess it was lucky. I ain't been able to set my eyes on Joe. I looked for hours through the telescope—an' I couldn't find him. He's gone, or Culver Rann is keeping him out of sight."

For several moments Aldous looked at his comparison in silence Then said:

"You're sure of all this, Donald? You have good proof—that Joe has turned traitor?"

"I've been suspicious of him ever since we come down from the north," spoke MacDonald slowly. "I watched him—night an' day. I was afraid he'd get a grubstake an' start back alone. Then I saw him with Culver Rann. It was late. I heard 'im leave the shack, an' followed. He went to Rann's house—an' Rann was expecting him. Three times I followed him to Culver Rann's house. I knew what was happening then, an' I planned to get him back in the mountains on a hunt, an' kill him. But I was too late. The shot came through the window. Then he disappeared. An'—Culver Rann is getting an outfit together! Twenty head of horses, with grub for three months!"

"The deuce! And the outfit? Is it ready?"

"To the last can of beans!"

"And your plan, Donald?"

All at once the old mountaineer's eyes were aflame with eagerness as he came nearer Aldous.

(Continued on page 15)

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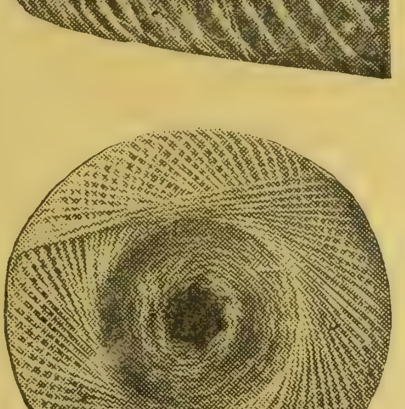

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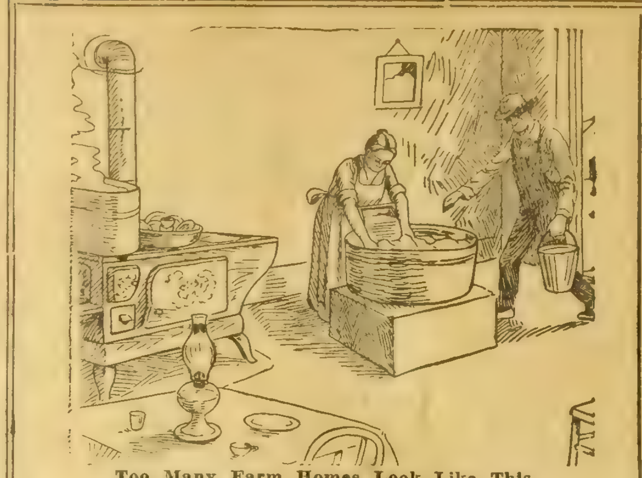

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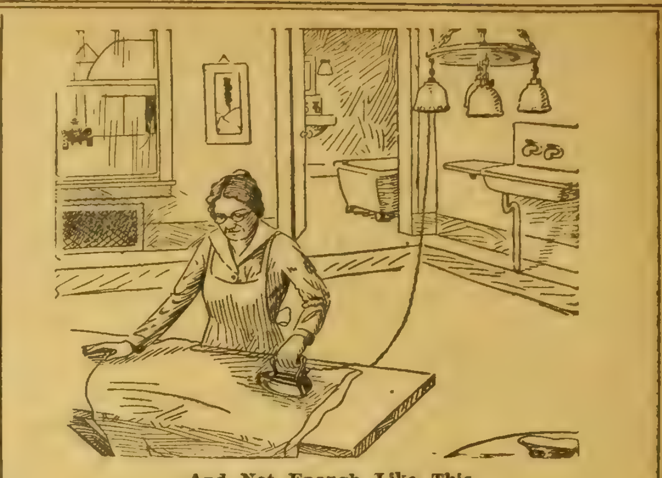

And Not Enough Like This

John Hobart Makes a New Year's Resolution

By Carl F. Haefka

R. F. D. No. 5, Midland, Michigan

"THERE, boss," said John Hobart, in a gentle tone of voice, as he finished stripping the last cow. He was pleased with himself on this crisp New Year's Eve—and he had reason to be, for everything about him radiated his success as a farmer. The buildings, were freshly painted and in good repair, were models of sensible architecture; the steel stanchions for his thorobred cows, with their individual drinking fountains, the milking machinery and the tractor, all demonstrated the good judgment and sound business principles of the man who owned them.

John Hobart was decidedly a successful farmer, but it was not this fact entirely which brought an anticipatory smile to his lips, as he picked up his 300 candle power lantern and prepared to leave the barn. No, it was that his chores were now finished and he would soon be at the house having a deliciously warm supper, after which he would be free to the cozy comfort of the living room, there to peruse the columns of his favorite farm magazine. Already, in fancy he could see the subdued light of the reading lamp and hear the cheery roar of the flames, as they went up the chimney.

Outside, the stars shone brightly, and the snow crunched under his feet with a pleasing sound as he walked. A few minutes more and he would be having supper, after which —the paper! As he climbed the back steps , he could hear the low toned gr-r-r-r of the cream separator, in the milk house at the end of the kitchen. Evidently Harry hadn't finished running the milk through yet. That boy would have to hurry if he intended taking the girls to the New Year's party at Benson's.

"Supper ready?" greeted John Hobart cheerily, as he thrust his head in the kitchen door.

His wife looked up and smiled wanly. A tired looking face was hers, the sparkle gone from the eyes, and vertical wrinkles prematurely come upon the forehead. She was churning, but rested a bit from the labor of turning the ten gallon barrel over and over, to reply:

"No, dear, but I'll have it ready soon. The butter doesn't seem to form; I've been churning for two hours, and still it looks no different than when I started. I'll need a pail of fresh water soon, too. Will you get it?"

Her husband grunted.

"I'll get some," he said, "but it does seem that we could manage to have our work done a little earlier at night."

"Supper is on the stove," said Mrs. Hobart, "but you'll have to wait a little until I can put it on the table."

The man grunted again. Already his little plans for the evening were being threatened. But he went out to the well for the pail of water.

Like many another man, John Hobart was, in no wise, familiar with the cooking of a meal indoors (He could cook a splendid one in camp), nor did he know how to prepare one already cooked. So, after he had returned with the water, he "washed up," combed his rather tousled hair and departed to the living room, where he lighted the lamp and settled himself before the fire to read a little while waiting for supper.

He tried to become interested in an article by a famous dairyman, but it was useless. The bedroom of his two daughters adjoined the living room, and a muffled conversation from that direction annoyed him. In vain did he attempt to concentrate his mind upon the article, and at last, in desperation, he tossed the magazine upon the center table and leaned back in his chair.

Then he caught a few words of the conversation in the next room and he sat suddenly upright.

"Dad could do better by mother," he heard Genevieve say.

"Uh huh," agreed Margaret.

"He has made lots of improvements in the barns," continued Genevieve, " and bought modern machinery, but mother still has to churn by hand and carry water from the well. I don't think it's fair."

The girls moved to another part of the room and he could no longer distinguish their conversation, but what he had heard gave him an unexpected jolt. He was bewildered—he who had felt so secure and at peace with everything about him but a short time before.

He tried to be fair—to discover the justice of his daughter's remarks. Wasn't the well but a few steps from the house, and didn't his wife have a washing machine and a barrel churn to make her work easier? Wasn't everything as convenient as possible under the circumstances? But what were these circumtances? Were they any different from the ones with which he had to contend every day in his business of farming? He had to admit that they were not. Gradually his resistance was broken down by the evidence of his own reason. It was true that when it seemed that his cows must have pure, running water he had supplied it; it was true that when changing conditions had seemed to warrant the use of the motor truck and a tractor he had not hesitated in purchasing them. And was the present matter any different in principle? No! . . He had wondered about that tired look in his wife's eyes; now he understood it. What an unmitigated, selfish fool he had been not to have known it before! Why should cows, even though they are blooded stock, be provided conveniences which his wife did not have? Why, she was worth more than all the cows in the world!

And then there came a sound of heavy footsteps outside the living room, and John Hobart leaned well back in his chair and simulated slumber. The person entered the room, and between partially closed eyelids the man saw that it was his son, Harry. At that moment Harry was not in the best of humor, for he was scowling darkly. He came tramping across the room, but when he noticed the supposedly sleeping form of his father he finished the walk to his room on tip toes. The elder felt guilty through and through and in that instant a great light flooded his soul. He had never before realized all his children meant to him. He must keep them interested in the farm! And then he made a resolution.

As soon as Harry entered his room, the father quietly left his chair and made his way to the kitchen where he found Mrs Hobart putting on supper.

"Did the butter come out all right?" he asked.

"No, dear" she said, "but it was taking so long. I thought you'd like supper first. I'll finish churning after we eat."

"No you won't," said her husband, and she looked at him in astonishment.

"Because," he continued, "I'm goin' to do it myself. An' what's more, you're never goin' to churn by hand again! Tomorrow—no, tomorrow is New Year's—the day after tomorrow, we are goin' to town with the truck an' fetch home a lot of things. A gas engine to put in the cellar, a power washin' machine an, power attachments for the seperator an' the churn. The engine will do all the churnin', run the seperator, wash the clothes an' light the house after I can have it wired. We can get a pump, too, so you won't have to carry the water from the well any more. I guess we can have improvements in the house as well as other places on the farm. What do you say to that?" he concluded, and kissed her—something he had not done for months.

Mrs. Hobart became tremendously joyful, and a light of renewed vigor shone from her eyes.

John—John!" she gasped. "You

(Continued on page 17)

FRUITAGE

I'VE been thinking much today John,
How, when we bought this place,
We carried water from the spring
With slow and labored pace;
And after while we dug a well
Near by the kitchen door,
We thought that that was very fine
And we couldn't ask for more;
But now I turn the water on
Above my kitchen sink,
And I'm thankful for the easy way
I get the old-time drink.

Upon the kitchen shelf
The lamps stood in a row,
Each with a spotless chimney
When I'd time to make it so.
At night each sent a feeble ray
To penetrate the gloom;
But now I press a button
And white light floods the room.
The kerosene lamp was very good,
It served us with the rest,
But for our old and dimming sight
We're thankful for the best.

Now our furnace and our auto,
May seem small to people here;
But to us they mean the weary toil
Of many a long, long year.
We're thankful for the strength of brain
That dared to plan to do,
And for the strength of nerve and brawn
That made our dreams come true.
We're thankful that the Lord has blessed
The labor of our hands,
The fruitage of our orchards,
The tilling of our lands.

There have been times of trial
When the burden of our care
Seemed to grind and almost crush us,
And be greater than our share.
Now, the glory of achievement,
The triumph, and the gain
Make us glad we've had our crosses;
Make us thankful for our pain.

—Written by Mrs. C. H. Read
for the Business Farmer.

FUR DEPARTMENT

Edited by A. R. HARDING, America's Foremost Author and Trapper

QUESTIONS INVITED

RAISE MUSKRATS

ALTHO the average person has not found the place "where dollars grow on bushes" during ecent years thousands of trappers ave literally "picked dollars out of he water" in the form of muskrat elts. This good thing however ould not last long for the wild su-ly could not stand the "picking." Only a very few years ago when est muskrat pelts were worth less han a dollar to the trapper there ere untold millions in nearly all onds, lakes and streams throughut North America. How is it toay? Greatly increased value of uskrat furs during the past few ears has caused this fur producer o be closely hunted and trapped, ot only by boys and amateurs, but rofessional trappers as well.

Five years ago the waters of such tates as Michigan, Wisconsin, innesota, the Dakotas, Nebraska, owa, Illinois and Indiana were the omes of large numbers of muskrat ut when the value went to $2, $3 nd even $4 each the animals greatly ecreased owing to persistent efforts f the fur hunters and trappers.

The past summer, during a three months' stay in Antrim County, Michigan, from which place I often drove out 30 miles into Grand Traverse, Kalkaska, Charlevoix, Otsego and Crawford Counties very little muskrat sign was seen altho I kept an eye out for sign and was on numerous streams and lakes. Trappers and buyers said that there was not one muskrat in these counties to five a few years back.

What is true of the Michigan section is largely true in most states. In Ohio where the lawful muskrat season lasts from November 15 to March 1 the crop will be small—twenty-five to thirty-five per cent of only a few years back. Indiana and Illinois both report short supply while under date of September 12 a well known dealer of Western Pennsylvania wrote as follows:

"We have miles of the finest muskrat creeks that do not have a rat track on them as high prices followed by high water and no closed season has left this section of the state with very few muskrat."

What does all this mean? If present demand continues, and indications are that it will, raising surely offers the only solution. The trappers of muskrat and others are not all idle by any means for I have received numerous letters from various parts of the country in regard the raising of this animal and they range from those who are thinking of building a pond to those who wish to buy or rent a marsh or lake. Both methods no doubt, at present prices of muskrat pelts, can be made a paying business.

The would-be raiser should select a pond, lake or stream that abounds in wild rice, flags, lilies, etc., as these make ideal food and building material for muskrat. It is not expected that all of these grow on any one stream or pond but at least one of them should. It is well to have the food supply well started before the muskrat crop becomes too numerous, yet of course, they can be fed corn, pumpkins, turnips and other roots.

Actual experience is what counts and the following is from a Minnesota raiser of some ten years experience who says: Litters average 5 to 8 and three litters each season. The young are born six weeks after mating. The first litter by early April usually. They like their own or natural food best, such as roots, etc., so we seldom feed except carrots, corn and apples. I plant marsh potatoes and my muskrat are kept in a natural swampy place—some in wire enclosures, but costs a great deal more—and the muskrat seldom leave if not disturbed and kept in feed. My observation covering ten years of muskrat farming, gives these facts: A tract of marsh one-half mile wide and one mile long paid more profit on investment than another fenced in. Of course an open tract, if allowed to get overcrowded, causes some rats to leave, but unless disturbed or unfed they seldom do. In a season of little rain fall they may leave if pond dries. This is prevented by flooding with dams. Our advice is select ponds or small lakes with an abundant supply of deep water and your rat farm where tresspassers can be kept off by law and you have a profitable side line, in fact, makes a worthless swamp worth hundreds of dollars per acre.

There are thousands of small ponds and lakes in Michigan, Wisconsin, Minnesota, the Dakotas and Iowa that offer golden opportunities for muskrat raising. Such places, I think, offer by far the best places to quickly build up your supply of muskrat for remember that they breed as a rule three times a year. Artificial ponds, of course, can be built but ponds or small lakes where the food supply is already started should not be overlooked. The raising of muskrat is a business that surely promises well to those who know something of the nature and habits of this now valuable but fast disappearing fur animal.

PUBLISHER'S DESK

PAY AS YOU ENTER—FOR A JOB!

An ambitious school teacher who wants to make her salary go farther, sends us the ciircular of the Professional Service Bureau, "a national organization," Goebling Building, Detroit, which offers for "$1 down and $2 more when earned" to put the young lady in touch with those who want spare-time work done at home. She wants to know if the company is reliable.

We always give a proposition the benefit of the doubt, but two letters to this company have failed to bring any response and there is no such concern listed in the Detroit telephone directory, so we have a fair idea that this lady saved a dollar, at least, by writing us before she "bit." Allow me again to repeat in this column, that the job you have to pay to get is usually not worth the price you pay for it!

Well, it looks as though what we predicted in the Nov. 11th, issue had come to pass. The American (alias Canadian) Silverware Company, of Montreal, Quebec, Canada, who by postal card advised thousands of farmers, that they were the "lucky" winners of a set of silverware and only had to send 98 cents to "pay the postage", are out of business. The assistant manager of The Bank of Montreal, advises the publisher, that, "their office at 43 St. Francois Xzavier street is closed." So endeth another lesson! We hope our timely warning saved a few of you from the clever scheme of the international boundary- line grafters.

A ROOFING GUARANTEE

I herewith inclose guarantee order blank for which I signed and ordered ½ barrel Saveall Roofing. This came when we were very busy on the farm and did not get it on for perhaps four weeks. The next time it rained it leaked as bad as ever. They also sent 40 gallon instead of ½ barrel. I wrote and told them the roof still leaked and offered to to send the balance back. They told us it was not put on right and said if we didn't pay by return mail they would sue. Please tell us what to do.

—Inasmuch as the Franklin Paint Company, Cleveland, Ohio, states very plainly in their order blank that the roofing is guaranteed for ten years, and you agreed to pay in four months, if it was all they claimed, or that you would report promptly and there was to be no charge for the amount you had used.

Under the above circumstances I do not believe this company has a possible chance of collecting any money from you in any court in the land. My suggestion is to return the unused portion by freight collect and tell them to go ahead with suit if they want to. Of course, this is only my opinion and you can secure a local attorney's opinion if you care to.

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The Truth About Henry Ford

By Sarah T. Bushnell

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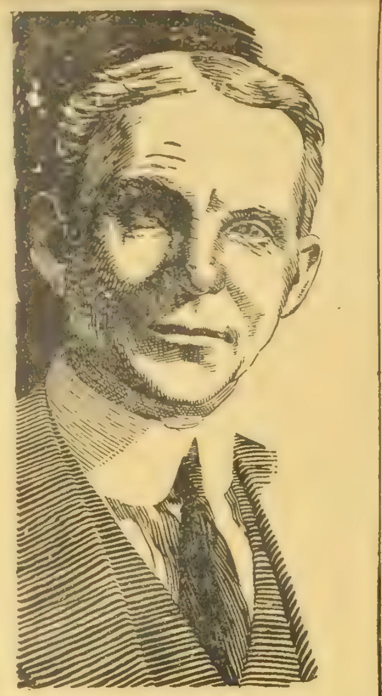

MR. HENRY FORD

CHAPTER I

His Childhood and School Days

HENRY FORD belongs to that stern, strong, creative generation of Americans that has served our country so well in the days of its critical development. He has the simple faith, the sturdy life, the unflaging industry, the love of family that typify the best Americans. This brief chronicle of some of the vital periods of his life will give his fellow countrymen a clearer understanding of the character and purposes of the man.

* * *

Two years after Michigan became a state the first link in the railroad connecting Detroit and Chicago was built to Dearbornville, then a small village ten miles from Detroit. In those early days the settlers drove to "town" in ox carts over corduroy roads that they themselves had built with logs from the surrounding forests. The coming of the first train, therefore, a great day in Dearbornville. The pioneers gathered in the shade of the stockade walls of the arsenal and debated the new invention. There were many pessimists among them who were sure that the crude locomotive of that time would never be of practical value. William Cremer had wagered that his white faced correl mare could out-run the iron horse in a race from Ten Eyck's tavern to the village; and it did, William reining in his horse at the arsenal before the train came in.

In the group that witnessed this triumph of the horse and the subsepuent arrival of the train was a young lad, William Ford, who lived between Dearbornville and Fort Wayne—a post where U. S. Grant was stationed a few years later as a lieutenant. William Ford had recently come over from Ireland. The twinkle in his blue eyes, the glow in his cheek and his ready wit told that, but his speech and his manners spoke of his English ancestry. He had cleared and put under cultivation the land where he lived, and some years later married Mary Litogot, the daughter of his nearest neighbor. In the five years that followed five children came to bless their home.

On July 30 in the third year of the Civil War, Henry Ford was born and was named after his uncle who owned an adjoining farm. The war and the still wonderful iron horse were general topics of conversation in the days of Henry Ford's childhood. He heard the grim tragedies of the conflict retold; he knew many of the soldiers at the arsenal and he often saw bluecoated army officers splashing along the road to Detroit. As he grew older he accompanied his parents when they drove to the small Episcopal church in Dearborn where William Ford was a vestryman and where the services were conducted by the army chaplain from Fort Wayne. Thus war had its part in his boyhood as in the later days of his life.

The five Ford children attended the old Scotch settlement school when very small, and when Dearborn and Springwells townships were land they went to the Springwells school. Every day that weather permitted, the five children walked the two and a half miles where they were taught reading, writing, spelling, geography and arithmetic. No attention was paid to history even though it was then in the making. The schoolmaster was Mr. Brush whose son Alonzo Brush, a playmate of the Ford children, was years later the inventor of the Brush automobile. Henry Ford's deskmate was Edsel Ruddiman, who for twenty-five years has been Dean of Chemistry at Vanderbilt University and after whom Henry Ford's only son is named. James Ruddiman, Edsel's brother, later married Mr. Ford's sister.

One of the earliest childhood recollections of Henry Ford is his longing to see the iron horse that he could hear a mile away beyond the woods. A frail child, he had been forbidden to venture away from his home alone, so he would climb a fence top when he heard the distant whistle and try to make out the strange machine as it toiled over the grades. His childish imagination could not believe that the ugly, silent monster of iron that he saw when occasionally he went to the village with his parents could be the fiery thing that whooped through the woods like an Indian—and in those days it was said that Chief Pontiac still roamed the forests of the region.

Henry Ford showed early in life that interest in machinery that shaped his later career. The story runs—and although it is fiction it may be repeated here—that when six years old Henry eluded his father and mother one Sunday morning as they were entering church, and was found later trying to put together a playmate's watch which he had taken apart. At 14 the lad was confirmed in the village church by the bishop and to this day he frequently attends service there.

There are many authentic stories of his boyhood interest in mechanics. About the time he was ten or twelve years old he developed a great interest in the steaming teakettle that sang and jiggled on the kitchen stove. While the other children romped outdoors Henry kept close to the hot wood stove, watching with the round eyes of childhood as the steam lifted the kettle top and rattled the lids of the vegetable sauce pans. In the dining room of the Ford home was an old fashioned fire place. One day Henry secured a thick earthenware teapot which he filled with water; then he stuffed the spout with paper and tied down the lid

"Now let's see if you can lift that lid, old Mister Steam," he said as he thrust the teapot close to the fire. Then he sat down to see what Mr. Steam could do. An explosion, followed by a child's cry of pain, soon brought Mrs. Ford running from the kitchen. Scattered about the room were fragments of the tea pot. One piece had shattered a window pane, another had broken a mirror, while a third had cut a gash in Henry Ford's head. His face, too, was badly scalded. To this day a faint scar remains to show what Mr. Steam did.

Mary Ford possesser that quick understanding sympathy of the true mother. "My dear child," she said after the wound had been attended to, "I am afraid you are going to hurt yourself many times if you try to imprison steam or make other experiments."

After the children had been put to bed that night she told her husband of the incident. "Henry is eaten up with curiosity," she declared. "He asked questions I could not answer in a thousand years. I am afraid he is different from other boys; they are satisfied with explanations but Henry has to investigate everything for himself. I wish you would watch him closely when he gets near machinery. I am worried about him whenever he goes to the barn, for he doesn't know the meaning of fear."

Sometime later his parents noticed that Henry was not returning from school until twilight. Inquiry brought out the following explanation: Near the school was a creek bordered by twisted weeping willows, whose cool shade afforded a delightful place for boys to lounge and plan the great things of boyhood. While the other pupils spent their noon hour in games, Henry Ford and his group of chums busied themselves in building a dam across the creek with stones and other materials gathered from the nearby fields. When the dam was done they fashioned a rude water wheel that revolved with gratifying rapidity. But the dam caused the waters of the creek to back up and this brought protests from the farmers. Schoolmaster Brush ordered the youthful engineers to tear out the dam. "When this is done," he concluded, "Henry, who is your ringleader, can remain with me after school each day until I tire of his company." And that was why Henry returned home each evening at twilight.

Today Mr. Ford counts among his most treasured possessions a picture of the old creek showing the dam and the water wheel and a group of his long ago companions sitting in in the shade of the willows. Mr. Ford's keen interest in water power still persists. He has traveled thru Michigan and other states buying water rights and sites for dams, and is formulating plans for locating small industries in country districts where water power can be developed.

At one time John Haggerty was Henry Ford's deskmate at the Springwells school. One afternoon the two boys, hidden behind their open geographies, were busy dissecting a watch. At the most interesting point in their investigation the sheltering geographies fell with a bang and their occupation was revealed. Mr. Brush serveyed them sadly. "Now John," he said at length, "I will trouble you and Henry to bring me that watch. You are sent here to get book learning. The idea of big boys like you, almost 16 years old, playing like children. You can stay after school and try to put the insides of that watch back like they were before you began to meddle with it. You might as well learn right now that it is wrong to start anything and leave it unfinished.

When Henry was 14 his mother died and the little family was overwhelmed with grief. With the fine courage of the early settlers Margaret Ford, the oldest daughter, took up the labors and responsibilities of the household, and the father did all he could to fill the mother's place, but the family life was sadly changed. Mary Ford was a remarkable woman; she taught all her children that to be useful to their country and community was the best of all ambitions, and she imbued them with noble principles and ideals. At 18 or 19, when she married William Ford, she was a rosy-cheeked, dark-haired, beautiful girl, calm, well poised and courageous. In those years a mother's tasks were many and heavy, especially in the country districts. Mrs Ford met each day's problems with a cheerfulness that made her seem wonderful in the eyes of her son, Henry. She taught him that he must not drink, smoke or gamble, and to these teachings he has remained steadfast all his life. She impressed upon him that he must be true to conscience and duty, and she taught him that courage which bore fruit in after years.

At 17 Henry Ford finished the eighth grade at the Springwells school and a year later he set out for the city, Detroit.

CHAPTER II.

The City Beckons

Like most active country boys Henry Ford had made himself a tool shop, where he spent many busy, happy hours on the farm. So adept did he become that as he grew older he became a general handy man for the neighboring farmers. He fixed many broken farm implements and before he was 18 he was in charge of his father's saw mill. But the city called him and he went.

Alone and unknown, he secured a job with the Flower Manufacturing company, engaged in the making of steam engines and employing more than a hundred men. The company was at that time one of Detroit's largest manufacturing concerns. His apprenticeship there was practically a course in mechanical engineering, and he was paid $2.50 a week. This was less than William Ford paid his hands on the farm and did not cover the cost of Henry's room and board in the city. But the place had this compensation: It brought him opportunities that were out of reach on the farm. He could spend his idle hours in the city library among the companions he valued most of all—the books and journals on mechanical engineering. To supplement his "salary" he made arrangements with a jeweler whereby he could repair watches. That was one of the red-letter days of his youth, rivaling that other when he was allowed to mend a neighbors sewing machine.

He worked hard and long, his two occupations keeping him busy from seven in the morning until six at night and from seven until bed-time. For nine months he was thus employed, steam engines and watches filling his waking hours and quicken-

The Author's Preface to This Story

IN publishing this biographical sketch, I wish to acknowledge my gratitude for the co-operation of Mrs. Henry Ford and of prominent Detroiters who were associated with Mr. Ford in his early days—among them being James Couzens, A. Y. Malcomson, Horace Rackham, E. G. Pipp, C. A. Brownell and many others.

From Mrs. Henry Ford, I secured most of the data. She personally helped me to secure accurate and authentic information. For months she gave me liberally of her time in order that I might compile this volume and verify my facts. This assistance entailed a sacrifice, for she shuns publicity, heartily dislikes any attempt to draw her into the limelight and objects to having her name appear in print.

Mr. Malcomson's financial support made Mr. Ford's success possible. Had there been no Alexander Malcomson and no James Couzens, the inventive genius of Henry Ford probably never would have reached the heights it has. From Mr. Couzens, I secured the figures of the stock subscribed by the first Ford stockholders. Mr. Pipp, widely known as the former editor of the Detroit News, was most kind and generous in assisting me on certain difficult and important points. I am indebted to Mr. Brownell for his friendly help and interest. He was for many years an executive officer of the Ford Company.

In this little book I have tried to include only points which are frequently discussed and to use carefully only information which I secured directly from those who have been closest to Mr. Ford for the past twenty years. To all who assisted me, I am sincerely grateful and I take this method of acknowledging my appreciation.—Sarah T. Bushnell.

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ing the many ideas that filled his mind, awake and asleep.

Someone has said that invention travels in thought waves. It is possible for two or more inventors, hundreds of miles apart, to be working on the same problem without any knowledge that someone else is engaged on the same project? It was about this time that the restless desire began to formulate itself in Henry Ford's brain to build a vehicle that would compete with the iron horse of childhood memory.

After seven months in the employ of the Flower Manufacturing company young Ford went to work for the Drydocks Engine company, whose specialty was marine machinery. He was doing well, and opportunity for advancement was just ahead when one day came word from his father urging him to return to the farm. William Ford said that his health was poor, that he was growing old, the farm hands were becoming careless and indifferent and beyond his ability to manage. He needed his boy, he said, to care for the home place. It was a blow to the young man in Detroit, but his mother's teachings made his decision certain. Putting aside ambition, he answered the call of filial duty and gave up his place in the city to return to the farm where he was needed. This summons, as will be seen later on, was the turning point in his life.

Brief mention will not be out of place here of the other sons of William Ford. John Ford remained on the farm. Some time later he became a member of the Springwells school board, a position he retains to this day. William Ford, another brother, became in later years Mayor of Dearborn and member of Dearborn school board.

Today two miles from the old Ford homestead can be seen the tall smokestacks of the great River Rouge foundry. This gigantic plant, owned by Henry Ford, was used during the world war as a naval station, and also in the making of the Eagle boats and submarine chasers. These boats were launched directly into the River Rouge and made the long voyage through the Detroit river, Lake Erie and Lake Ontario, through the Welland Canal and down the St. Lawrence river to the sea—and service. But that is getting ahead of the story.

CHAPTER IV.

His Courtship and Marriage

Up to this time Henry Ford had rough-hewn his life; now Destiny stepped in and began to shape his career. He spent the spring, summer and autumn following his return in plowing, planting and harvesting on his father's farm. But Fate was preparing a reward for his self-sacrifice and entrusting the details of Romance. Henry soon again became a favorite in the countryside, his city-learned ways adding to his popularity. When winter came he showed that he was still the best skater in the neighborhood. "In those days," as an old-timer has said, "no one went to Florida or California in winter. Instead they stayed at home and enjoyed the best sports of the year."

Henry bought a bright red cutter. As it sped over the smooth roads with many bells a-jingle, it was generally admitted that he was the best "catch" of the neighborhood. But that opinion was not unanimous; five miles away, in Greenfield township, lived Clara Bryant, local belle and beauty, with beaux a-plenty. She cared not a snap of her pretty fingers for Henry Ford, his city ways and his new cutter—and she made no secret of her opinion.

Naturally such indifference challenged young Ford's attention and quickened his interest. He forgot Detroit and mechanics and set about accomplishing a bigger undertaking. His red cutter was an asset of which he made effective use; good naturedly he carried many a laughing crowd to and from skating parties. At the Greenfield club one evening he quietly produced a curious watch, the like of which the countryside had never seen. It had two sets of hands and recorded both standard and sun time. As he displayed this wonder he dropped vague hints of other and greater inventions.

"Mother," said Clara Bryant the morning after the Greenfield club party, "Henry Ford is different from the rest of our crowd. He can invent the most interesting things. He is the best skater and he dances as well as he skates. We sat out two dances last night because I wanted to see a watch he had made. It is the queerest watch you ever saw. He says he is going to make something else and let me see it."

Mrs. Bryant, wise mother that she was, said nothing. She was acquainted with her daughter's sudden enthusiasms.

During that winter Henry Ford invented his first tractor, although it did not bear that modern name. It was a machine to use in plowing and harvest time, and it was fashioned out of an old wagon body, some wagon tires, harrow teeth and other pieces of discarded farm machinery. As he toiled over his new machine the young inventor did not dream that in later years his name would be known 'round the world wherever ground is broken and harvests gathered. About this time he took a course in Goldsmith's college in Detroit, but study and invention did not crowd one other plan out of his active mind.

"Father," he asked when he was twenty-four years old, "if I should marry what part of the land would be mine?"

"I'll do for you just as I intended to do for John and William," his father replied. "You can have enough timber to build a house and can have eighty acres facing Recknor road. When I'm gone there will be forty acres more for each of you children."

The son went about his courtship with the determination and enthusiasm that marked his undertakings in mechanics. Likewise he set about the building of a home for his future bride. Such methods could not fail and Henry Ford and Clara Bryant were married one April day 1888. Their new home, a modern structure with broad verandas, was ready for them. It stood in the midst of rolling farm land, with its red dairy and barns grouped in the rear. For three years the young couple dwelt there in happiness. The husband was busy with his farm work, but the hum of machinery still was music to his ears. In this time he built three saw mills and often he was to be seen sitting in the shade of a spreading oak figuring with pencil and paper; often, too, he was busy in his tool house with odds and ends of machinery.

One evening came the revealing of his great resolve. "Clara" he said, " it looks as if I could not stand the farm any longer. I'll have to go back to Detroit and begin work on my horseless carriage. I can't do much on it here."

His young wife was aghast. Her glance took in the many comforts of their home, the opened piano with its sheets of music, the cheerful fire on the hearth, the large carved armchair that her mother had brought from Warwick, England, the old-fashioned English clock that William Ford had given them as a wedding present. She loved that cozy home, and she never had heard of a horseless carriage. Was her husband losing his mind?

"Why, Henry," she exclaimed, "you are the best farmer around here. Your engine is a wonder—and whoever heard of a horseless carriage!"

"Bring me a pencil and a large piece of paper and I will show you what it is," her husband replied.

From the piano where she had been playing she took a piece of music. On the wide, white back of the sheet Henry Ford drew with quick, sure strokes, until to his wife leaning over his shoulder the strange vehicle took form and semblance. He explained each part as he drew it, his eyes sparkling, his hand trembled with his enthusiasm. As he pictured the vehicle to her it did not seem improbable. He spoke of the motive power and fire engines; he talked confidently of resilience and gasoline. It was midnight before he finished and then his wife had caught his enthusiasm.

"If you want to go back to Detroit we'll manage it somehow," she promised him.

Soon they were house hunting in town and found on Bagley street, then in a residential district but now a business thoroughfare, the home they wanted. It was a small building with a large red, brick barn which would serve as a workshop. They soon moved to the city and Mr. Ford, then twenty-eight years old, went to work for the Edison company. He had, in addition, an income from his farm and three saw mills and was not a poor man. However, he had to make the most of time, money, material and effort. Mrs. Ford was sympathetic and optimistic and she was a great help to him in those days when his home surroundings were such a factor in keeping his hopes high and his determination unshaken. It was by good management and hard work that he rubbed Aladdin's Lamp and became one of the world's richest and most famous men.

CHAPTER IV.

The First Car and the First Race

For two years that horseless carriage "ate its head off." Always it consumed money, money, more money. Bicycle wheels were bought for it, but all other parts had to be made to order and by hand. And often these parts would not fit and had to be made over. But Henry Ford never grew discouraged, never lost confidence in the ultimate success of his invention. And then—at 2 o'clock on a rainy morning in April 1893, the task was done and the vehicle ready for a test. Despite the darkness and downpour Mr. Ford would not delay. With no idea of what that strange machine might do, Mrs. Ford caught up an umbrella and followed her husband to the street.

As he clanked away all sorts of fears assailed her. If the machine did not kill him he probably would die of pneumonia. The noise of the vehicle would awaken the neighborhood. She wished for the moment that she had not encouraged him in his work. As her mind recalled the days and months of study and labor, a loud noise heralded her husband's safe return. The horseless carriage would go! Flushed with pride and excitement, the inventor pushed the strange little machine into the barn, locked the doors and went into the house. He drank a glass of hot milk, spread his dripping clothes before the fire and went calmly to bed to enjoy the best rest he had known since their return to the city.

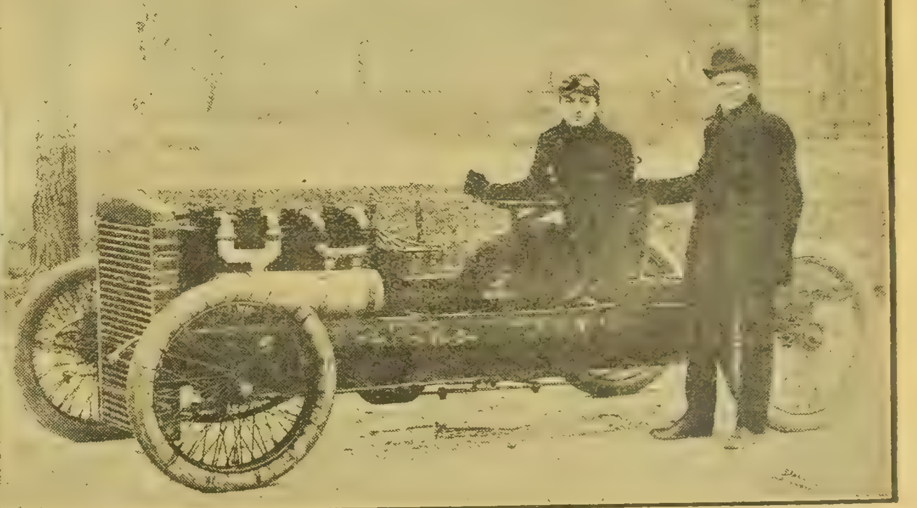
In the days and weeks that followed friends and neighbors flocked to see the new machine. Mr. and Mrs. Ford created a sensation every time they rode through the streets; in the country horses dashed into ditches or fences when the horseless carriage approached. Country people regarded them as much as they did a circus. Every time the vehicle was dragged from the barn Mrs. Ford made some excuse for accompanying her husband on his ride. She was optimistic by nature, but she felt that sooner or later some accident would occur—and she wanted to be with him then. He was anxious to test the machine's hill-climbing powers. The neighborhood was flat and the one hill in Wayne street was too near the river to make a test prudent. So Mr. and Mrs. Ford drove ten miles around the boulevard to the graded approach to the viaduct, Mrs. Ford said nothing of her fears but waited. The little car did not tip over or roll backward down the grade, but slowly, inch by inch, it gained the top.

Those were the days when everyone rode a bicycle and Woodward avenue was thronged with men and women on their wheels. One day as Mr. and Mrs. Ford were making their slow progress along the boulevard a bicyclist—a "scorcher"— approached their car. So astonished was he at sight of the strange contrivance that he fell under the Ford car. The two occupants were terrified. Mr. Ford urged the fallen cyclist to lie still; then he and his wife hastily got out. A wondering crowd gathered. There was but one thing to do and that must be done quickly. Carfully Mr. Ford lifted the car off the fallen rider, who scrambled to his feet unhurt, while the crowd roared with laughter. As Mr. Ford wiped the perspiration from his forehead he remarked, "That was a close call for us."

Later came another unpleasant adventure. The proudest possession of a wealthy resident of Boston boulevard was a pair of fine driving horses. The first time those horses saw the new car they snorted, reared and bolted. Their owner's wrath was almost beyond words as he

(Continued on page 17)

Brick barn on Bagley Street, Detroit, where Henry Ford worked on his first gas car.



Barney Oldfield (left), Henry Ford and "Old 999", Ford's first racing car.

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"The Farm Paper of Service"

BABSON PREDICTS FARM PROSPERITY FOR 1923

"ANOTHER reason I am optimistic is on account of the crop situation. Now, at times when the country has small crops and high prices, the farmers are happy, but it is not good for the nation; and there are times when we have bumper crops and low prices, the people in our cities are then happy, but it is not good for the farmers.

"The nation as a whole is best off when we have fair crops and fair prices and I hope that the next twelve months will show somewhat such conditions.

"I find that the farmers of this country will receive a billion dollars more for this year's crop than they received for last.

"Now, as operating expenses of the farms must have been less this year than last year, that means that the farmers will have considerably more to spend. As a third of the people of this country receive their incomes from the farms, that means that a third of the people of the country will have more money to spend in 1923 than in 1922."—Roger B. Babson, Famous Business Analyst, at Chicago, November, 29, 1922.

PRITCHARD'S WEATHER FORECAST

YOU remember the blizzard which covered northern Michigan with a sheet of ice the week of February eighteenth, last year? Trains stopped, telephone and telegraph lines sagged and fell. It was a near catastrophe in some sections. Well, the United States weather bureau for that week predicted: "Cloudiness; occassional snows, normal temperature." Mr. Pritchard predicted a "rain, sleet or snow storm" and pointed out his reasons why it might be disastrous, thus warning the readers of his column of what they might expect.

L. N. Pritchard is a Michigan man who has become famous the past few years by his almost uncanny predictions of what the weather is going to be a few weeks or months ahead.

Turn to page 23 of this issue and read what the weather will be for the next two weeks! You don't think anybody can predict the weather? Well, mark down what Mr. Pritchard says about next week and New Years day on your calender in the kitchen and then see how near he hits it!

TOO MANY ON THE FARMS?

OVER at Kalamazoo last week, Mrs. Stockman, according to the press dispatches told the state Grangers that we already have too many farms and too many farmers. This may be true and if it is, the present movement, which has been pretty general all over the country from the farms into the city, should be solving the problem. We do not question but what improved machinery has year by year, lessened the labor requirements of the farms. Nature does a heap of a lot of the manufacturing of farm products, with only the assistance which nowadays one man and machinery can give her a lot of, in a short space of time. Now, if they will only pay enough for farm products, so that the few of us who remain can have the wherewithal to buy the necessities and a few of the luxuries too, which our highly paid city cousins are going to make for us, then all will be merry.

RUSSIAN HORRORS SUBSTANTIATED

YESTERDAY from the lips of a man I have know intimately for many years, I heard a story of horror and suffering, which had I read it or heard it from one I did not know, I never should have believed. My friend, David A. Brown, a self-made man who by his unselfish service to humanity during the past few years has made himself typify the best side of dynamic Detroit had within the week returned from a six months trip in Russia and the Ukraine district. He was a member of a commission sent out officially to get the facts regarding the famine and America's work to relieve it. He said:

> "In the south of Ukraine, people have and are still, dying by the thousands. Wagons go around the streets each morning to pick up their loads of those who have died during the nights. People go to the cemetaries and dig their own graves, rather than be dumped into open pits by the wagons. I have seen the actual proofs of canibalism and in some parts, the authorities will not allow groundmeat to be sold, knowing not but what it will contain human flesh! In houses and buildings, attics and closets are searched for unfortunates who crawl into them to die. Of the millions of bushels of grain sent over by the United States for seed, not 25% reached the soil, because the hunger-crazed people ate it to fill their empty bellies! In unheated hospitals and abandoned asylums I saw old men and women lying on boards stretched over boxes, with only one single blanket to cover their wretched nakedness. The vermine, the stench, the horror of a visit to one of these places drove me nearly frantic."

Remember please, that Mr. Brown was talking of a white race, who but a few years ago were boasting of their culture! You will not believe it possible? Neither would I, if my authority were not unquestioned, nor would Mr. Brown, until he had seen it with his own eyes.

The redeeming feature is, however, that the American Relief agencies directed by Herbert Hoover, supported by countless charity organizations and aided by the twenty millions of dollars donated by the United States Government, have actually been the means of feeding and thus keeping alive 11,000,000 of these unfortunate people. Everywhere, according to Mr. Brown, the Russians speak of America as they would God, with reverence and devotion. The job is not completed. Political Russia is still in the hands of the Soviet. But with seed planted under American guidance and by American machinery in the wonderfully fertile valley of the Ukraine during the coming spring, Mr. Brown, believes that the attendent crop will relieve the suffering and place this agricultural country once more on a self-sustaining basis.

Does it seem possible that these conditions can exist today or that they can be brought about in so short a space of years. It seems only yesterday that Russia was the greatest food exporting country in the world, now America must attempt to feed her, while millions die from hunger!

LONG TERM CREDITS

ONE of the major questions which will undoubtedly confront the next Congress will be the establishment of long-time credit for farmers. Nearly all farm organizations and newspapers have been so insistent in their demands for a revision of the banking laws that they cannot very well be ignored. There is no question but what the farmer ought to have the same access to credit as do the business men of the city. When he produces a crop in the fall of the year and desires to borrow upon it for a matter of six months or longer, he ought to be able to do it with the same ease with which mechandise. Just what the government can do to improve the situation is problematical. It is really a question for bankers, but cursed with their traditional conservatism, they will usually wait in this case as they have in others, until the government goes ahead and at least points out the way for better rural credits.

BETTER CATTLE

AN encouraging sign of the times is the interest which business farmers are taking in the better strains of both dairy and beef cattle. What education failed to do necessity has accomplished. During the period of high prices farmers could if they wanted to, keep low producing cows and sell almost any kind of beef, but they can't do it today. Competition is too stiff for the farmer who does not produce economically. And the man who is still keeping boarder cows and raising scrub-beef is in that class.

But all over Michigan farmers who have never kept any watch on their milk records of their various cows are now joining cow testing assoinciations. For the first time since they have been in the dairy business they know which cows they should keep and which they should sell, or kill. It's no longer a case of guessing.

Farmers who proceed along scientific lines to build up their herds will have nothing to regret. Just now the pure-bred dairy industry is in the doldrums. But it's sure to have a come-back and very soon. Dairy cattle are going to the shambles by the thousands and the day is not far distant when their places must be taken by new and better cattle. That will be the day of opportunity for the alert breeder.

STARTS OFF ON HIS RIGHT FOOT

UNDER the heading of "Couzens Kicks Up Heels Early," a Washington press dispatch quotes Senator Couzens as saying:

> "I am not yet sufficiently familiar with the details of the subsidy bill to say how I will vote when it come up for final passage. I am firmly convinced the bill should not be passed on in this session and for that reason I have joined in the move to displace it and take up the Farm Credit Bill. Almost everybody seems to agree on the need for some such measure. It is fundamentally different from the subsidy bill in that the subsidy proposes to take money from the public treasury and give it to a special interest, whereas money extended in the form of credit to the farmers ultimately will be paid back. The farm bill is founded on the right principle and there is no partisan division over it."

Last issue, on this very page, we said we believed before a year from that time Mr. Couzens would find among his best friends at home our farmers, but we had no idea of prophesying that he would come out so plainly for a square-deal for farmers, almost before he had his seat in the Senate warmed! If you folks admire a fighter you'll like our new Senator.

WE'RE WITH YOU, BROTHER FRIDAY!

PRESIDENT Friday of M. A. C., who as arbitrator set the price of milk in the Detroit area for the month of December, is proving that it was not press talk, when he said at that time he proposed to go to the bottom of the milk situation. Now, we hear he has actually gone to work on a job that is not exactly a pleasant one for a man in his position, but it is a mighty necessary one. We want Mr. Friday to know that the farmers of Michigan, altho not all in this area nor all milk producers, will back him to the limit in a thorough investigation. And we want him to know also, that the columns of the Business Farmer are open for his use during this campaign. If you milk producers in the Detroit area have facts that Mr. Friday ought to know in making this investigation, now is the time to send them to him. If you feel that you have been subjected to injustices in the past, now is exactly the time to give them an airing and East Lansing is the address of the gentleman who will be mighty glad, we believe, to receive them.

J. R. Howard, who steps down from the presidency of the American Farm Bureau, has felt all the sensation of the national president. He has ben praised, censured, blamed, coerced, bulldozed, lied too, talked about and talked to death! Now it is all over and he can go back to his farm and watch the other fellow get it in the neck as he did for three years. The wonder is that there are always a bunch anxious at the trough to get the rope around their necks!

"The tumult and the shouting dies
The Captains and the Kings depart—"

and it makes little difference who was king or queen when Shakespeare wrote, or who was the wealthiest man in all of these United States when Longfellow composed his sonnets. There is something more in life than money, even though at times we are wont to forget this eternal fact.

Wonder what old banker Toldjerso says about the big farm organizations, all pulling in the same harness, towards the same end of the row?

Pritchard, our new weather prophet, predicts the January "thaw" late in the month.

Which is harder to get rid of, a Christmas cigar or a Christmas tie?

"Christmas comes but once a year," and some of us are glad of it!

What the Neighbors Say

"NOTHING IS WITHOUT SUFFICIENT CAUSE"

RECENTLY there was an article in the M. B. F., reciting the misfortune of "John and Mollie," and it was suggested that some one give some thought on the subject of those who have had hard luck on the farms, the reason and the remedy, if any.

"Nothing is without sufficient cause," is a truism, and it as true in regard to the "Johns and Mollies" as it is true in other fields of thought and being, beside that of agriculture. We are living in a universe of law and order, so far as the physical universe is concerned, and man-made laws are presumed to be made in the endeavor to bring the greatest good to the greatest number of people. In other words, laws should be made so as to bring justice to all men, or as nearly that as is possible for man to do.

Now why do the Johns and Mollies fail on the farm? They raise good crops, hay, corn, meat, eggs, and a vast variety of good stuff. There are several reasons for the failure to make good. Conditions over which the Johns and Mollies have no control, or at least exert a very trifling amount of influence. They have no political sower, hence exert no influence in legislation. Laws are made favoring the large corporation, banks, railroads, telephone and telegraph lines, while the ownership of coal mines, copper, iron and all minerals as well as timber lands have now passed into the hands of the capitalist class. The big corporations make the price on lumber, all building material and determine all food values. The greater part of the farming element are compelled to sell the products of the farms at harvest time and then later these products are re-sold at advanced prices. The railroads, capitalized at about three times their real value, are charging exhorbitant rates for transportation in order to make dividends. Almost all of the necessities of life are owned and controlled by men who toil not, neither do they spin,—only fine words for the workers to practice greater economy, and to produce more goods.

Another reason for failure of John and his wife is that we are in one, if not the mostly highly developed industrial countries in the world. The wealth of the country is being centralized in fewer hands and is located in or near the large cities ,and our population is drifting cityward. The workers in the cities derive no benefit from the cheap produce on the farm, for transportation rates and the middle man add to the cost of cheap farm products, and the consumers, to their own detriment, pay the bills. In other words, the farmer is carrying three or four parasites on his back, in the shape of three or four well-dressed, well-fed and well-housed men, who sport fine autos and front seats at the Gaiety.

Take for an example of our modern industrialism, Mr. Ford, of Detroit, and Mr. Ford is an exception to the general run of men of the capitalistic class. In spite of the fact that he pays his employees a generous wage, compared to what some employers pay, yet the 75,000 men who make the autos for him have turned over to Mr. Ford at the end of say twenty years an amount today of over four hundred million of dollars. He hires experts to manage the business, but as a phenomenon in our social life, it cannot be interpreted as being other than a menace.

The Federal Reserve Bank, with the power invested in a few men to inflate our currency at their own discretion, is a fruitful cause of injustice. The farmers of the country have lost billions of money, in depreciated farm and produce values, in the last three years. It has been politely called "the era of readjustment," but it has been the era of balking the unions; an era of enforced idleness and strikes, an era of extravagance and waste.

The recent action of the Detroit Creamery Co., very well illustrates how the city consumers and the farmers get it in the neck, but if the milk producers would organize as they did recently in Minneapolis, and sell their milk in the city themselves, they might stand a chance to get a whole melon, which would be much better for all except some very fine parasites.

There is no solution for the problem of the Johns and Mollies save through the method of co-operation. We will have to become more scientific in our exchange of commodities and in the production of them, in order that we may make a nearer approach to justice.—E. H. Barrett, Macomb County.

"I WANT A LITTLE PERSONAL FREEDOM"

IF my case were exceptional, I could not write this letter. My pride would prevent it. But I know that in this community at least it is the rule, not the exception and so for once and hoping that somebody may be benefitted by it, I am going to speak out.

I was married when a very young girl and came on a farm with my husband. I knew nothing of farm life but he had been raised on one and so I took it for granted that he knew all about it. He began managing everything and I, being very much in love and feeling my ignorance so keenly, laughingly acquiesced. Now, I blame myself for that very acquiescence. I feel that if I had asserted myself then and demanded the management of my household affairs, perhaps things would not be as they are now. I felt then, however, that he knew best but I resolved that I would leave no stone unturned to learn. I studied everything I could find about farm work and house work on a farm and I watched my neighbors for pointers.

I learned rapidly and soon wished to take over the management of the house. But he held tight to the rens and to this day, though we have been married sixteen years, I have no freedom even to do my own work when and how I see fit. He buys what he decides we need; I have no say in it at all. I have studied the needs of my children and it hurts me to know what they ought to eat and yet not be able to feed them right, especially when I know it would be cheaper than what we do eat.

It is just the same in the matter of clothes. He buys what he wants us to have when he wants us to have it. I go until I haven't a decent house-dress to wear to the front door and finally he'll decide I need something and he'll go and buy what he wants me to have. I don't get to select one dress out of ten that I have. And it's just the same with the children's clothes. I have borne seven children. I do all my own work: washing, ironing, cooking, scrubing, gardening, and I used to go to the field. I haven't done that for several years because my strength will not permit. But with all that, I never have five cents of my own. My market eggs must buy household necessities; he generally sells them himself. If I have any chickens to sell, he sells them and takes the money or if he hands it to me, he tells me what I must do with it. I have canned a good deal for market; that money goes the same way. I do not expect him to feel as I do over church work. But he need not cut me off from church because he doesn't care for it. We have a small church so of course every member needs to do his or her part. But I never know until I begin to get ready whether or not I will be permitted to go or not. The distance is too great to permit of my walking especially as I always have a baby so I can only go when he will let me have a way. I can't pay anything without begging for it and it cuts me to the quick. It isn't right and it makes me feel like a bond slave. To sum it all up I have absolutely no freedom of action.

He considers himself a good husband. We have a good home, he is fond of the children, and, of course cares for me in his own way. I wish he could realize that I'd be worth much more to my family if I were not kept bound hand and foot. Mrs. R. B., Ohio.

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The Farm Home

A Department for the Women

Edited by MRS. GRACE NELLIS JENN

A FITTING NEW YEAR'S RESOLUTION

LET us resolve that in the future we will always exercise our voting privilege to the best of our knowledge and ability, that we will never be slackers in this particular, that we will read, think and talk matters of public interest over and then go faithfully to the poles and cast our vote for good government and clean politics. Only then may we be called 100 per cent Americans. Only then may we deserve to be citizens of the best country on the face of the earth.

A RELIGIOUS DUTY

THE National League of Women Voters' campaign to teach voters that exercise of the franchise is a sacred duty and an obligation of conscience has a new champion in Dr. George Horton, poet, novelist, and U. S. Council General at Smyrna, who is spending a leave of absence in Washington. He has written a prayer for the use of voters and has given it to the National League. A prayer used by the Florida League has been widely circulated and in some cities was read out in churches on the Sunday before election. The League hopes that religious observance of the Sunday before election will become a national custom. Dr. Horton heartily favors the movement to establish such a custom and contributes the prayer in the hope that it will prove helpful. It is a brief and simple prayer, for, says the author, emergencies in which "you have to pray" have taught him the value of unadorned language and to-the-point utterance. The prayer is as follows:

O God, help us to realize that this vote which we are about to cast is the greatest instrument for good or ill that can be weilded by human hands; that it can set the worthy, however lowly, in high places and is a thunderbolt to cast down tricksters and tyrants. Help us to vote thoughtfully, reverently, and prayerfully and with an eye single to the common good. And especially, O God, to whom all minds are an open book, save us from voting for any selfish or dishonest candidate, or for any unpatriotic measure. And this we ask for Jesus' sake, Amen.

WOMEN AS INVESTORS

AN official of The Union Trust Co., of Detroit, said to me recently, that statistics showed that 70% of the insurance money paid to widows was totally lost thru unwise investment.

It is a sad commentary on the average woman's ability to invest money wisely and the over confidence she places in some promoters word. A big interest rate is a temptation and it is almost always true that the larger the rate of interest promised the greater the risk.

Many commercial stocks are good but these stocks are influenced by business conditions that no one can with any certainty forsee and are altogether beyond even the wisest and most honest management.

Mortgage bonds are safer than stocks and money loaned on real estate is safe providing the loan is not too large for the property, 60% of the value of farm property is considered safe.

Many stocks, that a business man, who watches the market, could safely invest in would not be a good investment for the average woman.

The business woman has a better chance to act wisely than the woman who has always lived a protected life and had all business matters managed for her, and money sufficient for her needs and those of her family handed to her. She has probably gone on in a happy care-free way until some calamity throws her upon her own resources then she becomes the natural prey of the unscrupulus promoter.

This is one of the issues in which this department hopes to be of use to women, if you write for advice the opinion you get will be from a source whose honesty and high standing is above question and whose knowledge of financial matters is as good as any in the land.

CORRESPONDENTS COLUMN

A. W. C.—About the only way to dispose of an old piano, for it's case is to find a wood worker near your home, a cabinet maker. Such a man is often willing to give a fair price for the mahogany. A grand piano, not too large, makes a fine desk, being both handsome and useful. It needs an expert cabinet maker to handle such work. I have not found any music house that will take a piano for the wood.

Mrs. A. R.—All dresses are made most simply this winter. Generally hanging straight from the shoulder, with a low girdle, which is worn well down around the hips. Giirdles may be of silk or of the goods if of the latter they are not over three of four inches in width. Small wooden beads about the size of a pea are much used as trimming around the neck and sleeves. Silk tassels may be used on girdle ends. Sleeve and girdle ends may be faced with a color. The length from the floor may be from five to seven inches. A bit of hand stitching is good, as the long, in and out stitch or the chain stitch. The girdle made of silk cord is very popular. Metal girdles are much worn, particularly by the young girls.

I think the prevailing styles are most attractive when well carried out. In the matter of comfort and simple beauty they are modern conceptions and adaptions of the gowns worn in Ancient Greece, and at no time have those gowns been excelled in their simple elegance, conforming to the lines of the figure but giving the utmost freedom of movement. They are an expression of this athletic and active age, when it is a disgrace not to be busy if one has the blessing of good health and that is more and more becoming a factor to be controlled by ones self, by right living and right thinking.

Attention! Ellsworth, Michigan — Received 24 cents for two patterns but no name given. Please send full address and patterns will be forwarded.

Please look your pattern orders over well before mailing. So often the size is not mentioned or the address is not complete or the stamps are forgotten and it all means confusion to your editor and a delay to you. Yes, there is just one Mrs. Jenney busy on this page and responsible for all of it. I get the pattern orders out the same day they come to my desk but they are all sent direct to you from the factory and you should order your pattern about a week before you wish to use it then there will be no disappointment caused by delay. Notify me if the pattern does not arrive in a weeks time. Giving if possible the date of your order. That will save me much time but notify me any way. We will always make good on every order.

If you wish a pattern for any purpose and do not find it just write and ask me about it. We have sometimes had patterns drafted especially for readers of the Business Farmer.

GERANIUMS WANTED

I was reading in the paper about seedling geraniums. A lady said that she had bought a packet of seed from a seed house and that she had some fine specimens. I had fifty of them and only two of them blossomed and they are both single. I would like some double pink ones, white and scarlet. I am a great lover of flowers. My name is Mrs. Ed. Tubbs and my address is Applegate, Michigan.

DILL PICKLES

I saw a request in the Business Farmer for a recipe for Dill Pickles and I offer the following: Wash cucumbers and wipe dry, now place layer each of horseradish root, dill, bay leaves, cucumbers, few whole cloves, one whole pepper, continue the same until the crock is full, then cover with 3 quarts Vinegar, 1 quart water, and 1 cup salt, then place over same, sack containing 5 cents worth of white mustard seed, held in place by close fitting plate.

The above has proven satisfactory, its keeping qualities also being good. Mrs. J. T. Daniells.

Am sending my dill pickle recipe in hopes that it may benefit Mrs. N. L., Ellwell, Mich.

1 quart vinegar, 4 quarts water, 1 cup salt, piece of alum size of a marble. Place layer of grape leaves, pickles and dill until crock is full, then pour over liquid. Alum and salt must be dissolved. Weight the pickles so juice will always be above them. Sometimes the top layer will soften and there will be a scum on top but this does not affect pickles on the bottom.

DARK CHOCOLATE CAKE

Here is a cake recipe worth trying.

2 cups brown sugar, ½ cup coto, suet or lard, 2 eggs well beaten, ½ cup sour milk, 9 tablespoons hot water, 2 teaspoons cocoa and 1 teaspoon soda, mix and put in cake, 2 cups flour, salt, 2 teaspoons baking powder, lemon or vanilla. This is delicious.

Will some reader please send a good recipe for nut bread?—Mrs. Lloyd Eckhardt.

MAKE CANDY WITH CORN SYRUP

Will you please print in the M. B. F. or tell me where I can get the directions for making candy with corn syrup. I saw some in the paper some time ago. I made delicious candy, one was peanut brittle, but I cannot find the paper now. I would like to make some for Christmas.—Mrs. Wm. W.

WILD GRAPES FOR WINE

Sometime ago I saw an item (in the editorials, I think) stating that wild grapes were no good for making grape juice. I wanted to write right away and contradict the statement but did not get at it. Here is my way of fixing them: Gather and clean the grapes then put them over the fire with just enough water to keep them from burning and a tight cover to keep in the steam. In a few minutes they will soften so they can be mashed with a potato masher. Do so, then let them come to a boil and strain the juice through a bag. Re-heat and can without sugar. Now this is not a bit good to the taste but when ready to use, to one cupful of the juice, add a gallon of water and about 1½ to 2 cups of sugar.

I forgot to state that the grapes must be thoroughly ripe or the flavor is not so good.

Here is another hint for those who can't drink coffee. Roast some soy beans (Ito-San variety) and grind up and try those.

Save the old inner tubes and cut can rubbers out of them, using the

NEW YEAR'S EVE

RING out, wild bells, to the wild sky,
The flying cloud, the frosty light,
The year is dying in the night;
Ring out, wild bells and let him die.

Ring out the old, ring in the new;
Ring, happy bells across the snow.
The year is going, let him go;
Ring out the false, ring in the true.

Ring out the grief that saps the mind,
For those that here, we see no more;
Ring out the fued of rich and poor,
Ring in redress to all mankind.

Ring out a slowly dying cause,
And ancient forme of party strife;
Ring in the nobler modes of life,
With sweeter manners, purer laws.

Ring out the false pride in place and blood,
The civic slander and the spite
Ring in the love of truth and right,
Ring in the common love of good.

Ring out old shapes of foul disease,
Ring out the narrowing lust of gold;
Ring out the thousand wars of old,
Ring in the thousand years of peace.

Ring in the valiant man and free,
The larger heart the kindlier hand;
Ring out the darkness of the land,
Ring in the Christ that is to be.

—Alfred Tennyson.

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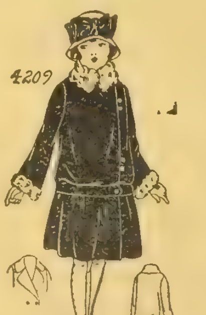
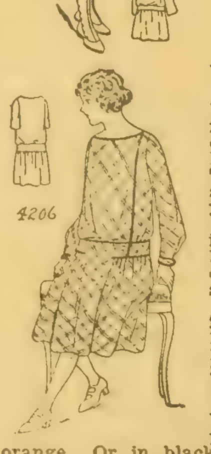
FASHION BOOK NOTICE

Send 12c in silver or stamps for our up-to-date fall and winter 1922-1923 Book of Fashions, showing color plates, and containing 500 designs of Ladies', Misses' and Children's Patterns, a concise and comprehensive article on dressmaking, also some points for the needle (illustrating 30 of the various, simple stiches) all valuable hints to the home dressmaker.



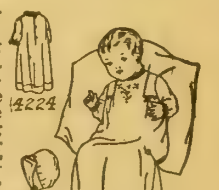
A Stylish Coat
4209. Black Velvet and squirrel fur are here portrayed. This is a good model for broad cloth, velours, and other cloakings. The collar is convertible. It may be turned up high, or rolled low with the fronts open.

The Pattern is cut in 5 Sizes: 6, 8, 10, 12, and 14 years. A 10 year size requires 2 1-4 yards of 54 inch material.



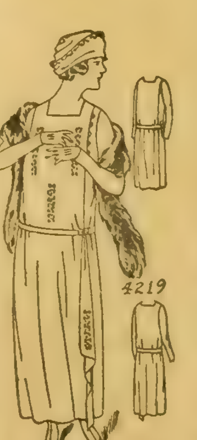
A Smart Style For The Growing Girl
4206. The girl who likes something different will be pleased with the style lines of this model. The long waist and side closing are youthful and becoming. Plaid suiting in brown tones with bands of red broad cloth developed this style.

The Pattern is cut in 4 Sizes: 8, 10, 12 and 14 years. A 12 year size requires 3 1-4 yards of 44 inch material. One could have this in blue homespun with pipings in henna or orange. Or in black panne velvet with pass stitchery in green or white.



A Pretty Set For Baby's Wardrobe
4224. Comprising a pretty dress, a dainty cap and comfortable shoes. The dress may be made of cambric, long cloth, nainsook, or voile. The cap of lawn, silk or crepe, or of embroidery and the shoes of silk, flannel, suede, satin or kid.

To make the dress 2 1-4 yards are required. For the cap 3-8 yard and for the shoes 1-4 yard, of material 16 inches wide.



A Stylish Frock With New Features
4219. Broadcoth or satin could be used for this model, with braiding or embroidery for decoration. The cascade drapery may be omitted. The sleeve is a new close fitting model in two peices.

This Pattern is cut in 3 Sizes: 16, 18, and 20 years. 18 year size requires 3 1-4 yards of 54 inch material. The width at the foot without lapped part of front is 2 1-4 yds.

top of the can as a pattern for the inside of the ring. In this way I managed to use several pint cans my mother used to have that had small tops and I could not buy rings for. You can cut a common sized ring and a small one out of same piece.

WANTS TO KNOW ADDRESS

I would like to have the address of the lady who makes sleeveless sweaters, and want to know how much yarn it would take to make size 48 in bust measure. Thanking you.—Mrs. Axel Lindquist, R. 3, LeRoy, Michigan.

POEMS WANTED

Can you tell me where I can get the poems, Brier Rose and Lasca? They begin this way:

"Said Brier Rose's mother to the naughty Brier Rose,
What will become of you, my child,
The Lord Almighty knows."

Lasca

"I want free life, I want fresh air,
I sigh for the canter after the cattle."

YOUNG HOUSEKEEPER

I have given the floor oil formula before, in fact just a few weeks ago but will gladly re-print it. Someone else may have missed it also. 2-3 Parafin oil, 1-3 Gasoline, 1 tablespoon full of turpentine to one quart of the liquid.

This is splendid for cleaning and polishing all woodwork. It will keep your varnished floors looking fine. I always use it on my dust cloth. Just put a little on a white dust cloth and do the dusting, it will prove to you how efficient it is. It is something like putting a good cold cream on your face, it will sink in and take off dust that soap and water will not touch. If this is a confession I will let it go at that.

SCALE ON FERN

Mrs. L. H. S.—There is no way to rid a fern of the scale shown on the leaf you sent me. I would destroy the fern and thus protect the other plants from the insect.

YULETIDE SWEETS

At the Christmas season one's thoughts naturally turn to candymaking, especially now that the price of sugar is "sliding." When the war was still being fought, every loyal citizen gave up the making of candy, and since the Armistice was signed sugar has been so expensive that it was only used when absolute necessity demanded.

The place of candy in diet is undoubtedly at the end of a meal. If eaten between meals, the digestion is forced to work when it should be resting, and the appetite for the meal is apt to be spoiled. Home made confections are more wholesome than those made commercially, as the ingredients are purer, and are thus better for children. They should on no account be persuaded to do things with the promise of candy as a bribe.

Our old friends, stuffed dates, peanut brittle and divinity fudge are shown in the illustrations to remind readers of recipes they have used before and the following recipes may give some new ideas:

White Creamy Fudge

3 cups of sugar, 1 tablespoon fat, ¾ cup condensed milk, ¼ cup water, 2 cups shelled walnuts, 2 teaspoons vanilla.

Place sugar, fat, milk and water into a saucepan and boil until a soft ball is formed in cold water. Remove from the fire, add vanilla and let stand undisturbed until cold. Stir in the nuts and work with the hands 15 to 20 minutes. Shape into rolls and slice. Milk may be substituted for the condensed milk and water, but the flavor is not as good. While being worked in the hands, this candy gets very soft, but will finally come off easily.

Lemon Taffy

3 cups sugar, ¼ teaspoon cream of tartar, 1 teaspoon lemon extract, and 1 cup water. Put sugar and water on the fire to heat, stirring until dissolved. See that there are no crystals of sugar sticking to the sides of the pan. Boil until the mixture reaches the "crack" degree, remove from the fire, cool slightly and add the lemon extract. Turn on to a greased pie plate and when it is partly cold mark into squares with a sharp, greased knife.

Raisin Delights

½ pound seeded raisins, ½ pound figs, ½ pound shelled nuts, ¼ cup pulverized sugar (if desired.) Run the fruits through the food chopper and if they are not too smooth consistency, put them through a second time. The sugar can be added here but it is not necessary. Shape the mixture into a cylindrical roll about two inches in diameter, wrap in waxed on oiled paper unitl ready for use. The candy can be served in slices. If the mixture is rather dry it may be moistened with orange juice.

Velvet Fudge

3 tablespoons fat, 2 tablespoons chocolate or 2 teaspoon cocoa, 3 cups sugar, 1 cup milk, 1 cup nuts. Put the fat, chocolate, sugar and milk into a saucepan and cook to the soft ball stage when tried in cold water. Do not stir. Remove from the fire and set aside to cool. When cold, add the nuts and work in the hands 15 or 20 minutes. Shape in long rolls and slice.

Molasses Chips

2 cups brown sugar, ¼ cup molasses 4 tablespoon butter, ¼ teaspoon salt, ½ cup water, 1 teaspoon vanilla. Dissolve the sugar in the water; add butter, molasses and salt. Boil until a hard ball is formed in cold water. Remove from fire, add vanilla and pour into rough shaped pieces.

"THE HUNTED WOMAN"

(Continued from page 7)

"Get out of Tete Jaune to-night!" he cried in a low, hissing voice that quivered with excitement. "Hit the trail before dawn! Strike into the mountains with our outfit—far enough back—and then wait!"

"Wait?"

"Yes—wait. If they follow us—fight!"

Slowly Aldous held out a hand. The old mountaineer's met it. Steadily they looked into each others eyes.

"If it had been two days ago I would have said yes. But to-night—it is impossible."

The fingers that had tightened about his own relaxed. Slowly a droop came into MacDonald's shoulders. Disappointment, a look that was almost despair settled in his eyes. Seeing the change, Aldous held the old hunter's hand more firmly

"That doesn't mean we're not going to fight," he said quickly. "Only we've got to plan differently. Sit down, Donald. Something has been happening to me. And I'm going to tell you about it."

A little back from the fire they seated themselves, and Aldous told Donald MacDonald about Joanne.

He began at the beginning, from the moment his eyes first saw her as she entered Quade's place. He left nothing out. He told how she had come into his life, and how he intended to fight to keep her from going out of it. He told of his fears, his hopes, the mystery of their coming to Tete Jaune, and how Quade had preceded them to plot the destruction of the woman he loved. He described her as she had stood that morning, like a radiant goddess in the sun; and when he came to that he leaned nearer, and said softly:

"And when I saw her there, Donald, with her hair streaming about her like that, I thought of the time you told me of that other woman—the woman of years and years ago—and how you, Donald, used to look upon her in the sun, and rejoice in your possession. Her spirit has been with you always. You have told me how for nearly fifty years you have followed it over these mountains. and this woman means as much to me. If she should die to-night her spirit would live with me in that same way. You understand, Donald. I can't go into the mountains to-night. God knows when I can go—now. But you——"

MacDonald had risen. He turned his face to the black wall of the forest. Aldous thought he saw a sudden quiver pass through the great, bent shoulders.

"And I," said MacDonald slowly, "will have the horses ready for you at dawn. We will fight this other fight—later."

(Continued in Jan. 6th issue.)

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Scald 1 pt. milk, or milk and water. Add 2 teaspoons butter or lard, 2 teaspoons sugar and 1 teaspoon salt. When luke warm add ½ yeast cake discolved in ½ cup water. Add Lily White flour to make a soft batter. Mix well; add flour to make a dough. Knead. Let rise until it is double in size. Knead again and shape. Let rise 1½ hours. Bake in a quick oven 20 minutes.

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The Children's Hour

DEAR Neices and Nephews:—Just a line to let you know who won the prize for describing how to make Christmas gifts. The winner is Anna Madzelan, R 1, Manton, Michigan, and the prize a package of holiday postcards. And Anna was the only one to guess what the prize was so she received two packages of cards.

Many did not understand about the prize offer and sent stories believing that I was offering a prize for the best Christmas story instead of how to make Christmas gifts so I am going to award a prize to the best story writer. I think the most interesting story I have received is "Pablo's Christmas" by Ruth Vandebogart of Augusta, Mich. She receives a package of holiday cards.

I suppose many of you think "Why does he give postcards when there are other things that would be more interesting and useful? If I won I would rather have a book or pencil box or something I could use every day" You all remember that recently I asked you to remember all your friends this Christmas, although you may only send them a Christmas card. Well, I gave cards so that the prize winner could do this.

When I began this letter I only intended to write a few lines to tell you about the prize winner but when I get started on letters to you girls and boys it seems there are so many interesting things to write about that I run on and on. But I must say good-bye. I wish you all a merry, merry Christmas and a happy New Year.—UNCLE NED.

OUR GIRLS AND BOYS

Dear Uncle Ned—I read in the November 11th issue about your Christmas contest, and as I was busy last week making cheap and simple gifts I might give a few suggestions to my cousins in this circle.

The five gifts that I decided to explain how to make are a sewing box or case, a handkerchief box, a calendar, a vanity case and a pretty handkerchief.

The simple way to make a sewing case is: You first get a box of suitable size and cover it up with cretonne, crepe paper or wall paper is good enough, then you line the inside with some nice soft cloth or paper will do. Then make six partitions in the box, leaving six compartments, one for needles, one for pins, another for buttons, another for thread, one for thimble and another for goods or material.

The handkerchief box is very simple to make too. A match box is suitable for that. Cover it with crepe paper, wall paper or cretonne. The inside is lined and then a little bag is made, filled with sachet powder and given along with the box.

A calendar is suitable for the older persons. It is made by getting a clean white paper, and a piece of card board about nine inches by four. Cover this up with the white paper. Then a nice design can be drawn on the front of it. A winter scent or something like that. You can buy those little calendars for a penny. Then paste this just under the picture. This makes a very nice gift especially if the picture is drawn by some daughter or son and given to their parents.

A vanity case is very nice and easy to make too. All you have to do is get a box, good size, sort of oblong shape, cover with black satin or most anything is suitable. Line the inside with bright colors, partition off little places for powder and puff, hairpins, handkerchief, money and miscellaneous articles. A looking glass can be pasted on under side of the cover. This is very nice for young girls.

And the pretty handkerchiefs that can be made are nice for almost any one. You can get a piece of lawn, cut in suitable sizes. Hemstitching makes it very pretty. A pretty design can be embroidered in one corner. Crochet edge makes it attractive. ?

Well I think I will fill up the whole page pretty soon so I will close hoping to win a prize. Also hope to hear from all the cousins. I remain, Your niece, Miss Anna Madzelan, R. 1, Manton, Michigan.

P. S.—I think the prize you are giving away is a pretty story or a package of cards.—Anna.

Dear Uncle Ned—I have been reading the letters in the M. B. F. and enjoy them very much. I read about your contest in the paper, so I thought I would try and win a Christmas present. I think the present will be a pencil.

Pablo's Christmas

Quite a long time ago there was a little Mexican boy named Pablo. He was tall for his age, his hair was black, and his eyes dark. Pablo was a very bright little fellow. His clothes were patched, he had never remembered of getting a nice new suit of clothes. Christmas was drawing near. Oh how he wished he could have some money to buy his dear little sister and mother and grandmother a Christmas present, but he could not get any money, so what was Pablo to do. His father had been killed in a coal mine.

Pablo went and asked them what they wanted for Christmas, Grandmother said she had seen a picture of a little boy and dove, she would dearly love to have that picture. His mother wanted a music box, she wanted so much to hear someone sing while she done her work, his little sister wanted a fairy book,

Next door to Pablo was an Indian woman who said she would teach Pablo to sing. So when Christmas morning came Pablo stood in the doorway of his grandmother's home with a dove. She said iti was a great deal better than the painted one she saw. Then to his mother he sang and how she was pleased to think her son could sing so well. To his little sister he told the stories he read at school and that was her fairy book. That night Pablo went to bed thinking he was the happiest boy that ever lived. After a while he heard someone walking on the porch, he got up and to his surprise there was a brand new suit of clothes that his little friends had given him. Pablo was a very much surprised boy that Christmas eve.

I will close, from your neice.—Ruth Vandebogart, R 2, Augusta, Michigan.

Dear Uncle Ned—May I join your merry circle? We take the M. B. F., and enjoy it very much.

Does any of the neice's or nephew's know Helen Steel's address? She and I corresponded with each other for about a year, then I did not hear from her any more. I am making a number of Christmas presents. I am 13 years old and have blue eyes, brown hair, and am 63 inches tall, and weigh 117 pounds. I think that "Curiosity Carmella" contained a very good lesson and I think that everybody who reads it ought to learn a lesson from it. I am in the eighth grade at school and I have a very good teacher, his name is Mr. George Robbins. I think the present that Uncle Ned is going to give away is a good story book. Am I right Uncle Ned? Wishing Uncle Ned and all the neice's and nephew's a merry Christmas, will close, hoping to hear from some cousins. I remain as ever.—Miss Eva Hall, R. 3, Springport, Michigan.

A Happy Christmas

Jack McMaster was a rich boy. His father was very rich and Jack had everything that he could wish for. One day Jack generously thought that he would get some of the poor boys of his school some nice presents for he had a kind heart. He said to his father "I thought I would get some of the poor children in the school some Christmas presents." To which his father made the reply, "I have no objections if you earn the money yourself." This hurt Jack's feelings very much but he resolved to do it just the same. He found many small jobs as unloading a load of coal, 75 cents. His father gave him 25 cents for carrying an invitation to his friend. Mr. Smith gave him 50 cents for carrying some cabbage to their house. He received a $1.50 for leading a cow a half mile from the city to the country. At last he went to the store to see what he could buy with the $3.00. He bought a pocket knife, a sled, a mouth organ and many other things for the boys. That Christmas he was happier than he had ever been before for he had helped to make other people happy. Violet E. Grandy, Evart, Michigan.

Dear Uncle Ned—I just thought that I would write to you. I am a farmer's daughter 12 years of age. I've been on the farm two years and would hate to go back to the city.

On Saturday I always sit by a window and watch the mailman for the M. B. F, I enjoy reading the Children's Hour. I am going to try my luck at a Christmas story.

A Russian Santa Claus

In Russia the Santa Claus is different from the American. There a man dresses up very funny and then he goes to the childrens homes on Christmas day or the day before. But he has no sleigh full of toys or the tiny reindeer. He takes a strong whip with him. When he gets to the boys' and girls' homes he walks right in and the children must read or write whatever he tells them to do. If they do not mind or read quite poorly Santa Claus whips them. But now I'll tell you a story of one of these Santa Claus.

One day old Santa Claus started out for a house where a little boy and girl lived. When he got to the house he met the mother of these children. She took him into the house and showed him where the children were. He went over to them and when the boy, who was sitting behind the stove saw him, he picked up a club and hit old Santa Claus on the nose and smashed it. Besides he broke a piece off of his mother's kitchen stove. Poor Santa went home with a smashed nose. "It's the last time I'll be Santa," he said. Let some one else get their nose smashed.

I hope this story is all right. It's a true story, told to me by my mother. She used to live in Russia and I did too. I have three brothers and one sister. I'm in the 7th grade Well I think I'd better leave off. I think the Christmas gift is a school bag with an assortment of pencils, tablets, etc. I wish some of the children would write to me.—Lydia Sounart, R. 1, Milford, Michigan.

Dear Uncle Ned—This is the first time I have written to you. But I thought I would write a little story, to try my luck. I am 12 years old and in the sixth grade at school. I have five brothers and no sisters. I guess I had better start my story.

The Time That Santa Got Lost

One time Santa started out on his annual round on Christmas eve. After he had gone a long way and had seen no house, he reached for his compass to see where he was, but alas,—he had forgotten to bring it along. "What shall I do," thought Santa. The only thing to do is to drive straight on, so on he went. And soon he came to a tall gate. "This is queer," thought Santa "I never happened to come across this before." So he rode on, and again he came to a gate, he came to it three times and was just wondering what to do when, lo—he saw some smoke curling up among the hills, his heart was filled with thankfulness. He got his task completed for another year, and never again did he forget his compass. I will close wishing you a merry Christmas. I am your loving little neice.—Thelma M. Shine, R. 1, Cadillac, Mich.

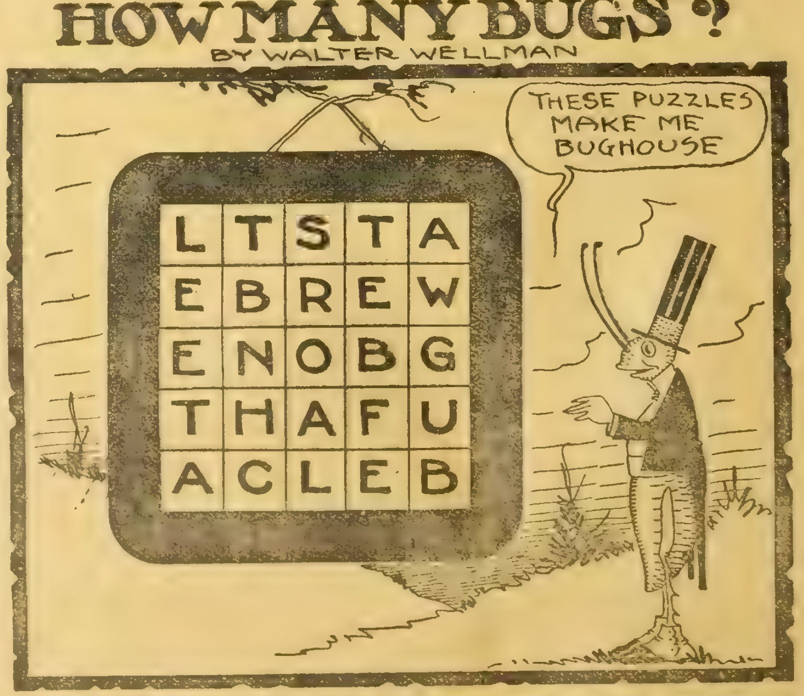
Dear Uncle Ned—I am a farmer girl, 14 years old and in the 10th grade at school. I have two sisters whose names are Laura and Pauline. Laura is in the same class with me at school and Pauline goes to the country school, is in the 4th grade. I was beginning to be afraid of there being a "green Christmas" but it was quite cold today and it snowed, so I have my hopes. I suppose you cousins are all looking forward to Christmas. I am. Do any of you know anything about a girl whose name is Georgia Brown? The last I knew of her she lived in Globeville, Michigan. She was my twin, her birthday being the same day, she being the same age, and in the same grade. If any of you know anything about where she is please let me know. Your neice, Ina B. Lake, Homer, Michigan.

Dear Uncle Ned—How are you these days? I live four and one half miles south and east of Sherwood and west of Union City.. It is very very lonesome where I live. I live on a farm of 120 acres. I go to the Smith school, we have a basketball team. Well I will close with hopes that I will get many letters from the boys and girls. Signing off at 8:00 P. M.—Richard Gaw, Sherwood, Michigan.

—I bet you have a radio in your home. Haven't you?—Uncle Ned.

Dear Uncle Ned—May I join your merry circle? I am 5 feet 7 inches tall and weigh 140 pounds, I have dark brown hair and blue eyes, and am in the seventh grade at school. Who can guess my age? Who guesses my age correct will receive a long letter from me. I have three and one half miles to go to school. Our nearest neighbors live 1 mile from us and it is lonesome here I wish some of the boys' and girls' would write to me. I will have to say good-bye to Uncle Ned and Cousins. —Evelyn Grandy, Evart, Michigan.

HOW MANY BUGS?


BY WALTER WELLMAN
THESE PUZZLES MAKE ME BUGHOUSE
L T S T A
E B R E W
E N O B G
T H A F U
A C L E B

Start with any letter. You can move to the right, to the left, upwards or downwards, or diagonally in any direction. How many bugs' names can you make out?

Answer to last puzzle: **Beet, Corn, Turnip, Cucumber, Beans, Pepper, Tomato, Parsnip, Peas, Onion, Carrot.**

RADIO DEPARTMENT

EDITED BY J. HERBERT FERRIS

RAILROAD FARE, BOARD AND LODGING ONLY EXPENSES

I have been requested by the master of our Grange to write to you to get some information regarding your offer to give a demonstration of radio for actual expense. We do not know whether our grange could stand the expense to White Cloud if we meet you there and provide you with board and lodging while there? My husband is a subscriber to the Business Farmer and I saw your offer and brought it up before the grange, hence this letter.—Mrs. H. S., White Cloud.

—As stated in our last issue the only cost will be actual traveling expenses and board and lodging for a night. By traveling expenses we mean railroad fare from Benzie county to your nearest station, or if you live near this county you can go and get the editor and take him home by auto. This would make the traveling expenses only cost of gasoline, wear and tear on the auto and time spent by a man calling for and taking the editor back to his home, the amount depending upon the distance you live from the editor's home. We already have requests from several different parts of the state, from granges, gleaner organizations, churches, etc. and as soon as we have dates arranged we will publish them in this department We will have this all arranged by our January 6th issue. In the meantime if you would like to have the editor come to your community for an evening do not hesitate but write at once or someone else will secure the date you would like.

THREE BIG FARM ORGANIZATIONS AGREE

(Continued from page 3.)

bring pressure to bear on the Legislature to enact a gasoline tax. They want the revenue turned to highway maintenance and bond retirement.

The farmer organizations, it was indicated, will favor appropriations for the Michigan Agricultural College, but are likely to oppose large sums for the University of Michigan. A resolution was offered suggesting that the mill tax for the university be cut one mill.

An effort will be made by the Grangers and their allies to have trust companies put on the same taxation basis as banks. They also want building and loan associations reasonably taxed, are against tax-exempt bonds, and would like a tonnage tax on railroad cars and ships to fatten the state treasury and reduce the property tax.

The outstanding sentiment of the convention was that the farmer is overtaxed, that he has not been getting a fair share in state tax matters, and that every possible means to produce revenue for the state from other sources than real property taxation must be encouraged.

The Grange went definitely on record against capital punishment and in favor of continuing rigid prohibition enforcement. It also let it be known that it is against extravagance in public life, including automobile for public officials at public expense.

American Farm Bureau Meet

Chicago, Dec. 11 to 14—Outstanding attention to co-operative marketing problems and a policy of strengthening and encouraging co-operative commodity marketing organizations were made the policy of the American Farm Bureau Federation according to resolutions adopted by the delegates to the fourth annual meeting of the organization held at Chicago, December 11-14. The Farm Bureau also took a positive stand on transportation and immigration problems as they affect agriculture. The ship subsidy was rejected. Congress was asked to grant adequate financial support to the U. S. Department of Agriculture and the Federation again voiced its objection to transferal of any bureaus of the department of agriculture to other government departments.

O. E. Bradfute of Xenia, Ohio, vice-president of the A. F. B. F., was unanimously elected president for the coming year. He succeeds J. R. Howard, who served three years. Mr. Howard stood fast to his previously announced intentions of retiring at the close of his present term.

W. Walker of Willows, California, was elected vice-president. Employment of a secretary and treasurer rests with the national executive committee. John W. Coverdale of Iowa is the present secretary. Charles W. Gunnells, treasurer, has resigned. Several changes were made in the national executive committee. In the Central region, wherein Michigan is most interested, J. F. Reed of Minnesota replaced Ralph Snyder of Kansas and W. H. Setle of Indiana replaced John G. Brown of Indiana.

Transportation resolutions included such items as demands for further reduction of freight rates until they shall be brought into proper working relation to the selling price of farm crops, a demand on the railroads to provide equipment sufficient to prevent the congestion of freight traffic which makes impossible the proper distribution of farm crops. State and national government were called upon for highway improvement and improvement of commercially feasible inland waterways. Opening of the Great Lakes-St. Lawrence waterway was stressed.

The U. S. Senate was asked for prompt passage of the Voight anti-filled milk bill. Previous resolutions in favor of Truth-in-fabrics legislation and acceptance of the Henry Ford offer for completion and operation of the Muscle Shoals Nitrates projects were asked.

The bureau went on record as in favor of immediate and thorough investigation by the Tariff Commission of tariff rates on all imports which farmers buy and an immediate reduction of excessive rates to such lower levels as shall only equal the differences in production here and abroad.

The Michigan State Farm Bureau was represented by nine member of its state executive committee and its secretary. They took an important part in the convention. Michigan made the outstanding report of Farm Bureau accomplishments, particularly in the matter of successful co-operative marketing agencies developed by the Michigan State Farm Bureau.

JOHN HOBART MAKES A NEW YEAR'S RESOLUTION

(Continued form page 8.)

haven't been drinking any of that spoiled cider, have you?"

Her husband laughed—loudly and long, setting echoes to ringing thru the house, and three young people to wondering.

And then John Hobart confessed.

"I've been an awful brute, honey," he said afterward, "but I never knew it until I overheard the girls. I've been thinking I was a successful farmer, but all I've been is a barbarian. But I'll make amends, by heck!"

And the light in his wife's eyes would have rewarded any one.

"TRUTH ABOUT HENRY FORD"

(Continued from page 11.)

threatened to have Mr. Ford arrested for causing a runaway. Years after this same Detroiter told of the incident with much amusement. He had called Mr. Ford "a public nuisance" for driving an automobile in the street.

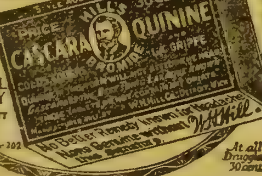
Long afterward Mr. Ford saw in a French magazine a picture of a car which a Frenchman had invented and which was called an "automobile." This was the first time he er heard the word that everyone knows today.

Further chapters of "The Truth About Henry Ford" in Jan. 6 issue.

Hill's acts at once
checks Colds in 24 Hours

At the first sign of a cold take Hill's Cascara Bromide Quinine. Quick to act. Safest and most dependable cold, headache and la grippe remedy known.

W. H. HILL COMPANY
DETROIT



At all Druggists 30 cents

Ask for
Hill's Cascara Bromide Quinine

White-of-Egg
in Calumet a Vital Element Most Baking Powders Lack

Don't use a leavener that does not contain white-of-egg. When you do you take chances—you run the risk of spoiling your bakings.

CALUMET
The Economy BAKING POWDER

contains a small amount of white-of-egg. This makes it possible for representatives of the company to test it frequently for leavening strength—right on the dealer's counter. Nothing but absolutely fresh stock is permitted to remain on the dealers' shelves. It must always be up to the high Calumet standard.

CALUMET
BAKING POWDER
1 lb
ABSOLUTELY PURE
NOT MADE BY A TRUST
CALUMET
CONTENTS 1 LB.
BAKING POWDER
CALUMET BAKING POWDER CO.
CHICAGO U.S.A.

BEST BY TEST

Remember the white-of-egg in Calumet protects the success of your bakings. It is the economical positive bake-day aid and its sale is 2½ times as much as that of any other brand.

A pound can of Calumet contains full 16 ounces. Some baking powders come in 12 ounce instead of 16 ounce cans. Be sure you get a pound when you want it.

THE WORLD'S GREATEST BAKING POWDER

CHANGE POWER AS YOU CHANGE JOBS

1½ to 6 H. P. just as you need it. The one economical engine on all farm jobs up to 6 H.P. Saves investment, upkeep, time. Portable.

WORLD'S GREATEST FARM ENGINE

Busiest machine on the farm. Wonderful value at less than pre-war price. Never was such an engine bargain. Direct from factory to you. Learn about this wonderful farm helper. Kerosene or gasoline. No cranking. Write for description and factory price.

THE EDWARDS MOTOR CO., 934 Main St., Springfield, O.

Many in One

THE GREATEST
CLUBBING OFFER
WE HAVE EVER MADE
Expires Jan. 10th, 1923

(To Rural Route Subscribers Only)

DETROIT TIMES
Daily, Regular Price $4
— AND —
THE MICHIGAN
BUSINESS FARMER
Regular Price $1

BOTH
$3
ONE YEAR

The Michigan Business Farmer,
Mt. Clemens, Mich.

I enclose $3 for which you are to send The Detroit Times and The Michigan Business Farmer one full year.

Name__________ R.F.D. No.______

P. O. __________ State______

If Renewal mark (X). Detroit Times ( ). Michigan Business Farmer ( ).

BREEDERS DIRECTORY

Advertisements inserted under this heading for reputable breeders of Live Stock at special low rates to encourage the growing of pure-breds on the farms of our readers. Our advertising rate is Thirty Cents (30c) per agate line per insertion. Fourteen agate lines to the column inch or $4.20 per inch, less 2% for cash if sent with order or paid on or before the 10th of month following date of insertion. SEND IN YOUR AD AND WE WILL PUT IT IN TYPE FREE, so you can see how many lines it will fill. Address all letters, BREEDERS DIRECTORY, MICHIGAN BUSINESS FARMER, MT. CLEMENS, MICH.

CLAIM YOUR SALE DATE

To avoid conflicting dates we will without cost, list the date of any live stock sale in Michigan. If you are considering a sale advise us at once and we will claim the date for you. Address, Live Stock Editor. M. B F., Mt. Clemens

LIVE STOCK AUCTIONEERS
WAFFLE & HOFFMAN
OUR SPECIALTY:
BIG TYPE SPOTTED POLANDS AND DUROC JERSEYS

We are experienced salesmen, Expert Judges and money getters.

Right prices. Write today for good dates and our terms address either of us.

WM. WAFFLE, Coldwater, Mich.
JOHN HOFFMAN, Hudson, Mich.

U-Need-A Practical Competent Auctioneer to insure your next sale being a success.

Employ the one Auctioneer who can fill the bill at a price in keeping with prevailing conditions.

Satisfaction GUARANTEED or NO CHARGES MADE. Terms $50.00 and actual expenses per sale. The same price and service to everyone.

I specialize in selling Polands, Durocs, and Chesters. Let me reserve a 1922 date for you. Write or wire,
HARRY A. ECKHARDT, Dallas City, Illinois

JOHN P. HUTTON
LIVE STOCK AUCTIONEER
ADVANCE DATES SOLICITED.
ADDRESS 113 W. LAPEER ST.
LANSING, MICH.

CATTLE

HOLSTEIN-FRIESIAN

32 LB. SIRE—30 LB. DAM—HERE'S A BULL bargain that will be snapped up quick. Born Nov. 3rd, 1921, ready for light service, nicely marked. more white than black.

His dam, a great grand-daughter of King Segis and Pontiac Korndyke, was 2nd Prize Junior 4 yr. old in both 7 and 30 day divisions, State of Michigan in 1918; her records being 30.79 lbs. butter and 653.10 lbs. milk in 7 days and 124.21 lbs. butter and 2779.90 lbs. milk in 30 days.

His 32 lb. sire is by a son of Pontiac De Nijlander, a 35.43 lb. Michigan champion. The 32 lb. dam of his sire is also a 2nd Prize Michigan cow in the Senior 4 yr. old 7 day division in 1918 and her dam a 29.43 lb. cow.

First check for $250.00 gets him f. o. b. White Pigeon, Mich. Pedigree and photo on request.
ALBERT G. WADE,
130 N. Wells Street, Chicago, Ill.

EXCEPTIONAL FINE BULL CALF BORN Dec. 12th. The Dam is the best cow we have and has A. R. O. records. Sire Romeo King Segis Pontiac Korndyke—son of the $30,000 bull. The first $25.00 gets him—don't linger. Entire herd free from T. B..
SCHAFFER BROS., R. 4, Oxford, Mich.

OCT. CLEARANCE SALE. WE ARE OFFERING 20 heifers and bulls. Heavy producing dams. Sire has 7 dams averaging nearly 1,100 lbs. on yearly test. Free from T. B., $50.00 and up.
WOLVERINE DAIRY FARM
Prop.—H. G. Booth Gladwin, Mich.

FOR SALE—HOLSTEIN BULL CALF, 8 weeks old. Dam 28.91 lbs. butter, sire 33 lbs. with 1,100 lb. yearly record. Price $300.00 or will exchange for suitable female.
COOK BROS., Fowlerville, Mich.

FOR SALE—REG. HOLSTEIN BULLS FROM A R. O. dams ready for service.
WM. GRIFFIN, R. 5, Howell, Mich.

SHORTHORNS

Richland Shorthorns

We have two splendid white yearling bulls by Imp. Newton Champion, also some young cows and heifers that we are offering for sale. Write for particulars to

C. H. Prescott & Sons
Herd at Prescott, Mich. Office at Tawas City, Mich.

SHORTHORNS AND POLAND CHINAS—NOTHING for sale at present. Are holding for public sale Nov. 15th. Write for catalogues.
SONLEY BROS., St. Louis, Mich.

A POLLED SHORTHORN HERD BULL 2 years old. Scotch Orangeblossom Family. Fit to head any herd. Younger ones for sale.
L. C. KELLY & SON, Plymouth, Mich.

GLADWIN COUNTY SHORTHORN BREEDERS offer the best in beef and milk strains. All ages, both sexes. **W. S. HUBER, Sec'y, Gladwin, Mich.**

DURHAMS

FOR SALE—FIVE REGISTERED DURHAM bulls from ten months to one year old I have also a few female Durhams for sale.
HENRY J. LYNCH, Mayville, Tuscola Co., Mich.

ANGUS

WE HAVE SOME FINE YOUNG ANGUS BULLS from International Grand Champion Stock at reasonable prices. **E. H. KERR & CO., Addison, Mich.**

FOR SALE—SIX YOUNG ABERDEEN-ANGUS cows and heifers. Well bred, good individuals. Price $800.00 F. O. B. Mich.
GEO. HATHAWAY & SON, Ovid, Mich.

REGISTERED PUREBRED ANGUS HERD Bull for sale at a reasonable price.
S. E. WHITE, R. 2, Hale, Mich.

SPECIAL PRICE ON BULLS, RANGING IN age from 8 to 11 months, until Jan. 1st, 1923.
RUSSELL BROS., Merrill, Mich.

GUERNSEYS

FOR SALE—REGISTERED GUERNSEY HEIFERS at reasonable prices, also choice bull calves of May Rose breeding.
H. W. WIGMAN, Lansing, Mich., Box 52.

SECURE YOUR NEXT BULL FROM ONE with both A. R. Sire and Dam. I have what you want. I also offer a few choice females.
A. M. SMITH, Lake City, Mich.

GUERNSEY BULL Bred Heifer. Yearling Heifer. Heifer calf. Best of breeding. From good producers. Price right. Write **G. A. WIGENT, Watervliet, Mich.**

AYRSHIRES

FOR SALE—REGISTERED AYRSHIRE bulls and bull calves, heifers and heifer calves. Also some choice cows.
FINDLAY BROS., R 5, Vassar, Mich.

BROWN SWISS

FOR SALE—REGISTERED BROWN SWISS bull Grit No 8919 born Sept. 14, 1921. Won first place as a senior calf at the State Fair. Also bulls, cows and heifers of equal merit. Herd federal accredited.
ERWIN R. MOORE, Osseo, Mich., R. 3.

HEREFORDS

BUYING, FEEDING AND SELLING FAT

CATTLE
at present, is too much like
GAMBLING
All experience proves Baby-Beef growing
THE BETTER WAY
GROW HEREFORD BABY BEEVES

Our Contractors are guaranteed top prices by Detroit Packing Co. Commission, yardage, Feed and all other expenses, except transportation—only; are cut out. Our plan opens the way to profitable beef-making, by Michigan Farmers.. In no other way can as much money per cow be earned, with so little labor. If you have no beef-bred cows, we have them on hand or listed.

Study our plan and be convinced. Come, wire or write. Right NOW.

T. F. B. SOTHAM & SONS
(Cattle Business Established 1835)
Phone 250 Saint Clair, Michigan

RIVERVIEW HEREFORDS—FOR SALE Bulls, also few females. **WM. C. DICKEN, Smyrna, Mich.**

RED POLLED

RED POLLED CATTLE—A few choice bulls and heifers for sale.
ROYSTAN STOCK FARM,
Will Cottle, R. R. 1, West Branch Michigan

RED POLLED CATTLE—Both sex Oxford and Tunis Rams. Yorkshire Hogs. **E. S. CARR, Homer, Mich.**

FOR SALE—OUR RED POLLED HERD BULL, Cosy Ells Laddie, and a few heifer calves.
PIERCE BRO'S., Eaton Rapids, Mich. R. 1.

JERSEYS

REG. JERSEYS, POGIS 99th OF H. F. AND Majesty breeding. Young stock for sale. Herd fully accredited by State and Federal Government. Write or visit for prices and description.
GUY C. WILBUR, BELDING, Mich.

FOR SALE—YEARLING JERSEY BULLS Sophie 19th Tormentor breeding.
J. E. MORRIS, Farmington, Mich.

SWINE

DUROCS

DUROC JERSEYS

NELLS LITTER; SIRED BY LIVINGSTONS PRIDE farrowed July 24, these pigs cannot be beat. Nell has farrowed 59 pigs in four litters. PRODUCTION is the big word of today, better get a boar out of this litter, and start on production. **LAPHAM FARMS, Pinckney, Mich.**

SENSATION MARSI Our new herd boar. Sired by "Marsi" Reserve grand champion National Swine Show 1922. We are taking orders for gilts and sows for spring farrow bred to this wonderful boar.
SCHAFFER BROS., Route 4, Oxford, Mich.

DUROC JERSEY BOARS READY FOR SERVICE. Sired by Fannie's Joe Orion $25 each. Will ship C. O. D. Write us now.
H. E. LIVERMORE & SON, Romeo, Mich.

DUROCS—POPULAR BLOOD LINES—SEND your wants to OCEANA CO. DUROC JERSEY HOG ASS'N. V. Bidgard Sec., Hesperia, Michigan.

PEACH HILL FARM offers choice weanling Duroc pigs, either sex. Priced very reasonable. Write us.
INWOOD BROS., Romeo, Mich.

HILL CREST DUROCS, PERRINTON, MICH. We are breeding twenty sows and eighteen gilts to a son of GREAT ORION SENSATION Yearling, spring and fall boars. **NEWTON & BLANK, Farm 4 miles straight south of Middleton, Gratiot Co., Mich.**

FOR SALE—FOUR CHOICE DUROC JERSEYS boars from Agriculture College herd. Just right for December service. Prices reasonable.
HUGH REID, Clifford, Mich.

POLAND CHINA

SELL REGISTERED SPOTTED POLAND China Pigs. 7 months old, Boars $25. Gilts $20. **Dr. Erwin Meyer, Drayton Plains, Mich., Box 43.**

DAIRY and LIVESTOCK

BETTER QUALITY LAMBS MEANS INCREASED CONSUMPTION

IMPROVEMENT in the quality of live stock is undoubtedly one of the most practicable and profitable ways of increasing meat consumption. No branch of the live stock industry offers more promising possibilities than the production of sheep and lambs. The annual consumption of mutton and lamb in the United States is only about six pounds per capita, or about 4 per cent of the total consumption of all meat.

The head sheep buyers of one of the larger packers is authority for the statement that the consumption of "native" lambs (which means lambs produced East and South of the Missouri River) could be increased 550 per cent "on quality alone", if the producers of these lambs could be induced to castrate their ram lambs when they are young. This, he states, would eliminate the large number of cull and medium natives we get, as the ram lambs are after two or three months of age worry the ewe lambs in the flock, as well as themselves, and prevent the entire flock from fattening.

The same authority states that certain sections of the country market as high as 85 per cent of their lambs undocked and uncastrated. Every one who has observed the large percentage of inferior lambs coming to large central markets will agree that the income of sheep producers could be greatly increased by the adoption of these modern practices in sheep management.

There is much evidence to indicate that a shortage of sheep and lambs is impending, and the sheep raisers can ill afford to neglect these simple operations that have such an important relation to profits.

The profit-making possibilities of the small farm flock have never been fully appreciated in this country.

New Zealand, with nearly twice the area of Illinois, has over half as many sheep as the entire United States. This indicates the opportunity for developing the industry in this country, by a substantial increase in the number and quality of our farm flocks.

BIG-TYPE HOGS FAVORITES, SAY NEW U. S. BULLETIN

THERE is no "best" breed of swine but within the different breeds the "big-type" pig is now finding most favor in nearly all parts of the country, says the United States Department of Agriculture in a recent Farmers' Bulletin, 1267 Breeds of Swine, by E. Z. Russell. The bulletin, which is well illustrated with photographs of specimens of all the leading breeds of some minor ones, gives a brief history of the origin of all these breeds now found in the United States, descriptions of their characteristics, and names of the record associations, with names and addresses of the secretaries.

The unusual classification under lard and bacon types is given. The breeds included under the first are the Duroc-Jersey, Poland China, Chester White, Berkshire, Hampshire, and Spotted Poland China. The Tamworth and the Yorkshire are the only breeds of the bacon type grown to any extent in this country and the only ones concluded.

The big-types animals, says the author, are found in all breeds, but are more numerous in some breeds than in others. Owing to an increased demand for cured hams and bacon of high quality, the type of hog becomes a matter of much importance. Hams weighing from 12 to 16 pounds are more likely to cure with high quality and flavor than lighter or heavier pieces. Neither hams nor bacon should carry excessive quantities of fat, but should be "well marbeled." The opportunity for producing meat of this character is greater in the quickly grown big-type than in the distinctly small-type. The most profitable hog is the one that can be grown to the required market weight in the shortest time. Well-bred and well-fed animals of the right type will make the market weight in 7 to 10 months. The market weight is generally from 175 to 225 pounds.

Copies of the bulletin may be obtained free by adressing the department at Washington, D. C.

VETERINARY DEPARTMENT

FISTULA

I have a horse that has a fistula. Can anything be done for it? Is an operation effective?—A Reader, Kalamazoo County, Michigan.

—A surgical operation, properly performed should perfect a cure, however, it depends a great deal upon the location. In conjunction with the operation I would strongly recommend the use of vaccine injections. Employ a good surgeon and you will be ahead in the long run.

COW NEARLY BLIND

I have a cow that went blind about one month ago. I first noticed that she would go around the pasture field with her head down and I finally discovered that she was practically blind. I consulted a veterinary and he pronounced it, contagious abthalmia, and left some eye medicine for the treatment, but she did not improve and she seemed to be in pain when being milked, and in fact she nearly quit giving milk entirely. I again called up the veterinary, and told him the circumstances. He said for me to put her in a pen by herself and fatten her, as I had lost her, as for the use of a cow. Now she keeps turning in circles. When she walks, she never walks straight. She can see a little but very little. She is very thin, but she eats, drinks and chews her cud. Now, I want your opinion about this cow and just what you think I ought to do with her.—R. D., Yale, Michigan.

—It would appear that the veterinarian had given you some sound advice. Evidently the cow's sight has been destroyed as the result of abcess or ulcer formation and the fact that the animal keeps turning in circles would indicate that pressure at least is being exerted upon the brain. If this is true, unless the brain involvement can be relieved which is not probable, the animal will die in a short time.—B J. Killham, State Veterinarian.

SELLING COW SUFFERING FROM LUMP-JAW

Would like to know if it is unlawful to sell for beef a cow that has lump-jaw.—Farmer, Montcalm Co.

—This disease is not ordinarily considered as contagious but it is infectious. Section 10 of Act 181 of the Public Acts of 1919, as amended, states in part, in referring to animals afflicted with contagious, infectious or communicable diseases, "Nor shall any person sell, ship, drive, trade or give away any such diseased animal, any animal which has been exposed to contagion or infection or move or drive any domestic animal in violation of any direction, rule, regulation or order establishing or regulating any quarantine." In making a disposition of an animal afflicted with lump-jaw, it would be advisable to ship to some point where an efficient inspection is maintained. The animal should be shipped subject to post mortem inspection and the examination would reveal whether or not the carcass was fit for food.—B. J. Killham, State Veterinarian.

COWS HAVE BUNCHES ON BACKS

My cows have bunches on their backs with a small opening in them. Would you please tell me what this is and the cause?—Reader, Oakland County, Michigan.

—I would say that these bunches are caused by a parasite, the Hypoderma lienatum. The only treatment is to squeeze out the worms and disinfect the openings with a mild coal tar preparation.—John P. Hutton, Asso. Prof. Med. and Surg., M. A. C.

M. A. C. Big Winner At International Show

WITH the exception of one, the Michigan Agricultural College won more prizes at the International Live Stock Show at Chicago, than any other state institution having entries at the show. Never before has a Michigan exhibitor received as many rewards.

The college won many firsts in the classes entered, one of the most prominent being that which fell to Jupiter, head of the Belgian herd at the college, who was shown in the four year old Belgian stallion class. Other first included: Yearling Belgian mare, wether lambs in both Oxford and Hampshire sheep classes, yearling Ramboullete ewe (Grand Champion), Berkshire hog in the 450-550 pound class (Reserve Champion), and Tamworth hogs in both 350-450 and the 450-550 pound classes, the latter being Grand Champion of the breed. The total winnings of the college were as follows:

Cattle

Aberdeen-Angus: Senior yearling, 7th place, 26 shown in this class; junior yearling, 3rd, 9 shown; herd, 5th, 10 shown.

Hereford: Junior yearling, 6th, 29 shown; herd, 5th, 9 shown.

Grades and Crossbreds: Senior calf, 2nd, 26 shown.

Swine

Poland China: 350-450 lb. barrow, 7th; pen 250-350 lbs. 4th; pen, 350-450 lbs. 3rd; pen of five 7th.

Duroc Jersey: Pen 250-350 lbs. 6th; pen of five 6th.

Hampshire: 150-250 lb. barrow 6th; pen 150-250 lbs. 4th.

Chester White: 150-250 lb. barrow 6th; 350-450 lb. barrow 3rd; pen 150-250 lbs. 4th.

Berkshire: 350-450 lb. barrow 2nd; 350-450 lb. barrow 6th; 450-550 lb. barrow 1st; pen 350-450 lbs. 2nd; Reserve Champion.

Tamworth: 150-250 lb. barrow 2nd; 250-350 lb. barrow 3rd; 350-450 lb. barrow 1st; 350-450 lb. barrow 2nd; 350-450 lb. barrow 3rd; 450-550 lb. barrow 1st; pen 350-450 lbs. 1st; pen of five 1st; Champion Barrow; Champion Pen.

Sheep

Shropshire: Wether lamb 3rd, 24 shown.

Hampshire: Yearling wether 3rd, 11 shown; yearling wether 4th, 11 shown; wether lamb 1st, 10 shown; pen of 3 wethers 2nd, 3 shown.

Oxford Down: Yearling wether 3rd, 9 shown; wether lamb 1st, 6 shown; wether lamb 2nd, 6 shown; wether lamb 3rd, 6 shown; pen of 3 wethers 1st.

Southdown: Wether lamb 3rd, 22 shown.

Cotswold: Yearling wether 3rd 4 shown; wether lamb 4th, 12 shown; pen of 3 wethers 3rd.

Rambouletto: Aged ram 4th, 4 shown; yearling ram 5th, 7 shown; yearling ewe, 1st, 15 shown; flock 3rd, 4 shown; pen of 3 ram lambs 4th; pen of 3 ewe lambs 4th; Champion Ewe.

Horses

Belgians: Stallion 4-5 yrs. 1st, 6 shown; mare 3-4 yrs. 4th, 7 shown; mare 2-3 yrs, 3rd, 6 shown; mare 1-2 yrs 1st, 9 shown; Filly Futurity 1st; Res. Jr. Champion Mare.

Percherons: Stallions 1-2 yrs. 4th; stallion futurity 4th; mare 4-5 yrs. 3rd, 8 shown; mare 3-4 yrs. 3rd, 9 shown.

Clydesdale: stallion 2-3 yrs. 5th, 7 shown; stallion foal 4th, 8 shown; Stallion Futurity 4th.

Carcass Classes

Hogs: 300-400 lbs. 1st, Chester White; 300-400 lbs. 2nd, Berkshire; 300-400 lbs. 3rd, Berkshire.

SHORTHORN DEMAND GOOD

The two white bulls we have advertised in your paper have been sold. Remington & Graham of Caro, Mich., buying the white bull, Meteor and Peter Zimermman & Son, of Traverse City, buying Richmond Choice.

We have just shipped the show cattle home from the International show at Chicago. Were quite successful this year and won the following prizes: First on Junior yearling bull, second on two year old bull, second on best pair of bulls by one exhibitor, fourth on three bulls by one exhibitor, fourth on get of sire class and seventh on young herd. The majority of the young calves in this season's show herd were sired by Sterling Supreme. It was a great misfortune that we had to lose this bull last March.

The demand for good Shorthorns is very keen and we look for a good trade through the winter and spring. C. H. Prescott & Sons, Tawas City, Michigan.

HOLD FIRST FAT STOCK SHOW

FORTY stock raisers of the southern part of Michigan exhibited the choice of their herds at Detroit's first fat stock show conducted last week, Monday to Wednesday evening, at the Michigan Central Stock Yards by the Live Stock Association. The show was conducted in the interest of the production of better beef and prizes to the aggregation of $1,100 were given away. No entry fee was charged and prizes were awarded for health conditions of the car lots regardless of strain or breed. Exhibits totaled 400 head of cattle, 1,000 lambs and 1,000 hogs. At the judging on Tuesday the following awards were made:

Cattle, carload lots—First premium, August and Ezra Lesser, Dexter, Mich., Aberdeen Angus steers; second, R. Binder & Co., Battle Creek, Mich, Herefords; third George B. Conley, Marshall, Mich., Herefords; fourth, C. A. Beamer, Blissfield, Mich., Herefords.

Cattle, single head—First, W. E. Scripps, Detroit, Aberdeen Angus steer; second, R. Binder & Co., Battle Creek, Mich., Durham steer; third, R. Binder & Co., Hereford steer; fourth, August and Ezra Lesser, Aberdeen Angus yearling steer.

Hogs—First, J. .L. Underwood, Britton, Mich., carload of Chester Whites; second, Owosso Sugar Co., Alica, Mich., Duroc-Jerseys; third, point exhibit of A. J. Spittler, Herman Gross and F. R. Clements, Saline, Mich., Poland China and Chester Whites. The prize winners were sold at auction on Wednesday, and the first prize steer brought 80 cents per pound, the highest price ever paid in Michigan for a steer.

SIXTH WEEK OF THE INTERNATIONAL EGG LAYING CONTEST

THE high pen for the week of December 12 comes in the Wyandotte class when the Evergreen Poultry Farm completes the week with a production of 42 eggs.

In the Barred Rock class, Dennison's pen still leads but with a decreased margin. Brummers' still holds second place but Christophel's pen exceeds Kent's pen by one egg.

In the Wyandotte class the Evergreen Poultry Farm has the lead of 7 eggs over Sink's pen who still holds second place. Hollis's pen takes third place with a total production of 138. Murphy's pen drops to fourth place with a total of 135 eggs.

The first three places in the Ancona class remain the same, being held by Van Ralte, Degroot and Beckwith respectively.

The Red pens remain unchanged in their standings.

This week Shaw's pen is again holding first place with a production of 235 eggs which is 10 eggs over the production of Hanson's pen. Taylor's pen has dropped down to third place with a production of 222 eggs. Thompson's and Hollywood remain the same.

The honor at the close of the first month for the individual bird goes to the Barred Rock class when one bird completes the month with a total of 27 eggs to her credit. A pen sister completes the month with a total of 24 eggs; also one in another shares second honor with 24 eggs during the month.

In our pen of White Rocks one bird has a total of 22 eggs to her credit.

Of the nine White Wyandotte pens one bird completes the month with a total of 23 eggs. Three others have a total of 22 eggs each for the month.

In the Rhode Island Red pens one bird finishes the month with a total of 23 eggs. In the White Leghorn class four individuals complete the month with a total of 23 eggs.

Artificial lights are now being used on the contest birds, having been turned on this week. Morning lights are being used and it is expected that lengthening of the days will help bring production up during the next few weeks.

The birds at the contest are receiving a standard ration, having a scratch feed of equal parts cracked corn and wheat. It is fed in the litter twice a day, a light feed in the morning and all they will clean up at the evening feed. The mash consists of the following constituents:

Corn, 30 parts; oats, 20 parts; bran, 20 parts; middlings, 20 parts; meat scrap, 20 parts.

The birds are supplier with grit, shell and charcoal in hoppers and are given two feeds a day of sprouted oats for a green feed. Oats can be readily sprouted where a warm basement or room is available. The grain is soaked for 24 hours; allowed to drain for 24 and it is then spread out on trays to a depth of 2 inches and fed when the sprouts are about three quarters of an inch in length.

"AMERICAN BRED SHORTHORNS"—WHY NOT?

AM enclosing check for renewal of my paper which I enjoy reading on account of the fearless stand you take on any question regardless of who it hits. Long may you continue on that line. You have my best wishes for succes.

As I am a breeder of shorthorn cattle I would like to see a discussion or views of other breeders on a few questions of breeding. I do not wish to find any fault or cast any shadow on our great families of shorthorn cattle as we have some great shorthorns in this state as well as other states, but I am what you might call a full fleged American. I believe we could beat the world if some of our big men as breeders would have the nerve to head a big herd with this heading: "American Bred Shorthorns." I belive we have men big enough and cattle good enough to beat the world. What do you think?—Peter Kunz, Barry County.

FRUIT and ORCHARD

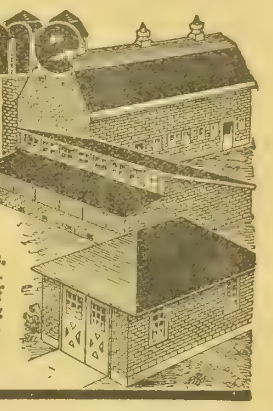
EDITED BY FRANK D. WELLS

NOTES AND COMMENTS

The San Jose scale is not altogether a thing of the past, but it has been robbed of its terrors. Spraying has helped some, but the little insect friends have done many times more. However, the scale did some good while it lasted. It taught fruit growers the importance of attending to business and it put the careless, indifferent man out of the game.

Nurserymen are preparing for an unusually large amount of business this winter. So many fruit tree growers have given up that the amount of stock is small. Orders should be placed early. Apples are liable to be scarce next spring, so are cherries.

The diseases that have been killing the raspberries have been worse than was supposed at first. A shortage in this fruit looks like a certainity. Now is the time to plant, if it is possible to get plants free from disease.



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Investigate for yourself the great superiority of Kalamazoo Glazed Building Tile for permanent, attractive, economical farm buildings. Warm in winter, cool in summer, storm-proof, rot and rat-proof. Save cost of paint and expensive upkeep.

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Positively without a superior in any way. Impervious to dampness. Ample air cells make insulation perfect. Single blocks withstand 40 tons pressure. FREE estimate of cost furnished if you send rough sketch of building wanted. Send us your name for full particulars.

KALAMAZOO TANK & SILO CO.
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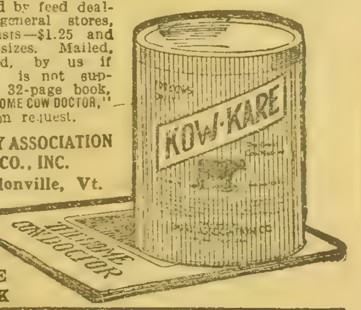

WHY DREAD CALVING?

Take no chances with your valuable cows at this serious period. There's no need of it. If the cow's health is fully up to par, nature will do the rest. Two weeks before calving and about three weeks after, feed the cow a tablespoonful of Kow-Kare morning and evening. Her health will be assured and a strong calf result.

Kow-Kare acts directly on the genital and digestive organs, making them strong and active. Disease has no chance to get a foothold.

Kow-Kare is a sure, safe remedy for the ailments of milking cows, Barrenness, Abortion, Retained Afterbirth, Scours, Milk Fever, etc.

Sold by feed dealers, general stores, druggists—$1.25 and 65c sizes. Mailed, prepaid, by us if dealer is not supplied. 32-page book, "THE HOME COW DOCTOR," free on request.

DAIRY ASSOCIATION CO., INC.
Lyndonville, Vt.

FREE BOOK

Rheumatism

A Remarkable Home Treatment Given by One Who Had It

In the year 1893 I was attacked by Muscular and Sub-Acute Rheumatism. I suffered as only those who are thus afflicted know for over three years. I tried remedy after remedy, but such relief as I obtained was only temporary. Finally, I found a treatment that cured me completely and such a pitiful condition has never returned. I have given it to a number who were terribly afflicted, even bedridden, some of them seventy to eighty years old, and the results were the same as in my own case.

I want every sufferer from any form of muscular and sub-acute (swelling at the joints) rheumatism to try the great value of my improved "Home Treatment" for its remarkable healing power. Don't send a cent; simply mail your name and address, and I will send it free to try. After you have used it, and it has proven itself to be that long-looked for means of getting rid of such forms of rheumatism, you may send the price of it, One Dollar, but understand I do not want your money unless you are perfectly satisfied to send it. Isn't that fair? Why suffer any longer, when relief is thus offered you free. Don't delay. Write today.

MARK H. JACKSON
265J Durston Bldg., Syracuse, N. Y.
Mr. Jackson is responsible. Above statement true.

Raise Silver Foxes
Most Profitable Livestock.
We sell outright or for monthly payments within your reach.
Write NOW.
SILVERPLUME FOXES
Box B-31, Keeseville, N. Y.

HAMPSHIRES

A CHANCE TO GET SOME REAL HAMPshires. Boar pigs, sired by Gen. Pershing Again, Gilt Edge Tipton, Messenger All Over 10th. Gen. Pershing 2nd., and other great boars. Writes for list and prices. DETROIT CREAMERY HOG FARM, Route 7, Mt. Clemens, Mich.

HAMPSHIRES—SPRING BOARS AND BRED gilts from 25 sows to select from. Place your order now or you may be to late. 10th year. JOHN W. SNYDER, R. 4, St. Johns, Mich.

HAMPSHIRE BRED GILTS, $20—$25. Bred sows $30—$50. Guarantee safe delivery. Registered free. C. F. Luckhard. Bach, Mich.

O. I. C.

REGISTERED O. I. C. SERVICE BOARS AND Bred Gilts, priced to sell.
J. R. VAN ETTEN, Clifford, Mich.

SHEEP

REGISTERED SHROPSHIRE YEARLING rams and ram lambs of exceptional quality and size. Priced to sell. Flock established 1890.
C. LEMEN, Dexter, Mich.

SHROPSHIRES—10 REGISTERED EWES. Choice wooly Rams.
DAN BROOHER, Evart, R. 4, Mich.

PET STOCK

FOR SALE—1 YEARLING, 2 SUCKLINGS Shetlend Ponies. Reg. Hampshire, 6 bred ewes. 8 ewe lambs. A bargain. HARRY W. GARMAN, & SONS, Mendon, R. 3, Mich.

PUREBRED SCOTCH COLLIES, SABLE AND white or the beautiful black and white. From heel-drivers. $10 and up.
SILVERCREST KENNELS, Gladwin, Mich.

POULTRY BREEDERS' DIRECTORY

Advertisements inserted under this heading at 30c per agate line, per issue. Commercial Baby Chick advertisements 45c per agate line. Write out what you have to offer and send it in. We will put it in type, send proof and quote rates by return mail. Address The Michigan Business Farmer, Advertising Department, Mt. Clemens, Michigan.

CHICKS

THAT GROW, LAY AND PAY
Barron English White Leghorns, Brown Leghorns and Anconas.

PURCHASE THIS YEAR'S CROP OF CHICKS from tested layers, headed by large vigorous 260 to 288 Pedigreed Males.

CUSTOMERS REPORT BIG PROFITS with these wonderful layers. Write today for our large illustrated catalogue. It tells all about them, it's free.

WYNGARDEN HATCHERY
Box B, Zeeland, Mich.

LAYING PULLETS

A limited number of laying White Leghorn Pullets, these Pullets are in prime condition and will make you a good investment for eggs this winter and in the spring.

A pen of very fine Anconas and one pen of Buff Orpingtons.

White Leghorn Cockerels, English breeding; also White Rock Cockerels.

Let us quote you on these birds.

STATE FARMS ASSOCIATION
202 Chase Building, Kalamazoo, Mich.

PULLETS, HENS AND COCKERELS
S. C. White Leghorns and S. C. and R. C. Black Minorcas. Must make room before cold weather. About ready to lay.
LAPHAM FARMS, Pinckney, Mich.

S. C. RHODE ISLAND WHITES. THOROUGHbred cockerels and pullets for sale.
JNO. A. HARTGERINK, Zeeland, Mich.

LEGHORNS

LEGHORNS
S. C. Buff Leghorn Hens, Pullets and Cockerels. Hens and pullets $2.50 each; cockerels $3.00 to $5.00 each. Show birds a matter of correspondence. LAPHAM FARMS, Pinckney, Mich.

FOR SALE May hatched S. C. White Leghorn Pullets also Rose and Single Comb Rhode Island Red Pullets. VALLEY RIDGE POULTRY FARM, Bloomingdale, Mich.

FOR SALE—R. C. BROWN LEGHORN cockerels, the big kind. These are extra good. $2.00 each, one or more. E. HIMEBAUGH, 462 Marshall St., Coldwater, Mich.

BUFF LEGHORNS—SINGLE COMB. Early Hatched Cockerels.
J. W. WEBSTER, Bath, Michigan

PEDIGREED ENGLISH W. L. COCKERELS 275 to 300 egg record Price $2.00.
JOHN W. MORGAN, Yale, Mich.

RHODE ISLAND REDS

RHODE ISLAND REDS, TOMPKINS STRAIN Both combs. Stock for sale after September 15th. WM. H. FROHM, New Baltimore, Mich R. 1.

SINGLE COMB REDS, DARK RICH COLORED cockerels $2.50 each. Heims strain
LOUIS MORRIS, Mt. Morris, Mich., R. 1.

SINGLE COMB R. I. RED COCKERELS April hatch $2.00. Whittakers Strain. Satisfaction guaranteed. Hampton & Son, R. 1, Bangor, Mich.

WHITTAKER'S R. I. REDS, 200 SINGLE comb red pullets at $2.50 to $5.00 each. Also both Rose and Single Comb cocks and cockerels. Write for calatog. Interlakes Farm, Box 4, Lawrence, Mich.

PLYMOUTH ROCK

BUFF ROCK COCKERELS—BIG HUSKY, healthy, uniform color, the result of years of careful breeding. J. C. CLIPP & SONS, Box M, Saltillo, Ind.

THOMPSON STRAIN BARRED ROCKS—DARK pullets $1.50. Light and dark cockerels $3.00. MRS. FRED KLOMP, St. Charles, Mich.

WYANDOTTES

FOR SALE—150 WHITE WYANDOTTE Cockerels and pullets. All from my prize winning stock of very best American White Wyandottes laying strain. They win for me. They will win for you.
C. W. CASE, Rochester, Michigan

WHITE WYANDOTTES—MARTIN STRAIN Michigan State Fair winners, 1922. Cockerels and pullets $3 to $7.
WAYNE CHIPMAN, Washington, Mich, Route 2.

FOR SALE—HIGH GRADE WHITE WYANdotte and R. C. Rhode Island Red cockerels—$3.00 each until January 1.
C. W. HEIMBACH, R. 1, Big Rapids, Mich.

ANCONAS

S. C. ANCONA COCKERELS HATCHED FROM Sheppards very best, order early, $5.00 each. H. CECIL SMITH, Rapid City, Mich., R. 2.

TURKEYS—DUCKS—GEESE

WHITE HOLLAND TURKEYS OF QUALITY Toms, $15.00, hens $10.00, trio $30.00. Toulouse geese $8.00, gander $10.00, trio $20.00. Order direct from this ad to insure filling order. We ship nothing but No. 1 stock.
ALDEN WHITCOMB, Byron Center, Mich.

We Specialize in White Holland Turkeys and have birds of best breeding to offer of Northern Grown Stock. Toms $10 to $12. Hens $8 to $9. Birds will be well crated and satisfaction guaranteed. Foote's Turkey Farm, Garden, Delta Co., Mich.

FINE, LARGE, VIGOROUS, THOROUGHBRED Bronze Turkeys Wish to lessen my flock. For quick sale Hens $8.00, Toms $10.00
MRS. ROBT. EMERICK, Harrisville, Mich.

Poultry for Profit

FOR BEST RESULTS HENS NEED OUTDOOR EXERCISE

GOOD results in egg production cannot be obtained when the flock is confined during the entire year, according to tests that have been made by the United States Department of Agriculture. The Department has kept a pen of 50 Rhode Island Red pullets and one of 50 White Leghorn pullets confined in poultry houses throughout the year, giving them a good variety of feed, including sprouted oats, and alfalfa meal, the later being used in the mash. These trials have extended over three years and the result has always been the same—lower egg production and excessive mortality.

The Leghorns stood the confinement much better than the Rhode Island Reds, but even in this case the production was too low to be profitable. In the different years the pens averaged 98 to 109 eggs per hen while the other hens on the farm, given good yards or free range, produced from 125 to 160 eggs.

The hens that were confined to the house produced well during the winter months, but in the spring the yield was only fair and during the summer production almost ceased. Many poultrymen keep hens used for egg production confined during the winter months, and this practice is satisfactory if the hens are not used to breeding. Hens kept as breeding stock should be given as much freedom as possible and it is the policy of the Department to let their hens out every day regardless of the weather.

In these flocks that were kept penned up during the entire year there was a death rate of almost 50 per cent in the case of the Rhode Island Reds and 25 per cent in the Leghorn flock. Most of this loss occured during the summer and fall months. Normal mortality in good-sized flocks kept in yards or given free range averages about 10 per cent, according to the Department's experience. The mortality is usually higher with general-purpose breeds than with the Leghorns.

There is no definite amount of yard space that must be supplied for hens, but the larger the yard the better. More hens can be kept on a certain space of light, sandy soil than on a heavy soil because the light soil is more easily cleansed by rain and sunshine. When only small space is available it is advisable to use the double-yard system so that one yard can be used in growing a crop while the other is used for the poultry. Alternating the use of these two yards for the hens keeps the soil in good condition and does not endanger the health of the hens.

DO NOT FEED WHOLE RYE TO TURKEYS

THE writer has before him a situation regarding a flock of turkeys, that came under his observation recently. These turkeys were feeding where a large crop of rye has been thrashed and the turkeys were allowed to range freely about the thrashing ground. The owned of these turkeys owned a fine herd of high class registered Berkshire swine and they too were permitted to pasture around this rye thrashing lot. The turkeys were first noticed to go wrong, first becoming lame and would fall over and laid around for several days and finally die. Not one of the flock escaped. To make a bad matter worse, they were a high class flock of exhibition turkeys that were maturing for exhibition and breeding turkeys.

Very soon the hogs were acting very much the same way. Some of the sows had good litters of pigs, some almost ready to farrow and other gilts of the finest quality. The sows mothering pigs soon failed on their flow of milk, the pigs could be found laying around over the lot weak and unable to get up, in few days they were seen over the lot dead, the sows became lame, could not walk, and some of the fine gilts died. A veterinarian was consulted and he pronounced it as usual genuine hog cholera. I examined both the hogs and turkeys and I found that the hogs were suffering with poison rye ergot, and the turkeys were suffereing from the same poison, but it was acting on their liver. Rye is the most dangerous feed that could be given to brood sows or turkeys. It may not injure any other fowls or animals, but I know from my own personal experience, that feeding rye on two occasions cost us thousands of dollars, before we knew what was the trouble. This convinced me that ignorance was the most costly disease of all. Now, since this trouble with rye, has just come under my observation again recently, I am positive that whole grain rye will kill turkeys, as rapidly as any poison you could give them and if fed to brood sows it will cause loss of pigs, death to the sows and effect the sows so severely that it would take from two to three years for them to get over the trouble if they ever did.

The way we handled our turkeys, when we found out what was the matter, was using a remedy an old pioneer turkey grower gave me for any form of liver trouble in turkeys. This same remedy is great for the so-called "black-head" in turkeys. Go to your druggist and procure crystals of copperas and sprinkle it in the drinking water. Confine the turkeys for a few days until they get their system well charged with the medicine and compel them to drink this water and no other. This was his remedy for rye poison in hogs, except he sprinkled the copperas in ashes and salt. The hogs will eat the ashes and copperas freely and there is nothing that will relieve them as quickly.

However, it's much better to not allow turkey or brood sows to feed on rye, as it is sure death to the pigs and frequently to the sows. However, rye shorts or ground rye make a fine feed for fattening market hogs, but being full of ergot, it is unfit for brood sows and it will not do for turkeys for any purpose. Only two years ago, we purchased some commercial wheat shorts of a feed merchant here in our town and sloped our brood sows. Very soon we noticed, one going wrong, in a day or two we found she had lost her pigs. In having her shorts analized, we found they contained 1-6 per cent rye bran, so that accounted for the trouble we noticed approaching in our herd. We never buy shorts any more except from the flour mill here, that is guaranteeed to be pure wheat shorts.—J. C. Clipp.

MARKINGS OF RHODE ISLAND RED

Please advise me regarding the markings of a purebred Rhode Island Red.—H. M., Mt. Clemens, Mich.

—The proper shade of red that is demanded by poultry judges is very difficult to describe. Rhode Island Reds vary in color from cherry to a deep mahogany brown. At the present time the mahogany color of Red is the most popular. It is easier to eliminate the slate or dark under color if this shade of surface color is used in selecting birds for breeding purposes. The lighter colored reds that may be classified as the cherry, usually show too great a variation in shade of color over various sections of the body. For instance, the hackle or neck feathers usually run light red, the back a shade darker, and the saddle or back feathers will take on a different shade of red. The standard Exhibition Red should be of the same shade of red in every section. The under color should also be a deeper red avoiding the light or dark under color.

The primary feathers of the wings have the upper web red in color and the lower web black. The maintail feathers are usually black in color with a red border. The sickle feathersand coverts that hide the

A New Discovery Makes Hens Lay

Any poultry raiser can easily and quickly double his profits by doubling his egg yield through the remarkable discovery of M. B. Smith, a Kansas City chemist.

Working along entirely original lines Mr. Smith discovered why hens lay less in winter than in summer, and perfected a formula that turns loafers into layers and profit makers.

Within five or six days this discovery, which is called Ditto Egg Tablets, will rejuvenate your flock. Your hens will go strutting and cackling about with red combs and full of life and pep. Every nest will yield an egg nearly every day in the week, which means a lot, since eggs are certaian to sell for 60 cents or more. This is not guess work as over 100,000 successful poultry raisers testify to the value of Mr. Smith's products.

Although different from anything you ever heard of, Ditto Egg Tablets are easily administered by simply dropping in drinking water.

So confident is Mr. Smith you can double or triple your egg yield, that he offers to send two large $1 packages of Ditto Egg Tablets (enough for a season) to any reader who will write for them. If you are satisfied they cost only $1 on this introductory offer, otherwise, nothing.

Send no money—just your name and address to M. B. Smith, 1261 Coca Cola Building, Kansas City, Mo. The two $1 packages will be mailed immediately.

When they arrive, pay the postman only $1 and postage. Use the tablets 10 days. If you are not getting more eggs or are not satisfied for any reason, simply return unused tablets and your money will be returned immediately without question. A big Kansas City bank guarantees the reliability of this offer. Write today before this introductory offer is withdrawn, as you can sell one package to a friend and thus get your own free.

TURKEYS—DUCKS—GEESE

FOR SALE—BOURBON RED TURKEYS African Geese, White Chinese Geese, Canadian Wild Geese, Black Muscovy Ducks, White Pekin Ducks, Mallard Ducks Pearl Guineas. Can furnish either on unrelated. JAMES CALLAGHAN, Tyrone Post Office, Fenton, Mich., R. F. D. 4.

BOURBON RED TURKEYS UNRELATED STOCK
Eggs in season.
THOS. G. CALLAGHAN, Fenton, Mich.

MICHIGAN'S BEST GIANT BRONZE TURKEYS Large, vigorous birds of splendid color from world's best strains. Unrelated stock furnished.
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maintail feathers should be of the same red that is found in every other section of the body. In other words, the birds should be red in every section except in the primary and secondary wing feathers, and the maintail feathers.—E. C. Foreman, Associate Professor of Poultry Husbandry, M. A. C.

DETROIT POULTRY SHOW LARGEST EVER HELD IN STATE

ON Sunday evening of this week the largest poultry show ever held in Michigan came to a close. It was staged in the Light Guard Armory under the name of Detroit National Poultry Exhibit and Rabbit Show and opened on Wednesday of last week. Breeders from seven states gathered at this show and displayed 2,000 chickens and rabbits, the finest ever shown in this part of the country.

In the poultry section Rhode Island Reds and Wyandottes led the field in number exhibited.

The quality of entries this year was well above the average. Some idea of the competition may be gained from the fact that it took the judge more than an hour to name the winner in the Single Comb Rhode Island Red class.

Ewald Schelwe, of Detroit, exhibiting for the first time, showed Buff Wyandottes. He took two firsts, four seconds, a third and a fifth. This is considèred a record for a first time exhibitor. One of his birds, the cockerel, which headed his young pen, was called by the judge in this class "the finest specimen I have ever seen."

An educational display by Prof. M. E. Dickson, formerly of Michigan Agricultural College, Poultry Department, and the University of Wisconsin, included culling demonstrations as well as on the correct methods of feeding the Winter egg production. He explained the latest scientific methods as determined by him at experimental stations. A senic display of manufactured feeds en-route from mill to consumer by use of electric train loaded with minature bags of feed was about the most interesting feature of the show.

POULTRY NOTES

Selection of a Breed

Leghorns, Minorcas, Spanish, Blue Andalusians, Campines and Anconas are egg breeds.

Plymouth Rocks, Wyandottes, Orpingtons, Javas, Dominiques, Rhode Island Reds, and Cornish arè general purpose breeds.

Brahmas, Cochins and Langshans are meat breeds.

Size is sacrificed when we breed for egg production. One of the general purpose breeds is best for the farmer because he usually desires both meat and eggs.

The strain is more important than the breed. Get stock always from some one who has developed a strain bred to lay. The trap-nest is the only test.

FARM MECHANICS

HOW TO STORE EXPLOSIVES

ALL explosives, including caps and fuse, dumorite, picric acid, or dynamite, that are to be kept over winter, should recieve the care necessary to keep them in good condition for use next spring. All of the explosives mentioned will be just as good next spring as they are now if proper storage conditions are provided. Cold, freezing temperatures will not do them any harm provided they are dry when placed in storage.

Water is practically the only enemy of modern explosives. For all practical purposes the explosives available to land clearers these days will keep a long, long time if they are protected from moisture at all times. If they have been kept dry up to this time and are stored over winter in a dry, well ventilated building, they will be as good a year from now as they are today.

It is very treacherous to store explosives in a basement, a root cellar, or any similar damp place. Dynamites do not have to come in direct contact with water to become dampened; they will absorb moisture from the air and the effect is just the same as if water is mixed with them. That is the reason the building in which they are stored should be well ventilated.

Stored explosives are dangerous. Every precaution against possible accidents should be taken. If a farmer must store explosives over winter, he should observe the following dont's:

Don't store explosives and blasting caps in the same building.

Don't store explosives or caps where children or irresponsible persons can get at them.

Don't cover explosives with old dirty rags, straw, etc.

Don't store caps "under the eaves" of a building; they may be disturbed and fall with disastrous results.

Don't fail to remember that explosives will deteriorate if they are not stored in a dry, well ventilated building where snow and rain cannot blow in on them.

WINTER MONTHS OFFER BARGAIN COUNTER TO BUILDERS

MORE Americans are flocking to the building bargain counter this fall than at any time since the war halted home construction. Contractors and architects, usually the first to feel the approaches of cold weather with a slump in business, report a steadily increased volume of inquiries and city officials are writing more permits for erection of homes.

Men in the building industry, from material manufacturers to carpenters and masons, have long known the economic advantage of building in the "slack season." For several years the industry has waged a steady campaign to bring this fact before the public and spread the congested activity of a few months over the entire year.

When the greater portion of building is crowded into seven months, prices reach their highest in the spring and summer when the demand crowds supply. The same situation obtains in the labor phase of the work.

By building in the fall and as far as possible into the winter ,this demand is more nearly proportioned among 12 months of the year; mills and factories are able to maintain a steadier flow of production; raw material is stabilized; workmen are not shifting, jobs are often, and the contractor and architect are able to keep their basic organizations intact, thus decreasing overhead expenses and assuring more satisfactory and efficient work.

Men in the industry see in this autumn's increased building, the prospect of a broadening of the old short season and a consequent stabilization of building costs, in estimating that the certain success of the home owners who are building this winter will prompt many others to take the step in succeeding seasons.

The manufacturers of cement particularly have waged steady campaigns on this one subject, in perfecting methods of using their product in cold weather to the best advantage, and to bring a realization of the savings to be affected before the public.

That such campagns have borne fruit is evidenced in reports for proposed construction from many cities which show a greater volume of all classes of building on the books for fall and winter than ever before.

The sigh on the little weather-beaten shop read: "Five miles to Hillsdale. If you can't read, ask the blacksmith."

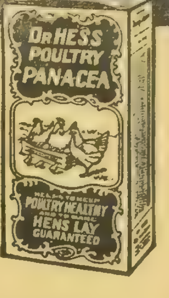
After the tourists had forgotten the laugh provoking sign board, and jolted a mile or so further along, the silent, solemn-faced man from His Majesty's Navy broke upon the silence: "I have it! Bah Jove! Rippin', too! Suppose the beggar wasn't in!"—Judge.

Young Lady: "Were you pleased with the new school, little boy?"

Little Boy: "Naw! They made me wash me face an' when I went home de dorg bit me 'cause he didn't know me."

Leslie had always been very much afraid of dogs. One day, after a struggle to get to pass a large dog on the corner, his mother scolded him for the unnecessary fear.

"Well,' was his reply, "you'd be afraid of dogs if you were as low down as I am."—Chicago Herald-Examiner.



Get Winter Eggs!

See to it that there is song and cackle, scratch and action, going on in your poultry yard.

That's when the eggs come.

Feed

Dr. Hess Poultry

PAN-A-CE-A

See them get busy. It gives hens pep.

Nux Vomica is what does it—that greatest of all nerve tonics. A Pan-a-ce-a hen can't hold still. It's her good feeling that makes her hop around.

Pan-a-ce-a has Quassia in it to make hens hungry. Great combination! One makes them eat—the other helps them digest what they eat.

No dormant egg organs when that combination gets to work on a hen's system. You just get eggs—eggs.

A Pan-a-ce-a hen is always a hungry hen—an industrious hen. She gets off the roost winter mornings, ready to scratch for her breakfast.

Tell your dealer how many hens you have. There's a right-size package for every flock.
100 hens, the 12-lb. pkg. 200 hens, the 25-lb. pail
60 hens, the 5-lb. pkg. 500 hens, the 100-lb. drum
For fewer hens, there is a smaller package.

GUARANTEED

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I spent 30 years in perfecting Pan-a-ce-a.
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A hatcher built as nature would build it. 16 remarkable new improvements. Built round—no cold corners. 1¼ gallons oil, and fill lamp twice to hatch. Amazingly easy to operate—only 3 minutes' care a day.

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C. E. Brooks, Inventor

Brooks Appliance Co., 463G State St., Marshall, Mich.

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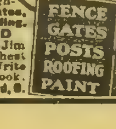

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MARKET FLASHES

MARKET SUMMARY

Bullish reports of crop conditions give strong tone to wheat market. Corn firm. Oats steady. Rye advances. Beans unchanged after recent advances. Supply of butter and eggs small and demand good. Poultry firm but inactive. Dressed hogs wanted. Cattle active and strong. Hogs higher. Sheep in demand.

(Note: The above summarized information was received **AFTER** the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press —Editor)

TRADE AND MARKET REVIEW

Advances in prices for all grains have been in gratifying feature of the developments in trade and industry the past two weeks. Farmers are getting good prices for the new crop of corn, which is being marketed freely, as well as much better prices for their remaining stocks of wheat, corn and rye. The increase in aggregate buying power of the producers is great in actual money, and the effect of the stronger markets has been welcome from a sentimental standpoint as well. The improved agricultural conditions, as reflected in the higher markets, has been coupled with further improvement in general industry.

Money conditions are still favorable and rates for loans are at about the same levels as recently, with ample funds available for commerical and industrial enterprises. Collections are reported good for this time of the year, and there has been an excellent retail trade as a general proportion, although some lines of seasonable goods were slow, owing to the open weather up to this time. For holiday goods the trade reports indicate an excellent business, comparing favorably with any previous recent year.

The steady gain in the steel and iron business, with the exception of a seasonable slowing of trade, has been gratifying. However, there is every indication of great building activity for at least another year, judging from the plans projected, both in way of big building and a continuation of the small buildings erected on a large scale the past year.

The wind-up of the year shows the automobile industry going ahead at full speed, on a scale seldom, if ever witnessed before.

Wholesale trade reports are favorable. In the shoe and leather trade the outlook is said to be much brighter than a year ago. Rubber company officials are more sanguine as to the future outlook also, and believe that in the coming year they will make more progress towards normal than was the case this year.

As an indication of the changed situation in agricultural communities as a result of the better prices prevailing for farm products, agricultural implement manufacturers report sufficient demand from the interior to warrant increases in their production programs, which is the first time this has occurred in some time. Railroads are placing orders for equipment and supplies in substantial volume and this is a favoring feature of the situation.

WHEAT

Wheat prices advanced sharply last week and attained new high points for the season. Strength was more pronounced during the early part of the week than it was later on. A great deal of the buying was in anticipation of better export trade. This, it was expected, would be brought about by some legislation which would be the means of furnishing credit to importing nations. The time of the year is coming when foreign demand for American wheat should improve. Lake navigation is closed and after the Canadian supplies now at eastern ports are exhausted Europe will be forced to depend more upon the United States for grain. By that time Argentine wheat will be on the market in larger quantities, but the southern hemisphere cannot ship enough wheat each week to supply the European requirements. Unfavorable crop news from Argentina, the strength in sterling exchange and the fact that premiums for cash wheat are steadily maintained were also bullish influences. There was a big improvement in the volume of trade. Interest was stimulated by the advance in prices and more general trading was done than for some time. The movement of wheat to primary markets showed some falling off. Trading in cash wheat was quiet.

Prices

Detroit—Cash No. 2, $1.42; No. 2, white and red mixed, $1.40.

Chicago—No. 2 hard, $1.27¼@$1.29.

New York—No. 2 red, $1.38¾.

Prices one year ago—Detroit, Cash No. 2 red, $1.19; No. 2 white, $1.16; No. 2 mixed, $1.16.

CORN

Corn also worked to a new high level, selling at Detroit on Friday of last week at the highest price yet reached by the new crop. The market followed the trend of wheat closely and at times the trade was active. Trading was fair on the closing day of last week. The government report for December gave the total production of the United States for 1922 at 2,890,712,000 bushels. Although this report was in the favor of the bears the market was not inclined to be affected by it. Shipping demand was light last week. Receipts were large but prices held their own as bulls would not allow enough to accumulate on the market to be a drug. Reports state Argentine corn is being offered abroad at lower prices than American. As a whole the market looks fairly good and as long as it continues to hold up in the face of bullish news and conditions as during the past week we need not feel alarmed.

Prices

Detroit—No. 2 yellow, 80c; No. 3 yellow, 79c; No. 4 yellow, 78c; No. 5 yellow, 67c.

Chicago—No. 2 mixed, 76½@76¾c.

New York—No. 2 yellow, 94¼c; No. 2 mixed, 93¼c.

Prices one year ago—Detroit, No. 3 yellow, 52½c; No. 4 yellow, 50½c.

OATS

Oats continue to act in sympathy with wheat and at the close of last week the market was higher and the trading larger. The market received considerable support from commission houses at Chicago. Receipts were somewhat smaller last week and domestic shipping demand slow. The government report for December gives the production of the United States for 1922 as 1,215,496,000 bushels, compared with 1,078,341,000 bushels in 1921 and 1,569,281,000 bu. two years ago.

Prices

Detroit—No. 2 white, 52½c; No. 3 white, 51c; No. 4 white, 49½c.

Chicago—No. 2 white, 47@48c; No. 3 white, 45@46½c.

New York—No. 2 white, 58@58½c.

Prices one year ago—Detroit, No. 2 white, 39½c; No. 3 white, 36½c; No. 4 white, 33½c.

RYE

Trading in the rye market was inclined to be quiet last week but the price at Detroit managed to advance 1 cent during the week, and tone was steady at the finish. The report of the Department of Agriculture on the crop was decidedly bearish. Their final report raised the total production to 95,597,000 bushels, compared with 61,675,000 bushels last year. This year's crop is the largest on record.

Prices

Detroit—Cash No. 2, 94c.

Chicago No. 2, 92c.

Prices one year ago—Detroit, Cash No. 2, 87c.

Official U. S. Marketgram

U. S. Bureau of Agricultural Economics

Washington, D. C., week ending December 16th.

Dairy Products: Butter markets barely steady. Prices at Chicago have declined account accumulation resulting from high prices. Eastern markets ruled steady during week. Some foreign imports coming in, but quanties not large. Closing prices 92-score butter: New York 54½c; Phila. 55⅛c; Boston 54c; Chicago 52 1-8c. Cheese markets firm but trading is slow, partly due to usual seasonal dullness. Wisconsin production holding up well, but cold weather is hampering shipments. Movement of goods from storage light. Dealers view general situation with confidence. Cheese prices at Wisconsin primary market: Dec. 15: Daisies 27¼c; double Daisies 27c; Longhorns and Square Prints 27¼c.

Feed: Western feed markets steady. Offerings for deferred delivery good. Transit shipments in fairly good request. High protein feeds dull especially cotton-seed meal, which is quoted 50c-$1 lower in many distributing markets. Corn feeds in good supply, demand fair. Production most feeds good. Demand from interior in most sections below normal with supplies in dealers hands slightly above normal. Receipts and movement good. Quoted Dec. 15: Bran $23, middlings $22.50, rye middlings $21.50, flour middlings $26, Minneapolis; 36 per cent cotton-seed meal $42.50, Memphis; $43.50 Atlanta; white hominy feed $28.50 St. Louis; $30 Chicago; 34 per cent Linseed meal $49.75 Minneapolis; $52 Buffalo; gluten feed $39.35 Chicago.

Live Stock and Meats: Chicago hog prices were from 25 to 35c lower for the week. Cattle prices were on the downward trend also. Beef steers were 25 to 75c lower. Beef cows, heifers, canners, cuters, bulls and veal calves remained about steady. Stocker and feeders were 25 to 40c lower. Choice fat lambs were steady to 10c lower, feeders strong to 25c lower. On Dec. 16 hogs closed active; steady with Friday's close. Cattle and sheep practically steady. Dec . 16 Chicago prices: Hogs, top $8.20, bulk of sales $7.85 to $8.10; medium and good beef steers $7.50 to $11.50; butcher cows and heifers $3.50 to $10.50 feeder steers $5.35 to $7.75; light and medium weight veal calves $8.50 to $10; fat lambs $13.25 to $15.60; feeding lambs $12.75 to $14.75; yearlings $9.25 to $13; fat ewes $4.75 to $7.75. Stocker and feeder shipments from twelve important markets during the week ending Dec. 8 were: Cattle and calves 92,929; hogs 19,909; sheep 66,798. In eastern wholesale fresh meat markets beef and veal ranged from steady to $1 higher; lamb $1 to $2 higher; mutton firm on good grade, $1 to $2 higher on medium grade, light pork loins $1 to $2 lowed and heavy loins $1 to 50c higher for the week. On Dec. 6, beef, veal, lamb, mutton and pork were practically steady. Dec. 16 prices good grade meats: beef $14.50 to $16; veal $15 to $19; lamb $23 to $26; mutton $11 to $17.

BEANS

Our belief that the biggest share of this year's crop of beans are still in the farmers' hands became stronger when last week the price on the Detroit market made several advances, aggregating 65c in all and the tone of the market was firm right along. It appears to us that dealers want the beans quite badly and they think a sudden spurt upwards of prices would flood the market with beans. Maybe it will, it generally does, but we wouldn't sell all of our surplus at this price nor would we advise holding your entire supply for still higher prices. Beans are worth a pretty good price now and if you can sell at a profit on the present market we say sell, and sell at least enough to take care of your present, and hold the rest if you wish and can afford to wait.

The U. S. Department of Commerce advises the farmers of this country to plant more navy beans. "For," it states, "this nation has become such a country of bean eaters that world markets are searched by American importers, the domestic supply not keeping up with the demand." The Department goes on to say "Rumania is an important bean producing country and the navy bean is the most extensively cultivated and is exported in large quantities. During the first seven months of this year nearly 40,000 tons were exported from that country." This would lead one to believe that the navy bean would be a profitable crop for the American farmer to plant every year—if the hands of the market manipulators could be tied in some way. However, the manipulators have seen the writing on the wall, in the form of cooperative marketing and their power to control the trend of the market is fast waning.

Prices

Detroit—C. H. P., $7.50 cwt.

Chicago—C. H. P., $8.50.

Prices one year ago—Detroit, C. H. P. $4.30.

POTATOES

Prices gained from 5c to 15c in the majority of the large potato markets of the country last week. The market had a stronger tone at shipping points north and east but weaker at western points. Receipts have been small. Contributary causes to the decreased movement are a rather evenly distributed yield, sufficient local supply at many points together with low prices, and the continued car shortage. Movement for the four weeks ending December 9th was nearly 15,000 cars, compared with 28,000 cars the previous four weeks. While shipments during the past few weeks from 18 of the leading late shipping states were heavier than for the corresponding period last year the total movement for these states is about 15,000 cars behind last season to date. The final estimate of the government on this year's crop is 451,185,000 bushels, or more than a million bushels over the final estimate on the 1921 crop.

Prices

Detroit—94c@$1.00.

Chicago—85@$1.00.

Prices one year aga—Detroit, $1.70.

HAY

Prices in the hay market rule unchanged and the tone is quiet with the usual holiday dullness. Receipts are about normal and demand light. The government in its final estimate places the production of all hay in the United States this year at 112,971,000 tons, compared with 97,770,000 tons last year and 105,351,000 tons in 1920.

Prices

Detroit—No. 1 timothy, $16.50@$17; Light standard, $16@$16.50; Light mixed, $16@$16.50; No. 2 timotmy, $14@$15.

Chicago—No. 1 light clover mixed $19.@$20; No. 1 timothy, $20@$22 No. 1 clover, $18@$19.

Prices one year ago—Detroit, No. 1 standard timothy, $18@$18; No. 1 clover and No. 1 clover mixed, $16@$17.

MISCELLANEOUS QUOTATIONS

Detroit, Tuesday, Dec. 19th.

BUTTER—Best creamery, in tubs, 49@50c.

EGGS—Fresh, current receipts, 50@50c; fresh, candled and graded, 53@55c; refrigerator, 28@31c per dozen.

APPLES—Greenings, $1.50@$1.75; Baldwin, $1.25@$1.50; Spy, $2@$2.50; Jonathan, $1.75@$2.25, other varieties, $1@$1.50 per bu; western boxes, $2@$3.

CHESTNUTS—28@30c per lb.

HONEY—Comb, 23@25c per lb.

CABBAGE—Home grown, 75@80 cents per bushel.

POPCORN—4@4½; Little Buster, 7½@8c per lb.

CELERY—Michigan, 30@50c per doz; square, $1.25@$1.50; California celery, Jumbo, 60c, extra Jumbo, 85c@$1; mammoth $1.10@$1.25 per dozen.

ONIONS—$2.75@$3 per sack of 100 lbs; Spanish, $2@$2.25 per per crate.

DRESSED HOGS—90 to130 lbs. 11@12c; 130 to 160 lbs, 10c; heavy, 6@8c per lb.

DRESSED CALVES—Choice, 15c; medium, 12@14c; large coarse, 5@10c perlb.

FURS—Mink, dark No. 1 large, $10; No. 1 medium, $7; No. 1 small, $5. Raccoon, No. 1 large$6; No. 1 medium, $4.50; No. 1 small, $3.25. Skunk, No. 1, $3.75; No. 2, $2.75; No. 3, $1.75; No. 4, $1. Muskrat, large fall, $1.50; medium fall, $1; small fall, 75c.

HIDES—No. 1 cured, 12c; No. 1 green, 11c; No. 1 cured bulls, 8c; No. 1 green bulls, 7c; No. 1 cured calf, 15c; No. 1 green calf, 14c; No. 1 cured kip, 12c; No 1 green kip, 10c; No. 1 horsehides, $3; No. 2, horsehides, $2. Sheep pelts 50c@1.50. No. 2 hides 1c under No. 1; calf and kip 1½c under No. 1.

PRITCHARD'S WEATHER FORECAST
INTERPRETED BY THE STARS

(Editors Note—Read the introduction of our new weather forecaster, on the editorial page 12, this issue. Mr. Pritchard welcomes letters from readers of The Business Farmer and will answer them when addressed return envelope is enclosed, address him in care of this office.)

Week of December 24

The predominating features of this week in Michigan will be the cold weather.

The early days of the week will be especially cold in Michigan; this includes Christmas day which is also expected to be fair.

About the middle of the week the weather will be cloudy and windy continuing until near the close. During this period there will be numerous snow flurries throughout the state.

The temperature in this state will fall again at the end of the week.

Week of December 31

The last day of 1922 and the first of 1923 is expected to be mild in temperature. New Year's day will be stormy with rain, snow and high winds. Precipitation if it falls during the mid-day hours will be rain or sleet or at best, very wet snow but if precipitation falls during the night, late afternoon or early morning, it will be in the form of snow.

These conditions are figured for central Western Michigan and hold good for the southwest part of the state also. For sections to the north, east and southeast most of the precipitation will be snow and not rain.

By Tuesday or Wednesday this rain period will have passes eastward bringing fair, cold weather that will continue for the remainder of the week in Michigan.

"January Thaw" Late in Month

The weather conditions during January, 1923 will average pretty close to normal but we expect many sudden extremes during this period. Most severe storms will occur during first half of month. Temperatures will average low during first two decades of January but during last ten days average temperatures will show marked change to warmer. The usual "January Thaw" will come during the last mentioned period in Michigan.

We believe the greatest amount of moisture in this state, either in form of rain or snow, will occur before the 15th. After that date evaporation will be greater that condensation although the latter condition will not be entirely absent in the Lake region or Eastern states but will break out for short intervals.

WOOL MARKETS

A continuation of very quiet trading, but with prices firmly maintained at ther recent levels, is reported in the middle western markets. Some dealers are looking for an increase in activity before long, but at any rate the tone seems to be one of optimism, as far as the keeping up of present price levels is concerned. Trade is limited not only by lack of insistent buying demand, but also by shortage of stocks. Manufacturers are not inclined to force the market by buying much at the present time, when stocks are so low.

PRODUCE MARKETS AT THE YEAR'S END

The general trend of the market the middle of December was upward. Cabbage and onions were higher while apples and potatoes held firm. Shipments of a dozen leading fruits and vegetables were only 58,025 cars for Nevember compared with 111,303 for the previous month, but were heavier than for November 1921 when 44,725 cars moved. Apples, cabbage, grapes, onions and white potatoes show greatest decrease.

Onion Market

The steady advance of the onion market has been a feature of the month. The rise started the third week in November and continued until Middlewestern Yellow Globes had gained $1 and were selling in leading markets at $2.25-$3 per 100 lb. sack. Eastern stock followed the trend of the market closing at $2-$2.50. Spanish Valencia declined slightly to $1.50-$1.75 per crate. Shipments for the past four weeks were around 1,500 caars compared with 900 for the same period last year.

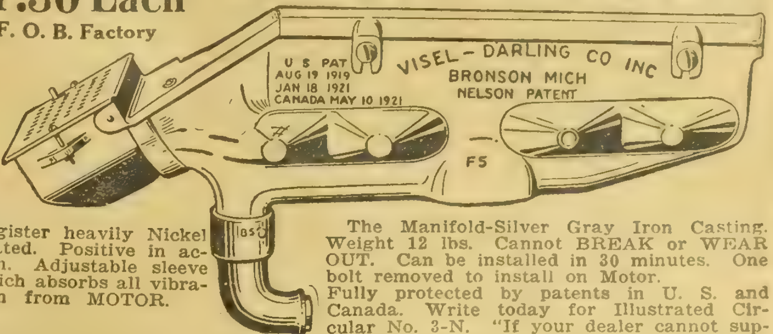
Barreled Apples Firm

firm tone prevailed in apple markets for leading varieties of barreled stock but box apples weakened slightly. New York Baldwins A 2½ advanced to $5 per bbl. in a few markets early in December, but closed slightly lower at $4.24-$4.75 a net gain of 25c. Prices ruled firm at $4 f. o. b. shipping points, while Rhode Island Greenings from cold storage ranged $4-$4.50. Virginia York Imperials strengthened 75c to a close of $3.75-$4.25 and Middlewestern Jonathans held at $4.25-$6 in city markets reaching high point in Chicago. Northwestern boxed stock was slow and weak in most leading markets. Extra fancy Jonathans and Spitzenburgs brought $1.50-$2.50 and Delicious $2.25-$3. Carlot movement decreased rapidly. Movement for the past four weeks was about 5,000 cars from barrel shipping areas and nearly 9,000 from box areas, compared with 1,700 from barrel sections and 7,000 from box States for the same period a year ago.

Cabbage Market Strong

The carlot movement of cabbage decreased about 400 cars a week early in December, but a strengthening market encouraged heavier shipments during the weed ending Dec. 9 they increased to 757 cars, making a total for the month of more than 2,300. New York Danish type stock advanced $10-$12 per ton in eastern markets to the season's high point of $22-$30, while at shipping points prices more than doubled reaching $14-$15 f. o. b. Northern Danish stock advanced in Chicago to $24 and in St. Louis to $35, but receded at the close to $30-$32 in the latter city, and held at $15-$16 f. o. b., Wisconsin points.

Pat: "Have you christened your new baby yet?"
Mike: "We have."
Pat: "And phwat do you call it?"
Mike: "Hazel."
Pat: "Sure, bad cess to ye, with two hundred and twenty-three saints to name the kid after, ye had to go and name it after a nut."



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Cream Separator
Carriage
Corn Planter
Clothing—Men's
Clothing—Women's
Concrete Mixer
Drain Tile
Dairy Feed
Dynamite
Ensilage Cutter
Fanning Mill
Fertilizer
Fur Buyers
Farm Lands
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Furniture
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Gas Engine
Guns
Grain Drill
Horse Collars
Harrows
Harvesters
Hay Rakes
Hay Presses
Hog Oilers
Hog Feeders
Incubators
Lumber
Lighting Plants
Lightning Rods
Limestone, Pulverized
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Pumps
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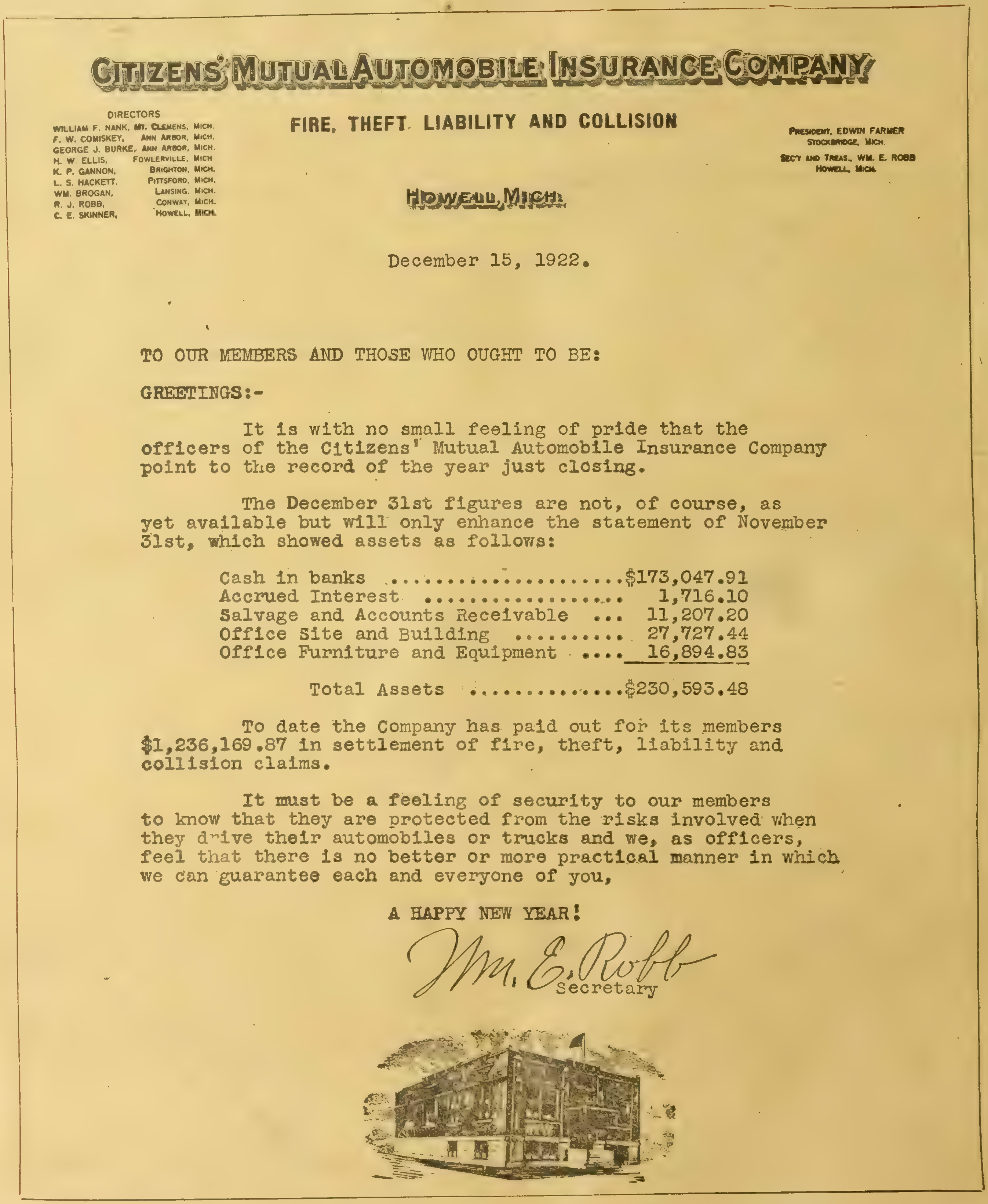

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December 15, 1922.

TO OUR MEMBERS AND THOSE WHO OUGHT TO BE:

GREETINGS:-

It is with no small feeling of pride that the officers of the Citizens' Mutual Automobile Insurance Company point to the record of the year just closing.

The December 31st figures are not, of course, as yet available but will only enhance the statement of November 31st, which showed assets as follows:

Cash in banks	$173,047.91
Accrued Interest	1,716.10
Salvage and Accounts Receivable	11,207.20
Office Site and Building	27,727.44
Office Furniture and Equipment	16,894.83
Total Assets	$230,593.48

To date the Company has paid out for its members $1,236,169.87 in settlement of fire, theft, liability and collision claims.

It must be a feeling of security to our members to know that they are protected from the risks involved when they drive their automobiles or trucks and we, as officers, feel that there is no better or more practical manner in which we can guarantee each and everyone of you,

A HAPPY NEW YEAR!

Wm. E. Robb
Secretary

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W. E. ROBB, Sec'y, CITIZENS' MUTUAL AUTOMOBILE INSURANCE CO., Howell, Michigan

The Michigan
BUSINESS FARMER

An Independent
Farm Magazine Owned and
Edited in Michigan

VOL. X, NO. 10 MT. CLEMENS, SATURDAY, JANUARY 6, 1923 $1 PER YEAR

"Fit to Grace the Equipage of a King!"

Read Frank Roger's Article "Where Your Highway Tax Money Went?"—"The Truth About Henry Ford"—Agricultural and Business Survey—Also other Big Features found in no other publication!

Whatever else may fail

Linking city, village and farm, crossing mountain and wilderness, the telephone system challenges Nature in her strongholds and battles her fiercest moods.

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North, south, east, west—in winter and summer, in forest and desert—the telephone workers guard the highways of communication. Traveling afoot where there are no roads, crawling sometimes on hands and knees, riding on burros, or motorcycles, or trucks, they "get there" as they can.

When Nature rages to that point where few things can stand against her, when property is destroyed and towns cut off, the telephone is needed more than ever. No cost is too much, no sacrifice too great, to keep the wires open. If telephone poles come down with the storm, no matter how distant they may be, no matter how difficult to reach, somehow a way is found, somehow—in blizzard, hurricane, or flood—the service is restored.

Whatever else may fail, the telephone service must not fail, if human effort can prevent it. This is the spirit of the Bell System.

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AMERICAN TELEPHONE AND TELEGRAPH COMPANY
AND ASSOCIATED COMPANIES
One Policy, One System, Universal Service, and all directed toward Better Service

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During the month of January, we will accept new or renewal subscriptions at One Dollar for Two Years ($1 for 2 years),, or $1 for Two One Year subscriptions, one of which must be a new subscriber. A net saving to our readers of 50%, which will be our contribution to a lowered cost of living for the farmers of Michigan and the nearby states.

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Current Agricultural News

STATE TAX LEVY CUT 2 MILLION

A REDUCTION of $2,000,000 or more in the state tax levy next year is forecast in the closely trimmed budget for the coming biennial period, which the budget committee of the State Administrative Board was completing today.

Although no official announcement regarding the budget had been made, it was believed that the total for the fiscal year of 1923-24 would be approximately $2,000,000 less than the state tax levy of more than $17,000,000 this year. Further reductions, in the recommendations of the budget committee, may be ordered by the State Administrative Board before the budget is finally presented to the Legislature next week.

A $30,000,000 Budget

It is understood that the budget total which will represent the recommended appropriations for institutions and departments—with the exception of the State Highway Department which members of the budget committee hope to finance from sources aside from the general tax—will be in the neighborhood of $30,000,000 for the coming two years.

If that sum should represent the total appropriations made by the incoming Legislature for which state taxes would be levied during the next two years it would represent a saving of more than $7,000,000, as the state tax in 1921 was more than $20,000,000 and in 1922 more than $17,000,000.

Two years ago the Legislature was presented with requests totaling nearly $70,000,000, and the Legislature allowed but half the amount requested. The budget, as it will be presented to the Administrative Board, represents only the tax clause appropriations. In addition the corporation tax brings in something like $6,000,000 a year, which goes into the general fund. It is reported that Gov. Groesbeck will urge the Legislature to remove the limit of $10,000 provided in the Corporation Tax Law and if the Legislature makes the change the revenue from that source will be considerably increased. Whatever amount it is increased will probably mean a corresponding cut in the state tax.

Closing General Fund

The needs of the highway department are understood to constitute the principal worry of members of the budget committee. The department, it is said, would like a total of about $8,000,000 or more a year for maintenance and the creation of a sinking fund for highway bonds. It will get $3,500,000 or $4,000,000 in 1923, from the automobile license fees. In addition, if its requests were to be met, it would take $4,000,000 or $5,000,000 from the general fund. That this amnout will not be taken from the general fund, however, seems to be the prevailing opinion among members of the committees. A majority of them believe the legislature will enact a gasoline tax or boost the automobile license fees sufficiently to provide the needed money to take care of the highway department.

The prospective $2,000,000 reduction in the state tax levy is based on the state tax as it now stands. The reduction may be much greater —from other causes taken the budget—before the Legislature concludes its deliberations. It will have tentatively before it a suggestion from a special tax commission that it abolish, or nearly abolish, the state property tax, and operate the state with the specific tax money now being paid into the primary school fund—about $12,000,000 a year—and the corporation tax—about $6,000,000 a year.

NEBRASKA FARMERS RUN OWN ELECTRIC PLANTS

NEBRASKA farmers, having failed in getting the electric companies of the state to supply them with light and power at a reasonable rate, have undertaken to do it themselves. The first of a number of farm electric companies to be organized under a new law has just received the approvel of the state railway commission.

The farmers are mortgaging their homes to get current but doing it under the modern way of issuing bonds. By petition of 10 per cent of the farm land owners in any described area the county board is obliged to order an election at which is submitted the question of whether the district shall bond itself to build a transmission and distributing system. If a majority votes in the affirmative all that is necessary is to invoke the powers of the state to get the current.

CHICAGO GETS TEN CENT MILK

THANKS to the Milk Cooparative Marketing Company the people of Chicago are saving thousands of dollars monthly on their milk bill. The Cooperative has broken the grip of a consciousless milk trust, which was recently found to be dumping good milk into the sewer in order to keep up the price by offering the storekeepers in the great city any quantity of milk to sell to their consumers provided the price is kept down to the cooperative level, which is two cents a quart less than the combine's prices. Nearly 200 grocery and delicatessen stores have taken advantage of the offer of the Milk Cooperative and are now selling pure, rich milk for ten cents a quart.

EIGHTH WEEK OF EGG LAYING CONTEST

THE week of December 26, concluded the second fourth weekly period. The standing of the pens for this period were as follows:

Evergreen Poultry Farm, W. W. 170; W. H. B. Kent, B. R., 155; J. A. Hanson, W. L., 149; Robt. Christophel, B. R., 147; H. E. Dennison, B. R., 146; Carterloa Farms, W. W., 143; F. W. Sinks, W. W., 139; L. W. Alstine, B. R., 137; Brummer's Poultry Farm, B. R., 136; Hollywood Poultry Farm, W. L., 131; H. A. Keister, W. W., 131, and E. E. Shaw, W. L., 130.

While Evergreen Wyandottes have made a remarkably good record for the month the high pen of the contect is still in the Leghorn class wren J. A. Hanson's Leghorns finished with a weeks total of 43 eggs; 3 eggs below Evergreen bringing their total up to date of 303 eggs. Shaw's pen of Leghorn's have dropped to second place with total production of 296 eggs. In the Leghorn class Hollywood's pen remains in third place, Taylor's pen fourth.

Dennison's Barred Rocks still lead this group with 279 eggs which also puts him fourth place for the entire contest. Kent's pen with a production of 269 moves up to second place and holds sixth place in the contest. Brummer's Poultry Farm dropped to third and Christophel remains in fourth with 257 eggs.

The exceptional good record main-[illegible] by the Evergreen Poultry Farm has put this pen in the lead in the Wyandotte section. The production of the Ancona class increased very slightly but the birds in this section are showing considerable improvement and we are expecting to see an increase here before very long.

Dunnings Reds maintain their position at the head of the Red section and Mrs. Travis' pen beat the College Reds to second place when they scored 25 eggs for the week and a total to date of 177.

The Wyandotte section is leading the contest with a 40% production. The Barred Rocks show 4% increase over last week. The Anconas a slight increase, the Reds and Leghorns show a slight decrease and the miscellaneous breeds are holding their own.

TO MARKET POULTRY AND DAIRY PRODUCTS

Co-operative dairy marketing associations of the United States plan to set up a national sales agency for collective selling of butter, cheese, condensed milk, eggs and poultry, E. B. Heaton, director of the dairy marketing department of the American Farm Bureau Federation, announced recently. A committee will meet in Chicago Jan. 16, to work out details for establishing the cooperative sales force. Branches are planned for all large consuming centers, he said.

SATURDAY
JANUARY 6th,
1923

VOL. X, NO. 10

Being absolutely independent our columns are open for the discussion of any subject pertaining to the farming business.

"Hew to the line, let the chips fall where they may!"

The Michigan
BUSINESS FARMER

"The Only Farm Magazine Owned and Edited in Michigan"

Published Bi-Weekly
Mt. Clemens, Mich.

$1 PER YEAR

Entered as second-class matter, August 22, 1917, at the post office at Mt. Clemens, Mich., under act of March 3rd, 1879.

Says Gasoline Tax Will Solve Highway Problem

F. S. Newton, of Saginaw County, takes Issue with Horatio Earle who Advocated One Mill Property Tax as More Equitable

The Business Farmer has opened its columns to a general discussion of the Gasoline Tax proposition believing it is of the utmost importance to the tax-paying farmers of Michigan. Mr. Earles article referred to appeared in the December 9th. issue on this same page. Now what do you say?

"FARMER" Earle is worried lest the State Highway Department have to go to the legislature and "beg for money."

He says we support the University of Michigan to educate the rich and propose to exempt the rich from taxes on their land. Who owns the big cars by the way? The hard pressed farmers. They are not, generally speaking sporting Cadillacs, Winton's and Paiges. On the other hand who are the majority of the land owners? The dirt farmers—not the dude farmers, like the distinguished advocate of an extra mill tax on real estate.

Considerate isn't it proposing to the discouraged farmers to sell or give away their property if unwilling or unable to pay their over-weening taxes.

Again the city "farmer" falls over in his attempt to excoriate the gasoline levy in one breath as discriminating in favor of Henry Ford and against the small car owner and in the next declaiming it is a thrust at the auto industry! That's the cat let right out of the bag. The oppressed motor manufacturers aren't concerned lest the owners of Fords pay a dollar or two more a year to help in the highway upkeep and the buildings. Oh, No! They're bothered about the possible check that might be put on the auto industry by requiring it to stand on its own feet and pay for the roads itself demands. Let them, in the words of the noble Roman, "if they don't want to pay, sell or get out!"

Too bad! That army of gasoline collectors! How about the swarm of employees, runners up and runners down, of our State and County highway departments? Surely Horatio should be better informed than to imagine such mountainous difficulties in a tax collected at its source.

In this connection note that Ohio and several of our neighboring states have adopted a gasoline tax. That means that the Michigan people who drive across the state line pay for the roads of Ohio, etc. Yet we are urged to impose no return tax on Ohio tourists who travel over Michigan's highways.

As to fairness, why should the owners of land, who may not own a car, pay for the hard surface type of roadway heavy cars require, while the benevolent owners of limousines and 8 ton trucks are let off free? Shouldn't those who dance pay the fiddler? Don't for heaven's sake compel the poor farm and home owners to fiddle and dance at the same time.

Mr. Earle is a Detroit manufacturer. He farms by proxy and evidently is in blissful ignorance of the desperate plight the agriculturalists are in.—I would like to take him over a six-mile section of a trunk line in Arenac County which traverses light land. Four residents only along the six-mile stretch have the pleasure of owning either Fords or cars. Several live in log cabins. A considerable portion have been compelled to borrow money to meet recent taxes. Some are also in the district of the Covert road and levied on for that. Of course they have the priviledge of seeing many fine cars whiz by their doors, kill their chickens and menace their children. Perhaps this show is worth paying for. But in the name of common sense is there to be no limit? Who then will buy the automobiles of Detroit factories. The fact is we are rapidly reaching the precipice. And such thoughtless, reckless urging of extravagant highway construction as our state is now rioting in will soon drive us over. Once the farmers of Michigan are forced to quit, we'll then realize that agriculture was indeed our basic industry. We can't go on much longer pyramiding property on a single industry, and that of a mushroom sort. As between the motor industry and agriculture it is plain which way "Good Roads Earle" leans. He says, "Let the farmers sell out." How can they when all want to sell and no one to buy? Where have his eyes been as he tours about in his fine car, that he has failed to note the pathetic "For Sale" signs on farm after farm and if he ever drove off the trunk line he'd see enough abandoned farms and not bad ones either, to set him thinking in a more prayerful mood. When the American farmer's back is broken what do you suppose will happen to the automobile and tractor industry.

"Good roads for the farmer" has been a very much abused shibboleth. The program of our State Highway Department has been to put all the emphasis and spend all the public money on trunk lines with no regard to farm and marketing needs or with those needs treated as purely incidental. Why is it that very many roads thru our best farming country are now, after this orgy of spending, in worse condition than in the old dirt road days? Because the highway taxes are so over-burdensome that townships have felt it unavoidable to cut off at the one point possible and in ever so many townships of Central and Northern Michigan no work has been done on local roads for the past two years.

What benefit having a $35,000 a mile concrete boulevard that the produce can only reach by being hauled thru trackless mud? Again these pieces of state built pavement thru our up state villages, which our Highway Department designed to ornament the Dixie and other snake trails, are of no use to anybody-except the few contractors who were enriched by the building. When the farmer with his wagon reaches this insult to his intelligence, his haul is done. There is no escape from the conclusion that our state highway officials have been guilty of wilful extravagance or worse. Had the bond issue been suspended and the petition of over 100,000 real Michigan farmers for a road holiday been considered by our State Administrative board, we should for one thing have witnessed a big come down in the prices demanded by the little pool of road contractors. The farming industry would have had little chance to recover from the smashing blows of 1920, and our State would not suddenly find itself saddled with a billion dollar load of highways built by federal, state and county appropriations, but everlastingly costly and difficult to maintain. We have simply gone highway mad.

But now the question is. How are these collosal works which were expensively, and as a rule, poorly constructed to be kept in repair? Ex-officio Eearle shouts, "Let the land owners foot the bill. That's nice. They paid for these monumental works which have made many a small man great and lined up in favor of the road officials all the politicians thru the pork-barrel allotment of bits of pavement to every little town. Yes, dump on to the hapless land owners more taxation. They're getting off too easily. But don't, for goodness sake, rub the fur of the foreign tourist or the commercial truck operator the wrong way. They are performing too important a public service speeding with heavy loaded cars over our costly roads. They haven't had enough unearned favors with their snouts in the public throug and should be freely permitted to get their feet in too.

What does H. S. say to the declaration pust passed by the Ohio State Grange that land is too heavily taxed?

The fact that Brother Earle and the writer are both non-resident farm owners. But the writer, not being a wealthy manufacturer, not a high salaried state official (nor ex-official) and also living out of the confines of the metropolis, happens to be closely in touch with the hard working tillers of the soil. No one, who knows their harassed condition at the present time, can fail to be impressed wth the fact that their limit has been reached. After years of hard sledding and a complete smash in prices of everything they produce with no corresponding drop in the prices of what they have to buy, they now see skyrocketing taxes. They cannot stay on the farms and continue to produce if it continues.

What it means to our institutions to have our land workers menaced with extinction may be faintly imagined when we recall that in every past crisis in our Country's history the American farmer has been the bulwark of liberty and of law and order. They have been the saving element in cosiety, without which it would surely have gone on the rocks. What now is to save our social fabric most seriously jeopardized as it is by national and international strife, if the independent yeomanry of our nation is wiped off the slate—or forced into factory jobs? Is the motor industry, with its breeding of discontent, luxury and laziness?

Ill fares the land, to hasten ills a prey,
Where wealth accumulates and arts decay,
Princes and lords may flourish and may fade,
A breath can make them as a breath hath made,
But a bold peasantry, their country's pride,
When once destroyed, can never be supplied.

It is a brilliant flash of imagination to conjure up an army composed of all owners of motor vehicles. "Richmen, poor men, beggar men, thieves; lawyers, doctors, merchants, chiefs," with the enraged washerwoman of our households bringing up the rear, and all this motely host flourishing bludgeons and broomsticks over the oppressive penny tax on gas. But a clearer insight into prevailing public sentiment of the times would have suggested that a movement like the gasoline tax which has in the short space of two years been enacted by 18 states and is being urged by farm organizations throughout the country is considered eminently just by a great number of owners of motor cars as well as plain citizens generally, and like the illustrious old Roman from whom he took his name, Horatio is apt to find himself left alone to defend the bridge.
—F. S. Newton, Saginaw, Michigan.

Says Feeding Potatoes Will Save Market

WHAT is the matter that we farmers can not find some way to take care of the over-production of potatoes this year? Are there not men among us that can start a successful feeding campaign?

We are told by our Experiment Stations that potatoes are worth from 25c to 30c per bushel for feeding to cows. Now if people do not want potatoes to eat suppose we turn them into butterfat. We surely cannot lose anything by feeding them they are only worth about 18c a bushel and the chances are that they will not be worth much more unless we do feed them.

If everyone would feed obout four bushels out of every eight they have there would be no potatoes to throw out next spring and we probably would get 50c or 75c a bushel for what we have to sell.

I am feeding all I can and intend to feed as long as they stay below 30c a bushel. Now if everybody would feed we could sell at a profit instead of a loss. Other businesses stick together and make it pay, why can't we? Come on farmers, let us feed. W. N. Stephens, Edmore, Michigan.

Hints on Feeding Potatoes to Livestock

ACCORDING to the U. S. Department of Agriculture, potatoes may be fed to livestock in small amounts in connection with other feeds.

While they may be sliced and fed with dry feeds, it is best to cook them before feeding, as heavy feeding of raw potatoes will cause scouring. Under ordinary farm conditions, boiling or steaming is the most economical method of cooking the potatoes for livestock. Steaming increases their feeding value about 60 per cent.

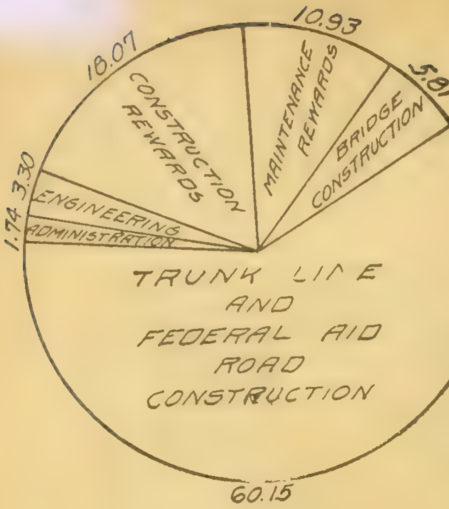
The low protein content of potatoes makes it advisable to feed them in connection with feeds that are relatively high in protein content.. Feeding investigations indicate that when potatoes are fed with other feeds to balance the protein requirements, from 350 to 450 pounds of cooked potatoes have a feediing value equal to about 100 pounds of corn, while from 500 to 600 pounds of raw potatoes are required to equal 100 pounds of corn.

Horses—Potatoes are palatable and well suited for use as a horse feed. It is safe to feed as high as 15 pounds a day to work horses. They are equivalent to aboutone-third their weight in hay. When potatoes are fed, a legume hay is a desirable supplement. If a grass hay, such as timothy is fed, the ration should contain feeds rich in protein, such as concentrates, legume hay, etc. It is advisable to chop the potatoes to lessen danger of chocking.

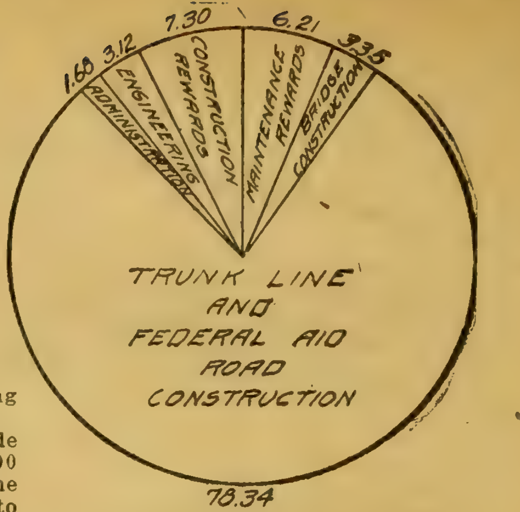
Cattle—Cooked potatoes may be fed to cattle at the rate of from 25 to 30 pounds a day per 1.000 pounds liveweight. The allowance should be lessened somewhat if they are fed raw, on account of their tendency to produce scouring. A heavy allowance of potatoes, however, produces milk and butter of poor flavor.

Where Your Highway Tax Money Went

The Question now uppermost in every Taxpayers' Mind is answered by Frank F. Rogers, State Highway Commissioner



How your 1921 dollar was spent.



Your 1922 dollar bought more roads.

MOST State Highway Departments started from small beginnings, probably none of them smaller than the Michigan Highway Department when it was first organized, July 1st, 1905. It then consisted of a Commissioner with a salary of $2,500 a year, a Deputy at $1,800 a year and a stenographer at $1,200. That year there was an appropriation of $30,000 of which $10,000 was for departmental expenses and $20,000 with which to pay state rewards on roads for one year, but since only 20 miles of roads were built that year there was plenty of money to meet all the demands for state rewards and some money to spare.

It is also of interest to note that as late as 1912, the appropriation for departmental expenses had not exceeded $10,000 a year. It is worthy of note, however, that the Legislature of 1911 passed a budget allowing the Department $15,000 a year but $5,000 of this was cut off by the Governor when he signed the bill so that for the first eight years the department was obliged to scrimp along with this small amount which covered salaries, traveling expenses and other departmental items.

This caused the Commissioner to remark in 1913: "The work of the Department has necessarily increased in proportion to the number of miles constructed but on account of the fact that no greater appropriation is available for the expense of the Department than there was when organized, it has been impossible to give the Commissioners building roads, the detailed instruction which is for the best interest of the State and the community where the road is being built. Many counties are adopting the county road system, nine during the past year, making 44 in all. Many of these are bonding for large sums for improving roads and unless careful supervision is provided to direct construction, much money will be wasted."

This condition of things existed until the Legislature of 1913 made an appropriation of $18,000 for departmental expenses for the year ending June 30, 1914 and $20,000 for the following fiscal year. In addition to that the Legislature of 1913 passed the State Trunk Line Act which made appropriations of $200,000 for the first year and $300,000 for the second year for the purpose of paying trunk line rewards and building trunk line bridges and "paying salaries and running expenses incurred by this Act." This was the beginning of great things for the Highway Department and also marked the beginning of trunk line highway and bridge construction on a scale heretofore thought to be impossible in Michigan.

I have before stated and wish to again repeat my regrets that this Trunk Line Act was not called the Alswede Act, thus giving due recognition to Senator Alswede through whose untiring efforts in the Legislature it became a reality.

Under the provisions of this Act the Highway Department expanded rapidly. The Commissioner was instructed to "cause preliminary surveys to be made and establish routes of the several divisions of the state trunk line highways herein provided and he is empowered to employ such engineers, clerks and other employees as may be necessary to carry out the provisions of this Act," which was given immediate effect.

The State Highway Commissioner was also directed "to design all bridges and culverts and construct all bridges greater than 30 ft. clear span on state reward trunk line highways," which made the employment of a bridge engineer an immediate necessity.

In this connection it is again worthy to note a recommendation of Mr. Earle, first State Highway Commissioner, in the first Biennial Report of the Department, which was as follows: "Give the State Highway Department the means to employ a first class bridge engineer who will save the state, through the townships and counties, many times his salary and expenses each year."

As the result of the expansion of the Department made necessary by these new laws, at the close of the fiscal year 1914, the Department had 35 employees and a monthly payroll amounting to $2,673.52.

In 1915 the Legislature passed the so-called Covert Act, Act 59, P. A. 1915, which provided an additional method for improving and constructing public highways, paid by a special assessment upon the lands benefitted thereby. Under the provision of this Act, petitions come direct to the State Highway Commissioner for all inter-county roads, and also for all roads that might be petitioned for in counties not working under the county road system. At present all of the counties of Michigan have adopted the county road system and all are functioning under it except Oceana and Benzie which counties have never put the county road law into operation.

In 1916 the first Federal Aid Act in recent years was passed by Congress which was followed by the Michigan State Federal Act passed by the Legislature of 1917. It was impossible to begin actual construction of Federal Aid roads until the Michigan Act was passed assenting to the provisions of the Federal Government and also appropriating funds to meet Federal money.

This first Federal Aid Act made a cash appropriation of $75,000,000 which was to be divided among the several states, one-third according to area, one-third according to population and one-third according to post road mileage. This provison brought to Michigan nearly three per cent of the Federal appropriation or a total of $2,173,510.04

Under the provisions of this Federal Aid Act and all subsequent acts up to this time, the states must match Federal money, dollar for dollar, in order to secure it but under the terms of this particular Act the maximum that could be received from the Federal Government was limited to $10,000 a mile.

While Michigan, under the provisions of the Trunk Line Act, had been building trunk line bridges and even now was constructing roads under the provisions of the Covert Act, this Federal Aid Act made it manditory that the states, in order to secure this money, should take active charge of the construction and maintenance of all roads in which the Federal Government participated. In order to comply with these requirements the Legislature of 1917 provided an appropriation of $225,000 for the fiscal year ending June 30, 1919. This Act placed much responsibility and all of the details of construction upon the state and the department grew rapidly until in June, 1917, it had 67 employees and a monthly payroll of $5,965.18.

During February of 1919, the Federal Government passed another appropriation of $200,000,000 which made available for Michigan $5,786,785.48. By this time, however, the state began to see the necessity of completing the state trunk line mileage of Michigan which now covered nearly 6,000 miles under the provisions of the Trunk Line Act of 1913 already mentioned in the article.

It became apparent, however that if the Federal funds were to be matched promptly and if the trunk line system of the state was to be completed within the lifetime of the present generation, that work on these roads would have to proceed more rapidly.

Accordingly the constitutional amendment was submitted to the people at the April election of 1919 which provided that the Legislature might issue not to exceed $50,000,000 in bonds for highway construction. This money, for the most part, was to be used in the building of trunk line roads and bridges including such roads as the Federal Government was willing to participate in.

The bond issue carried by an overwhelming majority at the April election of 1919 which was followed by the passage of the so-called Aldrich Act, Act 19, P. A. 1919, which provided among other things that "all trunk line highways established under provisions of Act 334, P. A. 1913, as amended, shall hereafter be constructed, maintained and improved in accordance with the provisions hereof under the direction and control of the State Highway Commissioner.

The Federal Aid Act originally passed in 1917 was also amended so as to co-ordinate with the Aldrich Act just referred to, both of which provided for a certain amount of financial participation from the counties on all trunk line and Federal Aid construction, the financial assistance from the counties being the same whether the roads were constructed wholly from the bond money or partly from the bond money and partly with Federal Aid.

These laws are still in force, having been amended slightly by the Legislature of 1921 but still call for assistance from the counties as follows: Counties with a valuation per trunk line mile of less than $50,000 pay only five per cent of the cost of building trunk line and Federal Aid roads while counties with a valuation of over $50,000 per trunk line mile pay 25 per cent of the cost of construction of such roads. Counties of intermediate valuations range in between these extremes, the rise being by steps of 2½ per cent in each case as the valuation increases.

A third Federal appropriation of $75,000,000 was made in November, 1921, which made available to Michigan $2,249,532.43 of additional Federal funds, the total Federal funds being more than $10,000,000.

Again in June, 1922 the Federal Congress made a fourth appropriation of $50,000,000 of which Michigan's share was $1,499,688.29. This Congress also tentatively agreed upon an additional appropriation of $65,000,000 and $75,000,000 for succeeding years but this money will not be available until it has again received the approval of Congress.

Under the provisions of the several Acts above referred to, viz. the Covert Act, the Federal Aid Act and the Trunk Line Act, the State Highway Department has already placed under construction 2,821 miles of road at a total contract price of $46,886,421.68.

It goes without saying that these millions of dollars worth of road construction in charge of the Highway Department each year during

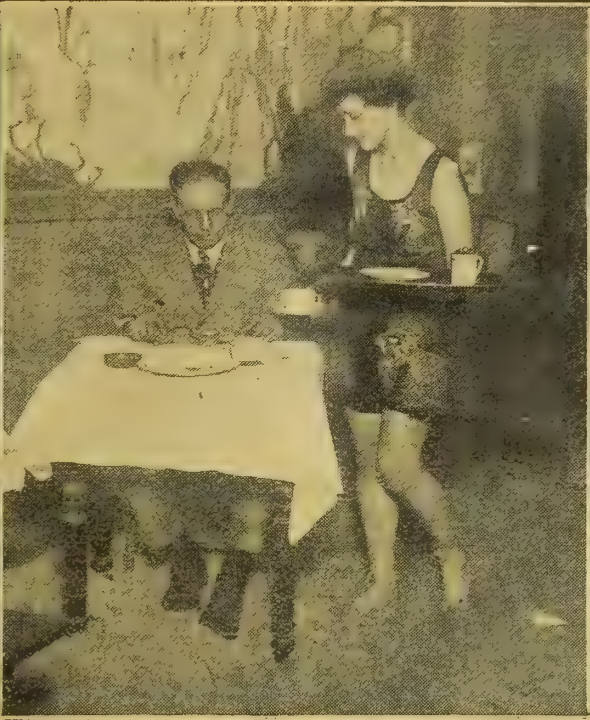
(Continued on page 19)

Fine stretch of paved road on M-11 in Ottawa county Mich., just south of Grand Haven.

View along M-11, about 2 miles north of Twelve Corners, in Berrien county.

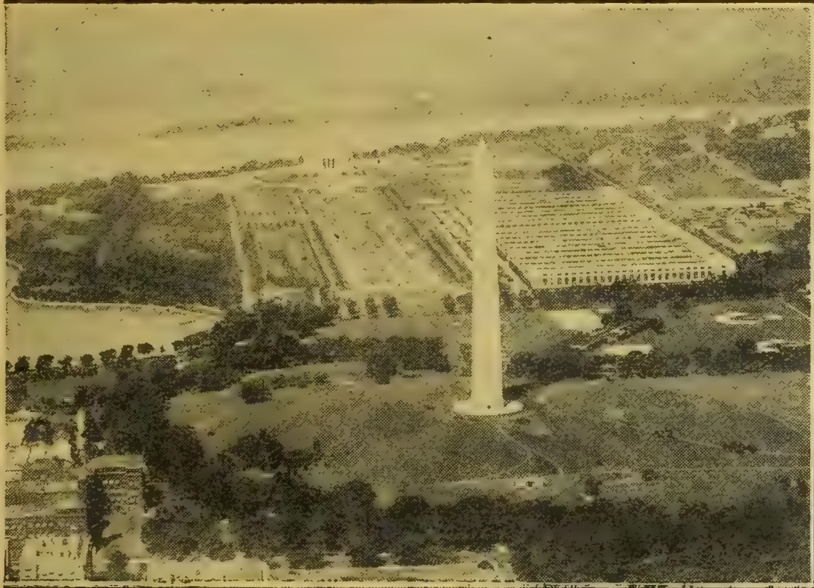
PICTURES FROM FAR AND NEAR

Here is the Loxodoncyclotis.—This "Pigmy" elephant arrived in New York on board the S. S. President Van Buren, and is seen with his captor, Captain Edward Cunningham. He is owned by the Bronx Zoo, New York City. He is one of the only two in captivity, and weighs 400 pounds.



Sand, Mermaids, 'n everything.—The Pollywog Restaurant has taken Greenwich Village, N. Y., by storm, for this new eatery on West 4th St., boasts of a sand floor; charming bathing beauties await your slightest wishes. There are beach umbrellas, fish on the walls, everything to give you that salt air tang.

Latest portrait of Italian Premier Mussolini.—Taken at Lausanne, Switzerland, where he has been attending the Peace Conference. Mussolini is reported to have stated that he had no intention of letting Germany get away without paying her war debt to Italy.



Seeing Washington by Airplane.—Everything centers around the Washington monument. On the lower left hand corner is the Bureau of Printing and Engraving, in the background, to the right, is the Navy Department and Munitions Building.

What is the pig population of the U. S. A?—Replies to 500,000 questionnaires distributed by rural mail carriers in a nation-wide pig survey are beginning to pour into the Department of Agriculture. Photo shows girls at work counting the "Pig Census."

David A. Brown, former Detroit newsboy, now a nationally known philanthropist, whom we mentioned last week editorially, as the man who told of the frightful conditions in Russia, after his six months of investigation there.

"Tiger" visits Independence Hall.—Georges Clemenceau, "Tiger of France," places his hand on the Liberty Bell in Independence Hall, Philadelphia, Pa., where he pleaded the cause of his country. His last speech in America was at the A. F. B. F. convention.

Smallest man in the world.—Major Mite, (Clarence Howerton) is 28 inches tall and weighs 19 pounds and is 18 yeaars old. Major Mite is two inches shorter than Tom Thumb. At birth he weighed 9 pounds.

(Copyright Keystone View Company)

The Truth About Henry Ford

By Sarah T. Bushnell

Early Struggles—Ford's Failures—Organizing the Present Company

MR. HENKY FORD

(Continued from Dec. 23rd issue.)

Before long others than Mr. Ford were convinced that the horseless vehicle was a practical commercial proposition, and a company was organized in Detroit with Mr. Ford as the chief engineer. But at the end of the year little progress had been made in perfecting the machine and it was decided to let Mr. Ford go and employ another draftsman. This company later became the Cadillac Motor company. Mr. Ford's car was returned to him and the inventor organized a company of his own. This second venture likewise proved a failure, but reverses served only to strengthen Mr. Ford's confidence in the future of his invention.

He decided to perfect a racing car, sold his old machine and devoted all his energies to devising a car that would establish a speed record. Rumors of his new plans spread and many Detroiters visited the Ford shop to inspect the new marvel—that was to be. Tom Cooper, the champion bicycle rider, visited Detroit and offered his cooperation and financial assistance. Cooper later was killed in an automobile accident in Central Park, New York. An interesting story of this period has to do with one "Coffee Jim" and his financing the Ford racer. The story, sad to relate, is unfounded; a man who operated a night lunch car in Detroit took a great interest in Mr. Ford's work, but advanced him no money. The financing of the racer, which was called 999, came from the farms in Springwells and Dearborn township.

Mrs. Ford has vivid recollections of that period. "Expenses were so great that I thought we never again would have any money for ourselves," she said.

Work on the car went steadily on, for a race had been arranged and Mr. Ford was eager to win it. To test the carburetors a steep grade was necessary and the steepest the inventor could find was in the cemetery. Here the final tests were made and the car was finished on the day set for the race, which was held on the Grosse Point race track, ten miles away. For days Alexander Winton had been on the ground with his car tuning it up for the great event. No other cars were entered, but a hilarious crowd was present to see the strange contest. The Winton car was finely finished and the low-slung, strange looking 999 seemed outclassed. But the race is not always to the beautiful, and 999 won.

In 1902 Mr. Ford began experimenting with a two-cylinder car. The work was carried on in a small wooden shop on Park avenue and Grand River, back of the Parker and Webb building. The messenger and handy man about the place was John Wandersee; Gus Degner was the mechanic, and C. H. Wills was draftsman and "boss" of the "force." The wages paid averaged twenty-two cents an hour. Mr. Ford gave up his position as coal buyer for the Edison company and devoted all his time to the new car. One of his friends was Alexander G. Malcomson, a prominent Detroit coal man. Mr. Malcomson was greatly interested in Mr. Ford's project and often visited the shop. Sometimes he was accompanied by his bookkeeper, James Couzens, in whose judgment he had great confidence.

One day Mr. Malcomson remarked to Mr. Ford, "Henry, my boy, you are working mighty hard, but you are not getting ahead fast enough. What you need is a barrel of money."

Henry Ford's gray eyes twinkled. "I reckon I'll have to make haste slowly," he replied. "I've tried two companies already and it looks like I am too venturesome. I'd better stick to the slow pace I am following now. If we could build a lot of machines and make them cheap enough all of us working in this little shop would be rich."

"You've got grit and it takes grit to put over a new idea," declared Malcomson. "I've had my eyes open and before you know it Haynes, Duryea and Winton will be so far ahead that you'll never catch up. It looks like we'll be obliged to organize a company—a big company. We ought to get together a hundred thousand dollars; that would be enough to start the wheels going. I would be willing to put up about twenty thousand in cash. You can put in old 999," and he pointed to a corner where the machine stood. "You've used up a deal of money in experiments—I expect you have spent all of seven thousand, and your time has been worth a lot. Suppose we start in as equal partners; I'll furnish the money and you the hard work—and genius."

Henry Ford, a joker himself, feared his friend was jesting. "And then what?" was his guarded question.

"Why then, we'll move this big working force of yours over to a building in Mack avenue. I'm nearly positive I can organize a company. Jimmy Couzens has saved up about two thousand dollars. He is young and level-headed and can afford to take a chance. Besides, Jimmy knows a lot about business. I'll add him to the force and I'll peddle the stock. We can try it anyway. If we fail –"

"We won't fail," Henry Ford interrupted; "we can't fail. We'll either succeed or I'll die in the attempt." He shut his lips grimly; then a cheerful smile appeared and he added, "we can have a lot of fun doing the right thing."

Even at the time it was Mr. Ford's idea to make good cars in large numbers and for a low price. In a few months the plant was moved to the Mack building and Mr. Ford was enabled to devote his time to perfecting his machine. The astounding success of the Ford company dates from that day.

It is interesting to note the rise of the men who worked with Ford at that time. As the business grew Mr. Ford sent John Wandersee all over the country to investigate and study chemistry, and today Mr. Wandersee is head chemist at the Ford company. Gus Degner is superintendent of inspection at the same plant. Harold Wills was sent about the country to study steel. It is he who invented molybdenum, the toughest and lightest of steels. At the time of the Chicago Tribune libel trial it was testified that Mr. Wills had received a salary of $80,000 a year for some years. Mr Wills is now a motor manufacturer himself. Enough has been said here to show that these men, although they did not buy stock in the Ford company have been rewarded with salaries and bonuses that have made them rich. They have shared in Henry Ford's prosperity just as if they had shared in the original risk.

Mr. Couzens invested twenty-five hundred dollars in the company and organized and directed five departments—bookkeeping, time clerk, purchasing agent, sales manager and business manager, but he had no assistants; he did all the work. Mr. Malcomson found it more difficult than he had expected to sell the company's stock but finally secured the following purchasers:

John S. Gray, a rich candy maker, who put in ten thousand, five hundred dollars in cash.

John Anderson of the law firm of Anderson & Rackham, attorneys for the company, who invested five thousand dollars.

Horace Rackham, his partner, who likewise invested five thousand dollars.

Albert Shelow, who invested five thousand dollars and later sold his holdings to Mr. Couzens for twenty-five thousand

V. C. Fry and C. H. Bennett, who bought five thousand dollars' worth of stock each and later sold out to Mr. Ford and Mr. Couzens for twenty five thousand each.

Alexander G. Malcomson, who put in twenty-five thousand, five hundred dollars in cash.

Mr. Ford was given an equal amount of stock for his assets.

At the end of two years the largest stockholders in the company were Alexander Malcomson, Henry Ford, James Couzens and John S. Gray. The Dodge brothers offered their foundry for the making of the car parts and each invested five thousand dollars in the company and became a director.

Back of the selling of one block of stock is an interesting story. Both Mr. Anderson and Mr. Rackham were young attorneys and Mr. Malcomson was their client. He talked to them of the company he was organizing, and Mr. Anderson, at once put his money into it, "taking a chance, as he said. Mr. Rackham's case was different. He lived only two doors from the Ford home and had nodding acquaintance with the inventor, but his health was poor and he could not afford to speculate with his savings. So he went to a leading banker for advice.

The banker took him to a window. "Look," he said pointing to the street. "You see all those people on their bicycles riding along the boulevard? There is not as many as there was a year ago. The novelty is wearing off; they are losing interest. That's just the way it will be with automobiles. People will get the fever; and later they will throw them away. My advice is not to buy the stock. You might make money for a year or two, but in the end you would lose everything you put in. The horse is here to stay, but the automobile is only a novelty—a fad."

Mr. Rackham was convinced. But a few days later he met Mr. Malcomson who showed him facts and figures and talked eloquently. Rackham was convinced again—but the other way. He sold some real estate and took the money to Malcomson. "Here, take this money and buy the stock before I have time to change my mind again," he said. Anderson and Rackham drew the incorporation papers for the company and each man held his stock, selling it finally for twelve and one-half million dollars.

CHAPTER V.

The Story of Magical Success

On October 1, 1902, Mr. Couzens took a trial balance—in pencil—which showed that the Ford company after three months of operation was making rapid progress. By January, 1903, the first commercial car was sold, and soon orders began to come in faster than they could fill them. One hundred and sixty-five cars were sold that year. A larger factory, located on Piquette street, was secured and the work went forward rapidly. In 1905 the company began to pay 6 per cent dividends.

In this Piquette street plant a young bookkeeper named Klingensmith was employed at a salary of sixty-five dollars a month. Mr. Ford advanced him rapidly and in time Mr. Klingensmith became Vice-President and Treasurer of the Highland plant. He testified in the Tribune suit that for several years his salary had been $75,000 a year. The drafting room at the Piquette street plant was in charge of Carl Emde, a German, who took out his first naturalization papers in 1902, and his second papers in 1911. When the company moved to the Highland Park plant Emde was put in charge of the tool room. This employee suddenly found himself in the spotlight of publicity in the last days of the Ford-Newberry senate campaign, as will be told later.

Another employee at the Piquette street plant was a pattern maker named Sorenson, a Dane who for years has been manager of the River Rouge foundry and tractor plant.

These are some examples of the way in which Mr. Ford has rewarded the men who have worked faithfully for him during long years. It always has been a source of pleasure to him to share his prosperity with his employees.

* * * *

Following the famous race at Grosse Point, when the Ford 999 defeated the Winton car, there were other races in various parts of the country, but in these Mr. Ford had no part. Finally, however, he decided to rebuild 999 and make it the "fastest thing on wheels." Soon afterward it was decided to hold a race against time on the frozen surface of Lake Sainte Claire in the hope of breaking the record then held by Vanderbilt. The race track was built of cinders laid on the ice and racing officials had come from many cities to serve as judges and time keepers. Mr. and Mrs. Ford and their small son, Edsel, had gone to the lake the evening before and Mr. Couzens followed them on the morning of the race. Mr. Ford was to drive 999, for the event was all important to him.

Early in the morning the engine was tested as a precaution, and to the consternation of the officials in the factory did not run well. They toiled over it like mad and finally, two hours before the time set for the race, the trouble was corrected, and the start made for Lake Sainte Claire, then considered a long way out in the country, although only ten miles from Detroit. Distances have shrunk since that day. The weather was cold and raw, with a high wind that added to the discomfort of the spectators. Mr. Ford huddled in a short thick coat of black curly astrakan and wished 999 would arrive.

Finally the car appeared down the road and preparations for the start were completed at once. Mr. Ford took his seat, and at the crack of the pistol threw on the power. For a moment 999 stood on its hind wheels, as if imitating a broncho,

(Continued on page 17)

HENRY FORD ON SLEEP

"Don't you think 10 or 12 hours a day is a fearful long time to spend in bed?" Mr. Ford was asked.

"It all depends on the individual—on his or her recuperative powers," said Mr. Ford. "I have no particular rule about sleeping except that I sleep whenever I feel tired and I stay in bed until I am rested."

"How long does it generally take—your night's rest" he was asked.

"Oh, it depends on a lot of things—and it varies. As a general rule I like to go to bed early and get up early. Pretty frequently 9 o'clock sees me abed; sometimes earlier. Then, sometimes, I wake up at 5 o'clock in the morning. If I feel fine and rested I get up—I can't lie in bed if I'm rested—and I like few things better than a good walk in the early morning—helps keep a fellow young.

"But if, on the other hand, I don't feel rested and stay in bed until 7:30 or 8 o'clock—well, that's all right, too. That's what beds were made for—to give rest, and there's no use getting up before you're rested."

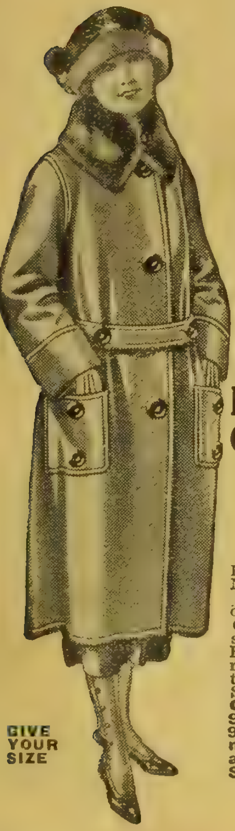
OPPORTUNITY SALE

SEND NO MONEY

Don't send a cent now. Just letter or postcard brings any of these smashed-price bargains. Merely give Name and Number of each article you want. When goods arrive pay bargain price and postage. If not delighted with the money you have saved, return the goods and we'll refund your money, instantly.

PAY ON ARRIVAL

Never before have you had the good luck to see such astounding money-saving values. You will get the most for your dollars by buying everything you possibly can NOW. Sharood is proud to offer you these saving OPPORTUNITIES. Make the most of it. BUY—BUY NOW!



Women's Fur Collared Coats

$5.98

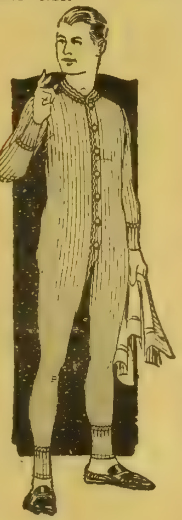
A practical and good-looking model of pressed velour with generous collar of real Brown Coney fur. All-around belt and button trimmings. Sizes 16 to 20, women's 34 to 46. **Order by No. 96E-5703. Send no money. Pay $5.98 and postage on arrival.**

Fur Trimmed Coat for Girls

$3.98

Pressed Velour in Navy Blue or Brown, regular $7 value. Has collar of genuine Kit Coney, which buttons snugly around throat. Belt all around, two novelty pockets and two buttons at back. Sizes 7 to 14 years. **Order Brown by No. 96E5595. Navy by No. 96E5596. Send no money. Pay $3.98 and postage on arrival. State size.**

GIVE YOUR SIZE

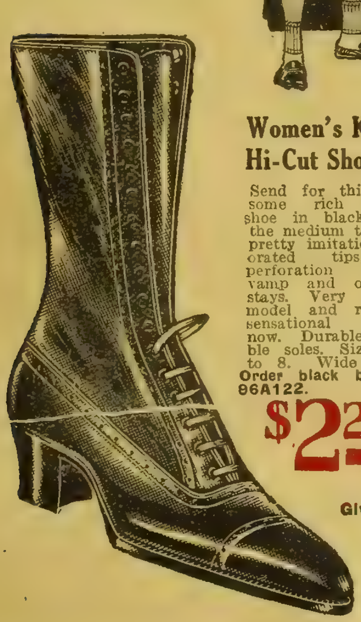


MEN'S WINTER UNDERWEAR

1.19

Heavy weight flat knit union suits of long fibre cotton in popular Jaeger or gray Random color. Brushed fleece lining. Wrists and ankles elastic knit. Sizes 34 to 46 chest. **Order Jaeger color by No. 96C1279. Order Random gray by No. 96C1280. Pay $1.19 and postage on arrival. State size.**

Boys' Flat Knit Union Suits of fine quality cotton. Sizes 22 to 34 for 3 to 16 years. Order by No. 96C1358. Pay 89c and postage on arrival.



Women's Kid Hi-Cut Shoes

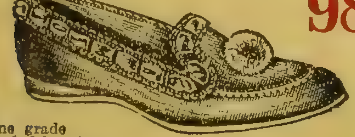
Send for this handsome rich kidskin shoe in black. Note the medium toes with pretty imitation perforated tips, the perforation around vamp and on lace stays. Very popular model and really a sensational bargain now. Durable, flexible soles. Sizes 2½ to 8. Wide widths. **Order black by No. 96A122.**

$2.29

Give Size

Women's Felt Moccasins, Ribbon Trimmed

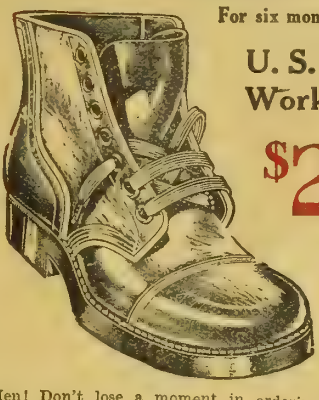
98c



Fine grade wool felt with combination insert of fawn. **Order American Beauty by No. 96A389. Order Copen by No. 96A390. Order Lavender by No. 96A391. Sizes 3 to 8. Send no money. Pay 98c and postage on arrival.**

GUARANTEED!

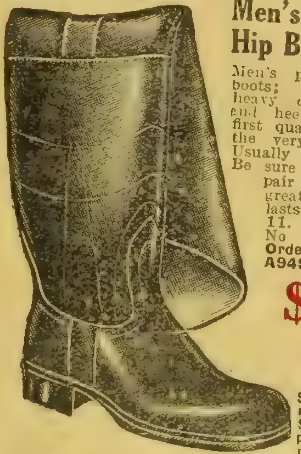
For six months' wear



U. S. Army Work Shoe

$2.98

Men! Don't lose a moment in ordering this wonderful brown work shoe. It is made of leather as near waterproof as can be made—solid leather through and through with full grain leather uppers, guaranteed to wear six months. Easily worth $5.00. Two full, heavy double soles, sewed and nailed for greater strength. Extra wide, full leather counter, riveted to prevent ripping. Sizes 6 to 14, wide widths. **Order by No. 96A699. Send no money. Pay $2.98 and postage on arrival.**



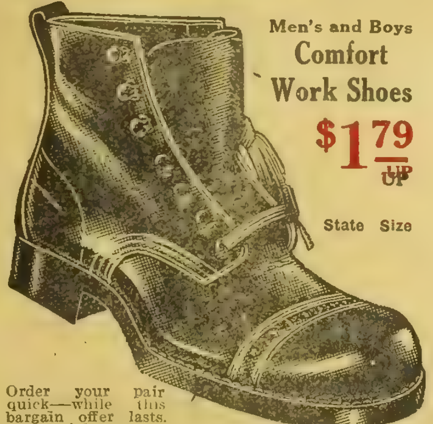
Men's Special Hip Boots

Men's pure gum hip boots; friction lined; heavy corrugated sole and heel; guaranteed first quality. Made of the very best rubber. Usually retailed at $5. Be sure to order your pair while this great saving offer lasts. Sizes 7 to 11. Wide widths. No half sizes. **Order by No. 96-A949.**

$2.98

GIVE SIZE

Send no money. Pay $2.98 and postage on arrival.

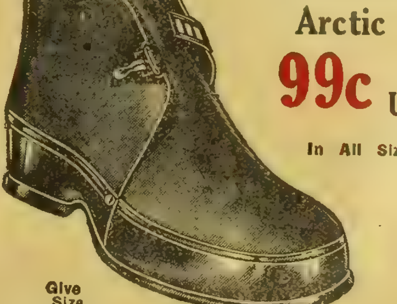


Men's and Boys Comfort Work Shoes

$1.79 UP

State Size

Order your pair quick—while this bargain offer lasts. Wonderful work shoe for men. Has soft, strong uppers that resist barnyard acids. Solid leather insoles. All seams stitched with waxed thread. Strong leather soles. Wide widths. Sizes 6 to 11. **Order by No. 96A-758. Send no money. Pay $1.98 and postage on arrival. Order boys' sizes, 1 to 5½ by No. 96A-554. Price $1.89. Order little gents', sizes 9 to 13½, by No. 96A555 Price $1.79 and postage on arrival. Mention size.**



One-Buckle Arctic

99c UP

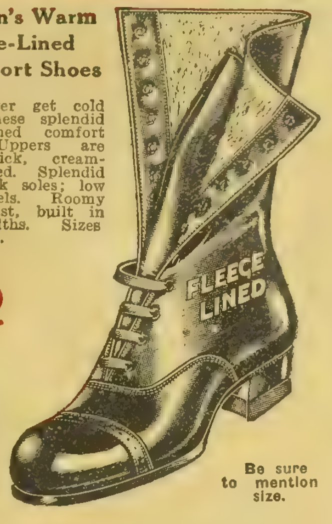
In All Sizes.

Give Size

Heavy cashmerette snow-proof top. Genuine gum rubber bottoms with heavy single soles. Full fleece lined. Sizes for all the family. **Misses' sizes 11 to 2, No. 96A970. Price 99c. Women's sizes 2½ to 8, No 96A969. Price $1.19. Youth's sizes 9 to 13½, No. 96A968. Price $1.19. Boys' sizes 1 to 5½, No. 96A967. Price $1.20. Men's sizes 6 to 12, No. 96A966. Price $1.49. Pay bargain price and postage on arrival. State size.**

Women's Warm Fleece-Lined Comfort Shoes

You'll never get cold feet in these splendid kid-finished comfort shoes. Uppers are warm, thick, cream-fleece lined. Splendid natural oak soles; low rubber heels. Roomy comfort last, built in wide widths. Sizes 2½ to 8.



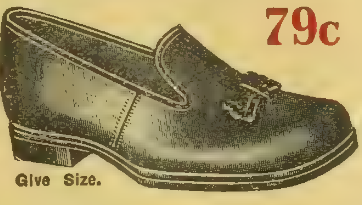
$2.29

Order by No. 96A-396. Send no money. Pay only $2.29 and postage on arrival. Money back if not satisfied.

Be sure to mention size.

Women's Felt Everett

79c



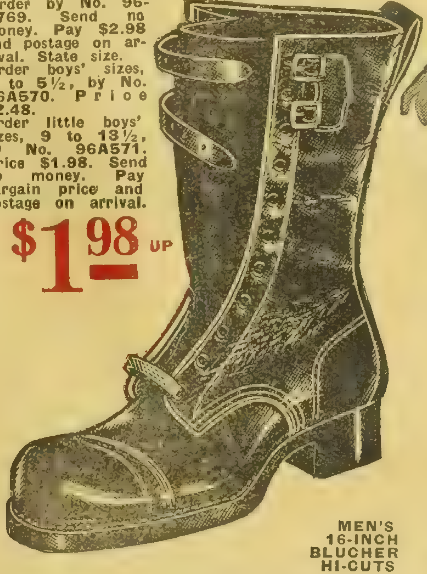
Give Size.

For cold weather wear indoors. Durable felt uppers. Combination soles, outside of natural oak leather and middle soles of warm felt. Pretty bok ornament on toe. Low rubber heels. Sizes 2½ to 8. Wide widths. **Order by No. 96A380. Send no money. Pay 79c and postage on arrival. State size.**

MEN'S STORM BOOTS

Wonderful Hi-Cut Storm Boots of soft brown cowhide leather, absolutely barnyard proof. Durable outsoles, sewed and nailed; solid leather insoles; durable counters; dirt-excluding bellows tongues. Sizes 6 to 12. Wide widths **Order by No. 96-A769. Send no money. Pay $2.98 and postage on arrival. State size. Order boys' sizes, 1 to 5½, by No. 96A570. Price $2.48. Order little boys' sizes, 9 to 13½, by No. 96A571. Price $1.98. Send no money. Pay bargain price and postage on arrival.**

$1.98 UP



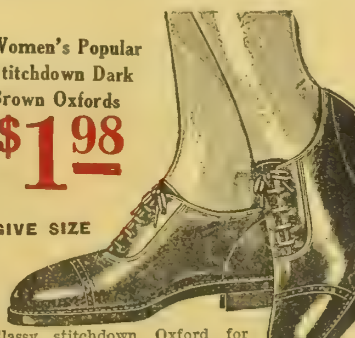
MEN'S 16-INCH BLUCHER HI-CUTS

Acid-proof, bellows tongue, pull strap, grain leather inner soles, tow strap and buckles. Natural oak leather outer soles and leather heels. Men's sizes 6 to 12, wide widths only. **Order by No. 96A777. Send no money. Pay $4.98 and postage on arrival.**

Women's Popular Stitchdown Dark Brown Oxfords

$1.98

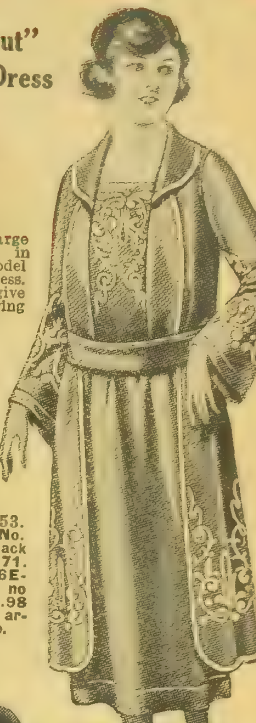
GIVE SIZE



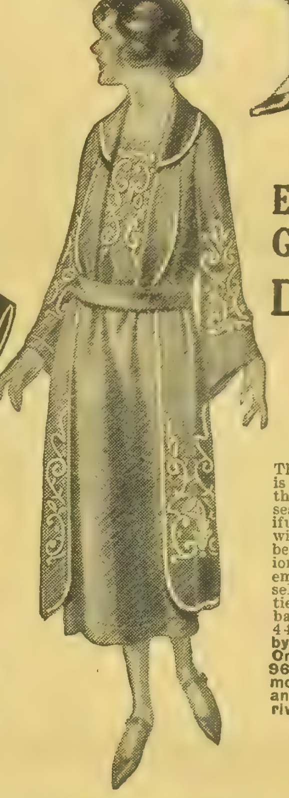
Classy stitchdown Oxford for women. Wonderfully comfortable and stylish. Uppers of dark brown leather. Smooth leather insole. Flexible stitched-down oak outsoles. Low rubber heels. Sizes 2½ to 8. Wide widths. **Order by No. 96A268. Send no money. Pay only $1.98 and postage on arrival.**

"Stylish Stout" Gabardine Dress

$3.98



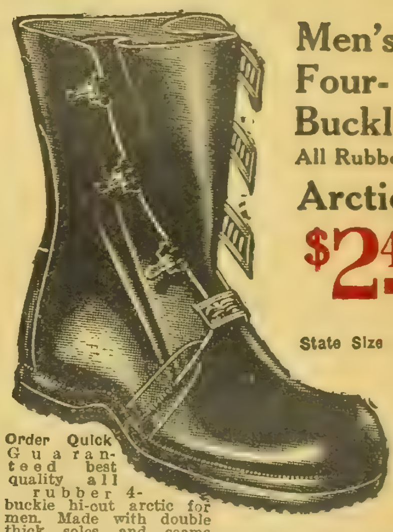
Women of large figure will see in this new model their ideal dress. planned to give long slendering lines. Note how the collar, revers and panels carry out the long effect. Attractive embroidery on sleeves, vestee and panels. The self-material belt ties at back. Sizes 39 to 53. **Order Navy by No. 96E5470. Black No. 96E5471. Brown No. 96E-5472. Send no money. Pay $3.98 and postage on arrival. State size.**



Embroidered Gabardine Dress

$2.98

This delightful model is sure to be one of the favorites of the season. It is of beautiful cotton garbardine with vestee, smart bell sleeves and fashionable panels richly embroidered. The self material belt ties gracefully at back. Sizes 16 to 44. **Order Navy by No. 96E5525. Order Brown bv No. 96E5526. Send no money. Pay $2.98 and postage on arrival.**



Men's Four-Buckle All Rubber Arctics

$2.48

State Size

Order Quick Guaranteed best quality all rubber 4-buckle hi-cut arctic for men. Made with double thick soles and seams reinforced. Snow-excluding tongue. Furnished in men's sizes 8 to 12. Wide widths Sensational value Send quick. **Order by No. 96A990. Send no money. Pay $2.48 and postage on arrival.**

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Use it in your incubators, its uniform heat will hatch healthy chicks from every fertile egg. No poisonous fumes to clog egg shell pores when used in Incubators or fumes to kill little chicks in the Brooder.

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Use it in your Tractor, it will develop more power than ordinary Coal Oil because every drop is consumed in the firing chamber, eliminating any chance of the unused portion diluting Lubricating oil in the crank case.

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UNLAWFUL FOR COUSINS TO MARRY

Is it unlawful for Cousins to get married in Michigan? If so, what States is it lawful? How old must a female be to get married without permit of parents?—J. K., Zeeland, Michigan.

—Section 11356, of the C. L. 1915 prohibits marriage of cousins of the first degree. I do not have a list of states that permit cousins to marry. Act 195 of the Public Acts of 1917 requires written consent of parents or guardian if the female is under 18 years of age.—Legal Editor.

KEEPING CIDER SWEET

What can I put into a 50 gallon barrel of cider to keep it sweet?—D. E. W., Hale, Mich.

—A fifty gallon barrel of cider may be kept sweet by the addition of 0.1 per cent benzoate of soda. This perounces of benzoate of soda to fifty gallons of cider.

Care should be taken in measuring the cider to which benzoate of soda is to be added as too little will result in no preservative action, while if too much is added it might have a harmful effect.

Cider to which benzoate of soda has been added cannot be used for vinegar-making as vinegar is the result of microbial fermentation and the growth of microbes is inhibited by the benzoate of soda.—R. L. Tweed, Res. Asst. in Bacteriology, M. A. C.

ERROR IN "RIGHT OF TEACHER TO PUNISH CHILD" ARTICLE

In the December ninth issue of the Michigan Business Farmer on the Farmers Service Bureau page, you published an article entitled "Right of Teacher to Punish Child" and included in connection with this a letter from me but you did not publish this letter as I had given it to you. I made the following statement:

"The law does give the school board the authority to make and enforce suitable rules governing the external affairs of the school."

You have given it in such a way as to convey the opposite meaning from what it is intended to convey. In your article it reads as follows:

"The law does not give the school board any authority, etc."

Will you kindly give the necessary explanation and print this in the correct form in your next issue.—B. J. Ford.

MORTGAGE

If A gave B a mortgage on 40 acres of land and A being a married man and his wife refusing and not signing the mortgage can B collect the same by law; or is there certain clauses that would make a difference. —B. H., Boyne Falls, Michigan.

—If the land mortgaged was a homestead the encumbrance would be void. The land would be free. If the land mortgaged was not a homestead the mortgage if not paid could be forclosed and deprive the husband from any interest therein. The mortgagee could hold the land during the life of the husband subject only to the dower of the wife if she lived longer than he. If she died first the mortgagee would obtain the whole title. If the husband gave a note with the mortgage that the wife refused to sign he would be holding for the note and it might be collected from other property of the husband besides the homestead.—Legal Editor.

PAYING TAXES

We came up here in August, 1920 and bought this place in Osceola county, for $5,000 with $1.000 cash and possession in November. We moved here the first week in Nov. 1920, paid the taxes for that year, interest due March 1st. We paid our interest in March that year. Now at prices the way things are, we feel we can not go on and pay for the place, we are back $220 and our last years interest. The man will take the place back, but says we shall pay the taxes for this year, 1922, as we had the use of the place, but he had the use of the place in 1920 and we paid the taxes also taxes last year of course. Will you please tell me if we will be made to pay taxes for this year? We would like to keep the place, but how can we with potatoes at 30 cents, hay at $5 and $6, etc.? This man claims he had to pay $28 to have the sale of this place recorded, is this true? Can such charges be made?—G. B., Sears, Michigan.

—If the taxes of 1922 were assessed to you and you have any personal property from which the tax could be made the town treasurer would be under obligations to levy upon the personal property to pay the tax. If the tax was not assessed to you then the tax would be returned against the land and hold against the land the same as a mortgage. The owner can not compel you to give up the land without foreclosure of mortgage, if you gave a mortgage, or steps to forfeit the land contract, if you gave a contract. You did not say which. You do not tell what the deal was in getting the place. If you took a deed there would be revenue stamps of 50 cents for each $500. If there was a mortgage or a land contract that would have a tax of 50 cents for each $100. The recording fee alone would not amount to $28 but the revenue stamps and tax might amount to $28 on a $5,000 farm. The purchaser of a farm under contract or by giving a mortgage can not be required to give up the property until the time provided by law for forfeiture in one case and foreclosure in another.—Legal Editor.

CULVERTS TOO SMALL

We live on State Reward Road M10. When the builders put in the culverts they were informed by the land owners that the culverts were too small to carry off the water in the spring but they put them in just the same. Can we ask damages done by water in cellars caused by culverts being too small? If the culverts had not been there the water couldn't do any damage as it could get away.—M. H. Hawks, Mich.

—You would not be in a position to press your claim for damages. You would receive more benefit if you would call the attention of the District Engineer or the County Highway Engineer to the condition which exists by reason of the inadequate culvert, asking that the same be enlarged and if his contention is correct the request would be granted.—H. H. Partlow, State Highway Dept.

MORE ABOUT COST OF LAND CLEARING SCHOOLS

In a recent issue I note a query asking as to who pays the expenses of the land clearing special trains and crews which have been operating in northestern Michigan. I also note the answer which Mr. Baldwin of the Extension Department of the Agricultural College says, which answers fully as the question goes, but I believe the writer of the question would be interested in knowing that there is much more to this than simply Mr .Baldwin's answer.

For instance the land clearing special work has saved the farmers $132,000.00 in explosive alone and in addition to that has saved them $30,000.00 by buying of explosives in carload lots; thus a nice saving of $162,000.00 as a result of the work which Mr. Baldwin points out costs the tax payers of Michigan such a small amount.

I know of one particular instance where the County Road Commissioner required a ditch through a swamp which would cost him $75.00 and Mr. Livingston with one helper from the land clearing crew in one hour's time and with $10.50 worth of dynamite completed the ditch, giving a larger and better ditch than would have been constructed by team or man labor.

Farmers of the state and others should not get the notion that this

AEROLECTRIC

ELECTRICITY from the WIND!

A new, better, and cheaper way to get electric light and power for your farm. The AEROLECTRIC, like a windmill, gets its power from the wind and is a complete plant. A faint breeze starts the aerolectric charging and it generates electricity as the wheel turns in the wind. It was invented and perfected by Perkins, for 60 years America's leading windmill makers.

No Cost for Fuel!

Aerolectric has a 14 ft. wind wheel which has a Westinghouse generator built in. The current as generated is carried along wires to the large capacity storage batteries, where it is ready when, and as, you need it, without one cent of cost because you know wind power is free power.

Current for 11 Days Calm

Even if no wind blew for 11 days—which never happens—you would have current enough to last that long because the big batteries have 11 days storage capacity. A faint breeze is as good as heavy wind, because Aerolectric charges in as low as 6 miles an hour wind.

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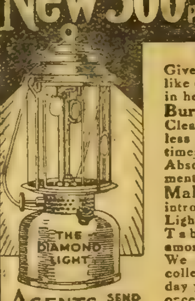

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land clearing work is in behalf of clearing up a lot of wild or new land. Perhaps this may be a result, but the effort being put forth is to clean up land which is already beoing tilled, getting stumps and snags out of these fields, and this demonstration work shows the best way that this cleaning up can be done and at the least cost—T. F. Marston, No. Eastern Michigan Development Bureau.

CAN COLLECT FROM ALL

Three years ago last spring I purchased a farm of 80 acres, which had an encumbrance of three thousand five hundred dollars in a mortgage long past due. Giving second mortgage of fifteen hundred dollars to the same party that held the first, in the fall I sold the place subject to the encumbrance, after which the place has its second owner after myself. No interest, taxes, or insurance have been paid since that time. Said encumbrance amounting to more. Nearly seven thousand dollars or more. Now if this place is sold at auction for less than the price against it, is it possible for them to collect the difference from me, as the other two parties are not worth anything now?—V. A. H., Holt, Michigan.

—A mortgage may be foreclosed in Chancery and the original maker of the mortgage, and note accompanying the same, and all subsequent purchasers who assumed the mortgage and agreed to pay the same may also be made parties, and if the land does not sell for enough to pay the mortgage, the mortgagee may take judgement against all who agreed to pay the mortgage for the balance and costs and require them to pay it if they have property from which it may be collected above exemptions.—Legal Editor.

READJUSTMENT ON TIRE

Some time ago I bought a tire, guaranteed, but after running it 200 miles it gave out. We took it to the agent, who sent it to the company for readjustment. He gave me a new tire in place telling us there was a flaw in the tire and did not think we would have to pay for it. The first tire was returned with a bill of $3.85 for repairs, the company saying it was no fault of the tire. Is the guarantee any good and do we have to pay for the tire and readjustment also?—E. W., Boyne City, Michigan.

If it was not the fault of the tire you would have to pay for the repair of the tire if you ordered it repaired. If you did not and they were not authorized to make any repairs you can tell them to keep the tire.If it was the fault of the tire you are entitled to be protected upon the guaranty and your dealer should assist you.—Legal Editor.

FUR DEPARTMENT

EDITED BY A. R. HARDING

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QUESTIONS ANSWERED

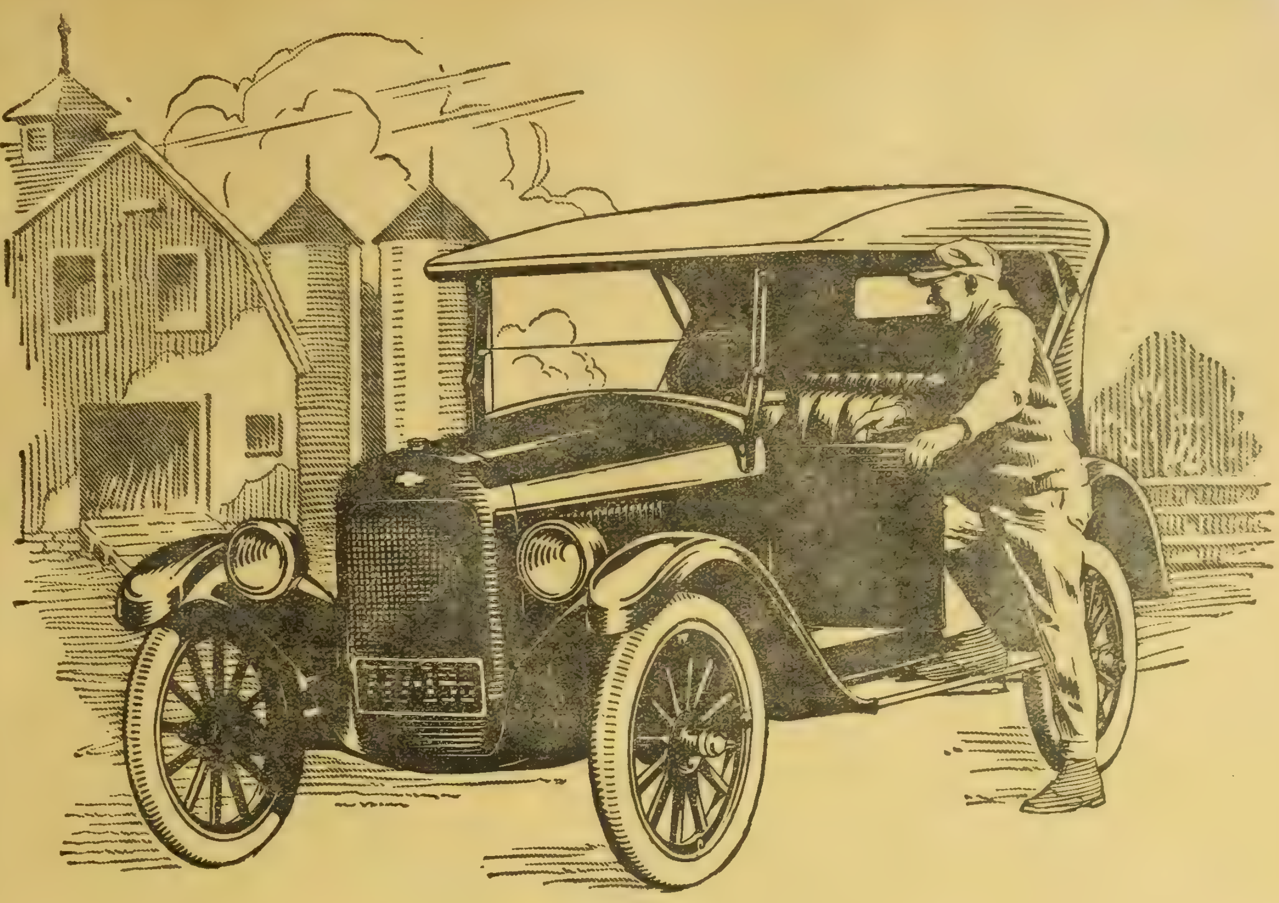
HIDES AND FURS

Will you please tell me if it hurts hides or fur to let them freeze after skinning them? How to take care of them?—B. C. N., Lawver, Wyo.

—Freezing does not hurt or lessen the selling value of either. Hides—cattle, horse, calf, sheep are usually salted heavily a few hours after killing, using say two gallons of salt on a hide that weighs 40 pounds. The object of not salting immediately after skinning is to allow the animal heat to get out. In some parts of the country—Wyoming for instance, where the altitude is high hides will cure without salt and are known as flint but are not as convenient to ship and handle as salt cured.

Fur pelts, such as fox, wolf, skunk, mink, etc., are stretched on a board made shape of the pelt and nailed. Fur pelts do not need any salt. Surplus fat and flesh should be removed. The pelts can be removed from the stretching boards after they have dried sufficiently to hold their shape. Pelts are placed on the stretching boards pelt side out—fur in.

Farmer: "See here, young feller, what are you doing up that tree?"
Boy: "One of your apples fell down and I'm trying to put it back."—Pathfinder.



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They find that Chevrolet, fully equipped as sold is the best value per dollar in the low-priced field, and neighbors tell them it costs least per mile to operate.

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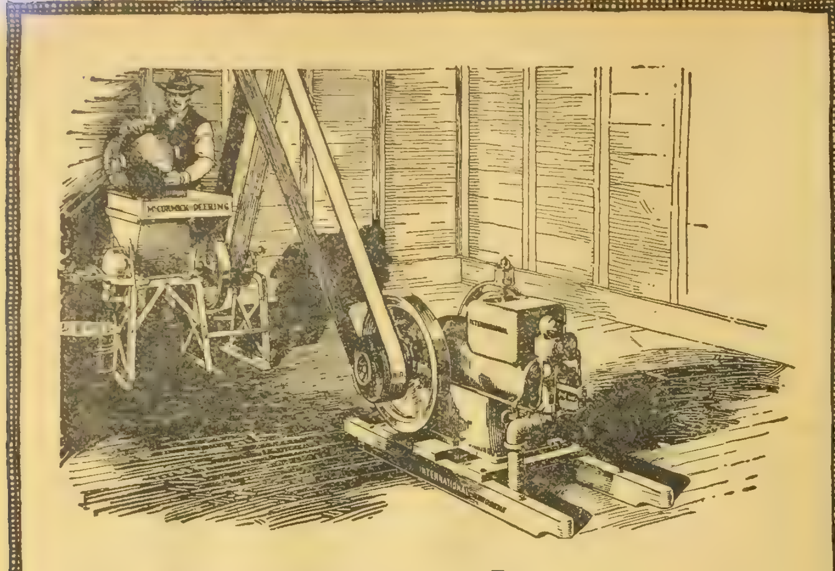
SUPERIOR Four Passenger Sedanette - -	850
SUPERIOR Five Passenger Sedan - - - -	860
SUPERIOR Light Delivery - - - - -	510

Chevrolet Motor Company, Detroit, Mich.

Division of General Motors Corporation

There are now more than 10,000 Chevrolet dealers and service stations throughout the world

Applications will be considered from high grade dealers in territory not adequately covered



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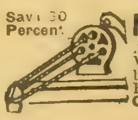

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The Hunted Woman

By James Oliver Curwood

Michigan's Own and America's Formost Author of the Great Northwest

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SYNOPSIS

JOANNE GRAY is one of the passengers on the train bound for Tete Jaune Cache, the home of "The Horde," where she has no friends and all will be strange to her. The train stops at a town composed of several tents, she goes in search of food and a bath. She is directed to "Bill's Shack" and here she meets Bill Quade, who not only owns and operates "Bill's Shack" but is also leader of the lawless men of the town. Quade says he has a room she can rent and that he will show it to her. As they pass out of the room a newcomer enters the doorway leading off the street. The newcomer is John Aldous, a well known novelist. He sees the strange girl enter the place and believes she has made a mistake and as he stands in the doorway his eyes rest upon the curtained doorway through which they have passed. In but a moment the girl steps out, face flaming and eyes flashing. Quade follows her apologetically. He starts to offer the girl money but before he can do so Aldous steps to the girl's side and floors Quade with a terrific blow. Aldous hurries the girl away from the scene to the home of friends. Joanne tells Aldous she is going to Tete Jaune to find her husband, Mortimer FitzHugh. Aldous decides to go with her to protect her from Quade and his partner Culver Rann. Aldous believes FitzHugh is dead and locates a friend who declares he has seen the grave. Upon their arrival at Tete Jaune they are met by friends of Aldous at whose place they are to stay during their stop.

(Continued from Dec. 23rd issue)

CHAPTER XII

For an hour after Donald MacDonald had pledged himself to accompany Jaonne and Aldous on their pilgrimage to the grave in the Saw Tooth Range the two men continued to discuss the unusual complications in which they had suddenly become involved, and at the same time prepared themselves a supper of bacon and coffee over the fire. They agreed upon a plan of action with one exception. Aldous was determined to return to the town, arguing there was a good straegic reason for showing himself openly and without fear. MacDonald opposed this apprehensively.

"Better lay quiet until morning," he expostulated. "You'd better listen to me, an' do that, Johnny. I've got something under my shoulder that tells me you'd better!"

In the face of the old hunter's misgiving, Aldous prepared to leave. It was nearly ten o'clock when he set back in the direction of Tete Jaune, Donald accompanying him as far as the moonlit amphitheatre in the forest. There they separated, and Aldous went on alone.

He believed that Joanne and the Blacktons would half expect him to return to the bunglow after he had seen MacDonald. He was sure that Blackton, at least, would look for him until quite late. The temptation to take advantage of their hospitality was great, especially as it would bring him in the company of Joanne again. On the other hand, he was, certain that this first night in Tete Jaune held very large possibilities for him. The dectective instinct in him was roused, and his adventurous spirit was alive for action. First of all, he wanted proof of what MacDonald had told him. That an attempt had been made to assassinate the old mountaineer he did not for an instant doubt. But had Joe DeBar, the half-breed, actually betrayed them? Had he sold himself to Culver Rann, and did Rann hold the key to the secret expedition they had planned into the North? He did not, at first, care to see Rann. He made up his mind that if he did meet him he would stop and chat casually with him, as though he had heard and seen nothing to rouse his suspicions. He particularly wanted to find DeBar; and, next to DeBar, Quade himself.

The night carnival was at its height when Aldous re-entered the long, lighted street. From ten until eleven was the liveliest hour of the night. Even the restaurants and soup-kitchens were crowded then. He strolled slowly down the street until he came to a little crowd gathered about the bear equestrenne The big canvass dance-hall a few doors away had lured from her most of her admirers by this time, and Aldous found no difficulty in reaching the inner circle. He looked first for the half-breed. Failing to find him, he looked at the woman, who stood only a few feet from him. Her glossy black curls were a bit dishevelled, and the excitement of the night had added the vivid colouring of her rouged lips and cheeks. Her body was sleek and sinuous in its silken vesture; arms and shoulders were startlingly white; and when she turned, facing Aldous, her black eyes flashed fires of deviltry and allurement.

For a moment he stared into her face. If he had not been looking closely he would not have seen the swift change that shot into the siren-like play of her orbs. It was almost instantaneous. Her slow-travelling glance stopped as she saw him. He saw the quick intake of her breath, a sudden compression of her lips, the startled, searching scrutiny of a pair of eyes from which, for a moment, all the lanquor and coquetry of her trade were gone. Then she passed him, smiling again, nodding, sweeping a hand and arm through her handsome curls as she flung a shapely limb over the broad back of the bear. In a garish sort of way the woman was beautiful, and this night, as on all others, her beauty had nearly filled the silken coin-bag suspended from her neck. As she rode down the street Aldous recalled Blackton's words: She was a friend of Culver Rann's. He wondered if this fact accounted for the strangeness of the look she had given him.

He passed on to the dance hall. It was crowded, mostly with men. But here and there, like so many faces peering forth from living graves, he saw the Little Sisters of Tete Jaune Cache. Outnumbered ten to one, their voices rang out in shrill banter and delirious laughter above the rumble of men. At the far end, a fiddle, a piano, and a clarinet were squealing forth music. The place smelled strongly of whisky. It always smelled of that, for most of the men who sought amusement here got their whisky in spite of the law. There were rock-hogs from up the line, and rock-hogs from down the line, men of all nationalities and of almost all ages; teamsters, trail-cutters, packers, and rough-shod navvies; men whose daily task was to play with dynamite and giant powder; steel-men, tie-men, and men who drilled into the hearts of mountains. More than once John Aldous had looked upon this same scene, and had listened to the trample and roar and wild revelry of it, marveling that to-morrow the men of this saturnalia would again be the builders of an empire. The thin, hollow-cheeked faces that passed and repassed him, rouged and smiling, could not destroy in his mind the strength of the picture. They were but moths, fluttering about in their own doom, contending with each other to see which should quickest achieve destruction.

For several minutes Aldous scanned the faces in the big tent-hall, and nowhere did he see DeBar. He dropped out, and continued leisurely along the lighted way until he came to Lovak's huge black-and-white striped soup-tent. At ten o'clock, and until twelve, this was as crowded as the dance-hall. Aldous knew Lovak, the Hungarian.

Through Lovak he had found the key that had unlocked for him many curious and interesting things associated with that powerful Left Arm of the Empire Builders—the Slav. Except for a sprinkling of Germans, a few Italians, and now and then a Greek or Swiss, only the Slavs filled Lavok's place—Slavs from all the Russias and the nations south: the quick and chattering Polak: the thick-set, heavy-jowled Croatian; the silent and dangerous eyed Lithuanian. All came in for Lovak's wonderful soup, which he sold in big yellow bowls at ten cents a bowl—soup of barley, rice, and cabbage, of beef and mutton, of everything procurable out of which soup could be made, and, whether of meat or vegetable, smelling to heaven of garlic.

Fifty men were eating when Aldous went in, devouring their soup with the utter abandon and joy of the Galician, so that noise they made was like the noise of fifty pigs at fifty troughs. Now and then DeBar, the half-breed, came here for soup, and Aldous searched quickly for him. He was turning to go when his friend, Lovak, came to him. No, Lovak had not seen DeBar. But he had news. That day the authorities—the police—had confiscated twenty dressed hogs, and in each porcine carcass they had found four-quart bottles of whisky, artistically imbedded in the leaf-lard fat. The day before those same authorities had confiscated a barrel of "kerosene." They were becoming altogether too officious, Lovak thought.

Aldous went on. He looked in at a dozen restaurants, and twice as many soft-drink emporiums, where phonographs were worked until they were cracked and dizzy. He stopped at a small tobacco shop, and entered to buy himself some cigars. There was one customer ahead of him. He was lighting a cigar, and the light of a big hanging lamp flashed on a diamond ring. Over his sputtering match his eyes met those of John Aldous. They were dark eyes, neither brown nor black, but dark, with the keeness and strange glitter of a serpent's. He wore a small clipped moustache; his hands were white; he was a man whom one might expect to possess the sang froid of a devil in any emergency. For barely an instant he hesitated in the operation of lighting his cigar as he saw Aldous. Then he nodded.

"Hello, John Aldous," he said.

"Good evening, Culver Rann," replied Aldous.

For a moment his nerves tingled—the next they were like steel. Culver Rann's teeth gleamed. Aldous smiled back. They were cold, hard, rapierlike glances. Each understood now that the other was a deadly enemy, for Quade's enemies were also Culver Rann's. Aldous moved carelessly to the glass case in which were the cigars. With the barest touch of one of his slim white hands Culver Rann stopped him.

"Have one of mine, Aldous," he invited, opening a silver case filled with cigars. "We've never had the pleasure of smoking together, you know."

"Never," said Aldous, accepting one of the cigars. "Thanks."

As he lighted it, their eyes met again. Aldous turned to the case.

"Half a dozen 'Noblemen'," he said to the man behind the counter; then, to Rann: "Will you have one on me?"

"With pleasure," said Rann. He added, smiling straight into the other's eyes, "What are you doing up here, Aldous? After local colour?"

"Perhaps. The place interests me.

"Decidedly . And I understand that you've played an important part in the making of it," replied Aldous carelessly.

For a flash Rann's eyes darkened, and his mouth hardened, then his white teeth gleamed again. He had caught the insinuation, and he had scarcely been able to ward off the shot.

"I've tried to do my small share," he admitted. "If you're after local colour for your books, Aldous, I possibly may be able to assist you—if you're in town long."

"Undoubtedly you could," said Aldous. "I think you could tell me a great deal that I would like to know, Rann. But—will you?"

There was a direct challenge in his coldly smiling eyes. "Yes, I think I shall be quite pleased to do so," said Rann. "Especially—if you are long in town." There was an odd emphasis on those last words.

He moved toward the door.

"And if you are here very long," he added, his eyes gleaming significantly, " it is possible that you may have experiences of your own which would make very interesting reading if they got into print. Good-night, Aldous!"

For two or three minutes after Rann had gone Aldous loitered in the tobacco shop. Then he went out. All at once it struck Aldous that he should have kept his eye on Quade's partner. He should have followed him. With the hope of seeing him again he walked up and down the street. It was eleven o'clock when he went into Big Ben's pool-room. Five minutes later he came out just as a woman hurried past him, carrying with her a strong scent of perfume. It was the Lady of the Bear. She was in a street dress now, her glossy curls still falling loose about her—probably homeward bound after her night's harvest. It struck Aldous that the hour was early for her retirement, and that she seemed somewhat in a hurry.

The woman was going in the direction of Rann's big log bungalow, which was built well out of town toward the river. She had not seen him as he stood in the pool-room doorway, and before she had passed out of sight he was following her. There were a dozen branch trails and "streets" on the way to Rann's, and into the gloom of some one of these the woman disappeared, so that Aldous lost her entirely. He was not disappointed when he found she had left the main trail.

Five minutes later he stood close to Rann's house. From the side on which he had approached it was dark. No gleam of light showed through the windows. Slowly he walked around the building, and stopped suddenly on the opposite side. Here a closely drawn curtain was illuminated by a glow from within. Cautiously Aldous made his way along the log wall of the house until he came to the window. At one side the curtain had caught against some object, leaving perhaps a quarter of an inch of space through which the light shone. Aldous brought his eye on the level with the space.

A half of the room came within his vision. Directly in front of him, lighted by a curiously shaped iron lamp suspended from the ceiling, was a dull red mahogany desk-table. At one side of this, partly facing him, was Culver Rann. Opposite him sat Quade.

Rann was speaking, while Quade with his bullish shoulders hunched forward and his fleshy red neck rolling over the collar of his coat, leaned across the table in a tense and listening attitude. With his eyes glued to the aperture, Aldous strained his ears to catch what Rann was saying. He heard only the low and unintelligible monotone of his voice. A mocking smile was accompanying Rann's words. To-night, as at all times, this hawk who preyed upon human lives was immaculate. In all ways but one he was the antithesis of the beefy scoundrel who sat opposite him. On the hand that toyed carelessly with the fob of his watch flashed a diamond; another sparkled in his cravat. His dark hair was sleek and well brushed; his bristly little moustache was clipped in the latest fashion. He was not large. His hands, as he made a gesture toward Quade, were of womanish whiteness. Casually, on the street or in a Pullman, Aldous would have taken him for a gentleman. Now, as he stared through the narrow slit between the bottom of the curtain and the sill, he knew that he was looking upon one of the most dangerous men in all the West. Quade was a villain. Culver Rann, quiet and cool and sauve, was a devil. Behind his depravity worked the brain which Quade lacked, and a nerve which, in spite of that almost effeminate immaculateness, had been described to Aldous as colossal.

Suddenly Quade turned, and Aldous saw that he was flushed and excited. He struck the desk a blow with his fist. Culver Rann leaned back and smiled. And John Aldous slipped away from the window.

His nerves were quivering; in the darkness he unbottoned the pocket that held his automatic. Through the window he had seen an open door behind Rann, and his blood thrilled with the idea that had come to him. He was sure the two partners in crime were discussing himself and MacDonald—and Joanne. To hear what they were saying, to discover their plot, would be three quarters of the fight won, if it came to a fight. The open door was the inspiration.

(Continued in Jan. 20th issue.)

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The Michigan
BUSINESS FARMER

SATURDAY, JANUARY 6, 1923

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AGRICULTURAL RESULTS

AN increase of nearly $2,000,000,000 in the buying power of the farmers of the country is the outstanding feature of a survey of the soil crops and their markets for 1922. The valuation of farm crops last year was $7,572,890,000, according to the final returns of the Department of Agriculture, a gain of $1,842,978,000, or 32.1 per cent., over the valuation placed on the crops on December 1, 1921. The big increase in the wheat yield—about 46,000,000 bushels over last year's—was made on an acreage 2,466,000 less than that of 1921.—From R. G. Dun & Co's. Annual Review of Business, Dec. 30, 1922.

THE SLOW ROAD UPWARD

"EVENTUALLY, why not now!" is a famous slogan. The farmers would like to apply it to the farm market situation. Every month shows an improvement in the trend of prices paid for farm crops. Every report shows Europe buying more of our surplus crops that have hovered over us like threatening clouds the past two years.

Things have undoubtedly improved for the farmers of America!

But it is a slow grind up the hill. Reminds us of the days we used to slide swiftly to the bottom of the long icy hill. Once in a while there was a bare spot or a stone at the bottom. Then we stopped with a dull, sickening thud. Climbing out of the scrambled pile, tired and bruised, we had to climb the long hill again. Sometimes our feet slipped and we seemed to lose what we had gained. It used to seem O, so much farther back up the hill than it did sailing swiftly down.

Now, its a long way up the farmers hill. But, we are already three-fourths of the way back to where we started in 1913. It does you good to pause a moment and look back over what you have passed thru these past two years. That is why the thoughtful reader will get a lot of boiled down information and some satisfaction out of the Agricultural & Business Survey, the second report of which you will find on page 21 of this issue. Study it!

THE SUGAR BEET PROBLEM LOOMS AGAIN!

WHY is it impossible for the two interested parties to the successful marketing of beet-sugar from the state of Michigan to get together? Has it come to the point of an ancient fued, which smells of dark-ages or Italian vendetta? Is the whole industry in Michigan to be sacraficed on an altar of false pride, which keeps stubborn heads from getting together as sane men should, laying the facts on the table and arriving at a sensible and practical solution.

The Business Farmer speaks now for the ordinary, every-day sugar-beet grower who asks only a fair profit over and above his actual cost of production. Surely the sugar-beet factories are not so near-sighted, but what they can see that unless they can continue to satisfy the men who grow beets, each year the problem of getting acreage will become harder, until finally the actual cost of maintaining the necessary supply will eat up all the profits.

There are enemies without the sugar-beet industry in America who are bent on wrecking it or making it impotent. They will find it much more easy to count the empty factories and smokeless chimneys of beet-sugar factories in not only Michigan but California and Colorado, if the present dissention within the ranks continues much longer.

It is costing the factories of Michigan many times what it should cost them to induce farmers to grow beets. There is no excuse for this. This waste of effort is costing the grower and the stock-holder money, which should be saved and put where it belongs if there was a friendly feeling between grower and factory.

Some one man is responsible for this "grower-be-damned" attitude which, varnish it with prize money as they may, still lurks between the lines of every sugar beet contract written. This man, wherever he is, is a traitor to the farming business in Michigan, and we propose to hunt him out and crush him as we would a snake. For this service, we will be thanked equally by the men who grow the beets and the men who own the factories.

Will you help us find him? We'll guarantee to so present the facts to the board of directors of the company that is hiring him, that he will be fired on the spot!

SHALL THE GOVERNMENT FIX THE PRICE

EVER since the government relinquished control of grain prices following the war there has been an insistent demand that this control be restored. The farmer has suffered severely the past several years because of the unstable condition of his markets and the low prices, and it has been argued that it would be to the benefit of the entire country for the government to create a subsidized board for the purpose of purchasing grains outright from the farmer and disposing of them as the demand would warrant. Nor has this suggestion come solely from the ranks of "small-fry" critics. No less a personage than a former Secretary of Agriculture has carried on an extensive propaganda to create sentiment in favor of such a scheme, and there are a number of intelligent men in Congress who are known to be in sympathy with this proposal.

Congressman Sinclair of North Dakota, a former Michigan boy, and not by the way a Non-Partisan Leaguer, has introduced several bills along this line. One of them was "pigeon-holed" in turn at the last election. Sinclair expects to re-introduce his bill at the next session, and he will have strong support from most of the members of the "farm bloc."

If the Senate finally puts its approval on the merchant marine bill, Congressman Sinclair will have an excellent argument to present in support of his own measure. The merchant marine bill is in fact a subsidy to ship owners, and if Congress can conscientiously and with good reason vote to subsidize a few hundred private ship owners it will have an embarrassing time explaining why it cannot also vote to subsidize six million farmers, if in the final accounting the subsidization does not cost the government a cent.

Until the affairs of the world become a little more ordered the prices of farm products will fluctuate over a wide range. Would not some kind of government control and price-fixing prove a great influence in stabilizing the markets and restoring prosperity to the farms?

WHAT WILL THE POOR BUYERS DO?

WHEN crop prices got caught on the tail of the war-aeroplane, prices of farm lands everywhere went up. Nowhere, however, did they reach the fabulous prices which were paid in Illinois, Iowa and some of the Mississippi valley states. Five hundred dollars an acre bought only an average quality of farm land. Most of the sales were made by farmers attracted away from the farms by the prospects of selling their homesteads at unheard-of prices. In some localities it became sort of a wild speculation, like the "tulip-bulb bubble" of Dutch history, when the prices of single bulbs, much sought-after, passed from hand to hand, though they were of little intrincic value, until the market burst over night.

There were hundreds of farms sold in these states for prices so out of proportion to actual producing value, that the buyer could never expect, except during peak-war-time prices to make a fair profit from his investment.

It is a pathetic picture. These families, chained down to high-priced land. Working a tread-mill that leads no nearer their goal of ownership at the end of a hard years work.

Michigan was remarkably free from this wild land speculation. Though it is true many farms were sold at seemingly high prices, they shrink in comparison. Michigan too, is so climatically fortunate that specialty crops, like celery, sugar-beets, pepper-mint, chicory and all fruits can be grown profitably, which are unknown in the western states mentioned. America's fourth city is our metropolis and still growing. Chicago, one of the world's largest cities, is but a few hours water-haul from our shores. We are but a few miles from the center of population. We have thousands of acres of as good land as America can boast. Michigan land might with equal justice, have sold as high as Iowa and Illinois land, but luckily for us now, it didn't!

DANGER IN THE SHREDDER

IT is a common thing these days to pick up a newspaper and read an account of some farmer losing one or both of his hands in a corn shredder. To lose one's hands is not a pleasant experience. Hands are very useful things to have. Even the man who works most with his brain finds his hands convenient at times. But for the farmer whose brain is practically useless unless he can execute its bidding with his hands, the loss of those eppendages is certainly most tragic.

Most accidents are preventable. There are few victims of the ordinary run of accidents who cannot say, "If I had only been a little more careful this would not have happened." So with the farmer who loses his hands in the corn shredder or ensilage cutter. He would never let his familiarity with the machine breed contempt for its dangers. Danger lurks in every mechanism driven by mechanical power. The very whirr of revolving knives spells DANGER. "Beware," "beware," they sing. But despite the warning many stick their hands into the maw and the terrible accident occurs.

Take heed, dear reader, it may be your turn next unless you are careful. Let safety come before every other consideration, whatever your work may be.

MICHIGAN CITIES PROSPEROUS

ONE department store in the city of Detroit is reported to have done a business of $280,000 in one day during Christmas week. All stores reported the largest business in their history. Detroit is undoubtedly the most prosperous city in America today. Manufacturing plants, of course, did it. Lansing, Flint, Grand Rapids are prosperous too. All growing and will need more fresh vegetables, fruit, dairy supplies, etc., from our farms. They ought to help lower the taxes too, if they pay their just portion of the states expense. One way would have been a state income tax on incomes over $5000. Things do not look so bad for farmers in Michigan as they do in other states. That is if we continue to work together and are not led astray by rattle-brained prophets of a farming business millenium.

Clemenceau says that Germany is preparing for another war. If the French Tiger should contend that an egg which is crushed could again gather its component parts together again and mount of its own accord to its former resting place, we might believe him, for we have great admiration for the doughty old Frenchman. But when he says that Germany is capable of waging another war now or a quarter of a century from now, we know that he is talking in his dreams. No egg was ever so helplessly crushed as the German military machine.

* * *

The tax on gasoline to raise funds for highway maintenance is a subject we are discussing pro and con in these columns. It reminds us of the sales tax discussion. The folks you expect to be for it, are against it, and vica versa. It is a live issue in Michigan. You cannot avoid arriving at a decision regarding it, because nothing can prevent its coming up for settlement by a popular vote. We are presenting both sides by the best authorities available, so if our readers do not get all the facts, it will not be our fault.

* * *

One writer says "he hears" we have sold out to Henry Ford, another that an agent for another farm paper told him The Business Farmer had been sold to Armour. We published a list, (in accordance with postal regulations) of the owners of this publication in our October fourteenth issue. There has been no change in the ownership since. As Abe Martin says: "Rooms must be a'getin scarse agin, thars so many rumors goin' round!"

What the Neighbors Say

ACKERMAN NOT SATISFIED WITH CONTRACT

I AM enclosing a letter from the Owosso Sugar Company which I understand has gone out to all large growers generally. You will notice the tone is very personal and is I think, an attempt to break the stand of the growers that are through with raising beets until a fair 50-50 contract can be secured.

The Owosso Company is also out offering a span of Belgium horses to the man growing the largest acreage in a township and also a job working to get contracts for 304 weeks for a contract. Well you can say to the growers, organized and unorganized that I believe, we through the Michigan Sugar Beet Growers' Association never asked for anything but what was right. I will say, as far as I am concerned personally that unless a fair 50-50 contract can be offered which expresses the same tone of fairness that the company in the enclosed letter seems to want the farmer to give their contract labor, I am done with growing beets forever, to any extent at least, under present conditions.

Now we come to the old, old question. What is a fair contract? We will answer the question just the same as we have always answered it. Let representatives of the growers and the factories meet together, place their cards on the table, face up, go over the local conditions that change from time to time and get out a contract and then go to it. However, I have a feeling that the sugar beet business in Michigan is on the decline and the greatest effort on the part of growers and factories must be used through earnest cooperation to ever bring it back to where it was once.

W. H. Wallace says, "When you try to find out what the growers want for a 50-50 contract they head off on something which shows they don't know what they want!" You see we never have been together in a real conference, therefore cannot understand each other. All we can do is to again come out in the press with our claim.

The grower has more invested in growing a ton of beets than has the factory in milling a ton into sugar and we employ six times the labor. Therefore, are we unfair in asking for one-half the sugar in a ton?

Take the last twelve years extraction and average it and you will find there are 260 pounds of white sugar in a ton of beets. We want a contract which pays us an amount equal to the price of 130 pounds f. o. b. New York or one-half the amount received by the factory, an amount which is still not really all the grower is really entitled to. We never did receive any good from a guaranteed minimum so why consider it?

The factories will have to hold the 80,000 acres they had this year and get 100,000 acres more to get themselves back to full capacity. Can they do it? On a $6 contract with $23.00 an acre, can they get the labor for that? This is a poorer contract than offered last year which was $5.50 beets and $16.00 an acre labor. Where can fertility and manager costs come in on either of these contracts? C. E. Ackerman, Shiawasse County, Michigan.

—It is high time for the growers and the beet sugar factories of Michigan to get together on a plan which is equitable to both parties. The stand of the factory owners in refusing to meet with the organized growers was in defensible. The sugar beet industry is in too precarious a position for either factory or grower to refuse to cooperate on a plan which will work to the mutual advantage of both. One thing is certain. The factories have expert accountants who can tell them exactly what it costs to produce sugar from beets. If they will go 50-50 with the growers on their profit, we believe the grower can be satisfied and the factory, thru lessened cost of maintaining acreage, solicitors, attorneys, etc., will actually make more for their stock-holders and save their management all the disagreeable feeling which has existed practically from the day the first factory in Michigan started to grind beets. —Editor.

TAX EXEMPT—WHAT IT MEANS!

I HAVE read the editorial in the Michigan Business Farmer of December 9th headed "Tax Exempt." I agree with your sentiments thoroughly. Millions and millions of dollars that are usually available for the financing of farm operations and industrial plants have been withdrawn from active service and returned to the safety deposit boxes in the form of tax exempt securities. Naturally, the income from tax exempt bonds is not taxable.

That was one of the principal points that we tried to make with the farm organizations in the income tax campaign. A good many of the farm organization representatives thought they might reach the income from these tax free bonds by a state income tax. Such, of course, is not the case, and an income tax for Michigan (had it been adopted) would have fallen upon the shoulders of those who are already paying the taxes, namely the farmers and manufacturers. In other words, most any form of taxation will be loaded on those who now pay them unless we can change the situation in reference to tax exempt securities. We now penalize initative and genius and business ability, whether on the farm or in the factories, by our form of taxation. When, as a matter of fact, the producers should certainly be encouraged rather than penalized. We encourage, by our laws now, the hiding away of wealth which should be active.—John L. Lovett, Wayne County.

The Week's Editorial

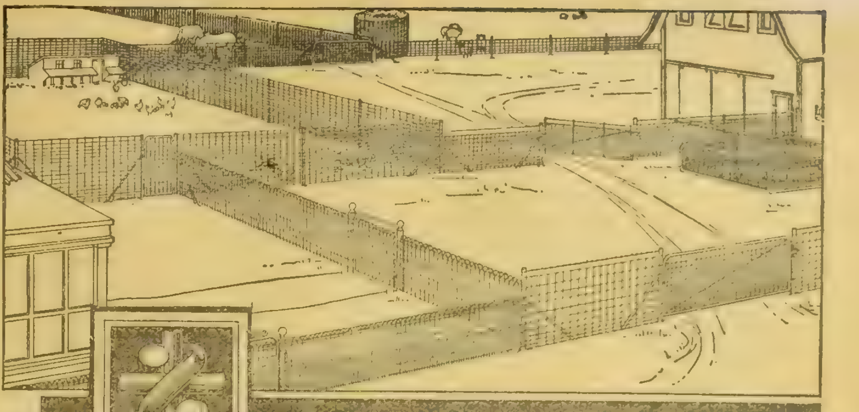
FARMER-LABOR FALLACY

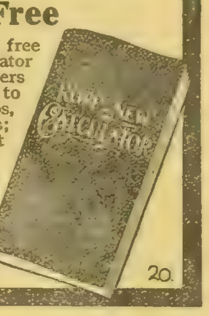
Two paragraphs in Secretary of Agriculture Wallace's annual report should not be lost on those who dream of a Farmer-Labor combination as the popular third party of the near future.

In one paragraph it is declared that the farmers have gained nothing from Labor's success in keeping its wakes from 50 to 100 per cent. above pre- war levels. On the contrary, as a direct consequence, farmers have had to pay more for transportation, fuel, implements, clothing and everything else they buy, without getting larger markets or higher prices for what they raise. And it might have been added that competition has drained the farmers' labor supply and raised his labor cost.

In another paragraph it is shown that the farmer has paid the cost of Labor's right to strike. Interruption of industry has reduced the food demand, stopped the marketing of some farm products, forced down the prices of others, raised fuel costs enormously and clogged the transportation lines with coal just when they should have been open for the crops.

If the farmers are to join forces with Labor, they will have to get something better than this out of the alliance. They have no means of coercing Labor, as Labor, by striging, can coerce them. If they ever join forces, it will be with a real partner, not a taskmaster. They want to see Labor fully employed, and at good wages. But when wages are forced beyond the points where consumption of products is increased, the farmer becomes a victim of Labor's cupidity. He is not likely to look with favor on any nation-wide merger to form a Farmer-Labor party so long as the Labor end of the partnership wants to dictate the policy for its own selfish advantage. —Philadelphia Bulletin.





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"Square Deal" fence adds beauty; increases farm values; is easy to put up and economical because of its long years of service.

Two Fine Books Free

If you own land we will send you free a 50c copy of Ropp's New Calculator —a handy farm book that answers 75,000 farm problems; tells how to figure capacities of barns, cribs, silos; shows tonnage of hay stacks; gives commercial law, parcel post rates. Also Square Deal Farm Book that tells what fence is best suited for every farm need. Write postal today for both books. Send no postage.

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WHEN WRITING TO ADVERTISERS MENTION THE M. B. F.

PARENT-TEACHER ASSOCIATIONS

A PARENT-teacher association is a voluntary partnership of parents and teachers and others whose object it is to surround little children with the environment most favorable for their development.

This organization brings parents and teachers together to study child life in regard to care and proper guidance in the home, in the school and in the community.

It aims to cooperate with educational institutions intelligntly; to work for public welfare with regard to health, morals, playground facilities, children's courts, mother's pensions, etc.

What would it mean to the children and the schools of the United States if every school would have the cooperation of a wide-awake, progressive parent-teacher association.

In the state of California there are more than 1,100 of these organizations connected with the public schools, with an individual membership of over 53,000 parents and teachers.

State Superintendent Wood, of California, says of the movement: "I believe in the Parent-Teacher Association because of the good it has done and the good it promises to do. An association of mothers and fathers deeply interested in the schools is certain to improve not only the school but the entire community. Our Parent-Teacher Associations are little democracies devoted to the advancement of the interests of boys and girls. I am deeply gratified by the growth of the Parent-Teacher Associations throughout the 'State during the last three or four years. Ere long we shall realize our aim to have a Parent-Teacher Association in every community." This is the testimony of the State Superintendent of Public Instruction in the State having the largest membership. In the United States there are now more than a half millon members in parent-teacher associations. There are organizations in every State.

Where does our State stand on the list? Can we afford to let other communities progress while ours stand still? Why not have a parent-teacher association in every school by 1924?

Call the parents together with the teachers in the schoolhouse, and see what can be done to make your school district the model for your State. Communicate with other organizations in your State and find out how they do it; exchange experiences; cooperate; work together for better citizenship, because the children of today are the citizens of tomorrow.

BETTER BUSINESS BUREAU

DETROIT has a Better Business Bureau and the bureau issues a timely warning. This government is about ready to pay out several hundred millions of dollars to the holders of war savings stamps and victory bonds. The parasites who make a living out of other people's misfortunes are all ready with their get-rich-quick investments, in which to place your money, promising a small fortune in a short time; there are people who will be taken in, that is the pity of it, in spite of all advice but be one of the wise and make no investment that is against the best judgement of your banker or of some reliable trust company. These agencies are always willing and anxious to help as prosperity for one man helps his neighbor and we are all neighbors of each other, tho miles intervene. This is verily the age of inter dependence and no man liveth unto himself either in matters of business life, social life or morality. The big financial concerns of the country are anxious that you reap the full benefit of your savings and that not one cent be lost to the unscrupulous promoter.

STOP, LOOK AND LISTEN, GIRLS

AT the Banker's Convention held recently in New York City, the wives of the bankers were beautifully entertained at lunch at the homes of some of the wealthiest and most exclusive of New York women. Their homes are most elegantly appointed and the guests were attended by inumerable servants in livery. Mrs. Douglas Robinson, Theodore Roosevelt's sister assisted one of the hostesses in the receiving line; but we are coming now to the matter of real importance. These society women wore no rouge, little powder, hair done most simply and eye brows au natural (not plucked.)

The Farm Home
A Department for the Women
Edited by MRS. GRACE NELLIS JENNEY

A JUST CRITICISM

THIS is one of Margot Asquiths criticisms of us and one we might well take to heart.

"As a complete outsider with a short and hurried experience of the United States, this has struck me more than anything else. Beauty, which is so obvious in the architecture and other things, seems to be underestimated, and where nature should dominate, I have been shocked on every road that I have traveled by huge billboards and advertisements of the most flamboyant kind, which irritate the eye and distort the vision of what otherwise would be unforgetable and inspiring. It is much the same everywhere. In Chicago the Michigan Boulevard, with the lovely lake on one side and grand buildings on the other, running at enormous width for a long distance, is one of the finest broadways in the world; but it is spoilt by a vulgar erection at the end, advertising something or other against the sky in electric bulbs of rapid and changing colors."

THE VILLAGE WEEKLY

AT last the floundering carrier bore
The village paper to our door.
Lo! broadening outward as we read
To warmer zones th' horizon spread;
In panoramic lengths unrolled
We saw the marvels that it told.
Its corner for the rustic Muse,
Its monthly gauge of snow and rain,
Its record mingling in a breath
The wedding-knell and dirge of death;
Jest, anecdote, and love-torn tale;
The latest culprit sent to pail;
Its hue and cry of stolen and lost,
Its vendue sales and goods at cost,
And traffic calling loud for gain.
We felt the stir of hall and street,
The pulse of life that round us beat;
The chill embarge of the snow
Was melted in the genial glow;
Wide swung again our ice-locked door,
And all the world was ours once more.

—From Whittier's "Snowbound"

SCHOOL LIBRARY

I wrote you some time ago and wish to thank you for your answer. Now I want to ask another question. Our Sunday School which is quite small has a small fund wish to start a library. Considering the high price of new books we have decided to see what we could do about getting second-hand books or perhaps get in touch with some other Sunday School that has an old library to sell. We would greatly appreciate any help or suggestions you may be able to give.—Mrs. B. L. F.

—I am publishing this letter so that if there are any Sunday Schools that have found a way thru this difficulty, they may give our subscriber the benefit of their experience. Some public libraries in the large cities make a practice of sending out quite a number of books, well selected, to smaller communities for a stated time and for a nominal sum, the books to be returned and others to take their places. The Public Library of Detroit has such a service. Why not write and find out what arrangement can be made. That plan would give you a circulating library which has some decided advantages. Address, Service Department, Detroit Public Library, Woodward Avenue, Detroit, Michigan.

PANCAKE RECIPE WANTED

I am a reader of the Business Farmer and receive lots of help thru the Woman's Department. I would like to see a recipe for pancakes, that can be made in the morning, quickly and easily and in time for breakfast.

I am having trouble with my starch, after I have it boiled as the directions say on the box and set it aside to cool, it gets lumpy and a thick film is all over the top; and when I want to iron my clothes the starch sticks to the iron, what makes this? I hope I have not asked too much.—A Reader.

—Is it a recipe for wheat or buckwheat cakes that is wanted? Perhaps we can have some recipes for both.

—Mix the starch with cold water and then slowly add the boiling water, first being sure that there are no lumps in the cold starch, put on the stove and boil slowly, carefully stirring all the time, do not allow it to get too thick. Add a little turpentine to the starch to prevent the iron from sticking. Smoothness and glossiness can be secured by stirring the starch with a parafin candle two or three times. Use two or three tablespoons of starch to one quart of boiling water, a teaspoon of kerosene oil to one quart of starch will also prevent sticking. If any reader has any further suggestions to offer we will be glad to print them.

ONE MORE DILL PICKLE RECIPE

I saw your request for dill pickle recipes in the best of farm papers. I have tried the following several years but never had it fail.

Pack cucumbers in layers with dill and a large grape leaf between each. Then cover wiith a brine made of 2 quarts of water, 1 quart of vinegar and 1 cup of salt. These can be packed either in open or sealed jars. I pack some in 2 quart jars and seal and they are good the second season. —Mrs. C. S.

HUNGARIAN GOULASH RECIPE

Peel and cut into pieces, 2 large carrots, 1 white turnip, 3 potatoes, 6 large onions, let cook in a little water until tender, then add 6 tomatoes or 1 can, 6 bay leaves, 1 green pepper, sliced, 2 large apples, peeled and sliced. Cook until tender, add a good sized piece of butter and thicken with browned flour. This makes a good supper or lunch dish. —Ed.

FRUIT CAKE RECIPE No. 1

2 cups sugar, 1 cup butter, 5 eggs, 1 cup buttermilk, 2 wine glasses boiled cider or some fruit juice, ¼ pound citron, ¼ pound almonds, 1 pound raisins, 1 pound currants, ½ cup molasses, 1 teaspoonful cloves, 2 teaspoonfuls ginger, 2 teaspoonfuls soda, 2 teaspoonfuls cinnamon, 2 teaspoonfuls allspice and 5 cups flour. The above is a "corking" good recipe and produces three good sized fruit cakes.

Fruit Cake Recipe No. 2

2 cups brown sugar, 2 cups ground dried apples, 1 cup molasses, 1 cup ground salt pork and ½ cup shortening. Let all boil up until pork is melted, spices, cinnamon and nutmeg added, 1½ cups sour milk, 1½ teaspoonful soda, 1 pound raisins, 1 cup nut meats, citron, orange peel, if you like, add the flour.

Fruit Cake Recipe No. 3

2 cups sugar, 1 cup lard, 1 tablespoon nutmeg, 1 teaspoon cloves, 1 tablespoon cinnamon, part teaspoon salt, ½ cup buttermilk or sour milk, 1 teaspoon soda (dissolved with water) 2½ cups flour and 1 cup of raisins or currents.

Bread Recipe

1 pint of potato water, 1 pint of milk, 3 quarts flour, measured before sifting, 1 cake compressed yeast, 2 tablespoon sugar, 2 tablespoon shortening and 1 tablespoon salt. If you make your yeast, ½ cake dry yeast in 1 quart of liquid will give the same results.

Soak yeast with 1 teaspoon of sugar in enough lukewarm water to cover it. Scald the milk. Place the rest of the sugar, the salt and the shortening in the mixing bowl and pour the scalding milk and potato water on them. (The water in which two or three medium sized potatoes have been boiled may be used if one has not saved the water in which the potatoes were cooked for dinner.) When cooled to lukewarm, add the yeast and about half of the flour. Set it to rise in a warm place for a half to three-quarters of an hour, then add the rest of the flour, enough to make a dough that will not stick when kneaded with but a slight sprinkling of flour on the kneading board. Stir in the mixing bowl or knead until the flour is well worked in. A cup of mashed potato will improve the quality of the bread. Let it rise in a warm place until almost double in volume, then knead

AIDS TO GOOD DRESSING

For Simplicity, Service and Style

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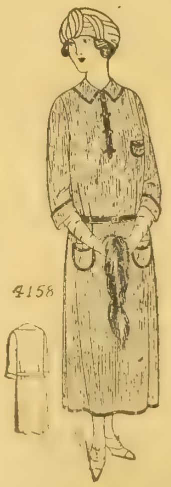
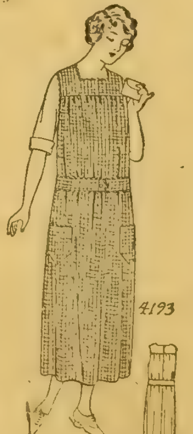
Catalog 15c—Pattern 12c



A Popular Day Dress

4158. A frock of this kind is neat and chic, and simplifies the work of the woman who makes it. The model is in "slip on" style. The bell shaped sleeve is comfortable and up-to-date. Plaits at the side seams, give added fulness to the skirt portions.

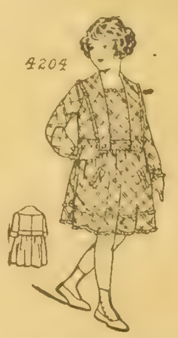
This Pattern is cut in 7 Sizes: 36, 38, 40, 42, 44, 46, and 48 inches bust measure. A 38 inch size requires 3 1-4 yards of 54 inch material. The width at the foot with plaits extended is about 2 1-4 yards.



A Comfortable Protective Apron

4193. Blue and white check gingham with rick rack braid for trimming is here illustrated. Crepe with a finish in colored yarn would be nice, as would also be percale of sateen with binding in a contrasting color.

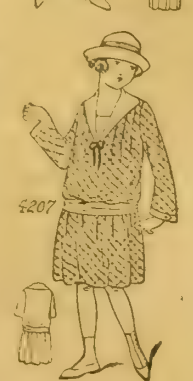
The Pattern is cut in 4 Sizes: Small, 34-36, Medium, 38,40, Large, 42-44; Extra Large, 46-48 inches bust measure. A medium size requires 4 1-2 yards of 36 inch material.



Girls' Dress With Sleeve In Either Of Two Lengths

4204. Plaid suiting was used for this design, with ruffles of taffeta. Inserted pockets are a pleasing feature of this style.

The Pattern is cut in 4 Sizes: 4, 6, 8, and 10 years. A 6 year size requires 3 yards of 36 inch material.



A Jaunty Frock For The "Young Miss"

4207 Checked woolen and serge would combine well in this model. It is also good for wool knit fabrics, and for velveteen. The sleeve may be in wrist or elbow length.

The Pattern is cut in 4 Sizes: 6, 8, 10 and 12 years. A 10 year size requires 3 1-2 yards of 32 inch material. To trim as illustrated will require 3-4 of a yard of 32 inch material.

until smooth and velvety and mould into loaves. Put in tins and when it has raised so that the volume or size has about doubled, it is ready for the oven. Bake about 45 minutes in a moderate oven.

REMOVING INK

Would it be possible for some of your readers to describe how to remove lettering from unbleached muslin feed sacks? I have tried various methods without success.—S. L. F.

ADDRESS WANTED

Will our Subscriber who makes sleeveless sweaters please send me her address? It is wanted and I have mislaid it.

NOT ADVERTISING

While we cannot use this column for advertising purposes, we will mention anything that promises to be a mutual help. This department has been the means of getting a good deal of help to a number of people, thru their making their wants known here.

J. D., Hastings,—Your card with the canning recipe did not reach me. If you will write again I will gladly publish it. Address your letter to me, in care of Home Department.

If you will send me an addressed envelope or postal card I will give you the address of a firm selling Rust Proof.

Well I'm back again to thank all those who helped me with my bread problem and those who gave the fruit cake recipes. I tried the bread recipe and it proved very satisfactorily, and as for the cake recipes I have not used all of them but I am keeping them for future use.—Nellie Isles.

NANCY HANKS

1 1-2 cups white sugar, 1-2 cup butter, 3 eggs beaten separately, 2 cups of flour, 2 teaspoons baking powder, 2 squares Baker's chocolate dissolved in 1-2 cup hot water.

Icing for Nancy Hank: 1 cup brown sugar, 1 cup white sugar, 1 desertspoon vinegar, 1-2 cup water. Boil till this forms a soft ball in cold water. Remove from fire. Beat in the whites of 2 eggs (beaten) put back on fire and add 8 marshmallows, stir until these disolve. To be put on cake when cold.—Canadian Subscriber.

GRAPE CONSERVE

1-2 peck grapes, 2 oranges (juice) 2 lemons, 1 c. chopped nut meats, sugar equal quantities as you have mixture. Wash fruit, remove grapes from stems. Remove skins from pulp. Cook pulp until soft. Strain to remove seeds. Place the strained pulp and skins in the preserving kettle. Add orange and lemon juice.

BEAUTIFUL ANGELS

(By request)

Beautiful angels are guarding us ever,
Sent by our Savior above;
Beckoning earnestly t'wards the bright river,
Sweet guiding angels of love.
Guarding us ever as onward we struggle,
Over life's ocean so broad;
Vigils they're keeping thro' joy and thro' trouble,
Beautiful angels of God.

Coming with heavenly mercies abounding,
Coming on missions of joy;
Life's flitting journey with brightness surrounding,
Coming its griefs to destroy.
And as we pass from its changes forever;
Leaving its glitter and gloss,
When we arrive at the beautiful river,
Angels will guide us across.

Angels will strengthen our faltering footsteps,
If their still voices we heed;
Sweetly they'll teach us the Lord's holy precepts,
Unto his kingdom they lead.
And when at last, we, through portals of brightness,
Enter the mansion above,
There we shall see in their heavenly whiteness,
Beautiful angels of love.

Uncle Rube Spinach Says

JUST THINKIN'

THE holiday season is just past an' gone an' of course most of us has had a great time. The weather was fine an' everything turned out as we would have it—for most folks any way. An' I'm thinkin' now of all the happy kiddies—happy 'cause Santa Claus came to them an' gave them the very things they wanted an' some of them the things they really needed.

An' I am also thinkin' of the little fellers that Santa missed this year jest as he has missed them every year since they were born. Say folks! Do you know I am sorry for the man or woman that has no little kiddies to make happy when Christmas times comes?

I know the joy that comes to one plannin' and buyin' the little things or maybe, bigger things to make the kiddies glad.

An' it takes so little to make a child happy! So you see I pity the ones who have no kiddies to buy for. An' oh how sorry I am for those who have little fellers an' yet, on account of sickness or misfortune, are not able to do what they would like to do an' have to tell the little ones that Santa could not come this year. I can feel for them as I picture the disappointment of the little boys an' girls to whom some of them Santa never omes—to them Christmas means nothin'—it's the same as any other day unless some one with a big heart, who knows conditions an' considers it a priv'ledge to step in an' help Santa out.

Yes, I pity those who have no little fellers an' I sympathise with those who have an' can't do anything for 'em. But I have no patience an' no love for the man or woman to whom God has given little ones—who are able to do everything for them an' yet do nothin'. Such folks don't know the joy of livin'! They care nothin' for the happiness of little folks; they forget they were ever children themselves. Some of 'em are so wrapped up in makin' money they pinch a dollar or a nickle so tight an' have pennies always before their eyes so they can't see anything else an' they don't want to see anything else 'cause money is their God an nothin' else counts with them.

If they lose a horse or a cow or hog, they take on somethin' awful—an' yet they neglect the most valuable thing they have on earth except the mother of the little ones an' the chances are they neglect her too.

I always look with suspicion on the man or woman who has no love for children. There is somethin' wrong in their makeup. An' somehow, I always feel like puttin' my hand on my pocketbook—if I have one—whenever I meet up with one of the kind.

Children were given us to be loved an' it's up to us to love 'em an' treat 'em right. Not only our own little fellers but every child for they have the same right to live an' enjoy life as we have. We were all little fellers once. Many there are what act as though they never were—they have no patience with kiddies—act as though they'd like to see 'em boiled an' made into soap or somethin'. An' yet the boys an' girls of today will be the fathers an' mothers of a few years hence—they will be runnin' things then an' the old curmudgeons who are so cranky to them now will be in their second childhood—if they are allowed to encumber the earth that long—an' will be dependent on the very kiddies whom they now look on with disdain.

Well, anyway its been a great holiday season an' now as I get back into the harness for another year's work I look back at the last few weeks an' find that I stored up happiness enough to last me for the time until we go through the same thing again.

If there is any one thing that I am more thankful for than any other it is—that God has given me children to live an' a heart to love 'em. An' not only the ones He has given to me but a love for childhood in gen'ral.

An' so here's wishin' for all that is brightest an' best for the little folks all over this great land of ours. Cordially yours—UNCLE RUBE.

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"The Flour the Best Cooks Use"

A GOOD RECIPE FOR MILK BREAD
3 quarts of Lily White Flour, 3 pints of lukewarm milk, 1 cake of Fleischmann's yeast. Set in morning in warm place and rise until light. 3 teaspoons of salt, 1 tablespoon of sugar, 1 tablespoon of melted butter or lard. Mix with Lily White Flour until stiff, or from 20 to 25 minutes. Set in warm place and let rise until light. Make in loaves and work each loaf from six to eight minutes. Set in warm place until light. When light take warm milk and sugar and put over top. Keep good fire and bake slow one hour and when baked wash over again to make nice smooth brown crust.

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Break it up overnight
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I want every sufferer from any form of muscular and sub-acute (swelling at the joints) rheumatism to try the great value of my improved "Home Treatment" for its remarkable healing power. Don't send a cent; simply mail your name and address, and I will send it free to try. After you have used it, and it has proven itself to be that long-looked for means of getting rid of such forms of rheumatism, you may send the price of it, One Dollar, but understand I do not want your money unless you are perfectly satisfied to send it. Isn't that fair? Why suffer any longer, when relief is thus offered you free. Don't delay. Write today.

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The Children's Hour

DEAR Nieces and Nephews:—Again Christmas has come and gone and we are on the threshhold of a new year. Most girls and boys go forward with shining eyes eager to see what the future has in store for them but the majority of the older people like your fathers and mothers or grandparents, or like Uncle Ned, hesitate and take inventory. We stop a moment in our daily work to balance the books, or to count the good deeds we have done during the past year and then compare them to the bad ones we did. Sometimes we are pleased with the results but many times we are not and then we decide that we will increase the number of good deeds and decrease the bad ones during the next year. I know that many girls and boys also do this but I think it would be a great step taken toward making this world of ours a finer and better place to live in if everyone, both large and small, would stop and take inventory every now and then.

If you will notice the people that pass your home you will soon be able to pick out the ones that stop each day to perform some good deed and the ones that do not. And, dear boys and girls, you will find that the tramp who calls at the back door for something to eat and the man known as "the miser" in your neighborhood are not of those trying to make our world a little better and brighter. Learn to stop and take inventory of yourself.

I certainly received a fine lot of Christmas stories. Some of them did not arrive until after the prizes had been awarded. I wish that we had space on our page to print them all even though Christmas is over but we cannot. However, we will try and have another contest soon so that all those who lost out this time can try again.—UNCLE NED.

OUR BOYS AND GIRLS

Dear Uncle Ned and Cousins:—May I snuggle in your cozy corner and enjoy "The Children's Hour" with you? I read our corner each week and enjoy my cousins' letters very much.

I am fifteen years old and I am in the eleventh grade in school. I, and a brother and sister go to the Elsie high school. I am taking four subjects, American literature, physics, modern history and algebra II. We have our semester tests in about three weeks. I like to go to high school better than I did at the country school. We have a high school assembly each month. The freshmen had charge of the assembly this month and they gave a very fine entertainment..

I am taking piano lessons now. I am in the fourth book. I like music and so I get along all right.

I think Lydia Sounart's story entitled "A Russian Santa Claus" very good but I am glad our Santa Claus drives a reindeer, aren't you?

I am sorry to leave your corner but I expect you will think I am taking all the room. Won't some of the boys and girls who read this corner please write to me. I will try and answer all who write to me. Well, good-bye Uncle Ned and Cousins. Your neice and cousin, Margaret Cook, Elsie, Michigan.

Dear Uncle Ned—Hello, everybody! How's the world treating you? If I'm thinking correctly, and I think I am, I said in my last letter that I was dreadfully lonesome here, but it must have been my imagination, as it's not a bit lonesome, now at least. If I had not had my age 'own pat I'm sure I wouldn't have nown how old I really was, I'm not sure yet. It sure kept me guessing for a while to know how old I really was. Those who guessed sixteen were right, those who did not guess that were wrong (naturally). I certainly like to read, and my favorite author is Zane Grey. Of course I like many more but I believe I enjoy his books the most. I intend to spend my spare time during the Christmas vacation reading. I wish some of the boys and girls would write to me. Did I hear you sigh? I know I did! Yes, I know Christmas is coming on and you most all are busy making gifts,—but can't you spare,—well, say five minutes,—to write to me? I assure you that I'll answer back so prompt that you'll be shocked. Try it, will you? Well I know Uncle Ned's eyes are tired reading my scribbling, so we'll say "Au-rovoir". Your neice, Venus Gazlay, Sidnaw, Michigan.

Dear Uncle Ned and Cousins:—I just read the December 23rd issue and though I would try my luck again. I have described myself before but probably you have forgotten what I look like. I am five feet and one inch tall, blonde complexion, and 16 years old. My birthday is the 17th of August. I wish those who have a birthday on the same day would write; not only them but all of the cousins around my age. I will gladly answer all that write. I am a freshman in high school.

How many had a merry Christmas? I hope you all did. Santa was very good to me this year.

I am a member of the Junior Red Cross. Our school made wreaths and calendars and sent them to the hospital in Newberry. It sure is great fun to join together and work. How many of the cousins joined the J. R. C.

My fountain pen is soo poor tonight that I mispelled almost every other word. I would like to hear from the cousins. A happy New Year to all.—Lillian Kuivinen, Box 71, Lewiston, Michigan.

Dear Uncle Ned:—I am a farmer boy and I am ten years old. My birthday is on the tenth of February. I go to school and I am in the sixth grade. There are twenty scholars in our school. For pets I have about thirty rabbits and one cat. It is snowing today. There is about four inches of snow and in some places it is about a foot deep. I went skiing and sleigh riding. We are going to have a program for Thanksgiving at our school. I earned $8.33 picking up potatoes this fall. We have taken the Business Farmer several years and I like to read it. I will close. from your nephew, Hugh Evan Good, Lake Ann, Michigan.

Dear Uncle Ned—May I join your circle of happy boys and girls? My father takes the M. B. F., and I have been a silent reader of the Children's Hour for some time. I would like to become acquainted with some of the boys and girls that write to the Children's Hour. I am ten years old and go to school every day. I am in the fifth grade and have about one mile to walk to school. I live on a 180-acre farm. We have 29 head of cattle, 6 horses and 14 pigs. For pets I have a little puppy, and a pony. I call my puppy collie and my pony's name is Baronet. I am sending you a photo of our pony. I have two brothers and three sisters. I would like to hear from some of the boys very much. Well I guess I will close for this time. From your friend, Alma Miller, Herron, Mich.

Dear Uncle Ned—I would like to join your merry circle. We take the M. B. F. and I like it very much. I enjoy reading the children's letters. I go to the Spicerville school. It is a little over a mile and a half. There are 9 children in our school. I am in the sixth grade. I have one brother. He is in the eighth grade. He is two years older than I am. We live on a farm of 80 acres. For pets I have two cats. We have two colts and two horses. We have one cow and three calves, and some chickens. We live a mile and a half from town. From your friend, Marion Wedon, R. 7, Eaton Rapids, Michigan.

Dear Uncle Ned:—I am a new writer and like to write letters. We take the M. B. F. and like it very well and I like to read the children's page.

The answer to the riddle that Francis wrote is "coal," because coal is stone at first and fire is the blaze, dust is the ashes, black is the color, red is the fire, white is the ashes.

I have brown eyes and hair, I am 12 years old and am in the the 7th grade. I am four feet and five inches tall. I have a sister 9 years old and a brother 7 years and a baby brother 16 months old, which has a head of yellow curls. Well I will close. Your friend, Hope Kratzer, R. 1, Allen, Michigan.

Dear Uncle Ned—Well it is not so very long ago since I wrote my last letter. We are having quite cold weather now days. I did not know what to say when I got up this morning and the ground was all covered with snow. We have lots of fun at school if there is snow on the ground. The boys make a big ring and then we all play fox and geese. The other morning we had a little snow. Of course the boys thought they could snowball us girls, but the teacher told them the first one that threw a snowball, would have to stay in all their noon hour and recess all winter through so we got along very good.—Esther Mann, R 1, Mount Clemens, Michigan.

Dear Uncle Ned—How are you these days? The most snow we have had this month is 1 inch and that did not last only a day, but father says we can go skating next Sunday and I am as glad as can be. I got a pair of skates last winter and it didn't take me long to learn to skate. My sister and I went skating and we had a lot of fun. The ice on the lake is about two inches thick. Goodbye, from Jeanette Sass, R. 1, Clayton, Michigan.

Dear Uncle Ned:—May I join your merry circle? My father takes the M. B. F., and enjoys it very much, and I read the Children's Hour. I am a girl 13 years of age, am in the 7th grade at school. I am taking up a health course and in one month I gained 7 pounds. My height is 60 inches. I have two brothers. We live on a 120 acre farm. Hope to hear from all the cousins.—Mary A. Brassinger, R. 1, Amadore, Michigan.

Dear Uncle Ned:—I am writing just a few lines. I am a girl of 12 years of age. I am in the sixth grade. My father takes the M. B. F. Your niece, Leota Way, 213 Meek St., Caro, Michigan.

Dear Uncle Ned:—May I join your merry circle? We take the M. B. F., and enjoy it very much. I am 14 years old and in the eighth grade. My birthday is October 26th. If I have any twin sisters or brothers please write to me. If I have no twins I would like to hear from any boy or girl. I have two sisters and one brother. For pets I have two cats. I hope you enjoyed your Christmas as I did mine. Love to all.—Helena E. Van Ouden, Webberville, Michigan, Box 96.

LAUGH IT OFF

Are you worsted in a fight?
Are you cheated of your right?
Laugh it off.

Don't make tragedies of trifles;
Don't shoot butterflies with rifles;
Laugh it off.

Does your work get into kinks?
Are you near all sorts of brinks?
Laugh it off.

If it's sanity you're after,
There's no recipe like laughter—
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EDITED BY J. HERBERT FERRIS

RADIO LECTURE DATES

January 29th, 7:30 p. m., Baptist Church, Tekonsha, Michigan.

January 31st, 7:30 p. m., Community Club, Cressy, Michigan.

HAVE YOU ARRANGED FOR LECTURE AND DEMONSTRATION

IN order to save extra letter writing and the wait for a reply, the following arrangement is being made to enable you to figure the exact cost to you for a lecture and demonstration on Radio.

1st. Railroad fare from Elberta and return is to be paid.

2nd. Board and lodging and transportation to and from station for one night.

3rd. Estimated cost of necessary supplies and incidental expenses that are incurred in giving demonstration, breakage of parts and wear and tear due to rough handling by transportation companies, such as vacuum tubes (each one broken or burned out costs us $6.50 and this is one item only.) Therefore a fixed charge of $10 is necessary in addition to items 1 and 2.

4th. If dates are arranged at places close to each other the railroad fare would then be divided and the cost would be less, but this would have to be in the nature of a rebate to you.

It is our effort to arrange the schedule, in so far as possible, so that railroad fare will be divided between two or more places.

You can charge admission to these lectures and in that way pay all expenses and in fact make a little extra money to put into your treasury.

We will supply you tickets free, all you have to do is to fill in the date and time of the lecture.

What You Will Get!

1st. An actual demonstration of receiving by radio, hearing music and speeches or other entertainment.

2nd. First hand demonstration of the working of a receiving set, actually seeing it work.

3rd. An opportunity to ask questions and receive answers at once.

4th. Hearing a lecture (or talk) in plain language that you will understand, about Radio, where to buy your parts for making sets, what to avoid and what you will need.

5th. How to apply radio to your actual benefit as well as entertainment.

PUBLISHER'S DESK

PATENT ATTORNEYS

I notice that you are handing out a lot of good advice in every issue, so I come for a little myself.

I have an idea which I think might be patented, and have been corresponding with a man in Washington, D. C., who says it is possible to legally protect an idea before patenting, so that it may be made known to manufacturers and their opinions solicited as to its commercial value, or even sell it without running the risk of losing your rights by making the idea known.

I am enclosing a treatis sent out by this man and would like your opinion as to its soundness.

He also sent me a blank form to be filled out and signed by witnesses and a notary public. It also has blanks for sketches. What is your opinion of this?

I agree with him when he says it is better to spend twenty dollars than seventy-five or more in finding out if an idea is of commercial value. But I would like to have someone elses opinion before investing even twenty dollars. Hence this letter.

—The gentleman from Washington may be all right and his may be a good plan, but we have never heard of Mr. Green and I wonder why he does not give his post-office address so we, or you, might look him up. I am sure your state representative at Washington would be glad to have someone in his office look Green up for you or recommend a good patent attorney. Without the address I cannot even find him in a commercial rating book.

SONG POEM "BUYERS"

I sent the Lenox Company a poem a year ago, they said it was good and they wanted me to accept their offer, since then I have heard from them several times. Now how can I find out if they will deal square. I like to write poetry and would like to make some money from my talent. Can you tell me how to procede. I first read their ad in "Comfort."

—I hope you have not sent the Lenox Company or any other any money. Their scheme is to get you to pay for seeing your own poem in print. Few copies are ever sold, if any. We have had several experincss with thse people, but have never known of anyone writing a "hit" for them. If you have real talent, send your material to any legitimate song publisher, they are anxious to buy suitable material and will not ask you to pay them first.

THE TRUTH ABOUT HENRY FORD

(Continued from page 6)

then the tires gripping the surface of the track and the machine was away like a shot. The hundred or more spectators held their breath as the little car tore along the track, then cheered wildly as it crossed the finish line. In a few minutes the timekeepers announced that Mr. Ford had broken all records by making the mile in 39 4-5 seconds. This feat made the car and its designer known the world over.

That race and the previous one in which he defeated Alexander Winton were the only speed contests in which Henry Ford drove his own car. Shortly afterward Barney Oldfield drove 999 at New York, Chicago, Los Angeles and other cities and won many successes, but the company's racing was destined to end soon in a near tragedy. Frank Kulick was driving a six cylinder car in a race at the Michigan State Fair when a rear tire exploded, flew off and struck him on the head. The blow stunned Kulick and the speeding car crashed through a fence. Kulick was extracted from the tangled wreckage and hurried to the hospital. As the unconscious driver was carried away Mr. Ford declared: "Never again will I risk the life of one of my men in this way."

Never, since that day, has the Ford Company entered a race.

Kulick recovered and is still in the employ of the Ford company. Likewise all the men who prepared the car for the race now hold important positions with the company. A picture was taken of them when the racer was completed. They were Peter E. Martin, now general manager of the Highland Park plant; Charles Hartner, now assistant plant superintendent, Gus Degner, now superintendent of inspection at the Highland Park plant, Fred Rockelman, now manager of the Indianapolis branch; Fred Haas, now in charge of all branches, and Ray Dalinger, who will be mentioned again in the account of the peace ship. This racer was the first of its type ever built.

Further chapters of "The Truth About Henry Ford" in Jan 20 issue.

BILLS AND NOSES

"There was a strange man here to see you today, papa" said little Ethel, on meeting her father in the hall.

"Did he have a bill?"

"No, papa; he just had a plain nose."—Everybody's Magazine.

NEW LAMP BURNS 94% AIR

Beats Electric or Gas

A new oil lamp that gives an amazingly brilliant, soft, white light, even better than gas or electricity, has been tested by the U. S. Government and 35 leading universities and found to be superior to 10 ordinary oil lamps. It burns without odor, smoke or noise—no pumping up, is simple, clean, safe. Burns 94% air and 6% common kerosene (coal oil).

The inventor, A. R. Johnson, 609 W. Lake St., Chicago, Ill., is offering to send a lamp on 10 day's FREE trial, or even to give one FREE to the first user in each locality who will help him introduce it. Write him to-day for full particulars. Also ask him to explain how you can get the agency, and without experience or money make $250 to $500 per month. (Adv.)

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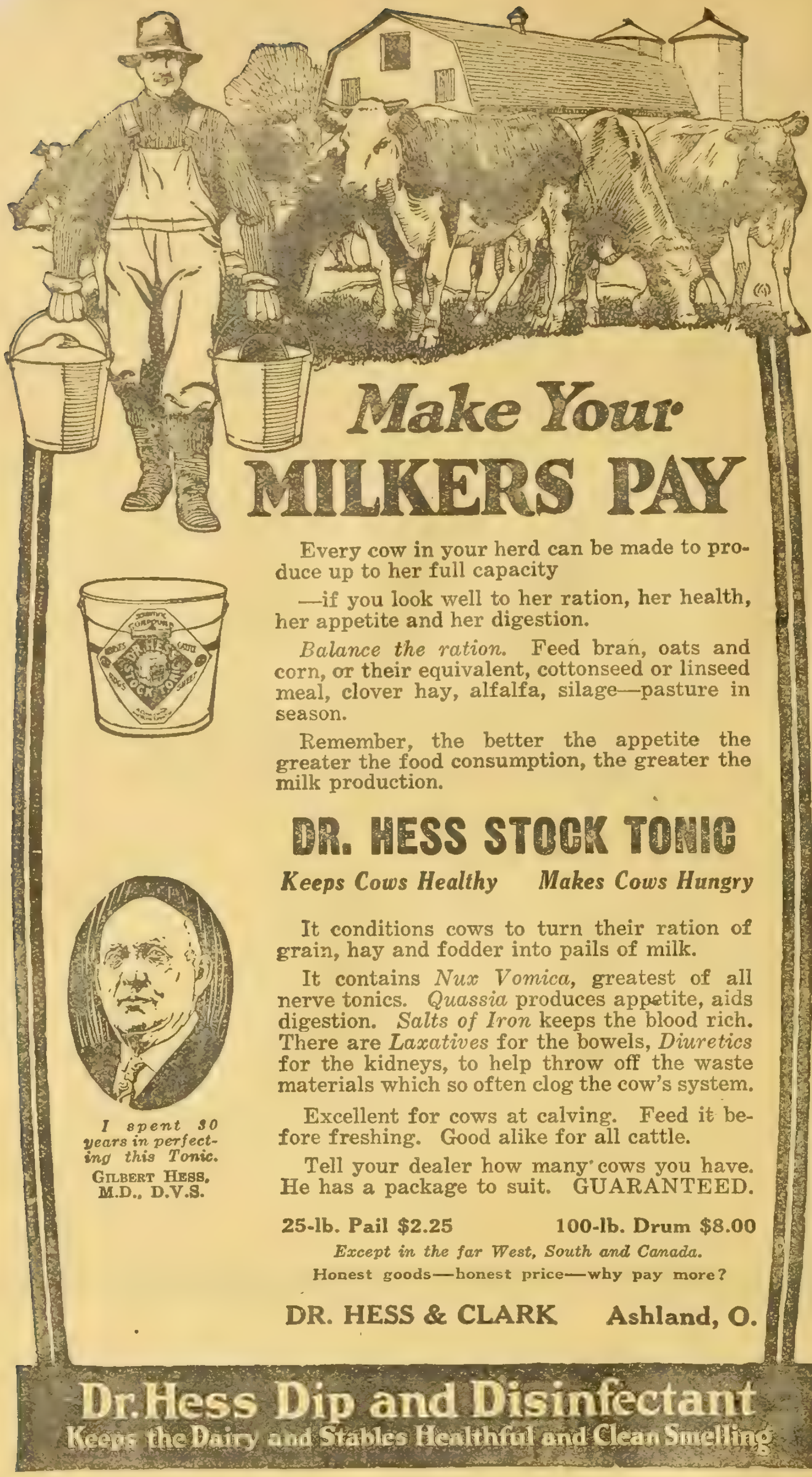
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—if you look well to her ration, her health, her appetite and her digestion.

Balance the ration. Feed bran, oats and corn, or their equivalent, cottonseed or linseed meal, clover hay, alfalfa, silage—pasture in season.

Remember, the better the appetite the greater the food consumption, the greater the milk production.

DR. HESS STOCK TONIC

Keeps Cows Healthy Makes Cows Hungry

It conditions cows to turn their ration of grain, hay and fodder into pails of milk.

It contains *Nux Vomica*, greatest of all nerve tonics. *Quassia* produces appetite, aids digestion. *Salts of Iron* keeps the blood rich. There are *Laxatives* for the bowels, *Diuretics* for the kidneys, to help throw off the waste materials which so often clog the cow's system.

Excellent for cows at calving. Feed it before freshing. Good alike for all cattle.

Tell your dealer how many cows you have. He has a package to suit. GUARANTEED.

I spent 30 years in perfecting this Tonic.
GILBERT HESS, M.D., D.V.S.

25-lb. Pail $2.25 100-lb. Drum $8.00

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Honest goods—honest price—why pay more?

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Dr. Hess Dip and Disinfectant
Keeps the Dairy and Stables Healthful and Clean Smelling

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OUR SPECIALTY:
BIG TYPE SPOTTED POLANDS AND DUROC JERSEYS

We are experienced salesmen, Expert Judges and money getters.

Right prices. Write today for good dates and our terms, address either of us.
WM. WAFFLE, Coldwater, Mich.
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Satisfaction GUARANTEED or NO CHARGES MADE. Terms $50.00 and actual expenses per sale. The same price and service to everyone.

I specialize in selling Polands, Durocs, and Chesters. Let me reserve a 1922 date for you. Write or wire,
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ADVANCE DATES SOLICITED.
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CATTLE

HOLSTEIN-FRIESIAN

EXCEPTIONAL FINE BULL CALF BORN Dec. 12th. The Dam is the best cow we have and has A. R. O. records. Sire Romeo King Segis Pontiac Korndyke—son of the $30,000 bull. The first $25.00 gets him—don't linger. Entire herd free from T. B.,
SCHAFFER BROS., R. 4, Oxford, Mich.

OCT. CLEARANCE SALE. WE ARE OFFERING 20 heifers and bulls. Heavy producing dams. Sire has 7 dams averaging nearly 1100 lbs. on yearly test. Free from T. B., $50.00 and up.
WOLVERINE DAIRY FARM
Prop.—H. G. Booth Gladwin, Mich.

32 LB. SIRE—30 LB. DAM—HERE'S A BULL bargain that will be snapped up quick. Born Nov. 3rd, 1921, ready for light service, nicely marked, more white than black.

His dam, a great grand-daughter of King Segis and Pontiac Korndyke, was 2nd Prize Junior 4 yr. old in both 7 and 30 day divisions, State of Michigan in 1918; her records being 30.79 lbs. butter and 653.10 lbs. milk in 7 days and 124.21 lbs. butter and 2779.90 lbs. milk in 30 days.

His 32 lb. sire is by a son of Pontiac De Nijlander, a 35.43 lb. Michigan champion. The 32 lb. dam of his sire is also a 2nd Prize Michigan cow in the Senior 4 yr. old 7 day division in 1918 and her dam a 29.43 lb. cow.

First check for $250.00 gets him f. o. b. White Pigeon, Mich. Pedigree and photo on request. **ALBERT G. WADE,**
130 N. Wells Street, Chicago, Ill

FOR SALE—HOLSTEIN BULL CALF, 8 weeks old. Dam 28.91 lbs. butter, sire 33 lbs. with 1,100 lb. yearly record. Price $300.00 or will exchange for suitable female
COOK BROS., Fowlerville, Mich.

FOR SALE—REG. HOLSTEIN BULLS FROM A. R. O. dams ready for service.
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RICHLAND SHORTHORNS

We offer one red, low down, thick bull calf fifteen months old, also one roan calf fifteen months old. A bargain if taken at once. Also a few young cows witr calves at foot.

C. H. Prescott & Sons
Office at Tawas City, Mich.
Herd at Prescott, Mich.

SHORTHORNS AND POLAND CHINAS—NOTHING for sale at present. Are holding for public sale Nov. 15th. Write for catalogues.
SONLEY BROS., St. Louis, Mich.

A POLLED SHORTHORN HERD BULL 2 years old. Scotch Orangeblossom Family. Fit to head any herd. Younger ones for sale.
L. C. KELLY & SON, Plymouth, Mich.

GLADWIN COUNTY SHORTHORN BREEDERS offer the best in beef and milk strains. All ages, both sexes. **W. S. HUBER, Sec'y, Gladwin, Mich.**

DAIRY and LIVESTOCK

CONTROL OF CATTLE LICE

CATTLE lice are more or less common in all parts of the United States. They are found mostly on underfed and poorly housed cattle, although they often occur on cattle in good flesh and kept in sanitary quarters. As a rule individual members of a herd are not infested equally, some being infested much worse than others, because some cattle seem to be practically immune. Young and old stock, and weak poorly fed cattle suffer the most from lice. Infested calves do not thrive or gain weight normally during the winter season and will remain stunted until the coat is shed in the spring at which time practically all the lice will disappear. The loss in weight is sufficient to warrant adopting some method of treatment.

Cattle lice live upon food obtained from the body of the host. The irritation caused by their feeding is shown by the efforts of the infested animals to obtain relief by rubbing and scratching, and one will often see animals with areas of skin where the hair has been rubbed off and the part bruised and raw from rubbing against objects.

There are three kinds of lice that are usually found on cattle, and are commonly known as "Short nosed cattle lice," "Long nosed cattle lice," both of which are blood sucking lice, and the "Biting lice of cattle," whose presence is not as serious as that of the former. All, however, are treated in the same manner.

In the control of cattle lice, plenty of nutritious food are essential to success, whatever method of control you choose to adopt.

There are two commonly used methods of treating cattle for lice; first, hand applications and, secondly, by spraying. The method to adopt will depend upon the season of the year, the remedies selected, the number of cattle to be treated and the facilities available. All animals in the herd should be treated regardless of whether they show evidence of being infested or not.

Of the hand applications, the common prepared louse powders that are on the market are useful in helping to hold in check the parasites during the season when the weather is too cold for dipping or spraying.

Grease and liquid preparations can be made up at home which are fairly effective and practicable where the farmer has only a few head to treat and will give the matter his personal attention. A small quantity of raw linseed oil applied with a stiff brush over the surface of the body is very efficient. A mixture containing equal parts of lard, kerosene and sulphur is very useful when applied in the same manner.

An efficient decoction can be prepared by placing a pound of larkspur seed in a gallon and a half of water and boiling down to a gallon, this preparation has worked well in the treatment of many herds. This may also be applied with a brush.

For spraying the coal tar dips will be found efficient if in making up the solutions you will add about ten ounces of vinegar to each quart of the coal tar solution. The vinegar is added for its destructive action upon the eggs of the lice. As soon as you have finished spraying an animal it is well to rub the solution in well with a brush. Further information on this subject may be obtained by sending for "Farmers Bulletin No. 909," United States Department of Agriculture, Washington, D. C.—Edw. K. Sales, Veterinary Division, M. A. C.

MEANING OF "TANKAGE"

Please give me the defination of the word tankage. I notice it so much in Farm Journals but it is new to me.—H. H., Lyon Manor, Mich.

—The word "tankage" refers to the by-product from the tanking of dead animals, and waste meat scraps, such as are found about abattoirs. All animals which arrive at terminal markets dead, those that are so severely injured as to be unfit for human food, or are diseased rendering them unfit for human food, are first skinned and then placed in a tank where they are thoroughly cooked until the flesh all falls apart and all of the grease is removed. The grease is drained off and used for inedible purposes. The meat is dried and then ground, the product being called tankage.

—Tankage is in several grades. A great deal of low grade tankage is sold to fertilizer manufacturers, whereas the better grades of tankage are sold for animal feeds. Tankage is used almost entirely as a hog feed, not being palatable to other classes of livestock. In purchasing tankage it is usually best to buy one of the better grades of "digester tankage," the word "digester" indicating that it is a feeding tankage. We always buy the grade containing 60% protein and take pains to see that we get it from an abattoir which has Federal inspection, so as to be absolutely sure that it has been thoroughly sterilized.—George A. Brown, Prof. of Animal Husbandry, M. A. C.

WILL SILAGE DETERIORATE?

Does ensilage deteriorate in feeding value if thrown down in a pile and let to heat twelve to twenty-four hours before feeding.—J. E. S., Edmore, Michigan.

—During warm weather silage should be thrown out of the silo as it is used, as it will deteriorate considerably if allowed to lay in a pile and heat from twelve to twenty-four hours before feeding. In cold weather, however, it will not deteriorate any and it is often advisable to throw it down at least twelve hours ahead of feeding, throwing any frozen of the top of the silo down first and then some of the warm silage from a little lower down on top. If this material is then slightly packed in the silo chute, it will often warm up enough to expel the frost from that which was thrown down first and the entire mass will be better as feed. This last will only apply where the chute is warm enough so that further freezing will not take place. George A. Brown, Prof of Animal Husbandry, M. A. C.

FATTENING COW

I have a cow to sell, one of our cattle buyers offered 1½c a lb. alive, calls her a canner. I asked him what she would be worth if I fattened her, he said he would give me 3c.' What I would like to know is if I can't get more for my corn if I fatten her than to take 1½c per lb. for the cow and 30c per basket for corn, have a feed grinder also. I have never fed cows or fattened them. How long does it take?—W. F. C., Standish, Michigan.

It would not be profitable to fatten a canner cow with corn at present prices. It would be much better for you to take 1½c per pound for the cow and sell your corn at 30c per basket than to feed the corn to the cow and later sell her at 3c per pound.

The transaction, if you were to fatten the cow, would figure out something like the following: One canner cow weighing 800 lbs. would be worth at 1½c, $12.00. To make her weigh 1000 lbs. and sell for 3c per lb. would require in the neighborhood of 800 lbs. of corn and 800 lbs. of clover hay, for each 100 lbs. gain or you would increase the value of the cow from $12.00 to $30.00, or $18.00 worth. To do this would require about 1600 lbs. of corn and a like amount of hay, which would be worth more than $18.00.—George A. Brown, Prof. of Animal Husbandry, M. A. C.,

VETERINARY DEPARTMENT

TAKING CATTLE FROM STATE TO ANOTHER

Do milk cows have to be tested for tubercular trouble when taking from Illinois to Michigan? If so, for how long will the test hold good? Do horses have to be inspected in order to take them?—L. A. R., Cordona, Illinois.

—The importation of cattle into this state for breeding or dairy purposes is prohibited except when such cattle are accompanied by a certificate of inspection made by a duly qualified veterinary surgeon who is a graduate of a recognized veterinary college in

20 Cents

to keep this separator in perfect running order for one year is the testimonial of 51 American farmers who purchased Melottes **over eight years ago.** They are still giving perfect service every day and skimming so close that not a single trace of cream is left in the milk. We will send you a Melotte right to your farm on

30 Days' Free Trial!

—then, if satisfied, only $7.50 and a few easy payments—and—the wonderful Belgium Melotte Separator is *YOURS.*

No Money Down!

Catalog tells all—*write.*

Caution! U. S. Bulletin 201 shows that vibration of the bowl causes *cream waste!* The Melotte bowl is *self-balancing.* Positively cannot get out of balance therefore cannot vibrate. Can't remix cream with milk. *The Melotte has won 264 Grand and International Prizes.*

Catalog FREE

Write for new Melotte catalog containing full description of this wonderful cream separator and the story of M. Jules Melotte, its inventor. Don't buy *any* separator until you have found out all you can about the Melotte and details of our 15-year guarantee which is infinitely stronger than any separator guarantee.

Runs so easily, bowl spins 25 minutes after you stop crankipg unless you apply brake. No other separator needs a brake. Bowl chamber is *porcelain lined.*

The Melotte Separator, *H. B. Babson, U. S. Mgr.*
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With Simple Mixture, Farmer Can Produce Better Hams and Bacon Than the Packers

Any farmer can produce high-priced sugar-cured meats, better than packing house products, by using a simple, quickly-prepared mixture. Besides sugar curing ham and bacon, the mixture preserves spare parts and makes cured mutton delicious.

To make it add a large jar of Wright's Ham Pickle to 27 pounds of salt and use as dry pack or brine. Let the meat cure 4 to 8 weeks. Then smoke it with Wright's Condensed Smoke, which will take only a few minutes, and you'll have meat that will delight the family or bring fancy prices. Wright's Smoke and Ham Pickle are fully guaranteed. They cost little at any drug store.

Send you name to the E. H. Wright Co., 850 Broadway, Kansas City, Mo., and receive, free and postpaid, a new $1 book, "Meat Production on the Farm," which tells how to cure every kind of meat. This book is free to farmers only. Write for it today.

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STRAWBERRY PLANTS, $3.00 per 1,000. History and valuable illustrated book free. You will learn. Add. **Mayer's Plant Nursery. Merrill. Mich.**

IS YOUR FARM
FOR SALE?

AN AD IN M. B. F.
WILL SELL IT.

United States, Canada or Europe. Such certificate shall show at the time of said inspection and within sixty days prior to shipment said cattle had been subjected to the tuberculin test and were free from tuberculosis.

The tuberculin test should not be considered as holding good for any length of time. If an animal passes a negative test, the result obtained merely indicates that the animal is not tuberculous at the time of the test.

It is unlawful to import horses into Michigan for any purpose except when such horses have been subjected to the mallein test by or under the direction of a graduate of some recognized veterinary college. A certificate shall accompany such horses and shall show the time and manner in which said test was conducted. The certificate shall further state that at the time of the inspection which shall not be more than sixty days prior to the importation, such horses were free from any contagious or infectious disease.—B. J. Killham, State Veternarian.

COW SUFFERS FROM MASTITIS

I have a young cow that shortly after calving began giving long strings of curdly, clotted blood from one of her teats. The other teats do not seem to be affected at all. This is her first calf. Would be very grateful for information as to cause and cure. Is the milk from the other teats fit for use?

We saved a colt by taking advise given in your paper, and have pasted all your columns in a scrap book for reference. Thanking you in advance, I am, A Constant Reader, Decker, Michigan.

—The history indicates that your cow is suffering from mastitis, the causes of which are infection, refrigeration due to lying on cold floors and traumatism. The milk from the other teats would be fit for use providing the quarters are not all effected. As there is no specified treatment for mastitis I would advise you to consult your local veterinarian relative to treatment as it is very unsatisfactory to successfully treat diseases by mail.—John P. Hutton, Associate Professor of Surgery and Medicine, M. A. C.

HOG LAME IN FRONT LEGS

I have a large O. I. C. boar that got lame in one of his front legs. The shoulder is swelled badly but the foot isn't. I can see nothing the matter with it.—M. G., Clarion, Michigan.

—It would be useless for me to try to prescribe treatment for a case of this kind without knowing more about it. The foot may have something in it or it may have gotten injured in some other way. If the boar is valuable better get a good veterinarian on the job and make a thorough examination of the foot.—John P. Hutton, Associate Prefessor of Surgery and Medicine, M. A. C.

WHERE YOUR HIGHWAY TAX MONEY WENT

(Continued from page 4)

the past few years, has made further expansion necessary and during the month of June, 1922 the Department had 551 employees and a total monthly payroll of $54.586.43

Notwithstanding this large force, the total overhead of the Department including surveys and supervision of road construction this year, has been kept down to 3.1 cents on the dollar. In other words 96.9 cents of every dollar has gone into the actual construction of the roads, or looked at from a different angle, during June of the same year there were 252 road and bridge contracts under construction or an average of about two employees for each live construction project.—Michigan Roads and Pavements.

(Editor's Note: The cuts used with this article are by the courtesy of Michigan Roads and Pavements.)

"And what did the poor little dog do when you brutal boys tied the can to his tail?"

"Oh, he just went broadcastin' down the road."

A drunken Congressman once said to Abraham Lincoln: "I am a self-made man." "Then, sir," replied Honest Abe, "that relieves the Lord of an awful responsibility."

At Calving —when a cow needs a friend

"The Home Cow Doctor"

—this is the title of a genuinely authoritative book on cow diseases, and how to successfully treat them at home.

We want you to have a copy of this book, and will send it free on request. We merely ask you in return to give us the name of your local dealer.

Drop us a postal today for your copy. The book has been worth hundreds of dollars to many cow owners by telling them just what to do at critical times.

NO NEED to tell you that calving is a severe strain on the vital organs of even the most vigorous dairy cow. In the shock and strain lurk many hazards to health and milk-giving.

The genital and digestive organs, carrying the burden of this function, need help. They need a real friend—before, during and after.

Here is where *Kow-Kare* comes in strong. It contains the medicinal properties to build up the genital organs to vigor, and regulate the digestive functions as nature requires. Because of its success in bringing cows safely thru calf-birth in perfect condition its use in this emergency is known in most well-regulated dairies.

The use of *Kow-Kare* is neither expensive nor difficult. Just a tablespoonful of the medicine in the feed twice a day for two weeks before and for two or three weeks after calf-birth. A few cents spent to assist nature will repay you with a healthy, productive milker and a vigorous calf.

Kow-Kare is equally effective in treating *Retained Afterbirth, Abortion, Barrenness, Scouring, Bunches, Milk Fever, Loss of Appetite,* etc. Many dairymen feed Kow-Kare one week each month to every cow, and realize big increases in milk yield thru the added vigor of the herd.

Try *Kow-Kare* and you will use it always. Feed dealers, general stores and druggists sell it, large size $1.25, medium, 65 cts. Sent prepaid if dealer is not supplied.

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The Great Cow Medicine
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FOR SALE—FIVE REGISTERED DURHAM bulls from ten months to one year old. I have also a few female Durhams for sale.
HENRY J. LYNCH, Mayville, Tuscola Co., Mich.

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WE HAVE SOME FINE YOUNG ANGUS BULLS from International Grand Champion Stock at reasonable prices. **E. H. KERR & CO., Addison, Mich.**

FOR SALE—SIX YOUNG ABERDEEN-ANGUS cows and heifers. Well bred, good individuals. Price $800.00 F. O. B. Mich.
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SPECIAL PRICE ON BULLS, RANGING IN age from 8 to 11 months, until Jan. 1st, 1923.
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SECURE YOUR NEXT BULL FROM ONE with both A. R. Sire and Dam. I have what you want. I also offer a few choice females.
A. M. SMITH, Lake City, Mich.

GUERNSEY BULL Bred Heifer. Yearling Heifer. Heifer calf. Best of breeding. From good producers. Price right. Write **G. A. WIGENT, Watervliet, Mich.**

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REG. JERSEYS, POGIS 99th OF H. F. AND Majesty breeding. Young stock for sale. Herd fully accredited by State and Federal Government. Write or visit for prices and description.
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THE BETTER WAY

GROW HEREFORD BABY BEEVES

Our Contractors are guaranteed top prices by Detroit Packing Co. Commission, yardage, Feed and all other expenses, except transportation—only; are cut out. Our plan opens the way to profitable beef-making, by Michigan Farmers. In no other way can as much money per cow be earned, with so little labor. If you have no beef-bred cows, we have them on hand or listed.

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RED POLLED CATTLE—A few choice bulls and heifers for sale.
ROYSTAN STOCK FARM,
Will Cottle, R. R. 1, West Branch Michigan

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BROWN SWISS BULLS FOR SALE OR EXchange for females of like quality. Don Stacis No. 8693 calved 3-8-20. Sired by Nellies Stacis Grand Champion for 1922-23. Owned by Marshall & Sons. Dam a direct decendant of College Barvera world's champion Swiss cow. Also calf dropped 2-4-22. Sire Don Stacis, dam Marybelle No. 8141. These bulls are of exceptional breeding and quality. **MAX JENNINGS, Okemos, Mich.**

FOR SALE—REGISTERED BROWN SWISS bull Grit No 8919 born Sept. 14, 1921. Won first place as a senior calf at the State Fair. Also bulls, cows and heifers of equal merit. Herd federal accredited.
ERWIN R. MOORE, Osseo, Mich., R. 3.

Auction Sale of Registered Brown Swiss Cattle Cows, heifers and bulls. All tubercular tested. Sale on the 17th day of Jan. 1923. Farm located 3 miles south of Imlay City, Mich. **John Ulrich, Prop.**

FOR SALE—REGISTERED BROWN SWISS heifers and cows, also one bull. Herd federal accredited. **ELMWOOD FARMS, Sebewaing, Mich.**

SWINE

DUROCS

DUROC JERSEYS

NELLS LITTER; SIRED BY LIVINGSTONS PRIDE farrowed July 24, these pigs cannot be beat. Nell has farrowed 59 pigs in four litters. PRODUCTION is the big word of today, better get a boar out of this litter, and start on production. **LAPHAM FARMS, Pinckney, Mich.**

SENSATION MARSI Our new herd boar. Sired by "Marsi" Reserve grand champion National Swine Show 1922. We are taking orders for gilts and sows for spring farrow bred to this wonderful boar.
SCHAFFER BROS., Route 4, Oxford, Mich.

PEACH HILL FARM offers choice weanling Duroc pigs, either sex. Priced very reasonable. Write us.
INWOOD BROS., Romeo, Mich.

HILL CREST DUROCS, PERRINTON, MICH. We are breeding twenty sows and eighteen gilts to a son of GREAT ORION SENSATION. Yearling, spring and fall boars. **NEWTON & BLANK, Farm 4 miles straight south of Middleton, Gratiot Co., Mich.**

FOR SALE—FOUR CHOICE DUROC JERSEYS boars from Agriculture College herd. Just right for December service. Prices reasonable.
HUGH REID, Clifford, Mich.

O. I. C.

REGISTERED O. I. C. SERVICE BOARS AND Bred Gilts, priced to sell.
J. R. VAN ETTEN, Clifford, Mich.

(Other Livestock on Page 23.)

BABY CHICKS

Bargain Prices—Write Quick. **Best paying, highest quality,** Pure Bred Tom Barron and Hollywood White Leghorns—Egg Records 270 to 300 eggs in one year—Brown Leghorns, Anconas, Barred Rocks, Rhode Island Reds, White Wyandottes. Book orders now—**get liberal discount. Valuable catalog free.**

We guarantee to save you money—give you strong, healthy, perfect chicks, the best that money can buy, guarantee live delivery, and absolute satisfaction. **Write today sure.**

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from Michigan Certified Stock. **Heavy Laying Strains of English White Leghorns, Brown Leghorns and Anconas.** Ask for our interesting catalog describing our strain also showing you the advantages of buying chicks direct from our large poultry farm which is located in the heart of the famous poultry district. LIBERAL DISCOUNT allowed on all chick orders booked now but you must ACT QUICKLY. Get your order in now at this low price and avoid the usual costly delay. 100% live arrival guaranteed.
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Hardy free range stock—a Pure Bred Practical Poultry especially adapted to the farmer poultryman; stock that has proved of exceptional practical value on Michigan farms.

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A limited number of S. C. White and R. C. Brown Leghorns, and White Rocks. Write for quotations.
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LOOK—75,000 CHIX 12c AND UP. TEN purebred certified egg-tested varieties. Hatching eggs, circular free. **LAWRENCE POULTRY FARM, R. 7, Grand Rapids, Mich.**

CHICKS—SINGLE COMB BUFF LEGHORNS only. Strong healthy chicks from good laying stock. **J. W. WEBSTER, Bath, Mich.**

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Tom Barron Imported White Leghorns

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SILVER WARD HATCHERY
Box 420, Zeeland, Mich.

DAY OLD CHICKS

Strong, sturdy, S. C. White Leghorns (English strain) from large, vigorous, yearling hens, raised on our own farms. That lay and pay. Barred Rocks and Rhode Island Reds, from best laying strains. Send for our illustrated catalog, free.

Hillcrest Poultry Farms
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R. R. 2 Holland, Michigan.

GUARANTEED BABY CHICKS

TOM BARRON ENGLISH S. C. WHITE LEGHORNS

1,500 breeders on our farm. Hatch every Tuesday starting March 1st. Write at once for new catalog and prices. 100% delivery guaranteed, shipped postpaid.

DOWNS POULTRY FARM
R. F. D. 1, Washington, Mich.

WOLVERINE BABY CHICKS ARE CHICKS THAT SATISFY

Bred for egg production 13 years. We hatched and shipped chicks for 12 years. This assures you success. **ENGLISH TYPE WHITE AND BROWN LEGHORNS** 100% safe arrival guaranteed. Write for catalogue. It's free. **WOLVERINE HATCHERY, R. 2, Zeeland, Mich.**

QUALITY CHICKS

GET THE PROFITABLE AND LAYING KIND

They will pay you big. Free range. Selected. Hogan test. Orpingtons, W. & Sil. Wyandottes, 50, $9.25; 100, $18. Rocks, Reds, Minorcas, 50, $8.25; 100, $16. Anconas, heavy broilers, 50, $7.25; 100, $14. Leghorns, 50, $7; 100, $13. Mixed, all varieties, $11 per 100 straight. Postpaid. Safe delivery. Circular free. Bank reference.
Middlepoint Hatchery, Middlepoint, Ohio, Dept. B.

BABY CHICKS—FROM SELECTED FLOCKS Six leading varieties. Popular prices and guaranteed delivery. Write for catalog and price list.
H. H PIERCE, Jerome, Mich.

POULTRY BREEDERS' DIRECTORY

Advertisements inserted under this heading at 30c per agate line, per issue. Commercial Baby Chick advertisements 45c per line. **Write out what you have to offer and send it in. We will put it in type, send proof and quote rates by return mail. Address The Michigan Business Farmer, Advertising Department, Mt. Clemens, Michigan.**

PULLETS, HENS AND COCKERELS

S. C. White Leghorns and S. C. and R. C. Black Minorcas. Must make room before cold weather. About ready to lay.
LAPHAM FARMS, Pinckney, Mich.

FOR SALE—PRIZE WINNING BIG BLACK Langshans. A few cockerels and pens. Won 1st pullet, 1st hen, 1st and 2nd pen at Monroe Co. Poultry Show. Eggs in season. Write for prices.
MRS. ETHEL BURGET, Maybee, Mich.

LEGHORNS

LEGHORNS.

S. C. Buff Leghorn Hens, Pullets and Cockerels. Hens and pullets $2.50 each; cockerels $3.00 to $5.00 each. Show birds a matter of correspondence. **LAPHAM FARMS, Pinckney, Mich.**

FOR SALE—R. C. BROWN LEGHORN cockerels, the big kind. These are extra good. $2.00 each, one or more. **E. HIMEBAUGH, 462 Marshall St., Coldwater, Mich.**

PEDIGREED ENGLISH W. L. COCKERELS 275 to 300 egg record. Price $2.00.
JOHN W. MORGAN, Yale, Mich.

WYANDOTTES

WHITE WYANDOTTES—MARTIN STRAIN Michigan State Fair winners, 1922. Cockerels and pullets $3 to $7.
WAYNE CHIPMAN, Washington, Mich, Route 2.

FOR SALE—HIGH GRADE WHITE WYANDOTTE and R. C. Rhode Island Red cockerels—$3.00 each until January 1.
C. W. HEIMBACH, R. 1, Big Rapids, Mich.

PLYMOUTH ROCK

BUFF ROCK COCKERELS—BIG HUSKY, healthy, uniform color, the result of years of careful breeding. **J. C. CLIPP & SONS, Box M, Saltillo, Ind.**

THOMPSON STRAIN BARRED ROCKS—DARK pullets $1.50. Light and dark cockerels $3.00.
MRS. FRED KLOMP, St. Charles, Mich.

BARRED ROCK COCKERELS. SIRED BY Detroit and Grand Rapids 1st and 2nd prize winners. **W. C. Coffman, Benton Harbor, Mich., R. 3.**

RHODE ISLAND REDS

RHODE ISLAND REDS, TOMPKINS STRAIN Both combs. Stock for sale after September 15th.
WM. H. FROHM, New Baltimore, Mich R. 1.

SINGLE COMB REDS, DARK RICH COLORED cockerels $2.50 each. Heims strain
LOUIS MORRIS, Mt. Morris, Mich., R. 1.

TURKEYS—DUCKS—GEESE

WHITE HOLLAND TURKEYS OF QUALITY Toms, $15.00, hens $10.00, trio $30.00. Toulouse geese $8.00, gander $10.00, trio $20.00. Order direct from this ad to insure filling order. We ship nothing but No. 1 stock.
ALDEN WHITCOMB, Byron Center, Mich.

We Specialize in White Holland Turkeys and have birds of best breeding to offer of Northern Grown Stock. Toms $10 to $12. Hens $8 to $9. Birds will be well crated and satisfaction guaranteed.
Foote's Turkey Farm, Garden, Delta Co., Mich.

PURE-BRED BOURBON RED TURKEYS
MRS RENA MEEKS, Belmont, Mich.

BOURBON RED TURKEYS UNRELATED STOCK
Eggs in season.
THOS. G. CALLAGHAN, Fen[illegible] Mich.

MICHIGAN'S BEST GIANT BRONZE TURKEYS Large, vigorous birds of splendid color from world's best strains. Unrelated stock furnished.
N. EVALYN RAMSDELL, Ionia, Mich.

BOURBON RED TURKEYS READY FOR shipment for prices, etc., address
R. W. ROBOTHAM, Hesperia, Mich.

FOR SALE—GIANT BRONZE TURKEYS FROM Michigan's best strains. Large healthy birds. **MRS. LAVERNE BROWNELL, R. 1, Belmont, Mich.**

MAMMOTH BRONZE TURKEYS. START right by buying strong, vigourous, pure bred stock. Write for prices.
MRS. PERRY STEBBINS, Saranac, Michigan.

FOR SALE CHOICE WHITE PEKIN DUCKS and drakes and mallards.
CEDAR BEND FARM, Okemos, Mich.

TOULOUSE GEESE ARE MONEY MAKERS. Two pounds cost less to raise than one of pork. Water not necessary. Every farmer should raise a few. **ALDEN WITCOMB, Byron Center, Mich.** Breeder Giant Toulouse Geese, White Holland Turkeys.

POULTRY

FEEDING VALUE OF MEAT SCRAPS

I have a flock of Barred Rocks which I am anxious to have lay thru the winter. I can get the meat scraps from one of the local meat markets free. How would you prepare them for the chickens? Some say just throw them out as they are, but seems as though there would be a better way. The use of these scraps will save the buying of commercial meat scraps and cut down expenses. Are the commercial scraps that come in big cakes cooked or raw?—Mrs. F. E., Flushing, Mich.

—Meat scraps are extremely palatable and stimulating. The common method, however, of feeding the green bone is to run them through a regular bone grinder which reduces the bone to smaller particles all of which can always be taken into the digestive tract. There is a high feeding value to the bone which, of course, is lost, unless the bone can be finely ground. There are a number of commercial bone grinders on the market and frequently the butcher will install one if sufficient people will show interest in purchasing the green bone. The green cut bone is used to advantage in forcing early maturity, or heavy production. This has an extremely stimulant effect on the entire digestive tract and causes ovarium activity. It should not be fed in quantities above ½ ounce per bird daily. One should be rather cautions in feeding it during warm weather. It is frequently unsafe to feed the regular commercial beef scraps because I have noted numerous cases of cannibalism where feeding of raw bone was practiced and suddenly this ply was curtailed. The commercial scraps that comes in large cakes referred to are undoubtedly pork cracklings. These have not the feeding value of the beef scrap and are rather inferior for poultry feeding. The beef bones and scraps are more palatable and have a higher feeding value.—E. C. Foreman, Associate Professor of Poultry Husbandry, M. A. C.

TURKEYS AND CALVES IN SAME BUILDINNG

What do you think of housing calves and turkeys in the same building with just a light partition between? Is it harmful to either one? J. W., Levering, Michigan.

—I believe you could house the calves and turkeys in the same building if partitioned off. Turkeys do not require a particularly warm building as long as it is airy and well ventilated. I do not believe there will be any dangers arise from this house combination. Turkeys can not, however, be housed with poultry very successfully. I have noted in practically every case where chickens and turkeys are housed together that the turkey stock is low in vitality and rather a high death rate occurs in every case. It seems to me as long as the turkeys are housed separate adjoining the calf pen that they could be maintained in a healthy vigorous condition.—E. C. Foreman, Associate Professor of Poultry Husbandry, M. A. C.

MONROE COUNTY POULTRY AND PET STOCK SHOW

DURING the week that closed December 23rd the Monroe County Poultry Association held its first show. The exhibits were of high class and there was a plentiful showing in all classes. The majority of the winners were located in and around Monroe but the show attracted breeders from Ohio and Illinois, and exhibits from those two states carried away some of the prizes. Other Michigan winners were located at Ida, LaSalle, Maybee, Strasberg and Royal Oak. Awards included over 100 ribbons besides several offers by individuals, companies and banks. Attendance at the show was rather disappointing to many but as a whole the members of the association feel well satisfied with their first attempt.

"BEST IN THE HOME"

"I don't want to miss a single copy of the M. B. F. I want to keep it up. It is the best paper in the home."—James C. Bell, Montcalm County.

A New Discovery Makes Hens Lay

Any poultry raiser can easily and quickly double his profits by doubling his egg yield through the remarkable discovery of M. B. Smith, a Kansas City chemist.

Working along entirely original lines Mr. Smith discovered why hens lay less in winter than in summer, and perfected a formula that turns loafers into layers and profit makers.

Within five or six days this discovery, which is called Ditto Egg Tablets, will rejuvenate your flock. Your hens will go strutting and cackling about with red combs and full of life and pep. Every nest will yield an egg nearly every day in the week, which means a lot, since eggs are certain to sell for 60 cents or more. This is not guess work as over 100,000 successful poultry raisers testify to the value of Mr. Smith's products.

Although different from anything you ever heard of, Ditto Egg Tablets are easily administered by simply dropping in drinking water.

So confident is Mr. Smith you can double or triple your egg yield, that he offers to send two large $1 packages of Ditto Egg Tablets (enough for a season) to any reader who will write for them. If you are satisfied they cost only $1 on this introductory offer, otherwise, nothing.

Send no money—just your name and address to M. B. Smith, 1261 Coca Cola Building, Kansas City, Mo. The two $1 packages will be mailed immediately. When they arrive, pay the postman only $1 and postage. Use the tablets 10 days. If you are not getting more eggs or are not satisfied for any reason, simply return unused tablets and your money will be returned immediately without question. A big Kansas City bank guarantees the reliability of this offer. Write today before this introductory offer is withdrawn, as you can sell one package to a friend and thus get your own free.

PRICES WAY DOWN On Radio Round Hatchers

Cut prices now on the famous Radio-Round Incubators of all sizes. Cost no more than cheap incubators. Radio-Round has 16 wonderful patented features make it practically self-operating. 3 minutes a day takes care of everything.

Hatch Eggs New Way

Radio-Round is built round like hen's nest; no cold corners. Fill lamp only once, 1 1-4 gallons oil to a hatch. Powerful Center Heater, Self-operation Flame Controller, Self-regulating Vaporizing Moisture Attachment. Don't miss free 36-page book.

Book Free Mail card NOW for free book telling all about patented features and giving rock bottom, new low Factory Prices. Write!

Radio-Round Incubator Co.
321 Wood St., Wayne, Neb.

Freight or Express Prepaid

BOWERS Colony Brooder

More Chicks---Less Cost

This brooder is a chick-saver and a money maker. It raises more and better chicks, at less cost than other brooders. Stove is best in the world to hold fire—air-tight and self-regulating. It burns soft coal—the cheapest brooder fuel—perfectly. Cuts fuel costs in half. Stove will also burn hard coal, wood, coke, etc. Regulator maintains even heat night and day. No trouble. Sizes for 500 or 1000 chicks.
Low priced Write TODAY.

F. M. Bowers & Sons Co.
1416 W. Wash. St.
INDIANAPOLIS, IND.

140 Egg Incubator $13.25 30 Days Trial

Both Machines Made of California Redwood

Freight Paid east of the Rockies, Hot water, copper tanks—double walls—dead air space—double glass doors—a real bargain at $13.25. Shipped complete, set up ready to use.

140 Egg Incubator and Brooder	$17.75
180 Egg Incubator Alone	15.75
180 Egg Incubator and Brooder	22.00
250 Egg Incubator Alone	22.75
250 Egg Incubator and Brooder	31.00

Made of California Redwood—last a lifetime. Positively the best value on the market today. Order the size you want direct from this ad. 30 days trial—money back if not pleased. If not ready to order now, don't buy until you get our new 1923 catalog. (3)
WISCONSIN INCUBATOR CO. Dept. 138 Racine, Wis.

Detroit Incubator $12.45

140-Egg Size — Guaranteed — has double walls, copper tank, full-size nursery, automatic regulation thermometer held so that chicks cannot break it when hatching. Detroit Brooders, too. Double walled, hot water heated. Write for special low price on both machines.

FREIGHT PRE-PAID

Detroit Incubator Co.
Dept. 10 Merritt St., Detroit, Mich.

HIGHEST PRICES PAID FOR LIVE AND Dressed Poultry, Veal, Eggs, Rabbits. A square deal always. **C. E. McNEILL & CO., 325 W. So. Water St., Chicago, Ill**

The Agricultural and Business Situation

Revised Monthly by the Department of Research of the American Farm Bureau Federation.

An understanding of the figures on this page as they are revised and presented each month, enables the farmer to see the position of the important factors which indicate the trend of business and prices and give a basis for judgment concerning future agricultural operations.

SUMMARY:

For the United States as a whole, the agricultural outlook is encouraging. The purchasing power of agriculture is 20 per cent stronger than a year ago, although still over 25 per cent under 1913. The rising price of English drafts is a factor in favor of higher prices for exports. Farmers are reducing their short-time borrowings. In spite of big crops, the present price ratio shows a slight gain for farm commodities over the low point in December, 1921.

I. PRODUCTION AND TRADE:

Combined sales of Montgomery Ward and Sears Roebuck for the five months ending November 30, 1922, are 16 per cent more than for the corresponding period in 1921.

The number of building contracts awarded in 27 states is 40 per cent greater for the first eleven months of 1922 than for the same months in 1921. On a value basis the increase in 1922 is 45 per cent. November, 1922, contracts show a 32 per cent gain in number over November, 1921, while October, 1922, showed an 18 per cent advance over October, 1921.

II. FOREIGN TRADE:

Encouragement in the outlook for foreign trade is found in the rise in price of drafts on British merchants and banks. Great Britain is the outstanding purchaser of American exports. Exporters, knowing that the drafts which they draw will sell for more dollars, are able to offer higher prices for goods which they buy to send abroad. Agriculture as the leading export interest shares largely in this advance.

A draft on a London business man or bank to pay 1 pound sterling sold for $4.49 November 20, and for $4.61 December 19, a gain of 12 cents in one month. It has 26 cents yet to go to reach par, namely $4.87. The price of London drafts has shown a gradual recovery since the low of $3.38 in February, 1920.

III. MONEY AND CREDIT:

The Federal Reserve Bulletin for November says: "From the peak of credit expansion in November, 1920, up to July 26, 1922, member banks in leading cities liquidated their indebtedness to the federal reserve banks much more rapidly and completely than did member banks outside of the leading cities. During recent weeks (namely, up to October 25) the resumption of borrowing from the reserve banks has been almost entirely by the city banks, the country banks in all districts except St. Louis reporting further liquidation."

IV. PRICES:

From their low point in December, 1921, prices of farm products increased much faster than prices of other commodities up to March, 1922. At this peak farmers had least to sell. From March until the present time other prices have advanced much more rapidly than farm prices. For the whole period, from December, 1921, to the present, farm prices show a slightly bigger increase, the purchasing power of farm products figure, representing the relationship of the two sets of prices, having advanced from 62 to 66. This ratio was maintained in face of the third largest crop output ever produced in the United States. The estimated total value of farm crops for 1922 is 32 per cent higher than for 1921. The figure for purchasing power of farm products, on total value instead of price basis, computed on December crop estimates and prices, and prices of other commodities in November, is 73. This is over 25 per cent under 1913 but 20 per cent better than last year.

On December 19, compared with the month previous, 15 out of 24 farm products advanced in price, 8 declined and 1 remained unchanged. Compared with a year ago there are 19 advances and 4 declines while 1 remains stationary.

I. Production and Trade

1. Agriculture:

U. S. Production—000,000 omitted.

	Dec. 1st 1922 Estimate Preliminary	1921	Average 1916-1920	Preliminary* Dec. 1st 1922 Estimate per cent
Corn, bu.	2891	3069	2831	102
Wheat, bu.	856	815	799	107
Oats, bu.	1215	1078	1413	85
Barley, bu.	186	155	197	94
Rye, bu.	95	62	68	139
Buckwheat, bu.	15	14	14	107
Potatoes, bu.	451	362	373	128
Sweet Potatoes, bu.	110	99	89	123
Hay, all, tons	113	98	102	111
Cotton, bales	10	8	12	83
Tobacco, lbs.	1325	1070	1378	96
Flaxseed, bu.	12	8	11	109
Rice, bu.	42	38	42	100
Peaches, bu.	57	33	44	129
Pears, bu.	19	11	14	136
Apples, total, bu.	204	99	179	114
Apples, com'l., bbls.	31	22	27	115
Sugar Beets, tons	5	8	7	71
Cranberries, bbls.	.6	.4	.4	150
Beans, bu.	12	9	13.3	90
Onions, bu.	18	14	17	105
Cabbage, tons	1	.6	.7	143
Sorghum Sirup, gal.	37	46	40	93
Cloverseed, bu.	1.9	1.5	1.5	127
Peanuts, lb.	624	[illegible]	1043	59
Hops, lb.	26	29	32.1	81

*As percentage of average 1916-1920.

World Production—000,000 omitted.

	1922	1921	Average 1909-13
Wheat, bu (1)	3,058	3,069	2,890
Corn, bu. (2)	3,450	3,781	3,572
Rye, bu. (3)	785	773	....
Oats, bu. (4)	3,003	2,759	3,008
Barley, bu. (5)	833	818	882
Potatoes, bu. (6)	3,123	2,445	3,066
Cotton, bales (7)	16	14.1	19.6

(1) Russia and Mexico excluded. (2) 17 countries. (3) 18 countries. (4) 27 countries. (5) 25 countries. (6) 16 countries. (7) 500 pounds net, linters excluded.

2. Mining:

Figures express production as a per cent of normal. In estimating normal production, due allowance is made for seasonal variation and year to year growth.

	Oct., 1922	Sept., 1922	Oct., 1921
Anthracite coal	* 94	61	85
Bituminous coal	* 75	72	75
Copper	* 84	80	20
Petroleum	*112	111	91

* Preliminary.

3. Manufacturing:

Wheat flour	109	112	111
Meat	103	105	87
Sugar	108	110	114
Cotton	95	92	89
Pig Iron	83	68	40
Steel Ingot	85	74	50
Lumber	*	106	80
Wood Pulp	*	102	77
Gasoline	*	104	92
Cement	126	123	110

* Not available.

4. Building:

	November 1922	November 1921	Eleven Months 1922	Eleven Months 1921
Contracts awarded in 27 States: (F. W. Dodge Co.)				
Number	9,079	6,981	100,558	72,042
Value (000,000 omitted)	$ 244	$ 192	$ 3,131	$ 2,162

5. Transportation:

Freight Car Loadings:	Week Ending Dec. 9, 1922	Same Week Month Ago	Same Week Year Ago	Week Ending Dec. 9, 1922*
Total	919,828	953,909	742,926	124
Grain and grain products	55,608	52,501	48,680	114
Livestock	38,170	38,001	32,159	119
Coal	200,505	188,312	137,836	146
Coke	13,051	12,273	6,638	197
Forest products	63,195	60,392	49,744	127
Ore	9,879	39,383	6,128	160
Merchandise & Miscel.	539,420	563,047	461,741	117

* As percentage of week year ago.

6. Employment:

	October, 1922	September, 1922	August, 1922
Out of 65 industrial centers employment			
Increased over previous month in	56	48	39
Decreased from previous month in	9	17	26

7. Bank Clearings:

Units of $1,000,000,000

	Nov., 1922	Oct., 1922	Nov., 1921
New York City	$17.33	$19.67	$16.82
Outside New York City	15.80	16.96	13.64

8. Mail Order Sales:

	November 1922	November 1921	Eleven Months 1922	Eleven Months 1921
Montgomery Ward	$11,003,750	$ 7,581,069	$ 80,844,890	$ 68,531,523
Sears Roebuck	20,196,559	15,186,495	161,409,528	159,934,008

II. Foreign Trade

1. Exports:

000 omitted

Commodity.	—October— 1922	—October— 1921	Ten Months 1922	Ten Months 1921
Grand total, all exports	$366,177	$336,949	$3,051,177	$3,978,511
Beef and veal, lb.	2,978	2,844	28,224	36,544
Pork, lb.	57,621	41,116	563,888	659,715
Lard, lb.	66,332	56,885	626,032	752,544
Neutral lard, lb.	1,762	1,184	16,503	21,699
Butter, lb.	524	464	10,012	7,095
Cheese, lb.	308	389	4,367	10,832
Hides and skins	379	324	3,278	3,118
Corn, bu.	10,149	9,217	151,330	114,189
Meal and flour, bbl.	41	63	534	703
Wheat, bu.	18,282	18,206	144,438	255,651
Flour, bbl.	1,510	1,557	11,968	14,541
Oats, bu.	3,042	520	17,066	2,994
Meal and rolled, lb.	13,036	6,277	88,686	85,673
Fruits and nuts	10,162	8,593	53,772	54,764
Veg. oils and fats	1,023	1,302	10,898	25,505
Sugar, lb.	13,200	38,664	1,822,041	824,648
Leaf tobacco, lb.	58,353	43,465	354,167	447,345
Cotton, bale	799	875	4,648	5,186

2. Imports:

	September 1922	September 1921	Nine Months 1922	Nine Months 1921
Grand total, all imports	$228,795	$179,292	$2 181,386	$1,872,696
Beef and veal, lbs.	10,533	2,066	26,998	22,033
Pork, lbs.	76	56	435	582
Butter, lbs.	89	398	2,735	12,173
Cheese, lbs.	3,037	2,571	26,241	15,535
Hides and skins	50,587	32,806	358,765	268,980
Corn, bu.	2	3	97	156
Oats, bu.	37	62	1,271	3,081
Wheat, bu.	782	81	14,321	19,171
Flour, bbl.	42	4	552	780
Fruits and nuts	3,864	5,268	55,489	48,529
Veg. oils and fats	2,990	3,822	44,079	26,474
Sugar, lbs.	390,150	315,999	8,434,011	4,747,517
Leaf tobacco, lbs.	2,780	2,600	51,556	36,914
Cotton, lbs.	2,506	3,181	113,724	67,091
Wool, lbs.	27,892	14,592	278,527	288,114

3. Prices of Foreign Drafts:

	Nominal Gold Value Par of Exchange	Price of Demand Drafts Dec. 19, 1922	Nov. 20, 1922	Dec. 16, 1921
England	$4.87 to 1£ Sterling	$4.61	$4.49	$4.16
France	19.3c to 1 franc	7.45c	7.4c	7.78c
Germany	23.8c to 1 mark	.015c	.01⅝c	.050c
Belgium	19.3c to 1 franc	6.83c	6.96c	7.48c
Italy	19.3c to 1 lire	5.08c	4.75c	4.50c
Spain	19.3c to 1 peseta	15.70c	15.38c	14.54c
Austria	20.3c to 1 crown	.0014c	.0014c	.04c
Denmark	26.8c to 1 crown	20.70c	20.18c	19.55c
Norway	26.8c to 1 crown	19.05c	18.33c	15.37c
Sweden	26.8c to 1 crown	26.89c	26.78c	24.50c
Holland	40.2c to 1 florin	39.82c	39.35c	36.32c
Argentina	42.5c to 1 peso	37.90c	36.6c	33.25c
Brazil	32.4c to 1 milreis	12.15c	12.65c	12.88c
India	48.7c to 1 rupee	30.95c	29.95c	17.75c
Japan	49.9c to 1 yen	48.95c	48.35c	47.88c
Canada	100 c to 1 dollar	99.43c	100.00c	92.7c

4. Discount Rate of the Bank of England:

Dec. 13, 1922	Month Ago	Year Ago
3%	3%	5%

III. Money and Credit

1. Gold, Currency and Bank Deposits:

000,000 omitted

	Nov. 1, 1922	Oct. 1, 1922	Nov. 1, 1921
Stocks of monetary gold in the United States	$ 3,902	$ 3,874	$ 3,505
Total supply of currency in the United States	4,570	4,521	4,610
	Sept. 15, 1922	June 30, 1922	Sept. 15, 1921
Total deposits in National Banks	$16,599	$16,321	$14,561
	Nov. 1, 1922	Oct. 1, 1922	Nov. 1, 1921
Deposits in New York City Banks	$3,830	$3,910	$3,800

2. Gold Movement:

000 omitted

	October 1922	October 1921	Ten Months 1922	Ten Months 1921
Exports of gold	$17,591	$ 7,576	$ 30,735	$ 21,122
Imports of gold	20,866	47,106	230,422	608,283

3. Federal Reserve Ratio:

	Dec. 13, 1922	Nov. 15, 1922	Dec. 14, 1921
Ratio of total reserves to deposit and Federal Reserve note liabilities combined	75.1%	75.2%	72.6%

4. Interest Rates:

	Nov., 1922	Oct., 1922	Nov., 1921
4-6 mo. commercial paper	4.88%	4.62%	5.45%
60-90 day commercial paper	4.62%	4.40%	5.18%

5. Discount Rates of the Federal Reserve Banks:

	Dec. 1, 1922	Nov. 1, 1922	Dec. 1, 1921
Range of rates for the twelve banks on commercial, agricultural and livestock paper	4-4½%	4-4½%	4½-5½%

6. Stock and Bond Prices:

Average price—	Dec. 8, 1922	Nov. 10 1922	Dec. 9 1921
20 Industrial Stocks	$97.88	$97.50	$79.60
20 Railroad Stocks	84.56	89.50	74.35
40 Bonds	89.06	89.30	83.99

7. Business Failures:

	—Week Ending— Dec. 8, 1922	Nov. 9, 1922	Dec. 8, 1921
Bradstreets	462	374	591
Duns	484	387	587

IV. Prices

1. Wholesale Prices of Farm Commodities:

Quotations at Chicago except as noted.

	Dec. 19, 1922	Month Ago	Year Ago
Fat hogs, cwt., average	$ 8.05	$ 7.70	$ 6.65
Beef, steers, good native, cwt., av.	9.60	9.85	6.40
Fat lambs, cwt., average	13.85	14.45	10.25
Fat sheep, cwt., average	7.20	7.40	4.10
Wool, Ohio delaine unwashed, lb. (Boston)	.565	.565	.39
Butter, 92 score, lb.	.53	.505	.425
Cheese, No. 1 twins, lb.	.2675	.2425	.2075
Eggs, fresh firsts, doz.	.51	.525	.49
Poultry, hens, lb.	.175	.18	.23
Wheat, No. 2 hard, bu.	1.28	1.20	1.115
Corn, No. 2 mixed, bu.	.7675	.725	.4775
Oats, No. 2 white, bu.	.475	.4475	.37
Rye, No. 2, bu.	.915	.89	.86
Barley, bu.	.6725	.67	.505
Kafir, No. 2 white, cwt. (K. C.)	1.68	1.89	.93
Hay, No. 1 timothy, ton	21.00	23.00	21.00
Flax. No. 1, bu. (Minneapolis)	2.72	2.45	1.935
Cotton, middling, lb. (New York)	.262	.254	.188
Beans, white, cwt. (f. o. b. Michigan)	7.75	6.90	4.30
Potatoes, northern whites, cwt.	1.00	.95	1.70
Onions, midwest yellow, cwt.	2.50	1.90	5.00
Apples, winter varieties, bbl.	5.25	5.00	8.25
Hides, No. 1 native heavy, lb.	.2025	.23	.165
Sugar, fine granulated, lb. (N. Y.)	.0705	.07	.051

2. U. S. Department of Labor Relative Wholesale Prices:

Prices in year 1913 equal 100

	Nov., 1922	Oct., 1922	Nov., 1921
All commodities (Weighted average or General Price Level)	156	154	141
Farm products	143	138	121
Food products	143	140	139
Cloth, clothing, etc.	192	188	180
Fuel and lighting	218	226	197
Metals and metal products	133	135	114
Building materials	185	183	163
Chemicals and drugs	127	124	129
House furnishing goods	179	176	178
Miscellaneous	122	120	119

3. Prices of Farm Products at the Farm Relative to 1913:

Prices in year 1913 equal 100

Commodity:	Oct., 1922	Sept., 1922	Oct., 1921
Cotton	181	161	143
Corn	106	104	69
Wheat	125	115	120
Hay	99	98	101
Potatoes	98	108	192
Beef Cattle	93	92	81
Hogs	111	110	98
Eggs	195	156	229
Butter	142	134	151
Wool	193	188	95

4. Relative Purchasing Power of Farm Products:

The quantity of various commodities which a given amount of each farm product would purchase at prices prevailing in 1913 is put equal to 100. The figures given represent the percentage of this quantity which the same amount of farm products would purchase in October, 1922. Prices at the farm are used for agricultural products, and wholesale prices at central markets for other commodities.

	All Commodities	Cloths, etc.	Fuel, etc.	Metals, etc.	Building Mtls.	House Furn'gs
Cotton	118	96	80	134	99	103
Corn	69	56	47	79	58	60
Wheat	81	66	55	93	68	71
Hay	64	53	44	73	54	56
Potatoes	64	52	43	73	54	56
Beef cattle	60	49	41	69	51	53
Hogs	72	59	49	82	61	63
Eggs	127	104	86	144	107	111
Butter	92	76	63	105	78	81
Wool	125	103	85	143	105	110

Average purchasing power of all farm products in terms of all other commodities. Same basis as above table.

1913	100	December, 1921	62
1914	112	January, 1922	65
1915	106	March	76
1916	89	May	73
1917	106	July	69
1918	112	August	64
1919	111	September	64
1920	86	October	65
1921	67	November	[illegible]

MARKET FLASHES

FOOTES MARKET REVIEW—ANOTHER NEW FEATURE

WITH this issue we introduce to readers of The Business Farmer, Mr. W. W. Foote, of Chicago, who will have a letter direct from the Chicago markets each issue on general financial conditions, world grain markets, and most important, a direct review of the Chicago live stock markets from a man who has been in intimate, daily contact with that market for more than thirty years. Mr Foote has volunteered to answer any questions from our readers addressd in care of The Business Farmer. We want the best that can be had served on these tables for the consumption of our folks, so we editorial cooks are glad to move over one place to make room for Mr. Foote, who will hereafter be responsible for a very important course in the Business Farmer's bi-weekly banquet!—Editor.

IMPROVED BUSINESS OUTLOOK

BRINGING about a return to normal financial conditions in the war-stricken countries of Europe is not as rapid as might be wished, but the outlook is at least better than it has been, under the prevailing sentiment is more optimistic than a year ago. Even under present unsettled conditions, we are exporting large amounts of commodities across the Atlantic, these consisting mainly of grains and meats. As soon as it becomes definitely settled how to establish credit in Germany and other countries it may be taken for granted that our foreign commerce will show marked improvement. The United States is now by far the richest country in the world, and we are large importers, while our home trade is extremely large. Nearly everybody in the middle west is at work, and more money is being spent than a few months ago, while savings deposits in the bank are ahead of a year ago. Farmers are buying more foods than for months, and the Chicago mail order houses have closed the year with net gains in sales over 1921, the gain of a leading firm being around 20 per cent. Labor is actively employed as unusually high wages throughout the country, and the high wages offered in the cities are responsible for many farm helpers leaving for the cities, thereby creating a scarcity of agricultural workers. Farmers are obtaining high prices for most of their products, including grains, live stock, etc., and these are selling much above values of a year ago. Country banks generally are doing their part in helping farmers needing assistance in carrying their crops, and the reserve banks are accomplishing great things, reasonable rates of interest being asked. The railroads are doing a much larger business than a year ago, and enormous shipments of grain have taken place during the month of December. Two important events are the burning of the Live Stock Exchange Building in Chicago and the merger of Armour and Morris packing companies in progress. The Exchange Building is to be replaced by a fine eight story building in the spring.

Large Demand for Wheat

The large domestic and foreign demand for wheat which began to develope several months ago has been gaining in volume, and recent sales have reached extremely liberal proportions. There is pretty unanimous agreement that all the wheat we can spare is going to be wanted by the importing countries of Europe, and it is estimated by the best authorities that Europe will require approximately 400,000,000 bushels from exporting countries during the first half of this year. The wheat crop of the United States has been marketed freely, and it has gone into consumption at home and abroad so rapidly that it was found a few days ago that the stock held in Chicago, Kansas City, St. Louis, Omaha and St. Joseph aggregated only one-half of such holdings twelve months ago. The weekly exports of wheat and flour from our shores have been for many weeks far heavier than a year earlier, and rye has been exported with unusual freedom because of its relative cheapness, Germany taking especially large supplies. A short time ago it was reported that Greece wanted immediately three million bushels of wheat from this country, and on the same day sales were announced of 600,000 bushels of Manitoba wheat for export. A great deal of corn and oats are exported from this country in the course of a year but for some time past such exports have fallen off in volume. Corn is being largely fed to cattle and hogs on the farms at the present time, some 27 per cent more cattle being held in feeding districts, it is estimated, than a year ago, while hogs are known to be in large supply. The visible wheat supply in this country is unusually small, while that of corn is placed at 14,788,000 bushels, comparing with 21, 586,000 bushels a year ago. Quite recently sales were made on the Chicago market of wheat for December delivery at $1.27, comparing with $1.12 5-8 a year ago; corn at 73 1-2 cents, comparing with 48 cents a year ago; oats at 43 1-2 cents, comparing with 34 1-2 cents last year; rye at 91 1-4 cents and barley at 63 to 74 cents. Clover seed sells at $15.50 to $20.50 per 100 pounds, timothy at $6 to $6.75 per 100 pounds and flax seed at $2.61 a bushel.

Decline in Cattle Prices

Early sales of beef cattle on the Chicago market during the two days following the Christmas holiday on Monday was very slow, and despite much smaller receipts than usual, prices declined from 50 to 75 cents below the low time of the previous week. Recent supplies were mainly short fed offerings, having been fed from 75 to 100 days, and on most days there was a lack of prime heavy steers. By Thursday there was a rally of about 25 cents under small offerings and a better demand, and some 900-pound yearlings brought $10.50. Choice heavy cattle have been selling at $11 to $11.90, with strictly prime beeves pretty much nominal at $12 to $12.50. A pretty good class of steers which averaged 1,500 pounds brought $8.50, and medium grade lots sold at $7.50 and over, with sales of common to fair light steers at $6.10 to $7.25, and a few inferior little steers at $3.60 to $6. Butcher stock had a better demand at higher average prices, cows and heifers going at $3.75 to $9.50, while canner and cutter cows sold at $2.25 to $3.60, bulls at $3 to $7.50 and calves at $3 to $11.50, light vealers selling at $9 and over mostly. A limited trade is going on in stockers and feeders, sales being mostly at $5 to $7.25. Dairy cows have sold at $40 to $60 per head mostly, a few Holsteins being salable up to $75. A year ago the best steers sold for $9. Beef steers sell mainly at $7.50 to $10.40. Prices broke 25 cents on Friday, no cattle selling above $10.25.

The Hog Market

Prices in the Chicago market broke from 5 to 15 cents on Thursday last week, when the receipts mounted up to about 60,000 hogs, but prior to that they advanced on moderate receipts, Monday being a holiday. The Thursday receipts were among the largest of the year. Eastern shippers are most of the time very good buyers, and at times speculators take a hand. Hogs are coming to market in good quality, and the bulk sell within a range of only 15 cents, prime light bacon and heavy butchers selling the highest. Recent receipts have averaged 232 pounds, comparing with 226 pounds a year ago. A good demand for fresh pork prevails, pork being much cheaper than beef, and provisions are exported much more freely than a year ago. Hogs are selling around $7.60 to $8.60, comparing with $5.90 to $8.25 a year ago.

Big Prices for Lambs

These are times when farmers who have stuck to raising flocks of sheep thank their lucky stars that they remained in when others were abandoning the industry because of the unsatisfactory returns. A short time ago a young Michigan farmer who is in the habit of buying feeding lambs in the Chicago markets said he had fed lambs for thirteen years, and in all that time he had lost money only once. Lambs are coming largely clipped at this time, and the packers prefer the wooled flocks, the latter selling at $13.25 to $15.40, while feeder lambs sell at $14 to $14.75, with few offered. Lambs avering 90 pounds and over have to sell at a discount, and sheep are marketed sparingly. Breeders are scarce too, owners keeping them for breeding yearlings are selling at $10 to $13, ewes at $2.50 to $8.25, wethers at $7.50 to $9.35 and bucks at $3.50 to $4.25. A year ago prime lambs sold at $11.75 and nine years ago at $6.60.—W. W. Foote.

WHEAT

The market closed last week with the bears in charge and holiday dullness prevailed. Receipts have been large and declines in the price plentiful. Every decline brought out many buyers but not enough to cause prices to advance to their previols level. The Detroit market lost 2 1-2 cents for the week. Milling demand was slow but a few inquiries were received from seaboard and some business was reported from that source. European demand for American grain is curtalied owing to the financial conditions. If Europe's credit is improved through giving her more time to pay her debts demand will improve. Heavy receipts are expected this week and the tone of the market will be about the same or easier, dealers believe.

Prices

Detroit—Cash, No. 2, $1.36½; No. 2 white and No. 2 mixed, $1.34½.

Chicago—No. 2 hard, $1.25½@$1.26½.

Prices one year ago—Detroit, No. 2 red, $1.17; No. 2 white, $1.14.

CORN

Corn followed the trend of wheat last week the greater part of the time although the tone was stronger at the close in corn than in the later grain. Corn lost only 1c on the Detroit market during the past couple of weeks. Indications point to a good export demand in the near future. Foreigners are trying to buy on the basis of 70c for May corn. Receipts at Chicago last week aggregated 3,667 cars compared with 1,411 last year.

Prices

Detroit—Cash No. 2. 79c; No. 3, 78c; No. 4, 77c; No. 5, 75c.

Chicago—No. 2 yellow, 74½@75c; No. 3, 71@73c; No. 4, 70@71c.

Prices one year ago—Detroit, No. 3 yellow, 53c; No. 4, 49c.

MARKET SUMMARY

Wheat quiet. Corn and oats steady with some grain going to seaboard. Rye inactive. Beans firm. Demand for potatoes improves. Butter and eggs easy with demand fair. Poultry in demand and receipts small. Large receipts weaken cattle market. Hogs strong to higher. Sheep easy.

(Note: The above summarized information was received **AFTER** the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press —Editor.)

OATS

The oat market is in about the same condition as it was when our last report was made. Commission houses and large elevator interests continue to support the market. Shipping demand is better than it has been for some time past, with reports coming from Chicago of shipping sales of 340,000 bushels.

Prices

Detroit—No. 2, white, 51½c; No. 3, 50c; No. 4, 48½c.

Chicago—No. 2 white, 44@45½c; No. 3, 42¾@43¾c.

Prices one year ago—Detroit, No. 2 white, 40c; No. 3, 38c; No. 4, 35c.

RYE

Rye also followed the trend other grains the past fortnight and the price is slightly under that quoted in our last issue. The market is steady in tone with nothing to indicate any immediate change.

Prices

Detroit—Cash No. 2, 93c.

Chicago—Cash No. 2, 88½@89½c.

Prices one year ago—Detroit, Cash No. 2, 90c.

BEANS

A decline of 10c took place in the Detroit bean market during the past fortnight. The decline was not due apparently to any decrease in consumption or heavy receipts but was a result of the holiday dullness in the grain market. The tone remains firm.

Prices

Detroit—C. H. P., $7.40 per cwt.

Chicago—C. H. P., $.50@ $9.00 per cwt.

Prices one year ago—Detroit, C. H. P., $4.30 per cwt.

POTATOES

The condition of the potato market shows further improvement. This commodity is steady on the leading markets of the country but continues to show some weakness at northern points. Supplies are moderate and demand is on the gain.

Prices

Detroit—Michigan, $1.00@$1.10.

Chicago—Northern Whites, 79@90c.

Prices one year ago—Detroit, $2.25.

HAY

A quiet tone prevails in the hay market. Receipts are generally light and country loading is nearly at a standstill. Prices are practically unchanged and demand is for current needs only.

Prices

Detroit—No. 1 timothy, $16.50@$17; standard, $16@$16.50; light mixed, $16@$16.50; No. 1 clover, $14.50@$15.

Chicago—No. 1 timothy, $20@$22; No. 1 light clover mixed, $19@$20; No. 1 clover, $16@$18.

Prices one year ago—Detroit, No. 1 timothy, $19@$20; Standard timothy, $18@$19; No. 2 timothy, $17@$18.

OFFICIAL U. S. MARKETGRAM

U. S. Bureau of Agricultural Economics

Washington, D. C.,—For the week ending December 30, 1922.

FEED—Western markets report a slight improvement in the demand but eastern markets continue dull. The interior demand in light and stocks in hands of dealers appear ample for present needs. Production of most feeds is fairly good and storage stocks appear burdensome in a few sections. Linseed and cottonseed meal hold firm. Hominy feed on increased production and light demand is offered at lower prices. Other quotations generally steady. Receipts and movement good.. Dec. 29 quotations, Bran$25; Middlings $25; Flour Middlings $27; Rye Middlings $23 Minneapolis; Gluten feed $40.35 Chicago; Thirty four per cent linseed meal at $52 Minneapolis, $52.50 Buffalo. Thirty six per cent cottonseed meal $42.50 Memphis, $43 Atlanta, White Hominy feed $30 St. Louis, $31.50 Chicago, No. 1 Alfalfa meal $28.50 St. Louis.

DAIRY PRODUCTS—Butter markets barely steady; dull demand has followed holidays. Dealers have been free sellers and in some cases granted concessions to keep floors cleared of accumulation. Arrivals at New York included fairly good shipments of Danish butter. Closing prices, 92 score butter: New York 53½c; Phila 55c; Boston 54c; Chicago 50c. Cheese markets steady although trading is very quiet. Better demand looked for after first of year. Cheese prices at Wisconsin Primary markets, December 29; Flats 27¼; twins 26¾.

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MISCELLANEOUS MARKET QUOTATIONS

Detroit, Tuesday, Jan. 2nd

BUTTER—Best creamery, in tubs, 46@48c per lb.

EGGS—Fresh, according to quality, 40@43c per doz; refrigerators, 26@28½c per doz.

APPLES—Greenings, $.50½ @ 1.75; Balwins, $1.25@1.50; Spy, $2 @2.50; Jonathan, $1.75@2; other varieties, $1@1.50 per bu.; western boxes, $2@3.

POPCORN—4@4½c; Little Buster, 7½@8c per lb.

ONIONS—$2.75 per sack of 100 lbs; Spanish, $2@2.15 per crate.

DRESSED HOGS—90 to 130 lbs. 11@12c; 130 to 160 lbs, 9@10c; heavy, 5@8c per lb.

DRESSED CALVES—Choice, 15 @16c; medium, 12@14c; large coarse, 5@10c per lb.

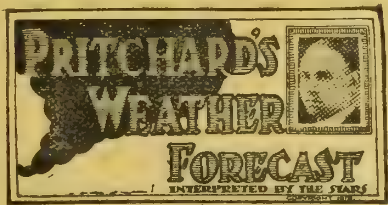
LIVE POULTRY—Best spring, 22 @23c; leghorns, 15@16c; large fat hens, 23@24c; medium hens, 20@ 22c; small hens, 14@15c; old roosters, 14c; geese, 18@20c; large ducks, 23@24; small ducks, 20@21; heavy turkeys, 35c; light turkeys, 25c per lb.

HONEY—Comb, 23@25c per lb.

CELERY—Michigan, 40@75c per doz.; square, $1.25@$1.75; California celery, Jumbo, 75c; extra Jumbo, 80@$1; mammoth, $1.10@ 1.25 per doz.

WOOL

The mid-western wool trade closed the year 1922 with a firm tone prevailing, recent sales being reported at top quotations in several of the leading lines, and with dealers showing a feeling of optimism in regard to the future business. An increase in inquiry from mills is reported, tending to help the tone of the market, though prices are quoted unchanged.



THE average temperature in Michigan beginning January 7th is expected to range below normal. Temperatures for the first half of the month will also average with a downward trend but more moderate conditions will occur during latter half.

At the beginning of this week temperatures will be cold with little variation, especially on the upward movement.

About Tuesday or Wednesday increasing cloudiness, snow flurries and winds will affect Michigan and continue in the state over the middle days of the week. About Thursday strong west and north winds will sweep over Lakes Superior and Michigan into the lower peninsula of the Mitten state sending the mercury in the thermometer way down. Temperatures in this state will remain cold for the season during the balance of the week.

Week of January 14

Average weather conditions for week beginning January 14 will be windy with precipitation about or above normal. Weather conditions may be expected to be full of extremes, more especially in temperatures rather than precipitation. In the latter case, rain or snow fall is expected to be as heavy and possibly heavier than during the first week of January.

During the early part of week temperatures will rise in Michigan and during this same period some rain or snow will fall in most sections of the state while during middle days of week we expect a greater amount of rain or snow. The last half of week will be free of moisture with clear skies and colder temperatures.

About Saturday of this week we are expecting a great moderation of temperature in this state.

Less Moisture Last Half Month

We do not look for as much general precipitation or as severe stormy weather in Michigan during last half of January as during first half. In fact, we belive the state will show quite an uneven distribution of rain or snow during this and next month.

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(Continued from page 19)

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HOMESPUN TOBACCO. SMOKING—5 LBS. $1.25, 10 lbs. $2.00; 20 lbs. $3.50. Chewing —5 lbs. $1.75; 10 lbs. $3.00. Furnish free recipe for preparing. Send no money. Pay when received. O'CONNOR SMOKEHOUSE, Mayfield, Ky.

HOMESPUN TOBACCO. CHEWING 5 pounds $1.75; 10 pounds $3.00; 20 pounds $5.00. Smoking 5 pounds $1.25; 10 pounds $2.00; 20 pounds $3.50. Send no money, pay when received. COOPERATIVE TOBACCO GROWERS, Paducah, Kentucky.

TOBACCO—KENTUCKY'S PRIDE. EXTRA fine chewing, 10 lb., $3.00; smoking 10 lb., $2.00; 20 lb., $3.50 FARMERS CLUB, Mayfield, Ky.

HELP WANTED MALE

WE PAY $200 MONTHLY SALARY, FURNish rig and expenses to introduce our guaranteed poultry and stock powders. BIGLER COMPANY, X682, Springfield, Ill.

AGENTS—SELL WOLVERINE LAUNDRY Soap. A wonderful repeater and good profit-maker. Free automobile to hustlers. WOLVERINE SOAP CO., Dept. E3, Grand Rapids, Mich.

PLANTS AND SEEDS

STRAWBERRY PLANTS—$4 PER THOUSand. Guaranteed strictly first class. 17 years experience. Our free catalog illustrates and describes fourteen best varieties, including three best raspberries. A valuable book for the grower. L. E. HAMPTON & SON, R. 20, Bangor, Mich.

RED CLOVER, NICE PURPLE SEED, $2.50 per bushel. SHULTZ SEED CO., Olney, Illinois.

FARM AND LANDS

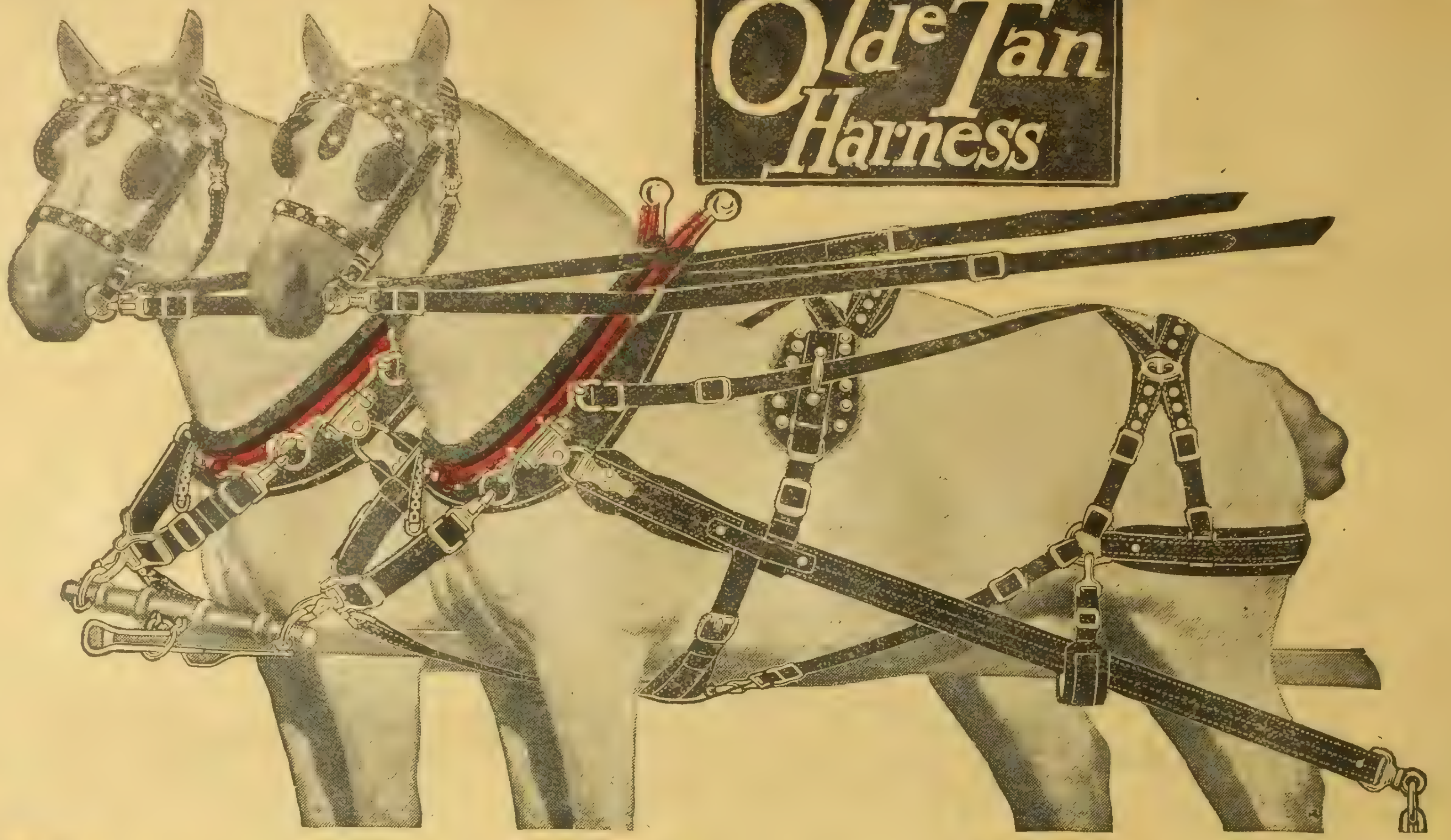
200-ACRE LAKESIDE FARM. 4 HORSES, 12 cattle, crops, poultry, implements, tools included to settle now; one of the best opportunities in Michigan; schools, stores, churches, good roads, splendid neighbors; 117 acres heavy-cropping field, muck land for truck, big pasture, woodland; 160 apple trees, 1 3-4 acres berries; excellent 5-room house overlooking lake, barn with frost-proof basement, silo, poultry houses. Because of family reasons, $7,000 takes all, part cash. Details page 65 Illus. Catalog Selected Farms. Copy free. STROUT FARM AGENCY, 814BE Ford Bldg., Detroit, Mich.

THE GREAT NORTHERN RAILWAY HAS 8,000 miles of railroad in Minnesota, North Dakota, Montana, Idaho, Washington and Oregon. In this vast empire lands are cheap. Send for free book describing grain lands, dairying, fruit growing and stock raising. E. C. LEEDY, General Agricultural Development Agent, Dept. 95, St. Paul, Minn.

IF YOUR FARM OR COUNTRY HOME IS for sale. Write us. No commission charged. CLOVERLAND FARM AGENCY, Powers, Mich.

EIGHTY ACRES CLAY AND GRAVEL LOAM in high state of cultivation, all tillable except three acres of high class timber. Good buildings and location, close to church and school. Plenty of fruit Also 80 acres pasture land. For full description, price, write owner, EDWARD SWADLING, North Branch, Mich.

Olde Tan Harness



Double Wear Certain!

Metal-to-Metal Does It

WRITE for the free Harness Book which tells you why Olde-Tan harness wears twice as long as any other high grade harness.

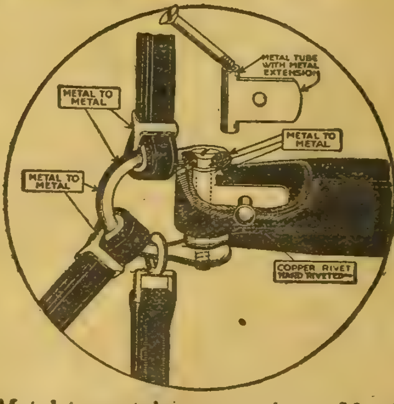
Every spot where there is excessive wear, strain or pull is protected by tough metal, shaped and fitted so that rounded metal parts are adjusted one against the other, thus taking away all corner pulls and sharp strains. No patching or mending of this harness because there are no places for Olde-Tan Harness to wear out. When you buy Olde-Tan Harness you do away with repair bills.

There is 70 year-old tanning skill behind Olde-Tan leather. Three generations of tanner-manufarturers have supervised the production of Olde-Tan Harness, following every step through the tannery and harness factory until the harness is ready for your horses. No wonder that it is known throughout America for its superior quality!

Olde-Tan Harness has every adjustabe feature—yet few buckles are used. These are placed only where convenience in putting on and taking off the harness is essential. No place where there is excessive strain or pull will you find a buckle on Olde-Tan harness.

You don't have to worry about your harness, if you are sure about the quality of the leather and if it has metal-to-metal constuction. Olde-Tan Harness is nothing radical or "new style". We just recognize the fact that nothing wears like metal. We merely place metal against metal to make sure of longer wear. Then, in addition to that, the finest leather that can be tanned is used.

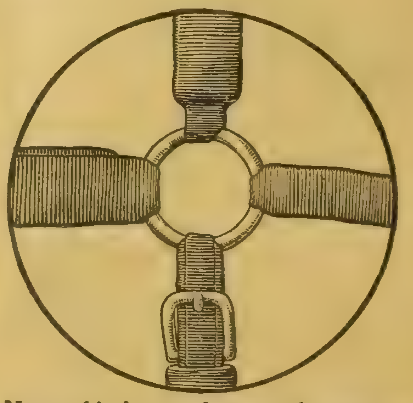
Every Olde-Tan Harness is sold under a guarantee which protects you during the entire life of the harness. Make no mistake. Find out all about Olde-Tan before you buy another set of harness. Write for the free Harness Book today. You may as well have the last word in harness—especially when it costs no more than any other harness you would buy.



Metal-to-metal construction. Metal bushing. Leather held tight without play or friction. Note special riveted metal extension in breeching.

$7.50 Down Puts This Harness On Your Horses

Write today for Free Olde-Tan Metal-to-Metal Book which tells you how for only $7.50 down you put this Olde-Tan Metal-to-Metal harness on your horses. You will find in this book information which any man buying harness should know. The Olde-Tan Harness book tells how Olde-Tan Leather is tanned, all the different processes from the raw hide through the liming and washing pits into the tanning drums and out again, finally to be made into what leather experts declare is the finest leather to be found in the whole world. Remember, our offer is to send you an Olde-Tan Harness absolutely no money down. After the first payment of $7.50, you may pay the balance in easy monthly installments.



Never this in metal-to-metal construction. All pull strain and wear is on metal.

Babson Bros., Dept. 3301
19th Street and Marshall Blvd., Chicago, Ill.

Please send me free your Olde-Tan Harness Book and all about your $7.50 down and easy monthly payment offer on Olde-Tan Harness.

My Name..

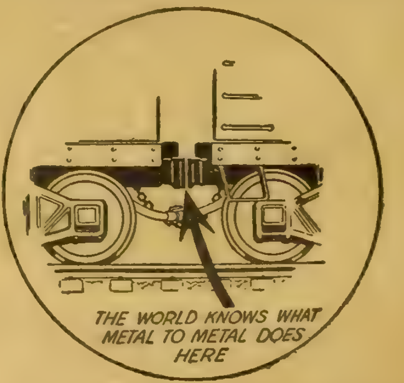
My Address..

....

Write—

FREE Ask for our free harness book. Get your copy even if you don't expect to buy harness right away. Learn about how metal-metal-construction — and Olde-Tan leather have doubled the life of a harness. Learn why you should buy a tanner-manufacturer harness. Mail coupon today and free book will be sent to you at once.

Babson Bros. 19th Street and Marshall Blvd.
Dept. 3301 Chicago, Ill.


THE WORLD KNOWS WHAT METAL TO METAL DOES HERE

(Keep the Business Farmer coming—see Coupon page 25)

The Michigan BUSINESS FARMER

An Independent
Farm Magazine Owned and
Edited in Michigan

UNIVERSITY ... JAN 29 1923

VOL. X, NO. 11 MOUNT CLEMENS, SATURDAY, JANUARY 20, 1923 $1 PER YEAR

Not too Early to Get the Tools in Shape!

Don't Forget Farmers' Week, Michigan Agricultural College, East Lansing, January 29th to February 2nd, 1923—Dr. Friday Extends You a Personal Invitation—see page 3.

Current Agricultural News

JERSEY MEN MEET DURING FARMERS' WEEK

THE annual winter meeting of the Michigan Jersey Cattle Club will take place during Farmer's Week at the Michigan Agriculture College January 30th and 31st, Tuesday and Wednesday. The first meeting will be held at 10:30 a. m., Tuesday and the members will be addressed by three speakers. Prof. O. E. Reed of the College will speak on "The Future of the Jersey in Michigan." Mr. H. F. Probert will address the assembly on "Breeding for Type and Production." Also an interesting talk will be given by Prof. H. E. Dennison of the College. A business meeting is to be held on Wednesday and at that time officers for the new year will be elected. Also there will be a general discussion on breeding, feeding and testing led by Pres. Probert. All Jersey breeders in Michigan are cordially invited and urged to attend.

CHICAGO PRODUCERS IN FIRST PLACE

THE Chicago Producers' Commission Association stepped into first place at the Union Stock Yards in Chicago the week ending January 6th. The weeks business of 246 cars was greater than that of any other firm at the yards, where there are more than 100 commission houses. The Chicago Producers have been juggling between second and third place for several months, and have finally reaches the top at the Chicago terminal. It is regarded as a sensational achievement of the farmers' live stock marketing program.

The Producers stood in first place at Buffalo, Indianapolis and Peoria last week as well as in Chicago. This is the association of which Michigan is a member. The Producers' Live Stock Commission Association at East St. Louis stood in second place with 135 cars.

The Producers at Indianapolis marketed 230 cars, or one-fourth of all the live stock in the Indianapolis yards. At Buffalo the Producers had 16 per cent of all the live stock—116 cars.

POTATO PRODUCERS MEET FEBRUARY 1 AND 2

THE Michigan Potato Producers' Association will hold a big annual meet and potato show during Farmers' Week. The meeting will last for two days, Thursday morning at 9:00 and the last meeting will begin Friday at the same hour. "What the College is doing for the Potato Producers" will be the topic discussed by Prof. J. F. Cox, Farm Crops Department of the College. Thomas Buell, president of the association will take for his talk "Michigan's Place in the Production of Certified Seed Potatoes." Hal B. Fullerton, director of agriculture, Long Island Railroad, Medford, Long Island, N. Y., will talk on "Healthy Spuds for Long Island." Prof J. W. Weston, potato specialist of the College will give a report of the season's experimental work with potatoes. And Prof. J. E. Kotila of the Botany Department of the College will discuss the potato diseases in Michigan. On Friday Prof. Wm. Stuart, U. S. Department of Agriculture, will talk on "Interstate Tests for Bettering the Quality of Certified Seed Potatoes." Sec'y-Treas. H. C. Moore will make a report for the past year. Also a general business meeting and election of officers will take place. Classes and list premiums in the potato show are as follows:

Petoskey Golden Russet (Russet Rural) Exhibit of 32 potatoes: 1st prize $20; 2nd prize $15; 3rd prize $10; next 3 best exhibits, each $5.

Any other variety, exhibit of 32 potatoes; 1st prize $15; 2nd prize $10; 3rd prize $5; next 5 best exhibits, each $2.

Boys' and Girls' Potato Club, Individual exhibits of 32 potatoes each, (any variety) 1st prize $5; 2nd prize $3; 3rd prize $2.

The Michigan Potato Growers' Exchange will award a silver cup to the individual winner of the State Club Championship provided there at least 20 exhibits entered. The State Championship will be decided on the Four Point Basis: Quality, Yield per acre, Report and Profit, being considered according to percentage given on report blanks for the various projects. No exhibits will be eligible to compete for championship prizes unless the report and story have been sent to R. A. Turner, State Club Leader, East Lansing, Michigan.

Certified Seed Sale Exhibit: Entries in this class are not in competition for prizes. They are composed of sample 100 pound bag seed stock. Growers of certifiied seed are encouraged to exhibit samples of their certified seed that are representative of the stocks they have for sale. The samples will be seen by several thousand farmers and will furnish the exhibitors a good means of advertising their seed potatoes.

General Suggestions for Selecting

Select 32 potatoes that are uniform in size, shape and color and that average from 8 to 10 ounces each in weight. The potatoes should be of the same variety and true in type. Do not select potatoes that show scab, black scurf or other diseases. The potatoes should be clean, bright, firm and free from blemishes, growth cracks and any mechanical injuries.

Clean the potatoes with a soft brush or woolen cloth. Do not wash them. Wrap the potatoes separately in paper and pack them tightly in a stout wooden box that is well lined with paper.

Shipping Suggestions

The grower should place on the inside of the box a card bearing his name, address and the name of the variety. Ship the potatoes by prepaid express so that they will arrive at East Lansing on or before Jan. 25. Ship the potatoes to the Michigan Agricultural College, Farm Crops Department, East Lansing, Michigan and mark the package, "Potatoes for Exhibit."

Potatoes that are sent by a Boys' and Girls' Club member should be marked "Club Exhibit." Certified seed potatoes for the 100 pound Seed Sales exhibit should be double sacked.

Competition is open to any potato growers in Michigan. No entry fee will be charged exhibitors. If interested write Mr. H. C. Moore, Sec'y-Treas., East Lansing, Michigan.

SAGINAW COUNTY GRAIN SHOW

A MEETING of the Saginaw Grain Growers Association was held at the Court House, January 2nd. Arrangements were completed for the First Annual Grain Show to be held in Saginaw, January 18th, 19th, and 20th, 1923.

Secretary Douglas Bow announces there will be complete classes for corn, wheat, oats, rye, barley, beans, and other small grains, seeds and potatoes. There will be about 60 premiums in each class.

All grain growers in Saginaw and adjoining counties are competing at this show. There will be no entry charges and admittance is free. Judging will be by competent judges from M. A. C.

Saginaw Valley Grain Growers have recently won many honors at the National Show just concluded at Chicago. They won places on all entries sent and brought home more honors than any other county in Michigan.

FOR FARM LOAN INCREASE

HERBERT Quick, who was one of the Federal Farm Loan Commissioners at the time the Federal Farm Loan System was established, has declared himself in favor of the Strong-Norbeck bill which would amend the Federal Farm Loan Act making it possible to lend as high as $25,000 to an individual through the Federal Farm Loan Banks instead of $10,000, the present limitation, and would permit the appointment of agents of the 12 Farm Land Banks to make loans without the forming of local co-operative organizations providing for a permanent board for the land banks and permitting farmers to place mortgages on their land in order to pay off debts already contracted.

Mr. Quick said: "The Joint Stock Land Banks enjoy the privilege of making larger loans and that the same privilege should be accorded to the co-operative loan associations which can make amortized loans from one-half to one per cent cheaper than the Joint Stock Land Banks. By increasing the individual loan limit from $10,00 to $25,000 the interest of the small borrower will not be jeopardized and the Federal Land mortgages will continue to be the excellent investment which they have been to date.

Nearly half the exports of corn from the United States in 1921—58,582,806 bushels—went to Canada, according to the United States Department of Agriculture. Much of this corn, however, was later shipped to Europe, Canadian statistics showing that only 12,000,000 bushels were imported from the United States for consumption.

How to use Long Distance Economically

In your use of Long Distance, you can get better and cheaper service if you know the way in which Long Distance messages have been classified for your convenience.

"ANYONE" CALLS—When you do not need to speak with a particular person but will talk with anyone who answers the call, tell your operator you wish to make an "Anyone" call. "Anyone" calls can be made quickly and cost less.

"CERTAIN PERSON" Calls—These are calls in which you tell the operator you wish to speak to a particular person. "Certain Person" calls cost more and take longer than "Anyone" calls because more time and expense are required to locate the person wanted.

On a "Certain Person" call, if you do not talk with your party, through no fault of the Telephone Company, a "Report" charge applies, providing you are given information concerning the person called.

EVENING CALLS—Between 8:30 and 12 o'clock in the evening, "Anyone" calls can be made at a reduced rate—approximately one-half the day cost. "Certain Person" calls cost the same day or night.

NIGHT CALLS—After midnight and before 4:30 a. m., "Anyone" calls may be made for about one-fourth the day rate.

APPOINTMENT CALLS and messenger Service—You can arrange an appointment to talk at a definite time by telling the operator. You can have a messenger bring your party to the telephone by requesting message service. Both of these calls cost more than "Anyone" or "Certain Person" calls.

MICHIGAN STATE TELEPHONE CO.

SATURDAY
JANUARY 20th,
1923

VOL. X, NO. 11

Being absolutely independent our columns are open to the discussion of any subject pertaining to the farming business.

"Hew to the line, let the chips fall where they may!"

The Michigan
BUSINESS FARMER

"The Only Farm Magazine Owned and Edited in Michigan"

Published Bi-Weekly
Mt. Clemens, Mich.

$1 PER YEAR

Entered as second-class matter, August 22, 1917, at the post-office at Mt. Clemens, Mich., under act of March 3rd, 1879.

We'll Meet You Farmers' Week at East Lansing

This is the year you ought to take Mother and Enjoy a Profitable Week at the Biggest Round-up of Farmers Ever Staged in Michigan

A PERSONAL INVITATION TO READERS OF THE BUSINESS FARMER FROM PRESIDENT FRIDAY!

TO the Editor of Michigan Business Farmer:—Will you kindly extend to the readers of your journal an invitation from the State Board of Agriculture and myself to be present at the Michigan Farmers' Week which will be held at the Agricultural College at East Lansing, January 29th to February 2nd.

During this week we hope to have at the College the leaders of every phase of the agricultural industry in the state. Special programs have been arranged at which the problems of the various phases of agriculture will be discussed by people technecially competent to bring to their audiences the latest developments and discoveries.

In addition to these meetings there will be general meetings every afternoon and evening at which men of national reputation will address the conference. The subjects of taxation, transportation, the future of prices, and general agricultural policy will be especially featured at these afternoon and evening meetings.

I consider such a gathering of the people engaged in agriculture especially important at this juncture in the affairs of our state and nation. There are an unusual number of problems confronting our industry which call for sound leadership based upon a competent knowledge of facts. This meeting will do much to discover and develop just such leadership.—David Friday, President.

INDICATIONS are that this year will see the largest attendance in the history of Farmers' Week. More than 5000 registered in 1922, and this record will be broken, it is expected by a considerable margin.

Thirty different state agricultural associations and groups will hold their annual meetings at M. A. C., during Farmers' Week. This number is nearly twice as large as that for any previous year. The Michigan Livestock Breeders and Feeders Association, with its dozen or more association groups, will meet during Farmers' Week for the first time. In other years, the livestock men have held a separate meeting earlier in the winter. Their addition to the Farmers' Week groups has brought the number up so high this year. Attendance at these association meetings alone will guarantee a big crowd for Farmers' Week, in addition to those who do not belong to any of the different groups.

Speakers listed for Farmers' Week this year include many national figures and the program will be one of the strongest ever given during Farmers' Week.

David Friday, new president of the Michigan Agricultural College, will be appearing before his first Farmers' Week crowds, and is scheduled for two stirring addresses, which will be full of "meat" for agricultural people of the state. Friday was unable to attend last year's Farmers' Week because of important investigational work at Washington, and his addresses this year are looked forward to with double interest.

Other headliner among the speakers will be Congressman Sydney Anderson, of Minnesota, brilliant agricultural leader at Washington; Signora Agresti, of Rome, Italy; Eugene Davenport, former dean of agriculture at Illinois University, and famous writer; Donald Conn, transportation expert of Washington; Dr. G. F. Warren, famous farm management specialist at Cornell University; and Charles E. Snyder, editor of the Chicago Drovers Journal.

Many other prominent figures in state and national agricultural life will appear upon the individual programs of the different association meetings.

Exhibits at this year's Farmers' Week are to be new and interesting. Most of the material will center around livestock production, in honor of the attendance of the various livestock associations at Farmer's Week.

One of the interesting displays will be the educational farm crops exhibit which won high praise for Michigan at the recent International Grain and Hay Show. Entries in the annual Michigan Crop Improvement Association show will also be on display. This show will bring together the finest grain samples of its class in America, and will include many of the entries with which farmers of Michigan cleaned up at the International.

The Horticultural Show, an annual feature of Farmers' Week prepared by students of the college, will be housed as usual in the College Armory. Extensive displays of fruit and flowers will transform this building into a veritable fairyland.

Special exhibits on home economics, farm mechanics, soils, dairy, livestock, and all ither phases of agriculture and rural life will be on display in their respective booths.

For the Women

A special program of interest to the women has been planned which will be vital to every woman in the state, and to the farmer's wife especially. A large attendance this year, as in previous years, is being looked forward to.

Dean Louise H. Campbell, State Leader of Home Economics Extension Work, who has this year been made head of the Home Economics Division of the College, with her staff of Extension and Resident Instructors, have been working on the program for several weeks and they insure to every woman who attends, a week of profit and pleasure.

Dr. Marie Dye, Research Specialist in Nutrition, who has come to the College from the University of Chicago, has been feeding a group of rats with special diets for experimental tests. Dr. Dye appears on the program for Farmers' Week and will illustrate her talk on "Experimental Work in Nutrition" with her rat colony. The Nutritional Research Department is in a position to render valuable assistance to the home makers of this state, under Dr. Dye's able leadership.

PROGRAM OF THE WEEK

GENERAL sessions—Afternoons and evenings on Monday, Tuesday, Wednesday, and Thursday, January 29—February 1, and on Friday morning, February 2. (These meetings will all be held in the college gymnasium. Motion pictures and other entertainment features will be mixed in with the main Farmers' Week addresses at these meetings.)

Housewives Congress—Tuesday, Wednesday, Thursday, Friday, January 30—February 2. All meetings to be held in College Womans Building.

Monday, January 29

Poland China Breeders Ass'n
County Agricultural Agents
Home Demonstration Agents
Boys and Girls Club Leaders

Tuesday, January 30

Breeders and Feeders Ass'n
Hereford Breeders Ass'n
Jersey Cattle Club
Ayrshire Breeders Ass'n
Aberdeen-Angus Breeders Ass'n
Duroc-Jersey Breeders Ass'n
Muck Farmers Ass'n
Beekeepers Ass'n
Boys and Girls Club Leaders
Hampshire Swine Breeders Ass'n

Wednesday, January 31

Crop Improvement Ass'n
Sheep Breeders-Feeders Ass'n
Oxford Sheep Breeders Ass'n
Red Pooled Breeders Ass'n
Guernsey Cattle Breeders Ass'n
Holstein-Friesian Ass'n
Swine Breeders Ass'n
Chester White Breeders Ass'n
Horse Breeders Ass'n
Beef Breeders Ass'n
Soils Ass'n
Muck Farmers Ass'n
Beekeepers Ass'n
Poultry Ass'n
County Y. M. C. A. Secretaries

Thursday, February 1

State Farm Bureau
Crop Improvement Ass'n
Shorthorn Breeders Ass'n
Potato Producers Ass'n
Soils Ass'n
Poultry Ass'n
County Y. M. C. A. Secretaries
High School Boys

Friday, February 2

State Farm Bureau—
Potato Producers Ass'n
Poultry Ass'n
Rural Press Ass'n
County Y. M. C. A. Secretaries
High School Boys
County Red Cross Chairman

Saturday, February 3

Michigan Rural Press Association

Miss Mariel Hopkins, Nutritional Specialist with the Extension Department, will discuss the "Extension Program of Nutrition." Miss Hopkins is well known throughout the state for her splendid work in behalf of better health through correct feeding.

Michigan Agricultural College has always given to her women students unusually fine social supervision, through their home life in dormitories, supervised by competent and able House Mothers. Mrs. Maude C. Thompson, Social Director at M. A. C., is in charge of this work and will speak on "The Home Life of Girls at M. A. C." The Shephert-Towner Maternity Bill, recently passed by Congress, is vitally important to every woman at this time. No person in Michigan is better prepared to discuss this subject than Dr. Blanche Haines, of the State Department of Health, who is in direct charge of the administration of this Act in this state.

Miss Ethel G. Webb, who has been connected for several years with the Clothing Economics Departments of the University of Chicago and Carnegie Institute of Technology, has recently joined the college faculty. Her long experience with the work of clothing selection and construction makes her especially suited to discuss "Some Stumbling Blocks in Clothing Construction," for the women in attendance at Farmers'

Miss Eunice Ryan, who has recently joined the Extension Faculty as Clothing Specialist, is bringing to the women of Michigan the benefit of years of special training in clothing work. She has a real contribution to make to every farm woman and farm home in her talk on "Hygienic Requirements of Clothing."

In addition to the speakers, several prominent persons from outside will have leading places on the week's program for women.

Mrs. W. R. Alvord, Ex-president of the State Federation of Women's Clubs, appears on the program at one of the joint evening meetings. Mrs. Alvord is a speaker of poise and forcefulness and always has a message of vital interest for everyone.

Miss Grace E. Frysinger, Field Agent in Extension Methods, States Relation Service, Washington, D. C., will speak on the subject "The Farm Home as the Fountain Head of Social and Economic Organization of the Nation."

Miss Bess Rowe, Field Editor of the Farmers' Wife, is to talk on the results of the contest recently conducted by her paper on "Do You want your Daughter to marry a Farmer?" This contest attracted nation wide attention and the conclusions drawn by Miss Rowe are sure to be of interest.

Between the regular meetings, many special features will be offered. Exhibits of work done by the home economic students, in all of their courses, will be on display during the entire week. Through these the regular worg of the College can be observed and judged.

A rest room, or silent room, will be provided in the basement of the Woman's Building, where women may lie down and rest at any time There will also be a nursery where children may be left in charge of competent students trained in the health and care of children, so that mothers may be free to give their whole attention to the meetings.

The teaching staff and students want every woman in the state to feel that M. A. C., is her College and their whole time and effort will be spent during the Farmers' Week in

(Continued on page 23)

Fifteen Years of Wood Life Tragedy

James Oliver Curwood, Native Son and Internationally Known for His Stories of Forest Life, Appeals for the Conservation of what Little Remains in Michigan

(Contributed especially for The Business Farmer.)

James Oliver Curwood

Born near Owosso, Michigan and a resident of this state who has won international fame as the author of books on the great Canadian Northwest. Author of "Nomads of the North," our recent serial and "The Hunted Woman," the wonderful story now appearing in every issue of the Business Farmer.

MORE than once I have been asked to give the fundamental reason for my fight to preserve what remaining wild life and forests we still have in my native state of Michigan—a bitter fight waged against those same elements of political machinery, incompetence and lack of practical intelligence which have played such deadly parts in the slaughter of natural resources throughout our country, and always my mind has swept back over the tragedy of the last fifteen years to find its answer. While my own state, where I was born and where I have lived for almost forty years, is in my opinion the darkest blot on the map of the American continent when it comes to the matter of forest destruction, and while I am confident it will take a quarter of a century of intelligence and technical ability to give back to us the wild life which lack of conservation has lost to us in a pitiable fraction of that time; and while, moreover, I shall continue to wage war until big and broad-minded men specially fitted to direct the conservation machinery of a mighty state replace the present system of political appointments, I am convinced that every true conservationist should put his shoulder to the "national wheel," and pull for the country at large as well as for his local environment if the ultimate and greater triumph is to be achived.

We Americans are, and have been, a breed of destroyers and of monumental egoists; in the blindness of self-conceit we have reaped but we have not sown; on the treacherous sands of human "almightiness" we have set ourselves up on pedestals, and we are only now beginning to see our sins and our weaknesses. My own life has been typical of millions whose boyhood began a generation ago. From the beginning, as a boy, I did not need argument or education to tell me that I was the greatest of all created things—that my particular brand of life, of all life on earth, was the only life that God intended to be inviolate. That fact was pounded home to me in the public schools; it was preached to me in the churches. I was part and parcel of the great "I Am." For me, all universe had been built. For me, the Great Hereafter was solely created. All other life was mere incidental, and made especially for my benefit. It was mine to do with as I pleased. In a mild sort of way, the school and the church told me to have a little charity, and not to "hurt the poor little birdies." But at the same time both religion and school instilled into me that I was next in place to God, and that all other life, from the life of trees and flowers to that of beasts and birds, was put on earth for my special benefit, and that no other life had a right to exist unless the human egoist saw fit to let it live.

While we are slowly but surely awakening to the deadly error of these teachings of our youth, and while the necessity for a proper conservation of the resources which God gave to us in the beginning is becoming a living thought throughout our commonwealth, in our homes, our churches and our schools, one still cannot feel himself a fighter in the ranks until he or she realizes the aweful devastation of the past few years. Our youth did not pass through the grimmest of that tragedy, and millions of boys and girls now in our public schools, our conservationists of tomorrow, must depend upon us for those visions of the past by which they will be guided to the possibilities of the future.

Fifteen Years Ago

For those who have not seen the Great Change with their own eyes, and who have not been in a position to witness the tragedy of destruction—not only in a local environment but in a scope covering two-thirds of a continent, my own experience of fifteen years in the open spaces may be of interest, if not of actual value, in showing how swiftly the destruction of our wild life has swept upon us, and how quickly we must now act to save it from utter annihilation.

With the beginning of those fifteen years, almost the entire northern half of our continent was one vast breeding ground of wild life and this in spite of the fact that for nearly two hundred years the Hudson's Bay Company had steadily used large areas of it as their hunting and trapping grounds. Fifteen years ago the buffalo were gone, it is true, with the exception of a few survivors in the Athabasca country. In those days I was employed by the Canadian Government as a sort of "last frontier" investigator and explorer, and I had unexcelled opportunities for coming in contact with the wild life between Montreal and the Pacific. On every railroad then running in western Canada the daily recreation of passengers was counting coyotes and antelopes. The buffalo trails and wallows were then, and even later, plainly visible from the car windows, and over vast areas the prairies were criss-crossed with them. But in the face of this tragedy of the recent passing of the buffalo people marveled at what seemed to be the inexhaustible supply of wild life still left. From the car windows wildfowl could be seen not only in thousands, but in countless millions. Every bog-hole and lake was black with them. One early autumn, when I rode several hundred miles horseback from Medicine Hat to the Caribou Mountains to run down a rumor of buffalo living there, I was not for an hour at a time where I could not hear the thunder of the wings of rising wildfowl. For years I looked upon the tragedy of settlers slaughtering ducks and geese literally by the wagon load. At Dundern, Saskatchewan, I was the guest of a wealthy rancher when a hunt was planned. There were six of us in the party that visited a lake several miles out in the prairies. Shooting began at dawn. Marksmanship was not necessary, and by the time the evening shoot was over the kill was over six hundred ducks and filled a wagon. In those days game was slaughtered in this way, cleaned and placed in ice houses for winter use.

Occasionally, in the years that followed, I went over these same tramping grounds. Year by year I watched the going of the wildfowl and the prairie chicken. During a "flight" season of wild geese I have counted as many as thirty straw-stacks on a single night, around which the slaughterers were gathered to kill the geese that circled low in the illuminations.

Result Appalling

The result was appalling. Today, at the end of those few years, if you ride from Winnipeg to the mountains on either the Grand Trunk Pacific or the Canadian Pacific the probability is that you will not see even a coyote. Surely you will not see an antelope. The ponds and lakes once black with wildfowl will occasionally hold a family of ducks, or a small flock. There are no wild geese; even prairie chickens create an unusual interest when they are seen. The greatest breeding grounds that North America has ever known outside of the Arctic tundras, are gone. In those days of a wild life paradise I saw a letter to the factor at Fort Churchill, on Hudson's Bay, from the factor at York Factory, lower down on the Bay, in which the latter asked if he might purchase or trade for a supply of wild geese, as his own luck had been poor that year. In reply, the factor at Churchill sent back word that he could not spare any geese, as his hunters had also had exceedingly bad luck that autumn, and had only succeeded in killing eight thousand geese, which was not as many as he could use in his district during the coming winter.

And yet, in spite of that, it has not been the Hudson's Bay Company's trappers and hunters or the Indians who have destroyed the wild life of Canada, from which the United States have very largely drawn their supply. The settler and the hunter, together with political stupidity and selfish ambition, have been almost entirely responsible in our own country. Not only have they "hogged" the wild life of lake and stream and forest, but so long as their own immediate wants have been filled they have not cared but little of the future. They have not made intelligent laws, and when such laws have occasionally been made they have not used the power of their vote to demand an enforcement of them. In almost every instance true conservation, where it has won out at all, has had to ride over rotten politics.

Within these same fifteen years I went ahead of the "line of rail" of the Grand Trunk Pacific, through Yellowhead Pass and the British Columbia mountains. This was before a mile of steel had been laid beyond the prairie foothills, and I found a game paradise which some might consider an exaggeration if I could describe it as it actually existed. Bear, deer, sheep, goat and caribou literally swarmed in these regions. At one time I counted eleven bears on one mountain slide, all visible at the same time, and I have seen bands of sheep which numbered as high as a hundred. Several times since those days I have gone through these same regions. The so-called "sportsman" with his automatic and his pump-gun, has wrought frightful havoc. Today one must outfit a pack-train and go deep into the mountains for days and weeks at a time to find a single grizzly or sheep, and he is a fortunate hunter if he brings home either. During one season which I spent in the Firepan Mountains gathering material for my "Grizzly King" I saw twenty-seven grizzlies, innumerable blacks and hosts of other game. On my last trip I spent six weeks and saw three bears.

Destruction Farther North

Still farther north one sees the result of modern day destruction. Less than fifteen years ago I was in the Artillery Lakes country at the time of the annual migration of caribou. All one day what was supposed to be the main herd crossed a stream, and three different individuals made their estimate of its numbers, added the estimates, then divided the total by three, which approximately figured the herd at thirty thousand head. Two days later an Indian brought information that this was not the main herd, but a branch of it, and that the main herd was still farther north!

Today, even to the Arctic coast, a caribou herd of a thousand head, even in migration, is unusual. All through the northland they have split into smaller bands. Rifles have come in with the white man. The slaughter of the wildfowl life of North America on the prairies of Western Canada and our own western states has also sounded the doom of the hoofed beasts. We must remember that the geese and ducks on Lake Superior today were on the Arctic tundras a few weeks ago, and will be in the tropics a few weeks hence. A slaughter in Florida may bring hunger and starvation to the Indian three thousand miles north. There was a time when the Arctic tundras were what the Indians conceive their Happy Hunting Grounds to be. They were the Canadian prairies, multiplied ten times; it seemed as though the wild life of the earth gathered there to breed. But the man from Saskatoon, Winnipeg, Topeka, Milwaukee, Detroit, and St. Augustine has rob-

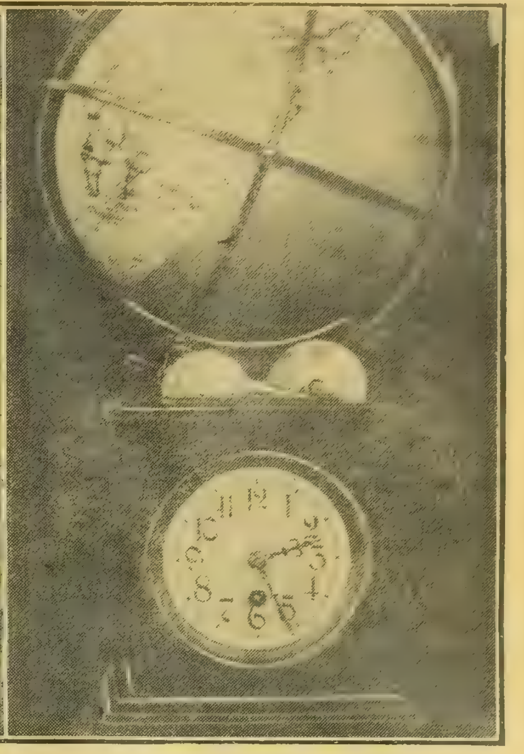
(Continued on page 24.)

James Oliver Curwood at his camp with his Indian guide and dog team, on the shores of Great Slave Lake, north of the arctic circle in northern Canada. Mr. Curwood is a true sportsman and believes in getting the material for his wonderful fiction stories at first hand, spending part of each year in the great Canadian Northwest. His home is at Owosso, Michigan.

PICTURES FROM FAR AND NEAR

No necessity for attending congressional debates.—Representative Vincent M. Brennan, (Republican) of Michigan, demonstrates that in the future it will not be necessary for a congressman to attend sessions simply to listen to debates. He has had a radio installed in the House Office Building, Washington, D. C., and through the instrument he hears all that is going on.

A sight that thrills thousands.—To the many foreigners coming to American shores, the Statue of Liberty is a symbol of freedom and enlightenment. It is a thrilling and heartening sight, this statue on Bedloe's Island, in the New York Bay, the gift to this country from French school children. This unusual picture was taken from an airplane encircling New York.



A unique clock.—Invented by Johann Verndel of Atzgersdorf, near Viennia, Austria, which tells the time in every part of the globe at once. This clock and its globe-like attachment shows even more than the time of day. It indicates the exact time of sunrise, when it is noon, the time of sunset, the year, month and day, at all points of the earth.

JUDAS
Heute Nachmittag: Judas

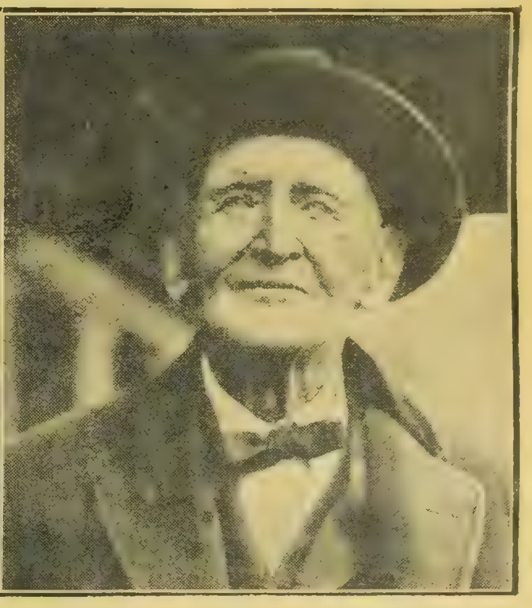
Where coal is more precious than gold.—Some of the German Provincial towns are hard up for coal, and that commodity is becoming the rate of exchange, instead of German paper marks which have lost their value. Here are a group of kiddies in front of a movie theatre ready to pay their admission fee in "black diamonds." I suppose we would be considered multi-millionaires if we lived in Germany because we have a couple of tons of coal.

Putting the prohibit in prohibition.—Fifteen Governors met with President Harding at the White House while the chief executive expressd his ideas on prohibition. Left to right;—Gov. Ritchie, Maryland; McKelvie, Nebraska; Kilby, Alabama; Secretary of Treasury Mellon; Gov. Trinkle, Virginia; President Harding; Vice President Coolidge; Gov. Davis, Idaho; Cox, Massachusetts; Allen, Kansas; McCray, Indiana and Campbell, Arizona.

Youthful musician plays way to fame.—Max Goberman, aged 11, of Camden, N. J., created quite a furore in eastern musical circles recently when he won the scholarship to the Philadelphia Musical Academy, the only one to be granted. This young prodigy is the son of a motorman, and is in his junior year in high school. Max has won several honors during the past year and musical authorities predict a great future for him.

FATHER TIME'S DIARY

An interesting page in Father Time's diary.—Billie Dove, of movie fame, declared that 1922 was the happiest year of her life. A contract, a fine home and important roles in two notable productions, this is what this fair young lady had to be thankful for in 1922. She has been going through Father Time's diary and says that while she is pleased with past years she is going to make 1923 the best of all.



Still swings a wicked axe at 103—"Uncle Joe" Daubeney, as he is known to all Taylor's Falls, Minn., is that state's oldest citizen and entering his 104th year he is still on the job as wood chopper. "Uncle" reads without glasses and often drives 50 miles in his flivver to Stillwater to see the latest movie. At the age of 100 he gave up smoking, but still chews tobacco.

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Gasoline Tax Becomes the Burning Question

MICHIGAN has just reason to be proud of her highway system. One can now drive from one end of the state to the other over roads such as our fathers never dreamed of. It is now almost possible to go from Detroit, Grand Rapids, Flint, Saginaw, Lansing or any of the principal cities of the state to any other city, village or hamlet over highways which may be traveled with perfect safety and comfort at any season of the year. But it is costing a large sum of money to carry out this program and it is well for us to consider whether or not that cost is being properly apportioned to those who are most directly benefiting from it. At first the entire cost of constructing a highway was paid by the township in which it was built; then to encourage faster progress in road construction, laws were passed by which a certain amount of financial aid was given from State funds, provided the road was built according to certain specifications, but by far the greater portion of the cost was still borne by the taxpayers of the township in which the road was built; then the "County Road System" was adopted, by which certain roads were constructed by the county and the cost charged to the taxpayers of the entire county, including the cities, state aid being given on these roads also the same as on those entirely constructed by the townships; then the State Highway Department was organized and the amount of State aid was materially increased on all roads designated as part of the state trunk line system. These funds for payment of State aid have come out only from licensing motor vehicles but also largely from appropriations by the legislature, met by general taxation. Within the past few years in order to make more rapid progress so that we who are alive today could receive good roads benefits, funds for giving State aid have been provided by the issue of bonds to the extent of $50,000,000 if necessary, the voters of the State having so voted by an overwhelming majority, the proceeds to be expended under the direction of the State Highway Department. These bonds have not as yet all been issued, but the interest on those already outstanding even now constitutes a substantial item in the State tax budget, and provisions must also be made in future budgets for a sinking fund with which to retire the bonds when due. Thus far the principal part of the cost of our highways has been borne by the general taxpayers of the State in the manner here described. The great increase in the amount demanded each year for highway purposes, together with the constantly increasing cost of practically every activity supported by the taxpayers of Michigan, and especially school and municipal expenses, constitute a burden on the property owner so large that it is now a serious question with thousands of taxpayers how the load can be borne.

There is no question but that the remarkable improvement in our highways is due almost entirely to and in fact demanded by the advent of the automobile. Until we began traveling in the fast moving motor car, comparatively few people other than residents of the agricultural districts made any extended use of the country roads. The farmers were able to haul their produce to market fairly well on existing highways and very little effort was made to secure better roads. Today our improved highways are crowded with motor vehicles carrying people through the country, giving them both pleasure and profit, and thousands of people are now becoming acquainted with distant parts of the state, and with other states as well, who until they began traveling in automobiles rarely, if ever, went outside the corporate limits of the cities in which they reside, except on a railroad train. It is true that almost every farm is considered increased in value when a good road connects it with the market-place, and the property in the city or village is likewise increased in worth, as improved highways make it easier for the farmer to transport his product to market, yet can it be said that the benefit is as much more to the property owner, either in city or country, as is indicated in the proportionate cost of the highways he is at present called upon to bear? The injustice would not exist to the same extent if every owner of an automobile was the owner also of other taxable property for then all would be contributing in fairer proportion. The condition would be much better even if the automobile was taxable in the same manner as real estate and tangible personal property, or if the license fee now required equalled the amount of tax an automobile owner would be required to pay were his car subject to a general property tax; but there are thousands of owners of motor vehicles in the State of Michigan who are not owners of property taxable under the general tax law and whose contribution toward supporting the highways is limited to the amount paid for their automobile licenses, and they contribute nothing whatever, as they should, to the other activities of government that are supported by a general property tax. It seems to me that those who travel by truck or car are deriving the greatest, most direct, and immediate benefit from the highways and that therefore they should bear a greater and more reasonable portion of the cost. I can see no fairer method of accomplishing this than to levy a tax on every gallon of gasoline sold within the State. The tax would naturally be added to the price of gasoline, but would be paid in such small amounts that one would hardly realize that it was being paid; no more attention would be paid to the matter than is now given when the price of gasoline is raised or lowered. No one purchases any less gasoline for use in a motor vehicle when the price advances a cent or two cents per gallon; now would the tax have the least effect upon the motor car industry. The sale of cars does not depend upon the price of fuel, but upon the condition of the times. When one considers the purchase of a car he gives no thought whatever as to whether gasoline will cost him twenty cents per gallon or twenty-five cents. This is proven by the fact that gasoline costs more than double to-day what it did when the automobile industry was started, yet the industry has grown faster than any other in the history of the world. It is to be presumed that the benefit and pleasure derived from good roads is in proportion to the use made of such roads and to the grade of the vehicle used in traveling the roads; a tax on gasoline therefore would be a levy almost in direct proportion to the benefit and pleasure received, for the greater the distance traveled or the larger and more powerful and comfortable the car driven the greater would be the consumption of gasoline. Likewise in the case of the truck and the bus, the consumption of gasoline being greater than that of the ordinary car, the contribution would be proportionately greater, as it should be. Then, too, the tourists from other states and countries, and no one derives more pleasure from our good roads than they, would also contribute toward the cost of our highways in proportion to the use they make of them and while the individual payment would not be large enough to be burdensome, the aggregate received would be large enough to be of very material assistance to Michigan taxpayers.

That the enactment of a law taxing gasoline would require the establishment of a large department and the employment of "practical proteges" is ridiculous and positively not true. The law should and undoubtedly will provide that the tax be paid by the person, firm or corporation to whom gasoline is shipped within the State; in other words, the tax should be collected on bulk lots only from the wholesaler or distributor. This would necessitate but a very small force and could be made a part of the duty of some department already in existence. Settlements would have to be made with comparatively few dealers and the cost of collection should be lower than for almost any other tax now being collected. The wholesaler would simply add the amount of the tax to the price charged the retailer and the consumer would pay the slight added charge when purchasing at the fiilling station. With the unquestioned cooperation of the railroad companies a very close check could be made on the gasoline shipped into the State and evasion of the law be effectively prevented.

The only possible excuse for the levy of new taxes is that the over burdened property taxible under our present general property tax law may be relieved. The farm, the home, and even the factory are to-day actually taxed up to and in some cases beyond their ability to pay, and relief must come from some source and that right soon. It is estimated that the whole tax burden is borne by less than one-half the actual wealth of the State and a tax of this character is one of the means students of the subject of taxation believe will help to remedy conditions with the least hardship to others. To make sure that the right result will be obtained care must be exercised in drafting the law to the end that the proceeds will be so disposed of that the owners of taxable property will actually benefit. The proceeds must be devoted entirely to the payment of charges which must otherwise come from the general property tax. If any attempt is made to divide the receipts and distribute them to the localities in which they are collected there is great danger that the money received will be considered as just so much more money available for spending and no relief would be obtained. A tax of more than two million dollars must be levied by the State each year for interest alone when the highway bonds authorized by the voters of the State have all been issued, and a sinking fund must also be provided with which to retire the bonds as they become due. At present there is no source from which these funds can be obtained except the general property tax. It is estimated that a tax of one cent per gallon on gasoline would yield approximately three million dollars; how could the proceeds of such a tax be more effectively expended than for the payment of interest on the highway bonds and for the creation of the required sinking fund? Under the present system every property owner in the State will have to pay his share of these obligations, that share being based upon the value of the taxable property he owns; then, if these funds can be provided through a gasoline tax, every owner of taxable property in the State will be directly benefitted and the funds will actually be raised from those who are deriving the most good, either in pleasure or profit, from the highways of the State.

It is objected to a gasoline tax that a large part of the automobile mileage is on city streets and that the cities to receive no outside help toward construction or maintenance of these streets. This objection would be well founded if the proceeds were to be based only for the maintenance of the country highways, but if applied on State highway bonds, as here recommended, the receipts will then be used to pay charges toward which city property will eventually be called upon to pay in exactly the same proportion as other property, i. e. in proportion to the actual value of taxable property within the district.

It is suggested by some that this highway budget should be met by a mill tax on all property in the State. This would provide no relief whatever, as the entire amount would be collected from property which is now bearing practically the entire burden and which already is paying much more than its fair share of the cost of the government. A one-mill tax sounds like a very small amount and so it is of itself, but wiith a one-mill tax for this purpose, another tax for another purpose and so on ad infinituum, the burden becomes heavier than the taxpayer can bear; and it is for the one and only one reason that that point has already been reached that we are now seeking new sources from which to obtain help.

A proposal has been made that two propositions for maintaining a highway budget be submitted to the voters of the State: One—the gasoline tax; the other—a one-mill tax on all taxable property of the State. This would be a perfectly fair proposal if every voter was a property owner. but it is hardly to be expected that thousands of automobile owners who are not owners of other taxable property would vote in favor of a tax upon themselves if there was a possibility of requiring someone else to stand the burden. This, then, is a question not to be so decided. The decision must be made by the Legislature, a body chosen by all citizens, and the rights and interest of all the people must be impartially considered to the end that the highway burden may be borne in the most equitable manner possible.—B. F. Burtless, Sec'y, Michigan Board of Tax Commission.

BOARD OF TAX COMMISSIONERS FAVOR TAX

"THIS Board is on record as favoring a gasoline tax, believing that the general property of the State is, under our present system, required to pay more than its fair proportion of the cost of our highways."—B. F. Burtless, Secretary, Michigan Board of State Tax Commissioners.

Not for Either Plan

I am neither an advocate of a tax upon gasoline or a mill tax upon property, for road maintenance, but I do not know that unless something is done soon you will find a greater problem ahead of you.

At present there are 50 per cent of the farms for sale and no chance to sell. Mr. Earle said that those who did not want to pay a mill tax to sell or give away. Now if Mr. Earle will please explain himself, some of we farmers will be very grateful, we are unable to do either, and with the tax rate where it is, about 75 per cent cannot keep this up very long. Locally the tax rate is 5.3 per cent plus special on roads, making some taxes $5.00 per acre. This is as much as you have to pay to rent the best of land.

If Mr. Earle is in the market for good land at give away prices, send him up here and I can show him lots of it, even in Midland county.

I do not believe Mr. Earle can show us that he has made his money at farming and he talks just like most all men do that have money in the bank and can check it out for taxes. But how about the man who has some interest to pay also, or even the man just out of debt, he cannot borrow the money, here at least, even if his credit is good.

I noticed also that the Highway Department plans to finish spending that $50,000,000 in the next two years. Why do we need six or seven trunk lines to the northern part of the state, through state land where no taxes are paid, shifting the expense back to the settled sections? Also why do we need a cement road through towns that have gravel roads already built? Some of these are only a year old and none of them worn out when they come in and tear up for pavement.

We have a very sensible highway department and there is no wonder that Mr. Earle is a pioneer good roads man, as he is president of a Road Builders Supply Company.

Mr. Earle also states that one sharp shod horse does more damage than a thousand autos. He may be right, but I fail to see any horses sharp shod or shod at all except on icy roads. I notice that most horses here travel at the side of these good roads if possible and sometimes go

in Michigan! Read and Judge for Yourself

out of their way to avoid them, being hard on unshod animals.

All of the money that most of us get over a living goes to taxes and about 30 per cent last year did not have that much ahead. We pay the truckman the same rate as we do the railroads for freight, so who wins in this case?

As far as the city worker is concerned, I notice that he goes on vacations and uses the state roads as much as I do. When you pay $5.00 per acre taxes, with markets where they are, you will have no time or money to chase over the country. You know the condition in the city today and you know that there are no young people left on the farms. They know where they can at least have time to enjoy themselves a little instead of slaving all hours to pay taxes. If we fail, we know there are others that will suffer with us, so go to it, you may be fixing your own funeral.

I believe the road user should pay for the road and I also drive an automobile.—E. N., Coleman, Mich.

Mr. Newton's Article Fine

The article by Mr. F. S. Newton of Saginaw, as reported in The Business Farmer of January 6th, I have read with deep interest and consider the article entirely logical, proving Mr. Newton to be a deep thinker.

Everyone who is conversant with present financial conditions, is aware that the Michigan Farmer is already taxed to near the "breaking point" and to place an additional tax upon him, as proposed by Mr. Horatio Earle, would be no less than an unmitigated injustice.

As stated by Mr. Newton, we as a people, have "gone wild" on the subject of "Good Roads" and a halt should be called until better financial conditions prevail. The proposition to make the highway from Detroit to Grand Rapids 100 feet in width illustrates the absurd condition of some men's "think tank". "We Farmers" enjoy riding on good roads but we do not want to "break our backs" with hard work to provide for their making and maintenance.

It would seem to be most proper for Granges and Farmers' Clubs to bombard the Legislature with resolutions, something like the following: Resolved by (name of Grange or Club) that we do hereby ask most earnestly of our members in the Legislature, that the expenses of the State government be kept at the very lowest amount consistent with the proper caring for the financial needs of the State and this we ask in view of the heavy burden of taxation which real estate of the Farmer is compelled to be at under the present unejual and unjust levying of taxes, and we feel assured that it will be far the best interests of all to recognize that upon the welfare of the Farmer depends the welfare of all classes of citizens, it being absolutely and everlastingly true.—"The Farmer: He garners, from the soil, the primal wealth of nations."—J. T. Daniells.

Township Treasurer for Tax

As you have given us the opportunity to express our opinions on this state-wide issue "Gasoline Tax" I'll add a few facts as I see them here in the northern part of the state. I agree with F. S. Newton.

The "One Mill" tax on the farmers of this state would be the last nail in his coffin for today he is little better than a slave to taxation. Who was it that said "Let every man and woman be free and independent?" Are the farmers independent? No, a thousand times no. But thank God they are free—and if anyone well read the reports of the Farm Bureaus, Granges, and Farmers' Clubs, I believe they will wake up to the fact that they are very much alive. The trouble is, we farmers have been too easy and put much trust in our state officials.

Mr. Earle says if we don't want to pay our tax, let us sell, "and get out." This is an insult to the average farmer, the real honest farmer, not the dude. If Mr. Earle will send buyers up in this part he can buy nine out of ten farms, for a lot less than our much talked of State men valued them at. Good farms too, good homes, well tilled fields and well stocked. Why? Because he cannot make a living for himself and family and pay his taxes. Mr. Earle spoke of owning several farms, yes, and when he has only a short distance to haul to a good market, "by truck" thus the holler on gas tax. If his farms were up here where he had to depend on R. R. freight rates, he would sing a different song.

I am in a position to know, being treasurer of this township, where up to date only eight farmers have paid their taxes. Why? Because they cannot sell their produce to get the money. I know of several good industrious farmers that have butchered and hung up most of their cattle and hogs and left wife and children to care for the rest and gone to camp to earn tax money. One man shipped two crates of fifty chickens each to the city, expecting a good return but the market had taken a slump and after paying the railroad he had just four dollars and sixty-three cents for his poultry, about one cent per pound. Now if he had been in Mr. Earle's place he would have phoned out, " take the truck and bring in those 100 good fat chickens, price is high" and presto, it's done! But this is not the life of the common farmer.

Again I take exception to Mr. Earle's remark that "One sharp shod horse did more damage to the good roads on one trip over than a thousand autos." The auto has it all over the poor horse—when it comes to cutting up roads. Now that Mr. Slocum has given us the chance to express our opinion I hope the real farmers will not be backward. Remember the Business Farmer stands for a square deal. Once and for all a good income tax and put the gas tax on to build the rich mans roads. —One of the Northern Michigan taxpayers, Cheboygan County, Mich.

Gas Tax Will Get Outsiders

I have just finished reading an article in the M. B. F. written by Horatio S. Earle on the proposed gasoline tax in Michigan, in fact I have read several articles written by Mr. Earle in opposition to this tax. His argument is applied to Detroit might be good, but as applied to the whole state, I consider it mighty thin.

I live in the midst of a resort region and during the summer months cars pass through here from nearly every state in the union. Some stay several months and some are campers and none of them, except those that own property here, pay one cent highway tax. And this tourist traffic is something immense and growing all the time. They wear out our roads more while they are here than our home people do in the whole year and a tax on gasoline would make those who wear out the roads keep them up whether they are from Michigan or California.

Mr. Earle's argument about the aeroplanes, motor boat and washing machine is a joke and the farm tractors use mostly kerosene.

Another injustice under our present taxing system is that the upper peninsula and northern part of the lower peninsula can use cars about two-thirds of the year and yet pay at the same rate as the whole state. I would say reduce the license tax to two or three dollars regardless of size of car and collect the rest through a gas tax.

Mr. Earle proposes to put an additional tax on real estate when there are thousands of real estate owners who never use the roads for anything more than to walk on.

It seems to worry Mr. Earle that they are going to tax the city of Detroit for helping to keep up the roads in other parts of the state. I know I have seen a lot of cars from Detroit up this way last summer and they don't stay on the state or county roads either. They go over our township roads which we farmers have to maintain without state or county aid. The way I look at it the Farmers ought to stand for it to the man.—N. T. Powell, Emmett County, Michigan.

"Hurrah, for Gas Tax!"

Why I think a gasoline tax a just tax is because it would make them that ride most pay most. Was the trunk line built for the farmers? No. It was built for the pleasure cars and automobile industry and the millionaire, and they bonded our county for millions of dollars with 20-year bonds for the farmers to pay.

Mr. Earle says who shall pay the tax, the truck man that hauls the farmers produce? Now I think Mr. Earle knows the farmers would pay at least the gasoline tax.

Mr. Earle speaks of the poor washer-woman. Now if a man took a dirty shirt to get washed, when he got the clean one who would pay the tax?

He says the cities maintain their streets but 75 per cent of the cars that run over our trunk lines are city trucks. Mr. Earle speaks of marching the Isrealites out of the swamps now I don't know whether he did or not but what has that got to do with the gasoline tax.

Mr. Earle speaks of exempting Mr. Ford from taxation. Would a gasoline tax exempt Mr. Ford? He says Mr. Ford doesn't pay a tenth part of the tax he should pay. Now Mr. Earle lives in that neck of the woods why doesn't he see that Mr. Ford pays his taxes or is he afraid that a gasoline tax would hurt the sale of Ford cars.

My taxes have doubled in four years at the same valuation. Now Mr. Earle says he pays 50 times the taxes of an ordinary farmer and pays them cheerfully and if the farmers don't want to pay their taxes let them give their farms away. Now how did Mr. Earle get his vast wealth, farming or out of the good roads system? Now Mr. Earle wants the farmers to vote a mill tax. I think what Mr. Earle wants we don't and what he doesn't we do. So hurrah for a gasoline tax.—Arthur Sterim, Osceola County, Michigan.

THAT PROPOSED GASOLINE TAX

IN theory the tax proposal has irreparable weakness. It would tax every user of gasoline for the maintenance of good roads when it is perfectly clear that many users, tractor operators, owners of gas engines on farms, and a vast number of vessels, for example, are not concerned with roads at all insofar as these activities are concerned. * * * Suggests a very grave objection to the gas tariff proposition. That is the necessity it would involve immediately of providing a new and highly expensive state agency for its collection.

Instead of the gas tax Col. Waldon suggests an increase in license fees if the automobilist must bear the road cost burden alone. That increase would not involve the employment of another clerk by the state, would add not another penny to the ordinary cost of running the Secretary of State's office.

The gas tax idea is impolitic and unfair in theory; it would prove improvident and wrong in practice. If the automobilist is going to pay a new tax there is now an ample sufficiency of machinery in the state of Michigan for its collection.—Detroit News Editorial.

Taxes on Real Estate High Enough

I note in the December 9th issue, Mr. Horatio S. Earle, on the highway tax problem, and think such an article worthy of notice. His claim of being a farmer and farm owner is a broad claim often used by men that are not dirt farmers, that depend on farming for their income and living.

I think a reasonable tax on property is all right but most dirt farmers and home owners know by this time that they are getting hit hard enough with taxes.

We have no state tax based on the value of motor cars. An old car worth $100 is taxed the same as a new car worth $1,000. A farmer in the north part of the state that makes a few trips to town with car in summer is taxed the same as a car owner in south part that drives car nearly every day in the year.

The statement that motorists are paying 5 per cent tax doesn't seem to balance right as far as state taxes go. Reports from states that have a gasoline tax show that it is one of the easiest taxes they have to collect and motorists do not consider it unreasonable as it is used to improve roads which benefit them and saves them money in running their cars.

I think the more farm and home owners we have the better and it will prove a poor policy to tax the people off from their farms. When the state builds and maintains an improved highway system at great expense it must be met by a tax and I fail to see any injustice in placing part of the tax on the traffic that uses the roads, in proportion to use.

Some states have a 2 cent per gallon tax on gasoline for highway purposes and it works well, why won't it work well here?—Earnest S. Allen, Osceola County, Michigan.

Wants Both Gas and Income Taxes

I was very much pleased to read the article in your paper of December 9th, concerning the gasoline tax by Mr. Earle. He sure brought out some good suggestions, but I hardly agree on the mill tax at present for the highway department, and will try and give my reasons.

I believe the way conditions are in Michigan at present, we should have a gasoline tax and an income tax and every good honest citizen who believes in doing his share and have others do the same will get out and vote for both. They tell us in Michigan 79 per cent of all taxes are on real estate. Real estate represents 35 per cent of the wealth of Michigan. That leaves 65 per cent of the wealth of the state to pay 21 per cent of taxes. Take the man with most of his money in non-taxable property who is probably raising a family has a machine, and is wearing out the roads that real estate pays about eighty-five per cent of the cost when built, or the man who makes his living trucking, some do not own a home, and have their money in trucks and non-taxable property. Where are they to get their just share, will not a gasoline tax help, also an income tax?—Henry D. Phillip.

Gas Engine Owner Speaks

Would a tax on gas be a just tax? How about the man who has no car, but owns a gas engine? Must he pay on power, not using the highway, or such power traveling on water? A tax on gas would make openings for some work dodging individuals to collect said tax. The people are graning under the tax burdens now. That does not indicate they want more. Unload, must be the slogan of every fair minded citizen. Where will we start.—C. H. A., Iosco County, Mich.

Tax-Exempt Securities

How different we see things. I am rather surprised at Brother Earle's article in which he proposes to add a one mill tax on all real estate for highway purposes. There seems to be about all the tax on real estate already that it can stand, more than it ought to stand. There are thousands of small real estate owners who are old, with small income not sufficient to support them, and when they apply to the mill or factory work they are met with this "you are too old to do our work." There are thousands of men that own machines that do not own real estate who would go free under Brother Earle's plan. I think a better plan would be for a vote at the spring election to empower the legislature to amend the constitution to tax tax-exempt securities.—Reader, White Pigeon, Michigan.

Historical Background of Michigan Agriculture

Second Installment of Historical Outline of Rural Life in Michigan, by Prof. L. A. Chase

THE primal need of the settler is for transportation. Michigan's rivers were mostly shallow and crooked, obstructed with drift-wood and sometimes completely blocked for long distances by it, and, after deforestation had advanced, sandbars likewise impeded navigation and there were great fluctuations in the depth of the water from season to season. In winter they were iced over and mill danms were at frequent intervals thrown athwart their channels. Makeshift roads were early constructed—some of the most important ones by the United States government before Michigan became a state, and that for military reasons. Territorial and, later, state roads were laid out by the territorial and state governments in accordance with aets of the legislature, while each township was expected to attend to the building of such portion of these roads as lay within its limits. Working out the road tax was for many years a familiar feature of rural economy in Michigan, with results that were unfavorable to good roads. But for many years the most that Michigan farmers could contribute for this object was labor. The people—pioneers in a wilderness—were poor and distances were great. Often the "road" lacked grading and a metalled surface, although where need was, in crossing a marsh or swamp, the log corduroy gave a painful passage to the wayfarer. The town-meeting, introduced from New York and New England even before statehood was attained, gave most of its attention, it may be presumed, to road work, as it still does in those rural sections where it is still held. It was only with the coming of the automobile that effective county and state highways systems have superseded the township-district system of the earlier period.

Need of Transportation

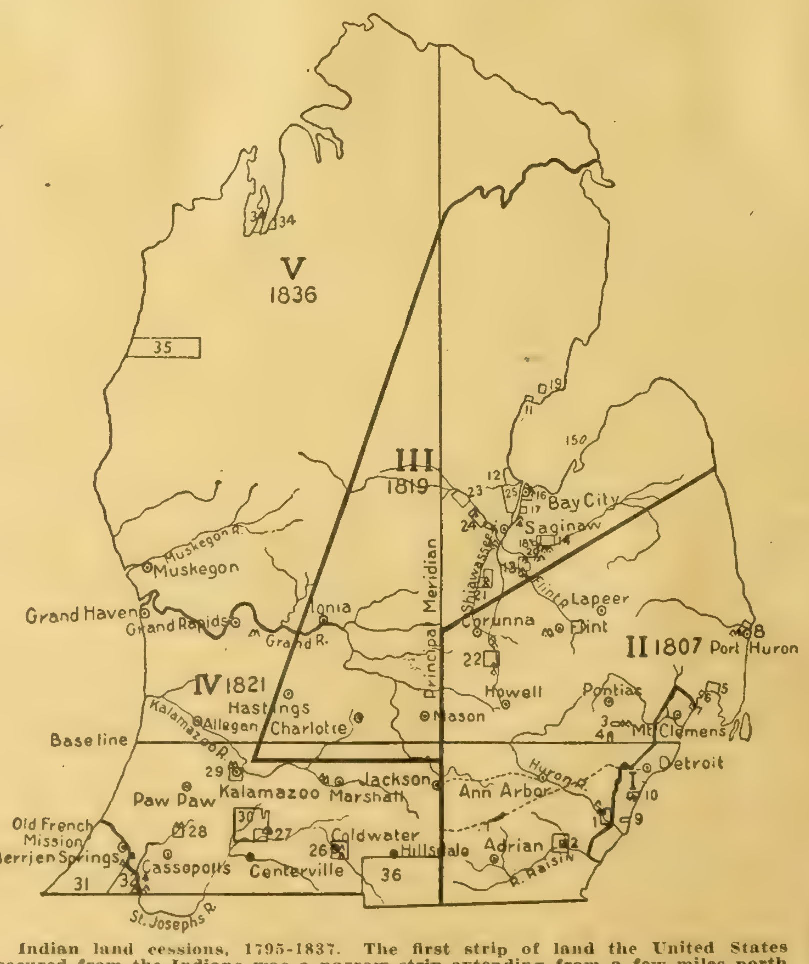
This need for transportation explains the fantastic effects at railway construction and internal improvements which featured the history of Michigan as soon as statehood was secured, and the people became masters of their own governmental affairs. The first railroad—the Erie and Kalamazoo—was opened from Toledo, Ohio, to Adrian, Michigan in 1836, although charters and projects had been provided in plenty during several years previous. This was a private undertaking as was that from Detroit to Pontiac, almost as early; but private effort was too conservative. The young state required vigorous action and got it through its own efforts. A great system of internal improvements was laid out by the governor and legislature in 1837, which with the hard times that came on about that time, well-nigh bankrupted the state and brought, in 1850, a constitutional prohibition of such state enterprises in the future. Three state-constructed railroads were built well into the interior of the state—from Detroit to Kalamazoo (designed to reach Lake Michigan at the mouth of the St. Joseph River) and the other from Monroe to Hillsdale (designed to reach Lake Michigan at New Buffalo). All these railways were built with the wooden rails with a metallic strap to cover the running surface, and some of them used horse-drawn vehicles at first. Indeed it is said to have been designed that farm-wagons should be provided with flanged wheels so that anyone could haul his wagon on the line as if on a country highway—safely out of the mud and sloughs of the public roads. Over these early lines the farmers shipped their grain, flour and other marketable produce to the lake ports and market towns, and received manufactured and non-domestic materials in return. Railway capacity was small. Trains on the state-owned roads ran only in the day time and sometimes it became necessary to call in wagon transport to relive the congestion on the railways. The state went out of railroading in 1846, and it was left to private capital and effort to cover the state with its present system of steam and electric transportation. Chicago was reached in 1852 and the two peninsulas were joined by railroad in 1881. In the southern counties it appears to have been the advancing agricultural frontier that promoted the extension of the railroad system, while farther to the northward, where good agricultural lands were less readily available, lumbering gave the incentive still further north, in the Upper Peninsula, mining, and later lumbering, led to railroad construction. But even in the north, agriculture where it was replaced by forest industries, directly depends upon the railroad. Electric interurban transportation is scarcely more than a generation in developing from its first small beginnings between Ann Arbor and Ypsilanti in 1890. But it, too, has come to have a very great importance to rural life in Michigan. The canal system which the state government contemplated in 1837, soo was dropped after some slight efforts were made close to Lake St. Clair and in the Saginaw valley, although the great lock and canal system at Sault Ste. Marie, first opened in 1855, has come to have a tonnage some three times that of the combined Panama and Suez canal traffic. But this has little direct connection with Michigan agriculture.

Education and Religion

The rural pioneers of Michigan were not indifferent to education or to religion. Territorial legislation had taken in account of public schools, but little seems to have been accomplished before statehood was attained. The state constitution of 1835 gave the state educational leadership by creating the office of superintendent of public instruction and devoted the proceeds from the sales of such lands as might be received from the United States for this purpose to the use of such schools. This primary school interest fund later was increased by the addition of taxes on railroads and certain other transportation companies as well as the tax on inheritances, and has been an important aid especially in some rural sections of the state where the proportion of school children to taxable valuation is high. Yet, the first schools were not free. The teachers kept account of the attendence from each family and at intervals a rate-bill was presented for payment of tuition. The constitution of 1850 directed that the legislature provide free schooling, but it was nearly a score of years before this was done. The teachers were poorly trained and poorly paid. The course of study was limited mainly to reading, writing, and arithmatic (there was for many years no attention given to agriculture). Schoolhouses were made of the same crude construction that characterized the homes of the people. Text-books were few and of all sorts and conditions. Special school equipment was largely lacking. Yet the schoolhouse filled an important place in the rural life of pioneer Michigan. It was a place for public meetings—religious, political, social. It afforded all the schooling that many eminent men and women of Michigan received.

The circuit rider moved about from place to place carrying the Gospel to remote hamlet and lonely fireside. His equipment was in his saddle-bags. His pay was trifling, his zeal was great. Like the physician, he made long and hard journeys. Occasionaly there were settlements of persons having a common religious bond whose members were chiefly engaged in agriculture, such as the Mennonites already referred to, the Quakers, the United Brethren, the Dunkards, the Mormans of Beaver Island, and latterly the Israelite House of David. The most striking example of re-colonization of co-religionists on a large scale is that of the Dutch settlement of Ottawa County, just before the middle of the last century.

As the mainland of Michigan extends through some six degrees of latitude there was found to be considerable divergence in the farm crops that could be grown. Among the early farmers wheat was a favored grain crop and the farmers chief dependence for a cash income. It has from the beginning been a leading crop of the southern counties. It has borne many names and varied greatly in quality. For years after the Civil War the "Clawson" wheat said to have been introduced in New York State stood in high repute. Of late, interest has been shown in the new type, called "Red Rock" bred from a single kernel selected in 1908 by the plant breeder at the Michigan Agricultural College. Under pioneer conditions wheat was sown broadcast from the hand and covered with the spike-toothed drag. Its yield would run from thirty to forty bushels per acre but in time this yield was not maintained and farmers came to plant wheat rather from force of habit or for seeding of the hay-crop than for any good business reason on its own account. From the first winter wheat has been chiefly grown in Michigan, but in the northern sections of the state spring wheat predominates, although an early planting of winter wheat is apt to turn out well.



Indian land cessions, 1795-1837. The first strip of land the United States secured from the Indians was a narrow strip extending from a few miles north of Mount Clemens south to the Rasin river in Monroe county. Through a treaty of 1807 the boundary line was extended from the Michigan-Ohio line through Jackson, Mason, Corunna, along the Saginaw valley to the shore of Lake Huron. The treaty of 1819 ceded territory around Charlotte, Ionia, the Saginaw valley and north to Presque Isle county. The treaty of 1821 ceded the land south of Grand river and through the treaty of 1836 the United States secured possession of all of the lower peninsula and the eastern part of the upper pninsula. In 1843 the Indians ceded their last claim upon Michigan, the western portion of the upper peninsula.

Crops Raised

Corn—already grown in the state by the Indians when the whites arrived, was planted sometimes on the untilled ground among the stumps. The surrounding forest, by interfering with air drainage, increased the liability to frost on the corn-field, until clearing operations reduced this danger. With corn as with wheat there was the same lack of standard varieties until recent years through the efforts of crop improvement associations and the Agricultural College standardization has been brought about. This applies also to other grains. In the pioneer era grain-growing suffered somewhat, too, from the depredations of wild animals. The succulent shoots of the growing grain suited the taste of the deer, and grain in the shock attracted the approving attention of raccoons, squirrels and wild turkeys. On the other hand, many of our destructive plant diseases did not make their appearance for some years. Wheat flour was produced at the water-driven mill reached, it might be, after many days of ardous traveling. The Indians knew how to reduce corn by breaking it in a hollowed end of a log or stump, while the whites improved on these methods by using a hand-mill or even a large coffee-mill.

In the pioneer period the prairies and marshes produces wild hay, and even yet there are times and places in which such wild grass is not scorned. For many years clover and timothy was almost entirely grown as a hay crop, but during the past score of years alfalfa and more recently, sweet clover and sunflowers have been winning favor for forage. The southern counties lead in the hay crop, but the eastern section of the Upper Peninsula in destinctively a hay-producing and hay-exporting region.

It was early discovered that the light soils of the northern counties were suited to the growing of potatoes and this region remains the leading potato section of Michigan and one of the most important potato sections of the country. As with the grains, varieties have become standardized and adapted to local conditions.

Sugar Beet District

The area of sugar beet culture is not far south of the potato belt but on soils that are stronger in clay in their composition. The state legislature in 1881 had tried to stimulate the home production of sugar through a bounty, but efforts to obtain crystalline sugar from the syrup of sorghum, or Chinese sugar-cane were not successful, although considerable sorghum molasses was being produced at that time in Mich-

(Continued on page 23.)

Chicago Daily Tribune

THE WORLD'S GREATEST NEWSPAPER

Announces

A BIG REDUCTION IN SUBSCRIPTION RATES

For the Benefit of the Farmer

THE CHICAGO TRIBUNE, realizing that its phenomenal success is due in a large measure to the fact that for seventy-five years it has numbered among its readers a large proportion of the residents of farms and small cities, announces for their benefit a big reduction in subscription rates effective January 15th, 1923.

The reduction ranges from 1/3 to 1/2 below former rates

In 1917, as a war measure, Congress passed a bill providing for four annual raises in Postal Rates for newspaper subscriptions. As The Tribune had, for many years before, sold its paper to out-of-town readers at less than cost, it felt compelled to add a portion of these postage increases to its subscription rates.

For the past three years The Chicago Tribune has been leading the fight to obtain a reduction in second-class postage rates so that it could reduce to pre-war prices its subscription rates to residents of farms and small cities.

Although every one of the other ten taxes established by the war revenue act of 1917 has been reduced, Congress has not seen fit as yet to reduce the tax on second-class postage.

At the present Postal Rates it costs The Tribune from $3.20 to $6.79 a year *for Postage alone* to send the paper to each subscriber in the States of Illinois, Indiana, Iowa, Michigan and Wisconsin. In many instances this is more than The Tribune's entire subscription price—without considering the cost of the product.

Many of our farmer friends have stated that it required from 10 to 12 bushels of corn to pay for a year's subscription to The Chicago Daily Tribune. The Tribune is anxious to remedy that fact.

TO TAKE ADVANTAGE OF THIS OFFER TEAR OUT COUPON *and*

MAIL AT ONCE!

If you prefer to do so, you may turn subscription coupon below over to your postmaster, publisher, or newsdealer who will forward it to us.

Therefore, without waiting further for Congress to act, The Tribune announces a reduction in subscription rates ranging from 1/3 to 1/2. This cut in rates will cost The Tribune approximately $200,000.00 each year, but The Tribune will pay the bill in the interest of its many country readers.

New subscriptions to The Chicago Daily Tribune, starting on and after January 15th, 1923, will be accepted at the following rates:

THE CHICAGO DAILY TRIBUNE

[*By Mail, Six Days a Week*]

These Rates Apply Only to Subscriptions in States of Illinois, Indiana, Iowa, Michigan and Wisconsin. [Cities, Towns and Rural Routes included.]

Period	*Old Rate*	*New Rate*
1 Month	$1.00	$ .50
3 Months	2.50	1.25
6 Months	3.75	2.50
12 Months	7.50	5.00

The Chicago Daily Tribune today enjoys the largest circulation in its history and the largest morning circulation in America—*averaging over 530,000 copies daily.* It will readily be seen, therefore, that the reduction is not made primarily to secure more circulation.

If you wish to receive The Chicago Daily Tribune—with its many wonderful features—regularly, take advantage of these new, low rates now. Mail subscription coupon below. Note that $2.50 will now bring you The Chicago Daily Tribune by mail for six months, or $5.00 for a whole year.

For the benefit of its country readers The Tribune will continue its fight for fairer postage rates.

SUBSCRIPTION COUPON

The Tribune Company,
Dept. 17 Chicago, Illinois,

Date..............................

I want to take advantage of your reduced subscription rates. Enclosed find $.. for which send The Chicago Daily Tribune [by Mail, Six Days a Week] as follows:

☐ 1 MONTH [50c]
☐ 3 MONTHS [$1.25]
☐ 6 MONTHS [$2.50]
☐ 12 MONTHS [$5.00]

Check the Subscription wanted

Name..

Street Address or R. F. D. ....

Post Office.. State..............................

"Every Day in Every Way We Are Getting Better and Better."

FINANCIAL STATEMENT

GLEANER CO-OPERATIVE MUTUAL FIRE INSURANCE CO.,

The following financial statement is a copy of the report submitted to Hon. L. T. Hands, Commissioner of Insurance, Lansing, for the year ending December 31st, 1922. In submitting reports to our members we conform exactly to the requirements of the state, therefore it may be depended upon as absolutely correct.

The Company is in splendid condition, the best since its organization six years ago. In reading this report we want it understood that while the indebtedness of the company is $28,172.40, that the last assessment was called September 1st, 1922, and this twenty-eight thousand dollars has been used to pay the losses and expenses for four months since assessment was called—September, October, November, and December. Our asessment year ends September 1st, and this report is made for the calendar year 1922. Bear in mind, we have operated the company, paying all losses for a third of a year and it has cost us $28,172.40. We have about $28,000,000 at risk. If we assessed $1 per thousand it would raise $28,000, and would pay up everything. If we should run along in the same ratio for the following eight months of our year we would assess $3 per $1,000. It would be very unwise to prophesy the future. We can only tell you what it has cost us to run a third of our next year.

This statement is combined, both Rodded and Unrodded classes made to meet the requirements of the State Insurance Department. We will say, however, that both classes are in equally good condition when separated. We want to call your attention to the fact that this company own no automobiles, the office furniture, safes, fireproof files, typewriters, adding machines, dictaphones, printed matter, etc., which has been paid for and in the office costing a lot of money is not carried as an asset. We have considerable money due us that we are going to get on assessments back of 1922, but as the Insurance Department does not allow us to carry these as an asset they are not included in this report.

We ask that you take special note of the expense of adjusting losses and inspecting risks on the twenty-eight million dollar company. There were 174 losses on both classes, scattered about the state and the expense of adjusting these losses averaged $18.90 each, which covered railroad fare, automobile hire, hotel expenses and salary paid the adjuster.

The exact amount of insurance at risk January 1st, 1923, was $27,697,422.75, or a net gain after all cancellation and decreases, of $4,244,318.50 and a net gain in membership of 911, making a total membership in both classes of 8,011. The two classes are two-thirds Rodded and one-third Unrodded.

INCOME

1.	Total assets at the close of business		$ 4,935.00
2.	Assessments levied during the year	$ 79,054.66	
3.	Premiums paid by new members	5,211.16	
4.	Policy Fees	2,208.90	
5.	Interest Received	2,246.86	
6.	Borrowed Money Received	57,500.00	
7.	Transfer Fees	148.33	
8.	Assessments of Year 1921, paid 1922	8,724.47	
9.	Assessments, prior to 1921	127.37	
12.	Cancelled Insurance	2,646.89	
13.	Excess	205.57	
14.	Total Income for Above Period	$158,074.21	$158,074.21
15.	TOTAL		$163,009.21

DISBURSEMENTS

16.	Amount of Losses Paid	$ 78,381.67	
17.	Adjusting and Settlement of Losses	3,285.06	
18.	Officers Salaries and Fees	4,450.22	
19.	Directors Fees and Expenses	353.05	
20.	Revenue Stamps	57.20	
21.	Clerk Hire	6,106.13	
22.	Advertising, Printing and Stationery	1,5[illegible]0.95	
23.	Postage and Stamped Envelopes	793.42	
24.	Commissions to Agents	3,474.98	
25.	Return to Policy Holders	11.[illegible]	
[illegible]	Borrowed Money Repaid	45,500.00	
	Interest on Same	4,119.06	
27.	Attorney Fees and other Legal Expenses	124.14	
28.	Miscellaneous Account	180.75	
29.	Telegrams and Telephone	215.12	
30.	Rent	600.00	
32.	Office Supplies	274.67	
33.	Notes Receivable	1,499.82	
34.	Inspecting	412.58	
35.	Cash Deposited in Reserve Fund	6,914.39	
36.	Collection Account	180.91	
37.	Bad Debt Charged Off	37.77	
		$158,523.57	$158,523.57
38.	BALANCE		$ 4,485.64

LIABILITIES

Borrowed Money	$ 50,600.00	
Losses Unsettled and Not Adjusted (2)	2,250.00	
TOTAL	$ 52,850.00	$ 52,850.00

ASSETS

Cash on Hand	$ 4,485.64	
Due on 1922 Assessments	12,836.67	
Due on Cancelled Insurance	440.90	
Money Deposited in Reserve Fund	6,914.39	$ 24,677.60
BALANCE		$ 28,172.40

We realize that some who read the above statement may not be able to fully understand same, and our aim has always been to keep our membership well informed, and thus we offer the following explanations:

No. 1—The money we had on hand when we started the year 1922. No. 2—Amount of assessments paid by our members. 3rd and 4th—Money paid by new members to join our company. Some of this was paid to agents for writing the applications. The amount so paid is item No. 24. 5th—This is the amount of interest we received from members who did not pay their assessments soon enough to avoid paying interest, most of whom took the full three months to pay same. We gave them extra time to pay if they paid a small interest. Notice item No. 26. We paid $4,119.06 interest on borrowed money, and our members paid in $2,246.86, therefore we were really out only $1,872.20 for interest the entire year for money advanced by the bank to pay the losses and expenses for the members. No. 7—This is self-explanatory. No. 8—Money received for transferring policies. Nos. 8 and 9—Self explanatory. No. 12—Assessments paid when insurance was cancelled. No. 13—Money sent in by agents more than required which was returned in item No. 24. No. 14—All the money received during the year.

The disbursement explanation is quite clear. Nos. 16, 17 and 18 are self explanatory. No. 19—Paid directors for attending meetings, travel, expenses and perdiem. Nos. 20, 21, 22 and 23 are self explanatory. No. 24—This is the amount paid agents for writing applications. The money they sent in is covered by Nos. 3 and 4, and was returned to them. No. 25—Money sent in above the amount required and returned. Nos. 26 and 27 are self explanatory. See our explanation to No. 5 above. No. 28—Typewriter and other office furniture and fixtures. Nos. 29, 30 and 32 are self explanatory. No. 33—Notes taken in payment and credited on assessment book, charged as a disbursement until notes are paid.

No. 35 is the amount of money received from new members for joining the company, which in most mutual companies goes to the officers as commissions. This is the start in our reserve fund that we are building without assessing our members therefor. It is deposited in the National Bank of Commerce, Detroit, as a savings account and is drawing interest. It will be added to every month.

No. 36—Paid for collecting accounts. No. 37—Bad debts charged off as uncollectable. The liabilities and assets are self explanatory.

Notice the item in liabilities: "Losses unsettled and not adjusted." There were but two losses unpaid at the close of the year, one occurring December 26th, 1922, and the other is a loss where there is a grave doubt as to whether the company is responsible for anything whatever. Isn't this a wonderfully clean slate for a big company?

Never was the Gleaner's Co-Operative Mutual Fire Insurance Company in better condition, financially or otherwise. It is being operated safely and conservatively. Insurance risks have been kept within the safety point and those who joined to sell their property to the company through the incendiarism route have been smoked out, and the suspicious are under surveillance.

We gladly open our gates to every good farm owner, whether he be a member of the Gleaner organization or not. We have issued a booklet covering every detail of the advantages and operation of the company which we will gladly send to anyone who desires same. We can only say to you that if you place your insurance with us we shall do our utmost to give you the best insurance to be had at the least possible cost, and that the management will be safe, careful and conservative.

L. F. BOSWORTH, President. JAMES SLOCUM, Secretary.

Home Office: National Gleaner Temple, Detroit.

Farmers Service Bureau

(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full name and address. Name not used if so requested.)

A PATHETIC REQUEST

DURING years of reading your paper, I have seen many troubles cleared up. We would like to know if you can help us by printing the following:

Our daughter, Bernice De Hart disappeared from Harbor Springs, Michigan, Nov. 24th. Her description: age 23, weight 110 pounds, height 5 ft. 3 inches, color of hair, medium brown, color of eyes, blue. Slight scar on right cheek. When last seen she was wearing a small black velvet hat, wine colored coat, with large black collar and black kid oxfords. She is a pianoist of excellent ability.

We will give to anyone who can give us information concerning her whereabout $300.00 in cash.—F. G. De Hart, Post Master, Vickeryville, Michigan.

DEPENDS ON WORDING OF CONTRACT

If A sells B a parcel of land on contract and after two or three years B is unable to meet payments when due, has A the right to step in and take the land back at once? Or has B a right to pay up later and redeem the land the same as on a mortgage? R. P. R., Kingsley, Michigan.

—The time when A may regain possession of the land sold on contract to B depends upon the wording of the contract itself. A notice of forfeiture probably must be served of from seven days to three months depending upon the wording of the contract. Under the statute if B retains possession until A commences an action against him notwithstanding B has not paid he may require the court to find the amount then due on the contract. B would then have five days to pay it or he may be put off the premises.—Legal Editor.

BRIEF COURSE FOR ELECTRICIAN OR PLUMBER

Can you give me any information, as to the learning to be either an electrician or plumber? Is there any other way other than being an apprentice or in the case of an electrician, taking a university course. Are there not some reliable trade schools that one might attend? One similar to the Detroit Automobile School, for learning the trades pertaining to automobiles? Are there any you could recommend?—W. M., Mt. Pleasant, Mich.

—The best place I know of is The Ohio Mechanics Institute, Cincinnatti, Ohio. However, the Detroit University or The Arthur Hill Trade School, Saginaw, or the Milwaukee School of Electrical Engineering might serve your purpose.—A. R. Sawyer, Professor of Electrical Engineering, M. A. C.

HOUSEWORK AND GENERAL HOUSEWORK

Will you please tell me if there is any difference between the terms "housework," and "general housework"?—A. R., Marilla, Mich.

—The distinction is simply one of custom. The term "general house work" is supposed to mean all types which would include the laundry, while "house work" would include only the care of the house and includes neither the laundry nor the culinary work.—Edna V. Smith, Asst. State Home Demonstration Leader.

WHO IS ENTITLED TO PENSION?

What widow and children are entitled to a pension?—Mrs. M. E. W., Honor, Mich.

—The mother of any dependent or neglected child under the age of seventeen years of age who is unmarried or divorced, or is a widow, or has been deserted by her husband, or if her husband has been declared insane or is feeble-minded, epileptic, paralytic, or blind, and is confined in a state hospital or other state institution, or is the wife of an inmate of some state penal institution serving sentence therein for crime, or if an inmate of a hospital for the treatment of insane who is confined therein for the purpose of being treated for insanity or other diseased mental condition and such mother is poor and unable to properly care and provide for said child, but is otherwise a proper guardian, the court may enter an order providing for the payment of not to exceed ten dollars per week and not less than two dollars per week in case said mother has but one child, with an additional sum of two dollars per week for each such additional child.—Charles J. Deland, Secretary of State.

OWE AGENT NOTHING

A year ago last spring an agent came to my place to sell me a cultivator. I wanted an Oliver but they did not have any. They had the Rodcerick Lean. I told them that I would think it over and let them know. I told them not to bring one out unless they heard from me. Two or three days later this man sent out a cultivator and I not being at home he unloaded it and went away. I gave it a fair trial and did not like it so when he came to draw up the papers I would not sign as I did not want it. We later bought an Oliver. I notified the firm I did not want the cultivator, to come and get it. He came out and I told him I did not like it and he put it up in the tool shed in the barn and went away. This fall he sent notice and we payed no attention to it. The other evening he came and said if I would pay him $15.00 he would take the cultivator, if not he would make us pay all of it. I want to know if I have to pay him $15.00 when I signed no papers for the cultivator and have kept it in storage for 16 months.—L. F., St. Charles, Michigan.

—Under the facts related you owe the agent nothing. If he sues you, you will have to defend yourself and if the justice of the peace decides against you get a good lawyer and appeal the case. The circuit court judge will see that justice is done upon the trial.—Legal Editor.

TRAVELING EXEPNSES FOR HIGHWAY COMMISSIONER

Will a highway commissioner serving a township, such service requiring the constant use of an auto, be required to furnish same from his salary or is he entitled to compensation for same?—L. B., Spring Arbor, Mich.

—Act 57, of the Public Acts of 1921 fixes the compensation of the Highway Commissioner at four dollars per day for each day actually and necessarily devoted by him to the service of the township in the duties of his office. This does not include his actual and necessary traveling expenses, which should be provided. —State Highway Department.

TRANSPLANT IN SPRING

Is it advisable to take up hardy plants like flax, peonies and iris now and store them down in cellar through the winter and set them out side next spring?—J. K., Dryden, Michigan.

—Flax, peonies and iris are much better in the ground for the winter than in any cellar protection you could give them. If they have to be moved for some cause or other from the position they are occupying, I would advise planting them in some permanent place protected by leaves or straw but they would be much better if transplanted in the spring. —Thos. Gunson, Ass't Professor of Horticulture, M. A. C.

LANDLORD FURNISHES ALL BUT LABOR

I would like to know your idea of the subject of rent for a one hundred and twenty acre farm; horses and tools furnished, renter doing all the work. If the tennant received one-third of all the crops would this be fair to both? Who should pay, or what part of the threshing expenses should tenant pay? Tenant may keep some chickens, farmer will furnish pasture for one cow.

—The usual practice under the above conditions, where the landlord furnishes everything except labor, is that the landlord receive two-thirds of income and tenant one-third, the tenant to pay one-third of thresh bill, seed purchased etc., and the landlord the other two-thirds.

As to the chickens and pasture for cow, this is an individual matter and can be agreed upon by landlord and tenant to suit conditions.—F. T. Riddell, Farm Management Demonstrator, M. A. C.

NOT OBLIGED TO MAINTAIN SLAUGHTER HOUSE

A butch who has just been compelled to rebuild his slaughter house to make it sanitary, told me that the laws says, that all meat put on the maket for the use of the public must be killed in a sanitary slaughter house. That the farmers could not kill meat and put it on the market. Does this law stop me from killing my hogs and selling them?—L. A. W., St. Clair County, Mich.

—There is no law nor department ruling in existence which seeks to compel a farmer to maintain a slaughter house or kill animals of his own raising in a slaughter house. He has a perfect right to do all of his butchering at any place on his farm, having in mind that if the meat is to be offered for sale it must be prepared under sanitary and clean conditions.

Slaughter house regulations apply only to butchers and others who buy wherever an opportunity affords, and from any source from which animals are available.—M. J. Smith, Solicitor, State Department of Agriculture.

SEE ATTORNEY

One of my neighbors was driving on a highway and was put in the ditch by an auto. This driver was altogether to blame and does not deny it. My neighbor was hurt, the buggy broke and the harness. He went to justice of the town and the justice would serve papers to auto driver to settle, but he never came. This happened some time ago, and I would like to know if the matter could be taken up yet.—Mrs. M. B., Merrill, Michigan.

—I do not understand what is meant by "justice serve papers to settle." If it was a letter from the justice to the party who caused the account he would be under no legal obligations to answer it nor does it lessen the injured parties rights. The justice of the peace if not an attorney at law has no right to practice law. If the injury has not outlawed the injured party should consult a good attorney and he will tell him what to do and what he can do, to collect his damages.—Legal Editor.

MICHIGAN CROPS

WHAT IS DIVERSIFIED FARMING?

WHAT is meant by diversified farming, about which so much has been said of late? Prof. P. E. McNall of the Wisconsin College of Agriculture says it means anything but "jumping in and out of every sort of agricultural activity."

"The farmer who diversifies has important major source of income," declares Prof. McNall. "Usually this is some class of live stock; occasionally in this state it is some cash crop. This one enterprise must form the backbone of the farming business. It is the farmer's specialty. He knows and loves the work with this particular stock. He is in it because he expects to remain in the production of the stock and he will not drop it because prices are not temporarily as he would have them."

In addition to his main line of live stock production, the farmer who pratices a good form of diversification, according to Prof. McNall, keeps stock of other kinds, to make the best use of farm by-products, perhaps; and he generally grows a cash crop as well. The idea is to have a number of sources of cash income, so that there will always be the chance of hitting a good market on some things produced.

Conditions the past two years have emphasized the need for great diversification. "Between 1916 and 1920," says Prof. McNall, "any farmer with energy could make money. A herd of cows, a few acres of crops, pigs, chickens or whatever the farmer had, was effective capital for bringing in the dollars. Neither management nor saving was required to pay all current expenses, and income which could have been used as reserve was expended either to increase the volume of business or to raise the standard of living. Since 1920 conditions have reversed. Very few farmers are making money."

Has diversification made headway the past two years? Think of the increased iinterest in hens. That is one step in diversified corn belt farming. Chicago Daily Drovers Journal.

POTAOTES ON SAND

I have a sandy soil which has been farmed in following rotation as far back as I know. First year clover, second year corn, third year oats, fourth year clover (this was a poor crop) fifth year or 1922 crop soy beans for seed—the roots of which did not seem to have any nodules. There are 90 acres in this field. I want to put this all in potatoes in 1923 but will only have enough manure to cover at the rate of 10 or 12 loads per acre. Do you think this amount is sufficient or would it be best to only plant 6 acres of potatoes and apply manure more heavily Is there any commercial fertilizer suitable for potatoes on sandy soil with gravel susoil? If so what? On the same sandy soil in same field as described on this letter this year 1922 potatoes made 130 bushels per acre. the patch was manured at the rate of 18 loads per acre. This was a very dry year. What I wish to get at is, would not 10 loads of manure produce nearly as good results as the 18 loads? Is the Irish cobbler potato the best early market variety? How many bushels per acre for seed of the above variety?—R. S. Coldwater, Michigan.

—The application of manure, where ground is not so irregular as to cause washing, is best applied the previous fall, during the winter or early spring. Disk thoroughly before plowing. 8 to 10 tons of manure properly incorporated will give very good results. Too heavy an application of coarse strawy manure may cause the land to dry out excessively in a dry season, and especially if the manure is plowed down late and in such a way as to make a mat in the bottom of the furrow.

Slice by thorough discing before plowing, the manure is placed in the soil, in the position of a wick in a lamp and assists the action of capillary water rather than retarding it.

The commercial fertilizer used principally for potatoes is a 3-10-4 of a 2-8-10. The 3-10-4 fertilizer demonstrations applied at 400 lbs. per acre gave an average increase this year of 45 bushels per acre and at a cost of $7.25 per acre or at a cost of 16 cents a bushel, for fall price of fertilizer.

The Irish Cobbler is a good quality, usually good yielding, early variety. It is somewhat later than the Early Ohio, the other standard early variety of potatoes. The planting date for early potatoes should be as soon as danger of severe frost is past in the spring. A good rule to follow would be plant your early potatoes before you plant your oats. The rate per acre, at least 12 bu. per acre, 15-18 inches apart in hills, rows three feet apart should be heavier on early plantings than on late on account of the danger of the frost killing the first growth and if good sized seed pieces are used there is sufficient plant food to start new growth. Where there is danger of frost when plants are small, 2 or 3 inches, high, run through field with a two wheeled cultivator, shovel set to cover potatoes and when danger of frost is past run crosswise with weeder and uncover plants. They will resume growth.—J. M. Weston, Potato Specialist, M. A. C.

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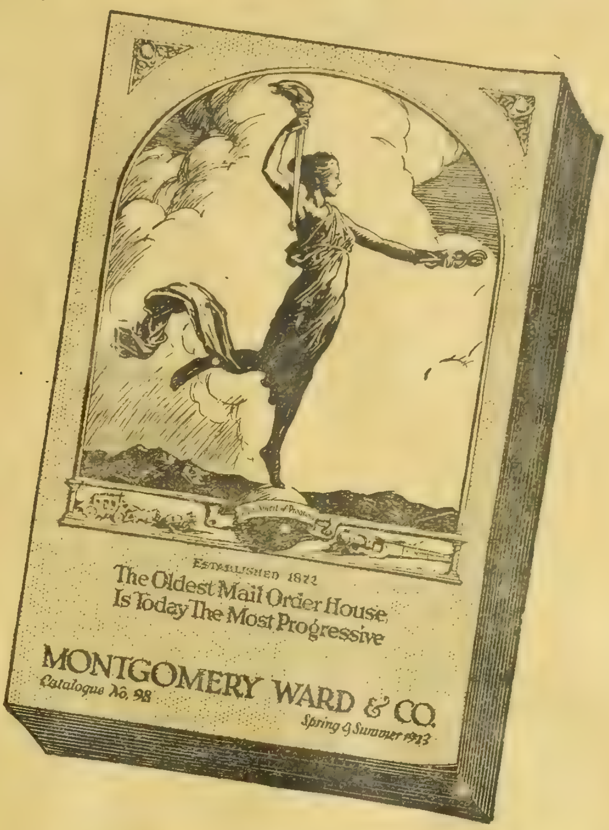

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(Continued from Jan. 6th issue)

The Truth About Henry Ford

By Sarah T. Bushnell

Secures Complete Control of Company—Five Dollar Wage—Refuses War Orders

EVEN though it made no more racing cars the Ford company enjoyed prosperity without limit; likewise the autom‹bile fever grew to white heat in Detroit. Fortunes were made quickly and lost as quickly, but through all the excitement Henry Ford clung to his policy of making a good car at the lowest possible price. In 1916 Mr. Malcomson sold his interest in the company to Mr. Ford and turned his time and attention to his coal business. Had he held his stock until 1919 and sold it then at the same price paid Mr. Couzens he would have received $62,500,000. Mr. Malcomson is a man of wealth, however, although he did not make a dollar out of the company he founded and which has made other men multi-millionaires. Writers frequently come to him for his story. "If you will let me send that around the world I will make you famous," one journalist told him. "Think of what you are missing! This is your biggest opportunity."

Mr. Malcomson laughed. "You don't understand," he explained. "I do not want fame or newspaper notoriety either. Why, the most fun I get is listening to what people say in hotels and on trains. I've heard more versions of how the Ford company was started than you could think up in a year. Sometimes the story is so pathetic that it almost brings tears to my eyes; some times it is so funny that I almost laugh in the speaker's face. I wouldn't miss all this fun for anything."

Mr. Couzens left the Ford company on November 1, 1915, a month before the Peace Ship sailed, but continued as a director of the company until September 1, 1919, when he sold his interest in the company to Mr. Ford for thirty million dollars. As mayor of Detroit Mr. Couzens has made a name for himself, particularly by the fight he won for municipal ownership of the street car lines. He is sponsoring a municipal hospital that in plan and purpose will be wonderful, and he has at every opportunity championed the cause of the people of his city.

After the twelve years' connection with the Ford company the Dodge brothers notified Mr. Ford in February, 1915 that they did not care to handle the work longer, their contract expired in June. They later began the manufacture of their own car and sold their interest in the Ford company to Henry Ford and his son for $25,000,000 each. It is reported that the holdings of the Gray estate were sold for $27,000,000.

* * * *

A young university graduate who expected to be advanced rapidly in the Ford service, remarked one day, "If I had Henry Ford's money I'd never prowl around the Rouge factory the way he does. All I'd know about the Ford industries would be what I read in the newspapers." His "prowling around" is undoubtedly has been one of the important factors in Mr. Ford's success. From the beginning no one in his employ worked harder than he, and no one works harder today. Mr. Ford believes that wealth is trust and he strives to use it accordingly, for the betterment of the workers in the Ford industries. He prefers to raise industrial standards rather than to make more millions by exploiting his workers. His influence extends far beyond his own plants and has proved a boon to the working classes generally.

He holds the affection of the mass of his workmen as no other large employer can hope to. How he will stand by a man was demonstrated in the case of Emde in the Ford-Newberry senatorial race. This incident which contributed to Mr. Ford's defeat will be told in a subsequent chapter. The Ford employes are generally "well fixed." They have bank accounts, they own securities and many of them own their homes. The real test of a man's popularity is in his home neighborhood, where he is best known. Mr. Ford is remarkably popular in Detroit; the mention of his name brings enthusiastic applause and his appearance at a large gathering has, on more than one occasion brought the throng to its feet cheering. Mere money could not do this. His popularity is founded on the fact that he is recognized as the friend of the common people—and that gives him a tremendous personal following throughout the country. This popularity has made him the target of criticism, but the best answer to the critics of Mr. Ford's methods is found in the fact that there never has been a strike in any of the Ford industries during the nearly twenty years of their life—not even in the coal fields he owns.

Mr. Ford's activities in behalf of his employees are enthusiastically supported by Jack Henkel , his employment manager at the Highland Park plant. Henkel is honest and capable, but the heart and brain of the Ford system is Henry Ford himself. As is inevitable in such a large organization inequalities sometimes creep into the system. Those placed in authority have not always been loyal to their trust. But Mr. Ford is always on the alert and wrongs are quickly righted once they are detected.

When the five-dollar wage was put in effect at the Ford plants thousands of workmen were attracted to Detroit, many more than could be given employment. Much distress resulted. Mr. Ford called in a trusted friend and gave him $50,000 with the request that the friend investigate conditions quietly and use the money to relieve the wants of the unemployed. None of those aided knew from whom the money came. Mr. Ford instinctively dreads notoriety and has an iron-clad rule that his name must not be connected with what he gives.

The wonderful achievements of the Ford factories are known wherever manufacturing is known. Industrial experts from far and near have come to Detroit to study the Ford methods. Many of these men have labored in the Ford plants to better acquaint themselves with the workings of the system. Such a man was K. Mimaura, employment manager of the Sumitonio copper works at Osaka, Japan. Although he worked for the Ford company for some time his identity was not learned until he resigned to return to Japan where he is now in charge of a large foundry and smelter. He left behind him in Detroit many friends and a trail of Japanese fans which he had ordered made in Osaka.

Early in the war a German baron went to Detroit and wanted to order five hundred Ford cars for immediate delivery.

"Mr. Ford is not willing to accept war orders," he was told.

"I understand all that," the baron replied impatiently, "but how long will it take you to make the five hundred cars?

Quite patiently the company official explained again Mr. Ford's determination. This was beyond the baron's comprehension. "Don't jest with me he declared," "I want to place this order today. I am willing to pay your price. When can the cars be delivered?"

"It is now noon," the official told him. "It would take until 4 o'clock to make the five hundred cars. But Mr. Ford has issued orders that nothing will be manufactured for war purposes. That is his order. The only condition that would make him change it would be America's entry into the conflict." When America did enter the war the German baron probably recalled what he had been told in Detroit.

A French commissioner who came with a war order had a similar experience. He was shown through the plant. "Time them," said his guide as they stood watching the finished cars rolled away by the mechanical starter. "A finished car every twenty-nine seconds. Take out your watch and time them." The Frenchman did, but he got no cars.

Throughout the country many plants worked day and night during the war turning out munitions and other military supplies. The Ford plant was unique in that no work was done on Sunday. "My men must have their day of rest," Mr. Ford ruled. "We can do our full part without breaking the fourth commandment." And they did. Today one out of every ten of his employees is a returned soldier and half of these veterans are physically disabled. Henry Ford is still doing his part.

CHAPTER VI.

The Peace Ship

The facts about the Peace Ship—how the idea was presented to Henry Ford; the theory of what could be accomplished and the results, direct and indirect, of the undertaking, make a story far different from that believed by, perhaps, the majority of people. The true account set forth in the following pages was given the writer by persons in a position to know the facts, and every statement has been verified. Instead of criticism and ridicule Henry Ford deserves commendation for his endeavor. The person who persuaded Mr. Ford to undertake the strange mission of peace is ommitted here for good reasons. This leader withdrew from the party before the ship sailed and let Mr. Ford to endure the criticism and censure alone. Much as we may deplore the spectacular manner that marked the undertaking, the three hundred thousand dollars that it cost was not money wasted. As will be shown later the country profited by Mr. Ford's expenditure.

Rebecca Shelley and Angelica Morgan, two American women writers, one a delegate to The Hague Peace Conference in 1915, and the other also an ardent peace advocate, brought back to this country the report that Europe was weary of war, and that the battling nations were all eager for peace. These women believed that if a delegation representing neutral countries were sent to Europe the way could be paved for peace negotiations. They wanted President Wilson to appoint Miss Jane Addams of Chicago as America's representative.

Both women tried to see the president and also endeavored to have him receive Miss McMillan, a prominent English woman, then in America and Madame Schwimmer, an Austrian, who claimed to possess documents of vital importance in any effort to end the war. Failing to reach the president, Miss Shelley and Miss Morgan went to Detroit to see Henry Ford, who, they knew, was close to President Wilson. They failed again, but they did meet and talk with a number of prominent Detroiters; also they secured the cooperation of a number of active club women.

As a last resort Miss Shelley and Miss Morgan went to the office of the Detroit News to enlist the support of that paper. To the then editor-in-chief, E. G. Pipp, they stated their case thus: "Jane Addams is willing to go to President Wilson and lay before him all the information she secured at The Hague concerning the sincere desire of the Europan nations to end the war. President Wilson has refused to see her. Miss McMillan has proof that the Allies want peace. Madame Schwimmer has documents which show that the Entente will enter into peace negotiations. These women must return home unless the president sees them soon. At the rate the war is progressing America will soon become involved."

Mr. Pipp went into his private office and soon was talking to Mr. Tumulty, the president's secretary. "Your information must be incorrect," Mr. Tumulty told him. When Mr. Pipp repeated the story just told him. "President Wilson has not refused Miss Addams an interview. Perhaps if she makes another effort to see him it can be arranged. The president can receive only delegations including representatives from both sides in the conflict. They must bring with them authentic information."

Mr. Pipp then got into communication with Miss Morgan and Miss Shelley. Madame Schwimmer came

(Continued on page 23)

This photograph taken in front of the Highland Park plant gives a glimpse of the 29,000 who work in one division of Henry Ford's industries.

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Things You Need Now At Amazing Cut Prices

Don't send one cent. Just letter or postcard brings you any of these smashed price bargains. Merely State Size and Write Your Name and Address Plainly to Avoid Delay. Pay nothing till goods arrive—then only the amazing bargain price and postage. Money cheerfully refunded if you wish.

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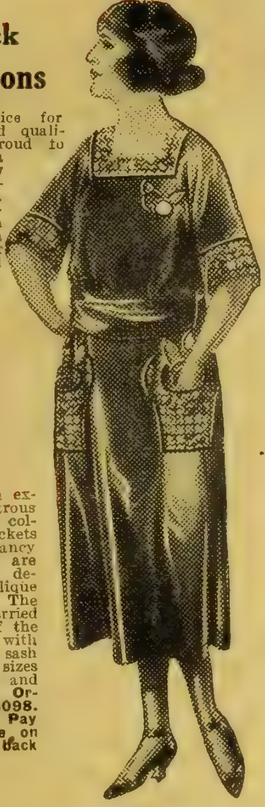
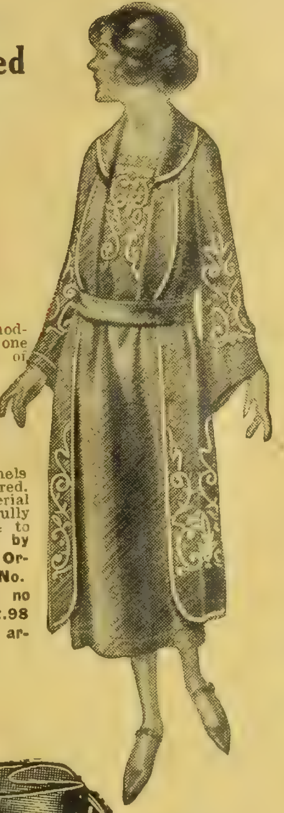


Amazingly low price for such truly splendid quality. Sharood is proud to recommend such a bargain to any woman who appreciates real value. And this apron represents not only a neat saving, but a charming style for house wear. Send for your size today—quick!

$\$1^{79}$

The material is an excellent soft lustrous black sateen with collar, cuffs and pockets of good grade fancy cretonne. Pockets are a novelty basket design with applique flower trimming. The same effect is carried out on one side of the waist. Designed with wide self-material sash belt all around, sizes small, medium and large. Big value. **Order by No. 96E5098. Send no money. Pay $1.79 and postage on arrival. Money back if not satisfied.**

Exquisitely Embroidered Gabardine Dress



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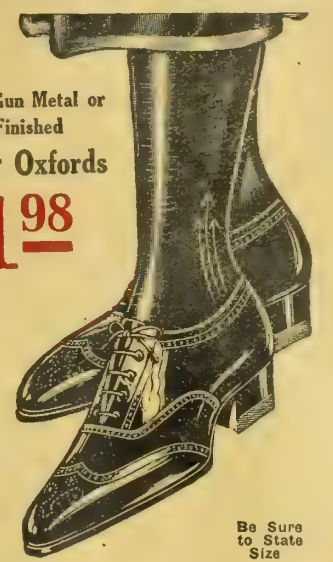
This delightful model is sure to be one of the favorites of the season. It is of beautiful cotton gabardine in navy blue or brown. The vestee, smart bell sleeves and fashionable panels richly embroidered. The self material belt ties gracefully at back. Sizes 34 to 44. **Order Navy by No. 96E5525. Order Brown by No. 96E5526. Send no money. Pay $2.98 and postage on arrival.**

Women's Gun Metal or Calf-Finished Leather Oxfords



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A REAL MONEY SAVER

Be Sure to State Size

Made with imitation shield tip and medallion perforated vamp; perforated lace stay and circular foxing. Has medium rubber heel and medium pointed toe. Sizes 2½ to 8, wide widths. **Order patent by No. 96A64. Order gunmetal by No. 96A69. Order brown by No. 96A70. Send no money. Pay $1.98 and postage on arrival.**

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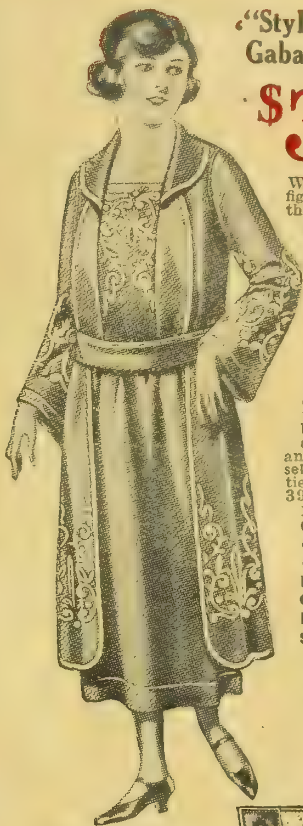

$\$3^{98}$

Women of large figure will see in this new model their ideal dress. This is a special design, planned to give long slendering lines to stout figures. Note how the collar, revers and panels carry out the long effect. Note, too, the attractive embroidery on sleeves, vestee and panels. The self-material belt ties at back. Sizes 39 to 53. In three popular shades. **Order Navy by No. 96E5470. Order Black by No. 96E5471. Order Brown by No. 96E5472. Send no money. Pay $3.98 and postage for any color on arrival. State size.**

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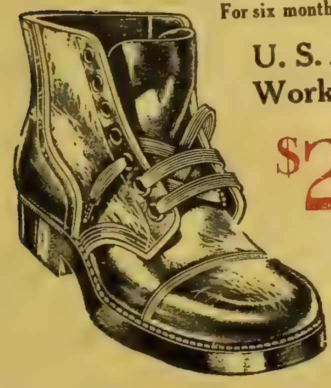
For six months' wear

U. S. Army Work Shoe



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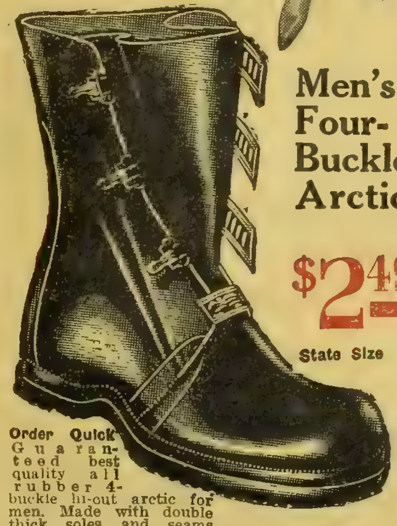
Men! Don't lose a moment in ordering this wonderful brown work shoe. It is made of leather as near waterproof as can be made—solid leather through and through with full grain leather uppers, guaranteed to wear six months. Easily worth $5.00. Two full, heavy double soles, sewed and nailed for greater strength. Extra wide, full leather counter, riveted to prevent ripping. Sizes 7 to 11, wide widths. **Order by No. 96699. Send no money. Pay $2.98 and postage on arrival.**

Boy's Guaranteed Shoes

Six months' guarantee. Two full green chrome leather soles. Solid leather heels. Made on Munsey type army last. Barnyard acid-proof. Solid leather insoles. Sizes 1 to 5½. Wide widths. State size wanted. Send no money. **Order by No. 96A550. Pay $2.69 and postage on arrival.**

Men's Four-Buckle Arctics



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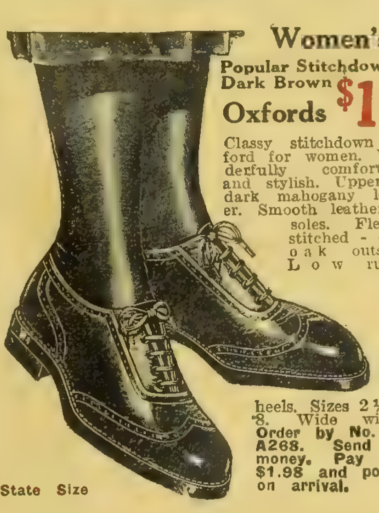
State Size

Order Quick Guaranteed best quality all rubber 4-buckle hi-cut arctic for men. Made with double thick soles and seams reinforced. Snow-excluding tongue. Furnished in men's sizes 6 to 15. Wide widths. Sensational value. Send quick. **Order by No. 96A990. Send no money. Pay $2.49 and postage on arrival.**

Women's Popular Stitchdown Dark Brown Oxfords

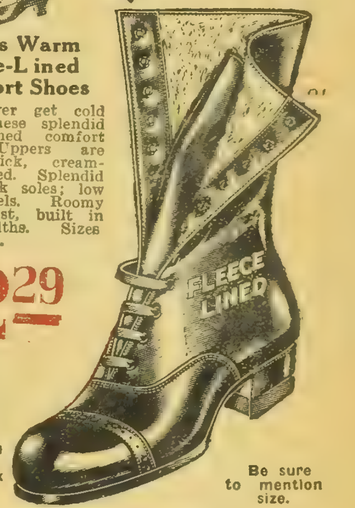
$\$1^{98}$



State Size

Classy stitchdown Oxford for women. Wonderfully comfortable and stylish. Uppers of dark mahogany leather. Smooth leather insoles. Flexible stitched-down oak outsoles. Low rubber heels. Sizes 2½ to 8. Wide widths. **Order by No. 96-A268. Send no money. Pay only $1.98 and postage on arrival.**

Women's Warm Feece-Lined Comfort Shoes



You'll never get cold feet in these splendid kid-finished comfort shoes. Uppers are warm, thick, cream-fleece lined. Splendid natural oak soles; low rubber heels. Roomy comfort last, built in wide widths. Sizes 2½ to 8.

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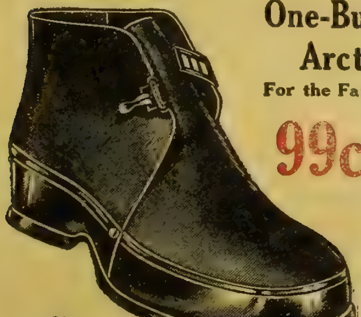
Be sure to mention size.

One-Buckle Arctic

For the Family

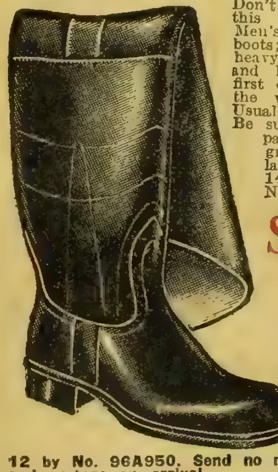


99c UP

Give Size

Heavy cashmerette snow-proof top. Genuine gum rubber bottoms; heavy single soles; full fleece lined; sizes for all the family. **Order Misses' size, 11 to 2, by No. 96A970. Price 99c. Order Women's size 2½ to 8, by No. 96A969. Price $1.19. Order Youths' size, 9 to 13½, by No. 96A968. Price $1.19. Order Boys' size, 1 to 5½, by No. 96A967. Price $1.29. Order Men's size, 6 to 12, by No. 96A966. Price $1.39. Pay Bargain Price and Postage on arrival. State size.**

Hip Boots Bagain



Don't fail to make this big saving on Men's pure gum hip boots; friction lined; heavy corrugated sole and heel; guaranteed first quality. Made of the very best rubber. Usually retails at $5. Be sure to order your pair while this great saving offer lasts. Sizes 6 to 14. Wide widths. No half sizes.

$\$2^{98}$

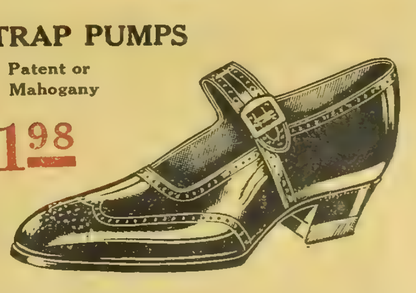
GIVE SIZE

Order by No. 96A949. Send no money. Pay $2.98 and postage on arrival. State size wanted. Order similar style in knee boot, sizes 7 to 12 by No. 96A950. Send no money. Pay $2.98 and postage on arrival.

STRAP PUMPS

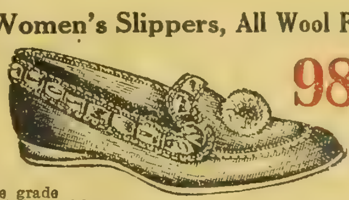
Patent or Mahogany

$\$1^{98}$



This smart pump in sizes 2½ to 8. In black patent leather or mahogany calf-finish—a stunning one-strap model with imitation shield tip and medallion, effectively perforated. Has medium rubber heel. **Order patent, 96A72, mahogany, 96-A73. Send no money. Pay $1.98 and postage on arrival. Give Size.**

Women's Slippers, All Wool Felt



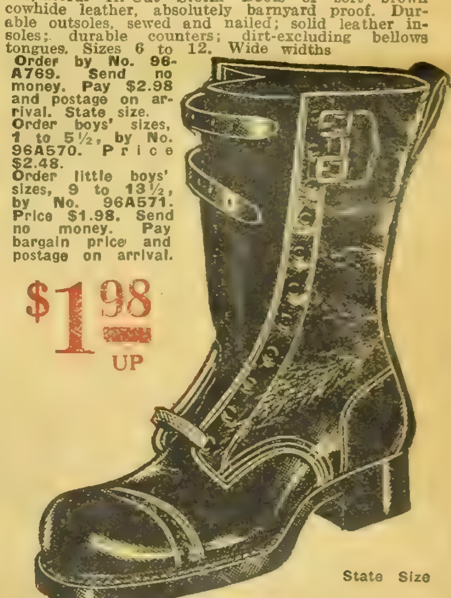
98c

Fine grade wool felt with combination insert of fawn. **Order American Beauty by No. 96A389. Order Copen by No. 96A390. Order Lavender by No. 96A391. Sizes 3 to 8. Send no money. Pay 98c and postage on arrival.**

MEN'S STORM BOOTS

Wonderful Hi-Cut Storm Boots of soft brown cowhide leather, absolutely barnyard proof. Durable outsoles, sewed and nailed; solid leather insoles; durable counters; dirt-excluding bellows tongues. Sizes 6 to 12. Wide widths **Order by No. 96-A769. Send no money. Pay $2.98 and postage on arrival. State size. Order boys' sizes, 1 to 5½, by No. 96A570. Price $2.48. Order little boys' sizes, 9 to 13½, by No. 96A571. Price $1.98. Send no money. Pay bargain price and postage on arrival.**

$\$1^{98}$ UP



State Size

Men's 16-in. Blucher Hi-Cuts

Of genuine brown chromite leather. Bellows tongue, pull strap, grain leather inner soles, two straps and buckles. Natural oak leather outer soles and leather heels. Men's sizes 6 to 12, wide widths only. **Order by No. 96A777. Send no money. Pay $4.98 and postage on arrival.**

Be Sure to Mention Sizes, Colors, etc., and Send all Orders from this Page Direct to

SHAROOD CO. Dept. 96 MINNEAPOLIS, MINN.

RADIO DEPARTMENT

EDITED BY J. HERBERT FERRIS

REGENERATIVE RECEIVING SET

IF you have built a regenerative receiving set as described in our past issue, or if you have bought one or received one for Christmas, you will now be listening-in for the broadcasted programs, and some of you will be having trouble in getting the set to function properly.

Tuning a set would be very simple if the broadcasting stations were all on different wave lengths or if there were only a very few of them, but at present there are over 600 such stations and one must tune carefully to prevent interference from the undesireable stations.

Set your vario-coupler switch on point 1 and then the grid variometer on zero also the plate variometer on zero, turn on the current from your A battery till your bulb burns quite brightly, and the turn grid and plate variometers a little at a time until you hear a hissing in your receivers, then keep adjusting until you can keep the hiss steady, and make it stop by a slight turn of either knob. Try to get this hissing at different points, should you be tuning at about the right wave length for a broadcasting station you should hear a flutelike note that goes up and down the scale as you turn your knobs a very little, the point you must reach is the dead point between two high tones as you bring them down to no note. If you get no flute like note turn your vario-coupler to point 2 and try over again, turning your dials slowly and carefully and not quickly as you will pass right past the correct spot without knowing it and miss the broadcast.

Each adjustment must be made carefully, from step to step, when you once hear the clear flute like note, tune very carfully, first making a note just where you heard it, so that should you lose it you will know where to turn again to hear it. When you have once heard the music or taking, you can tune at different points and try it in clearer and stronger, each time you will get it better.

Don't be discouraged, if you do not get it the first time, try again, and if you can get some one to help you who has a set, you may be saved a lot of time by being guided by the one who has had experience.

BROADCAST BILL'S RADIOLAY

HAD some snow out here last week, first we've had this years' reckon that's to let us know winter's gettin' near. 'Course winter has advantages, there's nothin' much to do, no corn to plow, er cultivate, but there's a cow er two that every mornin', hot er cold, to milk out in the shed, while all you city fellers are aucked in yer comfy bed. With winter there comes Christmas time with all its joy an' cheer, which after all, I reckon, is the bast time of the year. With snow an' sleet comes coastin' an' a lot of bob sled rides an' when the creek is frozen we kin skate a bit besides. I've noticed too, in winter, radio "comes in" the best, which bein' true I spose that I should ferget about the rest of winter's inconveniences like thawin' out the pump, with weather down to zero, when yer swing yer arms an' jump to keep up circulation. Gosh! I hate to do the chores when its as cold inside the barn as it is out of doors. When I get up these mornin's it's as dark as pitch outside an' 'fore I get the chores done I am almost froze beside. Last week I caught an awful cold, worst one I've had fer years. My nose wuz like an eight-day clock, an' eyes chuck full of tears; my back ached an' my head ached, I felt ninety-four years old. I wish some doc could find out how such things could be controlled. I soaked my dainty feet in mustard baths till they were pink—I'd hate to tell you how much lemonade Min made me drink. All wrapped up in a comforter there's nothin' I could do but listen to my Radio an' I wuz feelin' blue because on every Tuesday night they broadcast singin' lessons which helps me find an outlet fer my musical expressions. While I don't need no lessons still it keeps me up to date on how to tell the other boys who ain't so fortunate. But Tuesday I wuz feelin' bad, it kinda got my goat—all stuffed up with that cold of mine I couldn't sing a note.

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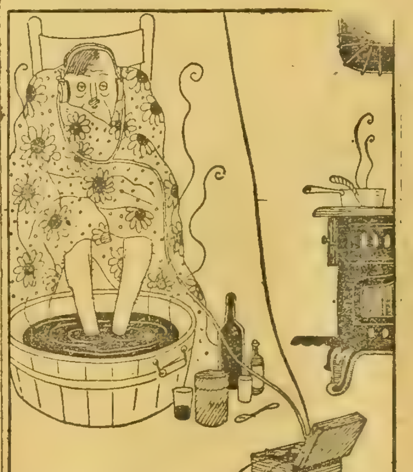

FARM MECHANICS

BREAKING CONCRETE

FARMERS make very hard work of breaking up concrete structures. As concrete construction is becoming increasingly common on farms, they should understand how to break them up when necessary.

I will describe how I demolished a concrete base recently. It was built in the shape of steps. The top slab was three feet wide and twelve feet long; the one beneath that, five feet wide and fourteen feet long; the third, seven feet wide and sixteen feet long, and the bottom slab was about seven inches thick. Three inch wooden piles with one inch spikes driven in their sides in all directions and extending about six inches above the ground formed the anchorage around which the concrete for the first course was poured. Then four steel bars ran all the way up through the four slabs and all slabs were reinforced by coarse mesh wire incorporated in them. To break this base with sledge hammers would have been a heart and back breaking job.

With fifty-seven pounds of twenty percent ammonia dynamite, it was easy. I borrowed a contractor's compressed and drill and with a 1½ inch drill, put down hole two feet deep and about three feet apart.

I loaded ten holes at a time. The charge per hole was one quarter pound of dynamite. We couldn't use heavier shots because of a five inch steam pipe carrying 175 pounds pressure located within four feet of the base. The charges were fired simultaneously with electric caps and a blasting machine. Damp clay was used for tamping. To prevent damage from flying debris, the blasts were covered with heavy wire screen and six railroad ties chained together.

Each shot broke out a lot of large lumps of the concrete. These were cleared away and other charges placed and fired as before.

When we reached the bottom slap and encountered the spiked piles on which it was built, I drove a pointed bar down under the slap and loaded charges in the earth close up against the concrete. The charges either lifted out the piles or cut them off below the ground level.

This was a simple and practical way to break up concrete. The job which was an unusually hard one was done in twenty hours. The ex-explosives cost $35.34.

Sow Seeds of Success IN YOUR GARDEN

Some vegetable gardens pay their owners $100 in returns for every $5 spent. They are a constant source of big profit. They yield the finest vegetables and yield lots of them, because they are planted with—

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Isbell's 1923 Seed Annual is one of the most helpful catalogs published. It tells what and how to plant to get bumper crops—gives cultural directions—tells of the Isbell way of growing, selecting, testing and cleaning seeds. It's Free! The coupon below will bring it to you. Use it today. It will bring valuable information that will mean more money from your crops.

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Apply it to Any Rupture, Old or Recent, Large or Small and You are on the Road That Has Convinced Thousands

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Anyone ruptured, man, woman or child, should write at once to W. S. Rice, 408B Main St., Adams, N. Y., for a free trial of his wonderful stimulating application. Just put it on the rupture and the muscles begin to tighten; they begin to bind together so that the opening closes naturally and the need of a support or truss or appliance is then done away with. Don't neglect to send for this free trial. Even if your rupture doesn't bother you what is the use of wearing supports all your life? Why suffer this nuisance? Why run the risk of gangrene and such dangers from a small and innocent little rupture, the kind that has thrown thousands on the operating table? A host of men and women are daily running such risks just because their ruptures do not hurt nor prevent them from getting around. Write at once for this free trial, as it is certainly a wonderful thing and has aided in the cure of ruptures that were as big as a man's two fists. Try and write at once, using the coupon below.

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You may send me entirely free a Sample Treatment of your stimulating application for Rupture.
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Every farmer should read "Meat Production on the Farm," a new illustrated book which is being distributed free to farmers only. It tells how to cure, smoke and sell every kind of meat and explains quick, easy methods that produce fancy high-priced sugar-cured meats with no more trouble than plain "salt stuff." It also tells how to save spare parts and make sausages, head cheese, pickled meat and other delicacies.

Send your name to the E. H. Wright Co., 850 Broadway, Kansas City, Mo., and this book, priced regularly at $1, will come to you free. write for it today.—a card will do.

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I was badly ruptured while lifting a trunk several years ago. Doctors said my only hope of cure was an operation. Trusses did me no good. Finally I got hold of something that quickly and completely cured me. Years have passed and the rupture has never returned, although I am doing hard work as a carpenter. There was no operation, no lost time, no trouble. I have nothing to sell, but will give full information about how you may find a complete cure without operation, if you write to me, Eugene M. Pullen, Carpenter, 210J Marcellus Avenue, Manasquan, N. J. Better cut out this notice and show it to any others who are ruptured—you may save a life or at least stop the misery of rupture and the worry and danger of an operation.

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$44 Buys the New Butterfly Jr. No. 2½ Light running, easy cleaning, close skimming, durable. NEW BUTTERFLY Separators are guaranteed a lifetime against defects in material and workmanship. Made also in four larger sizes up to No. 8 shown here; sold on 30 DAYS' FREE TRIAL and on a plan whereby they earn their own cost and more by what they save. Postal brings Free Catalog Folder. Buy from the manufacturer and save money (1)

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Box G, Allegan, Mich.

Uncle Rube Spinach Says

JEST A HORRID-SCAPE

EVERY little while, bein' gifted that way, I take my lantern an' go out an' see what the stars has to say.

An' you know, I kinda believe in stars? Not so much in movie stars, not since "Fatty" Arbuckle, Wallace Reid, Mary Miles Minter an' several others have fallen from grace—'course Fatty has been reinstated by Mr. Havs but that don't make Fatty a bit different then he wuz when he pulled the party where Virginia Rappe met her death. He's jest the same 'ol Fatty he wuz then—so you see I don't go by movie stars as I did.

I am jest given you what's revealed to me by readin' the stars what I can see with my lantern.

This bein' kind of a dark night there ain't revealed to me so much as there ort to be but I take it as it comes an' give it accordin'.

One of the great calamities 'at I see, first an' foremose is the meetin' of the legislatur'. A lot of men git together an' squabble an' fight for four months to do what ort to be done in thirty days easy.

They'll pass laws 'at nobody understands, repeal laws we've already learned, give work to courts an to city commissioners, raise taxes—whoa there! Say did you ever hear of a session of legislatur' 'at tried to lower taxes? No, by my whiskers! Ya never did—they jest try and see how much money can be raised an' then work overtime to see how they can spend it.

Well, the stars sex they'll be in operation any way so we might as well git ready for that.

An' then I see, by aid of my ol' lantern 'at some of our good citizens 'll try to git a law passed to make the sale of beer an' light wines legal. 'Course that won't cut much figger but it will give our law makers some material to quarrel 'bout for a month or so an' help to make their pay check look larger at the end of the session.

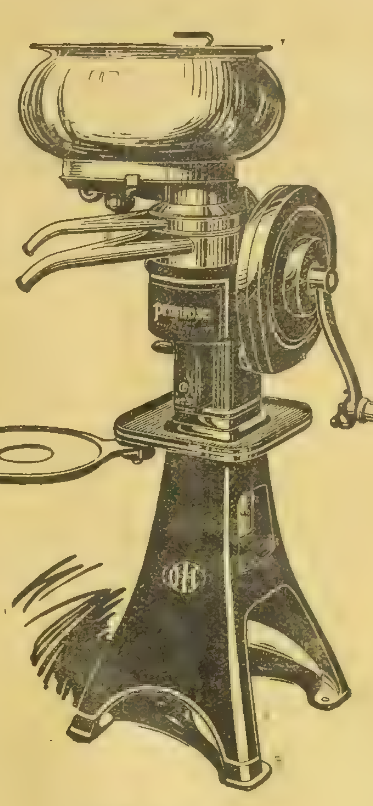
Oh I see a lot of things in the stars—not movie stars ya underunderstand—'cause they'r lots to be seen there but I'm getting 'long in years where such things don't matter so I'm sort of tryin' to forgit 'em—but in the every day life—well stars tell a whole lot of things if we only read 'em right.

And so this year, spite of the legislatur', spite of a good many other things not so bad, its goin to be a purty fair year after all.

Folk'll git married, babies'll be born, many'll die 'at never died before—yes an' be buried without hope—grafters'll ply their trade, coal miners'll talk strike an' prob'ly will strike and' coal'll be high an' you an' I'll cuss some under our breath—coal operators 'll wax rich an' defy the gover'ment' congressmen'll set tight an' let things run along. Mr. Pres'dent Harding 'll ask for more power an' not use the power he already has to control things. Henry Ford 'll pay the biggest wages of any man in this country an' make more money than any of 'em, women will wear skirts long and short—jest as they feel, but most of 'em 'll fail to vote when they have the chance—grass'll grow where it has always grown, farmers 'll git the small end of the deal 'cause they don't hang together as they should, divorces an' remarrages'll continue, wives 'll shoot and poisen their husbands as lovers an' go free. Fatty Arbuckle 'll come back, Wallie Reid 'll get well, bootleggers 'll keep on doin' business, dope 'll be peddled, preachers 'll preach, grafters 'll graft, flappers 'll flap, teachers 'll work for small pay, banks'll prosper and thieves 'll git in their work often an' vanish. In fact 'cordin' to the stars seen by my lantern this year'll be 'bout the same as other years only more so—shucks the ol' wick's burned out an' I 'm all in the dark. Cordially yours, UNCLE RUBE.

THANKS, MR, HALL

I am taking advantage of your offer to renew my subcription at two years for price of one. "I like the "Farmer" better than ever. I see much improvement in the "makin's" especially the last number (Dec. 9) and hope you can continue in the good work. Yours truly,—L. S. Hall, Lapeer County.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You want to know more about how to get the most out of your year 'round cream check "harvest"—why not ask the McCormick-Deering dealer to demonstrate the Primrose to you? He will do it, and it won't obligate you either.

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The Hunted Woman

By James Oliver Curwood

Michigan's Own and America's Formost Author of the Great Northwest

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SYNOPSIS

JOANNE GRAY is one of the passengers on the train bound for Tete Jaune Cache the home of "The Horde," where she has no friends and all will be strange to her. The train stops at a town composed of several tents, she goes in search of food and a bath. She is directed to "Bill's Shack" and here she meets Bill Quade, who not only owns and operates "Bill's Shack" but is also leader of the lawless men of the town. Quade says he has a room she can rent and that he will show it to her. As they pass out of the room a newcomer enters the doorway leading off the street. The newcomer is John Aldous, a well known novelist. He sees the strange girl enter the place and believes she has made a mistake and as he stands in the doorway his eyes rest upon the curtained doorway through which they have passed. In but a moment the girl steps out, face flaming and eyes flashing. Quade follows her apologetically. He starts to offer the girl money but before he can do so Aldous steps to the girl's side and floors Quade with a terriffic blow. Aldous hurries the girl away from the scene to the home of friends. Joanne tells Aldous she is going to Tete Jaune to find her husband Mortimer FitzHugh. Aldous decides to go with her to protect her from Quade and his partner Culver Rann. Aldous believes FitzHugh is dead and locates a friend who declares he has seen the grave. Upon their arrival at Tete Jaune they are met by friends of Aldous, the Blacktons, at whose place they are to stay during their stop. Aldous visits an old friend, Donald MacDonald and then strolls about town. He is on the lookout for Quade and Rann and finds them at Rann's home. He spys upon them.

(Continued from Jan. 6th Issue.)

Swiftly and silently he went to the rear of the house. He tried the door and found it unlocked. Softly he opened it, swinging it inward an inch at a time, and scarcely breathing as he entered. It was dark, and there was a second closed door ahead of him. From beyond that he heard voices. He closed the outer door so that he would not be betrayed by a current of air or a sound from out of the night. Then, even more cautionsly and slowly, he began to open the second door.

An inch at first, then two inches, three inches—a foot—he worked the door inward. There was no light in this second room, and he lay close to the floor head and shoulders thrust well in. Through the third and open door he saw Quade and Culver Rann. Rann was laughing softly as he lighted a fresh cigar. His voice was quiet and good humored, but filled with a banter which it was evident Quade was not appreciating.

"You amaze me," Rann was saying. "You amaze me utterly. You have gone mad—mad as a rock rabbit, Quade! Do you mean to tell me you're on the square when you offer to turn over half of your share in the gold if I help you get this woman?"

"I do," replied Quade thickly. "I mean just that! And we'll put it down in black an' white—here, now. You fix the papers, same as any other deal, and I'll sign!"

For a moment Culver Rann did not reply. He leaned back in his chair, thrust the thumbs of his white hands in his vest, and sent a cloud of smoke above his head. Then he looked at Quade, a gleam of humor in his eyes.

"Nothing like a woman for turning a man's head soft," he chuckled. "Nothing in the world like it, 'pon my word, Quade. First it was DeBar. I don't believe we'd got him if he hadn't seen Marie riding her bear. Marie and her curls and her silk tights, Quade—s'elp me, it wouldn't have surprised me so much if you'd fallen love with her! And over this other woman you're as mad as Joe over Marie. At first sight he was ready to sell his soul for her. So—I gave Marie to him. And now, for some other woman, you're just as anxious to surrender a half of your share of what we've bought through Marie. Good heaven, man, if you were in love with Marie—"

"Damn Marie!" growled Quade. "I know the time when you were bugs over her yourself, Rann. It wasn't so long ago. If I'd looked at her then——"

"Of course, not then," interrupted Rann smilingly. "That would have been impolite, Quade, and not at all in agreement with the spirit of our brotherly partnership. And, you must admit, Marie is a devilish good-looking girl. I've surreudered her only for a brief spell to DeBar. After he has taken us to the gold—why, the poor idiot will probably have been sufficiently happy to——"

He paused, with a suggestive shrug of his shoulders.

"—go into cold storage," finished Quade.

"Exactly."

Again Quade leaned over the table, and for a moment there was silence, a silence which Aldous thought the pounding of his heart must betray him. He lay motionless on the floor. The nails of his fingers dug into the bare wood. Under the palm of his right hand lay his automatic.

Then Quade spoke. There must have been more in his face than was spoken in his words, for Culver Rann took the cigar from between his lips, and a light that was deadly serious slowly filled his eyes.

"Rann, we'll talk business!" Quade's voice was harsh, deep and quivering. "I want this woman. I may be a fool, but I'm going to have her. I might get her alone, but we have always done things together—It ain't a hard job. It's one of the easiest jobs we ever had. Only that fool of a writer is in the way—an' he's got to go anyway. We've got to get rid of him on account of the gold, him an' MacDonald. We've got that planned. An' I've showed you how we can get the woman, an' no one will ever know. Are you in on this with me?"

Culver Rann's reply was as quick and sharp as a pistol shot.

"I am."

For another moment there was silence. Then Quade asked:

"Any need of writin' Culver?"

"No. There can't be a written agreement in this deal because—it's dangerous. There won't be much said about old MacDonald. But questions, a good many of them, will be asked about this man Aldous. As for the woman——" Rann shrugged his shoulders with a sinister smile. "She will disappear like the others," he finished. "No one will ever get on to that. If she doesn't make a pal like Marie—after a time, why——"

Again Aldous saw that peculiar shrug of his shoulders.

Quade's head nodded on his thick neck.

"Of course, I agree to that," he said. "After a time. But most of 'em have come over, ain't they, Culver? Eh? Most of 'em have," he chuckled coarsely. "When you see her you won't call me a fool for going dippy over her, Culver. And she'll come around all right after she's gone through what we've planned for her. I'll make a pal of her!"

In that moment, as he listened, to the gloating passion and triumph in Quade's brutal voice, something broke in the brain of John Aldous. It filled him with a fire that devoured every thought or plan he had made, and in this madness he was consumed by a single desire—the desire to kill. And yet, as this conflagration surged through him, it did not blind or excite him. It did not make him leap forth in animal rage. It was something more terrible. He rose so quietly that the others did not see nor hear him in the dark outer room. They did not hear the slight metalic click of the safety on his pistol.

For the space of a breath he stood and looked at them. He no longer sensed the words Quade was uttering. He was going in coolly and calmly to kill them. There was something disagreeable in the flashing thought that he might kill them from where he stood. He would not fire from the dark. He wanted to experience the exquisite sensation of that one first moment when they would writhe back from him, and see in him the presence of death. He would give them but one minute of life—just that one. Then he would kill.

With his pistol ready in his hand he stepped out into the lighted room.

"Good evening, gentlemen!" he said.

CHAPER XIII

For a space of perhaps twenty seconds after John Aldous announced himself there was no visible sign of life on the part of either Quade or Culver Rann. The latter set stunned. Not the movement of a finger broke the stonelike immobility of his attitude. His eyes were like two dark coals gazing steadily as a serpent's over Quade's hunched shoulders and bowed head. Quade seemed as if frozen on the point of speaking to Rann. One hand was still poised above the table. It was he who broke the tense lifeless tableau.

Slowly, almost as slowly as Aldous had opened the door, Quade turned his head, and stared into the coldly smiling face of the man whom he had plotted to kill, and saw the gleaming pistol in his hand. A curious look overcame his pouchy face, a look not altogether of terror—but of shock. He knew Aldous had heard. He accepted in an intant, and perceptibly, the significance of the pistol in his hand. But Culver Rann sat like a rock. His face expressed nothing. Not for the smallest part of a second had he betrayed any emotion that might be throbbing within him. In spite of himself Aldous admired the man's unflinching nerve.

"Good evening, gentlemen!" he repeated.

Then Rann leaned slowly forward over the table. One hand rose to his moustache. It was his right hand. The other was visible. Quade pulled himself together and stepped to the end of the table, his two empty hands in front of him. Aldous, still smiling, faced Rann's glittering eyes and covered him with his automatic. Culver Rann twisted the end of his moustache, and smiled back.

"Well?" he said. "Is it checkmate?"

"It is," replied Aldous. "I've promised you scoundrels one minute of life. I guess that minute is about up."

The last word was scarcely out of his mouth when the room was in darkness—a darkness so complete and sudden that for an instant his hand faltered, and in that instant he heard the overturning of a chair and the falling of a body. Twice his automatic sent a lightning-flash of fire where Culver Rann had sat; twice it spat thread-like ribbons of flame through the blackness where Quade had stood. He knew what had happened and also what to expect if he lost out now. The curiosly shaped iron lamp had concealed an electric bulb, and Rann had turned off the switch-key under the table. He had no further time to think. An object came hurtling through the thick gloom and fell with terrific force on his outstretched pistol arm. His automatic flew from his hand and struck against the wall. Unarmed, he sprang back toward the open door—full into the arms of Quade!

Aldous knew that it was Quade and not Culver Rann, and he struck out with all the force he could gather in a short-arm blow. His fist landed against Quade's thick neck. Again and again he struck, and Quade's grip loosened. In another moment he would have reached the door if Rann had not caught him from behind. Never had Aldous felt the clutch of hands like those of the womanish hands of Culver Rann.. It was as if sinuous fingers of steel were burying themselves in his flesh. Before they found his throat he flung himself backward with all his weight, and with a tremendous effort he freed himself.

Both Quade and Culver Rann now stood between him and the door. He could hear Quade's deep, panting breath. Rann, as before, was as silent as death. Then he heard the door close. A key clicked in the lock. He was trapped.

"Turn on the light, Billy," he heard Rann say in a quiet, unexcited voice. "We've got this housebreaker cornered, and he's lost his

(Continued on page 21.)

Fruit and Orchard

—:—

QUESTIONS INVITED

—:—

Edited by

Frank D. Wells

THE FUTURE

THE indications are that orchard planting will be extensive for at least two years to come. Nursery men are reporting a shortage in some varieties now, with many weeks remaining before orders will cease coming in. Peach stock is in the lead as is to be expected, but apple is a good second, the call for cherry is evidence of a rapidly growing interest in this fruit, while the plum is by no means neglected. On account of the blight the pear has been in disfavor, but even with that against the fruit an unusual number of trees will be set next spring.

Now what will be the result of this heavy planting? Well, for one thing many trees will be set where they ought not to be. Thousands of acres will be used for orchards which better be kept for other purposes. The result is a loss to the growers and little benefit to anybody, except the nursery man who sells the stock.

But there is much to encourage the man who is in the game to stay. The demand for fruit is increasing. It is no longer a luxury, but a food necessary to the health and welfare of the people. Not only is the amount consumed per capita on the increase, but new markets are being opened up and this will continue for many years to come. Better means for transportation ought soon to bring not only Europe, but Mexico, South America and even South Africa within reach of our apple.

At home the uses of fruits are becoming more numerous. A few years ago the suggestion that sugar could be made out of apples would now sounded ridiculous. Now it is to be expected in the near future. If the apple, why not other fruits?

Prohibition has increased the demand for fruits and this will to some extent continue, even though the country again becomes wet. Fruit juices have the virtues without the vices of the stronger beverages.

However we may look at it, the future is bright for the grower who will produce a good class of fruit. As for the other kind, no sympathy need be wasted there anyhow.

SETTING OUT PEACH TREES

I want to set out some peach trees next spring and have not ordered the stock. The two-years trees are much cheaper than the three-year stock. Would you consider them as good? The agent wants me to take the three year trees and says they will bear quicker. I want fruit as soon as I can get it.—H. T. R., Davisburg, Michigan.

—It is not probable that either you or the agent or any of your neighbors ever saw any three-year stock from a nursery. Now and then there are cut-backs', but they are save. Those trees were planted at the same time which was in the fall of 1920, they were budded in 1921 and dug in the autumn of 1922. Those large trees are nearly overgrown stock. Most orchard men of experiences prefer medium trees to the large size. Plant them side by side. The chances are that they will bear at the same time. As for living, the odds are in favor of the smaller trees.

TIME TO PRUNE GRAPE VINES

When is the time to prune grape vines and when should cuttings be made? How long would you make them?—C. J. N., Pontiac, Michigan.

—March is the favorite month for pruning and cuttings are made at the same time. Make them long enough to include three joints. Bury in a box of moist sand, top end up, keep in a cool place.

FUR DEPARTMENT

Edited by A. R. HARDING, America's Foremost Author and Trapper

QUESTIONS INVITED

SKUNK AND MUSKRAT RAISING

I have been thinking of trying skunk and muskrat raising. My farm is mostly work land and if I tried muskrat I would have to make an artificial pond. Do you think muskrat could be raised on grass and green feed in the summer or would they have to have wild grasses and roots? Do they eat the roots of grass in summer or just the wild grass itself? Could they be fed on clover hay in winter? I know they will eat quite a variety of feeds.

I have been told that it is a simple matter for anyone to operate on young skunk and take away the scent sack. Is this so? Can you tell me where there is a skunk farm that I can buy breeding stock from?—Inqurer, Clinton County, Michigan.

—There are thousands of small ponds, lakes, marshes, etc., in the state that it would be best to rent or buy such rather than to go to much expense to make an artificial pond. If you have a place where you can make a pond cheaply then it will pay. Yes muskrat can be raised on "grass and not green feed in the summer" but they like roots best. I do not think that muskrat would relish clover hay, but probably if fed from a silo it would be eaten. I think best to raise turnips, carrots, pumpkins, corn, altho it is roots of flag, wild rice and other water growing plants that muskrat like best. The would-be muskrat raiser had best get the food supply under way before getting too many muskrat for after they are numerous they do not allow the spreading of the food supply. It is a good plan to plant flag (cattail) sow wild rice, etc., even before stocking up a new pond or swamp for the muskrat will increase faster than the food supply. Most ponds and swamps are worth far more, acre for acre, to raise muskrat than is the best of land for farming or pasturing. The time is fast approaching when the many swamps, ponds and small lakes will annually be bringing to their owners a harvest of muskrat pelts, worth far more than any other crop the farm produces on the same number of acres, and at less cost.

Most raisers of skunk now remove the scent sacks which is easily done. The method is fully explained and illustrated in Fur Farming, a 278 page book, dealing with the raising of skunk, muskrat and other fur animals, price $1.00. The book can be gotten of the Michigan Business Farmer.

Coon and mink are two animals that do not require much space to raise and are also money makers if rightly handled. There is room for thousands to engage in fur raising—in fact if many do not the supply will not be enough in a very few years.

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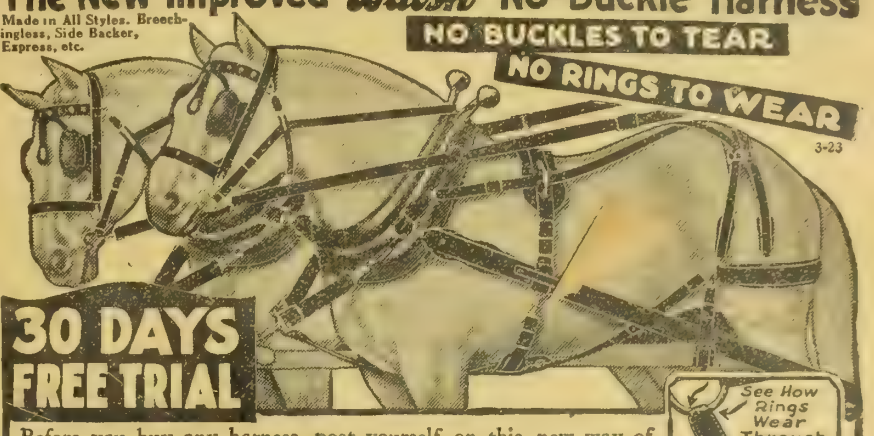

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The Michigan
BUSINESS FARMER

SATURDAY, JANUARY 20, 1923

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DAIRYING LEADS

THE development of the dairy industry has been one of the bright spots in the field of agriculture. It is today by far the largest branch of agriculture as well as the most profitable. The annual milk crop is close to one hundred billion pounds, the value of which in 1922 was greater than the output of the steel industry, more valuable than the combined wheat, oats, cotton and tobacco crops of that year and worth more than all the beef cattle, hogs and sheep put together. This gives one an idea of the magnitude of the business, which has further advantages in that after producing so much wealth the original animals are still left ready to do it over again, less fertility is removed from the soil than by any other crop or stock, and the income is steady—every month in the year.—F. J. Arend, President of the De Laval Separator Company.

THE NEED OF A FARM CREDIT BILL

SEVERAL measures are before congress at this very minute for the extention of credit to the farmers of this country. Luckily, as congress is now balanced there is little fear, but what one of the bills will pass both branches in record time and will find the willing signature of the President, who appears now to be fully awake to the condition which farmers have found themselves in the past two years.

Agriculture offers, the firmest foundation on which credit can be extended and the critics who cry "class legislation" do not take into consideration the fact that upon the farmer and his buying power depends the whole business fabric of prosperity.

The farmer asks only some form of long-time paper, which will permit him to buy his seed, his fertilizer or his live stock and will not force him to sell the resultant product until he can do so, on a profitable basis. The common three month loans, in the majority, fall due at approximately the same time and bankers crowding the farmer for their money, force on the market more that it can assimilate. We call this a "glutted market" and so accustomed has the whole farming business become to it, that we have taken it almost as a matter of course.

The past two years have forced action on this problem of credits and the next two months will, we predit, see one of the greatest steps forward ever made in the history of American agriculture. This may be the silver-lining to the readjustment clouds.

THE ISLE ROYALE PROJECT

DO not be lead quickly to a decision regarding the acquisition of Isle Royale, as a state or national park. This plan mentioned by the Governor in his message, is at present the center of a lively discussion in the metropolitan newspapers and there is such a cloud of propaganda smoke arising from both sides that it is rather hard to see the real facts as they exist.

There is no question as to the beauty of Isle Royale or its fitness to be used as a great natural park, the like of which could be found only by traveling as far west as Yellowstone. There is no question either, but what this and future generations would find full use for it. Each year distance is shortened by improved means of transportation. When Belle Island was acquired by the "village" of Detroit those who opposed it probably pointed out the fact, that few would ever paddle their canoes that distance to have a picnic!

The real question is, how can it be acquired, either by the state of Michigan or the national government without increasing present high taxes? It has been suggested that the copper company which owns it, should give it to the state for some concessions which would not involve the spending of any sum of money at the present time. Other plans too have been suggested, but the one that seems to us most logical, unless the national government should buy it with present appropriations, is that some living citizen or group of citizens should buy it, present it to the state and thus imortalize their names.

No credit can be given anyone for opposing some solution of a plan to retain for the coming generations one of the real gifts of the Almighty to mankind.

CURBING THE STOCK SALESMAN

MILLIONS of dollars worth of now worthless stock was sold in Michigan by glib, easy-talking salesmen who promised that with a small payment down, the stock they were selling, would pay for itself, from the dividends which it earned.

Farmers and city folks alike, took the bait; hook, line and sinker; paid ten per cent down, gave their note for the balance and hoped to pay up their notes with the dividend checks which the salesmen "promised" would be forthcoming, usually within a month, sometimes before the end of the year.

There is a bill before the present legislature which will put a good stiff bit in the mouth of every man who goes out to sell stock. It will make him liable for every statement and keep him properly tagged where the authorities can nab him when he slips back into any of his old, loose habits.

It may be a little late to lock the barn door so far as the farmer is concerned, because we are not exercised at the moment over the amount of stock being sold to farmers at this time, but with the more prosperous days which are flirting with us just ahead, it will be a mighty good protection for the future.

A GOOD TIME TO PUT TOOLS IN SHAPE

A GOOD many harsh and rather pointed remarks have been made about the farm machinery that ones sees standing in the fields where farmers left it when the last season's progress made it no longer necessary.

We do not like to believe, that farmers are, as a class, any less frugal or careful with their tools and machinery than any other group of out-door workers, but often an example of utter wastefulness is driven home to you as you pass a hay-loader, a mower or a binder, standing in an open field half buried by winter snows.

Our cover picture this issue suggests that now, in January, is a mighty good time to take inventory, look over your machinery, repair it where it needs repairing and cover it with rust resisting oil or other preparation so it will be all ready for use next spring and summer.

THE LONG WINTER EVENINGS

THE folks on the farm, of all people, are to be envied for the privilege of the long winter evenings, if the family knows how to enjoy them.

Good books, magazines, a game or some music while the fire crackles and the snow goes scurrying by the windows! That's contentment and if contentment is happiness, and happiness is all we on earth are striving for, then indeed are we rich, altho we have but few of the luxuries.

Now, has been added to the joy of the long winter evenings on the farm a thrill for thoes who are fortunate enough to possess the modern Alladin's lamp, a radio receiving set.

A few wires strung out towards the barn. A little bundle of electric equipment that is not so expensive but what the average farmer in Michigan can afford it and yet here is the key to the whole world of entertainment and education.

Father and the boys can build a good radio set and put it in operation. There are few small towns where this equipment is not sold and the catalog houses all list the complete or partly completed outfits.

We in Michigan are particularly fortunate because Detroit has two of the best sending stations in the country, operated by two of the great dailies who vie with one another in the quality of their daily and evening concerts. On the western part of the state the sending stations at Chicago and Milwaukee can be as easily heard and East Lansing is already broadcasting on a small scale.

Our radio editor, Mr. Ferris, is traveling about the state, carrying his receiving outfit and demonstrating it before local gatherings of farmers to whom he explains it mysteries. If he gets in your neighborhood do not fail to hear him or if your local church or organization want him for an evening, write him in care of this paper.

It will make the long winter evenings even brighter for us when we know there is a radio receiving set in the home of every one of our readers.

YANKS FROM THE RHINE RETURN

IT didn't take long after France had announced her intention of occupying the Ruhr district. for the powers that be at Washington to decide that, after all, there was no real reason for the more than a thousand American soldiers and their officers who were still keeping watch on the Rhine, to be there.

None of the former allies take very kindly to the program which France has set out to accomplish, and it makes the shivers run up and down your spinal column to contemplate what would happen if Grmany, resenting the action of France would call upon Russia and those two should attack France, who, because of her egotism had cut off the support of her former allies.

MICHIGAN'S NEW INFANT INDUSTRY

OVER on the west coast of Michigan there is developing an industry which for daily production makes Mr. Ford's factory look like a piker. The "baby chick" hatcheries in the country surrounding Holland and Zeeland, produce live, peeping little waifs of bird life faster than your Ingersoll can tick off the seconds.

Giant incubators, warmed by great coal-burning boilers, keep the vigil over millions of eggs, which once were intrusted to the motherly hen. Poultry raisers have come to recognize that it is far cheaper to buy "baby chicks" than it is to expended the effort and run the risks of individual

Michigan now leads every state in the United States in the production of "baby chicks" and the far-sighted men who have developed this amazing industry so quickly, have brought new cleaims for world-fame to our state.

OUR LANSING CORRESPONDENT

OVER at the state capitol, one of the most interesting sessions of the legislature, to farmers especially, is now well under way. There is more expected and more must be accomplished by this present legislature, than any which has met in years.

Tax reduction programs galore are offered for the relief of the present situation, many of them undoubtedly to make their sponsors strong with the home folks altho they have little excuse for appearing as practical schemes.

For the benefit of readers of The Business Farmer, we will have a digest of what is being accomplished at Lansing and our correspondent will also be glad to answer any questions or report on the voting of any individual member on any bill.

There are two fellows we never envy and one of them is the country doctor. To be routed out of bed at three a. m., pull on cold shoes, hitch-up or crank-up and drive out, miles and miles, to a house of sadness; or even worse, to get there and find only a case which a tablespoon of castor-oil the night before, would have easily cared for! The other fellow we don't envy is the fellow who has to collect for the doctor!

As the riveter on the 48 story Woolworth building said as he looked down at the street cleaner, on the busy thorofare four hundred feet below: "There ain't money enough to hire me to run the risks that man does!"

The automobile tourist may enjoy the paved roads most in the summer, but it is the farmer who appreciates what they mean during the winter months. Yet, how easy it is to forget that long stretch of clay, the deep ruts and belly-deep mud, when the hard road has covered it and ironed it out! As Eb Jones says: "Good roads are awful expensive, but they're awful nice!"

A noted Frenchman is in this country teaching us to say: "Day by day, in every way, I'm getting better and better!" That ought to be doubly good advice for the whole agricultural business and we would have a lot of good reasons on which to base it, too.

How has Mr. Pritchard been hitting the weather in your locality?

What the Neighbors Say

WANTS ISLE ROYALE

THE future of Isle Royale is at the the turning of the roads. One leads to private ownership, lumbering, fire, devastation and perpetual desolation. The other road leads to the purchase and preservation forever of this last bit of virgin territory by the state. The cost would not be excessive. With the recently acquired tract on the extremity of Kenesaw Point this would form an important link in our rapidly expanding state park system. The more and more picturesque state parks we have the more tourists will visit our state, with resulting benefit to all, not in the least among them the farmers. As the years go by and such places of beauty disappear from other places the more we could appreciate the foresight of our present-day legislators in providing such a refuge.

Opposition to the proposed purchase apparently comes entirely from chronic pessimists who habitually knock all such propositions through narrow-mindedness or fear of increased taxation. One statement was that it would require $4,000,000 to acquire it and twice as much to improve it. According to Governor Groesbeck the highest cost should not exceed $500,000 and might be less or possibly practically nothing. As to improving it it is highly improved already. There is not a foot of road constructed suitable for a whizzing automobile. Nature has taken infinite pains and centuries of labor to improve it; man may destroy it in a day.—Ralph Beebe, Wayne County, Michigan.

ADVERTISING WILL DO IT

DO you have any means of securing accurate statistics on results secured from advertising campaigns intended to increase the demand for different kinds of farm produce.

I am firmly convinced that intelligently conducted advertising campaigns would stimulate the demand for many farm products, such as potatoes, apples and dairy products, to an amazing degree but I fear it is going to require a lot of effort before our organization leaders will be brought to realize the importance of, and necessity for action.

Isn't there some city in Michigan, where the local co-op. or farm bureau would co-operate with city dealers in conducting a potato selling campaign, and secure fairly accurate check on results?

Personal inquiry among farmers seems to indicate that the per capita consumption of potatoes, in the rural districts, varies from three to fifteen bushels per year regardless of the market value of the spud. Imagine the result, if the national consumption should increase even to ten bushel per capita! I might add that strange tho it may sound, in the homes where most potatoes are eaten, the standard of living is often above the average.

When one thinks of a nation wide advertising campaign to increase the demand for essential food products, one is thinking in terms of a vast project, of course. It's going to require a lot of careful thought and planning, but why delay the beginning?

The farmers' business will never be on a sound economic basis, until he places it their himself, coddling and pampering will never do more than prolong slightly the life of the weakling. But the farmers' business will never be upon a sound basis until he adopts modern business methods.—Lisle E. Berry Sec'y-Treas. Cheboygan County Farm Bureau.

Mr. Berry has, in the above letter, struck at a very vital point in the whole present marketing proposition and one in which the Business Farmer is greatly interested. There actually exists in Michigan an opportunity to advertise beans, for instance, to the great consuming public of America, which is as obvious and practical as any staple now being alvertised by the growers' association of California. Citrus fruit growers were first to start the national advertising campaigns to increase the use of oranges, lemons and grape-fruit. Their success was so instantaneous and pronounced, that now prune, walnut, almond, and raisin growers of California advertise their products regularly in the newspapers and magazines which reach particularly the great city markets.

If, as Mr. Berry points out, the average consumption of potatoes could be increased to ten bushels per capita, there would actually be a potato shortage in the United States today! Can you imagine such a condition under present circumstances. Yet, probably a half-a-cent a bushel would have created a fund which would have screamed, hollered and repeated "EAT POTATOES EVERY MEAL!", from every magazine, newspaper and bill-board in the country.

There are a hundred and ten millions of people in these United States and they are easily reached because they all speak the same language. They are in the habit of buying what they see advertised, because they have come to realize that no inferior article can continue to be advertised, but the more advertising, the more sales and consequently the lessened cost to the consumer.

Michigan could afford a nevy bean advertising campaign of her own, because she produces more than 70% of all the beans sold in America. In a potato campaign she would be joined by Wisconsin, Maine and other states. The Business Farmer power to the carefully planned testout of a campaign to increase the sale of any product grown on the farms of Michigan, through advertising direct to the consumer. Let us hear from those who are with us or have suggestions for such a plan.

DEDICATED TO ALL TRUE PATRONS OF HUSBANDRY

PITY the farmer! Of course you do. What else could a human being do? With taxes up and prices down, on everything he hauls to town. He trys to think of the terrible cost of hours of labor that he has lost, for a bumper crop that they didn't need that wouldn't pay for the cost of seed. And a tear goes trickling down his face, as he grates his teeth and quickens his pace. For he knows that the interest has got to come, or, he will do what some others have done. And he turns the alarm on the clock ahead to shorten the hours that he stays in bed. (The efforts that should have made him rich is surely driving him into the ditch.) Then he thinks of Mollie who was fresh as a lark, But is now wrinkled and her face is dark. And he thinks of the Liberty bonds he bought, and almost wishes he'd went and fought, and died perhaps in that terrible hell, and buried beside his boy that fell. Alas! These thoughts have shattered his pride. His hoe has fallen by his side. "My son, to freedom's cause I gave." "Must his poor old father be a slave? "I'll not surrender. I'll try once more," as he gets a vision of the poorhouse door. But a great big motor goes whizzing by on a road he paid for at a price too high. The driver he lives in that fine abode. Why he bought the bonds that built this road. He opposes a tax on gasoline, because, he's driving a big machine. "For two cents a gallon," I've heard him say "'twould cost three shillings to drive all day." They voted the bonds to build the road. It's no more than right they should carry the load. "And father he left me my castle so fine. He made it lumbering Michigan pine. And I'd spend a million to defeat that bill fore I'd give a penny to grade that hill." Well Molly I guess we'll haft to roam when we lose our heart, we lose our home. For the mortgage is held by John McLean, who opposes the tax on gasoline. So we'll leave the place where our children played, where we've loved and enjoyed and worked and prayed. And down in the valley in the quiet shade, where God has promised the rich won't be, you and I may be tax free.—C. P. Barry, County Mich.

Mining German Potash

Good Healthy Crops

It has long been known that *German Potash Salts* prevented certain plant diseases, as well as greatly increased the quantity and improved the quality of crops.

Scientific investigation now shows us that not only *Potash* but also *Magnesia* is required to prevent certain plant diseases.

The *German Potash Salts* contain *Magnesia* as well as *Potash.*

If you insist on having your fertilizer contain from 5 to 10 per cent of *Potash,* derived from *Genuine German Potash Salts,* you will secure at the same time enough magnesia to prevent plant diseases due to magnesia hunger.

For **Tobacco,** and for those **Fruits** which are injured by Chlorin, the fertilizer should carry 10 per cent of *Potash,* derived from *Sulfate of Potash or from Sulfate of Potash Magnesia.*

Use the latter if your tobacco leaves are not sound.

SOIL & CROP SERVICE, POTASH SYNDICATE
H. A. HUSTON, Manager
42 Broadway New York City

POTASH PAYS

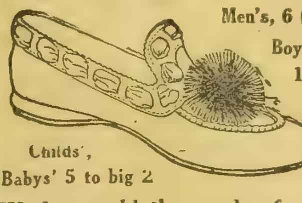
Special January Sale

Felt Slippers, $1.00

Women's, six colors, sizes 3 to 8

Men's, 6 to 12

Boys' 1 to 6



Childs', Babys' 5 to big 2

We have sold thousands of pairs.
Add 10c for post.

DAVIS BROS., Lansing, Mich,

Keep Michigan Business Farmer Coming. See page 25.

Corrugated Metal ROOFING

$3 10 SQ. 100 Ft.

Think of it. We can now sell Excell Metal Roofing, 28 gauge corrugated at only $3.10 per 100 sq. ft. painted. Galvanized, only $4.30. If you have been waiting for metal roofing prices to come down, here they are—direct from factory prices—lower than you can get anywhere else. Send for our New Catalog covering all styles Metal Roofing, Siding, Shingles, Ridging, Ceiling, etc., will save you money.

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AS THE TWIG IS BENT

SEVERAL letters have come to my desk recently asking me to encourage a discussion on the bringing up of children. Since that to my mind, is women's best and biggest undertaking. I think it eminently fitting that we mothers and teachers and fathers too perhaps, exchange our ideas and speak our difficulties. One letter will be found in to-day's issue, on the subject.

I always feel particularly gentle toward little children, born into this world where everything is so big, so hard to understand, so full of don'ts, so full of places to get hurt, so full of stomach ackes and toothaches and heartaches. If added to all this then life is certainly not a pleasant place. No doubt most children get the love and gentleness they need but we all know that there are cases where they do not, as their are cases where not enough firmness is shown, one is as bad for the child as the other.

We must admit that children are also handicapped from the start by inherited characteristics, the faults if father and mother and many fathers and mothers before them and we must take into consideration that they have much to overcome. Are we not often aghast on coming upon some fault or failing of our own reflected in our youthful progeny?

Childhood is supposed to be the happiest time of life and if a child has favorable surroundings I believe it is, but we must remember that the disappointments of children are just as big to them and troubles are just as large as ours are to us and they have not our philosophy that enables us to hear ours with some degree of calmness and hope. We have learned that nothing is final, that if we are good fighters, which we all need to be that we may turn defeat into success, that, as Kipling says, we may build again with rusty, worn-out tools. A child cannot see beyond the present situation, he has no experience to draw from, so we must kindly and sympathetically, encourage and admonish and let him know that he may always draw upon our love and experience.

Gradually his confidence in our judgement will grow and we may be able to save him from many pitfalls.

I believe too, that when a parent finds he has made a mistake it is a good thing to own up, you can't fool a child very often, do you not often wonder just what children thinks about us grown ups? I believe they are generally to polite or too wise to tell.

This little talk is just an opener, there is much to be said but let us hear from our readers, we might take up topics in detail, such as:

Teaching manners.

Teaching children how to properly care for their bodies.

How to get along with other children.

How desirous it is to tell the truth.

How to get and keep their confidence.

LEAGUE OF WOMEN VOTERS

ONE of the best accomplishments of the League above mentioned, was the passage of the bill in September of 1922, providing independent citizenship for married women. The enactment of this law removed the last federal disability remaining after suffrage was granted.

I will give section 1, which fully explains the act.

"Independent citizenship of women to the end that no American citizen shall lose her citizenship by marrying an alien, and that no alien woman shall acquire American citizenship by marrying an American citizen, the choice of citizenship resting with the individual woman as it rests with the individual man in the present law."

The passage of this act was simply making the status of women equal with that of men, in obtaining citizenship, and on it's face it manifestly fair. Sometimes a peculiar case brings the matter to our minds. I have a friend who was born in Canada, coming here as a child, with her parents, she lived here 50 years, unmarried, and then found that she was not a citizen and the only way she could become one was to marry an American citizen! Her mother, brothers and married sisters were all citizens, but she could never become one (unless married) altho a loyal and patriotic American. This is just one of the good things the League has put thru.

The Farm Home
A Department for the Women
Edited by MRS. GRACE NELLIS JENNEY

POEMS MAY BE FOUND

IN the M. B. F., of December 23 I notice a request for the poems, Brier Rose and Lasca. Both of these poems are found in a book called, "The Speaker's Library." It is an old book. I have had mine about thirty years. It was edited by Daphne Dale and published by Elliot ¼ Beezley, Chicago, Ill., and Philadelphia, Pa.

We have been reading the M. B. F., about two years and I always enjoy the Home Department.

I would like to have discussed in this department the subject of training children. I try to teach and train my children in the right ways but they are so "harum-scarum," not at all the little "lady and gentleman" that some people think children should be and I wonder if I am failing in my duty in this respect.

Wishing all a Happy New Year.—Mrs. Maude Bacon.

HOW DID YOU REST LAST

HOW did you rest last night?
I've hard my Grand'pap say
Them words a thousand times,
that's right—
Jes' them words thataway,
As punctual-like as morning dast
To ever heave in sigh
Grand'pap 'ud allus haf to ast—
"How did you rest last night?"
Us young-uns used to grin
At breakfast on the sly,
And mock the wobble of his chin
And eyebrows helt so high
And kind: "How did you rest last
night?"
We'd mumble and let on
Our voices trimble and our sight
Wuz dim and hearing gone.
Bad as I ust to be
All I'm a wanting is
As pure and calm a sleep for me
And sweet a sleep as his.
And so I pray on Jedgement Day
To wake and with it's light
See his face dawn and hear him
say—
"How did you rest last night?"
—Riley.

UNDER PONTIUS PILOT

A READER of the Business Farmer asks me whether the author of the above mentioned book, Wm. Schuyler, really wrote the book from the letters mentioned in the translator's note or whether the letters themselves are imaginary. I have written a Mr. Chislom of Vermont who helped Mr. Schuyler in the translation according to the author's note, for information. This is a matter of general interest to all who know the book so I publish the request. The book is composed of letters written in Latin, originally, between two Roman citizens, one an officer in the army of Caesar and the other a philosopher and scholar living in Rome.

The book deals with the three years of Christ's active ministry and is most beautifully written and reverently expressed.

It makes the claim that Mary Magdalene was the Mary, who was the sister of Martha and Lazarus, this point has been often disputed. It gives a first hand description of the raising from the dead of Lazarus, with new details, also a conversation and description of Saul of Tarus, later Paul the Apostle, and many other details which I cannot take space to enumerate. If the letters are genuine, it is a valuable book, if fectitious then compelling piece of imagery but without historical value.

Any information that I am able to obtain will be published. I would advise any one to read the book whether the letters are found to be genuine or not. It is well worth the time spent in reading it.

HE REMEMBERED THE BIRDS

CHRISTMAS as I was taking a walk in a place where farmer's respective woodlots join making a tract of some 200 acres of forest, I was following a wood-trail of a neighbor and my attention was attracted to the numerous quail tracks, all seemed to be going in the same direction I was. Suddenly they flew up—two large flocks of them—and I saw a place under some ash trees where several square rods of snow and leaves had been turned over by them. I looked to see if there were many seeds on the ground and I discovered that my neighbor had sown wheat all over the place, and this was what the birds were after. This was a very immaterial act in itself, i.e., of taking a few handfuls of grain and scattering it for the birds, yet it set me to thinking just why my neighbor did it. Surely he did not expect any return from the birds themselves, for he is a renter on the place and the spot was nearly a mile from any fields he expected to cultivate; doubtless he himself would be bothered to explain; yet in reality he did it because his own Christmas would be more sweet to know that the wild things have one too. This goes to show the effect the coming of the Manger Child, nearly two thousand years ago, is still having in the world, and it bespeakes the truth of the prophecy of a time when the "lion and the lamb shall lie down together," and the whole world shall know that 'God is Love'."—A. D.

SOME GOOD RECIPES

Pancakes

1 egg, pinch of salt, 2½ cups of buttermilk or sour milk, ½ cup of cream 1½ teaspoon soda, flour to make batter.

I find by keeping back 1 cup of liquid and stirring balance a little thicker than desired, that the lumps stir out more easily, then last add your cup of liquid. In answer an inquiry in the January 6th issue.

Being the mother of four children under 7 years I find a flour sack at 5 cents each from our bakery makes a combination, or under waist and bloomers as well as linings for some of their dresses, also dish towels.

Here are drop cookie recipes. I find save heaps of time and a holiday cookie that takes a day to bake and lasts weeks.

Cream Cookies

2 eggs, 2 cups sugar, 2 cups sour cream (thick), 2 teaspoonfuls soda, 4 cups flour, pinch of salt and seasoning, nutmeg or vanilla, drop from dessert spoon.

Orange Cookies

2 cups sugar, pinch of salt, 1 cup of shortening (half butter and half lard) cream together, 1 cup of milk. Grated rind and juice of one orange, 5 cups sifted flour, 1 level teaspoon soda and 2 teaspoonfuls baking powder, rounding full.. Drop from dessert spoon and put raisin in top.

Molasses Cookies

½ cup sugar, 1 cup molasses, 2 tablespoonfuls butter, teaspoon ginger and a little cinnamon, 1 teaspoon soda dissolved in ¾ cup hot water. Mix stiff with flour, drop and bake.

Holiday Cookies

1 quart of molasses or 1 pint of strained honey may be used, 1 pint sour cream, 1 pound brown sugar, ½ cup shortening (melt), 1 oz. of cinnamon, ½ oz. cloves, 4 teaspoonfuls soda, ½ pound raisins, ½ pound nutmeats, 1 teaspoon salt and all the flour you can stir in, mix and let stand over night, then roll or cut out either squares or round. For a change one may ice them on top. A prosperous New Year to all.—Mrs. Alice R. Maurer.

PANCAKE RECIPE

1 cup graham flour, 1 cup buckwheat flour, 1 cup white flour, 1 tps salt, 4 level tps baking powder, 1 level tps baking soda, 1 T. syrup or sugar.

Sift together, the buckwheat and white flour, salt and b-powder, add to graham: add slowly, sufficient sweet milk (skimmed) to make batter of proper consistency, then add soda and syrup (or sugar) which have been dissolved together in a little boiling water. A trial or two will determine the quantity of milk required. Water may be substituted, but milk is preferable. The batch may be increased proportionately. This serves five or six people.

Syrup for Pancakes

A good syrup for pancakes is very quickly made by boiling together for a few minutes 1½ cups brown sugar and one cup of water.

Starch for "A Reader"

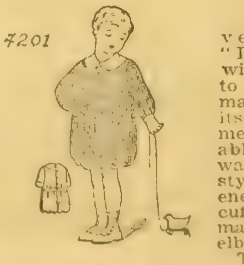
For about one quart of starch, use three level tablespoonfuls starch and dissolve in just sufficient cold water to make creamy, then add water that is actually boiling until starch is clear, stirring as water is slowly added. One teaspoon salt and one-half teaspoon lard, or other white grease should be added. This gives gloss and prevents the iron sticking. Keep covered until ready for use, to prevent the film you speak of. If you are careful to add just the right amount of water and have it always

AIDS TO GOOD DRESSING

For Simplicity, Service and Style

Address orders to Mrs. Jenney, Pattern Department, M. B. F.

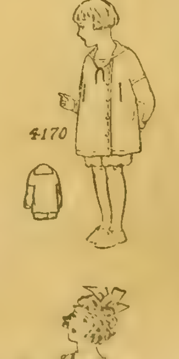
Send 15 cents in silver or stamps for our Up-To-Date FALL AND WINTER 1922-1923 BOOK OF FASHIONS


4201

A Popular Play Dress

4201. The simple version of the "Romper" fashion will readily appeal to the busy dress maker, because of its easy development and comfortable lines. Gingham was selected for this style with white linene for collar and cuffs. The sleeves may be in wrist or elbow length.

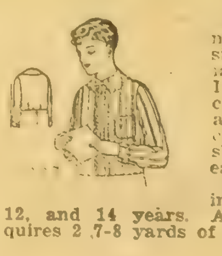
The Pattern is cut in 4 Sizes: 2, 3, 4, and 5 years. A 3 year size requires 2 1-2 yards of 27 inch material.


4170

A Natty Suit For The Little Man

4170. This is a comfortable style, with new and pleasing features. The inserted pockets in the smock will please the "little fellow." The "knickers" too boast of pockets that are large enough to hold many things boys like to keep with them.

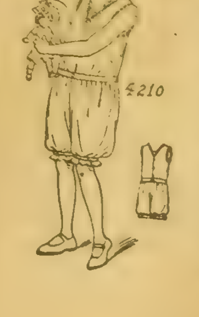
The Pattern is cut in 4 Sizes: 2, 3, 4, and 6 years. To make the suit for a 3 year size, will require 3 3-8 yards of 32 inch material. For knickers alone 1 3-8 yds is required.



A Practical Garment

4223. Gingham, madras, flannel and silk are good materials for this design. It has a comfortable collar, and serviceable pockets. It is cut on regulation shirt lines and is easy to develop.

The Pattern is cut in 5 Sizes: 6, 8, 10, 12, and 14 years. A 12 year size requires 2 7-8 yards of 32 inch material.


4210

A Popular Garment

4210. Both the waist and "knickers" in this style are practical and good for development in muslin, long cloth, creper, or flannelette.

The Pattern is cut in 5 Sizes 4, 6, 8, 10, and 12 years. A 6 year size requires 1 3-4 yards of 36 inch material.

bubbly boiling, you will not need to cook it on the stove. Do not dip garments into the whole amount of starch, but into a second basin put a portion to which you add water to thin it, always keeping the bulk covered. Use it as warm as you can; so that grease will not settle on top and cause garments to show grease spots.

Nut Loaf

2 cups graham flour, 1 cup white flour, 1 cup sugar, (white or brown) 1 cup nutmeats (cut up coarsely), 2 cups sour milk or buttermilk, 1 tps salt, 2 tps baking powder, 1 tps baking soda.

Put all dry ingredients into mixing bowl, sifting baking powder and white flour together; dissolve soda in milk. Bake in a long, large loaf one hour, or two small loaves about forty-five minutes, in slow oven. Pans should be greased and floured. —Mrs. J. C. T.

THE BATTLE OF LAKE ERIE

By Request

September tenth full well I wean
In Eighteen Hundred and Thirteen,
The weather mild the sky serene,
Commandered by bold Perry
Our saucy fleet at anchor lay,
In safety moored on Put-in-Bay.
T'wixt sunrise and the break of day
The British Fleet we chanced to meet.
Our Admiral said he would them greet.
With a welcome on Lake Erie.
Bold Barclay one day to Procter did say,
"I'm tired of Jamica and Sherry,
So let us go down to that new floating town
And get some American Perry,
Oh, cheap American Perry,
Most pleasant American Perry
We need only bear down, knock and then call
And we'll have the American Perry."

The above is taken from the book entitled Naval Battles and our New Navy. It is written on page 67 in the part called Naval Battles of America. It was written by Theodore Roosevelt before he became Vice-President. The book is by Shippen.—Subscriber.

If this bit of rhyme(?) was really composed by Theodore Roosevelt, it not only goes to show that one mind no matter how keen and splendid cannot do everything well.

CORRESPONDENCE COLUMN

Will someone please tell in the household column how to remove rust stains from white linen?—Mrs. K. M.

—Use lemon juice on stain then cover with salt and place in sunshine. This may have to be repeated, but I have never known it to fail.

Can anyone tell me how to make labels stick to tin cans, we make maple syrup and it is impossible to make the labels stick to them.—Mrs. J. A., Honor, Michigan.

I saw in the last M. B. F., that you wanted the address of the subscriber who made sleeveless sweaters. It is Mrs. B. C. Hoover, Tustin, Michigan.

Will the lady who wished to sell her old grand piano send me her full address? A subscriber wishes to purchase one.

Mrs. Rosa E.—If your tooth jumps use oil of cloves on cotton in the tooth. If it has a dull pain, use a good linament on the gums. Then get to a good dentist as soon as possible.

Will Mrs. Dyer, Eaton County, send me her full address? I have a letter here for her.

Miss E. A.—We know of no reliable house that takes handwork. There seems to be no demand to-day for crocheting or tatting. A number of young ladies whom I know, have made up a supply of pretty garments, simple ones for children, aprons and underwear for women, towels with cross-stitching and have sold their supply out time and again. Some have opened small shops and some have sold to private customers.

I have the poem "Lasca", and will mail it to the reader who wants it. Please send stamped and addressed envelope.

We thank Vern L. Doty for it. He would like the poem called "The Dead Man's Hand."

Will you kindly ask the readers of our page, if any one has ever had experience in making wool batts for comfortables "from the fleece as sheared."

I am sending a favorite recipe for desert, especially nice for parties, will serve fifteen people.

Part 1. 1 package of lemon jello, ½ cup of sugar, 1¼ cup of boiling water.

Part 2. 1 pint of sweet cream, 1 can of shredded pineapple, 1 teaspoon lemon extract.

When part one begins to thicken, whip cream, add fruit and cream to part one and whip again, let set, if made the day before needed it is much better.—Mrs. M. F.

REARRANGEMENT OF KITCHEN LIGHTENS HOUSEWIFE'S WORK

NEW equipment is not always required to make home kitchens more convenient and less tiring to work in, says a report to the United States Department of Agriculture on extension-agent work. Much can be done by rearranging the equipment already on hand, such as grouping objects commonly used in the preparation of food, or those used for washing or storing dishes, or articles belonging to the cleaning outfit. In many cases the attention of the housewife is drawn to the need of doing work requiring a good light by a window, or by having a good suspended light at night. One widely adopted improvement is that of giving old floors an easily cleaned surface. A number of simple contrivances can be made at home to lighten the housework, and frequently the farmer himself will assist by building shelves, a folding ironing board, dresser, wheel tray, and other labor-saving conveniences.

Improvements in farm kitchens are being carried on in practically all the States. Last year, through demonstrations given by extension workers, over 21,000 families are reported as adopting suggestions regarding home rearrangements and management; 7,000 kitchens were rearranged, 5,000 water systems installed, 3,000 washing machines and 4,000 steam-pressure cookers purchased, 65,000 homes screened, 4,000 septic tanks installed, and 7,000 lighting systems placed in farm homes.

THE HUNTED WOMAN

(Continued from page 16)

gun. Turn on the light—and I'll make one shot do the business!"

Aldous heard Quade moving, but he was not coming toward the table. Somewhere in the room was another switch connected with the lamp, and Aldous felt a curious chill shoot up his spine. Without seeing through that pitch darkness of the room he sensed the fact that Culver Rann was standing with his back against the locked door, a revolver in his hand. And he knew that Quade, feeling his way along the wall, held a revolver in his hand. Men like those two did not go unarmed. The instant the light was turned on they would do their work. As he stood, silent as Culver Rann, he realized the tables were turned. In that moment's madness roused by Quade's gloating assurance of possessing Joanne he had revealed himself like a fool, and now he was about to reap the whirlwind of his folly. Deliberately he had given himself up to his enemies. They, too, would be fools if they allowed him to escape alive.

He heard Quade stop. His thick hand was fumbling along the wall. Aldous guessed that he was feeling for the switch. He almost fancied he could see Rann's revolver levelled at him through the darkness. In that thrilling moment his mind worked wiith the swiftness of a powder flash. One of his hands touched the edge of the desk-table and he knew that he was standing directly opposite the curtained window, perhaps six feet from it. If he flung himself through the window the curtain would save him from being cut to pieces.

(Continued in Feb. 3rd issue)

THE SIGN For Your ROWENA OF QUALITY Protection

Lily White

"The Flour the Best Cooks Use"

A GOOD RECIPE FOR ENGLISH TEA BISCUITS
4 cups Lily White flour, 4 level teaspoons baking powder, 1 teaspoon salt, 2 tablespoons butter or fat, 1 cup of mashed potatoes, 1 cup of milk. Boil and mash potatoes, having them free from lumps. Sift the flour, salt and baking powder, add potatoes and rub in fat or butter. Mix to a light dough with egg and milk; roll out a little thinner than ordinary biscuits and bake in hot oven Serve hot. Use potatoes while warm

Our Guarantee
We Guarantee you will like Lily White Flour, "the flour the best cooks use" better than any flour you ever used for every requirement of home baking.
If for any reason whatsoever you do not, your dealer will refund the purchase price.---He's so instructed.

Continues Popular
For three generations Lily White has been "the flour the best cooks use." It continues popular because its quality always has been maintained.
For baking good-to-eat, wholesome breads Lily White has never been surpassed. This is because the wheat is selected and every step of the milling process is made for the purpose of producing breads you will like. But you will never appreciate Lily White to the fullest extent until you have experienced the pleasure of baking with it.

Why You Should Use Lily White
REASON No. 20
Untouched by Human Hands
We cannot over-emphasize the importance of clean flour. Dirt is not good to eat. It destroys flavor, and also it prevents the best baking. The wheat from which Lily White is milled is cleaned, washed and scoured eight times. It is milled until the granulation is uniform and perfect.
And throughout the entire process it is kept absolutely clean.

VALLEY CITY MILLING COMPANY
GRAND RAPIDS, MICHIGAN
"Millers for Sixty Years"

It Builds Strength
You have often wondered why a very little emulsified cod-liver oil, taken regularly, works almost like magic in building up the body.
Scott's Emulsion
enables you to enjoy the fullest benefits of the purest vitamine-bearing cod-liver oil. It helps keep the vital forces of the body strong. Be sure it's Scott's!
Scott & Bowne, Bloomfield, N. J 22-48

Reaches Deep Colds Immediately!
Rubbed on, Vicks Has a double effect
HERE is the last word in treating cold troubles—rub Vicks well in over throat and chest. Get into bed and leave the coverings loose about the neck. All night long you breathe in the healing vapors of camphor, menthol, eucalyptus, turpentine, etc. The application also acts like a heating liniment or plaster—almost sure to loosen the cold before morning.
Vicks is just as good, too, for inflammations, such as cuts, burns, bruises, sores, stings and skin itchings.
Write to Vick Chemical Co., Box I-92 Greensboro, N. C., for a test sample.
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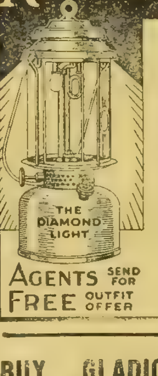
OVER 17 MILLION JARS USED YEARLY



New 300 Candle Power Lantern
Increases Egg Yield
Gives brilliant, soft, white light—like daylight. Just the thing to hang in hen house night and morning.
Burns Kerosene or Gasoline
Clean, odorless, economical. Burns less than wick lantern. Is 100 times brighter Lights with match. Absolutely safe. Greatest improvement of age. Patented.
Make $50 to $100 a Week
introducing this wonderful new light. Take orders for Lanterns, Table Lamps, Hanging Lamps among friends and neighbors.
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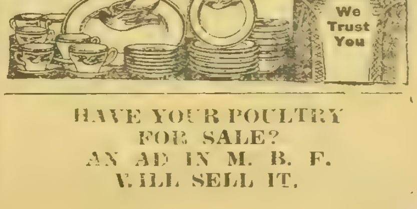

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for selling only 30 packs vegetable or flower seeds (mention which) at 10c large pack. Handsome 31-piece Blue Bird Dinner Set given according to plan in catalog. Send no money. American Seed Co., Lancaster, Pa. Box M-104
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WILL SELL IT.

TWENTY SECOND ANNUAL
DETROIT AUTO SHOW
JAN. 20-27
NEW MUNICIPAL BLDG. JEFFERSON AND CHENE

CITIZENS' MUTUAL AUTO INSURANCE CO.

HOWELL, MICH.

Figures taken from Annual Statement, December 31, 1922

Claims and Losses Paid, 1922

504 Fire and Theft	$ 83,714.77
146 Personal Injury	46,109.10
600 Property Damage	40,689.35
2,067 Collision	124,633.99
3,326	$295,147.21

Total Claims and Losses to Date

10,969, Amounting to $1,261,697.99

Assets, Dec. 31, 1922

Cash in Banks and in Office	$ 173,215.01
Office Site and Building	27,727.44
Furniture and Equipment	12,000.00
Salvage Department	6,200.00
Accounts Receivable	4,702.20
Accrued Interest, Cert. of Deposit	2,654.80
Total	$226,499.45

Cash Surplus Increased From $80,083.07 to $173,215.01; A Gain of Over 100 Per Cent

More than 16,000 persons killed, nearly 200,000 injured by automobiles in the United States last year. Car owners paid the bill. Are you protected against this hazard by adequate automobile insurance?

AUTO INSURANCE AT COST PLUS SAFETY

A GREAT OFFER

CLUBBING OFFER NO. 101.

Amer. Fruit Grower, m.	$ .50	ALL 1 YEAR $1.65
Poultry Keeper, - mo.	.50	
Good Stories, - - mo.	.50	
Mich. Bus. Farmer, w.	1.00	

New or Renewal Subscriptions send $1.65 in check, money orders or registered letter.

Mich. Business Farmer, Mt. Clemens, Mich.

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10 Days Trial 50¢. Regular $1.00
Do it Now-Send Stamps-Wonderful Results
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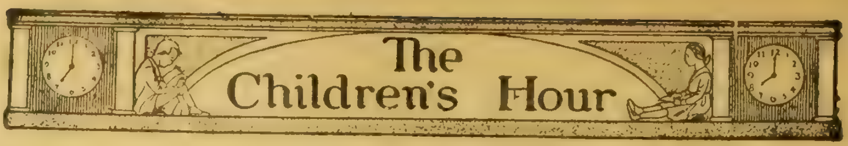

The Children's Hour

DEAR Nieces and Nephews: Did you ever stop to think what we owe the cow and what a great benefactor of mankind she is? Her association with man dates back twenty thousand years and her assistance to him his been such that she is known as man's greatest benefactor. During the dark ages of savegery she was found among the wild animals of the forest but as civilization penetrated the darkness the cow was called upon by man and she responded. She was first brought to America by Columbus on his second trip to this country and from that time to the present day she has been an important factor in making our country the greatest nation in the world. It was her hardy sons that helped the pioneers clear away the forest and fit the ground for crops and as the people moved westward they hauled the the great wagons containing the belongings of man and his family across the sun-scorched plains, thru valley and over great mountains to new lands that were to be future farms and cities. And now, as in those days, thru years of failures and want as well as prosperous times she produces the most nourishing and life-sustaining foods. She is the foster-mother and life itself to thousands upon thousands of little children all over this great world. She complains but little and is friend of man thru fair or foul weather. God bless "bossy", treat her kindly.

I believe several of my nieces and nephews made New Year resolutions, and one of the resolutions was that they would write a letter to Uncle Ned, because during the past couple of weeks I have received a great pile of the most interesting letters that have come to my desk in some time. After you read those on this page, which were taken from here and there from all I received, I am sure you will agree with me. Now, girls and boys, I hope you did not resolve to write just once but several times during the next year. I am always glad to hear from any of you and if you have any suggestions to offer on making our page more interesting write to me about them. This is your page.—UNCLE NED.

INTERESTING FACTS WORTH REMEMBERING

A man will die for want of air in five minutes; for want of sleep in ten days; for want of water in a week; for want of food at varying intervals, dependent on various circumstances.

OUR BOYS AND GIRLS

Dear Uncle Ned and Cousins:—I am a boy 10 years old and in the 5th grade in school. I live on a 40 acre farm. We raise fruit. The name of our farm is "Vinecroft." There is an old lime quarry and a spring just below it. There is also an old lime kiln. We have 2 cows, 2 heifers, 2 calves, one team of horses, and a truck. We have a young peach orchard. We live on a hill and can see the farmers at work in the spring. We also can see the village of Spring Arbor across the valley where my two brothers and sister go to school. My mother has just taken some bread out of the oven and it smells very good. She bakes sixteen loaves a week. She can make very good bread.—Anthony Zeller, Spring Arbor, Michigan.

Dear Uncle Ned:—Is there enough room for another cousin? If there is I would like to become a cousin. I like to read the interesting letters that the boys and girls write. I have been corresponding with Eunice Butler this year. I do not have much time to write letters because I have to help my daddy out doors. My brothers work in Detroit so I have a pair of overalls, a pair of four buckle overshoes and some leather mittens. I can do all the chores but milking.

I am eleven years old. I am in the 6th grade. I weigh eighty pounds. My birthday is July ninth. I have two sisters, and one brother, and one brother-in-law. My oldest sister is married and has two little boys. One is almost ten months old and the oldest will be three years old in May. My married sister teaches the school I go to. My mother takes care of the smallest baby.

Well Uncle Ned I am getting sleepy so I guess I had better close for this time, and I guess I had better go to bed. Good-bye for this time. Your niece and cousin.—Eunice Norma Traver, R. 5, Williamston, Michigan.

Dear Uncle Ned:—Just to begin the new year nicely I will write to the Children's Hour. I am 16 years old. I have one brother and three sisters and I am the youngest of the family. Did you all have a nice Christmas? We did, and we received many beautiful and useful gifts. Did you ever try having the members of the circle tell a story about a picture? Why don't you put a picture on the page and then have several stories told about it? I think that would prove interesting. Try it. Your sincere friend.—Madge Jane Hibberd, Remus, Michigan.

—Yes, Madge, we had a story contest about a picture. That was nearly a year ago. We will have another one of these days, so be ready to write a very good story because you will have some strong competition.—Uncle Ned.

Dear Uncle Ned:—Do you care to hear from a farmer boy? I have a good time reading the Children's page so I thought I'd write to the paper. I am only nine years old and I am the only boy in the family. I have four sisters. Their names are Marian, Ruth, Imogene and Madge. Of course you can imagine that makes life rather hard for me but I'm getting fat on it. I have lived on a farm all my life but maybe we'll go to the city soon. Do you think I'll like it? Will some of the little city boys and girls write and tell me what city life is like?—Charles F. Hibberd, Remus, Mich.

Dear Uncle Ned and M. B. F.:—Out of doors the snow is falling, but indoors it is very bright and cheery. I have finished reading the Children's Hour and have decided to join the circle of boys and girls. Don't you think it would be nice to have a continued story in our page. I think it would be just great. Ask the other boys and girls if they wouldn't like it too. I would like to have the other boys and girls write to me. I go to the Tinker school. It is two miles from my home. My school is in Isabella County.—Imogene Hibberd, Remus, Michigan.

Dear Uncle Ned:—I read the M. B. F., and like it very much. I think the Children's Hour is fine. I am a farmer girl. I am 14 years old and 60 inches tall. I weigh 120 pounds. My father is working in town and I have to do the chores before I go to school in the morning. We have 9 cows to milk, 2 horses to

NEW LAMP BURNS 94% AIR

Beats Electric or Gas

A new oil lamp that gives an amazingly brilliant, soft, white light, even better than gas or electricity, has been tested by the U. S. Government and 35 leading universities and found to be superior to 10 ordinary oil lamps. It burns without odor, smoke or noise—no pumping up, is simple, clean, safe. Burns 94% air and 6% common kerosene (coal oil).

The inventor, A. R. Johnson, 609 W. Lake St., Chicago, Ill., is offering to send a lamp on 10 day's FREE trial, or even to give one FREE to the first user in each locality who will help him introduce it. Write him to-day for full particulars. Also ask him to explain how you can get the [illegible] without experience or money [illegible] $250 to $500 per [illegible]

take care of 5 pigs and 100 chickens besides we have 2¼ miles to walk to school. I have 2 sisters and 4 brothers younger than I am. I go to the Hollister school and we have a very good teacher. We are carrying out the Health Crusade at our school and I think it is a wonderful help to make clean and honest boys and girls. I will close for this time hoping all the nieces and nephews have started a good New Year. From your niece.—Rosalie M. Dupraw, R. No. 1, Cadillac, Mich.

P. S.—I wish some of the other children would write to me.

Dear Uncle Ned:—I have been reading the letters and enjoy them very much. I am most sixteen. I live on a farm of forty acres. South east of our place is a huckleberry marsh. I have almost two miles to walk to school. We just moved here last month so you see I do not know very many. I get so homesick sometimes I wish I was back where I used to live. But I suppose we have to take things as they come. It is getting late so I will close. I sure would like to hear from some of the cousins. Your niece.—Ethel Philo, R. No. 3, Lansing, Michigan.

Dear Uncle Ned:—My father takes the M. B. F., and likes it very much. I am 9 years of age and in the 5th grade at school. I have one-half mile to go to school. My birthday is in June between the 1st and 15th, and to the one who guesses the right date I will write a letter. I have a brother 11 years of age and in the 6th grade at school and I have a baby brother that will be 3 months old the 13th of January. I have dark brown hair and eyes. I weigh 50 pounds and I am 3 feet and 11 inches tall. I suppose you got a lot of presents for Christmas. I got a doll head with brown curly hair and sleeping eyes, a pocket-book, 2 handkerchiefs, a bottle of perfume, 2 strings of beads, a drinking cup and a soap bubbler, a pin cushion, a sack of candy and peanuts and a big sack of Christmas candy. With love from—Beulah Morey, R. No. 3, Wheeler, Michigan.

The Collection Box

The purpose of this department is to protect our subscribers from fraudulent dealings or unfair treatment by persons or concerns at a distance.

In every case we will do our best to make a satisfactory settlement or force action, for which no charge for our services will ever be made, providing:

1.—The claim is made by a paid-up subscriber to The Business Farmer.

2.—The claim is not more than 6 mos. old.

3.—The claim is not local or between people within easy distance of one another. These should be settled at first hand and not attempted by mail.

Address all letters, giving full particulars, amounts, dates, etc., enclosing also your address label from the front cover of any issue to prove that you are a paid-up subscriber.

THE BUSINESS FARMER, Collection Box
Mt. Clemens, Mich.

Report Ending January 6, 1923

Total number claims filed	1097
Amount involved	$20,259.56
Number of claims settled	650
Amount secured	$10,686.56

QUICK WORK

I wish to thank you for the favor you did me in helping to get the money due me from that New York company, I received your letter on the 19th stating that you were writing to them on that date, and on Dec. 25th I received the money which they owed me. Again I wish to thank you.—Mrs. Grant Howard, Osceola County, Michigan.

THANK YOU

I received an answer to the letter I wrote you to the Mercantile Credit Co. Many thanks to you—while I have not received the money, they gave me encouragement so will in return advance my subscription by sending you a dollar check. I am in favor of receiving the paper every two weeks as I think it is more eagerly looked forward to. It is the nicest and most interesting paper I have ever read.—Fred W. Schutt.

SETTLES ON STRENGTH OF GOVERNMENT REPORT

Beg to acknowledge receipt your your letter with reference to reliability of H. C. Gawn & Co., Cleveland, Ohio. For your information beg to advise you I settled with them in full on strength of Government Inspection report which was furnished me. I want to thank you for your suggestion and will sure be glad to call again should I need assistance.

WE'LL MEET YOU FARMERS' WEEK AT EAST LANSING

(Continued from page 3)

making the visit of the guests pleasant one.

Entertainment and education will be given in equal portion during the week. Music, moving pictures, pageants, and other entertainment features will be balanced off against the more serious side of the program, which will include educational material on all phases of farmers' problems.

One of the leading features of the week will be the big agricultural parade, to be held at one o'clock Thursday afternoon, February first. More than a mile of livestock and exhibits will pass in review during this pageant.

Special rates on all steam and electric railroads have been granted Farmers' Week visitors. These rates give round-trip tickets from any point in the state to East Lansing for one and one-half times the one way fare.

HISTORICAL BACKGROUND OF MICHIGAN AGRICULTURE

(Contiued from page 8)

igan. The Michigan Agricultural College set to work to find out if sugar beets could be grown in Michigan. Sugar beet seed was imported from Europe and was distributed to farmers for trial plantings, where the United States Weather Bureau determined that climatic conditions were favorable. A beet sugar factory was erected at Bay City in 1908 and still other factories were soon opened at Lansing, Owosso, and other points, and another great industry based on agriculture was established in the state, which, at last report, (1920) represents a capital investment of more than $22,000,000.

The growth of mint on the muck lands in the southwestern counties is quite as old as the state, and has not spread much from this region although it has been demonstrated that mint will grow and yield well of oil as far north as the Lake Superior country. The larger portion of the mint output of the United States is produced in the southwestern portion of Michigan and the northern region of Indian, and in order to stablize market conditions producers have not been keen for bringing new areas into mint production. The growing of celery and onions has also become important in southwestern Michigan and for the same reason, while a very excellent celery is produced on a small scale near Newberry, in the Upper Peninsula.

(To be continued in a future issue)

THE TRUTH ABOUT HENRY FORD

(Continued from page 6)

to Detroit, but Miss McMillan had returned to England. It was suggested that Mrs. Philip Snowdon, wife of a member of Parliment. and at that time lecturing in this country, be placed on the peace committee in place of Miss McMillan. Miss Shelley and Miss Morgan favored the idea of having many telegrams sent the president urging him to undertake the preliminaries of peace. They also wished to arrange a big peace parade in Detroit to attract the attention of the country. Mr. Pipp urged them to abandon all such plans.

"There is nothing to be gained by spectacular efforts," he said. you wished an audience with the president. It can be arranged. Publicity is altogether inadvisable and cannot help your cause."

(To be continued in Feb. 3rd issue)

Colds Broken Quickly

HILL'S CASCARA QUININE BROMIDE

In disagreeable weather always have Hill's handy. Stops Colds in 24 hours—la grippe in 3 days. Standard remedy for two generations. No bad after effects. Safe and dependable. Demand red box bearing Mr. Hill's portrait and signature.

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Don't be a Victim

—of the cheap or big can baking powders—don't waste your time, your money, your efforts, in preparing bakings and have them ruined through the use of uncertain baking powders.

ALWAYS USE

CALUMET

The Economy BAKING POWDER

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BAKING POWDER

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because it never varies in leavening strength—because it lasts longer—goes farther—keeps perfectly and is moderate in price—because it is most dependable, most economical.

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THE WORLD'S GREATEST BAKING POWDER

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A Trial Bag will prove it!

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Pumps
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Plows
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Roofing
Sawing Machinery
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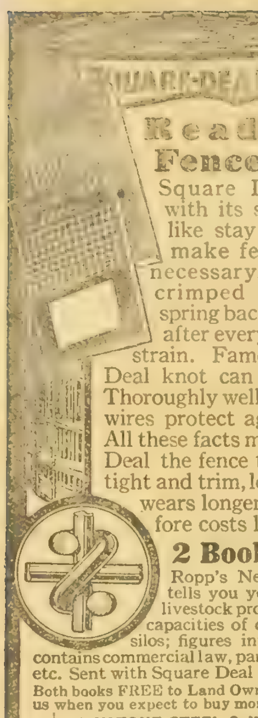

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Square Deal leads with its stiff, picket-like stay wires that make fewer posts necessary. Its well-crimped line wires spring back into place after every shock and strain. Famous Square Deal knot can never slip. Thoroughly well galvanized wires protect against rust. All these facts make Square Deal the fence that stands tight and trim, looks better, wears longer and therefore costs less.

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Productive Fruit and other Crops

They will contain the latest developments of methods for growing larger and better crops.

They will be issued at intervals and will be mailed *free* to farmers.

Your address on a Post Card asking for my Bulletin Service will bring them to you as issued, covering a period of a year or more.

They will make an interesting and valuable addition to the farm library.

Dr. William S. Myers, *Director*
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A Remarkable Home Treatment Given by One Who Had It

In the year 1893 I was attacked by Muscular and Sub Acute Rheumatism. I suffered as only those who are thus afflicted know for over three years. I tried remedy after remedy, but such relief as I obtained was only temporary. Finally, I found a treatment that cured me completely and such a pitiful condition has never returned. I have given it to a number who were terribly afflicted, even bedridden, some of them seventy to eighty years old, and the results were the same as in my own case.

I want every sufferer from any form of muscular and sub-acute (swelling at the joints) rheumatism to try the great value of my improved "Home Treatment" for its remarkable healing power. Don't send a cent, simply mail your name and address, and I will send it free to try. After you have used it, and it has proven itself to be that long-looked for means of getting rid of such forms of rheumatism, you may send the price of it, One Dollar, but understand I do not want your money unless you are perfectly satisfied to send it. Isn't that fair? Why suffer any longer, when relief is thus offered you free. Don't delay. Write today.

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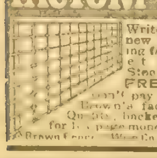

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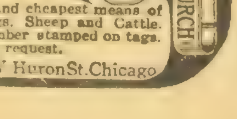

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FIFTEEN YEARS OF WOOD LIFE TRAGEDY

(Continued from page 6)

bed even the distant tundras of their life .

In the United States even more than in Canada are we today seeing and feeling the effects of an appalling devastation. My own state of Michigan is an example. The story of its outraged forests and wild life is a tragedy of desecration, of money-lust, of personal selfishness and political incompetence and stupidity. Michigan is a particularly good state to look at in these last days of forest and wild life simply because of the fact that God intended it to be the greatest water, forest and wild life paradise on the American continent. No other state was so completely endowed with all things or so richly stored with possibilities at the beginning. Its wild life and forest resources have been worth billions, and had these natural gifts been harvested instead of slaughtered they would be worth billions today. Yet, in this state, never have we had a man technically trained and educated in conservation matters at the head of our conservation affairs. The present Director of our Conservation Department is a man who has been thirty years in politics. Our Secretary of Conservation is a newspaper man. And only a few days ago the dean of American forestry, Professor Filbert Roth, Professor of Forestry in the University of Michigan, found it necessary to resign from our Conservation Commission because he could no longer fight against the environment which made his life-long experience and technical worth of no practical value at all.

This system is not the fault of an individual or individuals. It is perfectly legitimate for politicians, newspapermen, railroad engineers, lawyers, preachers or candle-stick makers to run the vast natural resources of any state if the people so will. They cannot be held accountable for the fact that they are not technically skilled forestry men or that they have not had the long and intensive training, education, and scientific application of study which every other great corporation on earth would demand of those in charge of its resources. The people themselves are at fault. They alone are to blame for not rising in the power of their vote and bringing about a condition where the very best men that money and science can produce are employed as the guardians and care-takers of our forests and wild life, our lakes and streams. Until that time comes, until every governor and every legislature in every state demand the very highest of skill, training, intelligence and technical ability at the heads of our conservation activities, we must miserably fail.

The tremedous loss which has occurred throughout the United States because of lack of these things is shown by conditions as they exist in my own state Michigan. Because of timber-slaughter and forest fires over one-third of Michigan is virtually bankrupt, paying no more in taxes than the cost of collecting the taxes, unable to build roads and schools, and even unable to provide police protection. Fourteen million acres, or over twenty thousand of our fifty-seven thousand square miles are idle, barren and fire-blasted. In 1890 Michigan was the greatest lumber state in the Union, and the annual value of her lumber products was $70,000,000. Today Michigan is consuming between two and three times the lumber she produces, and is now one of the thirty wood-importing states in America, and the freight rates and increased cost of her imported timber alone equal the total value of her lumber products in that year of 1890. The hickory for the wheels of her automobiles comes from Arkansas and Mississippi; the oak for her furniture is cut in Louisianna and Tennessee. Michigan does not even supply herself with enough telephone poles and railroad ties, but imports the poles from Idaho and the ties from Virginia.

In spite of the newspaper propaganda which is always sent out in great volumes from the center of political activities, our wild life has gone rapidly with our forests. Of our two thousand miles of inland waters at least fifty percent, or one thousand square miles, have been robbed and polluted until they are now what is technically known as "barren." Our grayling is utterly extinct. Our trout streams are going swiftly, and are not twenty percent of what they were a few years ago. While energy and money have been expended in importing and propagating the ring-necked pheasant, a semi-domestic fowl that will forever be impossible as a game-bird, our native partridge has been neglected until pot-hunters, if they were allowed to exist today, would starve to death. And while raindeer, an animal that has been domesticated for more than fifteen centuries, have been imported into our northwoods, where they are cared for and fenced and fed like cattle, one of the finest of all game animals, the black bear, is still killed in our state as "vermin."

During the two years of 1919 and 1920 there were 1,442 forest fires in Michigan, and these fires burned over 620,493 acres of forest land or one thousand square miles. At the ridiculously low rate of $50 an acre this means a total loss of over $30,000,000 in those two years, or $10 for every man, woman and child in the state. Whle our political regime estimates Michigan's forest-fire loss at only $2,000,000 a year, experts trained in their business have estimated the loss at $100,000,000 a year. I have split this in two, and estimate it at $50,000,000.

These figures for 1919 and 1920 are tragic enough, but in the year 1921 there were 1,028 forest fires in Michigan, or almost as many as in the proceeding two years combined.

I have always hunted, have always loved the woods, have lived in them a great deal of my time. The money which carried me through college I earned at trapping. But it is only when I view my experiences of the past few years that I see the tragedy of today in all its naked horror. With wild life not only going, but almost gone it seems to me little less than criminal that the people of great commonwealths will still allow politicians to run their conservation affairs. I feel and see the sickening effect of it. A great corporation that builds automobiles would consider it sucidal to place a plumber or a carpenter at its head. A big hotel would not place its management in the hands of a stone-cutter. Yet the people of a state, the mightiest of all corporations, will see a petty politician, or a butcher, or a mechanical engineer in control of all the forest and wild life resources which God has seen fit to give it. To me this is little less than sacrilege. It is a body blow at the Great Giver of Things Himself. It is as senseless as placing a trained forester in command of a ship at sea, or a railroad engineer in charge of an electric light plant. Before success comes to us politics must go. The people of every state must make their governors and their legislatures see that conservation of forests and wild life is not for the hunter and fisherman alone. Trained men, skilled and intelligent in their professions, must replace those who are utterly unable to cope with the tragedy as it exists today. Ten years from now, five years from now, will be too late. And only the people can save us from an utter devastation. Only the people, with their power of the ballot, can put their lakes, their streams, and what wild life and forests they have left into hands capable of caring for them, perpetuating them, and increasing them. Intelligence, skill and technical ability will do these things; politics, vote-getters' appointments, and the ignorance and selyfish ambitions that build up political machines will bring still greater ruin.

People must come to an understanding of what conservation means. They must be made to realize that human life is absolutely dependent upon wild life and forests. Without these things we would become extinct as a race. If all the vegetation, all wild life and all forests should disappear tomorrow the human race would become extinct upon the face of the earth within a year. Without wood we would have no agriculture, no manufacture, no commerce. Civilization, as

(Continued on page 26)

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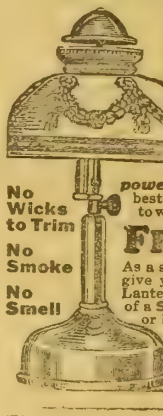

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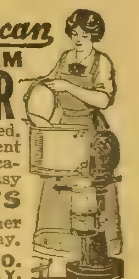

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DAIRY and LIVESTOCK

FARMERS LOSE MONEY THRU IMPROPER STOCK SHIPMENTS

LIVESTOCK shippers frequently lose money by shipping improper mixtures of animals to market, an investigation by the United States Department of Agriculture shows.

Many instances of losses due to this cause have come to the department's attention. For example, a cooperative association in Indiana recently shipped a car containing 66 sheep and 6 cattle. The sheep weighed 5,195 pounds and the cattle 5,800 pounds. The total freight charge on the shipment was $105.60, or at the rate of 95c per 100 pounds.

The actual rates quotable from the point of shipment to point of destination were—sheep 48c and cattle 38c per 100 pounds. The high rate actually charged was due largely to the fact that the 6 cattle included in the shipment made it necessary to apply the cattle minimum weight of 22,000 pounds which may be compared with the sheep minimum of 12,000 and with 10,995 pounds which was the actual of the shipment. Had the cattle been excluded this car could have been forwarded at a total charge of only $57.60 instead of 105.60 which was actually paid. The charge for shipping the 6 cattle therefore was $48 which was an increase of 83% over the charge which would have been levid on a straight carload of sheep. Stating it differently the freight charge on the cattle amounted to 83c per 100 pounds.

The important fact to be borne in mind, the department says, is that as a rule where two or more kinds of stock are shipped in the same car the freight for the entire load is based on the highest minimum weight combined with the highest rate. A mixture of cattle and sheep therefore usually takes the cattle minimum weight and the sheep rate.

As a rule take the highest minimum weights, with hogs next, calves next and sheep the lowest. In the case of rates the order is generally reversed. Sheep take the highest rate, hogs and calves the next highest, with cattle generally taking the lowst rate.

In all cases, it is pointed out, the local agent should be consulted regarding minimum weights, foreign rates, freight rates, shrinkage allowances and any other pertinent matters if the shipper desires to forward his stock in the most economical manner.

STEER FEEDING

THE rations for feeding steers should be in most cases be built around the roughage the feeder has on hand. Where steer feeding is carried on extensively, corn silage, clover hay and shock corn are the most popular roughages and form an excellent basis for a good ration. When the gains are made by the steers, cost per pound of gain, the amount of beef produced from a given area and the labor involved in storing and feeding are considered, corn silage, where grown successfully, is recommended as the best available roughage.

The amount of silage that may be fed depends upon the size of the steers and the amount of silage and other roughages available. With steers weighing from 800 to 1,000 pounds, as much as 45 to 50 pounds per day may be fed to advantage at the forepart of the feeding period unless a heavy grain ration is given, in which case the steers would refuse such a heavy feed of silage. From 3 to 6 pounds of clover hay per day is usually fed, as very few feeders favor silage as a sole roughage.

Shock corn is fed extensively in some sections, the claim being made that a better finish is produced than by feeding silage. This no doubt is true, as the steers are allowed to choose the proportions of ears and stalks consumed. As the feeding period advances and the steers become more highly finished, they naturally become particular in what they consume and select more ears and fewer stalks. This produces a good finish, but a heavy grain ration is being consumed, while only a small portion of the stalks are being utilized. When an abundance of roughage is available, this plan gives good results, but a large amount of the stalks are wasted. If a silo is used, a larger number of cattle could be finished on the same amount of feed.

The amount of concentrates that should be fed depends upon the quality of the roughage, age of the cattle and the finish desired. Although yearlings or short two-year-olds make more economical gains than do older cattle, they require more grain to produce an equal finish. Corn is the best fattening feed, but barley can be used to good advantage. If the steers are fed a heavy grain ration, a protein supplement such as cottonseed meal or linseed oil meal should be added, but if little grain is given and the roughage consists largely of clover or alfalfa hay, no supplement may be needed. With silage in the ration the cottonseed meal is preferred, as it supplies the protein more cheaply per unit. With the roughage, linseed oil meal acts as a conditioner and keeps the digestive system in good working order. Not more than 2.75 pounds of cottonseed meal per 1,000 pounds live weight is recommended. There is no danger from this amount or slightly more, but any great excess, if continued over a long feeding period, is liable to cause slow poisoning and put the steers in an unthrifty condition.

A ration of corn silage, clover hay and cottonseed or oilmeal without any concentrates produces good results and a fairly high finish. At the Michigan Experiment Station in trials conducted during the past winter, steers fed an average of corn silage, 3.93 pounds of clover hay and 1.96 pounds of oilmeal per day gainer 2.6 pounds daily per day for the first 59 days. However, if a good finish is desired, more concentrates must be fed during the latter part of the feeding period. Accordingly these steers were given an average of 9.5 pounds of shelled corn per day for the last 84 days, the amount of silage being gradually reduced and the oilmeal increased to 2.25 pounds per day. The average daily gain per steer during this period was 2.22 pounds and for the whole feeding period 2.39 pounds per day.

In all cases hogs should follow steers to utilize the corn voided especially when shelled corn or shock corn is fed.

In the experiments mentioned above, with silage at $4.00 per ton, clover hay at $12.00 per ton, corn at 56 cents per bushel and linseed meal at $50.00 per ton, the cost per hundred pounds gain, not crediting the gains made by the hogs following the steers, was $9.1[illegible]. Crediting the gains made by the hogs, the cost of grains in the steers was $7.88 per hundredweight.

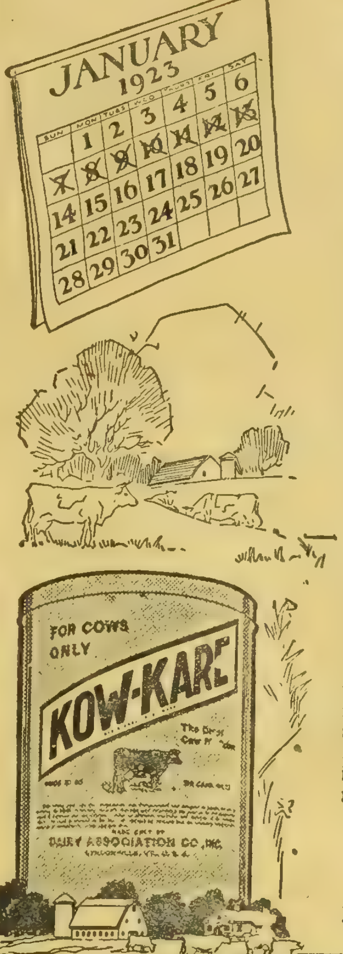
Many other factors must be considered if steer feeding is to prove successful. Clean, well ventilated quarters should be provided; clean water should be available at all times; all changes in feed, both in quantity and quality, should be made slowly; and the condition of the steers should be watched carefully and their appetite catered to, so that there is less danger of putting them off feed.—W. E. J. Edwards, Animal Husbandry Department, M. A. C.

EARLY MICHIGAN TRAINING PIAD

H. R. SMITH, who has judged the beef breeds for many years at the International and other shows, was this year assigned the more difficult task of judging Red polls and has just received from the management of the International Live Stock Exhibition a fine letter of commendation.

Howard was in Michigan last week attending a T. B. Conference at Lansing, and stated that much of his success in cattle judging he attributed to his early training in Michigan. Many of the older residents will remember his father, the late F. Hart Smith, when active with the State Fair had a considerable reputation in picking the right animals to head the line, in our local contests at that time.—G. B. S.

Prove it —this way



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Feb. 9—Durocs. J. C. Barney, Coldwater, Mich.
Feb. 17—Poland Chinas. Witt Bros., Adrian, Mich.
Feb. 27—Poland Chinas. Mygrants, St. Johns, Mich.
Feb. 28—Poland Chinas, Charles Wetzel & Sons, Ithaca, Mich.
Mar. 1—Poland Chinas, Archie Ward, Breckenridge, Mich.
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His dam, a great grand-daughter of King Segis and Pontiac Korndyke, was 2nd Prize Junior 4 yr. old in both 7 and 30 day divisions, State of Michigan in 1918; her records being 30.79 lbs. butter and 653.10 lbs. milk in 7 days and 124.21 lbs. butter and 2779.90 lbs. milk in 30 days.

His 32 lb. sire is by a son of Pontiac De Nijlander, a 35.43 lb. Michigan champion. The 32 lb. dam of his sire is also a 2nd Prize Michigan cow in the Senior 4 yr. old 7 day division in 1918 and her dam a 29.43 lb. cow.

First check for $250.00 gets him f. o. b. White Pigeon, Mich. Pedigree and photo on request.
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—The cow in question is suffering a persistent corpus lateum in the ovary. If this is dislodged by a veterinarian who has had experience in the treatment of the reproductive organs of cattle it is quite probable that the cow will come in heat. —John P. Hutton, Associate Prof. of Surg. and Med., M. A. C.

COW HAS MASTITIS

I have a four year old heifer that freshened in April, 1921. She came in heat twice in the following August and was served by a bull but did not get with calf and has not come in heat since. Cow is fat and in good health and not giving milk. What can I do for her to bring her in heat?—J. D., Tyre, Mich.

—It is quite probable that there is from mastitis. It would be all right to beef her if she has not elevation of body temperature and there are no large abscesses in the udder. —John P. Hutton, Assoc. Prof. of Surg. and Med., M. A. C.

FIFTEEN YEARS OF WOOD LIFE TRAGEDY

(Continued from page 24)

we know it, would come to an end. In the United States today three billion dollars are invested in manufacturing plants where the raw material is wood. Fourteen million people, or one-eigtht of the total population of the country, are dependent upon these wood-working plants for their livelihoods. Yet within the last five years seven thousand sawmills have been junked in this country because of lack of material.

The hour for action is not ahead of us. It is here. Tomorrow will be too late. If every governor in every state realized this today there would be a wholesale resignation of incompetents throughout the land, and their replacement by men who are technically and professionally fitted. Conservation and propagation is a science. It is a life and death problem confronting a hundred and twenty million people in the United States. It is not a trivial matter to be juggled in the hands of politicians, or to be guided happen-chance by lucky appointees chosen from any and every walk of life. It is a problem for broad and intelligent minds technically and professionally prepared for the gigantic work in hand—the very men who are held back, kept out, and seldom employed. And there seems to me but one inference. Such men, the very biggest that can be secured for the work, will not prostitute their ability, their training and their profession by seeking political influence. They cannot swing counties or sections of states. Such men are employed in our colleges and our universities. Upon them we depend for the education of our children and the advancement of science. They have forgotten more about real conservation, than the conservation departments of all our states will ever know. Yet governors seldom appoint them, legislatures rarely employ them. Why?

BACK TO GOOD OLD MICHIGAN

As I am returning to Grand Haven, Michigan, (Good Old Michigan) you can send the next and following copies of M. B. F., to that address and oblige. I enjoy the paper and am disappointed if I miss a copy.

While I am not engaged in active farming my heart is in that work and as Gladstone said early in his political life that farming is one of the foremost foundations of any commonwealth I like to keep informed of its progress, for it is making progress now as at no other time in history. Thanking you, I remain, M. A. Connor, old address Salt Lake City, Utah, new address, Grand Haven, Michigan.

Child of eight bitten by a dog—explanation is animal was "antagonized"— Entertainment Benefits Church.

GUERNSEYS

FOR SALE—REGISTERED GUERNSEY HEIFers at reasonable prices, also choice bull calves of May Rose breeding.
H. W. WIGMAN, Lansing, Mich., Box 52.

GUERNSEY BULL 1½ YEARS OLD. SIRE and dam A. R. Typy, robust and well bred. 7-8 blood of Norman Missankee Red Nose. Price $125. Accredited herd. **A. M. SMITH, Lake City, Mich.**

JERSEYS

JERSEY BREEDERS ATTENTION!

We offer several yearling bulls, ready for service out of a **Silver Medal Sire** and **R. O. M. Dams.** Good looking individuals, and priced to sell.
Federal accredited herd.
Samuel Odell, Owner HIGHLAND FARM Shelby, Mich. Adolph Heege, Farm Supt.

REG. JERSEYS, POGIS 99th OF H. F. AND Majesty breeding. Young stock for sale. Herd fully accredited by State and Federal Government. Write or visit for prices and description.
GUY C. WILBUR, BELDING, Mich.

FOR SALE—YEARLING JERSEY BULLS Shopie 19th Tormentor breeding.
J. E. MORRIS, Farmington, Mich.

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PRODUCE YOUR OWN FEEDERS UNDER EARLIRIPE HEREFORD BEEF PLAN which guarantees maximum prices. Investigate personally the success of other Michigan Farmers. For further information write
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(Herefords since 1839) St. Clair, Mich.

RIVERVIEW HEREFORDS—FOR SALE Bulls, also few females. **WM. C. DICKEN, Smyrna, Mich.**

AYRSHIRES

FOR SALE—REGISTERED AYRSHIRE bulls and bull calves, heifers and heifer calves. Also some choice cows.
FINDLAY BROS., R 5, Vassar, Mich.

RED POLLED

RED POLLED CATTLE—A few choice bulls and heifers for sale.
ROYSTAN STOCK FARM,
Will Cottle, R. R. 1, West Branch Michigan

BROWN SWISS

FOR SALE—REGISTERED BROWN SWISS heifers and cows also one bull. Herd federal accredited. **ELMWOOD FARMS, Sebewaing, Mich.**

SWINE

DUROCS

L. A. Burhans, R. 1, Lyons, Mich., has

Bred Sow Sale
February 12, 1923
45 Bred Sows, bred to Wolverine Sensation and Wolverine Decoration.
Write for Catalogue

SENSATION MARSI Our new herd boar. Sired by "Marsi" Reserve grand champion National Swine Show 1922. We are taking orders for gilts and sows for spring farrow bred to this wonderful boar.
SCHAFFER BROS., Route 4, Oxford, Mich.

PEACH HILL FARM offers choice weanling Duroc pigs, either sex. Priced very reasonable. Write us.
INWOOD BROS., Romeo, Mich.

HILL CREST DUROCS, PERRINTON, MICH. We are breeding twenty sows and eighteen gilts to a son of GREAT ORION SENSATION. Yearling, spring and fall boars. **NEWTON & BLANK, Farm 4 miles straight south of Middleton, Gratiot Co., Mich.**

REGISTERED DUROC JERSEY PIGS, AUGUST and September. Brookwater stock. Sire Schabros Top. Colonel. Dam Schabros Wonder Oriones.
ORLA WISE, So. Lyons, Mich.

O. I. C.

REGISTERED O. I. C. SERVICE BOARS AND Bred Gilts, priced to sell.
J. R. VAN ETTEN, Clifford, Mich.

O. I. C.'s 20 LAST MARCH AND APRIL Gilts bred for March and April farrow. Big growthy ones. Recorded free. One-half mile west of depot. City phone. **Otto B. Schulze, Nashville, Mich.**

BRED SOWS AND FALL GILTS FOR SALE Also some fall boars. Pedigree furnished.
WILBUR JONES, Route No. 1, Romeo, Mich.

HAMPSHIRES

A CHANCE TO GET SOME REAL HAMPshires. Boar pigs, sired by Gen. Pershing Again, Gilt Edge Tipton, Messenger All Over 10th. Gen. Pershing 2nd., and other great boars. Writes for list and prices. DETROIT CREAMERY HOG FARM, Route 7, Mt. Clemens, Mich.

HAMPSHIRES—SPRING BOARS AND BRED gilts from 25 sows to select from. Place your order now or you may be to late. 10th year.
JOHN W. SNYDER, R. 4, St. Johns, Mich.

HAMPSHIRE BRED GILTS, $20—$25. Bred sows $30—$50. Guarantee safe delivery. Registered free. **C. F. Luckhard, Bach, Mich.**

SHEEP

800 BRED EWES FOR SALE

in lots of 50 or more, black faced, from 1 to 4 yrs. old; no broken mouths, in good condition, bred to Shropshire and Oxford rams to lamb May first. Located 22 miles S. W. of Detroit on Detroit and Toledo electric and Dixie Highway. Telegraph address, Rockwood.
ALMOND B. CHAPMAN, So. Rockwood, Mich.

50 HEAD REGISTERED, BRED SHROPSHIRE ewes, large, well covered, 1 to 4 years. In fine healthy breeding condition. Flock established 1890.
C. LEMEN & SONS, Dexter, Mich.

SHROPSHIRES—10 REGISTERED EWES. Choice wooly Rams.
DAN BROOHER, Evart, R. 4, Mich.

REG. HAMPSHIRE EWES—RAMS AND DUROC spring gilts, fall pigs both sexes.
W. W. CASLER, Ovid, Mich.

Poultry for Profit

BLACKHEAD OF POULTRY

INFECTIOUS entero-hepatitis is a communicable disease of turkeys and chickens characterized by an inflamation of the intestines, mainly the ceca (enteritis), and the liver (hepatitis). It is commonly called blackhead, due to the fact that a number of the affected birds show a bluish or purplish discoloration of the comb, wattles and skin of the head. This results from a lack of oxygenation of the blood and may accompany any disease which has a tendency to interfere with the circulation. A considerable number of fowls suffering from infectious entero-hepatitis fails to show this symptom. It should, therefore, be evident that the mere presence or absence of 'blackhead' does not mean so very much to the diagnostician.

Young turkeys from one month to one year of age are most susceptible to this disease. Older turkeys and chickens show a higher degree of resistance. Chickens or turkeys which have recovered from an attack of infectious entero-hepatitis may become carriers of the infection.

This disease is caused by a protozon microparasite called Histomonas meleagridis. Diseased flocks constitute the main source of infection. Droppings of sick birds or carriers contain the organism, it has also recently been shown that eggs of the intestinal worm of poultry called Heterakis papillosa may harbor the Histomonas meleagridis, a fact which will account for the persistence of the infection in contaminated soil. Infectious entero-hepatitis is most commonly spread by introducing diseased birds or carriers into healthy flocks. Persons, birds, rodents or other animals may also carry the infection from place to place mechanically.

Symptoms

Although the symptoms may vary in different outbreaks the following signs of disease are usually noticeable: Droppiness, ruffled feathers, slow movements, weakness, lack of appetite, yellow to yellowish green diarrhea, darkening of the comb, wattles and skin of the head, and in protracted cases emiciation. Death may occur as early as the third day after the first appearance of the symptoms. In chronic cases it may take three to four weeks before the disease results fatally. The mortality ranges from 10 to 90 per cent of the flock, depending upon the amount of exposure and to the age of the fowls.

The most common pathological changes consist of thickening and ulceration of the walls of the ceca (blind pouches) and spots on the liver. These spots vary in size and color at times present a sunken appearance. In general it may be said that they are gray and tinged with yellow, green or brown. In some cases no lesions appear in the liver. One case has been reported in which the primary lesion was found in the proventriculus. Secondary lesions appeared on the serous (outside) surfaces of adjacent organs while the ceca were normal.

A person familiar with entero-hepatitis will in most cases be able to diagnose the disease by its history, symptoms and lesions. However, it may at times be necessary to submit specimens for laboratory diagnosis. In such cases one should not make the mistake of sending the head of a diseased bird because it would in no way aid the diagnostician. If the laboratory is fairly close at hand the whole bird should be submitted, otherwise the ceca and liver may be sent in suitable containers.

Treatment

Ipecac, sulphur, triplesulpho-carbolates and catechu have been used as remedies against entero-hepatitis. The two former drugs have recently been proved worthless by carefully conducted experiments. Some people who have used triplesulpho-carbolates (1 tablet to each quart of drinking water) claim that affected fowls are greatly benefitted by this remedy. The main objection to this treatment seems to be the high price of the drug. Crude catechu given in the drinking water is inexpensive and convenient to apply. Those who have tried this remedy claim that excellent results can be obtained by giving one teaspoonful of powdered crude catechu to each gallon of drinking water, keeping this solution before the flock as long as the outbreak lasts. This dosage is for adult turkeys. In order to make the treatment more effective one should prepare the flock by feeding sparingly for one day. The following morning give 1 to 5 teaspoonfuls of epsom salts to each ten fowls (dose depending on age and size of birds) in wet mash. The amount of mash be such that it will be cleaned up at one meal The following afternoon put catechu in the drinking water. As catechu has a constipating effect it is advisable to give epsom salts from time to time to assure proper elimination. In this connection it may be well to warn against the use of drugs in order to "keep the flock well." A long continued use of medicines will invariably reduce the resistance of the fowls and will pave the way for diseases rather than prevent them. Perfect health is the result of good and sound parentage plus the regular application of the principles of hygiene and sanitation in feeding and housing.

Prevention

To rid soil of contamination with Histomonas meleagridis is exceedingly difficult especially if the fowls have been allowed to range on large fields. It is definitely known that the infection will remain in the soil for many years without losing its disease-producing power. On this account turkey raising has become unprofitable in certain parts of the United States. Successful prevention must therefore begin with clean premises and clean stock. Turkeys or chickens should never be introduced from infected flocks. If there is any doubt as to the absence of black-head infection in the flocks from which birds have been taken it is advisable to keep them confined in isolation quarters for at least one month before turning them loose. By doing this it is possible to detect any disaese which might be present and to avoid the infection of clean premises and healthy fowls. Eggs bought for hatching should be washed with 70 to 80 per cent alcohol as an additional safety measure. The Histamonas melegridis may be present on the shells. In view of the fact that infection may be introduced by means of mechanical carriers one should give this possibiiity due attention.

If the disease made its appearance on a farm all visibly affected should be preferably killed and burned. The houses should be cleaned, the litter burned and the walls, floors, roosts, feeding and drinking utensils should be disinfected by a liberal application of a 3 per cent solution of compound solution of cresol or a similar coal-tar product. This disinfection of the soil of run-ways and ranges is very difficult and the most radical efforts in this direction may result in disappointment. If turkey-raising is attempted on infected premises it is best to do so in enclosed yards in order to limit the source of infection and permit frequent disinfection. Under this system it is also possible to move the flock from one yard to another which will also aid in minimizing the amount of exposure, provided the evacuated yards are cleaned and disinfected every time the flock is moved. Stagnant pools of water must never be allowed on any poultry farm. If affected birds are to be held for treatment they should be kept apart from the ones which still appear to be well, and there may be some question as to the advisability of ever turning them loose among the flock again.—H. J. Stepseth, Bacteriological Section, M. A. C.

Keep the M. B. F. coming. See page 25.

Get Winter Eggs!

See to it that there is song and cackle, scratch and action, going on in your poultry yard.

That's when the eggs come.

Feed

Dr. Hess Poultry

PAN-A-CE-A

See them get busy. It gives hens pep.

Nux Vomica is what does it—that greatest of all nerve tonics. A Pan-a-ce-a hen can't hold still. It's her good feeling that makes her hop around.

Pan-a-ce-a has Quassia in it to make hens hungry. Great combination! One makes them eat—the other helps them digest what they eat.

No dormant egg organs when that combination gets to work on a hen's system. You just get eggs—eggs.

A Pan-a-ce-a hen is always a hungry hen—an industrious hen. She gets off the roost winter mornings, ready to scratch for her breakfast.

Tell your dealer how many hens you have. There's a right-size package for every flock.
100 hens, the 12-lb. pkg. 200 hens, the 25-lb. pail
60 hens, the 5-lb. pkg. 500 hens, the 100-lb. drum
For fewer hens, there is a smaller package.

GUARANTEED

DR. HESS & CLARK Ashland, O.

I spent 30 years in perfecting Pan-a-ce-a.
GILBERT HESS
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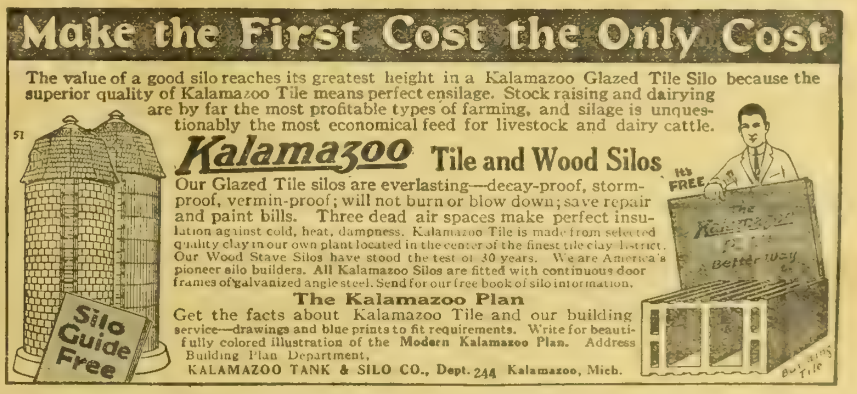
Dr. Hess Instant Louse Killer Kills Lice



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More Chicks---Less Cost

This brooder is a chick-saver and a money maker. It raises more and better chicks, at less cost than other brooders. Stove is best in the world to hold fire—air-tight and self-regulating. It burns soft coal—the cheapest brooder fuel—perfectly. Cuts fuel costs in half. Stove will also burn hard coal, wood, coke, etc. Regulator maintains even heat night and day. No trouble. Sizes for 500 or 1000 chicks.
Low priced Write TODAY.

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Detroit Incubator $12.45

140-Egg Size—Guaranteed—has double walls, copper tank, full-size nursery, automatic regulation thermometer held so that chicks cannot break it when hatching. Detroit Brooders, too. Double walled, hot water heated. Write for special low price on both machines.

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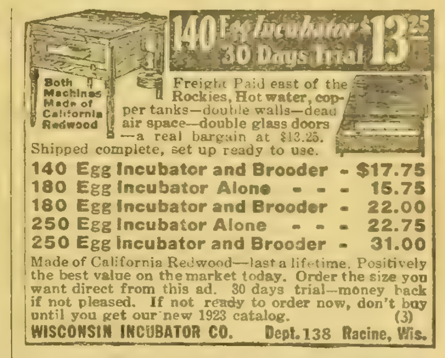

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Both Machines Made of California Redwood

Freight Paid east of the Rockies, Hot water, copper tanks—double walls—dead air space—double glass doors—a real bargain at $13.25. Shipped complete, set up ready to use.

140 Egg Incubator and Brooder	$17.75
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Made of California Redwood—last a lifetime. Positively the best value on the market today. Order the size you want direct from this ad. 30 days trial—money back if not pleased. If not ready to order now, don't buy until you get our new 1923 catalog. (3)

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BABY CHICKS—WHITE ENGLISH LEGHORNS Tom Barron strain White and Barred Plymouth Rocks S. C. R. I Reds Buff Orpingtons. All pure bred from selected stock. Live arrival guaranteed. Postage paid We do custom hatching.
DURAND HATCHERY, Fenton, Nich.

CHICKS—WE HAVE SHIPPED THOUSANDS each season since 1904. Different breeds. free booklet with guarantee and delivered price. Freeport Hatchery, Box 10, Freeport, Mich.

BABY CHICKS—REMARKABLE FOR SIZE and strength. Reasonable prices. Leghorns Anconas, Rocks, Reds, Wyandottes Orpingtons, Minorcas Spanish, Brahmas.
TYRONE POULTRY FARM, Fenton, Mich.

BABY CHICKS
Guaranteed Chicks From Select Certified Flocks
Kept on free range. Carefully fed and cared for to insure the best of health and vigor.
WHITE and BROWN LEGHORNS, ANCONAS, 50, $7.50; 100, $14; 500, $65.
BARRED ROCKS, 50, $8.50; 100, $16; 500, $75.
Write for prices on 1,000 or more.
EXTRA SELECT from Certified Flocks, $2 per hundred higher. Postpaid to your door, full live count guaranteed. Bank Reference. Free Catalog. We want your business not only this year but for years to come and we will certainly endeavor to handle your orders so as to merit your continued patronage.
COLONIAL POULTRY FARMS, Box B, Zeeland, Michigan

GOOD CHICKS--FAIR PRICES
Pedigreed and Utility Grades on Barron Type White Leghorns, also Barred Rocks and S. C. R. I. Reds. Customer report Pullets laying at 4 months and 20 days.
Pedigreed Chicks from flocks headed by males bred by Mich. Ag. College from trap-nested hens of 200 to 300 egg record.
Leghorns, 25, $5.50; 50, $10; 100, $20. Rocks and Reds, 25, $6.75; 50, $12.75; 100, $25. Utility Chicks from selected, free range, flocks, pure-bred, heavy egg strain hens. Great value in Medium Priced Chicks. White Leghorns, 25, $4; 50, $7.50; 100, $15; 500, $70; 1,000, $136. Barred Rocks and Reds, 25, $5; 50, $9; 100, $18; 500, $88.
All prices hold until May 1st, discount of one cent per chick on all orders placed before March 1st. 97% live delivery guaranteed by prepaid Parcel Post. Instructive catalog free. Bank Reference.
MICHIGAN HATCHERY & POULTRY FARMS, Box A, Holland, Michigan

BABY CHICKS
$10.50 PER 100 AND UP
From Hogan tested, well-kept and housed heavy laying flocks
Barred and White Rocks, Reds, Anconas, Minorcas: 50, $8.50; 100, $16; 500, $77.50
Buff Orpingtons, White Wyandottes: 50, $9; 100, $17.50; 500, $85
White, Brown and Buff Leghorns: 50, $7.50; 100, $14; 500, $67.50
Mixed: .... $11 per 100 straight
Postpaid, full live delivery guaranteed. Order NOW from this ad. and get them when you want them. Catalog free. ALSO EGGS FOR HATCHING. Reference, 4 Banks.
TRI-STATE HATCHERIES, Box 511, Archbold, Ohio

Michigan Chicks
Guaranteed Michigan Bred and Hatched
WHITE and BROWN LEGHORNS, ANCONAS, 50, $7; 100, $13; 500, $60.
BARRED ROCKS, R. and S. C. REDS, 50, $8.50; 100, $16; 500, $75.
1,000 Orders at 500 rate.
RHODE ISLAND WHITES, 100, $18; 200, $35.
Postpaid, full live delivery guaranteed. Strong, vigorous Chicks from select, heavy laying flocks. Order NOW right from this ad. Get them when you want them. I want your business and will try to hold it. Reference, Holland City State Bank.
KNOLL'S HATCHERY, Box L, Holland, Michigan

BABY CHICKS $12 per 100 and UP
FROM SELECT, HEAVY LAYING, VIGOROUS HENS
WHITE LEGHORNS, ANCONAS .... 50—$7 100—$13 500—$60
BARRED ROCKS .... 50—$8.50 100—$16 500—$75
Well hatched in modern machines. Carefully and correctly packed and shipped Postpaid to you and full live arrival guaranteed. We give you Bank Reference and this guarantee and you are perfectly safe in ordering your Chicks direct from this advertisement NOW, and get them when you want them. All your order and requests will have our careful personal attention. WE WANT YOUR BUSINESS. New Catalog now ready.
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Chicks That Make Profits
Strong, vigorous, well-hatched Chicks from Heavy laying flocks of SINGLE COMB WHITE, BROWN and BUFF LEGHORNS, RHODE ISLAND REDS, WHITE WYANDOTTES, WHITE ROCKS, BARRED ROCKS, BUFF ORPINGTONS and ANCONAS
100% live delivery guaranteed. Postpaid. Catalog giving particulars also price list on request. Bank Reference.
BLUFFTON HATCHERY, Box L, Bluffton, Ohio

GUARANTEED CHICKS
Hatched from High Laying Quality Fowls on free range, properly fed and housed to insure strong Chicks.
BARRED ROCKS, S. C. REDS, MINORCAS, ANCONAS. 50, $8; 100, $15; 500, $74
WHITE WYANDOTTES, BUFF ROCKS 50, $8.50; 100, $16; 500, $78
WHITE, BROWN and BUFF LEGHORNS 50, $7.50; 100, $14; 500, $65
Postpaid to your door. 100% live delivery guaranteed. Catalog free. Bank Reference.
MORENCI HATCHERIES, Box B, Morenci, Mich. Member I. B. C. A.

Chicks With Pep $11 per 100 and up
Selected Hogan Tested Flocks. Postpaid, full live delivery guaranteed. Buff Orpingtons, Wh. and Sil. Wyandottes, 50, $9.25; 100, $18. Barred and Wh. Rocks, S. and R. C. Reds, Minorcas, 50, $8.25; 100, $16. Anconas and Heavy Broilers, 50, $7.25; 100, $14. Wh., Br. and Buff Leghorns, 50, $7; 100, $13. Mixed, all varieties, $11 per 100 straight. On 500, 5% off; 1,000 10% off. Ready February 26th. Free Catalog. Member I. B. C. A.
HOLGATE HATCHERY, Box B, Holgate, Ohio

CERTIFIED CHICKS
GUARANTEED. From Hogan tested, free range stock. Our plant is modern 65 acre poultry farm.
egg production. Winners at leading shows. 10 years careful breeding for heavy
egg production. Winners at leadng shows. Big, strong, vigorous, well-hatched chicks at following prices. WHITE and BROWN LEGHORNS, CERTIFIED, 50, $8.50; 100, $16; 500, $77.50. ANCONAS, CERTIFIED, 50, $9; 100, $17; 500, $82.50. WHITE and BROWN LEGHORNS, SELECT, 50, $7; 100, $13.50; 500, $65. ANCONAS, SELECT, 50, $7.50; 100, $14.50; 500, $70. Postpaid to your door and 100% live delivery guaranteed. Order direct from this ad. early and get them when you want them. Also breeding stock and special mating Chicks. Get Our Catalog. Reference 2 Banks. TOWNLINE POULTRY FARM, Box 27, Zeeland, Mich.

GUARANTEED CHICKS
Full 100% live arrival guaranteed. Postpaid. Personally inspected and hatched from STATE INSPECTED Flocks. PURE TOM BARRON STRAIN WHITE LEGHORNS, 50 $8.50; 100, $16; 500, $77.50; 1,000, $150. HEAVY LAYING BROWN LEGHORNS, 50, $8; 100, $15; 500, $72.50; 1,000, $140. SELECT ANCONAS, 50, $9; 100, $17; 500, $82.50; 1,000, $160.
10% OFF THESE PRICES ON ORDERS RECEIVED BEFORE FEBRUARY 15th.
Get our fine new catalog, it's free. We want your business and will give it our most careful attention. RURAL POULTRY FARM, Route 1 B, Zeeland, Michigan.

SUNBEAM HATCHERY
The Chicks that I sell are produced under my personal supervision in a good, modernly equipped hatchery which is kept in best possible condition. The parent stock is carefully selected and of best heavy laying strains, kept on free range, well-housed and handled. Free from disease and properly fed. This enables me to produce strong, growthy Chicks which will mean PROFIT to my customers. PRICES: WHITE, BROWN AND BUFF LEGHORNS, 50, $7; 100, $13; 500, $62.50. BARRED ROCKS, R. AND S. C. REDS AND ANCONAS, 50, $8; 100, $15; 500, $72.50. WHITE AND BUFF ROCKS, WHITE WYANDOTTES, AND B. MINORCAS, 50, $8.50; 100, $16; 500, $77.50. WHITE AND BUFF ORPINGTONS, SIL. L. WYANDOTTES, 50, $9; 100, $18; 500, $87.50. I guarantee full live delivery by prepaid post. Get your order in now and I will ship when you want them. Bank Reference. Catalog Free. H. B. Tippin, Box E, Findlay, Ohio. Member I. B. C. A.

ADVANTAGES IN BUYING CHICKS READY HATCHED

IT is estimated that last season (Spring of 1922) fully ten per cent of the chicks produced in the United States were hatched and sold right from the incubators by the mammoth hatcheries.

In northern Ohio are most plentiful and where they have been longest in operation the big majority of the farmers now buy their chicks from the hatcheries, having found this method is much more economical than trying to produce them at home by the old methods and has other advantages besides that of economy. Very few, if any, of these farmers have gone back to the old methods after once trying this way of supplying the needed chicks each spring.

To handle these chicks to the best advantage the only equipment needed is a suitable small house and a colony brooder stove. For 500 or less chicks a house 10x12 or 10x14 feet is required, This should be just high enough to allow the attendant to move about in it comfortably and should have a good tight floor. Many of these houses are mounted on runners, simply 2x4 or 2x6 timbers set up edgewise, and they may then readily be moved about from place to place as desired. The first cost of the 2 or 25 brood coops required to hen brood 400 or 500 chicks will more than cover the cost of such a house and the stove to go in it. Frequently there is a small building already at hand which may be converted into a very suitable brooder house.

When the attempt is made to produce the crop of chicks by the old method there is a great waste of time in setting and caring for a lot of hens, and later on a lot of small broods of chicks. Besides, the time of the hens throughout the hatching season is wasted, since they might just as well be producing eggs for the market during all this time. These eggs will go part way toward paying for the chicks. When the chicks are purchased they are all one age and one size throughout the growing season; also all one color if one variety is purchased and they will be nearly alike in feeding requirements. If the chicks are produced by the old methods they will be of many different ages and sizes, and frequently at the end of the hatching season the farmer's wife has not succeeded in getting nearly as many chicks as she had planned to have.

These chicks are shipped to the buyers as soon as they are nicely dried off in the incubators. They are mailed in boxes made especially for this purpose, and go safely 1,000 to 1,500 miles.

One of the greatest advantages, however, in buying chicks is the fact that such a purchase direct from a good hatchery enables the farmer to switch in one season and at practically no expense from a flock of mongrels, mixed breeds or an unsatisfactory flock of pure breds to a flock of good pure bred fowls or pullets, all one age, one size, one color and one in food requirements throughout the season. If a flock of 200 layers is desired, it is advisable to buy 500 chicks at one time. As a rule, one-half or more are mules, and, naturally, there may be some loss before maturity.

If these chicks are properly fed and cared for, there need be but little loss. We have known 500 chicks to be brought to maturity with a loss of only 20, and these were lost largely through accident.

As soon as the combs on the cockerals begin to show growth it is well to separate them from the pullets, and feed quite liberally. At ten or twelve weeks old these cockrels will be ready for the market and will bring in more actual cash than was paid for the entire bunch of chicks when purchased. Then also it will likely be advisable to dispose of all the old hen stock on the place to make room for the flock of pure bred pullets. This will mean putting the 200 old hens on the market, which will be another very considerable source of revenue.

We would sum up some of the advantages and money returns on the purchase of 500 chicks as follows:—

First, the saving of the time of the hens required to hatch and brood that number of chicks. Allowing 8 live chicks from each setting, it will require over 60 hens three weeks

POULTRY BREEDERS' DIRECTORY

Advertisements inserted under this heading at 30c per agate line, per issue. Commercial Baby Chick advertisements 45c per agate line. Write out what you have to offer and send it in. We will put it in type, send proof and quote rates by return mail. Address The Michigan Business Farmer, Advertising Department, Mt. Clemens, Michigan.

PULLETS, HENS AND COCKERELS
S. C. White Leghorns and S. C. and R. C. Black Minorcas. Must make room before cold weather. About ready to lay.
LAPHAM FARMS, Pinckney, Mich.

SILVER SPANGLED HAMBURG COCKERELS at $2.00, $3.00 and $5.00 each. J. G. PHILPOTT, Port Huron, Mich., R. No. 1, Box 44.

A FEW FINE LIGHT BRAHMA COCKERELS left, $4 each.
MRS. E. B. WILLETS, Reading, Mich.

LEGHORNS

LEGHORNS
S. C. Buff Leghorn Hens, Pullets and Cockerels. Hens and pullets $2.50 each; cockerels $3.00 to $5.00 each. Show birds a matter of correspondence. LAPHAM FARMS, Pinckney, Mich.

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WHITE WYANDOTTES—MARTIN STRAIN Michigan State Fair winners, 1922. Cockerels and pullets, $3 to $7.
WAYNE CHIPMAN, Washington, Mich, Route 2.

FOR SALE—HIGH GRADE WHITE WYANdotte and R. C. Rhode Island Red cockerels—$3.00 each until January 1.
C. W. HEIMBACH, R. 1, Big Rapids, Mich.

FOR SALE—CHOICE WHITE WYANDOTTE cockerels. Fishel strain at $3. Also hatching eggs.
MRS. TRACY RUSH, R. 7, Ithaca, Mich.

PLYMOUTH ROCK

BUFF ROCK COCKERELS—BIG HUSKY, healthy, uniform color, the result of years of careful breeding.
J. C. CLIPP & SONS, Box M, Saltillo, Ind.

WHITE PLYMOUTH ROCKS. LARGE HEAVY laying pullets, winning quality. $1.75 each. No cockerels. Eggs for hatching.
MRS. FLORENCE HOWARD, Petersburg, Mich.

BARRED ROCK COCKERELS. BRED FROM Holterman's Pedigreed Aristocrats direct. Price $4—two for $7 until Feb. 15.
N. AYERS & SON, Silverwood, Mich.

BARRED ROCK COCKERELS. SIRED BY Detroit and Grand Rapids 1st and 2nd prize winners. W. C. Coffman, Benton Harbor, Mich., R. 3.

PURE WHITE ROCK COCKERELS. LARGE and vigorous from prize winning stock. $3.50 each. DAWSON'S FARM, R. No. 4, Muskegon, Mich.

CHOICE PARKS STRAINED BARRED ROCK cockerels. $2.75 each until Feb. 15.
REESE BROS., Williamston, Mich.

ORPINGTONS

BUFF ORPINGTON COCKERELS
Cooks strain. A. J. BREWBAKER, Elsie, Mich.

RHODE ISLAND REDS

RHODE ISLAND REDS, TOMPKINS STRAIN
Both combs. Stock for sale after September 15th.
WM. H. FROHM, New Baltimore, Mich R. 1.

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PURE-BRED BOURBON RED TURKEYS
MRS RENA MEEKS, Belmont, Mich.

BOURBON RED TURKEYS UNRELATED STOCK
Eggs in season.
THOS. G. CALLAGHAN, Fenton, Mich.

MICHIGAN'S BEST GIANT BRONZE TURKEYS
Large, vigorous birds of splendid color from world's best strains. Unrelated stock furnished.
N. EVALYN RAMSDELL, Ionia, Mich.

MAMMOTH BRONZE TURKEYS. START right by buying strong, vigourous, pure bred stock. Write for prices.
MRS. PERRY STEBBINS, Saranac, Michigan.

PURE MAMMOTH BRONZE TURKEYS. VIGorous and healthy. Toms $9.00, hens $6.00.
DAWSON'S FARM, R. No. 4, Muskegon, Mich.

I HAVE A FEW MORE MAMMOTH BRONZE turkeys for sale. Gobblers $10, hens, $7.
MRS. WILBUR SPIDLE, East Jordan, Mich.

FOR SALE—MAMMOTH BRONZE TURKEYS
Beautiful birds.
MRS, WILL DILLMAN, R. 5, Cassopolis, Mich.

WHITE HOLLAND TURKEYS
The farmers friend. No crop failure when you raise them as they eat all insects that destroy crops. Toms $15.00 Hens $10.00. Trios $30.00.
ALDEN WHITCOMB. Byron Center, Mich.

PURE BRED W. H. TOM TURKEYS, FOR sale, $10 each. One last years bird. weight 28 lb., $15. Mrs. Ed. Colling, Fostoria, Mich.

FOR SALE—WHITE HOLLAND TOMS $8. Satisfaction guaranteed.
JOHN CRAWFORD, Dowagiac, Mich., Cass Co.

ORDERS ENTERED NOW AT $1.50 PER setting for eggs from the largest and whitest Mammoth Pekin Ducks raised in Michigan. Deposit required for sure delivery. A few choice drakes yet to spare. Cedar Bend Farm, Okemos, Mich.

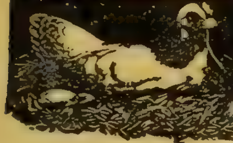
MAMMOTH PEKIN DUCKS AND R. C. RHODE Island Reds. Cockerels $2 each.
MRS. OTIS TERPENING, R. 1, Ithaca, Mich.

HIGHEST PRICES PAID FOR LIVE AND Dressed Poultry, Veal, Eggs, Rabbits. A square deal always. C. E. McNEILL & CO., 325 W. So. Water St., Chicago, Ill

HAVE YOU POULTRY
FOR SALE?
AN AD IN THE MICHIGAN
BUSINESS FARMER
WILL SELL IT!

A New Discovery Makes Hens Lay

Any poultry raiser can easily and quickly double his profits by doubling his egg yield through the remarkable discovery of M. B. Smith, a Kansas City chemist.



Working along entirely original lines Mr. Smith discovered why hens lay less in winter than in summer, and perfected a formula that turns loafers into layers and profit makers.

Within five or six days this discovery, which is called Ditto Egg Tablets, will rejuvenate your flock. Your hens will go strutting and cackling about with red combs and full of life and pep. Every nest will yield an egg nearly every day in the week, which means a lot, since eggs are certain to sell for 60 cents or more. This is not guess work as over 100,000 successful poultry raisers testify to the value of Mr. Smith's products.

Although different from anything you ever heard of, Ditto Egg Tablets are easily administered by simply dropping in drinking water.

So confident is Mr. Smith you can double or triple your egg yield, that he offers to send two large $1 packages of Ditto Egg Tablets (enough for a season) to any reader who will write for them. If you are satisfied they cost only $1 on this introductory offer, otherwise, nothing.

Send no money—just your name and address to M. B. Smith, 1261 Coca Cola Building, Kansas City, Mo. The two $1 packages will be mailed immediately. When they arrive, pay the postman only $1 and postage. Use the tablets 10 days. If you are not getting more eggs or are not satisfied for any reason, simply return unused tablets and your money will be returned immediately without question. A big Kansas City bank guarantees the reliability of this offer. Write today before this introductory offer is withdrawn, as you can sell one package to a friend and thus get your own free.

Chicks World's Champion Layers

Tom Barron Imported White Leghorns

SILVER WARD HATCHERY ZEELAND, MICH.

Sheppard Famous Anconas Direct

From grand selected flocks on full range. Strong vigorous chicks that will prove great layers. Flocks culled by poultry experts and headed by vigorous pedigreed males. Fine catalog free.

SILVER WARD HATCHERY
Box 420, Zeeland, Mich.

DAY OLD CHICKS

Strong, sturdy, S. C. White Leghorns (English strain) from large, vigorous, yearling hens, raised on our own farms. That lay and pay. Barred Rocks and Rhode Island Reds, from best laying strains. Send for our illustrated catalog, free.

Hillcrest Poultry Farms and Hatchery
R. R. 2 Holland, Michigan.

Star Hatchery BABY CHICKS

From Select, Vigorous, Certified, Heavy Laying Breeding Stock

WHITE and BROWN LEGHORNS and ANCONAS
50—$7 100—$14 500—$65
SINGLE COMB REDS
50—$8 100—$16 500—$75

Hatched by modern methods in best machines under our personal supervision. Carefully packed and sent postpaid and 100% live delivery guaranteed. Bank Reference. You take no chances in ordering STAR BABY CHICKS. Place your order now and get them when you want them.

STAR HATCHERY, Box X, Holland, Michigan

GUARANTEED BABY CHICKS

TOM BARRON ENGLISH S. C. WHITE LEGHORNS

1,500 breeders on our farm. Hatch every Tuesday starting March 1st. Write at once for new catalog and prices. 100% delivery guaranteed, shipped postpaid.

DOWNS POULTRY FARM
R. F. D. 1, Washington, Mich.

DAY OLD CHICKS

Best Paying, Heavy Laying, Pure Bred Tom Barron English White Leghorns, Rhode Island Reds. Park's Barred Rocks. **Strong healthy chicks from State Inspected and Approved Stock.** Order now at new low prices. Instructive catalog FREE.

Brummer's Poultry Farm, Box 26, Holland, Michigan

WHEN WRITING TO ADVERTISERS MENTION THE M. B. F.

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merely to hatch the chicks. Allowing 20 chicks to a brood it will require 25 hens for two months to brood them. This is equal to the loss of fully three months time on 25 hens. This, too, during the very best laying season. In these three months each hen would produce not less than 4 dozen eggs at the lowest estimate, meaning 100 dozen eggs, to say nothing at all about the value of the time saved by the attendant. It is very little more trouble or work to care for four or five hundred chicks in the proper brooder house than to take care of a couple of hens with broods. The next source of revenue would be say 200 cockerels at not less than 50 cents each. If properly finished and marketed they are more likely to bring 75 cents each. But we have shown a saving of at least $25 of eggs laid, and allowing $100 for 200 cockerels gives us a clear cash return of $125, and a flock of 200 pullets at 10 or 12 weeks old, the cost of the pullets being nothing whatever but the feed which they have consumed to that age. The 200 old hens which would be left and marketed in the fall, since the pullets would replace them would probably bring $150 more.

The brooder house and stove required should not cost over $60 to $70 but this is a permanent investment since they will last a lifetime.

A few words of caution. Beware of very cheap chicks. They may easily be too cheap to be good or prove satisfactory. Buy direct from a known hatchery. The men who, themselves, hatch the chicks and supervise the flocks from which the eggs come that produce the chicks. You will find the advertisements of such hatcheries in the leading farm publications. Usually the hatcheries are behind in filling orders during the rush season from the middle of March to the middle of May; hence, it is well to order quite early if the chicks are wanted on a certain date during this period. Provide also well in advance of the arrival of the chicks, a suitable house and brooder with which to raise them. As a rule, the hatchery men can advise you as to these brooder houses and stoves.

CHICK FEEDING

Great care in feeding young chicks should be exercised. A few don'ts should be observed.

1—Don't feed a chick till it is at least 48 hours out of the shell.
2—Don't feed too much at a time.
3—Don't feed sloppy foods.
4—Don't feed poor quality food.
5—Don't keep the chicks too warm or too cold.
6—Don't overcrowd your chicks.
7—Don't allow filth to accumulate in their quarters.
8—Don't keep chicks indoors too long.
9—Don't neglect keeping water and buttermilk or sour milk before them at all times.
10—Don't neglect the grit and fine oyster shells and charcoal.—M. A. C.

CO-OPERATIVE MARKETING OF EGGS

Co-operative egg selling associations have been organized by several farmers in several parts of the country. One of the most successful is in Orange township, Black Hawk County, Iowa.

"The object of the association is to produce better and more eggs. The eggs are guaranteed strictly fresh. Eggs must be gathered at least once a day in winter, twice a day in summer, and all male birds sold or shut up June 1. Each member is furnished a letter which is stamped on each egg sold by him and on each carton containing eggs. The producer must replace every egg that is not up to the guarantee. All eggs are sold at four cents a dozen above the market price. The association sells about 10,000 dozen eggs a year." (Iowa State College Bulletin No. 184.)

Dear Mr. Slocum—I am spreading the gospel of the M. B. F. among the ruralites. You surely are making a hit with them. Your December 9 issue was a hummer. Keep each number up to a high standard and you surely will win out so that in the near future you will be back to a weekly issue which will enable you to reach the one hundred thousand circulation mark. Respectfully yours, C. W. Eisenmann.

Keep the Business Farmer coming. See page 25.

CHICKS

THAT GROW, LAY AND PAY
Barron English White Leghorns, Brown Leghorns and Anconas.

PURCHASE THIS YEAR'S CROP OF CHICKS from tested layers, headed by large vigorous 260 to 288 Pedigreed Males.

CUSTOMERS REPORT BIG PROFITS with these wonderful layers. Write today for our large illustrated catalogue. It tells all about them, it's free.

WYNGARDEN HATCHERY
Box B, Zeeland, Mich.

BABY CHICKS

***Bargain Prices—Write Quick.* Best paying, highest quality,** Pure Bred Tom Barron and Hollywood White Leghorns—Egg Records 270 to 300 eggs in one year—Brown Leghorns, Anconas, Barred Rocks, Rhode Island Reds, White Wyandottes. Book orders now—**get liberal discount. Valuable catalog free.**

We guarantee to save you money—give you strong, healthy, perfect chicks, the best that money can buy, guarantee live delivery, and absolute satisfaction. **Write today sure.**

SUPERIOR POULTRY FARMS
Box 104 - Zeeland, Michigan

Egg Bred White Leghorn CHICKS

Double your poultry profits with our Famous Improved Winter Egg Basket Strain of S. C. White Leghorns. They are the selected, long, deep-bodied typical hens with large lopped combs, mated to the famous Hollywood and Beall 250-300 EGG Pedigreed sires. All our breeders are culled, selected, and mated by poultry specialists and inspected and approved as to their laying ability and health.

Our Leghorns are winners at LEADING Egg Laying Contests and Poultry Shows. Thousands of customers all over the U. S. are reaping a golden harvest of eggs the year round from our egg bred layers. **You, too, can make big money with them.**

FREE **Valuable Catalog tells all about** EGG FARMING FOR PROFIT and What and How to feed for results. **Worth many dollars to you.** Get our prices on chicks and eggs before you buy. **Write AT ONCE.**

Q. DEVRIES, Grandview Poultry Farm. Box L Zeeland, Mich.

FROM ONE OLD TRUSTY TO 42,000 CAPACITY IN 8 YEARS

A grow like this means Honest dealing. Please send for our new catalog at once, it is a dandy. Reasonable prices and satisfaction guaranteed. Order early to avoid delay in shipping, as many were disappointed last season.

CITY LIMITS HATCHERY
R. 5 Holland, Mich.

400,000 Chicks

Big, strong, Well-hatched Chicks from selected to lay stock on free range, properly fed and housed to insure health and vigor. **WHITE, BROWN & BUFF LEGHORNS, 50, $7; 100, $13; 500, $62.50. BARRED & WHITE ROCKS, S. C. & R. C. REDS, ANCONAS, 50, $8; 100, $15; 500, $72.50. WHITE WYANDOTTES, 50, $8.50; 100, $16; 500, $77.50. BUFF ORPINGTONS, SILVER WYANDOTTES, 50, $9.50; 100, $18; 500, $87.50. POSTPAID.** We guarantee full 100% live arrival. Reference, Citizen's Bank. Order direct from this ad. and save time. Free circular.

MODERN HATCHERY
Box F, Mt. Blanchard, Ohio

HIGHEST QUALITY CHICKS

Michigan's Old Reliable Hatchery

(The most modern and best equipped Hatchery in the state)

PURE BRED English and American S. C. W. Leghorns; S. C. Anconas; Barred Plymouth Rocks and R. I. Reds. **Strong, well hatched** chicks from tested Hoganized Free range stock that **make wonderful winter layers.**

Chicks sent by Insured Parcel Post Prepaid to your door. **100%** live delivery guaranteed. Fifteen years of experience in producing and shipping chicks has given absolute satisfaction to thousands. Write for illustrated free catalog and price list.

Get **lowest price** on **best quality** chicks before you buy.

Holland Hatchery, R. 7, Holland, Mich.

GUARANTEED BABY CHICKS

From World's Champion Layers. Certified, Trap-Nested, Pedigreed, Snowden's English White Leghorns, 250-291 Egg records; Sheppard's 331 Egg strain Anconas. **Guaranteed** strong healthy chicks. **Real money makers. Beautiful Catalog FREE.**

FRANK A. VAN BREE, Box 48, Zeeland, Mich.

Day Old Chicks

From Select, Hogan Tested, Flocks on Free Range. Well-fed and handled to insure strong, vigorous chicks. Heavy Layers. **PRICES: WHITE and BROWN LEGHORNS and ANCONAS, 50, $7.50; 100, $14; 500, $65. BARRED ROCKS, 50, $8.50; 100, $16; 500, $75.** Hatched right and shipped right. Postpaid. 100% live delivery guaranteed. Bank Reference. Order direct from this ad. Circular free.

BORST & ROEK, Box P, Zeeland, Mich.

CHICKS From State Inspected Flocks

We Specialize In ARISTOCRAT BARRED ROCKS, TOM BARRON WHITE AND EVERLAY BROWN LEGHORNS, SHEPPARDS STRAIN ANCONAS. SELECT ARISTOCRAT ROCK CHICKS, $30 per 100. SELECT LEGHORN AND ANCONAS CHICKS, $22 per 100. 10% discount on early orders to March 1st on these special matings. Get our special low prices on our grade B Chicks. Postpaid, full live delivery guaranteed. Reference 2 Banks. Also Breeding stock in above varieties. Member M. B. C. A. **FAIRVIEW POULTRY FARM, Route 2 K, Zeeland, Michigan.**

CHICKS

$10. per 100 and Up

From good heavy laying flocks on free range. **WHITE LEGHORNS, 50, $7; 100, $13; 500, $62.50. BARRED ROCKS AND REDS, 50, $8; 100, $15; 500, $72.50.** From Extra Select flocks headed by Mich. Ag. College Cockerels. **WHITE LEGHORNS, 50, $8.50; 100, $15; 500, $72.50. BARRED ROCKS AND REDS, 50, $9; 100, $17; 500, $82.50.** Postpaid and full live delivery guaranteed. Order now from this ad. Catalog Free.

LAKE VIEW POULTRY FARM,
Route 8, Box 3, Holland, Michigan

OVIE'S BABY CHICKS

BABY CHICKS OF QUALITY AND MERIT

HEAVY LAYING

breeding stock or real quality helps producers Ovie's strong healthy and husky chicks.

25,000 Thrifty Chicks Weekly

Write for catalog. 14c and up, prepaid. 12 leading breeds. Delivery guaranteed.

Ovie's Poultry Farm and Hatchery
132 Boots Street, Marion, Indiana

QUALITY CHICKS

GET THE PROFITABLE AND LAYING KIND

They will pay you big. Free range. Selected. Hogan test. Orpingtons, W. & Sil. Wyandottes, 50, $9.25; 100, $18. Rocks, Reds, Minorcas, 50, $8.25; 100, $16. Anconas, heavy broilers, 50, $7.25; 100, $14. Leghorns, 50, $7; 100, $13. Mixed, all varieties, $11 per 100 straight. Postpaid. Safe delivery. Circular free. Bank reference.

Middlepoint Hatchery, Middlepoint, Ohio, Dept. B.

PIONEER FARMS

CHICKS FROM CERTIFIED FLOCKS Single Comb White Leghorns, Heavy Layers, 50, $7; 100, $13; 500, $60. Tom Barron Strain S. C. W. Leghorns, 50, $8; 100, $15; 500, $70. Barred Rocks, Extra Fine, 50, $9.50; 100, $18; 500, $85.

All Chicks hatched from our own flocks. Postpaid, 100% live delivery guaranteed. Reference, Zeeland State Bank. Circular.

PIONEER FARMS, R. 3 M, Zeeland, Mich.

Barred Rocks
White Rocks
Rhode I. Reds
Wyandottes
Orpingtons
Leghorns—
Wh., Br., Buff
Anconas
Minorcas

BABY CHICKS

Hardy free range stock—a Pure Bred Practical Poultry especially adapted to the farmer poultryman; stock that has proved of exceptional practical value on Michigan farms.

PULLETS

A limited number of S. C. White and R. C. Brown Leghorns, and White Rocks. Write for quotations.

STATE FARMS ASSOCIATION
202 Chase Block, Kalamazoo, Michigan

WOLVERINE BABY CHICKS ARE CHICKS THAT SATISFY

Bred for egg production 13 years. We hatched and shipped chicks for 12 years. This assures you success. **ENGLISH TYPE WHITE AND BROWN LEGHORNS** 100% safe arrival guaranteed. Write for catalogue. It's free. **WOLVERINE HATCHERY, R. 2, Zeeland, Mich.**

CHICKS Low prices. From selected heavy laying flocks. **English White Leghorns, Brown Leghorns, Anconas, Barred Rocks.** Postpaid, full live delivery guaranteed. Catalog free. Bank Ref. **THE BOS HATCHERY, R. 2, Zeeland, Michigan. John Bos, Prop.**

WHITTAKER'S R. I. REDS—Michigan's Greatest Color and Egg Strain. Bred from winter layers for 13 years. Chicks and eggs. Write for free catalog. **Interlakes Farm, Box 4, Lawrence, Mich.**

BABY CHICKS—FROM SELECTED FLOCKS Six leading varieties. Popular prices and guaranteed delivery. Write for catalog and price list.
H. H PIERCE, Jerome, Mich.

CHICKS—SINGLE COMB BUFF LEGHORNS only Strong healthy chicks from good laying stock. **J. W. WEBSTER, Bath, Mich.**

BABY CHICKS—PUREBRED BARRED ROCKS, Buff Wyandottes, Black Minorcas, R. I. Reds, Brown and White Leghorns. 12c and up shipped postpaid. **THOS. G. CALLAGHAN, Fenton, Mich.**

LOOK—75,000 CHIX 12c AND UP. TEN purebred certified egg-tested varieties. Hatching eggs, circular free. **LAWRENCE POULTRY FARM, R. 7, Grand Rapids, Mich.**

CERTIFIED BABY CHICKS S. C. Brown and English strain White Leghorn Baby Chicks. Write for catalogue. **Cooks Poultry Farm, Holland, Mich.**

MARKET FLASHES

MARKET SUMMARY

Wheat steady. Corn, oats and rye unchanged. Beans firm. Receipts of eggs large and prices easy to lower. Butter steady and supply small. Poultry market easy, owing to large supply and small demand. Dressed calves steady and hogs easy. Potatoes in active demand. Cattle dull and lower. Sheep firm.

(Note: The above summarized information was received **AFTER** the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press —Editor.)

FOOTE'S MARKET REVIEW

THE contrast between business in the United States and business conditions in European countries is very marked, and bringing about a restoration of pre-war conditions across the Atlantic is evidently going to be slow. One of the most important announcements made in this country is that of the railroads that record expenditures for new equipment and improvements are going to be made this year, and twenty-seven roads plan to spend more than $350,000,000. These systems have less than 40 per cent of the milage of the country, and their officers say that even greater expenditures will be made if conditions are favorable. "If it is to be assumed that an equal amount will be spent by railroads having the reminder of the mileage of the country," says the Railway Age, "the total expenditures for equipment and improvements will exceed $700,000,000." It is not generally believed, however that enough money will be spent this year to make good the deficiency caused by several years of stoppages of growth, and increases in expenditures are well safeguarded. Published statements just out show that the class 1 railroads earned much more money last year than in 1921, but they only earned 4.02 per cent on the investment in their property. It is learned that more traffic has been moving over the railroads recently than ever before this season. Our import trade looms up big for the past calendar year, and imports were around $400,000,000 greater than for 1921, but exports ran around $700,000,000 below those for 1921. The packers report that their export trade in meats is seriously injured by the European political situation, as well as economic conditions. On the other hand, the domestic trade in packing house products shows marked improvement, beef moving into trade channels more freely, while there has been a broad and strong demand for fresh pork. Money is loaned by the banks at unchanged rates, Chicago banks receiving from 5 to 5¼ per cent.

The Fall in Wheat Prices

The long upward movement in prices for wheat reflecting the large exports of wheat and flour from the United States and Canada, has been followed by big breaks in values, renewed warlike occurances in Germany and marked falling off in our exports of breadstuffs serving to bring a bearish sentiment among traders on the Chicago Board of Trade, and the former substantial premium over prices of a year ago has largely disappeared. Still some large foreign purchases of rye have been made within a short time, and it was reported that Germany bought in the first week of 1923 a total of 6,000,000 bushels of rye, the largest purchase of the season. Because of its relative cheapness, rye has all along been in large foreign demand, Germany leading in buying, and in all probability the surplus supply will all be needed. The visible rye supply in this country is placed at 10,865,000 bushels, comparing with 7,145,000 bushels a year ago; that of oats at 32,122,000 bushels, comparing with 67,182,000 bushels last year; and that of corn at 16,585,000 bushels, comparing with 24,787,000 bushels a year ago. Recent marketing of all grains reached the largest proportions seen in five years, and it is evident that farmers largely want to sell their surplus holdings or at least a fair share. The world's wheat crop is now placed at 2,932,000,000 bushels, comparing with 2,228,000,000 bushels for the year preceding the war's close. The flour trade is very dull, and large dealers are well supplied, while millers are buying only enough to keep the mills at work, because of the recent unsettled state of the wheat trade. Within a short period flour prices have declined from 50 to 75 cents a barrel. May wheat sells in Chicago at $1.19, compared with $1.12 a year ago; May corn around 72 cents, compared with 53 cents last year; May oats at 45 cents, compared with 38 cents a year ago;and May rye at 88½ cents, compared to 83¾ cents a year ago. Barley sells for cash at 57 to 60 cents.

The Cattle Industry

The markets of the country cannot use as many cattle to advantage as they could several weeks ago, and on days when supplies are much above the average prices are pretty sure to develope more or less weakness, as happened on last Monday, when a "run" of 24,740 head in the Chicago Stock Yards sent prices down from 15 to 25 cents for the principal part of the offerings. It should be stated, however that the country shippers are very apt to get in too many cattle at the beginning of the week, and later rallies are quite the usual occurance, as happened last Tuesday, when receipts of only 12,000 brought about a rally of 25 cents for the medium to pretty good grades. For several weeks the receipts have consisted of mainly short-fed and warmed up cattle, and the principal part of the offerings have sold far below prices paid for choice beef steers. Sales of the latter are made at a substantial premium, with the bulk of the beef steers bringing $8.25 to $10.50. The course of the cattle market last week was a surprise, prices being largely 50 cents higher, in spite of the heavy supplies, the Chicago receipts aggregating 60,800 head, comparing with 50,247 a week earlier and 66,968 a year ago. The best long fed steers sold at $10.50 to $11.85, and prime long yearlings sold at $11.75. Inferior steers sold at $6.50 to $7.50, not counting some on the canner order taken at $5 to $6.25. Stockers and feders sold mostly at $6 to $7.50, a few going at $8. Veal calves sold at $5 to $11.75 and butcher cows and heifers at $3.50 to $8.75. A year ago the best beef steers brought $10.

Large Marketing of Hogs

Owners of hogs as a class seem to be ready to get their hogs to market as soon as they are well finished, and for a week the Chicago market was liberally supplied, the receipts far exceeding those for a week earlier and those for the corresponding week last year. Naturally, some bad breaks in prices took place, notwithstanding an unusually large demand from eastern packing points, but most of the declines were really smaller than might have been expected with so many on sale, as many as 27,000 hogs being carried over unsold at night, largely held by the speculators. The bulk of the hogs offered sell within a range of 40 cents, with prime light hogs going highest and selling 25 cents above the best heavy butcher weights. Recent receipts averaged 239 pounds, comparing with 226 pounds a year ago and 219 pounds for the past ten-year average for corresponding weeks. Most of the time exports of lard and cured hog meats are much greater than a year ago, and the consumption of fresh pork in this country is on a big scale. Provisions are much higher than last year. Western markets are receiving this month far more hogs than a year ago, and Chicago's receipts for last week are around 275,500 head, the largest in four years, comparing with 227,677 a week earlier and 255,049 a year ago. Naturally prices went off, and on the closing day hogs sold at $6.70 to $8.55, comparing with $7.40 to $9 a week earlier and with $6 to $8.40 a year ago.

High Lamb Prices

Sheep and yearlings are marketed rather sparingly, most of the Chicago receipts consisting of lambs, prices for which rule far higher than in most past years. Of course, values rule lower at times, and this happens on such days as the big packers hold back after receiving supplies consigned to them direct from other western markets. Many of the lambs weigh 90 pounds or more, and killers discriminate against these, prefering the medium weights. Not many feeding lambs are offered, and they come high, the larger share going to Michigan. Feeders weighing around 60 pounds sell the highest. The shorn lambs sell $1.50 to $2.50 under prices quoted below for wooled lots. The sales were made on the Chicago market of lambs at $12.75 to $15, feeding lambs at $13.75 to $14.85 and yearlings at $10 to $13. A year ago the best lambs sold at $12.90.—Foote.

WHEAT

Last week was a period of light trading in the wheat market and changes in prices were small. Trading was light because of inability to figure out the trend of the market in the near future. Dealers were unable to understand how the reports from Europe are going to affect the future of the market. The movement of France to force the collection of a debt from a defeated nation has never been duplicated in history as far as grain dealers are able to see and they are at a loss to predict what the future may hold for the man who owns any wheat. Latest reports, however, indicate an early settlement between France and Germany and leaders are more optimistic and trading promises to be better before the close of the current week. It is a well known fact that Europe needs wheat and the American product will find a ready market if Europe can settle her internal troubles soon.

Prices

Detroit—Cash, No. 2 red, $1.35; No. 2 white and No. 2 mixed, $1.33.

Chicago—No. 2 hard, $1.19@1.21¼.

New York—No. 2 red, $1.34; No. 2 hard, $1,32½.

Prices one year ago—Detroit—No. 2 red, $1.19½; No. 2 white, $1.16½.

CORN

Corn ruled firm much of the time the past fortnight and the only thing that prevented substantial gains in prices was free selling whenever the market advanced. Shipments from the country showed a falling off and export demand improved. Although prices are higher than one year ago consumption of corn is heavy. The advance at Detroit during last week amounted to only 1 cent. Receipts at Chicago last week aggregated 4,358,000 bushels and shipments amounted to 2,623,000 bushels.

Prices

Detroit—Cash No. 2 yellow, 77c; No. 3, 76c; No. 4, 74c; No. 5, 72c.

Chicago—No. 2 mixed, 72@72¾c; No. 2 yellow, 72@73c.

New York—No. 2 yellow and No. 2 white, 90¼; No. 2 mixed, 89¾c.

Prices one year ago—Detroit—No. 2 yellow, 56c; No. 3 yellow, 51½c.

OATS

Trading in oats has been quiet the past fornight. Prices in this grain have followed the trend of those of other grains, while demand has ranged from nul to fair. Receipts are larger and Chicago reports domestic shipping demand has broadened out to a further extent.

Prices

Detroit—Cash No. 2 white, 50c; No. 3, 48½c; No. 4, 47c.

Chicago—No. 2 white, 44½@45½c.

New York—No. 2 white, 55½@56c.

Prices one year ago—Detroit—No. 2 white, 42c; No. 3, 39½c; No. 4, 36c.

RYE

Rye was easy the first half of the past fortnight and the price at Detroit declined 3 cents during the last week the tone changed to firm and there was a gain on this market of 1 cent.

Prices

Detroit—Cash No. 2, 91c.

Chicago—Cash No. 2, 87½c@87¾c.

Prices one year ago—Detroit—Cash No. 2, 83c.

BEANS

Bean prices are still climbing. The Detroit market advanced 60 cents during the past two weeks and the tone at present is firm and the market has a healthy look to it. The farmer who decided at threshing time last fall to hold his beans and still has them in good condition has made some money. And if present demand continues and the outlook for the future remains as bright he will make still more money by continuing to hold.

Prices

Detroit—C. H. P., $9 per cwt.

Prices one year ago—Detroit—C. H. P., $4.00.

Official U. S. Marketgram

U. S. Bureau of Agricultural Economics

Washington, D. C.,—For the week ending January 13, 1923.

FEED—Mill feed markets inactive with buyers and sellers far apart. Stocks mostly in second hands and firmly held because of improvement in grains. Wheat feeds slightly firmer on light offerings by mills. Oil meals easier and cottonseed meal quoted about $1 lower. Gluten feed prices advanced by the manufacturers $2 per ton. Hominy feed firm, price shade higher, demand and offerings light. Inferior and storage stocks good. Receipts and movement good. Quoted January 12, Bran $25.75; Middlings $24.50;Flour middlings $27.25; Rye middlings $23; Minneapolis gluten feed $44.35; Chicago; 34 per cent linseed meal $53.50 Minneapolis; $52.50 Buffalo; 36 per cent cottonseed meal $41 Memphis, $41.75 Atlanta; White Hominy feed $30 St. Louis, $31.50 Chicago; No. 1 Alfalfa meal $24.75 Kansas City.

DAIRY PRODUCTS—Butter markets which have been relatively steady throughout the week developed a sudden easy to weak feeling today where resulted in a sharp decline at New York. This was principally due to temporarily heavy receipts which included several thousand packages of imported butter from Denmark and Argentine. It is reported also that 3,000 packages from Australia and New Zealand arrived at San Francisco during the week. Closing prices, 92 score butter: New York 53c; Chicago 52c; Phila 54c; Boston 54½c. Advances in prices on Wisconsin cheese boards Monday have places trading on slightly higher basis than last week. Cheese prices at Wisconsin Primary markets January 12: Flats and Daisies 27c; Double Daisies 26¾c; Young Americas 26½c; Longhorns 26¾; Spuare Prints 27c.

POTATOES

The potato market was in fine condition last week and on Monday, January 15th the Detroit market advanced 10c. This commodity is active, demand very good and receipts are small at many points, New York being the only market complaining of large arrivals. There is a general feeling that the market is in a position for further advances in the near future.

Prices

Detroit—Michigan, $1.06@1.16.

PRITCHARD'S
WEATHER
FORECAST
INTERPRETED BY THE STARS

Week of January 21

ROUGHLY speaking the average trend of the temperature in Michigan for the rest of January and the first few days of February will be upward. The rise will not be continuous during all this time as the "circuit" will be broken at the end of this or beginning of next week. This "break" will induce a change to much colder weather to affect the Central states. Conditions will gradually moderate then in Michigan until about the beginning of the second week in February at which time there will be another break with the result of more cold weather which will begin the next general downward trend of the temperature for this state.

Maximum temperatures between 40 and 50 degrees will effect Michigan about or before Wednesday of this week with rain, sleet or snow about the 23rd, 24th, and 25th. Winds are also expected to be strong at this time.

Following this storm center temperatures will fall to a minima of 10 to 15 degrees above zero in Michigan with the days during the latter part of the week remaining generally fair.

Week of January 28

The mild temperatures expected to be in full swing in Michigan about the beginning of this week should be taken as a warning that within two days the bottom will drop out of Medicine Hat and flood the state with cold, winter weather. Temperatures will then remain low until about Thursday but during the latter days of the week the mercury in the thermometer will again go higher reaching its maxima point about Friday or Saturday.

Rain or snow fall is not expected to be very heavy during first half of the week. There will be two general storm periods in Michigan this week—one at the beginning and the other near the end of the week. Both storm centers will bring high winds but during the latter part of week precipitation will be heavier.

The week ends with temperatures falling in this state and skies clearing but these conditions will not last long due to another storm that will be moving eastward from the Pacific coast states.

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S. S. HUDSON, Farm Supt.,
East Lansing, - Michigan

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PUREBRED SCOTCH COLLIES, SABLE AND white or the beautiful black and white. From heel-drivers. $10 and up.
SILVERCREST KENNELS. Gladwin, Mich.

Chicago—Idaho Round Whites, $1@1.10; Michigan bulk, 80@90c.

New York—Michigan, $1.33.

Prices one year ago—Detroit, $1.87.

HAY

There has been an improved tone to the market conditions with a trace of irregularity in the New Year market. Receipts generally are moderate due in some cases to the stormy weather at shipping points. The demand for nearly all grades has improved over a week ago.

Prices

Detroit—No. 1 timothy, $16.50@17; standard, $16@16.50; No. 2 timothy, $15@15; No. 1 clover mixed, $14.50@15 per ton.

Chicago—No. 1 timothy, $21@23; Light clover mixed, $19@20; No. 1 clover, $14.50@16 per ton.

New York—No. 1 timothy, $24; No. 1 light clover mixed, $24 per ton.

Prices one year ago—Detroit—No. 1 timothy, $19@20; standard, $18@19; No. 1 clover mixed $15@16 per ton.

Alfalfa—Detroit—No. 1, $14@18 per ton; Chicago, No. 1, $22@24 per ton.

MISCELLANEOUS MARKET QUOTATIONS

Detroit, Tuesday, Jan. 16th

EGGS—Fresh, according to quality, 35@36½c; refrigerator, 26@29c per dozen.

BUTTER—Best creamery, in tubs, 48½@49c per lb.

APPLES—Greenings, $1.50@1.75; Baldwin, $1.25@1.50; Spy, $2.00@2.50; Jonathan, $1.75@2; other varieties, $1@1.50 per bu; western boxes, $2@3.

DRESSED HOGS—90 to 130 lbs, 11@12c; 130 to 160 lbs, 9@10c; heavy. 5@8c; per lb.

DRESSED CALVES—Best, 16@17c; medium, 14@15c per lb.

LIVE POULTRY—Best springs, 20@21c; leghorns, 17c; large fat hens, 23c; medium hens, 20@21c; small hens, 17c; old roosters, 15c; geese, 15@18c; large ducks 22@23c; small ducks, 18@20c; heavy turkeys, 32c; light turkeys and old toms, 25c per lb.

HIDES—No. 1 cured, 12c; No. 1 green, 11c; No. 1 cured bulls, 8c; No. 1 green bulls, 7c;No. 1 cured calf, 15c; No. 1 green calf, 14c; No. 1 cured kip, 12c; No. 1 green kip, 10c; No 1 horsehides $3; No. 2 horse hides, $2. Sheep pelts, 50@1.50. No. 2 hides, 1c under No. 1; calf and kip 1½c under No. 1.

WOOL

The steady to active tone prevailant in the wool market for some weeks past has translated itself into action and large quantities of wool are moving at steady to higher prices. All classes of wool are selling readily at top quotations and some grades are establishing new price levels.

LARGE PART OF ALFALFA MARKETED

More than half the marketable surplus of the 1922 alfalfa crop has already been marketed, a survey just completed by the United States Department of Agriculture indicates. A survey made Sept. 15th included a marketable surplus of about 15 per cent less than the amount marketed during 1921. It is now estimated that about 65 per cent of this surplus was marketed by December 15, compared with 45 per cent of the 1921 crop at the corresponding date last year.

The movement of timothy hay to market, however, has not been as heavy to date as for the corresponding period last year, the survey shows. It is estimated that 36 per cent of the marketable surplus had been marketed to December 15, compared with 38 per cent on December 15, 1921.

The increased demand for alfalfa has been reflected in the price trend. On September 15, No. 1 alfalfa was quoted at the principal markets at an average price of $21.50 per ton. On December 15, the average price of alfaalfa at the same markets was $23.75 per ton. This price was also $1 per ton higher than the average price of No. 1 alfalfa on December 15, 1921. Timothy prices, however, have had a downward trend and the average price of No. 1 timothy at the principal markets on December 15, 1922 was $21.50 per ton, compared with $22.50 on September 15.

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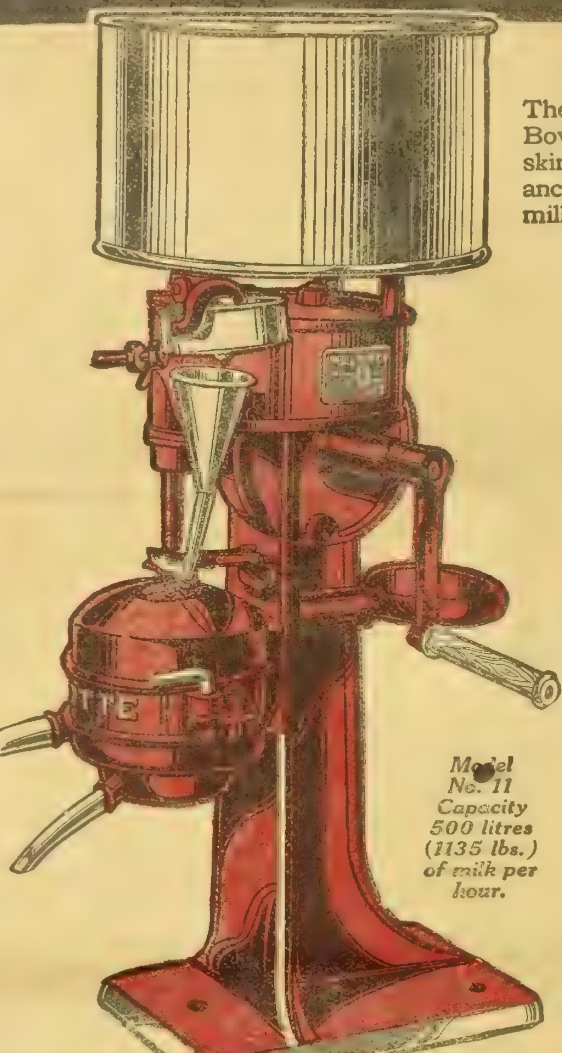

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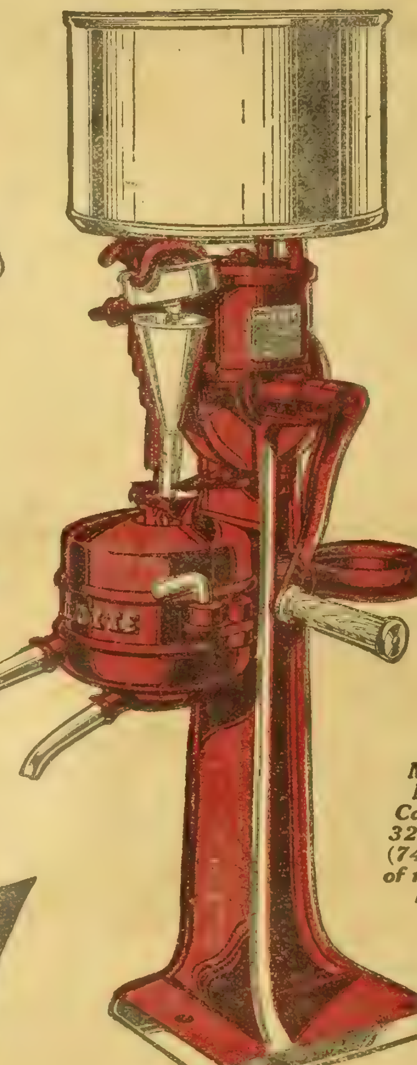

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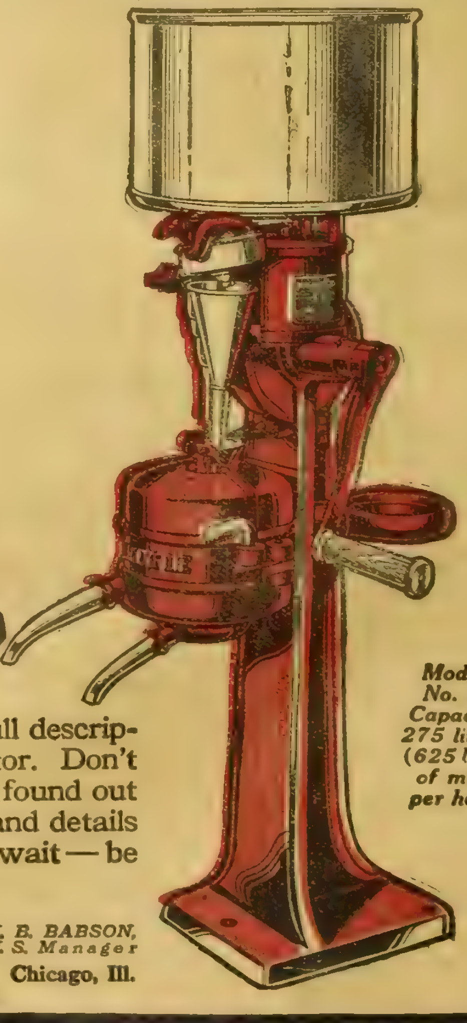

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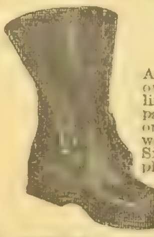

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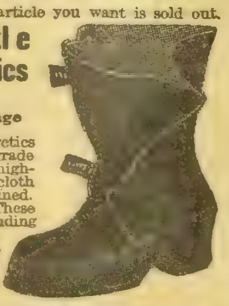

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Current Agricultural News

1922 CROP OUTPUT IN MICHIGAN SHOWS INCREASE

THE crop output for the farms of Michigan in 1922 aggregated $215,000,000, an increase of 17 per cent over 1921 when the valuation dropped to 184,004,000. The complete annual report of the Michigan Cooperative Crop Reporting Service is now in the hands of the printer and will be ready for mailing within a short time, according to Verne H. Church, Agricultural Statistician. The report further states that each of the grain crops, together with beans,, clover seed and sugar beets were bringing better prices on December 1, 1922 than on the corresponding date of the previous year, and that a large monetary return per acre was derived from all crops except wheat, buckwheat, potatoes and wild hay. The fruit crops, potatoes and hay were less in price than one year ago.

It is asserted that the figures indicate that the low point has been passed and farm financial conditions are beginning to improve with favorable prospects for the future. Michigan's important position as a dairy state and the diversified nature of her crops have lessened the severity of the depression and are aiding in the recovery from it, in comparison with other states that suffered the greater distress caused by inflated land values.

The combined yields of all crops in the State were 7.4 per cent better than the average of recent past years. This is an exceptional showing as only four other important crop states made as good a record. While the State generally leads in the yields of one or more crops, it is unusual to attain this high average for all crops.

The best crop of the year was hay, although corn, potatoes, clover seed and most of the fruits yielded above the average. The poorest crops were winter wheat and rye although these were fair in both yield and quality for the State as a whole. All main crops were larger in volume than last year except corn, rye and sugar beets, and all had a greater total value except potatoes, sugar beets and clover seed.

FARM BUREAU REPORTS SURPLUS OF $200,000

FROM a $15,000 deficit to a net worth of more than $200,000 in two years' time is the record of the Michigan State Farm Bureau, according to a report from Lansing, and if unpaid memberships were included, the net worth of the bureau would be $642,000.

The annual report of the Farm bureau is now being prepared for the annual meeting at the Michigan agricultural college during Farmers' week and the above figures will appear in it.

This report will also show that the Michigan State Elevator exchange has made up its deficit of $11,000 shown on the books 18 months ago and has accumulated a surplus of $30,000 besides.

Every department of the bureau, except the Detroit Produce exchange organized last spring, now is on a paying basis and the outlook for the organization is said to have never looked better.

While the membership is not as large as two years ago, the bureau from a financial standpoint is in a much stronger position.

MICHIGAN CONDITIONS IMPROVE

TEMPERATURES have averaged above normal over the entire area, with percipitations slight, as a rule.

Wheat and rye continue in good condition. Alternative thawing and freezing has caused slight damage and chinch bugs are reported in some localities.

The car shortage is interfering with the free movement of corn to some extent, but the demand is good on account of the heavy feeding operations.

Pastures and meadows were benefited by light rains, snow and mild weather, and are furnishing some winter feed.

Michigan beans are in good demand and prices generally are satisfactory. Farmers are feeding their surplus potatoes to dairy cattle with good results.

Livestock is in good condition generally, except for a few scattered cases of hog cholera.

INTERNATIONAL EGG LAYING CONTEST AT M. A. C.

THE production at the contest for the week ending January 23, shows another big increase.

Evergreen Poultry Farm continues with their excellent work when they established a new record for weekly production with a weeks total of 52 eggs and a total to date of 488.

The Barred Rock section show 4.6 per cent increase. Kent's pen from New York continues to lead this section with a production of 439 eggs. Dennison's pen with 419 eggs retain their position in second place. Brummer's Poultry Farm with a production for the week of 41 eggs get into third place and Christophel drops to fourth place with 37 eggs for the week and 409 eggs to date.

The Wyandotte section remains the same for weekly production, showing a very slight increase. The pen from Evergreen Poultry Farm gradually increase their lead. Sink's pen from Farmington remains in second place with 395 eggs. Caterola farm is third with 371 eggs and Keister's pen from Bangor, retains fourth place with a production of 318 eggs.

Smith's pen of Buff Wyandottes are showing excellent production finishing with 45 eggs for the week and 313 to date. Decker's Wyandottes which were late arrivals are getting in their stride.

Van Raalte again leads the Ancona section with 10 birds in action. DeGroot and Manning are again in second and third place respectively.

In the Rhode Island Red section the same three places recieve mention. Mrs. Travis is standing first, Dunning second and the College Reds third. Mrs. Goss' pen from South Haven threatened to be a serious opponent when their production for the week increased to 50 eggs

In the White Leghorn class we find Shaw's pen from South Haven once more in the lead with a weekly production of 45 eggs and a total to date of 447. Hanson drops to second place only three eggs behind Shaw's pen.

GIRL BEST FARM ACCOUNTANT IN WEXFORD COUNTY SCHOOLS

A COMMITTEE composed of T. T. Riddell, Farm Management Demonstrator, M. A. C., Roy Noteware, Commissioner of Schools and Fay Horton, Banker of Manton, January 22nd, examined the books and stories of the Farm Accountants in the Consolidated Schools of Wexford County awarding the prize to Dorothy M. Smith of Manton, who kept the accounts on the farm of Edgar Derbychire.

This closes the first year's work in the consolidated schools of Wexford County on the project of farm accounting, the students keeping the actual accounts on the farms upon which they live.

Of the forty-eight starting last January, twelve graduated or left school; five moved from the County; two died and twelve quit the work and eighteen finished the books in one or more departments. This is above the percentage in the United States by several per cent.

The winning of this honor entitles Miss Smith to a trip to Farmers Week which is furnished by the Cadillac State Bank and the Peoples Saving Bank of Cadillac, the Manton State Bank of Manton, and the Farmers State Bank of Mesick.

The competition was keen between individuals from all the schools and it gave the committee considerable work to properly award the honors. Among the higher standing contestants stood Dorothy M. Smith of Manton; Edwin Ransom, Pearl Srackengust of Buckley; Ethel Bump and Earl Teal of Mesick; Clara Phillips of Hoxeyville and Gertrude Stiver of Harlan.

SATURDAY
FEBRUARY 3rd.
1923

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Being absolutely independent our columns are open for the discussion of any subject pertaining to the farming business.

"Hew to the line, let the chips fall where they may!"

The Michigan
BUSINESS FARMER

"The Only Farm Magazine Owned and Edited in Michigan"

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Dr. Friday Begins Milk Quiz in Detroit Area

With Gov. Groesbeck, Legislature and Daily Press Backing Him, He Promises to Uncover Facts Long Demanded by Producers—Mauy Want Milk Investigation Made State-wide

WHAT the milk producers have long demanded about, but with little encouragement is apparently about to become a reality through the good offices of Dr. David Friday, president of the Michigan Agricultural College.

About two months ago, Dr. Friday was called in to act as an arbitrator for the producers and distributors in the Detroit area, who could not reach a mutual understanding in the price of milk for the month of December. He set the price at $3 per hundred to the producer and 14 cents per quart to the consumer in Detroit. But at the same time, Dr. Friday announced that he could not be sure of this price being fair to the three parties: producer, distributor and consumer, until he had made a thorough investigation of the situation and promised to start work on such a probe, for the benefit of all concerned, at once.

In the meanwhile the daily press in Detroit took up the cry and thus, Governor Groesbeck became interested and is reported to have instructed Representative Vincent P. Dacey, of Detroit, to conduct a personal investigation, for the specific purpose of helping Dr. Friday, if it became necessary to use the powers of the state to do so.

Same Prices for January

The first meeting of the investigation being conducted by Dr. Friday was held at the Hotel Cadillac, Detroit, and representatives of the press, which means the public, were barred, so in effect the meeting was secret. At its conclusion Dr. Friday said: "My purpose in conducting this inquiry," "is primarily to learn whether or not the present price of milk in Detroit is a just one. To find this out I shall have to probe the costs and methods of distribution here as well as the cost of production on the dairy farms and the manner in which the farmers get their milk.

"I know already that many farmers maintain 'inefficient' cows. By that I mean cows don't produce according to the demands of the market. The consumption of milk is about 20 per cent less in winter than in summer. But almost always there is a surplus of milk in winter and a shortage in summer. The farmers should 'freshen' their cows so a greater yield would come in the summer. That automatically would revise the price.

"This afternoon the dealers and producers got together pretty well on this angle. They agreed to a tentative arrangement whereby the farmer will be penalized for over-production in the wrong season."

He announced also, that the price of milk to the producer and consumer in the Detroit area would remain the same for the month of January, that it had been set by him, a month earlier, for the December.

While Dr. David Friday's milk inquiry settled itself down to an examination of books, evidences continued today to accumulate to show that producers are not receiving the $3 rate for each 100 pounds of milk.

It is the payment of this rate that makes the cost of milk high to the consumer, the distributors have been claiming.

The practice of underpaying the farmer, and at the same time loading on him the charges of hauling from the stations to the creameries in Detroit, is classified as good business by the management of the big distributing companies.

It is good business also to undersell rivals who set up in business along routes formerly owned by the big creameries. Evidence of this type of cutting was obtained by a daily paper and submitted to W. J. Kennedy of the Detroit Creamery.

Mr. Kennedy readily admitted his company was cutting the price in one section. He declared that former employes of his concern had had the termerity to set themselves up in business. He was going to sell milk 2 cents cheaper than the new distributors did in order to drive them out of business, he said.

Want Inquiry Made State-Wide

Several Michigan legislators have now come forward with the demand that the milk investigation be made state-wide and such important areas as Grand Rapids, Flint, Saginaw, Kalamazoo and Jackson, be taken into consideration. They seem to feel that the conditions are only slightly worse in the Detroit area. Lansing has, of course, in operation a farmers' owned company which is making the experiment, with apparent success of distributing its own milk to the consumer and yet both consumer and distributor have reaped a great benefit.

"I am inclined to agree with my colleague, Representative Joseph Warner, of Ypsilanti," said Representative Howell, of Saginaw. "He says the distributors in Detroit give a rotten deal to both the farmer and the consumer. "He has been both producer and distributor and he ought to know."

Next Meeting February Tenth

Prof. J. T. Horner, of the Dairy Division, M. A. C., has been delegated by Dr. Friday to carry on an actual investigation of the creamery companies books and the next meeting is scheduled for February tenth and it has not yet been announced as to whether this meeting will be conducted publicly or not, altho there is considerable pressure being brought to bear on Dr. Friday, to hold these meetings in the open, where all the facts can be secured and presented to the judgement of the vast masses of people interested in milk, from both sides of the question.

AN INTERVIEW WITH DR. FRIDAY

TO secure a statement from Mr. David Friday on the Detroit Milk situation, I interviewed him Thursday, January 25, upon his return from the Detroit conference, which was held on Wednesday.

The situation at present seems to be somewhat indefinite and unsettled. Friday is starting a careful investigation of all phases of the Detroit situation which bear upon the distributing of milk.

He will probably be some weeks upon this work, as there are a number of difficult angles to be considered. The fluctuation of supply and demand at different seasons, unorganized distributers, labor costs in the distributing plants—these are among the things which Friday mentioned yesterday as calling for a careful and complete study.

Prof. J. T. Horner, of the M. A. C., economics department, is working with Friday in the detailed investigation.

For the present, as I understand the situation, the contract price agreed upon for December between the producers and distributors (with Mr. Friday serving as "arbitrator") is to continue in effect. This calls for $3.00 a hundred pounds to the farmer and retail sales from the wagon at 14 cents a quart.

The only definite bit of information Mr. Friday gave out on the present situation in Detroit is that they are receiving in Detroit now 15 to 20 per cent more milk than the people of Detroit are consuming as whole milk. This, of course, means that the surplus must be used in manufactures, and bought at a lower price. This, according to Friday, is one of the chief problems connected with the entire issue. Consumption of milk in Detroit has declined two and one-half to three per cent—the normal lowered consumption at this season of the year, apparently.

President Friday seemed unwilling to give out any definite statement at this time, beyond the fact that he is to make a careful study of all angles of the difficult situation during the next few weeks.—J B. Hasselman.

Car Shortage Causes Thousands of Dollars of Loss to Potato Growers

WHETHER thousands and thousands of dollars in unpaid taxes on some of the finest potato farms in the second tuber producing county in Michigan will be returned to the state this year depends upon the relief which the Pere Marquette and Pennsylvania railroads are able to give shippers in Mecosta county in the next few weeks.

People in southern Michigan have no idea of how badly the car shortage has paralyzed the agricultural interests in this county. During the past three days while the writer was attending and speaking at eight agricultural meetings in Mecosta county he interviewed scores of farmers who have not been able to sell one pound of their 1922 potato crop. Many of them said they had borrowed to the limit of their credit during the past three years and now they must let their taxes go back to the state because of their inability to pay.

Decline in prices is not entirely the cause of this situation. A survey of the area indicates that the lack of transportation facilities making it impossible for growers even to get production costs out of their crops, has percipitated this crisis in the lives of the nation's food producers in Mecosta county.

Last fall, when farmers could have sold their potatoes at 60 to 65 cents a hundred-weight, they were unable to get even common box cars for movement of their crop during the season when it was not necessary to go to the expense of relining the car But, under the belief that the railroad would fulfill its obligations as a common carrier and would furnish cars, farmers stated that they left their potatoes in pits or hauled them into temporary basements until cars could be supplied. Those tubers still are in the pits and cellars but farmers say they are now worthless. Many of them froze early in December and others have frosted since.

400 Carloads Perish

Marketing representatives at the shipping points in the county estimate that approximately 400 carloads of potatoes valued at $96,000 have perished through frost or have been consumed by cattle simply because the railroads were unable to furnish the necessary cars. A question has been raised by some of the growers as to whether the farmers can hold the railroads liable for these damages alleged to be the direct result of the railroads failing to supply cars upon numerous and repeated requests.

The car shortage seems to be most acute on the Pere Marquette line. Seven months ago when the writer was investigating claims of this railroad for its request to abandon the branch lines from Mecosta to Barryton and Remus to Weidman he was told that the tonnage was not sufficient to warrant maintaining the lines. This week he found that there is more business on these two branch lines than the railroad can begin to handle.

Since last September the Barryton potato growers' association has had a request on file with the Pere Marquette for one car a day to load out potatoes, but the railroad has been unable to supply only a part of the orders.

This is not the first year, farmers stated, that this region has been gripped with a car shortage. While other lines, particularly the Michigan Central, have been supplying its shippers with nearly all the cars they needed, the Pere Marquette for some reason, either lack of cars or indifference, has been slow in filling orders, but not as tardy as during the last four months.

Question of Leasing

The situation now has resolved itself, according to growers and market men, into the question of whether the state should not lease or buy enough cars to insure its farmers adequate transportation facilities to market their crops. The farmers believe, however, that the railroads should be charged with their transportation responsibilities. They point out that factories in the cities do not have to buy or lease cars, and they can see no reason why they should do so although there is some talk among the local associations of advising the Michigan Potato Growers' exchange at Cadillac to lease cars next season the same as the old line companies do.

In order to be economical in the marketing of potatoes, C. C. Wells, manager of the Michigan Potato Growers' exchange and one of the speakers at this series of meetings, half of the Michigan crop should go to market before Nov. 1,. The balance, if the railroads supply the cars, can be marketed in an orderly manner during the winter and early

(Continued on Page 18.)

Pruning Fruit Trees

Now is the Time to Do this Valuable Work

By ROY E. MARSHALL
Professor of Horticulture, M. A. C.

Proper training of this tree during the first two or three years of its life would have prevented this.

MOST fruit growers will agree that tree growth and fruit production are regulated to a considerable extent by pruning practices, but there is much confusion as to the amount and kind of pruning that should be employed to give the desired results. Experiment Station investigators are gradually working out various phases of the pruning problem, but it will probably be many years before definite rules can be formulated relative to the training and pruning of all kinds and types of fruit trees.

Yet, while these problems are being solved, trees must be pruned. It is the main purpose of this article to present some of the underlying principles which the fruit grower should constantly keep in mind, and to show how these principles may be applied to such trees as are commonly found in Michigan.

Throughout the discussion of pruning practices certain terms are used more or less frequently, and it is well that an understanding be had of these, together with the general principles involved. Again, certain practices are applicable, in a general way, to all kinds of deciduous fruit trees, and these may be briefly discussed before taking up more detailed consideration of the handling of specific kinds of fruit trees.

The removal of an entire branch, limb, twig or spur is referred to as thinning or "thinning out." Thinning results in a less crowded condition throughout the tree, and it usually permits a greater amount of light and a freer circulation of air in the interior portions. This kind of pruning generally encourages the formation of fruit spurs and discourages the formation of lengthy side branches or laterals. It favors the development of an extensive fruiting system, but continued thinning with some kinds and varieties of fruits eventually leads to the formation of wide-spreading or rangy trees that are expensive to handle and that are unable to carry their crops without artificial supports.

When the tip or any larger portion of a branch is removed, the process is known as heading or "heading back." This type of pruning is practiced when branches are growing out of bounds; when one part of the tree is growing more rapidly in proportion to the tree as a whole that is desired; to encourage the development of the framework branches of the tree at such points as they are desired, and to avoid a rangy type of growth. The heading back of a vigorous shoot usually results in the formation of several strong-growing lateral shoots and few spurs the succeeding year. Hence, it promotes the formation of a compact head. In other words, heading back has more to do with the development of form of tree than with the development of a fruiting system, and is practiced to a greateh extent with young trees than with those in bearing. Heavily headed back young trees should not be expected to attain greater size than those headed lightly or not at all—in fact, if continued for several years, the gross effect is an undersized tree, as well as one late in coming into fruit production.

This division between thinning and heading is somewhat artificial. In other words, a single pruning cut may result in a thinning out as well as a cutting back. This is frequently the case when three- or four-year-old wood is being removed from peach trees and the cuts are made close to a lateral of the former parent branch.

Two branches that have made practically the same amount of growth are often found growing from a common point. If left unpruned or if headed back to the same length, the amount of growth from each of the following year will be approximately equal. If one branch is cut several inches shorter than the other, the longer one will give rise to more growth the following years, and eventually the shorter one will become a side branch of the longer, as naturally occurs if one branch is longer than the other and no pruning takes place. Thus equal cutting back of branches arising from a common point results in equal growth, and unequal cutting back results in unequal growth. Furthermore, when two branches of equal size emerge from a common place in such a way as to form a sharp "Y", a weak crotch results unless steps are taken to strengthen it. Equal cutting back of these two branches will not better the condition, but unequal cutting back, leaving one considerably longer than the other, will encourage the longer one to become a leader or main branch, and the other will eventually become a lateral or side branch. The crotch is strengthened and splitting in later years avoided.

Long Pruning

Recently the attention of some fruit growers has been directed to a kind of pruning, very popular in California, known as "long pruning," and it may be well to state briefly the meaning of this term. Pruning as commonly practiced on the Pacific Coast, until recently, consisted of some thinning-out and a very heavy heading back (removal of 50 to 75 per cent of each new branch) of the new growth each year. This resulted in devotion by the trees of too large a part of their energies to the growth of long shoots and not enough to fruit production, and the fruiting wood on the interior portions of the trees was often shaded out by the dense top. Fruit growers have found that they can reduce this excessive wood growth and increase the fruitfulness of their trees by practicing a "thinning-out" and they thus discontinue the former severe "heading." Since the new growth is left without heading, the result is a tree very different in appearance from the former heavily cut-back one, and hence the term "long-pruning."

Generally, the greatest growth response takes place in the immediate vicinity of a pruning cut. This is noticeable where a large branch has been removed, resulting in the formation of numerous watersprouts near the point of removal. In like manner, if a branch or shoot is cut back, a few laterals (side branches) will usually devolop near the end of the headed-back branch, although some response may be noted some distance away. The removal of a branch has comparatively little direct effect on the tree as a whole. If, then, it is desirable to renew vegetative growth throughout the tree, the cutting must be distributed throughout the entire tree. Work confined to the outer parts of the tree will give direct response in thase parts, but will generally indirectly affect the central parts by admitting more light and permitting a freer circulation of air. The careful pruner should keep these facts in mind in all pruning practices.

There is a strong tendency among pruners to remove all the fruit spurs and short shoots from the young trees, especially from the scaffold branches, as they are thought to be of no use. However, experience shows that, if allowed to remain, these are productive of the first fruit of the tree. If they are removed, the tree will not come into early bearing. Some pruners think that these small twigs will only be in the way in later years. These fruiting branches seldom reach a length of more than a few inches, and if they do they may be shortened. Even if some are broken off from time to time, it will certainly pay well to leave and preserve a liberal supplyof them as long as possible.

How to Remove a Branch

So much emphasis has been placed by many writers upon right and wrong methods of removing branches that it would seem unnecessary to mention these again, but some growers are still very careless in this operation. The wound resulting from the removal of a branch will heal much more rapidly if the cut is made close to and almost parallel with the main stem. If removed even a slight distance beyond the parent branch, the result is a slow healing wound. If a stub is left, it usually dies and heart rot eventually develops in the parent branch. It is often advisable first to saw in for a short distance on the under side of large branches so as to prevent the splitting and peeling of bark from th parent branch when the branch is nearly sawed through.

Pruning is ordinarily done during the dormant season. Slight preference should be given to that done in late winter or early spring because the wounds heal more rapidly; but if all pruning is left until such a time, the work may not be completed because of the rush of other farm practices in early spring. Consequently, any favorable weather, after the dropping of the foliage in the fall and before the opening of the buds in the spring, may be utilized for pruning. If one has a large acreage, he should start work in the older apple and pear trees during the early winter, and reserve the stone fruit and younger trees for late winter and spring pruning. It is believed that pruning done during any weather that is suitable for the pruner will result in no ill effects. However, it is possible that heart rot, die-back, bruising, splitting, etc., may result from pruning frozen wood.

Pruning Tools

Two tools are essential for pruning work: a pair of small hand shears and a saw. With these two tools a pruner can do practically all of the work that will be required in bearing trees and most of the work in young trees.

The shears should be made of the best material obtainable, as cheap shears are easily sprung. A good pair of steel shears will withstand heavy work for several years. The shears should be seven to ten inches in length, nine being the size usually preferred.

The saw should be so constructed as to cut rapidly, leave a smooth cut, be as light as is consistent with rigidity and good lasting qualities; and it should have a hand grip that will not tire or cramp the hand or wrist. A saw on which the teeth are set to cut on the "pull" is less tiring to the pruner. Saws with teeth on both edges are objectionable, as they are usually poor in cutting quality and frequently injure bark on the permanent branch.

A pair of lopping or wooden handled shears often facilitate the work about young trees and about the lower parts of old trees. It is a somewhat awkward tool to use in the upper parts of bearing trees.. Such shears should be about 20 to 26 inches in length and of double leverage.

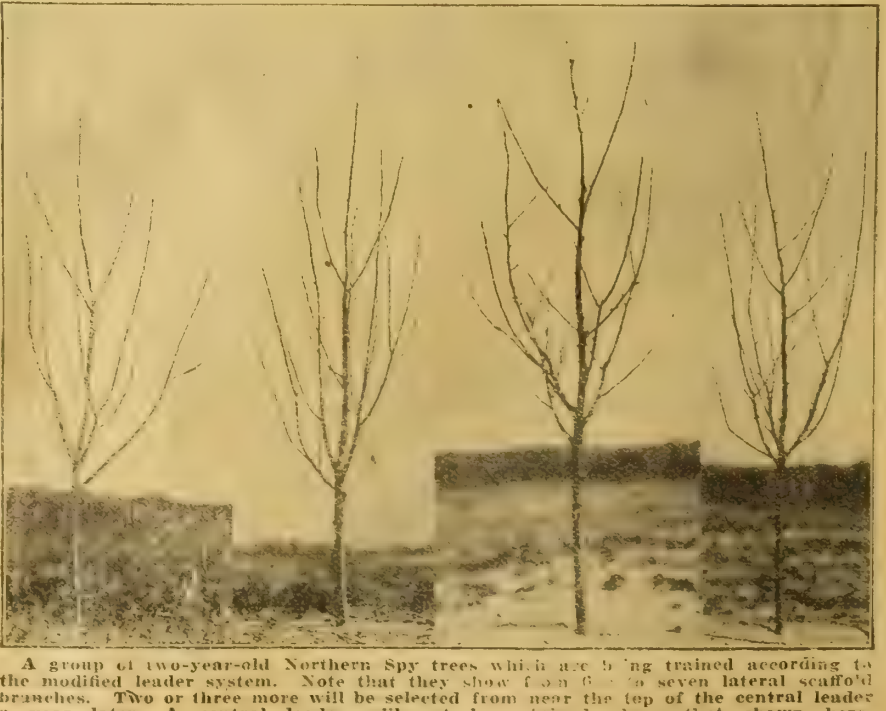
Pole pruners, six to ten feet in length, enable the pruner to work the tops of trees five to ten years old to better advantage. They should not be used where it is possible to employ the other tools, because work with the pole pruner is, at best very slow, and the cutting cannot be done as precisely as with other tools.

It is considered good practise to paint wounds larger than one and one-half to two inches in diameter with a good white lead to which some kind of antiseptic has been added. An ounce of cyanide of mercury or bichloride of mercury may be dissolved in a little turpentine and thoroughly mixed with a gallon of the paint. A charcoal, brush, grafting wax, such as is used in bridge grafting, makes an excellent covering. See Michigan Experiment Station Circular No. 14, Revised.

Types of Training

Fruit trees may be developed according to any one of several different styles of training during the non-bearing, vegetative, or formative

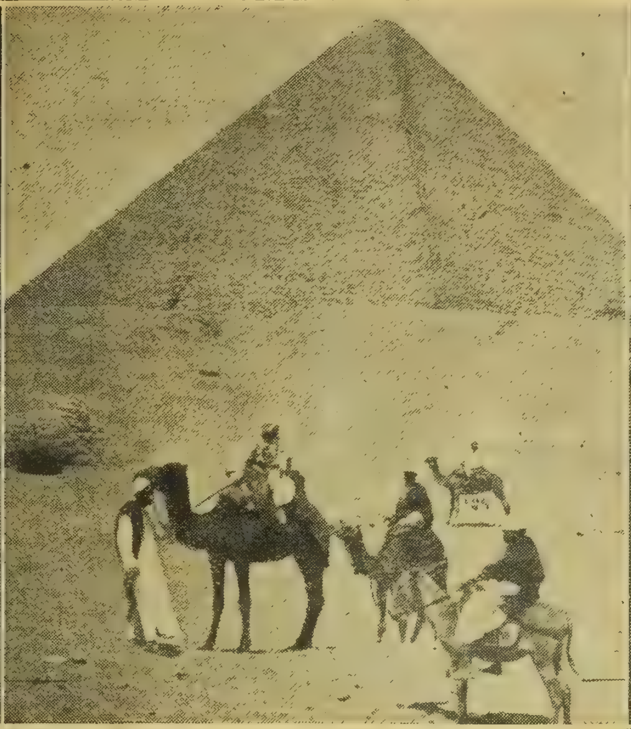
(Continued on page 17.)



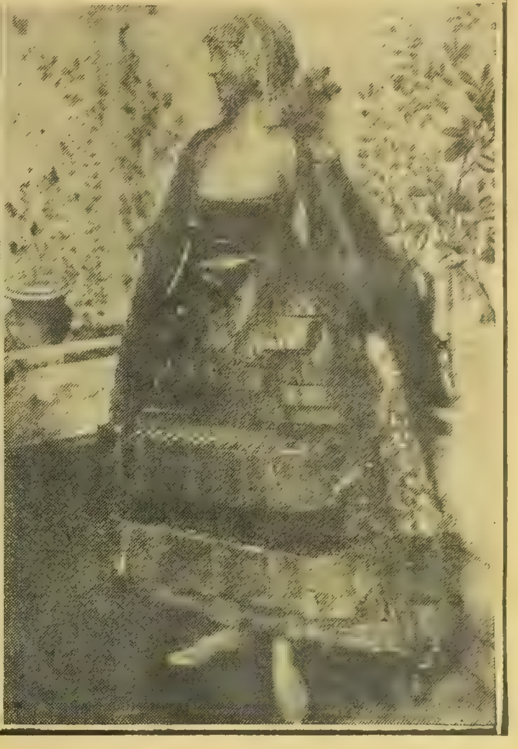
A group of two-year-old Northern Spy trees which are being trained according to the modified leader system. Note that they show from 6 to seven lateral scaffold branches. Two or three more will be selected from near the top of the central leader a year later. A central leader will not be retained above that shown here. These trees have had a very light thinning out and sufficient tipping back to maintain the proper relationship between branches

PICTURES FROM FAR AND NEAR

Four feet—count 'em yourself!—This chicken, a Rhode Island Red, was hatched on an Indiana farm, and 'tis said, that by virtue of its two useless appendages it rules the barnyard. The chicken is perfectly normal otherwise.



Great pyramid is work of scientist—The pyramid of Kunuf, at Gizih, Egypt, which according to English engineers, was designed by a scientist who must have known the shape of the earth. They give the date of the commencement of the pyramid as 2170 B. C.



A novelty for the bride—A unique chest of drawers which is being imported into Germany. The chest is made of marble and is in the form of a bride in bridal gown of the 18th Century. In the body are several small and large drawers.

PEANUTS
POP CORN

Waiting for the train!—John McGuigan, of White Cloud, Michigan, who has been paralyzed for the past fifteen years, has supported himself and his family by meeting all trains and selling candy, cigars, and magazines. "Billy" brings his master in. "Billy" leads a happy life. The passengers feed him with everything from cigars to magazines.

What Coue suggested to sculptor —"Every day in every way," the bust of Emile Coue, the now famous evangelist of optimistic health, is being completed in marble under the skillful chisel of Jo Davidson, eminent American sculptor. Mr. Davidson did most of the work in France, before M. Coue, sailed for America, but he is completing the work now at his studio in New York.

The Radio Typewriter—Edward Hebern, a mechanic of Oakland, California, has just invented a radio-typewriter that takes its messages from the air and writes them out as if operated by the hand of a ghost. What next will man invent?

They're going swimming!—Up in Manchester, New Hampshire, where there is plenty of snow, and where ice skating is the chief sport in the winter time, men and boys, with Indian-like fortitude, don bathing suits and make for the Old Swimmin' Hole, while the Mercury slithers around 20 below zero.

Uncle Sam employes blind man—W. A. West, who is blind, is considered one of the most efficient lacers in Uncle Sam's mail bag repair shop. He puts the finishing touch on the bag, putting in the rope that is used to lock the bags. He has turned out an average of 300 bags a day.

(Copyright Keystone View Company)

Michigan Leading Fight to End T. B. in Cattle

Cost State over $300,000 in 1922 to Idemiify Owners and it will cost nearly Two Million More

IT is possible to free Michigan of tuberculous cattle within five years, but the cost will be around two million dollars if we are to accept the figures just issued by the State Department of Agriculture, in their first annual report.

Dr. T. S. Rich, federal inspector in charge of the tuberculosis eradication in cooperation with the state officials, agrees with this statement and says he bases his judgement on the phenomenal achievements in Michigan during the last 12 months.

The State first undertook to encourage bovine tuberculosis eradication by payment of indemnity for animals slaughtered on account of this disease in 1909. The testing was done by veterinarians over the State without any definite plan until July 1, 1917, when a cooperative agreement was entered into with the Federal Government under the Federal and State accredited plan, by which owners of purebred herds voluntarily submitted their cattle for the tuberculin test by State or Federal veterinarians and agreed to follow instructions in regard to methods of handling their herds in order to prevent exposure to the disease from outside sources. Herds were signed up and taken under supervision in many counties of the State and were regularly tested without expense to the owner, and both State and Federal Governments paid indemnities when animals reacted and were slaughtered. These herds were widely scattered in many counties over the State and greatly stimulated interest in tuberculin testing by educating the general public and the herd owners in particular as to the importance and significance of the work. As the work increased, however the expense became too great in proportion to the results secured because of the time wasted and expense incurred in traveling from place to place to test herds. This led to the adoption of the area plan, by which the tuberculin test is applied to all cattle in a given area. The work is conducted with much greater economy and efficiency and infected herds are located rapidly and diseased animals removed.

Under the area plan, as is it now being handled in this State, the County Board of Supervisors is asked to make an appropriation sufficient to cover the salary of one veterinarian employed by the county and the cost of carrying on the work in the county, including transportation of veterinarians, ear tags for cattle, etc., and the Board of Supervisors signs the cooperative agreement with the Bureau of Animal Industry and the United States Department of Agriculture.

In October of last year the first big victory over bovine tuberculosis was won when the herds of Hillsdale county, in a whirlwind campaign of 12 days through the work of 33 testers, were freed of the scourge.

One of the men who was instrumental in obtaining funds for the work was Prof. H. R. Smith, formerly a resident, but now live stock commissioner of the National Live Stock Exchange. Among state authorities, cooperating with the department, are H. W. Norton, Jr., director of the bureau of animal industry of department of agriculture and State Veterinarian B. J. Killam.

The results of the drive fired the state with enthusiasm for tuberculosis eradication.

At the beginning the applications from herd-owners were purely voluntary. But the county authorities here and there caught the spirit of the movement. Boards of supervisors began to invite the department of agriculture to send representatives to explain to them the needs and cost of the campaign, and county after county made the necessary appropriations to undertake the work.

These invitations had the approval of about 95 per cent of the herd-owners, and yet it was felt that to leave even 5 per cent of the herds in any area untested might largely nullify the effort.

Prompted by overwhelming public opinion, a search was made for means to compel objectors to comply with the will of the great majority and the existing law was found to be ample on the subject. The commissioner of agriculture is empowered to quarantine any herd deemed a menace to the public health.

Armed with this authority, the inspectors have been able to make the eradication absolute in every county to which they have been invited by the county authorities. No effort has been made to bring pressure on any county and no county has been solicited to undertake the campaign.

Over 160,000 Cattle Tested

The total amount accomplished during the past year has surprised even the authorities themselves. More than 23,000 herds containing about 160,000 cattle have been put under supervision.

All the cattle have been tested at least once in eight counties. Hillsdale, Jackson, Livingston, Grand Traverse, Charlevoix, Antrim, Emmet and Gogebic.

In addition to the test is now in progress in Wayne, Washtenaw, Ingham, Eaton, Kent and Shiawassee, while Monroe, St. Joseph, Calhoun, Huron, Muskegon, Oceana, Leelanau, Otsego, Presque Isle, Cheboygan, Schoolcraft and Ontonagon are on the waiting list.

The counties have appropriated out of their own funds from $2,500 to $15,000, depending on their area and number of herds. The appropriation usually is based on 25 cents per animal. The total money raised by the counties reached $125,000.

Indicative of the rapid spread of the idea is the fact that 17 other counties have, through their boards of supervisors, requested representatives of the state department to come and explain the work and advise with them as to plans. All this has been accomplished during the last 12 months.

$300,000 for Five Years

The experience gained has enabled a pretty accurate estimate of costs. Fortunately, Michigan was aroused to the need before conditions became bad. The percentage of animals reacting to test is only about 3½.

Out of the 23,000 herds under supervision, 19,000 have no tuberculosis. This fact greatly simplifies the problem, and at the same time argues forcefully for the adoption at once of a thorough state-wide program.

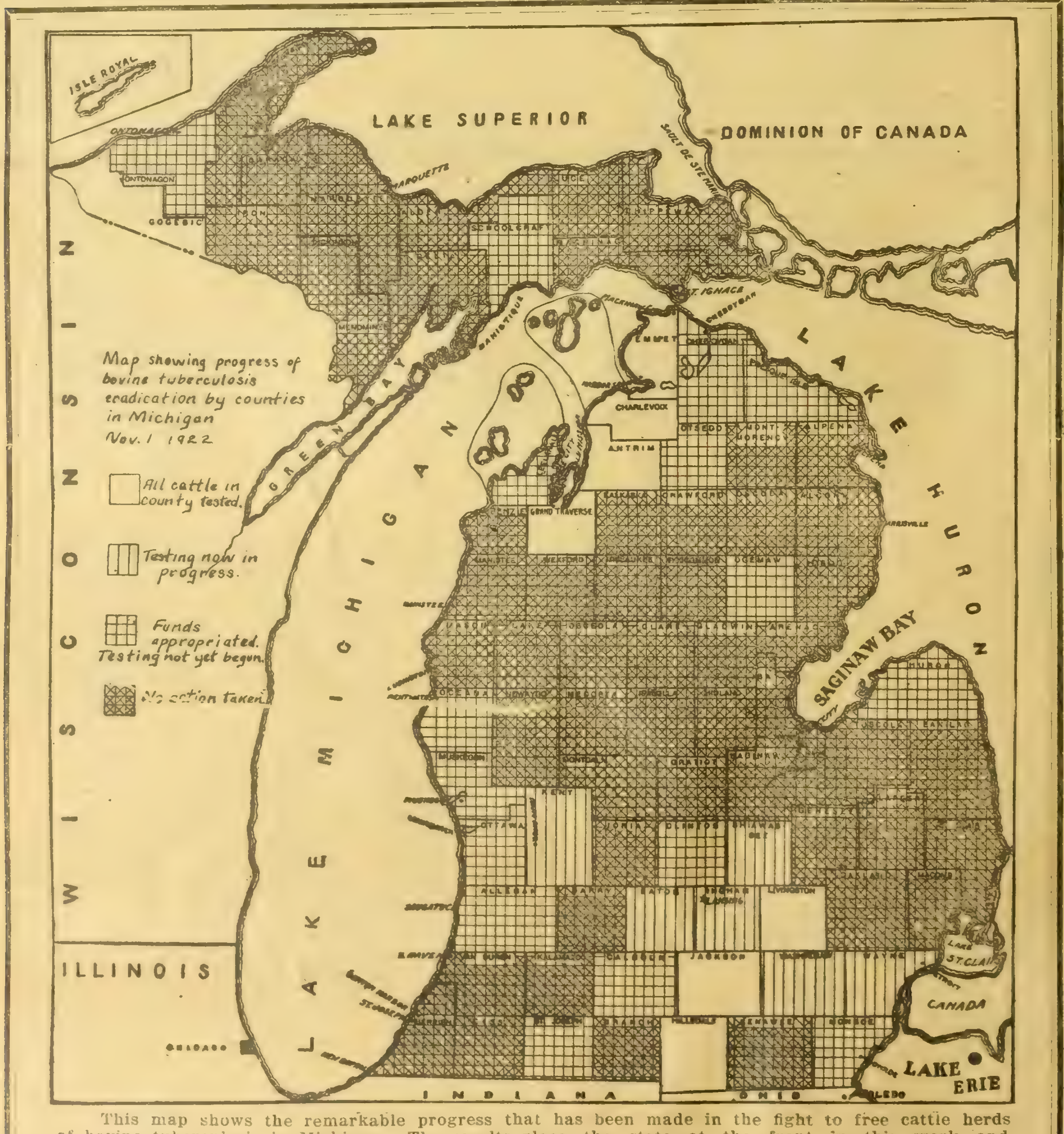
As an illustration of the cost of neglect, the experience of New York State is cited. During the last year the authorities in that state have expended for tuberculosis eradication

For less that $300,000 the Michigan authorities estimate that they could finance a five-year campaign which would completely eradicate tuberculosis from the cattle of Michigan.

MONEY APPROPRIATED TO FIGHT BOVINE TUBERCULOSIS IN MICHIGAN

THE total funds appropriated by counties during the past year for cooperative bovine tuberculosis eradication on the area basis amounted to $107,700.00. The counties and amounts given are as follows:

Hillsdale	$7,000.00	Washtenaw	$10,000.00
Jackson	8,000.00	Eaton	8,000.00
Livingston	4,500.00	Ingham	5,000.00
Grand Traverse	2,500.00	Calhoun	9,000.00
Antrim	2,500.00	Clinton	8,000.00
Charlevoix	2,500.00	Monroe	5,000.00
Emmet	2,500.00	Lelanau	1,500.00
Gogebic	2,500.00	Oceana	4,000.00
Wayne	5,000.00	Muskegon	5,000.00
Kent	5,000.00	Ogemaw	5,000.00
Shiawassee	5,000.00		
		Total	$107,700.00



This map shows the remarkable progress that has been made in the fight to free cattle herds of bovine tuberculosis in Michigan. The results place the state at the front in this work and strengthen confidence in the belief that the disease can be driven to the last ditch in Michigan and all other states before many years. At the left is a key to markings.

(Courtesy Chicago Daily Drovers Journal)

Historical Background of Michigan Agriculture

Third and Concluding Installment of Historical Outline of Rural Life in Michigan, by Prof. L. A. Chase

For many years the farmers of Michigan seemed not to have been greatly concerned regarding the quality of the seed grown. It is said to have been as late as 1909 that the Michigan Agricultural College began the distribution of pedigreed grain seed. It was not long thereafter that a group of farmers organized an association for the promotion of the use of superior and purebred seeds. This organization is now known as the Michigan Crop Improvement Association. In this way there has come into use such new improved varieties of grain as "Rosen Rye" (introduced from Russian by a student at the College by the name of Rosen) "Red Rock Wheat," "Worthy," and other varieties of oats, "Black Barbless Barley," etc. These have demonstrated their worth and added greatly to the productiveness of Michigan agriculture. Similarly there has been organized "The Michigan Potato Producers Association" for the purpose of improving the quality and yield of the Michigan potato crop. Both associations have a system of inspection and certification for purebred seed. The Michigan State Farm Bureau, since its organization in 1919 has undertaken the distribution of purebred seed to its members. When one contrasts the fifty-five varieties of potatoes listed by the State Board of Agriculture in the state in the year 1868 with the much smaller number of standard varieties found here today, one sees something of the revolution that has taken place in agricultural practice in the last few years.

It is no doubt true that certain other factors have reduced agricultural production in Michigan. The fertility of the soil has generally speaking not been maintained up to the standard found by the pioneers. Our farmers in this respect have not taken anything; like the pains which belong to the patient, industrious and wise farmers of China. History must record that the fertile surface soils were allowed to be washed away by rains and floods, and to have its essential humus destroyed by frequent burnings by forest and brush fires. Hilltops were deforested and this encouraged their denudation and ruin for agricultural purposes. In some sections, continued cropping in the same tracts, with the removal and sale of forage grasses without anything being done to replace the elements they have taken from the soil, has had its inevitable result in bankrupting the productive power of the land. It is requiring all the improvements in agricultural practices and marketing methods to overcome this self-imposed handicap.

Native Wild Fruits

The native wild fruits of Michigan—the wild crabapple, wild plum, wild cherry and numerous wild berries (raspberries, black, red and white, salmon-berry, cranberry huckleberry, wintergreen berry) were added to by certain tame species, such as the pear and the apple which, originally introduced into the territory by early French settlers or coureurs de bois, were found growing in a wild state by the first American travelers and settlers. The wild grapes had a wonderful luxuriance in the southeastern section of the state where soil conditions were more favorable than the elimate, giving rise to the name "River Raisin" along whose banks, as well as the Detroit River, the vine grew of enormous size and in great profusion. To find bearing apple-trees in remote places in the Michigan wilderness struck the first American comers as curious, and they wondered much as to the cause. It is still more a matter of conjecture than of clear record.

With the settlement came imported varieties of domesticated fruits and fruit culture, first among the early French and then among the Americans. Familiar types of apple, like the "Rambo," the "Greening," the "Snow," the "Spitzenberg," the "Twenty Ounce," and various pippins seem to have arrived early. Very early, too, apparently as early as the attainment of statehood—the great fruit industry of the Lake Michigan shore had gained its start, and peaches were going to market from the mouth of the St. Joseph River, and tame grapes were growing close to Grand Haven. There is testimony that the removal of the protecting forest from the interior of the state had its part in driving fruit culture, particularly of the peach and grape, to the lake shore where the winter blasts and summer breezes were tempered by the influence of the vast body of water over which they passed. The hardier plums, apples, cherries made good their position in the interior counties and even as far north as the shore of Lake Superior. At Ypsilanti and other southern points tree nurseries appeared very early and supplied fruit-growers with native stock. Thus before the time of the Civil War the Michigan fruit industry was thoroughly established. The State Horticultural Society was established in 1870 and in the intervening half century there has been a steady improvement in horticultural methods and results. The nut-bearing trees—the hickory, the beech, the butternut, the walnut, the chestnut and the hazelbush—have also contributed largely to the food supply of the people, but not much in commercial quantities. Of late there has been formed "The Northern Nut-growers' Association" to promote the growing of edible nuts in the northern states.

Horses are reported to have been introduced into Michigan by the early French, described as hardy, strong, of a quiet disposition and some of them quite speedy. An amalgamation of this type with early American breeds is said to have occurred. These early American horses were of moderate size, (fifteen to sixteen hands high and weighing 1,000 to 1,200 pounds). English thoroughbred stallions crossed with native mares improved the strain and provided the carriage and driving horses of later days. About 1854 the Morgan and Black Hawk horses are said to have been introduced from New England along with Hamiltonian and other trotting blood. During this period draught horse breeds, mainly of English stock, are reported to have entered the state. Then came Percherons from France, English Clydes and other types. By 1892 Belgians were also in evidence. Cleveland Bays and French coach-horses had then arrived. In 1892 Michigan had 530,000 horses which had risen to 640,000 in 1920.

In the pioneer era cattle, sheep and swine were of various non-descript types and it is only recently that there has arisen a demand for pure-bred stock.

In 1890 the Michigan Improved Livestock Breeders' and Feeders' Association was formed, and, as interest grew, there were formed special associations for particular breeds, such as the Aberdeen-Angus, the Holstein-Friesian, Short-horns and other varieties of cattle, and for particular breeds of sheep and swine. It is now much more common than it once was to find Michigan farmers with pure bred registered livestock.

Manufacturing Butter and Cheese

The manufacture of butter and cheese in factories dates from the time shortly after the Civil War and has been closely associated with the cattle business. It did not destroy the domestic manufacture of these products, but it has become relatively of much greater importance as the census figures show. It has always been of greatest importance in the southern and central counties. The milk producers of the state have oragnized and Michigan Allied Dairy Association comprises a number of industries related to the production and distribution of milk and milk products. Laws have been enacted for the protection of the purity of milk supply and to prevent short measures in its sale. Some cities have established commissions to certify to the purity of the milk sold to the public and to prevent the sale of impure milk.

Sheep are grown both for their fleece and for mutton. The pioneers made their own cloth from home-grown wool and even yet there are people in Michigan who continue this practice in spite of the greater cheapness of factory-made goods. The spinning wheel still hums in a few farm homes, and turns out a product that has no shoddy in it. There are also several factories in Michigan in both peninsulas, for the manufacture of woolen goods—not all from Michigan wool however, although they have utilized a portion of the wool gathered in by the Michigan State Farm Bureau. There has been a great improvement in the grades of Michigan sheep and Michigan wool is regarded as of excellent uqality. In the early period of Michigan history, however, sheep-raising was common especially in the southern counties.

In the earlier period of the state's history, meat, like almost everything else, was produced at home or in local slaughter-houses. While at present, much Michigan livestock is shipped to packing-plants outside the state—to Chicago, Toledo and Buffalo—Detroit stockyards and packing plants have also received large shipments and are doing an increasingly important business. Indeed, as Detroit contains more than a quarter of the population of Michigan it affords an important market for many Michigan farm products.

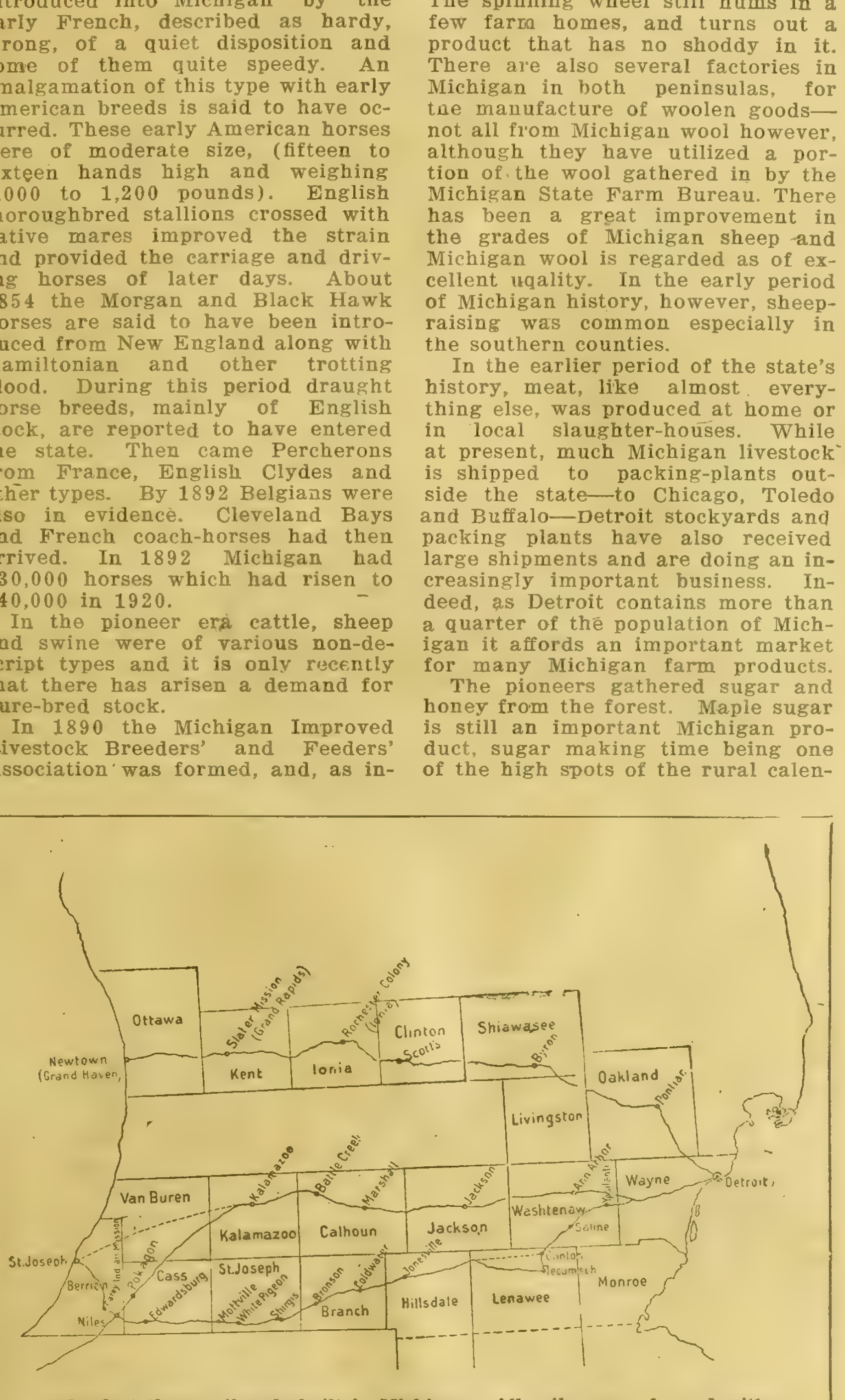
The pioneers gathered sugar and honey from the forest. Maple sugar is still an important Michigan product, sugar making time being one of the high spots of the rural calendar. The sugar-maple grows throughout most of the two peninsulas and sugar making on the farm is equally distributed. The maple sugar producers recently formed a state association to further their interests, and they are now distributing a portion of their syrup and sugar through the Michigan State Farm Bureau. Very much the same remarks apply to the production of honey. The unimproved cutover lands of the northern section of the state, through the abundance of the nectar-yielding vegetation which their carry, are becoming recognized as very favorable to honey-production and a beginning has been made in this territory.

The abundance of the right kinds of timber and iron, favored the early growth of factories of the manufacture of farm machinery, at first, fanning mills, corn planters, plows, etc., and more recently were added vehicles, threshing-machines, hand-mills, wire-fence, many kinds of implements and tractors, while the upper Peninsula contributes butter-bowls, clothes-pins, handles, and stump-pullers.

Marketing

For many years Michigan farmers marketed their products, each for himself, as best he could. The results were not always profitable. The Grange was established in Michigan in the early '70's and still later the Ancient Order of Gleaners, both of which have sought to improve market conditions for the farmers. Later still associations of farmers for the purpose of marketing some particular crop—such as potatoes, milk, honey, livestock, sugar-beets, etc., —were formed, and some of these have done a very large business—that of the Michigan Potato Growers Exchange amounting to several millions of dollars in a year. The fruitgrowers have a considerable number of these selling organizations. This organizing movement culminated in 1919 with the establishment of the Michigan State Farm Bureau which grew very rapidly and now (1921) has nearly 100,000 members. With and through its county and local farm bureaus, it handles seed, wool, grain, fertilizers, forest products and other things bought or sold by members; and it serves as a sort of business clearing house for the other farmers' selling organizations. There is a similar national organization—the American Farm Bureau Federation—with which the State Farm Bureau is affiliated. Local groups of farmers have also established co-operative stores, elevators, creameries and cheese factories, bull associations, telephone and lighting companies, and purchasing organizations for their mutual advantage. There are state laws which permit and favor such organizations. All this is quite unlike the individualism of the early period of Michigan rural life.

Through the telephone, rural mail service, automobile, and the inter-urban, rural life has ceased to be isolated. This easier contact with the common life of the state and the nation has stimulated rural thought and made it more responsive to new ideas. This may well prove one of the most noteworthy aspects of the agricultural revolution that the past generations seems to have witnessed. Though laborious the farmers' life appears to be, it is undoubtedly much less laborious than it was before the invention of labor-saving machinery relieved the husbandman of much of the severest drudgery of his existence and elevated him to the position of a business manager requiring executive ability rather than sheer brute force to gain results. This, too, has liberalized thought and done much to relive the farmer from the stigma of narrow conservatism that has sometimes attached to him. The stock has always been sturdy and capable of growth but it has required greater breadth and flexibility of mind. This the development of the later-years has seemed to be bringing about.



The first three railroads built in Michigan. All rails were of wood with a metal metal strip covering the running surface, and some of these roads used horse-drawn vehicles at first.

The Hunted Woman

By James Oliver Curwood

Michigan's Own and America's Formost Author of the Great Northwest

(Copyright by James Oliver Curwood

SYNOPSIS

JOANNE GRAY is one of the passengers on the train bound for Tete Jaune Cache the home of "The Horde," where she has no friends and all will be strange to her. The train stops at a town composed of several tents, she goes in search of food and a bath. She is directed to "Bill's Shack" and here she meets Bill Quade who not only owns and operates "Bill's Shack" but is also leader of the lawless men of the town. Quade says he has a room she can rent and that he will show it to her. As they pass out of the room a newcomer enters the doorway leading off the street. The newcomer is John Aldous, a well known novelist. He sees the strange girl enter the place and believes she has made a mistake and as he stands in the doorway his eyes rest upon the curtained doorway through which they have passed. In but a moment the girl steps out, face flaming and eyes flashing. Quade follows her apologetically. He starts to offer the girl money but before he can do so Aldous steps to the girl's side and floors Quade with a terrific blow. Aldous hurries the girl away from the scene to the home of friends. Joanne tells Aldous she is going to Tete Jaune to find her husband, Mortimer FitzHugh. Aldous decides to go with her to protect her from Quade and his partner Culver Rann. Aldous believes FitzHugh is dead and locates a friend who declares he has seen the grave. Upon their arrival at Tete Jaune they are met by friends of Aldous, the Blacktons, at whose place they are to stay during their stop. Aldous visits an old friend, Donald MacDonald and then strolls about town. He is on the lookout for Quade and Rann and finds them at Rann's home. He spys upon them.

(Continued from Jan. 20 issue)

NO sooner had the idea of escape come to him than he had acted. A flood of light filled the room as his body crashed through the glass. He heard a cry—a single shot—as he struck the ground. He gathered himself up and ran swiftly. Fifty yards away he stopped, and looked back. Quade and Rann were in the window. Then they disappeared, and a moment later the room was again in gloom.

For the second time Aldous hurried in the direction of MacDonald's camp. He knew that in spite of the protecting curtain, the glass had cut him. He felt the warm blood dripping over his face; both hands were wet with it. The arm on which he received the blow from the unseen object in the room gave him considerable pain, and he had slightly sprained an ankle in his leap through the window, so that he limped a little. But his mind was clear—so clear that in the face of his physical discomfort he caught himself laughing once or twice as he made his way along the trail.

Aldous was not of an ordinary type. To a curious and superlative degree he could appreciate a defeat as well as a triumph. His adventures had been a part of a life in which he had not expected to win, and in to-night's game he admitted that he had been hopelessly and ridiculously beaten. Tragedy, to him, was a first cousin to comedy; to-night he had set out to kill, and, instead of killing, he had run like a jack-rabbit for cover. Also, in that same half-hour Rann and Quade had been sure of him, and he had given them the surprise of their lives by his catapultic disappearance through the window. There was something ludicrous about it all—something that, to him, at least, had turned a possible tragedy into a very good comedy-drama.

Nor was Aldous blind to the fact that he had made an utter fool of himself, and that the consequences of his indiscretion might prove extremely serious. Had he listened to the conspirators without betraying himself he would have possessed an important advantage over them. The knowledge he had gained from overhearing their conversation would have made it comparatively easy for MacDonald and him to strike them perhaps a fatal blow through the half-breed DeBar. As the situation stood now, he figured that Quade and Culver Rann held the advantage. Whatever they had planned to do they would put into quick execution. They would not lose a minute.

It was not for himself that Aldous feared. Neither did he fear for Joanne. Every drop of red fighting blood in him was ready for further action, and he was determined that Quade should find no opportunity of accomplising any scheme he might have against Joanne's person. On the other hand, unless they could head off DeBar, he believed that Culver Rann's chances of reaching the gold ahead of them would grow better with the passing of each hour. To protect Joanne from Quade he must lose no time. MacDonald would be in the same predicament, while Rann, assisted by as many rascals of his own colour as he chose to take with him, would be free to carry out the other part of the conspirators' plans.

The longer he thought of the mess he had stirred up the more roundly Aldous cursed his imprudence. And this mess, as he viewed it in these cooler moments, was even less disturbing than the thought of what might have happened had he succeeded in his intention of killing both Quade and Rann. Twenty times as he made his way through the darkness toward MacDonald's camp he told himself that he must have been mad. To have killed Rann or Quade in self-defence, or in open fight, would have been playing the game with a shadow of mountain law behind it. But he had invaded Rann's home. Had he killed them he would have had but little more excuse than a house-breaker or a suspicious husband might have had. Tete Jaune would not countenance cold-blooded shooting, even of criminals. He should have taken old Donald's advice and waited until they were in the mountains. An unpleasant chill ran through him as he thought of the narrowness of his double escape.

To the surprise, John Aldous found MacDonald awake when he arrived at the camp in the thickly timbered coulee. He was preparing a midnight cup of coffee over a fire that was burning cheerfully between two big rocks. Purposely Aldous stepped out into the full illumination of it. The old hunter looked up. For a moment he stared into the blood-smeared face of his friend; then he sprang to his feet, and caught him by the arm.

"Yes, I got it," nodded Aldous cheerfully. "I went out for it, Mac, and I got it! Get your emergency kit, will you? I rather fancy I need a little patching up."

MacDonald uttered not a word. From the balsam lean-to he brought out a small rubber bag and a towel. Into a canvas wash-basin he then turned a half pail of cold water, and Alodus got on his knees beside this. Not once did the old mountaineer speak while he was washing the blood from Aldous' face and hands. There was a shallow two-inch cut in his forehead, two deeper ones in his right cheek, and a gouge in his chin. There were a dozen cuts on his hands, none of them serious. Before he had finished MacDonald had used two thirds of a roll of court-plaster.

Then he spoke.

"You can soak them off in the morning," he said. "If you don't, the lady'll think yo're a red Indian on the warpath. Now, yo' fool what have yo' gone and done?"

Aldous told him what had happened, and before MacDonald could utter an excusable idiot and that nothing MacDonald might say could drive the fact deeper home.

"If I'd come out after hearing what they had to say, we could have got DeBar at the end of a gun and settled the whole business," he finished. "As it is, we're in a mess."

MacDonald stretched his gaunt frame before the fire. He picked up his long rifle, and fingered the lock.

"You figger they'll get away with DeBar?"

"Yes, to-night."

MacDonald threw open the breech of his single-loader and drew out a cartridge as long as his finger. Replacing it, he snapped the breech shut.

"Don't know as I'm pertic'lar sad over what's happened," he said, with a curious look at Aldous. "We might have got out of this without what you call strenu'us trouble. Now—it's fight! It's goin' to be a matter of guns an' bullets, Johnny—back in the mountains an' the snake of a half-breed'll get the start of us. Let 'em have a start! They've got two hundred miles to go, an' two hundred miles to come back. Only—they won't come back!"

Under his shaggy brows the old hunter's eyes gleamed as he looked at Aldous.

"To-morrow we'll go to the grave," he added. "Yo're cur'ous to know what's goin to happen when we find that grave, Johnny. So am I. I hope——"

"What do you hope?"

MacDonald shook his great gray head in the dying firelight.

"Let's go to bed, Johnny," he rumbled. "It s gettin' late."

CHAPTER XIV

To sleep after the excitement through which he had passed, and with to-morrow's uncertainties ahead of him, seemed to Aldous a physical impossibility. Yet he slept, and soundly. It was MacDonald who roused him three hours later. They prepared a quick breakfast over a small fire, and Aldous heated water in which he soaked his face until the strips of court-plaster peeled off. The scratches were lividly evident, but inasmuch as he had a choice of but two evils, he preferred that Joanne should see these instead of the abominable disfigurement of the court-plaster strips.

Old Donald took one look at him through half-closed eyes.

"You look as though you'd come out of a tussle with a grizzily," he grinned. "Want some fresh court-plaster?"

"And look as though I'd come out of a circus—no!" retorted Aldous. "I'm invited to breakfast at the Blackton's, Mac. How the devil am I going to get out of it?"

"Tell 'em you're sick," chuckled the old hunter, who saw something funny in the appearance of Aldous' face. "Good Lord, how I'd like to have seen you come through that window—in daylight!"

Aldous led off in the direction of the trail. MacDonald followed close behind him. It was dark—that almost ebon-black hour that precedes summer dawn in the northern mountains. The moon had long ago disappeared in the west. When a few minutes later they paused in the little opening on the trail Aldous could just make out the shadowy form of the old mountaineer.

"I lost my gun when I jumped through the window, Mac," he explained. "There's another thirty-eight automatic in my kit at the corral. Bring that, and the .303 with the gold bead sight—and plenty of ammunition. You'd better take that forty-four hip-cannon of yours, along, as well as your rifle. Wish I could civilize you, Mac, so you'd carry one of the Savage automatics instead of that old brain-storm of fifty years ago!"

MacDonald gave a grunt of disgust that was like the whoof of a bear.

"It's done business all that time," he growled good humouredly. "An' it ain't ever made me jump through any window as I remember of, Johnny!"

"Enough," said Aldous, and in the gloom he gripped the other's hand. "You'll be there, Mac—in front of the Blacktons'—just as it's growing light?"

"That means in three quarters of an hour, Johnny. I'll be there. Three saddle-horses and a pack."

Where the trail divided they separated. Aldous went directly to the Blacktons'. In the kitchen he saw Tom, the Oriental cook, busy preparing breakfast. Blackton himself, comfortably dressed in duck trousers and a smoking-jacket, and puffing on a pipe, opened the door for him. The pipe almost fell from his mouth when he saw his friend's excoriated face.

"What in the name of Heaven! he gasped.

"An accident," explained Aldous, with a suggestive shrug of his shoulders. "Blackton, I want you to do me another good turn. Tell the ladies anything you can think of—something reasonable. The truth is, I went through a window—a window with plenty of glass in it. Now how the deuce can I explain going through a window like a gentleman?"

With folded arms, Blackton inspected him thoughtfully for a moment.

"You can't," he said. "But I don't thing you went through a window. I believe you fell over a cliff and were caught in an armful of wait-a-bit bushes. They're devilish those wait-a-bits!"

They shook hands.

"I'm ready to blow up with curiosity again," said Blackton. "But I'll play your game, Aldous."

A few minutes later Joanne and Peggy Blackton joined them. He saw again the quick flush of pleasure in Joanne's lovely face when she entered the room. It changed instantly when she saw the livid cuts in his skin. She came to him quickly, and gave him her hand. Her lips trembled, but she did not speak. Blackton accepted this as the psychological moment.

"What do you think of a man who will wander off a trail, tumble over a ledge, and get mixed up in a bunch of wait-a-bit like that? " he demanded, laughing as though he thought it a mighty good joke on Aldous. "Wait-a-bit thorns are worse than razors, Miss Gray," he elucidated further. "They're perfectly devilish, you know!"

"Indeed they are," emphasized Peggy Blackton, whom her husband had given a quick look and a quicker nudge. "They're dreadful!"

Looking straight into Joanne's eyes, Aldous guessed that she did not believe, and scarcely heard, the Blacktons.

"I had a presentment something was going to happen," she said, smiling at him. "I'm glad it was no worse than that."

She withdrew her hand, and turned to Peggy Blackton. To John's delight she had arranged her wonderful shining hair in a braid that rippled in a thick, sinuous rope of brown and gold below her hips. Peggy Blacton had in some way found a riding outfit for her slender figure, a typical mountain outfit, with short divided skirt, loose blouse, and leggings. She had never looked more beautiful to him. Her night's rest had restored the color to her soft cheeks and curved lips; and in her eyes when she looked at him again, there was a strange, glowing light that thrilled him. During the next half-hour he almost forgot his telltale disfigurements. At breakfast Paul and Peggy Blackton were beautifully oblivious of them. Once or twice he saw in Joanne's clear eyes a look which made him suspect that she had guessed very near to the truth.

MacDonald was prompt to the minute. Gray day, with its bars of golden tint, was just creeping over the shoulders of the eastern mountains when he rode up to the Blacktons'. The old hunter was standing close to the horse which Joanne was to ride when Aldous brought her out. Joanne gave him her hand, and for a moment MacDonald bowed his shaggy head over it. Five minutes later they were trailing up the rough wagon-road, MacDonald in the lead, and Joanne and Aldous behind, with the single pack-horse between.

For several miles this wagon-trail reached back through the thick timber that filled the bottom between the two ranges of mountains. They had travelled but a short distance when Joanne drew her horse close in beside Aldous.

"I want to know what happened last night," she said. "Will you tell me?"

Aldous met her eyes frankly. He had made up his mind that she would believe only the truth, and he had decided to tell her at least a part of that. He would lay his whole misadventure to the gold. Leaning over the pommel of his saddle he recounted the occurences of the night before, beginning with his search for Quade and the half-breed. He left out nothing—except all men-

(Continued on page 18)

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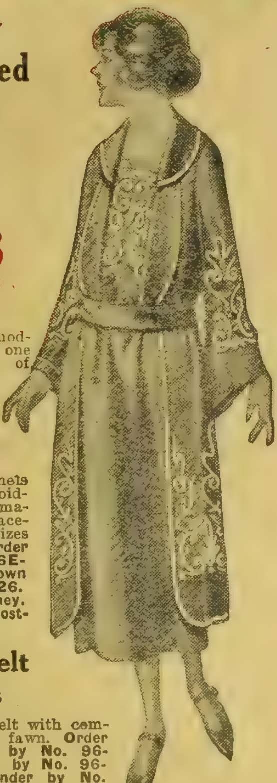

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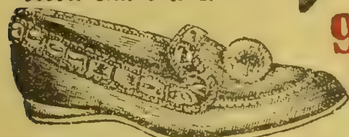

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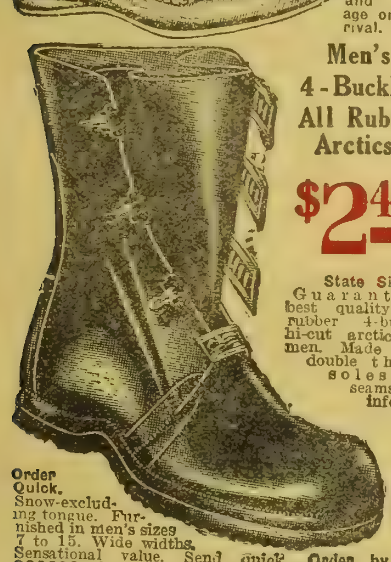

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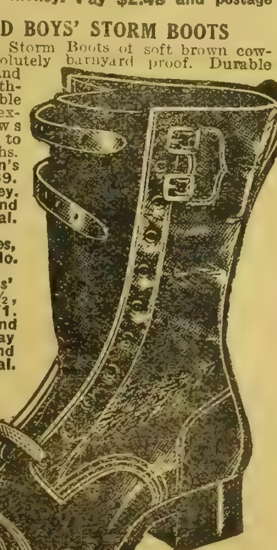
State Size

Guaranteed best quality all rubber 4-buckle hi-cut arctic for men. Made with double thick soles and seams reinforced.

Order Quick. Snow-excluding tongue. Furnished in men's sizes 7 to 15. Wide widths. Sensational value. Send quick. **Order by No. 96A990. Send no money. Pay $2.48 and postage on arrival.**

MENS' AND BOYS' STORM BOOTS

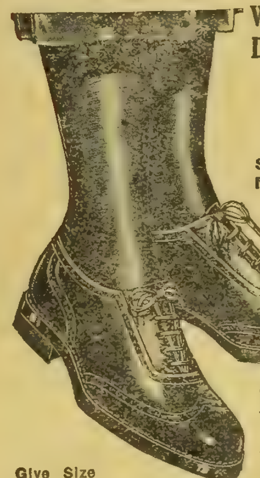
Wonderful Hi-Cut Storm Boots of soft brown cowhide leather, absolutely barnyard proof. Durable outsoles, sewed and nailed; solid leather insoles; durable counters; dirt-excluding bellows tongues. Sizes 6 to 12. Wide widths. **Order 9 in. Men's by No. 96A769. Send no money. Pay $2.98 and postage on arrival. State size. Order boys' sizes, 1 to 5½, by No. $2.48. Order little boys' sizes, 9 to 13½, by No. 96A571. Price $1.98. Send no money. Pay bargain price and postage on arrival.**



$1.98 UP

Same style, barnyard proof, 16-in. cowhide hi-cut for men. Sizes 6 to 12. Wide widths. **Order by No. 96A777. Send no money. Pay $4.98 and postage on arrival.**

Women's Stitch-Down Oxfords



$1.98

SEND NO MONEY

Give Size

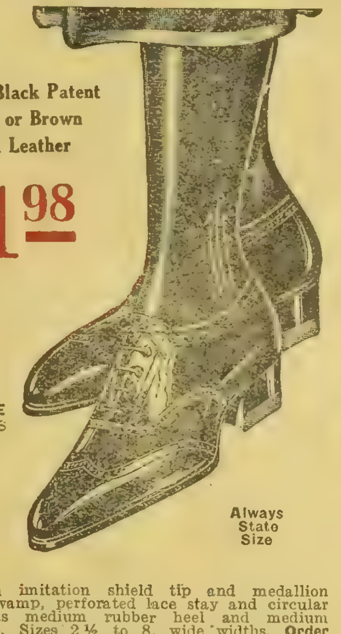
Classy stitchdown Oxford for women. Wonderfully comfortable and stylish. Uppers of dark mahogany leather. Smooth leather insoles. Flexible stitchdown oak outsoles. Low rubber heels. Sizes 2½ to 8. Wide widths. **Order by No. 96A268. Send no money. Pay only $1.98 and postage on arrival.**

Order similar style patent leather by No. 96A-264. Pay $2.48 and postage on arrival.

Women's Black Patent Gun Metal or Brown Calf Finish Leather

$1.98

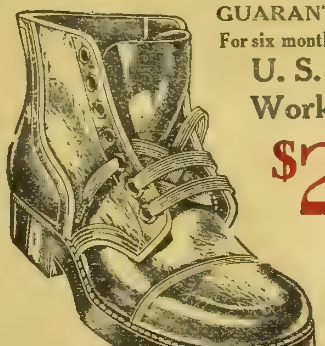
CHOICE OF THREE LEATHERS



Always State Size

Made with imitation shield tip and medallion perforated vamp, perforated lace stay and circular foxing. Has medium rubber heel and medium pointed toe. Sizes 2½ to 8, wide widths. **Order Patent by No. 96A64. Order Gunmetal by No. 96A69. Order Brown by No. 96A70. Send no money. Pay $1.98 and postage on arrival.**

GUARANTEED
For six months' wear
U. S. Army Work Shoe



$2.98

State Size

Send no money.

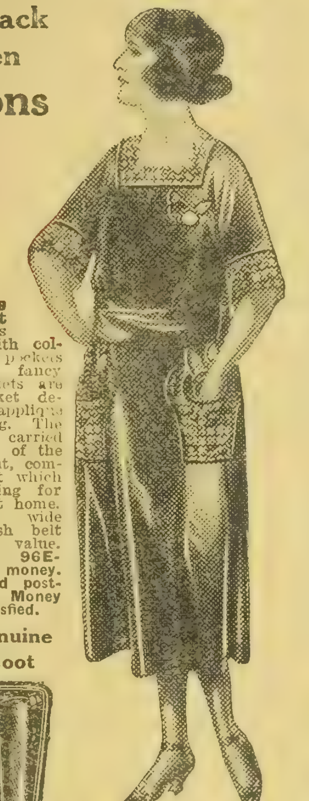
Men! Don't lose a moment in ordering this wonderful brown work shoe. It is made of leather as near waterproof as can be made—solid leather through and through with full grain leather uppers, guaranteed to wear six months. Easily worth $5.00. Two full, heavy double soles, sewed and nailed for greater strength. Extra wide, full leather counter, riveted to prevent ripping. Sizes 7 to 11, wide widths. **Order by No. 96A699. Send no money. Pay $2.98 and postage on arrival.**

Boy's Guaranteed Shoes

Six months' guarantee. Two full green chrome leather soles. Solid leather heels. Made on Munsey type army last. Barnyard acid-proof. Solid leather insoles. Sizes 1 to 5½. Wide widths. State size wanted. Send no money. **Order by No. 96A550. Pay $2.69 and postage on arrival.**

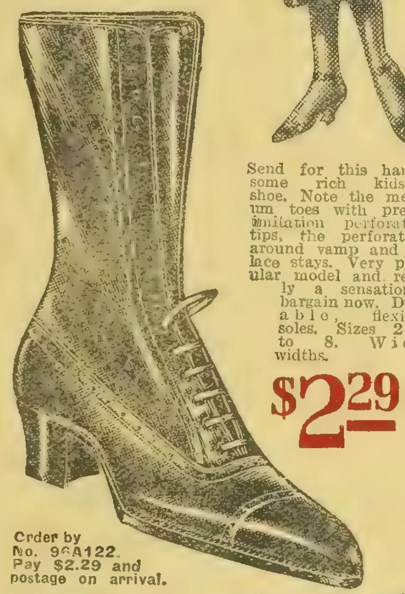
Rich Black Sateen Aprons

$1.79



The material is an excellent soft, lustrous black sateen with collar, cuffs and pockets of good grade fancy cretonne. Pockets are a novelty basket design with appliqué flower trimming. The same effect is carried out on one side of the waist. A full cut, comfortable garment which is just the thing for morning wear at home. Designed with wide self-material sash belt all around Big value. **Order by No. 96E-5098. Send no money. Pay $1.79. and postage on arrival. Money back if not satisfied.**

Women's Genuine Kid Hi-Cut Boot



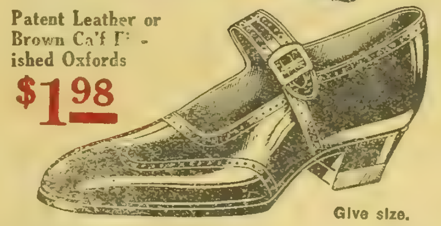
Send for this handsome rich kidskin shoe. Note the medium toes with pretty imitation perforated tips, the perforation around vamp and on lace stays. Very popular model and really a sensational bargain now. Durable, flexible soles. Sizes 2½ to 8. Wide widths.

$2.29

Order by No. 96A122. Pay $2.29 and postage on arrival.

Patent Leather or Brown Calf Finished Oxfords

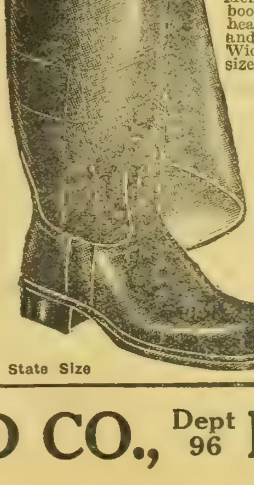
$1.98



Give size.

This smart pump in sizes 2½ to 8. In black patent leather or brown calf finish—a stunning one-strap model with imitation shield tip and medallion, effectively perforated. Has medium rubber heel. **Order patent leather by No. 96A72. Order brown calf finish by No. 96A73. Send no money. Pay $1.98 and postage on arrival.**

Men's Boots



Men's pure gum hip boots; friction lined; heavy corrugated sole and heel; 7 to 14. Wide widths. No half sizes.

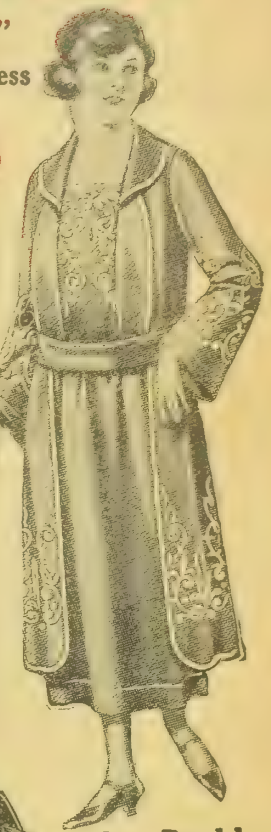
$2.98

Order by No. 96-A949. Send no money. Pay $2.98 and postage on arrival. State size wanted. Order similar style in knee boot sizes 7 to 12 by No. 96A-950. Pay $2.98 and postage on arrival.

State Size

"Stylish Stout" Gabardine Dress

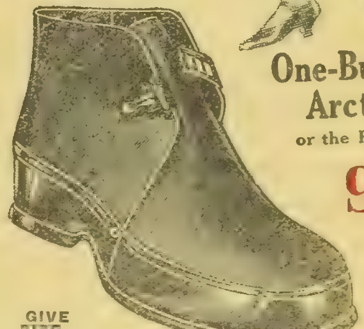
$3.98



Women of large figure will see in this new model their ideal dress This is a special design, planned to give long, slendering line to stout figures. Note how the collar, revers and panels carry out the long effect. Note, too, the attractive embroidery on sleeves, vestee and panels. The self-material belt ties at back. Sizes 39 to 53. In three popular shades.

Order Navy by No. 96E5470. Order Black by No. 96-E5471. Order Brown, by No. 96-E5472. Send no money. Pay $3.98 and postage for any color on arrival. State size.

One-Buckle Arctic
or the Family



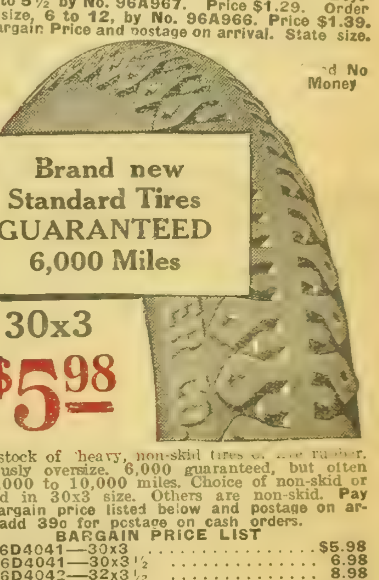
99c UP

GIVE SIZE

Heavy cashmerette snow-proof top. Genuine gum rubber bottoms; heavy single soles; full fleece lined; sizes for all the family.

Order Misses' size, 11 to 2, by No. 96A970. Price 99c. Order Woman's size, 2½ to 8, by No. 96A969. Price $1.19. Order Youth's size, 9 to 13½, by No. 96A968. Price $1.19. Order Boys' size, 1 to 5½ by No. 96A967. Price $1.29. Order Men's size, 6 to 12, by No. 96A966. Price $1.39. Pay Bargain Price and postage on arrival. State size.

Send No Money



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30x3

$5.98

Fresh stock of heavy, non-skid tires of [illegible] rubber. Generously oversize. 6,000 guaranteed, but often give 8,000 to 10,000 miles. Choice of non-skid or ribtread in 30x3 size. Others are non-skid. **Pay only bargain price listed below and postage on arrival, add 39c for postage on cash orders.**

BARGAIN PRICE LIST

No. 96D4041—30x3	$5.98
No. 96D4041—30x3½	6.98
No. 96D4042—32x3½	8.98
No. 96D4043—31x4	10.28
No. 96D4044—32x4	11.98
No. 96D4045—33x4	12.28
No. 96D4046—34x4	12.98

8,000 mile Garantee

SHAROOD'S JUNIOR CORD, 30x3

Same sturdy construction as regular cord but not oversized. A wonder service tire for Fords. **Order by No. 96D4090. Send no money. Pay only $9.19 and postage on arrival, add 49c for postage on cash orders.**

GUARANTEED INNER TUBES

Now is your chance to buy extra thick, live rubber inner tubes at a big saving. Don't wait for tube prices go up. How many shall we send? Give size wanted. No money now. **Pay only bargain price and postage on arrival, add 10c for postage on cash orders.**

BARGAIN PRICE LIST

No. 96D4020—30x3	99c
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No. 96D4022—32x3½	1.45
No. 96D4023—31x4	1.69
No. 96D4024—32x4	1.79
No. 96D4025—33x4	1.79
No. 96D4026—34x4	1.79

Be sure to mention all Sizes, Colors, etc., and send all Orders from this Page Direct to **SHAROOD CO.,** Dept 96 **MINNEAPOLIS, MINN.**

Square Deal Fence

Farmers who know how to save money buy Square Deal Fence and get the many years of extra service Square Deal gives. Stiff, picket-like stay wires make fewer posts necessary; wavy or crimped strand wires provide springiness and keep the fence tight and trim; the famous Square Deal Knot holds stay and strand wires in a vise-like grip without cutting, breaking or slipping; extra heavy galvanizing prevents rust and insures longest wear.

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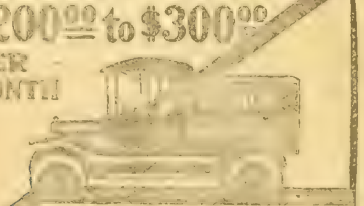
Factories at Cleveland, O., Adrian, [illegible] Memphis, Tenn.



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Farmers Service Bureau

(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full name and address. Name not used if so requested.)

WEEDS AND BRUSH ALONG HIGHWAY

I own a farm in Saginaw Township and my land runs up to the township line between Kotchville and Saginaw townships. There is brush along the road that has been there for years and the Kotchville road commissioner has ordered me to cut all the brush from my fence to the center of the road. It is Kotchville's end of the road to keep up. I just took possession of the farm last March and it doesn't seem fair to make one man cut it with several of the neighbors just as bad as mine if not worse. Will you please let me know if I must cut all the brush without any pay or print the law about cutting brush along the highway.

I like the M. B. F., very much and think the service and market pages are worth the price of the paper alone.—H. C. H., Saginaw, Mich.

—Section 2, of Chapter 24 of the General Highway Law imposes the duty of cutting all brush and weeds within the limits of the highway upon the Overseer and Commissioner of Highways of the various townships.

Section 10 of the same chapter imposes the duty on the Prosecuting attorney of the county to prosecute all violations of the provisions of the above section of the statute.—State Highway Department.

FORECLOSING

We purchased a farm Nov. 8, 1919, and it called for $200 and interest a year. We have only paid the interest in the last two falls. We are letting them foreclose and last year we didn't pay the taxes either nor this year. Now what I want to know is this: Can we hold possession? That is put in crops and take them off, and not live there. I know they can't put us off for 15 months after default of payment of interest. We bought on a mortgage. But we want to know if we can hold possession and not live there and can they make us pay last year's taxes?—L. W. H., Vassar, Mich.

—The mortgagor has the right of possession whether he lives on the property or not until the expiration of the equity of redemption, which is one year from date of sale. He does not need to live on the premises to make one who interferes with his possession a trespasser. He might think today that he would quit but change his mind before the time is up and arrange to keep the place. He may suddenly find the land to be valuable. If the taxes were assessed to the mortgagor, personally, and he has any personal property from which the town treasurer could collect the tax he must lose or make himself personally liable to the mortgagee who might have to pay the tax if the property was returned on the land.—Legal Editor.

CONDEMN RELIGION IN SCHOOL

Is it lawful for a district school teacher to condemn or molest, in any way a faith, or religion or any part thereof during school hours?—A Reader, Durand, Michigan.

—A district school teacher does not have the right to condemn or molest in any way any religion or any religious faith during school hours.—G. N. Otwell, Department of Public Instruction.

KU KLUX KLAN

Will you kindly inform me thru your valuable paper what the Ku Klux Klan is? What their laws, if any, are, or what their society stands for? This will be very much appreciated. Are there any Klansmen in Michigan?—Mrs. A. S., Curtisville, Michigan.

—The Ku Klux Klan, a secret organization, was founded at Paluski, Tennessee in 1866. It was formed originally for purposes of amusement only but soon after developed into an association of "regulators," and became notorious for deeds of violence. The proceedings of the Ku Klux Klan in the southern states were a feature of the determined struggle to withold from the emancipated slaves the right of voting. At a convention held in 1867 in Nashville, a positive declaration of principles was made. It was in the following terms, in effect:

"We recognize our relations to the United States Government; the supremacy of the Constitution; the union of the states thereunder." They defined the objects of the order as follows:

1. To protect the weak, the innocent and the defenseless from the indignities, wrongs and outrages of the lawless; to succor the suffering and especially the widows and orphans of the Confederate soldiers. To protect and defend the constitution of the United States and all laws passed in conformity thereto, and to protect the States and people form invasion from any source whatsoever. To aid and assist in the execution of all constitutional laws. The Klan was disbanded in 1869 but has since been re-organized, and is claimed to have members in every state in the Union, from Maine to California.

LET LOCAL PERSON JUDGE

What division is customary when one rents a farm, and furnishes everything, that is, seed, tools and horses. The renter thinks he would be a fool to husk my share of the corn.—E. M. L., Mt. Pleasant, Mich.

—If there was nothing said in the lease about what work was to be done I would be of the opinion that the taking of land on shares or percentage contemplates that the renter should do all the work usuel in farming and deliver the proceeds in proper shape. The amount given the renter under the circumstances related by would depend upon the locality in which the property is situated. Some land might be worth $500 per acre and other only $50 and it would hardly be fair to class the high priced land with that of less value. It would be fairer to take the opinion of those acquainted with the premises in the locality.—Legal Editor.

DUTIES OF COUNTY SCHOOL COMMISSIONER

What are the duties of a County School Commissioner, and are there any State, County or District School inspectors?—J. S., Toivola, Mich.

The county school commissioner is the chief eduational officer in the county. The following are some of his legal duties:

(a) To conduct all teachers examinations and 8th grade examinations.

(b) To visit each school in his county at least once a year.

(c) To inspect, and require correction if necessary of the annual reports of the several school boards.

(d) To advise with boards of education concerning buildings, equipment, sanitation, etc.

(e) To advise with teachers concerning methods of instruction, control, community ativities, etc.

(f) To co-operate with village and state superintendent of schools concerning the conduct and development of grade schools.

(g) To act as assistant conductor of all teachers' institutes held in the county.

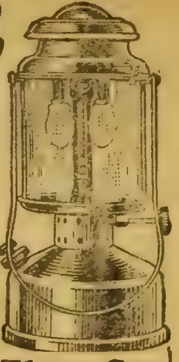
(h) To do all things possible that will improve educational conditions and methods within his county, and to co-operate with all forces directly or indirectly related to education.

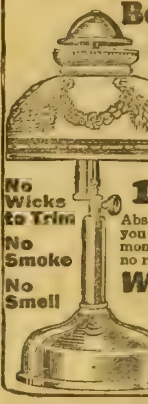
There are no state or county school inspectors in Michigan. That term is not used in Michigan law.—W. H. French, Director Vocational training, M. A. C.

MUST PAY ASSESSMENT

I wish to know if a land owner who does not sign a petition for a trunk line road which is to be built where his farm is situated, can be compelled to pay the special tax that will be levied against his land. Any information you can give us on this will be much appreciated.—A. H., Crosswell, Michigan.

—When a portion of the trunk line highway is constructed under the





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300 Candle Power Sunray Lantern
As a special introductory offer, a 300 Candle Power SUNRAY Lantern worth $8.50 will be given absolutely Free with the first purchase of a SUNRAY Lamp. Lights up the yard or barn like a search-light. Brighter than sun light—burns 30 hours on a few cents worth of kerosene or gasoline. Lights with match or torch. No wicks to trim—no chimneys—no smoke—no smell. Find out about this great special offer.
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Whitest light ever produced. Nothing to wear—simple—absolutely safe—you can burn it upside down. Get rid of drudgery and poor light—see the SUNRAY—flood your home with light—save your eyes.
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Absolute satisfaction guaranteed. If you don't like it, send it back. Our money-back guarantee protects you—no red tape.
Write Today Send for special introductory offer on FREE Lantern and agency proposition, also free literature on the cheapest and best way to light the home. Act Now!
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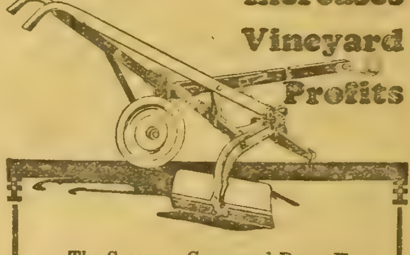
Dept. 3302 Chicago, Ill.



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The Syracuse Grape and Berry Hoe is the best tool ever designed for culture of grapes and berries. Kills weeds and stirs up soil under vines and close to roots so that air and plant food are available. Easily guided in and out around posts and vines. Blade reversible to throw soil to or from vines. Cultivator attachment extra. Sold by John Deere dealers.
FREE BOOK. Write today for booklet describing this implement. Address John Deere, Moline, Ill., and ask for Booklet GB-633.
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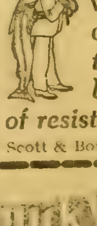

FISHER FOLKS
enjoy robustness and live until ripe old age. They know the value of cod-liver oil and its importance as a factor of diet and health
Scott's Emulsion
should be taken regularly during a time of weakness as a means of *helping to nourish the body and to build up the powers of resistance to normal.*
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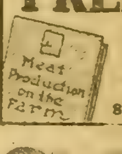
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Quick Way to Sugar Cure and Smoke Meat
SIMPLY pack meat in *Wright's Ham Pickle* and Salt. Then apply *Wright's Smoke* with brush or cloth. *Wright's Ham Pickle* sugar cures and flavors meat better. No trouble. *Wright's Smoke*, made from hickory smoke, gives delicious flavor. Quick—better than smoke-house. No shrinkage or loss. One bottle smokes a barrel of meat. *Wright's Smoke* and *Wright's Ham Pickle* cost little at any drug store. Fully guaranteed.
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lower in price today than we will ask later. Act quick—supply limited—market advancing. Buy now—your grass seed—our prices subject to change. Have wonderful values in guaranteed high grade tested Iowa grown Clover. Also Sweet Clover, Timothy, Alfalfa, Hubam and all farm and garden seeds. Our prices lowest yet. Save money. Write today for FREE SAMPLES, special prices and 116 page catalog.
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assessment district plan all property lying within the limits of the assessment district as established by the Highway Commissioner is assessable according to benefits received and a property owner having property within the district would be obliged to pay his assessment whether he had signed the petition or not.

Under the assessment district plan only 61 per cent of those having property abutting upon the highway are required to sign the petition in order to give the Commissioner authority to proceed under the petition in establishing an assessment district and building the road as described in the petition. In case the road is built under the trunk line act and not under the assessment district plan then there would be no special assessment for any abutting property owners.—H. H. Partlaw, Legal Adviser, State Highway Dept.

TAX EMPTION OF SPANISH-AMERICAN WAR VETERAN

I understand that all ex-soldiers of the Spanish-American War are exempted from taxes and am informed that you can give me instructions so I can obtain this exemption.—O. W. R., Detroit, Mich.

—All real estate to the value of $1,000 used and owned by any soldier or sailor who served three months or more during the Spanish-American War is exempt from taxation. Should such homestead exceed in value the sum of $1,000, it is exempt only to the amount of such sum.—Charles J. Deland, Secretary of State.

TANNING FUR PELTS

Through the M. B. F. please advise me how I can tan raw muskrat and weasel hides?—H. R., Bad Axe, Mich.

—Fleash the skin or skins carefully. Weasel pelts if properly skinned will need but little, if any fleshing. Soak them two to six hours in the following liquor: Four gallons of cold, soft water; one-half ounce borax; one-half pint salt; one ounce of sulphuric acid. This will prepare the skins for the tanning liquor. Now take two gallons of cold, soft water, (rain water is good) one-fourth pound of pulverized oxalic acid, and one quart of salt. Put the skins in this and leave them until there are no dense spots to be seen. It will take about 36 to 48 hours for muskrat and other fur pelts of the same thickness, but somewhat less perhaps for weasel. When tanned, remove the skins and wring them dry, then pull and work them while drying, so they dry soft. Do this work in the shade, remembering that the more they are worked while drying the softer the tanned pelts will be. In fact "elbow grease" is one of the essentials in sucessful tanning.

MICHIGAN CROPS

SEEDING FOR HAY

I have five acres of land that I wish to seed for hay. The land is high, dry and is weak light sand. Please tell me what kind of grass seed is best fit for it? The reasons for seeding is because the land has been cropped so long it needs to be built up. The seed I wish to plant is for to build up the ground and produce hay as well. I shall have five acres I wish to seed also, which is low and wet. Hope you can suggest to me the proper kind of seed to sow, when and what to sow with it. —R. S., Star Route.

—If you desire a crop that may be made into hay this coming summer we believe you will find soybeans better adopted to the light soil than any other crop. The Manchu, Ito San and Black Eyebrow are the leading varieties for Michigan conditions. They should be sown on well prepared seed bed at the rate of from thirty to thirty-five pounds of seed per acre, when sown in twenty-eight to thirty-two inch rows, and from eighty to ninety pounds of seed per acre when drilled solid. Soybeans may be sown from May 15th to June 10th.

Soybeans are more resistent to soil acidity than any other leguminous crop adapted to Michigan conditions.

If a premanent crop is desired, it would be advisable to lime the soil and either seed sweet clover or a mixture of Mammoth clover, June clover, orchard grass and Kentucky blue grass.

On the low, wet land would recommend seeding a mixture of red top, timothy, alsike clover with a small amount of June clover.—C. R. Megee, Farm Crops Dept., M. A. C.

SUDAN GRASS

I would like some information regarding Sudan grass. Where can I get the seed? What is the price of it? How much per acre should be sown? Would it do well on light gravelly soil? Can it be cut for hay? Or is it for pasture? What time in the spring should it be sown? Is it anything like quack grass, or can it be exterminated like other grass?

Sudan grass may be used quite successfully for either hay or pasture. It is practically the only crop that can be sown the latter part of May and produce pasture for horses and cattle the same season as sown. As a hay crop it has about the same feeding value as timothy. The yield usually runs from two to four tons of hay per acre.

Sudan grass should be sown about the middle of May at the rate of from twenty to twenty-five pounds of seed per acre. An ordinary grain drill set to sow two pecks of wheat will sow approximately twenty-five pounds of Sudan grass seed. It does not have an under-ground root system like quack grass and will not live over the first winter.

The price of Sudan grass seed is quite low, ranging from $6 to $7 per hundred pounds. Seed may be secured from the Farm Bureau Seed Department, 221 N. Cedar St., Lansing, Mich., the S. M. Isabell Company of Jackson, Mich., or quite frequently from local seed dealers.—C. R. Megee, Associate in Farm Crops, M. A. C.

RENEWING STAND OF ALFALFA

I sowed Alfalfa with oats last spring. There is only about a half stand of alfalfa. I wish to leave it and want to know how I can sow more alfalfa seed to secure a good stand this spring. When should it be sowed?—N. S. A., Fairgrove, Mich.

—It is only occasionaly that old stands of alfalfa are successfully thickened by seeding new seed on the old stand. Many more failures occur than successes. Much depends upon the cause of the old stand thinning out. It it was due to the original seed not being winter hardy, then some good might be accomplished by seeding six pounds of either Grimm or northern grown common during the early spring. The old plants however, will shade and rob the young ones of moisture so that the new seeding will not have the same chance as when seeded by itself. If the lack of lime is the cause of thinning then it would be more economical to turn under the old stand, lime and reseed. The lack of drainage and inoculation also cause failures. In seeding alfalfa a firm, well prepared seed bed is also of great importance.—C. R. Megee, Farm Crops Dept., M. A. C.

ADD ACID PHOSPHATE TO MANURE

TESTS which have been running the Ohio Experiment Station for 20 years show that substantial profits follow the reinforcement of stable manure with acid phosphate before application to the field. According to Director C. G. Williams, 320 pounds of acid phosphate added to eight tons of manure, and applied to corn in a corn-wheat-clover rotation has produced increases, over the yield from manure alone, at the rate of $109 per ton of acid phosphate. While all land cannot reasonably be expected to yield the same rate of return, there is no question according to Director Williams, but that the practice is a very profitable one. He suggests scattering a pound and a half per animal daily in the stall or manure gutter.

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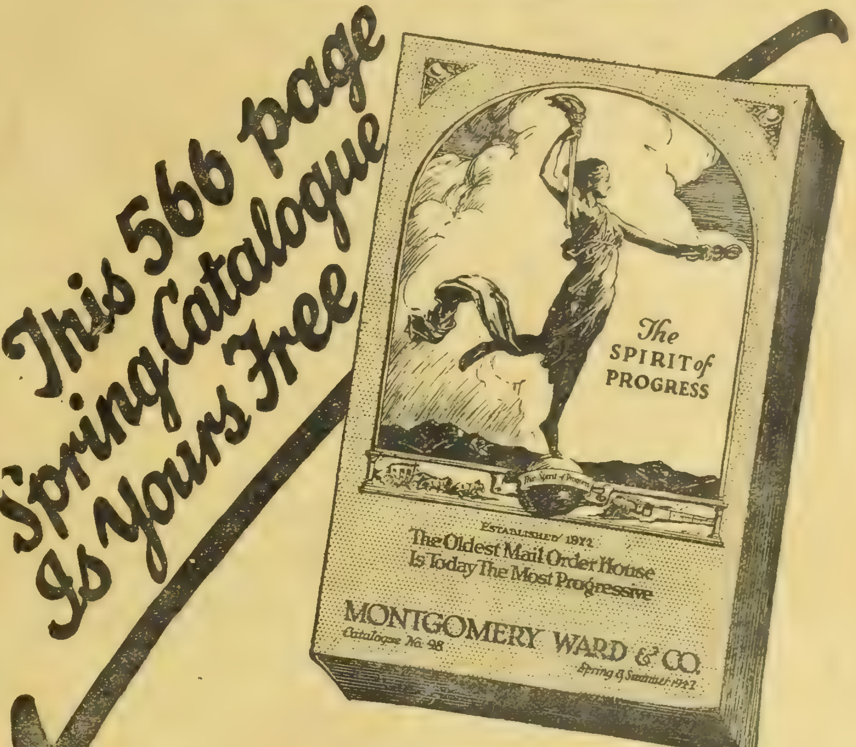

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(Continued from Jan. 20th issue)

The Truth About Henry Ford

The Inside Story of the Peace Ship Told for the First Time

By Sarah T. Bushnell

(Copyright by Reilly & Lee Co.)

WHEN Madame Schwimmer reached Detroit she learned that Miss Morgan and Miss Shelley had exhausted their funds. She immediately sold her jewelry to meet the obligations incurred and took a small room on the top floor of the Tuller Hotel. The writer was told by a woman who knew her that Madame Schwimmer was not the charming dazzling creature that report had made her. She is described as a woman of culture and education, sincerely eager to end the war. She was fairly good looking, pale, with dark hair and snappy eyes. She seemed just a plain motherly person, with no great amount of personal magnetism.

Like every newcomer in Detroit Madame Schwimmer was anxious to meet Henry Ford. She was an admirer of the Ford industrial system and desired moreover to show the motor king letters and documents from Earl Grey, the King of Sweden, von Bethman-Hollweg and others. These documents she carried with her always, enclosing them in a flat green leather bag secured to her wrist. It has been said that these papers were forged, but the charge has never been proved. She appealed to Mr. Pipp to secure for her an interview with Mr. Ford. "I think I can arrange for you to meet him," Mr. Pipp told her, "but I shall make the appointment on one condition: You must promise not to ask him for financial aid or try, directly or indirectly, to secure money from him."

Madame Schwimmer's snappy black eyes looked straight into Mr. Pipp's steady blue eyes as she answered: "I give you my word of honor that I shall not ask Mr. Ford for money for any project whatever. I want to secure his aid in presenting my documents to President Wilson." Mr. Pipp then arranged the meeting. At his suggestion Alfred Lucking, Mr. Ford's senior counsel and a former member of Congress, was present when Madame Schwimmer met the motor king in his great office at the Highland Park plant. She presented her credentials and other documents and was questioned searchingly by Mr. Lucking. No witness in court ever underwent a more gruelling cross-examination than did this Austrian woman that morning.

* * * *

In this connection it must be remembered that there was no stronger advocate of peace in the country than Henry Ford. He had been born in the years of the Civil War and had spent his childhood in the shadow of the old arsenal at Dearborn. His boyhood had been filled with stories of the horrors of war, and one day, years afterward, when driving away from this plant with a friend, he remarked: "There is the factory into which I have put my life. I have given it the best that is in me, but I would rather tear it down brick by brick with my own hands than have it used for making munitions of war."

The writer can state on the best authority that Mr. Ford did not agree to go to Washington with the peace committee. He was in Washington shortly after his meeting with Madame Schwimmer, and it was there that he was persuaded to go abroad with the peace delegates. It was at this time that the Peace Ship was suggested to him. Shortly after ward he telephoned Mrs. Ford at their home:

"We are going to Europe," he told her.

"Going where?" asked his astonished wife.

"You and I—We're going to Europe. And we are going to take some people with us."

"Indeed we are not," was Mrs. Ford's emphatic reply. "Don't let anyone talk you into any such notions."

It may be suspected that the motor king was unwilling to risk further discussion with his wife, for next day he called up Mr. Pipp from New York. "There is a rumor here that I am dead," he told the newspaperman. "I don't want Mrs. Ford to worry. Will you telephone her that I am all right. You can get her quicker from your office than I can from here. Tell her my cold is better and that I'll be home soon."

"What about the interview with President Wilson?" Mr. Pipp asked.

"There is nothing that he can do." came the answer in weary tones. "I'll tell you about it when I return. By the way, do you mind if I bring Miller back with me? I do not like to make the trip alone." Miller was the Washington correspondent of the News, and Mr. Ford was particularly fond of him.

The next thing Mr. Pipp and Mrs. Ford heard was that the newspaper announcement that Mr. Ford had agreed to finance a peace expedition to Europe; that a considerable party of peace enthusiasts would accompany him, and that he had chartered a ship for the voyage.

Mr. Ford returned to Detroit fired with the zeal of a crusader. To every advisor who urged him to abandon the project he replied: "In Washington they have experts studying every hill, valley, river and road in Europe. They have men studying every phase of war, but no one studying the possibilities of peace. If America is dragged into the war there will be a terrible loss of life among our young men. Thousands will be slaughtered like cattle and other thousands will die from exposure and disease. The reconstruction period through which we shall have to pass will be terrible. If I can be of any service whatever in helping end this war and keeping America out of it I shall do it if it costs me every dollar and every friend I have."

The Peace Ship sailed on December 4, 1915. It was necessary to take in gold the money needed to defray all expenses. Mr. Ford's farm manager, Ray Dalinger, who had served him since the days of the Piquette street plant, had charge of guarding and handling the great bags of coin that were carried in the ship's hold. Hardly was the Statue of Liberty out of sight before the peace delegates began to be less peaceful among themselves. In a short time the disagreements and friction became more marked. Madame Schwimmer herself became unpopular. She was temperamental and wrapped herself in a mantel of reserve. It has since been said that perhaps Madame Schwimmer was "a conspirator seeking to focus the attention of the world on peace at a time when her country and its allies held the whip hand."

If this be true, she was sadly lacking funds for the undertaking. Her interviews were in full glare of the searching light that beats upon publicity. If she was an arch-spy, what could she accomplish by announcing her presence in a neutral country where the secret service is swift, active and effective? What could she gain by approaching a man whose father was an Englishman; whose wife was the daughter of an English mother, both of whom keep in close touch with England? If she were an adventuress, she was bound to know that it is utterly impossible to reach a man of Henry Ford's prominence without being carefully scrutinized and investigated. If she were sincere in her motives, she has been terribly maligned and her disappointment in the failure of the expedition must have been overwhelming.

Henry Ford was ill when the party reached Christiana. A cold had become worse and he was in no condition to go farther with his already hopeless task. He remained aboard long enough, however, to gather first-hand information of the European situation, especially astunding information regarding Russia. He learned, too that Germany had no intention of ending the war without a victory that would subjugate the entire English speaking world. He found that what the Allies needed was a submarine detector.

Mr. Ford returned home on New Year's Day, 1916. The experience had aged him. It had opened his eyes to many things he would rather not have known and which he probably never would heve believed had he not made the voyage in the Peace Ship. That the war would continue he was convinced. The struggle would be a terrific one and the day was rapidly approaching when America would be drawn into it. Germany knew this country was unprepared and believed that we could not whip an army into shape in time to count in the conflict.

Forthwith Mr. Ford began to do some planning of his own. He ordered his yacht overhauled and made ready for instant service if the government should need it. His River Rouge plant, as has been said, is located at the point where the stream from which it takes its name flows into the Detroit river. The plant was rapidly equipped for the making of eagle boats and submarine chasers. The situation is an ideal one for a naval station, and it was used for this purpose throughout the war after the entry of the United States. Finally, Mr. Ford issued orders that work be rushed on his three million dollar hospital.

With all these preparations he never discussed with any one what he had learned abroad or the work he now had to do. If he read the bitter criticisms he gave them no heed. People close to him realized, however, that the current of his life had changd. He was busy day and night now; the twinkle came to his eyes but seldom, and the iron gray of his hair whitened.

A year later America entered the war and Henry Ford was summoned to Washington.

"How quickly can you supply us with cars and munitions?" he was asked by a congressional committee.

"I must have a little time," he parried.

"Exactly how long will it be before you can make your first delivery of cars, trucks, caissons and the like?" came the insistent question.

Henry Ford looked at his watch; it was 11:30. "By 3 o'clock tomorrow afternoon my first delivery will be complete," he replied. "I can telegraph to the plant and start work immediately. They should receive the order in five minutes."

The Congressmen laughed. They did not know that he had spent many sleepless nights planning every detail of the work that he knew he would be called upon to do. They did not know that he had been waiting the day when he must place all the resources of his great industry at the service of the government. The great factory—the largest motor plant in the world and the only one that hitherto had refused war orders—was equipped to the last detail so that at the signal from its owner every department could take up the work for war.

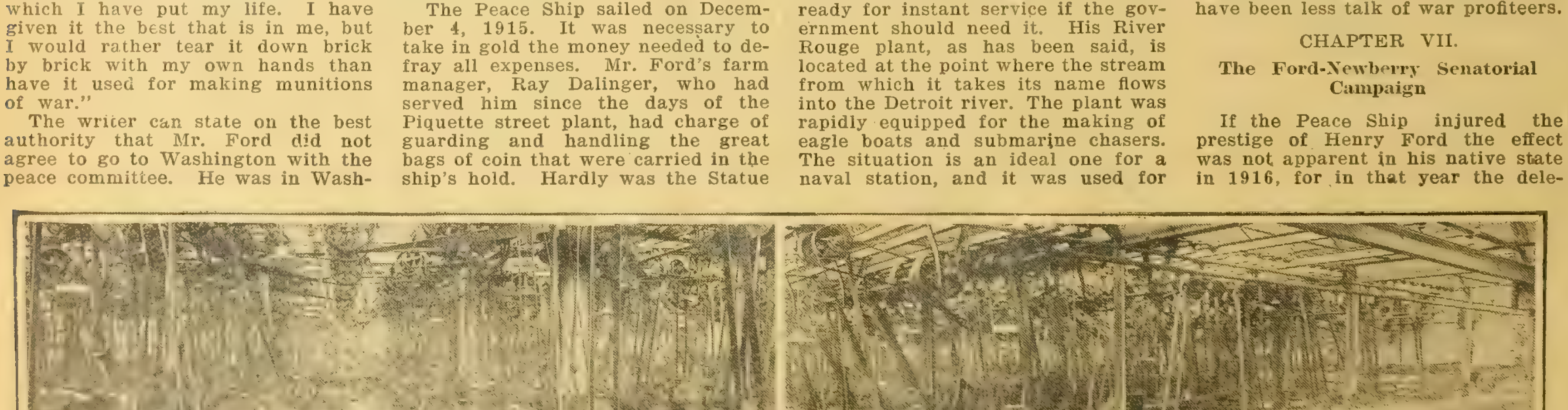
That is why the Ford plant played the wonderful part it did in supplying the necessities of war. That is why it was able to turn out finished materials for the armies faster than the ships could carry them across the Atlantic. What Henry Ford had learned on his unsuccessful peace voyage had caused him to prepare for the day that now had arrived. He knew that every day the struggle was prolonged more brave young soldiers would fall and he employed all his vast resources to hasten the coming of peace by a speedy victory.

Henry Ford gave all his war profits—twenty-nine millions—to the government, with no hampering conditions. This vast amount was turned back to the Treasury to be used as the government saw fit. This was the act of a pacifist. If all the war advocates had done the same the country's war debt would not be so staggering to-day and there would have been less talk of war profiteers.

CHAPTER VII.

The Ford-Newberry Senatorial Campaign

If the Peace Ship injured the prestige of Henry Ford the effect was not apparent in his native state in 1916, for in that year the dele-



Two views of the Ford plant at Highland Park, showing the maze of belting and machinery which make it possible to turn out four thousand complete automobiles in a single day. These machines are kept busy by three shifts of men who fill in twenty-four hours every day. Even with Mr. Fords earnest endeavor, it is hardly possible to keep the thousands of humans who toil here from becoming machines themselves. Thousands of visitors are conducted through this plant every year. Many foreign notables visiting America ask to be shown only two world-famous sights, "Niagara Falls and the Ford factory." This now is only one of the industries owned by Henry Ford who once, as this story has told, was a Michigan farmer boy.

gation sent to the Republican National Convention at Chicago was instructed to give him its complimenary "favorite son" vote. Mr. Ford had none of the characteristics of a statesman, or even politician, and does not yearn for public office, but he has more men working for him than there are people living in Nevada and Wyoming; he has been marvelously successful in his conduct of immense business underakings, and it would seem that he must be capable of filling a place in the Senate of the United States—not as a statesman or politician, not as a hard-working, successful man who always has had the interests of many people at heart.

In Michigan, where he is best known and most esteemed, many citizens were eager for him to be their senator, as William Alden Smith had announced that he would not be a candidate to succeed himself. Mr. Ford was urged to make the race on the Republican ticket and although the nomination would have been equivalent to election he refused, partly because he did not want the office and partly because he did not want to take the time away from his business. Then the Democrats appealed to him to become their standard bearer. "Michigan," they told him, "is overwhelmingly Republican. You are the only man who can make the race as a Democrat with any hope of sucess. At this critical period the President needs the support in Washington of every friend he has."

About this time the President sent for Mr. Ford to come to Washington for a conference. They discussed the submarine detector on which Mr. Ford himself had been working. From that the conversation turned to the coming senatorial campaign. Partisanship did not enter into the conversation, but the President said that he needed Mr. Ford in the Senate and gave as his reason that he "was fair-minded and had no party prejudices,' 'and he added: 'No one knows as I do the work that you and your son are doing to help win the war. No one knows better than I know the heartache and the sacrifice that you are putting into it. But I hope you will put aside your personal feelings, make this additional sacrifice and be a candidate.

Mr. Ford was touched by the appeal, but his reply was characteristic of the man. "I cannot leave Detroit," he told the President. "I cannot take my eyes off the plant. No matter how many officials I may have, I must be there myself. If I am around my factory all day and every day; I am there very often at night. I've gotten out of bed many a time to drop in on the night shift and see how things were moving. I've worked right along with the men on the submarine detector and we have just completed it. I cannot take time to make the race. Moreover, I have so much to do at Detroit that I could not spend enough time in Washington if I were Senator. Besides, I can't make speeches and I have not the patience to sit around and listen to folks who like to talk."

Mr. Wilson put his hand on Mr. Ford's shoulder. "The country needs you," he said. "We are being swamped with waste; we are being hamperd by various combinations. I need your aid in this time of stress. I know your obligation and I realize that I am asking more than you feel you can give; but I need you—need you more than you know."

And when Henry Ford returned to Detroit the same argument was advanced from every side: "The President needs you. You are the only man in Michigan that can be elected on the Democratic ticket."

Meanwhile the Republican, alarmed by the general talk of Mr. Ford as the Democratic candidate, cast about for the strongest man they could find to oppose him. They selected Cammander Truman H. Newberry, prevailed upon him to enter the primaries and he was selected as the Republican nominee. Mr. Newberry was a man of great wealth—several times a millionaire—and was connected with the most influential families of the state. His home was in the fashionable suburb of Grosse Pointe, ten miles from Detroit. In 1905 he had been appointed Assistant Secretary of the Navy and when America entered the world war President Wilson made him a Lientenant Commander in the navy, the highest rank ever conferred upon a civilian. Later he became aide to Rear Admiral N. E. Usher, commandant of the third naval district, which includes New York and Brooklyn. At that time no one had any idea of the bitternes and legal prosecutions that would follow the campaign; no one had any idea that Commander Newberry, one of Michigan's leading citizens, would be convicted and sentenced by a Republican jury and judge for violation of the federal election law, and that many other party leaders would be involved with him. If either Mr. Ford or Commander Newberry had known what was in store it is more than likely that neither would have taken part in the campaign, even if they had forseen that after the long and bittter fight Mr. Newberry would be cleared in the United State Supreme Court and the law under which he was prosecuted declared unconstitutional.

Finally Mr. Ford agreed to run. Soon the battle was on. His admirers took off their coats, rolled up their sleeves and went to work. Party lines were swept aside and Detroit never has known such a campaign as that which followed. Soon the excitement swept over the entire state—both men were known in every township and village and both were regarded as the strongest their respective parties could have selected. As time passed the campaign grew hotter and hotter. Straw votes were taken everywhere and it was confidently predicted that Henry Ford would be elected by an overwhelming majority, although he had almost no newspaper support—Michigan having few Democratic papers.

But the race was not over. Two developments were to upset the hopes of Mr. Ford's followers. One was the letter written by President Wilson asking for a Democratic congress. This did his candidacy much harm. The other was the statement attributed to Charles Evans Hughes, which appeared in the newspapers on November 3, 1918, just two days before the election. The statement itself hurt Mr. Ford's chances, and Mr. Ford's subsequent action did his cause still more harm. It should be kept in mind that the Ford Motor company did vast amount of war work. Armistice rumors were already being heard, but the necessity of guarding the country's war secrets was as great as ever.

In its issue of Sunday morning, November 3, the Detroit Free Press carried a full-page advertisement, which also appeared in other newspapers, parts of which are given below. The "ad" was published by the Republican State Central Committee, over the signature of John D. Mangum, chairman. At the top in heavy type, at least two inches high, were the words:

"HENRY FORD AND HIS HUNS."

Below this was the following statement:

"Carl Emde, a German alien and a German sympathizer, is boss of the drafting work on the Liberty motor at the Ford plant. Henry Ford knows he is a German alien and a German sympathizer, but he refuses to take him off this work.

"This is not hearsay. It is absolute fact, vouched for by Charles Evans Hughes, whom President Wilson appointed to find out why the production of American aeroplanes has been so much delayed, when the American soldiers in France needs them so much. President Wilson's confidence in Mr. Hughes is emphasized by the fact that Mr. Hughes is a former justice of the Supreme Court of the United States. His reputation and respect for the truth and for fairness in judgment have never been questioned, even by his bitterest adversaries. Concerning Emde's job, Mr. Hughes says in his report to the President:

" 'IT IS POSSIBLE FOR ONE IN THAT DEPARTMENT TO BRING ABOUT DELAYS THE CAUSES FOR WHICH, IN VIEW OF THE MULTIPLICITY OF DRAWINGS, IT WOULD BE HARD TO TRACE.' "

(Continued on page 18.)

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Dumorite has approximately the same strength as 40% dynamite, stick for stick, with the slow, heaving action of "20%"—and you get 1/3 more sticks for each dollar. It is non-freezing and non-headache. Get it at your local dealer's and clear more land at less cost.

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(2) For $1 enclosed renew my own subscription as above 1 year and add the following new subscribers name paid-in-full for 1 year:

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The Michigan
BUSINESS FARMER

SATURDAY, FEBRUARY 3, 1923

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"The Farm Paper of Service"

1923 SHOUULD BE READJUSTMENT MIDDAY

EXTRACTS from article under above caption, by financial editor of the Chicago Tribune, under date of January 1, 1923:

"The year 1922 will go down in American economics as the beginning or recovery from the drastic deflation of wartime and its aftermath, one of the most severe periods of depression in the country's history.

"American business industry throughout the year manifested a steadily improving pace. From a general depression in the winter of 1921, which revealed itself in unemployment of several million workers, the situation in one year reversed itself, and in recent months there have been complaints from some of the larger industries of shortage of labor, in spite of an advancing trend in wages.

"One of the best indices of the year's progress lies in a comparison of the country's financial situation now and at the end of 1921, as disclosed by the reports of the federal reserve system. Loans and rediscounts now aggregate about $565,000,000, or as much as at the close of 1921.

"Improvement in both agriculture and industry undoubtedly would have been more marked out but for the troubled European situation. Nevertheless, the record of our international commerce is not such as to cause discouragement.

"The United States last year sold about $1,000,000,000 more commodities than it bought, which is a comfortable margin.

"Generally, all classes enter the new year with better sentiment, encouraged by obstacles overcome and the more cheerful prospects. There is no reason why the work of the country should not go forward in orderly and sustained progress."

DR. FRIDAY'S MILK QUIZ

TRUE to his promise, David Friday, busy president of the Michigan State Agricultural College, opened his investigation of the milk situation in Detroit area last week and incidently raised the wrath of the daily press by refusing admittance to the session, not only to the public, but to the reporters.

The fact that the prices for the month of January, will remain unchanged from his prices set for the previous month, also caused some complaint, but it was hardly to be expected that in so short a space of time, Dr. Friday could determine whether or not the producer was getting a fair price or the public being robbed.

Obviously all are agreed that the spread in price between what the producer gets and what the public pays, is eaten up in the costs and profits of distribution and it is at this heart of the question that Dr. Friday's investigation aims. The average consumption of milk, per captia, in large cities is not one half what it should be, when measured in the food value of milk and its by-products. There are periods of the year when milk is actually wasted in Michigan and yet the price remains so high in cities that it is used only sparingly in homes which should have it in abundance.

The producer must have his cost of production plus a fair profit—and by the way, the producers have never shown an inclination to even hope to "profiteer' 'on their product. The consumer on the other hand must be able to buy milk at a lower price than he now pays and be educated to use twice as much milk for his family as he now uses. These things are possible, practical and eventual.

We have great confidence in Dr. Friday's ability to conduct the first step in this plan and every farmer in Michigan is intensely interested in what will be the outcome. We do agree with the daily press that these meetings should be open at last to representatives of newspapers and farm papers. "Open convenants, openly arrived at!"—seems to be a beautiful theory, hard to put in actual practice. Secrecy never breeds confidence and seldom broods good. We do not believe that Dr. Friday was responsible for the fact that the first meeting was held secretly and we hope that he will insist upon the next being thrown open to the white light of publicity.

MILO CAMPBELL ON RESERVE BOARD

THAT a Michigan man should have been appointed to a place on the Federal Reserve Board by President Harding were honor for our state, but that the man appointed should be none other than Milo Campbell, of Coldwater, should be a real source of satisfaction to the farmers of Michigan.

Washington newspaper dispatches say that Mr. Campbell was appointed as a "dirt farmer" to represent agriculture on the board. There is some discussion in the same periodicals as to whether a man who has been insurance commissioner, Mayor, United States Marshall and a member of the state legislature, can in reality be called a "dirt farmer."

We, in Michigan, would prefer to call Milo Campbell a business farmer, and in that phrase we would consolidate the virtues of a man who knows farming, its problems, its discouragements and its present-day needs. A man who will see clearly, deal squarely, have the respect of his associates and fight to the last ditch for what he believes to be right.

Mr. Campbell has the biggest job of any man on the board, beause he must represent the class who can be helped or hindered most by its immediate future acts. He goes to take up his work with all the well wishes of every good citizen in his home state and The Business Farmer joins with only one admonition—that he get back and rub shoulders with us often enough so that he can know what is actually happening on the farms and in the farmers minds.

CAN MORE CREDIT HURT THE FARMER?

MOST critics of the general principle of an extension of credit to farmers point out that a man cannot be helped out of debt, by being able to borrow more and on easier terms. Obviously they would be right, but they do not, or apparently do not care, to know that what the farmer wants is not a means for getting further into debt, but a means of borrowing at such times in such amounts and for such periods which will allow him to conduct his business of planting, producing and selling in an orderly manner, as every other division of manufacture ing is conducted.

How many times must it be pointed out that the farm—each and every farm—is a factory, complete in itself? The farmer must, not only be, designer, mechanic and finisher of his product, but salesman as well. If you would force the manufacture of any line to all dump their produts on a market at one time what would happen? Glutted market, no buyers, panic!

And yet that is just what has been going on and just what will continue to go on, unless some orderly manner of marketing farm products can be, designer, mechanic and finisher of his proplan of relief credit will accomplish the millenium, but we do sincerely believe that it is a far step in the right direction.

CANADA GETS OUR HARD COAL

IT will doubtless make you feel warm, at least under the collar, to learn that one of the reasons why you cannot buy any hard coal for your base-burner right now is because a very large quantity of anthracite is being exported each week to Canada.

The average small town in Michigan has been without hard coal all of this winter, some fortunate ones have been doling out a car at a time in half-ton lots at prices which make us think all coal-dealers are highwaymen whether their alibis are founded on fact, or not.

We believe in charity and were our Canadian cousins going without fuel we would be the first to say give them all of the nice, soft coal they need to keep them warm, but when it comes to supplying their rich with the cream and leaving us only the skim-milk, we think it is high time to tell our mine-owning coal barons that we, as humble citizens and taxpayers of these United States, have some interest in where our anthracite goes.

BEWARE OF THE LAND SHARKS!

NEVER was a time when the land shark could gather in the sheckels as he can today! There are a great many farms for sale in every state in the Union. These "mail-order" real-estate men, advertise usually in the want columns of farm paper and country weeklies, something like this:

> Farm Wanted—Want to hear from owner of a farm for sale. No dealers or brokers. Must deal with the owner direct. John I. Gettum, Suckers Shoals, Anystate.

Naturally, when the owner of a farm for sale writes, he pictures Mr. Gettum as a substantial, serious farm buyer. Sometimes, the owner is so sure he has exactly the farm that Mr. Gettum wants, that no sooner has his letter gone in the mails, than he begins to look for the place in town or hurry mother off packing up the dishes and furniture.

What Mr. Farm Owner gets back is a nicely worded letter, with a circular explaining that Mr. Gettum, is really asking for a large number of prospective farm buyers and he asks only a small fee, a trifling ten dollar bill, most likely, for which he promises—well, he doesn't exactly promise, but he does not say that, in all probabilty he will be able to sell the farm, by listing it and doing his best to sell it!

Nowadays, every mail that comes to my desk contains one or more letters from readers of The Business Farmer asking about this grafter in Ohio, or that faker in Wisconsin. Some of these folks have read my repeated warnings NOT to bite on indefinite promises by mail. Read between the lines of every letter of this kind that comes to your mail-box. The postoffice department is very strict. Leavenworth is not so far away and it is the final resting place of all mail-order grafters. A sane man will not promise by mail what he cannot deliver. So read every promise, accept no "perhaps" or "maybe" or "we hope to"—if you do not understand thoroughly exactly what they promise to do for your money. Write them to put their promise in plain words. Then do not be surprised if you fail to get an answer. Plain words? Well, that's something else again!

I. C. C. TO INVETIGATE EXPENDITURES OF RAILROADS

FOLLOWING a petition to the Interstate Commerce Commission by President Johnston of the International Association of Machinists, for investigation by that body into the expenditures of the railroad companies of the country for maintenance and equipment, which was seconded by the Farmers' National Council, the Interstate Commerce Commission has ordered such an investigation to cover:

> (a) whether expenditures by such carriers for the maintenance of equipment have been reasonable;
>
> (b) the manner and method in which the business of such carriers is conducted, with especial reference to the furnishing of of car service, and,
>
> (c) whether the courses adopted by such carriers in the maintenance of equipment and in providing "car service" have been efficient and economical, and whether the service provided has been reasonably adequate.

This investigation will be of the greatest importance and throw light upon the conduct of the railroads in reducing equipment, upon their inter-locking directors, and the reasons for maintaining enormously high freight rates.

As the result of a recent successful radio test, it is predicted that radio-telephonic conversation across the Atlantic Ocean will be the usual thing before very long. Every word of a speech by H. B. Thayer, delivered in New York City, was distinctly heard in New Southgate, England.

The modern racing airplane of today moves faster than did the cannon ball used in the Civil War. The cannon ball of that time averaged but 200 feet a second and the airplane does 360 feet a second.

We smiled when we read the first article on increasing egg production by keeping electric lights burning, early and late. Now, whereever there is electricity one sees the poultry houses lit up.

What the Neighbors Say

EXPENDING PUBLIC FUNDS

THERE are strong indications which leads one to believe that public funds are not economically and wisely expended. In 1915 the Tawas City built a small iron bridge, lenght 40 feet, height 6 feet. The state trunk line crosses this bridge now. In 1921 the State Highway department sent 7 or 8 men to paint said bridge, said improvement cost $784.00. Near the village of Whittemore a bridge about the same size a professional painter offered to furnish paint and good workmanship for $240.00. His bid was rejected and said painting, cost nearly $800.00

In the village of Whittemore 160 rods of concrete road was built, said 160 rods cost $40,000.00. A citizen from Genesee County stated that in his neighborhood, 8 miles of stone road was built, and when completed a man was hired to take care of said 8 miles for $1,100 per year. At the end of the year a bill was presented for extra material in the amount of $11,000.00. Does that not warrant an investigation on the part of the people to know how their funds are expended? We must unload the army of useless officials, which have feathered their nest under the high cost of living. They have the same effect on the tax payers, like lice on a fine blooded sheep, it must die.

The people must demand to oust the State Police. They are neither ornamental or useful. They must demand to abolish the State Tax Commissioners. They have done more harm than good. Unload the Utility Commissioners. They are only a bill of expense. Stop supporting the Northwestern Development Bureau that serves to advertise land corporation, their cut-over lands, and the people pays the bill. Repeal the Covert Act which sends the farmer to the Poor House. Abolish the power to fill offices by appointments. That will close the door on Easy Street. Let State Officials buy their own car, and all unreasonable salaries must be reduced. The people should select and elect three competent men, who's honesty can not be questioned to lift the lid, and report what they find. It's up to the people to demand what must be done. A public official is a public servant, and not a public master. The mastership belongs to the people. The November election proved the fact that Mr. Newberry made a swift jump for an old man. This wonderland must be closed, and the people must refuse to maintain a fools paradise for the oily tongued politician to live on the fat of the land. Farms after farms are needed under normal conditions. The farmers paid from $20 to $25 tax, now under this wild movement they pay two or three hundred or leave the farm.

If said reforms are carried out, it will remove a mountain of taxes, and we can build good roads just the same. What is good for the state, can be applied to the county also. Remove the drone. Let every citizen be useful and a producing member on the Public Body. This is like parking into a hornets nest.—C. H. A., Iasco County, Michigan.

HOW ABOUT IT, HENRY?

AS I have been reading Henry Ford's talk in the Detroit News it makes me think that Mr. Ford knows very little about the average farmer and the men that buy his cars and are making the roads. Men that kept a hired man before the war are now glad to work on the road to pay their taxes as they are as high as rent for some farmers, as high as $3.00 per acre.

Mr. Ford says that if it doesn't pay to run the business to let someone else run it and work for the other fellow. That is just what the farmers are doing as fast as they can have sales and move into the city.

Young men say they are getting as high as $12.00 a day by working a few hours overtime. Now who pays that? The men that buys the cars and mortgages their homes to pay for them.

I say if we don't get some help from the gasoline tax we farmers will buy less cars and Henry Ford will not have to go over "the pond" to get help because the farm boys are going to the city sure. There was not enough produce raised in my township this year to pay this year's taxes.—J. S. F., North Branch, Michigan.

HALF TAXED AND HALF UNTAXED

WE HEAR a lot these days about the U. of M. and M. A. C., wanting large appropriations and a great many are opposed to it, but I am not. I say, let Michigan have the best schools in the good old U. S., but this is what I am supposed to.

Let us consider our doctor for a few moments. Real estate pays 79% of the money at present, given by the state to the U. of M., now if it was not for the generous old farmers, many a young man would go without a college education, but, by the farmers furnishing a good share of the money to run these institutions, it enables them to get an education very reasonably.

Now, we must have doctors and we welcome them. We build stone roads, the cost of which real estate pays about 85%. Now what do they do? They buy a house and a lot in town, an automobile, and as much tax exempt, or nearly so, property as they can buy. This little problem not only applies to doctors, but lawyers, dentists, professors, salesmen, tec., or anybody who gets his education at an institution where real estate pays the largest portion of the running expenses, and when his education is completed, invests his earnings in property that pays at least to support such institutions. Why is it not fair to expect a man to pay his just share toward the running of the institution where he got his education, or in other words, I don't think an education should be for the purpose of enabling a man to make an easier living and getting out of paying his just share of taxes.

Let us consider two men, one with $100,000 of non-taxable bonds, the other with $100,000 worth of real estate, their valuation is the same. The man with real estate pays a tax, whether he makes a profit or not, and if a large profit is made, he pays a Federal income tax, while the man with the bonds pays the Federal income tax only, providing his profit is large enough. What is right about it?

I think we should have a gasoline tax until the wealth of Michigan outside the real estate pays its just share of taxes, and a state income tax, as long as we have non-taxable property that produce incomes.

Get these figures: real estate represents 35% of the wealth of Michigan and pays 79% of the taxes. If the other 65% of the wealth paid in proportion to real estate, we would receive over two times as much taxes and real estate would not have to pay a cent more than at present. What the farmer wants is equalization of tax burdens.

Abraham Lincoln said; "A nation cannot exist, half free and half slave." Do you think a state can exist half taxed, and half untaxed?—H. D. P., Riga, Michigan.

PROTECT THE QUAIL

EDITOR M. B. F.—The farmers are almost unanimous in wanting the quail protected. Will you kindly give it a writeup in your editorial columns.—P. M. Baucher, Stanton, Michigan.

(Editor's Note)—If there is any good reason why the few remaining quail in Michigan should not be protected, we do not know what it is and we would be glad to have someone enlighted us. The good sportsmen of this and other states, want to see the quail protected. The poor sportsmen don't want the quail or wild fowl or fish protected. Luckily the good sportsmen make the laws and see that they are enforced.

HELPS SOLVE HIS PROBLEMS

I appreciate reading your paper very much and find it a great help in solving many problems on my farm.—Emil H. Roberts, Chicago, Illinois.

ENJOYS UNCLE RUBE

I like your paper real well. And I especially enjoy reading Uncle Rube.—Mr. Peter Stanek, Charlevoix County, Mich.

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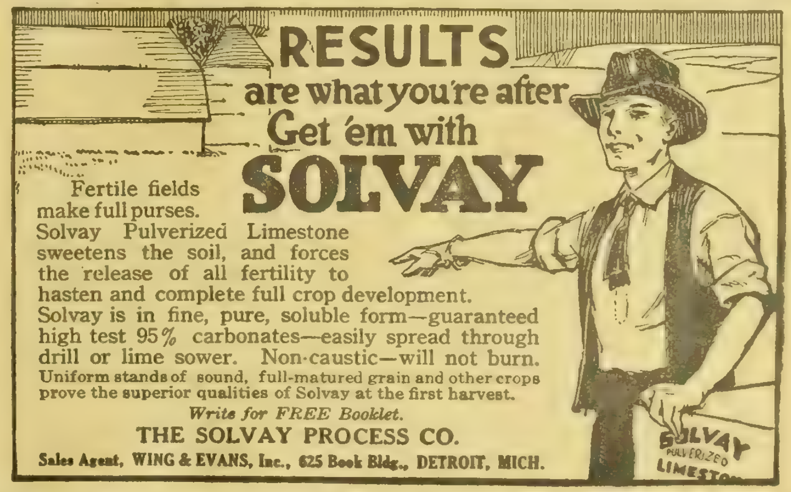

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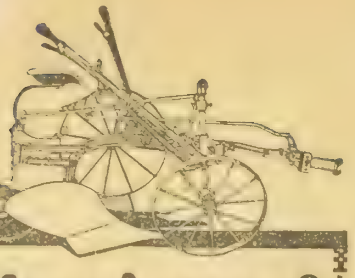

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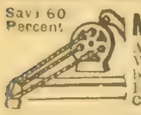

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FARM MECHANICS

HANDLING DYNAMITE ON THE FARM

WHILE the word "dynamite" has a rather dreadful sound, it is not nearly as wicked as is generously supposed. The stories about dynamite exploding when dropped are either figments of the imaginative story writer or refer to an entirely obsolete product made some thirty or forty years ago. Explosives manufacturers have spent a great deal of time and vast sums of money in perfecting their product, and today dynamite is safer to handle than ever before. Considering that in normal years 300,000,000 pounds of dynamite are made and sold, the proportion of accidents is very small indeed. Even in the manufacture (an admittedly hazardous operation) there is only a fraction of the number of fatalities that occur in a big machine employing the same number of men.

Dynamite is nowadays generally packed in cylinders of heavy parafine paper to form cartridges or "sticks" usually 1 1-4 inches in diameter and 8 inches long. These cartridges are dipped in paraffin to make the paper still more water-proof, and this gives them a greasy feeling which is sometimes mistakenly supposed to be caused by the nitroglycerin which is the essential ingredient in all modern high explosives. Besides nitroglycerin, dynamite ordinarily contains nitrate of soda, sometimes called Chile saltpetre, and some substance to supply necessary carbon, such as wood meal. In addition about one per cent of alkaline material called antacid is put in as a corrective for any tendency of the nitroglycerin to decompose on account of insufficient purification. When you open the wrapper of a dynamite stick the contents look like slightly moist brown sugar.

For all around purposes on the average farm only two types of dynamite out of a great many are manufactured need be considered. One of these types is of relatively low strength and slow action and is adapted for practically every kind of work around the farm such as blowing out stumps and boulders; loosening up hard packed soil for tree planting; rejuvenating old orchard trees by shaking up the soil around their roots; breaking through impervious strat like hard pan or cemented gravel, which prevent free drainage into the sub-soil from the surface; and for sub-soiling to prevent erosin and washing away of the surface soil in rolling land. The other type of explosive is low freezing straight dynamite, the 50% strength being generally best for farm work. This is an exceedingly powerful, quick acting and shattering dynamite, which is used for blasting ditches through swampy ground where no other method of procedure would be possible. This ditching by the propagation method is a very facinating subject and will be taken up in detail later.

Dynamite is a detonating explosive; that is, it cannot be fired by a spark alone but requires a device known as a blasting cap in order to detonate it. These blasting caps are small copper cylinders about half filled with a very powerful and sensitive composition, usually fulminate of mercury, which is fired by fuse. This fuse consists of a small and very uniform train of a special black powder tightly wound around with threads of jute or cotton more or less water-proofed. Most fuse burns at the rate of about ninety seconds per yard, and is very uniform in its burning sped, very seldom varying more than five percent either way.

Another kind of blasting cap made is called an electric blasting cap. This is similar to the one first described except that it has two copper wires running into it which are connected together in the explosive composition by another very fine wire which becomes heated to white heat by the passage of an electric current and thus fires the cap. Electric blasting caps are sealed up with water proof compound so that they can be used under water even when submerged for a considerable length of time. Electric blasting caps with wires attached do not cost much more than the blasting cap with fuse of the same length as the wires of the electric blasting cap, and are much safer to have around on account of their being sealed up. They should be fired by means of a blasting machine, which is a simple dynamo conveniently built for transforming muscular energy into electric energy. The blasting machine is much safer to use than any kind of dry cell battery, or storage battery, for the reason that the contact points or binding posts are dead; that is, no current will flow through them except when the machine is operated purposely, whereas with the dry cell or storage battery, the connecting posts are always alive and there is considerable danger of their being inadvertently connected or even touched by the leading wires before it is safe to fire the blast. With cap and fuse, sufficient length of fuse must be used so that after lighting the free end the operator has time to run to a place of safety. With the electrical method the operator connects the two wires of the electric blasting cap with about two hundred-fifty feet of leading wire, which generally allows him to get to a place of safety, and connects the battery at the far end of the leading wire for firing the blast. One of the great advantages of electrical firing is the fact that it is instantaneous and that the time of the blast is therefore under control of the blaster. In shooting stumps along the roadway with cap and fuse, if some vehicle approaches after the fuse has been lighted at about the time the blast is due to fire there is no way of holding off the blast, whereas with the electrical method if anything happens which renders it desirable to delay the shot for a few minutes, the blaster simply waits until all is clear before firing.

All the above may sound a little complicated. However, it is nothing like as complicated as making a loaf of bread, for instance. Let us illustrate this by going through the process of blowing out a stump. With a crowbar we punch around under the stump until we find a place between the roots where we can get the bar down in the soil a couple of feet under the stumps and then we wiggle the crowbar around with a rotary motion in order to enlarge the hole. If the soil is very hard it may be necessary to drive the crowbar in with a sledge hammer or to use a dirt auger or a punch bar. Let us say this stump is about two feet in diametor and is four or five year old and is ordinarily stiff loam. Four cartridges of low strength and slow action dynamite is about the right charge. With a sharp knife we slit the paper shell of the first three cartridges down the length of the cartridge, drop one into the hole, and with a sawed-off broom stick press it firmly down so as to cause it to spread out and fill the bottom of the hole without leaving any air space there. We drop the second and the third cartridge in and press them in to position in the same way. Now we take a blasting cap out of its box, cut off about three feet of fuse and the oil, slip the blasting cap on the freshly cut end of the fuse in such a way that the fuse just touches the cap composition. Holding it in this position, we crimp the cap firmly on the fuse by means of a ap crimper. We then take the fourth cartridge, punch a hole about an inch from one end in a slanting direction with the pointed leg of the ap crimper, insert the cap in this hole, and tie a piece of string about ten inches long first around the fuse about half an inch above the cap and then around the cartridge so that the cap cannot be pulled out of the dynamite. This cartridge with the cap in it is called the primer. It is not generally slit or, if it is slit, only about half its length, beginning at the end opposite the cap. After placing the primer in the hole we fill the remaining space with clay, loam or sand, paking it down carefully with the broom stick, which is know as a tamping stick. Then with a sharp knife, we slit the exposed end of the fuse half way through to a length of one inch, take a match (a box of safety matches is the best kind to use) and, holding the box lose to the fuse, strike the match and, while its head is still flaming put it quickly into the powder exposed in the fuse. We now retire to a safe place and in about ninety seconds the charge explodes. If the amount of dynamite has been gauged correctly, the stump is blown clear and clean out of the ground leaving very few, if any, roots in the earth.—Arthur La Motte, Manager Technical Section, Explosives Department, E. I. duPont de Nemours & Company.

RUNNING ELECTRIC LIGHT PLANT

I would like to know if it is possible to run an electric plant with water without storage batteries by running the wheel when I am using lights, and what would be required for such a system? Also how much power would it require to run twenty lights? Would a man have to get lights?—W. W., Glennie, Michigan.

—Whether or not it is possible to run an electric light plant from water without storage batteries would depend entirely upon the power available in the stream, and whether this stream flow is great enough to furnish this amount of power whenever it is needed. If the stream is large enough this would be thoroughly practical.

You have in mind one water power installation where about 35 horse power is available in the stream and where a one-half horse power generator is connected by means of a friction pulley to the rim of a 15 horse power turbin. The excess power going through this turbin is, of course, simply wasted.

Assuming that 20 50 watt lamps are to be used, they will require 20x50 or 1000 watts which is equal to 1 kilowatt and which is equal to about 1 1-3 horse power. Since some power is lost in all the transmission equipment it will be necessary to have 2 2-3 horse power in the stream to supply this amount, of course if this amount of light is the minimum or the least that can be used then it can easily be seen that it will be necessary to have this amount of power when the stream is at its lowest, to supply power.

For an ordinary small stream a turbin or water wheel is necessary, where the fall is very little then probably the turbin would be found most satisfactory. The turbin is a wheel through which the water passes to produce power. The governor which controls the speed of this wheel is an important part of the equipment and involves some expense in addition to the turbin. It is very likely, however, if no storage batteries are to be used that a governor would be especially important. H. H. Musselman, Professor of Farm Mechanics, M. A. C.

IMPROVED WHEAT VARIETIES AMONG YEAR'S ACHIEVEMENTS

THE Office of Cereal Investigations in the Bureau of Plant Industry, U. S. Department of Agriculture, is working steadily to improve the varieties of wheat and other cereals grown in this country.

In the annual report of the bureau recently made public are listed among the significant accomplishments of the past fiscal year, two new wheats named Forward and Honor that have been developed in the breeding experiments in cooperation with the agricultural experiment station of Cornell University. These are now being grown commercially, and seed is offered for sale by seedsmen and farmers in New York State.

Kota, a bearded, hard red spring variety, discovered in 1918 to be especially resistant to stem rust, was grown in 1921 at 30 experiment stations to determine its value in comparison with adapted commercial varieties of both common and durum wheats. During the past three years its resistance to stem rust has proved nearly equal to that of the most resistant durum varieties. The commercial stocks of Kota seed were increased to about 6,000 bushels in 1921, and nearly all of this was sown in 1922.

A number of other varieties developed by the department have continued to give good satisfaction with the result that their commercial production has been increased considerably.

PRUNING FRUIT TREES

(Continued from page 4)

period but we are chiefly concerned with the three more commonly accepted systems.

The Central Leader of Pramidal Tree system has long been in use, and since it is the easiest to develop, it will receive first consideration The central branch is allowed to ascend year—after year with little or no cutting back, while the lateral scaffold or main branches are kept somewhat shorter by greater or less heading. As a result, the lateral branches are considerably smaller than the central axis, and crotches are formed which seldom split. Strong trees result, but it is very difficult to keep them opened sufficiently to permit light to penetrate to the inner parts, and the tops usually become too high to permit orchard operations to be conducted economically. This system is not favored by many present-day fruit growers.

The Open Center Type of tree usually has three to five scaffold branches well distributed around the trunk and extending outward and upward from it to form the framework. The leader or upright branch is removed, usually the first year. These three to five branches are cut back to approximately the same height after the first season's growth, and this equal heading of all branches is continued until the framework is completed. In other words, each of the scaffold branches is given equal prominence, and any tendency of one to outgrow the others is surpressed. The center is kept sufficiently open to permit the penetration of light throughout the tree. The result is a spreading tree, sufficiently open to permit good coloring of the fruit, and low enough to allow economical handling. This type of tree is easily maintained after it is once started.

The open center tree is structually weak, due to the fact that, in general, the scaffold branches issue from practically the same point, thus forming weak crotches. Frequently one of the scaffold branches splits off and the tree is practically ruined. Many trees trained in accordance with this system, have met this fate. Artificial supports must be resorted to in many orchards with trees trained in such a manner. In spite of these defects, however, this system of training is recommended and very generally adopted for some kinds of fruits.

The Modified Leader or Delayed Open Center is the third type of tree. As the terms indicate, it is a modification of the leader tree or is intermediate between the open center and leader types. It combines the more important advantages and climinates some of the disadvantages of each. The resulting tree is low headed, spreading, and has from six to ten scaffold branches distributed along and about a central axis, thus forming a strong framework with well-formed crotches. It is not possible to secure the several scaffold branches from one season's growth of the main axis and have them properly distributed; so the selection must extend over some three or four years, starting two or three new scaffold branches each year. After the desired number of well-distributed scaffold branches has been obtainned, the tree should be opened by discontinuing (removing) the leader.

At this point, attention should be called to the fact that the system of training employed during the first four or five years of the tree's life definitely determines its form, and later attempts to change the form are very frequently accompanied by disastrous results. An established leader should not be removed, after the second or third year, with the idea of developing a strictly open center tree, and, in like manner, attempts should not be made to change an open center tree to a modified leader or leader type. Well trained trees may be devloped along any of the above lines and no one system is best for all species, varieties and conditions.

Since many fruit growers are not familiar with the modified leader type of tree, and since it is recommended for most varieties of apples, pears, cherries and European plums, a more detailed description and development of a theoretically ideal tree may be in order.

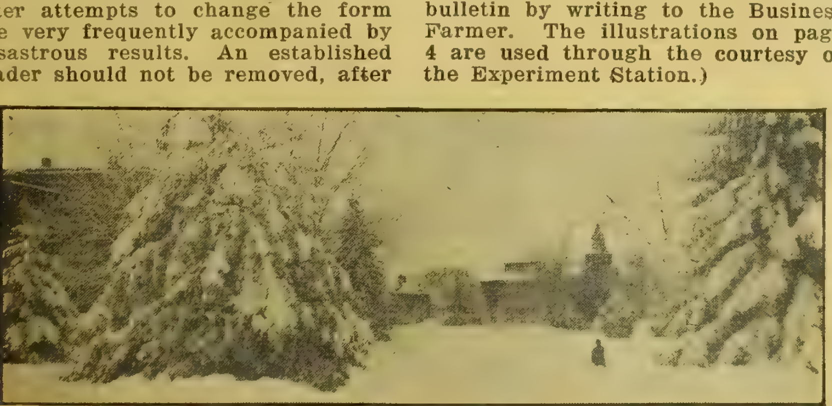
Assuming that a one-year-old tree has been planted and headed at the desired height, the growth the season after planting will usually consist of an almost upright branch produced from the uppermost bud, and of four or five shorter ones arising from lower buds. If so, two or three of them, well distributed about the trunk, should be selected in addition to the uppermost one, and the others removed. In cutting or heading back these branches, it should be borne in mind that the longest branch of a group has the advantage and will make correspondingly more growth the following season. Since it is desirable to develop the uppermost branch into a leader for several years, it must be left a little longer than the scaffold branches. The amount of cutting back depends upon the amounts of growth produced. Usually in Michigan it will simply consist in cutting back sufficiently to give the leader some advantage in length. If a good, vigorous growth has been produced the first year, one should leave the lateral scaffold branches 15 to 24 inches long, and the central upright one 20 to 30 per cent longer.

The following winter the leader should be treated in much the same manner as just described for one year previous. The scaffold branches will probably have produced several laterals. Two or three of these should be selected and headed back, if necessary, sufficient to avoid "legginess." Care should be taken, as previously described, to prevent the formation of weak "Y" shaped crotches.

This system should be continued throughout a third and possibly to the fourth year, after which the leader should be suppressed or discontinued. This system of training results in a tree with a central axis or leader about five to six feet in height, with from six to ten scaffold branches extending outward and upward in all directions and spaced along the main axis for three to five feet.

The pruner should develop the several scaffold branches carefully. The heading back should not only be done from the standpoint of the tree as a whole, but also with regard to the relation of the main branches to each other. If certain ones are outgrowing others, the stronger should be headed back more than the weaker ones. If the lower scaffold branches are not developing sufficiently, the upper ones must be cut back more heavily, or the lower ones may be entirely suppressed as real scaffolds and the tree actually becomes high headed. Thus all main branches of the tree must be properly dominant.

(Editor's Note—This article is taken from Special Bulletin No. 118 issued by the Experiment Station, Michigan Agricultural College. If you are interested and desire further information regarding the work you can secure a free copy of this bulletin by writing to the Business Farmer. The illustrations on page 4 are used through the courtesy of the Experiment Station.)



The Campus, Michigan Agricultural College.

KELLOGG'S GREAT CROPS OF STRAWBERRIES

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The finest Book on Strawberry growing ever published. Written by America's foremost grower. Gives his secrets of growing the big crops. Beautifully illustrated in colors and describes the world-famed

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This Free Book shows how families everywhere are getting big crops and big profits from early summer until snow flies from Kellogg Everbearing Gardens. It also tells about Kellogg's new Strawberry Sensation, the

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This is a wonderful garden for farmers and other busy folks. Plants will root deep and bear well in spite of neglect, weeds, or adverse conditions. Covers space about 25 ft. x 30 ft. Consists of 250 plants from our hardiest and strongest standard varieties.

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50 Warfield	.60
50 Gibson	.60
50 Big Wonder	1.05
50 Marvel	1.25

Regular Price $4.10. Our Special Reduced Price, only **$3.75**, delivered all charges paid. Order direct from this ad. Send check, draft or money order and this Sure-Crop Garden will be delivered to you at planting time.

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But whether you order this garden or not, don't fail to write for our **Free Book**, which tells all about Kellogg's great crops of Strawberries and how to grow them.

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The work of preparing the land and planting is the same whether you use unknown seed or pedigreed seed. But the crop tells the story; often double or triple the profit comes from using HARDY, BIG-YIELDING, MICHIGAN GROWN

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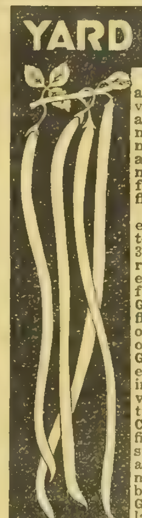
YARD LONG BEANS



This is an excellent variety, as well as being an interesting curiosity. The vines are rampant growers and produce an enormous crop of long, slender pods, many of which grow to three feet or more in length, having the thickness of a lead pencil. Produce late in the summer, very productive, excellent quality for snap beans, tender and of fine flavor. Packet of seed, 10c; 3 for 25c.

Japanese Giant Radish, 10 to 30 lbs. each; **Mammoth Prize Watermelon**, 50 to 150 lbs. each; **Jumbo Pumpkin**, 100 to 300 lbs.; **Vine Peach**, fine for canning, ripe fruit in 80 days after seed is planted; **Garden Huckleberry**, a big crop of fruit the same season seed is planted; **Groun dAlmonds**, delicious cocoanut flavor, grow anywhere, plant in spring or early summer and harvest a big crop of nuts the following September; **Early Giant Rhubarb**, produces large, marketable size stalks next year after planting; **Japanese Climbing Cucumber**, fine variety that can be trained to fence, trellis or poles and save garden space; **Chinese Celery Cabbage**, celery flavored, fine for salads; **String Peas**, cook like string or snap beans; **Burgess' Earliest and Best Tomato**, earliest and best tomato on earth, large, smooth, free from blight and the equal of any late variety; **Giant Ostrich Feather Aster**, handsome, large, fluffy flowers; **Giant Ruffled Spencer Sweet Peas**, finest sweet peas grown; **Red Sunflower**, very attractive. Take your choice of these varieties at 10c per packet; 3 for 25c; 7 for 50c; or 15 for $1.00, postpaid.

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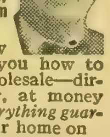

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VICTORY PLANTS

TREES—SHRUBS—EVERGREENS—FLOWERS

100 Everbearing and 100 Gibson strawberry plants postpaid for $1.00. **1 Spirea** or 2 Concord grapevines free with every order of $4.00 or over. **25 choice mixed Gladioli** postpaid for $1.00. **12 Concord** grapevines postpaid for $1.00. **1,000 choice Strawberry plants** our selection for $3.50. **1,000 fine Concord grapvines** for $40.00. **Bargains in peach trees and cherry trees.** Live and let live prices on everything I plant. Free catalogue worth seeing too. Order now.

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A BETTER JOB NOW!

Learn good trade in a few weeks. 12 million autos, trucks and tractors need service. Repairmen needed. Write today for FREE catalog giving full particulars. **Michigan State Automobile School, 2262 Auto Bldg., Detroit, Mich.**

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CHOICE STRAWBERRY PLANTS. $3.75 Per 1,000. All standard varieties at $3.75. Guaranteed first class or money refunded. Catalog. **MRS. FILENA WOOLF, ALLEGAN, MICH.**

FREE—To introduce our Pedigreed Everbearing Strawberries we will send 25 fine plants free. MASON NURSERY CO., Piedmont, Mo.

Aspirin

Say "Bayer" and Insist!

BAYER

Genuine

Unless you see the name "Bayer" on package or on tablets you are not getting the genuine Bayer product prescribed by physicians over twenty-two years and proved safe by millions for

Colds — Headache
Toothache — Lumbago
Earache — Rheumatism
Neuralgia — Pain, Pain

Accept "Bayer Tablets of Aspirin" only. Each unbroken package contains proper directions. Handy boxes of twelve tablets cost few cents. Druggists also sell bottles of 24 and 100. Aspirin is the trade mark of Bayer Manufacture of Monoaceticacidester of Salicylicacid. (1)

Nature's Own Remedy

Indian Herb Tea

Made of roots, barks, seeds and leaves from forests, mountains and meadows.

No alcohol or narcotics

Take steaming hot for colds and grippe. Relieves constipation, headache, bad breath and sour stomach.

Large Package, $1.00, by Mail.

Money refunded if not satisfied.

American Herb Co., Pittsburg, Pa.

FARM AND LANDS

ADS UNDER THIS HEAD 10c PER WORD

FARMING BUSINESS FOR SALE—A PUREbred business in Duroc Jersey Hogs, Short Horn Durhams, Delaine Merino Sheep, Buff Leghorns, Buff Plymouth Rocks, Bronze Turkeys, White Pekin Ducks, Toulouse Geese, which I have built up with the [illegible] my [illegible] the farm is for sale, including the farm of 200 acres within fifty miles of Detroit, 20 acres under timber, balance all under plow. Equiped with tractor, truck and all machinery. Stocked with registered stock. Mail orders coming in every day as the result of three years building a real business. I hope the right man, who wants a big opportunity will get this farm and the business. I am ready to take a smaller farm as part payment. If you are ambitious do not hesitate to write me. I own this farm and I am ready to listen to every proposition. I am sincere in every statement I have made in this advertisement. I am known to the publisher of the Business Farmer and he has advised me to thus lay all the facts before the readers of this publication, hoping that I may find the right man, who is looking for just what I have to offer. Write me fully, at once, if you are interested, address BOX 231, in care of The Michigan Business Farmer, Mt. Clemens, Mich.

60-ACRE S. E. MICHIGAN FARM, FURNITURE, 3 horses, 3 cows, 8 hogs, poultry, tools, cream separator, implements, 50 cords wood included, prosperous neighbors, schools, stores, churches, handy to city and college; all tillable, adapted alfalfa, pasture, woodland, apples, pears, cherries, berries, nuts, good 2-story 10-room house on beautiful lawn, large hip-roof barn, poultry house, piggery, etc. To settle affairs $5,800 gets all, only $2,000 needed. Quick possession. Details and picture page 64 Illus. Catalog 1200 Selected Farms 160 pages. Copy free STROUT FARM AGENCY, 814BE Ford Bldg., Detroit, Mich.

60 A. GOOD SOIL LAND ½ MILE FROM Hesperia. 8 room cement block house, furnace in basement, 44X40 basement barn. A bargain to some one, part down. Cause of sale, man and wife both dead. Administration sale. Write or call on PARKER PRICE, Hesperia, Mich.

IF YOUR FARM OR COUNTRY HOME IS for sale. Write us. No commission charged. CLOVERLAND [illegible] AGENCY, Powers, Mich.

80 ACRES, GOOD HOUSE, 40 FARM LAND 40 [illegible] Inquire BOX 232 [illegible]

WANTED TO HEAR FROM OWNER OF [illegible] sale. Address BOX 101 [illegible], Mich.

160 ACRE FARM FOR SALE. WRITE. Good buildings. FRANK GLAWE, [illegible], Mich.

CAR SHORTAGE CAUSES LOSS TO POTATO GROWERS

(Continued from page 3.)

spring months. Only about half of the 1922 crop has been shipped to date, which means that the railroads must supply practically every loading point in the state with about one car a day in order to get the tubers into consumers hands.

An illustration of how serious the car situation is is available at Remus. Shippers at that point are about the hardest hit of any point along the Big Rapids-Grand Ledge division of the Pere Marquette. On Jan. 1, 1923 Remus had loaded out 57 cars of potatoes as compared with 159 cars on the same date a year ago.

Many Speak at Meetings

Speakers at the series of meetings which have been in progress for the last three days included Clark L. Brody, general manager of the Michigan State Farm Bureau; C. C. Wells, of Cadillac, general manager of the Michigan Potato Growers' exchange; Gifford Patch, marketing specialist of the Michigan Agricultural college; Dr. Eben Mumford of M. A. C., and Attorney W. B. Fast of Big Rapids, County Agent M. F. Jackson and O. S. Wood, Barryton banker and director of the Michigan Potato Growers' exchange, arranged the meeting.

Meetings were held at Remus, Weidman, three in Barryton territory, Rodney, Mecosta and Stanwood.—D. L. Runnells.

THE TRUTH ABOUT HENRY FORD

(Continued from page 13.)

There are three more paragraphs attacking Mr. Ford on this score, which I shall omit—not wishing to weary the reader. The advertisement continued:

"Sacrifice? What about the sacrifice of American soldiers if this German pet of Henry Ford's sees fit to delay the production of Liberty motors and the making of aeroplanes, as he is in a position to do? How many American lives have already been sacrified in aeroplanes tampered with by German agents? If Henry Ford puts so much faith in the German Emde after all he knows about him, is there any reason why he should not put the same faith in the German Hohenzollern? Since Henry Ford is so fond of this German pet of his, is there no place in his large establishment where he can give Emde work to keep him out of the way of temptation to serve his fatherland, as many other Germans have already served in this country? As Mr. Hughes says:

" 'THERE HAS BEEN A LAXITY AT THE FORD PLANT WITH RESPECT TO THOSE OF GERMAN SYMPATHIES WHICH IS NOT AT ALL COMPATIBLE WITH THE INTERRESTS OF THE GOVERNMENT.' "

The advertisement went on at much length along these lines, emphasizing various paragraphs with heavy type. Then it said:

"It is now plain to every voter in Michigan that Henry Ford is no more wary of Hun agents than he was when he followed Rosika Schwimmer to Europe on the peace ship three years ago. He is as innocent as ever.

"If Carl Emde wishes to make plans and photographs of the Ford plant or the Liberty motor for use by the enemies of the United States, Henry Ford is willing to give him a chance to do it, just as he fell for Madame Schwimmer's pro-German peace plans.

"Henry Ford loves the Huns too much to be trusted with a seat in the Senate of the United States and help make peace with them. Commander Newberry knows them for what they are and is helping to fight them at every stage of the game.

"There can be but one choice for wide-awake American in this election."

The Ford campaign managers were taken completely by surprise. The Liberty motor work, the particular department attacked, was the best piece of work that Henry Ford had accomplished, and the Republican letter was a staggering blow. The only hope of offseting the damage done lay in an immediate reply through the Monday papers so that as many as possible of the voters, especially in the rural districts, could be reached before they went to the polls Tuesday morning. Mr. Pipp, who had resigned as editor-in-chief of the Detroit News and who had been government inspector in seven Detroit factories engaged in war work, was in charge of all the Ford campaign statements given to the press.

(Continued in Feb 17th issue.)

"THE HUNTED WOMAN"

(Continued from page 8)

tion of herself. He described the events lightly, not omitting those parts which appealed to him as being very near to comedy.

In spite of his effort to rob the affair of its serious aspect his recital had a recided effect upon Joanne. For some time after he had finished one of her small gloved hands clutched tightly at the pommel of her saddle; her breath came more quickly; the color had ebbed from her cheeks, and she looked straight ahead, keeping her eyes from meeting his. He began to believe that in some way she was convinced he had not told her the whole truth, and was possibly displeased, when she again turned her face to him. It was tense and white. In it was the fear which, for a few minutes, she had tried to keep from him.

"They would have killed you?" she breathed.

"Perhaps they would only have given me a good scare," said Aldous. "But I didn't have time to wait and find out. I was very anxious to see MacDonald again. So I went through the window!"

"No, they would have killed you," said Joanne. "Perhaps I did wrong, Mr. Aldous, but I confided—a little—in Peggy Blacton last night. She seemed like a sister. I love her. And I wanted to confide in some one—a woman, like her. It wasn't much, but I told her what happened at Miette: about you, and Quade, and how I saw him at the station, and again—later, following us. And then—she told me! Perhaps she didn't know how it was frightening me, but she told me all about these men—Quade and Culver Rann. And now I'm more afraid of Culver Rann than Quade, and I've never seen him. They can't hurt me. But I'm afraid for you!"

At her words a joy that was like the heat of fire leaped into his brain.

"For me?" he said. "Afraid—for me?"

"Yes. Why shouldn't I be, if I know that you are in danger?" she asked quietly. "And now, since last night, and the discovery of your secret by these men, I am terrified. Quade has followed you here. Mrs. Blackton told me that Culver Rann was many more times dangerous than Quade. Only a little while ago you told me you did not care for riches. Then why do you go for this gold? Why do you run the risk? Why—"

He waited. The color was flooding back into her face in an excited, feverish flush. Her blue eyes were dark as thunder-clouds in their earnestness.

"Don't you understand?" she went on. "It was because of me that you incurred this deadly enmity of Quade's. If anything happens to you, I shall hold myself responsible!"

"No, you will not be responsible," replied Aldous, steading the tremble in his voice. "Besides, nothing is going to happen. But you don't know how happy you have made me by taking this sort of an interest in me. It—it feels good," he laughed.

For a few paces he dropped behind her, where the overhead spruce boughs left but the space of a single rider between. Then, again, he drew up close beside her.

"I was going to tell you about this gold," he said. "It isn't the gold we're going after."

He leaned over until his hand rested on her saddle-bow.

"Look ahead," he went on, a curious softness in his voice. "Look at MacDonald!"

The first shattered rays of the sun were breaking over the mountains and reflecting their glow in the valley. Donald MacDonald had lifted his face to the sunrise; out from under his battered hat the morning breeze sweeping through the valley of the Frazer tossed his shaggy hair; his great owl-gray beard swept his breast; his broad, gaunt shoulders were hunched a little forward as he looked into the east. Again Aldous looked into Joanne's eyes.

"It's not the gold, but MacDonald, that's taking me north, Ladygray. And it's not the gold that is taking MacDonald. It is strange, almost unbelievedly strange—what I am going to tell you. Today we are seeking a grave—for you. And up there, two hundred miles in the north, another grave is calling MacDonald. I am going with him. It just happens that the gold is there. You wouldn't guess that for more than forty years that blessed old wanderer ahead of us has loved a dead woman, would you? You wouldn't think that for nearly half a century, year in and year out, winter and summer alike, he has tramped the northern mountains—a lost spirit with but one desire in life—to find at last her resting place? And yet it is so, Ladygray. I guess I am the only living creature to whom he has opened his heart in many a long year. A hundred times beside our campfire I have listened to him, until at last his story seems almost to be a part of my own. He may be a little mad, but it is a beautiful madness."

He paused.

"Yes," whispered Joanne. "Go on—John Aldous."

"It's—hard to tell," he continued. "I can't put the feeling of it in words, the spirit of it, the wonder of it. I've tried to write it, and I couldn't. Her name was Jane. He has never spoken of her by any other name than that, and I've never asked for the rest of it. They were kids when their two families started West over the big prairies in Conestoga wagons. They grew up sweethearts. Both of her parents, and his mother, died before they were married. Then, a little later, his father died, and they were alone. I can imagine what their love must have been. I have seen it still living in his eyes, and I have seen it in his strange hour-long dreams after he has talked of her. They were always together. He has told me how they roamed the mountains hand in hand in their hunts; how she was comrade and chum when he went prospecting. He has opened his lonely old heart to me—a great deal. He's told me how they used to be alone for months at a time in the mountains, the things they used to do, and how she would sing for him beside their camp-fire at night. 'She had a voice sweet as an angel,' I remember he told me once. Then, more than forty years ago, came the gold-rush away up in the Stikine River country. They went. They joined a little party of twelve—ten men and two women. This party wandered far out of the beaten paths of the other gold-seekers. And at last they found gold."

Ahead of them Donald MacDonald had turned in his saddle and was looking back. For a moment Aldous ceased speaking.

"Please—go on!" said Joanne.

(Continued in Feb. 17th issue.)

LIKES IT FROM COVER TO COVER

Enclosed find renewal. You have made no mistakes, my paper has been regular and I have on many occasions received more than my money's worth by one article published in each issue. Your paper is instructive and educational from cover to cover. Wishing you success, Edwin Cordery, Kent County.

NEW LAMP BURNS 94% AIR

Beats Electric or Gas

A new oil lamp that gives an amazingly brilliant, soft, white light, even better than gas or electricity, has been tested by the U. S. Government and 35 leading universities and found to be superior to 10 ordinary oil lamps. It burns without odor, smoke or noise—no pumping up, is simple, clean, safe. Burns 94% air and 6% common kerosene (coal oil).

The inventor, A. R. Johnson, 609 W. Lake St., Chicago, Ill., is offering to send a lamp on 10 day's FREE trial, or even to give one FREE to the first user in each locality who will help him introduce it. Write him to-day for full particulars. Also ask him to explain how you can get the agency, and without experience or money make $250 to $500 per month. (Adv.)

RADIO DEPARTMENT

EDITED BY J. HERBERT FERRIS

FOR YOUR PROTECTION!

THE following Fire Insurance Underwriters rules should be preserved and studied. The proper installation of a radio set is not a fire hazard—but if the rules are not followed, you may lose your insurance, no matter what the cause of fire may be!—Radio Editor.

Radio Rules—National Electric Code

The following requirements governing the installation of radio receiving and transmitting apparatus were placed in effect on April 29, 1922.

For Receiving Stations Only

Antenna:—

a. Antennas outside of buildings shall not cross over or under electric light or power wires of any circuit of more than six hundred (600) volts or railway or trolley or feeder wires nor shall it be so located that a failure of either antenna or of the above mentioned electric light or power wires can result in a contact between the antenna and such electric light or power wires.

Antennas shall be constructed and installed in a strong and durable manner and shall be so located as to prevent contact with light or power wires by sagging or swinging.

Splices and joints in the antenna span, unless made with approved clamps or splicing devices, shall be soldered.

Antennas installed outside of buildings are not covered by the above specifications.

Lead-in Wires:—

b. Lead-in wires shall be of copper, approved copper-clad steel or other approved metal which will not corrode excessively and in no case shall they be smaller than No. 14 B. & S. gage except that approved copper-clad steel not less that No. 17 B. & S. gage may be used.

Lead-in wires on the outside of buildings shall not come nearer than four (4) inches to electric light and power wires unless separated therefrom by a continuous and firmly fixed non-conductor that will maintain permanent separation. The non-conductor shall be in addition to any insulation on the wire.

Lead-in wires shall enter buildings through a non-combustible, non-absorptive insulating bushing.

Protective Devices:—

c. Each lead-in wire shall be provided with an approved protective device properly connected and located (inside or outside the building) as near as practicable to the point where the wire enters the building. The prcector shall not be placed in the immediate vicinity of easily ignitable stuff, or where exposed to inflammable gases or dust or flyings of combustible materials.

The protective device shall be an approved lightning arrester which will operate at a potential of five hundred (500) volts or less.

The use of an antenna grounding switch is desirable, but does not obviate the necessity for the approved protective device required in this section. The antenna grounding switch if installed shall, in its closed position, form a shunt around the protective device.

Protective Ground Wires:—

d. The ground wire may be bare or insulated and shall be of copper or approved copper-clad steel. If of copper the ground wire shall not be smaller than No. 14 B. & S. gage, and if approved copper-clad steel, it shall not be smaller than No. 17 B. & S. gage. The ground wire shall be run in as straight a line as possible to a good permanent ground. Preference shall be given to water piping. Gas piping shall not be used for grounding protective devices. Other permissable grounds are grounded steel frames of buildings or other grounded metallic work in the building and artificial grounds such as driven pipes, plates, cones, etc.

The ground wire shall be protected against mechanical injury. An Approved ground clamp shall be used whenever the ground wire is connected to pipes or piping.

Wires Inside Buildings:—

e. Wires inside buildings shall be securely fastened in a workmanlike manner and shall not come nearer than two (2) inches to any electric light or power wire unless separated therefrom by some continuous and fimly fixed non-conductor making a permanent separation. This non-conductor shall be in addition to any regular insulation on the wire. Porcelian tubing or approved flexible tubing may be used for encasing wires to comply with this rule.

Receiving Equipment Ground Wire:

f. The ground conductor may be bare or insulated and shall be of copper, approved copper-clad steel or other approved metal which will not corrode excessively under existing conditions and in no case shall the ground wire be less than No. 14 B. & S. gage except that approved copper-clad steel not less than No. 17 B. & S. gage may be used.

The ground wire may be run inside or outside of building. When receiving equipment ground wire is run in full compliance with rules for Protective Ground Wire, in Section d. it may be used as the ground conductor for the protective device.

RADIO PHONE AID TO CROPS

DEVELOPMENT of the radio telephone broadcasting service will save the country millions of dollars in the saving of crops that might be lost through lack of knowledge of unfavorable weather conditions approaching.

Heretofore the farmer has gone ahead more or less blindly in the harvesting of the crops, only to have them destroyed in the fields by rain snows, etc. Many of these farmers, more or less isolated from the centers, were unable to get the information in any time to be of use.

Farmers, however, like many others, are getting radio sets in their homes, and listen intently to the broadcasting stations. With the cooperation of the weather bureau, both government and private broadcasting stations are sending out the weather reports twice daily, so that the farmer by his fireside and many miles from the cities can sit in his home at night with some degree of certainity as to what kind of weather he will meet with.

Radio telephony as a medium for the dissemination of weather forecasts warnings and information to agricultural interests became a reality during the past year. With the introduction of radio telephony the the interior has increased enormously. On July 7 of this year there were 98 station in 35 states broadcasting weather forecasts and warnings daily by radio telephone.

It has come to the attention of the government that thousands of farmers, realizing the importance of these forecasts, have installed radio sets to catch this information, because they realized that knowledge of what to expect in the way of weather would save them many times hundreds of thousands of dollars.

The weather bureau does not own or operate any wireless equipment. The radio distribution work is accomplished through plants operated by other government agencies, by corporations and by private individuals, and without expense to the weather bureau.

Be careful that you trace every connection through carefully, and that your connections are correct before you turn on your current. A burned out vacuum tube is no good, and a new one will cost you $5 to $6.50 each. With care a tube will give from 500 to 1000 or more hours of service.

There are bed-time stories from some broadcasting station every night for the childrern. Are you enjoying them?

WELL PLEASED WITH M. B. F.

I am sending you my check for $1 for two years subsoription. I have taken your paper one year and am well pleased with it.—Robt. B. Nicholas, Lapeer County, Michigan.

LIKES M. B. F. BEST OF ALL

We take four farm papers, but we like the M. B. F., better than all the rest of them.—Dail Sleeper, Calhoun County, Michigan.

Prepare
YOUR HORSES
for Spring Work

Time will mean money to you, Mr. Farmer, one of these days —when spring comes on, when the sun begins to shine.

The acres you plow, or harrow, or sow, each day will depend entirely upon the good condition of your team.

Condition them now with a course of

DR. HESS STOCK TONIC

You can feel it on the lines

It helps them shed their winter's coat, whets their appetite, tones up their digestion, cleans out the bowels and kidneys, drives out the worms.

Feed your workers Dr. Hess Stock Tonic and you will soon discover that you have a team before you that can do an honest day's work, without a pant or a tremble of the muscle. They will be there for business—and willing.

Excellent for mares in foal—and colts of any age. GUARANTEED.

Tell your dealer how many horses or mules you have; he has a package to suit.

25 lb. Pail, $2.25 100 lb. Drum, $8.00

Except in the far West, South and Canada.

Honest goods—honest price—why pay more?

DR. HESS & CLARK Ashland, O.

I spent 30 years in perfect ing this Tonic
GILBERT HESS
M.D., D.V.S.

Dr. Hess Dip and Disinfectant
Keeps the Dairy and Stables Healthful and Clean Smelling

Send no money

BUILD YOUR OWN
LONG RANGE RADIO!

Pay Advertised Price and Postage on arriva

WE HAVE A SURPLUS OF FINE PARTS ON HAND AND IN ORDER TO RAISE MONEY QUICKLY WE ARE GOING TO SLASH PRICES

PICK OUT YOUR REQUIREMENTS FROM THE LIST BELOW AND ORDER BY MAIL AT ONCE AS WHEN THE AMOUNT OF CASH WE MUST HAVE IS REALIZED THE PRICES GO UP WHERE THEY BELONG!

Study the list carefully. It contains every thing reeded to make a radio outfit that will reach out and bring in concerts from all over the country, from Van Couver, B. C. to Havana, Cuba, and from Los Angeles, Cal. to Portland, Maine. If you cannot afford so powerful a set, you can obtain the material for a very few dollars that will reach 1,000 to 1,400 miles bringing in some hundreds of different broadcasting stations.

REMEMBER WE MANUFACTURE MUCH OF THIS MATERIAL OURSELVES, SO YOU ARE NOT PAYING JOBBERS, WHOLESALERS NOR RETAILERS PROFITS ON THAT MATERIAL

	Price
1—Handsome Rabbated Cabinet for 6X21 in. panel, finished in light, golden, dark or flemish oak, mahoganized maple (red) or black walnut stained gray elm—securely packed. .	$ 3.10
2—Same as above for 9X21 in. panel	4.20
3—Same as No 1, knocked down so you can put together and stain in just 15 minutes. Solid oak only. . . . (This comes so much cheaper because of the saving in packing expense.)	2.00
4—Same as No 2, knocked down. .	3.00
5—Large size Perfection Variometer	2.50
6—Parts complete to make same (except wire)	.80
7—Large, sure contact, long range variocoupler—12 taps	2.50
8—Variometer balls—3 ¾ in.—genuine wild cherry	.20
9—Variocoupler balls—3 ¾ in., genuine wild cherry	.20
10—Variometer stators—mates to above balls, per set of 2	.30
11—Variometer hardware complete. .	.30
12—Audio Frequency Transformer. . .	3.10
13—Radio Frequency Transformer. . .	4.00
14—Rheostat	.75
15— V. T. Socket	.50
16—43 Plate Variable Condenser. . . .	3.00
17—23 Plate Variable Condenser. . . .	2.00
18—Grid Leak Condenser	.25
19—Phone Condenser	.20
20—Large Gold Bronze Power Horn 11 in. Bell	22.50
21—Western Electric Head Phones. .	10.00
22—Good 3000 Ohm Headphones. . .	5.10
23—Seal Finish Panels—genuine horn fibre—absolutely dielectric—built in section to prevent warping—3-16 in. thick—handsome, unbreakable, won't show finger marks: 5 ⅞ X9 ⅛ in.—1 piece	.55
5 ⅞ X21 in.—Built in 3 sections. .	2.00
9 ⅛ X21 in.—Built in 4 sections. .	3.00
24—Handsome 3 in. dials—3-16 in. or 1-4 in. shaft hole	.40
25—Handsome 15 cent Black binding posts	.05
26—Handsome 10 cent black binding posts	.03
27—Handsome black 1 in. knobs—worth 20 cents	.08
28—Handsome black 13-16 in. knobs—worth 15 cents	.06
29—Perfection panel switch	.35
30—Phone jacks—double circuit—$1 value	.75
31—Phone jacks—single circuit—85c value	.50

We also have about 2,000 handsome, glass enclosed crystal detectors that we will close out cheap, as we are going out of the crystal set business. . Price .50

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POSTMAN
PRICE
PLUS
PROPER
PARCEL
POSTAGE

Michigan Rod and Lever Company,
CORNER FRONT AND CLINTON STREETS
MT. CLEMENS, MICHIGAN
SEND—NO—MONEY
PAY POSTMAN PRICE PLUS PROPER PARCEL POSTAGE

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STRAWBERRY PLANTS—$4 PER THOUSAND. Guaranteed strictly first class. 17 years experience. Our free catalog illustrates and describes fourteen best varieties, including three best raspberries. A valuable book for the grower. J. E. HAMPTON & SON, Bangor, Mich.

RED CLOVER, NICE PURPLE SEED, $12.50 per bushel. SHULTZ SEED CO., Olney, Illinois.

FOR SALE—NORTHERN GROWN HUBAM Sweet Clover cleaned. Price $18.00 bu. Write for samples. HENRY BAUKNECHT, R. 4, Midland, Mch.

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33rd Anniversary Style Book
One Million More Customers for 1923
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Ours Approved by IRENE CASTLE!

So different are this year's styles that the woman who doesn't want to be a "back number" owes it to herself to be posted on the styles.

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The Farm Home
A Department for the Women

Edited by MRS. GRACE NELLIS JENNEY

DON'T SAY DON'T

A MOTHER writes and asks me how it is possible to keep from saying, "don't" to children. We agree that it is annoying to have some one, any one continually saying it just naturally sets up a feeling of irritability and a desire to do the very thing we are told not to do. It is a perfectly natural trait of character and that is why educators say, "Don't say don't." We are dealing with human nature and must take it as it is. If we can say, do this, instead of don't do that, we are taking a step in the right direction, do not seek to take away without filling the gap. Nature abhors a vacuum and children abhore to be idle and idleness is not safe either for children or adults. You have heard how Satan seeks idle hands to carry out his purposes.

Management is always better than discipline, managing is preventing the wrong, discipline is managing after the wrong is done. Children must have many things to interest them, and we must in some way get the best of the situation by planning things out for them and keeping just a step ahead. Make their occupation legitimate but let them play in their own way, we may give them the opportunity but can not and should not supervise their play, they know how much better than we do.

When my children were very young I tried to teach them respect for all material for all their possessions, toys, clothes, furniture, not only their own but other peoples, to allow a child to wantonly destroy anything not wise, in the first place everything has some use, there is no "junk" these days, and a habit of destructiveness or carelessness is apt to stick to one thru life.

I do not believe in punishing a child because he has offended you, nor in showing anger toward a child, that is not judicial, just let the wrong deed come back on the doer, do not interfere between the breaking of the law and the penalty. Natur never does. If you put your hand on a hot stove, it will be burned, if you read in a poor light for long, you will have a headache, the penalty for straining your eyes—we soon learn to be careful. Let a child learn that if he breaks the laws laid down by a kind and understanding parent that he will surely in one way or another suffer for it and he will soon reason out for himself that it is much pleasanter and safer to keep the regulations of the household, especially when he realizes that father and mother and all the rest come under discipline as well as himself. The laws of God, the laws of our country, the laws of our state all must be obeyed, for only by that method do we any of us have peace, security or liberty.

Here is a question, Do you, dear Reader, believe in giving the reason for a rule or do you just say "because I say so?" It would be interesting and perhaps profitable to get an expression of opinion from some thotful mothers.

THE STORY OF DENTAL DECAY

IT is difficult to explain how teeth decay without using names and words that are hard to understand, but every intelligent adult should have a reasonably correct idea about it, in order to help the children to have sound teeth.

Decay of the teeth always starts from the outside surfaces, never from the inside. The surfaces that decay most frequently are first, those between the teeth, where one tooth touches the other, second, in the fissures or rough surfaces on the tops of the teeth where you chew, and third, close to the gums where food clings to the border of the gums. Meat will not cause the teeth to decay, because, when it is decomposed by germs, an alkali is produced and the enamel of the teeth is not affected by an alkali,—an alkali is just the opposite of an acid. The enamel of the tooth is made of crystal-like rods and between them is a cementing substance which holds them tightly in place. This can be dissolved by acids, especially by lactic acid which is very easily formed from sugar. When milk becomes sour it is caused by germs decomposing the sugar in the milk, producing lactic acid which gives the milk its sour taste. Starchy foods if allowed to remain in the mouth, can be changed to sugar by an ingredient in the saliva. The sugar can then be acted upon by the germs in the mouth and can be changed into lactic acid, so that it can be easily seen that to leave starches and sugars on the teeth for any length of time is to produce some lactic acid which can dissolve out the cementing substance between the enamel rods. But in order that the acid be strong enough to actually dissolve the enamel it has to be held against the tooth surfaces for some time.

Using silk dental floss and a good tooth paste or powder every day will do much toward preventing decay by keeping the teeth clean. Both of these cleaning materials are rather expensive and on that account I wrote to Dr. Gibson of the Michigan Department of Health for directions for making a cheap and good powder. Here it is I have tried it and found it splendid. The cost was 65 cents and the quantity about a pint.

Place in a quart Mason jar the following: Finest grade English percipitated chalk, ½ pound; powdered castile soap, 1¾ ounces; light carbonate of magnesia, 1-3 ounce; oil of cloves, 46 drops; oil of wintergreen, 35 drops; oil of sassafras, 35 drops; oil of peppermint, 18 drops; saccharin, finely powdered, 4 grains. The glass top should be securely fastened and the contents vigorously shaken. Let stand 24 hours, shaking from time to time to hasten the mixing process.

PARENT TEACHERS AGAIN

HOW are the Parent-Teachers meetings coming along in the rural schools?

Not so many years ago American society was largely rural and simple in its organization, and in that day the school was nearer home. The teacher was most frequently a son or a daughter of the neighborhood or of an adjoining neighborhood and knew and was known to practically every home from which the children came. The school curriculum was elementary and well within the knowledge of the average patron. The parents knew what the school was aiming at.

How great the change. Today in by far the majority of our communities teachers drop out of the unknown. They are strangers in a foreign, frequently indifferent and sometimes hostile land. They neither know the homes nor are known to the homes which they serve. The curriculum is complex and often well-meaning with the purposes and methods of the schools which they support and their children attend. These things ought not to be.

The school is the biggest collective undertaking of our communities. by law every tax payer must contribute to its support and parents are legally compelled to send their children to school. In some communities from twenty to forty per cent of every dollar paid in taxes goes to the support of the schools.

"IT'S ONLY ME."

I thought myself indeed secure,
So fast the door, so firm the lock;
But, lo! he toddling, comes to lure
My parent ear with timorous knock.
My heart were stone could it withstand
The sweetness of my baby's plea,
That timorous, baby knocking, and
"Please let me in—it's only me!"
I threw aside the unfinished book,
Regardless of its tempting charms,
And, opening wide the door, I took
My laughing darling in my arms.
Who knows but in eternity
I, like a truant child, shall wait
The glories of a life to be
Beyond the Heavenly Father's gate?
And will the Heavenly Father heed
The truant supplicating cry,
As at the outer door I plead,
" 'Tis I, O Father, only I!"

Eugene Field.

AIDS TO GOOD DRESSING

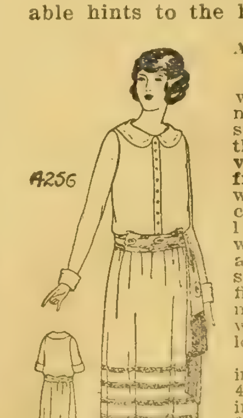
For Simplicity, Service and Style

Address orders to Mrs. Jenney, Pattern Department, M. B. F.

Watch for our new Spring styles, order your catalog now.
Catalogs 15c. Patterns 12c.

FASHION BOOK NOTICE

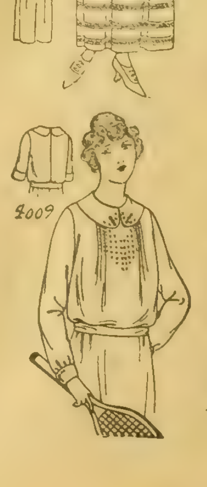
Send 12c in silver or stamps for our UP-TO-DATE SPRING and SUMMER 1923 BOOK OF FASHIONS, showing color plates, and containing 500 designs of Ladies', Misses' and Children's Patterns, a CONCISE and COMPREHENSIVE ARTICLE ON DRESSMAKING, ALSO SOME POINTS FOR THE NEEDLE (illustrating 30 of the various, simple stitches) all valuable hints to the home dressmaker.



A New and Stylish Frock

5256. With the waistline gracefully normal, and with simple pleasing lines, this style features a very attractive frock. It may be of wool crepe, or of crepe de chine. In linen, and other wash fabrics it is also desirable. The sleeve is a new close fitting model, that may be finished in wrist or elbow length.

The Pattern is cut in 7 Sizes: 34, 36, 38, 40, 42, 44, and 46 inches bust measure. 38 inch size requires 4 7-8 yards of 26 inch material. The width of the skirt at the foot is about 2 3-4 yards.



A Popular Style

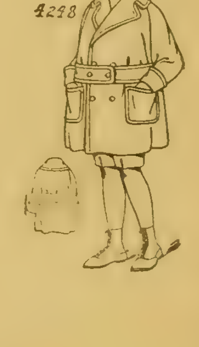
4009. This is a very serviceable model. It may be made of linen, voile or batiste or of flannel or silk. It is nice in net, or chiffon, as a guimpe, for "jumper" or "sleeveless" dresses.

The Pattern is cut in 7 Sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38 inch size requires 3 1-8 yards of 32 inch material.

A Jaunty Top Garment for "The Boy"

4248. Here is just the coat to make a boy comfortable and to keep him warm. The fronts are double breasted. The sleeve is in raglan style, with roomy armscye. Serge, cheviot, tweed and other coat materials may be used for this design.

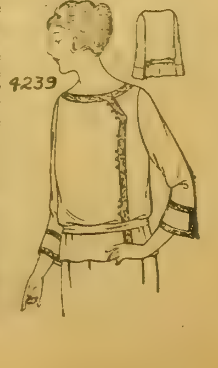
The Pattern is cut in 4 Sizes, 4, 6, 8, and 10 years. A 6 year size requires 2 1-8 yards of 54 inch material.



A Simple Popular Style

4239. This is a pretty suit model, and one that may be worn with a separate skirt. Crepe, satin, tricolette, and crepe de chine could be used, with braid or bands of embroidery for decoration. The side closing and pretty neck line are youthful, and becoming to most figures.

The Pattern is cut in 7 Sizes: 34, 36, 38, 40, 42, 44, and 46 inches bust measure. A 38 inch size requires 2 1-2 yards of 36 inch material.



The combined intelligence of parents, patrons and teachers is necessary to the wise expenditure of the people's money and the children's time. School superintendents and teachers do not pretend to omniscience but on the contrary they are painfully aware of their limitations, and good parents too feel their inefficiency to deal wisely with the boys and girls that bless their homes. Each group needs the encouragement and help which the other can render. The Parent-Teacher Club is an effective agency for the dissipation of ignorance, the thawing of iciness and the creation of sympathy and understanding between the parents and teachers and it all works for the benefit of those concerned.

A PRACTICAL SUGGESTION

YE farmers wives, can earn extra money by selling your eggs, butter, etc., to private parties living in town or city and get retail prices for same. The women are pleased to get nice fresh produce and in no time you will have a nice trade.

About two weeks before Thanksgiving I took my little book and pencil and started down one city block and in less than one hour I had orders for 9 dressed chickens and 2 live ones, I dressed them this way. Scalded and picked the feathers off. then weighed them, figuring them at 30 cents per pound. Then I singed them inside and out in fact scrubbed them with a brush using warm water and soap, then quickly rinsed them in cold water, washed the liver, heart, and gizzard and put inside and hung up to drip, and dry. They were all ready for the oven when delivered and oh, how pleased the women were, I delivered them the day before Thanksgiving and they gave orders for Christmas the same day and they kept on wanting more and still more.

Those I sold were all young roosters about six months old. I am a woman 60 years old and any woman could do as I did. My customers are all in one block. I sell eggs at the same time or any other articles I have to spare, I drive to the city in an auto and have time to shop. Try it sisters.

I should like to hear from some readers who like to piece quilts. I have some pieces that I do not need, percale, gingham and plush and would be glad to exchange for any thing useful.

Here is my recipe for Liver Sausage:1 pork liver, 1 heart, and any bony fat and lean meat, usually the head, wash and boil all together until the meat falls off the bones, then put thru the grinder, salt, pepper, and sage, if you like. Mix thoroughly with your hands and pour a little of the strained liquor over but just enough to moisten, not enough to make it sloppy. Then pack it in small bowls or cups until almost full, melt some lard and pour over the dishes of meat. The lard hardens and keeps the meat sweet, sausage may be done this way, it will keep for months. Then take off the lard and slice for sandwiches or table use, can be served with salad dressing. Hope others will try this. —Mrs. G. W. Morgan, R. 3, Vicksburg, Michigan.

CARING FOR A FERN

I have raised wonderful ferns, a Boston fern that was 12 feet in circumference, I always gave it all the sun there was, in the corner of my living room I had a south window and an east window, just a nice place for a fern. I always kept it in that place and turned it around so that it would grow evenly, I turned it about twice every year. Every one who came said it was the nicest fern they ever saw. I always water it with cold tea, I have made tea when the family were drinking milk, on purpose to water my fern. During the cloudy weather of November and December the plants do not require as much water but when the sun shines I usually water them once a day.—Mrs. H. C.

CORRESPONDENCE COLUMN

Dear Readers—I want to acknowledge many letters that lie upon my desk, some I want to answer personally, others I want to print but cannot get them in this issue, each one is appreciated and each one is read over carefully, I think in a near issue we will have the whole department given up to letters and comments on them, it would make interesting reading and perhaps bring us all a little closer in touch with one another; You can be editors pro tem. How do you like the idea?—Mrs. Jenney.

I noticed that a reader asks how to remove ink stains from cloth sacks; if she will soak them in kerosene oil before she washes them, then wash with soap and boil with some good washing powder the marks will all come out. If the reader wants a quick pan-cake recipe will use 1 level teaspoon of soda to 2 cups of sour milk adding flour enough for a thin batter or use a little less soda and a teaspoon of baking powder, will find them good.—Mrs. I. C. B. —I use this recipe but add 2 eggs and a tablespoon of melted lard or butter adding the whites of the eggs last, beating them very stiff. This makes the cakes very light, the proverbial pinch of salt is always necessary.—Mrs. Jenney.

Readers have been very kind in sending in the poem, Lasca, copying it by hand. If it were not so long I would be glad to publish it. As it is I have several copies and will send them to those first asking for them.—Mrs. Jenney.

Mrs. J. D. B.—As each sewing machine company makes it's own attachment for hem-stitching it would be necessary for you to write to the company that makes your machine, they could undoubtedly give you all the information you wish.

Who can tell us something about Patron's Day organization, how long leaders are elected for and whether there are programs to be obtained. —G. A.

Mrs. Celia A., Gobles, Michigan.—If you will write to the United States Department of Agriculture, for Department Circular 207, it will give you full instructions for making a paper dress form. Address your letter to Washington, D. C. There is no charge for these bulletins. The making of these dress forms has been taken up by the extension workers in the various States.

We should like to know whether sausage that is to be canned by the cold pack method should be made into patties ready for serving or should it be packed into cans in a mass?

Do you know a better method for canning sausage? We should be pleased to have this question answered in your paper.—Mrs. J. M. —I have sent for the latest method for meat canning and will publish the directions as soon as received. Mrs. Jenney.

In answer to Mrs. J. A., Honor, Mich., issue of Jan. 20th, I wish to state that the most convenient way of labeling maple syrup cans is to use a small portion of the syrup itself to paste on label. This method is recommended.—E. E. Pauli.

The New Spring Catalog will be issued about February 1st. As soon as it comes out I will fill the orders that are on hand. It would be wise to send immediately for this splendid new book, look it over well, choose the patterns you are going to need and order promptly. Then you will have your patterns all ready to use when you want them. It always takes a week to get the patterns thru. But our patterns sell so cheaply that one can well afford to wait a few days for them.

Hill's acts at once
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At the first sign of a cold take Hill's Cascara Bromide Quinine. Quick to act. Safest and most dependable cold, headache and la grippe remedy known.

W. H. HILL COMPANY
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Ask for
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Baking Powder—
that's the big thing in successful baking

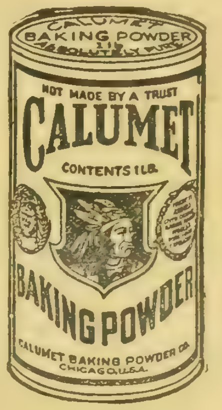
It determines failure or success in baking, more than any other ingredient.

If you do not *always* have satisfactory bakings, change to Calumet for just one trial.

It is pure: containing only such ingredients as have been officially approved by U. S. Food Authorities.

Within the Calumet factories — the largest and most sanitary on earth—hundreds of skilled workers clad in white are busily engaged in producing the baking powder that is used by millions. Human hands never touch it. Its sale is 2½ times as much as that of any other brand. Pure in the making—pure in the baking.

A pound can of Calumet contains full 16 ounces. Some baking powders come in 12 ounce instead of 16 ounce cans. Be sure you get a pound when you want it.



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The Economy BAKING POWDER
THE WORLD'S GREATEST BAKING POWDER

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Here is a big Montgomery Ward offer! A DOUBLE LENGTH roll of wall paper for only 6c. Enough to paper an entire room 10x12 for as little as 82c! This includes side wall, border and ceiling paper.

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Send for this interesting and valuable book *today*. Ask for Wall Paper Sample Book, No. 1923DD Address our House nearest you.

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THE NEW ERA MILLING Co.
ARKANSAS CITY, KANS.
48 Lbs. POLAR BEAR Flour

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Polar Bear Flour
Positively Best Flour Money Can Buy.
A Trial Bag will prove it!
Manufactured by The New Era Milling Co., Arkansas City, Kans.
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Just how *does* Kow Kare increase the milk yield?

Maybe you have been a regular user of Kow-Kare in treating cow diseases, but you may have never fully realized that this famous cow medicine is being used regularly in thousands of dairies to increase the winter milk yield.

Both uses are equally logical. Cow Diseases—nearly all of them—arise from a lowered vitality of the genital and digestive organs. Kow-Kare removes the cause by reaching these very organs and restoring vigor. The milk yield is controlled by the same set of organs. Dry winter feeds put a greater strain on their functions and produce a lowered vitality and yield.

Kow-Kare, fed moderately and regularly, gives to the milk-making organs the added strength they need to offset winter feeding conditions. A greater milk yield cannot fail to result.

The expense of this Kow-Kare treatment is decidedly small. Most dairymen give a tablespoonful morning and evening in the feed, one week out of each month. The increased milk-profit pays for this a hundred-fold.

No cow medicine can equal Kow Kare for the treatment of actual disease. For twenty-five years it has been the standard remedy for *Barrenness, Abortion, Retained Afterbirth, Scours, Bunches, Milk Fever, Lost Appetite.*

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FREE Cow Book

We publish a very valuable book on cow diseases called, "The Home Cow Doctor." We will gladly send you a copy free if you give us your dealer's name

DAIRY ASSOCIATION CO., Inc.
Lyndonville, Vt.

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Advertisements inserted under this heading for reputable breeders of Live Stock at special rates to encourage the growing of pure-breds on the farms of our readers. Our advertising rate is Thirty Cents (30c) per agate line per insertion. Fourteen agate lines to the column inch or $4.20 per inch, less 2% for cash if sent with order or paid on or before the 10th of month following date of insertion. SEND IN YOUR AD AND WE WILL PUT IT IN TYPE FREE, so you can see how many lines it will fill. Address all letters,
BREEDERS DIRECTORY MICHIGAN BUSINESS FARMER MT CLEMENS. MICH.

CLAIM YOUR SALE DATE

To avoid conflicting dates we will without cost, list the date of any live stock sale in Michigan. If you are considering a sale advise us at once and we will claim the date for you. Address, Live Stock Editor, M. B. F., Mt Clemens

Feb. 6—Poland Chinas, Shorthorn, Percherons, J. M. Hicks & Sons, Williamston, Mich.
Feb. 9—Durocs, J. C. Barney, Coldwater, Mich.
Feb. 16—Poland Chinas, E. J. Mathewson, Burr Oak, Mich.
Feb. 17—Poland Chinas, Witt Bros., Adrian, Mich.
Fer. 21—Duroc Jerseys, Clyde Godfrey Jonesville, Mich.
Feb. 28—Poland Chinas, Charles Wetzel & Sons Ithaca, Mich.
Mar. 1—Poland Chinas, Archie Ward, Breckenridge, Mich.
Mar. 7—Holsteins, E. E. Butlers, Coldwater Mich.
Mar. 8—Chester Whites, Alexander & Bodimer, Vassar, Mich.
Mar. 13—Duroc Jerseys, Schaffer Bros., Oxford, Mich.
Mar. 21—Aberdeen-Angus, Russell Bros. Merrill, Mich.

CATTLE

HOLSTEIN-FRIESIAN

32 LB. SIRE—30 LB. DAM—HERE'S A BULL bargain that will be snapped up quick. Born Nov. 3rd, 1921, ready for light service, nicely marked, more white than black.

His dam, a great grand-daughter of King Segis and Pontiac Korndyke, was 2nd Prize Junior 4 yr. old in both 7 and 30 day divisions, State of Michigan in 1918; her records being 30.79 lbs. butter and 653.10 lbs. milk in 7 days and 124.21 lbs. butter and 2779.90 lbs. milk in 30 days.

His 32 lb. sire is by a son of Pontiac De Nijlander, a 35.43 lb. Michigan champion. The 32 lb. dam of his sire is also a 2nd Prize Michigan cow in the Senior 4 yr. old 7 day division in 1918 and her dam a 29.43 lb. cow.

First check for $250.00 gets him f. o. b. White Pigeon, Mich. Pedigree and photo on request.
ALBERT G. WADE,
130 N. Wells Street, Chicago, Ill

OCT. CLEARANCE SALE. WE ARE OFFERING 20 heifers and bulls. Heavy producing dams. Sire has 7 dams averaging nearly 1,100 lbs. on yearly test. Free from T. B., $50.00 and up.
WOLVERINE DAIRY FARM
Prop.—H. G. Booth Gladwin, Mich.

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In One Visit, Without Discomfort, Glasses, Hospital, Chloroform or Ether and Facial Defects Corrected By A Simple Method

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Chicago's Eminent Specialist in Diseases of the

Eye, Ear, Nose and All Facial Deformities

w[illegible] 20 years has practiced in the leading [illegible] Europe and America—former [illegible] Surgeon correcting deformities [illegible] eyes and face in the largest [illegible] in this country [illegible] in [illegible] straighten cross eyes and correct facial deformities [illegible] take care of a few more cases while in Detroit.

Write to his Chicago office for an appointment, including a free examination while in this city which places you under no obligation.
DR. W. C. WILLIAMS
Specialist in Eye, Ear, Nose and Facial Deformities.
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DAIRY and LIVESTOCK

PROBABLE INCREASE IN SPRING PIGS INDICATED

THE number of sows bred during the first six months of 1923 will be 13 per cent more than the number of sows which actually farrowed in the spring of 1922, provided farmers carry out their intentions as indicated in the December 1, 1922, pig survey made by the United States Department of Agriculture. For the 11 Corn Belt states the survey shows an intention to breed 15.6 per cent more sows than a year ago. Most of the southern states show an actual decrease in prospect for 1923.

The probable increase in farrowings in the spring of 1923 over 1922 compares with an increase of 22.8 per cent in the spring of 1922 over 1921 in the 11 Corn Belt states. The spring pig crop of 1922 in the southern states was about the same as in 1921. Comparisons for other states are not available.

Whether or not the expressed intentions of farmers with regard to the number of sows to be bred to farrow next spring will be carried out will depend largely on the relative prices of hogs and corn, the Department says.

An actual increase of 16 per cent in the number of pigs in 1922 over 1921 is shown in the December survey as compared with the estimated increase of 14.5 per cent shown in the May survey. The number of pigs saved per litter up to July 1, 1922, in the Corn Belt states is placed at 5.8 as compared with 5.7 saved up to May 1. This increase in number of spring pigs in 1922, the Department says.

The number of litters farrowed in the United States in the fall of 1922 shows an increase of 18.6 per cent over the fall of 1921. An increase of 27.8 per cent is shown for the 11 Corn Belt states as compared with an intended increase in these states of 49 per cent in the number of sows to be bred for fall farrowing, as reported last May. The survey shows that in the Corn Belt states 6.1 pigs per litter were saved in the fall of 1922 as compared with 5.9 pigs saved from the 1921 fall litters. For the entire United States a saving of 6.1 pigs per litter in the fall of 1922 as compared with 6 pigs per litter in 1921 is shown.

The decrease in actual number of pigs produced last fall as compared with intentions of farmers the preceeding May is attributed to the decline in hog prices, increased corn prices, increased losses from hog cholera and other diseases, and of the publicity given the results of the spring pig survey made by the Department of Agriculture. Losses from hog cholera and other diseases in the 11 Corn Belt states for the year show an increase of 22.6 per cent over losses in 1921.

The Department received for this report more than 200,000 replies to questionnaires distributed and gathered by rural mail carriers in all sections of the United States where pigs are produced for market. The survey is but the second of its kind that has been made and there has not yet been opportunity to check any differences that may exist between the figures shown for the farms reporting and those for all farms. It is pointed out, however, that the forecast made last spring of an increase of 14.5 per cent in the number of spring pigs over the preceeding year is being borne out by the increased volume of receipts at the principal stockyards during the past three months. The surveys also show that the production of fall pigs in proportion to spring pigs has increased materially during the past two years, thus making a more stabilized supply of pigs throughout the year.

The Department points out that increased production does not necessarily mean an over-supply or decline in prices. Total receipts of hogs at all public stockyards during the first 11 months of 1922 were 5 per cent more than in 1921. During the last four months of 1922 the increase totaled nearly 20 per cent. The number of hogs slaughtered under Federal inspection during the same period was 7.7 per cent more than in 1921 and the total carcass weight of pork and lard resulting from this slaughter shows an increase of 461,246,000 pounds for the 11 months. Despite these increases old storage holdings of pork and lard averaged considerably less than during 1921 and prices showed a substantial advance over 1921. The Department's explanation for this situation is that improved industrial and economic conditions resulted in an increased consumptive demand and a much freer, current movement of pork and lard into trade channels.

MILK PRODUCTION LOW

I have a full blood Jersey cow, eight years old, fresh the 4th of November. She gives only about nine quarts of milk a day, but a wonderful amount of cream. Should she give more milk? We just purchased her two weeks before she came fresh and she was recommended highly. Now, when I churn the butter will not gather and I can do nothing with it, which is a loss. We feed her cornstalks, carrots with ground oats and cornmeal. Would be grateful indeed if you can advise me through your paper.—F. B., Frankfort, Mich.

—It is very difficult matter to tell why your Jersey cow does not give more milk this year without knowing more about the cow that you state in your inquiry. I cannot tell whether she ought to give more milk or not. If she has given more milk in the past, perhaps she is simply taking a year off and cows do this now and then. The fact that the cow is eight years old may account for the fact that she is gradually giving less milk. Some cows are old when eight years old while others are not old until 12 years. It all depends upon how they are fed and cared for in early life.

There is no reason why the cream should not churn well, if you have all the conditions right for churning. The feed that you are feeding would not affect the churnability of the cream in any way. The cream always churns better if allowed to sour first and during cold weather we know that it takes longer to sour than in warm weather. So if you have been making sour cream butter you should see that the cream is just as sour as it is in summer time or any other time when you had no trouble in making butter. This can be accomplished by putting it near the stove to give the bacteria souring. It may be too that your cream is too cold when you start in to churn and it will only foam or whip. The temperature for churning at this time of year should be around 55 to 60 degrees, but is very easy to have the cream from 30 to 40 at this time of year and at this temperature you need not expect the butter to gather very fast. Place the can containing the cream in a but of hot water or allow it to stand near a stove for a while before churning until the temperature is right. These are the principal things that you have to guard against in overcoming difficult churning at this time of the year.—O. E. Reed, Professor of Dairy Husbandry, M. A. C.

RATION FOR MILK COWS

Would you please tell me a balanced ration for my milk cows. I have plenty of good corn silage. I would consider it had just about the right amount of corn in it. I also have plenty of good timothy hay but no clover, this will be their main feed with a little bean straw and shelled corn stalks. I have plenty of oats. What should I buy to go with it and what amount and how much shall I feed? Is buckwheat bran good?—T. S., Sterling, Mich.

—It is very difficult to make up an economical ration for your milk cows with the feeds you have on hand. Any ration that has for its base as a roughage, timothy hay and corn fodder without clover hay or alfalfa in it, is always expensive. As a ration, however, for your cows, I would suggest the following: Give them all the hay and silage that they will clean up twice a day. Then feed one pound of the following mixture for each three pounds of milk produced per day: four parts ground corn, four parts ground oats, two parts bran, two parts cottonseed meal, two parts oil meal, mixed by weight. You will find this is a very expensive ration, but if you are going to make one that will give the cow the nutriments she must have, where you haven't alfalfa or clover hay, you will find that the ration will always be expensive. The feeder will undoubtedly cut this amount of grain down, but in so doing the cows will either cut down their milk flow or the good cows will take off a lot of flesh from their bodies to produce milk and come out in the spring in very poor condition.

Buckwheat bran makes a comparatively good feed. As compared to wheat bran it only contains 2.4 pounds protein while wheat bran contains 12.2—O. E. Reed, Professor of Dairy Husbandry, M. A. C.

CHEMICAL ANALYSIS OF CARROT AND ONION

What is the chemical analysis of a carrot, also an onion? Are carrots a good dairy feed? How many should be fed at one meal and how many meals a day? I have been told they would kill a cow if given carrots twice daily.—H. E. H., Alma, Mich.

—The analysis of the digestible nutrients contained in carrots and onions is as follows:

Carrots: Total dry matter in 100 pounds, 11.7; crude protein, 0.9; carbohydrates, 8.6; fat, 0.2; total 9.9.

Onions: Total dry matter in 100 pounds, 12.4; crude protein, 0.8; carbohydrates, 9.6; fat, 0.2; total, 10.8.

Carrots make an exceptionally good feed for dairy cows. They can be fed in quantities of 30 to 35 pounds per day in two feeds along with plenty of good roughage, preferably clover hay or alfalfa and with what grain the animals require.

I would not advise onions as a dairy feed, while cows do eat wild onions in the spring and seem to crave them, very largely because they are one of the first things that is green in the spring, we find that the milk is tainted with the odor of the onions and as market milk is very undesirable and is not at all desirable when the cream is going to be made into butter.—O. E. Reed, Professor of Dairy Husbandry.

POLLED SHORTHORNS AND RED POLLED

What is the difference between a Polled Shorthorn and a Red Polled? I would like to know how they compare in size, milk, etc., with Durhams.—L. O. T., Johannesburg, Michigan.

—The Polled Shorthorn and Red Polled cattle are two distinct breeds, the Polled Shorthorn having been developed in the United States and the Red Polled breed in England. The Polled Shorthorn and the Shorthorn, sometimes called Durham cattle, are of one and the same breed. The Polled Shorthorn is red, white, red and white, or roan in color, whereas the Red Polled is always red. The Shorthorns are larger, somewhat quicker maturing and of better conformation, as a rule, than the Red Polled. I would say also that the Red Polled is perhaps a somewhat better milker than the Polled Shorthorn, although there are strains of dual purpose Shorthorn cattle that are fully as good milkers as the Red Polled.—Geo. A. Brown, Prof. of Animal Husbandry, M. A. C.

COW TESTING ASSOCIATIONS TELL TRUTH TO DAIRYMEN

THE study of production records of large numbers of cows, made possible by the work of the many cow-testing associations that have been organized in almost every part of the country, has brought out a grist of information on the possibilities of dairy-cow improvement and on the efficiency of various methods and practices. The records of many thousands of cows have been gone over in the last few years by the United States Department of Agriculture.

From the lowest-producing group of cows to the highest-producing group every jump of 50 pounds in annual butterfat production was accompanied by an increase of about $16 in income over cost of feed. The more fat produced, the bigger this income. A few heavy producers of the 21,234 cows whose 12-month records have been studied was 6,077 pounds of milk and 248 pounds of butterfat, or about 50 per cent more than the average of all the dairy cows in the country. The records show that selection of animals and better methods of feeding raise average production rapidly during the first year or two that the cow-testing association is in operation, but the figures for subsequent years show small gains. This is proof enough that there is still much room for improvement in the breeding of cow-testing association cows.

Each year more farmers realize the value of the testing association as a basis for herd improvement. On July 1, 1922, there were in operation 513 associations, including 12,458 herds and 215,321 cows, as compared with 452 associations the previous year. Wisconsin and Minnesota, two of the greatest dairy States, showed great gains in testing associations. During the year the number in Wisconsin grew from 103 to 127, and Minnesota from 23 to 37.

MILKING AND FEEDING TIME

IT has long been a rule on well-managed dairy farms to milk and feed the cows at the same hours every day. Regularity was always thought to have a beneficial effect on production. However, experiments carried on by the United States Department of Agriculture on the Government farm at Beltsville, Md., have shown that cows of average production milked at the same hours every day produced but slightly more milk and slightly less butterfat than those milked at random, provided the feeding was done at regular times. When the feeding as well as the milking was done at random hours the cows produced about 5 per cent less of both milk and fat.

VETERINARY DEPARTMENT

CURE FOR LICE

Would you please tell me what to use on cattle for cattle lice?—M. E., Empire, Michigan.

During moderate weather when cattle will not be injured by being wet, an excellent remedy for lice is any one of the coal tar dips. We have used both Kreso and Zenolium with very satisfactory results, using about one part of the dip to sixty parts of luke-warm water; applying it to the cattle with either a spray pump or brushing it in with a brush. Two applications at intervals of two or three weeks are necessary to eliminate the lice and this will not do it unless pains are taken to cover all parts of the animal's body which the lice frequent.

For use during real cold weather, an excellent lice powder can be made by combining equal parts of powdered naptha flakes, finely powdered tobacco dust and sulphur, which can be sprinkled onto the cattle.—George A. Brown, Prof. of Animal Husbandry, M. A. C.

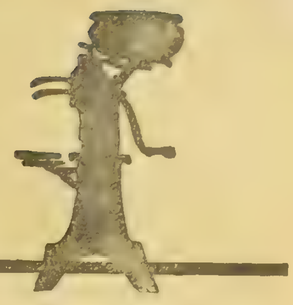
An Irishman working for a Hewbrew asked for an increase in pay. The Hebrew replied: "If you are worth it, I would be pleased to give it to you. Now, let us see what you do in a year, Pat.

"We have 365 days in a year; you sleep 8 hours every day, which makes 122 days you sleep, taken from 365 days leaves 243. Now you have 8 hours' recreation every day which makes 122 days taken from 243 days leaves 121 days. We have 52 Sundays in a year which you have off, leaving you 69 days. You have 14 days' vacation; take this off and you have 55 days left. You don't work Saturday afternoon: this makes 26 days in a year. Take this off and you have 29 days left. Now, Pat, you allow 1 1-2 hours for meals, which totals in a year 28 days. Take this off and you have 1 day left. I always give you Yom Kipper off, so I ask you, Pat, if you are entitled to a raise?" Pat then answered, "Well, what have I been doing, then?"

BIGGER AND BETTER

Dear Mr. Slocum—I am enclosing $1.00 for which please enter my subscription for the Michigan Business Farmer for 2 years as per your offer in this week's issue. I saw a copy today and it was so much bigger and better than when I was a subscriber before that I could not resist subscribing for it again.—Edward Finley, Calhoun County, Michigan.

How do you account for this?



Why is it that there are approximately as many De Lavals in use today as all other makes of seprators combined? For ust one reason, which is based on the actual experience of several milions of users over a period of forty years, who have found it the *most satisfactory*, in that it skims cleaner, lasts longer and is easier to operate and clean than any other

98% Of the best creameries use De Laval Separators

The creameryman knows the best cream separator. Practically all of them use De Lavals. Why? Because they have found by testing the skim-milk, and by experience, that the De Laval is the most profitable. They know that a poor separator can soon waste all their profit and that a De Laval soon pays for itself. The De Laval you use is built on the same principle as the creameryman's.

86% Of the exhibitors at the National Dairy Show use De Laval Separators

At the 1922 National Dairy Exposition an investigation among the exhibitors of purebred dairy cattle disclosed the fact that 86% of them use De Laval Separators. These exhibitors of purebred dairy cattle are the cream of the world's best dairymen—they know the best separator and use it. Butter made from De Laval cream also won first place in *every class.*

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More butter is made and more cream separators are used in Minnesota than in any other state. According to an investigation by a prominent farm paper, 64% of the cream separators in Minnesota are De Lavals—almost two out of every three. A remarkable record—which simply drives home the fact that the more people know about separators, the more they appreciate De Laval.

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—according to an investigation by a group of prominent farm papers of wide circulation. There are, still, many inefficient and worn-out separators in use today which are wasting enough butter-fat to pay for new De Lavals. Get the most out of your butter-fat with a new De Laval. See your De Laval Agent or write us.

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NEW YORK, 165 Broadway CHICAGO, 29 E. Madison St. SAN FRANCISCO, 61 Beale St.

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WM. GRIFFIN, R. 5, Howell, Mich.

FOR SALE—SEVERAL REGISTERED HOLSTEIN cows bred to my Rag Apple sire. Tuberculin tested. **Geo. H. Schlader, R. 2, Freeland, Mich.**

FOR SALE—REGISTERED HOLSTEIN COWS give from 60 lbs. to 88 lbs. milk $160 to $250. Would like to [illegible]
BACON BROTHERS, Pittsford, Mich.

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For sale—20 head Registered Holsteins T. B. tested. 1 Registered Percheron stallion. 1 Registered Percheron mare. J. F. Glady, Vassar, Mich.

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GLADWIN COUNTY SHORTHORN BREEDERS offer the best in beef and milk strains. All ages, both sexes. **W. S. HUBER**, Sec'y, Gladwin, Mich.

RICHLAND SHORTHORNS

We offer one red, low down, thick bull calf fifteen months old, also one roan calf fifteen months old. A bargain if taken at once. Also a few young cows witr calves at foot.

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A POLLED SHORTHORN HERD BULL 2 years old. Scotch Orangeblossom family. Fit to head any herd. Younger ones for sale.
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ON
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We will sell Registered Duroc Jerseys consisting of
7 BOARS--35 SOWS and GILTS
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Anyone ruptured, man, woman or child, should write at once to W. S. Rice, 408B Main St., Adams, N. Y., for a free trial of his wonderful stimulating application. Just put it on the rupture and the muscles begin to tighten; they begin to bind together so that the opening closes naturally and the need of a support or truss or appliance is then done away with. Don't neglect to send for this free trial. Even if your rupture doesn't bother you what is the use of wearing supports all your life? Why suffer this nuisance? Why run the risk of gangrene and such dangers from a small and innocent little rupture, the kind that has thrown thousands on the operating table? A host of men and women are daily running such risks just because their ruptures do not hurt nor prevent them from getting around. Write at once for this free trial, as it is certainly a wonderful thing and has aided in the cure of ruptures that were as big as a man's two fists. Try and write at once, using the coupon below.

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408B Main St., Adams, N. Y.
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A Remarkable Home Treatment Given by One Who Had It

In the year 1893 I was attacked by Muscular and Sub-Acute Rheumatism. I suffered as only those who are thus afflicted know for over three years. I tried remedy after remedy, but such relief as I obtained was only temporary. Finally, I found a treatment that cured me completely and such a pitiful condition has never returned. I have given it to a number who were terribly afflicted, even bedridden, some of them seventy to eighty years old, and the results were the same as in my own case.

I want every sufferer from any form of muscular and sub-acute (swelling at the joints) rheumatism to try the great value of my improved "Home Treatment" for its remarkable healing power. Don't send a cent; simply mail your name and address, and I will send it free to try. After you have used it, and it has proven itself to be that long-looked for means of getting rid of such forms of rheumatism, you may send the price of it, One Dollar, but understand I do not want your money unless you are perfectly satisfied to send it. Isn't that fair? Why suffer any longer, when relief is thus offered you free. Don't delay. Write today

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The Children's Hour

PAYING MOTHER'S BILL

A TEN-YEAR-OLD Oxford lad heard a conversation about certain bills to be paid and conceived the idea of making out a bill for his own services. So next morning he laid this statement of account on his mother's breakfast plate:

"Mother owes Willie for carrying coal six times, 20c; for bringing water lots of times, 30c; for going errands, 15c." His mother read the bill, but said nothing about it. That evening Willie found on his plate the 75c and also another bill, which read as follows: "Willie owes mother for his happy home for ten years, nothing; for nursing him through a long illness, nothing; total, nothing."

When Willie saw the 75c he was pleased, but when he read his mother's bill his eyes grew dim and his lips quivered. Then he took the money to his mother, threw his arms about her neck and begged that she would let him do lots of things for her. Mother's bill is rarely presented, but it will pay each one of us to think it over ourselves, and then settle in love and service.

DEAR Nieces and Nephews:—The above was sent to me by Nephew Lee Valentine of Oxford, Michigan. It is so true that I want all of you to read it.

Many times you feel that your folks ask you to do so many things, and particularly when you are playing some game that is very interesting. I know just how it is. When I was a boy I was no better. I used to think that I did most of the work around home while all the work I did in one day did not amount to more than two or three hours and sometimes not that much. It seemed that mother always wanted me to run some errand for her just at the time I always wanted to play, and I felt just like asking for pay for the work I was doing. I never ask but mother often gave me money when I did something for her and I greedily accepted it believing she owed it to me for my labor. Mother never presented her bill and it was not until I was nearly grown-up that I realized fully what she had done for me.

Father will do all that he can but it is mother that does most of the sacrificing. It is she who shares more closely all your joys and sorrows. Do not be impatient and rude when she asks you to help her. Remember that many, many times mother sacrifices in more ways than one to give you some pleasure, like a new toy or doll, or a party, etc. Do not present your bill to mother because it will keep you busy half way out of debt to her.

What great man was born 114 years ago the 12th of this month? You have guessed it. I hope the day is observed at your schools in a manner fitting. If you are not going to have a program why not ask your teachers to discontinue classes the last two hours of school and read about Lincoln to the pupils. I am sure if you get together and ask that, your tachers will be pleased to do this.

St. Valentine's Day will also come and go before you hear from me again. I hope you all get many valentines. UNCLE NED.

OUR BOYS AND GIRLS

Dear Uncle Ned:—I have written to the M. B. F., before and I saw my letter in print. I have 5 brothers and one sister. My youngest brother is 19 years old. He is in the Navy at the Submarine Base in Panama. I had a brother older than him in the World War. He died from the effects of diphtheria. He enlisted when only 17 years old. We have lived in Michigan since I was small We lived in Iowa before we came here. I am in the 8th grade at school. We have a fine teacher. Your niece.—Myrtle Neumann, Glennie, Michigan.

Dear Uncle Ned:—I am a girl 13 years old, and in the 7th grade. I like my teacher. We had two weeks vacation. I had some fun the last week. I went over to my cousins and stayed from Tuesday until Friday. Will some of the girls write to me?—Ruth Ream, R. No. 1, Clayton, Michigan

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Dearest Uncle Ned—I have written before, but as you know, I have told you in my last letter, that I have no dear mother, as I lost her last July 15, and it is very lonesome without her, so I am writing again. We have been playing in the snow today, to keep me from being lonesome. It is very windy tonight. Last night it was cold and frosty and today it looked like spring had begun. My birthday comes on the 18th of November. I am 16 years old and I wish many of the boys and girls would write.

I haven't written many stories but will try and write one today which I heard a long time ago. My mother has told me. Valentine Day will soon be here.

Saint Valentine

Here is one of the stories that have been told about Saint Valentine.

Father Valentine was a priest who lived a long time ago. He spent his time in nursing the sick people and children, and comforting the sorrowing. As he went among his people, the children, too, found a kind and helpful friend. The children liked to talk with him and run by his side as he went from one house to another. Father Valentine loved all the little creatures of the woods and streams, and they seemed to love him in return. The birds would come at his call and the squirrels would scamper down the trees to take food from his hand. Years went by, and at last the good priest became too old to visit his people. How they wished to hear the sound of his footsteps at the door, again. How the children have missed their kind teacher and the stories that he told them! Father Valentine was very sad because he could no longer go about from home to home. Father Valentine soon found a way by which he could still be of use to those he loved. As he sat in his room he wrote the kind words which had always made his visits so full of good cheer. Every day he sent loving messages near and far. They were carried by boys and girls who had learned from him to be happy in helping others. Soon his friends began to watch for the kind words that were sure to come to them whenever they were in need of help. Even the little children, when they were ill would say, "I am sure Father Valentine will send me a letter today." After a time the good father passed away from earth. But he was not forgotten. Each year, when the fourteenth of February comes around, we still keep his birthday.

Well as my story is getting long so will close with a little verse:

Think of the lonely, remember the sad,
Be kind to the poor, make every one glad,
On good old Saint Valentine's day.

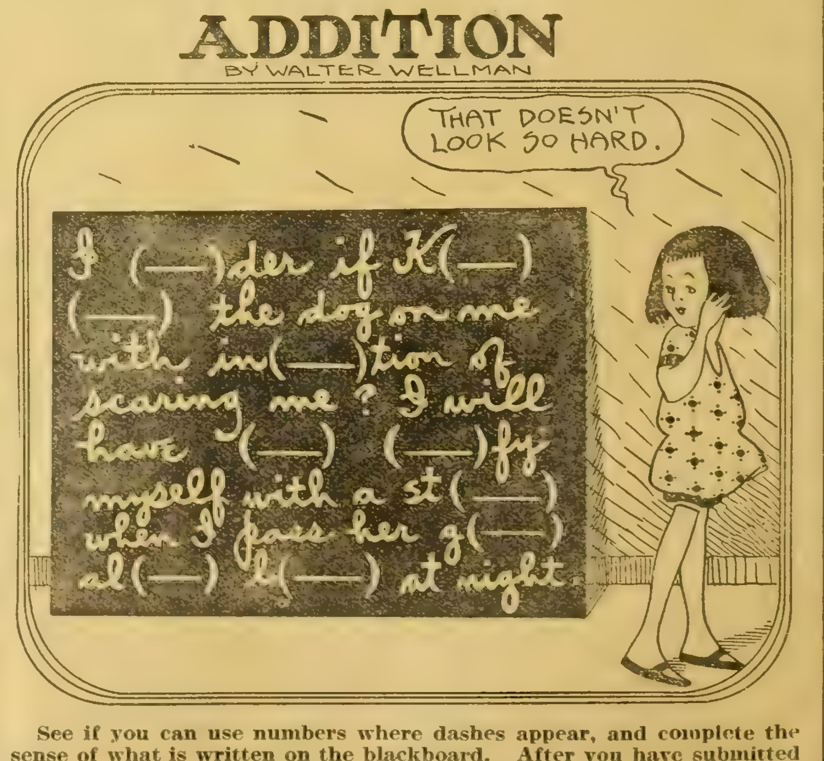
—Miss Elizabeth Kleido,, Elkton, Michigan.

Dear Uncle Ned—I have been reading the Children's Hour for a few years. We had frosty weather for a few days. Today it is warmer and the snow is melting. We have made about six snow men today. Two are about six feet tall or taller. We have been out with our pony for a ride. We have a new pony cutter and my sister Elizabeth hitches the pony to the cutter and away we go for a ride. I am 13 years old today, January 18. I have three sisters and four brothers. The oldest is 17 years old. As my letter is getting long and wish many of the boys and girls would write to me. I will close with best wishes to Uncle Ned and all the rest.—Miss Virginia Kleido, Elkton, Mich.

Dear Uncle Ned:—I have been a silent reader of the M. B. F., for some time, and am very much interested in the Children's Hour. I thought I'd write for the first time. I am a girl 13 years of age, and a blond. I am in the eighth grade and I like to go to school. There are 40 pupils in our school. I have 2 brothers, both younger than I.—Lucille Richards, Bad Axe, Michigan.

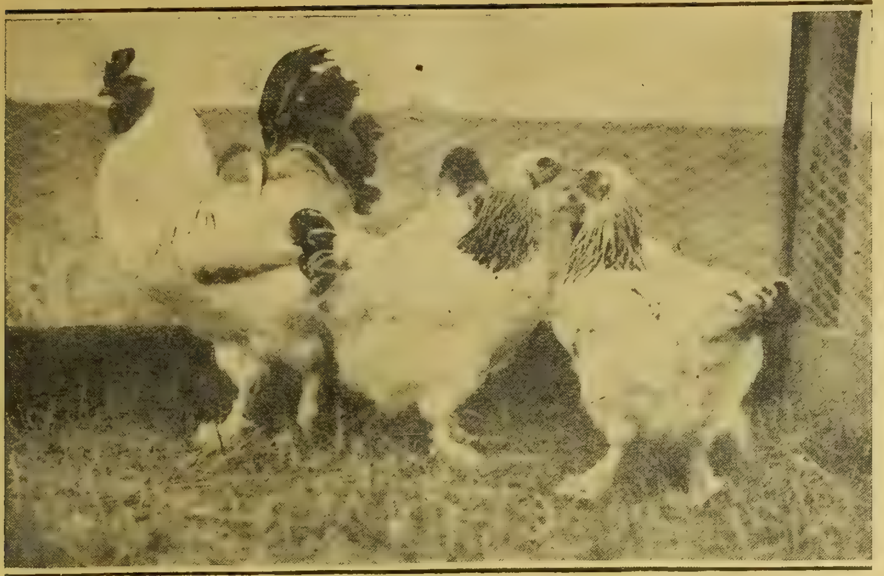
Dear Uncle Ned:—I would like to join your merry circle. I never have written before. My father takes the M. B. F., and I like to read the Children's Hour very much. I am a girl 12 years old and I am in the 6th grade. I live on a 100-acre farm, one-half mile from town and I go to high school. My birthday is the 6th of July. Good-bye Uncle Ned.—Wilma McTaggart, Silverwood, Michigan.

Dear Uncle Ned:—I am a farmer's boy 4 feet and 1 inches tall, I weigh 80 pounds and am 10 years old. I am in the 5th grade at school. I think Evelyn Grundy is about 13 years old. I have 40 rods to go to school. There are 20 pupils in my school. I enjoy reading the M. B. F. I have one sister, she is in high school. I hope to hear from the boys and girls. I will say good-bye, from your nephew.—Thomas D. Blair, R. No. 1, Box 64, Vestaburg, Michigan.


ADDITION
BY WALTER WELLMAN
THAT DOESN'T LOOK SO HARD.
I (—)der if K(—) (—) the dog on me with in(—)tion of scaring me? I will have (—) (—)fy myself with a st(—) when I pass her g(—) al(—) l(—) at night.

See if you can use numbers where dashes appear, and complete the sense of what is written on the blackboard. After you have submitted numbers, add them all together, and give the sum.

Answer to last puzzle: There are seven—Flea, Beetle, Waterbug, Bee, Ant, Hornet, Roach.



A pen of pure-breds, no matter what the breed, are about the best investment any business farmer ever makes.

Keeping Up the Egg Production

THE farm flock commences laying in the fall and early winter and gradually increase the monthly production until in April and May they may average two dozen eggs per hen. After the spring flow the average per hen begins generally to drop very fast unless special care is given the flock.

The flocks roam about the farm and are supposed to find their living about the farmstead. They may for a very short time, soon the proper food for egg-making has been consumed, worms and bugs become scarce, hot weather comes on, mites multiply and inevitably the hens stop laying, just as the cows go down in milk when the grass gets short, flies are plentiful and the weather is hot and they seek the shade.

There should always be egg-mash, or ground feed in a hopper to supplement the food that may be found about the farm. Skim milk, or buttermilk, should be supplied, or meat scraps to take the place of the departed worms that burrow deep in the ground when the weather is hot and air is sultry.

Grit, oyster shells and charcoal must be supplied just as in the winter when the flock is confined.

Many poultry houses are uncomfortable day and night. Filthy, hot, with air fouled by accumulated droppings, poorly ventilated, full of mites, swarming with lice, how can the flock do otherwise but quit laying in self respect?

A flock of 90 hens laid 53 eggs on July 14th, but they were properly fed and kept busy during the day and comfortable at night. The flock had a grove with plenty of shade to work in during the day seeking the scratch feed that was scattered in every nook and corner for them to find. A well balanced egg mash in a hopper, a moist, crumbly mash feed in a trough at noon day, plenty of cool, fresh water and buttermilk to drink, and grit, shell and charcoal always at hand.

It is easier perhaps, to keep a yarded flock up to a high percentage of production, but a farm flock may be so managed as to avoid the heavy slump that is common with the ordinary farm flock. The dairyman can keep his milk flow by the use of soiling crops when the grass gets short and the flies pester the herd day and night.

The farmer can so feed and house as to keep the egg flow up to 50 per cent and by systematic culling continue the high percentage thru the summer months. With such feed and care mentioned eggs of splendid quality can be produced throughout the season until the molt begins in earnest.

Hoppers for egg mash are not found on many farms. Some flocks are not fed out of hand for three or four months in summer, some flocks must find all the water they have and spend the nights in a house that is as hot as—well, hot enough, while the cows are let out of the barn after milking and they seek a high hill where the breezes blow.

Can't you do something to make your flock more comfortable day and night? They will repay you in more eggs to eat and sell.—Farm, Stock and Home.

ENORMOUS WASTE IN EGGS

THE waste in eggs in the United States every year amounts to nearly $50,000,000. It is estimated that 17 per cent of all the eggs produced in this country become unfit for human food before reaching the consumer because of careless methods of handling.

We should help to prevent this loss by producing infertile eggs, by not letting hens nest on the domp ground, by keeping the nests clean, by not washing the eggs, by being careful not to crack them while handling, by gathering eggs daily, by storing them in a cool, dry place and by marketing them at least once a week—twice a week if possible.

Few people understand that eggs are almost as perishable as meat or milk. They belong to the same class of food, but because they are enclosed in a hard shell, many of us think they will stand any kind of treatment.

We will need poultry and eggs. We must produce and conserve them.

CHICKEN POX (AVIAN DIPHTHERIA) AND ROUP

CONTAGIOUS epithelioma, chickenpox, avian or fowl diphtheria, canker, contagious catarrh, roup, cold, simple catarrh, swelled-head, etc., are terms used to designate various diseased conditions of fowls, the most prominent symptoms of which appear about the head. This array of names is very confusing and is due to the practic of naming pathological manifestations according to symptoms without taking the underlying cause into consideration. Leaving aside non-infectious diseases and using the etiology (the cause) as a basis for our nomenclature, we find that the lise of names given above represents only two distinct diseases, namely: (1) contagious epithelioma, commonly called sorehead, chickenpox or fowl diphtheria, and (2) roup, which also has various synonyms such as colds, swelled-heads, etc. Some authors distinguish between chicken-pox on one side and diphtheria on the other as if the latter ones were etiologically identical, but no experimental data support this view, while there is abundant evidence to show that chicken-pox and avian diphtheria are caused by the same organism, and that roup, which in its name resembles colds in man and higher animals, is etiologically distinct from the former. Chicken-pox and avian or fowl diphtheria are simply two different forms of the same disease the scientific name of which is contagious epithelioma, epithelioma meaning a tumor of epithelial cells.

Cause—This disease is caused by a so-called filterable virus, i. e., the organism is so small that it will pass through a dittomaceous earth filter, and cannot be seen under the most highly magnifying microscope. The virus may be found in the scabs, in

(Continued on following page)

Here's My Greatest Offer on World Famous Detroit Incubator

HERE it is—my world-beating low price offer on a high-grade guaranteed hatcher. I've cut my usual low prices right to the bone. Why worry along with your old makeshift machine, when you can now get a new Detroit at rock-bottom price?

Look where you will, you won't find hatching equipment that has higher quality than I build into Detroit Incubators. Compare prices and see what you save. You waste money to pay more. Satisfaction or money back.

The Detroit is equal in every way to incubators costing twice my price—yes, and even more. The Detroit has double walls, hot water heat, copper tank, no cold corners, big nursery, automaticregulation thermometer that can be easily read without opening door and held in horizontal position so chicks cannot break or knock it down when hatching. Many other features that insure big hatches of strong, healthy, vigorous chicks. Capacity 140 eggs. Equally successful on duck and turkey hatches.

$12.45

DETROIT
INCUBATORS and BROODERS

represent the accumulated experience of 18 years devoted to perfecting a hatching outfit that would be as near 100% efficient as money and brains can make it. My low prices are possible only because of big production and my direct-to-you selling plan that cuts out all unnecessary expense.

Why wait and wish for big poultry profits when I place guaranteed equipment within easy reach? This is the year for you to start. Egg and poultry prices are still high. Act Now.

Freight prepaid east of the Rockies — north of Tennessee, and allowed to points beyond. Incubator shipped complete—all set up and ready to use except putting on the legs.

$7.10

My 140-chick brooder is another big bargain. Double walls, hot water heat, strong and durable, yet light and easily handled. A practical brooder in every detail. Will prove a big help in raising your brood and increasing poultry profits.

Big Combination Offer

I make it easy for you to get started in the poultry-raising business. My record-smashing combination offer is the talk of the country. Think of it! A complete hatching and chick raising outfit — Detroit Incubator and Brooder—worth $25.00 of anybody's money for only $17.50. You can't duplicate this value anywhere else in America. Order direct from this ad, or send for catalog containing complete descriptive information on both incubator and brooder. Write today— sure.

$17.50 Both

DETROIT INCUBATOR COMPANY Dept. 10 Detroit, Mich.

Sale of Men's 15-inch LACE ARCTICS at $2.98 PLUS POSTAGE

Just about HALF PRICE • almost knee high

Here's a double-size bargain, so extraordinary that mighty few men will hesitate to snap it up. Imagine! Almost knee high A1 quality, pure gum rubber, lace arctics at just about half price! Reinforced front and back, good, warm lining, full snow excluding tongue, finely built throughout, all rubber—washes off easily. Fits over shoe, and many men wear it as a knee boot. We could sell 10 carloads at this price if we had them—but there is

ONLY A LIMITED SUPPLY—SO GET YOUR ORDER TO US QUICK! Before you turn this page write out your order. A half a dozen cold winters will come and go before you get another bargain that can equal this.

SEND NO MONEY—PAY ON ARRIVAL

Just write and tell us what size to send. Pay the postman on arrival—and WE INVITE you to return them to us and get every penny back at once if you are not completely pleased.

Sizes 6 to 12
Order No. 443

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Costs Less To Hatch

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Radio Round Incubator has 16 wonderful, patented features; practically self-operating. 8 minutes a day takes care of everything. One filling of lamp to hatch. Big tank holds 5 quarts oil. Saves time, saves oil, saves money.

FREE! Big book about Radio Round Incubator sent free with new, low, Direct from Factory prices. Freight or express prepaid. Write NOW.

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More Chicks---Less Cost

This brooder is a chick-saver and a money maker. It raises more and better chicks, at less cost than other brooders. Stove is best in the world to hold fire—air-tight and self-regulating. It burns soft coal—the cheapest brooder fuel—perfectly. Cuts fuel costs in half. Stove will also burn hard coal, wood, coke, etc. Regulator maintains even heat night and day. No trouble. Sizes for 500 or 1000 chicks. Low priced Write TODAY.

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140 Egg Incubator $13.25 30 Days Trial

Both Machines Made of California Redwood

Freight Paid east of the Rockies, Hot water, copper tanks—double walls—dead air space—double glass doors—a real bargain at $13.25. Shipped complete, set up ready to use.

140 Egg Incubator and Brooder -	$17.75
180 Egg Incubator Alone - - -	15.75
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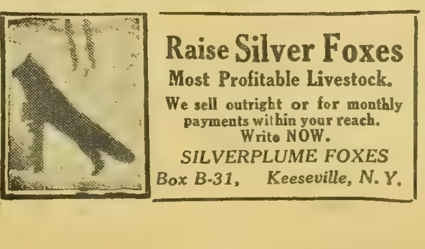
Made of California Redwood—last a lifetime. Positively the best value on the market today. Order the size you want direct from this ad. 30 days trial—money back if not pleased. If not ready to order now, don't buy until you get our new 1923 catalog. (3)

WISCONSIN INCUBATOR CO. Dept. 138 Racine, Wis.



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Most Profitable Livestock.
We sell outright or for monthly payments within your reach.
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Only $2 DOWN ONE YEAR TO PAY

$44 Buys the New Butterfly Jr. No. 2½ Light running, easy cleaning, close skimming, durable.

NEW BUTTERFLY Separators are guaranteed a lifetime against defects in material and workmanship. Made also in four larger sizes up to No. 8 shown here; sold on

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From selected, heavy laying, vigorous hens. White and Brown Leghorns, Anconas, 50, $7; 100, $13: 500, $60. Barred Rocks, 50, $8.50; 100, $16; 500, $75. Extra Select, $2 per 100 higher. Mixed Chicks, 50, $6.50; 100, $12; 500, $55. Well hatched in modern machines. Carefully and correctly packed and shipped. Postpaid, full live arrival guaranteed. Bank reference and this guarantee makes you perfectly safe in ordering direct from this ad NOW. Get them when you want them. All orders have our careful personal attention. WE WANT YOUR BUSINESS. Catalog Free.
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GUARANTEED CHICKS

Hatched from High Laying Quality Fowls on free range, properly fed and housed to insure strong Chicks.

BARRED ROCKS, S. C. REDS, MINORCAS, ANCONAS 50, $8; 100, $15; 500, $74
WHITE WYANDOTTES, BUFF ROCKS 50, $8.50; 100, $16; 500, $78
WHITE, BROWN and BUFF LEGHORNS........ 50, $7.50; 100, $14; 500, $65

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Full 100% live arrival guaranteed. Postpaid. Personally inspected and hatched from STATE INSPECTED Flocks. PURE TOM BARRON STRAIN WHITE LEGHORNS, 50 $8.50; 100, $16; 500, $77.50; 1,000, $150. HEAVY LAYING BROWN LEGHORNS, 50, $8; 100, $15; 500, $72.50; 1,000, $140. SELECT ANCONAS, 50, $9; 100, $17; 500, $82.50; 1,000, $160.
10% OFF THESE PRICES ON ORDERS RECEIVED BEFORE FEBRUARY 15th.
Get our fine new catalog, it's free. We want your business and will give it our most careful attention. Reference, Zeeland State Bank.
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CHICKS—ENGLISH WHITE LEGHORNS, BROWN LEGHORNS (Holland Importation Strain), 50, $7; 100, $13; 500, $62.50; 1,000, $120. BARRED ROCKS, REDS, BUFF LEGHORNS, 50, $8; 100, $15; 500, $72.50; 1,000, $140. WHITE WYANDOTTES (Heavy Laying Flocks), 50, $9; 100, $17. Postpaid, full live delivery guaranteed. All flocks composed of Selected Heavy Layers. Order now from this advertisement and get them when you want them. I have been producing good Chicks successfully for the past 20 years and KNOW HOW. I want your business and will try hard to please you. Free Catalog. Bank Reference. MEADOW BROOK FARM, Henry De Pree, Proprietor, Route 1 H, Holland, Mich. Member Michigan B. C. A.

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From heavy laying well selected, well-fed and housed fowls in best vigorous breeding condition, insuring VIGOROUS CHICKS FOR OUR CUSTOMERS. That is what you get from us in the following varieties and prices: WHITE and BROWN LEGHORNS, 50, $7; 100, $13; 500, $62.50; 1,000, $120. ANCONAS, 50, $7.50; 100, $14; 500, $65; 1,000, $127.50. Postpaid, full delivery guaranteed.

We want your business and WANT TO HOLD IT when we do get it and will endeavor to treat you right. Order now right from this ad and GET THEM WHEN YOU WANT THEM. Reference, Holland City State Bank. CITY LIMITS HATCHERY, Box M, Holland, Mich. Only 5 hours to Chicago. Can reach any point in Illinois or Wisconsin in 24 hours.

CHICKS $12.00 per 100 and Up

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PRICES—WHITE, BROWN and BUFF LEGHORNS, 50, $7; 100, $13; 500, $60. BARRED ROCKS, S. C. and R. C. REDS, ANCONAS, B. MINORCAS, 50, $8; 100, $15; 500, $70. WHITE WYANDOTTES. WHITE ROCKS and BUFF ORPINGTONS, SHEPHARDS 331 EGG STRAIN ANCONAS, WHITE MINORCAS, 50, $8.50; 100, $16; 500, $75. MIXED, 50, $6; 100, $11; 500, $50.
Hatched from selected heavy laying flocks that are well fed and cared for, insuring strong, livable chicks that will make a profit for you. POSTPAID TO YOUR DOOR. ORDER DIRECT FROM THIS AD and SAVE TIME. Catalog free. Reference, Geneva Bank. THE GENEVA HATCHERY, Box 505, Geneva, Ind.

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Returns commence on your investment in 4½ to 5 months from the time you receive your stock. Pure Bred Chicks from our own free range farms of S. C. English White Leghorns, Anconas, Barred Rocks. All breeders inspected and approved. Years of good egg breeding back of them. Our catalog for guaranteed terms, delivery, etc., it's free. Write today. Riverview Poultry Farm, Route 2. Box T, Zeeland, Mich.

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Barron S. C. W. LEGHORNS
Parks Strain BARRED ROCKS
The greatest egg producers known. Heavy winter layers. See record of our pen 16 now at the Michigan International Egg Laying Contest. Get Quality chicks at Reasonable prices from Holland's pioneer poultry farm. Catalogue free.
Pine Bay Poultry Farm, Box 56, Holland, Mich.

BABY CHICKS White and Brown Leghorns, Single and Rose Comb Reds, Buff Orpingtons, Barred and White Plymouth Rocks, Anconas, and White Wyandottes $15 per 100 and up. P. W. STONE HATCHERY, Lock Box 44, Fenton, Mich. P. W. Milliken, Mgr.

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Knowing from terrible experience the suffering caused by rheumatism, Mrs. J. E. Hurst, who lives at 608 E. Douglas Street, C-489, Bloomington, Ill., is so thankful at having cured herself that out of pure gratitude she is anxious to tell all other sufferers just how to get rid of their torture by a simple way at home.

Mrs. Hurst has nothing to sell. Merely mail your own name and address, and she will gladly send you this valuable information entirely free. Write her at once before you forget.

Attention Guaranteed BABY CHICKS World's Greatest Egg Producers

Tom Barron Imported White Leghorns
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From grand selected flocks on free range built direct from laying contest winners. Strong, vigorous chicks that will prove great layers. Flocks culled by poultry experts and headed with vigorous pedigreed males. Send for catalog and prices on our wonderful egg producers, it's free. Reference, two banks.
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Chicks from 265-270 Egg Strain stock and Pedigreed Stock from 280 to Over 300 Egg Hens. Postpaid. Free Feed with each order. One hundred percent Safe Arrival Guaranteed. A Special Discount of $3 per 100 Chix on orders placed promptly. Book of valuable information to poultry raisers Free for the asking. We Want you to have it. Drop us a card right now before you forget it and let us tell you more about this truly wonderful strain of layers.
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CHICKS—WE HAVE SHIPPED THOUSANDS each season since 1904. Different breeds, free booklet with guarantee and delivered price. Freeport Hatchery, Box 10, Freeport, Mich.

the exudate and, in acute cases, in the blood and internal organs. Besides affecting chickens it is pathogenic to turkeys, pigeons, geese ducks, and guinea fowls. Wild birds, such as pheasants, quail and some others, are also susceptible.

Mode of dissemination—Within the flock the disease may be spread by direct contact between diseased and healthy fowls. As the virus is contained in the scabs and discharges of infected birds it is clear that water, feed, litter, etc., form ready means of dissemination. The infection may be carried from coop to coop or from farm to farm by the introduction of birds from a diseased flock no matter whether they show signs of disease or not. The disease is very often brought from poultry shows, in fact this is one of the most common ways of disseminating chicken-pox from one territory to another. The infection may be spread from place to place by the people carrying the virus on their shoes, clothes and hands. It is also possible that dogs, cats, rats or wild birds may act as mechanical carriers and means dissemination.

Characterization and Symptoms—This disease may appear in three forms, namely (1) A pure skin disease, in which wart-like tumors or scabs appear on the combs, wattles, ears and skin of the head, and in some instances on the skin or other parts of the body. These tumors begin as whitish spots or elevations gradually growing larger until they appear as distinct papilla-like growths. As time goes on these lesions change from white to gray, to brown, and finally to an almost black color. The development of these scabs may take as long as three weeks.

(2). A pure mucous membrane disease. In this case grayish or yellowish white cheesy masses develop on the mucous membrane of the oral cavity and eyes. Sometimes the lesions are confined to the larnyx or mouth alone, at other times only one eye may be affected, and so on. In the mouth these patches of so-called pseudomembranes may vary from the size of a pinhead to large areas involving the larynx and almost the entire oral cavity. The eye effection begins with a thin discharge which if not taken care of will thicken and accumulate under the eyelids which finally become glued together preventing the escape of the discharge thus producing a more or less marked bulging.

(3) A combination of the affections described under 1 and 2. The virulence of the organism and the resistence of the fowls are the factors which determine the severity of the disease. In many cases of pure skin affection the general condition of the birds may remain apparently undisturbed. However, when the mucous membranes affected signs of general distress become evident. Such cases the following symptoms may be observed: more or less of a thin, clear, mucous discharge from the mouth, sometimes from one or both eyes, accompanied by difficult breathing, very light at first but usually increasing gradually until the bird dies of asphyxiation due to accumulation of muco-purulent or cheesy exudate in the larynx, or from starvation due to occulsion (closing) of the eyes which prevents the fowl from feeding. In the early stages one may detect the disease by a rattling sound in the larynx of affected fowls. Sneezing and the so-called bird cough may be observed. Concomitant symptoms are dullness, emiciation, cessation of egg production and diarrhea.

Cause and Mortality—The disease may be acute or chronic. Sometimes the birds may die suddenly without having shown any noticeable sign of a disease due to a toxemia or in other cases the cause of death may be occlusion (closing) of the larynx. Chronic cases may go on for weeks. In some outbreaks as many as 80 per cent of the exposed birds contract the disease, in others only 10 per cent may became ill. The death rate is also variable, sometimes reaching 50 per cent of those affected.

Diagnosis—A correct diagnosis of the disease is of paramount importance in order to handle the outbreak intelligently. Where the typical scabs and diphtheritic patches are present there is no need of any doubt as to the identity of the trouble, but in some cases the symptoms may be such as to make it very difficult to arrive at a diagnosis. Scabs on the combs, wattles and skins may be due to mechnical injury.

Canker of the eye and cheesy masses in the mouth may be due to foreign bodies lodging in the conjunctival sac or cleft of the palate causing inflammation of the mucous which, in appearance, resemble some lesions of chicken-pox (diphtheritic form). Conditions of this kind are called mechanical canker and disappear promptly when the irritant is removed.

Roup may be mistaken for the diphtheritic form of chicken-pox due to the bulging of the nasal sinuses which will resemble canker of the eye. However, on closer examination one will find that in the case of roup the eye proper in unaffected and that the closing of the eye is due to the accumulation of discharge in the nasal sinuses which bulges the bone and forces the eyelid upward. The nasal passages may not be involved in contagious epithelomia.

Malignant canker may also be mistaken for the diphtheritic form of chicken-pox. This disease is characterized by small pustules on the base of the tongue and side of the pharynx. They penetrate deeply and may be so numerous as tocoalesce froming masses similar to the pseudomembranes of chicken-pox. Malignant canker is rare, does not spread will not yield to treatment and is always fatal.

Prevention—The following points are essential in keeping the disease within due bounds:

(1) Caution in introducing fowls from strange flocks.

(2) Quarantining of newly purchased birds, or birds brought home from shows or fairs for at least one month.

(3) Prevent undue communication at shows and fairs.

(4) Prompt and complete isolation of diseased fowls.

(5) Good hygienic quarters.

(6) A sufficient knowledge of hygiene to be able to practice sanitation intelligently and efficiently.

Attempts at sanitation are often made, on account of lack of knowledge of the fundamental principles of hygiene, all that is gained is a lot of wasted labor.

How to Handle

Complete isolation of diseased individuals is essential to prevent dissemination of any contagious disease. Suitable facilities for this purpose should therefore be provided for on all up-to-date farms. The mere closing up of diseased birds in a room immediately adjacent to one containing healthy birds is of little or no use. Walls in chicken-houses, as the author has seen them, are not generally "infection-proof" in some cases they are hardly "chicken-proof" so they cannot be depended upon to keep infection from spreading. To keep fowls affected with contagious disease in wire cages placed in killing rooms, feeding rooms, some part of the stables or in any other place where people, cats, and dogs walk to and fro is also bad practice because of the possibility of infected litter, feathers or droppings, which have fallen out of the cages, being carried away on shoes or the feet of animals.

One fairly satisfactory way of providing for isolation is to put the diseased birds in a room at one end of the chicken house keeping the adjacent room empty. In the latter a pair of old rubbers, a duster, or suit of over-alls should be kept for use only in the isolated room. Other facilities necessary for the handling of diseased birds should also be kept in this room if possible. This latter room is just as important as the isolation room itself so some such arrangement as the one suggested should be made available in order to check the infection. After handling diseased fowls one should always carefully wash the hands in plain soap and water or some mild disinfectant before touching anything else. The entire flock should be gone over once or twice daily for the purpose of detecting any diseased birds, and their immediate removal is imperative. If they are too sick to justify treatment they should be killed and burned or buried very deeply. Throwing dead birds on the manure pile is an excellent way of spreading disease. It is well to put

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enough potassium permanganate in the drinking water to give it a purple or wine colored appearance. One may use sufficient to make one-half per cent solution for this purpose. Frequent cleaning of the coops with burning of the litter and thorough spraying of the walls, roosts, floors, etc., using a 3 per cent cresol solution or something similar, is advisable. Meat scraps should be reduced to a minimum during the outbreak. Buttermilk may be used rather freely.

Treatment of Individuals—As soon as symptoms of chicken-pox appear the heads of the affected birds should be dipped in a 2 per cent potassium permanganate or 3 per cent boric acid solution once or twice daily for 30 seconds. In dipping the head the mouth should be kept open and the beak elevated so as to allow the air escape and be replaced by the solution. Removing scabs from the combs, wattles or skin, and then applying salves or other preparations to the raw surface is unnecessary and inadvisable as it will never hasten the recovery but on the contrary lowers the birds vitality and often results in early death. Cheesy masses in the eyes should be removed by carefully pressing on the eyelids or by picking them out with a pair of forceps. A cotton swab may also be used to remove exudate from the eye. As eye wash one may use a 3 per cent boric acid or a 0.9 per cent cooking salt solution which may be applied with a medicine dropper or syringe and should be lukewarm when applied. Having removed the exudate and washed the eyes with one of the above-mentioned solutions, 2 drops of a 20 per cent solution of argyrol should be deposited directly on the eyeball. The latter solution should be applied twice daily in most cases while once daily will suffice for the remainder of the eye treatment. Cheesy membranes should be removed from the mouth and larynx and if raw surfaces are left they should be touched with a mixture of tincture of iodine and glycerin equal parts.

Immunization—Lack af space prevents a discussion of this subject. Suffice to say that vaccination against chicken-pox hàs not proved uniformly successful.

A general discussion on Roup, its symptoms, treatment, immunization, how to prevent, etc., will be published in our February 17th issue. The above article and the one to appear in our next issue are written by Prof. H. J. Stepseth, Bacteriology Section, Michigan Agricultural College.

BUY CHICKS FROM WELL ADVERTISER HATCHERIES

LAST spring at Cleveland, Ohio, operating under the name of "Kings Hatchery," H. H .Mason, an old offender in the mail-order fraud, put out post cards covering the states of New York, Pennsylvania, Ohio, Indiana, and Illinois offering bargain prices on Chicks on orders received before a certain date, in some instances, April 18th, and in others, April 25th. Mason obtained information as to the number of Routes out of each small Post Office in the States above mentioned and the number of Boxes on each Route. Then the post-cards were simply addressed:" THE POULTRY RAISER, ROUTE BOX JONESDALE, OHIO," or whatever State and Post Office was necessary. The responses to these post cards were of great volume and so many Money Orders were presented to the Post Office that the authorities became suspicious and started an investigation, but before an arrest could be made Mason disappeared taking with him $25,000 or more, which he had received thru the mails in a few weeks and leaving a considerable sum in Cleveland Banks. Those who sent him money for Chicks of course lost their money. He evidently had no intention of filling the orders at all. We are giving this information so that the public may be warned against patronizing any Chick-selling schemes or offers which come to them in this or similar manner from unknown parties. To play safe buy Chicks only from real Hatcheries who come out in the open through legitimate advertisements in reliable Journals and which present to you good Bank references. The operations described above are the third time that Mason has succeeded in defrauding the Chick-buying pub-

(Contiued on following page)

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Guaranteed Chicks From Select Approved Flocks
Kept on free range. Carefully fed and cared for to insure the best of health and vigor.
WHITE and BROWN LEGHORNS, ANCONAS, 50, $7.50; 100, $14; 500, $65.
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BABY CHICKS White English Leghorns, Tom Barron Strain. White and Barred Plymouth Rocks, S. C. R. I. Reds, Buff Orpingtons. All pure bred from selected stock. Live arrival gauaranteed. Postage paid. We do custom hatching. Durand Hatchery, Fenton, Mich.

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BABY CHICKS—PUREBRED BARRED ROCKS, Buff Wyandottes, Black Minorcas, R. I. Reds, Brown and White Leghorns, 12c and up, shipped postpaid. THOS. G. CALLAGHAN, Fenton, Mich.

KNIGHT STRAIN WHITE PLYMOUTH ROCK cockerels $5.00 each. Baby chicks $20.00 per 100. ROBERT E. KNIGHT, New Baltimore, Mich.

lic. The first was at Des Moines and the following year at Kansas City. All told he probably defrauded the public out of $100,000 or more. As we have said before, buy Chicks only from firms or individuals who can and do present proper credentials and references to you.

MANAGEMENT OF GROWING CHICKS

THE care of growing chicks, especially during the very warm weather, is most important, you should give them the best of care at this time if you wish to succeed. The baby chicks may be smart little fellows from strong, vigorous parent stock, and they may have been brooded carefully for the first two or three weeks, but unless they recieve proper care and management during their later growing period they will not develop properly, and many of them will be lost by sickness or disease.

The chief essentials to proper growth are good coops or houses, cleanliness, proper feed and water, shade, and free range.

Coops and Houses

Growing chicks should be provided with large, roomy coops or houses which will give them a comfortable place to stay at night and during stormy weather. No particular kind of house is necessary, but it should be so built that it will provide the chicks with lots of light, pure air, and sunshine, and protect them from dampness and storms of all kinds. It also should be arranged so that it can be cleaned easily and frequently, which is very important.

If brood coops are used, do not let too many chicks go into one coop at night, as crowding will cause them to become overheated, resulting in improper growth and sometimes in dead chicks. As the season advances and the chicks become larger, some should be removed and placed in other coops to prevent crowding. When possible it is best to provide larger quarters .

A good house can be built from dry-goods or piano boxes at a small cost.

Every coop and poultry house used for growing chicks should be kept clean at all times. Sickness or disease usually starts in unclean quarters, and in such quarters lice and mites are always more plentiful. The coops and houses should be cleaned and sprayed once a week, and clean shavings, chaff, or sand put on the floor. Examine the chicks and houses often for lice and mites, and if found they should be got rid of at once.

Feeds and Water

A variety of feeds, with fresh, clean water, is necessary if chicks are to grow properly. The three feeds most necessary for rapid growth are grain feed, green feed, and dry mash.

Grain Feed—In addition to the green feed and dry mash, which should be fed night and morning, giving as large a quantity as the chicks will eat clean, but no more. A good grain mixture for growing chicks consists of 3 parts cracked corn, 2 parts wheat, and 2 parts of hulled oats. When available, kafir corn or rolled oats or hulled barley may be substituted for hulled oats. In localities where hulled oats, kafir corn, or rolled barley cannot be obtained or is too high in price, a mixture of cracked corn and wheat only may be fed until the chicks are old enough to eat whole oats, when 2 parts oats only may be added to the corn and wheat mixture.

Green Feed—A reasonable supply of fresh green feed is almost as necessary as grain for growing chicks if they are to develop properly. If allowed liberty they will obtain much of it for themselves, but if kept in confinement or in quarters where green feed is not abundant, it should be supplied to them regularly. Lawn grass, beet tops, cabbage, and lettuce make excellent green feds.

When chicks are confined to brood coops with runs these should be placed on ground where the grass is green and tender, and as fast as it is eaten off the coop and run should be moved to a place where the grass is plentiful .

Dry Mash—In addition to grain and green feeds, dry mash should be kept before growing chicks at all times after they are three or four weeks old. It is best to feed it in a hopper inside the building or where it will nót be exposed to rain or wet. If a large number of chicks are raised the mash may be fed in an outdoor hopper.

The following mixture makes a good dry mash: Two pounds corn meal, 2 pounds middlings, 1 pound oatmeal, 2 pounds wheat bran, 1 pound beef scrap, and one-fourth pound of charcoal. When larger a larger quantity is desired it should be mixed in the same proportion.

Grit and oyster shell should be provided also, so that the chicks may help themselves whenever they wish.

Sour Milk—Nothing is better for growing chicks than a liberay supply of sour milk. If it can be obtained, it should be kept always before them in an open dish or pan where they can eat and drink it freely. When sour milk is feed, the amount of beef scrap in the dry mash may be reduced one-half.

Water—Plenty of fresh, clean water is absolutely necessary for all growing chicks. In hot weather it should be given twice daily and put into fountains or dishes and placed in the shade so as to keep as cool as possible. Clean the water dish thoroughly each day before filling.

An abundance of free range with plenty of shade is necessary if the chicks are to grow rapidly into vigorous fowls. Growing chicks that have free rangs obtain quantities of green feed, bugs, worms, and other things, therefore requiring less grain, and they are also less liable to sickness or disease. Give your chicks free range whenever possible.—Animal Husbandry Division, U. S. Dept., of Agriculture.

MICHIGAN BREEDER TRICKED AT NEW YORK

TWENTY-three years of scietific work gone for naught. Fifteen thousand dollars vanished. All because of a few missing feathers.

This is what a few words in a telegram received from New York said. At the Madison Square Gardens poultry show, several crates of birds entered by Mr. Ferris, were found to have been tampered with and $15,000 worth of prize winning white leghorns possibly rendered worthless. Tails of 14 male birds had been clipped, and they had been roughly handled. L. E. Heasley, representating Mr. Ferris at the show, was compelled to withdraw them from exhibition.

The management of the show posted notice of $500 reward for information leading to the arrest of persons responsible for the mutilation of the birds. It is believed the act was committed by a rival exhibitor.

Represents 23 Years' Work

The 14 mutilated birds are the result of 23 years' breeding, culling and selecting and were the choicest of his flocks. Although their market value is probably around $15,000, he says, to him they were worth many thousands more and were not for sale at any price.

For one year these birds had been carefully groomed for this show, Mr. Ferris said. In order that not a single feather should be broken or the plummage rufled, they had not been exhibited for 12 months, and when the crates had been prepared and the birds shipped it was Mr. Ferris' belief that they were the best to be found anywhere in the country. He was confident they would carry off all the awards as they have done time and again in previous years at other shows.

The loss of the 14 males will cause him many thousands of dollars' loss in addition to their actual value.

ANNUAL POULTRY CROP WOULD BUILD TWO PANAMA CANALS

The poultry in the United States yields over half a billion dollars every year—enough to build two Panama Canals.

The Panama Canal cost about $300,000,000. The poultry products are worth over $600,000,000 annually.

Ninety per cent of this amount is produced by the small flocks on the farms of the country.—International Harvester Co., of America.

DOING HIS SHARE TOO

Editor Michigan Business Farmer—Enclosed find order for one dollar to renew my subscription to Business Farmer for two years. I sure think you are doing something to help us farmers in these strenuous times so I feel we must do our part with you.—Thomas Rawson, Huron, County, Michigan.

HIGHEST QUALITY CHICKS
Michigan's Old Reliable Hatchery
(The most modern and best equipped Hatchery in the state)
PURE BRED English and American S. C. W. Leghorns; S. C. Anconas; Barred Plymouth Rocks and R. I. Reds. Strong, well hatched chicks from tested Hoganized Free range stock that make wonderful winter layers.
Chicks sent by Insured Parcel Post Prepaid to your door. 100% live delivery guaranteed. Fifteen years of experience in producing and shipping chicks has given adsolute satisfaction to thousands. Write for illustrated free catalog and price list. Get lowest price on best quality chicks before you buy.
Holland Hatchery, R. 7, Holland, Mich.

Day Old Chicks
From Select, Hogan Tested, Flocks on Free Range. Well-fed and handled to insure strong, vigorous chicks. Heavy Layers. PRICES: WHITE and BROWN LEGHORNS and ANCONAS, 50, $7.50; 100, $14; 500, $65. BARRED ROCKS, 50, $8.50; 100, $16; 500, $75. Hatched right and shipped right. Postpaid. 100% live delivery guaranteed. Bank Reference. Order direct from this ad. Circular free.
BORST & ROEK, Box P, Zeeland, Mich.

CHICKS From State Inspected Flocks
We Specialize In ARISTOCRAT BARRED ROCKS, TOM BARRON WHITE AND EVERLAY BROWN LEGHORNS, SHEPPARDS STRAIN ANCONAS. SELECT ARISTOCRAT ROCK CHICKS, $30 per 100. SELECT LEGHORN AND ANCONAS CHICKS, $22 per 100. 10% discount on early orders to March 1st on these special matings. Get our special low prices on our grade B Chicks. Postpaid, full live delivery guaranteed. Reference 2 Banks. Also Breeding stock in above varieties. Member M. B. C. A. FAIRVIEW POULTRY FARM, Route 2 K, Zeeland, Michigan.

Star Hatchery BABY CHICKS
From Select, Vigorous, Heavy Laying Breeding Stock
WHITE and BROWN LEGHORNS and ANCONAS
50—$7 100—$14 500—$65
SINGLE COMB REDS
50—$8 100—$16 500—$75
Hatched by modern methods in best machines under our personal supervision. Carefully packed and sent postpaid and 100% live delivery guaranteed. Bank Reference. You take no chances in ordering STAR BABY CHICKS. Place your order now and get them when you want them
STAR HATCHERY, Box X, Holland, Michigan

WOLVERINE BABY CHICKS ARE CHICKS THAT SATISFY
Bred for egg production 13 years. We hatched and shipped chicks for 12 years. This assures you success. ENGLISH TYPE WHITE AND BROWN LEGHORNS 100% safe arrival guaranteed. Write for catalogue. It's free. WOLVERINE HATCHERY, R. 2, Zeeland, Mich.

PIONEER FARMS
CHICKS FROM APPROVED FLOCKS Single Comb White Leghorns, Heavy Layers, 50, $7; 100, $13; 500, $60. Tom Barron Strain S. C. W. Leghorns, 50, $8; 100, $15; 500, $70. Barred Rocks, Extra Fine, 50, $9.50; 100, $18; 500, $85.
All Chicks hatched from our own flocks. Postpaid, 100% live delivery guaranteed. Reference, Zeeland State Bank. Circular.
PIONEER FARMS, R. 3 M, Zeeland, Mich.

GUARANTEED BABY CHICKS
TOM BARRON ENGLISH S. C. WHITE LEGHORNS
1,500 breeders on our farm. Hatch every Tuesday starting March 1st. Write at once for new catalog and prices. 100% delivery guaranteed, shipped postpaid.
DOWNS POULTRY FARM
R. F. D. 1, Washington, Mich.

DAY OLD CHICKS
Best Paying, Heavy Laying, Pure Bred Tom Barron English White Leghorns, Rhode Island Reds, Park's Barred Rocks. Strong healthy chicks from State Inspected and Approved Stock. Order now at new low prices. Instructive catalog FREE.
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GUARANTEED BABY CHICKS
From World's Champion Layers. Certified, Trap-Nested, Pedigreed, Snowden's English White Leghorns, 250-291 Egg records. Sheppard's 301 Egg strain Anconas. Guaranteed strong healthy chicks. Real money makers. Beautiful Catalog FREE.
F[illegible]K A. VAN BREE, Box 48, Zeeland, Mich.

BABY CHICKS—REMARKABLE FOR SIZE and strength. Reasonable prices. Leghorns Anconas. Rocks. Reds. Wyandottes. Orpingtons. Minorcas. Spanish. Brahmas. TYRONE POULTRY FARM, Fenton, Mich.

BABY CHICKS—FROM SELECTED FLOCKS Six leading varieties. Popular prices and guaranteed delivery. Write for catalog and price list. H. H PIERCE, Jerome, Mich.

LOOK—75,000 CHIX 12c AND UP. TEN purebred certified egg-tested varieties. Hatching eggs, circular free. LAWRENCE POULTRY FARM, R. 7, Grand Rapids, Mich.

QUALITY BABY CHICKS S. C. Brown and English strain White Leghorn Baby Chicks. Write for catalogue. Cooks Poultry Farm, Holland, Mich.

CHICKS—SINGLE COMB BUFF LEGHORNS only. Strong healthy chicks from good laying stock. J. W. WEBSTER, Bath, Mich.

The Agricultural and Business Situation

Revised Monthly by the Department of Research of the American Farm Bureau Federation.

SUMMARY:

Industrial output is beginning to catch up with agricultural production. The large volume of equipment now being ordered by the railroads is significant and encouraging. Automobile production is continuing at a pace that contains a warning. The favorable factors in Europe in 1922 were financial improvement in England and France and industrial activity in France and Germany. Disheartening features of the foreign situation include unemployment in England and financial collapse in Germany. The new move by France to force payment by Germany injects new uncertainty into European affairs.

Money and credit conditions point to continuing business revival in the United States. The general price level is 14 per cent above a year ago. Agricultural prices have made about a 6 point gain toward the relationship with other prices existing before the war but have 32 points yet to go.

I. PRODUCTION AND TRADE:

The year 1922 brought increasing industrial activity. Manufacturing output was around 30 per cent greater than in 1921. The output in December, 1922, was about 50 per cent more than the month of lowest production, July, 1921.

The railroads purchased eight times as many freight cars in 1922 as in 1921. This is particularly encouraging in view of the deficiency in railroad equipment. A fact which is not so favorable is the enormous output of automobiles which shows no sign of lessening. Automobiles fall partly in the luxury class. Prices of steel are rising and costs are and will be higher in lines of industry more necessary of present development than the automobile industry.

Agricultural output in 1922 was the third largest ever produced, being exceeded in the years 1915 and 1920.

II. FOREIGN TRADE:

Total exports for 1922, when higher price level is considered, were practically the same as for the previous year. Imports showed a slight increase. Agricultural exports which customarily comprise a little over one-half of the total, declined in volume. The decline in cotton and pork products was small, but in the case of wheat about 40 per cent. It should be remembered that wheat exports in 1921 were unprecedented in volume.

England, the leading purchaser of American goods, has improved its financial position to a marked degree during the year as reflected in a gain of about 50 cents in the price of British drafts. The price is still 20 cents under par. A discouraging feature of the situation in England is the large amount of unemployment which persists.

France made some progress during 1922 in stabilizing its finances and its population has been at work producing goods and rebuilding the devastated areas.

In Germany, during the year, production has been feverishly maintained partly as a result of rising prices due to the unlimited issue of paper money which has brought the financial structure to ruin.

American agriculture has a large stake in the stability of Europe and will be confronted with uncertainty until European affairs are arranged. The present activity of France, designed to force Germany to meet its obligations, has not gone far enough to indicate whether it will retard or hasten the coming of more settled conditions.

III. MONEY AND CREDIT:

Interest rates are low, ample credit is available and industrial profits are slightly higher than in 1921. This combination of circumstances should lead to moderate increase in the demand for credit, and expanding industrial activity. The Harvard Economic Service gives great significance to the money factor in forecasting a continuation of the upswing in business for the year 1923.

IV. PRICES:

Farm commodities made a gain of 21 per cent in price during the year 1922. Food products of which several are sold directly from the farm, advanced 6 per cent. All commodities, other than farm and food products, gained 16 per cent during the year. These facts are based on wholesale prices collected monthly on 400 items by the United States Bureau of Labor Statistics.

I. Production and Trade

1. Agriculture:

U. S. Production—000,000 omitted.

	Dec. 1st 1922 Estimate Preliminary	1921	Average 1916-1920	Preliminary* Dec. 1st 1922 Estimate per cent
Corn, bu.	2891	3069	2831	102
Wheat, bu	856	815	799	107
Oats, bu	1215	1078	1413	85
Barley, bu.	186	155	197	94
Rye, bu.	95	62	68	[illegible]
Buckwheat, bu.	15	11	11	[illegible]
Potatoes, bu	451	362	373	[illegible]
Sweet Potatoes, bu.	110	99	89	[illegible]
Hay, all, tons	113	98	102	111
Cotton, bales	10	8	12	83
Tobacco, lb.	1325	1070	1378	[illegible]
Flaxseed, bu	12	8	11	[illegible]
Rice, bu.	42	38	42	[illegible]
Peaches, bu.	57	33	44	129
Pears, bu.	19	11	14	[illegible]
Apples, total, bu.	204	99	179	114
Apples, com'l, bbls.	31	22	27	115
Sugar Beets, tons	5	8	7	71
Cranberries, bbls.	.6	.4	.4	[illegible]
Beans, bu.	12	9	13.3	[illegible]
Onions, bu.	18	14	17	[illegible]
Cabbage, tons	1	.6	.7	[illegible]
Sorghum Sirup, gal.	37	46	40	93
Cloverseed, bu.	1.9	1.5	1.5	127
Peanuts, lb.	624	829	1043	59
Hops, lb.	26	29	32.1	81

*As percentage of average 1916-1920

World Production—000,000 omitted.

	1922	1921	Average [illegible]
Wheat, bu (1)	3,078	3,089	[illegible]
Corn, bu (2)	3,450	3,781	[illegible]
Rye, bu. (3)	785	773	
Oats, bu. (4)	3,003	2,739	3,068
Barley, bu. (5)	833	818	[illegible]
Potatoes, bu. (6)	3,123	2,445	[illegible]
Cotton, bales (7)	16	14.1	19.6

(1) Russia and Mexico excluded. (2) 17 countries. (3) 18 countries. (4) 27 countries. (5) 25 countries. (6) 16 countries. (7) 500 pounds net, linters excluded.

2. Mining:

Figures express production as a per cent of normal. In estimating normal product a due allowance is made for seasonal variation and year to year growth.

	Nov., 1922	Oct., 1922	Nov., 1921
Anthracite coal	* 99	95	82
Bituminous coal	* 81	75	67
Copper	* 87	84	19
Petroleum	*123	*112	102

* Preliminary.

3. Manufacturing:

Wheat flour	102	109	78
Meat	*	97	83
Sugar	147	108	125
Cotton	106	95	99
Pig Iron	92	83	47
Steel ingot	83	85	53
Lumber	*	*	84
Wood pulp	*	92	83
Gasoline	*	105	96
Cement	*	126	102
Wool	*	131	121

* Not available.

4. Building:

	December 1922	December 1921	Twelve Months 1922	Twelve Months 1921
Contracts awarded in 27 States: (F. W. Dodge Co.)				
Number	7,080	6,181	107,637	78,222
Value (000,000 omitted)	$ 215	$ 199	$ 3,346	$ 2,359

5. Transportation:

Freight Car Loadings:	Week Ending Jan. 13, 1923	Same Week Month Ago	Same Week Year Ago	Week Ending Jan. 13, 1922*
Total	873,271	919,828	720,877	121
Grain and grain products	51,034	55,608	50,187	102
Livestock	37,500	38,170	36,165	104
Coal	198,683	200,505	159,245	124
Coke	13,795	13,051	7,258	190
Forest products	68,632	63,195	48,490	142
Ore	10,763	9,879	4,451	243
Merchandise & Miscel.	492,841	539,420	415,081	119

* As percentage of week year ago.

6. Employment

	November, 1922	October, 1922	Sept., 1922
Out of 65 industrial centers employment			
Increased over previous month in	54	56	48
Decreased from previous month in	11	9	17

7. Bank Clearings.

Units of $1,000,000,000

	Dec., 1922	Nov., 1922	Dec., 1921
New York City	$18.90	$17.33	$18.48
Outside New York City	16.51	15.80	14.37

8. Mail Order Sales:

	December 1922	December 1921	Twelve Months 1922	Twelve Months 1921
Montgomery Ward	$11,023,292	$ 7,425,126	$ 92,474,182	$ 75,956,649
Sears Roebuck	20,750,296	17,030,880	182,165,824	177,014,888

II. Foreign Trade

1. Exports:

000 omitted

Commodity.	November 1922	November 1921	Eleven Months 1922	Eleven Months 1921
Grand total, all exports	[illegible]	$289,212	$3,425,724	$4,087,753
Beef and veal, lb.	[illegible]	2,763	30,743	39,307
Pork, lb.	60,775	37,647	624,663	697,362
Lard, lb.	62,721	51,851	688,354	804,399
Neutral lard, lb.	1,478	733	17,981	22,428
Butter, lb.	[illegible]	480	10,576	7,576
Cheese, lb.	332	500	4,699	11,333
Hides and skins	$ 313	$ 521	$ 3,591	$ 3,642
Corn, bu.	7,521	4,542	158,851	118,731
Corn meal and flour, bbl.	50	38	584	742
Wheat, bu.	10,577	13,955	155,015	269,606
Flour, bbl.	1,556	1,246	13,524	15,787
Oats, bu.	2,614	132	29,679	3,126
Meal and rolled, lb.	14,250	4,039	102,936	89,712
Fruits and nuts	$ 13,658	$ 9,725	$ 67,430	$ 64,489
Veg. oils and fats	$ 1,921	$ 1,037	$ 12,818	$ 26,573
Sugar, lb.	8,707	37,874	1,830,748	862,522
Leaf tobacco, lb.	*	29,236	*	476,581
Cotton, bale	858	649	5,506	5,834

*Not available.

2. Imports:

	September 1922	September 1921	Nine Months 1922	Nine Months 1921
Grand total, all imports	$228,795	$179,292	$2 181,386	$1,872,696
Beef and veal, lb.	10,533	2,066	26,998	22,033
Pork, lbs.	76	56	435	582
Butter, lbs.	89	308	2,735	12,173
Cheese, lbs.	3,037	[illegible]	26,241	15,535
Hides and skins	$ 50,587	32,806	358,765	268,980
Corn, bu.	2	3	97	156
Oats, bu.	37	62	1,271	3,081
Wheat, bu.	782	81	14,321	19,171
Flour, bbl.	42	4	552	780
Fruits and nuts	$ 3,864	5,268	55,489	48,529
Veg. oils and fats	$ 2,990	3,822	44,079	26,474
Sugar, lbs.	[illegible]	315,999	8,484,011	4,747,517
Leaf tobacco, lbs.	[illegible]	[illegible]	51,556	36,911
Cotton, lbs.	2,506	3,181	113,724	67,091
Wool, lbs.	27,892	14,592	278,527	288,114

3. Prices of Foreign Drafts:

	Nominal Gold Value Par of Exchange	Price of Demand Drafts Jan. 22, 1923	Dec. 19, 1922	Jan. 23, 1921
England	$4.87 to 1 £ Sterling	[illegible]	$4.61	$4.22
France	19.3c to 1 franc	[illegible]	7.45c	8.04c
Germany	23.8c to 1 mark	.005c	.015c	.48c
Belgium	19.3c to 1 franc	5.67c	6.83c	7.74c
Italy	19.3c to 1 lire	[illegible]	5.08c	4.37c
Spain	19.3c to 1 peseta	15.02c	15.70c	14.94c
Austria	20.3c to 1 crown	.0014c	.0014c	.03c
Denmark	26.8c to 1 crown	18.68c	20.70c	20.00c
Norway	26.8c to 1 crown	18.04c	19.05c	15.65c
Sweden	26.8c to 1 crown	26.80c	26.89c	24.85c
Holland	40.2c to 1 florin	39.50c	39.82c	36.36c
Argentina	42.5c to 1 peso	39.25c	37.90c	34.25c
Brazil	32.4c to 1 milreis	11.45c	12.15c	12.63c
India	48.7c to 1 rupee	32.25c	30.95c	28.00c
Japan	49.9c to 1 yen	48.85c	48.95c	47.38c
Canada	100 c to 1 dollar	99.13c	99.43c	95.00c

4. Discount Rate of the Bank of England:

Jan. 17, 1923	Month Ago	Year Ago
3%	[illegible]	5%

III. Money and Credit

1. Gold, Currency and Bank Deposits:

000,000 omitted

	Jan. 1, 1923	Dec. 1, 1922	Jan. 1, 1922
Stocks of monetary gold in the United States	$ 3,943	$ 3,909	$ 3,657
Total supply of currency in the United States	4,733	4,617	5,775
	Sept. 15, 1922	June 30 1922	Sept. 15, 1921
Total deposits in National Banks	$16,599	$16,321	$14,561
	Dec. 1, 1922	Nov. 1, 1922	Dec. 1, 1921
Deposits in New York City Banks	$3,850	$3,830	$3,840

2. Gold Movement:

000 omitted

	November 1922	November 1921	Eleven Months 1922	Eleven Months 1921
Exports of gold	$ 3,431	$ 607	$ 34,165	$ 21,729
Imports of gold	18,308	51,298	248,730	659,582

3. Federal Reserve Ratio:

	Jan. 17, 1923	Dec. 13, 1922	Jan. 18, 1922
Ratio of total reserves to deposit and Federal Reserve note liabilities combined	76.1%	75.1%	76.0%

4. Interest Rates:

	Dec., 1922	Nov., 1922	Dec., 1921
4-6 mos. commercial paper	4.88%	4.88%	5.38%
60-90 day commercial paper	4.62%	4.62%	5.12%

5. Discount Rates of the Federal Reserve Banks:

	Jan. 1, 1923	Dec. 1, 1922	Jan. 1, 1922
Range of rates for the twelve banks on commercial, agricultural and livestock paper	4-4½%	4-4½%	4½-5½%

6. Stock and Bond Prices:

	Jan. 12, 1923	Dec. 8, 1922	Jan. 13, 1922
20 Industrial stocks	$98.63	$97.88	$80.82
20 Railroad stocks	85.09	84.56	74.98
40 Bonds	89.01	89.06	85.26

7. Business Failures:

	Week Ending Jan. 11, 1923	Dec. 8, 1922	Jan. 12, 1922
Bradstreets	550	462	717
Duns	[illegible]	484	719

IV. Prices

1. Wholesale Prices of Farm Commodities:

Quotations at Chicago except as noted.

	Jan. 23, 1923	Month Ago	Year Ago
Fat hogs, cwt., average	$ 8.30	$ 8.45	$ 8.75
Beef steers, good native, cwt., av.	9.35	9.00	7.00
Fat lambs, cwt., average	14.20	14.25	13.30
Fat sheep, cwt., average	7.90	7.15	6.85
Wool, Ohio delaine unwashed, lb. (Boston)	.57	.565	.45
Butter, 92 score, lb.	.50	.51	.34
Cheese, No. 1 twins, lb.	.276	.2675	.20
Eggs, fresh firsts, doz.	.355	.395	.39
Poultry, hens, lb.	.22	.17	.25
Wheat, No. 2 hard, bu.	1.155	1.26	1.16
Corn, No. 2 mixed, bu.	.695	.73	.505
Oats, No. 2 white, bu.	.435	.455	.38
Rye, No. 2, bu.	.875	.90	.815
Barley, bu.	.625	.67	.585
Kafir, No. 2 white cwt. (K. C.)	1.575	1.55	.94
Hay, No. 1 timothy, ton	21.00	21.00	21.50
Flax, No. 1 bu. (Minneapolis)	2.81	2.605	2.16
Cotton, middling, lb. (New York)	[illegible]	.268	.1775
Beans, white, cwt. (f. o. b. Michigan)	8.05	7.50	4.65
Potatoes, northern whites, cwt.	[illegible]	.85	2.00
Onions, midwest yellow, cwt.	[illegible]	2.50	8.00
Apples, winter varieties, bbl.	5.00	5.00	8.50
Hides, No. 1 native heavy, lb.	.205	.20	.165
Sugar, fine granulated, lb. (N. Y.)	.067	.0705	.0505

2. U. S. Department of Labor Relative Wholesale Prices:

Prices in year 1913 equal 100

	Dec., 1922	Nov., 1922	Dec., 1921
All commodities (Weighted average or general price level)	[illegible]	156	140
Farm products	145	143	120
Food products	144	143	136
Cloths and clothing	194	192	180
Fuel and lighting	[illegible]	218	199
Metals and metal products	131	133	113
Building materials	185	185	158
Chemicals and drugs	[illegible]	127	127
House furnishings	[illegible]	179	178
Miscellaneous	122	122	121

3. Prices of Farm Products at [illegible] Relative to 1913

Prices in year 19[illegible]

Commodity:	Nov., 1922	Oct., 1922	Nov., 1921
Cotton	192	[illegible]	131
Corn	[illegible]	[illegible]	[illegible]
Wheat	[illegible]	[illegible]	118
Hay	115	[illegible]	110
Potatoes	90	[illegible]	171
Beef Cattle	[illegible]	[illegible]	[illegible]
Hogs	[illegible]	111	[illegible]
Eggs	[illegible]	[illegible]	[illegible]
Butter	[illegible]	[illegible]	[illegible]
Wool	189	[illegible]	[illegible]

4. Relative Purchasing Power of Farm Products

The quantity of various commodities which a given amount of each farm product would purchase at prices prevailing in 1913 is put equal to 100. The figures given represent the percentage of this quantity which the same amount of farm products would purchase in November, 1922. Prices at the farm are used for agricultural products, and wholesale prices at central markets for other commodities.

	All Commodities	Cloths, etc.	Fuel, etc.	Metals, etc.	Building Mtls.	House Furn'gs
Cotton	123	100	88	144	104	107
Corn	71	58	51	83	60	62
Wheat	83	67	59	97	70	72
Hay	74	60	53	86	62	64
Potatoes	58	47	41	68	49	50
Beef cattle	57	46	41	67	48	50
Hogs	67	54	48	78	56	58
Eggs	152	124	110	172	129	133
Butter	[illegible]	81	71	116	84	87
Wool	128	104	91	150	108	111

Average purchasing power of all farm products in terms of all other commodities. Same basis as above table.

1913	100	December, 1921	62
1914	112	January, 1922	65
1915	106	March	76
1916	89	May	73
1917	106	July	69
1918	112	September	64
1919	111	October	65
1920	86	November	66
1921	67	December	68

MARKET FLASHES

MARKET SUMMARY

Wheat prices gain slightly as demand improves. Corn easy. Oats and rye remain unchanged. Beans are inactive. Live poultry, dressed calves and hogs are wanted. Receipts of butter and eggs exceed demand and market is easy. Potatoes steady. All live stock show more activity and the market is steady.

(**Note: The above summarized information was received AFTER the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press —Editor**)

FOOTE'S MARKET LETTER

By W. W. Foote

IT is an old saying that advice is cheap and the more one gives, the more one has left. Perhaps this is an exaggeration; at any rate there are many requests from farming districts asking what appears to be the best course to follow at this time in regard to selling grain and other farm products. In replying, it should be said that much depends upon how the farmer is fixed financially and whether he is working his own farm or that is not mortgaged. Supposing that the Michigan farmer is out of debt, and physically able to carry on his farm work without hiring any helpers, there appears to be no good reason for worrying over the existing conditions over in Europe, bad as they are. Michigan farmers are as a class practically clear of the strined conditions in such states as Iowa and Illinois, where the great war boom in farm prices lifted lands to extremely artificial figures; and furthermore, our Michigan farmers are largely in the habit of diversifiying their crops, instead of depending mainly on a single crop. Then the farmers of this state are more than ever before realizing the importance of growing most of the foods consumed on the farm. It is worth remembering that about 9 per cent more of the food consumed on farms could economically be produced locally rather than brought in from distant producing areas, as a recent nation-wide survey made by the United States Department of Agriculture maintains. This statement is the result of questions mailed to 20,000 crop reporters in all parts of the country, revealing that about 60 per cent of the food consumed on American farms is produced locally. To this statement, it may be added that this applies especially to Michigan, and farmers who raise their own vegetables, apples, beans, hens, cows, and hogs have gone a long way to solve the vexing problem of living comfortably on the old farm. As for marketing the surplus products of the farms, that is, of course, quite a different matter.

Manifestly, the market reporter is fallible in judging the future outlook, but just now it seems to be advisable to let the live stock go to market as soon as fat enough to grade well and not try to produce as much weight as is possible. Much depends upon whether the farmer has sufficient feed for his stock, and if he is short of feed, the best course is to ship the stock without delay. In reading the market reports, it should be remembered that cattle classed as choice to prime cut no figure in the sales, so few are offered. Most of the cattle marketed are of what is termed an "in-between" kind, with good representation of the poorer kind. Hogs are bringing good prices still, despite the liberal marketing at packing points, while sheep are making their fortunate owners no end of money.

Why Wheat Prices Fell

While prices for wheat are lower than they were several weeks ago, being put forth by market writers ago, they are still higher than before the war. No end of predictions are being put forth by market writers, reinforced by figures showing the available stocks and what the world importing countries may be expected to consume; but it may be just as well for the farmer owning marketable grain to take a fair price so long as it is offered, even if the price is higher later on. As for corn, the farm is the place for using it, although after feeding all that is needed for home feeding and for seed, the remaining surplus should be sold without undue delay. Corn for May delivery has been selling recently on the Chicago market around 20 cents a bushel higher than a year ago, although remaining stocks appear to be ample. Traders are not showing much interest in the oats market, and supplies are ample, although stocks in sight are much smaller than a year ago. Oat prices are considerably higher than a year ago, and May rye sells a little higher than last year. Exports of wheat, flour, and rye have been running on quite a large scale, with heavy exports of rye to Germany and Norway, owing to the fact that rye is cheaper than wheat. Wheat for May delivery sells in Chicago at $1.17, while cash sales are made of No. 2 yellow corn at 71½ cents, No. 2 white oats at 46½ cents, rye at 86 cents and barley at 60 to 64 cents. Michigan pea beans sell at $8.35 to $8.45 per 100 pounds, with buying in a small way.

Live Stock on Farms

There were more hogs on farms in the United States on January 1 than at any time since 1919, as is shown by the recent government live stock report. The total number is 63,424,000 head, a gain of 5,000,000 as compared with the revised figures of the previous year and 7,327,000 in excess of two years ago.

Milch cows increased 347,000 head as compared with the previous year, while cattle increased 373,000 head. The largest increase in other cattle is in the states where the corn crop was largest, and represents a shifting of livestock from sections where the crops were short to other parts of the country where feed is abundant.

A gain of 882,000 was shown in the number of sheep as compared with 1922, while mules increased 39,000 and horses decreased 203,000 head. Comparative figures follow:

Farm Animals	Total
Horses—Jan. 1, 1920	19,766,000
Do Jan. 1, 1921	19,208,000
Do Jan. 1, 1922	19,056,000
Do Jan. 1, 1923	18,835,000
Mules—Jan. 1, 1920	5,427,000
Do Jan. 1, 1921	5,455,000
Do Jan. 1, 1922	5,467,000
Do Jan. 1, 1923	5,506,000
Milch Cows—Jan. 1, 1920	23,722,000
Do Jan. 1, 1921	23,594,000
Do Jan. 1, 1922	24,082,000
Do Jan. 1, 1923	24,429,000
Other Cattle-Jan. 1, 1920	43,398,000
Do Jan. 1, 1921	41,993,000
Do Jan. 1, 1922	41,550,000
Do Jan. 1, 1923	41,923,000
Sheep—Jan. 1, 1920	39,025,000
Do Jan. 1, 1921	37,452,000
Do Jan. 1, 1922	36,327,000
Do Jan. 1, 1923	37,209,000
Swine—Jan. 1, 1920	59,344,000
Do Jan. 1, 1921	56,697,000
Do Jan. 1, 1922	57,834,000
Do Jan. 1, 1923	63,424,000

The Chicago Cattle Market

More cattle are being fed in feeding districts than a year ago, and western markets are receiving more than at that period, the bulk of the beef steers grading only fairly well and few of the prime long-fed heavy steers going at $10 to $11 per 100 pounds. However, prices are still much higher than a year ago or before the war, and there is a good profit for the stock feeder who understands the business. Not many stocker and feeder cattle are being shipped back to the farms for a proper finish, and such cattle sell at high prices, the packers competing with country buyers for the best offerings. Beef steers are selling mainly between $8 and $10, with sales down to $6.25 to $7.25 for the commoner kinds and plenty of cows and heifers taken at $4.50 to $7. Veal calves are selling at $6 to $12.50 per 100 pounds and stockers and feeders at $5 to $8, mainly at $6.50 to $7.50

Chicago Hog Market

Because of greatly increased receipts, prices have undergone a great reduction within a short time, ruling the lowest in a long time, notwithstanding a large demand for the better classes of swine for shipment to eastern packing points. Meanwhile, the consumption of fresh pork products is extremely large, and exports of provisions are heavy, recent exports of lard being far greater than a year ago. Hogs are marketed mostly very heavy in weight, recent receipts averaging 241 pounds. This is the heaviest at this season in over ten years and 15 pounds above the average for the period. The large number of hogs feeding points to heavy consumption of corn and corresponding high prices. Unusually heavy receipts of hogs last week caused big breaks in prices, late sales being made at $6.80 to $8.40.

Big Profits from Sheep

Michigan farmers have never gone back on sheep, and seldom have they made such handsome profits as this season. Michigan is one of the important feeding states, and owners have been marketing their fat flocks of sheep, yearlings and lambs in Chicago freely recently, prices alternately advancing and weakening, but all the time ruling much higher than a year ago or before the war. Colorado is a large sheep state, and many flocks are being marketed from there. Demand runs much strongest on fat handy-weight lambs, and consignments averaging 90 pounds and over are severely discriminated against by packers. Late sales were made of lambs at $12.75 to $15, with feeding and shearing taken at $13.75 to $15.25. Shorn lambs fetch $1.50 to $2.50 less than these prices.

WHEAT

In spite of the fact that during the past fortnight the wheat market has had nothing but bearish news the price has changed only slightly. In general, the price has been at about a standstill. Any increase in the price brought out a large supply of grain while any decline found the market well supplied with buyers. export demand is practically nothing. Dealers are expecting only a very little business from that source until a settlement has been reached between France and Germany. It is hard to predict what the market will do. The supply is large and demand small at present and if times were normal the natural trend of prices would be downward. But conditions are far from normal at present and the supply and demand position is not exercising its usual influence. Many of the larger dealers are confident that the wheat market is in a position for an advance in the near future. Some look for the advance to amount to as much as 5 cents.

Prices

Detroit—Cash No. 2 red, $1.35; No. 2 white, $1.33.

Chicago—No. 2 hard, $1.15¾.

New York—No. 2 red, $1.29½; No. 2 hard, $1.25½.

Prices one year ago—Detroit, No. 2 red, $1.27½; No. 2 white, $1.24½; No. 3 mixed, $1.24½.

CORN

The corn market was agected by the action of wheat during the past two weeks. The price at Detroit has shown little change during this period. Demand is light being mostly local and receipts are of fair volume, although not enough to overload the market and cause prices to decline.

Prices

Detroit—Cash No. 2, 76½c; No. 3, 75½c; No. 4, 73½c; No. 5, 71½c.

Chicago—No. 2 mixed, 70@71c; No. 2 yellow, 70¼@71c.

New York—No. 2 yellow and No. 2 white, 88¾c; No. 2 mixed, 88¼c.

Prices one year ago—Detroit, No. 2 yellow old, 57c; No. 3 yellow new, 53c; No. 4 yellow new, 51½c.

OATS

Oats are featureless and continue to follow the trend of other grains. The market is inactive with demand light, both domestic and shipping.

Prices

Detroit—Cash No. 2, 49c; No. 3, 47½c; No. 4, 46c.

Chicago—No. 2 white, 43¼@44½; No. 3 white, 42½@44c.

New York—No. 2 white, 55c.

Prices on year ago—Detroit, No. 2 white, 40c; No. 3, 37½.

RYE

This market has been quiet the past couple of weeks. Demand and supply are just about balanced. At the present time many of the larger dealers believe that the market is in position to decline although the tone is steady and quiet on the majority of the larger markets.

Prices

Detroit—Cash No. 2, 90c.

Chicago—Cash No. 2, 86½@86¾c.

Prices one year ago—Detroit, Cash No. 2, 87c.

BEANS

There has been several declines in the price of beans on the Detroit market during the past fortnight and many are becoming frightened believing that the market is at the beginning of a long slump. We cannot believe this is true because present conditions justifies an upward trend instead. To the "Bean and Pea Journal" the market for the navy beans appear as follows, according to the most recent issue of that publication: "The predictions that beans will see 9 or 10 cents seems possible of fulfillment. Many believe there will be a steady drift upward well into the spring and summer months.

But another view is coming to the fore. With the price at present high point, there is a slight nervous feeling. Realized that it will take little to swing the market the other way. It is most authorativedy stated that in Michigan most of the beans are out of the farmers' hands, and that elevators are filled to the brim with beans of finest quality.

"They were bought at much lower prices. They are in strong hands, in the hands of those who intend to get the highest figure they can. And while there has been a distinct lessening of demand, canners are said to be badly in need of beans.

"Thoughts are turning to acreage. The government has urged that more beans be planted. Various new sections are experimenting with beans, and it is very likely that 1923 will see one of the largest acreages of beans in recent history.

"Importations continue to be a slight factor, but not enough to cause much domestic concern.

"Several bean orders have been filled during recent weeks, one for the navy."

Prices

Detroit—C. H. P., $7.70 per cwt.

Chicago—C. H. P., $8.10@8.15.

Prices one year ago—Detroit, C. H. P., $4.80.

POTATOES

The tone of the potato market is better than it has been for some time. The car shortage is causing the surplus on the eastern markets to disappear at such a rapid rate that dealers are beginning to worry, and there is a stronger and healthier appearance to this market at this time in that section than for some time in the past. The car shortage along with increased demand is giving the western markets a firm tone and higher prices are expected in the near future. However, higher prices are of no interest to the potato producers if he cannot secure the cars to ship his supply to the market.

Something must be done, and done soon.

Prices

Detroit—Michigan, $1@1.10 per cwt.

Chicago—Minnesota sacked, $1 per cwt; Minnesota sacked round whites, 85@90c per cwt.

Prices one year ago—Detroit, $2.30 per cwt.

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50 medium wool breeding ewes. Mostly 2 and 3 yr. olds. Bred to Reg. Oxford buck for March lambs.

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Range from 3 to 6 yr. olds due to calve or will have calves by side. Grand sires and grand dams Imp. Bred to a son of Imp. Lorne. 10 mo. old red heifer calf 10 mo. red bull calf

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2 pure bred stallion colts 8 mo. old, dark greys. 1 pure bred stallion colt 9 mo. old, wt. 1,000. These colts will be shown at M. A. C. Farmers' Week. Pair 3-4 yr. black mares. Full sisters. Terms 2 per cent discount for cash. Bank notes 8 mo. at 6 per cent. The above stock will positively be sold regardless of price.

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(Continued from page 23.)

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FOR SALE—SHORTHORN BULL CALF, ROAN 9 months. Of herd of Joe Murray & Son.
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FOR SALE—FIVE REGISTERED DURHAM bulls from ten months to one year old. I have also a few female Durhams for sale.
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WE HAVE SOME FINE YOUNG ANGUS BULLS from International Grand Champion Stock at reasonable prices. **E. H. KERR & CO., Addison, Mich.**

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RED POLLED CATTLE—A few choice bulls and heifers for sale.
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HAY

Eastern markets generally are steady under smaller receipts of the good qualities of hay. Some embargoes last week curtailed shipments and very few permits were issued. This has created a little better feeling as not enough hay arrives to cause any accumulation. Western markets, however, are a little lower, as in some instances the receipts exceed the demand. There are many reports of poor hay in the daily offerings.

Prices

Detroit—No. 1 timothy, $16.50@17; standard, $15@16.50; light mixed, $16@16.50; No. 2 timothy, $15@15.50; No. 1 clover mixed, $14@14.50.

Chicago—No. 1 timothy, $20@21; standard No. 2, $17@18; light clover mixed, $18@19; clover No. 1, $14@15.

New York—No. 1 Light clover mixed, $23@24; No. 1 timothy, $23@24; No. 2, $21@23.

Prices one year ago—Detroit, No. 1 timothy, $19@20; standard timothy, $18@19.

Aalfalfa—Detroit, No. 1, $14@17 per ton; Chicago, No. 1, $22@24 per ton.

MISCELLANEOUS MARKET QUOTATIONS

Detroit, Tuesday, Jan. 30th.

BUTTER—Best creamery, in tubs, 48c per lb.

EGGS—Fresh, according to quality, 35@36½c; refrigerator, 26@27½c per doz.

HONEY—Comb, 23@25c per lb.

DRESSED HOGS—90 to 130 lbs, 11@12c; 130 to 160 lbs, 9@10c; heavy, 5@8c per lb.

LIVE POULTRY—Best chickens, 21c; leghorns, 17c; best hens, 22@24c; medium hens, 21@22c; small hens, 17c; old roosters, 15c; geese, 16@17c; ducks, 24c for large and 20c for small; large turkeys, 34@35c; small turkeys, 35c per lb.

PRITCHARD'S WEATHER FORECAST
INTERPRETED BY THE STARS

Week of February 4

BRIGHT, sunshiny days and clear moonlight nights will usher in the week of February 4. Each day nearer the middle of the week after Sunday will average warmer in Michigan as a result of the eastward movement of a moderate storm center.

By the middle of the week rain or snow in scattered localities together with moderately strong winds will have reached the state and immediately following, say about Thursday or Friday, there is expected to be a sudden and extensive drop in temperature.

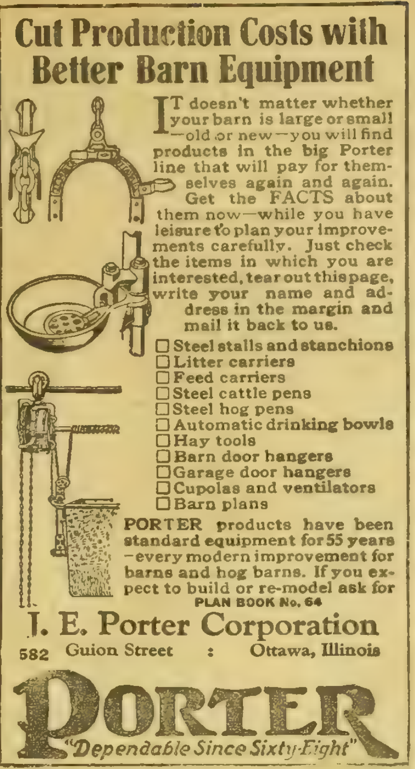
About Saturday of this or Sunday of next week Michigan residents may expect moderate snow and sleet storms with strong winds that will cause drifts and blockades in many sections unless proper precautions have been taken.

Week of February 11

Rain, sleet or snow will be falling in Michigan as this week begins that may cause local drifts and blockades. These will not necessarily cripple business or transportation for any great length of time, if at all but we do look for a sudden and rapid fall of sleet or snow that in combination with the high winds and storminess will occur about Monday but another storm that was formed soon after the last storm got its start will have reached the Lake region about Tuesday. Some wind with snow or sleet may be expected in Michigan just before the middle of the week as a consequence.

During the next two or three days of the week temperatures will drop far below the normal for this month in Michigan and no moderation is to be expected until after the middle of the week.

About Thursday temperatures will be getting warmer in Michigan, the sky will be cloudy and there will be more indications of rain or snow. Much colder weather is to be expected during the closing days of this week.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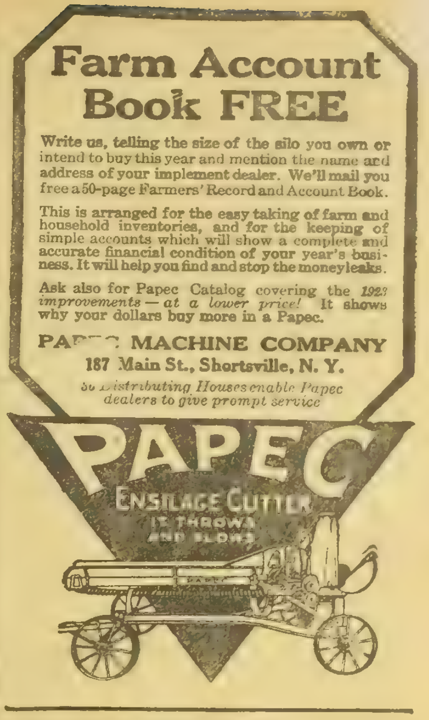
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A CHANCE TO GET SOME REAL HAMPSHIRES Boar pigs, sired by Gen. Pershing Again, Gilt Edge Tipton, Messenger All Over 10th. Gen. Pershing 2nd., and other great boars. Writes for list and prices. DETROIT CREAMERY HOG FARM, Route 7, Mt. Clemens, Mich.

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50 HEAD REGISTERED, BRED SHROPSHIRE ewes, large, well covered. 1 to 4 years. In fine healthy breeding condition. Flock established 1890.
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SHROPSHIRES—10 REGISTERED EWES. Choice wooly Rams.
DAN BROOHER, Evart, R. 4, Mich.

KEEP THE MICHIGAN BUSINESS FARMER COMING. SEE PAGE 25.

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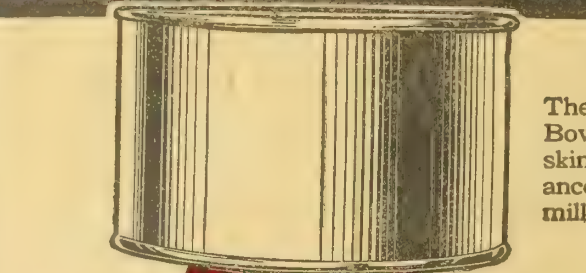
The Belgium Melotte is the only single-bearing-bowl separator ever made. This patent Bowl hangs from one frictionless ball bearing and spins like a top. It is *self-balancing.* It skims as perfectly after 15 years of use as when new. Positively cannot ever get out of balance—cannot vibrate and thus cause cross currents which waste cream by remixing with milk. Send coupon below today. Get the Free Book that tells about this great Melotte.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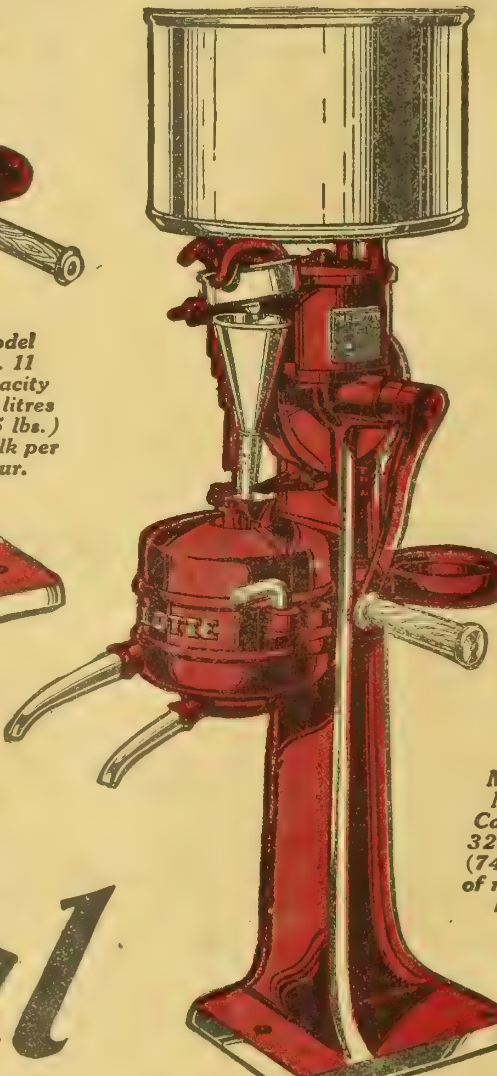
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Your choice of any of these three models. NO MONEY DOWN—FREE TRIAL—SMALL MONTHLY PAYMENTS—DUTY FREE. This wonderful Belgium Melotte Separator has been picked by a jury of thousands of farmers—picked by dairy experts throughout the world to be the "king" of all separators ever manufactured. It has broken all records for Efficiency of Skimming, Ease of Turning, Convenience of Operation and Durability. Send coupon below for Big Free Book.

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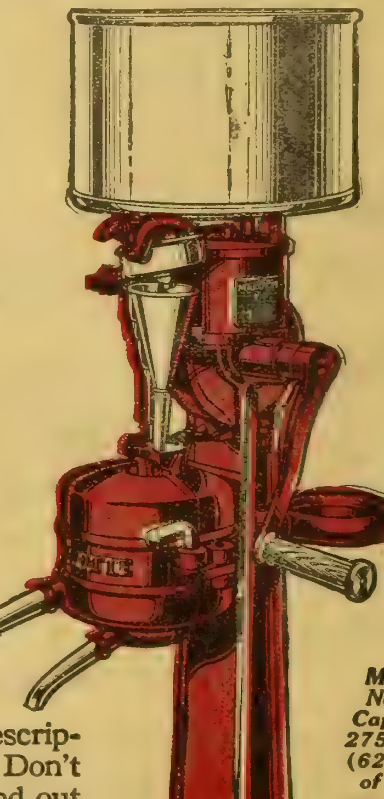
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The Michigan
BUSINESS FARMER

An Independent
Farm Magazine Owned and
Edited in Michigan

VOL. X, NO. 13 SATURDAY, FEBRUARY 17, 1923 $1 PER YEAR

FEB 27 1923

In this issue don't miss reading: Dr. David Friday's "Agricultural Program for an Industrial State"—The Long Desired "50-50" Sugar Beet Contract Has Arrived—Farmers' Week a Big Success

Sailing Under False Colors

SENATOR YOUNG has introduced Senate Bill No. 62 in the Michigan Legislature, known as the "full crew law." Under the guise of a Safety measure, it means really—

An additional tax of $1,500,000 at least to the users of Transportation in Michigan.

The creation of an artificial demand for more labor.

Waste in man power.

Greater hazards to the men, it is designed to protect, since it divides responsibility.

THERE is another phase to the issue: In the event of a strike, such as the "outlaw switchmen's strike" of three years ago, complete paralysis of the transportation system will follow, because one clause of that measure makes experience mandatory upon the newest recruit to the train crew—the flagman. Had such a law been in full force and effect when the strike referred to occurred, there would have been a complete tie-up of not alone the railroads, but of every factory in the country. Not a pound of farm produce could have been transported to market, nor a ton of coal brought from the mines *by rail.* There would have followed in its wake greater misery, greater chaos, greater general suffering upon all who are dependent upon transportation—and profiteering on a scale the like of which the country had never seen!

This bill would give to organized labor in times of peace what the country reluctantly gives to the general in the field in times of war.

SENATOR GANNSER'S bill No. 72, requiring automatic fire doors installed on all locomotives means the scrapping of a number of serviceable engines. This bill, too, means higher transportation costs to you, who "pay the shot" eventually.

Send your local representative a "case card" today telling him that these measures are uneconomic, unreasonable, unnecessary and un-American.

Frank H. Alfred

President and General Manager.

Detroit, Mich., February 4, 1923.

Pere Marquette Railway

TWO YEARS FOR $1

—if YOU act at once!

$1 and the coupon below will renew you own subscription for TWO YEARS FROM DATE OF EXPIRATION.

—or will enter a NEW subscriber's name for TWO FULL YEARS

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This is the greatest offer we have ever made and we do not promise to keep it open over 30 days, so you must act at once, if you wish to profit by this 50% saving!

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THE MICHIGAN BUSINESS FARMER,
Mt. Clemens, Michigan

(1) For $1 enclosed you will enter or renew my subscription for 2 years:

My Name____________________ R. F. D. No.________

P. O.____________________ State________

(If you are renewing kindly send address label from recent issue)

(2) For $1 enclosed renew my own subscription as above 1 year and add the following new subscribers name paid-in-full for 1 year:

New Name____________________ R. F. D. No.________

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Current Agricultural News

LECTURE COURSE ON LAND CLEARING TO START FEB. 19

A SERIES of forty-one land clearing meetings arranged for northeastern Michigan by N. A. Kessler, assistant land clearing specialist of the Michigan Agricultural College with the co-operation of the Northeastern Michigan Development bureau, will start at Midland February 19. As with the land clearing schools conducted by the college last fall, the Michigan Central and Detroit & Mackinaw railroads are cooperating in this project.

The program at each meeting will consist of movies and a talk on land clearing by L. F. Livingston, land clearing specialist, of the M. A. C., and a discussion of the dairy business in northern Michigan by E. J. Loonhouts, assistant agricultural agent for the New York Central lines. A part of the land clearing talk which will be of vital interest to the farmers will be that on how explosives, both government and commercial, may be obtained at a lesser cost than heretofore.

All of the meetings will be held in the big white demonstration car which has a seating capacity of a hundred people, and is admirably equipped for the showing of moving pictures. It is expected that this car will be taxed to its capacity at the various places listed in the itinerary.

FARMERS OPPOSE DAYLIGHT SAVING

OFFICIALS of the Michigan State Farm Bureau state that the burreau's questionnaire distributed recently among the farmers of the state, clearly shows the attitude of the Michigan farmers as regards various problems affecting rural life.

The majority went on record as opposing the proposed eastern time for the state, the abolition of the primary school fund, and the creation of county assessors.

The questionnaire showed that the farmers favored a state income tax law calling for a $4,000 exemption limit, and a progressive rate, the removal of the existing corporation tax limits, a minimum two-cent gasoline tax, the primary election law, state and federal laws to abolish tax-exempt securities, and the state regulation of motor busses, and commercial operating over state highways.

POTATO GROWERS AIM FOR GREATER EFFICIENCY

MEANS of bringing about greater efficiency in Michigan potato production were brought out before the meeting of the Michigan Potato Producers Association at M. A. C., Farmer's Week.

Thomas Buell, of Elmira, president of the association; Hal B. Fullerton, director of agriculture for the Long Island Railroad, Medford, Long Island; and J. W. Weston, extension specialist in potato work with the M. A. C. crops department, were headliners on the program.

Increase in the use of certified seed potato stocks of high quality was discussed by Mr. Buell, who also pointed out the large amount of Michigan seed stock which is going outside of the state each year. Fullerton told of disease control work being carried out among the Long Island potato growers.

Recommendations that Michigan potato growers aim in 1923 for better seed, better culture, better grading and better storage were contained in J. W. Weston's address. Weston told of the ways in which the college extension department is endeavoring to bring about greater efficiency in the state potato industry.

GERMANY TO REDUCE PURCHASES OF AMERICAN CORN

A MATERIAL reduction in the demand for American corn in Germany because of the large potato crop harvested in Germany in 1922, is indicated in reports received by the United States Department of Agriculture from its agricultural representatives at Berlin.

Germany has been importing American corn largely for the manufacture of alcohol, since the Government food regulations limited the quantity of potatoes which could be used by distilleries. Because of the potato surplus, permission has been granted German distillers by the Ministry of Agriculture to use potatoes in the production of 60 per cent of the alcohol instead of 20 per cent as heretofore.

Normal exportation of corn from the United States to Germany has totaled about 6,000,000 bushels annually. In 1921, exportations were nearly 13,000,000 bushels, and in 1922 more than 30,000,000 bushels. It is estimated that in recent months fully 75 per cent of this corn was used by German distilleries, leaving little more than the normal exportation for other uses.

The estimated 1923 production of alcohol in Germany is 53,000,000 gallons, so that it will still be possible to manufacture 32,000,000 from potatoes. This will leave only 21,000,000 gallons to be manufactured from other materials, including corn. Even though American corn is used exclusively to produce this remaining 40 per cent, the distilleries will require only about 8,000,000 bushels of corn in 1923, the Department of Agriculture says.

SHIAWASSEE FIGHTS BOVINE TUBERCULOSIS

WHAT is regarded as the most important and effective step yet taken in Shiawassee county in the fight for the eradication of bovine tuberculosis, has been ordered by the state commission of agriculture, in proclaiming a quarantine against the entrance of any cattle, not tuberculin tested, for dairy or breeding purposes.

The ban also prohibits the offering at a public sale of any cattle not tested and found to be free from the disease.

A penalty of a fine not to exceed $500 or a jail sentence of not to exceed six months, is provided for violation of the proclamation.

Testing has been under way in that county for nearly a year and six of the sixteen townships have been inspected. The percentage of re-acting cattle is very low.

MICHIGAN HEREFORD BREEDERS HOLD ANNUAL MEET

MICHIGAN Hereford Breeder's Association held their banquet and annual meeting at the Kerns Hotel, Lansing, January 30th during Farmer's Week.

The Hereford judging demonstration called at the Stock Pavilion at 10 A. M. was well attended and new breeders were much interested in the good points brought out by Professor Brown and T. F. B. Sotham during the demonstration of M. A. C. Herefords, two sires four matrons and three steers being used in the ring.

At six P. M. forty seven Hereford boosters set down to a banquet; Michigan Earliripe Hereford Beef being served for the occasion. After all had done justice to the banquet everybody joined in the singing of the Hereford song; as everybody on the program was present the instructive talks were given and enjoyed by all present.

The officers elected for 1923 are Presidents, Frank H. Sanders, Eaton Rapids; L. Whitney Watkins, Manchester; E. V. Morgan, Boon; Warner E. Ramsey, Pt. Hope; and Earl C. McCarty, Bad Axe, Secy.-Treas.—Earl C. McCarty.

MASON CO-OPERATORS PROSPER PAST YEAR

AT the annual meeting of the Co-operative Shipping association held at Mason recently, the former officers of the association were all re-elected as follows: president, John Coy; vice president, H. W. Lyon; secretary-treasurer, Claude Edgar; manager, L. T. Lasenby. The report of the secretary showed an increase in business amounting to around $74,000 during the past year. The total receipts of the association for the year were $312,069.53, and the total disbursements were $311,983.93, leaving a surplus on hand at the present time of $874.42, this having proved to be one of the best years the association has had.

SATURDAY
FEBRUARY 17th,
1922

VOL. X, NO. 13.

Being absolutely independent our columns are open for the discussion of any subject pertaining to the farming business.

"Hew to the line, let the chips fall where they may!"

The Michigan
BUSINESS FARMER

"The Only Farm Magazine Owned and Edited in Michigan"

Published Bi-Weekly
Mt. Clemens, Mich.

$1 PER YEAR

Entered as second-class matter, August 22, 1917, at the post-office at Mt. Clemens, Mich., under act of March 3rd, 1879.

Desired "50-50" Sugar Beet Contract Arrives

Owosso Sugar Company First to Meet Growers' Fight for Square Deal Proposed Years Ago—Big Meeting at Durand Hears Good News

THE "50-50" SUGAR BEET CONTRACT

As suggested by the Michigan Sugar Beet Growers Association and first accepted by the Owosso Sugar Company.

What it is—(three sections of the actual contract being offered Growers, which explains method in which the "50-50" contract operates):

13. The following example is given to show the method above described:

If 160,000 net tons of beets are delivered by the growers to the company, from which 40,000,000 pounds of sugar are made, the extraction per net ton of beets will be 250 pounds of sugar. If the average market price of sugar is determined to be $6.75 per hundred pounds, the value of sugar produced per net ton of beets will be $16.88, and the grower will then be paid 50%, or $8.44 per net ton of beets delivered to the company.

14. The company agrees that substantial preliminary payments to growers shall be made per net ton of beets grown and delivered under this contract on the fifteenth day of each month, for beets received during the preceding month. Final payments to be made the grower shall be paid on the fifteenth of February, 1924.

15. For beets delivered and unloaded by the grower in beet sheds at the factory, an additional seventy-five cents (75c) per ton shall be added.

ANOTHER milestone in the progress of the business of farming in Michigan was passed last week, when it was announced that an agreement had been secured by a committee representing the growers, with the president of the Owosso Sugar Company whereby that company offers the growers the "50-50" contract so long desired.

Most growers in Michigan will well remember the organization of the Michigan Sugar Beet Growers Association three years ago and the valiant efforts made by that small body of enthusiasts, led by The Business Farmer, to secure recognition and an equitable contract from the beet sugar manufacturers.

At that time the manufacturers, condemned the efforts as "radical," hinted that the men behind it ought to be deported as "undesirables" and refused point-blank to contaminate themselves by exposing themselves in any meeting, open or secret in which the representatives of the organized growers were present.

Since that time a lot of water has run under the mill! Sugar prices have been down in the basement, along with the farm prices of wheat, corn and a few other staples that fell with a sickening thud when old man Mars was tumbled over.

Early in the fall of 1922, A. B. Cook of Owosso, head of the Michigan Grange, who has long been a leaders in the beet growers fight, opened negotiations with C. D. Bell, Vice-President and General Manager of the Owosso Sugar Company, who had indicated an interest in the proposed "50-50" contract, if he could be assured that the growers would be willing to run the risk of a split in losses, as well as a split in profits. Mr. Cook assured him that the farmer was calloused to taking the whole loss and possible prospect of having to split the loss for a season would not drive the beet growers panicy.

Negotiations from this point progressed rapidly, because Mr. Bell, represented a sensible company which recognized that the future successful operation of their factory depended pretty largely upon a satisfied body of growers. The Owosso company was the first in Michigan to lift their heads out of the sands into which they had shoved them like silly ostriches when the growers association first loomed on the horizon seven years ago. C. E. Ackerman, of Durand, secretary and undaunted main-spring of the old beet growers association, worked with Mr. Cook, as did D. S. Stewart, St. Johns; Bert Mellinger, Ithaca; and Fred Holland, Swartz Creek.

Meeting Called at Durand

A meeting was called by C. E. Ackerman, at Durand High School, on Thursday, February 8. Invitations to attend or send delegates to the meeting were mailed to the officers of every local association in the state. About 80 growers came, mostly from Shiawassee, Genesee, and Clinton counties.

Others at the meeting were A. B. Cook, Master of the State Grange, and Mr. Clark Brody, Secretary and General Manager of the Michigan State Farm Bureau. Mr. C. D. Bell, Vice President and General Manager of the Owosso Sugar Company, represented the manufacturing interests.

Objects of the meeting were:

(1) To announce to the growers the granting of the "50-50" contract by the Owosso Sugar Company for which the Association has been working for the last seven years.

(2) To urge Association members to support the Owosso Sugar Company and the "50-50" contract by signing up a liberal acreage, and to talk the "50-50" contract to all growers.

(3) To arouse enthusiasm among the Association membership to work for "50-50" contracts from other companies, and to try to solve other problems of the growers.

Beet Raising Conditions

Mr. Cook spoke on the beginning and growth of the sugar beet industry in Michigan from the experiments conducted by the late Dr. Kedzie, of the Michigan Agricultural College. How this earnest professor convinced that the beet sugar industry was a promising one for Michigan, and after much effort interested capital in the beet sugar manufacture in the state. From a first factory at Bay City, the industry has grown rapidly to the present time at which there are 17 factories in the state. Some seven years ago the growers became dissatisfied with the prices they were receiving for their beets and sponsored by the Grange and Gleaners, the present state Growers Association was formed. At that time it was figured out that a "50-50" contract was the most just price arrangement between the manufacturers and growers. During the seven years since, the Association has worked toward this contract as an ideal. Finally the Owosso Sugar Company has granted their growers the long fought for "50-50" contract.

The contract is fair, continued Mr. Cook, just what the growers wanted and they should come across with a good acreage. Backed by the "50-50" contract, sugar beet raising is sure to be a permanently profitable industry. The "50-50" contract is the best one out, better than $7.00 a ton with 6 cent sugar and $1.00 a ton raise, for each cent raise in sugar price.

Mr. Cook concluded by saying, "Give the "50-50" contract a trial this year, and watch results."

Mr. Ackerman, Durand, formerly Manager of the Beet Growers Association, at present a member of the Board of Directors, carefully explained the "50-50" contract as follows: The grower delivers his beets and sees that the weights and tare is correct. At the end of the season's run of the factory, the total weight of beets brought is figured, and the total output of sugar. The total output is divided by the total beet tonnage, and the average yield of sugar per ton for the season found. The average price of sugar at New York for the months of Oct., Nov., Dec., and Jan., is figured, relying on daily market quotations of a reliable market reporting firm. Each grower is paid that average New York price for the four months for one-half the sugar yield from his beets. The pay received for the sugar is split 50-50 between the grower and manufacturer, hence the name "50-50" contract.

It is the simplest form of contract. The grower can follow market quotations and figure his own price as well as can the manufacturer. To insure fairness on the part of the manufacturer, the Owosso Sugar Company has offered to have a certified public accountant audit their books at the end of the seasons and furnish the Growers Association with a report of the tonnage of beets bought and the yield of sugar. The Growers Association also has permission to station men in the factories during the campaign to tally the sugar production.

Mr. Ackerman explained how it was decided seven years ago that a '50-50" contract would be most just. The grower and manufacturer have about equal investments. To grow a ton of beets, however, requires six times as much labor as is required to manufacture them. On the other hand, the manufacturer takes much greater risk than the grower. He cannot turn his equipment to other uses as the grower can, and he has no other enterprises to fall back on in case the sugar business proves unprofitable. The factory has the by-products, which are sometimes, however, so low in price that it hardly pays to handle them.

The increase in price to the grower under the "50-50" contract over that under the old contract was pointed out. The old rate was $7.00 a ton with sugar at 6 cents, and a raise of $1.00 a ton for each rise of one cent in the price of sugar. The "50-50" rate for 6 cent sugar, assuming the sugar yield to be average, 250 lbs per ton, the sugar from a ton of beets would be worth 6 times 250 or $15, of which the grower gets one half or $7.50, an increase of 50 cents a ton over the old rate. Should sugar increase in price one cent a pound, the "50-50" rate increase would be one-half of 1 times 250 or $1.25, as against an increase of but $1.00 under the old rate. So the grower is sure of at least 50 cents a ton more with six cent sugar, and $1.25 increase per ton instead of $1.00 for every cent increase over six cents.

Mr. Ackerman predicts that sugar certainly will not go much below 6½ cents this year, and may be higher. That will mean $8.25 to $8.50 a ton for beets under the "50-50" contract.

"A better contract cannot be made than the "50-50" contract," declared Mr. Ackerman. "It is the right solution of the beet price question!"

The grower furnishes his own labor under the "50-50" contract. The Owosso company will furnish labor at a 5% charge, making a 45-55 split on the sugar price. Or they will loan growers money at regular interest rates to pay for labor if they wish to hire their own.

Mr. Ackerman spoke of the possibility of other companies coming across with a "50-50" contract. The Association should work for statewide "50-50" contracts for growers. The Continental Sugar Company, operating three factories in southern Michigan, have already offered a "45-55" contract.

Mr. Ackerman doubts if the Michigan Sugar Company, operating seven large factories in the state, will come across with a "50-50" contract. The company is said to be controlled by eastern capitalists whose holdings are largely cane interests, and Mr. Ackerman believes the trust will dispose of its holdings in beet sugar factories and confine its capital to cane sugar rather than meet the growers demand for a "50-50" contract.

Since the Owosso Sugar Company has taken the lead in offering "50-50" contracts, it is hoped other companies will follow.

Mr. C. D. Bell, Vice President and General Manager of the Owosso Sugar Company, told the meeting of the manufacturer's side. Mr. Bell spoke of the efforts of the Association to get a '50-50" contract. "It seems to me that Mr. Cook or Mr. Ackerman have interviewed me seven times a day every day for the last seven years in behalf of a "50-50" contract, until we have finally given it to them." Mr. Bell, who is responsible for the "50-50" contract offer of the Owosso company, admitted that it seems to be the fairest basis for a growers contract. The manufacturers will profit in that the growers will try to raise better beets with a higher sugar content, for they will be paid for the sugar which the factory gets out of their beets. A factory must be equipped with efficient machinery which will recover all the sugar from the beets before it can afford to offer the growers a "50-50" contract. The Owosso Sugar Company spent $350,000 last year for better machinery before they could offer a "50-50" contract. They now recover from 30% to 40% more sugar from the beets than by the old process. Mr. Bell concluded with the statement that the "50-50" contract will net the grower higher pay for his beets than any other contract out.

Mr. N. C. McBride, of Burton spoke on "Industrial Relations." For farmers and maunfacturers to make a satisfactory bargain, there must be a profit for each. Mr. McBride believes that sugar beets is one of the most profitable crops at the present time. There is prospects of a sugar price rise, the "50-50" contract assures the growers a square deal, and the tariff is satisfactory. Michigan consumes more sugar than she produces, so a market is assured. High freight rates will act only as a protection.

A grower of grain or other crops takes a chance of losing all his profit by selling when the market is low, but a beet grower with a "50-50" contract is not affected by price fluctuations. With a "50-50" contract, the growers and manufacturers will have the best industrial relations, their interests will be the same, and they share equally in the profits. Beet growers with the the new contract now have the best assurance of a profitable crop they have had for years. Beets are a money making crop at present prices, and the prospects are that the prices will go higher. Mr. McBride concluded by assuring the growers that they would get a square deal from the Owosso Sugar Company, and recommended the "50-50" contract over any other.

Farmer's Week a Big Success

Big Round-Up of Farm and Live Stock Organizations at East Lansing Lauds Work Being Done at Agricultural College

By GEORGE IRVINE

DR. DAVID FRIDAY
President Michigan Agricultural College and acknowledged as one of the foremost economists in United States.

ALTHOUGH the fountain of youth has never been discovered, about four thousand farmers of Michigan found a fountain of inspiration and new ideas in the 1923 Farmers' Week at M. A. C. The Farmer's Week visitor this year found himself in the predicament of a spectator at a three ring circus, there was so much to see and hear that it was impossible to take in everthing.

The outstanding idea impressed upon the Farmer's Week throngs was the necessity for lower cost of production of farm products. Preident David Friday, who needs no introduction to Michigan farmers, in his opening address predicted that there will be a steady decline in prices for at least a few years. His prediction was seconded by Dr. G. F. Warren of Cornell, the noted farm managment expert, in an address later in the week. If the farmers of Michigan hope to prosper, they must produce their crops, livestock, poultry products, milk, and fruit at a lower cost than now prevails. Mr. Friday believes there are wonderful opportunities for cutting the production costs of farm products in Michigan.

An idea new to many farmers, that of a policy for agriculture for the state and nation, (see page 6 this issue) was the subject of President Friday's first address to the Farmer's Week audience. Michigan's policy for agriculture should be to lower cost of production by better methods and by the use of better seeds and livestock; to make farming sufficiently renumerative and attractive to keep an intelligent and highly cultured class of people on the farms. A thorough survey of markets is also needed. Reclaiming of waste land, in President Friday's opinion, is a great waste of time and energy at the present time when land can be bought within ten miles of most of the cities of the state for the value of the improvments on it. He also brands agitation for a "back to the farm" movement as foolishness. There are enough people on farms now.

The vital importance of tuberculosis eradication was impressed on the livestock men by Dr. W. J. Kiernen of the Bureau of Animal Industry, Washington. This matter was also discussed at several of the live stock association meetings, and resolutions were passed requesting an appropriation by the legislature to make possible the immediate resumption of this work which is now halted in Michigan for lack of funds.

Rep. Sidney Anderson of Minnesota, an agricultural leader in Congress, gave some good advice on marketing farm products. Produce what the consumer wants, standardize your products, and market as near home as possible was Mr. Anderson's word to the farmers of Michigan.

Dr. Friday Discusses Taxation

Dr. Friday gave his viewpoint on that vital question of the hour, taxation, in a talk before the Michigan Press Association at the close of the week. We cannot hope for a lowering of taxes, in Mr. Friday's opinion, for we will continue to demand public improvements at the same rate as in the past. Mr. Friday's plan for a more just placing of the burden of taxation provides for the removal of the upper valuation limit in the corporation tax, the enactment of the gasoline tax, and a reduction in the general property tax of about 25%.

Regarding the gasoline tax President Friday said "I believe that the gasoline will pass, although it is not entirely equitable."

Dr. Eugene Davenport, formerly Dean of Agriculture at the University of Illinois, told of the conditions necessary to a permanent agriculture. If the farmers of our country are to be land owners, a farm must yield a sufficient income to provide the farmer a comfortable living and a large enough surplus to enable him to pay for the farm in twenty years. If farm incomes prevail below this level, the land will revert to a landowning class and will be farmed by a tenant or peasant class.

How Russia, through changing conditions in the Black sea area, has lost her supremacy among nations for world export of wheat and other cereals, and how it has resulted in making the United States the greatest exporter of these products, was explained by Louis G. Michael, foreign agricultural economist for the United States department of agriculture.

Mr. Michael's statements had the authority behind them of eight years research and agricultural experimental work in the countries of southeastern Europe.

"When the countries of the world awake sufficiently to realize they are interdependent on one another in the economics of agriculture, then prosperity for the world can be assured and the present state of unrest find an end," said Signora Oliva Agresti of Italy, in an address to some 5,000 farmers Thursday afternoon.

The annual meeting of the Michigan State Farm Bureau was held at the College during Farmer's Week, there being 126 voting delegates present. The only changes made in the officials of the Bureau were in the president's office, where Walter Phillips of Decatur succeeds James Nichol, and in the election of one new member to the Board of Directors, V. Gormely of Newberry.

The Housewives Congress for farm women was an important feature of the week. Several prominent women addressed the Congress on home making, clothing, and nutrition. An interesting talk by Bess Rowe, Field Editor, revealed the fact that most farmer's wives in Michigan are satisfied with their lot. The results of a contest Miss Rowe has recently conducted show that a large percentage of farm women of Michigan are willing to have their daughters marry farmers. Milinary, clothing, and nutrition exhibits in the Women's Building of the College were an additional source of interest and information to the women visitors.

The annual meetings of most of the livestock breed associations were held during Farmer's Week this year for the first time.

The County Agent's Conference boosted 100% attendance, this year. Talks by members of the agricultural faculty and of the research department gave them the latest information on college and experiment station activities. The County Club Agents were also out to a man for their Conference. State Leader R. A. Turner reviewed the work of the past year and outlined the program for 1923.

Grain and Potato Shows

Two new Farmer's Week features this year were the grain show of the Michigan Crop Improvement Association, and a potato show. Both were well supplied with entries by state growers, and were prominent points of interest to the farmers.

The Horticultural Show displayed an even greater collection of apples than usual; thirty-eight varieties were entered. Allegan county won first place in county collections. The Round-Up Poultry Show attracted considerable interest and a large number of entries from breeders of the state.

The central idea running through all exhibits this year was lower cost of production. The Michigan exhibit at the International Livestock and Grain Show at Chicago last fall were re-assembled by the Farm Crop Department as their exhibit for Farmer's Week. A large wall exhibit showing how Michigan cheapens production by growing alfalfa, it proved one of the most attractive of the exhibits.

A pig feeding exhibit showing the value of skim milk, by the Dairy Department attracted much interest. Two pens of pigs, one fed on corn alone and the other on corn and skim milk were of such great difference in size that it was almost unbelievable that they were from the same litter.

A record attendance viewed the campus parade, Thursday afternoon, when the student body and all movable equipment and live stock appeared in a procession which extended for more than a mile and a half. The parade was the biggest and most impressive ever put on by the college, M. A. C. officials said.

Educational exhibits by every department of the college filled all available space. All the engineering shops and laboratories were open to the visitors throughout the week. and student guides were ready to show and explain the equipment. All machinery was kept in operation most of the each day.

That Michigan ranks foremost among the several states of the union in agricultural education was plainly demonstrated, it was agreed by numerous leaders of agriculture who visited M. A. C. during the fifth annual Farmer's Week. At the final check of the total registrations of visitors at the college during the week, it was reported that close to 4,000 names had been recorded.

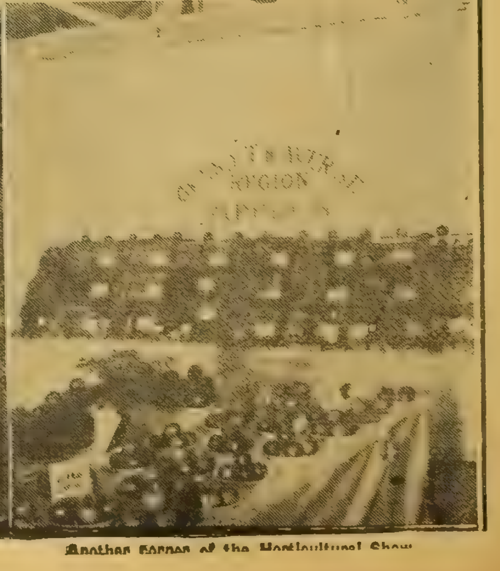
The drop in attendance at the 1923 Farmer's Week of about 20% from that of last year's, due to the almost impassable roads in the central part of the state during most of the week, is by no means discouraging when we consider that the next largest Farmer's Week held this year, that of Iowa, had an attendance ranging from 300 to 800.

Had road conditions been more favorable in the central part of the state, it is believed the total registration this year would have far exceeded that of any previous year. The heavy registration of the first two days was attributed to the fact that the early comers are usually dependent on railway transportation while the attendance during the last few days is swelled by motorists who drive 40 or 50 miles to the exhibits and return the same day. It was a cut in the latter class of visitors which has tended to keep the total figures for attendance about equal to a year ago.

The Michigan Farmer's Week is by far the largest and best annual state wide convention of farmers ever held; and is yearly becoming of greater benefit to Michigan farmers as a source of new ideas, broader views, and a better understanding of farming conditions.

One corner of Horticultural Show

High school boys judging live stock in the M. A. C. pavilion during Farmers' Week



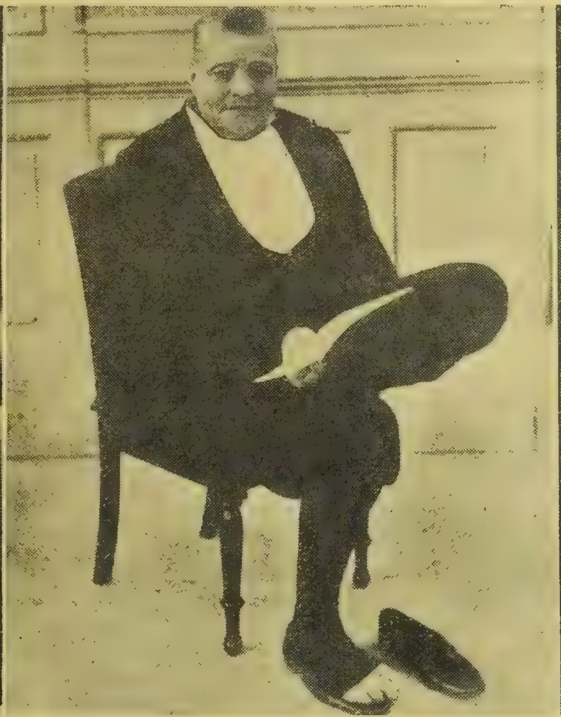
Another corner of the Horticultural Show

PICTURES FROM FAR AND NEAR

Philadelphia Mummers hold belated New Year parade.—Philadelphia paid belated tribute to King Momus by turning out a record crowd recently to view the postponed parade of New Year Mummers. Prizes were given away for the most fancy and comic displays. The above shows the prize-winning cape in the fancy division. Over 100 attendants were required to carry it.

British debt commission finally arrives.—After years of delay England finally sent over the above group whose duty it was to strike a bargain, the best they could drive with their Uncle Samuel. They found Uncle Samuel was a hard-hearted money lender, because he insisted on their paying the billions they owe us sometime, even if it takes forty or fifty years.

Youngest lawyer in New York State.—Miss Roberta Levy, who at the age of 21 holds the rare distinction of being the youngest lawyer in New York State. At present a member of a Brooklyn, N. Y. law firm, Miss Levy is pretty and up-to-date in every way. She is a graduate of the Brooklyn Law School, but had to wait 2 years for admission to the bar after graduation because of her age.



He refuses to be handicapped.—Karl Herman Uhlhaus, 72 years old, is a living example of optimism. Crippled by the loss of his hands, he was nothing daunted and began to learn to use his feet. He has taught hundreds of German crippled soldiers how to work without their hands. Photo shows him reading a letter which he holds with his feet.

A new photograph of the Duke of York.—He's a fine looking chap, is the second son of King George of England, and its no wonder the girls all like him. It has been rumored in London, where such things generally start, that the Duke of York is paying court to the charming Lady Elizabeth Boews Lyon and she may be using the title of "Duchess" as a prefix before long.

Led French troops into Germany.—These French cyclists led the invading French troops into the Ruhr Valley. As a result of the invasion of the industrial district all lines of business are at a standstill.

"League of Notions" winter carnival in New Hampshire.— To complete a perfect day of winter sports these merrymakers engaged in a tug-of-war contest and made it one of the features of the carnival held at Jackson, New Hampshire.

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An Agricultural Program for an Industrial State

By DAVID FRIDAY

PRESIDENT MICHIGAN AGRICULTURAL COLLEGE

(Reprinted from the Saturday Evening Post, Copyright 1923 by the Curtis Publishing Co.)

IF you are fed-up on the clap-trap mouthings of cheap politicians who pose as willing Moses to lead the farmer out of the wilderness into which their business was forced this past two years, read this article by Dr. Friday.

If you believe, as The Business Farmer does, that there has been too much brainless legislation and too little real business action proposed by the leaders in the farming business, you'll like Dr. Friday's article.

Those who would rather listen to flag-wavers or read wonderful theories of a farming millineum, which sound nice, are swallowed easily, but only serve to get us deeper in the hole, will not like what Dr. Friday says, because he writes without gloves on.

If you want to know what has happened and what is going to happen, particularly in Michigan, you'll consider this article, which we have reprinted in full, worth its weight in gold to the industry of agriculture.

IT NO LONGER interests people greatly to be told that the farmer is dissatisfied. That fact has been beat in upon the public mind during the last eighteen months through both the spoken and the written word until we feel a little like an audience that has been listening to a snare drum solo. The farmer has had abundant cause for dissatisfaction. His prices have fallen more than the average. He finds it difficult therefore, to maintain his customary standard of living, to say nothing of meeting the debts he may have incurred in the optimistic days when Europe was ruining its monetary system and its financial standing to pay him, as well as other producers fabulous prices for the things it wanted.

What the country wants to know now is how the farmer is to be got out of his present situation and restored to prosperity. Not the prosperity of wartime, for that comes only several times in a century, but a stable and dependable state of well-being such as he enjoyed from 1898 to the outbreak of the war in 1914. American agriculture suffered more seriously during the depression of 1894 to 1896 than during these last two years. Yet in the spring of 1900 Ray Stannard Baker, who knew the agricultural situation well, opened his book Our New Prosperity with these paragraphs:

> A witty Western writer, summing up the marvels of growth, expansion and prosperity of the year 1899 in the United States, made this telling climax: "And every barn in Kansas and Nebraska has had a new coat of paint."
>
> As anyone who knows the great unpainted West of 1896 and 1897, with its bare, weather-stained houses, its dilapidated barns, its farm machinery standing out in the rain, its ruinous boom-towns, its discontented inhabitants crying out for legislation to relieve their distress this bit of observation raises a picture of improvement and smiling comfort such as no array of figures, however convincing, could produce.

Nor did agricultural prosperity cease with 1900. During the next fifteen years the gross value of farm products more than doubled. In 1899 they amounted to $4,700,000,000; by 1914 they stood at $9,800,000,000. The number of people engaged in producing this product had increased by only 10 per cent, while the volume of farm products had increased by more than 30 per cent. Prices of farm products had risen more than 50 per cent, while the wholesale prices of other commodities had increased less than 30 per cent. If the farmer was prosperous in 1900 he must have been well off indeed by the outbreak of the European war. The problem that interests the public is how this march of agricultural prosperity can be restored.

The Farmer as Exporter

There are those who believe that agricultural improvement will come through political action. But the fact that the increase in well-being which preceded the fifteen years before the war came about without any political action whatever, casts doubt upon the efficacy of the legislative measures that politicians have been willing to enact for the farmer's benefit. It is dawning upon the rural community that political relief can aid him but slightly. In the long run some benefits will undoubtedly accrue from the legislative measures that have been passed, but immediately they will avail the farmer little. Neither badgering speculators, nor regulating packers, nor providing credit facilities that enable the farmer to borrow money to be repaid in the far-distant future, will help him materially.

The root of the farmer's immediate difficulty is not to be found in the nature of our credit structure; nor in the speculative markets that have developed out of the experience of the past for the marketing of his produce; nor in the nature of the institutions that manufacture and distribute our meat products. His present trouble arises rather out of the disheveled industrial situation in those foreign countries that have bought his product heretofore. It was the foreign situation which brought about the fall in prices in 1920 and 1921. Almost simultaneously industrial depression struck our home industry. The consequent fall of productive activity and of purchasing power among our industrial groups accentuated the downward movement of agricultural prices.

Nor does production for the foreign market promise the farmer much for some years to come. In the disheveled state of European industry agricultural production is more nearly normal than are manufacturing and mining. Agriculture differs from other industries in one important respect: Business depression always reduces the output of manufactures, mines, industrial construction and building operations, but it has practically no effect upon the acreage of crops planted or upon the average yield. We have seen again during the last few years that the farmer does not lower either his acreage or his activity when prices are falling and times are hard. At such times he tries to make up through increased production for the fall in prices. Those of us who lived through the depression of the '90's as farmers flouted the idea so commonly put forth during the winter of 1920-21 that agricultural acreage and output would be reduced because of the price decline. Nothing of the sort happened; it never does.

European agriculture is not different from ours in this respect. The war and proceeded, with their families, and with their sons who had returned from the armies and from the disturbed industrial centers, to till their fields. These were not so fertile as they had been in 1913 and 1914; the work animals were poorer; the quality of the seed had been deteriorated but the farmer proceeded to utilize his labor and resources to the full. The result is a more nearly normal state of production in agriculture than in other lines of industry. Europe is not so well supplied with agricultural products as she was before the war or as she would like to be. But she is better supplied with these products than with the manufactures she must send us in payment if she is to buy farm produce in America. Europe is in no position to buy large quantities of American agricultural products at high prices. We produce a surplus for export which must be sold on the European market, and that portion of the product sold at home will not bring a higher price than that which goes abroad.

In view of this situation, one of the means for getting the farmer out of trouble is to take him as far as possible off the international market. For though the home market suffered from the business depression that extended from the latter part of 1920 to the spring of 1922, the purchasing power of the people has now been restored with the revival of industry. Never before has the nation had such activity in the building trades as during the past year. This bids fair to continue for another twelve months. The production of automobiles defeats all previous records and industry generally is enjoying a revival of prosperity. Though this may slacken somewhat after the building boom has spent itself, there can be no question of its existence at present. Large production, complete employment of labor, rising profits, wages and prices are the order of the day. The best evidence available indicates that the total wages and salaries paid by government and by industries other than agriculture amounted to $38,000,000,000 for the year 1920. They fell in 1921 to $30,000,000,000. They cannot be less than $33,000,000,000 for the year 1922, and will probably be larger in 1923. It is doubtful whether these payments were ever as large as $18,000,000,000 in any prewar year. The purchasing power of the inhabitants of our cities and towns is, therefore, adequate to absorb a large volume of agricultural products at prices materially higher than those of the prewar period.

Purchasing Power of Home Markets

Nor do wages and salaries constitute the entire income of the people living in cities and towns who buy and consume the products of our farms. They are less than three-quarters of that income. Rents, interest and profits make up another $12,000,000,000 of income for the urban dwellers. When this is added to the wages and salaries we have a total spending power in our cities and towns of $45,000,000,000 for 1922. If prosperity continues for 1923 it will amount to even more. As a consequence of this revival of purchasing power among our people the gross value of the farmers' product will be almost fifteen billion dollars for 1922 as against twelve and one-third billions in 1921, and less than ten billions in 1914.

Our town dwellers have, therefore, $7,000 of spending power for each of the six and a half million farms in the United States. **No other agricultural population in the world has within its own nation any market remotely comparable with this in purchasing power. In states like Michigan, which have become predominantly industrial during the last decade, the urban purchasing power is even larger. Though the United States as a whole has two and one-third persons living in town for every one on the farm. Michigan has three and one-third. The townspeople of that state have a net income which amounts to more than $11,000 for every one of its 196,000 farms. Besides this they have access to an urban population of 3,000,000 people in Illinois and Wisconsin through the cheap transportation by water. The total income which the farmer of Michigan may tap by venturing less than 100 miles outside the boundaries of his state is adequate to consume his entire product at prices that would make him prosperous.**

The problem of getting the Michigan farmer out of difficulty and establishing him once more in a state of prosperity has for its setting this disparity between urban and rural population in the state and this growth of purchasing power among our industrial population. Neither the foreign situation nor the high freight rates that now prevail on our American railroads need concern him greatly. If he will adjust his production to the needs of this consuming population the high transportation costs may serve him as a protective tariff wall. For Michigan, like our Eastern industrial commonwealths has now a net import of farm products. No one can come into this market to compete with the farmers unless he pays the prevailing freight rates. The great mass of our producers for the home market can reach the consumer over good roads with motor trucks. The automobile is one of the few things that can be bought more cheaply now than in the prewar period. In this manner the farmer avoids paying a wage for railway labor and a price for coal consumed which are twice as high as in the prewar period. The farmer who grows wheat finds the international market impoverished and has been forced to sell for a dollar a bushel or less. The grower of potatoes finds the national market overcrowded this year. But the growers of early tomatoes for the local market were receiving $2.50 a bushel when the grower of ever early potatoes was receiving only thirty-five cents.

The product of Michigan's vineyards was five or six tons of grapes an acre. The price was sixty dollars a ton.

The hope of our Michigan farmer must lie, then, in the developement of production for his home markets. Thus will he escape at once both the ruinous competition of an impoverished foreign market and the high freight rates that are necessary to cover the labor and fuel costs that have been saddled upon railroads and to provide the investors who own these transportation systems with a paltry five per cent return.

The same situation prevails in many of our other states that have a mixed industrial and agricultural population. In the New England and Middle Atlantic States we find almost eleven persons in cities and town for every one on the farms. Ohio has four; Illinois five; and Deleware and Maryland, including the District of Columbia, have three and one-third and five and three-quarters respectively. The Pacific States have four and one-half. In the remaining states there are, on the average, only one and one-fifth townsfolk for each person on farms. Thirteen states have more people on farms than in cities or towns.

Adjustments Difficult

This situation is of such recent development—in the Great Lakes basin at least—that agriculture has only partly adjusted itself to the new conditions. Twenty years ago the population on farms and in urban communities in Michigan almost evenly balanced. The towns had one and a quarter persons for every one on the farm. In 1910 the ratio had risen to one and three-quarters and now it is three and a third. We have had an industrial revolution in the Middle West since 1900, and Michigan has enjoyed more than its share of it. The wages and salaries paid by manufacturers in the state have multiplied by ten during the last two decades. Twenty years ago the income of the total population of the cities and towns of the state amounted to less than $2,000 for each farm; in 1910 it had become almost $4,000 and today it is $11,000. Yet during these twenty years the acreage of a crop like strawberries has fallen 20 per cent, when it should have doubled.

The manner in which the farming industry is organized always makes adjustment to a rapidly changing market situation a slow process. **The number of people engaged in Michigan agriculture approximates 350,000. There are 196,000 farms. We have, therefore, less than two persons working on the farm.** What **shall be produced and what methods of production shall be employed depend upon the decision of almost 200,000 men, each one of whom is** not only manager of the farm but is ordinarily its principal laborer as well. It is inevitable that a man chared with the aduous work of the field should rarely possess either the knowledge of the market or the managerial sense of necessity for adjustment and change which characterizes industries like manufacture.

This difference in the organization of agriculture and other industries is one of the chief facts that underlie what is commonly known as the agricultural problem. It is the principal reason for the failure of agriculture to reduce its output in times of depression and falling prices. When curtailment of demand has reduced the price of manufactured products to the point where they no longer cover the cost of labor and materials and leave a profit, the manager ceases hiring labor and purchasing materials until the curtailment in the output of commodities has raised their price once more above cost, or until wages and material have fallen far enough to make production at a profit possible once more. But the farmer is at once capitalist, manager and laborer. He cannot dismiss himself without a net loss. He purchases few materials produced by others than himself. His farm is quite as much a tool which he utilizes to sell his labor as it is a capital investment which might yield its owner a living without working.

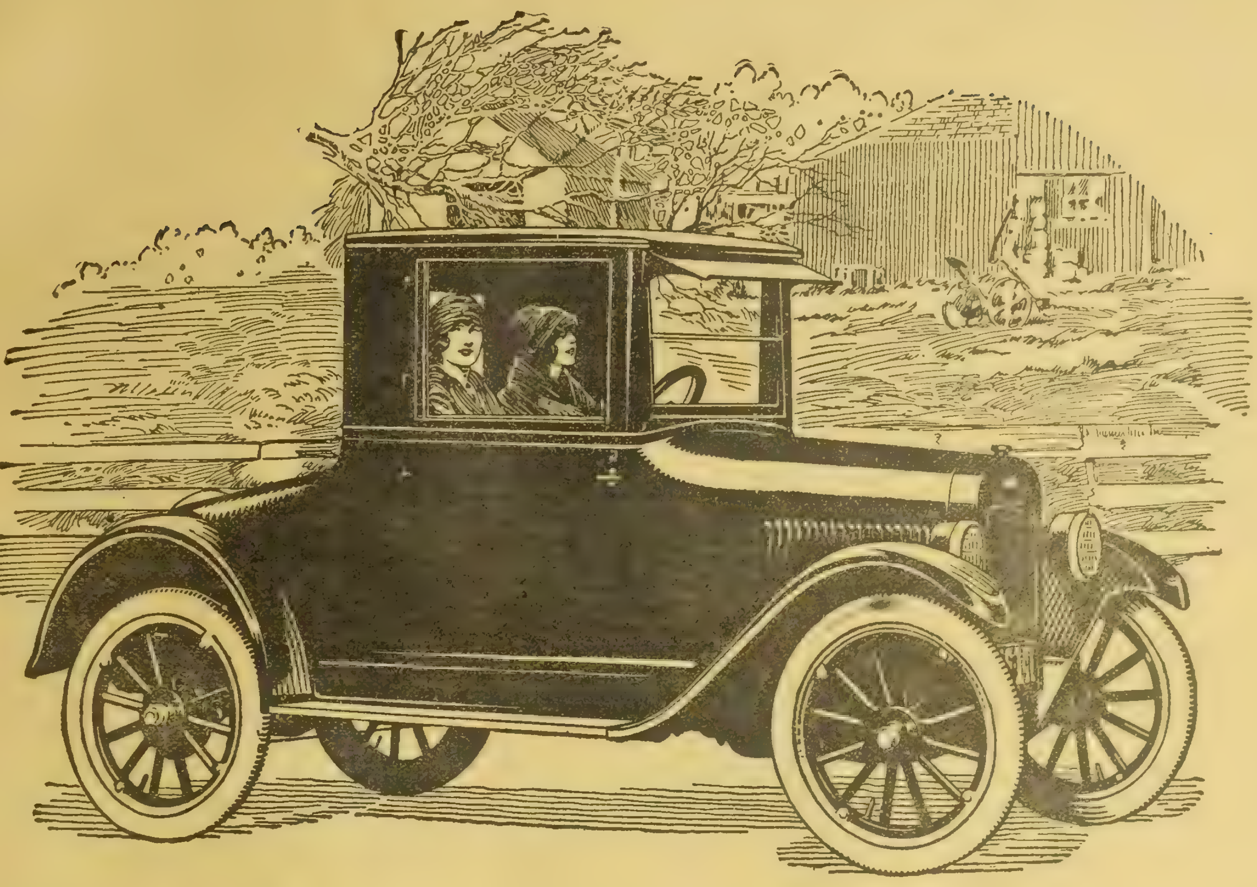
Diversity of Output

It is clear that the individual farmer cannot undertake any adequate analysis of the market situation which will keep him informed of the varying opportunities it affords. Our state contains cities that have grown from 13,000 people to more than 90,000 during the last twenty years. It is small wonder that production has not adjusted itself to the changed demand that this growth has brought. The co-operative marketing organizations in the agricultural field have grown largely out of this necessity for adequate market analysis. They perfirm their most useful function in keeping this analysis up to date and in combining the producers into a compact organization such that the volume of output may be adjusted to needs. The Department of Agriculture and the extension divisions of agricultural colleges must assist in this task in all our industrial states.

The inflexibility of agricultural production which grows out of the nature has been supplemented by another set of forces which impeded the adjustment of production to markets. From 1915 on, the European demand for American food products carried the prices of cereals, meats and other animal products, such as condensed milk, to unheard-of heights. Even at these high prices Europe stood ready to take all we could supply. In an industry where the manager owned his plant and equipment and furnished more than half the labor; there was no necessity for adjusting production to the changed situation. War and war prices were a sedative which made him content to remain in old paths. Transportation costs, controlled as they were by public authorities, long lagged behind the general price level, as did the level of wages. Today agriculture in the Middle West faces a situation that gives little promise of increased prices for the commodities that enter the international market. Transportation rates are high, and relief must be attained by removing the farmer as far as possible from the international market.

The extent to which this can be done in any state depends upon one further factor—that of diversity of output. Fortunately Michigan is in an enviable position in this matter. It grows all the important cereals except rice, and all the forage crops. It is among the first few states in its output of small fruits. It produces in commercial quantities all the tree fruits except citrus fruits. It is one of the principal producers of both beans and sugar beets. It has a large production of dairy products, and is not unsuited to the production of meats. In such a state there is no need to dispair because the foreign market is poor or because the cost of transporting agricultural products to market is burdensome. What is needed is a thorough analysis of the market possibilities and an adaptation of production to the local demand. To this end the Agricultural College and all organized forces of

(Continued on page 18.)



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WHEN WRITING ADVERTISERS MENTION M. B. F.

The Hunted Woman

By James Oliver Curwood

Michigan's Own and America's Formost Author of the Great Northwest

(Copyright by James Oliver Curwood

SYNOPSIS

JOANNE GRAY is one of the passengers on the train bound for Tete Jaune Cache, the home of "The Horde," where she has no friends and all will be strange to her. The train stops at a town composed of several tents, she goes in search of food and a bath. She is directed to "Bill's Shack" and here she meets Bill Quade, who not only owns and operates "Bill's Shack" but is also leader of the lawless men of the town. Quade says he has a room she can rent and that he will show it to her. As they pass out of the room a newcomer enters the doorway leading off the street. The newcomer is John Aldous, a well known novelist. He sees the strange girl enter the place and believes she has made a mistake and as he stands in the doorway his eyes rest upon the curtained doorway through which they have passed. In but a moment the girl steps out, face flaming and eyes flashing. Quade follows her apologetically. He starts to offer the girl money but before he can do so Aldous steps to the girl's side and floors Quade with a terriffic blow. Aldous hurries the girl away from the scene to the home of friends. Joanne tells Aldous she is going to Tete Jaune to find her husband, Mortimer FitzHugh. Aldous decides to go with her to protect her from Quade and his partner Culver Rann. Aldous believes FitzHugh is dead and locates a friend who declares he has seen the grave. Upon their arrival at Tete Jaune they are met by friends of Aldous, the Blacktons, at whose place they are to stay during their stop. Later they secure horses and supplies and start off into the wilderness accompanied by Donald MacDonald who believes he knows where the grave of FitzHugh is located.

(Continued from Feb. 3 issue)

"HE doesn't know whether he buried his wife or left her her lying on the sand floor of the cave. He doesn't know how he got out of the mountains. But he did, and his mind came back. And since then, Joanne—for a matter of forty years—his life has been spent in trying to find that cave. All those years his search was unavailing. He could find no trace of the little hidden valley in which the treasure-seekers found their bonanza of gold. No word of it ever came out of the mountains; no other prospector ever stumbled upon it. Year after year Donald went into the North; year after year he came out as the winter set in, but he never gave up hope.

"Then he began spending the winter as well as the summer in that forgotten world—forgotten because the early gold rush was over, and the old Telegraph trail was travelled more by wolves than men. And always, Donald has told me, his beloved Jane's spirit was with him in his wanderings over the mountains, her hand leading him, her voice whispering to him in the lonliness of the long nights. Think of it, Joanne! Forty years of that! Forty years of a strange, beautiful madness, forty years of undying love, of faith, of seeking and never finding! And this spring old Donald came almost to the end of his quest. He knows, now; he knows where that little treasure valley is hidden in the mountains, he knows where to find the cave!"

"He found her—he found her?" she cried, "After all those years—he found her?"

"Almost," said Aldous softly. "But the great finale in the tragedy of Donald MacDonald's life is yet to come, Ladygray. It will come when once more he stands in the soft white sand of that cavern floor, and sometimes I tremble when I think that when that moment comes I will be at his side. To me it will be terrible. To him it will be—what? That hour has not quite arrived. It happened this way: Old Donald was coming down from the North on the early slush snows this spring when he came to a shack in which a man was almost dead from smallpox. It was DeBar, the half breed.

"Fearlessly McDonald nursed him. He says it was God who sent him to that shack. For DeBar, in his feverish ravings, revealed the fact that he had stumbled upon that little Valley of Gold for which MacDonald had searched through for forty years. Old Donald knew it was the valley, for the half-breed raved of dead men, of rotting buckskin sacks of yellow nuggets, of crumbling log shacks, and other things the memories of which stabbed like knives into Donald's heart. How he fought to save that man! And, at last he succeeded.

"They continued south, planning to outfit and go back for the gold. They would have gone back at once, but they had no food and no horses. Foot by foot, in the weeks that followed DeBar described the way to the hidden valley, until at last MacDonald knew that he could go to it as straight as an eagle to its nest. When they reached Tete Juane he came to me. And I promised to go with him, Ladygray—back to the Valley of Gold. He calls it that; but I—I think of it as The Valley of Silent Men. It is not the gold, but the cavern with the soft white floor that is calling us."

In her saddle Joanne had straightened. Her head was thrown back, her lips were parted, and her eyes shone as the eyes of Joan of Arc must have shone when she stood that day before the Hosts.

"And this man, the half-breed, has sold himself—for a woman?" she said, looking straight ahead at the bent shoulders of old MacDonald.

"Yes, for a woman. Do you ask me why I go now? Why I shall fight, if fighting there must be?"

She turned to him. Her face was a blaze of glory.

"No, no, no!" she cried. "Oh, John Aldous! if I were only a man, that I might go with you and stand with you two in that Holy Sepulchre—the Cavern—— If I were a man, I'd go—and, yes, I would fight!"

And Donald MacDonald looking back, saw the two clasping hands across the trail. A moment later he turned his horse from the broad road into the narrow trail that led over the range.

CHAPTER XV

From the hour in which she had listened to the story of old MacDonald a change seemed to have come over Joanne. It was as if she had risen out of herself, out of whatever fear or grief she might have possessed in her own heart. John Aldous knew that there was some deep significance in her visit to the grave under the Saw Tooth Mountain, and that from the beginning she had been fighting under a tremendous mental and physical strain. He had expected this day would be a terrible day for her; he had seen her efforts to strengthen herself for the approaching crisis that morning. He believed that as they drew nearer to their journey's end her suspense and uneasiness, the fear which she was trying to keep from him, would, in spite of her, become more and more evident. For these reasons the change which he saw in her was not only delightfully unexpected but deeply puzzling. She seemed to be under the influence of some new and absorbing excitement. Her cheeks were flushed. There was a different poise to her head; in her voice, too, there was a note which he had not noticed before.

It struck him all at once, that this was a new Joanne—a Joanne who, at least for a brief spell, had broken the bondage of oppression and fear that had fettered her. In the narrow trail up the mountain he rode behind her, and in this he found a pleasure even greater than when he rode at her side. Only when her face was turned from him did he dare surrender himself at all to the emotions which had transformed his soul. From behind he could look at her, and worship without fear of discovery. Every movement of her slender, graceful body gave him a new and exquisite thrill; every dancing light and every darkening shadow in her shimmering hair added to the joy that no fear or apprehension

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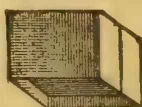

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could overwhelm without him now. Only in these wonderful moments, when her presence was so near, and yet her eyes did not see him, could he submerge himself completely in the thought of what she had become to him and of what she meant to him.

During the first hour of their climb over the break that led into the valley beyond they had but little opportunity for conversation. The trail was an abandoned Indian path, narrow, and in places extremely steep. Twice Aldous helped Joanne from her horse that she might travel afoot over places where he considered dangerous. When he assisted her into her saddle again, after a stiff ascent of a hundred yards, she was panting from her exertion, and he felt the sweet thrill of her breath in his face. For a space his happiness obliterated all thoughts of other things. It was MacDonald that brought them back.

They had reached the summit of the break, and through his long brass telescope the old mountaineer was scanning the valley out of which they had come. Under them lay Tete Jaune, gleaming in the morning sun, and it dawned suddenly upon Aldous that this was the spot from which MacDonald had spied upon his enemies. He looked at Joanne. She was breathing quickly as she looked upon the wonder of the scene below. Suddenly she turned and encountered his eyes.

"They might—follow?" she asked.

He shook his head.

"No danger of that," he assured her.

MacDonald had dismounted, and now he lay crouched behind a rock, with his telescope resting over the top of it. He had leaned his long rifle against the boulder; his huge forty-four, a relic of the old Indian days, hung at his hip. Joanne saw these omens of preparedness, and her eyes shifted again to Aldous. His .303 swung from his saddle. At his waist was the heavy automatic. She smiled. In her eyes was understanding, and something like a challenge. She did not question him again, but under her gaze Aldous flushed.

A moment later MacDonald closed his telescope and without a word mounted his horse. Where the descent into the second valley began he paused again. To the north through the haze of the morning sun gleamed the snow-capped peaks of the Saw Tooth Range. Apparently not more than an hour's ride distant rose a huge red sandstone giant which seemed to shut in the end of the valley. MacDonald stretched forth a long arm in its direction.

"What we're seekin' is behind that mountain," he said. "It's ten miles from here." He turned to the girl. "Are you gettin' lame Mis' Joanne?"

Aldous saw her lips tighten.

"No. Let us go on please."

She was staring fixedly at the sombre red mass of the mountain. Her eyes did not take in the magnificent sweep of the valley below. They saw nothing of the snow-capped peaks beyond. There was something wild and unnatural in their steady gaze. Aldous dropped behind her as they began the gradual descent from the crest of the break and his own heart began to beat mare apprehensively; the old question flashed back upon him, and he felt the oppression that once before had held him in its grip. His eyes did not leave Joanne. And always she was staring at the mountain behind which lay the thing they were seeking. Her face had not paled. Its coulor was like the hectic flush of a fever. Her eyes alone betrayed her; their strange intensity—the almost painful steadiness with which they hung to the distant mountain and a dread of what was to come seized upon him. Again he found himself asking questions which he could not answer. Why had Joanne not confided more fully in him? What was the deeper significance of this visit to the grave, and of her mission in the mountains?

Down the narrow Indian trail they passed into the thick spruce timber. Half an hour later they came out into the grassy creek bottom of the valley. During that time Joanne did not look behind her, and John Aldous did not speak MacDonald turned north, and the sandstone mountain was straight ahead of them. It was not like the other mountains. There was something sinister and sullen about it. It was ugly and broken. No vegetation grew upon it, and through the haze of sunlight its barren sides and battlemented crags gleamed a dark and humid red after the morning mists, as if freshly stained with Aldous guessed its effect upon Joanne, and he determined to put an end to it. Again he rode up close beside her.

"I want you to get better acquainted with old Donald," he said. "We're sort of leaving him out in the cold, Ladygray. Do you mind if I tell him to come back and ride with you for a while?"

"I've been wanting to talk with him," she replied. "If you don't mind——"

"I don't," he broke in quickly "You'll love old Donald, Ladygray. And, if you can, I'd like to have you tell him all you know about—Jane. Let him know that I told you."

"I will," she said.

A moment later Aldous was telling MacDonald that Joanne wanted him. The old mountaineer stared. He drew his pipe from his mouth, beat out its half-burned contents, and thrust it into its accustomed pocket.

"She wants to see me?" he asked. "God bless her soul—what for?"

"Because she thinks you're lonesome up here alone, Mac. And look here"—Aldous leaned over to MacDonald—"her nerves are ready to snap. I know it. There's a mighty good reason why I can't relieve the strain she is under. But you can. She's thinking every minute of that mountain up there and the grave behind it. You go back, and talk. Tell her about the first time you ever came up through these valleys—you and Jane. Will you, Mac? Will you tell her that?"

MacDonald did not reply, but he dropped behind. Aldous took up the lead. A few minutes later he looked back, and laughed softly under his breath. Joanne and the old hunter were riding side by side in the creek bottom, and Joanne was talking.

He looked at his watch. He did not look at it again until the first gaunt, red shoulder of the sandstone mountain began to loom over them. An hour had passed since he left Joanne. Ahead of him perhaps a mile distant, was the cragged spur beyond which according to the sketch which Keller had drawn for him at the engineer's camp—was the rough canyon leading back to the basin on the far side of the mountain. He had almost reached this when MacDonald rode up.

"You go back, Johnny," he said, a singular softness in his hollow voice. "We're a'most there."

He cast his eyes over the western peaks, where dark clouds were shouldering their way up in the face of the sun, and added:

"There's rain in that. I'll trot on ahead with Pinto and have a tent ready when you come. I reckon it can't be more'n a mile up the canyon."

"And the grave, Mac?"

Is right close to where I'll pitch the tent," said MacDonald, swinging suddenly behind the pack-horse Pinto, and urging him to trot. "Don't waste any time, Johnny."

Aldous rode back to Joanne.

"It looks like rain," he explained. "These Pacific showers come up quickly this side of the Divide, and

(Continued on page 29.)

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NOTIFY HIGHWAY COMMISSIONER REGARDING CULVERT

Who should I notify if a culvert in a quarter line is out, making the road unfit to travel? Same has been out all summer. I have notified the Highway Commissioner of same but he fails to repair same.—C. E. R., Sanilac, Michigan.

—The statute provides that it is the duty of the Highway Commissioner to see that the road is kept in reasonable repair, safe and fit for public travel and in case he neglects this duty, after receiving your notice you should then bring this matter to the attention of the township board.—H. H. Partlow, State Highway Department.

PAYING TUITION

Does the district have to pay the tuition for a child if the application was filled out and filed with the director on or before the fourth Monday of June and the child remained in the district until November 16, 1922? At this time the parents moved to Lake View, Michigan, but the child was attending Owosso high school.—J. W. S., Lake View, Mich.

—The question apparently arises because the parent is now living in a school district that maintains a legal high school and if the child were at home no tuition would be chargeable.

Section 1 of the tuition law, which is Section 5380 of the compiled Laws of 1915, found on page 320 of the 1921 school laws, provides in part as follows:

"The district board or board of education of any school district which does not maintain a high school shall have authority and is hereby required to vote a tax sufficient to pay the tuition to any high school which is approved by the superintendent of public instruction of any children of school age residents of said district at the time of giving notice as hereinafter provided.

The parents of the child in this case were living in a district which did not maintain a legal high school at the time of making application for tuition. The statute quoted provides that if that is the case the district must pay the tuition for that school year. The fact that the parent may move into a district that maintains a high school would not relieve the district where the application was filed from the payment of high school tuition, if the parent continued to send his child to another high school.

This construction of the tuition law is in accordance with justice both from the standpoint of the child and the district. If a child has entered high school it might cause an interference with his work if he were required at any time if the parents moved into a high school district, to change high schools. It might be also that the child could better attend some other high school than the one in the district where his parents had moved. There might be several reasons why this would be true. Further, if the parent is living in the district at the usual time of making application the child's name is on the census list of the district and that district will draw primary money for the following year, regardless of where the parent may move. If the parent has any property in the district it would be on the assessment roll and subject to tax. You will see, therefore, that there is no hardship to the district because it is obliged to pay the tuition.—W. L. Coffey, Dept. of Public Instruction.

LINE FENCE DISPUTE

I own a farm along the corporation line of the village of Portland. There is no street laid out along the line. I and the man I bought of, had the County Surveyor, survey it out. There are corner stakes at each end one-half mile apart. It is on a section line. Then I stretched barbed wire and fastened it to trees about a rod from the line on my farm. Now a party has bought an acre of land on contract. The place has been worked a good many years, and plowed to the line. Now he has grubbed out the extra land, and claims the fence is the line, and has cut the trees the wire was fastened to, has planted corn right up to the fence so that my stock can reach through the wires and eat it. Would those wires be called a line fence? How long would it have to be there to be an established line fence? I have filled in between the trees with stakes and posts to hold stock. I put the wires all along the corresponding line. Would I have to deal with the party on the place or the man that holds the deed?—C. V. P., Portland, Mich.

—You do not state in which one worked and claimed the rod of fence to the corporation line. To gain title by adverse possession to the rod strip of land it requires something more than just laying idle and growing up to weeds. If your title by deed goes up to the section line it would require some overt act claiming title to the strip adverse to the title by deed and it must be continuous and without interruption for 15 years. A two strand wire fence may be a line fence but not a lawful fence. A line fence is the line between two properties and may be marked by any line even though that line may not stand the test of a lawful fence. If you claim to own the strip of one rod of land and another has taken possession and not necessarily with the man who owns the adjacent land. His contract to the purchase of one acre may not include the strip but only to the section line. I think you will need to consult with a good attorney to explain to him just what the facts are so he can tell you what your rights are.—Legal Editor.

MUST BUILD SHARE OF LINE FENCE

I own an apple orchard and it is open on two sides to public highways that is no fence. There are two farms that join to my farm on the two sides. I have no stock and no need for a fence. Does the state require me to share the expense of fencing?—J. H., Holland, Mich.

—Chapter 68, of the compiled laws of 1915 provide a method whereby abutting property owners of improved lands may compel you to construct and maintain your portion of the line fence between your orchard and the adjoining property owner. There is nothing in the law however that requires you to construct highway fences on the two sides of your orchard abutting the public highway.—H. H. Partlow, State Highway Dept.

COMMON LAW MARRIAGE

I understand that if a couple live together as man and wife and pass for the same, it is called a common law marriage after a few years say 10 or 12 years. In case such couple should separate, does a divorce have to be obtained before the parties are free same as in a lawful marriage? Can a common law wife claim any of a man's property if he has no other heirs?—C. D. H., Muskegon, Mich.

—The law is that if a couple live together for a period of two years or more and hold each other out to the world as man and wife, it is a common law marriage and it would be necessary for either of them to secure a divorce; their children would be legitimate and the wife could inherit property from the man, or the man from the woman.—C. DeL.

LAND CONTRACT

In regard to a land contract, what right has the second party to the timber on the same farm. Here is the condition of the contract:

"It is expressely agreed as a part of the consideration that first parties may have their fire-wood for their own domestic use from the premises herein conveyed for a period of 15 years from the date hereof, they to cut the same from dead and down or dying timber and to clean up tops and leave the premises in a good and workmanlike manner." There is not anything stipulated for sec-

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ond party. The first party goes in and takes his first choice of the down timber, cuts some that would make lumber and cuts about 25 cords of wood when it was customary to cut about 15 cords the first year, even leaving some two year old wood in the woods. What can second party have to say?—E. W., Woodbury, Michigan.

—If the purchaser in a land contract takes possession and occupies the land under the terms of the contract, and is not in default in his payments, he has the right to the use of the timber on such land, so long as he does not cut and sell it in excessive quantities so as to amount to waste. He may hold the seller to his contract to use only such wood as is required for domestic purposes, and may recover from him for any wood in excess of this amount, or in violation of any terms of the contract.

The fact that the seller takes the choice of the down timber does not alone make him liable, however, so long as he is permitted by the contract to cut down such timber. —Assistant Legal Editor.

EXPENDITURE OF COUNTY ROAD FUNDS

I would like to know through the columns of your paper if the Board of County Road Commissioners have the authority to spend the good road money for other purposes other than to construct and maintain highways?—A. E., Waltz, Michigan.

—The county road law specifically provides for the purchase of right of ways for relocations of highways, for the purchase of lands for gravel, borrow or other necessary material to be used on the highway, also they are given authority to pay for the services of a Deputy County Clerk when such clerk is necessary by reason of the volume of work. They are also given specific authority to employ such servants and laborers as may be necessary and may purchase such machines, tools, appliances and materials as shall on their judgment be necessary or conveni- for the proper carrying on of their work.

The statute further provides that the Board of County Road Commissioners shall have all the authority in respect to roads, bridges, culverst, etc., which is vested in highway offices in townships and the statute specifically provides that township commissioners shall provide a suitable place for the storage and proper housing of all tools, implements and machinery that are owned by the township. It would therefore follow that Boards of County Road Commissioners are vested with the authority to purchase land and erect the necessary buildings for housing and storage of their equipment and for making necessary repairs incident to such equipment.

I believe this constitutes their authority for the expenditure of money with the understanding of course that the superintendents, engineers and the construction of bridges are included in the above.—H H Partlow, State Highway Department.

ANYONE KNOW WHERE TITUS CHAULKLIN IS?

Some time ago we published a request from Mrs. Bergman, R. 1, Gulliver, Michigan, in this department. She desired information regarding her nephew, Titus Chaulklin, whose home address is Ensign, Mich. In June, 1922, he worked for a motor company in Muskegon. She received a letter from him at that time and he advised he was about to move. Since that time none of his relatives have received a word from him. They are afraid something has happened to him. He is 5 feet 5 inches tall, 21 years old, and dark complexioned. His mother is nearly heart broken and any word from a reader who knows anything about where the boy is will be appreciated. Address your letters to Mrs. John Bergman, R. 1, Gulliver, Michigan.

RADIO DEPARTMENT

EDITED BY J. HERBERT FERRIS

FOR YOUR PROTECTION!

THE following Fire Insurance Underwriters rules should be preserved and studied. The proper installation of a radio set is not a fire hazard—but if the rules are not followed, you may lose your insurance, no matter what the cause of fire may be!—Radio Editor.

FOR TRANSMITTING STATIONS

Antenna—g.—Antennas outside of buildings shall not cross over or under electric light or power wires of any circuit of more than six hundred (600) volts or railway trolley, or feeder wires, nor shall it be so located that a failure of either the antenna or of the above mentioned electric or power wires can result in a contact between the antenna and such light and power wires.

Antennas shall be constructed and installed in a strong and durable manner and shall be so located as to prevent accidental contact with light and power wires by sagging or swinging.

Splices and joints in the antenna span shall, unless made with approved clamps or splicing devices, be soldered.

Lead-in Wires—h—Lead-in wires shall be of copper, approved copper-clad steel or other metal which will not corrode excessively and in no case shall they be smaller than No. 14 B. & S. gage.

Antenna and counterpoise conductors and wires leading therefrom to ground switch, where attached to buildings, must be firmly mounted five (5) inches clear of the surface of the building, on non-absorptive insulating supports such as treated wood pins or brackets equipped with insulators having not less than five (5) inch creepage and air-gap distance to inflammable or conducting material. Approved suspension type insulators may be used.

i.—In passing the antenna or counterpoise lead-in into the building a tube or bushing of non-absorptive material shall be installed so as to have a creepage and air-gap distance of at least five (5) inches to any extraneous body. If porcelain or other fragile material is used it shall be installed so as to be protected from mechanical injury. A drilled window pane may be used in place of bushing provided five (5) inch creepage and air-gap distance is maintained.

Protective Grounding Switch—j.—A double-throw knife switch having a break distance of four (4) inches and a blade not less than one-eighth (⅛) inch by one-half (½) inch shall be used to join the antenna and counterpoise lead-ins to the ground conductor. The switch may be located inside or outside the building. The base of the switch shall be of non-absorptive insulating material. Slate base switches are not recommended. This switch must be so mounted that its current-carrying parts will be at least five (5) inches clear of the building wall or other conductors and located preferably in the most direct line between the lead-in conductors and the point where ground connection is made. The conductor from grounding switch to ground connection must be securely supported.

Protective Ground Wire—k.—Antenna and counterpoise conductors must be effectively and permanently grounded at all times when station is not in actual operation (unattended) by a conductor at least as large as the lead-in and in no case shall it be smaller than No. 14 B. & S. gage copper or approved copper-clad steel. This ground wire need not be insulated or mounted on insulating supports. The ground wire shall be run in as straight line as possible to a good permanent ground. Preference shall be given to water piping. Gas piping shall not be used for the ground connection. Other permissible grounds are the grounded steel frames of buildings and other grounded metal work in buildings and artificial grounding devices such as driven pipes, plates, cones, etc. The ground wire shall be protected against mechanical injury. An approved ground clamp shall be used wherever the ground wire is connected to pipes or piping.

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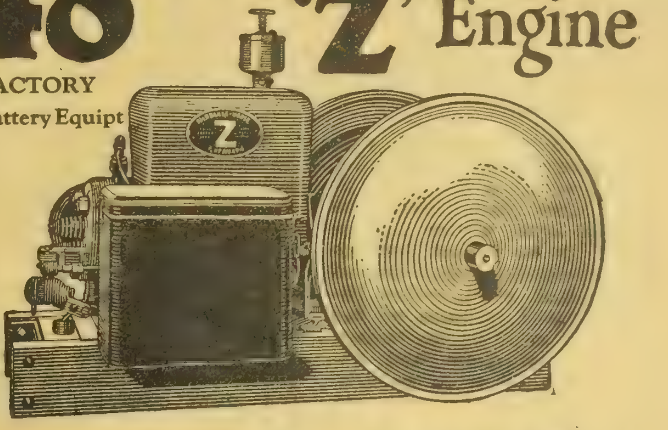
F. O. B. FACTORY

1½ H.P. Battery Equipt



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Here's a helper that will do a hundred jobs around your farm; save time and money all day long every day; do more work for less money than any other aid you can employ.

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The magneto equipt 1½ H. P., 3 H. P., and 6 H.P. are *real* kerosene engines, but operate equally well on gasoline. Have simple high-tension oscillating magneto. Throttling governor assures steady speed. Prices F.O.B. Factory. Add freight to your town.

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PICK OUT YOUR REQUIREMENTS FROM THE LIST BELOW AND ORDER BY MAIL AT ONCE AS WHEN THE AMOUNT OF CASH WE MUST HAVE IS REALIZED THE PRICES GO UP WHERE THEY BELONG!

Study the list carefully. It contains every thing reeded to make a radio outfit that will reach out and bring in concerts from all over the country, from Van Couver, B. C. to Havana, Cuba, and from Los Angeles, Cal. to Portland, Maine. If you cannot afford so powerful a set, you can obtain the material for a very few dollars that will reach 1,000 to 1,400 miles bringing in some hundreds of different broadcasting stations.

REMEMBER WE MANUFACTURE MUCH OF THIS MATERIAL OURSELVES, SO YOU ARE NOT PAYING JOBBERS, WHOLESALERS NOR RETAILERS PROFITS ON THAT MATERIAL

	Price
5—Large size Perfection Variometer	2.50
6—Parts complete to make same (except wire)	.80
7—Large, sure contact, long range variocoupler—12 taps	2.50
8—Variometer balls—3 ¾ in.—genuine wild cherry	.20
9—Variocoupler balls—3 ¾ in., genuine wild cherry	.20
10—Variometer stators—mates to above balls, per set of 2	.30
11—Variometer hardware complete	.30
12—Audio Frequency Transformer	3.10
13—Radio Frequency Transformer	4.00
14—Rheostat	.75
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16—43 Plate Variable Condenser	3.00
17—23 Plate Variable Condenser	2.00
18—Grid Leak Condenser	.25
19—Phone Condenser	.20

	Price
23—Seal Finish Panels—genuine horn fibre—absolutely dielectric—built in section to prevent warping—3-16 in. thick—handsome, unbreakable, won't show finger marks: 5 ⅞ X 9 ⅛ in.—1 piece	.55
5 ⅞ X21 in.—Built in 3 sections	2.00
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24—Handsome 3 in. dials—3-16 in. or 1-4 in. shaft hole	.40
25—Handsome 15 cent Black binding posts	.05
26—Handsome 10 cent black binding posts	.03
27—Handsome black 1 in. knobs—worth 20 cents	.08
28—Handsome black 13-16 in. knobs—worth 15 cents	.06
29—Perfection panel switch	.35
30—Phone jacks—double circuit—$1 value	.75

We also have about 2,000 handsome, glass enclosed crystal detectors that we will close out cheap, as we are going out of the crystal set business. Price .50

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4 TIMES Around the World with ONE OILING

100,000 Miles Without Stopping for Oil

An inventor who could develop an automobile, a railroad car or any other conveyance on wheels which would perform such a feat would be considered a wonder. But such is the record of regular accomplishment by the Auto-oiled Aermotor during the past eight years in pumping water.

Did you ever stop to think how many revolutions the wheel of a windmill makes? If the wheel of an Aermotor should roll along the surface of the ground at the same speed that it makes when pumping water it would encircle the world in 90 days, or would go four times around in a year. It would travel on an average 275 miles per day or about 30 miles per hour for 9 hours each day. An automobile which keeps up that pace day after day needs a thorough oiling at least once a week. Isn't it marvelous, then, that a windmill has been made which will go 50 times as long as the best automobile with one oiling?

The **Auto-oiled Aermotor** after 8 full years of service in every part of the world has proven its ability to run and give the most reliable service with one oiling a year. The double gears, and all moving parts, are entirely enclosed and flooded with oil all the time. It gives more service with less attention than any other piece of machinery on the farm. To get everlasting wind-mill satisfaction buy the Auto-oiled Aermotor, the most efficient windmill that has ever been made.

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The Truth About Henry Ford

Helping America During World War—Chicago Tribune Libel Suit

By Sarah T. Bushnell

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(Continued from Feb. 3rd issue)

IT was essential to produce a seamless wall in the cylinder and four men, Emde, Findlater, Hartner and Martin, set to work to find a method of doing it. This they did by placing the point of the cone to one side, so that the defect was located on the spot where a two-inch hole had to be drilled for the valve seat. Production was started under this method, but another delay was experienced because of the slow method of cutting the tubes. Emde set to work again and designed and built a shear to be used instead of a steel saw. The result was that 4,000 cylinders a day were produced. In other plants the valve housings, intake and exhaust were acetylene welded to the top of the cylinder. Emde with a companion, Riemenschneider, worked out a method of butt welding which made a superior weld and saved much time. This method was subsequently adopted by other makers of the Liberty motor. In all 511,854 cylinders were made by the Ford company. Approximately 125,000 were used at the Ford plant and the remainder delivered to the government for other Liberty engine makers.

The company also turned out 700,000 bearings for the Liberty motor, and these were so superior that the government had placed orders with the company for all the Liberty motor bearings made in this country. Up to the day of the publication of the Hughes statement 400,000 of these bearings had been delivered.

Another important war-time achievement of the Ford company was in the making of caisson axles. The problem was to get away from the solid axle forgings, as these required the drilling of a three and one-half inch hole for seventy-six inches through solid metal. The Ford company made the axles from steel tubing at one-sixth the cost. And every axle passed the government test.

But Mr. Pipp knew much more about the achievements of the Ford company. It had delivered 2,000,000 steel helmets, 8,000 caissons, more than 8,000 trucks and 25,000 Ford cars and 6,000 ambulances, several hundred of which were given free. Nor was that all. Much experimental work had been done on three-ton tanks and a smaller two-man tank. More than a million dollars' worth of work had been done in producing special devices for the British navy, and the Ford chemical department had co-operated in the making of gas masks. Motion picture reels for the Liberty Loan, the Red Cross and other patriotic uses were made by the company and supplied to the government in sufficient quantities to be used all over the country. Other motion pictures were sent to the American forces on every fighting front.

How much of this information he would be warranted in publishing as an answer to the Hughes criticisms was the problem that confronted Mr. Pipp. However, time pressed and he set to work, and a statement was completed on Monday morning. Just as he finished his labors Mr. Ford, who was in the room, started to the telephone. "I want to get Emde," he explained. "I want to tell him not to worry." Emde, it is true, was born in Germany, but he had been a naturalized citizen of the United States for many years.

"Let me read this statement to you first," urged Mr. Pipp. "Then I can give it to the papers. Any delay in getting it published may mean your defeat."

"If this candidate has to go through this sort of thing to get into the Senate I don't want to go there," said Mr. Ford. "Wait until I talk to Emde." After considerable delay he got Emde on the wire. "Don't worry, Emde," said Henry Ford. "I have seen the papers. I know you; I have watched you work and I know you are honest and faithful. If they try to hang you they will have to hang me first. I am going to see that you get a square deal."

When Mr. Ford had finished his conversation with Emde, Mr. Pipp induced him to read the statement. Mr. Ford approved it and Mr. Pipp sent it to the newspapers. It was too late; the Monday noon papers had gone to press and it was these editions that the Ford managers had relied upon to undo the harm wrought by the Hughes statement, for they circulated throughout the state. The statement did get into the night editions, but these have little country circulation, and the papers that reached the rural districts on election morning carried the Ford statement tucked away where comparatively few saw it. It is probable that many who read the Hughes statement never saw the Ford answer.

This was as follows:

"Our policy is to make men, not to break them. In times of panic great injury and injustice are often try to keep our heads.

"We would not allow injustice to be done to an old, trusted and valued employee, even though he was born in Germany. The results speak for themselves. Mr. Emde, referred to as the special example in the Hughes report, has been with us a little over twelve years, and he is a most able and excellent engineer and has always given perfect satisfaction. Not one word could be found by Mr. Hughes or anyone else with regard to Mr. Emde's actual work. We in the plant know that he gave valuable assistance and many suggestions with regard to the development of the Liberty motor cylinders, which are being furnished to all the manufacturers, with a saving of three hundred and forty-five thousand dollars a month to the government over former orders.

From the beginning of the war we have taken the greatest precaution. * * * We have had no interference with our work that could be in any way traced to enemy aliens. * * * The United States Marshall can speak for himself as to our organization and work with regard to that. Mr. Ford was a witness before Mr. Hughes, but he was not asked a single question with reference to enemy aliens, Mr. Emde or anyone else."

Under the Ford reply was printed a statement from the United States Marshal:

"We have had less trouble with enemy aliens in the Ford plant than in any other large plant. If there is any blame with regard to the Forn plant, it should be on the marshal's office and not on the Ford people. The Ford company did not employ a single German alien without a permit of the marshall's office.

Friends who dropped in to see Mr. Ford that day still expressed confidence that he would be elected, but as he and Mr. Pipp left the campaign headquarters together Mr. Ford said to his companion, "I noticed that you did not join with the others when they were insisting that I would win tomorrow.

"No," replied Mr. Pipp. "I think you have plain sailing. I think you have a fair fighting chance, but only a fair one."

"But that wasn't what you said Saturday."

"No; if the election had been held Saturday you would have won. But today is Monday and it's a different story."

"Do you mean that you think the Wilson letter—"

"In my estimation," interrupted Mr. Pipp, "the Wilson letter cost you ten thousand votes. You could spare that many. There were people in Michigan who had forgotten all about party lines; they only remembered that you were a candidate and they wanted to pay you the highest honor they could. The Wilson letter jerked them up. It reminded them that they were Republicans and that you are running as a Democrat. I would wager that letter cost you their votes. You could spare ten thousand votes, but you can't spare many more."

"Then you thing the Hughes statement—"

"The Hughes statement will work more havoc than anything else could have done. People will not have time to learn the truth. If I could have got a reply out in time for it to reach every voting precinct it would have helped some. Up-state and in the rural districts they won't see tomorrow's papers, but you can be perfectly sure that they'll get word of the Hughes report. If they don't see it themselves some one will pass it along. The gossip that you're keeping a German working in your cylinder department will reach them. Coming from a man of Mr. Hughes' prominence it will carry weight. I know that last minute rumors often turn the tide. In my opinion you have a fair fighting chance. You may pull through by a narrow margin. You probably will lose by between five and ten thousand votes."

The first election reports gave the state to Commander Newberry by 7,567 votes. The official recount, some eighteen months later, changed the figures somewhat, but not the result. Mr. Pipp had been right.

The results of that contest were far reaching. If Henry Ford had won there would have been an equal number of Republicans and Democrats in the Senate and the Vice-President, a Democrat, would have cast the deciding vote where there was a tie. Moreover, the Republicans would not have had the chairmanships of all the committees. Finally, but for the Republican majority of two in the Senate the League of Nations might have been endorsed.

The many good Americans who are opposed to the League feel that it was fortunate for the country that Commander Newberry was elected. Many others, firm believers in the League, regard the outcome of the Michigan campaign as a defeat, not alone for Henry Ford but for the hope of permanent peace. Certainly the whole nation, was involved in that contest. It was not until a short time ago, on May 2, 1921, that the case was finally disposed of by the decision of the United States Supreme Court at Washington, which set aside the conviction of our Commander Newberry in the Michigan District Federal Court and declared unconstitutional the Corrupt Practices act under which he had been indicted.

There are those who say that Mr. Hughes never made the statement attributed to him, and that he would not have stooped to such campaign methods had he been aware of the Republican committee's plan. "That statement was held back until the last minute so that Mr. Hughes would not have an opportunity to deny it," they argue.

His defeat brought to Henry Ford, no doubt, a feeling of relief. He had made the best fight any candidate could make. He was surprised and hurt by the eleventh-hour methods of the Republican organization. For himself his conscience was clear; he had fought a clean fight and had not stooped to underhand methods. Long before the votes were recounted and the official election figures filed he had received several citations from the United States War Department, which meant much more to him than a seat in the United States Senate. The citation which gave him the most pleasure is printed herewith:

"To Ford Motor Company,
Detroit, Michigan:

"In accordance with the recommendation of the Director of Air Service a certificate of merit has been sent to you under separate cover.

"The citation by the Director of Air Service is as follows:

"THIS COMPANY PRODUCED 3,950 COMPLETE LIBERTY-12 MOTORS OF UNUSUALLY GOOD QUALITY. THEY ALSO PRODUCED ALL CYLINDER FORGINGS USED BY ALL PLANTS IN THE MANUFACTURED OF LIBERTY MOTORS, AND THEY INVENTED AND DEVELOPED SPECIAL MACHINERY AND PROCESSES FOR THIS PURPOSE. THIS PLANT WAS 100 PER CENT ON WAR WORK.

"The Chief of Ordnance also made similar recommendation and citation:

"IT IS VERY GRATIFYING TO ME TO BE ENABLED TO TRANSMIT THIS VISIBLE RECOGNITION OF PATROTIC WAR SERVICE.
GEO. W. BURR,
Major General,
Assistant Chief-of-Staff."

This proved that Henry Ford, in his own field, had done all that any living man could do for his country. Without doubt he had been the medium of saving the lives of many soldiers.

The strangest thing about this Senate race was that Mr. Ford was not a Democrat. He was and is a Republican. He made the race for Senator because he belived in the principles for which President Wilson was standing. With the exception of that one campaign, and the time when he voted for the reelection of Woodrow Wilson, he has always voted the Republican ticket. Yet he was the storm center of one of the bitterest political battles that ever has been waged.

CHAPTER VII.

The Chicago Tribune Libel Suit

Shortly after the time of the Ford-Newberry campaign an eastern writer came to Detroit to secure material for a book dealing with Henry Ford and his achivements. He failed to secure the "copy" he wanted and for that or some other reason gave out a story dealing with Mr. Ford and the American flag that had no foundation in fact. The story was widely circulated among newspapers throughout the country and was, also, the subject of much editorial comment. It should be said that many newspapers printed the original telegram from Detroit in good faith, merely as a matter of news, and with no thought at the time that the article was untrue.

The editorial comment that the "fake" story provoked was, however, extremely severe in many instances and especially in some of the papers which had opposed Mr. Ford's senatorial candidacy. Those familiar with Mr. Ford, his work and his aims, knew, of course,

Three close friends, Henry Ford, Thomas A. Edison and the late John Burroughs. The death of John Burroughs broke up this trio of world-renown men who spent many happy hours together.

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Geo. Webber, Hookstown, Pa.
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It puts you under no obligation to buy. $2.00 per roll includes all nails and cement. (Add 8c if wanted with extra long nails.)

Shipped from Chicago, Kansas City, St. Paul; York, Pa.; Southern, Ill., or New Orleans, La. ($2.10 per roll from Kansas City or St. Paul.)
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KITSELMAN BROS. Dept. 193 **MUNCIE, IND.**

that he was not an anarchist and had no sympathy with anarchists, yet sharp-penned editorial writers made the charge against him. Mr. Ford waited patiently, but the attacks continued. Finally, his patience exhausted, he placed the matter in the hands of his attorneys, who sent letters to the offending papers, but no retractions were printed.

At length Mr. Ford and his advisors decided that in defense of his good name he must act. The leading paper among the group that had attacked him most bitterly was selected and suit for libel was started against it in the Circuit Court for Wayne County at Detroit. This paper was the Chicago Tribune. It had challenged his patriotism, had termed him an ignorant idealist and had linked his name with the names of noted anarchist leaders whom Mr. Ford did not know and with whom he never had had any connection whatever.

A more absurd charge probably never was brought against a well known man than the allegation that Mr. Ford was an anarchist. At his great plants in Detroit an Americanization school had been maintained for five years, one of the primary purposes of which was to instill respect for American principles in the minds of the foreign-born employees of the Ford company. This school had prepared thousands of immagrants for the duties of citizenship. Mr. Ford, himself, had done great things for his country in the critical days of the war and the beneficial results of his example and influence were far-reaching. He was a member of the Episcopal church, attended services regularly and was by instinct as well as by training a champion of law and order, of patriotism and truth. He knew little and cared less about history, although he played a part in its making, and concerned himself with what could be done today for the good of his fellow men, rather than with what had transpired in past ages. He enjoys books on philosophy and science and is a close read of Tolstoy. Darwin, Maeterlinck and Emerson. A volume of Emerson is always to be found beside a couch in the library where, after dinner, he frequently spends much time reading before a huge fireplace.

In bringing suit against the Chicago Tribune Mr. Ford's position was simply this: He disliked the idea of protracted litigation and all the attendant publicity, but he was no coward, and once he had decided that he must act, act he did and vigorously. He reasoned that in order to secure adequate satisfaction from the paper that had libeled him he must demand a sum that would make a lasting impression on the press of the country, hence the million dollars asked in the bill filed by his attorneys. He believed that his suit would have a salutary effect upon the press in general and serve as a warning that "free speech" does not shield the slanderer. He felt too that he was championing the cause of other men similarly wronged, but not so well equipped financially for a long and expensive struggle in the courts. He was not fighting the newspapers; he was fighting falsehood.

Elaborate preparations for the suit were made on both sides. Alfred Lucking, former member of Congress, and senior counsel for Mr. Ford, was assisted in the presentation of the case by Judge Alfred Murphy, who resigned from the Wayne County bench to enter the case. The case came to trial in the summer of 1919 at Mt. Clemens, where it was sent on a change of venue from Detroit. Among the attorneys for the Tribune was Elliott G. Stevenson, who had been counsel for the Dodge brothers in their suit against Mr. Ford a few years before. Mr. Stevenson is an expert in cross examination, adept in the ridiculing of a witness, catching him off his guard and disconcerting him with sudden and unexpected questions. Report reached Mr. Ford and his lawyers that Mr. Stevenson had boasted that he would force Mr. Ford to read aloud in court long documents and extracts from books with which the inventor was unfamiliar. Mr. Ford was determined to do nothing of the kind. Upon the day when he was on the witness stand he carefully neglected to take his glasses to court, and whenever documents were presented to him to read he refused to do so. It was following one such refusal that Mr. Stevenson, with profuse apoligies, blandly said to the witness:

"Mr. Ford, I dislike to ask you this question, but I have heard that you cannot read or write. Is it true?"

Counsel for Mr. Ford were on their feet instantly with vigorous objections to the question and the argument was sharp and bitter. To say that a boy who had grown up on a Michigan farm under home conditions such as had marked the childhood of Henry Ford, was illiterate was, of course, absurd. Mr. Ford's friends believed that the sole purpose of the question was to supply a basis for a sensational newspaper story that would be widely circulated and thus further wound the inventor.

(Continued in March 3rd issue.)

INTERESTED IN FORD STORY

Dear Mr. Slocum—It is with great pleasure that I enclose $1.00 for the renewal of my subscription to your very valuable paper. We have found it almost invaluable. We are very much interested in the Ford history, and would be disappointed should we miss a single number. I consider it one of the best farm papers published. Long may it live and prosper.—Prof. F. W. Scott, Commissioner of Municipal Market, Ypsilanti, Michigan.

DON'T WANT TO MISS A COPY

Your paper surely is of great help. We don't want to miss a single copy of it if possible.—Mr. Andrew Kallungi, Houghton County, Michigan.

MUSINGS OF A PLAIN FARMER

AROSE early, being tired of the bed where I spent most of my time since last October, being ill with typhoid fever.

Was given a dish of oat meal porridge spread thick with brown sugar, which I crave.

As the sun became higher I was bundled up and then hobbled to the barn. My wife wishing me to look at the stock and mows.

It was fine to see the horses. I believe they knew that I had been absent.

Stood gazing up the silo chute, wishing my leg was equal to my eye.

Returned to the house, weak of leg. Commended my wife on the fine condition of the stock; thanks to her, and the good neighbors, who have been most kind.

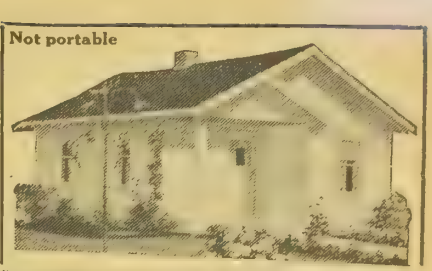
Was ordered to my couch, my wife being firm about my rules of exercise, more so than the good nurses at the hospital.

Was aroused for dinner which I attacked with vigor, having an appetite like an ostrich.

Spent the afternoon smoking a bit and gazing out on the fields which will soon need my hand.

Made a few plans for next crop season, which I hope my health will permit me to carry out.

Was busy this evening assisting my daughter with her problems, which muddled my brain and I retired to my cot, very tired but thankful that have been spared.—A. P. Ballard.



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The Michigan
BUSINESS FARMER

SATURDAY, FEBRUARY 17, 1923

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"The Farm Paper of Service"

FARMER MUST PROSPER TOO!

"IT takes no prophet to scan these facts and foretell an early collapse of the present city prosperity unless the farmer soon gets his equitable share. This present prosperity is a sham, because it is the opulence of some at the depletion of others, the profits of unfair and therefor ruinous trade. Half this country cannot long run riot in plenty abstracted from the capital of the other half. The source will run dry. The way out? Only the slow integration of farmers into powerful economic groups and a recasting of the whole system of agricultural finance and marketing. This is a national need and a national duty."—Gray Silver, Washington Rep. American Farm Bureau.

A TEST FOR LEGISLATORS

IF we had been consigned to Lansing in either the house or senate by the voters of our district, which we will assume was largely rural we would set for ourselves a sort of laboratory-test to which we would put each bill that came up for our vote. Perhaps we would even have it printed up on cards so that we could hand them out to the persistent lobbyist, male or female and thus save ourselves many an ear-full of absolutely meaningless information or advice.

We would print in two colums and under heads as follows:

VOTE "YES"	VOTE "NO"
Lower Taxes	Higher Old Tax
Lower Salaries	Any New Tax
Lower Expenditures	Higher Salaries
Less Jobs	More Jobs
Less Officials	More Officials
Less Legislation	More Legislation

And under these classifications we believe we could easily arrive at a sane answer for any bill which would come up in Lansing during the present session.

Only last week nearly five hundred business men, representing practically every industry, came to Lansing as a "committee-in-boots" to beg for, insist on or fight to a finish for—EXACTLY WHAT THE FARMERS OF MICHIGAN ARE DEMANDING— LOWER TAXES! Thus, for once, are the people on both sides of the town line demanding the same thing.

Every man in Lansing who has been sent there by popular vote has promised to lower taxes—every man among them from Governor down, has promised on his word NOT to increase state expenditures. Pretty soon, the people of Michigan are going to call a "show-down" and they are not going to be satisfied with anything but a hard-boiled proof that these pre-election promises have been lived up to.

THE "50-50" CONTRACT ARRIVES!

EVERY beet grower from Messers. Cook and Ackerman down, can feel a glow of pride in the fact that their seven years of honest endeavor to have the manufacturers of beet-sugar in Michigan see the necessity of a square-deal, has borne fruit.

The owners and managers of the Owosso Sugar Company are to be congratulated on the fact that they were the first to see the light and acknowledge the grower as a partner in the problem of placing Michigan sugar in the markets of the world, at a price which will make the continuation of the industry economically sound.

The Business Farmer hopes that before another issue goes to press we will be able to announce the names of other manufacturers who are willing to give the plan a trial for two or three seasons at least.

We importune the beet-growing farmers to stand by the word and the spirit of this contract to the letter. When a man shows you he is willing to work with you, that is your opportunity to show what you are made of. There is no indication but what this will be a profitable year for the manufacture of sugar, but if by any chance this contract should not prove as profitable because of a slump in the sugar-market or some other unforseen reason, let the beet-growers show the stuff they are made of—it will be an object lesson for big business who now make the easy claim that farmers are "good fair-weather sailors!"

There are a dozen branches of the farming business that ought to be operated on a 50-50 basis—perhaps this will be an opening wedge in that direction.

We are more than happy that The Business Farmer played its part in getting the producer and the manufacturer of beet-sugar into working harmony—now let's make it unanimous!

THE DEATH PENALTY IN MICHIGAN

AS often as the legislators meet at Lansing comes forward from its depths the skeleton of "capitol punishment." We thought this had been the subject of enough school-room debates to settle it, pro and con, for all time to come, but like Abel's ghost it haunts us always!

When that crazed criminal, "Gypsy Bob," already serving a life-sentence for two terrible murders, jumped from his pew in the prison-chapel and stabbed the warden of Marquette prison to death, inflicting almost fatal wounds on the warden's son and a guard, we said: "that man should be killed!" and the state echoed with the demand that such a dangerous member of society had no place among living men.

When, within the past fortnight, a man was released from Jackson, who had by mistake of justice, been serving a sentence for a crime which he did not commit, we said "how fortunate that he was not hanged for the crime!"

That seems to be the whole answer to this problem of society's right to take the life of the murderer. If we know that a man or a woman is guilty of a murder which has been planned and executed in cold blood as was the warden's slaying by "Gypsy Bob", then why should we let that being live as a constant menace to others? But, if there is any possibility of innocence, what right have we to take that which no power on earth can replace—life?

FARMERS' WEEK AT EAST LANSING

WHATEVER has been your own personal opinion of the annual Farmers' Week at the Michigan Agricultural College in former years, prepare to change it for unless your opinion was formed this year, you are drawing your conclusions regarding it from the days before Dr. Friday was brought to head our institution.

Not that other Farmers' Weeks have not been filled with worth-while meetings and worth-while speakers, but this year's Farmers' Week, showed the guiding hand of a man who was determined that the farmers who braved the February elements to come to East Lansing should have some insight into what was going on in the world to influence their business.

On one program Dr. Friday, introduced a man who was the avowed representative of "big business," as represented in the ownership of the great railroads of these United States. This man defended present-day freight rates and apologized only because they had not kept pace with the high-prices of farm produce during war-times, nor had they come down when prices hit the toboggan. A great many farmers and others who heard all or part of this talk criticised Dr. Friday for his allowing such a speaker. Cornered, however, by the thinking business farmers in attendance, these critics had to admit that what the farming business of America is suffering most from just now, is a horde of headless, loud-talking politicians who say only what their farmer readers or listeners want to hear, NOT what they ought to hear.

It is a pity and a wonder, that more farmers do not avail themselves of a day or two at East Lansing, during Farmers' Week each year. It comes at a time of year when farmers can most easily leave their daily work. It serves to break the long monotony of the winter. It's a good thing to do for mother or the older bys or girls at home. This year they had a registration of between three and four thousand, probably sixty per cent of whom were men and women who earn their living from farming exclusively. All the live-stock and crop improvment association meetings were well attended.

If the college wants an attendance of ten thousand farmers next year, The Business Farmer offers the following suggestions: (1) Aggressive advertising and publicity, the same as is given the state and county fairs. (2) Special trains on every road into Lansing, leaving the end of the line early enough in the morning to arrive in Lansing for the first meetings of the day and return at night after the evening meeting is over. The special fare and a half rate should induce a large crowd, if they were not obliged to stay over night in Lansing. (3) For this purpose one big day, say Thursday, in which morning, afternoon and evening meetings were devoted to the top-notch speakers. Association and other meetings all on other days.

Farmers' Week can be made the biggest thing in Michigan for the farming business and this first year under the direction of Dr. Friday, with the help of his very able staff, was a long step in that direction.

FARM LOAN ACT JUSTIFIED

THE Billion dollar mark in loans to farmers through the federal farm loan system is in sight. At the close of business December 31, 1922, the total of loans closed by the federal land banks and joint stock land banks since organization was $890.506.782. More than 250,000 farmers have borrowed at these banks. The federal land banks lend in every one of the forty-eight states, while the joint stock land banks operate in thirty-nine states.

The federal land banks, co-operatively owned, furnished the farmers of the country more than $681,000,000 of credits, while the joint stock land banks supplied $209,000,000.

While the first loans made through the system were placed in 1917, it was in 1922 that it experienced its largest growth, when nearly $350,-000,000 of loans were made, of which nearly $230,000,000 were through the twelve federal land banks and over $120,000,000 through the joint stock land banks. The great volume of business since organization justifies the expectations of the farmers of the farm loan act, and is evidence that the farmers use extensively both branches of the system.

THE JOINT STOCK LAND BANK

FROM the published reports of the total loans made by both branches of the Federal Farm Loan System. it is apparent that Michigan has been laggard in its use of the facilities offered by the Joint Stock Land Banks.

Out of a total of $10,579,640 borrowed by farmers of Michigan from the inception of the system to December 31, 1922, only $59,600 had been borrowed from the Joint Stock Land Banks, altho in states like Iowa and Illinois, the same report shows that more money has been borrowed from these than from the Federal Land Banks, altho they are both operated under control of the same act.

There are advantages, which were well planned by the framers of the Farm Loan System to both divisions of this service. It is obvious that the farmers of Michigan are not acquainted sufficiently with both systems, to judge between them. We will be glad to answer questions of our readers who are contemplating loans from either branch.

The appointment of Honorable L. Whitney Watkins of Manchester, to be commissioner of the state department of agriculture, filling in the unexpired term of John A. Doelle, who leaves to become associated with the Federal Land Bank at St. Paul, will meet with the approval of most farmers in Michigan. Mr. Watkins will not resign his position on the Board of the Agricultural College, nor should he. This will mean that practically all of his time will be devoted to the farmers problems at Lansing. The Business Farmer assures Mr. Watkins of an earnest desire to co-operate in making his department all that it should mean to the farmers of this state.

* * *

The story is told of the down-south coon dog that sat out in front of a store howling pitifully. A traveling man asked the village-loafer what made the dog howl so. "Sure, Sah," he replied, "that 'er darg is a'sittin' on his own tail, but he's too dorned lazy to get offen it!" There are some senators who find it easier to howl, than to make efforts necessary to actually help the farming business.

What the Neighbors Say

DR. FRIDAY MISQUOTED?

IN a recent issue of M. B. F. you published an article on the whole milk situation of Detroit district in which you made reference to Dr. Friday's decision which gave the producers $3.00 per cwt. for milk during December.

Such advance in price was not only fair and just but lent encouragement to many who had become discouraged.

Recent reports would indicate that he favors a cut of 50c per cwt. to the producers in order to give Detroit consumers milk at 12c per qt.

Dr. Friday allows that in several districts producers are receiving $3.40 to $3.60 per cwt. whilst consumers pay but 12c. Knowing as he must, what conditions of laboring classes are better in Detroit than any other industrial center of the U. S. (Men as a whole boasting of high wages received.)

We fail to understand why he chooses to favor Detroit dealers and consumers at the expense of the farmer who is struggling against great odds to make ends meet.

If Dr. Friday is really interested in the welfare of farmers, we feel confident he will use his good office in our behalf that we also may become something more than mere servants for Detroit consumers.—J. B. Younglove, Monroe County, Mich.

—The inference that some city papers gave, that Dr. Friday would give the consumers 12c milk at the expense of the producer was not correct. Dr. Friday, represents the farmers of Michigan first and in his present investigation, he hopes to prove that the cost of distribution is unjustified and should be split in a saving to the consumer, which would increase the demand for milk and a greater price to the producer, which would increase the production.

AGAINST CHANGING PRIMARY SCHOOL LAW

PLEASE print the following resolution in the Business Farmer at your earliest convenience:

Whereas; Two bills will be presented to the present session of our State Legislature for changing the Primary School Law.

Whereas; The present law is an equal benefit to all.

Whereas: The proposed change would benefit some, and harm others.

Therefore; Be it resolved that the Fayette Grange No. 1368 of Fairbanks Township, Delta County, hereby puts itself on record as being opposed to any change in the present Primary School Law, and that we respectfully urge our representatives in the legislature, Hon. Edward R. Carter, and Hon. Frank Bohn to oppose any change in the present Primary School Law, and that copies of this resolution be sent to our above named representatives.—Fayette Grange No. 1368, Marie Peterson, Secretary.

MANISTEE BEETS STILL IN GROUND

THE sugar beet question is again about to get another airing out. I wish to inform you that the farmers of Manistee township had the pleasure of growing sugar beets last year and some of them made barrels of money and others are going to make barrels of money when they dig their crop in the spring.

One of my neighbors contracted one-half acre and he raised one full wagon load which netted him $5.00 and some odd cents, others did equally as well. Another farmer done his weeding with a spring tooth harrow and planted corn for a nurse crop. The best field of sugar beets that was grown here is left in the ground for the company to come and get them, but the company has not come; $5.50 per ton was their price.

One day, last April, the agent called on me accompanied by one of our farmers, a member of the Grange, and a "knocker" of the Farm Bureau, and tried to write me a contract for beets. We had a real conversation and it ended up when I told him to go back home and fix things up with the fellows that were dissatisfied and by doing so he would get the required acreage. He insisted that the growers had got independently rich in growing beets and now they didn't know what they wanted, so I had to tell him what the growers wanted and when they got it (a fair deal, 50-50) to come and see me. He bid me good bye and we shook hands over a barbed wire fence.

I wish to ask one question: "Are the beet growers organized?" The reason I ask is because I talked the matter of growing sugar beets with our county agent as he was in favor or having them tried out here at $5.20 per ton. He insisted the growers were not organized and said that he would organize them here, but there's one thing I am sure of when it comes to organizing the sugar beet growers here he will have to get out a bench warrant to find the growers.—Joe Switalski, Manistee County, Mich.

PAY EACH WHAT HE EARNS

I WOULD like to say a word in behalf of "Mr. Warnock" of Presque Isle county. I think he has struck the nail on the head. When everything is run economically, and for the benefit of all not for a few, then the people in general will have some heart to work. Let everyone get paid for what they produce. If it's $5 or $10 per day let it be that and no more, and those that do not work with hand or brain, that is, those that are able to perform a day's work, and those that will not work, shall not eat. Not let a few "stalwarts" be the means of impoverishing the many, same as our system is composed today. A few rides the backs of the many, get their living by the sweat of some other one's brow. You can call it what you are a mind to but that is the only remedy.—S. H. Slagle, Harrietta, Mich.

—Over in Russia right now they are having an interesting experiment right along the line which Mr. Slagle suggests in his letter above. Everything was usurped by the revolutionary government. The rich class or so-called aristocray of Russia was driven penniless into the streets from their homes and palaces. The czar, his family and many, many thousands of men and women and children were murdered in cold blood. The government took over all industry and incidently, demanded of the peasants, who filled the soil, a part of all they raised. All men were supposed to be equal. The government took all and provided all. Incentative, ambition and success are unknown in Russia. How has this Utopia worked out?

The communists have killed more people in their five years in power than the czars did in fifty. Russian money is valueless. America has been feeding 11,000,000 starving Russians and more than that number have died unfed. Conditions in Russia can hardly be described. Many hundreds of misled persons, who believed everything was wrong in these United States, left here and got into Russia one way or another. Once in awhile one of these deluded persons escapes out of Russia or smuggles a letter home to friends. If you have any idea that a revolution would make the United States a better place to live and work in, if any red-flag waver has touched home in your heart with one of his lies, go to a library and get all the information you can on what has happened in Russia. It ought to cure the sensible people of the world from following hair-brained fanatics for several generations to come. Step by step, America is leading the world towards the perfect form of democratic government, but a jump towards the millenium will land us where Russia is today—in the scrap-heap!

POISE

An apt definition of poise is: The quality that keeps a hostess smiling when a departing guest holds the screen door open and lets the flies in.—Everybody's Magazine.

IF YOU HAVE ONE—TELL US!

As it is getting difficult in many counties to find qualified men who care to serve as commissioner of schools, may we not have some articles from people living in counties having women commissioners who are getting good results? Subscriber, Petersburg, Mich.

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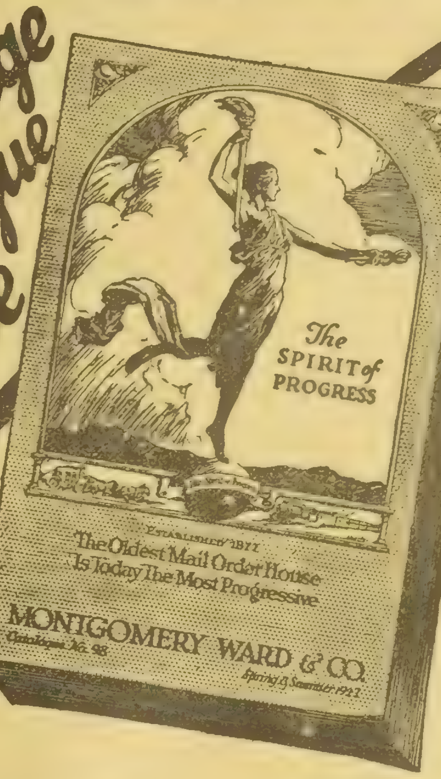

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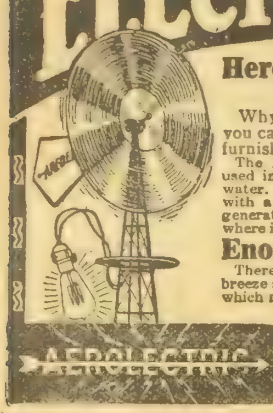

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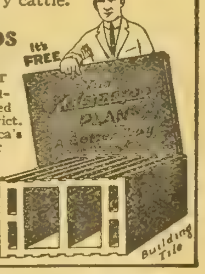

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FRUIT AND ORCHARD

Edited by FRANK D. WELLS

SOME NEW APPLES

THE Delicious may still be classed among the new varieties, though it is now widely known and deservedly popular. The large demand for the trees which nurseries have reported make it evident that within a brief time the fruit will be one of the common apples in the Great Lake district, but that need discourage no one. It is impossible that the supply will equal the demand for years to come..

While the fruit has received most attention as a dessert apple, it has other uses as well. It is not trat enough for sauce and pies, but for baking it has few equals. Indeed, if anything can bring the baked apple into the place it deserves on the American table it will be this variety.

The tree is a good grower when on heavy soil, but not one of the early bearers. However, if one has thrifty stock of any kind he need not wait long, for the Delicious responds generously and quickly when top worked. This is something that has not received the attention it deserves. Large trees of undesirable varieties, so long as the wood is sound, can by grafting be changed into profitable members of the orchard in three or four years. There are many such trees. The coming spring will be a good time to begin.

Golden Delicious

The Golden Delicious is correctly named, in so far as the apple is concerned, but names so nearly alike for two distinct varieties are liable to cause confusion. The apple is a golden yellow and the flavor fine. Really, it seems as though it might have stood on its own merits, instead of borrowing from another variety by having 'Delicious' tacked upon it.

To most persons the Golden Delicious is known as a highly advertised possibility. Those who have really become acquainted with it have found the fruit a high quality and a good keeper. The tree is a wonderful grower and an early and abundant bearer.. When top-worked on strong stock it has produced apples the second year of grafting.

The value of the tree for a commercial orchard is still in doubt. Such a rapidly growing and early maturing tree may be short lived, or it may be a poor bearer as it grows older. Too much should not be expected, but it may fall far short of the claims made for it and still be a desirable variety. That it will take the place of the time tried Grimes Golden remains to be seen.

Whitten

The Missouri Agricultural Experiment Station has brought out a new apple, the result of cross fertilization 13 years ago by Dr. J. C. Whitten, using pollen of the Delicious upon Ingram blossoms. The variety has been named the Whitten. It is said to possess the size and shape, sweetness and aroma of the Delicious, also the firmer and jucier flesh of the Ingram, a combination which is hard to improve upon. By some special freak of fortune, late-blooming is added to the other desirable qualities.

The Whitten is a promising variety, but is not to be recommended for commercial planting until further test has been made, for which purpose scions or to be distributed among the apple growers of the state. The results of the coming four years will be awaited with interest. The variety may prove a valuable addition to the list of apples, or it may develop weak points that will make it useless. After so many years of waiting it is certainly to be hoped that the propagator will not be dissappointed.

ROOT GALL

IS root gall injurious? The nurseryman says it is not, the orchardist says that it is, and each prove his point by examples.

Several years ago a Michigan nurseryman selected the worst specimeans of gall he could find among his peach trees and planted them on sandy ground. They grew, bore three good crops, then were killed by a severe winter. After standing seven or eight years they were pulled out. No galls were found on the roots.

A similar test was made by a Missouri nursery. Two rows of apple trees were planted, one composed of badly diseased specimens, the others being clean. After twenty years there was no difference between them.

A pioneer nurseryman of Michigan stated that when he began business in the early fifties, trees with bunches of fibrous roots were at a premium. Nobody had heard of gall in those days.

Infected trees had been planted that had developed into thrifty, productive orchards that had stood for 60 or 70 years.

Against this evidence the orchard man puts his experience. Some of his trees have been weak, sickly or have died, the first or second year after planting. On digging them up he found galls on the roots, sometimes many and large, so that it is hard to convince him that they are harmless.

From the evidence thus far submitted it may be concluded that the gall may kill a tree or it may not. If it can easily be cut or broken clean from the root and the tree is otherwise healthy and viborous it will probably overcome the disease, but it is not safe to plant a tree with a large gall at the crown or on a main root, which has become insparable from the wood. Such trees are liable to die the first or second year.

It is unlawful for nurserymen to send out trees with galls on them and pay for such stock cannot be collected. But these much abused gentlemen should not receive too much blame. Reputable firms carefully guard against sending out undesirable stock. Nevertheless, some trees will be overlooked by the best of sorters.

The nurseryman has many troubles of his own, so it is no more than fair to suppose that the poor fellow is doing the best he knows how. If anything is wrong with his stock he should be treated honestly and given a chance to make good.

BUSH EVERBEARING STRAWBERRY

Can you tell me anything about the Bush Everbearing Strawberry? Do you think it is worth planting? Is it really a strawberry or what is it?—R. A. P., Akron, Ohio.

—The strawberry in question we have not seen, but reports regarding it are not favorable. Are any of our readers acquainted with this "wonder?" If so, we shall be pleased to hear from them. Meanwhile, go slow in planting it.

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PUBLISHER'S DESK

DID McRAE "SELL" YOU OR YOUR FARM?

SINCE last November we have had under investigation the Warren McRae Farm Agency, of Logansport, Indiana, who judged by the number of inquiries that have come from our readers, must have been carrying on extensive advertising, principally by mail, to the farmers of Michigan.

When the first of his circulars was sent us by a reader, we read them, saw that they resembled a class of so-called "farm agencies" who usually advertise under assumed names as "farm buyers," so we wrote asking for their references and also the names and addresses of Michigan farmers who had sold farms through their agency.

Some weeks passed and a letter finally arrived from Mr. McRae, in which he stated, "this is a new agency and has only been operating a few weeks. We have not made any sales as yet, but have several very good prospective buyers." A bulletin of farms offered for sale was enclosed and we wrote the four Michigan farm owners who had, presumably accepted Mr. McRae's proposition and sent him $10 each, to have him list their farms.

One answered: "I have not sold my farm, nor had any prospective buyers from the Warren McRae Farm Agency, however it was late in October when I listed with him." Another: "I have not heard a word from Warren McRae since the listings were given, nor of any of his so-called buyers he writes about!" The third answer said in part: "I was overloaded and needed the money badly, therefore the ridiculously low price, as it was cash that I wanted and still do want, as I must sell this property to save some other property. So he sent me a special delivery letter asking me if I still had the 880 acres and if so he would send me a buyer. ***But I have not sold it yet and the buyer has not arrived!"

Mr. McRae's letters, which many of our readers have sent in are really very clever. One letter starts off, with the address and Dear Mr. Blank, filled in by a typewriter on an imitation typewritten letter, signed in ink, supposedly, by none other than Warren McRae himself:

> "Dear Mr. Blank:—
>
> "The writer had the pleasure of visiting your section a short time ago and was very much impressed with your farming community; also the low price that farm land was selling for.
>
> "Upon his return to this State he got several of our good Indiana farmers interested in your neighborhood. These are all good farmers and hard workers, but want to get away from the high-priced land. Most of them have several thousand dollars to invest and will be ready to do business within the next sixty days.
>
> "If you are looking for good, quick sale, kindly fill out the enclosed listing form and return to me with the regular listing price of $10 and I will send the buyer direct to you and notify you when to expect him so you can meet him at the station. In case the first one does not buy, please let me know and I will keep on sending you buyers until you do make a deal.
>
> "I do not care to charge this listing fee, as I make my profits on commissions, and would not have to do so if every one was on the square and meant business, but as we do not have a representative in your section we simply have to protect ourselves against triflers, curiosity seekers and men who try to get twice what their property is worth. This listing fee is simply a guarantee of good faith and will be returned to you when your property is sold.
>
> * * * *
>
> "I only want a limited number of farms in your section for my clients that are ready to buy at once. When this number is listed the above offer will be withdrawn. Some of these buyers will want possession at once and others in the Spring. The time to sell is when the buyers are ready to buy. If you are going to be one of the lucky ones act at once."

Mr. McRae certainly lets no grass grow under his feet, for when our reader did not rush his hard-earned ten-spot back by the next mail, he received this letter dated only three days after the first.

> "Dear Mr. Blank:—
>
> "Mr. M. A. Brown is very much interested in Michigan farm lands and is doing to take a trip with his car some time within the next couple of weeks through your section.
>
> "Mr. Brown is a well-to-do farmer living in the Northern part of Cass County, Indiana. His son and a couple of friends will go to Michigan with him. Mr. Brown does not want to buy a farm for himself, but will help the other boys select a good farm home. He also informed me that there are other men in his neighborhood that are looking for farms in a cheaper section. I will call on these men at once and try and get them interested in your section as the land is a great deal cheaper there than it is here.
>
> "Some of the people that I have interested in Michigan farms were under the impression that most of the farms that I have listed were misrepresented because I did not personally inspect them myself, but when I explained that I charged a listing fee and that no one would pay a listing fee unless they really meant business and were anxious to sell, they were satisfied and are willing to spend their money to make the trip and investigate. In case these people does not buy please let me know and I will keep on sending you buyers until you make a deal.
>
> "Please hurry your listing along as I would like to get a few more listings in your section before sending the buyers."
>
> Very truly yours,
> Warren McRae.

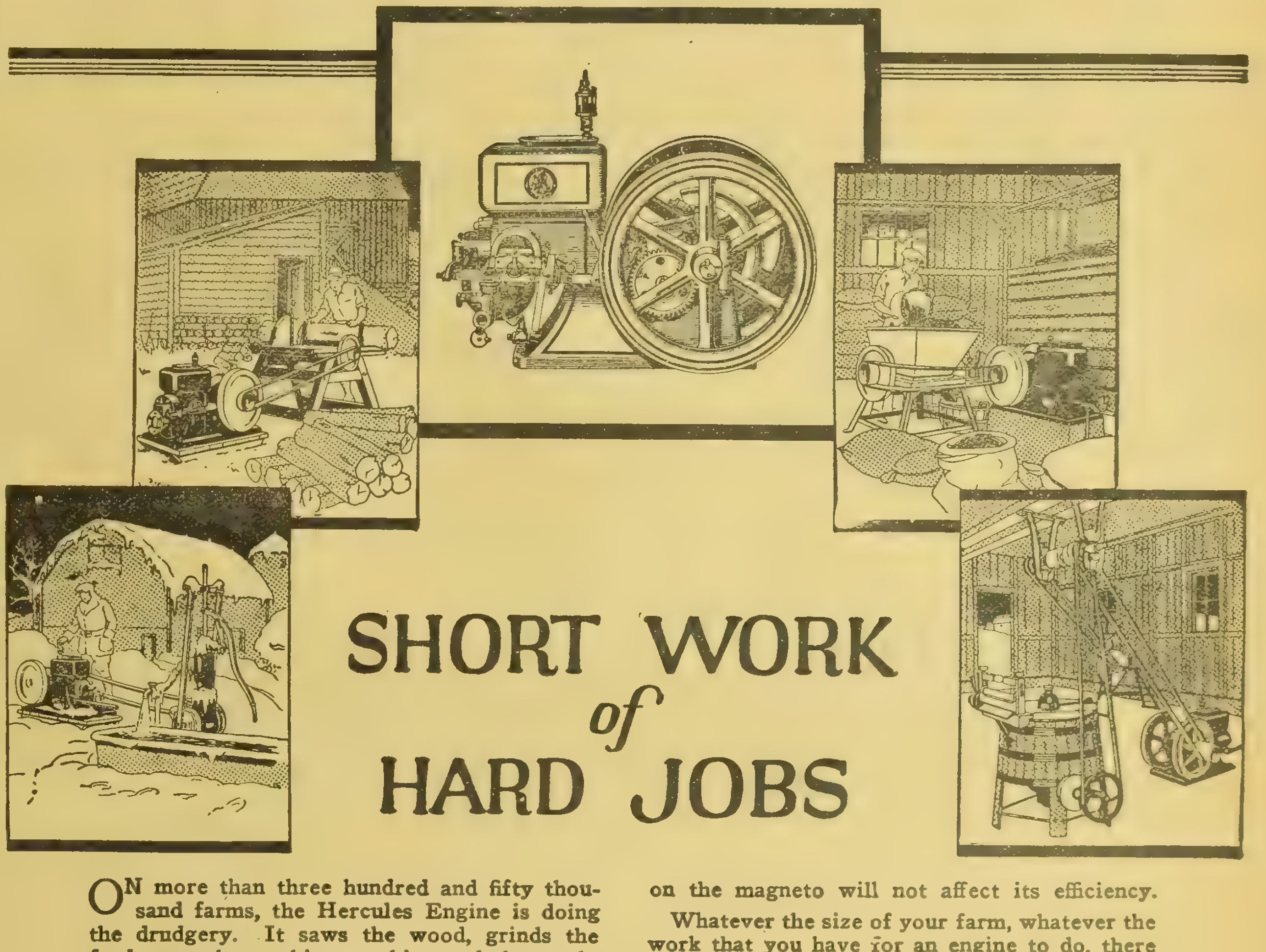
We would be interested to know if any of the readers of The Business Farmer, have sold their farm thru the McRae agency, to Paul Paulinski, of Logansport, Mr. McRae's home city. As recently as January 11th, Mr. McRae wrote one of our readers:

> "Mr. Paulinski of this city has just recently sold his farm for $400 per acre and we have him interested in Michigan as he wants to buy where land is cheaper than it is here and where land will increase in value. Mr. Paulinski is mostly interested in a well improved farm with good buildings and will pay cash for anything that suits him. He also will consider a couple of small cheap farms that can be bought right for speculation. Mr. H. L. Skinner has also just sold his farm and will be leaving for Michigan within a few days. We have several renters that will be buying Michigan farms between now and March 1st."

But the most recent disclosure, vouched for by one of our readers, is that Mr. McRae is so determined not to loose his postage, that if you do not send him $10, he gets impatient and cuts his regular listing fee to $5, and then—becoming desperate at your lack of appreciation of his offer to turn your farm immediately into golden cash, he cuts his listing fee to $2.50! But read our subscribers letter:

> "I am a subscriber of your paper and like it very much. I would now like to ask a favor of you. Could you find out for me if the Warren McRae Farm Agency, Logansport, Ind., is a swindle or are they working in good faith. I received a letter for them last Sept. claiming they had been in this locality and were delighted with conditions here, etc., and with a listing fee of $10 would guarantee a sale within 90 days, for which they charged 2½% commission. The $10 to be taken out of the commission at the time of sale. I filled out the blank for listing but told him I would deposit the $10 here in the bank in his name. If he sold the farm within 90 days I would give him the $10 besides the commission, and if he sold it within 60 days I would give him $15 besides the commission, but I could not send him the $10 as I must protect myself from fraud.
>
> "They did not answer this letter. After a little while I received another letter saying that for a certain number of days they had cut the listing fee to $5 and urged me to act quickly as they knew of men with means who wished to buy farms. I did not answer this letter. After a while I received another letter saying that for a certain time cut the listing price to $2.50. I filled out another blank taking more pains and telling things I neglected in the former.

(Continued on page 23.)



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You may send me entirely free a Sample Treatment of your stimulating application for Rupture.

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30 days' free trial—then, if satisfied, only $7.50 and a few easy payments – AND – the wonderful Belgian Melotte Separator is YOURS.

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Catalog tells all—*write.*

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Catalog FREE

Write for new Melotte catalog containing full description of this wonderful cream separator and the story of M. Jules Melotte, its inventor. Don't buy any separator until you have found out all you can about the Melotte and details of our 15-year guarantee which is infinitely stronger than any separator guarantee. Write TODAY.

Runs so easily, bowl spins 25 minutes after you stop cranking unless you apply brake. No other separator needs a brake. Bowl chamber is porcelain lined.

The Melotte Separator, *H. B. Babson, U.S. Mgr.* Dept. 3302, 2843 W. 19th Street, Chicago, Ill.

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— 26 —

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1 mile south Shepherd—1-2 mile from Kennedy stop on Ann Arbor R. R.

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AN AGRICULTURAL PROGRAM FOR AN INDUSTRIAL STATE

(Continued from page 7.)

agriculture within the state are directing their efforts. When the program has been carried out the industrial cities and towns of the state should be more abundantly supplied with food products of a higher quality than they have ever enjoyed before. These should be furnished to them at prices that are reasonable and that will pay the farmer a profit far greater than he could make by producing for the foreigne market. This is Michigan's program for taking her farmers off the international market.

The other source of relief for the farmer is to be found in his costs of production. These are, upon the whole, far larger than they need be in view of the advance which scientific agriculture has had and of the methods which our best farmers are practicing. An industry may prosper, even when prices are falling, provided it can reduce its costs. The automobile industry is a good example; it is selling its product at less than prewar prices, yet is is one of the most prosperous lines of business today.

Though it is impossible to prove absolutely that the prices of agricultural products may fall during the remainder of this decade, it would be the sheerest folly to base any agricultural program upon an assumption of rising prices. Even now prices of agricultural products are twice as high as they were during the '90's, and 60 per cent above the decade of 1900-09. They are 38 per cent higher than they were in the five-year period of 1910-14. The gross value of agricultural output in 1922 is 65 per cent higher than in the half-decade 1910-13. Though the prices of farm products may attain a level slightly higher than at present, there is no reason to expect any pronounced or constant rise during the remainder of this decade. Profits must be increased, if at all, through the reduction of costs.

Checking Up Hens and Cows

Fortunately this is quite within the mounds of possibility. To anyone unacquainted with the technic of scientific agriculture and with the practices of our best farmers, it is startling to learn the wide range of difference that prevails among the productive units with which the farmer carries on his business. An ordinary flock of one hundred hens normally contains thirty that lay no eggs whatever. A man trained in poultry can discover these by inspection. If these hens are segrated the seventy remaining ones will lay as many eggs as did the one hundred. The average production of such a flock will be about 600 dozen eggs a year. Obviously the mehe elimination of the culls has increased the average production per hen from six dozen to almost nine: and it has decreased the cost of production by approximately one-third. Furthermore, your poultry expert will find ten hens out of the flock whose everage egg production is around twelve dozen. If these hens are segrated and supplied with a cockerel of a high-producing strain the chicks from these eggs will not contain more than 10 to 15 per cent of culls. If this process if culling is repeated during a period of three years the average production of the flock will increase from six dozen to more than ten dozen eggs, and the cost of production will be correspondingly reduced.

There are further important economic differences between the output of an ordinary flock of hens and of one that has gone through this process of evolution. A hen that lays only six or seven dozen eggs will produce most of them during the months from March to June inclusive. Even the crows lay eggs at this season of the year, and it is the season of overproduction and low prices. The hen whose production amounts to twelve dozen or more a year will produce a substantial portion or her output during the months from November to February. This is the season of the year when the demand for eggs must now be satisfied largely out of cold storage eggs, and fresh-laid eggs bring a fancy price. The output of a hen that lays twelve dozen eggs will ordinarily sell upon the market for three times as much as that of the one that produces only six dozen.

Michigan has 10,000,000 hens, and they now produces 60,000,000 dozen eggs. It has on its Agricultural College faculty one of the ablest poultrymen in the world. There is no reason why a like number of hens should not be producing 100,000,000 dozen eggs by the end of three years. To accomplish this we must have a tremendous campaign of education which shall aim to reach practically all the 196,000 farmers in the state. This will cost $50,000 a year for the next three years; and the legislature will be asked to appropriate this amount within the next few months. Surely there can be no question about the wisdom of the expenditure, for if the program succeeds in accomplishing only half what is hoped for, it will increase the income of the farmers from this source alone more than $6,000,000 a year.

At this point someone is sure to raise the objection that such a campaign of efficiency in production is self-destructive for the farmer because it will increase production to the point where the decline in price will offset the decrease in cost. Though this will benefit the consumer it does not necessarily help the poultryman; indeed his last state may be worse than his first. And this might be the case if this were a program for the whole United States; but we are formulating a program for only a single state. Besides this, the methods here outlined will probably be applied quite universally within the next decade. The road to success for any one state in such a situation is to enter upon the program first and to push it more vigorously than anyone else, for a general improvement in the methods is bound to lower prices. Profits can be maintained only if the reduction in costs proceeds as rapidly as the fall in prices. Time is of the essence in this situation, so that those who start earliest on a campaign for cost reduction will find that their profits are increased. Those who reduce their costs only when they are forced to do so by competition will suffer a decline in profits.

The situation in the dairy industry illustrates well the possibilities of reduction in costs. The State of Michigan has 800,000 dairy cows two years old and over. They produce 3,600 pounds of milk, on the average. The total output for the state, therefore, is somewhat under 3,000,000,000 pounds. This average of 3,600 pounds is made up of cows that give 20,000 pounds of milk a year, and of others that give 16,000 and 12,000 respectively. There are large herds in the state that average 10,000 to 12,000 pounds of milk a cow. No man is considered a successful commercial dairyman unless his output averages 6,000 pounds an animal. And yet it must be quite obvious that if there are many cows which produces 6,000 pounds of milk or more, at least half of all the cows of the state must yield less than 3,000 pounds, in order to bring the average down to 3,600. These cows that give so low a yield are being fed and cared for at a loss. Much could be accomplished to increase production and decrease cost through better feeding; but no phenomenal decrease in the cost of milk can be obtained until 400,000 scrub cows that are now grafting upon farmers' time and effort are eliminated and replaced by animals of superior breeding.

Raising the Average of the Herd

To accomplish this is undoubtedly a slow process, for it involves testing all our dairy herds with a view to discovering the unfit individuals. Two hundred thousand cows are so poor that they can be eliminated simply by inspection. If we can induce our farmers to sell these for beef during the next year or two, and to practice better feeding, we shall probably produce as much milk with the 600,000 cows remaining as we are now getting from the larger number.

But the great improvement must come from superior selection and breeding. It is nothing more or less than a problem in eugenics. These grafters, or scrub cows, are what they are very largely because they are the offspring of scrub sires. Fortunately, monogomy does not prevail in the dairy industry, so that it is possibly to attack the problem simply through the sire. There are at present 24,000 dairy bulls in the state. Of these, 16,000, or two-thirds, are scrubs that are not fit to be fathers of dairy cows. If they can be eliminated within the next year or two and replaced by pure-bred dairy sires of good breeding, an immense step will have been taken toward a reduction in the cost of producing dairy products in the future. The Agricultural College, through its extension department and the county agents of the state, has for some time past been planning a state-wide series of bull funerals for these scrub sires. The plan is to have these animals brought to the market and sold for sausage meat, and to leave in each community at least one pure-bred sire of good lineage. There-after there must be an intensive campaign for the elimination of scrub cows and for better feeding. Such a campaign should increase the net profits of the dairy business by $15,000,000 a year during the next two years, and by twice that amount in four years.

The crux of these programs for the lowering of production costs is the fact that the efficiency of the individual productive unit varies so widely. This is a stubborn physical fact, the economic implications of which are of tremendous import. The productive capacity of hens varies from 300 eggs down to zero. Even the ordinary flock will vary from 180 eggs to zero.

This variation is by no means confined to the animal kingdom. It holds for seed quite as truly. The necessity for selection there is just as great and the possible results are just as striking as in the animal kingdom. The situation prevails even as between two crops. There are more than 1,500,000 acres on old and established farms in the state of Michigan which do not produce crops worth ten dollars an acre, but which should produce annually thirty dollars' worth of alfalfa. Besides producing a profitable forage crop these old and run-down soils would be renovated and restored. At present there are only 350,000 acres of alfalfa in the state. We must have an aggressive program directed to the sowing of 400,000 acres a year for the next four years. Michigan can raise alfalfa profitably at a price that is no greater than the cost of freight and handling charges from the points where it its supply ns now grown to the point of consumption within the state.

No doubt the reader has questioned before this why it is necessary to formulate programs and legislate public money to put into effect practices that are sc obviously to the benefit of the individual farmer. If the question is one of defending the use of public money for the promotion of more economical production of agricultural products the answer must be that an abundant food supply at a cheap price is a matter of public interest for which it is quite legitimate to spend public revenue. It must always be in the public interest, too, that the production of public necessities that go to make up the standard of living, whether food, clothing or shelter, shall be effected with the minmum of toil and labor.

If the problem is not that of defense, but of explaining why the farmer has neglected to do of his own initiative what is so obviously to his own self-interest the answer will be found in the nature of the organiza-

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Beats Electric or Gas

A new oil lamp that gives an amazingly brilliant, soft, white light, even better than gas or electricity, has been tested by the U. S. Government and 35 leading universities and found to be superior to 10 ordinary oil lamps. It burns without odor, smoke or noise—no pumping up, is simple, clean, safe. Burns 94% air and 6% common kerosene (coal oil).

The inventor, A. R. Johnson, 609 W. Lake St., Chicago, Ill., is offering to send a lamp on 10 day's FREE trial, or even to give one FREE to the first user in each locality who will help him introduce it. Write him to-day for full particulars. Also ask him to explain how you can get the agency, and without experience or money make $250 to $500 per month. (Adv.)

tion that prevails in the agricultural industry. The average manufacturing establishment in Michigan employs more than sixty men. Its output is sufficient to enable it to pay for all the materials it uses, and to leave $150,000 for the payment of salaries, wages, taxes and interest, and to provide for depreciation. What remains constitutes profits. The organization of the farming industry is very different. There are only 35,000 people engaged on our 196,000 farms; and this number includes the farmers themselves. Their average annual sale of products does not, at this time, exceed $2,500 a farm.

Expert Guidance Needed

It is clear that most of the manufacturing establishments have enough at stake and command an income that enables them to employ managers and professional men who shall keep the processes of the establishment abreast of the discoveries made by science pertaining to the line of manufacture in which the concerns are engaged. As long as we have research laboratories and technical schools we shall have a continually advancing body of knowledge and a supply of professional men who stand ready to sell their services to those who desire the latest advances of science incorporated in the art of manufacture. Ordinary commercial motives move the individuals concerned to avail themselves of the services of these men.

But in agriculture, where the farmer is not only manager of the establishment but constitutes its chief laborer as well and where the gross money income is less than $2,500, it is apparent that the individual farmer will not hire the services of scientists and other professional experts. Something can be done in this direction by co-operation, but for the most part ordinary commercial processes, under the urge of self-interest, will not insure that the advances made by scientific agriculture are incorporated in the every-day processes of farming. If they are to be so incorporated this must be accomplished in pursuance of public policy and at public expense. Our agricultural colleges are not only institutions of research and learning; they, through their extension departments and the county agents, must render to the agricultural industry a professional service comparable with that which the manufacturer hires upon the market. No industry organized on the small scale that prevails in agriculture will keep pace with the rapid progress of our modern world unless this public service is rendered it.

In the past the knowledge of the scientist and the practice of the best farmers have been incorporated into the industry all too slowly. The reason has been that the various institutions charged with this duty have used almost exclusively the methods of education. They have printed bulletins and sent them to those who wrote in concerning their problems. If no bulletin answering the inquiry was available the technical expert in whose field the problem lay wrote to the farmer. If the problem was new and of sufficient interest, field men were sent out to conduct research on the spot. In this manner only a very small number of the managers and operators of our farms have been reached. The average farm still lags far behind the best practice, and has availed itself to a disappointing degree of the best that is known about agricultural production.

Co-operative Effort

Of late the Department of Agriculture and the colleges have supplemented these methods of education by the methods of publicity and propaganda. Michigan expects to rely upon these methods to a large extent in carrying through its program for taking the farmers off the international market, and for reducing their costs of production. They must have skilled assistance in analyzing their local markets, which have grown so rapidly and become so complex that the average farmer can afford neither the time nor the money for their analysis. They must have continuous and effective agricultural research, and they must have a profession of adequately trained agricultural specialists. But beyond this they must be made conscious of the possibilities that await the man who will readjust his production to the new demand that has grown up at his door. He must be made to realize the wastefulness of his productive methods and the possibility of reducing his costs and increasing his product by the practice of better ones. To accomplish this the farmers must be organized into groups along lines of their common interest. Each of these groups must set up for itself definite ends for realization.

It is just at this point that the co-operative spirit which has been so greatly in evidence during the past few years will find its chief field of activity and usefulness. People must be made conscious of this program, of its value, and of the importance of the methods through which it will be realized. They will be brought to this state of self-consciousness by co-operative endeavor and discussion. Such a program of publicity and propagonda will be expensive, measured by the standards of the past; but it should return twentyfold every dollar spent. In our endeavor to help the farmer we have poured water into the sand in driblets, as it were. We can never create a river in that way.

Political action plays small part in this program. It may just as well be frankly stated that those who have evolved it have but slight confidence in most of the political action that is being proposed for the benefit of the farmer. The spirit of co-operation and of interest in agriculture which led people to political action, and which culminated in the formation of the farm bloc, is significant. It has brought about social cohesion among the group and has stimulated an interest in agriculture that will lead to fruitful activity. Every great intellectual movement must have as its motive power a reservoir of emotional heat. Considered from this point of view our political activity has been of great benefit. Considered from the point of view of any practical legislative suggestions now before the public the results are bound to be disappointing. We in Michigan shall pin our faith primarily to a program that proposes to take our agriculture off the international market, and that looks to the reduction of costs as one of the chief roads to the maintenance of profits.

BEAVER CULTURE

ALTHOUGH the practicability of beaver farming has not been fully demonstrated, the U. S. Department of Agriculture believes that the business of raising beavers for their fur may develop, under proper control measures, into a profitable branch of fur farming. With as small beginning, the enterprise seems to promise an advance to good returns and even greater possibilities.

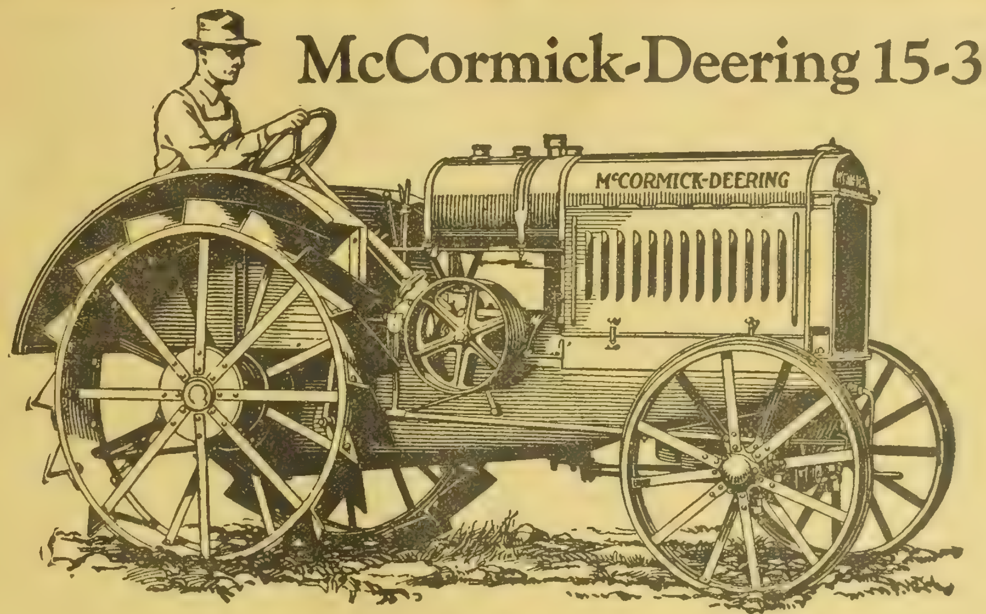
A fertile field for beaver culture may be found in connection with projects for the reforestation with conifers of burned or cut-over timber-lands. Many of these areas, cleared by ax or fire and later covered with a second growth of aspen, willow and pin cherry, are for the time considered almost worthless. Over much of the northern border of the United States and still larger areas of Canada where such land is found it is generally unsuited for agriculture and would not pay taxes until covered by valuable forest timber, but would supply ideal food for beavers, and if stocked with them could be made to yield an income while the process of reforestation is going on.

The animals should not be introduced or uncontrolled into places where their activities may menace irrigation or power ditches, important road or railroad grades, or agicultural districts. A suitable food supply and permanent water should be assured.—Dakota Farmer.

THOSE WHO FAIL

The farmer who takes everything out of the soil, and gives but little back to it; the one who neglects to make the home attractive to the young folks, gradually driving them to the city—all these, and then some, are but examples of farmers who fail to render a maximum they they must give.—A. F. Sheldon.

You can not do wrong without suffering wrong.



McCormick-Deering 15-30

A Three-Plow Tractor With
Ball and Roller Bearings
at 29 Points

In developing the McCormick-Deering 15-30, the Harvester Company has produced a tractor which gives maximum service and economy in operation. The features in design of this tractor are the result of field experience gained through 18 years of contact with tractor farming conditions. Ball and roller bearings have been used at the points of high speed or extreme strain, and all other parts have received the same consideration. The resultant smooth-running, modern tractor meets the many power requirements of the present-day farm.

Practical design, ease of operation and handling, make the McCormick-Deering tractor an ideal three-plow power unit. It also develops a surplus of power to handle a great variety of belt jobs (threshing, silo filling, husking and shredding, feed grinding, etc.) and its smooth, flexible operation and increased speed make it a leader for all kinds of draw-bar work.

You will want to know more about this latest McCormick-Deering tractor. Ask the McCormick-Deering dealer for complete details or write for our new catalog.

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HER THIRD BIRTHDAY

By Sir Milliam Watson

(One Hundred Poems)

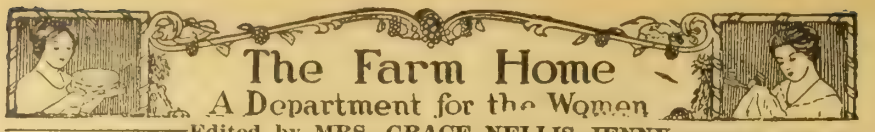
My tiny lady, can it
Be true that you and I
On something called a planet
Are somewhere in the sky?

Yes—and at such a tearing
And madcay speed we've spun,
That you with dreadful daring
Have thrice been round the sun.

Nay it yet more amazes,
That my far-venturing girl
Can be as fresh as daisies
After so wild a whirl!

And now 'neath western billow
The sun is put to bed
And you, too, on your pillow
Must lay a golden head.

Ah, tears—they come so quickly
For grief so quickly gone!
Yet joys have rained as thickly
For you to dream upon.



The Farm Home
A Department for the Women
Edited by MRS. GRACE NELLIS JENNY

THE CONQUEST OF FEAR

I HAVE just finished reading the above named book, written by Basil King and feel that when one has happened upon anything, so reasonable and so convincing, it is selfish not to pass the knowledge of it on, especially as the ideas set forth in the book if put into practice would certainly make many people happier, and as the author says even richer, according to the author.

Anyone and I believe that means every one who fears for his health, his family, or his business, who fears the future, who fears to live or fears to die and who reads this book, with an open mind, will receive some benefit from it.

I am going to print a bit from the first chapter but to give an adequate idea of his philosophy would not be possible in this column. We are neither selling nor advertising the book—I am just passing a good thing along.

"When I say that most of my life I have been a prey to fears I take it for granted that I am expressing the case of the majority of people. I cannot remember the time when a dread of one kind or another was not in the air. In childhood it was fear of going to bed, of that mysterious time when regular in life was going on down stairs, while I was buried alive under sheets and blankets. Later it was the fear of school, the first contact of the tender little soul with life's crudeness. Later still it was the experience which all of us know of waking in the morning with a feeling of dismay at what we have to do on getting up; the obvious duties in which, perhaps we have grown stale; the things we have neglected; those in which we have made mistakes; those as to which we have wilfully done wrong; those which we weary or bore or annoy or discourage us. Sometimes there are more serious things still; bereavements, or frightfully adverse conditions, or hardships we never expected brought on us by someone else.

It is unnecessary to catalog these situations as we at all times in our lives have to face them daily. Fear dogs one of in one way and another, but everyone in some way.

Look at the people you run up against in the course of a few hours. Everyone is living in fear. The mother is afraid for her children. The father is afraid for his business. The clerk for his job. The worker is afraid of his boss or his competitor. There is hardly a man who is not afraid that some other man will not do him a bad turn. There is hardly a woman who is not afraid that the thing she craves may be denied her, or what she loves may be snatched away. There is not a home or an office or a factory or a school or a church in which some hang-dog apprehension is not eating at the hearts of the men, women and children who go in and out.

If, therefore one has the feeblest contributions to make to the defeat of such a foe it becomes difficult to withold it."

This is just part of the opening chapter and from there the author goes on thru 270 pages to give a cure for fear, one that has not only been a curative to him personally but to his knowledge to hundreds of others. He does not claim the ideas are original with him.

They have come from many sources some deep in the past, others of so recent a date that the very day or hour when they revealed themselves is known. He has just put these ideas thru the mill of his own mind developed and practiced them and benefitted to such an extent that he has constrained to broadcast them. The dominant idea on which he builds is, that every one is necessary to his Creator and to his community, each one has a part to play and a destiny to work out and therefore by putting himself in harmony with the plans of his Maker has for him he draws upon such resources as he cannot estimate. He may put himself in a state of mental quiet and trust and draw upon a limitless supply of devine energy, drawing unto himself the health, success and happiness he craves.

BRINGING UP CHILDREN

THIS subject is as old as life itself, animal or human. The dumb animals of the wild train their young and the bear of today is the same in nature as a hundred years ago.

But in the human, well, we hear parents make the remark. I don't know where my children or child got such ideas, I never was that way, showing that there are influences in human life not met with in animal life, or rather these influences are not dealt with in the human as in the animal.. A story will illustrate. Preacher No. one, proud father of a little boy called with his wife and boy on preacher No. two who had two children, boy and girl. When bed time for the children came preacher No. two said to his children, it's your bedtime now, put away your playthings and get ready for bed. They immediately complied without any resistance. Whereupon preacher No. one remarked to preacher No. two. will they always do that? to which preacher No. two replied "Will they." We furnish the will, they do the rest. The point is parents do not furnish the will while the child is yet too young to judge and use his will correctly. We furnish them a home, clothes, food; watch over them and guard them against injury, why not furnish them the will while they are dependent little folks. We mistake temper for will. Temper is a good thing, in steel it is a condition for which steel has been brought by a process of heating, cooling and drawing until we know just what its temper is. Until then it is of no use. So with children. We can help temper them.

Remember that every proclivity a child displays is the direct product of their subconscious mind and this product is in turn the result of repeated thot of their forbears.

What I am in my subconscious mind up to the age of reason is what as before stated was the oft repeated conscious thot of my progenitors. What I am in my subconscious mind after I reach the age of reasoning is what I allow to reach my subconscious mind, thus there is a great work for us to begin at that age, take an inventory of our proclivities and if we find there undesirable ones, supplant them with desirable ones, always remembering the law that two things cannot occupy the same place at the same time. Understanding and doing this work in myself I can start the work for my children earlier in their life thus saving them much hard work later in life. "It is man's privilege to take part in the process of his own creation." We enter and leave this world without having anything to say about it, but we have all to say about it while we are here and if we do the work above stated while here we will be kept busy. As to the bouyancy of children spoken of by Mrs. Bacon. Be glad of it sister, you cannot guide a ship unless it is under motion.—M. A. Connor, Grand Haven, Michigan.

SPRING FASHIONS

WHILE Winter still lingers in the lap of Spring we know that in a few short weeks we will have to lay aside our drab winter clothing and blosson out like the crocuses. A little planning and a few patterns chosen from our paper or our splendid new catalog, which by the way has been reduced to 12c will make the accomplishment easier.

Some of our new blouses are very gay. Made of crepe de chine in most gorgeous colors and designs. Egyptian figures, Paisley-shawl patterns and arebesques that make one gasp and say—what next? I saw one that looked like a snapshot of the congregation on the tower of Babel, so varied and grotesque were the figures. The windows show many pretty sport skirts of silk, and wool. In cottons, pique, poplin, and gabardine are in use as formerly. Vieylla flannel makes a splendid skirt and blouse for summer wear, a plaited or plain skirt buttoned on one side and a blouse such as those pictured in the last issue, will make a practical and pretty outfit. This flannel will neither fade nor shrink and of course wears exceedingly well. It comes in the lovely useda green so much worn this coming summer and in many other colors. I saw one very attractive design, the skirt of of cream colored wool, side plaits all around, worn with a pretty green crepe de chine blouse. A soft white hat completed the costume. In cloth suits of dark material one sees the plain straight lines in coat and skirt and long, close sleeve.

UNDER PONTIUS PILATE

My letter to the publishers of this book, about which we had an inquiry, was answered as follows:

Dear Madam:—

We are in receipt of your favor of the 20th regarding the authenticity of the letters published in Mr. Schuyler's book "Under Pontius Pilate." We beg to advise you that the letters are not authentic but are the creation of the late Mr. Schuyler, based on historical documents which came into his possession. We believe they are authentic as far as the descriptions of the happenings are concerned, but they are not translations of actual letters. Very truly,—Funk & Wagnalls Co. Per N. G. D.

CORRESPONDENCE COLUMN

Your offer to print anything that promises to be of mutual is fine, I think our Editor is doing her share in offering those fine patterns, for women and children at that price. Others charge war prices. Would Ye Editor allow us women to send in our favorite quilt patterns and could we have them illustrated? Would we have to send them pieced of cloth? It would help the older women pass away many tedious hours, piecing and designing. There is no farm paper that does print quilt patterns and your subscribers would surely be pleased.—Reader.

—We will be glad to make up the patterns sent in, just send a drawing, having all lines carefully and clearly marked using a good ruler so that the lines may be perfectly straight and mark the length of each line in inches.

Notice Please

A pattern here for Mrs. D. A. Nichols. It was sent to wrong address. A stocking foot pattern and child's romper suit also wrong address. I will forward them if given correct address.

The Michigan Agricultural College is sending out a splendid bulletin on home canning, taking up fruits, vegetables and meats. Full directions are given and illustrations of equipment used. The One-Period Cold Pack method is given preference. Canning, drying and brining are the three methods resorted to in preserving food but the first is recommended as it keeps the products in a condition more like freshly cooked foods, also they can be prepared for the table so much more quickly. Send to the M. A. C., East Lansing, Michigan, for this bulletin. It is Club Bulletin No. 10.

Mrs. J. A.,—I read your request for a preparation to make labels stick to syrup cans. We had the same trouble until we used cooked starch, we apply it with a lather brush, the same as used for shaving. The brush can be cleaned afterward. The labels stick now.—Mrs. G. D., Woodland, Michigan.

I would like to find out thru the columns of your paper, the M. B. F., what was the name of the Secretary of the Treasury, under the Lincoln administration, also who originated the idea of the (Greenback money.) It was before my day, but I think it was during the war. I am anxious

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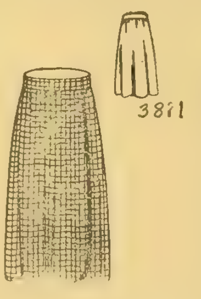


A Practical Utility Skirt

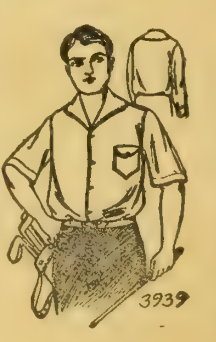
3871—Here is a pleasing version of the "wrap" skirt, which is made in one piece and closes like a coat, or wrap. The advantage is at once apparent. No disarranged hair or blouse, just ease and comfort in adjusting and removing this skirt. It may be made with or without a back seam. The style is nice for sports materials, as well as for taffeta, moire, prunella and crepe. It is excellent for wash materials.

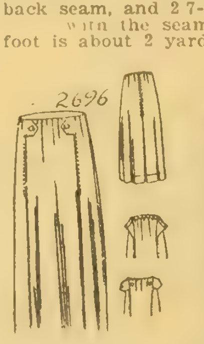
The Pattern is cut in 8 sizes: 24, 26, 28, 30, 32, 34, 36, and 38 inches waist measure. A 30-inch size requires 2 5-8 yards of material 44 inches wide if made without back seam, and 2 7-8 yards of 42-inch if with the seam. The width at the foot is about 2 yards.

A Desirable Model

2899—Men's and Boys' Shirt, with Two Styles of Collar and with Regulation or Coat Closing. Suitable for madras, percale, linen, cambric, silk, soisette, or flannel.

The Pattern is cut in 8 sizes: for Men: 36, 38, 40, 42, 44, 46, 48 and 50 inches breast measure, and in 4 sizes for Boys: 10, 12, 14 and 16 years. It requires 4 3-8 yards of 27 inch material for a 36 inch size.





A servicable Practical Skirt

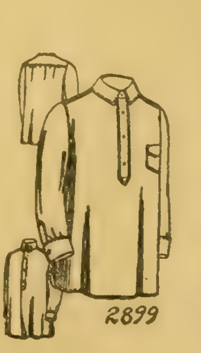
2696—This is a splendid model for maternity or invalid service. The side gores and back have plait extensions at the seams. Serge, broadcloth, gabar dine, satin, velveteen and crepe, also wash fabrics are good for this style.

The Pattern is cut in 7 sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. Width of skirt is about 2 1-2 yards at the foot, with plaits drawn out.

A Serviceable Practical Model

3939.—Madras, percale, gingham, soisette, poplin, linen, pique, flannel and silk are nice for this style. The short sleeve is a new feature and fine for warm work.

The Pattern is cut in 7 sizes: 38, 40, 42, 44, 46, 48 and 50 inches breast measure, neck measure to correspond in sizes, 15, 15 1-2, 16, 16 1-2, 17, 17 1-2 and 18. It requires 3 1-2 yards of 36 inch material for a 17 inch neck size.



to know and will be very glad if some one can tell me, and oblige.—A sonstant reader of your good paper—Mrs. S. H. Andrews.

—Salmon P. Chase was Secretary of the Treasury under Lincoln. It was he who originated the Greenback money.

F. Pierce—After the war, the the Kaiser was sent to Doorn, Holland, and remains there, virtually a prisoner of war, having freedom only of his house and grounds. He is obliged most simply.

His first wife died since the war and recently he married again, a widow much younger than himself. She has a family of children. The report is current that they do not get along very happily, in fact, that they have virtually separated, living in entirely different parts of the domicile. It is also reported and no doubt true that his health has failed, that he is broken in mind, spirit and body, practically deserted by his children who entirely disapproved of his second marriage.

Mrs. M. C.—Many thanks for your good letter. You may be sure that when I am in your locality again I shall be most happy to pull that latch string you speak of. I can imagine what your view must be and surely would enjoy seeing it and you.

Does any reader have directions for making hominy with soda? I would like to print them.

Mrs. H.—Peroxide will bleach the hairs and in time kill them. Electricity kills the roots but is rather trying. There are many good and safe depilatories on the market. If you wish I will send you the name of several that can be purchased at any drug store.

RECIPES, ASKED FOR

Corn Starch Cake

2 cups pulverized sugar, ¾ cup of butter, 1 cup of corn starch dissolved in 1 cup of sweet milk, 2 cups of flour, whites of 7 eggs, 2 tps of baking powder, mixed well into the flour. Cream the butter and sugar, add starch and milk, then add the whites and flour gradually. Flavor with lemon or rose.

Panned Oysters

18 to 30 small oysters, 1 tbs butter, 1 tbs cracker crumbs, salt and pepper to taste. 1 tps lemon juice, a dash of cayanne. Put oysters on in their own liquor and when they boil up add the other ingredients. Cook one minute and serve on toast.

Oyster Stew

1 quart of milk, 1 pint of oysters, butter, salt and pepper. Serves four people. Let milk get hot, then add oysters aand cook until they shrivle, add a generous piece of butter, seasoning and serve piping hot.

Canning Sausage

I will give my way that I have used for years. Having never lost a quart, I clean small casings and fill with sausage, usually the day after butchering. I fill pans and skillets and fill my oven. Then I have my jars sterilized and ready. I cook meat just enough to get the water out, do not brown, fill the cans, use the cooked out liquid to pour over the sausage in the cans. Adding lard if the liquid runs short. I put on rubbers and caps and boil 30 minutes in my boiler. Then tighten covers very tight.—Mrs. V. Lidgard.

I found the following recipe in a government bulletin on maple sugar making. It has proven very satisfactory. Purchase ungummed labels and apply paste. It does not rust the cans as acid does and it sticks.

½ oz. silicate of soda, 1 oz. corn starch, 1½ pints cold water. Mix soda and starch with a little water, add all of the water and cook in a double boiler until clear. Yours truly.—Mrs. Fred Rowlander.

AWAY WITH SPOTS

HAVING received so much help from our paper, I feel that I must do my bit to help some others. I am sending some stain removers and hope these will be of help to those inquiring about them.

To remove ink—Melted tallow or butter and salt.

To remove oil—A few drops of chloroform will remove the oil from the finest goods. Place a piece of blotting paper under the spot and drop a few drops of chloroform on soiled spot.

To remove rust stain—Make a paste of cream of tartar and water, cover the spot and hang the article in the sun, when dry brush off, repeat this until the spot is removed.

To remove mud stain—From white goods by dipping in kerosene before washing. From the colored clothes by letting the mud dry, brushing out as much as possible and covering the spot with a mixture of salt and flour, let stand several hours in a dry place and then brush off.

To remove tar—Rub the spot with lard, let stand a few minutes then rub to loosen tar and wash in the usual way.

To remove axel grease—Put sweet cream on white goods, leave until dry then wash with soap and water.

To remove mildew—Mix two teaspoons of baking powder with the juice of one lemon, apply and let article dry. After drying, wash and hang in the sun.

To remove perspiration stain—If the spots are of recent origin, rinsing with ammonia is usually sufficient: if the stain has been on the goods for some time, treat the stain with oxalic acid and rinse in water.

My favorite cookie recipe is for ginger cookies. 1 cup sugar, 1 cup shortening, 1 cup molasses, 1 cup of hot water, 1 tps. each of soda, salt, ginger, and flour to roll out.

Hermits—drop from spoon: 1 cup of brown sugar, ½ cup of shortening ½ cup each of molasses and warm water, 1 egg, 1 tps soda, 1 tps vanilla, ½ tps salt, ½ tps nutmeg, 3 cups of flour, 1 tps baking powder, ½ cup of fruit or nut meats.

Pancakes—Part buckwheat flour can be used, 1 quart of skim milk, 2 tablespoonfuls sugar, 1 tps salt, 2 tps. baking-powder, flour to make a batter, 2 tbls of cream will improve them.

If the lady will put a spoonful of borax in her starch, her irons will not stick I have written so much I fear you will not want to hear from me again.—Mrs. R. E. Combs.

—Indeed we will, and many thanks for all the help in your letter. In last issue there are instructions for caring for a fern.

WHAT IS YOUR MILEAGE?

THE inspiration for the motion picture was finished by a Tired Housewife to whom her husband remarked one evening. "You have nothing to do but housework. I don't see why you should always be so fagged out at night."

The wife decided that she would prove to her husband some reason for being tired. In order to do so she purchased a pedometer, hooked it to her belt, gaged to the length of her step, to measure the steps she took about the house.

In one average day's work she had taken 27,840 steps. They covered a distance of nearly eight miles. At the rate she was going she could have walked around the world in less than ten years.

This, of course, did not include the "labor of heart or hands," but it was sufficient to call the attention of her husband to the amount of actual physical energy which was being consumed in her housework and to induce him when he made an addition to the house to include in his plans a model kitchen that would save steps.

A FABLE

Having slept for three months, a boa constrictor woke up with an appitite that respected neither weak nor strong, friend or foe.

As a first victim he caught a rabbit which he devoured in his usual way, poor bunny being but a mouthful. Having whetted his appetite with this tidbit, the boa constrictor started out on the quest of further victuals. Presently he came to a rail fence and started under it. But the undigested rabbit made a lump which could not pass through the fence.

Too stubborn to back out, the reptile remained in that position until another rabbit came along and was also swallowed by the boa constrictor.

This rabbit went down as far as the fence rail and with his predecessor on the other side of the fence formed a perfect locking arrangement which held the boa constrictor so firmly that he could move neither forward nor back and fell an easy victim to a farmer who came along just then.

Moral: When you're in wrong don't hesitate to back out before it is too late.
—The Walk-Over Man.

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If they are the "big can and cheap" kind because they may mean baking failures.

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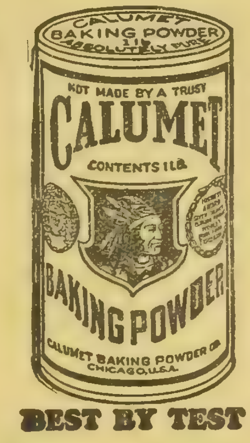
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Positively Best Flour Money Can Buy.

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DO you know? Did your last year's work show a profit? Accurate accounts are as necessary in farming as in any other business. The Papec way is simple and easy. A few entries daily in our Farmers' Record and Account Book will show you where the money goes and what returns it brings. There are 50 pages for accounts, inventories, breeding records, useful tables, etc.

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The 1923

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The new Self-feed Third Roll entirely does away with hand feeding. The new elastic Angle-steel Link Belt assures positive action—and will retain its shape for years. These and other improvements make the 1923 Papec the finest and best Ensilage Cutter ever made, regardless of price. Yet we are offering this splendid new model at a substantial reduction. Your dollars go farther when invested in a Papec. Four sizes: Nos. 10, 13, 16, and 19.

Our Catalog tells all about the 1923 Papec—shows how it will pay for itself in from one to two years. Write for it today.

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36 Distributing Stations Enable Papec Dealers To Give Prompt Service.

BREEDERS DIRECTORY

Advertisements inserted under this heading for reputable breeders of Live Stock at special low rates to encourage the growing of pure-breds on the farms of our readers. Our advertising rate is Thirty Cents (30c) per agate line, per insertion. Fourteen agate lines to the column inch or $4.20 per inch, less 2% for cash if sent with order or paid on or before the 10th of month following date of insertion. SEND IN YOUR AD AND WE WILL PUT IT IN TYPE FREE, so you can see how many lines it will fill. Address all letters,
BREEDERS DIRECTORY, MICHIGAN BUSINESS FARMER, MT. CLEMENS, MICH.

CLAIM YOUR SALE DATE

To avoid conflicting dates we will without cost, list the date of any live stock sale in Michigan. If you are considering a sale advise us at once and we will claim the date for you. Address, Live Stock Editor, M. B. F., Mt. Clemens

Feb. 17—Poland Chinas. Witt Bros., Adrian, Mich.
Feb. 21—Duroc Jerseys, Clyde Godfrey, Jonesville, Mich.
Feb. 22—Poland Chinas, A. A. Feldkamp, Manchester.
Feb. 27—Poland Chinas, J. E. Mygants, St. Johns.
Feb. 28—Poland Chinas, Chas. Wetzel & Sons, Ithaca.
Mar. 1—Poland Chinas, Archie Ward, Breckenridge, Mich.
Mar. 2—C. V. Tracey, Ithaca, Mich.
Mar. 2—Spotted Poland Chinas, C. Watson, Breckenridge.
Mar. 7—Holsteins, E. E. Butters, Coldwater, Mich.
Mar. 8—Chester Whites. Alexander & Bodimer, Vassar, Mich.
Mar. 10—Holsteins, Musolff Bros., South Lyons, Mich.
Mar. 13—Duroc Jerseys, Schaffer Bros., Oxford, Mich.
Mar. 21—Aberdeen-Angus, Russell Bros., Merrill, Mich.
Mar. 22—Poland Chinas, Sonley Bros., St. Louis.

CATTLE

HOLSTEIN-FRIESIAN

OCT. CLEARANCE SALE. WE ARE OFFERING 20 heifers and bulls. Heavy producing dams. Sire has 7 dams averaging nearly 1,100 lbs. on yearly test. Free from T. B., $50.00 and up.
WOLVERINE DAIRY FARM
Prop.—H. G. Booth Gladwin, Mich.

FACINATION FARM, SOUTH MAIN ST., Vassar, Mich. Auction Sale, Wednesday, Feb. 21, 1923, 1 P. M. 10 cows milking; 7 heifers; 3 bull calves; 1 registered Percheron stallion; 1 registered Percheron Mare. J. F. GLADY, Vassar, Mich.

Size!

Every man who makes his living milking cows knows that size is one of the best reasons for Holsteins.

Size Means:

Capacity - Ruggedness - Economical Production - Strong Calves that Live - Ability to Turn Rough Feed Into Milk - More Meat Value at the End of Their Milking Days

Let Us Tell You the Whole Story of the Holstein Cow

EXTENSION SERVICE,
The Holstein-Friesian Association of America
230 East Ohio Street, Chicago, Ill.

HOLSTEINS

FOR SALE—REGISTERED HOLSTEIN COWS give from 60 lbs. to 88 lbs. milk. $160 to $250. Would like to place where would be tested.
BACON BROTHERS, Pittsford, Mich.

DISPERSION SALE OF 35 Pure Bred Holsteins ON MARCH 7, 1923

Representing 22 years of selecting and breeding. All but herd sire are direct decendants of two cows bought one in fall of 1900 and one in fall of 1901, one of which won three firsts at Sheboygan County Fair at Plymouth, Wis., in 1905, with N. J. Jelet of Rosendale as judge; first as best Holstein cow shown, first as best of all breeds shown and first as cow giving most milk at fair. A daughter of hers won first over Meneva Beats, the cow that has won more state and national prizes than any other of the breed. A granddaughter of hers is to be sold in the sale, Neeltji Terzool Segis. She has a 7 day record of 28.46 lbs. butter and 633.5 lbs. milk, milking 99.4 lbs. her best day as a 3-year-old. There are also 2 of her sons to be sold. They are from the herd sire to be sold, Paul Pieterje Wane Princi; his dam has a record of 117 lbs. milk in a day and an average of 107 lbs. for 30 days with 30 lbs. butter in 7 days and 122 lbs. in 30 days. He has two sisters that at 2½ years of age milked 80 lbs. and 75 lbs. respectively and made 22 and 24 lbs. butter each. There are also 13 of his daughters in the sale.

The herd has passed four tuberculosis tests without a reactor and they will be sold on a 60-day gurrantee retest.

The herd is also free from abortion.

W. H. Krouse, Thorp, Wis.; Homer Green, Bronson, Mich.; Auctioneers
Write to E. E. BUTTERS, Coldwater, Michigan for Catalog.

DAIRY and LIVESTOCK

SUGGESTIONS ON CARE OF THE BROOD SOW

PROVIDE sufficient bone and muscle forming foods, such as oats, middlings, oil meal, digester tankage, skim milk, butter milk, or fine alfalfa hay, to insure healthy development of both sow and litter. The amount of fattening foods such as corn and barley should be regulated largely by the condition of the sow.

Good rations are: 1. Equal parts by weight of corn and barley, oats and middlings. 2. Nine or ten parts of corn with one part of digester tankage. By feeding fine alfalfa hay in a rack, bulg and growing constituents are added and a larger proportion of corn or barley can be used in these rations. A small amount of roots add variety and acts as a conditioner. Provide plenty of fresh water.

If the sow was in fair condition when bred, she should gain from 50 to 75 pounds before farrowing. The amount to feed cannot be stated definitely as much depends upon the individual, but one and one-quarter pounds of feed per 100 pounds live weight is a guide to follow for mature sows. Gilts should have about two pounds per day for 100 pounds live weight.

Do not allow the sow to become overly fat but keep her in strong, healthy condition. She should gain steadily throughout the period of gestation, but especially during the last six or eight weeks.

Give the sow a small amount of wood ashes, charcoal or soft coal ocassionally.

If your sows in the past have farrowed hairless pigs, add 10 grams of potassium iodide to each 100 pounds of feed given during pregnancy.

Exercise is very essential. Give the sow a fair-sized lot to run in.

Provide a clean, dry, well-ventilated, well-bedded pen. This need not be very warm. If the sows are steaming in the morning, they are being kept too warm. A portable cot gives excellent results and exercise can be induced by feeding at one end of lot and placing cot at the other end.

Do not keep more than three average-sized sows in one regular sized cot (6 feet by 8 feet) especially near farrowing time. They are liable to tramp on one another and cause abortion or kill the unborn pigs.

Do not allow the sow to become infested with lice or other parasites. Rub her thoroughly with crude oil a couple of times during the winter.

Put a sow in a farrowing pen about ten days before she is due to farrow. Place a guard rail around pen about ten inches from the floor and same distance from wall so she cannot crush the pigs against the wall. Provide a limited amount of short or cut straw for bedding. If floor is cement, cover a portion with boards to make a warmer bed.

Allow the sow exercise after being placed in farrowing pen. Lack of exercise causes constipation which causes the death of large numbers of pigs. Control this by regulating the feed rather than by drugs. A small amount of oil meal daily is a good laxative.

The sow should be watched at farrowing time and assistance given, if necessary. If the weather is cold, put weak pigs in a basket with a covered bottle of warm water or a warm brick for a short time. See that each pig nurses as soon as possible after being dropped. Do not disturb the sow even to feed, for at least 12 hours, but provide fresh water slightly warmed if weather is cold. Feed very lightly with a thin slop at first. Gradually increase the amount as pigs consume more milk. Be very careful to not overfeed at this stage as it will cause digestive troubles in the pigs and may injure the sow's urred.

As the pigs develop, feed the sow more liberally as feed fed through the sow will make larger gains in the pigs than the same amount of feed given direct to the pigs after being weaned. A good ration at this stage is 100 pounds each of ground corn or barley, oats and middlings with 20 pounds of oil meal.

As soon as the pigs begin to eat, start feeding them in a separate trough, where the sow cannot molest them. They may be fed as much as they will eat twice a day of the following mixture: 20 pounds of middlings, 10 pounds of ground oats, 10 pounds of ground corn, barley or rye with sufficient skim milk to make a fairly thin slop. If skim milk is not available, 1½ pounds of 60% digester tankage or 2½ pounds of oil meal should be added to the above ration. If ground oats are fed in fairly large proportions, the hulls should be screened out, as they are apt to cause digestive disturbances.

Remember that a brood sow worth keeping is deserving of close attention. Catering to the individual needs is what spells success with any class of live-stock.—W. E. Edwards, Animal Husbandry Dept., M. A. C.

Breeders Meetings During Farmers' Week

The 15th annual meeting of the Michigan Horse Breeders' Association was held at Michigan Agricultural College on Wednesday, January 31, 1923, in conjunction with the annual Farmer's Week.

A parade of prize winning horses owned at the college was the first event. This was followed by a judging contest in which the breeders of the state participated.

In the stallion foal class, 1st, 2nd, and 3rd went to C. M. Hicks and Son of Williamstown, Michigan, and 4th to M. A. C. In the yearling class 1st went to M. A. C., 2nd to M. A. Hatch, Okemos, 3rd to L. D. Cook, Wiliamstown, Michigan, and 4th to M. A. C. John Sharkey of Bellevue tied the ribbons.

A meeting of the Association followed the horse show. President Ray Whitney of Onondago, presiding. An address of welcome by Dean Shaw, F. T. Riddell of the Farm Management Department, M. A. C., followed with a talk on "The Results of a Survey of Michigan Farms to Determine the status of the horse and Tractor Situation." Addresses by John Sharkey of Bellevue, and John Jacobs of Lansing on the "Supply and Market for Work Horses" was followed by Jacob DeGeus, who spoke on "The Supply and Market in Registered Belgians." An explanation of the changes in the Stallion Law was given. All made up a program of unusual interest. The meeting was unique in that no outside talent was used and yet one of the most inspiring meetings ever put on by the Association. The meeting adjourned until 1:30 when after a dinner with the Exchange Club of Lansing the meeting was again called to order for the business session.

Upon motion of John Sharkey of Bellevue a rising vote of appreciation was extended Superintendent Hudson and College authorities for the splendid improvement and work being done with College horses.

Following the reading of the minutes and Treasurers report officers were elected as follows:

President, John Jacobs, St. Johns; Vice-Pres., Jacob DeGeus, Alicia; Sec'y-Treas., R. S. Hudson, East Lansing.

Executive Board: John Sharkey, Bellevue; O. E. Belle, Mason; L. C.

Delay Doesn't Pay
Break That Cold Today

HILL'S CASCARA QUININE BROMIDE

CHECKS Colds in 24 hours—la grippe in 3 days. Quickly relieves Headaches. Tablet form. Standard remedy world over. Demand red box bearing Mr. Hill's portrait and signature.

At All Druggists—30 Cents

W. H. HILL COMPANY (A-203) DETROIT, MICH.

FOR SALE—HOLSTEIN BULL CALF, weeks old. Dam 28.91 lbs. butter, sire 33 lbs. with 1,100 lb. yearly record. Price $300.00 or will exchange for suitable female.
COOK BROS., Fowlerville, Mich.

SHORTHORNS

GLADWIN COUNTY SHORTHORN BREEDERS offer the best in beef and milk strains. All ages, both sexes. **W. S. HUBER, Sec'y, Gladwin, Mich.**

RICHLAND SHORTHORNS

We offer one red, low down, thick bull calf fifteen months old, also one roan calf fifteen months old. A bargain if taken at once. Also a few young cows witr calves at foot.

C. H. Prescott & Sons
Office at Tawas City, Mich. **Herd at Prescott, Mich.**

A POLLED SHORTHORN HERD BULL 2 years old. Scotch Orangeblossom Family. Fit to head any herd. Younger ones for sale.
L. C. KELLY & SON, Plymouth, Mich.

FOR SALE—ENTIRE HERD OF SHORTHORN Cattle. Cows, heifers, and cows with calves by side. Priced to sell. Satisfaction guaranteed. T. B. tested. Write now.
H. E. LIVERMORE, Romeo, Mich.

CENTRAL MICH. SHORTHORN BREEDERS' Assn. offer for sale both milk and beef breeding, all ages. Write
M. E. MILLER, Sec'y, Greenville, Mich.

SHORTHORN CATTLE TUBERCULIN TESTED Berkshire hogs, both sexes,
SIMON G. MAICHELE, Middleville, Mich.

DURHAMS

FOR SALE—FIVE REGISTERED DURHAM bulls from ten months to one year old. I have also a few female Durhams for sale.
HENRY J. LYNCH, Mayville, Tuscola Co., Mich.

ANGUS

WE HAVE SOME FINE YOUNG ANGUS BULLS from International Grand Champion Stock at reasonable prices. **E. H. KERR & CO., Addison, Mich.**

FOR SALE—SIX YOUNG ABERDEEN-ANGUS cows and heifers. Well bred, good individuals. Price $800.00 F. O. B. Mich.
GEO. HATHAWAY & SON, Ovid, Mich.

SPECIAL PRICE ON BULLS, RANGING IN age from 8 to 11 months, until Jan. 1st, 1923.
RUSSELL BROS., Merrill, Mich.

GUERNSEYS

FOR SALE—REGISTERED GUERNSEY HEIFers at reasonable prices, also choice bull calves of May Rose breeding.
H. W. WIGMAN, Lansing, Mich., Box 52.

FOR SALE REGISTERED GUERNSEYS—ONE bull ready for service and bull calves. Herd just T. B. tested, no reaction
H. F. NELSON, R. 1, McBride, Mich.

GUERNSEY BULL 1½ YEARS OLD. SIRE and dam A. R. Typy, robust and well bred. 7-8 blood of Norman Missankee Red Nose. Price $125. Accredited herd. **A. M. SMITH, Lake City, Mich.**

JERSEYS

REG. JERSEYS, POGIS 99th OF H. F. AND Majesty breeding. Young stock for sale. Herd fully accredited by State and Federal Government. Write or visit for prices and description.
GUY C. WILBUR, BELDING, Mich.

JERSEY BULL CALVES FOR SALE. FROM 1 mo. to 12 mo. old. From high producing dams. Sired by Sunburst Arigos Majesty. Farmers prices. Write your wants to
F. S. WELBORN, R. 1, Kalamazoe, Mich.

BROWN SWISS

FOR SALE—REGISTERED BROWN SWISS heifers and cows, also one bull. Herd federal accredited. **ELMWOOD FARMS, Sebewaing, Mich.**

FOR SALE—REGISTERED BROWN SWISS Herd federal accredited. Come and see them or write for what you want. **Ervin R. Moore, Ossee, Mich.**

RED POLLED

RED POLLED CATTLE—A few choice bulls and heifers for sale.
ROYSTAN STOCK FARM,
Will Cottle, R. R. 1, West Branch Michigan

FOR SALE—OUR RED POLLED HERD BULL Cosy Ells Laddie, and a few heifer calves.
PIERCE BRO'S., Eaton Rapids, Mich. R. 1.

POLLED SHORTHORN BULLS 4 TO 12 MOS. Heifers same. O. I. C. and C. White Gilts bred for Spring farrow.
FRANK BARTLETT, Dryden, Mich.

AYRSHIRES

FOR SALE—REGISTERED AYRSHIRE bulls and bull calves, heifers and heifer calves. Also some choice cows.
FINDLAY BROS., R 5, Vassar, Mich.

HEREFORDS

PRODUCE YOUR OWN FEEDERS UNDER
EARLIRIPE HEREFORD BEEF PLAN
which guarantees maximum prices. Investigate personally the success of other Michigan Farmers. For further information write
T. F. B. SOTHAM & SONS
(Herefords since 1839) St. Clair, Mich.

RIVERVIEW HEREFORDS—**FOR SALE** Bulls, also few females. **WM. C. DICKEN, Smyrna, Mich.**

SWINE

DUROCS

14 DUROC SOWS

bred to a son of Big Bone Giant Sensation of Brookwater Farm for April and May farrow; also three fall boars. **John O. Dean, Mason, Mich., R. 1.**

SENSATION MARSI Our new herd boar. Sired by "Marsi" Reserve grand champion National Swine Show 1922. We are taking orders for gilts and sows for spring farrow bred to this wonderful boar.
SCHAFFER BROS., Route 4, Oxford, Mich.

Hunt, Eaton Rapids; R. E. Whitney, Onondago; Wm. Bird, St. Johns.

Favorable action was taken upon the following matters:

1. A resolution requesting the State Fair Board to make premiums in Horse Classes uniform, ie., giving as large a premium for young animals as for old making a class for brood mares and colts, and putting the book on a par with that of other states.
2. A request that the Extension Division of the College, through the State Club Leader, give some attention to the formation of colt clubs, as well as pigs and calves.
3. The discontinuance of the small premium offered at the State Fair by the Association and the money used in Club work if necessary.
4. To accept the invitation of Jacob DeGeus to visit the Prairie Farm the date to be set by the Executive Board working with Mr. DeGeus.
5. To put on a banquet in connection with next years' meeting.

Meeting adjourned—attendance 50—R. S. Hudson, Sec'y-Treas.

DUROC BREEDERS MEET

The Michigan Duroc Jersey Breeders Association held their annual meeting on Jan. 30th, 1923, at East Lansing, Mich.

The morning session was a regular get together meeting, new members were received and officers for the coming year were nominated.

Mr. C. C. Terrell of New Vienna, Ohio gave us a very interesting talk on Duroc Salesmanship and was voted the thanks of the association.

Bob Evans was also on the program, but notified the association that business made it impossible to be present.

The "Lion's Club" then entertained the visitors at a luncheon held in the College Gymnasium and Prof. Gardner addressed the breeders and gave the boys lots of encouragement for 1923.

The afternoon session opened at 2:00 P. M. Pres. Foster called the meeting to order and the following officers were elected for 1923:

Pres., O. F. Foster, Pavilion, Mich., Sec'y, and Treas., F. J. Schaffer, Detroit, Mich.; Directors, V. A. Freeman, East Lansing, Mich., Carl Story, Lowell, Mich., N. Barnhart, St. Johns, Mich.

A resolution was then offered by V. A. Freeman that all county association be made member of the state association and that each county has a representative at the state meetings.

Mr. N. Barnhart was then elected to represent the Duroc Association at the Mich. Swine Breeders Association on the 1 ton Litter Club, with full power to act.

The meeting then adjourned and the balance of the day was spent in visiting the fine new hog houses and splendid display of Dairy and Stock Cattle. The poultry exhibit was also large and the fine display of draught horses was very complete.—F. J. S., Sec'y.

DID McRAE "SELL" YOU OR YOUR FARM?

(Continued from page 17.)

I sent no money but made him the same offer as in that of the first letter. I also told him that winter would soon be here and I hoped his rich Mr. Brown and the other wealthy men he spoke of were not setting around and missing opportunities to buy good farms, waiting for him to get a few dollars out of some poor widow woman. I have never heard from him since. He is now running an ad in the Benzie Record published at Beulah, Michigan. My neighbor a widow, with a farm told me yesterday that she sent him $5. I am anxious to know if he is a swindle"

From the above, you may take it that Mr. McRae is not exactly living up to his statement to the publisher under the date of December eighth, last, when he said "We are here to stay and expect to build up a nice clean business!"

Settled woman wishes to reduce expenses of trip any place near or north of Omaha, Nebraska. Would accompany corpse. Tel. 65909.—Los Angeles Times.

YOU CAN'T AFFORD TO HAVE SICK OR BACKWARD COWS

Kow-Kare Insures Profitable Dairying for Thousands All Over the Country

Cut out the constant leaks of dairying that result from sick cows and disappointing milk-yield, and you will begin to reap the real profits. Stop looking upon cow diseases as inevitable; they CAN be prevented.

The cow's winter diet is hard on her digestive and genital organs—runs them down. Overfeeding of rich concentrates only aggravates the condition. What is needed is to keep the milk-making and digestive organs healthy enough to maintain top-notch production and at the same time throw off disease.

Kow-Kare has the medicinal properties to accomplish just that. It acts directly on the vital organs of the milch cow, toning up and giving strength. It is this marvelous rebuilding action that has made Kow-Kare famous in the treatment of cow diseases, such as Barrenness, Retained Afterbirth, Abortion, Bunches, Scours, Milk Fever.

We get thousands of letters each year, like this one from Jacob Germann, Farmingdale, Ill.

"I had three cows this Spring, one had garget, and one had milk fever, and one was done up completely from calving and could not get up or walk and I had a veterinarian with no good results. I began feeding Kow-Kare and she is able to go to pasture with the other cows now. I just know I would have lost the three if I had not had your medicine."

Remarkable increases in winter milk yield can be attained by feeding just a tablespoonful of Kow-Kare twice a day for one week in each month. Try it, and you will never go through a winter without Kow-Kare.

KOW-KARE
DAIRY ASSOCIATION CO. INC.

Our 32-page book on cow diseases, free. Kow-Kare is sold by feed dealers, general stores and druggists. $1.25 and 65c sizes. If your dealer is not supplied, we will mail postpaid, on receipt of price.

DAIRY ASSOCIATION CO., Inc.
LYNDONVILLE VERMONT

Dispersion Sale Registered Holstein Cattle

On Farm 3 **Saturday, March 10, 1923**

Farm sale at 10:00 o'clock a. m. Cattle sale at 12:30 p. m.
4 bulls, two from 30 lb. dams, two with yearly backing.
50 cows and heifers. 4 thirty lb. cows. 8 others with records from 25 to 29 lbs.
2 daughters of 1000 lb. cows. 5 are now on S. O. Test.
14 daughters of King Ona Champion one of the best bred bulls in the World, others bred to him.
Catalogs ready March 1st. Herd under State supervision.
(60 day retest guarantee)

MUSLOFF BROTHERS, SOUTH LYONS, MICHIGAN
(32 miles from Detroit, Michigan.)

Bred Sow Sale of Chester White Swine

MARCH 8th, 1923

Consisting of 37 bred gilts, 2 tried sows and 1 spring yearling boar, all well grown and of the best blood lines to be had. Big type and quality. Cholera immuned. Send for catalog.

ALEXANDER & BODIMER, VASSAR, MICHIGAN

Duroc Bred Sows and Gilts at Private Sale

Also fall pigs either sex. These are sired by or bred to State Fair winners. Prices are low and satisfaction guaranteed. Public sale of bred sows March 9. **MICHIGANA FARM, Pavilion, Mich.**

PEACH HILL FARM offers choice weanling Duroc pigs, either sex. Priced very reasonable. Write us.
INWOOD BROS., Romeo, Mich.

HILL CREST DUROCS, PERRINTON, MICH. We are breeding twenty sows and eighteen gilts to a son of GREAT ORION SENSATION. Yearling, spring and fall boars. **NEWTON & BLANK,** Farm 4 miles straight south of Middleton, Gratiot Co., Mich.

DUROC JERSEY BOARS READY FOR SERVICE. Sired by Fannie's Joe Orion $25 each. Will ship C. O. D. Write us now.
H. E. LIVERMORE & SON, Romeo, Mich.

CHESTER WHITES

BRED SOWS AND FALL GILTS FOR SALE Also some fall pigs. Pedigrees furnished.
WILBUR JONES, Route No. 1, Reese, Mich.

O. I. C.

REGISTERED O. I. C. BRED GILTS FOR sale. Weighing 250 lbs. A few fall boars.
J. R. VAN ETTEN, Clifford, Mich.

HAMPSHIRES

A CHANCE TO GET SOME REAL HAMPshires. Boar pigs, sired by Gen. Pershing Again, Gilt Edge Tipton, Messenger All Over 10th. Gen. Pershing 2nd., and other great boars. Writes for list and prices. DETROIT CREAMERY HOG FARM, Route 7. Mt. Clemens, Mich.

HAMPSHIRES—SPRING BOARS AND BRED gilts from 25 sows to select from. Place your order now or you may be to late. 10th year.
JOHN W. SNYDER, R. 4, St. Johns, Mich.

SHEEP

800 BRED EWES FOR SALE

in lots of 50 or more, black faced, from 1 to 4 yrs. old; no broken mouths, in good condition, bred to Shropshire and Oxford rams to lamb May first. Located 22 miles S. W. of Detroit on Detroit and Toledo electric and Dixie Highway. Telegraph address, Rockwood.
ALMOND B. CHAPMAN, So. Rockwood, Mich.

HIGH CLASS REGISTERED SHROPSHIRE Ewes bred to rams of quality. In lots to suit. Large well covered. Flocks established 1890.
C. LEMON & SONS, Dexter, Mich.

SHROPSHIRES—**10 REGISTERED EWES.** Choice wooly Rams.
DAN BROOHER, Evart, R. 4, Mich.

WHEN WRITING TO ADVERTISERS MENTION THE M. B. F.

Auction Duroc Jersey Swine

ON

Tuesday, March 13, 1923, 12 o'clock

We will sell Registered Duroc Jerseys consisting of

7 BOARS--35 SOWS and GILTS

Bred to "SENSATION MARSI"

AT

Farm 6 miles east of Oxford on Rochester Road.

Catalog on request free. Mail bids to Mr. R. Clark, Our care.

SCHAFFER BROS., R. 4, Oxford, Mich.

10 Cents

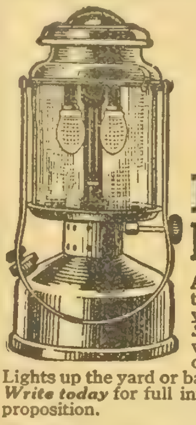
worth of common kerosene or coal oil will keep this *Sunray* lamp or lantern in operation for *30 hours.* Produces *300 candle power* of the purest, whitest and best light known to science. Nothing to wear; simple; safe; *15 Days' Trial.*

No Wicks to Trim
No Smoke
No Smell

FREE Lantern

As a special introductory offer, we will give you a 300 Candle Power *Sunray* Lantern *FREE* with the first purchase of a *Sunray* Lamp. Lights up the yard or barn like a search light. *Write today* for full information and agency proposition.

KNIGHT LIGHT CO., Dept. 93-02 Chicago. Ill.



SMOKES HIS MEAT BY PAINTING IT

Utah Farmer's Simple Method Gives Wonderfully Delicious Flavor and Saves 20 pounds in Every 100

You can flavor your hams and bacon deliciously and save time, money and meat by the easy method successfully used by W. H. Laws, Richfield, Utah.

Mr. Laws simply paints his meat with Wright's Smoke, which smokes meat perfectly in a few minutes without fire, trouble or loss, gives better flavor, keeps insects away and saves 20 pounds in every 100 by preventing shrinkage. Mr. Laws sugar cures his meat with 27 pounds of salt and a bottle of Wright's Ham Pickle. Large bottles of Wright's Smoke or Wright's Ham Pickle cost little at any drug store, and are guaranteed.

Send your name to the E. H. Wright Co., 850 Broadway, Kansas City, Mo., and receive, free and postpaid, a new $1 book, "Meat Production on the Farm," which tells how to cure every kind of meat. This $1 book is free to farmers only. Write for it today.

Rheumatism

A Remarkable Home Treatment Given by One Who Had It

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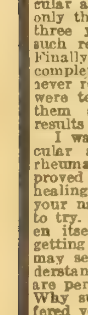
I want every sufferer from any form of muscular and sub-acute (swelling at the joints) rheumatism to try the great value of my improved "Home Treatment" for its remarkable healing power. Don't send a cent; simply mail your name and address, and I will send it free to try. After you have used it, and it has proven itself to be that long-looked for means of getting rid of such forms of rheumatism, you may send the price of it, One Dollar, but understand I do not want your money unless you are perfectly satisfied to send it. Isn't that fair? Why suffer any longer, when relief is thus offered you free. Don't delay. Write today.

MARK H. JACKSON

265J Durston Bldg., Syracuse, N. Y.

Mr. Jackson is responsible. Above statement true.



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The Children's Hour

DEAR Nieces and Nephews:—I do not know what to write this week. My brain does not appear to be working just right I seem to be suffering from a popular disease which quickly spread over the world about two years ago. I am all right during the day at the office but as soon as I get home I sit down and sit for hours and hours in one spot. My loved ones talk to me but I hear them not and then becoming vexed they call in loud tones but still I do not hear and they are obliged to touch me to attract my attention. And still all of this time there are sounds passing into ears—beautiful music, songs, talking and also strange noises that are not so pleasant to hear. I contracted the disease from the bite of an insect and while it is said that while one may get better they will never become the same as before. One that contracts this disease desires to sit up until all hours of the night, bed having no attraction for them until around three o'clock in the morning: that is if the disease has secured a good hold upon you. Yes, I was bitten by an insect, a bug in fact, the "Radio Bug," and I have a small receiving set. I am sure all of you girls and boys who have radio sets in their homes know just how I feel. I hope that some day all readers of the Children's Hour will own radio sets so that they can hear the interesting and educating lectures, fine music, songs, and stories, that are in the air nearly all hours of the day and night. Maybe when that time comes we can call each other up just like we do over the telephone. It's about time for a Detroit broadcasting station to open one of their programs so I am going to sign off and listen to it.—UNCLE NED.

OUR BOYS AND GIRLS

Dear Uncle Ned and Cousins:—We still take the M. B. F and like it very much. I enjoy reading the Children's Hour. I am in the eighth grade at school and hope I will pass. I thought I would tell you of a day's outing I had in the summer. One nice summer's day mother, sister and I took our lunch and went out in the woods. We stopped by a spring and ate our lunch. After lunch we gathered a large basket full of beautiful flowers and walked through the woods. It certainly was wonderful scenery, trees growing on the sloping banks and flowers growing on the mossy banks along the cool rippling stream. And our cows were lying under the shade of the large maple trees, chewing their cuds. We also saw many beautiful birds such as the robin, canary, bluebird and many others. Their melodious voices were delightful to hear. It was about four-thirty when we reached home. Somewhat tired, but pleased with our day's outing. I will close, with love to Uncle Ned and Cousins.—Eleanor D. L. Stovel, Hubbard Lake, Michigan.

Dear Uncle Ned and Cousins:—I suppose you will be very much surprised to hear from me as I have not written in so long I expect you have forgotten me. How are all of you? I hope well and enjoying this lovely winter. It is snowing this morning. We've had a lot of snow this winter. I wonder how many of the cousins have ever gone to a spelling match and for a sleigh ride. I mean go to another school and spell against them. Well we went last Thursday, January 18. We went to a school six miles from our school. We just went a little ways off the main road though when we had to get off the sleigh and walk a ways, it was thawing a little and the sleighing had all gone off and left the mud so we would have had a mud ride instead of a sleigh ride if we had stayed on the sleigh, don't you think so? Well we got to the school at last but they were not expecting us and I guess they got afraid and they didn't want to spell very badly so we played a few games and came home. We had a good time though. Nellie Inman, if you are reading this letter I wish you would write to me again or did that picture of me scare you? I hope not, you know you have not written since I sent it to you. Well I will be taking up all of the space if I don't stop. Won't some of the cousins please write to me? I am a girl 14 years old and I am now sick in bed and would like to hear from you. Goodbye everyone. From your niece and cousin.—Audrey Conlin, R. 4, Bay City, Michigan.

Dear Uncle Ned:—I have never written before and I only saw one letter from around here, so I thought I would write. What is the matter with our page, is it going to sleep? Lets wake up cousins and write some nice letters. Well I will describe myself. I am 63 inches tall, have dark brown hair and light brown eyes and a light complexion. How many of you cousins wish summer was here I do. We have a big ditch near our place but the ice is no good, there is too much snow on it. This is my first letter and it is not very good but I will write again and that will be quite soon. What! Am I hearing you sigh Uncle Ned? Oh, I did not intend to write a story book. Will Myrtle Baress of Owendals please write to me. Oh, I forgot to tell you my age. I am 14 years old. Please cousins, boys and girls, write to me and I will try and answer everyone.—Alma Holland R. 2, Owendale, Michigan.

Dear Uncle Ned:—May I join hand in hand in the circle of letter writers? This is the first time I have written to you or any of the rest. I am a farmer's daughter, 13 years old. We have a farm of 40 acres and also took a contract for pickles so this means work. I am attending Hemlock High School now and am in the ninth grade. Some mornings when my partner and I go to school there is ice on our coat collars so you may be sure it is cold. I often wonder why we don't have school in summer and not in winter, because in winter it is too cold to go to school, while it would be warm in summer. Your niece.—Catherine Baker, R. 4, Hemlock, Michigan.

P. S.—I think it would be a nice thing for you to put a nmber of words on our page for us to see who can get the most words out of it, if the rest will second the motion.

Dear Uncle Ned:—I am a girl 15 years of age and live on a farm of 800 acres. We came out here from Michigan over three years ago and all want to go back in the spring as we do not like it out here. I am in the second year of high school and I like my school and teachers very well. I think I will have to close now. I enjoy reading the letters in the M. B. F., from the other boys and girls very much. Will some readers of the M. B. F., please send me the piece "How Little Katie Knocked at the Door of Heaven?"—Miss Fairy M. Dunklee, Farmersville, Station, New York, Box 102.

Dear Uncle Ned:—May I join your merry circle. My father takes the M. B. F., and I enjoy reading the Children's Hour very much. I have one mile to walk to school and I am in the 5th grade. There are 32 children in our school. We have examinations every month. We have them on Thursday and Friday. I am 10 years old, my birthday is the 12th of May. I have 7 sisters and 1 brother. We have 5 cows, 3 calves, 2 horses and 96 chickens. I live on a 120 acre farm. We have 2 pigs, 2 cats and 1 dog. I remain your niece,—Ida Gill, R. 1, Box 100, Kalamazoo, Michigan.

Dear Uncle Ned:—I have read in the M. B. F., many interesting letters of boys and girls, and enjoyed them very much and thought I would write to you. I have 1 brother and for pets I have a bull dog and a cat. I am 13 years old and in the 8th grade. My birthday is January 9th. I hope you all enjoyed your Christmas as much as I did mine. If I have any twin sisters or brothers I would like to hear from them. If I have no twin sisters or brothers, I would be pleased to hear from any boy or girl. Love to all.—Ruby E. Smith, Box 138, Webberville, Mich.

Dear Uncle Ned:—Here I am again. How are you and all cousins? I am fine. I was home from school one week and I started again today. I live on an 80-acre farm. For pets I have 1 dog and 2 cats. My dogs name is Shep. My father takes the M. B. F., and I like it very well. I have 3 sisters. My two greatest sports are skating and skiing at which I have a very good time. My birthday comes May 1st, and I will be 16 years old. I have light hair and eyes and I am 5 feet and 1 inch tall. Have I a twin? Your friend.—Frank Stimax, Box 101, Engaldine, Michigan.

Dear Uncle Ned—May I join your merry circle? I will be 13 years old next Sunday and I am in the Seventh grade at school. I'm five feet and four inches in heighth and weigh about 90 pounds. I have blue eyes, brown hair and light complexion. I live on a 40-acre farm and we have 4 cows and 4 horses and 8 sheep. We have about 200 hens and 6 turkies. How many of the girls know how to knit? I do. I am knitting my little niece a scarf. She was 5 years old last Sunday. I got a ring, a sweater, two pencils and tablets, a air of stockings, and shoes, a book of "Timothy's Quest" and candy, and nuts last week.—Miss Bernice Drew, Hubbardston, R. 3, Mich.

Dear Uncle Ned—Is there enough room for another cousin? I will tell you about myself. I am 13 years old, in the 8th grade. I weigh 80 lbs. I have brown hair, brown eyes, fair complexion and wear glasses. My birthday is July sixteenth. Have I any twin sister or brother? I have 3 sisters and 2 brothers. Uncle Ned did you ever go coasting, well if you didn't you have missed a lot. I am sending you a story. Will sime of the cousins write to me? Your neice.—Francis Nielsen, Coral, R. 2, Box 4, Mich.

Once upon a time some boys were playing at the edge of a pond in which lived a family of frogs. The boys amused themselves by throwing stones into the pond so as to make them skip on top of the water. The stones were flying thick and fast and the boys were enjoying themselves very much; but the poor frogs in the pond were trembling with fear.

At last one of the frogs, put his head out of the water and said, "Oh please, dear children, stop your cruel play! Though it may be fun for you, it means death to us!"

Always stop to think wether your fun may not be the cause of another's unhappiness.

—Yes, I have coasted and it sure is great fun—that is if you don't tip over and get a lot of snow down your neck. Your story is fine.—Uncle Ned.

THAT WOOD-BOX

OH, gee whiz. That wood-box makes me sick.
I have to trot, and trot and trot,
To fill it stick by stick.
And then it simply disappears
Within the big stove door,
And Ma she up and hollers out for me to get some more.

No matter where I want to go
Or what I want to do
Why Ma looks in the woodshed and at the wood-box
And if the wood ain't piled up high,
And split up nice and fine,
She frowns and tells me, "No Siree,
You cut up wood till nine.

And if the sun's a shinin' bright
And you have got some ski's,
You wish the darned old wood-box
Was in Halifax, by gee.
You see the other neighbor boys
Go rearin' tearin' by.
And someone whispers, "Come on, Jimmie,
Can't you get out on the sly."

Then if you mutter to yourself
And out the door you slips,
When you get back you have to go
And pick up all the chips.
And so I say, most every day
When time is on the wing:
My goodness, gracious, MERCY ME.
I'LL be GLAD when it comes spring.
—Mrs. Charlotte Byers.

FARM MECHANICS

CARE AND REPAIR OF THE FARM TRACTOR

A CERTAIN amount of time regularly employed should be given to the care and repair of the farm machinery. It is now the acceptable time to investigate the ills of the iron family and remedy them for their maximum efficiency in the spring.

The tractor, of all modern farming tools, is perhaps the least understood and will be considered first. The tractor, after each year's use, should be given a thorough examination for wear and defective parts. In ordinary usage, connecting rod bearings, piston pin bearings, rings and pistons will show signs of wear, which should be attended to at this time. A competent repair man is desirable for this work as a job poorly done is worse than no job at all. A manufacturing company should be better able to furnish competent help at this season than any other time.

However, for the owner mechanically inclined, the following is a suggested procedure for the adjustment of loose connecting rod bearings. Remove lubrication oil and necessary covers to make connecting rods and crank shaft accessible. With spark plugs removed, place crank shaft so that pistons are about one-half way on their strokes. Grasp the lower end of the connecting rod for one piston and move up and down and also sidewise in a direction parallel to the crank shaft. The up and down motion will indicate the extent of the looseness which requires adjustment. The looseness will be evident. Do in like manner with the rest of the rods. Assuming that all rods are loose, remove cotter keys and loosen nuts, holding caps of bearings to the body of the rods. Adjust one by one by first removing cap and then removing liner on both sides of the bearing. The cap is replaced with the remaining liners fastened rigidly to the rod by means of the bolts and nuts. Considerable care should be exercised in making sure that the nuts are drawn tightly against the cap and the liners properly placed. Turn the starting crank and note its ease in turning. If it turns too easily, it is an indication that not sufficient liners have been removed. Remove more until, when assembled in place, there will be considerable effort required to turn the shaft. The adjustment is now too tight. Again remove cap, add a thin liner and readjust. This should be the correct setting. If not, repeat the operation.

Now unscrew the nuts by about one turn and proceed to the next connecting rod until all are adjusted. tighten all caps, replace cotter keys with new ones, replace covers and add the required amount of new lubrication oil. Where there are no liners between the bearing halves, it will be necessary to carefully file the cap to eliminate the looseness. When thick liners are used, apply the file to the liner for adjustment. Bearing adjustment is not difficult. It requires a little patience but is worth while.

Just as the tractor will require attention from time to time, so will the various other farm machinery. Proper housing is a great factor in preserving machinery. At least a week each year should be set aside, know as farm machinery week, when each farmer can give his implements the attention that means better service and longer life.—E. C. Sauve, Asst. Prof. Farm Mechanics. M. A. C.

MICHIGAN CROPS

HUBAM CLOVER

As we would like to try some of the Hubam clover seed would like to have your advice on this. Whether it is necessary to inoculate and is it advisable to sow it with the grain? Does it withstand the winter? Also about what time to cut it for hay and can clover seed be threshed from this and is it a good soil builder? We have a clay and sand mixed soil. —J. S. Y., Burr Oak, Mich.

—Hubam may be sown with a grain crop or, when used for pasture and the land is comparatively free from weeds, may be seeded alone. The soil should be well supplied with lime, the seed bed should be well firmed, and the seed should be inoculated.

Hubam is an annual and does not live through the winter. Seeds scattered on the ground during the late fall usually germinates and produces a crop the next season.

In tests conducted here at the Agricultural Experiment Station practically the same yield has been secured from Hubam as the biennial white sweet clover when sown on the same day. The root system produced by the biennial white sweet clover the first season is much more extensive than that produced by Hubam.

Sweet clover should be cut for hay just before the blossom buds appear, and if cut at this stage the Hubam is not likely to produce a seed crop unless the fall is very favorable.—C. R. Megee, Farm Crops Dept., M. A. C.

VETCH AS A FEED

I would like to get all the information I can about sand vetch as a feed, the time to sow, amount of seed per acre and time to harvest.—H. E. C., Secord, Michigan.

—Hairy vetch may be sown with rye and used for seed, pasture or for plowing under. When sown with rye it should be planted about the middle of August using a bushel of rye and from fifteen to twenty pounds of hairy vetch seed per acre.

Hairy vetch is also used with oats for hay in which case it should be sown during the early spring, using approximately two bushels of oats and twenty pounds of hairy vetch seed.

Circular No. 50 on the culture of hairy vetch may be secured through the Business Farmer by addressing Director R. S. Shaw of the Michigan Agricultural College, East Lansing.—C. R. Megee, Farm Crops Dept., M. A. C.

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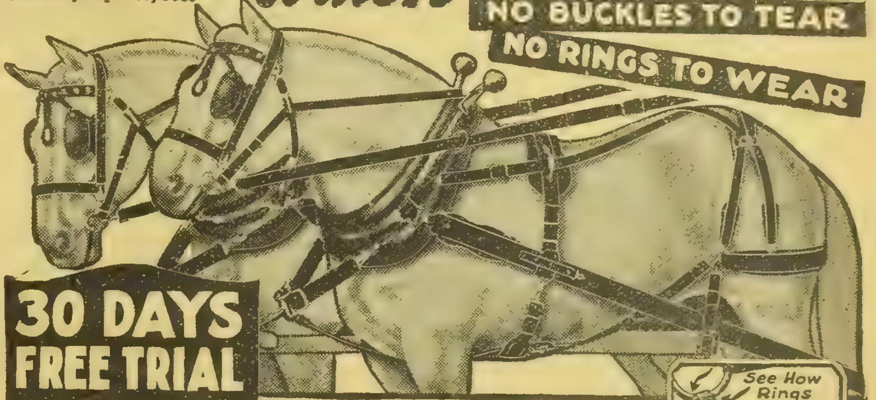

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BABY CHICKS White and Brown Leghorns, Single and Rose Comb Reds, Buff Orpingtons, Barred and White Plymouth Rocks, Anconas, and White Wyandottes, $15 per 100 and up. **P. W. STONE HATCHERY, Lock Box 44, Fenton, Mich. F. M. Milliken, Prop.**

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Knowing from terrible experience the suffering caused by rheumatism, Mrs. J. E. Hurst, who lives at 308 E. Douglas Street, C-488, Bloomington, Ill., is so thankful at having cured herself that out of pure gratitude she is anxious to tell all other sufferers just how to get rid of their torture by a simple way at home.

Mrs. Hurst has nothing to sell. Merely mail your own name and address, and she will gladly send you this valuable information entirely free. Write her at once before you forget.

Attention—Guaranteed Baby Chicks

WORLD'S GREATEST EGG PRODUCERS

Tom Barron Imported White Leghorns

SILVER WARD HATCHERY

Sheppard Famous Anconas Direct

From grand selected flocks on free range built direct from laying contest winners. Strong, vigorous chicks that will prove great layers. Flocks culled by poultry experts and headed with vigorous pedigreed males from the best laying strain in the country, postpaid. Full live delivery guaranteed. Fine instructive catalog free. Reference two banks. **SILVER WARD HATCHERY, Box 420, Zeeland, Mich.**

CHICKS **KERLIN QUALITY**

English-American S. C. White Leghorns

Chicks from 265-270 Egg Strain stock and Pedigreed Stock from 280 to Over 300 Egg Hens. Postpaid. Free Feed with each order. One hundred percent Safe Arrival Guaranteed. A Special Discount of $3 per 100 Chix on orders placed promptly. Book of valuable information to poultry raisers Free for the asking. We Want you to have it. Drop us a card right now before you forget it and let us tell you more about this truly wonderful strain of layers.

Member International Baby Chick Association

KERLIN'S GRAND VIEW POULTRY FARM
Box 45, Center Hall, Pa.

A Breeding Institution of merit since 1900.

CHICKS—WE HAVE SHIPPED THOUSANDS each season since 1904. Different breeds, free booklet with guarantee and delivered price. Freeport Hatchery, Box 10, Freeport, Mich.

POULTRY

POULTRY SHOW HELD DURING FARMERS' WEEK

MEMBERS of the Michigan Branch of the American Poultry association met in conference three days at M. A. C. Farmers' Week.

Judge Chas. Gibson, Ellwood, Ind., spoke to the association Wednesday on the general care of rabbits, while scientific selection for egg production was taken up by Professor E. C. Foreman of the M. A. C. Poultry department. Professor W. R. Graham of the Ontario Agricultural College told of experiments in poultry nutrition carried on at the Canadian college.

On Thursday, C. M. Ferguson, M. A. C. Poultry Extension Department discussed how invironment affected egg production. Professor W. R. Graham, O. A. C., told of Canada's National Egg Policy. Different kinds of poultry feed and the feeding were taken up by D. E. Hale, Chicago, who judged the Poultry Show.

At the meeting on Friday, Professor E. C. Foreman outlined various forms of poultry house construction. This was followed by a caponizing experiment conducted by C. M. Ferguson of the college Poultry extension department.

Over 400 entries were made for the annual poultry show. The largest entries were found in the classes White Wyandottes, Light Barred Rocks and Dark Barred Rocks making the competition exceptionally strong here.

One of the attractions of the show was a four-legged pullet exhibited by the college. This bird caused much comment among the visitors.

Judging in the various classes was done by Judge D. E. Hale, of Chicago, one of the best known poultry experts in the country.

POTATOES AS POULTRY FEED

POTATOES should be boiled or steamed before being fed to fowls and are fed to best advantage when mixed with mash. Since potatoes are quite fattening, they should be fed in limited quantities to laying hens or growing chickens, and should be used in connection with other feeds. One hundred hens will consume about 10 pounds of cooked potatoes daily, and these potatoes can be used to replace cornmeal in the poultry mash. If so used, an equal weight of potatoes and mash may be mixed together. A laying mash for this purpose may be made of 1 part meat scrap, 1 part middlings, 2 parts bran, and 4 parts potatoes, by weight.—Colorado Agricultural College.

WATCH WHITE DIARRHEA

WHITE Diarrhea is one of the most deadly diseases we have in the poultry yard. It has attained its present prevalence over the country largely because poultry keepers have failed to take organized steps toward its eradication through the simple means of breaking up the life cycle of the germ. This is done by the simple expedient of refusing to use any birds in the breeding pen which have had the disease or were exposed to it as chicks.

It reaches its greatest activity two or three days after the chicks are hatched, oftentimes killing an entire brood. Some may survive and apparently be in excellent health, but the truth of the matter is that the germs are still in the reproductive organs, where they lie dormant until the fowl commences to produce eggs, and are in the chicks at the time they are hatched. The simplest way in which to stop the disease is to refuse to breed from stock ever exposed to it. It seems to have slight effect upon matured stock.

One way of preventing its spred as much as possible is to thoroughly disinfect the incubators and brooders in which chicks infected with it were hatched or brooded before the young stock this season is produced. Do not pack eggs for hatching in straw, chaff, sawdust or any other material likely to become musty. Wiping the shells of the eggs with a cloth dampened in 60 per cent grain alcohol

BUSINESS FARMERS EXCHANGE

Ads Under this Head 10c per Word, per Issue

GENERAL

FREE COAL—FOR A FEW HOURS SPARE tim—write today. PEOPLES COAL CO., 1120 W. 35th St., Dept. 71, Chicago, Ill.

WANTED TO BUY A SECOND HAND, Perkins shingle mill. Must be in good condition. A. F. LONGPRE, Hardy, Mich.

HELP WANTED MALE

SALESMEN, GREAT OPPORTUNITY FOR pushers to make big money selling oils and greases on liberal commission and bonus. Unlimited prospects for men who know how. Old company. Quality products. Attractive prices. Square deal. Write today to Dept. A-22, MANUFACTURERS OIL & GREASE COMPANY, Cleveland, Ohio.

WE PAY $200 MONTHLY SALARY, FURNISH rig and expenses to introduce our guaranteed poultry and stock powders. BIGLER COMPANY, X682, Springfield, Ill.

WANTED POSITION—OUR SUCCESSFUL farm manager, 36 years of age, widower, no children. This man is honest, clean and a hard intelligent worker. Graduate U. of Wis. and life experience as farmer. Address him, HERMAN R. FRANZEN, Akron, Lancaster County, Pa.

AGENTS—SELL WOLVERINE LAUNDRY Soap. A wonderful repeater and good profit-maker. Free automobile to hustlers. WOLVERINE SOAP CO., Dept. E3, Grand Rapids, Mich.

FARM AND LANDS

FARMING BUSINESS FOR SALE—A PUREbred business in Duroc Jersey Hogs, Short Horn Durhams, Delaine Merino Sheep, Buff Leghorns, Buff Plymouth Rocks, Bronze Turkeys, White Pekin Ducks, Toulouse Geese, which I have built up with the hope of keeping my boys on the farm is for sale, including the farm of 200 acres within fifty miles of Detroit, 20 acres under timber, balance all under plow. Equiped with tractor, truck and all machinery. Stocked with registered stock. Mail orders coming in every day as the result of three years building a real business. I hope the right man, who wants a big opportunity will get this farm and the business. I am ready to take a smaller farm as part payment. If you are ambitious do not hesitate to write me, I own this farm and I am ready to listen to every proposition. I am sincere in every statement I have made in this advertisement. I am known to the publisher of the Business Farmer and he has advised me to thus lay all the facts before the readers of this publication hoping that I may find the right man, who is looking for just what I have to offer. Write me fully, at once, if you are interested, address BOX 231, in care of The Michigan Business Farmer, Mt. Clemens, Mich.

200-ACRE MICHIGAN FARM WITH FULL equipment; 200 apple trees; handy to town; 90 acres tillage; estimated 50,000 ft. timber, 1,000 cords wood; 10-room house, big barn, silo. Owner unable to operate. $5,500 takes it, team, 3 cows, 8 hogs, 60 poultry, full modern implements, threshing machine, vegetables included, less than half cash. Details page 71 Catalog Bargains. Copy free. STROUT FARM AGENCY, 427KJ Marquette Bldg., Chicago, Ill.

40 ACRES FIRST CLASS LAND VERY cheap Windmill on farm, 60 apple trees. About 25 acres under cultivation. Every foot good soil. Insurance $3,800. For sale at $4,200, 1-3 needed only. AXEL HASSENFELDT, R. 5, Ludington, Mich.

140 ACRES 1 MILE FROM TOWN. BEST soil, brickhouse, basement barn, all buildings good. A bargain. Write or call RUDOLPH HASSLER Sandusky, Mich., R. 4.

GOOD 160 ACRES, ALL BROKE, ONE MILE from Smiley, Saskatchewan. Sell for cash or trade for Michigan property. P. A. NIEMAN, 718 Market St., St. Joseph, Mich.

DAIRY FARM, 70 ACRES, GOOD LOCATION, black soil for trucking. R. 1, BOX 3, Lawrence, Mich.

80 ACRES, GOOD HOUSE, 40 FARM LAND 40 swamp. Grass and water good for muskrat raising. Rent or sell. Inquire BOX 232, care Michigan Business Farmer.

PLANTS AND SEEDS

STRAWBERRY PLANTS—$4 PER THOUSand. Guaranteed strictly first class. 17 years experience. Our free catalog illustrates and describes fourteen best varieties, including three best raspberries. A valuable book for the grower. J. E. HAMPTON & SON, Bangor, Mich.

RED CLOVER, NICE PURPLE SEED, $12.50 per bushel. SHULTZ SEED CO., Olney, Illinois.

FOR SALE—NORTHERN GROWN HUBAM Sweet Clover cleaned. Price $18.00 bu. Write for samples. HENRY BAUKNECHT, R. 4, Midland, Mich.

STRAWBERRY PLANTS FOR SALE. SENAtor Dunlap, Gibson and Dr. Burrill, 60 cts. per hundred, $4.00 per thousand. Postpaid. Progressive Everbearers, $1.00 per hundred. Postpaid. Cuthbert Red Raspberries, $1.00 per hundred, $9.00 per thousand. Postpaid. ROBERT J. DeGURSE, Ovid, Mich.

TOO LATE TO CLASSIFY

S. C. REDS, GOOD LAYING STOCK, FINE color. Hatching eggs, $6.00 per 100. Limited number of chicks, $16.00 per 100.
EDWARD CRYDER, Alamo, Mich.

FOR SALE—NUMBER OF FULL BLOOD Bronze Turkeys. Cheap if bargained for at once. **MRS. C. W. COPHER, Marietta, Mich., R. 1.**

BOURBON RED TURKEYS. 2 PURE BRED young hens.
MRS. SAMUEL PUTMAN, Caro, R. 4, Mich.

NOW IS THE TIME
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TO GET RESULTS
TRY IT!

BABY CHICKS

Bargain Prices—Write Quick. Best paying, highest quality, Pure Bred Tom Barron and Hollywood White Leghorns—Egg Records 270 to 300 eggs in one year—Brown Leghorns, Anconas, Barred Rocks, Rhode Island Reds, White Wyandottes. Book orders now—**get liberal discount. Valuable catalog free.**

We guarantee to save you money—give you strong, healthy, perfect chicks, the best that money can buy, guarantee live delivery, and absolute satisfaction. **Write today sure.**

SUPERIOR POULTRY FARMS
Box 104 - Zeeland, Michigan

WASHTENAW

HATCHERY CHICK PRICES: March 26th and following hatches: Barred Rocks and Reds, 50, $8.50; 100, $16; 500, $75. White Rocks, White Wyandottes, 50, $9.50; 100, $18; 500, $85. White, Brown, and Buff Leghorns, 50, $7.50; 100, $14; 500, $65.. From hatches due March 12th and 19th add $2 per 100 to these prices. Postpaid, full live delivery guaranteed, Our flocks are carefully selected and bred for high egg production. Order from this ad. Reference, Farmers and Mechanics Bank.

WASHTENAW HATCHERY, Ann Arbor, Mich.

DeKoster's Hatchery

Strong, vigorous Chicks from selected heavy laying ENGLISH STRAIN WHITE LEGHORNS and BROWN LEGHORNS, 100, $12.50; 500, $60. THOMPSON & HOLTERMAN STRAIN BARRED ROCKS and ANCONAS, 100, $18; 500, $87.50. Postpaid, full live delivery guaranteed. Catalog free. Bank Reference.

DEKOSTER'S HATCHERY, Box X, Zeeland, Mich.

Peerless Chicks

HATCHED FROM BRED-TO-LAY S. C. WHITE LEGHORNS

They are selected long deep-bodied, with large lopped combs. Liberal discount. Live arrival guaranteed. Catalog free.

PEERLESS HATCHERY & POULTRY FARM, Box 10, Zeeland, Mich.

BABY CHICKS

Hatched from strong and vigourous flocks of ENGLISH WHITE LEGHORNS AND ANCONAS, BRED FOR HIGH EGG-PRODUCTION. We guarantee 100 per cent [illegible] chicks on arrival. Postage PAID. Prices reasonable. Instructive Catalog and prices free on request. **QUALITY HATCHERY, Box A11, Zeeland, Mich.**

Pedigreed State Approved S. C. W. LEGHORNS CHIX

AMERICAN-ENGLISH STRAIN

Are you going to buy them from a hatchery or from a BREEDER. Buy from Michigan's Largest Leghorn Farm and insure success. We hatch our own eggs only. Supply limited. Prices reasonable. Satisfaction guaranteed.

Descriptive Circular tells all about them. It's free.

SIMON HARKEMA & SON, R. 1, Holland, Mich.

QUALITY BABY CHICKS

The kind that will Lay and Pay. BARRON STRAIN ENGLISH WHITE LEGHORNS, BROWN LEGHORNS AND ANCONAS. Prices $9.50 per 100 and up. Send for catalog, instruction free on care and feeding of poultry.

KARSTEN'S FARM, Zeeland, Michigan

CHICKS

BARRON'S S. C. W. LEGHORNS, SHEPPARD ANCONAS, and BARRED ROCKS, EGGS and CHICKS FROM SELECTED STOCK

Our Leghorn flocks are headed by large vigorous males from M. A. C.; Anconas from Sheppard's 285 hens. Buy from an old reliable poultry farm and you will be proud to own a flock of high producing hens that will bring you a big profit. We guarantee safe delivery and prepay shipments. Write for catalogue.

BYRON CENTER POULTRY FARM AND HATCHERY Box R, Byron Center, Mich.

QUALITY CHICKS White Leghorns, Barred Rocks, Anconas. 5,000 culled breeders. 12 years experience. New Smith 40,000 egg hatcher. Member Baby Chick Assocs. Send for Folder B and prices.

DEAN EGG FARM & HATCHERY

BIG BEAVER, BIRMINGHAM, MICH.

Rhode Island Reds, Tompkins strain, hatching eggs and baby chicks. Eggs per hundred $12.00; chicks per hundred $25.00. On all orders for either stock, eggs or chicks of $15.00 or more, I will give the Rhode Island Journal free for one year. A few good cockerels left. Quality Breeder of Rhode Island Reds, both combs.
WM. H. FROHM, New Baltimore, Mich., R. 1.

BABY CHICKS and HATCHING EGGS

Direct from our farm at greatly reduced prices, only 9c up. Barred Rocks, White Leghorns and Anconas. Write quick for particulars and special introductory offer. **MODEL POULTRY FARM & HATCHERY, Zeeland, R. 4, Michigan.**

BABY CHICKS—GUARANTEED PUREBRED, all varieties, selected heavy layers, and broilers. 12c and up, 10% cash with order. Avoid disappointment, order now.
GUY BABION, Chesaning, Mich.

DAY OLD CHICKS SINGLE and ROSE COMB RHODE ISLAND WHITES. Write for Catalogue. **Fischer's Hatchery and Poultry Farm, R. 1, Holland, Mich.**

If you have a few good hens or cockerels that you don't need you can sell them through an ad in M. B. F.

will destroy any germs adhering to the outside of the shell, and this precaution will be well worth the expense and effort.

The disease spreads among chicks through contamined drinking water or mash hoppers, or the droppings. As soon as their is any evidence of it in the brood kill on sight every chick "pasted up" behind and keep the droppings cleaned up in the run several times a day. Be very particular to prevent the little fellows becoming chilled.

After the chicks are two weeks old there is practically no danger whatever of infection. It seems to be most virulent the first two days.

PROTEIN FOR LAYING FLOCK

I want to know what would be the best and cheapest way to furnish protein for chickens. How about steeping alfalfa leaves in hot water for winter feed?—Mrs. G. M.

—Alfalfa leaves steeped, but more especially steamed, furnish considerable protein. Steamed alfalfa leaves are somewhat bulky for a chicken to properly handle. Alfalfa leaves help, of course, but as the only source of protein they fall somewhat short. I would keep on feeding steamed alfalfa leaves and in addition would supply protein in some other form. In the winter, pieces of raw meat, such as a dead rabbit, or portion of any animal that did not die of some disease can be kept hanging in the poultry house where the chickens can pick at it. The probabilities are that with alfalfa leaves and fresh meat together with scaps from the table the chickens will receive sufficient protein. Another good way to supply alfalfa is by using it as litter in place of straw.

The egg production of a flock is almost entirely governed by the amount of protein fed. If a sufficient amount of protein is not fed the chickens cannot be profitable egg producers, therefore under average conditions it seems only wise to feed protein in an excessive rather than in a scanty manner. A good ration for laying hens consists of either one quart of oats or one quart of barley fed as scratch feed, that is, it is thrown in the litter as a morning feed. One quart is usually sufficient grain for from 12 to 20 birds depending on the breed. The evening meal consists of one quart of corn for every 12 to 20 birds, then in addition to the scratch feed they should have before them at all times in a self-feeder the following dry mash mixture: Equal parts ground oats, ground corn, bran, shorts and meat scrap and tankage. Under average farm conditions it is necessary to buy the shorts and bran and it is always necessary to buy meat scrap or tankage, however an investment in these feeds will usually prove profitable in that your chickens will produce eggs in such quantity as to make an investment in such feeds profitable.

ROUP

General Discussion—This disease resembles in its nature colds in man and higher animals. It is not, as far as our present knowledge goes, caused by one specific organisms. Roup is not etiologically related to chicken-pox but may under certain conditions occur as an accompanying disease. On up-to-date farms where chickens are kept under hygienic conditions and are properly fed this disease is seldom seen except under exceptionally bad weather conditions. On the other hand it is rather common where chickens are poorly fed and kept in small, damp, filthy or poorly ventilater coops. It is probable that a number of organisms are instrumental in the production of this disease, and that these organisms, which ordanarily are low in pathogenic power, depend on other influences to lower the resistance of the fowls so as to make a general infection possible.

Symptoms—The primary seat of infection is in the nasal cavities. First a watery discharge is noted escaping from the nostrils. The anatomical arrangement of the nasal cavities of fowls is such as to make damage very inefficient. Consequently the discharge accumulates and gradually thickens, sealing the nostrils and finally a bulging of the bones below one or both eyes which

(Continued on following page)

BABY CHICKS

Guaranteed Chicks From Select Pure Bred Flocks

Kept on free range. Carefully fed and cared for to insure the best of health and vigor.
WHITE and BROWN LEGHORNS, ANCONAS, 50, $7.50; 100, $14; 500, $65.
BARRED ROCKS, REDS, MINORCAS, 50, $8.50; 100, $16.50; 500, $78. Write for prices on 1,000 or more.
EXTRA SELECT from Pure-Bred Flocks, $2 per hundred higher.
Postpaid to your door, full live count guaranteed. Bank Reference. Free Catalog. We want your business not only this year but for years to come and we will certainly endeavor to handle your orders so as to merit your continued patronage.
COLONIAL POULTRY FARMS, Box B, Zeeland, Michigan

Michigan Chicks Guaranteed Michigan Bred and Hatched

WHITE and BROWN LEGHORNS, ANCONAS, 50, $7; 100, $13; 500, $60.
BARRED ROCKS, R. and S. C. REDS, 50, $8.50; 100, $16; 500, $75.
1,000 Orders at 500 rate.
RHODE ISLAND WHITES, 100, $18; 200, $35.
Postpaid, full live delivery guaranteed. Strong, vigorous Chicks from select, heavy laying flocks. Order NOW right from this ad. Get them when you want them. I want your business and will try to hold it. Catalog free. Reference, Holland City State Bank.
KNOLL'S HATCHERY, Box L, Holland, Michigan

CHICKS WITH PEP, $11 per 100 and up

Selected Hogan Tested Flocks. Postpaid, full live delivery guaranteed. BUFF ORPINGTONS, WH. and SIL. WYANDOTTES, 50, $9.25; 100, $18: BARRED and WH. ROCKS, S. and R. C. REDS, MINORCAS, 50, $8.25; 100, $16. ANCONAS and HEAVY BROILERS. 50, $7.25; 100, $14. WH., BR. and BUFF LEGHORNS, 50, $7; 100, $13. MIXED, ALL VARIETIES, $11 per 100 straight. On 500, 5% off; 1,000 10% off. Ready February 26th. Free Catalog. Member I. B. C. A.

HOLGATE HATCHERY, Box B, Holgate, Ohio.

SUNBEAM HATCHERY

The Chicks that I sell are produced under my personal supervision in a good, modernly equipped hatchery which is kept in best possible condition. The parent stock is carefully selected and of best heavy laying strains, kept on free range, well-housed and handled. Free from disease and properly fed. This enables me to produce strong, growthy Chicks which will mean PROFIT to my customers. PRICES: WHITE, BROWN AND BUFF LEGHORNS, 50, $7; 100, $13; 500, $62.50. BARRED ROCKS, R. AND S. C. REDS AND ANCONAS, 50, $8; 100, $15; 500, $72.50. WHITE AND BUFF ROCKS, WHITE WYANDOTTES, AND B. MINORCAS, 50, $8.50; 100, $16; 500, $77.50. WHITE AND BUFF ORPINGTONS, SIL. L. WYANDOTTES, 50, $9; 100, $18; 500, $87.50. I guarantee full live delivery by prepaid post. Get your order in now and I will ship when you want them. Bank Reference. Catalog Free. **H. B. Tippin, Box E, Findlay, Ohio. Member I. B. C. A.**

CHICKS THAT MAKE PROFIT

$10 PER 100 AND UP. From vigorous, pure-bred flocks on free range, selected for heavy-laying qualities and well cared for. Low prices considering exceptional quality. WHITE, BROWN and BUFF LEGHORNS, 50, $7; 100, $13; 500, $62.50; 1,000, $120. WHITE and BARRED ROCKS, WHITE WYANDOTTES, BUFF ORPINGTONS, ROSE and S. C. REDS, ANCONAS, 50, $8; 100, $15; 500, $72.50; 1,000, $140. Mixed, all varieties for broilers, $10 per 100 straight. Postpaid to your door and full live count guaranteed. You can order now direct from this ad and get them when you want them. Bank reference. Free catalog.

BLUFFTON HATCHERY, Box L, Bluffton, Ohio

BABY CHICKS

$10.50 PER 100 AND UP

From Hogan tested, well-kept and housed heavy laying flocks
Barred and White Rocks, Reds, Anconas, Minorcas: 50, $8.50; 100, $16; 500, $77.50
Buff Orpingtons, White Wyandottes:.......... 50, $9; 100, $17.50; 500, $85
White, Brown and Buff Leghorns:.......... 50, $7.50; 100, $14; 500, $67.50
Mixed:.. $11 per 100 straight
Postpaid, full live delivery guaranteed. Order NOW from this ad. and get them when you want them. Catalog free. ALSO EGGS FOR HATCHING. Reference, 4 Banks.
TRI-STATE HATCHERIES, Box 511, Archbold, Ohio

Egg-Bred Baby Chicks

ENGLISH WHITE LEGHORNS, BROWN LEGHORNS. 11 years of breeding for egg production. Highest quality chicks from tested layers. Satisfaction guaranteed. 100 chicks $12.50; 500, $60.00. From Extra selected matings $2.00 per 100 higher. Postpaid,, 100% delivery guaranteed. Order now. Bank reference. Catalog free.

ROYAL HATCHERY & FARMS, R. 2, Zeeland, Mich. S. P. Wiersma, Prop.

CHICKS, $10 per 100 and up Postpaid to your door and full live count guaranteed

Varieties	Prices on 50	100	300	500	1,000
WHITE, BROWN and BUFF LEGHORNS	$7.00	$13.00	$38.00	$62.00	$120.00
BARRED ROCKS, BLACK MINORCAS and ANCONAS	8.00	15.00	44.00	72.00	140.00
WHITE ROCKS, WHITE WYANDOTTES and REDS	8.50	16.00	46.00	75.00	145.00

BUFF MINORCAS, 50, $13; 100, $25. MIXED CHICKS FOR BROILERS, 50, $6; 100, $11; 500, $50. Postpaid. Full live delivery guaranteed. Hatched in the best possible manner from good, vigorous, pure-bred, heavy laying flocks on free range. Carefully selected and packed to go safely. No catalog. Order right from this ad. and save time. Reference, Citizen's Saving Bank. You take no chances.

THE EAGLE NEST HATCHERY, Box K, Upper Sandusky, Ohio
Only 7 hours from Grand Rapids. Can reach any point in Michigan in 24 hours.

Egg Bred White Leghorn CHICKS

Double your poultry profits with our Famous Improved Winter Egg Basket Strain of S. C. White Leghorns. They are the selected, long, deep-bodied typical hens with large lopped combs, mated to the famous Hollywood and Beall 250-300 EGG Pedigreed sires. All our breeders are culled, selected, and mated by poultry specialists and inspected and approved as to their laying ability and health.

Our Leghorns are winners at LEADING Egg Laying Contests and Poultry Shows. Thousands of customers all over the U.S. are reaping a golden harvest of eggs the year round from our **egg bred layers. You, too, can make big money with them.**

FREE **Valuable Catalog** tells all about EGG FARMING FOR PROFIT and What and How to feed for results. **Worth many dollars to you.** Get our prices on chicks and eggs before you buy. **Write AT ONCE.**

Q. DEVRIES, Grandview Poultry Farm. Box L Zeeland Mich.

Good Chicks-Fair Prices

Barron Type W. Leg., B. Rocks, S. C. Reds. Pedigreed Chicks from M. A. C. cockerel matings. Utility grade from pure-bred, heavy-laying, free range inspected flocks. Pullets laid at 4 mos., 20 days last year. Guaranteed delivery. Discount on Feb. orders. Instructive catalog. Bank reference.
Michigan Hatchery & Farms, Box A, Holland, Mich.

BABY CHICKS SELECTED CHICKS FROM the heart of the baby-chick industry. Leading pure breeds from heavy egg-producing strains. Alive delivery guaranteed. Send for catalogue and prices.
L. VAN HOVEN & BRO., Zeeland, Mich.

Rosewood Farm
Healthy, Hardy Chicks

Well-hatched, carefully packed and shipped. Select, heavy laying WHITE LEGHORNS, 50, $7; 100, $13; 500, $62.50; 1,000, $120. Select ANCONAS, 50, $7.50; 100, $14; 500, $67.50. Select BARRED ROCKS, 50, $8.50; 100, $16.50; 500, $80. Postpaid, full live delivery guaranteed. Our chicks will render you the best of satisfaction and you will COME BACK TO US. We have had long experience in producing good Chicks and our flocks are second to none. Catalog free. **ROSEWOOD FARM, R 12 A, Holland, Mich.**

TIMMER'S HATCHERY

Hardy, healthy Chicks from selected heavy laying flocks. WH. and BR. LEGHORNS, 50, $7; 100, $13; 500, $62.50. ANCONAS, 50, $7.50; 100, $14; 500, $67.50. BARRED ROCKS and REDS, 50, $8.50; 100, $16.50; 500, $80. Postpaid, full live delivery. Bank reference. Free Catalog.
TIMMER'S HATCHERY
Route 3 A, Holland, Mich.

BABY CHICKS From select vigorous, heavy laying breeding stock White, Brown Leghorns, Anconas, Barred Rocks. Our price 12 cents and up. Guarantee 100% live delivery by prepaid post. Get your order in now—will ship when you want. Customers report "Big Profits" with these wonderful layers. Write today for Illustrated Catalog. It's free. Reference: State Commercial Saving Bank. Member M. B. C. A.
Queen Hatchery & Poultry Farm, Zeeland, Mich.

CHICKS—Exhibition and Utility

strains from America's best. W. and Barred Rocks, Reds, W. and Brown Leghorns, Wyandottes, Anconas. Surprising prices, quality considered. 13 years' hatchery experience. Catalog.
HAIGHT HATCHERY, Cedar Springs, Mich.

CHICKS

THAT GROW, LAY AND PAY Barron English White Leghorns, Brown Leghorns and Anconas.

PURCHASE THIS YEAR'S CROP OF CHICKS from tested layers, headed by large vigorous 260 to 288 Pedigreed Males.

CUSTOMERS REPORT BIG PROFITS with these wonderful layers. Write today for our large illustrated catalogue. It tells all about them, it's free.

WYNGARDEN HATCHERY
Box B, Zeeland, Mich.

400,000 Chicks

Big, strong, Well-hatched Chicks from selected to lay stock on free range, properly fed and housed to insure health and vigor. WHITE, BROWN & BUFF LEGHORNS, 50, $7; 100, $13; 500, $62.50. BARRED & WHITE ROCKS, S. C. & R. C. REDS, ANCONAS, 50, $8; 100, $15; 500, $72.50. WHITE WYANDOTTES, 50, $8.50; 100, $16; 500, $77.50. BUFF ORPINGTONS, SILVER WYANDOTTES, 50, $9.50; 100, $18; 500, $87.50. POSTPAID. We guarantee full 100% live arrival. Reference, Citizen's Bank. Order direct from this ad. and save time. Free circular.

MODERN HATCHERY
Box F, Mt. Blanchard, Ohio

CHICKS

$10 per 100 and Up

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in time may force the lower eyelid upwards and at last close the eye. From this condition the disease has derived the name swelled-head. The nostrils being closed the bird is forced to breathe through the mouth. This will dry the tip of the tongue which becomes brownish and hard, a condition commonly called "Pip," which may be observed in any disease causing the bird to breathe through the mouth. Other symptoms egg production and occasionally are dullness, sneezing, suppressed diarrhea.

Treatment—As improper feeding and unsanitary conditions are largely responsible for an outbreak of this disease prompt attention to these matters will usually terminate the attack. Diseased fowls should be isolated and treated as follows: Remove dried exudate covering the nostrils and using a medicine dropper or syringe wash out the nasal cavities with a 20 per cent solution of baking soda. B. F. Kaupp, North Carolina Experiment Station, recommends forcing this solution through the nasal passages into the mouth. He then suggests the use of hydrogen peroxide in like manner, the former solution dissolving the mucus and the latter cleaning the cavities. Following this treatment he recommends injecting a small quantity of the following mixture: oil of thyme 1 dram, oil of eucalyptus 20 drops, oil of petrol 2 ounces. It may suffice to remove the crust over the nostrils and by applying pressure over the sinuses force the exudate out thru the nasal openings. The heads of the fowls may then be dipped in the same solution and in the same manner as suggested under chicken-pox.

Immunization—Knowing as little as we do about the role played by microorganisms in this disease and having abundant evidence to show that feeding and sanitation may determine its seriousness it seems that one should feel fully justified in condemning the use of vaccines or bacterins the value of which no one knows.

J. R. Beach of the California Experiment Station reports a disease which as to external manifestations resembles roup very closely. This disease has been proved to be due to faulty nutrition and may be easily distinguished by post mortem examination. Small, deeply penetrating pustules are found on the base of the tongue and on the sides of the pharynx. The kidneys and sometimes the liver and heart will be found to be marked with a fine network of white lines which probably represent tubules filled with urates. Change of diet will correct this malady.

How to Prevent Recurrence

When no new cases have appeared for some time and the diseased individuals seem well, a general cleaning of all coops with burning their litter and thorough disinfection of the interior of the chicken-houses should be undertaken. This includes the isolation quarters. To disinfect properly one should spray (soak) the walls, roosts, floors, inclosed runs, eating, drinking and other utensils with a 3 per cent solution of some reliable disinfectant such as compound solution of cresol or a similar preparation and the whitewash if so desired. In the poultry yard quicklime may be used and whenever it is possible to do so the ground should be turned over by plowing or spading. The isolated birds should be kept from mingling with the rest of the flock for at least one month after recovery of the last case.

How to Make Per Cent Solutions

Per cent means parts per hundred, e. g., 2 per cent potassium permanganate, 2 parts pt. perm. to 100 parts of water. 1 level teaspoonful 4 grams. 1 level tablespoonful 15 grams. 1 heaping teaspoonful and 1 heaping tablespoonful 5 and 20 grams respectively. 1 full quart milk bottle 1000 cubic centimeters. 1 cubic centimeter 1 grain by weight. 20 grams of a solid or liquid to 1000 grams of water, 2 per cent solution. From these equivalents one should be able to mix up any strength desired.—H. J. Stapseth, Bacteriology Section, M. A. C.

RAISING GEESE ON SHARES

A loaned B four geese and two ganders, for one year. B is to return the four geese and two ganders at the end of the year. What share of the profits should each share?—V. A. B., Carson City, Mich.

—The goose raising enterprise which you mentioned as being carried on by two parties, A. and B. is an unusual one. Poultrymen distributing hatching eggs generally work on the basis that for every setting of eggs released they will have the privilege of selecting one cockerel or pullet when matured. I think in this particular ase that the party B. should receive at least two thirds of the stock produced because he has assumed the responsibility in taking care of the breeding stock and the raising of the goslings.—E. C. Foreman, Associate Prof. of Poultry Husbandry, M. A. C.

MOISTURE FOR HATCHING EGGS

PROBABLY no question concerned with the incubation of eggs has called forth the comment and controversy that the moisture question has. Whether it should be supplied to hatching eggs during the incubating period or not, is one of the favorite topics for an annual spring argument among poultrymen and hatchery operators.

There can be no doubt but that where the incubation of eggs takes place under hens that there is more or less an application of moisture to the eggs through external sources. This is responsible, more than anything else, for the currency given the idea that moisture ought to be applied externally from time to time during the incubation period.

We are not absolutely opposed to the application of moisture, for we recongnize that there are times when this is desirable, but, in the majority of cases, it is unnecessary and will do more harm than good. If good, fresh eggs are set—eggs that have not been held more than two or three days and not over a week, if possible, no application of moisture will be necessary unless you are using a very unsatisfactory type of incubator. Nature makes ample provision for the moisture content of an egg sufficient to supply all the needs of the developing embroyo chick during the process of incubation provided reasonably fresh eggs are set. But as an egg ages the moisture content evaporates and the chance of hatching a good, strong chick diminishes.

Many people advocate sprinkling the eggs with lukewarm water from time to time during the hatching period. We are absolutely apposed to this direct application of moisture to the shell of the hatching egg because we have tried that method time and again and have convinced ourselves that it affects the size of the chick hatched adversely. The more moisture applied to the shell of the egg, the smaller the chick hatched. This is due to the fact that the moisture drying off the surface of the shell rapidly, as it is bound to do, draws further on the natural moisture content of the egg and thereby decreases the size of the chicks hatched. Of course, the plan of dipping all eggs in lukewarm water is to be discouraged for the same reason.

Where moisture must be added in the incubator we feel that the plan of keeping a saucer of water under the egg tray is the best. It is naturally true that a wooden incubator well dried out will absorb considerable moisture as it warms up and unless it comes from some such source, it is bound to come from the eggs placed in the machine. Incubators that have stood idle in a dry place for a whole season will absorb more moisture than those that have been running several hatches.

The moisture question is taken care of by automatic arrangements on many incubators, more particularly on the large mammoth machines used in hatcheries for the large flocks. Some of the smaller machines provide sand trays which are to be kept moist all the time. We see no objection to these provided the sand is kept moist. If it happens to dry out overnight or during the day it will, in turn, absorb moisture from the eggs and may do more harm than can be remedied. If you have such a moisture tray, be sure to keep it moist according to directions all the time for the best results.

In order to get away from the moisture habit or evil, set absolutely fresh eggs whenever possible. Eggs set the same day they are laid will hatch larger and better chicks than eggs a week old. The difference is

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THE HUNTED WOMAN

(Continued from page 9.)

they drench you in a jiffy. Donald is going ahead to put up a tent."

By the time they reached the mouth of the canyon MacDonald was out of sight. A little creek that was a swollen torrent in spring trickled out of the gorge. Its channel was choked with a chaotic confusion of sandstone rock and broken slate, and up through this Aldous carefully picked his way, followed closely by Joanne. The sky continued to darken above them, until at last the sun died out, and a thick and almost palpable gloom began to envelop them. Low thunder rolled through the mountains in sullen rumbling echoes. He looked back at Joanne, and was amazed to see her eyes shining, and a smile on her lips as she nodded at him.

"It makes me think of Henrik Hudson and his ten-pin players," she called softly. "And ahead of us—is Rip Van Winkle!"

The first big drops were beginning to fall when they came to an open place. The gorge swung to the right; on their left the rocks gave place to a rolling meadow of buffalo grass, and Aldous knew they had reached the basin. A hundred yards up the slope was a fringe of timber, and as he looked he saw smoke rising out of this. The sound of MacDonald's axe came to them. He turned to Joanne, and he saw that she understood. They were at their journey's end. Perhaps her fingers gripped her rein a little more tightly. Perhaps it was imagination that made him think there was a slight tremble in her voice when she said:

"This—is the place?"

"Yes. It should be just above the timber. I believe I can see the upperbreak of the little box canyon Keller told me about."

She rode without speaking until they entered the timber. They were just in time. As he lifted her down from her horse the clouds opened, and the rain fell in a deluge. Her hair was wet when he got her in the tent. MacDonald had spread out a number of blankets but he had disappeared. Joanne sank down upon them with a little shiver. She looked up at Aldous. It was almost dark in the tent, and her eyes were glowing strangely. Over them the thunder crashed deafeningly. For a few minutes it was a continual roar, shaking the mountains with mighty reverberations that were like the explosions of giant guns. Aldous stood holding the untied flap against the beat of the rain. Twice he saw Joanne's lips form words. At last he heard her say:

"Where is Donald?"

He tied the flap, and dropped down on the edge of the blankets before he answered her.

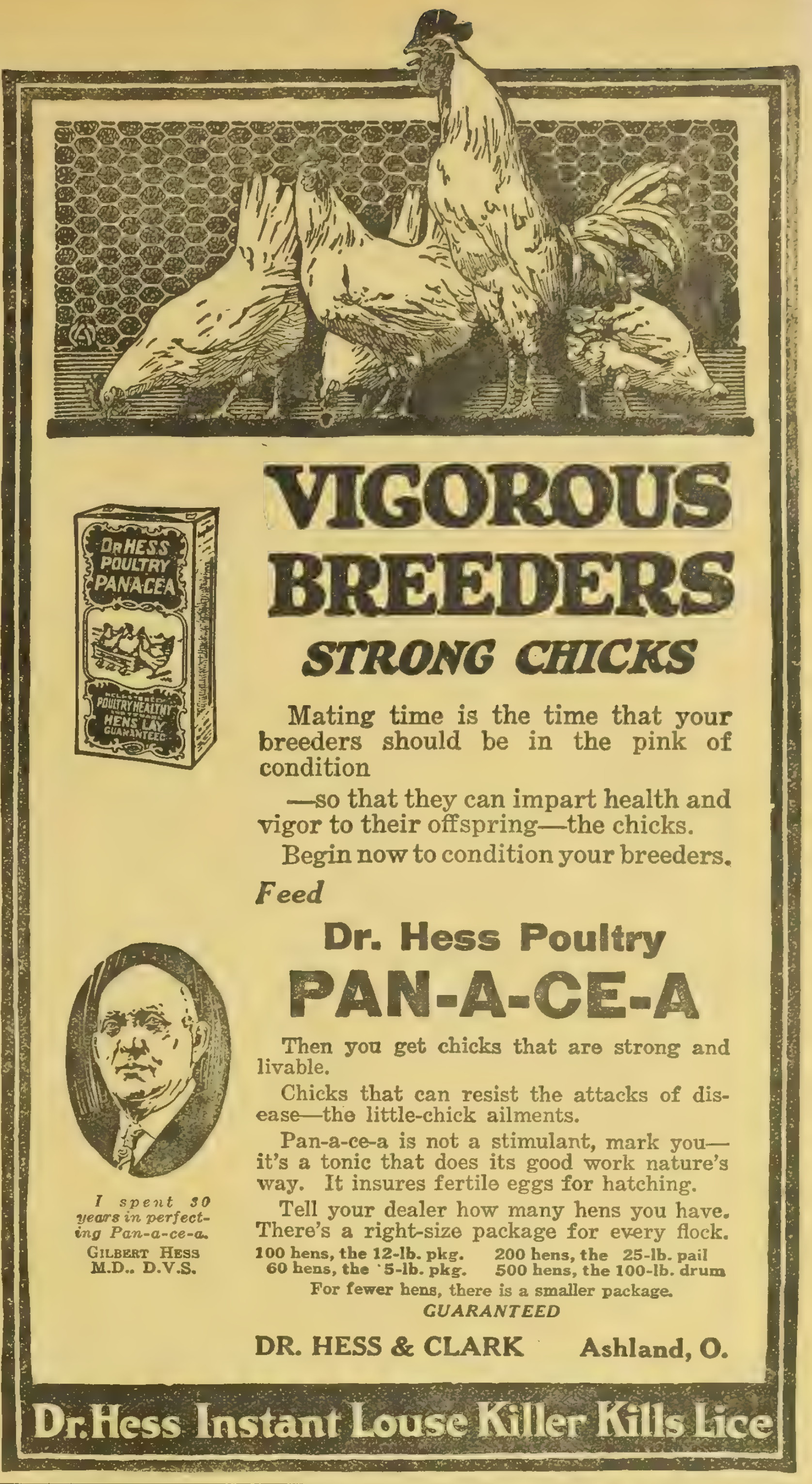
"Probably out in the open watching the lightning, and letting the rain drench him," he said. "I've never known old Donald to come in out of the rain, unless it was cold. He was tying up the horses when I ran in here with you."

He believed she was shivering, yet he knew she was not cold. In the half gloom of the tent he wanted to reach over and take her hand.

For a few minutes longer there was no break in the steady downpour and the crashing of the thunder. Then, as suddenly as the storm had broken, it began to subside. Aldous rose and flung back the tent-flap

"It is almost over," he said. "You had better remain in the tent a little longer, Ladygray. I will go out and see if MacDonald has succeeded in drowning himself."

(Continued in Mar. 3rd issue.)



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MARKET FLASHES

MARKET SUMMARY

Cold snap causes wheat prices to advance, market firm. Other grains follow trend of wheat. Beans advance 15c with demand brisk. Eggs steady. Butter not wanted and easy. Potatoes quiet. Cattle slow and prices unsteady. Hogs active but lower. Sheep quiet.

(Note: The above summarized information was received **AFTER** the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press —Editor.)

FOOTE'S MARKET LETTER

By W. W. Foote.

A GREATER contrast between business conditions in the United States and those prevailing in several European countries could hardly be imagined, and refraining from getting mixed up in the controversies over there has saved us from all kinds of evils. Furthermore, not only is our home trade showing marked improvement over that of last year, but we are still exporting a great deal of provisions. As to the future, predictions are hazardous perhaps, but bankers, manufacturers and merchants believe that sufficient credit will be arranged to admit of large exports of food and other necessities. The railroads report the largest movement of freight ever seen at this season of the year, recent shipments running far ahead of the previous week, as well as far above the corresponding weeks of the last two years. There is a continuance of easy money conditions, and the Chicago banks are making loans on collateral at 4¾ to 5¼ per cent. Liberty bonds have sold at advanced prices, while government bonds of leading European countries have sold off sharply, French issues going down materially, with British finances much better than those of continental war countries and promise of an early settlement for payment of the huge loans made by the United States to Great Britain. While the home trade of this country is active and on sound basis, there is no disposition upon the part of merchants to load up heavily with commodities, and farmers should not look for any boom. It is encouraging to know that savings in the banks of this country have shown a large increase during the past year. Labor is well employed at high wages, and this means large consumption of meats and other food. Despite the greatly increased marketing of hogs this season, the stocks of lard and hog meats in this country are unusually small, the prices are higher than last year.

Large Sales of Grain

Only a short time ago it was very generally expected that a renewal of war in Europe would bring about much diminished exports of the several grains and flour, but thus far this has failed to take place, and such shipments have been running much ahead of a year ago. Besides liberal exports from North America of wheat breadstuffs, Germany and Norway have been large buyers of rye, and other countries have taken a good deal of rye, which is much cheaper than wheat. Exports of corn and oats are smaller than they were a few months ago, and price fluctuations in oats are usually within narrow limits, sales being made at an advance of several cents above the prices current a year ago. Wheat, while advancing in price within a short time, is selling well below the prices of a year ago, and rye is cheaper than last year, but barley is higher. Corn is controlled mainly by home influences, and its unusually large consumption on the farms is mainly responsible for its selling nearly 20 cents a bushel higher on the Chicago Board of Trade for May delivery than a year ago. Reports from most parts of the corn belt are that corn is plentiful, and farmers are in no hurry about parting with their surplus stocks at ruling prices. Late reports are that Germany is buying Russian rye at much below the American prices. It is impossible to forecast the future, but farmers who market their grain at fair profits are not likely to regret it. May wheat has been selling in Chicago at $1.12½, compared $1.31¾ a year ago. May corn sells at 76½ cents, comparing with 59 cents a year ago; and May oats at 45½ cents comparing with 40½ cents last year.

Large Supply of Hogs

The Department of Agriculture a short time ago reported the number of hogs in the United States as unusually large, and the heavy receipts in Chicago and other packing points bear out this statement, supplies running far ahead of a short time ago and a year ago. The Chicago packers, in common with those of other packing centers, want a great many hogs to convert into fresh pork products and lard and cured meats, and there is a very large call in the Chicago market for hogs to ship to eastern packing points, but the large receipts have put prices much lower. The bulk of the hogs sell within a range of about 50 cents per 100 pounds, with prime light bacon hogs going highest and the best heavy butchers are selling 35 cents below them. Hogs are selling at much lower prices than in recent years, and so long as this keeps up it will be difficult to check the downward tendency of prices. The marketings are largely of well matured hogs, weights being much heavier than in past years, causing killers to pay a good premium for the lighter offerings. Looking ahead, it may be said that all the indications are that large numbers of hogs will continue to be marketed, forcing prices gradually lower, and the best authorities advocate marketing hogs averaging from 200 to 250 pounds, as corn valued at feeding points at 60 cents a bushel makes rather dear feed. Provisions are having a large consumption in this country, as well as abroad, exports continuing much heavier than a year ago. Stocks of lard in western packing centers are much less than a year ago, but stocks of cured hog meats are far heavier, while prices for provisions are higher. Recent hog sales on the Chicago market were made at $6.85 to $8.70, comparing with $8 to $10.25 a year ago.

Beef Cattle Plentiful

Farmers are feeding many more cattle than usual, and they are shipping them to market after short feeding, the offerings on the Chicago and other markets including an unusually small proportion of long-fed steers and fat yearlings. Much of the time supplies are too large, causing declines in prices, but quite recently they have been on a more curtailed scale, and this caused an upward turn in Chicago prices for fat beeves. The choicer steers sold for $10 to $11 per 100 pounds, with a good class at $9 and upward, the bulk of the steers crossing the scales at $7.75 to $10.25, and common to medium at $6.40 to $7.50. Most of the cows and heifers found buyers at $4.50 to $7.50, and calves sold at $6 to $13.50, most of the light veal calves fetching $11 and over. The stockers and feeders had a fair sale at $5 to $8, the desirable kinds selling at $6.50 and over.

Lambs Sell High

Despite occasional breaks in prices in the Chicago lamb market, sales are made all the time at far higher figures than in most former years, particularly under pre-war values, and Michigan sheepmen are making generous profits on well finished consignments of lambs, yearlings and sheep, while feeding lambs sell as high as the best killers, with nowhere near enough offered to meet the demand. Wooled lambs are selling in Chicago at $13.50 to $13.25.

WHEAT

As we predicted the wheat market has advanced. To date the price has advanced 4 cents over that of a fortnight ago and it is in a position to advance further. The opinion entertained by the trade in general is that the trouble in Europe will soon be settled, which means that Europe will soon be bidding in the American market for supplies. The market was firm all of last week. Supplies were fairly large but dealers only fed the market what it could take care of. Domestic demand is small at present and business from the seaboard is practically nothing; however, it is reported that there is a heavy shortage in Europe, and although Europe's financial condition is handicapping her at present, the bulls in the market think there will be a way out and that American grain will find the way to Europe. They expect congress to do something to improve Europe's buying power in this country.

Prices

Detroit—Cash No. 2 red, $1.39; No. 2 white, $1.39; No. 2 mixed, $1.37.

Chicago—No. 2 hard, $1.23½; No. 4 hard, $1.19¾.

Prices one year ago—Detroit, No. 2 red, $1.42; No. 2 white and No. 2 mixed, $1.39.

CORN

Corn has followed the trend of wheat during the past couple of weeks and prices are somewhat higher. Advances at Detroit amounted to 4 cents. Although demand has been light there has been considerable bullish talk about this market, observers believing the supply will be light. Farmers seem ready to sell at prevailing prices and some dealers are disposing of their stock.

Prices

Detroit—No. 2 yellow, 80½c; No. 3, 79c; No. 4, 77c; No. 5, 75c.

Chicago—No. 2 mixed, 75c; No. 2 yellow, 75@75¾c; No. 2, 74c.

Prices one year ago—Detroit, No. 2 yellow, 60c; No. 3, 55c.

OATS

This market made a weak attempt to follow wheat and corn but it fell rather flat. Demand has improved slightly and the supply is small, but enough to take care of present demand. The tone of the market is firm .

Prices

Detroit—No. 2 white, 50c; No. 3, 48½c; No. 4, 47c.

Chicago—No. 2 white, 45¼@46½c; No. 3, 44@45¾c; No. 4, 43¾@44c.

Prices one year ago—Detroit, No. 2, white, 43c; No. 3, 40½c

RYE

Rye remains unchanged with little doing in the way of demand or receipts. The market seems to be in a rut and there is no indication as to whether it will leave the rut and if it does which way will it go, up or down. The future trend of this market depends considerably on the outcome of the European troubles.

Prices

Detroit—Cash No. 2, 90c.

Chicago—Cash No. 2, 87½@89c.

Prices one year ago—Detroit, Cash No. 2, $1.00.

BEANS

Elevator men throughout the state reported the middle of last week that the bean market was lifeless, that they could not dispose of their stocks very readily and that they were paying the farmer from $6.75 to $7 per hundredweight. The market ruled easy for a few days but before closing Saturday the price at Detroit advanced 30 cents bringing the Detroit price back within 10 cents of what it was two weeks ago. Although deliveries increased when the market weakened there were not enough receipts to bear the trend.

Prices

Detroit—C. H. P., $7.60 per cwt.

Chicago—C. H. P., $8.15@8.50 per cwt.

Prices one year ago—Detroit, C. H. P., $5.50 per cwt.

POTATOES

The quantity of potatoes in the 35 late potato states on January 1 of this year is estimated by the United States Bureau of Agriculutral Economics to have been 125,290,000 bu. or 29.7 per cent of the total production of those states. These figures include those for sale for local consumption as well as those available for shipment, but do not include the stocks necessary for family consumption on the farms where produced nor those retained for seed. One year ago the stocks amounted to 90,023,000 bushels and two years ago, 107,991,000 bushels. Of the total stocks on hand this year, Michigan held 13,160,000 bushels, or 10.5 per cent, according to the report issued by Verne H. Church, U. S. Agricultural Statistician and L. Whitney Watkins, Commissioner of Agriculture. This represents 34.8 per cent of Michigan's crop.

The Dept. estimate caused the market to weaken at some points in the east and declines in prices were made in some instances. Western markets were steady as the car shortage continues to hold up receipts and prices have made only slight changes during the past couple of weeks. Holders of potatoes should not become too anxious and unload all of their potatoes at once. Indications are that the potato market will enjoy a more healthy condition than at present.

Prices

Detroit—Michigan, $1@1.10.

Chicago — Wisconsin, 90@95c; Michigan, 80@85c.

Prices one year ago—Detroit, $2.20.

HAY

Hay markets generally show very little change. A general dullness has been shown with holders anxious to realize. Snow and colder weather exerted little influence in demand conditions. Prices generally are steady to a little lower. A stronger feeling is reported in New York market at present, but higher prices have not been realized.

Prices

Detroit—No. 1 timothy, $16@16.50; standard $15.50@16; light mixed $15.50@16; No. 2 timothy, $14@15; No. 1 clover mixed, $14@14.50.

Chicago—No. 1 timothy, $19@21; No. 1 clover, $12@14; No. 1 light clover timothy and clover mixed, $17@18.

New York—No. 1 timothy, $24; No. 1 light clover mixed, $24; No. 2, $22@23.

Prices one year ago—Detroit, No. 1 timothy, $19@20; standard, $18@19; No. 2 timothy, $17@18.

Alfalfa—Chicago, No. 1, $23@26.

WOOL NOTES

The seaboard wool markets have not displayed the activity expected after the recent showing in New York and sale of finished goods by some of the prominent manufacturers in the United States. The prices at which these fabrics were offered were less than had been anticipated by the trade; as a result of this sale the prices for wool have not changed materially. More attention is being directed to wool of the medium grades such as ¼ Blood and ⅜ Blood and if any hardening tendency is noticed it is for these grades. It may be said that the market is moderately active with prices fairly strong.

WEEKLY MARKETGRAM

U. S. Bureau of Agricultural Economics

Washington, D. C., for the week ending February 10, 1923.

FEED—Markets steady for transit feeds. March, April, and May bran offered at $2 below prompt shipment prices. Cottonseed meal weak, demand dull, offerings plentiful. Linseed meal about $2 lower, demand light. Gluten and hominy feed quiet, inquiry and offerings light. Alfalfa meal draggy, prices lower. Receipts and stocks generally good. Movement fair. Quoted Feb 9—bran $26.50, middlings $26.75, flour middlings $28.75, rye middlings $25, Minneapolis; gluten feed $42.65 Chicago; 34 percent linseed meal $52 Minneapolis, $50 Buffalo; 36 percent cottonseed meal $40 Memphis; $41 Atlanta; white hominy feed $30 St. Louis, $30.50 Chicago, No. 1 alfalfa meal $25 Kansas City:

DAIRY & POULTRY PRODUCTS—Butter markets firm most of week but are weak at close. Prices have advanced to 2½ over a week ago. The firmness during the week was due to speculative support, altho interest primarily was lacking in face of the holiday Monday the 12th, and anticipated heavy receipts following this, but little interest in foreign butter now. Closing prices 92 score butter: New York 49c; Boston 49½; Philadelphia 50c; Chicago 49c. Cheese markets partly stedy to weak. Decline occurred on Wisconsin cheese boards Monday, but trading interest is still lacking in view of further declines. Prices on Wisconsin primary cheese markets Feb 9: Twins 24¾c; Flats 25¾c; Daisies 25½c; Double Daisies 25¼c; Long Horns 25¾c; square prints 26c.

PRITCHARD'S
WEATHER
FORECAST
INTERPRETED BY THE STARS

Week of February 18

THE week beginning February 18 promises to be quite cold for the season in Michigan.

The warmest period of the entire week will occur about Wednesday and possibly again at the close of the week, while the coldest period of the seven days in question will come during the very early part of the week.

During Sunday and Monday and probably Tuesday the weather is expected to be fair in Michigan but during these latter days the temperature will be rising. These conditions will be due to the eastward advance of a southwestern storm that will bring with it much rain, sleet or snow according to latitude and particular portion of any stated town in relation to the storm center.

We expect that this will be one of the greatest moisture carrying storms of the month and Michigan will receive its share of the burden as the passes which will be during middle part of week. Locally there will be severe winds, sleet, ice storms and blizzards.

No sudden change to colder is expected immediately following in the wake of this storm although the temperature will drop and live stock should not lack attention.

There is a probability that storminess will again effect Michigan about Saturday with more rain, sleet or snow and strong winds.

Temperatures Below Normal

During the next three or four weeks the temperatures will average colder than normal and during this same period there will develop some severe sleet and blizzard storms.

Week Ending February 25

The opening days of this week promises to bring Michigan a decided rise in temperature.

The weather will have become threatening, the winds increasing and before Wednesday general rain or snow may be expected in the state. During the storm there may also be some sleet but in any event we figure that storminess will be severe enough to cause delays or hinderances to traffic and business in at least parts of the state.

Following close on the heels of this storm there will be a cold wave. This decided drop in temperature is expected to hit this state about middle of week.

For the balance of this week, with the possible exception of Saturday, temperatures will remain cold in Michigan.

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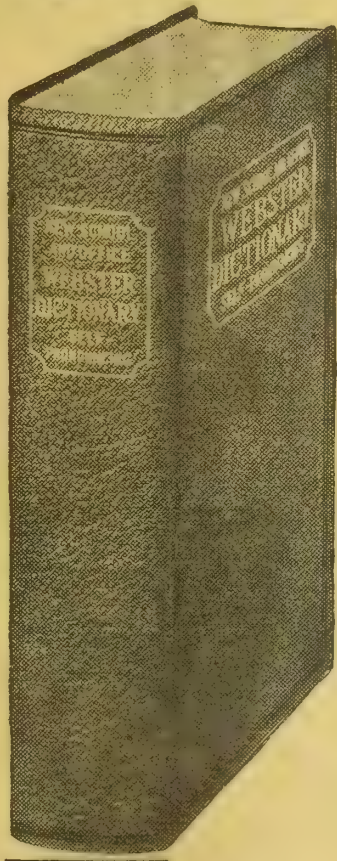

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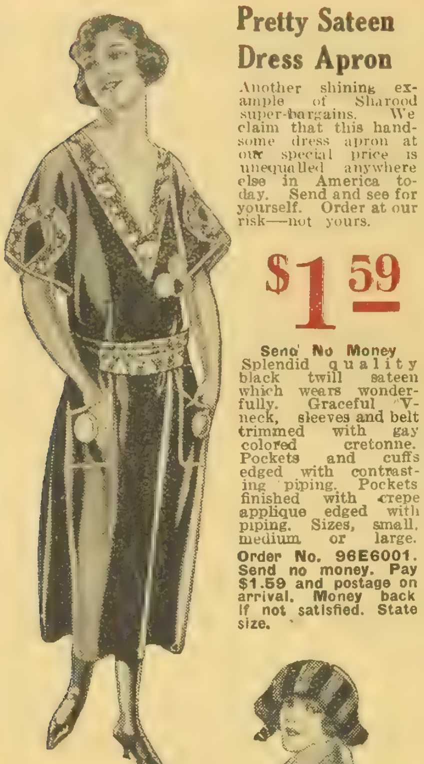

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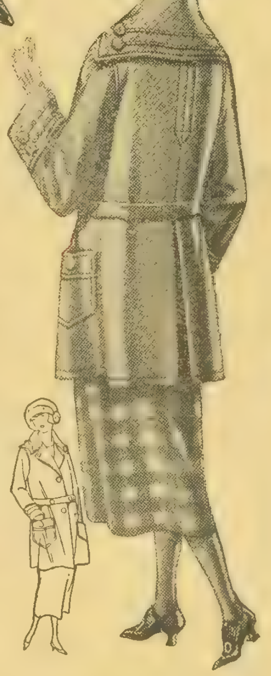

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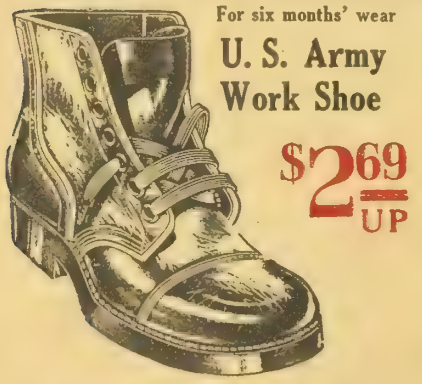

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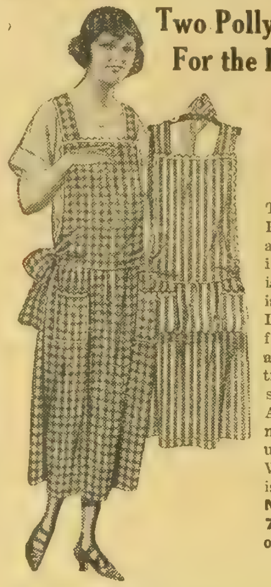

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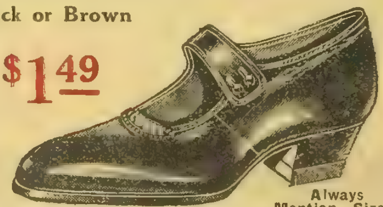

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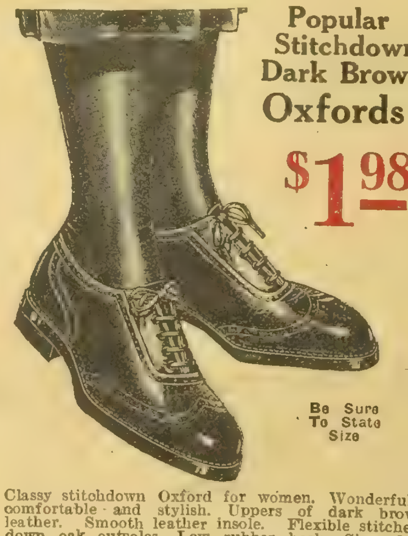

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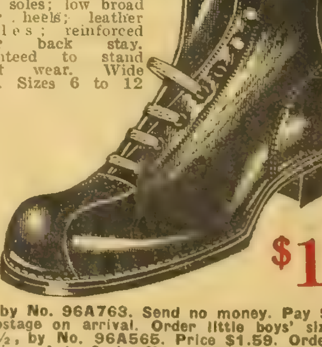

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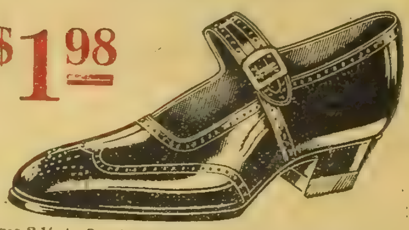

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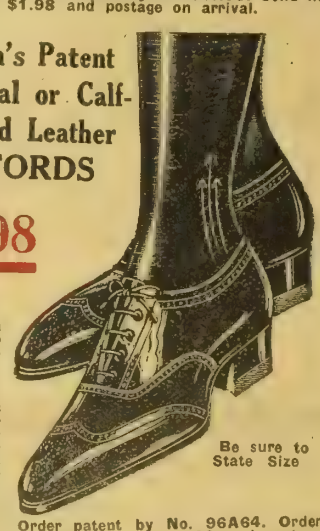

Made with imitation shield tip and medallion perforated vamp, perforated lace stay and circular foxing. Has medium rubber heel and medium pointed toe. Sizes 2½ to 8, wide widths **Order patent by No. 96A64. Order gunmetal by No. 96A69. Pay $1.98 and postage on arrival.**

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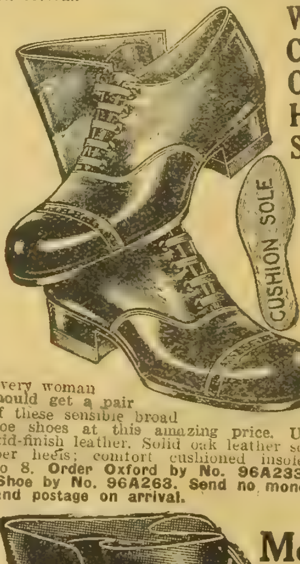


Women's Comfort Oxfords or High-Cut Shoes only

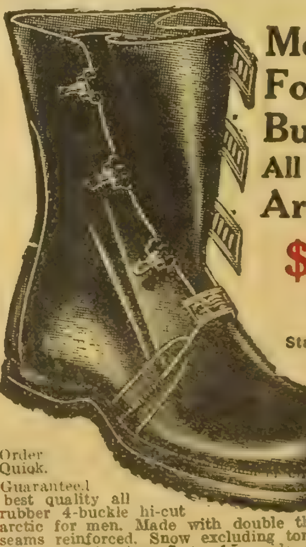
$1.98

Send No Money

SIZES 2½ to 8

State Size

Every woman should get a pair of these sensible broad toe shoes at this amazing price. Uppers of soft kid-finish leather. Solid oak leather soles. Low rubber heels; comfort cushioned insoles. Sizes 2½ to 8. **Order Oxford by No. 96A233. Order High Shoe by No. 96A263. Send no money. Pay $1.98 and postage on arrival.**



Men's Four Buckle All Rubber Arctics

$2.48

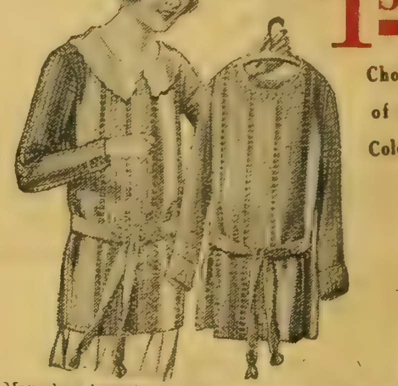
State Size

Order Quick. Guaranteed best quality all rubber 4-buckle hi-cut arctic for men. Made with double thick soles and seams reinforced. Snow excluding tongue. Furnished in men's sizes 7 to 15, wide widths. Sensational value. Send quick. **Order by No. 96A990. Send no money. Pay $2.48 and postage on arrival.**

New Wool Worsted Pollyann Slip Over

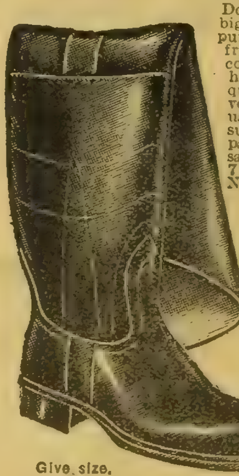
2 For $1.98

Choice of all Colors



Marvelous bargain in women's and misses' all wool worsted knit slip over, the very latest thing in smart Spring and Summer wear. Can be worn over a waist or with detachable collars and cuffs. Comes in Misses' sizes 14 to 20 and Women's 34 to 44; two for $1.98. Choice of the following colors: **Orchid No. 96E6205, Buff No. 96E6206, Brown No. 96E6207, Jade No. 96E6208, Navy No. 96E6209. Send no money. Pay $1.98 and postage when goods reach you.**

Men's Boot Bargains



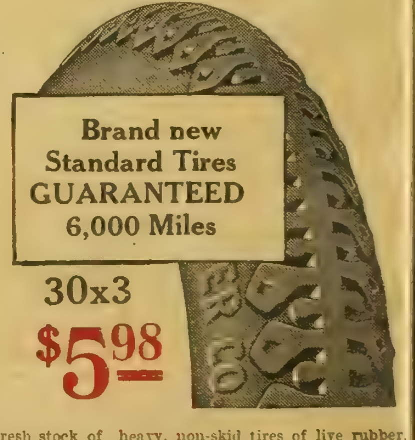
Give size.

Don't fail to make this big saving on Men's pure gum hip boots; friction lined; heavy corrugated sole and heel; guaranteed first quality. Made of the very best rubber. Usually sells at $5. Be sure to order your pair while this great saving offer lasts. Sizes 7 to 14. Wide widths. No half sizes.

$2.98

Order by No. 96A-949. Send no money. Pay $2.98 and postage on arrival. State size wanted. Order similar style in knee boot sizes 7 to 12 by No. 96A950. Send no money. Pay $2.98 and postage on arrival.

TIRES and TUBES



30x3

$5.98

Fresh stock of heavy, non-skid tires of live rubber. Generously oversize. 6,000 guaranteed, but often give 8,000 to 10,000 miles. Choice of non-skid or ribtread in 30x3 size. Others are non-skid. **Pay only bargain price listed below and postage on arrival.**

BARGAIN PRICE LIST

No. 964040—30x3	$5.98
No. 96D4041—30x3½	6.98
No. 96D4042—32x3½	8.98
No. 96D4043—31x4	10.28
No. 96D4044—32x4	11.98
No. 96D4045—33x4	12.28
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SHAROOD'S OVERSIZE CORD, 30x3½

Same sturdy construction as regular cord well oversized. A wonder service tire for Fords. **Order by No. 96D4051. Send no money. Pay only $9.19 and postage on arrival.**

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Now is your chance to buy extra thick, live rubber inner tubes at a big saving. Don't wait for tube prices to go up. How many shall we send? Give size wanted. No money now. **Pay only bargain price and postage on arrival.**

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No. 96D4020—30x3	99c
No. 96D4021—30x3½	$1.19
No. 96D4022—32x3½	1.45
No. 96D4023—31x4	1.69
No. 96D4024—32x4	1.79
No. 96D4025—33x4	1.79
No. 96D4026—34x4	1.79

Be Sure to Mention All Sizes Colors, etc., and Send All Orders From This Page Direct to **SHAROOD CO.** Dept. 96 MINNEAPOLIS MINNESOTA

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The Michigan
BUSINESS FARMER

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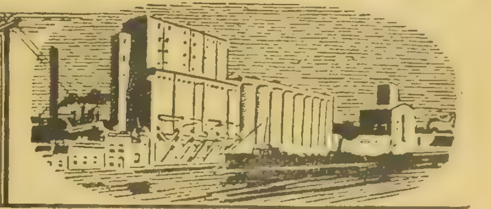

VOL. X, No. 14 SATURDAY, MARCH 3, 1923 $1 PER YEAR

A Simple Lesson in Business Farming

Eggs are now selling 239% higher than in 1913, before the war!

Read in this issue: Detroit Jumps Ahead as a Live Stock Market—Is the Midway Necessary to Support Our Fairs?—Make Your Woods Produce Profitably Both as Sugar Bush and Woodlot.

4 TIMES Around the World with ONE OILING

100,000 Miles Without Stopping for Oil

An inventor who could develop an automobile, a railroad car or any other conveyance on wheels which would perform such a feat would be considered a wonder. But such is the record of regular accomplishment by the Auto-oiled Aermotor during the past eight years in pumping water.

Did you ever stop to think how many revolutions the wheel of a windmill makes? If the wheel of an Aermotor should roll along the surface of the ground at the same speed that it makes when pumping water it would encircle the world in 90 days, or would go four times around in a year. It would travel on an average 275 miles per day or about 30 miles per hour for 9 hours each day. An automobile which keeps up that pace day after day needs a thorough oiling at least once a week. Isn't it marvelous, then, that a windmill has been made which will go 50 times as long as the best automobile with one oiling?

The **Auto-oiled Aermotor** after 8 full years of service in every part of the world has proven its ability to run and give the most reliable service with one oiling a year. The double gears, and all moving parts, are entirely enclosed and flooded with oil all the time. It gives more service with less attention than any other piece of machinery on the farm. To get everlasting wind-mill satisfaction buy the Auto-oiled Aermotor, the most efficient windmill that has ever been made.

For full information write **AERMOTOR CO.** Chicago Kansas City Dallas Minneapolis Des Moines Oakland

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Let us show you a better way of building—a way that means permanence, fire protection, appearance and more profit.

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Make more profit out of your herd. Save repair and paint bills; reduce fire hazard; keep stock comfortable and healthy; warm in winter, cool in summer; decay, storm and vermin-proof; will not burn. Kalamazoo Tile is made from selected quality fire clay in our own plant located in the center of the finest fire clay district. **Let our Building Plan Department help you.** Write for descriptive literature. Free estimates on receipt of your rough plans.

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On the 33-Year Government Amortization Plan to desirable borrowers who own good, well-managed farms in Michigan and Ohio, and wish to borrow not over 50% of the value of their land plus 20% of the appraised value of the buildings.

No commissions—Low interest rates. No stock investment. Unusually prompt and satisfactory service. If your loan will meet these requirements, write us.

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Guardian Building, Cleveland, Ohio

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Earn money by making maple syrup. Great demand for quality product.

CHAMPION EVAPORATOR

Produces finest quality. Saves time, fuel and labor. Pays for itself in a couple of seasons—lasts for many years.

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CHAMPION EVAPORATOR CO., Hudson, Ohio

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ALL AROUND SATISFACTION FOR ANY CULTIVATION PURPOSE

Its thru right kind of cultivation that foul growths are kept down and can be eradicated. THE KOVAR DIGGER has opened the field for the right kind of cultivation and having exclusive features will give satisfaction which no other machine will produce. Thousands of farmers have been convinced and we want to show you. Write for free booklet on land cultivation and how to work foul growths. Besides our regular tooth we make a Special Sow and Canadian Thistle Tooth. This will work deeper and move the ground more thoroughly. KOVAR has the most successful Spring Tooth Corn Cultivator. Also a Harrow Cart. **Write for further information.**

JOS. J. KOVAR, OWATONNA, MINN.

Only $2 DOWN ONE YEAR TO PAY

$44 Buys the New Butterfly Jr. No. 2½ Light running, easy cleaning, close skimming, durable.

NEW BUTTERFLY Separators are guaranteed a lifetime against defects in material and workmanship. Made also in four larger sizes up to No. 5 1-2 shown here; sold on

30 DAYS' FREE TRIAL

and on a plan whereby they earn their own cost and more by what they save. Postal brings Free Catalog Folder. Buy from the manufacturer and save money. (1)

ALBAUGH-DOVER CO. 2260 Marshall Bl. Chicago

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Every reader of M. B. F. will be in need of one or more of the following items this season. Check below the items you are interested in, mail it to us and we will ask dependable manufacturers to send you their literature and lowest prices free and without any obligation on your part.

Automobiles
Auto Tires
Auto Supplies
Auto Insurance
Bee Supplies
Berry Baskets
Building Supplies
Bicycles
Binder Twine
Barn Equipment
Bean Thresher
Chemical Closets
Cultivator
Cream Separator
Carriage
Corn Planter
Clothing—Men's
Clothing—Women's
Concrete Mixer
Drain Tile
Dairy Feed
Dynamite
Ensilage Cutter
Fanning Mill
Fertilizer
Fur Buyers
Farm Lands
Ford Attachments
Furniture
Feed Cutter
Furnace
Gas Engine
Guns
Grain Drill
Horse Collars
Harrows
Harvesters
Hay Rakes
Hay Presses
Hog Oilers
Hog Feeders
Incubators
Lumber
Lighting Plants
Lightning Rods
Limestone, Pulverized
Manure Spreader
Motorcycles
Milking Machine
Mantel Lamp
Nursery Stock
Oils and Lubricants
Poultry Supplies
Pumps
Paint
Plows
Potato Machinery
Roofing
Sawing Machinery
Stock Food
Shoes
Stoves
Stump Puller
Seeds
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Silo
Spray Materials
Tanners
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Truck
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Tank Heaters
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Wagons
Water System
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Windmill
Wire Fencing
Wool Buyers

(Write on margin below anything you are interested in not listed above.)

Name ....

Address .... R. F. D. .... State ....

THE MICHIGAN BUSINESS FARMER, Buyers' Bureau, Mt. Clemens, Michigan.

Current Agricultural News

TO DETERMINE VALUE OF MICHIGAN WOODLOTS

THE Department of Forestry of the University of Michigan is sending out short and simple questionnaires to farmers in some thirty or fourty counties of lower Michigan in an effort to determine the value of the woodlots of southern Michigan. They wish to ascertain with some degree of accuracy their annual returns to the farmers and their economic position in the wealth of the state. Their idea in this study is to obtain sufficient data that they may present forcefully the need of government or state agents to assist the farmers in the handling and marketing of their woodlot products, and the care of the woodlot, in much the same manner that county agricultural agents now assist in farm products. You all realize the importance of this work and you will be helping both yourself and your neighbor by filling out the questionnaire if you receive one. As soon as it comes set right down and fill it out so you can return it by the next mail.

COW TESTERS HEAR ABOUT MICHIGAN DAIRY LAWS

MEMBERS of the Michigan Association of Cattle Testers met at the Dairy Department of the Michigan Agricultural College, East Lansing, on February 2nd for a general discussion of their work and a better understanding of the value of the work of the Association. The dairy laws of Michigan were explained by Mr. T. L. Broughten, director of the State Bureau of Dairying and Prof. O. E. Reed, head of the Dairy Department of the M. A. C., spoke on the value of the tester in his cow testing association work. Other things considered were the Register of Profit work as explained by Mr. R. H. Addy, Extension Specialist in Dairying at the College, and also the Bull Association work was emphasized by Mr. S. J. Brownell, another Extension Specialist in Dairying at the M. A. C. The cow testers elected the following officers: President, Hoyt D. Shisler; Vice-President Fred Leonard; Secretary-Treasurer, J. M. Mathiesen; and S. P. Sexton and L. J. Carter, directors.

HORTICULTURISTS MEET THIS THIS WEEK

THE annual pre-spring meeting of the Michigan State Horticultural Society is being held this week, Feb. 28 to Mar. 2, at Paw Paw. Grape culture, insect and disease control. cure and harvest of small and tree fruits and marketing problems will be discussed by some of the leading pomologists and growers in the Middle West.

A vice president of the society will be elected by the executive committee at this meeting to fill the vacancy caused by the election of A. J. Rogers of Beulah as president at the Grand Rapids meeting last December, Two candidates mentioned for the office are George Friday of Coloma, brother of the president David Friday of the Michigan Agricultural College, and Robert Anderson of Covert, one of the leading peach growers of Michigan.

The itinerary for the annual summer tour will probably be decided upon at this meeting. President David Friday, economist, will be one of the principal speakers.

UPPER PENINSULA BOOSTING CLUB WORK

SUBSCRIPTIONS of $1000 and $500 to promote, respectively, the boys' and girls' club work program, and the land-clearing campaign throughout the Upper Peninsula of Michigan during the ensuing year have been made by the Upper Peninsula Development Bureau of Michigan. The Decision was reached at a recent meeting of the officers and directors, at Menominee meeting.

The $1000 appropriated for the club work will be devoted, largely, to making possible the sending of a group of upper Michigan calf club boys, with their prize-winning animals to the National Dairy Show in the fall of 1923. It is a feature never before attempted by Cloverland's dairying interests. The boys' and girls' club work in upper Michigan is carried on under the direct supervision of A. C. Ketunen, Marpuette, Michigan.

The $500 for land-clearing purposes will be added to the general fund appropriated for the various upper Michigan counties. "Larry" F. Livingston, land-clearing expert for the Michigan Agricultural College, is in charge of these activities throughout the state. A. J. McAdams and George Amundsen, two experienced land-clearing workers, will be directly in charge of the upper Michigan campaign with the opening of the land-clearing season, this spring.

INTERNATIONAL EGG LAYING CONTEST

HIGH individual honors for the week ending February 13 go to Mr. Whittaker's Reds when they finished with 51 eggs for the week. The Ontario Agricultural College claims second honors with 50 eggs for the week with the Wolverine Hatchery third honor with 49 eggs.

In the Barred Rock class Brummer's Poultry Farm now hold first place with a total to date of 528 eggs. Dennison's pen second place, only two eggs behind the leading pen. Christophel holds third place.

In the Wyandotte section Evergreen Poultry farm still maintains an easy lead. Sink's pen from Farmington is in second place with 477 eggs, Carterloa Farm is third. Keister's pen are in fourth place.

Van Rallte still leads in the Ancona section with 354 eggs. Manning holds second place with 306 eggs and DeGoot third with 302.

The production in the Rhode Island Red class have been very satisfactory for the past few weeks. Dunning's pen takes the lead, four eggs ahead of Mrs. Travis's pen. The excellent production of Whittaker's pen is making them a dangerous rival.

Mr. Shaw's pen with 10 birds in action again lead the White Leghorn section with 587 eggs to date.

PRODUCERS TO OPEN IN KANSAS CITY MARCH 5

THE National Live Stock Producers' Association announces that its seventh co-operation commission house will open for business in Kansas City, Missouri, on March 5. Seven organizations are directly interested in supplying the new Kansas City terminal with live stock. They are: Missouri Farm Bureau Federation, Missouri Live Stock Shippers' Association, Kansas Farm Bureau Federation, Kansas Live Stock Shippers' Association, Oklahoma Live Stock Shipping Association, Texas and Southwestern Cattle Raisers Association, and the Texas Farm Bureau Federation. The new co-operative will also draw livestock from Colorado, Utah, Nebraska, and other western states.

MICHIGAN WOMAN CHAMPION HORSESHOE PITCHER

LAST Thursday, February 22, at St. Petersbery, Florida, a Michigan woman proved herself to be the greatest woman "barnyard golfer" in the country. This lady, Mrs. J. F. Francisco of Muskegon, won the national women's championship over five of the best women pitchers in the United States. This is the second time Mrs. Francisco has held this title as she won it for the first time in 1921. Last year she took second place.

FARMER-MERCHANT PICNIC IN MAY

ONE of the largest joint picnics of business men and farmers ever held in the vicinity of Lansing will take place in May. This picnic is to help bring about closer relationship between the merchants of Lansing and the farmers in the surrounding territory. Mrs. Dora Stockman, of the Michigan State Grange, represents the farmers and a well known business man represents Lansing business men as a committee to arrange the affair. This idea would work to the good of all in any community.

SATURDAY
MARCH 3rd,
1922

VOL. X, NO. 14

Being absolutely independent our columns are open for the discussion of any subject pertaining to the farming business.

"Hew to the line, let the chips fall where they may!"

The Michigan
BUSINESS FARMER

"The Only Farm Magazine Owned and Edited in Michigan"

Published Bi-Weekly
Mt. Clemens, Mich.

$1 PER YEAR

Entered as second-class matter, August 22, 1917, at the post-office at Mt. Clemens, Mich., under act of March 3rd, 1879.

Detroit Jumps Ahead As a Live Stock Market

Farmer Owned Packing Plant Helps Swell 1922 Totals and Yet Great Market is Only Partially Supplied by Live Stock From Michigan Farms.

By FRANK GARRISON

SOME five or six months ago it was estimated that we would handle for 1922 over 100,000 head of livestock. This figure was not quite reached, although an increase of 18,000 head was handled the second half of the year, or practically 50% more than from January to June inclusive thus showing a consistant gain in volume throughout the year, and right here is a good place and time to make the statement that at no stage of the game were our livestock purchasers made contingent on having an outlet for products, as it has always been the case with the sales department that difficulty existed in filling orders than in getting the orders, the fact being we could only cut the garment to suit the cloth and purchase what our available money would buy in raw materials, consequently limiting and cramping both the manufacturing department and sales department accordingly, to the handling of a small volume not commeasurate with available facilities and automatically creating a situation where neither could operate except on excessive costs.

With the natural healthy progress of the business, coupled with full and complete co-operation of our stockholders, this condition will undoubtedly show up to better advantage during the current year.

All things considered, the results obtained to date are encouraging and the figures mentioned below show this farmer-owned packing company to be more than a flash in the pan. We have absolutely made good in our plan of saving to share-holders heavy marketing expense by absorbing livestock out of first hands, as our figures show but 25% of our livestock to have been purchased in the local stock yards. No later than last week one community (where our representation of stockholders is perhaps larger than any where else in the state) had five car loads of live-stock for us and this week they are back with two more. Previous to our starting slaughtering operations all the livestock from these same people was subject to heavy toll in yardage, commission, insurance and feed which now are absolutely saved to them by shipping direct to the Detroit Packing Company.

75% Direct from Farmers

More power to their elbows. Others can, will and do benefit equally and I personally look for largely increased receipts from such sources as our business becomes better known.

Now for the figures:

Livestock Handled in 1922
(Detroit Packing Company Plant)

	Bought at Yards	Direct from Farms	Total Killed
Cattle	3183	6067	9250
Calves	1595	6360	7955
Sh. & Lbs.	1203	9270	10473
Hogs	12944	48114	61058

88736 head of livestock.

Total money value being:
Yards purchases..$ 487,643.05
Direct purchases..$1,501,096.09

Total........$1,988,739.14

These figures indicate that for every dollar expended in the M. C. Stock Yards we spent four dollars with the men who would otherwise have had to market their cattle, sheep, lambs and hogs through the stock yards at great expense to them. Now then, if these men saved the yard expense on a volume of business exceeding one and one-half million dollars, they surely found their affiliation with our company to be worth while.

Figuring the average value of $1-500.00 per car the $1,501,096.09 bought better than a thousand cars and consequently saved to the shippers between twenty-five and forty thousand dollars, in other words it paid them to this extent to have a great modern packing plant in Michigan's metropolis.

Detroit Gains 23% in 1922

Outside of being of direct benefit financially to its stockholders I consider that the Detroit Packing Company has materially helped the livestock interests of Michigan as a whole by not ouly our campaign of education which has carried over several years and will never stop, but also by supporting the local stock yards and helping to establish a better market in Detroit for Michigan livestock. Perhaps the commission men in the yards and other "powers that be" will hardly consent as freely to my contention as I am to contend, but facts speak for themselves and it is a fact that 19796 more cattle, 32303 more calves, 4513 more sheep and lambs, and 74663 mare hogs were handled through the M. C. Yards at Detroit during 1922 than the year previous, the increases being 23% on cattle, calves and hogs, with sheep and lambs showing relatively small differences.

Just a word further on livestock: It is a proven economic fact that the best is the cheapest and I have seen so much three cornered, mullet-headed, poor-bred stuff and often well-bred but poorly-fed stuff come into our yards the past year that I plead with you as a livestock producer to mend your ways and make more money with the same expenditure of time and effort by handling the right kind in the right way hereafter.

People Eating More Meat

To aptly illustrate what quality and condition mean in livestock it is only necessary to compare purchases made the same week by us—steer cattle, all of them, one lot costing us under 4¾c at the plant while for some fancy, well-bred and fully finished cattle we paid close to 12c, so it looks like a three to one bet in favor of the quality and condition proposition. Think it over, then do the necessary to get a good run for your time, feed and money.

The per capita consumption of meat for the U. S. in 1921 was:

Beef	57.7 pounds
Veal	8. pounds
Mutton	6.3 pounds
Pork	72.8 pounds

Or 144.8 pounds, which seems in line with reason, as this would mean but six and one-third ounces per day for 365 days.

We have within easy trucking distance of our plant in Detroit over two million people who on 1921 basis would consume 115,400,000 pounds of beef, equivalent to about 200,000 cattle; 16,000,000 pounds of veal, equivalent to about 110,000 calves; 12,600,000 pounds of lamb, equivalent to about 300,000 sheep and lambs, and 145,600,000 pounds of pork, equivalent to about 1,000,000 hogs, so you can realize how even this small percentage of Michigan's population insures absorption of all the meat food products of quality and condition Michigan can produce.

If You Think You Can Raise Ton of Pork from Litter Here's Your Chance

HOW YOU CAN ENTER

ANY FARMER in Michigan can enter before April 1st, 1923. All the rules and regulations are printed here. Simply write a postal card to V. A. Freeman, State Leader, Michigan Ton Litter Club, East Lansing, Michigan, asking for an entry blank which he will gladly mail you, free.

IF you have barbored the idea that you know just about as much about putting fat on a litter of pigs as the next fellow, here is a chance for you to test your prowess!

A ton of pork from one litter!

Thats the order and if you can fill it, with any litter to farrow between the first of March and the fifteenth of May, 1923, you are right in line for the suitable prizes to be awarded by the Michigan Ton Litter Club at the annual meeting of the Michigan Swine Breeders Association next fall. There is not a pennies cost for you to nominate any litter and any farmer in Michigan is eligible to enroll.

Any Litter is Eligible

"The idea of a Ton Litter Club is being taken up enthusiastically by Michigan pork producers," said V. A. Freeman, of M. A. C. the state leader of this club. "Most of them believe in their own hogs and in their ability to make them produce large litters and rapid gains. The results of the contest in Indiana brought home many facts related to economic pork production. We believe it will do the same for Michigan.

"It will demonstrate the value of large litters raised to weaning age. and many of the factors which will make these large litters possible will be shown. The importance of controlling parasites, particularly the round worms and hog lice, will be brought out by the contest. Practical combinations of feeds that will give rapid gains and make vigorous pigs will be demonstrated. Blood will certainly tell and the competition is open to all breeds as well as to grades and any kind of cross-breeds that anyone wishes to enter."

We are reprinting for Business Farmer readers the complete rules and regulations for 1923, as there is no time to be lost if you are to enter one or more litters before May 15th.

Rules and Regulations

The Michigan Ton Litter Club will award suitable prizes to Michigan farmers who produce litters of pigs, farrowed between March 1, and May 15, 1923, that reach the weights given below when six months (180 days) old:

1. Litter weighing 2,000 pounds or more. 2. Litter weighing 1,800 pounds and less than 2,000 pounds. 3. Litter weighing 1,600 pounds and less than 1,800 pounds.

Who is Eligible?—Any Michigan farmer is eligible to enroll in the Michigan Ton Litter Club without charge.

Enrollment—1. Members may enroll any time before the pigs are farrowed and previous to April 1, 1923 through the county agent or direct with the State Leader of the Club. No litter farrowed before enrollment of the member can be nominated for award. 2. Names and addresses of members shall be in the hands of the State Leader of the Michigan Ton Litter Club not later than April 5, 1923. 3. Boys and girls who are properly enrolled in the Boys and Girls Sow and Litter Clubs, and who comply with all requirements of the Ton Litter Club, can compete as regularly enrolled members of the Club.

Memorandum of Rations—1. Members shall keep a memorandum of rations fed to the breeding herd during the gestation and suckling periods, and forward same through the county agent to the state leader of the club as soon as the pigs are weaned. 2. Members shall keep a memorandum of the rations fed to the pigs from the time they are weaned until they are officially weighed and forward same through the county agent to the state leader of the club as soon as the hogs are officially weighed.

Ear Marking of Pigs—1. Members shall ear-mark each litter within seven days after birth, and forward a certified report of this marking, along with the date of farrowing and the number of boar and sow pigs in the litter, to the state leader of the club within seven days after the litter is farrowed. 2. Litters that are to be kept eligible to nomination for an award shall be ear-marked by the notch system recommended by the Michigan Ton Litter Club, or by some similar system by which the litters can be identified easily and accurately by the committees on inspection and weighing. 3. All the pigs in litters that for any reason are not to be kept eligible to nomination for an award shall be ear-marked with a single notch in the outer or lower side of the tip of the left ear. 4. Reports must be sent in for every litter of pigs farrowed on the farm in the spring of 1923. Failure to ear-mark and report a litter within the seven day limit shall make the entire herd ineligible for an award.

Inspection of Herds—1. All herds from which litters are nominated for a wards shall be inspected before July 1, 1923. 2. The county agent or the state leader of the club, or both, and a committee of two or more disinterested farmers that represent the swine or general agricultural interests of the county or township, shall make this inspection. 3. The committee on inspection shall examine the ear-marks of all the spring pigs on the member's farm to see that each litter has been ear-marked as required under these rules and regulations, and shall certify to the nomination of the litter nominated by the member if they are eligible to nomination.

Nomination of Litters—1. Mem-

(Continued on page 31.)

Educational? A deep-sea diver, in a glass tank, works in this tent on the Midway.

The "Ballyho" or "Barker"; not a word of truth in what he says, but no believes him anyway!

The "Free Show" to attract the crowd for the "Barker" is usually better and more entertaining that that inside the tent!

Is the Midway Necessary to Support Our Fairs?

DO YOU WANT THE MIDWAY ELIMINATED?

TO have or not to have a midway, not only at the Michigan State Fair, but West Michigan State Fair and the many excellent county fairs held in this and nearby states is the problem that is bothering every fair director and manager.

A bill has just been introduced in the Michigan Legislature which shows that the state, if the midway were to be abandoned at the Detroit fair alone would have to put up about one hundred thousand dollars to make up the resultant deficiency.

George W. Dickinson, who because of his phenominal development of the Michigan State Fair is regarded as the foremost manager in America, does not believe there is any basis for the criticism of the present midway, which is, in his opinion, clean, wholesome amusement which the people demand and which brings in a revenue large enough to allow the fair to progress more rapidly along the many necessary lines of education.

The Business Farmer would like to hear from its readers on this important subject.

HAVE managers and boards of directors of agricultural fair associations underrated the capacity of the people to enjoy a good, wholesome entertainment? Is it necessary to appeal to the rabble to increase attendance? Do they have to sell concessions to know fakers who operate their games from the same stands from year to year, in order to obtain the money necessary to pay legitimate premiums and expenses? Isn't this "Just to advertise" stunt a little out of keeping with fairs claiming to be great educational and industrial institutions?

It is true that patrons of fairs demand and expect entertainment. At least a portion of those who attend go for no other purpose. They also demand a variety of entertainment and are willing to pay just a little more than it is worth. But, it is a mistake to believe with Barnum that "the American people like to be humbugged." Rather, it is better to believe with Lincoln that "You can fool some of the people all of the time; all of the people some of the time, but you can't fool all of the people all of the time."

Old practices, like old habits, are hard to break, and so many fair managers "kid" themselves into believing that their patrons continue to be enthusiastic about the same old carnival that they have seen year after year since they were children. They still believe that the average patron rates so low in mentality that it is highly amusing to look into a box-like enclosure at a deformed, crippled or idiotic human being who should be receiving treatment at an eleemosynary institution instead of being exhibited as the "Wild Man from Borneo." The five-legged horse and the fat lady are expected to be a never-failing source of amusement, drawing the thousands through the gates daily. It is a great show, say the directors, because the show manager said so. None of them ever visited a single one of them. "But," they say, "look at the big crowds on the carnival grounds and around the doll racks and other contraptions" (barred from all decent cities and resorts except fair grounds). Of course. There is always a certain percentage that have their curiosity aroused by the flaring banners who are willing to risk a dime to learn just how badly they are fooled, and another class who wander up and down the streets to get free enjoyment out of the "suckers." Some of these also spend dimes because, as it is frequently remarked, the shows are so "rotten" they are good.

In the same neighborhood, generally adjoining, are the games of chance. The police are supposed to have already rounded up the hundreds of crooks who are attracted to cities where fairs and conventions are in session. They have even gone around to the drug stores and confiscated all the little punch boards where a lucky number draws a box of candy. "Nigger" crap games are raided and the city put on its good behavior, so to speak. But gambling devices on fair grounds are exempt with the "smooth" gentry who collect in that neighborhood.

Are these things necessary to the successful conduct of any fair?

Ohio "Cuts Out" Carnivals

Not many years ago there were thousands of good people who earnestly believed that making Dallas a saloonless town would kill growth. Did it? How many were of the honest opinion that the State Fair of Texas could not exist without horse racing and the accompaning book makers? The enforcement of the law against selling liquor on Sunday, many years ago, was going to depopulate the Galveston beach, but it didn't, and so we find conscientious objectors to every reform. When the directors of the Ohio State Fair decided that carnival companies and gambling games

(Continued on page 19.)

Make Your Woods Produce Profitably Both as Sugar Bush and Woodlot

By P. L. BUTTRICK

ASSISTANT PROFESSOR OF FORESTRY, M. A. C.

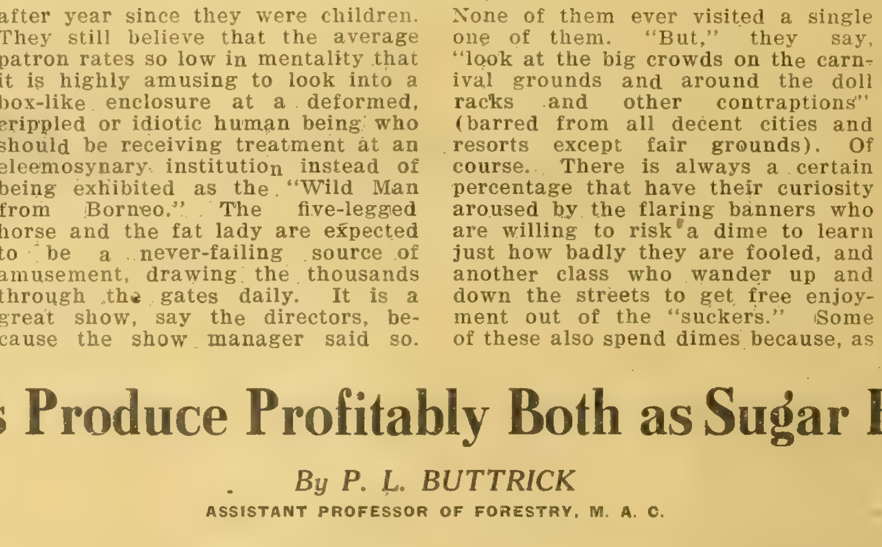
MANY Michigan farmers have to decide this question for themselves: "Will my woods yield me the greatest return if managed as a sugar bush or if managed to produce fuel wood, fence posts, and farm timbers generally?" The answer is, of course, the old one—the one that can be used for almost everything—"that depends." In this case it depends upon the kind of woods the farmer has with which to start.

Obviously a stand containing but little maple could not be used as a sugar bush, and would in that case as a matter of course be managed for fuel wood and farm timbers. The policy being to cut out the poorer trees for fuel and posts, leaving the better trees to grow and increase in value, or if the stand is poor and straggling to cut nothing till new growth has come to fill it up.

On the other hand if the woods consist largely of mature maples, too big to be easily made into cord wood, it would without question be better policy to let them remain standing and tap them for syrup, or if they had to be cut to make them into lumber.

There are thousands of acres of woods, however, which do not at once classify themselves as best suited to be managed either as woodlots or as sugar bushes. They consist of mixtures of maples and many other kinds of trees both old and young, big and little, with one kind or size of tree predominating. The owner may well be puzzled as how to best handle such a piece of woods. The owner generally is: If there are maples enough to justify it, tap them and increase the amount of maple by carefully removing the other trees from there immediate vicinity of the larger maples, thus stimulating their growth so that they may become in a few years large enough to be tapped. Some of the trees removed to favor the smaller maples will be large overtopping trees and some of them will be smaller trees which shut in the maples from the side, therefore both fuel wood and farm timbers may be obtained from the trees which are cut. Under careful management there is no reason why the woods should not go on almost indefinitely increasing in values as a sugar bush and at the same time continuing to produce a supply of fuel wood and farm timbers. It is possible and easy to grow fuel wood trees under the shade of the maples.

Maples to produce sugar abundantly must be fairly large trees and their tops should not be too close together. This leaves room for a crop of smaller trees underneath the maples, which after a few years of growth are large enough to work up for fuel, fence posts and the like. As an example one sometimes sees a woodlot which is composed of an overstory of large maples that are used to produce sugar and an understory composed of smaller beeches which are used for fuel wood.



Maple sugar, the golden by-product of the woods, provides an income when there is little money coming in from other sources on the farm. This sap boiling scene was taken on the farm of Mr. Edwin Lentz, Charlotte. Mich.

Beech and maple are trees which are frequently found together and do well in each other's society. Beech lends itself readily to growing as an understory, since it is what the forester calls "tolerant" meaning that it will grow well in the shade of the other trees. It makes good cordwood and when small reproduces itself readily by sprouting from the stumps and roots of trees which have been cut, so that a new stand of beech will spring up rapidly to take the place of those cut off.

In developing a combined wood lot and sugar bush it will be necessary to keep sheep and cattle out since they will eat or trample down the young sprouts and seedlings which if left ten or fifteen years will be large enough to cut for fuel. A few old beech trees should be left to furnish seed for the understory in case the sprouts fail, so that it may always be renewed as fast as it is cleared off. It may be necessary at times to leave a few anyway to protect the big maples from windfall since they are shallow rooted and easily tipped over by heavy winds.

Look over your woods and see if you can't make them into a two-storied sugar bush and woodlot. The Forestry Department of the M. A. C. will be glad to help you.

PICTURES FROM FAR AND NEAR

Michigan Holstein third highest producer in the world.—The state's highest senior two-year-old producing cow in 1922 for ten consecutive months is Eden White Rose, owned by G. W. Ridgeman of Vassar. With a record of 19,446.3 lbs. milk containing 706.56 lbs. butterfat her production is exceeded by only two other Holstein cows of her age in the world.

Main bone of contention.—This is an unusal view of Essen, in the heart of the Ruhr region, which has been occupied by the French. Despite the determination of the French authorities to operate the industries in this city on a normal basis, very little activity is in evidence thus far. Strikes by the various groups of workers have curtailed production of mines and factories and the French are unable to induce the Germans to return to their work.

Charlie to marry.—The famous movie comedian, Charlie Chaplin has decided to embark upon the matrimonial sea for the second time. This time his companion will be Pola Negri, continental film star. The engagement was announced a few days ago but when the wedding will take place has not been disclosed.

Novice is champion swimmer.—Little fourteen-year-old Miss Hilda Curtis, of Alameda, California, won twelve coast championships for women in 1922, according to the annual report of the Pacific A. A. U. Swimming Committee just published. This record is unusual inasmuch as she was a novice last spring.

Highest paid postmistress in U. S.—Elizabeth D. Bernard, woman postmaster of Tampa, Florida, receives a salary of $6,000 a year. This is the first time in the history of the U. S. postoffice that a woman has been appointed to so high salaried a postmastership. Up to this time the highest salary paid to a woman in this line of work was $2,500.

Wild element wrecks havoc in Ireland.—There is no peace in Ireland. Here is a photo showing the latest outrages by the wilder Irish element.

Chinese Republic celebrates anniversary.—Reviewing troops at the ceremony of the 11th anniversary of the Chinese Republic, at Pekin, China.

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Farmers Service Bureau

(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full name and address. Name not used if so requested.)

USE AND VALUE OF MARL

As I have some marl on my farm I would like to know what is the best way to vitalize it to the best advantage? Can I sell if for cement? What is it worth, where is there a market for it, is it good as a fertilizer, and how would I use it? I had this tested by the State Geoligist, Lansing, it tested 90% pure and 10% sand.—P. F. C., Ithaca, Mich.

—As to the commercial possibilities of marl for Portland cement, it may be said that this depends largely upon the quantity and quality of the marl available; its location; transportation facilities and markets; distance from competition, especially cement plants using limestone; nearness to suitable clays or shale; physical conditions for winning the marl; and nearness to coal supplies. Small deposits of marl or deposits variable in chemical composition have no value from the standpoint of the cement manufacturer.

Obviously a large deposit of pure marl would have very little commercial possibilities if located away from railroads or from cement markets, or in close proximity to other cement plants having the advantage of lower costs. In short, the value of a marl deposit for cement manufacture depends upon several very important factors, none of which can be lacking or deficient to any great degree without seriously jeopardizing the possibilities of success.

It may be of interest to know that we have some 27,000 acres of proven deposits of sufficient size, depth, and purity to warrant the use as a source of cement manufacture; and the mere fact that but few attempts have been made during recent years to utilize any of these deposits is significant.—R. A. Smith, State Geologist.

—Marl is used the same way that ground limestone is, to correct the acidity of the soil. It is doubtful whether you will find a market for it other than the local market, on account of the extensive marl beds in Michigan. It is no good as a fertilizer, being used only to correct acidity. This should be applied as limestone, preceding a crop—most generally a legume—and worked well into the soil before seeding.—O. B. Price, Dept. of Soils, M. A. C.

CANNOT COLLECT ON NOTES

I am a young man of nineteen years. Without consulting my parents I signed a contract with a certain school agreeing to take a commercial course by correspondence. It is stated in the contract that it is unforfeitable. They hold six notes against me. Five for $25 each and one for something over $100. Since my parents have found out the circumstances of what I have done they are dissatisfied. They say that I should drop the correspondence course and help them. They need my help and I now realize that I should help them first and sincerely hope that it is not too late. I have received five lessons from the school but am willing to pay for them and return my contract. What I want to know is whether they, the college, can force me to pay the money that is mentioned in the notes. My father says that they cannot.—J. F., Ruth, Michigan.

—Contracts with infants other than contracts for necessaries, cannot be enforced against the infant. He may, upon reaching the age of 21, either affirm the contract or repudiate it, but unless and until he affirms it he is not bound by its terms. If, however, the contract has been partially executed, he cannot repudiate and at the same time retain the benefits he has received.

I would write a letter to the company, frankly telling them that circumstances had prevented me from taking the course and that I could not preform the contract, offering to return any books or other material sent me, and to pay a reasonable sum for the damage they may have suffered. The clause in the contract against forfeiture does not affect your liability. They cannot collect from you on the notes.—Ass. Legal Editor.

DIVISION OF HUSBAND'S PROPERTY

Upon the death of a married man leaving a widow and children, what amount the widow will share in his property? Is the balance divided equally among his children? There being no will left, what does an administrator allowed for his services? —F. S. S., Coldwater, Michigan.

—If there were two or more children, the widow would receive one-third and the other two-thirds would be divided equally among the children, the issue of any deceased child taking its share. If there were only one child, the widow would receive one-half and the child one-half.

The administrator of an estate receives as compensation, in addition to all his expenses, 5 per cent for $1,000, up to $5,000, and 1 per the first $1,000; 2½ per cent for all over $1,000, up to $5,000; and 1 per cent for an estate of over $5,000. He is also paid at the rate of $1.00 per day for time employed by him in taking care of the estate. —Asst. Legal Editor.

TELEPHONE COMPANY CUTS TREES

Some years ago, I planted walnuts along my fence inside and the telephone poles are set two feet from the fence. As the trees grew up near the wires the linemen cut the tops off and destroyed the looks of the trees and stop the wrangle I sold the trees and they cut them down. Since I have heard it was a crime to cut trees along the road; this is not a state road. I would like to know if the telephone company has a wholesale slaughter right along the roads and over the fence? If so farmers should move back.—J. O. C., Jackson, Michigan.

—Your statement that these walnut trees were planted some years ago is so indefinite that it is difficult to tell what your legal rights are. Previous to 1899 telephone companies had the right to trim trees along the highways and they were practically permitted to destroy the trees if in their opinion the telephone lines were interfered with in any way by the existence of the trees. In 1899 the legislature passed an Act providing that telephone companies should have authority to build their lines along public highways "provided that the same shall not injuriously interefere with or injure any trees located along the line of such streets or highways." In the cases of Boland vs. Washtenaw Home Telephone Company, 161 Mich. 315, the court said "When the telephone company in its alleged maintainance of its line went upon the property of the plaintiffs and trimmed said tree, if in such cutting and trimming shall injure the tree, it had no statutory authority so to do, but on the contrary was expressly forbidden so to do by the plain language of the statute."

The legislature of 1921 by Act 2, of the Special Session provided that "It shall be unlawful to cut, destroy, or otherwise injure any shade or ornamental tree or shrub growing within the limits of the public highways within the State of Michigan without the consent of the authorities having jurisdiction over such road."

This statute goes on to provide that the authority having jurisdiction of state trunk line highways is the State Highway Commissioner and is silent with regard to who may have roads.— Michigan Public Utilities authority over county or township Commission.

WAGES OF HIGHWAY COMMISSIONER

In reference to the wages set at four dollars per day for every day spent on the work, I am thinking of running for Commissioner of highways in a certain township that only pays fifty dollars per year. If elected could I demand the four dollars per day and also for auto if I should need one.—J. G., Dollar Bay, Mich.

—Act 57 of the Public Acts of 1921 fixes the compensation of township highway commissioners at the rate of $4.00 per day for each day actually and necessarily devoted by them to the services of the township in the duties of their office. The township board has no authority for fixing the compensation of the commissioner. The township Board would, however have the right to pass upon the commissioner's expense account if he were to charge for the use of his auto or other method of transportation and they would have a right to deny it or allow it.—H. H. Partlow, State Highway Department.

CANNOT SUE FOR TAX MONEY

A sells a farm to B for $9,000, on a contract, receiving $2,000 down, balance to be paid with interest in annual payments. Some time later B dies and his estate is taken over by an administrator and is thus held at present. The administrator tries to sell the farm but is unable to do so and fails to pay the payment and interest and allows the farm to go back by default, and last December surrenders the contract to A. B during his life, paid the taxes, as they were assessed to him but the administrator did not pay the taxes due December 1922. In order to avoid return of the taxes and increased charges A paid them when due. What I wish to know is, should not the administrator have paid the 1922 taxes, since they were assessed to B and since the estate was able to pay, both in real and personal property? If so does the fact that A has already paid the taxes, to prevent increased charges, keep A from suing the estate for the amount of taxes paid?—R. E. G., Alma, Mich.

—The duty of the vendee of a land contract to pay the taxes is one arising out of the contract relationship, and if the vendor voluntarily pays the taxes in order to protect his interest in the property, his right to reimbursement from the vendee is a right arising out of the contract relationship. Now, if B voluntarily surrenders the premises and the contract, forfeiting all his rights under it, and if A elects to accept such forfeiture and to consider the contract as void and of no effect, then A could not recover for taxes voluntarily paid by him before B's forfeiture.

In this case, if A acquiesced in B's forfeiture and accepted the return of the premises and contract without refunding the installments already paid by B, I am of the opinion that A could not recover from B's estate the amount of taxes paid.—Asst. Legal Editor.

CAN DAM STREAM WITHOUT PERMIT

Would a man have to get a permit from the state to put a dam on a small trout stream? If so who would I write to, would I have to put a fish chute on a dam 6 feet high and what are the dimensions required? —W. W., Glennie, Mich.

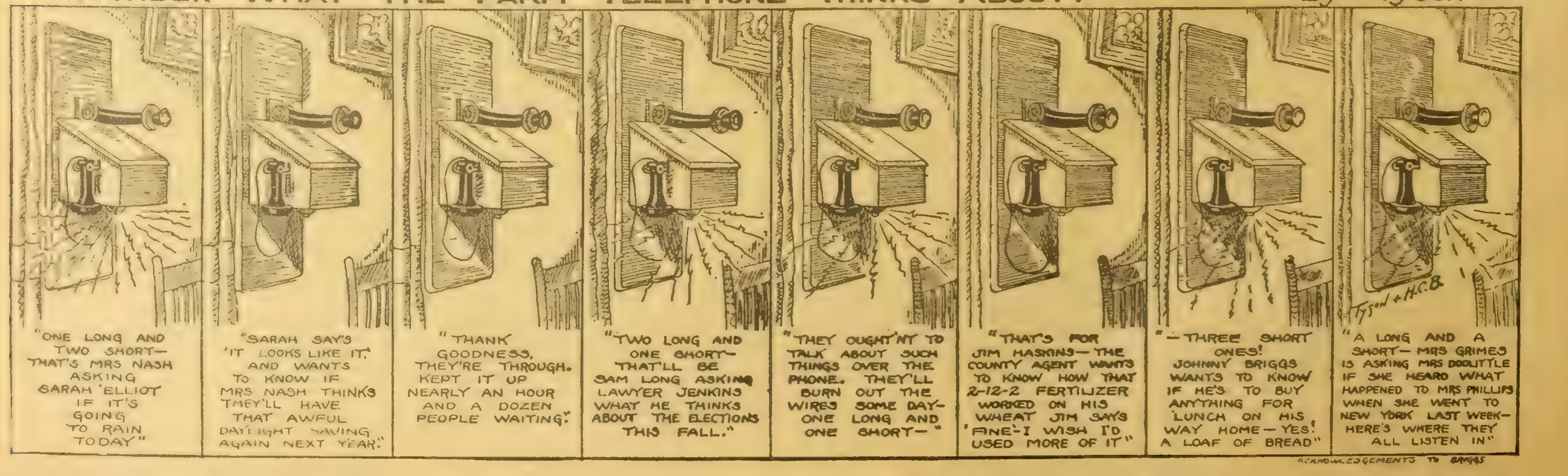
—It is not necessary to have a permit to build a dam in a stream in this state. The law requires, however, that all dams in the state be supplied with fish chutes. Specifications for chutes are furnished by this Department.—John Baird, State Dept. of Conservation.

FORCE PAYMENT BY SUING

Now if a person has small accounts or notes due and has not got the money to pay for them can a person force payment by suing? I am going to put this question in four parts. 1. Gave first and second mortgage on his land to party two. He also gave third mortgage to party No. 3. Now party No. 3 owes party No. 4 a sum of money and gave the party No. 4 his third mortgage papers as security on the debt. The third parties condition is such that he cannot pay the debt and interest. Now has the third party a right to foreclose on the third mortgage, and has the fourth party a right to buy our mortgage from the second party, being he is only a holder of the papers on third mortgage. Mortgage on land was due last May. Could they do anything if the interest is paid each year? Would it be necessary to make a new mortgage? How long is a mortgage good? Now about a chattle mortgage. Is a person better off if a woman don't sign off? And is it necessary that she should sign off? in case the chattel mortgage is foreclosed, can they turn him out empty-handed or do they allow a certain amount of money or personal property? Please give me an explanation. Where can a person get one of the latest law books and what is the price.—Reader.

—One who owes accounts or notes may be sued if he does not pay. Upon suit, if sufficient proof is offered, a judgment may be taken. After the judgment is taken then an execution may be issued and placed in the hands of a constable or the sheriff who have a right under the execution to take any property the debtor has that is not exempt from execution. Such property as seized by the officer may be offered by him for

WONDER WHAT THE FARM TELEPHONE THINKS ABOUT? By Tyson


"ONE LONG AND TWO SHORT— THAT'S MRS NASH ASKING SARAH ELLIOT IF IT'S GOING TO RAIN TODAY"
"SARAH SAYS 'IT LOOKS LIKE IT,' AND WANTS TO KNOW IF MRS NASH THINKS THEY'LL HAVE THAT AWFUL DAYLIGHT SAVING AGAIN NEXT YEAR."
"THANK GOODNESS, THEY'RE THROUGH. KEPT IT UP NEARLY AN HOUR AND A DOZEN PEOPLE WAITING."
"TWO LONG AND ONE SHORT— THAT'LL BE SAM LONG ASKING LAWYER JENKINS WHAT HE THINKS ABOUT THE ELECTIONS THIS FALL."
"THEY OUGHT'NT TO TALK ABOUT SUCH THINGS OVER THE PHONE. THEY'LL BURN OUT THE WIRES SOME DAY— ONE LONG AND ONE SHORT—"
"THAT'S FOR JIM HASKINS— THE COUNTY AGENT WANTS TO KNOW HOW THAT 2-12-2 FERTILIZER WORKED ON HIS WHEAT JIM SAYS 'FINE—I WISH I'D USED MORE OF IT'"
"—THREE SHORT ONES! JOHNNY BRIGGS WANTS TO KNOW IF HE'S TO BUY ANYTHING FOR LUNCH ON HIS WAY HOME— YES! A LOAF OF BREAD"
"A LONG AND A SHORT— MRS GRIMES IS ASKING MRS DOOLITTLE IF SHE HEARD WHAT HAPPENED TO MRS PHILLIPS WHEN SHE WENT TO NEW YORK LAST WEEK— HERE'S WHERE THEY ALL LISTEN IN"
Tyson + H.C.B.

ACKNOWLEDGEMENTS TO BRIGGS

sale after he has advertised it. From the money obtained from the sale he has the right to pay the judgment and his own expenses in seizing the property and making the sale. The officer would have no right to seize any exempt property. Suits are not usually instituted on the note given with a mortgage. In the foreclosure of the mortgage they must certify that no suit or proceeding at law has been had to recover the money secured by the mortgage. Any one to whom you gave a mortgage has the right to assign it to another and that person has a right to foreclose if there is a default in the agreement to pay. One who has a 3rd mortgage would have a right to buy the 2nd if the owner of the second will sell it to him. A mortgage may be foreclosed after it is due even though the interest is paid up to the time it is due. If the mortgagor does not want a mortgage foreclosed he must get an "extension" or give a new mortgage as he can agree but the owner of the mortgage does not have to give an extension nor take a new mortgage. He has the right do demand payment when it is due; and, if not paid, he has the right to foreclose, subject to the right of redemption.

I do not know what you mean by "better off if a woman doesn't sign off." A "woman" may be your mother, your daughter, or your sister, as well as your wife, and be interested in the property. There is no law to make a woman "sign off" her interest in property unless she is willing and agrees to do so. It is a matter of bargain. She only signs when she thinks it is best for her to do so. There are some chattel mortgages that would be worthless unless signed by both husband and wife. It might cover property that the law says the wife must sign with the husband to make valid. There is other property that the husband could mortgage without the wife's signature. The property covered by chattle mortgage may all be taken, if it is a valid mortgage, regardless of the amount of property left the mortgagor. When he gave the mortgage the mortgagor promised to pay the amount specified in the mortgage and also agreed that if h did not pay, the mortgagee could seize the property and offer it for sale. A foreclosure is carrying out this agreement.

I would not be surprised if there were a hundred new law books published this month and possibly another hundred next month and so on every month in the year. There are thousands of "law books in law libraries. I do not know what kind of a "law book" you would like to buy. You would have to have thousands of dollars to buy all the law books. It would be less expense to you if you would go up to the office of some good lawyer and ask him to tell you what law you would like to know about. Law books can be bought from 25c to $150 a set. You see it would be hard for me to tell you which one to pick out. I am afraid your head would ache frightfully before you get half read through the first volume—Legal Editor.

MONEY GOES TO HEIRS

A wife has money in the bank in her own name. Upon her death would this money be held by husband or would it go to the children? Suppose this money was held jointly by the wife and one of the children? What disposition would be made of her share in case of her death?—A. W., Clare, Mich.

—Upon the death of a married woman the money which she has in the bank in her own name would descend to her heirs, and not to her husband. If the money was deposited in the bank as a joint fund of the wife and child, it would vest in the child on the death of the mother.—Asst. Legal Editor.

WHO PAYS TAXES

On November 21, 1922, I sold on contract my house and lot, contract reading that said party of the second part shall pay all taxes and assessments from date November 21, 1922. Now said party of the second part says that I must pay taxes falling due December 1st, 1922. There is nothing said in regard to taxes other that what the contract reads. I would like to know who is the one to pay these taxes. The party of the second part or myself. Of course I want to pay them if it is my duty to do so, but not unless.—C. R., Lowell, Michigan.

—The terms of a contract are to be construed according to what the parties had in mind when making the contract. As to whether second party should pay the taxes due on December 1st, would depend upon whether the parties meant taxes accruing after November 21st, or taxes falling due after November 21st. In the absence of any contract or stipulation relative to taxes, the purchaser pays the taxes due December 1st, if he purchases before that date, otherwise the seller pays.—Asst. Legal Editor.

ASSESSMENT ON PROPERTY

Has the supervisor a right to assess property for more than it will sell for on the grounds that it might cost the owner more to replace it? Has he the right to raise his own salary while in office? Has he the right to take his team and work on the road for wages while in office? If he has no such right to do these things is there any penalty?—F. S., Blanchard, Michigan.

—Article 10, Section 7 of the Constitution of Michigan provides that all assessments on property shall be at its actual cash value. Cash value means what the property would actually sell for at a private sale.

The Supervisor's compensation is fixed by statute. For services not provided for by law, the township board allows such compensation as they deem reasonable, but the supervisor cannot raise his own salary.

The law will not permit a public officer to place himself in a position where his own private interest and the interest of the public might conflict.

Willful neglect of his official duty by an public officer is punishable as a misdemeanor, where no special provision is made to cover the particular offense.—Ass't. Legal Editor.

SHEEP PELT TANNING

Through the Michigan Business Farmer advise me how I can tan raw sheep pelt.—Mrs. W. S., Camden, Michigan.

—Put the pelt into a vessel containing enough cold water to cover it; dissolve one-half pound of alum and one-half pound of salt in three pints of boiling water; pour the mixture over the skin, rinse it up and down in the water, and let it soak twelve hours. Then hang it up to drain. If the pelt has much wool (say an inch or more in length) tack to the barn or some other floor, wool to the floor, stretch well and when nearly dry, rub into the skin one ounce of powdered alum and saltpeter.

The more rubbing that the pelt gets the better, more pliable will it be. In fact the pelt should be rubbed for an hour or more and a very good method is for two to take hold of the pelt and draw back and forth over a smooth round stick or over the edge of a smooth board.

Michigan highways are to retain their beauty if the state highway department can preserve it. A new law, recently passed, prohibits the destruction of trees or shrubs along the highways except with the permission of the highway department. This law includes the activity of the owner of property abutting on the highways.

Keep Michigan Business Farmer Coming. See page 17.

ESSEX COACH

$1145 *Freight and Tax Extra*

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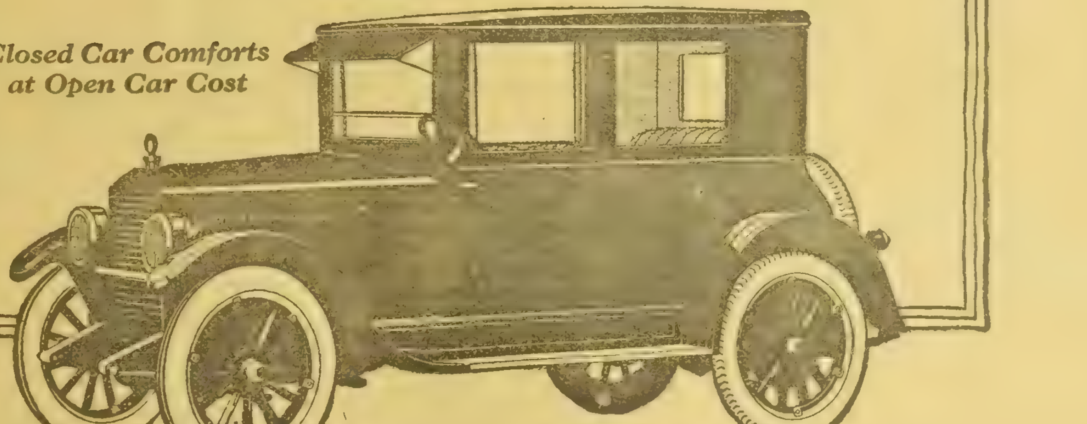


Hidden Values in Every Essex

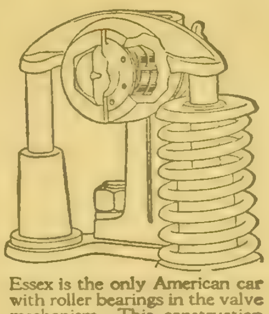
They Keep the Car Young in Long Hard Service

All models have the noted Essex chassis. European and American experts call it the greatest of its size.

After fifty, sixty and seventy thousand miles, Essex cars keep the dash and action of new cars. They stay tight and quiet. They keep their economy of operation and maintenance.

Service like that is not accidental. It results from hidden values which are fully revealed only in long hard service. Attention to detail extends to parts you never see. Finest roller bearings are used where commonly plain bushings are used. For the weight carried the Essex frame is the sturdiest built, save one.

Qualities like these make Essex cost less in the long run than the lowest priced cars, because of the difference in repair, maintenance and replacement costs.



Essex is the only American car with roller bearings in the valve mechanism. This construction overcomes wear and frictional loss at one of the most important points. Prevents noisiness and saves a big item of replacement expense. All other cars use plain bushings for this vital function. Just another of the hidden values that account for the everlasting goodness of Essex cars.

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Touring $1045 *Freight and Tax Extra*

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The Truth About Henry Ford

End of Chicago Tribune Libel Suit—Mr. Ford's Interesting Personality

By Sarah T. Bushnell

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(Continued from Feb. 17th issue.)

IT was midsummer. The court room was stifling; an occasional breath of air wandered in thru the open windows, but was a questionable relief, for it was laden with the sulphur fumes of the nearby Mt. Clemens baths. A small army of newspaper correspondents was entrenched at long tables surrounding the lawyers, jury and witnesses. Telegraph boys sauntered in and hurried out bearing "copy" for papers far and near. The realization of all this publicity was distressing to Mr. Ford as he sat in the witness box. Mr. Stevenson's voice is throaty and difficult to understand and frequently Mr. Ford could not catch the question put to him. This was another strain on the weary witness.

On the day on which he was to take the stand Mr. Ford wore to court an old and comfortable pair of shoes. Now any witness should be on the alert during cross examination; he should watch the opposing attorney much as one fencer watches another, prepared for any sudden thrust. That day, as the questioning droned on, Mr. Ford let his attention wander. Absent-mindedly he drew from his pocket an old knife, opened it and began idly to trim a bit of leather from the edge of the sole of his shoe. For the moment he was off his guard.

It was just the moment a clever lawyer would make the most of. While I cannot quote from the transcript of the trial, the question which Mr. Stevenson suddenly shot at Mr. Ford was, as I remember it:

"Tell the jury who Benedict Arnold was."

Mr. Ford paused in the whittling of his shoe sole and looked at the lawyer, a pained expression on his face. "Arnold?—Why, Arnold was a writer," he replied.

At once trained pencils sped over the paper of the newspaper men and the tense silence in the court room was broken by the clatter of telegraph boys as they sped away with more "copy." In no time at all newspapers all over the country were proclaiming that "Henry Ford says Benedict Arnold was a writer."

"If only you had not said Benedict Arnold was a writer," groaned a close friend who joined Mr. Ford as soon as court adjourned. Henry Ford sighed. "I thought Stevenson wanted to know about Arnold who used to write for us," he replied. "Don't you remember him? He left the office one day saying he was ill, and that night died of heart disease. Stevenson surely realized that I did not catch his question. He had been asking me about Delavigne and the other men who wrote for me. He had asked me several times about Brownell, and I thought he was nagging me about our publicity and advertising departments."

Such was the simple explanation of the Benedict Arnold reply.

"Never mind," his friend consoled him. "What does it matter? It was just a trick to bring out that you seldom think of history. You are too busy with present day affairs. An attorney is hard up when he has to drag a Revolutionary War traitor into a twentieth century case."

The Ford lawyers had kept the testimony of Clinton C. DeWitt, head of the Americanization school at the Ford plant, till the last to give their case an effective climax. Mr. DeWitt presented the lessons which he had been teaching the foreign-born workers for several years, lessons which taught them to become good Americans, taught allegiance to the flag, interpreted the constitution and pictured the anarchist in his true colors as a peril to government and people alike. Mr. DeWitt testified further that he had arranged the lessons after receiving direct instructions from Mr. Ford, who frequently inspected them in outline and who had, during the last five years, kept in close touch with and frequently had attended the classes.

At last the case went to the jury, which promptly returned a veridct against the Tribune. The clerk of the court read the verdict as follows:

"You do say upon your oath that the said defendants, the Tribune company, is guilty in manner and form as the said plaintiff hath in his declaration in this cause complained, and you assess the damages of the said plaintiff on occasion of the premises over and above costs and charges by him about his suit in this behalf expended, at the sum of 6 cents' damages."

The jury acknowledged the verdict as correct and hurried from the court room.

Mr. Ford's main purpose in bringing the suit was to prove false the accusation of the Tribune that he was an anarchist. The newspaper did not appeal the case.

Few similar suits have been more widely read or discussed than this. It made "good reading," but as reported in many papers the proceedings gave an utterly false picture of the complainant. Many of those who aimed much ridicule at Mr. Ford could have done no better on the witness stand. As some one later observed: "After all, the worst that one of the most powerful papers in the country could say against Henry Ford injured him only to the extent of six cents"

CHAPTER IX

Henry Ford's Interesting Personality

The Ford company plant attracts thousands of visitors, foreign government officials and other distinguished travelers as well as plain Americans. Two hundred thousand persons have been conducted through the plant in a year, and in one month there were forty-eight thousand visitors. Naturally they all want to see and talk to Mr. Ford himself; naturally, too, he can receive only a small percentage of them if he is to have any time for his own affairs. One day his callers included a European Queen, the Rockefeller of China, an ex-president of the United States, several senators, two university presidents, a committee of educators and a California woman, who had crossed the country in her Ford roadster.

A staff of secretaries is kept busy opening Mr. Ford's mail. Ten thousand letters were received each day for a considerable time. If he were to comply with half the requests he receives for help he would be compelled to close his business. Appointments are generally made for him by Ernest G. Liebold, who is Mr. Ford's general secretary, to whom he has delegated great power. He often acts for Mr. Ford. Mr. Liebold's assistant is Frank Campsall, who possesses much ability and a pleasing personality.

It has been said that Mr. Ford does not read the newspapers, and that he does not keep in touch with the affairs of the day. Both statements are untrue. Mr. Ford reads the morning papers more regularly than he eats his breakfast; he glances through the noon editions and the evening papers are always put by his favorite chair and reading light. He goes through them carefully. Moreover, he receives many cartoons and clippings that refer to him, both favorable and unfavorable.

The activities of his experts show that Mr. Ford is in touch with modern conditions and needs. His chemical department has perfected a gasoline substitute by liquifying gases that form much as coke is made from coal. The same department has made tests with a milk substitute which is purer than the average cow's milk and which, it is hoped, will prove a blessing to many thousands of ailing babies. Mr. Ford frequently discusses small communities as industrial centers and many similar subjects.

It has happened not infrequently that persons who never knew Mr. Ford have drawn freely from their imagination to substantiate the claim that they are familiar with all the details of his life. A book was written by a writer with no more foundation than a few interviews with Mr. Ford as he stepped from an elevator or walked in the park with his wife. Nearly all the stories of the financial difficulties of the inventor in the early days of his car-making come from vivid imagination and nothing else.

* * * *

At twenty-eight Mr. Ford's only son is at the head of the motor plant. The heir to vast wealth, it would not be unusual if he devoted much of his time to golf and other amusements and spent months at winter and summer resorts, or, like many another son of a rich father, let Dad do the work. Instead Edsel Bryant Ford is at his desk every morning. Those who know him well say that he has his father's genius, enthusiasm and common sense and his mother's poise and that he is a young man of ability and strength of character.

Edsel Ford was a small child in the days when his father was struggling to get a start in the automobile industry, and he naturally has both love and respect for the great business that his father founded and built up. He had no college education, for he was schooled in the factory; starting in at an unimportant position he worked his way through the various departments and learned the entire business first hand. The draft board granted him one of the ten thousand exemptions that were given industrial workers in Detroit. The board felt that he was more needed in the factory than in active military service. Not by a word or gesture did Mr. Ford seek to keep his son out of war.

* * * *

Mr. Ford seldom wears a hat and his hair is snowy white. He is a frail looking man, with shoulders slightly stooped, and he usually wears a gray suit that matches his gray eyes. His features are delicate and his hands and feet are small, and his height about five feet nine inches. In manner he is friendly and genial, and although very retiring he is a delightful conversationalist. He has traveled much, has inherited a touch of his father's keen wit and enjoys a hearty laugh. Around his home he whistles like a school boy. He is devoted to outdoor life, but abhors hunting. He will not allow anything to be killed on his land, not even the crickets, nor will he permit the servants to drive away birds.

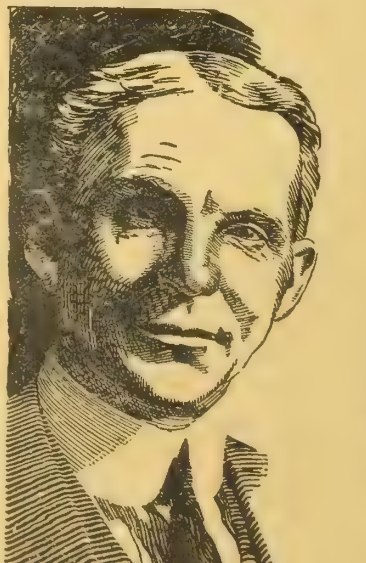
Among his freinds he is known for his quaint and apt expressions. With a quizzical glance at a rainy sky he will remark, "You can't change the weather, so change your attitude toward it." "Pool your knowledge" is a favorite bit of advice he gives and a comment familiar to his intimates is, "It takes pluck not luck, to make people successful." One Sunday while he and Mrs. Ford were attending services in the Episcopal cathedral in Detroit Mr. Ford's car was stolen from in front of the church. Since then he laughingly declares that he has lost interest in church services. And is fond of saying the he "believes in religion, but he doesn't work at it much."

His country estate is seven thousand acres was ten miles from Detroit, but extends almost to what is now the city limits. There Mr. Ford lives the year 'round, entertains his friends and is happy among his birds and trees. A part of his grounds extends behind the Dearborn village school. It is a natural amphitheatre, and Mr. Ford has had it cleared for the use of the school athletic association. He delights in driving through the village where his own boyhood was spent, filling his limousine with boys and girls and carrying them off for a picnic in the woods. For his personal use he generally drives a small gray closed car—a Marmon—but he has, of course, many other cars, including a "flock of Fords."

He is a skillful camp fire cook, and one of his favorite amusements is a steak broiling contest with some titled visitor. On such occasions he personally selects the meat at the butcher's. His frequent visitors include John Burroughs, who died recently, Thomas A. Edison and Harvey S. Firestone. These four regularly spent two weeks together camping or touring, their automobiles followed by a "house on wheels," a large motor truck equipped like the prairie wagons in which the western sheep herders cook, live and sleep. Mr. Ford and Mr. Firestone, being in the same business, have many interests in common. Mr. Ford and Mr. Edison have been the closest friends for twenty years. Both are possessed of many similar characteristics and have the same tireless, inventive genius. Both believe that "success is one-tenth inspiration and nine-tenths perspiration." They have consulted each other in their problems and correspond by letter occasionally by wireless for both have wireless stations at their homes.

Mr. Ford first met John Burroughs some twenty years ago when the great naturalist was visiting in Detroit. Their devotion to the out-of-doors soon made the closest of friends, and that friendship was unbroken until death took the naturalist a few months ago. The last time Henry Ford saw his old friend alive was in December 1920. At that time Mr. and Mrs. Ford visited the Burroughs home place, Riverby-on-Hudson. Mr. Ford stopped at a

(Continued on page 19.)



MR. HENRY FORD

Some of Mr. Ford's Epigrams

Religion, like everything else, is a thing that should be kept working. I see no use in spending a great deal of time learning about heaven and hell. In my opinion, a man makes his own heaven and hell and carries it around with him. Both of them are states of mind.

* * *

Poverty doesn't hold a man down. Money doesn't amount to anything—it has no real value whatever. Any young man who has a good idea and works hard enough will succeed; money will come to him. What do I mean by a good idea? I mean an idea that will work out for the best interests of everyone—an idea for something that will benefit the world. That's the kind of an idea the world wants.

* * *

Do the thing that is the best for everybody and it will be best for you in the end.

* * *

More than enough money to keep him comfortable is no use to a man. You can't squander on yourself without hurting yourself. Money's only a lubricant to keep business going.

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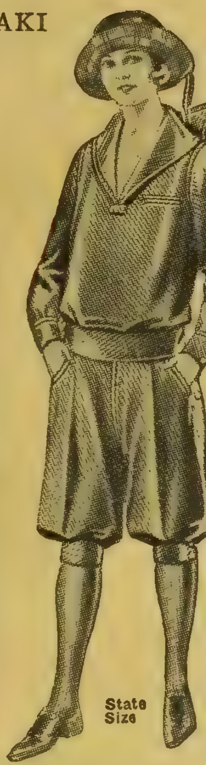

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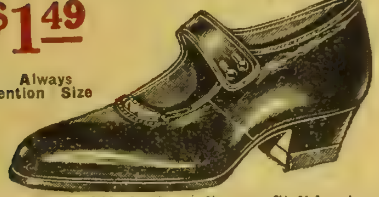

Beautiful soft kid leather slipper. Stylish strap model with two buttons. Medium round toe. Cushion soles. Black only. Sizes 2½ to 8. Wide widths. **Black by No. 96A228. Brown by No. 96A229. Send no money. Pay $1.49 and postage on arrival. State size.**

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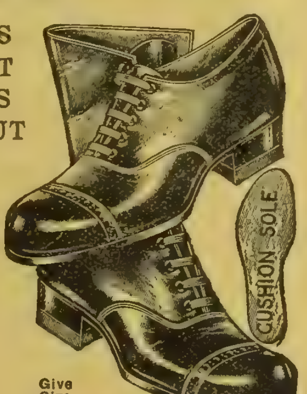

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Every woman should get a pair of these sensible broad toe shoes at this amazing price. Uppers of soft kid finish leather, solid oak leather soles. Low rubber heels, comfort cushioned insoles. Sizes 2½ to 8. **Order oxford by No. 96A233. Order high shoe by No. 96A263. Send no money. Pay $1.98 and postage on arrival.**

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Reliable sturdy soles; low broad leather heels; leather insoles; reinforced leather back stay. Guaranteed to stand hardest wear. Wide widths. Sizes 6 to 12.

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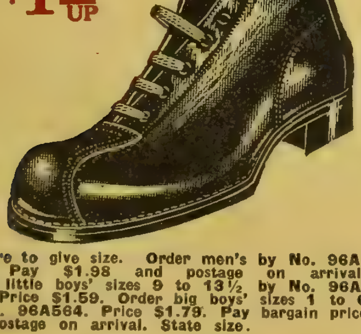

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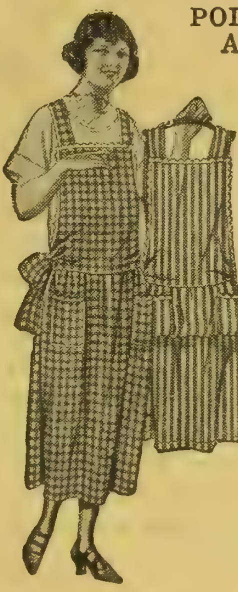

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Favorite Polly Prim Apron. One apron is of rich checked material and the other of a very pretty striped pattern. Both have long flowing sashes, two pockets. Trimmed throughout with rickrack. A wonderful bargain that you could not duplicate if you tried to make these aprons yourself. **Order the combination as illustrated, by No. 96E5092. Send no money. Pay only 79c for two aprons and postage on arrival.**

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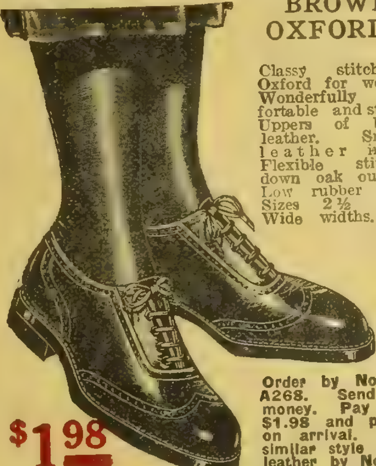

Classy stitchdown Oxford for women. Wonderfully comfortable and stylish. Uppers of brown leather. Smooth leather insoles. Flexible stitched-down oak outsoles. Low rubber heels. Sizes 2½ to 8. Wide widths.

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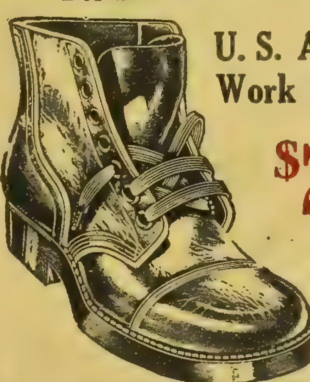

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Men! Don't lose a moment in ordering this wonderful brown work shoe. It is made of leather as near waterproof as can be made—solid leather through and through with full grain leather uppers, guaranteed to wear six months. Easily worth $5.00. Two full, heavy double soles, sewed and nailed for greater strength. Extra wide, full leather counter, riveted to prevent ripping. Sizes 7 to 11, wide widths. **Order by No. 96A699. Send no money. Pay $2.98 and postage on arrival.**

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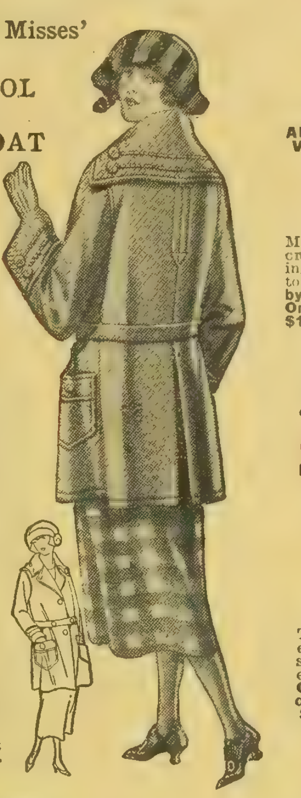

Think of this beautiful all wool polo coat in a snappy smart model for only $4.98, made of genuine all wool polo with beautiful large collar with two rows of stitching and novelty buttons. Has inverted pleat in the back like the best made coats and two novelty pockets button trimmed. 34 inches in length. Comes in beautiful color of reindeer tan, misses' sizes 14 to 20, women's sizes 34 to 44. **Order by style No. 96E6900. We know you will be more than pleased. Send no money. Pay $4.98 and postage on arrival.**

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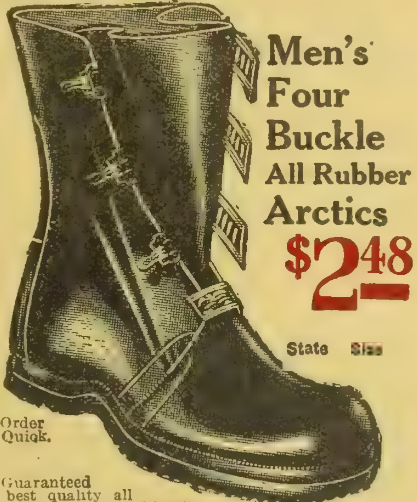

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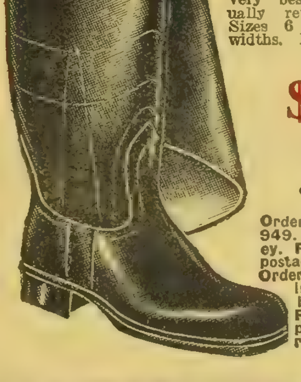

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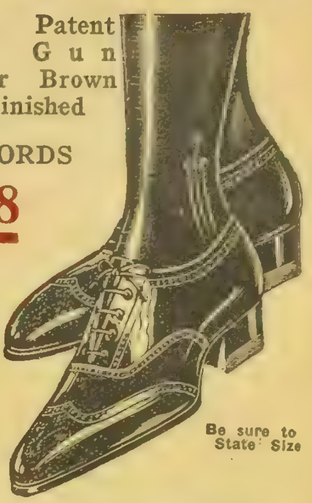

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Made with imitation shield tip and medallion perforated vamp, perforated lace stay and circular foxing. Has medium rubber heel and medium pointed toe. Sizes 2½ to 8. Wide widths. **Order patent by No. 96A64. Order gunmetal by No. 96A69. Order brown by No. 96A70. Send no money. Pay $1.98 and postage on arrival.**

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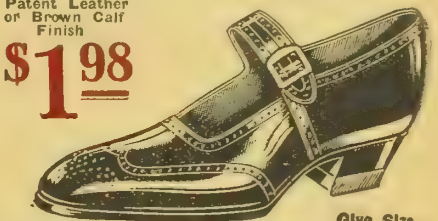

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This smart pump in sizes 2½ to 8. In black patent leather or brown calf finish—a stunning one-strap model with imitation shield tip and medallion, effectively perforated. Has medium rubber heel **Order patent leather by No. 96A72. Order brown calf finish by No. 96A73. Send no money. Pay $1.98 and postage on arrival.**

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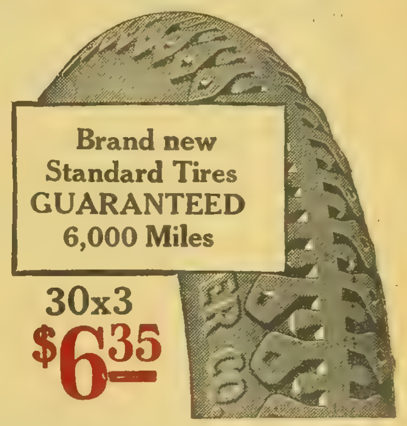

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Edited by FRANK D. WELLS

THE IDEAL PEACH

IN the first place, we should like to have an Elberta with more dessert quality and more hardiness. Secondly, we desire a peach at Carman time or earlier, with a better shape for packing than that variety, with a brighter color and freestone. Thirdly, we desire a yellow freestone variety at that season and another to follow that one. Fourthly, a good yellow to follow Elberta is desirable. Combined in these must be productiveness, resistance to diseases, hardiness in bud and lack of irratibility. A big order? Indeed it is, but to get anywhere we must aim high. The fulfillment may be long put off, but must come some day. If we could get a series of varieties having the good qualities of Elberta with added hardiness and quality to extend from Greensboro time till frost, methinks the ideal will have been consummated.

NEW APPLE HAS NO CORE OR SEEDS

APPLES without cores or seeds are promised by a discovery announced at Abbotsford, Canada, the particulars of which have just been received by the Department of Commerce from Consul General Halstead. According to the announcement a seedless and coreless variety of Fameuse apple has been developed which differs but slightly in shape from an ordinary Fameuse by being longer and flatter at the ends with the typical coloring and flavor. Except for a slight marking on the flesh which outlines the situation of the core in an ordinary apple, there are neither core or seeds. The apples were developed in an orchard at Abbotsford and the discovery that they were out of the ordinary was an accident. They had come from a new block of Fameuse, about eight years old, bearing for the first time in market quantities, which had been top grafted on Rabka seedlings. The discovery was made while grading for market, but unfortunately no record was kept of the tree or trees producing the new fruit and it will not be before another harvest that steps can be taken for its commercial development.

NOTES AND COMMENTS

From the comments on that fifty-thousand dollar strawberry it might be inferred that the price was paid for a single plant, but such was not the case. The variety was raised under contract by a Michigan grower who produced many thousands of them, but even at that price was one to break the record.

The Rockhill, as the new strawberry is called, was named from its propagator, Henry Rockhill of Concord, Iowa, who was 14 years in developing it. The variety is large, production of fine quality, and a vigorous plant maker. Besides these features it produces a good crop both summer and fall. It looks now as though the Rockhill might introduce a new era in strawberry growing.

Among the new peaches the Rochester is deserving of attention. It has size and quality, while ripening soon after the Dewey. If the tree prove hardy enough, it ought to add a valuable variety to the list of peaches for the Great Lakes district.

There are several varieties of quinces, some of large size, but none to take the place of the old Orange, Though not remarkable for size, it has quality. Then the bush, laden with its golden fruit in autumn, is not to be passed by as an ornamental. Plant it in a good soil and it will reward your attention handsomely.

The Japan quince has its place among the ornamentals, but the fruit has some culinary value. The juice has a strong flavor, so much so that most persons would not desire it alone, but when added to other fruits the combination makes a fine jelly. It is not very productive and would hardly be desirable for the fruit merely, but as a combination of the useful and ornamental.

Some kinds of wild roses produce large seed containers or hips, which are not only ornamental in winter, but have some flavor when eaten. They are too small to be of value as a food, though a starving person might exist for a little time if given enough of them, but they might be developed for some aspiring fruit. Here is an opportunity for some aspiring Luther Burbank to make himself famous and do the world a favor by producing something new and useful from a promising source.

RADIO DEPARTMENT

EDITED BY J. HERBERT FERRIS

LETTING THE FAMILY HEAR "RADIO"

THE word "Radio" is now used by the average person to mean either a radio receiving set or the broadcasted music, lectures etc., that are received on a radio receiving set. It is just as well that we can use such a simple word as that to mean what we have to say without using a long sentence for the same purpose.

"Have you a radio?"—or "How'd your radio work last night?" are familiar greetings between friends when they meet on the street or in the store. One neighbor tells of the wonderful music that he heard while the other tries to get a word in edgewise to tell of the talk by the French healer Coue, and so on 'till each forgets that they were sent to the store to buy a spool of thread or a pound of coffee.

Yes, radio is getting quite the rage now, and each day sees more and more that it has come to stay. It is not a passing fad any more than the automobile is a fad, it has been used for years in a commercial way and for study and experiment by the thousands of American "Amateurs" raiging in age from 14 to 60.

It has saved ships and aided business; it has been a blessing in sickness and emergencies; it has helped armies to win victories; and now it has come to be one of the blessings of the new age when the city visits with the country and singers sing to multitudes that they never see; where colleges can instruct students in their own home; where the sick can go to church; where markets come to you, and many other changes take place that are too numerous to mention. The largest blessing is to the family group.

Let us see what the family can get out of the radio. First let us take mother or wife and see what she will get. There are cooking lessons, dressmaking lessons, hints on interior decorations, flowers and how to grow them, hints on the health, teeth, eyes and hair; children, their care, education, health and amusements, in fact everything that you need to know to give your children proper care.

Now it's father's turn:—market reports, weather and crop reports, farm hints spraying and care of the fruit and other crops, disease prevention in animals and crops, scientific agricultural bulletins, business news, stock and grain market reports and general news of world and local state happenings.

Sister:—How to dress, how to do the hair, latest styles in different cities and countries, dancing hints, etiquette, the latest music, instructive talks and lectures, and many other useful and instructive activities.

Brother:—Sports, scores of ball games, hunting information and stories of adventure, agricultural college extension courses, how to make different things, politics, history, talks by the President and other noted speakers, time signals and the weather forecasts, etc.

Little brother and sister:—Bed time stories, songs and music suitable for young folks. Santa Claus at Christmas time and many unforseen little specials that children will enjoy.

The whole family, young and old:—Church services on Sundays, Politics for both men and women, Club work for womens' and mens' clubs, operas, concerts, lectures, dramas,

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Those people who are fortunate enough to be situated near a large broadcasting station can enjoy all these things at a very little expense, but the family that is far away must spend quite a bit more if they are all going to enjoy these good things, as freely as the more fortunately situated.

One hundred dollars carefully spent will enable most of the farmers to have a radio set that will give the family night after night of good things, not "canned" music and speeches, but live up-to-the-minute articles, just as it happens and in many cases long before the papers have the news.

Think it over, you folks that spend your evenings by yourselves, and get a little of the outside world in your home. Keep posted on the latest things and not spend your time worrying about the things that are past.

Get a radio set. It will pay you many times it's cost in the pleasure it will bring you, not to think of the possible profit by watching the markets.

Think it over!

FARM MECHANICS

WATER BACKS UP IN TILE

I would like as much information as I can receive to find a way to stop the water of a stream flowing back in the tile as follows: We have a low place on our farm and a river is near this place. Now we dug a little drain from this low place to the river in which we put eight inch tile and where these tile reach the river they are just a little above normal water, as we had to cut through a high bank on the river. Now we have a flood gate which rises up and down with a handle which is all cemented in but somehow the water gets by it so that when the stream rises it flows back into this low place. Now what I want to know is what can I use at the stream that will stop this back flow?—R. M., St. Charles, Mich.

—It would be very difficult to say in regard to water backing up to this low spot, whether the seepage is through the gate or along the high bank along the river. If the seepage occurs any other place that at or along the flood gate it would be next to impossible to shut off the flow. If it is desired to close the tile only, a flat valve of a sheet of rubber and cast iron disc could be made to close the mouth of the tile, this could be hung at the top so that it would swing out with the flow of water and rest normally over the mouth of the tile when there is no flow. It seems to me that careful investigation of the spot is necessary to determine where the water returns back to the low place, this might be indicated by boring holes with an auger at different points along the bank. If the water passes through the gate or near the gate it would seem possible to find the point at which it passes through.—H. H. Musselman, Prof. of Farm Mechanics, M. A. C.

WALL FOR BASEMENT

I have a barn 20x40x16 feet to the eaves. It has sills under it 9x9 inches. It stands on a side hill and I want to raise it 2 feet and dig out underneath which will give me a basement with an eight foot ceiling. Please tell me how thick the wall ought to be? It is to be made of concrete to make a good solid job of it. How many yards of gravel will it take to make the wall, which will be 8 feet deep, on the two ends and along one side? The other side I intended to put posts under.—F. P.,—Paw Paw, Michigan.

—The walls should be 8 inches thick and would require 10 yards of gravel and about 11 barrels of cement using a 1x6 mix of bank run gravel, in using bank run gravel make sure that you have about the right proportion of sand and gravel and that it does not contain dirt or organic matter. By putting a quantity of gravel in a 2 quart can filling the can nearly full of material shaking thoroughly and the coarse gravel will settle to the bottom, the coarse sand in the next layer, fine sand next with clay and silt next and the organic matter on the top. By studying this carefully you can get a very good idea of the proportion of sand and gravel and the amount of dirt and organic matter. The proportion of sand to gravel should be about 1:2. Material that will pass thru a ¼ mesh screen is considered sand. That that passes over, gravel.—F. E. Fogle, Asst. Professor of Farm Mechanics, M. A. C.

ADVICE TO YOUNG MAN INTERESTED IN ENGINEERING

What would you advise a young man to do who is eighteen years of age, has an eighth grade diploma, (not a state diploma)' no high school education, but who is interested in the electrical and mechanical engineering professions especially mechanical engineering? A college preparatory course and then a university course would take too long for one without funds wouldn't it? Isn't there some way of working up in these professions? Why do some schools graduate their pupils in less time than state universities? Is it a serious drawback in this field to be a poor penman?—R. J. K., Suttons Bay, Michigan.

—The aims and ambitions which this young man has would determine largely what course might be advisable to pursue. It is unquestionably true that short cuts or shorter courses would be better than no attempt at all at self improvement and perhaps some of this work supplemented by practical experience along the line which is desired to develope would prove very effective. For the man who has the ambition and tenacity to stay with it, the correspondence school in construction and practical work has also proven effective in many cases.

It is very likely that the young man who starts out in any one of these so-called short cuts will acquire knowledge of the field to show that the more extended course of training is desirable, if it can be accomplished. The fact of the matter is that if this young man is really interested in mechanical engineering he will take advantage of any and every opportunity which will carry him in this direction. Poor penmanship need not stand in the way, although if he is sincere in his ambition in this direction, effort would be made to overcome this drawback rather than let it reduce his chances for success.—H. H. Musselman, Professor of Farm Mechanics, M. A. C.

STRANGE AD

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The Hunted Woman

By James Oliver Curwood

Michigan's Own and America's Formost Author of the Great Northwest

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SYNOPSIS

JOANNE GRAY is one of the passengers on the train bound for Tete Jaune Cache, the home of "The Horde," where she has no friends and all will be strange to her. The train stops at a town composed of several tents, she goes in search of food and a bath. She is directed to "Bill's Shack" and here she meets Bill Quade, who not only owns and operates "Bill's Shack" but is also leader of the lawless men of the town. Quade says he has a room she can rent and that he will show it to her. As they pass out of the room a newcomer enters the doorway leading off the street. The newcomer is John Aldous, a well known novelist. He sees the strange girl enter the place and believes she has made a mistake and as he stands in the doorway his eyes rest upon the curtained doorway through which they have passed. In but a moment the girl steps out, face flaming and eyes flashing. Quade follows her apologetically. He starts to offer the girl money but before he can do so Aldous steps to the girl's side and floors Quade with a terrific blow. Aldous hurries the girl away from the scene to the home of friends. Joanne tells Aldous she is going to Tete Jaune to find her husband, Mortimer FitzHugh. Aldous decides to go with her to protect her from Quade and his partner Culver Rann. Aldous believes FitzHugh is dead and locates a friend who declares he has seen the grave. Upon their arrival at Tete Jaune they are met by friends of Aldous, the Blacktons, at whose place they are to stay during their stop. Later they secure horses and supplies and start off into the wilderness accompanied by Donald MacDonald who believes he knows where the grave of FitzHugh is located.

(Continued from Feb. 17th issue.)

JOANNE did not answer, and Aldous stepped outside. He knew where to find the old hunter. He had gone up to the end of the timber, and probably this minute was in the little box canyon searching for the grave. It was a matter of less than a hundred yards to the upper fringe of timber, and when Aldous came out of this he stood on the summit of the grassy divide that separated the tiny lake Keller had described from the canyon. It was less than a rifle shot distant, and on the farther side of it MacDonald was already returning. Aldous hurried down to meet him. He did not speak when they met, but his companion answered the question in his eyes, while the water dripped in streams from his drenched hair and beard.

"It's there," he said, pointing back. "Just behind that big black rock. There's a slag over it, an' you've got the name right. It's Mortimer FitzHugh."

Above them the clouds were splitting asunder. A shaft of sunlight broke through, and as they stood looking over the little lake the shaft broadened, and the sun swept in golden triumph over the mountains. MacDonald beat his limp hat against his knee, and with his other hand drained the water from his beard.

"What you goin' to do?" he asked.

Aldous turned toward the timber. Joanne herself answered the question. She was coming up the slope. In a few moments she stood beside them. First she looked down upon the lake. Then her eyes turned to Aldous. There was no need for speech. He held out his hand, and without hesitation she gave him her own. MacDonald understood. He walked down ahead of them toward the black rock. When he came to the rock he paused. Aldous and Joanne passed him. Then they, too, stopped, and Aldous freed the girl's hand.

With an unexpectedness that was startling they had come upon the grave. Yet not a sound escaped Joanne's lips. Aldous could not see that she was breathing. Less than ten paces from them was the mound, protected by its cairn stones; and over the stones rose a weather-stained slab in the form of a cross. One glance at the gravel and Aldous riveted his eyes upon Joanne. For a full minute she stood as motionless as though the last breath had left her body. Then slowly, she advanced. He could not see her face. He followed, quietly, step by step as she moved. For another minute she leaned over the slab, making out the fine-seared letters of the name. Her body was bent forward; her two hands were clenched tightly at her side. Even more slowly than she had advanced she turned toward Aldous and MacDonald. Her face was dead white. She lifted her hands to her breast, and clenched them there.

"It is his name," he said, and there was something repressed and terrible in her low voice. "It is his name!"

She was looking straight into the eyes of John Aldous, and he saw that she was fighting to say something which she had not spoken. Suddenly she came to him, and her two hands caught his arm.

"It is terrible—what I am going to ask of you," she struggled. "You will think I am a ghoul. But I must have proof! I must—I must!"

She was staring wildly at him, and all at once there leapt fiercely through him a dawning of the truth. The name was there, seared by hot iron in that slab of wood The name! But under the cairn of stones——

Behind them MacDonald had heard. He towered beside them now. His great mountain-twisted hands drew Joanne a step back, and strange gentleness was in his voice as he said:

"You an' Johnny go back an' build a fire, Mis' Joanne. I'll find the proof!"

"Come," said Aldous, and he held out his hand again.

MacDonald hurried on ahead of them. When they reached the camp he was gone, so that Joanne did not see the pick and shovel which he carried back. She went into the tent and Aldous began building a fire where MacDonald's had been drowned out. There was little reason for a fire; but he built it, and for fifteen minutes added pitch-heavy fagots of storm-killed jack-pine and spruce to it, until the flames leapt a dozen feet into the air. Half a dozen times he was impelled to return to the grave and assist MacDonald in his gruesome task. But he knew that MacDonald had meant that he should stay with Joanne. If he returned, she might follow.

He was surprised at the quickness with which MacDonald performed his work. Not more than half an hour had passed when a low whistle drew his eyes to a clump of dwarf spruce back in the timber. The mountaineer was standing there, holding something in his hand. With a backward glance to see that Joanne had not come from the tent, Aldous hastened to him. What he could see of MacDonald's face was the lifeless colour of gray ash. His eyes stared as if he had suffered a strange and unexpected shock. He went to speak, but no words came through his beard. In his hand he held his faded red neck-handkerchief.. He gave it to Aldous.

"It wasn't deep," he said. "It was shallow, turribly shallow, Johnny—just under the stone!"

His voice was husky and unnatural.

There was something heavy in the handkerchief, and a shudder passed thru Aldous as he placed it on the palm of his hand, unveiled its contents. He could not repress an exclamation when he saw what MacDonald had brought. In his hand, with a single thickness of the wet handkerchief between the objects and his flesh, lay a watch and a ring. The watch was of gold. It was tarnished, but he could see there were initials, which he could not make out, engraved on the back of the case. The ring, too, was of gold. It was one of the most gruesome ornaments Aldous had ever seen. It was in the form of a coiled serpent, wide enough to cover half of one's middle finger between the joints. Again the eyes of the two men met, and again Aldous observed that strange, stunned look in the old hunter's face. He turned and walked back toward the tent, MacDonald following him slowly, still staring, his long gaunt arms and hands hanging limply at his side.

Joanne heard them, and came out of the tent. A choking cry fell from her lips when she saw MacDonald. For a moment one of her hands clutched at the wet canvas of the tent she swayed forward, knowing what John Aldous had in his hand. He stood voiceless while she looked. In that tense half-minute when she stared at the objects he held it seemed to him that her heart-strings must snap under the strain. Then she drew back from them, her eyes filled with horror, her hands raised as if to shut out the sight of them, and a panting, sobbing cry broke from between her pallid lips.

"Oh, my God!" she breathed. "Take them away—take them away!"

She staggered back to the tent, and stood there with her hands covering her face. Aldous turned to the old hunter and gave him the things he held.

A moment later he stood where the three had been, staring now as Joanne had stared, his heart beating wildly.

For Joanne, in entering the tent, had uncovered her face; it was not grief that he saw there, but the soul of a woman new-born. And as his own soul responded in a wild rejoicing, MacDonald, going over the summit and down into the hollow, mumbled in his beard:

"God ha' mercy on me! I'm doin' it for her an' Johnny, an' because she's like my Jane!"

CHAPTER XVI

Plunged from one extreme of mental strain to another excitement that was as acute in its opposite effect, John Aldous stood and stared at the tent-flap that had dropped behind Joanne. Only a flash he had of her face; but in that flash he had seen the living, quivering joyousness of freedom blazing where a moment before there had been only horror and fear. As if ashamed of her own betrayal, Joanne had darted into the tent. She had answered his question a thousand times more effectively than if she had remained to tell him with her lips that MacDonald's proofs were sufficient—that the grave in the little box canyon had not disappointed her. She had recognized the ring and watch; from them she had shrank in horror, as if fearing that the golden serpent might suddenly leap into life and strike.

In spite of the mightiest efforts she might have made for self-control Aldous had seen in her tense and tortured face a look that was more than either dread or shock—it was abhorrence, hatred. And his last glimpse of her face had revealed those things gone, and in their place the strange joy she had run into the tent to hide. That she should rejoice over the dead, or that the grim relics from the grave should bring that new dawn into her face and eyes, did not strike him as shocking. In Joanne his sun had already begun to rise and set. He had come to understand that for her the grave must hold its dead; that the fact of death, death under the slab that bore Mortimer FitzHugh's name, meant life for her, just as it meant life and all things for him. He had prayed for it, even while he dreaded that it might not be. In him all things were now submerged in the wild thought that Joanne was free, and the grave had been the key to her freedom.

A calmness began to possess him that was in singular contrast to the perturbed condition of his mind a few minutes before. From this hour Joanne was his to fight for, to win if he could; and, knowing this, his soul rose in triumph above his first physical exultation, and he fought back the almost irresistable impulse to follow her into the tent and tell her what this day had meant for him. Following this came swiftly a realization of what it had meant to her—the suspense, the terrific strain, the final shock and gruesome horror of it. He was sure, without seeing, that she was huddled down on the blankets in the tent. She had passed through an ordeal under which a strong man might have broken, and the picture he had of her struggle in there alone turned him from the tent filled with the determination to make her believe that the events of the morning, both with him and MacDonald, were easily forgotten.

He began to whistle as he threw back the wet canvass from over the camp outfit that had been taken from Pinto's back. In one of the two cow-hide panniers he saw that thoughtful old Donald had packed materials for their dinner, as well as utensils necessary for its preparation. That dinner they would have in the valley, well beyond the red mountain. He began to repack, whistling cheerily.

He was still whistling when MacDonald returned. He broke off sharply when he saw the other's face.

"What's the matter Mac?" he asked. "You sick?"

"It weren't pleasant, Johnny."

Aldous nodded toward the tent.

"It was—beastly," he whispered. "But we can't let her feel that way about it, Mac. Cheer up—and let's get out of this place. We'll have dinner somewhere over in the valley."

They continued packing until only the tent remained to be placed on Pinto's back. Aldous resumed his loud whistling as he tightened up the saddle-girths, and killed time in half a dozen ways. A quarter of an hour passed. Still Joanne did not appear. Aldous scratched his head dubiously, and looked at the tent.

"I don't want to disturb her, Mac," he said in a low voice. "Let's keep up the bluff of being busy. We can put out the fire."

Ten minutes later, sweating and considerably smoke-grimed, Aldous again looked at the tent.

"We might cut down a few trees," suggested MacDonald.

"Or play leap-frog," added Aldous.

"The trees'd sound more natcherel," said MacDonald. "We could tell her——"

A stick snapped behind them. Both turned at the same instant. Joanne stood facing them not ten feet away.

"Great Scott!" gasped Aldous. "Joanne, I thought you were in the tent!"

The beautiful calmness in Joanne's face amazed him. He stared at her as he spoke, forgetting altogether the manner in which he had intended to greet her when she came from the tent.

"I went out the back way—lifted the canvass and crawled under just like a boy," she explained. "And I've walked until my feet are wet."

"And the fire is out!"

"I don't mind wet feet," she hurried to assure him.

Old Donald was already at work pulling the tent-pegs. Joanne came close to Aldous, and he saw again that deep and wonderful light in her eyes. This time he knew that she meant he should see it, and words which he had determined not speak feel softly from his lips.

"You are no longer afraid, Ladygray? That which you dreaded—"

"Is dead," she said. "And you, John Aldous? Without knowing, seeing me only as you have seen me, do you think I am terrible?"

"No, I could not thing that."

Her hand touched his arm.

"Will you go out there with me, in the sunlight, where we can look down on the little lake? she asked. "Until to-day I had made up my mind that no one but myself would ever know the truth. But you have been good to me, and I must tell you—about myself—about him."

He found no answer. He left no word with MacDonald. Until they stood on the grassy knoll, with the lakelet shimmering in the sunlight below them, Joanne herself did not speak again. Then, with a little gesture, she said:

"Perhaps you think what is down there is dreadful to me. It isn't. I shall always remember that little lake, almost as Donald remembers the cavern—not because it watches over something I love, but because it guards a thing that in life would have destroyed me! I know how you must feel, John Aldous—that deep down in your heart you must wonder at a woman who can rejoice in the death of another human creature. Yet death, and death alone, has been the key from bondage of millions of souls that have lived bebore mine! and there are men—men, too—whose lives have been warped and destroyed because death did not come to save them. One was my father. If death had come for him, if it had taken my mother, that down there would never have happened—for me!"

She spoke the terrible words so quietly, so calmly, that it was impossible for him entirely to conceal their effect upon him. There was a bit of pathos in her smile.

"My mother drove my father mad," she went on, with a simple directness that was the most wonderful thing he had ever heard come from human lips. "The world did not know that he was mad. It called him eccentric. But he was mad—in just one way. I was nine years old when it happened and I can remember our home most vividly. It was a beautiful home. And my father! Need I tell you that I worshipped him—that to me he was the king of all men? And as deeply as I loved him, so, in another way, he worshipped my mother. She was beautiful. In a curious sort of way I used to wonder, as a child, how it was possible for a woman to be so beautiful. It was a dark beauty—a recurrence of French strain in her English blood.

"One day I overheard my father tell her, if she died, he would kill himself. He was not of the passionate, over-sentimental kind; he was a philosopher, a scientist, calm and self-contained—and I remembered those words later, when I had outgrown childhood, as one of a hundred proofs of how devoutly he had loved her. It was more than love, I believe. It was adoration. I was nine, I say, when things happened. Another man, a divorce, and on the day of the divorce this woman, my mother, married her lover. Somewhere in my father's brain a single thread snapped and from that day he was mad—mad on but one subject; and so deep and intense was his madness that it became a part of me as the years passed, and today I, too, am possessed of the madness. And it is the one greatest thing in the world that I am proud of, John Aldous!"

Not once had her voice portrayed excitement or emotion. Not once had it risen above its normal tone; and in her eyes, as they turned from the lake to him, there was the tranquillity of a child.

"And that madness," she resumed, "was the madness of a man whose brain and soul were overwrought in one colossal hatred—a hatred of divorce and the laws that made it possible. It was born in him in a day, and it lived until his death. It turned him from the paths of men, and we became wanderers upon the face of the earth. Two years after the ruin of our home my mother and the man she had married died in a ship that was lost at sea. This had no effect upon my father. Possibly you will not understand what grew up between us in the years and years that followed. To the end he was a scientist, a man seeking after the unkonwn, and my education came to be a composite of teachings gathered in all parts of the world. We were never apart. We were more than father and daughter; we were friends, comrades—he was my world, and I was his.

"I recall, as I became older, how his hatred for that thing that had broken our home developed more and more strongly in me. His mind was titanic. A thousand times I pleaded with him to employ it in the great fight I wanted him to make—a fight against the crime of divorce. I know, now, why he did not. He was thinking of me. Only one thing he asked of me. It was more than a request. It was a command. And this command, and my promise, was that so long as I lived—no matter what might happen in my life—I would sacrifice myself body and soul sooner than allow that black monster of divorce to fasten its clutches on me. It is futile for me to tell you these things, John Aldous. It is impossible—you cannot understand!"

"I can," he replied, scarcely above a whisper. "Joanne, I begin—to understand!"

And still without emotion, her voice as calm as the unruffled lake at their feet, she continued:

"It grew in me. It is a part of me

(Continued on page 19.)

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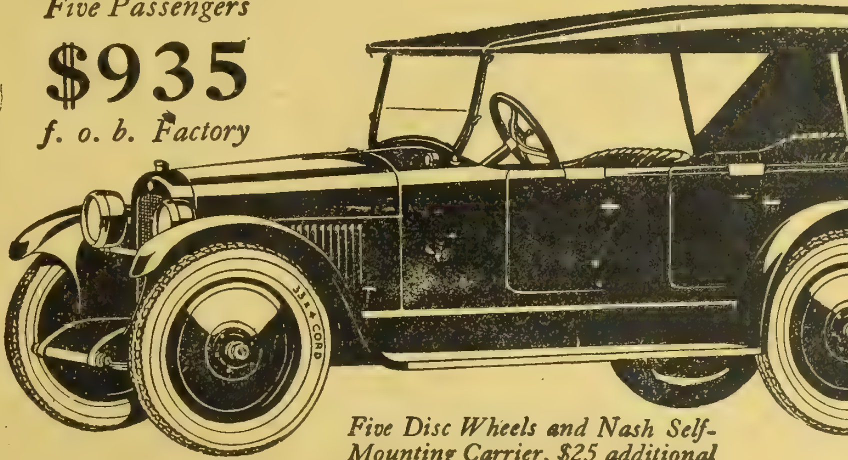

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The Michigan
BUSINESS FARMER

SATURDAY, MARCH 3, 1923

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We will not knowingly accept the advertising of any person or firm who we do not believe to be thoroughly honest and reliable. Should any reader have any cause for complaint against any advertiser in these columns, the publisher would appreciate an immediate letter bringing all facts to light. In every case when writing say: "I saw your advertisement in The Michigan Business Farmer!" It will guarantee honest dealing

"The Farm Paper of Service"

MICHIGAN FARED BETTER

THE farms of Michigan produced crops to the approximate value of $215,000,000, in 1922, an increase of 17 per cent over 1921 when the valuation dropped to $184,004,000.

Each grain crop, sugar beets, beans and clover seed showed a higher price on December 1 this year than one year ago. All crops except winter wheat, buckwheat, potatoes and wild hay gave a larger monetary return per acre this year than last.

The principal encouraging factors are the diversified nature of Michigan's crops and the high degree of development of the State's dairy industry, which have given its farmers a much stronger economic position than occupied by many of the other corn belt states, especially those which have suffered from the distress caused by inflated land values.

The combined yields of all crops in the State were 7.4 per cent better than the average of recent past years. Only four other important states fared as well this year.

Hay was relatively the best crop of the year, although corn, potatoes, clover seed and most of the fruits yielded above the average. The poorest crops were winter wheat and rye, although, for the State as a whole, these were fair both in yield and quality.

All main crops were larger in volume than last year except corn, rye and sugar beets, and had a greater total value except potatoes, sugar beets and clover seed.—Annual Summary, 1922, U. S. Dept. of Agriculture, Jan. 6, 1923.

HELPING DROWN THE FARMER WITH CREDIT

THE Senate Committee on Banking and Currency has reported out two bills, called Rural Credits Bill. The "Capper Bill" retains the power in the Federal Reserve Board, which, through denial of credit to farmers and discrimination in granting of credit helped ruin farmers, to continue this life and death policy. It specifically provides that the regulations of the Federal Reserve Board shall be designed to insure that notes drafts, etc., drawn or issued, shall be a part of a program of orderly marketing of such agricultural products "and not for speculative holding of such products." Naturally, when the Federal Reserve Board wants to break farmers, it can charge that they are holding crops for speculation and deny them all credit. The Capper Bill, like the Strong Bill in the House, amending the Federal Farm Loan Act, permits a loan of $25,000 by the Farm Loan Bank to any one borrower while the present maximum is $10,000. This is clearly an invitation to uneconomic speculation in farm lands, which has been a serious injury to real producing farmers.

The Lenroot Bill (S-4103) combines a personal or productive credit system with the long term or mortgage credit system in the Federal Farm Loan system, although the United States Commission to investigate rural credits abroad recommended the long term and short term credit system for farmers should be kept segrated, because of the different purposes of the two systms of credit.

IS THE FARMER BEING "KIDDED"?

NO less an authority than "The Chicago Tribune," recently headed an editorial "Farmers Being Kidded by Experts!" which goes on to say:

> "Congress is busily approving measures designed for the purpose of pulling the farmer out of the financial slough in which he has been struggling for two years or more. Without going into details of the methods of extrication thus offered, it is clear that most of the proposals are artificial. Mostly they provide for increase of extension of credits to farmers or potential customers who might buy farm produce at higher prices. Under easy conditions of credit a farmer who needs a new tractor or a new silo can borrow and provide himself with them. Perhaps he could also hold his crop over a few months for an improved market, which might or might not develop. In any event his future would depend upon the demand and consequent prices for his product. He would be certain of nothing except the debt thus incurred. The government or banks would be certain of nothing except responsibility for public or popular funds so loaned."
>
> "It is economically impossible thus to subsidize a basic industry. The farmers admit, especially around election time, that theirs is a basic industry. It is. The country cannot live without it. But if it is to be subsidized, where is the money to come from to subsidize it? For a year or two we may take it by taxation from capital. When capital is thus used up we would have Russia, alike in Wall street, La Salle street, and on the Iowa prairie. That would be the end of subsidy unless we took the money from the basic industry of farming and gave it back to the farmers."
>
> "The farmers are holding up the world. We cannot exist without food. That being true, the world cannot reach down and put a new foundation under the feet of this agrarian Atlas. Our American life and civilization now rests upon the farm, assisted by coal, iron, and copper. All the means of subsistence comes out of the ground. It is obviously impossible to take a part of this production, turn it into money through taxation, and with it restore to the earth a greater measure of wealth than we have extracted."
>
> "The farmer wants a better balance between the prices he gets for his produce and the prices he pays for his necessities. We do not blame him for that. But the assistance offered cannot accomplish that, unless through inflation of currency. If thus the farmer could pay off his debts of dollars with 50 cent pieces he might enjoy it. Even that would be only a "shot in the arm." He'd awake with a parched tongue, a fever, and a craving for more."
>
> "Political spellbinders who have been "kidding" the farmer have been giving him the legislation they persuade him he wants, not the help he needs. They gave him the present tariff, preventing the importation of hogs and corn into Illinois, for instance, because the farmer wanted it. And so the farmer agreed to the tariff which prevents the importation of German or British manufactured goods into this country. Germany and Britain, are being unable to sell here, cannot buy here. The farmer has no competition from Canadian wheat, and he pays for that independence by a sacrifice of foreign markets."
>
> "He has been, and is being, "kidded" by experts. Perhaps the next constitutional amendment should be one making an examination in rudimentary economics a condition for the seating of any member of congress."

Farmers perhaps are being "kidded," but business farmers, are not listening to political spell-binders or if they are they are only smiling at their antics. They are not going into further debt just because credit may be easier, unless they know how in their business they can use that money to bring them in more when the harvest comes. The business farmer only asks the same credit which is extended every other line of manufacturing business. He must be able to hold his produce until he can market it at a profit. He does not ask a subsidy, but because his is the largest business in America, no single source of capital, except the government itself, is prepared to meet his credit needs.

THE GASOLINE TAX

PERHAPS by the time this reaches you the gasoline tax will have been settled at Lansing. At this writing it is hanging in the balance with Governor Groesbeck in favor of a one cent per gallon tax, to be collected from the source at the inter-state line, this tax to be coupled with an increased license tax based on weight which will penalize the heavy, expensive car. A separate measure has been introduced and is favored which will make the heavy trucks and buss lines pay their share of the highway upkeep.

Everyone knows that something must be done to collect more money to keep the states elaborate system of highways in good repair, otherwise the millions that have been spent to date will soon have disappeared in dust and we will be worse off than when we voted for paved roads.

It seems obvious that those who use the roads and do the greatest damage to them should be made to pay as much of their proportion of upkeep as possible. Whether it be raised by gasoline-tax, increased license fee or what method, we who own automobiles know that it has got to be paid and we might as well get ready to pay it.

As a source of consolation to those who fear the gasoline tax we offer our own figures on the amount of gasoline consumed, in average driving of a twenty-mile to the gallon (?) automobile. Our gasoline bill for 1922 averaged $12 per month, so if the price averaged twenty cents per gallon, we burned sixty gallons of gasoline, which at a tax of one cent per gallon, would cost us sixty cents per month or $7.20 per year.

As for the dry-cleaner and others, who use gasoline in their business, they will have to speak for themselves, because it is obvious that no exemptions can be made without employing an army of spies to ascertain whether the gasoline were being used for the purposes purchased or not.

MORE THRILLING THAN FICTION!

THE eyes of the world were riveted on an island that lays midway in Lake Michigan and is a part of our own state, two weeks ago. Ice-bound, by great bergs that had jammed and frozen in an unsurmountable and impassable mass, lay Beaver Island, famed as the onetime empire of that Morman king, Strang.

On the island lay in agony a woodman, whose leg had been crushed between the mighty logs they are felling. With no medical assistance nearer than the mainland and that succor impossible for humans to reach over the intervening miles of broken ice, he was doomed to a painful death.

Then stepped into the arena to combat age-old nature, which for centuries has scoffed at puny man; modern science. First, propelled by tiny batteries, electric waves flashed through space and carried the message to similarly tuned instruments, hundreds of miles away, "S.O.S." it cried, "a human being lies here in distress!" Human ears listened and human hearts quickened to the rescue of their kind.

Wires tingled from Charlevoix on the mainland to the Commander of Selfridge Flying field, there is one way and only one way to reach Beaver Island over the ice and thus to carry medical aid to the afflicted woodsman. The air offered no barriers to man. Within a decade man has conquered almost the last natural force that defied his ingenuity. He has sprouted wings and taken to the element from whence the eagle had for so long looked down in pity on the two-legged animal chained to earth.

Within a few minutes after the messages had been exchanged, a giant bird, with a man on its back, was soaring straight over village and farm at the rate of a hundred miles per hour, towards the afflicted human on the ice-bound island.

Soon a blizzard of snow was whirled back from the propellers into the aviators visors. The first plane had to alight far from its destination, but no sooner than was this message relayed back to the field, than another plane had taken to its wings. A stop at Charlevoix for the doctor, a dash through the air that laughed at the mountain crags of ice below and modern science was at the bedside of the stricken human.

Jules Verne might have written this story from the imaginations of a wierd brain a hundred and fifty years ago. He wrote no stranger tales, nor none that would have caused more smiles from those who pointed to him as "the man who was a bit queer!"

Fiction is fast becoming obsolete, because the news of these days is more thrilling.

Hi Simpkins wants to know what would have happened to the price of potatoes if all the growers had only offered for sale one half of what they grew? He has an idea farmers would have have got more for one half, than they will now for both halves! Maybe Hi ain't as crazy as he looks!

* * *

The older we get the more we believe that the quiet, steady workers are the ones who keep things building in this world.

* * *

Yet, the fellow on the soap-box gets the crowd—while the man who makes the soap works unapplauded!

PUBLISHER'S DESK

The best advice I can give the many readers who ask about correspondence schools which teach everything from barbering to auctioneering and auto painting by mail, is to ask the school for references of satisfied students. Not testimonial letters that you read in their circulars, but actual names and addresses of men and women who have passed the course and are using it. Then satisfy yourself from this student that your money will be well invested in the prospective course. It may take a little time to do this and you might even spend a little money if necessary to visit the student and with him or her face to face, but it is a safe method to follow, if you would be sure.

We do not have very much patience with the person who will dash headlong into a trap when a little effort would secure the vital facts. All to often The Business Farmer is called on to help someone out of trouble, who could have saved themselves, countless worry, if they had written for our advice before they got into it.

They say a child never fears fire until it gets burned, but grown-ups who can read and write, ought to be able to use these two very valuable faculties.

A manufacturer wrote us that he feared our exposition of so many frauds and quack schemes which are worked by mail, would make Business Farmer readers, suspicious of any proposition offered by mail. Our answer was that we gave our readers credit for too much good sense to arrive at any such false conclusions.

As a matter of fact there are more quack and fake schemes offered by peddlers and agents at the doors of the farm home, than by all the mail order schemes put together.

The man who does business thru the United States mails must be honest. Uncle Sam, is your attorney without cost, when you have been defrauded thru the mails.

The Business Farmer has never registered a complaint with a recognized mail order or catalog house, of the kind that we are proud to introduce thru our advertising columns, who did not effect an immediate settlement, satisfactory to our reader.

It must be remembered that we are all prone to take advantage of the one from whom we buy by mail. Often an article which does not exactly please us is kept, because we prefer not to go back to the store clerk and demand our money back or a new article face to face. Yet, it is mighty easy to ship it back to the mail-order house—they advertise "satisfaction—or your money back!" and we are apt to take advantage of it.

We have known many instances where the mail-order house not only returned every penny paid them, but all the freight charges both ways, besides running the risk of the condition of the shipment when it finally was received back in their stock.

There is one simple rule in mail-order dealing:

Don't send money to a firm or person you do not know by previous dealings, unless recommended by a friend, advertised in the columns of a reliable publication or known to you by long-standing reputation.

Several readers have inquired lately regarding the so-called "food and fur companies," one of which advertises from New York and another from Kansas City, I believe. We had a representative of The Business Farmer in New York City make an investigation and I will let his advice to one of our readers answer the many who have been writing me, he says "To be perfectly frank with you, I would suggest that you let this matter alone. Presumably, they sell you a pair of rabbits at a specified price, say $14.00. For every pair you raise and return to them, they pay you $7.00 On the surface it looks good, but I am firmly convinced that a very small percentage of the rabbits sent them meet their requirements, which in itself is entirely in their hands.

While they might specify certain things in the contract, and you, to the best of your knowledge, would live up to that contract, there is no way of your finding out whether or not the condition of the stock was good when it reached their New York station."

In the M. B. F., of Feb. 17th, I saw an article in regard to Warren McRae Land Company, would say I saw his ad in the Allegan Gazette, so I wrote to him about December 1, 1922 and the enclosed was his first answer but there had been a man by the name of Jones from Illinois that had the same kind of ads in the Allegan Gagette and he got some listing fees out of some people and that was the last they heard of him. So I wrote McRae that if Mr. Paulinski or any other mister wanted to come and was afraid of misrepresentation that I would pay his fare here and back to Logansport, but I would not send money to parties I knew nothing about. When my people came from New York to Michigan they just packed their grips and started. McRae thought he had a sucker but I did not bite. I know the price of land here perhaps as well as Mr. McRae. Yours truly,—Chas. W. Goodeve.

* * *

McRae did not sell me or my farm. He is now running an ad in "The Lawrence Times." Go after him. If you need any more evidence than you now have, I will get some more. —D. Mosher, Berrien County.

AT IT AGAIN!

"I want to warn the readers against buying any spectacles from strangers traveling on the roads. Two men came along here and frightened a woman into buying two pair. She needed the one pair, but he told her and her husband she had a cataract coming on her left eye, and manipulated his tools so that they really believed she had and told her she needed one pair to see off and it would straighten the left eye so that cataract would not grow. They finally bought the two pair and paid $10 per pair, more than they are worth. The one pair to read with are O. K., and the other pair lays in a bureau drawer of no use to her or anyone, as she has no cataract. So beware. The men gave a Detroit address, and letters addressed to them there were returned."—Mrs. G.

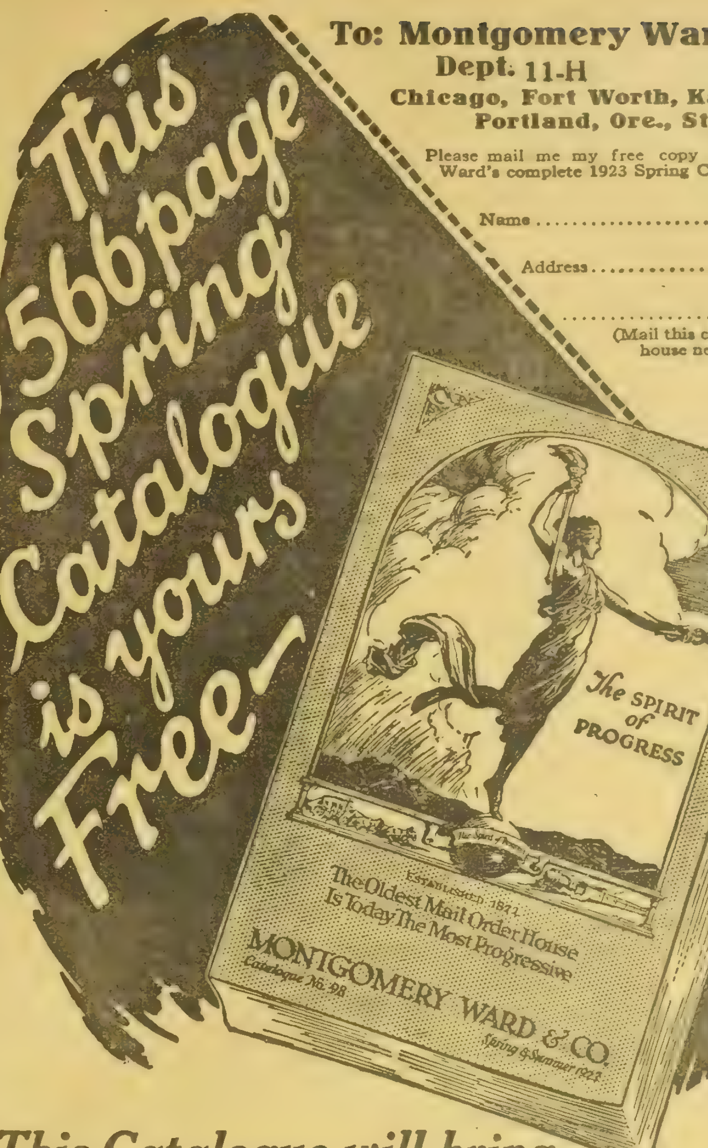
* * *

When brother Noah clambored over the side of his beached ark, probably the first two living creatures to greet him were a pair of spectacle salesmen. Surely he had none on the ark and they must have floated on the yellow flood until it subsided. Ever since then, apparently their breed has increased and although attacted by better education, common sense and the legalized optometrists during recent years, every once in a while they bob up again in some community with their little black bags and their big black lies.

Generous nature gives most all of us two good optics through which to guide our way through life. However, before a great many years have passed we find our eyes giving out on us. Then it is we turn to glasses exactly as we would buy crutches, were we lame, but the difference comes, in the fact that glasses can be more injurious, than they are beneficial. It takes as well trained a specialist to properly fit a pair of spectacles, as it dots to practice surgery, yet few of us would listen to the peddler who came to our door, looked at our tongues and told us he ought to perform an operation on our appendix then and there! Nor would we be more tempted when he offered us "two operations for the price of one!"

PROFITS THROUGH M. B. F. SERVICE DEPARTMENT

Dear Mr. Editor—Am writing a few lines to thank you for that letter you sent me as it saved me the trouble of feeding and lots of corn. My neighbor fattened one hog about the same size and we sold the same day. It weighed 220 pounds more than mine, after taking out the price of grain and hay he received $8.60 and I got $12.00 and my corn is in the crib yet. Thank you again for sending the answer so soon, and wishing you all a happy new year.—Wm. F. Chaney, R. 1, Standish, Michigan.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CHICAGO, FORT WORTH, KANSAS CITY, PORTLAND, ORE., ST. PAUL

What the Neighbors Say

MARKET MICHIGAN'S POTATOES AND BEANS IN THE SOUTH

BEFORE leaving my home state there was much said about the large potato crop and the marketing of it. On going to buy white potatoes here in south Georgia, I found that they were very scarce and were piled up in the windows as they in the north pile up oranges and they sold for from 3 to 5 cents a pound. They are good potatoes but scarce and this thought came to me. Why could not the Michigan growers ship their potatoes south? I believe there would be a ready market for them in the winter months. There are some grown here but not enough for the winter and there is a growing demand for them for the southern people are beginning to use them more and more each year. They plant them here in January and February but do not harvest them till May. Then it is hard to keep white potatoes long here on account of the warm weather, they rot easily. Our Navy beans are not found in any of the stores here. The southern cook does not know how to prepare them for the table and if they were sacked and the directions on how to cook them put on the sack, they too might become a southern dish as now it is hardly known at all. Only a few buy the canned baked beans.—Mrs. L. L., Cuthbert, Georgia.

THINKS FRIDAY FAVORS THE DISTRIBUTORS

I HAVE been a subscriber of the M. B. F., since the first issue and think the paper deals with problems of the day squarely. I have been reading Dr. Friday's talk on milk and from the farmer's standpoint think him very much in favor of the city people. Here in your issue of February 3rd, in part saying: whereby the farmer will be penalized for over-production in the wrong season. Now just as though we could change our flow of milk in a fortnight like Ford could his autos. It takes 3 to 6 years to raise a heifer calf to a producer, then about one-third are not suitable to keep as profit makers. The $3.00 per cwt. looks good but following the line back, 40c off for hauling from Adrian to Detroit, Adrian price $2.60.

I pay 20c from my farm to Adrian leaving $2.40 and then last but not least the test goes down to 3 per cent or 3.2 taking about 20c more off, netting me $2.20. Possibly my cows are boarders, if so, I have neighbors in like situation. I pity the guy paying 14c per quart. Where I only get 4 2-5c per quart, it costs a difference of 9 3-5c get our product to the consumer.—Porter McLouth, Lenawee County, Michigan.

AMEND THE COVERT ACT

IN your issue of December 9th, our mutual friend and good roads booster, H. S. Earle, asks "Will gasoline tax solve the highway problem?" and then proceeds to answer, "No" to his question. Perhaps he is right. But first what is the highway problem? Is it not, like any other question of taxation, the problem of levying the cost in fair proportion to the benefit derived, taking into consideration, too, the ability to pay? If this statement of the problem is correct, let us ask first if the present law levies the cost of road construction in fair proportion to the benefit derived?

As I understand the operation of the Covert Act, under which most of our improved roads are now and must be hereafter constructed, it assesses first a proportion of the cost of the road on the abutting property and such other property in a district as will receive direct benefit from the road to be built. This proportion, I believe, is twenty-five per cent. Then the township in which the road is situated is assessed for twenty-five per cent, and the county for the balance, the county receiving about half of its assessment back from the state, as an award. So it actully works out about on the basis of twenty-five per cent on the road district, twenty-five per cent on the township, twenty-five per cent on the county, and twenty-five per cent on the state. But let's keep in mind that a farm abutting on a Covert Act road is first in the district, but also in the township, the county and the state, and is therefore taxed in four different places. Is the quadruple tax on the farm a fair proportion on the cost of the improvement on the basis of the benefit derived, as compared with the proportion paid by the hundreds of automobiles and trucks which immediately avail themselves of the good roads? I think not. Nor does it take into consideration the ability to pay. We often hear the argument that a good road in front of or along side of a farm costs the owner nothing because the value of his farm is immediately increased at least to the extent of the cost of the road and often beyond. This is undoubtedly true, but it does force the farm owner to make an investment, and with the present prices of farm products the farming business is not in position to make an investment, and if the present road building program is continued on the present basis of distributing the cost many farms will have to be sold at a sacrifice because they cannot raise the cash to pay for the investment in good roads.

A gasoline tax alone not only would not solve this problem—it would make it worse. Such a tax would go directly to the state and with no more money to pay the state's share the State Highway Department and the County Road Commissioners would re-double their efforts to get more and more roads built, with the consequent piling of more and more district, township and county taxes on the farms.

What then is the solution? Let me offer this—amend the Covert Act so that the road-district pays from ten per cent to twenty-five per cent of the cost of building, the exact percentage to be determined by the State Highway Department on the basis of the average value of property by counties. For instance, a thickly settled, highly productive county like Oakland or Lenawee would be assessed twenty-five per cent on the road district, while a thinly settled unproductive county like Roscommon or Montmorenci would assess the minimum of ten per cent. Then let the State pay all of the balance, relieving the road-districts of their portion of the present township, county, and state taxes, The State to raise all money for highway purposes by specific taxes on those who use the roads. Perhaps a gasoline tax is as good as any to raise the money, but my opinion is that along with it there should be an increase in the license fees on automobiles.

The automobile is not paying its fair share of taxes as compared with other property. A car costing $1,500.00 pays as a license (which is in lieu of all taxes) about $16.00, while the same money invested in a home or a farm and assessed at two-thirds of its actual value pays double that amount in taxes. On higher priced cars the difference is even greater. And the little home or farm does not ask the State to spend millions of dollars a year for improved roads to operate on. Automobile owners, whether in country districts or cities want good roads all over the State, and with but few exceptions would welcome the opportunity to pay their fair share of the cost of the roads.

The Legislature is now in session and a great deal of talk is being heard about a gasoline tax, or about raising the automobile license, but I have seen nothing to indicate any thought of amending the Covert Act, so as to relieve the farms of any portion of the present burden. The property owners, as I see it, are not nearly so much interested in putting more tax on automobiles as in being relieved of a part of the burden they now bear. And the only way to get less taxes on general property (and on the farms in particular) for road purposes is to amend the Covert Act to distribute the burden more equitably.

In closing I might state that I operate two automobiles and am a stock-holder and officer of a corporation owning and operating three trucks and five autos in Michigan—and we'll gladly pay a fair tax on our machines to have good roads and to

Record Garden Yields

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By L. D. Johnson

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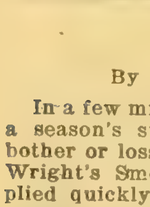
Send your name to the E. H. Wright Co., 850 Broadway, Kansas City, Mo., and you will receive, free and postpaid, a new $1 book, "Meat Production on the Farm," which tells how to cure every kind of meat. This $1 book is free to farmers only. Write for it today.—(Adv.)

For Healthy Orchards
Plant Michigan Grown Trees



Buy handsome, thrifty trees, grapevines, berry bushes, roses and shrubs from your own state and insure prompt receipt in vigorous condition. Kalamazoo County is famous for hardy, well-rooted stock. We guarantee healthy and true to name. You ought to plant more fruit trees this season. Special rates if you order now. Our handsome catalog of dependable trees free for the asking.

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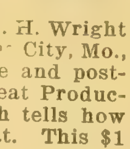

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BE COMFORTABLE—
Wear the Brooks Appliance, the modern scientific invention which gives rupture suffers immediate relief. It has no obnoxious springs or pads. Automatic Air Cushions bind and draw together the broken parts. No salves or plaster. Durable. Cheap. Sent on trial to prove its worth. Beware of imitations. Look for trade-mark bearing portrait and signature of C. E. Brooks which appears on every Appliance. None other genuine. Full information and booklet sent free in plain, sealed envelope.

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Our paint *has* to be good, because we *guarantee* it. We can't *afford* to have it any other way.

That's why we make our own paint—to be *sure* it is good—and why *you* can be sure, too. And why you save money on

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$1.68 to $1.89 per Gallon

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Stiff, picket-like stay wires prevent bagging and sagging.

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Small, compact knot allows fence to fit hills and hollows yet never slip.

Square Deal Fence

is trim looking, long lasting—economical. Heavy galvanizing keeps out rust; full gauge wires guarantee full strength.

FREE—Copy of Ropp's New Calculator (answers 75,000 farm problems) to land owners who write for Square Deal catalog.

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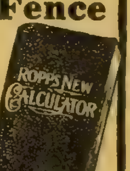

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Unhulled. Have big stock highest quality scarified hulled seed at Special Money-Saving Prices. We specialize on Grass and Field Seeds and quote them at Special Bargain Prices. Write today for FREE SAMPLES, special prices and big seed guide. ALL FREE.
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Dept. 927 Chicago, Ill.

WHEN WRITING TO ADVERTISERS PLEASE MENTION MICHIGAN BUSINESS FARMER

place the cost of them where it belongs.—Another Good Roads Booster.

THE OTHER MAN'S SIDE

TOO many country folks seem anxious to condemn the city receiver for things beyond control. In our 12 years of experience here in Detroit, it has been our observation that the average receiver—whether on commission or outright purchase—endeavors to give the shipper a square deal, realizing that Satisfaction with a capital "S" is the only means of continued shipments in fact we might go so far as to state that 999 out of 1000 dealers will give the shipper their very best efforts in the handling of his shipment and in some instances give him more than he is entitled to by market conditions for the sake of that same Satisfaction.

We also realize that the country shipper has actually been stung at times and these "stings" have been so advertised by the press that it has come to be common impression that the shipper always gets the raw deal.

"The evil that men do lives after them, the good is oft interred with their bones." How many times does a shipper write in and say: "That was a good price you got for me on that shipment old man?" or write "We are mighty well pleased with the service you rendered us on that shipment." Not often. The writer knows from personal experience.

A few years ago when we were doing a commission business, we handled as much or more poultry than any two of our competitors in point of volume. As a Christmas reminder the house decided to get up a memorandum book to be distributed to shippers. Advertising naturally played some part in the copy and it was intended that one page should carry a few sample letters from satisfied shippers, who had written us their approval of the manner in which their accounts had been handled. The stenographer was instructed to search through the letter files and get out a few copies of such letters—yes, so confident was I that we must have a lot of them, that I said a "few."

Diligent search of the records for the entire year failed to bring forth a letter that would sing the praise of our service and the "few" pitiful recognitions that we did receive came from women! All of this, mind you, in the files of the house that has doing the largest commission business in Detroit at the time. One naturally conceedes that if he has a large clientele he must be giving satisfaction.

We, as humans, are too prone to blame the other fellow for our own faults.—Smith Poultry and Egg Co., Detroit, Michigan.

"O, FOR A LINCOLN!"

ALONG with my renewal permit me to again express my appreciation of the M. B. F., and especially of the article on page 19, (Jan. 20) by C. P., Barry county, Mich.: "Dedicated to All Patrons of Husbandry." That one article is worth a year's subscription, because it tells the truth in regard to the great majority of farmers in this part of Michigan. Many men who in years gone by have prospered, and felt a just contentment with their lot, and their achivements, today, have felt their feet slipping "and the thought has shattered their pride

"The hoe has fallen by their sides" But they hate to acknowledge defeat, after years of achivement, and their pride seals their lips in regard to their true condition. Nevertheless in their hearts they are saying. Oh, for a Lincoln, that could throw off the "Slavery of Taxation." But it is all in vain. The "Neros" of the Road Builders, keep on fiddling.—V. W. C., Saranac.

Uncle Rube Spinach Says:

EVERYBODY'S DOIN' IT

THIS is the age of advertisin'. There's been many ages since Adam's time—stone age, copper—all kinds of ages, so to speak, but we, right now, are livin' in the greatest of all ages, the advertisin' age. Everybody is advertizin' somethin' or other and all are tryin' to make the other feller believe somethin' that—well sometimes at least, ain't true.

The big meat packers fr' instance advertizin' hundreds of thusands of dollars worth to try an' make the people think it's a sort of a benev'ent sort of an institution an' it's sellin' its products almost at a loss, mebbe tis but I kinda doubt it, don't you?

Politicians advertize 'at they're in the game—not for their own benefit—Oh bless you no—they're in it to save the country from goin' to the dogs and' they're jest 'bout the only chance we've got to escape some awful calamity that's bound to come if they fail to be elected to office. Advertizin' may be all right in their case but by their works we shall know them—if they ever do any work.

Merchants advertize, as they should do, an' some of 'em do as they advetize to do—an' some of 'em don't. Many advertize one thing an' do the opposite.

Railroads advertize 'at they're losin' money—almost—an' yet they had more business last year than they could handle an' handled more business than ever before in the history of railroadin'. They are advertizin' in order to keep up rates or cut wages or both—most likely both.

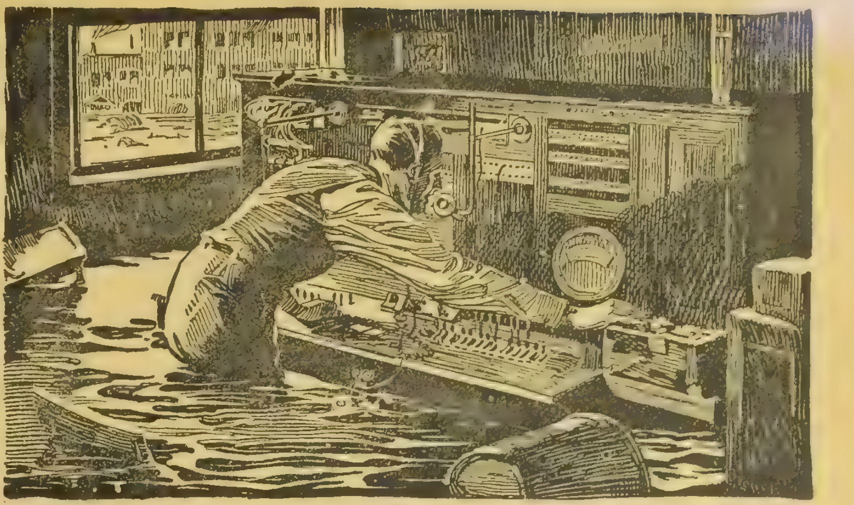
Our legislatur', members of it least ways, 'fore election last fall, advertized a reduction of taxes—less public expenditure of money, they said, an' now they're layin' awake nights to figure out some way to raise taxes so's to have more money to spend. They're wantin' to tax automoblies heavier, tax gasoline—it's a wonder they don't tax the sunshine an' the air we breathe. If they'd put a tax onto hot air an' meter what's bein' shot off at the Capital at Lansin' their whole problem would be solved an' they'd have all the money they needed an' some to spare.

An' it's not the big guys 'ats doin' it. Ol' maids in various an' many ways advertize 'at they are on the vine an' ready to be picked.

Bachelors advertize 'at they're a little shy of women an' some how, manage to keep away from 'em an' so remain their own bosses for a greater or lesser time—but git roped in the end an' there—well then they're gone an' never advertize nothin' no more.

Auto speeders advertize the fact 'at they have no brains an' rooms to rent in the upper story. The little shrimp with the five-cent mustache advertizes 'at he's tryin' to ape simethin' or other 'at don't know any more than himself—the flapper advertizes that she has to help nature to make herself attractive—hence she paints, powders, uses lip sticks, wears "knickers" or skirts so short she shows her ignorance of what's right an' proper for girls to wear.

The ol' grouch aavertizes 'at he's tired of the world, mad at himself an' everybody else an' don't amount to much anyway an' everybody agrees with him, he advertizes well but is not interestin'. The farmer also advertizes—by his actions an' ways—not all you know but some of 'em do—by not hangin' together—not bein' organized. They advertize 'at they're the prey of every grafter an' every shyster 'at comes along to rope 'em in—in fact many of our good farmers, who will not join in the farm bureau or some other good farm organization advertizes that they are lone an' in the sucker class—grafters an' profiteers see their ad's an' profit accordin'ly. Oh its an' advertizein' age all right an' I believe in advertizin', everybody's doin' it, why shouldn't we? But the best advertizin' to my notion is the man or woman who can smile in the face of any an' all things an' who lives up to the smile. It's a pleasure to meet such fellers an' I like to think that their advertizement is good an' that they can be trusted. They are good friends to all an' it's a pleasure to meet 'em anywhere. Cordially yours.—UNCLE RUBE.



Why they stick

On the ground floor of the telephone building a man worked at the test board. It was night; flood had come upon the city; death and disaster threatened the inhabitants. Outside the telephone building people had long since sought refuge; the water mounted higher and higher; fire broke out in nearby buildings. But still the man at the test board stuck to his post; keeping up the lines of communication; forgetful of self; thinking only of the needs of the emergency.

On a higher floor of the same building a corps of telephone operators worked all through the night, knowing that buildings around them were being washed from their foundations, that fire drew near, that there might be no escape.

It was the spirit of service that kept them at their work—a spirit beyond thought of advancement or reward—the spirit that animates men and women everywhere who know that others depend upon them. By the nature of telephone service this is the every-day spirit of the Bell System.

The world hears of it only in times of emergency and disaster; but it is present all the time behind the scenes. It has its most picturesque expression in those who serve at the switchboard, but it animates every man and woman in the service.

Some work in quiet laboratories or at desks; others out on the "highways of speech." Some grapple with problems of management or science; some with maintenance of lines and equipment; others with office details. But all know, better than any one else, how the safe and orderly life of the people depends on the System—and all know that the System depends on them.

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AMERICAN TELEPHONE AND TELEGRAPH COMPANY
AND ASSOCIATED COMPANIES
One Policy, One System, Universal Service, and all directed toward Better Service

HERE'S YOUR COUPON!

TWO YEARS FOR $1
—if YOU act at once!

$1 and the coupon below will renew you own subscription for TWO YEARS FROM DATE OF EXPIRATION.
—or will enter a NEW subscriber's name for TWO FULL YEARS
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This is the greatest offer we have ever made and we do not promise to keep it open over 30 days, so you must act at once, if you wish to profit by this 50% saving!

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THE MICHIGAN BUSINESS FARMER,
Mt. Clemens, Michigan

(1) For $1 enclosed you will enter or renew my subscription for 2 years:

My Name__________ R. F. D. No.______

P. O.__________ State______
(If you are renewing kindly send address label from recent issue)

(2) For $1 enclosed renew my own subscription as above 1 year and add the following new subscribers name paid-in-full for 1 year:

New Name__________ R. F. D. No.______

P. O.__________ State______

The Children's Hour

DEAR Nieces and Nephews:—March, the month in which spring begins, is with us again and I for one, am glad. I enjoy all of the seasons, but spring the most. Summer with its growing crops, ripening grains and fruits is very pleasant, while fall, the harvest season and the time of year that we store away supplies for the coming winter, like the squirrel, is enjoyed by all. The woods are decorated in gay colors as the leaves of the trees change color and drop to the ground, covering the earth with a thick brown carpet; we all appreciate the beauty of the world during this season. And then comes winter, and snow which carpets the world with a white blanket. The trees, bushes, corn shocks, fences and buildings are covered with snow and the country looks like a great fairyland. But we get tired of seeing the snow and having to bundle up every time we go out-of-doors, and we long for spring. With the coming of spring the world is born anew. The snow melts away, the ground soon changes color from brown to green, the leaves come out on the trees, crops are planted, the flowers bloom and birds on all sides send forth their sweet notes proclaiming that spring is here again. Yes, and the fishworms are plentiful so on Saturday afternoon a fellow can take a hook and line and some bait, go down to the creek or river, cut a pole and spend the most enjoyable afternoon fishing. And the girls can gather flowers in the woods. Yes, I am getting the spring fever and I'll bet most of you are feeling about the same way.—UNCLE NED.

OUR BOYS AND GIRLS

Dear Uncle Ned:—How are you? I am feeling fine. I live on a 20-acre farm. We have one cow, and three heifers. I am a boy ten years old on the 12th of February this year. I go to the Deming Lake school. I have some skates. I like to go skating on the ice. We raise onions, but I don't like to weed them, but Daddy said I have got to weed. I have two sisters. I am the only boy in the family. I have five doves and one black rabbit, his name is Dick. My sister and I raised some potatoes last fall and we bought our Christmas presents with the money. —Lee Ream, R. 1, Clayton, Mich.

Dear Uncle Ned:—Hello everybody! May I join your merry circle? I have been a silent reader of the Children's Hour for sometime. Well seeing as I have never written before and you do not know what I look like maybe you would like to know. I will describe myself. I am 4 feet 9 inches tall and weigh 80 pounds. I am a brunette and have long hair. My age is between 12 and 16 years. Who guesses my right age shall receive a long letter from me. I am in the eighth grade at school, and I like to go to school real well. I live on the banks of the Muskegon river, about four miles from Bridgeton. We catch lots of fish in the spring and summer time. The river is frozen over now. I have three sisters and two brothers all younger than myself. My brother and myself are the only ones of us that go to school. We have a mile and a quarter to walk to school. We have just come from sliding down hill.

My father has taken the M. B. F. for some time and we like it fine. Well I suppose you are getting tired of reading this so I will close with a riddle. What will go up the chimney down that won't go down the chimney up? Answer, an umbrella.

I would like to hear from some of the boys and girls of this corner. Will answer all letters that I receive. From your niece.—Doris Storms, R. F. D. 1, Box 73, Grant, Michigan.

Dear Uncle Ned:—Please let a little girl in from Boyne City. I am ten years old and in the fifth grade. I go to the Knap school, but it ought to be called the Behling school for there are six Behling girls and one Knap girl. We have a mile to walk to school. I have four sisters and two brothers. I am the oldest.

My father takes the Michigan Business Farmer and we like it very much. I tried the recipe for dark chocolate cake given last week in the Farm Home Department and it was very good. I love to make cakes. I got lots of Christmas presents this year and I hope you all the same. I wish some of the girls would write to me and tell me what they are doing. What garden stuff you are going to raise next summer. I always have a little garden. I like to take care of one.—Mary Behling, R. 1, Box 91, Boyne City, Michigan.

Dear Uncle Ned:—Here is another boy who wants to join your merry circle, may I? I have brown eyes and black hair. I am 11 years old and in the sixth grade at school. My favorite study is language. I like all winter sports but as I was brought up in the city I didn't get a chance to get the nice fresh air there is in the country, and I had colds so much of the time. But this winter I am living with my aunt and uncle on a farm and my health is better. We have 3 cats and I have lots of fun with them. I carry in the wood, and feed the pigs. I have a little sister, her name is Evelyn and she is 6 years old. I guess I will close with a riddle and the one that guesses it right I will write a long letter to. Three cornered square, black as a bear, guess this riddle or I'll pull your hair. Your nephew,—L. D. Biddle, R. 2, Lakeview, Mich.

Dear Uncle Ned:—May I write to your merry circle? I wrote about a year ago. My brother makes radios. He has made ten of them already. Some large and some small. We have two aerials and two pairs of receivers. I like to listen to it when I get time. There are nine people at our place that listen to it so that's why I don't often get a chance. I hope all the boys and girls who have no radio would get one, because it is very amusing. Anyway they are very amusing to me because ours is so loud. My brother that makes the radio's cannot do anything else. He has tuberculosis of the spine. He wears a cast. He, his wife and my nephew stay at our place now. My nephew is eight months old, he is very pretty. His name is Horace Leander. I'll bet none of my cousins or even Uncle Ned, had as fast a cutter ride as I did. A week ago last Sunday, my brother hitched the cutter to his auto (Saxon.) We went on Lake St. Claire. We took two pictures of the cutter and the auto. There were four girls in the cutter and three people in the auto. Of course I was one of the girls that was in the cutter. We went at the rate of thirty-five miles an hour. We sure had a lot of fun that Sunday. My sister Iris goes to the Mt. Clemens High School. I am in the eighth grade at school. Am fourteen years old. My birthday is the 25th day of September, have I a twin? If I have a twin I wish they would write to me. Will some of my cousins write? Will answer all letters, Your niece.—Rose M. Arnold, R. F. D. 4, Mt. Clemens, Mich.

Dear Uncle Ned:—I wrote once before and had my letter printed so thought I would try again. I am 16 years old and five feet, 6 in. tall. I have 4 brothers and 6 sisters. I like to receive letters , ε boys and girls please write. I will surely answer all letters. Your neice.—Lois Garver, Harbor Springs, Mich.

Dear Uncle Ned and Cousins:—Hello! Everbody. How is the world treating you? It is treating me fine. I am ten years old and my height is four feet, eight inches and I am in the sixth grade. I like to go to school very well. I go to the Ithaca Union School. For pets I have a kitty and a dog. I read the stories and enjoy them very much. I am taking piano lessons. Well Uncle Ned I suppose your eyes are getting tired of my scribbling and so I will close. From your neice and cousin. —Mildred Eicher, Ithaca, Mich.

P. S.—I would like to hear from some of the cousins and would write back so quick it would shock them.

Dear Uncle Ned—I would like to join your merry circle. I am four feet two inches tall, have brown hair, blue eyes, light complexion. I am thirteen years old and am in the eigthth grade. We live on a twenty-acre farm. We grow fruit. My father takes the M. B. F. and likes it very much. I read the Childrens Hour. For pets I have four cats, a dog and a hen. I have two sisters and one brother. I remain as ever your loving niece—Barbara Ebner, Croswell, Michigan.

Dear Uncle Ned and Cousins:—I have never written to the cousins but I have enjoyed reading their letters. I would love to join your merry circle. I am 15 years old and in the eighth grade . I have one brother. His name is Floyd. He is 12 years old and in the 7th grade. I have one sister, married. I live ¾ of a mile from the station, 1 mile from the post-office and school. I have a good teacher. We live on a raise of ground overlooking the trunk line No. 18 and the Michigan Central railroad and the beautiful Mullet Lake.

We have 2 cows, 1 heifer, 3 calves, 8 ducks, and 40 chickens. I love to see the ducks paddle around in the creek near the house. I have a pet cat named Bobbie. He does tricks. We named him Bobby because he has a bob tail. In the Summer the Boy Scouts stay all summer near here, not far off. I can swim and dive and there is no other thing that is so much fun. In winter we have coasting parties, skiing parties, and skating parties. I love to skate. Do you have skating? If not you miss a lot of fun.

My birthday! I'll let you guess that. It's between the 2nd and 7th of July. We have a lot of fruit. Snow apples! Oh, boys! Cherries, plums and pears, I cannot begin to tell you of them all.

In answer to Charles F. Hibberd about city life, I'll say I have lived in the city of Pontiac. In the city you have only to travel the streets, and that is surely a poor plan. You have no woods to ramble through and you do not get the fresh pure air as in the country.

I wish some of the boys would write to me. My father takes the M. B. F. Your friend,—Harold Rose, Mullet Lake, Michigan.

Dear Uncle Ned:—My father takes the M. B. F. and I enjoy reading the Children's Hour. I am in the seventh grade at school and am twelve years old. I weigh one hundred and two pounds. I have 3 brothers and 1 sister. One of my brothers fought in the World War. He was wounded three times. We live on an 80-acre farm. We have about two feet of snow. One of my schoolmates and Wilma McTaggart are the same age and their birthdays are on the same day. I wish some of the boys and girls would write to me. Your niece.—Norma Griffen, R. 1, Charleviox, Michigan.

Dear Uncle Ned:—I wish to join your merry circle if you will let me. My father takes the M. B. F. and he likes it pretty well. I am 11 years old. My birthday is the 3rd of July. I am in the 6th grade. My sister teaches our school. I enjoy reading the Children's Hour. My father is sick. He has been sick for eleven months with heart trouble. He has always been an ambitious man. We live on a 200-acre farm and have a tenant house with 160 acres. I have been sick with the chicken-pox for two weeks. I will close with love to Uncle Ned and cousins.—Donald Dean, R. 2, Milford, Michigan.

Dear Uncle Ned:—I am 5 feet 3 inches tall, have light brown hair and brown eyes, fair complexion and am 11 years old and in the 5th grade at school. I have to walk a mile and three quarters. I think the poem in the M. B. F. "The Wood-box" was a nice poem and I must carry in the wood for the cook stove and I do not like to carry wood in the winter time. We have a river about one-quarter of a mile from our house and in the summer we go swimming. I think it is good sport. Good-bye. Your niece and cousin, Elizabeth Dieterman, R. 4, Marion, Michigan.

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REMARKABLE TRIPLE STRENGTH VIRUS KILLS EVERY ONE—NOT A POISON

You can now easily and quickly kill all rats, mice and gophers with Triple Strength Virus—the most powerful concentrated virus known—the sure, safe way to destroy rodents. Positively not a poison. Harmless to humans, pets, poultry, stock, etc.—affects only rodents.

RATS DIE OUTSIDE

Rats flee because they become infected with a plague that affects the heart, blood vessels and lungs destroying the blood corpuscles and causing suffocation. Rats rush outside to get fresh air and water. When the diseased rats get outside, they never get back for the disease is then so far gone it kills them. No odor, no dead rats to handle, no live rats to kill.

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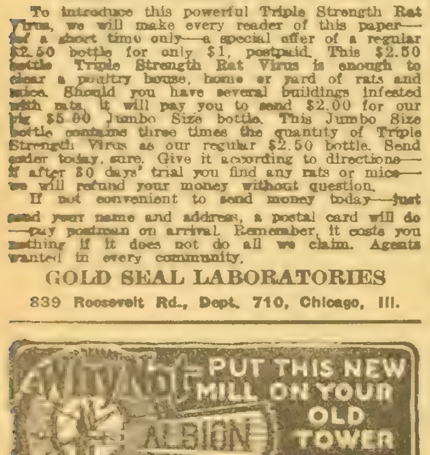

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MICHIGAN BUSINESS FARMER
"The Farm Paper of Service"

IS THE MIDWAY NECESSARY TO SUPPORT OUR FAIRS?

(Continued from page 4.)

should go, there was the usual protest, but the Ohio State Fair, known as the cleanest exhibition of its kind in the country, has continued to make progress. Ed. S. Wilson, manager of the Ohio State Fair says, "The Ohio State Fair has no shows of any kind, no midway or games of any kind on its grounds. We have three riding devices for the amusement of the children; also we sell the novelty privilege and wire jewelry privilege so that patrons may have the opportunity to obtain souvenirs. Aside from the sale of these articles, we have eliminated all small articles from the ground, such as potato peelers and fountain pens. Anything sold on the grounds must be sold from space which is sold for exhibition purposes and no one is allowed to bark or cry their wares. We try to put on a strictly educational show.

"We have the free acts which we pay for ourselves and which we aim to have of the highest order. These are put on in front of the grand stand and in the coliseum at night in connection with the night horse show.

"Our fair has increased in attendance and in the class of its attendance and is considered a model fair. He can see no place at an agricultural fair for cheap shows, gambling devices, etc., and consider that they can do nothing but detract from the real purpose of the fair. The class of patrons these exhibits would draw would in no wise help a fair."

No Wheels of Chance in Iowa

A. R. Corey, secretary of the Iowa State Fair, says, "Practically all the larger and successful fairs have eliminated gambling devices and questionable shows. As for the Iowa State Fair, we have not permitted a wheel of any kind, doll racks or any other kind of such device on the fair grounds for at least fifteen years. We do, however, have a midway. The shows are inspected two or three weeks before a contract is made. Our midway consists largely of riding devices and a few worth-the-money shows. I feel safe in saying that there is no other fair in the United States attended by so many people from the rural sections. We provide free music and put on high class entertainment. We also have automobile races, but they are not of a hippodrome character. We have real copetition in our races."

It seems that the cleaning up process has proved most beneficial to the Ohio and Iowa State Fairs. At these great fairs one no longer is greeted with a blare of discordant clatter of alleged jazz bands; the hammering of gongs and the ear bursting blasts of other noise-making devices in order to attract the attention of patrons to a semi-nude parade of highly painted dames in front of a tent show. They do not have those kind of shows, or the man along with them who slyly winks at the unsophisticated in an effort to convey to them the idea that they can see something rich, rare and racy on the inside. They have gone back to solid ground, realizing that the foundation of all fairs and expositions are constructed on the agricultural, livestock and kindred industries, not forgetting manufacturing and other industries, or the fact that good entertainment and good sports should not be neglected.

We have in the Southwest, as in all other sections of the country, many fairs and expositions. They are all serving a useful purpose and to those who have given their time and energy in building them to their present power may be ascribed much of the progress and development of the country. They have and are yet rendering a service of almost incomparable value to the people. The greatest of all of the fairs is the State Fair of Texas, which for thirty-six years has been the recognized leader in encouraging better livestock, better poultry and diversified agriculture. The Fort Worth Fat Stock Show, the Cotton Palace at Waco, the South Texas Fair, at Beaumont, the Houston Fair, and the Fairs at San Antonia, Wichita Falls, Abilene, Pittsburg, Tyler and the many other county and district fairs in Texas and in other Southwestern States, all have a wide influence in promoting industry. All should receive the patriotic support of the people even to the point of offering suggestions and criticisms. The criticisms and suggestions in this and a previous article are not directed at any particular fair. They are broadcasted to be picked up by director or manager who may desire to tune in.—Texas Farm and Ranch.

THE HUNTED WOMAN

(Continued from page 13.)

now. I hate divorce as I hate the worst sin that bars one from Heaven. It is the one thing that I hate. And it is because of this hatred that I suffered myself to remain the wife of the man whose name is over that grave down there—Mortimer FitzHugh. It came about strangely—what I am going to tell you now. You will wonder. You will think I was insane. But remember, John Aldous—the world had come to hold but one friend and comrade for me, and he was my father. It was after Mindano. He caught the fever, and he was dying."

For the first time her breath choked her. It was only for an instant. She recovered herself, and went on:

"Out of the world my father had left he had kept one friend—Richard FitzHugh; and this man, with his son, was with us during those terrible days of fever. His father, I thought, was the soul of honour, and I accepted the son as such. We were much together during those two weeks of my despair, and he seemed to be attentive and kind. Then came the end. My father was dying. And I—I was ready to die. In his last moments his one thought was of me. He knew I was alone, and the fear of it terrified him. I believe he did not realize then what he was asking of me. He pleaded with me to marry the son of his old friend before he died. And I—John Aldous, I could not fight his last wish as he lay dying before my eyes. We were married at his bedside. He joined our hands. And the words he whispered to me last of all were: 'Remember—Joanne—thy promise and thine honour!"

(Continued in March 17th issue.)

THE TRUTH ABOUT HENRY FORD

(Continued from page 8.)

butcher shop on the way and bought a number of choice steaks so that "J. B." could prepare what he called "brigand steaks." Here are the directions: Place a steak, a slice of bacon and an onion on a long green stick and hold over the hot coals, turning often. Mr. Ford, although he had never mentioned it, hired men to clear up Mr. Burroughs' land and also paid off the mortgage so that the naturalist would not lose his paternal homestead. This Mr. Burroughs mentioned in his will.

Mr. Ford still takes a keen delight in skating, and the small lake on his estate is kept clear of snow from the first freeze to the coming of spring. There Mr. Ford spends many winter evenings gliding over the ice. It is to such pastimes as this, no doubt, that he largely owes his excellent health. He has lived all his life practically in the same spot and even today he seldom leaves the vicinity of Dearborn for any length of time with the exception of a summer cruise on his yacht, a hasty trip of inspection or for a brief trip with old friends.

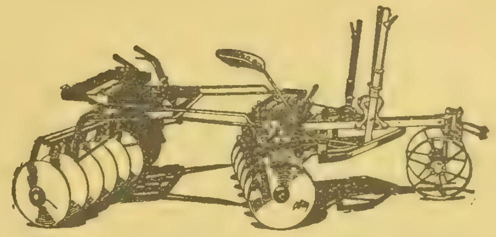
(Continued in March 17th issue.)

The Colonel had a colored hired man who was absent from the farm on Sunday and Monday and finally appeared on Tuesday in a rather dilapidated condition.

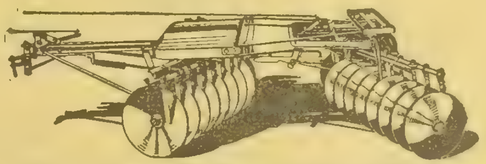
"How's this, Sam?" he inquired. "What's been happening to you?"

"Well, suh, you know Sat'dy was payday, and after supper we gets into a big crap game. 'Long come 'bout two o'clock in de a. m. and Napoleon Sims gets into a li'l friendly argument. Cunnel, befoh I know it he hits me in de mouf and he knocks out fo' teef, and he hits me in de eyes and blacks dem, and he blame near busts mah nose and mah jaw. Den he gets me down on de ground and stomps on me and cracks three ribs. Fo' God, Cunnel Ah never got so tiahd of a man in all mah life."

McCormick-Deering
Tillage
Implements



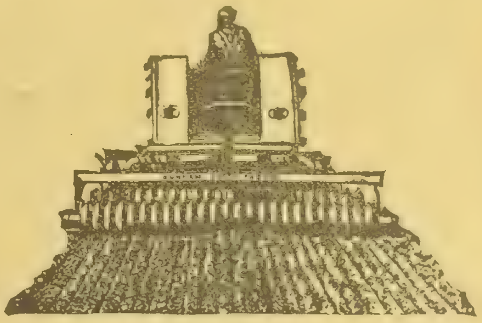
The *McCormick-Deering Disk Harrow* is a simple and efficient implement, built and trussed like a steel bridge, to serve many years. You will like the details and conveniences—the dust-proof bearings and the bearing oil cups set above the frame, the built-in angle-steel weight boxes, the oscillating disk scrapers, the forecarriage, etc. Made in sizes for everybody—4 to 10 feet. All sizes can be equipped with the tandem attachment which is shown above. Double disking is popular—farmers know that it more than pays for itself.



The *McCormick-Deering Leverless Disk Harrow* is a genuine tractor disk, not a made-over horse harrow. It is built for heaviest duty. It is controlled entirely from the driver's seat, without levers, yet it is very simple. Merely backing the tractor automatically sets the angle of both front and rear gangs. When the tractor starts forward the gangs hold that angle until released by a pull on the rope. In 5 to 10-foot sizes to fit your power.

SEED-bed making will call for fast and thorough work this year as always. The planting season will roll around in a twinkling, but no matter how few the days between plowing and planting you can have a profit-building soil by using efficient equipment.

McCormick-Deering Tillage Implements combine the three essentials—good work, long life and convenience. They are of practical design, their construction being based on ninety years of farm and factory experience. They are priced on the basis of economical quantity production, and as an investment they offer you attractive returns.



The *Dunham Culti-Packer* has no equal as a seed-bed finisher. It pulverizes the soil, fills out air spaces, and saves moisture content. Following the drill, it helps the little plants to get a quick start, firmly set in finely mulched soil. Use it to prevent winter-killing of wheat; to rejuvenate meadows, etc. It is far ahead of a roller for small grains. Made in eight sizes, for horse and tractor use.

To Fill All Your Tillage Tool Needs See the McCormick-Deering Dealer. It Pays!

INTERNATIONAL HARVESTER COMPANY
OF AMERICA
(INCORPORATED)
CHICAGO USA

BEGIN AT THE TOP BY USING YOUR HEAD

(That Accounts for its Location)

A woodpecker pecks
Out a great many specks
Of sawdust
When building a hut.
He works like a nigger
To make the hole bigger—
He's sore if
His cutter won't cut.
Doesn't bother with plans
Of cheap artisans,
But there's one thing
Can rightly be said:
The whole excavation
Has this explanation
He builds it
By
Using
His
Head.

MANDY JANE applied this principle when she said, "W'enebber I pray to de Lord to sen' one of my nex' neighbo's fat chickens into my yard, dere is no notice tuk; but w'en I pray dat de ol' man take it into his head to go right ober and get one ob dem chickens, de 'ting is tended to befo' sun up."

We can avoid colds by employing a bit of the same common sense which we all probably possess but which we often neglect to use. This is the time of year when colds are most prevalent and most serious in their consequences often developing into pneumonia and serious bronchial troubles. Let us then refresh our minds with a few don'ts and do's in regard to this really serious and contagious malady.

A generation ago a prominent doctor was asked by a lady how he treated a cold and the answer was, "With contempt, Madam." Well that day is past—now we treat a cold with proper respect and a few remedies knowing that with such treatment it may prove quite harmless.

Here are a few very pertinent don'ts.

If you want to take cold,
Keep your windows shut.

Avoid drafts as if they were a pestilence.

Take no exercise between meals.

Bathe seldom, and in warm water.

Wear heavy flannels, chest-protectors, abdominal bandages, and electric insoles.

Have no heat in your bedroom.

Never let anything keep you away from church, the theatre, or parties, in winter.

Never go out-of-doors when it's windy, or rainy, or wet underfoot, or cold, or hot, or looks as if it was going to be any of these.

Be just as intimate and affectionate as possible with every one you know who has a cold. Don't neglect them on any account.

But if you don't then just remember that if we keep ourselves vigorous, clean and well ventilated, we can defy that cold devil and all his works. Keep the system well flushed by drinking at least two quarts of water daily between meals. One glass of cold water at a meal is enough for any one, more, chills the stomach and retards digestion. Keep the lungs healthy and blood pure with fresh air, not necessarily cold air, for the cold chilly dampness found in the air of a guest-room closed for the winter is full of germs and exceedingly dangerous. There was an old rhyme which went this way, "When a draft blows thru a hole, make your will and mend your soul." We now know that a "draft" of fresh, pure air is going to give us vigor, physical as well as mental. There is nothing more stupefying than a close, stuffy atmosphere.

If your child develops a cold when the weather is mild keep him playing out-of-doors by himself but if stormy and severe keep him in a sunny, well ventilated room by himself, for a few days, he will soon recover and the rest of the family will escape. Give him plenty of warm, easily digested food, eggs, broths, and milk and fruit for laxative purposes. This same treatment is just as good for us grown-ups.

GREETINGS FROM DR. ROGERS.

Dr. Rogers who conducts our Health Department, has been in California since the middle of December. He will return April 1st. Last week the following letter to our readers was received and I am sure you will

The Farm Home
A Department for the Women

Edited by MRS. GRACE NELLIS JENNY

find it interesting. It was particularly interesting to me, who of necessity, do much walking. Verily the law of compensation is still working.

WALKING FOR HEALTH

FEW people walk correctly or know how to stand on the corner and watch other people walk. You will agree with me it is not best to imitate a soldier, his gait is too stiff and stilted. The body should be straight and relaxed. The arms swinging but not too much. The step long and easy with a swing, striking the foot first on the heel but not too hard.

Walking is becoming a lost art and it is one of the finest exercises in the world. The automobiles are largely accountable for it and are the cause of the shortening of the lives of many thousands of Americans.

Everyone should walk at least four miles a day and should be able to do it in an hour or an hour and a quarter, taking all the while long breaths of fresh air. The English people are good walkers and make it a real recreation, we call it hiking to-day. Well call it what you like, but do it any way. Mountain climbing is fine for those who can stand it but we can all do a good deal of walking or running up and down stairs and call it pastime. We are picking roses just now while you people in Michigan are shoveling snow. Does not this make you just a bit envious?—Dr. F. N. Rogers.

—Yes, Dr. Rogers, it does, but just wait, we will also pick roses in a little while and ours have a much sweeter perfume than any you can find in California and our crisp winter air is full of ozone and bottled up pep, that quality that we middle state people are supposed to have a corner on.

NEW EVERY MORNING

Every day is a fresh beginning,
Every morn is the world made new.
You who are weary of sorrow and sinning,
Here is a beautiful hope for you—
A hope for me and a hope for you.
All the past things are past and over;
Tasks are done and the tears are shed,
Yesterday's errors let yesterday cover;
Yesterday's wounds which smarted and bled.
Are healed with the healing which night has shed.
Yesterday now is a part of forever,
Bound in a sheaf which God holds tight;
With glad days, and sad days, and bad days, which never
Shall visit us more with their bloom and their blight,
Their fulness of sunshine or sorrowful night.
Let them go, since we cannot relieve them,
Cannot undo and cannot atone;
God in his mercy receive and forgive them!
Only the new days are our own;
Today is ours and today alone.
Every day is a fresh beginning;
Listen, my soul to the glad refrain,
And in spite of old sorrow and older sinning.
And troubles forecasted, and possible pain
Take heart with the day and begin again.—Susan Coolidge.

AIDS TO GOOD DRESSING

For Simplicity, Service and Style

Address orders to Mrs. Jenney, Pattern Department, M. B. F.

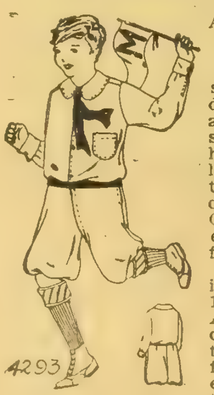
SPRING FASHIONS FOR THE LITTLE FOLKS

Catalogs 12 cents Patterns 12 cents

FASHION BOOK NOTICE

Send 12 cents in silver or stamps for our UP-TO-DATE SPRING and SUMMER 1923 BOOK OF FASHIONS, showing color plates, and containing 500 designs of Ladies', Misses' and Children's Patterns, a CONCISE and COMPREHENSIVE ARTICLE ON DRESSMAKING.

ALSO SOME POINTS FOR THE NEEDLE (Illustrating 30 of the various, simple stitches) all valuable hints to the home dressmaker.

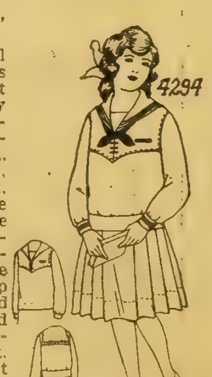


A Comfortable Suit For The Growing Boy

4293. Wool jersey, serge, khaki, linen, drill and gingham are suitable for this style. One could have the blouse of linen or madras and the knickerbockers of cloth or khaki. Corduroy too is an excellent material for the trousers.

The Pattern is cut in 5 Sizes: 6, 8, 10, 12 and 14 years. A 10 year size requires 1 7-8 yard for the blouse and 1 3-8 for the knickerbockers, of 36 inch material.

Pattern mailed to any address on receipt of 12c in silver or stamps.

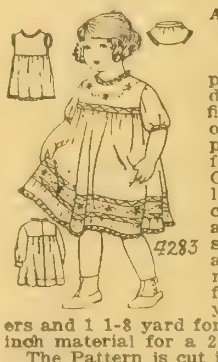


A Popular "Middy" Style

4294. No school girl's wardrobe is complete without several middy blouses, and no garment is quite as comfortable. In drill, Indian head, flannel, khaki, linen and silk, this style will be very pleasing. The blouse may be finished with straight lower edge, or with the now so popular 'hip band." The plaited skirt is to be finished with a band or joined to an under waist.

The Pattern is cut in 5 Sizes: 4, 6, 8, 10 and 12 years. A 10 year size requires 2 5-8 yards for the blouse, and 1 7-8 yard for the skirt, of 36 inch material.

Pattern mailed to any address on receipt of 12c in silver or stamps.

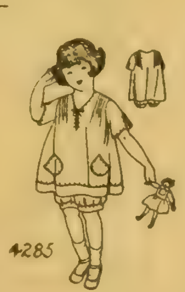


A Dainty Set For The "Little Girls" Wardrobe

4383. This comprises a neat yoke dress that may be finished with or without the ruffle, and a petticoat and comfortable drawers. One may use voile, lawn, batiste or crepe for the dress and cambric or nainsook for petticoat and drawers. It will require 1 5-8 yard for the Dress, 5-8 yard for the Drawers and 1 1-8 yard for the Petticoat, of 36 inch material for a 2 year size.

The Pattern is cut in 4 Sizes: 6 months to 1 year, 2, 3 and 4 years.

Pattern mailed to any address on receipt of 12c in silver or stamps.



A Pretty "Play" Garment

4285. Linen, chambrey, flannel or chintz could be used for this model. A simple finish of stitching or stitchery, or a binding in contrasting color, would be very pleasing.

The Pattern is cut in 3 Sizes: 2, 4 and 6 years. A 4 year size requires 2 5-8 yards of 36 inch material..

Pattern mailed to any address on receipt of 12c in silver or stamps.

LOVE IS MASTER OF ALL ARTS

AS someone has said "Love is master of all arts" I think there is nothing that it can apply to as bringing up children.

To make a success we must love them. Why of course we do. But do they know it? Do not take it for granted that they do. But tell them and explain why they are so dear to us.

How many times as we look back into our own childhood we can easily see what affected us most.

I think we will admit it was when we were taken in a good heart to heart talk when most good came to us. Also when our parents were not angry with us.

I think harsh methods that we sometimes allow ourselves to use only breeds hatred and then we fail entirely.

How many times we do to children what we would not think of doing to some grown up person.

If we expect good tempers, good manners, honesty and happy dispositions we must first set the example.

If you will some time watch their playing with their pets be it dog or cat or dolls or what ever they are interested in, watch if some of your own word and manners are not used.

As mothers we must take time to listen to their troubles (they are real troubles to them) for if we don't the day will come when we will find we are on the outside, and have lost the things that we valued most.

In small children, how they like to have mother or father play with them. A ride down hill, no matter if you are lame the next day—I hear someone say but I haven't time I cannot leave my work.

Make time while you have them and while they want you.

Which is most important whether every speck of dust is moved to lond somewhere else or every dish wiped or whether we give our children the comradship they need?

I think let all unnecessary work go. If we wish we may be model housekeepers when the children have all grown up and gone.

But while we have them in our home—then is the time for us to be real chums with them. And do not forget to let them know how much their good behavior means to us.—Mrs. X. J.

CORRESPONDENCE COLUMN

The formula for a tooth-powder, which you gave in a recent issue, I believe February 3rd, is worth the price of the paper for a year. It is good, cheap and makes your teeth feel just fine. I was another one who wanted a cornstarch cake recipe. Have you any more copies of Lasca? I would like one also.—Mrs. Q.

—I have entirely run out of copies of Lasca and have several requests for same on my desk. I sent out the last one I had and believe if someone will send me another copy I will try to have it published somewhere in our paper to satisfy our subscribers.—Mrs. Jenney.

Who of the readers of the M. B. F., knows the words to the song which begins with these lines:

"Please Mister, take me in your car,
"I want to see Ma-Ma
"They say she lives in heaven
"Is it very, very far?"

I would be very much obliged if you would print it in the Home Department. Mother used to sing it before she left us. What I have written here is all I can remember of it.—Miss M. M.

Mrs. G. H.—A 44 pattern would surely be large enough for you. Get the size by taking the bust measure loosely.

Mrs. McK.—Our book of fashions and catalog are one and the same and a very practical and useful book it is. There are patterns in it for all kinds of underwear for men, women and children. Even a pattern for a splendid home made corset waist which is simple and easy to make and give one good lines for the present-day dress.

I am a reader of the M. B. F. and I notice that someone asks how to remove rust from white linen. The lemon juice and salt are all right, but I have a product that works like magic on rust and ink also without

For School or Play or for a Party

The prettiest and most serviceable children's dresses are trimmed with

WRIGHT'S BIAS FOLD TAPE

Made in 13 colors of fast color percale and 6 colors of fine taffeta silk. Also in black, white and fancy materials. Leading fashion magazines for this Spring have many excellent designs for trimming with tape.

Sold at notion counters in the best stores everywhere.

Send 10c. for our 1923 enlarged sewing book with new designs for women's and children's clothing, aprons, lingerie and useful articles for the home or for traveling. We will send also a 3-yard trial piece of tape in fast color percale in any one of the following colors: Gray, Pink, Light Blue, Brown, Reseda, Navy, Lavender, Linen Color, Old Rose, Alice Blue, Red, Black, Yellow.

Wm. E. Wright & Sons Co.
Manufacturers
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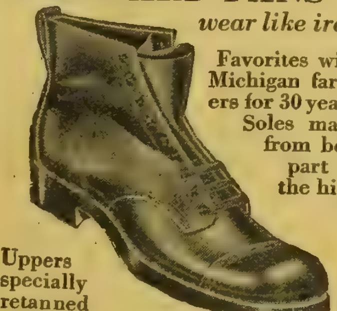
Made in a great modern factory by skilled Michigan workmen.

H-B HARD PANS
wear like iron



Favorites with Michigan farmers for 30 years. Soles made from best part of the hide

Uppers specially retanned to make water-resistant. Special process for brown Hard Pan uppers to resist barnyard acids. Sold at a fair price by a good shoe store in almost every Michigan town and village.

Herold-Bertsch Shoe Co.
Grand Rapids
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SAVE BIG MONEY

I guarantee you a clear saving of 25 to 30% on Fence, Roofing and Paints and I pay the freight. Get my

CUT PRICE CATALOG

Learn how half a million farmers save big money by buying their Fence, Roofing and Paints direct from my big factories at prices way below others—send for catalog NOW — You'll save money.

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Raise Silver Foxes
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We sell outright or for monthly payments within your reach.
Write NOW.
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Box B-31, Keeseville, N. Y.

the aid of the sun. Have handled it for a number of years in Aid Societies to which I have belonged. If any of the readers of the M. B. F., are members of clubs, aid societies, or organized Sunday School classes and are interested in a very practical household product and would like an easy to add dollars to their treasury at the same time, write me and I shall be glad to give you the necessary information. Please enclose stamp.—Mrs. D. F. Warner, Kittanning, Pa.

FLOUR SACK GARMENTS

I GET flour sacks at the baker shops, 12 at a time, wash and bleach them out. I make large pillow cases and take just as much care with them as if I had pillow tubing. Some I put lace on. I make aprons for myself, also every-day underskirts, children's panties and underwaists. My neighbor even makes sheets of them. They make fine picnic spreads, something nice and white and nothing to spoil if things are spilled which always happens at a picnic.

Another help is that I put my two little girls in play skirts for summer. I make them out of khaki cloth. In the warm weather they don't need anything else on. This of course saves washing.

I found when I have trouble with starch sticking on the iron, it can be helped by putting white laundry soap in the starch. Just take the bar of soap and swing it around in the hot starch, it also makes the cloth glossy.

I have canned sausage and I always make it in little pats, and pack it in two-quart syrup pails, seal over with lard, leaving a space in the top of the pail, place a white cloth on top and pack in salt. This seals it air tight.

I think if Mrs. J. M. will try this she will like it very much.—Mrs. E. Short, Manistee County.

ON CHILDREN

I'LL send you a small article on children. I am glad you are bringing it up in your paper. I have two children, a boy of twelve and a girl of eleven years and sometimes I feel like such a failure.

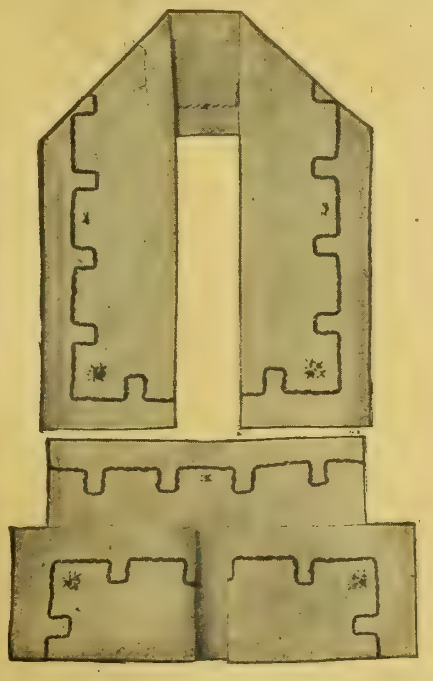
When I am sick, however, they are so good and do so much for me and keep the work done up so well that I feel they are pretty good children after all.

As you have visited on the East side of Trombly mountain I will have to tell you that our home is on the West side and we have such a pretty view from our home at evening when the sun is setting and in the morning at sunrise.

I like your page fine, I think it gives so many helps. Remember our latch-string is always out if you ever come this way. Last June I was so sorry our Farmer's Club reached your office too late to see you.—Mrs. Mark Chamberlain.

COLLAR AND CUFF SET

This Spring brings forth once more the collar and cuff set of organdie. You will find such a set very popular and a nice addition to your wardrobe. Work the design in a heavy rope silk. A vest is also pictured here.



Are your Bakings Always Uniform?

The very first time you use Calumet your baking will be perfectly raised, sweet and wholesome. And you can expect unfailing uniformity just as long as you continue to use it, because

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BAKING POWDER
NOT MADE BY A TRUST
CONTENTS 1 LB.
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CHICAGO, U.S.A.

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CALUMET

The Economy BAKING POWDER

Never varies. The can you buy to-day holds the same quality and leavening strength as the first can that was made thirty-five years ago. In every can the last spoonful is as good as the first.

There is no substitute for Calumet—nothing "just as good." Its sale is 2½ times as much as that of any other brand.

A pound can of Calumet contains full 16 ounces. Some baking powders come in 12 ounce instead of 16 ounce cans. Be sure you get a pound when you want it.

THE WORLD'S GREATEST BAKING POWDER

82¢ Buys All the Wall Paper for An Entire Room

Here is a big Montgomery Ward offer! A DOUBLE LENGTH roll of wall paper for only 6c. Enough to paper an entire room 10x12 for as little as 82c! This includes side wall, border and ceiling paper.

Send for our new book of Wall Paper Samples and see the MANY OTHER big values we have ready for you. It shows you our complete new assortment—grass-cloths, tapestries, oatmeal papers, leather patterns, fabrics. And all at prices to suit your pocketbook. Among the better grades, we have a big variety for only 50c and up per DOUBLE LENGTH roll. And remember, you get *twice as much wall paper* in one of our 16-yard DOUBLE LENGTH rolls as in the ordinary 8-yard *single roll.*

This Wall Paper Book FREE

Contains over 100 Actual Samples

Be sure to get a copy of this book before planning your Spring decorating. It is made up of actual large-sized samples. With each side wall is shown a sample of the border to match. Easy and pleasant to select your wall paper this way.

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DAIRY and LIVESTOCK

ANNUAL MEETING OF MICHIGAN HOLSTEIN-FRIESIAN ASS'N.

THE annual meeting of the Michigan Holstein-Friesian Association was held in the Agricultural Building at the Michigan Agricultural College, January 31st, President Dudley E. Waters, of Grand Rapids, in the chair.

The President's address outlined a broad program of work for 1923 under the new co-operative arrangement with the Dairy Extension Department of the College by which Mr. James G. Hays is employed as Holstein specialist. Plans are being made to re-organize the county associations and get them started on definite lines of constructive work under the county manager plan, and to organize counties where associations are not already in the field.

Earl J. Cooper, Extension Representative of the Holstein-Freisian Association of America, discussed the calf club program, illustrating many phases of club work with lantern slides. Following Mr. Cooper's talk Mr. D. D. Aitken donated $100.00 to pay special calf prizes for the past year, and a resolution was passed endorsing the calf club program and pledging support throughout the state.

Professor O. E. Reed, of the Dairy Husbandry Department of the M. A. C., addressed the meeting, discussing the work of the Dairy Department and the co-operation with the Michigan Holstein-Friesian Association through the employment of a Holstein Specialist, Mr. James G. Hays, whose time will be devoted to Holstein matters. Mr. Hays will be available to assist county Holstein organizations and will help organize calf clubs, bull associations, and cow testing associations.

After considerable discussion, the dues were changed to $2.00 per year and the Board of Directors was reduced from fifteen to nine members, to be elected for one year.

Officers were elected as follows:

President, E. L. Smith, Adrian; Vice-President, W. R. Harper, Middlesville. Directors: E. L. Smith, Adrian; W. R. Harper, Middlesville; J. Neal Lamoreaux, Comstock Park; James I. Post, Hillsdale; H. W. Norton, Jr., Lansing; S. H. Mumsell, Howell; G. L. Spillane, Flint; M. W. Wentworth, Battle Creek; and R. F. Sloan, Charlevoix.

The Board of Directors will elect a secretary and treasurer at their first meeting, to be held February 17th.

Resolutions were adopted endorsing the five-year program for bovine tuberculosis eradication as outlined by the livestock breeders' conference and urging the passage of bills before the legislature to provide funds for the campaign, and endorsing the filled milk bill now before the legislature.

SHORTHORN FUNCTIONS WELL ATTENDED

THE Forty-second Annual Meeting of the Michigan Shorthorn Breeders' Association was held at the M. A. C., Thursday, February 1st, seventy breeders being present. In the absence of President George A. Prescott, Jr., Vice-President S. H. Pangborn occupied the chair. M. E. Millar of Greenville, Michigan, gave a very interesting talk on "Milking Shorthorn Development," showing something of the progress made by the milking Shorthorn during recent years. The Association was very fortunate in having with them F. W. Harding, General Executive of the American Shorthorn Breeders' Association, Chicago, Illinois, who gave a very interesting talk on "The Present Shorthorn Situation." The following resolution was unanimously indorsed by the breeders present:

"WHEREAS, The Boards of Supervisors of the thirty-three counties in Michigan have already appropriated funds to the extent of $175,000 to co-operate with the State and Federal Bureaus of Animal Industry in the control and eradication of bovine tuberculosis within those counties, and demands for this work are constantly increasing, and

WHEREAS, The funds provided for the Bureau of Animal Industry of the State for carrying on this work are now and have been for some time past, completely exhausted, and

WHEREAS, We recognize the importance of testing all cattle in the State and eradicating this disease as rapidly as possible as a matter of ultimate economy not only to the livestock owners, who bear a large part of the loss, but also to the general taxpayers of the State, and

WHEREAS, We believe that this is one of the most important measures before us at this time as dealing directly with human health and particularly the health and welfare of the children of the State

THEREFORE, BE IT RESOLVED, By the Michigan Shorthorn Breeders' Association in annual meeting assembled, that we go on record as favoring enactment by the present session of the Legislature of adequate measures for the expansion of the work of bovine tuberculosis eradication now being carried on by the Bureau of Animal Industry of the State and the adoption of the five-year program proposed by the Livestock Breeders' Conference held at Lansing, December 21, 1922, as appended hereto, and that we commend highly the action of the Governor and Administrative Board in providing emergency funds in order that this work could be continued during the past year."

The officers elected for the coming year are:

President, S. H. Pangborn, Bad Axe, Michigan; Vice-President, M. E. Millar, Greenville, Michigan; Secretary-Treasurer, W. E. J. Edwards, East Lansing, Michigan. Directors, Frank Lessiter, Clarkston, Michigan; J. Smith, Ann Arbor, Michigan; Fred Hebblewhite, Armada, Michigan; Thomas Martin, Ionia, Michigan, and H. W. Hayes, Chelsea, Michigan.

The annual banquet was held the same evening in the Wildwood Inn, W. C. Kellogg acting as Toastmaster. Among the speakers were R. J. Bidwell, Tecumseh; W. C. Rosenberger, Tiffin, Ohio; Professor G. A. Brown, East Lansing; President S. H. Pangborn, Bad Axe; Dr. J. P. Hutton, Lansing; and F. W. Harding of the American Shorthorn Breeders' Association, Chicago, Illinois.

A shorthorn Show of the sale cattle was held Friday morning. This show attracted a great deal of attention and the placing of the ribbons by Mr. F. W. Harding was watched with keen interest.

The annual Association Sale was held Friday afternoon, February 2nd. A very large crowd of farmers and breeders was present and while the prices obtained were not high, it was quite apparent that those present are looking for improved livestock conditions in the near future.

The top of the sale, May Amaranth 943790, consigned by John Lessiter's Sons, Orion, Michigan, and sold to W. C. Thatcher, of Flint, Michigan, brought $310.00. The highest priced bull, DaleLeader 1113954, was contributed by the same breeder and sold to T. J. Rixon, Britton, Michigan, for $210.00. Twenty-five females made an average of $138.00, while seven bulls sold for an average of $163.00.

RED POLLED CATTLE CLUB

Following is a short report of our annual meeting which was held at East Lansing, Jan. 31, 1923. We had a very interesting meeting and took in several new members following are the officers elected.

President, N. C. Herbison, Birmingham, Mich.; Vice President, R. L. Finch, Saline, Mich.; Secretary-Treasurer, Mark R. Westbrook, Ionia, Mich.; Director, 3 years, Robert A. Randall, Armada, Mich.; Director, 2 years, John E. Killick, Doster, Mich.—Mark R. Westbrook, Secy.

DUROC JERSEY MEN REORGANIZE

The Michigan Duroc Jersey Swine Breeders association, after a lapse of two years in association activities, came to life at the college Tuesday and effected complete reorganization of their groups. Thirty men attended the meeting, and laid plans for future expension of the association's activities.

C. C. Terrell, President of the Ohio Duroc Jersey Swine Breeders association delivered the principal

Spring is Here

All out-of-doors is filled with the bleat of the lamb, the bawl of the calf, the grunt of the pig, and the whinny of the colt.

Youth asserting itself everywhere!

Keep their bodies healthy, and stomachs full.

You can then count on good growth—quick development—and begin to cash in on them before the summer-end.

Let

DR. HESS STOCK TONIC

be your insurance policy

against disease, insurance of good appetite, good digestion. It keeps the worms away.

Then, there are the mothers:

Your COWS need it for its system-toning, bowel-cleansing, appetizing effects. Puts them in fine condition for calving.

Your BROOD SOWS will be relieved of constipation and put in fine fettle for farrowing.

Excellent for MARES in foal—and EWES at lambing time.

It makes for good appetite, and more milk to nourish the offspring.

Tell your dealer what stock you have. He has a package to suit. GUARANTEED.

25 lb. Pail, $2.25 100 lb. Drum, $8.00

Except in the far West, South and Canada.

Honest goods—honest price—why pay more?

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DR. HESS STOCK TONIC

I spent 30 years in perfecting this Tonic.
GILBERT HESS M.D., D.V.S.

Dr. Hess Dip and Disinfectant
For Sheep Ticks - for Hog Lice - for Health

BREEDERS DIRECTORY

Advertisements inserted under this heading for reputable breeders of Live Stock at special low rates to encourage the growing of pure-breds on the farms of our readers. Our advertising rate is Thirty Cents (30c) per agate line per insertion. Fourteen agate lines to the column inch or $4.20 per inch, less 2% for cash if sent with order or paid on or before the 10th of month following date of insertion. SEND IN YOUR AD AND WE WILL PUT IT IN TYPE FREE, so you can see how many lines it will fill. Address all letters,
BREEDERS DIRECTORY, MICHIGAN BUSINESS FARMER, MT. CLEMENS, MICH.

CLAIM YOUR SALE DATE

To avoid conflicting dates we will without cost, list the date of any live stock sale in Michigan. If you are considering a sale advise us at once and we will claim the date for you. Address, Live Stock Editor. M. B. F., Mt. Clemens

Mar. 7—Holsteins, E. E. Butters, Coldwater, Mich.
Mar. 8—Chester Whites. Alexander & Bodimer, Vassar, Mich.
Mar. 10—Holsteins, Musolff Bros., South Lyons, Mich.
Mar. 13—Duroc Jerseys, Schaffer Bros., Oxford, Mich.
Mar. 21—Aberdeen-Angus, Russell Bros Merrill, Mich.
Mar. 22—Poland Chinas, Sonley Bros., St. Louis.
Oct. 18—Holsteins, Howell Sales Company Livingston County. Wm. [illegible] Sec'y, Howell, Mich.

CATTLE

SHORTHORNS

RICHLAND SHORTHORNS

We offer one red, low down, thick bull calf fifteen months old, also one roan calf fifteen months old. A bargain if taken at once. Also a few young cows with calves at foot.

C. H. Prescott & Sons
Office at Tawas City, Mich. Herd at Prescott, Mich.

A POLLED SHORTHORN HERD BULL 2 years old. Scotch Orangeblossom Family. Fit to head any herd. Younger ones for sale.
L. C. KELLY & SON, Plymouth, Mich.

GLADWIN COUNTY SHORTHORN BREEDERS offer the best in beef and milk strains. All ages, both sexes. W. S. HUBER, Sec'y, Gladwin, Mich.

Yield!

Every man who milks cows for a living knows that *Yield* is one of the best reasons for Holsteins.

Yield To You Will Mean:

Dependable Cash Income - Profits
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Better Things for the Family

Holsteins hold all world's records and average highest over all breeds for both butterfat and milk yield.

Let Us Tell You the Story of the Holstein Cow.

EXTENSION SERVICE,
The Holstein-Friesian Association of America
230 East Ohio Street, Chicago, Ill.

HOLSTEINS

FOR SALE—ENTIRE HERD OF SHORTHORN Cattle. Cows, heifers, and cows with calves by side. Priced to sell. Satisfaction guaranteed. T. B. tested. Write now.
H. E. LIVERMORE, Romeo, Mich.

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They contain practical suggestions for the prevention of diseases common to livestock and poultry and describe in detail the many uses of

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For all Livestock and Poultry

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No. 157—**DOG BOOKLET.** Tells how to rid the dog of fleas and to help prevent disease.
No. 160—**HOG BOOKLET.** Covers the common hog diseases.
No. 185—**HOG WALLOWS.** Gives complete directions for the construction of a concrete hog wallow.
No. 163—**POULTRY.** How to get rid of lice and mites, also to prevent disease.

Kreso Dip No. 1 is Sold in Original Packages at all Drug Stores.

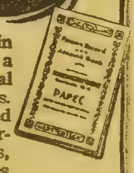
ANIMAL INDUSTRY DEPARTMENT OF

Parke, Davis & Co.

DETROIT, MICHIGAN

ACCOUNT BOOK FREE to Silo Owners

Throws and Blows Saves One Man



A FEW simple entries daily in this Book will give you a complete and accurate financial picture of your farming business. There are 50 large pages, arranged for farm and household inventories, cash accounts, crop records, breeding records, etc. Also tables every farmer needs to use.

Write us telling the size of silo you own or expect to buy this year and the name and address of your implement dealer. We'll mail you free the splendid Account Book, also 1923 Papec Catalog.

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ENSILAGE CUTTER
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We have improved the Cutter and lowered the price.

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BARN EQUIPMENT

A complete line which gives you a full range of designs—individually operated or lever operated stanchions; swinging or rigid sure stops; etc. Pick what you want and have your barn the way you want it. Don't wait to build, equip your old barn.

Hudson Barn Equipment is designed to satisfy every purse. It is backed by the most rigid guarantee.

Stalls
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Write for free catalog and name of your *Home-Town Hudson Dealer.*

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address at the session, talking on the general subject of "Salesmanship." Terrell pointed out the need of adequate selling methods in the pure bred hog game, and gave the features which make the Duroc Jersey Breed one of the most popular in America

At the close of the meeting the association passed a resolution favoring raise in pay for federal men working on hog cholera eradication in the state.

DEFICIENCY OF MINERAL MATTER AND BULK IN RATION

I have a Poland China sow, 4 months old, that has been in perfect health up to about a week ago, when I fed her one day, she just started to take her feed when she had a sort of convulsion or fit, fell on her back, with legs stiff and trembles all over, for perhaps 5 to 8 minutes, then she got all right and went to eating, giving a sort of squealing and grunting noise. She is getting poor, and has had the same thing every time I feed her since. No black teeth, quarters clean, but is in a small pen and does not get a great deal of exercise. Pen is about 10x10 feet. Can you tell me the trouble and give a remedy? She has had corn, ground corn, oats, wheat and rye, mixed with skim milk or water for slops, have been feeding 6 or 8 ears of whole corn per day.—A. L. W., Brighton, Michigan.

—From the symptoms which you describe and the ration you are feeding, I believe that this sow is suffering from a deficiency of mineral matter and bulk in her ration, also from a lack of exercise.

I would, by all means, advise turning her out for exercises each day, or better still giving her the run of a barn yard. Likewise, give her access to some clover or alfalfa hay and keep a mineral mixture before her at all times.

Unless some skim milk is available to feed regularly, it would be well to feed a small amount of digester tankage or oil meal in her ration when skim milk is not at hand. If tankage is being used, about one part tankage for each ten parts of the grain which you have would be sufficient. If oil meal was being used, about one-seventh of the ration might well consist of the oil meal.—Geo. A. Brown, Prof. of Animal Husbandry, M. A. C.

PREVENTING HORNS WITH CAUSTIC

Please inform me in your next issue , as to how to remove the horns of little calves with caustic, or is there anything any better?—D. H., Boyne City, Michigan.

—The use of caustic is perhaps one of the best methods of preventing the growth of horns on calves. The horns should be killed as soon as they form a distinct button so that it can be readily relt. This will usually be at about three weeks of age.

The hair should be removed from about the horn, the base of the horn scraped with a knife or other instrument, until the serum starts to ozze out or it becomes moist. The base of the horn should be rubbed with a stick of caustic until a distinct ring appears. Ocassionlly with n experienced operator, a second application is necessary although this is seldom the case.

The stick of caustic should be wrapped with a paper and only the end which is coming in contact with the horn left exposed, as it will burn the fingers very severely if not handled in this way and should be kept in a tightly corked bottle when not used, for if exposed to air, it dissolves.

Care should be taken not to apply too much as if any of the material runs down onto the head, it will burn the calf's head and remove the hair.—Prof. Geo. A. Brown, Dept., of Animal Husbandry, M. A. C.

TURN COW DRY

Please let me know how long should a person turn a cow dry before she comes fresh.—I. E., Grand Junction, Michigan.

—A cow should always be turned dry at least a month before she freshens and better if six weeks. A cow needs this length of time to recuperate and make preparations for the next year. This is one of the most important times in the cow's life as far as milk production is con-

(Continued on following page.)

DE LAVAL CREAM SEPARATOR PRICES

A word about De Laval Cream Separator prices to prospective 1923 purchasers is pertinent at this time.

De Laval prices were reduced last year to practically the pre-war level, allowing for increased capacity and other improvements made meanwhile.

This reduction was made in anticipation of a further reduction in labor and material costs. The reverse has happened. Labor and material costs are going up rather than down.

If they continue to do so De Laval prices will have to be advanced. They are now too low. The economies possible through greatly increased production can alone permit of their remaining so.

In any event, De Laval prices cannot be reduced. They may easily have to be advanced at any time. The safe thing to do is to buy now and take no chances.

This is the more so by reason of the fact that 1923 De Laval machines are even better than ever before, that dairying was never more profitable, and that no one having use for a cream separator could ever less afford to be without the best or to continue the use of an inferior or half-worn-out machine.

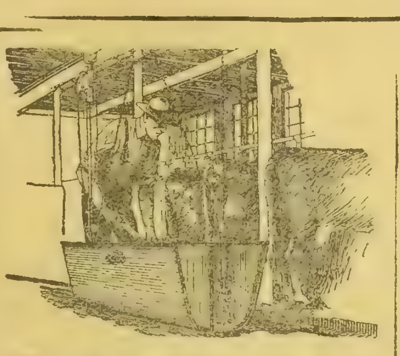
Why not see your local De Laval agent at once or write us direct at the nearest address given below?

The De Laval Separator Company

NEW YORK
165 Broadway

CHICAGO
29 E. Madison St.

SAN FRANCISCO
61 Beale Street



The Litter Carrier for Hard, Steady Service

YOU can do the job better, in half the time, and with half the effort, with the Porter all-steel, water-tight carrier and it works every day. It turns a mean, sloppy job into an agreeable task, and saves every pound of valuable fertilizer, both solid and liquid. This is only one of many Porter labor-saving devices that will make your barn work more profitable. Check below the items in which you are interested, tear out this page, write your name and address in the margin and mail it back to us. Also ask for Barn Plan Book No. 64.

......Steel stalls and stanchions
......Feed carriers
......Steel hog pens
......Hay tools
......Garage door hangers
......Barn plans
......Litter carriers
......Steel cattle pens
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J. E. PORTER CORPORATION
584 Guion Street Ottawa, Illinois

PORTER
"Dependable Since Sixty-Eight"

CENTRAL MICH. SHORTHORN BREEDERS' Assn. offer for sale both milk and beef breeding, all ages. Write
M. E. MILLER, Sec'y, Greenville, Mich.

DURHAMS

FOR SALE—FIVE REGISTERED DURHAM bulls from ten months to one year old. I have also a few female Durhams for sale.
HENRY J. LYNCH, Mayville, Tuscola Co., Mich.

ANGUS

WE HAVE SOME FINE YOUNG ANGUS BULLS from International Grand Champion Stock at reasonable prices. E. H. KERR & CO., Addison, Mich.

Bellevue Stock Farm

Public Sale of

Aberdeen-Angus Cattle

To be Held on the Farm at Merrill, Mich.,
Wed., Mar. 21st, 1923, at 1:00 O'clock P. M.

22 Head 15 Females—7 Bulls—8 Cows with calves by side, 7 Heifers

An opportunity to buy real quality cattle at your own price. These cattle are right in pedigree and individuality. Teeming in the blood of such fashionable families as Blackbirds, Aricas and Prides. In this offering will be found real show prospects. This sale should appeal to beginners. Nine months time will be given on bankable notes. Write for catalog.

Auctioneers: Col. J. P. Hutton and Col. D. J. McInnes.

RUSSELL BROS., Prop.
MERRILL, (Saginaw Co.), MICH.

Will meet trains on sale day. Good auto roads.

GUERNSEYS

FOR SALE—REGISTERED GUERNSEY HEIFers at reasonable prices, also choice bull calves of May Rose breeding.
H. W. WIGMAN, Lansing, Mich., Box 52.

FOR SALE REGISTERED GUERNSEYS—ONE bull ready for service and bull calves. Herd just T. B. tested, no reaction
H. F. NELSON, R. 1, McBride, Mich.

MISSAUKEE GUERNSEYS. A NEW CROP OF calves coming soon. No females for sale. Order that new bull calf A. R. Sire and Dam.
A. M. SMITH, Lake City, Mich.

JERSEYS

REG. JERSEYS, POGIS 99th OF H. F. AND Majesty breeding. Young stock for sale. Herd fully accredited by State and Federal Government. Write or visit for prices and description.
GUY C. WILBUR, BELDING, Mich.

JERSEY BULL CALVES FOR SALE. FROM 1 mo. to 12 mo. old. From high producing dams, Sired by Sunburst Arigos Majesty. Farmers' prices. Write your wants to
F. S. WELBORN, R. 1, Kalamazoo, Mich.

KOW-KARE
THE HOME COW DOCTOR

Herdsman Tells of Wide Experience with Kow-Kare

Paul A. Chadwick of Corona, Cal., writes us a typical letter on the results of his use of Kow-Kare in the dairy. He says:

"I am a herdsman for the Jameson Estate and I am having difficulty to convince the manager of the value of KOW-KARE. We are troubled with abortion, retained afterbirth, and barrenness, all of which I can prevent with KOW-KARE and I have had 100% results with barrenness, never in sixteen years with several thousand cows in several states failed to get cows with calf after three months' continuous use. I have used about a ton of your product and some Garget Remedy as well as Bag Balm. My father used KOW-KARE when I was very young and never had a case of abortion, and only one case of retained afterbirth in over twenty years."

That KOW-KARE can and does accomplish such wonderful results is not strange. The medicinal properties of the remedy build up and put into healthy operation the digestive and genital organs. It is in these organs that most diseases of cows are centered—and it is these same organs that regulate the flow of milk.

During the months of winter feeding the milk-making functions need outside support.

BOOK FREE

KOW-KARE furnishes this help. Just a tablespoonful in the feed twice a day for one week in each month will show a big increase in the yield of milk. The use of KOW-KARE before and after calving assures more robust cows and healthier calves.

We have a thirty-two page book that tells just what to do in case of cow illness. It is called "The Home Cow Doctor" and is yours for the asking. Thousands of cow owners ask for it each year.

Feed dealers, general stores and druggists have KOW-KARE—$1.25 and 65c sizes. If dealer is not supplied we will mail, postpaid, on receipt of price.

DAIRY ASSOCIATION CO., INC.
Lyndonville, Vt.

Dispersion Sale Registered Holstein Cattle

On Farm 3 **Saturday, March 10, 1923**

Farm sale at 10:00 o'clock a. m. Cattle sale at 12:30 p. m.

4 bulls, two from 30 lb. dams, two with yearly backing.

50 cows and heifers. 4 thirty lb. cows. 8 others with records from 25 to 29 lbs.

2 daughters of 1000 lb. cows. 5 are now on S. O. Test.

14 daughters of King Ona Champion one of the best bred bulls in the World, others bred to him.

Catalogs ready March 1st. Herd under State supervision.
(60 day retest guarantee)

MUSLOFF BROTHERS, SOUTH LYONS, MICHIGAN
(32 miles from Detroit, Michigan.)

BROWN SWISS

FOR SALE—REGISTERED BROWN SWISS heifers and cows, also one bull. Herd federal accredited. **ELMWOOD FARMS, Sebewaing, Mich.**

FOR SALE—REGISTERED BROWN SWISS Herd federal accredited. Come and see them or write for what you want. **Ervin R. Moore, Osseo, Mich.**

RED POLLED

RED POLLED CATTLE—A few choice bulls and heifers for sale. **ROYSTAN STOCK FARM, Will Cottle, R. R. 1, West Branch Michigan**

FOR SALE—OUR RED POLLED HERD BULL Cosy Ells Laddie, and a few heifer calves. **PIERCE BRO'S., Eaton Rapids, Mich. R. 1.**

AYRSHIRES

FOR SALE—REGISTERED AYRSHIRE bulls and bull calves, heifers and heifer calves. Also some choice cows. **FINDLAY BROS., R 5, Vassar, Mich.**

HEREFORDS

PRODUCE YOUR OWN FEEDERS UNDER **EARLIRIPE HEREFORD BEEF PLAN** which guarantees maximum prices. Investigate personally the success of other Michigan Farmers. For further information write

T. F. B. SOTHAM & SONS
(Herefords since 1839) St. Clair, Mich.

FOR SALE CHEAP—REG. HEREFORD BULL, 2 years old. **CALVIN BARKER, Clio, Ohio.**

RIVERVIEW HEREFORDS—FOR SALE Bulls, also few females. **WM. C. DICKEN, Smyrna, Mich.**

HORSES

FOR SALE AT A BARGAIN: A BLACK Percheron Mare and her coming 3 year-old filly. Will make a well matched pair. Both registered. **A L. SCHMIDT & SON, R. 5, Reed City, Mich.**

SWINE

DUROCS

SENSATION MARSI Our new herd boar. Sired by "Marsi" Reserve grand champion National Swine Show 1922. We are taking orders for gilts and sows for spring farrow bred to this wonderful boar. **SCHAFFER BROS., Route 4, Oxford, Mich.**

Duroc Bred Sows and Gilts at Private Sale

Also fall pigs either sex. These are sired by or bred to State Fair winners. Prices are low and satisfaction guaranteed. Public sale of bred sows March 9. **MICHIGANA FARM, Pavilion, Mich.**

PEACH HILL FARM offers choice weanling Duroc pigs, either sex. Priced very reasonable. Write us. **INWOOD BROS., Romeo, Mich.**

HILL CREST DUROCS, PERRINTON, MICH. We are breeding twenty sows and eighteen gilts to a son of GREAT ORION SENSATION. Yearling, spring and fall boars. **NEWTON & BLANK,** Farm 4 miles straight south of Middleton, **Gratiot Co., Mich.**

DUROC JERSEY BOARS READY FOR SERVICE. Sired by Fannie's Joe Orion $25 each. Will ship C. O. D. Write us now. **H. E. LIVERMORE & SON, Romeo, Mich.**

CHESTER WHITES

BRED SOWS AND FALL GILTS FOR SALE Also some fall pigs. Pedigrees furnished. **WILBUR JONES, Route No. 1, Reese, Mich.**

O. I. C.

REGISTERED O. I. C. BRED GILTS FOR sale. Weighing 250 lbs. A few fall boars. **J. R. VAN ETTEN, Clifford, Mich.**

HAMPSHIRES

HAMPSHIRES—SPRING BOARS AND BRED gilts from 25 sows to select from. Place your order now or you may be to late. 10th year. **JOHN W. SNYDER, R. 4, St. Johns, Mich.**

(Continued on page 31.)

Auction Duroc Jersey Swine

ON

Tuesday, March 13, 1923, 12 o'clock

We will sell Registered Duroc Jerseys consisting of

7 BOARS--35 SOWS and GILTS

Bred to "SENSATION MARSI"

AT

Farm 6 miles east of Oxford on Rochester Road.

Catalog on request free. Mail bids to Mr. R. Clark, Our care.

SCHAFFER BROS., R. 4, Oxford, Mich.

cerned, as well as very important in the life of the young calf. Too many people turn the cow to the stalk field or to the back pasture in the summer time and at least do not feed her very well before she freshens. A cow should have full feed while she is dry and should be fed about the same feed as she would normally receive when about half through her milking period. This gives her an opportunity to build up and fleshen up as nature demands. A cow that is feed well before she calves and comes in in good condition will give a higher percentage of butterfat in her milk than will one in thin condition. She will also give more milk.—O. E. Reed, Professor of Dairy Husbandry, M. A. C.

DIPPING SHEEP

ONE of the most important requisites in the successful management of sheep is that the fleece and skin be kept a clean, healthy condition and free from parasites.

The external parasites that often cause serious lisses are the tick, louse and scab mite. The tick is a blood-sucking parasite. When present in a flock, more feed is required to winter the sheep and the quality of the fleece is injured. The louse is a skin-eating parasite. It causes the sheep considerable pain and result in a large proportion of the wool being pulled.

The scab is a microscopic parasite that feeds on the skin causing a watery exudate that forms a hard scab. Under this scab, the mite feeds and multiplies very rapidly, causing intense irritation, pulling of the wool and rubbing the affected parts, and eventually resulting in the death of the sheep unless proper treatment is given.

Sheep can only become infested with scab through coming in contact with infested sheep or quarters. The flock should be dipped immediately upon discovery of infestation with scab and the dipping repeated in ten days. Every flock should be dipped twice each year to keep the skin and fleece in a healthy condition as well as destroy ticks and lice. If the dipping is done as soon after lambing and shearing as the weather will permit, less dip is required and the she can be handled easier than at any other time. After shearing, the ticks will go from the sheep to the lambs, making it necessary to dip the lambs.

Any one of the standard dips on the market will prove satisfactory. At the College, we have found the coal tar dips especially satisfactory. The water used in mixing the dip should be warmed to a temperature of 90 degrees Fahrenheit and each sheep held in the solution for two minutes, the head being immersed just before leaving the vat.—Prof. George A. Brown, Dept. of Animal Husbandry, M. A. C.

VETERINARY DEPARTMENT

CAUSE OF STERILTIY

I have a large cow weighing about fourteen hundred pounds. This cow is half jersey and half holstein. She has a record that I believe not many cows have. This cow came in with her first calf in Nov., 1916. She has not missed one single milking up to this day. She has had three calves in the six years, she had her last calf July 29, 1920 and is giving eighteen pounds of milk a day now.

I cannot get her with calf this time. She comes in heat every three weeks and is healthy in every way so far as we can see. Is there anything or any way to get her with calf? She would be worth any two cows I have if I could get her with calf.—P. M., Farwell, Mich.

—It is impossible to state the cause of sterility in a case of this kind without a personal examination. Infection of the cervix or of the tuber or both might be factors assocoated with sterility. The fact that this cow has been giving milk continuously for over six years without having a period of rest during that time may be an important factor in sterility. This cow has certainly been overworked and overwork is very likely to lower the potency of an animal. If the cow were dried up for a few months, fed liberally and allowed all the exercise she is inclined to take, her condition might be improved. As soon as pasture is available she should have access to a legume pasture. An examination should be made of her reproductive organs by a qualified veterinarian to determine if there are any changes that might be factors in sterility. The fact that she is coming in heat regularly indicates that the reproductive organs are not likely to be seriously deranged and I am inclined to believe that overwork is the underlying cause of her trouble.—E. T. Hollman, Associate Professor of Animal Pathology, M. A. C.

CAN COMPEL TESTING OF CATTLE FOR TUBERCULOSIS

Can you give your readers the law and rulings on tubercular testing of cattle? Must we submit our cows to be tested every 60 days? We are being told a lot of stuff, I fear is not so. We wish to go right, but it seems like a large problem now in many ways.—W. J. F., Hillsdale, County, Michigan.

—The Attorney General has ruled that the Commissioner of Agriculture has the power to compel the tuberculin test of any herd of cattle. This power is being utilized in those counties in which co-operative tuberculosis eradication work is being conducted. Hillsdale is one of those counties.

Herd tests are required only at reasonable intervals. If a herd is clean, the owner is not required to subject the herd to another test for a year. No effort is being made to subject any herd to a test every 60 days. It is customary, when a herd is demonstrated to be infected with tuberculosis, to conduct tests at intervals of six months.

In Hillsdale county it is possible that tests upon some of the infected herds may be conducted at intervals of less than six months, owing to an effort which is being made to classify Hillsdale county as a Modified Accredited Area.—B. J. Killham, State Veterinarian.

LICKING DISEASE OR PICA

My cattle eat on all the old boards they can get; also rub the root of the tail till it sometimes makes a scab. What will I do for it? F. B., Central Lakes, Michigan.

—The cattle are probably suffering from what is called "Licking Disease" or "Pica" a perversion of the appetite manifested by a craving for unnatural food. The affected animals will gnaw, lick and even eat objects which they would not touch in health.

It occurs most commonly among cattle that are kept stabled continuously and especially during the winter months. The cause of the disease is not known. The course of the disease is chronic at times animals show improvement, then getting worse again. A change of food will sometimes bring about a cure. The cattle should be kept in a stable that has plenty of good light and ventilation. If stable is damp that should be corrected.

There is no specific drug for this disease. Apomorophine given three times daily for three days in succession in two or three grain doses has been much recommended.—John P. Hutton, Asso. Prof. of Surgery and Medicine, M. A. C.

55 YEARS OF WEDDED LIFE

Dear Mr. Slocum—As we think so much of your paper, I am taking advantage of your offer and am sending you one dollar to renew my subscription for one year from 1923 to 1924, and adding a new subscriber for one year. We have taken quite a few farm papers in our 55 years of wedded life, but we think yours beats them all in truth and honesty. Yours in sincerity, Geo. W. Dwagart, Clinton County, Michigan.

Colds Broken Quickly

HILL'S CASCARA QUININE BROMIDE

IN disagreeable weather always have Hill's handy. Stops Colds in 24 hours—la grippe in 3 days. Standard remedy for two generations. No bad after effects. Safe and dependable. Demand red box bearing Mr. Hill's portrait and signature.

At All Druggists—30 Cents

W. H. HILL COMPANY (A-204) DETROIT, MICH.

MICHIGAN CROPS

RENEWING STAND OF ALFALFA

Having had considerable experience in renewing alfalfa I wish to say to inquirer N. S. A. (page 11, Feb. 3rd issue) that I would leave the alfalfa. Half a stand will pay well, and if left you can see just where the bare spots are and apply the necessary elements where needed to renew the fertility of the soil. Harrow whole field or just spots, sow seed and harrow again. Sow between April 1st and August 1st whenever conditions are right. A good time is immediately after cutting. If doubtful about results you can use white blossom sweet clover (on account of cheapness of seed) until desired results show.

I had many bare spots on sandy soil and cured them all with additional applications of marl. Use three to ten yards per acre. Experiments with Sudan grass on these light gravely soils have proven mostly failures.—V. P. Kalamazoo.

SWEET CLOVER AS FERTILIZER

I would like to ask through the Business Farmer if sweet clover is as good for fertilizer as barnyard manure.—R. L. M., Breckenridge.

—Sweet clover is a leguminous crop and when inoculated is able to make use of the free nitrogen of the air. If grown continuously for several years on the same field and plowed under the nitrogen and organic matter of the soil should increase. When this organic matter decays it is quite likely that additional phosphorus and potash will be made available. However, the total supply of phosphorus and potash in the soil will not be increased.

Barnyard manure contains nitrogen, phosphorus and potash and also considerable organic matter that is in a more or less decaying condition. Consequently, barnyard manure will increase the nitrogen, phosphorus and potash content of the soil while sweet clover will increase the nitrogen content only.—C. R. Megee, Farm Crop Department, M. A. C.

PLANT FLAX WITH OATS

I have a piece of ground which I wish to seed down in oats, and most of it has been manured quite heavily for two years. I think under a normal year my oat straw would grow so tall that a strong wind would lay it flat. Can I seed flax with my oats for a support and will the flax and oats get ripe at the same time and can they be threshed successfully with the threshing machine? And if so how?—C. H., Posen, Michigan.

—Oats and flax planted together under Michigan conditions mature at nearly the same time. Flax usually ripens a little earlier but will stand without damage until the oats are ripe. The practice of seeding oats and flax together was quite common during the war years when oil meal was at a high price. The oats and flax can be threshed together with the ordinary threshing machine and separation can be made later by use of the fanning mill.

Under present conditions I believe you will get better results by seeding a stiff strawed variety of oats without the flax, using two hundred and fifty pounds per acre of acid phosphate. The Worthy variety is known to be much stiffer strawed than ordinary oat varieties and should give good results under the conditions you describe.—J. F. Cox, Professor of Farm Crops, M. A. C.

CLOVER ON SAND

Is it better to sow Mammoth clover alone in early March or with oats in April, on sandy soil? Will oats rob the clover of moisture later on? —Mrs. A. G., Rothbury, Michigan.

—On slight sandy soil Mammoth clover will stand a better chance of producing a crop when seeded alone than when seeded with a nurse crop like oats. The oats tend to shade the clover and also utilize moisture that is needed very badly by the young seeding.

In some sections it is advisable to sow a small amount of oats, three or four pecks, with the seeding to prevent sand particles from blowing and thereby causing considerable injury. A large amount of the damage caused by a nurse crop is done the last three weeks that it is on the ground. In this case it is advisable to cut the oats for hay, which will allow the seeding to make use of availible moisture.—C. R. Megee, Farm Crops Dept., M. A. C.

SOWING SWEET CLOVER

Would like to have some advice on sweet clover. I have a field I wish to seed to sweet clover this spring to plow under. Red clover grows good on this field, would it pay me to sow the sweet clover? Would it make more growth to plow under? Can it be seeded the same way you would sow red? Of course I do not know about the acidity, but the red clover grows rank considering the difference in cost of seed and amount of growth to turn under. Would you try it once?—H. B. Vermontville.

—Sweet clover is a little more sensitive to soil acidity than red clover but since you state that red clover grows quite rank you are not likely to experience any difficulty in securing an excellent growth of sweet clover. Sweet clover will produce a higher tonnage of dry matter in both tops and roots the first season than will red clover. The seed of sweet clover is also somewhat cheaper and for a crop to plow under we believe that under the present conditions is the more economical one. —C. R. Megee, Asso. Prof., Farm Crops Department, M. A. C

DIAGRAM FOR SCARIFYING MACHINE

Please give digram of sweet clover scarifying machine.—J. S.

—A diagram for the Ames sweet clover scarifying machine may be secured from the Farm Crops Department of the Iowa State College, Ames Iowa. This machine was invented by Professor Hughes who is Chief of the Crops Department at Ames. A diagram for constructing the machine may be secured from him free of charge.—C. R. Megee, Farm Crops Dept., M. A. C.

A Six-Horse Hitch

C. L. Brody, Secretary-Manager, of Michigan State Farm Bureau, and J. W. Nicolson, Mgr. of Seed Dept., inspecting seed at threshing time near Oasis, Utah.

Utah Common Alfalfa Seed

Farm Bureau Brand Utah Alfalfa Seed is the cheapest, Michigan adapted Alfalfa Seed on the market.

Inspected while growing and after threshing by representatives of the Farm Bureau Seed Department.

Grown at an altitude of 4500 feet under severe climatic conditions our high quality strains, free from noxious weeds, will give results.

For short rotations we recommend this seed. For permanent fields use Grimm, Cossack or Michigan grown Farm Bureau Brands.

About 10,000,000 pounds of Alfalfa Seed has been imported each year for the last three years.

Don't take a chance on these imported seeds. We do not handle them.

Buy Farm Bureau Brand Seeds from your local Co-Op.

If you can't get this service locally, write

MICHIGAN FARM BUREAU BRAND SEEDS

Seed Department
MICHIGAN STATE FARM BUREAU
LANSING, MICHIGAN

Contagious Abortion
Can be Stopped in Cows and Sows

Erick Bowman
Discoverer of the
Bowman Abortion Remedy

That statement applies to Your herd. It's no use to worry about past losses which this dread disease may have caused. The important thing to do is to save yourself from future losses by stamping out every trace of Contagious Abortion Now.

The Bowman Abortion Remedy has behind it a record of positive results in the thousands of cases where it has been used. These should recommend it to anyone facing the problem of how to eradicate Contagious Abortion. The experience of satisfied users is your best guide. The Bowman Abortion Remedy will positively rid your herd of Contagious Abortion. Any farmer can administer it with ease. Cattle and hogs like it and take it readily when it is given to them.

Read what Mr. Dodge says:
Rochester, Minn. Jan. 17, 1923.
I feel that it is my duty to write you and let you know how I am getting along since I treated my cows with your remedy.
I believe it was the fore part of August that I gave your remedy to my entire herd. Before treating them I had lost several calves; since that time conditions have changed. One come today, which makes ten calves and in every case the afterbirth came away in a short time. I have three more to calve soon, but shall lose no sleep, as I believe the trouble is over.
I never saw any medicine that is so easy to give as your remedy. I gave the medicine according to directions and the second morning the cattle were running in every direction to get in the barn to get their share. And another good thing about it is that a person doesn't have to spend a lot of extra time and labor. Just giving the medicine does the job. Will write you later.
ELMER E. DODGE.

Write Today for Bowman's Bulletin

It is FREE. Gives full information about Contagious Abortion and how to eradicate it, as well as the experience of many farmers who have used Bowman's Remedy. A postal sent today will bring you a copy by return mail.

ERICK BOWMAN
Remedy Company
730 Bridge Street
Owatonna, Minnesota

GET IT FROM THE FACTORY DIRECT
KITSELMAN FENCE
"I Saved One-Third," says Wm. B. Lee, Stanton, Mich. You, too, can save.
We Pay the Freight. Write for Free Catalog of Farm, Poultry, Lawn Fence.
KITSELMAN BROS. Dept. 193 MUNCIE, IND.

PATENTS Write today for free instruction book and "Evidence of Conception" blank. Send sketch of model for personal opinion. CLARENCE O'BRIEN, Registered Patent Lawyer, 1053 Southern Building, Washington, D. C.

300,000 Chicks Guaranteed Michigan Bred and Hatched

ENGLISH WHITE and BROWN LEGHORNS, SHEPPARD'S Famous Strain ANCONAS, 50, $7; 100, $13; 500, $60. BARRED ROCKS, R. and S. C. REDS, 50, $8.50; 100, $16; 500, $75. 1,000 orders at 500 rate. RHODE ISLAND WHITES, 100, $18; 200, $35. Postpaid full live delivery guaranteed. Strong, sturdy chicks from heavy laying flocks. Order right from this ad. WE SATISFY OUR CUSTOMERS. Catalog free. Reference, Holland City State Bank.

KNOLL'S HATCHERY, Box L, Holland, Michigan

CHICKS WITH PEP, $11 per 100 and up

Selected Hogan Tested Flocks. Postpaid, full live delivery guaranteed. BUFF ORPINGTONS, WH. and SIL. WYANDOTTES, 50, $9.25; 100, $18: BARRED and WH. ROCKS, S. and R. C. REDS, MINORCAS, 50, $8.25; 100, $16. ANCONAS and HEAVY BROILERS. 50, $7.25; 100, $14. WH., BR. and BUFF LEGHORNS, 50, $7; 100, $13. MIXED, ALL VARIETIES, $11 per 100 straight. On 500, 5% off; 1,000 10% off. Ready February 26th. Free Catalog. Member I. B. C. A.

HOLGATE HATCHERY, Box B, Holgate, Ohio.

SUNBEAM HATCHERY

The Chicks that I sell are produced under my personal supervision in a good, modernly equipped hatchery which is kept in best possible condition. The parent stock is carefully selected and of best heavy laying strains, kept on free range, well-housed and handled. Free from disease and properly fed. This enables me to produce strong, growthy Chicks which will mean PROFIT to my customers. PRICES: WHITE, BROWN AND BUFF LEGHORNS, 50, $7; 100, $13; 500, $62.50. BARRED ROCKS, R. AND S. C. REDS AND ANCONAS, 50, $8; 100, $15; 500, $72.50. WHITE AND BUFF ROCKS, WHITE WYANDOTTES, AND B. MINORCAS, 50, $8.50; 100, $16; 500, $77.50. WHITE AND BUFF ORPINGTONS, SIL. L. WYANDOTTES, 50, $9; 100, $18; 500, $87.50. I guarantee full live delivery by prepaid post. Get your order in now and I will ship when you want them. Bank Reference. Catalog Free. H. B. Tippin, Box E, Findlay, Ohio. Member I. B. C. A.

CHICKS THAT MAKE PROFIT

$10 PER 100 AND UP. From vigorous, pure-bred flocks on free range, selected for heavy-laying qualities and well cared for. Low prices considering exceptional quality. WHITE, BROWN and BUFF LEGHORNS, 50, $7; 100, $13; 500, $62.50; 1,000, $120. WHITE and BARRED ROCKS, WHITE WYANDOTTES, BUFF ORPINGTONS, ROSE and S. C. REDS, ANCONAS, 50, $8; 100, $15; 500, $72.50; 1,000, $140. Mixed, all varieties for broilers, $10 per 100 straight. Postpaid to your door and full live count guaranteed. You can order now direct from this ad and get them when you want them. Bank reference. Free catalog.

BLUFFTON HATCHERY, Box L, Bluffton, Ohio

BABY CHICKS

$10.50 PER 100 AND UP

From Hogan tested, well-kept and housed heavy laying flocks

Barred and White Rocks, Reds, Anconas, Minorcas: 50, $8.50; 100, $16; 500, $77.50
Buff Orpingtons, White Wyandottes:.......... 50, $9; 100, $17.50; 500, $85
White, Brown and Buff Leghorns:.......... 50, $7.50; 100, $14; 500, $67.50
Mixed: .... $11 per 100 straight

Postpaid, full live delivery guaranteed. Order NOW from this ad. and get them when you want them. Catalog free. ALSO EGGS FOR HATCHING. Reference, 4 Banks.

TRI-STATE HATCHERIES, Box 511, Archbold, Ohio

Egg-Bred Baby Chicks

ENGLISH WHITE LEGHORNS, BROWN LEGHORNS. 11 years of breeding for egg production. Highest quality chicks from tested layers. Satisfaction guaranteed. 100 chicks $12.50; 500, $60.00. From Extra selected matings $2.00 per 100 higher. Postpaid., 100% delivery guaranteed. Order now. Bank reference. Catalog free.

ROYAL HATCHERY & FARMS, R. 2, Zeeland, Mich. S. P. Wiersma, Prop.

CHICKS, $10 per 100 and up Postpaid to your door and full live count guaranteed

Varieties Prices on	50	100	300	500	1,000
WHITE, BROWN and BUFF LEGHORNS	$7.00	$13.00	$38.00	$62.00	$120.00
BARRED ROCKS, BLACK MINORCAS and ANCONAS	8.00	15.00	44.00	72.00	140.00
WHITE ROCKS, WHITE WYANDOTTES and REDS	8.50	16.00	46.00	75.00	145.00

BUFF MINORCAS, 50, $13; 100, $25. MIXED CHICKS FOR BROILERS, 50, $6; 100, $11; 500, $50. Postpaid. Full live delivery guaranteed. Hatched in the best possible manner from good, vigorous, pure-bred, heavy laying flocks on free range. Carefully selected and packed to go safely. No catalog. Order right from this ad. and save time. Reference, Citizen's Saving Bank. You take no chances.

THE EAGLE NEST HATCHERY, Box K, Upper Sandusky, Ohio

Only 7 hours from Grand Rapids. Can reach any point in Michigan in 24 hours.

BABY CHICKS Postpaid to your door $11 per 100 and Up

FROM HOGAN TESTED, FREE RANGE HEAVY LAYINY FLOCKS. ALL VARIETIES.

WHITE, BROWN and BUFF LEGHORNS and ANCONAS.......... $14.00
BARRED ROCKS and R. I. REDS.......... $16.00
WHITE WYANDOTTES, WHITE ROCKS, BUFF ROCKS.......... $17.50
BLACK MINORCAS, BUFF ORPINGTONS.......... $18.00

All lots of 500, $1.00 per 100 discount.

EXTRA SELECTED FLOCKS.......... $2.00 per 100 higher

Large Price List for return mail.

Postpaid full live delivery guaranteed. Hatched by the most modern method of incubation from good, vigorous, pure-bred varieties carefully selected and safely packed. No catalogue. Order right from this ad and save time and disappointment. Reference Chesaning State Bank or any business in Chesaning.

Address BABION'S FRUIT AND POULTRY FARM, Guy L. Babion, Prop., Chesaning, Mich.

BABY CHICKS

FROM SPECIAL MATINGS

A specialist breeder can furnish better baby chicks. Our ANCONAS are Michigan's leading strain today—both in exhibition and in egg production. WHITE LEGHORNS from a select special egg flock having blood lines of world's greatest layers. We specialize in quality—not quantity. Lowest prices. Write for illustrated catalogue.

PROGRESSIVE POULTRY FARM
Box 1 Holland, Mich.

BABY CHICKS SELECTED CHICKS FROM the heart of the baby-chick industry. Leading pure breeds from heavy egg-producing strains. Alive delivery guaranteed. Send for catalogue and prices.

L. VAN HOVEN & BRO., Zeeland, Mich.

CHICKS—Exhibition and Utility

strains from America's best. W. and Barred Rocks, Reds, W. and Brown Leghorns, Wyandottes, Anconas. Surprising prices, quality considered. 13 years' hatchery experience. Catalog.

HAIGHT HATCHERY, Cedar Springs, Mich.

Cured Her Rheumatism

Knowing from terrible experience the suffering caused by rheumatism, Mrs. J. E. Hurst, who lives at 608 E. Douglas Street, C-439, [illegible], Ill., is so thankful at having [illegible] that out of pure gratitude she is anxious to tell all other sufferers just how to get rid of their torture by a simple way at home.

Mrs. Hurst has nothing to sell. Merely mail your name and address, and she will gladly send you this valuable information entirely free. Write her at once before you forget.

Attention—Guaranteed Baby Chicks

WORLD'S GREATEST EGG PRODUCERS

Tom Barron Imported White Leghorns

SILVER WARD HATCHERY ZEELAND, MICH.

Sheppard Famous Anconas Direct

From grand selected flocks on free range built direct from laying contest winners. Strong, vigorous chicks that will prove great layers. Flocks culled by poultry experts and headed with vigorous pedigreed males from the best laying strain in the country, postpaid. Full live delivery guaranteed. Fine instructive catalog free. Reference two banks. SILVER WARD HATCHERY, Box 420, Zeeland, Mich.

BABY CHICKS

Best Paying, Heavy Laying, Pure Bred Tom Barron English White Leghorns, S. C. Rhode Island Reds, Park's Barred Rocks. Strong Healty Chicks hatched from greatest and best incubator known. Chicks are given full twenty-one days and hatched under proper temperature.

YOU CAN DO IT WITH BABY CHIX

Mr. Frank Fulerson, Niles, Mich., writes as follows: "From the 66 pullets we raised from your stock last year along with the thirty which we had, we got 1,610 eggs in December. Can you beat it?"

We are the first and oldest importers of White Leghorns in this state.

Watch our pen number 17 in the Michigan Egg Laying Contest. It's coming strong! All flocks thoroughly culled and properly mated to pure bred cockerels. Try some real chicks this year. Order now at new low prices. Instructive catalogue free.

BRUMMER-FREDERICKSON POULTRY FARM
Box 26 Holland, Mich.

POULTRY

SEND IN YOUR QUESTIONS

If you want any information regarding poultry we shall be glad to secure it for you and publish both question and answer in this department. The service is free. Send in your questions, we are glad to be of service. Be sure to sign your full name and address to question, as many times we are obliged to write you for further information. In publishing we will not print your name.

IMPORTANCE OF EARLY HATCHING

IN order to keep chickens profitable it is of prime importance that at least part of the pullets each year are hatched early. The early hatched pullets are the most profitable from every standpoint. The early hatched cockerels are also the most profitable.

Too few people appreciate the importance of early hatching. The following winter they would like to get winter eggs, when they command a high price, but they are not willing to prepare for it in time. It is a great mistake not to practice early hatching. It will be noticed that early hatching is growing more and more important all the time.

One reason early hatching is very profitable is because this automatically necessitates hatching from the best in the flock. The good layers are laying at that time of the year. The poor layers are not laying, and hence all the chicks hatched early as a rule come from the best laying flock. This is in itself a great advantage. The hen that is laying in January and February is a good winter layer, hence hatching at that time necessitates hatching eggs laid at that time of the year by hens that are laying at that time of the year. Early hatching automatically culls the poor layers from the flock, especially if practices for a series of ten years or more.

Often the question is asked, "What is the best way to get winter layers?" We can only say, "Hatch in the winted time." It is easier to get eggs from pullets that come from hens that can lay in the winter time. It is no secret to get plenty of winter eggs, but it is necessary to make plans now. Those plans are to get a flock of early hatched pullets. February is not too early to hatch a large number of pullets. Some of them may go through a partial molt, but if you feed them carefully you will get a good and profitable egg-production before they do that. The trouble with too many people is that they expect a good winter egg-production from hens. It is a fact that winter egg-production can be profitably realized from pullets. Many people keep hens until they are three or four years old and expect a good winter egg-production. From the egg-production standpoint, after a hen has passed the three-year-old period, she has passed her time of usefulness. It is a fact that as a general rule, from the market egg-production standpoint, it seldom pays to keep a hen longer than two years. There are, of course exceptions to this rule, and they are that the exceptional good layer may be kept a year longer.

Another very good reason for practicing early hatching, is that the early hatched chicks are the strongest and the easiest to raise. We have found this to be true year after year. At this writing we have close to 4000 chicks in our brooder houses. All are doing fine, appear healthy and strong. It stands to reason that the hen is in a better physical condition early in the year before she has had time to drain her body of vitality, by heavy laying for a long time. The egg produced in January contains a healthier and stronger germ than the egg laid in May or June. Every time a hen lays an agg she reduces the vitality in her system. For this reason the early chick is much stronger and therefore much easier to raise than the late hatched chick. In spite of the fact that the early hatched chick may encounter more severe weather it will outgrow and outlive the late chick. It is also a fact that we sometimes have

BOWERS Colony Brooder

More Chicks---Less Cost

This brooder is a chick-saver and a money maker. It raises more and better chicks, at less cost than other brooders. Stove is best in the world to hold fire—air-tight and self-regulating. It burns soft coal—the cheapest brooder fuel—perfectly. Cuts fuel costs in half. Stove will also burn hard coal, wood, coke, etc. Regulator maintains even heat night and day. No trouble. Sizes for 500 or 1000 chicks. Low priced Write TODAY.

F. M. Bowers & Sons Co.
1416 W. Wash. St.
INDIANAPOLIS, IND.

CHICKS

THAT GROW, LAY AND PAY

Barron English White Leghorns, Brown Leghorns and Anconas.

PURCHASE THIS YEAR'S CROP OF CHICKS from tested layers, headed by large vigorous 260 to 288 Pedigreed Males.

CUSTOMERS REPORT BIG PROFITS with these wonderful layers. Write today for our large illustrated catalogue. It tells all about them, it's free.

WYNGARDEN HATCHERY
Box B, Zeeland, Mich.

Rosewood Farm

Healthy, Hardy Chicks

Well-hatched, carefully packed, and shipped. Select, heavy laying WHITE LEGHORNS, 50, $7; 100, $13; 500, $62.50; 1,000, $120. Select ANCONAS, 50, $7.50; 100, $14; 500, $67.50. Select BARRED ROCKS, 50, $8.50; 100, $16.50; 500, $80. Postpaid, full live delivery guaranteed. Our chicks will render you the best of satisfaction and you will COME BACK TO US. We have had long experience in producing good Chicks and our flocks are second to none. Circular. free. ROSEWOOD FARM, R 12 A, Holland, Mich.

Good Chicks-Fair Prices

Barron Type W. Leg., B. Rocks, S. C. Reds. Pedigreed Chicks from M. A. C. cockerel matings. Utility grade from pure-bred, heavy-laying, free range inspected flocks. Pullets laid at 4 mos., 20 days last year. Guaranteed delivery. Discount on Feb. orders. Instructive catalog. Bank reference.

Michigan Hatchery & Farms, Box A, Holland, Mich.

Hardy Northern Bred Chicks

Pine Bay Farm

Barron S. C. W. LEGHORNS Parks Strain BARRED ROCKS The greatest egg producers known. Heavy winter layers. See record of our pen 16 now at the Michigan International Egg Laying Contest. Get Quality chicks at Reasonable prices from Holland's pioneer poultry farm. Catalogue free.

Pine Bay Poultry Farm, Box 56, Holland, Mich.

White Leghorn CHICKS

Write Quick. Free feed—Liberal Discount on early orders: World-Famous 265-270, and 280-326 egg strain trapnested, pedigreed English American S.C.W. Leghorns, Heavy Layers. Best Payers. Strong healthy chicks. 100% live delivery guaranteed, p.p. Big valuable catalog Free.

KERLIN'S GRAND VIEW POULTRY FARM, Box 43 Center Hall, Pa.

White Leghorn CHICKS

Heavy Laying, pure bred, English strain. Flocks culled and tested for laying ability. Strong, healthy chicks. 100 per cent live delivery guaranteed. Postage paid. Catalog, low price list free. Write quick.

Catalpa Grove Hatchery, Box 4 R. 2, Holland, Mich.

BABY CHICKS White and Brown Leghorns, Single and Rose Comb Reds, Buff Orpingtons, Barred and White Plymoth Rocks, Anconas, and White Wyandottes, $15 per 100 and up. P. W. STONE HATCHERY, Lock Box 44, Fenton, Mich. F. M. Milliken, Prop.

CHICKS—WE HAVE SHIPPED THOUSANDS each season since 1904. Different breeds, free booklet with guarantee and delivered price. Freeport Hatchery, Box 10, Freeport, Mich.

TOBACCO

HOMESPUN TOBACCO. CHEWING 5 pounds $1.75; 10 pounds $3.00; 20 pounds $5.25. Smoking 5 pounds $1.25; 10 pounds $2.00; 20 pounds $3.50. Send no money, pay when received. CO-OPERATIVE TOBACCO GROWERS, Paducah, Kentucky.

KENTUCKY NATURAL LEAF TOBACCO. Chewing 5 pounds $1.75; 10 pounds $3.00; smoking 5 pounds $1.25; 10 pounds $2.00; 20 pounds $3.50. Send no money; pay when received. FARMERS CO-OPERATIVE TOBACCO UNION Paducah, Ky.

KENTUCKY TOBACCO—BEST OBTAINABLE 3 year-old leaf. Free flavoring and directions. Pay for tobacco and postage when received. Chewing 10 lbs. $3.25; smoking 10 lbs. $2.75. OLD HOMESPUN CO., Hawesville, Ky.

NATURAL LEAF TOBACCO. CHEWING 5 pounds $1.75; 10 pounds $3. Smoking 5 pounds $1.25; 10 pounds $2.00. Send no money. Pay when received. TOBACCO GROWERS' UNION Paducah, Ky.

TOBACCO—EXTRA SMOKING, 5 LBS., $1; 10 lbs. $1.50; 20 lbs. $2.75. Chewing 5 lbs. $1.50; 10 lbs. $2.75. Quality guaranteed. O'CONNOR SMOKEHOUSE, Mayfield, Ky.

CORD-WOOD SAW FRAMES

BUZZ SAW FRAMES, BLADES MANDRELS, belting, pulleys, wood-working machinery etc., of every description. Low prices. prompt shipments. Catalogue free. Write GEO M. WETTSCHURACK, La Fayette, Indiana.

BABY CHICKS
SEX
The most Progressive Hatchery in the country
GUARANTEED

By years of experimenting we have evolved a system of sex determination. We guarantee 60% of the sex ordered. Our average is considerably higher. We guarantee 100% live delivery; bred from males whose dams have egg records of 250 to 287. Specialize S. C. White Leghorns but fill orders for any breed. Further information if asked

ORDER FROM THESE PRICES

Grade A chicks at 14 cents
Grade AA chicks at 15 cents
Grade AAA chicks at 16 cents

Specify pullets or cockerels. Terms cash, except on advance orders, 25% down, remainder one week before shipped.

UTILITY HATCHERIES [illegible]
Dept. 60
ZEELAND, MICH.

400,000 Chicks

Big, strong, Well-hatched Chicks from selected to lay stock on free range, properly fed and housed to insure health and vigor. WHITE, BROWN & BUFF LEGHORNS, 50, $7; 100, $13; 500, $62.50. BARRED & WHITE ROCKS, S. C. & R. C. REDS, ANCONAS, 50, $8; 100, $15; 500, $72.50. WHITE WYANDOTTES, 50, $8.50; 100, $16; 500, $77.50. BUFF ORPINGTONS, SILVER WYANDOTTES, 50, $9.50; 100, $18; 500, $87.50. POSTPAID. We guarantee full 100% live arrival. Reference, Citizen's Bank. Order direct from this ad. and save time. Free circular.

MODERN HATCHERY
Box F, Mt. Blanchard, Ohio

CHICKS

$10 per 100 and Up

From good heavy laying flocks on free range. WHITE LEGHORNS, 50, $7; 100, $13; 500, $62.50. BARRED ROCKS AND REDS, 50, $8; 100, $15; 500, $72.50. From Extra Select flocks headed by Mich. Ag. College Cockerels. WHITE LEGHORNS, 50, $8.50; 100, $15; 500, $72.50. BARRED ROCKS AND REDS, 50, $9; 100, $17; 500, $82.50. Postpaid and full live delivery guaranteed. Order now from this ad. Catalog Free.

LAKE VIEW POULTRY FARM,
Route 8, Box 3, Holland, Michigan

OVIE'S BABY CHICKS

HEAVY LAYING

breeding stock or real quality helps producers Ovie's strong healthy and husky chicks.

BABY CHICKS OF QUALITY AND MERIT

25,000 Thrifty Chicks Weekly

Write for catalog. 11c and up, prepaid. 12 leading breeds. Delivery guaranteed.

Ovie's Poultry Farm and Hatchery
132 Boots Street, Marion, Indiana

QUALITY CHICKS

GET THE PROFITABLE AND LAYING KIND

They will pay you big. Free range. Selected. Hogan test. Orpingtons, W. & Sil. Wyandottes, 50, $9.25; 100, $18. Rocks, Reds, Minorcas, 50, $8.25; 100, $16. Anconas, heavy broilers, 50, $7.25; 100, $14. Leghorns, 50, $7; 100, $13. Mixed, all varieties, $11 per 100 straight. Postpaid. Safe delivery. Circular free. Bank reference. Middlepoint Hatchery, Middlepoint, Ohio, Dept. B.

Day Old Chicks

Strong, sturdy, S. C. White Leghorns (English strain) from large, vigorous, yearling hens, raised on our own farms. That lay and pay. Barred Rocks and Rhode Island Reds, from best laying strains. Send for our illustrated catalog, free.

Hillcrest Poultry Farms and Hatchery
R. R. 2, Holland, Michigan

BABY CHICKS

Barred Rocks
White Rocks
Rhode I. Reds
Wyandottes
Orpingtons
Leghorns—
Wh., Br., Buff
Anconas
Minorcas

Hardy free range stock—a Pure Breed Practical Poultry especially adapted to the farmer poultryman; stock that has proved of exceptional practical value on Michigan farms as high as 173 eggs a year flock average. Send for price list.

STATE FARMS ASSOCIATION
202 Chase Block, Kalamazoo, Michigan

CHICKS Low prices. From selected heavy laying flocks. English White Leghorns, Brown Leghorns, Anconas, Barred Rocks. Postpaid, full live delivery guaranteed. Catalog free. Bank Ref. THE BOS HATCHERY, R. 2, Zeeland, Michigan. John Bos. Prop.

CHICKS Barron Strain Selected White Leghorns. Produced under my personal care. Strong, vigorous chicks carefully packed to go safely. Postpaid, full live delivery guaranteed. 50 chicks, $7; 100, $13; 500, $62.50. Get your order in early. ELGIN HATCHERY, Box 317 A, Zeeland, Mich.

BABY CHICKS White English Leghorns. Tom Barron Strain. White and Barred Plymouth Rocks, S. C. R. I. Reds, Buff Orpingtons. All pure bred from selected stock. Live arrival guaranteed. Postage paid. We do custom hatching. Durand Hatchery, Fenton, Mich.

more pleasant weather for raising chicks in February and March than in April or May. This year, so far, we have had very beautiful weather for raising early hatched chicks, although by the time this article gets into print it may no longer be true. Nobody can tell about Texas weather, therefore, it is just as well to go ahead and make plans and ignore the weather entirely.

In raising chicks it must be remembered that we get as many cockerels as pullets as a general rule. For this reason they are an important factor to consider. The early hatched cockerel can be sold as a small broiler, and then must be sold in the majority of cases at an actual loss. Last year we sold our early hatched cockerels at the farm at 75 cents each when they weighed about one pound each and less. The late hatched cockerels we delivered at 35 cents each when they weighed about one and a half pounds each. The late hatched cockerels we produced and sold at an actual loss. That seems to be true in the majority of cases. The early hatched broiler is a rare article, and therefore commands the price. The late hatched cockerels come on the market when every farmer is selling young chickens on the market, and hence the low price. We believe that from the standpoint of profitable marketing of the early hatched cockerel alone we can afford to bring off our chicks early rather than late.

We have always noticed that the early hatched chicks grow better, faster and, when mature, are larger and better developed. The early hatched pullets in the small breeds will easily average at least a pound heavier than the late hatched pullets among the small breeds like the Leghorns. Among the medium weight breeds the pullets will average close to a pound heavier than the late hatched pullets. This is an important consideration. If your stock is running small practice early hatching.

Matures for Fall Fairs

The early hatched pullets and cockerels will mature in time to be in excellent show condition during the fall fairs and poultry shows. If you are planning on showing at any of these shows or fairs, it is absolutely necessary to hatch some of your chicks not later than February. We have found it wise to hatch out a number in January, February and March. This insures some individuals that will be in fit condition to show the entire fall. We know of some breeders that get a good number of chicks hatched in December. The early chicks will win in the early shows, where the late chicks have no chance whatever. Early hatching is the secret of getting birds in good condition for the fall and early winter fairs and shows. A pullet or cockerel is in the best show condition when she is getting ready to lay her first egg.

It certainly is a fact that the early hatched chicks get a good start, and therefore are better able to stand the hot weather when it comes. Cold weather is better for chicks than hot weather. For this reason the mortality in early hatched chicks as a rule is less than half that of the late hatched chicks. The excessive heat and the greater number of lice and mites are a serious worry to the late hatched chicks and, therefore, they seldom do as well as early hatched chicks.

SPRING WORK IN POULTRY YARD

AFTER being more or less closely housed for the greater part of the winter, chickens often are bothered with insect pests, not to mention that yards and runs may have become foul. In addition to this, unless great care has been observed in managing the flock, the hens may have low vitality—little power to resist the beginning of any disease.

If nothing has heretofore been done to get the flock to working on a business basis, now is the time to commence. It has been proved that few other departments of farm work will pay better than poultry when rightly managed, and a resolution made now that you are going to get your share of poultry profits will help greatly.

Beginning with the house, clean it up thoroughly the first warm

(Continued on following page.)

Attractive Chick Investments

FROM SELECT PURE-BRED FLOCKS

WHITE and BROWN LEGHORNS, ANCONAS, 50, $7.50; 100, $14; 500, $65. BARRED ROCKS, REDS and MINORCAS, 50, $8.50; 100, $16.50; 500, $75. Discount on orders of 1,000 or more. From extra select flocks $2 per 100 higher. Postpaid to your door. Full live count guaranteed. Bank reference. Free Catalog. We know it will be to your advantage to get our catalog and full price list before making a final decision regarding your investment in Chicks this season. Send for it TODAY.

COLONIAL POULTRY FARMS, Box B, Zeeland, Michigan

BABY CHICKS $10 per 100 and UP

From selected, heavy laying, vigorous hens. White and Brown Leghorns, Anconas, 50, $6.75; 100, $13; 500, $62.50. Barred Rocks, 50, $8.50; 100, $16; 500, $75 Extra Select, $2 per 100 higher. Mixed Chicks, 50, $5.50; 100, $10; 500, $50. Well hatched in modern machines. Carefully and correctly packed and shipped. Postpaid, full live arrival guaranteed. Bank reference and this guarantee makes you perfectly safe in ordering direct from this ad NOW. Get them when you want them. All orders have our careful personal attention. WE WANT YOUR BUSINESS. Catalog Free.

WINSTROM FARM & HATCHERIES, Box H 5, Zeeland, Michigan

GUARANTEED CHICKS

Hatched from High Laying Quality Fowls on free range, properly fed and housed to insure strong Chicks.

BARRED ROCKS, S. C. REDS, MINORCAS, ANCONAS . 50, $8; 100, $15; 500, $74
WHITE WYANDOTTES, BUFF ROCKS 50, $8.50; 100, $16; 500, $78
WHITE, BROWN and BUFF LEGHORNS 50, $7.50; 100, $14; 500, $65

Postpaid to your door. 100% live delivery guaranteed. Catalog free. Bank Reference.

MORENCI HATCHERIES, Box B, Morenci, Mich. Member I. B. C. A.

150,000 RURAL CHICKS

You can double your profits with our famous RURAL Strain PURE BRED S. C. ENGLISH STRAIN WHITE LEGHORNS, BROWN LEGHORNS and ANCONAS. They have years of constant breeding for high flock averages back of them. We operate a modern hatchery and 70-acre poultry farm and can save you considerable money, quality considered. Our poultry is all on free range which assures our customers the desirable sturdy, lively chicks which mature more rapidly with recreased mortality and develop in four to five months into the greatest layers. We guarantee 100% live arrival of healthy, vigorous chicks. If you are interested in securing a flock of poultry that will give you a splendid dividend on your investment write us at once. Beautiful catalog free.

RURAL POULTRY FARM, Dept. B, Route 1, Zeeland, Mich.

MEADOW BROOK FARM

CHICKS—ENGLISH WHITE LEGHORNS, BROWN LEGHORNS (Holland Importation Strain), 50, $7; 100, $13; 500, $62.50; 1,000, $120. BARRED ROCKS, REDS, BUFF LEGHORNS, 50, $8; 100, $15; 500, $72.50; 1,000, $140. WHITE WYANDOTTES (Heavy Laying Flocks), 50, $9; 100, $17. Postpaid, full live delivery guaranteed. All flocks composed of Selected Heavy Layers. Order now from this advertisement and get them when you want them. I have been producing good Chicks successfully for the past 20 years and KNOW HOW. I want your business and will try hard to please you. Free Catalog. Bank Reference. MEADOW BROOK FARM, Henry De Pree, Proprietor, Route 1 H, Holland, Mich. Member Michigan B. C. A.

HARDY, HEALTHY CHICKS

From northern bred, heavy laying, closely selected parent stock in ENGLISH WHITE LEGHORNS, BROWN LEGHORNS AND SHEPPARD ANCONAS. Our breeding birds are well-fed and housed to insure vigorous breeding condition and vigorous chicks for our customers. POSTPAID. FULL DELIVERY GUARANTEED. LOWEST PRICES. CATALOG FREE. Write your exact wants and let us quote you prices before you buy chicks elsewhere. YOU NEED these vigorous, northern bred chicks to make profits.

CITY LIMITS HATCHERY, Box M, Holland, Mich.
Reference, Holland City State Bank.

CHICKS $12.00 per 100 and Up

100% SAFE ARRIVAL GUARANTEED

PRICES—WHITE, BROWN and BUFF LEGHORNS, 50, $7; 100, $13; 500, $60. BARRED ROCKS, S. C. and R. C. REDS, ANCONAS, B. MINORCAS, 50, $8; 100, $15; 500, $70. WHITE WYANDOTTES, WHITE ROCKS and BUFF ORPINGTONS, SHEPHARDS 331 EGG STRAIN ANCONAS, WHITE MINORCAS, 50, $8.50; 100, $16; 500, $75. MIXED, 50, $6; 100, $11; 500, $50.

Hatched from selected heavy laying flocks that are well fed and cared for, insuring strong, livable chicks that will make a profit for you. POSTPAID TO YOUR DOOR. ORDER DIRECT FROM THIS AD and SAVE TIME. Catalog free. Reference, Geneva Bank.

THE GENEVA HATCHERY, Box 505, Geneva, Ind.

HILLVIEW HATCHERY

GUARANTEED TO ARRIVE

Strong and Healthy. Chicks from selected heavy laying, Hogan tested flocks. ENGLISH WHITE LEGHORNS and BROWN LEGHORNS, 50, $7; 100, $13; 500, $62.50; 1,000, $120. Heavy Laying EXTRA GOOD BARRED ROCKS, 50, $8.50; 100, $16.50; 500, $80; 1,000, $155. Postpaid to your door and full live delivery guaranteed. Our flocks are kept on free range, properly fed and cared for insuring the vigor necessary in the Chicks to live and MAKE A PROFIT. Give us a trial and you will come again.

HILLVIEW HATCHERY, Route 12 E, Holland, Michigan

QUALITY CHICKS GUARANTEED. From Hogan tested, free range stock. Our [illegible] is modern 65 acre poultry [illegible] 10 years careful breeding for heavy egg production. Winners at leading shows. Big, strong, vigorous, well-hatched chicks at following prices: WHITE and BROWN LEGHORNS, SELECT, 50, $8.50; 100, $16; 500, $77.50. ANCONAS SELECT, 50, $9; 100, $17; 500, $82.50. WHITE and BROWN LEGHORNS, SELECT, 50, $7; 100, $13.50; 500, $65. ANCONAS, SELECT, 50, $7.50; 100, $14.50; 500, $70. Postpaid to your door and 100% live delivery guaranteed. Order direct from this ad. early and get them when you want them. Also breeding stock and special mating Chicks. Get Our Catalog. Reference 2 Banks.

TOWNLINE POULTRY FARM, Box 27, Zeeland, Michigan

STRONG PURE BRED CHICKS

S. C. English White Leghorns, Barred Rocks, Anconas Direct from our free range farms, by Prepaid Parcel Post to you. Bred for egg production because it means most money to you. Returns on your investment in 4½ to 5 months. A Post Card will bring our free Catalog and details of our contest offer. Highest quality—Bargain prices—Satisfaction guaranteed. Most modern equipped Hatchery in Michigan.

4½ Months Old and Laying

Riverview Hatchery and Poultry Farm
10 Years in Poultry
R. No. 2. Zeeland Michigan

ARISTOCRAT

STRAIN BARRED ROCKS. THE WORLD FAMOUS PRIZE WINNING AND HEAVY LAYING STRAIN.

Barron White Leghorns

Splendid, big, heavy weight, heavy laying hens.

Everlay Brown Leghorns

Beautiful business hen, Wonderful winter layers. Second to none.

ANCONAS Sheppard's Famous Strain 331 egg strain.

CHICKS From all these great strains. Postpaid and full live delivery guaranteed. Also EGGS FOR HATCHING and Breeding Stock. Reference 2 Banks. Member M. B. C. A.

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Hardy, healthy Chicks from selected heavy laying flocks. WH. and BR. LEGHORNS, 50, $7; 100, $13; 500, $62.50. ANCONAS, 50, $7.50; 100, $14; 500, $67.50. BARRED ROCKS and REDS, 50, $8.50; 100, $16.50; 500, $80. Postpaid, full live delivery. Bank reference. Free Catalog.

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BABY CHICKS From select vigorous, heavy laying breeding stock. White, Brown Leghorns, Anconas, Barred Rocks. Our price 12 cents and up. Guarantee 100% live delivery by prepaid post. Get your order in now—will ship when you want. Customers report "Big Profits" with these wonderful layers. Write today for Illustrated Catalog. It's free. Reference: State Commercial Saving Bank. Member M. B. C. A.

Queen Hatchery & Poultry Farm, Zeeland, Mich.

WHEN WRITING ADVERTISERS MENTION M. B. F.

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Bargain Prices—Write Quick. Best paying, highest quality, Pure Bred Tom Barron and Hollywood White Leghorns—Egg Records 270 to 300 eggs in one year—Brown Leghorns, Anconas, Barred Rocks, Rhode Island Reds, White Wyandottes. Book orders now—**get liberal discount. Valuable catalog free.**

We guarantee to save you money—give you strong, healthy, perfect chicks, the best that money can buy, guarantee live delivery, and absolute satisfaction. **Write today sure.**

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WASHTENAW HATCHERY CHICK PRICES: March 26th and following hatches: Barred Rocks and Reds, 50, $8.50; 100, $16; 500, $75. White Rocks, White Wyandottes, 50, $9.50; 100, $18; 500, $85. White, Brown, and Buff Leghorns, 50, $7.50; 100, $14; 500, $65. From hatches due March 12th and 19th add $2 per 100 to these prices. Postpaid, full live delivery guaranteed. Our flocks are carefully selected and bred for high egg production. Order from this ad. Reference, Farmers and Mechanics Bank.

WASHTENAW HATCHERY, Ann Arbor, Mich.

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Strong, vigorous Chicks from selected heavy laying ENGLISH STRAIN WHITE LEGHORNS and BROWN LEGHORNS, 100, $12.50; 500, $60. THOMPSON & HOLTERMAN STRAIN BARRED ROCKS and ANCONAS, 100, $18; 500, $87.50. Postpaid, full live delivery guaranteed. Catalog free. Bank Reference.

DE-KOSTER'S HATCHERY, Box X, Zeeland, Mich.

Peerless Chicks

HATCHED FROM BRED-TO-LAY S. C. WHITE LEGHORNS

They are selected long deep-bodied, with large lopped combs. Liberal discount. Live arrival guaranteed. Catalog free.

PEERLESS HATCHERY & POULTRY FARM, Box 10, Zeeland, Mich.

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Hatched from strong and vigourous flocks of ENGLISH WHITE LEGHORNS AND ANCONAS, BRED FOR HIGH EGG-PRODUCTION. We guarantee 100 per cent good live chicks on arrival. Postage PAID. Prices reasonable. Instructive Catalog and prices free on request. **QUALITY HATCHERY, Box A11, Zeeland, Mich.**

Pedigreed State Approved **S. C. W. LEGHORNS CHIX**
AMERICAN-ENGLISH STRAIN

Are you going to buy them from a hatchery or from a BREEDER. Buy from Michigan's Largest Leghorn Farm and insure success. We hatch our own eggs only. Supply limited. Prices reasonable. Satisfaction guaranteed.

Descriptive Circular tells all about them. It's free.

SIMON HARKEMA & SON, R. 1, Holland, Mich.

QUALITY BABY CHICKS

The kind that will Lay and Pay. BARRON STRAIN ENGLISH WHITE LEGHORNS, BROWN LEGHORNS AND ANCONAS. Prices $9.50 per 100 and up. Send for catalog, instruction free on care and feeding of poultry.

KARSTEN'S FARM, Zeeland, Michigan

CHICKS

BARRON'S S. C. W. LEGHORNS, SHEPPARD ANCONAS, and BARRED ROCKS, EGGS and CHICKS FROM SELECTED STOCK

Our Leghorn flocks are headed by large vigorous males from M. A. C.; Anconas from Sheppard's 285 hens. Buy from an old reliable poultry farm and you will be proud to own a flock of high producing hens that will bring you a big profit. We guarantee safe delivery and prepay shipments. Write for catalogue.

BYRON CENTER POULTRY FARM AND HATCHERY Box R, Byron Center, Mich.

QUALITY CHICKS White Leghorns, Barred Rocks, Anconas. 5,000 culled breeders. 12 years experience. New Smith 40,000 egg hatcher. Member Baby Chick Assocs. Send for Folder B and prices. **DEAN EGG FARM & HATCHERY BIG BEAVER, BIRMINGHAM, MICH.**

Rhode Island Reds, Tompkins strain, hatching eggs and baby chicks. Eggs per hundred $12.00, chicks per hundred $25.00. On all orders for either stock, eggs or chicks of $15.00 or more, I will give the Rhode Island Journal free for one year. A few good cockerels left. Quality Breeder of Rhode Island Reds both combs.
WM. H. FROHM, New Baltimore, Mich., R. 1.

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Direct from our farm at greatly reduced prices, only 9c up. Barred Rocks, White Leghorns and Anconas. Write quick for particulars and special introductory offer. **MODEL POULTRY FARM & HATCHERY, Zeeland, R. 4, Michigan.**

WHITTAKER'S R. I. REDS—Michigan's Greatest Color and Egg Strain. Bred from winter layers for 13 years. Chicks and eggs. Write for free catalog. **Interlakes Farm, Box 4, Lawrence, Mich.**

BABY CHICKS—PUREBRED BARRED ROCKS, Buff Wyandottes, Black Minorcas, R. I. Reds, Brown and White Leghorns. 12c and up shipped postpaid. **THOS. G. CALLAGHAN, Fenton, Mich.**

KNIGHT STRAIN WHITE PLYMOUTH ROCK cockerels $5.00 each. Baby chicks $20.00 per 100. **ROBERT E. KNIGHT, New Baltimore, Mich.**

days that come. It may take two or three days to do it properly, and may discommode the flock, but it is worth it. If it appears to be very dirty, or if insect pests are numerous, perhaps the best thing is to scald the house from top to bottom, and not allow the poultry in it again until it has dried. While you are about it, it is as well to whitewash it inside and out. The lime in whitewash greatly discourages the spread of both insects and disease, not to mention the fact that it makes the houses look better and gives an added attraction to the work of the poultry. The coops should also be given some whitewash. The best whitewash is made from the Government formula, as follows: Slack a half-bushel of lime with boiling water, covering during the process. Dissolve a peck of salt in water. Boil three pounds of ground rice to a paste. Dissolve a pound of joiner's glue in water. All these added together while the lime is still hot, and then a half pound of Spanish whiting added, to the whole is added five gallons of hot water, and the whole is set aside, covered, for a few days. To use, stir it up well and apply while hot, heating in any convenient manner.

Of course, all old nesting material should be burned now and new material used. It is not so essential to cleanup the yards and runs if the flock is allowed the freedom of the farm, but if any part of the flock, including chicks, is to be kept close in, the yard must be clean. A common ailment of poultry is gapes, and this is almost invariably caused by a filthy yard. It may look alright when raked up, but it is not if it has been constantly used for a long time. If you have an earth floor in any of your houses, pens, or sheds, sprinkle lime freely upon it. The yards and runs can be treated in a different manner, as you can get to them to clean them. My plan is to put down a little lime over the yard, and then plow it up. You will be surprised at the number of worms in the soil. Probably a great percentage of these are gape worms. They stick in the throat of the chickens when swallowed, and cause gapes when the chickens make an effort to dislodge them. For this reason, it is best to exclude the flock from the yards or runs for at least one day when you plow. After plowing, put down a little more lime and rake it off. These gape worms can exist in a soil that is covered with a grass sod just as well as in bare soil, so do not think the soil is free of them just because the grass is growing thickly. However, where the grass grows well you can usually be sure there is not a large flock to keep the soil very dirty.

Just remember you want setting eggs in large numbers. You can get the eggs all right, but I found it pays to get the hens in fine condition before setting their eggs. The eggs may be fertile, yet not hatch because of the low vitality of the hen that laid it. In this connection, however, it has been my experience that it is best to change rations for the hens very gradually. And if you can select a pen of hens that are not exhausted by winter laying you will get better hatching eggs, especially if the older, tried hens thus selected are mated with a young, vigorous cockerel that has inherent in himself the qualities you want to keep up in your flock.

BAD HABITS OF HENS

EGG eating hens usually form this habit because of lack of lime or meat food in their ration. The taste is most often acquired in the winter when meat food is scarce and when eggs are apt to be frozen and broken in the nests. One egg-eating hen will soon teach others the trick.

Egg-eating hens can be cured by baiting the eggs with ground mustard or strong pepper or powdered aloes.

Prevent further trouble by better feeding. Give all the oyster shell, meat meal, table scraps, and green food they will eat.

Feather Pulling—This habit is worse during the spring, it often results from confining active fowls. It is caused by lack of meat food or by lack of grit, or by irritation from lice and mites.

Feather-pulling hens prefer young, succulent feathers, whose quills are full of blood.

In case of valuable exhibition birds, smear the feathers with lard or vaseline mixed with powdered aloes.

If egg-eating and feather-pulling hens can't be reformed, use them for Sunday dinners.

Hens given free range are not apt to form these bad habits.

HOW TO DETERMINE GOOD AND POOR LAYERS

CULLING as a means of increasing egg production is given especial attention in the United States Department of Agriculture Poultry Exhibit. One lot of 12 hens is shown, which was not culled, and which in one year ate 900 pounds of feed costing $20.70; the 12 hens laid 100 dozen eggs. Contrasted with this loss is one of 8 hens which were culled and which laid the same number of eggs, but ate only 600 pounds of feed at a cost of $13.50. The lot of 12 hens that was not culled ate 50 per cent more feed than the lot that was culled and produced no more eggs. The extra cost of feed, is but one of the larger costs. Others are the extra labor, extra housing room, and extra capital invested.

To enable the poultrymen to cull his hens properly, the exhibit gives the points to be looked for when determining a poor layer, or a good layer. The outlines are as follows:

How to Determine a Poor Layer

Comb—Shrunken, dull and whitish scales.

Eye—Sunken, dull and listless.

Beak—Deep yellow (on yellow-shanked breeds).

Shank—Deep yellow (on yellow-shanked breeds).

Pelvic bones—Thick, rigid, close together.

Abdomen—Rather hard and shallow from pelvic bones to end of keel.

Vent—Small, puckered, dry.

A poor producer moults early, in July and August.

How to Determine a Good Layer

Comb—Full, bright, red, waxy.

Eye—Bright, prominent, alert.

Beak—Pale or white (on yellow-shanked breeds).

Shanks—Pale or white (on yellow shanked breeds).

Pelvic bones—Thin, flexible, wide apart.

Abdomen—Flexible and deep, as measured from end of keel to pelvic bones.

Vent—Large, expanded, moist.

A good producer molts late, in September and October.

HENS STOP LAYING

Can you tell me why my hens stop laying? They look good and feel good. They get scratch feed containing corn, wheat, and buckwheat, plenty of buttermilk but no eggs. The pullets were laying but they stopped also.—H. H. J., Old M[illegible], Michigan.

—[illegible] and pullets frequently stop laying at this season is due to faulty nutrition. Very frequently the early hatched pullets will produce two or three dozen eggs and suddenly go into a hackle or complete body moult. This moulting condition is generally induced by either poor breeding. or faulty management, and more especially faulty nutrition. If the birds are not properly fed and are in production they will invariably lose weight. Loss of weight is almost a certain indication that production will drop. The birds will go into a slightly off condition which will be immediately followed by a moult. One of the problems is to develop more rugged stock that carries more weight and greater resistance to disease.—E. C. Foreman, Associate Professor of Poultry Husbandry, M. A. C.

CAN USE PULLETS EGGS FOR HATCHING

Kindly advise me if pullets eggs will be strong enough for hatching. They are large Barred Rocks.—Mrs. R. J. A., Owosso, Michigan.

—We do not usually get quite as strong chicks from pullet eggs as from eggs laid by older birds, we very frequently use them for breeding purposes, particularly if they are well matured strong pullets from which we are anxious to get some stock.—Clarence M. Fergerson, Dept. of Poultry Husbandry, M. A. C.

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Michigan's Old Reliable Hatchery
(The most modern and best equipped Hatchery in the state)

PURE BRED English and American S. C. W. Leghorns; S. C. Anconas; Barred Plymouth Rocks and R. I. Reds. Strong, well hatched chicks from tested Hoganized Free range stock that make wonderful winter layers.

Chicks sent by Insured Parcel Post Prepaid to your door. 100% live delivery guaranteed. Fifteen years of experience in producing and shipping chicks has given absolute satisfaction to thousands. Write for illustrated free catalog and price list.

Get lowest price on best quality chicks before you buy.

Holland Hatchery, R. 7, Holland, Mich.

Day Old Chicks

From Select, Hogan Tested, Flocks on Free Range. Well-fed and handled to insure strong, vigorous chicks. Heavy Layers. PRICES: WHITE and BROWN LEGHORNS and ANCONAS, 50, $7.50; 100, $14; 500, $65. BARRED ROCKS, 50, $8.50; 100, $16; 500, $75. Hatched right and shipped right. Postpaid. 100% live delivery guaranteed. Bank Reference. Order direct from this ad. Circular free.

BORST & ROEK, Box P, Zeeland, Mich.

289 EGGS

289 Eggs in one year, actual trap-nest record. "LADY MICHIGAN" also made record of 283 eggs in one year. She laid 294 eggs in 381 consecutive days. Sons and daughters of "LADY MICHIGAN" are now in use in our matings for 1923. If you want

Real Barron Leghorns

Single Comb Whites, get our 1923 catalog and learn full particulars In regard to our flock which we have carefully bred for high-egg records for the past 21 years. Our best matings are made up of mature females with actual trap-nest records from 200 to 289 eggs.

Chicks and Eggs for Hatching

that will put the PROFIT into your Leghorn flocks. Write postcard for catalog today and before ordering Chicks or Eggs elsewhere. **STRICK POULTRY FARM, Route 4 M, Hudsonville, Mich.**

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From Select, Vigorous, Heavy Laying Breeding Stock

WHITE and BROWN LEGHORNS and ANCONAS
50—$7 100—$14 500—$65
SINGLE COMB REDS
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Hatched by modern methods in best machines under our personal supervision. Carefully packed and sent postpaid and 100% live delivery guaranteed. Bank Reference. You take no chances in ordering STAR BABY CHICKS. Place your order now and get them when you want them

STAR HATCHERY, Box X, Holland, Michigan

Selected Baby Chicks and Breeding Stock

Tom Barron strain White Leghorns. Also Barred Rocks. Guarantee 100 per cent live delivery on chicks. Cockerels and pullets in season. All stock carefully selected. Write for catalog and prices. Reference Zeeland State Bank.

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R. R. 3 M ZEELAND, MICHIGAN

WOLVERINE BABY CHICKS are Chicks That Satisfy

Bred for egg production 13 years. We hatched and shipped chicks for 12 years. This assures you success. ENGLISH TYPE WHITE AND BROWN LEGHORNS.

100% safe arrival guaranteed. Write for catalogue. It's free. **WOLVERINE HATCHERY, R. 2, Zeeland, Mich.**

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Best Paying, Heavy Laying, Pure Bred Tom Barron English White Leghorns. Rhode Island Reds. Park's Barred Rocks. Strong healthy chicks from best Inspected and Approved Stock. Order now at new low prices. Instructive catalog FREE.
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GUARANTEED BABY CHICKS

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BABY CHICKS—REMARKABLE FOR SIZE and strength. Reasonable prices. Leghorns, Anconas, Rocks, Reds, Wyandottes, Orpingtons, Minorcas, Spanish, Brahmas. **TYRONE POULTRY FARM, Fenton, Mich.**

BABY CHICKS—FROM SELECTED FLOCKS Six leading varieties. Popular prices and guaranteed delivery. Write for catalog and price list. **H. H PIERCE, Jerome, Mich.**

LOOK—75,000 CHIX 12c AND UP. TEN purebred utility egg-tested varieties. Hatching eggs, circular free. **LAWRENCE POULTRY FARM, R. 7, Grand Rapids, Mich.**

QUALITY BABY CHICKS S. C. Brown and English strain White Leghorn Baby Chicks. Write for catalogue. **Cooks Poultry Farm, Holland, Mich.**

CHICKS—SINGLE COMB BUFF LEGHORNS only Strong healthy chicks from good laying stock. **J. W. WEBSTER, Bath, Mich.**

DAY OLD CHICKS SINGLE and ROSE COMB RHODE ISLAND WHITES. Write for Catalogue. **Fischer's Hatchery and Poultry Farm, R. 1, Holland, Mich.**

CHICKEN AND EGG VALUES LOWER LAST YEAR

THE combined farm value of chickens raised and eggs produced in 1922 is estimated at $854,207,000, by the United States Department of Agriculture. The value in 1921 was $900,820,000.

About 543,000,000 chickens were raised on farms in 1922, with a farm value of $354,199,000, as compared with 510,000,000 chickens raised in 1921 valued at $362,253,000. Egg production totaled 1,962,356,000 dozen eggs with a value of $538,567,000 in 1921.

Of the chicken eggs produced in 1922, large quantities were consumed in industries in the manufacture of other than food products, and about 113,000,000 dozen were used to produce chickens, the department says.

The average farm price of chickens raised in 1922 was 65c per fowl, compared with 71 cents in 1921, and with 86½c in 1920. The average farm price of chicken eggs was 25.5 cents a dozen in 1922, compared with 29.3 cents per dozen in 1921 and with 44.4 cents in 1920.

It is estimated that there were 412,000,000 chickens on farms January 1, 1922, a time of year when the number of chicks is low. There were 386,000,000 chickens on farms January 1, 1921, and January 1, 1920, there were 360,000,000, according to census figures.

SOME HEN!

THE daily press reports that a man living in Sharpetown, Maryland, has a hen that taps on the door at 11 a. m., each day. When admitted, it walks to a rocking chair, hops up, lays an egg, and then hurries to the door to be let out. If her pecking on the door on arrival brings no response she flies to the window to attract attention.

Some hen! we say. Take this out to the chicken house and read it to the hens. Maybe after hearing this, your flock will decide to follow her example. Then all you will have to do is to teach them to lay their eggs in a basket instead of the rocking chair and your nest-finding and egg-gathering troubles are over. You can hire someone to stand outside the door to regulate the traffic and keep the hens in line. Then when the basket becomes full you can set it aside and place another. Or maybe you can teach them to lay the eggs right in the crate and save handling over. It might be worth trying. If you do try this on your hens let us know how you come out.

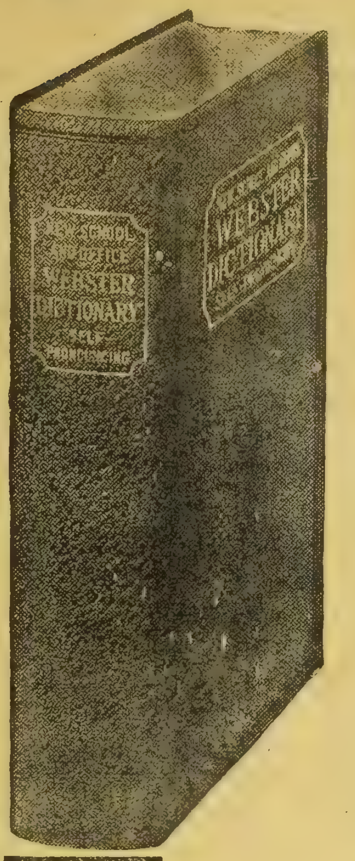
GOVERNMENT BULLETINS OF INTEREST IN MARCH

A SMALL list of Farmers' Bulletins and Circulars of general interest during March is believed to be of value to our readers. Copies may be obtained free by addressing the Division of Publications, United States Department of Agriculture, Washington, D. C. Specify the number and name and whether Farmers Bulletin or Department Circular.

Farmers' Bulletin 181, Pruning; 206, Milk Fever: Its Simple and Successful Treatment; 440, Spraying Peaches for the Control of Brown Rot and Curculio; 597, Road Drag and How Used; 609, Bird Houses and How to Build Them; 639, Eradication of Cattle Tick in Dairying; 766, The Common Cabbage Worm; 863, Irrigation of Grain; 947, Care and Repair of Mowers, Reapers, and Binders; 961, Transferring Bees to Modern Hives; 979, Preparation of Strawberries for Market; 1017, Cattle Scab and Methods of Control; 1045, Laying Out Field for Tractor Plowing; 1150, Parasites and Parasitic Diseases of Sheep, 1175, Better Seed Corn; 1176, Root, Stalk, and Ear Rot Diseases of Corn; 1181, Raising Sheep on Temporary Pastures; 1185, Spraying for the Alfalfa Weevil; 1189, The Handling of Spinach for Long Distance Shipment; 1211, Home Canning of Fruits and Vegetables; 1220, Apple-Orchard Renovation. Department Circular 214, Fusarium Tuber Rot of Potatoes.

STRAIGHT FROM THE SHOULDER

Inclosed please find payment for two years more as I want you to keep the paper coming. Mr. Editor you are a man after my own heart, you strike straight from the shoulder. Keep the good work up.—J. D. T., Gobles, Michigan.



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LEGHORNS
S. C. Buff Leghorn Hens, Pullets and Cockerels. Hens and pullets $2.50 each; cockerels $3.00 to $5.00 each. Show birds a matter of correspondence. LAPHAM FARMS, Pinckney, Mich.

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S C. W. L. PURE BRED COCKERELS FOR sale at two prices $1.50 and $2.00. Write JOHN BUCHNER, R. 1, Box 29, Morley, Mich.

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FOR SALE—HEIMBACH'S WHITE WYANdottes. Few A1 cock birds and cockerels. Hatching eggs in season. Write for prices.
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BUFF ORPINGTON COCKERELS
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FOR SALE S. C. RHODE ISLAND RED
Cockerels, dark red, good undercolor, good type. Aztec Strain. G. W. VAN FOSSEN, Hillsdale, Mich.

S. C. REDS, GOOD LAYING STOCK, FINE color. Hatching eggs, $6.00 per 100. Limited number of chicks, $16.00 per 100.
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Eggs in season.
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FOR SALE—GIANT BRONZE TURKEYS FROM Michigan's best strains. Large healthy birds. MRS. LAVERNE BROWNELL, R. 1, Belmont, Mich.

WHITE HOLLAND TURKEYS
The farmers friend. No crop failure when you raise them as they eat all insects that destroy crops. Toms $15.00, Hens $10.00, Trios $30.00.
ALDEN WHITCOMB, Byron Center, Mich.

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CHOICE MAMMOTH PEKIN DUCK EGGS, $1.50 per setting.
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HIGHEST PRICES PAID FOR LIVE AND Dressed Poultry, Veal, Eggs. A square deal always.
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Red Clover and Timothy mixed—the standard grasses cannot be surpassed for hay and pasture. Contains good per cent clover, just right to sow. Thoroughly cleaned and sold on approval, subject to government test. Ask for this mixed seed if you want our greatest bargain. Have Pure Clover, Sweet Clover, Timothy and all Field and Grass Seeds. Buy now. Prices are advancing. SAMPLES and 116-p. catalog FREE.
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A Remarkable Home Treatment Given by One Who Had It

In the year 1893 I was attacked by Muscular and Sub-Acute Rheumatism. I suffered as only those who are thus afflicted know for over three years. I tried remedy after remedy, but such relief as I obtained was only temporary. Finally, I found a treatment that cured me completely and such a pitiful condition has never returned. I have given it to a number who were terribly afflicted, even bedridden, some of them seventy to eighty years old, and the results were the same as in my own case.

I want every sufferer from any form of muscular and sub-acute (swelling at the joints) rheumatism, to try the great value of my improved "Home Treatment" for its remarkable healing power. Don't send a cent; simply mail your name and address, and I will send it free to try. After you have used it, and it has proven itself to be that long-looked for means of getting rid of such forms of rheumatism, you may send the price of it, One Dollar, but understand I do not want your money unless you are perfectly satisfied to send it. Isn't that fair? Why suffer any longer, when relief is thus offered you free. Don't delay. Write today.

MARK H. JACKSON
265J Durston Bldg., Syracuse, N. Y.
Mr. Jackson is responsible. Above statement true.

MARKET FLASHES

MARKET SUMMARY

All grains are quiet after decline on opening of week. Beans unchanged. Potatoes firm. Butter and eggs inactive. Receipts of poultry exceed demand and prices decline. Demand for dressed calves good but hogs not wanted. Cattle active to steady. Hogs active but prices lower. Small demand for sheep. Provisions easy.

(Note: The above summarized information was received **AFTER** the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press.—Editor.)

FOOTE'S MARKET LETTER

By W. W. Foote

OUR Michigan farmers, in common with those of adjoining states, who are so situated financially as to require no assistance from the banks have no cause for complaint, even if affairs abroad are uncertain and extremely unsatisfactory; while farmers are requiring money to tide them over for a short period are told by their county bankers that they are prepared to furnish funds to meet their needs. It may be said truthfully that the financial problem has been settled so far at least as where the farmer is solvent and producing average crops. It is especially cheering that banks stand ready to loan money to farmers who desire to purchase live stock for feeding purposes. Rates of interest are much lower than during the war or a year ago, and the Chicago banks are making loans on collateral at 4¾ to 5¼ per cent. Bank deposits are much larger in farming districts generally than a year ago, and bankers are giving legitimate borrowers the preference over speculators except in some instances in the leading cities. A world of grain is being converted into beef and pork products, and flocks of sheep are getting their full share, for live mutton sells so exceptionally high that owners realize the importance of giving them the best care. Just now the big markets are largely supplied with lambs fed in Colorado, for which very high prices are paid, lamb and mutton being a luxury, but Michigan and Ohio are doing their share in the production of mutton and wool. The consumption of wool and the stocks of wool are now nearly as large as before the war, and more domestic wool is being consumed than at that period. Sheepmen now have but one cause for dissatisfaction, and that is the fierce discrimination made by the packers against lambs of heavy weight, the public have been long accustomed to eating lamb chops, although in England heavy chops have the preference. Many farmers are still showing their faith in the production of beef, and more feeders have been shipped from cattle markets than a year ago, although beef cattle have declined in value in recent months. Hog feeding goes on actively, although huge marketings have made lower prices.

The Grain Markets

Grain is still exported to European war countries, even to Germany to a fair extent, but quite recently our exports have undergone a decided falling off. A striking feature of this foreign trade in our surplus grain is the steadily large rye shipments, this cereal being much cheaper than wheat and much desired for making bread. Much less corn is exported than a year ago, nor are the exports of oats on a large scale. Wheat is bringing good prices, and after sharp breaks rallies have taken place, but prices are much lower than a year ago. Corn is being fed very extensively to live stock, and more oats are being fed on farms than usual because of their cheapness. The visible wheat supply in this country is smaller than it was last year, while the rye supply in sight amounts to 12,946,000 bushels, comparing with 7,273,000 bushels a year ago. The visible oat supply is 30,266,000 bushels, comparing with 67,857,000 bushels a year ago. The corn in sight is much less than a year ago, although ample. The Department of Agriculture states that the exports from this country to Germany are mostly paid for in foreign currencies, and only in rare instances is credit extended to a German buyer. May wheat has been selling in the Chicago market around $1.19, comparing with $1.44¾ a year ago; May corn at 75 cents, comparing with 66 cents last year; May oats at 45½ cents, comparing with 41¾ cents last year; and May rye at 87 cents, comparing with 98 cents a year ago.

The Cattle Market

One of the signs of the times is the marked falling off in the demand for stocker and feeder cattle in Chicago and other western markets to ship to feeding districts in the surrounding territory, for desirable offerings have sold relatively higher than beef cattle of quality. Common cattle can still be bought at low prices it is true, but experienced stockmen have demonstrated that feeding inferior stock is not likely to pay, particularly when the price of corn is high. Of late the demand has centered in well-bred steers suitable for making choice beef, and some sales were made at $8 per 100 pounds and over, with most sales at $6.50 to $7.75.

Most stockmen in preparing cattle for the market are practicing short feeding, and very few beeves that class as choice are arriving in packing points. The bulk of the cattle offered on the Chicago market sell far below the top figures, steers that sell at $10 and over cutting very little figure. Steers are bought by the packers largely at $7.75 to $9.75, with the best at $10.25 and common lots at $6.25 to $7.50. A year ago the top was $10.90.

Hog Feeding Popular

A few months ago the United States Department of Agriculture announced that many more cattle, hogs, and sheep were held in feeding districts than a year earlier, and the receipts of cattle and hogs have demonstrated the truth of this by showing big gains over recent years, but such gains are not shown by the marketing of sheep. As was anticipated early in the winter packing seasons, there has been steadily increasing marketing of hogs, and the predicted large decline in their prices has taken place, as owners have become panic-stricken and hurried so many swine to market that it was out of the question to dispose of them without putting prices materially lower. For a long period heavy hogs greatly predominated in the western markets, causing their sale at a big discount from prices paid for light hogs, but within a short time more of the light weights have been marketed, the higher prices for corn being one of the reasons for shortening the feeding time. Meanwhile the home consumption of fresh and cured hog products has been extremely large, while in spite of the political complications across the Atlantic, our exports of lard and cured hog meats have been running for larger in volume than a year ago. The spread in hog prices has narrowed considerably, and while prime light bacon hogs still top the market, they sell at a smaller premium over the best heavy butchers than a few weeks ago. Late sales were made of hogs at $6.65 to $8.25, comparing with $9 to $10.90 a year ago.

Heavy Lambs at a Discount

As happens every year, heavy Colorado lambs are discriminated against severely by buyers, although sellers contend that heavy chops and roasts are sold in the butcher shops at the same prices as those asked for light weights. Killers greatly prefer lambs weighing from 80 pounds down, while the lambs marketed weigh largely from 85 to 90 pounds and have to be sold for 50 cents to $1 discount. Extremely few feeding lambs are coming on the Chicago market, and because of their scarcity they have been selling higher in some instances than prime killers. The Colorado lambs are being marketed freely, with Chicago getting its share, and it is stated that about 25 per cent of these youngsters have gone to market. Our Michigan farmers do not need any advice on the sheep industry, for they know that it is one of the most successful of farm industries, and they are not going to abandon it, although it does not follow that they are going to pay fancy prices for thin feeding lambs. It is quite likely that some of these feeders will make some money for their owners, but there is such a thing as paying too much at the start. On a late Monday a Michigan stockman bought in the Chicago market 300 head of choice 70-pound feeder lambs at $15.40, but larger sales have been made at $14.50 to $14.75. Recent lamb sales took place at $12.50 to $15.40.

WHEAT

Prices in the wheat market declined during the past fortnight and the trading was dull. The Chicago feeling is that the market for wheat is weak and belief is general that dealers in that market are nearly all on the short side of the market. Outside dealers are long and are carrying all the grains. Stocks of wheat are heavy and the supply will prove more than enough if some way is not found by which Europe will be enabled to purchase the American surplus. The Ruhr trouble is believed to be the cause of the slow European buying and bulls are anxious that something be done that will bring this tangle to a satisfactory finish. Those who expect an early settlement are bulls and those who look at the supply and demand situation by itself are bears. It appears that dealers are heavily short and commission houses in Chicago are advising customers to avoid the short side, fearing that the bears may be forced to cover. The general outlook is considered bearish because of abundant supplies and lack of export buying. Very little American wheat is going out of the country and there is scarcely and fresh buying by foreigners. Reports were around last week that two or three European countries were going to buy a large quantity of American wheat before the week closed but these proved to be only rumors; however, grain is going out of the country as exports last week amounted to 4,351,000 bushels compared with 3,688,000 bushels for the previous week.

Prices

Detroit—Cash No. 2 red, $1.35; No. 2 white, $1.35; No. 2 mixed, $1.33.

Chicago—No. 2 hard, $1.18½.

New York—No. 2 hard, $1.27½.

Prices one year ago—Detroit, No. 2 red, $1.40; No. 2 white, $1.37; No. 2 mixed, $1.37.

CORN

Trading in the corn market has been inactive and the tone easy. Many dealers sold out of corn because of the declines in wheat prices. There were bulls in the market who came out from time to time to support the market and losses were only moderate. Receipts are smaller than they have been and farmers seem to be inclined to hold their corn at prevailing prices. Export trade has been fair. Reports show that 1,177,000 bushels were exported last week or 2,000,000 bushels more than the previous week. Receipts at Chicago last week aggregated 3,722,000 bushels and shipments were 1,117,000 bushels. This market has many friends who believe higher prices will come in spite of the dull fortnight the market has just passed through. We are inclined to take a bullish stand and expect prices to advance.

Prices

Detroit—Cash No. 2 yellow, 79c; No. 3, 77c; No. 4, 75c; No. 5, 73c.

Chicago—No. 2 yellow, 71¾@72½c.

New York—No. 2 yellow, and No. 2 white, 90½c.

Prices one year ago—Detroit, No. 2 yellow, 66½c; No. 3, 64½c.

OATS

Oats followed other grains. The market firmed up on the close of last week but values did not change. Receipts showed a decrease and demand was unchanged. The larger markets of the country received about the same amount of grain as they did a year ago and they expect to receive less this week as country offerings are practically nothing. Oats will continue to follow other grains.

Prices

Detroit—Cash No. 2 white, 49½c; No. 3, 48c; No. 4, 46½c.

Chicago—Cash No. 2 white, 44@45c; No. 3, 42¾@44c.

New York—Cash No. 2 white, 55½c.

Prices one year ago—Detroit, Cash No. 2 white, 42c; No. 3, 39⅛c.

RYE

Rye looks weak at the present time and trading is quiet with prices steady. The price has declined slightly but such facts as can be secured on this market indicate this grain will advance.

Prices

Detroit—Cash No. 2, 87c.

Chicago—Cash No. 2, 83¼@84c.

Prices one year ago—Detroit, Cash No. 2, $1.05.

BEANS

The bean market finished last week with an easy tone and a decline of 10c per cwt. at Detroit, but the price is still above that quoted in our last issue. Demand fell off some the fore part of February but since that time buying has been more satisfactory. Students of the market declare that all the factors concerning this product lead one to believe that beans will rule from firm to stronger, with slight declines from time to time from now until the new crop. Regarding the future trend of this market the Bean and Pea Journal states:

"The main reason for belief in higher prices—not so much higher, but some—is the quantity of beans on hand at this time in comparison with former years. Michigan and California are the only two producing states with any considerable quantity of beans on hand. At the present rate of consumption, these stocks will all be gone by new crop. Oriental beans are coming in to some extent, but they can be absorbed easily and scarcely affect the domestic market. Beans from the Danubian states and other producing districts also are finding their way to the states, but the same holds true of them."

Prices

Detroit—C. H. P., $7.80 per cwt.

Chicago—C. H. P., $8.15@8.50 per cwt.

New York—C. H. P., $8.00@8.50 per cwt.

Prices ane year ago—Detroit, C. H. P., $6.35 per cwt.

POTATOES

Cold weather during the past couple of weeks has caused a decrease in receipts and the market has become firm. Demand is slow and only the better grades are moving. Cars are still scarce and not much relief is expected before warm weather when box cars can be used for getting the potatoes to market.

Last week Grand Rapids hotels, high class cafes and the more particular consumers were paying 10c per pound for Idaho baking spuds while growers a few miles from Grand Rapids were getting around 40c per cwt. for their best stock. A prominent Chicago potato dealer says its the color and the Potato Growers' Exchange say it is the grade. The Chicago dealer believes that the farmer in this state should raise white potatoes instead of russets but the potato men of Michigan state that if the potato growers will observe more closely the rules of production and marketing, grading their product more carefully, they can get

WINDMILLS! 45 YEARS OLD

Mr. B. A. Constable of Indiana, writes that he is watering 100 head of stock with a Perkins Windmill that has been on the job since 1877.

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A silent, powerful steel mill—Hyatt Roller Bearing equipped. Blades are heavily reinforced with outside and inside bands. Has automatic safety regulator. Pumps in faintest breeze. Quite, durable, and dependable.

Grease only once in two years. Large, easily filled grease reservoirs keep working parts perfectly lubricated.

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$2 for $1 HALF DRUG STORE PRICES on all kinds of Medicines (Aspirin tablets 32c for 100; $1 for 500, etc.) Rubber goods ($2 Hot Water Bottle or Fountain Syringe outfit, $1; both for $1.80; $3 Combination $1.40; Nipples 45c dozen); Razors ($5 Gillette outfit, Army style, $1; Inported Blades 45c dozen); Fever Thermometers (60c, 2 for $1); Fountain Pens ($1.50 Style 90c; Self-filler $1.20); Manicuring and Embroidery Scissors 50c, 2 for 90c); Gauzes (1x5 yards 50c), etc. Request ACEY price-lists; trial orders at JOBBING prices. Agents DOUBLE MONEY by simply showing list to friends. Irresistible BARGAINS needed by everybody. Storekeepers Write. A. C. SMITH, Wholesale & Mfg. Druggist since 1895, Box 1374, Detroit, Mich.

BUSINESS FARMERS EXCHANGE
Ads Under this Head 10c per Word, per Issue

FARM AND LANDS

FARMING BUSINESS FOR SALE—A PUREbred business in Duroc Jersey Hogs, Short Horn Durhams, Delaine Merino Sheep, Buff Leghorns, Buff Plymouth Rocks, Bronze Turkeys, White Pekin Ducks, Toulouse Geese, which I have built up with the hope of keeping my boys on the farm is for sale, including the farm of 200 acres within fifty miles of Detroit, 20 acres under timber, balance all under plow. Equiped with tractor, truck and all machinery. Stocked with registered stock. Mail orders coming in every day as the result of three years building a real business. I hope the right man, who wants a big opportunity will get this farm and the business. I am ready to take a smaller farm as part payment. If you are ambitious do not hesitate to write me, I own this farm and I am ready to listen to every proposition. I am sincere in every statement I have made in this advertisement. I am known to the publisher of the Business Farmer and he has advised me to thus lay all the facts before the readers of this publication hoping that I may find the right man, who is looking for just what I have to offer. Write me fully, at once, if you are interested, address BOX 231, in care of The Michigan Business Farmer, Mt. Clemens, Mich.

JUST OUT; BIG ILLUSTRATED GUIDE OF the organization selling over 35,000 improved farms since its founding in 1900,—filled with agricultural information—carefully planned to save you money and valuable time; hundreds of farms of all descriptions at bargain prices. See page 17 for 58-acre Michigan farm for $600 down; on improved road handy village, 35 acres tillage, good orchard; comfortable house, barn, poultry house. Age forces sale; furniture, organ, horse, poultry, full implements included, all $1,200. Productive 62-acre Michigan farm described page 18; horses, cows, poultry, sows, 15 pigs; city markets; all tillable; variety fruit; 9-room house, 85-ft. barn, silo, poultry houses, all $4,000, only $1,200 needed. Then on page 29 comes 195-acre So. Michigan farm; 120 acres tillable; variety fruit; new 2-story 7-room house, furnace, bathroom; 100-ft. barn, silo. Retiring owner's low price $13,200, horses, 8 cows, full implements, tools, etc., included, only $2,000 needed. Hundreds of bargains throughout Michigan, Illinois, Indiana, Ohio. 29 other states and Canada,—stock, furniture, tools, seed included,—ready for spring's planting. You can save time and money through this big helpful book. Copy free. Write today. STROUT FARM AGENCY, 427 Marquette Bldg., Chicago, Ill.

ONE DOLLAR AN ACRE—LET ME TELL you how to obtain 40 to 640 acres of valuable cut-over farm land in Gladwin county, Mich., at $1 per acre each year for 4 years without interest, balance 5 year mortgage at 5% interest. U. G. REYNOLDS Gladwin, Mich.

80 ACRES, GOOD HOUSE, 40 FARM LAND 40 swamp. Grass and water good for muskrat raising. Rent or sell. Inquire BOX 232, care Michigan Business Farmer.

44 ACRES, 6-ROOM HOUSE, SMALL BARN, garage and good soil. C. W. GOODEVE, Gobles, Mich.

WRITE FOR OUR FREE LIST OF 50 GOOD farms. DeCOURDES, Bloomingdale, Mich.

HELP WANTED MALE

SALESMEN, GREAT OPPORTUNITY FOR pushers to make big money selling oils and greases on liberal commission and bonus. Unlimited prospects for men who know how. Old company. Quality products. Attractive prices. Square deal. Write today to Dept. A-22, MANUFACTURERS OIL & GREASE COMPANY, Cleveland, Ohio.

WE PAY $200 MONTHLY SALARY, FURNish rig and expenses to introduce our guaranteed poultry and stock powders. BIGLER COMPANY, X682, Springfield, Ill.

WANTED POSITION—OUR SUCCESSFUL farm manager, 36 years of age, widower, no children. This man is honest, clean and a hard intelligent worker. Graduate U. of Wis. and life experience as farmer. Address him, HERMAN R. FRANZEN, Akron, Lancaster County, Pa.

WANTED GOOD MAN TO WORK GOOD farm on shares. CHAS. UPLEGGER, Rhodes, Mich.

PLANTS AND SEEDS

STRAWBERRY PLANTS FOR SALE. SENAtor Dunlap, Gibson and Dr. Burrill, 60 cts. per hundred, $4.00 per thousand. Postpaid. Progressive Everbearers, $1.00 per hundred. Postpaid. Cuthbert Red Raspberries, $1.00 per hundred, $9.00 per thousand. Postpaid. ROBERT J. DeGURSE, Ovid, Mich.

CERTIFIED WOLVERINE OATS—MICHIgan's leading variety. O. D. FINKBEINER, Greenwood Farm, Clinton, Mich.

GENERAL

LET US TAN YOUR HIDE—COW AND Horse hides for fur coats and Robes. Cow and Steer hides into Harness or Sole Leather. Catalog on request. We repair and remodel worn furs; estimates furnished. THE CROSBY FRISIAN FUR CO., Rochester, N. Y.

SURVEYOR'S INSTRUMENTS. GURLEY make, complete set. MRS. MARY ARTHUR, Marlette, Mich.

the Michigan tuber back on a price level with other producing centers. Commission merchants are expecting an improved demand at western markets within the near future.

Prices

Detroit—Michigan, $1.07@$1.13 per cwt.

Chicago—Wisconsin round white, 90c@$1.05 per cwt.

New York—Michigan, $1.27@1.38 per cwt.

Prices one year ago—Detroit, $2.08 per cwt.

HAY

Hay markets generally are steady to firm with prices showing little change from a week ago. Country loadings are reported very small on account of storm conditions at many shipping points. Receipts are therefore only fair and markets show more strength in consequence.

Prices

Detroit—No. 1 timothy, $16@16.50; standard, $15.50@16; light mixed, $15.50 @16; No. 2 timothy, $14@15; No. 1 clover mixed, $13 @14; No. 1 clover, $13@14.

Chicago—No. 1 timothy, $19@21; No. 2 timothy, $15@17; No. 1 light clover mixed, $17@18; No. 1 clover, $12@14.

New York—No. 1 timothy, $25; No. 2 timothy, $24; No. 1 light clover mixed, $25; No. 2, $23@24.

Prices one year ago—Detroit, No. 1 timothy, $19@20; standard, $18 @19; No. 2 timothy, $17@18.

Chicago—Alfalfa, No. 1 and choice, $24@27; No. 2 and standard, $17@21.

WOOL

Quieter European markets, less activity in the west and a more waiting attitude in eastern centers have resulted in taking the edge off wool trading in the midwest, with many operators feeling that prices have reached their peak. The tone is still firm, however, with no recessions from the top price levels, and with fair amounts of the various grades of wool moving.

MISCELLANEOUS MARKET QUOTATIONS

Detroit, Tuesday, February 27.

BUTTER—Best creamery, in tubs, 50@51c per lb.

EGGS—Fresh, according to quality, 36½@37c per doz.

APPLES—Greenings, $1.50@1.75; Baldwins, $1.65@1.90; Spy,$2 @2.50; other varieties, $1.50@1.75; western boxes, $2@3; in barrels, Greenings, $5; Baldwins, $5.50.

HONEY—Comb, 23@25c per lb.

POPCORN—4@4½c; Little Buster, 7½@8c.

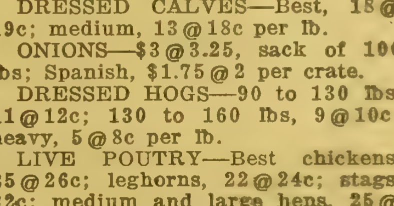
DRESSED CALVES—Best, 18@19c; medium, 13@18c per lb.

ONIONS—$3@3.25, sack of 100 lbs; Spanish, $1.75@2 per crate.

DRESSED HOGS—90 to 130 lbs, 11@12c; 130 to 160 lbs, 9@10c; heavy, 5@8c per lb.

LIVE POUTRY—Best chickens, 25@26c; leghorns, 22@24c; stags, 22c; medium and large hens, 25@26c; small hens, 24c; roosters, 17c; geese, 20c; ducks, 28c for large and 24@25 for small, per lb.

HIDES—No. 1 cured, 11c; No. 1 green, 11c; No. 1 cured bulls, 8c; No. 1 green bulls, 7c; No. 1 cured calf, 15c; No. 1, green calf, 14c; No. 1 cured kip, 12c; No. 1 green kip, 10c; No. 1 horsehides, $3; No. 2 horsehides, $2. Sheep pelts, 50@$1.50; No. 2 hides 1c under No. 1, calf and kip 1½c under No. 1.



Week of March 4

FOR the week as a whole temperatures will average below normal and precipitation above.

Michigan temperatures will be on the upward trend as this week begins continuing until about Thursday or Friday when a maximum of about 44 degrees will be reached. These figures are based from central Western Michigan; counties to north and east will be lower while those to the south and east will be the same or a little higher. Temperatures will fall suddenly near the close of the week but rise again the next day.

Tuesday will be unsettled if not actually stormy on or immediately after the middle of week there will be an increase in wind, rain or snow. These conditions will continue thru the rest of the week with storm damage more or less certain in various sections.

Week of March 11

Cold, fair weather and with temperatures more or less steady are the conditions expected during opening days of this week. For the last half readings will continue lower each day reaching a minimum about Friday.

Centering on about the 15th, Michigan will experience rain, sleet or snow and gales. By end of week the sky will clear and temperatures reach moderately cold readings but rapidly begin rising. In fact, conditions are such as to bring on a decided warm wave at the end of this or beginning of next week. Maximum temperatures of about 50 degrees will occur in central and southern Michigan at this time.

With the warm temperatures will be some severe local storms of wind, rain or hail. Heavy local rains, if not cloud bursts, are probable although the greatest damage will most likely be from wind.

This predicted warm spell will not mark a record for Michigan March warmth nor will the cold to follow next week constitute a record but we believe the change will be rapid and marked enough to cause inconvenience to many.

IF YOU CAN RAISE TON OF PORK FROM LITTER

(Continued from page 3.)

bers may nominate any litter or litters of pigs farrowed on their farms between March 1 and May 15 for an award. 2. Litters must be nominated at the time of inspection on the special blank provided for this purpose. 3. Nominations must be certified by the committee on inspection and forwarded by this committee through the county agent to the state leader of the club immediately after inspection.

Official Weights of Litters—1. Litters shall be weighed on the day they are 180 days old, if possible. If this is not possible they may be weighed any time within three days preceeding or following this date. The gain for the intervening days shall be pro-rated at the average daily gain made by the litter since birth and added to or subtracted from the scale weight. 2. Litters shall be weighed by a committee of two or more disinterested farmers, representing the swine or general agricultural interests of the county or township. 3. Reports on weights and the eligibility of litters to an award shall be certified by the committee on weighing on the special blanks provided for this purpose, and forwarded through the county agent to the state leader of the club immediately after weighing.

Basis of Awards—1. Only one prize shall be awarded to a member. 2. Awards shall be made on the basis of the weight of the litter as herein provided, but no award will be made unless all the requirements set forth under memorandum of rations, earmarking of litters, inspection of herds, nomination of litters and official weights are complied with fully and correctly. 3. Awards shall be made by the executive committee of the Michigan Ton Litter Club, under the conditions outlined in the paragraph above. 4. Prizes shall be presented at the annual meeting of the Michigan Swine Breeders' Association.

Officers of the Club—1. The officers of the Michigan Ton Litter Club for 1923 shall consist of the Presidents of the various Swine Breeders' Associations of the State, namely: W. E. Livingston, Parma, Michigan, of the Michigan Poland China Swine Breeders' Association; F. W. Alexander, Vassar, Michigan, of the Michigan Chester White Swine Breeders' Association; O. F. Foster, Pavilion, Michigan, of the Michigan Duroc Jersey Swine Breeders' Association, and Lloyd Aseltine, Okemos, Michigan, of the Michigan Hampshire Swine Breeders' Association, with V. A. Freeman, Michigan Agricultural College Extension Specialist in Animal Husbandry, East Lansing, Michigan, acting as State Leader of the Club.

Digs Deep—Works All the Soil

You can penetrate to greater depth, dig up the lower stratum of soil and mix it with top soil; make the seed bed that results in bigger crops — bigger profit—by using the

SYRACUSE
SPRING TOOTH HARROW

High carbon, spring steel teeth are clipped to tooth bars —no bolt holes to weaken them. Teeth are evenly spaced and easily adjusted to take up wear or to give desired penetration. Non-clogging—frame constructed so that trash readily works [illegible] Reversible levers—convenie[illegible] for use with either horses or tractor. Riding attachment extra.

FREE BOOK. Write today for booklet describing this harrow. Tell us what other implements you are interested in and we will also send you "Bookkeeping on the Farm," just the book for your records. Address John Deere, Moline, Ill., and ask for Package HX-6 33.

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New Invention Aids Thousands

Here's good news for all who suffer from deafness. The Dictagraph Products Corporation announces the perfection of a remarkable device which has enabled thousands of deaf persons to hear as well as ever. The makers of this wonderful device say it is too much to expect you to believe this, so they are going to give you a chance to try it at home. They offer to send it by prepaid parcel post on a ten-day free trial. They do not send it C. O. D.—they require no deposit—there is no obligation.

They send it entirely at their own expense and risk. They are making this extraordinary offer well knowing that the magic of this little instrument will so amaze and delight the user that the chances of its being returned are very slight. Thousands have already accepted this offer and report most gratifying results. There's no longer any need that you should endure the mental and physical strain which comes from a constant effort to hear. Now you can mingle with your friends without that feeling of sensitiveness from which all deaf persons suffer. Now you can take your place in the social and business world to which your talents entitle you and from which your affliction has, in a measure, excluded you. Just send your name and address to The Dictograph Products Corporation, Suite 1302Y, 220 W 42nd St., New York, for descriptive literature and request blank.

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A Kalamazoo Direct to You

BREEDERS DIRECTORY
(Continued from page 24)

A CHANCE TO GET SOME REAL HAMPshires. Boar pigs, sired by Gen. Pershing Again, Gilt Edge Tipton, Messenger All Over 10th. Gen. Pershing 2nd., and other great boars. Writes for list and prices. DETROIT CREAMERY HOG FARM, Route 7, Mt. Clemens, Mich.

SHEEP

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TOO LATE TO CLASSIFY

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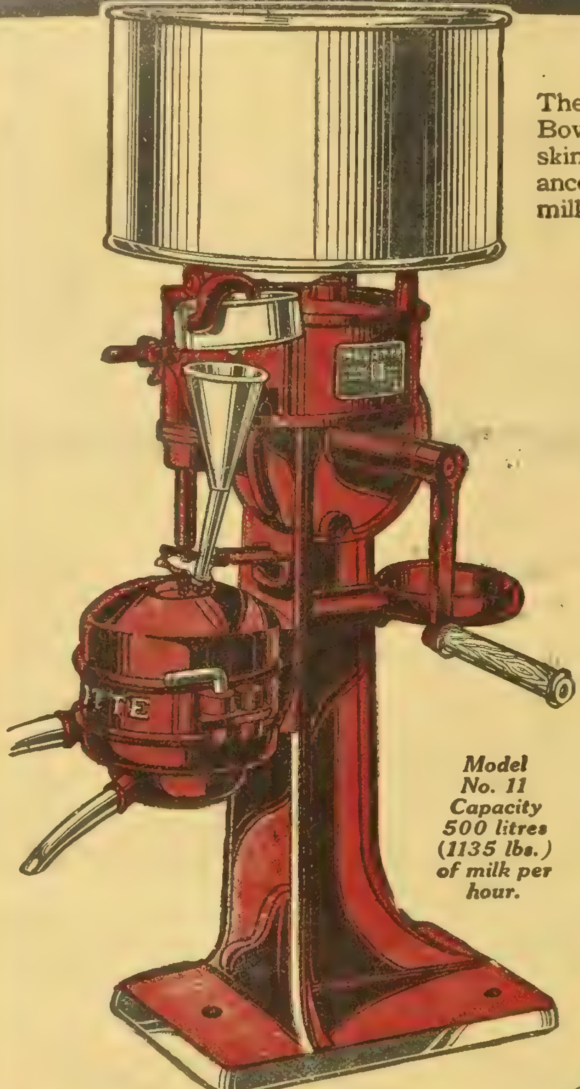
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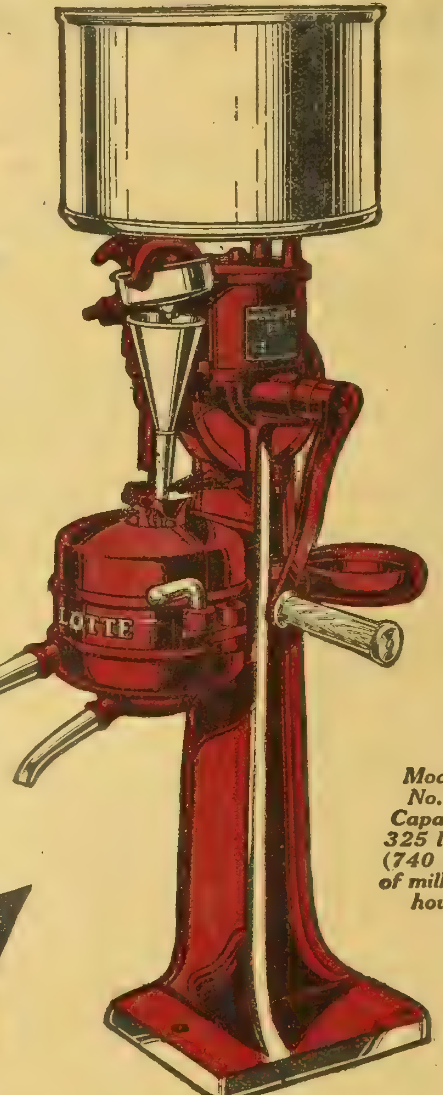
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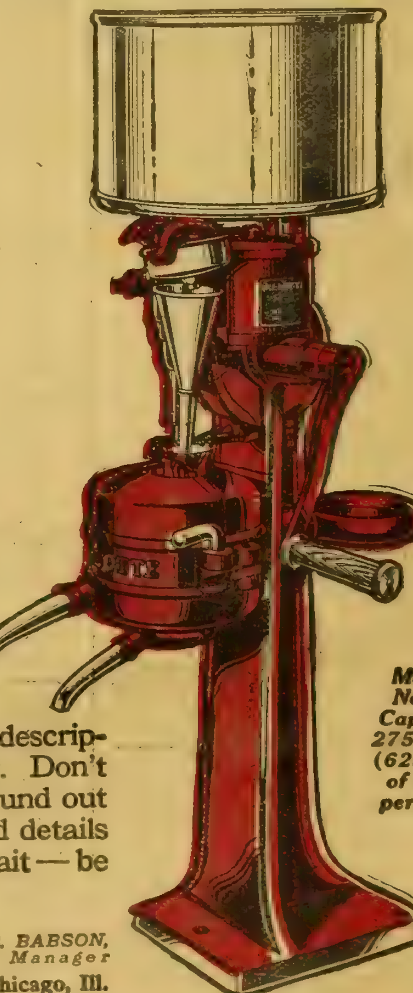
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The Michigan

BUSINESS FARMER

An Independent
Farm Magazine Owned and
Edited in Michigan

VOL. X, No. 15 SATURDAY, MARCH 17, 1923 $1 PER YEAR

Helping Mother

Read in this issue: "Can We Reduce Taxes, Yet Insure Receipts?"—"Growers Should Get 50c per Pound for Wool" says McBride—"Properly Prepared Lambs Bring Top Prices"—"How Shall I Apply Fertilizer to My Corn Crop to Increase the Yield?"

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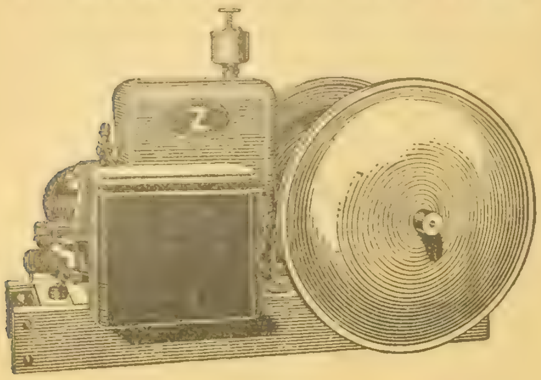

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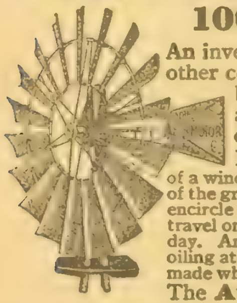

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Current Agricultural News

RIVALRY MUST STOP, LEADING CATTLE BREEDERS AGREE

AT a meeting called in Washington, February 5, by the Chief of the Dairy Division, United States Department of Agriculture, representatives of five dairy cattle breeders associations agreed to make special efforts to suppress destructive rivalry and to work together in every way possible to develop the dairy industry and particularly the purebred dairy cattle business. The breeds represented were the Ayrshire, Brown Swiss, Guernsey, Holstein—Friesian, and Jersey. More than 20 representatives were here from various parts of the country, including the presidents of four of the breed associations and the secretaries of all five.

Resolutions passed at the conference called attention to the need for more widespread testing for production records among breeders of purebred cattle; means of causing a wider distribution of purebred cattle; the recognition in counties and states of superior sires; rules governing sales of purebred cattle; means of lowering the cost of recording animals in herd books; supervision of production records; means of making the showing of cattle at fairs more educational to farmers and other visitors; rules governing public sales; scope of the work of field representatives of breed associations; and other subjects concerning the conduct of breed associations and the furthering of the interests of purebred dairy cattle. The need of more support for tuberculosis eradication by the area method was also emphasized.

BEET GROWERS ASS'N DIRECTORS MEET

A VERY important directors meeting of the Michigan Sugar Beet Growers Association was held February 23rd in Owosso at the Hotel Wildurmuth. The meeting was called to order by President Tom C. Price of Saginaw.

A sworn itimized financial report was presented by General Manager C. E. Ackerman in which it was shown that $2,992.90 came into his hands from the 113 local organizations in the state. The balance, $1,156.72 after all bills were paid. handled directly by him, was turned over to Sec'y-Treas. R. P. Reavey of Caro, Michigan. A great many locals sent their money direct to Sec'y-Treas. Reavey which is not included in the above figures. A complete report will be made in Saginaw to the Growers at their annual meeting which will be called by President Price in the very near future. The recorded membership of the organization is around 10,000 members. Membership fees were $100.00 each one-half of which was to be paid the state organization. Many locals have not as yet remitted their share and on this account the organization is hampered somewhat.

The new 50-50 contract was indorsed unaminously by the directors of the organization and a resolution was passed in which all growers of beets were urged to give the Owosso Sugar Company their acreage for beets on one of their contracts, for beets enough to give them a full capacity run this year. Being the first to recognize the principal of the 50-50 contract and their willingness to meet with this organization and iron out the details of sugar beet contracts all efforts will be made by this organization to assist the agricultural department of this company and any and all other companies that recognize the principal of the 50-50 contract for beets as the Owosso Sugar Company has done.

Mr. C. D. Bell, Sec'y & Gen. Mgr. of the Owosso Sugar Company was present at the meeting and explained their position to the directors in every detail to the utmost satisfaction of the board.

The meeting adjourned amid much feeling of good will and all expressed their desire to do everything possible to co-operate for the general good of the sugar beet industry and will ask all farm organizations and farm papers to also co-operate in making this important step a success and of financial gain to the farmer and all industry connected with the beet industry.

This organization will get out circular letters to every member explaining the new 50-50 contract in a general way and showing its merits and the importance of this great step in Michigan agriculture.

All local beet growers organizations will be asked to co-operate and call meetings at which the state organization will furnish speakers if possible to explain to the growers all the details and answer all questions pertaining to all three of the contracts now offered. Since all banks and all chamber of commerce boards are directly interested in the welfare of the farmer and his welfare they also are asked to co-operate with this organization in their efforts to place great Michigan industry on a little firmer basis.

Since the U. S. imports three-fourths of the sugar it is one of the crops that cannot be over producted easily so long as Europe, where half of this sugar was produced, must devote their acres to producing grain to feed their hungry millions who have not the money to buy our excess crops of wheat, rye, corn, pork and potatoes, at prices that we can afford to raise them. It seems a few acres of beets may be a good investment for the farmer for 1923 and a good cash crop to chance especially since the consumption of sugar is increasing rapidly and also the price is advancing rapidly.—C. E. Ackerman, Manager, Mich. Sugar Beet Growers Ass'n.

MEXICAN TARIFF FAVORS WHEAT IMPORTS

A DEMAND for American wheat is looked for throughout the Saltillo and other Mexican districts following the recent increased duty on imported flour. Flour mills of Saltillo, in spite of the fact that they are located in the heart of Northern Mexico's richest section, have been closed for some time on account of depleted stocks of wheat, says Vice Consul Earl W. Eaton, Saltillo, in a report just received by the Department of Commerce. The mills have not been buying in the United States on account of the hope that the Mexican of four centavos per kilo might be removed, this duty making it impossible for the mills to compete with flour from the United States bearing a Mexican duty of but five centavos per kilo.

U. S. STOCKMEN FACING RIVALS

AMERICAN agricultural interests and farmers can expect real competition from Argentina in the next few years, in the opinion of A. M. McKinstry, vice-president of the International Harvester Co., who has completed an extensive tour of this country and Brazil.

He said he found an increasing demand for North American agricultural machinery in Argentina and felt that, aside from the low ebb in the livestock industry, the farmers here were in as good condition as those in the United States.

"I never saw such splendid Shorthorn cattle," said Mr. McKinstry, discussing his trips to the big Argentina ranches. "They mean that sock raisers in the United States have serious competition. The same is true of the grain that they raise here. The soil in the grain country is similiar to that of Iowa, and the crops are immense. Argentina is developing some splendid farmers. They are coming along rapidly in adopting the most up-to-date farming methods.

"The Argentina corn crop has been quite seriously hurt by the intense heat this summer, and the wheat crop will fall short of early predictions."

EXPORT MARKET FOR U. S. PRODUCTS

Secretary Hoover announced last week that under appropriation made recently by Congress, the Department of Commerce is at once undertaking an exhaustive investigation of all the facts bearing upon the present situation and the outlook of our export market in agricultural products with the cooperation of the Department of Agriculture.

SATURDAY
MARCH 17th,
1922

VOL. X. NO 15

Being absolutely independent our columns are open for the discussion of any subject pertaining to the farming business.

"Hew to the line, let the chips fall where they may!"

The Michigan
BUSINESS FARMER

"The Only Farm Magazine Owned and Edited in Michigan"

Published Bi-Weekly
Mt. Clemens, Mich.

$1 PER YEAR

Entered as second-class matter, August 22, 1917, at the post-office at Mt. Clemens, Mich., under act of March 3rd, 1879.

Can We Reduce Taxes, Yet Increase Receipts?

Business Farmer's Correspondents Suggest Many Novel Plans to Answer this Paradox which is Uppermost in Minds of Our Farmers. If You Do Not Agree, Let's Have Your Plan

THE State of Michigan could wipe out debts amounting to $63,500,000 within the next ten years if a four per cent income tax were adopted, as such a tax would yield a sufficient surplus over the amount needed to run the state to accomplish this task.

If the income tax law were drawn in such a manner as to require the reporting of all incomes, large or small, the grand total reported under the law would not be far from two billion dollars in an average year. From this amount would be deducted the personal exemptions allowed. If such exemptions averaged $1,000 for persons reporting, they would amount to about $1,400,000,000. The income subject to the four per cent tax rate in an average year would therefore be around $600,000,000, and the tax thereon would amount to $24,000,000.—David Friday, President of Mich. Agricultural College.

TAXING FARMERS OR TAXING INCOMES

MICHIGAN farmers and wage earners recently helped to defeat an income tax. They are coming to see that they should not have defeated it; sometime they will correct their mistake, and Michigan will have an income tax that will exempt such incomes as those of wage earners and farmers.

A tax on gasoline is now proposed, and some farmers and some wage earners are supporting it. The proposal should be considered a bit carefully. To put a tax on gasoline might be making another mistake that would have to be corrected. Taxing gasoline was a real issue in Nebraska lately. Farmers and wage earners there gave unusual attention to it, and they defeated the tax.

There are three chief sources of mechanical power: steam, electricity and gasoline. Steam and electricity give power for railroads, factories and big business generally. Gasoline is the fuel of the farm engine, the tractor, the truck. Big business almost entirely escapes a gasoline tax. Michigan's power dams would escape it. Railroads would have no gasoline tax to pay. On the contrary the truck would be taxed, and the truck is the railroad's chief competitor, the railroads have good reason for supporting a gasoline tax: it would tend to free the railroads from taxation and to keep trucks from competing with them. The truck has been the farmers' reliance and hope in avoiding high freight rates; a gasoline tax would serve the railroads by handicapping trucks, by helping to put trucks out of business.

More is said about the rich man's automobile than about the farmer's Ford, which also uses gasoline. An income tax would reach the big income and would not touch the farmer's income, but a gasoline tax would be a tax on every trip the Ford makes to town with cream or eggs. Farmers have to go to town now and then, for marketing, for repairs to machinery, or to see a doctor. The car proves cheaper than horses for such trips, and commonly a farmer finds that he has to have a car. In general, the farmer who has no car is hoping to have one. Taxing gasoline is not a help to the farmer; it is taxing his Ford, his tractor, his buzzsaw. To tax the men best able to pay, a gasoline tax is not necessary; an income tax will do the work.

Living far from town is a disadvantage. A gasoline tax makes the disadvantage greater; the farmer who has ten miles to go must pay five times the tax paid by the farmer who has two miles to go. It is an unfair tax, not a tax proportioned to ability to pay.

A gasoline tax is a sales tax, and a sales tax is wrong in principle; it is a tax on the consumer, the man least able to pay. Organized farmers and organized labor have thought the subject through, and national organizations are positively on record against sales taxes. They have defeated sales tax proposals in Washington.

Sales taxes are no new thing. They were tried out in Egypt and Babylon and have been tried out very many times since. Regularly wherever they have been tried they have made trouble. It was sales taxes that started the American Revolution. A national sales tax would be a device to put the cost of the world war on men least able to pay it. A great American authority on taxation (Professor Seligman of Columbia University) says that it would make such trouble in this country as the country has never yet known. Nebraska farmers chose to stop sales taxes before they started; and the gasoline tax proposal was an attempt to start them. Michigan farmers may yet decide that they want an income tax and no sales taxes.

Taxation should be according to ability to pay. A graduated income tax is a tax of exactly that kind. Small incomes are exempt because they are needed; they can not be taxed without lowering the standard of living of the taxpayers. Big incomes may be taxed without any harm; but men who have big incomes are interested in advocating taxes of other kinds. The way to tax the rich man is to tax his income, not his gasoline.

A state income tax is not unfair even for meeting some local expenses, such as the expense of the country school. The incomes of millionaires are not derived from their own school districts; they are contributed by farmers and other producers who must pay for freights, gasoline and farm implements (including Ford cars). Some of the tribute that the people pay to the profit system should come back to them in support of local schools by a state income tax. A real unfairness is giving a poor education to a child merely because the child's parents happen to live in a poor district; that unfairness may be seen in many places in Michigan. There is talk of discontinuing the help that the state now gives to rural schools; instead, that help should be increased. An income tax would supply the money to increase it.

Taxes on farm lands are clearly too high. They are among the reasons why Michigan no longer produces its own food and why the farm population of the United States was 1,700,000 less in 1920 than in 1910 while cities were growing rapidly. Unless some change is made in the system of taxation, Michigan farm lands are likely to have more to pay. There is now a project to prohibit the sale of "lands absolutely unfit for agricultural purposes." Nobody will pay taxes on land that can never be sold. Sending lands back to the state would make heavier taxes to be paid by the rest of the land. That land also would tend to become "unfit for agricultural purposes" because the taxes would be more than farmers could pay.

The project seems honest but a few years ago Kalamazoo celery land and other good Michigan lands were held worthless by everybody. In its time the whole state has been condemned as worthless. We know that our plains are seldom "absolutely unfit" to grow potatoes and cherries, for example. If farming were more profitable, more of Michigan's land could be farmed. Michigan land does not need investigation as much as the marketing system that makes cities pay ten cents apiece for such apples as Michigan farmers can not sell.

There is not need to tax farm land more heavily; there is no need for the state to tax it at all. There is no need to discourage the use of gasoline. The Wall Street Journal says that the profits of the Ford Motor Company in 1922 were over $125,000,000. This is one of the indications that income taxes could easily pay the total expenses of state government in Michigan without hardship to anybody, without lowering anybody's standard of living. In comparison, a gasoline tax is too little a thing to talk about; but the little thing will do much harm if it keeps people from thinking about an income tax and getting it.—C. F., Ansley, Mich.

TAXES $120 IN 1905, JUMP TO $602 IN 1921

I HAVE just read the article by David Friday published in The Business Farmer of February seventeenth, which is interesting. Dr. Friday states the farmers should not expect prices of farm produce to go higher, and I believe Dr. Friday is right. I read an item in the "Grand Rapids Press," written by Ed. Kissenger, of Ashton, who owns one of the best farms in Osceola county. Mr. Kissenger says "tax farms according to their producing value, and tax gasoline 4c per gal., tax cars by their weight, have every one pay a poll tax of $5. In fact try and get every one to bear their share of the tax burden," and Mr. Kissenger is right. Everyone says something must be done for the farmers or our country will go to ruin, and everyone is right, but what must be done?

At our first good roads meeting held in LeRoy, in 1913, one of our progressive farmers (John A. Nelson) stated it was not our work to build the public roads, it was the Federal Government's job, the same as was done in the country he came from, and many other countrys, and Mr. Nelson is right, but when will it be done?

With the present auto traffic the government should build and maintain all Trunk Line and mail routes, it is the only perminent cure for our present condition. Any other system must be inferior, and a make shift, owing to the present distribution of our wealth. Our law makers in Washington are wasting a lot of wind and have been for several years but have done very little to benefit our hundred million people. One bunch wants to cover the ocean with U. S. Ships to compete with foreign countries, another bunch wants to build another Panama canal, another bunch wants to increase the farm loan from $10,000 to $50,000. All this is rot and a damage to our country. Any farmer who demands more than $10,000 is a capitalist, and should be able to farm without suffering.

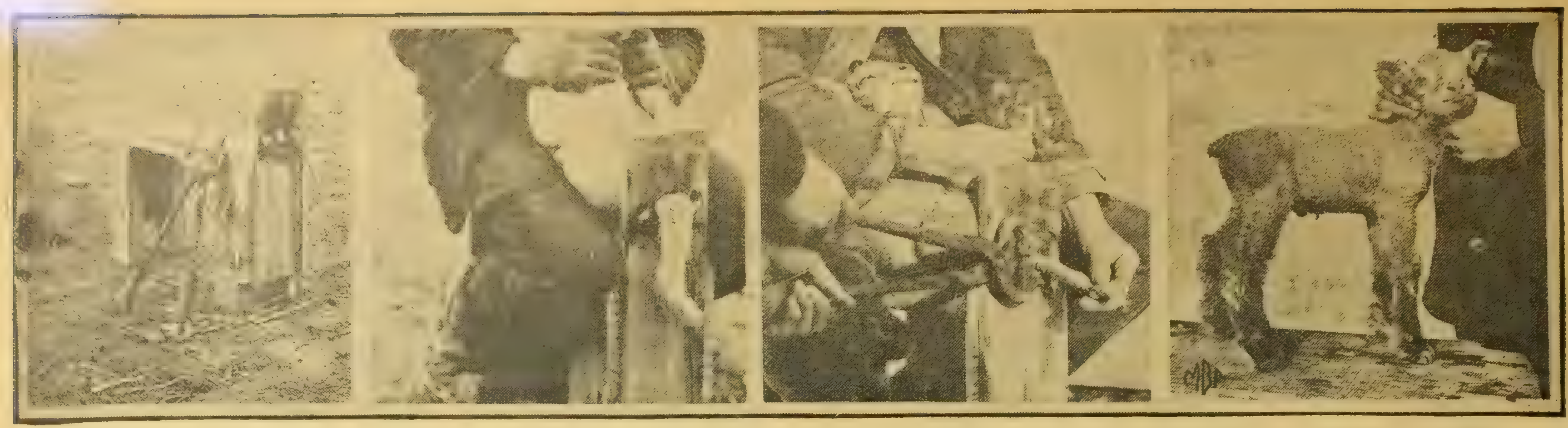
What do we want with another Panama canal, or why build more ships while our harbors are full of them rotting. Our country cannot compete in ocean freight rates with countries where wages are so much lower, and we must have lower rates if we sell our produce. With the great auto factories turning out thousands of cars every day, and the public calling for more roads and better roads, and our state school department demanding of our rural school districts more expensive equipment and continually raising the amount of tuition they must pay the graded schools, and the higher wages for teachers added to our regular township, county and state tax, has raised the taxes to about six times what they were in 1905. I have just looked up my tax receipts for 1905, and I paid on a certain lot of property, $120.69, and on the same property without any improvements made since 1905 the tax for 1921 was $602.82 and the prices on farm products are not much different. Many farmers are leaving their farms and taxes unpaid, this will bring bad results, some of our statesmen are trying to find a remedy, but have met

(Continued on Page 15.)

Growers Should Get 50c Pound for Wool

I HAVE had repeated requests for advice on wool markets and prices. I have several folios of reports, forecasts and subject matter relating to foreign and domestic wool conditions. These can be reduced to advices on prices which is that the average Michigan wool clip should bring the grower 50c per pound. Any forecast or price advice based on statistics may be negatived by a concerted effort to lower the market by buyers during the marketing season, or by the timidity of the sellers failing to hold to a fair market value. There is little possibility of local dealers exerting marketing influences as in the case of beans, for example. Many dealers are "financed" or are simply commission buyers for some wholesaler. Unfortunately there is no community of advices in agriculture operating to advise sellers and acquaint them of the common demononator of values, as Master of the Mich. State Grange A. B. Cook says, the "mark to shoot at."

From the consensus of markets in London, Boston and feelers being tried out in the west, the figures quoted seem probable. Based on production costs, the price is also equitable. However if losses sustained during the last three years are considered the price is low. The general price level of wool on this basis is according to the price index 166 as compared to 100 in 1914. The general price level of all commodities is 164. Iron 170. Lumber 193. Railroad rates 188. Cotton 209. Wool at 50c per pound is not out of line with other staple products. Michigan is second only to Ohio in the production of bright wools, producing around ten million pounds, this including pulled wools. Wool west of the Mississippi river is rated lower than Ohio and Michigan. Ohio and Michigan can make their prices to correspond to the cost of production by consistantly holding for 50c per pound for average clips of wool.—Jas. N. McBride, Pres. Michigan Sheep Breeders Assn.



Lambs for market should be docked as they are more attractive to the buyers. Docking makes the hind-quarters appear more blocky and it also adds to the cleanliness of the animal.

Properly Prepared Lambs Bring Top Price

Market Value of Lambs Greatly Increased Through Docking and Castration

DOCKING and castration of lanbs destined for the market materially increases their market value because of improvement in quality, according to the United States Department of Agriculture.

There are several reasons for this. Docking makes the hind-quarters of lambs appear more blocky and deep and it also adds much to the cleanliness of the animals. Thus they appear more attractive to the buyer when they reach the market. Ewes which are to be kept in the breeding flock should also be docked as a large portion of the undocked ewes will fail to breed.

Ram lambs over three months of age tend to grow thin and develop coarse shoulders and neck. Thin-fleshed, coarse, open-shouldered lambs are not of a desirable quality and when they reach the market they are discriminated against by the buyers because of these features. If the lambs are castrated and docked when they are a few days old their growth will not be retarded. On the other hand they will present a better appearance and if they have been properly fed will have a smooth, desirable finish at four months of age. Lambs of good quality in this condition command a premium over bucky and undocked lambs at the markets. Oftentimes during the period when the Jersey City market is receiving large numbers of lambs from the Eastern states, lamb prices at that market fluctuate sharply because of the high percentage of undocked and bucky lambs which are discriminated against by buyers seeking a high-quality priduct. Improving the quality of the lambs intended for that market will help to stabilize prices, according to members of the trade represented there.

Wether lambs are quiet and easily handled. They feed well and make good gains in flesh, particularly in the hind-quarters, the region of the high-priced cuts. Thus a better quality of carcass is secured together with higher market prices for wether lambs. Meat of this quality when sold by the retailer will result in a well satisfied customer and a future demand for more meat of the same quality. It is often stated that lambs which are to be shipped to the market before they are four months old need not be castrated. This is a mistake as some of the ram lambs will begin to worry the rest of the flock and to lose flesh before this time. Furthermore, the market may not be strong at the time the lambs reach this age and they may be held back by the owner for several weeks for higher prices. During this time the ram lambs will not only rapidly lose in weight but if kept with the rest of the flock they wll also cause the ewes and ewe lambs to lose flesh.

Neither docking nor castrating are dangerous operations if properly performed. Lambs should be docked and castrated when they are from seven to fourteen days of age, as there is practically no retarding of growth and less pain than is the case when they are older. Lambs may be both docked and castrated at the same time, thus avoiding the necessity of handling them twice. The operations should be performed on a clear, cool morning and care should be taken that the animals are not excited or overheated either before or after the work is done.

A sharp knife or some type of docking irons may be used to do the docking. In either case the tail should be cut at the first joint which occurs about one inch from the body. If a knife is used the lamb should be held with the feet up, the rump resting on the top of the fence or upon the knee of the person assisting in the work. There is less pain when the knife is used but there is more loss of blood and it is sometimes necessary to tie a string around the stump to prevent the lamb from losing a large amount of blood. This string must be removed a few hours later. When hot irons are used it is necessary to rest the lamb on a board. The irons sear the stump as the cut is made and this prevents the loss of blood. The wound will heal more slowly, however, than when a knife is used.

In castrating, the lamb should be held in the same position as for docking. The lower third of the schotum should be cut off and the testicles pulled straight out. It is highly important that the wound be washed with an anticeptic solution and that the hands and knife be disinfected for each operation. It is also necessary to furnish clean quarters for the lambs in order to prevent infection of the wounds.

More and Better Potatoes to the Acre

MY certified seed was grown on five acres of well manured clover-sod ground. On four acres I used two tons of commercial fertilizer but did not use any on the other. On the four acres I planted certified seed; on the other mixed seed, mostly Russets. The unfertilized seed yielded 252 bushels; the other four acres 419 bu. In experimenting with the fertilizer I used one ton on the first acre and one third of a ton each on the other three. The one acre yielded 504 1-2 bushels, the other three averaged 390 1-3 bushels. The potato rows were thirty inches apart each way, with an 85 percent stand. I am a firm believer in more and better potatoes to the acre rather than more acres.

My certified seed won first prize at the Michigan potato show in Grand Rapids in December. I also won four other prizes at the exhibit.

I hill-select my seed to plant, taking hills with vines free from disease and with from nine to nineteen perfect potatoes in each.—By E. Sutton, First Prize Winner at Michigan Potato Show, 1922.

"How Shall I Apply Fertilizer to My Corn Crop to Increase the Yield?"

By Special Correspondent

THIS is a question of interest to many corn growers in Michigan and one on which there is not a little difference of opinion among farmers and students of soil fertility as well. The best method, undoubtedly, will vary somewhat in accordance with soil and climatic conditions and with farm practice. Sandy soil, low in organic matter, and heavy clay soil rich in organic matter respond very differently to fertilizers. Rainfall during the growing season is also an important factor in determining the results to be obtained from an application of fertilizer.

Some farmers prefer to apply the corn fertilizer in the hill or row, while others are convinced that it should be drilled solid or broadcasted. The arguments for and against the two methods can be stated briefly.

Fertilizer is applied in the hill so as to be near the seed and give the young corn a "running" start. The corn gets ahead of the weeds and can be cultivated several days ahead of corn that has been fertilized broadcast. The increased yield is usually larger in proportion to the amount of fertilizer used in the case of hill or row application. The claim is made, however, that when only 75 to 125 pounds of fertilizer are applied in the hill or row, it is all used up by the corn crop or if there is a residual effect on the next crop it is only in the old hills or rows and not of much value. It is also claimed by some that small applications of fertilizer cause the crop to draw more heavily on the supply of plantfood in the soil. But so does anything else that is done to increase the yield, such as the use of good seed or careful cultivation. The old adage, "You can't eat your cake and have it," applies very well in this instance. Every bushel of corn takes its toll of plantfood and the only question is, how can this plantfood be supplied most economically?

There is a common impression that fertilizer in the hill cause "bunching" of the roots and that as a result corn fertilized in this way is more likely to be injured by summer drouth. The Michigan Experiment Station has carried on a careful investigation and has concluded that there is no "bunching" of roots nor injury from drouth that can be traced to hill application. The Wisconsin Experiment Station has obtained similar results and it would therefore seem that this objection to hill application of fertilizer may not be so important as was formerly thought to be the case.

There is no need for explanation as to where fertilizer was applied in this field and where it was not—results speak for themselves.

Fertilizer attachments for corn planters are, in many cases, poorly constructed. They too often drop the fertilizer in a "bunch" and do not mix it with the soil. Some of them even deposit the fertilizer in direct contact with the seed and this is very likely to delay or even to prevent the germination of the seed. There is little if any danger in the hill fertilization of corn if the fertilizer is distributed so that it is mixed with the soil near the seed but not in direct contact with the seed.

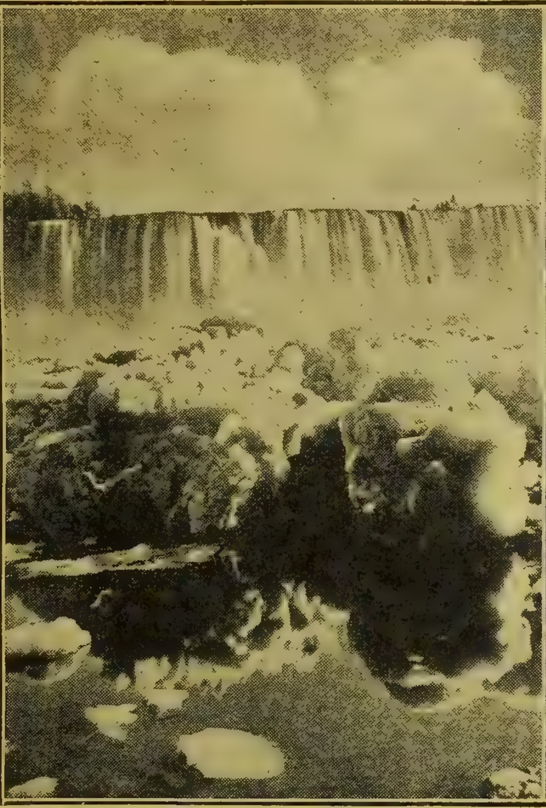
It is pretty generally agreed that the bulk of the fertilizer used in a general rotation should be applied broadcast. Corn fertilized in this way, however, starts slowly and is not benefited materially by the fertilizer until several weeks after planting. There is, of course, a large residual effect from a broadcast application of 200 to 300 pounds of fertilizer on corn.

All things considered, the best results will be obtained if a small amount of fertilizer, say 75 to 125 pounds, is applied in the hill or row and the rest of it applied broadcast. In this way the advantages of both methods of application can be obtained. The corn will be given a quick start, the demand of a larger crop for plantfood will be met, and the residual effect on the following crop will be worth while.

PICTURES FROM FAR AND NEAR

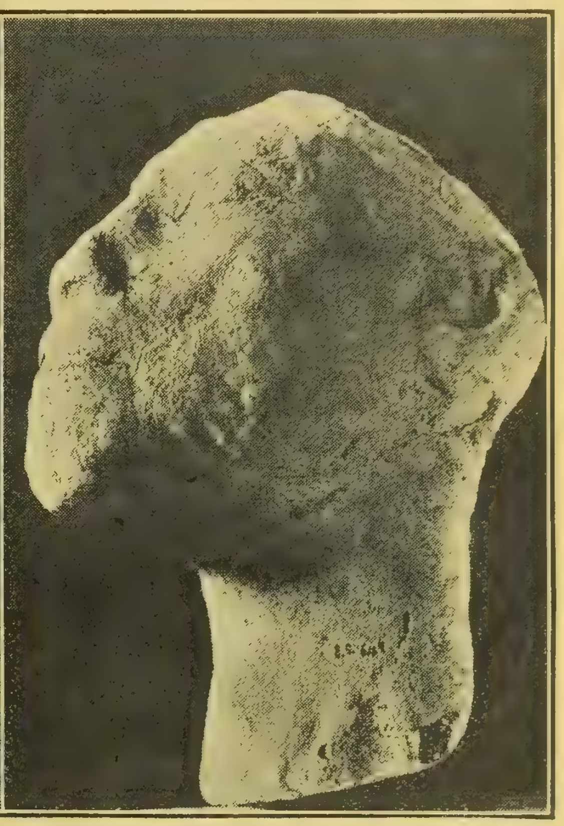
MICHIGAN WOMAN FIRST TO TALK OVER TELEPHONE.—"As near as I can recollect it was in the summer or 1874," says Mrs. E. G. Sovereign of Bay City, first woman to speak over the telephone. "The first words I spoke were, 'Can you hear my voice?' and was surprised when I turned to listen to hear Dr. Bell answer, 'Yes, I can hear what you say.'" This conversation took place over a wire one and one-half mile long at Brantford, Ont.

COW TESTERS MEET AT M. A. C.—The members of the Michigan Association of Cow Testers met last month at the M. A. C. The aim of the meeting was to get a better understanding of the value of the work being done by the testers. The officers and members are as follows, reading from left to right: Front row—B. L. Peck; Harold J. Schaner; S. P. Sexton, Director; Roy Chilberg; Eldon Bruce; Karl S. King; Nicholas Gordon; J. H. Mathieson, Secretary-Treasurer; H. F. Simmons. Middle Row—Ernest Johnson; H. E. Frank; Leslie Wilcox; Fred Leonard, Vice President; Hans Kardel; Oscar Sundell; Hoyt Shisler, President; Eldron Barclay. Back Row—Percy Parkyn; R. G. Powell; Paul Hayward; L. J. Carter, Director; Jesse Huggett; L. D. Leisenring; Fred Walker.



KING WINTER PLACES HIS SEAL.—Together with Mother Nature, he has produced a picture that for loveliness and grandeur surpasses anything mere man could do. Here is Niagara Falls, in the winter time, with ice and snow adding to the splendor of the scene.

JACKIE COOGAN ACHIEVES AMBITION OF HIS LIFE.—Little Jackie. 8-year-old screen actor, reached the height of his ambition when under the kindly instruction of the big traffic cop on 42nd St., and 5th Ave., New York City, he told them when to "stop" and "go".



RELICS OF KING TUT'S FATHER-IN-LAW.—Cast of a death mask of Akhnaton, father-in-law of King Tut-Ankh-Amen, whose tomb was opened recently. The death mask was found in an undertaker's establishment at Tel-el-Amarna, Egypt, and is now on view in the University Museum, Philadelphia, Pa.

SEVEN CHILDREN IN FOURTEEN MONTHS.—That is the record of this southern Maryland ewe. It is rather hard to believe, but here is the record: Twins first in November 1921 and again in May 1922 and final triplets January 1923. The home of this prodigy of the sheep world is the birthplace of Francis Scott Key, author of our national anthem "The Star Spangled Banner."

COMPLETES PAINTING OF PRESIDENT HARDING.—Miss Margaret Lindsay Williams, an artist of renown, came here from Cardiff, Wales, to paint a portrait of the president for the London branch of the English speaking union. Miss Williams completed her work and had the president for his last sitting at the White House, where he consented to be photographed with the artist and her canvass.

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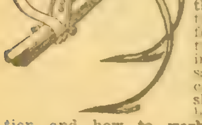

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FREE MEAT CURING BOOK
To learn the best methods of curing meat, write to E. H. Wright Co., 850 Broadway, Kansas City, Mo., and get absolutely free a new $1 book, "Meat Production on the Farm," which tells all about meat curing. Free to farmers only. Send name today.—Adv.

Farmers Service Bureau

(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full name and address. Name not used if so requested.)

WORKING FARM FOR THIRD

Please inform us the terms working on a farm for a third.—Mrs. C. E. G., Concord, Michigan.

—Under the one-third stock lease the landlord furnishes farm machinery and all stock and tenant furnishes the labor and gets one-third of the proceeds. Such expenses as thresh bill, seeds, etc., are divided in same proportions as proceeds.

If the landlord furnishes nothing but the farm and the tenant furnishes horses, machinery and labor, he is entitled to one-third of the small grains as the proceeds and the tenant pays for the seed and thresh bill.

The hay is usually divided equally and if baled the landlord pays half. Such crops as hay the landlord furnishes the seed.—F. T. Russell, Prof. of Farm Management, M. A. C.

ENTITLED TO HALF OF STRAW

I have been working on a farm on shares beside of my own farm. The man that is agent of the farm reserves the house and I am working the fields. We do not keep any stock on the farm, raising mostly grain. The agent of the farm sold the straw and refuses to pay me half. The contract doesn't say anything about the straw but it does say: "Each to get one-half the proceeds derived from the the sale of all grains, produce, etc., taken off said farm." Am I entitled to one-half the money from the straw? This straw amounts to about $70.00. I raised the straw and consider I ought to have half of it. Will the farm hold the straw in such a case.—P., Concord, Mich.

—The clause in the contract providing that each shall receive one-half the proceeds derived from the sale of grain, produce, etc., taken from the farm would include proceeds derived from the sale of the straw, and in the absence of a stipulation relative to the straw, each would be entitled to one-half the proceeds from its sale. Some settlement might have to be made to cover the cost of marketing of the straw.—Asst. Legal Editor.

APPLICATION FOR DRAIN

I am working a farm which is owned and occupied by my father and mother. My father ditched the farm several years ago but made no outlets and we have no county ditches in our neighborhood and father's ditches are not large enough to take the water away. What must I do in order to have the drain commissioner establish a drain as such a drain is badly needed and would be a great benefit to the neighborhood? Would I have the right to get out an application the same as if I owned the land and would I have the right to sign an application were one made out and how many signers would it have to have in order to secure the drain?—Subscriber. Vassar, Mich.

—If you have the power of attorney from your father and mother, giving you general powers to deal with their property you would thereby be authorized to sign an application for the construction of a drain.

Section 1 of Ghapter 3 of the Drain law provides that a commissioner will have authority to act upon receipt of an application signed by not less than one-half of the free holders whose lands are traversed by the drain. You should therefore obtain an application from the Drain Commissioner of your county and procure the signatures of not less than half of the property owners whose lands would be traversed by the drain to be applied for.—H. H. Partlow, State Highway Dept.

QUESTION OF NEGLIGENCE

Two of my horses got out in the road. I went after them, while driving them home I met a car. It was just getting dark. A few rode in front of the car the horse walked up into the road. The car struck it and broke its leg. I called a veterinary and he advised me to kill the horse. The driver claims he did not see the horse although he had the lights lit. He was driving at the rate of about fifteen miles per hour. His car was slightly damaged and he told me that he would expect me to settle his bill, on the ground that I was not carrying any light. Can I get pay for my horse?—C. C., Lake Odessa, Mich.

—Your recovery in this case would depend upon the question of negligence. In a recent case, the Michigan Supreme Court held that it is negligence for the driver of a car to drive at such a rate of speed that he is unable to stop within the distance covered by the range of his lights. If your horse had been standing still in the road, it would be negligence on the part of the driver to fail to see it in time to stop. However, if the horse ran into the road in front of the car so as to take the driver by surprise, his failure to stop his car in time would not be negligence. The only way you can recover is by showing that the driver was negligent and that you were not negligent.—Asst. Legal Editor.

NATURAL GAS

I know where there is a place that if you light a match and pass it over it burns like gas. No snow lies on it in winter and it burns till smouthered and there is no smell of gas.—H. L., Gladwin, Mich.

—I would advise that very probably the inflamable gas is actually natural gas. It may have a slightly different composition than ordinary natural gas which will account for the lack of smell. I suspect that you have found one of the numerous gas seepages which occur in a number of areas in this State.

In southwestern Macomb and southeastern Oakland counties the farmers use some of the surface gas, which is struck in wells, for heating and lighting their homes. A gas spring in Montmorency county is so large that probably if the flow could be successfully trapped it would be sufficient for lighting a group of houses. Gas wells of considerable size have been struck in Manistee county around Portage Lake. Such signs are not significant since they are in areas of leakage and not of accumulation. The pool, if the gas is derived from one, in most cases is distant from the seepage. Drilling in the vicinity of such signs therefore would be of little use in most instances. Many wells have been drilled on the basis of these signs and nothing worthy of mention has been found.—R. A. Smith, State Geologist.

REFUSES TO PAY DEBTS

Your Service Bureau seems to answer all questions I would like a reply to this one. A signs notes with B to the extent of $2,000.00 and secures no mortgage. B in about two years refuses to either pay interest or notes or to even renew them. A gets a judgement on stock and machinery being forced to hold a sheriff's sale, and secured about $300 that way. B and his wife own 90 acres in joint deed and A has been told that there is no way to secure a hold on this farm as it is held in a joint deed. If this is a law in Michigan, why couldn't any man that holds a joint deed with his wife on property, refuse to pay his honest debts?—G. G., Breckenridge. Mich.

—The property could not be reached for the satisfaction of the debt. However, if the husband purchased the property after the debt accrued, taking a joint deed with his wife, his undivided half interest could be levied upon for the debt.

Before any person extends credit to another or takes his note without security, he should be sure that the debtor is financially responsible, and if he is depending on certain property out of which to satisfy the debt, he should ascertain whether that property can be reached by creditors.

The law always looks to the securing to every man of his rights and aims to protect him in those rights from unscrupulous practices by others. However, it expects in return that every man will exercise reasonable prudence in his business dealings, and it cannot always furnish a remedy when the injured party has not taken proper precaution in protecting his own interests.—Asst. Legal Editor.

JOINT STOCK LAND BANK

Could you explain the joint stock land bank and how loans are obtained from them, and the difference between is and the federal farm loan. —J. N., Sanilac County, Mich.

—The Federal Farm Loan Act provides for a dual system of banking, consisting of Federal Land Banks and Joint Stock Land Banks. Both are under the same supervision. Federal Land Banks loan their funds through National Farm Loan Associations, and each borrower must take 5 per cent of his borrowings in stock with a double liability on that stock, and must help maintain the association while he is a member. These associations are limited to loans of $10,000.00 and to men who are actually living on the farm. This bank is limited to loans not to exceed $37,500.00 to one individual, but is not limited to men who actually live on the farm, just so they use the funds for agricultural purposes.

The purpose of these two types of banks was to give the farmer the choice of joining a co-operative institution or making a loan direct through a Joint Stock Land Bank without any further liability. This is the reason why there has always been a difference of one-half of one per cent between the interest rate charged by the Federal Land Banks and by the Joint Stock Land Banks. The actual cost of the money to the Borrower is the same.

There is no commission charge in our loans. The total charge we make is a flat charge of $5.00 per thousand to cover the services of the Federal Appraiser and the Title Examiner. We require that every application coming to us be accompanied by an application fee of $12.50, which is credited to the $5.00 per thousand charge when the loan is closed. Our Mortgages are exempt from the Mortgage Registration Tax in the State of Michigan.

On account of the limited profits, however, to Joint Stock Land Banks in this business, it is necessary that we receive a number of applications at one time in order to enable us to make all inspections at a reasonable cost, unless an application is for a large amount.

If any of your neighbors or friends whom you feel would be desirable moral risks, and who own well managed farms, wish to avail themselves of this type of financing, we will gladly write them at your or their request.—John H. Kraft, Vice-Pres., First Joint Stock Land Bank, Cleveland, O.

HUNTING WITH FERRET ON OWN FARM

I would like to find out if a person is allowed to hunt with a ferret on their own farm, and do they have to get a permit to have one in possession?—W. K., St. Charles, Mich.

—The law provides for the issuing of permits to farmers and fruit growers only, to use a ferret in hunting rabbits on their own lands. Thse permits are issued at the discretion of the Director of Conservation.—Dept. of Conservation.

LOGS FOR BARN FLOOR

Would poplar logs eight inches through at small end flattened on one side be strong enough for barn floor with three lengths for barn 36 feet wide? That is with 12 feet between supports in basement. 16 feet to eaves of barn. How close would they need to be spaced? Would peeling them when green help the strength of them?—R. R., Farwell, Mich.

—Poplar logs 8 inches through at small end placed 18 inches apart would give sufficient strength. Peeling them would lessen the likelihood of their decaying and would be advisable.—F. E. Fogle, Asst. Professor of Farm Mechanics, M. A. C.

HOW TO PROCEED TO COLLECT NOTE

On Dec. 12, 1921, our rural carrier borrowed $25 from me. He said some of his checks were lost in the mail and he needed the money. I gave him a check for $25 and he gave me a note for $30 due in six months. When the note was due in June I asked for the money. He said he could not pay until July. In July he put me off until August and in August he said he would pay it in the fall. In December, 1922, I left the note at the bank for collection. The cashier of the bank sent him notice to which he paid no attention. This man has no one to care for but himself. Would you please let me know how to collect this money. Any information you can give will be greatly appreciated.—F. O., Minden City, Mich.

—If there were any indorsers on the note, you could proceed against them, after making proper presentation to the maker for payment, and after giving notice to the indorsers, your only recourse would be to sue on the note.—Asst. Legal Editor.

SMALL WHITE BUG AROUND LILY ROOOTS

I have a lily and there are small white bugs in the ground around it. When I put water on the lily they come to the top and float on the water and when water settles down they go back in the ground again. What can I put on to kill them? The lily is doing fine. The bug has been in the ground about one year.—A. W. H., Fairgrove, Mich.

—I cannot, of course, be sure what the insect is but I would suggest that a little black leaf forty or fifty percent nicotine sulphate be added to the water which is applied to the plant, about one teaspoonful to a pint of water should be sufficient and if this is used several times in watering the plant I have no doubt that the insects will be destroyed without injury to the plant.—R. H. Pettit, Professor of Entomology, M. A. C.

ENTITLED TO DOWER INTEREST

I am writing for information. Can an old lady, marrying an old man, collect anything from the estate on the death of man, the woman not helping accumulate any of the property but merely taking care of man? —H. D., Big Rapids, Mich.

—Upon the death of the husband without having made a will, the widow would be entitled to her dower right interest, that is, the use during her natural life of one third of the lands which her husband owned while they lived together. Or she may choose instead of dower, her interest as an heir of her husband. In the latter case, if the husband had two or more children, the widow would receive one-third and the children two-thirds of the estate. If there were only one child, the widow would receive one-half and the child one-half. If there were no children, nor heirs of a deceased child, the widow would receive one-half and the husband's father, mother, brothers, sisters, nephews or neices one-half. If there were neither of the above named relatives living, then the widow would receive the entire estate.—Asst. Legal Editor.

HIRING SCHOOL TEACHER

Can a director alone or the three officers of a school district alone hire a teacher at the time of the Xmas vacation or first of January? Has the law changed in the last few years when they used to take a vote of all the one at the school meeting in July? A few years ago no teachers were hired until the night of the school meeting in July. Last Xmas our director hired the teacher again for another year.—E. M., Clifford, Mich.

—The board of education is the authority for the employment of teachers and they may do so at any time during the school year. The director alone cannot legally hire a teacher. The legal voters have not had the right to direct the employment of the teacher in over forty years at least. Section 13 of Chapter 3 of Act 164 of the Public Acts of 1881 provides that the board is the authority for employing the teacher and such has been the law ever since.—W. L. Coffey, Dept. of Public Instruction.

CAN MOVE OR SELL

A rents a house and barn from B for cash rent, no land included. A buys feed for all his stock, draws it there and feeds it. Is B entitled to the manure because it is not on boards or can A move or sell it if he wishes?—L. B., LeRoy, Mich.

—Under the circumstances you mention, the manure would be personal property, and A could remove it. The fact that it is not on boards makes no difference except that it is more difficult to ascertain the amount A is entitled to.—Asst. Legal Editor.

Keep the Business Farmer Coming —See page 13.

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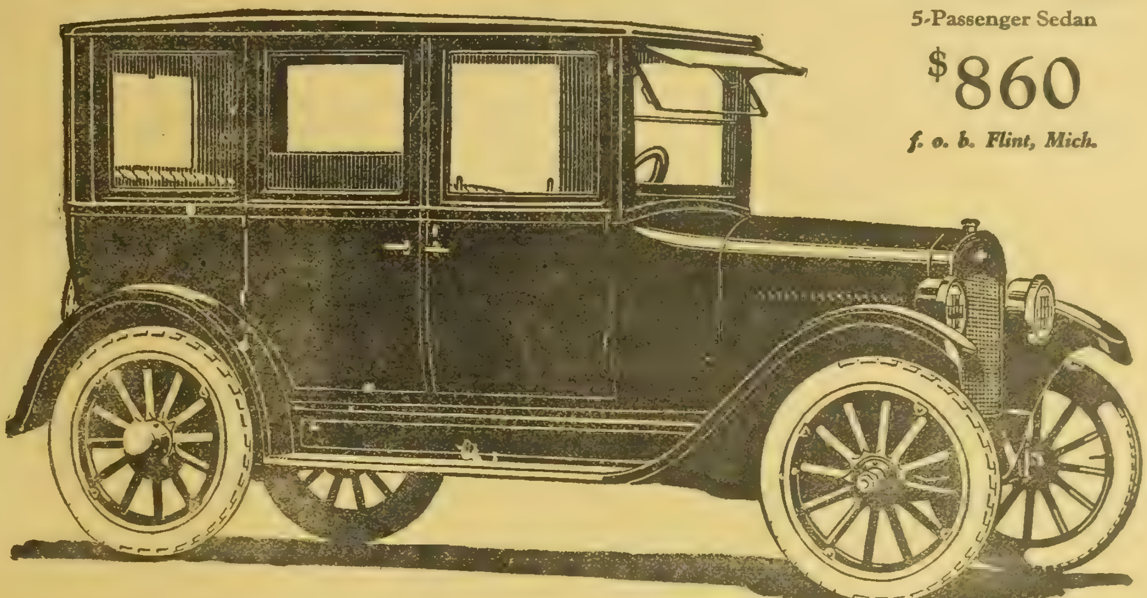

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Applications will be considered from high grade dealers in territory not adequately covered

The Truth About Henry Ford

By Sarah T. Bushnell

Mr. Ford and Religion—His Wife and His Home

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(Continued from March 3rd Issue)

The Ford residence is of gray native stone and built along the Gothic lines. His study is in the round tower. Long bookcases shelter his books, the technical ones among them showing plainly their constant use, and a large window looks toward the bungalow which Mr. Ford built in the first days of his prosperity as a resting place where he would be safe from intrusion. Its broad veranda and great fireplace surrounded with easy chairs make it comfortable in summer or winter. The study windows overlook what at first glance seems an Indian mound, but which is the natural shelter for the electric boat which Mrs. Ford drives up and down the river. All the windows give a view of the River Rouge, which has been compared to the James in Virginia.

Within a short distance of the residence is the gray stone garage in which are Mr. Ford's laboratory and experiment rooms, and where he perfected the tractor on which he worked harder than on any other of his inventions. In reality this garage building is a modern power plant with exceptionally heavy walls to shut in all noise. Here the inventor often labors until late in the night, just as he did in the red brick barn in Bagley street, Detroit, where he made his first car.

* * * *

About ten years ago a certain clergyman in Detroit, who was ambitious to build a costly church, went to Mr. Ford for a contribution, hoping to get a large sum.

"No," replied the millionaire, "I don't believe in expensive churches."

"Then," said the clergyman, "will you come to my next service and let me preach a sermon especially for you? I hope to convince you that you are wrong.".

The following Sunday the minister cast a searching eye over his congregation; then he announced his text. It was from I Chronicles, 17 chapter and first verse; "And it came to pass, when David dwelt in his house that David said to Nathan, the prophet: 'Lo, I dwell in a house of cedar, but the ark of the covenant of the Lord dwelleth under curtains.' " The minister raised his eyes from his Bible and exclained: "The word curtains used here means tents." He followed the text by reading the verses one, two, four, five and nine with especial emphasis on the fourth, fifth and ninth. Then he turned the pages to II Samuel, 7 chapter, and read:

"And Nathan said to the King, 'Go, do all that is in thine heart; for the Lord is with thee.'

"And it came to pass the same night, that the word of the Lord came unto Nathan, saying:

" 'Go and tell my servant David, "Thus saith the Lord, Shalt thou build me an house for me to dwell in.

" 'I have been with thee whithersoever thou wentest and have cut off thine enemies from before thee and I will make thee a great name, like unto the name of the great ones that are on the earth.' "

The Clergyman launched into his sermon. After he was well started he fixed his eye on Henry Ford and said: "The church is the dynamo of the Lord's business. It is right and proper that churches should be beautiful and should be as lovely as it is possible to make them. Why should we live in fine houses, houses of cedar, and worship the Lord in tents? There is a rich man in this city, a very rich man, who considers that his engine is the dynamo of his factory. It has always been the custom to place such engines near the rear, in an ugly section of a factory, facing an alley. This rich man had put his engine in the front part of his factory, it is in a beautiful room with pure white tiling. He keeps men constantly polishing and cleaning it; he has surrounded it with handsome plate glass windows. The engine faces the most expensive thoroughfare in our city. Sightseers stop to admire its immaculate beauty. The very rich man loves this engine; he surrounds it with the best that money can buy. He considers it the dynamo of his business. This is true with churches. They are the dynamo of the Lord's business. They should have in and around them everything that is lovely and beautiful. No expense should be spared in the construction of a church nor its location."

The minister went on and on with his argument. The following week he went to see his richest parishioner. No mention was made of the sermon until he was leaving.

"I haven't changed my mind," said Mr. Ford then. "I feel just as I did. I don't believe in expensive churches. But I do think that a minister should be paid a salary that will enable him to live in comfort, and lay by something, so that he can buy a home or a farm or a little place in the country where he can round out his last days. I'm going to disappoint you; I'm not going to give you anything for your new church." He handed the minister an envelope. "Please give that to your wife when you get home, just a little token of my regard for you both."

When the rector returned home he told his wife of the disappointing visit and handed her the envelope. In it were twenty one-hundred dollar bills.

The rector later built his big church. He succeeded in his ambitions. He was taken abroad, and sent to various parts of the country by the millionaire; eventually he received a large salary.

Eventually the minister and his wife drove into the country; they found a little fruit place, with a tiny house on it, something to tie to in case of old age or misfortune.

It is characteristic of Henry Ford that he took no offense to the frankness of the sermon, but did not change his mind.

* * * *

In order to keep his factory running full blast through December, 1920, Mr. Ford took a loss of fifteen millions. Against the advice of his business associates he kept production going until after Christmas Day. When New York reporters telephoned his office he refused to give his reasons for the shut down, his idea being that a statement regarding his retrenchments and the re-organization of his business might depress the market. Immediately there arose wild rumors that he was in financial difficulties. Happily, these were untrue. His aversion for borrowing has placed his gigantic undertakings on a safe financial footing. Detroit is not New York; Griswold is not Wall Street, but a prominent Detroit banker has said: "If Henry Ford should need large sums of money, Detroit will secure it for him."

However, it was the serious illness of his son, who went through an appendicitis operation, which caused Mr .Ford grave concern during the winter of 1920-21, and not financial difficulties.

A joy he is getting from his money is refurnishing his mother's old home, which he bought from his brother, John. As stated before, the town line when finally surveyed ran through this house. The county commissioners ordered the house moved so that a road called "Townline" could be built. Accordingly, the dwelling was thrust back to make way for progress, and the forest trees in the yard were hewn down because they interfered with the grading. Mr. Ford is having similar trees placed around the old home. He has gone into the attics and barns of his brothers' houses and has found discarded furniture which he associates with his mother's memory and he has said to the rest of the family: Before many years roll by we will begin to grow old. We will fix the home place like mother and father had it. We were so happy when we were children there together."

More than his vast wealth, Mr. Ford's real riches consist of a wife, whose constant thought is his health and well being; a loving son and two small grandsons, who are his pride and joy.

CHAPTER X

His Wife and His Home

No one could hope to write an adequate review of the development of Henry Ford's life and character without including some account of the wife who has meant so much to him in so many ways from the day he devised the watch with four hands, through all his struggles, disappointments and successes, down to the present time. During all these years the home life of Mr. and Mrs. Ford has been ideal.

One must know Mrs. Ford intimately to understand fully her part in the Ford achievements. She is thoroughly home-loving, capable and charming. So considerate is she, so unpretentious and gracious, that visitors to the Ford home forget that their hostess is one of the richest women in the world, owning in her own right a one-third interest in the corporation that is reported to pay an annual tax of eighty millions.

Mrs. Ford dresses in shades of brown or blue, and mink and sable are her favorite furs. She is small of figure, youthful in appearance, with chestnut eyes. Her voice is low and musical. We sat one winter afternoon in the sun parlor of her home watching the birds about the weather-worn stump on which each winter day she places fresh grain for her feathered friends. Beyond, the River Rouge wound in and out among tall forest trees, snow covered the ground and the frozen water was a sheet of gray ice. Behind us in the drawing room, which is paneled in French-bleached American walnut and furnished with cozy chairs and heavy velvet draperies of mulberry color, long hickory logs were crackling cheerfully in the carved white marble fireplace. The conversation drifted to the part that woman must take in present day affairs.

"There are so many demands for help that it would be unfair to take them lightly or to consider them in a haphazard, happy-go-lucky fashion," she said softly. "If they are handled carefully and systematically women can uplift, not pauperize, those they seek to help. Every village, city and state has its problems to solve. It seems to me that every homeloving woman should use her personal influence to cope with all the issues that directly and indirectly touch her home. If she does this," she added with a smile, "she will be compelled to take an active interest in politics. She may have to get out her school books and brush up on community civics and the science of government; for woe be unto her if she fails to understand exactly what she is undertaking. Of course," she added whimsically, "it would be easier and pleasanter to sit at home by the fire and knit, or chat idly over our teacups; but those times are slipping from us."

Mrs. Ford seldom has an ilde moment. Large wealth has brought her pleasures and privileges; it has also brought heavy responsibilities. Each day she receives volumes of mail. Her desk overflows with appeals for help; to answer them personally would be an endless task. Her name and assistance are sought by local, state, national and international welfare workers. Personally she visits the detention homes; she lunches at the House of Correction; she consults with the women's police board officials. Each case she seeks to help is first investigated by experts through authorative channels. Some of us know of thousands of families she helped while the factories were closed; many of those she visited; to others she sent her agents. She works constantly for the Girls' Protective League and other active organizations. For many years she has been treasurer of the Priscilla Inn, a home in Detroit, where girls can lead carefully chaperoned lives and enjoy comforts not easily obtained in an overcrowded manufacturing city like Detroit.

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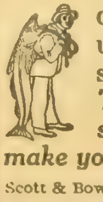

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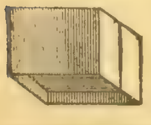

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Dearborn estate, and half-way between Detroit and the University of Michigan at Ann Arbor, is a square red brick home, "Valley Farm." Passers-by, in automobiles, gaze at it with frank curiosity. It is understood that Mrs. Ford is deeply interested in social welfare problems and that this Valley Farm belongs to her. If the inventions and vast wealth of Henry Ford have made him a world figure, they have made the activities of his wife of interest wherever their name is known. The general public knows little of the work accomplished at Valley Farm; except that it is some sort of rescue work. The old house is bravely facing new conditions. It is doing ultra-modern work; developed scientifically, by professionally trained workers, for the benefit of posterity. This is possibly the strongest link in the chain of work of the Dunbar Memorial Woman's Hospital, and the most far-reaching of all the great and good achievements of Detroit women. The farm, thirteen miles out in the country, has proved a boon to the hospital in Detroit, which is located on the busy, noisy corner of Frederick and St. Antoine.

Through Mrs. Ford's courage and thoughtfulness in sponsoring this work, its results will be felt to many generations. It has meant the salvation of thousands, whose successful reclamation has blezed the trail for welfare workers.

What has actually been accomplished is of more importance than any general theorizing. Mrs. Ford has been affectionately called "the erring girl's friend." She says, "Men are willing to help boys and pulsiveness have brought trouble and distress to many girls and to their families. It is wonderful what has been done for them by those in charge at Valley Farm. They do it beautifully and sympathetically. They reach the girls when they are friendless, depressed and often bitterly antagonistic to the world. The quiet activities include two months' training and hygiene, household arts and parental duties. The kindly, far-sighted board of trustees and the tireless, unselfish trained nurses assist each one to secure work and establish a clean, wholesome home."

* * * *

Mrs. Ford has opened the door of opportunity for many ambitious people, and has put success within the grasp of others. She is constantly lending a helping hand to those who need it most. Each day she is confronted with a round of duties, for she is the energetic, capable type of American womanhood which is playing a tremendous part in world affairs today. Her creed is that "Money should be used to make the world better, not to create envy and breed selfishness."

Being a musician, Mrs. Ford has a concert piano in her family living room; a pipe organ in the walls of her drawing room; in her library, which is lined from floor to ceiling with much-read books, is a Victrola; in her sun-parlor an Edison. "Music is refreshing," she says.

She organized the Dearborn Garden Club, of which she has long been president, and through her influence the members combine well-fare work with nature study. This club holds two annual flower shows. Blue Ridge Mountain rhododendron, which in June is laden with gorgeous pink blossoms, flanks the Ford doorway and the lovely graystone mansion is very comfortable, very homelike.

Seven thousand acres are in the estate. The land stretches back to the city limits and in the opposite direction toward the tractor plant a River Rouge. The first home built by Mr. Ford still stands in the grounds. It is an attractive, frame farm house, with awide veranda and green roof, and is furnished as it was during their early housekeeping days. Near it is a rustic bungalow, where guests are sometimes entertained.

In spring and summer a rush of lilac and heliotrope fragrance surges through the open windows of Mrs. Ford's rooms. These purple flowers are banked around the gray-stone walls, border the flagstone walk and cluster under the big trees. The heliotrope trees she propagated are from slips which the mistress of the house raised with infinite care. In autumn they are taken into the conservatory; the following spring they are re-set outdoors. This cycle, followed year by year, has produced specimens five feet in height, with trunks four inches in circumference. Some of her other flowers are blue larkspur, yellow gaillardias, bronze salpigolossis, blue seabosa, sweet peas, asters, shirley poppies, marigold and gourds which she raises to please her grandchildren. The rose garden is the only bit of formal landscape. She said one day while talking about her flowers: "I cannot buy everything I crave. Like my mother I love old-fashioned pinks. I haunted florists' shops, old homes and cemeteries in search of these tiny, red-flecked, spicily scented plants. It was my dress-makers sister who, generously, sent the basket of roots to form the nucleus of my large beds."

Two miles from the estate can be seen the twinkling lights of the little village of Dearborn. To it she has given a library site, and has built and given to the Episcopal church a large brick rectory; she is a member of the social service committee of her church. Greenfield, where she was born and reared, is five miles from Dearborn. In the summer Mrs. Ford takes a family party for a cruise on their yacht. She has traveled the world over, but, with the exception of a small place at Fort Myers, Florida, which Thomas Edison persuaded them to purchase next to his winter cottage, the Fords have never owned a home outside of Detroit or Wayne County. "We have lived here always," she say, "and here we love to stay."

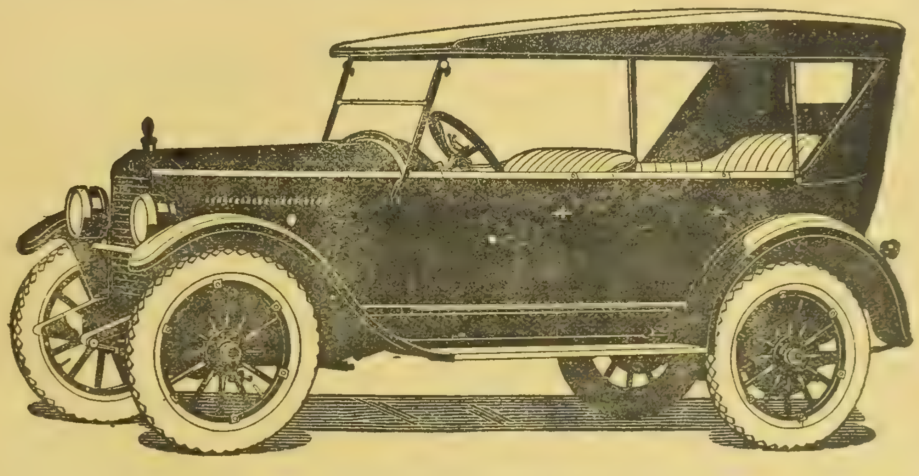
Persistent sightseers have made it necessary to keep the gates of the estate locked and guarded. All the servants, both in and outside the mansion, have held their positions many years. They have an air of courteous consideration and softness of voice which they seemed to have caught from the owners of the home.

The country and the wide outdoors hold for Mrs. Ford more attractions than the social life of any city, yet in her home she has entertained inventors, statesmen, capitalists and titled visitors. John Burroughs was a frequent guest. He enjoyed the birds, flowers and native trees which are under the care of Longfeather, a southern Indian. In the library is an autographed set of Burroughs' books; in a secluded part of the grounds is a rough bronze statue of him, and on the drawing-room table an exquisite miniature of the great naturalis.t John Burroughs once sent to Mr. and Mrs. Ford a carload of red sandstone from the Catskill mountains of his beloved native state, New York. These stones were worked into a sort of shelter for the bronze figure and for the bird pool near it. This spot the Fords called their "Burroughs Nook." Many rare birds, including Kirkland's Warbler and other unusual members of the feathered family, tarry at this quiet retreat, and here Burroughs, himself, discovered several northern birds, including the Bohemian waxwing, which he had long hoped to see, but had never been able to find elsewhere.

Since his death Mrs. Ford and Mrs. Edison have been made members of the executive board of the Burroughs Memorial association. They attended his funeral and went to New York two weeks later to formulate plans for preserving Woodchuck Lodge, Slab Sides (where Burroughs had his study and where he used to write his books) and Riverby, which was a more pretentious home near Poughkeepsie, just outside of the small town of West Park, New York.

(Continued on Page 19.)

E S S E X



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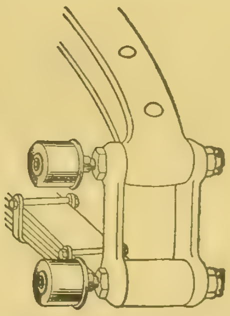

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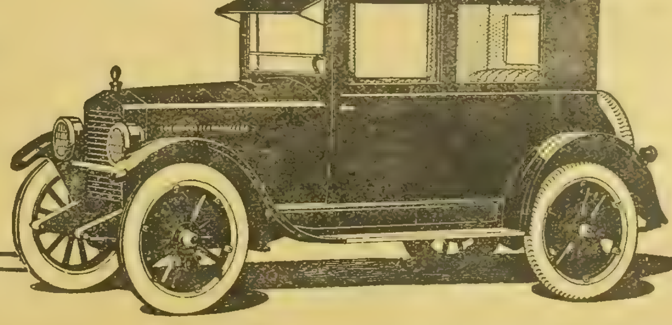

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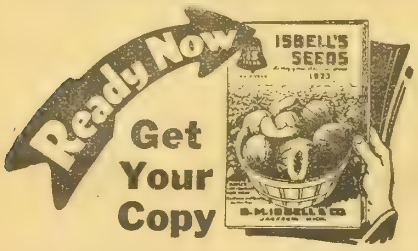

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FARM MECHANICS

SAFE AND EFFICIENT TOOLS FOR THE USE OF EXPLOSIVES

TO use high explosives with the maximum of safety and efficiency, various tools and accessories are necessary or desirable. Of course the character of the work governs to a great extent the kind of tools required and to certain extent the blasting accessories also.

A four-pound hammar and a drill are necessary tools for shooting boulders that can not be blasted in any other way. A round soil punch bar pointed at one end and with an expanded head on the other, with a heavy sledge hammer or maul is necessary for quick work in shooting stumps or tree planting or subsoiling in hardpan or dry clay. A punch bar of different type is useful in moist ground, muck and swampy land. This consists of a length of two inch galvanized iron pipe about five feet long, pionted at one end and threaded to receive a "T" at the other. Two shorter pieces of pipe about a foot long each threaded into this "T" which forms a handle. This make a convenient punch for one or two men to operate where the soil permits but it is not adapted to being driven down by a hammer. An axe or mattock are convenient tools for clearing brush around stumps and boulders and a sawed off broom stick or rake handle makes a very efficient tamping stick. A shovel handle with the rounded end sawed off square, leaving the offset end to hold by, makes a convenient tamping stick in some kinds of work. The tamping stick is used for pressing the charges of dynamite into the bore hole and for pressing in the tamping such as earth, clay or sand to confine the charge. It is not safe to hammer this at any time; in fact, it is extremely dangerous. The charges are pressed in firmly but not pounded.

Various types of soil augers are used, but an ordinary two inch wood auger with an extension welded on the shaft which ends in a ring through which a wagon spoke can be used as a handle, answers the purpose very well. Do not make the mistake of using too small an auger: Two inches in diameter is about the minimum. A straight steel bar sharp pointed at one end and chisel-pointed at the other, about seven feet long, made out of one-inch or one and one-quarter inch drill steel makes a very handy tool for making holes under stumps and boulders, getting between roots which the auger becomes tangled with, and for cutting off rootlets with the chisel end.

In the blasting accessories line you will require besides the dynamite, some blasting caps and fuse or electric blasting caps, leading wire and a blasting machine. The electrical method is much safer than the can and fuse method but the initial cost is somewhat greater as you have to buy a blasting machine and leading wire. The electric blasting caps however do not cost much more than blasting caps with the required amount of fuse. Cap crimpers are a desirable and necessary part of your equipment if you use the cap and fuse method, and are convenient even with the electrical method, as one leg of the crimper is pointed for the purpose of punching a hole in the dynamite cartridge in which the electric blasting cap is inserted. The most convenient leading wire is called duplex wire because it has two wires laid parallel to each other and insulated from each other and from the ground. This is generally sold in lengths of 250 feet. A shorter amount than this is not particularly safe for shooting large size stumps in the open. The No. 2 blasting machine is the best all round arrangement for generating current for electric blasting as the terminals are dead except at the moment the machine is operated. Many accidents have occurred when dry cells or storage batteries are used, due to the fact that their terminals are always alive until the battery runs down.

A necessary rule in all kinds of electrical blasting which is put with all possible emphasis is this: Disconnect the leading wire from the battery immediately after firing a shot of attempting to fire one. In looking for a broken wire anywhere in your circuit, first make sure that the battery is disconnected, otherwise there may be an accident.

A galvanometer for testing the continuity of the circuit is desirable but not absolutely necessary, for the general run of agricultural blasting unless you expect to go into the business. The same may be said of the rheostat which is an instrument for testing the blasting machine to see that it is in working order.—Arthur LaMotte, Mgr. Technical section, Explosives Dept., E. I. du Pont de Nemours & Co.

FRUIT AND ORCHARD

Edited by FRANK D. WELLS

MAKING UNPROFITABLE ORCHARDS PAY

MEASURED by the abundance and regularity of the crops of high-grade fruit produced, there are many apple orchards of bearing age that are not successful. Because a large number of these unprofitable orchards can be made to yield good crops of high-quality fruit by special treatment, the United States Department of Agriculture has prepared Farmers' Bulletin 1284, Apple-Orchard Renovation, by H. P. Gould, which discusses the principal practices found useful in bringing neglected trees back into profit-producing condition.

Orchards in need of renovation are found not only in sections where the home orchard or fruit garden is the prevailing type of fruit growing, and in regions where orchards of considerable size occur only occasionally, but also in the recognized commercial apple-growing districts. Some orchards are not worth the time and expense necessary to renovate them. In deciding what is to be done the following factors need to be considered: The orchard must be on a good site with no rock ledges or hardpan near the surface, well drained and without unusual danger from frosts; the trees must have good vitality, without decayed trunks, cankers that girdle the limbs, or weakness that would make good growth impossible; finally, the varieties must be good unless it is practicable to top-graft the trees.

A neglected orchard is always a menace to other orchards in the neighborhood and in sections where there are many commercial plantings much damage may be done by insect pests and diseases that have their source in badly infected trees. In some states a neglected orchard is practically declared by law to be a public nuisance and is treated accordingly. If the owner will not clean it up, public officials do it and the expense becomes a lien on the property until paid.

As a rule, says the author of the bulletin, a much-neglected orchard does not justify its existance. If an orchard is worth keeping it is worth giving good attention; otherwise, the trees merely encumber the ground and interfere with its use for other purposes. If an apple tree is not of value for fruit production it may be worth converting into tool handles, plane blocks, and other useful things.

Persons interested in renovating orchards or those who wish to decide whether or not a certain orchard is worth the attempt should get the bulletin, which may be obtained without cost from the Department of Agriculture, Washington, D. C.

RENEWING THE STRAWBERRY BED

RATHER than plow it up and set a new one, the old strawberry plantation may be renovated when it has become unprofitable. As soon as the berries have been picked, and new runners have begun to root, plow up the row, leaving a strip a foot wide in the center between rows where plants have rooted. Then harrow down level. Some of the plants will be destroyed with the harrow, but if an old bed has been al-

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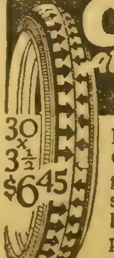

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R. H. SHUMWAY, Rockford, Ill.

lowed to fill out solidly from row to row there will still remain plenty of plants. The fresh earth that is dragged around the plants will be of benefit, while the teeth of the harrow will loosen the crust. After ground has produced two or three crops of berries it is likely to need fertilizer, and this may be scattered along the plowed strip between the new rows. The strip that has been plowed up should be stirred frequently through the summer, and as much fresh soil as possible pushed in between the plants. If the plants should be very thick, a strip even less than a foot in width will be sufficient for the new row. Stable manure should be used only when the ground may be cultivated to destroy weeds and grass.—H. F. Grimstead.

PRUNING AND PROPAGATING BOX

Is it possible to root boxwood from cuttings? The kind I have is the tall-growing variety; not the low bushes, usually found in old gardens along the path. Is this the proper time to trim them?—C. H. P., Mich.

—Boxwood can be rooted from cuttings made of young shoots, 4 or 5 in. long, either in the spring or fall. Some growers are quite successful in rooting them planted in sandy soil in early spring, but the surest and most successful method is to handle them under glass, either in the green house or cold frame. In either case they should be planted in good propagating sand, and the glass shaded with whitewash to keep the temperature down on bright days. Boxwood, like mostly all other evergreens, may be pruned any time that the wood is not frozen.

PRUNING CHERRY TREES

I have some cherry trees, planted last year and year before, and ask just where they should be pruned.—V. W. B.

—When planting is done in the fall there should be no pruning until spring. If one-year-old trees are planted, they should not be touched except to be headed off at the proper height in case they would otherwise make too high a head. If older trees are planted, all branches not needed for the framework of the tree should be removed, and the remaining branches should not be pruned. The newly planted tree should have plenty of foliage, and as soon as possible. The last year's growth which is left for the framework will give more foliage if left entire, since the large perfectly developed buds at the ends of the branches, which would be removed if pruned, are the buds which give the most luxuriant foliage in the shortest time. Further than this it is not good practice to prune cherry trees at all, except to remove dead and broken branches incident to picking, and to remove entire such other limbs as are not desired.

SAVING THE HAY THROUGH RADIO

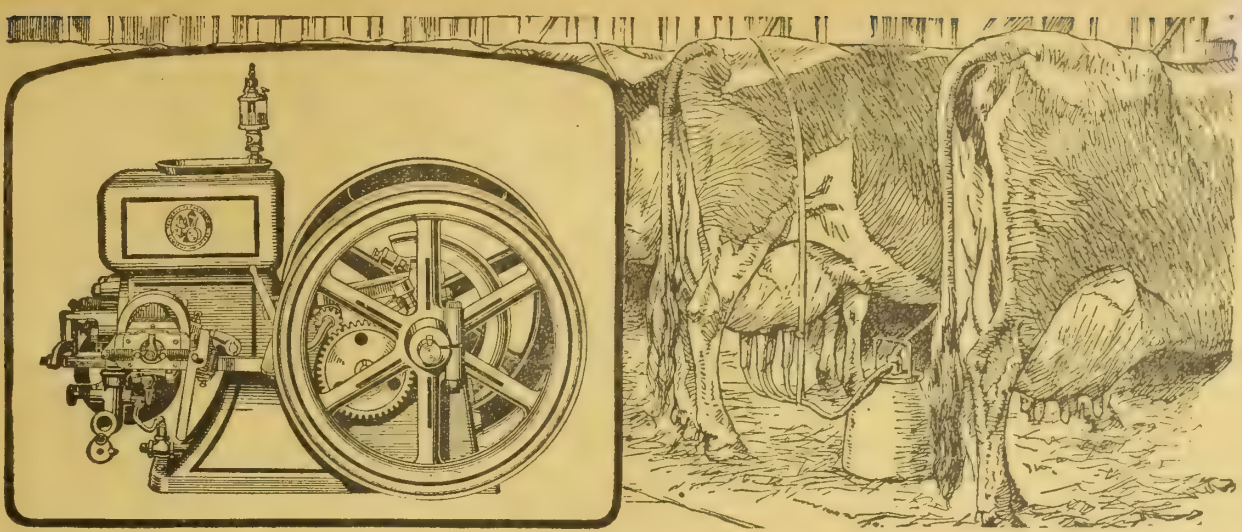
LAST June and July were two of the wettest months so far as rainfall is concerned that New Jersey has ever seen. Farmers all over the state lost thousands of tons of hay because the heavens wept so continuously that it was impossible to get hay sufficiently dry and well enough cured to put in the barns before it had turned black with rot and spoiled. If a farmer could always know exactly when the rain was coming he could beat the game by not mowing down his hay until old Sol, the sun and boss of all hay makers was going to show his face.

E. Smith Hoover, Manager of the State Farm of Annandale obtained this information over the radio and as a result has his barns full of an one-hundred percent crop of fine alfalfa and clover hay. He never lost a load all summer.

During haying season every morning at eleven either Mr. Hoover or his wife tuned up their set and listened for WJZ, the Newark Broadcasting Station of the Westinghouse Company, which gives out the U. S. Weather Bureau forecast. As soon as the news came Mr. Hoover knew wether to tell his boys to mow down more hay for the morrow or to stop cutting and hustle that which was curing in the mow.

A REAL "BROTHER"

Dear Mr. Editor: Enclosed please find one dollar for which enter my brother's name on your list for one year along with my renewal for one year. I think it is a worthy little paper to be in the house as it gives good reading for all in the house and I know my brother will appreciate it very much.—C. C. McC., Petersburg, Mich.



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IN Rummerfield, Pennsylvania, Mrs. Boyle runs a dairy farm with the help of one steady man and a Hercules Engine. The herd consists of from twenty-five to thirty cows and she says that one man can do the milking in two hours. Here is an extract from her letter:

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Mrs. Boyle's farm is one of more than three hundred and fifty thousand where the Hercules is bearing the brunt of the hard work—doing the milking, running the dairy, grinding feed, running the washing-machine, the workshop, the water-pump, the grindstone—doing the thousand and one things that must be done and that are downright hard work.

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The Hunted Woman

By James Oliver Curwood

Michigan's Own and America's Formost Author of the Great Northwest

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SYNOPSIS

JOANNE GRAY is one of the passengers on the train bound for Tete Jaune Cache, the home of "The Horde," where she has no friends and all will be strange to her. The train stops at a town composed of several tents, she goes in search of food and a bath. She is directed to "Bill's Shack" and here she meets Bill Quade, who not only owns and operates "Bill's Shack" but is also leader of the lawless men of the town. Quade says he has a room she can rent and that he will show it to her. As they pass out of the room a newcomer enters the doorway leading off the street. The newcomer is John Aldous, a well known novelist. He sees the strange girl enter the place and believes she has made a mistake and as he stands in the doorway his eyes rest upon the curtained doorway through which they have passed. In but a moment the girl steps out, face flaming and eyes flashing. Quade follows her apologetically. He starts to offer the girl money but before he can do so Aldous steps to the girl's side and floors Quade with a terrific blow. Aldous hurries the girl away from the scene to the home of friends. Joanne tells Aldous she is going to Tete Jaune to find her husband, Mortimer FitzHugh. Aldous decides to go with her to protect her from Quade and his partner Culver Rann. Aldous believes FitzHugh is dead and locates a friend who declares he has seen the grave. Upon their arrival at Tete Jaune they are met by friends of Aldous, the Blacktons, at whose place they are to stay during their stop. Later they secure horses and supplies and start off into the wilderness accompanied by Donald MacDonald, a friend of Aldous. They locate the grave and return to the Blacktons.

(Continued from March 3 Issue)

FOR a moment Joanne stood facing the little lake, and when she spoke again there was a note of thankfulness, of subdued joy and triumpt in her voice.

"Before that day had ended I had displeased Mortimer FitzHugh," she said, and Aldous saw the fingers of her hands close tightly. "I told him that until a month had passed I would not live with him as a wife lives with her husband. And he was displeased. And my father was not yet buried! I was shocked. My soul revolted.

"We went to London and I was made welcome in the older FitzHugh's wifeless home, and the papers told of our wedding. And two days later there came from Devonshire a woman a sweet-faced little woman with sick, haunted eyes; in her arms she brought a baby; and that baby was Mortimer FitzHugh's!

"We confronted him—the mother, the baby, and I; and then I knew that he was a fiend. And his father was a fiend. They offered to buy the woman off, to support her and the child, They told me that many English gentlemen had made mistakes like this, and that it was nothing—that is was quite common. Mortimer FitzHugh had never touched me with his lips, and now, when he came to touch me with his hands, I struck him. It was a serpent's house, and I left it.

"My father had left me a comfortable fortune, and I went into a house of my own. Day after day they came to me, and I knew that they feared I was going to secure a divorce. During the six months that followed I learned other things about the man who was legally my husband. He was everything that was vile. Brazenly he went into public places with women of dishonour, and I hid my face in shame.

"His father died, and for a time Mortimer FitzHugh became one of the talked-about spendthrifts of London. Swiftly he gambled and dissipated himself into comparative poverty. And now, learning that I would not get a divorce, he began to regard me as a slave in chains. I remembered, one time, that he succeeded in laying his hands on me, and they were like the touch of things that were slimy and poisonous. He laughed at my revulsion. He demanded money of me, and to keep him away from me I gave it to him. Again and again he came for money; I suffered as I cannot tell you, but never once in my misery did I weaken in my promise to my father and to myself. But—at last—I ran away.

"I went to Egypt, and then to India. A year later I learned that Mortimer FitzHugh had gone to America, and I returned to London. For two years I heard nothing of him; but day and night I lived in fear and dread. And then came the news that he had died, as you read in the newspaper clipping. I was free! For a year I believed that; and then, like a shock that had come to destroy me, I was told that he was not dead but that he was alive, and in a place called Tete Jaune Cache, in British Columbia. I could not live in the terrible suspense that followed. I determined to find out for myself if he was alive or dead. He is down there—dead. And I am glad that he is dead!"

"And if he was not dead," said Aldous quietly, "I would kill him!"

He could find nothing more to say than that. He dared trust himself no further, and in silence he held out his hands, and for a moment Joanne gave him her own. Then she withdrew them, and with a little gesture, and the smile which he loved to see trembling about her mouth, she said:

"Donald will think this is scandalous. We must go back and apologize!"

She led him down the slope, and her face filled with the pink flush of a wild rose when she ran up to Donald, and asked him to help her into her saddle. John Aldous rode like one in a dream as they went back into the valley, for with each minute that passed Joanne seemed more and more to him like a beautiful bird that had escaped from its prison-cage, and in him mind and soul were absorbed in the wonder of it and in his own rejoicing. She was free, and in her freedom she was happy!

Free! It was that thought that pounded steadily in his brain. He forgot Quade, and Culver Rann, and the gold: he forgot his own danger, his own work, almost his own existence. Of a sudden the world had become infinitesimally small for him, and all he could see was the soft shimmer of Joanne's hair in the sun, the wonder of her face, the marvellous blue of her eyes—and all he could hear was the sweet thrill of her voice when she spoke to him or old Donald, and when, now and then, soft laughter trembled on her lips in her sheer joy of the life that had dawned anew for her this day.

They stopped for dinner, and then went on over the range and down into the valley where lay Tete Jaune. And all this time he fought to keep from flaming in his own face the desire that was like a hot fire within him—the desire to go to Joanne and tell her that he loved her as he had never dreamed it possible for love to exist in the whole wide world. He knew that to surrender to that desire in this hour would be something of a sacrilege. He did not guess that Joanne saw his struggle, that even old MacDonald mumbled low words in his beard. When they came at last to Blackton's bungalow he thought that he had kept this thing from her, and he did not see—and would not have understood if he had seen—the wonderful and mysterious glow in Joanne's eyes when she kissed Peggy Blackton.

Blackton had come in from the work-end, dust-covered and jubilant.

"I'm glad you folks have returned," he cried, beaming with enthusiasm as he gripped Aldous by the hand. "The last rock is packed, and tonight we're going to shake the earth. We're going to blow up Coyote Number Twenty-seven, and you won't forget the sight as long as you live!"

Not until Joanne had disappeared into the house with Peggy Blackton did Aldous feel that he had descended firmly upon his feet once more into a matter-of-fact world. MacDonald was waiting for the horses, and Blackton was pointing over toward the steel workers, and saying something about ten thousand pounds of black powder and dynamite and a mountain that had stood a million years and was going to be blown up that night.

"It's the best bit of work I've ever done, Aldous—that and Coyote Number Twenty-eight. Peggy was going to touch the electric button to Twenty-seven to-night, but we've decided to let Miss Gray do that, and Peggy will fire Twenty-eight to-morrow night. Twenty-eight is almost ready. If you say so, the bunch of us will go over and see it in the morning. Mebby Miss Gray would like to see for herself that a coyote isn't only an animal with a bushy tail, but a cavern dug into rock an' filled with enough explosives to play high jinks with all the navies in the world if they happened to be on hand at the

"Fine!" said Aldous.

"And Peggy wants me to say that it's a matter of only common every-day decency on your part to make yourself our guest while here," added the contractor, stuffing his pipe. "We've got plenty of room, enough to eat and a comfortable bed for you. You're going to be polite enough to accept, aren't you?"

"With all my heart," exclaimed Aldous, his blood tingling at the thought of being near Joanne. "I've got some business with MacDonald and as soon as that's over I'll domicile myself here. It's bully of you, Blackton! You know——"

"Why, dammit, of course I know!" chuckled Blackton, lighting his pipe. "Can't I see Aldous? D'ye think I'm blind? I was just as gone over Peggy before I married her. Fact is, I haven't got over it yet—and never will. I come up from the work four times a day regular to see her, and if I don't come up I have to send up word I'm safe. Peggy saw it first. She said it was a shame to put you off in that cabin with Miss Gray away up here. I don't want to stick my nose in your business, old man, but—by George!—I congratulate you! I've only seen one lovlier woman in my life, and that's Peggy."

He thrust out a hand and pumped his friends limp arm, and Aldous felt himself growing suddenly warm under the other's chuckling gaze.

"For goodness sake don't say anything, or act anything, old man," he pleaded. "I'm—just—hoping."

Blackton nodded with prodigious understanding in his eyes.

"Come along when you get through with MacDonald," he said. "I'm going in and clean up for to-night's fireworks."

A question was in Aldous' mind, but he did not put it in words. He wanted to know about Quade and Culver Rann.

"Blackton is such a ridiculously forgetful fellow at times that I don't want to rouse his alarm," he said to MacDonald as they were riding toward the corral a few minutes later. "He might let something out to Joanne and his wife, and I've got reasons, Mac—for keeping this affair as quiet as possible. We'll have to discover what Rann and Quade are doing ourselves."

MacDonald edged his horse in nearer to Aldous.

"See here, Johnny, boy—tell me what's in your mind?"

Aldous looked into the grizzled face, and there was something in the glow of the old mountaineer's eyes that made him think of a father.

"You know, Mac."

Old Donald nodded.

"Yes, I guess I do, Johnny," he said in a low voice. "You think of Mis' Joanne as I used to—to—think of her. I guess I know. But—what you goin' to do?"

Aldous shook his head, and for the first time that afternoon a look of uneasiness and gloom overspread his face.

"I don't know, Mac. I'm not ashamed to tell you. I love her. If she were to pass out of my life to-morrow I would ask for something that belonged to her, and the spirit of her would live in it for me until I died. That's how I care, Mac. It wouldn't be the square thing. And yet she won't remain in Tete Jaune very long. Her mission is accomplished. And if—if she goes I can't very well follow her, can I, Mac?"

For a space old Donald was silent. Then he said, "You're thinkin' of me, Johnny, an' what we was planning on?"

"Partly."

"Then don't any more. I'll stick to you, an' we'll stick to her. Only"

"What?"

"If you could get Peggy Blackton to help you——"

"You mean——" began Aldous eagerly.

"That if Peggy Blackton got her to stay for a week—mebby ten days—visitin' her, you know, it would'nt be so bad if you told her then, would it, Johnny?"

"By George, it wouldn't!"

"Yes——"

"Bein' an old man, an' seein' mebby what you don't see——"

"Yes——"

"That she'd take you, Johnny."

In his breast John's heart seemed suddenly to give a jump that choked him. And while he stared ahead old Donald went on.

"I've seen it afore' in a pair of eyes just like her eyes, Johnny—so soft an' deeplike, like the sky up there when the sun's in it. I seen it when we was ridin' behind an' she looked ahead at you, Johnny. I did. An' I've seen it afore. An I think——"

Aldous waited, his heart-strings ready to snap.

"An' I think—she likes you a great deal, Johnny."

Aldous reached over and gripped MacDonald's hand.

"The good Lord bless you, Donald! We'll stick! As for Quade and Culver Rann——"

"I've been thinkin' of them," interrupted MacDonald. "You haven't got time to waste on them, Johnny. Leave 'em to me. If it's only a week you've got to be close an' near by Mis' Joanne. I'll find out what Quade an' Rann are doing, and what they're goin' to do. I've got a scheme. Will you leave 'em to me?"

Aldous nodded, and in the same breath informed MacDonald of Peggy Blackton's invitation. The old hunter chuckled exultantly. He stopped his horse, and Aldous halted.

"It's workin' out fine, Johnny!" he exclaimed. "There ain't no need of you goin' any further. We understand each other, and there ain't nothin' for you to do at the corral. Jump off your horse and go back. If I want you I'll come to the Blackton's 'r send word, and if you want me I'll be at the corral or the camp in the coulee. Jump off, Johnny!"

Without further urging Aldous dismounted. They shook hands again, and MacDonald drove ahead of him the saddled horses and the pack. And as Aldous turned back toward the bungalow old Donald was mumbling low in his beard again, "God ha' mercy on me, but I'm doin' it for her an' Johnny—for her an' Johnny!"

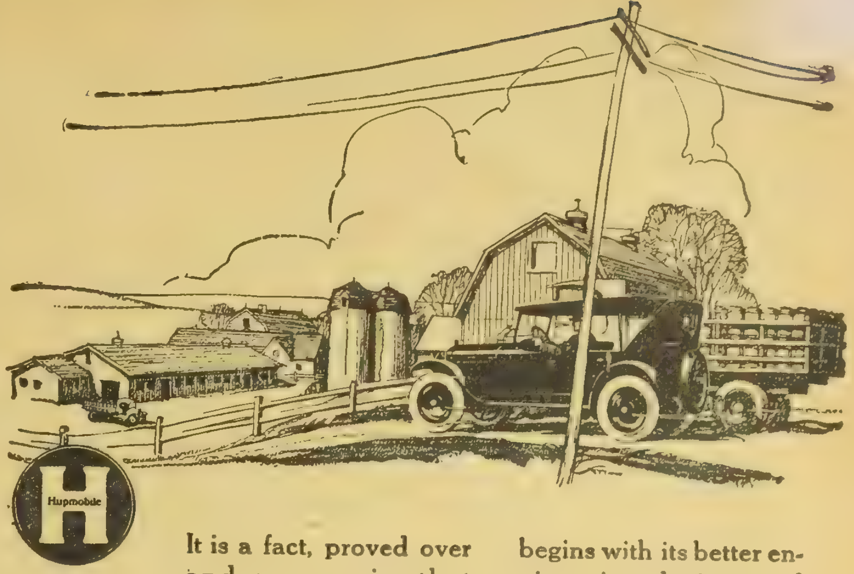
(Continued March 31st issue)

UGANDA CATTLE AID TO MATRIMONY

SINCE the earliest days in the Uganda territory of Africa, the measure of wealth of the various tribes have been the number of domestic animals owned. Practically all of the live stock in the territory is owned and raised by natives. Animals constitute the natives bank accounts and chief trading assets. Even since the introduction of coins, animals form an important medium of exchange and in some parts of the colony one cow may be owned by several people, says a report from Consul William L. Jenkins, Nairobi, to the Department of Commerce. According to official figures for 1921 the cattle in that country numbered 680,764, while there were 632,206 goats and 221,524 sheep, with the exception of certain provinces from which no statistics could be received. It is believed, however, that the cattle population of the Protectorate is about one million. Family life is still dependent upon the ability of young men to acquire the number of animals demanded by his prospective father-in-law. These young men are often-times up against it, because the country is very susceptable to cattle diseases.

"Without my hogs," said Nathan Boggs,
"I surely would be lost;
My nice purebreds, both blacks and reds,
Bring in twice what they cost."

I am taking advantage of your offer to get something for nothing and am inclosing check for one dollar and coupon to renew subscription. We enjoy the paper and are interested in the letters concerning the schools and taxation especially as we are in a newly consolidated school and have had chicken-pox, whooping cough and pink eye, our doctor bill for same and one hundred dollars extra school tax besides the loss of sleep and damage to temper and expect to have the itch before spring. Wishing the paper success along with the farmer, I am.—Wm. A. Smith, Wexford County, Mich.



It is a fact, proved over and over again, that the Hupmobile costs less to maintain over a period of three years, or longer, than any other car built today.

Owners of passenger car fleets have demonstrated Hupmobile's unequalled economy beyond any possibility of doubt.

After experimenting with various cars, they have finally standardized upon the Hupmobile as giving lowest cost service in the long run.

There is no secret about Hupmobile economy. It begins with its better engineering design, and comes down to the fact that finer, more durable parts are used where wear and durability promote longer life and lower costs.

Most of these parts are concealed within the motor, transmission, or rear axle, where the average owner never sees them.

Any disinterested repair man will tell you, however, that, judged solely by the way it is built, the Hupmobile is really a fine car at a low price.

Touring Car, $1115; Roadster, $1115; Special Touring Car, $1215; Special Roadster, $1215; New Two-passenger Coupe, $1385; Four-passenger Coupe, $1535; Sedan, $1675. Cord tires on all models. Prices F. O. B. Detroit—Revenue Tax Extra

Hupp Motor Car Corporation, Detroit, Mich.

Hupmobile

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—if YOU act at once!

$1 and the coupon below will renew you own subscription for TWO YEARS FROM DATE OF EXPIRATION.
—or will enter a NEW subscriber's name for TWO FULL YEARS
—or will renew your subscription for ONE YEAR and enter the name of a NEW subscriber for ONE YEAR.

This is the greatest offer we have ever made and we do not promise to keep it open over 30 days, so you must act at once, if you wish to profit by this 50% saving!

(We acknowledge every remittance received with a receipt by first class mail)

THE MICHIGAN BUSINESS FARMER,
Mt. Clemens, Michigan

(1) For $1 enclosed you will enter or renew my subscription for 2 years:

My Name______ R. F. D. No.______

P. O.______ State______
(If you are renewing kindly send address label from recent issue)

(2) For $1 enclosed renew my own subscription as above 1 year and add the following new subscribers name paid-in-full for 1 year:

New Name______ R. F. D. No.______

P. O.______ State______

The Michigan
BUSINESS FARMER

SATURDAY, MARCH 17, 1923

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RELIABLE ADVERTISERS

We will not knowingly accept the advertising of any person or firm who we do not believe to be thoroughly honest and reliable. Should any reader have any cause for complaint against any advertiser in these columns, the publisher would appreciate an immediate letter bringing all facts to light. In every case when writing say: "I saw your advertisement in The Michigan Business Farmer!" It will guarantee honest dealing.

"The Farm Paper of Service"

ADJUST PRODUCTION TO DEMAND

"FARMERS have just as much right to organize to control their output as union labor has to organize for the purpose of shortening hours and increasing wages. They have as much right to cease production wholly or in part as union labor has to strike. It is no more wrong for farmers to reduce products when prices are below cost of production than it is for the United States Steel Corporation to cut pig iron production in half when prices are rapidly falling."—H. A. Wallace, in a recent address.

THE FARMER IS A BUSINESS MAN

REPORTS of the success met by the acreage men of the sugar factories in Michigan who have adopted the now famous "50-50" contract by which the farmer becomes a co-partner of the factory, in the profits derived from the manufacture and sale of beet sugar, seems to prove the fact which The Business Farmer has reiterated so many times; that the farmer is not afraid to take every risk which the business man in any other line will, if he is given an equal chance at the profits.

There is, of course, the possibility that everything possible will be done this fall by the manufacturers who have refused to enter into the growers contract, to discourage its further practice, even if they find it necessary to curtail their own profits by lowering the price of sugar to do it.

Let every grower who has signed the "50-50" contract, pledge himself to stand by the plan for three years—win or lose—if he will, we risk the prediction, that before the three years have elapsed, every manufacturer in Michigan will have offered the same or a more attractive proposition to the growers.

When you hear a man knocking the "50-50" contract, ask him how long he's been on the other fellows "pay-roll", its a safe bet he is there, one way or another!

NOW ADVISES PARTICIPATION IN LEAGUE

THEY do President Harding and the present Republican administration an injustice who seek to poke fun at the recent announcement that the president and Secretary Hughes are about to stump the country in favor of participation in the World Court of the League of Nations, as did Woodrow Wilson, only a few years back.

Better late than never! And far better for the United States, leader of civilization, that we accept our responsibility and contribute our strength to a plan which has for its foundation, at least, the abolishment of wholesale slaughter of human beings, in the avowed cause of patriotism, to settle disputes bteween nations.

What matters it now, if in the heat of partisan politics our eyes were clouded by the smoke screen of propaganda, three years ago? What matters it whether Democrat or Republican is to be given the credit of helping to form the League? What matters anything under Gods heaven, when the question is whether it is possible to prevent so fruitless a butchery of mothers sons, as we who live to-day have just witnessed!

Families live in peace, communities live in peace, states and provinces in peace, great nations with thousands of miles of boundary as witness the United States and Canada, live in peace, why cannot the nations on this old globe live in peace? But you say, families, communities, states and nations have disputes to settle—surely, but the individual who kills to settle a dispute is a murderer and the nation which kills to attain the same result is no less a murderer and should be so appraised in the eyes of the world.

That is the reason for the World Court and the League of Nations is simply the power, the police force, to enforce the mandates and the punishments prescribed by the court.

Let those who will scoff at President Harding and the apparent turn-about-face of his administration to the policies proposed by Woodrow Wilson, have their fling. As for The Business Farmer, although steadfast in our belief in the League of Nations, as the best step out of the pit-fall of future wars, we would rather see the United States go in whole-heartedly and with the unanimous approval of our people now, than three years ago, with the mind of the press and the public so divided.

It takes a braver man to admit he was wrong, than it does to fight blindly on, altho knowing he is wrong!

A WISE APPOINTMENT

PRESIDENT HARDING has appointed Charles Townsend, retiring senator from Michigan, to the chairmanship of the joint-committee which cooperates with the Canadian government in the control of interrelations between the two great nations of the North American continent.

The zealots who have fought and fostered the Great Lakes-to-Ocean plan, have thus taken new heart, because they believed the last election which deprived them of Senator Townsend as the leader in their fight, was a staggering blow to the rapid progress the plan had been making during the past few years.

The new position gives Mr. Townsend even a more direct point of advantage and citizens of Michigan and the whole northwest, who are so vitally concerned over the early consumation of this great project will commend the president on his wise selection and appointment.

COUNTERFEIT MONEY

THE secret service has very recently unearthed the most daring and extensive operations of counterfeiters ever discovered in the United States. The operations of this gang have extended from coast to coast and it has been in operation for almost six months unchecked, while the government slueths have been attempting to reach the master-minds behind the gigantic scheme. When the net was finally complete, a campaign of arrests was begun which is expected to enmesh a thousand persons, men and women in all parts of America.

Most of the money has been in large sized bills, principally of $20 denomination. A greater part of it was passed through the illicit whiskey ring, but naturally found its way into countless hands.

Sooner or later a part of this money will reach the rural districts, it therefore might not be bad advice to suggest, that you have your banker look over any considerable amount of currency you are receiving.

A "NEW" CONTINENT DISCOVERED

WHEN you hear the word "Africa", what springs up in your mind? Roaring lions, charging elephants, crouching tigers or boa constrictors hanging from trees ready to embrace you! Or should not one of these animals get you, from the rank jungle, hideously painted cannibals brandishing feathery shields and poisoned spears, leap forward to impale you for their evening meal!

Is that your Africa? We confess that it was ours until the very recent few weeks while we have been following the traveler Newman from Cape Town to Cario, which would be somewhat similar to traveling from Panama to Hudson Bay in our own continent.

From the spot where Stanley found Livingstone, then in the midst of a wilderness as you remember it described in your geagraphy, motion pictures (which cannot lie or exaggerate as the Marco Polo's of old were inclined) show a railway station, giant steamships and in the back-ground the tall stacks of the copper mining companies.

Copper, gold, zinc, tin, and radium mines that will rival the better known diamond fields further to the south, in their output of wealth, now are developing the heart of Africa. The fierce cannibal tribes of Stanley's time, have been converted into sober workers who listen for the factory whistle, come home to eat baked beans canned in America and go in the evening to laugh at the antics of Charley Chaplin on the silver screen!

That is Africa—central Africa—today, as the pictures prove it.

Millions of acres of fertile prairie, that have never felt the scratch of plow; billions of feet of fine lumber, from mahogany to teak-wood; enough coal to heat the world for a thousand years; water-power, unharnesses that could do the work of the world!

What open space for the teeming millions of China, India, Japan and Europe to migrate to and bring into productiveness. Here is a great continent, once the very cradle of civilization, which is almost as undeveloped to-day as was North America, before the war of the Revolution.

It may occur to you, too, as you read this that some of our allies in the great war, knew something of all this when they divided up German South Africa among themselves. The land Belgium acquired in Africa is twenty times the area of the mother country in Europe. The copper mines which Great Britain acquired will produce probably more than all of the copper mines in America combined, and at a cost of production which may threaten our own copper in the worlds market.

Africa beckons to the adventurous youth of the world, as once did America, and the same type of sturdy pioneers are hearing her call.

STATE INSTRUCTION FOR MOTHERS

WHEN you know that 145 babies out of every thousand born in one county in in Michigan died at birth last year, you will know why the women leaders in Michigan are backing the Bohn bill, which ratifies the acceptance by the state of the funds provided from the national treasury by the Sheppard-Towner act, for the purpose of instructing prospective mothers.

If the bill passes the state will contribute $29,000 which will be met with a similar sum from the national treasury. In every county in Michigan one or more nurses will be provided to help lower the mother and child death-rate.

If there is any possible way in which the state and nation can repay the mother for risking her life to furnish its life-blood, then let that means to be speedily provided regardless of the cost. There is a time when dollars lose their significance only as a means to an end. This is one of the times!

THE "HIRED" HELP

HAVE you, father, ever been called a "hired man"? Or have you, mother, ever came suddenly into the dining room to hear your mistress telling her guests that you were their "new hired girl"?

If you have ever worked in either capacity for someone else, this little message will not be intended for you. It will not be necessary to remind you of the sting which these seemingly simple words have when they come to your ears for the first time, and you realize that you are a "hired man" or a "hired girl".

This message is to the mothers and fathers of growing children, who are in circumstances which permit them to employ extra help on their farm, whether in the home or in the fields. It is a plea for the abolition of the hated words "hired man" and "hired girl" from the vocabulary of every farm home.

Learn to speak of your employed help as your "assistants"—explain it to your children that the work is too heavy for mother or father and that "John" or "Clara", have come to assist you with your work. Teach your children to respect those who are helping you and you will be surprised at the result.

In the first place, you will find it easy to keep better employees. There is something so un-American and akin to slavery, about the hated terms "hired man", "hired girl", or "servant" that no intelligent and self-respecting American will remain in a place where it or the attitude which means the same thing are continually expressed in word or action.

There are no "servants" in America, thank God! Servant, means servile, and we free citizens of this great republic, all of us, except the parasite and the loafer, are all helpers, cooperating, assisting one another; no matter what our position be in societies stratas.

The Agricultural & Business Survey, appears again this issue on page 29, it shows the trend of change in every phase of business or finance which reflects on agriculture. It looks like a lot of figures that you want to miss, but once you find out how much information it contains, you would not miss it for a farm! The sweetest meat is always in the nut that is hardest to crack!

The best thing about hearing a political speech over the radio is that you can shut it off!

PUBLISHER'S DESK

WARREN McRAE FARM AGENCY

We assume that by this time our friend, McRae, the philanthropic farm agent at Logansport, Ind., has joined the ranks of those who are not particularly fond of The Business Farmer. It is lucky that we do not reach every farm home in Michigan or Mr. McRae would have to change some of his tactics in getting farms to sell.

Since our exposition of his letters and methods in the February 17th issue we have had any number of letters from our readers, not all of whom paid the ten dollars, but all of whom got similar letters to those we published in that issue.

The one that interests us most and should encourage those who have paid Mr. McRae his listing fee, whether $10 or $2, is one dated September 21st., 1922, and addressed to a reader at Cloverdale, Mich., which contains the following paragraph:

> If you are looking for a good quick cash sale, kindly fill out the enclosed listing form and return it to me with the regular listing fee of $10.00 and **I will guarantee to furnish you with a buyer for your property at your price and terms within 90 days or I will return your $10.00 in full.** When the deal is closed you pay me 2 per cent commission of the selling price. In case the first buyer does not buy notify me and I will keep on sending you buyers until you make a deal.

If Mr. McRae will make this proposition to every reader who has a farm for sale and will prove to us that he will return the listing fee, if he has not sent a buyer for the farm within 90 days, we will agree that his proposition is perfectly legitimate and he has only erred in the manner in which he has presented it.

It seems a little strange however, that in the many form letters, most of them dated later than the one quoted above, we have seen no mention of this very important "sell-your-farm-or-money-back" guarantee.

* * * *

"We are subscribers to your paper and we, too, got a letter from Warren McRae. He ran an ad. in the Allegan News for a few weeks and we were thinking of selling our place so I told my husband that I would answer the ad thinking that it was a man that wanted a small farm in Mich. and I enclosed an envelope addressed with 2c stamp for reply but instead in a few days we got a letter and some papers to fill and if we would send $10 he would send a buyer and if the first didn't buy he would keep sending until our place was sold and then he would return our $10.00. The letter was similiar to the one you printed in the paper but we didn't answer and in a few days we got another letter stating that for a limited time he would reduce it to $5.00. He is very generous but I think he didn't get any one around Allegan county and we are sorry for that widow woman that sent her money to him, because it is doubtful if she ever gets it. I see in the Grand Rapids Press that he is running an adv in it for Kent county. I hope nobody falls for him. All we are out is the 2c stamp and I am sorry he got that much. Such people should be punished.—Mrs. J. H. P., Allegan Co., Mich.

POOR HENRY!

Few days pass but what The Business Farmer receives a letter from some reader who wants to put a proposition up to Mr. Henry Ford. It may be like the one before me, a farmer who owns sixty acres on which he has been paying taxes for years, up in the Minnesota iron ore country. It lies in between the property of a great mining company. Our reader claims it has been illegally lumbered over and now he is afraid the mining company is going to take out the ore from beneath his land! That's being attacked from above and below, we should say.

Where can our reader turn for advice? He comes to us. Where can he get help to fight the gigantic financial groupe that is robbing him of his heritage? From Henry Ford, of course! He makes enough millions while his eyes are closed in slumber to relieve half of the financial worries that beset the poor folk.

So they come. But, we have to advise that about the hardest man in the civilized world to reach with any proposition, philantrophic or business, is our worthy neighbor at Dearborn. His personal mail is larger, 'tis said, and his staff of personal secretaries busier than that of the president of the United States.

Mr. Ford is a plain man, very human, emotional and extremely modest. Yet he represents a mass of worldly wealth which attracts to Dearborn the dreamers and the schemers from every corner of the world. Probably most of them are honest in their purpose, but it still remains, that all of them come to get some part of that pile of gold, whether their desire be for much or little of it.

They used to say that "everybody sometime in a lifetime has an overwhelming desire to write a book," now if this old saw were changed to "everybody some time in a lifetime wants to put a proposition up to Henry Ford" it would be more truthfully a statement of fact.

TAXES $120 IN 1905, JUMP TO $602 IN 1921.

(Continued from Page 3)

a club at every turn, the State Income Tax, would have helped, but met defeat last fall. A tax on gasoline would also bring some relief, but some of the city auto clubs, object because the farmers use it to run their farm machinery, (however I never talked with any farmer who objected). Then some propose to tax the weight higher, this plan has met with the objection that the rich cannot sell their old cars to the poor as they could not pay the tax, and it would not be just to tax an old worn our car with such high tax. Another wants a poll tax of $5, on each voter, I would be glad to see them all passed in order to get something out of those who are now paying no tax, but have full use of our roads and schools.

Our large manufacturing cities where wealth is concentrated, are paying millions of dollars in large salaries to people who pay no taxes, but who own and operate large and expensive cars and the tax on real estate must build their roads and schools for their children, they rent city homes, and the city land lord gets back at them for his high tax by boosting his rents. The farmer has no way of getting back at any one.

There is only one way to help the farmer, that is to relieve him of some of the burden he is now bearing in heavy taxes, and until our national government takes over the roads, our state should take some action at once. There is a way to relieve the real estate tax, which no honest person can object to. Put a tax of 4 per cent on the selling price of all autoes trucks and vans of all kinds as well as on motor cycles. etc. This on the selling price when new, then make a reduction of 10 per cent for depreciation for each year the vehicle is run, for five years, after that tax it for 50 per cent of its value new as long as it is run. This 4 per cent could be increased or decreased as the times may require, but at present some of the real estate is paying 7 per cent on an inflated valuation set by out State Tax Commission at a time that was pre-mature for such an act, and he is not allowed 10 per cent on his property each year for depreciation. The government is offering him a Federal Loan, but that is like knocking a person in the head with a club and then selling him a plaster.

The only relief to any one staggering under a heavy load is take part of the load from him. Remember the laws of Confusius, "The Strong must help the weak bear their heavy burdens." Yours for a good and honest Government.—Ed C. Allen, Osceola County, Mich.

President Harding broke White House records of several months standing when he shook hands with 1,450 persons in a recent reception.

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Pure gum rubber; friction lined; well reinforced. Solid rubber soles and heels. Sizes 6 to 12 Hip Boots, No. 2750. Knee Boots, No 2730. Price, either style, $2.98 and postage.

$2.98 and Postage

Men's Heavy All Rubber 4 Buckle Arctics

You can't appreciate the value of these arctics until you see them. First quality heavy black rubber throughout, with extra weight corrugated rubber soles and heels, reinforced with rubber strip all around. Warmly lined and roomily built for wide toe, broad heel shoes. Hi-cut 4-buckle tops. Tremendous value. Sizes 7 to 12 Order No. 2123. Price, $2.38 and postage

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No commissions—Low interest rates. No stock investment. Unusually prompt and satisfactory service. If your loan will meet these requirements, write us.

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Guardian Building, Cleveland, Ohio

Planter Profits

AFTER you have spent weeks behind the plow, the disk, and the harrow—after your fields have been worked down to a perfect seed bed—then comes the time to make planter profits. Big yields are largely the result of perfect planting—every hill in its place and every hill a full hill. Year after year the profits of good planting follow

International and C B & Q Corn Planters

They plant accurately and evenly whether set for checking, drilling or power drop. Without stopping the team the variable clutch can be set to plant 2, 3, or 4 kernels to the hill. Edge, flat, and full hill plates interchange in the same hopper. The automatic markers require no attention. Valve mechanism is so carefully fitted and so accurately timed that missing and stringing are entirely eliminated.

The tongue adjustment for leveling the boots insures an even cross check. Fertilizer attachments always available.

This year, pocket the profits of good planting by using an International or C B & Q Corn Planter.

See your McCormick-Deering dealer and write for our catalog

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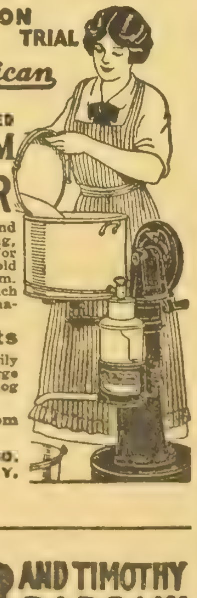

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$4 50 Per bu. Red Clover and Timothy mixed—the standard grasses cannot be surpassed for hay and pasture. Contains good per cent clover, just right to sow. Thoroughly cleaned and sold on approval, subject to government test. Ask for this mixed seed if you want our greatest bargain. Have Pure Clover, Sweet Clover, Timothy and all Field and Grass Seeds. Buy now. Prices are advancing. SAMPLES and 116-p. catalog FREE.

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For Ills of All the Family

VICKS is good for all cold troubles—common colds, sore throat, bronchitis, catarrh, croup, tonsilitis and grip. These are all inflammations of the nose, throat or lungs. The ingredients—camphor, menthol, eucalyptus, turpentine, juniper tar, cedar leaf, etc.—make Vicks equally effective for inflammation of the skin such as cuts, burns, sores, bruises and skin itchings. An ideal household remedy—useful almost every day.

Write to Vick Chemical Co., Box 1-94 Greensboro, N. C., for a test sample.

VICKS VAPORUB

OVER 17 MILLION JARS USED YEARLY

KEEP THE BUSINESS FARMER COMING—SEE PAGE 13.

What the Neighbors Say

MISSES SERMON

DEAR Editor: We have been reading M. B. F. for two years and like it very much, we find lots of information in it too. The only thing we miss is a scripture text, Sermon. We out here in the woods feel rather lonesome on account of not having church preveliges.

In reading our M. B. F. we also enjoy "What the Neighbors Say" and it is indeed a pitty that we as people of our good America can not cooperate together. Where is the democracy of our good U. S. A. going to? Our Government is ever ready to fix a price on Farmers Products, as during the war to cut the high cost of living, but the consumer had to pay very near the same old price for his flour as before. Now today the farmer has to sell his stuff at a sacrifice, but who is gaining by it; surely not the consumer? For instance, cattle that farmers sell, from 3 to 6 cents per pound, how much do consumers in cities pay for their beef in butchershops? Who gets the profit, surely not the farmer and the consumer!

Why can't we see the pure fabric law passed? The "all-wool" garments we buy nowadays don't last at all, the best that can be made out of pure virgin wool would be none too good for the consumer. Had ought to pass by all means.

Now they talk of reducing the taxes, but we farmers have to pay more every year, how about it? Our government should adopt "Single Tax" (Canadian style) so farmers would not have to pay a "fine" every time they improve their Farms. Farmers are all anxious to sell out and move to the city. The boys have gone already, who is going to product the nation's grub in the future under such conditions if this city move can not be stopped? Why can we as a nation not take an example from Europe? It has gone to the dogs just because of oppressing the poor. We read in Luke 13:1-3, "There were present at that season some that told Him of the Galleans, whose blood Pilate had mingled with their sacrifices * * * and Jesus answering said unto them, 'Suppose ye that these Galileans were sinners above all Galileans, because they suffered such things? I tell you nay; but except ye repent, ye shall all likewise perish.' " The judgement of God has come upon the old countries, and will unfailingly come upon us unless, we repent. The heavy tax burdens have to go or we farmers of America will not much longer be able to produce stuff to live. May God guide our leaders and keep our country from disaster. If not, judgement will come as we read in James 5:1-6, "Go now, ye rich men, weep and howl for your miseries that shall come upon you. Your riches are corrupted and your garments are moth-eaten. Your gold and silver is cankered; and the rust of them shall be a witness against you, and shall eat your flesh as it were fire. Ye have heaped treasurer together for the last days behold, the hire of the laborers who have reaped down your fields, which is of you kept back by fraud, crieth; and the cries of them which have reaped are entered into the ears of the Lord of Sabaoth. Ye have lived in pleasure on the earth and been wanton; ye have nourished your hearts, as in a day of slaughter. Ye have condemned and killed the just; and he does not resist you." We have felt it our duty to write these words, may the Lord bless them to his glory.—C. S., Oscoda County.

STAND UP FOR HER RIGHTS

I THINK a great deal of your paper and I read it carefully each week. Several weeks ago on the "What the Neighbors Say" page I read the piece written by Mrs. R. B., Ohio, and I can't resist writing a few lines in answer to it. I really pity her.

I don't believe in the women voting and I do not vote. I feel that is for the men, but I do believe in "personal freedom." I must say I think Mrs. R. B. has just lost out and right now if she takes my advice she will turn a new leaf, tell Mr. R. B. that she has served her time as a servant in her own house and now she will manage it to suit herself, do her work just to suit herself. She sure must know how by now, after being told for 16 years, that she will relive him of the duty to see to it, also from now on to use her own butter and cream money also egg money as she see fit. Tell him kindly but firmly and plainly that she means it and stick to it. It may not be pleasant for her for a time, but she can win out if she has the grit. Do not quarrel with him or have any angry words. Kindly tell him just what is what and mean it too.

The very idea of his buying her dresses. Does she buy machinery for him? Oh no, of course not, she doesn't know what kind he likes best. He may try a new kind next time. How about the dresses, she might like a change too and surely the liberty of getting just what you want and being suited is worth a lot, and if ever you have any rights while you are young enough to enjoy them and use them the time is right now. What they have earned together is hers as much as his. Suppose she, not being used to having her own money, does make a few mistakes in buying. He, I know, has not always hit the market just right. It is worth something to try and to feel you really live and not just simply exist. Get your nerve up and stand up for yourself, don't cry or scold. He will honor you twice as much for being his equal.

Now as to a way to go to church. Are not the horses as much hers as his? I say yes. Tell him you want one to drive and have it, or if you can't, just hire someone to take you and let him pay the bill a few times. He will soon see it is cheaper and sounds better to take you yourself.

Now I am a farmer's wife have always lived on a farm. I have been married 24 years. We always talk things over and work together. I have never asked for a horse and been refused, but I never ask when I know they are busy; in fact I have a horse of my own. He always works my horse and I never interfere but when I need him I say so. I always sell my eggs and cream and we use the money the same as when he sells grain or stock. If he did not then I would keep the egg and butter money for my own self but I think it better to work together, but equal rights I shall have.

I have always worked in the field and do yet. I do not believe in either one being the boss. I have no children. He goes where he likes to sales, all men enjoy them. I go where I wish. We do not always think alike—far from it—but we compromise and I think any man thinks more of his wife if he understands she is his equal.

I do not belive in parting or divorces but can say Mr. R. B. should have changed his ways long ago. If he loves her as he should the mother of his children he will see his mistake and gladly make right the wrong she has endured. If not, quit. The world is wide and there is room for us all. The days of tyranny are past. What good time is she having, to alawys live on an uncertainity, never know whether she can go anywhere or do anything unless he says so. This is what I think. What do the other readers say?—"Mollie Brown," Michigan.

THE FARMERS' TROUBLE—OVERPRODUCTION

THE woes of our farmers are chiefly due to the same cause that has deranged our coal mining industry. To many are in the game, causing overproduction. The great rise in the price of land, which has doubled, and in some cases trebled and quadrupled, in the last ten years, proves this. If the poor and remote farms and mines (which comprise over one-fifth of the total) were abandoned, it would encourage the others to produce to capacity, insuring bigger crops at lower cost, and it would release a lot of first class labor to other industries. Farmers, instead of deploring should welcome every increase of wages in other occupations, as it decreases the number

(Continued on Page 19)

The Remarkable Growth of Fur Farming

BY DR. C. B. SHORE

SINCE the creation of the world and man's inhabitance upon the earth, the first clothing worn was that of furs. Man's first choice of wearing appearel has been passed down through generations and has been in continuous use by all nations and peoples.

Since the rapid advance of civilization, those wild animals that bear suitable furs for wearing purposes, are very fast becoming extinct, and today the trapper must of necessity, look elsewhere for profitable income. Furs of all species are in constant demand throughout the whole world.

I believe no other industry in this Northwest country promises such profitable returns as may be realized from the domestication of fur bearing animals.

I shall speak principally of the domestication and production of the standard bred silver fox fur. This fur, exclusive of the Russian sable, which cannot successfully be raised in the United States, is of a distinctive class, and cannot be successfully imitated. For this reason its pelt is capable of procuring very profitable results for the rancher.

Silver and black foxes are classified into four distinct types, depending on the quantity of silver tipped guard hairs present in the pelt. The classes are designated as black, dark silver, medium silver and light silver. All types are necessary on the average ranch. The demand at present is for dark and medium pelts and these are produced largely by mating black animals with light silvers. Much care and thought is given to the mapping out of a definite breeding program on the large ranches.

Most of the northern states are admirably adapted for fox raising. The humid, cool atmosphere in the northern states makes a dense, dark pelage on fur animals that always commands top prices in the fur markets. In addition, the entire region possesses a wealth of lakes, marshes and rocky, hilly, timbered lands unfit for cultivation, but furnishing unequalled sites for the prospective fur farmer.

Early breeders thought that foxes would not do well in captivity unless ranched in secluded spots. This has been disproved by the phenomenal successes of American ranchers, most of whom operate in thickly settled communities. It would, of course be inadvisable to build a ranch immediately adjacent to a large factory along railroad or trolley tracks or in the heart of a city. Ranches may be built on the outskirts of villages and towns, along rural highways or within a reasonable distance of farm buildings without danger of creating unfavorable conditions.

The chosen ranch site should, first of all, be carefully considered from the drainage standpoint. Fox pens should be erected on a well-drained piece of high land. Foxes will not do well in a swampy hallow, where the soil stays damp for long periods. Disease breeds readily in damp locations of this character. Clay or heavy black loam top-soil should be avoided. If possible, choose a location with a clay subsoil and a gravel or sand top-soil.

Many ranchers make the mistake of placing too much stress on the shade requirements of a fox farm site. Proper soil and drainage are and should be foremost. Some of the most successful ranchers have discovered that foxes kept in pens erected in the open have been remarkably free from disease. This is undoubtedly due to the fact that disease germs cannot exist in soil subjest to the direct burning rays of the sun.

Considering the value of the animals, guard fences, pens and kennels are comparatively inexpensive. Frame works can be built of cheap lumber left in the rough or of the best, carefully fitted and painted. In building a large ranch it will pay to lessen depreciation by using high grade materials. Wire should always be the best obtainable.

The size and shape of breeding and rearing pens differ considerably according to the area and physical characteristics of the site. The dimensions of pens very from 90 feet in length by 30 feet in width to 30 feet in length by 10 feet in width. Height depends on the average snowfall. The pen should be high enough to permit an average sized man to walk around in same without stooping. Allowance must be made for depth of snow.

In some ranches pens are laid end to end and side by side across the ranch, pens and alleys detached or separated by alleys from two to ten feet in width.

A successful breeder has experimented with various types of fox kennels or dens. After giving them thorough and conscientious trials he has found that a simple double kennel with separate entrances will suffice. The remarkable record of 2 1-2 to 3 1-2 pups average to the pair on his ranches would indicate that his adopted style of kennel is far superior to any other.

His kennels are double walled and are placed on a block foundation two or three inches from the ground, thus insuring warmth and dryness. The roof is hinged and serves as a lid. The kennel is divided into two separate compartments with covered chute entrances approximately four feet long inclining from the kennel opening to the ground.

The breeding season on the fox ranch lasts from late January to March. The gestation period is approximately fifty-one days. This period, together with the early rearing or pupping season, constitutes the most critical time of the year on the fox ranch.

As a rule, the animals are monogamous, the dog rarely mating with more than one female. Segregated pairs must be carefully watched during the breeding season and if harmony does not prevail, the vixens are paired with new mates, the object being to produce a litter of fox puppies in every den if possible.

The litter ranges in numbers from one to nine, the average on many of the ranches being 2 1-2 to 3 1-2 which is remarkable. Males are left with the mother and young. They take care of their share of the parental duties and are absolutely necessary in the pen for the first few days after the young are born, as the vixen relies largely on her mate to carry food to her.

Fox puppies are blind for the first two weeks of their existance. They grow rapidly and usually appear outside the kennel when one month old. Within a short time they learn to lap milk from a basin and when two months old include solid foods in their diet. The mother fox will wean them when three months old. Fox puppies attain sufficient size and fuality of pelt by the first of December following the month in which they were born that they may be pelted at that time.

Even if the price of breeding stock be brought to one-half or less of its present level, and pelts bring only $100 apiece, there will be left enough profit to make the industry worth while.

An open invitation is extended by many breeders during the summer months, to visit their ranches. Some raise, besides hundreds of pairs of silver foxes, deer, buffalo, raccoon, wolves, different species of birds, and German police dogs.

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But here is something slicker.
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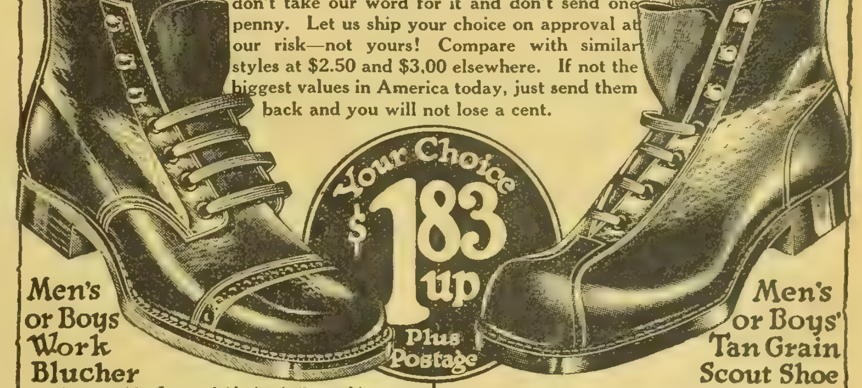

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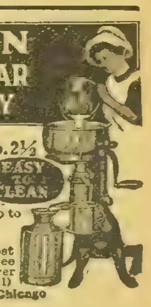

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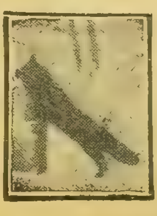

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80 ACRES, GOOD HOUSE, 40 FARM LAND 40 swamp. Grass and water good for muskrat raising. Rent or sell. Inquire BOX 232, care Michigan Business Farmer.

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WRITE FOR OUR FREE LIST OF 50 GOOD farms. DeCOURDES, Bloomingdale, Mich.

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WANTED—SINGLE MAN FOR YEAR. Prefer some milking experience, good wages and good home. State wages in first letter. Position open April 1st. CHAS. HAUCH, Whittemore, Michigan.

MARRIED MAN TO WORK A LARGE FARM in Oakland county, on shares. This is one of the best equipped frms in the county, rich level black land bordering on a beautiful lake, with large dairy and stock barn, lots of other buildings. Good large house for tenant. Silo, orchard pleasant place to live. Owner a business man and necessarily absent much of the time, therefore the tenant must be the best man obtainable. Must be able and willing to work every day and not lay down on the job. Farm has every possible equipment, even to tractor. Owner will furnish up to 30 cows for dairying. Tenant not required to furnish anything excepting his own automobile. Contract for ony year with privilege of five. General farming and dairying. Man will be compelled to furnish high class references as to honesty, ability, and as a successful farmer, and to such a man I am ready to make the most liberal sharing proposition ever offered a tenant farmer. Unless you are a hustler and use your head as well as your hands, and want to make good, don't apply. Write JAMES SLOCUM, 5705, Woodward Avenue, Detroit, Michigan.

WANTED POSITION—OUR SUCCESSFUL farm manager, 36 years of age, widower, no children. This man is honest, clean and a hard intelligent worker. Graduate U. of Wis. and life experience as farmer. Address him, HERMAN R. FRANZEN, Akron, Lancaster County, Pa.

WE PAY $200 MONTHLY SALARY, FURNish rig and expenses to introduce our guaranteed poultry and stock powders. BIGLER COMPANY, X682, Springfield, Ill.

WANTED—TWO SINGLE MEN TO WORK on farm. Good environments. MITCHELL BROS., Holly, Michigan. Bell Phone 64-F-21.

PLANTS AND SEEDS

STRAWBERRY PLANTS FOR SALE. SENAtor Dunlap, Gibson and Dr. Burrill, 60 cts. per hundred, $4.00 per thousand. Postpaid. Progressive Everbearers, $1.00 per hundred. Postpaid. Cuthbert Red Raspberries, $1.00 per hundred, $9.00 per thousand. Postpaid. ROBERT J. DeGURSE, Ovid, Mich.

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CERTIFIED COLLEGE WONDER OATS. Purity 99.7%, germination 92, test weight 37 pounds. Write for prices. HOMER GOULETT, Kawkawlin, Michigan.

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LET US TAN YOUR HIDE—COW AND Horse hides for fur coats and robes. Cow and Steer hides into Harness or Sole Leather. Catalog on request. [illegible] worn furs; estimates furnished. THE CROSBY FRISIAN FUR CO., Rochester, N. Y.

FARMERS, BOOK-KEEPERS, STUDENTS, I can and will teach you in one minute's time the absolute proof of any sum in addition, also simplified methods in addition, division and mutliplication. Errors are costly, my method will eliminate them. Send $1 for the lessons, they cost me $100. Address G. H. HOLLISTER, Twining, Michigan.

WANTED—TO BUY BLACK PERCHERON Stallion or dark Belgian. What have you? C. M. CULBERT, D. V. S., Chesaning, Michigan.

The Children's Hour

DEAR Nieces and Nephews: Did you ever hear of a tree called the "cow tree?" There is such a tree and it grows in South America on the broad barren plateaus of Venezuela. The sap of this tree resembles milk both in taste and appearance, and, is not only wholesome but nourishing as well, according to naturalists who have examined it. It is said to be not very different from rich cream aside from a slight balsamic flavor. The trees often grow to a height of one hundred feet and have no branches within less than eighty feet of the ground. The bark of the tree is generally smooth. If a hole is bored or any sort of a wound made on the bark, the milk-like fluid will commence to flow and continue for days until it coagulates at the mouth of the wound and forms a waxy substance which prevents further flow. I would like to see one of these trees, wouldn't you?—UNCLE NED.

OUR GIRLS AND BOYS

Dear Uncle and Cousins: I wrote a letter last fall, and seeing it in print, I thought I would write again. When I wrote I ask the boys and girls to guess if I was a boy or a girl, by my name, Leslie. I said if they guessed correctly I would write them a long letter. I received about fifteen answers of which some were right and some were not. I am now corresponding with five or six of them. Well, as my friend and I want go skiing I will close with a few riddles. How many peas in a pint? Answer: One p. What is the commonest put-up job you know of? Answer: Paper on the wall. Why does a tall man eat less than a short one? Answer: Because he makes a little go a long way. What kind of a cape does a prisioner like best? Answer: Es cape. Where can all the words of our last foolish conversation be found? Answer: In a dictionary. Patch upon patch and has seams. Answer: Cabbage. Well I guess it is too late to go skiing now, so I guess I will close for sure. Your cousin and niece, Miss Leslie Hillard, Cadillac, Mich., R. No. 2, Box 69.

Dear Uncle Ned: I was out to my grandpa's Feb. 19th and got interested in reading the Children's Hour in M. B. F. This is the first time I have ever written you a letter. I am twelve years of age and in the sixth grade. I have six blocks to go to school and live right on the river bank. I have two sisters, one eleven years old and the other four years old. How many Valentines did you get? I got between one and twelve, and the one that guesses how many I got I will write a letter to. We just posted our Africa maps and are about to take up the study of Australia. My father is the general delivery groceryman in St. Louis. I use to live one a farm one mile and half west of Forrest Hill. We had sixty acres of land, and believe me we used to raise crops. We have a farm two miles south of Elm Hall now but I live in St. Louis. My dad has a different car or farm nearly every day. Well I guess I had better close for this time—Clayton J. Anderson, St. Louis, Michigan.

Dear Uncle Ned: I see by the M. B. F. that I am not the only silent reader of your paper. My father is a reader and subscriber of the M. B. F. and likes it real well, especially the article about Henry Ford. I thought I would write a few lines tonight as I just took a notion to write a letter. I just wonder if this letter will escape the waste basket. I don't see many letters in the M. B. F. from here. I am sweet sixteen, and have five sisters and one brother. I am the oldest and my youngest sister was a week old last Friday. The answer to the riddle of L. D. Biddle is, a flat iron. Say, I like the poem about "The Wood Box." I don't have to help carry in the wood but I have to help saw it and I don't like that very well. I haven't sawed any for over two weeks, on account I was sick a week and the other week I had to keep house. Say, Uncle Ned, I am not getting the spring fever but have already had it. Ha! Ha! Well, I guess I must close as this is getting to be a long letter. Best wishes to you and the cousins. Your niece, Miss Trecel Sweeney, Cadillac, Mich., R. R. No. 2.

Dear Uncle Ned: This is my first time writing to you I am a girl of 16, I'll be 17 May 20th. I have dark hair and eyes. I am five feet tall and have passed the 9th grade. I signed for the Michigan Business Farmer just last summer and I like it very much. I am writing to a girl in Lansing. I found her address in M. B. F. I like her very much. I will tell you her initials and if you guess her name I shall write another letter (E. P.) Will some of the nieces and nephews write me a letter, please? Your loving niece.—Louese Irene Barker, Route No. 3, Box 102, St. Louis, Mich.

Dear Uncle Ned: I have never written before. May I join your merry circle? I enjoy reading the letters in the Children's Hour. I am nine years of age and in the sixth grade at school. Well, I will tell you about our valentine day at school although my letter is a little late, the old saying is "better late than never." We had valentine cookies and pop corn. I got twenty-nine valentines and my brother got nine. We are writing a composition about George Washington. Who ever has the neatest one gets a prize. No one got the prize yet. Please, some of the girls and boys, write to me.—Ruth Pobanz, Owendale, Michigan, R2, Box 59.

Dear Uncle Ned: I have read the M. B. F. so long I thought I would write to you. I am 5 ft. 4 in. tall. I have a light complexion and brown hair and blue eyes. My age is between 12 and 16. Any one guessing my age will receive a nice long letter from me as I love to write letters. My birthday is on July 22. I live on a 160-acre farm. We have 8 cows, 2 pigs, 2 horses and 4 sheep. I have one sister and 3 brothers at home. My sister is 11. Her name is Amy. My oldest brother is 17. His name is Harold. One is 15. His name is Carl and the third one is 6 years old. His name is Leon Graves. Well, I guess this is enough for now, so will close with a few riddles. Why is a caterpillar like a pancake? Answer: Because its the grub that makes the butterfly. What is the key of good manners? Answer: B natural. See who can guess this one. Why is an important young lady like a music book? I will tell the answer in my next letter if no one guesses it. Will close hoping to hear from some of the boys and girls. Will answer everyone I can. I remain Your niece, Miss Marie Graves, R. 1, Box 88, Manton, Mich.

Dear Uncle Ned: I suppose you will be very much surprised to hear from me as I have not written for so long. I am a girl 14 years old and in the seventh grade at school. I go to the Greenwood school on the M-10 trunkline road. My father and mother take the M. B. F. and like it fine. I have one sister. Her name is Muriel. I live on a farm of 160 acres. We have 7 horses, 8 cows, 10 calves and 85 chickens. We have a thoroughbred Shorthorn Sire and 2 thoroughbred pigs and 7 little pigs. My daddy shipped two large pigs which weighed 620 pounds. I think that is pretty good for pigs at 7 months old. We have a creek that runs through our farm and in the winter it is covered with ice and my cousin comes over and goes skating with my sister and I. We go coasting down the hill in front of our house. My grandmother, who is a widow, is staying with us this winter. We girls like her to tell us stories about when she was young. For pets I have a cat named "Tetedils" and two kittens. I help my daddy milk and my sister washes the dishes for mother. It is pretty cold for me to go out to milk in the morning. If you guess my sister's age I will write you a long letter. She is between 9 and 13. Well I guess I will close wishing some of the boys and girls would write to me.—Leorna Brown, Tawas City, Mich., R. F. D.

UNCLE RUBE SPINACH SAYS

THE FOUR SEASONS.

WINTER, the time of year 'at most everybody dreads, is nearly past. In a few days it'll be spring. Spring is so beautiful an' lovely 'at everybody loves it. Flowers begin to bloom in springtime an' folks al'us say "Ah spring is the most beautiful time of the whole year." Mebbe 'tis, mebbe not, it's jest as we look at it, what makes it beautiful or not. The springtime sure is a lovely time. Summer comes right after the spring an' who can say 'at summer isn't a lovely time? An' then when Autumn comes—Oh Boy—she's a lovely time too. Leaves all turned to gold, walnuts an' hickory nuts fallin'—the season's comin' to an end when autumn comes. Spring, summer, fall an' winter—somehow you know I like 'em all. Sometimes I think spring best—young life jest startin' out—so it is with humanity. Springtime—time of love an' everything. Summer—gittin' together an' life is all lovely, green like the grass, flowers kinda growin every place—nothin quite like love in the summer time. An' then comes Autumn—leaves are turnin' yeller—golden they are an' in our lives we see life in a more serious form. Many of our young folks have decided to marry, now—good luck go with them, and may God help them. Well, alright—I like the season's jest as they come. I watch men as they go through the different stages—spring, fall, winter—an' all I see— men that have entered into the—well, we'll call it the winter of life—hair gray, mebbe white, no matter, they give up —the gray hair makes 'em old an' then they become just grouchy ol' cusses—you know what I mean? When a man begins to think winter has come into his life he's just 'bout all alone. An' I'm talkin' of women jest as much as I am of men. Women git old—they feel, talk, an' act old.

Yes, even in our life time, winter is not so bad. Look with me if you will, at the man or woman, silver-white hair that shames the snowdrifts but with a smile that matches the flowers of spring. Yes, they are in the winter of life, and could make it somber an' very disagreeable but they don't. God bless the man or woman with silver-white hair that still sees the sunshine of life—that sees the beauty of it all—those who have sympathy for, an' mingles with the young. To them there can be no real winter—there is no winter to any of us unless we look through gray an' wint'ry eyes. Oh yes, my friends, I love the springtime 'cause everything speaks of new life; but I also love the summer fall an' winter —not only of the seasons but of life itself, an' of all the seasons I think the winter jest the best—'specially if we try to make the winter season—whether of life of natur' the best season. Are you linvin in spring, summer, fall or winter? An' are you makin the most of your seasons? —Cordially yours, Uncle Rube.

THE TRUTH ABOUT HENRY FORD

(Continued from page 9.)

Mrs. Edison and Mrs. Ford are to be the only two women on this executive memorial board.

At the beginning of the European war Mrs. Ford leased Oughtrington Hall, in Chestshire Township, England, a short distance from Warwick, where her mother was born. She equipped it as a home for Belgian refugees; one hundred at a time were clothed, fed and sheltered there. As they found friends, relatives or work was secured from the London clearing house. Teachers were employed for the children; a school room was furnished; outdoor tennis courts were covered and heated for a supervised playground. Tailoring and other trades were taught the refugees. Among them was a Catholic priest, and a chapel was equipped in which he said mass and held other services. Wonderful results were accomplished, as is attested by letters and documents from the Lord Mayor and others. After the armistice the furniture and equipment were sold and the proceeds placed with the Manchester Belgian Relief Fund to be used by that organization. When Elizabeth, Queen of the Belgians, visited this country, Mrs. Ford was one of the few women on whom she bestowed her medal which is inscribed: "Pro patria Honore et Cartate."

Mrs. Ford's most intimate friends are those she knew in girlhood or before the advent of automobiles. Her poise and culture, her innate goodness, makes her immensely popular. Her judgement and clear intellect have been of untold value to her gifted husband. Their ideal home life is a happy demonstration that love does not dwell only in a cottage. The following incidents somewhat indicates her tastes.

Shortly before the holidays in 1920, while she was shopping in New York, the clerk of a Fifth Avenue shop asked her to inspect the Duke of Hamilton's silver service. It weighed seventeen hundred pounds, and was heavily crested. It had been sold to a young mid-western manufacturer to match his dining-room set, also purchased from the Duke's estate. "Would Mrs. Ford care to place an order for similar silver?"

She has a vivacious and cordial smile. "I have no ambition to collect heirlooms of royalty," she replied. "My resources are needed elsewhere."

The undaunted clerk produced a short string of pearls, each as large as a hazel nut. "Only a half million dollars," he urged suavely, as he laid them on the black velvet square to accent their creamy sheen and luster..

Mrs. Ford shook her head. "At home I have the finest jewels in the world," she remarked, as she concluded her purchases. "Nothing you have on sale can equal them."

The Fords have a son; his home is ten miles east of Detroit, in Grosse Pointe on Lake Sainte Claire, near the point where it joins the Detroit River. The Henry Ford estate is ten miles west of the city on the Rouge, which also flows into the Detroit River. A private telephone wire connects Mr. Ford's study with his son's; a private wire connects Mrs. Ford's bedroom with the sleeping porch of her grandchildren, Henry II and Edsel junior, chubby, golden-haired, blue-eyed cherubs. Like the Athenian mother, Mrs. Ford says: "These are my jewels."

THE FARMERS' TROUBLE—OVPRODUCTION

(Continued from Page 16.)

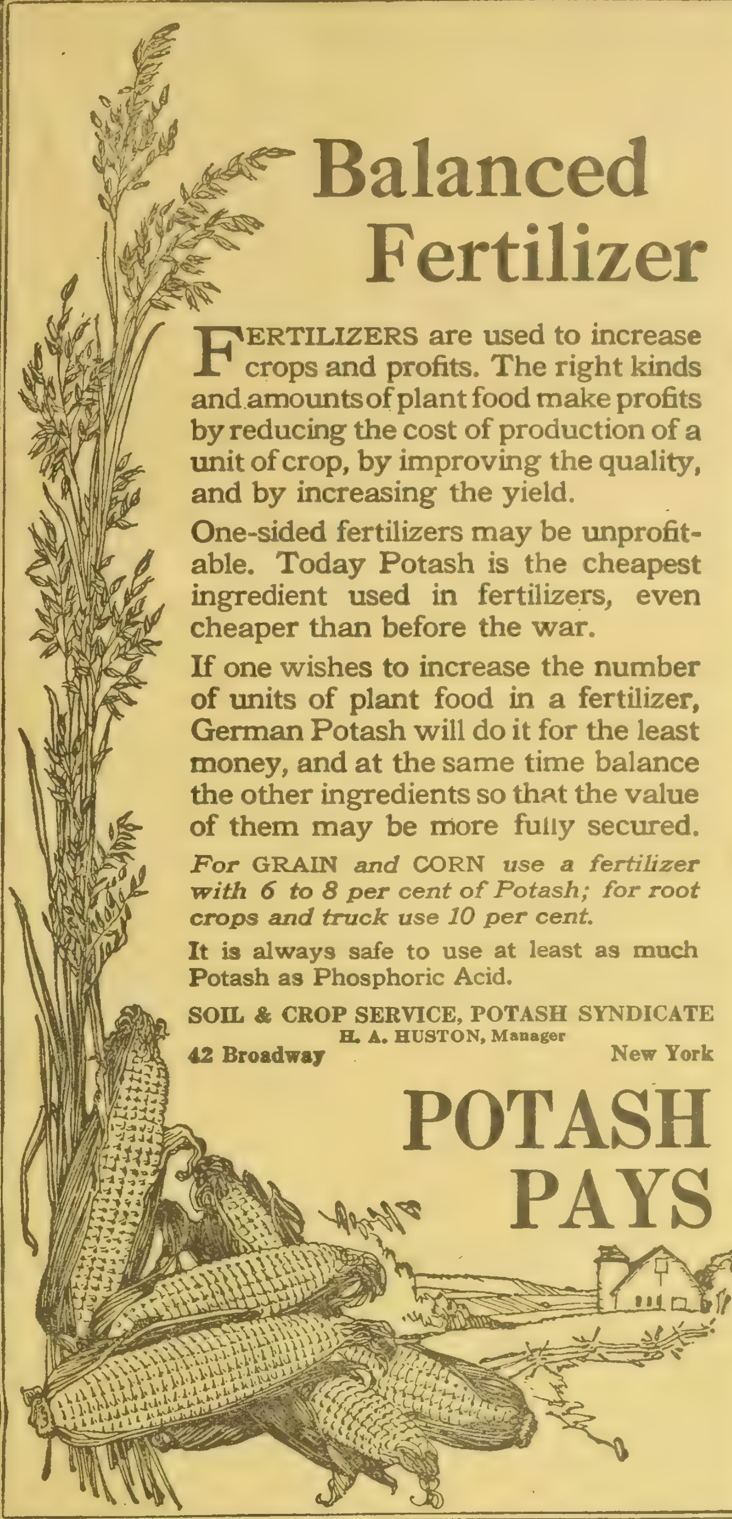
of farmers and increases the number and buying power of farmers' customers. Any substantial reduction of freight rates can be made (until we have government ownership) only by bankrupting the roads of beggaring their employes. Lending money or giving credit to nations whose credit is exhausted to enable them to buy our surplus is practically making them a present of it. If our lawmakers really want to get our farmers more money for their crops, several nations have lately shown them a sure way to do so. The Japanese government, by taking control of the silk crop, has nearly doubled the price of raw silk in two years. Brazil has done the same thing with coffee. England is now doing likewise with rubber and tea. As this country takes 75 per cent of silk, coffee, and rubber that these nations export, and they in turn take most of our surplus wheat, cotton, etc., it wouldn't seem unfair if our government, by taking control, made them pay enough for our wheat and cotton, at least, to give our farmers a slight margin of profit.—J. Tierney, Illinois

---

FARMERS' EXCHANGE SHOWS REMARKABLE RECORD

BEGINNING with a borrowed working capital of $5,000 in 1900 the Eastern Shore of Virginia Produce Exchange at Onley, Va., which is composed of farmers on the narrow strip of land separating Chesapeake Bay from the Atlantic Ocean, has built up a business that is a conspicuous example of successful farmer cooperations in the opinion of the United States Department of Agriculture. In 1922, total sales aggregated more than $9,000,000. A profit of $57,000 was made, of which $39,000 was distributed as patronage dividend and the remainder carried as surplus. At the close of business December 31 the exchange had an outstanding capital of $31,000 and a surplus of $265,000.

The principal products sold are white potatoes, sweet potatoes, strawberries, cabbage, and onions.



Balanced Fertilizer

FERTILIZERS are used to increase crops and profits. The right kinds and amounts of plant food make profits by reducing the cost of production of a unit of crop, by improving the quality, and by increasing the yield.

One-sided fertilizers may be unprofitable. Today Potash is the cheapest ingredient used in fertilizers, even cheaper than before the war.

If one wishes to increase the number of units of plant food in a fertilizer, German Potash will do it for the least money, and at the same time balance the other ingredients so that the value of them may be more fully secured.

For GRAIN *and* CORN *use a fertilizer with 6 to 8 per cent of Potash; for root crops and truck use 10 per cent.*

It is always safe to use at least as much Potash as Phosphoric Acid.

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HOMESPUN TOBACCO. CHEWING 5 pounds $1.75; 10 pounds $3.00; 20 pounds $5.25. Smoking 5 pounds $1.25; 10 pounds $2.00; 20 pounds $3.50. Send no money, pay when received. CO-OPERATIVE TOBACCO GROWERS, Paducah, Kentucky.

FROM THE BALLAD OF READING GAOL

By Oscar Wilde.

IN Debtor's Yard the stones are hard,
And the dripping wall is high,
So it was there he took the air
Beneath the leaden sky,
And by each side a Warder walked,
For fear the man might die.

* * *

Or else he sat with those who watched
His anguish night and day;
Who watched him when he rose to weep,
And when he crouched to pray;
Who watched him, lest himself should rob
Their scaffold of it's prey:

* * *

For oak and elm have pleasant leaves
That in the spring-time shoot;
But grim to see is gallows-tree,
With it's adder-bitten root,
And, green, or dry a man must die
Before it bears it's fruit.

* * *

It is sweet to dance to violins
When Love and Life are fair;
To dance to flutes, to dance to lutes
Is delicate and rare;
But it is not sweet with nimble feet
To dance upon the air.

* * *

I know not whether Laws be right,
Or whether Laws be wrong;
All that we know who lie in gaol
Is that each day is like a year,
A year whose days are long.

* * *

The vilest deeds like poison weeds
Bloom well in prison air;
It is only what is good in man
That wastes and withers there;
Pale Anguish keeps the heavy gate,
And the Warder is Dispair.

WOMEN HAVE MUCH TO LEARN

THE editor of this page recently had an interview with former Senator Eva M. Hamilton of Grand Rapids. She says that women have much to learn in politics, that, "In the first place they do not back each other as they should, that they allow personal feelings to come in and befog the issue, that women are much inclined to be jealous of each other in politics and it being a new game in the hand of amatuers an unseemly scramble for honors is the result."

This desire to be the standard bearer among the women active in politics and the quite general indifference of the majority of women does leave much to be desired and yet a review of the bills that have been passed thru womens efforts and the constructive legislation that is under consideration gives the student of these matters much hope.

From its organization, the National League of Women Voters has believed in and worked for the removal of all unfair discriminations against women, under the law. In less than three years, sixty-three laws in twenty-six states have been secured to this end, largely through League effort. The greatest single federal disability left after women were given the franchise, has been removed and the citizenship of married women made as independent of marriage as is the citizenship of men.

The League believes in, and works for, also, protective legislation which the experience of the world has shown to be needed for the good, not of women only, but of the race. Because we believe that women need a kind of protection which men do not need, we have worked for minimum wage laws, mothers' pensions, the 8-hour day for women in industry, the Sheppar-Towner law, and other measures necessary to safe-guard the future physical well-being of the race through proper consideration for potential mothers.

If you are interested in the work that the National League of Women Voters is doing write to the headquarters, 25 Traction Building, Peru, Indiana, for pamphlets telling of it's work. Write for Specific Bills for Specific Ills and enclose 10c. It is interesting reading.

GLAD OR SORRY?

THE Ballad of Reading Goal came to my mind this morning when I picked up the paper and read that once more Michigan had voted against capitol punishment.

The prison walls have given us two very wonderful expressions of the English language. Pilgrim's Progress written by John Bunyan a saintly man and the above mentioned ballad written by a man in which the low and the high struggled for mastery, Oscar Wilde, of unquestionable literary ability but who was convicted of a moral crime and served two years in a penitentiary.

When one remembers that in 1921 there were committed in the city of Detroit alone 100 murders one's sence of justice cries out for the supreme penalty but when one reads clear thru, The Ballad of Reading Gaol a horror of legalized murder grips the soul, and one is inclined to be glad that the record of our State has been against it since 1847.

The Farm Home

A Department for the Women

Edited by MRS. GRACE NELLIS JENNY

TEACH INDEPENDENCE

I WONDER if I dare to call myself a thotful mother, so as to take part in the discussion of your question. Anyway, I have three children, and it seems to me that I think several times a day. Will that do?

It is my firm conviction that children ought always to be told the reason for rules, or helped to find the reason.

I figure it out like this: If I have not a good sound reason for any rule or request, then that rule or request is unreasonable. If I try to enforce it I am an unreasonable mother.

On the other hand, if I have a good sound reason for any rule or request, I can develop the child's reasoning power by helping him to find the reason. And well developed reasoning power results in a reasonable child.

All too soon our children must leave us to begin manifesting what we have taught them. If they are not taught to reason while in our care, they must learn by bitter experience later on. If children were horses and parents could always hold the lines we might say "Whoa, back, gee, haw, giddap." They would have to obey "Because I say so." But children are not horses, and parents cannot always hold the lines.

I am acquainted with three families who grew up under that sort of discipline. After a while the guiding hand dropped the lines. * * *

The ones who were gifted with horse sense knew they could only pull, while someone else drove. They are self-supporting.

The ones who lacked horse sense believed that after a lifetime of pulling, they could now drive, and tell someone else just how to pull. They will end their days in the poor house.—Mrs. J. C.

OUR LEAD

THE Detroit Saturday Night followed our lead this week and came out with an article on how and how not to take cold. I print the following remedy which we overlooked:

"I can gib you sobething for your cold," says a kind friend between sneezes. "Take a raw odion and cud it into slices. Thed put some viddegar on it and ead id before you go to bed. Id always cured be."

CORRESPONDENCE COLUMN

There are two pattern orders on my desk which I cannot fill for the reason that no post-office address is given. One asks for No. 2696, 30 waist measure, the other for the same No., size 26. I will gladly fill the orders as soon as I receive the necessary information. A number came thru this week with no change or stamps enclosed and no sizes mentioned. Please look your orders over well before mailing, it will save you disappointment and delay.

I have just bought a second-hand Majestic range. It is in good shape with the exception of a little rust. Now can any of our readers tell me the best way of cleaning that rust. Is there any kind of enamel paint that will not burn off? Thanking you for an early reply.—Mrs. M. E. R.

—To clean steel oven doors, rub briskly when the door is warm with a cloth dipped in vinegar.

To clean the iron parts saturate a woolen cloth with linseed oil and rub until the rust disappears, next rub with a dry clean cloth. Now use a Rust-proof paint and the range should be in very good condition. I am mailing you a card giving the name of a firm that makes a rust-proof paint. If any of our readers have suggestions to make along this line I will publish them.

J. D. O.—Tarnished copper may be cleaned with vinegar and salt. Care must be take to remove all traces of it or the preparation will corrode the copper. Wash off carefully and rub dry with a clean soft cloth.

Claude R.—Write to some music store in a large city, they will furnish you with what you want if it is obtainable.

I saw in the M. B. F. a request for the Sec. of the Treasury under Lincoln. I have a picture of Lincoln and his cabinet, as follows: President, Abraham Lincoln; Sec. of War, Frederick Stanton; Sec. of Int. Caleb B. Smith; Sec. of Navy, Gideon Welles; Sec. of State, William H. Seward; Sec. of Treas., Salmon B. Chase; Postmaster General, Montgomery Blair; Attorney General, Edward Bates.

Have all the songs asked for been received? I had some of them but was too busy in the fall to send them in.

This is my first letter to the paper. We have always taken it and would be lost without it if it did not come, we helped to get it started.—Fraternally yours, R. A. Kinney.

—The Dead Man's Hand was one poem asked for and not received. The Brier Rose another.

We would like very much to get the full name of a Mrs. McAllister whose husband and brother kept a staple and fancy grocery store at Otsego over ten years ago. I will very much appreciate any information.—Mrs. Perry Haven, 530 Pine St., Mt. Pleasant, Mich.

Some time ago I saw a recipe for curing rancid lard, in your department. I intended to cut it out. but was taken sick and did not. The paper is now gone and I ask you to print it again. Will appreciate it very much.—A Reader.

—Re-heat the lard being careful not to fill the kettle more than three fourths full. When hot put in a large handful of salt, stir well for a few minutes, remove from the fire and strain. The salt will settle to the bottom of the kettle, the lard will not taste at all salt and will be much improved.—From issue of March 4, 1922.

I am asking you to thank the good woman who gave the cure for eczema. I saw it in your helpful corner eight months ago and have been helped greatly by it. I wish to thank her and you also. Your corner is my choice of this paper. May the good work go on.—Mrs. Bert Tidey.

J. M. B.—Shingles is not a contagious disease. It is sometimes produced by sudden exposure to cold after violent exercise and sometimes follows acute affections of the respiratory organs.

The treatment consists in gentle laxatives, and in rectifying any derangement of the system. It sometimes has an obscurely nervous character, occurs in the course of a nerve and is proceeded by stinging neuralgic pains. It must be allowed

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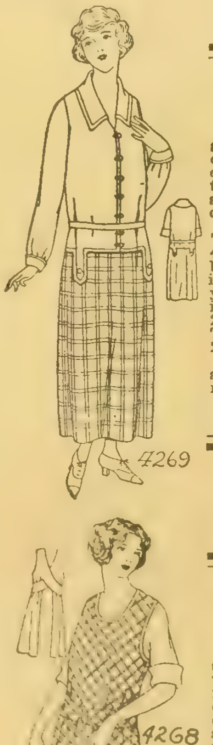
ALSO SOME POINTS FOR THE NEEDLE (Illustrating 30 of the various, simple stitches) all valuable hints to the home dressmaker.



4269

A Popular Style

4269. Chambray and gingham, or serge and checked or plaid suiting could be combined for this model. It portrays a style becoming to slender and mature figures. The Pattern is cut in 7 Sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38 inch size requires 2 ½ yards of 36 inch material for the waist, and 2 ⅜ yards for the skirt. The width at the foot is 2 ⅜ yards.

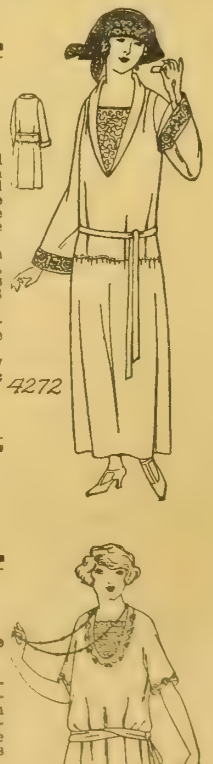
Pattern mailed to any address on receipt of 12c in silver or stamps.

One of Fashion's Favorites

4272. Blue broad cloth, braided with soutache would be good for this model. The style is also attractive for velvet, Canton crepe and taffeta.

The Pattern is cut in 7 Sizes: 36, 38, 40, 42, 44, 46 and 48 inches bust measure. A 38 inch size will require 3 ⅞ yards of 54 inch material. The width at the foot is 3 yards.

Pattern mailed to any address on receipt of 12c in silver or stamps.



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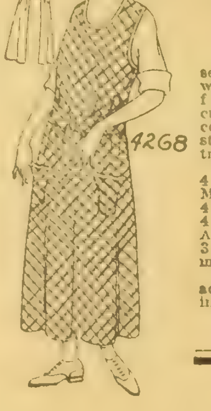


4268

A Practical Apron Model

4268. Gingham was selected for this design, with white bias banding for a finish. Sateen, cretonne, chintz or crepe could be used with stitching or braid for trimming.

The Pattern is cut in 4 Sizes: Small, 34-36; Medium, 38-40; Large 42-44; Extra Large, 46-48 inches bust measure. A medium size requires 3 ¾ yards of 36 inch material.

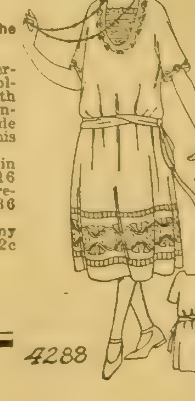
Pattern mailed to any address on receipt of 12c in silver or stamps.

A Simple Frock for the Growing Girl

4288. Blue wool jersey embroidered in colors, or green taffeta with piping and vest of pongee in a natural shade will be pretty for this model.

This pattern is cut in 8 Sizes: 12, 14 and 16 years. A 14 size requires 3 ⅝ yards of 36 inch material.

Pattern mailed to any address on receipt of 12c in silver or stamps.



4288

to run it's course. Languor, loss of appetite, shiverings nausea and headache often follow after which the erruption appears in irregular patches. The erruption recedes by the fifth or sixth day. Gentle laxatixes, rest and quiet for a few days accompanied by a light diet is about all one can do to overcome the disease.

My husband is . cripple and we have three children two boys, one four and one five and also one little girl of two. We are very much in need of clothes for the children and in need of quilts, if some readers had pieces of percale and gingham I could make them into quilts. We are trying to raise our children the best we know how but I do need help and come to the readers of Our Page asking for it.—Mrs. Mansel Cone, Rosecommon, Mich.
—I believe this lady is entirely worthy and that she needs and deserves help so do what you can. I am mailing her a bundle to-day and hope it will be of use to her and her little family.—Mrs. Jenney.

One of our subscribers will make sweaters, bonnets, crocheted hats, booties, door-panels and table runners.

If you wish her address write to me for it.—Mrs. Jenney.

Who can send the words to the song, "The Maine?" I think it was called "Remember the Maine."

SOMETHING FRESH

From a youthful writer of very tender years, comes an article published in the London Morning Post, called, "The Advantages and Disadvantages of Novel-Reading." Read it and smile once more.

SOME person's opinion differ greatly with regard to the reading of novels there are a good many different kinds of novels, such as 1d., 2d., 4d., 6d. I do not think there is much harm in reading novels if you read them at the right time, and do not spend to much money on them, which is sometimes the case. The Waverly novels, for instance, are not at all bad books if read at the proper time. The great fault of some people are that they are always reading novels, and of course the more they read the more they want. I think it is not right to read a novel on Sundays; it is just as much harm as playing, because it generally gives great pleasure to the mind. The great harm of reading novels are to be careful not to follow them. Novels do not increase your learning much, but does sometimes decrease it. I think it is about the worst thing any schoolboy could have in the way of books and 4d. novel it generally does a lot of harm. Tom Jones was a very good novel and was written by a very good novelist. George was also a great novelist who died but a short time ago.

BOUGHT A COMMUNITY CANNER

FIVE farm women in Bates county have provided full shelves of canned fruit and vegetables for their families at a minimum outlay of time and labor according to extension specialists at the Missouri College of Agriculture.

At the beginning of the canning season last summer these women, following the suggestion of their home economics agent, bought a steam pressure canner, a supply of tin cans and a can sealer. Through the co-operative ownership and operation of this equipment all kinds of food have been preserved in the safest and easiest way and the cost to any one family has been camparatively small.

POINTS OF INTEREST

We still have the unsightly billboard with us, however.

Buyers of poultry, say the Nooksack, (Wash.) Sentinel, have discovered that healthy birds can not be found on farms where the poultry and cattle are allowed to run together except when the herd has been tested and found free from tubercular taint.

Up in the vicinity of Traverse City, Michigan large numbers of robins are reported, which the native declare, forgot to go south last fall. But the question is, how do the natives tell whether a robin's coming or going?

Apples having neither seed nor core are being developed in Abbotsford, Canada. The fruit is a veriety of Farmeuse and has only a slight marking of the flesh where the core is ordinarily found.

The windowless room is a menace to health and is unfit for occupation by either man or beast.

HEALTH HINTS

OR
HOW TO CURE YOURSELF
BY
DR. T. N. ROGERS

CANCER

CANCER is not a local disease or a blood disease but a constitutional one. Coming on very slowly and insiduously. Diet has very much to do with it, and diet has more to do with it's cure than anything else. Cancer and rheumatism are very often associates. Most cancer gives history or rheumatism. The one big factor is diet. The blood in rheumatism and cancer show almost the same conditions.

Preventative Measures

Eat very little meat. However, I consider starchy foods more harmful than meat as they produce an acid condition or an acidosis. The ordinary breakfast foods are indigestible and so ferment in the stomach especially when boiled. Baking or roasting is much better for any starchy food. White bread as baker's bread should not be eaten with meat. The meat takes three hours to get out of the stomach and by this time the starch in the bread is fermented and throws out or forms acids which are poison. We call this Toxemic poisoning. This irritates the stomach causing catarrh, then ulcers, or cancer. The poison may be carried to other parts of the body and produces a condition of the tissues which lowers the vitality and favors the formation of cancer.

Increase of Cancer

Cancer has increased 30% in 20 years. Cold storage foods, meat and vegetables create too much acid in the body and so breed germs which cause cancer. The public taste for such food is increasing every where, also the habit of eating meat in large quantities.

CONSTIPATION

CERTAIN foods improperly cooked cause constipation and the colon becomes clogged and a seed bed of disease. The safeguard is a reformed diet of nutritious and natural foods, fruit, cereals and vegetables well cooked.

Test the saliva with blue litmus paper yourself and if the paper turns red you are on the road to trouble. Better stop and make a fresh start, cut down the starch, sugar and meat and cut out coffee, drink plenty of water, eat only two meals a day for a while and fast one day each week.

CURE FOR EAR-ACHE

Having received so much help from your paper I want to do my share. I enjoy every page of the M. B. F. and am anxious for it to come. I will send my remedy for ear-ache.

My little girl of nine was bothered with gatherings in her ears and suffered very much. After using this remedy she was entirely cured. Take a cotton cloth, double it and wet it put it in on onion cut fine and one-half as much tobacco. I used Peerless. Tie cloth in a sack shape and lay in hot ashes until the onions are cooked, squeeze out juice and put in ear. It acts at once. I press out all the juice I can and keep it for another time. Just warm it a little.
—A Reader.

LAUGH IT OFF

Are you worsted in a fight?
Are you cheated of your right?
  Laugh it off.
Don't make tragidies of trifles;
Don't shoot butterflies with rifles;
  Laugh it off.
Does your work get into kinks?
Are you near all sorts of brinks?
  Laugh it off.
If it's sanity you're after,
  Laugh it off.
—Modern Methods

There's no recipe like laughter—

There is no "Just As Good"
Don't accept substitutes—don't buy baking powder that is supposed to be just as good as Calumet—don't think that a big can at a low price means a real saving. Use
CALUMET
The Economy BAKING POWDER

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BAKING POWDER
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Avoid disappointments. Millions of housewives are using Calumet because of its dependability. They know that the bakings will always turn out just right. Pies, cakes, biscuits, muffins, will always be perfectly raised, light and wholesome if you use Calumet, the real economical leavener.
Calumet sales are 2½ times as much as that of any other brand—always call for it.
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Here is a big Montgomery Ward offer! A DOUBLE LENGTH roll of wall paper for only 6c. Enough to paper an entire room 10x12 for as little as 82c! This includes side wall, border and ceiling paper.
Send for our new book of Wall Paper Samples and see the MANY OTHER big values we have ready for you. It shows you our complete new assortment—grass-cloths, tapestries, oatmeal papers, leather patterns, fabrics. And all at prices to suit your pocketbook. Among the better grades, we have a big variety for only 50c and up per DOUBLE LENGTH roll. And remember, you get *twice as much wall paper* in one of our 16-yard DOUBLE LENGTH rolls as in the ordinary 8-yard *single roll*.
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Selected mail-size vines from the Michigan Grape Belt where the finest Concords in the world are grown. Hardy, healthy, lusty vines, bred up to yield A BUSHEL of the Finest Grapes from EVERY Vine!
Three vines planted in your garden will make a vigorous start. Of rapid growth, they will soon amply supply your table. They will grow and fruit in very cold locations with a little simple winter covering.
Our Big Fruit and Garden Magazine Sent Four Months to Help You Start RIGHT!
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J. E. HAMPTON & SON, Box 14, Bangor, Mich.

Saved Big Veterinary Bills — Cows Gave More Milk the Year Through

Mr. C. E. Dodge of Dewittville, N. Y., is one of the many cow owners who have discovered that it pays best to PREVENT cow diseases. He knows that it is a fine thing to have on hand such a valuable medicine as Kow-Kare in the event of actual diseases, such as Abortion, Retained Afterbirth, Barrenness, Milk Fever, Scours, Bunches, etc. But he also knows that a moderate use of Kow-Kare in the feed not only PREVENTS these diseases, but greatly increases the winter milk flow. He writes us his experience, as follows:

"Since I have been on the County Farm, I have been using Kow-Kare in the dairy for the last ten years. I have 52 cows. My experience is that a few dollars' worth of Kow-Kare saves us a great many dollars' worth of veterinary bills, and also every cow in the dairy that I feed it to produces more all the year thru because of the Kow-Kare. I have no sick cows or trouble, when I begin feeding Kow-Kare, from the first of January until I turn them out in the Spring."

Winter feeds are so much harder on the digestive and milk making organs of the cow that the vitality of these functions is sure to become impaired unless nature is assisted. Kow-Kare is designed primarily to strengthen these very organs so that they may throw off disease and keep up the normal milk production.

The best of it is, this valuable Kow-Kare treatment costs so little. Just a tablespoonful of the remedy morning and evening about one week in each month will keep a cow in best of health and heaviest milking. Your troubles from sick and backward cows are over when you have learned to depend on Kow-Kare.

Feed stores, general stores and druggists sell Kow-Kare; large size, $1.25, medium, 65c. If dealer is not supplied we will mail, postpaid, on receipt of price. Write now for valuable book, "The Home Cow Doctor."

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Lyndonville, Vt.
Manufacturers of KOW-KARE and BAG BALM

KOW-KARE
HOME COW DOCTOR
DAIRY ASSOCIATION CO
FREE BOOK

BREEDERS DIRECTORY

Advertisements inserted under this heading for reputable breeders of Live Stock at special low rates to encourage the growing of pure-breds on the farms of our readers. Our advertising rate is Thirty Cents (30c) per agate line per insertion. Fourteen agate lines to the column inch or $4.20 per inch, less 2% for cash if sent with order or paid on or before the 10th of month following date of insertion. SEND IN YOUR AD AND WE WILL PUT IT IN TYPE FREE, so you can see how many lines it will fill. Address all letters,
BREEDERS DIRECTORY, MICHIGAN BUSINESS FARMER, MT. CLEMENS, MICH.

CLAIM YOUR SALE DATE

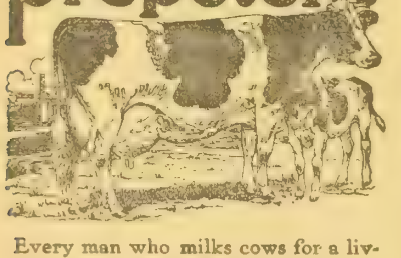
To avoid conflicting dates we will without cost, list the date of any live stock sale in Michigan. If you are considering a sale advise us at once and we will claim the date for you. Address, Live Stock Editor. M. B F., Mt. Clemens

Mar. 21—Aberdeen-Angus, Russell Bros. Merrill, Mich.
Mar. 22—Poland Chinas, Sonley Bros., St. Louis.
Oct. 18—Holsteins, Howell Sales Company Livingston County, Wm. Griffin, Sec'y, Howell, Mich.

CATTLE

HOLSTEINS

Prepotent



Every man who milks cows for a living knows that *prepotency*, ability to "breed on," is one of the best reasons for Holsteins.

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Influence of 2,000 years of Breeding for Great Size and Ruggedness combined with highest yield - Strong Healthy Calves - Assured improvement in grading up common cows with Holstein bulls.

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YEARLING BULL BARGAIN—DAM A 25 LB. junior 4-year-old Pontiac Korndyke King Segis breeding. Sire 32 lb. grandson of 35 lb. Michigan Champion. Calf well built, nicely marked. Federally tested. Pedigree, photo and bargain price on request.
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We offer a red, low down, thick bull calf fifteen months old, also one roan calf fifteen months old. A bargain if taken at once. Also a few young cows with calves at foot.

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L. C. KELLY & SON, Plymouth, Michigan.

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M. E. MILLER, Sec'y, Greenville, Mich.

ANGUS

Bellevue Stock Farm

Public Sale of
Aberdeen-Angus Cattle

To be Held on the Farm at Merrill, Mich.,
Wed., Mar. 21st, 1923, at 1:00 O'clock P. M.

22 Head 15 Females—7 Bulls—8 Cows with calves by side, 7 Heifers

An opportunity to buy real quality cattle at your own price. These cattle are right in pedigree and individuality. Teeming in the blood of such fashionable families as Blackbirds, Aricas and Prides. In this offering will be found real show prospects. This sale should appeal to beginners. Nine months time will be given on bankable notes. Write for catalog.

Auctioneers: Col. J. P. Hutton and Col. D. J. McInnes.

RUSSELL BROS., Prop.
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Will meet trains on sale day. Good auto roads.

WE HAVE SOME FINE YOUNG ANGUS BULLS from International Grand Champion Stock at reasonable prices. E. H. KERR & CO., Addison, Mich.

GUERNSEYS

FOR SALE—REGISTERED GUERNSEY HEIFERS at reasonable prices, also choice bull calves of May Rose breeding.
H. W. WIGMAN, Lansing, Mich., Box 52.

GUERNSEYS—Registered Bull Calves, Cheap, also grades. Best of breeding for production and size. George Damken, North Manchester, Indiana.

MISSAUKEE GUERNSEYS. A NEW CROP OF calves coming soon. No females for sale. Order that new bull calf A. R. Sire and Dam.
A. M. SMITH, Lake City, Michigan.

JERSEYS

Jersey Breeders Attention!

DO YOU WANT A COW OUT OF A SILVER Medal Sire and R. O. M. Dam? Good looking individuals, priced to sell. Photos and prices on application.
Samuel Odell, Owner. HIGHLAND FARM Shelby, Mich. Adolph Heeg, Farm Supt.

REG. JERSEYS, POGIS 99th OF H. F. AND Majesty breeding. Young stock for sale. Herd fully accredited by State and Federal Government. Write or visit for prices and description.
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which guarantees maximum profits. Let us personally [illegible] success of other Michigan farmers. For further information write

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HEREFORDS FOR SALE. SEVEN CHOICE yearling and heifer calves and seven yearling bulls sired by Wyoming 9th. International Prize winner. Farmers prices. Herd established in 1860 by Gov. H. H. Crapo. Write for information. CRAPO FARMS, Swartz Creek, Michigan.

FOR SALE CHEAP—REG. HEREFORD BULL, 2 years old.
CALVIN BARKER, Clio, Ohio.

RIVERVIEW HEREFORDS—FOR SALE Bulls, also few females. WM. C. DICKEN, Smyrna, Mich.

DAIRY and LIVESTOCK

10 MICHIGAN HOLSTEIN BREEDERS JOIN NATIONAL ASS'N.

TEN Michigan Dairymen were recently admitted to membership in The Holstein-Friesian Association of America, according to an announcement just issued by Secretary F. L. Houghton. They are Lyman E. Beach of Groswell; F. B. Breeks of Corunna; C. E. Chappell of Charlotte; Robert J. Crouse of Howell; A. B. George of Garland; Francis D. Guncer of Riga; Edward B. Henne of Manchester; Mark A. Knight of Rockwood; O. B. Merriman of Deckerville and Marion R. Wilkinson of Dowagiac.

The Michigan membership in this association now numbers 1,443. According to the 1920 government census, there were 46,533 purebred dairy cattle in this state, of which 32,702 were Holsteins. With a total membership of over 22,000 living animals registered in its Herd Books, this livestock breeders' association is the largest in the world.

NEW MICHIGAN HOLSTEIN IN JUNIOR CLASS

Burke Pontiac Clare is new State Holstein champion in the yearly test period division junior three year class, according to official announcement by The Holstein-Friesian association of America. She is owned by W. C. Cornwell of Saginaw. In one year she produced 23,2118 pounds of milk and 747 pounds of fat.

MIXTURE OF BEANS AND OATS UNPALATABLE

Would like to feed cull beans and oats to milk cows. Would like to know how many pounds of oats to a hundred pounds of beans, to make a good ration for milk cows, to be ground together.—C. Q., Marion, Mich.

—We are feeding the following ration to some of the cows in the college herd at the present time: 500 pounds of oats and beans ground together, 300 pounds of hominy, 100 pounds of ground corn and 100 pounds of gluten feed.

This ration as you will notice, contains 25 per cent ground beans. Beans and oats are ground together in equal amounts. This ration seems to be a fairly satisfactory one for diary cows. If only beans and oats are going to be fed, I would recommend that equal parts of beans and oats be ground together for feeding. The percentage of beans in a ration of this kind, would, of course, be affected by the kind of roughage fed to the cows. I do not like your grain ration, consisting of just beans and oats, as there is danger of feeding too many beans to the cow. I think you will find that a mixture of just beans and oats in this proportion rather unpalatable as the cows have a dislike for the ground beans.—J. E. Burnett, Asso. Prof. of Dairy Husbandry, M. A. C.

MAKING ALFALFA MEAL

Can you please tell me how alfalfa meal is made?—A. Z., Grand Rapids, Mich.

—The grinding of alfalfa into meal was practiced quite extensively in Kansas for several years but has been more or less discontinued and has moved further west into the irrigated sections of Colorado and Wyoming. It is quite an expensive practice costing from $3.00 to $6.00 a ton to make the meal, and after the meal is secured the feeding value is not materially increased. Stock will consume practically all the alfalfa hay without grinding; consequently, there is little advantage in grinding alfalfa.—C. R. Megee, Associate in Farm Crops, M. A. C.

CALF WEANED TOO YOUNG

Could you tell me what to do for a calf six months old. The calf was on the cow until it was three months old and did remarkably well. It came in July and in October last we weaned it. It has not done well since. Can't see anything particularly wrong only it has a small appetite. We have tried it on all kinds of feed but it seems the same. Doesn't drink over a half pail of milk or water.—J. H., Akron, Mich.

—I judge that you weaned the calf too young and did not have it accustomed to eating grain before it was weaned. Had this calf been thoroughly accustomed to grain before weaning, this trouble would not have been experienced. I would advise giving it plenty of good clover hay and as grain, would offer it a mixture of equal parts whole corn, oats and bran and endeavor to have it eat about one pound of grain daily for each hundred pounds that it weighs.—Prof. Geo. A. Brown, Department of Animal Husbandry, M. A. C.

VALUE OF CULL BEANS AS FOOD FOR CATTLE

Can you tell me how much food value cull beans ground fine contain for dairy cattle? How many pounds of grain to every pound of milk? Which is the best for ensilage, corn fodder or sun flowers?—M. D., Marion, Michigan.

The analysis of cull beans, as is shown by Henry's Feeds and Feeding, is as follows:

Total dry matter in 100 lbs. 87.2; Digestible nutrients in 100 pounds, Crude protein 18.3; Carbo Hydrates 54.3; Fat 0.8.

This analysis shows that two pounds of cull beans have about the same protein composition as one pound of cottonseed meal.

Your second question is not quite clear. You ask how many pounds of grain to every pound of milk. I am assuming that you mean how much grain to feed for each pound of milk produced per day. This varies somewhat with the test of milk. With a low testing cow a pound of grain to each three and a half or four pounds of milk produced per day is sufficient. For Jerseys or Guernseys, that have high testing milk, we feed a pound of grain to each three or three and a half pounds of milk produced per day.

The best ensilage crop we know of is corn. Corn fodder, as mentioned in your inquiry, does not make a very satisfactory silage. It is only in times when corn is very high in price that it pays to shuck the corn off the stalk and put the stalks into the silo. I would never advise the use of sunflowers for silage in a section or locality where it is possible to obtain a good yield of corn, but in the northern part of the state, where corn is a gamble one year with another, sunflowers will make an excellent substitute for corn in silage. O. E. Reed, Professor of Dairy Husbandry, M. A. C.

PUTTING PIGS ON SELF-FEEDER

I have forty fall pigs that weigh about eighty pounds each. I want to put them on a self-feeder. They get twenty gallons of skim milk a day. What would be the best feed to put in the self-feeder to make the best gain? Where one has that much skim milk, is tankage necessary?—P. M., Farwell, Michigan.

—Twenty gallons of skim milk will not be sufficient to provide enough protein or growth producing food for forty pigs weighing eighty pounds each. I would, therefore, advise putting tankage as well as corn in the self-feeder for them, using a separate compartment for each. If barley could be obtained any cheaper that corn, I would advise the use of barley.—Prof. Geo. A. Brown, Dept., of Animal Husbandry, M. A. C.

VETERINARY DEPARTMENT

OPERATION PROBABLY NECESSARY

I am writing to your veterinary column for a little advise. I have a mare seven years old and is in the best of health. In October, 1922, a swelling came on the left side of her bag, it kept swelling until it broke and about one quart of slate colored matter came out of it. I took her to a veterinary and he cut it, cleaned it all out and gave me some dissinfectant to syringe it out with and said she would be all right, that it was an abcess, but it did not get all right. It swelled and filled up again and she got so ugly I could not do anything with her. In one month from the first time I had to call the doctor he opened it up and cleared it again

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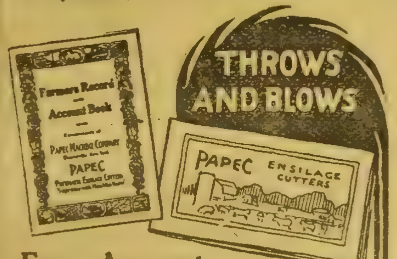
The 1923 improvements on the Papec's "powerful compression" Self-Feed make it a better-than-ever Ensilage Cutter. This Self-feed saves you money—does the work of the men at the feeding table and does it better.

You can buy this new and improved Cutter, backed by the Papec Guarantee, at a **new low price.** The simple design, tremendous production and specialized machinery make this possible.



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Our Farmers' Record and Account Book will help you find and stop the money leaks. It contains 50 pages arranged for farm and household inventories, crops and breeding records, cash account, etc. Write us, telling the size of silo you own, or intend to buy, and mention your dealer's name and address. We will mail you this Account Book **free,** also the 1923 Papec Catalog.

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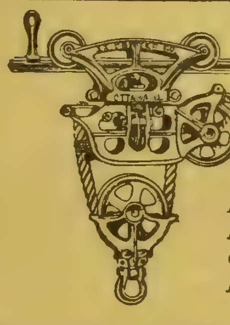

Porter Fork Carrier Fig. 43

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FOR SALE—REGISTERED BROWN SWISS Herd federal accredited. Come and see them or write for what you want. Ervin R. Moore, Osseo, Mich.

RED POLLED

RED POLLED CATTLE—A few choice bulls and heifers for sale. ROYSTAN STOCK FARM, Will Cottle, R. R. 1, West Branch Michigan

FOR SALE—OUR RED POLLED HERD BULL Cosy Ells Laddie, and a few heifer calves. PIERCE BRO'S., Eaton Rapids, Mich. R. 1.

AYRSHIRES

FOR SALE—REGISTERED AYRSHIRE bulls and bull calves, heifers and heifer calves. Also some choice cows. FINDLAY BROS., R 5, Vassar, Mich.

and said as long as it stayed open and drained she would get along. I was not satisfied so I saw another veterinarian and he told me about the same. If I would bring her to him he would keep her and chloriform her and take care of her every day. But it was too much expense, I could not stand it and to have him come to my place would cost me twenty dollars a trip, so I thought you could give me advise.—G. H., Nessen, Mich.

—This is a case that in all probability will require an operation before a cure can be brought about. There may be a foreign body at the bottom of the fistula tract or it may be a diseased lymph gland that will have to be removed.—John P. Hutton, Assoc. Prof. of Surg. & Med., M. A. C.

REMOVING WARTS

I have a yearling steer which has large white warts about the size of a quarter in clusters on the sides of his neck and about his back. Have been on him for some time. He seems healthy and is in good shape. Would consider it a great favor in giving some remedy for it. —F. H. B., Cheboygan.

—We do not know the cause of these warts. Where there is only a very few warts present on the surface of the skin about the best treatment is to remove them by cutting them off after the surface of the skin has been well disinfected. The application of a little glacial acetic acid to the surface of the wart will sometimes cause it to disappear. Where you have a large number of them on the body and they are in clusters little can be done. Better send the steer to the butcher as soon as he can be gotten in good condition to kill.—John P. Hutton, Assoc. Prof. of Surg. and Med., M. A. C.

COW POX

I have a cow which has some kind of a breaking out on the bag which are small pimples which scab over. She is due to freshen in about eight weeks. Would like to know the cause and a remedy.—V. B., Dryden, Mich.

—From the history given of the case I am of the opinion that the trouble is cow pox. Try washing the udder after each milking with a 1 per cent solution of sodium hyposulphite. No internal treatment is required.—John P. Hutton, Assoc. Prof. of Surg. & Med., M. A. C.

FEED SOW SCORCHED CORN

What should I do with my Poland-China sow, as I have her in a large pen and she doesn't come in heat nor hasn't been in heat for the last six months. Have raised two litters with her already. She is two years old, and I feed her tankage and corn. Have given her oats at times and also charcoal—Reader.

—A method that often proves effective in getting sows to come in season is to feed them entirely on scorched corn for a few days.

If this fails, drugs may be resorted to. We have used a preparation known as Vetol, put out by Lehn & Fink, 124 Williams Street, New York City, with very satisfactory results.

If this sow is fat, it would be a good idea to limit her feed allowance to reduce the condition of flesh.—Geo. A. Brown, Prof. of Animal Husbandry, M. A. C.

NO LAW ON DISTANCE HOGS MUST BE FROM ROAD

I would like to know how far from the public highway do I have to keep my hogs that are being fattened in a building? And how far from the highway must the other ones, brood sows and such, be if confined? They are in a small pard of less than one half acre.—J. B. B., St. Charles, Mich

—There is no State law fixing the distance that hogs must be removed from a public highway. It is simply a question of whether of not they are allowed to become a nuisance. The matter is under the control and within the jurisdiction of township officials.—M. J. Smith, State Department of Agriculture.

PORK EXPORTS DECREASE IN 1922

Exports of pork and pork products from the United States were less in 1922 than in 1921, according to reports of the United States Department of Agriculture. This decrease was due to smaller shipments of bacon and lard.

Write for free booklets on Farm Sanitation

They contain practical suggestions for the prevention of diseases common to livestock and poultry and describe in detail the many uses of

Kreso Dip No. 1

(STANDARDIZED)

Parasiticide and Disinfectant

For all Livestock and Poultry

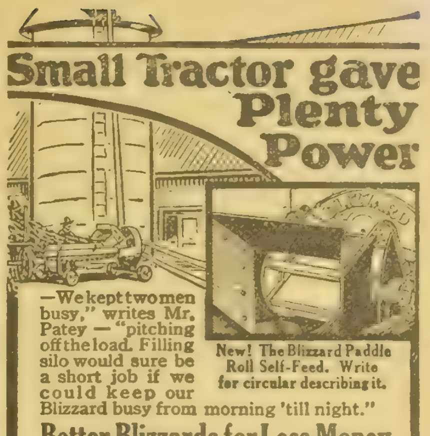
FREE BOOKLETS ON FARM SANITATION:

No. 151—FARM SANITATION. Describes and tells how to prevent diseases common to livestock.
No. 157—DOG BOOKLET. Tells how to rid the dog of fleas and to help prevent disease.
No. 160—HOG BOOKLET. Covers the common hog diseases.
No. 185—HOG WALLOWS. Gives complete directions for the construction of a concrete hog wallow.
No. 163—POULTRY. How to get rid of lice and mites, also to prevent disease.

Kreso Dip No. 1 is Sold in Original Packages at all Drug Stores.

ANIMAL INDUSTRY DEPARTMENT OF
Parke, Davis & Co.
DETROIT, MICHIGAN

Small Tractor gave Plenty Power



—We kept two men busy," writes Mr. Patey — "pitching off the load. Filling silo would sure be a short job if we could keep our Blizzard busy from morning 'till night."

New! The Blizzard Paddle Roll Self-Feed. Write for circular describing it.

Better Blizzards for Less Money

New models have self-feeding, feed regulating features. Blizzards do most work per h. p.—they fill world's highest silos—they are running after 20 years of work—they run very low for upkeep; all parts of wear being replaceable.

THE JOS. DICK MFG. CO.
Box521 Canton, O.

DICK'S Blizzard Ensilage Cutter

WRITE for circular describing the new Blizzard improvements. Also describes Dick's "Famous" Feed Cutters. Leaders for 49 years. For power or hand operation.

HORSES

FOR SALE AT A BARGAIN: A BLACK Percheron Mare and her coming 3 year old filly. Will make a well matched pair. Both registered. A L. SCHMIDT & SON, R. 5, Reed City, Mich.

SHEEP

ALL SOLD OUT FOR THIS WINTER. BOOKing orders for next August. DAN BOOHER, Evart, Michigan.

(Continued on page 31.)

AUCTION SALE Registered Stock

Thursday, March 22nd

LAPHAM FARMS Pinckney, Mich.

Sale of Implements at 9:00 a. m.
Sale of Live Stock at 1:00 p. m.

CATTLE

White Butterfly No. 686-420, Short Horn Cow, coming fresh.

Duke of Pickney, roan Bull, son of White Butterfly.

SWINE

12 Registered Duroc Jersey Hogs.

Boar, Livingston's Pride No. 438751, coming three years old, a son of Cherry King of Maple Row 2nd, a credit to any breeders yard.

Orion Defender 2nd., No. 444321, one and a half years old, good all around hog.

3 Boars, seven months old, sons of Livingston's Pride, any one of them you would like to own.

Sow, Nell No. 896716, coming four years, a daughter of Red Nell, sired Brookdale Prince, a large, long sow, due to farrow April 10th, one of the best sows in Michigan, her average, 15 pigs to a litter.

Sow, Some Girl 2nd., bred to Livingston's Pride, a very choice sow, weight about 400 pounds.

3 Open Gilts, seven months old, sired by Livingston's Pride. Dam: Nell, good as the best.

1 Open Gilt, four months old, sired by Orion Defender 2nd.

1 Grade sow and six pigs, three weeks old.

2 Grade Sows, bred.

POULTRY

500 Thoroughbred Single Single Comb Buff Leghorn hens.

40 Thoroughbred Single Comb Buff Leghorn Cocks and Cockerels.

50 Thoroughbred Single Comb Black Minorca Pullets.

HORSES

2 Good Work Teams.
1 Mare and Colt.

2 Colts, age two and three years.

LAPHAM FARMS are located 1 mile south of Pinckney, 18 miles north west of Ann Arbor. Bus passes farms four times daily.

We will meet all trains at Pinckney and Dexter on day of sale.

S. D. LAPHAM,
Proprietor.
Col. John W. Fawcett,
Auctioneer.
A. R. Roach—A. R. Little,
Clerks.

Michigan Farm Bureau Brands include the Best varieties of alfalfa, clover, seed grains and other field and grass seeds. Their Vitality, Description and Purity is guaranteed to be as represented to the full amount of the Purchase Price.

Certified Seed Oats and Barley

These varieties are certified after field and bin inspection on the basis of freedom from mixtures, foul seeds and diseases.

Through years of constant selection and elimination of weaker strains, they are the highest yielding in the state.

Even those who purchased seed of these varieties two or more years ago can afford to purchase new seed stock at the reasonable prices quoted this year.

If you are growing "Just Oats" or "Barley" you cannot afford to miss this opportunity to make money on the increased yields these varieties will return.

Wolverine, Worthy Oats

6 to 25 bushel lots, $1.00 per bushel, f. o. b. Lansing, Michigan.

Wisconsin Pedigree and Black Barbless Barley

6 to 25 bushel lots, $1.40 per bushel, f. o. b. Lansing, Michigan
2½ bu. jute sacks extra 16c each; 16 oz. grain bags 47c each.

Seed Corn, Beans, Soy Beans, etc., should also be ordered now.

If your Local Co-Op. cannot supply you with these high yielding, disease free, certified varieties, Write at once to

MICHIGAN FARM BUREAU BRAND SEEDS

Seed Department
MICHIGAN STATE FARM BUREAU
LANSING, MICHIGAN

Contagious Abortion

Can be Stopped in Cows and Sows

Erick Bowman
Discoverer of the
Bowman Abortion Remedy

That statement applies to *Your* herd. It's no use to worry about past losses which this dread disease may have caused. The important thing to do is to save yourself from future losses by stamping out every trace of Contagious Abortion *Now.*

The Bowman Abortion Remedy has behind it a record of positive results in the thousands of cases where it has been used. These should recommend it to anyone facing the problem of how to eradicate Contagious Abortion. The experience of satisfied users is your best guide. The Bowman Abortion Remedy will positively rid your herd of Contagious Abortion. Any farmer can administer it with ease. Cattle and hogs like it and take it readily when it is given to them.

"It did all you claim for it." writes Mr. Weiner

Columbus, Wisconsin
December 3rd, 1922

Erick Bowman Remedy Co.,
Owatonna, Minn.

Gentlemen
In reply to using your abortion remedy I can say that it did all you claim for it. We had lost six calves but after using your remedy, we have not lost any more.
We have seventeen live calves now. Cows cleaned nice with cleanings nice and fresh.

Yours respectfully,

HENRY WEINER

Write Today for Bowman's Bulletin

It is FREE. Gives full information about Contagious Abortion and how to eradicate it, as well as the experience of many farmers who have used Bowman's Remedy. A postal sent today will bring you a copy by return mail.

ERICK BOWMAN
Remedy Company
730 Bridge Street
Owatonna, Minnesota

Save 60 Percent

MAKE YOUR OWN ROPE
All sizes including hay fork ropes. Wonderful saving. Send for free booklet "Rope Making On The Farm." New Era Rope Machine Company, Minneapolis, Minn.

GET IT FROM THE FACTORY DIRECT

KITSELMAN FENCE
"I Saved One-Third," says Wm. B. Lee, Stanton, Mich. You, too, can save. We Pay the Freight. Write for Free Catalog of Farm, Poultry, Lawn Fence.
KITSELMAN BROS. Dept. 193 MUNCIE, IND.

MICHIGAN CROPS

CULTIVATION—FROM 53 YEARS' EXPERIENCE

CULTIVATION of land begins with plowing and the first question will be when and how deep. When to plow will vary according to the crop and land conditions. Plowing long enough before the crop is planted to get the weeds killed on the surface is a big gain whenever practical.

As oats, barley and spring wheat need sowing very early in the spring, the only way to plow long before planting in this state is to fall plow and while this is fine under some conditions it is bad under others. Soils that are heavy and wet or hillsides that are bad should not be fall plowed so they will have to be sowed as soon as the ground can be fitter for them and in case of heavy wet soils don't plow them too wet as you will injure the soil if you do.

As to depth, oats will do well on shallow plowing if a sod has been turned down the year before sowing the oats. When plowing sod for corn I get best results by going by the depth that the grass roots go as soil that is much below where the grass roots grow is generally poor or in a poor condition to feed the corn roots.

Plowing as early as the ground is fit to work and harrowing smooth to get the surface weeds to sprout so they can be killed give the best results with corn as this warms the soil and kills the weeds at one time.

Potato ground needs to be plowed a little deeper than for corn and can be worked longer before planting and harrowed deeper if it needs to be, but it can be made too loose. In a dry time the ground should be just loose enough for the roots to penetrate easily and yet to press some against the roots and then air must get into the ground enough for chemical action on the soil, but not enough to dry it up too much.

Watch and see what condition the soil is in when the crops grow the best and then aim at keeping it in that condition. Cultivate shallow if the ground is loose and dry and deeper if the soil is heavy and wet or caked. Cultivate with fine teeth and nearly level in a dry time; use larger teeth hilling up when the soil or weather is wet.

Potatoes should be hilled enough to prevent them from sunburning or freezing too easy and this means more hilling if they set shallow than when they set deep. Cultivate beans level and smooth.—Francis G. Smith,

VALUE OF TIMOTHY OR CLOVER FOR FERTILIZER

I would be pleased to received your estimation as to what hay (each all clover & all timothy) in the barn ought to be worth to be of the same value to me, to leave in the barn and leave the new crop on the ground as fertilizer.—F. H., Scotts, Mich.

—It is rather difficult to arrive at a satisfactory estimate of the value of timothy and clover hay for fertilizer purposes. The feeding value is usually much greater than the fertilizing values especially when we consider the fact that when the hay is fed and the manure well taken care of from fifty to sixty-five percent of the nitrogen, sixty to eighty percent of the phosphorus and sixty to eighty percent of the potash of the original feed may be returned to the land in the manure. Of the organic matter from twenty to thirty-five percent is returned. Consequently, the greater profit is usually secured by feeding the hay and carefully returning the manure to the land.

Also, the value of hay as a fertilizer depends greatly upon the need of that particular soil for organic matter and whether or not the succeeding crop can make use of fertility in this condition.

The following table from Henry's "Feeds & Feeding" shows the fertilizing constituents in 1,000 pounds of hay and the fertilizing and fanurial value estimating nitrogen at 18c per pound, phosphoric acid at 4½c and potash at 5c per pound and assuming that on the average a farm animal will return 80 per cent of the fertilizing value of the feed in the manure. The manure will have to be very carefully handled to prevent additional losses:

Fertilizing Constituents in 1,000 lbs. Timothy Hay, Nitrogen 9.9, Phosphoric acid 3.1, Potash 13.5, Fertility Value per ton $5.20, Manurial Value per ton $4.16.

Fertilizing Constituents in 1,000 pounds Red Clover Hay, Nitrogen 20.5, Phosphoric acid 3.9, Potash 16.3, Fertility Value per ton $9.36 Manurial Value per ton $7.49.

Timothy hay then is worth approximately $5.20 per ton and red clover hay $9.36 per ton for fertilizing purposes according to the above estimate.—Prof. C. R. Megee, Farm Crops Dept., M. A. C.

CROPS DRAW ALL ELEMENTS OF FERTILITY IN SOIL

"Will you please inform me what substance corn takes from the ground and what it gives back to the soil? Also wheat, oats and potatoes. —T. L., Onaway, Mich.

—The crops, corn, wheat, oats and potatoes draw all elements of fertility in the soil. The following gives the amount of nitrogen phosphorus and potassium in pounds in the above crops:

Corn 100 bu. including stover, Nitrogen 148 pounds, Phosphorus 23 pounds, Potassium 71 pounds.

Wheat 50 bu. including straw, Nitrogen 96 pounds, Phosphorus 16 pounds, Potassium 58 pounds.

Oats, 100 bu. including straw, Nitrogen 97 pounds, Phosphorus 16 pounds, Potassium 68 pounds.

Potatoes, 300 bu., Nitrogen 63 pounds, Phosphorus 13 pounds, Potassium 90 pounds.

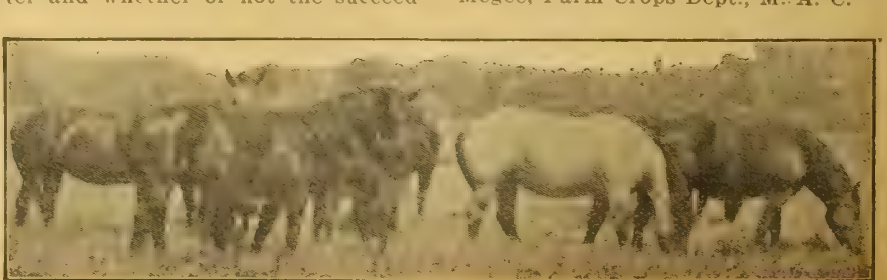
Inasmuch as these crops are nonlegumes they return to the soil, when the entire crop is returned, only the amount of nitrogen, phosphorus and potassium removed by the crop. In addition to the elements of fertility organic matter is returned which is a great benefit to most of Michigan soils.—G. M. Grantham, Soils Dep't., M. A. C.

CHEROKEE CLOVER

I would like some informaion regarding Cherokee clover. Is it adapted to Michigan conditions? What kind of land does it require and what is its feeding value?—D. G., Alanson, Mich.

—Cherokee clover is an early maturing variety of beggarweed. This is an annual legume with large beanlike leaves and with stems and roots somewhat like sweet clover. There are approximately twenty-six varieties of beggarweed, only two of which are of value commercially; namely the Florida beggarweed and the Cherokee. The Cherokee is the earlier variety and probably the best adapted to northern conditions.

Beggarweed has become quite popular in the south where it is used for hay, pasture and green manuring purposes. Some authorities claim that it does quite well on acid soils. It has not been tried very extensively in Michigan and should you care to try it would suggest that you do so in a small way. Soybeans, on the other hand, have been tried quite extensively and for the southern half of the lower Peninsula have been found quite satisfactory for hay and green manuring purposes.—Prof. C. R. Megee, Farm Crops Dept., M. A. C.



DETROIT CREAMERY FARM

COMPLETE DISPERSION SALE

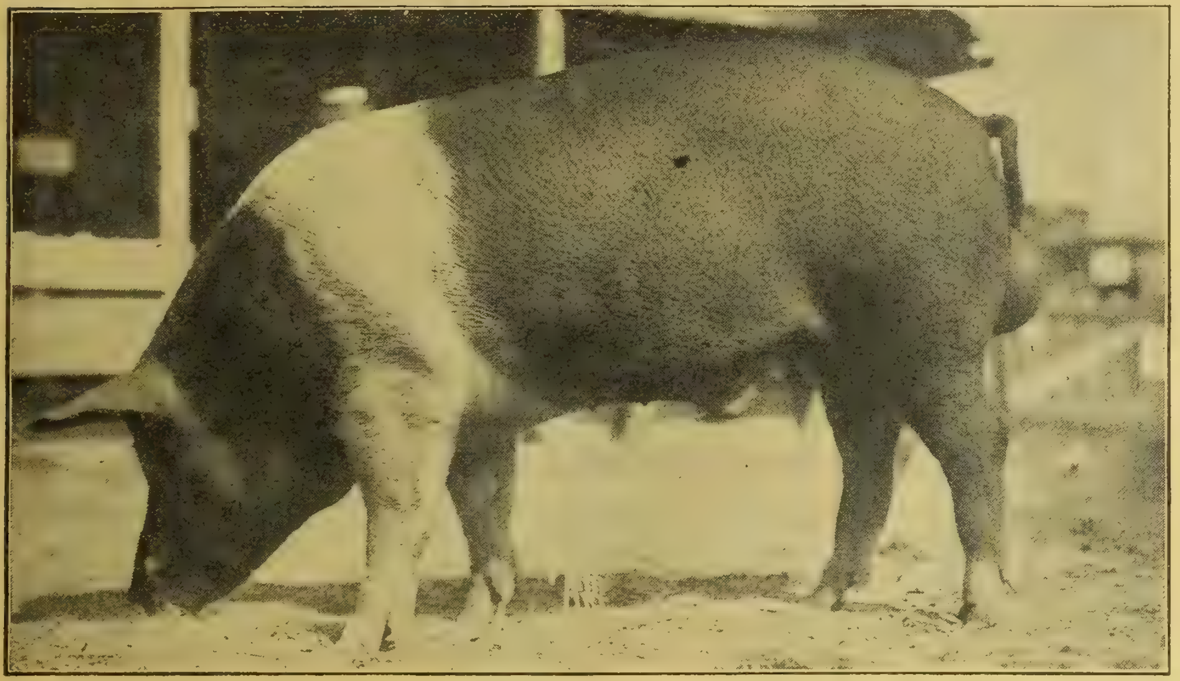
— OF —

ENTIRE HAMPSHIRE HERD

on Monday, March 19th, 1923

CONSISTING OF

27 Tried Sows Bred 13 Gilts Bred 5 Boars



INTRUDER NO. 103987

INTRUDER is considered by expert judges to be the greatest son of the National Swine Show Grand Champion, Messenger All Over, who in turn was the greatest son of that great pillar of the breed, Messenger Boy.

As a show boar he was defeated only by the great General Perishing, Grand Champion of the National Swine Show in 1921. Intruder was Junior Champion at the Ohio State Fair, Grand Champion at Erie, Pa., Dayton, Ohio, Sidney, Ohio, and Troy, Ohio. At Sidney, Ohio, he was placed Royal Grand Champion over all breeds, an honor never before won by an under year Hampshire. He stands a leader of his kind and unapproached. He is a great boar with a great pedigree.

LOCATION—This dispersion sale will be held in Fred Smith's Sale Barn at Utica, Mich.
TERMS—Cash.

GUARANTEE—Every animal is guaranteed a breeder. Every bred sow Guaranteed safe to date of service given should any prove not to be with pig, we will refund 30 per cent of purchase price. Complaint must be made within 30 days.

IMMUNE—The entire offering has received the double treatment for hog cholera and should be immune.

ENTERTAINMENT—Parties from out of town can put up at the Utica Hotel as our guests. Lunch will be served at 11:30 A. M. by the Ladies Aid.

MAIL BIDS—Although we wish all who can to attend this sale, your bids mailed to C. R. Bowers, care of Detroit Creamery Farm, Mt. Clemens, Mich., will be treated honorably.

Every animal purchased by mail will be shipped on approval and if found unsatisfactory, may be returned at our expense and purchaser will be cheerfully reimbursed for full purchase price.

AUCTIONEER—Col. F. H. Hulick, Atlanta, Ind.

FIELDMAN—C. R. Bowers of the Hampshire Advocate. For mail bids address him in our care.

PEDIGREES—Certificate of registry duly transfered will be supplied purchaser, as soon after sale as transfers can be reasonably and correctly made.

ANNOUNCEMENT

It is with the greatest regrets that we announce the dispersion of our entire Hampshire herd.

In our short Hampshire career we have collected some of the finest breeding material that could be found in Ohio, Illinois and Iowa. From the very first it has been our aim to develop one of the best herds of Hampshires. We have always endeavored to keep in mind, the true Hampshire type and all our purchases were made with this in view. One of the important additions to our herd, is the recent purchase of the great boar "Intruder" from C. G. Bitzer and Son at Washington C. H., Ohio, a boar that has one of the greatest show records of the breed. A large percentage of sows and gilts in this sale are bred to him.

We realize that this is the wrong time of the year to dispose of our high class boars, still there is no other course open to us, our loss will be the gain of the Hampshire breeders who attend this sale.

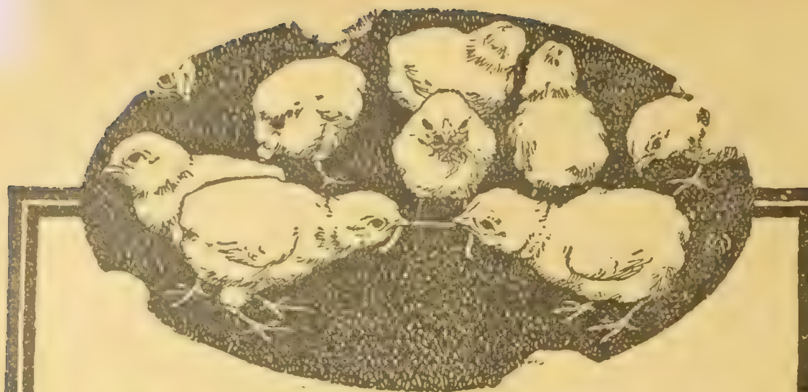
In addition to breeding Hampshires, we have some of the world's finest breeding stock in Poland China's, Duroc Jersey's and Chester White's. The extra labor and expense involved in maintaining four separate breeds is proving to be too much to carry on the business profitably and rather than let any one breed suffer from lack of attention, we are dispersing our most recent addition, namely the Hampshire Breed. We do not wish anyone to infer from this that we think the Hampshire are inferior to any of the other breeds. Even to this day it hurts to sell out all our Hampshire sows and boars that we have become very much attached to. Since we have a larger and more established herd in these other breeds, our loss would be far greater should we dispose of any of the other breeds at one sale.

We want every one who possibly can to be present, if it is impossible to honor us with your presence, we would appreciate your mail bid. Any cooperation you can give us will be greatly appreciated.

SOME OF THE BRED SOWS IN THIS SALE

DETROIT CREAMERY FARM

R. D. SCHECK, Asst. Supt. A. A. SCHULTZ, Supt.



Raise all the Chicks You Hatch

Raise them the PAN-A-CE-A way.

Start them right—keep them growing right along without any backset.

PAN-A-CE-A gives chicks good appetite and good digestion—helps them develop rapidly—gives them vigor to resist disease.

PAN-A-CE-A prevents fermentation of the food; fermentation is where most of the bowel troubles start.

PAN-A-CE-A is a gentle tonic to all the little-chick organs—keeps the system in order.

PAN-A-CE-A contains the Salts of Iron, so essential to early chick life, and during the rapid growth of feathers.

PAN-A-CE-A prevents and cures gapes, indigestion, diarrhea and leg weakness.

PAN-A-CE-A your chicks and then watch them feather! A Pan-a-ce-a chick will outfeather a non-Pan-a-ce-a chick every time.

Tell your dealer how many hens you have. There's a right-size package for every flock.
100 hens, the 12-lb. pkg. 200 hens, the 25-lb. pail
60 hens, the 5-lb. pkg. 500 hens, the 100-lb. drum
For fewer hens, there is a smaller package.

GUARANTEED

I spent 30 years in perfecting Pan-a-ce-a
GILBERT HESS
M.D., D.V.S.

DR. HESS & CLARK Ashland, O.

Dr. Hess Instant Louse Killer Kills Lice

Karsten's Farm --Quality Chicks--

that will lay and pay. The famous BARRON STRAIN ENGLISH WHITE LEGHORNS, ANCONAS AND BROWN LEGHORNS QUALITY BABY CHICKS CAN NOW BE PURCHASED AT PRICES UNHEARD OF BEFORE. SEND FOR CATALOG IT TELLS HOW AND WHAT TO FEED YOUR POULTRY FOR PROFIT. REMEMBER WE SHIP DIRECT FROM THE
KARSTEN'S FARM, Zeeland, Michigan, Box 102.

CHICKS
YPSIFIELD POULTRY FARM
CHICKS
are from stock carefully selected for those qualities essential to good egg production, broiler production, roaster production, or caponizing.
Write for free price list.
LEONARD F. FIELD, Ypsilanti, Michigan.

Pure Bred Chicks Buy 'Em Near Home

Broiler Chix	11c	Wh Wyandottes	
W. or B. Leghorns	13c	Buff Orpingtons	17c
B. Rocks or Reds	15½c	Light Brahmas	22c
W. or Buff Rocks	17c	Black Minorcas	16c

Add 35c if less than 100 lots wanted. Circular.
LAWRENCE POULTRY FARM
Dept. 8 Good Refernece R. 7, Grand Rapids, Mich.

BABY CHICKS—REMARKABLE FOR SIZE and strength. Reasonable prices. Leghorns, Anconas, Rocks, Reds, Wyandottes, Orpingtons, Minorcas, Spanish, Brahmas.
TYRONE POULTRY FARM, Fenton, Mich.

CHICKS—SINGLE COMB BUFF LEGHORNS only. Strong healthy chicks from good laying stock. J. W. WEBSTER, Bath, Mich.

Cured Her Rheumatism

Knowing from terrible experience the suffering caused by rheumatism, Mrs. J. E. Hurst, who lives at 608 E. Douglas Street, C-489, Bloomington, Ill., is so thankful at having cured herself that out of pure gratitude she is anxious to tell all other sufferers just how to get rid of their torture by a simple way at home.

Mrs. Hurst has nothing to sell. Merely mail your own name and address, and she will gladly send you this valuable information entirely free. Write her at once before you forget.

YOU CAN DO IT WITH
B-F
BABY CHIX

BABY CHICKS
Best Paying, Heavy Laying, Pure Bred Tom Barron English White Leghorns, S. C. Rhode Island Reds, Park's Barred Rocks. Strong Healty Chicks hatched from greatest and best incubator known. Chicks are given full twenty-one days and hatched under proper temperature.

Mr. Frank Fulerson, Niles, Mich., writes as follows: "From the 66 pullets we raised from your stock last year along with the thirty which we had, we got 1,610 eggs in December. Can you beat it?"

We are the first and oldest importers of White Leghorns in this state.

Watch our pen number 17 in the Michigan Egg Laying Contest. It's coming strong! All flocks thoroughly culled and properly mated to pure bred cockerels. Try some real chicks this year. Order now at new low prices. Instructive catalogue free.

BRUMMER-FREDERICKSON POULTRY FARM
Box 26 Holland, Mich.

QUALITY CHICKS
AT LIVE AND LET LIVE PRICES
$10 per 100 and Up
FROM EXCELLENT PAYING, HEAVY LAYING flocks on unlimited range. Well-hatched, Sturdy, Healthy CHICKS in following varieties: TOM BARRON ENGLISH WHITE LEGHORNS, 50, $7; 100, $13; 500, $62.50. PARK'S BARRED ROCKS and RHODE ISLAND REDS, 50, $8; 100, $10; 500, $72.50. From EXTRA SELECT flocks headed by Michigan Agricultural College cockerels. (Dams records from 230 to 270.) WHITE LEGHORNS, 50, $8; 100, $15; 500, $72.50. ROCKS and REDS, 50, $9; 100, $17; 500, $82.50. DELIVERED RIGHT TO YOUR DOOR BY INSURED PARCEL POST. 100% delivery guaranteed. Order NOW and from this ad a smany were disappointed last year. Profitable Catalog FREE. Bank Reference.
LAKEVIEW POULTRY FARM
Route 8, Box 8, Holland, Michigan.

BABY CHICKS White English Leghorns, Tom Barron Strain. White and Barred Plymouth Rocks, S. C. R. I. Reds, Buff Orpingtons. All pure bred from selected stock. Live arrival gauranteed. Postage paid. We do custom hatching. Durand Hatchery, Fenton, Mich.

POULTRY

KEEP UP THE GREEN FOOD

THE constant supply of succulent green food must be maintained if you expect the best egg production throughout the summer, and the best growth from the young stock. Hens that have range over the farm do not necessarily secure the right kind of green food. In fact, it has been demonstrated that hens do not eat readily of grass or other range green food later in the summer months when it has lost much of its succulence.

The commercial poultrymen have long since learned that it is just as important to supply green food in succulent form during the summer months as it is during cold weather and they continue to feed sprouted oats. Several articles have been published in these columns in recent issues giving various methods of oat sprouting on large and small scale. For the small flock raiser the best method is to use oat sprouters such as are to be obtained on the market. For large commercial flock use, other methods may be used.

Lettuce from the garden, especially where a succession is planted, can well be used. Lawn clippings, especially clover, are valuable during the summer. Cabbage is not ordinarily to be recommended, although there is no harm in it if not fed to excess.

An abundance of green food is especially valuable for the growing chicks. Too often it is overlooked and the beneficial effects lost. It tends to supply deficient elements in the ordinary ration which, at this season, contains an excess of animal proteins, and it tends also to act as a digestive corrective and purifier.

Green food, on the other hand, is not recommended for use where fowls are to be fattened for market. Most commercial feeders contend that fowls do not put on weight as readily when green food is given.

CURING HENS OF EATING EGGS

We have been troubled with our hens eating eggs. Have you any remedy for this?—J. H., Clare, Mich.

—The egg eating habit is more prevalent where hens are in heavy production and are receiving limited quantities of mineral matter such as is supplied in oyster shell. Close confinement and insufficient straw in the nests also help the spread of this undesirable habit. Poor quality of shell causes the heavy breakage that occurs during production. The eggs are naturally extremely palatable and are greatly relished by the hens. This trouble however, may be continued to such a degree that the hens will actually break the shell in order to get at the contents of the egg.

There is no very satisfactory remedy other than eliminating the ring leaders, darkening the nests and placing plenty of straw in the nests to reduce the breakage as much as possible, and encourage the hens to exercise which keeps them in better physical condition. Oyster shells should be available in liberal quantities which contains mineral matter necessary in shell production. Some people practice doping the eggs with some condiment such as mustard, pepper, etc. to make them unpalatable.—E. C. Foreman, Associate Professor of Poultry Husbandry, M. A. C.

POND NOT NECESSARY

Will you please tell me thru the colums of your paper if a swimming hole is necessary to geese to insure fertility to their eggs?—M. J., Turner, Mich.

—It is not absolutely necessary to have a pond available for swimming purposes in order to maintain or to secure good fertility and hatchability of geese eggs. However, if such a pond is available, the breeding pen should be located near by because of the beneficial results in the increase of fertility and hatchability of the eggs. If a pond is not available, eggs can be produced that are of good fertility although this is less liable than where water is available. —E. C. Foreman, Associate Professor of Poultry Husbandry, M. A. C.

Carbola
Paints and Disinfects
Dries White

Better than Whitewash

CARBOLA
The Disinfecting White Paint

It takes less than five minutes to mix the Carbola powder with water and have it ready to use as a white paint and powerful disinfectant. *No waiting or straining; no clogging of sprayer.* Does not spoil. Does not peel or flake. Disinfectant is right in the paint powder—one operation instead of two. Gives better results, costs less. Used for years by leading farms.

Your hardware, paint, seed or drug dealer has Carbola, or can get it. If not, order direct. Satisfaction, or money back. 10 lbs. (10 gals.) $1.25 and postage; 20 lbs. (20 gals.) $2.50 delivered; 50 lbs. (50 gals.) $5.00 delivered; 200 lbs. (200 gals.) $18.00 delivered; trial package and booklet 30c.
Add 25% for Texas and Rocky Mt. States

CARBOLA CHEMICAL CO., Inc.
310 Ely Ave., Long Island City, N. Y.

Carbola
Paints and Disinfects
Dries White

One Man Log Saw

Big Sale Now
30 Days' Trial
OTTAWA
$91.50 F.O.B. Ottawa Kans.
Prices smashed on this better, faster cutting machine. Saws logs, limbs; falls trees. 10-year Guarantee. Cash or Easy Terms.
Free Book and Special Offer. Write quick before sale ends!
From Pittsburgh, Pa. $97.25
OTTAWA MFG. COMPANY
1481Q Wood St. OTTAWA, KANS.
Room 1481Q Magee Bldg. PITTSBURGH, PA.

HEAVES Is your own horse afflicted? Use 2 large cans. Cost $2.50.
Money back if not satisfactory
ONE can at $1.25 often sufficient. In powder form.
Most for cost
NEWTON'S
A veterinary's compound for Horses, Cattle and Hogs. Heaves, Coughs, Distemper, Indigestion. Worm expeller. Conditioner. At dealers' or by parcel post.
30 years' sale
THE NEWTON REMEDY CO., Toledo, Ohio

HIGHEST QUALITY CHICKS
Michigan's Old Reliable Hatchery
(*The most modern and best equipped Hatchery in the state*)
PURE BRED English and American S. C. W. Leghorns; S. C. Anconas; Barred Plymouth Rocks and R. I. Reds. Strong, well hatched chicks from tested Hoganized Free range stock that make wonderful winter layers.
Chicks sent by Insured Parcel Post Prepaid to your door. 100% live delivery guaranteed. Fifteen years of experience in producing and shipping chicks has given absolute satisfaction to thousands. Write for illustrated free catalog and price list.
Get lowest price on best quality chicks before you buy.
Holland Hatchery, R. 7, Holland, Mich.

WOLVERINE BABY CHIX

WOLVERINE BABY CHICKS are Chicks That Satisfy
Bred for egg production 13 years. We hatched and shipped chicks for 12 years. This assures you success. ENGLISH TYPE WHITE AND BROWN LEGHORNS.
100% safe arrival guaranteed. Write for catalogue. It's free. WOLVERINE HATCHERY, R. 2, Zeeland, Mich.

Chicks
From select vigorous, heavy laying breeding stock. White, Brown Leghorns, Anconas, Barred Rocks. Our price is 12 cents and up. Guarantee 100% live delivery by prepaid post. Get your order in now—will ship when you want. Customers report "Big Profits" with these wonderful layers. Write today for Illustrated Catalog. It's free. Reference: State Commercial Savings Bank. Member M. B. C. A.
Queen Hatchery & Poultry Farm,
Zeeland, Michigan

Pedigreed State Approved S. C. W. LEGHORNS CHIX
AMERICAN-ENGLISH STRAIN
Are you going to buy them from a hatchery or from a BREEDER. Buy from Michigan's Largest Leghorn Farm and insure success. We hatch our own eggs only. Supply limited. Prices reasonable. Satisfaction guaranteed.
Descriptive Circular tells all about them. It's free.
SIMON HARKEMA & SON, R. 1, Holland, Mich.

Attractive Chick Investments

FROM SELECT PURE-BRED FLOCKS

WHITE and BROWN LEGHORNS. ANCONAS, 50, $7.50; 100, $14; 500, $65. BARRED ROCKS, REDS and MINORCAS, 50, $8.50; 100, $16.50; 500, $75. Discount on orders of 1,000 or more. From extra select flocks $2 per 100 higher. Postpaid to your door. Full live count guaranteed. Bank reference. Free Catalog. We know it will be to your advantage to get our catalog and full price list before making a final decision regarding your investment in Chicks this season. Send for it **TODAY.**

COLONIAL POULTRY FARMS. Box B, Zeeland, Michigan

BABY CHICKS Postpaid to your door $11 per 100 and Up

FROM HOGAN TESTED, FREE RANGE HEAVY LAYINY FLOCKS. ALL VARIETIES.

WHITE, BROWN and BUFF LEGHORNS and ANCONAS	$14.00
BARRED ROCKS and R. I. REDS	$16.00
WHITE WYANDOTTES, WHITE ROCKS, BUFF ROCKS	$17.50
BLACK MINORCAS, BUFF ORPINGTONS	$18.00

All lots of 500, $1.00 per 100 discount.

EXTRA SELECTED FLOCKS .... $2.00 per 100 higher

Large Price List for return mail.

Postpaid full live delivery guaranteed. Hatched by the most modern method of incubation from good, vigorous, pure-bred varieties carefully selected and safely packed. No catalogue. Order right from this ad and save time and disappointment. Reference Chesaning State Bank or any business in Chesaning.

Address **BABION'S FRUIT AND POULTRY FARM, Guy L. Babion, Prop., Chesaning, Mich.**

STOP! LOOK! READ!

GUARANTEED BABY CHICKS

From **WORLD'S GREATEST LAYERS** and **LAYING CONTEST WINNERS. TOM BARRON ENGLISH S. C. WHITE LEGHORNS.** Imported stock. **SHEPPARD'S FAMOUS ANCONAS.** Direct.

If we could show you our Flocks and have you talk with our **CUSTOMERS** you would order **IMMEDIATELY.** Our **FLOCKS** are all **CULLED BY EXPERTS** and headed with **VIGOROUS PEDIGREED MALES** of from **250** to **280 EGG STRAIN.** Our **CHICKS** become wonderful **LAYERS** You want **EGGS? GET** our **CHICKS.** Write to-day for our free illustrated **CATALOG.**

SILVER WARD HATCHERY, Box 420, Zeeland, Michigan.

Egg-Bred Baby Chicks

ENGLISH WHITE LEGHORNS, BROWN LEGHORNS. 11 years of breeding for egg production. Highest quality chicks from tested layers. **Satisfaction guaranteed. 100 chicks $12.50; 500, $60.00. From Extra selected matings $2.00 per 100 higher.** Postpaid. **100% delivery guaranteed.** Order now. Bank reference. Catalog free.

ROYAL HATCHERY & FARMS, R. 2, Zeeland, Mich. S. P. Wiersma, Prop.

CHICKS, $10 per 100 and up

Postpaid to your door and full live count guaranteed

Varieties	Prices on 50	100	300	500	1,000
WHITE, BROWN and BUFF LEGHORNS	$7.00	$13.00	$38.00	$62.00	$120.00
BARRED ROCKS, BLACK MINORCAS and ANCONAS	8.00	15.00	44.00	72.00	140.00
WHITE ROCKS, WHITE WYANDOTTES and REDS	8.50	16.00	46.00	75.00	145.00

BUFF MINORCAS, 50, $13; 100, $25. MIXED CHICKS FOR BROILERS, 50, $6; 100, $11; 500, $50. Postpaid. Full live delivery guaranteed. Hatched in the best possible manner from good, vigorous, pure-bred, heavy laying flocks on free rangs. Carefully selected and packed to go safely. No catalog. Order right from this ad. and save time. Reference, Citizen's Saving Bank. You take no chances.

THE EAGLE NEST HATCHERY, Box K, Upper Sandusky, Ohio

Only 7 hours from Grand Rapids. Can reach any point in Michigan in 24 hours.

GOOD CHICKS—LOW PRICES

Pedigreed and Utility Grades of Barron Type White Leghorns, Barred Rocks, S. C. R. I. Reds. Customers report pullets laying at 4 months and 20 days. Pedigreed chicks from flocks headed by males bred by Michigan Agricultural College, from trapnested hens of 200 to 300 egg records. **LEGHORNS, 25, $5.50; 50, $10; 100, $20. ROCKS and REDS, 25; $6.75; 50, $12.50; 100, $25.** Utility chicks from selected, free-range flocks, pure-bred, heavy egg-strain hens, Great Value in Medium Priced Chicks. **W. LEGHORNS, 25, $4.50; 50, $7.50; 100, $15; 500, $70; 1000, $136. BARRED ROCKS and REDS, 25, $5.50; 50, $9.50; 100, $18; 500, $85; 1000, $165. Special Discount of 2c per chick on all orders with remittance in full sent in before April 1st.** Prepaid. 97% live delivery guaranteed. Instructive actalog free. Bank Reference.

MICHIGAN HATCHERY & POULTRY FARMS, Box C, Holland, Mich.

HILLVIEW HATCHERY

GUARANTEED TO ARRIVE

Strong and Healthy. Chicks from selected heavy laying. Hogan tested flocks. **ENGLISH WHITE LEGHORNS** and **BROWN LEGHORNS. Heavy Laying EXTRA GOOD BARRED ROCKS.** Postpaid to your door and full live delivery guaranteed. Our flocks are kept on free range, properly fed and cared for insuring the vigor necessary in the Chicks to live and **MAKE A PROFIT.** Give us a trial and you will come again.

HILLVIEW HATCHERY, Route 12 E, Holland, Michigan.

BABY CHICKS $10 per 100 and UP

From selected, heavy laying, vigorous hens. **White and Brown Leghorns, Anconas, 50, $6.75; 100, $13; 500, $62.50. Barred Rocks, 50, $8.50; 100, $16; 500, $75 Extra Select, $2 per 100 higher. Mixed Chicks, 50, $5.50; 100, $10; 500, $50.** Well hatched in modern machines. Carefully and correctly packed and shipped. Postpaid, full live arrival guaranteed. Bank reference and this guarantee makes you perfectly safe in ordering direct from this ad NOW. Get them when you want them. All orders have our careful personal attention. WE WANT YOUR BUSINESS. Catalog Free.

WINSTROM FARM & HATCHERIES, Box H 5, Zeeland, Michigan

GUARANTEED RURAL CHICKS

EXCEPTIONAL VALUES IN HIGHEST QUALITY, PROVEN LAYERS.

PURE BRED S. C. Barron White Leghorns, Heavy Laying Brown Leghorns, Select Anconas. Heavy Winter Layers. Result of constant breeding for high flock averages. Buy direct from large modern hatching and breeding institution. All stock scientifically culled and approved and headed by large vigorous males. NEW LOW PRICES. Sent Postpaid, 100% live delivery guaranteed. Write for fine 1923 catalogue. Its free. Reference: Two Banks.

RURAL POULTRY FARM, Department B, R. 1, Zeeland, Michigan

GUARANTEED CHICKS

Hatched from High Laying Quality Fowls on free range, properly fed and housed to insure strong Chicks.

BARRED ROCKS, S. C. REDS, MINORCAS, ANCONAS	50, $8; 100, $15; 500, $74
WHITE WYANDOTTES, BUFF ROCKS	50, $8.50; 100, $16; 500, $78
WHITE, BROWN and BUFF LEGHORNS	50, $7.50; 100, $14; 500, $65

Postpaid to your door. 100% live delivery guaranteed. Catalog free. Bank Reference.

MORENCI HATCHERIES, Box B, Morenci, Mich. Member I. B. C. A.

CHICKS

THAT GROW, LAY AND PAY

Barron English White Leghorns, Brown Leghorns and Anconas.

PURCHASE THIS YEAR'S CROP OF CHICKS from tested layers, headed by large vigorous 260 to 288 Pedigreed Males.

CUSTOMERS REPORT BIG PROFITS with these wonderful layers. Write today for our large illustrated catalogue. It tells all about them, it's free.

WYNGARDEN HATCHERY
Box B, Zeeland, Mich.

Star Hatchery BABY CHICKS

From Select, Vigorous, Heavy Laying Breeding Stock

WHITE and BROWN LEGHORNS and ANCONAS
50—$7 100—$14 500—$65
SINGLE COMB REDS
50—$8 100—$16 500—$75

Hatched by modern methods in best machines under our personal supervision. Carefully packed and sent postpaid and 100% live delivery guaranteed. Bank Reference. You take no chances in ordering STAR BABY CHICKS. Place your order now and get them when you want them

STAR HATCHERY, Box X, Holland, Michigan

ARISTOCRAT

STRAIN BARRED ROCKS. THE WORLD FAMOUS PRIZE WINNING AND HEAVY LAYING STRAIN.

Barron White Leghorns
Splendid, big, heavy weight, heavy laying hens.

Everlay Brown Leghorns
Beautiful business hen. Wonderful winter layers. Second to none.

ANCONAS Sheppard's Famous Strain 331 egg strain.

CHICKS From all these great strains. Postpaid and full live delivery guaranteed. Also **EGGS FOR HATCHING** and Breeding Stock. Reference 2 Banks. Member M. B. C. A.

Fairview Poultry Farm, Route 2 K. Zeeland, Mich.

BABY CHICKS

FROM SPECIAL MATINGS

A specialist breeder can furnish better baby chicks. Our **ANCONAS** are Michigan's leading strain today—both in exhibition and in egg production. **WHITE LEGHORNS** from a select special egg flock having blood lines of world's greatest layers. We specialize in quality—not quantity. Lowest prices. Write for illustrated catalogue.

PROGRESSIVE POULTRY FARM
Box 1 Holland, Mich.

BABY CHICKS SELECTED CHICKS FROM the heart of the baby-chick industry. Leading pure breeds from heavy egg-producing strains. Alive delivery guaranteed. Send for catalogue and prices.

L. VAN HOVEN & BRO., Zeeland, Mich.

MEADOW BROOK FARM

CHICKS—ENGLISH WHITE LEGHORNS, BROWN LEGHORNS (Holland Importation Strain), 50, $7; 100, $13; 500, $62.50; 1,000, $120. BARRED ROCKS, REDS, BUFF LEGHORNS, 50, $8; 100, $15; 500, $72.50; 1,000, $140. WHITE WYANDOTTES (Heavy Laying Flocks), 50, $9; 100, $17. Postpaid, full live delivery guaranteed. All flocks composed of Selected Heavy Layers. Order now from this advertisement and get them when you want them. I have been producing good Chicks successfully for the past 20 years and KNOW HOW. I want your business and will try hard to please you. Free Catalog. Bank Reference. **MEADOW BROOK FARM, Henry De Pree, Proprietor, Route 1 H, Holland, Mich. Member Michigan B. C. A.**

HARDY, HEALTHY CHICKS

From northern bred, heavy laying, closely selected parent stock in **ENGLISH WHITE LEGHORNS, BROWN LEGHORNS AND SHEPPARD ANCONAS.** Our breeding birds are well-fed and housed to insure vigorous breeding condition and vigorous chicks for our customers. **POSTPAID. FULL DELIVERY GUARANTEED. LOWEST PRICES. CATALOG FREE.** Write your exact wants and let us quote you prices before you buy chicks elsewhere. **YOU NEED** these vigorous, northern bred chicks to make profits.

CITY LIMITS HATCHERY, Box M, Holland, Mich.
Reference, Holland City State Bank.

QUALITY CHICKS

GUARANTEED. From Hogan tested, free range stock. Our plant is modern 65 acre poultry farm. 10 years careful breeding for heavy egg production. Winners at leading shows. Big, strong, vigorous, well-hatched chicks at following prices: **WHITE and BROWN LEGHORNS, SELECT, 50, $8.50; 100, $16; 500, $77.50. ANCONAS SELECT, 50, $9; 100, $17; 500, $82.50. WHITE and BROWN LEGHORNS, SELECT, 50, $7; 100, $13.50; 500, $65. ANCONAS, SELECT, 50, $7.50; 100, $14.50; 500, $70.** Postpaid to your door and 100% live delivery guaranteed. Order direct from this ad. early and get them when you want them. Also breeding stock and special mating Chicks. **Get Our Catalog.** Reference 2 Banks.

TOWNLINE POULTRY FARM, Box 27, Zeeland, Michigan

STRONG PURE BRED CHICKS

S. C. English White Leghorns, Barred Rocks, Anconas Direct from our free range farms, by Prepaid Parcel Post to you. Bred for egg production because it means most money to you. Returns on your investment in 4½ to 5 months. A Post Card will bring our free Catalog and details of our contest offer. Highest quality—Bargain prices—Satisfaction guaranteed. Most modern equipped Hatchery in Michigan.

4½ Months Old and Laying

Riverview Hatchery and Poultry Farm
10 Years in Poultry
R. No. 2. Zeeland Michigan

300,000 Chicks

Guaranteed Michigan Bred and Hatched

ENGLISH WHITE and BROWN LEGHORNS, SHEPPARD'S Famous Strain ANCONAS, 50, $7; 100, $13; 500, $60. BARRED ROCKS, R. and S. C. REDS, 50, $8.50; 100, $16; 500, $75. 1,000 orders at 500 rate. RHODE ISLAND WHITES, 100, $18; 200, $35. Postpaid, full live delivery guaranteed. Strong, vigorous Chicks from heavy laying flocks. Order right from this ad. **WE SATISFY OUR CUSTOMERS.** Catalog free. Reference, Holland City State Bank.

KNOLL'S HATCHERY, Box L, Holland, Michigan

CHICKS $12.00 per 100 and Up

100% SAFE ARRIVAL GUARANTEED

PRICES—WHITE, BROWN and BUFF LEGHORNS, 50, $7; 100, $13; 500, $60. BARRED ROCKS, S. C. and R. C. REDS, ANCONAS, B. MINORCAS, 50, $8; 100, $15; 500, $70. WHITE WYANDOTTES, WHITE ROCKS and BUFF ORPINGTONS, SHEPHARDS 331 EGG STRAIN ANCONAS, WHITE MINORCAS, 50, $8.50; 100, $16; 500, $75. MIXED, 50, $6; 100, $11; 500, $50.

Hatched from selected heavy laying flocks that are well fed and cared for, insuring strong, livable chicks that will make a profit for you. POSTPAID TO YOUR DOOR. ORDER DIRECT FROM THIS AD and SAVE TIME. Catalog free. Reference, Geneva Bank. **THE GENEVA HATCHERY, Box 505, Geneva, Ind.**

QUALITY BABY CHICKS S. C. Brown and English strain White Leghorn Baby Chicks. Write for catalogue. **Cooks Poultry Farm, Holland, Mich.**

BABY CHICKS—FROM SELECTED FLOCKS Six leading varieties. Popular prices and guaranteed delivery. Write for catalog and price list.
H. H PIERCE, Jerome, Mich.

400,000 Chicks

Big, strong, Well-hatched Chicks from selected to lay stock on free range, properly fed and housed to insure health and vigor. **WHITE, BROWN & BUFF LEGHORNS, 50, $7; 100, $13; 500, $62.50. BARRED & WHITE ROCKS, S. C. & R. C. REDS, ANCONAS, 50, $8; 100, $15; 500, $72.50. WHITE WYANDOTTES, 50, $8.50; 100, $16; 500, $77.50. BUFF ORPINGTONS, SILVER WYANDOTTES, 50, $9.50; 100, $18; 500, $87.50. POSTPAID.** We guarantee full 100% live arrival. Reference, Citizen's Bank. Order direct from this ad. and save time. Free circular.

MODERN HATCHERY
Box F, Mt. Blanchard, Ohio

Rosewood Farm

Healthy, Hardy Chicks

Well-hatched, carefully packed, and shipped. Select, heavy laying **WHITE LEGHORNS, 50, $7; 100, $13; 500, $62.50; 1,000, $120.** Select **ANCONAS, 50, $7.50; 100, $14; 500, $67.50.** Select **BARRED ROCKS, 50, $8.50; 100, $16.50; 500, $80.** Postpaid, full live delivery guaranteed. Our chicks will render you the best of satisfaction and you will **COME BACK TO US.** We have had long experience in producing good Chicks and our flocks are second to none. Circular free. **ROSEWOOD FARM, R 12 A, Holland, Mich.**

BABY CHICKS

You can now order Chicks in 11 breeds of the Pure Breed Practical Poultry that is making egg records on our customer's own farms. If you want stock that will make real money, send for our description and price list. All stock guaranteed 100% post paid. We want you to try our stock this year. It is the best practical stock you can buy.

- **Barred Rocks**
- **White Rocks**
- **Rhode I. Reds**
- **Wyandottes**
- **Orpingtons**
- **Leghorns—**
  - **Wh., Br., Buff**
- **Anconas**
- **Minorcas**

STATE FARM ASSOCIATION
202 Chase Block Kalamazoo, Michigan.

BABY CHICKS

Our Baby Chicks are the kind that live and grow. White Leghorns, Brown Leghorns, Buff Leghorns, Barred Rocks, White Rocks, Buff Rocks, Rhode Island Reds, White Wyandottes, Anconas, Minorcas, and Orpingtons. Silver Spangled Hamburg stock and eggs for sale. Catalog Free.

Rosedale Farms
Route 1, Box 74. Port Huron, Michigan.

CHICKS Barron Strain Selected White Leghorns. Produced under my personal care. Strong, vigorous chicks carefully packed to go safely. Postpaid, full live delivery guaranteed. 50 chicks, $6.50; 100, $12.50; 500, $60. Get your order in early. **Elgin Hatchery, Box 317A, Zeeland, Mich.**

SUNBEAM HATCHERY

The Chicks that I sell are produced under my personal supervision in a good, modernly equipped hatchery which is kept in best possible condition. The parent stock is carefully selected and of best heavy laying strains, kept on free range, well-housed and handled. Free from disease and properly fed. This enables me to produce strong, growthy Chicks which will mean PROFIT to my customers. **PRICES: WHITE, BROWN AND BUFF LEGHORNS, 50, $7; 100, $13; 500, $62.50. BARRED ROCKS, R. AND S. C. REDS AND ANCONAS, 50, $8; 100, $15; 500, $72.50. WHITE AND BUFF ROCKS, WHITE WYANDOTTES, AND B. MINORCAS, 50, $8.50; 100, $16; 500, $77.50. WHITE AND BUFF ORPINGTONS, SIL. L. WYANDOTTES, 50, $9; 100, $18; 500, $87.50.** I guarantee full live delivery by prepaid post. Get your order in now and I will ship when you want them. Bank Reference. Catalog Free. **H. B. Tippin, Box E, Findlay, Ohio. Member I. B. C. A.**

CHICKS THAT MAKE PROFIT

$10 PER 100 AND UP. From vigorous, pure-bred flocks on free range, selected for heavy laying qualities and well cared for. Low prices considering exceptional quality. **WHITE, BROWN and BUFF LEGHORNS, 50, $7; 100, $13; 500, $62.50; 1,000, 120. WHITE and BARRED ROCKS, WHITE WYANDOTTES, BUFF ORPINGTONS, ROSE and S. C. REDS, ANCONAS, 50, $8; 100, $15; 500, $72.50; 1,000, $140. Mixed, all varieties for broilers, $10 per 100 straight.** Postpaid to your door and full count guaranteed. You can order now direct from this ad and get them when you want them. Bank reference. Free catalog.

BLUFFTON HATCHERY, Box L, Bluffton, Ohio

BABY CHICKS

$10.50 PER 100 AND UP

From Hogan tested, well-kept and housed heavy laying flocks
Barred and White Rocks, Reds, Anconas, Minorcas: 50, $8.50; 100, $16; 500, $77.50
Buff Orpingtons, White Wyandottes:.......... 50, $9; 100, $17.50; 500, $85
White, Brown and Buff Leghorns:.......... 50, $7.50; 100, $14; 500, $67.50
Mixed:.. $11 per 100 straight
Postpaid, full live delivery guaranteed. Order NOW from this ad. and get them when you want them. Catalog free. ALSO EGGS FOR HATCHING. Reference, 4 Banks.
TRI-STATE HATCHERIES, Box 511, Archbold, Ohio

CHICKS WITH PEP, $11 per 100 and up

Selected Hogan Tested Flocks. Postpaid, full live delivery guaranteed. **BUFF ORPINGTONS, WH. and SIL. WYANDOTTES, 50, $9.25; 100, $18: BARRED and WH. ROCKS, S. and R. C. REDS, MINORCAS, 50, $8.25; 100, $16. ANCONAS and HEAVY BROILERS. 50, $7.25; 100, $14. WH., BR. and BUFF LEGHORNS, 50, $7; 100, $13. MIXED, ALL VARIETIES, $11 per 100 straight. On 500, 5% off; 1,000 10% off.** Ready February 26th. Free Catalog. Member I. B. C. A.

HOLGATE HATCHERY, Box B, Holgate, Ohio.

OVIE'S BABY CHICKS

HEAVY LAYING

breeding stock or real quality helps producers Ovie's strong healthy and husky chicks.

BABY CHICKS OF QUALITY AND MERIT

25,000 Thrifty Chicks Weekly

Write for catalog. 11c and up [illegible] 12 leading breeds. Delivery guaranteed.

Ovie's Poultry Farm and Hatchery
132 Boots Street, Marion, Indiana

QUALITY CHICKS

GET THE PROFITABLE AND LAYING KIND

They will pay you big. Free range. Selected. Hogan test. Orpingtons, W. & Sil. Wyandottes, 50, $9.25; 100, $18. Rocks, Reds, Minorcas, 50, $8.25; 100, $16. Anconas, heavy broilers. 50, $7.25; 100, $14. Leghorns, 50, $7; 100, $13. Mixed, all varieties, $11 per 100 straight. Postpaid. [illegible]ivery. Circular free. Bank reference.
Middlepoint Hatchery, Middlepoint, Ohio, Dept. B.

Day Old Chicks

Strong, sturdy, S. C. White Leghorns (English strain) from large, vigorous, yearling hens, raised on our own farms. That lay and pay. Barred Rocks and Rhode Island Reds, from best laying strains. Send for our illustrated catalog, free.

Hillcrest Poultry Farms and Hatchery
R. R. 2, Holland, Michigan

Selected Baby Chicks and Breeding Stock

Tom Barron strain White Leghorns. Also Barred Rocks. Guarantee 100 per cent live delivery on chicks. Cockerels and pullets in season. All stock carefully selected. Write for catalog and prices. Reference Zeeland State Bank.

BRANDT'S POULTRY FARM AND HATCHERY
R. R. 3 M ZEELAND, MICHIGAN

White Leghorn CHICKS

Write Quick. **Free feed—Liberal Discount** on early orders: **World-Famous** 265-270, and 280-326 egg strain trapnested, pedigreed English American S.C.W. Leghorns. **Heavy Layers. Best Payers.** Strong healthy chicks. 100% live delivery guaranteed, p.p *Big valuable catalog Free.*
KERLIN'S GRAND VIEW POULTRY FARM, Box 43 Center Hall, Pa.

White Leghorn CHICKS

Heavy Laying, pure bred, English strain. Flocks culled and tested for laying ability. **Strong, healthy** chicks. **100 per cent** live delivery guaranteed. Postage paid. **Catalog, low price list free. Write quick.**
Catalpa Grove Hatchery, Box 4 R. 2, Holland, Mich.

BABY CHICKS White and Brown Leghorns, Single and Rose Comb Reds, Buff Orpingtons, Barred and White Plymoth Rocks, Anconas, and White Wyandottes, $15 per 100 and up. **P. W. STONE HATCHERY, Lock Box 44, Fenton, Mich. F. M. Milliken, Prop.**

BABY CHICKS and HATCHING EGGS

Direct from our farm at greatly reduced prices, only 9c up. Barred Rocks, White Leghorns and Anconas. Write quick for particulars and special introductory offer. **MODEL POULTRY FARM & HATCHERY. Zeeland, R. 4, Michigan.**

WHITTAKER'S R. I. REDS—Michigan's Greatest Color and Egg Strain. Bred from winter layers for 13 years. Chicks and eggs. Write for free catalog. **Interlakes Farm, Box 4, Lawrence, Mich.**

CHICKS—WE HAVE SHIPPED THOUSANDS each season since 1904. Different breeds, free booklet with guarantee and delivered price. **Freeport Hatchery, Box 10, Freeport, Mich.**

BABY CHICKS—PUREBRED BARRED ROCKS, Buff Wyandottes, Black Minorcas, R. I. Reds, Brown and White Leghorns, 12c and up shipped postpaid. **THOS. G. CALLAGHAN, Fenton, Mich.**

KNIGHT STRAIN WHITE PLYMOUTH ROCK cockerels $5.00 each. Baby chicks $20.00 per 100. **ROBERT E. KNIGHT, New Baltimore, Mich.**

2 8 9 EGGS

289 Eggs in one year, actual trap-nest record, "LADY MICHIGAN" also made record of 283 eggs in one year. She laid 294 eggs in 381 consecutive days. Sons and daughters of "LADY MICHIGAN" are now in use in our matings for 1923. If you want

Real Barron Leghorns

Single Comb Whites, get our 1923 catalog and learn full particulars In regard to our flock which we have carefully bred for high-egg records for the past 21 years. Our best matings are made up of mature females with actual trap-nest records from 200 to 289 eggs.

Chicks and Eggs for Hatching

that will put the PROFIT into your Leghorn flocks. Write postcard for catalog today and before ordering Chicks or Eggs elsewhere. **STRICK POULTRY FARM, Route 4 M, Hudsonville, Mich.**

Day Old Chicks

From Select, Hogan Tested, Flocks on Free Range. Well-fed and handled to insure strong, vigorous chicks. Heavy Layers. **PRICES: WHITE and BROWN LEGHORNS and ANCONAS, 50, $7.50; 100, $14; 500, $65. BARRED ROCKS, 50, $8.50; 100, $16; 500, $75.** Hatched right and shipped right. Postpaid. 100% live delivery guaranteed. Bank Reference. Order direct from this ad. Circular free.
BORST & ROEK, Box P, Zeeland, Mich.

WASHTENAW

HATCHERY CHICK PRICES: March 26th and following hatches: **Barred Rocks and Reds, 50, $8.50; 100, $16; 500, $75. White Rocks, White Wyandottes, 50, $9.50; 100, $18; 500, $85. White, Brown, and Buff Leghorns, 50, $7.50; 100, $14; 500, $65.** From hatches due March 12th and 19th add $2 per 100 to these prices. Postpaid, full live delivery guaranteed. Our flocks are carefully selected and bred for high egg production. Order from this ad. Reference, Farmers and Mechanics Bank.
WASHTENAW HATCHERY, Ann Arbor, Mich.

DeKoster's Hatchery

Strong, vigorous Chicks from selected heavy laying **ENGLISH STRAIN WHITE LEGHORNS** and **BROWN LEGHORNS, 100, $12.50; 500, $60. THOMPSON & HOLTERMAN STRAIN BARRED ROCKS and ANCONAS, 100, $18; 500, $87.50.** Postpaid, full live delivery guaranteed. Catalog [illegible] Bank Reference.
DE[illegible]ER'S HATCHERY, Box X, Zeeland, Mich.

Peerless Chicks

HATCHED FROM BRED-TO-LAY S. C. WHITE LEGHORNS

They are selected long deep bodied, with large lopped combs. Liberal discount. Live arrival guaranteed. Catalog free.
PEERLESS HATCHERY & POULTRY FARM, Box 10, Zeeland, Mich.

BABY CHICKS

Hatched from strong and vigourous flocks of **ENGLISH WHITE LEGHORNS AND ANCONAS, BRED FOR HIGH EGG-PRODUCTION.** We guarantee 100 per cent [illegible] live chicks on arrival. Postage PAID. Prices reasonable. Instructive Catalog and prices free on request. **QUALITY HATCHERY, Box A11, Zeeland, Mich.**

DAY OLD CHICKS SINGLE and ROSE COMB RHODE ISLAND WHITES. Write for Catalogue. **Fischer's Hatchery and Poultry Farm, R. 1, Holland, Mich.**

POULTRY MANURE A VALUABE BY-PRODUCT

THE average poultry raiser attaches little or no value to the manure produced by his flock. Its gradual accumulation beneath the perches of his fowls receives only occasional attention, in many instances, and even when cleaned out more frequently is thrown away. When its removal becomes necessary he considers it one of the unavoidable and unpleasant evils that go with the business.

But poultry manure has a very real value, and may become a profitable by-product of the plant. It has been determined by the Maine Experiment Station, working in co-operation with the United States Department of Agriculture, that the average night droppings of the medium breeds amounts to 30 pounds a year for one fowl. On this basis 100 fowls would produce 3,000 pounds, or one and one-half tons. The analyses of this manure show it to be especially high in two of the three principal fertilizing elements. If the plant food contained in a ton of average fresh poultry manure were bought at the price paid, usually, for it in the form of commercial fertilizers, the outlay would be about $10.

Taking into account the fact that the quantity of manure produced in the daytime is at least equal to that produced at night, the specialists find that one average hen produces about 60 pounds of manure in a year. However, only the night droppings are available for use, as the day droppings are widely scattered over the yards and ranges. The night droppings from 1,000 hens would be worth about $150 a year. As hen manure, as it usually is cared for, contains only about one-half its original value, the loss thru this form of neglect must be very large for the entire country.

If immediate use is resorted to, the manure should be applied somewhat sparingly. It is from two to three times richer in nitrogen and three to eight times richer in phosphoric acid than the ordinary farm manures. This, of course, is due to the kinds of feeds used, and also to the fact that the liquid and solid matter are together.

It can be handled most satisfactorily if mixed with loam to remove stickiness in the summer. In the winter it should be mixed with a fair proportion of loam, sawdust, or coal ashes, sifted dried earth, land plaster or gypsum. Wood ashes and lime should never be used, as they set free the nitrogen, which must be avoided.

Keep it in a Dry Place

To put the manure on the ground in the winter should mean to lose one-half or more of its value. The better plan is to store it in barrels or boxes until time to use on a growing crop. When stored this way the container should have several large holes bored in it to admit air. Some plants having several thousand fowls have large bins of concrete for saving this manure. Untreated, a large part of the nitrogen escapes into the air as ammonia escapes.

The Maine Experiment Station recommends using with every 30 pounds of poultry manure 10 pounds of sawdust, 16 pounds of acid phosphate and the kainit. The acid phosphats and the kainit prevent the loss of nitrogen, and the sawdust absorbs the excess moisture. If sawdust is not obtainable, dried earth in about the same proportion may be substituted. After being treated in this way the manure should be put in a sheltered place until used. If the materials are kept handy the business of mixing soon becomes a routine task.

FERTILIZERS FOR CORN

FROM 300 to 400 pounds per acre of a 3-12-4 fertilizer is recommended for corn by Director C. G. Williams, Ohio Experiment Station, when neither a clover sod nor manure is at hand to help make the crop. If there is good clover, 300 pounds per acre of an 0-14-4 will answer, while if there is plenty of manure from 200 to 300 pounds of acid phosphate only is advised.

Keep the Business Farmer coming —See page 13.

The Cause of White Diarrhea

White Diarrhea is caused by the bacillus Bacterium Pullorum transmitted through the yolk. There is scarcely a hatch without some infected chicks. The germs multiply very rapidly and one infected chick may infect the entire brood. The germs can be killed by the use of preventitives. Intestinal Antiseptics to kill the germs should be given as soon as the chicks are out of the shell. It is much easier to prevent than it is to cure.

How to Prevent White Diarrhea

Dear Sir: Last spring my first incubator chicks when but a few days old began to die by the dozens with White Diarrhea. I tried different remedies and was about discouraged. Finally, I sent 50c to the Walker Remedy Co., Dept. 683, Waterloo, Ia. for a box of their Walko White Diarrhea Remedy. It's just the only thing for this terrible disease. We never lost a single chick after the first dose. We raised 700 thrifty, healthy chicks, where before we never raised more than 100 a year. I'd be glad indeed to have others know of this wonderful remedy. Ethel Rhoades, Shenandoah, Ia.

Don't Wait

Don't wait until White Diarrhea gets half or two-thirds your chicks. Don't let it get started. Be prepared. Write today. Let us prove to you that Walko will prevent White Diarrhea. Send 50c for box on our guarantee—money back if not satisfied.
Walker Remedy Co., Dept. 683, Waterloo, Ia.
(Adv.)

BABY CHICKS
SEX GUARANTEED
The most Progressive Hatchery in the country
UTILITY HATCHERIES AND FARMS
Dept. 61
ZEELAND, MICH.

By years of experimenting we have evolved a system of sex determination. We guarantee 60% of the sex ordered. Our average is considerably higher. We guarantee 100% live delivery; bred from males whose dams have egg records of 250 to 287. Specialize S. C. White Leghorns but fill orders for any breed. Further information if asked

ORDER FROM THESE PRICES

Grade A chicks at 14 cents
Grade AA chicks at 15 cents
Grade AAA chicks at 16 cents

Specify pullets or cockerels. Terms cash, except on advance orders, 25% down, remainder one week before shipped.

TIMMER'S HATCHERY

Hardy, healthy Chicks from selected heavy laying flocks. **WH. and BR. LEGHORNS, 50, $7; 100, $13; 500, $62.50. ANCONAS, 50, $7.50; 100, $14; 500, $67.50. BARRED ROCKS and REDS, 50, $8.50; 100, $16.50; 500, $80.** Postpaid, full live delivery. Bank reference. Free Catalog.
TIMMER'S HATCHERY
Route 3 A, Holland, Mich.

Hardy Northern Bred Chicks

Pine Bay Farm

Barron S. C. W. LEGHORNS Parks Strain BARRED ROCKS The greatest egg producers known. Heavy winter layers. See record of our pen 16 now at the Michigan International Egg Laying Contest. Get **Quality** chicks at **Reasonable** prices from Holland's pioneer poultry farm. Catalogue free.
Pine Bay Poultry Farm, Box 56, Holland, Mich.

CHICKS

BARRON'S S. C. W. LEGHORNS, SHEPPARD ANCONAS, and BARRED ROCKS, EGGS and CHICKS FROM SELECTED STOCK

Our Leghorn flocks are headed by large vigorous males from M. A. C.; Anconas from Sheppard's 285 hens. Buy from an old reliable poultry farm and you will be proud to own a flock of high producing hens that will bring you a big profit. We guarantee safe delivery and prepay shipments. Write for catalogue.
BYRON CENTER POULTRY FARM AND HATCHERY Box R, Byron Center, Mich.

QUALITY CHICKS White Leghorns, Barred Rocks, Anconas. 5,000 culled breeders. 12 years experience. New Smith 40,000 egg hatcher. Member Baby Chick Assocs. Send for Folder B and prices. **DEAN EGG FARM & HATCHERY BIG BEAVER, BIRMINGHAM, MICH.**

Rhode Island Reds, Tompkins strain, hatching eggs and baby chicks. Eggs per hundred $12.00; chicks per hundred $25.00. On all orders for either stock, eggs or chicks of $15.00 or more, I will give the Rhode Island Journal free for one year. A few good cockerels left. Quality Breeder of Rhode Island Reds, both combs.
WM. H. FROHM, New Baltimore, Mich., R. 1.

CHICKS—Exhibition and Utility

strains from America's best. W. and Barred Rocks, Reds, W. and Brown Leghorns, Wyandottes, Anconas. Surprising prices, quality considered. 13 years' hatchery experience. Catalog.
HAIGHT HATCHERY, Cedar Springs, Mich.

SELL YOUR PURE-BRED POULTRY THROUGH THE BUSINESS FARMER.

The Agricultural and Business Situation

Revised Monthly by the Department of Research of the American Farm Bureau Federation.

SUMMARY:

Foreign demand is the most uncertain element in the agricultural situation. Purchases by Europe have a determining influence upon the prosperity of the producers of wheat, cotton, pork and tobacco, and affect—to a lesser extent—other agricultural groups. What is the condition and outlook in regard to European purchasing power?

The principal ways in which our exports of commodities, the last two years, have been paid for, are as follows: (1) by imports of commodities; (2) by imports of gold; (3) by extending credit, particularly long-time credit through the purchase of foreign bonds. During these two years exports of goods have totaled 8,144 million dollars. Import figures for 1922 are not yet complete but, for the two years, will be close to 5,509 million dollars. This makes an excess of exports over imports of 2,635 million dollars, which was paid mainly by net imports of gold, for the two years, of 906 million dollars and the purchase of new foreign bonds of 1,463 million dollars. The situation for each of the two years was as follows:

	1922	1921
Exports of goods	3,765	4,378
Imports of goods	3,000*	2,509
Net imports of gold	238	667
New foreign loans	769	694

*Partly estimated.

Note that exports in 1922 are less than in previous year; imports are higher; net imports of gold are less; new foreign loans are slightly more. If exports of commodities are to be maintained or expanded as is desired, one or all of the other three items must be maintained or expanded. The last item in the list, namely, new foreign loans, has declined sharply in recent months, only 23 per cent of the loans for 1922 being made in the second half of the year. Net gold imports cannot be expected to continue indefinitely and there is no reason to think that they will increase in 1923. Europe is probably in a position to send us as many goods in 1923 as last year but much of an increase would be surprising. These factors, combined, point to a diminution of export demand in 1923. At least it will be conservative for farmers to lay their plans on the basis of a strong possibility that foreign demand for cotton, wheat and pork will be less than last year. This need not be true if improvement in European conditions increases production abroad and brings a return of confidence among American investors.

Cotton will start the new crop year with practically no carryover. With the price of cotton around thirty cents per pound the incentive will be strong to plant a large acreage. Also with the price high, fertilizers and poisons will be applied more generously. The weather and boll weevil may restrict output in spite of the factors tending to increase it. A crop of 12 million bales, the average for 1916-1920, would probably not prove excessive even with lower exports.

The proportion of wheat exports to production was 27 per cent in 1922 compared with 43 per cent in 1921 and 23 per cent for the twenty year average. With Russia and the Danube countries still out of the European market, the small volume going out of the United States in 1922 was disappointing. This was partly due to an excess supply in Canada and Argentina and the substitution of corn and other cheaper grains. Europe has had two short grain years in succession and will need our grain badly in 1923. With purchasing power low, Europe can be expected to continue to give preference to our cheaper grains. With wheat prices unsatisfactory, winter wheat acreage was cut three per cent and it is anticipated that the spring wheat area may be reduced.

From reports of the United States Department of Agriculture, we may conclude that the number of hogs raised for market in 1923 will be about 15 per cent larger than last year. Pork and lard exports are now making up about 15 per cent of production compared with an average around 11 per cent before the war. Exports in 1922 show a slight decline from previous year. With an indication of a large supply of pork products in 1923, larger exports than last year would seem necessary to sustain the market.

I. Production and Trade

1. Agriculture:

U. S. Production—000,000 omitted.

	Dec. 1st 1922 Estimate	1921	Average 1916-1920	Dec. 1st* 1922 Estimate Per cent
Corn, bu.	2891	3069	2831	102
Wheat, bu.	856	815	799	107
Oats, bu.	1215	1078	1413	85
Barley, bu.	186	155	197	94
Rye, bu.	95	62	68	139
Buckwheat, bu.	15	14	14	107
Potatoes, bu.	451	362	373	128
Sweet Potatoes, bu.	110	99	89	123
Hay, all, tons	113	98	102	111
Cotton, bales	10	8	12	83
Tobacco, lbs.	1325	1070	1378	96
Flaxseed, bu.	12	8	11	109
Rice, bu.	42	38	42	100
Peaches, bu.	57	33	44	129
Pears, bu.	19	11	14	136
Apples, total, bu.	204	99	179	114
Apples, com'l., bbls.	31	22	27	115
Sugar Beets, tons	5	8	7	71
Cranberries, bbls.	.6	.4	.4	150
Beans, bu.	12	9	13.3	90
Onions, bu.	18	14	17	105
Cabbage, tons	1	.6	.7	143
Sorghum Sirup, gal.	37	46	40	93
Cloverseed, bu.	1.9	1.5	1.5	127
Peanuts, lb.	624	829	1043	59
Hops, lb.	26	29	32.1	81

*As percentage of average 1916-1920.

World Production—000,000 omitted.

	1922	1921	Average 1909-13
Wheat, bu (1)	3,058	3,069	2,890
Corn, bu. (2)	3,450	3,781	3,572
Rye, bu. (3)	785	773	....
Oats, bu. (4)	3,003	2,759	3,008
Barley, bu. (5)	833	818	882
Potatoes, bu. (6)	3,123	2,445	3,066
Cotton, bales (7)	16	14.1	19.6

(1) Russia and Mexico excluded.
(2) 17 countries. (3) 18 countries. (4) 27 countries. (5) 25 countries. (6) 16 countries. (7) 500 pounds net, linters excluded.

2. Mining:

Figures express production as a percent of normal. In estimating normal production, due allowance is made for seasonal variation and year to year growth.

	Dec., 1922	Nov., 1922	Dec., 1921
Anthracite coal	†96	99	74
Bituminous coal	†85	81	59
Copper	84	87	15
Petroleum	†121	119	112
3. Manufacturing:			
Wheat flour	93	102	74
Meat	*	98	77
Sugar	136	147	144
Cotton	95	106	94
Pig iron	105	92	58
Steel ingot	89	88	48
Lumber	*	129	79
Wood pulp	*	91	92
Gasoline	*	111	103
Cement	127	127	98
Wool	*	140	113

†Preliminary. *Not available.

4. Building:

	December 1922	December 1921	Twelve Months 1922	Twelve Months 1921
Contracts awarded in 27 States: (F. W. Dodge Co.)				
Number	7,080	6,181	107,637	78,222
Value (000,000 omitted)	$ 215	$ 199	$ 3,346	$ 2,359

5. Transportation:

Freight car loadings:	Week Ending Feb. 3, 1923	Same Week Month Ago	Same Week Year Ago	Week Ending Feb. 3, 1922*
Total	865,675	770,303	753,886	115
Grain and grain products.	41,736	45,498	48,969	85
Livestock	33,675	31,686	27,998	120
Coal	189,773	187,746	185,151	102
Coke	14,199	13,028	7,844	181
Forest products	69,767	57,530	50,204	139
Ore	11,239	9,718	4,015	280
Merch. and Miscel.	505,286	425,097	429,705	118

*As percentage of week year ago.

7. Bank Clearings:

Units of $1,000,000,000

	Jan., 1923	Dec., 1922	Jan., 1922
New York City	$19.78	$18.90	$17.30
Outside New York City	17.52	16.51	13.39

8. Mail Order Sales:

	January 1923	January 1922	Seven Months Ending January 1923	Seven Months Ending January 1922
Montgomery Ward & Co.	$ 8,477,239	$ 5,594,153	$ 56,261,864	$ 47,263,497
Sears Roebuck	18,930,082	14,188,422	118,592,681	101,788,110

II. Foreign Trade

000 omitted

Commodity.	December 1922	December 1921	Twelve Months 1922	Twelve Months 1921
Grand total, all exports	$339,352	$291,175	$3,765,192	$4,378,928
Beef and veal, lb.	1,942	1,702	32,686	41,009
Pork, lb.	74,955	40,394	699,618	737,756
Lard, lb.	78,596	64,542	766,950	868,942
Neutral lard, lb.	2,516	1,513	20,497	23,951
Butter, lb.	362	439	10,938	8,015
Cheese, lb.	307	439	5,007	11,772
Hides and skins	$ 428	$428	$4,019	$4,067
Corn, bu.	4,758	10,243	163,609	128,975
Meal and flour, bbls.	46	61	630	503
Wheat, bu.	9,676	10,451	164,692	280,058
Flour, bbls.	1,500	1,014	15,025	16,801
Oats, bu.	332	98	30,011	3,224
Meal and rolled oats, lb.	11,188	9,127	144,123	98,839
Fruits and nuts	$8,434	5,669	75,864	70,157
Vegetable oils and fats	$1,464	1,204	14,162	27,668
Sugar, lbs.	5,974	71,270	1,836,722	933,792
Leaf tobacco, lb.	36,954	38,772	430,907	515,353
Cotton, bales	608	640	6,114	6,474
Wool, lbs.	8	82	453	1,927

2. Imports:

Commodity.	October 1922	October 1921	Ten Months 1922	Ten Months 1921
Grand total, all imports	$345,083	$188,008	$2,527,132	$2,060,704
Beef and veal, lb.	4,504	3,562	31,502	25,595
Pork, lb.	54	226	637	661
Butter, lb.	232	1,858	2,967	14,031
Cheese, lb.	6,776	3,953	33,019	19,487
Hides and skins	$13,487	5,252	81,915	56,670
Corn, bu.	3	....	100	157
Oats, bu.	8	65	1,279	3,146
Wheat, bu.	2,566	878	16,887	2,685
Fruits and nuts	$ 8,724	9,114	57,703	52.577
Vgeetable oils, fats	$ 5,166	3,140	50,987	31,297
Sugar, lb.	432,456	362,079	8,866,467	5,109,581
Leaf tobacco, lb.	6,285	908	57,841	42,052
Cotton, bales	28	33	266	173
Wool, lb.	25,261	9,086	303,894	297,200

3. Prices of Foreign Drafts:

	Nominal Gold Value Par of Exchange	Price of Demand Drafts Feb. 19, 1923	Jan. 22, 1923	Feb. 20, 1922
England	$4.87 to 1 £ Sterling	$4.70	$4.66	$4.39
France	19.83c to 1 franc	6.06c	6.34c	9.15c
Germany	23.8c to 1 mark	.005c	.005c	.445c
Belgium	19.3c to 1 franc	5.33c	5.67c	8.68c
Italy	19.3c to 1 lire	4.80c	4.72c	5.03c
Spain	19.3c to 1 peseta	15.65c	15.62c	15.94c
Austria	20.3c to 1 crown	.0014c	.0014c	.0275c
Denmark	26.8c to 1 crown	19.18c	18.68c	20.73c
Norway	26.8c to 1 crown	18.56c	18.64c	17.0c
Sweden	26.8c to 1 crown	26.62c	26.86c	26.55c
Holland	40.2c to 1 florin	39.56c	39.50c	38.05c
Argentina	42.5c to 1 peso	37.2c	39.25c	36.56c
Brazil	32.4c to 1 mileris	11.55c	11.45c	13.66c
India	48.7c to 1 rupee	31.75c	32.25c	28.75c
Japan	49.9c to 1 yen	48.45c	48.85c	47.37c
Canada	100c to 1 dollar	98.81c	99.13c	97.0c

4. Discount Rate of the Bank of England:

Feb. 14, 1923	Month Ago	Year Ago
3%	3%	5%

III. Money and Credit

1. Gold, Currency and Bank Deposits:

000,000 omitted

	Jan. 1, 1923	Dec. 1, 1922	Jan. 1, 1922
Stocks of monetary gold in the United States	$ 3,943	$ 3,909	$ 3,657
Total supply of currency in the United States	4,733	4,617	5,775
	Sept. 15, 1922	June 30, 1922	Sept. 15, 1921
Total deposits in National Banks	$16,599	$16,321	$14,561
	Jan. 1, 1923	Dec. 1, 1922	Jan. 1, 1922
Deposits in New York City banks	$ 4,000	$ 3,850	$ 3,910

2. Gold Movement:

000 omitted

	December 1922	December 1921	Twelve Months 1922	Twelve Months 1921
Exports of gold	$ 2,710	$ 2,162	$ 36,875	$ 23,891
Imports of gold	26,440	31,666	275,170	691,248

3. Federal Reserve Ratio:

	Feb. 14, 1923	Jan. 17, 1923	Feb. 15, 1922
Ratio of total reserves to deposits and Federal Reserve note liabilities combined	75.3%	76.1%	76.4%

4. Interest Rates:

	Jan., 1923	Dec., 1922	Jan., 1922
4-6 mos. commercial paper	4.72%	4.88%	5.15%
60-90 days commercial paper	4.40%	4.62%	4.90%

5. Discount Rate of Federal Reserve Banks:

	Feb. 1, 1923	Jan. 1 1923	Feb. 1, 1922
Range of rates for the twelve banks on commercial agricultural and livestock paper	4-4½%	4-4½%	4½-5%

6. Stock and Bond Prices:

	Feb. 9, 1923	Jan. 12, 1923	Feb. 10, 1922
20 Industrial stocks	$100.82	$98.63	$83.05
20 Railroad stocks	89.17	85.09	76.77
40 Bonds	88.74	89.01	86.15

7. Business Failures:

	Week Ending Feb. 8, 1923	Dec. 11, 1922	Feb. 8, 1922
Bradstreets	405	550	580
Duns	371	546	581

IV. Prices

1. Wholesale Prices of Farm Commodities:

Quotations at Chicago except as noted.

	Feb. 20, 1923	Month Ago	Year Ago
Fat hogs, cwt., average	$ 8.00	$ 8.30	$10.35
Beef steers, good native, cwt., av.	8.85	9.35	7.55
Fat lambs, cwt., average	13.90	14.20	14.90
Fat sheep, cwt., average	7.65	7.90	7.70
Wool, Ohio delaine unwashed, lb. (Boston)	.575	.57	.49
Butter, 92 score, lb.	.52	.50	.36
Cheese, No. 1 twins, lb.	.2425	.265	.2125
Eggs, fresh firsts, doz.	.37	.355	.26
Poultry, hens, lb.	.2375	.22	.25
Wheat, No. 2 hard, bu.	1.2175	1.155	1.4275
Corn, No. 2 mixed, bu.	.7425	.695	.5775
Oats, No. 2 white, bu.	.4675	.435	.3925
Rye, No. 2, bu.	.855	.855	1.0425
Barley, bu.	.68	.625	.63
Kafir, No. 2 white, cwt. (Kansas City)	1.59	1.575	1.34
Hay, No. 1 timothy, ton	21.00	21.00	21.00
Flax, No. 1, bu. (Minneapolis)	3.1575	2.84	2.59
Cotton, middling, lb. (New York)	.29	.2875	.1855
Beans, white, cwt. (f. o. b. Michigan)	8.15	8.05	5.95
Potatoes, northern whites, cwt.	1.10	.90	1.70
Onions, midwest yellow, cwt.	2.65	2.75	7.00
Apples, winter varieties, bbl.	5.30	5.00	9.00
Hides, No. 1 native heavy, lb.	.205	.205	.165
Sugar, fine granulated, lb. (New York)	.0825	.067	.05

2. U. S. Department of Labor Relative Wholesale Prices:

Prices in year 1913 equal 100.

	Jan., 1923	Dec., 1922	Jan., 1922
All commodities (weighted average or general price level)	156	156	148
Farm products	143	145	116
Food products	141	144	134
Cloths and clothing	196	194	183
Fuel and lighting	218	216	183
Metals and metal products	133	131	117
Building materials	188	185	202
Chemicals and drugs	131	130	159
House furnishings	184	182	214
Miscellaneous	124	122	146

3. Prices of Farm Products at the Farm Relative to 1913:

Prices in year 1913 equal 100.

Commodity:	Dec., 1922	Nov., 1922	Dec., 1921
Cotton	198	192	130
Corn	117	111	72
Wheat	135	129	118
Hay	107	115	110
Potatoes	92	90	173
Beef Cattle	89	89	78
Hogs	102	104	[illegible]
Eggs	229	239	265
Butter	162	155	152
Wool	211	199	101

4. Relative Purchasing Power of Farm Products:

The quantity of various commodities which a given amount of each farm product would purchase at prices prevailing in 1913 is put equal to 100. The figures given represent the percentage of this quantity which the same amount of farm products would purchase in December, 1922. Prices at the farm are used for agricultural products, and wholesale prices at central markets for other commodities.

	All Commodities	Cloths, etc.	Fuel, etc.	Metals, etc.	Building Mtls.	House Furn'gs
Cotton	127	102	92	151	107	109
Corn	75	60	54	89	63	64
Wheat	86	70	63	103	73	74
Hay	69	55	50	82	58	59
Potatoes	59	47	43	70	50	51
Beef Cattle	57	46	41	68	48	49
Hogs	65	53	47	78	55	56
Eggs	147	118	106	175	124	126
Butter	104	84	75	124	88	89
Wool	135	109	98	161	114	116

Average purchasing power of all farm products in terms of all other commodities. Same basis as above table.

1913	100	December, 1921	62
1914	112	January, 1922	65
1915	106	March	76
1916	[illegible]	July	69
1917	106	September	64
1918	112	October	65
1919	111	November	66
1920	86	December	68
1921	67	January, 1923	[illegible]
1922	59		

MARKET FLASHES

MARKET SUMMARY

Wheat steady. Corn and oats unchanged. Beans quiet after small decline on opening day of week. Supply of butter moderate and demand good. Receipts of eggs exceed demand. Potatoes firm. Poultry steady. All live stock steady to active and higher.

(Note: The above summarized information was received **AFTER** the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press.—Editor.)

FOOTE'S MARKET LETTER

By W. W. Foote

THE cost of living is increasing and is much higher than a year ago, and farmers are complaining of their great increase in taxes above pre-war years, while their farm profits have been far lower. A matter of interest to dairy farmers is the recent arrival in New York of a cargo of 5,320,000 pounds of butter from New Zealand, and the arrival the same day of 2,500,000 pounds of poultry in the same city from California, both by way of the Panama Canal. It was stated at the same time that a fleet of butter carrying ships was on the sea carrying nearly 10,000,000 pounds of New Zealand butter destined for consumption in this country, and predictions were made that it would force prices for domestic butter lower. According to an agreement between the Chicago milk distributors and the milk producers association, composed of dairy farmers in Illinois, Wisconsin and Indiana, the wholesale price fell ten cents per hundredweight a few days ago, the new rate to be in force until the first of May. The new price of milk for twelve gallons of milk fell from $2.50 to $2.40. No reduction was made in prices to consumers.

Grain on Farms

Reserves of grains on farms in the United States on March 1 aggregated 1,706,000 bushels of wheat, corn, oats, rye and barley, as given by the government report, being 187,000,000 bushels less than last year and 822,000,000 bushels under two years ago. It is estimated that reserves are ample for domestic and normal export requirements until the next crops. An increased percentage of the wheat crop was moved from the farms this season, this amounting to 67.1 per cent, comparing with 61.7 per cent last year and a ten years average of 57.7 per cent. One-third of the wheat reserves are held in the four northwestern states. amounting to 51,706,000 bushels, of 24,700,000 bushels more than last year. Corn supplies on the farms of 1,087,000,000 bushels were 210,000,000 bushels less than last year and 477,000,000 bushels less than two years ago. A heavy consumption of oats is shown by reserves of 421,514,000 bushels.

Prices for wheat hold up remarkably, although sales are made far below the prices paid one and two years ago. Sales are made of May delivery wheat in the Chicago market around $1.20, comparing with $1.37 a year ago. May corn sells at 74 1-2 cents, comparing with 62 1-2 cents a year ago; May oats at 45 cents comparing with 39 1-2 cents last year; and May rye at 83 3-4 cents, comparing with $1.06 1-2 a year ago.

Cattle in Moderate demand

The only way that will keep prices for cattle from declining is for stockmen to market their holdings moderately, avoiding large shipments at one time. Many more cattle are reported as feeding in the corn belt than a year ago, and because of the comparative cheapness of hog products, they are largely substituted for beef. The present tendency of cattle prices is to narrow, very few prime beeves being needed to meet the demand, and late sales of beef steers offered on the Chicago market were largely at a range of $7.75 to $9.50, with the best lots at $9.50 to $10, a few head of 1135-pound long yearlings fetching $10.40. Steers grading as good are salable at $9 and over, medium grade lots going at $8 and over, and sales down to $6.40 to $7.75 for common to fair lots of light weights, a few inferior little steers fetching $4.25 to $6.25. The packers compete with country buyers for fleshy feeders, a moderate business being carried on in stockers and feeders at $5.25 to $8.40, sales being principally at $6 to $7.75. Most stockmen hesitate about loading up with thin cattle at high prices, as they are afraid of the future market for finished cattle. Spring calves have been marketed liberally, causing bad breaks in prices, with recent sales at $5 to $11.50. Prime heavy steers and fancy yearlings sell at $10. Most cows and heifers sell at $4.50 to $6.50, prime heifers going at $8 to $8.75. A year ago the best steers sold at $9.40 and eight years ago at $8.75.

Excessive Hog Supplies

Stockmen owning hogs and cattle are marketing rapidly, being opposed to a long feed, and hog receipts are especially large, causing frequent declines in prices. Eastern shippers are purchasing a much smaller proportion of the swine offered on the Chicago market than several weeks ago, and lack of competition between buyers has favored the decline in prices. Comparisons with prices pair a year ago show a big decline, the top at that time having been $11.50, the high point for 1922, but last November the best hogs sold down to $7.85. There has been a marked increase in the marketing of pigs and underweights, and the spread in prices has narrowed materially, the bulk of the hogs selling within a range of 35 cents. Prime light bacon hogs still top the market, selling 25 cents above the best heavy butchers. Recent Chicago receipts of hogs averaged 229 pounds. The principal bullish factor in the hog trade is the extremely large consumption of lard and fresh and cured meats at home and abroad, exports continuing much heavier than a year ago. During last week Chicago received 215,650 hogs, comparing with 194,865 a week earlier and 150,798 a year ago. And yet the good demand put prices higher, closing sales being made at $7.25 to $$8.65, comparing with $6.90 to $8.45 a week earlier and $9.50 to $11.30 a year ago.

Early Spring Lamb Supply

The early spring lamb supply available for the markets of the country promises to be materially larger an to start to market earlier than last year, according to the Bureau of Agricultural Economics. This applies to lambs which go to market before the first of June. California lambs are expected to arrive in the markets in large volume in April, while marketing from the southwest will not be well under wav until May. Marketings from Tennessee and Kentucky for April and May promise to be larger than last year and about the same as in 1921. Last fall the number of breeding ewes in those two states was estimated as 7 per cent larger than a year earlier, and earlier breeding than usual was the rule. Lambs from Virginia will move later than the Tennessee and Kentucky flocks. Such states as Iowa, Illinois, and southern Ohio begin marketing lambs in June. These lambs are dropped mostly in February and March. Ewes generally wintered well, and are in good condition all over the corn belt, feed being plentiful. Shed lambs dropped in February and March in Idaho begin to go to market in June. Wooled lambs are selling in Chicago at $12.75 to $15.25. The University of Wisconsin had a car load of superior fed western lambs that averaged 87 pounds on the Chicago market recently that sold at $15.25, the top price. Sheep are making much more money on the Wisconsin farms than either cattle or hogs, both lambs and wool selling extremely high. Shropshires lead other breeds, but Cheviots are becoming more popular in parts of Wisconsin.

WHEAT

Prices in the wheat market fluctuated considerably during the past two weeks. The forepart of this period the trend was downward and during the last week prices have advanced until at Detroit they closed last Saturday within 1-2c of the closing price on the same market two weeks previous. During the entire time the news circulated about the market was very bearish, but it appears that bearish news has been used so long to bear the market that it is losing influence on prices. The wheat outlook, as far as present wheat is concerned, could not be much more bearish, but that has been the case for a long time and no attention is paid to it. Strength is coming from the new crop outlook, which is far from favorable. The southwest needs rain and any precipitation in recent days has not been over the dry districts. This is the most important point in the grain situation and will be for some weeks or until spring weather has definitely developed the strength of the plant.

Foreign news is more favorable to the constructive side of wheat, but export buying has not yet given much evidence of returning life. Some bullish dealers believe they see an early end of the Ruhr trouble. The invasion of Germany by France is held as the reason why Europe is not buying American wheat and it is believed the buying would be resumed should the French settle up and go home. Foreigners took about half a million bushels of durum wheat last week, buying it at Minneapolis. James A. Patten says: "I believe that the whole question of a continued movement back to general prosperity rests upon a return to the former relation between the price of farm products and such commodities as the farmers need to buy. I regard corn as the keystone of the agricultural arch and fortunately every condition appears present for a price range for the rest of the year that will do much toward restoring the farmer to his position of the greatest element of purchasing power in our population."

Prices

Detroit—Cash No. 2 red, $1.35½; No. 2 white, $1.35½; No. 2 mixed, $1.35½.

Chicago—Cash No. 2 hard, $1.19½@1.20½; No. 3 hard, $1.19.

New York—Cash No. 2 hard, $1.34; No. 2 mixed, $1.25.

Prices one year ago—Detroit, No. 2 red, $1.37; No. 2 white, $1.34; No. 2 mixed, $1.34.

CORN

Corn showed more strength on the closing day of last week than probably at any time during the past two weeks and considerable grain changed hands as demand was active and selling of good volume. Bearish news has dominated the market recently but a bullish statement was given out that offsets the bearish influence. Mr. James A. Patten, in discussing the domestic needs after March 1 to the new crop, stated that our present corn reserve of 1,089,000,000 bushels is short by 119,000,000 bushels of our actual consumption during the last two years. Receipts are smaller than expected.

Prices

Detroit—Cash No. 2 yellow, 79c; No. 3, 77c; No. 4, 75c; No. 5, 73c.

Chicago—No. 2 mixed, 74@74½c; No. 2 yellow, 74½@75½c.

New York—No. 2 yellow & No. 2 white, 93c; No. 2 mixed, 92½c.

Prices one year ago—Detroit, No. 2 yellow, 64½s; No. 3, 63c.

OATS

Oats are quiet and steady with the Detroit price at the same level as two weeks ago. Cash oats are reported in good demand.

Prices

Detroit—Cash No. 2 white, 49½c; No. 3, 48c; No. 4, 46½c.

Chicago—Cash No. 2 white, 46@46¾c; No. 3, 44@45½c.

New York—Cash No. 2 white, 56c.

Prices one year ago—Detroit, Cash No. 2 white, 42c; No. 3, 40c.

RYE

Demand in the rye market is light. Export business is at a standstill and indications are that it will remain that way until some kind of a settlement is arrived at in the sections where war threatens. Domestic demand is very light and has been for some time. The future trend of rye will depend much on what the other grains do.

Prices

Detroit—Cash No. 2, 84½c.

Chicago—Cash No. 2, 83½c.

New York—Cash No. 2, 96c.

Prices one year ago—Detroit, Cash No. 2, $1.02.

BEANS

The bean market continues steady in tone with prices unchanged. Trading is rather quiet at present but it is expected to show more activity soon.

Prices

Detroit—C. H. P., $7.75.

Chicago—C. H. P., $8.00@8.25.

Prices one year ago—Detroit, C. H. P., $6.65.

POTATOES

Potatoes are firm in spite of the fact that receipts are in excess of the demand. Prices are higher at many points than they were two weeks ago. Receipts on western markets are small while markets in the east are plentifully supplied. Dealers are inclined to be backward about buying more than for immediate needs as they feel that prices should go lower.

Prices

Detroit — Michigan, $1.17@1.33 per cwt.

Chicago—Wisconsin round white, 90c@1.00 per cwt; Idaho russets, $1.15@1.35.

Prices one year ago—Detroit, Michigan, $2.06.

HAY

Markets have been steady with a decidedly stronger feeling in the central western section. The stormy weather had a strengthening effect on most markets as the demand picked up and arrivals delayed. The eastern terminals report slightly larger receipts and prices have softened a trifle from a week ago.

Prices

Detroit—No. 1 timothy, $16@16.50; standard, $15.50@16; light mixed, $15.50@16; No. 2 timothy, $14@15; No. 1 clover mixed, $13@14; No. 1 clover, $13@14.

Chicago—No. 1 timothy, $21@23; light mixed, $18@19; No. 2 timothy, $17@19; No. 1 clover, $13@15.

New York—No. 1 timothy, $27@28; No. 2 light mixed, $24@26; No. 2 timothy, $25@26.

Prices one year ago—Detroit, No. 1 timothy, $19@20; standard, $18@19; No. 2 timothy, $17@18; No. 1 light mixed, $18@19.

Alfalfa—Chicago, No. 1 and choice, $23@25; No. 2 standard, $15@19.

MISCELLANEOUS MARKET QUOTATIONS

Detroit, Tuesday, Mar. 13th

APPLES—Greenings, $1.60; Baldwins, $1.65@1.90; Spy, $2@2.50; other varieties, $1.50@1.75 per bu; western boxes, $2@3; in barrels, Greenings, $5.25@5.50; Baldwins, $5.50@6.

HONEY—Comb,23@25c per lb.

POPCORN—4@4½c; Little Buster, 7½@8c per lb.

DRESSED CALVES—Best, 15@16c; medium, 13@14c per lb.

DRESSED HOGS—90 to 130 lbs., 11@12c; 130 to 169 lbs., 9@10c; heavy, 5@8c per lb.

LIVE POULTRY—Best chickens, 26@27c; leghorns, 22@24c; stags, 24c; medium and large hens, 26@27c;small hens, 24c; roosters, 17c; geese, 20c; ducks, 30c for large and 27@28c for small per lb.

BUTTER—Best creamery, in tubs, 47@47½c per lb.

EGGS—Fresh, 26@26½c per doz.

POULTRY BREEDERS' DIRECTORY

Advertisements inserted under this heading at 30c per agate line, per issue. Commercial Baby Chick advertisements 45c per agate line. Write out what you have to offer and send it in. We will put it in type, send proof and quote rates by return mail. Address The Michigan Business Farmer, Advertising Department, Mt. Clemens, Michigan.

PULLETS, HENS AND COCKERELS
S. C. White Leghorns and S. C. and R. C. Black Minorcas. Must make room before cold weat' ·r. About ready to lay.
LAPHAM FARMS, Pinckney, Mich.

LEGHORNS

LEGHORNS
S. C. Buff Leghorn Hens, Pullets and Cockerels. Hens and pullets $2.50 each; cockerels $3.00 to $5.00 each. Show birds a matter of correspondence. **LAPHAM FARMS, Pinckney, Mich.**

YOUNG AND WYCKOFF WHITE LEGHORNS
Selected hatching eggs $2.00 a setting. Prepaid circular. **F. Arthur Martin, Indian River, Mich.**

PEDIGREED S. C. ENGLISH W. L. COCKERels. Egg record 275 to 300 each $2.00
JOHN W. MORGAN, Yale, Mich.

WYANDOTTES

FOR SALE—HEIMBACH'S WHITE WYANdottes Few A1 cock birds and cockerels. Hatching eggs in season. Write for prices.
C. W. HEIMBACH, Big Rapids, Mich., R. 5.

FOR SALE--PURE BRED PARTRIDGE WYANdotte cockerels and hatching eggs. For immediate delivery, send for prices.
FRED RIERSON, R. 5, Bronson, Michigan.

WHITE ROCKS— HEAVY LAYERS— CHOICE Quality. Guaranteed eggs, 15, $1.50; 50, $3.50; 100, $6.50. Prepaid.
MRS. FLORENCE HOWARD, Petersburg, Mich.

WHITE WYANDOTTES MARTIN STRAIN, Eggs for hatching.
WAYNE CHIPMAN, R. 2, Washington, Mich.

SILVER LACED AND WHITE WYANDOTTES Four large, beautiful roosters. Eggs $2.50 per 15.
C. W. BROWNING, Portland, Michigan.

PLYMOUTH ROCK

BUFF ROCK EGGS BY 10 LB. MALES and 1st Cincinnati, O., winners. Hogan tested hens, heavy layers.
J. C. CLIPP & SONS, Box M, Saltillo, Ind.

BARRED ROCK COCKERELS AND PULLETS from America's best prize-winning laying strains. Winners of 18 first prizes at Detroit and M. A. C. the last two seasons. Low prices.
TOLLES BROS, R. 10, St. Johns, Mich.

BARRED ROCKS. EGGS AND BABY Chicks from Silver Cup winners and Champion Winter Layers. Eggs $2 per 15 and Chicks from 18c up delivered. Circular free. FRED ASTLING, Constantine, Michigan.

JOHN'S BIG BEAUTIFUL BARRED ROCK Cockerels, light and dark color. Sold on approval. $3.00 to $6.00 each. Circulars.
JOHN NORTHON, Clare, Michigan.

THOMPSON HEAVY LAYING BARRED ROCK eggs. $1.75-15; $3-30. Dark matings.
MRS. FRED KLOMP, St. Charles, Michigan.

BARRED ROCK COCKERELS, NORMAN Strain, shipped on approval, express paid.
MRS. JESSIE C. DEAN, R. 1, Mason, Mich.

BARRED AND WHITE ROCK HATCHING eggs for sale from exhibition utility stock. Farmers' prices. **Dawsons' Farm, R. 4, Muskegon, Mich.**

FOR SALE—FINE COCKEREL $2.50 FROM Shoemakers. Also 7 months old Belgian Hares, $5.00 a pair. **C. STRONG, Essexville, Michigan.**

ORPINGTONS

BUFF ORPINGTON COCKERELS
Cooks strain. **A. J. BREWBAKER, Elsie, Mich.**

PURE BRED BUFF ORPINGTON EGGS AT $2-15; $5.50-50. Prepaid.
MRS. ANNA LA NOUE, Fostoria, Michigan.

RHODE ISLAND REDS

FOR SALE—S. C. RHODE ISLAND RED COCKERELS. Pure bred, Mankood strain. Vigorous, dark, large red birds. Price $3 apiece or 2 for $5.00.
ALFRED DEICHMANN, R. 3, Pigeon, Michigan.

S. C. REDS, GOOD LAYING STOCK, FINE color. Hatching eggs, $6.00 per 100. Limited number of chicks, $16.00 per 100.
EDWARD CRYDER, Alamo, Mich.

TURKEYS—DUCKS—GEESE

BOURBON RED TURKEYS UNRELATED STOCK
Eggs in season.
THOS. G. CALLAGHAN, Fenton, Mich.

BIG BRONZE TOMS BY 45 LB. YEARLING 1st Cincinnati, O., Winner.
J. C. CLIPP & SONS, Box M, Saltillo, Ind.

FINE VIGOROUS BOURBON RED TOM 2 years old. Evan's strain.
MARY BEACOM, Mariette, Michigan.

MAMMOTH BRONZE TURKEYS. TOMS 18 lbs. $20, hens 10 lbs. $15. Eggs $8 for 10. **Ralph Wise Nurseries, Box 151, Plainwell, Mich.**

FOR SALE: ONE PURE BRED DARK MAMmouth Bronze Gobbler at $12. Also six turkey hens at $7 each.
MRS. BERTHA HALLADAY, Ashton, Michigan.

FOR SALE—GIANT BRONZE TURKEYS FROM Michigan's best strains. Large healthy birds. **MRS. LAVERNE BROWNELL, R. 1, Belmont, Mich.**

FOR SALE—WHITE HOLLAND TURKEYS. Write for prices.
MRS. DON ROSS, R. 6, Mariette, Michigan.

MAMMOTH PEKIN DUCK EGGS FOR SETTING $2.00 or two settings $3.00. Also Wild Mallard Duck eggs same price. Very choicest stock. All orders prepaid. **Cedar Bend Farm, Okemos, Mich.**

WOOL

Wool prices in the middle west remain on a steady to firm basis, with trading of good character, though not of very large volume, on account of the shortage of stocks. Reports from the west indicate that growers are inclined to hold for good prices, better financing arrangements and the general feeling of optimism being factors in this tendency. Throughout the country the trade seems to feel confident that wool prices will be steady to firm this spring season.

WEEKLY MARKETGRAM

U. S. Bureau of Agricultural Economics

Washington, D. C.—For the week ending March 10, 1923.

FEED—Demand quiet. Deliveries of wheat feeds by flour mills heavier and track stuff is available in Minneapolis. Cottonseed meal market weak; transactions small. Exporters bid $46.50 for slab cake delivered Gulf Ports. Fair feeding demand from west. Hominy feed offerings exceed demand and prices are easier. Gluten feed unchanged, demand fair, production heavy. Linseed meal in liberal supply at lower prices. Interior demand fair. Storage stocks of wheat feeds good. Movement light. Quoted March 9—bran, $28.-25, middlings $28.50, flour middlings $30, Minneapolis; 36 per cent cottonseed meal $40.50, Memphis, $41.50 Atlanta; 34 per cent linseed meal $47.75, Minneapolis; $48.75 Buffalo; gluten feed $42.65 Chicago; white hominy feed $29 St. Louis, $29.50 Chicago.

Why are we buying western apples by the pound, when our own Michigan apples rotted on the trees last fall?

PRITCHARD'S WEATHER FORECAST
INTERPRETED BY THE STARS

Week of March 18

MILD weather coming at the end of last week or beginning of this will be followed by a cold wave, temperatures falling to between 10 and 15 degrees above zero on or before Tuesday the 20th. Heavy local rains will change to sleet and snow which is liable to cause local hinderances to trafic or communication. The winds at this time will also be high.

About Wednesday temperatures will begin to moderate rapidly in this state and during Thursday or Friday one may expect showers or snow flurries.

At the end of this week there will be another change to colder but we do not believe it will be as severe as the previous low temperature period.

Week of March 25

Cold, fair days and nights will be the rule during early part of this week but by Tuesday or Wednesday light rain or snow will be in evidence in Michigan. Unsettled conditions will continue for the balance of the week but we believe there will be about or a little above the average amount of clear sky, notwithstanding.

Beet Sugar Outlook

The outlook for the Michigan sugar beet sugar content is fairly promising judging by what we believe the weather will be during the coming summer and fall. It will not be however, the best kind of a sugar beet year for all parts of the state.

While the rainfall will be heavier during some of the summer months than others, we believe June, July, August and September as a whole will average about normal.

We estimate that a very late planting of sugar beets in Michigan will produce a greater tonnage that the early seeded crop and that the sugar content will be equally as good.

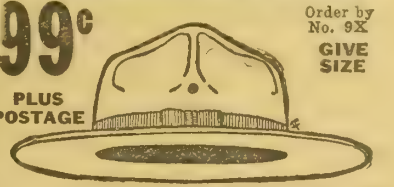
FOUR TOULOUSE GEESE FOR SALE. ONE year old this Spring.
MRS. JOHN BLOCHER R. 3, Woodland Mich.

HATCHING EGGS
S. C. White Leghorns. Tom Barron Strain, 250 egg utility line. November to April, average 65 per cent. Pure white plumage. Range grown, healthy, vigorous stock. Eggs $1.50 per 15; $4.00 per 50; $7.00 per 100. Prepaid. Limited supply. Order from this ad now.
MAPLEWOOD POULTRY FARMS
C. W. Bovee, Prop. **North Star, Michigan.**

ARMY GOODS SAL

SEND NO MONEY Examine goods and if you are not convinced that you have more than your money's worth we will gladly return your money. Don't delay. Order now before the article you want is sold out. **PAY ON ARRIVAL**

CAMPAIGN HATS
99c PLUS POSTAGE
Order by No. 9X
GIVE SIZE



U. S. Army Campaign Hats made of pure wool elt. A very serviceable and practicable hat for farmers, campers and Boy Scouts. The best grade of wool felt was used in making these hats. Sizes 6½ to 7⅛. Easily worth twice our price of 99c plus postage.

ARMY KHAKI COATS
39c Plus Postage
Order by No. 17X
ONLY SIZES 32 to 37
$2.00 would not duplicate this value. U. S. Army Khaki blouses, slightly used but in perfect condition, in fact practically as good as new. Made of fine material, with four pockets. Sizes 32 to 37. Order yours at the low price of 39c Plus Postage.

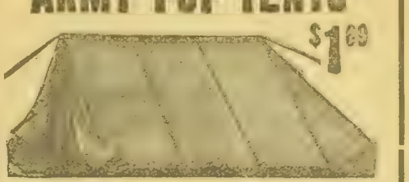
100% PURE WOOL JERSEY
$1.39 Plus Postage
Men's pure wool worsted yarn jersey sweaters at a price below manufacturing cost. Elastic knit wrists, slipover style with V neck in maroon, khaki, gray, old gold, black, or orange. Sizes 34 to 44. At this price they will all be sold in a hurry, and we advise you to mail your order at once.

All Wool O. D. Trousers
$2.49 Plus Postage
Order by No. 13X
U. S. Army O. D. wool serge, Yankee pants well tailored. Made of excellent quality 14 oz. wool serge and melton without cuffs. Have four pockets made of extra heavy drill an the trousers are double stitched throughout. They are worth at least $6.00. Sizes 30 to 36. While they last only $2.49 plus postage.

GUARANTEED TO WEA
$2.89 ONE YEA
Plus Postage

U. S. Army Field shoes, at less than one-hal the price originally paid by the government. Made of the best leather obtainable, soft toe bellows tongue; glove finish inside; solid leath er counter, steel heel plates, hub nails in sol and heel. Three full super quality soles, al most impossible to wear them out. Sizes 8 t 11½. Special Price $2.89 plus postage.

ARMY PUP TENTS
$1.69



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Regular United States Army issue Pup Tent consisting of two shelter halves. Everyon knows the quality of regular army issue tent waterproof and of best, longest wearing mate rial. Tent is large enough to hold two people At $1.69 they are a wonderful bargain.

Genuine Army Wool Shirts

$2.39 Plus Postage
Order by No. 7X
This is the most won derful shirt value tha has been offered o the market. They ar neatly tailored, cu full. Made of the fin est gray wool mate rial; with reinforce elbows; lined chest large breast pocket with flaps. If this shirt were to be manufac tured today it would cost at least $4. Size 15 to 17½.

KHAKI SHIRTS
89c Plus Postage
Order by No. 14X
U. S. army style khaki cotton shirts. Think of it—only 89c for this splendid khaki shirt. full cut, perfect fitting; has large breast poc Sizes 14½ to 17. Our price— 89c

U. S. SALVAGE CO., Wabash St., B, Cor. 10th, St. Paul, Minn.

No Other Mixer Like It

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As pioneer mixer manufacturers we have developed two features that put the Gilson Mixer in a class of its own. It is the only mixer with **Patented Reverse Unloading Gear and Curved Mixing Blades,** insuring thorough mixing in shortest time. Loads on one side, dumps on the other side.

Gilson Concrete Mixer **30 Days FREE Easy Terms**

Due to the special **Curved Mixing Blades** the Gilson thoroughly mixes in ⅓ the time required by the ordinary type of mixer. Handles 2½ to 3 cubic feet of concrete at one time at the rate of one batch per minute. Turns out 34 cubic yards in ten hours. Mixes perfectly concrete, mortar or plaster. Any 1 H. P. Engine turns it easily.

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The lowest priced, practical, improved mixer made. Built of iron and steel—lasts a lifetime. Ideal for farmer or contractor. Mixes concrete that requires no replacements, no repairs. Use this mixer 30 days at our risk. We guarantee it exactly as represented. Send your name today and get full description of this, the only Reverse Unloading Gear Mixer, and easy payment plan.

FREE Circular Explains Two Greatest Mixer Improvements of the Age

Gilson Mixer Co.
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CHOICE MAMMOTH PEKIN DUCK EGGS, $1.50 per setting.
MRS. HAROLD SIMMS, Holly, Mich.

HIGHEST PRICES PAID FOR LIVE AND Dressed Poultry, Veal, Eggs. A square deal always.
C. E. McNEILL & CO.,
825 W. So. Water St., **Chicago, Ill.**

BREEDERS DIRECTORY

(Continued on page 23.)

SWINE

DUROCS

SENSATION MARSI Our new herd boar. Sired by "Marsi" Reserve grand champion National Swine Show 1922. We are taking orders for gilts and sows for spring farrow bred to this wonderful boar.
SCHAFFER BROS., Route 4, Oxford, Mich.

PEACH HILL FARM offers choice weanling Duroc pigs, either sex Priced very reasonable. Write us.
INWOOD BROS., Romeo, Mich.

HILL CREST DUROCS, PERRINTON, MICH. We are breeding twenty sows and eighteen gilts to a son of GREAT ORION SENSATION. Yearling, spring and fall boars. **NEWTON & BLANK, Farm 4 miles straight south of Middleton, Gratiot Co., Mich.**

DUROC JERSEY BOARS READY FOR SERvice. Sired by Fannie's Joe Orion $25 each. Will ship C. O. D. Write us now.
H. E. LIVERMORE & SON, Romeo, Mich.

O. I. C.

O. I. C. BIG TYPE GILTS FARROWED MAY 15th. 22 weighing 300 lbs. Bred to Leighty Monster, an outstanding boar. We have been breeding and shipping O. I. C.'s for 20 years. **NEWMAN'S STOCK FARM, Marlette, Michigan.**

REGISTERED O. I. C. BRED GILTS FOR sale. Weighing 250 lbs. A few fall boars.
J. R. VAN ETTEN, Clifford, Mich.

CHESTER WHITES

BRED SOWS AND FALL GILTS FOR SALE Also some fall pigs. Pedigrees furnished.
WILBUR JONES, Route No. 1, Reese, Mich.

HAMPSHIRES

HAMPSHIRES—SPRING BOARS AND BRED gilts from 25 sows to select from. Place your order now or you may be to late. 10th year. **JOHN W. SNYDER, R. 4, St. Johns, Mich.**

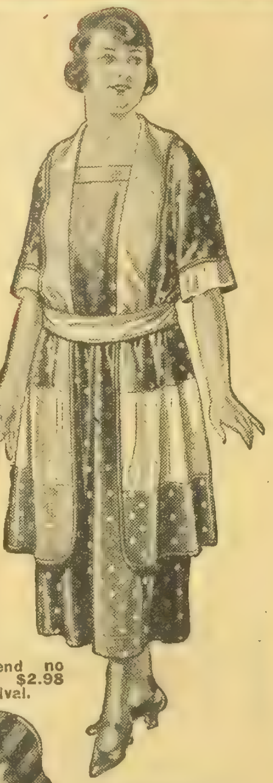
REGISTERED HAMPSHIRES, BRED SOWS and Gilts, fall pigs both sex. Leading blood lines. Priced to sell. Inspection invited.
CLARENCE L. CAMPBELL, Parma, Michigan

Sharood

First Spring Styles At Lowest Prices in America

Sharood

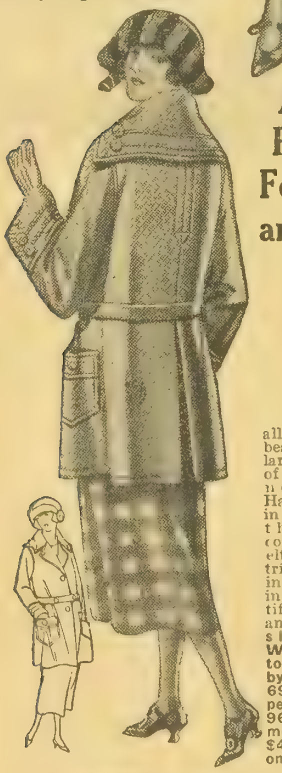
Women's "Stylish Stout" Voile Dresses



$2.98

A very beautiful tunic model in "stout" voile dress of graceful, slenderizing lines, for stout women. Made of good quality polka dot voile with tunic overskirt attractively trimmed with pretty organdy collar and cuffs. You will pay much more for a dress of equal value elsewhere. Better get your order in early. Sizes 39 to 53. State size wanted. Choice of colors. **No. 96E6811, Black; No. 96E6812, Navy; No. 96E6813, Brown. Send no money. Pay only $2.98 and postage on arrival.**

All Wool Polo Coat For Women and Misses

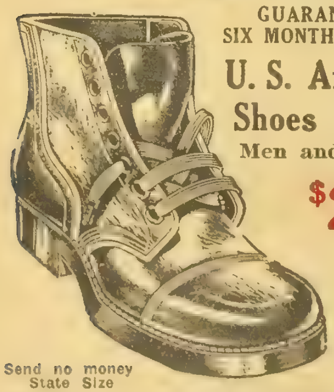


$4.98

Made of genuine all wool polo with beautiful large collar with two rows of stitching and novelty buttons. Has inverted pleat in the back like the best made coats and two novelty pockets, button trimmed. 34 inches in length. Comes in colors of beautiful Reindeer tan and copen. **Misses' sizes, 14 to 20. Women's sizes 34 to 44. Order Tan by style No. 96E6900. Order Copen by style No. 96E6901. Send no money. Pay only $4.98 and postage on arrival.**

GUARANTEED SIX MONTHS' WEAR

U. S. Army Shoes For Men and Boys



$2.98

Send no money
State Size

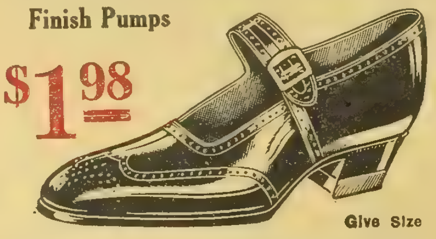
Men! Don't lose a moment in ordering this wonderful brown work shoe. It is made of leather as near waterproof as can be made—solid leather through and through with full grain leather uppers, guaranteed to wear six months. Easily worth $5.00. Two full, heavy double soles, sewed and nailed for greater strength. Extra wide, full leather counter, riveted to prevent ripping. Sizes 7 to 11, wide widths. **Order by No. 96A699. Send no money. Pay $2.98 and postage on arrival.**

Boy's Guaranteed Shoes—Six months guarantee. Barnyard acid-proof. Two green chrome leather soles, same feature quality points as shoe above. Made on Munson type army last. Barnyard acid-proof. Sizes 1 to 5½. Wide widths. **Send no money. Order by No. 96A550. Pay $2.69 and postage on arrival.**

Send No Money

Don't send one cent. Just letter or postcard brings you any of these smashed price bargains. Merely give name and number of each article you want. Also state size and write your name and address plainly to avoid delay. Pay nothing till goods arrive—then only the amazing bargain price and postage. If you are not delighted with your bargain return the goods and your money will be cheerfully refunded. ORDER NOW.

Women's Patent Leather or Brown Calf Finish Pumps

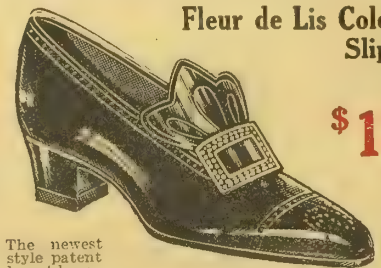


$1.98

Give Size

This smart pump in sizes 2½ to 8. In black patent leather or brown calf finish—a stunning one-strap model with imitation shield tip and medallion, effectively perforated. Has medium rubber heel. **Order patent leather by No. 96A72. Order brown calf finish by No. 96A73. Send no money. Pay $1.98 and postage on arrival.**

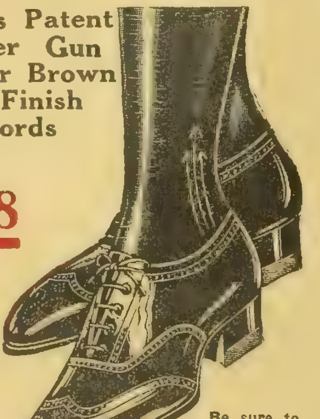
Fleur de Lis Colonial Slipper



$1.98

The newest style patent leather dress slipper. The popular Colonial model. Has shiny metal buckle and graceful Fluer de Lis Colonial tongue. Tongue, toe and slipper top are perforated, live rubber heels. Slippers like this are selling in cities for twice what we are asking. We guarantee they will please you. Sizes 2½ to 8. Wide widths. State size wanted. **Send no money. Order by No. 96A106. Pay $1.98 and postage on arrival.**

Women's Patent Leather Gun Metal or Brown Calf Finish Oxfords



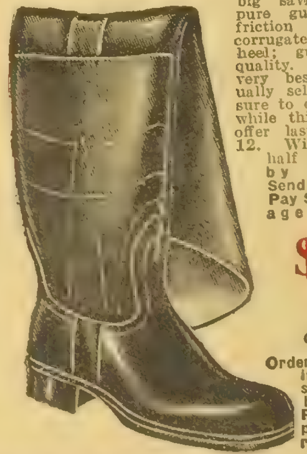
$1.98

Choice of Three Leathers

Be sure to State Size

Made with imitation shield tip and medallion perforated vamp, perforated lace stay and circular foxing. Has medium rubber heel and medium pointed toe. Sizes 2½ to 8. Wide widths. **Order Patent by No. 96A64. Order gunmetal by No. 96A69. Order brown by No. 96A70. Send no money. Pay $1.98 and postage on arrival.**

Men's Boots—Bargains



Don't fail to make this big saving on Men's pure gum hip boots; friction lined; heavy corrugated sole and heel; guaranteed first quality. Made of the very best rubber. Usually sells at $5. Be sure to order your pair while this great saving offer lasts. Sizes 7 to 12. Wide widths. No half sizes. **Order by No. 96A949. Send no money. Pay $2.98 and postage on arrival.**

$2.98

Give Size

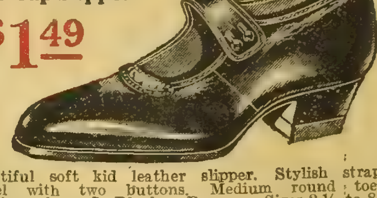
Order similar style in knee boot sizes 6 to 12 by No. 96A950. Pay $2.98 and postage on arrival.

Pay On Arrival

Here is good fortune for Sharood customers. Positively the season's newest merchandise, the latest fashions—all priced far below what you would pay anywhere else in the U. S. A. Now, folks, you can dress right up in the newest creations—be proud of yourself—and you save real money by ordering from Sharood. These are rare bargains and we advise your early buying. Every item a money-saver.

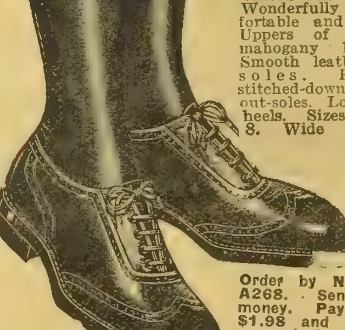
Women's Soft Kid Strap Slipper

$1.49



Beautiful soft kid leather slipper. Stylish strap model with two buttons. Medium round toe. Cushion soles. In Black or Brown. Sizes 2½ to 8: Wide widths. **Black by No. 96A228. Brown by No. 96A229. Send no money. Pay $1.49 and postage on arrival. State size.**

Women's Stitchdown Oxfords
Brown Calf Finish



$1.98 UP

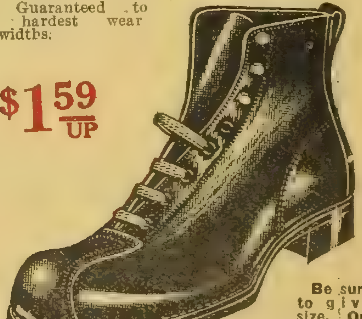
Classy stitchdown Oxford for women. Wonderfully comfortable and stylish. Uppers of dark mahogany leather. Smooth leather insoles. Flexible stitched-down oak out-soles. Low rubber heels. Sizes 2½ to 8. Wide widths.

Order by No. 96-A268. Send no money. Pay only $1.98 and postage on arrival.

Men's, Boys' and Little Boys' Scout Shoes

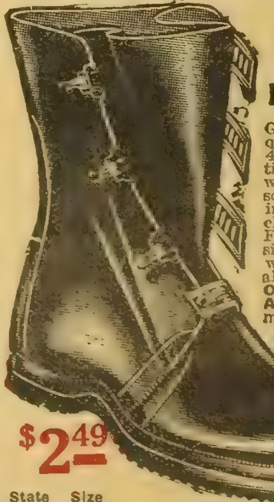
Reliable sturdy soles; low broad leather heels; leather insoles; reinforced leather back stay. Guaranteed to stand hardest wear wide widths.

$1.59 UP



Be sure to give size. Order mens sizes 6 to 12 by No. 96A733. Send no money. Pay $1.98 and postage on arrival. Order little boys' sizes 9 to 13½ by No. 96A565. Price $1.59. Order big boys' sizes 1 to 6 by No. 96A564 Price $1.79. Pay bargain price and postage on arrival. State size.

Men's Four-Buckle All Rubber Arctic

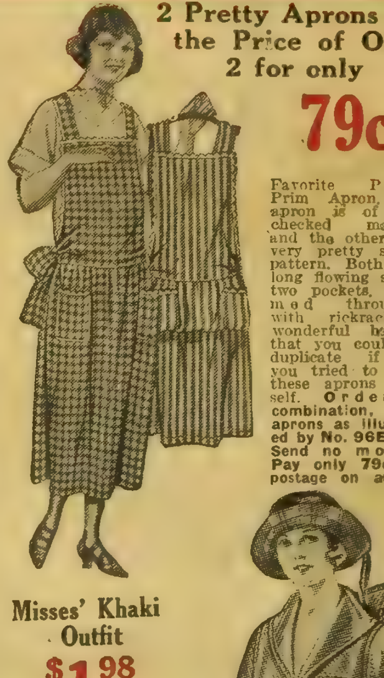


Guaranteed best quality all rubber 4-buckle hi-cut arctic for men. Made with double thick soles and seams reinforced. Snow-excluding tongue. Furnished in men's sizes 6 to 15. Wide widths. Sensational value. Send quick. **Order by No. 96-A990. Send no money. Pay $2.49 and postage on arrival.**

$2.49

State Size

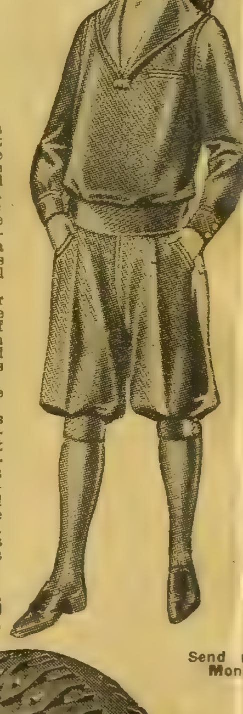
2 Pretty Aprons for the Price of One 2 for only



79c

Favorite Poll Prim Apron. On apron is of ric checked materia and the other of very pretty stripe pattern. Both hav long flowing sashes two pockets. Trim med throughou with rickrack. wonderful bargai that you could n duplicate if y you tried to mak these aprons your self. **Order th combination, tw aprons as illustrat ed by No. 96E600 Send no money Pay only 79c an postage on arrival**

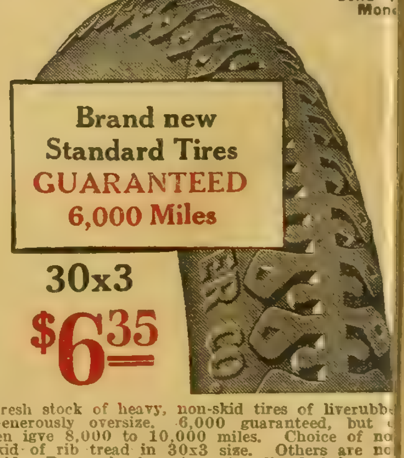
Misses' Khaki Outfit



$1.98

This is beyond a doubt the greatest offer of this type that you have ever had the good fortune to see. Never have we been able to make such radical reductions in face of a rising market. This Khaki outfit will give good service. It is made for rough wear. The suit consists of tailored middy with long sleeves and sailor collar. Has tie loop in front. Knickers are made with fitted waistband, side openings trimmed with buttons and two front slash pockets. Fitted knee bands. This popular sport garment was designed for the up-to-date Miss. Don't fail to profit by this amazing offer. Ages 14 to 20 years. **No. 96E6800. Send no money. Pay $1.98 and postage on arrival. State size.**

Send r
Mon



Brand new Standard Tires
GUARANTEED
6,000 Miles

30x3

$6.35

Fresh stock of heavy, non-skid tires of liverubb Generously oversize. 6,000 guaranteed, but ten igve 8,000 to 10,000 miles. Choice of no skid of rib tread in 30x3 size. Others are no skid. Pay only bargain price listed below a postage on arrival.

Bargain Price List

No. 96D4040—30x3	$6.
No. 96D4041—30x3½	7.
No. 96D4042—32x3½	9.
No. 96D4043—31x4	9.
No. 96D4044—32x4	11.
No. 96D4045—33x4	12.
No. 96D4046—34x4	12.

8,000 Mile Guarantee
Sharood's Junior Cord, 30x3½

Same sturdy construction as regular cord l not oversized. A wonder-service tire for For **Order by No. 96D4090. Send no money. P only $8.98 and postage on arrival.**

Guaranteed Inner Tubes

Now is your chance to buy extra thick, live rubb inner tubes at a big saving. Don't wait for t prices to go up. How many shall we send?

Bargain Price List

No. 96D4020—30x3	$1.
No. 96D4021—30x3½	1.
No. 96D4022—32x3½	1.
No. 96D4023—31x4	1.
No. 96D4024—32x4	1.
No. 96D4025—33x4	1.
No. 96D4026—34x4	1.

Be Sure to Mention All Sizes, Colors, etc., and Send All Orders From This Page Direct to **SHAROOD CO.** Dept. 96 MINNEAPOLIS MINNESOTA

The Michigan BUSINESS FARMER

An Independent
Farm Magazine Owned and
Edited in Michigan

VOL. X, No. 16 SATURDAY, MARCH 31, 1923 $1 PER YEAR

UNIVERSITY OF ILLINOIS LIBRARY

Glad to Get in the Fields Again

Read in this issue: Government Millions Available for Farm Credits—Shall We Plant Our Late Potatoes Earlier?—Commercial Fertilizer Found to be Better than Manure for Sugar Beets—Build a Septic Tank to Dispose of Sewerage

The streets of the big shoe towns are lined with the attractive homes of the E-J Workers.

Style at a Low Price!—
Our Easter Greeting to You

IN the past few months we've made hundreds of thousands of shoes for the Easter season. And the results are so good that this year it's E-J's for Easter everywhere.

Never have our shoes been so good looking. Never have they represented such splendid values. They're built the E-J way to last long and keep their good looks. We're proud of every pair.

The big sale of these new shoes has made us very happy. You'll be happy too when you see them. There's a pair for you at your own shoe store now. Get them today.

Styleroom scene. Expert designers and fashion artists create the styles for E-J shoes

The E-J Workers

At any shoe dealer's with an E-J Sign in the window.
Men's oxfords, boy's and girl's shoes at economy prices.

ENDICOTT-JOHNSON SHOES
Made With Smiles

YOUR AUTOMOBILE immediately needs a good cleaning after severe service through the winter months and MARVELITE—THE WONDER POLISH—should be at hand. This new discovery is the only polish on the market which CLEANS and POLISHES in one operation. There are already thousands of satisfied MARVELITE users in Michigan. One application of MARVELITE will restore the lustre to the body of any machine, and the surface will be left perfectly smooth and dry so that no dust, oil, or rain will accumulate. Send a dollar bill for special introductory offer, or send your name and we will send you more information and an interesting discussion on "BODY FACTS"

ELMER ECKERT, 104 South Avenue, Mount Clemens, Michigan.

FARM AND LANDS
(ADS UNDER THIS HEAD 10c PER WORD)

JUST OUT: BIG ILLUSTRATED GUIDE of the organization selling over 35,000 improved farms since its founding in 1900,—filled with agricultural information—carefully planned to save you money and valuable time; hundreds of farms of all descriptions at bargain prices. See page 17 for 58-acre Michigan farm for $600 down; on improved road handy village, 35 acres tillage, good orchard; comfortable house, barn, poultry house. Age forces sale; furniture, organ, horse, poultry, full implements included, all $1200. Productive 62-acre Michigan farm described page 18; horses, cows, poultry, sows, 15 pigs; city markets; all tillable; variety fruit; 9-room house, 85-ft. barn, silo, poultry houses; all $4000, only $1200 needed. Then on page 29 comes 195-acre So. Michigan farm; 120 acres tillable; variety fruit; new 2-story 7-room house, furnace, bathroom; 100-ft. barn, silo. Retiring owner's low price $13,200, horses, 8 cows, full implements, tools, etc., included, only $2000 needed. Hundreds of bargains throughout Michigan, Illinois, Indiana, Ohio, 29 other states and Canada, —stock, furniture, tools, seed included—ready for spring's planting. You can save time and money through this big helpful book. Copy free. Write today, STROUT FARM AGENCY 427KJ Marquette Building, Chicago, Illinois.

80 ACRES, GOOD HOUSE, 40 FARM LAND 40 swamp. Grass and water good for muskrat raising. Rent or sell. Inquire BOX 232, care Michigan Business Farmer

SMALL DOWN PAYMENT—80-ACRE NEW [illegible] farm 5½ miles from [illegible], Gladwin county on State Trunk line. [illegible] tion for berry, bee and poultry farming; market right at your door, where hundreds of tourists [illegible] Michigan resorts. Twelve acres ready to crop, new 16'x24' frame house, stable, well, etc. Write me at once for particulars. U. G. REYNOLDS, Gladwin, Michigan.

HELP WANTED MALE

SALESMEN, GREAT OPPORTUNITY FOR [illegible] make big money [illegible] commissions [illegible] for men who [illegible] Old company. Quality products. Attractive prices. [illegible] Write today to Dept. A-22 MANUFACTURERS OIL & GREASE COMPANY, Cleveland, Ohio.

WANTED—SINGLE MAN FOR YEAR. Prefer some feeding experience, good wages and good home. State wages in first letter. Position open April 1st. CHAS. HAUCH Whittemore, Michigan.

DON'T Waste Your Money on Cheap Tires

I offer Business Farmers, genuine, guaranteed new stock, CORD TIRES, of standard makes:

Kelly-Springfield or Goodrich-Silvertowns

Ford Oversize at $12.95 each or Two for $25.90

(Ask me for prices on any other size)
I also offer my own special
VULCAN FLAT TREAD CORD

Covered by standard manufacturers warranty and adjusted on a 10,000 mile basis.

Ford Size, $10.95

I ship same day your order is received from Detroit, C. O. D., subject to your examination before you pay your own postman. I warn you that tire prices are [illegible]—ORDER A NEW SET FOR YOUR CAR TODAY!
I guarantee to save you money

WM. C. SCHMIDT, Tire Broker
134 East Jefferson ave., Detroit
(Reference: Publisher of The Business Farmer.)

WE PAY $200 MONTHLY SALARY, FURNish rig and expenses to introduce our guaranteed poultry and stock powders. BIGLER COMPANY, X682, Springfield, Ill.

KEEP THE BUSINESS FARMER COMING—SEE PAGE 13.

Current Agricultural News

BIG TURN-OVER IN FARM OCCUPANTS LAST YEAR

NEARLY 1,250,000 farms, or approximately one out of every five farms in the United States, changed occupants in 1922, according to a survey made by the United States Department of Agriculture.

In 9 southern states one farm in every four changed occupants; in 6 states in the New England group the turn-over was one farm in every ten, and in most of the corn belt and western states between 10 and 15 per cent of the farms changed hands.

Changes in ownership of farms took place on nearly 400,00 farms, or approximately one farm in every sixteen in the United States. In general, more farms changed owners in the west and south than in the New England, Middle Atlantic and Corn Belt states.

Of the 2,300,000 or more farm tenants in the United States more than 625,000 changed the scene of their operations during the year. More than 75 per cent of these tenant changes occurred in the 15 southern states.

Although the number of tenant farms in United States shows a net increase of 27,000 for the year, more than 230,000 tenants either discontinued farming for some other occupation or left their communities for parts unknown to the department's correspondents. A percentage decrease in tenant farms is shown in only 10 states; in 2 states the percentage was unchanged. In general, the largest exodus occurred in the south and west.

A. B. COOK TALKS TO GRANGERS

A. B. COOK, Master of State Grange, was the speaker at the Huron County Pomona Grange hall, Thursday, March 15th. The Grange, he said, is the only national farmers progressive organization that has stood for 50 years and is really doing things to educate the farmer so that he delights in raising No. 1 products and then can demand eventually a No. 1 price in proportion to the prices he has to pay for what he needs.

One of the things that the Grange is striving for is a fertilizer plant which will be operated by the inmates of the State prison. This will not interfere with any Michigan business as practically all of our fertilizer is manufactured outside this state. This will materially benefit the Michigan farmers as it will lower the cost of fertilizer to the user.

The Michigan State Grange at the present time has a contract with the prison to use its binder twine. They also have a contract with the State of Minnesota for farm machinery. This machinery is made by prison labor.

AMERICAN CORN HANDICAPPED IN EUROPE

EUROPEAN corn millers and stock breeders believe that the meal obtained from the Argentina hard flint corn is more nutritious than that obtained from the yellow and white corn shipped from the United States. Consul F. F. Dumont, Frankfort-on-Marne, Germany informs the Department of Commerce that the Argentine product is reputed to be better dried and to have better keeping qualities than American corn. The nutritive qualities of the two stocks are tested abroad by putting equal quantities of the different varieties in containers and pouring water over them. As Argentine corn absorbs more water, it is considered the better.

CANADIAN RAILROAD WILL HELP FARMERS

NEW plans, never before tried, to increase immigration into Canada from European countries are being put into effect by the Canadian Pacific Railway. Printed forms for the use of farmers have been distributed throughout Canada. These are to be filled out by agriculturalists requiring help, setting forth the nationality of the help wanted, male or female, wages, kind of work, and so on. With the direct demands of the farmers to guide them, officials of the Canadian Pacific Railway will undertake to deliver immigrants who will fill the requirements.

ANNUAL MEET OF HURON CO. SHORTHORN BREEDERS

THE Huron County Shorthorn Cattle Breeders' Association annual meeting and banquet Wednesday night, March 7th, at the Irwin House was a blinger. It easily topped anything of the kind previously held here. A few over 100 sat down to the well filled tables after singing "America."

Community Club members were invited guests, of whom about 40 were present. Cattle men representing the Holstein and Hereford county associations were also guests. County Agent E. E. Twing presided and he certainly made it snappy. There was surely a flow of soul that kept the feast of reason guessing, but the great and growing cattle industry of Huron county was ever kept to the front, as it is all over Michigan.

S. H. Pangborn, president of the State Shorthorn Association, was the first speaker. He commended the get-together spirit so manifest the past year among farmers, stock men and town people and paid some nice compliments to the Community Club.

Prof. W. E. Edwards of the M. A. C., talked on the present day business farmer and the person that at one time was known to the city people as a "hay seed." He was followed by Dr. J. S. Wurm, of Pigeon. president of the State Veterinary Association, who gave a short talk which created much laughter and at the same time gave the listeners some valuable pointers on the raising of stock. Mr. R. A. Turner, state leader of Boys' and Girls' Club Work, discussed the club work in Michigan and told how it was helping to keep the boys and girls on the farms. Mr. W. H. McCarty, leading Hereford breeder of Huron county also gave a talk that will be remembered. Musical features followed the speaking and after that the program was concluded with a picture reel on stock and farm topics by E. E. Twing and C. M. Horn.

GOVERNMENT BULLETINS OF INTEREST IN APRIL

A SMALL list of Farmers' Bulletins and Circulars of general interest during April is belived to be of value to our readers. Copies may be obtained free by addressing the Division of Publications, United States Department of Agriculture, Washington, D. C. Specify number and name and whether Farmers' Bulletins or Department Circular.

Farmers Bulletin 181, Pruning; 609, Bird Houses and How to Build Them; 662, The Apple Tree Tent Caterpillar; 710, Bridge Crafting; 734, Fly raps and Their Operation; 766, The Common Cabbage Worm; 842, Methods of Protection Against Lightning; 849, Capons and Caponizing; 851, The House Fly; 874 Swine Management; 896, Rats and Mice; 909, Cattle Lice and How to Eradicate Them; 932, Rodent Pests on the Farm; 946, Care and Repair of Plows and Harrows; 948, The Rag Doll Seed Tester; 949, Dehorning and Castrating Cattle; 959, The Spotted Garden Slug; 975, The Control of European Foulbrood; 976, Cooling Milk and Cream on the Farm; 979, Preparation of Strawberries for Market; 1045, Laying Out Field for Tractor Plowing; 1085, Hog Lice and Hog Mange; 1096, Frost and the Prevention of Damage From It; 1175, Better Seed Corn; 1176, Root, Stalk and Earworm Diseases of Corn; 1250, Green Manuring; 1284, Apple-Orchard Renovation. Department Circular 36, Use of Poultry Club Products; 48, The Club Members Home Vegetable Garden; 214, Fusarium Tuber Rot of Potatoes; 219, Phoma Rot of Tomatoes; 238, United States Grades for Potatoes Recommended by the United States Department of Agriculture.

The largest yield of wheat ever recorded was 117.2 bushels per acre. It was produced on an 18 acre field in Island county, Washington, in 1895.

SATURDAY
MARCH 31st,
1922

VOL. X. NO. 16

Being absolutely independent our columns are open for the discussion of any subject pertaining to the farming business.

"Hew to the line, let the chips fall where they may!"

The Michigan BUSINESS FARMER

"The Only Farm Magazine Owned and Edited in Michigan"

Published Bi-Weekly
Mt. Clemens, Mich.

$1 PER YEAR

Entered as second-class matter, August 22, 1917, at the post-office at Mt. Clemens, Mich., under act of March 3rd, 1879.

Government Millions Available for Farm Credits

Judge Lobell, Head of Farm Loan Board, Explains New Credit Legislation Passed by Last Congress— Question Now is: Can Farmers Use It to Practical Advantage?

TWELVE million dollars is ready to be turned over by the U. S. Treasury to the twelve intermediate credit banks of the Federal Farm Loan Board immediately the charters are issued. The $60,000,000 capital authorized by the new law for the banks has been automatically accredited to the Farm Loan Board by the Treasury, according to Secretary of the Treasury A. W. Mellon.

The Federal Farm Loan Board has completed the regulations which will serve as the guide for the system's operations in aid of the farmer. Temporarily, at least, the board plans to hold loans made under the new law to a basns of nine months' maturity. Judge Charles E. Lobdell, executive of the Farm Loan Board, is quoted as follows:

"It is the ambition of those charged with the administration of the new law to render maximum service, but elemental safety must be the first consideration. Banks and cooperative associations desiring to use the service and see it developed will make their best contribution by offering nothing but perfectly good paper.

Direct Loans to Co-Ops.

"Direct loans cannot be made to individuals. Direct advances may be made to co-operative marketing associations or livestock associations secured by warehouse receipts for staple agricultural products or by chattel mortgages on livestock.

"No such loan may exceed 75 per cent of the market value of the agricultural product or livestock.

"Loans may be rediscounted for national and state banks, savings banks, trust companies, agricultural credit corporations and incorporated livestock loan companies.

"No paper can be rediscounted upon which the borrower has been charged a rate more than one and one-half per cent in excess of the discount rate of the intermediate credit bank of the district.

"In making advances on warehouse receipts, the credit from bonded government warehouses or satisfactorily bonded warehouses operating under satisfactory State supervision and regulation. This should lead to broader interest and greater activity in the development of warehouse facilities and proper regulation.

Will Promote Co-Operation

"The facilities which the banks will be able to afford to co-operative marketing concerns should lead to a greater development of such enterprises.

"Ample funds will be available for loans to facilitate original marketing but none to support speculative holding of farm products.

"No loans will be made for a longer period than 9 months, until the system is thoroughly tried out. Upon livestock paper, satisfactory assurance of renewal will be given in proper cases but only in aggregate amounts equal to the bank's capital, and then the subject of the mortgage must submit to reinspection and a satisfactory condition of security provided."

Many writers and students of economics fail to see where the present legislation is going to help the small farmer and stock or fruit grower such as we have in the middle west, they are not optimistic as Judge Lobdell, that all is well, but they are generally agreed that the opportunity is now presented for the measure to be tried out and if found wanting, it can be so altered as to meet the needs of actual conditions.

ANALYSIS OF CREDITS LAW

THE American Farm Bureau Federation submits the following brief analysis of the rural credits bill:

(1) The maximum loan which may be extended to one borrower by the Federal Land Banks raised from $10,000 to $25,000. The larger loans under the Federal Farm Loan System have been made by the joint stock land banks. Under the new legislation, the Federal Land Banks will be able to make these loans and the borrower will get the money about 1 per cent cheaper.

(2) Intermediate credit departments are established in each of the twelve Federal Land Banks. These departments may extend loans for agricultural and livestock purposes from six months to three years. They may make loans directly to co-operative associations. They may discount for or buy from any state or national bank or trust company, co-operative marketing association, livestock company, or agricultural credit corporation, notes, bills, drafts, etc., the proceeds of which have been advanced or employed in the first instance for any agricultural purpose or to raise, breed, fatten, or market livestock. These departments may issue and sell tax-exempt collateral trust debentures with a maturity of not more than five years.

(3) National agricultural credit corporations, with a minimum capital of $25,000, may organize under the jurisdiction of the Comptroller of the Currency. They may make loans, rediscount, purchase or sell, commercial paper and also accept drafts drawn for agricultural purposes, or the principal of which are to be so used. The notes and drafts are to be secured by warehouse receipts or other documents conveying title to unperishable and readily marketable agricultural products, or by chattel mortgages or other similar instruments conveying a first lien upon cattle being fattened for market; such notes and drafts to have a maturity when purchased, of not more than nine months. These credit corporations may also make advances upon, discount, etc., notes secured by chattel mortgages upon breeding stock and dairy herds, such notes to have a maturity at time of discount of not more than three years. The corporation may issue collateral trust notes or debentures with maturities not exceeding three years. National agricultural credit rediscount corporations may also be organized under the Comptroller of the Currency with capital stock of $1,000,000 or more, for the purpose of rediscounting notes, drafts, etc., for the national agricultural credit corporations.

(4) Federal Reserve banks may now rediscount agricultural and livestock paper having a maturity up to nine months.

(5) The War Finance Corporation has been extended to April 1. 1924.

It is now possible for agriculture to borrow money for production purposes for a period of time long enough to cover the regular production process. Heretofore, farmers have borrowed on the same basis as merchants and manufacturers who needed credit for only thirty, sixty, or ninety days, or six months at the most. Farmers may need credit for the entire growing season and after harvest may wish to hold the crop for a favorable time to market. This is likely to require a twelve or eighteen months loan. For raising livestock a loan as long as three years may be desirable.

Shall We Plant Our Late Potatoes Earlier?

By R. R. ROSSMAN, Lakeview

I HAVE often heard that late planted potatoes outyielded early planted ones. Our experience is contrary to this. We find with the Russet Rurals that the earlier they are planted the greater the yield. This we find is a practical advantage in favor of early planting. Of course we usually have a drouth in August and these early planted potatoes have quite a top by that time and are using a lot of moisture. If one has followed good farm practices up to this time and has lots of organic matter in the soil, it will be a very protracted drouth indeed that will reduce the crop to or below the level of the late planted patch.

An early planted potato stands up under hauling better than a late one at harvesting time and is the only kind fit to go on the fall market. If the late planted potato is given time to ripen in the bin before marketing, I see no objection to late planting from this angle, but we all know that a lot of immature stock is dumped on the market every fall and the general potato market suffers from it. I don't think a late planted potato should be allowed in braded sacks until it has ripened in the bin.

Field frost cost us hundreds of thousands of dollars last fall. Had our potatoes been planted early, we would have escaped a lot of this as they would then have been dug and out of danger before the frost came. Then if those that were waiting for the frost to ripen their potatoes had been compelled to store them for a few weeks in bins and pits before marketing, we could have gotten entirely away from this loss. If our potatoes were all pooled, too, our growers would lose interest in this idea of rushing their spuds on the market and we could market the ripe potatoes first, and let the immature spuds ripen in storage.

In 1921 we had a great demonstration of the advantage of early planting over late, in another way. We had the hottest June on record. Those who planted before June seventh obtained a good stand and harvested a ripe even sized crop. After June seventh, because of the heat, seed potatoes deteriorated very rapidly as the ground dried out deeper and deeper. The result for the late planter with their weakened seed planted in the hot soil, followed up with a cloud burst that packed the soil, was about a 50 per cent stand. When the harvest came they got a lot of pumpkins, fit only for hog feed.

The earlier you get your seed in the ground the more vitality it has, but be sure it is treated with corrosive sublimate and is disease free if you would reap the full benefits of early planting.

Diseased seed will not have as good a chance of infecting your crop when planted late and harvested early, but why plant diseased seed?

To summarize—If you would reap the advantages of early planting, plow in the fall, fit like a garden, plant disease-free seed, cultivate shallow and spray continually. If the field has good under drainage and is full of humus you are "sitting pretty" as far as yield and quality are concerned.

If you are bound to put a piece of thin land into spuds and your source of seed is questionable; and if you don't believe in spraying, even for bugs, plant 'em late and sell 'em to any old line dealer. He will pay you just as much as he would if they were good for humans to eat.

WOOL MARKETS FOR 1923

LAST year the mills and Eastern wool buyers felt that the local buyers put one over on them by advancing prices during the buying season and charging the full advance of purchased wools to them. The local dealer made, as one expressed, "a barrel of money," and in many cases made up the losses which were heavy in 1920. This year the East has said "that this must not happen again" and are paying steady to higher prices for imported wool, and acting real indifferent to the new clip. This is part of the play. Foreign markets are higher proportionately than Boston. Imports at Boston for the first week in March were 15,374,600 pounds; almost 1-10 of the U. S. production. There is a world's shortage of wool; 10 per cent, as compared with the five years pre-war average, and a 15 per cent shortage of wool in North America. In the U. S. from 1909-13 the average was 314,110,000 pounds; in 1921, 273,064,000 and 1922, 261,095,000. Western wool producers are standing firmer for what is more than equivalent to 50 cents a pound in Michigan, freight, shrinkage and quality considered. These men are asking that Ohio and Michigan do not cut the ground from under them by selling at a less figure. There is no better wool in the world than is produced in Ohio, Michigan and portions of adjoining states. Austrailian wool comes to the mills, skirted or with the legs and belly wool trimmed off. In this sense it is preferable, but the new tariff makes it cost proportionately more. Prior tariffs were practically of no protection to the American grower, when skirted prior to exportation, and the rejected portions were sent to free trade countries. Rejections and discount wool is a trade practice which has made undue exactions from the grower for burry, seedy and choffy wool. Importers of carbonized wool did not want to have this stock considered as anything but clean content wool, claiming that carbonizing was merely a cleansing process and the cost was normal. The treasury department however ruled that carbonized wool was partially manufactured and must pay the higher duty. Unreasonable penalizing of chaffy and burry wool belongs to the past if growers would stand firm. Eight to ten cents per pound is a very liberal discount. Fifty cents per pound for average clips of wool should be the growers price this year.—Jas. N. McBride, Pres. Mich. Sheep Feeders and Breeders As

Preventing the Potato Landslide

Northwestern Writer Tells what Happened and How Cooperative Associations Plan to Avoid Catastrophe in 1923

BY M. L. BIGELOW

WHEN THE POTATO CROP OVERFLOWS!

There is no market for the over-production and those that are not needed to fill the market, serve only to demoralize the normal market, so no fair price is paid for the entire crop and growers must sell at less than it cost to produce.

MR. MURPHY is sick. He has an obscure ailment. Doctors from seven states have been in consultation and, as doctors sometimes do, both agreed and disagreed as to Mr. Murphy's symptoms. Some thought he should have an operation, some that his physical system needed regulating, but all agreed that he'd been over-exerting himself and needed to relax a bit.

"What under the sun is she talking about?" I hear you exclaim. Why about our humble friend, Mr. Potato Murphy, to be sure. Of coarse you know he's ailing. Getting down to cases, here's the story.

Several years ago, three or four to be exact, potato producers became aroused to the fact that their product was subject to competitive juggling of prices, discriminatory shipping agreements, hazy and biased inspection reports and various other manipulations, most of them decidedly unfair.

As a cure-all for these troubles it was thought a good system of co-operative marketing would meet the needs. A great step in improvement was soon noticeable. Michigan first, then other in the "potato belt" organized and started to work with zeal and promised such noteworthy results that the enthusiasm surged back and forth all along the line. It took root on the farm and in the small market town; great waves of it lapped the studious halls of agricultural colleges and the public mind focussed on Mr. Murphy gave a little bit of an inflated idea of himself.

An Interesting Conference

Minnesota having bumped the bumps probably fully as much as any locality in the Northwest, The Minnesota State Department of Agriculture on January 12, 1923. called a potato conference of the states of Michigan, Wisconsin, North and South Dakota, Montana, Nebraska and Minnesota, the 9th Federal Reserve Bank and the National Markets Committee.

The purpose of the call was to consider ways and means to better the marketing conditions in the potato industry in the northern group of potato growing states, by means of better diversified farming, or by better enforcement of grade quality by state grading or by improved car service, or by co-operative marketing control of crop thru binding contracts calling for quality, time and place delivery, warehousing and financing.

Delegates from four of these states were present and two others while not able to be at the meeting signified their desire to co-operate and to work together instead of competitively.

Those who sat in at this discussion were able to visualize the status of the industry. As one speaker after another spoke and different phases of the problem were presented one could not fail to realize the magnitude of the work ahead, and its absolute necessity if potatoes are to continue to be an important crop in the Northwest.

Co-operative marketing, that magic idea, so potent when accompanied by its able lieutenants, efficient and controlled production and expert handling, so helpless when standing alone, has been expected to do the trick.

In any great manufacturing concern the sales organization is supposed to take charge when, and only when, a high grade, salable commodity has been produced in the right quantities which careful surveys have ascertained that the market can absorb, and a product which when sold will be shipped to the consumer in such manner that it will arrive in salable condition. Added to this the article manufactured is christened with a branded name, and this brand means a certain known quality and on this quality its price is fixed. How has it been with potatoes? Has the exchange manager been able to say definitely what he is offering to the market?

The crepe hangers tell us that in this case co-operation has fallen down; but indeed it hasn't. There simply wasn't enough of it. Those who are working out the potato problem are convinced that co-operation is the answer. Not co-operative marketing alone, but co-operation between producer and producer that may grow the amount and quality that all may sell at a profit. Co-operation between grower and the local warehouse manager, that the product may be graded and stored in such manner that when called out by market demand there will be no come-back from the buyer to reflect back on the man who grew the potatoes. Co-operation between state exchanges so that when one exchange has its market demand established and the channels of trade open, a sister state will not pour in an avalanche of potatoes and, as was done only last season in Michigan by the states immediately west, and wreck the market.

Over-production

Mr. Hughes, Director of Markets, in stating the object of the meeting called attention to the fact that 62 per cent of the potatoes which rolled in interstate commerce are produced in the seven states represented in the conference. He had prepared charts which were hung where all could study them. Among these was a very illuminating table showing an increase in potato production in these states of 33 per cent in the last three years, with disasterous results. Here are the figures:

Acreage—Three Years

	1920	1921	1922
Mich.	345,000	340,000	357,000
Wis.	308,000	315,000	328,000
Minn.	319,000	430,000	486,000
N. D.	83,000	124,000	198,000
S. D.	75,000	90,000	110,000
Neb.	85,000	102,000	139,000
Mont.	40,000	41,000	46,000
Total, 7 states—	1,255,000	1,442,000	1,664,000

Yields—Three Years

	1920	1921	1922
Mich.	36,225,000	27,200,000	37,800.000
Wis.	33,200,000	21,400,000	40,600,000
Minn.	31,500,000	32,200,000	43,700,000
N. D.	6,500,000	11,900,000	17,800,000
S. D.	7,900,000	5,400,000	8,500,000
Neb.	8,400,000	8,100,000	11,600,000
Mont.	4,400,000	4,700,000	5,700,000
Total, 7 states—	128,000,000	111,000,000	165,000,000

The Director of Markets said: "Farmers agree that it is a bad year, next year will be a good year. And what I am afraid of is that next year again will see an increase in acreage and that we will be faced with a sec-

(Continued on Page 19)

DON'T PLUNGE IN POTATOES

REX E. WILLARD, North Dakota potato expert says: "Potatoes in a limited acreage are a profitable crop over a period of years but the man who jumps into potatoes in one year without the next, usually jumps in at the wrong time. The price of potatoes fluctuates up and down pretty consistently in alternate years in the opposite direction from the amount of production in the country. Our records indicates, however, that over the long time period potatoes are even more profitable, acre for acre, than some other cash crops.

Commercial Fertilizer Found to be Better than Manure for Sugar Beets

FEW crops give as large returns on expenditure for fertilizer as do sugar beets. Increases of from 1⅝ to 3 tons of beets are not uncommon for 400 pounds of fertilizer. The sugar beet demands a liberal supply of available plantfood, particularly, in the early stages of growth. It takes a certain amount of plantfood to start the plant and make the leaves. Any plantfood in excess of this amount goes into making larger beets, increased leaf surface and capacity to make sugar.

Fertilizer vs. Manure

Manure, while an excellent fertilizer for most crops, has some disadvantages for sugar beets as compared with commercial fertilizer. When used, manure should be well rotted, applied during the previous fall, and plowed under so as to decay. Spring applications of fresh manure may cause short prongy, low yielding beets, and in many cases it carries so many weed seeds that the labor necessary to care for the crop is greatly increased. Furthermore, the plantfood in manure is not so readily available as in fertilizers, and does not supply available plantfood so quickly early in the season. Frequently, manure produces an unduly large growth of leaves and root above ground. Altogether, the best place for manure is on the crops preceding beets, to build up the soil to the point where fertilizers can be used more profitably.

What Kind of Fertilizer

For most soils, the right kind of fertilizer should contain from two to four per cent ammonia or nitrogen, eight to twelve per cent of phosphoric acid, and two to six per cent of potash. The proportions of each of these fertilizer constituents will depend on the nature of your soil, and the farming practice you follow. In a system of dairy or livestock farming, where plenty of manure has been applied to the preceeding crops, it is not necessary to use much ammonia and potash in the fertilizer, especially on the heavier dark colored soils. On thin soils, a fertilizer fairly high in both ammonia and potash will be most profitable. Practically all soils in Michigan respond to a fertilizer high in phosphoric acid, we are advised by the Michigan Agricultural College. On sands and light sandy loams where legumes are grown in the rotation the 3-12-4, 2-12-6, and 4-8-6 analyses are recommended. On heavy sand loams, silt loams and clay loams, the choice of analyses may be confined to 2-12-6, 2-16-2, 0-12-6, and 3-12-4. Where a considerable amount of manure has been used previously in the rotation, the 0-16-0, 0-14-4, and 2-16-2 fertilizers are suggested. All of these fertilizers are what is known as high-analysis fertilizers, carrying the maximum amount of plantfood with the least amount of filler. Such fertilizers are more economical per pound of plantfood than the lower analyses sometimes offered.

How Much Fertilizer

Some growers use 800 pounds of fertilizer to the acre. It is not advisable to use less than 200 pounds except under special conditions. In the majority of cases from 400 to 600 pounds per acre will prove to be the most profitable amount to apply. A common error is to use too little fertilizer, or too low an analysis.

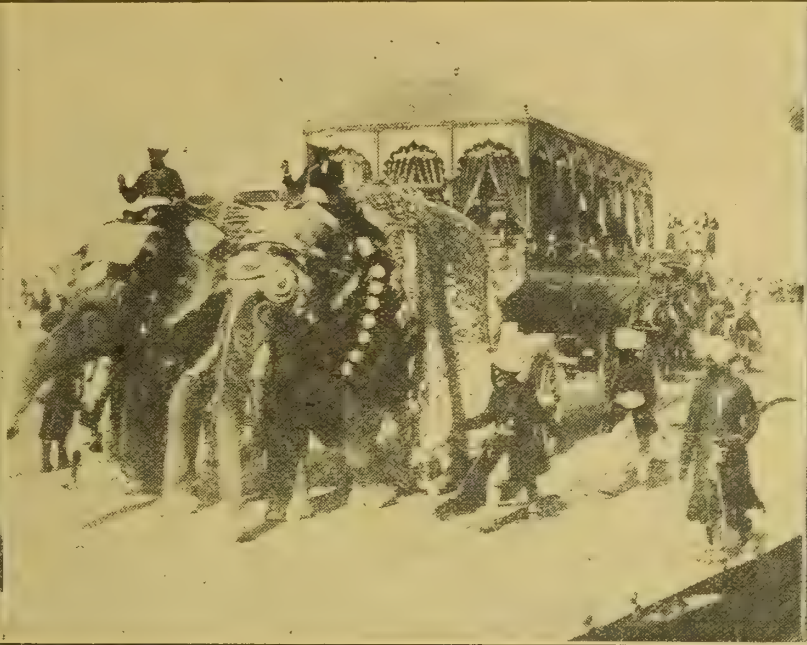
How to Apply

If the beet drill has a fertilizer attachment, a part of the fertilizer, not to exceed 200 per acre, may be applied at seeding time through this attachment. The remainder should be broadcasted by means of a fertilizer grain drill or a lime and fertilizer distributor, and harrowed or disked in before planting. When beet seed is sown with a grain drill, leaving every third hole open for the seed, all of the fertilizer holes may be left open. Some growers prefer to broadcast all of the fertilizer, which is a good practice when 600 or 800 pounds are used to the acre. Such an application should be made before seeding so that the fertilizer can be worked thoroughly into the soil.

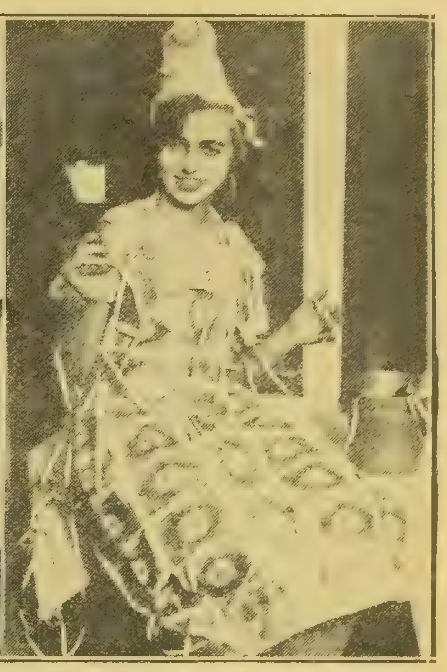
This Michigan field of sugar beets shows the value of fertilizing your sugar beets. Fertilizer was used on a part of the field and the remainder sown without fertilizer. The fertilized part is shown on the left.

PICTURES FROM FAR AND NEAR

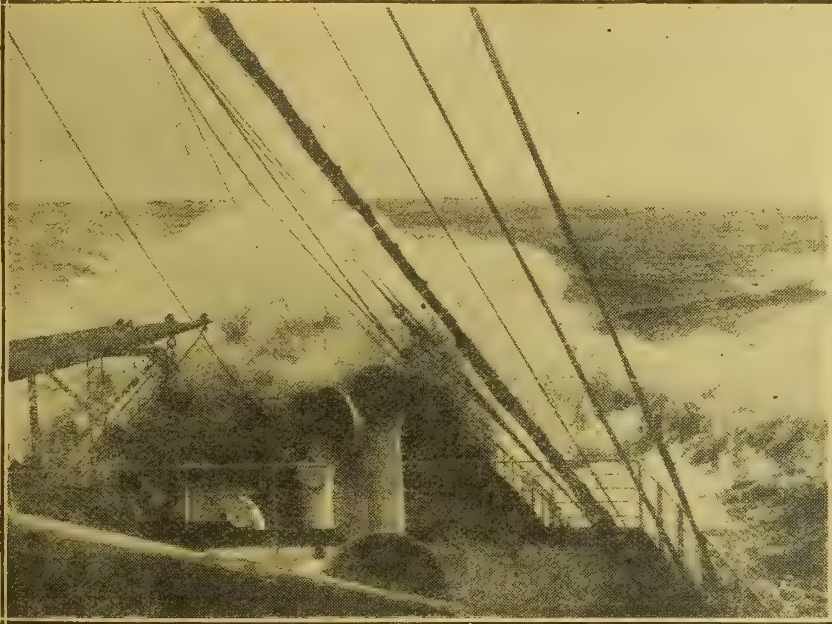
MRS. HENRY FORD, who was Clara Bryant, the daughter of a farmer who lived eight miles from the Ford farm near Dearborn, Michigan. Mr. Ford attributes a large measure of his success to his faithful helpmate and companion and she is carrying on as agressively as her husband many plans of social uplift and charity.



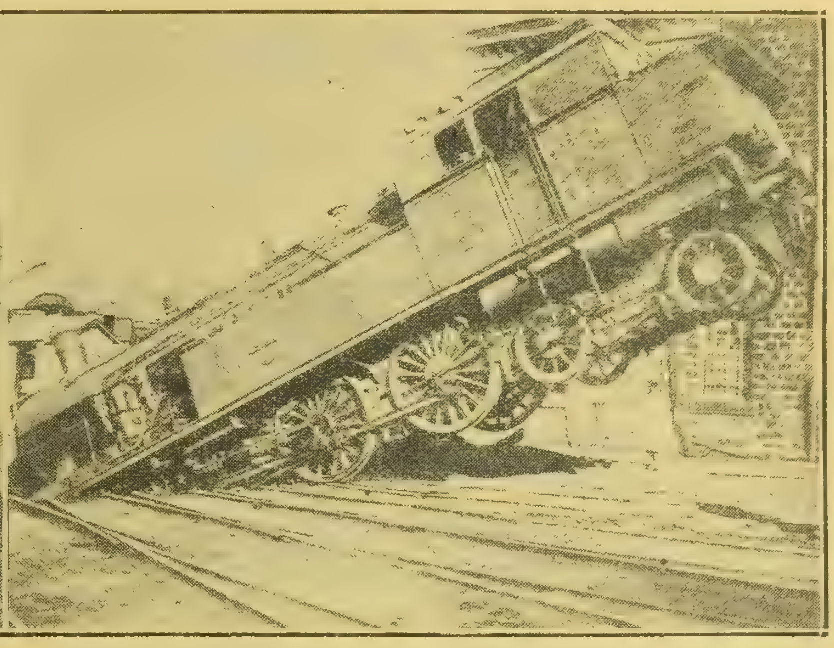
THE ROLLS ROYCE OF INDIA.—For real class, the elephant cars kept by the native Princes of India surpass anything in the world in the way of private equipages. The most magnificent trappings are used while artists are hired to decorate the tusks of the animals with carvings in precious metals and to paint extraordinary designs in glowing colors over the hides of the beasts. The upkeep of such a car would make the expense of keeping up a high powered automobile compare with the upkeep of a kiddie car. Photo shows such a car being conducted through the streets on a native holiday.



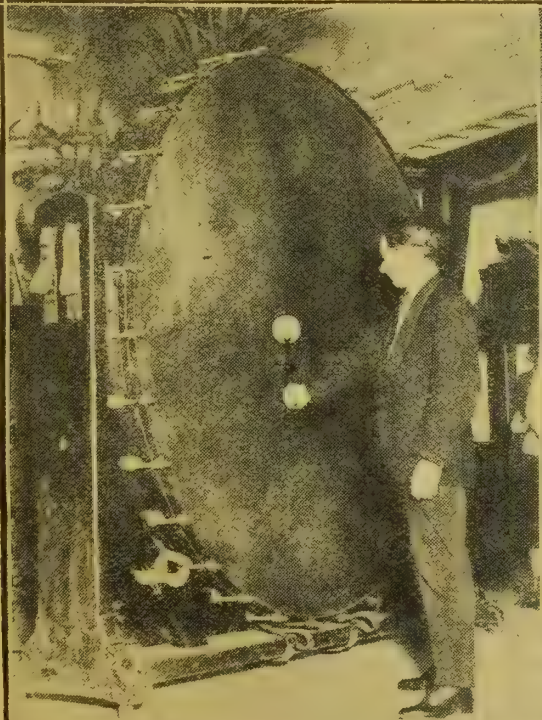
"MARK" THIS COSTUME.—On the continent the mark doesn't mean a thing, and it is being used instead of paper to cover walls, wrap up commodities, etc. Here is an original costume, taken at a masquerade in Amsterdam, Holland. The Dutch girl is covered with 100 and 1000 marks.



"THE BREAKING WAVES DASHED HIGH."—Passengers and crew on the steamship Homeric declared that she had passed through what was the worst seas of her career during her last trans-Atlantic trip. Many never expected to see land again. Here is a view of the ship driving through an 80 mile gale with the waves actually mountain high.



SABOTAGE IN THE RUHR.—Incensed by the French invasion, the Germans are committing many acts of sabotage. Here is what happened in one of the railroad yards, in the occupied Ruhr territory. The train was derailed and it was many hours before order was restored. The French are finding it difficult to punish the culprits.

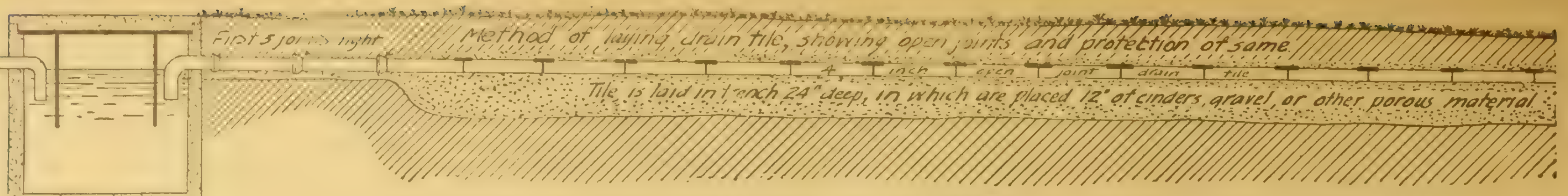


BIGGEST DRUM IN THE WORLD.—What is said to be the biggest drum in the world, is this one, discovered in a London movie theatre. It is 8½ feet in diameter, and was made by Henry Giston many years ago. The hide comes from an enormous prize bull featured in a Cattle Show.

A VICTIM OF "BLIND" JUSTICE.—Leroy McKinney of Cincinnati, Ohio, was the victim of miscarried justice. He was sent to the Ohio penitentiary for life as the slayer of a policeman and had served five months when the perpetrator of the crime confessed.

THOUSANDS FLOCK TO LUXOR.—The discovery of King Tutankhamen's tomb, in the ruins of Luxor, Egypt, has converted the desolate ravine into a veritable mecca for tourists, historians and archaeological students, who come streaming here from all parts of the world

(Copyright Keystone View Company)


First 5 joints tight
Method of laying drain tile, showing open joints and protection of same.
4 inch open joint drain tile
Tile is laid in trench 24" deep, in which are placed 12" of cinders, gravel, or other porous material.

TWO HUNDRED AND SEVENTY-GALLON SEPTIC TANK AND DISPOSAL LINE—SUITABLE FOR THE AVERAGE HOME

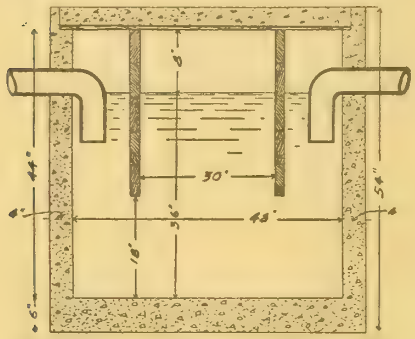
Build a Septic Tank to Dispose of Sewerage

Complete Directions on Constructing Tank that Meets Demand of Average Farm Home

NEARLY five years ago I built a septic tank, similar and no larger than the one here described to care for the sewage from a toilet, bath-tub, wash-stand and kitchen sink at my home. From that day to this it has cared for every particle of sewage from our family. Has never frozen up, filled up or otherwise given a moment's trouble of any kind. The outside privy ought to be one of the first things abandoned on any farm, there is no greater human convenience than an inside toilet and bath-room and none that will contribute so much to keeping your young folks on the farm.—Editor.

THERE is much evidence to show that a tight, well-built, underground septic tank, so called, with shallow distribution of the effluent in porous soil, generally is the safest and least troublesome method of treating sewage upon the farm, while at the same time more or less of the irrigating and manurial value of the sewage is realized.

The antecedents of the septic tank were known in Europe more than 50 years ago. Between 1876 and 1893 a number of closed tanks with submerged inlet and outlet, and all embodying the principle of storage of sewage and liquefaction of the solids, were build in Massachusetts, New Jersey, Maryland, and Canada. In the past 20 years great advance has been made, and many plants, large and small, have been built. Much remains to be learned, but it is now certain that many of the early claims for the septic process were extravagant. There is nothing magical about a septic tank, and citizens should not trust implicitly in the name. The liquid escaping from a septic tank is assuredly not "spring water," nor is it harmless. It may contain, since the process involves intensive growths, even more bacteria than the raw sewage. As to the effects upon the growth and virulence of disease germs, little is known definitely. If disease germs be present, many of their number, along with other bacteria, may pass through with the flow or may be enmeshed in the settling solids and there survive a long time. Hence, so far as the danger of transmitting disease is concerned, spetic sewage is not improved materially over crude sewage, and the farmer should safeguard wells and springs from the seepage or the discharges from a septic tank with no less certainty than from that of liquefying closets and cesspools.



VERTICAL SECTION OF SEPTIC TANK

In all sewage tanks a considerable portion of the solid matter, especially if the sewage contains much greese, float on the liquid as a scum, the heavier solids settle to form sludge, while other finely divided solids and matter in a state of emulsion neither float nor subbside. If the sludge is held in the bottom of the tank to be converted into liquids and gasses, virtually to rot, the tank is called a septic tank and the process is known as septicization. Just how far this process may be carried to obtain the maximum sanitary benefit with the least nuisance and cost is still open to question. As preciously stated, spetic sewage implies offensive putrefaction. Not only is this objectionable as to odors, but numerous examples indicate that sewage reduced to the septic condition, or even highly staled, is less effectively purified, whether subjected to artificial filtration or to the natural filtration of the soil, then is moderately stale sewage. Aeration of a septic effluent seems to aid in its purification, but aeration lowers the temperature of the sewage and may result in the spread of objectionable odors or disease.

From what has preceded it is seen that the septic tank is not a complete method of sewage treatment. With the general run of small septic tanks, it probably is close to the facts to say that of all the solid matter in the crude sewage one-third is reduced to liquids and gas, one-third remains in the tank and one-third escapes with the effluent.

The tank shown herewith is easy to build and meets the demands of the average home. It has a capacity of 270 gallons, sufficient for not more than 6 or 8 persons.

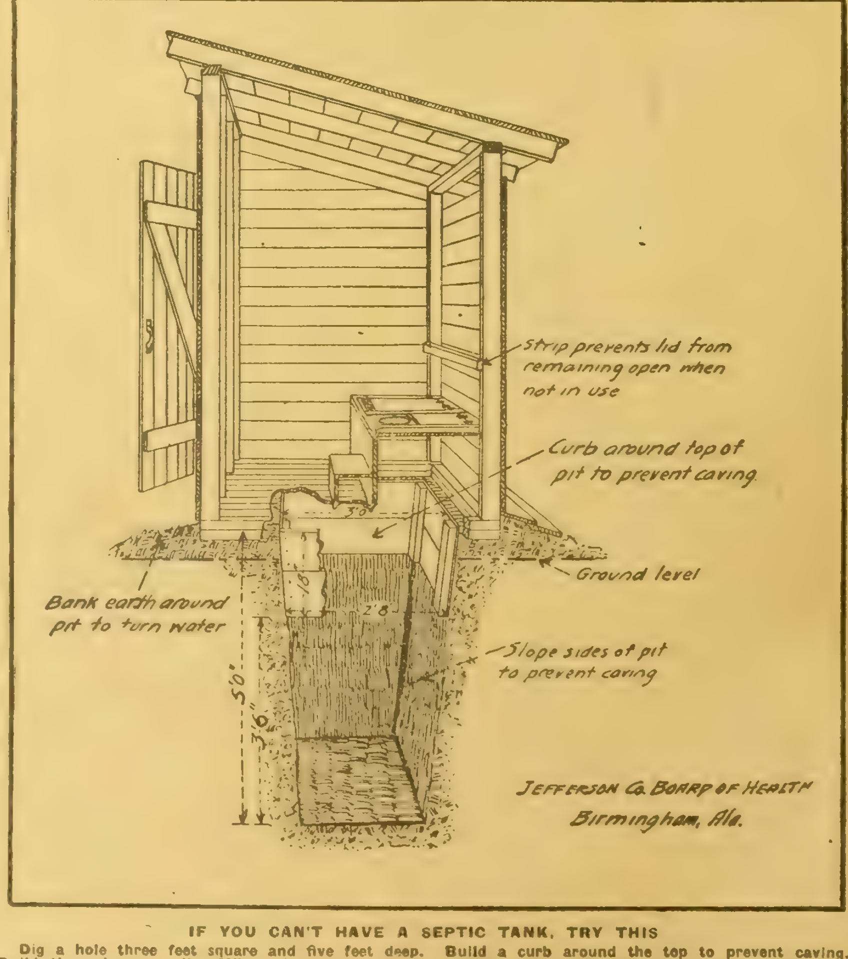
The construction of this tank falls under four heads as follows: Digging the hole; building and placing the forms; pouring and finishing the tank; constructing the disposal field.

Select a place for the tank. This may be as near the house as desired but care should be taken so that the tile line does not run into a hillside, necessitating extra digging to reach grade. Dig a hole 44 inches wide and 56 inches long, making the sides straight and square, the hole must be 42 inches deep below the level of the sewer from the house. If the depth of the sewer is not known, make the hole 54 inches deep and then lay the house sewer to agree. If the hole is dug true and clean, the forms will fit into them nicely.

The number and dimensions of the pieces required for making the form are shown on the drawing of the form. Cut these pieces and put them together as indicated. The pieces marked "H" must be fastened in by toe-nailing, and by inside cleats. With the form put together as shown in the drawing, nail or bolt two pieces of 2x4 timbers across the top to aid in handiing. The form is now ready to place in the hole.

By means of the 2x4 timbers the form can be placed as desired, centered carefully and held at the right heighth, which allows a clearance of 6 inches between the bottom of the form and the bottom of the hole. Put interior braces in the form—pieces of board a little longer than the inside of the form will do—to prevent the weight of the concrete from caving in the form. Level the form, and be sure that it is firmly in place.

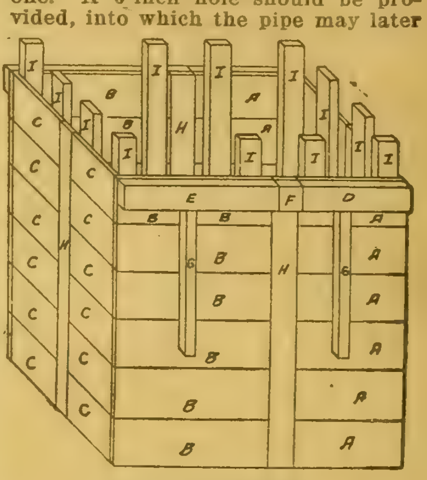
The material required for the concrete work includes 9 sacks of cement, half a yard of sand, and a yard of broken stone, slag or gravel. Mix the concrete about 1:2:4—not leaner than 1:2½:5. Mix the first few batches a little stiff and use these for the bottom of the tank. If the mixture is not too wet, the sides can be poured without waiting for the bottom to be set, thus saving time.


Strip prevents lid from remaining open when not in use
Curb around top of pit to prevent caving
3'0"
1'8"
2'8"
Ground level
Bank earth around pit to turn water
Slope sides of pit to prevent caving
5'0"
3'6"
Jefferson Co. Board of Health
Birmingham, Ala.

IF YOU CAN'T HAVE A SEPTIC TANK, TRY THIS

Dig a hole three feet square and five feet deep. Build a curb around the top to prevent caving. Build the privy over it. When the hole is filled to within about 18 inches of the top, move the house to a new pit and cover the old one with soil. Moving will have to be done only about once in three or four years.

The inlet and outlet pipes can be placed in the form, or wooden boxes can be used to form holes through which the pipe can later be led. The later method is usually the easiest one. A 6-inch hole should be provided, into which the pipe may later be concreted. Place elbows at both inlet and cutlet, as shown in the drawing.



FORMS ASSEMBLED

THE FOLLOWING PIECES ARE REQUIRED FOR CONSTRUCTING FORM

Piece	No.	Diameter	Piece	No.	Diameter
A	12	1x8x18 in.	F	2	1x4x 4 in.
B	12	1x8x26 in.	G	4	2x4x24 in.
C	24	1x8x15 in.	H	4	1x4x48 in.
D	2	2x4x18 in.	I	12	2x4x54 in.
E	2	2x4x26 in.			

MATERIAL FOR MAKING TANK

9 Sacks cement.
½ Yard sand.
1 Yard broken stone or gravel.

Let the forms remain until the concrete has set for 36 or 48 hours. In taking down the forms, remove the pieces marked "H" first, after which the main portion will slip out easily. Place the wooden baffles in the groves provided for them, set the elbows firmly, and place the wooden floor for the cover. A shoulder is provided along the top for the purpose of supporting this. Make the concrete cover 5 or 6 inches thick. It is well to construct a manhole in the cover, and to use some reinforcing.

While the concrete is setting, the trench for the line may be dug. This should be at least 100 feet in length, but need not be in a straight line. Methods of bracing are shown for use where straight-away space is not available. Dig the trench 12 inches wide and 10 inches deeper than the outlet of the tank. Fill the trench to the level of the outlet witn broken stone, slag, gravel, or cinder, and on this porouus bed lay the tile, carefully and to line, with a fall of about 4 inches to the hundred feet. The best tile for the purpose, as well as the cheapest, is the unglazed farmer tile, without bells. One hundred feet will be required. About 3 or 4 yards of gravel, broken stone, slag, or cinder will be needed for the trench filling.

After the tile is laid carefully to grade, protect each joint from wash by placing over it a cover of burlap, roofing paper, tile or similar material, as shown. Then cover with 3 or 4 inches additional of gravel or slag, and fill the remained of the trench with earth.

The outfit is now completed, and will start to work as soon as sewage is discharged into it. No chemicals or other means for starting action are needed.

If properly and carefully built, there should be no trouble for many years. 8 or 10 years the tile disposal line may clog and require relaying. The tank needs an occasional cleaning out, possibly once in 3 to 5 years.

Farmers Service Bureau

(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full name and address. Name not used if so requested.)

CAN NOT HOLD SILAGE

I filled a silo for a party last fall and said party has not paid for filling yet. He put me off and then he had a sale and sold everything off. He promised to settle with me after the sale, but he still keeps putting me off. Knowing he was in hard shape, I didn't like to push him, but would like to settle now, and he doesn't seem to be in a hurry. Would like to know whether the ensilage in the silo still stands good for the pay of cutting and filling. How would I have to go about it to get it?—V. C., Whittemore, Mich.

—I am of the opinion you would not have a lien on the ensilage for your labor, but would have an adequate remedy in an action at law for the amount due on your contract of labor. I would sue and get judgment and levy an execution on the ensilage.—Asst. Legal Editor.

MAKING VINEGAR FROM SOURED HONEY

Would like to hear from some one if soured honey could be made into vinegar and if so how made?—L. V., Riggsville, Mich.

—Soured honey may be utilized for vinegar, provided that the acidity does not exceed one and one-half percent after the honey is diluted. A very good formula for making honey vinegar is forty to forty-five pounds of strained honey, thirty gallons of water (preferably soft), ammonium chloride four ounces, potassium carbonate and sodium phosphate two ounces each. The chemicals should be dissolved in water and added to the honey. This will assure their complete solution.

The above chemicals are added to the honey stock because the honey after dilution is poor in nitrogen and phosphorus and these are necessary foods for the vinegar-making microorganisms. Heat should be used to facilitate the dilution of the honey and also to destroy the undesirable germs which the soured honey probably contains.

After being diluted according to the above formula it should weight not less than nine pounds per gallon in order to contain sufficient sugar. From twelve to fifteen percent sugar should be present. Diluted honey prepared in the above manner will then have to be inoculated with vinegar yeast, as the heat used in dissolving the honey also destroys the desirable germs. Pure cultures of yeast selected for its ability to produce high percentages of alcohol from sugar may be secured from the Bacteriological Laboratory, East Lansing, Michigan, as may also the chemical salts. The price of the chemicals and the vinegar yeast is twenty-five cents each for one-barrel amounts.

Following the alcoholic fermentation produced by the yeast it will be necessary to add a vinegar bacteria culture which is for the purpose of changing the alcohol into acetic acid of vinegar and which the state law requires to be four percent before it is marketable. This vinegar bacteria culture may also be obtained from the Bacteriological Laboratory, East Lansing, Michigan, and at the same price as the vinegar yeast. —R. L. Tweed, Res. Asst. in Bacteriology, M. A. C.

ASSESSED TOO HIGH

When personal property is assessed for two hundred dollars more than he would sell it for, or what he thinks is the real value of it, and he refused to pay taxes for that amount and it is sold, don't they have to allow a man at least what it is assessed for, or can the assessor value your property anything he wants to, and you have to pay it or have it sold for whatever it brings, or just enough to pay the tax for that year? Also how is real estate that is over-valued? All of our taxes are assessed from one to four hundred more than we think they are worth or what we would sell them at.—H. A., Doster, Michigan.

—If any person fails to pay the taxes on his property and it is sold for taxes, the defaulting taxpayer will receive, upon sale, whatever the property actually brings, after deducting the amount of the delinquent taxes. He may redeem the property so sold at any time prior to the first Tuesday in May following the sale, upon payment of the amount of the sale, with interest at 1 percent per month. Property should be assessed at its actual cash value, and when any taxpayer feels that his property is over-assessed, he should make complaint to the board of review of his township, to have such assessment adjusted.—Asst. Legal Editor.

HAS WILL BEEN PROBATED?

Will you please let me know if heirship property can be outlawed or barred when there is a good title and also a will left to heirs and their heirs for ever and ever? Please let me hear from you. The property is in New York City. I have a large sum of money that was left me years ago.—Mrs. R. B., Beaverton, Mich.

—If money or other personal property was bequeathed to you by a valid will and the will duly probated, I am of the opinion you have a good title to the property. However, if the will has not been probated and more than 4 years have elapsed since testor's death, you may have lost your right to the property by its having been sold to a bona fide purchaser after the lapse of 4 years. Title to real property may be barred by adverse possession.—Asst. Legal Editor.

MORE INFORMATION NEEDED

A farmer wishes me to help him farm on shares this summer but he does not know what share I should get. He has his hay planted and has about 20 acres and it is all good hay; has wheat planted, but the potatoes, oats and bean land has not had anything done to it. He has enough barn yard manure to spread it. Now the machinery and team all belong to him. All I do is to go in and help him and he is to work the same as I do. He has eight cows to milk and sells his cream. What share should I get from all these different things? Should I get a share of the calves and pigs or any other increase in live stock?—H. H., Boyne Falls, Mich.

—Sufficient data is not given to figure definately what share of the farm income should go to you for your work? If it is possible to estimate the income from the various sources and knowing what you can afford to work for it would be an easy matter to determine what portion you should have.—F. T. Riddell, Dept. of Farm Management, M. A. C.

ENTITLED TO ONE HALF OF ESTATE

At the death of the husband several years ago no will was left, and only one child. There was some indebtedness on the farm, but widow and child have remained on farm, paid the indebtedness, everything is clear from debt. The widow has lived there continuously for 46 years. What share is the widow entitled to? —Mrs. S., Branch County, Mich.

—Upon the death of the husband without having made a will and leaving a widow and one child, the widow and child would each be entitled to one half of the estate, according to the satutes relative to descent and distribution.—Asst. Legal Editor.

CAN RECOVER DAMAGE

I am writing to you for a little information. I bought a cow registered and she was to have a calf in the spring, and she never had it or come around, and we went and seen the man I bought her of, and he made me an offer. I was to give $25.00 more and receive another cow. She was to come fresh inside of four weeks. I asked him if he thought it would hurt her to move her, and he said it would not hurt her, but he did not move her for 12 days after the bargain was made, and he put her in a truck and tied her, and she was sick when she was delivered. The cow was sick before she got to

(Continued on Page 10)

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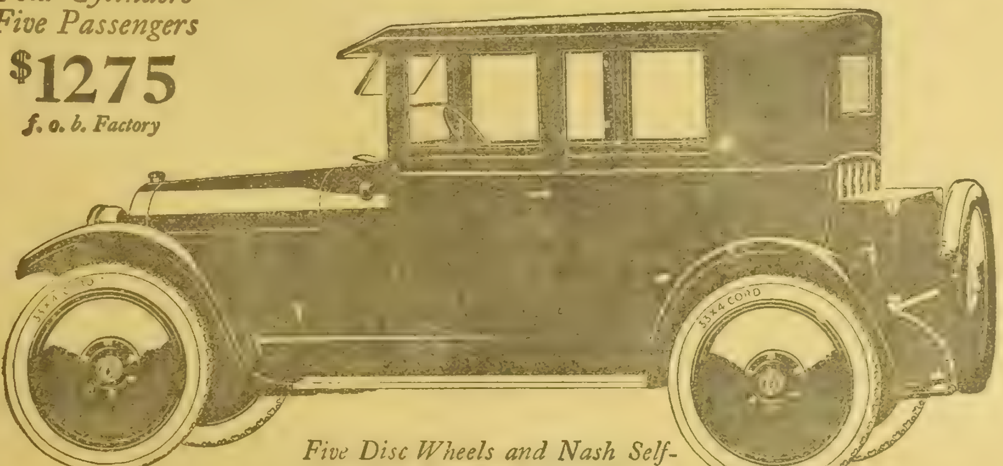

Five Disc Wheels and Nash Self-Mounting Carrier, $25 additional

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FOURS *and* SIXES

Prices range from $915 to $2190, f. o. b. factory

The Nash Motors Company, Kenosha, Wisconsin

(1290)

(Continued from Mar. 17th issue)

The Truth About Henry Ford

By Sarah T. Bushnell

The Ford Factory, Foundry and Trade School—His Americanism

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CHAPTER XI

The Ford Factory, Foundry and Trade School

WHEN the first Ford factory outgrew the Piquette street plant, the larger plant in Highland Park was built. This is really a great industrial city in itself. It covers one hundred and twenty acres and employs fifty-three thousand men. Each employee receives his wages twice a month; yet every day is a pay day in some section of the plant and a half million dollars is handed the men.

In the Ford organization are men doing every conceivable kind of work. The factory operates its own power, heating and lighting plant, fire department, telephone and telegraph exchange, freight and express offices, hospital, safety and hygiene departments, motion picture studio, park and athletic field, band and auditorium, educational and legal departments, grocery, drug and shoe stores, meat market, tailor shop, and publishes its own newspaper—the Ford News.

The Ford fire alarm system is said to be more efficient and up-to-date than any other in the country, even including the cities of New York and Chicago. Ninety experienced fire fighters are employed in the plant and two hundred trained workmen are ready to aid at an instant's notice. When a general alarm is sounded the automatic call goes instantly to the Superintendent's office, factory service office, fire department headquarters and Chief Engineer's office. The minute, hour, day, month, year and box from which the call comes are thus recorded. Three hundred call stations are placed throughout the factory two hundred feet apart.

The medical department is wonderful and is one of the most modern institutions of its kind in the world. This is entirely separate and distinct from the Henry Ford Hospital, built at a cost of three million dollars and rented to the government during and after the war for one dollar a year. Mr. Ford calls this his garage. "It is my shop," he says, "where I hope people can get well as rapidly as possible and have their injured parts repaired." A pretty bit of sentiment is connected with the tall elms that reach to the fifth story of this building. They were moved from his Dearborn estate and replanted so that the new part of the hospital, which is the same length as the National Capitol, is surrounded by old trees that once had their roots in the soil of his boyhood home. This hospital was not built to serve the very poor, for whom free clinics are provided, nor to serve the very rich, who can afford to pay large surgical fees; but is for those of us who find it difficult to make ends meet and to whom heavy hospital bills are a calamity.

The moving picture laboratory, in in the Highland Park plant, is remarkable. Its educational pictures are shown in seventy per cent of our country's theaters. It may not be known that these are sent to Mexico, Brazil, Chile, Argentina, South Africa, Spain, Sweden, Norway, Japan, China, Alaska and other countries. Mr. Ford desires that they be used in the large and small schools, wherever they can be of service or can give pleasure. Therefore, the rental price to schools is fifty cents a day per reel. The movie staff includes many of the best-known specialists in educational lines, under whose guidance are editors, scenario writers and directors. They strive to produce films of value to teachers throughout the land, to be used for instructing their pupils.

The Ford educational department, its wefare work and Americanization school have been treated at length elsewhere. The Ford trade school is in a large wing of the plant which serves as a school building. It is incorporated under the Michigan laws and extends to a limited number the opportunity to continue their academic education while learning a trade. It is one of the best plans for salvaging some of our destitute boys, or boys who have no one to care if they succeed or fail. Mr. Ford is not willing for them to be called destitute; he prefers to think of them as boys without friends. For several years he maintained a home for homeless boys near his estate. This required such a large amount of his time and interest that he planned the trade school. Each student receives a scholarship which amounts to four hundreds dollars annually, divided into semi-monthly portions. This enables him to be self-supporting while studying. His scholarship is increased in accordance with his ability and effort until it reaches nine hundred dollars. To develop thrift one dollar is added to each pay envelope, provided the boy keeps a savings account. There are fifteen instructors employed; a board of five members directs the policy of the school, and a long waiting list is kept of boys who wish to be admitted. Mr. Searles, the head of the school, is a distinguished educator.

Mr. Ford realizes that the future of our country depends on the boys and girls of today. He gives to those he befriends his money, his time and thought, and to each an opportunity to achieve success. They will be the men and women of tomorrow, and it is his hope that they become good and honorable citizens.

Some idea of the gigantic size of the Ford organization may be secured from the fact that besides the Highland Park plant, the tractor plant is located at the River Rouge foundry where twenty-one railroad tracks enter. Here at one point a log goes in and at another point comes out a finished body. There are thirty-one assembling plants in this country and others in different parts of North and South America, Europe, Australia and the Orient. During the last year nearly one hundred thousand freight cars were needed to handle Ford shipments. Every available method of transportation was used also, such as express companies, parcel post and motor truck.

With a total of sixty-six thousand employees in the Highland Park, River Rouge and Dearborn plants, it is a conservative estimate to say that one-fourth of the men, women and children in Detroit and its environs are directly dependent on the Ford industries for support, and that an equal number are indirectly supported from this source.

It is said that man's efficiency has been increased 66 per cent by the automobile; families and friends have been drawn closer together; health has improved; lives have been prolonged. It has given more service and pleasure than any other invention in the last several decades. The inventor who built a car within the reach of the mass of the people has been a benefactor to his fellow man, and has helped make history.

* * * *

For sentimental reasons the handmade bricks that were in the foundation of Ten Eyck's tavern are part of the hugh fireplace in the trophy room, on the lower floor of the Ford mansion. The great iron horse storms through Wayne County at a more rapid rate as it parallels the Michigan highway toward Chicago. The forests have been cleared .There are no more Indians about. For many years the Dearborn arsenal has not been used as an army post, but the thick, gray stockade walls still stand. One of the square, gray buildings flanked by twin chimneys is the City Hall, where William Ford acts as Mayor. The old site of Ten Eyck's tavern is interesting to people who flash by in their motors, because it is the entrance to Henry Ford's estate. The gray-stone entrance is kept locked and guarded; it is adjacent to the gatekeeper's tiny gray-stone cottage, tucked quaintly under its Indian red-tiled roof; around it sturdy forests look down on the spot which William Cremer won his wager that he could beat the iron horse into Dearbornville, just two miles away.

CHAPTER XII

His "Honest-to-Goodness Americanism"

Five years ago a rainbow of promise, with a bag of gold at each end, hung over a great industrial plant. When the rainbow appeared some called it a menace, but it grew brighter and clearer; some of the colors became obscure; three came out stronger than all the others, and behind them stars formed the two words, "Americans all." At each end of the rainbow the bags emptied an endless stream of gold, and with the gold came freedom from old industrial conditions and with the freedom came the privileges and obligations of American citizenship.

Henry Ford made automobiles to defray the expense of his main business, which was the making of men. He took wise men and good men, successful and unsuccessful. He took Americans of good old colonial stock and laborers from every nook and corner of obscure foreign lands. He took men with the stigma of wrong-doing upon their lives. He took untried men and men who had tried and failed. Through one great system he put them all, to determine the number who would come out pure gold. He thrust aside labor organizations and paid his workers wages at that time considered fabulous. He had his own dreams and he followed them to fulfillment.

Beyond a few brief newspaper reports, the light of publicity never disclosed the inner workings of Henry Ford's mind, yet the spirit of it permeates the country from Canada to the Gulf and from the Atlantic to the Pacific where other plants have used the Ford idea on a smaller scale. The pioneer who began the movement has been assailed and held up for ridicule, yet he was the first advocate of simonpure Americanism in industry. What would his critics have said had they known that he took the dean of a great cathedral, made him head of a vast educational system and gave him power no clergyman ever before had had in the history of business—entire authority over the living conditions of the Ford workman and real influence in the case of labor difficulties? Labor difficulties, however, refused to arise. During strikes at nearby plants the Ford workers remained at their posts, performing their labors in contented prosperity.

Henry Ford had evolved a system so unique and remarkable that his plans and dreams blend, making a practical whole which has actually benefited over fifty thousand homes. The foundation is education and Americanism. That the system has paid commercially is only a side issue, but one of tremendous importance—marking the ideal adjustment of capital and labor, and proving beyond doubt that the experiment is overwhelmingly correct. The assistants in this departmen are called advisors, and the welfare work they are doing is as helpful as it is novel. What they do and how they do it will be explained later.

Mr. Ford states his position frankly. "If I can make men of my employees, I need have no fear for my business," he says. "Everything I do to help them ultimately benefits me; the more money I spend on them, the more enthusiasm they will have for my interests and the more money they will make for themselves and for me."

And he uses all possible labor-saving devices, for he says: "The less fatigued a men is when he leaves his work the more self-improvement can he gain during leisure hours." This is the message of Henry Ford to mankind: "Be your brother's helper." In his plant Bolshevism has not dared to rear its serpent head.

The Ford plan is not to build elaborate libraries, gymnasiums or lunch rooms for the employees, but serviceable and substantial ones. The difference in the expense is given the working men for their homes, their living and their families. It is not the possession of money but the right use of it which is emphasized. Mr. Ford holds that the system of education which increases, through the so-called cultural studies, the capacity for happiness and fails to develop the financial power for gaining the same is a cruel, not a kindly system. It increases human misery and failure. The Ford idea, while increasing a man's capacity for happiness, at the same time increases his efficiency, his earning capacity, his home conditions, his knowledge of the laws of the state and the nation, making him a more valuable citizen, more worthwhile to society, giving him a broader vison, all of which develops a man's mind while training his hands.

The factory has two slogans: "Be a Good American," and "Help the Other Fellow." You find these signs in the working sections of the plant. The workmen are taught self-application of these slogans, even beneficially coerced into adapting them as life standards.

(Continued in April 14th issue)

HENRY FORD'S SUCCESS RULES

FEAR is the great canker that eats at the hearts of men. Most men are entirely too confident of their ability to fail—and they fail. If they were as confident of their ability to succeed, most of them would succeed.

* * * * *

What the world needs is more faith. We haven't half enough of it. We are always saying "I can't," when we should be saying, "I'll try and I'll never stop until I succeed."

* * * * *

The idea of human beings in a hurry always seemed a little absurd to me. Haste is a great maker of discouragement. It was nearly twelve years from the time that I built my first car before I put one on the market.

* * * * *

It is work done against the will that wears. Or work done merely for wages. Wages are necessary, of course, but mere wages are not enough to keep body awake or prevent him from becoming weary.

* * * * *

Nobody who is willing to get money legitimately need think about money. It is only the people who want to get money without earning it who need think about it.

* * * * *

Right now there are thousands of opportunities to make fortunes. People don't see them; that is all. Let anybody who wants money to come to him take the simplest useful thing he can think of; let him study it, improve it and refine it until it is better than anybody ever made it before. Then let him manufacture it on a big scale and money will come to him.

* * * * *

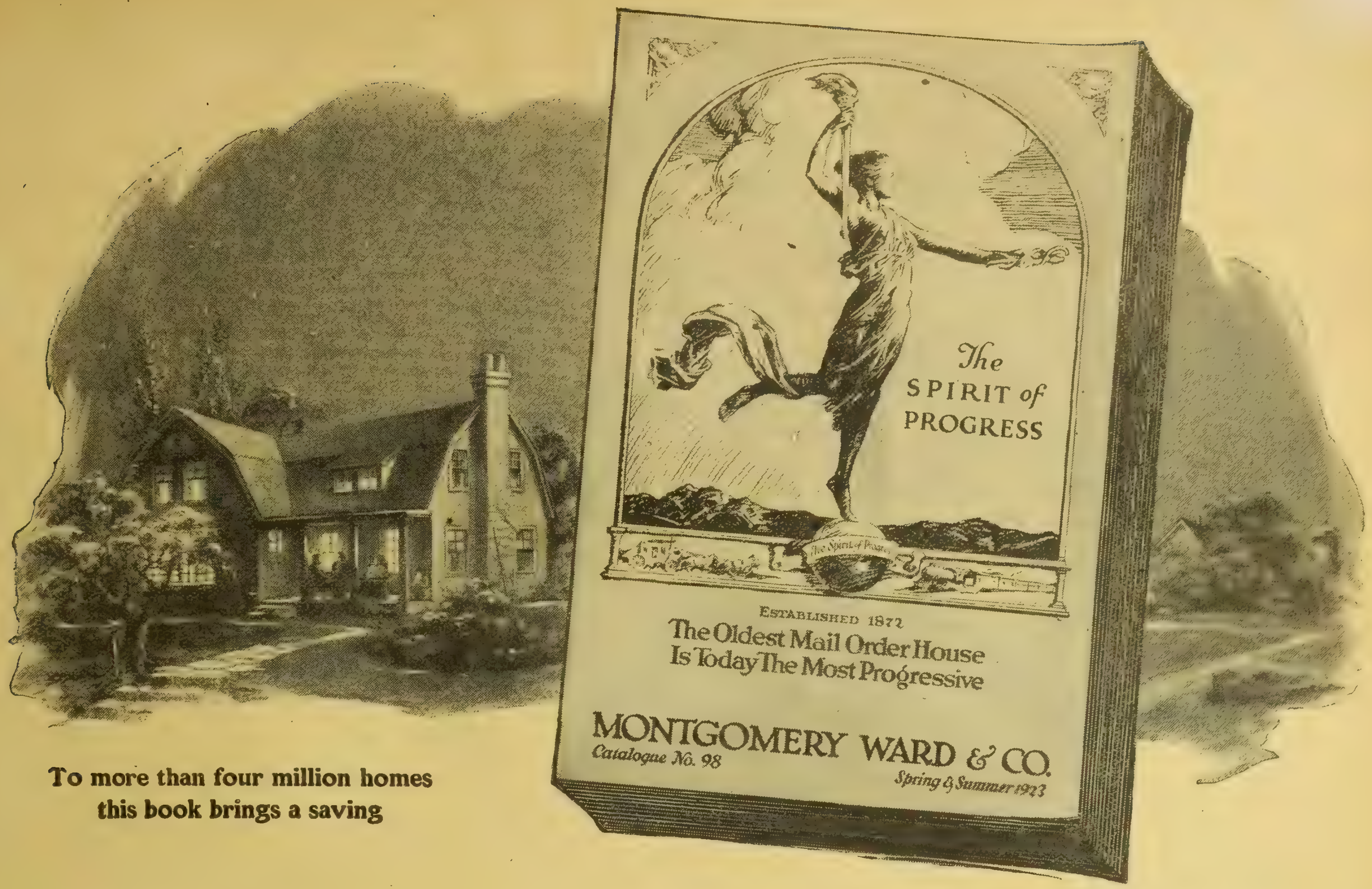
Money mixes with nothing that is worth doing. The right way to get money, therefore, is not to try to get it. Money, when it comes, should come as an incident to something else—as the result of doing something useful.

* * * * *

One of the reasons why American business men, as a class, are not as efficient as they might be is because they think first of profits and next of service.

* * * * *

If American manufacturers and business men generally would, for a period of five years, cease thinking of profits and devote all of their energies to giving the greatest values and the best possible service to the public, they would make more money and they would revolutionize American business.



To more than four million homes this book brings a saving

This book is saving millions of dollars for the American people

Are you using this Book? Is it saving money for *you and your family?*

Are you taking full advantage of the opportunity for saving it brings into your home?

Do you consult this Book—this price guide — *every week* to find the lowest price for everything you buy?

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This Book is of value to you only if you get the habit of using it every week.

It will save you money *only if you use it.* And, then it will bring into your home a great satisfaction and a large saving.

It will bring you the advantage of always getting dependable goods. It will insure your getting prompt, courteous service. It will insure your always buying at the lowest price.

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ANIMAL INDUSTRY DEPARTMENT OF

Parke, Davis & Co.

DETROIT, MICHIGAN

HUDSON

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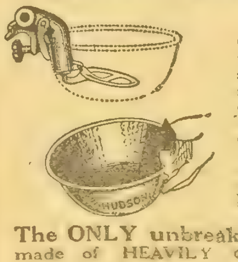

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PAPEC
ENSILAGE CUTTER

Keep The Business Farmer Coming—See Page 13.

FRUIT AND ORCHARD

Edited by FRANK D. WELLS

CALLUS GRAPE CUTTINGS

How can I callus grape cuttings? The bulletins say that they should be callused, but do not say how it is done.—R. M. Saginaw County.

—The callus is the formation on the wound at the end of the cutting. Place cuttings of grape, currant, gooseberry, or any of the plants that take root readily, in moist sand and keep in a cool place. If done when the plant is dormant the callus will soon form. The sand should be kept moist, but not wet, until the weather is warm enough for planting out.

BEST GRAPE FOR MICHIGAN

What is the most profitable grape for Michigan? What is the right distance for planting? Does the grape bear on the new or the year-old wood?—E. T. C., Oakland County.

—The Concord is by far the most important variety of grape for Michigan. All other varieties combined come far short of the Concord. In the Grape Belt there are a few Morris Early, for the first of the market, a few Niagara and three or four others, but they are unimportant. The general market takes the Concord and so do the juice factories. The variety is hardy, productive and a good shipper, a combination suited to the commercial vineyard. For home use Niagara for a white grape and Brighton for an amber might be added to Morris, and Concord. For a special market they have been found desirable. But in general there is nothing to take the place of the Concord. Some years ago the Worden was introduced as an improvement which was to supercede the old favorite. It has much in its favor, but the berries come off the stems too easily. Grape vines are planted about 12 feet apart in the row, and the rows far enough apart to admit cultivation, about 8 feet. The wood which grew last year will produce the fruit next summer.

GRAFTING GRAPES

Can grape vines be grafted, and if so how is it done? Are seedling grapes like the parent?—H. G. C., Livingston County.

—Grapes can be grafted, though that is not often done, since a vine can be grown so easily and quickly from a cutting. As the vine is flexible the graft is put in the root. Dig down four or five inches below the surface, cut off the root and make a cleft graft. Cover with wax, clay, or some material to protect from moisture. Grafting may be of little commercial value, but it may occasionally be of service. A wild vine could soon be made profitable, as a strong root system would force a graft into a vigorous growth. Seedling grapes cannot be depended upon to be like the parent. Like the orchard fruits they produce new varieties. Many kinds have been produced by hybridging or the crossing of two varieties, but few of them have been of any value.

NOTES AND COMMENTS

The questions asked regarding grape culture indicate the interest taken in this fruit. The planting this spring promises to be unusually large, but as the demand has increased enormously during the last few years there seems little danger of over production for several years to come.

While the Concord is the most important variety, both for the commercial plants and for home use, there are other varieties that merit consideration. The Cotowaba requires too long a season for Michigan, but the Deleware, Brighton, Ogawan, Niagara, Morris Deamond, Green Mountain and Salem have many friends. Will it not be well for grape growers to plant a greater variety than they have in the past? An orchardist is not content with one peach, even the Alberta, or with one apple, even the Jonathan. Why be satisfied with one or two grapes, even Morris Early and Concord?

* * *

One of the needs of the hour is a sweet cherry suited to Southern Michigan. This is not saying that the sweet cherry will not grow in this part of the state, but is is difficult to get started. The trees have the bad habit of dying the first season, or if they live through that year they try it the next summer. Then there is sun scald and other ills to which the tree is heir, all of which is discouraging to the fruit grower. So to plant some other tree, here is an opportunity for some good work. Let someone develope a fruit for the purpose. It ought not to be more difficult than some of the work that has been done.

* * *

A cherry not often seen, yet one of the best in flavor is the Princess Eugenie. It is slow to bear, which is the chief reason for its neglect, though production if given time, for a sour cherry it has few equals.

* * *

The shortage in raspberries is an encouragement to the strawberry grower. This fruit promises to be in good demand for some time to come.

* * *

Scions may be low cut now, and stored in moist sand or sawdust until wanted. Use last season's growth, discard the tip or immature wood.

* * *

Seedling apple trees in out-of-the-way places may be made useful at the cost of a little time and labor. If the trunks and limbs are sound they make the best of stock for grafting. Put in some Delicious, Steel's Red or Grime's Golden. They do well on vigorous natural stock.

* * *

Japanese plums are poor self-pollenizers. It is not safe to plant one variety alone Abundance or Burbank when sanding alone may blossom freely. then shed their fruit. Much disappointment has resulted from this. Grow at least two kinds.

* * *

The plum can be grafted, but the varieties should have similiar habits of growth. To graft Burbank and Abundance would result in a freakish tree in looks, at least.

* * *

Why not grow more currants? They soon begin to bear and there is a ready market for the fruit. The plants are scarce and expensive, but it is not difficult for one to grow his own. Make cuttings and plant them this spring. Foy's Prolifer, Cherry and Wilder are good market varieties, but for jelly it is hard to beat the old Red Dutch, though the fruit is small. It is very productive too. The greatest enemy is the current worm, but that is easily controlled.

* * *

Peach trees ought to be sprayed for leaf curl. Copper sulphate at the rate of one pound to 50 gallons of water, no line, may be used at any time when the liquid will not freeze, the earlier in the spring, the better.

CAN RECOVER DAMAGE

(Continued from Page 7)

my place, but he kept her moving around so we did not notice her being sick when she was unloaded, but noticed it shortly afterwards. She lost her calf, and will not get with calf now. I had a veterinary and he said it was caused by moving her. I have got proof that the cow was sick before he got to my place.—J. L., Midland, Mich.

—If you can show that the seller was negligent in delaying to remove the cow, or that he failed to use proper care in moving her, and that as a result of such negligence she lost her calf, I think you would have a right of action against him to recover the damage you have suffered. —Asst. Legal Editor.

TRY TO HAVE CHILD ADOPTED

I have a step daughter that has had ephleptic fits for five years. At the age of 17 she gave birth to a baby which is now 11 months old. I took this matter up with our prosecutor. She told him who the baby's father was and he was a poor married man. The prosecutor said he could not do anything for the reason the girl's mind was too bad for evidence against him. The girl now has gone to a home, and the baby is left with me. Is there any support I can get for such a child? If so, will you please tell me whom to apply to, and how to do this. The baby must have support.—F. C. T., Mecosta County, Mich.

—If the legability of the father for the child's support cannot be enforced, it would become the duty of the county or township to provide such support. However, if you cannot take care of the child, you should make every effort to have it adopted by some private family or sent to some good orphans home, so it will not become a public charge. It should be realized that the child is the innocent victim of unfortunate circumstances over which it had no control, and is as deserving of a fair chance in life as if born in lawful wedlock.—Asst. Legal Editor.

FINISHING MAPLE FLOORS

What is the most successful method of finishing a hard maple or elm floor in a light finish?—H. B. A., Otisville, Mich.

—The following formula for finishing maple floors has proved very satisfactory for several years:

Boiled linseed oil, ½ gal.; raw linseed oil, ½ gal.; turpentine, 2⅛ pints; Japan dryer, ¼ pint; bees wax, ¼ pound.

Shave or cut the wax in small pieces and dissolve in the turpentine. Heat wax and turpentine by setting in a dish of hot water. When hot add Japan dryer and mix with the oil.

For new floors apply by dipping a soft rag or waste into the oil and rub into floor until thoroughly covered. Let stand about one-half hour. Then wipe thoroughly dry with rags or waste. Burn oily rags at once. Let floor stand 3 or 4 days until thoroughly dry. Then finish with wax or varnish as desired.

Elm floors are more open grained and will need a light paste wood filler the first application—S. B. Howard, College Painter, M. A. C.

COULD NOT COLLECT FEE

Will you please tell me whether a note is legal drawn up in this manner? A buys from B, cattle amounting to $450.00. B tells A that C has money to loan. B goes and talks with C, comes and gets A, A and B goes to C, C makes out he will have to go to Reed City Bank to get the money, and his fee would be $25.00 and a bonus of $25.00. C draws up note for $500.00 payable one year with 7 per cent interest. C is a stockholder and director of the local bank. C presents note to cashier, takes $25.00. A gets $450.00 and the bank gets the rest. Would this note be collectable?—C. H. S., Evart, Mich.

—The $25.00 charged by the bank as a bonus would be usurious and could not be collected from the maker of the note. If C is a director of the bank loaning money, I am of the opinion he could not collect from A the $25.00 charged as his fee.—Asst. Legal Editor.

INDORSER RELEASED

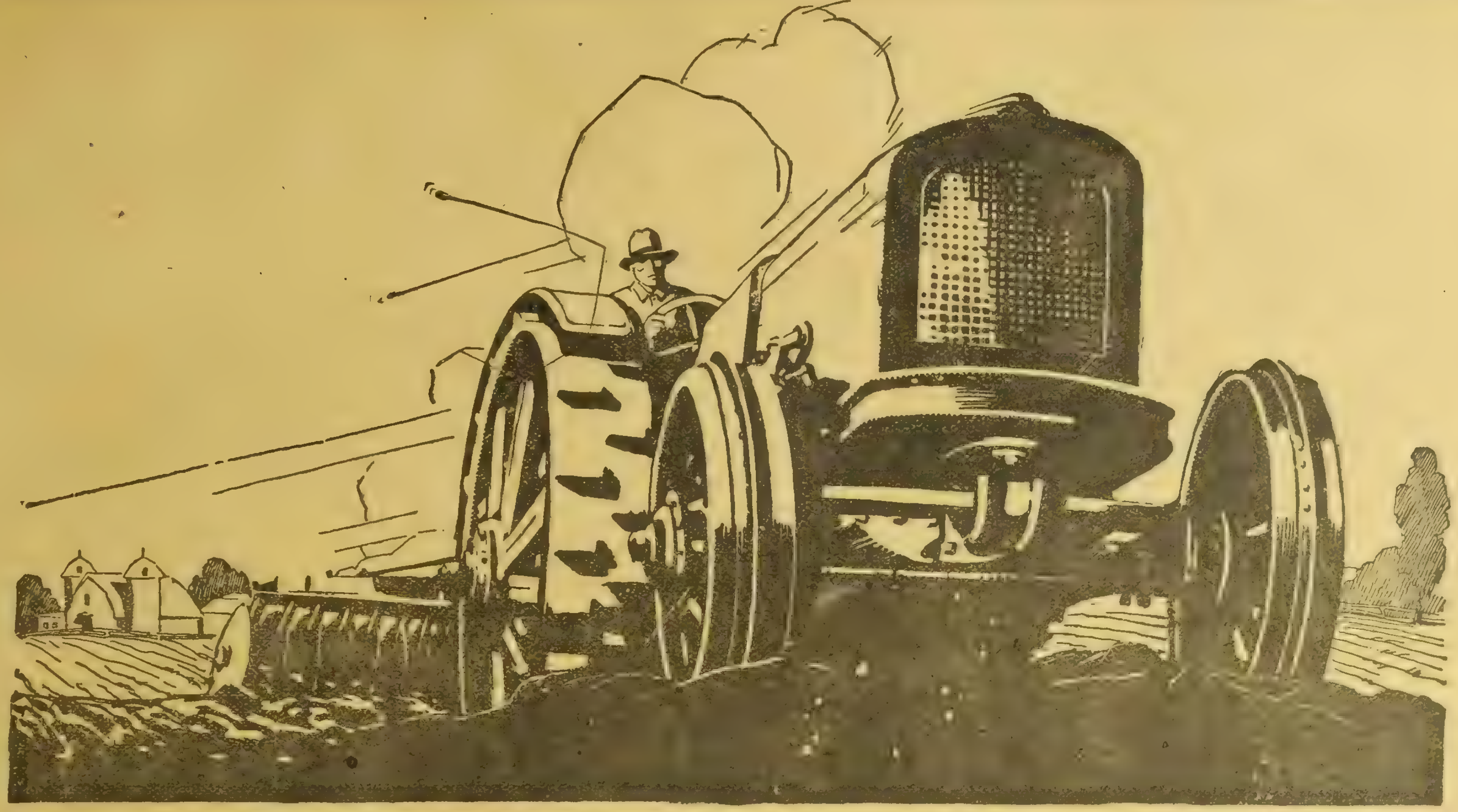
Please give me information in regards to a note. A sells a horse to B for $80.00 taking a property note and C indorses note with B. There A sells note to the bank and endorses same. I don't know whether note was recorded or not. Then B moves and gets an extension of time on this note, has the interest charged to note. During this 30 days extention, B has a sale and moves away taking horse with him, afterwards selling it. Now the bank insists upon C paying the note. C was not notified that the note was not paid until after the 30 day extension had expired. Is C liable to pay or should A pay, and take his property with his property note?—J. V., Remus, Michigan.

—Where an extension of time is given to the maker of a note, an accommodation indorser thereon is released if such extension was given without his knowledge.—Asst. Legal Editor.

DO NOT PUT KEROSENE IN GASOLINE CAN

—Would like to know if it is lawful to put kerosene in gasoline cans?—F. V., Fremont, Mich.

—The statutes expressly prohibit the putting of kerosene in gasoline cans. The law provides that gasoline containers be painted red to make errors of this nature next to impossible.—Chas. J. DeLand, Secretary of State.



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Tractor Chart of Recommendations

Trade Name	Motor Oil
Adaptable	H.
Allis-Chalmers, 6-12	H.
Allis-Chalmers, 15-25	S. H.
Allis-Chalmers, 18-30 and 20-35	S. H.
All Work	S. H.
Andrews-Kinkade	E. H.
Armington	S. H.
Aultman-Taylor, 15-30	S. H.
Aultman-Taylor, 22-45 and 30-60	S. H.
Automotive	S. H.
Avery, Model C	H.
Avery, 8-16, 12-20, 12-25, 14-28, 18-36, 25-50, 40-65, 20-35	E. H.
Avery Track Runner	S. H.
Bates Steel Mule, All Models	S. H.
Best Tracklayer, All Models	E. H.
Big Farmer	E. H.
Big Four E-B	E. H.
Buckeye Trundaar	S. H.
Burnoil	E. H.
Capitol, All Models	E. H.
Case, 10-18, 10-20, 12-20, 15-27, 9-18	H.
Case, 22-40	S. H.
Case, 12-25, 30-60, 40-72	E. H.
Case, 20-40	E. H.
Cletrac, All Models	S. H.
Coleman	E. H.
Dart Blue "J"	S. H.
Dill Harvesting	H.
Eagle	E. H.
E-B, All Models	S. H.
Ellwood	S. H.
Farm Horse	E. H.
Farquhar, 15-25	S. H.
Farquhar, 18-35 and 25-50	S. H.
Fitch Four Drive	E. H.
Flour City Junior	H.
Flour City, 20-35	S. H.
Flour City, 30-50, 40-70	E. H.
Fordson	H.
Fox	E. H.
Frick, All Models	S. H.
Good Field	H.
G-O	S. H.
Grain Belt	S. H.
Gray	S. H.
Great Western	S. H.
Hadfield-Penfield	S. H.
Hart-Parr, All Models	E. H.
Heider	S. H.
Holt Caterpillar, All Models	E. H.
Huber, All Models	S. H.
Indiana	H.
International, 8-16	H.
International, 15-30	S. H.
Klumb	E. H.
Lauson, All Models	S. H.
Leader	E. H.
Leonard Four Wheel Drive	S. H.
Liberty	E. H.
Lincoln	S. H.
Linn	S. H.
Little Giant, A & B	S. H.
Magnet, 14-28	S. H.
Mark VI	S. H.
McCormick-Deering, 15-30	H.
Minneapolis, 12-25 and 17-30	S. H.
Minneapolis, 22-44 and 35-70	E. H.
Mogul	S. H.
Moline Universal	S. H.
Monarch	S. H.
Montana	E. H.
Nilson Junior and Senior	S. H.
Oil Gas, 20-42 and 25-50	E. H.
Peoria	E. H.
Pioneer, 18-36 and 30-60	E. H.
Port Huron	S. H.
Quadpull	S. H.
Reed	S. H.
Rex	S. H.
Rogers	E. H.
Rumley, Oil Pull, 12-20, 16-30 and 20-40	E. H.
Rumley, Oil Pull, 30-60	E. H.
Russell "Junior", 12-24	S. H.
Russell Boss	S. H.
Russell "Giant," 30-60	E. H.
Sampson, Model M	H.
Savage A	E. H.
Shawnee, 6-12 and 9-18	H.
Shelby, All Models	S. H.
Square Turn	E. H.
Stinson	S. H.
Titan	S. H.
Topp-Stewart	S. H.
Townsend	E. H.
Traylor	H.
Trundaar	S. H.
Twin Ports	E. H.
Twin City, 12-20 and 20-35	S. H.
Twin City, 40-65 and 60-90	E. H.
Uncle Sam, All Models	S. H.
Wallis	S. H.
Waterloo Boy	S. H.
Wellington, 12-22 and 16-30	S. H.
Wetmore	S. H.
Wheat	S. H.
Western	E. H.
Wisconsin	E. H.
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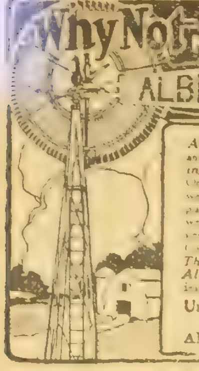

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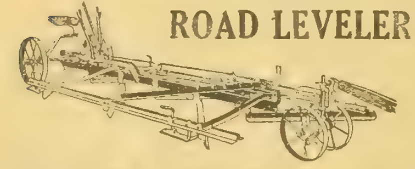

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The Hunted Woman

By James Oliver Curwood

Michigan's Own and America's Formost Author of the Great Northwest

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(Continued from March 17th Issue)

CHAPTER XVII

HALF an hour later Blackton had shown Aldous to his room and bath. It was four o'clock when he rejoined the contractor in the lower room, freshly bathed and shaven and in a change of clothes. He had not seen Joanne, but half a dozen times he had heard her and Peggy Blackton laughing and talking in Mrs. Blackton's big room at the head of the stairs, and he heard them now as they sat down to smoke their cigars. Blackton was filled with enthusiasm over the accomplishment of his latest work, and Aldous tried hard not to betray the fact that the minutes were passing with gruelling slowness while he waited for Joanne. He wanted to see her. His heart was beating like an excited boy's. He could hear her footsteps over his head, and he distinguished her soft laughter, and her sweet voice when she spoke. There was something in her nearness and the fact that she did not once show herself at the top of the stair. Blackton was still talking about "coyotes" and dynamite when, an hour later, Aldous looked up, and his heart gave a big, glad jump.

Peggy Blackton, a plump little golden-haired vision of happiness, was already half a dozen steps down the stairs. At the top Joanne, for an instant, had paused. Through that space, before the contractor had turned, her eyes met those of John Aldous. She was smiling. Her eyes were shining at him. Never had he seen her look at him in that way, he thought, and never had she seemed such a perfect vision of loveliness. She was dressed in a soft, clinging something with a flutter of white lace at her throat, and as she came down he saw that she had arranged her hair in a marvellous way. Soft little curls half hid themselves in the shimmer of rich coils she had wreathed upon her head, and adorable little tendrils caressed the lovely flush in her cheeks, and clung to the snow-whiteness of her neck.

For a moment, as Peggy Blackton went to her husband, he stood very close to Joanne, and into his eyes she was smiling, half laughing, her beautiful mouth aquiver, her eyes glowing, the last trace of their old suspence and fear vanished in a new and wonderful beauty. He would not have said she was twenty-eight now. He would have sworn she was twenty.

"Joanne," he whispered, "you are wonderful. Your hair is glorious!"

"Always—my hair," she replied, so low that he alone heard. "Can you never see beyond my hair, John Aldous?"

"I stop there," he said. "And I marvel. It is glorious!"

"Again!" And up from her white throat there rose a richer, sweeter color. "If you say that again now, John Aldous, I shall never make curls for you again as long as I live!"

"For me——"

His heart seemed near bursting with joy. But she had left him, and was laughing with Peggy Blackton, who was showing her husband where he had missed a stubby patch of beard on his cheek. He caught her eyes, turned swiftly to him, and they were laughing at him, and there came a sudden pretty upturn to her chin as he continued to stare, and he saw again the color deepening in her face. When Peggy Blackton led her husband to the stair, and drove him up to shave off the stubby patch, Joanne found the opportunity to whisper to him.

"You are rude, John Aldous! You must not stare at me like that!"

And as she spoke the rebellious colour was still in her face, in spite of the tantalizing curve of her red lips and the sparkle in her eyes.

"I can't help it," he pleaded. "You are—glorious!"

During the next hour, and while they were at supper, he could see that she was purposely avoiding his eyes, and that she spoke oftener to Paul Blackton than she did to him, apparently taking the keenest interest in his friend's enthusiastic descriptions of the mighty work along the line of steel. And as pretty Peggy Blackton never seemed quite so happy as when listening to her husband, he was forced to content himself by looking at Joanne most of the time, without once receiving a smile.

The sun was just falling behind the western mountains when Peggy and Joanne, hurried most incontinently by Blackton, who had looked at his watch left the table to prepare themselves for the big event of the evening.

"I want to get you there before dusk," he explained. "So please hurry!"

They were back in five minutes. Joanne had slipped on a long gray coat, and with a veil that trailed a yard down her back she had covered her head. Not a curl or a tress of her hair had she left out of its filmy prison, and there was a mischievous gleam of triumph in her eyes when she looked at Aldous.

A moment later, when they went ahead of Blackton and his wife to where the buckboard was waiting them, he said:

"You put on that veil to punish me, Ladygray?"

"It is a pretty veil," said she.

"But your hair is prettier," said he.

"And you embarrassed me very much by staring as you did, John Aldous!"

"Forgive me. It is—I mean you are—so beautiful."

"And you are sometimes—most displeasing," said she. Your ingenuousness, John Aldous, is shocking!"

"Forgive me," he said again.

"And you have known me but two days," she added.

"Two days—is a long time," he argued. "One can be born, and live, and die in two days. Besides, our trails have crossed for years."

"But—it displeases me."

"What I have said?"

"Yes."

"And the way I have looked at you?"

"Yes."

Her voice was low and quiet now, her eyes were serious, and she was not smiling.

"I know—I know," he groaned, and there was a deep thrill in his voice. "It's been only two days after all, Ladygray. It seems like—like a lifetime. I don't want you to think badly of me. God knows I don't!"

"No, no, I don't," she said quickly and gently. "You are the finest gentleman I ever knew, John Aldous. Only—it embarrasses me."

"I will cut out my tongue and put out my eyes——"

"Nothing so terrible," she laughed softly. "Will you help me into the wagon? They are coming."

She gave him her hand, warm and soft; and Blackton forced him into the seat between her and Peggy, and Joanne's hand rested in his arm all the way to the mountain that was to be blown up, and he told himself that he was a fool if he were not supremely happy. The wagon stopped, and he helped her out again, her warm little hand again close in his own, and when she looked at him he was the cool, smiling John Aldous of old, so cool, and strong, and unemotional that he saw surprise in her eyes first and then that gentle, gathering glow that came when she was proud of him, and pleased with him. And as Blackton pointed out the mountain she unknotted the veil under her chin and let it drop back over her shoulder, so that the last light of the day fell richly in the trembling curls and thick coils of her hair.

"And that is my reward," said John Aldous, but he whispered it to himself.

They had stopped close to a huge flat rock, on this rock men were at work fitting wires to a little boxlike thing that had a white button-lever. Paul Blackton pointed at this, and his face was flushed with excitement.

"That's the little thing that's going to blow it up, Miss Gray—the touch of your finger on that little white button. Do you see that black base of the mountain yonder?—right there where you can see men moving about? It's half a mile from here, and the 'coyote' is there, dug into the wall of it."

The tremble of enthusiasm was in his voice as he went on, pointing with his long arm: "Think of it! We're spending a hundred thousand dollars going through that rock that people who travel on the Grand Trunk Pacific in the future will be saved seven minutes in their journey from coast to coast! We're spending a hundred thousand there, and millions along the line, that we may have the smoothest roadbed in the world when we're done, and the quickest route from sea to sea. It looks like a waste, but it isn't. It's science! It's the fight of competition! It's the determination behind the forces—the determination to make this road the greatest road in the world! Listen!"

The gloom was thickening swiftly. The black mountain was fading slowly away, and up out of that gloom came now ghostly and far-reaching voices of men booming faintly through giant megaphones.

"Clear away! Clear away! Clear away!" they said, and the valley and the mountain-sides caught up the echoes, until it seemed that a hundred voices were crying out the warning. Then fell a strange and weird silence, and the echoes faded away like the voices of dying men, and all was still save the far-away barking of a coyote that answered the mysterious challenges of the night. Joanne was close to the rock. Quietly the men who had been working on the battery drew back.

"It is ready!" said one.

"Wait!" said Blackton, as his wife went to speak. "Listen!"

For five minutes there was silence. Then out of the night a single megaphone cried the word:

"Fire!"

"All is clear," said the engineer, with a deep breath. "All you have to do , Miss Gray, is to move that little lever from the side on which it now rests to the opposite side. Are you ready?"

In the darkness Joanne's left hand had sought John's. It clung to his tightly. He could feel a little shiver run through her.

"Yes," she whispered.

"Then—if you please—press the button!"

Slowly Joanne's right hand crept out, while the fingers of her left clung tighter to Aldous. She touched the button—thrust it over. A little cry that fell from between her tense lips told them she had done the work, and a silence like that of death fell on those who waited.

A half a minute—perhaps three-quarters—and a shiver ran under their feet, but there was no sound; and then a black pall, darker than the night, seemed to rise up out of the mountain, and with that, a second later came the explosion. There was a rumbling and a jarring, as if the earth were convulsed under foot: volumes of dense black smoke shot upward, and in another instant these rolling, twisting volumes of black became lurid, and an explosion like that of a thousand great guns rent the air. As fast as the eye could follow sheets of flame shot up out of the sea of smoke, climbing higher and higher, in lightning flashes, until the lurid tongues licked the air a quarter of a mile above the startled wilderness. Explosion followed explosion, some of them coming in hollow, reverberating booms, others as if in mid-air. Unseen by the watchers, the heavens were filled with hurtling rocks; solid masses of granite ten feet square were thrown a hundred feet away; rocks weighing a ton were hurled still farther, as if they were no more than stones flung by the hands of a giant; chunks that would have crashed from the roof to the basement of a skyscraper dropped a third of a mile away. For three minutes the frightful convulsions continued, and the tongues of flame leaped into the night. Then the lurid lights died out, shorter and shorter grew the sullen flashes, and then again fell—silence!

During those appalling moments, unconscious of the act, Joanne had shrank close to Aldous, so that he felt the soft crush of her hair and the swift movement of her bosom. Blackton's voice brought them back to life.

He laughed, and it was the laugh of a man who had looked upon work well done.

"It has done the trick," he said.

"To-morrow we will come and see. And I have changed my plans about Coyote Number Twenty-eight. Hutchins, the superintendent, is passing through in the afternoon, and I want him to see it." He spoke now to a man who had come up out of the darkness. "Gregg, have Twenty-eight ready at four o'clock to-morrow afternoon—four o'clock—sharp!"

Then he said:

"Dust and a bad smell will soon be settling about us. Come, let's go home!"

And as they went back to the buckboard wagon through the gloom John Aldous still held Joanne's hand in his own, and she made no effort to take it from him.

CHAPTER XVIII

THE next morning, when Aldous joined the engineer in the dining-room below, he was disappointed to find the breakfast table prepared for two instead of four. It was evident that Peggy Blackton and Joanne were not going to interrupt their beauty nap on their account.

Blackton saw his friend's inquiring look, and chuckled.

"Guess we'll have to get along without 'em this morning, old man. Lord bless me, did you hear them last night—after you went to bed?"

"No."

"You were too far away," chuckled Blackton again, "I was in the room across the hall from them. You see, old man, Peggy sometimes gets fairly starved for the right sort of company up here, and last night they didn't go to bed until after twelve o'clock. I looked at my watch. Mebby they were in bed, but I could hear 'em buzzing like two bees, and every little while they'd giggle, and then go on buzzing again. By George, there wasn't a break in it! When one let up the other'd begin, and sometimes I guess they were both going at once. Consequently they're sleeping now."

When breakfast was finished Blackton looked at his watch.

"Seven o'clock," he said. "We'll leave word for the girls to be ready at nine. What are you going to do meantime, Aldous?"

"Hunt up MacDonald, probably."

And I'll run down and take a look at the work."

As they left the house the engineer nodded down the road. MacDonald was coming.

"He has saved you the trouble," he said. "Remember, Aldous—nine o'clock sharp!"

A moment later Aldous was advancing to meat the old mountaineer.

"They've gone, Johnny," was Donald's first greeting.

"Gone?"

"Yes. The whole bunch—Quade, Culver Rann, DeBar, and the woman who rode the bear. They've gone, hide and hair, and nobody seems to know where."

Aldous was staring.

"Also," resumed old Donald slowly, "Culver Rann's outfit is gone—twenty horses, including six saddles. An' likewise others have gone, but I can't find out who."

"Gone!" repeated Aldous again.

MacDonald nodded.

"And that means——"

"That Culver Rann ain't lost any time in gettin' under way for the gold," said Donald. "DeBar is with him, an' probably the woman. Likewise three cut-throats to fill the other saddles. They've gone prepared to fight."

"And Quade?"

Old Donald hunched his shoulders, and suddenly John's face grew dark and hard.

"I understand," he spoke, half under his breath. "Quade has disappeared—but he isn't with Culver Rann. He wants us to believe he has gone. He wants to throw us off our guard. But he's watching, and waiting—somewhere—like a hawk, to swoop down on Joanne! He——"

"That's it!" broke in MacDonald hoarsely. "That's it, Johnny! It's his old trick—his old trick with women. There's a hundred men who've got to do his bidding—do it 'r get out of the mountains—an' we've got to watch Joanne. We have, Johnny! If she should disappear—"

Aldous waited.

"You'd never find her again, so 'elp me God, you wouldn't, Johnny!" he finished.

"We'll watch her," said Aldous quietly. "I'll be with her to-day, Mac, and to-night I'll come down to the camp in the coulee to compare notes with you. They can't very well steal her out of Blackton's house while I'm gone."

For an hour after MacDonald left him he walked about in the neighborhood of the Blackton bungalow smoking his pipe. Not until he saw the contractor drive up in the buckboard did he return. Joanne and Peggy were more than prompt. They were waiting. If such a thing were possible Joanne was more radiantly lovely than the night before. To Aldous she be came more beautiful every time he looked at her. But this morning he did not speak what was in his heart when, for a moment, he held her hand, and looked into her eyes. Instead, he said:

"Good morning, Ladygray. Have you used——"

"I have," she smiled. "Only it's Potterdam's Tar Soap, and not the other. And you—have not shaved, John Aldous!"

"Great Scott, so I haven't!" he exclaimed, rubbing his chin. "But I did yesterday afternoon, Ladygray!"

"And you will again this afternoon, if you please," she commanded. "I don't like bristles."

"But in the wilderness——"

"One can shave as well as another can make curls," she reminded him, and there came an adorable little dimple at the corner of her mouth as she looked toward Paul Blackton.

Aldous was glad that Paul and Peggy Blackton did most of the talking that morning. They spent half an hour where the explosion of the night before had blown out the side of the mountain, and then drove on to Coyote Number Twenty-eight. It was in the face of a sandstone cliff, and all they could see of it when they got out of the wagon was a dark hole in the wall of rock. Not a soul was about, and Blackton rubbed his hands with satisfaction.

"Everything is completed," he said. Gregg put in the last packing this morning, and all we are waiting for now is four o'clock this afternoon."

The hole in the mountain was perhaps four feet square. Ten feet in front of it the engineer paused, and pointed to the ground. Up out of the earth came two wires, which led away from the mouth of the cavern.

"Those wires go down to the explosives," he explained. They're battery wires half a mile long. But we don't attach the battery until the final moment, as you saw last night. There might be an accident."

He bent his tall body and entered the mouth of the cavern, leading his wife by the hand. Observing that Joanne had seen this attention on the contractor's part, Aldous held out his own hand, and Joanne accepted it. For perhaps twenty feet they followed the Blacktons with lowered heads. They seemed to have entered a black cold pit, sloping slightly downward, and only faintly could they see Blackton when he straightened.

Hs voice came strange and sepulchral:

"You can stand up now. We're in the chamber. Don't move or you might stumble over something. There ought to be a lantern here."

He struck a match, and as he moved slowly toward a wall of blackness, searching for the lantern, he called back encouragingly through the gloom:

"You folks are now standing right over ten tons of dynamite, and there's another five tons of black powder——"

A little shriek from Peggy Blackton stopped him, and his match went out.

"What in heaven's name is the matter?" he asked anxiously. "Peggy——"

"Why in heaven's name do you light a match then, with us standing over all those tons of dynamite?" demanded Peggy. "Paul Blackton, you're——"

The engineer's laughter was like a giant's roar in the cavern, and Joanne gave a gasp, while Peggy shiveringly caught Aldous by the arm.

(Continued April 14th Issue)

DAIRYMEN WIN TWO VICTORIES

The dairy interests of the United States succeeded in securing at the hands of the 67th Congress, two pieces of legislation which mark real progress. The Voight Anti-Filled Milk Bill prohibiting filled milk in interstate commerce was passed on March 1. The Haugen Butter Standards Bill was passed two days later.

PETOSKEY Potatoes

"Rural Russets"
King of the Late Potatoes!
Resists heat, drought and disease.

Our Michigan grown Certified Seed Potatoes produce the largest yields. In 1922 Certified Petoskeys gave Michigan growers 61 bushels per acre more than the yield from all kinds of seed.

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Production costs were the same except the small additional cost of Certified Seed.

If your Local Cooperative Association or County Agent cannot take your order write to

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Cadillac, Michigan or
Michigan State Farm Bureau
SEED DEPARTMENT
Lansing, Michigan

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20 APPLE TREES FOR $1
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FOR SALE
MEMBERSHIP SILVER BLACK FOX CLUB.
$300 gets pedigreed pair. $5.00 monthly.
JOHN KOTKE, Secretary, Rodney, Michigan.

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$1 and the coupon below will renew you own subscription for TWO YEARS FROM DATE OF EXPIRATION.
—or will enter a NEW subscriber's name for TWO FULL YEARS
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This is the greatest offer we have ever made and we do not promise to keep it open over 30 days, so you must act at once, if you wish to profit by this 50% saving!

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Mt. Clemens, Michigan

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My Name.................................... R. F. D. No..............

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(If you are renewing kindly send address label from recent issue)

(2) For $1 enclosed renew my own subscription as above 1 year and add the following new subscribers name paid-in-full for 1 year:

New Name.................................... R. F. D. No..............

P. O.................................... State..............

The Michigan
BUSINESS FARMER
SATURDAY, MARCH 31, 1923

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RELIABLE ADVERTISERS
We will not knowingly accept the advertising of any person or firm who we do not believe to be thoroughly honest and reliable. Should any reader have any cause for complaint against any advertiser in these columns, the publisher would appreciate an immediate letter bringing all facts to light. In every case when writing say: "I saw your advertisement in The Michigan Business Farmer!" It will guarantee honest dealing.

"The Farm Paper of Service"

THE following news note has been going the rounds of the newspapers:

WHO GOT THE 96 CENTS?

NOTE IN A POTATO SHOWS PRICE ROSE 400 PER CENT.

Lynchburg, Va., March 8.—Mrs. W. J. Crowder of this city, while peeling a potato found a note in it reading:

"I got 24 cents per bushel. What did you give?"

It was signed "G. F. Beardsley, Stanton, Michigan."

Mrs. Crowder said she paid 30 cents a peck, or at the rate of $1.20 a bushel.

"FARMERS GETTING DISCOURAGED AND QUITTING!"

> "Farmers all around here are getting discouraged and quitting. There have been more Auction Sales around here this past winter than ever before. Within the last two or three weeks there have from one to four sales every week, within a radius of ten to fifteen miles and in most cases the heading of the bill says, "having decided to quit farming I will sell at Auction", and nearly all of them go to town or city to work. I wonder how much longer it will be before the towns are filled up."

FROM Rockford comes this letter from an earnest business farmer who thus bewails the fact that farmers, in his locality, are "getting discouraged and quitting!"

Let's take out our pencils a minute and do a simple problem in economics—you never learned economics?—well, sit in close and get a lesson in what Dr. Friday calls economics, but what perhaps you have always called "putting-two-and-two together" or practicing "common-horse-sense!" As near as we can figure out, they amount to the same thing—basing predictions on experience, we all do that!

"Farmers getting discouraged and quitting" to move to town!

Don't sigh, neighbor, throw your hat in the air! Here's your neighbor, his wife and three children; five mouths to feed. Five producers, all working hard to grow more crops to feed themselves and other mouths somewhere in the cities.

They move to town! He has a "good" job in a factory, going to work before sun-up every morning and working in a spray of paint, painting wheels all day, until it is nearly dark again and he can stand in line to get on a crowded street car and become another of the human sardines, but that is another part of the story!

Five pairs of hands that were producers, move to the city and become five mouths which are consumers! Supply less—Consumption greater! What happens? Prices for farm products higher.

So there really is nothing to be glum about, unless you miss the social life of your neighbors and we might suggest, that more money from your crops will buy you a better automobile, that will bring you near all the social life that will be good for you.

Didn't know you could do a problem in simple economics, did you?

But it is mighty comforting, if a lot of misguided farmers and farmers' sons and daughters don't discover how simple it is, figure it out for themselves and decide to stay right where they are and continue to be producers!

AND HIS WORK ONLY BEGUN!

IT seems but yesterday and in reality it was only a few weeks back that we wished Milo Campbell good luck and God-speed on his departure to take up his work as a member of the Federal reserve board, to which President Harding had so wisely called him.

Milo Campbell dropped dead from heart failure in Washington on March twenty-second, less than ten days after he had left his home in Coldwater to take up his work and residence in the capital.

Every earnest business farmer in Michigan will regret the passing of a man who contributed so much to the agricultural welfare of this state. Mr. Campbell was 72 years of age when he laid down his work, having been born in New York state, of English parents, he came to Michigan in 1848 and settled at Quincy. He graduated from the Coldwater High School in 1871 and from the state normal at Ypsilanti in 1875. In 1877 he was admitted to the bar, practicing in Coldwater, with the Honorable Clayton C. Johnson, now circuit judge, as his law partner.

Mr. Campbell held several political appointments during his busy life-time, and ran for governor of the state of Michigan, with the general support of the rural districts because of his years of work in their interests.

Probably the position which brought him the widest acquaintance nationally, was his election to presidency of the National Milk Producers Association where he was instrumental in suggesting and pushing to a successful issue several important innovations in the milk situation for the benefit of the producer.

There is a genuine loss to Michigan and to the farmers of this entire country in the passing of Milo Campbell, but the record of his life and his achievements should shine forth as a beacon to those of us who are left behind to humbly pattern the course of our footsteps after his.

EAT MORE WHEAT!

A FEW years ago and it was "Save Wheat for the Fighters—It will Win the War!", now from the north-west in particular comes the appeal—"Eat-more-Wheat!"—and it is justified, because every year American wheat producers meet a curtailed export market because of millions of acres of new wheat lands under cultivation in other parts of the world and during the past few years a money-value condition which has taken white bread off the tables of millions of people in central Europe.

The time was when we were wont to smile at such appeals as "Buy-a-Bale-of-Cotton" or when we figured that the National Raisin Day, was only a half-baked scheme of a promoter, who really had little faith in its effect. To-day, however after years of experience with this open propaganda, we have come to know exactly what may be expected from a campaign to educate the great mass of people to an idea.

Two weeks ago there was a "bread-war" in Chicago between two lines of so-called chain-stores, each operating several hundred retail stores in all parts of that city. When the war opened a small loaf of bread was retailing at nine cents, one chain of stores cut the price to eight, down went the other and so until it was two-loaves-for-a-cent, whereupon the last chain offered "Bread Free!" with every purchase and within a few days had forced a truce upon their rivals.

The price of bread and the price of flour will have a lot to do with the success of a "Eat-more-Wheat!" campaign and if the miller will allow the farmer a fair price for his wheat, add a fair margin for his milling and pass it on to the baker or home with the least possible over-head we believe this, coupled with a popular appeal to the more than a hundred millions in America will have its effect.

THE SUGAR MARKET

JUST now the sugar market is turning hand-springs and getting ready so it appears, for some high and lofty tumbling. No one seems to know from just what direction the manipulating is being done, but several gentlemen in Washington, including Secretary of Commerce Hoover, are very anxious to find out and they seem to have an inkling that it may come from a certain well known street in lower New York, altho it is carefully wrapped and labeled "made in Havana"!

It is such a long time before the 1923 beet sugar crop from Michigan will be on the market, that we would scarcely advise beet growers to become panicky and plant more acreage than they had originally planned, altho we would not hesitate to advise the signing of the "50-50" contract, because we still hold that over a period of three seasons the grower cannot help but profit from this contract that gives him an equal share of the possible profits—providing, of course, he is given a square-deal and The Business Farmer has promised that it will help, at least, to see that the beet-growers of Michigan get that.

THE PORTS OF MICHIGAN

IN a very few years, fewer than many realize, the Great Lakes-St. Lawrence Waterway will be a completed project. Its future value, however, as a commercial factor will largely depend upon the agressiveness of the ports along the Great Lakes. Ships are going to bring their cargoes and receive the same where proper facilities are provided to load goods at a fair charge.

Modern ports are far different from the old type ports of the early shipping days. Future requirements will mean still more changes which will demand very careful planning and a point of view that can see a long ways ahead. Even more essential than a clear vision on the matter, however, is the necessity for a public control of such port facilities which will assure to all who desire to use them that they shall have the fairest of treatments.

The tonnage of our lakes this past summer exceeded 200,000,000 tons. Two or three times the tonnage of both the Panama and Suez canals goes through the Soo locks every year. With the coming of ocean ships to our Great Lakes, this great highway of commerce is bound to grow to unprecedented importance if only our port cities will make it possible for this commerce to develop.

The present session of the legislature has recently passed a Port Development Amendment which is to be placed on the April 2nd ballot. This amendment to the constitution if adopted will be,

> "To authorize the Legislature to provide for the incorporation of port districts and confer power and authority upon them to engage in work of internal improvements in connection therewith."

This Amendment is a question on which it does not seem possible that negative votes can be cast with any sound reason. The future needs of every Michigan Port can best be gauged by the experience of every American port which indicates the necessity for immediately giving the legislature the power to create these port districts and make a start in the development of the water transportation of the State.

BRING THE CREDIT BILL HOME

IF you want to borrow money and have wondering just what all this talk about "extended credits" was going to mean to John Henry You—turn back to page three in this very issue of The Business Farmer and you will see the rural credits bill, analyzed, boiled-down and explained from the best authorities we could locate.

In a nutshell the value of the relief measure as adopted is going to be the extension of time allowed the producer of grains or live-stock in which he can market his product sanely and orderly. The oldest trick in history, has probably been the loaning of money to farmers on short time paper that came due just at the time the crop was being harvested, so that it was forced on the market, thus creating unnaturally low prices and consequent loss.

Of course, as with any innovation it would be easy to pick out the probable flaws in this piece of legislation. It has been roundly cussed by both those it is aimed to help and those it has promised to ruin. Republican and Democrat have united in defending and defaming this measure and yet it has won out and we are going to have a look at it in operation.

If you need money now for legitimate purposes in the conduct of your farming business, go to your local banker, sit down and talk over the situation with him frankly. State all of the facts regarding the loan you want. Do not try to cover or apologize for your actual needs. The legislation which has been enacted is avowedly for the benefit of you, the farmers of Michigan and every other state. If your local banker will not cooperate or cannot, in meeting your needs, let The Business Farmer hear from you and we will do our utmost to help get all the benefit possible from the new legislation for our readers in particular and for the whole farming business in general.

The Business Farmer is most anxious to see the credit machinery in actual operation and we are willing to lend our utmost support to that end.

PUBLISHER'S DESK

THE Publisher's Desk has been fairly swamped this past month with letters from hundreds of our readers who are in one kind of trouble or another, and we have attempted to the best of our ability to answer each promptly or to take any necessary action to secure the information which our readers have requested.

In a good many of these letters our readers tell us that they are willing to pay for our services, and I want you to know that the Business Farmer makes no charge of any kind to a paid-up subscriber, unless we find it necessary to supply legal assistance or expend money in some other manner, in which case, we will, in every instance, secure the written authority of our reader before we make any such expenditure.

You can always write the Publisher's Desk, knowing that there will be no charge for our services unless it is fully understood in advance, but I do wish that you would look at your subscription label before you write us, because we must confine this service to readers who are paid-up in advance, otherwise, naturally we would be taken advantage of by those who are not subscribers to the Business Farmer, or those who have not paid up. I think you will agree with us that this is no more than fair.

THE "COME-ON"

Dear Mr. Slocum—Will you please inform me through the columns of your valuable paper, to which I am a subscriber of the financial standing and reliability of the "Corporation" whose literature I herewith inclose. A lady friend of mine bought shares of their stock to the amount of about $1000.00 a couple of years ago, on which she has received cash dividends as high as five per cent, every three months. Last Oct. a representative of this "Corporation" informed my friend that all parties who had bought stock in the corporation were required to buy an additional number of shares of stock, the number of share being in proportion to the amount which they already held, and which in her case amounted to a cash payment of about $290.00, the additional call being made on stockholders for the purpose of creating a fund to enable the corporation to place its stock on the "curb" market. My friend paid her $290.00, signed some papers, the wording of which she did not understand, but which later proves to be a contract whereby she promises to buy 72 shares of stock at $16 per share, a total of $1,152.00 and that the $290.00 which she had paid was but the initial cash payment the balance of the $1,152.00, which is $862.00, being payable within six months or failing to do so she forfeits the $290.00 which she has paid.

My friend was given a written agreement which states that after thirty days or more, should she become dissatisfied with her investment, her money would be refunded upon request.

I am willing to pay you any reasonable amount which you may request for information which you will give or obtain for me regarding this corporation's financial standing, reliability, etc. Please do not publish my name."

* * *

I am reprinting the above letter in this column only because it illustrates the manner in which the "Oil Shark" operates, once he has a victim in his clutches he has many oily schemes with which to extract more money than the purchaser originally intended.

The Collection Box

The purpose of this department is to protect our subscribers from fraudulent dealings or unfair treatment by persons or concerns at a distance.

In every case we will do our best to make a satisfactory settlement or force action, for which no charge for our services will ever be made, providing:

1.—The claim is made by a paid-up subscriber to The Business Farmer.

2.—The claim is not more than 6 mos. old.

3.—The claim is not local or between people within easy distance of one another. These should be settled at first hand and not attempted by mail.

Address all letters, giving full particulars, amounts, dates, etc., enclosing also your address label from the front cover of any issue to prove that you are a paid-up subscriber.

THE BUSINESS FARMER, Collection Box
Mt. Clemens, Mich.

Report Ending March 27, 1923

Total number claims filed	1192
Amount involved	$21,214.29
Number of claims settled	723
Amount secured	$11,699.64

We wonder sometimes why a person will go so far afield to find an investment, or when the speculation is so wide as it is in the case of oil wells, or mining stock. They do say however, that most men and women at some time or other in their lives, take a fling at these two kinds of speculative investments; like the child who will not beleive that the stove is hot until it has burned it's tiny fingers! Although continually warned, there seems to be no end to the game, and it goes merrily along from generation to generation.

* * *

By-the-way, the most appropriately named oil well proposition that I have seen in some time, was sent in by a reader who asked what I thought of the "Rainbow's End Company, Unincorporated, Oklahoma City, Okla."

I don't know anything in particular about this company, anymore than that their advertising is very sensational, and I don't beleive I would care to invest in their proposition which is to lease at the rate of $1 per acre, with the understanding that "should oil not be produced on or before January 16th, 1929, the lease dies a natural death."

They must be getting hard up for names out in the Texas and Oklahoma district, when they call an oil company "Rainbow's End." I wonder if any company has grabbed the title "Will-O-the-Wisp?" That would in my opinion be equally appropriate.

A SORRY PLIGHT

Last summer an agent who gave his name and address as, Geo. McCanna, 416 East Water St., Milwaukee, Wis., called at our house and said he was selling an automobile polish receipt for twenty dollars. As I am a cripple, and I have a hard time getting any money, he said he would give it to me for ten dollars. I did not have ten dollars, so he said he would give it to me for five dollars. I bought the receipt from him. He said I could make the polish for fifty cents a gallon and sell it for four dollars a gallon. I gave the receipt to our druggist, he told me it would cost about $2.75 per gallon, for the ingredients, besides the bottles and labels. I hope you can get my five spot back through the collection box.

What do you think about those hand knitting machines, put out by the "Auto Knitter Hosiery" concerns.

Are these reliable companies? Are their machines all right, so that anybody can knitt socks on them. I mean people who are able to understand the machines—bright minded people? As I am a cripple and can not go away from home to work all day, I would like to buy one of these machines but some people say you cannot make the complete sock on the machine, so I am afraid to buy one.

—I am sorry I cannot help this unfortunate reader collect the amount he paid the agent over a year ago. We cannot handle claims over six months old. We have found there is little possibility of making collections of that age.

I can, however, save the reader money on buying a knitting machine, if he is determined to have one, altho I have yet to find anyone making a success of this scheme. I am sorry because I realize how much this reader would like to procure home work.

There are several cripples in Michigan who have built up a business taking subscriptions for papers and magazines, sending out circulars to their friends or to mailing lists in their counties. Perhaps this might be a suggestion for our friend who certainly has my sympathy and whom I would like to help in some way. Has any reader a suggestion to offer this ambitious, tho unfortunate neighbor.

Your warning about the land agent just in time as I was about to send $4.50 to have my place listed.—H. J. H., Sanilac county, Mich.

First Mortgage Real Estate Gold Bonds

Here is a new guide book to Safe Investment that you can have free, simply by asking for it. Mail us today your request for Booklet AG806.

Tax Free in Michigan
6 1-2% First Mortgage Bonds
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Are Better Bonds

FEDERAL BOND & MORTGAGE COMPANY
FEDERAL BOND AND MORTGAGE BUILDING, DETROIT

4 TIMES Around the World with ONE OILING
100,000 Miles Without Stopping for Oil

An inventor who could develop an automobile, a railroad car or any other conveyance on wheels which would perform such a feat would be considered a wonder. But such is the record of regular accomplishment by the Auto-oiled Aermotor during the past eight years in pumping water.

Did you ever stop to think how many revolutions the wheel of a windmill makes? If the wheel of an Aermotor should roll along the surface of the ground at the same speed that it makes when pumping water it would encircle the world in 90 days, or would go four times around in a year. It would travel on an average 275 miles per day or about 30 miles per hour for 9 hours each day. An automobile which keeps up that pace day after day needs a thorough oiling at least once a week. Isn't it marvelous, then, that a windmill has been made which will go 50 times as long as the best automobile with one oiling?

The **Auto-oiled Aermotor** after 8 full years of service in every part of the world has proven its ability to run and give the most reliable service with one oiling a year. The double gears, and all moving parts, are entirely enclosed and flooded with oil all the time. It gives more service with less attention than any other piece of machinery on the farm. To get everlasting wind-mill satisfaction buy the Auto-oiled Aermotor, the most efficient windmill that has ever been made.

For full information write **AERMOTOR CO.** Chicago Kansas City Dallas Minneapolis Des Moines Oakland

Auction Sale!
April 3, 1923

AN IDEAL DAIRY FARM HAVING:

A distance of only ¼ mile to R. R. depot.
A creek originating from a spring right on the farm.
The largest barn in community.
Large comfortable house and well arranged outbuildings.
A size of about 170 acres.

WILL BE SOLD AT AUCTION!
on Easy terms by widow of late owner
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THERE WILL ALSO BE SOLD
1 Cletrac Model M. Tractor,
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and the complete equipment of farm implements and household goods on the farm.
All in first class condition at
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Write for our Free Catalog! Shows you how you can save money by buying direct from *the largest Berry Box and Basket Factory in the Country.*

New Albany Box & Basket Co., Box 137 New Albany, Ind.

GOVERNMENT NEEDS RAILWAY MAIL Clerks, $133 to $192 month. Write for free specimen questions. COLUMBUS INSTITUTE, 0-4. Columbus, Ohio.

GENERAL

LET US TAN YOUR HIDE—COW AND Horse hides for fur coats and Robes. Cow and Steer hides into Harness or Sole Leather. Catalog on request. We repair and remodel worn furs; estimates furnished. THE CROSBY FRISIAN FUR CO., Rochester, N. Y.

TOBACCO

KENTUCKY TOBACCO—BEST OBTAINABLE 3-year-old leaf. Free flavoring and directions. Pay for tobacco and postage when received. Chewing 10 lbs. $3.25; smoking 10 lbs. $2.75. OLD HOMESPUN CO., Hawesville, Ky.

HOMESPUN TOBACCO. CHEWING 5 pounds $1.75; 10 pounds $3.00; 20 pounds $5.25. Smoking 5 pounds $1.25; 10 pounds $2.00; 20 pounds $3.50. Send no money, pay when received. CO-OPERATIVE TOBACCO GROWERS, Paducah, Kentucky.

NATURAL LEAF TOBACCO. CHEWING 5 pounds $1.75; 10 pounds $3. Smoking. 5 pounds $1.25; 10 pounds $2.00. Send no money. Pay when received. TOBACCO GROWERS' UNION. Paducah. Ky.

CORD-WOOD SAW FRAMES

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In *size*—often from 2½ to 3½ lbs.; in *flavor*—sweet, mild, unsurpassed; in *quality*—solid meat, almost free from seeds; in *yield*—not only produces larger fruit but more per plant.

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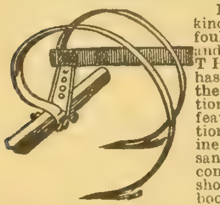

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What the Neighbors Say

TOO MANY OFFICIALS WITH HIGH SALARIES

SINCE the beginning of the World War there has been a mad scramble to supplant the old order of simpler American affairs with every sort and kind of Imperialism, and every sort of economic device imaginable. The concentric rings of this giant contest for survival of the fittest is now centered upon the farmer and his possessions.

An inventory of conditions shows the politicians have waxed fat on increased salaries for official jobs, the jobs have multiplied innumerably and every job is a planetary with a cluster of satelites of various little and functionary obligations. Equipment of the job that once consisted of a plain salary, an office, desk-room and modest clerical assistance, now involves all these in palatial and princely display and retinue. Auto conveyance and its operatives, electric fans and uniformed artists of the cuspidore. In the old saying, "the farmer feeds them all." It is not the feeding them that challanges his resentment but the little that most of them return for their services. We go out in the morning to feed the cows, presto—over night there has been a meeting of the Spook City Women's Club and an administrator of stables informs us our cows are facing the wrong point of the compass because they are nonresistant to T. B.

We stoke the furnace, and low—a fuel administrator has ordered choas out of consistency.

A farmer was asked "what is a fuel administration for?" Answer—"I don't know." A merchant was asked. Answer—"I don't know." A manufacturer was asked. Answer—"I don't know;" a coal dealer was asked. He pondered a moment and answered, "He's a damn nuisance to himself and a damage to the coal business." Then related how recently in the city of Greenville, Mich., a man seeking to engage in the coal business ordered a car of coal and a dealer's license. The coal came. The fuel administrator stated there were several dealers already doing business in Greenville and no need of more. The license was refused. Did I err when I said Imperialistic forces have been involved? Were I to ask a politician why have a fuel administrator he would lay his finger beside his nose and wink, I think. I have been in politics a bit and can answer the question this way.

The fuel administrator, like scores of other jobs, chiefly constitutes one more spoke in political machinery, that depends on its appointive creations for its chief support and maintainance. Everywhere, the propelling votes of economic industry are overloaded with idler wheels represented by political jobs.

If our Legislation wants to do a good job that would considerably reduce taxes, let them get out their broad ax and decapitate one half the political jobs in the state. Then cut back the salaries of the rest of officialdom to a "state of normalcy" beginning with the Governor and passing down to the members of the town ship board. There would be plenty of staunch, capable men willing to accept place for the prestige in it and there would be much less incentive to attract idlerrs and gamblers in affairs of public welfare to public trust.—J. E. Taylor., Ionia County, Mich.

A REMEDY SUGGESTED

IN your issue of February seventeenth is an article by S. H. Slagle of Herrietta, endorsing an article be me published in your issue of December 9, 1922. The editor's comment on Mr. Slagle's article is of a nature to lead one to believe that the editor is opposed to any plea that would give the farmer the full value of the product of his toil; and the reason for his opposition is based on the fact that Russia has attempted something of that nature and as a result of the attempt a great many people have lost their lives.

This is not the time or place to denounce or commend the Russians for what they have so far accomplished. To my mind the great lesson for us to learn from Russia is to see that our own country does not become like old Russia to a degree that will cause the farmers and wage workers to attempt violence as a remedy for their economic ills.

Conditions always determine our actions. Hence, the blame for any loss of life must rest on those having the power to prevent injustice failing to do so, and not on those who, because of their suffering apply the only remedy apparent to them in their desperation caused by starvation.

The trouble with most of those who suggest remedies for the difficulties of the farmer and wage worker is that they have not studied the nature of the economic system under which we now operate.

The nature of the competitive system must have been very well mastered by the late Bishop Williams, otherwise he would not have been able to utter the following words of wisdom:

"If the Lord in desperation—pardon the phrase—should say, I will feed these downtrodden starving children of mine, and rain brown bread and molasses upon the earth, it would do nothing to help the poverty of the world under our present system. It would merely raise the value of the land where the fall was heaviest."

Henry Ford is another of the few who understand our present economic system, as witness the following taken from "The Intimate Life of Henry Ford," written by Allen L. Benson:

"Our men work eight hours a day for a living because it takes all they can earn in that time to maintain themselves and pay their share of the general wastefulness and inefficiency of the world. Our workingmen do not get full value for the wages they spend. Nobody does. Every time anybody pays more for a thing than it is should cost to produce and sell it, he is helping to support those who are not producers and also paying his part of the penalty for not organizing the world on a scientific basis. Earning a living will be the smallest part of our troubles once we have learned to do without parisites and without waste. Too many activities are now non-productive. That is partly because of our faulty industrial organization and partly because of parasitism."

President Harding in his message to Congress December eighth, 1922, among other suggestions gave us the following:

"The widespread gap between production costs and prices which consumers pay concerns every citizen of the Republic. It contributes very largely to the unrest in agriculture and must stand sponser for the familiar term—the high cost of living. No one doubts the excesses traceable to the levy of the middleman; but it would be unfair to charge him with all responsibility before we appraise what is exacted of him by our modernly complex life. We have attacked the problem on one side by the promotion of co-operative marketing and we might well inquire into the benefits of co-operative buying."

Considering the opinions of the eminent gentlemen above quoted, are we not justified in looking upon the critisms of the article by Mr. Slagle as being somewhat unwarranted.

In an effort to right their wrongs the people of a country will adopt methods of a voilent nature against their economic masters. Ability to co-operate for the general welfare is our only proof of intelligence. The higher the state of civilization, the greater the co-operation for the elimination of waste of every nature. In my article in your issue of December 9th I stated that I was working on a program for the industrial emancipation of all wealth producers and useful workers.

I herewith submit it for the critism of the editors and readers of The Business Farmer. As a test of the soundness of the idea, organize from fifty to one hundred retail stores in an equal number of the most promising communities, have one purchasing organization for the chain. The saving will be as follows:

Retailers average gross profit 25 per cent, wholesalers average gross profit 15 per cent, manufacturers selling cost 10 per cent. Total amount saved, 50 per cent, less cost of co-operative retailing 10 per cent. Net saving 40 per cent.

To enlarge upon this in this article would require too much space; but I will endeavor to answer all critisms that appear in The Business Farmer as a result of the suggested method.—Joseph Warnock, Presque Isle County, Mich.

A PIONEER

I HAVE lived in Tuscola county ever since 1861. I know the Cass river country from Sanalac county to Huron county both sides for miles each way. When it was a wilderness I was where Cass City now stands, before there was a tree cut down and at Caro when there was only one board house and pine stumps and logs.

I could turn a hand at any kind of labor; I could fill the place of a lumber jack or a village cop but was no drunkard and always associated with all kinds of company. I took the first Caro paper that was printed in Caro by Grant Slocum. I took that paper as long as it lived, so I want the Business Farmer. I could write a pioneer life for weeks to come. I also know something about Macomb county, also Detroit.—L. H. D., Vassar, Mich.

ISLE ROYALE

I AM enclosing to you Isle Royale, in verse. I know this represents the sentiment of this my Huron County

Oh, beautiful island of splendor,
Ringing back to those manors of old
The tale of the ages recording
Word pictures so weirdly told.

'Tis a church, in our heart, forever enshrined,
For 'tis in league with mountains of snow,
And the prows of leviathans are ever inclined
To do homage in passing, so proudly in tow.

Great inland seas pass by in review,
And mutely enquire the way,
Their passport, the smiles of citizens true,
Who have in those beauties forever portrayed.

The serried cedars in array,
Their sombre beauty makes appeal,
That woodman may their fate delay,
God knows their plaint is ever real.

The noble beech whose bosom bland,
Is scarred by names of many lands,
Yet, trite, and dignified she stands,
Her drooping boughs are angel Wands.

The pensive pine whose towering spire
Had beckoned pilgrims to the shrine,
She gave her all, that homestead fires
Might kindle love, supreme, divine.
—George J. Barrie, Huron County.

PUBLIC FUNDS

THE article of C. H. A., page 15, Michgan Business Farmer February 3d, is right to the point. I heartily indorse his views. Farmers must plan better laws and methods and see that they are enforced if they ever get out from under the present unjust taxes.

The public gives liberally for support of public schools, state and national government, etc., and by so doing the people are in reality furnishing the population the machinery of government, and the capital which makes great accumulations of wealth possible. No person ever earned a million dollars. It was accumulated from the public, and the major part should, by law and justice, be returned in taxes to the public to whom it rightfully belongs. It is said there are three ways of getting rich—by labor, by gift and by stealing. Now labor is honorable, gift will not stand law, and if any man has millions and has not justly compensated the public for it, he should hang his head in shame and his photo should be in the rogues' gallery along with the lesses rogues that try to follow his example.

Appointment to the federal bench of attorneys of the Pierce Butler type who have long served great corporations, is viewed with distrust and alarm. The initiative and recall, with election by direct vote of the people is the remedy.—V. P. S., Alamo, Mich.

MICHIGAN CROPS

SWEET CLOVER PASTURE

DURING the summer of 1921 the Dairy Department in cooperation with the Farm Crops Department conducted a feeding trail of biennial sweet clover as a pasture crop. The lot pastured was a portion of a field of sweet clover used by the Farm Crops Department in a series of investigations.

The test was started on June 4 when three cows were turned into the lot. The clover had made a good growth and was an excellent stand, being from 37 to 42 inches in height in different parts of the field. Over 40 per cent of the plants were in bud, and nearly 15 per cent were in bloom. Another portion of this same seeding was harvested as hay at the same date and produced two and three-fourths tons per acre.

The cows used in this experiment had previously been on a mixed grass pasture and fed silage and grain in the barn. During the experiment were given no silage or other roughage than the sweet clover pasture. The cows were given approximately one pound of grain to four pounds of milk produced, and were on pasture continuously except while they were being milked or weighed. The average weights taken for three consecutive days at ten day intervals were taken as the true weights of the cows.

A total of 177 cow days of pasturage was obtained from this plot containing 1.46 acres. The cows produced 6,088.6 pounds of milk and 201.0 pounds of butterfat. At this rate one acre furnished roughage for 4, 170.3 pounds of milk and 137.67 pounds of fat. During this time the average production per cow per day was 34.4 pounds of milk containing 1.135 pounds of fat. During the 177 cow days there were consumed 1,452.5 pounds of grain or approximately one pound of grain for every 4.2 pounds of milk produced. Figuring the grain at $40.00 per ton and milk at 20 cents a gallon, $69.07 worth of milk was produced from an acre of sweet clover. With grain at $40.00 per ton and butterfat worth 40 cents per pound the cows produced $26.02 worth of fat per acre of sweet clover.

The cows neither gained nor lost an appreciable amount, weighing in the total practically the same when taken from the clover plat as they did when they were started on the experiment.

When the cows were first turned on the sweet clover pasture they did not eat it readily. There was a very limited amount of orchard grass and June grass along one fence and this was cleaned up entirely before the cows would eat the sweet clover to any extent. It was three or four days before the cows evidently acquired a taste and ate the clover with relish. One cow in the experiment, however, was not turned into the pasture field until after the small amount of orchard grass had been entirely eaten and she ate the sweet clover readily the first day.

The cows were allowed to eat the sweet clover every day and at all times of the day, regardless of whether or not the clover was wet with dew or had been rained upon. In fact there were several heavy storms during which the cows received no shelter and were allowed to eat freely of the clover afterwards. During the time of the experiment no animal showed signes of bloating.

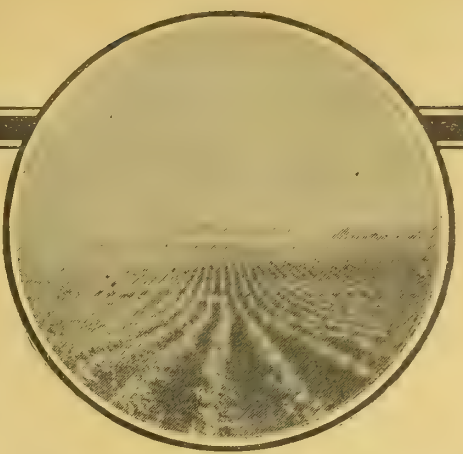
A considerable portion of the clover was destroyed, due to the trampling of the cattle and to their lying on it. Some of the main stems, after being trampled down, sent out new shoots. Without question, however, a considerable portion of the possible feed was lost in this way.

It is the belief of the authors that much greater value would have been obtained had it been possible to have turned the cattle on it three weeks earlier or before the sweet clover had obtained so much of a start. It is expected that this work will be carried on another year.—O. E. Reed, J. E. Burnett, Dairy Section.

POTATOES BOON TO MANKIND

THE lowly potato will now take on a new lease of life. Its position in the everyday standard of things must surely rise with the publication in Germany of a treatise on its many and varied uses, just received by the Department of Commerce from Vice Consul J. H. Wetmore at Breslau. Divers are the uses outlined. The first use of the potato is for the nourishing of man—in a raw or cooked state one cwt. is sufficient for one person for ninety days, with additional and usual food. In the form of potato flakes, 1 cwt. of raw potatoes gives 28 pounds of dry potatoes; the dried potatoes give 20.3 pounds of potato flour, 4.4 pounds of groats, and 3.3 pounds of waste. The second big use of potatoes is for the nourishing of animals—1 cwt. with other food feeding a hundred pound breeding hog 12 days. In the form of dried potatoes, calculated in starch values, 1 cwt. is equal to 1.15 cwt. of oats; therefore they are sufficient for a working horse for nine days. Compared with corn as a stock feed, 1 cwt. of potatoes produces 4.8 pounds of pork fat, 1 cwt. of dried potatoes 18.2 pounds and 1 cwt. of corn 20.2 pounds. The third possibility for potatoes is for technical purposes. In the manufacture of starch 1 cwt. of potatoes with 20 per cent starch gives 32 to 34 pounds wet, or 20 to 21 pounds dry starch, with a nadequate residue of pulp. The pulp is used for stock feed; in the distillery 1 cwt. of pulp gives 1 liter of pure alcohol; for the manufacturing of paper, buttons, broaches, and as fuel. On the other hand the dry starch is used as a foodstuff in bakeries, confectioneries, kitchens, and as potato grain for the manufacture of macaroni, noodles, chocolate, and for sausages. It also goes into vulnerary powders, paste bandages, pills, salves, and other pharmaceutical remedies. In other industries, potato starch is used as an addition in the manufacturing of ferments, washing powders and soaps, and as thickening filling for corrosives and colors. In a distillery, a hundredweight of raw potatoes produces 5 to 6 liters of pure alcohol and 80 to 90 liters of residuary liquors. The spirits are used for beverage purposes and for generating light. In the manufacture of dry yeast, 1 cwt of raw potatoes gives 6 pounds of the product.

A field of potatoes that any man would be proud to own



Michigan Farm Bureau Brands include the Best varieties of alfalfa, clover, seed grains and other field and grass seeds. Their Vitality, Description and Purity is guaranteed to be as represented to the full amount of the Purchase Price.

Certified Seed Corn · Beans · Soy Beans

Never before has it been possible to purchase in quantities at low prices such high yielding varieties of seed corn and beans in Michigan.

Farm Bureau Brands of Seed Corn are high yielding varieties most of which were developed through careful breeding at the Michigan Agricultural College and certified by the Michigan Crop Improvement Association.

They include certified M. A. C. Yellow Dent, Golden Glow, Duncan's Yellow Dent, Silver King, Pickett's Yellow Dent, also limited quantities of Illinois and Iowa grown fodder varieties.

We have seed corn adapted to all sections of Michigan of varieties that will give big returns for the slight increase cost of seed.

Farm Bureau Brand certified Robust Beans are the highest yielding white beans in Michigan and Highly resistant to disease.

Farm Bureau Brand Soy Beans, Black Eyebrow, Ito San and Mid West are excellent for an emergency crop, for ensilage, hogging-off with corn, and for green manure.

This spring purchase seed certified as to orgin, purity and adaptibility and you know your money time and labor will be invested not spent.

Buy Farm Bureau Brand Seeds of known value through your LOCAL CO-OPERATIVE. If they cannot supply you write direct to the

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BINDER TWINE

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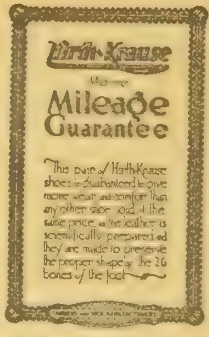
It is making the best twine that can be placed on the market and has a mixture of fiber this year. Manila is added to the sisal to give extra strength.

The State Farm Bureau and other organizations and dealers of the state are in position to handle your twine. If they do not, write direct for prices as we want you to use your own twine as we make 14,000,000 lbs. more than Michigan can use.

Michigan State Prison
HARRY L. HULBERT, Warden
JACKSON, MICH.



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100% WEAR COMFORT STYLE

On the better farms you always find implements of the highest type—**because** they assure the modern agriculturist long and efficient service and the greatest crop return.

Then why not assure yourself of the greatest possible use of your feet by protecting them, your health, and pocketbook by always demanding—**Grief Defying ROUGE REX SHOES For Wear and Comfort for Dad and Son!**

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—don't drive an automobile or truck without

Collision Coverage

NEARLY two-thirds of the entire number of claims paid in 1922 were collision claims, yet a great many members, either through oversight of misunderstanding, are still driving their cars without this protection.

Collision insurance is written in two forms, collision with moving traffic objects, including street cars and railroad trains, and accidental collisions with all objects either moving or stationary.

Compare our rates with the old line rates where the collision rate on a Buick car in the country district is $132.00 per year and in cities of the size of Bay City and Battle Creek it is $151.00 per year. Our collision rate is reasonable and yet affords good protection. Talk with your local agent about your collision insurance.

CITIZENS' MUTUAL
AUTOMOBILE INSURANCE
COMPANY of HOWELL, MICHIGAN

The Children's Hour

DEAR Nieces and Nephews: So many of you have written to me asking that I hold another contest, that I have decided to do so. This contest is to be different than any we have held so far and I hope all of you find it very interesting.

I wish to know which is the most interesting article or department in this issue of the Business Farmer, so here is an opportunity to help me decide and at the same time compete for a prize. Read this issue very carefully, pick out the article or department that you believe will prove of greatest interest to our readers and then write me a letter telling which article or department is your choice and why you think readers will like it the best. You can have your father or mother help you. Make your choice and you can discuss with them why it is most interesting if you desire, but you must compose your own letter. It would not be fair for you to have someone help compose your letter because then it would not be your own letter and even though it was the best of all received you would not be entitled to the prize. The contest closes Saturday, April 14th, and all letters received between the time you receive this paper and noon, Saturday, April 14, will be elegible for the prize providing they are of your own composition.

The prize—well, it is another "mystery prize" and even the winner will not know what it is until he or she receives it. If a girl wins she will receive something she will prize highly and if a boy is the lucky one he will win something he will enjoy very much. Don't you think it is more fun to work for a prize when you do not know what it is? I do. There are two things you wish to learn then—whether you won and what there was to be won. The prize I am offering is well worth working for and I hope you will all try and make this contest the best we have held. If you do we will have some more contests soon.—UNCLE NED.

OUR BOYS AND GIRLS

Dear Uncle Ned: May I join your merry circle? I am ten years old and in the fifth grade at school. I have three sisters and two brothers. One of my sisters was taken sick in school Monday and came home. There are twenty-one scholars in our school. I have seven studies. My birthday is the 18th of June. We have no woods. I have been learning to skate this winter. I wish some of the girls would write to me. Your niece, Lila E. Baker, Osseo, Mich.

Dear Uncle Ned and Cousins: Hello everybody. May I write to your merry circle? I wrote about a year ago. I live on an 80 acre farm. We raise mostly fruit, such as peaches, cherries, apples, a few plums and pears and we also have a little raspberry patch. I am in the 8th grade, and I am 13 years old. My birthday is the 1st day of January. I have two brothers and one sister. I weight 98 lbs. I was reading the letters in the Business Farmer last night and I happened to see that riddle by L. D. Biddle: a three cornered square, black as a bear, guess this riddle or I will pull out your hair. Answer: an old fashioned flat iron. I will close with a riddle and the one that guesses it right I will send a card to. Twelve pairs hanging high. Twelve knights came riding by. Each took a pair, yet it left 11 hanging there. I wish some of my cousins would write to me. I will answer all letters I receive. Bernice Mauer, Beulah, Mich., Box 156, K. & W. Orchards.

Dear Uncle Ned: This is the first time I have written. We have 250 pure bred Barred Rock hens. We live on a 50-acre farm. I have two brothers. The oldest is 12 years old and the other is 3 years old. I have no sisters. I am in the fifth grade at school and I have to walk one mile and a quarter. My father takes the Business Farmer and I like to read the Children's Hour. I will close with some riddles: Why is a airplane like a policeman? Ans.: Because he takes people up. Why is Sunday the strongest day? Ans.: Because all the others are week (weak) days. To what island should hungry people go? Ans.: The Sandwich Island. What tree is nearest to the sea? Ans.: The beach. I think I have written enough and will close.—Frances Marten, St. Louis, Michigan, Route 1, Box 6.

Dear Uncle Ned: I have been a silent reader of the Business Farmer and I thought I would write. I am a girl fifteen years old, March ninth. Have I a twin? I am five feet tall and weigh 100 pounds. I have long brown hair, I live one-half mile west of town on a one hundred and sixty acre farm. Do you like the farm? Well I do. Of course, I like to have a change once in a while but back to the farm I go. The grammar room and high entertain each other. The grammar room gave it last Friday and it was good. It was composed of two dialogues and a piece and songs. The junior class entertains this coming Friday. How many cousins like to skate? I like to skate, I think it is fun. I can roller skate too. The best ice we have had this winter was a week ago, but it has disappeared. Will some of the boys and girls write, I will try and anuswer all letters. I like to write them and receive them. Your niece. —Mable V. Robarts, Owendale, Mich., Box 6.

Dear Uncle Ned: May I join your merry circle? I am in the eighth grade at school and thirteen years old. I am in the calf club. I have a Jersey calf. We have seven head of Jerseys. I won first in the judging contest in Hillsdale County. I have four sisters and one brother. We had two or three days of summer last week and today is a regular blizzard. We take the Business Farmer and I like to read the Children's Hour. I like to ride down hill and skate on a large pond and play pomp-pomp-pullway. I go to the east Maple Grove school just across the road from our place. The answer to the riddle that L. D. Biddle wrote, three corners square, black as a bear, guess this riddle or I'll pull your hair, is a flatiron. My sister is going to write too.—Frank Baker, Osseo, Mich.

WINNERS IN "B" CONTEST FINALLY ANNOUNCED!

REGULATIONS which required that the master list be selected from contestants findings in the picture itself and the winning lists be based on the average, made a much longer job of correcting and auditing the lists of objects than was required in the "S" contest last year.

The Business Farmer appreciated how anxious were the contestants to know the final outcome and we take this opportunity of thanking all those who participated for their patience.

STANDING	CONTESTANT	ADDRESS	CORRECT WORDS	INCORRECT WORDS	PERCENTAGE
1.	Frances A. Smith	Memphis, Mich.	198	51	.7528
2.	[illegible] G[illegible]	[illegible]ton Lake, Mich.	184	[illegible]	.7479
3.	Mrs. C. D. Curren	Elmira, N. Y. R. 1	198	56	.7388
4.	[illegible] H. A. Anderson	[illegible], Mich.	196	65	.7374
5.	Grace G. Sanders	Tacoma Pk. Md.	193	50	.7366
6.	Mrs. B. A. Lehman	Coldwater, Mich.	212	81	.7235
7.	G. H. McBain	Lake City, Mich.	197	40	[illegible]
8.	R. E. Fletcher	Pellston, Mich.	132	50	[illegible]
9.	[illegible]	[illegible], Ala.	182	53	[illegible]
10.	Solomon Kellogg	Lake City, Mich.	178	52	.6742
11.	Grace D. Shimm	Novi, Mich.	182	59	.6715
12.	[illegible]	[illegible], Mich.	172	45	.6692
13.	[illegible] Bowman	[illegible], Mich.	173	47	.6679
14.	Ralph A. Bonnell	Sumner, Iowa	174	[illegible]	.6666
15.	Emma House	Frederick, Mich.	167	39	.6653

The master list of objects in the "B" Contest, will be mailed to anyone interested on request addressed to The Business Farmer.

What Co-operative Associations Are Planning to Do to Prevent Potato Landslide

(Continued from Page 4)

and disasterous year in the potato marketing business. Our freights have gone up, and the indications are that they will go still higher. That restricts our market when seven states are competing, one with the other."

It was suggested that if 15 per cent of the crop could have been kept out of the market the balance could have been handled profitably. The meeting was asked to consider whether it is possible to get together on a regional basis and work out some method of co-operatively handling the crop, and marketing on the basis of quality and guaranteed contracts between the grower and the sales organization.

North Dakota Having Its Troubles

Mr. Gorden Randlett stated that the potato industry has grown during the past few years in North Dakota because of the educational campaign put on by the Agricultural College, Farmers' Institute forces, Farm Bureäu and other organized effort with the effect that the potato acreage has increased from year to year with the consequence that North Dakota took its share of the grief.

This grief was brought about, not only by the glutted market, but partly by car shortage, improperly fitted product and also because of a system of buyers and commission agencies that haven't always done the square thing by the people with whom they deal. He suggested an educational campaign among growers to the effect that in case of over-production, 15 or 20 per cent of the crop should be held back on the farm and fed to stock and only the best 80 or 85 per cent shipped to market.

Minnesota's Experiences

Mr. Dunton, manager of the Minnesota Potato Exchange said: "I think we are all agreed that the big trouble this year is the result of over-production." He stated that one of the factors that seriously effects the problem is lack of quality. There is not only poor production quality, but inefficient local grading brings about results as shown in the following table:

Report from State Inspection, Minneapolis office.

1922	Cars Inspected	Cars U. S. No. 1
Aug.	35	1
Sept.	123	56
Oct.	461	190
Nov.	247	125
Dec.	45	27
1923		
Jan.	23	17

"One of the great faults of the present system is consigning cars unsold. The presence of 50 or more cars of potatoes in Chicago unsold and bidding for a market is one of the strongest factors in reducing the price.

"The unrealibility of the dealers is another factor that must be overcome. We haven't developed in this territory a satisfactory marketing system. I believe that the solution lies in creating large supplies of standard potatoes in the hands of a few strong organizations. The solution of the problem for any one state is impossible. Mr. Wells, the manager of the Michigan Exchange, stated that Michigan had gone as far as it was possible until the other states were organized. Michigan has a very strong organization; they have facilities for storage that will enable them to hold back their entire crop until conditions are favorable, and yet, last season 1,000 cars moved from Minnesota, South Dakota and nearby territory into the markets and broke the market, not only for Michigan, but for the entire west."

Mr. Dunton stated that Minnesota's largest problem right now is proper warehouseing. To this end he favors the organizing of two associations, a marketing association and a warehouse corporation. The associations for purely marketing purposes; where warehouses are needed they are organizing warehouse corporations. These are financed by the issuance of common stock to the growers and preferred stock to others, the common stock to eventually retire the preferred stock as business increases so that the warehouses will, in time, become the property of the growers.

South Dakota has also been seeing her share of woe. When she organized her association two years ago her great idea was to get all the growers possible to market thru the association. She sent out live men to organize the growers and they signed up about 60 per cent of the acreage in a little over a month's time. Result, that potatoes poured into the market and the first six days saw the association with 600 cars on track, unsold. This year the association has learned a few things. It handled fewer cars of better stuff and consigned no cars unsold.

The conference lasted all day; the committees on production, grading and transportation reported and their findings were turned over to the committee on organization, which becomes the permanent interstate committee. It cousists of A. M. Dunton, manager of Minnesota Potato Exchange; Gordon Randlett, Director North Dakota Agricultural College; Mr. Foster, Wisconsin Potato Growers' Association; J. J. Martin, manager South Dakota Potato Exchange; Mr. Wilson, Potato Association, Montana and Mr. Wells, manager Michigan Potato Exchange.

Meetings will be called in each state to discuss the reports of this meeting with the view of forming plans for state organizations along the same lines and that may be federated if so desired at some future time.

MILO D. CAMPBELL

Born 1851—Died 1923. See Editorial Page

FUR DEPARTMENT

EDITED BY A. R. HARDING

America's Foremost Author and Trapper

QUESTIONS ANSWERED

TANNING DEER SKINS

Will you kindly send me a receipt for tanning deer hides into soft buck skin leather.—E. J. S., Winegar.

—The skins should first be unhaired. This may be done in various ways, the simplest, however, is to soak in clear water until the hair slips. A tub of lukewarm water kept in a warm room will help this along.

When the hair and "grain" or epidermis can be readily scraped off, put the skin on the beam hair down and flesh it well, then turn it over and scrape off all hair and epidermis (loose outer hide). A steel tool, with a square edge, is best for this. A skate blade answers very well. If you perfer, the graining may be done before the fleshing.

Next dissolve a half bar of laundry soap in two gallons of warm water. While still warm put the skin in and work the suds well into it. Let it stand about twenty-four hours, take it out, wring and pull it dry. Keep working — pulling and wringing while drying—for the working has much to do with making the tanned pelt SOFT. Give it a coat of oil dressing of some kind, butter or grease will do, warm the water, add another half bar of soap and put in again. After twenty-four hours more take it out and pull and stretch as it dries. The more you pull and work with the pelt while drying the SOFTER it will be. A very thick skin may require a third soaking in the warm suds (and a third pulling and wringing) but twice should answer for does and young bucks.

When dry and soft, skins should be smoked with a punky or dozy hardwood fire; this should give them a nice yellow tinge, much better than can be done rubbing ochre into the buckskin, as is sometimes done.

QUICK! SNAP THESE UP!
Startling Values in U. S. Army Goods and Other Merchandise

ARMY CAMPAIGN HATS 97c
This hat is made of pure wool felt. They were manufactured under government supervision. Very practical for farmers, campers and boy scouts. Easily worth $2.50; sizes 6½ to 7¼. Special .... 97c plus postage

O. D. WOOL OVER-SEA CAPS 11c plus postage

GOOD QUALITY COTTON HOSE 9c plus postage

MEN, YOU CAN'T AFFORD TO PASS THIS UP
Rubberlined Raincoat $3.39
We defy competition on this remarkable value.
Men's raincoats, made of strong waterproof drill cloth, Pure gum rubber lining with two slash pockets; belt all around. A dressy and serviceable garment. Cloth is very closely woven. Is about 45 inches long. Sizes 36 to 46; at $3.39 plus postage

Khaki Breeches $1.79
Khaki lace leg breeches, made from closely woven durable khaki cloth, double seat. Double sewed throughout. Regular $2.50 value. $1.79 plus postage

Moleskin Breeches $2.49
These breeches are made like the above only they are made of extra fine quality moleskin cloth. $2.49 plus postage

ARMY PUP TENTS $1.79
U. S. Army, Class B, Pup Tents, cannot be distinguished from new, made with two halves that button together; will accomodate two persons and are absolutely waterproof. Folds up into a small bundle and only weighs 6 lbs. Just the thing for the camper or for a children's play tent. They can also be used as waterproof covers.
Regular $6.00 value ...... $1.79 plus postage
Complete with poles, 25c extra.

U. S. Government Auto Tow Lines 89c
Made of extra fine quality Russian hemp, ⅜ inch, waxed and oiled, making it extra durable and waterproof. About 27 feet long and equipped with steel loops and snaps on each end. A wonderful auto tow line. Hitch rein for animals, pulley rope, etc. Can be used for 100 purposes. Cost the government $2.50 a piece. Has six times the strength of ordinary rope, as proven by tests. Put one in your car. Special, each .... 89c plus postage

Guaranteed Six Months' Wear $2.97
You cannot really appreciate this shoe until you actually see it. Soft pliable uppers, full vamp, two full oak soles, sewed and nailed, leather inner soles. Regular $5.00 value. $2.97 plus postage
Write for our 1923 catalog —it's free

ARMY WOOL WRAP LEGGINS .... 79c plus postage
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WRITE FOR OUR FREE 1923 SPRING AND SUMMER CATALOG

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Guaranteed SATISFACTION or Money Back
Pay the postmaster on arrival. If after examining the goods you find that any part or all of the shipment is unsatisfactory, return the merchandise and we will gladly refund you in full. No questions asked.

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U. S. Army Khaki cotton blouse, made of closely woven cotton material, 4 flap pockets. Slightly used, but they look like new; $3.00 value; sizes 32 to 38 39c plus postage
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Do not confuse this shirt with inferior grades. Double sewed throughout, with 1 pocket, heavy roll collar, slip-over style. 97c plus postage

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We are proud to offer you this marvelous value in a scout shoe. Strong muleskin upper, durable chrome outer soles, barnyard proof. $1.97 plus postage
$1.97

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Do Not Send a Penny
Do not send a penny—pay the postmaster for the goods, plus postage on arrival. If after examining the merchandise you feel dissatisfied, return the goods and we will gladly refund your money.

AN EASTER HYMN

By Thomas Blackburn

AWAKE, thou wintry earth,
Fling off thy sadness,
Fair, vernal flowers, laugh forth
Your ancient gladness,
Christ is risen.

Wave, woods, your blossoms all,
Grim Death is dead,
Ye weeping, funeral trees,
Lift up your head,
Christ is risen.

Come, see, the graves are green;
It is light; let us go
Where our loved ones rest
In hope below,
Christ is risen.

All is fresh and new,
Full of Spring and light;
Wintry heart, why wear'st the hue
Of sleep and night?
Christ is risen.

Leave thy cares beneath,
Leave thy worldly love,
Begin the better life
With God above,
Christ is risen.

SPRINGTIME

DEAR Folks:—Springtime brings with it all the feeling of wanting to stretch ourselves and embrace the big outdoors, to see all the wonderful things coming into life and hear our birds busying themselves with building their new homes.

Our animal friends teach us a great lesson in the spring of cleaning house and freshening up their abode. All the things about us take on new life and seem to tell us to get busy. A new season is here and we must be up and to our task.

So let us take an inventory of our own and start this week with our own house-cleaning and fixing things up, both inside and out. I know it will bring with it a great deal of satisfaction and happiness in our minds. One of woman's chief problems is house-cleaning and all the wonders of going thru drawers and boxes getting out last summer's clothes and putting away the winter ones so that the moths and other pests will not destroy them before they are needed again.

Some feel house-cleaning a chore, but after one gets into the work and sees the wonderful results gained, not only in having the house-in-order, but that wonderful peace of mind that comes to us all when a job is well done.

Why not let us try this spring and have the outside of the house made attractive. You do not have to look with envy upon the town woman and think she is the only one that can have an attractive front-yard. Why not let us have John fix a fence or an enclosed place to let the chickens run in, instead of letting them roost on our front porches, and decorate our front yards. Why not have the children take an interest in keeping the animals in the back of the house.

Let us try this spring to see how attractive we can make the front of our houses, with a few shrubs and flowers. If you cannot afford to buy seed or special shrubs and flowers, I might suggest the woods flowers. They have a lovely charm all their own and will make very attractive rows or beds. The little labor put on these few things pays for itself in the happiness that almost amounts to pride. You will enjoy sitting there to do your sewing and rest when the day is done.

SUMMARY OF WHAT SHOULD BE DONE CLEAN-UP WEEK

CLEAN-UP week should be preceeded by a health sermon in all the churches and the Monday following should be give as a school holiday in order that the children may help in the home and community clean-up work.

Following is a general summary of what should be done:

1. Move out all rubbish, salvage what may be useful and burn the remainer; move, dust and clean well all pictures, furniture, drapery, carpeting, bedding, clothing, cooking utensils, and all the furnishings of the house into the open air and sun them all day. If the day set aside for cleaning is cloudy or rainy, use the next bright day.

2. Brush down walls and ceiling of all rooms; scrub and clean thorougly all floors and woodwork. Strong lye and hot water may be used on rough floors, but only hot water and good soap should be applied to painted or finished floors and furniture. Do not use lye water on anything that is painted. Now is the time also to paint, paper or whitewash such inside walls, ceilings and woodwark as need attention.

3. Clean front and back yards, scrape off surface dirt, level and mend walkways, and attend to hedges, flowers and shrubs. Clean barns, hen houses and pig pens, and remove all accumulations of manure.

4. The water supply should be carefully inspected to see that surface filth cannot get into it.

5. Sanitary privies and water closets should be installed or rerpaired and made fly-proof.

6. Make all needed repairs to house, out-buildings and fences. See that screens are tight, and free from holes. Be sure to use plenty of paint or whitewash. In whitewashing use plenty of good lime, and, to keep the whitewash from rubbing off add one quart of salt to each five gallons of whitewash.

The Farm Home
A Department for the Women

Edited by MRS. ANNIE TAYLOR

A NEW service department for women will be made possible thru these columns. Any questions will be answered to the best of my ability. I will gladly advise you on any problems regarding your home or personal affairs. I will gladly purchase for you any articles you might find if difficult to obtain in your own vicinity. Detroit has most everything and it could be sent to you C. O. D. Maybe you would like to match up something either in thread or material. I want you to feel free to write me anything you might have on your mind and know that it will be taken care of at once. We will call it "Personal Shopping Service Bureau."

CASH PRIZES FOR SIMPLE GARDEN LETTERS

In our next issue I am planning to devote this page to the garden and making our front yard more beautiful. Prizes will be given for the best suggestions which incur little or no expense. $2.00 for the best letter, and $1.00 for the next best letter. The next three best letters will receive a year's subscription to the Business Farmer.

Your Friend,
Mrs Annie Taylor

Address letters: Mrs. Annie Taylor, care The Business Farmer, Mt. Clemens

SLIP-ONS REVIVE OLD FURNITURE

TO get a change or an appearance of newness to your furniture, try the slip-on scheme. There is no limit to what these slip-ons will do for a room and you will also come to love your furniture.

New fashioned, sprightly slip-ons for furniture are made from crinkly chintz.

Very often the furniture becomes worn or shabby and the owner doesn't wish to invest in a complete new set. Here the slip-ons serve their purpose.

Just lay the material on the piece of furniture and cut exactly the same size. Cut the back length six inches longer and three inches wider than the back of the chair, if you wish to make your own slip-ons. In the same way cut the seat pieces. Keep the cretonne straight and let any large figure design come squarely in the middle of the back or seat. Extra pieces can be cut for the arm pieces and up over the back, giving the appearance or effect of an applied banding. The bottom may be straight or plaited. If cretonne is not available or used, awning or crash will do, but are not adaptable for plaiting.

WALLS AND COVERING

IT IS best to remove any old paper and if one does not want to paper with regular wall paper, butchers' or building paper can be put on with narrow strips, making a clean, nice wall. Where there has been no paper and the house is not lathed and plastered, beaverboard can be put on by some home folks. If you have good plaster foundation, the cold water colored mixture can be easily applied and stenciled. I rather like this finish as it is easy to apply and by getting a good quality it will not rub off and can be obtained in soft tones. Below are a few suggestions in color and design.

North exposure and rooms that seem cold and dark need warm colors—Yellow, orange and red.

If the room is small, light color makes it appear larger.

Dark colors are advancing colors, making large rooms look smaller.

Southern or western exposures require cool colors—Blue, violet, green.

Stripes make room appear higher.

Bright colors make one restless.

Red paper often causes headaches.

If one has several good pictures and wants them to stand out, it is best not to use patterned paper unless indistinct in design.

Be sure to choose colors that harmonize with rugs and furniture.

PUTTING WINTER CLOTHES AWAY

The winter clothes will look better and be worth more for wear next winter if they are cleaned, brushed and mended before being put away for the summer. Moths thrive best in soiled clothes, and it is most embarrassing to take out the winter suit or overcoat some frosty day in November and find it full of lacy little holes where the moths have been living in comfort all summer.

Mothers Problems

THE CHILD AT THE PENCIL-MARKING STAGE

A FRIEND made the remark to me when my first little boy was approaching two years: "He's just getting to the pencil-marking stage, isn't he? I suppose soon your books and your pictures, your paint and your wallpaper will bear his first scrawls." I was horrified at the thought. I saw no reason why they should be, and now, though the home has four little children, the paper. the paint, the books and the pictures remain undesecrated by pencil-markings.

Whether pencil-markings shall be everywhere in evidence rests entirely with you. Every normal little child finds pleasure in using a pencil. It is to him a delightful sensation when he finds that there is a result from merely moving the slender object in his hand on paper. Naturally he desires to make those funny lines, once he has discovered how. If, at that stage, he is not taken in hand and his efforts guided, pencil-markings will appear all over the house.

The mother who understands will not take the pencil away from the child, and forbid him to have one again. Instead she will provide him with a piece of paper "like Mama writes on" for his scribblings. When that piece is used up, she will provide another piece until the cravings to make marks has been satisfied.

Little children understand much more than they are oftentimes given credit for. If a mother will repeat when the baby wants to use the pencil he has picked up, "Mama give baby paper; baby make pencil go on paper; baby write on paper," she will be surprised to see how quickly the child grasps the idea, and how soon. when he desires to make marks, he will run and get a piece of paper.

Persistence and patience a mother must have. One lesson will not teach a little child. The lessons must be continued over a considerable period. The mother must be continually on the lookout. "Mama doesn't write on pretty books. See. book is all clean. Mama write on paper; Baby write on paper, too." And Baby will understand.

There really is no excuse for books and walls to be spoiled by the child and his pencil.—Margaret Bartlett.

EASTER DINNER IN YOUR HOME

EASTER is here and with it all the glory of happiness that comes to us on this particular Sunday. Why not help celebrate it with a suggestion of the day in our menu and have our table take on a different look. If it is possible have some flowers or even a little green of some kind in the center with a touch of yellow or purple ribbon. Let us have a meal in keeping with the day. The following is a very simple one and if not heavy enough any good meat will balance it. I have planned a menu with this in mind:

Oranges
Purple Jelly
Creamed Eggs on Toast
French Fried Potatoes
Buttered Asparagus in Lemon Rings
Twin Mountain Muffins Grape Ice
Washington Pie

Serve halves of large oranges with a little whipped cream colored purple in the center of each. Put a rather thick white sauce on buttered toast and on this place halves or quarters of hard cooked eggs. The yellower the yolks the prettier the effect.

Draw asparagus stalks or string beans which have been heated and seasoned through rings of lemon skins.

The twin mountain muffins are yellow. Cornmeal muffins are also.

Grape Ice: 4 c water, 2 c sugar, 2 c grape juice, juice 2 lemons, 1-2 oz. citron cut very fine (if desired).

Make a syrup of the water and sugar and boil for 10 minutes. Cool. Add the other ingredients and freeze.

If grape jelly is used instead of grape juice melt the jelly, add to the syrup and use less sugar. Determine this by the taste.

Washington Pie: 1-2 c fat, 1 c sugar, 2 eggs, 1-2 c milk, 1 3-4 c flour, 1-2 tps. salt, 2 1-2 tps. baking powder, 1-2 tps. vanilla or 1-4 tps. lemon extract.

Cream the fat, add the sugar gradually, then the eggs well beaten. Add the milk alternately with the mixed and sifted dry ingredients, then the flavoring. Bake in two layers in round tins.

Spread cream filling between the layers and over the top.

Cream Filling: 7-8 c (14 tbs.) sugar, 1-3 c flour, 1-8 tps. salt, 2 eggs, 1 tps. vanilla, 1-2 tps. lemon extract.

Mix the dry ingredients, add the eggs slightly beaten and pour on gradually the scalded milk. Cook 15 minutes in a double boiler, stirring constantly until thick, then occasionally. Cool and add the flavoring.

In the filling on the top arrange a circle or other design of purple cherries.

Hot Cross Buns

Hot cross buns, of course, are especially for Good Friday. In olden times, if eaten before any other feed on Good Friday morning, they were supposed to ward off witches, cure internal diseases and to protect dwellings from fire. They now have lost much of this legendary significance, yet they are still considered a delicacy of the Good Friday menu. Although properly belonging to Good Friday there is no reason why they may not be served on Easter if one wishes to do so. I give the recipe:

Hot Cross Buns: 1-4 c sugar, 2 tbs. fat, 1-2 tps. salt, 1 c scalded milk, 1-2 yeast cake disolved in 1-4 c lukewarm water, 3-4 tps. cinnamon, 3 c flour, 1 egg, 1-4 c raisins or currants.

Add the fat, sugar and salt to the milk. When lukewarm add the softened yeast cake, the flour and cinnamon gradually and the egg well beaten. When thoroughly mixed add the fruit. If raisins are used cut them in pieces. Cover and let raise over night.

In the morning shape in round biscuits, place in a pan, let rise, brush over with beaten egg. Bake twenty minutes, cool and with ornamental frosting make a cross on top of each bun.

Personal Column

Pomace stone to rub the rust off from needles and the sharpen needles is fine just rub them on a piece of stone.—J. D.

One way to save washing and ironing, make the best parts of old tablecloths into towel shaped strips and place across the ends and sides of the table. They can be changed often and are a good deal easier to wash and iron than a table cloth.—J. D.

We hear a lot of talk sometimes about women not having the meals on time, but very little is said about the men not being on time for their meals. The last is just as much of a nuisance as the first.—J. D.

We have the poem, "Briar-Rose" and find it too long to print in the paper, but will be glad to send it by mail if the reader who asked for it will send me her name and address.

Keep Away Moths

Apply gasoline with a sponge or brush to your carpets to keep the moths away.

Makes Furniture Shine

Old pieces of velvet or velveteen should be saved and used for polishing furniture.

What Will Remove Liniment Stain?

I have a large yellow stain on one of my best pillow slips, caused by a bottle of Turkish liniment tipping over on it and it seeped out through the cork. I have tried several things such as lemon juice, butter, sweet cream, etc., but nothing seems to do any good. I do not know anything about what the liniment contains as it does not tell on the bottle. It is oily and is or was put up at Portland, Mich. The label was dated 1906. Can anyone tell me something that will remove it?—Mrs. A. D.

—Has anyone ever had this trouble? Write me and let us help Mrs. A. D.

For Mrs. C. C.

We are indebted to Mrs. E. S. for the following information on cleaning feather pillows, requested by Mrs. C. C. a few days ago. Mrs. E. S. says to take a large clear pollow slip, open one end and pour the feathers into this bag. Then to make a suds of soap flakes using three parts flakes to one of borax. Wash in three waters and then rinse in clean warm water. When rinsed thoroughly hang bag on the line on a bright sunny day; fluff it often with the hands then take into the house to dry.

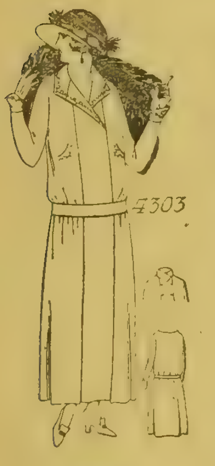
Mrs. S. H. S. sends in directions for cleaning as follows: Remove from cases to cheese cloth bag and allow feathers to hang in sunlight for two days or more. Wash ticking, then return feathers, she says.

—if you are well bred!

—You will never open another's letters.

—you will not enter the room of any member of the family without first knocking.

AIDS TO GOOD DRESSING

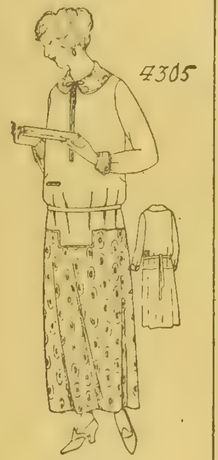

4303

EFFECT OF LINES IN DRESS

1. Perpendicular lines seem to increase the height of an individual and may be introduced into the costume by panels, plaits, rows of buttons, tucks or braid, etc.

2. Horizontal lines seem to increase the width of an individual and may be introduced into the costume by ruffles, tucks, braid, etc.

3. The more nearly a curved line approaches a straight line the more beautiful it becomes. An individual with very ample curves may straighten her curves by not drawing her dress in too tightly at the waist line.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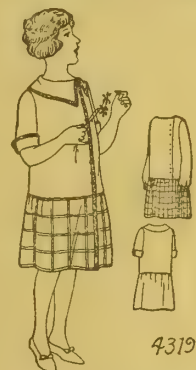
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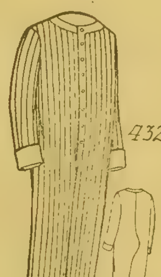
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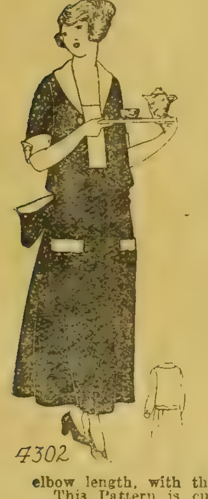
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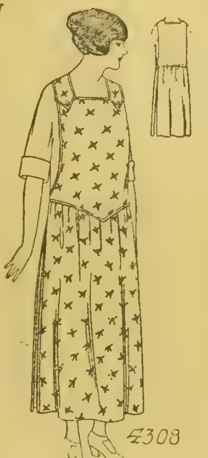
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A Stylish Dress in One Piece Style

4303. Taffeta, satin, serge or linen could be used for this model. The vest portions are crossed in double breasted style. The collar may be rolled high, or turned low.

The Pattern is cut in 3 Sizes: 16, 18 and 20 years. An 18 year size requires 5¼ yards of 40 inch material. The width at the foot is 2¾ yards, with plaits extended.

Simplicity and Good Taste Combined

4305. Here is a model that has attractive features, and is withal comfortable. Figured and plain crepe, or the same combination in voile or foulard, or linen and gingham could be used for this style.

The Pattern is cut in 3 Sizes: 16, 18 and 20 years. To make this style for an 18 year size will require 4¾ yards of 32 inch material. The width at the foot is 2¼ yards. To make the waist and sleeves of contrasting material requires 2⅛ yards of 32 inches wide.

A Simple Pretty School Frock

4319. Plaid or checked Gingham could be combined with chambrey or linine for this style. The collar may be omitted. The sleeve may be finished in wrist length with a band cuff, or in elbow length, with the shaped cuff illustrated The dress closes at the side.

This Pattern is cut in 4 Sizes: 6, 8, 10 and 12 years. A 10 year size requires 1⅞ yard of 36 inch material for the waist and 1⅛ yard contrasting material for the skirt. To make of one material will require 3 yards of 36 inch material.

A Comfortable Sleeping Garment

4329. Madras, cambric, silk or flannellette, could be used for this style. It is finished with centre back and leg seams. The cuff may be omitted.

The Pattern is cut in 4 Sizes for Boys: 10, 12, 14 and 16 years, and in 3 Sizes for Men: Medium, 38-40, Large, 42-44; Extra Large, 46-48 inches breast measure. To make the garment for a Medium size requires 4¾ yards of 36 inch material.

A Very Attractive House Frock

4302. Blue or black sateen with white dots, and with trimming of white linine, would be pleasing for this style. It is also nice for percale and gingham.

The Pattern is cut in 7 Sizes: 34, 36, 38, 40, 42, 44, and 46 inches bust measure. A 38 inch size requires 5 yards of 40 inch material. To trim as illustrated will require ⅞ yard of 32 inch material. The width at the foot is 2½ yards.

A Comfortable Apron Model

4308. This style should appeal especially to women of mature figure. The apron may be finished to close at the shoulders, or sides or to be slipped over the head. It is easy to make and easy to launder. The style is good for percale or gingham, also for other apron fabrics.

The Pattern is cut in 4 Sizes: Small, 34-36; Medium, 38-40; Large, 42-44; Extra Large, 46-48 inches bust measure. A Medium size requires 3½ yards of 36 inch material.

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CLAIM YOUR SALE DATE

To avoid conflicting dates we will without cost, list the date of any live stock sale in Michigan. If you are considering a sale advise us at once and we will claim the date for you. Address, Live Stock Editor, M. B. F., Mt. Clemens

Oct. 18—Holsteins, Howell Sales Company of Livingston County, Wm. Griffin, Sec'y, Howell, M

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Home of Merry Commander, Junior Champion at the recent International. Now is the time to buy. We have several young cows and heifers, bred to this wonderful bull, for sale. Also, several bulls and heifers of breeding age, from our other noted sire, Perfection Heir 3rd. Visit or write us at once.
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FOR SALE—REGISTERED GUERNSEY HEIFERS at reasonable prices, also choice bull calves of May Rose breeding.
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WE HAVE SOME FINE YOUNG ANGUS BULLS from International Grand Champion Stock at reasonable prices. **E. H. KERR & CO., Addison, Mich.**

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FOR SALE: BROWN SWISS BULL, TEN Months old. Carries the blood of Colage Bravura 2nd. **FRANK POET, R. 6, Clare, Michigan.**

Registered Brown Swiss Cow For Sale. 6 yr. old, to freshen May 10. Splendid milker. T. B. tested. Price $160. **Dewey Hartley, Kalkaska, Michigan.**

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RED POLLED CATTLE—A few choice bulls and heifers for sale.
ROYSTAN STOCK FARM,
Will Cottle, R. R. 1, West Branch Michigan

FOR SALE—OUR RED POLLED HERD BULL Cosy Ells Laddie, and a few heifer calves.
PIERCE BRO'S., Eaton Rapids, Mich. R. 1.

AYRSHIRES

FOR SALE—REGISTERED AYRSHIRE bulls and bull calves, heifers and heifer calves. Also some choice cows.
FINDLAY BROS., R 5, Vassar, Mich.

SWINE

DUROCS

THE BEST FALL DUROC PIGS IN MICHIGAN is at Michigana Farm, Pavilion. They are sired by State Fair winners of Sensation and Pathfinder breeding. Sept. pigs tall and growthy, weigh from 200 to 240 lbs., Oct. pigs 165 to 200 lbs. Priced to move in a hurry.
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PEACH HILL FARM offers choice weanling Duroc pigs, either sex [illegible]. Write us.
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HILL-CREST DUROCS, PERRINTON, MICH. We are breeding twenty sows and eighteen gilts to a son of GREAT ORION SENSATION. Yearling, spring and fall boars. **NEWTON & BLANK,** Farm 4 miles straight south of Middleton, Gratiot Co., Mich.

O. I. C.

O. I. C. BIG TYPE GILTS FARROWED MAY 15th, 22 weighing 300 lbs. Bred to Leighty Monster an outstanding boar. We have been [illegible] O. I. C.'s for 20 years.
NEWMAN'S STOCK FARM, Marlette, Michigan.

DAIRY and LIVESTOCK

ALEXANDER & BODIMER SALE WONDERFUL SUCCESS

ONE of the most successful livestock sales of the season was that of Alexander & Bodimer, at Vassar, on March 8th, where they sold 40 head of registered Chester White swine consisting of 36 bred gilts and one open gilt, two tried sows and one yearling boar.

The sale was held in a heated sale barn on the Alexander farm and the day was a fine one and there was a large crowd of buyers gathered from all parts of the state and other states as well, bidders being present from Illinois, Indiana, Ohio and Pennsylvania. The sale went with a bang right from the start and brought an average of nearly $62.00 per head.

No. 33 topped the scale going to Wilbur Jones of Reese, Mich., at $177.50. She was an open gilt sired by Alexander & Bodimer's great herd boar "The Monster" and from their champion sow "Long Beauty." She is certainly a splendid animal with great size for her age and as smooth as a ribbon. Besides Mr. Jones, Thomas Hile of Caro and the Detroit Creamery Co. Farms of Mt. Clemens were the opposing bidder. Detroit Creamery Co. Farms bought the tops of the bred gilts, Nos. 7 & 8, at $105 and $110 respectively. The whole offering was in splendid condition and at the prices paid should prove profitable investments for the buyers. Col. H. T. Walker of Montpelier, Ind., assisted by Cols. MacEldowney of Caro and Atkins of Vassar sold the offering in a very able and pleasing manner. List of buyers follows:

No. 1, Otto Neu, $50.00; No. 2, Wm. Hall, Vassar, $62.50; No. 3, Albert Hall, Fairgrove, $50.00; No. 4, M. Culbert, Fairgrove, $47.50; No. 5, Claude Cole, Caro, $65.00; No. 6, Henry Lane, Fairgrove, $65.00; No. 7, Detroit Creamery Co., Mt. Clemens, $105.00; No. 8, Detroit Creamery Co., Mt. Clemens, $110.00; No. 9, Thomas Hile, Caro, $70.00; No. 10, Knox Youngs, Reese, 65.00; No. 11, Clara V. Dorman, Snover, $50.00; No. 12, (boar) Thomas Hile, $75.00; No. 13, Crapo Farm, Swartz Creek, $45.00; No. 14, Roy Gardner, Fairgrove, $45.00; No. 15, C. Sodolski, Bay City, $55.00; No. 16, Claude Cole, Caro, $47.50; No. 17, E. Hodges, Colemen, $52.50; No. 18, Roy Jackson, Caro, $55.00; No. 19, Norris Miller, Fairgrove, $50.00; No. 20, Robert Aherns, Fairgrove, $50:-00; No. 21, L. H. Ald, Reese, $62.50; No. 22, O. Wriggelsworth, Howell, $65.00; No. 23, Mr. Vanderlip, Lapeer, $52.50; No. 24, Wiley Kirk, Fairgrove, $62.50; No. 25, J. C. Kirk, Fairgrove, $57.50; No. 26, R. Hamnet, $50.00; No. 27, Henry Rogner, Reese, $45.00; No. 28, Bruce Brown, Mayville, $55.00; No. 29, Lute Jones, Lapeer, $52.50; No. 30, Thomas Hile, Caro, $70.00; No. 31, John Howell, Ovid, $52.50; No. 32, Irvin Cross, Colling, $67.50; No. 33, Wilbur Jones, Reese, $177.50; No. 34, Findlay Bros., Vassar, $65.-00; No. 35, S. E. Lawrence, Britton, $62.50; No. 36, A. Gremmel, Sebewaing, $40.00; No. 37, A. Davis, Lapeer, $47.50; No. 38, J. Richards, Reese, $47.50; No. 39, N. J. Neal, Bay City, $52.50; No. 40, Crapo Farm, Swartz Creek, $50.00.

SPRINGTIME FOR HOLSTEIN BREEDERS

SPRING is a time of quickening life, and breeders of Holsteins in Michigan are acting springy. Five County Associations met within four days recently. The State Holstein field man, J. G. Hays, was called upon to attend these gatherings and to explain the extension program of the National Holstein Association, and to indicate how the county units should organize to get results from the Extension Service.

Monroe county started the fireworks with a meeting the 14th. The main interest in Monroe seems to lie along the lines of Cow Test Ass'n. work. Guy Doty, of Monroe, was elected as Cow Test Ass'n. deputy. E. L. Smith, of Adrian, president of the State Holstein Ass'n., was present and talked State Holstein policies to the breeders.

The second meeting took place the 15th in Lenawee county. Lenawee has been actively organized for several years, boosting different projects. At their gathering calf club work held the center of the stage. Earl Holmes of Clayton is the county calf club deputy.

The night of the 15th found the Wastenaw county breeders gathered for a banquet at the Huron Hotel at Ypsilanti. This was mainly a social affair—with a little fancy dancing by local talent to add to the good time. After the feed a short business session was held in which O. J. Feldkamp, of Saline, and Frank Geiger, of Rushton, were selected to assist Co. Agent Osler in pushing cow test work; and Jas. Sanderson was elected to work with Club Leader Watts in calf club work.

The following day the Livingston county ass'n. staged a meeting. The proportion of high class sires for the county held the main attraction here. J. E. Williams, dairy supt. for the Detroit Creamery Co. farms at Mt. Clemens, gave a talk regarding popular blood lines of the day, and told of his travels searching for an outstanding sire.

The week was ended with a meeting is Kent county. Advertising the breed and the Holsteins' milk occupied the breeders' attention. Members pledged their support to County Agent Vining in a project to locate several of the large "Bill-boards" in the county at strategic points.

Another sign of "Spring" in the Holstein business is the result of a couple of recent sales, on which prices showed a rising tendency.

Musolff Bros., of South Lyon held a sale March 10th, dispersing a herd of 54 head owned by the brothers on one of their farms. In this sale appeared many record animals, including four 30 lb. cows. Most of the offerings were either sired by or bred to King One Champion, King Petch Segic Lyons, or Maplecrest Application Pontiac. These sires represent good seven day and yearly records. Two cows brought the figure $610.00, one, Wabash Fayey 2nd, a showy five-year-old with 23.4 lbs. as a three year old and 689.25 from 16,601.9 milk in 10 months; the other a 28.66 lb. four year-old Johnna Korndyke Walker De Kol, her dam a 1,000-lb. cow.

The sale of H. T. Lewis at Elsie the 13th contained no large record stuff, except the herd sire, a two-year-old from a 1,000 lb. dam. He brought $300.00. However, the cattle were of good individuality, and the herd was fully accredited. The milking cows averaged $204.00 the young stuff, $137.00, and the calves $90.00.

The sale was topped by Inka Canary De Kol Aoggie, a 6 year old cow of great capacity and quality. She had no official record, but had milked over 100 lbs. a day on private test. She went to Colonel Shubel of Lansing for $540.00.

With cattle moving more freely, and at better prices in private and public sales and with breeders showing interest in organization it is apparent that the Holstein business is looking up in our state.—J. G. Hays, State Holstein Fieldman.

SCHAFFER BROTHERS' SALE

OUR first Annual Sale of Duroc-Jerseys was held March 13th, and thirty-seven head were disposed of at an average of $40.00. The top sale was $100.00 and several fine Gilts sold at from $60.00 to $65.00 and nearly all were taken by neighborhood farmers from Oakland and Macomb Counties and we hope that next year we will be able to take in a larger territory.

"Sensation Marsi," our herd boar is coming along fine and his two litters are real pigs, and we are now fitting him for County and State shows. We also have some very fine Sows, that we expect to show.

Mr. Walter Rice, formerly of Victoria, Ill., is now in charge of our herd and his many friends will be glad to know of his new location where he will be glad to hear from them.—F. J. Schaffer.

PRODUCING MILK TO SELL IN THE CITY

What are the state requirements in regard to the barns in which cattle are housed from which the milk is sold to people in a village? How much light must be allowed for each cow also is a plank floor with a drop sufficient? Has the state any objetion to horses being housed in the same barn? How far from the barn must the manure be carried? How must the milk be handled after it is milked, does there have to be a cement floor in the milk room where cooler is located? Do all milk utensils and bottles have to be steamed or can they be washed and kept clean with boiling water? What is the name of the state milk inspector?—W. H., Marcellus, Mich.

—This matter is not definitely covered by any regulations which we have. It is necessary under each individual case, to determine whether the milk is being produced properly or not. Definite requirements are, however, insisted upon by City Departments. We do consider inspection work, especially in places where city inspection is not carried out.

Barns in which cattle are kept should be reasonably tight so that dust, cobwebs, etc., are not prevalent in the stable. For a perfect score four square feet of light per cow is required. However, two square feet per cow is about the average. Objection is made to the keeping of horses with cattle when the horse stable is immediately adjacent to the cow stable. Many cities require a separate compartment for the cows. Manure should be carried at least 25 feet if possible from the cow stable, but no definite distance has been established.

A cement floor in milk rooms is practically required and if a cooler is used it should be located in a milk room free from dust, etc. Utensils may be either steamed or scalded. The inspecter who does most of this work for us is Mr. E. J. Friar.—H. H. Broughton, State Bureau of Dairying.

FEEDING VALUE OF SUDAN GRASS

I would like to ask what you think of Sudan grass for feed for horses and cattle? When should I put it in and what kind of ground does it grow best on?—R. C. A., Harbor Springs.

—Sudan grass has practically the same feeding value as timothy hay. It makes a fairly good emergency crop because the yield is good and the hay is secured the same season that the seed is sown.

Sudan grass is best adapted to good corn soil. It should be sown about the middle of May at the rate of from twenty to twenty-five pounds of seed per acre. An ordinary grain drill set to sow two pecks of wheat will sow approximately twenty-five pounds of Sudan grass seed. In the southern tier of counties two crops may sometimes be secured in one season, while in the central part of the state it is not likely that more than one crop will be secured.— C. R. Megee, Farm Crops Dept., M. A. C.

WRONG RATION

I am writing you in regard to my pigs. These pigs are about three months old. They look good, their hair is slick and in good growing condition. One day last week when I fed them two of them came up to get their meal and just touching the trough they would squeal and fall over on their sides and back and they would lie there for a while before they could get up, lingered along for two or three days and died. After these pigs died we opened them but could not find anything that looked wrong. These pigs have ground rye and corn together but mostly rye. The seven pigs weigh about fifty pounds each.—O. M., Mancelonia, Michigan.

—The trouble you are having with your pigs may possibly be due to worms, although from the symptoms which you describe, I would sooner think that it is due to the ration which you are feeding.

An excellent remedy for worms is the following: 2.5 grains of santonin, 1 dram Areca nut, .5 grains of calomel and 1 dram of sodium bicarbonate, for a 50 pound pig, given after the pig has been off feed 24 hours.

When purchased from a local druggist, this preparation is rather costly, but capsules or tablets containing any of these ingredients can be purchased from any reliable drug house and from most mail order houses.

Rations consisting of rye and corn are decidedly unsatisfactory for young growing pigs. These pigs are not getting nearly a sufficient amount of mineral matter, nor are they getting a sufficient amount of protein or muscle growing material. Furthermore, when rye is fed, pains should be taken to see that it does not contain much ergot, which may be easily recognized as kernels affected with this disease are black in color, elongated and crescent shaped.

Apparently rye is the cheapest feed which you have judging from the fact that you are feeding it in large quantities. I would advise that for these young pigs one-half of the ration in connection with rye should consists of wheat middlings and that for each 100 pounds of rye and middlings, you feed about 6 pounds of digester tankage. If skim milk was available, the tankage would not be necessary. In addition, these pigs should have access to some good mineral matter. We are using the following with our hogs this winter: 30 pounds finely ground lime stone, 30 pounds percipitated bone meal, 30 pounds salt, 10 pounds sulphur. They should also be given access to clover or alfalfa hay.—George A. Brown, Professor of Animal Husbandry, M. A. C.

VETERINARY DEPARTMENT

REMOVING CORNS

I have a horse that has corns on his front feet. What can be done to eradicate the corns?—T. F. K., Germfast, Michigan.

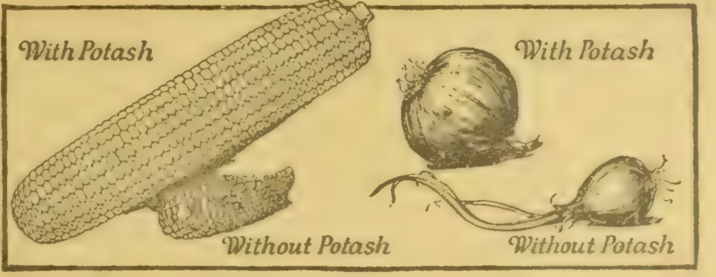
—The causes of corns are bad leg direction, poor quality of hoofs, injudicious dressing of the hoof such as leaving the toe too long, excessive weakening of the sole, bars, frog and the quarter are common causes. Hollowing the sole and unnecessary thinning of the branches of the sole in the search for corns is also a cause. Shortening one quarter too much in relation to the other so that the foot is unbalanced and the lower side is overloaded is a common cause. Shoes not level on the hoof surface, too short in the branches, and shoes whose bearing surface does not completely cover the hoof commonly causes corns. Allowing shoes to become loose and shifted in position is also a cause. Dryness is very injurious to hoofs and very favorable to the production of corns. Treatment consists in first removing the cause by restoring the proper form to the hoof by cutting down quarters that are too high, shortening a toe which is too long. Deeply digging out an area of blood stained horn is injurious. It is much better to thin the entire branch of the sole uniformly. The proper shoe is the bar shoe with some frog pressure unless the horse is suffering from side bone. The pressure should not be taken from the quarter walls unless they are sore. The care of the hoof consists in keeping it moderately moist and clean.—John P. Hutton, Asso. Prof. of Surg. and Medicine, M. A. C.

SECURE SERVICE OF VETERINARIAN

I have several cows I cannot get with calf, is there anything I can do?—A. V., Croswell, Mich.

—Failure to breed in most animals is due to disease of some part of the reproductive tract and is most effectively treated by local applications to the diseased part by one who has had some experience in treating diseases of the reproductive organs. The nature of this treatment is such that it cannot be applied by the layman. Some have recommended the oral administration of potassium iodide. This can act only as a tonic and is of questionable value. If a local veterinarian is available the best thing for you would be to have him make an examination of these cows and to determine if possible the exact nature of the trouble.—E. T. Hallman, Assoc. Prof. of Animal Path., M. A. C.

Farmers of the country buy 40 per cent of their food supplies, according to a survey of the United States Department of Agriculture. It is shown that about 9 per cent of the food consumed on farms can economically be produced locally, rather than being brought in from distant producing areas.



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FARM MECHANICS

AMOUNT OF POWER AVAILABLE FROM STREAM

I have a small stream dammed and have it fixed so I could shut it off until I would have water enough that I think would give me lots of power. I want to put in an electric light plant which would supply me with twenty-five or thirty lights. Also want to have it fixed so I could get power that would equal a six or eight horse power gasoline engine. I would like to have all the information I could get along this line.—A. F, L., Curran, Mich.

—I may say that before the amount of power which is available from the stream can be determined it is necessary to know something of the flow.

If the stream is now flowing it is possible to measure its flow approximately by taking the average cross section of the stream and multiply this by the distance which it flows in a minute and the result by 8-10. For example, a stream 2 feet deep 6 feet wide flowing 100 feet per minute will discharge 1200x.8 or 960 cubic feet of water the volume of water multiplied by the fall which can be secured, say 5 feet, given in the example would be equal to 4800 cubic feet or since water weighs 62.5 lbs. per cubic foot the result would be 300,000 foot pounds per minute. Divide this by one horse power or 33,00 foot lbs., which would give a trifle more than 9 horse power. This amount of power would be the total or the theoretical amount in the stream. There would be, of course, considerable loss in any kind of wheel or turbin developing this power, and also there would be some loss in storage batteries, if these were used, so in a rough way it would not be safe to figure more than 50% of this amount or 4½ h. p. for available use.

If the flow of the stream was not sufficient to produce power continually it might be dammed and the flow used for a part of the day or during the time that lights or power is wanted. With this arrangement the storage of power consists in storing it in the stream rather than storage batteries, this scheme would not be very advantageous if the power was located at a great distance from the house or source wanted. Perhaps if the head of water did not exceed 6 or 7 feet the turbin would be the most satisfactory and efficient unit for developing power. The smallest turbin requires about 350 cubic feet of water per minute and a minumum fall of not less than about 4 or 5 feet. If the fall is more than 6 or 7 feet perhaps the water wheel would be satisfactory and less expensive to install.—J. H. Musselman, Prof. of Farm Mechanics, M. A. C.

TINNING SOLDERING IRON

Can you tell me exactly through your valuable paper how to tin a soldering iron?—J. W., Walkerville, Mich.

—The following instruction should be closely observed.

General Soldering Instructions

A flux is any cleansing material which will remove grease from and prevent the formation of oxides on materials to be soldered.

For bright tin or lead, rosin or tallow may be used as a flux. For rusty materials, iron, brass or copper, a zinc chloride flux is best. This can be prepared by putting a few chips of zinc into hydrochloric acid, gradually adding more until the bubbling has stopped allowing an excess of zinc to remain. The hydrogen gas coming off is explosive and should be kept away from flames. Galvanized iron or sheet zinc should be cleaned with dilute pure hydrochloric acid before being soldered.

Salamoniac is a white crystalline substance which is used for tinning soldering bits.

A lap or flat seam is one in which the plates simply lap over each other for about one-quarter inch and are soldered in place in this manner. This is not a very strong joint and should be used only with very thin material and for light work.

A lock seam is made by doubling over an edge of each sheet hooking the two together and pounding them shut. This makes a strong joint after it is soldered.

A bead seam is only used for joining very thick pieces of metal and is made by beveling the edges down to about an angle of 60 degrees each thus leaving a space of about 60 degrees to be filled with solder when the two edges are butted together.

A cup joint is used for soldering together lead pipes or light tubing. It is made by spreading the end of one pipe into a cup or funnel shape and shaving down the other to fit into it.

An overcast joint is used for soldering lead pipe to short nipples or couplings. It is made by spreading the pipe to fit over the nipple and then soldering a sort of a lump right over the joint.

Soft Soldering and Tinning

All the common metals become oxidized when exposed to the air especially when they are slightly heated. As solder will not adhere to a surface that is ever so slightly oxidized it is necessary to apply somthing to the surfaces to be soldered which will guard against this oxidation.

The object in tinning is to coat the metals to be slodered with tin or solder to prevent this oxidation. In order to transmit the heat rapidly from the soldering bit to the work it is necessary to have the solder in close contact with the bit with no intervening film of copper oxide or carbon. This is why soldering bits are tinned before putting them into use.

Tinning copper bit

The bit should be placed squarely into the flame or fire so that it becomes evenly heated. When it is hot enough to melt solder rapidly, (not red hot) file the bit bright on two adjacent sides to a distance of about 1½ inches from the point. Do this rapidly so that the bit does not become too cold. Next rub these sides on a bar of salamoniac to reduce the oxide which has already formed. Then pick up your solder and melt a few drops of it on to the salamoniac, rubbing the bit on the two together at the same time. You will now notice that the two filed sides have a bright coating of solder on them which enables the bit to pick up globules of solder. If at any time the bit becomes red hot the tinning will burn off and it will be necessary to retin it. Care should be taken therefore not to overheat the bit.

Tinning Materials to be Soldered

Bright tin, copper, brass, zinc and lead need not be tinned before soldering, but sheet iron and rusted metal should be carefully tinned so as to insure a strong joint. All paint, rust or soot should be removed by scraping, filing or sandpapering. Now apply zinc cloride flux freely, after which rub the brightened surface well with the hot bit at the same time applying the solder. It may be necessary to apply flux and solder several times before the article is properly tinned. The article is now ready to be soldered, just like bright tin, which is as follows: If the pieces which are to be joined are liable to beshifted or pulled apart it will first be necessary to "tack" them together. This is done by applying a few drops of solder at several places on the work. It will now be necessary to know only a few general principles to do good soldering.

(1) First of all have your work well fluxed but do not flux too large an area at a time.

(2) Have your bit well tinned and hot. If you solder with a bit that is not much hotter than the fusing point of solder you will not be able to get the solder to flow into the joint but will simply cover it with a thin film. This is called skin soldering and should be avoided because it makes a weak joint.

(3) Do not try to solder with the point of the bit, but use as much of the flat tinned surface as possible.

(4) If possible hold your work in such a position that the solder will flow in place by gravity, it only being necessary to follow with the bit so as to keep the work hot.

(5) Do not run the bit over a place that has once been soldered as this only tends to make rough appearing work.

(6) Never put your bit down on iron or stone as this rapidly withdraws the heat and wastes time. Put it back into the fire at every opportunity.

(7) When soldering heavy or thick articles, (say a pipe to an iron tank) it will be necessary to heat the work to nearly the melting point of solder.

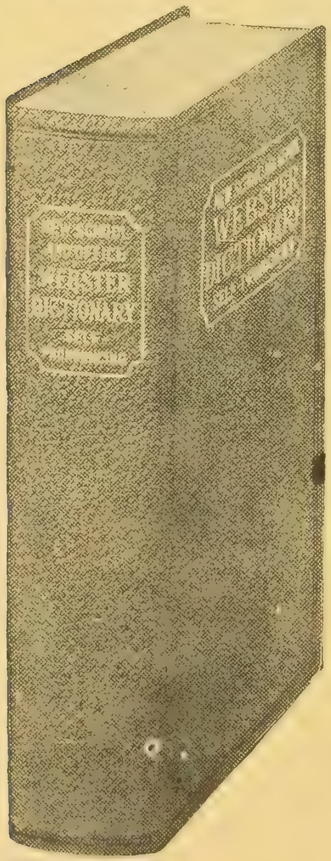
(8) To solder a flat or lap seam it is best to first tin one of the edges to be joined and then lay the other edge on top of it. Solder should then be run right over the outside of the lap.

(9) In a lock seam care must be taken to have the solder run well into the seam.

(10) When using a bit to pick up solder do not take it directly from the bar of solder because this tends to heat up the entire bar and leaves the bit cold. Instead of this melt a few globules from the bar and pick these up as they are needed.

(11) Leaks in washboilers and pails, etc., should be soldered from the inside.—E. C. Sauve, Ass't Prof. of Farm Mechanics.

A thousand pounds of hens need 8,278 cubic feet of air a day, while a thousand pounds of horse uses up only 3,401 cu. ft. of air a day. Hens have to breathe at a furious pace to keep up their high body temperature. Give them air.



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Poultry for Profit

EXPENSE IN REARING YOUNG CHICKS

THE embrayo chick finds all its parts in the white of the egg; the yoke is only its starting place and the last thing it does before breaking the shell is to surround the yolk, which becomes its food for the next three days, or longer if needs be. That is one of the reasons why the best time to ship away young chicks is within 24 hours after they are hatched. The chick's first great need is to be kept warm. In a state of nature the hen remains on her stolen nest unless driven off by hunger long after all the chicks have been hatched, and when one after another the chicks have come out from under her, picking at bright little pebbles and swallowing them for the millstones which are to grind their food, the hen calls them back under her, but the next time they stray further away, and then she goes with them to scratch and hunt for their food. From which we can learn that it is not necessary to feed little chicks the first 24 hours, and also that they should have fine grit to pick at when they are first fed food that needs any grinding; and there is not much fed to a chick that does not need grinding. If we, when eating, get a piece of stone between our teeth it sends a thrill of repulsion through us; but that sensation which is so unpleasant to us is delightful to a chick. Using clean sharp sand in a brooder, I have had chicks fill themselves full, crop and intestines, with the sand, probably because it felt good going down their little throats.

Careful Feeding

It is very unwise to overfeed young chicks; a little and often should be the rule. About three-hour intervals are considered right for a human baby, and like intervals during the first week would not be far wrong for young chicks. It is far better for them to be a little underfed than to be cloyed. After they are a week old a dry mash can be kept where they can help themselves. They will not overeat of that, for the reason that they cannot furnish saliva enough to moisten more than two or three mouthfuls, and dry they cannot swallow it. They also need some cracked grain, for that little grist mill, the gizzard, needs to work—wants a job. Water they must have, but so arranged that the chick cannot get in it. A very cheap drinking fountain is made by taking a quart tomato can, denting in the sides at the top, filling with water putting on the cover, then turning it bottom up. The chick can stick its beak into the cover where the indentations are, but cannot get in itself. The same thing answers for milk, if it is in liquid form. When it thickens a shallow tin pan with wire netting fastened over it answers very well.

Moisture needed

Chicks will thrive very well apparently for the first two or three weeks on a floor, whether covered with dry earth or not, but soon after that there will be trouble. They need moisture, dampness — They must wet their feet. But they must have dry quarters to sleep in at night. I have seen little chicks with their legs just skin and bone dried down for lack of moisture. I had to learn that by experience. My chicks had grown very well in the brooder house, but they gradually stopped growing, feathers stuck out rough, did not lie smooth and close to the body, some of them died; there was an outside run they could go outdoors when they pleased, but they did not go out much. It was in April, rainy, the top of the ground an inch of mud. I took one of the brooders and the chicks and put them out in that mud. In a week no one would have thought them the same chicks; not another chick died, their feathers smoothed down, they began to grow again, and I had learned something. Contact with Mother Earth is what they must have. President Smith, of the Massachusetts Poultry Association, used to raise "soft roasters" on the south shore below Boston. Hatching out thousands of chicks in the fall, as soon as large enough to do without artificial heat they were put out in little colony houses, and the snow swept away, day by day, to let them on the bare ground, even though it was frozen.

Experience With Turkeys

That subject of moisture needs investigation. We have always heard that young turkeys must be kept in until the dew was off the grass; they must not get wet. My neighbor, Mr. George V. Smith, editor of New England Farms, raised, or hatched some turkeys. For an experiment he let them run with the mother turkey wherever they pleased. I think there were nine of the young poults. Out in the dewy morning grass, out in thunder-storms, their umbrella the mother's wings, every night the nine came home. They found nearly all their food; a little was fed at night to induce them to come home. Week after week the nine were all there. Then a fox came into the game, and one by one they disappeared. I think he managed to save three of them.

Living Food

While chicks were still in the brooder house I have carried in a pailful of damp earth and dumped it in the little yard by the brooder, then mixed their cracked grain with dirt, so they would have to scratch for it, and if they found an occasional worm in the dirt then there was "racing and chasing o'er Canoby lea." That matter of taste. I have thrown a piece of worm down in front of a chick, and the chick would stand and look at the squirming thing, but if it ventured to take it in its beak then hesitation vanished instantly and it ran to make sure of having that delicious morsel all to itself, and never again would there be any hesitation when a worm was offered. It's a living food, and no kind of dead food equals it. I have not mentioned green food for chicks, but sprouted oats, lettuce or any tender green stuff it very good for them; almost essential to thrifty growth.

Brooding

During my last few years on the farm I did not use artificial brooders, using hens only for that purpose. I had 40 little A houses, 20 in a row, with 20 chicks to a hen. As they were all white chicks there was never any difficulty about hens refusing the chicks. I kept White Wyandottes and White Leghorns. Occasionally a Leghorn would sit long enough to hatch chicks, and when they do they make fine mothers; far less likely to tramp on their chicks than the larger breeds. I made a long pen in front of the row of 20 coops, dividing it into little pens, one for each coop, the pens being about six by five feet. this prevented the chicks from getting out of the mother's sight, or too to run for cover when the mother's skyward-looking eye descried a hawk.

Sprouted Oats

The green food problem was solved by covering the ground in these little pens with oats and spading them in about a week before the chicks were due to hatch. The hen soon taught the chicks what those green sprouts were for. They would dig up and eat the whole thing, the green sprout, the oat and the long white rootlets, and when they were getting scarce more oats were spaded. When the chicks got large enough to fly over the 14-inch boards forming the pens, the pens were taken away and the chicks left to run wherever they pleased.

The Row of Coops

Those rows of 20 coops were set facing the east. Why? Because it's cool early in the morning. The chick is out with the first streak of dawn, and the morning sun, rising far to the north of east, soon strikes directly into his little house, and he gets the sun's heat when he need's it. Take a row of coops facing the south; the morning sun strikes the back of those coops, the chick is in the shade, and not until 10 o'clock or after does the sun strike the front of these houses and in the midday heat the panting hen has no shade or

(Continued on Page 26)

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Reference, Holland City State Bank.

CHICKS WITH PEP, $11 per 100 and up

Selected Hogan Tested Flocks. Postpaid, full live delivery guaranteed. BUFF ORPINGTONS, WH. and SIL. WYANDOTTES, 50, $9.25; 100, $18: BARRED and WH. ROCKS, S. and R. C. REDS, MINORCAS, 50, $8.25; 100, $16. ANCONAS and HEAVY BROILERS. 50, $7.25; 100, $14. WH., BR. and BUFF LEGHORNS, 50, $7; 100, $13. MIXED, ALL VARIETIES, $11 per 100 straight. On 500, 5% off; 1,000 10% off. Ready February 26th. Free Catalog. Member I. B. C. A.

HOLGATE HATCHERY, Box B, Holgate, Ohio.

MEADOW BROOK FARM

CHICKS—ENGLISH WHITE LEGHORNS, BROWN LEGHORNS (Holland Importation Strain), 50, $7; 100, $13; 500, $62.50; 1,000, $120. BARRED ROCKS, REDS, BUFF LEGHORNS, 50, $8; 100, $15; 500, $72.50; 1,000, $140. WHITE WYANDOTTES (Heavy Laying Flocks), 50, $9; 100, $17. Postpaid, full live delivery guaranteed. All flocks composed of Selected Heavy Layers. Order now from this advertisement and get them when you want them. I have been producing good Chicks successfully for the past 20 years and KNOW HOW. I want your business and will try hard to please you. Free Catalog. Bank Reference. MEADOW BROOK FARM, Henry De Pree, Proprietor, Route 1 H, Holland, Mich. Member Michigan B. C. A.

BABY CHICKS

$10.50 PER 100 AND UP

From Hogan tested, well-kept and housed heavy laying flocks
Barred and White Rocks, Reds, Anconas, Minorcas: 50, $8.50; 100, $16; 500, $77.50
Buff Orpingtons, White Wyandottes: 50, $9; 100, $17.50; 500, $85
White, Brown and Buff Leghorns: 50, $7.50; 100, $14; 500, $67.50
Mixed: .... $11 per 100 straight
Postpaid, full live delivery guaranteed. Order NOW from this ad. and get them when you want them. Catalog free. ALSO EGGS FOR HATCHING. Reference, 4 Banks.
TRI-STATE HATCHERIES, Box 511, Archbold, Ohio

CHICKS THAT MAKE PROFIT

$10 PER 100 AND UP. From vigorous, pure-bred flocks on free range, selected for heavy-laying qualities and well cared for. Low prices considering exceptional quality. WHITE, BROWN and BUFF LEGHORNS, 50, $7; 100, $13; 500, $62.50; 1,000, $120. WHITE and BARRED ROCKS, WHITE WYANDOTTES, BUFF ORPINGTONS, ROSE and S. C. REDS, ANCONAS, 50, $8; 100, $15; 500, $72.50; 1,000, $140. Mixed, all varieties for broilers, $10 per 100 straight. Postpaid to your door and full live count guaranteed. You can order now direct from this ad and get them when you want them. Bank reference. Free catalog.

BLUFFTON HATCHERY, Box L, Bluffton, Ohio

SUNBEAM HATCHERY

The Chicks that I sell are produced under my personal supervision in a good, modernly equipped hatchery which is kept in best possible condition. The parent stock is carefully selected and of best heavy laying strains, kept on free range, well-housed and handled. Free from disease and properly fed. This enables me to produce strong, growthy Chicks which will mean PROFIT to my customers. PRICES: WHITE, BROWN AND BUFF LEGHORNS, 50, $7; 100, $13; 500, $62.50. BARRED ROCKS, R. AND S. C. REDS AND ANCONAS, 50, $8; 100, $15; 500, $72.50. WHITE AND BUFF ROCKS, WHITE WYANDOTTES, AND B. MINORCAS, 50, $8.50; 100, $16; 500, $77.50. WHITE AND BUFF ORPINGTONS, SIL. L. WYANDOTTES, 50, $9; 100, $18; 500, $87.50. I guarantee full live delivery by prepaid post. Get your order in now and I will ship when you want them. Bank Reference. Catalog Free. H. B. Tippin, Box E, Findlay, Ohio. Member I. B. C. A.

Rosewood Farm
Healthy, Hardy Chicks

Well-hatched, carefully packed and shipped. Select, heavy laying WHITE LEGHORNS, 50, $7; 100, $13; 500, $62.50; 1,000, $120. Select ANCONAS, 50, $7.50; 100, $14; 500, $67.50. Select BARRED ROCKS, 50, $8.50; 100, $16.50; 500, $80. Postpaid, full live delivery guaranteed. Our chicks will render you the best of satisfaction and you will COME BACK TO US. We have had long experience in producing good Chicks and our flocks are second to none. Circular free. ROSEWOOD FARM, R 12 A, Holland, Mich.

Day Old Chicks

From Select, Hogan Tested, Flocks on Free Range. Well-fed and handled to insure strong, vigorous chicks. Heavy Layers. PRICES: WHITE and BROWN LEGHORNS and ANCONAS, 50, $7.50; 100, $14; 500, $65. BARRED ROCKS, 50, $8.50; 100, $16; 500, $75. Hatched right and shipped right. Postpaid. 100% live delivery guaranteed. Bank Reference. Order direct from this ad. Circular free.

BORST & ROEK, Box P, Zeeland, Mich.

QUALITY CHICKS AT LIVE AND LET LIVE PRICES.
$10.00 PER 100 AND UP

FROM EXCELLENT PAYING, HEAVY LAYING flocks on unlimited range. Well-hatched, Sturdy, Healthy CHICKS in the following varieties: TOM BARRON ENGLISH WHITE LEGHORNS, 50, $7; 100, $13; 500, $62.50. PARK'S BARRED ROCKS and RHODE ISLAND REDS, 50, $8; 100, $10; 500, $72.50. From EXTRA SELECT flocks headed by Michigan Agricultural College cockerels. (Dams records from 230 to 270.) WHITE LEGHORNS, 50, $8; 100, $15; 500, $72.50. ROCKS and REDS, 50, $9; 100, $17; 500, $82.50. DELIVERED RIGHT TO YOUR DOOR BY INSURED PARCEL POST. 100% delivery guaranteed. Order NOW and from this ad as many were disappointed last year. Profitable Catalog FREE. Bank Reference.

LAKEVIEW POULTRY FARM
Route 8, Box 3, Holland, Michigan.

Good Chicks, Low Prices

BARRON TYPE W. LEGHORNS, BARRED ROCKS, S. C. REDS. Pedigreed Chicks from flocks mated with M. A. C. [illegible] 200 to 300 egg hens. Our [illegible] grade Chicks produced pullets [illegible] Get our instructive catalog, low prices, and special discount before you order.

MICHIGAN HATCHERY & POULTRY FARMS,
Box A, Holland, Michigan.

QUALITY BABY CHICKS S. C. Brown and English [illegible] write for catalogue. Cooks Poultry Farm, Holland, Mich.

CHICKS—SINGLE COMB BUFF LEGHORNS only. Strong healthy chicks from good laying stock. J. W. WEBSTER, Bath, Mich.

400,000 Chicks

Big, strong, Well-hatched Chicks from selected to lay stock on free range, properly fed and housed to insure health and vigor. WHITE, BROWN & BUFF LEGHORNS, 50, $7; 100, $13; 500, $62.50. BARRED & WHITE ROCKS, S. C. & R. C. REDS, ANCONAS, 50, $8; 100, $15; 500, $72.50. WHITE WYANDOTTES, 50, $8.50; 100, $16; 500, $77.50. BUFF ORPINGTONS, SILVER WYANDOTTES, 50, $9.50; 100, $18; 500, $87.50. POSTPAID. We guarantee full 100% live arrival. Reference, Citizen's Bank. Order direct from this ad. and save time. Free circular.

MODERN HATCHERY
Box F, Mt. Blanchard, Ohio

289 EGGS

289 Eggs in one year, actual trap-nest record. "LADY MICHIGAN" also made record of 283 eggs in one year. She laid 294 eggs in 381 consecutive days. Sons and daughters of "LADY MICHIGAN" are now in use in our matings for 1923. If you want

Real Barron Leghorns

Single Comb Whites, get our 1923 catalog and learn full particulars in regard to our flock which we have carefully bred for high-egg records for the past 21 years. Our best matings are made up of mature females with actual trap-nest records from 200 to 289 eggs.

Chicks and Eggs for Hatching

that will put the PROFIT into your Leghorn flocks. Write postcard for catalog today and before ordering Chicks or Eggs elsewhere. STRICK POULTRY FARM, Route 4 O, Hudsonville, Mich.

WASHTENAW HATCHERY

CHICK PRICES: March 26th and following hatches: Barred Rocks and Reds, 50, $8.50; 100, $16; 500, $75. White Rocks, White Wyandottes, 50, $9.50; 100, $18; 500, $85. White, Brown, and Buff Leghorns, 50, $7.50; 100, $14; 500, $65. From hatches due March 12th and 19th [illegible] Postpaid, full live delivery guaranteed. Our flocks are carefully selected [illegible] production. Order from this ad. Reference, Farmers and Mechanics Bank.

WASHTENAW HATCHERY, Ann Arbor, Mich.

BABY CHICKS White English Leghorns, Tom Barron [illegible] Barred Plymouth Rocks, S. C. R. I. Reds, Buff Orpingtons. All pure bred from selected stock. Live arrival gauaranteed. Postage paid. We do custom hatching. Durand Hatchery, Fenton, Mich.

BABY CHICKS REMARKABLE FOR SIZE [illegible] reasonable prices. Leghorns, Anconas, Rocks, Reds, Wyandottes, Orpingtons, Minorcas, Spanish, Brahmas.
TYRONE POULTRY FARM, Fenton, Mich.

relief from the direct rays of the hot sun, while with the coops facing east the hen is comfortable in the shade.

After most of the hens had weaned the chicks and begun to lay the chicks were moved into the corn lot, 300 ft. long by 180 feet wide. A strip 30 ft. wide by 300 long was sown thickly with oats and cultivated in; on the rest of the lot corn was growing. Having been educated in oats, the chicks did not bother the young corn to any extent. A row of houses 3x4 ft., were along the north side of that 30-ft. strip, and the chicks ran in the corn all summer, the corn forming both shade and shelter from hawks. In four years the chicks had practically denuded the ground of weeds. There were about 400 chicks in that lot, remaining there until time to be put into winter quarters.

Yes they do some damage to the corn, stripping the under part of the husk off and eating two or three rows of the under part of the ear. But the fifth year I raised 165 bushels of ears, 133 of shelled corn, on that lot, and all the cultivation it had was the cultivator run through it both ways twice. No hoeing whatever on the main part of the lot; on the south side furthest from the chicks, I had a strip of potatoes the previous year and that had to be hoed. I think 10 bushels would cover all the damage the fowls did to the corn. Foxes bothered, so I plowed a deep furrow around the lot, set posts at the edge of the furrow and put up a six-foot poultry-wire fence around it, letting the wire down into the furrow, and filling it so they could not dig under.

CAPONIZING

EVERYBODY is fond of chicken, but many do not know that capons have the same delicious meat, only more of it. Birds for broiling must be killed while they are still comparatively light in weight, in order to have them at their best, but cockerels when caponized can be brought to a weight four or five times that of the broiler, according to the breed, and still retain the tender, sweet flavored flesh of broilers.

It is difficult to state the exact size or age at which a cockeral may be most successfully operated upon, as different birds develop differently.

As a starting point, however the beginner will be safe in using birds weighing between 7-10 and 9-10 kilo if they are of the Plymouth, Rhode Island Red, Wyandotte, or Orpington breeds. Later as one becomes more familiar with the matter, the birds will be selected by their "look" rather then by weight or age. The proper time is just before the Cockeral begins to make comb, when the generative organs are about the size of a small navy bean. The organs are oval in shape, and at the time most favorable for caponizing are the size of a small pea.

The Operation

Previous to the operation the only preparation necessary is to keep the bird from food and water for thirty-six hours. This will allow the intestines to empty and subside, making the operation much easier and less dangerous.

The present mode of operating is to make a small cut between the last two ribs on either side. This is preferable to one large opening on one side, being easier on the bird and the wounds heal more quickly.

Lay the bird on its side on the operating table. Wrap a cord twice around its legs. Wrap another cord around both wings close to the body. Attach the other ends of these cords to weights like a small stone, letting them hang over the table side, holding the bird safely. A few feathers should be plucked just in front of the thigh, thus laying bare a small space just over the last rib. The surrounding feathers should be moistened to make them lie down and not interfere during the operation. The last two ribs should now be located by the forefinger of the left hand. Having located the ribs pull the skin as far toward the thigh or hip as possible, so that after the operation is completed it will go back to its place and entirely cover the cut between the ribs. With the knife in the right hand, insert it between the last two ribs, cutting through skin and flesh, being careful not to touch the intestines. Make the cut about 25 millimeters long. Insert the spreader, between the ribs, through the incusion, which will spread the ribs apart. Then with the hook pick the thin membrane covering the intestines. When this has been done and the intestines pushed aside the organ (testicle) will be in plain sight. In a bird of the proper age it will be a rich creamy yellow and about the size and shape of a small bean.

The care with which the operator grasps the organs without grasping the blood vessel, or the tissues surrounding it constitutes the whole trick of the operation. Having grasped the testicle with the forceps, twist them around a couple of times and pull them out and cut the twisted cords with a knife. Remove the spreaders and allow the skin to cover the opening between the ribs. In ten days there will be nothing but a shiny scar.

After the testicle is removed the bird is laid on its other side and the other testicle removed.

After the operation, the birds should be placed in a yard by themselves and fed on soft food for three or four days. It is well to examine the birds several days after the operation, to see if there is and swelling (wind puff). If there is, a slight puncture of the skin will correct it. —Progressive Agriculture.

STANDARD REQUIREMENTS OF GOLDEN POLISH FOWL

Will you please publish the standard requirements for Golden Polish fowls?—A. R. V., Croswell, Mich.

—We are giving the standard requirements for the Golden Polish fowl as stated in the American Standard of Perfection.

Disqualifications: Shanks other than blue or slaty-blue.

Male

Head: Face, red.
Beak: Dark horn.
Eyes: Reddish-bay.

Comb, and Crest: Comb, red. Crest, golden-bay, laced with black.

Neck: Golden-bay. Each feather laced with black; coverts, golden-bay each feather laced with black, lacing widest at end, forming two well defined wing bars; primaries, golden-bay, each feather ending with black, the black tapering to a point at lower edge; secondaries, golden-bay with well defined black lacings.

Back: Golden-bay, each feather laced with black; saddle feathers abundant, each feather laced with black, the texture of feathers giving a rayed appearance.

Tail: Golden-bay, each feather laced with black; lacing widest at ends; sickles and coverts, golden-bay each feather laced with black, lacing widest at end.

Brest: Golden-bay, free from mossiness, each feather laced with black, the lacing being proportionate to size of feather.

Body and Fluff: Body, golden-bay, each feather laced with black; fluff, bay, tinged with black.

Legs and Toes: Thighs, bay, each feather laced with black; shanks, and toes, slaty blue.

Under color of all sections: Slate.

Female

Head: Face, red.
Beak: Dark horn.
Eyes: Redish-bay.

Comb & Crest: Comb, red; Crest in pullets black laced with bay, which after first moult should be golden-bay laced with black.

Wattles & Ear lobes: Wattles, red. Ear lobes, white.

Neck: Golden-bay, each feather laced with black; feather in front of neck same as breast.

Wings: Bows, golden-bay, each feather laced with black; coverts, golden-bay, each feather laced with black and black growing wider at the extremity; primaries, golden-bay each feather ending with black and black tapering to a point on lower edge; secondaries, golden-bay with well defined lacings.

Back: Golden-bay, each feather laced with black.

Tail: Golden-bay, each feather laced with black, the black being wider at outer end of feather.

Brest: Golden-bay each feather laced with black.

Body & Fluff: Body, golden-bay, each feather laced with black; fluff, a lighter shade of bay tinged with black.

Legs and Toes: Thighs, bay, each feather laced with black; shanks and toes, slaty blue.

Under color of all sections: Slate. —E. C. Foreman, Associate Professor of Poultry Husbandry, M. A. C

PARALYZED CHICKS

My white Leghorn chicks act as if they were poisoned. They seem to be paralyzed in both legs, fall down, stretch out, quit eating and finally die. They are three weeks old. When they were taken sick I was feeding cracked wheat, cracked corn, chick feed, green grass and chicken grit, before them all the time. I cut out the corn, wheat and chick feed and have been feeding rolled oats, bran, grass and sour milk; have also put permanganate of potash in the drinking water.—Subscriber.

—The trouble is digestive unquestionably. I have seen s--- troubles developed by feeding moldy bran, and it might come from any kind of spoiled or dirty feed. If you have kept all these different feeds before them they have overfed unless they are on range and pick up so much that they do not care much for what is before them in the r-- And that green grass—do you mean that you feed it long just as is comes from the mower, or do you run it through a cutter? If they are trying to eat it without cutting up their little crops may be full of long pieces of grass which they cannot manage. Rolled oats, bran and sour milk make a good ration if you add some hard grain. They need grain to keep their digestive organs strong. The potassium permanganate is an antiseptic but not a remedy for indigestion. As they are a month old by this time they should have a good growing mash. Keep this before them only half a day at first. After a month you can lengthen the time gradually till at the end of the third month it is before them all day. Feed mixed grain morning and evening, either in litter or spaded into the ground if you have not litter. They should by this time be through with chick feed and eating whole wheat and Egyptian corn or cracked corn. Keep the sour milk before them, and feed cut greens at least once a day. It is better to put the green before them about 9 o'clock and let them pick at it all day. Alfalfa and lettuce are the best greens for young chicks, but lettuce is not practicable for a large flock.

SOFT SHELLS

What shall I do for a Light Brahma pullet six months old that lays soft shelled eggs? Her first egg was double yoked and since then she has laid two perfect eggs and several soft shelled. Last night she dropped two at roosting time and I found another under the roost this morning.—Subscriber, Calhoun County.

—Your ration must be to forcing. If you are feeding a laying hen mash change to bran for a week or so and be sure to give plenty of green and keep oyster shell before her. Brahmas mature slowly and should not be pushed for eggs till they are eight or nine months old.

SMALL EGGS

One of my Anconas laid a tiny egg with just a speck of yolk. I have been told this is the last egg off a clutch and that after a rest the hen will begin laying again.—Subscriber, Clayton, Mich.

—Pearl, Surface and Curtis in "Poultry Diseases and Their Treatment," say that these little eggs do not mark the end of a laying period but may be produced at any time. They are usually laid when the bird is in a very active laying condition, and the white seems to form about some foreign body, such as a piece of hardened albumen, a bit of coagulated blood or a small piece of yolk which has escaped from a ruptured yolk. The egg you found was probably formed about a piece of ruptured yolk.

CULLING REDS

I am hatching from a dozen R. I. Red hens mated to a rooster that is the son of a prize winner. What points shall I take into consideration when I come to cull my spring chicks? When should I begin to cull?—R. B., Clayton, Mich.

—You should have a late Standard of Perfection if you think of raising show stock and you should also look at birds that have won prizes. In general, exhibition Reds should have dark, briliant red plumage, free from white, but with black in wing and tail feathers. They should have long, straight backs and the male should have a five point comb. Weight is very important. No bird that is much below standard weight should be considered as an exhibition possibility. Do not begin to cull, except to remove sickly or backward birds, till the males weigh 2½ to 3 pounds. You can tell then whether they will be even in color and blocky in build. All but the best should be sent to market as fryers for there is no market for breeding cockerels that are not fairly up to standard. Pullets should not be so readily discarded for they may make good layers in spite of white feathers of other disqualifications. If you really want a good standard bred flock, however, it is best to get rid of all that are not good color and size.

FINE MEAT SCRAPS MAKE BEST MASH

MEAT scraps in the home-mixed mash for poultry should be ground fine to prevent waste and to insure uniform distribution to all indiviluals of the flock, say poultrymen at the Ohio Experiment Station.

The coarser meat scraps do not mix uniformly with the other ground feeds, so the birds pick over the mash for the particules of meat, causing much waste and what is worse permitting a few birds to get more than is good for them while others are unable to get what they need. After the fresh supply of mash is picked over it is difficult to get the mash consumption required for profitable egg production.

If the other mash ingredients are of proper texture the final mixture will be a uniform product and palatable. To make a mash of this kind standard wheat middlings is preferable to coarse bran and coarsely ground oats or alfalfa.

Many dealers do not carry the fine meat scraps in stock, but it can be obtained from them by special order at the same price as the coarse. When the feed dealer orders meat scraps the coarse product is sent unless the fine meat scraps is specified.

A SENSIBLE EGG CARRIER

A CHOCOLATE or broken candy pail that can be had for a song at any grocery store, makes and excellent egg carrier when treated in the following manner: Take a sheet of the corrugated brown paper board used in wrapping for breakable articles and line the sides and bottom of the pail, as shown in the cut. Then cut circles from other pieces of the same material to use between each layer of eggs, smaller circles for the bottom, increasing in size as the top is approached. Eggs can be gathered from the nests in such a pail and carried to market, with reasonable assurance that few, if any, breakages will occur. The cost of the whole will be but a trifle, and your own grocer may give you all that is needed for the carrier. The corrugated paper can be obtained in large sheets from grocers, to whom it has come packed about breakable goods.

GOOD BROODER ESSENTIAL TO SUCCESS WITH CHICKS

THERE is many a good brood of chicks ruined by worthless brooding arrangements. Some persons can take care of a few chicks in any kind of basket or soapbox arrangement behind the kitchen stove, while others taking hold of the same outfits would fail every time. All such things are but veritable makeshifts at best. If you care to make a real success of raising what chicks you hatch, better put aside all recommendations for fireless brooders, and invest in a good roomy reliable brooder. One that has some reputation behind it, and can produce results which are claimed.

There are various kinds of brooders. In the first place, there is the old-fashioned kerosene lamp heated brooder, which is pretty good, but we think a much better one is the so-called blue flame kerosene heater, which produces a flame very similar to the blue flame cook stove. These are the best of that kind of brooder. Then where a good many chicks are to be brooded in a right cold climate, the hard coal or soft nut coal stove heater for heating a brooding house is good. They are, of course, not calculated to use where a hundred or two chicks are to be warmed. The gist of the whole matter is that no matter what number of chicks you are to take care of from 50 up, do not try to economize by not investing in some kind of a brooder.

BRED TO LAY CHICKS DIRECT from large Modern 65 acre Poultry Farm Result of ten years of careful breeding for heavy egg production. Winners at leading shows. M. A. C. Inspected and Approved. 100% live arrival guaranteed. Shipped Postpaid. Bank reference. Order at once at these prices or write for Catalog. BARRON ENGLISH WHITE LEGHORNS, BROWN LEGHORNS and S. C. ANCONAS. EXTRA SELECT, 50, $7.50; 100, $14.00; 500, $65.00; 1,000, $125.00. SELECT, 50, $6.50; 100, $12.50; 500, $60.00; 1,000, $115.00.

TOWNLINE POULTRY FARM, Box 27, Zeeland, Michigan

GUARANTEED RURAL CHICKS

EXCEPTIONAL VALUES IN HIGHEST QUALITY, proven layers. Pure-bred S. C. Barron White Leghorns, Heavy Laying Brown Leghorns, Select Anconas. Heavy Winter Layers. Result of constant breeding for high flock averages. Buy direct from large modern hatching and breeding institution. All stock scientifically culled and approved and headed by large vigorous males. New low prices. Sent postpaid. 100% live delivery guaranteed. Write for fine 1923 catalogue. Its free. Reference: Two Banks.

RURAL POULTRY FARM, DEPT. B. R. 1, ZEELAND, MICH.

CHICKS, $10 per 100 and up Postpaid to your door and full live count guaranteed

Varieties Prices on	50	100	300	500	1,000
WHITE, BROWN and BUFF LEGHORNS	$7.00	$13.00	$38.00	$62.00	$120.00
BARRED ROCKS, BLACK MINORCAS and ANCONAS	8.00	15.00	44.00	72.00	140.00
WHITE ROCKS, WHITE WYANDOTTES and REDS	8.50	16.00	46.00	75.00	145.00

BUFF MINORCAS, 50, $13; 100, $25. MIXED CHICKS FOR BROILERS, 50, $6; 100, $11; 500, $50. Postpaid. Full live delivery guaranteed. Hatched in the best possible manner from good, vigorous, pure-bred, heavy laying flocks on free rangs. Carefully selected and packed to go safely. No catalog. Order right from this ad. and save time. Reference, Citizen's Saving Bank. You take no chances.

THE EAGLE NEST HATCHERY, Box K, Upper Sandusky, Ohio
Only 7 hours from Grand Rapids. Can reach any point in Michigan in 24 hours.

DON'T BUY CHICKS

4½ Months Old and Laying

until you get our prices as we can save you money on English Leghorns, Barred Rocks and Anconas, that will lay when egg prices are highest. Mr. M. W. Sellers, Route 1, Saginaw, Mich., writes: "I made better than $1200.00 last year from 425 pullets in 5 months." Write today for free catalog and our contest offer and our ironclad guarantee. We are breeders and practically about the only so advertised poultry farm in this vicinity.

RIVERVIEW POULTRY FARM, Route 2, Zeeland, Michigan

CHICKS $12.00 per 100 and Up

100% SAFE ARRIVAL GUARANTEED

PRICES—WHITE, BROWN and BUFF LEGHORNS, 50, $7; 100, $13; 500, $60. BARRED ROCKS, S. C. and R. C. REDS, ANCONAS, B. MINORCAS, 50, $8; 100, $15; 500, $70. WHITE WYANDOTTES, WHITE ROCKS and BUFF ORPINGTONS, SHEPHARDS 331 EGG STRAIN ANCONAS, WHITE MINORCAS, 50, $8.50; 100, $16; 500, $75. MIXED, 50, $6; 100, $11; 500, $50.

Hatched from selected heavy laying flocks that are well fed and cared for, insuring strong, livable chicks that will make a profit for you. POSTPAID TO YOUR DOOR. ORDER DIRECT FROM THIS AD and SAVE TIME. Catalog free. Reference, Geneva Bank. THE GENEVA HATCHERY, Box 505, Geneva, Ind.

GUARANTEED CHICKS

Hatched from High Laying Quality Fowls on free range, properly fed and housed to insure strong Chicks.

BARRED ROCKS, S. C. REDS, MINORCAS, ANCONAS .50, $8; 100, $15; 500, $74
WHITE WYANDOTTES, BUFF ROCKS..........50, $8.50; 100, $16; 500, $78
WHITE, BROWN and BUFF LEGHORNS........50, $7.50; 100, $14; 500, $65

Postpaid to your door. 100% live delivery guaranteed. Catalog free. Bank Reference.

MORENCI HATCHERIES, Box B, Morenci, Mich. Member I. B. C. A.

Karsten's Farm --Quality Chicks--

that will lay and pay. The famous BARRON STRAIN ENGLISH WHITE LEGHORNS, ANCONAS AND BROWN LEGHORNS QUALITY BABY CHICKS CAN NOW BE PURCHASED AT PRICES UNHEARD OF BEFORE. SEND FOR CATALOG IT TELLS HOW AND WHAT TO FEED YOUR POULTRY FOR PROFIT. REMEMBER WE SHIP DIRECT FROM THE KARSTEN'S FARM, Zeeland, Michigan, Box 102.

300,000 Chicks Guaranteed Michigan Bred and Hatched

ENGLISH WHITE and BROWN LEGHORNS, SHEPPARD'S Famous Strain ANCONAS, 50, $7; 100, $13; 500, $60. BARRED ROCKS, R. and S. C. REDS, 50, $8.50; 100, $16; 500, $75. 1,000 orders at 500 rate. RHODE ISLAND WHITES, 100, $18; 200, $35. Postpaid, full live delivery guaranteed. Strong, vigorous Chicks from heavy laying flocks. Order right from this ad. WE SATISFY OUR CUSTOMERS. Catalog free. Reference, Holland City State Bank.

KNOLL'S HATCHERY, Box L, Holland, Michigan

TIMMER'S HATCHERY

Hardy, healthy Chicks from selected heavy laying flocks. WH. and BR. LEGHORNS, 50, $7; 100, $13; 500, $62.50. ANCONAS, 50, $7.50; 100, $14; 500, $67.50. BARRED ROCKS and REDS, 50, $8.50; 100, $16.50; 500, $80. Postpaid, full live delivery. Bank reference. Free Catalog.

TIMMER'S HATCHERY
Route 3 A, Holland, Mich.

Hardy Northern Bred Chicks

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THAT GROW, LAY AND PAY
Barron English White Leghorns, Brown Leghorns and Anconas.
PURCHASE THIS YEAR'S CROP OF CHICKS from tested layers, headed by large vigorous 260 to 288 Pedigreed Males.
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Splendid, big, heavy weight, heavy laying hens.
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Beautiful business hen. Wonderful winter layers. Second to none.
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Some Factors in Poultry Success

IMPROVEMENT is the constant aim of those who would achieve the highest type of success. Without this desire agriculture would still be in the thatched stable stage of development in this country. And any sort of improvement which is not honestly won, which is not permanent in character, is deceitful. By that we mean that we cannot adopt a type of progress which merely defers the day of reckoning; if we are going to secure high crop yields at the expense of soil fertility, or high egg yields at the expense of the constitutional vigor of our stock, then it would be better not to hazzard it at all.

Success with poultry, especially in improving the flock records, must be built upon the solid rock of honest methods or the structure is certain to come tumbling down about our ears. That is why so many people who seek to beg the question through the feeding of nostrums and stimulants fail to achieve any real success. They have not taken stock of all the factors influencing success. By crowding the hens, by forcing an unnatural production upon them, they have secured temporary results at the expense of the future. And the future has invariably cost them more than the temporary increase made possible.

The very first thing to do, in seeking to improve the home flock, is to take stock of the situation and get an accurate record of what the flock is doing—something upon which an intelligent analysis of future efforts may be based. There is nothing quite so important in any business as a "set of books." The merchant finds them indispensible as to his business success, for they are the barometer which accurately gauges the state of health of that business. No man can do business these days without records of what he is doing and records over a long period of years—comparative statements. Records must be had of the poultry flock before one can attempt improvement.

We do not mean that trapnests should be installed on every farm, or that they need be installed on any farm—although that would be worth while, if it were done—but we do mean that every person keeping poultry ought to know in round numbers at least what his or her flock is doing by days, weeks or months. Too many people imagine that their hens are laying a good deal of eggs merely because they lay at a good clip at certain seasons. Then, too often, no stock is taken of the eggs consumed on the home table, and since they are not checked off, there is a tendency to overestimate them, thereby causing one to decieve himself as to the real productiveness of the hens.

Keep an egg record, and while you are keeping that record keep in mind the fact that commercial poultrymen feel they cannot do business with layers which produce less than 12 dozen eggs per year. How many hens have you producing less than that number of eggs? You can estimate, if you have a total egg record for the year, and it will bring home some astonishing things to almost anyone with a flock which has not been systematically checked.

If you are getting eggs practically the entire year, it will indicate that not all the hens are loafers. The problem, if your egg record is not what it should be, will be to eliminate the loafers and get more of the producers into the flock. And this will be a problem of culling and breeding, other factors in the poultryman's route to success. Culling is no longer much of a problem. Practically every community now has its qualified poultry cullers, usually working through the county agent or the state agricultural college or both. If one cannot command the services of such experts, then the art of culling can soon be mastered by a study of modern poultry text-books and a little practice. Culling is essential because it prevents the propagation of undesirable individuals in the flock, and because it cuts down feed bills and provides room for more producers, thereby giving them a better chance.

Breeding is, of course, important. While every poultry raiser cannot be expected to master the art of breeding, the rudiments of the science can at least be learned. And it means a great deal more than simply selecting a good looking male and turning him loose with the hens and pullets. The more one gets into the subject of breeding, the more important and vital it seems to be. But it is worthy the effort and the study because, in the final analysis, all substantial progress depends upon it. If more people were aware of this truth there would be less of the disposition to fly in the face of nature and do some of the things they continually practice. More people would come to realize that the poultry flock is like a piece of delicate machinery which must be given in proper amount all the elements, the fuel, the lubricant, and the like, necessary to make good performance possible. To attempt to secure results from a motor by placing water in the crankshaft for lubricant, for instance, would be fool-hardy, but many poultry raisers are trying to do just such a thing when they feed them something other than a balanced ration and give good, systematic care and housing. Such a procedure would ruin a good motor and it will ruin a good layer and the [illegible] of her will not save the day, either.

Good f[illegible]s are as necessary as good breeding, whatever the respective purpose you may have in mind. And good feeding means, a balanced ration—a ration which supplies in proper proportion all of the respective elements necessary to achieve the purpose which you have in mind. If it means market eggs, then you must feed a ration which will produce eggs, giving all the elements necessary for egg production and leaving nothing to be supplied by chance. Leaving some one element to chance is one of the reasons why more farm hens do not develop into the producers they should, for it is singularly true, that the average farm hen today is as well bred as the average hen found in any other place The trouble lies in other directions.

It is in recognizing all of the factors which are necessary for success, in giving them their proper place and in seeing that they are discharged that the greatest chance of success comes. Details, we have said before, are the bricks which make success possible, if they are mastered. And they must be overcome or there will be no success in anything we may undertake. They will not denied.—Wisconsin Farmer.

ROOSTING PLACES FOR THE POULTRY

THE arrangement of roosts in the hen-house is a matter of considerable importance. Not only should these be so placed that they may be easily kept clean by the attendants, but the health and contentment of the fowls should be considered as well. The usual method of the farmer in putting up the perches is to nail them to the wall of the house, beginning near the floor and placing them at intervals ladderwise, even up to the roof. Take a look at one of these houses after the fowls have gone to roost and you will find all the birds crowded on the higher perches. This instinct of self-preservation prompts them to get as far away from the ground as possible, a trait inherited from their wild ancestors. Often in striving for the highest perch the heavy fowls are crowded off and receive severe injuries, or in flying down from the roosts they are apt to be injured. Injury in the last mentioned way is a common cause of the so-called bumble-foot, prevalent among heavy fowls. Where perches are arranged in this way the highest is cold and unsanitary. Snow and frost upon the roof may chill the combs and backs of the birds, resulting in sickness and death in the flock.

All perches should be upon the same level and never more than four feet from the floor. Many contend that two feet is the ideal height. The Asiatic breeds should not be expected to roost far from the ground, while the Mediterranean varieties may be given higher perches. It seems to add considerably to the contentment of the smaller and more active birds if they are allowed to roost farther from the ground. They should never be allowed too near the roof, however, for reasons already stated.

An excellent arrangement is a square platform with a perch some

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Best Paying, Heavy Laying, Pure Bred Tom Barron English White Leghorns, S. C. Rhode Island Reds, Park's Barred Rocks. Strong Healty Chicks hatched from greatest and best incubator known. Chicks are given full twenty-one days and hatched under proper temperature.
Mr. Frank Fulerson, Niles, Mich., writes as follows: "From the 66 pullets we raised from your stock last year along with the thirty which we had, we got 1,610 eggs in December. Can you beat it?"
We are the first and oldest importers of White Leghorns in this state.
Watch our pen number 17 in the Michigan Egg Laying Contest. It's coming strong! All flocks thoroughly culled and properly mated to pure bred cockerels. Try some real chicks this year. Order now at new low prices. Instructive catalogue free.
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25,000 Thrifty Chicks Weekly
Write for catalog. 11c and up. prepaid. 12 leading breeds. Delivery guaranteed.
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GET THE PROFITABLE AND LAYING KIND
They will pay you big. Free range. Selected. Hogan test. Orpingtons, W. & Sil. Wyandottes, 50, $9.25; 100, $18. Rocks, Reds, Minorcas, 50, $8.25; 100, $16. Anconas, heavy broilers. 50, $7.25; 100, $14. Leghorns, 50, $7; 100, $13. Mixed, all varieties, $11 per 100 straight. Postpaid. [illegible] delivery. Circular free. Bank reference.
Middlepoint Hatchery, Middlepoint, Ohio, Dept. B.

Day Old Chicks
Strong, sturdy, S. C. White Leghorns (English strain) from large, vigorous, yearling hens, raised on our own farms. That lay and pay. Barred Rocks and Rhode Island Reds, from best laying strains. Send for our illustrated catalog, free.
Hillcrest Poultry Farms and Hatchery
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Selected Baby Chicks and Breeding Stock
Tom Barron strain White Leghorns. Also Barred Rocks. Guarantee 100 per cent live delivery on chicks. Cockerels and pullets in season. All stock carefully selected. Write for catalog and prices. Reference Zeeland State Bank.
BRANDT'S POULTRY FARM AND HATCHERY
R. R. 3 M ZEELAND, MICHIGAN

Peerless Chicks
HATCHED FROM BRED-TO-LAY
S. C. WHITE LEGHORNS
They are selected long deep-bodied, with large lopped combs. Liberal discount. Live arrival guaranteed. Catalog free.
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Strong, vigorous Chicks from selected heavy laying ENGLISH STRAIN WHITE LEGHORNS and BROWN LEGHORNS. 100, $12.50; 500, $60. THOMPSON & HOLTERMAN STRAIN BARRED ROCKS and ANCONAS, 100, $18; 500, $87.50. Postpaid, full live delivery guaranteed. Catalog [illegible]
DE-KOSTER'S HATCHERY, Box X, Zeeland, Mich.

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Hatched from strong and vigorous flocks of ENGLISH WHITE LEGHORNS AND ANCONAS, BRED FOR HIGH EGG-PRODUCTION. We guarantee 100 per cent [illegible] chicks on arrival. Postage PAID. Prices reasonable. Instructive Catalog and prices free on request. QUALITY HATCHERY, Box A11, Zeeland, Mich.

White Leghorn CHICKS
Write Quick. Free feed—Liberal Discount on early orders: World-Famous 265-270, and 280-326 egg strain trapnested, pedigreed English American S.C.W. Leghorns. Heavy Layers. Best Payers. Strong healthy chicks. 100% live delivery guaranteed, p.p. Big valuable catalog Free.
KERLIN'S GRAND VIEW POULTRY FARM, Box 43 Center Hall, Pa.

White Leghorn CHICKS
Heavy Laying, pure bred, English strain. Flocks culled and tested for laying ability. Strong, healthy chicks. 100 per cent live delivery guaranteed. Postage paid. Catalog, low price list free. Write quick.
Catalpa Grove Hatchery, Box 4 R. 2, Holland, Mich.

BABY CHICKS and HATCHING EGGS
Direct from our farm at greatly reduced prices, only 9c up. Barred Rocks, White Leghorns and Anconas. Write quick for particulars and special introductory offer. MODEL POULTRY FARM & HATCHERY. Zeeland, R. 4, Michigan.

WHITTAKER'S R. I. REDS—Michigan's Greatest Color and Egg Strain. Bred from winter layers for 13 years. Chicks and eggs. Write for free catalog. Interlakes Farm, Box 4, Lawrence, Mich.

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BABY CHICKS—FROM SELECTED FLOCKS Six leading varieties. Popular prices and guaranteed delivery. Write for catalog and price list.
H. H PIERCE, Jerome, Mich.

POULTRY BREEDERS' DIRECTORY

Advertisements inserted under this heading at 30c per agate line, per issue. Commercial Baby Chick advertisements 45c per agate line. Write out what you have to offer and send it in. We will put it in type, send proof and quote rates by return mail. Address The Michigan Business Farmer, Advertising Department, Mt. Clemens, Michigan.

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S. C. White Leghorns and S. C. and R. C. Black Minorcas. Must make room before cold weather. About ready to lay.
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EGGS FOR HATCHING: FROM THE FOLLOWING varieties. Barred, Buff and White Rocks; Silver Laced, and White Wyandottes: S. C. White Orpingtons, and S. C. Black Minorcas. Eggs, $1.25 for 15, $2.25 for 30, prepaid. From pure bred Good Laying Stock. Booking orders for eggs. Order early. **BENJAMIN SCOTT, Bannister, Mich.**

EGGS FOR HATCHING—UTILITY STOCK. Grand White Wyandottes—M. A. C. Champions. Good, square deal. Reasonable prices. Send for price list.
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S. C. White Leghorns. Tom Barron Strain, 250 egg utility line. November to April, average 65 per cent. Pure white plumage. Range grown, healthy, vigorous stock. Eggs $1.50 per 15; $4.00 per 50; $7.00 per 100. Prepaid. Limited supply. Order from this ad now.
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WHITE WYANDOTTES MARTIN STRAIN, Eggs for hatching.
WAYNE CHIPMAN, R. 2, Washington, Mich.

SILVER LACED AND WHITE WYANDOTTES Four large, beautiful roosters. Eggs $2.50 per 15.
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BUFF ROCK EGGS BY 10 LB. MALES and 1st Cincinnati, O., winners. Hogan tested hens, heavy layers.
J. C. CLIPP & SONS, Box M, Saltillo, Ind.

THOROUGHBRED BUFF ROCK EGGS from Blue Ribbon Winners, $1.50 per 15; $9.00 per 100.
BALDWIN & NOWLIN, R. 4, Laingsburg, Mich.

THOMPSON HEAVY LAYING BARRED ROCK eggs. $1.75-15; $3-30. Dark matings.
MRS. FRED KLOMP, St. Charles, Michigan.

BARRED AND WHITE ROCK HATCHING eggs for sale from exhibition utility stock. Farmers' prices. **Dawsons' Farm, R. 4, Muskegon, Mich.**

PURE BRED BUFF ORPINGTON EGGS AT $2 15; $5.50-50. Prepaid.
MRS. ANNA LA NOUE, Fostoria, Michigan.

S. C. REDS, GOOD LAYING STOCK, FINE color. Hatching eggs, $6.00 per 100. Limited number of chicks. $16.00 per 100.
EDWARD CRYDER, Alamo, Mich.

FOR SALE: ANCONAS EGGS FOR HATCHING, good utility stock. Shepards strain. $1.00 for 15. **Mrs. William O. Johnson, Twin Lake, Mich.**

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CHOICE MAMMOTH PEKIN DUCK EGGS, $1.50 per setting.
MRS. HAROLD SIMMS, Holly, Mich.

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LEGHORNS
S. C. Buff Leghorn Hens, Pullets and Cockerels. Hens and pullets $2.50 each; cockerels $3.00 to $5.00 each. Show birds a matter of correspondence. **LAPHAM FARMS, Pinckney, Mich.**

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BARRED ROCK COCKERELS AND PULLETS from America's best prize-winning laying strains. Winners of 18 first prizes at Detroit and M. A. C. the last two seasons. Low prices.
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FOR SALE—S. C. RHODE ISLAND RED COCKERELS. Pure bred, Mankood strain. Vigorous, dark, large red birds.Price $3 apiece or 2 for $5.00.
ALFRED DEICHMANN, R. 3, Pigeon, Michigan.

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BOURBON RED TURKEYS UNRELATED STOCK
Eggs in season.
THOS. G. CALLAGHAN, Fenton, Mich.

BIG BRONZE TOMS BY 45 LB. YEARLING 1st Cincinnati, O., Winner.
J. C. CLIPP & SONS, Box M, Saltillo, Ind.

FOR SALE—WHITE HOLLAND TURKEYS. Write for prices
MRS. DON ROSS, R. 6, Marlette, Michigan.

TOULOUSE GEESE ARE MONEY MAKERS. Two pounds cost less to raise than one of pork. Water not necessary. Every farmer should raise a few. **ALDEN WITCOMB, Byron Center, Mich.** Breeder Giant Toulouse Geese, White Holland Turkeys.

10 inches higher, arranged on the top, which follows for the removal of droppings and thorough cleanliness. This should be the main idea in the poultry house. There should be no cracks and crevices for filth to gather. Such spots are breeding places for red mites, the most destructive parasite that infests our fowls during the day but hide away in the dark corners, where a single female in a few days will furnish the family tree for countless thousands. The aim of the poultrymen should be to allow no harboring places for these insects. The roosting platform described may easily be kept clean. Perches should be so placed as to be readily removed for sweeping off the dropping platforms. One may if desired, arrange the perches with dropping platforms 18 or 20 inches wide, in tiers across one end of the room or house. They should be separate and in no way attached to the walls of the building. Then if all filth is carefully swept away each day, it is always possible to keep the quarters neat and clean. The roosts and platforms should receive frequent treatment with coal-oil or liquid lice-killer. In this way no vermin will be able to gain a foot-hold.

Ample roosting room should be provided for all fowls. None should be allowed to sleep on the ground. Chicks should have shelves arranged for their comfort. They should not be allowed to perch on the regular roosts until three or four months old. By this time their bones will have become firm and solid and the danger of crooked breast bones will have passed. The roosts should be of material about two and one-half inches wide and rounded on the upper edges. This will avoid injury to the fowls' feet. All material used in the house should be dry and as light as possible. The droppings platform should be of smooth matched material to allow for clean sweepings and afford no hiding for mites. Droppings should be swept off daily and the litter in the pens changed frequently.

FERTILITY OF TURKEY EGGS

Please tell me how long before laying turkeys must be mated to insure good hatching? Also how long kept together?—Mrs. C. P., Onaway, Mich.

—The best information availabe on the subject of turkey raising would indicate that the Toms should run with the hens from seven to ten days prior to saving the eggs for hatching. Fertility usually appears on the third day but the highest fertility is not usually secured at least of seven days after the introduction of the Tom.—E. C. Foreman, Associate Professor of Poultry Husbandry, M. A. C.

TURKEYS HAVE ENLARGED KNEE JOINTS

What shall I do for my turkeys? They are late turkeys and would like to know what is the matter with them. They eat good and are in good condition, only their legs are weak and they lay around a good. deal. Their knee joints are enlarged.—Mrs. W. H., Elmira, Mich.

—As to the first one, dealing with an ailment in turkeys, I might say that it is difficult to give a diagnosis from the description given. It may be that the addition of precipitated calcium phosphate (sprinkle lightly over the feed) or the giving of lime water in quantities of two teaspoonfuls a day per bird giving in the drinking water, and also the addition of bone meal would be of assistance in relieving this trouble provided it is of a nutritional origin. If it should be contagious it is necessary that a diagnosis be made before any intelligent advice could be given. If you care to do so you may send us a bird for diagnosis.—H. J. Stafseth, Dept. of Bacteriology and Hygiene, Mich. Agricultural College.

BREED BETTER FLOCKS

TWO points to keep in mind: The cockerel is half the flock and he cannot be too good, and only your best layers should be permitted to rear cockerels to use in your main breeding pens. There seems to be no question any more that the high-producing hen sends her laying character down to future generations thru her sons. I have noticed several times that where a flock of badly colored hens were mated to a fine cockerel the pullets have been much better colored than the cockerels.

Your cockerel breeding hen should be as nearly perfect in form, color, and laying qualities as you can select, and if you have only one such she will provide you with your cockerels. Select your cockerels, sons of your best laying hens, especially for their form and color.

In this way you will soon bring your flock up in all desirable characteristics. To do this to the very best advantage you will need two breeding pens, one to produce cockerels and the other to produce pullets for your main flock, the two flocks to be unrelated as much as can be conveniently arranged. Follow this by strict fall culling and the results will soon be noticeable.

POULTRY NOTES

It is a harmful costly practice to permit little chickens to get wet and cold. Clean, warm, dry quarters are indespensable.

It is a mistake to feed sour or tainted food. All mash or soft food that is not eaten up an hour after feeding should be gathered up and thrown away.

The best method of combating contagious diseases is to dispose of the sick fowls and disinfect the premises thoroughly.

Let the fowls have all the exercise possible to keep their digestive organs working.

The slightest ailment should be treated as promptly as a contagious disease.

A mixture of white and brown-shelled eggs in the incubator will give an unsatisfactory hatch.

Never over feed the young chicks; feed little and often; keep them satisfied, but not overfed.

Good, thick buttermilk is about as good as green bone to make the chicks grow and the hens lay.

Foul air and filth will furnish shelter for contagion.

When the fowls are restless and constantly picking their feathers, it is usually a sign that they are infected with vermin.

No matter how fine the strain, it is careful and intelligent management that counts most in the long run.

Parched corn, wheat and oats offer possibilities for varying the grain ration of the hens. Almost any change of diet will prove good for the hens if they relish the new feed.

Weight and fat conditions count when the hen is wanted for the market but don't sell her as long as she is producing eggs in profitable quality.

The chick does not come from the shell with gravel in its crop. Sharp sand or fine grit should be furnished along with the first meal.

The market demands uniform products. If your eggs are alike, shape and color, you can sell to a fancy market and get a price much higher than you can get at the local grocery store.

Your flock is easier to tend if it is uniform. Leghorns are more active than Brahmas. Plymouth Rocks set well and make good mothers. Leghorns do not. It is hard to provide the best conditions for all of your chickens unless they are alike in rate of growth, size, temperament, and habits.

TRAP FOR WOLVES

I HAVE read a good deal about wolves in the north woods and the havoc they make on deer and offtimes humanity. Now I would like to suggest a trap I heard of from an old hunter many years ago. It is to make a square den on the ground, say twelve or sixteen feet square, five or six feet high, tapper it as it is built up, the opening at the top, say three feet square. The logs of course, are notched close enough so they could not get through. Put an old sheep, cull of the flock, in it and feed him there. The object of the sheep is the scent and a wolf chooses to kill its own game. Drag bloody meat for miles to this trap is a good call. I have heard it said if a pack is attracted the trapper generally gets a good haul. I am an old reader of Michigan Business Farmer and it is complete.—Jas. O Colburn, Jackson County, Mich.

George Washington owned America's first mule. The mule was a present to Washington from the King of Spain, and was named Royal Gift.

White Diarrhea

Remarkable Experience of Mrs. C. M. Bradshaw in Preventing White Diarrhea

The following letter will no doubt be of utmost interest to poultry raisers who have had serious losses from White Diarrhea. We will let Mrs. Bradshaw tell of her experience in her own words:

"Gentlemen: I see reports of so many losing their little chicks with White Diarrhea, so thought I would tell my experience. I used to lose a great many from this cause, tried many remedies and was about discouraged. As a last resort I sent to the Walker Remedy Co., Dept. 680, Waterloo, Iowa, for their Walko White Diarrhea Remedy. I used two 50c packages, raised 300 White Wyandottes and never lost one or had one sick after giving the medicine and my chickens are larger and healthier than ever before. I have found this company thoroughly reliable and always get the remedy by return mail.—Mrs. C. M. Bradshaw, Beaconsfield, Iowa."

Cause of White Diarrhea

White Diarrhea is caused by the Bacillus Bacterium Pullorum. This germ is transmitted to the baby chick through the yolk of the newly hatched egg. Readers are warned to beware of White Diarrhea. Don't wait until it kills half your chicks. Take the "stitch in time that saves nine." Remember, there is scarcely a hatch without some infected chicks. Don't let these few infect your entire flock. Prevent it. Give Walko in all drinking water for the first two weeks and you won't lose one chick where you lost hundreds before. These letters prove it:

Never Lost a Single Chick

Mrs. L. L. Tam, Burnetts Creek, Ind., writes: "I have lost my share of chicks from White Diarrhea. Finally I sent for two packages of Walko. I raised over 500 chicks and I never lost a single chick from White Diarrhea. Walko not only prevents White Diarrhea, but it gives the chicks strength and vigor; they develop quicker and feather earlier."

Never Lost One After First Dose

Mrs. Ethel Rhoades, Shennandoah, Iowa, writes: "My first incubator chicks, when but a few days old, began to die by the dozens with White Diarrhea. I tried different remedies and was about discouraged with the chicken business. Finally, I sent to the Walker Remedy Co., Waterloo, Iowa, for a box of their Walko White Diarrhea Remedy. It's just the only thing for this terrible disease. We raised 700 thrifty, healthy chicks and never lost a single chick after the first dose."

You Run No Risk

We will send Walko White Diarrhea Remedy entirely at our risk—postage prepaid—so you can see for yourself what a wonder-working remedy it is for White Diarrhea in baby chicks. So you can prove—as thousands have proven—that it will stop your losses and double, treble, even quadruple your profits. Send 50c for a box of Walko, or $1.00 for extra large box—give it in all drinking water for the first two weeks and watch results. You'll find you won't lose one chick where you lost hundreds before. It's a postive fact. We guarantee it. The Leavitt & Johnson National Bank, the oldest and strongest bank in Waterloo, Iowa, stands back of this guarantee. You run no risk. If you don't find it the greatest little chick saver you ever used, your money will be instantly refunded.

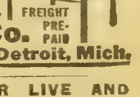
Walker Remedy Co., Dept. 680, Waterloo, Iowa

$24.95 Upward American CREAM SEPARATOR

On trial. Easy running, easily cleaned. Skims warm or cold milk. Different from picture which shows larger capacity machines. Get our plan of easy MONTHLY PAYMENTS and handsome free catalog. Whether dairy is large or small, write today.
AMERICAN SEPARATOR CO.
Box 7067 Bainbridge, N. Y.

Detroit Incubator $12.45

140-Egg Size—Guaranteed—has double walls, copper tank, full-size nursery, automatic regulation thermometer held so that chicks cannot break it when hatching. Detroit Brooders, too. Double walled, hot water heated. Write for special low price on both machines.



FREIGHT PRE-PAID
Detroit Incubator Co.
Dept. 10 Merritt St., Detroit, Mich.

HIGHEST PRICES PAID FOR LIVE AND Dressed Poultry, Veal, Eggs. A square deal always.
C. E. McNEILL & CO.,
825 W. So. Water St., Chicago, Ill.

MARKET FLASHES

MARKET SUMMARY

Wheat gains strength and price advances slightly. Improved export demand causes corn prices to go up. Oats follows trend of wheat and corn. Rye and beans show no change. Potatoes firm and prices are expected to go higher. Receipts of poultry exceed demand at Detroit. Cattle slow to lower. Hogs and sheep active and prices advance. Provisions following the trend of hogs.

(Note: The above summarized information was received AFTER the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press—Editor.)

FOOTE'S MARKET LETTER

By W. W. Foote

GENERAL farm conditions in Michigan are better than a year ago, and the outlook is encouraging, especially for sheepmen, those who own fair sized flocks being extremely fortunate. Not many farms in this state are changing ownership, and as Michigan farms generally failed to undergo the boom in prices so common during the war in other states of the middle west, they have not suffered a similar decline. Farmers looking for farms can make purchases in Ohio around $85 to $150 an acre, whereas a few years ago numerous sales were made at $200 to $250, and even as high as $300 in some instances. Farms in Ohio are largely rented for $6 an acre. There has been a marked reduction in the rate of interest paid on farm mortgages throughout the country, and sales are made in Chicago of high-class ones netting from 5 to 6 per cent to buyers. The several grains, with the exceptions of wheat and rye, are selling above prices of a year ago, corn being especially higher, and unusually large quantities of corn were fed to live stock during the past winter. The domestic trade of the country is active, being far ahead of last year, and manufacturers are complaining that it is difficult to hire enough workers, even at the unprecedentedly high wages offered. Farmers in many districts report that it is impossible to hire helpers, with carpenters, painters and other workers in the cities getting as high as $1.25 an hour, while miners in the Pennsylvania coal mines have been paid as high as $400 a month. The foreign trade of the United Sttes is growing in volume, the exports for the eight months ending on February 28 aggregating in value $2,657,064,000, comparing with $2,480,021,000 for the corresponding period a year earlier. Meanwhile our imports of gold have fallen off materially, as Europe is paying largely for its imports with various commodities. Of late large quantities of provisions have been exported from our shores to European countries. Rates of interest are unchanged, Chicago banks making loans at 5 to 5½ per cent.

Wheat Sells Higher

The long predicted fall in wheat prices fail to materialize, and, on the contrary, recent sales were made on the Chicago Board of Trade at the highest figures recorded in several weeks. Speculative operations in wheat have increased in volume recently, and when the "shorts" entered the market to settle their trades they were compelled to pay higher prices. It is estimated that 15,000,000 bushels of "short" wheat were bought in the course of a fortnight. Of course, the marked falling off in our wheat exports is a drawback, but stocks are not in the least burdensome. Rye continues to loom up as an important article. in our export trade, it being much cheaper than wheat. Not much corn or oats are being shipped out of the country, yet supplies of both in sight are much less than a year ago. The prevailing belief is that feeding livestock with grain will continue a paying policy, provided farmers have the grain. Late sales were made in the Chicago market of May wheat at $1.22½, comparing with $1.33 a year ago; while May corn sold at 74¾ cents, comparing with 59⅜ cents last year; May oats at 45¼ cents, comparing with 37 cents last year; and May rye at 84½ cents, comparing with $1.02 a year ago.

The Bean Market

In a late issue The Bean and Pea Journal points out that about the only beans in any large amounts are to be found in Michigan and California, and even in those states there are no overstocks. With the admitted large increase in acreage, more beans will be needed for seed purposes than for many years. The Journal hears reports that beans will be grown in many new sections where they have never been raised in a commercial way. The Robust bean is in high favor, and Michigan farmers testify to an increase in yield of fully ten bushels per acre over common beans. Michigan is a large consumer of beans, and heavy shipments are made to other states.

Restricted Demand For Beef

Many families got into the habit during the war of cutting down in their use of beef, and it appears hat in many cases they are still much smaller consumers than in former years. This explains why any marked improvement in beef cattle prices brought about by smaller offerings is quickly lost as soon as normal supplies are received. Last week, for instance, there was a big advance in prices on Monday, because of the eager offerings shipped to Chicago on account of the severe storm, while it disappeared later on normal receipts. Early week sales of prime fat Hereford steers were made at $10.10 to $10.35, and some prime 647-pound Hereford heifers brought $10, an unusual price. Other sales of heifers of superior quality were made at $8 to $9.50, commoner lots selling at $5.50 to $6.50, while butcher cows went at $4.50 to $7.75. Calves were wanted for the Easter trade, and sold much higher, common to prime lots going at $6 to $13 per 100 pounds. Limited offerings checked the trade in stockers and feeders, county buyers paying $5.50 to $8.50, chiefly $6.50 to $7.75. Late in the week cattle sold much lower under larger offerings. A year ago beef steers sold at $6.25 to $9.30 for common to prime. Recent sales of beef steers were made at $6.75 to $9.90, largely at $8 to $9.75.

The Hog Market

The country supply of hogs is understood to be unusually large, and when prices are up the receipts are almost certain to be of liberal proportions. Prices all along have been much lower than a year earlier, but they have for many weeks shown marked rallying power, with a large demand from Chicago packers, as well as eastern shippers. Hogs moving to market grade well on the whole, and the bulk sell within a range of 35 cents, light bacon going highest and 30 cents above the best heavy butchers. Recent Chicago receipts averaged 240 pounds. There is an extremely large domestic consumption of fresh products and provisions, while exports of lard and cured hog meats are running far ahead of a year ago, despite the higher prices. Last week's hog receipts were far larger than a year ago, but active local and shipping buying kept prices almost as high as a week earlier, late sales ranging at $7.25 to $8.50. A year ago hogs brought $8.75 to $10.40.

The Lamb Crop

The first shipments of California spring lambs to eastern markets were started a short time ago. Lack of moisture and high winds have affected adversely the growth of feed in the California spring lamb region. The first shipment of spring lambs for the season reached Chicago the other day, comprising 53 Illinois bred lambs averaging 45 pounds, which brought $18 per 100 pounds. It looks promising for the lamb market, but owners should make their flocks prime and not too heavy. Late lamb sales were made at $13.25 to $15.35, feeding and shearing lambs going at $13.75 to $14.85.

WHEAT

Wheat is slightly lower in price than it was at our last writing and the tone of the market is from easy to weak. During last week trading was quiet and prices showed little change. There was some business reported for export but not enough to change the trend and the best the market could do was hold steady most of the time the early part of the week at prices established the week before. But before the close of the week weakness appeared and a decline in prices followed. There was no news and the dope from day to day was a reiteration of previous facts and views. There is a fight between faith and the old idea of supply and demand. The faith people believe the future will bring crop damage news and active foreign buying. The supply and demand people say stock are heavy and subjecting the market to heavy pressure, while foreigners neglect American wheat in favor of grain from Canada and Argentine. Domestic demand is not active and the bears say these conditions have always brought lower prices in the past and will do so again.

Crop damage reports have not been sensational; in fact, much of the news from the southwest has been favorable. Weather has been just what the plant was in need of over a great deal of the winter wheat territory and in some places the crop appears more promising than it did at the corresponding date last year.

Flour is not active and the mills have been rather slow in taking wheat, but a scarcity of soft winter wheat has developed in the past few days and the Michigan mills are looking for wheat. Mills that had received all the wheat they needed from their own neighborhood from day to day, report that farmers are not liberal sellers now and there is a feeling that the supply of good milling wheat back in the hands of Michigan farmers is not large.

Prices

Detroit—Cash No. 2 red, $1.32½; No. 2 white, $1.32½; No. 2 mixed, $1.32½.

Chicago—Cash No. 2 red, $1.30@1.32; No. 2 hard, $1.19½@1.21.

New York—Cash No. 2 hard, $1.32; No. 2 red, $1.45½.

Prices one year ago—Detroit, No. 2 red, $1.42; No. 2 white, $1.39; No. 2 mixed, $1.39.

CORN

The corn market is easy after a small decline on the closing day of last week. The Detroit market declined ½c bringing the price down to the level quoted in our last issue at Detroit.

Prices

Detroit—Cash No. 2 yellow, 79c; No. 3, 77c; No. 4, 75c; No. 5, 73c.

Chicago—Cash No. 2 yellow, 73¾@74¾; No. 2 mixed, 73½.

New York—Cash No. 2 yellow, 92¼c; No. 2 white, 92¼; No. 2 mixed, 91¾c.

Prices one year ago—Detroit, No. 2, yellow, 63½c; No. 3, 62c.

OATS

Prices in the oat market are slightly lower than they have been at any time for over a month. The tone of the market in general is steady while dealers report they are finding it difficult to dispose of their supplies, demand seeming to be nearly at a standstill.

Prices

Detroit—Cash No. 2 white, 49c; No. 3, 47½c; No. 4, 46c.

Chicago—Cash No. 2 white, 45@46c; No. 3, 43¾@44¾c.

New York—Cash No. 2 white, 56@56½c.

Prices one year ago—Detroit, Cash No. 2 white, 41½c; No. 3, 39½c.

BEANS

During the week before last the Detroit bean market declined sharply and last week it started out to regain what it lost and had advanced 15c but dropped 5c on Saturday which left the price 25c per cwt. under the price of two weeks ago. Trading is quiet. State bean jobbers estimate that bean surpluses in Michigan to be between 1,400 and 2,000 cars. This includes beans in the hands of the farmers other than those retained for seed, and also stocks in elevators. Using the smallest estimate, at 40,000 lbs. or 400 cwt. per car this would bring the total holdings in Michigan to well over 6,500 bushels which jobbers say they are confident will take care of all demand unless conditions change and business becomes brisk. Elevators throughout the state are reported to be offering from $7 to $7.25 per cwt. with the lower figure leading.

Prices

Detroit—C. H. P., $7.40 per cwt.

Prices one year ago—Detroit, C. H. P., $6.95 per cwt.

RYE

Rye seems to be without friends, nobody wanting it, and prices were on the down grade last week.

Prices

Detroit—Cash No. 2, 81½c.

Chicago—Cash No. 2, 81½@82½c.

Prices one year ago—Detroit, Cash No. 2, $1.04.

POTATOES

The potato market has been steady the greater part of the time during the past fortnight and changes in prices have been only slight. The price at Detroit is higher than it was two weeks ago. Supplies are small on Michigan markets as storms held up shipping, farmers were unable to get their potatoes to town because of the bad condition of the roads. Larger receipts are expected from now on.

Stocks of white potatoes in the hands of growers and dealers in the United States March 1 are reported at 171,555,000 bushels to the United States Department of Agriculture. Comparative figures with other years are not available. Of the total stocks 23,968,000 bushels are reported as unfit for food or seed, 60,514,000 bushels will be needed for food and seed on farms where grown, 27,278,000 bushels are held for consumption in local markets, and 59,795,000 bushels are available for movement by rail and other means out of the counties where produced. More than one-half the quantity of potatoes available for shipment are in Michigan, Wisconsin, Minnesota and North Dakota.

Stocks in hands of growers and dealers March 1 to 21 Northern States which usually produce about four-fifths the total crop are reported at 152,117,000 bushels, which is approximately 42 per cent of the estimated crop in these States. Stocks on hand March 1, 1922, were 102,764,000 bushels, or 35 per cent of the estimated crop in these States last year.

A good market is said to be awaitin the northern shippers since the East is running short of old stock, there being reported scarcely more than 50 cars for shipment from New York state and not more than 15 to 20 per cent of the entire crop left in Maine. Michigan potatoes are reported to be reaching a market in New York city even now, indicating a continued strong market in this commodity it is said.

Prices

Detroit—Michigan, $2.00@1.50.

Chicago—Wisconsin round whites, $1.25@1.30 per cwt; Idaho rurals, $1.40 per cwt.

Prices one year ago—Detroit, Michigan, $1.97.

HAY

Hay markets generally remain fairly firm, but the warmer weather is causing some slacking in the recent urgent demand. Eastern markets show some irregularity and val-

PRITCHARD'S
WEATHER
FORECAST
INTERPRETED BY THE STARS

Week of April 1

THE greater share of this week will be unsettled with light rain or snow flurries occuring in Michigan. This general storminess will increase to a full fledged storm of high winds, rain and snow beginning about the middle of this week and lasting through Thursday and probably Friday of this week.

Previous to the arrival of this severe storm to Michigan the temperatures will rise unseasonably high but at the end of the week the temperatures will have fallen and the sky become mostly clear. However, there is a probability that some unsettled weather conditions will affect parts of the state at tail end of the week.

Week of April 8

Unsettled and stormy conditions are to be expected in Michigan during first part of this week. The winds will be moderately strong during this time and the temperatures moderate to cool.

During the middle days of the week and until near the close the weather is expected to be fair in Michigan. As Friday and Saturday approach the temperatures will be rising and some unsettled, showery weather may be expected in the state.

Potato Outlook Poor

The probability of a potato yield above the normal in Michigan this season will range from 25 to 75 per cent with the later plantings getting the best chance, those who plant spuds about middle of June, believing they will dodge the hot, dry weather of late summer, will find this year very different.

This year we believe the weather before June 15th will average cold and wet while the latter part of June will average warm and wet. However, the entire summer season we figure will average cool and with about normal rainfall. Except for severe frosts the harvest season will be favorable for potatoes.

Judging by the general characteristics of the Rurals, there will be less tendency for this variety to become hollow this year. In as much as we are expecting droughty conditions during latter part of August, this variety will stand the conditions better than most kinds. The Green Mountain and Gold Coin are also well adapted to the 1923 season but should be planted early.—L. N. PRITCHARD.

WEATHER FOR SUMMER

As I am a raiser of pure bred chickens, turkeys and geese, and also reader of the M. B. F. paper, would like your advice on what kind of a season I might look for this coming summer. The weather makes a big difference in my poultry business. Do you expect it to be cold and dry, cold and wet, hot and dry or hot and wet? Which do you think it will be?—H. S., Rapid City, Mich.

—We are expecting the spring and summer of 1923 as a whole to average cooler than usual in Michigan judging by what we believe will be the average eastward track of the storm centers for the period in question.

The exception to this general statement will apply during latter part of May, most of June and about first two weeks of July, when temperatures will be warmer and thus help bring up the general deficiency.

We are also of the opinion the summer months will average only normally wet in this state but that there will be an over amount of cloudiness.

The lack of sunshine together with the average low temperature will not, of course, be the best condition for your flocks. As a consequence, we suggest you house your young broods of turkeys, especially, in warm quarters, particularly during early summer which we believe will be damp.

The grown turkey will range farther than the average from his home this year, we believe and with a fairly good crop of grasshoppers expected, feeding should be easy picking for them.

ues are not steady. Bad roads are still restricting country loading and there are no accumulations of hay reported at any market. The reserves on Michigan farms March 1st are estimated at 38 per cent of the crop, which is considerably more than usual at this time, the reason given being that last year's crop was unusually large, that it has been difficult to obtain cars and that the prices have been satisfactory to farmers who could hold their stock.

Prices

Detroit—No. 1 timothy, $16@16.50; standard, $15.50@16; light mixed, $15.50@16; No. 2, timothy, $14@15; No. 1 clover mixed, $13@14; No. 1 clover, $13@14.

Chicago—No. 1 timothy, $21@23; light mixed, $19@21; No. 2 timothy, $18@20; No. 1 clover, $15@16; No. 2, $13@14.

New York—No. 1 timothy, $24@25; light mixed, $22@24; No. 2 timothy, $20@23.

Prices one year ago—Detroit, No. 1 timothy, $19@20; standard, $18@19; No. 2 timothy, $17@18; No. 1 light mixed, $18@19; No. 1 clover mixed, $15@16; No. 1 clover, $14@15.

Alfalfa—Chicago, No. 1 and choice, $22@23; No. 2 and standard, $16@19.

MISCELLANEOUS MARKET QUOTATIONS

Detroit, Tuesday, March 27th

BUTTER—Best creamery, in tubs, 50@51c per lb.

EGGS—Fresh, 24½@25c per doz.

APPLES — Greenings, $1.75@2; Baldwins, $1.65@1.90; Spys, $2@2.50; other varieties, $1.50@1.75 per bu.; western boxes, $2@3; in barrels, Greenings, $5.50@6; Baldwins, $5.50@6.

HONEY—Comb, 23@25c per lb.

CABBAGES—Home-grown, $2@2.25 per bu.; Louisana sugar loaf, $5@5.50 per crate; round heads, $5@5.50 per crate; Mobile, $5@5.50 per crate.

POPCORN—4@4½c; Little Buster, 7½@8c per lb.

DRESSED CALVES—Best 17@18c; medium, 15@16c per lb.

ONIONS—$4@4.25 per sack of 100 lbs.; Spanish, $2@2.25 per crate.

DRESSED HOGS—90 to 130 lbs., 10c; 130 to 169 lbs., 9c; heavy, 5@6c per lb.

LIVE POULTRY—Best chickens, 29@30c; leghorns, 24@25c; stags, 24c; medium and large hens, 29@30c; small hens, 25@26c; roosters, 17c; geese, 20c; ducks, 30c for large and 27@28c for small per lb.

WEEKLY MARKETGRAM

U. S. Bureau of Agricultural Economics

Washington D. C.—For the week ending March 24, 1923.

FEED—Markets dull and prices lower. Linseed meal and wheat feeds continued downward trend and May bran is quoted at $5 below prevailing prices. Stock most feeds in excess of demand. Fair demand for nearby wheat feeds. Cornfeeds in ample supply. Gluten feed prices steady, hominy feed prices easier. Cottonseed meal in liberal supply by resellers and a few large offers are made by mixed feed manufacturers. Fair export demand from Texas. Production most feeds good. Movement fair. Quoted March 23—Bran $27.75; middlings $27.50; flour middlings $29.25; Minneapolis; gluten feed $42.65 Chicago; white hominy feed $28 St. Louis; $28.50 Chicago; 31 per cent linseed meal $40 Buffalo; 36 per cent cottonseed meal $38 Memphis; $40 Atlanta; 34 per cent linseed meal $43.75 Minneapolis.

DAIRY PRODUCTS—Butter markets unsettled during week. Uncertainty as to production and supplies during the immediate future has added to the uncertainey of the market. Some California butter on Eastern markets at selling prices is slightly under corresponding grades of regular receipts. New Zealand, Danish & Argentine butter also selling in a limited way. Tone of the market firm at close today. Closing prices 92 score butter; New York 50½c; Chicago 51½c; Philadelphia 50½c; Boston 50c.

REVIEW OF BUTTER MARKET

POWERFUL conflicting factors placed the butter market, during the week ending March 24 in so nervous and sensitive a position that only a slight disturbance would have been necessary to have caused either a sharp advance or a rapid decline. On the one side was sentiment which resisted every advance and greatly favored declines. In view of the rapidly approaching season of flush production, the trade generally felt that prices were too high. All trading was featured with the greatest caution. Speculative demand was almost entirely lacking. Receivers pressed goods for sale almost on arrival and buyers purchased only for orders on hand. Each operator was nervous until he had passed his purchases or receipts on to the next fellow in his line. Those conditions were conducive to weakness and confidence could only be restored by a decline in prices.

On the side of strength were light receipts, due to delayed shipments and possibly to a decrease in the make. Stocks on all markets were generally so closely cleaned up that a decline was almost impossible. The small supplies which appeared in some quarters at times would no more than seem to give the market a weaker tone when they would melt away again under an urgent demand from jobbers. The market showed some declines and some advances, depending on whether sentiment or light supplies was the stronger in its influence but by the close of the week under review no indications of a definite trend appeared.

KEEP THE BUSINESS FARMER
COMING
SEE PAGE 13

THE ROAD TO SUCCESS
SOLVAY
SOLVAY PULVERIZED LIMESTONE

SOLVAY PULVERIZED LIMESTONE

Don't let another seeding go by before you put in SOLVAY. You make more money using SOLVAY because it gives you bigger crops, better crops and that means more money.

It's so easy to handle SOLVAY—shipped in 100 lb. bags or in bulk, may be spread by hand or lime sower. Safe, will not burn, and is so finely ground it brings results the first year.

Sweeten your soil and you "sweeten" your bank roll too. There's years of profit in using SOLVAY. Find out all about it—Write for the valuable SOLVAY lime book—free!

This Year Spread Solvay

THE SOLVAY PROCESS CO.
Sales Agent, Wing & Evans, Inc.
Real Estate Exchange Building Detroit, Mich.

EGGS FOR HATCHING—PURE BRED WHITE Wyandottes, 15 eggs $1.25; 30 eggs $2.00; 50 eggs $3.00; 100 eggs or more 5 cents each. Single settings prepaid. Others f. o. b. Allegan. H. M. HORTON, Citz. Phone 294B Allegan Mich.

BARRED ROCKS. EGGS AND BABY Chicks from Silver Cup winners and Champion Winter Layers. Eggs $2 per 15 and Chicks from 18c up delivered. Circular free. FRED ASTLING, Constantine, Michigan.

READ THE MASTER KEY AND BECOME Successful, $2.50. PHIPPS, 1014 Belmont, Chicago.

PLANTS AND SEEDS

STRAWBERRY PLANTS FOR SALE, SENAtor Dunlap, Gibson and Dr. Burrill, 60 cts. per hundred, $4.00 per thousand. Postpaid. Progressive Everbearers, $1.00 per hundred. Postpaid. Cuthbert Red Raspberries, $1.00 per hundred, $9.00 per thousand. Postpaid. ROBERT J. DeGURSE, Ovid, Mich.

STRAWBERRY PLANTS FOR SALE—SEN. Dunlap $3.50 per 1000. Gibson's $4.50 per M. Five other varieties. Also Raspberry plants. Price list free. FRED STANLEY, 124 Main St., Bangor, Michigan.

CERTIFIED COLLEGE WONDER OATS. Purity 99.7%, germination 92, test weight 37 pounds. Write for prices. HOMER GOULETT, Kawkawlin, Michigan.

FANCY MIXED COLOR GLADIOLA BULBS Produces large flowers. 1⅛ to 2 inches 25c doz.; 5 doz, $1.00. ¾ to 1¼ half price. Postage paid. MARTHA OSMOND, Vermon, Michigan.

SEED POTATOES--CERTIFIED PETOSKEYS Northern grown. L. D. DUNLAP, Lupton, Mich.

FROSTPROOF CABBAGE PLANTS. MICHIgan gardeners and truckers are finding it pays big in earlier and better crops to use our open field grown plants from the South. Early Jersey, Charleston, Wakefield, Succession, Flat Dutch Cabbage, Bermuda Onion plants, Big Boston and Iceberg lettuce. Prepaid mail 200, 60c; 400, $1.00; 1000, $2.00. By express 2000, $2.50; 5000, $5.00. Get price list Sweet potato, tomato and other open field grown plants. PARKER FARMS, Atlanta, Georgia.

GRAPEVINE SPECIAL WEEK: 20 VINES $1 postpaid. 15 good Medium Blue Concord, 3 No. 1 White, 2 Red. GOBLES MICH. NURSERIES.

TO LATE TO CLASSIFY

Pen Mated S. C. White Leghorns
Ferris 264-300 egg strain, range grown, healthy, vigorous stock. Eggs $2.00 per 15; $3.00 per 30; $4.00 per 50. Limited supply. Prepaid. satisfaction guaranteed. Order from ad.
H. A. JOHNSON, Norwalk, Michigan.

MAMMOTH BRONZE TURKEY EGGS FOR Hatching. Best stock. Farmers prices.
DAWSON'S FARM, R. 4, Muskegon, Michigan.

EGGS FOR HATCHING, BIG TYPE PEKIN Ducks, 12, $1.00; 24, $1.75. Buff Orpington Ducks, 12, 85c; 24, $1.50, prepaid.
BENJAMIN SCOTT, Bannister, Michigan.

RUNNER DUCK EGGS, FAWN AND WHITE, Good laying strain. $1.50 for 15; $7.00 for 100. Order from ad.
H. A. HERSHISER, West Unity, Ohio.

BARRED ROCK HATCHING EGGS. PARKS 200-egg strain. $2 per 15; $5 per 50; $10 per 100 by prepaid parcel post.
R. G. KIRBY, R. 1, East Lansing, Michigan.

ROSE COMB RHODE ISLAND REDS. HATCHing eggs $1.25 per setting. [illegible]
Mrs. Albert Harwood, R. 4, Charlevoix, Mich.

S. C. RHODE ISLAND WHITES THAT HAVE the laying habit. Eggs $2.00 per 15. Also cockerels and pullets.
Jno. Hartgerink, Box W. Zeeland, Michikan.

WANTED—TO BUY BLACK PERCHERON Stallion or dark Belgian. What have you? C. M. CULBERT, D. V. S., Chesaning, Michigan.

SELL YOUR PURE-BRED POULTRY THROUGH THE BUSINESS FARMER.

Sharood Sells for Less!

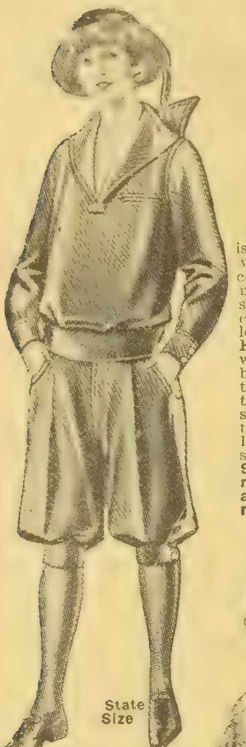
Send No Money

Pay On Arrival

These Smashed Bargain Prices PROVE IT!

Yes, AMAZING VALUES—every one! Sharood absolutely guarantees that these are the Lowest Prices in America—quality considered. But don't take our word for it. Don't send a penny now. Let us send your choice of these bargains on approval at our own risk—not yours. You are free to compare them with similar articles offered elsewhere. Keep the goods only if you are convinced that Sharood has actually saved you big money.

Don't send one cent. Just a letter or postcard brings you ary of these smashed price bargains. Merely give name and number of each article you want. Also state size and write your name and address plainly to avoid delay. Pay nothing till goods arrive—then only the amazing bargain price and postage. If you are not delighted with your bargain return the goods and your money will be cheerfully refunded. ORDER NOW!

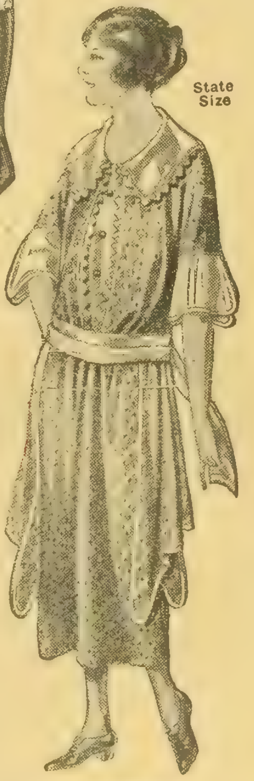


LADIES' AND MISSES' KHAKI OUTFITS

$1.98

This khaki outfit is made for rough wear. The suit consists of tailored middy with long sleeves and sailor collar. Has tie loop in front. Knickers are made with fitted waistband, side openings trimmed with buttons and two front slash pockets. Fitted knee bands. Ladies' and Misses' sizes 34 to 44. **No. 96E6800. Send no money. Pay $1.98 and postage on arrival.**

State Size



State Size

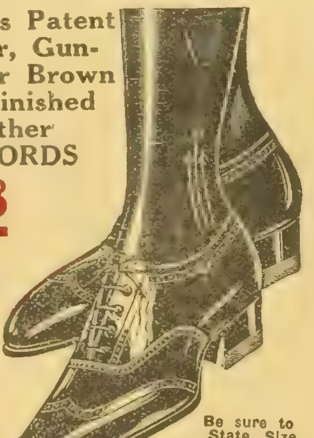
Voile Dress

$1.98

Very attractive voile dress with organdy trimming. Beautiful figured voile with new side panels. Youthful organdy collars and and cuffs. Also pretty vestee insert of organdy and and neat organdy sash. Misses' sizes 14 to 20. Women's sizes 34 to 46. Be sure to state size. **Order Navy by No. 96E6712. Order Copen by No. 96-E6713. Order Rose by No. 96E-6714. Order Lavender by No. 96-E6715. Send no money. Pay $1.98 and postage on arrival.**

Women's Patent Leather, Gun-Metal or Brown Calf Finished Leather OXFORDS

$1.98

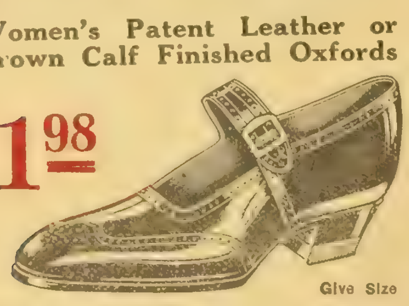


Be sure to State Size

Made with imitation shield tip and medallion perforated vamp. perforated lacestay and circular foxing. Has medium rubber heel and medium pointed toe. Sizes 2½ to 8. Wide widths. **Order patent by No. 96A64. Order gunmetal by No. 96A69. Order Brown Calf by No. 96A70. Pay $1.98 and postage on arrival.**

Women's Patent Leather or Brown Calf Finished Oxfords

$1.98



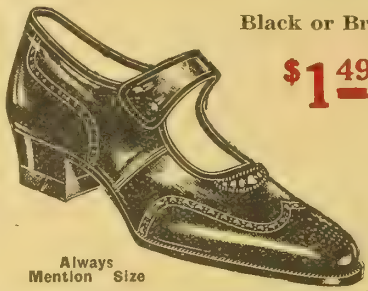
Give Size

Sizes 2½ to 8, wide widths, in black patent leather or brown calf — a stunning one strap model with imitation shield tip medallion, effectively perforated. Has medium rubber heel. **Order patent by No. 96A72, $1.98. Order Brown by No. 96A73. Send no money. Pay $1.98 and postage on arrival.**

Women's Soft Kid Slippers

Black or Brown

$1.49

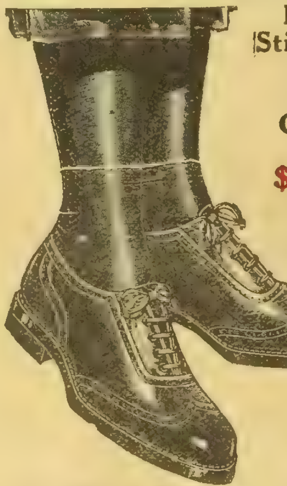


Always Mention Size

Soft kid leather slipper. Stylish strap model with two buttons. Medium round toe with medallion tip and perforated wing tip and quarter. Cushion insoles. Medium rubber heels. Solid oak leather soles. A bargain at our slashed prices. Sizes 2½ to 8. Wide widths. **Order black by No. 96A228. Order brown by No. 96A229. Send no money. Pay $1.49 and postage on arrival.**

Popular Stitchdown Dark Brown Oxfords

$1.98

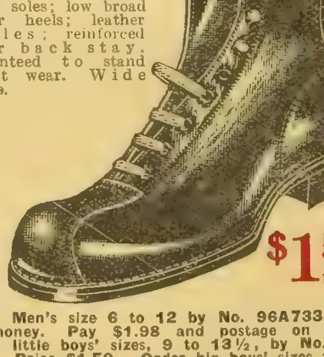


Be Sure To State Size

Classy stitchdown Oxfords for women. Wonderfully comfortable and stylish. Uppers of dark brown leather. Smooth leather insole. Flexible stitched-down oak outsoles. Low rubber heels. Sizes 2½ to 8. Wide widths. **Order by No.96-A268. Send no money. Pay only $1.98 and postage on arrival.**

Men's, Boys' and Little Boys' Scout Shoes

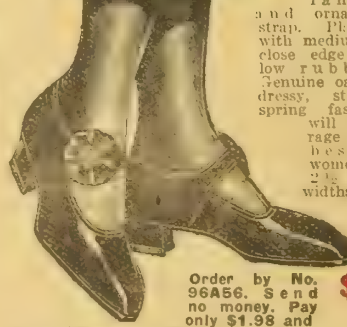
Fine scout shoe of soft pliable brown leather. Absolutely guaranteed barnyard proof; reliable sturdy soles; low broad leather heels; leather insoles; reinforced leather back stay. Guaranteed to stand hardest wear. Wide widths.



$1.59 UP

Order Men's size 6 to 12 by No. 96A733. Send no money. Pay $1.98 and postage on arrival Order little boys' sizes, 9 to 13½, by No. 96A-565. Price $1.59. Order big boys' sizes 1 to 6 by No. 96A564. Price $1.79. Pay bargain price and postage on arrival.

Black Satin Strap Pumps



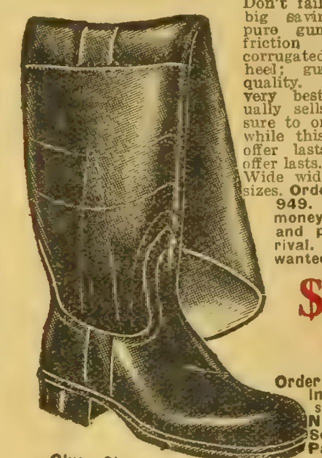
State Size

Women's black satin dress pump, one-strap, one-button style with fancy rosette and ornament on strap. Plain vamp with medium toe and close edge sole with low rubber heels. Genuine oak soles. A dressy, stylish new spring fashion that will be all the rage among the best dressed women. Sizes 2½ to 8, wide widths.

Order by No. 96A56. Send no money. Pay only $1.98 and postage on arrival.

$1.98

Men's Boot Bargains



Give Size

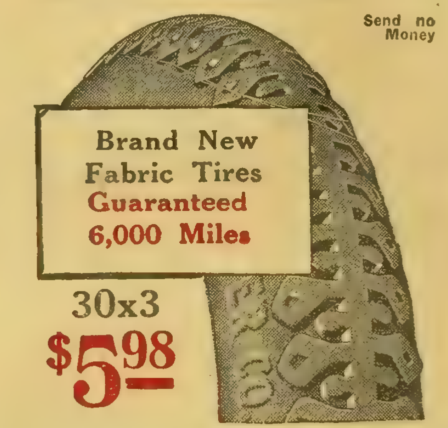
Don't fail to make this big saving on Men's pure gum hip boots; friction lined; heavy corrugated sole and heel; guaranteed first quality. Made of the very best rubber. Usually sells at $5. Be sure to order your pair while this great saving offer lasts. Sizes 7 to offer lasts. Sizes 7 to 12. Wide widths. No half sizes. **Order by No. 96A-949. Send no money. Pay $2.98 and postage on arrival. State size wanted.**

$2.98

Order similar style in knee boot sizes 6 to 12 by No. 96A950. Send no money. Pay $2.98 and postage on ar-

Send no Money

Brand New Fabric Tires Guaranteed 6,000 Miles



30x3

$5.98

Fresh stock of heavy, non-skid tires of live rubber. Generously oversize. 6,000 guaranteed, but often give 8,000 to 10,000 miles. Choice of non-skid or rib tread in 30x3 size. Others are non-skid. Pay only bargain price listed below and postage on arrival.

Bargain Price List

No. 96D4040—30x3	$5.98
No. 96D4041—30x3½	6.98
No. 96D4042—32x3½	9.39
No. 96D4043—31x4	9.98
No. 96D4044—32x4	11.98
No. 96D4045—33x4	12.28
No. 96D4046—34x4	12.95

8,000 Mile Guarantee

Sharood's Standard Cord, 30x3½

Same sturdy construction as regular cord but not oversized. A wonder-service tire for Fords. **Order by No. 96D4090. Send no money. Pay only $8.98 and postage on arrival.**

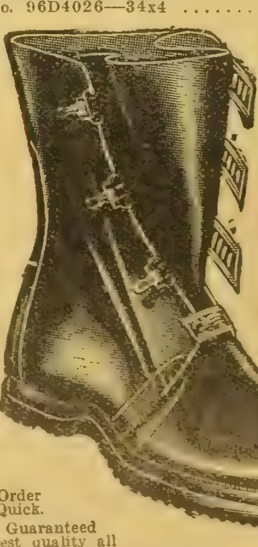
Guaranteed Inner Tubes

Now is your chance to buy extra thick, live rubber inner tubes at a big saving. Don't wait for tube prices to go up. How many shall we send?

Bargain Price List

No. 96D4020—30x3	$1.09
No. 96D4021—30x3½	1.25
No. 96D4022—32x3½	1.39
No. 96D4023—31x4	1.69
No. 96D4024—32x4	1.75
No. 96D4025—33x4	1.79
No. 96D4026—34x4	1.79

Men's Four Buckle All Rubber Arctics



$2.48

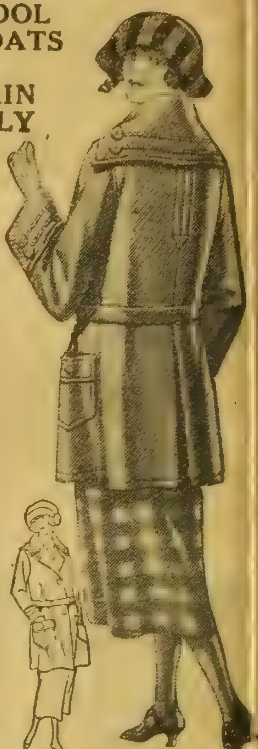
State Size

Order Quick.

Guaranteed best quality all rubber 4-buckle hi-cut arctic for men. Made with double thick soles and seams reinforced. Snow excluding tongue. Furnished in men's sizes 7 to 13. Wide widths. Sensational value. Send quick. **Order by No. 96A990. Send no money. Pay $2.48 and postage on arrival.**

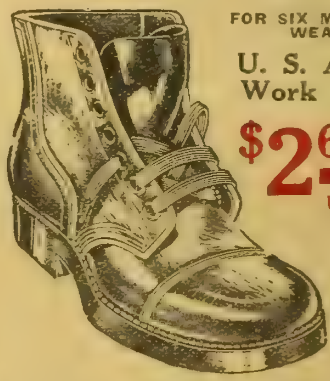
ALL WOOL POLO COATS A BARGAIN AT ONLY

$4.98



Think of this beautiful all wool polo coat in a snappy smart model for only $4.98, made of genuine all wool polo with beautiful large collar with two rows of stitching and novelty buttons. Has inverted pleat in the back like the best made coats and two novelty pockets button trimmed. 34 inches in length Comes in beautiful colors of reindeer tan, and Copen.. Misses' sizes 14 to 20. Women's sizes 34 to 44. **Order Tan by No. 96E6900. Order Copen by No. 96E 6901. Order now at our risk. We know you will be more than pleased. Send no money. Pay $4.98 and postage on arrival. Your satisfaction guaranteed or money cheerfully refunded.**

GUARANTEED FOR SIX MONTHS' WEAR U. S. Army Work Shoe



$2.69 UP

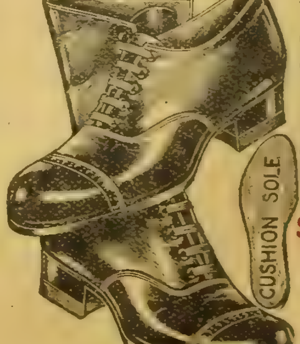
Men! Don't lose a moment in ordering this wonderful brown work shoe. It is made of leather as near waterproof as can be made—solid leather through and through with full grain leather uppers, guaranteed to wear six months. Easily worth $5.00. Two full, heavy double soles, sewed and nailed for greater strength. Extra wide, full leather counter, riveted to prevent ripping. Sizes 7 to 11, wide widths. **Order by No. 96A699. Send no money. Pay $2.98 and postage on arrival.**

Boys' Guaranteed Shoes

Six months' guarantee

Two full green chrome waterproof leather soles, solid leather heels. Munson army type. Barnyard acid-proof. Sizes 1 to 5½. Wide widths. State size wanted. Send no money. **Order by No. 96A550. Pay $2.69 and postage on arrival.**

Women's Comfort Oxfords or High-Cut Shoes Only



$1.98

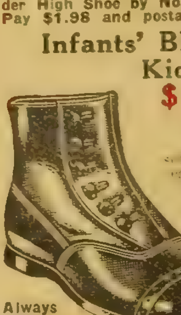
Send No Money SIZES 2½ to 8

State Size

Every woman should get a pair of these sensible broad toe shoes at this amazing price. Uppers of soft kid-finish leather. Solid oak leather soles. Low rubber heels; comfort cushioned insoles. Sizes 2½ to 8. **Order Oxford by No. 96A233. Order High Shoe by No. 96A263. Send no money. Pay $1.98 and postage on arrival.**

Infants' Black or Brown Kid Shoes

$1.09 Up



Always State Size

A real money-saver — infants' soft kid leather shoe in black or brown. Has fine soft uppers, flexible solid oak leather sole. Sizes 3 to 8. **Order Black by No. 96A-1115. Price $1.09. Order Brown by No. 96A1118. Send no money. Pay $1.29 and postage on arrival.**

Be Sure to Mention All Sizes, Colors, etc., and Send All Orders From This Page Direct to **SHAROOD CO.** Dept. 96 MINNEAPOLIS MINNESOTA

The Michigan BUSINESS FARMER

An Independent
Farm Magazine Owned and
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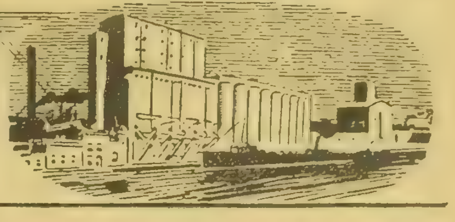


VOL. X, No. 17 SATURDAY, APRIL 14, 1923 NEW TERMS: TWO YEARS $1 60c PER YEAR—5 YRS. $2

Who Whistled?

Turn to page three and read the article, "State Income Tax Promises Property Tax Relief"—It is of vital interest to you and you can assist in securing the passage of this law if you act at once. Also read, "Saving Mother Those Extra Steps."

Current Agricultural News

PROGRAM OF POTATO GROWERS EXCHANGE

THE program for the Michigan Potato Growers Exchange for improving the status of the potato industry in Michigan in 1923.

WHEREAS, the potato industry of Michigan during the past season has severely suffered from the bad effects of 1. Country-wide overproduction. 2. Car Shortage. 3. Field Freezing. 4. Inferior Quality. 5. Rough handling of green stock. 6. Insufficient grading and sorting. 7. Improper conditions in storage. 8. "Bearing" the market by unscruplous buyers and brokers within the state. 9. Over specialization in potato production in certain localities, and

WHEREAS, it is our belief and conclusion that these conditions are generally amenable to correction, and that the bad effects of all can be greatly modified by a campaign of education and preparation, therefore

BE IT RESOLVED, that we, the Directors and Officials of the Michigan Potato Growers' Exchange go on record in favor of and hereby pledge our support to the following program for improving the status of the potato growing industry in the state of Michigan.

Program

1. The promotion of an educational campaign for more careful sorting and grading and the feeding of the surplus in case the Government Crop Report for August 1st shows a possible crop of 380,000,000 bushels or more.

2. To insist that the Railroads of the State, in their capacity as Common Carriers, take steps immediately to live up to their franchise obligations and proceed to equip themselves for handling in an orderly and expeditious manner the tonnage offered for shipment. If an unbaised presentation of the seriousness of our case does not meet with adequate response on the part of the Railroads, then we advocate the leasing of a reasonable number of refrigerator cars by the Exchange. As further precautions toward the end of meeting the bad effects of car shortage we advocate more early shipping in box cars and a careful study by Exchange members of the system of pooling all potatoes by seasons as a means of equalizing the prices to growers which result from enforced inequality of shipping.

3. Earlier planting of the late crop, to secure maturer stock; and earlier digging to avoid possible danger of field freezing.

4. The improvement of the quality of our commercial crop by the more general use of certified or high quality seed; seed treatment; early planting; control of leaf diseases by high pressure spraying.

5. The use of machine diggers where possible; more careful handling in field and warehouse; and the elimination of unduly severe sizing machinery in potato warehouses.

6. In case of a normal or overproduction we advocate very careful sorting and grading in order to put an attractive and superior quality pack on the market, also the use of trade-marked sacks for each grade adopted by us in order to realize both financially as well as an increased favorable reputation on the prestige established by our quality offerings.

7. Inspection of all potato warehouses and the installation of proper heating and ventilating facilities to prevent abnormal heating, sweating, molding and discoloration.

8. More general pooling of potatoes through the cooperative marketing associations; also an educational campaign to unveil the "bearish" practices of unscrupulous buyers and brokers within the state.

9. The system of farming, in some localities, which limits the amount of live stock and legume hays, in favor of specialization in potato growing, we believe to be fundamentally wrong. We advocate enough dairy and other stock to take care of all the cull potatoes during years of normal production and consume the surplus during years of over-production.

BEET GROWERS HOLD ANNUAL MEET AT SAGINAW

THE annual meeting of the Michigan Sugar Beet Growers Association was held in Saginaw, March 28th, at the auditorium. Being a state meeting it was not very well attended by the actual growers of beets. Many were there that used to grow beets but on account of labor conditions did not know as they would grow any. General satisfaction of the 50-50 contract principal was expressed. It was conceeded that the factories and growers would have to co-operate in the most sincere manner or the sugar beet industry in Michigan would become a thing of the past. The speakers were A. B. Cook, Master of the State Grange; Hale Tennant, of the State Farm Bureau; Harold F. Pitcerian, president of the Owosso Sugar Co.; Tom C. Price, president Michigan Sugar Beet Growers Ass'n, and C. E. Ackerman, manager Michigan Sugar Beet Growers Ass'n. Practically all the old board of directors were reelected with a few additions, including A. B. Cook and others.—C. E. Ackerman.

TO LOWER WIRE RATES BETWEEN TWO PENINSULAS

REDUCED toll and long distance telephone rates between cities of the upper peninsula and points in the lower peninsula of Michigan will be put into effect April 21, according to a schedule filed last week with the Public Utilities Commission by the Michigan State Telephone Company.

Judge Franz C. Kuhn, president of the telephone company, states that this move is in line with the company's policy of doing everything possible to bring closer together the distant points of the state.

NINE STATES NOW HAVE FILLED MILK LAWS

SIX additional states have enacted filled milk laws to prohibit the manufacture and sale of filled milk within the state boundaries, in the past two months, according to the report of the Extension Service of The Holstein-Friesian Association of America. These states are Iowa, Kansas, Missouri, South Dakota, Massachusetts and Vermont. In Vermont, the bill was passed over the veto of the Governor. Three additional states—Wisconsin, New York and Ohio formerly had filled milk laws.

Filled milk bills are now pending in Illinois, Minnesota, Michigan, Connecticut, New Hampshire, Pennsylvania and Wisconsin.. In only one state, Indiana, has filled milk legislation been defeated.

False advertising bills designed to prohibit the use of the dairy terms, dairy cow pictures and the name of dairy cattle breeds the advertising of butter substitutes have been past by the states of Missouri, South Dakota, Ohio, Vermont, New Jersey, Massachusetts and Deleware in the past two months. States already having false advertising laws are Iowa, Michigan and Pennsylvania, now making a total of eleven. A false advertising bill inroduced into Kansas legislature is the only defeat reported.

False advertising bills are pending in Illinois, Minnesota, Wisconsin, New York and New Hampshire.

THE MILK POOL IN AUSTRALIA BETTERS SITUATION.

AUSTRALIA has made considerable progress in the solution of the problems involved in satisfying both the producers and the consumers of milk as to prices, according to M. R. Harrison, publisher of The Producers' Review, of Toowoomba, Queensland. Mr. Harrison is making a study of agricultural economics in the United States. A few days ago, he discussed with representatives of the World's Dairy Congress Association the probability of getting a large delegation from Australia to attend the Congress. This is to be held from October 2 to 10 opening at Washington and including sessions at Syracuse, N. Y., with a one-day stop at Philadelphia en route. Australia has officially accepted President Hrading's invitation to send representatives to the meeting.

The elimination of overhead charges, or "spread", has been one of the most important means employed by the Australians in improving the milk situation. This has been made possible through the formation of a dairy "pool" in Queensland, according to Mr. Harrison, Australia has had much experience with the pools in the sphere of agriculture. Some of these pools, notably the wheat pools, have been formed by act of the Government. The dairy pool is voluntary. The economics effected by its managers have enabled them to pay the farmers more than they had been receiving for milk and consumers are required to pay no more than formerly and some are getting a reduction.

Your Telephone Manager Is Responsible to You for Good Telephone Service

Your Telephone Exchange Manager is *directly* responsible *to you* for your telephone service.

We urge you particularly to meet and know him.

Sometimes, there may be little, irritating difficulties with the service that the ordinary trouble report does not seem to quite clear up. In such cases the Telephone Manager will make it a matter of personal attention to see that service is restored to your satisfaction.

But don't wait until then to make his acquaintance. Drop into your telephone office, some day, and meet him. If he is not in, capable representatives will gladly attend your telephone needs. Or leave your card, and the Manager himself will call on you.

The telephone people will give you any information about your own telephone service or about telephone matters in general.

They are animated with just one purpose—their primary and most important business is to serve you.

MICHIGAN STATE TELEPHONE CO.

SATURDAY
APRIL 14th,
1923
VOL. X. No. 17

Being absolutely independent our columns are open for the discussion of any subject pertaining to the farming business.

"Hew to the line, let the chips fall where they may!"

The Michigan
BUSINESS FARMER

"The Only Farm Magazine Owned and Edited in Michigan"

Published Bi-Weekly
Mt. Clemens, Mich.
TWO YEARS $1

Entered as second-class matter, August 22, 1917, at the post-office at Mt. Clemens, Mich., under act of March 3rd, 1879.

State Income Tax Promises Property Tax Relief

Byrum Bill now before the Legislature Taxes Personal Incomes, Exempts Dependents, and will, its Sponsors Claim Eliminate Property Tax—Quick Action from Rural Districts Necessary

By LANSING CORRESPONDENT

IF YOU WANT THE GENERAL STATE PROPERTY TAX SHIFTED FROM THE FARMER TO THE NET INCOME OF ALL INDIVIDUALS—ACT

THE Byrum Income Tax Bill, (House No. 377) is at this moment before the legislature of the State of Michigan. This bill, with which you are undoubtedly familiar, provides for a state income tax of four per cent (4%) on the net income of every individual, who has been resident of the state for six months or more of the taxable year, allowing deductions of $1,000 for a single person, $2,000 for a married person and $400 additional for each child under 18 years of age or any dependent incapable of self-support.

The tax would become effective covering the net incomes of all individuals for the year 1923 and would be payable March 1, 1924 and each year thereafter. This state income tax would be deductable from the net income reported to the federal government.

That in a nut-shell is House Bill No. 377.

At Lansing, in view of the defeat of the income tax measure at the last election they are puzzled as to whether the farmers of Michigan are solidly for this Bill or not.

It is hard for The Business Farmer to understand in view of the small amount paid on net incomes to the federal government by the farmers of Michigan and the very much larger proportion of these taxes, paid by urban dwellers why any farmer should oppose the state income tax.

There is, undoubtedly, a powerful lobby at work in Lansing to defeat the present bill. Your representative must know that you, the farmers of their districts, are solidly behind them if you expect them to vote in favor of it.

There is not one minute to be lost. Do not depend on the mails. A telegram or a telephone call to Lansing will cost you little and get you immediate attention, if it can have the backing of your local arbor, grange, farm bureau or cooperative, so much the better. If you do not have time to call a meeting, get the approval of the officers and sign your appeals or pledges of support with the names of these officers and the name of your organization.

THE proposition to provide the state of Michigan with an income tax which is based on the net income of all individual citizens is not a new one. At the last November election an income tax amendment was presented, which was designed to provide for a graduated income tax, the exact amount and all details being left to the legislature for their special enactment of laws to control its operation.

This amendment was voted down by a considerable majority which gave rise to the statement from the opposition that the people of the state of Michigan did not want an income tax law, and had proven it by their actions at the ballot. This statement is not believed to be founded upon facts. Certain it was that the residents of the rural districts in Michigan did not understand the meaning of his income tax, and there was no promise made in the discussion of it that there would be relief from the property tax, or that there was any possiblity of the income tax taking the place of a property tax, or providing sufficient funds to enable the state to entirely eliminate the property tax.

The Byrum Bill

Shortly after the first of the year representative Warren E. Byrum of Leslie, introduced a state income tax which seems to meet the crying need of the hour; that of raising sufficient funds to cover the operation of state expenses and to lower the tax on those who are least able to pay them.

This bill, known as House Bill, No. 377, supposes a personal income tax of 4% on all individual incomes from all sources. It will yield a revenue to the state treasury of from 14 to 16 million per year. is in addition to the corporation privilege fee as provided by the 1921 legislature which raises from $5,500,000 to $8,000,000 per year, and will, with its addition of the four million dollars received annually from other state sources, being the total receipts for the general fund of the state to from 23 million to 28 million annually.

General property taxes are said to have increased practically 700%, from 1901 to 1921, and the property itself has been increased in assessments over 400%, while the average cost of state and local government has increased from $17.49 per thousand in 1901, to $28.88 per thousand in 1921. The fact is, that so serious has become the problem that in 1921 about one tenth of the home-owners, farmers, and property owners in the state were unable to pay their taxes and they were returned as delinquent. It has come to a point where there is serious weight given to the proposition that there is little incentive for one to purchase or farm in the state of Michigan.

Estimated Revenue for State

Experts have figured that on the basis of a 4% income tax as provided in the Byrum bill, the state will raise from between 15 to 20 million dollars annually. In 1920 according to the United States Internal Revenue Department, 305,000 persons in Michigan have a taxable income of 470 million dollars, which at the rate provided by the Byrum bill of four per cent would yield to the state 18,800,000 dollars annually.

The income bill now before the legislature does not exempt state employees or school teachers who would all be forced to pay four per cent on their net incomes as would all other citizens of the state.

Unlike the federal income bill, the Byrum bill No. 377 taxes not only the net income but includes incomes from rentals, interest, profits, dividends, salaries, professional services, and all services whatsoever, except salaries of U. S. Officials, U. S. Government Bonds, and state soldiers' bonus bonds, which could not legally be taxed by the state.

Farmer Will Benefit Most

Needless to say, it is the farmer of Michigan, who will as a class, secure the greatest benefit from the passage of this act, and it is to the farmer that the legislature is looking for an answer as to whether or not the farmers of Michigan wants this income tax passed at the present session.

In brief, house bill No. 377, provides a state income tax of four per cent to be imposed upon every individual who has been a bona fide resident of the state for six months or more during the tax year, upon his entire net income deducting an exemption of $1,000 for a single individual, and $2,000 for a married individual, in addition to which, $400 may be deducted for each child under 18 years of age, or for any dependent who is not capable of self support. The tax is collectable March 1st, each year, beginning March 1st, 1924, on the income for 1923, and thereafter falls due 15 days before the Federal income tax from which all state taxes may be deducted.

The total receipts from this tax would go under the General Funds of the state, and thereafter could be used as the legislature saw fit to appropriate it.

It is interesting to know how the Byrum bill would benefit the farmer tax payers of the state. In 1921 the property tax collected was as follows:

State Corporations	$ 5,625.000
Other city property....	7,275,000
Villages of state........	1,550,000
Twps. outside villages	6,000,000
Total................	$20,450,000

This shows that more than one-third of the actual property tax relief would directly affect the farmers of Michigan irrespective of their interests outside of the township in which they reside.

Bringing the proposition of the state income tax directly to your own door Mr. Reader, can you figure that your income tax in the state of Michigan would be approximately the same as you paid on the federal income tax the past year; in other words, the four per cent and the exemptions allowed are comparable to it, and would be in addition to it,

Income Tax Is Justified

An income tax measure is always justified by its sponsors because it derives its revenue from those who are best able to afford it. Other states in the union have provided themselves with an income tax. The state of New York, being an example of the successful operation of an income tax which provides sufficient money for the operation of all state departments.

Michigan is, as pointed out by Dr. Friday in a recent article in the Business Farmer, an industrial state, which must provide some encouragement to the farmers who are to supply her directly with the food products which she consumes. In no more direct way could this encouragement be offered than thru the establishment of a state income tax which the present legislature is able to provide.

Inquires made by the Business Farmer representative at the capitol this week, disclosed the fact that this measure is tied up in the hands of a committee, two members of which have been on the investigating committee traveling thru the sugar beet countries, holding meetings in regards to the employment of child labor in the beet fields. Other members of the committees are inactive, and the chairman insists that if a meeting is not called, and action taken before the end of the present week, he will ask that a new committee be appointed.

There is yet time for the farmers of Michigan to make their voice known, and every local organization in the state, has within its power to let both representative and senator at Lansing, know that the rural community is solidly behind him in his vote for the passage of this law at the present session.

Political observers believe that this measure will pass the House quickly, and that particular pressure should be brought upon the Senate where its passage will not be as easy. There seems to be no doubt but that the governor will sign it, and it would become operative covering the net incomes of the present year.

FARMERS' TAXES IN 1922 EXCEEDED INCOMES

TAXES which the farmers of the United States were called upon to pay in 1922 amounted to a larger sum of money than the total net incomes of the farms of the United States of the same year according to official statistics recently made available. Agriculture cannot prosper until the tax problem is properly solved.

Saving Mother Those Extra Steps

Dan Baxter Shows His Father How They Can Intall a Kitchen Sink for Mother At Little Expense

By MILON GRINNELL

There should be a sink in the kitchen of every farm home in Michigan. The cost of installation is very small and the extra steps saved in one month more than pays for it.

"THANKS, Dan, for drying the supper dishes," said Mrs. Baxter, as she took the dish towel from the hands of her son and hung it up to dry. "I have had a busy day today and am very tired."

"Glad to help you mother," replied Dan.

He stood watching his mother as she carried her pan containing the dish water to the back door to empty it into a pail. Then glancing thoughtfully about the kitchen he passed into the livingroom where his father sat reading the daily paper.

Dan Baxter had just completed his first year at the Michigan Agricultural College and was helping his father during the summer.

At College he was learning the value of farm home conveniences, how they make life on the farm more pleasant and pay the cost of installing within a short time through work and time saved. He had never noticed very much the lack of the things that make a home modern until this summer, and it had never been brought as forcefully to his mind as it was when he stood watching his mother carry her pan of dish water to the door to empty it into a pail. His father had the latest machinery to do his farming with and his barns were most modern. His father was a good man but he was so busy with farm work that he thought little of the house or mother's comforts.

Dan walked up to where his father sat.

"Dad," said he, as his father glanced up at him from the paper he was reading, "you have been so busy with the farm and I with my school work that we have neglected mother. She is working very hard and we can make at least a part of her work much easier."

"Now what put that idea into your head?" John Baxter's voice was deep and pleasant to hear. "Mother never said anything about wanting anything. Whenever she wants a dress, or dishes or anything she always just goes and buys it. She is a pardner in the business, son, and knows what we can afford as well as I do."

"That proves what I just said," exclaimed Dan. "You are too busy with your farm work to notice. Mother takes hundreds of steps each day that we can save her——"

"How?" interrupted his father.

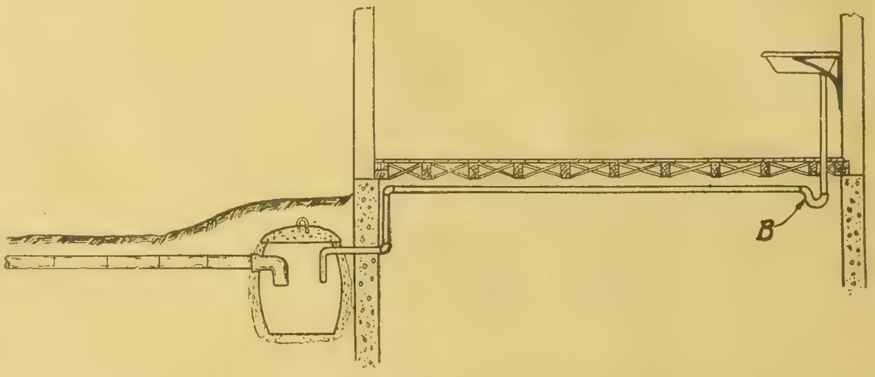
"By putting a sink in the kitchen," said Dan.

"But we can't afford any such thing. We would have to hire a plumber to install it properly and put in the drain—no, that will have to wait a while yet." And his father returned to his reading.

But Dan was determined to get a hearing as he knew his father would install the sink at once if convinced that it could be done at a reasonable expense.

"If you will listen for just a few minutes, dad, I can tell you all about how we can install the sink ourselves and the expense won't break you either."

John Baxter was thinking about what the boy had said to him about neglecting his wife. He hadn't noticed. Dan was right. He folded the paper, laid it on the table, and turned toward Dan.



A trap (B) should be placed in the sewer line when the sink is eight feet or more from the outside wall. This prevents the backing up of offensive gases caused by the accumulation of waste matter in the pipe from the sink to the grease trap.

"Alright, son, shoot," he said.

"First, we will consider the cost," began Dan. "The total cost of installing the kitchen sink, aside from labor, all of which you and I will do, will be $12.50 to $22.85, depending on the kind of sink you put in."

"Is that all it is going to cost us? Why I thought it would be about twice that. But do you understand all about installing one?" questioned his father.

"No, I don't, but I have a bulletin that I brought home from the M. A. C. that explains in full about it. Just a minute and I'll get it." And he went up the stairs leading to his room taking two steps at a time.

In this case the sink has not been properly installed. In the first place it is placed back in a corner where the light is very poor. No woman would care for a sink located like this one. It should be near a window. Also this sink has an inadequate method of sewage disposal. When the pail is full it is necessary to carry it outdoors making many steps that are not necessary.

Mrs. Baxter came into the room having completed her work and her husband noticed for the first time how tired she looked. She was working too hard, he could plainly see now. Have to pay more attention to her comforts hereafter, he decided.

"Where is Dan?" she asked.

"Just gone up to his room for a couple of minutes. Had a hard day of it, mother?"

"Yes, I have, John. and I am rather tired. I guess I'll go straight to bed."

Good idea," said her husband. And as Dan came down stairs. "Dan and I have a little figuring to do before I roll in."

Dan bid his mother goodnight and then drew a chair up beside his father's.

"Here's all the dope," as he opened the bulletin. "We will take a paper and pencil and write down what we need."

"You read 'em off and I'll write 'em down," And suiting actions to words his father secured paper and pencil.

"Here they are: A white enameled sink, 20 inches by 30 inches, price from $6 to $14, depending on quality——"

"I'll put down $14, might as well be the best 'cause it is the cheapest in the long run," said Mr. Baxter.

"That is a good idea," agreed Dan. "It says here in the bulletin that for ordinary kitchen use, sinks of cast iron white enameled are best. Sinks of painted cast iron and also of sheet steel can be obtained; however they are not as easy to keep clean."

"The rest is as follows," continued Dan. " 'One pair sink brackets or sink yoke, 50c to $2.50; 12 feet of 1⅛ inch lead pipe, $2.50; ¼ pound of putty, 10c; 50 feet of 4 inch drain tile, $2; 2 sacks of cement, $1.50, 1 yard of gravel, 25c."

"Now that we have the material what are we going to do with it?" laughed his father.

"The first thing to decide is, where the sink is to be put," said Dan.

Mr. Baxter thought for a moment. "Of course, that will be up to mother, but I suppose she will want it under that window on the north side of the kitchen. That would be a fine place for it as the light is very good and then it is near the stove so she would not have to take so many steps."

"Alright, dad, we will leave that for mother to decide. Now the next thing on the program, according to the bulletin, is how high the sink is to be from the floor. The bulletin states that for a woman 4 feet 10 inches tall the working surface or bottom of sink should be 30¾ inches; 5 feet 5 inches, 34½ inches; 5 feet 7 inches, 35 inches; 5 feet 10 inches, 37 inches."

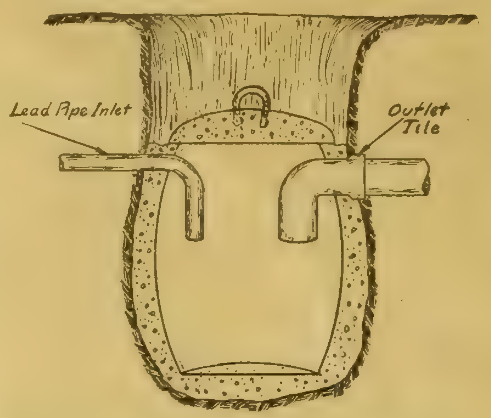
"I reckon that it would have to be about 35 inches from the floor for mother," mused Mr. Baxter. "She is about 5 feet 7."

Dan could see that his father was very interested as he did not notice when the clock struck nine, which was his bedtime. Urging Dan to go on he reached for his pipe.

"Read about the installing," he said settling himself back in his chair.

" 'First'," read Dan, " 'after the location of the sink has been decided upon, measure up from the floor the proper height for bottom of the sink or working surface, then add five inches for the depth of the sink. Draw a level line on the wall at this point.

" 'A sink may be attached to the wall either with sink brackets or a sink yoke or frame. The yoke is stronger and more easily put up although more expensive. The brackets or yoke should be attached to the wall with their top edge even with the line and spaced far enough apart to receive the rim of the sink. If the sink has a back attached, special brackets are sometimes provided for attaching to the wall.



Sink water should not be merely run out on the surface. It soon becomes unsightly, ill-smelling, and a harbor for flies. Since the sink water does not contain much solid matter, it can usually be disposed of very readily by fairly simple methods. Owing to the grease which is generally present in waste water, it should not be run directly into a tile drain, whether this line runs into the farm drainage system or is merely a short line running away from the house. If the waste water is first run through an easily constructed grease trap, the grease will be separated so that the water can pass out into a tile system without danger of clogging.

" 'Either lead or iron piping may be used to carry the waste water. When ordering sinks, fittings can be secured for attaching either lead or iron pipe. For a simple installation lead pipe should be used, as practically no special tools are required.

" 'Secure a piece of 1½ inch lead pipe long enough to reach from the sink to the floor and through the wall into the grease trap. The pipe can be bent readily to proper shape. If the bends are sharp, the pipe should be filled with fine sand to prevent flattening and heated slightly on the side that will be stretched.

" 'Where the sink is attached to the outside wall, and with the grease trap directly outside the house, no trap will be required below the sink, as the immersion of the waste pipe into the liquid in the grease trap prevents the gasses from coming back. On long lines of waste pipe a trap is recommended.

" 'If quite a large hole is made in the wall, the pipe may be inserted from the outside and slowly bent to enter a hole made in the floor directly beneath the strainer in the sink. When the pipe is about one foot above the kitchen floor remove the pipe clamp from the sink and slip it over the end of the pipe. With a round stick or ball pein hammer flange over the end of the end of the pipe until it fits the pipe clamp; then cover the flanged end with a layer of putty and bolt to the sink. If the hole through the floor has not been neatly made a ring or collar can be secured to fit the pipe closely and cover any irregularities.

(Continued on Page 19)

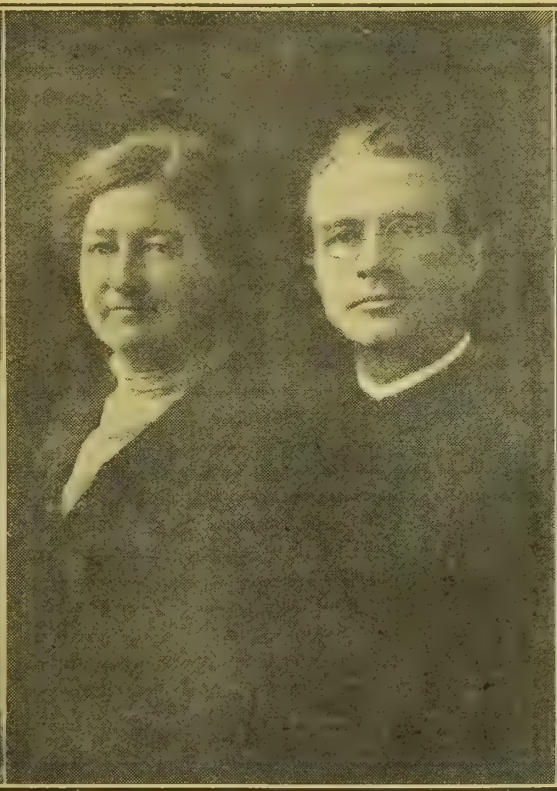
What woman wouldn't be pleased to have her kitchen arranged like the above? The sink is located directly under a window so that light is ample making working conditions better and the sink more sanitary. On the right of the sink is a large drain board while to the left are built-in cupboards and a flat top cabinet. In this kitchen one would have to take only a very few steps in preparing a meal. Notice there is no pail for sewage in this case. A tile drain takes care of the waste water.

PICTURES FROM FAR AND NEAR

GETTING ALONG NICELY, THANK YOU.—For the first time in ten years, a baby camel, born in New York, has lived over the critical age of the first two or three weeks. Here is the newest addition to the Central Park Zoo, New York City, a baby camel, three weeks old, with its mother and the keeper.

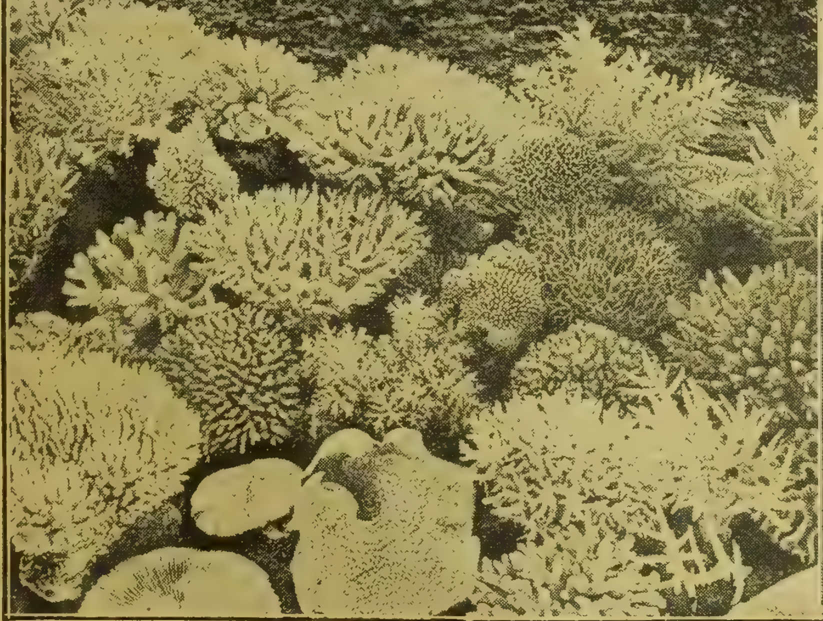
EUROPEAN MIDGETS VISIT THE NATIONAL CAPITOL AND INSPECT THE FIRE DEPARTMENT.—Midgets from all parts of Europe who arrived in Washington inspect the Fire Department and demonstrate to the Chief their ability to do big things. Photo shows a group of midgets who have donned firemen's hats already for action.

RIVALS QUEEN OF SHEBA IN SPLENDOR.—Eleanor Boardman, of the movies, wears here a headdress of glycerined octrich and cross aigrettes, with a bandeaux studded with rhinestones and pearls. It is valued at $600 and in a forthcoming production Miss Boardman will ruin it by jump-overboard while wearing it.

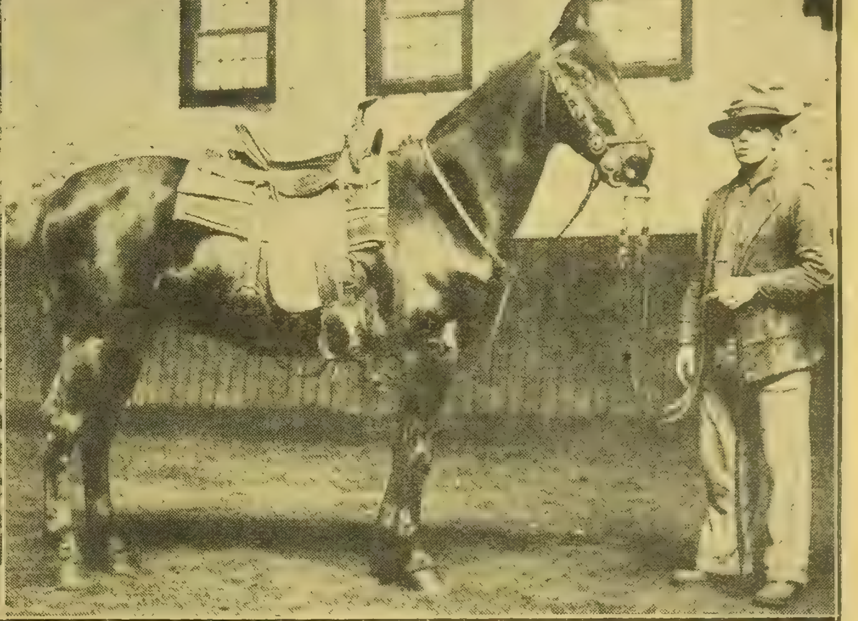


70,000 FAMILIES IN HIS CONGREGATION—You can imagine how big a church it would take to hold them all. Yet Rev. David F. Warner has assumed the pastorate of The Business Farmer's congregation and you will find his first sermon on page 11 of this very issue. Rev. Warner is here shown with his good wife and help-mate.

EASY TO MAKE MONEY, SAYS HE.—Lord Leverhulme, English soap magnate claims that it is the simplest thing in the world to make 100,000 pounds or twice that sum. But absent-mindedly he has forgotten to add the recipe for amassing such a sum. He considers Henry Ford the leading member of the "Make Money Club."



IN NATURE'S UNDER-SEA GARDEN.—These look like so many flowers, but in reality they are just some very pretty specimens of coral. This picture was made, with difficulty, under-seas, off the coast of North Queensland, Australia and the coral is much in demand throughout the world.



QUITE AN EXPENSIVE SEAT.—Would you pay $600 for a seat? Well, that is what this saddle and bridle cost. It is German Silver mounted and is very rare, both for its price and its unique service. The horse is named "Peg" and is the property of Capt. P. C. Lewis of Troop A, 110th Cavalry.

(Copyright Keystone View Company)

Get the Best Jobs

You run a threshing outfit to make money. To do that you must get the best and largest jobs. To get the best jobs you must have an outfit that can do the very best of work—that can thresh most, save most and run the steadiest. The

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will do all that. Its Big Cylinder, "Man Behind the Gun," Beating Shakers, Graduated Adjustable Chaffer, and sturdy construction make it the most effective thresher and the most profitable one.

It saves the Farmer's thresh bill by saving enough more of his time and grain.

It does such good work and threshes so well when conditions are bad that the best and biggest jobs wait for it.

And the man who owns it makes the most money because it gets those jobs.

Built in both wood and steel. A size for every need.

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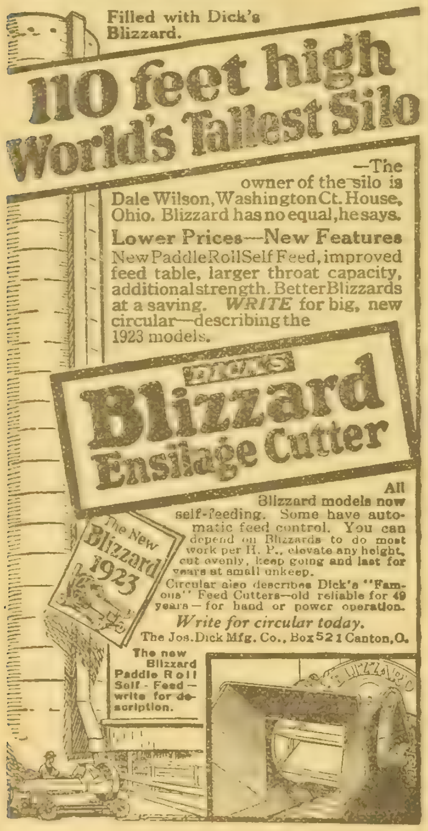
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110 feet high World's Tallest Silo

—The owner of the silo is Dale Wilson, Washington Ct. House, Ohio. Blizzard has no equal, he says.

Lower Prices—New Features

New Paddle Roll Self Feed, improved feed table, larger throat capacity, additional strength. Better Blizzards at a saving. *WRITE* for big, new circular—describing the 1923 models.

DICK'S Blizzard Ensilage Cutter

All Blizzard models now self-feeding. Some have automatic feed control. You can depend on Blizzards to do most work per H. P., elevate any height, cut evenly, keep going and last for years at small unkeep.

Circular also describes Dick's "Famous" Feed Cutters—old reliable for 49 years—for hand or power operation.

Write for circular today.

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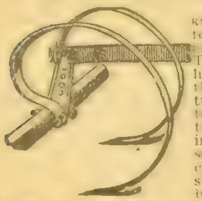
The New Blizzard 1923
The new Blizzard Paddle Roll Self-Feed—write for description.

ALL AROUND SATISFACTION FOR ANY CULTIVATION PURPOSE



It's through the right kind of cultivation that foul growths are kept down and can be eradicated. THE KOVAR DIGGER has opened the field for the right kind of cultivation and having exclusive features, will give satisfaction which no other machine will produce. Thousands of farmers have been convinced and we want to show you. Write for free booklet on land cultivation and how to work foul growths. KOVAR has the most successful Spring Tooth Corn Cultivator, also Harrow Cart. Write for further information and prices.

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HEAVES Is your own horse afflicted? Use 2 large cans. Cost $2.50.

Money back if not satisfactory

ONE can at $1.25 often sufficient. In powder form.

Most for cost
30 years' sale

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A veterinary's compound for Horses, Cattle and Hogs. Heaves, Coughs, Distemper, Indigestion. Worm expeller. Conditioner. At dealers' or by parcel post.

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Farmers Service Bureau

(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full name and address. Name not used if so requested.)

TREE SURGERY

In our cemetery we have many beautiful shade and ornamental trees. During the past summer many of the trees all of the silver-leaf maples were badly injured by the bark cracking, on some trees from the ground to the lower limbs a distance of four or five feet. The insects had entered and the trees were in great danger of being ruined. We had all foreign and dead bark cut away and the wounds painted. Did we apply the proper remedy or what should be done where the bark is injured by being broken or torn away? We would like some information relative to tree surgery, if you would kindly direct us where to get it.—Mrs. E. A. N., Kingsley, Mich.

—The damage to the silver maples is probably the result of sun scorch or as it is sometimes called, sun scald. This damage is quite common on smooth barked trees, especially on those portions of the trunk which for some reason, such as pruning or the removal of neighboring trees or shrubs are suddenly exposed to direct sunlight. It occurs often on trees which have been recently planted and where the crown is not sufficiently developed to shade the stem of the tree or where there is reflected light from some cause as well as direct light from the sun. It occurs only on the southwest side of the tree and if the injury is on some other side it was caused by another agency. Such damage can only be prevented by shading the stems of the trees which seem susceptable. this can be done by tying burlap or some other material around the stem of the tree.

After such injury has occurred, or any similiar injury, all injured bark and decayed wood underneath should be removed and the wound painted with lead paint or better still with creosote in order to prevent infection. You could obtain a bulletin on tree repair by writing to the Forestry Department of the Michigan Agricultural College, East Lansing, Michigan.—A. K. Chittenden, Professor of Forestry, M. A. C.

FENCE VIEWERS

I have no law book and will ask where and how the fence viewers are obtainable or where I can get them. I also would like to know how to collect damages for neglect on live stock.—N. A. A., Leroy, Mich.

—The highway overseers and highway commissioner are fence viewers in each twonship. When any controversary arises between occupants of adjacent farms over a partition fence, it is their duty to view fences and determine the rights of the respective parties. When cattle break through a partition fence and damage the adjoining land owner, he may bring an action of trespess for such damage provided he has kept in good condition his share of the fence.—Asst. Legal Editor.

DO NOT DESTROY TREES OR SHRUBS ALONG HIGHWAY

I own a farm along state trunk line and brush has not been kept cut along same as I moved here a short time ago. I wish to clean up along the road, but have been told it is against the law to cut brush along trunk line as it is to remain for shrubbery. Please let me know is there any such law in Michigan, when passed and what is the penalty for same?—P. K., Lowell, Mich.

—I call your attention to Act 2 of the First extra session, Public Acts of 1921, which reads in part as follows:

"It shall be unlawful to cut, destroy or otherwise injure any shade or ornamental tree or shrub growing within the limits of any public highway within the state of Michigan without the consent of the authorities having jurisdiction over such road."

The purpose of this legislature is for the advancement of roadsire development as well as for the protection of the highways by the preservation and planting of shade trees therein and before a property owner would be authorized in cutting or removing trees or shrubs, he should make application to the authorities having jurisdiction over the highways who will grant the permit to remove such trees or shrubs as do not materially benefit such highway.

On country roads property should apply to the Board of county Road Commissioners, on township highways to the township highway commissioner and the township board and on trunk line highways and federal aid roads, application should be made to the State Highway Commissioner.

The penalty for violation of the above cited act is a fine of not to exceed $100.00 or imprisonment in the county jail not to exceed 30 days or both such fine and imprisonment.—H. H. Portlaw, Legal Advisor, State Highway Dept.

CAN AGENT COLLECT COMMISSION?

I have a question I would like to have answered in your next issue if possible. If I give a real estate man the exclusive right to sell my farm for a certain length of time, and during that time another real estate man sells said farm, can both collect commission? Or if I sell said farm myself, can either real estate agent collect?—L. McC., Croswell, Mich.

—Only the man who sells your farm can collect commissions, and if you sold it yourself, neither can collect. However, if you made a contract with a real estate agent, giving him the exclusive right to sell the farm, and then breached that contract before its termination by employing another to make the sale, or selling it yourself, you would be liable to him for any damages he may have suffered by reason of your breach of contract.—Asst. Legal Editor.

PLANNING A LIVESTOCK LEASE

Will you kindly suggest an outline for a lease where the landlord furnishes the cows, brood sows and poultry, and the necessary feed until more is grown? The tenant is to furnish horses, machinery and all help. Who should furnish the seed? How should threshing and silo filling bills be divided? Who should pay the personal property tax and the insurance?—G. C., Saginaw County.

—It would seem that the ordinary half and half livestock lease would be best adapted to your case. Under this arrangement, the landlord and tenant usually own the cattle, hogs, feed and seed in partnership. The tenant furnishes the horses, machinery and labor. In your case the tenant could buy a half interest in the cattle, hogs, feed and seed, and if he has not the ready money, could give you his note secured by chattel mortgage on his share of the goods and on his half of the crop. Usually the tenant is allowed to keep up to one hundred hens and to raise sufficient chickens to maintain the flock and have the product for his own, but sometimes the poultry is included in the partnership. Most tenants will not give much attention to poultry if the product must be divided with the landlord. All sales are divided half and half. If dairying is the principal source of income, or if the farm is rather run down, the landlord may find it necessary to furnish all the cows in order to keep a good tenant on this basis. The idea is that if the tenant is required to increase his labor bill in order to milk a large number of cows, the landlord should do something to offset this extra contribution of the tenant. Such bills as threshing, twine and rent of machinery for silo filling are divided half and half. Each party ordinarily pays the personal tax and insurance on his own property. Taxes and insurance on company property are divided half and half The landlord usually furnishes all the grass seed, altho on a long-term lease, this may be divided.

OFFICERS WHO ENFORCE PROHIBITION LAW

Some months ago you published in your paper particulars in regard to conducting an investigation of the prohibition law. We have altogether too much of it in this county. Please give me the name and address of the one whom it is necessary to inform.—Subscriber, Kalkaska, Mich.

—An investigation in regard to the violation of the prohibition law can be conducted: (1) By any private citizen who could report the result of his investigation to the law-enforcing officers; (2) by the law-enforcing officers of any city or village; (3) by the law enforcing officers of the county; (4) by the law-enforcing officers of the state, including the State Police, and (5) by the law inforcing officers of the Federal Government.

Whether or not there is too much investigation of violations of the Prohibition Law is of course a matter of opinion and should any citizen want such investigations discontinued, I should judge he would have to take it up with the different classes of law-enforcing officers, above mentioned.—Charles J. DeLand, Secretary of State.

C LIABLE FOR RENT

A sells 40 acres to B on contract. B makes small payment down and is to make another of $500.00 first of January, 1923, to gain full possession at that time. He fails to meet the second payment. B rents some land to C for wheat shortly after purchase. Can C hold wheat as per agreement?—C. E., Williamston, Mich.

—If C has leased the farm from B as purchaser under a land contract, and through no fault of C's the estate of B is terminated by B's forfeiture, thus terminating the lease, C has a right to cultivate and harvest the crops which he has planted while the lease was in effect, being liable to the vendor under the land contract for rent according to the terms of the lease.—Ass't. Legal Editor.

MICHIGAN CROPS

RAISING MORE AND BETTER POTATOES

In a recent issue, you had an article, entitled "More and Better Potatoes to the Acre," by E. Sutton. I do wish you could get him to give a detailed article on how he raised them, how deep he plowed, and when, what kind of fertilizer, and how put in. How many eyes he aimed to put in a hill, and everything connected with the growing of potatoes, including spraying and cultivating, also if ground was plowed in fall or spring. Would certainly be pleased to see an article of this kind in your paper.—R. G. H., Berrien Springs, Mich.

—The raising of potatoes is getting to be more of a problem each year. Farmers are awakening to the fact that ignorance along this line is keeping them back. But it also makes them work harder with less results.

I am passing along my ideas of raising better potatoes. Beginning with what I consider the very first step, namely, a good clover sod. This I manure thoroughly with a spreader using 20 to 30 loads to the acre.

If I am in a position to do so I put the manure on the year before, or as early in the spring as we can get on the ground. This should lay on the ground 2 or 3 weeks before plowing or until the rains have soaked it well into the soil.

I plow at least 8 inches deep dragging it lightly before quitting time each night. On this I sow commercial fertilizer, broadcast or with grain drill, working it thoroughly into the soil using ½ to 1 ton per acre. I use 0-10-5, 0-10-10, or 2-10-5. This I drag once a week good and deep until planting time.

We have tried fertilizer both in the row and broadcast and have had better results with the latter especially if it happens to be a dry season. If the acreage is small I prefer them rowed both ways. About 28 or 30 inches each way. This year I intend to put mine 24 by 28 inches to keep them from growing too large.

Good seed and spraying are essential. I select disease free Russett Rural potatoes. Cut them in blocky pieces, weighing not less than 2 ounces and having at least 2 eyes to the piece.

In spraying we use a power sprayer. Three nozzles to the row and 200 pounds pressure. We begin spraying when the vines are 6 inches high, continuing about every 10 days until we have at least sprayed them 5 times. When spraying for bugs we mix Arsenate of Lead with bordeau doing both jobs at once. The first couple of times cultivating I cultivate deep to loosen the soil, after that I cultivate shallow and level, keeping away from the plants.

In the Business Farmer of March 31st we were interested in the article "Shall We Plant Our Potatoes Earlier." The writer's idea might be all right for his particular locality, but as we live in Antrim county, near the lakes, where we have cool nights with a good amount of rainfall and are not bothered by frosts, we do not exactly agree with him. Our experience has been that if we plant before the 10th of June, about 4 years out of 5 we have a dry spell and it is sure to shorten the crop. We have raised potatoes planted as late as the 19th of June that were thoroughly ripened and taken care of before the frost came. Our season is shorter but potatoes grow faster than further south.

We treat our seed then green sprout them. We spread them very thin on the floor so that light gets to every potato and leave them from 4 to 6 weeks. By doing this we have stronger vines and they come up from a week to 10 days earlier.

We like to cut our seed about two days ahead of planting, but if this is not possible we use dry sulphur to heal them over quicker and make them better to handle.—E. Sutton.

TREAT SEED CORN WITH COAL TAR

Can I put anything on my seed corn before planting it to prevent crows pulling it up? I read in one of the papers last year where a man stated he had treated his seed with Creso Dip No. 2 and the crows did not pull up his corn. Do you think this would stop them? Is there any other remedy? How many pecks of white navy beans will it take to plant an acre of ground, rows 3 ft. apart and 18 inches apart in rows, or would 32 in. be wide enough between rows? I would plant 7 to 10 beans in a hill.—H. S. Whitmore, Mich.

—The coal tar treatment is one of the most effective for treating seed corn to prevent crows from pulling it up. This treatment is an old one and has been proved by years of use in Michigan. Several days before planting, the seed corn should be shelled and graded. The corn to be treated is moistened for ten minutes in lukewarm water. The water is then drained and coal tar applied at the rate of two tablespoonsful to a bushel of seed corn or one teaspoonful per peck. The coal tar is stirred thoroughly through the moistened corn until the kernels are evenly coated with a thin film. The corn is then spread out thinly on a floor or table to dry.

Creso is a coal tar product, and hence commercial Creso Dip is also effective.

From fourteen to sixteen quarts of beans are required to plant an acre of ground—rows 3 ft. apart, hills 18 inches apart, 7 to 10 beans per hill. On ground of average or better fertility you will get a larger yield by planting in rows thirty-two inches apart, in which case sixteen to eighteen quarts would be needed per acre.

Our experiments at M. A. C. show that on land of good fertility highest yields are secured by planting in rows twenty-eight inches apart, using from twenty to twenty-four quarts of seed per acre.—J. F. Cox, Professor of Farm Crops, M. A. C.

TREATING SEED POTATOES

I would like to know if you would advocate filling a silo with stover silage. We do not know what to do; buy a new ensilage cutter or put the silo filling attachment on our McCormick husker and take out all the corn. Does stover ensilage keep well and how do you take care of corn so it does not spoil? Will you please tell me just how to treat seed potatoes with Corrosive Sublimate? I would like to try mine this spring. —W. S., Lansing, Mich.

—Recent experiments at M. A. C., conducted by the Department of Animal Husbandry, show that stover ensilage is much less efficient for fattening steers than ensilage made from corn stalks carrying the ear at the proper stage of maturity. Stover ensilage will keep as well as ensilage made from the entire corn plant if properly packed in the silo and if sufficient water is added. It is usually in a more advanced stage of maturity and hence dryer. The addition of sufficient water when filling the silo will insure the proper keeping of stover ensilage. A larger amount of purchased concentrated feeds must be fed with stover ensilage than with ensilage made from the whole corn plant.

The following method of treating seed potatoes with Corrosive Sublimate is given in Experiment Station Bulletin No. 117:

Seed potatoes should be carefully graded and all ill-shaped, mechanically injured, and partially rotted tubers should be removed before the seed is put in the disinfecting solution. Potatoes should be comparatively free from dirt before they are treated. Potatoes should be treated while they are dormant and before they are cut. Soak the potatoes for 30 minutes in a solution of corrosive sublimate (Bichloride of mercury), the strength of which is 4 ounces of corrosive sublimate to 30 gallons of water.

Dissolve the 4 ounces of corrosive sublimate crystals in 2 quarts or so of hot water, and then add it to the 30 gallons of unheated water. Corrosive sublimate corrodes metals. It should be used in wooden vessels. A 50 gallon wooden barrel is a satisfactory container in which to soak the potatoes. By using two or more barrels, a large quantity of potatoes can be treated in a day.

Where 100 bushels or more of potatoes are to be treated, the work can be done conviently if a wooden trough or tank that will hold 8 or 12 potato crates is used. The potatoes in bushel crates are immersed in the corrosive sublimate solution. The tank can be made water tight by lining it with canvas and giving the canvas a coat or two of asphaltum paint.

The corrosive sublimate loses its strength with use, because the potatoes and dirt condense and chemical and take it out of solution. From one-tenth to one-fourth of the corrosive sublimate is removed with each batch of potatoes treated. The treating solution can be kept at the proper strength by adding corrosive sublimate from time to time. If the potatoes are placed in the solution loose and are comparatively free from dirt, add one ounce of corrosive sublimate dissolved in one quart of hot water for each 30 gallons of liquid after each second batch is treated.

If the potatoes are dirty and are treated in bags, add one ounce of corrosive sublimate for each 30 gallons of liquid after each batch is treated. When the treating solution gets very dirty, discard it and make up a fresh solution. One pound of corrosive sublimate will treat from 30 to 60 bushels of potatoes.

Corrosive sublimate is a deadly internal poison. Do not pour the solution where livestock or poultry can get at it, and do not use treated potatoes for eating purposes.

After the potatoes have been taken out of the solution they should be spread in a cool, shady place and allowed to dry thoroughly. It is a good plan to soak the bags or crates used for handling the treated seed in the corrosive sublimate solution in order to prevent any possible reinfection.—J. F. Cox, Professor of Farm Crops, M. A. C.

The Coach
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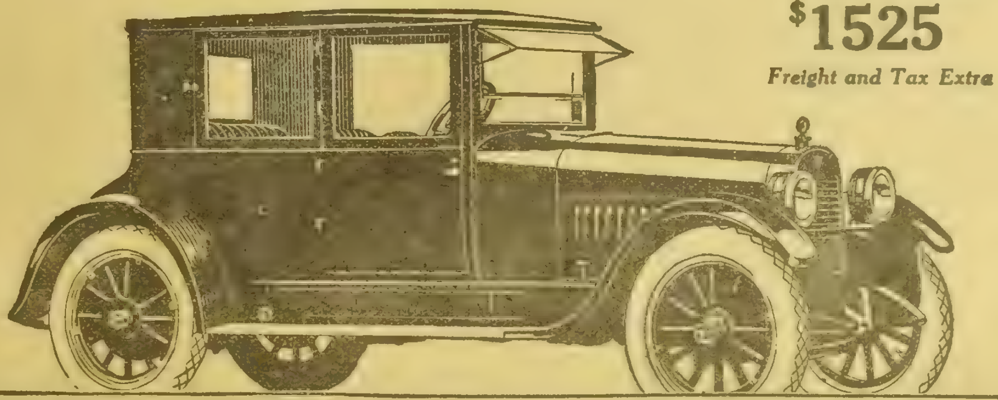
Freight and Tax Extra



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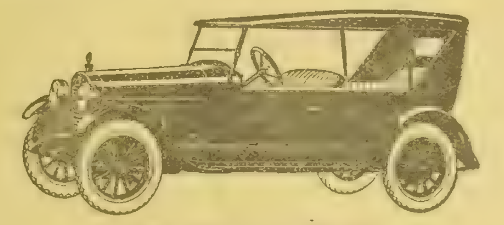

The Speedster $1425
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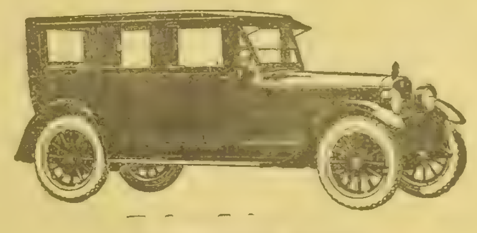

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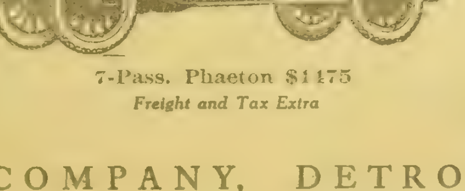

7-Pass. Phaeton $1475
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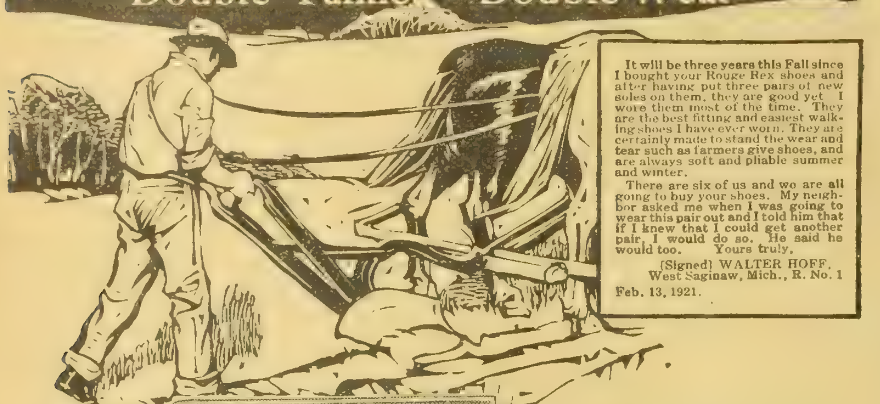


It will be three years this Fall since I bought your Rouge Rex shoes and after having put three pairs of new soles on them, they are good yet. I wore them most of the time. They are the best fitting and easiest walking shoes I have ever worn. They are certainly made to stand the wear and tear such as farmers give shoes, and are always soft and pliable summer and winter.

There are six of us and we are all going to buy your shoes. My neighbor asked me when I was going to wear this pair out and I told him that if I knew that I could get another pair, I would do so. He said he would too. Yours truly,

(Signed) WALTER HOFF,
West Saginaw, Mich., R. No. 1

Feb. 13, 1921.

The Plowboy

For plowing here's the shoe. High enough to keep out dirt, low enough for coolness. It fits snug and protects and supports the ankles going over rough, broken ground. And it wears like iron.

Ask for Stock Nos. 470 and 446

It Wears 1000 Miles

and it *stays* soft—rain or shine

We are exclusive makers of work shoes made of horsehide double-tanned by our own secret process.

This is our specialty. Our every energy is bent on making the world's strongest work shoes. To insure the best wearing leather we do our own tanning, in our own specialized tanneries. We tan horsehide, and it is known as the toughest fibre leather on earth, yet we make it soft and pliable as buckskin. Horsehide is used to cover league baseballs because it is the only leather tough enough to stand the pounding.

And it stays soft when double tanned our way. When other leathers get wet they dry out hard. Rouge Rex double-tanned horsehide stays soft. Wet it, soak it in water, snow, slush, mud, and it dries out soft and flexible as velvet. Wear Rouge Rex shoes and you'll say you have gained an entirely new conception of shoe service, endurance and comfort.

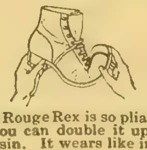
We are the largest tanners of horsehides for work shoes in the country. We buy only the choicest hides. In making Rouge Rex shoes, we use only the strongest part of each hide — the butts, where the fibre is toughest and most enduring.

You'll say that Rouge Rex Shoes are the most economical shoes you ever owned, and you'll rejoice in the comfort they give you. Notice how thick the leather is, and then feel how soft it is. Just like velvet. Yet Rouge Rex wear like iron. And they never tire your feet.

We make a Rouge Rex work shoe for every purpose. All are horsehide through and through. For field and factory, for lumber and mining camp or oil fields, for hunting and motoring, where a husky, hard-wearing, comfort-giving shoe is needed, there is a special Rouge Rex shoe.

If your dealer hasn't the Rouge Rex we'll see that you are supplied them by our nearest dealer. Write to us for catalog.

Rouge Rex Comfort Shoe



This Rouge Rex is so pliable and soft you can double it up like a moccasin. It wears like iron but you'll hardly know you have a shoe on, it is so soft and easy.

For tender feet, or where you do not encounter wet weather, wear this Comfort Shoe. You'll find it a blessing to the feet.

HIRTH KRAUSE CO.
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Dept. K230 Grand Rapids, Mich.

The Truth About Henry Ford

By Sarah T. Bushnell

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The Conclusion

FOR five years foreign-born laborors have received diplomas symbolic of nine months training in citizen-making. I sought a man to whom Mr. Ford had said: "The Bible is the most valuable book in the world. If it could be written in the language of today, I would scatter a million copies among the people who never read it and who fail to grasp its worth and beauty." I asked this man, Mr. Brownell, this question: "How has this great millionaire made the educational department of this plant the very dyna mo of its success, and why has he given a clergyman such wide and sweeping power?

Mr. Brownell took off his glasses and laid them carefully on the desk. "He does it by dispensing practical Christianity, interpreted through dollars and cents; in the sharing of profits with employees; in opening the doors of employment to maimed and crippled men, and to men who have unfortunately run into debt to society, but who have paid such debts in full. His has been the humane recognition that all men are of common clay and that all, barring none, are entitled to a helping hand.

"You shall meet Dean Marquis, head of the educational department, and Mr. DeWitt, head of the English school, which should really be called the American school, for its scholars are from fifty-eight countries and they speak one hundred different dialects. They have been taught one language and have been trained to become citizens of our own American nation. But first let me tell you an incident that will illustrate how men have been reclaimed in this factory.

"One cold night in December an official of the company was called to the front door of his house. Outside was the half-wreck of a man, who plunged into complaint without formality. 'They say Henry Ford gives the fellow who is down and out a chance—that he thinks there is some good in the worst of us, but it is a lie—a black, barefaced lie. I have stood in line at his plant trying to get work and never have been given a look-in. I'm at the end of my rope and I've got to go back to my old ways.'

"The conpany official interrupted him. 'Mr. Ford wants to give every man who deserves it a chance,' he said. The other man shivered. 'Ever since they turned me loose, two years ago, I've tried to go straight, and every time I get a job a dick passes the word and I'm fired. If I can't get steady work I'll have to be a crook again. To-night they——"

" 'Don't worry about tonight,' the company official told him; 'come to the factory tomorrow and a place will be found for you. We have more than five hundred men who have served penitentiary sentences and only two of them have disappointed us. When you begin work no one will be against you so long as you do what is right.' "

Somewhere in that great factory that man made good and he is still working there.

The probation period, formerly six months, has been reduced to thirty days, the minimum salary raised from five to six dollars a day. There has been no strikes nor is there any labor discontent. The power of discharge has been taken out of the hands of superintendents and foremen. They can discharge from their departments, but not from the factory. The employment office investigates and places the laborer in that other department to which he is better adapted.

The Educational Department, through the advisors, or helpers, has a record of the living conditions of each employe. They know his habits, good or bad. They know what money he has saved, if any. They know what insurance he carries. They consult with him as to his bank savings. They have taught him how and why to save. In rare cases they have moved his family to Detroit and provided a home in which to shelter them. There is nothing of the spy or detective methods in their visits. They go in the spirit of helpfulness and interest. They teach the employee hygienic living and how to buy food. While teaching him how to earn money they also teach him—which is more important—how to spend it. They have taught him that debt is the result of poor management or misfortune.

Take for example the case of an employee who wages were garnisheed month after month. He was industrious and hard-working; the bills were not of his making. An advisor was sent to his home. He met the wife, a nice little woman who believed in a happy-go-lucky existance, and who made expenditures out of all keeping with her husbands salary. That she was a woman of sense was proven when she grasped the idea that this sort of thing could not continue. A scientific housekeeper was sent to instruct her in up-to-date economics. She welcomed the suggestions made. To-day the bills are paid, the man and his wife own their home and have money in the bank.

There is another rule on which the cornerstone of right living must be laid—an employe, if it be thought justifiable, is required to produce his marriage license. No recognition is given socialism or free love. This is mentioned because a case of this sort was recently made an issue. An important ruling of the Ford company in 1913 covers such questions.

The legal department aids the workers by examining deeds to property they wish to buy, assessing its value and passing on the validity of the contracts.

In the Ford English school are natives of Arabia, Persia, India, Poland, Armenia, Turkey, Chaldea, Albania, Serbia, Korea, Macedonia and other innermost parts of Asia, Europe and obscure regions of the world. Each of these foreigners speaks two or more dialects, but has no knowledge of our own language. They are taught reading, writing, arithmetic and grammar according to the modernized methods of Francois Guoin, who lived in 1710. The everyday problems of life are the keynote of each lesson, and a new psychology of good fellowship and interest accents the instruction. Mr. DeWitt was recently borrowed by Pennsylvania to demonstrate to the teachers of that state his original experiments. Mr. Ford watches the lessons. The one on birds, which emphasizes the great American bird, the soaring eagle, the emblem of freedom, is his favorite. There are other lessons which Mr. Ford personally supervises—for this department is the child of his brain and is dear to his heart. The foreigners are taught cleanliness, table manners, courtesy in public places and also, when possible, they are instructed in gardening. As an evidence of the eager earnestness of the pupils the case may be cited of a Macedonian who learned the Constitution of the United States verbatim in four days.

The nine months' course has been turning out annually between three and six thousand graduates. The diplomas, signed by Henry Ford, Dean Marquis and Mr. DeWitt, state that "the holder has been given ground work in English which enables him to write it and to read it within certain limitations. It gives him a definite comprehension of the rudiments of government, national, state and municipal, and fits him to become a citizen of the United States and to understand the obligations thereof."

The day war was declared Mr. Ford instructed the chief of his medical staff to ascertain accurately the exact number of positions that might be filled with disabled soldiers. **Every** wheel and cog of the factory was devoted to winning the war, and openings have been made for those who served. Dr. Mead reported that four thousand maimed and injured could be used. The factory was then using thirty-seven deaf men, two hundred and seven civilians blinded in one eye, sixteen who were deaf and dumb, and one totally blind. Before peace was signed the Ford factory had employed seven hundred and eighty-three disabled soldiers. Positions have been given to five thousand four hundred and eighty returned soldiers and sailors, and more are constantly being added. Direct instructions have been issued that soldiers are to be given preference over all other applicants.

A great problem in every factory is tuberculosis. It has been demonstrated in the salvaging section that tubercular patients are as productive as any other class of workmen. Hospital treatment is given free. The state law of conpensation allows ten dollars weekly to a bedridden man; the Ford company gives eighteen to twenty dollars. Mr. Ford believes that regular wages and light work will drive away worry and expedite a man's recovery. Hence handiwork is taken each day to patients able to sit up, and they are enabled to earn full wages.

Just as he conceived the perfection of his tractor while on a vacation by watching the movement of a horse's legs, so Mr. Ford's mind reaches out to help humantiy. Indifferent to the usual hobbies and amusements of men of the world, he has his own interests and recreations. He believes in practicing the gospel, "Give a man the chance he deserves, not charity." The following incident is so unusual as to seem improbable, yet it is true. As Mr. Ford was driving one day he passed a much be-draggled tramp to whom he gave a lift. The tramp claimed to be penniless and without work, and for that reason was walking to his sister's home in Connecticut. The next day he was given a position in the Ford plant. The employment office was instructed to equip him with the necessary clothes and report his progress to the office. All moved smoothly for a while, but, unlike the usual fairy tale, the end of the month found a restless worker instead of a diligent one. He was moved to another department, but when pay day came his restlessness had grown to loud protests, and to Mr. Ford was brought the news that wanderlust was beckoning his protege, who had threatened to quit.

"What's this I hear?" asked Mr. Ford when the prodigal came to his office. Into his ear was poured, forthwith, a story of homesick yearning for the far-away sister that would have done credit to an expert. Mr. Ford listened patiently. "See here, Bill," he said then, "you have no idea of going to Connecticut. You want to quit so that you can be a plain shiftless tramp."

The ex-hobo studied the carpet.

"Yes, that was it," he admitted. "A factory is no place for me; I'm lazy. I've lived the old life so long that I like it."

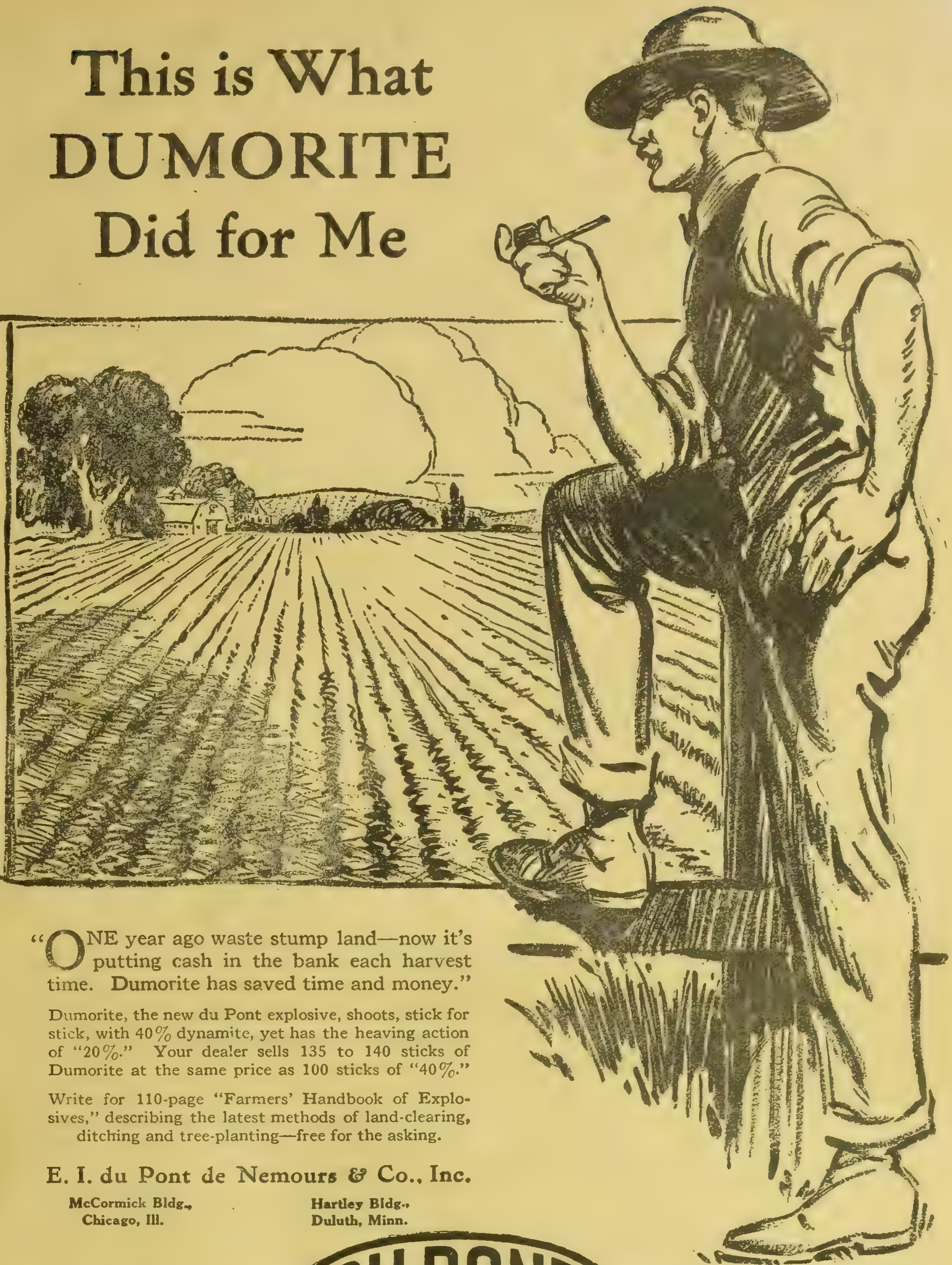
"All right," said Mr. Ford, "You can quit. I've told them not to bother with you any longer. But remember one thing, I am not going to let you slip back into your old ways. I'm going to employ a man to follow you everywhere you go and watch everything you do. If you ever feel sorry for the way you have treated me you can come back to your old place, provided you are willing to work. Until you do I am going to watch you every minute. Perhaps you will decide to brace up and be a man."

"Gosh," said the surprised man. "If you are going to do that I might as well give in right now."

This ex-tramp is now a faithful worker. Again the theory succeeded.

The next five years will witness the most important readjustment period in our national history. It will be a time when capital and labor must throw off their shackles and meet on a middle ground of consideration, each recognizing the rights of the other. Organized labor will have to make great concessions. Capital will have to make even greater concessions. Neither group can strangle the other if the principles for which our boys fought and died are to survive. Is it right that the soldiers who fought to save this country be assailed by food profiteers, by rent pirateers, by selfish capitalists and dictated to by labor organizations? What is to be the ideal solution? Will practical education be incorporated into the new order of American industry? Is real Americanism to be the foundation stone of the nation, or will the

(Continued on Page 13)



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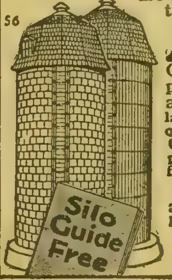

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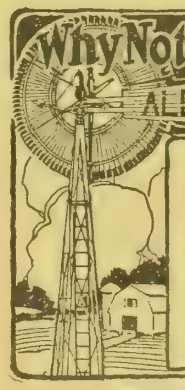

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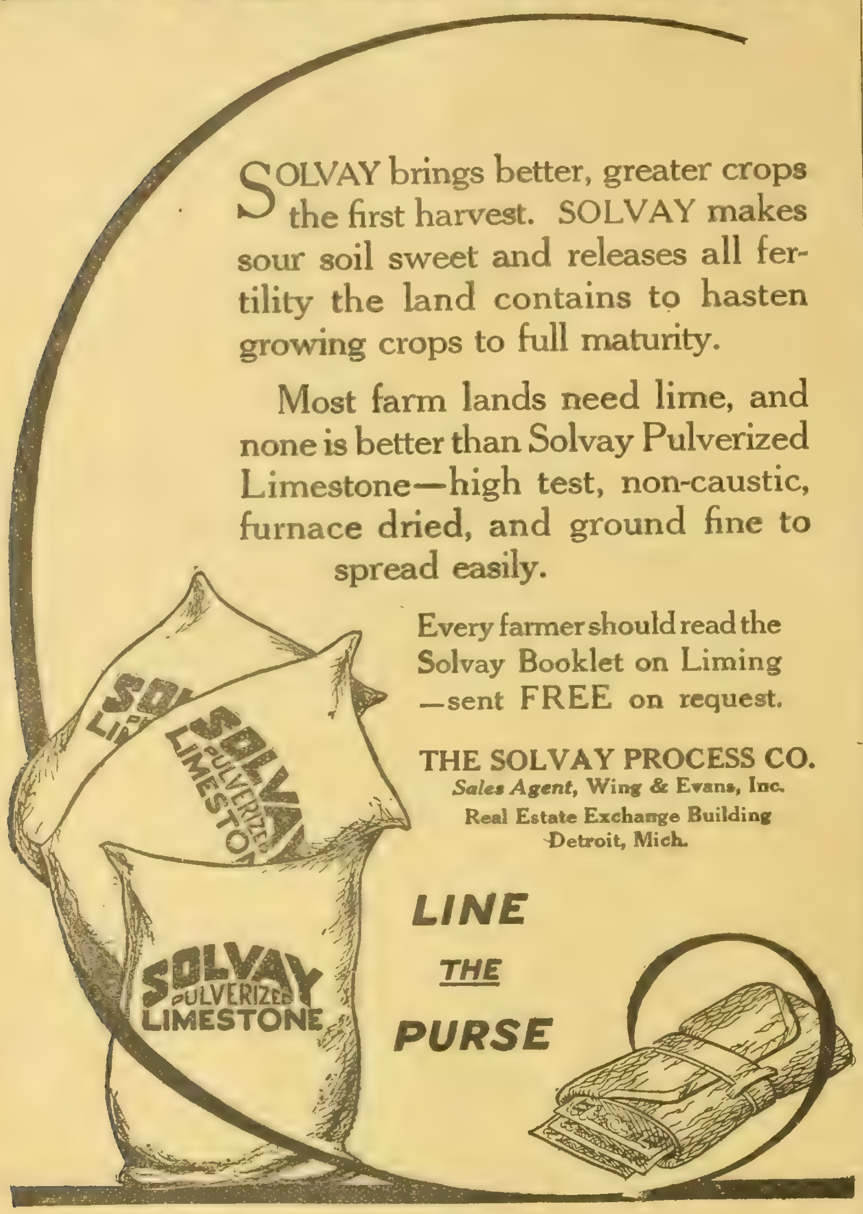
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Uncle Rube Spinach Says:

WHAT "THEY" SAY

SAY! Do you know that 'bout the biggest fam'ly of busy body's this world has ever known is "They," an' what "They" say, an't what "They" think, causes us human bein's more misery an' more troubles than most any other thing on earth. What "They" will say or what "They" will think, sometimes—not often—makes people do good deeds, not 'cause its in 'em partic'larly to do it, but 'cause they are afear'd of the "They" fam'ly an' what they'd think. An' on the other hand the same bunch of "They's" keep us from doin' the things we know to be right. If we have done wrong—have gone the fast pace an' wish to turn about an' go right—if we would like to go to church or do good deeds, would like to help our fellows an' try an' be somebody, we are quite often held back by the fear of what "They" would say if we suddenly changed our ways an' tried to make good.

What "They" would say has separated many fam'lies an' has kept fam'lies apart when they wanted to get back together again. The fear of what "They" would say has kept young couples from gettin' married an' has caused marriages where none should have occurred. The "They" bunch, an invisible group of nothing, is the foundation of nine or ten tenths of all the good an' all the evil that has ever come into our lives.

The fear of what "They" would say has made thieves of honest men —men who on account of this fear have tried to live way beyond their means to keep up appearances; an' has caused thieves to become honest —not often the latter case, but many of the first. The fear of what "They" would say has kept many preachers from preachin' the Gospel as God would have 'em preach it. It has kept men from tellin' the truth; has made liars of otherwise honest men; has kept women from goin' wrong an' saved men from temptation. What "They" would say has more to do with the runnin' of our gover'ment then almost any other thing I know.

There ain't hardly a thing we can think of but what "They" take an important part. I know of fam'lies that have been sep'rated for some time—mebbe through drink, mebbe jealousy, mebbe something else—any way the cause has been removed, but yet they are kept apart on 'count of what "They" would say if the fam'lies should be reunited.

Men an' women have been sent to prison—or have escaped just punishment, because the judge an' jury wuz afraid of what "They" would say if things went diff'rent. Ah, the "They" fam'ly sure is numerous as the sands of the sea an' jest 'bout as treach'rous. "They" smile at us today and curse us tomorrow. We are all, slaves of the fam'ly known as "They." An' really now, who an' what is this—Well—who are "They?" "They" are just an imaginary thing—a nothing, 'cept what we, in our ignorance, conjure up in our own mind. What "They" say 'bout us, what "They do, makes no real difference to us—can not change our lives only as we let this bogey-man sway us.

What "They" say makes no diff'rence to me—my life is my own—mine to live as I think best. Your life belongs to you—"They" cannot make nor break you, nor I. If we do a wrong thing "They" don't have to tell us—our own conscience tells us an' yet "They" are the things we fear more than most anything else in all the world.

Let 'us forget all about the little thing called "They." Let's jest be our own self, doing the best we know how. If we are sep'rated from those we love an' are bein' kept apart on account of what "They" might say, let us be good forgetters. Let's forget there is any such thing as a "They" fam'ly an' jest get together on our own occount—let us be ourself regardless —kiss an' make up. Make things right between us. "They" are small pumpkins compared to real happiness an' what "They" say can't make a bit of diff'rence if we jest for get that any such thing as a "They" fam'ly exists.

What "They" say an' what "They" think, makes no partic'lar diff'rence to me if I really think I'm right, an' if "They" or any of the "They" relation are keepin' you from happiness jest forget the whole tribe an' be happy in spite of 'em. Cordially yours, UNCLE RUBE.

FARM MECHANICS

THE SLUMP TEST

DO you know that the Slump Test is the simplest and most practical way of detremining the proper amount of water to use in mixing concrete?

The correct cement-water ratio for any concrete mixture will develop the maximum strength of the concrete. A knowledge of how to determine this ratio is a matter of importance to the builder.

The slump test is a simple, easy, and practical method of making this determination. The only apparatus necessary is a special mould, made from sheet metal, preferably noncorrosive. in the form of a frustum of a cone 4 inches in diameter at the top, 8 inches in diameter at the bottom, and 12 inches in vertical height.

After thorough mixing the concrete is placed in the mould in three or four successive layers, each layer carefully puddled or rammed with a blunt-pointed 5-8-inch round rod. The metal mould is then removed with a steady, vertical lift, leaving the concrete free to spread at the base. The "slump," or reduction in vertical height of the pile of concrete which results, is an indication of the consistency of the mixture.

The consistency which produces concrete of maximum strength is known as a "normal" mixture, and has a slump of about one inch. A reduction in the amount of water of 10 per cent below that required for a normal mixture will change the slump to only one-half inch, and decrease the strength of the concrete about 30 per cent. Increasing the water 10 per cent above normal will inches, and a loss of at least 15 per result in a slump of almost three cent in strength.

A portion of the strength of the concrete must sometimes be sacrificed in order to obtain the placticity of mixture required by the manufacturing processes employed. For payments, floors and large foundations, the slump should not exceed 3 inches. For thin, reinforced concrete walls where smoothness is required but compacting is difficult, a mixture with a slump of 6 or 7 inches is permissable because its wet consistency practically eliminates the necessity of tamping. Remember: Do not make your mixture more plastic than is required by the nature of your work.

POWER FROM STREAM TO RUN GENERATOR

I have a stream of water five inches in diameter, that flows continually year around on my farm from three springs, with a fall of twenty feet (overhead). Is it possible to obtain enough power from it to run a 32 volt generator to store up current in fifteen cell battery? If so, by what mechanical means would be least expensive to construct, overhead wheel or turbin type?—F. X. D., Grand Traverse County, Mich.

—I have calculated that the theoretical power of a 5 inch stream falling 20 feet would be three-quarter of a horse power on the assumption that the rate of flow of water through the pipe is 100 feet per minute. Considering that there would be a considerable loss of power through friction on the water wheel or turbin and some loss of power also on the generator, it is not prob-

(Continued on Page 19)

VISIONING OUR TASK

A SERMON BY REV. DAVID F. WARNER

INTRODUCING DAVID F. WARNER

THE first appearance of a sermon in the columns of The Business Farmer, is our answer to readers, like C. S. of Oscoda, whose letter was printed on page 16 (392) of the March 17th issue. When we searched for a minister who would fill our needs; a man who believed in his bible, his fellowmen and who lived among and knew the problems of the farmer and his family; a man who, above all, would be a non-sectarian, we found him in the person of Reverend David F. Warner, whose photograph, with Mrs. Warner in the center of page 5, will tell you what kind of folks they are. I hope you will like the Warners, as well as I know they are going to like you!—Editor.

TEXT: Where there is no vision, the people cast off restraint.—Prov. 29:18.

VISION caused Moses to give his life to the freeing of the Israelitish slaves in Egypt. Vision made Lincoln declare if he ever got a chance he would strike slavery in America and strike it hard. And, lo! the "Emancipation Proclamation." Vision led Woodrow Wilson to issue a pronunciamento for universal freedom from the bondage of war. (No, not yet. How depraved our politics and diplomacy!). And vision will move Christian forces out to make men like Christ and the kingdoms of men to become the Kingdom of Christ.

Reader, listen! Isn't the world in appalling need of real brotherhood; of a fellowship of kindness; of a community spirit of love and sympathy? Hasn't the recent war with its aftermath emphasized this need? Hasn't it created for the church a a spiritual crisis? You know that it has. And it has made for us a problem to solve so stupendous in its magnitude as to well tax our faith to its limits. But the Christianity of vision is the Christianity that is prepared to match its faith by its works. To-day we hold the key to the new epoch of tomorrow; and that epoch, if we will, will be a brighter and more glorious one. The church is mistress of that key.

We have faith that the Business Farmer has a clear vision of its task. Our paper's slogan "Hew to the line, let the chips fall where they may," is a good index. The editorials are fitting and ornamenting this rallying cry. And, I take it, these sermons should line up also. To make the printed page warm with the urge and challenge of the higher life, is not easy. This is no sinecure. But the time seems auspicious, and we shall start expecting happy results.

But indulge me a word about preaching. Don't you think sermons and theology are given a disproportionate honor and emphasis? Isn't the pulpit too far from the pew? Aren't they both too far from the unregenerate? I believe, myself, that preaching, polemics, dogma—all are out of all proportion to the time we give to viital religion. As for theology, that is definition. But as for religion, that is life. Jesus placed his emphasis upon life, character, conduct; upon doing righteousness. Since early Christianity men have been fighting over theology, and are as I write. Pathetic, isn't it? But now, let us understand one another at the outset. Let us vision our task to be in agreement with our Master and emphasize religion or conduct. We come to easy agreement here, don't we?

So we are called, not to dissension or destruction, but to harmony and construction. Not to criticism, but to Christian evangelism. What is that? Evangelism is Christianity at work regenerating society. The work is exacting. It means a constant drain upon your strength; a losing of your life. It is not enuf to make a cross upon your heart. You must set up the Cross in your life. It takes a crucified man to promote a crucified Christ. This man is constantly radiating the virtues of the Christ. This is constructive living. This is progress. Any man who is not in sympathy with this onward, upward, society-saving movement is surfeiting and polluting the stream of progress for the aspiring folks about him. "Live fish swim up stream." I felt we should understand one another from the beginning.

But you say, I am a Methodist, a Baptist, or a Presbyterian, and the dogmas of my church are my truth-containers. Yet another said: "I (personally) am the truth." He also said: "Ye are the light (truth)." So we can agree after all that our common task is to translate literal truth into living truth; into personality. This is religeon. This incarnate Truth is to cover the earth as the waters cover the sea. Just this gave us a restless Paul and filled his heart with a pure and ardent passion. It was that pulse-beating of life that gave the world a Justin Martyr, a John Huss, a Wesley, a Luther, a Judson, a Stover, and other bright lights in the spiritual firmament. It is giving us such moderns as Jno. R. Mott and Sherwood Eddy. And it will make you a soul of power and blessing in your community.

But, once more, what is our task? Ask the friendless and the needy; the lonesome and the suffering; and the many that have been stricken by the demons of liquor and war and industrial oppression. Ah, the world is yet a caldron of hate. Her soul is groaning under severest travail. And your church and mine must overcome the racial hatreds and the social misery which have become intensified and embittered by this woeful condition. Thru the extension of Christian ministries we must appease the spirit that is crying out for greed and revenge. We have urgent need to set up the fellowship of reconciliation in the midst of the nations. And doesn't it look as tho our biggest assignment is to spiritualize our own? And we are not going to let pettiness over ecclesiastical differences kill the ennobling spirit which we must bring to this need. Now, we are getting better acquainted with our common task, I am sure.

So, dear friends, sermons alone as a regenerating agency have been weighed in history's balances and found socially wanting. There is but one solution. Jesus injected that solution into a selected twelve and said "Go." Have you made your "mustard-seed" beginning? Then leaven your community. He said it was a leavening, a personal contact process. Think of that when you inoculate your soil for that alfalfa crop. If you believe that Christ is the hope of the world; if you are inoculated with that belief; live it out in your community and you shall witness a consequent luxurious crop in community righteousness.

In the business world the cry is "What can you do?" That measures your worth. In the religious world in that newer, brighter day, it will be, similarily, "What are you doing for others?" That will measure your moral worth. But that must be our measure now. The standard of Christ is "My father worketh hitherto and I work." Heaven's test is "Each man's work shall be made manifest." Would you rest from your labors? Then your works (character worth) must follow you into that earthless, timeless realm.

So our task, as we see it together, will be to build and transmit moral worth, character, life. This, we may be sure, is Christianity. Tho, forsooth, in attempting it we can not hope to satisfy every dogmatic demand of a divided "churchianity."

To estimate the number of bushels of grain in a bin, multiply the number of feet of the inside length by the number of feet of the width of the bin, then multiply the product by the number of feet of the average depth of the grain. This gives the cubic feet, multiplied by fourfifths, gives the number of bushels.

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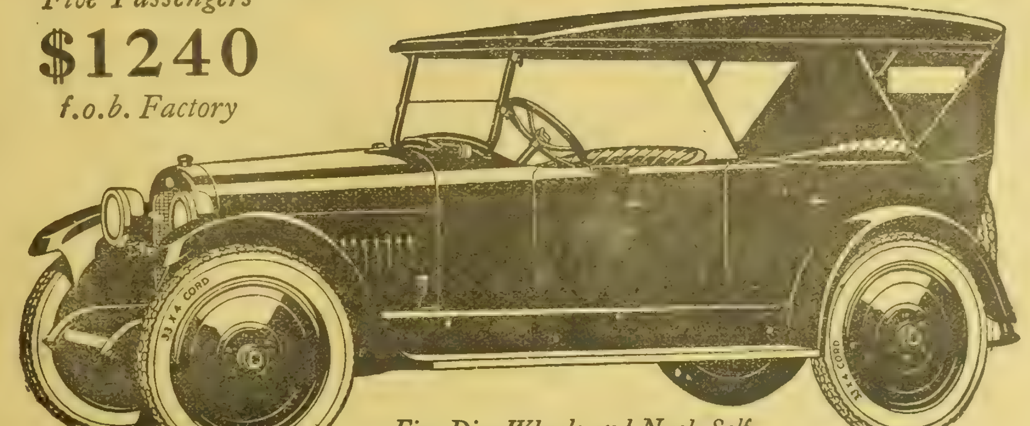

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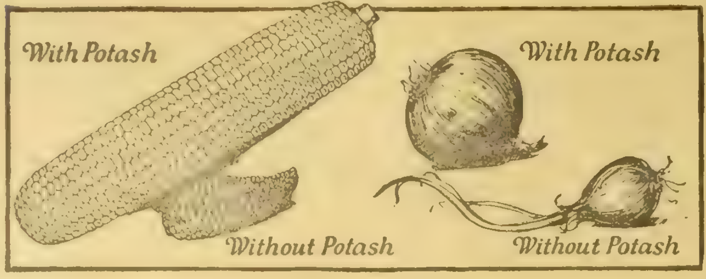

Potash for Swamp Land

DOES the corn grown on your swamp or muck land look like the large ear or like the small one? The small one shows the kind of corn produced on potash hungry muck land. When 100 to 200 lbs. per acre of German Muriate of Potash, or 400 to 800 lbs. of German Kainit, are broadcasted on potash hungry muck, full yields of sound corn are produced.

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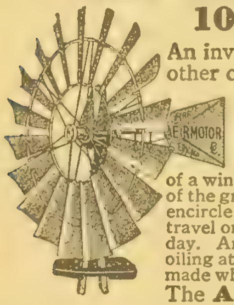

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The Hunted Woman

By James Oliver Curwood

Michigan's Own and America's Formost Author of the Great Northwest

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(Continued from March 31 issue)

"THERE—I've got the lantern!" exclaimed Blackton "There isn't any danger, not a bit. Wait a minute and I'll tell you about it." He lighted the lantern, and the the glow of it Joanne's and Peggy's faces were white and startled. "Why, bless my soul, I didn't mean to frighten you!" he cried. "I was just telling facts. See, we're standing on a solid floor—four feet of packed rock and cement. The dynamite and black powder are under that. We're in a chamber—a cave—an artificial cavern. It's forty feet deep, twenty wide, and about seven high."

He held the lantern even with his shoulders and walked deeper into the cavern as he spoke. The others followed. They passed a keg on which was a half-burned candle. Close to the keg was an empty box. Beyond these things the cavern was empty.

"I thought it was full of powder and dynamite," apologized Peggy.

"You see, it's like this," Blackton began. "We put the powder and dynamite down there, and pack it over solid with rock and cement. It we didn't leave this big air chamber above it there would be only one explosion, and probably two thirds of the explosive would not fire, and would be lost. This chamber corrects that. You heard a dozen explosions last night, and you'll hear a dozen this afternoon, and the biggest explosion is usually the fourth or fifth. A 'coyote' isn't like an ordinary blast or shot. It's a mighty expensive thing, and you see it means a lot of work. Now, if some one were to touch off those explosive at this minute—— What's the matter, Peggy? Are you cold? You're shivering!"

"Ye-e-e-e-s!" chattered Peggy.

Aldous felt Joanne tugging at his hand.

"Let's take Mrs. Blackton out," she whispered. I'm—I'm—afraid she'll take cold!"

In spite of himself Aldous could not restrain his laughter until they had got through the tunnel. Out in the sunlight he looked at Joanne, still holding her hand. She withdrew it, looking at him accusingly.

"Lord bless me!" exclaimed Blackton, who seemed to understand at last. "There's no danger—not a bit!"

"But I'd rather look at it from outside, Paul, dear," said Mrs. Blackton.

"But—Peggy—if it went off now you'd be in just as bad shape out here!"

"I don't think we'd be quite so messy, really I don't, dear," she persisted.

"Lord bless me!" he gasped.

"And they'd be able to find something of us," she added.

"Not a button, Peggy!"

"Then I'm going to move, if you please!" And suiting her action to the word Peggy led the way to the buckboard. There she paused and took one of her husband's big hands fondly in both her own. "It's perfectly wonderful, Paul—I'm proud of you!" she said. But, honestly, dear, I can enjoy it so much better at four o'clock this afternoon."

Smiling, Blackton lifted her into the buckboard.

"That's why I wish Paul had been a preacher or something like that, she confided to Joanne as they drove homeward. "I'm growing old just thinking of him working over that horrid dynamite and powder all the time. Every little while some one is blown to nothing."

"I believe," said Joanne, "that I'd like to do something like that if I were a man. I'd want to be a man, not that preachers aren't men, Peggy dear—but I'd want to do things, like blowing up mountains for instance, or finding buried cities, or"—she whispered, very, very softly under her breath—"writing books, John Aldous!"

Only Aldous heard those last words, and Joanne gave a sharp little cry; and when Peggy asked her what the matter was Joanne did not tell her that John Aldous had almost broken her hand on the opposite side—for Joanne was riding between the two.

"It's lame for life," she said to him half an hour later, when he was bidding her good-bye, preparatory to accompanying Blackton down to the working steel. "And I deserve it for trying to be kind to you. I think some writers of books are—are perfectly intolerable!"

"Won't you take a little walk with me right after dinner?" he was asking for the twentieth time.

"I doubt it very, very much."

"Please, Ladygray!"

"I may possibly think about it."

With that she left him, and she did not look back as she and Peggy Blackton went into the house. But as they drove away they saw two faces at the window that overlooked the townward road, and two hands were waving good-bye. Both could not be Peggy Blackton's hands.

"Joanne and I are going for a walk this afternoon, Blackton," said Aldous, "and I just want to tell you not to worry if we're not back by four o'clock. Don't wait for us. We may be watching the blow-up from the top of some mountain."

Blackton chuckled.

"Don't blame you," he said. "From an observer's point of view, John, it looks to me as though you were going to have something more than hope to live on pretty soon!"

"I—I hope so."

"And when I was going with Peggy I wouldn't have traded a quiet little walk with her—like this your suggesting—for a front seat look at a blow-up of the whole Rocky Mountain system!"

"And you won't forget to tell Mrs. Blackton that we may not return by four o'clock?"

"I will not. And"—Blackton puffed hard at his pipe—"and, John—the Tete Jaune preacher is our nearest neighbor," he finished.

From then until dinner time John Aldous lived in an atmosphere that was not quite real, but a little like a dream. His hopes and his happiness were at their highest. He knew that Joanne would go walking with him that afternoon, and in spite of his most serious efforts to argue to the contrary he could not keep down the feeling that the event would mean a great deal to him. Almost feverishly he interested himself in Paul Blackton's work. When they returned to the bungalow, a little before noon, he went to his room, shaved himself, and in other ways prepared for dinner.

Joanne and the Blacktons were waiting when he came down.

His first look at Joanne assured him. She was dressed in a soft gray walking-suit. Never had the preparation of a dinner seemed so slow to him, and a dozen times he found himself inwardly swearing at Tom, the Chinese cook. It was one o'clock before they sat down at the table and it was two o'clock when they arose. It was a quarter after two when Joanne and he left the bungalow.

"Shall we wander up on the mountain?" he asked. "It would be fine to look down upon the explosion."

"I have noticed that in some things you are very observant," said Joanne, ignoring his question. "In the matter of curls, for instance, you are unapproachable; in others you are—quite blind, John Aldous!"

"What do you mean?" he asked, bewildered.

"I lost my scarf this morning, and you did not notice it. It is quite an unusual scarf. I bought it in Cairo, and I don't want to have it blown up."

"You mean——"

"Yes. I must have dropped it in the cavern. I had it when we entered."

"Then we'll return for it," he volunteered. "We'll still have plenty of time to climb up the mountain before the explosion."

Twenty minutes later they came to the dark mouth of the tunnel. There was no one in sight, and for a moment Aldous searched for matches in his pocket.

"Wait here," he said. I won't be gone two minutes."

He entered, and when he came to

the chamber he struck a match. The lantern was on the empty box. He lighted it, and began looking for the scarf. Suddenly he heard a sound. He turned, and saw Joanne standing in the glow of the lantern.

"Can you find it?" she asked.

"I haven't yet."

They bent over the rock floor, and in a moment Joanne gave a little exclamation of pleasure as she caught up the scarf. In that same moment as they straightened and faced each other, John Aldous felt his heart cease beating, and Joanne's face had gone as white as death. The rock-walled chamber was atremble; they heard a sullen, distant roaring, and as Aldous caught Joanne's hand and sprang toward the tunnel the roar grew into a deafening crash, and a gale of wind rushed into their faces, blowing out the lantern, and leaving them in darkness. The mountain seemed crumbling about them, and above the sound of it rang out a wild, despairing cry from Joanne's lips. For there was no longer the brightness of sunshine at the end of the tunnel, but darkness—utter darkness; and through that tunnel, there came a deluge of dust and rock that flung them back into the blackness of the pit, and separated them.

"John—John Aldous!"

"I am here, Joanne! I will light the lantern!"

His goping hands found the lantern. He relighted it, and Joanne crept to his side, her face as white as the face of the dead. He held the lantern above him, and together they stared at where the tunnel had been. A mass of rock met their eyes. The tunnel was choked. And then, slowly, each turned to the other; and each knew that the other understood—for it was Death that whispered about them now in the restless air of the rockwalled tomb, a terrible death and their lips spoke no words as their eyes met in that fearful and silent understanding.

CHAPTER XIX

JOANNE'S white lips spoke first.

"The tunnel is closed!" she whispered.

Her voice was strange. It was not Joanne's voice. It was unreal, terrible, and her eyes were terrible as they looked steadily into his. Aldous could not answer; something had thickened his throat, and his blood ran cold as he stared into Joanne's dead-white face and saw the understanding in her eyes. For a space he could not move, and then, suddenly as it had fallen upon him, the effect of the shock passed away.

He smiled, and put out a hand to her.

"A slide of rock has fallen over the mouth of the tunnel," he said, forcing himself to speak as if it meant little or nothing. "Hold the lantern, Joanne, while I get busy."

"A slide of rock," she repeated after him dumbly.

She took the lantern, her eyes still looking at him in that stricken way and with his naked hands John Aldous set to work. Five minutes and he knew that it was madness to continue. Hands alone could not clear the tunnel. Yet he worked, tearing into the rock and shale like an animal; rolling back small boulders, straining at larger ones until the tendons of his arms seemed ready to snap and his veins to burst. For a few minutes after that he went mad. His muscles cracked, he panted as he fought with the rock until his hands were torn and bleeding, and over and over again there ran through his head Blackton's last words—Four o'clock this afternoon!—Four o'clock this afternoon!

Then he came to what he knew he would reach very soon, a solid wall! Rock and shale and earth were packed as it by battering rams. For a few moments he fought to control himself before facing Joanne. Over him swept the grim realization that his last fight must be for her. He steadied himself, and wiped the dust and grime from his face with his handkerchief. For the last time he swollowed hard. His soul rose within him almost joyously now in the face of his last great fight, and he turned—John Aldous, the superman. There was no trace of fear in his face as he went to her. He was even smiling in that ghostly glow of the lantern.

"It is hard work, Joanne."

She did not seem to hear what he had said. She was looking at his hands. She held the lantern nearer.

"Your hands are bleeding, John!"

It was the first time she had spoken his name like that, and he was thrilled by the calmness of her voice, the untrembling gentleness of her hand as it touched his hand. From his bruised and bleeding flesh she raised her eyes to him, and they were no longer the dumb, horrified eyes he had gazed into fifteen minutes before. In the wonder of it he stood silent, and the moment was weighed with an appaling silence.

It came to them both in that instant—the tick-tick-tick of the watch in his pocket!

Without taking her eyes from his face she asked:

"What time is it, John?"

"Joanne——"

"I am not afraid," she whispered. "I was afraid this afternoon, but I am not afraid now. What time is it, John?"

"My God—they'll dig us out!" he cried wildly. "Joanne, you don't think they won't dig us out, do you? Why, that's impossible! The slide has covered the wires. They've got to dig us out! There is no danger—none at all. Only it's chilly, and uncomfortable, and I'm afraid you'll take cold!"

"What time is it?" she repeated softly.

For a moment he looked steadily at her, and his heart leaped when he saw that she must believe him, for though her face was as white as an ivory cross she was smiling at him—yes! she was smiling at him in that gray and ghastly death-room of the cavern!

He brought out his watch, and in the lantern glow they looked at it.

"A quarter after three," he said. "By four o'clock they will be at work—Blackton and twenty men. They will have us out in time for supper."

"A quarter after three," repeated Joanne, and the words came steadily from her lips. "That means——"

He waited.

"We have forty-five minutes in which to live!" she said.

Before he could speak she had thrust the lantern into his hand, and seized his other hand in both her own.

"If there are only forty-five minutes let us not lie to one another," she said, and her voice was very close. "I know why you are doing it, John Aldous. It is for me. You have done a great deal for me in these two days in which one 'can be born, and live, and die.' But in these last minutes I do not want you to act what I know cannot be the truth. You know—and I know. The wires are laid to the battery rock. There is no hope. At four o'clock—we both know what will happen. And I—am not afraid."

She heard him choking for speach. In a moment he said:

"There are other lanterns—Joanne. I saw them when I was looking for the scarf. I will light them."

He found two lanterns hanging against the rock wall. He lighted them, and the half-burned candle.

'It is pleasanter," she said.

She stood in the glow of them when he turned to her, tall, straight, and as beautiful as an angel. Her lips were pale; the last drop of blood had ebbed from her face; but there was something glorious in the poise of her head, and in the wistful gentleness of her mouth and the light in her eyes. And then, slowly, as he stood looking with a face torn in its agony for her, she held out her arms.

(Continued April 28th issuue)

THE TRUTH ABOUT HENRY FORD

(Continued from Page 9)

country wait until the evil conditions of today become a menace?

Are Henry Ford's theories and their practical workings during the last five years worth while? Many industries and department stores are putting the interests of their workers above the volume of their profits. They are doing their utmost to benefit their workers, to pay them fair wages and to maintain helpful welfare departments, somewhat similiar to the Ford Educational department. There are still some concerns where women and girls are paid wages that are disgraceful and utterly destructive to the morale of the country. Is it right or even necessary? Or is it better to give labor a square deal and to do it on the basis of honest-to-goodness Americanism?

THE END

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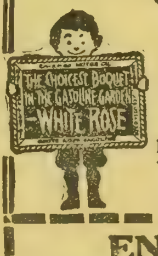

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The Michigan
BUSINESS FARMER

SATURDAY, APRIL 14, 1923

[illegible]
THE RURAL PUBLISHING COMPANY, Inc.
GEORGE M. SLOCUM, President
Mt. Clemens, Michigan

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Member Agricultural Publishers Association
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RELIABLE ADVERTISERS

We will not knowingly accept the advertising of any person or firm who we do not believe to be thoroughly honest and reliable. Should any reader have any cause for complaint against any advertiser in these columns, the publisher would appreciate an immediate letter bringing all facts to light. In every case when writing say: "I saw your advertisement in The Michigan Business Farmer!" It will guarantee honest dealing

"The Farm Paper of Service"

THE STATE INCOME TAX.

IT is hardly conceivable that there is any division of opinion among the farmers of Michigan regarding the Byrum bill now before the Michigan legislature, which provides for an immediately effective tax on the income of citizens of the state.

That it will meet with militant opposition from the representatives of the urban centers which it will directly effect is equally as certain.

It would behoove the city dweller to ponder the present situation casually at least, before arriving at too hasty a conclusion regarding the income tax. If he has given any thought whatever to the subject he must realize that the city or town where he resides is largely engaged in taking the products of the farm and making them into salable products for the worlds markets. The largest market for the sale of his manufactured product, must always be on the farms of this country.

Property taxes in Michigan, as in other states, has advanced during the past few years to a point where they are actually driving thousands of families off the farms. Forcing them to become competitors in the labor markets and consumers of farm products, where before they were producers.

Any individual can certainly afford to pay a direct tax as low as four per cent on his net income, after exemptions have been made for his dependents. There is not a farmer in Michigan who will not gladly pay his share on the basis of the net income derived from his farm and if the farmer is willing to pay such a tax, why is it not equitable for the city man no matter what his work or his earning.

Thousand of citizens live in flats, apartment houses or hotels and owning no real estate or other property pay no direct state tax whatever for the privilege of enjoying the facilities which the state affords for their well being. The state income tax is as sound in principle as the federal income tax and altho faulty, that law is today an accepted fact.

It is claimed that the vote taken in Michigan on the tax amendment to the state constitution voiced the sentiment of the people but we challenge this statement in view of the voluminous correspondence received by this publication immediately following that voting which proved that the farmers, at least, were not sufficiently acquainted with its purpose to vote intelligently on it. We commend to every reader the action suggested in the statement on page three of this issue.

NATIONAL REVIVAL TESTS COUNTRY CHURCH

ALTHO newspaper heads scream with murder, crime and degradation which seem national in their scope, the United States is being swept with a religious revival which is apparent to all who have observed the growth of the church and church activities during the past eighteen months.

Some lay credit for this national revival to prohibition, some to the natural working of the inevitable law which swings from one extreme to the other, some to the depression and slowing-up which followed in the wake of the war and some to the frightful nearness to death, which the war brought to all who were a part of it or had loved ones in it.

In any event the revival is here and the cities which have felt the wave of crime most, now boast of crowded churches at all services The city church too, has taken its rightful place as the center of community life. No longer a place to be sanctified in silence and opened on Sunday only, the modern church is a bee-hive of activity from Monday morning to Sunday night. Young and old are brought under the influence of clean living and the right attitude, (which is after all the whole foundation of Christs teaching) not only thru meditative study of the Bible, but through play and entertainment. Many city churches now boast gymnasiums, swimming pools, dining rooms and always good libraries.

Has the revival come to the country church? Are the pews filling up again with the old-time standbys or the newcomers? If not, it is not because the cycle of time has not brought this condition to within reach again, but because the country church is not living up to its opportunity to become the center of social life in the community where it exists.

With the coming of the automobile the country church suffered immeasurably. Some country churches have turned the automobile to their advantage, however, by extending the radius of their activity the distance which this more comfortable means of conveyance brought within easy range.

If the cross-roads church no longer has its place, it is because the nearby town or city churches have opened their arms to the neighbors without their gates and perhaps this is only in keeping with the trend of times, with is for consolidation. If the country church still has a place, now during this wave of a nation-wide revival is the time to prove it.

TARIFF VS. INCOME TAX

FINANCIAL circles are said to be in high glee over the possibility that the large returns to the government from the present Fordney tariff, will make it possible to reduce the present income tax rate which is six per cent, to three per cent next year.

Let's see now—

The tariff money comes from the people who buy the ordinary things of life, such as sugar, woolens, coffee, tea, etc., in a much larger proportion than from those who buy the luxuries. It is the family, which in the great measure pays the tax, as indirectly collected by the high tariff wall. That ought to be pretty well understood by now!

From this source then comes the extra money which is going to lower the income tax.

Who pays the income tax? Quite generally the men and women who can afford to pay it, many of whom spend less in the United States than does some struggling family of eight on a northern Michigan forty.

We are inclined to believe that this is a step towards unjust taxation, whether you label it "protective" tariff or not, it comes home to the same point; that those who can least afford to pay a high tax for the privilege of bringing up their families in the United States of America would be asked to pay what their prosperous neighbor could pay without feeling it.

The income tax can be made the most equitable means of raising the necessary money for national government operation. It operates most equitably when applied only to net individual incomes. A real saving to all the people could be affected through abolishing altogether the corporation income tax, because it is only passed along to the people in higher prices for the products of these corporations which they buy.

The corporation income works this way. Two persons, one rich the other poor, each own a share of stock in a corporation. A profit is made. The corporation pays a tax on that income. The tax is taken out of the profit due the poor man in exactly the same measure it is taken out of the rich man.

If no corporation income tax were levied, both stockholders would receive the same income from their individual shares of stock, but each would then pay their tax on this income in relation to the amount of their total income from labor and investments. The poor man would pay little or no tax on his dividend from the corporation, the rich man with returns from many investments would pay a high rate, inasmuch as the return from this one share was only a small part of his total income.

EFFECTIVE April 2nd, the subscription price of The Business Farmer was reduced to:

One Year, 60c
Two Years, $1
Five Years, $2

and new or renewal subscriptions will hereafter be accepted at these rates.

There is much evading and many flaws in the present income tax system, as pointed out, but in comparison to a tax, from high tariffs, it is boon to the mass of American citizens.

THE BRANCH THAT THOUGHT IT WAS A TREE

IT had every right to be proud of itself—this grafted branch. In the blooming season, its flowers were large and the creamy petals red on the edges, while the other blossoms on the tree were small and scraggly and dirty-white.

When Autumn changed the flowers to fruit, the apples on this branch were big, deep-red, with hearts as white as snow.

And the branch, seeing this, was swollen with pride.

"Why should I remain a part of this poor tree. I give more fruit than the rest of the branches combined. I will be a tree unto myself that men may know me and give me credit for my fruits."

The next time a strong wind blew, the branch strained and pulled and twisted and finally tore itself from the tree. The tree bled at the wound for a little time, but the gardener came along and grafted another branch in the place.

But the branch that tore itself away died very quickly.

It did not realize that the sap—the life-blood that gave it health and strength to produce—came from the roots of the tree. The branch could not see that because the tree had other branches it was able to drink in more sunshine and rain—that all the branches drew life from the soil and air and gave it gladly that the one branch could flourish and produce much fruit.

So the grafted branch, that thought it could be a tree, died. The tree lived on.

* * * *

The moral of this old fable is that there are a lot of men in every business, or profession, including farming, who consider themselves and their work, so superior to their neighbors in the organization to which they have joined for a common purpose, that they finally break away and end up, whether they know it or not, just where the branch did.

IOWA FARMERS ELEVATORS SUCCEED

FROM 1904 to 1922 there were 532 farmer-owned elevators organized in the state of Iowa and during the same period only 51 ceased business. Where in 1904, nineteen years ago there were only 43 elevators in operation, at the close of 1921 there were 511. These facts are obtained from a very interesting bulletin just issued by the agricultural college of that state entitled "Fifty Years of Farmers' Elevators in Iowa".

We republish these figures here because they prove that farmer-owned elevators can be operated successfully and at a profit. There are always plenty of those who like to say "I told you so!", and usually they make the same remark no matter which way the venture goes.

In the state of Michigan many earnest men have tried to solve the marketing problem, which dominates every other in the profitable operation of agriculture in this country. Many of these men have worked night and day, usually without profit to themselves to try and make the co-operative plan a practical and profitable success. We know of this type of men in our state who have actually killed themselves, worrying over the problems of the cooperative elevator.

And yet, when similar figures for the state of Michigan are produced, we believe a record equal, proportionately, to that of Iowa, the home of the cooperative elevator will be shown. We commend the suggestion of a similar summary for early publication by our own agricultural college. It might be a practical tribute to some of these men who are still alive.

THE FLAT DWELLER'S LAMENT

I live in a flat
where I hang my hat,
And I don't own a farm or a home.

I earn the fat pay
but I'm not the jay,
Who gets tied so I can't ever roam!

Do I give a care, how
much taxes rare?
I pocket my salary
and smile.

But sometimes I get dizzy
for fear they'll get bizzy
An' collect income tax once in a while!

Co-operative marketing and controlled production are economic twins. Neither can be fully efficient alone.

* * *

A ten millon wheat acreage in the four big spring wheat states will beat an act of Congress a mile as a price raiser.

PUBLISHER'S DESK

IT is not hard to sound the depth of human emotion and universal sympathy. Under the heading "A SORRY PLIGHT", in our last issue, I told of the experience of a poor cripple who had been taken-in by an agent who sold him the formula for an automobile polish, charging him $20 for it, which was purely a fraud. Our unfortunate neighbor also asked as to our experience with the so-called "Auto Knitters", and I had to advise him that I had never known of one in successful operation, that is, of one that was being continuously operated to produce hosiery on a profitable basis.

In response to this article, I have received a large number of letters offering suggestions. Two of these letters were from cripples who themselves were operating auto-knitters satisfactorily, but, in each case they were buying their own wool, and selling their products in their own locality. In view of these two statements, it may be that a cripple who can afford to spend the necessary time, can operate one of these machines successfully, where a person in normal health could employ his or her time more profitably at some regular occupation.

I can assure you the publisher was highly gratified to find sympathetic response which the mere publication of these facts brought forth from our readers. With this spirit of helpfulness The Business Farmer can live up to its highest ideals.

THE IMP-O-LUCK

Several readers have asked me whether or not they were responsible for the package sent them C. O. D. $1, by the Imp-O-Luck Company of Spencer, Indiana, and I want to assure them that they are most certainly not responsible for anything which they did not order.

The scheme is not in compliance with Post Office regulations, and we shall bring it to the attention of that department. No company, or individual has a right to send a package which is not ordered, by C. O. D. parcel post, and if you receive a package of this kind from a source which you did not know, do not under any consideration pay the charges. The Imp-O-Luck consists of a cheap Billiken in which can be burned the common incense, which can be purchased in any Five and Ten Cent Store. In their advertising this company claims that to breath this incense will bring "success." They also sell "Love Cones," which burned in a similar way will, 'tis said set the heart of an old maid or old bachelor aflame with new hopes and desires.

* * *

Will some good reader who lives near Paw Paw, Michigan, tell me who W. J. Barnard is, what he does, and how he earns his living. A reader sends me a newspaper clipping referring to statements which he is said to have made before the Allegan County Milk Producers Associaition, in which he attacked President Friday, county farm agents and farm paper publishers. Generally, I would like to know about this gentleman. Perhaps he is the Moses who has come to lead the agricultural business out of the desert! If so, we wonder what he charges for piloting.

* * *

I have been asked about the Railway Educational Association, 227 Monroe Street, Brooklyn, New York, who promised to teach the art of becoming a locomotive fireman, with the assurance that their students will earn from $200 to $250 a month, and I want to repeat that there is no other way to test out the merits of a Correspondence School than to ask them for the name of a student in your locality who you can see and talk to, or at least write for their advice.

Most correspondence school schemes depend on the students who start the work and never finish. A student who goes all the way through the course and passes their examination is usually the exception, and costs them more to teach, than they charge for the course. They have to depend on the fellow who drops out, after one or two lessons, and whom they usually force to pay the entire amount he originally contracted. My advice again is, don't sign up until you know you are going to complete the course.

* * *

THE GREEN EGG COMPANY

Has any reader had experience with the Green Egg Company, of St. Louis, Mo., who we understand are soliciting shipments of eggs in Michigan, and regarding whom we cannot secure reports which would lead us to encourage shipments to them. If any of our readers had experience with this company, we would like to hear from them.

* * *

HEIR TO MILLIONS

Some of my readers are in high glee! They have been notified by lawyers somewhere that they are far distant relatives of Anneka Jan Bougardus, and therefore are the lawful claimants to part of 168 acres in the very heart of the city of New York, where giant skyscrapers tower heavenward from tiny patches of ground which are therefore worth millions.

Think how you would feel if you were heir to the very heart of the richest city in the world! Would there be any reason why you should not contribute to these lawyers to fight your claim for this property.

Well to make a long story short, we would say that there were several good reasons why we wouldn't offer any heir to this, or any similar estate more than five cents on the million of the legacy that he or she expects to get, and then it would be on gambling spirit, and not our better judgment that was making the speculation.

* * *

FAT REDUCERS

Lately we have had several letters from corpulent ladies who are regretting the fact that although they have sent their $5, $10 or $20 for treatment, which ranged all the way from phonograph records to powder they put in their coffee or tea, they have not been able to reduce in weight so they resemble the Venus like figure shown in circulars!

It is hard to keep a straight face and read some of these letters, because if it is true that "everybody loves a fat man," it must be equally true that the average corpulent lady is usually endowed with two of God's rarest talents, which He can give to womankind: The habit of laughing at trouble and the ability to turn ordinary food stuffs into delectable dishes which hold their men folks. You seldom see a fat ladv who is not a good cook. If these fat reducing schemes are going to lesson their cooking ability, God save us!

Seriously it is not necessary for any person to be overly fat. Proper food and proper exercise will bring sure reduction. There is a splendid book on this subject called "Eat and Grow Thin." If any of you fat men and women are interested apply at your nearest library for it.

CLAIM SETTLED IN TEN DAYS

In regard to the claim which you took up for me will say they made a satisfactory adjustment within ten days. The number of claim was 1181. Many thanks to you for the help and you may rest assured I will always be a booster for your paper which I would not be without. —R. J. R., So. Lyon, Mich.

Book Review

(Books reviewed under this heading may be secured through The Michigan Business Farmer, and will be promptly shipped by parcel post on receipt of publisher's price stated.)

THE 50-50 FARM, by Dr. C. L. Wendt—The author has in this 105 page volume covered in full the Wendt Farming agreement, which has been discussed in The Business Farmer and other farm papers during the past year. It is an exposition of the earnest attempt of a student of farm tenantry in America to arrive at an equitable contract which gives both landlord and tenant a square deal. Whether you are in one class or the other this book ought to save you many times its original cost and your effort in studying it. (Manilla Covers, $1.)

First Mortgage Real Estate Gold Bonds

The general attitude of mind of the American public seems to be to concede Federal first mortgage bonds a place and position all their own as a sound, safe investment.

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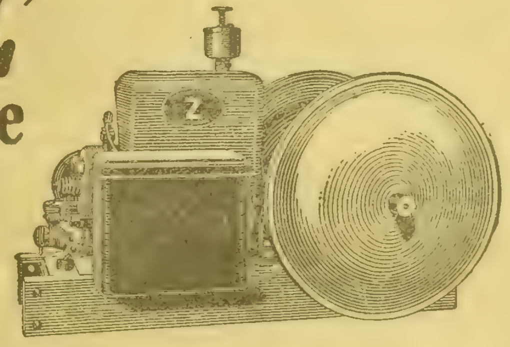

Make more money on your farm

"Time *is* money" on the farm today. Every farmer knows that he must make every minute count to get the most production and profit out of his place. You can save time—and "time saved is money made"—with a Fairbanks-Morse "Z" Engine.

This famous helper is now at work on more than 350,000 farms. At present remarkably low prices the 1½ H.P. Battery Equipt Model is the cheapest farm help any man can have. It does more work for less money than any other machine or man you can employ. It has been in such great demand all over the country that for many months the factory was unable to build enough of them.

Uses gasoline alone. Has high tension battery ignition, hit-and-miss governor and balanced safety flywheels. Control lever gives six speed changes. Carburetor requires no adjusting. A remarkable value.

The magneto equipt 1½ H. P., 3 H. P., and 6 H. P. are *real* kerosene engines, but operate equally well on gasoline. Have simple high tension oscillating magneto. Throttling governor assures steady speed. Prices, F. O. B. Factory. Add freight to your town.

1½ H. P. $71 3 H. P. $105 6 H. P. $168

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HERCULES MANUFACTURING CO., 350 29th St., Centerville, Iowa

KEEP THE BUSINESS FARMER COMING
SEE PAGE 25

What the Neighbors Say

TOO MUCH CREDIT

I AM writing these lines in hopes some of the readers will see what credit, credit and more credit can and does do for the majority of small farmers. I know all this from experience, but, thank goodness, I have profited by a most expensive lesson. Credit was the name and about $1,500 the cost.

When I first came to this state to start farming I had no money to buy for cash, so I, like most all farmers are doing today, started going to sales. My banker said my credit was good. It was, too. I bought what I needed to farm with. Then he told me "Here's a good buy" and "There's a good buy." Oh, yes, he was very accomodating then (and is to everybody now till he get them to buying).

The first year I paid all my notes. That fall I bought more cows. The second year crops were not extra good so I paid every cent I had and still had to renew some. High interest had to come in advance so I had to make a note, due in the spring, for interest. In the winter I had sickness and was not able to pay the interest. I got word that the sheriff would be my next visitor. I went to a lawyer. He said the bank could not forclose on an advance interest note which was an unlawful note to start with. This proved so. Then by selling all the young stock I had I paid off the interest and some on the principal. But the banker tore up the note instead of stamping it paid and giving it to me. Then the third year my crop drowned out. I could pay nothing. I was told to have an auction sale, which I would have been forced to do if I had not had a friend of true blue. He helped me out, and seen to it that my notes were made out at 7 percent interest and no interest in advance and I will always keep them that way. For if I can't do business with one that will do it lawfully, I will go without. Since I have started on this system I am getting ahead instead of sinking with excessive interest as a dead weight.

I am not the only one that was so foolish, for literally speaking the majority of this country belongs to the bank as I once did.

Why is it the law makers are forever thinking up some law to punish the small offender, and never make a law that would take care of bolder and much greater offenders. Many of the small country bankers can put on a white collar and tie, get behind their cage and rob every one that comes that way—they call it a bonus. If the people won't be robbed peacefully, they are told to have an auction sale. Oh, yes, then they are a big man. It certainly would be the work of providence if all the small banks could be—well, just put out of business. I hope many of the readers will see what credit will do, and will profit by another's experience.—P. B., Gladwin County, Mich.

MORE ABOUT TAXES

I NOTICE in the February "Review of Reviews" Dr. Friday's computations show that "the farmers were paying 26 percent of all the taxes in the year 1913-14 and 18 per cent in 1921-22. Putting it somewhat different the farmer shouldered $774,000,000 out of a total of $5,362,000,000. He had been paying one fourth of all the taxes before the war, but he assumed only one seventh of the additional burden which has been laid upon the public." He also computes that the farmers only assumed slightly over one ninth of the increase of the direct taxes. This information should be a great comfort to the farmers, no doubt they will now be able to meet this small proportion of the taxes with no inconvenience.

Wonder if the Doctor will find that the dairymen are not carrying their just burden in supplying milk for the City of Detroit.

In discussion of taxes, Dr. Friday might have brought out the fact that property assessment is computed generally from the income of the property. But this rule does not apply to farm property. I do not think that farmers would ask that this rule be strictly adhered to, as they would have paid no taxes the past two years on that basis. But the rule should not be ignored.—Howard Smith, Saginaw County.

BAD CASE OF "CARNIVALITIS"

AT one of our Northern Michigan fairs we have developed one of the worst cases of "carnivalitis" that you ever saw for a fair its size. From every known form of gambling, dancing girls, gypsy fortune tellers, and all are there in fine form(???)

I never could see the advantage of inviting other horses in to run away with fat purses when the local interest is twice as great in local horses at one fourth of the money needed to induce outside horses to race.

After a recent fair I overheard a conversation between two little boys. They were joshing each other about seeing one of the tent attractions reserved for men, and from what I gathered neither was very proud of having seen that particular "show."

I hear some one person say, "O pshaw, they must bump into such things sooner or later." But I think most mothers would rather it would be later.

To me it seems to be the most unfair thing to have a fair like this when we have such wonderful agricultural resources with which we could have such a good fair. Personally, I know of a number of farmers that will have nothing to do with a fair of this kind that would enter heart and soul in the right kind of a fair.

What is more stimulating than a friendly rivalry as to who can raise and exhibit the best potatoes, corn or fruit and what is more interesting and instructive than a good livestock exhibit, besides see the opportunities for advertising one's particular specialty.

I am sure from the comments heard on all sides that the farmers prefer an agricultural fair to a carnival every time. Let the State Fair have their carnivals if they want to but I hope to see the day when our own particular fair will have all such objectionable features eliminated.—Mrs. E. J. C., Alpena County, Michigan.

THE FARMER AND HIS TROUBLES

THE farmer is receiving his full share of adverse critism and free advice as usual. I read an article in a farm paper recently which implied that the farmer is better off than he thinks he is. It enumerated a long list of things which a farmer with intelligence and gumption," should do when times are hard and work slack (as if work on a farm ever was slack) such as grubbing stumps, cutting fence posts, breeding better cattle, culling poultry, repairing buildings, raking the yard, making flower beds and being more civil.

It also said that with proper management the farmer can always have fine potatoes, choicest beef and pork (fresh), fried chicken or chicken-pie when his fancy dictates. Eggs without number, cream and the finest of fruit and vegetables. No mention was made of the work necessary to produce all these or their worth in the market.

I quite agree that it requires gumption and intelligence to manage a farm properly and profitably. One can't be on the job today and off tomorrow. I also maintain that the majority of farmers possess the necessary qualifications.

Also there is no business in which man invests so much, runs so great a risk on his investment, works so hard to make it pay and where the outcome is so uncertain. He may prepare the ground for seed, plant, or sow the best, cultivate and hoe, but if weather conditions are unfavorable, he loses.

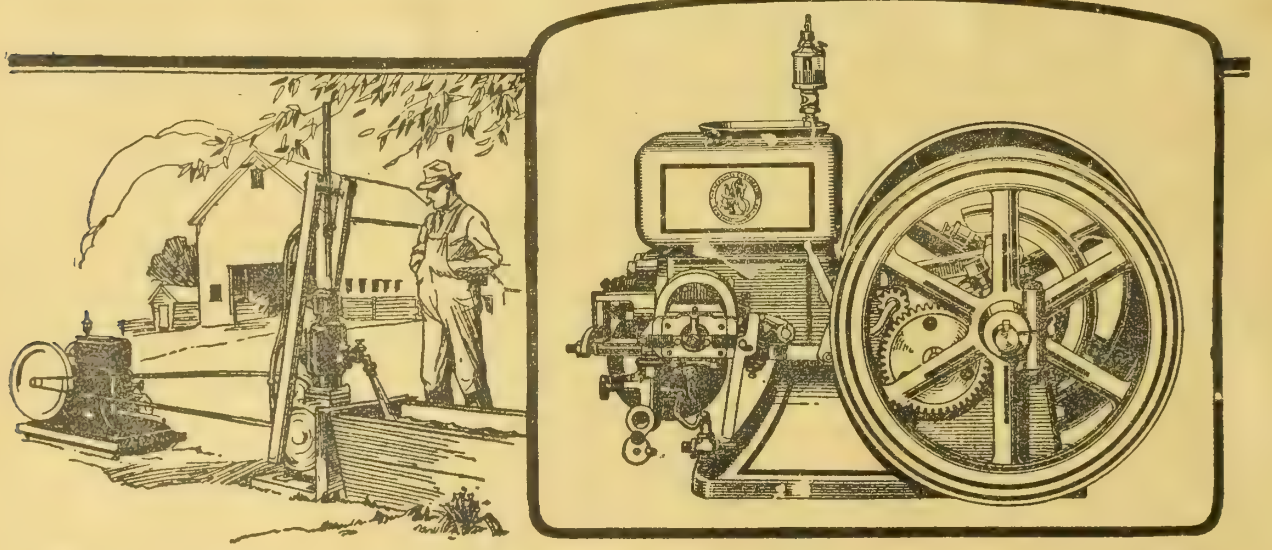
The crop may grow and flourish and a wet harvest ruin or hamper. Also there is the fly for the wheat, smut for all grains, bugs and blight for potatoes, anthroenose for beans, and WEEDS for all.

The garden where all those wonderful fruits and vegetables are produced does not, like Jonah's gourd, spring up in a night, but is the result of constant and patient labor with the hoe and rake, in the cool hours of morning and late evening, by each member of the family in turn. And many more hours before those same delicious things stand in shinning jarrs on the shelf.

The city woman can go to the early morning markets and buy in quantity from trucks at a reasonable price and fill the same kind of jars with equally delicious fruits and vegetables if she possesses the same brand of gumption and intelligence as the farmer's wife.

As for meats, she also has the privilege of going to the market, buying in quantity, curing and canning as cheaply as the farmer's wife. We often do this rather than dress at home as it costs no more, after counting pounds an animal dresses away and cost of dressing.

As for fried chicken and chicken pies, we never grew them that way.



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"A YEAR ago," writes Benjamin Gerlack, of Kingston, New York, "I purchased a 5 H. P. Hercules Gasoline Engine, thinking that it would help the hired man and me about the barn and farm.

"It has done more than that. It has saved me the wages of one man, besides making the work easier for all of us. *It has already paid for itself.* . . . I call it my partner."

The Hercules is a partner that does more than its share of the work without asking a share in the profits. And its work is the hard work, the backbreaking, uninteresting work. It saws the wood, pumps the water, runs the dairy, the washing machine, the feed grinder, the machine shop—the jobs that no one else wants to do. And it does them faithfully the year 'round.

On your farm there is work for the Hercules. There is a Hercules designed to do that work so efficiently, so much better and more quickly and at such a saving that, like Mr. Gerlack, in a short time you can say, "It has paid for itself."

Hercules Engines range in size from 1½ H.P. to 12 H.P.—both gasoline and kerosene types. They are equipped with the latest type of magneto—one that keeps the engine at work out-of-doors in any conditions of weather.

There should be a Hercules dealer near you. If there is not, write us and let us advise you about the ideal power for *your* farm—the size and type of engine that will best suit your requirements.

THE HERCULES CORPORATION
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HERCULES ENGINES

It takes our eggs 3 weeks to hatch out fluffy balls that must be kept warm and well fed for many weeks before they are large enough to dress and fry. We usually use one dozen to 15 from August 15 to Nov. 30. Then cull out old hens and undesirable pullets and sell them. Also all except a few choice roosters to sell for breeding. This leaves a flock of the desired number and my fancy never dictates killing a laying hen.

The endless number of tasks Mr. B. would have us do when times are hard, have always been part of our yearly routine. The lawn, back and front is always raked in spring and mowed as long as grass grows. There are flowers in the flower-graden from spring's first kisses until snow flies.

Stumps are unknown, the wood lot is quite diminished and coal a necessity.

The farmer must work and fight against odds continually. He has crop failures, loss of stock, low prices, sickness, taxes and interest and "hard times" is often the knock-out blow. He earns every cent he gets but he does not get every cents he earns by any means.

It requires the same gumption and intelligence to live and learn in any walk of life, and the farmer is no better off than he thinks he is. He knows his needs and his limitations.

The foolish farmer, so they say,
Grumbles louder ev'ry day;
Tho' sixteen hours of daily toil
No man's temper ought to spoil.
'Tis only "gumption" that he needs,
To create a zest for feeds
Of richest viands with dearth
With no thot of what they're worth.

The envied farmer is, they say,
Growing richer day by day.
This hard time talk is just a bluff.
He is farming well enough.
Six hours of chores are only fun
Quite forgotten soon as done.
"Tis finer sport to pitch manure,
Aching back to thus insure.

The fabled farmer must, they say,
Show his mettle all the way—
Plowing, rolling, discing, dragging,
Countless miles, never lagging;
Sowing, planting, using hoe,
For the weeds begin to grow;
Not for a moment dare he rest
Since with 'tater bugs he's blest.

Lucky farmer, if he but knew,
Is much better off than you,
When times are hard and spirits low,
Still his "gumption" make him go.
Stumps to grub and yard to rake,
Flower beds for wifie's sake,
Cows to breed and his poultry cull,
Times for him can not be dull.

Greedy farmer, your sumptious fare
Comes like manna from the air;
Choicest beef and juciest pork,
Chickens fried and with no work,
Scores of eggs, oodles of cream—
Sounds like a fanciful dream.
Tax forgotten, int'rest unpaid,
Annual payment no yet made—
Hurrah for the farmer! Lucky guy!
Who cares a fig? Not I.
—Bessie O. Roberts, Saginaw Co.

CHANGING TIMES

By JOHN T. BARTLETT

A GEAT FUTURE FOR HONEY

EVEN most young folks, and certainly very readily older ones, can recall the day when honey meant just one product—comb honey. The general introduction of strained or extracted honey, only a comparatively few years ago, was an event the economic importance of which was little guessed at the time. It gave seven league boots to the beekeeping industry. Before comb had been a commodity not easily shipped and handled. Now, honey could be put in glass jars and pails. It was readily shipped, readily displayed by the dealer, readily kept in the home. An enormous increase in production and consumption followed.

The advance of honey has just begun. Low prices contended with the past two years are "growing pains," met with in the expansion of any industry.

Here are straws which prove a great future.

The public is being educated to larger purchases. Hundreds of retailers the present year have picked honey to use for price specials, selling at nearly cost. Most of them have priced 10 pound pails, many 60 pound pails, as well as smaller sizes. Many families have been educated to buy the larger sizes, most economically and certain to encourage greater use.

There are new honey products of great possibilities. A live Pacific Northwest beekeeper packages and distributes granulated honey. This makes a great spread for bread, and, besides secures an economy in container cost. "Honey-nut" butter, under this name or others, is being regularly retailed in various places. It is a simple combination of honey and peanut butter. It makes a splendid filling for candies. Its much wider use is as a spread supplanting peanut butter. When one realizes how enormous is the peanut butter traffic, it is easy to glimpse the expanded market for honey being sold on an increasing scale. Watch honey consumption increase.

NEW IDEAS IN CONTAINERS

MAKING a container which the producer can pack, and which as packed can go through to the consumer unbroken, half bushel baskets are in limited use in a considerable number of shipping districts. Their use will probably grow.

A Michigan fruitgrower has invented a bushel basket with a detachable bottom. It is packed upside down. The top, that is, is put cn, the basket inverted, the bottom removed, and the basket packed. Then the bottom is put on. Time is saved in packing, less skill is required, and when the retailer removes the top for display, the top apples are uninjured.

Onions and other products now go to market from the South and some other sections in fibre boxes. A nifty package! The shipper put his advertisement on the box.

Things are happening fast these days in the field of fruit and vegetable containers. The use of bushel baskets for apples and other fruits and vegetables has had astonishing growth. It is now the commonest package in some districts which, four years ago, had hardly seen a basket used for apple shipment.

Several points have established the basket in use. First, it is economical. Nested, it is readily shipped from factory to country shipper, and readily stored prior to use.. .Numerous efficient ways of tiering baskets in cars have been originated. Retailers like baskets for display purposes; something about the rounded effect is very appealing to customers. With its handles, the basket is very conveniently handled—all along the route from producer to consumer. Improved methods of manufacture have made the modern basket light, yet strong.

Finally, the bushel basket is of a size adapted to modern conditions. Retailers like to buy in bushel units; the unit suits consumers.

More than any other thing one condition gave the bushel basket its initial foothold in many localities—its low cost. When apple barrels reached over $1.50 in the East, combined with the low market prices for apples, there was a landslide to the basket. In boxed territory, the basket is much used for the lower grades.

MIDWAY UNNECESSARY

IN answer to your recent query: "Is the Midway Necessary to Support Our Fairs?" I am expressing my views. To my mind the midway is both vulgar and unnecessary. It awakens the gambling spirit and caters to the morbid and curious. I have seen with disgust the hardboiled proprietors of games of chance rake in the children's hard-earned coins with brawling and unconcerned manner.

A fair should be free from vulgar and grotesque carnival features, and instead, foster a keen and honest spirit of worthy competition in all lines. It should encourage the young generation to higher ideals, not lower. It is not desirable to deprive the youngsters of all wholesome amusements at a fair, so by all means let us retain a clean and first class free grandstand show, and the ferris wheel, whip and frolic, they all have their places. A good movie, musical treats or even a public dance pavilion, conducted by proper officials would be a vast improvement instead of the now prevailing and undesirable Midway.—J. J. G., Akron, Mich.

McCormick-Deering 15-30 Tractor Offers You Power Based on Five Construction Principles

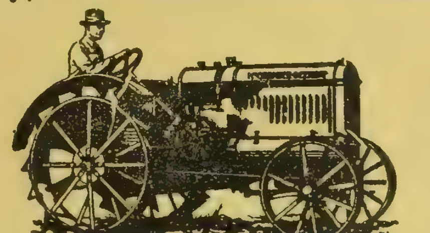
1. *Sturdy Unit Main Frame—*
Extends the entire length of the tractor; its shape and design make it an unfailing foundation for the working parts. No twisting nor yielding. Permits the entire tractor to be built with greater precision, which reduces wear and vibration.

2. *Ball and Roller Bearings at 28 Points—*
The power of the sturdy McCormick-Deering engine is carried without unnecessary loss through smooth-running ball and roller bearings to the drive wheels or belt pulley—steady, dependable power, at your command through long years of service.

3. *Unit Construction—Easily Accessible—*
Every important part [engine, transmission, steering assembly, etc.] of the McCormick-Deering 15-30 is built and tested as a separate unit, then bolted securely into place in the rigid main frame. Easily removed and repaired in the field or shop. No unnecessary delay and expense.

4. *Ball-Bearing Engine—*
The crankshaft has two heavy-duty ball bearings. This design minimizes friction and shaft breakage—a feature years ahead of general practice. All wearing parts are replaceable, including the cylinder walls. There should be no limit to the life of this engine.

5. *Operator Comfort, Convenience and Safety—*
Assured by the roomy platform, wide fenders, adjustable seat and foot levers, minimum vibration, well-balanced weight, adjustable drawbar, throttle governor and Alemite lubricating system. All gears and important bearings are enclosed and run in an oil bath. No moving parts exposed.



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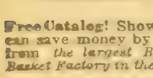

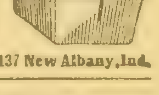

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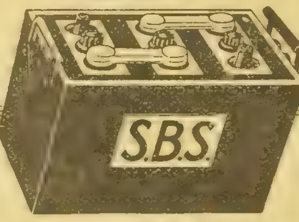
NATURAL LEAF TOBACCO. CHEWING 5 pounds $1.75; 10 pounds $3. Smoking. 5 pounds $1.25; 10 pounds $2.00. Send no money. [illegible] TOBACCO GROWERS' UNION, Paducah, Ky.



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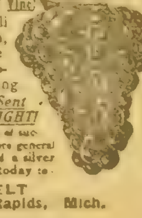

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THE FRUIT BELT
15 Market St., Grand Rapids, Mich.

The Children's Hour

DEAR Nieces and Nephews:—Last week a letter came to me from one of my nephews (I will not tell his name) that contained the following:

"I would like to get a squirrel for a pet. Would you please give me some instructions on making a trap that would catch them and not harm them? They are such frisky little fellows that I would like to catch one."

He must be a new member of the Children's Hour because if he has been a reader of our department for some time he should know what I think of capturing the animals that roam the woods and fields to make pets of them.

I will not tell him how to make a trap. God did not put the squirrel on earth to be caged up as a pet for man. What would you think if some great giants captured us and placed us in cages and made us stay there the rest of our lives? We would not like it, would we? Of course not, and neither would the squirrel.

If you wish to make a pet of a squirrel it is not necessary to catch it and put it in a cage. If you have ever been to Detroit and visited Belle Isle you no doubt have noticed how friendly the squirrels are on the island. Some of them will even eat from your hand if you are very quiet. Squirrels in the country will be just as tame if you are careful. Spread food where they can find it, keep some distance off while they eat for several days, then each day come a little nearer and before you know it you will be able to stand within a short distance of them and they will not be afraid. Within a few weeks they will expect you to feed them and watch for your coming. With kindness and patience you will be able to win their friendship.

Our contest is coming along nicely as shown by a few samples on this page of the letters I have received so far. Most of the letters are very well written and show careful thought and I am sure we are going to have considerable trouble in deciding the winner.—UNCLE NED.

OUR GIRLS AND BOYS

Dear Uncle Ned.—I was reading about which was the most interesting part of the Business Farmer and so I thought I would tell you what I thought the people like best.

I think the Farm Home department is what interests our mothers because it tells all about how to get stains, contains recipes, and the poems are beautiful. I think that for the men the story about Henry Ford and the front part of this paper is good. I know my father is interested in it and I have heard many other men speak about it. My mother likes the Farm Home department and I have heard many other women speak about it. I expect you know what part I am interested in. The Children's Hour. I was sick about three weeks ago and my mother read them to me. There was quite a few in the paper that time, there was about two pages of them. I like the poems you print. I speak pieces quite a lot. I like the piece you wrote in the paper this time or the poem that was put in the Farm Home department last issue or the Easter hymn.

I must describe and tell you about myself now. I have blue eyes, medium brown hair, am thirteen years old and in the eighth grade. We live four miles from Charlotte, two miles from Potterville. I would like to have the children write to me. I will answer their letters as soon as I receive them. I will close with a riddle, when is a nose not a nose? The one's that guess this riddle I will write a letter to, I will have to close for this time, your niece, Miss Isadora Perry, R. 8, Charlotte, Michigan.

Dear Uncle Ned:—May I join your merry circle? I have written before but did not see it in print. I am a boy 12 years and in the sixth grade. My birthday is the 4th of June. I wish any boys whose birthday is on that date, would write to me.

The best department of the M. B. F. is the "Poultry for Profit." I like it because it's about poultry and I like to take care of chickens, especially when they are small. They are so cute, it is fun to see them quarreling over a worm or see them step on one anothers feet and get in a fight. I like to make pets of them so they will come up to the doorway where I feed them. I hope I will win a prize.

Well I will close with a riddle. Round as the moon, black as a coal; and has a tail on it. Answer: A frying pan. Well I think I have written enough so good-bye to Uncle Ned and the boys and girls. Harold Snyder, 2130 Luella St., [illegible]

Dear Uncle Ned:—This is the first letter I have ever written to you. But have thought of writing lots of times. I do not live on a farm just now. We sold our farm last fall and took a trip to southern Georgia. I liked it quite well there but I like Michigan best.

I am 13 years old. I have no pets now, but when I lived on the farm I had about 60 rabbits and a big shepherd dog.

What I think is best in your paper is the Children's Hour. My mother likes the stories and the Farm Home department. My father likes it all. He says he never saw a paper with so much of interest to the farmer and it is so much help to him. I like also to read the M. B. F. better than any paper but I think the Children's Hour is of most interest to the boys and girls. Also the picture page. Your loving niece.—Sussie Tonpkins, R. 5, Reed City, Mich.

Dear Uncle Ned:—I was reading in your letter last night that you are going to have a contest. May I tell you which part I choose? I choose the Children's Hour because I understand it better and I choose it because there are more children in it.

I am a Girl Scout of Huron City. There are forty-six scouts. I have four sisters and two brothers and two nephews. I live on a farm of 160 acres. We have six cows, four horses, ten young cattle, five small calves and five pigs. We have a pet goose. Its name is Peggy. I am eleven years of age and in the fifth grade. My birthday is on the 14th of January. I will close with some riddles. When is a sheep and ink alike?—Answer: When it is in a pen. Spell black water with three letters.—Answer: I-n-k. What is all patches and no stitches?—Answer: Cabbage. Why don't they collect fare from o policeman on a street car?—Answer: Because you can't take a nickle from a copper. What is the difference between a pen and a pencil?—Answer: One is drove and the other has to be lead. Always a liquid but sometimes gets hard? Answer: Cider. Your niece, Katherine Berry, Grindstone City, Michigan.

Dear Uncle Ned: May I join your merry circle? I am a girl 15 years old and I thought I would try the prize winning contest for our Boys and Girls, that you mentioned in the March 31st issue of the M. B. F. The department that I think is the best in the March 31st issue is as follows:

Poultry for Profit

The reason why I think this is the best department is because most all people raise puoltry. The city people, as well as the country people most always raise poultry. In the M. B. F. of the March 31st issue, is mentioned the facts that all people need to know in order to get the best results in poultry raising. I will now mention a few of the facts below. First of all comes careful feeding. You must feed the baby chicks just a little at a time, and feed them three or four hours apart so as they will have enough saliva to moisten the food and then be able to digest it properly. Second, is the moisture that is needed to satisfy the little chicks thirst. At first, until they are about three days old there is moisture enough in their food for them, but after that you will have to set a dish of water in their pen for them, as they will need quite a lot of water as they grow older. Third, is the chickens shelter or coops. Their coops should be set facing the east so they will get the first rays of sun in the morning. This is necessry because chickens are always up as soon as it is day light, and as it is generally cool then they need all the warmth they can get. They should have plenty of room in their coops and as they they should have roosts to set on when they go to bed for the night. With the facts mentioned I think people can take care of their chickens so as to get the best results in the meat and eggs. Well good-bye Uncle Ned.—Isabell Manary, Auburn, Michigan, Route 1.

Hello Everybody:—As I have never won a prize yet, I thought I would try and win this one. I think that "The Truth About Henry Ford" is the most interesting article in the Business Farmer because the older people enjoy reading the life of this rich man. I heard that he had three million dollars in the bank and had forgotten all about it so he must be pretty rich, don't you think so, Uncle Ned? I do. The older people enjoy reading this story because it tells all about the life of Henry Ford and some of his adventures and what inventions he has made.

Well Uncle Ned, do you think you could answer some riddles if I asked you some? I will ask some and give the answers too. What is the best material for airplanes? Answer: Fly-paper. What ship carries the most passengers? Answer: Courtship. Round as an apple, deep as a cup all of kings horses can't pull it up. Answer: Well. Round as an apple, flat as a chip, has two eyes and can't see a bit? Answer: Button. Round as an apple, busy as a bee, the prettiest little thing that you ever did see. Answer: Watch. Now the one that answers this one, I will write a letter to telling about what I seen in Detroit the last time I was down. Little Nancy Edicoat, standing in a petticoat, the longer she stands the smaller she grows. How many of the cousins got over 20 valentines? I'll say I did. I got 23. What do you think about that? It has not thawed here yet. I mean we still have a little snow. It thawed about two weeks ago but it snowed after that. I heard that they have five feet of snow in Alpena county. I was 12 years old on the 24th of March. Is there anyone whose birthday is on the same day as mine? If there is I wish they would write to me and I would answer all letters received, and from any other cousins too. I am in the sixth grade. Well Uncle Ned, I would like to win the prize but don't know whether I will or not, and my letter is getting pretty long and if I do not quit pretty soon Uncle Ned will be getting a switch off the old willow tree and getting after me for writing so long a letter so I will say good-bye Uncle Ned and Cousins.—Hazel Baker, in care of J. Baker, Elkton, Michigan.

Dear Uncle Ned:—First, I think that the farm crops, and veterinary departments are the most interesting parts of the M. B. F. because they give opinions of other people, facts that have been proved, and last but not least the cures for the farm animals. It tells how to improve your crops, and which crops to grow in rotation. Second, I think that the Farm Home department is next best, for it gives good recipes for cooking and baking. It tells how to keep the house clean and how to take dirty and greasy spots off. It has patterns that are all up-to-date. Third, I think that the children's department is next in line. It brings the lonely and sad, the happy and gay children closer together, and the contests you have help them also, because some of them may be inclined toward writing and this helps very much in penmanship. Next comes the story, Collection Box, "What the Neighbors Say" and other numerous departments of the paper.—Mary James, Sheridan, Michigan.

Dear Uncle Ned:—I have been a silent reader for sometime. May I join your merry circle? When we get the paper the first thing I look for is the Children's Hour. I am in the seventh grade at school, and am 13 years old. I have to walk one mile and a half to school. We have stone roads all the way so you see it is not hard walking. Good-bye, from Neola Townsend, R. 2, Freeland, Michigan.

SAVING MOTHER THOSE EXTRA STEPS

(Continued from Page 4)

" 'Roll rim sinks with a back attached are usually provided with nickel plated traps, either extending to the floor or to the wall. Extending to the floor is usually better for sinks attached to outside walls. Traps to the wall leave the floor beneath the sink free from piping.

" 'Nickel plated traps may be attached to either lead or iron pipe if the proper fittings are provided. When attached to an iron pipe a slip joint is used. The nickel plated pipe is inserted into the iron pipe; then the slip nut is screwed down onto a rubber gasket. A nickel plated pipe may be attached to a lead pipe by soldering, or by a union and a short piece of iron pipe. The lead pipe is inserted in the lower half of the union and beaded over, the nickel plated pipe is then inserted in the iron pipe and the slip nut screwed down.

" 'In some installations it is impossible to have the sink on an outside wall or near an outside wall. In such cases it will be necessary to have a low waste pipe.' "

"Just a minute, Dan," interrupted his father. "How about bad odors that might come back through the sink owing to the accumulation of waste matter in the longer waste pipe."

"To overcome that it is necessary to insert a trap in the pipe just below the floor, where you make the bend," explained Dan. "There is a picture in the book that shows just how it is done."

" 'Traps are usually placed directly beneath the fixture, but since in a great many cases sinks are installed in houses not heated by a furnace, the trap will be less likely to freeze if placed just below the floor line. as shown.

" 'In cases where a long waste pipe is necessary, it will be best to use 1½ inch iron pipe with threaded fittings. The trap used is a half S sact trap provided with a cleanout plug at the bottom, for use in case it becomes clogged. Elbows, tees, etc., used in connecting the waste pipe should be special drainage fittings if they can be secured.

" 'It will be necessary to have a special fitting to attach an iron pipe to the sink.

" 'Occasionally a lead trap is used beneath the sink, and sometimes this is attached to an iron waste pipe. This connection can be made with an ordinary cast union (a union with a brass seat is better). Screw the lead pipe into the half of the union having the brass seat until it projects through about ⅜ of an inch; then flange over. The flange on the lead pipe will serve as a gasket.

" 'The best location for the grease trap is close to the cellar wall. This location reduces to a minimum the possibility of clogging in the sewer.

" 'Procure a barrel of large size; it need not be perfectly tight. Dig a hole in the ground close to the wall at the point where the waste pipe comes through. This hole should be about 8 inches larger than the diameter of the barrel and about 15 inches deeper than the barrel is high.

" 'Put about 3 in. of concrete in the bottom of the hole and tamp down. About 16 inches of the lead waste pipe should extend into the hole. It need not be bent downward until after the barrel has been removed. Place the barrel in the center of the hole, letting the waste pipe rest on top of the barrel; then fill around the outside with concrete. When nearly full remove the upper hoop of the barrel and cut a notch deep enough to receive the waste pipe. At the point where the tile drain is to be attached, leave a notch deep enough for the outlet tile elbow.

" 'Remove the barrel when the concrete has set, bend down the waste pipe as shown in Fig. 12, and the outfit is ready for the drain and elbow to be attached.

" 'The tile from the grease trap may be run directly into the farm drainage system if convenient, or, if the soil is sand or gravel, about 75 feet of ordinary drain can be attached to the trap. If the soil is clay, it may be necessary to put six inches of gravel in the trench before putting in the tile.' "

Dan laid the bulletin one side and yawned, his father looked at his watch.

"Why it's a quarter past ten," exclaimed Mr. Baxter. "Time all good boys like you and I were in bed."

He rose and stretched.

"We'll go to town tomorrow and get that stuff," he remarked to Dan as the latter sat removing his shoes. "And maybe mother won't be glad when we tell her in the morning—yes, maybe she won't."

With a pleasant "Goodnight" Dan went to his room. His father knocked the ashes from his cold pipe and as he turned out the light he mused to himself:

"The trouble with us menfolks is that we don't always appreciate the women, and what they do for us. Guess I'd better figure on putting in running water and the fixtures that go with it this fall."

(Editor's Note: We are indebted to Prof. O. E. Robey, Extension Specialist, M. A. C., for the facts used in this article and cuts used to illustrate it.)

POWER FROM STREAM TO RUN GENERATOR

Continued from Page 10)

able that it would be possible to make more than one-third of this amount available for actual power which would be not more than one-quarter H. P., this would be sufficient to operate a few lights without storage batteries, provided it would not have to be transmitted a great distance.

It might be possible that one of either two plans of storage could be used in this case. If a reservoir could be built to store the water then a large flow might be used for a shorter period of the day. To illustrate one-quarter H. P. useable for 24 hours of the day would be equal to 1 H. P. useable for one-quarter day or 6 hours or 2 H. P. for 3 hours. If the water was stored so that the light and power could be used only as needed then a larger wheel and generator could be used, probably this would be a more practical installation. However if developed at the slower rate through the stored in a 16 cell battery so as to generate 32 volts.

Home made machines could be constructed for this purpose but are rather impractical because they do not show very high efficiency. It is very likely with the amount of head available the water-wheel would be found more practical than the turbin.—H. H. Musselman, Professor of Farm Mechanics, M. A. C.

QUACKGRASS DIFFICULT TO EXTERMINATE

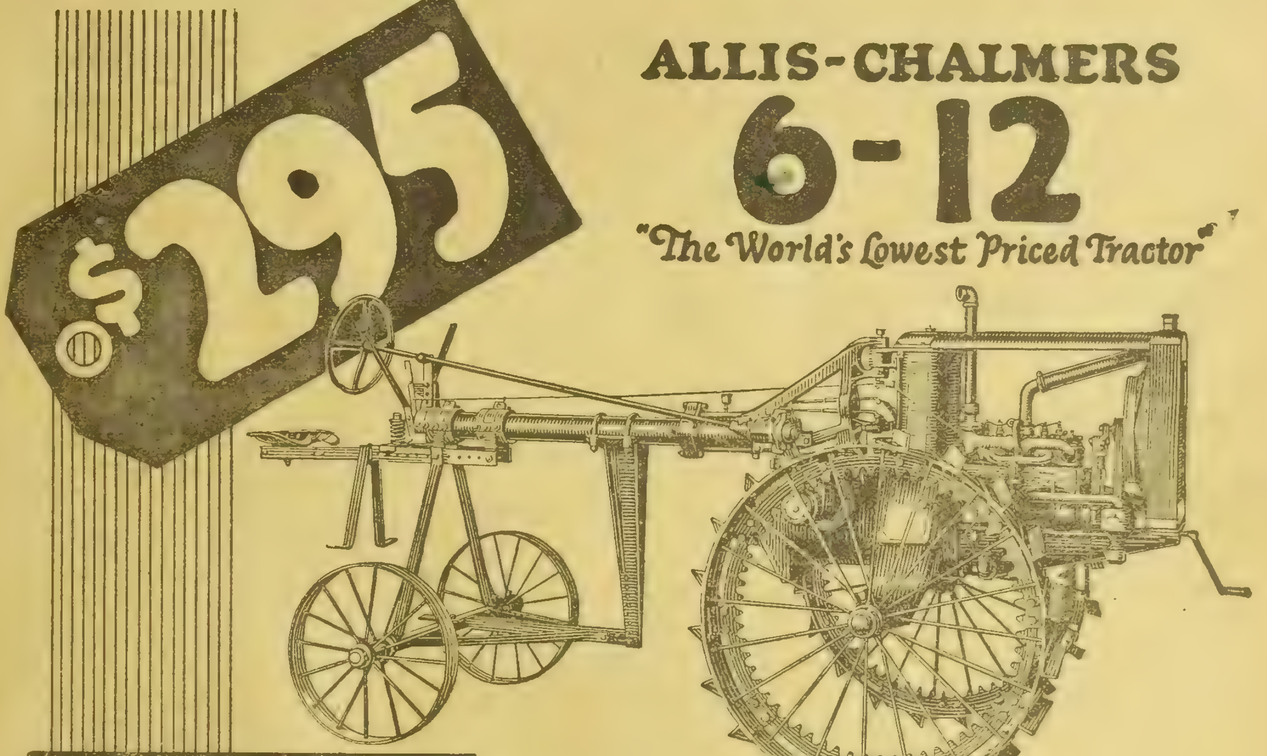
QUACKGRASS can rarely be exterminated on large areas, but it can be brought under reasonable control, says the United States Department of Agriculture. The best plan, according to Farmers' Bulletin 1307, Quackgrass, by L. W. Kephart of the Bureau of Plant Industry, is to allow it to form a sod and then plow it in midsummer during dry, hot weather. After plowing, the field should be harrowed frequently until winter and the following year planted with a cultivated crop.

To be effective against quackgrass cultivation and harrowing must be thorough, frequent, and persistant. Half way cultivation is worse than none. Certain systems of cropping are suggested in the bulletin as a means of holding quackgrass in check on large areas. The use of smother crops that make a heavy, dense growth and kill the weeds by crowding and shading is also suggested under certain conditions. Miscellaneous methods of control for small areas are discussed. On small patches tar paper covering can be used effectively to smother the quackgrass, but this method is too laborious for large areas.

Those interested in the methods of quackgrass control may have the bulletin free of charge by writing to the U. S. Dept. of Agriculture.

WANT A NEW ACCOUNT BOOK?

The Papec Machine Co., 178 Main St., Shortsville, N. Y., offer again this year to send readers of the Business Farmer a copy of their new 50-page Farmers Record and Account Book, free if you mention the size of your silo and the name of your implement dealer. There is no other obligation involved. Better send for your copy now!



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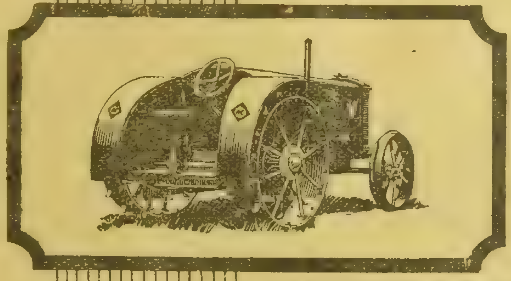

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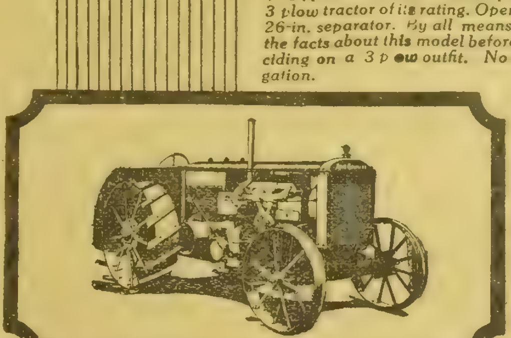

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ALLIS CHALMERS

A GARDEN SONG

HERE, in this sequestered close
Bloom the hyacinth and rose;
Here besides the modest stock
Flaunts the flaring hollyhock;
Here, without a pang, one sees,
Ranks, conditions, and degrees.

All the seasons run their race
In this quiet resting-place;
Peach, and apricot, and fig
Here will ripen, and grow big;
Here is store and overplus—
More had not Alcinous.

—Austin Dobson

GETTING THE GARDEN SPIRIT

WHEREVER there is soil, plants grow and produce their kind, and, all plants are interesting. Every family should try and make their home their castle and be proud of it. What difference does it make it you do rent the land. The outside of one's home speaks very plainly what kind of folks dwell within. One plant in a tin can may be a more helpful and inspiring garden to some mind than a whole acre of lawn and flowers may be to another. The satisfaction of a garden does not depend on the area, nor happily on the cost or rarity of the plants. It depends on the temper of the person. One must first seek to love plants and nature and then to cultivate the happy peace of mind that is satisfied with what they have.

We are won't to covet the things that we cannot have, but we are happier when we love the things that grow because they must. A patch of lusty pigweeds growing and crowding in luxuriast abandon may be a better and more worthy object of affection than a bed of coleuses in thich every spark of life and spirit and individuality has been sheared out and supressed. The man who worries morning and night about the dandelions in the lawn will find great relief in loving the dandelions. Each blossom is worth more than a gold coin, as it shines in the sunlight of the growing spring, and attracts the insects to its bosom.

Little children like the dandelions. Why not we? Love the things nearest at hand; and love intensely. If I were to write a motto over the gate of a garden, I should choose the remark that Socrates the great philosopher made as he saw the luxuries in the market: "How much their is in this world that I do not want."

VEGETABLES AS HEALTH-BUILDERS

IF any of you folks attended Farmers' Week in Lansing this winter I am sure you must have been impressed with the wonderful program of talks on life on a farm and some of the remedies these speakers tried so hard to have the farm mother take home with her.

It is hard to make our women folks believe they are not bringing up the family right. Too little has been said to help us realize the importance of vegetables in our diet and the wonders that these vegetables do for our bodies in making us strong and healthy.

Altho strange as it seems, the farmer usually tills his fields and raises food for the market and the garden for the family is forgotten.

Why not this year have a small plot laid aside and have the children take an interest. Make them feel responsible for the weeding and if it is necessary and I think it only right, suggest a small amount to be paid them or else the promise of the treat in town when you go.

Children are told to eat carrots if they want color in their cheeks and beets to be strong and able to romp and play. Just how much there is to this is hard to say, but all the root crops are rich in vitamines and the elements that aid digestion. Carrots are rich in the coloring matter known as "carrotin," which is also present in green grass and gives the rich color to the cow's milk during the early summer. Radishes are effective for warding off scurvy and similar disorders and are eaten more as a salad than a true vegetable.

Root crops such as carrots, beets, parsnips and salsify, yield large quantities of actual food from a small space of ground and for this reason are adapted for growing in the small garden. Parsnips may be grown as an early spring crop in the south and used before the extremely hot weather of summer. In the north parsnips require the entire growing season for their development and may be left in the ground during the winter and to a certain degree improve with freezing.

The Farm Home
A Department for the Women

Edited by MRS. ANNIE TAYLOR

HOW TO EARN MONEY AT HOME

THERE seems to be a call from all the women to help in some way to swell the bank account. It just seems possible that some work could be done at home and a little spare time taken to do or make these things that will bring in more money. Surely there are some of our readers who have found a way to help and I think a good plan would be to pass it on. Tell me your experience, how you go about the task and some idea of how much time is spent upon the enterprise. Tell me approximately how much money you think you have made by these efforts. I have received several letters asking me how my readers could make a little extra money. Let us try and help our neighbors by telling them of our own experiences. God has made us all alike in our desisres and it just seems that some have more fore-sight than others but we all can have the same ambitions if we only know how to go about our tasks.

Your Friend,
Mrs Annie Taylor

Address letters: Mrs. Annie Taylor, care The Business Farmer, Mt. Clemens

The essentials for growing root crops are a deep, rich, well-drained soil, good seed proper thinning and frequent shallow cultivation. None of the root crops, with the possible exception of beets, can be transplanted successfully as the breaking of the tap root in transplanting causes them to grow rough and distorted. The proper method is to spade and pulverize the soil 8 to 10 inches deep, working fine fertilizer to the full depth of spading, then sow the seeds where they are to grow and thin out the plants so that every plant left has room to develop. In the case of beets what appears to be a seed is really a seed "ball" containing one to three seeds, consequently beets usually come up much thicker than the gardner expects. Carrot and parsnip seed lose their vitality or power to grow very quickly and seed of last year's production should always be used.

When it comes to planting the beets, carrots and other root crops the soil which has been spaded and fertilized should be raked smooth and the little rows or furrows formed by means of the hoe handle or a rounded stick drawn along a tight line. The distance between rows may be about 18 inches for beets and carrots and at least 24 inches for parsnips and salsify. The seeds should not be covered more than one inch deep on sandy land and less on heavy soils, and the soil used for covering them should always be fine and mellow. If the soil is in the least dry it should be firmed over the seeds by laying a board on top of the row after the seeds are covered, then walking on the board.

Beans and peas make muscle and backbone.

BLUE AMONG YOUR FLOWERS

BLUE is a color that is not common among garden flowers, and yet there are some very pretty blues we may have. The blue cornflower has long been a garden favorite. No blue makes much of a showing unless planted with white or perhaps a decided pink or bright red. In some cases several colors are combined. I do not like these mixtures, however, as one companion color with blue always looks best.

White sets off the blue without being too "showy," or in a background where display is desirable bright red is effective with a bright blue. Altho the cornflower (centaurea cyanus) is planted more than any other tall blue flower, there are five blues among the annual larkspurs and asters which are very desirable. Larkspurs bloom a long time in summer, and the asters bloom late in the fall when the flowers are scarce.

Larkspurs are more showy than cornflowers. Whites and reds can be obtained in each of these, or some other flower that is taller and blooms with them may be used as a background. Nicotiana makes a nice companion plant to grow with cornflowers. Asters, however, are massive flowers, so are prettier when grown in a mass with whites or reds of the same flower.

Ageratums, pansies, verbenas and lobelias are all low growing flowers with good blues. The ageratum comes in blue and white only. It is easy to grow and quite popular, but I do not admire it very much. The verbena is one of our finest flowers a trailer much valued for planting among gladioli or other tall plants. The pansy is too well known and loved to need praise. The lobelia is not so well known as it deserves, for it is very pretty, grows low, is compact, likes shade and is an intense blue.

BIRD HOUSES ON THE GROUNDS

THIS year would be a splendid one to have John build you a bird house or purchase one. Birds are one of our best friends and they help in their own way to prevent insect life getting too far with our trees and shrubs. A bird making ready his home for the mate teaches us humans a great deal in love and respect. They bring happiness untold with their songs of love.

Henry Ford is a great lover of birds, and his home and other properties he owns are just alive with birds making their nest ready in the many bird-houses he has had put up on his ground. Let us take a little while this spring and see if we cannot improve our surroundings.

SWEET PEAS FOR EVERY GARDEN

THE sweet pea deserves a place in every garden for it is not to be surpassed by any other annual when it comes to beauty, fragrance, range of color, and usefulness for cut flowers.

For early flowers the winter flowering type is useful. The Waved or Spencer varieties are much superior to the Grandiflora varieties. These are older types of the flower which will be discarded by all growers of sweet peas when once they have tried the Spencer variety with the long stems and beautiful waved edges.

Location and Soil

Choose a site for your sweet peas that will give them plenty of sun and allow you to run the rows north and south, for by so planting, the tops shade the base of the plants and keep the soil cool.

Sweet peas will grow in any good garden soil if it is well drained so that the water does not stand around the plants during rainy periods. Although ordinary preparation of the soil will give reasonably good sweet peas if the season is favorable; if the summer is hot and dry, the peas will bloom for only a short period. If the soil has not been prepared in the fall, the first thing to do as soon as the ground will allow working is to spade a trench about a foot wide and approximately two deep. If the subsoil is not good, it should be removed and replaced with good garden loam which has been mixed with well-rotted manure. A heavy application of superphosphate of lime should be worked into the soil. Sweet peas do best in heavy soil if it is sweetened with lime and loosened with manure. By all means plant your peas as soon as you can work the ground so that they get a good root development.

As soon as the plants send forth tendrils, some support should be provided. In the country where good twiggy boughs are easily obtained, such support is best.

Sweet peas make a beautiful boquet with baby breath.

GREENS AS A MEDICINE

ONE of the ways of preventing the human system from suffering from digestive monotony is to provide plenty of green or leaf vegetables in the diet. Fresh green food not only serves as the broom for the stomach, but supplies the human system with the mineral elements that are so essential to health.

Spinach, kale, mustard, dandelion, sour grass and other kinds of greens taste best in spring because they are more tender and fresher at that time.

By the use of coldframes, coverings of straw or pine boughs and other means of protection, spinach and kale may be carried through the winter rather far north.

Beds on which late fall, winter and early spring kale and spinach are grown should be raised three to six inches above the surrounding surface so as to drain well. They are best located on a southern of eastern exposure to get the full benefit of the sun. A shelter of pine boughs or corn fodder along the north and west sides of the beds is a great protection against cold and wind. Plenty of fertilizer is essential where fall plantings are made for spring use.

Highly nitrogenous fertilizers should not be applied until after the cold weather or until active growth of th plants begins.

The season for greens on the table can be prolonged during the spring and summer. Mixtures of young, tender beet tops, swiss chards, mustard and other greens may be made. In combining the mixture for canning only a small proportion of mustard or of any pungent green material should be used.

Mothers Problems

TRAIN CHILDREN TO MEET EMERGENCIES

NO child is too young to be trained for an emergency: yet accidents, with their terrible consequences, are not good subjects for a child to dwell upon. The knowledge of "what to do if——" must be imparted in a pleasant way—and there is no pleasanter way than by means of a game which Mother and the children can play whenever they are together.

Says the mother: "What would you do if your clothes should ever catch on fire?" The children will probably give varying answers, some good, some highly impractical, even dangerous. Finally the mother tells what she would do, which is, of course, the correct course to pursue in such an accident.

It is then time for the child who gave the best answer to ask Mother a question. She may think of some big accident, such as burning, drowning, being run over and the like, as she may be more interested in knowing what Mother would do in case her "nose got to bleeding and wouldn't stop," or she "got caught in a snowstorm and couldn't see a thing." In either case the information gained would be invaluable if ever she was called upon to meet such an emergency.

Far fewer fatalties would result from accidents if people were only trained to do the proper thing. Mothers who play this game with their children will find out that they must study up on "emergencies and how to meet them," in order to impart

TIME EXTENDED TO WEDNESDAY, APRIL 18TH FOR GARDEN LETTERS

IN order that all our readers might have an opportunity to send in their suggestions on making the front of the house beautiful with flowers and shrubs with the least cost possible, we are extending our contest over to the next issue and will then print some of these suggestions.

SULPHUR AND MOLASSES

By JAMES M. WOODMAN

In them good old days back yonder th' home-folks useter make
Th' tonics which our mothers were so prone t' have us take,
When th' Springtime's balmy breezes began t' gently blow—
They had th' modern "dopes" outclassed a mile, I'd have you know.
E'en now I see our healthy brood, each take his turn by gee!
When mother dealt th' sulphur an' molasses out t' me.

Some folks tuk sassafras, an' some, et slipp'ry elum bark;
An' some used yaller-dock, but say! jest please let me remark
Uv all th' tonics ever made t' set yer teeth on edge,
An' make y' squirm an' argue back, an' duck around and hedge;
If there is anything on earth, much worse, what could it be
Than that old sulphur aad molasses mother gave t' me.

Ef I should live a millyun I don't think I'd forget
Th' taste uv that old medicine—by jing! I see it yet
Up in th' big old tumbler glass, upon th' kitchen shelf,
A-sort o' sayin' "come along, old chap, an' help yourself."
Still, could I be a boy again, I'd take it willingly—
Th' sulphur and molasses which my mother gave t' me.

the correct knowledge to their children. And they will find that their children will think up all sorts of accidents which it had never occurred to them to warn against.

What would you do if—— "you tumbled into a well?"——"if you almost stepped on a rattlesnake?"——"if you swallowed a penny?"——"if you nearly cut your foot off and nobody was at home?" Such questions your children would like to have answered, and ought to have answered. Could you answer them? If not, "brush up" on first-aid and interest the children in the "game" mentioned above.—Margaret Bartlett.

Personal Column

Would like to know if any reader has the story "Pam De cides" by Betlina Van Hutten? If so, will they sell it or lend it, or exchange it, and for how much? I have the first story, "Pam". Would like very much also to secure the Geographical magazine for January, February, March, April, 1923. Willing to buy or exchange magazines such as Ladies' Home Journal, Woman's Home Compaion, McCall's, Today's Housewife, and Saturday Evening Post. Or, I have a year's number (1922) of The Mentor, that I would exchange for these numbers of The Geographic.

Is there any one having a receipt for canning horse-radish, so it will keep.—Mrs. C. F.

Miss M. M.—Here is the poem you asked for and I hope it will bring you much joy. I could buy this in sheet music for the piano if you care to send the money. I think I could get it for twenty-five cents. Verse sent in by Mrs. Harvey Gable, Ithaca, Michigan.

ALWAYS IN THE WAY.

Please Mister take me in your car
I want to see my mama
They say she Lives in Heaven
Is it very very far.

Cho.
Always in the way
So they always say
I wonder why they don't kiss me
Just the same as sister May
I dare never play
My own mother would never say
You're always in the way.

The song it ended all to soon
She tottled off alone
A Light shone in the window
And she peeped into the room
Please tell me is this Heaven
And will they let me stay
Forever child for this is Heaven
And you are not in the way.

One of our readers would like to know if any one as the song, "I Hain't Got Nobody to Make a Fuss Over Me."

Will subscriber who makes sweaters, bonnets, door-panels and table-runners please send in her name again and let me know all about her work. Have several letters asking for this information.

Sometime ago a reader sent in a remedy for eczema and we have had a request asking for this same remedy to be printed once more. Would appreciate receiving it as one of our subscriber's sons is suffering right now.

FOR CLOUDY EYE-GLASSES

Keep a small bottle of half water and half household ammonia to clean your spectacles. A drop or two and a clean cloth will make them shine.

The Runner's Bible

FOR him who must run and yet would read, and particularly for her who at seventeen has already begun to run, these commands and promises of Holy Writ are gathered and grouped by one who while running has felt the need.

I am going to give you a few thot's each week from this wonderful book and let us try and see if it will not help to make our days happier for having read them.—

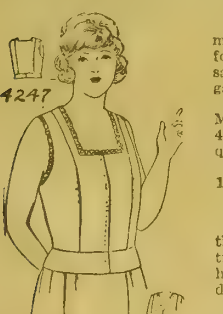
There is nothing as important when making ready for the day as an early morning period of stillness werein to make sure that the Truth and the Truth only, controls our consciousness, However that the consciousness may be clear enough to percieve the Truth, we must let go of our thot's oud sensatious of the material world (Ps. 46:10) and know that all that truly exists is Good, and determine to know nothing else.

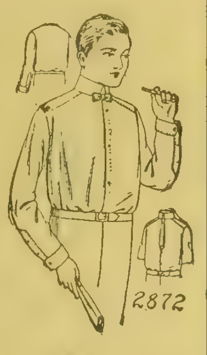
—if you are well bred!

"Etiquette, remember, is merely a collections of forms by which all personal contacts in life are made smooth." Here is the whole thing in a nutshell. No argument could be stronger.

AIDS TO GOOD DRESSING

THE vogue for one-piece frocks has made the top coat and wrap a necessity. And the new spring models are not only necessities, but are things of rare beauty and convenience, and there are wraps and coats for all occasions and ones for general were as well. The cape is considered the last word in all our large cities, especially New York. Any good coat material for summer suiting cloths in plain colors such as black, tan, brown, navy,-blue are very popular. Will try and have some patterns in next issue.





A Model Good For Stout Figures

4247. This corset cover is ideal for the woman of mature figure. The seams may be boned for firmness. Nainsook, cambric, linen, silk or satin may be used to develop this comfortable garment.

The Pattern is cut in 4 Sizes: Small, 34-36; Medium, 38-40; Large, 42-44; Extra Large, 46-48 inches bust measure. A Medium size requires 1⅝ yard of 36 inch material.

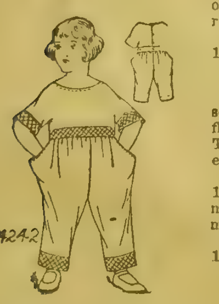
Pattern mailed to any address on receipt of 12 cents in silver or stamps.

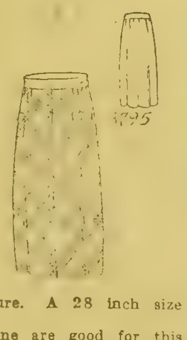
A Practical Play Suit For Boy or Girl

4242. Here is a new and pleasing version of the Romper style, with outstanding pocket sections, and comfortable sleeve. Chambrey, gingham, khaki, linen and cretonne are good for this design.

The Pattern is cut in 5 Sizes: 2, 3, 4, 5 and 6 years. A 4 year size requires 2⅛ yards of 36 inch material. To trim as illustrated will require ⅜ yard of 36 inch contrasting material.

Pattern mailed to any address on receipt of 12 cents in silver or stamps.





A Popular Model

2872. This style is good for madras, percale, soisette, silk, cambric, khaki, muslin, linen and flannel. The fronts are finished in coat style. The sleeve may be finished with the cuff or in elbow length.

The Pattern is cut in 8 Sizes: 15, 15½, 16, 16½, 17, 17½, 18 and 18½ inches neck measure. Size 16 requires 3⅝ yards of 36 inch material.

Pattern mailed to any address on receipt of 12 cents in silver or stamps.

A Good Skirt Model

Pattern 3795 was used to make this style. It is cut in 7 Sizes: 24, 25, 28, 30, 32, 34 and 36 inches waist measure. A 28 inch size requires 2⅜ yards of 42 inch material. The width at the foot is 2 yards.

Serge, mohair, duvetyn, tricotine, prunella, broad cloth; velvet and gabardine are good for this practical design.

A pattern of this illustration mailed to any address on receipt of 12 cents in silver or stamps.

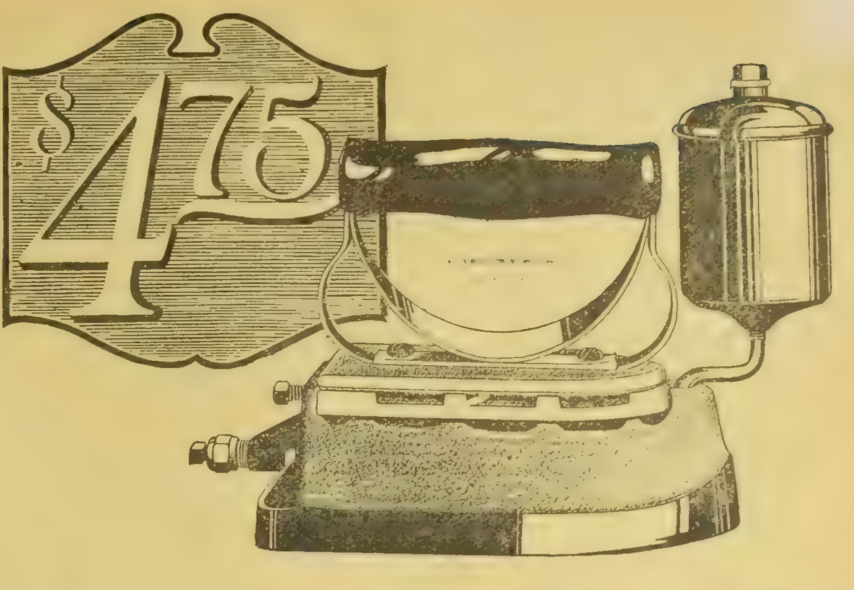
ALL PATTERNS 12c EACH—3 FOR 30c POST-PAID

Order from the above or former issues of The Business Farmer, giving number and sign your name and address plainly.

ADD 10c FOR SPRING AND SUMMER FASHION BOOK

Address all orders for patterns to

Pattern Department, THE BUSINESS FARMER, Mt. Clemens, Mich.



YOUR WIFE SHOULD HAVE
THIS CONVENIENT, ECONOMICAL IRON

No electric cord or gas tube to bother. Gasoline heated. No stove fire needed. Fuel cost of average ironing less than two cents.

Ready instantly. Automatic gravity feed. No pumping. Graceful lines. Rich nickel plated finish. Over 1,000,000 now in use.

If your general store or hardware dealer has none in stock we will gladly tell you the nearest one who has.

Royal SELF HEATING IRON COMPANY
Box 402 BIG PRAIRIE, Ohio

POLAR BEAR FLOUR
THE NEW ERA MILLING CO
ARKANSAS CITY, KANS.
48 Lbs. POLAR BEAR Flour

DEMAND
POLAR BEAR FLOUR
Most Value for Your Money
A Trial Bag will prove it!
Write us for valuable Cook Book FREE!
J. W. HARVEY & SON,
Central States Managers,
MARION, IND.

85 Pound Standard
Slate Surfaced
Roofing
$2.00 Per Roll

Ward's Radio Roofing Guaranteed 15 Years

Lay Your Own Roofing This Spring

Do it in your spare time. No experience needed. Only hammer and jack knife required. Use our standard Radio Slate-Surfaced Roofing.

Approved by Fire Underwriters
Spark proof. Fire resisting. Better protection than wood shingles. Extra durable and not affected by heat or cold.

Best Standard Quality You Can Buy
Only $2.00 per roll (enough to cover 100 sq. ft.). For old or new roofs, or over old wood shingles.

Red or Green
Non-fading crushed slate surface beautifies as well as protects your home. Guaranteed for 15 years but should last longer.

You Can Do The Same!
"I saved 50c a roll, buying my roofing from you."
Geo. Webber, Hookstown, Pa.
(Used with permission)

Send for FREE SAMPLES
It puts you under no obligation to buy. $2.00 per roll includes all nails and cement. (Add 8c if wanted with extra long nails.)

Shipped from Chicago, Kansas City, St. Paul: York, Pa.; Southern, Ill., or New Orleans, La. ($2.10 per roll from Kansas City or St. Paul.)
Write to our house nearest you. Address Dept. C-18

Montgomery Ward & Co.
Chicago Kansas City St. Paul Fort Worth Portland, Ore

Herold-Bertsch
Michigan-Made Shoes

Favorites with Michigan families for over 30 years. Look for the H-B circle trademark.

All leather-
and all good leather

Stylish, long-wearing Men's and Boys' oxfords and shoes for dress and business wear

At $5 to $6

Made in a great modern factory by skilled Michigan workmen. Sold by a good shoe store in almost every town and village in Michigan. Ask for them by name. Built on special lasts to give roomy comfort and yet look stylish.

Herold-Bertsch Shoe Co.
Grand Rapids
Send for Booklet
HB

PATENTS Write today for free instruction book and "Evidence of Conception" blank. Send sketch or model for personal opinion CLARENCE O'BRIEN
Istered Patent Lawyer, 1053 Southern Building, Washington, D. C.

KEEP THE BUSINESS FARMER COMING SEE PAGE 25

Spring is Here

All out-of-doors is filled with the bleat of the lamb, the bawl of the calf, the grunt of the pig, and the whinny of the colt.

Youth asserting itself everywhere!

Keep their bodies healthy, and stomachs full.

You can then count on good growth—quick development—and begin to cash in on them before the summer-end.

DR. HESS STOCK TONIC

Let

DR. HESS STOCK TONIC

be your insurance policy

against disease, insurance of good appetite, good digestion. It keeps the worms away.

Then, there are the mothers:

Your COWS need it for its system-toning, bowel-cleansing, appetizing effects. Puts them in fine condition for calving.

Your BROOD SOWS will be relieved of constipation and put in fine fettle for farrowing.

Excellent for MARES in foal—and EWES at lambing time.

It makes for good appetite, and more milk to nourish the offspring.

Tell your dealer what stock you have. He has a package to suit. GUARANTEED.

I spent 30 years in perfecting this Tonic.
GILBERT HESS
M.D., D.V.S.

25 lb. Pail, $2.25 **100 lb. Drum, $8.00**

Except in the far West, South and Canada.

Honest goods—honest price—why pay more?

DR. HESS & CLARK Ashland, O.

Dr. Hess Dip and Disinfectant
For Sheep Ticks – for Hog Lice – for Health

BREEDERS DIRECTORY

Advertisements inserted under this heading for reputable breeders of Live Stock at special low rates to encourage the growing of pure-breds on the farms of our readers. Our advertising rate is Thirty Cents (30c) per agate line per insertion. Fourteen agate lines to the column inch or $4.20 per inch, less 2% for cash if sent with order or paid on or before the 10th of month following date of insertion. SEND IN YOUR AD AND WE WILL PUT IT IN TYPE FREE, so you can see how many lines it will fill. Address all letters,
BREEDERS DIRECTORY, MICHIGAN BUSINESS FARMER, MT. CLEMENS, MICH.

CLAIM YOUR SALE DATE

To avoid conflicting dates we will without cost, list the date of any live stock sale in Michigan. If you are considering a sale advise us at once and we will claim the date for you. Address, Live Stock Editor, M. B. F., Mt. Clemens

May 9—Guernseys, Wigman & Surato, Holt, Michigan.
Oct. 18—Holsteins, Howell Sales Company of Livingston County Wm. Griffin Sec'y Howell

SHORTHORNS

Richland Shorthorns

SPECIAL OFFER: Two choicely bred cows. One roan—One white—One with bull calf at foot by son of IMP. Rodney. This show stock of real caliber and great foundation material. A bargain at the price.

C. H. Prescott & Sons.

Office at Tawas City, Mich. Herd at Tawas City, Mich.

SHORTHORNS

Home of Merry Commander, Junior Champion at the recent International. Now is the time to buy. We have several young cows and heifers, bred to this wonderful bull, for sale. Also, several bulls and heifers of breeding age, from our other noted sire, Perfection Heir 3rd. Visit or write us at once
S. H. PANGBORN and SONS, Bad Axe, Mich.

RAISE SHORTHORNS WITHOUT HORNS Like Kelley does. U. S. Accredited Herd No. 28945. For description and price write,
L. C. KELLY & SON, Plymouth, Michigan.

FOR SALE: SHORTHORNS: 5 YEARLING Heifers, 2 calves, 1 bull calf, selected for beef and milk. Farmers prices.
Alfred L. Priemer, R. 4, Harbor Beach, Mich.

HOLSTEINS

Net Profit!

Every man who milks cows for a living knows that *net profit* – income over labor and feed costs – determines the value of a dairy herd.

Holstein Herds Assure Net Profit --

through large, economical production of milk and butter-fat, regular crop of healthy calves, greater salvage value from animals after milking days are ended.

Holsteins Will Increase Your Net Profit

Let Us Tell You the Story of the Holstein Cow.

EXTENSION SERVICE,
The Holstein-Friesian Association of America
230 East Ohio Street, Chicago, Ill.

HOLSTEINS

DAIRY and LIVESTOCK

MARKETS WANT LIGHTER WEIGHT LAMBS

THE number of heavy, fed lambs weighing from 45 to 50 pounds dressed weight marketed during recent months has been considerably in excess of the demand. An investigation recently made by the Bureau of Agricultural Economics, United States Department of Agriculture, to determine the reasons for the discrimination against heavy lamb developed the fact that hotels, restaurants, railroad dining car systems and steamship lines are able to utilize heavy lamb cuts to advantage, but that the average housewife, with a small family considers lighter weight cuts more economical for family use.

As a result of improved breeding for the production of wool and mutton, flocks in general have increased somewhat in average weight. Producers complain that they are unable properly to furnish lambs for the market under 90 to 100 pounds, which means a dressed carcass weighing from 45 to 50 pounds. On the other hand, consumers' preference has turned toward lighter cuts of all classes of meat, and for this reason heavy lamb has ben at a disadvantage. The additional amounts of fat found on heavy lamb cuts is also responsible for some of the prejudice against this class of meat, as lamb fat is not relished by most meat consumers.

A cutting test was recently made by the department on five light and five heavy lambs of good grade. The light lambs averaged 33 pounds and sold at wholesale at 26 cents per pound. The heavy lambs averaged 45.80 pounds and brought 24 cents per pound wholesale. The price of the light lambs therefore was $8.58 and that of the heavy lambs $10.99. In other words the heavy lambs were worth $2.41 more than the light lambs on a carcass basis. The carcasses were divided into the usual wholesale cuts, namely rattles, racks and saddles, and the percentage weights of these cuts were practically the same in both instances.

The rattles, consisting of the shoulder, neck and breast, and the racks, of 8 ribs, were valued at 12 cents and 4 cents per pound respectively in both cases. However, the saddles consisting of the leg and loin, sold at 34 cents per pound when cut from the light lambs, while the heavy saddles sold at 30 cents per pound. The higher prices which retailers were willing to pay for the former is due to the consumers' preference for light legs of lamb.

Retail prices at cash and carry and credit and delivery markets during the same period were as follows: Legs 35c-45c per pound, loin and rib chops 45c-60c, breast for stewing 10c-15c, shoulders 20c-25c. These prices represent the general range covering retail cuts from light and heavy lambs.

Most retail dealers who cater to family trade are averse to purchasing heavy lamb except in limited quantities on account of the difficulty of disposing of the legs. The greatest demand is for legs of lamb weighing from 5½ to 6 pounds These are obtained from lambs weighing from 33 to 35 pounds dressed weight, whereas a 45 to 50 pound lamb produces a leg weighing 8 pounds or more. Some retailers have attempted to solve this difficulty by cutting off enough chops or steaks from the leg to reduce it to the most desired weight, and others have made price differentials amounting to fully 6 cents per pound in favor of the heavy legs, without being able to materially widen the outlet.

Forequarters, which are used for stews, roasts and shoulder chops, can easily be divided into cuts of any desired weight, and for this reason little distinction is made in prices between light and heavy rattles, unless the latter are excessively fat. Furthermore, little difficulty is experienced in disposing of the racks when cut into rib chops. However the housewife who plans to purchase a certain number of chops for a certain number of people, dislikes to buy an extra pound or more of meat at present prices to provide the requisite number of chops. This has had the effect of reducing somewhat the sale of heavy chops, although not to the extent of causing a material difference in price, as chops are in fairly good demand most of the time.

The tendency toward lighter cuts of meats is not confined to lamb. As a result of the demand from consumers for lighter cuts, the average weight of beef cattle marketed has been tending lower for the past several years. Beef producers have recognized this and have changed their methods of marketing accordingly.

Apparently the problem for the lamb producer is to determine whether he will realize the greatest net return by marketing his lambs at an earlier age and at lighter weights thereby obtaining a higher price, or by producing heavier lambs and trusting the increased weight to compensate for the lower price per pound which he will have to accept.

RUSSELL BROTHERS' SALE OF ABERDEEN ANGUS

ALTHOUGH our sale did not break any records for high prices, we feel that it was above the average make by a good many pure bred sales held in the last year. A average of $128.00 per head was made on females. Hall Orchards, Inc., of Belding, Michigan, took the largest alotment and tops of the sale. The remainder went to Gratiot, Isabella and Saginaw counties to found new Aberdeen-Angus herds. We have every reason to believe these cattle will do good in their new homes and create a demand for more Aberdeen-Angus. Thanking you for the good work, our advertisement in your paper did for our sale and assuring you our patronage in the future, we beg to remain, Russell Bros., Merrill, Mich.

GRATIOT LIVE STOCK ASSOCIATION FORMED

PERHAPS the most concerted move ever attempted in Gratiot county to put the county at the top of the list as a good livestock center was started at the Farm Bureau office in Ithica, Saturday, March 17th, when the Gratiot Live Stock Breeders' Association was formed. Original intent of the meeting was only to find out the sentiment of the breeders toward a general organization. The discussion brought out so many benefits possible that an organization was effected and committees appointed to promote the various activities desired.

VETERINARY DEPARTMENT

TREAT HOUND FOR BEALED EARS

What will it be necessary for me to do in treating a hound for bealed ears? He wants his ears ruffer and they irritate him very much.—E. S., Winegar, Mich.

—Wash and disinfect ears thoroughly, dry and apply zinc oxide ointment to bealed parts and then apply a bandage loosely over the head to keep the hound from shaking the ears until they are well. It will be necessary to repeat the treatment daily.—Prof. John P. Hutton, Dept. of Med. & Surg., M. A. C.

CASE INCURABLE IF OF LONG EXISTENCE

I have a two year old heifer that is out in both stifles and I don't want to kill her if I can do any thing for her.—C. M., Macomb County, Mich.

—You do not say how long this conditions has existed. I judge from however, that is a chronic condition. If so, it is incurable. The best thing to do would be to send the heifer to the butcher at once.—John P. Hutton, Assoc. Prof. of Surg. and Med., M. A. C.

COLT BOTHERED WITH LICE

I have a three year old colt and I curry and brush him every morning and for the past month he is troubled with lice. Will you please tell me some good remedy.—G. M., Bay City, Mich.

—Lice are blood-sucking parasites. Each of the domestic animals harbors its own species. Occasionally lice will pass from one host to an-

FOR SALE—HOLSTEIN BULL CALF, BORN March 8th, 1923. Color nearly white. Fine individual. Dam just completed record of 26.26 lbs. butter and 543.3 lbs. milk in seven days as a senior three years old. Sires dam 29.74 lbs. butter in seven days. First check for $75 takes calf with papers complete.
F. B. HOWARD, R. 6, Ionia, Michigan.

YEARLING BULL BARGAIN—DAM A 25 LB. junior 4-year-old Pontiac Korndyke-King Segis breeding. Sire 32 lb. grandson of 35 lb. Michigan Champion. Calf well built, nicely marked. Federally tested. Pedigree, photo and bargain price on request.
RUSSELL JONES, White Pigeon, Michigan.

4 EXTRA FINE BULL CALVES—ALL BORN in January. From heavy milking Dams and Sired by "Romeo King Segis Pontiac Korndyke." Herd T. B. tested. Bargain prices to move quick. Write today. Pedigrees free.
SCHAFFER BROS., R. 4, Oxford, Michigan.

FASCINATION FARM, VASSAR, MICHIGAN. Holsteins, registered fully accredited 32½ lb sire. Write your want.

GUERNSEYS

FOR SALE—REGISTERED GUERNSEY HEIFERS at reasonable prices, also choice bull calves of May Rose breeding.
H. W. WIGMAN, Lansing, Mich., Box 52.

MISSAUKEE GUERNSEYS. A NEW CROP OF calves coming soon. No females for sale. Order that new bull calf A. R. Sire and Dam.
A. M. SMITH, Lake City, Michigan.

FOR SALE: MAY ROSE GUERNSEY BULL Calf. Born on Nov. 20, 1922. Dam on A. R. Test. Federal Accredited Herd.
GILMORE BROTHERS, Camden, Michigan.

GUERNSEYS—Registered Bull Calves, Cheap, also grades. Best of breeding for production and size. **George Damken, North Manchester, Indiana.**

REGISTERED GUERNSEYS—FEMALES AND Bull Calves. A. R. Sire and Dam. **DR. W. R. BAKER, 4800 West Fort St., Detroit, Michigan.**

ANGUS

WE HAVE SOME FINE YOUNG ANGUS BULLS from International Grand Champion Stock at reasonable prices. **E. H. KERR & CO., Addison, Mich.**

JERSEYS

Jersey Breeders Attention!

DO YOU WANT A YOUNG BULL OUT OF A Silver Medal Sire and R. O. M. Dam? Good looking individuals, priced to sell. Photos and prices on application.

Samuel Odell, Owner. HIGHLAND FARM Shelby, Mich. Adolph Heeg, Farm Supt.

REG. JERSEYS, POGIS 99th OF H. F. AND Majesty breeding. Young stock for sale. Herd fully accredited by State and Federal Government. Write or visit for prices and description.
GUY C. WILBUR, BELDING, Mich.

HEREFORDS

HEREFORDS

Young Cows with calves by side consisting of blood from America's foremost herds at prices that enable them under Earliripe Hereford Beef Plan to pay for themselves within a year to 18 mos. Bulls including prize winners at the larger shows at practical prices. Herds headed by Straight Edge 1169786, one of two sons of Perfection Fairfax out of a daughter of the famous Disturber.

T. F. B. SOTHAM & SONS
(Herefords since 1839) Saint Clair, Mich.

HEREFORDS FOR SALE. SEVEN CHOICE yearlings and heifer calves and seven yearling bulls sired by Wyoming 9th. International Prize winner. Farmers prices. Herd established in 1860 by Gov. H. H. Crapo. Write for information. **CRAPO FARMS, Swartz Creek, Michigan.**

REPEATER BRED HEREFORDS. YEAR Bulls, price $75.00. Good individuals.
JOSEPH FELDPAUSCH, Fowler, Michigan.

BROWN SWISS

FOR SALE: BROWN SWISS BULL, TEN Months old. Carries the blood of Colage Bravura 2nd. **FRANK POET, R. 6, Clare, Michigan.**

Registered Brown Swiss Cow For Sale. 6 yr. old, to freshen May 10. Splendid milker. T. B. tested. Price $160. **Dewey Hartley, Kalkaska, Michigan.**

REGISTERED BROWN SWISS CATTLE FOR Sale. Bull, cows and calves. For information write. **ED. GRISWOLD, R. 1, Bellaire, Mich.**

RED POLLED

RED POLLED CATTLE—A few choice bulls and heifers for sale.
ROYSTAN STOCK FARM,
Will Cottle, R. R. 1, West Branch Michigan

AYRSHIRES

FOR SALE—REGISTERED AYRSHIRE bulls and bull calves, heifers and heifer calves. Also some choice cows
FINDLAY BROS., R 5, Vassar, Mich.

SWINE

DUROCS

THE BEST FALL DUROC PIGS IN MICHIGAN is at Michigana Farm, Pavilion. They are sired by State Fair winners of Sensation and Pathfinder breeding. Sept. pigs tall and growthy, weigh from 200 to 240 lbs., Oct. pigs 165 to 200 lbs. Priced to move in a hurry.
MICHIGANA FARM, Pavilion, Michigan.

Duroc Jersey Bred Sows and Gilts

Plenty of size bone and quality. April and May farrow, bred to grandson of International Stock Show Champion.
JOS. SCHUELLER, R. 2, Weidman, Michigan.

HILL CREST DUROCS, PERRINTON, MICH. We are breeding twenty sows and eighteen gilts to a son of GREAT ORION SENSATION. Yearling, spring and fall boars. **NEWTON & BLANK, Farm 4 miles straight south of Middleton, Gratiot Co., Mich.**

PEACH HILL FARM offers choice weanling Duroc pigs, either sex. Priced very reasonable. Write us.
INWOOD BROS., Romeo, Mich.

$10.00 FOR A DUROC PIG FARROWED IN March, shipped in May. Express paid, Registered free. Write for pedigree.
D. W. SUTHERLAND, Grand Ledge, Michigan.

other of a different species. Chicken lice will attack horses and human beings. A two per cent solution of creolin rubbed well into the skin with a brush is good treatment, a warm day, however, needs be selected for a treatment of this kind. If the colt has a heavy hair coat have him clipped then apply above treatment.—John P. Hutton, Assoc. Prof. of Surg. & Med., M. A. C.

THE EXPERIENCE POOL

Bring your everyday problems in and get the experience of other farmers. Questions addressed to this department are published here and answered by you, our readers, who are graduates of the School of Hard Knocks and who have their diplomas from the College of Experience. If you don't want our editor's advice or an expert's advice, but just plain, everyday business farmers' advice, send in your question here. We will publish one each week. If you can answer the other fellow's question, please do so, he may answer one of yours some day! Address Experience Pool, care The Business Farmer, Mt. Clemens, Mich.

CURE FOR COW POX

In your issue of March 17th, V. B. Drwyden wants a cure for cow pox. I have been in the dairy business for 25 years and find the following a sure cure: Take well salted butter and put in enough carbolic acid to singe the scores. Apply to the scores and it will heal them up and kill the germ. It is also good for barnyard itch or ring worms, but do not use quite as much acid.—H. E. Coblentz, Charlevoix County.

REMOVING WARTS

I read in the Business Farmer of March 17th about removing warts on cattle. Several years ago I had a fine heifer that had warts on the side of her head covering a space as large as a saucer. I removed them inside of four weeks by greasing them four or five times with caster oil. It will not leave any scars.—W. L. Hersha, Charlevoix County.

TO CURE HENS OF EATING EGGS

"How can I keep my hens from eating eggs?" was asked in a recent issue. I am not an inventor but have made a great many useful articles and here is one. Take an old cheese box, bore a 2¼ inch hole in the center of the bottom. Then take some straw or old burlap (burlap is better) and put it around the edge of the inside of the box. Take 6 or 8 strips of burlap and tack one end of each strip to the top of the box and the other to the edge of the hole. The strips are to be placed at an even distance from each other around the edge of the box. When you have this completed take a piece of burlap a little larger than the top of the box and cut a hole in the center large enough to allow an egg to pass through easily. Then place the burlap across the top of the box allowing the center to sag until it touches the bottom of the box with the hole in the burlap coming directly over the one in the box. Tack the edge of the burlap to the top of the box and your job is done. Now put the box over a nest where the hens lay and you will laugh to see the hen that lays and eats her eggs when she looks for the egg and cannot find it.—C. E. S., Glennie, Mich.

ANOTHER WART REMEDY

I know from my own experience that warts on a cow can be cured and are not very hard to cure either. Just take a pair of sheep shears and clip off the tops of warts and apply a mixture of sulphur, caster oil and salt. Sulphur and salt equal parts and enough caster oil to make a paste just thick enough so it will not run. Apply this every third day and within six weeks you will find all your warts will be gone.—Alex Bruce, Huron County.

The insurance man was putting questions to a former cowboy, as he wrote out his application.

"Ever have any accidents?"

"No," was the reply.

"Never had any accidents in your life?"

"—ope. A rattler bit me once, though."

"Well, don't you call that an accident?"

"Hell, no! He bit me on purpose!"

Wanted—General office position by young married man with five years experience.—Wausau, Wis., Record-Herald.

"As a mortgage lifter the hog has nothing on a De Laval Cream Separator"

"My work as field man for the Wisconsin State Dairymen's Association," says Herman Marx, in a recent letter, "brings me into contact with a great many farmers and a great many separators. Of all the farmers who own separators, I find about 80% of them own a De Laval.

"For close skimming, low upkeep, easy running and long life it is hard to beat a De Laval. I have adjusted a good many separators and I find that the easiest one to adjust is a De Laval.

"A hog has always been called a mortgage lifter, but he has nothing on a De Laval Separator. I have known several instances where the buying of a De Laval in place of some other they were using saved enough money to pay the interest on a fair sized loan."

—A remarkable tribute to the De Laval Separator, not only because it shows that the majority of experienced farmers in the great dairy state of Wisconsin use and appreciate the De Laval, but because it proves that it makes them money as well.

The present De Laval is the best De Laval Separator ever made. It skims cleaner, lasts longer and is easier to clean and operate than any other. It will pay for itself in a year's time, and is sold on such easy terms that you can use it while it is doing so. See your local De Laval Agent or write us for complete information.

The De Laval Separator Co.
NEW YORK 165 Broadway
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Sooner or later you will use a
De Laval
Cream Separator and Milker

DISSOLUTION SALE!

Bon Ayre Farm Guernseys

OWNED BY

WIGMAN & SURATO, HOLT, MICH.

May, 9th, 1923

65 Head of high class, pure bred GUERNSEYS **65**

This great herd of cows, several with fine official records, together with their offspring, make an aggregation that has rarely been placed at the disposition of the buying public through the medium of the auction sale ring.

Included will be 20 daughters of Uplands Monarch of the May, a grandson of Ne Plus Ultra out of Ellen May Queen of Glenmore with 16369 lbs. milk and 816 lbs. fat. All females of breeding age are bred to May King's Prince of Bon Ayre (1st at Mich. state fair 1921), a son of Uplands Monarch out of Gala of Weston with 13545 lbs. milk and 760 lbs. fat.

For catalogue, address

H. W. WIGMAN

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O. I. C.

O. I. C. BIG TYPE GILTS FARROWED MAY 15th. 22 weighing 300 lbs. Bred to Leighty Monster, an outstanding boar. We have been breeding and shipping O. I. C.'s for 20 years. **NEWMAN'S STOCK FARM, Marlette, Michigan.**

REGISTERED O. I. C. BRED GILTS FOR sale. Weighing 250 lbs. A few fall boars.
J. R. VAN ETTEN, Clifford, Mich.

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CHESTER WHITES All sold out of bred sows, but will sell herd boar No. 107095 far. Nov 1, 1921. Assure breeder with large litters. Price $50. Also booking orders for Mar. 1st. Boar pigs for Apr. delivery. Will ship C. O. D.
WILBUR JONES, Reese, Michigan

Other Livestock Ads. on Page 31.

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Mr. Dealer Mr. Jobber

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If your Local Cooperative Association or County Agent cannot take your order write to

Michigan Potato Growers' Exchange
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Michigan State Farm Bureau
SEED DEPARTMENT
Lansing, Michigan

Give your potato crop the right start by planting the best seed.

Better Potato Prices Expected This Year

IT is not my intention to pose as an expert nor as a large grower with a liftetime of experience; but I have raised a good many potatoes over a period of several years and it is my opinion that given a normal season and careful attention the 1923 potato crop will again be on the profit side of the grower's ledger.

There will surely be a considerable decrease in acreage this year unless human nature has subjected itself to great and sudden change.

The enormous increase in acreage in 1922 was due obviously to the nice profits obtained by the 1921 grower, and a general feeling that in the face of the disastrous year of small grain anyone who planted potatoes would just as surely take a good profit for his trouble.

Farm papers and near farm papers were full of propaganda, devoting page on page to potato profits, poato culture and seed treatment, grades and what not, until everyone was willing and anxious to snuggle and cuddle up to the winsome spud.

I know of those whose experience was limited to about a couple of rows grown in the garden, plunging in with anywhere from 20 to 60 acres. This may not sound so much to some; but if it is properly and thoroughly done it is undoubtedly "a right smart of a chaw" for those who have yet to cut their wisdom teeth on the ring of experience.

I feel it is safe to opine that, in the face of the high cost of production on last year's crop, the difficulties encountered in transportation and the continued demoralized condition of the market, we will have with us this year very few of last year's fledgings.

For the same reasons, the regular grower who expanded his operations last year will likely drop back to his normal acreage again.

There are many old saws current among us, some wise and some otherwise. One that I have heard many times, most emphatically belongs to the latter class: "Oh! if you can get two bits a bushel you can make a little money on spuds." If this were ever true, it is certainly obsolete under present conditions and methods of culture.

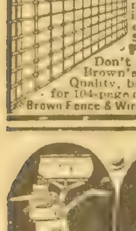
What with scab, wilt and bugs common in all sections, and the blight rapidly encroaching on our territory, 25 cents per bushel falls considerably short of paying for production. With all the material, machinery and labor involved in protecting the crop from pests and diseases, comes a much heavier production expense than was the case when the country was new and spraying and treating were not necessary. The coming of these pests also greatly increased the chances of failure.

Under the conditions existing here in the north central part of South Dakota, where the yield will hardly average 90 bushels to the acre, I hardly think a real profit will materialize much below 75 cents per bushel. When I say profit, I have in mind more than merely getting the cost of production along with ordinary wages for the labor involved. No one takes longer chances than the farmer, and few average businessmen have anything like as much capital invested as has the average land-owning farmer. By the same token, few deserve the same margin of net profit that he should have for bucking these long chances.

While the potato grower is undoubtedly a great gambler, he certainly is not in all cases a good one, as there always has been and probably always will be many who will quit while they are losers and a great many more who in spite of all experience and advice to the contrary, will continue to quit one year and plunge the next in a hopeless attempt to be always on the right side of their pocketbooks.

Another old saw that is current with all, has been handed down from our grandfathers' day and is just as applicable today as the day it was coined: "When everyone else runs, stand still." It is the grower who stays in the game year in and year out who plants potatoes on a plan consistent with the rules of common sense. He knows that over a period of years the good crops will certainly outweigh the bad and when there are any grapes he is there to pick them while the picking is good. It is the guesser, the plunger, and the spasmodic planter that spoil the game for themselves as well as everyone else.

I doubt if any grower ever lost money in a period of five straight years. If we will all do the sensible thing, the conservative and the consisting thing, there should be a nice feeling of satisfaction among us all after shipping time next fall.—J. H. Piercy.



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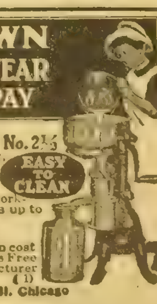

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Two Beauties.

White Diarrhea

Remarkable Experience of Mrs. C. M. Bradshaw in Preventing White Diarrhea

The following letter will no doubt be of utmost interest to poultry raisers who have had serious losses from White Diarrhea. We will let Mrs. Bradshaw tell of her experience in her own words:

"Gentlemen: I see reports of so many losing their little chicks with White Diarrhea, so thought I would tell my experience. I used to lose a great many from this cause, tried many remedies and was about discouraged. As a last resort I sent to the Walker Remedy Co., Dept. 687, Waterloo, Iowa, for their Walko White Diarrhea Remedy. I used two 50c packages, raised 300 White Wyandottes and never lost one or had one sick after giving the medicine and my chickens are larger and healthier than ever before. I have found this company thoroughly reliable and always get the remedy by return mail.—Mrs. C. M. Bradshaw, Beaconsfield, Iowa."

Cause of White Diarrhea

White Diarrhea is caused by the Bacillus Bacterium Pullorum. This germ is transmitted to the baby chick through the yolk of the newly hatched egg. Readers are warned to beware of White Diarrhea. Don't wait until it kills half your chicks. Take the "stitch in time that save nine." Remember, there is scarcely a hatch without some infected chicks. Don't let these few infect your entire flock. Prevent it. Give Walko in all drinking water for the first two weeks and you won't lose one chick where you lost hundreds before. These letters prove it:

Never Lost a Single Chick

Mrs. L. L. Tam, Burnetts Creek, Ind., writes: "I have lost my share of chicks from White Diarrhea. Finally I sent for two packages of Walko. I raised over 500 chicks and I never lost a single chick from White Diarrhea. Walko not only prevents White Diarrhea, but it gives the chicks strength and vigor; they develop quicker and feather earlier."

Never Lost One After First Dose

Mrs. Ethel Rhoades, Shennandoah, Iowa, writes: "My first incubator chicks, when but a few days old, began to die by the dozens with White Diarrhea. I tried different remedies and was about discouraged with the chicken business. Finally, I sent to the Walker Remedy Co., Waterloo, Iowa, for a box of their Walko White Diarrhea Remedy. It's just the only thing for this terrible disease. We raised 700 thrifty, healthy chicks and never lost a single chick after the first dose."

You Run No Risk

We will send Walko White Diarrhea Remedy entirely at our risk—postage prepaid—so you can see for yourself what a wonder-working remedy it is for White Diarrhea in baby chicks. So you can prove—as thousands have proven—that it will stop your losses and double, treble, even quadruple your profits. Send 50c for package of Walko—give it in all drinking water for the first two weeks and watch results. You'll find you won't lose one chick where you lost hundreds before. It's a positive fact. We guarantee it. The Leavitt & Johnson National Bank, the oldest and strongest bank in Waterloo, Iowa, stands back of this guarantee. You run no risk. If you don't find it the greatest little chick saver you ever used, your money will be instantly rerfunded.

WALKER REMEDY CO., Dept. 687
Waterloo, Iowa.

Send me the ( ) 50c regular size for ( ) $1 economical large size) package of Walko White Diarrhea Remedy to try at your risk. Send it on your positive guarantee to instantly refund my mony if not satisfactory in every way. I am enclosing 50c (or $1.00). (P. O. money order, check or currency acceptable.)

Name ....

Town ....

State..R. F. D. ....

Mark (X) in square indicating size package wanted. Large package contains nearly three times as much as small. No war tax.

POULTRY

POULTRY MORE THAN MERE SIDELINE

THE day of the hit-or-miss method of handling poultry in the United States is over. The farmer considers his wife's chickens as something worth while. Many a farmer has paid his grocery bills the last two years with the returns from the flock of hens that he once looked on as his wife's fad. Today this same farmer is looking for better stock. He says that with good purebred stock he can always get the market for his eggs and surplus birds. However, he finds it difficult to supply the demand for this class of stuff at several times the market price. He has found, too, that there are several things that enter into the poultry business that make it interesting, as well as profitable.

Several years ago E. Philo of Elmira, New York, published book on how to raise poultry on a fifty-foot lot. Since that book first came out there have been several proved tests that the old idea the hen has to have large runs is not altogether correct. Some of our foremost poultrymen of California and the East claim that better egg production is obtained if the hens are confined to pens. Some are using an eight-foot-square pen to care for fifteen hens, or a twelve-foot-square space to accomodate fifty hens, There is one man at Riverdale, California, that has 2,500 hens on one acre that earned $2 per head, last year.

The whole year's profit on an egg farm depends on the kind of chicks and the way they are brooded. Chicks must be from hens not less than two years old, mated to males whose ancestry has been bred for vigor and heavy egg production for generations. Without a vigorous, well-bred chick to start with, nothing can be accomplished. Too many baby chicks are cast upon the beginners that are hatched from pullet's eggs. Nine times out of ten this means disaster right from the start.

After securing good chicks the next step is to brood them properly. I believe the one great mistake in brooding chicks is to put too many together. Nature never intended for 500 to 1,000 chicks to be raised together. Best results are obtained with not over 150 chicks in one flock. It only takes six weeks to brood chicks and poultrymen would find it more profitable to spend more time on quality instead of on quantity. Better take more time and care the first six weeks than to have an inferior bunch of poultry on your hands for the balance of the year. There is a knack in brooding chicks which requires time and study and the more you can give it the greater the success. Good, well-bred from correct matings, not over 150 together in brooders with no foul corners, cleanliness, and good balanced feeds are sure to bring success.

Growing is more than a matter of mere energy relations. It is associated on the one hand with the factors of heredity and evolution, and on the other hand with the factors of environment. The first is sometimes spoken of as the internal factor and the latter as the external factor. As S. D. Wilkins puts it, pronounced results in modifying the external factors is perhaps more quickly realized than in the consideration of the former factors.

While, then, it is important for the breeder to utilize every source of improvement in growing his birds, the part played by the exercise of the external factors warrents much attention and study. At the outset we must realize that neither of these factors are independent of the other.

External Factors

The external factors are represented by such conditions as climate, habitat, temperature, air, food, water, soil, use, and disuse. Without doubt the most important of these is the question of the food supply and since the supply of food cannot stimulate growth beyond the limits predetermined by the internal or growth impulse factor, the importance of understanding fully the feed requirements during the period of growth is at once apparent.

In general, poultrymen consider the nutritive requirements of poultry as being ssatisfied when the ration

(Continued on page 26)

A Better Cutter for Less Money

YOUR dollars buy more when invested in the 1923 Papec. It has positive-action Self-feed that saves a man at the feeding table. Also other important improvements. Retains the simple, sturdy Papec construction that means long life. Tremendous production in a specially-equipped factory enables us to offer

The 1923
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You can depend on the Papec for long, hard service. Ames Bros. of Weaver, Minn., write: "We are still using our N-13 Papec after nine years of service and it is going strong." Hook up a Papec to your Fordson or other light tractor. Even a farm gas engine 3 h. p. and up will run our smaller sizes.

SAVES ONE MAN

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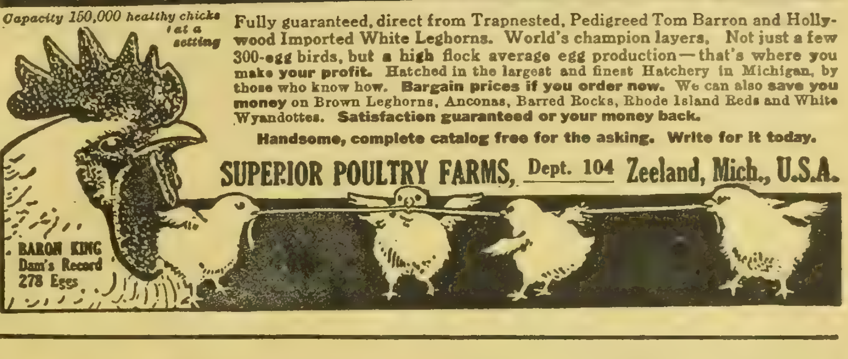
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278 Eggs

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FROM SELECT PURE-BRED FLOCKS

WHITE and BROWN LEGHORNS, ANCONAS, 50, $7.50; 100, $14; 500, $65. BARRED ROCKS, REDS and MINORCAS, 50, $8.50; 100, $16.50; 500, $75. Discount on orders of 1,000 or more. From extra select flocks $2 per 100 higher. Postpaid to your door. Full live count guaranteed. Bank reference. Free Catalog. We know it will be to your advantage to get our catalog and full price list before making a final decision regarding your investment in Chicks this season. Send for it TODAY.

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Varieties	Prices on 50	100	300	500	1,000
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BUFF MINORCAS, 50, $13; 100, $25. MIXED CHICKS FOR BROILERS, 50, $6; 100, $11; 500, $50. Postpaid. Full live delivery guaranteed. Hatched in the best possible manner from good, vigorous, pure-bred, heavy laying flocks on free rangs. Carefully selected and packed to go safely. No catalog. Order right from this ad. and save time. Reference, Citizen's Saving Bank. You take no chances.

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EXCEPTIONAL VALUES IN HIGHEST QUALITY, proven layers. Pure-bred S. C. Barron White Leghorns, Heavy Laying Brown Leghorns, Select Anconas. Heavy Winter Layers. Result of constant breeding for high flock averages. Buy direct from large modern hatching and breeding institution. All stock scientifically culled and approved and headed by large vigorous males. New low prices. Sent postpaid. 100% live delivery guaranteed. Write for fine 1923 catalogue. Its free. Reference: Two Banks.

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I want every sufferer from any form of muscular and sub-acute (swelling at the joints) rheumatism to try the great value of my improved "Home Treatment" for its remarkable healing power. Don't send a cent; simply mail your name and address, and I will send it free to try. After you have used it, and it has proven itself to be that long-looked for means of getting rid of such forms of rheumatism, you may send the price of it, One Dollar, but understand I do not want your money unless you are perfectly satisfied to send it. Isn't that fair? Why suffer any longer, when relief is thus offered you free. Don't delay. Write today.

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CHICKS From all these great strains. Postpaid and full live delivery guaranteed. Also EGGS FOR HATCHING and Breeding Stock. Reference 2 Banks. Member M. B. C. A.

Fairview Poultry Farm, Route 2 K, Zeeland, Mich.

DAY OLD CHICKS SINGLE and ROSE COMB RHODE ISLAND WHITES. Write for Catalogue. Fischer's Hatchery and Poultry Farm, R. 1, Holland, Mich.

includes ingredients coming under these units: Protein, carbohydrates, fat, and ash or inorganic material. It is known that protein is required by the body for the production of muscle, carbohydrates and fat to supply heat and energy and build up stores of bodyfat; mineral water to provide for skeleton development.

Until recent years it was believed that any ration which includes these nutriments in variable amounts depending upon the purpose for which the ration was compounded was adequate. Failure to obtain normal growth was attributed to faulty brooding methods, improperly hatched chicks and numerous other causes.

There has come to the knowledge of the poultrymen a new term, vague perhaps, as to its specific meaning, but withal expressive of something significant. The term vitimine suggested by Casimir Funk in 1911 is used to designate a class of substances found in naturally occuring food-stuffs in variable amounts but lacking in many of the highly milled by-product foods.

The word vitimine is preferred to the phrase, "accessory food substance or food factor" for vitamines are necessary to life and there is no reason why we should argue against the use of the term vitamine or against the vitamine theory simply because no one has seen these substances? We do not know what electricity is other than an invisible agent.

Chemists have never isolated these substances so that their chemical composition might be known. They are known, however, by the effect which their absence in the diet produces on the animal organism and by the effects of adding them to diets that are deficient in vitamines. Perhaps someone in the near future will be able to isolate them in a pure state and determine their chemical makeup. Meanwhile it is advisable that the poultrymen pay more attention to the poultry ration based somewhat on our present knowledge of the vitamines.—J. C. Philo.

PRODUCE INFERTILE EGGS

UNITED States government experts recently conducted an experiment in Kansas to compare the loss from fertile and infertile eggs.

10,000 eggs, collected from different farms, were used in the experiment. Half were fertile and half infertile, and every egg was absolute fresh when it entered the experiment. These eggs were kept stored in parlors, some in kitchens, some in cellars, and some in pantries. Some were put in nests, some under laying hens, and some under setting hens. The same number of fertile and infertile eggs were always put under exactly the same conditions. In a week the eggs were collected and sold to the local grocery store where they were candled. They were then shipped to St. Louis where they were again candled.

While on the farm 29 per cent of the fertile eggs were spoiled for food, as compared with only 16 per cent of the infertile ones. On the way to market 14 per cent of the fertile ones were spoiled as compared with 9 per cent of the infertile. This makes a total of 43 percent of the fertile eggs unfit for food as compared with only 25 per cent of the infertile ones—a difference of 19 per cent. Notice that the greatest loss in both fertile and infertile eggs is on the farm.

In nature the purpose of the egg is to hatch a chick. Every fertile egg contains the germ from which a chick may develop. Incubation will start in a fertile egg whenever the temperature is more than 7 degrees. The germ from which the chick develops will grow just as well in a hot poultry house or in a cupboard by the kitchen range as it will under a hen. If the temperature falls below 70 degrees or runs higher than 109 degrees, incubation is checked.

Eggs come to market in all stages of incubation. The dealers call eggs which have started to incubate "blood rings," because they show a cluster of blood vessels when placed before the candle.

If an egg which has started to incubate cools, the germ dies. Such an egg, if kept in unfavorable conditions, completely decays, making the "black rot"—the kind of rotton egg which smells so disagreeable because of the hydrogen sulphide gas

BABY CHICKS *The most Progressive Hatchery in the country*

SEX GUARANTEED

A 60% guarantee of sex, giving a majority of either cockerel or pullet chicks, as ordered, plus unsurpassed quality in high egg bred chicks, bespeaks Utility Hatchery & Farms success, and the satisfaction of its customers. Grade AAA flocks are sired by pedigreed males, sworn records from 250-287. Grade AA and Grade A from tested and selected flocks of exceptional merit.

Delivery date guaranteed—100% live delivery guaranteed—60% sex guaranteed—Satisfaction guaranteed.

The Utility Hatchery & Farms is giving away $5,000 worth of Stock in Amazing Special Contest. Information on contest sent upon receipt of each S. C. White Leghorn order. Don't delay. Get started now. Order tonight.

Terms cash, except on advance orders, 25% down, remainder one week before shipped.

UTILITY HATCHERIES AND FARMS
Dept. 63
ZEELAND, MICH.

ORDER FROM THESE PRICES

S. C. WHITE LEGHORNS	
Grade A	14c
Grade AA	15c
Grade AAA	16c
OTHER BREEDS	
S. C. Anconas	17c
S. C. Brown Leghorns	17c
S. C. Barred Rocks	20c
S. C. R. I. Red	20c
Broiler Chicks	10c

HIGHEST QUALITY CHICKS

VAN APPLEDORN BROS. BABY CHICKS MICHIGAN'S OLD RELIABLE HATCHERY HOLLAND, MICHIGAN

Michigan's Old Reliable Hatchery
(The most modern and best equipped Hatchery in the state)

PURE BRED English and American S. C. W. Leghorns; S. C. Anconas; Barred Plymouth Rocks and R. I. Reds. Strong, well hatched chicks from tested Hoganized Free range stock that make wonderful winter layers.

Chicks sent by Insured Parcel Post Prepaid to your door. 100% live delivery guaranteed. Fifteen years of experience in producing and shipping chicks has given adsolute satisfaction to thousands. Write for illustrated free catalog and price list. Get lowest price on best quality chicks before you buy.

Holland Hatchery, R. 7, Holland, Mich.

WOLVERINE BABY CHICKS are Chicks That Satisfy

WOLVERINE BABY CHIX

Bred for egg production 13 years. We hatched and shipped chicks for 12 years. This assures you success. ENGLISH TYPE WHITE AND BROWN LEGHORNS. 100% safe arrival guaranteed. Write for catalogue. It's free. WOLVERINE HATCHERY, R. 2, Zeeland, Mich.

Chicks

From select vigorous, heavy laying breeding stock. White, Brown Leghorns, Anconas, Barred Rocks. Our price is 12 cents and up. Guarantee 100% live delivery by prepaid post. Get your order in now—will ship when you want. Customers report "Big Profits" with these wonderful layers. Write today for Illustrated Catalog. It's free. Reference: State Commercial Savings Bank. Member M. B. C. A.

Queen Hatchery & Poultry Farm,
Zeeland, Michigan

BABY CHICKS

You can now order Chicks in 11 breeds of the Pure Breed Practical Poultry that is making egg records on our customer's own farms. If you want stock that will make real money, send for our description and price list. All stock guaranteed 100% post paid. We want you to try our stock this year. It is the best practical stock you can buy.

Barred Rocks
White Rocks
Rhode I. Reds
Wyandottes
Orpingtons
Leghorns—
  Wh., Br., Buff
Anconas
Minorcas

STATE FARM ASSOCIATION
202 Chase Block Kalamazoo, Michigan.

Pedigreed State Approved **S. C. W. LEGHORNS** **CHIX**

AMERICAN-ENGLISH STRAIN

Are you going to buy them from a hatchery or from a BREEDER. Bry from Michigan's Largest Leghorn Farm and insure success. We hatch our own eggs only. Supply limited. Prices reasonable. Satisfaction guaranteed.

Descriptive Circular tells all about them. It's free.

SIMON HARKEMA & SON, R. 1, Holland, Mich.

BABY CHICKS

FROM SPECIAL MATINGS

A specialist breeder can furnish better baby chicks. Our ANCONAS are Michigan's leading strain today—both in exhibition and in egg production. WHITE LEGHORNS from a select special egg flock having blood lines of world's greatest layers. We specialize in quality—not quantity. Lowest prices. Write for illustrated catalogue.

PROGRESSIVE POULTRY FARM
Box 1 Holland, Mich.

Day Old Chicks

Strong, sturdy, S. C. White Leghorns (English strain) from large, vigorous, yearling hens, raised on our own farms. That lay and pay. Barred Rocks and Rhode Island Reds, from best laying strains. Send for our illustrated catalog, free.

Hillcrest Poultry Farms and Hatchery
R. R. 2, Holland, Michigan

A NEW DISCOVERY BANISHES LICE

Simply Hang Can of Wonderful Liquid in Hen House and Lice Vanish

Any poultry raiser can easily and quickly double his profits by ridding his hen house of lice through the remarkable discovery of H. C. Haist, a Kansas City chemist.

Working along original lines Mr. Haist discovered that certain odors are highly offensive to lice and that they will not live where such odors exist. This enabled him to perfect his formula which is guaranteed to rid any hen house of these blood sucking and profit stealing pests.

This wonderful formula which is known as Lice Doom is easily used by simply uncorking a can and hanging at any convenient place in the hen house. Immediately a powerful gas is given off which, altho harmless to poultry, routs the lice as though by magic. In fact it is guaranteed that lice will not stay in any hen house where a can of Lice Doom is hung up to evaporate. Once rid from pestering lice and mites your flock will take on new life. The hens will lay more and the broilers will get fatter. In fact you can almost see your profits grow.

So confident is Mr. Haist that Lice Doom will rid any hen house of lice that he offers to send two large $1 cans to any reader who will write for them for only $1; and with the understanding that they cost nothing if not entirely satisfactory.

Send no money—just your name—a card will do, to H. C. Haist, 2017 Coca Cola Bldg., Kansas City, Mo., and the two large $1 cans will be mailed immediately. When they arrive pay the postman only $1 and postage. Use Lice Doom 10 days. If your hen house is not free from lice, or for any reason you are not satisfied, simply return the unused part and your money will be refunded. A large Kansas City bank says Mr. Haist does as he agrees, and ample bank deposits guarantee the refund of your money if you are not satisfied. Write today before the offer to send two $1 cans for only $1 is withdrawn, as this will enable you to sell a can to a friend and get your own free.

Better than Whitewash

CARBOLA
The Disinfecting White Paint

It takes less than five minutes to mix the Carbola powder with water and have it ready to use as a white paint and powerful disinfectant. *No waiting or straining; no clogging of sprayer.* Does not spoil. Does not peel or flake. Disinfectant is right in the paint powder—one operation instead of two. Gives better results, costs less. Used for years by leading farms.

Your hardware, paint, seed or drug dealer has Carbola, or can get it. If not, order direct. Satisfaction, or money back. 10 lbs. (10 gals.) $1.25 and postage; 20 lbs. (20 gals.) $2.50 delivered; 50 lbs. (50 gals.) $5.00 delivered; 200 lbs. (200 gals.) $18.00 delivered; trial package and booklet 30c.

Add 25% for Texas and Rocky Mt. States

CARBOLA CHEMICAL CO., Inc.
810 Ely Ave., Long Island City, N. Y.

Carbola
Paints and Disinfects
Dries White

WHITE DIARRHOEA

Kills millions of Chicks each season. THEY CAN BE SAVED by using "FADOIL"—a guaranteed remedy and preventive. $1 per bottle. Postpaid. Enough to successfully treat 650 Chicks. Your money cheerfully refunded if not satisfactory. Bank reference. You take no chances. Send your order TO-DAY and be INSURED against loss. Circulars free. Dealers wanted everywhere.
FADOIL REMEDY CO., Box 507, Norwalk, Ohio

KEEP THE BUSINESS FARMER COMING
SEE PAGE 25

which develops in it. Eliminate the fertile egg and the black rot, the most common and worst kind of rotten egg, will be eliminated.

If we want to use eggs for food, especially in hot weather, we must defeat nature's purpose by producing fertile eggs. Fertile eggs cause trouble only during the hot weather. You can prevent the great annual loss caused by them, if you will dispose of your roosters as soon as the breeding season is over. Experiments show that hens lay just as well, if not better, when there is no male in the flock.

This is such an important subject that the government has issued and distributed thousands of posters explaining how fertile eggs spoil, and urging farmers to dispose of their roosters immediately after the breeding season.

In Missouri, June 1st is set aside as "Swat the Rooster" day, other states are active along the same line.

RADIO DEPARTMENT

EDITED BY J. HERBERT FERRIS

BURN OUT BULBS

We have a complete Radio outfit we purchased as a receiving outfit. It does very satisfactory, it will receive from the middle western states to the gulf of Mexico. We have used it two evenings and burned out two tubes.—F. A., Plainwell, Mich.

—We think that you are burning your bulbs too bright, turn the rheostats down to the lowest point and then gradually light your bulbs until you are just able to hear the music. Your bulks will last for several hundred hours if they are not burned too brightly.

You also may be using too high voltage for your "A" battery, 6 volts is all that should be used for lighting your filaments, never use more than a 6 volt storage battery or 4 dry cells.

The music does not always come in as loud with your bulbs not so bright you get much longer service from them. I am using bulbs that have been used for over 2,000 hours each and they are as good as new.

BROADCAST BILL'S RADIOLAYS

DURIN' ev'nin's, 'fore its' time to go to bed, how I like 'o sit and listen, rubber ear-muffs on my head, to the singin' and the speakin' comin' in my radio; weather don't make any difference—let 'er rain, er hail, er snow. While I'm list'nin' there so peaceful to the music from the air, I kin also get enjoyment in a game of solitaire. I like most a game of canfield, there are others I kin play, but I never knew it had a name until the other day, when a drummer down at Perkin's store explained how it wuz done in those classy gamblin' joints where they don't play jest for fun. You hand out yer fifty dollers, or I guess it's fifty-two, then a gent gives you a deck of cards an' after you are through fer each card up in the ace now he will hand you back five beans—Gosh! I like the game much better, now I've found out what it means. So when wifey goes out callin', leavin' me at home alone I get out a deck of cards an' play there by my radi'phone. It combines my fav'rite pastime, an' the time goes by so fast that the clock soon ticks nine-thirty, an' I know my bedtime' past. So I play another hand er two while waitin' fer the time that they broadcast out from Arlington before I start my climb. Sweet Minerva, that's my better half, religiously inclined, hasn't took so very to my habits so I find just because on Sunday ev'nin' when she went in town to church, I said I'd stay at home an' listen—kinda left her in the lerch. That wuz not the only reason, fer while workin' Saturday I had sprained my back most awful loadin' up some bales of hay. So she went to church with Willie—I stayed home to listen in an' I reckon she'd fergive'd me is it only hadn't been. I'd fergot that it wuz Sunday an' wuz playin' solitaire as I listened to the choir, an' the sermon from the air. Min came home an' caught me playin'—I kin tell the Universe when it comes to home made sermons Sweet Minerva ain't so worse. Now I'll sit these cool evenin's 'fore its time to go to bed, an' do nothin' else but listen since Minerva's say is said. Copyright, 1922, Westinghouse Electric and Manufacturing Company.

BABY CHICKS $10 per 100 and UP

From selected, heavy laying, vigorous hens. White and Brown Leghorns, Anconas, 50, $6.75; 100, $13; 500, $62.50. Barred Rocks, 50, $8.50; 100, $16; 500, $75 Extra Select, $2 per 100 higher. Mixed Chicks, 50, $5.50; 100, $10; 500, $50. Well hatched in modern machines. Carefully and correctly packed and shipped. Postpaid, full live arrival guaranteed. Bank reference and this guarantee makes you perfectly safe in ordering direct from this ad NOW. Get them when you want them. All orders have our careful personal attention. WE WANT YOUR BUSINESS. Catalog Free.
WINSTROM FARM & HATCHERIES, Box H 5, Zeeland, Michigan

STOP! LOOK! READ!
GUARANTEED BABY CHICKS

From WORLD'S GREATEST LAYERS and LAYING CONTEST WINNERS. TOM BARRON ENGLISH S. C. WHITE LEGHORNS. Imported stock. SHEPPARD'S FAMOUS ANCONAS. Direct. If we could show you our Flocks and have you talk with our CUSTOMERS you would order IMMEDIATELY. Our FLOCKS are all CULLED BY EXPERTS and headed with VIGOROUS PEDIGREED MALES of from 250 to 280 EGG STRAIN. Our CHICKS become wonderful LAYERS You want EGGS? GET our CHICKS. Write to-day for our free illustrated CATALOG.
SILVER WARD HATCHERY, Box 420, Zeeland, Michigan.

DON'T BUY CHICKS

until you get our prices as we can save you money on English Leghorns, Barred Rocks and Anconas, that will lay when egg prices are highest. Mr. M. W. Sellers, Route 1, Saginaw, Mich., writes: "I made better than $1200.00 last year from 425 pullets in 5 months." Write today for free catalog and our contest offer and our ironclad guarantee. We are breeders and practically about the only so advertised poultry farm in this vicinity.

6½ Months Old and Laying

RIVERVIEW POULTRY FARM, Route 2, Zeeland, Michigan

CHICKS $12.00 per 100 and Up
100% SAFE ARRIVAL GUARANTEED

PRICES—WHITE, BROWN and BUFF LEGHORNS, 50, $7; 100, $13; 500, $60. BARRED ROCKS, S. C. and R. C. REDS, ANCONAS, B. MINORCAS, 50, $8; 100, $15; 500, $70. WHITE WYANDOTTES. WHITE ROCKS and BUFF ORPINGTONS, SHEPHARDS 331 EGG STRAIN ANCONAS, WHITE MINORCAS, 50, $8.50; 100, $16; 500, $75. MIXED, 50, $6; 100, $11; 500, $50.

Hatched from selected heavy laying flocks that are well fed and cared for, insuring strong, livable chicks that will make a profit for you. POSTPAID TO YOUR DOOR. ORDER DIRECT FROM THIS AD and SAVE TIME. Catalog free. Reference, Geneva Bank.
THE GENEVA HATCHERY, Box 505, Geneva, Ind.

GUARANTEED CHICKS

Hatched from High Laying Quality Fowls on free range, properly fed and housed to insure strong Chicks.

BARRED ROCKS, S. C. REDS, MINORCAS, ANCONAS .50, $8; 100, $15; 500, $74
WHITE WYANDOTTES, BUFF ROCKS 50, $8.50; 100, $16; 500, $78
WHITE, BROWN and BUFF LEGHORNS........50, $7.50; 100, $14; 500, $65

Postpaid to your door. 100% live delivery guaranteed. Catalog free. Bank Reference.
MORENCI HATCHERIES, Box B, Morenci, Mich. Member I. B. C. A.

Egg-Bred Baby Chicks

ENGLISH WHITE LEGHORNS, BROWN LEGHORNS. 11 years of breeding for egg production. Highest quality chicks from tested layers. Satisfaction guaranteed. 100 chicks $12.50; 500, $60.00. From Extra selected matings $2.00 per 100 higher. Postpaid, 100% delivery guaranteed. Order now. Bank reference. Catalog free.
ROYAL HATCHERY & FARMS, R. 2, Zeeland, Mich. S. P. Wiersma, Prop.

HILLVIEW HATCHERY
GUARANTEED TO ARRIVE

Strong and Healthy. Chicks from selected heavy laying, Hogan tested flocks. ENGLISH WHITE LEGHORNS and BROWN LEGHORNS. Heavy Laying EXTRA GOOD BARRED ROCKS. Postpaid to your door and full live delivery guaranteed. Our flocks are kept on free range, properly fed and cared for insuring the vigor necessary in the Chicks to live and MAKE A PROFIT. Give us a trial and you will come again.
HILLVIEW HATCHERY, Route 12 E, Holland, Michigan.

BABY CHICKS

Best Paying, Heavy Laying, Pure Bred Tom Barron English White Leghorns, S. C. Rhode Island Reds, Park's Barred Rocks. Strong Healty Chicks hatched from greatest and best incubator known. Chicks are given full twenty-one days and hatched under proper temperature.

YOU CAN DO IT WITH B. & F. BABY CHIX

Mr. Frank Fulerson, Niles, Mich., writes as follows: "From the 66 pullets we raised from your stock last year along with the thirty which we had, we got 1,610 eggs in December. Can you beat it?"

We are the first and oldest importers of White Leghorns in this state.

Watch our pen number 17 in the Michigan Egg Laying Contest. It's coming strong! All flocks thoroughly culled and properly mated to pure bred cockerels. Try some real chicks this year. Order now at new low prices. Instructive catalogue free.
BRUMMER-FREDERICKSON POULTRY FARM
Box 26 Holland, Mich.

OVIE'S BABY CHICKS
HEAVY LAYING
breeding stock or real quality helps producers Ovie's strong healthy and husky chicks.
BABY CHICKS OF QUALITY AND MERIT
25,000 Thrifty Chicks Weekly
Write for catalog. 11c and up, prepaid. 12 leading breeds. Delivery guaranteed.
Ovie's Poultry Farm and Hatchery
132 Boots Street, Marion, Indiana

QUALITY CHICKS
GET THE PROFITABLE AND LAYING KIND
They will pay you big. Free range. Selected. Hogan test. Orpingtons, W. & Sil. Wyandottes, 50, $9.25; 100, $18. Rocks, Reds, Minorcas, 50, $8.25; 100, $16. Anconas, heavy broilers, 50, $7.25; 100, $14. Leghorns, 50, $7; 100, $13. Mixed, all varieties, $11 per 100 straight. Postpaid. Safe delivery. Circular free. Bank reference.
Middlepoint Hatchery, Middlepoint, Ohio, Dept. B.

Pure Bred Chicks Buy 'Em Near Home

Broiler Chix..........11c
W. or B. Leghorns..13c
B. Rocks or Red [illegible]
W. or Buff Rocks..17c
Wh Wyandottes
Buff Orpingtons..17c
Light Brahmas.......22c
Black Minorcas......16c

Add 35c if less than 100 lots wanted. Circular.
LAWRENCE POULTRY FARM
Dept. 8 Good Referncce R. 7, Grand Rapids, Mich.

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Free Roycroft Book
WHITE LEGHORNS AND MOTTLED ANCONAS Also Black Leghorns, Brown Leghorns, Buff Leghorns, Black Minorcas, R. C. Rhode Island Reds, Barred Plymouth Rocks, White Plymouth Rocks, Silver Wyandottes, White Wyandottes. WE HATCH eggs from Hoganized flocks on free range on separate farms.
Send for 1923 Price List.
CRESCENT EGG COMPANY
Allegan, Michigan.

CHICKS Barron Strain Selected White Leghorns. Produced under my personal care. Strong, vigorous chicks carefully packed to go safely. Postpaid, full live delivery guaranteed. 50 chicks, $6.50; 100, $12.50; 500, $60. Get your order in early. Elgin Hatchery, Box 317A, Zeeland, Mich.

Rhode Island Reds, Tompkins strain, hatching eggs and baby chicks. Eggs per hundred $12.00; chicks per hundred $25.00. On all orders for either stock, eggs or chicks of $15.00 or more, I will give the Rhode Island Journal free for one year. A few good cockerels left. Quality Breeder of Rhode Island Reds, both combs.
WM. H. FROHM, New Baltimore, Mich., R. 1.

White Leghorn CHICKS
Heavy Laying, pure bred, English strain. Flocks culled and tested for laying ability. Strong, healthy chicks, 100 per cent live delivery guaranteed. Postage paid. Catalog, low price list free. Write quick.
Catalpa Grove Hatchery, Box 4 R. 2, Holland, Mich.

BABY CHICKS and HATCHING EGGS
Direct from our farm at greatly reduced prices, only 9c up. Barred Rocks, White Leghorns and Anconas. Write quick for particulars and special introductory offer. MODEL POULTRY FARM & HATCHERY, Zeeland, R. 4, Michigan.

BABY CHICKS SELECTED CHICKS FROM the heart of the baby-chick industry. Leading pure breeds from heavy egg-producing strains. Alive delivery guaranteed. Send for catalogue and prices.
L. VAN HOVEN & BRO., Zeeland, Mich.

WHITTAKER'S R. I. REDS—Michigan's Greatest Color and Egg Strain. Bred from winter layers for 13 years. Chicks and eggs. Write for free catalog. Interlakes Farm, Box 4, Lawrence, Mich.

BABY CHICKS 12c AND UP
Member Mid-West Baby Chick Association.
THOS. G. CALLAGHAN, Fenton, Michigan

BABY CHICKS—FROM SELECTED FLOCKS Six leading varieties. Popular prices and guaranteed delivery. Write for catalog and price list.
H. H PIERCE, Jerome, Mich.

CHICKS WITH PEP, $11 per 100 and up

Selected Hogan Tested Flocks. Postpaid, full live delivery guaranteed. BUFF ORPINGTONS, WH. and SIL. WYANDOTTES, 50, $9.25; 100, $18: BARRED and WH. ROCKS, S. and R. C. REDS, MINORCAS, 50, $8.25; 100, $16. ANCONAS and HEAVY BROILERS. 50, $7.25; 100, $14. WH., BR. and BUFF LEGHORNS, 50, $7; 100, $13. MIXED, ALL VARIETIES, $11 per 100 straight. On 500, 5% off; 1,000 10% off. Free Catalog. Member I. B. C. A.

HOLGATE HATCHERY, Box B, Holgate, Ohio.

MEADOW BROOK FARM

CHICKS—ENGLISH WHITE LEGHORNS, BROWN LEGHORNS (Holland Importation Strain), 50, $7; 100, $13; 500, $62.50; 1,000, $120. BARRED ROCKS, REDS, BUFF LEGHORNS, 50, $8; 100, $15; 500, $72.50; 1,000, $140. WHITE WYANDOTTES (Heavy Laying Flocks), 50, $9; 100, $17. Postpaid, full live delivery guaranteed. All flocks composed of Selected Heavy Layers. Order now from this advertisement and get them when you want them. I have been producing good Chicks successfully for the past 20 years and KNOW HOW. I want your business and will try hard to please you. Free Catalog. Bank Reference. MEADOW BROOK FARM, Henry De Pree, Proprietor, Route 1 H, Holland, Mich. Member Michigan B. C. A.

BABY CHICKS

$10.50 PER 100 AND UP

From Hogan tested, well-kept and housed heavy laying flocks
Barred and White Rocks, Reds, Anconas, Minorcas: 50, $8.50; 100, $16; 500, $77.50
Buff Orpingtons, White Wyandottes:.......... 50, $9; 100, $17.50; 500, $85
White, Brown and Buff Leghorns:.......... 50, $7.50; 100, $14; 500, $67.50
Mixed:.......... $11 per 100 straight
Postpaid, full live delivery guaranteed. Order NOW from this ad. and get them when you want them. Catalog free. ALSO EGGS FOR HATCHING. Reference, 4 Banks.
TRI-STATE HATCHERIES, Box 511, Archbold, Ohio

CHICKS THAT MAKE PROFIT

$10 PER 100 AND UP. From vigorous, pure-bred flocks on free range, selected for heavy-laying qualities and well cared for. Low prices considering exceptional quality. WHITE, BROWN and BUFF LEGHORNS, 50, $7; 100, $13; 500, $62.50; 1,000, $120. WHITE and BARRED ROCKS, WHITE WYANDOTTES, BUFF ORPINGTONS, ROSE and S. C. REDS, ANCONAS, 50, $8; 100, $15; 500, $72.50; 1,000, $140. Mixed, all varieties for broilers, $10 per 100 straight. Postpaid to your door and full live count guaranteed. You can order now direct from this ad and get them when you want them. Bank reference. Free catalog.

BLUFFTON HATCHERY, Box L, Bluffton, Ohio

SUNBEAM HATCHERY

The Chicks that I sell are produced under my personal supervision in a good, modernly equipped hatchery which is kept in best possible condition. The parent stock is carefully selected and of best heavy laying strains, kept on free range, well-housed and handled. Free from disease and properly fed. This enables me to produce strong, growthy Chicks which will mean PROFIT to my customers. PRICES: WHITE, BROWN AND BUFF LEGHORNS, 50, $7; 100, $13; 500, $62.50. BARRED ROCKS, R. AND S. C. REDS AND ANCONAS, 50, $8; 100, $15; 500, $72.50. WHITE AND BUFF ROCKS, WHITE WYANDOTTES, AND B. MINORCAS, 50, $8.50; 100, $16; 500, $77.50. WHITE AND BUFF ORPINGTONS, SIL. L. WYANDOTTES, 50, $9; 100, $18; 500, $87.50. I guarantee full live delivery by prepaid post. Get your order in now and I will ship when you want them. Bank Reference Catalog Free. H. B. Tippin, Box E, Findlay, Ohio. Member I. B. C. A.

Day Old Chicks

From Select, Hogan Tested, Flocks on Free Range. Well-fed and handled to insure strong, vigorous chicks. Heavy Layers. PRICES: WHITE and BROWN LEGHORNS and ANCONAS, 50, $7.50; 100, $14; 500, $65. BARRED ROCKS, 50, $8.50; 100, $16; 500, $75. Hatched right and shipped right. Postpaid. 100% live delivery guaranteed. Bank Reference. Order direct from this ad. Circular free.
BORST & ROEK, Box P, Zeeland, Mich.

QUALITY CHICKS AT LIVE AND LET LIVE PRICES.
$10.00 PER 100 AND UP
FROM EXCELLENT PAYING, HEAVY LAYING flocks on unlimited range. Well-hatched, Sturdy, Healthy CHICKS in the following varieties: TOM BARRON ENGLISH WHITE LEGHORNS, 50, $7; 100, $13; 500, $62.50. PARK'S BARRED ROCKS and RHODE ISLAND REDS, 50, $8; 100, $10; 500, $72.50. From EXTRA SELECT flocks headed by Michigan Agricultural College cockerels. (Dams records from 230 to 270.) WHITE LEGHORNS, 50, $8; 100, $15; 500, $72.50. ROCKS and REDS, 50, $9; 100, $17; 500, $82.50. DELIVERED RIGHT TO YOUR DOOR BY INSURED PARCEL POST. 100% delivery guaranteed. Order NOW and from this ad as many were disappointed last year. Profitable Catalog FREE. Bank Reference.
LAKEVIEW POULTRY FARM
Route 8, Box 3, Holland, Michigan.

Good Chicks, Low Prices

BARRON TYPE W. LEGHORNS, BARRED ROCKS, S. C. REDS. Pedigreed Chicks from flocks mated with M. A. C. cockerels bred from 200 to 300 egg hens. Our Utility grade Chicks produced pullets laying at 4 months, 20 days. Get our instructive catalog, low prices, and special discount before you order.
MICHIGAN HATCHERY & POULTRY FARMS,
Box A, Holland, Michigan.

Hardy Northern Bred Chicks

Pine Bay Farm

Barron S. C. W. LEGHORNS Parks Strain BARRED ROCKS The greatest egg producers known. Heavy winter layers. See record of our pen 16 now at the Michigan International Egg Laying Contest. Get Quality chicks at Reasonable prices from Holland's pioneer poultry farm. Catalogue free.
Pine Bay Poultry Farm, Box 56, Holland, Mich.

CHICKS

BARRON'S S. C. W. LEGHORNS, SHEPPARD ANCONAS and BARRED ROCKS, EGGS and CHICKS FROM SELECTED STOCK
Our Leghorn flocks are headed by large vigorous males from M. A. C.; Anconas from Sheppard's 285 hens. Buy from an old reliable poultry farm and you will be proud to own a flock of high producing hens that will bring you a big profit. We guarantee safe delivery and prepay shipments. Write for catalogue.
BYRON CENTER POULTRY FARM AND HATCHERY Box R, Byron Center, Mich.

QUALITY CHICKS White Leghorns, Barred Rocks, Anconas. 5,000 culled breeders. 12 years experience. New Smith 40 000 egg hatcher. Member Baby Chick Assocs. Send for Folder B and prices **DEAN EGG FARM & HATCHERY** BIG BEAVER, BIRMINGHAM, MICH.

BABY CHICKS—REMARKABLE FOR SIZE and strength. Reasonable prices. Leghorns, Anconas, Rocks, Reds, Wyandottes, Orpingtons, Minorcas, Spanish, Brahmas.
TYRONE POULTRY FARM, Fenton, Mich.

KNIGHT STRAIN WHITE PLYMOUTH ROCK cockerels $5.00 each. Baby chicks $20.00 per 100. ROBERT E. KNIGHT, New Baltimore, Mich.

400,000 Chicks

Big, strong, Well-hatched Chicks from selected to lay stock on free range, properly fed and housed to insure health and vigor. WHITE, BROWN & BUFF LEGHORNS, 50, $7; 100, $13; 500, $62.50. BARRED & WHITE ROCKS, S. C. & R. C. REDS, ANCONAS, 50, $8; 100, $15; 500, $72.50. WHITE WYANDOTTES, 50, $8.50; 100, $16; 500, $77.50. BUFF ORPINGTONS, SILVER WYANDOTTES, 50, $9.50; 100, $18; 500, $87.50. POSTPAID.
We guarantee full 100% live arrival. Reference, Citizen's Bank. Order direct from this ad. and save time. Free circular.
MODERN HATCHERY
Box F, Mt. Blanchard, Ohio

289 EGGS

289 Eggs in one year, actual trap-nest record, "LADY MICHIGAN" also made record of 283 eggs in one year. She laid 294 eggs in 381 consecutive days. Sons and daughters of "LADY MICHIGAN" are now in use in our matings for 1923. If you want

Real Barron Leghorns

Single Comb Whites, get our 1923 catalog and learn full particulars in regard to our flock which we have carefully bred for high-egg records for the past 21 years. Our best matings are made up of mature females with actual trap-nest records from 200 to 289 eggs.

Chicks and Eggs for Hatching

that will put the PROFIT into your Leghorn flocks. Write postcard for catalog today and before ordering Chicks or Eggs elsewhere. STRICK POULTRY FARM, Route 4 O, Hudsonville, Mich.

WASHTENAW

HATCHERY CHICK PRICES: March 26th and following hatches: Barred Rocks and Reds, 50, $8.50; 100, $16; 500, $75. White Rocks, White Wyandottes, 50, $9.50; 100, $18; 500, $85. White, Brown, and Buff Leghorns, 50, $7.50; 100, $14; 500, $65. From hatches due March 12th and 19th add $2 per 100 to these prices. Postpaid, full live delivery guaranteed. Our flocks are carefully selected and bred for high egg production. Order from this ad. Reference, Farmers and Mechanics Bank.
WASHTENAW HATCHERY, Ann Arbor, Mich.

Rosewood Farm

Healthy, Hardy Chicks

Well-hatched, carefully packed, and shipped. Select heavy laying WHITE LEGHORNS, 50, $7; 100, $13; 500, $62.50; 1,000, $120. Select ANCONAS, 50, $7.50; 100, $14; 500, $67.50. Select BARRED ROCKS, 50, $8.50; 100, $16.50; 500, $80. Postpaid, full live delivery guaranteed. Our chicks will render you the best of satisfaction and you will COME BACK TO US. We have had long experience in producing good Chicks and our flocks are second to none. Circular free. ROSEWOOD FARM, R 12 A, Holland, Mich.

CHICKS—SINGLE COMB BUFF LEGHORNS only Strong healthy chicks from good laying stock. J. W. WEBSTER, Bath, Mich.

CHICKS—WE HAVE SHIPPED THOUSANDS each season since 1904. Different breeds, free booklet with guarantee and delivered price. Freeport Hatchery, Box 10, Freeport, Mich.

MARKETING EGGS IN THE SUMMER

THE egg problem in the summer is of importance to everybody having poultry. It is in summer that there is little demand for hatching eggs, a reduced market, and increased production, and temperatures unfavorable to long keeping. The successful meeting of these conditions depends somewhat on the location of the person having the poultry, the size of the flock and the number of eggs.

In order to outdistance the heavy competitive field at this difficult season of the year, it is necessary that the eggs be delivered absolutely fresh. It is often more satisfactory for the eggs to be delivered direct to the housewife rather than to the retailer. A house-to-house canvas for customers in the nearby town, supplemented by advertising, and capped off by a guarantee of the freshness of the eggs. To insure the success of this system, it is essential that not one customer shall ever find one bad egg among those delivered. One bad egg will often lose a customer permanently; no number of good eggs can ever compensate for it. If the eggs are always fine, fresh, and cool when delivered, it will, of course, be unnecessary to replace any eggs under the guarantee, and premium prices will be commanded—prices sometimes almost twice as high as those that the retailer would have paid for the "yard eggs," if dedelivered to him.

If the eggs are to be "fine" and "fresh" they must be gathered often. They must be kept in a cool place from the time they are carried to the house until they are delivered to the customer. They must not be permitted to become warm on the way to town. Of course, it goes without saying that the eggs must be infertile; that is, the males must be kept segregated from the females throughout the summer season and, in fact, at all times except during the breeding period.

The eggs, by all means, should be clean. This implies that they shall be laid in nests made of clean, fresh straw or other suitable material. The hen house and yard should be kept as clean as possible, and free from mud. The eggs themselves should never be washed but a damp cloth may be used to remove occasional spots on an otherwise clean and attractive egg. Dirty eggs always look stale, even though they are not, and they are repulsive to the eyes of the housewife.

Summer is a good time for the family to eat all the eggs it likes, for prices in town are not so good as at other seasons. Right at home is often one of the best markets that can be found. Eggs may be made into appetizing early-morning egg-and-milk drinks that are just the thing to start a hard working day. They are fine in all sorts of cooking, as the kitchen chairman knows, being ideal for cakes, cookies, deserts and all sorts of good things that are especially popular in summer.

If the flock is large and production is high, it is often advisable to use the water-glass route for marketing. The United States Department of Agriculture has full information in printed form in regard to the water-glass method of preservation, or the county home demonstration agent can furnish the right advice. Water-glassing will permit the poultryman-farmer to make high-priced winter eggs of low-priced summer eggs. This method, properly employed, offers no serious objection. It has repeatedly been demonstrated with thousands of eggs that the eggs so preserved are equal to any other kind of eggs for cooking purposes. They may be sold as water-glassed eggs to retailers at prices slightly lower than those paid for fresh "yard" eggs, or they may be used by the family at a time when the production is reduced.

Marketing eggs in summertime is a problem that may be solved with the assistance of a little forethought.

A young lawyer wrote a prominent practitioner in Dallas, Texas, asking what chance there was for a man of his stamp in that section. He said,

"I am a Republican in politics, and I am an honest man."

The Texan wrote back,

"If you are an honest lawyer, you will have no competition here, and as you are a Republican, the game laws will protect you."—Everybody's Magazine.

POULTRY BREEDER'S DIRECTORY

Advertisements inserted under this heading at 30c per agate line, per issue. Commercial Baby Chick advertisements 45c per agate line. Write out what you have to offer and send it in. We will put it in type, send proof and quote rates by return mail. Address The Michigan Business Farmer, Advertising Department, Mt. Clemens, Michigan.

PULLETS, HENS AND COCKERELS
S. C. White Leghorns and S. C. and R. C. Black Minorcas. Must make room before cold weather. About ready to lay.
LAPHAM FARMS, Pinckney, Mich.

PURE BRED LIGHT BRAHMAS. A FEW Cockerels for sale at $4.00 each.
JOHN L. CURTIS, R. 3, Box 93, Shelby, Mich.

HATCHING EGGS

HATCHING EGGS
S. C. White Leghorns. Tom Barron Strain, 250 egg utility line. November to April, average 65 per cent. Pure white plumage. Range grown, healthy, vigorous stock. Eggs $1.50 per 15; $4.00 per 50; $7.00 per 100. Prepaid. Limited supply. Order from this ad now.
MAPLEWOOD POULTRY FARMS
C. W. Bovee, Prop. North Star, Michigan.

YOUNG AND WYCKOFF WHITE LEGHORNS Selected hatching eggs $2.00 a setting. Prepaid circular. F. Arthur Martin, Indian River, Mich.

EGGS FOR HATCHING—UTILITY STOCK. Grand White Wyandottes—M. A. C. Champions. Good, square deal. Reasonable prices. Send for price list.
C. W. HEIMBACH, R. 5, Big Rapids, Michigan.

EGGS FOR HATCHING—PURE BRED WHITE Wyandottes, 15 eggs $1.25; 30 eggs $2.00; 50 eggs $3.00; 100 eggs or more 5 cents each. Single settings prepaid. Others f. o. b. Allegan. H. M. HORTON, Citz. Phone 294B Allegan Mich.

WHITE WYANDOTTES MARTIN STRAIN, Eggs for hatching.
WAYNE CHIPMAN, R. 2, Washington, Mich.

SILVER LACED AND WHITE WYANDOTTES Four large, beautiful roosters. Eggs $2.50 per 15.
C. W. BROWNING, Portland, Michigan.

EGGS FOR HATCHING: FROM THE FOLLOWING varieties, Barred, Buff and White Rocks; Silver Laced, and White Wyandottes: S. C. White Orpingtons, and S. C. Black Minorcas. Eggs, $1.25 for 15, $2.25 for 30, prepaid. From pure bred Good Laying Stock, Booking orders for eggs. Order early. BENJAMIN SCOTT, Bannister, Mich.

BUFF ROCK EGGS BY 10 LB. MALES and 1st Cincinnati, O., winners Hogan tested hens, heavy layers.
J. C. CLIPP & SONS, Box M, Saltillo, Ind.

THOROUGHBRED BUFF ROCK EGGS from Blue Ribbon Winners, $1.50 per 15; $9.00 per 100.
BALDWIN & NOWLIN, R. 4, Laingsburg, Mich.

BARRED ROCK HATCHING EGGS. NORMAN Heavy Laying Strain.
MRS. JESSIE B. DEAN, R. 1, Mason, Mich.

White Rocks. Heavy Layers, Choice Birds. Prepaid guaranteed eggs. 15, $1.50; 50, $3.50; 100, $6.50. Mrs. Florence Howard, Petersberg, Mich.

BARRED ROCK HATCHING EGGS. PARKS 200-egg strain. $2 per 15; $5 per 50; $10 per 100 by prepaid parcel post.
R. G. KIRBY, R. 1, East Lansing, Michigan.

THOMPSON HEAVY LAYING BARRED ROCK eggs. $1.75-15; $3-30. Dark matings.
MRS. FRED KLOMP, St. Charles, Michigan.

BARRED AND WHITE ROCK HATCHING eggs for sale from exhibition utility stock. Farmers' prices. Dawsons' Farm, R. 4, Muskegon, Mich.

PURE BRED BUFF ORPINGTON EGGS AT $2-15; $5.50-50. Prepaid.
MRS. ANNA LA NOUE, Fostoria, Michigan.

S. C. REDS, GOOD LAYING STOCK, FINE color. Hatching eggs, $6.00 per 100. Limited number of chicks, $16.00 per 100.
EDWARD CRYDER, Alamo, Mich.

ROSE COMB RHODE ISLAND REDS. HATCHING eggs $1.25 per setting. Postpaid.
Mrs. Albert Harwood, R. 4, Charlevoix, Mich.

S. C. RHODE ISLAND WHITES THAT HAVE the laying habit. Eggs $2.00 per 15. Also cockerels and pullets.
Jno. Hartgerink, Box W. Zeeland, Michikan.

BOURBON RED TURKEYS. EGGS 50c EACH.
THOS G. CALLAGHAN, Fenton, Michigan.

MAMMOTH BRONZE TURKEY EGGS FOR Hatching. Best stock. Farmers prices.
DAWSON'S FARM, R. 4, Muskegon, Michigan.

EGGS FOR HATCHING, BIG TYPE PEKIN Ducks, 12, $1.00; 24, $1.75. Buff Orpington Ducks, 12, 85c; 24, $1.50, prepaid.
BENJAMIN SCOTT, Bannister, Michigan.

MAMMOTH PEKIN DUCK EGGS FOR SETTING $2.00 or two settings $3.00. Also Wild Mallard Duck eggs same price. Very choicest stock. All orders prepaid. Cedar Bend Farm, Okemos, Mich.

LEGHORNS

LEGHORNS
S. C. Buff Leghorn Hens, Pullets and Cockerels. Hens and pullets $2.50 each; cockerels $3.00 to $5.00 each. Show birds a matter of correspondence. LAPHAM FARMS, Pinckney, Mich.

PULLETS BARRON ENGLISH WHITE Leghorns, eight weeks to maturity—May to October. Breeding flocks repeatedly culled by experts. Extra large and vigorous. Wedge shaped bodies, big looped combs. "Lay-bilt" in every way. Also breeding cockerels. Satisfaction and more or money back.
MORSE WHITE LEGHORN FARM,
Belding, Michigan.

PLYMOUTH ROCK

BARRED ROCK COCKERELS AND PULLETS from America's best prize-winning laying strains. Winners of 18 first prizes at Detroit and M. A. C. the last two seasons. Low prices.
TOLLES BROS, R. 10, St. Johns, Mich.

More Poultry Advertising on Page 31

The Agricultural and Business Situation

Revised Monthly by the Department of Research of the American Farm Bureau Federation.

The growth of industrial prosperity as indicated by such barometers as iron output and the stock market is proceeding rapidly. Insofar as this continues, it will mean strong domestic demand for the products of agriculture. The past month's developments, however, are adverse to immediate agricultural prosperity, which awaits more favorable price relationships. Price readjustments appear likely to be slow in coming. In the last month farm products at wholesale have declined relative to other commodities.

I. PRODUCTION AND TRADE.

The high rate of industrial production is reflected in the iron and steel trade which is now operating at 90% of capacity and is producing at the rate of about 45 million tons per year, which is approximately the same as at the peak of production in 1920.

The official report of the Bureau of the Census on cotton ginnings, places the 1922 crop at 9,761,817 equivalent 500 pound bales, which is a reduction of 200,000 bales from the December estimate of the Department of Agriculture. The unofficial forecast of the cotton acreage by the Brookmire Economic Service places the probable acreage for 1923 at 35,250,000 acres, or an increase of 4.4% over 1922 plantings.

II. FOREIGN TRADE.

The latest available figures indicate some shifts in foreign trade. Pork and lard exports for the first seven months of the current fiscal year are close to the figures for the same period in the fiscal year 1922. Vegetable oils are running about the same; cotton shows a 10% decrease. Cereals, however, have fallen off largely; corn from 91 million bushels to 66 million; wheat from 167 to 121 million bushels. Part of the decrease in corn exports may be accounted for by 40 million bushels of rye exported since July 1. Rye being only ten cents above corn in price is at an unusually attractive figure for buyers. The decline in our wheat exports has apparently been made good on the part of European consumers by purchases elsewhere, especially in Canada. This is made clear by a comparison of world shipments which, in the period from August 1, 1922, to March 1, 1923, totalled 414 million bushels against 401 million a year ago, and 332 million two years ago.

On the import side it is to be noted that the United States is swinging back into its normal position as a heavy importer of cheese, 40 million pounds having been imported in the eleven months ending November, 1922. Imports of vegetable oils and oil bearing materials have increased as a result of the industrial revival. Imports of sugar for the eleven months period of 1922 are nearly twice as large as in 1921 as a result of the rapidly growing demand in this country.

In foreign exchange, the most important feature is the continued strength of sterling which stands now at about $4.70 or 96.5 per cent of par. Continental exchanges continue weak and rather erratic although French and French Belgium francs are somewhat higher than a month ago. Marks are still holding around the 20,000 to the dollar mark.

III. MONEY AND CREDIT.

Financial statistics indicating the volume of trade, such as bank clearings, are low in February on account of the shortness of the month. A significant feature of recent months is the increased exports and smaller imports of gold, net imports for the seven months ending January, 1923, being 150 million dollars against 354 million for the same period last year. The trend of the stock market has continued strongly upward, whereas advancing interest rates are reflected in a slight decrease in bond prices.

IV. PRICES.

Wholesale price changes in February were slightly unfavorable to agriculture, the all commodity index rising one point while farm products lost a point. During the past month twelve out of the twenty-four products quoted in the table below increased in price, ten decreased, and two remained unchanged. The most important changes were increases in the price of cotton, potatoes and poultry; and declines in egg, butter and hide prices.

Recovery from the depths of depression a year to a year and a half ago has been much slower in raw farm products than in industrial raw materials. Industrial materials such as pig iron, copper and rubber have regained 30 to 40 per cent of the decline from their extreme high points before the crisis while corn, wheat and livestock have regained but 10 to 20 per cent of this loss. Cotton has shown a rapid recovery having regained close to two-thirds of its extreme decline.

I. Production and Trade

1. Agriculture: U. S. Production—000,000 omitted.

	1922	1921	Average 1916-1920	1922* Per cent
Corn, bu.	2891	3069	2831	102
Wheat, bu.	856	815	799	107
Oats, bu.	1215	1078	1413	85
Barley, bu.	186	155	197	94
Rye, bu.	95	62	68	139
Buckwheat, bu.	15	14	14	107
Potatoes, bu.	451	362	373	128
Sweet Potatoes, bu.	110	99	89	123
Hay, all, tons	113	98	102	111
Cotton, bales	9.76	7.95	12	81
Tobacco, lbs.	1325	1070	1378	96
Flaxseed, bu.	12	8	11	109
Rice, bu.	42	38	42	100
Peaches, bu.	57	33	44	129
Pears, bu.	19	11	14	136
Apples, total, bu.	204	99	179	114
Apples, com'l., bbls.	31	22	27	115
Sugar Beets, tons	5	8	7	71
Cranberries, bbls.	.6	.4	.4	150
Beans, bu.	12	9	13.3	90
Onions, bu.	18	14	17	105
Cabbage, tons	1	.6	.7	143
Sorghum Sirup, gal.	37	46	40	93
Cloverseed, bu.	1.9	1.5	1.5	127
Peanuts, lb.	624	829	1043	59
Hops, lb.	26	29	32.1	81

*As percentage of average 1916-1920.

World Production—000,000 omitted.

	1922	1921	Average 1909-13
Wheat, bu (1)	3,058	3,069	2,890
Corn, bu. (2)	3,450	3,781	3,572
Rye, bu. (3)	785	773	....
Oats, bu. (4)	3,003	2,759	3,008
Barley, bu. (5)	833	818	882
Potatoes, bu. (6)	3,123	2,445	3,066
Cotton, bales (7)	16	14.1	19.6

(1) Russia and Mexico excluded.
(2) 17 countries. (3) 18 countries. (4) 27 countries. (5) 25 countries. (6) 16 countries. (7) 500 pounds net, linters excluded.

2. Mining (Federal Reserve Bank of New York):

Figures express production as a percent of normal. In estimating normal production, due allowance is made for seasonal variation and year to year growth.

	Jan., 1923	Dec., 1922	Jan., 1922
Anthracite coal	108	96	78
Bituminous coal	83	85	64
Petroleum	124	121	108

3. Manufacturing (Federal Reserve Bank of New York):

Wheat flour	*	93	85
Meat	*	*	89
Sugar	115	136	140
Cotton	103	95	91
Pig iron	*	105	55
Steel ingot	98	89	50
Lumber	*	*	100
Wood pulp	*	*	85
Gasoline	*	*	93
Cement	157	127	97
Wool	*	*	111
Copper	93	84	22

*Not available.

4. Building:

Contracts awarded in 27 States: (F. W. Dodge Co.)	Feb., 1923	Jan., 1923	Jan. 1 to Mar. 1 1923	1922
Number	6,338	6,126	12,464	....
Value (000,000 omitted)	$ 230	$ 217	$ 447	$ 339

5. Transportation:

Freight car loadings:	Week Ending Mar. 3, 1923	Same Week Month Ago	Same Week Year Ago	Week Ending Mar. 3, 1923*
Total	917,896	865,675	803,255	114
Grain and grain products	44,967	41,736	49,520	91
Livestock	32,810	33,675	28,329	116
Coal	193,551	189,773	196,639	98
Coke	16,138	14,199	8,257	195
Forest products	76,131	69,767	47,664	160
Ore	10,547	11,239	4,651	227
Merch. and Miscel.	543,572	505,286	468,195	116

*As percentage of week year ago.

7. Bank Clearings:

Units of $1,000,000,000

	Feb., 1923	Jan., 1923	Feb., 1922
New York City	$16.78	$19.78	$15.34
Outside New York City	14.17	17.52	11.62

8. Mail Order Sales:

	February 1923	1922	Eight Months Ending February 1923	1922
Montgomery Ward & Co.	$ 9,063,304	$ 5,784,685	$ 65,325,168	$ 50,165,096
Sears Roebuck	17,114,759	12,413,308	135,707,440	114,201,418

II. Foreign Trade

Commodity:	000 omitted —January— 1923	1922	Seven Mos. Ending —January— 1923	1922
Grand total, all exports	$330,894	$274,612	$2,311,276	$2,189,715
Beef and veal, lbs.	1,730	2,442	18,223	20,780
Pork, lbs.	84,982	53,139	457,986	410,400
Lard, lbs.	107,786	73,194	511,120	521,957
Neutral lard, lbs.	3,371	1,279	14,607	11,591
Butter, lbs.	384	539	6,531	3,260
Cheese, lbs.	326	431	2,349	4,919
Hides and skins $	356	487	2,234	2,919
Corn, bu.	7,163	19,393	65,613	90,620
Meal and flour, bbls.	56	51	304	444
Wheat, bu.	7,296	10,038	120,501	166,872
Flour, bbls.	1,161	1,105	9,118	9,834
Oats, bu.	212	113	16,523	9,834
Meal and rolled, lbs.	5,465	7,629	71,791	54,322
Fruits and nuts $	5,138	4,349	55,202	45,178
Vegetable oils and fats $	1,421	1,677	8,244	7,784
Sugar, lbs.	10,568	142,822	356,192	653,762
Leaf tobacco, lbs.	41,652	32,265	271,124	282,718
Cotton, bales	473	476	3,753	4,183
Wool, lbs.	14	14	1230	701

2. Imports:

Commodity.	—November— 1922	1921	Eleven Months 1922	1921
Grand total, all imports	$291,906	$210,948	$2,819,054	$2,271,652
Beef and veal, lb.	3,146	3,361	34,647	28,956
Pork, lbs.	82	47	718	708
Butter, lbs.	835	1,926	3,801	15,957
Cheese, lbs.	6,518	3,980	39,537	23,468
Hides and skins $	12,227	5,122	94,142	61,792
Corn, bu.	10	1	110	158
Oats, bu.	9	199	1,288	3,346
Wheat, bu.	3,176	1,185	20,062	21,234
Flour, bbls.	41	83	643	908
Fruits and nuts $	8,220	10,793	65,923	63,371
Vegetable oils, fats $	3,760	4,263	154,747	35,560
Sugar, lbs.	537,479	462,950	9,403,946	5,572,531
Leaf tobacco, lbs.	502	616	6,129	4,928
Cotton, bales	52	54	318	227
Wool, lbs.	27,084	10,946	330,978	308,146

3. Prices of Foreign Drafts:

	Nominal Gold Value Par of Exchange	Price of Demand Drafts March 19, 1923	Feb., 19 1923	March 20, 1922
England	$4.87 to 1 £ Sterling	$4.70	$4.70	$4.37
France	19.83c to 1 franc	6.46c	6.06c	8.97c
Germany	23.8c to 1 mark	.0048c	.005c	.375c
Belgium	19.3c to 1 franc	5.57c	5.33c	8.45c
Italy	19.3c to 1 lire	4.85c	4.80c	5.08c
Spain	19.3c to 1 peseta	15.46c	15.65c	15.54c
Austria	20.3c to 1 crown	.0014c	.0014c	.015c
Denmark	26.8c to 1 crown	19.23c	19.18c	21.25c
Norway	26.8c to 1 crown	18.20c	18.56c	17.45c
Sweden	26.8c to 1 crown	26.62c	26.62c	26.17c
Holland	40.2c to 1 florin	39.48c	39.56c	37.85c
Argentina	42.5c to 1 peso	37.12c	37.20c	36.88c
Brazil	32.4c to 1 milreis	11.25c	11.55c	13.81c
India	48.7c to 1 rupee	31.50c	31.75c	28.00c
Japan	49.9c to 1 yen	48.50c	48.45c	48.50c
Canada	100c to 1 dollar	97.56c	98.81c	96.88c

4. Discount Rate of the Bank of England:

March 14, 1923	Month Ago	Year Ago
3%	3%	4½%

III. Money and Credit

1. Gold, Currency and Bank Deposits (000,000 omitted):

	March 1, 1923	Feb. 1, 1923	March 1, 1922
Stocks of monetary gold in the United States	$ 3,961	$ 3,938	$ 3,681
Total supply of currency in the United States	4,611	4,509	5,488
	Dec. 29, 1922	Sept. 15, 1922	Dec. 31, 1921
Total deposits in National Banks	$17,420	$16,599	$15,075
	Feb. 1 1923	Jan. 1, 1923	Feb. 1, 1922
Deposits in New York City banks	$ 3,970	$ 4,010	$ 3,830

2. Gold Movement (000 omitted):

	January 1923	1922	Seven Months Ending January 1923	1922
Exports of gold	$ 8,472	$ 862	$ 35,202	$ 18,064
Imports of gold	32,817	26,571	184,973	371,877

3. Federal Reserve Ratio:

	March 14, 1923	Feb. 14 1923	March 15, 1922
Ratio of total reserves to deposits and Federal Reserve note liabilities	75.4%	76.2%	75.6%

4. Interest Rates:

	Feb., 1923	Jan., 1923	Feb., 1922
4-6 mos. commercial paper	4.94%	4.72%	5.12%
60-90 days commercial paper	4.62%	4.40%	4.88%

5. Discount Rate of Federal Reserve Banks:

	Mar. 1, 1923	Feb. 1, 1923	Mar. 1, 1922
Range of rates for the twelve banks on commercial agricultural and livestock paper	4½%	4-4½%	4½-5%

6. Stock and Bond Prices:

	March 9, 1923	Feb. 9, 1923	March 10, 1922
20 Industrial stocks	$104.48	$100.82	$87.18
20 Railroad stocks	89.19	89.17	78.68
40 Bonds	87.09	88.74	86.22

7. Business Failures:

	——Week Ending—— Mar. 8, 1923	Feb. 8, 1923	Mar. 9, 1922
Bradstreets	406	405	519
Duns	351	371	521

IV. Prices

1. Wholesale Prices of Farm Commodities:

Quotations at Chicago except as noted.

	March 20, 1923	Month Ago	Year Ago
Fat hogs, cwt., average	$ 8.50	$ 8.00	$10.00
Beef steers, good native, cwt., av.	8.90	8.85	7.95
Fat lambs, cwt., average	14.00	13.90	14.15
Fat sheep, cwt., average	8.00	7.65	8.50
Wool, Ohio Delaine unwashed, lb. (Boston)	.565	.575	.485
Butter, 92 score, lb.	.4825	.52	.36
Cheese, No. 1 twins, lb.	.2325	.2425	.20
Eggs, fresh firsts, doz.	.2475	.37	.2325
Poultry, hens, lb.	.26	.2375	.26
Wheat, No. 2 hard, bu.	1.215	1.2175	1.355
Corn, No. 2 mixed, bu.	.7475	.7425	.575
Oats, No. 2 white, bu.	.4675	.4675	.395
Rye, No. 2, bu.	.84	.855	1.0325
Barley, bu.	.655	.68	.61
Kafir, No. 2 white, cwt., K. C.	1,645	1.59	1.31
Hay, No. 1 timothy, ton	22.00	21.00	23.00
Flax, No. 1, bu. (Minneapolis)	3.045	3.1575	2.55
Cotton, middling, lb. (New York)	.311	.29	.184
Beans, white, cwt. (f. o. b. Michigan)	7.60	8.15	6.75
Potatoes, northern whites, cwt.	1.20	1.10	1.70
Onions, midwest yellow, cwt.	2.65	2.65	7.85
Apples, winter varieties, bbl.	5.85	5.30	8.50
Hides, No. 1 native heavy, lb.	.185	.205	.1475
Sugar, fine granulated, lb, N. Y.	.091	.0825	.055

2. U. S. Department of Labor Relative Wholesale Prices:

Prices in year 1913 equal 100.

	Feb., 1923	Jan., 1923	Feb., 1922
All commodities (weighted average or general price level)	157	156	141
Farm products	142	143	131
Food products	141	141	135
Cloths and clothing	199	196	174
Fuel and lighting	212	218	191
Metals and metal products	139	133	110
Building materials	192	188	156
Chemicals and drugs	132	131	123
House furnishings	184	184	177
Miscellaneous	126	124	117

3. Prices of Farm Products at the Farm Relative to 1913:

(U. S. Bureau of Agricultural Economics)

Prices in year 1913 equal 100.

Commodity:	Jan., 1923	Dec., 1922	Jan., 1922
Cotton	209	198	125
Corn	119	117	77
Wheat	133	135	124
Hay	110	107	103
Potatoes	101	92	179
Beef cattle	94	89	81
Hogs	104	102	93
Eggs	174	229	166
Butter	157	162	128
Wool	211	211	108

4. Relative Purchasing Power of Farm Products:

(U. S. Bureau of Agricultural Economics)

The quantity of various commodities which a given amount of each farm product would purchase at prices prevailing in 1913 is put equal to 100. The figures given represent the percentage of this quantity which the same amount of farm products would purchase in January, 1923. Prices at the farm are used for agricultural products, and wholesale prices at central markets for other commodities.

	All Commodities	Cloths, etc.	Fuel, etc.	Metals, etc.	Building Mtls.	House Furn'gs
Cotton	134	107	96	157	111	114
Corn	76	61	55	89	63	65
Wheat	85	68	61	100	71	72
Hay	73	56	50	83	58	60
Potatoes	65	51	46	76	54	55
Beef cattle	60	48	43	71	50	51
Hogs	67	53	48	78	55	57
Eggs	112	89	80	131	93	95
Butter	101	80	72	118	83	85
Wool	135	108	97	159	112	115

Average purchasing power of all farm products in terms of all other commodities. Same basis as above table.

1913	100	December, 1921	62
1914	112	January, 1922	65
1915	106	March	76
1916	89	July	69
1917	106	September	64
1918	112	October	65
1919	111	November	66
1920	86	December	63
1921	67	January, 1923	68
1922	69		

MARKET FLASHES

MARKET SUMMARY

Wheat quiet. Corn and oats unchanged. Demand for rye off. Beans steady. Potatoes firm. Butter easy but eggs in demand with prices firm. Poultry quiet and steady. Dressed calves in demand. Cattle active and prices steady. Sheep dull and lower in price. Hogs in demand and prices higher. Provisions average Higher.

(Note: The above summarized information was received **AFTER** the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press —Editor.)

FOOTE'S MARKET LETTER

By W. W. Foote

WHILE there is still much complaint regarding rising prices for most commodities and the consequent higher cost of living than a year ago, the times are somewhat better for farmers, especially for those out of debt, and the Michigan farmers as a class have not seen their lands shrink as much as the farmers of other states of the middle west. Conditions in the grain trade are mostly satisfactory for farmers, and despite much bearish talk indulged in by speculators on the Chicago Board of Trade and other leading markets, wheat has undergone a fair upward movement, May wheat having sold within a short time as high as $1.21⅝, comparing with $1.30¼ a year ago. Corn, too, shows a firm undertone, with no burdensome stocks in sight and unusually large consumption on the farms of the corn belt states. "Cash corn is selling around 75 cents per bushel for the No. 3 grade in Chicago," says a prominent grain trader, in discussing the situation. "Hogs on the farms are not selling far below $8 per 100 pounds, or equal to 80 cents a bushel for corn in the country. It will be seen that the position of shorts in May corn is very uncomfortable," Turning from grain to live stock, it cannot be denied that the recent course of cattle and hog markets has been such as to give encouragement to stockmen, prices having advanced at a time when the pessimists were predicting declines. Casting speculative opinions aside, it must be said that since the close of Lent consumption of beef has shown marked improvement, while the consumption of fresh and cured hog products has been extremely large for many weeks. Lambs are the greatest money-makers of all kinds of live stock, as every sheepman fully realizes, and especially liberal profits are made by the fortunate ones who have any early spring lambs to sell. Most of the lambs now being marketed were born a year ago, however, and they are selling for higher than before the war. Michigan farmers are particularly interested in the market for pea beans, and it may be said on authority of the Bean and Pea Journal that there are probably not over one hundred cars of pea beans left in the state of New York, most of the remaining holdings being held in Michigan. That journal says: "Practically all of the pea beans in the United States are grown in Michigan and New York. Of course, there are some unimportant quantities grown in Minnesota, Wisconsin, and some northern states, but there are none worthy of mention, grown in the latitudes south of these states, and this is because the climatic conditions are not favorable for them. The feature of the Michigan market which is most surprising to the Michigan jobbers, who realize that 40 percent of the Michigan crop is consumed by the canning trade, is where are the canners getting their beans.

The Grain Trade

Wheat continues to sell at lower prices than were paid a year ago, but the difference is less than it was early this year, and the undertone is much stronger. Recently the export demand for durum and hard winter wheat has shown marked improvement, and the visible supply of wheat in the United States is decreasing, although it stands at 45,785,000 bushels, or about 10,000,000 bushels over a year ago. Corn is in a firm position, and both corn and oats continue to sell much higher than a year ago, while rye is selling very much lower than at that time, the visible rye supply being up to 18,268,000 bushels, comparing with 9,495,000 bushels at this time last year. The visible corn supply is down to 28,742,000 bushels, comparing with 46, 889,000 bushels a year ago; while that of oats is only 24,044,000 bushels, comparing with 64,644,000 bushels last year. Huge amounts of corn and oats have been fed to live stock, and within a short time Indiana stockmen have bought corn in Chicago costing around 78 cents a bushel laid down in northern Indiana. Reports come from the northwest that the bankers are advising farmers to curtail their acreage devoted to wheat and other grains. Late sales were made of May wheat at $1.23, comparing with $1.30¾ a year ago; May corn at 77 cents, comparing with 58⅝ cents last year; May oats at 45¾ cents, comparing with 36¾ cents last year; and May rye at 83½ cents, comparing with $1.01½ a year ago.

The Live Stock Problem

How to produce cattle, hogs and sheep for the market profitably is one of the problems farmers must meet in these times of changing conditions. Just now the approach of the grazing season forces them to look the ground over and figure what kind of feeder cattle to buy and how much to pay, for a small difference in the cost per 100 pounds in buying a steer may go far to offset the cost of putting on fat. As is the case every spring, the market for stockers and feeders has been advancing steadily for weeks, and there are few bargains to be picked up in the Chicago stock yards. It is true, thin cattle can still be purchased at low prices, but offerings with good quality to recommend them are selling much above the prices paid a month ago. Different stockmen have varying opinions about what stock to buy and what to feed them with, and some men are successful in fattening high-priced thin cattle, but the average stock feeder buys good stock cattle, while avoiding the highest priced lots. Stockers and feeders sell in the Chicago market at $5.25 to $8.50, mainly at $6.75 to $7.85, no good lots selling below $7.

The Cattle Outlook

Farmers who have not yet arranged to stock their pastures with cattle for summer grazing are deliberating what course to follow, while those owning matured beef cattle are losing no time in getting them shipped to market. Cattle are being marketed much more freely than a year ago, but recent marked improvment in the demand in the Chicago market has enabled sellers to obtain higher prices, especially for the choicer class of weighty steers, as well as for strictly yearling steers and heifers. The commoner cattle are less active than the better offerings, but even ordinary steers are much higher than they were several weeks ago. More cattle are reported in feeding districts than a year ago, but the demand is larger, and fat yearling heifers are especially active and firm. Beef steers sell on the Chicago market at $6.90 to $10.40, mainly at $8.25 to $9.90. A year ago $9.35 paid for best.

Recent Advance in Hogs

During the latter part of March there was a rush to get Illinois fed swine on the market, as tax assesments in that states are made on the first of April. Early April receipts of hogs in Chicago have undergone a great falling off, and much of the restricted marketings are attributed to bad country roads. Prices have had some good advances, with a lively local demand and fair purchases of eastern shippers, prime light bacon hogs selling highest, although at a reduced premium. Hogs offered of late graded well and averaged 240 pounds. Of course, the large exports of lard and cured hog meats tend to strengthen hog values, weekly shipments to foreign consumers running far ahead of a year ago. The large marketing of hogs may be judged from the fact that western packing for the season to recent date amounts to 4,306,000 hogs, comparing with 2,623,000 for the same period a year ago. Stocks of cured hog meats in packing points are much larger than a year ago, but lard holdings are down to 27, 201,000 pounds comparing with 44,675,000 pounds a year earlier. Hogs look like good property, and they should be made good, but not heavy. Recent sales of hogs were made at $7.25 to $8.75.

High Prices for Lambs

Extremely high prices are paid in the Chicago market for choice flocks of lambs of not too heavy weight, as well as for light yearlings, fat wethers an dewes, although recent sharp declines have taken place in prices for choice lambs. Exporters are fair buyers of fat heavy clipped lambs, and in the course of a week 2,000 head averaging 107 pounds brought $10 per 100 pounds. Colorado has been furnishing the greater part of the lambs born a year ago, while California is supplying numerous consignments of lambs born last November. Wool lambs sell at $12.25 to $14.75.

WHEAT

The past fortnight was a healthy period for wheat and prices are somewhat higher than they were at the beginning of this period. The market opened weak but closed firm for the first week opening easy again the last week but firming up later and gains in prices were made, an increase in the export demand caused the upward turn to the market. While the takings were nearly all Canadian wheat purchases of American durum were larger than usual and some other varieties were in moderate demand. The total was large enough to alarm the bears and those who had been short were in a hurry to get out, while some heavy dealers in the east who had sold out their holdings of wheat got busy reinstating their lines. The market has had a great deal of eastern support all along. There appears to be a general willingness to see higher prices and bulls are quick to return to the buying side of the deal every time they see an opportunity. The feeling is again general that Europe will take a lot of wheat in the near future. The market has plenty of bearish news, but there is a tendency to ignore the big stocks and all other things that look like causing weakness.

Crop damage was not specially bad. The western part of Kansas appears to be the worst spot on the map and there is lack of moisture in Nebraska also. Some rains have been falling on the other dry places, but there is yet time for plenty of alarm over the new winter wheat crop and observers sap the growing weather will develop a very unfavorable condition over a great deal of the southwest.

Prices

Detroit—Cash No. 2 red, $136½; No. 2 white, $1.36½; No. 2 mixed, $1.36½.

Chicago—Cash No. 2 hard, $1.23½@1.24; No. 1 northern, $1.24½.

New York—Cash No. 2 red, $1.50; No. 2 hard, 1.35½; No. 2 mixed, $1.29.

Prices one year ago—Detroit, No. 2 red, $1.40; No. 2 white, $1.37; No. 2 mixed, $1.37.

CORN

Corn has shown a great deal of strength and is in a firm position all over the country. Prices at Detroit gained 4c last week and 1c the previous week. Local demand has been only moderate. Canadian exporters were active in the market but found the grain hard to get. Sales of 300,000 bushels of contract corn were reported to go to store. Country offerings were practically nil despite strong bids sent out. Experts agree that this grain is in a position favorable to higher prices.

Prices

Detroit—Cash No. 2 yellow, 85½c; No. 3, 83½c; No. 4, 81½c; No. 5, 79½c.

Chicago—Cash No. 2 mixed, 79½c; No. 2 yellow, 79¾@80½c.

New York—No. 2 yellow and No. white, 99½c; No 2 mixed, 99c.

Prices one year ago—Detroit, No. 2 yellow, 64c; No. 3, 62½c; No. 4, 61c

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OATS

The backward spring is giving the oat market a bullish outlook and large consumers of this grain are beginning to wear a worried look. They have good reason to, because farm work is far behind and seeding is going to be unusually late which indicates higher prices.

Prices

Detroit — Cash No. 2 white, 51½c; No. 3, 50c; No. 4, 48½c.

Chicago—Cach No. 2 white, 46¾@47½c; No. 3, 45½@46½c.

New York—Cash No. 2 white, 56½@57c.

Prices one year ago—Detroit, No. 2 white, 42c; No. 3, 40c; No. 4, 38c.

RYE

Rye made a small gain in price at Detroit during the past fortnight following the trend of other grains but there is not much demand and the market is quiet. Indications are that rye will follow the other grains upward.

Prices

Detroit—Cash No. 2, 81½c.

Chicago—Cash No. 2, 84¾c.

Prices one year ago—Detroit, Cash No. 2, $1@1.01½.

BEANS

The bean market looks like a big question mark to producer, dealer and student of the market. At Detroit and several other points a dull tone prevails with prices quiet after recent declines, while at New York and on many other markets there is sufficient demand to take all offerings at steady prices. Demand on the New York market is such that dealers believe that state will go into the new crop season with empty bins. Reports from California indicate the market in that state is in a fairly healthy condition with no immediate prospects of much lower prices.

Prices

Detroit—C. H. P., $7.15 per cwt.

Chicago—C. H. P., $7.65 per cwt

Prices one year ago—Detroit, C. H. P., $6.90 per cwt.

POTATOES

Many markets report receipts far greater than demand but the Detroit market has only a small supply and prices on this market are firm. The shortage at Detroit is due in part to the fact that some Michigan spuds are eastward to New York city and other markets in that section.

Prices

Detroit—Michigan, $1.41 @ 1.50 per cwt.

Chicago—Wisconsin sacked round whites, $1@1.05 per cwt; Minnesota sacked red river Ohios, $1.15@1.25 per cwt.

Prices one year ago—Detroit, Michigan, $2.10 per cwt.

HAY

The movement of hay to market during the last three months has been about normal, with some exceptions, a survey just completed by the United States Department of Agriculture indicates. About 65 per cent of the marketable surplus of timothy was reported marketed up to March 15. Although this was about 10 per cent less than the percentage marketed to March 15 last year, a larger volume of timothy has been marketed this season than during the corresponding period last

New Way to Rid Poultry of Lice

Rev. G. R. Mente Tells of Amazing Discoverv Which Keeps Hens and Chicks Free From Vermin

Few Drops of Liquid in Drinking Water Does it—No More Dusting, Spraying or Greasing

"I have used your remarkable Lice and Mite Remedy with fine results," writes Rev. G. R. Mente, Methodist Parsonage, New Washington, Ohio. "Mentioned this at a Farmer's Institute a few weeks ago. Consequently, farmers by the dozen have been after me every since to find out where and how they could get it. It has put a stop to the poultry losses in this community. You are a great benefactor to poultry raisers."

Lice and Mites Go Like Magic

No Wonder She Doesn't Lay or Set

This remarkable new discovery which Rev. G. R. Mente, used is Imperial Lice and Mite Remedy. Just a few drops occasionally in the fowls drinking water makes Lice, Mites, Ticks and all vermin go like magic. No more disagreeable and unsanitary dusting, spraying, greasing or dipping. Equally good for Chickens, Turkeys, Ducks, Geese and Pigeons Fine for baby chicks and makes them healthier, sturdier and grow faster. All poultry raisers know that sickly, lice-infected hens cannot lay or have good hatches. Vermin sap the very life and strength of hens and baby chicks. Stop these losses now. Guaranteed not to affect eggs or flesh of fowls in any way. Also a spleidid egg tonic and blood purifier. Costs but a trifle, on money-back guarantee of satisfaction.

White Diarrhea Remedy Free (Regular $1.00 Size Package)

At last a sure treatment for this dread disease. No muss. No fuss. Comes in condensed tablet form to be dropped occasionally in chicks' drinking water. Raise every chick hatched. Economical to use. Be prepared. These remedies should always be on hand.

SEND NO MONEY. Just your name and address to Imperial Laboratories, Dept. 6399, Kansas City, Mo., for one regular, full size $1.00 bottle of Imperial Lice and Mite Remedy (double strength), and they will include free of cost, a regular $1.00 box of Imperial White Diarrhea Remedy. Pay postman only $1.00 and few cents postage on arrival. Or, a large size Trial Package of either one of these remedies for 50c.

If you have a large flock, this Special Introductory Offer also applies on a double quantity of both remedies—two regular $1.00 bottles of Lice and Mite Remedy, and two regular $1.00 packages of White Diarrhea Remedy at an additional saving—all for $1.75. Simply specify that you be sent this regular $4.00 value for only $1.75. Readers risk no money, as Imperial Laboratories are fully responsible and will refund the cost on request any time within 30 days.

BREEDERS' DIRECTORY
(Continued from Page 23)

HAMPSHIRES

HAMPSHIRES—SPRING BOARS AND BRED gilts from 25 sows to select from. Place your order now or you may be to late. 10th year. **JOHN W. SNYDER, R. 4, St. Johns, Mich.**

REGISTERED HAMPSHIRES, BRED SOWS and Gilts, fall pigs both sex. Leading blood lines. Priced to sell. Inspection invited.
CLARENCE L. CAMPBELL, Parma, Michigan

HORSES

FOR SALE: OUR ENTIRE STABLE EQUIPMENT. Six horses, harness, wagons, feed grinder, etc, etc. We are motorizing all our routes and have no further need for horses. Look our stable over and make us an offer for anything you may need. **FEDERAL LAUNDRY COMPANY, Third and Elizabeth Sts., Detroit.**

SHEEP

ALL SOLD OUT FOR THIS WINTER. BOOKING orders for next August.
DAN BOOHER, Evart, Michigan.

WANTED TO BUY 100 BREEDING EWES. Write description, price and ages.
Williams & Williams, Williamston, Michigan.

POULTRY BREEDERS'
Continued from Page 28)

PEN MATED S. C. WHITE LEGHORNS. Ferris 264-300 egg strain. Range grown, healthy, vigorous stock. Eggs $2.00 per 15; $3.00 per 30; $4.00 per 50; prepaid. Satisfaction guaranteed. Limited supply. Order from ad.
H. A. JOHNSON, Norwalk, Michigan.

ARISTOCRAT DARK BARRED PLYMOUTH Rocks. Foundation stock direct from Holterman's choicest matings. Eggs from special pen at $8 for 15 prepaid. From other pens at $3 and $5. Satisfaction guaranteed. **R. W. BRANDT, R. 4, Box B, Saginaw, W. S., Michigan.**

WHITE WYANDOTTE COCKERELS: GOOD Strong Birds, 1 yr. old, March hatch, $2.50 apiece. **MRS. A. J. FISH, R, 1. Blanchard, Mich.**

JOHN'S BIG BEAUTIFUL BARRED ROCKS are hen hatched, good layers, quick growers, light and dark matings, 30-eggs $3.50; 50-$5.00 postage paid circulars, **John Northton, Clare, Mich.**

FOR SALE—FINE ROCK COCKEREL $2.50, from Shoemakers. Also 7 months old Belgian Hares $3.00 a pair.
C. STRONG, Essexville, Michigan.

TURKEYS—DUCKS—GEESE

2 PUREBRED BRONZE TURKEY TOMS FOR sale. Large birds.
MRS. FRANK IRVINE, R. 2, Hersey, Michigan.

WHITE HOLLAND TURKEYS
The farmers friend. No crop failure when you raise them as they eat all insects that destroy crops. Toms $15.00, Hens $10.00, Trios $80.00.
ALDEN WHITCOMB, Byron Center, Mich.

HIGHEST PRICES PAID FOR LIVE AND Dressed Poultry, Veal, Eggs. A square deal always.
C. E. McNEILL & CO.,
825 W. So. Water St., Chicago, Ill.

year, and a larger volume yet remains to be marketed, the survey shows. Movement from Michigan, New York, and Wisconsin has been especially light, where approximately 50 per cent of hay remains to be marketed.

Bad roads and a scarcity of cars are reported to have retarded the movement of hay in the central west while severe winter weather has held up shipments in New York and New England. Movement in the southwest has been larger under mild weather conditions.

General demand for all kinds of hay is reported as having been about normal, but large local supplies in the south have cut down somewhat the demand for timothy from central western markets. High freight rates have restricted marketing in the far western states.

Timothy prices at the principal markets are about $1.50 per ton lower on an average than at the corresponding time last year, but have advanced about $2 per ton during the present crop year. Alfalfa prices have advanced about $2.50 per ton during the marketing season but are on practically the same level as April 1, 1922.

Stocks of hay in consuming channels are about normal and there is small prospect of any material increase in the demand, the department says.

Prices

Detroit—No. 1 timothy, $16@-16.50; standard, $15.50@16; light mixed, $15.50@16; No. 2, timothy, $14@15; No. 1 clover mixed, $13-@14; No. 1 clover, $13@14.

Chicago—No. 1 timothy, $21@-22; No. 2 timothy $18@20; No. 1 llight cllover mixed, $19@21; No. 1 clover, $15@16; No. 2, $13@14.

New York—No. 1 timothy, $27; No 2 light clover mixed, $23@25; No. 2 timothy, $25@26.

Prices one year ago—Detroit, No. 1 timothy, $20@21; standard, $19-@20; No. 2 timothy, $17@19; No. 1 light mixed, $19@20; No. 1 clover mixed, $16@17. Alfalfa—Chicago, $16@23; Detroit, $11@15.

PRITCHARD'S WEATHER FORECAST
INTERPRETED BY THE STARS

Week of April 15

This week begins with strong winds and rains in Michigan. Temperatures will average about normal or a little above until about Tuesday.

During the middle days of the week we expect generally fair, sunshiny weather, good for most growing crops and the seeds already planted. Temperatures will not be very low.

At the end of the week weather will be warmer with an increase of wind.

Week of April 22

The very beginning of this week will be sunshiny in Michigan but during Monday or Tuesday rain will set in which will be heavy in sections of the state before Thursday. Winds will be of gale force.

Stormy conditions through the middle part of the week will hinder spring seeding but will benefit pasture land.

Temperatures will fall below the normal about the 25th and for the next two or three days the ground will average cold and wet. By the end of the week temperatures will be rapidly rising bringing assurances that next week will average warmer than usual.

Peas and Beans

Believing the average temperature will be below normal for the season, we would say that peas would have a pretty good year. Canada field peas should do well in Michigan this year by planting now but soys and cow peas will be better if planted a little later than usual—say about the end of May.

Planting time for beans this year will be backward, cold and wet on the average. Conditions will remain wet during June and part of July, but as the temperature is expected to average above normal for the three weeks centering on the solstice date, germination and growth, once started will be rapid. Late plantings will be successful.

Owners Say, Hupmobile Costs are Lowest

The most amazing thing about the Hupmobile has yet to be learned by the vast majority of motor car buyers and owners.

That is the fact that our owners' carefully kept cost-records, and their letters to us, strongly indicate that the Hupmobile cost of operation and maintenance is lowest among motor cars.

This is particularly true when the records cover a period of years.

What we are repeating here is the actual experience of Hupmobile fleet-owners, and of individual Hupmobile owners, who previously operated cars generally conceded to be among the most economical five manufactured,—and who have formed their judgments on the sound basis of cost-per-mile.

Hupp Motor Car Corporation, Detroit, Michigan

Hupmobile

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FARM AND LANDS

FOR SALE—800 ACRES SANDY CLAY Loam Stump Land, easily cleared, in English speaking settlement. 10 miles from Onaway with school privileges. Will break this tract into 400-240 an 160 acres. $10.00 to $12.00 per acre. $1.00 an acre down, balance long time. Balance can be paid out of annual Hardigan or Grimms certified seed crop at option of purchaser —if grown according to the instrucions from Michigan Agricultural College. No finer Alfalfa, June or Sweet Clover soil in Michigan. Our Alfalfa yields as high as 8 bushels per acre. Sheep is our most profitable live stock year in and year out. Here is a combination hard to better. Small clearing, building and shed on 400 acre tract. First payment loaned to settler 5 years at 6 per cent. secured on live stock when winter feed and shelter is provided. JOHN G. KRAUTH, Millersburg, Presque Isle County, Michigan.

80-ACRE MICHIGAN FARM, 1000 APPLES and Cherries, Cow, cream separator, full implements, tools included if taken now; pleasant, healthful surroundings; in sight city; machine-worked fields, spring-watered pasture, woodlot; excellent orchard; attractive 7-room house, good barns. Owner called away $3,000 takes all, part cash. Details page 33 Illus. Catalog Bargains. Copy free. STOUT FARM AGENCY, 427KJ Marquette Bldg., Chicago, Ill.

FARM FOR RENT OR TRADE—TESSMAN Farm, 120 acres near Gratiot, on Quick Road, Chesterfield 10 room house, 2 barns, windmill, orchard, etc. Will subdivide 10 acre tract. Rent $600 year. GEORGE GIES, owner, 311 Majestic Bldg., Detroit, Mich, Phone Cherry 0065,

160-ACRE FARM AT A BARGAIN—GOOD buildings, 60 acres clear, all fenced. ¾ mile from school. FRANK GLAWE, Ocqueoc, Mich., Presque Isle County.

80 ACRES, GOOD HOUSE, 40 FARM LAND 40 swamp. Grass and water good for muskrat raising. Rent or sell. Inquire BOX 232, care Michigan Business Farmer.

HELP WANTED MALE

WANTED—SINGLE MAN FOR YEAR. Prefer some feeding experience, good wages and good home. State wages in first letter. Position open April 1st. CHAS. HAUCH, Whittemore, Michigan.

WANTED POSITION—OUR SUCCESSFUL farm manager, 36 years of age, widower, no Children. This man is honest, clean and a hard intelligent worker. Graduate U. of Wis. and life experience as farmer. Address him, HERMAN R. FRANZEN, Akron, Lancaster County, Pa.

GENERAL

LET US TAN YOUR HIDE—COW AND Horse hides for fur coats and Robes. Cow and Steer hides into Harness or Sole Leather. Catalog on request. We repair and remodel worn furs; estimates furnished. THE CROSBY FRISIAN FUR CO., Rochester, N. Y.

CREAMERY SUPPLIES—ONE 400-GALLON Wizard Agitator or Pasturizer, One 6 H. P. steam engine, One 24 bottle steam tester, One starter incubator. H. PRINCE, Box 1, Lucas, Michigan.

SICILIAN BUTTERCUPS, No. 1 GOOD LAYERS, good table fowl; eggs $1.50 per 15. White Rocks $1.50 per 15. R. I. Reds $1.25 per 15. Chicks 12 and 16 cents each. IDA S. PRAUSE, Maple City, Michigan.

BEE SUPPLIES—SAVE 20% BY ORDERING direct from the factory. Reliability guaranteed. Get our prices and catalog. CHAS. MONDENG, 165 Cedar Lake Rd, Minneapolis, Minn.

BE A FINGER PRINT EXPERT. DEMAND increasing. Write for special free offer. AMERICAN FINGER PRINT SYSTEM, 1966 Broadway, New York.

CAPONS BY NEW SYSTEM. SUCCESS ASSURED. Book ten cents. SIMPLEX PRODUCTS CO., 8-R South Dearborn St., Chicago.

PLANTS AND SEEDS

STRAWBERRY PLANTS FOR SALE. SENATOR Dunlap, Gibson and Dr. Burrill, 60 cts. per hundred, $4.00 per thousand. Postpaid. Progressive Everbearers, $1.00 per hundred. Postpaid. Cuthbert Red Raspberries, $1.00 per hundred, $9.00 per thousand. Postpaid. ROBERT J. DeGURSE, Ovid, Mich.

SPECIAL OFFER—300 STRAWBERRY Plants. 150 Senator Dunlap, 150 Warfields $2.00 postpaid. Also Raspberry plants. Prices reasonable. 17 years experience. Satisfaction guaranteed. Catalog free. Write today. J. E. HAMPTON & SON, 20, Bangor, Michigan.

STRAWBERRY PLANTS FOR SALE—SEN. Dunlap $3.50 per 1000. Gibson's $4.50 per M. Five other varieties. Also Raspberry plants. Price list free. FRED STANLEY, 124 Main St. Bangor, Michigan.

CERTIFIED COLLEGE WONDER OATS. Purity 99.7%, germination 92, test weight 37 pounds. Write for prices. HOMER GOULETT, Kawkawlin, Michigan.

FANCY MIXED COLOR GLADIOLA BULBS Produces large flowers. 1½ to 2 inches 25c doz.; 5 doz, $1.00. ¾ to 1¼ half price. Postage paid. MARTHA OSMOND, Vernon Michigan.

SEED POTATOES--CERTIFIED PETOSKEYS Northern grown. L. D. DUNLAP, Lupton, Mich.

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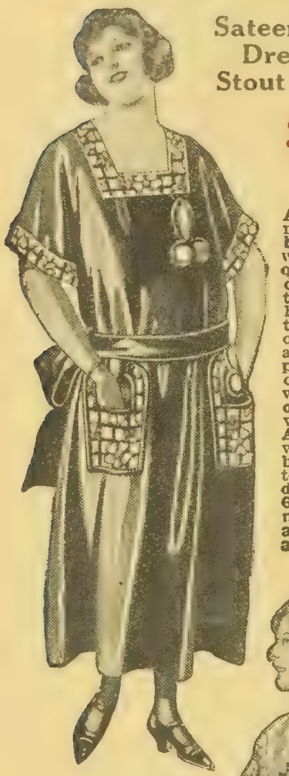
Send No Money--Pay On Arrival

Every item on this page is a big money-saver. Each is typical of the wonderful bargains that have made Sharood famous as offering constantly the greatest values in the United States. For here are the season's very latest fashions—the newest styles—in honest merchandise at honest prices. Spring is on the way. It's time to spruce up. You'll save the most money by ordering everything from Sharood.

Don't send one cent. Just a letter or postcard brings you any of these smashed price bargains. Merely give name and number of each article you want. Also state size and write your name and address plainly to avoid delay. Pay nothing till goods arrive—then only the amazing bargain price and postage. If you are not delighted with your bargain return the goods and your money will be cheerfully refunded. **ORDER NOW.**

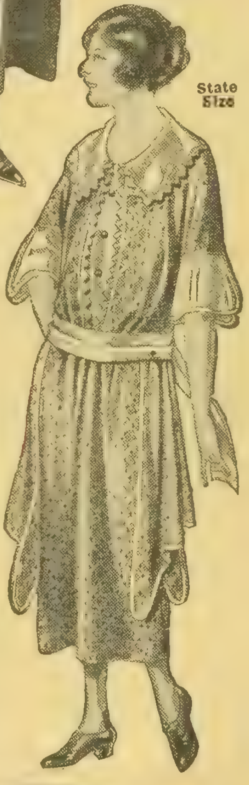


Sateen House Dress For Stout Women

$1.98

A very attractive model of lustrous **black sateen** for women who require extra size dresses. This pretty house dress has attractive cretonne trimming on collar, cuffs and flower basket pockets. Also the charming applique work in harmonious colors on waist and pockets. A garment that will give service beside. Sizes 39 to 53 Bust. **Order by No. 96E-6054. Send no money. Pay $1.98 and postage on arrival.**

State size wanted

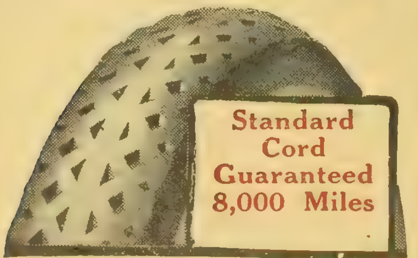


State Size

Voile Dress Bargain

$1.98

Very attractive voile dress with organdy trimming. Beautiful figured voile with new side panels. Youthful organdy collars and and cuffs. Also pretty vestee insert of organdy and and neat organdy sash. Misses' sizes 14 to 20. 32 to 38 Bust. Women's sizes 34 to 46. Be sure to state size. **Order Navy by No. 96E6712. Order Copen by No. 96-E6713. Order Rose by No. 96E-6714. Order Lavender by No. 96-E6715. Send no money. Pay $1.98 and postage on arrival.**



Sharood's Standard Cords

Guaranteed 8,000 miles; 30x3½ size.......... $8.98

This 8,000-mile guaranteed Sharood's Standard Cord Tire is made especially for the Ford, Chevrolet and all other cars using 30x3½-inch sizes. Built just like the Oversized Cords but costs much less. Same sturdy construction but not oversized. Wonderfully serviceable and a big bargain. **Order by No. 96D4090. Send no money. Pay $8.98 and postage on arrival.**

Fabric Tires, 30x3 Size, $5.98.

Fresh stock of heavy, non-skid tires of live rubber. Generously oversize. 6,000 guaranteed, but often give 8,000 to 10,000 miles. Choice of non-skid or rib tread in 30x3 sizes. Others are non-skid. Pay only bargain price listed below and postage on arrival.

BARGAIN PRICE LIST

96D4040—30x3	$5.98
96D4041—30x3½	6.98
96D4042—32x3½	9.39
96D4043—31x4	9.98
96D4044—30x4	11.98
96D4045—33x4	12.28
96D4046—34x4	12.95

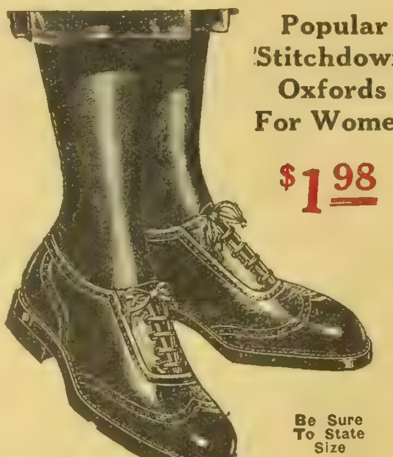
GUARANTEED INNER TUBES

Now is your chance to buy extra thick, live rubber inner tubes at a big saving. Don't wait for tube prices to go up. How many shall we send? **Pay only bargain price and postage on arrival.**

Pay only bargain price listed below and postage on arrival.

BARGAIN PRICE LIST

96D4020—30x3	$1.09
96D4021—30x3½	1.25
96D4022—32x3½	1.39
96D4023—31x4	1.69
96D4024—32x4	1.75
96D4025—33x4	1.79
96D4026—34x4	1.79



Popular Stitchdown Oxfords For Women

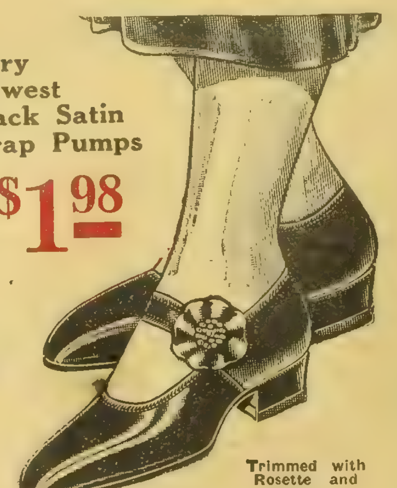
$1.98

Be Sure To State Size

Classy stitchdown Oxfords for women. Wonderfully comfortable and stylish. Uppers of Patent leather or dark brown calf. Smooth leather insole. Flexible stitch-down oak outsoles. Low rubber heels. Sizes 2½ to 8. Wide widths. **Order Brown by No. 96A263. Send no money. Pay only $1.98 and postage on arrival. Order patent leather by No. 96A264. Send no money. Pay $2.48 and postage on arrival.**

Very Newest Black Satin Strap Pumps

$1.98



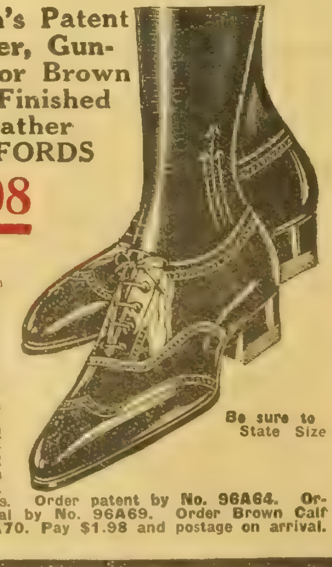
Give Size

Trimmed with Rosette and Ornament

Women's black satin dress pump, one-strap, one-button style with fancy rosette and ornament on strap. Plain vamp with medium toe and close edge sole with low rubber heels. Genuine oak soles. A dressy, stylish new spring fashion that will be all the rage among the best dressed women. Sizes 2½ to 8, wide widths. **Order by No. 96-A56. Send no money. Pay only $1.98 and postage on arrival.**

Women's Patent Leather, Gun-Metal or Brown Calf Finished Leather OXFORDS

$1.98



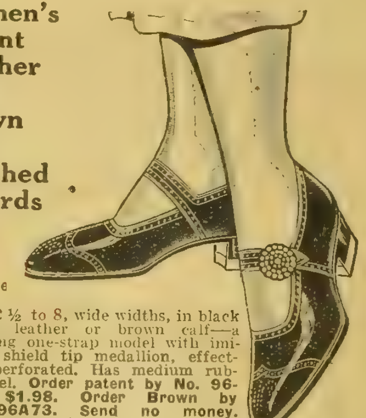
Be sure to State Size

Made with imitation shield tip and medallion perforated vamp. perforated lacestay and circular foxing. Has medium rubber heel and medium pointed toe. Sizes 2½ to 8. Wide widths. **Order patent by No. 96A64. Order gunmetal by No. 96A69. Order Brown Calf by No. 96A70. Pay $1.98 and postage on arrival.**

Women's Patent Leather or Brown Calf Finished Oxfords

$1.98

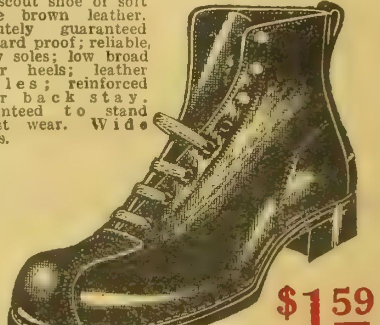
Give Size



Sizes 2½ to 8, wide widths, in black patent leather or brown calf—a stunning one-strap model with imitation shield tip medallion, effectively perforated. Has medium rubber heel. **Order patent by No. 96-A72, $1.98. Order Brown by No. 96A73. Send no money. Pay $1.98 and postage on arrival.**

Men's, Boys' and Little Boys' Scout Shoes

Fine scout shoe of soft pliable brown leather. Absolutely guaranteed barnyard proof; reliable, sturdy soles; low broad leather heels; leather insoles; reinforced leather back stay. Guaranteed to stand hardest wear. Wide widths.



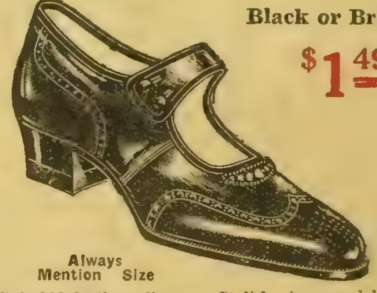
$1.59 UP

Order Men's size 6 to 12 by No. 96A733. Send no money. Pay $1.98 and postage on arrival Order little boys' sizes, 9 to 13½, by No. 96A-565. Price $1.59. Order big boys' sizes 1 to 6 by No. 96A564. Price $1.79. Pay bargain price and postage on arrival.

Women's Soft Kid Slippers

Black or Brown

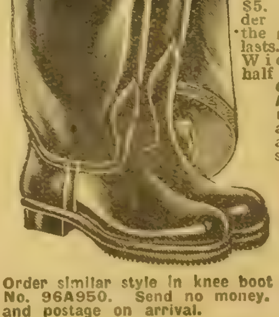
$1.49



Always Mention Size

Soft kid leather slipper. Stylish strap model with two buttons. Medium round toe with medallion tip and perforated wing tip and quarter. Cushion insoles. Medium rubber heels. Solid oak leather soles. A bargain at our slashed prices. Sizes 2½ to 8. Wide widths. **Order black by No. 96A228. Order brown by No. 96A229. Send no money. Pay $1.49 and postage on arrival.**

Men's Boot Bargains



Don't fail to make this big saving on Men's pure gum hip boots; friction lined; heavy corrugated sole and heel; guaranteed first quality. Made of the very best rubber. Usually sells at $5. Be sure to order your pair while the great saving offer lasts. Sizes 7 to 12 Wide widths. No half sizes.

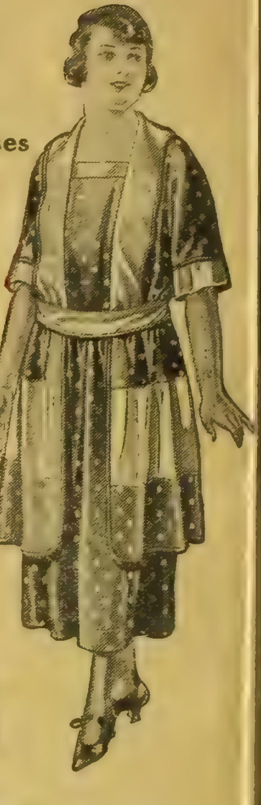
Order by No. 96-A949. Send no money. Pay $2.98 and postage on arrival. State size wanted.

$2.98

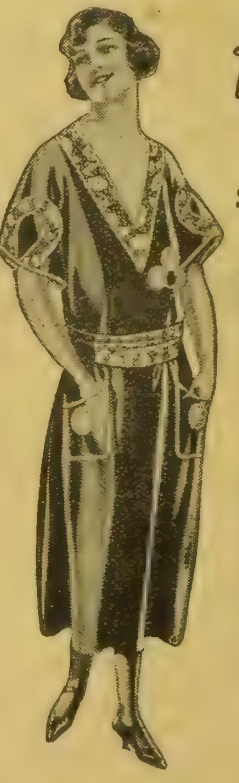
Order similar style in knee boot sizes 6 to 12 by No. 96A950. Send no money. Pay only $2.98 and postage on arrival.

Women's "Stylish Stout" Model Voile Dresses

$2.98



A very beautiful model in "stout" voile dress of graceful, slenderizing lines for stout women. Made of good quality polka dot voile with tunic over-skirt, attractively trimmed with pretty organdy collar and cuffs. Sizes 39 to 53 Bust. State size wanted. Choice of colors. **Order black by No. 96E6811. Order Navy, No. 96E6812. Order brown, No. 96E-6813. Send no money. Pay only $2.98 and postage on arrival.**



Pretty Sateen Dress Apron

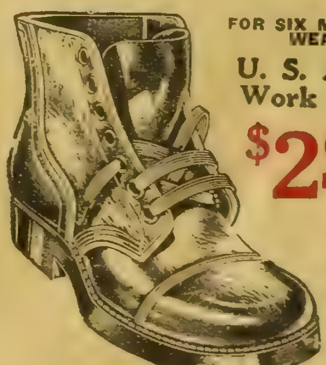
Another shining ex ample of Sharoo super-bargains. Sen and see for yoursel Order at our ris —not yours.

$1.69

Splendid qualit black twill sate which wears wond fully. Graceful neck, sleeves a belt trimmed wit gay colored cretonn Pockets finished w crepe applique edg with piping. Siz small, medium large. **Order by N 96E6001. Send money. Pay on $1.69 and posta on arrival.**

State Size

GUARANTEED



FOR SIX MONTHS WEAR

U. S. Army Work Shoe

$2.69 UP

Men! Don't lose a moment in ordering this w derful brown work shoe. It is made of leather near waterproof as can be made—solid lea through and through with full grain leather pers, guaranteed to wear six months. Easily wo $5.00. Two full, heavy double soles, sewed a nailed for greater strength. Extra wide, full lea er counter, riveted to prevent ripping. Sizes 7 11, wide widths **Order by No. 96A700. Send money. Pay $2.98 and postage on arrival.**

Boys' Guaranteed Shoes

Six months' guarantee

Two full green chrome waterproof leather so solid leather heels. Munson army type. Ba yard acid-proof. Sizes 1 to 5½. Wide wid State size wanted. Send no money. **Order No. 96A550. Pay $2.69 and postage on arri**

Be Sure to Mention All Sizes, Colors, etc., and Send All Orders From This Page Direct to **SHAROOD CO.** Dept. 96 MINNEAPOLIS MINNESOTA

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The Michigan BUSINESS FARMER

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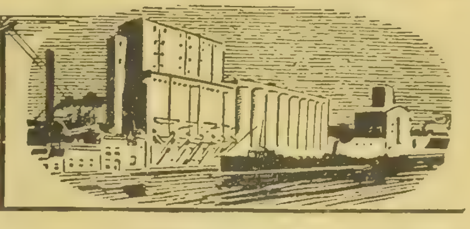

VOL. X, No. 18 SATURDAY, APRIL 28, 1923 TERMS: TWO YEARS $1 60c PER YEAR—5 YRS. $2

UNIVERSITY OF ILLINOIS
APR 30

Three Partners of Prosperity

Read in this issue: "What the Present Legislature has Accomplished"—"New York Dairy League Sets Pace for Michigan"—"Are You Protecting the Health of Your Family?"—"U. S. Weather Bureau Explodes Theory that Man Can Cause Rainfall."

Ideal Park where E-J Workers and their families enjoy out-door sports

Our way of saving you money on Boys' and Girls' shoes

Because from the first, the best workers, the best material and the best workmanship were our standards, everybody wanted our shoes. The result is that now we have to make 32,500,000 pairs a year to supply the demand.

This quantity production has brought down manufacturing costs to us, prices to dealers and prices to you. *Quality stays up!* We keep it there. We take pride in our work and always try to make it better. People call us the "smiling shoemakers."

Why?—Our factories are fine, our homes attractive. We have libraries, playgrounds, medical attention without charge when we are sick. We share in the profits of our work. Isn't it natural our work should be better? We are sure you will think so with the first pair of E-J's you buy for your children.

332 of these machines cut soles for E-J shoes.

The E-J Workers

At any dealer's with an E-J sign in the window. Boys' and girls' shoes at economy prices

ENDICOTT-JOHNSON SHOES

Made With Smiles

4 TIMES Around the World with ONE OILING

100,000 Miles Without Stopping for Oil

An inventor who could develop an automobile, a railroad car or any other conveyance on wheels which would perform such a feat would be considered a wonder. But such is the record of regular accomplishment by the Auto-oiled Aermotor during the past eight years in pumping water.

Did you ever stop to think how many revolutions the wheel of a windmill makes? If the wheel of an Aermotor should roll along the surface of the ground at the same speed that it makes when pumping water it would encircle the world in 90 days, or would go four times around in a year. It would travel on an average 275 miles per day or about 30 miles per hour for 9 hours each day. An automobile which keeps up that pace day after day needs a thorough oiling at least once a week. Isn't it marvelous, then, that a windmill has been made which will go 50 times as long as the best automobile with one oiling?

The **Auto-oiled Aermotor** after 8 full years of service in every part of the world has proven its ability to run and give the most reliable service with one oiling a year. The double gears, and all moving parts, are entirely enclosed and flooded with oil all the time. It gives more service with less attention than any other piece of machinery on the farm. To get everlasting wind-mill satisfaction buy the Auto-oiled Aermotor, the most efficient windmill that has ever been made.

For full information write **AERMOTOR CO.** Chicago Kansas City Dallas Minneapolis Des Moines Oakland

Collie Puppies

Either males or spayed females, pedigree with each puppy. Father imported and mother on one of the largest stock farms in Michigan. Wonderful worker. Puppies guaranteed.

DR. W. AUSTIN EWALT, Mt. Clemens, Mich.

GENERAL

BEE SUPPLIES—SAVE 20% BY ORDERing direct from the factory. Reliability guaranteed. Get our prices and catalog. CHAS. MONDENG, 165 Cedar Lake Rd. Minneapolis, Minn.

BE A FINGER PRINT EXPERT. DEMAND increasing. Write for special free offer. AMERICAN FINGER PRINT SYSTEM, 1966 Broadway, New York.

PRINTED STATIONERY, 200 SHEETS, 100 envelope with your name and address on both, $1.00. THE BENTE PRINT SHOP, Kalamazoo, Michigan.

CAPONS BY NEW SYSTEM. SUCCESS ASsured. Book ten cents. SIMPLEX PRODUCTS CO., 8-R South Dearborn St., Chicago.

LET US TAN YOUR HIDE—COW AND Horse hides for fur coats and Robes. Cow and Steer hides into Harness or Sole Leather. Catalog on request. We repair and remodel worn furs; estimates furnished. THE CROSBY FRISIAN FUR CO., Rochester, N. Y.

FOR SALE: 8 FT. CEDAR FENCE POSTS, 4 in. tops No. 2 grade, 20c each, picked up at our yard. BARNES WIRE FENCE COMPANY, 1930 Ferry Park Avenue, Detroit, Michigan.

GOVERNMENT NEEDS RAILWAY MAIL Clerks, $133 to $192 month. Write for free specimen questions. COLUMBUS INSTITUTE, 0-4. Columbus, Ohio.

WHEN WRITING TO ADVERTISERS PLEASE MENTION MICHIGAN BUSINESS FARMER

Current Agricultural News

FRIDAY PREDICTS PROSPEROUS YEAR FOR FARMER

CONSIDERABLE damage done to fruit and truck by freezing during month," a statement from the bureau of economics, U. S. Department of Agriculture, concerning the crop situation in the southern states, bears out the prediction of President David Friday, of M. A. C., that Michigan is due for an unprecedented period of agricultural prosperity.

"From a purely selfish standpoint," declared President Friday, "the recent frosts in the southern states have done more to guarantee good crop prices for Michigan producers than any other factor."

He stated that Michigan Agricultural College would not have to conduct an extensive research program in agricultural marketing for the next year, inasmuch as the farmers could find a ready market for their products at prices far exceeding those of any year since 1919.

"It will be a banner year for the growers," he affirmed, "and they can thank the frost for it, almost entirely."

BIG REDUCTION IN POTATO ACREAGE

A REPORT of special interest to commercial potato growers has just been made by the statisticians of the U. S. Bureau of Agricultural Economics in the leading potato states. By an exchange of this information, L, Whitney Watkins, Commissioner of Agriculture and Verne H. Church, Agricultural Statistician for Michigan, have been able to make a report on the intentions of potato growers with respect to their operations in 1923, in Michigan and competing potato states.

There is to be a decreased acreage in all principal potato states, but the market decrease will occur in the western states where acute car shortage prevented early moving of the crop, and where the low prevailing prices and high freight rates have made it unprofitable to market at all in many sections. Colorado expects to reduce its acreage 20 per cent; Idaho, 22 per cent; North Dakota, 25 per cent; and South Dakota, Nebraska and New Jersey, 15 per cent. These are the states that showed the greatest increases in acreage last year, and this report shows the general tendency to return to normal.

Minnesota's statistician estimates a ten per cent decrease, Wisconsin and New York will decrease their plantings to the extent of six per cent. Michigan eight per cent, Maine seven per cent and Virginia nine per cent.

The eastern states were able to clean up their last year's crop fairly well and if they can finance their fertilizer purchases satisfactorily will decrease their acreages only a few per cent. In the central states like Michgian, the increased acreage last year was principally in the counties bordering on the main commercial districts rather than on the farms of large growers. The discouraging prices at which many new growers sold will cause some drop out this year entirely or to reduce their acreage.

The reductions indicated will bring the acreage close to, or slightly below that of two years ago. With a normal yield, a crop sufficient for the needs of the country should be produced from that area. Such a crop would not leave a large surplus to force the price down below the cost of production, as was the case in 1922. With the tendency toward the increased use of certified seed and suitable commercial fertilizers, better average yields per acre should be obtained.

M. A. C. GETS SUGAR BEET TEST STATION

THE federal sugar beet experiment station formerly located at Blissfield, Michigan, has been transferred to East Lansing under a new cooperative arrangement whereby the U. S. Department of Agriculture and the college will work together in joint sugar beet investigation work, according to announcement made here this week.

Important developments in plant breeding and experimental work of value to the sugar beet industry of the state will be undertaken by the new station. Prof. F. A. Spragg, famous plant breeder with the M. A. C. crops department, and his assistant, E. E. Down, will cooperate with the federal workers in extensive projects and cultural investigations.

Michigan ranks third among the states of the country in sugar beet production, and an effort will be made by the college crops department, to whom the Blissfield equipment has already been turned over, to develop the strongest possible sugar beet work in the state.

PLANT LESS WHEAT THAN LAST YEAR

A SPECIAL inquiry was made this year in 11 states relative to what farmers intended to plant. This was in the nature of an experiment to determine whether such an inquiry would be for practical use each year in appraising farmers of the situation in other sections of the country. The results exceeded expectations and the U. S. Bureau of Agricultural Economics believes the information will be helpful to farmers in planning their season's work. The following report was issued by L. Whitney Watkins, State Commissioner of Agriculture, and Verne H. Church, U. S. Agricultural Statistician, on the subject.

For the United States, the acreage of the principal crops intended to be planted, in percentage of last year's acreage grown for harvest is as follows: spring wheat, 94.5; corn, 102.6; oats, 102.6; barley, 105.7; flax, 189; potatoes, 90.9.

In Michigan, the tendency is for an increase of principal crops except spring wheat and potatoes. The spring wheat acreage is a small factor and has decreased materially in late years, but a further decrease of 22 per cent is indicated by the repors. The decrease in potatoes is reported as eight per cent, or slightly more than the increased plantings made last year, An increase of one per cent in corn, seven per cent in oats and 22 per cent in barley is reported, but the backward spring and shortage of labor will probably prevent much of this intended increase. There is much interest in beans, and reporters estimated an increase of 17 per cent over the large acreage of last year. The marked increase in the price offered for sugar beets has stimulated interest in that crop and a gain of 56 per cent over last year is anticipated, last season's acreage being far below normal.

M. A. C. TO HOLD FIRST HORSE SHOW

"DYNAMITING people out of cars onto horses," will be the slogan of the first annual horse show, to be held at East Lansing, May 30. The memorial day fete, the first ever planned here is sponsored by the Reserve Officers' training corps of the Michigan Agriculural college.

Captain William C. Chase, cavalry officer in the regular army, is directly in charge of all arrangements. He is assisted by the other cavalry officers detailed to the M. A. C. military detachment of R. O. T. C.

Many classes of events are being arranged: The charger class, open to all comers; cadet jumping, an exhibition of riding and jumping to be staged by the military cadets of the college; open jump; the ladies' mount, and the horsemanship class, for cadets only. It is expected the 117th field artillery, of Lansing, will enter one gun from each battery in the exhibition riding.

Cavalry exhibitions will be staged throughout the afternoon, and bands will give a continuous concert.

Cups and ribbons are to be awarded for the evarious events. The cups will be donated by individuals in Lansing, the M. A. C. Officers' club and the college military unit.

Dealing with birds and their habits, an English naturalist says that among common British birds the one which built the most wonderful and the most beautiful nest was the long tailed tit, which used nine hundred feathers to line its nest.

SATURDAY
APRIL 28th.
1923

VOL. X. NO. 18

Being absolutely independent our columns are open for the discussion of any subject pertaining to the farming business.

"Hew to the line, let the chips fall where they may!"

The Michigan
BUSINESS FARMER

"The Only Farm Magazine Owned and Edited in Michigan"

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What the Present Legislature Has Accomplished

Of the Many Bills Proposed of Interest to Michigan Agriculture, Some Have Passed, Some Have Been Vetoed and Some are Marking Time Awaiting Support from Home

By STANLEY M. POWELL

ELEVATOR EXCHANGE BACKS CASE BILL

SENATE BILL No. 308 introduced by Senator Bernie L. Case, ordered printed, and referred to the Committee on Agriculture. To prevent unlawful discrimination in the purchase of potatoes and to provide punishment for the same.

> The People of the State of Michigan enact. Any person, firm, co-partnership, corporation or association engaged in the business of buying potatoes for the purpose of resale, who shall, with the intention of creating a monopoly or destroying the business of a competitor, discriminate between different sections, localities, communities or cities of this State, by purchasing such potatoes at a higher rate or price in one locality than is paid for potatoes of like grade and quality by said person, firm, co-partnership or corporation in any other locality, after making due allowance for the difference, if any, in the actual cost of transportation, shall be deemed guilty of unfair discrimination and upon conviction thereof shall be punished by a fine not to exceed five hundred dollars or by imprisonment in the county jail not to exceed six months.

WHEREAS, the farmers' co-operative marketing movement is of the utmost importance to the greatest number of the people in Michigan including both farmers and consumers, and

WHEREAS, unjust discrimination on the part of competitors purchasing agricultural products at several different points in the state constitutes one of the most serious handicaps to the farmers' co-operative marketing movement.

BE IT RESOLVED, that the board of directors of the Michigan Elevator Exchange, representing one hundred and seven local co-operative elevators and associations serving 2,500 farmers, hereby requests the members of the legislature to give the Senate Bill No. 308 introduced by Bernie L. Case, their support.

BE IT FURTHER RESOLVED, that the agricultural committees of both houses be requested to report the bill out as promptly as possible.

The secretary of the Michigan Elevator Exchange is hereby instructed to forward copies of this resolution to the members of of the said commitees. Signed: W. E. Phillips, Decatur; Carl Martin, Coldwater; M. Shisler, Caledonia; Jas. Eardley, Rockford; Geo. McCalla, Ypsilanti; John Nicholson, Marlette; H. D. Horton, Kinde, Board of Directors, Michigan Elevator Exchange, at regular meeting April 18, 1923.

WHILE the present session of the Michigan State Legislature is being accused by the press and public of enacting the least constructive legislature of any session in history, it is refreshing to review its accomplishments and to note the friendly attitude shown toward Michigan agriculture. Perhaps this is due to the fact that many of the Senators and Representatives are farmers themselves, perhaps it is due to the fact that Michigan farmers are today better organized than ever before and their organizations are co-operating in a splendid way, and perhaps it may be due to the fact that the public is realizing that there can be no stable social conditions or real prosperity until agriculture is placed on a sound financial basis:

The law-makers seem to be responsive to the general public demand for strict governmental economy and the adoption of a pay-as-you-go policy. Appropriation requests are being cut to the limit and no new or radical expenditures have been sanctioned. A bill has been passed which will suspend for two years at least the payment of state rewards on highways.

Corporation Tax Extended

It is generally agreed that there is great injustice in the present distribution of the taxation burden in Michigan and the Legislature has been carefully considering various proposals looking to a more equitable solution of this perplexing problem. One of the first moves along this line was an amendment to the corporation tax law which will lower the minimum from $50 to $10 and considerably raise the maximum above the present limit of $10,000. The exact maximum is yet a subject of disagreement between the Senate and the House. The Senate placed the figure at $50,000 while the House wishes to assess the large coroporations still more and would place the maximum figure at $450,000. Both branches have agreed to reduce the rate from 3½ mills to 2½ mills on the capital stock and surplus of the coroporation.

The Byrum Income Tax

Perhaps the most far reaching of all the proposed taxation changes now being considered is Representative Byrum's state income tax. This measure would provide a straight 4 per cent tax on all personal incomes in Michigan after exempting $1,000 for a single person, $2,000 for a married and $400 for each child under 18 years, or other dependent. This tax, which would yield $16,000,000 or $18,000,000 annually would entirely replace the general property tax for state purposes. It would thus shift the burden of state support from real estate and personal property which is already struggling under the heavy load of county, township, city, village, school and highway support and would place it upon those having comfortable incomes many of whom are not now paying any taxes, except perhaps the federal income taxes.

During the past week this state income tax measure has been passed by the House of Representatives and is now being considered in the Senate. Enemies of the income tax are, of course, extremely active and if the measure is to receive support in the Senate the members of that body must be assured that here is a strong demand for it in their local communities. When this bill was up in the House it was agreed by all that it was the best state income tax which they had ever studied and that its enactment into the laws of Michigan would be a credit to the state.

Debate over this bill chiefly centered around Rep. Geo. Watson's proposal to attach a referendum clause to the bill which would require its submission to the voters before becoming effective. This motion was finally defeated and probably this fact lost many votes for the bill, but it was finally passed with votes to spare.

Many representatives who were personally strongly in favor of a state income tax voted against the Byrum bill because the voters in their home districts had voted down the state income tax constitutional amendment at the last general election. Many of these representatives admitted that the voters in their districts were mislead as to just how the income tax would effect them, and so voted against it when in reality they would have been greatly benefited by its passage. However they did not care to place themselves in a position of seeming to know more about what was good for the voters than the voters themselves knew.

Rep. Nevins pointed out that there were two or three voters to each tax payer in Michigan and so it would be hard to get the salaried men and those securing their income from investments in tangible property to vote an income tax upon themselves. He felt that it was up to the legislature to decide this matter directly. Rep. John Espie of Clinton county called attention to the large proportion of the wealth and earning power of the state which is not contributing to its support, and declared, "this state cannot exist half taxed and half tax-free."

Rep. Byrum, father of the bill, in a masterly address urging the passage of his measure, called attention to the general sentiment which has developed throughout the State calling for a reduction of the levy on general property and a redistribution of the burden of governmental support. He quoted official figures showing the increase in taxes during the last two decades and pointed out that an ever increasing proportion of the property of the State is unable to pay these taxes. He declared that this proposed income tax would not be burdensome on any individual, but would tax all in proportion to their ability to pay and that it would produce about $18,000,000 annually, which would be sufficient to finance the State without any general property tax for this purpose.

He pointed ont that by making the general property tax a purely local matter it would encourage local economy, because high property taxes could not then be blamed on the action of the Legislature. Local economy is after all of first importance because 87 percent of all taxes are local and only 13 per cent go to the state.

Highway Funds Biggest Problem

Early in the present session it was realized that one of the biggest taxation problems of the state was the matter of raising funds for highway purposes. Not only did this require larger amounts for construction of new roads and the maintenance of roads already built, but there was also the matter of the interest and principal of the $32,000,000 of state highway bonds which had been issued and for which no arrangements had been made regarding final payment.

After thorough analysis of this situation it was decided by many of the leading law makers that a two cent gasoline tax would be the most workable and most equitable solution of this perplexing problem. In accordance with this decision the Warner two cent gasoline tax was passed through both the House and the Senate by substantial majorities. However, the Governor vetoed this bill and so the fight was lost for this session at least. The Senate now appears willing to submit to the Governor's desire for a weight tax on automobiles to bring in the needed increase in revenue.

Farmers Want Tax Commission

There is every indication that the Legislature will yield to the desires of the farmers' organizations of the state to retain the present state taxation commission. It was proposed to abolish this commission and create a state department of taxation to be controlled by one commissioner to be appointed by the governor at an annual salary of $6,000. It was openly rumored that it was the plan to fill this position with a Detroit man. In view of the great power which he would have over the assessment and equalization throughout the state it would certainly not be advantageous to the rural districts to centralize so much authority in regard to taxation in the hands of a Wayne County sympathizer. The bill never got out of the committee and we trust that it never will.

Covert Act May be Amended

Abuses of the Covert highway law led to a strong feeling among many people and some of the representatives that this law should be repealed. This moverment went so far that Rep. Peter Lennon of Genessee introduced a bill calling for the repeal of this measure. However, after thorough study of the situation it has been decided that the objectionable features of the law may be removed while some of its advantages may be retained. Consequently several amendments to safeguard the Covert act are now receiving consideration and will no doubt become law.

The Meggison Primary Bill

An equalization of the opportunity for securing a primary school education in all parts of the state is being sought through the passage of the Meggison bill providing for a new method of distributing the primary school interest fund. Under the present law this valuable state aid is apportioned directly in accordance with the school census of the several districts with no regard to the number of students attending school or to the ability of the district to support schools.

The Meggison bill which has already passed the House by a vote of 72 to 22 provides that the fund shall be distributed directly in proportion to the school census of the district, directly in proportion to the school attendance of children from that district and inversely in proportion to the equalized assessed valuation of the district. The enactment of this law will give the aid in proportion as it is needed and will be a great boon to the proper and more sparsely populated districts of the state where the valuation per school child is very low and where the rate for school purposes is consequently high at present. If this bill passes the Senate it will be, no doubt, the greatest advance in educational progress which has ever been made possible by action of the Michigan State Legislature.

(Continued on Page 10)

New York Dairy League Sets Pace For Michigan

Big distribution plant of the Dairymen's League Cooperative Association at Avenue B and 19th Street, New York City. This modern distribution plant located in the heart of the metropolis was purchased by the League and taken over on September 1, 1922. A large part of the pooled milk of the association goes direct to this plant in New York, from which it is delivered to the wholesale and retail trade. When they are not busy distributing milk the big trucks connected with this plant, are delivering cases of "Dairylea" evaporated milk, which is the brand name recently adopted by the association for this product.

How Seventy Thousand New York Dairymen Have Turned Salesmen and Are Putting Punch Into Cooperative Marketing

NEW YORK STATE furnishes the greater part of the raw milk consumed in America's first city. Michigan furnishes an even greater proportion of the milk used by America's fourth city. Our milk producers problems are therefore identical. Detroit and the other metropolitan cities of Michigan have sprung up in a decade. New York has had years of experience. The Business Farmer wants the Michigan milk producers to study and profit by what the New York Dairy League has accomplished. Correspondence from our readers on this subject is especially invited. —The Editor.

By DEWEY J. CARTER
Editor Dairymen's League News

NEW YORK CITY is quite used to waking up in the morning and finding its mental citadels under bombardment from the advertising batteries of some new kind of tooth paste, face powder, or chewing gum or even sometimes a new kind of food product. It has become a habit for New Yorkers to spend much of their time reading advertising signs in the subways, railroad stations, and newspapers. But New York woke up the other morning to find not only a new brand of food product before its eyes but a new brand put out by a new kind of business organization. It was advertising put out by 70,000 farmers, telling about a product as old as the hills and one that is on the tables of young and old in some form or other almost every day in the year; namely, milk and more specifically evaporated milk, on the market under the brand "Dairylea," the new trade name of the Dairymen's League Cooperative Association, Inc. Authorities say that it is the biggest and best food product campaign that New Yorkers have ever enjoyed.

The big gun in the great battery of outdoor signs of the League in New York is an animated electric sign at the north end of Longacre Square between Broadway and Seventh Avenue. Eleven so-called "high spots" illuminated at night make up the secondary battery while there are two hundred and sixty-five painted walls scattered throughout the length and breadth of Manhattan and Brooklyn. Of course, along with this is linked up a comprehensive campaign of advertising in the newspapers, magazines, subway trains, and retail stores. These 70,000 dairy farmers of New York State and vicinity who make up this giant marketing association have adopted the methods of big business to get their message to New Yorkers and they are succeeding.

Of course, along with this advertising the association has turned loose upon New York and Philadelphia a group of about forty high powered salesmen who have been selling this farmer brand of evaporated milk almost as fast as the association plants could make it.

Took Cow to Start Campaign

The first inkling that New York had that the dairy farmers of the League had something up their sleeves was when the association presented a fine Holstein cow to the Central Park animal farm. In his presentation speech, President G. W. Slocum of the League said that the association was giving this cow to the city because there was so many little boys and girls learning to drink good pure milk who did not know anything about how it was obtained. Dr. R. S. Copeland, at that time Health Commissioner of New York but later elected to the senate of the United States, who accepted "Dairylea", which by the way was the name of this cow, on behalf of the city, expressed his great joy and satisfaction at the appropriateness of the gift. New York newspapers and newspapers in many other parts of the country carried long stories about this gift of the League Farmers to the metropolis. Suffice to say that "Dairylea" has proved herself to be one of the best mixers in the park zoo and is rapidly becoming the most popular member of the animal family in the park.

This was the first time that the name "Dairylea" appeared in the New York papers but it has appeared many times since and the high quality of the farmer made evaporated milk which is being sold under this brand name is now going to many thousands of homes in New York and Philadelphia.

We can't enter into the details of the selling campaign here but there is certainly one feature of it that ought to be mentioned, and that is that the entire operation from the time the milk leaves the udder of the cow until it reaches the retailer's counter is in the control of the farmers association. Their dairies produce it. Their plants manufacture it. It leaves them for a time while it is being transported by railroad to New York but there the League's own trucks pick it up again and eventually deliver it at the door of the retailer. In other words, the farmers of this association, so far as New York is concerned, have constituted themselves producers, manufacturers, wholesalers, and salesmen. The result is that the association is receiving for its evaporated milk the full advertised price without any deduction for middlemen's services.

Dairymen's League plant at Carthage, N. Y. This building was formerly used as a factory but was entirely remodeled under the direction of the League's own engineering department. It is one of the best equipped shipping and manufacturing plants which the association owns. During the present season this plant is turning out over 1500 gallons per day of the popular League ice cream.

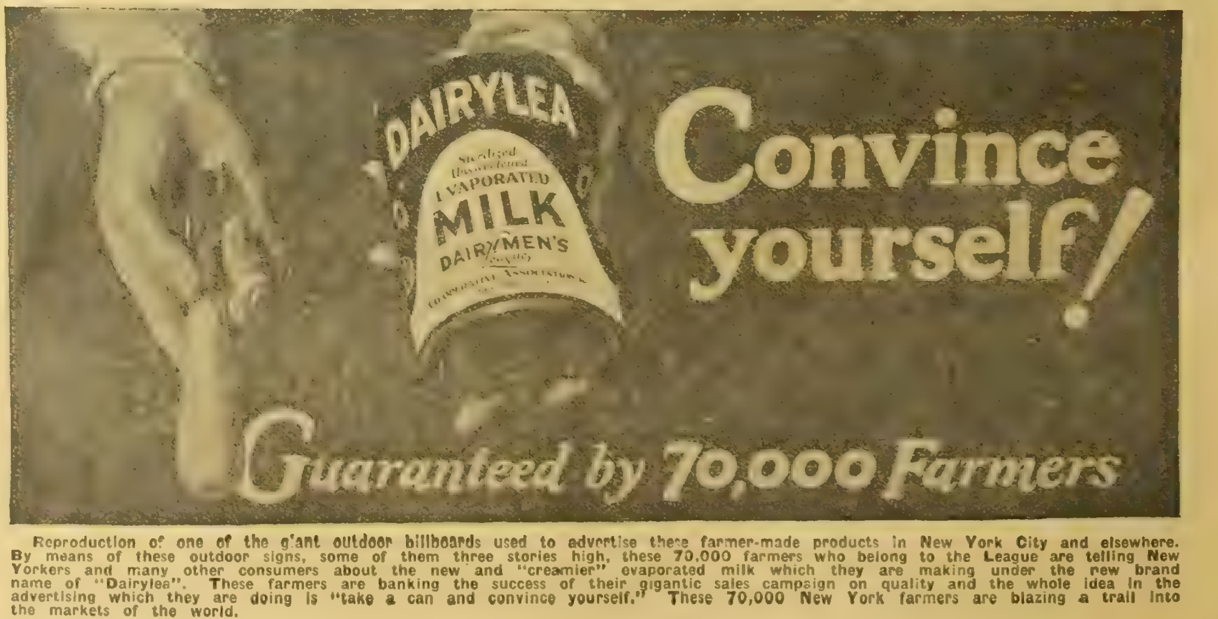
This advertising and selling campaign will gradually be extended to other large centers and over the entire eastern half of the United States. Nothing like it has ever been attempted by dairymen anywhere in the world. It is doubtful if any more businesslike merchandising campaign has ever been put on by any group of farmers anywhere.

It is evident that the League dairymen planned to do something big on a big scale and effective when they hired as sales and advertising director some few months ago Mr. S. Q. Grady, formerly acting in the same capacity with the Raisin Growers of California. Cooperative marketing of dairy products under a brand new name has been preached for some time but it remained for the New York State dairymen to achieve the first big results.

Farmer Made Ice Cream Too

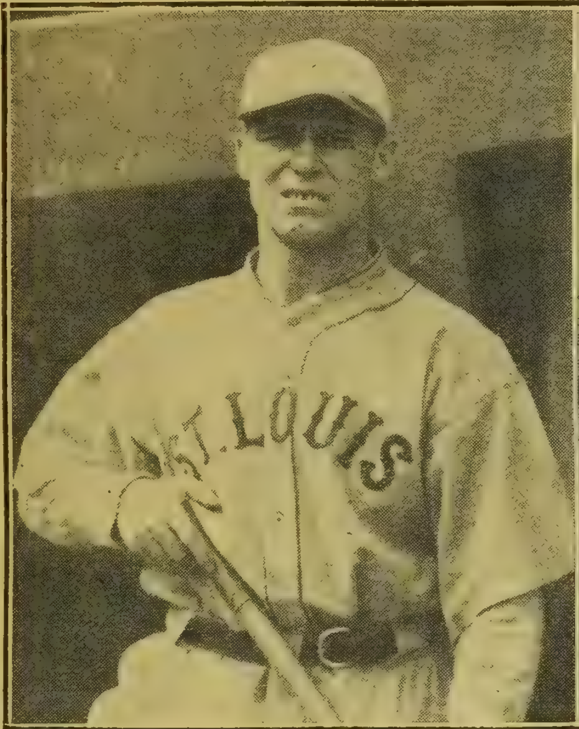
And this is not all. The League is anticipating great increases in its ice cream output during the approaching season. The three manufacturing plants of the association are so located that unfortunately League ice cream cannot be distributed to New York City but it will be distributed throughout a large portion of the state the same as last year. The selling of 430,000 gallons of League ice cream last season broke all first season records in the history of ice cream manufacturing. Its high quality was proclaimed everywhere. The pooling dairymen

(Continued on page 25.)

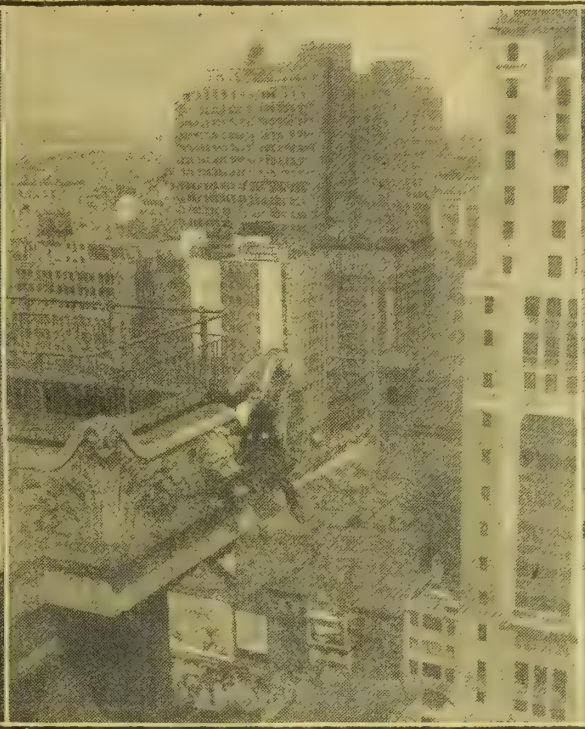


Reproduction of one of the giant outdoor billboards used to advertise these farmer-made products in New York City and elsewhere. By means of these outdoor signs, some of them three stories high, these 70,000 farmers who belong to the League are telling New Yorkers and many other consumers about the new and "creamier" evaporated milk which they are making under the new brand name of "Dairylea". These farmers are banking the success of their gigantic sales campaign on quality and the whole idea in the advertising which they are doing is "take a can and convince yourself." These 70,000 New York farmers are blazing a trail into the markets of the world.

PICTURES FROM FAR AND NEAR

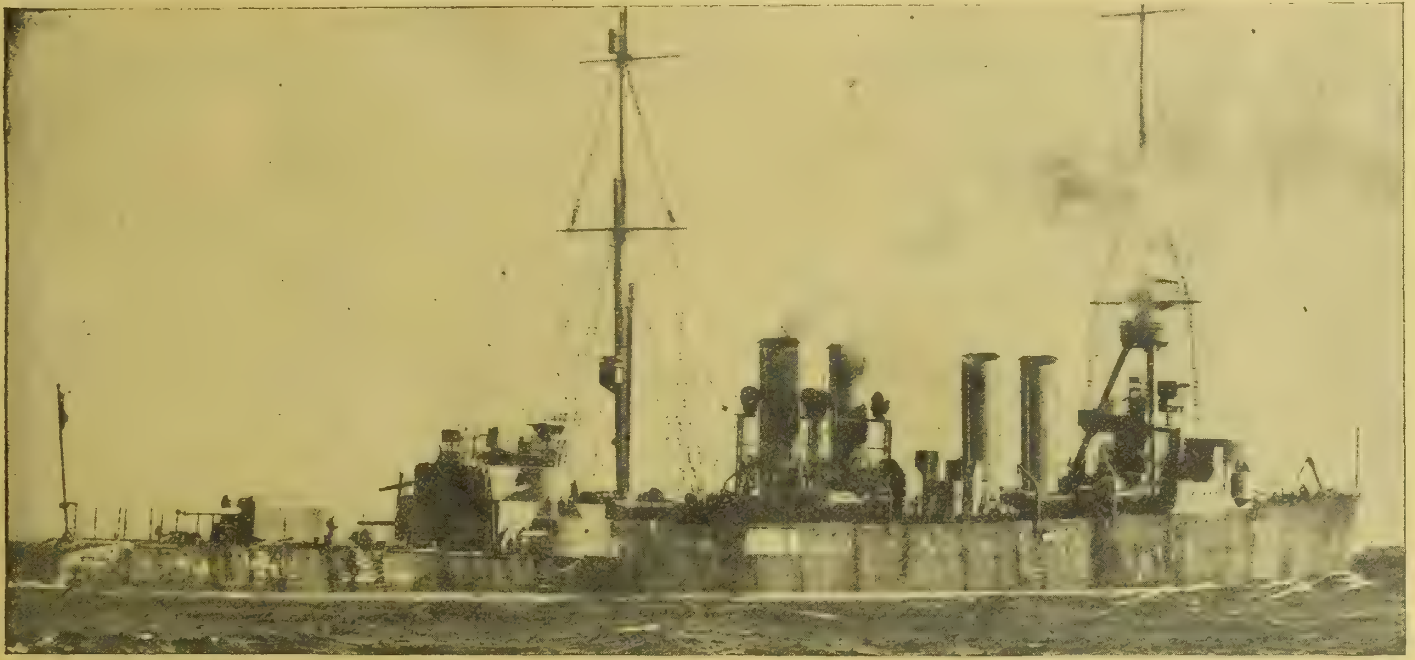


MAY NEVER PLAY BALL AGAIN.—George H. Sisler, famous player of the St. Louis Browns, who, it is reported will not play ball this season, and possibly will never appear on the diamond again. Sisler's eyes are bothering him. He sees "double" and even the best physicians in this country seem to be unable to remedy his trouble.



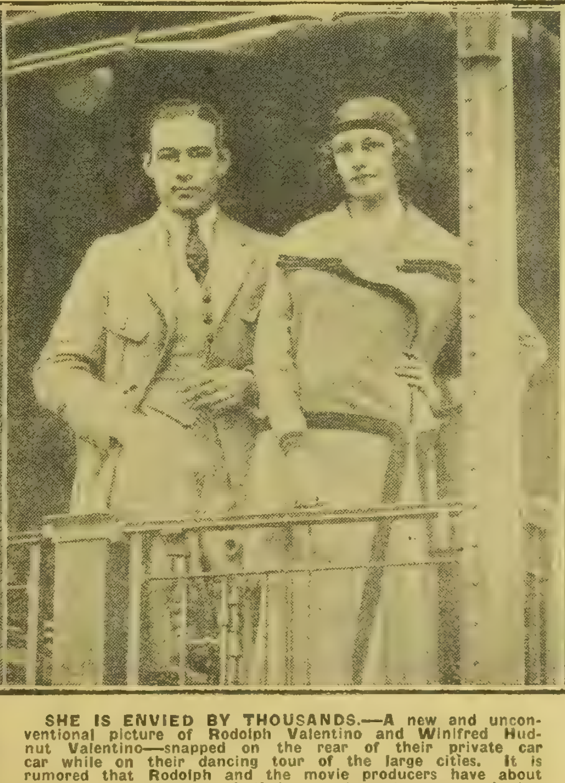
LOOK OUT—YOU'LL FALL!—Carlo Aldini, known as the "Douglas Fairbanks" of Germany, who heads a German film company is seen here on top of a New York sky-scraper doing a few stunts. This is the first German film company to come to New York to get proper settings for movie thrillers. None of it for us. We prefer to keep at least one foot on solid earth.

VENUS NEWLY RISEN FROM THE WAVES.—Venus Anadyomene, queen of the winter bathing beauties, at San Antonio, returns from communion with Father Neptune. No, the draperied mass is not a veil of moss, but her natural, home grown raven tresses, which measure 58 inches in length.



CRUISER "DETROIT", NEW SPEED QUEEN OF UNITED STATES NAVY.---Michigan's metropolis and America's fourth city has been signally honored by having the speediest boat in the navy named after her. Reports say that her maiden trial trip which was showed her to have a speed of 30 knots per hour, the fastest ship of her size in the world. The new "Detroit" represents a class of speed cruisers developed from the experience in the late war, when it was proven that the heavier and slower boats were too vulnerable to the aerial attacks of bomb carrying aeroplanes. The new type of tripod mast, superseding the basket construction is shown on this new ship and her long lines suggest more of the torpedo-boat destroyer, than the heavier cruiser. She will carry a crew of over 1,000 men. The city of Detroit presented the ship with a beautiful ships clock, suitably engraved and of the finest workmanship. Perhaps with the "lakes to ocean" canal opened up, the cruiser "Detroit," may sometimes visit the proud city whose name she so fittingly bears. It has been suggested that the "Detroit" be manned with men whose homes are in Michigan.

TO TEACH AMERICAN METHODS IN PHILIPPINES.—Miss Pilar P. Herrera, a graduate of the University of the Philippines and former instructor in chemistry in the same university, who will receive her PH. D. at Columbia University. Upon her frail shoulders she has taken the task of attempting to inculcate American methods of education in her native country.



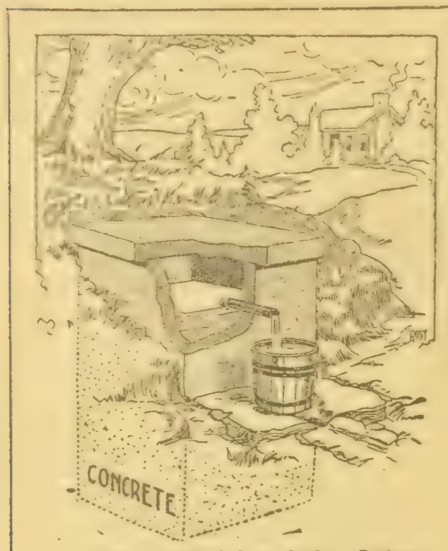
SHE IS ENVIED BY THOUSANDS.—A new and unconventional picture of Rodolph Valentino and Winifred Hudnut Valentino—snapped on the rear of their private car car while on their dancing tour of the large cities. It is rumored that Rodolph and the movie producers have about come to a settlement of their recent controversy and that he is soon to return to the pictures.

CIVIL WAR VETERAN STILL ON ACTIVE DUTY. Nat Poyntz who is perhaps the only veteran of the Civil War who served in the Confederate Army and is now on duty in the U. S. Army. He holds the post of field clerk in the Quartermaster Corps, assigned to duty at the Army Base, South Boston. Nat is 76 years old and was born in Maysville, Mason County, Ky. He joined the Confederate Army at the age of 14.

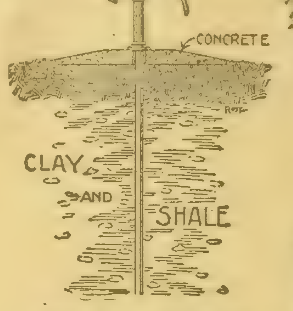
(Copyright Keystone View Company)

Are You Protecting the Health of Your Family?

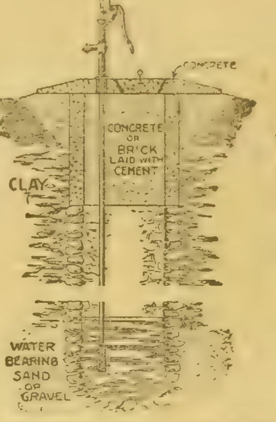
Health Depends Much on Water Supply



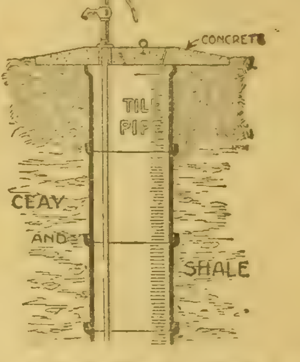
A Spring Protected from Surface Drainage, Animal and Other Contamination



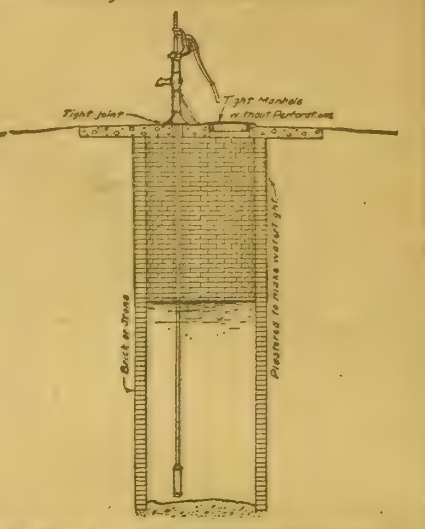
Protecting A Driven Well from Contamination


CONCRETE
CONCRETE OR BRICK LAID WITH CEMENT
CLAY
WATER BEARING SAND OR GRAVEL

How to Rebuild an Old Well to Make It Safe



A Good Way to Protect a Well from Contamination


Tight joint
Tight Manhole without Perforations
Brick or Stone
Plastered to make water tight

Dug Well Adequately Protected Against Surface Contamination

By W. A. HARDENBERGH

THE water supply for the average country or farm home comes from a well or a spring. Wells and springs may furnish fine water, or they may furnish water so unfit for drinking as to cause disease or death. In a limestone section there are usually many fine springs. Unfortunately, a good proportion of these are so contaminated that the water is unfit to drink. Many wells are in the same bad condition. Most of this contamination, however, is due to causes which the farmer can remedy easily at small cost.

Springs.—While springs are sometimes contaminated from sources of pollution a long distance away, most of the trouble comes from nearby places, such as an open privy, surface drainage from the barn yard or road, and similar easily preventable causes. To eliminate these, a sanitary privy should be built, and surface drainage diverted from the spring.

The best way to prevent surface drainage from entering and contaminating the water is to dig out the spring carefully, going down into the ground 18 to 24 inches, and then walling up around the spring with a tight wall and covering with a tight cover, so that surface and rain water, animals and dirt cannot get in. A concrete mortar does very well. The main object is to keep contamination out of the spring. A pipe in the wall makes a good outlet for the water and prevents contamination by dipping into the spring.

Wells.—There are various kinds of wells, as shallow and deep; dug, driven, or bored. The shallow dug well, especially when it has an open top, with a bucket to be let down into the well, is nearly always contaminated in some way, though not always, of course, so as to produce sickness or death.

Most of this contamination, except in wells less than 8 or 10 feet deep, enters from the top. In other words, the ground water, especially when it is 8 or 10 feet down is usually fairly pure. But filth from the shoes of persons using the well, from pigs and dogs, and from the feet of chickens which may have been scratching around an open privy, enter through or around the cover and polutes the water, frequently causing disease.

Dug wells are usually 3 or 4 feet in diameter and loosely walled with stone, or occasionally with brick, but the walls are seldom water tight. Contamination from the ground surface easily passes down and around the cover, which is often nothing more than rotting boards, and through the loose wall into the water. Usually it is also easy for pollution to soak directly through the board cover into the well. Even a stone cover allows plenty of chance for the entrance of filth and contamination.

The driven well is better, for the iron pipe is tight all the way to the ground water, but there should be protection around the top to prevent the passage of surface wash down along the pipe to the ground water.

Open top wells with buckets are most dangerous, for they allow dirt and animals to enter; while the bucket, handled by every user, is usually soiled with many kinds of dirt and filth. The bucket ought to be replaced with a pump, and the well protected with a tight top and casing.

Of equal importance is a tight top. This should be made of concrete, as shown. Dig out around the well to a depth of 6 inches for 2 or 3 feet back from the well hole. Lay timbers across to hold the concrete, while setting, and pour the cover, placing the pump so there will be no leakage around it; or the cover may be poured in another place and moved over the well. In either case, reinforcing is desirable, if the well is more that 30 inches in diameter. Wagon axles, iron rods,, iron pipe, etc., make good reinforcing.—The Progressive Farmer.

Is Organization Helping the Potato Men?

By KRIS P. BEMIS, Mason County Agricultural Agent

WHAT is organization doing for the potato grower? That question confronts potato growers as they look back upon the past season, with its over-production in the Northwestern States, due to plunging in potatoes by owners of sow-thistle infested wheat land.

The Michigan Potato Growers Exchange at Cadillac, now affiliated with the Farm Bureau, offers the only grower-controlled agency for selling potatoes in Michigan. It sells for co-operative farmers' associations only, and is run from the bottom up. It is out to get every cent it can for the grower.

Most of you will remember that back in March, in that period of

(Continued on Page 23)

U. S. Weather Bureau Explodes Theory that Man Can Cause Rainfall

RAIN-MAKING is a futile undertaking, according to the Weather Bureau, United States Department of Agriculture. To produce one inch of rainfall over an area of an acre, approximately 113 tons of moisture would have to be drawn up into the air and then precipitated. There are 640 acres in a square mile, for which 72,320 tons of moisture would be required. A square mile, however, would be scarcely a dot in the center of any section where drought prevails, as in Arizona or parts of Texas. It would be less than one-seventh of the area of the District of Columbia.

Enormous forces are required in nature to elevate moisture above the earth before it can be precipitated. Billions of horsepower are represented in the cloud that separate over the house-tops; and even if some artificial means were found to cause the aggregation and fall as rain of the infinitesimal drops of which it is made up, calculation shows that only a trifling amount of precipitation would result. There must be some way by which the moisture laden atmosphere can be lifted to a considerably higher altitude, to lower its temperature and thus precipitate a considerable part of its moisture content.

It is quite true that in the laboratory a small amount of moisture can be precipitated by the use of special equipment. Meteoroligists of the Weather Bureau of the U. S. Department of Agriculture say that they do not know of any scheme for the artificial production of rain on a scale of practical magnitude, nor for otherwise affecting atmospheric behavior. Widespread drought is due to lack of sufficient moisture in the atmosphere and the absence of other conditions essential to the formation of rain. If there is little moisture to bring down, obviously no device for causing rain artificially has any value, because of the absurdity of supposing that human agencies can supply adequate amounts of water for extended areas when the atmosphere itself is practically dry.

In spite of these facts, statements appear at intervals in the press heralding new ways of making rain, preventing rain or fog, or forestalling the disastrous effects of storms. These ideas are not new. Ten years or more ago certain countries in Europe were thrown into excitement, reflected in the newspapers, over the possibility of a scheme called "hail-shooting." It was believed that by shooting bombs into the air before an oncoming storm it could be dissipated, thus averting consequent destruction to crops from rain or hail. Contrary to the opinions of the best meteorologists a good deal of money was spent in experimenting with "hail-shooting," but little is ever heard of it now.

More recently, in our own country, a man achieved prominence by advertising a contrivance, which he proposed to build at various points where more rain would be welcome. This scheme was entirely from proposals to shoot bombs, sprinkle hygroscopic or nonhygroscopic dust particles in the air, or electrified sand, to induce precipitation. It consisted of powerful fans at the base of high towers for forcing upward great quantities of air and thus stimulating the conditions which occur in storms and cyclones when rain is produced. This plan is futile and economically impossible.

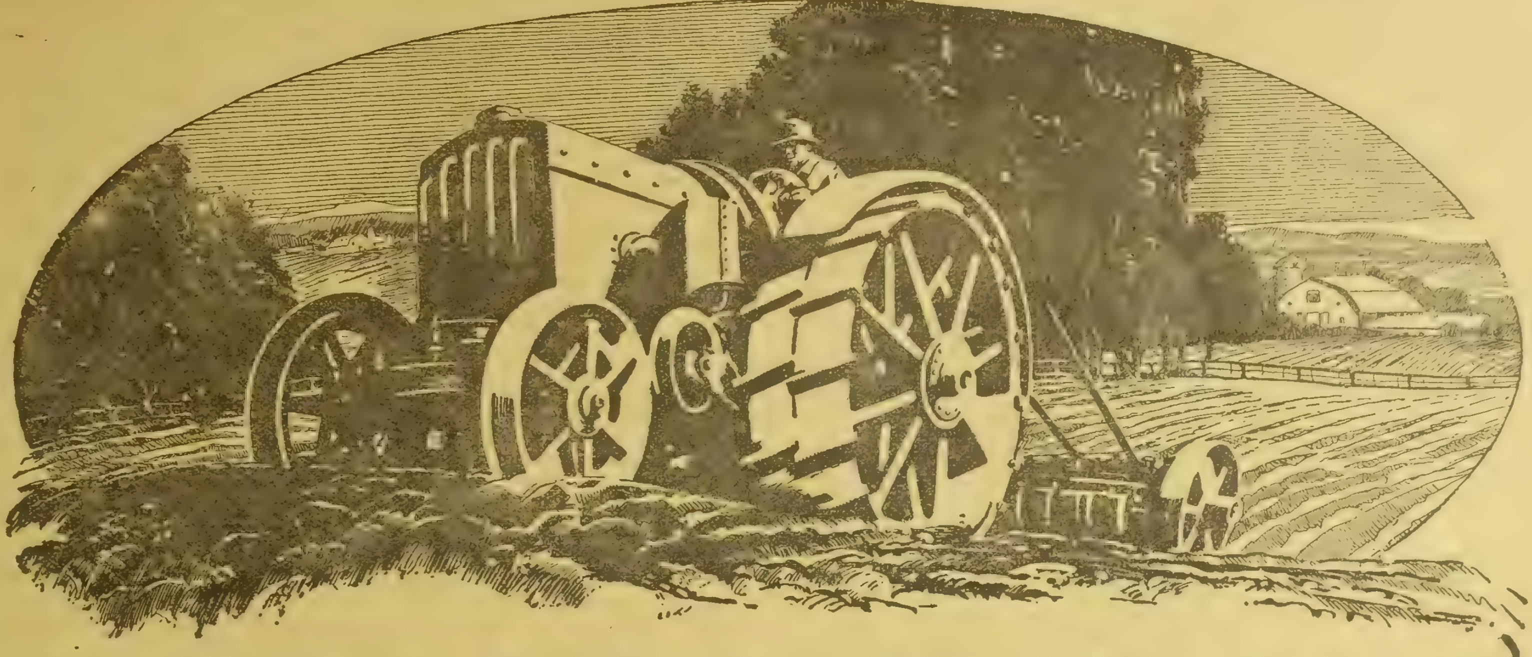
The case of the man who contracted with farmers in drought-stricken regions to produce an inch or more of rainfall within a period of two or three months for a consideration of $1,000 per inch is well known. This man, claimed to be able to cause rain by a secret process with the use of chemicals. If the rain came and the man collected his fees; if the rain failed he lost nothing. Now the average amount of rain for each region is accurately recorded, and under a long drought and within the limits of the record a shrewd operator is quite safe in promising precipitation and collecting $1,000 per inch from desperate farmers.

A recent proposal is to cause precipitation by sprinkling dust particles in the air by means of apparatus carried on airplanes, on the theory that these will aid condensation. Cloudiness due to dust particles, however, takes place long before precipitation occurs, and frequently continues after the rain is over, indicating that the motes and dust particles do not necessarily cause precipitation. If clear weather follows rainfall, it may be because new dry air has moved in from other localities.

Presence or absence of dust particles in the atmosphere does not, in the opinion of meteorologists, have any thing to do with the distribution of rainfall. As a rule, far more dust particles are present in the atmosphere everywhere than would be essential, were the dust hypothesis correct, to bring about abundance of precipitation. On the other hand, enormous quantities of rainfall occur over the ocean where there is least dust. Some places in the Hawaiian Islands have an annual rainfall exceeding 500 inches, and yet the air is nearly dust free. The most dust in the atmosphere, except near industrial cities, occurs over dry and semi-arid regions.

The suggestion has also been made that powdered quicklime be employed to precipitate moisture. On this point the Weather Bureau says that dry, powdered quicklime, exposed to the atmosphere absorbs a certain quantity of moisture—that is, it dries the air. Dry quicklime is used in many industrial operations for drying gasses. The moisture absorbed in these cases completely disappears as available water and forms new chemical compound commonly called air-slacked lime. Unless exceedingly fine, this sprinkled quicklime, after absorbing about one-third of its weight of water, would fall to earth, leaving the air drier than before. Any exceedingly fine particles remaining in the air would very slowly absorb carbon dioxide, also present in the air in very small quantities and form a substance chemically the same as limestone or marble. If the plan to sprinkle dust of some sort into the air were feasible at all, it would therefore appear to be better to sprinkle finely powdered marble in the air in the first place, because this would not rob the atmosphere of any of the moisture present.

All of these schemes, however, are, in the opinion of the Weather Bureau, entirely futile.



Polarine Lubricates Perfectly
137 Makes of Tractors

Polarine lubricates perfectly—137 different makes of tractors. No matter how extreme the temperature—the grade of Polarine indicated in the Chart will remain of the right viscosity. It will spread rapidly. It will form a perfect film between the moving frictional surfaces. It will insure long life to the bearings; complete protection to piston and cylinder.

Changing to Polarine has saved many a farmer hundreds of dollars a year in repair bills. Yet Polarine cost little, if any, more than the lubricant you are using now.

Use Polarine

THE PERFECT MOTOR OIL

Made in Five Grades

It outstrips any lubricant on the market in maintaining its body through any extreme of temperature. Its elasticity and adhesiveness cause a perfect seal and complete lubrication at all motor speeds and temperatures.

Don't fool yourself into fancied security, by thinking, "Oh, the oil I'm using works all right—why bother to change? It's just as good!" There is no "just as good," or even "second best" lubrication. There is one right lubricant for your tractor. It is specified in the Chart. When you do not use this lubricant, you fail to get the maximum of economy, efficiency and saving of wear on your engine. Change your motor oil very frequently—it is the essence of economy.

Remember the resources—the experience—the scientific experts of the Standard Oil Company (Indiana) are behind every gallon of Polarine sold. This means maintained quality—at all seasons, in all temperatures—and everywhere throughout 10 middle Western states.

Tractor Chart of Recommendations

Trade Name	Motor Oil
Adaptable	H.
Allis-Chalmers, 6-12	H.
Allis-Chalmers, 15-25	S. H.
Allis-Chalmers, 18-30 and 20-35	S. H.
All Work	S. H.
Andrews-Kinkade	E. H.
Armington	S. H.
Aultman-Taylor, 15-30	S. H.
Aultman-Taylor, 22-45 and 30-60	S. H.
Automotive	S. H.
Avery, Model C	H.
Avery, 8-16, 12-20, 12-25, 14-28, 18-36, 25-50, 40-65, 20-35	E. H.
Avery Track Runner	S. H.
Bates Steel Mule, All Models	S. H.
Best Tracklayer, All Models	E. H.
Big Farmer	E. H.
Big Four E-B	E. H.
Buckeye Trundaar	S. H.
Burnoil	E. H.
Capitol, All Models	E. H.
Case, 10-18, 10-20, 12-20, 15-27, 9-18	H.
Case, 22-40	S. H.
Case, 12-25, 30-60, 40-72	E. H.
Case, 20-40	E. H.
Cletrac, All Models	S. H.
Coleman	E. H.
Dart Blue "J"	S. H.
Dill Harvesting	H.
Eagle	E. H.
E-B, All Models	S. H.
Ellwood	S. H.
Farm Horse	E. H.
Farquhar, 15-25	S. H.
Farquhar, 18-35 and 25-50	S. H.
Fitch Four Drive	E. H.
Flour City Junior	H.
Flour City, 20-35	S. H.
Flour City, 30-50, 40-70	E. H.
Fordson	H.
Fox	E. H.
Frick, All Models	S. H.
Good Field	H.
G-O	S. H.
Grain Belt	S. H.
Gray	S. H.
Great Western	S. H.
Hadfield-Penfield	S. H.
Hart-Parr, All Models	E. H.
Heider	S. H.
Holt Caterpillar, All Models	E. H.
Huber, All Models	S. H.
Indiana	H.
International, 8-16	H.
International, 15-30	S. H.
Klumb	E. H.
Lauson, All Models	S. H.
Leader	E. H.
Leonard Four Wheel Drive	S. H.
Liberty	E. H.
Lincoln	S. H.
Linn	S. H.
Little Giant, A & B	S. H.
Magnet, 14-28	S. H.
Mark VI	S. H.
McCormick-Deering, 15-30	H.
Minneapolis, 12-25 and 17-30	S. H.
Minneapolis, 22-44 and 35-70	E. H.
Mogul	S. H.
Moline Universal	S. H.
Monarch	S. H.
Montana	E. H.
Nilson Junior and Senior	S. H.
Oil Gas, 20-42 and 25-50	E. H.
Peoria	E. H.
Pioneer, 18-36 and 30-60	E. H.
Port Huron	S. H.
Quadpull	S. H.
Reed	S. H.
Rex	S. H.
Rogers	E. H.
Rumley, Oil Pull, 12-20, 16-30 and 20-40	E. H.
Rumley, Oil Pull, 30-60	E. H.
Russell "Junior", 12-24	S. H.
Russell Boss	S. H.
Russell "Giant," 30-60	E. H.
Sampson, Model M	H.
Savage A	E. H.
Shawnee, 6-12 and 9-18	H.
Shelby, All Models	S. H.
Square Turn	E. H.
Stinson	S. H.
Titan	S. H.
Topp-Stewart	S. H.
Townsend	E. H.
Traylor	H.
Trundaar	S. H.
Twin Ports	E. H.
Twin City, 12-20 and 20-35	S. H.
Twin City, 40-65 and 60-90	E. H.
Uncle Sam All Models	S. H.
Wallis	S. H.
Waterloo Boy	S. H.
Wellington, 12-22 and 16-30	S. H.
Wetmore	S. H.
Wheat	S. H.
Western	E. H.
Wisconsin	E. H.
Yuba Ball Tread	S. H.

KEY

L.—Polarine Light.
M.—Polarine Medium
H.—Polarine Heavy
S.H.—Polarine Special Heavy.
E.H.—Polarine Extra Heavy.

N. B. For recommendations of grades of Polarine to use in automobiles and trucks consult chart at any Standard Oil Co. (Indiana) station.

Polarine
THE
PERFECT
MOTOR
OIL

Standard Oil Company
910 So. Michigan Ave. *(Indiana)* Chicago, Illinois

3185

Farmers Service Bureau

(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full name and address. Name not used if so requested.)

HAVE MORTGAGE RENEWED

A loaned B a certain amount of money and took a mortgage on B's farm. The mortgage was to run for three years and will expire the 17th of this month. The interest is 7%. the amount A loaned was $1700, and all that B has paid in the last three years is $100. Now A doesn't want the principal or the farm, either. All he wants is the interest. What A wishes to know is this: What is to be done at the expiration of the mortgage to compel B to pay the interest? Or if A is compelled to foreclose, what proceedings must he go to?—A. R. H., Elmira, Mich.

—If A is willing to forego his right of forclosure, it seems that B ought to be willing to pay the interest on the loan without coercion. If he is not willing to do this, suit may be brought to recover the interest alone, without foreclosing the mortgage. A should, upon the termination of the mortgage, have it renewed or take other steps to provide for the security of his loan.—Assistant Legal Editor.

CHANGING SCHOOL DISTICTS

About three years ago I purchased a farm at Lowell, Mich., I did not know at the time that, by request of the owner who had children to educate, it had been set over into the school district of the town of Lowell. Now, I beg that I may be informed as to what proceedure to take to have it set back into the rural school district where it territorially and naturally belongs? Can my right to be set back into the district where this farm formerly was, be questioned? In other words, is there any condition under which I could be compelled to remain in the town district?—D. W., Pennsylvania.

—It would be necessary first that you get the written permission of the board of education of Lowell to have this farm transferred to another district. This permission will have to be granted at a meeting of the school board of Lowell, and a copy of the resolutions granting the permission filed with the township board where this territory is located. The township board may set the territory out into the other district.

The law governing this proceedure is found under Sections 5655-56 of the Compiled Laws of 1915, pages 21-22 of the 1921 school laws, and Section 5737 of the Compiled Laws of 1915, page 68 of the 1921 school laws.—W. L. Coffey, Dept. of Public Instruction.

DEFAULTS IN PAYMENTS

A and B bought 80 acres of land on a contract. They agree to pay $100 per payment. Contract reads $100 or more on January 30th of each year until full amount is paid. A and B are to each pay half and each own a forty. Now B made a payment then sold his contract to C (contract being transferred was again signed by all parties) C sold to D and took a mortgage of $250 and tax said mortgage to X for cash. Now D's payment is due January 30th and he cannot meet it. A had to pay it in order to get hold his forty. The contract being for 80 acres. Agreement for each a forty. What I want to know is: How long must A give D to pay the payment back? If A keeps payments etc., up can he get a deed for the eighty without any trouble? Can X collect that mortgage of $250 which was given unknown to owner and A? The contract was not signed when transferred last time. A's contract has never been changed in any shape or form since first written in 1917. The party holding the mortgage has the other contract, a copy of A's, but mortgage is only pinned on. Is it lawful to pin a mortgage to a contract?—P. E. A., Aloha, Michigan.

—When one of two or more joint purchasers in a land contract pays more than his share of the purchase price, he has a right of contribution from the others for their share. C's transfer to D would give D the same rights and liabilities in the contract that C had. If D defaulted in his payments, and A, in order to prevent forfeiture, keeps up D's payments, then as soon as A had paid the entire purchase price, he could proceed against D for contribution of his share.

The mortgage of the vendee in a land contract takes no greater rights than the vendee had; he simply acquires the right to purchase the property for the consideration stipulated in the contract of purchase, and a right to require a conveyance from the vendor according to the terms of the contract. Consequently C here is liable to A for contribution of D's share of the contract price which A paid, and before C can satisfy his $250 debt out of the mortgaged property, he must make contribution to A for the delinquent payments of D. X, as C's purchaser, or assignee, would be subject to the same liability to A.

If the contract is made to several purchasers jointly, one could not arbitrarily take the title in his own name.—Assistant Legal Editor.

SAWING LUMBER FOR MARKET

Would you please advise me how to cut and saw the following logs? Red oak, maple, elm, ash, white oak and hickory to the best advantage of the manufacturuer? Also how small may I take the trees if they are clear?—C. F. E., St. Clair, Mich.

—I would not advise cutting or sawing until you had taken the matter up directly with the purchaser and obtained the specifications wanted. It usually pays the owner of woodlot timber better to sell his product in logs rather than in lumber. Lumber cut on a portable mill in a farm woodlot is usually either too thick or too thin, does not make the best use of the grades and the purchaser of the lumber, if it goes to a lumber yard or manufacturing establishment, is put to considerable expense and bother in having it gone over by a grade inspector before being accepted. The woodlot operator usually fails to see the justice of the grading and is therefore unsatisfied with his returns.

The minimum diameter to which trees may be cut would depend largely on the use to which the timber was to be put. Bolts for hickory handles must be at least 4 feet long by 6 inches in diameter at the small end. Timber for vehicles and vehicle parts usually requires at least 16 foot logs with a 7 inch diameter at the top. White oak for tight cooperage should be at least 18 inches in diameter and veneer stock the same. The timber usually does not begin to put on "clear" lumber until it gets to be about 14 inches in diameter breast height. The most valuable growth comes from 14 inches D. B. H. to 18 or 20 inches. The growth then usually slows up and decay may set in although the tree may continue sound up to 30 or 40 inches D. B. H.—John C. DeCamp, Assistant Professor, Dept. of Forestry, M. A. C.

ALLOWED 30 DAYS TO REDEEM

I have been a subscriber for your paper for the past few months and note you always help a fellow when he is down. I would like information in regard to a farm contract.

We have a payment due soon, owing to the exceptionally poor financial year we will not be able to meet the principal. The contract is the usual legal form. If the party holding same insists on payment of principal and refuse to continue same, how long could we hold the farm?—Reader, Traverse City, Mich.

—Compiled Laws of 1915, Secs. 13-240-13257 providing for foreclosure of land contracts, provides that the vendee shall be allowed 30 days in which to redeem the premises after judgment is rendered against him in the forclosure proceedings.—Asst. Legal Editor.

KEEPING CHILD AFTER SCHOOL

Would a teacher have the right to make a pupil stay after school each night if he could not pass the monthly tests?—K. Y., Jamestown, Mich.

—The statutes remain silent with reference to the type of punishment that may be administered by the teacher. The Supreme Court has rendered a decision that the teacher has delegated parental control over the children while under her jurisdiction and that she has authority to administer any reasonable punishment. Conditions might arise where in the teacher's judgement the appropriate type of punishment would be to require a child to remain after school.

If in the case in question the pupil's failure was due to wilful neglect or carelessness on his part the teacher might deem it advisable to require him to devote a little extra time to study and special preparation after school.—B. J. Ford, Division of Rural Education, Dept. of Public Instruction.

NO SATISFACTORY METHOD TO CONTROL SPARROWS

What can I do to kill the English sparrows round my barn, something that will not harm chickens, cats or my dog if they should eat it or eat the sparrows?—O. R. D., Mancelona, Mich.

—There is no satisfactory method yet envolved for the control of the English Sparrow. In spite of all the control measures used thus far, the bird maintains its numbers and only by concerted efforts and persistent measures can any relief be assured from the pest. The Government Sparrow Trap, made according to the directions which were issued by the Biological Survey Department of Agricultural, Washington, D. C., is sometimes successful in reducing the number or Sparrows. Persistent destruction of the nests about barns and out-buildings on the farm is also effective. The use of poison has several bad features. Contrary to general belief, there is no poison known which will kill Sparrows and at the same time be harmless to other birds and animals. During the winter season, when snow covers much of the available food and our native birds are in the south, it is possible to use poison with a fair degree of success. At the present time (April) it is not so effective a control measure. The poison usually used is strychnia sulphate. Dissolve one-eighth ounce of strychnine crystals in two quarts of water, then soak four quarts of wheat in this solution for forty-eight hours, and spread out in a safe place to dry. Bait the Sparrows to a selected feeding place inaccessible to birds, doves or poultry and when they are accustomed to coming there to feed, spread out poisoned grain. Pick up the bodies of dead birds, sweep up poisoned grain not eaten, and burn both. Since this poison is dangerous to all animals and birds, handle it with extreme care.—Allen C. Couger, Associate Prof. of Zoology, M. A. C.

BELIEVES HE IS OVERTAXED

I am writing in regard to our taxes on 8 acres of land. The valuation is $1,180 and the taxes for this year $70.12. There is no personal property on the place. If the taxes were $70.80 that makes 6 cents on the dollar. Is it lawful for that town to tax it that high? If so, what are the limitations? How much can they lawfully assess on a dollar?—O. L., Ellsworth, Michigan.

—The amount of money a township may raise by taxation for ordinary expenses is limited by law, the maximum amount depending upon the population of the township. This does not apply to levies for specific purposes, however, and in order to determine whether you are over-taxed it would be necessary to investigate the tax rolls and ascertain for what purposes the taxes are levied, and whether the limit is exceeded for any of those items:—Asst. Legal Editor.

HORSEHIDE ROBE

I would like to know how to soften a spot about a foot square, in a horsehide robe, which was caused by placing it over a frozen radiator while thawing it out. (The radiator contained a solution of about 50 per cent alcohol.) The steam of the solution caused the robe to harden. —B. D. R., Holland, Mich.

—Try applying butter (not salted) lard or most animal fat. If this has no effect, try using warm water to first soften and them apply the fat or most animal oil. The work should be done in a warm room and the hide rubbed and worked for an hour or more, giving several applications of the butter, lard or whatever you are using.—Fur Editor.

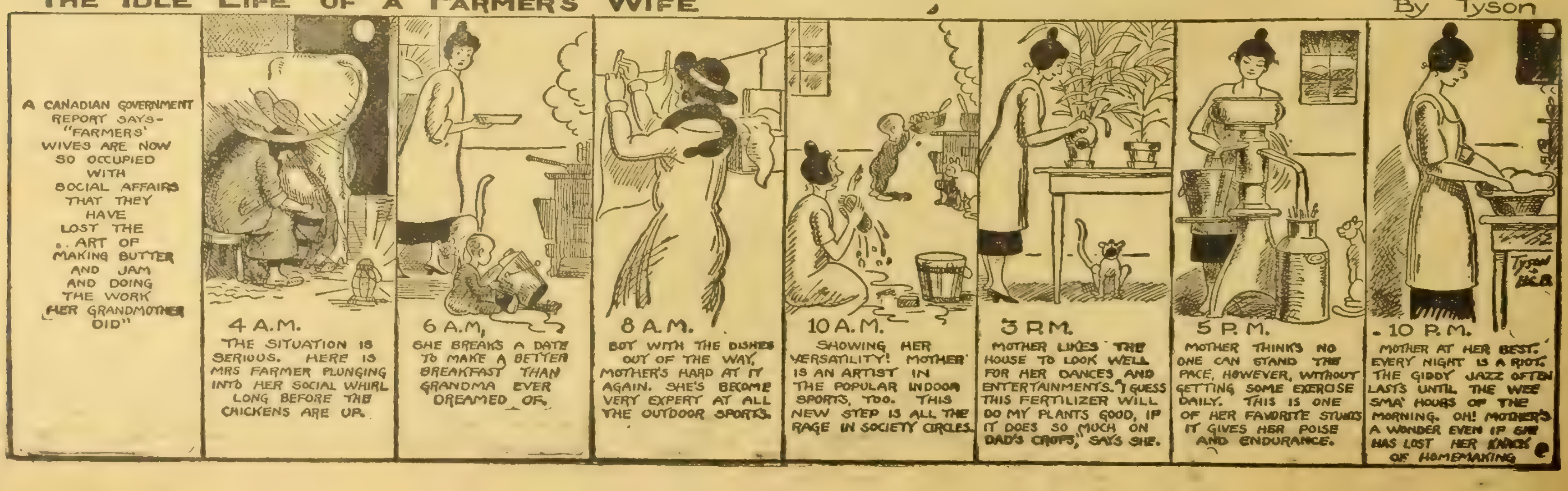
SIGNS OF OIL

We have an open well about 7 feet deep where we water our cattle and horses in the winter, and there is always oil on top. Some days so much that we have to dip off the top or the horses will not drink it at all. It has been like that for years. Do you think it might be an oil well? Do you think we ought to have it analyzed?—Mrs. G. D. B., Conway, Mich.

—As to the significance of the signs described, I would advise that in

THE "IDLE" LIFE OF A FARMER'S WIFE

By Tyson


A CANADIAN GOVERNMENT REPORT SAYS- "FARMERS' WIVES ARE NOW SO OCCUPIED WITH SOCIAL AFFAIRS THAT THEY HAVE LOST THE ART OF MAKING BUTTER AND JAM AND DOING THE WORK HER GRANDMOTHER DID"
4 A.M.
THE SITUATION IS SERIOUS. HERE IS MRS FARMER PLUNGING INTO HER SOCIAL WHIRL LONG BEFORE THE CHICKENS ARE UP.
6 A.M,
SHE BREAKS A DATE TO MAKE A BETTER BREAKFAST THAN GRANDMA EVER DREAMED OF.
8 A.M.
BUT WITH THE DISHES OUT OF THE WAY, MOTHER'S HARD AT IT AGAIN. SHE'S BECOME VERY EXPERT AT ALL THE OUTDOOR SPORTS.
10 A.M.
SHOWING HER VERSATILITY! MOTHER IS AN ARTIST IN THE POPULAR INDOOR SPORTS, TOO. THIS NEW STEP IS ALL THE RAGE IN SOCIETY CIRCLES.
3 P.M.
MOTHER LIKES THE HOUSE TO LOOK WELL FOR HER DANCES AND ENTERTAINMENTS. "I GUESS THIS FERTILIZER WILL DO MY PLANTS GOOD, IF IT DOES SO MUCH ON DAD'S CROPS," SAYS SHE.
5 P.M.
MOTHER THINKS NO ONE CAN STAND THE PACE, HOWEVER, WITHOUT GETTING SOME EXERCISE DAILY. THIS IS ONE OF HER FAVORITE STUNTS IT GIVES HER POISE AND ENDURANCE.
10 P.M.
MOTHER AT HER BEST. EVERY NIGHT IS A RIOT. THE GIDDY JAZZ OFTEN LASTS UNTIL THE WEE SMA' HOURS OF THE MORNING. OH! MOTHER'S A WONDER EVEN IF SHE HAS LOST HER KNACK OF HOMEMAKING
Tyson

southeastern Michigan such signs appear to have no significance other than indicating that oil formations are present. There is a belt extending through southeastern Michigan in which seegages of oil and gas are very common about ponds, around springs, and in wells. In fact in many places the seepages are sufficient to make the water unfit for stock use even, except in the manner described. Some of the farmers in the vicinity of Royal Oak and Warren, northwest of Detroit, find so much gas in their water wells that they separate the water and use the gas for heating and lighting purposes. Some of these wells last several years. There are large gas springs throughout the belt extending from Alcona county northward, in an arc around to Manistee where geological conditions are similar to those in southeastern Michigan.

The reason for these signs appears to lie in the fact that the above described belts lie directly over the edges of formations which are known to contain oil and gas. These substances are constantly escaping from the edges of these formations upward into the sands and gravels in the surface deposits which cover the underlaying bed rocks. The surface seepages may be some miles away from the pools if they exist. There is little to indicate just where the most favorable places are for the occurrence of pools. There are definite possibilities for oil throughout the belt extending from north of Port Huron southeastward into Ohio. Many small oil and gas wells have been drilled in and about Port Huron. The Mt. Clemens mineral wells yield very considerable quantities of gas and some of them have yielded oil. At least one of the bath houses uses gas from its wells to aid in firing its boilers.

Judging from your address your farm lies in the northern belt of seepages. Anywhere in the belt northeastward around to Alcona County would be favorable for such phenomenon. The largest surface gas well ever struck in Michigan was on Portage Lake, just north of Manistee. The oil formations lie directly beneath conway and seepages in that region are to be expected.

As to analysis of the sample, I would advise that if you send us a sample of the oil as skimmed from the water we would be very pleased to make a qualitative chemical examination, free of charge. We would like, however, an exact description of the occurance, the precise location, and any other information which might have any bearing on the explanation of the local causes.—R. A. Smith, State Geologist.

CAN RECOVER FROM COMPANY

Last November I sold my white pea beans at the elevator and I asked them to screen three bushels of them and save them for me, which they said they would and so I paid them for screening them. The elevator at that time wasn't in working condition, therefore they couldn't screen them that day. When I went to get the beans they said they had forgotten to save out the beans but admitted they remembered my telling them to save and screen three bushels. They wanted me to take three bushels of beans which they had gotten in afterward but wanted me to pay the difference in price; in the meantime beans had raised in price. I have called them up a number of times and they keep putting me off. I understand they have quit buying produce now and the building is up for sale. How can I get my seed beans? I am not in a financial condition that I can stand to lose these beans.—N. R., Sand Lake, Mich.

—If you left the beans with the elevator company with instructions to screen and save them for you, and they failed to save them, I am of the opinion you could recover from the company whatever amount would be sufficient to purchase the same amount of beans, of like quality, at the present market price.—Asst. Legal Editor.

GROWTH OF SWEET CLOVER FIRST SEASON

I would like to ask you a question on sweet clover. If it was sowed with just a few oats could I cut hay off it this year? When should it be cut? What is its feed value? Is it equal to alfalfa?—R. S., Harrison, Mich.

—The growth made by sweet clover the first season will depend very largely upon soil and seasonal conditions. When the soil is well supplied with lime, of fair fertility, and there is plenty of rainfall, sweet clover usually produces a crop of hay the same season as sown. However, if the soil is inclined to be somewhat acid, or the season a little too dry, sweet clover will not make much of a growth. It should be cut early enough so that the plants will make five or six inches of top growth to prevent winterkilling. Sweet clover is a leguminous crop and the hay is quite high in feeding value, but hardly equal to alfalfa hay.—C. R. Megee, Farm Crops Dept., Mich. Agricultural College.

OFFERED TO PAY TAXES

A buys a lot from B. A resides in one county and the lot is located in another county. Said lot to be in a subdivision near a certain city, it being an eighty acre description which was laid out in blocks and lots. The purchase was made in the year 1916 B furnished A a warranty deed, said being on record in said county, showing Liber and Page number, etc. A has been making inquiry from year to year as to the amount of taxes due on his lot, always giving his correct description, but he was always informed that said tract was not assessed in lots but as acreage and that they had no other way of collecting the taxes than such. A again makes inquiry for the year 1922 and receives the following answer: That said tract is still assessed as acreage and this plat will never be recorded, so it will always continue to be assessed as eighty acres of land. The taxes on the above eighty acres of land are unpaid on the records of this office for the years 1919, 1920, 1921, Signed "County Treasurer." I wish to ask your consideration on what steps to take in order to avoid having said lot sold for taxes. Could the eighty acres (including this lot) be sold for taxes under such circumstances, for A has offered to pay his tax but was always denied of being any taxes against him?—R. E. D., Tawas City, Mich.

—Compiled Laws of Michigan, 1915, Sec. 4049 provides that "any person owning an undivided share or other part or parcel of real property, assessed in one description, may pay on the part thus owned by paying an amount having the same relation to the whole tax as the part on which payment is made has to the whole parcel. The person making such payment shall accurately describe the part or share on which he makes payment * * *"

If, upon offering to pay your taxes, you are told by the township treasurer that no taxes are due, and, relying upon such statement, you do not pay them, your land could not be sold for delinquent taxes.—Asst. Legal Editor.

RABBIT HIDE TANNING

Would you please tell me through the columns of The Business Farmer how to tan rabbit hides with the fur on?—A. E. P., Detroit, Mich.

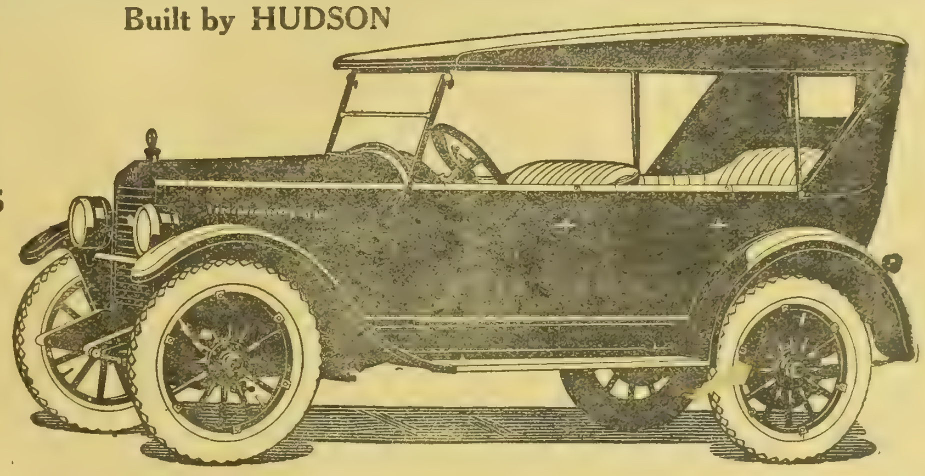
—Take a quart of oatmeal, a half pound of powdered alum and the same amount of salt; mix and add soft water enought to make a thick paste. Stretch the skin on a board, flesh side out and apply the paste, spreading it on about a half inch

(Continued on Page 25)

ESSEX

Built by HUDSON

Touring
$1045
Cabriolet $1145
Freight and Tax Extra



Essex Stays Young

Because of Hidden Values

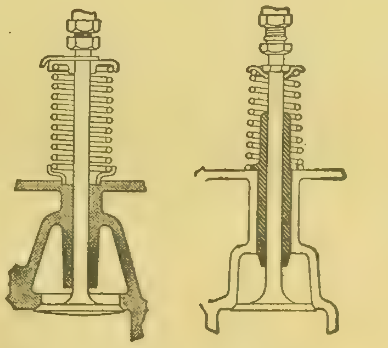
In Essex particular attention is bestowed on hidden values.

Finest roller bearings are used throughout, where commonly bushings are used. For weight carried the frame is the sturdiest built, save one. European and American experts call its chassis the finest of its size.

Easily made adjustments keep the car snug and free of noise. Essex design and construction minimize service needs, and account for its remarkable acknowledgment among owners as a long life car.

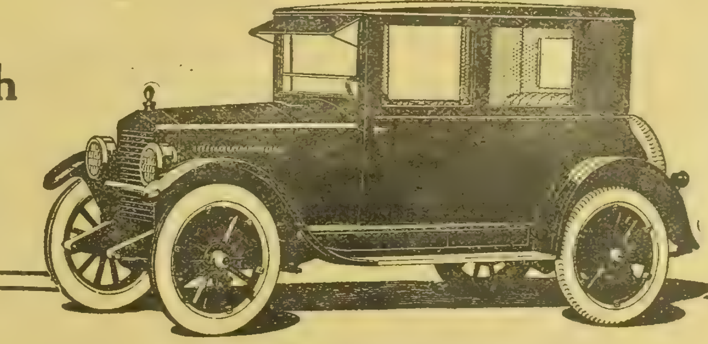
Essex cars that have seen 50,000 and 60,000 miles of service are today as dependable as when new. And they continue the economy of their first cost in years of reliable service.

Another Essex Feature Giving Low Maintenance Cost and Good Service



Essex removable valve guides (at left) are simple to replace when worn. Greater length gives perfect alignment. **At Right** the ordinary type, not removable, can only be repaired by a costly, unsatisfactory operation.

The Coach
Built by Hudson
$1145
Freight and Tax Extra



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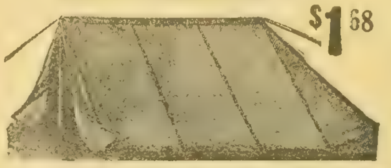

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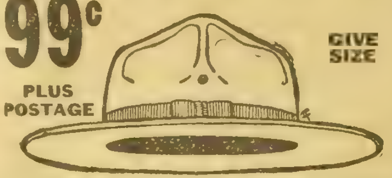

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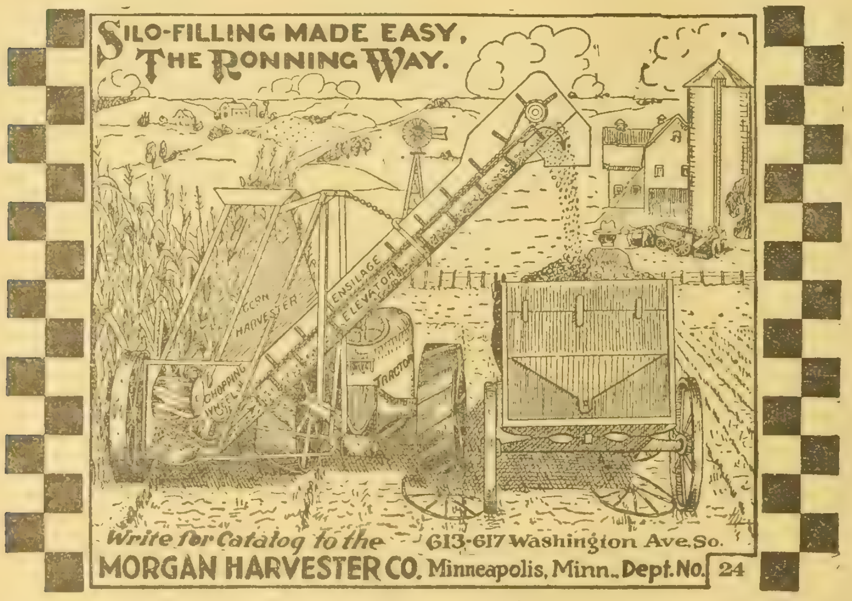

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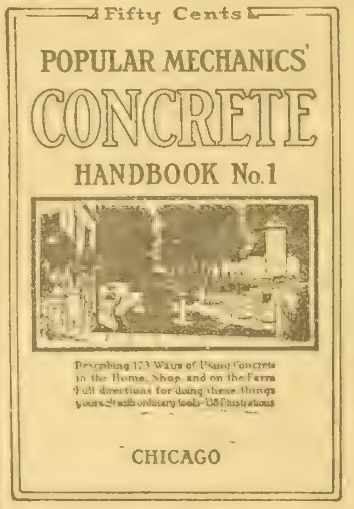

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What Present Legislature Has Accomplished

(Continued from Page 3)

Bovine Tuberculosis Eradication

Farm organizations and pure-bred live stock associations have united behind an adequate five-year program for the eradication of bovine tuberculosis in Michigan. A bill has already passed both branches of the legislature which paves the way for county co-operation in carrying out this work and an adequate appropriation bill to finance the indemnities on condemned cattle during the next two years is receiving favorable consideration in the Senate. If this disease can be checked and stamped out in Michigan it will be of great direct financial benefit to Michigan farmers and dairymen and will promote the health of Michigan citizens.

A Foresting Measure

From the standpoint of the northern part of the state perhaps one of the most important bills is Rep. Meggison's measure which is intended to promote useful forest growth in the state. One of its chief provisions allows land carrying a satisfactory timber stand to be taxed annually on its bare-land value without regard to the value of the timber which is accumulating. Then at the time when the timber is matured and ready for market a harvest tax would be assessed.

Friends of the bill point out that an annual tax on the accumulated value of all of the stand of timber is not adapted to such a long-time crop and that in actual operation it results in the timber being harvested long before it is mature. It is thought that this bill would result in more forests in Michigan and in their more efficient handling.

To Curb the "Land-Sharks"

Another measure which has for its purpose the orderly settlement and development of the northern portion of the State is also being sponsored by Rep. Meggison. This bill was drafted by the Development Bureau of the State Department of Agriculture and is the so-called "Land Certification" bill. This bill has been considered for several weeks by the House Judiciary Committee and has finally been so amended that is satisfactory to them and it will, no doubt, pass the House at an early date. It is the purpose of this bill to prevent the land sharks from dumping worthless land on prospective Michigan settlers and thus giving Michigan real estate a black eye.

Farmers Defeat Full-Crew Bill

Farm organizations were, no doubt, largely responsible for the defeat in the Senate of the proposed full crew railway bill. This measure would require an additional flag man on certain specified trains and would set a visious precendent whereby labor could dictate to the railroads in regard to their operating conditions. As long as we continue to make it harder for the railroads and increase their operating cost we cannot logically ask them for lower rates on farm products which we buy and sell.

For Cheaper Steel

At the request of the Michigan State Farm Bureau a resolution was passed by both Houses of the Legislature urging Congress and the Interstate Commerce Commission to take immediate steps to abolish the practice of selling all steel on the Pittsburgh Plus basis. Pittsburgh Plus it is explained is a shrewd practice of those engaged in steel manufacture of selling all rolled steel on the Pittsburgh price, plus the freight from Pittsburgh to point of delivery. Michigan steel, it must be remembered, comes largely from Gary and South Chicago where it can be manufactured much more cheaply than at Pittsburgh. Despite this fact we must pay the higher Pittsburgh price and the phantom freight all the way from Pittsburgh.

Filled Milk Bill a Law

Another bill which was also prepared and sponsored by the State Farm Bureau would prevent the manufacturer and sale within the state of "filled milk," milk from which the butter fat has been wholly or partily removed and replaced with a vegetable oil. This bill has already become a law, having passed both Houses and having been signed by the Governor.

Enactment of this measure at this time is regarded as most timely because Michigan Farm Bureau officials discovered that filled milk manufacturing companies which had been outlawed in other states were planning to move their machinery and equipment to Michigan. Filled milk is not a healthful product and does not contain the necessary vitamines to make a good food for children so the passage of this law not only benefits farmers and dairymen but city dwellers as well.

Eastern Time Defeated

After considerable debate the House of Representatives defeated the bill which would make eastern time the standard time for Michigan. This proposal had quite general opposition among the rural districts who feel that they get up early enough as it is without turning the clcok ahead. Fruit and produce growers and dairymen have especially hostile to the faster time. If the city people want to go to work a little earlier in the morning the farmers will be perfectly willing.

Standardization Bills Pending

In an effort to standardize Michigan farm products and increase their demand on the big markets, several bills have been passed setting up definite state standards and grades and requiring honest labeling, in order that the consumer may know what he is purchasing.

A bill has already been passed and become a law which sets up fat and moisture content standards for cheese and requires honest labeling. perhaps with this law we may win back some of the trade which Wisconsin, with its standardized and guaranteed cheese has won from us during the past few years.

At the request of the grape growers, a bill has been passed setting up three standard grades of grapes sold in closed packages within the state. An amendment to the apple standards bill is now being considered.

There is some prospect that Michigan may take the lead in the adoption of a state truth-in-fabric law. Wyoming passed such an act two years ago and has found it very successful. State legislatures in several other states now have similar measures under consideration.

Even the friends of this proposal are agreed that a federal law would be preferable to a state act, but they point out that Michigan had a state pure food law 15 years before the federal enactment was secured. Rep. Sanson of Caro has a very conservative and workable state truth-in-fabric bill which he has succesfully piloted through the House committee of the whole. His bill is now up for final passage on third reading by that body.

Through fair and unprejudiced legislative news sent out by Michigan State Farm Bureau to all of the weekly papers of the state the residents of rural districts have been kept better informed on legislative issues than ever before. Perhaps this knowledge on the part of the folks back home regarding just what sort of representation they were getting and what important issues affecting agriculture were pending has had something to do with the enactment of this beneficial agricultural legislation.

Many important bills effecting the farmer still await final passage and it would be well worth the time of any rural citizen to watch closely what takes place during the next two weeks. Let your Senator and Representative know what you think about these issues. He is there to carry out your wishes. That's what you sent him there for.

FARM BUREAU SEED DEPT. OPENS DETROIT OFFICE

THE Michigan State Farm Bureau has established a branch office of the Seed Department on the Eastern Market at Detroit, in connection with the Produce Exchange at 2729 Russell street. The Detroit branch will carry Michigan adapted western Grimm and Idaho alfalfas' hardy northern-grown clovers and legumes, grain, timothy and grass seeds.

FROM THE OLD TO THE NEW

A SERMON BY REV. DAVID F. WARNER

BIBLE TEXT—II Cor. 5:17.

"Old things are passed away, behold they have become new."

AT once, this will seem like a sweeping, revolutionary statement. But it is. It carries with it a revolutionary spirit and law. It gets clear entirely of past tradition. Paul poses as an ardent reformer who is crying, "Down with the past." It sounds like the cry of the Bolsheviki. It seems to say there is nothing good in old beliefs and ways; we must strike out entirely on new paths.

Now, because of this new temper in Christ's teaching, Christianity was looked upon as a class movement by some. Why? Because of the promise of social redemption and political release. It piqued the church leaders because of its seeming favoritism and its breaking down of a conventional and unsocial religion; and rulers tried to crush it, because, they said, it subverted all good government.

But did Paul have reference to sudden revolution in church and state? No. Discerning readers of the apostle know that he refers to a spiritual revolution in the individual; and thru this individual, to a new and reconciled society. He is summoning an inner and true estimate of things and values. He is saying we need a new look upon life, and not according to worldly estimates. According to Moffat, he is emphasising, not "externals," but "inward reality." Said Livingston, "I will place no value on anything I have or may possess except in relation to the Kingdom of God." Livingston demonstrated the reality of this Pauline doctrine. Have you? The annauls of history are filled with the names of those who caught this new thing; this new way of life. "Is your name written there?" And many, to have their old life merge into the new, must pay the martyr's price. How much are you paying?

From now on, says Paul, I know Christ no longer after the flesh, after externals; but in inner consciousness. The historical Christ had become the spiritual, abiding Christ. "It is no longer I that live, but Christ that liveth in me." This Pharisee, "as touching the law," became a mystic, as touching the spirit, Life no longer consisted in forms, rituals, ordinances, and sense matters. The apostle demonstrated in his own life the truth that, "If any man be in Christ" he has passed out of these into the new, creative things of the spirit. And it ought to be said here, that nothing in the church today, so hurts its progress as the mechanical theory of salvation and arbitrariness as to its ordinance life. It cuts the nerve of stewardship and is blighting to the spirit of unity. Here is where we may well pray that this old, unreasoning, uncharitable, spirit may pass away. Yet, for most of us, there is something fine and beautiful and necessary in symbol worship. Only, let us be charitable about externals.

Old things have been made into new. This is the divine way. It is the law of transformation, not destruction. We find it illustrated in Creation; in the scientific law of matter and energy; in the vegetable kingdom where the old seed becomes the new grain; and in the law of the resurrection which give us a new body out of the old.

And so, there shall be "a new heaven and a new earth." Not thru destruction or annihilation, but thru transformation. This new earth is to be filled with transformed individuals. Faith will have the world getting continually newer and freer. Life is full of promise and good in proportion as we accept the spiritual companionship of Christ; the saving mission of the church; and the new, moral push in the doings of men. Said a friend and bank president to me, "There is a place for everyone to grab hold." This is true since new and brotherly plans are engaging the thoughts of men. A great moral revolution is on and I am sure it is the spirit of the lowly Nazarene that has filtered down thru the centuries.

Do you see? Old things becoming new in Christ is the law of Christian progress. It provides for change and growth. It would not try to maintain old, wornout opinions and allegiances and try to galvanize them into new life. But would adapt the principle in new methods and loyalties to meet changes and customs in human life. Just this is the secret of growth in a religion that was dedicated by Christ to the universal man. And at this writing we have no better evidence of this in the church realm, than a change of front on the part of foreign missionaries, relative to the demands of a western denominationalism of the natives of the Orient. Good, virtue, love, light, faith—these do not change but they take new forms.

And this is the testimony of history. The Jewish nation passed away, but not her witness to the true God. Imperial Rome fell, but not her witness to the necessity of law and order. Similarly, we are beholding world changes in our day. Governments are being made over into new forms. God is working thru it all that the old may become new.

And who cannot trace the operation of this law in science and invention. What startling achievement by man in our own day thru a co-working with God's laws. "For thou hast made him (man) but little lower than God, and crownest him with glory and honor." All hail THE MAN! And may his transfigured followers soon come into their promised dominion. Even now, "The meek shall inherit the earth." They may pass from the old to the new.

But again, we have the witness of the church to this new creation. For the sin of Adam, God did not destroy the race. But out of a fallen, perverted, human nature he provided for a converted nature. He took a man of flesh (Jesus) and made him the groundwork of a new man. Man, which fell in the first Adam was made new in the second Adam. God came to our earth in man, and not to destroy, but to fulfil; to perfect and make complete. The Jewish temple, rites and practices were established by God only as parenthetical provisions in the process of developing this new creature. Their meaning is perpetuated in the man, Jesus. Hence we are not come unto the old Sinai but unto the new Sinai; "unto Mount Zion, and unto the city of the living God, * * * * to the spirits of just men made perfect, and to Jesus, the mediator of a new covenant."

The old perishing world is passing, friend. And where do you stand? A recent magazine says, "We are on the very threshold of a new age. The dates are unimportant, for in the advance of the plan of the ages it is not the sharp-cut dates, but periods of time, that are important. Old things pass away in a fading out process; new things gradually dawn. Only on looking backward do the people usually realize that "a great thing took place back there. Surprisingly few of the real turning points of the world come amid signs and wonders and people standing in awe of what is passing. In the minds of most, the War was THE cataclysm, because it was noisy; but something greater than the War, tho much less clamorous, is in passage now."

Jenny Lind, after discovering her power as a singer, was given a new outlook on life. She said, "I got up that morning one creature and went to bed another." A good, Christian woman said to me "I have passed out of bondage into liberty." These are free testimonies to a new creation. Verily, we are given a new standing before God. My Father is near when I know the love and sympathy and attention he bestows upon Christ he bestows upon me. Judgment is gone. Gloom, suspicion, and doubt are passed away. And when, men, everywhere, will give "conscious allegiance" to the new, creative power of Christ; when they are ready to line up with Christian duty and brotherhood obligations; then, "old things are passed away; behold they are become new." Then will have come to pass the Patmos dream, "I saw a new heaven and a new earth, for the first heaven and the first earth are passed away."

AN OMMISSION

The article "Preventing the Potato Landslide" which appeared in our March 31st issue was published through the courtesy of Farm, Stock and Home. It was through error that credit was not given to this publication.

12,000 People Killed By Automobiles in 1922

Automobile Insurance now a Necessity

More than 12,000 persons were killed by automobiles in 1922. 1,347 children are victims in 78 cities of more than 50,000 population. Pedestrians should use greater care, parents should guard the lives of their children, and automobile owners should drive carefully and keep insured.

The Citizens' Mutual pays about 300 claims each month, amounting to about 30,000. With the heavy traffic on all highways and in the cities, accidents are very frequent. The Company is enjoying a greatly increased business for 1923 because:

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KEEP THE BUSINESS FARMER COMING
SEE PAGE 25

The Hunted Woman

By James Oliver Curwood

Michigan's Own and America's Formost Author of the Great Northwest

(Copyright by James Oliver Curwood

(Continued from April 14th Issue)

“John—John Aldous——”

“Joanne! Oh, my God—Joanne!”

She swayed as he sprang to her, but she was smiling—smiling in that new and wonderful way as her arms reached out to him, and the words he heard her say came low and sobbing:

“John—John, if you want to, now—you can tell me that my hair is beautiful!”

And she was in his arms, her warm, sweet body crushed close to him, her face lifted to him, her soft hands stroking his face, and over and over again she was speaking his name while from out of his soul there rushed forth the mighty flood of his great love; and he held her there, forgetful of time now, forgetful of death itself; and he kissed her tender lips, her hair, her eyes—conscious only that in the hour of death he had found life, that her hands were stroking his face, and caressing his hair, and that over and over again she was whispering sobbingly his name, and that she loved him. The pressure of her hands against his breast at last made him free her. And now, truly, she was glorious. For the triumph of love had overridden the despair of death, and her face was flooded with its colour and in her eyes was its glory.

And then, as they stood there a step between them, there came—almost like the benediction of a cathedral bell—the soft, low tinkling chime of the half-hour bell in Aldous' watch!

It struck him like a blow. Every muscle in him became like rigid iron, and his torn hands clenched tightly at his sides.

“Joanne—Joanne, it is impossible!” he cried huskily, and he had her close in his arms again, even as her face was whitening in the lantern-glow. “I have lived for you, I have waited for you—all these years you have been coming, coming, coming to me—and now that you are mine—mine—it is impossible! It cannot happen——”

He freed her again, and caught up a lantern. Foot by foot he examined the packed tunnel. It was solid—not a crevice or a break through might have traveled the sound of a voice or the explosion of a gun. He did not shout. He knew that it would be hopeless, and that his voice would be terrifying in that sepulchral tomb. Was it possible that here might be some other opening—a possible exit—in that mountain wall? With the lantern in his hand he searched. There was no break. He came back to Joanne. She was standing where he had left her. And suddenly, as he looked at her, all fear went out of him, and he put down the lantern and went to her.

“Joanne,” he whispered, holding her two hands against his breast, “you are not afraid?”

“And you know——”

“Yes, I know,” and she leaned forward so that her head lay partly upon his breast.

“And you love me, Joanne?”

“As I never dreamed that I should love a man, John Aldous,” she whispered.

“And yet it has been but two days——”

“And I have lived an eternity,” he heard her lips speak softly.

“You would be my wife?”

“Yes.”

“Tomorrow?”

“If you wanted me then, John.”

“I thank God,” he breathed in her hair. “And you would come to me without reservation, Joanne, trusting me, believing in me—you would come to me body, and heart, and soul?”

“In all those ways—yes.”

“I thank God,” he breathed again. He raised her face. He looked deep into her eyes, and the glory of her love grew in them, and her lips trembled as she lifted them ever so little for him to kiss.

“Oh, I was happy—so happy,” she whispered, putting her hands to his face. “John, I knew that you loved me, and oh! I was fighting so hard to keep myself from letting you know how happy it made me. And here, I was afraid you wouldn't tell me—before it happened. And John—John——”

She leaned back from him, and her white hands moved like swift shadows in her hair, and then, suddenly, it billowed about her—her glorious hair—covering her from crown to hip; and with her hands she swept and piled the lustrous masses of it over him until his face, and head, and shoulders were buried in the flaming sheen and sweet perfume of it.

He strained her closer. Through the warm richness of her tresses his lips pressed her lips, and they ceased to breathe. And up to their ears, pounding through that enveloping shroud of her hair came the tick-tick-tick of the watch in his pocket.

“Joanne,” he whispered.

“Yes, John.”

“You are not afraid of—death?”

“No, not when you are holding me like this, John.”

He still clasped her hands, and a sweet smile crept over her lips.

“Even now you are splendid,” she said. “Oh, I would have you that way, my John!”

Again they stood up in the unsteady glow of the lanterns.

“What time is it?” she asked.

He drew out his watch, and as they both looked his blood ran cold.

“Twelve minutes,” she murmured, and there was not a quiver in her voice. “Let us sit down, John—you on this box, and I on the floor, at your feet—like this.”

He seated himself on the box, and Joanne nestled herself at his knees, her hands clasped in his.

“I think, John,” she said softly, “that very, very often we would have visited like this—you and I—in the evening.”

A lump choked him, and he could not answer.

“I would very often have perched myself at your feet like this.”

“Yes, yes, my beloved.”

“And you would always have told me how beautiful my hair was—always. You would not have forgotten that, John—or have grown tired?”

“No, no—never!”

His arms were about her. He was drawing her closer.

“And we would have had beautiful times together, John—writing, and going adventuring, and—and——”

He felt her trembling, throbbing, and her arms tightened about him.

And now, again up through the smother of her hair, came the tick-tick-tick of his watch.

He felt her fumbling at his watch pocket, and in a moment she was holding the timepiece between them, so that the light of the lantern fell on the face of it.

“It is three minutes of four, John.”

The watch slipped from her fingers, and now she drew herself up so that her arms were about his neck, and their faces touched.

“Dear John, you love me?”

“So much that even now, in the face of death, I am happy,” he whispered. “Joanne, sweetheart, we are not going to be separated. We are going—together. Through all eternity it must be like this—you and I, together. Little girl, wind your hair about me—tight!”

“There—and there—and there, John! I have tied you to me, and you are buried in it! Kiss me John——”

And then the wild terrible fear of a great loneliness swept through him. For Joanne's voice had died away in a whispering breath, and the lips he kissed did not kiss him back, and her body lay heavy, heavy, heavy in his arms. Yet in his loneliness he thanked God for bringing her oblivion in these last moments, and with his face crushed to hers he waited. For he knew that it was no longer a matter of minutes, but of seconds, and in those seconds he prayed, until up through the warm smother of her hair—with the clearness of a tolling bell—came the sound of the little gong in his watch striking the Hour of Four!

In space other worlds might have crumbled into ruin; on earth the stories of empires might have been written and the lives of men grown old in those first century-long seconds in which John Aldous held his breath and waited after the chiming of the hour-bell in the watch on the cavern floor. How long he waited he did not know; how closely he was crushing Joanne to his breast he did not realize. Seconds, minutes, and other minutes—and his brain ran red in dumb, silent madness. And the watch! It ticked, ticked, ticked! It was like a hammer.

He had heard the sound of it first coming up through her hair. But it was not in her hair now. It was over him, about him—it was no longer a ticking, but a throb, a steady, jarring, beating throb. It grew louder, and the air stirred with it. He lifted his head. With the eyes of a madman he stared—and listened. His arms relaxed from about Joanne, and she slopped crumpled and lifeless to the floor. He stared—and that steady beat-beat-beat—a hundred times louder than the ticking of a watch—pounded in his brain. Was he mad? He staggered to the choked mouth of the tunnel, and then there fell shout upon shout, and shriek upon shriek from his lips, and twice, like a madman now, he ran back to Joanne and caught her up in his arms, calling and sobbing her name, and then shouting—and calling her name again. She moved; her eyes opened, and like one gazing upon the spirit of the dead she looked into the face of John Aldous, a madman's face in the lantern-glow.

“John—John——”

She put up her hands, and with a cry he ran with her in his arms to the choked tunnel.

“Listen! Listen!” he cried wildly. “Dear God in Heaven, Joanne—can you hear them? It's Blackton—and his men! Hear—hear the rock-hammers smashing! Joanne—Joanne—we are saved!”

She did not sense him. She swayed, half on her feet, half in his arms, as consciousness and reason returned to her. Dazedly her hands went to his face in their old, sweet way. Aldous saw her struggling to understand—to comprehend; and he kissed her soft upturned lips, fighting back the excitement that made him want to raise his voice again in wild and joyous shouting.

“It is Blackton!” he said over and over again. “It is Blackton and his men! Listen!—you can hear their picks and the pounding of their rock-hammers!”

CHAPTER XX

AT LAST Joanne realized that the explosion was not to come, that Blackton and his men were working to save them. And now, as she listened with him, her breath began to come in sobbing excitement between her lips—for there was no mistaking that sound, that steady beat-beat-beat that came from beyond the cavern wall and seemed to set strange tremors stirring in the air about their ears. For a few moments they stood stunned and silent, as if not yet quite fully comprehending that they had come from out of the pit of death, and that men were fighting for their rescue. They asked themselves no questions—why the “coyote” had not been fired? How those outside knew they were in the cavern. And, as they listened, there came to them a voice. It was faint, so faint that it seemed to whisper to them through miles and miles of space—yet they knew that it was a voice!

“Some one is shouting,” spoke Aldous tensely. “Joanne, my darling, stand around the face of the wall so flying rock will not strike you and I will answer with my pistol!”

When he had placed her in safety from split lead and rock chips, he drew his automatic and fired it close up against the choked tunnel. He fired five times, steadily, counting three between each shot, and then he placed his ear to the mass of stone and earth and listened. Joanne slipped to him like a shadow. Her hand sought his, and they held their breaths. They no longer heard sounds—nothing but the crumbling and falling of dust and pebbles where the bullets had struck, and their own heart-beats. The picks and rock-hammers had ceased.

Tighter and tighter grew the clasp of Joanne's fingers, and a terrible thought flashed into John's brain. Perhaps a rock from the slide had cut a wire, and they had found the wire—had repaired it! Was that thought in Joanne's mind, too? Her finger-nails pricked his flesh. He looked at her. Her eyes were closed, and her lips were tense and gray. And then her eyes shot open—wide and staring. They heard, faintly though it came to them—once, twice, three times, four, five—the firing of a gun!

John Aldous straightened, and a great breath fell from his lips.

“Five times!” he said. “It is an answer. There is no longer doubt.”

He was holding out his arms to her, and she came into them with a choking cry; and now she sobbed like a little child with her head against his breast, and for many minutes he held her close kissing her wet face, and her damp hair, and her quivering lips, while the beat of the picks and the crash of the rock-hammers came steadily nearer.

Where those picks and rock-hammers fell a score of men were working like fiends: Blackton his arms stripped to the shoulders; Gregg, sweating and urging the men; and among them—lifting and tearing at the rock like a madman—old Donald MacDonald, his shirt open, his great hands bleeding, his hair and beard tossing about him in the wind. Behind them, her hands clasped to her breast—crying out to them to hurry, hurry—stood Peggy Blackton. The strength of five men was in every pair of arms. Huge boulders were rolled back. Men pawed earth and shale with their naked hands. Rock-hammers fell with blows that would have cracked the heart of a granite obelisk. Half an hour — three quarters — and Blackton came back to where Peggy was standing, his face black and grimed, his arms red-scared where the edges of the rocks had caught them, his eyes shining.

“We're almost there, Peggy,” he panted. “Another five minutes and——”

A shout interrupted him. A cloud of dust rolled out of the mouth of the tunnel, and into that dust rushed half a dozen men led by old Donald. Before the dust had settled they began to reappear, and with a shrill screan Peggy Blackton darted forward and flung her arms about the gold-shrouded figure of Joanne, swaying and laughing and sobbing in the sunshine. And old Donald,

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THE LATE SPRING

Oh, day in month of April,
Like the month of March much more,
For so cold the wind is blowing
It prevents the open door.

Your looks almost deceive me,
As sitting in this chair
The sun's rays thru the window
Make you appear quite fair.

The fleecy clouds of white
Sailing in a lovely blue,
With the sunshine coming in between
Speak very well of you.

But frost is in the ground
And how can grasses grow
In places which this morning
Were cold with sullen snow.

The heavy wraps are with us yet,
And stoves and coal pails tell
That winter still is quite alive,
Tho we have sung his knell.

Where are the soft and balmy winds
To warm and cheer our soul,
And where the birds whose melodies
From out their throats should roll?

Did not we hear a robin
About a month ago,
Tell us spring was coming,
Why does it tarry so?

And yet, Oh day in April,
Tho cold and bleak you are,
We're very thankful for you—
It could be worse, by far.

—By Parm Mayer

clasping his great arms about Aldous, cried brokenly:

"Oh, Johnny, Johnny—something told me to foller ye—an' I was just in time—just in time to see you go into the coyote!"

"God bless you, Mac!" said Aldous, and then Paul Blackton was wringing his hands, and one after another the others shook his hand, but Peggy Blackton was crying like a baby as she hugged Joanne in her arms.

"MacDonald came just in time," explained Blackton a moment later and he tried to speak steadily, and tried to smile. "Ten minutes more, and——"

He was white.

"Now that it has turned out like this I thank God that it happened," said Aldous, for the engineer's ears alone. "We thought we were facing death, and so—I told her. And in there, on our knees, we pledged ourselves man and wife. I want the minister—as quick as you can get him, Blackton. Don't say anything to Joanne, but bring him to the house right away, will you?"

"Within half an hour," replied Blackton. "There comes Tony with the buckboard. We'll hustle up to the house and I'll have the preacher there in a jiffy."

As they went to the wagon, Aldous looked about for MacDonald. He had disappeared. Requesting Gregg to hunt him up and send him to the bungalow, he climbed into the back seat, with Joanne between him and Peggy. Her little hand lay in his. Her fingers clung to him. But her hair hid her face, and on the other side of her Peggy Blackton was laughing and talking and crying by turns.

As they entered the bungalow, Aldous whispered to Joanne:

"Will you please go right to your room, dear? I want to say something to you—alone."

When she went up the stair, Peggy caught a signal from her husband. Aldous remained with them. In two minutes he told the bewildered and finally delighted Peggy what was going to happen, and as Blackton hustled out for the minister's house he followed Joanne. She had fastened her door behind her. He knocked. Slowly she opened it.

"John——"

"I have told them, dear," he whispered happily. "They understand. And, Joanne, Paul Blackton will be back in ten minutes—with the minister. Are you glad?"

She had opened the door wide, and he was holding out his arms to her again. For a moment she did not move, but stood there trembling a little, and deeper and sweeter grew the colour in her face, and tenderer the look in her eyes.

"I must brush my hair," she answered, as though she could think of no other words. "I—I must dress."

Laughing joyously, he went to her and gathered the soft masses of her hair in his hands, and piled it up in a glorious disarray about her face and head, holding it there, and still laughing into her eyes.

"Joanne, you are mine!"

"Unless I have been dreaming—I am, John Aldous!"

"Forever and forever."

"Yes, forever—and ever."

"And because I want the whole world to know, we are going to be married by a minister."

She was silent.

"And as my wife to be," he went on, his voice trembling with his happiness, "you must obey me!"

"I think that I shall, John."

"Then you will not brush your hair, and you will not change your dress, and you will not wash the dust from your face and that sweet little beauty-spot from the tip of your nose," he commanded, and now he drew her head close to him, so that he whispered, half in her hair: "Joanne, my darling, I want you wholly as you came to me there, when we thought we were going to die. It was there you promised to become my wife, and I want you as you were then—when the minister comes."

"John, I think I hear some one coming up the front steps!"

They listened. The door opened. They heard voices—Blackton's voice, Peggy's voice, and another voice—a man's voice.

Blackton's voice came up to them very distinctly.

"Mighty lucky, Peggy," he said. "Caught Mr. Wollaver just as he was passing the house. Where's——"

"Sh-h-hh!" came Peggy Blackton's sibilant whisper.

Joanne's hands had crept to John's face.

"I think," she said, "that it is the minister, John."

Her warm lips were near, and he kissed them.

"Come, Joanne. We will go down."

Hand in hand they went down the stair; and when the minister saw Joanne, covered in the tangle and glory of her hair; and when he saw John Aldous, with half-naked arms and blackened face; and when, with these things, he saw the wonderful joy shining in their eyes, he stood like one struck dumb at sight of a miracle descending out of the skies. For never had Joanne looked more beautiful than in this hour, and never had man looked more like entering into paradise than John Aldous.

Short and to the point was the little mountain minister's service, and when he had done he shook hands with them, and again he stared at them as they went back up the stair, still hand in hand. At her door they stopped. There were no words to speak now, as her heart lay against his heart, and her lips against his lips. And then, after those moments, she drew a little back, and there came suddenly that sweet, quivering, joyous play of her lips as she said:

"And now, my husband, may I dress my hair?"

"My hair," he corrected, and let her go from his arms.

Her door closed behind her. A little dizzily he turned to his room. His hand was on the knob when he heard her speak his name. She had reopened her door, and stood with something in her hand, which she was holding toward him. He went back, and she gave him a photograph.

"John, you will destroy this," she whispered. "It is his photograph—Mortimer FitzHugh's. I brought it to show people, that it migh help me in my search. Please—destroy it!"

He returned to his room and placed the photograph on his table. It was wrapped in thin paper, and suddenly there came upon him a most compelling desire to see what Mortimer FitzHugh had looked like in life. Joanne would not care. Perhaps it would be best for him to know.

He tore off the paper. And as he looked at the picture the hot blood in his veins ran cold. He stared—stared as if some wild and maddening joke was being played upon his faculties. A cry rose to his lips and broke in gasping breath, and about him the floor, the world itself, seemed slipping away from under his feet.

For the picture he held in his hand was the picture of Culver Rann!

(To Be Continued)

GOVERNMENT BULLETINS OF INTERESTED IN MAY

A SMALL list of Farmers' Bulletins and Circulars of general interest during May is believed to be of value to our readers. Copies may be obtained free by addressing the Division of Publications, United States Department of Agriculture, Washington, D. C. Specify number and name and whether Farmers' Bulletin or Department Circular.

Farmers' Bulletin 450, Some Facts About Malaria; 602, Production of Clean Milk; 701, Bagworm: an injurious Shade Tree Insect; 710, Bridge Grafting; 863, Irrigation of Grain; 932, Rodent Pests on the Farm; 948, The Rag Doll Seed Tester; 959, The Spotted Garden Slug; 975, The Control of European Foulbrood; 977, Hay Caps; 984, Farm and Home Drying of Fruits and Vegetables; 1191, Cheesemaking on the Farm; 1198, Swarm Control; 1247, American Moles as Agricultural Pests and as Fur Producers; 1250, Green Manuring; 1266, Preparation of Peaches for Market; 1310, The Corn Earworm.

Department Circular 25, Points for Egg Buyers; 36, Use of Poultry Club Products; 219, Phoma Rot of Tomatoes; 238, U. S. Grades for Potatoes Recommended by the United States Department of Agriculture.

BAD ANY TIME

Dad—"Son, there's nothing worse than to be old and broken."

Young Hopeless—"Yes, father—to be young and broke."—Punch Bowl.

Air-Cure Your Hay

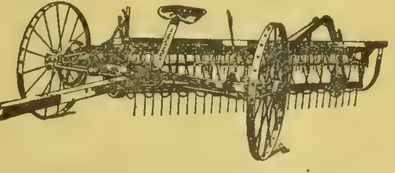
with McCormick-Deering Hay Tools

IT ISN'T sun-drying that puts quality into hay, but *air-curing.* And hay is air-cured best when side-tedded into light, breeze-sifting windrows such as those that trail off in the wake of the

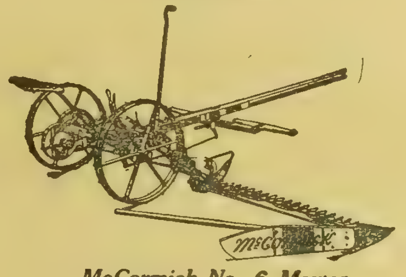
McCormick-Deering Side Rake and Tedder

You can follow closely behind the mower with this machine and rake the hay before the leaves begin to wilt. The teeth strike the heads of the hay first and rake clean, picking up every last wisp—and there is no shattering of leaves. The hay is turned completely over and deposited in snug, airy windrows through which the air circulates freely, curing evenly both stems and leaves with its magic touch.

There are points of mechanical excellence that distinguish this fast-working, gentle hay-handling machine from all other types of side rakes and tedders. There are also many points of mechanical excellence that distinguish all hay machines made in the International Harvester factories—**McCormick, Deering and Milwaukee mowers, McCormick-Deering self-dump rakes, tedders, sweep rakes, stackers and loaders.** Ask your near-by McCormick-Deering dealer to show you.



McCormick-Deering Side Rake and Tedder



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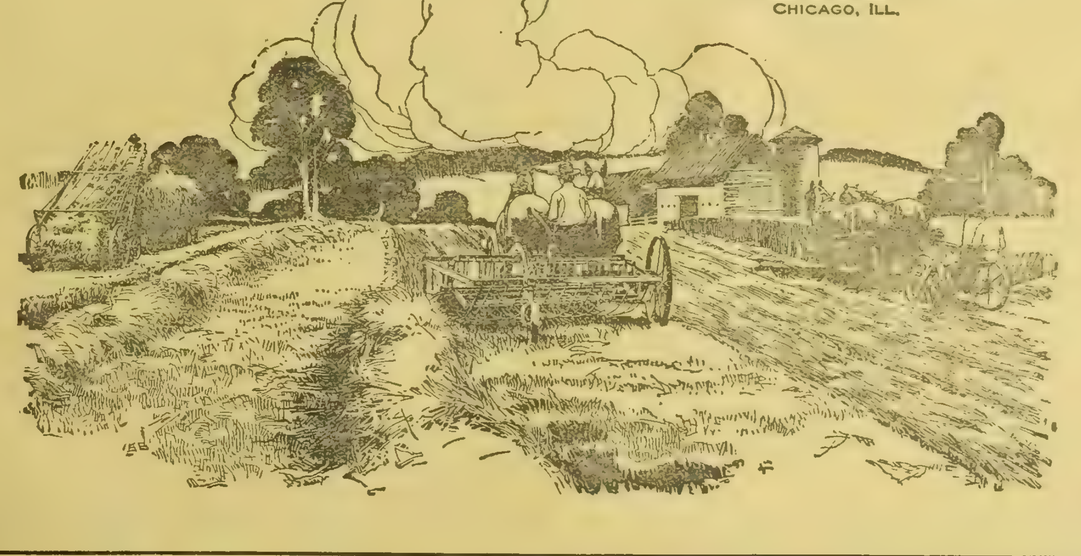

The Michigan
BUSINESS FARMER
SATURDAY, APRIL 28, 1923

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THE RURAL PUBLISHING COMPANY, Inc.
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RELIABLE ADVERTISERS

We will not knowingly accept the advertising of any person or firm who we do not believe to be thoroughly honest and reliable. Should any reader have any cause for complaint against any advertiser in these columns, the publisher would appreciate an immediate letter bringing all facts to light. In every case when writing say: "I saw your advertisement in The Michigan Business Farmer!" It will guarantee honest dealing.

"The Farm Paper of Service"

FRED M. WARNER

THRICE governor of the state to which he had come an immigrant boy from England, beloved by thousands of men and women who knew him as "Fred" and went to him with their troubles, as children go to their parents for consolation, Fred M. Warner, passed away last week at the age of fifty-eight.

Only a few months ago we watched him throw every ounce of his energy into the campaign for United States senator, when contrary to the advice of his friends, and at the risk of his position as national committeeman, he backed a man who had in former years befriended him.

Fred Warner never forgot a friend and he made friends wherever his smile went. The farmers of Michigan never had a better friend than this man, because he was never entirely out of the farming business himself. He knew the farmers problems, but only recently he was heard to remark that things were not nearly so dark for the farmer as they appeared on the surface. He believed a better day for all farmers, and particularly for the dairy farmer, was not far distant and he repeated this optimism to many a worried farmer who came to him for advice during the past year or two.

From his old-fashioned home under the elms at Farmington, Fred M. Warner was taken to the little cemetery, that from the crest of a hill overlooks the town and the industries he helped to build. No more representative throng ever assembled in Michigan to pay its respects to a beloved and worthy citizen. Rich and famous men who came in liveried equipage, mingled with simple folk whose dusty footgear showed how they had come. From the home to the cemetery, the school-children of Farmington, joined hand in hand on either side of the roadway formed a guard of honor.

A fitting tribute to a noble man who served his state so well!

TOO MUCH IS ENOUGH

ONE of the formost agricultural journals in this country denounced last week most severely the policy employed by Secretary of Agriculture Wallace and his Department. It was stated in this editorial that running down the farmer's business was not going to help him reestablish himself. In other words, that the last thing you would tell the banker of whom you were trying to borrow money would be the discouraging side of your business. You would want to paint an optimistic picture, which would go to show that in the near future your business would be on a sound foundation, and you would be back in a position to repay the loan he was making you.

There can be no question but what the airing of the farmer's demoralized financial condition has reduced by a great many millions of dollars the value of the farms in this country. The price of any commodity is set by the demand for it, and buyers are not going to clamor for a business which is reported to be in such bad shape as the farming business is.

Probably it is true that no single source of information has been so prolific in its output of this sort of publicity as has the Department of Agriculture.

However, Secretary Wallace is not to be hastily condemned because it is undoubtedly true that he was trying to prove to the lawmakers (then in session at Washington) that the situation was, as we know it to be, very serious, and that unless some changes were made and some relief offered the farmer, a serious catastrophe might result.

It is not clear to us how the Secretary could have made these facts known without making them public, and if he made them public than the farming business generall had to suffer the consequences.

Farmers as a whole may not be in as bad shape as has been painted. We have talked with many farmers in Michigan who had a satisfactory year in 1922. Satisfactory because they had already adjusted themselves to post-war conditions, knew that the change had to come, specialized in dairy or other cash crops, and were so fortunately situated that they were able to show a profit for the year. We readily grant that these are exceptions and that the average farmer in Michigan, as in other states, did not secure a satisfactory return from his material and his labor last year.

We do believe, however, that optimistic publicity given to the farming business at this time will aid in re-establishing conditions, and we believe that Secretary Wallace has in the Department of Agriculture, the most potent force through which this information may be broadcasted.

A DAIRYMAN'S QUESTIONS

"WHY is it," asks a Livingston county dairyman, "that the price of milk is cut during the months of March and April, two of the most expensive months in which to produce milk, when it is sold to the consumer at the same price as January milk?"

That sounds like a perfectly fair and reasonable question and one which we trust Dr. Friday will include in his present study of the milk marketing conditions in Michigan and particularly in the Detroit area.

This same inquiring dairyman who is not afraid to ask publicly some of the questions which come to him while he is feeding his cows, wants to know why the price of milk is quoted at the terminal and not at the receiving station. Here are two subjects worthy of investigation and study.

We hope to publish the answers from the milk commission and Dr. Friday in our next issue and in addition perhaps some of our readers can throw further light on these or other dairymens questions. Inasmuch as the lid is off the milk-can, lets scrub-it, steam-it and thus steralize it inside and out. The Business Farmer has no intention of picking a fight, but we certainly will not stay out if we can help the milk producers and we are pretty sure we can!

FARM BUREAU AND LABOR DON'T HITCH

CLARK L. Brody, Secretary and Manager of the Michigan State Farm Bureau, had to lay down the law last week to the representatives of the labor unions who were trying to secure the passage of the Full-Crew bill, which he characterized as unwarranted, "because it added an unnecessary burden on the people of Michigan." It is said that the labor union representatives had promised their support of the income tax measure if the farm bureau would support the union Full-Crew bill.

Union labor and farm organizations, although theoretically similar, are in fact economically opposed to one another inasmuch as the farmer is a capitalist, and also an employer of labor.

The farmer knows that while he has been put through a period of deflation, the like of which is unparalleled in the history of this country, labor, thanks largely to their unions, has been able to maintain a standard of wages so much higher than the price of farm products that there is no comparison.

The farmer is interested in seeing labor well employed and efficient in its work, but when the hours of labor are cut down to a point where the mechanic is giving only a part of himself for a wage too high, then it is the farmer, as the largest consumer of manufactured products, who must pay for this lack of efficiency and extravagance.

Theorists and hair-brained economists are always trying to weld a link between union labor and farm organizations, but when it comes down to a show-down and the actual facts are weighed, it usually works out about as it did in the recent demonstration at our own state capitol.

POTATO GROWERS GET TOGETHER

THE silver lining of the black cloud which hovered over the potato growers has already come to the surface in the formation of a national potato growers' association, which will include the potato growers of all of Michigan, Maine, New York, and other potato growing states, and which will be operated on the same plan which has been so successfully used by the fruit growers of California, the cotton producers of the south, and the tobacco growers of Kentucky.

It is planned to operate a national sales agency with offices in the larger cities, and probably a direct control of the markets will be thus maintained. It is our opinion that the only way out of the present farm dilemma is the operation of farmer-owned selling agencies. It would seem that the success met by the co-operative marketing on this basis in other states has proved the efficiency of this plan, and we know of no better staple in which to extend the experiment than in potatoes. We certainly commend this plan to the potato growers of Michigan.

THE ROAD BUILDING PROBE

THE gasoline tax measure which went down to an inglorious defeat, thanks to the veto of Governor Groesbeck, focused the attention to the State Highway Department, for which the extra funds were found to be necessary.

Remarks were passed in the legislature which were not complimentary to the State Road Commissioner or to the work that has been accomplished. In answer to these charges, Commissioner Frank Rogers invited the Senate to make a thorough investigation of his department, all of its activities, and where its money had been spent, which was so commendable that his suggestion was promptly accepted.

It seems to be a pretty well-accepted idea not only from the farmer but from the tax-paying class in Michigan generally that some revision of the road building program must be made which will not call for an increase in taxes, except as they come directly from those who use the roads, which, luckily (?), today includes most of us.

The Business Farmer will be glad to place before the investigating committee any instances of apparent misuse of road building funds or any other conditions regarding the road building program which should be brought to their attention. We agree not to divulge the name of the sender, providing all of the facts as stated will bear investigation by us.

A SPRING TONIC

THE two days last week when the summer came back to give us a promise of what we might expect was a better "spring tonic" than all of the patent potions which we might accumulate from the apothecary.

There is one satisfaction which comes to us who live so far north and that is the contrast which comes in the spring of the year, after a stretch of winter which we sometimes think will never end.

There is a sensation which comes to the man who follows the plow in new turned earth on a day like this which cannot be compared with any similar experience in this old world of ours.

The farmer's wife and family too, can lift their hands to high Heaven and give some thanks when spring comes that they are not confined within the narrow walls and shut in by the clutter of buildings on all sides, as are the millions who live in cities.

Be glad you are alive this year, friends. Take an inventory of the things you have to be thankful for and it may go a long ways toward making up for the things you wish you had.

Try it, and you will have the best prescription we know of for a "Spring Tonic."

NAMING THE FARM

DID you ever stop to think as you drove along a country road that every farm looks alike except the one with a name on it. As a recent writer pointed out, there is exactly as much reason for naming your farm as naming your horse, your dog, or your cat, and yet you name them because you are fond of them and want to distinguish them from others of their kind.

A farm is just a farm, after all, unless it is named, and certainly it is not hard to select a name for something which is near and dear to you for a reason.

That lone pine, the orchard, the twin silo, the winding stream, the long view, the hill-crest, the old homestead; look about you and you will find a dozen subjects that might suitably name your farm and from these select the one that seems best to distinguish your farm from that of your neighborhood.

A new sense of proprietorship comes from the possession of a "named" farm, yet how simple it is to give your farm this distinction.

PUBLISHER'S DESK

MR. JONES OF OLNEY, ILLINOIS

THERE are so many folks with farms for sale these days that the farm land sharks are thicker than flies around a molasses barrel, if we are to believe the reports which we get.

We have told readers of the methods employed by the Warren-McRae Farm Agency of Logansport, Indiana, and recently we have had several inquiries regarding Jones, of Olney, Illinois, who has a very much different scheme, the efficiency of which we are not informed.

It is, we believe, Mr. Jones' plan to insert a description of your farm for sale in 'The Farm Buyers Guide', and the cash payment which he asks pays for this ad. At the same time the seller promises to pay a commission if the farm is sold through the advertisement thus inserted.

The scheme operated by Mr. Jones may be all right, and if any of our readers have had dealings with Mr. Jones, satisfactory or otherwise, I would be glad to hear from them, as the number of inquiries I have had leads me to believe this gentleman to be doing a considerable business in the state of Michigan.

It has been some time now since we have heard from any readers doing business with Warren McRae, Logansport, Indiana. Either he has withdrawn from the state of Michigan or Business Farmer readers are sufficiently warned so that we do not hear from them. I feel quite sure that he has cancelled his advertising in Michigan, and if any of our readers have had recent dealings with him of any kind, the publisher would be glad to hear from them.

SECOND-HAND AUTOMOBILES

Doping up old Lizzie
  and addin' a little paint,
Makes her run like sixty
  and look like what she ain't!

Let me warn my readers that prices on second-hand automobiles were never lower than they are today and I understand that Detroit street corner dealers are planning on driving into the country whole fleets of large and small used cars which might better be headed for the scrap-heap and foisting them off on farmers and small-town folks.

The great big seven passenger cars that weigh tons, and burn gasoline like a bonfire are the real drugs on the market. The agent who offers to sell you one of these ice-wagons may in truth tell you it cost $5,000 only three years ago and still he offers it to you for $500! He may not be lying, but the car will probably be a liability and a big one on your shoulders from the day you buy it.

Undoubtedly there are good used cars on the market, but if you insist on buying one, be sure you get it from a dealer you know and can trust, for buying and trading hosses in the old days was kindergarten work compared to the second-hand automobile business of today.

PAPERS THAT NEVER STOP

Many readers write to ask if they can be made to pay for a periodical which has been mailed by the publisher after the subscription paid for has expired.

Unfortunately we must reply "yes", for the law is that the publisher may assume that the subscriber has simply neglected to renew his subscription and the periodical may be mailed for one year from date of expiration and remuneration therefor collected.

Many publications make it a rule to stop on expiration of the subscription, this as often makes bad friends of the reader, as does the policy of continuing for one year, unless notified to discontinue.

A publication cannot collect more than one year in arrears, nor for any period after it has been notified by the subscriber to stop.

BUYING NURSERY STOCK

Don't buy nursery stock from a stranger! If you will paste that bit of advice up somewhere in your house you will save yourself some of the worries which many of my correspondents have sent in to me.

An agent, who has found it more profitable to carry a nursery order book and catalog, than do plain "tramping" can be sure of landing one or two suckers a day, out of a dozen calls. Usually he asks for half-cash down, the balance to be paid when trees are received. Sometimes however, when in a pinch, he will take 10% down or $1 on every $10 represented in the order.

When the deluded purchaser writes the "nursery company" he gets either a curt letter telling him they never heard of the agent in question or the letter is returned by the post-office marked "not known at this address".

If I were buying nursery stock I would want to know exactly the company I was buying from, how long they had been in business and then I would want to see the stock and examine it before I paid for it. The answer is in my opening sentence:

Don't buy nursery stock from a stranger!

MUTUAL FIRE INSURANCE

Mutual insurance societies are founded on a perfectly safe and economical system which has been in operation in all parts of the world and on all possible risks for many, many years. The success of a mutual depends however so much on the men in whose hands lie its destiny that all too often we hear of one leaving its members in the lurch with nothing but some worthless office fixtures and a big assessment to be paid.

Recently I have received more than one inquiry regarding a state mutual fire insurance company, which I have promptly turned over to the state insurance commissioner, thus through promptly bringing this company to the attention of the proper authorities, I may be able to save the farmer-members what might have otherwise been a most serious loss, not only to this, but to other mutuals in Michigan.

GETTING MONEY ON CHATTEL MORTGAGES

The Publisher is curious to learn if farmers throughout Michigan are unable to borrow money on chattel mortgage. In response to readers in the northern part of the state. an investigation was made and the bank frankly admitted that it was not in a position to accept chattel mortgage because it could not watch the collateral.

Apparently this brings us back exactly were we started in the matter of extending credit, if the renting farmer cannot secure a small loan covering a period in which he is pressed for money, it leaves the rentor and the tenant entirely at the mercy of the money grabber, and makes it doubly hard for him under present-day farming conditions.

AMERICAN HORTICULTURAL COMPANY, DES MOINES, IA.

WE have several claims pending against this concern; all of them are small, but we have net been able to secure a satisfactory settlement for our readers. Last year this company sent out vouchers which were to be accepted this year as cash, but a reader informs us that after sending the voucher in she has had no reply from the company. We are doing our best to secure satisfaction for our many readers

The Collection Box

The purpose of this department is to protect our subscribers from fraudulent dealings or unfair treatment by persons or concerns at a distance.

In every case we will do our best to make a satisfactory settlement or force action, for which no charge for our services will ever be made, providing:

1.—The claim is made by a paid-up subscriber to The Business Farmer.

2.—The claim is not more than 6 mos. old.

3.—The claim is not local or between people within easy distance of one another. These should be settled at first hand and not attempted by mail.

Address all letters, giving full particulars, amounts, dates, etc., enclosing also your address label from the front cover of any issue to prove that you are a paid-up subscriber.

THE BUSINESS FARMER, Collection Box
Mt. Clemens, Mich.

Report Ending April 28, 1923

Total number claims filed	1215
Amount involved	$21,529.37
Number of claims settled	744
Amount secured	$11,897.36

First Mortgage Real Estate Gold Bonds

There is no escaping the fact that there is a consistent, continuous growth in the conviction that the qualities of Federal first mortgage bonds entitle them to a special rating and a preferred ranking among safe securities.

Write for Booklet AG847

Tax Free in Michigan
Free from Federal Income Tax of 4%

6½%

FEDERAL BONDS
Are Better Bonds
(847)

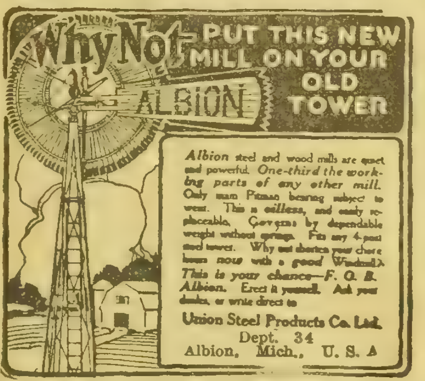
FEDERAL BOND & MORTGAGE COMPANY
FEDERAL BOND & MORTGAGE BUILDING, *DETROIT*

MONEY TO LOAN

On the 33-Year Government Amortization Plan to desirable borrowers who own good, well-managed farms in Michigan and Ohio, and wish to borrow not over 50% of the value of their land plus 20% of the appraised value of the buildings.

No commissions—Low interest rates. No stock investment. Unusually prompt and satisfactory service. If your loan will meet these requirements, write us.

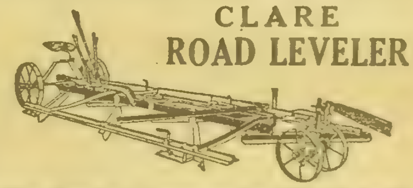
FIRST JOINT STOCK LAND BANK OF CLEVELAND
Guardian Building, Cleveland, Ohio


Why Not PUT THIS NEW MILL ON YOUR OLD TOWER

Albion steel and wood mills are quiet and powerful. *One-third the working parts of any other mill.* Only main Pitman bearing subject to wear. This is *oilless*, and easily replaceable. Governs by dependable weight without springs. Fits any 4-post steel tower. Why not shorten your chore hours *now* with a *good* Windmill? *This is your chance—F. O. B. Albion.* Erect it yourself. Ask your dealer, or write direct to

Union Steel Products Co. Ltd.
Dept. 34
Albion, Mich., U. S. A

CLARE
ROAD LEVELER

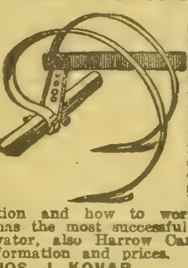


Makes Motoring a pleasure. For dirt and gravel roads, streets, parks, cemeteries, etc. It planes, levels and grades. A sure cure for ruts, chatter holes and road vibrations. Levels loose gravel. Length 14 ft.; width 6 ft.; weight 850 lbs.; 8 cutting blades. Sold on approval

Price $110 F. O. B.

Clare Road Machinery Co.,
Clare, Mich.

ALL AROUND SATISFACTION FOR ANY CULTIVATION PURPOSE



It's through the right kind of cultivation that foul growths are kept down and can be eradicated. THE KOVAR DIGGER has opened the field for the right kind of cultivation and having exclusive features, will give satisfaction which no other machine will produce. Thousands of farmers have been convinced and we want to show you. Write for free booklet on land cultivation and how to work foul growths. KOVAR has the most successful Spring Tooth Corn Cultivator, also Harrow Cart. Write for further information and prices.

JOS. J. KOVAR, OWATONNA, MINN.

HOW WOULD YOU LIKE TO ACT AS THE BUSINESS FARMER AGENT IN YOUR COUNTY?

Write Circulation Manager Care This Paper

HELP WANTED MALE

WANTED—SINGLE MAN FOR YEAR. Prefer some feeding experience, good wages and good home. State wages in first letter. Position open April 1st. CHAS. HAUCH, Whittemore, Michigan.

WANTED POSITION—OUR SUCCESSFUL farm manager, 36 years of age, widower, no Children. This man is honest, clean and a hard intelligent worker. Graduate U. of Wis. and life experience as farmer. Address him, HERMAN R. FRANZEN, Akron, Lancaster County, Pa.

WHEN WRITING ADVERTISERS MENTION M. B. F.

Save Your Thresh Bill

Have the man who owns a Red River Special do your threshing this year.

He will save enough more of your grain and time to pay your thresh bill. The

Red River Special

with its "Man Behind the Gun" and the Beating Shakers separates by force.

It Beats the Grain Out of the straw and chaff like a man would with a pitchfork.

Buy the Junior to run with your little tractor.

Write for our free catalog telling how you can save your Thresh Bill

Nichols & Shepard Co.

(In Continuous Business Since 1848)

Builders exclusively of Red River Special Threshers, Wind Stackers, Feeders, Steam and Oil-Gas Traction Engines

Battle Creek, Michigan

GUARANTEED 10,000 MILES BRAND NEW CORDS

30 x 3 $6.95

Every One First Quality—Guaranteed

Size	Tires	Tubes
80x3	$6.95	$0.95
80x3½	8.45	1.15
82x3½	9.95	1.25
81x4	10.65	1.35
82x4	11.85	1.40
33x4	12.45	1.45
84x4	13.25	1.50
82x4½	16.25	1.75
83x4½	16.95	1.80
34x4½	18.60	1.85
85x4½	18.95	1.90
83x5	22.05	2 10
85x5	24.95	2.25

Buy at these amazing prices. Send no money. Specify sizes and number of tires; fill every possible need—save—TODAY.

CHARLES TIRE CORPORATION

1840 S. Michigan Ave. Dept. 58 Chicago

Rheumatism

A Remarkable Home Treatment Given by One Who Had It

In the year 1893 I was attacked by Muscular and Sub-Acute Rheumatism. I suffered as only those who are thus afflicted know for over three years. I tried remedy after remedy, but such relief as I obtained was only temporary. Finally, I found a treatment that cured me completely and such a pitiful condition has never returned. I have given it to a number who were terribly afflicted, even bedridden, some of them seventy to eighty years old, and the results were the same as in my own case.

I want every sufferer from any form of muscular and sub-acute (swelling at the joints) rheumatism, to try the great value of my improved "Home Treatment" for its remarkable healing power. Don't send a cent; simply mail your name and address, and I will send it free to try. After you have used it, and it has proven itself to be that long-looked for means of getting rid of such forms of rheumatism, you may send the price of it, One Dollar, but understand I do not want your money unless you are perfectly satisfied to send it. Isn't that fair? Why suffer any longer, when relief is thus offered you free. Don't delay. Write today.

MARK H. JACKSON

265J Durston Bldg., Syracuse, N. Y.

Mr. Jackson is responsible. Above statement true.

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We Teach You and Give You A YEAR TO PAY Expert Instructors. Lowest Tuition Rates. New Methods. Texts and first lessons of any course on approval. You pay postman only ONE DOLLAR and postage, balance as you wish. Courses in Advertising, Journalism, Photographic Journalism, Federal Tax Accounting, Salesmanship, Office Management, Business Administration. Postal will bring either course—your first C. O. D. payment $1.00 and postage, returnable if not satisfied.

WALHAMORE INSTITUTE

Dept E, Lafayette Building, Philadelphia, Pa.

KEEP THE BUSINESS FARMER COMING
SEE PAGE 25

What the Neighbors Say

PALS ON A 50-50 BASIS

WE are retired farmers now, but we hold a hearty interest in the farmers and we enjoy the M. B. F. and feel that it is doing a great service to all. Long may it live and prosper.

Some time ago on "What the Neighbors Say" page, there was an interesting article from Mrs. R. B., Ohio, on "Personal Freedom" of which, it would seem, she is completely deprived of. I hoped some capable writer would defend her, for, unfortunately, there are many wives who suffer practically the humiliation and in your issue of March 17th comes a splendid article of defence from "Molly Brown" I am am just bubbling over to add a few words of support.

If there were more women like Molly Brown there would be fewer men like Mr. R. B. and the world would be better for it.

Good for you Molly, you have loyally championed a just cause. The marriage license doesn't rob either party of their personal rights and privileges and there should be equality, co-operation and a kindly unselfish consideration, each for the rights and comforts of the other.

The average wife puts in as many weary hours of toil as the husband and she is justly entitled to a fair share of the profits. If not, why not? The husband doesn't oblige his hired help to ask for their wages Then why should the wife have to ask for money? Doesn't she earn it? If the head of the house thinks she doesn't, just let him hire some one to fill her place for a while and it want take long to convince him that he will pay far more for inferior services.

A generous husband, and there are many of them, too, will give his wife an allowance according to his means and spare her the humiliation of having to ask for every dollar she wants and then probably be expected to tell what she wants it for. Ye Gods! That is enough to fill the heart of a proud woman, with scorn and contempt rather than love and devotion. But it has been said that a woman can dig her own grave and step down into it behind the look and the smile and the duty she gives her husband and it may be years before he finds it out. However, I question her wisdom or if he would love her better for it. For with man its the unatainable that is the most desirable. Come on, Uncle Rube, let us hear from you on this subject.—Sincere Subscriber, Caro, Mich.

WHAT IS WRONG WITH FARMING?

THERE is much uneasiness and more or less dissatisfaction, because the farmers' products as a whole have not advanced in price as rapidly as other commodities. It is a fact that cotton and wool have advanced more rapidly than the average of the commodities, in which advance the farmer should participate if he does his marketing wisely. Not only the cotton growers and wool growers, but the growers of citrus fruits, vegetables, raisins and apples and dairymen, etc., have very greatly improved their margin of profits through marketing associations. What is known as the "dirt farmer" or the raiser of potatoes, corn, wheat, etc., are the ones who are most badly hit and who are lacking in marketing organizations. In fact, they are the victims of organization on the part of others.

It is reasonable to say that the export market for American grains is cut off and will be so for many months, if not years, to come on account of the inability of foreign countries to pay the debts they have already contracted, to say nothing of their ability to pay for new commitments.

It is acknowledged that we raise more grain than our domestic market will consume. It seems that there is only one way to provide for the consumption of the surplus, inasmuch as that surplus cannot be sold abroad, and that way is to increase the home market. Inasmuch as we cannot send our surplus to the foreigner, we can bring the foreigner to our surplus. Heretofore, the population of our country has grown rapidly and the increase in population has required a very considerable increase in the amount of farm products. On account of the immigration laws recently passed by congress at the request and in the interest of the labor unions, the flow of immigrants to this country has been cut down to the minimum. If a considerably larger number of immigrants were admitted it would result in the larger consumption of farm products at home and would also furnish larger supply of farm labor.

The writer of this article is a nursery man and finds it necessary to pay sixty cents per hour for good help in the nursery. He can secure common labor for forty cents per hour, but it is cheaper to pay sixty cents for good efficient help. The difficulty in securing farm labor and its extraordinary high cost together with its average inefficiency, is due to the scarcity of labor caused by the law mentioned above. Farmers are obliged to hire and put up with the inefficient labor that is discarded by the manufacturers, who are obliged to offer extraordinary inducements in the way of wages to secure help enough in a very much depleted labor market. The manufacturers can pay higher wages and get their choice of labor, the inefficient surplus going to make up the supply of farm labor with which the farmer must be content. There was a time when high grade Irish, English, German, Dutch, and other skilled farmers immigrated to this country in considerable numbers. They are prevented from coming at this time on account of the law restricting immigration and particularly on account of the "contract labor" law both of which were enacted at the request of the American Labor Unions and are at the expense of the American farmer.

It does not take a farmer long to figure out and appreciate that an increase in the number of foreign immigrants would very quickly increase the domestic demand for his farm products and would furnish a materially larger supply of help, and would result in a more efficient grade of farm laborers. Neither would it take a farmer long to figure out that if his home market was increased and his cost of production from the increase of farm labor were reduced, that his margins of profit would at once be increased with the result of materially changing status of the farmers' bank account.

There is another angle that the farmer should consider, namely, that increased immigration would reduce not only the farmers' cost of production, but would reduce the cost of producing the various products that the farmer is obliged to buy. The cost of these manufactured products is greatly increased by the restricted labor supply as it exists under the present law. We would, therefore, see this happy condition, that the farmers' income and margin of net profits would be materially increased at the same time and the cost of the farmers' purchases would likewise be materially decreased. This point could be elaborated, but it seems so clear to the writer that it seems unnecessary to dwell upon it further. There is, however, another thought in connection with this, and that is that after the farmer has produced his crops at the minimum cost he has yet to transport them to his market. The American Federation of Labor has seen to it that the cost of moving the farmers' crops should be at a maximum rather than a minimum, due to labor shortage and to increase of costs due to higher wages and diminished efficiency, all due to labor union conditions.

It is not the intention of this article to take up matters in relation to politics, but there is one point in which the farmer is vitally interested, and that is that he should not allow himself to be made the cat's paw to rake chestnuts out of the fire for the labor unions. The labor unions are directed and engineered by very able and shrewd men at the head of whom is Mr. Gompers, and anyone who thinks Mr. Gompers is asleep at the switch is mistaken. Labor unions have been trying to get the farmers to join with them politically, and it seems almost a foregone conclusion that such a union of labor with us farmers would be engineered largely through Federation of Labor headquarters. We need mention only one instance and that a very recent one as follows:

Last summer there was a strike on the railroads to prevent the reduction of wages and the consequent reduction of freights. The result of this strike was that rolling stock including both cars and engines were largely relegated to the bad order yards when the labor unions had gained their end of maintaining high wages (and they are the highest paid of all labor). The rolling stock was in bad order, and the farmers' crops were ready to be moved to market. What was the result? It was impossible to move a large per cent of the perishable crops, including fruits and vegetables with the result that the farmer lost his crop and his year's work. In other words, the farmer held the bag while the labor union came through with undiminished wages. The writer may be a poor judge of conditions, but it seems to him that in nearly every case, the farmer foots the bill and the labor union absorbs the profit.

Please excuse discretion, which may seem to be a political one and let us return to the question of immigration. With the very restricted labor market, due to the law afore-mentioned, it is the easiest thing in the world through strikes, for any union to force an increase in wages. This statement hardly needs to be elaborated. There is only one thought in this connection and that is that in England the farm laborers have organized and there is a farm laborer's strike in progress in that country. The question before us farmers at this time is this: With the very much decreased immigration and restricted labor, how long will it take for us to get into the same condition that they are now in, in England and be up against the farm hands' union with greatly increased wages?

The writer has only attempted herein to make a few suggestions which might be greatly simplified and in that way clarified and made forcible. The writer has simply tried to lay before other farmers what seems to him to be the cause of our trouble and to suggest that we cannot too quickly ask for relief in the shape of a repeal of the law which creates for us unnecessary hardship in view of the fact that the farmer in the end has to carry the burden of all increases in costs in all of the industries.

If farmers would promptly write to their senator and representative in congress and insists upon less restriction of immigration, I am sure would greatly help the situation and in the end would materially increase the net profits of their farming operations. Let us take some action along this line and do it promptly.—Harry S., Cooper, Wisconsin.

VOTERS DISFRANCHISED BY SMOKE

AT our April 2nd town meeting I noticed several "prominent townsmen" smoking—some almost continuously during meeting. A certain man being remonstrated with, said "any person that did not like tobacco smoke should not come to the town hall," he would smoke anyway.

Not even the women voters present were asked if they enjoyed ar appreciated tobacco smoke second handed. It appeared as if all those citizens male or female, who had not formed the habit of smoking were to be smoked out and thus disfranchised.

Let us suppose a parallel case. Some person builds a few small fires of old rags and chips in the hall. Would these same gentlemen smokers stand for it? Not for a minute.

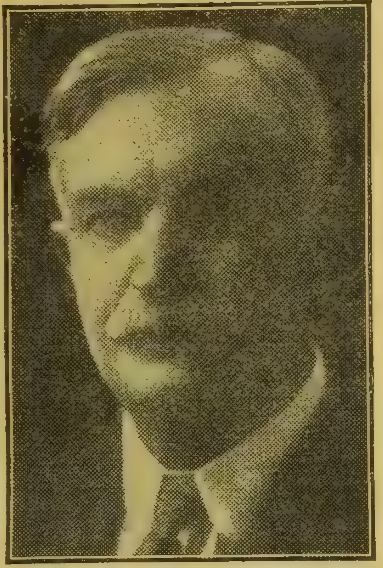
As I heard a lady say "While so much is being said about health measures—all people should by state law be protected in their natural rights to assemble in public halls, with pure invigorating air free from smoke."

I fully acknowledge the right of the smoker to isolate himself from the public and smoke to his heart's content. However, when in public places, the right of the public to free, unpoluted air, is first. Will some reader kindly suggest the remedy?—A subscriber, Almo, Mich.

Warner's Life an Inspiration

Fred M. Warner, Three Times Governor of Michigan, Rose to Prominence in Spite of Great Difficulties

By JOHN FITZGIBBON



FRED M. WARNER
(Born 1865—Died 1923)

THE son of an English immigrant who was so poor that, dying when the boy was seven years old, the mother gave him for adoption to and Oakland County merchant. Fred M. Warner, by his own efforts, achieved large success in business lines and was elected Governor of Michigan before he was 40 years old. Prior to his election as chief executive of the State he had been the youngest senator in two Legislatures, as well as the youngest man to be elected Secretary of State, excepting Stevens T. Mason, the first governor of the state, he was the youngest governor Michigan has had, and the only governor that was elected for three successive terms.

Born in Nottinghamshire, England, July 21, 1865, Gov. Warner was seven years old when he first saw the United States.

His parents located on a small tract of wild woodland near Farmington, Oakland County. Soon afterwards his father died. P. Dean Warner was then a citizen of importance at Farmington, about 18 miles out Grand River avenue from Detroit City Hall. He was speaker of the Legislature in 1867 and a state senator in 1869. Having no sons of his own, Senator Warner adopted the young English lad and gave him his name.

The boy went through all the classes in the Farmington village school and then entered the Michigan Agricultural College. Student life did not appeal to him and so at the end of his first year in college he quit of his own accord and went to work in the general store of his foster-father. In addition to the store the elder Warner conducted a bank.

It was here that the young man learned his first lessons in trading and banking. He early showed a strong aptitude in both lines.

In Business at 20

He was barely 20 when he made his first venture in business. The bicycle craze came on and the long obsolete' high wheel machine began to appear in the early 80's. The craze caught the future Governor and he invested $165 of his savings in a wheel. For doing so his foster father reproved him. "You'll never get ahead in the world if you squander money that way," was the parental admonition. But he got back in parental favor on the bicycle question. Securing the agency of several makes he cleared $800 the first season.

Incidentally, he accumulated a handful of medals, for he became the amateur champion of Michigan.

When he was twenty-one his foster-father turned the management of the general store over to him. He had been a voter but a year or so when he was elected president of Farmington. Six times he was re-elected. His entrance into state politics was in 1894, when he was elected senator for the district that then comprised Oakland and Macomb counties, and he was re-elected two years later.

From a skeptic on the merits of the primary system when he entered on his first term, Gov. Warner before he finished his third term was an ardent advocate of the system. In the face of bitter opposition by machine legislators, he had enacted the first genuine State-wide primary law, as well as a law for the selection at primaries of party candidates for United States senator. This was several years before the Federal Consitution was amended so as to provide for the election of senators by direct vote.

Gov. Warner got his second renomination with opposition; and, still having no enemies in his party, he was re-elected in 1906 by a plurality of 97,549.

Gov. Warner had about made up his mind that, having had the customary two terms, he would retire. When the machine leaders began talking of what they would do to him if he ever again sought office, he accepted their defi. He gave notice that he was going to smash precedents and be a candidate for a third consecutive term. Twice he had been nominated by State conventions. Now he was going to seek nomination from the electors at the primaries. The machine picked a popular state official for their candidate. The primary contest was exceedingly warm.

Gov. Warner in a valedictory at the close of his third term, mentioned that, as the State's chief executive he advocated and helped make into law the Two-Cent Fare Act, the act creating the State Railroad Commission and giving the commission large powers to regulate rates, and the service of public utilities, and act making stock watering illegal and the act establishing a binder twine plant at Jackson Prison. This latter was opposed viciously by a powerful lobby of prison labor contractor, yet it has proven to be one of the best investments the State government ever made. In his valedictory he said: "The people also will benefit by a score of other good laws advocated by me and passed during my administration which those in control of the Republican Party in Michigan at this time do not dare to repeal."

Never Lost His Temper

Gov. Warner's dominant characteristics were never to lose his temper in a controversy; never to use heated language or epithets in referring to a political adversary, to try to make friends instead of enemies, yet not yield when he was sure he was right, even if by such a course he broke a friendship; to proceed cautiously before he arrived at a conclusion, but when he arrived to adhere to his conclusion; to remember his friends and also his enemies, and to be naturally genial, but never effusively so. He had a smile that was infectious, never was spoiled in the least by business or political successes. He had remained just "Fred" even to the humblest of his acquaintances and had always led a temperate life.

When 23 years of age Mr. Warner started a cheese factory at Farmington. Twenty years later he had 2 cheese factories in several counties and was making 1,500,000 annually. At Farmington he acquired a farm of 250 acres and another of 1,000 acres in Sanilac County. He became chief owner and president of the bank his foster father established, now the Farmington Exchange Bank. He was one of the organizers of the United Savings Bank, of Detroit, and has been vice-president of it since its organization.

Shortly after he retired as Governor in 1911, he began changing his dairying business, marketing in Detroit the milk from his herds, in addition to what he purchased from a great many farmers, instead of turning it into cheese.

At the state election in 1920, Mr. Warner was elected Republican National committeeman from Michigan and he held this place up to the time of his death.—The Detroit News.

MR. FARMER!
Mr. Dealer Mr. Jobber

BINDER TWINE

IT Is THE BEST

THE PRICE IS RIGHT

Are you remembering in purchasing your binder twine that you have a factory of your own at Jackson?

It is making the best twine that can be placed on the market and has a mixture of fiber this year. Manila is added to the sisal to give extra strength.

The State Farm Bureau and other organizations and dealers of the state are in position to handle your twine. If they do not, write direct for prices as we want you to use your own twine as we make 14,000,000 lbs. more than Michigan can use.

Michigan State Prison
HARRY L. HULBERT, Warden
JACKSON, MICH.

THIS BEAUTIFUL BRIDAL WREATH
AND 4 OTHER HARDY ORNAMENTAL SHRUBS

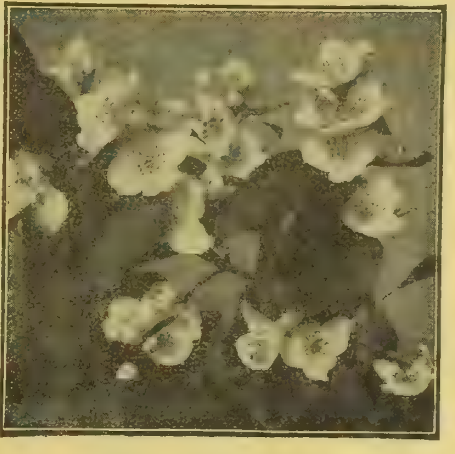
Planting a few shrubs this season will soon make your home a beauty spot and a greater joy to live in. Also, if you should later decide to sell it, you will find it more salable and worth a few hundred dollars more. Our collection consists of the following five most desirable varieties. They are not little, greenhouse-rooted cuttings, such as are often given in offers of this kind. These shrubs are all field grown, healthy and thrifty, and are sure to give satisfaction. We would recommend that you accept our special offer without delay, as this offer may be withdrawn at any time.

Beautify Your Home at Our Expense

SPIREA VAN HOUTTEI (Bridal Wreath)—A leader among shrubs, and a beautiful ornament at all seasons. A round and graceful bush with arching branches, covered with white flowers in early summer. No doubt the most useful of all shrubs.

ALTHEA (Rose of Sharon)—A beautiful shrub that nearly everyone is familiar with. Flowers profusely in late summer and early fall, when few other shrubs are in bloom.

Spirea Von Houttei (Bridal Wreath)



Syringa (Mock Orange)

BUSH HONEYSUCKLE — Handsome bush with pink and white flowers in the eary spring, followed by beautiful and showy red berries during summer and fall.

FORSYTHIA (Golden Bell) — The first shrub to bloom in the spring, the golden-yellow flowers appearing before the leaves; frequently while the ground is still covered with snow. Branches cut off in winter and put in a vase of water will bloom in the house.

SYRINGA (Mock Orange)—One of the finest of the tall shrubs. Valuable for backgrounds, screens, grouping and specimens. Flowers white and very fragrant. Beautiful for cutting.

These are the five grandest shrubs for all climates, and will be delivered to you, by parcel post, postpaid, as per our special offer below.

OUR SPECIAL OFFER

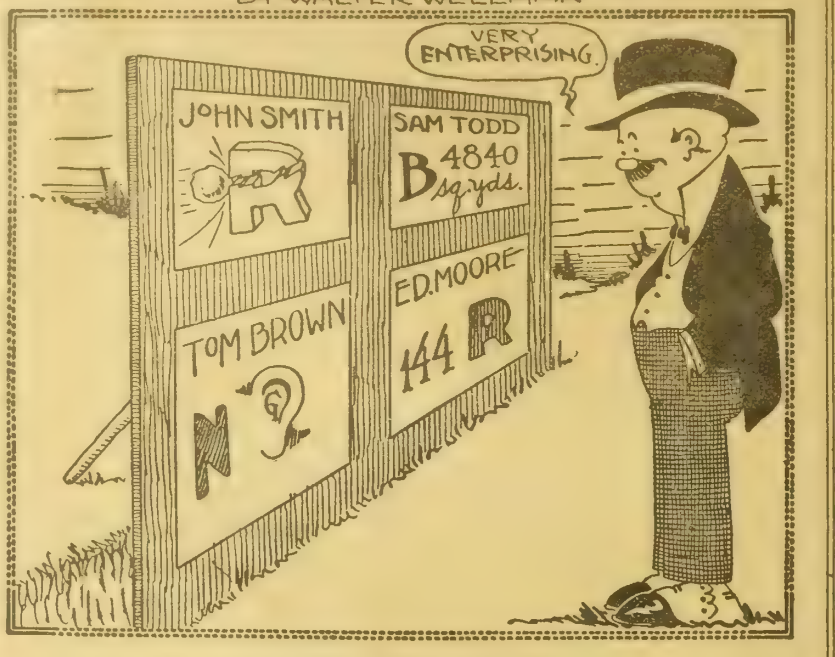
ALL FIVE SHRUBS, above described, shipped from our Michigan nursery, direct to your mail box, postage paid and safe arrival guaranteed, for ONE DOLLAR, which includes a One Year New or Renewal subscription to The Michigan Business Farmer. This may apply on your own renewal or add any new name ONE FULL YEAR.

Order of THE BUSINESS FARMER, Mt. Clemens, Mich.

The Children's Hour

OCCUPATIONS

BY WALTER WELLMAN



Several enterprising merchants have decided to combine to use one large advertising board, and split the expense. These four merchants' names are John Smith, Sam Todd, Tom Brown and Ed. Moore. What business has each?

DEAR Nieces and Nephews: All letters entered in our contest, including those published in last issue, were put on file and at 12 o'clock, April 14th, I began reading, one at a time, to decide who wrote the best letter. The first one I read seemed so very good and I laid it one side for further consideration. The second one seemed equally as good and so did the third and fourth and fifth and so on, and I continued to lay each letter aside for further consideration until when I finished the last letter and turned to reconsidor the ones I had laid aside for that purpose I discovered I had not thrown out a single one. I again went through them all but results were the same—they all best—I was no further ahead than I was when I started. Then the office force came to my assistance by choosing a committee composed of several members of the force and offering the service of the committee to decide for me. I turned the letters all over to them and they finally declared that Katie Prowant, Durand, Michigan, was the winner. And the prize is a pair of shears, small size, just right to use when doing any sewing, making patterns, etc.

Each and every department and article was declared the best but the one chose most was the article "The Truth About Henry Ford." Over half of the writers stated they thought all would be more interested in that article than any other article or department.

I hope you will not forget Mothers' Day. Remember your mother with a small token of appreciation and continue to show your love for her each day by helping her all you can with her work. Sometimes it will take you away from your play and you will not feel like doing it but remember that mother is always ready to help you and wants to have you enjoy yourself although many times it causes her considerable extra work.—UNCLE NED.

OUR BOYS AND GIRLS

Hello Uncle Ned:—I am writing to tell you which department I like best of the Business Farmer, and why I think the readers will like it, too. The 'Farmers' Service Bureau" is my choice. I think the readers will like it best because it is a clearing department for every farmer's everyday troubles, and if at any time a question on any subject comes up in their home that they want answered and answered right, all they need to do is to just let the Farmers' Service Bureau Department know about it and they answer it by return mail or through the next issue of the Business Farmer—and say, Uncle Ned, if you can't decide after April 14th, just ask the Farmers' Bureau Service Department. I'm sure it can help you. Ha! Ha! I will close with best wishes. From Katie Prowant, Durand, Mich.

Dear Uncle Ned:—I have been a reader of the Business Farmer for about two years and I thought I would write to you and your merry circle. I live on a farm of 400 acres. We raise nearly everything that is to be raised in this county, or is suitable for this climate. I have been having the most difficult time trying to find an article for this contest. It seems as tho they are all so helpful and such a service to the people it was very hard for me to pick or choose the best department in this issue, but I found it at last. Your niece, Loretta Moore, Levering, Mich. Contest letter attached:

The Publisher's Desk

This is why I think this department is the best in the issue and also in previous issues of the Business Farmer: Because it enables you to get the best advice available concerning your troubles, also there is no charge for this. It warns the subscribers of this farm paper against and concerning fraudulant oil companies and farm agencies and such companies. This department tries to give legal as well as prompt service to subscribers.

Dear Uncle Ned:—Can those that live in town, but their parents own a farm, compete in this contest? If so, I'm going to try and tell why I think "The Truth About Henry Ford" the most interesting. It shows that he is doing great things for his employees. It shows that his factories have fire departments, telephone and telegraph offices, hospitals and motion picture studio and everything that is necessary for safety and enjoyment. These are for all, the rich and the poor.

It shows that he is putting automobiles and tractors on the markets at low prices. It also shows that he is as good an American as anybody in America. This is all for now. Your niece, Mary Klurk, 209 East Plain St., Eaton Rapids, Mich.

Dear Uncle Ned:—I think your idea about our letter to you telling you what article we like the best in this magazine is a good one. I also like mystry prizes.

I read the last issue carefully, in fact, I read all of the issues. I liked the article "The Truth About Henry Ford," by Sarah T. Bushnell, the best, because I think Henry Ford is one of our greatest living Americans. You know, too, that Henry Ford may run for president of the United States, he may even be our president, and we should know more about him. This article has been running in this magazine for quite a while. I have read it every time. In the last issue it told about his schools, hospitals and other things. Don't you think the person who is bright enought to invent a Ford deserves a great deal of credit? I do. I will close now so my cousins will have room for their letters on our page. With love, your niece—Beryl Bradley, Dexter Mich.

Dear Uncle Ned:—I have read carefully each article and department of the Business Farmer, and think they are all very good, but have decided that the raising of potatoes and learning how to get the best yield is the most interesting of all. I have discussed the fact with father, and he also thinks this is an interesting article, being that they are a quick crop and easily grown. Why I think readers would like this article is because if they are farmers they naturally would want to get, also know how to get, the best yield from their crop, and they can surely find the facts they are looking for by reading the Business Farmer.—Mildred Ward, Imlay City, R4, Mich.

Dear Uncle Ned:—I am a farmer girl fifteen years of age and am in the eighth grade at school. I am 4 feet 11½ inches in heighth and weigh 104 pounds.

I think the most interesting article in the Business Farmer is "The Truth About Henry Ford," because he has the most remarkable factory in the world, and he is an extraordinary man, raising up wages and lowering the price of automobiles. Therefore, I think its the most interesting article in the Business Farmer.—Stella Adolph, R5, Yale, Michigan.

Dear Uncle Ned: I have read many interesting letters from boys and girls and liked them very much, and thought I would write to you. I am a boy 16 years old and live on a farm of 40 acres with my father and mother. My birthday is the 17th of October and if I have any twin sisters or brothers I would like t hear from them. Well, I must close but maybe I will write again sometime. Everybody please write to me as I would like to hear from you.—Joseph Forstner, Jr., Allegan, R. F. D. No. 1, Mich.

Dear Uncle Ned:—As I was reading the M. B. F., I saw you would like to have some help. I am willing to help you decide the most interesting department in the Business Farmer.

I think the most interesting department is "Poultry for Profit." I think it is interesting because some people want to buy poultry and they want to know what kind to buy for they want profit off their chickens. I also have another department I think is quite interesting. That is "Michigan Crops." I think this is quite interesting because some men are thinking of what crops to put in, where, and how much they might earn and if they read it they know better what to do.

This is the first time I am writing to you. I would like to join your merry circle. I live one quarter of a mile west of the school house. I am in the sixth grade in school. The one that guesses my age correctly will receive a letter. My age is from 10 to 15 years. I live on a ninety acre farm. I like it very well. I had a lot of fun this winter riding on my sled and skating. I have one sister and two brothers. I am anxious to know if I win the prize or not, so I would like to have an answer soon. Your niece, Florence Bloemsma, Marion, Michigan, Route 3, Box, 57.

Dear Uncle Ned:—I have read the letters in the Children's Hour and at times nearly decided to write, so at last I did. I have three brothers and one sister. I am twelve years old and in the seventh grade at school. Three schools are going to have a program together. Our school has an indian part. It is going to be a week from Friday night. I read in the last M. B. F. about the contest you were giving, and I thought it was a good chance for me to try. I have been looking at the paper and find what I think will prove of great interest to our parents and all farmers, and that is the "Market Flashes." Every farmer wants to get the best he can for his crops. But do not think I am slighting you Uncle Ned, for all us children like the Children's Hour best, but I think grown-up people are not so interested in the parts we are most. Well I must say good-bye to Uncle Ned and cousins. I wish some of the cousins would write to me. Your neice, Mildred Burk, Marion, Mich.

Dear Uncle Ned:—Of the M. B. F. I think the "Pictures from Far and Near" are very interesting, and are most pleasing to every one. The Children's Hour is very nice, too, but the pictures are the best, because old people can enjoy them as well as the young. From the pictures that we see and read about, it teaches us what there is on different lands and places. If a person does not travel or even go about a bit, they do not know anything of the world. By having pictures people can look at them and read about them and always learn, because they are never too old to learn. If the people cannot read some one could read for them to help them. We can learn how the world is progressing from pictures alone. Your niece, Rose Arnold, Box 474, R. F. D. 4, Mt. Clemens, Michigan.

Dear Uncle Ned:—I am a girl of eleven and live an a twenty acre farm and like the Children's Hour very much.

In the March 31st issue you asked the best department in the paper. I think "The Truth About Henry Ford" is the very best. His success rules are indeed true. The story is interesting because he is a real man It is wonderful; his and his wife's work of helping the poor and friendless as well as his employees. My father and mother think the story very nice. They have always liked Henry Ford. He is the poor man's friend, and a true American. His factory, foundry and trade school are certainly worth reading about. I remain, your reader, Faith E. Harris, Alpena, Mich.

Dear Uncle Ned:—I have never written before but hope you will accept this letter from an old reader. I am a farm girl and live on a farm of 160 acres. I am 5 ft. tall and weigh 103, pounds. My birthday is the 15th of April. Have I a twin? I was 13 years old. I saw Bernice Mauer's riddle and think the answer is "Each." Am I right? I would like to earn the prize Uncle Ned is giving, so here is my opinion of the things in the paper for this week:

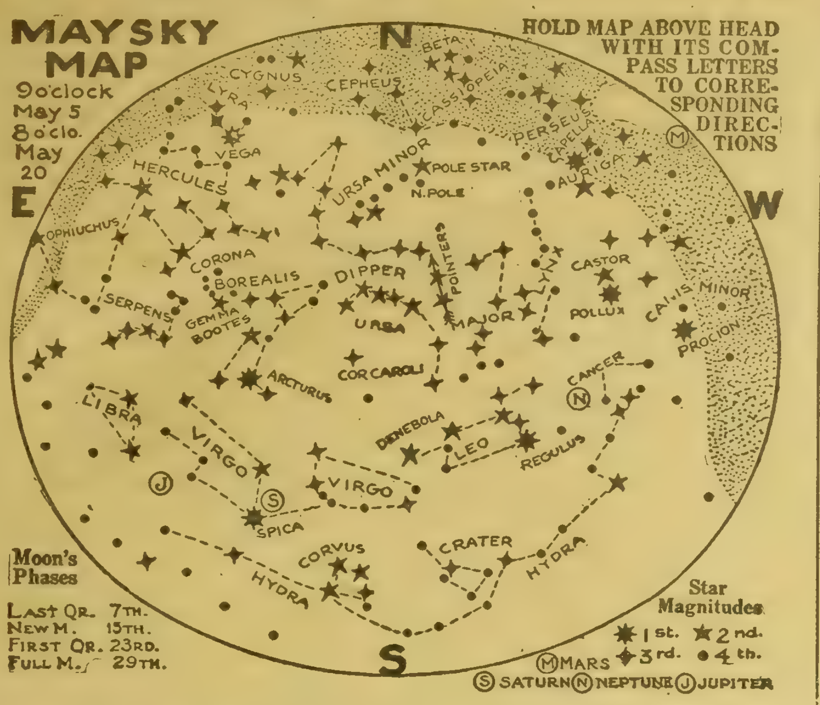
"Preventing the Potato Landslide" was good. "The Farmers' Service Bureau" and also "What the Neighbors say" and "Fruit and Orchard" are very good. "Poultry for Profit" is also good. I know that a great many people are interested in "The Truth About Henry Ford" It is very good. I think that every Michigan farmer should have the paper. It is very good. All the way around it is hard to pick out which is the best things in the paper.

There, Uncle Ned, is what I think. No one helped me make it up. I did it myself. I have no father, but have a step-father. I will go to high school Harbor Springs next year. How many of the cousins go to Sunday School and church? I do and love to. I have always gone and always will. We have a fine teacher. Goodbye with love to all the cousins. Let's boost our page. Lovingly yours, Elsie L. Mahler, Harbor Springs, R. R. 1, Mich.

Dear Uncle Ned:—May I enter your contest about the most interesting article or department in your M. B. F.? I have been a constant reader of your M. B. F. for the last few years, and I find the entire paper very interesting, but I think "The Children's Hour" is the most interesting, because it brings boys and girls closer to each other from different parts of our state and we get to know boys and girls outside of our own county and neighborhood. I do like to read the different letters from so many different boys and girls. Your neice, Peral Smith, R2, Box 66, West Branch, Mich.

The Heavens in May

By DR. C. S. BRAININ
Columbia University, Observatory staff



Every evening a curtain goes up on the "greatest show on earth", and yet it is spread right over your farm home, no matter where you live. That you may appreciate this show we publish this chart of the May sky and the comments of a famous authority. If enough of our readers indicate their interest in this department, by telling us so, even on a postal card, we will make this a regular monthly feature of The Business Farmer.—The Editor.

THE first two weeks of May present a particularly fine opportunity for the observation of the largest planet of the entire solar system, the giant Jupiter. On May 5 the planet will be in opposition to the sun, which means to the astronomer that it will lie exactly opposite the sun in the sky; it will rise at sunset and set at sunrise, approximately.

Furthermore, the earth will be nearer to the planet, and, therefore, it will appear larger in the telescope and brighter to the naked eye. Its stellar magnitude will be about minus two; brighter than Sirius, the brightest of the fixed stars, whose magnitude is minus one and six-tenths. Sirius has already set at map time and will not appear on the map for many months.

Jupiter will be found in the southeastern sky below Spica, the first magnitude star of the constelation of Virgo. No other very bright stars are near the planet and it is itself very much brighter than Spica.

Fairly close to Spica is another bright planet, Saturn, with its rings, which can easily be distinguished from the fixed star by the absence of twinkling. Saturn also is much brighter than Spica, although not nearly so bright as Jupiter. Saturn's magnitude is about plus one-half. Spica's about plus one and two-tenths. It will be remembered that the smaller the magnitude order the greater the brilliancy and that minus magnitudes are a continuation of the series of magnitude numbers toward the side of greater brightness.

If one is so fortunate as to possess a small telescope or a good field glass, observation of the satellites of Jupiter and their movements will well repay effort and time. The discovery of these satellites by Galileo was the first discovery in the heavens made by means of an optical instrument, marking a most significant milestone in the progress of science.

Galileo discovered four companions with the planet and satisfied himself by a careful study of their movements that they really were satellites of the great planet, just as the moon is a satellite of the earth. He discovered only the four larger of the Jupiter family of moons, and these are the only ones visible in any small or moderate sized telescope. But there are, in reality, nine members of the satellite family, the remaining five having been discovered by the use of the very largest telescopes and with the help of the photographic plate.

Up to 1892, which, of course, is long after the beginning of what we may call modern astronomy, only the four satellites discovered by Galileo in 1610, were known to the scientific world. In that year Prof. E. E. Barnard announced the discovery of a fifth satellite, lying closer to the planet than any of those already known. Two more were discovered photographically by the American obscrver, Perrine, in 1905. Then an eighth was found by Melotte of Greenwich, England, and a ninth and last—at present—by S. B. Nicholson of Lick Observatory in California.

These latter two are very far from the planet and have the peculiarity of moving about clock-like direction i. e., from east to west, instead of the reverse direction, which is the general direction of orbital movement in the solar system. Whether the reverse direction means a difference in origin or evolution from these satellites having the normal direction of movement is not at present clear.

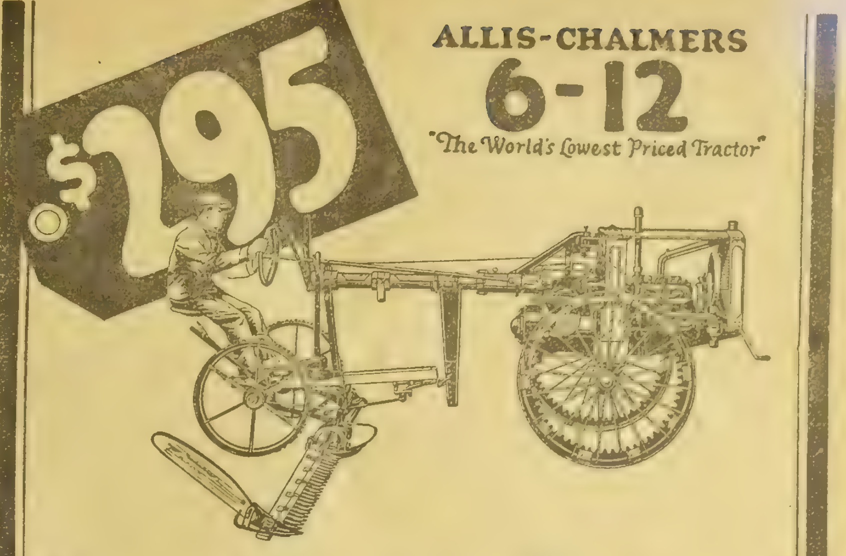
The amateur astronomer, with a small telescope at his disposal, will find particularly interesting the plotting of the movements of the satellites with respect to their great planet and also the observation of satellite eclipses which are very frequent. Since the satellites revolve about Jupiter, they will at times be hidden from view by the bulk of the planet, and this forms one kind of eclipse. Again, the satellite may be in a position where it should be visible from the earth, but is in the shadow cast by the planet, and is thus deprived of the sunlight by means of which it is made visible to us.

This is another kind of eclipse. But more interesting a phenomenon than either of these is that of the passage of a satellite in front of the face of Jupiter itself. In that case it will often throw a tiny shadow on the planet's brilliant orb, and this tiny black speck can be seen to move across the planetary disk. The satellite itself can also be seen, in a large telescope particularly, when crossing one of the dark cloud belts seen on the planet. These remarks refer, of course, to the Galilcan satellites only.

The winter constellations are now disappearing from our map and the evening heavens. The grand aggregation of stars known as the constellation of Orion, the Hunter, is below the horizon at map time, although it can still be observed low down in the West at about the end of the twilight. Sirius also is gone, and Procyon is about to follow.

The visible first-magnitude stars are Capella in the far Northwest, Procyon in the Southwest, Pollux of the Gemini, Regulus in Leo, Spica in Virgo, Areturus in Bootes and, rising in the Northeast, the brilliant blue-white Vega of the Lyre.

It is interesting to note that a great circle through the positions of Pollux, Regulus and Spica, also Jupiter and Saturn, marks the approximate course of the celestial ecliptic through the heavens.



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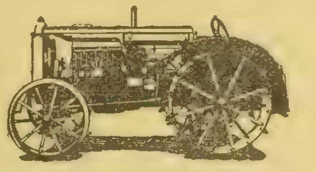

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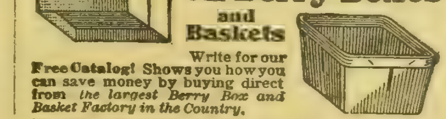

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Keep The Business Farmer Coming—See Page 18.

The Farm Home
A Department for the Women

Edited by MRS. ANNIE TAYLOR

DEAR, dear friends:—Your many letters have been appreciated and I have not found time to reply to all of them, as yet, because I wanted to be sure in this page to suggest some things you must do this spring to make your grounds more attractive. Please write me some more letters on your flowers and shrubbery, I am going to hold open the prizes until I hear from you. Then remember, dear folks, I am passing around the hat for your letters on "How To Earn Money at Home", If you have found a way, how nice it would be to pass the idea along to some other woman, who perhaps has a little brood she is mothering and whom your suggestion will be a God-send. Please, write me, on the above and other subjects. I want this to be, O, such a friendly corner of our paper for the women and girls in the thousands of farm homes which The Business Farmer reaches. Remember I will never use your name or initials if you do not wish it and your letter to me will be sacredly confidential, if you wish it so, I want to be,

Your Friend,
Mrs Annie Taylor

Address letters: Mrs. Annie Taylor, care The Business Farmer, Mt. Clemens, Michigan.

SIGNS OF SPRING

The sun's so bright an' hot today
I just feel sure it's spring to stay;
My sweater's a scratchy thing,
An' that's a sure-'nough sign o' spring!
Besides, the birds are coming back
To the orchard trees. An' such a pack
Of tiny ants on the rockpile, too;
An' the air all smells so green an' new.
My daddy says warm days in spring
Make little boys grow like everything.

—Nina Hatchitt Duffield.

OF GARDENS

AND because the breath of flowers is far sweeter in the air, where it comes and goes, like the warbling of music, than in the hand, therefore nothing is more fit for that delight, than to know what be the flowers and plants that do best perfume the air. . . That which above all others yields the sweetest smell in the air, is the violet; especially the white double violet, which comes twice a year, about the middle of April, and about Bartholomew-tide. Next to that is the musk rose; then the strawberry leaves dying, with a most cordial smell; then the flower of the vines—it is a little dust, like the dust of a bent, which grows upon the cluster, in the first coming forth; then sweet-briar; then wallflowers, which are very delightful, to be set under a parlor, or lower chamber window; then pinks and gilliflowers, especially the matted pink and clove gilliflower; then the honey-suckles, so they be somewhat afar off. Of bean-flowers I speak not, because they are field-flowers; but those which perfume the air most delightfully.

—Francis Bacon.

OUR FRIENDSHIP GARDEN

DO you know what a "Friendship Garden" means? It is a beautiful thing to have. It cherishes so many loving thot's and brings us so much closer to our neighbors.

Just think, if you want to you can start one this spring and have such a variety of beautiful flowers and shrubs for little or no expense. A "Friendship Garden" means the giving of a slip off some plant or if you have a good supply of pansies or baby breath, lily of the valley, pinks or any flower that multiplies fast and you can spare some out of your garden, give it to your friend and neighbor and in exchange, she may have some different kind that would find a lovely spot in your garden.

These exchanges may start with just a root of some treasured plant that would never be missed, and what happiness it would bring to see it growing in your neighbors front-yard. A slip off of the old vine that would help cover up the bare places around Mrs. Jone's front porch.

Surely this would bring a great deal of beauty to your neighborhood and make the whole county known for its beauty and thotful women-folks. A forget-me-not bed can give so much of itself and still remain as tho untouched. The marigold is always a thing of beauty in a garden and grows so rapidly and propagates so fast.

There are so many species of Perenniels that once you have started them growing in your yard you will enjoy untold happiness from the wonderful flowers that come each year with so little effort attached to them.

Let us all try this year to see what we can do to make our front-yard attractive.

ANNUAL FLOWERING PLANTS

FOR natural beauty and pleasing color effects it is hard to beat some of the old-fashioned flower gardens made up of annual plants. Nowadays temperorary plantings are not relied upon when conditions will warrant the use of more permanent material, such as shrubs and perennials. Annual flowering plants, however, should certainly be encouraged.

When quick, though temporary, effects are desired, and when flowers are needed at a season of the year when blossoms are scarce on permanent plant material, annual flowering plants are useful. The most perennials that once you have sults are obtained with an open lawn as a foundation, with trees making a frame for the house and giving a grateful shade, accompanied by shrubs and permanent flowers to round off the corners. In the bays or pockets of such plantings, or in beds and borders , annual flowering plants will furnish bright blooms at a time when the shrubs or perennials may be dull and uninteresting. When permanent planting, especially shrubbery beds, are newly set they often look thin and ragged, and interplantings of annuals will fill in the otherwise bare spaces with attractive foliage and brightly colored flowers.

A rose arbor constructed from cedar posts. The construction is simple when covered with vines such as morning glories, honey suckle, or roses, the result is very beautiful. About a foot of the branches is left on the cedar posts.

GARDEN HERBS —LET'S GROW THEM

THE herb gardens of our grand parents' time have almost ceased to exist and the present generation knows nothing of many of the herbs cherished a generatoin or two ago, yet there are some of the old Southern gardens that have preserved the custom and uses of the herb garden. Many of us are interested in some of the several more common herbs. All of the herbs below may be started in the early spring:

Caraway.—(Carum carui). The seeds are used for cakes, confectioneries, pastries, etc., and the leaves for soups. Grown from seeds sowed where they are to grow.

Dill.—(Anethum graveolens). The seeds of this annual have a peculiar pungent taste and are used in many ways as a condiment and as an addition to (dill) pickle to increase the flavor. The whole plant is strongly aromatic. Grown from seed sown where they are to grow.

Fennel. — (Feniculum vulgare). An aromatic annual used for making tea for children and as a flavoring in cooking. Similar to oil of anise. The shoots are eaten blanched. Seed, leaves and stems used.

Horehound.—(Marrahium vulgare). The leaves and buds of this perennial are used for making cough medicines and for flavoring candy. Propagated by seeds or division of plants.

Lavendar.— (Lavendula vera). This hardy perennial produces flowers used for the distillation of the oil of lavendar, lavendar water, etc. The dried flowers are used for cushions and stored with linens and wearing apparel to which is imparted the pleasant and characteristic lavendar odor. Propagated by cuttings and seed.

Peppermint.—(Mentha piperita). A perennial hardy species, grown mainly for producing oil of peppermint which is used in candies, chewing gum, and as a disguise in medicines and has several other uses.

Sage. — (Salva officinalis). The common herb intimately associated with pork sausage, used in medicine and as a flavoring for various products of the cook's art. The leaves should be taken when the flower spikes are forming, spread in a dark room, and dried as quickly as possible. Propagated by seeds, cuttings, and root division.

THE FLOWER GARDEN
Vines for Arch or Trellis

ANNUAL Vines.—Balloon - vine, wild cucumber, hop-vine, morning-glory, moon-flower, balsam pear, scarlet runner bean.

Perennial Vines (Harbaceius).—Kudzu vine, moon-flower, everlasting, wistaria.

Woody Vines.—Aklebia, Virginia creeper, Dutchman's pipe, clematis, bittersweet, mattrimony-vine, honeysuckle, trumpet creeper, grape, wistaria.

Vines for Brick and Stone.—Boston ivy, English ivy, euonymus radicans, ampelopsis quinquefolia.

Beauty Border of the Vegetable Garden

Annuals.—Cosmos (mixed), dahlia (mixed), sage, floss flower (blue), zinnia, tickseed (yellow), verbena (mixed), petumia (mixed), bachelor's button, cockscomb, corn-flower, china aster (white), spider plant, marigold, pansy (mixed), Shirley poppy, cone-flower, sweet-william.

Shrubbery and Perennial Garden

Trees and Shrubs.—Apple, golden bell, barberry, spirea, globe-flower, deutzia, buddleia, hibiscus, weigelia.

Perennials. — Candytuft, peony (red), Oriental poppy, iris (blue), alyssum, Canterbury bells, milfoil, phlox (pink), phlox (red), phlox (white), tickseed, blanket flower, helenium, pink, Shasta dairy, hollyhocks, golden glow aster.

Window Boxes

Plants Enduring Shade.—Asparagus, trailing, green; dracaena indivisa, upright, green; dracaena terminalis,. upright, red; English ivy, trailing, green; sord fern, upright, green; whitmani fern, upright, green; pandanus, upright, variegated; vinca, trailing, variegated; Wandering Jew, trailing, variegated; German ivy, trailing, green.

Flowering.—Pansy, prostrate, yellow, purple, white.

Mothers Problems

Sometimes Delay Punishment

A MOTHER of my acquaintance had purchased a beautiful dinner-set, the first real "set" she had ever owned. Together she and her daughter were washing it and putting the glossy flowered dishes in the china closet. The mother, on her way to the dining-room with a stack of bright dinner-plates, kicked up the rag rug that lay a few steps from the table. The daughter, following directly after her failed to notice the upturned rug, caught her foot in the fold and fell, her own stack of dishes crashing to the floor and breaking into hundreds of pieces.

At the crash the mother turned and glared angrily at the girl. She placed her own dishes on the table and started with hands clenched toward her daughter. Then, suddenly, she relaxed. She bit her lips, then pointed toward the hallway. "Eva," she said, "go up to your room at once. Stay there till I tell you to come down. Right now I am too angry to think what I ought to do."

By the time the mother had cleared away the wreckage, noticed the turned-up rug which she then remembered having kicked up, and calmed down somewhat, she was ashamed of the feeling she had shown toward the daughter who was not to blame for the accident. As soon as she could she went to the girl's room, where she found her sobbing on the bed, told her she realized it was an accident and asked her to come down and help with the rest of the dishes.

A punishment for that accident would have been unjust, and the child would have known it was unjust and been hurt, perhaps forever, by it. Yet many, many unjust punishments are meted out to children because the parents punish in the heat of their anger without waiting till they can judge calmly and correctly.

Remember this incident next

"In the morning early, if the day's work seems too much for you; if your confidence is low; your courage gone,—why that's just the time to work in your garden."

placed her own dishes on the table and started with hands clenched toward her daughter. Then, suddenly, she relaxed. She bit her lips, then pointed toward the hallway. "Eva," she said, "go up to your room at once. Stay their till I tell you to come down. Right now I am too angry to think what I ought to do."

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Remember this incident the next time some accident or deed occurs which rouses you to sudden anger. Rather than ever punish unjustly, send the child responsible for your feelings to his room and do not go to him till you have weighed his offence most carefully. If you would not later be filled with regret, it is sometimes best to delay punishment.—Margaret Bartlett.

MOTHERS' DAY

MOTHERS' Day—it means so much! Mothers' Day should hold for her all the things that are beautiful. How happy we should be upon May 2nd, when we can show our living mothers all the tenderness and thotfulness that only a child of hers can show. No matter how trifling the deed mother will think it the sweetest and noblest because her boy or her girl was thotful of her on this Day set aside to commerate the ones that have passed on and the day to show the living. Let us not be forgetful.

HOME SUGGESTIONS

PAINTING wire screens before putting them up in the spring will keep them from rusting and will make them look like new.

Porch chairs and stands can be gone over with a water-proof varnish—also good for renewing kitchen furniture that has become dingy.

Provide a place for refuse so that it may be easily put "in its place;" a waste basket of some description does this, and there is need for one in practically every room in the house. There are innumerable varieties of sizes, shapes and styles of baskets on the market; everything, from the most inexpensive to the very elaborate or some simple home-made one may be made to serve.

There is an old trick that many mothers know nothing about. That is to cut off a boy's stocking at the ankle and turn it around so that the thin darned places at the knees go underneath, where it does not show.

The Runner's Bible

We must humble (Ps. 37: 11), willing to be taught (Prov. 13: 18), to receive, andthen when joy has been let into the heart (Neh. 8: 10), and gratitude is felt, we are in a condition to receive the blessing—to know the Truth, and we can be assured that Love will guide us, that success will ultimately crown every endeavor, for all things work together for good.

We must also protect ourselves from all that would bring us harm, or even disturb us, by realizing that we are enveloped in an impenetrable armor of love and evil cannot reach us.

—if you are well bred!

At the table men should remain standing until all ladies present are seated.

Do not begin eating until all have been served.

Place napkin in lap.

Eat quietly and slowly.

Fork should be used with tines upward.

When not in use, place knife and fork across plate.

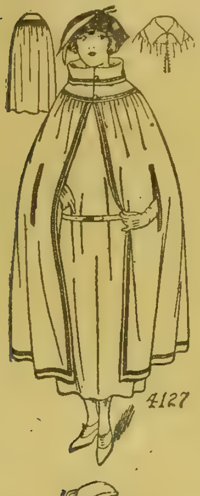
Sit quietly until all have finished.

Notice "Polar Bear Flour" ad in this issue and send for the free cook book.

AIDS TO GOOD DRESSING

As usual there will be much sewing done in the spring, so the first step is to get the sewing machine and shears in good condition. It is hard to spare the shears to be sharpened after work is begun and on the other hand it is encouraging to find them sharp and well set when work commences.

Give the sewing machine a thorough overhauling. Take a soft cloth. Dip it either in kerosene or gasoline and wipe off the oil and dirt which has accumulated. Wipe until the parts are clean and bright. Remove ravelings which have wound around the joints. When all parts are clear tighten the screws and see that everything is properly adjusted. Oil in every place where one part rubs against another. The machine is delicate in its mechanism and should be well kept and oiled to keep it from wear and also to make it run easily. A few drops of oil put on the wooden case and rubbed in well with a soft cloth will improve its appearance. See to it that the machine is supplied with needles of desired sizes and if the belt is worn a new one in the draw may save a day's delay.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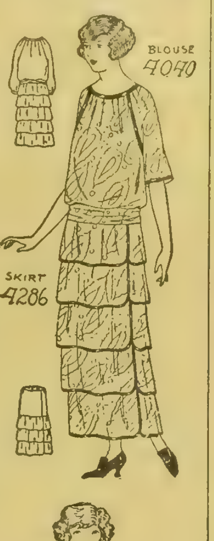

BLOUSE 4040

SKIRT 4286

A Jaunty "Wrap"

4127. This is a splendid utility style, suitable for all cloakings. As portrayed tweed was used, with trimming braid. The collar is convertible.

This pattern is cut in 4 Sizes: Small, 34-36; Medium, 38-40; Large, 42-44; Extra Large, 46-48 inches bust measure. A medium size requires 5½ yards of 44 inch material.

A Jaunty Blouse Dress for Slender Figures

4330. This is a good style for sports materials, for taffeta, kaska, jersey and serge. Vest, collar and cuffs may be of contrasting material. A very attractive development would be red and gray ratine, with red suede for trimming, or linen, with checkered gingham.

The Pattern is cut in 3 Sizes: 16, 18 and 20 years. An 18 year size requires 4¼ yards of 40 inch material. To trim as illustrated requires ¼ yard contrasting material 40 inches wide. The width of the skirt at the foot is 2¼ yards.

A Pretty Gown for "Many" Occasions

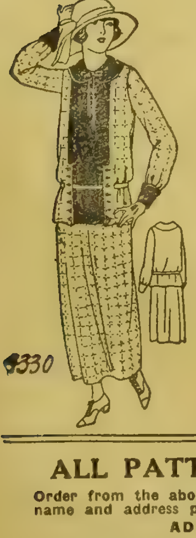
4040-4286. Printed silk with binding of crepe satin is here portrayed. This design is also good for voile, organdy or tissue gingham. The tiered skirt is very new and effective. It may be finished with three tiers. The blouse has a comfortable "raglan" sleeve that may be finished in wrist or elbow length.

The Skirt is cut in 6 Sizes: 25, 27, 29, 31, 33 and 35 inches waist measure. The width at the foot is 2⅝ yards. The Blouse is cut in 6 Sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. To make this dress as illustrated for a medium size requires 8¼ yards of 36 inch material.

A Simple, Pretty Frock for A Little Miss

4347. Printed voile or crepe would be attractive for this style. It is also pleasing in summer, taffeta and crepe de chine. Binding in a contrasting color would be effective for trimming.

This Pattern is cut in 4 Sizes: 4, 6, 8 and 10 years. A 6 year size requires 2¼ yards of 32 inch material.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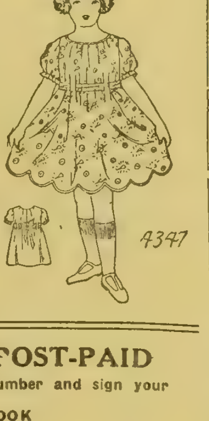
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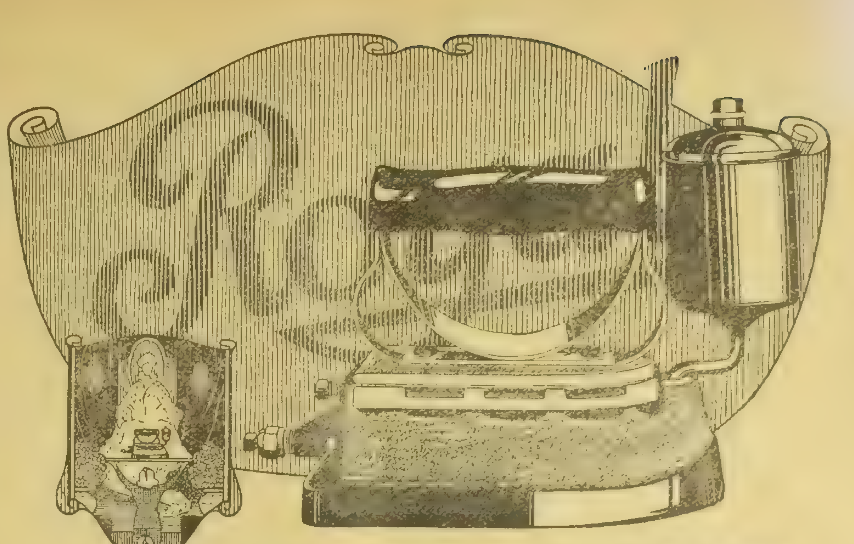

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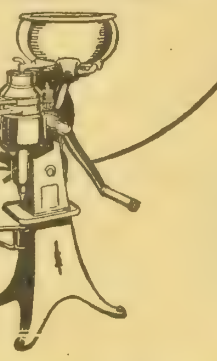

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CLAIM YOUR SALE DATE

To avoid conflicting dates we will without cost, list the date of any live stock sale in Michigan. If you are considering a sale advise us at once and we will claim the date for you. Address, Live Stock Editor, M. B. F., Mt. Clemens

May 9—Guernseys, Wigman & Surato, Holt, Michigan.
May 10—Holsteins, McPherson Farms Co., Howell, Michigan.
May 10—Holsteins, Geo. W. Ridgeman, Vassar, Michigan.
May 31—Shorthorns and Berkshires—Simon G. Maichle, Middleville, Michigan.
Oct. 18—Holsteins, Howell Sales Company of Livingston County, Wm. Griffin, Sec'y Howell M[illegible]

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82 LB. SIRE—25 LB. DAM. HAVE A 15 mos. old Pontiac Korndyke, King Segis bull. Sired by a 32 lb. grandson of a 35 lb. Michigan Champion. Dam, a 25 lb. 4 yr. old, King Segis breeding. Calf well grown, straight, nicely marked. Herd federally tested—clean. Price, $100, delivered anywhere in lower peninsular.
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4 EXTRA FINE BULL CALVES—ALL BORN in January. From heavy milking Dams and Sired by "Romeo King Segis Pontiac Korndyke." Herd T. B. tested. Bargain prices to move quick. Write today. Pedigrees free.
SCHAFFER BROS., R. 4, Oxford, Michigan.

FASCINATION FARM, VASSAR, MICHIGAN. Holsteins, registered fully accredited 32½ lb sire. Write your want.

GUERNSEYS

FOR SALE—REGISTERED GUERNSEY HEIFers at reasonable prices, also choice bull calves of May Rose breeding.
H. W. WIGMAN, Lansing, Mich., Box 52.

MISSAUKEE GUERNSEYS. A NEW CROP OF calves coming soon. No females for sale. Order that new bull calf A. R. Sire and Dam.
A. M. SMITH, Lake City, Michigan.

GUERNSEYS—Registered Bull Calves, Cheap, also grades. Best of breeding for production and size. George Damken, North Manchester, Indiana.

REGISTERED GUERNSEYS—FEMALES AND Bull Calves. A. R. Sire and Dam. DR. W. R. BAKER, 4800 West Fort St., Detroit, Michigan.

FOR SALE: MAY ROSE GUERNSEY BULL Calf. Born on Nov. 20, 1922. Dam on A. R. Test. Federal Accredited Herd.
GILMORE BROTHERS, Camden, Michigan.

ANGUS

WE HAVE SOME FINE YOUNG ANGUS BULLS from International Grand Champion Stock at reasonable prices. E. H. KERR & CO., Addison, Mich.

COMPLETE DISPOSAL SALE OF THE
GEO W. RIDGEMAN HERD OF
HOLSTEIN CATTLE
VASSAR, MICH., THURSDAY, MAY 10, 1923

Sale starts at one thirty rain or shine at my farm, 3 miles north and one miles west of Vassar, Michigan or sixteen miles east of Saginaw:

15 head of the highest quality Holstein cattle ever offered at dispersal in Michigan, a fully accredited herd never a reactor, including "Eden White Rose," world's champion Sr. 2 yr. old, producer for 1922, 305 day div., butter 883.2, milk 19,446.3; and Eden Hope, Michigan state champion Jr. 2 yr old, 30 day div., butter 100.2, milk 2106.8; two of Michigan's wonder cows, their dams, grand dams, sisters, daughters and a son of "Rose," nine daughters in all of Flint Korndyke Butter Boy whose three two year old daughters tested in 1922 ave.: butter 24.47, milk 513.2. He is the best proven son of Maple Crest Korndyke Hengerveld, The New Century Sire. Catalogues are now ready, write for one.

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DAIRY and LIVESTOCK

FARM DAIRYING

SOMETIMES farmers who keep cows as a source of income rather than to gratify a hobby, are inclined to discount records made by pure breds, claiming that big daily yields of milk are made by milking three or four times a day or by resorting to other methods which are artificial or unnatural. No doubt the claim that the yield is the result of extra labor and not due to the natural producing ability of the cow is true in some cases, but not in all herds, for example, that of W. J. Gamble of Caro.

In this herd seven pure bred Holstein cows, freshening since Christmas, and milked but twice a day, showed on the barn sheets so far in April, an average production of 64.44 pounds each per day. Of course part of such good production is due to good care given these cows by the manager, Thomas Kimmell, but the main credit must be given to the cows themselves, that, standing in stanchions, without any babying, can roll out practically 30 quarts of milk each per day.

And some farmers say that once in a while a cow without any forcing can give a big flow for short time but she would have to be pampered to stick to it throughout the year. Such farmers may well ponder over the record made by a pure bred Holstein in a Cow Testing Association in Livingston County where she was given ordinary care by an ordinary farmer, fed ordinary farm feeds and milked but twice a day throughout the year. She yielded 17,246 pounds of milk and fat enought for 801 pounds of butter; and incidentally showed a profit over her feed costs of $187.00.

There is certainly something in pure blood and breeding when cows can show every day production such as these cows did.

DOCK YOUR LAMBS

MR. Louis F. Swift has a farm at Everett, Illinois, thirty miles from Chicago, and has had more or less to do with raising sheep and lambs. Mr. Swift says:

"In order to realize best returns in the production of lambs, a certain rule must be followed. Much money has been lost by people raising lambs through failure to observe this rule, prevalent in the western states, which is as follows:

> " 'All lambs must have their tails cut off, and all the bucks not needed for breeding purposes must be made wethers when about two weeks old.'

"Nothing is so discouraging and inexcusable or financially disastrous as to see lambs in the fall or later, with long tails (which means negligence on the part of the raiser), or buck lambs sold at a big discount on account of their coarse quality for mutton, in the fall, which should have been made wethers in the spring and sold for a premium as wethers."

DETROIT CREAMERY HOG SALE

THE Detroit Creamery Farm had a very snappy Hampshire sale at Utica, Mich., March 19. The greater portion of the offering was taken up by Michigan buyers. The top sow selling to C. J. Cheeseman, of Clarkston, Mich., for $118.50. Strevel & VanCamp of Blaine, Mich., bought five sows and one of the good young boar pigs. Three sows and a boar pig to Bert Coulon of Mt. Clemens, Mich. Col. F. H. Hulick of Atlanta, Ind., officiated in an efficient manner and was ably assisted by C. R. Bowers of the Hampshire Advocate. The 39 pigs sold brought $2,486.00 an average sale of $63.74.

Lot No. 1, Boar, sold to Fred Smith, Utica, Mich., $410.00; 3, boar, sold to Fred Strevel, Blaine. Mich., $82.50; 4, boar, sold to W. V. Reid, Richmond, Ind., $85.00; 5, boar, sold to Bert Coulon, Mt. Clemens, Mich., $70.00; 6, sow, sold to C. J. Cheeseman, Clarkton, Mich., $118.50; 7, sow, sold to Fred Strevel, Blaine, Mich., $52.50; 10, sow, sold to Burt Coulon, Mt. Clemens. Mich., $75.00; 11, sow, sold to Earl Terry, Clarkston, Mich., $50.00; 12, sow, sold to Fred Strevel, Blaine, Mich., $40.00; 13, sow, sold to Keystone Farms, Marion, Ohio, $42.50; 14, sow, sold to Bert Coulon, Mt. Clemens, Mich., $35.00; 15, sow, Fred Smith, Utica, Mich., $60.00; 16, sow, sold to Gust Cishke, Rochester, Mich., $52.50; 17, sow, sold to W. V. Reid, Richmond, Ind., $52.50; 18, sow, sold to H. G. Gamber, Mt. Clemens, Mich., $67.50; 19, sow, sold to Mrs. J. C. Brown, Wabasha, Minn., $67.50; 20, sow, sold to W. V. Reid, Richmond, Ind., $35,00; 21, sow, sold to W. V. Reid, Richmond, Ind., $50.00; 22, sow, sold to C. H. Jones, Pontiac, Mich,, $65.00; 23, sow, sold to Elmer Moore, Utica, Mich., $62.50; 24, sow sold to Julius Kendt, Mt. Clemens, Mich., $42.50; 26, sow, sold to Helen Target, Warren, Mich., $57.50; 27, sow, sold to C. R. Wolford, Plymouth, Ohio, $37.50; 28, sow, sold to Keystone Farms, Marion, Ohio, $50.00; 29, sow, sold to Floyd Gale, 47.50; 32, sold to L. J. Smith, Utica, Mich., 37.50; 33, gilt, sold to H. G. Gamber, Mt. Clemens, Mich., $67.50; 34, gilt, sold to W. V. Reid, Richmond, Ind., $45.00; 35, gilt, sold to G. Cishke, Rochester, Mich., $50.00; 36, gilt, sold to W. V. Reid, Richmond, Ind., $37.50; 37, gilt, sold to W. V. Reid, Richmond, Ind., $37.50; 38, gilt, sold to Fred Strevel, Blaine, Mich., $55.00; 39, gilt, sold to Fred Strevel, Blaine, Mich., $60.00; 40, gilt, sold to Bert Coulon, Mt. Clemens, Mich., $30.00; 41, gilt, sold to Jos. Weingartz, Halfway, Mich., $50.00; 42, gilt, sold to Fred Strevel, Blaine, Mich., -$52.50; 43, gilt, sold to Howard Gibson, Oxford, Mich., $35.00; 44, gilt, sold to Dr. Sharp, Romeo, Mich., $60.00; 45. gilt, sold to Mrs. Leason, Warren, Mich., $50.00.

VETERINARY DEPARTMENT

CANNOT KILL TICKS BY FEEDING SULPHUR

Will you kindly inform me whether sulphur if fed to sheep will kill the ticks on them? How should I feed sulphur to sheep, in their salt or grain, and how long and how much would I give 50 sheep to rid them for ticks? —L. K., North Branch, Michigan.

—The feeding of sulphur to sheep will not destroy the ticks, nor cause the ticks to leave the sheep. Sulphur is relished by sheep and they use considerable sulphur in producing a good fleece of wool. We, therefore, add some sulphur to the salt which we give our sheep. Just at present we are feeding our sheep the following mixture in place of salt:

20 lbs. salt, 20 lbs. precipitated bone meal, 5 lbs. sulphur. There should be no danger of the sheep catching cold if they get wet while taking this mixture.—G. A. Brown, Prof. of Animal Husbandry, M. A. C.

RAISING PIG ON BOTTLE

Will you please tell me what to feed a little pig when raising it on a bottle?—W. H. L., Belding, Mich.

—The feeding of orphan pigs is rather a difficult matter and requires very close attention to detail. As a general rule it is not advisable to endeavor to alter the composition of cow's milk any, but rather to start the little pigs on whole milk, feeding then from six to eight times per day a small allowance each time. To start with, a pint of whole milk per day per pig is sufficient. This should be gradually increased until the pigs are receiving about one quart of milk per day per pig, by the time they are two weeks of age, at which time the number of feeds may be reduced to three or four.

The pigs may be taught to drink by placing the milk in a shallow pan or dish and forcing the little pigs' heads in until they get a taste of milk two or three times and they will soon learn to drink. Where the bottle is resorted to, it means too much work where one has a little of eight or ten pigs. In addition to the milk, the pigs should be given access to good corn and also middlings in a small self-feeder, where they may help themselves at will. Salt, charcoal and wood ashes should be kept before them at all times.—Geo. A. Brown, Prof. of Animal Husbandry, M. A. C.

SHORTHORNS

Richland Shorthorns

SPECIAL OFFER: Two choicely bred cows. One roan—One white—One with bull calf at foot by son of IMP. Rodney. This show stock of real caliber and great foundation material. A bargain at the price.

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Home of Merry Commander, Junior Champion at the recent International. Now is the time to buy. We have several young cows and heifers, bred to this wonderful bull, for sale. Also, several bulls and heifers of breeding age, from our other noted sire, Perfection Heir 3rd. Visit or write us at once.
S. H. PANGBORN and SONS, Bad Axe, Mich.

RAISE SHORTHORNS WITHOUT HORNS Like Kelley does. U. S. Accredited Herd No. 28945. For description and price write,
L. C. KELLY & SON, Plymouth, Michigan.

Polled Shorthorn Bulls and Heifers 3 to 12 mo. old. C. W. Gilts bred. Boars to use. White and yellow dent seed corn, heavy yielding. Write your wants. Frank Bartlett, Dryden, Mich.

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OF SERVICEABLE AGE

Buy a Financial King Jersey bull from register of merit cows. Why not own a real bull that is sure to breed wonderful sons and daughters. Terms to responsible parties. Prices reasonable. Write to Emil Anderson, Coldwater Jersey Farm, Coldwater Mich. Mich. home of Financial Kings.

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GUY C. WILBUR, BELDING, Mich.

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HEREFORDS FOR SALE. SEVEN CHOICE yearlings and heifer calves and seven yearling bulls sired by Wyoming 9th. International Prize winner. Farmers prices. Herd established in 1860 by Gov. H. H. Crapo. Write for information. CRAPO FARMS, Swartz Creek, Michigan.

REPEATER BRED HEREFORDS. YEAR Bulls, price $75.00. Good individuals.
JOSEPH FELDPAUSCH, Fowler, Michigan.

BROWN SWISS

FOR SALE: BROWN SWISS BULL, TEN Months old. Carries the blood of Colage Bravura 2nd. FRANK POET, R. 6, Clare, Michigan.

FOR SALE—VEL VERDE BROWN SWISS Cattle, registered. Bull, cows and calves, Write
ED. GRISWOLD, R. 1, Bellaire, Michigan.

RED POLLED

RED POLLED CATTLE—A few choice bulls and heifers for sale.
ROYSTAN STOCK FARM,
Will Cottle, R. R. 1, West Branch Michigan

AYRSHIRES

FOR SALE—REGISTERED AYRSHIRE bulls and bull calves, heifers and heifer calves. Also some choice cows.
FINDLAY BROS., R 5, Vassar, Mich.

SWINE

DUROCS

Duroc Jersey Bred Sows and Gilts

Plenty of size bone and quality. April and May farrow, bred to grandson of International Stock Show Champion.
JOS. SCHUELLER, R. 2, Weidman, Michigan.

HILL CREST DUROCS, PERRINTON, MICH. We are breeding twenty sows and eighteen gilts to a son of GREAT ORION SENSATION. Yearling, spring and fall boars. NEWTON & BLANK, Farm 4 miles straight south of Middleton, Gratiot Co., Mich.

DUROC JERSEYS Fall boars and gilts of quality, prices very low Am booking orders for March pigs to ship in May. $10, reg., short time. Satisfaction or money back. B. E. KIES, Hillsdale, Mich.

PEACH HILL FARM offers choice weanling Duroc pigs, either sex. Priced very reasonable. Write us.
INWOOD BROS., Romeo, Mich.

O. I. C.

O. I. C. BIG TYPE GILTS FARROWED MAY 15th. 22 weighing 300 lbs. Bred to Leighty Monster, an outstanding boar. We have been breeding and shipping O. I. C.'s for 20 years. NEWMAN'S STOCK FARM, Marlette, Michigan.

REGISTERED O. I. C. SOW, DUE TO FARrow in July, weight about 500 lbs; 2 years old; bred to registered boar. Only $50.00. Selling out is reason for selling her.
GILBERT VANDE VOOREN, R. 1, Ada, Mich.

REGISTERED O. I. C. BRED GILTS FOR sale. Weighing 250 lbs. A few fall boars.
J. R. VAN ETTEN, Clifford, Mich.

HAMPSHIRES

HAMPSHIRES—SPRING BOARS AND BRED gilts from 25 sows to select from. Place your order now or you may be to late. 10th year.
JOHN W. SNYDER, R. 4, St. Johns, Mich.

IS ORGANIZATION HELPING POTATO MEN

(Continued from Page 6)

severe blizzards, the market underwent a marked raise, from 30c to a dollar in a few days. What was the situation of the organized farmer, selling thru his co-op. and the man who "lets Blinks have 'em because I get the cash right off?"

C. C. Wells, Exchange Manager at Cadillac, has recently made this clear in a letter. He says, "During the first 16 days of March our average net returns to growers for potaties were 52c a hundred on plain sacks and 60c a hundred on branded sacks. This average is based on the sales of 151 cars.

"During the same period independent buyers in western Michigan paid an average of only 31.5 cents per hundred. In very few cases did dealers' prices reach our lowest figure, and at many small country points they paid as low as 15 to 20c a hundred.

"The jump in prices which occurred March 1st gave our competitors a chance to take unfair advantage of the growers' ignorance of market conditions. The advance was so sudden that many farmers sold at the old prices; and, even a week later, some did not know the real situation. Such persons are "easy picking" for speculating buyers who have an opportunity, under such conditions, to regain some of the money lost in bucking the Co-op. heretofore.

"A farmer at Weidman made $159.60 by refusing a dealers' offer of 25c and shipping through the local association. Our pool price netted him 63c. He advertised this result in his neighborhood and, as a result, the Weidman warehouse was again plugged full of potatoes.

"Ivan M. Nielson, Manager at Gowen, wrote me—'If your prices continue to be as far above local prices as they have been for the past two weeks, we will ship for many new members and will handle more cars than ever before.' "

California farmers have found prosperity by merchandising their products, not dumping them. The story of the prune, orange, lemon, raisin, and walnut growers is, or should be, an old one to us in Michigan. But "selling to Blinks because I get the cash" is not merchandising. To use plain terms, it is pin-healed short sightedness. It is placing enough of your product in competitive hands to break your own market and bear down your own price. The reports of the Michigan Potato Growers Exchange for the past winters are in your Farm Bureau Office. Run and see them. Learn of the many times when independent dealers in Southern Michigan undersold your Exchange in Pittsburg, in Cleveland, in Chicago—undersold them with the same potatoes you "sold to Blinks for Cash"—and forced the Exchange prices down, thus cutting off your own nose in return.

No, co-operative merchandising is not going to benefit you as long as you let your neighbor do it, and you "sell to Blinks for the cash." Your organization is now set up and working. Give it your support. If any grower has to sell for cash, a method can be found to deal with his own organization that way. New credit laws, passed through organized farm bureau influence by the last Congress, are providing a way to do this. We have got to do it ourselves.

Co-operative marketing will at best be but half-success, a milk and water Michigan reflection of the 180-proof California brand, till we see into this thing far enough to stop competing with ourselves in our own market.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912, of The Michigan Business Farmer, published biweekly at Mount Clemens, Michigan for April 1, 1923. 1. That the names and addresses of the publisher, editor, managing editor and the business managers are: Publisher, Georoge M. Slocum, Mount Clemens, R. F. D. No. 4, Mich. Managing Editor, Milon Grinnell, Mt. Clemens, Mich. That the owners are: Give names and addresses of individual owners, or, if a corporation, give its name and the names and addresses of stockholders owning or holding 1 per cent or more of the total amount of stock. The Rural Publishing Co., Inc., Geo. M. Slocum, M. H. Slocum, W. W. Slocum, Mt. Clemens; C. Allen, Lake; Aug. & E. Amos, Owosso; E. Ellsworth, Oden; N. Powell, Oden; C. J. Pratt, Charlevoix; J. Ritzler, Rogers; F. R. Schalck, Chicago; F. A. Lord, Gaylord; W. Schriner, Marine City; A. Voss, Luther; B. Wolff, Riggsville; F. Yost, Bridgeport. 3. That the known bondholders, mortgagees and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none so state.) Citizens Savings Bank, Mt. Clemens; R. R. Olds, Detroit, Mich. George M. Slocum, Publisher. Sworn to and subscribed before me this 14th day of April, 1923. Mae R. Sullivan. My commission expires August 29, 1923.

EARLY BROILERS
November Layers

Make it ten weeks from peeps to broilers—two-pounders.

Do it this way:
Keep them healthy.
Keep them hungry.
Feed the old reliable

Dr. Hess Poultry
PAN-A-CE-A

Never mind about indigestion, diarrhea, leg weakness and gapes. Pan-a-ce-a takes care of all that. There will be wellness, cheer and good growth.

PAN-A-CE-A your chicks—then put them on the scales at ten weeks, set her at two pounds, and watch that beam come up!

You will see a mighty difference in the feather growth, too, between your flock and a non-Pan-a-ce-a flock.

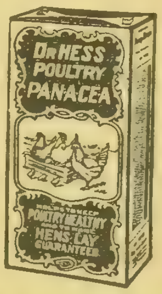
Pan-a-ce-a will develop your pullets into early henhood—fall and winter layers.

Tell your dealer how many hens you have. There's a right-size package for every flock.
100 hens, the 12-lb. pkg. 200 hens, the 25-lb. pail
60 hens, the 5-lb. pkg. 500 hens, the 100-lb. drum
For fewer hens, there is a smaller package.

GUARANTEED

DR. HESS & CLARK Ashland, O.

I spent 30 years in perfecting Pan-a-ce-a.
GILBERT HESS
M.D., D.V.S.


DR HESS POULTRY PAN-A-CEA
POULTRY HEALTHY HENS LAY GUARANTEED

Dr. Hess Instant Louse Killer Kills Lice

DISSOLUTION SALE!
Bon Ayre Farm Guernseys
Owned by
WIGMAN & SURATO, HOLT, MICHIGAN
May, 9th, 1923
65 Head of high class, pure bred GUERNSEYS **65**

This great herd of cows, several with fine official records, together with their offspring, make an aggregation that has rarely been placed at the disposition of the buying public through the medium of the auction sale ring.

Included will be 20 daughters of Uplands Monarch of the May, a grandson of Ne Plus Ultra out of Ellen May Queen of Glenmore with 16369 lbs. milk and 816 lbs. fat. All females of breeding age are bred to May King's Prince of Bon Ayre (1st at Mich. state fair 1921), a son of Uplands Monarch out of Gala of Westen with 13545 lbs. milk and 760 lbs. fat.

For catalogue, address H. W. WIGMAN, Lansing, Michigan.

Public Sale 34 Registered Holstein Friesian Cattle
6 High Grade Holstein Cows
(All Females)
Sale Pavilion, Fair Grounds, HOWELL, MICHIGAN
Thursday, May 10, 1923, at 1 o'clock P. M.

Herds under State and Federal Supervision
(60 day retest privilege)

Included in the sale is a cow that has twice made a record above 31 lbs. butter in 7 days, a daughter of a 30 lb. cow, two daughters of 25 lb. cows, a cow that has produced over 14000 lbs. milk in one year at 28 months old, a daughter of a cow that has produced over 24000 lbs. milk in one year and others with good records.

Catalogs ready May 1st.
McPHERSON FARMS CO., W. J. Witty, Howell, Michigan.

FOR SALE: BLACK PERCHERON STALLION 4 years old. Broken single and double. Sire Count, Dam Platina a ton mare and twice champion of State. Second Dam Pelitte a Big 4 mare of Elwood Stock Farm.
JUNE ELLIOTT, Rives Junction, Michigan.

FOR SALE: OUR ENTIRE STABLE EQUIPment. Six horses, harness, wagons, feed grinder, etc., etc. We are motorizing all our routes and have no further need for horses. Look our stable over and make us an offer for anything you may need. FEDERAL LAUNDRY COMPANY, Third and Elizabeth Sts., Detroit.

Write for free booklets on Farm Sanitation

They contain practical suggestions for the prevention of diseases common to livestock and poultry and describe in detail the many uses of

Kreso Dip No. 1

(STANDARDIZED)

Parasiticide and Disinfectant

For all Livestock and Poultry

FREE BOOKLETS ON FARM SANITATION:

No. 151—**FARM SANITATION.** Describes and tells how to prevent diseases common to livestock.
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No. 163—**POULTRY.** How to get rid of lice and mites, also to prevent disease.

Kreso Dip No. 1 is Sold in Original Packages at all Drug Stores.

ANIMAL INDUSTRY DEPARTMENT OF
Parke, Davis & Co.
DETROIT, MICHIGAN

If Ruptured Try This Free

Apply it to Any Rupture, Old or Recent, Large or Small and You are on the Road That Has Convinced Thousands

Sent Free to Prove This

Anyone ruptured, man, woman or child, should write at once to W. S. Rice, 408B Main St., Adams, N. Y., for a free trial of his wonderful stimulating application. Just put it on the rupture and the muscles begin to tighten; they begin to bind together so that the opening closes naturally and the need of a support or truss or appliance is then done away with. Don't neglect to send for this free trial. Even if your rupture doesn't bother you what is the use of wearing supports all your life? Why suffer this nuisance? Why run the risk of gangrene and such dangers from a small and innocent little rupture, the kind that has thrown thousands on the operating table? A host of men and women are daily running such risks just because their ruptures do not hurt nor prevent them from getting around. Write at once for this free trial, as it is certainly a wonderful thing and has aided in the cure of ruptures that were as big as a man's two fists. Try and write at once, using the coupon below.

Free for Rupture
W. S. Rice, Inc.,
408B Main St., Adams, N. Y.
You may send me entirely free a Sample Treatment of your stimulating application for Rupture.
Name ....
Address ....
State ....

SAVED $30.00 Get Brown's New CUT PRICES
W. T. Greathouse writes: "Fence received yesterday. I saved $30.00 in buying from you." Our new cut prices are way below others—and
Brown Pays Freight
Write for our new 1923 cut price catalog—see the dollars you save. 150 styles. Double galvanized, open hearth wire. Roofing and paints.
THE BROWN FENCE & WIRE CO.
Dept. 3804 Cleveland, Ohio
FENCE
GATES
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(4)

3 BIG BARGAINS
WAIT! Before you buy an Engine, Separator, Spreader or any other machine get Galloway's new low prices, save one fourth to one-half. [illegible]00,000 pleased customers testify to faultless designs, best materials. Satisfaction guaranteed. Send for new 1923 catalog
Wm. Galloway Co.
Box 887
Waterloo, Iowa

FARM MECHANICS

BLASTING DRAINAGE DITCHES WITH DYNAMITE

WITH the possible exception of clearing cut-over land in the states of Wisconsin, Michigan and Minnesota, more dynamite is used for blasting drainage ditches than for any other agricultural purpose. What this means can perhaps be realized by considering that one single orchardist uses more than a carload of dynamite every year for planting fruit trees. There are two distinct methods of blasting ditches, known respectively as the propagation method and the electrical method. These names are not entirely satisfactory, for a propagation ditch can be shot electrically, as will be explained. Straight notroglycerin dynamite of 50 per cent and 60 per cent strength has the property of transmitting the detonation impulse from one cartridge to another, even when these cartridges are buried in the ground, with incredible speed. In soft, mucky, swampy land, dynamite of the type mentioned will propagate an explosion when placed in holes as far apart as twenty inches and some-times farther. Eighteen inches is the standard distance between holes for ditches requiring but one cartridge per hole. The operation is as follows:

A line or string is stretched along the course of the proposed ditch. At every eighteen inches a hole is made in the ground, usually with a pointed crowbar, to the depth desired, and a cartridge f 1¼" x 8" 50 per cent straight dynamite is placed in each hole not deeper than thirty inches. It is necessary to prime, or put a cap in, but one of these cartridges and that is the one nearest the center of the line of charges. Either an electrical blasting cap or a blasting cap and a piece of fuse may be used. We usually put an extra dynamite cartridge in this central hole to be sure that the initial detonation is perfect. In ordinary swamp land it is not necessary to tamp the holes at all. The central hole is exploded either by lighting the fuse or by connecting the electric blasting cap wires to a blasting machine by leading wire and operating the blasting machine. The shock is communicated from the center charge to the adjoining charges which pass it on to those next and so on at the rate of about 15,000 feet per second, so that as far as the eye can see the whole line of ditch explodes at once and a regular curtain of mud goes up several hundred feet in the air. The result is a perfectly straight and completed ditch requiring no trimming and leaving no spoil bank. This is the quickest and most effective method of digging a ditch in wet soil.

It is not practical however in dry sand, and care should be taken in attempting such a ditch in wet sand or gravel. In any case it is not wise to attempt to blow the whole ditch at first. Test shots of fifteen or twenty feet along the line of the proposed ditch should be made with different spacings and different charges until the operator is satisfied that the charge and spacing is correct for his purpose. The principal error that beginners commit in blasting a ditch is placing the charges too deep. While the action of explosives is in the line of the least resistance, they are so quick that the ditch will be excravated several inches below the bottom of the charges.

The propagation method is used extensively to make ditches for draining swamps, meadows and low lands and can be used where any other method would be out of the question, as for instance through a tangle of briars, underbrush and other vegetation. Where stumps, logs, boulders or other obstructions are encountered in the line of the proposed ditch, extra charges of dynamite are placed under such obstructions so that they will be blown out along with the ditch.

The electrical method has one advantage over the propagation method in that it can be used in any kind of soil whatever, although in dry, shifting sand it is not possible to blast a ditch very economically. Holes are made in the ground to the desired depth as before, but are spaced farther apart up to thirty-six inches for ditches requiring only two or three cartridges per hole. Each hole is primed with an electric blasting cap and these electric blasting caps are connected in series, up to the capacity of the blasting machine available; that is, if you have a No. 3 blasting machine you can fire only thirty holes at a time; if you have a No. 5 blasting machine you can shoot one hundred. Another advantage of the electrical method is that any kind of high explosive can be used, although a 40 per cent Red Cross Extra is the grade usually recommended. Where stumps or other obstructions are encountered in the line of the ditch and extra charges are necessary to blow them out, each of these extra charges has to be primed with an electric blasting cap.

While ditches blasted with dynamite are perfectly satisfactory for open drainage, the surrounding material is so loosened and shaken up by the explosion that they do not serve well for placing tile drains. Blasted ditches retain their shape and slope as well as, or better than, dug ditches. Of course, no ditch is a permanent channel. Most ditches will fill up in time, but a blasted ditch does not fill up any sooner than any other kind.

Up to about the first of January, 1923 the agricultural representatives of one manufacturer of dynamite had collectively blasted about one hundred and twenty miles of drainage ditches with dynamite, nearly all of it by the propagation method. How many hundred miles of ditches have been blasted by farmers, road engineers, health officials, and for mosquisto and malaria control is not known but is doubtless an impressive mileage. Almost any kind, length, width or depth of a ditch can be blasted by dynamite if enough explosive is used and necessary care and intelligence are exercised.—Arthur La Motte, E. I. du Pont de Nemours & Company.

CHANGING TIMES

By JOHN T. BARTLETT

FARM taxes have gone up rapidly. Moreover, they are not likely to come down, in most places. That is not such unpleasant news as it first seems, if we look into the situation.

The explanation of higher taxes is partly a higher standard of community living, and partly a higher level of community efficiency. Taxes in the writer's neighborhood, for example, for 1923, are practically double what they were in 1922. The district has put in a new and costly school plant. This fine, large, brick building has running water, electric lights, excellent heating and ventilating systems. There are manual training and domestic science departments. Teachers employed grade with those employed in large cities; they have far better training than the "schoolma'ams" of our youth—and they receive far higher salaries.

Though we are "in the country" we have city educational facilities.

Now, this district could have got along with the kind of schoolhouses districts commonly used ten, fifteen and twenty years ago. It wanted something different. The best was not too good for the boys and girls. So the district voted to have the best. And now the district is paying the price—high taxes.

On one side, high taxes are caused everywhere by a higher standard of community living. The community treats itself to a softer deal at the hands of life. And pays the price in taxes.

The second cause of high taxes is a higher level of community efficiency. Good roads are not luxuries. They are community equipment. Farms are operated at a greater profit: The whole community gets the most from its resources and labor. Taxes are a part of the cost of doing business.

The receipt for low taxes everywhere is the same. As a community, do without things. Do without fine schools, town buildings, good roads, etc. But do you want to? You don't!

SMALLER FARM FAMILIES

A RECENT survey by competent investigators showed that it costs, under typical farm conditions, $3,000 to raise a child to the age of 18 years.

The exact figure doesn't matter. What is fundamentally significant is that it costs a great deal to raise a child properly on the farm, and though this figure is unquestionably much less than for the town child, and the farm child in the way of labor contributes considerable to his maintenance, the cost is increasing from decade to decade. Moreover, it is increasing faster through the current period than at any previous time.

The average family is small, not through fear of childbirth, or a shirking of family responsibilities, but a moving desire of parents to do all for such children as are born as they merit. Back before the Civil war, before the age of machinery, a growing child's labor matched, sometimes exceeded, his or her keep. There was no economic obstacle to doing for one's children all that others did, and to having a large family. Then there were large families.

There began to be smaller families as children began not to pay their way—as machine methods came in with which human labor could not compete. As they paid their way less on the average farm, the size of families continually decreased. The number of children kept considerably higher than with town families because it was far less expensive to raise a farm child than a city child.

The gulf between a farm child's economic return and the expense he entails steadily widens, and as it widens the number of children decreases.

We can expect smaller and still smaller farm families. One result absolutely assured is that, simultaneously, more and more operations on the farm will be performed by machines. Tractor farming is an eventual certainty. Investment in farm equipment will constantly increase. Farm population, in relation to city population, will grow less.—John T. Bartlett.

HORSESHOE PITCHING

FIFTEEN-YEAR-OLD BOY IS WORLD'S CHAMPION

A 15-YEAR-OLD lad in knickerbockers now holds the national horseshoe pitching championship, Harold Falor, of Akron, Ohio, having tucked away first honors under his belt at St. Petersburg, Fla., where the mid-winter national tournament was held.

In taking the championship young Falor dethroned Lundin, of New London, Ia., who finished second in the tournament. Lundin won his laurels at Des Moines, Ia., last Summer. C. C. Davis, Columbus, Ohio, carried off third prize and Frank Jackson, Kellerton, Iowa, who held the championship for several years, finished fourth. Michigan's champion, L. M. Wilkes, of Battle Creek, won seventh place. There were 30 men and 6 women entered in the tourney.

Mrs. J. F. Francisco, of Muskegon, Mich., now holds the women's national championship, taking first place at the St. Petersburg tourney. Mrs. C. A. Lanham, of Bloomington, Ill., forfeited her title, failing to compete in the mid-winter event.

In addition to winning the national honors, Falor was bestowed with a diamond studded gold medal and was handed a check for $500. Lundin won second and was given $300, while Davis got third money, amounting to $200. Frank Jackson, fourth, was awarded $175. Many other splendid prizes including a number of horseshoes, were awarded winners. The women also were given cash prises, Mrs. Francisco carrying off a check for $75, in addition to other prizes.—R. B. Howard, Editor Horseshoe World.

N- Y. Dairy League Sets Pace for Michigan

(Continued from Page 4)

themselves became boosters and were of constant assistance to the salesmen.

This year many new dealers have been taken on and the old dealers have all requested new contracts.

The ice cream activities of the association had a wonderful effect upon its farmer members everywhere and why not? They saw these outdoor signs and painted walls offering to the public a product of their own farms and factories. They couldn't go into town but what they would see in the stores, their city friends enjoying this delicious ice cream. Frequently along the state roads they met the great yellow League trucks equipped with every modern contrivance for refrigeration and delivery. They saw at the railroad stations groups of the League ice cream freezers on their way to and from the market.

What could make a stronger appeal to their pride and interest? What could better boost the moral of the membership? Many farmers offered space on their barns or silos for the outdoor advertising bulletins of the League ice cream. Not only do the farmers of the association read these advertising signs that are so prominent a feature of the Empire State landscape but they impress themselves upon the senses of of the tourist from cities and from other states. And there is another thing that the tourist sees as he rides over New York State highways. At the front gate or conspicuously posted on the front of the dairy barn or house he will see the Dairymen's League membership sign setting forth the fact that the owner of the farm is a member of the Dairymen's League Cooperative Association, Inc. and is proud of it. These signs are ten by twenty-seven inches and are made of metal and painted in the conspicuous blue and white colors which are used in all of the League's advertising.

These Farmers Bank on Quality

Just a word as to the quality of League products and there is only one word—the "best." Not only by popular approval but by actual analysis, League ice cream and League evaporated milk and condensed milk contain a higher percentage of butter fat, that is, of real cream, than any other similar product on the market. This has had a tendency to stimulate other manufacturers to raise the quality of their products but the farmers are still one jump ahead of them.

It is quality that these business farmers are banking on. They believe in advertising and advertising in a big way but more than this they believe in making good on their advertising by delivering the quality. This is beginning to bring results with the consuming public wherever the League products are sold.

The Plan of Operation

The association operates on what is generally called the pooling plan. No matter in what form the milk of these farmers finally reaches the market, so far as returns are concerned, it is all blended in one pool. That is, the money received for all this milk in one form or another is blended into one amount, expenses of administration and certificates of indebtedness deducted, and an average or base price ascertained. The price which each farmer receives for his milk varies to the freight zone and the butterfat of his milk of like quality in like amounts is always paid for at the same base rate.

The association, on April 1, was operating one hundred and fourteen plants, seventy of which it actually owned. These operations are all controlled from the central office of the association and require about sixteen hundred employees.

These farmers now own one of the biggest and best distributing plants in New York City, formerly the Levy Dairy Company plant. This plant is capable of handling six thousand cans of milk per day and a large quantity of pooled milk is now being distributed to wholesalers and retailers in New York City through the League's metropolitan plant. The trucks which are connected with this plant are also used in transferring the League evaporated milk from railroad stations to distributing centers throughout the city. This plant was purchased by the association because the farmers felt that they needed to have their own outlet for at least a part of their pooled milk reaching the New York market.

At the present time about four hundred people are employed for the clerical work in the offices of the association at Utica and New York City. There are nine hundred and fifty-four membership units called local associations, each one being incorporated under the laws of the State. The League territory is divided into twenty-four directors' districts with a director elected for a term of three years from each district. Each year eight directors are elected. The locals elect delegates to attend what are called district meetings where directors are nominated and elected. Elections are by ballot and the result is announced at the annual meeting of the association held on the third Thursday in June each year. Only actual dairymen who are producing milk for the market may become members of the association.

As organized at present the highest departmental executive of the association is the sales and advertising director. The recent growth in sales and the increasing importance of the marketing activities of the association have made it necessary to move the sales and advertising offices from Utica to New York City.

During the cancellation period in February last there were something like ten thousand withdrawals. A large proportion of these were withdrawals that did not in any way effect the pooling operations of the association. During the year over nine thousand new contracts were signed up which much more than offset any reductions brought up by cancellations. In short, the past year has seen the Dairymen's League solidify its membership. Criticism and rumors and propaganda have served to strengthen the loyalty of these pooling diarymen. They have come to understand and believe in their association and in its leadership.

They are now entering upon a period where the emphasis will be upon the merchandising of their products. In other words, the Dairymen's League Cooperative Association, Inc. has passed through its period of organization and is now rapidly developing into a business organization capable of successfully merchandising in the face of the keenest competition in the world, every one of the products it is producing and manufacturing.

RABBIT HIDE TANNING

(Continued from Page 9)

thick. The above quantity is only enough for two or three pelts. Let it remain three or four days, where moderately warm, say at least 60 degrees, then remove the paste and gently work the skins between the hands until soft. The more pelts are handled and worked the softer they will be. Rabbit hides, however, are tender and must be handled carefully.—Fur Editor.

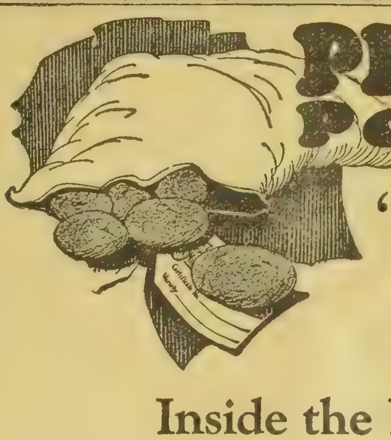
TIME TO PLOW CLOVER UNDER

I would like to know when would be the best time to plow sweet clover down? I want to plow the first crop down, when would it do the most good, when it is green or when dry? —B. C., Traverse City, Michigan.

—The first crop of sweet clover should be plowed down during the early fall after the plants have practically finished their growth for that season. It is advisable to plow crop under at the time it has reached its maximum growth and before the plant has lost too much of its moisture. If it is still green it will stay decaying much more readily and become more thoroughly incorporated into the soil.—C. R. Megee, Asso. Prof. Farm Crops Dept., M. A. C.

HELPFUL WIND

While on his recent visit to this country Marshal Foch made a witty reply to a man, who, when one of the guests at a inner party in Denver, given by a party of Americans, took exception to French politeness. "There is nothing in it but wind," he said with questionable taste. "Neither is there anything but wind in a pneumatic tire," retorted the gallant Marshal, "yet it eases the jolts along life's highway wonderfully."—The Argonaut.



PETOSKEY Potatoes

"Rural Russets"
King of the Late Potatoes!
Resists heat, drought
and disease.

Inside the Russet Coat

is a wealth of mealy whiteness of excellent flavor. Baked piping hot PETOSKEYS served with butter is a dish fit for a king.

Grow them for your table—greatest yielder known.

If your Local Cooperative Association or County Agent cannot take your order write to

Michigan Potato Growers' Exchange
Cadillac, Michigan *or*

Michigan State Farm Bureau
SEED DEPARTMENT
Lansing, Michigan

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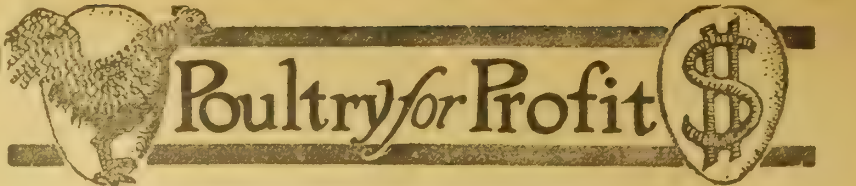

Poultry for Profit

POULTRY DOES PAY

A COMPARATIVELY small proportion of the people who keep chickens have any definite figures to know just exactly how profitable their hens have been. There is a general notion in the minds of poultry keepers who are giving their birds a fair chance by feeding them properly and providing comfortable houses that the time and attention which the chickens require are well paid by the returns. However, it is very difficult to secure figures which can be used as a definite basis for stating whether or not the poultry enterprise, as commonly carried on among farmers, is profitable or otherwise. Indeed, there are many economists who assert that if the poultry flock were properly charged with all the feed eaten and allowance were made for the hours of labor actually spent, it would be found that poultry keeping was a poorly paid occupation.

The numerous instances of specialty poultry keepers who are making satisfactory incomes from devoting their entire time to poultry raising rather disprove the assertion that intelligent application of time and energy to the problems of poultry keeping cannot be made to yield a satisfactory recompense. However, the fact that here and there a farm, where exclusive attention is given to poultry raising is succesful does not necessarily prove that a poultry flock as a side line on a general farm which receives only such care as can be furnished in the time left after attending to the various other farm duties is an enterprise that justifies its existence by the financial rewards.

For the reason that such figures are relatively scarce, the reports from the demonstration farm flocks in Indiana and Missouri ought to be of particular interest to farm poultry keepers in general.

A poultry news letter from the Division of Poultry Husbandry of Purdue University, located at Lafayette, Indiana, shows that the demonstration flocks scattered thruout Indiana managed by practical farmers on their own farms returned a labor income for 1922 of $2.45 per hen. This report shows that the average demonstration farm 234 hens. These hens layed an average of 128 eggs each and these eggs brought an average of 30 cents per dozen. The records show that it cost $1.53 to supply the feed for each individual hen on these demonstration farms. This feed cost, however, includes the feed fed to roosters and growing stock and is somewhat higher than the amount required for feeding hens for egg production where no young stock is being raised. However, since the typical farm poultry enterprise includes the raising of chicks each year to replace the layers which may die or be culled out, the feed cost per hen on the basis of the total amount of feed used by the flock, ought to be of practical value to poultry keepers.

Reports from the University of Missouri, Agricultural Extension Service, released a few weeks ago show that the records from 289 demonstration flocks, conducted by farmers scattered throughout the state of Missouri, show an average of 154 hens kept on each farm which layed 128 eggs per hen during the year ending November 1, 1922. The feed cost for each hen on these farms was $1.31 and the net labor income over feed cost was $2.51 per hen. The average demonstration farm in Indiana kept 234 hens, which produced a labor income per farm of $572.81, while the Missouri demonstration flock averaged only 154 hens per farm and produced a labor income of $385.24 per farm.

In either case the labor income would go a long way toward paying ordinary farm wages to one person, and anyone familiar with poultry feeding methods on the average farm knows that the average farm flock does not by any means require full time and attention of any member of the family nor require enough attention from all members of the family to justify paying straight time to anyone for taking care of the poultry.

THE "CHICKEN FEVER"

WHEN the chicken fever gets a good hold on anyone it seldom or never lets go. Our "Cullud brudders" are attacked by it in early life and there are other night marauders which have an appetite for a bit if chicken to the great vexation of the poultry raiser.

There are some who raise chickens who term themselves fanciers and they are; there are some who wish to be fanciers and will become so. There are others who fail to class and they are apt to join the ranks of utility breeders. The man who is breeding fancy poultry depends upon sales of stock and hatching eggs for his income, the utility man from eggs alone.

To Keep Up Prices

If he is a real fancier he never sells a male bird for within around two dollars of what such a one would bring as market poultry, which is right. No male should ever go into a breeding pen that is not worth $5, and $10 would be rather more appropriate and the fanciers from that price up—or as far as one likes.

Sell the market poultry, keep up prices and raise the standard of the flocks. The sale of five hens, winners in a laying contest, is reported at $400 each or $2,000 for the quintette. For a world's record Buff Orpington hen $5,000 is said to have been reported. The $400 hens were bought by a commercial poultryman, one who sells baby chicks and is no novice at the game.

Fifty Dollar Pullets

We never get quite that bad down here in Maine, yet the fever has run fairly high at times. Even at the recent Maine State Poultry Show $25 females were frequently quoted and the author seemed to take it quite as a matter of course and the writer heard of cockerels there which had cost as high as $40 and that would be rather low in real high-class chicken society.

Prices depend much upon how badly the owner wants the money and how badly the other fellow wants the bird. There is one Maine man who frequently gets a chance to ship choice pullets at $50 and perhaps even more. There are few early layers among the birds of the ultra fancy. A pullet doesn't lay many eggs before she is "off bloom."

Time of Hatching

The commercial poultry foods warranted to make hens lay, find no place in the pens of the fancier. Foodstuffs are sought that discourage egg production and methods like walking the pullets in the snow have been employed for the same purpose.

The object is to insure egg production around March 15th to May 1st. A lot of hatching is done between May 1st and June 1st but not by them who are looking for pullets commencing to lay by October 15th and in a month from then they should be going strong.

Hens or Pullets?

There are many who believe the year-old hens are fully as profitable as pullets, even more so. It seems probable some one will be hatching chickens in August for the next year layers. Such chickens would get a good start before winter and could be held back a bit to begin laying in September of next year. The few who have tried this speaks highly of the laying qualities of the birds hatched at that time.

There is a lot of good money in the poultry business. A couple of ladies of our acquaintance report about $1.25 each above cost of feed for 100 cockerels sold at market prices. Their accounts were accurately kept. Now this would give them their pullets free of cost and sufficient to pay for time in caring for the flock. Besides this there is a fascination in poultry and a good profit in a well-kept flock.

How Many of Your Chicks Should Die?

ANYONE planning the poultry operations for the season who did not figure on a part of the chicks dying would be indeed an optimist if he did not deserve to be designated by some harsher term. It is entirely in the nature of things that some chicks out of every flock will be lost by accident, disease, or the attacks of vermin and varmints.

Since the percentage of the chicks which die before reaching marketable age is a very important factor in determining profits, it should be of interest to every poultry keeper to have some definite figures on the rate of mortality which may be reasonably expected in trying to grow chicks. In the hazards of life which are coverable by insurance, particularly as applied to humans, the probabilities of death for a given age has been worked out to a mathematical certainty which places the business of life insurance on a scientific basis.

Possibly due to the fact that each individual chick represents such a small economic quantiy but few figures are available to show the reasonable rate of motality in attempting to grow chickens out of baby chicks. For the reason that such figures are relatively scarce, reports from a large number of demonstration farms in Indiana which show that an average of only 63 chicks are raised out of each 100 hatched, ought to be of interest. These same figures show that for each 100 eggs set only 57 chicks were hatched and since 37 percent of these chicks died before reaching marketable age, only 36 chicks were raised out of each 100 eggs set. Since at least half of these chicks are likely to be roosters, approximately six eggs had to be set on these Indiana farms for each pullet raised.

Possible to Raise 75 Percent

While definite figures covering any large number of poultry plants are relatively scarce, showing the percent of chickens raised, the Indiana average is somewhat lower than is generally considered satisfactory. On well-managed poultry plants where the chicks are given the benefit of satisfactory brooding equipment and scientific feeding methods, it is usually possible to raise at least 75 chicks out of each 100 chicks hatched and the commonly accepted figure for a well-managed plant is that one pullet may be expected to reach maturity from each five eggs set.

It has been frequently stated by observers as well as by great numbers of poultry keepers that brooding the chicks is the most difficult part of the poultry keeping project on the farm. The Indiana report laid much of the blame for low percentage of chicks raised there to poor equipment for brooding, lack of experience on the part of the poultry keeper, and disease among chicks. Probably the most important of these items is poor brooding equipment . For some reasons the development of brooding devices did not keep pace with the discoveries and inventions in methods of hatching chicks, and it is only in recent years that really satisfactory brooding equipment has been devised for the use of poultrymen who hatch chicks by artifical heat or who handle them in large numbers.

Not Ideal for Small Flocks

At the present time the stove brooder, operated in a movable colony house, provides almost the ideal brooding conditions for the flock owner who can hatch his chicks in units of from 200 to 500, but not many farms are supplied with this kind of brooding equipment. Not so much attention has been paid to the development of brooders for small flocks and even today there is no well - recognized, satisfactory method of brooding chicks in flocks of 50 to 200. The development in electrical brooders offers much promise for poultry keepers who have access to electric current as relatively inexpensive electric hovers can be constructed or purchased for brooding the small flocks of chicks. However, the majority of farm flocks do not and will not have access soon to electric current, so the development of these brooders are of secondry interest to farm poultry keepers.

While the hen is by no means an ideal brooder, a well-behaved hen in a well-constructed coop is probably the safest brooder for small flocks of chicks. As many as 25 chicks can be safely intrusted to one good-sized hen providing she has a good, roomy coop so she can handle her flock. For best results in using hen brooders, however, the hen should be confined and the coop be arranged so the chicks can go in and out as desided during fair weather.

POULTRY AS A SIDE LINE

THERE are few side lines open to dairy or mixed farming that offer the same certainty of satisfactory profit as does poultry. Small flocks of poultry are almost an integral part of all farms. We refer particularly to poultry as a worthwhile side line looked after with the same intelligent interest that a good dairy farmer bestows on his cows. On many such farms in the Pacific northwest, flocks of 100 and 200 hens are adding many dollars to the incomes of their owners. The farmer who is acquainted with the best and modern poultry knowledge receives satisfactory returns from his poultry. The fundamentals of profitable poultry keeping may be briefly summarized as follows: A breed to lay a strain of pullets hatched out early in the spring and well grown on free range; all culls removed from the flock; liberal feeding and correct housing. These are requirements that are simple and easy to understand. However, the personal equation counts for much as it does with high producing cows, for poultry, to be successful, demands regular attention.

FEATHER PULLING

We have a flock of white Wyandotte hens and they pull the feathers out of one another and eat the feathers. Do you know anything that will stop them? R. T. M., Ulby, Michigan.

—Feather pulling is a canabalistic habit frequently caused by close confinement or faulty nutrition. Very often one or two individuals in the flock are specializing in this practice although it may become quite general if the ring leaders are not segregated once this trouble is in evidence.

This practice usually stops after the birds are out on free range and therefore we would suggest inducing as much out door exercise as possible. The ration should contain at least ten per cent meat scrap or tankage, or some other form of animal protein. Skim milk is a common source of protein for laying stock but frequently we find it necessary to supplement it with additional protein in the dry mash which should be before the birds at all times.

In order to break the birds of this habit I would suggest providing a mash of 30 per cent bran, and 20 per cent middlings, corn meal, and ground oats, and 10 per cent meat scrap plus about 1 per cent salt. Very satisfactory results have been obtained by hanging a beef liver suspended off the floor so that the birds may all pick at it. Glandular organs of this kind, usually contain a dietary essential known as Fat Soluble A that is frequently lacking in the ration. In addition, the liver is extremely palatable and should cause the birds to forget the practice of feather pulling.—E. C. Foreman, Associate Professor of Poultry Husbandry, M. A. C.

RAISING GEESE

How should geese be mated? Should goose eggs be treated differently than hen eggs? What is a good feed for goslings?—M. G. Berrien County, Mich.

—A gander may be mated with from one to four geese, but pair or trio matings usually give the best results. Wherever possible provide free range for the geese. Collect the eggs daily and keep in a cool place. If kept for some time they may be stored in loose bran. Usually the first eggs are set under hens, while the last ones that the goose lays may be hatched either under hens or under the goose if the latter becomes too broody. Removing the eggs from the nest from which the goose is laying is advised. If not removed she usually stops laying sooner than when taken away. Dust the hens that are hatching the goose

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Dam's Record
278 Eggs

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GUARANTEED BABY CHICKS

From WORLD'S GREATEST LAYERS and LAYING CONTEST WINNERS. TOM BARRON ENGLISH S. C. WHITE LEGHORNS. Imported stock. SHEPPARD'S FAMOUS ANCONAS. Direct. If we could show you our Flocks and have you talk with our CUSTOMERS you would order IMMEDIATELY. OurFLOCKS are all CULLED BY EXPERTS and headed with VIGOROUS PEDIGREED MALES of from 250 to 280 EGG STRAIN. Our CHICKS become wonderful LAYERS You want EGGS? GET our CHICKS. Write to-day for our free illustrated CATALOG.

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BABY CHICKS $10 per 100 and UP

From selected, heavy laying, vigorous hens. White and Brown Leghorns, Anconas, 50, $6.75; 100, $13; 500, $62.50. Barred Rocks, 50, $8.50; 100, $16; 500, $75 Extra Select, $2 per 100 higher. Mixed Chicks, 50, $5.50; 100, $10; 500, $50. Well hatched in modern machines. Carefully and correctly packed and shipped. Postpaid, full live arrival guaranteed. Bank reference and this guarantee makes you perfectly safe in ordering direct from this ad NOW. Get them when you want them. All orders have our careful personal attention. WE WANT YOUR BUSINESS. Catalog Free.

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Strong and Healthy. Chicks from selected heavy laying. Hogan tested flocks.ENGLISH WHITE LEGHORNS and BROWN LEGHORNS. Heavy Laying EXTRA GOOD BARRED ROCKS. Postpaid to your door and full live delivery guaranteed. Our flocks are kept on free range, properly fed and cared for insuring the vigor necessary in the Chicks to live and MAKE A PROFIT. Give us a trial and you will come again.

HILLVIEW HATCHERY, Route 12 E, Holland, Michigan.

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Best Paying, Heavy Laying, Pure Bred Tom Barron English White Leghorns, S. C. Rhode Island Reds, Park's Barred Rocks. Strong Healty Chicks hatched from greatest and best incubator known. Chicks are given full twenty-one days and hatched under proper temperature.

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Chicks sent by Insured Parcel Post Prepaid to your door. 100% live delivery guaranteed. Fifteen years of experience in producing and shipping chicks has given adsolute satisfaction to thousands. Write for illustrated free catalog and price list. Get lowest price on best quality chicks before you buy

Holland Hatchery, R. 7, Holland, Mich.

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Broiler Chix	11c	Wh Wyandottes	
W. or B. Leghorns	13c	Buff Orpingtons	17c
B. Rocks or Red	1 c	Light Brahmas	22c
W. or Buff Rocks	17c	Black Minorcas	16c

Add 35c if less than 100 lots wanted. Circular.

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Hatched from strong and vigourous flocks of ENGLISH WHITE LEGHORNS AND ANCONAS, BRED FOR HIGH EGG-PRODUCTION. We guarantee 100 per cent good live chicks on arrival. Postage PAID. Prices reasonable. Instructive Catalog and prices free on request. QUALITY HATCHERY, Box A11, Zeeland, Mich.

CHICKS Barron Strain Selected White Leghorns. Produced under my personal care. Strong, vigorous chicks carefully packed to go safely. Postpaid, full live delivery guaranteed. 50 chicks, $6.50; 100, $12.50; 500, $60. Get your order in early. Elgin Hatchery, Box 317A, Zeeland, Mich.

Hatching Eggs & Baby Chicks

Tompkins strain. For April and May chicks, per hundred, $18.00. Eggs per hundred, $8.00. Quality breeder of Rhode Island Reds, both combs.

WM. H. FROHM, New Baltimore, R. 1, Mich.

White Leghorn CHICKS

Heavy Laying, pure bred, English strain. Flocks culled and tested for laying ability. Strong, healthy chicks. 100 per cent live delivery guaranteed. Postage paid. Catalog, low price list free. Write quick.

Catalpa Grove Hatchery, Box 4 R. 2, Holland, Mich.

BABY CHICKS and HATCHING EGGS

Direct from our farm at greatly reduced prices, only 9c up. Barred Rocks, White Leghorns and Anconas. Write quick for particulars and special introductory offer. MODEL POULTRY FARM & HATCHERY, Zeeland, R. 4, Michigan.

BABY CHICKS—REMARKABLE FOR SIZE and strength. Reasonable prices. Leghorns, Anconas, Rocks, Reds, Wyandottes, Orpingtons, Minorcas, Spanish, Brahmas.

TYRONE POULTRY FARM, Fenton, Mich.

CHICKS $12.00 per 100 and Up

100% SAFE ARRIVAL GUARANTEED

PRICES—WHITE, BROWN and BUFF LEGHORNS, 50, $7; 100, $13; 500, $60. BARRED ROCKS, S. C. and R. C. REDS, ANCONAS, B. MINORCAS, 50, $8; 100, $15; 500, $70. WHITE WYANDOTTES, WHITE ROCKS and BUFF ORPINGTONS, SHEPHARDS 331 EGG STRAIN ANCONAS, WHITE MINORCAS, 50, $8.50; 100, $16; 500, $75. MIXED, 50, $6; 100, $11; 500, $50.

Hatched from selected heavy laying flocks that are well fed and cared for, insuring strong, livable chicks that will make a profit for you. POSTPAID TO YOUR DOOR. ORDER DIRECT FROM THIS AD and SAVE TIME. Catalog free. Reference, Geneva Bank. THE GENEVA HATCHERY, Box 505, Geneva, Ind.

GUARANTEED CHICKS

Hatched from High Laying Quality Fowls on free range, properly fed and housed to insure strong Chicks.

BARRED ROCKS, S. C. REDS, MINORCAS, ANCONAS 50, $8; 100, $15; 500, $74
WHITE WYANDOTTES, BUFF ROCKS..........50, $8.50; 100, $16; 500, $78
WHITE, BROWN and BUFF LEGHORNS........50, $7.50; 100, $14; 500, $65

Postpaid to your door. 100% live delivery guaranteed. Catalog free. Bank Reference.

MORENCI HATCHERIES, Box B, Morenci, Mich. Member I. B. C. A.

CHICKS WITH PEP, $11 per 100 and up

Selected Hogan Tested Flocks. Postpaid, full live delivery guaranteed. BUFF ORPINGTONS, WH. and SIL. WYANDOTTES, 50, $9.25; 100, $18: BARRED and WH. ROCKS, S. and R. C. REDS, MINORCAS, 50, $8.25; 100, $16. ANCONAS and HEAVY BROILERS. 50, $7.25; 100, $14. WH., BR. and BUFF LEGHORNS, 50, $7; 100, $13. MIXED, ALL VARIETIES, $11 per 100 straight. On 500, 5% off; 1,000 10% off. Free Catalog. Member I. B. C. A.

HOLGATE HATCHERY, Box B, Holgate, Ohio.

CHICKS THAT MAKE PROFIT

$10 PER 100 AND UP. From vigorous, pure-bred flocks on free range, selected for heavy-laying qualities and well cared for. Low prices considering exceptional quality. WHITE, BROWN and BUFF LEGHORNS, 50, $7; 100, $13; 500, $62.50; 1,000, $120. WHITE and BARRED ROCKS, WHITE WYANDOTTES, BUFF ORPINGTONS, ROSE and S. C. REDS, ANCONAS, 50, $8; 100, $15; 500, $72.50; 1,000, $140. Mixed, all varieties for broilers, $10 per 100 straight. Postpaid to your door and full live count guaranteed. You can order now direct from this ad and get them when you want them. Bank reference. Free catalog.

BLUFFTON HATCHERY, Box L, Bluffton, Ohio

SUNBEAM HATCHERY

The Chicks that I sell are produced under my personal supervision in a good, modernly equipped hatchery which is kept in best possible condition. The parent stock is carefully selected and of best heavy laying strains, kept on free range, well-housed and handled. Free from disease and properly fed. This enables me to produce strong, growthy Chicks which will mean PROFIT to my customers. PRICES: WHITE, BROWN AND BUFF LEGHORNS, 50, $7; 100, $13; 500, $62.50. BARRED ROCKS, R. AND S. C. REDS AND ANCONAS, 50, $8; 100, $15; 500, $72.50. WHITE AND BUFF ROCKS, WHITE WYANDOTTES, AND B. MINORCAS, 50, $8.50; 100, $16; 500, $77.50. WHITE AND BUFF ORPINGTONS, SIL. L. WYANDOTTES, 50, $9; 100, $18; 500, $87.50. I guarantee full live delivery by prepaid post. Get your order in now and I will ship when you want them. Bank Reference. Catalog Free. H. B. Tippin, Box E, Findlay, Ohio. Member I. B. C. A.

289 EGGS

289 Eggs in one year, actual trap-nest record, "LADY MICHIGAN" also made record of 283 eggs in one year. She laid 294 eggs in 381 consecutive days. Sons and daughters of "LADY MICHIGAN" are now in use in our matings for 1923. If you want

Real Barron Leghorns

Single Comb Whites, get our 1923 catalog and learn full particulars in regard to our flock which we have carefully bred for high-egg records for the past 21 years. Our best matings are made up of mature females with actual trap-nest records from 200 to 289 eggs.

Chicks and Eggs for Hatching

that will put the PROFIT into your Leghorn flocks. Write postcard for catalog today and before ordering Chicks or Eggs elsewhere. STRICK POULTRY FARM, Route 4 O, Hudsonville, Mich.

WASHTENAW

HATCHERY CHICK PRICES: March 26th and following hatches: Barred Rocks and Reds, 50, $8.50; 100, $16; 500, $75. White Rocks, White Wyandottes, 50, $9.50; 100, $18; 500, $85. White, Brown, and Buff Leghorns, 50, $7.50; 100, $14; 500, $65.. From hatches due March 12th and 19th add [illegible] per 100 to these prices. Postpaid, full live delivery guaranteed. Our flocks are carefully selected and bred for high egg production. Order from this ad. Reference. Farmers and Mechanics Bank.

WASHTENAW HATCHERY, Ann Arbor, Mich.

Day Old Chicks

From Select, Hogan Tested, Flocks on Free Range. Well-fed and handled to insure strong, vigorous chicks. Heavy Layers. PRICES: WHITE and BROWN LEGHORNS and ANCONAS, 50, $7.50; 100, $14; 500, $65. BARRED ROCKS, 50, $8.50; 100, $16; 500, $75. Hatched right and shipped right. Postpaid. 100% live delivery guaranteed. Bank Reference. Order direct from this ad. Circular free.

BORST & ROEK, Box P, Zeeland, Mich.

QUALITY CHICKS AT LIVE AND LET LIVE PRICES.

$10.00 PER 100 AND UP

FROM EXCELLENT PAYING, HEAVY LAYING flocks on unlimited range. Well-hatched, Sturdy, Healthy CHICKS in the following varieties: TOM BARRON ENGLISH WHITE LEGHORNS, 50, $7; 100, $13; 500, $62.50. PARK'S BARRED ROCKS and RHODE ISLAND REDS, 50, $8; 100, $10; 500, $72.50. From EXTRA SELECT flocks headed by Michigan Agricultural College cockerels. (Dams records from 230 to 270.) WHITE LEGHORNS, 50, $8; 100, $15; 500, $72.50. ROCKS and REDS, 50, $9; 100, $17; 500, $82.50. DELIVERED RIGHT TO YOUR DOOR BY INSURED PARCEL POST. 100% delivery guaranteed. Order NOW [illegible] from this [illegible] FREE. Bank Reference.

LAKEVIEW POULTRY FARM
Route 8, Box 3, Holland, Michigan.

Hardy Northern Bred Chicks

Pine Bay Farm

Barron S. C. W. LEGHORNS
Parks Strain BARRED ROCKS

The greatest egg producers known. Heavy winter layers. See record of our pen 16 now at the Michigan International Egg Laying Contest. Get Quality chicks at Reasonable prices from Holland's pioneer poultry farm. Catalogue free.

Pine Bay Poultry Farm, Box 56, Holland, Mich.

BABY CHICKS

SEX GUARANTEED

The most Progressive Hatchery in the country

A 60% guarantee of sex, giving a majority of either cockerel or pullet chicks, as ordered, plus unsurpassed quality in high egg bred chicks, bespeaks Utility Hatchery & Farms success, and the satisfaction of its customers. Grade AAA flocks are sired by pedigreed males, sworn records from 250-287. Grade AA and Grade A from tested and selected flocks of exceptional merit.

Delivery date guaranteed—100% live delivery guaranteed—60% sex guaranteed—Satisfaction guaranteed.

The Utility Hatchery & Farms is giving away $5,000 worth of Stock in Amazing Special Contest. Information on contest sent upon receipt of each S. C. White Leghorn order. Don't delay. Get started now. Order tonight.

Terms cash, except on advance orders, 25% down, remainder one week before shipped.

UTILITY HATCHERIES AND FARMS
Dept. 64
ZEELAND, MICH.

ORDER FROM THESE PRICES

S. C. WHITE LEGHORNS
Grade A — 14c
Grade AA — 15c
Grade AAA — 16c

OTHER BREEDS
S. C. Anconas — 17c
S. C. Brown Leghorns — 17c
S. C. Barred Rocks — 20c
S. C. R. I. Red — 20c
Broiler Chicks — 10c

400,000 Chicks

Big, strong, Well-hatched Chicks from selected to lay stock on free range, properly fed and housed to insure health and vigor. WHITE, BROWN & BUFF LEGHORNS, 50, $7; 100, $13; 500, $62.50. BARRED & WHITE ROCKS, S. C. & R. C. REDS, ANCONAS, 50, $8; 100, $15; 500, $72.50. WHITE WYANDOTTES, 50, $8.50; 100, $16; 500, $77.50. BUFF ORPINGTONS, SILVER WYANDOTTES, 50, $9.50; 100, $18; 500, $87.50. POSTPAID. We guarantee full 100% live arrival. Reference, Citizen's Bank. Order direct from this ad. and save time. Free circular.

MODERN HATCHERY
Box F, Mt. Blanchard, Ohio

Rosewood Farm

Healthy, Hardy Chicks

Well hatched, carefully packed and shipped. Select, heavy laying WHITE LEGHORNS, 50, $7; 100, $13; 500, $62.50; 1,000, $120. Select ANCONAS, 50, $7.50; 100, $14; 500, $67.50. Select BARRED ROCKS, 50, $8.50; 100, $16.50; 500, $80. Postpaid, full live delivery guaranteed. Our chicks will render you the best of satisfaction and you will COME BACK TO US. We have had long experience in producing good Chicks and our flocks are second to none. Circular free. ROSEWOOD FARM, R 12 A, Holland, Mich.

eggs with incest powder and see that she is given good attention, as the period of incubation is longer than in that of hens eggs, running from 28 to 30 days. Add some moisture to the eggs after the first week is set under hens or in an incubator. This is usually done by sprinkling the egg or the nest with warm water. set from four to six eggs under the hen and 10 to 13 under the goose. When hatching under hens, since the the eggs hatch slowly, the goslings are usually removed as soon as hatched and kept in a warm place until the eggs are hatched, when they are put back under the hen or goose. The hens with goslings should be confined to a coop and the goslings allowed to range. Do not allow the goslings to go into the water until they are several days old. Goslings do not need feed until they are from 24 to 36 hours old, when they should be fed any of the mashes suitable for chickens or ducklings, or a mash or dough of two-thirds shorts (middlings) and one-third cornmeal, which can be made of equal parts shorts and cornmeal and 5 per cent of beef scraps added after six weeks. Bread and milk has often been found to be an excellent feed for young goslings. fine grit or sharp sand should be provided for goslings by feeding 5 per cent of it in their mash or keeping it in a hopper before them. Provide shade in hot weather and when the goslings are young give them attention, as they may get lost or caught in deep holes and in rubbish. Drinking fountains or pans should be constructed so that neither goslings nor older stock can get their feet into the water.

RATION FOR EGG PRODUCTION

Please recommend an economical and practical ration for egg production.—Reader.

—There are a number of rations for egg production recommended, depending very largely upon the feed at the command of the poultryman. A good scratch grain ration is made as follows: Ten pounds shell corn, five pounds dry oats. For a dry mash use three pounds wheat bran, three pounds wheat shorts, one and one-half pounds of meat scraps. Three gallons of skimmed milk or buttermilk daily will take the place of meat scraps. For successful egg production milk or some form of lean meat should be supplied in every ration. Barley or wheat may be used instead of oats. Barley meal or ground oats may be substituted for shorts in the mash. Clover or alfalfa meal may take the place of the bran. A good grade of tankage may be used instead of the meat scraps. Feed a grain ration in deep straw so as to compel the birds to take exercise. We suggest feeding the mash in dry hoppers that are self-feeding, in troughs, or a supply may be kept before the birds. Supply an abundance of good clean water and give free access to sharp grit, crushed oyster shell or soft limestone grit.

HENS BECOME LAME ALL OF SUDDEN

Would like to know if you could tell me what is the matter with my hens. They seem to be all right and all of a sudden go lame and don't seem to have any use of their legs and lay around under the roost. They don't stay that way long but get poor and quit laying. I keep it clean and dry with plenty of oat straw. I have fed a poultry tonic all winter with their mash.—G. H., Ithaca, Mich.

—Leg weakness is a common and prevalent ailment at this time of year. It is sometimes referred to as "spring complaint" or as "layers' cramps." Very frequently birds that are in heavy production succomb to this trouble.

The cause of this ailment has not been definitely understood. In some cases faulty housing conditions are responsible, especially if the floors are damp. We have noted that eggs produced by hens subsequent to developing this trouble frequently contain blood clots which indicates internal hemorrhages are partly responsible for such trouble.

Our variable weather conditions such as we experience during the spring months affect the rate of yolk development and abnormal ruptures of the yolk occur which usually create a nervous condition and affects the physical condition of the hen, resulting in leg weakness. This latter cause applies more especially to temperorary leg weakness. If the trouble is more of a permanent nature, it may be due to faulty nutrition. A moist mash containing about five per cent of paper pulp will correct this condition where cellulose has been laking in the ration.

There is a possibility that tuberculosis is present in the flock and in order to make an accurate diagnosis it may be necessary to make a post morten examination. Doctor Stafseth of the Bacteriology Department will be glad to receive any specimens you may care to have diagnosed. He will in each case identify the disease and prescribe a suitable method or treatment.—E. C. Foreman, Associate Professor of Poultry Husbandry, M. A. C.

CAN HATCH EGGS IN INCUBATOR

Please tell me whether duck eggs can be hatched in an incubator or not? Can you give me full information how to do it and how to raise young ducks? — H. S., Croswell, Mich.

—Duck eggs can be successfully hatched in incubators providing that a high moisture content is supplied. It is usually a good practice to take a whick broom and a dish of warm water each day after the fourteenth day and spray a small quantity of the water on the eggs. One of the members of the Department is preparing a bulletin on the subject of duck raising and pending publication of this bulletin we would refer you to the Department of Agriculture, Washington, D. C., for their literature on this subject.—E. C. Foreman, Associate Professor of Poultry Husbandry, M. A. C.

MITE INFECTION UNDER SKIN

We killed a hen which we were going to cook. While cutting it up we noticed little yellowish white spots on the flesh just under the skin. When we scraped on the flesh the would come off. They only seemed to be on the breast and under the wings and neck. Do you think this is the starting of lice? This hen was fat and had been laying and she looked healthy enough. —Mrs. R. W., Owosso, Mich.

—The condition encountered is undoubtedly connective- tissues mite, scientifically termed Laminosioptes cysti-cila. It is a mite infection occurring on, in or under the skin and is not injurious to health. Birds which have the parasite on the skin sometimes show scaly formations. It may be possible that general measures to prevent mites from barboring in the coop would keep it from spreading. Spraying the coops with kerosene emulsion and treating the birds with sulphur oint might be a means of preventation. The condition, however, is not serious.—H. J. Stafseth, Res. Assoc. in Bacteriology, M. A. C.

TROUBLE NOT ENTIRELY DUE TO LICE

I have 100 baby chicks a week old, Anconas. They seem to have something peculiar ailing them. Seven have died, others ailing. Yesterday I found one dumping, so I picked up several and examined them carefully for lice using a little microscope but could not find any but found one on my hand with the microscope that I couldn't see at all with my eyes. They get seemingly almost raw around the head and neck and across the back. The feathers seem eaten right off and also the skin. I put vaseline on but they seem to go faster then ever afterwards. I have them with two old hens, fine mothers which we have dusted about three times with lice powder.—Mrs. R. F. S., Brown City, Mich.

—It is very difficult to diagnose the trouble that you are having in your flock of 100 Anconas. If lice are present they will usually be found either below the wings or vent, or near the top of the head. The use of sodium fluoride is generally recommended and has given excellent results. It can be purchased in powdered form and requires only a small pinch applied to the above mentioned areas. I am of the opinion that the trouble is not entirely due to lice and would need further information on the method of feeding, etc., in order to arrive at the cause of this trouble. The Ancona chicks should be showing feathers

POULTRY BREEDER'S DIRECTORY

Advertisements inserted under this heading at 30c per agate line, per issue. Commercial Baby Chick advertisements 45c per agate line. Write out what you have to offer and send it in. We will put it in type, send proof and quote rates by return mail. Address The Michigan Business Farmer, Advertising Department, Mt. Clemens, Michigan.

PULLETS, HENS AND COCKERELS
S. C. White Leghorns and S. C. and R. C. Black Minorcas. Must make room before cold weather. About ready to lay.
LAPHAM FARMS, Pinckney, Mich.

WHITE WYANDOTTE COCKERELS: GOOD Strong Birds, 1 yr. old, March hatch, $2.50 apiece. **MRS. A. J. FISH, R, 1. Blanchard, Mich.**

JOHN'S BIG BEAUTIFUL BARRED ROCKS are hen hatched, good layers, quick growers, light and dark matings, 30-eggs $3.50; 50-$5.00 postage paid circulars. **John Northton, Clare, Mich.**

SICILIAN BUTTERCUPS. GOOD YEAR around layers of large white eggs; also White Rocks, good laying strain. Eggs $1.50 per 15.
IDA PRAUSE, R. 3, Maple City, Michigan

HATCHING EGGS

HATCHING EGGS
S. C. White Leghorns. Tom Barron Strain, 250 egg utility line. November to April, average 65 per cent. Pure white plumage. Range grown, healthy, vigorous stock. Eggs $1.50 per 15; $4.00 per 50; $7.00 per 100. Prepaid. Limited supply. Order from this ad now.
MAPLEWOOD POULTRY FARMS
C. W. Bovee, Prop. North Star, Michigan.

EGGS FOR HATCHING—UTILITY STOCK. Grand White Wyandottes—M. A. C. Champions. Good, square deal. Reasonable prices. Send for price list.
C. W. HEIMBACH, R. 5, Big Rapids, Michigan.

WHITE WYANDOTTES MARTIN STRAIN, Eggs for hatching.
WAYNE CHIPMAN, R. 2, Washington, Mich.

SILVER LACED AND WHITE WYANDOTTES Four large, beautiful roosters. Eggs $1.50 per 15.
C. W. BROWNING, Portland, Michigan.

EGGS FOR HATCHING: FROM THE FOLLOWING varieties, Barred, Buff and White Rocks; Silver Laced, and White Wyandottes: S. C. White Orpingtons, and S. C. Black Minorcas. Eggs, $1.25 for 15, $2.25 for 30, prepaid. From pure bred Good Laying Stock. Booking orders for eggs. Order early. **BENJAMIN SCOTT, Bannister, Mich.**

BUFF ROCK EGGS BY 10 LB. MALES and 1st Cincinnati, O., winners. Hogan tested hens, heavy layers.
J. C. CLIPP & SONS, Box M, Saltillo, Ind.

THOROUGHBRED BUFF ROCK EGGS from Blue Ribbon Winners, $1.50 per 15; $9.00 per 100.
BALDWIN & NOWLIN, R. 4, Laingsburg, Mich.

BARRED ROCK HATCHING EGGS. NORMAN Heavy Laying Strain.
MRS. JESSIE B. DEAN, R. 1, Mason, Mich.

BARRED ROCK HATCHING EGGS. PARKS 200-egg strain. $2 per 15; $5 per 50; $10 per 100 by prepaid parcel post.
R. G. KIRBY, R. 1, East Lansing, Michigan.

FOR SALE—BARRED ROCK HATCHING EGGS from good winter layers. $1.25 per 15 or $2.00 per 30 postpaid.
Mrs. Frank Millikin, R. 1, Roscommon, Mich.

THOMPSON STRAIN BARRED ROCK EGGS by 9 lb. males, bred to lay. Dark matings $1.75 per 15; $3.00 per 30 prepaid.
MRS. FRED KLOMP, St. Charles, Michigan.

PURE BRED BUFF ORPINGTON EGGS AT $2-15; $5.50-50. Prepaid.
MRS. ANNA LA NOUE, Fostoria, Michigan.

S. C. REDS, GOOD LAYING STOCK, FINE color. Hatching eggs, $6.00 per 100. Limited number of chicks, $16.00 per 100.
EDWARD CRYDER, Alamo, Mich.

ROSE COMB RHODE ISLAND REDS. HATCHING eggs $1.25 per setting. Postpaid.
Mrs. Albert Harwood, R. 4, Charlevoix, Mich.

REDS: BOTH COMBS, CHESTER COUNTY and Harrison Pierce strain. Eggs $1.50 per 15 postpaid. **Leo Van Conant, New Haven, Mich.**

SILVER SPANGLED HAMBURG Eggs for Hatching, $1.50 setting. Write for prices on all varieties.
ROSEDALE FARMS, Port Huron, Michigan.

BOURBON RED TURKEYS. EGGS 50c EACH.
THOS G. CALLAGHAN, Fenton, Michigan.

MAMMOTH PEKIN DUCK EGGS FOR SETTING $2.00 or two settings $3.00. Also **Wild Mallard** Duck eggs same price. Very choicest stock. All orders prepaid. **Cedar Bend Farm, Okemos, Mich.**

LEGHORNS

LEGHORNS
S. C. Buff Leghorn Hens, Pullets and Cockerels. Hens and pullets $2.50 each; cockerels $3.00 to $5.00 each. Show birds a matter of correspondence. **LAPHAM FARMS, Pinckney, Mich.**

PULLETS BARRON ENGLISH WHITE Leghorns, eight weeks to maturity—May to October. Breeding flocks repeatedly culled by experts. Extra large and vigorous. Wedge shaped bodies, big looped combs. "Lay-bilt" in every way. Also breeding cockerels. Satisfaction and more or money back.
MORSE WHITE LEGHORN FARM,
Belding, Michigan.

TURKEYS—DUCKS—GEESE

2 PUREBRED BRONZE TURKEY TOMS FOR sale. Large birds.
MRS. FRANK IRVINE, R. 2, Hersey, Michigan.

TOULOUSE GEESE ARE MONEY MAKERS. Two pounds cost less to raise than one of pork. Water not necessary. Every farmer should raise a few. **ALDEN WITCOMB, Byron Center, Mich.** Breeder Giant Toulouse Geese, White Holland Turkeys.

HIGHEST PRICES PAID FOR LIVE AND Dressed Poultry, Veal, Eggs. A square deal always.
C. E. McNEILL & CO.,
825 W. So. Water St., Chicago, Ill.

over the back at the ages of 5 and 6 weeks. Evidently the chicks have not reached this age so that they are still in the danger zone of Bacillary White Diarrhea infections which may be present.—E. C. Foreman, Associate Professor of Poultry Husbandry, M. A. C.

CHICK ACTS QUEER

We have a baby chick that was hatched one night and taken away from the hen the following noon with nine other chicks. This perticular chick acted very queer when I took it off. It would go through the funniest motions with its head and whole body, then it would drop its head and act lifeless. Then it would rise up and go through the same motions over and over. What causes this and what is a good remedy?—L. R. V., Delton, Mich.

—This is usually classified by hatchery men under the head of "Cripples and Fools." In incubation work a large number of chicks are found whose actions coincide exactly with those described. Possibly the shell membrane became glued or attached to the head during incubation and with the result that the chick became crippled and had an attack of brain fever.—E. C. Foreman, Associate Professor of Poultry Husbandry, M. A. C.

PACKING DOWN EGGS

Will you advise the correct way to pack down eggs using water glass? I put some down according to directions which were published some time ago. I started packing the fore part of August. How long after eggs are placed in the solution before it becomes solid?—A. E., Applegate.

—A certain amount of vaporation will take place but water glass should never become solid. It is usually a good practice to keep the surface of the liquid at least two inches above the eggs at all times. This is easily accomplished by adding water from time to time. Sometimes eggs are inclined to float and a rock or other weight is used to keep the eggs below the surface.—George F. Davis, Instructor in Poultry Husbandry, M. A. C.

THE VALUE OF OATS

MOST people underestimate the value of oats for poultry of all ages as a valuable and all-around feed. During the war we found that it would largely take the place of wheat in the ration if properly handled in relation to other ingredients. It is one of the best all-around feeds for laying hens and it is impossible to observe injurious effects from a liberal use in the ration if it is handled with any judgement at all.

In fact, we have found that it is an absolute necessity in the laying ration. Many commercial poultrymen who are credited with doing wonders with hens and pullets feed it in large quantities, some keeping it before the hens all the time in hoppers. Fed in sprouted form, it unquestionably is an economical and beneficial feed, increasing the much-desired bulky element in the ration, supplying the necessary green food elements, and cheapening considerably the cost of the ration as compared against the more highly concentrated, and, therefore more expensive grains.

For growing chicks, from the baby chick on up to the matured pullet it is, with the single exception of wheat and wheat derivatives, the most valuable grain we have. Rolled or steel cut oats for baby chicks will make them grow faster than anything else. Of course something else has to be fed in connection with the oats, but where it is the base of the ration it will produce chicks superior to any chicks ever raised on any other ration.

As soon as the chicks are two months old, one can commence to feed whole oats, provided they have developed properly. Soak the oats half a day and feed at noon with the water squeezed out, in pans, all the chicks will eat in 10 minutes. After the first week of soaking, this process can be discontinued and the oats fed in dry form in hoppers, allowing the growing chicks all they will eat. You will be surprised and gratified at the unusual growth they make and at the real economy in feed cost.

It is a mistake to make corn or corn meal the base of the growing chick ration, as so many people do. It is the cause of many of the evils experienced in raising chicks. It often is the direct cause of leg weakness because it tends to fatten faster than the muscles develop or are strengthened by exercise, and it often is the direct cause of digestive troubles, apoplexy in chicks, and of other troubles. Wet corn meal, such as so many people fed chicks, is an abomination. The fact that you have "gotten by" in the past on such feeding is not because of feeding it but in spite of it. The real comparison will be to try oats as a base and compare results with the former method.

Oats is always considerably cheaper on the market than most other grain feeds—certainly such grain feeds as are susceptible of use in the poultry ration. The element of cost often half or more of the cost of corn, and the superior results obtained from its use, should commend the grain to every poultry feeder. If oats will "make kids husky," as one manufacturer of rolled oats states, and as many parents know to be true isn't it fair to say that they will also make chicks husky? We know they will.

Uncle Rube Spinach Says:

TAKE 'EM FISHIN'

I WENT visitin' today, had a real good time an' we all talked of sev'ral things—specially of the number of young fellers 'at was goin' to town to work in factories where wages seem high. Mebbe they look high to some of the boys—mebbe some of 'em's never had any wages—just had what dad has seen fit to hand out to 'em. You know there's lots of dads in this country 'at thinks 'bout all the boys need is work shirts, shoes an' a pair of overalls. With this outfit the boys are all set for work.

If they want a dollar or two dad sez, "My gosh boy, I give you a dollar last month, what'd you do with that?".

Well, now you know our boys are kinder wakin' up if they don't do it naturally, why don't you see there's always a little girl lookin' 'round at tells 'em to spruce up a little an' be somebody. An' the boys are fallin' for it an' they're gettin' tired of workin' for jest bread an' butter, pants an' shirts an' a shoe or two now an' then, an' they're quittin' the farm an' the ol' man jest natcherly wonders what makes 'em so uneasy an' why they want to flock into town.

If you want to keep the boys on the farm you've got to give 'em a chance friends. Boys are brighter'n they wuz when we were boys. We thought a few clothes an' sim'lar wuz more'n enough—it ain't that way now. Boys on the farm want a chance, they want to git out an' spread themselves an' so they go to the city where life looks altogether lovely—'cause they learn their mistake eventually but for the time be'n' it looks fine.

My little boy who happened to be in the gatherin' today, said, "Well daddy, why don't dads take their boys fishin' once in a while?"

Well now do you know that kinda set me thinkin' an' every since I've been home I've been thinkin' 'bout it. Why don't dad take 'em fishin' once in a while? Yes folks, farmer friends why don't you do that? Don't you know that the best way to keep a boy on the farm is to make that farm a lively place? Folks, if our boys go to the city to work its our fault—we haven't given 'em a chance, have we?

We must get the habit. The boys an' girls must have a chance—mebbe they were born an' raised on a farm, had cows milk, hens eggs and real bread an' butter—mebbe solid fried cakes an' coffee—no matter they all want somethin' different. My dear farmer friends, just give the boys an' girls an even share—they'll stay by if the chance is given 'em.—Cordially yours, UNCLE RUBE.

White Diarrhea

Remarkable Experience of Mrs. C. M. Bradshaw in Preventing White Diarrhea

The following letter will no doubt be of utmost interest to poultry raisers who have had serious losses from White Diarrhea. We will let Mrs. Bradshaw tell of her experience in her own words:

"Gentlemen: I see reports of so many losing their little chicks with White Diarrhea, so thought I would tell my experience. I used to lose a great many from this cause, tried many remedies and was about discouraged. As a last resort I sent to the Walker Remedy Co., Dept. 680, Waterloo, Iowa, for their Walko White Diarrhea Remedy. I used two 50c packages, raised 300 White Wyandottes and never lost one or had one sick after giving the medicine and my chickens are larger and healthier than ever before. I have found this company thoroughly reliable and always get the remedy by return mail.—Mrs. C. M. Bradshaw, Beaconsfield, Iowa."

Cause of White Diarrhea

White Diarrhea is caused by the Bacillus Bacterium Pullorum. This germ is transmitted to the baby chick through the yolk of the newly hatched egg. Readers are warned to beware of White Diarrhea. Don't wait until it kills half your chicks. Take the "stitch in time that saves nine." Remember, there is scarcely a hatch without some infected chicks. Don't let these few infect your entire flock. Prevent it. Give Walko in all drinking water for the first two weeks and you won't lose one chick where you lost hundreds before. These letters prove it:

Never Lost a Single Chick

Mrs. L. L. Tam, Burnetts Creek, Ind., writes: "I have lost my share of chicks from White Diarrhea. Finally I sent for two packages of Walko. I raised over 500 chicks and I never lost a single chick from White Diarrhea. Walko not only prevents White Diarrhea, but it gives the chicks strength and vigor; they develop quicker and feather earlier."

Never Lost One After First Dose

Mrs. Ethel Rhoades, Shennandoah, Iowa, writes: "My first incubator chicks, when but a few days old, began to die by the dozens with White Diarrhea. I tried different remedies and was about discouraged with the chicken business. Finally, I sent to the Walker Remedy Co., Waterloo, Iowa, for a box of their Walko White Diarrhea Remedy. It's just the only thing for this terrible disease. We raised 700 thrifty, healthy chicks and never lost a single chick after the first dose."

You Run No Risk

We will send Walko White Diarrhea Remedy entirely at our risk—postage prepaid—so you can see for yourself what a wonder-working remedy it is for White Diarrhea in baby chicks. So you can prove—as thousands have proven—that it will stop your losses and double, treble, even quadruple your profits. Send 50c for a box of Walko, or $1.00 for extra large box—give it in all drinking water for the first two weeks and watch results. You'll find you won't lose one chick where you lost hundreds before. It's a postive fact. We guarantee it. The Leavitt & Johnson National Bank, the oldest and strongest bank in Waterloo, Iowa, stands back of this guarantee. You run no risk. If you don't find it the greatest little chick saver you ever used, your money will be instantly refunded.

Walker Remedy Co., Dept. 680, Waterloo, Iowa

WHITE DIARRHOEA
Kills millions of Chicks each season. **THEY CAN BE SAVED** by using **"FADOIL"**—a guaranteed remedy and preventive. $1 per bottle. Postpaid. Enough to successfully treat 650 Chicks. Your money cheerfully refunded if not satisfactory. Bank reference. You take no chances. Send your order **TO-DAY** and be **INSURED** against loss. Circulars free. Dealers wanted everywhere
FADOIL REMEDY CO., Box 507, Norwalk, Ohio

GREEN LAWN CHIX sent insured parcel post prepaid. Barred Rox, White Rox, R. I. Reds, and Black Minorcas, $16 per 100. Brown Leghorns, English White Leghorns or Anconas $14 per 100. Heavy Broilers $14 per 100. Odds and Ends $13.00 per 100. 5% discount on 500 or 1,000 lots. All varieties 17c each in less than 100 lots. Our 13th year producing high grade chix that please. Our method of shipping positively prevents chilling and crowding and we guarantee 100% live delivery. May, June, July 1c per chix less. Order from this ad and state just when you wish chix sent. A saving to cash customers. Deduct 5% if full cash is sent with order. Reference: Fenton State Bank.
GREEN LAWN POULTRY FARM, Fenton, Mich.
Gus Hecht, Proprietor.

BABY CHICKS SELECTED CHICKS FROM the heart of the baby-chick industry. Leading pure breeds from heavy egg-producing strains. Alive delivery guaranteed. Send for catalogue and prices.
L. VAN HOVEN & BRO., Zeeland, Mich.

MARKET FLASHES

MARKET SUMMARY

Wheat steady. Other grains quiet with prices firm. Beans easy. Potatoes in fair demand. Receipts of butter and eggs small, demand good and prices steady. Poultry shows no change. Some grades of dressed calves moving while others not wanted. Cattle market is steady and trade active. Certain grades of hogs active, others slow. Sheep quict.

(Note: The above summarized information was received **AFTER** the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press —Editor.)

FOOTE'S MARKET LETTER

By W. W. Foote

FARMERS are in better condition than a year ago, especially those who are out of debt, and not many Michigan farmers care to sell their farms. Aside from the fact that commodities which the farmer buys have advanced in value more than what he sells, one of the worst features he is up against is the scarcity of farm labor, while wages and helpers demand are higher than many farmers feel able to pay. This results in many farmers doing without extra work except in the harvest time, and the tendency is to cultivate fewer acres and put more land into meadows and pastures.. The labor shortage extends to manufacturing cities, and there is talk of coming legislation opening the way for larger immigration from European countries. Our foreign trade is growing highly satisfactorily, strange to say, in spite of the turmoil over there, and during the last nine months our exports ran $193,818,895 ahead of the corresponding period a year ago. Foreigners are largely paying for what they import with merchandise, and our gold imports for March were only $5, 559, 257, comparing with $23,524,848 in March, 1922. Farmers are buying tractors more extensively because of the lack of farm workers.

Why Wheat Sold Higher

Contrary to predictions of leaders in the wheat market, who for weeks past were bearish on wheat, prices scored substantial advances, these being based upon the old-fashioned law of supply and demand and bad crop reports from the southwestern wheat states, as well as late cold weather in the spring wheat regions of the United States and Canada. While predictions are not always easy to make, it looks now more encouraging for the bulls than the bears, and one of the most surprising factors is the revival in recent weeks of the foreign purchases of United States and Canadian wheat, exports running week after week far ahead of corresponding weeks last year. On the other hand, our exports of corn, oats and rye have undergone a big falling off recently, but the large consumption of corn on farms is a highly important bull factor. The visable wheat supply in this country is larger than a year ago and that of rye is far greater. but corn and oats are in much smaller supply than at that time. May wheat sold the other day on the Chicago Board of Trade at $1.26½, comparing with $1.10⅛ a year ago. May corn at 80 cents, comparing with 61½ cents last year; May oats at 46 cents, comparing with 38 cents last year; and May rye at 86¾ cents, compared with $1.10½ a year ago. Sugar prices have boomed because of wild speculation, while butter prices are off under expectations of larger receipts.

The Cattle Industry

The main strength of the cattle market today lies in the general employment throughout the country of labor at unusually high wages. Still, the profits of stock feeders for the year to date have not been very large as a rule, and this causes many farmers to pause when considering next summer's operations. The spread in beef cattle prices is now very wide, with comparatively few sales around top figures and the bulk of the steers selling on the Chicago market for $8.25 to $10. Common steers have sold at $6.75 and over, good kinds being salable at $9 and upward and the best lots at $9.75 to $10.35, but a few go above $10, with the best yearlings salable at $9.50 to $10.10. In discussing the cattle situation, a leading Chicago live stock commission firm tells its patrons: "It is not a question of available funds for buying, for money may be had; it is the initial cost that hurts. The logical outcome will be less beef later, and with the northwest undoubtedly short of beef cattle, it looks like a rather good time in our opinion to keep in the game." Most of the time fat cows and heifers are having a good sale at $4.50 to $9.25 but not many sell above $8.25. Cattle were largely around 25 cents higher in the Chicago market last week, the best excepted, although there were good receipts. The best steers sold at $10.35, comparing with $9.25 a year ago. Stockers and feeders were slow and lower at $6 to $8 for the general run, no good lots going below $7.25 and the best at $8.25.

Cattle Feeding Propositions

The approaching grazing season warns farmers who are in the habit of preparing beef cattle for the market that it is time to be looking about for thin cattle for feeding; but thus far sales of stockers and feeders in the Chicago market have fallen short of expectations, many stockmen regarding the prices demanded as too high compared with those paid for finished cattle. The general run of stockers and feeders have been bringing $8 and under for good lots, although inferior descriptions have sold as low as $5.50 to $6.50, with many sales of middling kinds at $6.75 to $7. The best feeders are taken at $8.25 to $8.75, these steers being really killers, but they are sent to Mineral Point, Wisconsin, for a short finish. There were around 13 per cent more cattle in feeding districts in the eleven corn belt states on April 1 than a year ago, according to the Department of Agriculture.

Plenty of Hogs

The corn belt states have been bountifully supplied with hogs the past winter and spring, and they have gone to market in vastly increased numbers compared with recent years, Chicago's share being especially large. Fat droves predominate, and recent receipts averaged 241 pounds, the heaviest since last October. Chicago packers receive large supplies of hogs consigned direct from western markets, while eastern packers receive many from Chicago, eastern holdings being moderate in number. Naturally, hogs have sold at lower prices, but the decline has not been as great as might have been expected. Reasonable prices for fresh and cured meats and lard encourage domestic consumption, while exports are running far ahead of a year earlier. For the second week of April exports from North America included 23,712,000 pounds of lard, comparing with 32,193,000 pounds a week earlier and only 6,557,000 pounds a pounds a year ago; as well as 18,-year ago; as well as 18,054,000 pounds of cured hog meats comparing with 21,393,000 pounds a week earlier and 6,557,000 pounds for the corresponding week of 1922. It is a startling fact that during the period from the first of last November to the close of March exports ran 126,396,000 pounds ahead of the corresponding time a year earlier. According to the government reports, the number of brood sows on farms on April 1 was 6.7 per cent more than a year earlier. Uufortunately, large numbers of pigs died because of the cold, wet spring, and this will greatly lower the pig population. Hogs have been selling at $6.50 to $8.40, mainly at $7.60 to $8.30, light lots going highest. Pigs sell at $5.75 to $7.75.

WHEAT

There has been considerable bullish news afloat in the wheat market the past two weeks and during the first week and the forepart of the last week the market was steady to strong but after that it weakened and prices declined. At Detroit the decline for last week amounted to 2½c making the market ½c lower than at the opening two weeks previous. Domestic demand shows some improvement while export business is reported good at some points and slow at others. In general, demand for export seems to show that foreigners are buying only to supply immediate needs. Reports from the country show the fall sown grain is coming along nicely but spring seeding is several weeks behind and in some sections farmers have been unable to get on their ground so far this spring to do any preparing. As a result the 1923 wheat acreage will show a decline over 1922.

Prices

Detroit—Cash No. 2 red, $1.36; No. 2 white, $1.36; No. 2 mixed, $1.36.

Chicago—Cash No. 2 red, $1.32½; No. 2 hard, $1.25@$1.26.

Prices one year ago—Detroit, No. 2 red, $1.41; No. 2 white, $1.38.

CORN

Predictions of a large acreage this year is weakening the corn market, also the declines in wheat prices affected the trend of this coarse grain. Receipts are of good volume amounting to 1,246,000 bu. while shipments were only 540,000 bu. The grain closed steadier last week at Chicago owing to better demand and a decrease in offerings. Should this condition continue the market will undoubtedly take on a better appearance all over the country. There are many friends of this market who believe higher prices are coming.

Prices

Detroit—Cash No. 2 yellow, 88½c; No. 3, 86½c; No. 4, 84½c.

Chicago—Cash No. 2 yellow, 80¼@82c; No. 2 mixed, 80@80¾c.

New York—Cash No. 2 yellow and No. 2 white, $1.00; No. 2 mixed, 99½c.

Prices one year ago —Detroit, No. 2 yellow, 67½c; No. 2, 66c.

OATS

Oats were weak along with other grains and prices declined. Demand is dull while country offerings to arrive are small. Predictions are that the acreage planted to oats this year will be somewhat larger than last year. Oats will be planted in the place of spring wheat on many farms.

Prices

Detroit—Cash No. 2 white, 51½c; No. 3, 50c; No. 4, 48½c.

Chicago—Cash No. 2 white, 46@-46½c; No. 3, 43¾@45¾c.

New York—Cash No. 2 white, 56½c.

Prices one year ago—Detroit, Cash No. 2 white, 43½c; No. 3, 41½c.

RYE

There is little to say about the rye market at the present time as it is unchanged, however, men who make it their business to study the markets anticipate higher prices.

Prices

Detroit—Cash No. 2, 85c.

Chicago—Cash No. 2, 85½@85¾.

Prices one year ago—Detroit, Cash No. 2, $1.09.

BEANS

Without question the Bean and Pea Journal is an authority on the bean market and conditions governing it. The following is taken from the latest issue of that publication. You will note that in the last paragraph that they advocate the same thing we have for some time.

"Talking with two Michigan jobbers, it was found one was distinctly bearish, the other just as distinctly bullish, on the future bean market. A third was inclined to be about half way between, and here's about what he had to say:

" 'Trade has been dull for three weeks. It should be better very soon now, and we look for a decided increase in buying. Foreign beans have hurt somewhat, but there are not any more beans in Michigan than will be needed, when you consider the amount needed for seed. We do not expect the price to fall below what it now is, and it should improve a little before new crop—not much but some.'

"Estimates of stocks on hand in Michigan at this time vary greatly. There are probably more beans here than there were a year ago. But with any normal buying on the part of wholesalers, together with the increased quantity that will be needed for seed, the stocks should not be in excess of requirements.

"California and Michigan control the bean situation this year; other producing states are nearly cleaned out. Imported beans have been coming in and are being bought to some extent, but we do not believe them to be of the quality to establish a real continued demand for them.

"The big need seems to be some organized effort to increase bean consumption. Advertising will do this. Spasmodic attempts of the part of various organizations and firms have invariably resulted in an increased consumption in the territory where it was tried, and there is no reason why, on a national scale, advertising will not bring into being a steady and an increasing demand for beans of the quality kind. We'd like to see this development, and will do all in our power to assist such a movement."

Prices

Detroit—C. H. P., $7.00 per cwt.

Chicago—C. H. P., $7.25@$7.75 per cwt.

Prices one year ago—Detroit, C. H. P., $6.90 per cwt.

POTATOES

The receipts at Detroit continue to be small and prices are firm at higher levels. Chicago has a quiet to dull market with prices unchanged. Reports from the potato growing sections of the country show that the 1923 acreage will be considerable under the acreage of last year. The Maine potato crop in 1922 brought less than one-third of what the crop of 1921 did and the 1923 acreage in that great potato growing state will be smaller, it is stated. However, to what extent the acreage will be cut, it is hard to determine at this time as prices at eastern markets have advanced during the past fortnight which may influence growers to plant more than originally planned.

Prices

Detroit—Michigan, $1.83 per cwt.

Chicago—Wisconsin sacked round white, $1.25 per cwt.; Michigan sacked round white, $1.25@$1.55.

Prices one year ago—Detroit, Michigan, $1.97.

HAY

Bad roads and urgent farm work are restricting the movement of hay and markets generally continue firm under light receipts. Central west offerings are slowing up and southern demand is less active. Lower grades show some tendency to weakness but good grades are firm and steady.

Prices

Detroit—No. 1 timothy, $17.50@$18; standard, $16.50@17; light mixed, $16.50@$17; No. 2 timothy, $15.50@ $16.50; No. 1 clover, mixed, $14@15; No. 1 clover, $13@$14. $14.

Chicago—No. 1 timothy, $21@$22; light mixed, $19@$21; No. 2 timothy, $18@$20; No. 1 clover, $15@$16.

New York—No. 1 timothy, $26; standard, $14@$17; No. 2 timothy, $24@$25; No. 2 light clover mixed, $24.

Prices one year ago—Detroit, No. 1 timothy, $21@$22; standard, $20@$21; No. 2 timothy, $19@20; No. 1 light mixed, $20@21; No.

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MONEY-MAKING LAKEVIEW FARM, 40 acres with horse, cow, poultry, tools, furniture included to quick purchasers; near hustling village, stores, churches, schools, etc.; 32 acres tillage for big crops hay, corn, grain, potatoes; pasture, woodlot; variety fruit; comfortable 5 room house; pleasant lake view; barn, poultry-house, corn crib; other business pressing, $2,000 takes all. Part cash. Don't delay. G. N. GOULD, Harbor Springs, Michigan.

FORTY-ACRE FARM, ALL UNDER CULTIVATION; sand and gravel soil; best of potato land and will grow every kind of a crop; 6-room house, woodhouse, icehouse, smokehouse, corn crib, hog house, cow barn, tool shed, hen house, barn 24x38. Young team horses, 6 and 7 years; 3 head of cattle, and all farming tools. All for $1400—400 cash. Bal. time. Poor health reason for selling. Write to owner. H. WOODBURY, South Branch, Michigan.

185 ACRE FARM FOR SALE—AT $100.00 per acre. Buildings would cost $14,000.00. Block silo, 100 ft. barn. Cement basement under all buildings. If sold at once "milk route" will be included. Valuable gravel pit on farm. Soil good loam. Never had a crop failure. Well drained. One mile from city and lake. NATHAN CASE, Harbor Beach, Michigan.

FARM FOR RENT OR TRADE—TESSMAN Farm, 120 acres near Gratiot, on Quick Road, Chesterfield 10 room house, 2 barns, windmill, orchard, etc. Will subdivide 10 acre tract. Rent $600 year. GEORGE GIES, owner, 311 Majestic Bldg., Detroit, Mich. Phone Cherry 0065,

FOR SALE—ONE OF THE BEST PRODUCTIVE farms in St. Clair Co. 132 acres with 12 cows and all farm implements. See it before you buy. On gravel road. JOHN GLYSHAW, Atkins, Michigan.

80 ACRES, GOOD HOUSE, 40 FARM LAND 40 swamp. Grass and water good for muskrat raising. Rent or sell. Inquire BOX 232, care Michigan Business Farmer.

FOR SALE—GOOD FARMS AT REASONABLE prices in Cheboygan County. For bargains write NELSON R. PETER, Wolverine, Mich.

40 ACRES FOR SALE. INQUIRE IDA EASTMAN, Grand Junction, Michigan, R. 2.

PLANTS AND SEEDS

STRAWBERRY PLANTS FOR SALE. SENATOR Dunlap, Gibson and Dr. Burrill, 60 cts. per hundred, $4.00 per thousand. Postpaid. Progressive Everbearers, $1.00 per hundred. Postpaid. Cuthbert Red Raspberries, $1.00 per hundred, $9.00 per thousand. Postpaid. ROBERT J. DeGURSE, Ovid, Mich.

SPECIAL OFFER—300 STRAWBERRY Plants. 150 Senator Dunlap, 150 Warfields $2.00 postpaid. Also Raspberry plants. Prices reasonable. 17 years experience. Satisfaction guaranteed. Catalog free. Write today. J. E. HAMPTON & SON, 20, Bangor, Michigan.

STRAWBERRY PLANTS FOR SALE—SEN. Dunlap $3.50 per 1000. Gibson's $4.50 per M. Five other varieties. Also Raspberry plants. Price list free. FRED STANLEY, 124 Main St., Bangor, Michigan.

CHOICE DAHLIA BULBS FOR SALE. $1.00 a doz. MRS B. A. SMITH, Walkerville, Michigan, R. 2.

SEED BEANS: C. H. P. LIGHT RED Kidneys, while they last $9.00 per cwt. F. O. B. Alma, Michigan, DAN RUSH, R. 1.

SEED OATS SILVER MINE. GREAT yielders. DAN BOOHER, Evart, Michigan, R. 4.

TO LATE TO CLASSIFY

AMERICAN ROSE COMB WHITE LEGHORNS. Hatching eggs $1 per 15; $6 per 100 prepaid. FRANK KORCAL, Pierson, Michigan.

1 clover mixed, $17@18; No. 1 clover, $17@18.

Alfalfa—Chicago, $16@23; Detroit, $13@17.

WOOL

The midwestern wool trade remains on about a steady basis, with trading rather light on account of smallness of stocks. Reports from the east continue favorable and western dispatches indicate that while buying has been slowed up by the fact that growers are determined to get top or even higher prices, the tone of trade there is still good, with prospects that the growers may succeed, according to the Chicago Daily Drovers' Journal.

Some dealers are less optimistic as to the future trend, but the market as a whole presents a firm appearance.

Quotations on midwestern or so-called "native" wools in large lots—such prices as are obtained by the farmers' pools—are as follows (f. o. b. Chicago): Fine and medium staple, 53@54c; ½ blood staple, 52@54c; ½ blood clothing, 49@50c; ⅜ blood wools, 52@53c; ¼ blood, 50@51c; low ¼ blood, 40@42c; braid, 30@32c. Western ("territory") wools sell, Chicago basis, at about these same prices for corresponding grades.

MISCELLANEOUS MARKET QUOTATIONS

Detroit, Tuesday, April 24th

BUTTER—Best creamery, in tubs, 41@42c per lb.

EGGS—Fresh, 26@26¾c; storage packed, 28½@29½c per doz.

APPLES—Greenings, $1.75@2; Baldwins, $1.90@2; Spys, $2@2.50; other varieties, $1.50@1.75 per bu.; western boxes, Winesaps, $3@3.50; in barrels, Greenings, $5.75@6.25, Baldwins $5.75@6.25.

HONEY—Comb, 23@25c per lb.

CABBAGE—Home grown, $2@2.25 per bu.; Louisiana sugar loaf, $5-75@6 per crate; Mobile, $5.50 per crate, South Carolina division crates, $5.50.

POPCORN—4@4½c, Little Buster, 7½@8c per lb.

DRESSED CALVES—Best 13@14c; medium, 10@12c per lb.

ONIONS—$4.25@4.50 per sack of 100 lbs.; Spanish, $3@3.50 per crate; new Texas, $4@4.25 per crate.

DRESSED HOGS—90 to 130 lbs., 10@11c; 130 to 169 lbs., 9@10c; heavy, 5@6c per lb.

HIDES—No. 1 cured, 11c; No. 1 green, 11c; No. 1 cured bulls, 8c; No. 1 green bulls, 7c; No. 1 cured calf, 15c; No. 1 green calf, 14c; No. 1 cured kip, 12c; No. 1 green kip, 10c; No. 1 horsehides, $3; No. 2 horsehides, $2. Sheep pelts, 50c@$1.50; No. 2 hides 1c under No. 1, calf and kip 1½c under No. 1.

WEEKLY MARKETGRAM

U. S. Bureau of Agricultural Economics

Washington, D. C., for the week ending April 20, 1923.

FEED: Mill feed markets dull and declining. Demand slow with buyers holding off for lower prices. Withdrawal of recent low quotations by shipping interest for a few important feeds and change to higher basis also affected demand. Gluten feed quoted $1 higher, offerings good, demand fair. Hominy feed firm, offerings light, demand fair. Demand for oil meals very light, prices steady. Good inquiry for transit feeds but deferre deliveries quoted at sharp discounts. Receipts and supplies generally ample. Quoted April 20: bran $26.50, middlings $26.50, flour middlings $28 Minneapolis; 36 percent cotton seed meal $39.50 Memphis, $41 Atlanta; gluten feed $34.65 Chicago; white hominy feed $30.50 St. Louis, $31 Chicago; 32 percent linseed meal $43 Minneapolis, $43 Buffalo.

DAIRY PRODUCTS: Butter markets continue to remain unsettled and very sensitive to old conditions effecting prices. Supplies ample for trade requirements and the added factors of approaching Spring production and necessary quantities which may be inported have had much to do in influencing price tendency which are working downward. Closing prices 92 score butter; New York 44; Pila 44; Boston 44; Chicago 42½c. Despite furthur declines on Wisconsin cheese boards Monday cheese markets continued more or less week and unsettled. Trading shows slight increase in some quarters but on the whole buyers have kept off the market except for necessary requirements. Prices at Wisconsin primary cheese markets April 19: twins 19¾c; Daisies 20½c; double daisies 20¼c; longhorns 20c; sq. prints 20¾c.

PRITCHARD'S
WEATHER
FORECAST
INTERPRETED BY THE STARS

Week of April 29

DURING the early part of the week beginning April 29th we expect Michigan temperatures to average cool. About the first of May, however, temperatures will be rising and will continue above normal for the balance of the week.

We are expecting the rainfall to be plentiful during Tuesday and Wednesday with high winds general and gales on the Great Lakes.

While there may be indications of storminess or even a storm itself about Friday of this week we believe the average conditions from the 2nd to the 6th will be fair and cool. No decided fall in the temperature in Michigan is expected this week but colder conditions will manifest themselves next week.

Week of May 6

With the average weather conditions for the week of May 6th promising to be cold and dry we believe germination and growing vegetation will be retarded. The week offers splendid opportunities for the farmer to rush his field work such as planting early potatoes and seeding his barley and oats. The farmer of the southern counties of Michigan can get his corn fields in shape. If the winds do not destroy the blossoms, pollination should be good among cherry and plum trees since the bees are expected to be active during this period.

Temperatures will be rising at beginning of the week with showers and high winds during middle days. Following the storm the winds will shift to west and north and wax strong at the same time inducing fair weather for the last days of the week with cold temperatures.

MICHIGAN AYRSHIRE BREEDERS PLAN BIG PICNIC

MICHIGAN Ayrshire men are planning the biggest meeting in the breed's history in the state for May fifth. On that date they are the guests of Mr. William H. Murphy at his farm at Birmingham. Features of the day's program are the inspection of Mr. Murphy's dairy buildings and his prize winning herd of Red and Whites and an address by Paul O. Reymann of Wheeling, West Virginia, president of the National Ayrshire Breeders' Association. Breeders from all sections of Michigan will attend and take part in the plans being made for the Ayrshire's further advancement in the state. President W. T. Shuttleworth, Ypsilanti, and Secretary Edward C. W. Roberts, of Fennville, officers of the Michigan Ayrshire Club will have charge of the day's program.

Ayrshires have made notable progress in Michigan during the past eighteen months, particularly since the organization of the State Association in January 1921. The rapidly increasing popularity of the Scottish dairy breed is resulting in the founding of many new herds. One of these is at the Michigan Agricultural College. Professor O. E. Reed last summer selected five animals which average as high in quality as any college herd in America. He bought these animals in the rough at a moderate price and has developed and fitted them so that their milk flow is proving them to be among the leading producers of the breed. There are now one hundred Ayrshire men in the state. That they are doing worth while things is well shown by the interest being taken by the National Association and that the president is coming from West Virginia to take part in the May fifth meeting.

$7.50 After 30 Days Free Trial

The Belgium Melotte Separator — with the wonderful Self-Balancing Bowl. No other like it.

Sanitary Melotte

30 days' free trial—then, if satisfied, only $7.50 and a few easy payments — AND — the wonderful Belgium Melotte Separator is *YOURS.*

No Money Down!
Catalog tells all—*write.*

Caution! U. S. Bulletin 201 shows that vibration of the bowl causes *cream waste!* The Melotte bowl is *self-balancing.* Positively cannot get out of balance therefore cannot vibrate. Can't remix cream with milk. *The Melotte has won 264 Grand and International Prizes.*

Catalog FREE
Write for new Melotte catalog containing full description of this wonderful cream separator and the story of M. Jules Melotte, its inventor. Don't buy *any* separator until you have found out all you can about the Melotte and details of our 15-year guarantee which is infinitely stronger than any separator guarantee. Write TODAY. How many cows do you milk?

Runs so easily, bowl spins *25 minutes* after you stop cranking unless you apply brake. No other separator has or needs a brake. Bowl chamber is *porcelain lined.*

The Melotte Separator, *H. B. Babson, U S. Mgr.*
2843 W. 19th Street, Dept. 33-04, Chicago, Ill.

New Big Ball Binder Twine

More than a mile of twine in one ball and occupies same space as old style.

Maple Leaf Twine

Guaranteed to work on any binder because of more strength and no uneven places to cause breaks. Will work to the very end as there is no loose cover.

Manufactured by skilled workmen in one of the largest factories in the world.

BIG BALL WORTH THREE OLD FASHIONED STYLE

Write today.

F. L. WELLMAN,
Grand Rapids, Michigan

Seed Corn Adapted to Michigan conditions. Send for circular and prices.
Frank C. Hambleton, Coopersville, Mich.

WHITTAKER'S R. I. REDS—Michigan's Greatest Color and Egg Strain. Bred from winter layers for 13 years. Chicks and eggs. Write for free catalog. Interlakes Farm, Box 4, Lawrence, Mich.

CHICKS—WE HAVE SHIPPED THOUSANDS each season since 1904. Different breeds, free booklet with guarantee and delivered price. Freeport Hatchery, Box 10, Freeport, Mich.

CHICKS—SINGLE COMB BUFF LEGHORNS only. Strong healthy chicks from good laying stock. J. W. WEBSTER, Bath, Mich.

Cured Her Rheumatism

Knowing from terrible experience the suffering caused by rheumatism, Mrs. J. E. Hurst, who lives at 608 E. Douglas Street, C-489, Bloomington, Ill., is so thankful at having cured herself that out of pure gratitude she is anxious to tell all other sufferers just how to get rid of their torture by a simple way at home.

Mrs. Hurst has nothing to sell. Merely mail your own name and address, and she will gladly send you this valuable information entirely free. Write her at once before you forget.

$ We can use a few earnest men and women part or full time in soliciting subscriptions and acting as our agents. Write

Circulation Manager
THE BUSINESS FARMER
Mt. Clemens, Mich.

Sharood's Smashed Prices — Positively Greatest Values in America

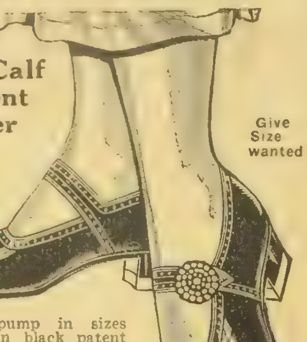
Send No Money — Pay On Arrival

Women's Dressy Pump

Brown Calf or Patent Leather

$1.98

Give Size wanted

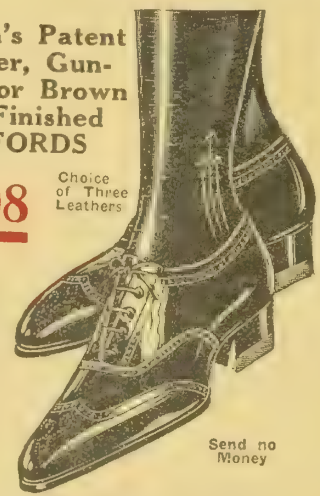


This smart pump in sizes 2½ to 8. In black patent leather or brown calf finish —a stunning one-strap model with ornament on strap, imitation shield tip and medallion effectively perforated. Has medium rubber heel. **Order patent leather by No. 96A72. Order brown by No. 96A73. Send no money. Pay $1.98 and postage on arrival.**

Women's Patent Leather, Gun-Metal or Brown Calf Finished OXFORDS

$1.98

Choice of Three Leathers

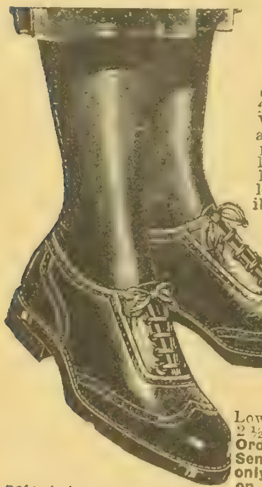


Send no Money

Made with imitation shield tip and medallion perforated vamp. perforated lace stay and circular foxing. Has medium rubber heel and medium pointed toe. Sizes 2½ to 8. Wide widths. **Order patent by No. 96A64. Order gun metal by No. 96A69. Order Brown by No. 96A70. Send no money. Pay $1.98 and postage on arrival.**

Women's Stitchdown Oxfords

$1.98 UP



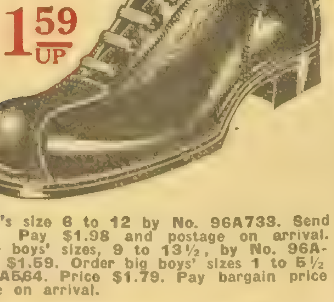
Classy stitchdown Oxford for women. Wonderfully comfortable and stylish. Uppers of dark brown leather or patent leather. Smooth leather insoles. Flexible stitch-down oak outsoles.

Low rubber heels. Sizes 2½ to 8. Wide widths. **Order by No. 96A268. Send no money. Pay only $1.98 and postage on arrival. Order patent leather by No. 96A264. Pay $2.48 and postage on arrival.**

Men's, Boys' and Little Boys' Scout Shoes

Fine scout shoe of soft pliable brown leather. Absolutely guaranteed barnyard proof; reliable sturdy soles; low broad leather heels; leather insoles; reinforced leather back stay. Guaranteed to stand hardest wear. Wide widths.

$1.59 UP



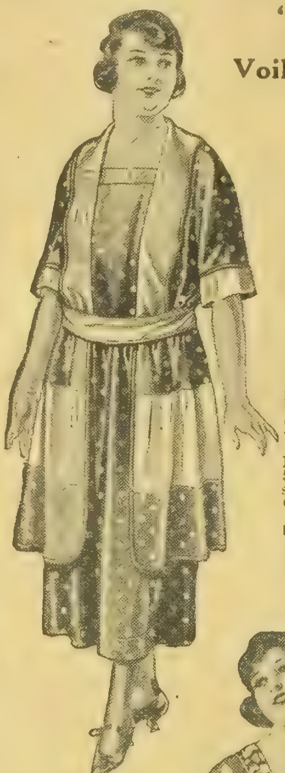
Order Men's size 6 to 12 by No. 96A733. Send no money. Pay $1.98 and postage on arrival. Order little boys' sizes, 9 to 13½, by No. 96A-565. Price $1.59. Order big boys' sizes 1 to 5½ by No. 96A564. Price $1.79. Pay bargain price and postage on arrival.

Dollar for dollar, there is not a single offer in this advertisement that is equalled today, anywhere else in America. This is a very broad statement to make—and we would not claim it if we were not prepared to prove it. Let us do so now at our own risk. Let us send you any of the amazing values shown on this page so that you can see—so that you can actually judge for yourself. Absolutely no obligation—not the slightest risk. Take advantage of these absolutely lowest prices. Order everything needed for the family. Act quick. Today!

Don't send one cent. Just letter or postcard brings any of these smashed price bargains. Absolutely no obligation and not the slightest risk to you. Merely give name and number of each article you want. Also state size and write your full name and address plainly to avoid delay. Pay nothing till goods arrive—then only the amazing bargain price and postage. Then examine your selection—try it on—show it to your family and friends. Then if you are not delighted with your bargain your money will be cheerfully refunded. Order Now.

"Stylish Stout" Voile Dress

$2.98

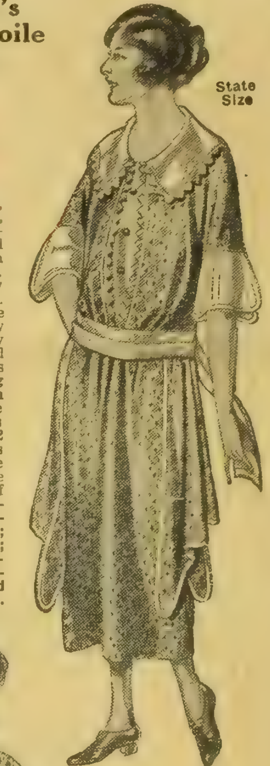


A very beautiful model in "stout" voile dress of graceful, slenderizing lines for stout women. Made of good quality polka dot voile with tunic over-skirt, attractively trimmed with pretty organdy collar and cuffs. You will pay much more for a dress of equal value elsewhere. Better get your order in early. Sizes 39 to 53 Bust. State size wanted. Choice of colors. **No. 96E6811, Black; No. 96E-6812, Navy; No. 96E6813, Brown. Send no money. Pay only $2.98 and postage on arrival.**

Women's Pretty Voile Dress

$1.98

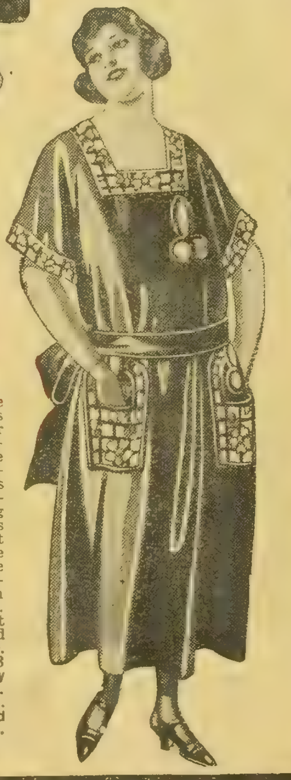
State Size



Very attractive, dainty voile dress, with organdy trimming. Beautiful figured voile with new side panels. Youthful organdy collars and cuffs. Also pretty vestee insert of organdy and neat organdy sash. This model has all the lines of fashions selling at much more than Sharood's sale price. Misses sizes 14 to 20 years, 32 to 38 bust Women's sizes 34 to 46. Be sure to state size wanted. Choice of colors. **No. 96E-6712, Navy; 96E-6713, Copenhagen; 96E6714, Rose; 96E6715, Lavender. Send no money. Pay $1.98 and postage on arrival.**

Sateen House Dress for Stout Women

$1.98

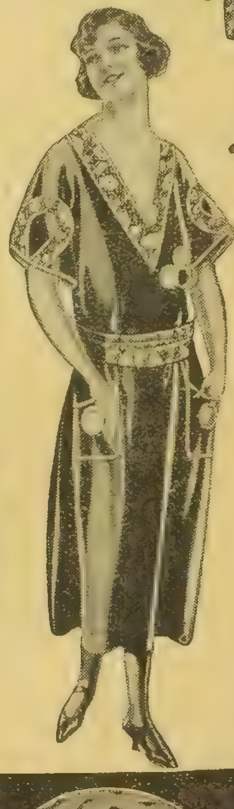


A very attractive model of lustrous black sateen for women who require extra size dresses. This pretty house dress has attractive cretonne trimming on collar, cuffs and flower basket pockets. Also the charming applique work in harmonious colors on waist and pockets. A garment that will give splendid service beside. Sizes 39 to 53 Bust. **Order by No. 96A6054. Send no money. Pay $1.98 and postage on arrival.**

State size wanted

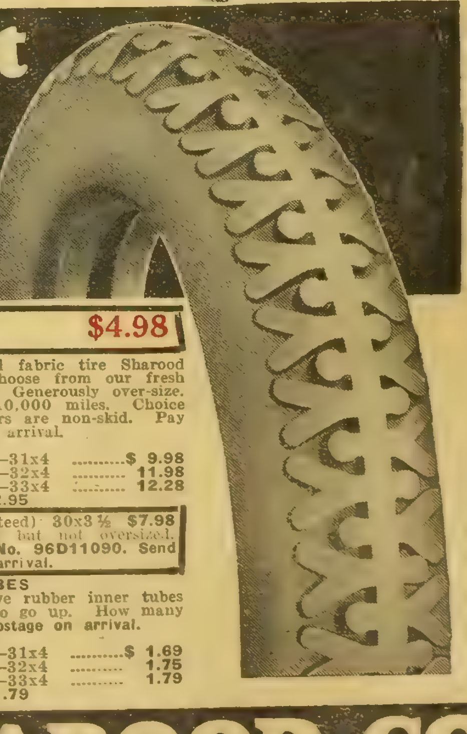
Pretty Sateen Dress Apron

$1.69



Splendid quality black twill sateen which wears wonderfully. Graceful V-neck, sleeves and belt trimmed with gay colored cretonne. Pockets finished with crepe applique. Sizes small, medium and large. **Order No. 96E6001. Send no money. Pay $1.69 and postage on arrival. Money back if not satisfied. State Size.**

Greatest TIRE BARGAINS in the U.S.A.



FABRIC TIRES

Guaranteed 6,000 Miles

30x 3 Size $4.98

Think of it—only $4.98 for a guaranteed fabric tire Sharood will save you big money on any size you choose from our fresh stock of heavy non-skid tires of live rubber. Generously over-size. 6,000 guaranteed, but often give 8,000 to 10,000 miles. Choice of non-skid or rib-tread in 30x3 sizes. Others are non-skid. Pay only bargain price listed below and postage on arrival.

BARGAIN PRICE LIST

96D11040—30x3	$ 4.98	96D4043—31x4	$ 9.98
96D11041—30x3½	5.98	96D4044—32x4	11.98
96D4042—32x3½	9.39	96D4045—33x4	12.28
96D4046—34x4	$12.95		

Sharood's Standard Cord (8,000-Mile Guaranteed) 30x3½ $7.98
Same sturdy construction as regular cord but not oversized. A wonder-service tire for Fords. **Order by No. 96D11090. Send no money. Pay only $7.98 and Postage on arrival.**

GUARANTEED INNER TUBES

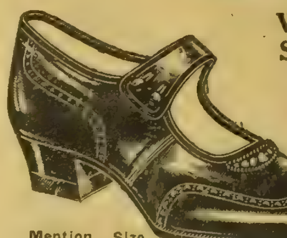
Now is your chance to buy extra thick, live rubber inner tubes at a big saving. Don't wait for tube prices to go up. How many shall we send? **Pay only bargain price and postage on arrival.**

BARGAIN PRICE LIST

96D4020—30x3	$ 1.09	96D4023—31x4	$ 1.69
96D4021—30x3½	1.25	96D4024—32x4	1.75
96D4022—32x3½	1.39	96D4025—33x4	1.79
96D4026—34x4.	$ 1.79		

Women's Soft Kid Slipper

$1.49

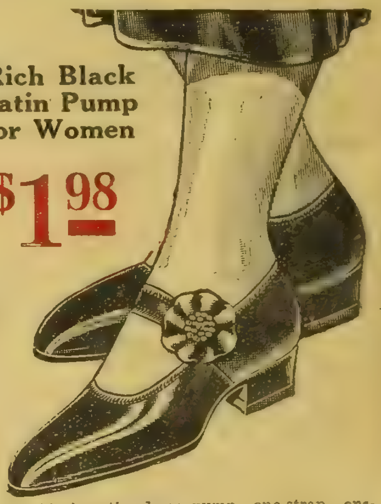


Mention Size

Beautiful soft kid leather slipper. Stylish strap model with two buttons. Medium round toe. Cushion soles. Black or brown kid. Sizes 2½ to 8, wide widths. **Black by No. 96A228. Brown by No. 96A229. Send no money. Pay $1.49 and postage on arrival. State size.**

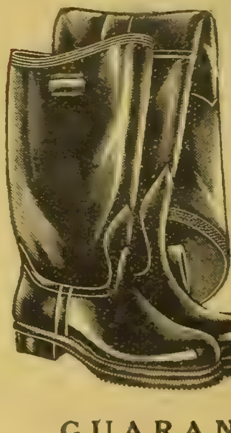
Rich Black Satin Pump for Women

$1.98



Women's black satin dress pump, one-strap, one-button style with fancy rosette and ornament on strap. Plain vamp with medium toe and close edge sole with low rubber heels. Genuine oak soles. A dressy, stylish new spring fashion that will be all the rage among the best dressed women. Sizes 2½ to 8.; wide widths. **Order black satin by No. 96A56. Send no money. Pay only $1.98 and postage on arrival. State size.**

Sensational Bargains in Men's Hip and Knee Boots

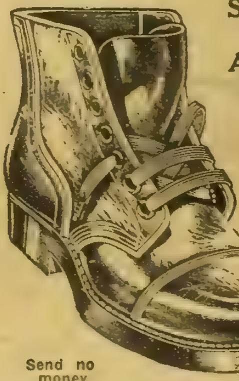


Don't fail to make this big saving on Men's pure gum hip boots; friction lined; heavy corrugated sole and heel; guaranteed first quality. Made of the very best rubber. Usually sells at $5. Be sure to order your pair while the great saving offer lasts. Wide widths. No half sizes. **Order hip boot by No. 96A949. Sizes 8 to 15. Send no money. Pay $2.98 and postage on arrival. Order similar style knee boot, sizes 6 to 12, by No. 96A950. Pay $2.98 and postage on arrival.**

$2.98

GUARANTEED Six Months' Wear U. S. Army Shoes for Men & Boys

$2.98



Send no money

Men! Don't lose a moment in ordering this wonderful brown work shoe. It is made of leather as near waterproof as can be made—solid leather through and through with full grain leather uppers, guaranteed to wear six months. Easily worth $5.00. Two full, heavy double soles, sewed and nailed for greater strength. Extra wide, full leather counter, riveted to prevent ripping. Sizes 7 to 11, wide widths...**Order by No. 96A700. Send no money. Pay $2.98 and postage on arrival.**

Boys' Guaranteed Shoes—Six months' guarantee; barnyard acid-proof. Two green chrome leather soles, same feature quality points as shoe above. Made on Munson-type army last. Sizes 1 to 5½. Wide widths. **Send no money. Order by No. 96A550. Pay $2.69 and postage on arrival.**

Be Sure to Mention All Sizes, Colors, etc., and Send All Orders From This Page Direct to **SHAROOD CO.** Dept. 96 MINNEAPOLIS MINNESOTA

MIC

The Michigan
BUSINESS FARMER

An Independent
Farm Magazine Owned and
Edited in Michigan

VOL. X, No. 19

SATURDAY, MAY 12, 1923

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MAY 15

"It Takes a Good Gambler to Plant 'em Again!"

In this issue read: "Legislature Closes Session in War-Like Array" —Senator Couzens Urges that Michigan's Cut-Over Lands be Reforested, and in a Special Message to Readers of the Business Farmer He Discusses Reforestation Possibilities in Michigan

The powerful hold of the Hupmobile upon the American public is not due to any one or two outstanding features.

The Hupmobile is unique today in that it combines within itself, in balanced measure, all the advantages which are worth while in a motor car, and which every motor car buyer always hopes to get when he buys.

In the Hupmobile you obtain, in major degree, dashing appearance, brilliant performance, power, strength and sturdiness, extreme endurance, very low operating cost and long life.

The Hupmobile is uncommon, furthermore, because it can be purchased at a comparatively low price, and re-sold again—when the time for a new Hupmobile finally does arrive—at a comparatively high price.

Hupp Motor Car Corporation, Detroit, Michigan

Hupmobile

NEW CORDS
10000 MILES
GET 10000 MILES SERVICE
30 x 3 $5.95
10000 MILES

Sensational New Cord Tire Sale!

Our big volume business enables us to sell *brand new Cord* tires at lowest prices. Don't miss this Sale. Every Cord guaranteed first quality and new. Order your season's supply now and cut your tire cost in two. Thousands of steady customers getting full mileage and you, too, can get **10,000 Miles**

Size	Cords	Tubes	Size	Cords	Tubes
30x3	$5.95	$1.05	34x4	$11.75	$1.65
30x3½	6.90	1.25	32x4½	13.70	2.00
32x3½	7.25	1.30	[illegible]	14.40	2.10
31x4	9.90	1.40	34x4½	[illegible]	2.15
32x4	10.65	1.45	[illegible]	[illegible]	2.25
33x4	11.20	1.60	[illegible]	[illegible]	2.50

SEND NO MONEY

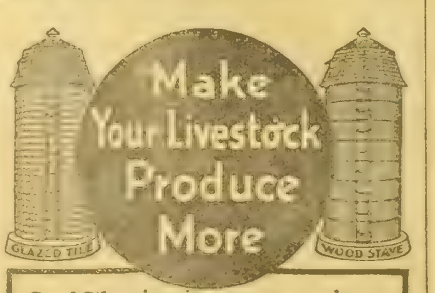
Just send your name and sizes of tires wanted. Don't wait! Price soon to go up. Take advantage of this sensational tire sale. Shipment C.O.D. Section unwrapped for inspection. Order now. Dept. 23

SUPREME TIRE CO., 3234 W. Jackson Blvd., Chicago

TOBACCO

HOMESPUN TOBACCO. CHEWING 5 pounds $1.75, 10 pounds $3.00, 20 pounds $5.25. Smoking 5 pounds $1.25, 10 pounds $2.00; 20 pounds $3.50 Send no money, pay when received. CO-OPERATIVE TOBACCO GROWERS, Paducah, Kentucky.

NATURAL LEAF TOBACCO. CHEWING 5 pounds $1.75; 10 pounds $3. Smoking 5 pounds $1.25; 10 pounds $2.00. Send no money. Pay when received. TOBACCO GROWERS' UNION, Paducah, Ky.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Good Silage is as important as good pasture, and the better the silage the greater the production. Stock raising and dairying are by far the most profitable types of farming. Make your farm more profitable by using

Kalamazoo Tile & Wood SILOS

Our Glazed Tile Silos are decay-proof, storm-proof, vermin-proof; will not burn or blow down. Save repair and paint bills. Three dead air spaces make perfect insulation against cold, heat, dampness. Kalamazoo Tile is made from selected quality fire clay in our own plant located in the center of the finest fire clay district. Our Wood Stave Silos have stood the test of 30 years. **We are America's pioneer silo builders.** All Kalamazoo Silos are fitted with continuous door frames of galvanized angle steel. Send for free book of silo information.

Kalamazoo Glazed Building Tile

Makes permanent farm buildings. Economical, handsome, low in cost of upkeep, low insurance rate, cool in summer, warm in winter and cheapest in the long run.

Before you plan a building of any kind get the facts about the Kalamazoo Tile. Write today.

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Collie Puppies

Either males or spayed females, pedigree with each puppy. Father imported and mother on one of the largest stock farms in Michigan. Wonderful worker. Puppies guaranteed.

DR. W. AUSTIN EWALT, Mt. Clemens, Mich.

Current Agricultural News

INCREASED BEAN PRODUCTION SOUGHT

MICHIGAN elevator companies are taking part in a nation-wide campaign to increase the acreage and production of beans in every state to such an extent that the domestic market will not be dependent on foreign grown stock at any time of the year, it was announced today at the state headquarters of the Michigan Elevator Exchange.

The movement was started in the New England states, it is said, and is rapidly being taken up all over the country. It is not to increase the home-consumption of dry beans, the exchange authorities claim, but to make pork-and-beans a national dish in place of corned beef and cabbage.

If enough beans can be produced to care for the normal consumption demands in this country, the shippers claim, the farmers will still be able to get a fair price for his crop and be assured of disposing of all he raises. It is up to the farmer to make his crop the predominating one on his own market, it is said, and to increase production to the point where the foreign producers can not compete in this country.

MASON DAIRYMEN START TESTING

MASON dairymen organized the third Ingham County Cow Testing Association, at a meeting held in Mason week before last. Twenty-six of the leading dairymen of the Mason vicinity joined in the association.

A tester is to be employed who will spend one day a month on one farm of each member, obtaining milk weights, feed weights, and a butter fat test on each individual cow. It is expected that these records will form a basis of judgment as to the producing quality of the cow, and that the undesirable and unprofitable cow may be eliminated from the herds. Better feeding methods will be practiced, it is claimed, through the efforts of the association.

Mason-Ingham Cow Testing Association is the fortieth association to be organized in the state. Ten new organizations are expected to organize in the near future which will bring the Michigan total to fifty.

PLAN DRIVE ON MILK DEALERS NOT LICENSED

PROSECUTION of all milk dealers in Michigan who have not procured their state license is on the program of the dairy department of the state department of agriculture, according an announcement of T. H. Broughton, head of the dairy activities. It is the hope of the department that all 2,700 dealers will be reached before the end of the fiscal year June 30.

Most of the large dealers in the state have obtained the licenses necessary, according to Mr. Broughton, but there are a number of one-man wagons for which licenses have not been issued, and it is to these that the department is turning its attention. The erring dairymen first is given an opportunity to comply with the law, and prosecution is the last resort. Seventeen prosecutions were started during April, according to the records turned into the office here. In the same time but two prosecutions were started for watering milk.

The state also revoked the license of one tester, who was detected giving incorrect readings at one of the cream buying stations.

MICHIGAN LIVE STOCK EXCHANGE PAYS DIVIDEND

LOCAL associations of the Michigan Live Stock Exchange will receive during May a patronage dividend of about $7,000 which the Exchange is paying to associations which have patronized the Live Stock Exchange's Cooperative House at the Detroit stockyards during the past year. The divident is a savings and represents a refund to membre patrons of 10% of all commissions paid to the Exchange for sales service.

The Michigan Exchange established a cooperative commission house at the Detroit yards May 1, 1922. Since then the association has handled 4,129 carloads of stock out of 12,616 sent to market of 30.5% of the total business. The business handled by the Detroit Cooperative Commission House the first year shows a net savings of $17,500, which is a savings of about 25% of the commissions paid for service. The Live Stock Exchange charges the regular commissions. The Exchange voted to return 10% of all commissions paid to members or $7,000. The remainder gives the Live Stock Exchange Commission House a reserve fund on which to do business. It also belongs to the members.

The Live Stock Exchange is the second Michigan community marketing exchange to declare a patronage dividend within the past month. Last week the Michigan Elevator Exchange paid its member associations a patronage dividend of $8,000. The Michigan Potato Growers Exchange has been paying patronage dividends for some time past. The foregoing commodity exchanges are affiliated with the Michigan State Farm Bureau.

CURWOOD BUILDS HIS OWN CASTLE

James Oliver Curwood, Owosso author and naturalist, who is building a studio after the fifteenth century type of castle, has purchased an acre of land across the Shiawassee river from his studio and will set out a minature forest of pines, firs, balsams and spruce.

FARM BUREAU HANDLES MORE SEED FOR 1923

Nearly twice as much certified seed has been handled by the state farm bureau this year as was sold in 1922, it is said, while the amount of certified seed potatoes has increased about 400 per cent over a year ago.

START COLLECTION OF EATON WOOL

The 1923 wool pool of the Michigan State Farm Bureau started assembling of wool for the season at Eaton Rapids on April 30th. A flat advance of 25 cents per pound is made at the time of pooling, with final settlement when pool is sold.

HURON FARM BUREAU SEEKS NEW MEMBERS

"Every Huron farmer a member," is the keynote of the County Farm Bureau Association drive to open July 16. Alfred Bentaal of the state organization outlined the work of the campaign in a talk before the board of directors at their monthly meeting last week. Extensive demonstrations in ditch blasting, stump and stone blowing, using picric acid, will be started by the association soon.

INTERNATIONAL EGG LAYING CONTEST AT M. A. C.

The week ending May 1 completes the first half of the contest and a considerable increase in production is evident. The weeks total reached 3,609 eggs and the total production to date is 71,954. All groups registered an increase, the White Leghorns leading with 61.0%, Anconas second with 54.0%, Barred Rocks third with 46%, Rhode Island Reds, with 43.0%, miscellaneous with 38.0%, White Wyandottes with 29.0%.

Michigan State Highway Department Bulletin No. 46, May 1, 1923—Gravel and macadam roads in the southern part of the state are now in a softened condition and may be easily injured by heavily loaded trucks and busses. To avoid undue damage to these roads county road commissioners have been asked to put forth every effort to protect the roads until they become more settled and safe for normal traffic. The maximum carrying capacity of tires on all vehicles traveling these roads while the frost is coming out of the ground shall be limited to one-half the carrying capacity of the tires as provided by law; and in no case shall a vehicle be operated on the highways when the gross weight exceeds seven and one-half tons.

SATURDAY
MAY 12th,
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Being absolutely independent our columns are open for the discussion of any subject pertaining to the farming business.

"Hew to the line, let the chips fall where they may!"

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Legislature Closes Session in War-Like Array

Governor's Veto of Gasoline Tax Brings Retaliation from House so Weight Tax Loses—Senate then Refuses Byrum Income Tax and Possibility of Extra Session Looms

By STANLEY M. POWELL

BITTERNESS BLASTS HOPES FOR CONSTRUCTIVE LEGISLATION

WHEN the smoke of battle has cleared away from the 52nd session of the Michigan State Legislature, legislative observers will probably agree that if it really has been a "do nothing" Legislature, as has been so frequently charged, it is not because the members did not come there with constructive ideas, but because the bitterness which developed over the gas tax, weight tax and the proposed reapportionment of the representative and senatorial districts made constructive cooperation utterly impossible. There seems to be a general sentiment that if the Governor had adopted a little different attitude in his dealings with the Legislature, all this unpleasantness and failure of constructive accomplishment might have been averted.

In some far off Utopia there may some time come such a pure form of representative government that issues will be decided and settled solely on their merits, but that day is not yet. Under present conditions every action seems to be a compromise and especially during the closing days of the session vote swapping and log rolling seems to settle the fate of most of the bills of major importance.

The squabble over the gas tax and the weight tax is a case in point. After the House had attempted to pass the gas tax over the Governor's veto and had displayed a rather cool attitude towards the proposed weight tax for motor vehicles, as favored by Governor Groesbeck, the Senate began to hold up all important House bills. When the House refused to be browbeaten and by a vote of 56 to 41 defeated the weight tax, all hope that the Senate would pass the major House measures was gone. Big bills which were the victims of this unfortunate condition included the Byrum state income tax and the Meggison bill to provide a more just and desirable system of distributing the primary school interest fund. Nearly all of the tax reform measures passed by the House were put to sleep in the Senate as a rebuke to the House for not falling in line behind the weight tax.

In view of this situation the question naturally arises "Why should the House pay such a high price to kill the weight tax?" The answer is rather complicated, but one need not look far to find at least some of the reasons. Rep. Charles Evans in the final debate in speaking in opposition to the bill said, "This has ceased to be a question of a gas tax or a weight tax, it is now a question of whether or not representative government shall prevail in Michigan."

The representatives felt that the weight tax was being forced on them by the Governor after he had arbitrarily vetoed the gas tax which the people seemed to favor strongly. They also objected to the provisions of the bill which placed the administration of the funds under the control of the State Administrative Board. This they regarded as being another effort to build up a strong political machine for the present administration.

THE settlement of many issues during the closing hours of the session brought a fitting climax to what one solon termed "the most nerve-racking legislative session" in his memory. The Governor's automobile weight tax, the income tax, and the proposed new method of distributing the primary school interest fund were leading measures the fate of which was not determined until nearly the final hour of adjournment.

Much of the jam in the legislative machinery was caused by failure of the Senate and the House to reach an agreement over the various items in the more important appropriation bills. As a rule the Senate was more liberal than the House, and desired larger appropriations for the University of Michigan, the Michigan Agricultural College and the general building program for the other state institutions.

As in the closing hours of the many previous sessions, it was a regretable fact that many of the most important issues were not settled entirely upon their merits, log-rolling and vote-swapping seemed to determine the fate of most of the big bills that came up in the closing hours.

Reforestation Promoted

Measures to promote the orderly development of the northern part of the state have received final legislative approval. The Senate concurred unanimously in the action of the House in the passing of the Meggison-Sargant bill to provide a deferred tax on forest growth.

Under the terms of this bill, the owner of any timber lands, or lands chiefly valuable for the growth of timber within this state, may apply to the Commissioner of Agriculture to have such property set apart for the growth of timber. If, after investigation, the application is approved by the Commissioner of Agriculture, the land shall thereafter be taxed at the rate of 5 cents per acre annually.

After a 25 year period the timber would be subject to cutting, under general control of the Commissioner of Agriculture, who would guard against wasteful methods. At this time the owner of the timber would be assessed a tax equal to 25 per cent of the stumpage value of the timber cut, to be paid into the state treasury.

There is a provision in the bill which would prevent it from working a hardship on any local taxing unit. Section 6 of the bill provides that "The State administrative board may, in its discretion, advance to the townships in which any forest reserve lands lie, such sums each year out of the general fund of the state as will compensate them for the amount of taxes which would be collectible from such forest reserve lands had they not been registered."

There was a general feeling that the annual general property tax was not adopted for the production of long-time crops, such as forest products, and that the passage of this bill would go a long way toward the most economical utilization of large areas of northern Michigan, and would do more to promote forest development than large sums invested in paternalistic tree planting by the state.

Land Certification Approved

Another bill sponsored by Rep. Meggison which has for its object the orderly settlement of Michigan farm land was passed by the Senate with but one negative vote. This was the so-called land certification bill which has been promoted by the Development Bureau of the State Department of Agriculture.

The provisions of this measure are entirely optional and no one need have his land certified unless he desires. The owners of worthless land will probably not care to have their holdings subjected to inspection and certification by the State Commissioner of Agriculture. The evident purpose of the bill is to protect those desiring to purchase Michigan land from deceptive practices of unscrupulous land sharks.

M. A. C. Gets Stadium

The proposal to loan money from the general fund of the state to finance the building of a stadium at the Michigan Agricultural College, as favored by Gov. Groesbeck, has passed both branches of the legislature.

The bill provides for the loan of $160,000 from the State to the College for the construction of the initial unit of an athletic stadium. This loan must be repaid in ten equal annual installments beginning in 1924. As far as possible this refund is to be made out of receipts of athletic contests to be held in the proposed stadium.

Defectives to be Sterilized

One of the most sensational debates of the closing hours of the session centered around final passage through the House of Senator Sligh's bill to authorize the sterilization of mentally defective persons. Those who advocated the bill declared that sterilization was the proper treatment for many cases and that it increased both the physical and mental welfare of the individual to "make good" in his local community with the minimum amount of supervision. Rep. Baxter of Grand Rapids, who led the fight for this measure in the House, declared that the enactment of this bill would allow the state officials to release at least one hundred inmates from the institutions for the feeble minded at Lapeer and that 10 percent of those now coming to this institution could be left at large in their home communities if this bill were passed. The great financial saving to the state which would result from the adoption of such a policy was also pointed out by Rep. Baxter.

Discrimination Bill Passes

Senator Bernie L. Case's bill to prevent unlawful discrimination in the purchase of potatoes was amended by the House to include grain and beans and was passed by them 85 to 3. This bill is intended to protect small local private and co-operative elevators and marketing associations from the unfair competition practiced by some old-line dealers. It has been a common practice for a few unscrupulous dealers to temporarily pay more than the market price in towns where a small elevator is trying to get a start in order to freeze out competition. These dealers have been able to pay this higher price for a short time in a few localities because they paid the farmer much less than the market price in localities where they had no competition. Senator Case's bill was drafted by the Michigan State Farm Bureau and had the active support not only of that organization, but also of the Michigan Elevator Exchange and the Michigan Potato Growers Exchange.

Drain Laws Codified

One of the constructive measures enacted during the closing hours of the session was a revision and codification of all the drain laws of the state. This bill repeals a multiplicity of separate and somewhat disconnected acts and provides a simple and workable general drain law for Michigan. There had been no codification of the drain laws for 26 years and conditions were such that a Philadelphia lawyer was required to look up the law regarding any drainage project.

After being involved in one of the most knotty parlimentary tangles which has occurred this session, the general game law, the most interesting feature of which is the protection afforded to quail until 1930, was passed without opposition by a vote of 94 to 0. Rep. Rowe who sponsored this bill has fought hard for its passage for several months, but because of some of the other features of the bill it has had a very stormy time in getting through and was nearly strangled to death by a parliamentary tangle of red tape.

Tax Exemption Banned

After prolonged debate the House passed by a vote of 75 to 16 Senator Sligh's bill to repeal act No. 88, of the public acts of 1909, which exempts from taxation bonds issued by any county, township, city, village or school district. The House has already passed the bill which provide an annual specific tax of 3 mills on such securities, but unless the Senate also passes this measure, municipal securities will be taxed on the ad valorem basis. If the Senate does not pass the three mill tax, probably the Governor will veto the Sligh bill.

Senator Condon's bill to control the possession and sale and use of pistols, revolvers, and guns and to place their sale under strict governmental regulation was killed by the House committee of the whole without a record vote.

Senate Dodges Tax Issues

The Senate has displayed a disposition not to pass any of the important tax revision schemes which have been proposed and sanctioned by the House. Rep. Byrum's state income tax bill has never emerged from the Senate Taxation committee. Geo. C. Watson's bill to limit the tax on real and personal property for state purposes to an increase of not more than 2 per cent a year was defeated in the Senate by a vote of 12 to 17.

This measure appeared in the form of a constitutional amendment which would of necessity have been submitted to the voters for their approval. Senator Horton maintained that such an important tax reform should be submitted to the voters and he declared that he felt confident that they would pass it. In a speech in favor of the bill he said that real estate in Michigan is now bearing practically 80 per cent of the tax burden although it represents but 33 per cent of the total wealth of the state. Rep. Charles Evan's bill to limit in a similar manner taxes imposed on real and personal property for local purposes was postponed from day to day in the Senate and finally referred to the taxation committe for interment, Rep. Manwarring's bill to prevent the spread within the state of contagious dis-

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Reforest Michigan Cut-Over Lands

Senator Couzens Urges that Michigan Legislature Take Immediate Steps to Bring About Reforestation

SENATOR JAMES COUZENS

By J. G. HAYDEN
(Washington Correspondent The Detroit News)

POSSIBILITIES for re-foresting the cutover Michigan pine lands will be investigated this summer by the special committee of the Senate which is considering a national reforestation policy, Senator James Couzens announces.

Mr. Couzens, a member of this committee, has returned from a two weeks' trip through lumber regions adjacent to the Gulf of Mexico, where the situation is similar to that in Michigan. He is enthusiastic about the advantages, both industrially and in tax revenue, which effective re-forestation would produce.

Mr. Couzens suggests that the Michigan Legislature should consider immediately the Louisana system of taxing areas being reforested.

How They Do It

The fundamental of the Louisiana law is the reducing of taxes on lands during the unproductive period of re-forestation, the revenue being reimbursed to the state later by a tax of 10 per cent or more on the ultimate lumber yield. In return for this concession, land owners bind themselves not to cut any growing timber until the trees have reached a specified size, and then to limit their cut so that the re-forestation process will be continued permanently.

Originally these Louisiana re-forestation areas were valued for taxation at $1 per acre, but this valuation now has been increased to $3. That is to say, if the state tax rate is three mills to the dollar, the annual tax on the land is 9 cents per acre.

The one serious weakness of the Louisiana law, as developed in the Senate committee hearings, is its failure to provide for dividing the tax revenue between the state and the counties. The law specifies that the contracts between the land owners and the state must be approved by the county boards of supervisors, but fails to allow the counties any part of the revenue.

The counties, in effect, are asked to strike the re-forestation lands from their tax rolls, without any compensatory return. The natural result has been that the country authorities have been slow to approve re-forestation contracts.

Mr. Couzens believes the tax return to the state during the re-forestation process should be limited to a sufficient fund to maintain an adequate conservation system, to provide fire protection and such supervision as is necessary to insure compliance with the contract. The remainder of the current revenue he would turn over to the counties, the state, however, to receive a liberal division of the tax yield when the timber finally is harvested.

Experts who appeared before the committee estimated the amount of denuded timber lands-that is, land from which virtually all of the trees have been removed, and which is not in use for farming and other purposes, at 81,000,000 acres. There also are considerable areas where most of the timber has been removed but sufficient trees left to provide for natural re-seeding. Of the latter sort, all that is necessary for re-forestation, the experts held, is assurance that the lands will be left undisturbed and adequately protected from fire. The general opinion was that 75 per cent of the whole reforestation problem is fire protection.

Cites Benefits

The benefits from reforestation in a state like Michigan, which now is a large importer of lumber, are easy to estimate, Mr. Couzens declared.

"Southern producers told me privately that they start out by placing a value of their timber at $10 per 1000 feet, based on their advantage in shipping cost, as against the Pacific Coast region, which now has the larger part of the virgin forests in the United States," he said. "That is to say, the lumber growers of Louisiana, Florida, and Mississippi can sell their lumber in the North and East on an equality of price with the Westerners, and take an extra profit of $10 per thousand, due to difference in freight rates.

"On lumber grown in the Lower Peninsula of Michigan, and consumed in Detroit and other State cities; of course the advantage in shipping costs would be even greater. It does not require an expert economist to figure, on this basis, the great profit to be derived from re-foresting the barren sand wasts of Northern Michigan, to producers, consuming industries, and the Government treasuries alike.

Revenue Diverted

"In considering re-forestation in Louisiana, the lumbermen early proposed what they termed a "severance tax" of one-half of one per cent, on all property removed from their cut-over areas, including second growth timber, oil and fish. The specific purpose of the tax was to provide a conservation department to guard against fires, and to foster the work.

"The tax, however, proved so profitable that the State Legislature increased it to 2 per cent, and diverted the revenues thus derived to other purposes. At the present time this "severance tax" is providing approximately $2,500,000 annually, most of which is being used for a state university.

"This action obviously was unfair to the lumberman, and illustrates the great obstacle to re-forestation. It is sufficiently difficult, at best, to induce men to invest their money in an enterprise which will not show a profit for a period ranging from 20 to 70 years. When you add to this uncertainty about exactions of the state in taxation during this unproductive period, it is certain no person but a philanthropist would stake his money on the proposition.

The First Essential

"The first essential in promoting re-forestation by private enterprise, obviously is to let the land owner know exactly what the tax will be during the entire period of re-forestation. Lumbermen who appeared before our committee stated that they did not object to a yield tax of 10 per cent, or even higher, if they were assured of nominal taxation while the timber is growing.

"The degree to which many Southern lumber producers are taking up re-forestation, even under existing adverse conditions, was an encouraging feature of our hearings. For instance Bogalousa, La., is a city established in the middle of what, 14 years ago, was a virgin pine forest. The Southern Lumber Company, which is promoting the enterprise, is proceeding on the expectation that, by the time their original timber is cut, they will have grown a new crop, and that they will be able to maintain their business permanently on its present basis.

"We saw a large park in the center of Bogalousa in which were literally hundreds of thousands of little pine trees, ultimately to be transplanted on the cut-over lands. This company is proceeding with re-forestation, both by transplanting and by the natural process of seeding, with every appearance of success."

The committee will resume its investigation in June on the Pacific Coast, and will work eastward, probably arriving in Michigan in August.

The members of the committee which made the trip south, in addition to Mr. Couzens, are Senators Charles L. MeNary, of Oregon; Duncan U. Fletcher, of Florida, and Patrick Harrison, of Mississippi.

HOW SHALL FERTILIZER BE APPLIED FOR POTATOES?

THE question of the proper method of applying fertilizer for potatoes is one on which there is a considerable difference of opinion among potato growers of Michigan. All agree that fertilizer should not come in actual contact with the seed pieces. Some growers prefer to broadcast fertilizer before planting, while others believe that application in the row, either with an attachment on the planter or by means of separate machine, is the proper method. In the light of present information, it is not possible to state definitely which is the best method, but it is possible to point ont the factors that favor one method against another.

When to Broadcast

An occasional failure to secure results from fertilizer on potatoes is an amount. 200 or 300 pounds of fertilizer per acre spread broadcast is a very light application for an intensive crop such as potatoes. The full benefit of the fertilizer is not received until the root system of the crop has covered the entire area between the rows. It has been pretty definitely established by experiments that the fertilizing elements in the soil solution move principally upward and downward in the soil, and that there is very little movement sideways. The young plants therefore can feed only on the plant food in their immediate root zone, which is limited. After the roots have penetrated the entire area of soil between the rows and the plants in the row, all of the fertility in the soil can be drawn upon. By this time, however, the crop has been pretty well established, and the plant food will not have the same efficiency in making the crop as it would have, had it been available to the young plants in giving them a quick vigorous start. Moreover, the full benefit of the fertilizer is not likely to be received, particularly in the case of the nitrogen or amonia. Practically no phosphoric acid and potash are lost from the soil, but nitrogen may be lost very rapidly in leaching and drainage. In the broadcast application of fertilizer containing a small amount of nitrogen the amount of the nitrogen that is actually utilized by a cultivated crop is open to question. The broadcast method of applying fertilizer for potatoes, however, is entirely logical and sound when fairly large amounts of phosphatic or potash fertilizers are applied to build up the soil supply.

Fertilizer in the Row

The methods of eastern growers, particularly in Maine and New Jersey, are worthy of consideration because they represent a practice based on the cumulative experiences of many years of fertilizer usage. In these sections there are two common

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The Reforestation Possibilities in Michigan

By SENATOR JAMES COUZENS

(Written especially for The Business Farmer)

THE evidence secured by the Senate Committee on Reforestation, which has recently returned from a ten days' trip in the Gulf States, where they held numerous hearings, indicates that the public are generally alive to the necessity of prompt action in promoting the growth of trees. Public interest in this is greater than most of us supposed, and a much greater interest is being manifested every day than the average person believes, and this in itself is a most encouraging condition. This does not mean, however, that there is not a great deal more to be done in an educational way to point out not only the necessity but the advantages to be gained from reforesting our cut-over lands not adaptable for agriculture, and possibly for other lands best adapted for tree-growing.

The two outstanding things to be done to encourage private reforestation are fire protection and stabilization of taxes. It has been quite clearly developed that 75% of the difficulties will be removed when proper fire protection is assured, and then there will be nothing standing in the way, when each state adopts a taxation plan, that will enable the owners of timber lands to reforest. Many states are giving earnest consideration to these matters, and some of them have adopted plans which are most encouraging and from which all states can learn.. The Committee witnessed several activities based on the plan of perpetuating lumber operations. These were based primarily in protecting the cut-over lands, which were showing re-growth, as well as the virgin timber lands. Really, no one actually knows what wonderful accomplishments can be obtained by protecting the forests from fire. Evidences existed everywhere of the damages that fire had done to young growth of timber. These enterprises referred to are not only protecting their holding against fire, but they are taking such of the land that had been denuded previously and planting pine trees. Lands that they are cutting, they are limiting their cuts to trees over 12 inches in diameter, and where the stand is larger than this, they are leaving seed trees, which automatically re-seed the cut-over land, and where protected from fire shows remarkable results. They are establishing large paper mills so as to eliminate every waste possible. They are taking their tree-tops and under-sized part of the tree and using it for pulp purposes. They are conducting their turpentine operations on a scientific basis. One large undertaking at Bogalusa, La., is conducting an operation which is planned for an operation in perpetuity, and they are satisfied that this can be done. The State of Louisiana is pioneering in assisting in the protection and growth of timber by making contracts with private owners on a basis of stabilizing taxes in the parishes or countries at three dollars per acres, which with a thirty mill tax would be nine cents per acre per year. The taxes remain on this basis for ten, fifteen, or twenty years and when the timber is cut off a gross income tax or yield tax is paid to the State government, which tax is used in part for fire protection. Where the land, of course, is more adaptable for agriculture, this is not being done. Many farmers, with large acreage, could, with profit, grow trees on the least valuable of their agricultural land. The State of Michigan, the evidence shows is doing admirable work in the conservation line, but they could do more by studying some of the plans adopted by other States.

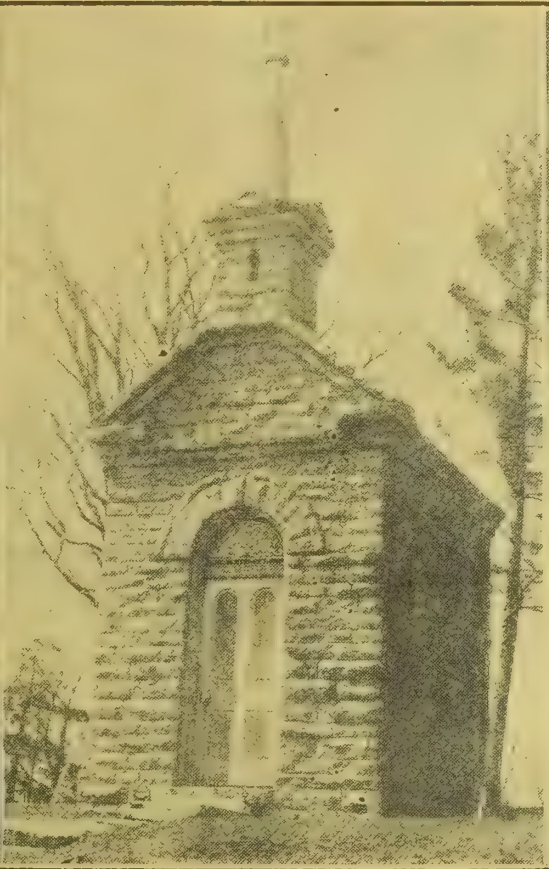
While the Committee has not completed its hearings, and will not for some months to come, I think enough information has developed to show that our people are going to grow forests, and with continued Federal aid and co-operation see to it that our timber supply does not become exhausted.

PICTURES FROM FAR AND NEAR

THE SPEED CHAMPS OF MONKEYLAND.—Left to right: "Man O' War" and "Spark Plug", as they will appear in the monkey race championship to take place at Venice Beach, California, on July 4th. It is to be hoped that the monkeys will not assert their independence and refuse to race—unless more money is assured them. They would be no different than many human professional athletes if they did that.

AWAITING THEIR FATE IN "UNDERTAKERS ROW" HOG ISLAND.—These costly vessels and many others, representing millions of dollars spent feverishly by America during the war, lie idle awaiting a purchaser. Although they are offered at a small fraction of their cost no one will buy. Wouldn't it be better for Uncle Sam to operate them as a merchant marine rather than allow them to rot down?

HIS FIRST BITE IN TWO DAYS.—A ravenously hungry and ragged little Hungarian child who is tasting the stale loaf of bread, the first bite he has had in two days. The poverty stricken populace face starvation and disease unless immediate aid is given.



SMALLEST CHURCH IN THE WORLD.—It is so tiny that only three, besides the preacher, can pray in it at the same time. It is probably fitted to the needs of the congregation. Many years ago a monk named Father Otto built it for his brother devotees at Mount Casino, Kentucky.

HIGHEST PAID WOMAN PLAYER IN WORLD.—Lizzie Murphy, of Eddie Carr's All Star Team, Boston, Mass., who pulls down $300 weekly for her services as a star baseball player. This young lady is a real first sacker and takes her turn at the platter, asking no favors.

THE FALL OF A PRINCE.—The Prince of Wales took a tumble at the water jump in the Army Point-to-Point meet held at Arborfield. Note the "sorrowful" expression on the faces of the bystanders. The Prince of Wales as a sportsman has endeared himself to the people of Great Britian.

PRIEST CONVICTED OF MURDER.—Father Charles Dillon, until April 12th, assistant pastor of St. Augustine's Church at Kalamazoo, Michigan, who has begun serving a life sentence in the state penitentiary at Marquette, for the murder of his superior, Father Henry O'Neill. The convicted man claims that the cruel treatment accorded him drove him to the deed.

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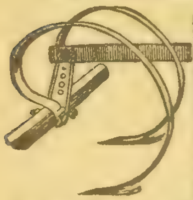

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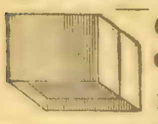

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AGREEMENT IS BINDING

I am writing for some advice. Some time ago I enrolled with a school of domestic arts and sciences to learn dressmaking. The application blank read as follows:

"I send herewith $5 and agree to pay $5 each and every month hereafter from date of this application until I have aid $65." I find that I am not able to make the payments and I haven't the time to study the lessons. I have written to the school several times and explained it to them, but still they keep writing me for payments. I have aid $15 on the course and have received five lessons. Will you kindly advise me if they can hold me to such an agreement?—Mrs. S. M., Bangor, Mich.

—Such an agreement would be valid, and binding upon both parties. You could not avoid your liability under the contract on the ground that you haven't time to study the lessons.

When you entered into the contract, you agreed to perform certain acts, and in consideration thereof, the company should refuse to send the number of lessons agreed to send, or should otherwise to perform their part of the contract, you would feel that you had a right to hold to their contract. Likewise, when you fail to perform your part of the contract, they should have a right to hold you to your agreement.

The facts you have given me do not indicate that there was any fraud or mistake which would relieve you of your duty to perform, and if the company has done its part under the contract, they could compel you to do your part, or to pay them damages for your failure to do so.

The proper time to consider the nature of your obligation, and whether or not you will be able to perform, is before you attach your signature to the contract. I would admonish you at all times, to think carefully before signing your name to any paper.—Asst. Legal Editor.

NOT RIGHT TO SET TRAPS ON YOUR LAND

I would like to know through the columns of your valuable paper if a neighbor has a right to place a dead carcass and set traps around it on my farm, after I have forbidden him to do so? He claims he can set traps wherever he likes. Thanking you for your trouble I remain.—H. Mc. K., Alpena, Michigan.

—Your neighbor would have no right to go upon your land and set traps without your permission.—Assistant Legal Editor.

THINNING VARNISH STAIN

Will you please inform me thru your columns, how I may properly thin varnish stain? I have a quart can that had not been tightly sealed and has thickened to the consistency of heavy molasses.—Mrs. J. L. P., Curtis, Michigan.

—I would advise that you let the can of stain in a dish of hot water, add about ⅛ to ¼ pint of turpentine. Then thoroughly stir until all dissolved then strain through cheese cloth or a very fine screen.—S. B. Howard, College Painter, M. A. C.

INSURING SCHOOLHOUSE

Our local agent for old line insurance companies tells me the attorney general has made a ruling making it unlawful for us to insure schoolhouse in the Farmers Mutual Insurance Co. Is this true and if so has he the right to do so when the charter of our insurance company gives it the right to insure in Benzie, Manistee and Mason counties? Schoolhouses is enumerated as among the forms of property to be be insured.—J. M.,Bear Lake, Mich.

—The statute authorizing the organization of farmers' mutual insurance companies was amended in 1919, and in its amended form does not include schoolhouses as property that may be insured. As to whether or not this limitation applies to companies already organized, or only to those hereafter organized would depend on the interpretation of the statute. I would suggest that you write to the attorney general's office to ascertain if he has recently made a ruling on this matter.

When a charter is granted to a corporation by the state, it usually contains a provision which reserves to the state the right to repeal it by subsequent legislation.—Asst. Legal Editor.

APPLY TO STATE HIGHWAY COMMISSIONER

Am writing for information as so many others are doing. I live on a mail route where the roads are almost impassable part of the year. At such time it is impossible to get a doctor, were it necessary. There has been no work on this road, of any account, for not less than ten years and which ever way I go must travel over one and one-half miles to reach a good road. Some three years ago $1,000 was voted to repair this road and the money was used elsewhere and we are still wading mud. Have complained to the officials but they are absolutely indifferent and evade the issue. Now, is there anything that can be done to compel those in authority to build a road which will be fairly decent? We do not expect a paved thoroughfare, but would like a square deal. Our highway tax has gone to build goods roads elsewhere. Now would like some of the benefits at home. Is there any way in which we can get it?—A. H. Y., Alma, Michigan.

—If your county or township officials will do nothing apply to the state highway commissioner at Lansing. We are sure he will assist you if possible.—Editor.

PERSONAL PROPERTY

Can manure be moved off rented land? A rents land from B. There was no contract. A feeds his stock on B's land. Can A haul manure off B's place?—Subscriber, Sault Ste Marie, Mich.

—Manure in the barnyard is personal property, and a tenant who furnishes the feed which it was produced from would have a right to remove it.—Assistant Legal Editor.

SIGNERS OF APPLICATION FOR DRAINS

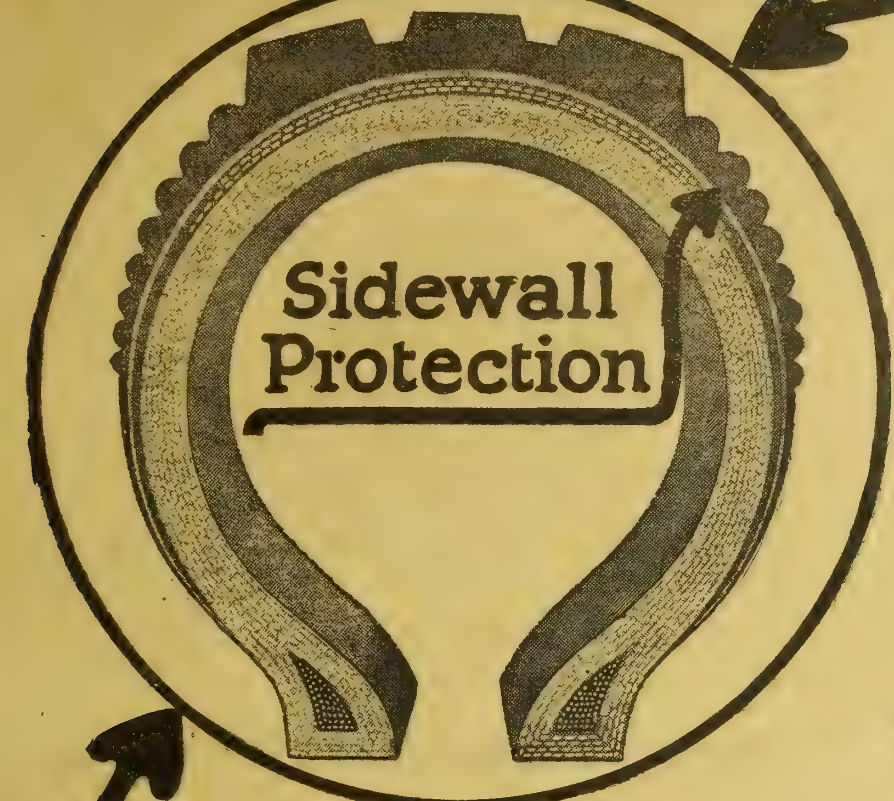
In making application for a county drain or dredge drain how many names are necessary on the application and is it necessary the names should be of those along the banks of the stream to be dredged, or in other words can free holders who pay or are liable to pay but very little tax sign the application and put a dredge through when but a small per cent of land owners along the stream are in favor of such dredge, and in case such a dredge goes thru is it right that those along the stream pay the debt of the tax when free holders miles back sign said petition to put it thru? After the drain is surveyed and blue print out is it possible to stop said drain providing said drain is liable to bankrupt the farmers along the drain?—A. S., Perry, Michigan.

—Section 1 of Chapter 3 of the Drain Law provides that the application for the establishing, widening, deepening or extending of the drain shall be signed by not less than one-half of the freeholders whose lands are traversed by such drain. It is impossible for a taxpayer to stop the construction of the drain if all the proceedings have been regular and in accordance with the provisions of the statute unless the drain commissioner and others interested were willing to discontinue the proceedings.—H. H. Partlow, Legal Adviser, State Highway Deartment.

COULD COLLECT INTEREST

I have a question to ask. I would like to have you to answer through your paper. In October 15, 1918, I entered a contract with a party for the sale of my place. Principal and interest was to be paid every six months, but he has paid only the interest the last two years, and a hard time to get that. I started the contract wrong. He paid $500 down

(Continued on Page 10)



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The Hunted Woman

By James Oliver Curwood

Michigan's Own and America's Formost Author of the Great Northwest

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(Continued from April 28th issue)

CHAPTER XXI

FOR a minute, perhaps longer, John Aldous stood staring at the photograph which he held in his hand. It was the picture of Culver Rann—not once did he question that fact, and not once did the though flash upon him that this might be only an unusual and startling resemblance. It was assuredly Culver Rann! The picture dropped from his hand to the table, and he went toward the door. His first impulse was to go to Joanne. But when he reached the door he locked it, and dropped into a chair, facing the mirror in his dresser.

The reflection of his own face was a shock to him. If he was pale, the dust and grime of his fight in the cavern concealed his pallor. But the face that stared at him from out of the glass was haggard, wildly and almost grotesquely haggard, and he turned from it with a grim laugh, and set his jaws hard. He returned to the table, and bit by bit tore the photograph into thin shreds, and then piled the shreds on his ash-tray and burned them. He opened a window to let out the smoke and smell of charring paper, and the fresh, cool air of early evening struck his face. He could look off through the fading sunshine of the valley and see the mountain where Coyote Number Twenty-eight was to have done its work, and as he looked he gripped the window-sill so fiercely that the nails of his fingers were bent and broken against the wood. And in his brain the same words kept repeating themselves over and over again. Mortimer Fitz Hugh was not dead. He was alive. He was Culver Rann. And Joanne—Joanne was not his wife; she was still the wife of Mortimer FitzHugh—of Culver Rann!

He turned again to the mirror and there was another look in his face. It was grim, terribly grim—and smiling. There was no excitement, nothing of the passion and half-madness with which he had faced Quade and Rann the night before. He laughed softly, and his nails dug as harshly into the palms of his hands as they had dug into the sills of the window.

"You poor, drivelling, cowardly fool!" he said to his reflection. "And you dare to say—you dare to think she is not your wife?"

As if in reply to his words there came a knock at the door, and from the hall Blackton called:

"Here's MacDonald, Aldous. He wants to see you."

Aldous opened the door and the old hunter entered.

"If I ain't interruptin' you, Johnny——"

"You're the one man in the world I want to see, Mac. No, I'll take that back; there's one other I want to see worse than you—Culver Rann."

The strange look in his face made old Donald stare.

"Sit down," he said, drawing two chairs close to the table. "There's something to talk about. It was a terribly close shave, wasn't it?"

"An awful close shave, Johnny. As close a shave as ever was."

Still, as if not quite understanding what he saw, old Donald was staring into John's face.

"I'm glad it happened," said Aldous, and his voice became softer. "She loves me, Mac. It all came out when we were in there, and thought we were going to die. Not ten minutes ago the minister was here and he made us man and wife."

Words of gladness that sprang to the old man's lips were stopped by that strange, cold, tense look in the face of John Aldous.

"And in the last five minutes," continued Aldous, as quietly as before, "I have learned that Mortimer FitzHugh, her husband, is not dead. Is it very remarkable that you do not find me happy, Mac? If you had come a few minutes ago——"

"Oh, my God! Johnny! Johnny!"

MacDonald had pitched forward over the table, and now he bowed his great shaggy head in his hands, and his gaunt shoulders shook as his voice came brokenly through his beard.

"I did it, Johnny; I did it for you an' her! When I knew what it would mean for her—I couldn't, Johnny, I couldn't tell her the truth, 'cause I knew she loved you, an' you loved her, an' it would break her heart. I though it would be best, an' you'd go away together, an' nobody would ever know, an' you'd be happy. I didn't lie. I didn't say anything. But Johnny—Johnny, there weren't no bones in the grave!"

"My God!" breathed Aldous.

"There were just some clothes," went on MacDonald huskily, "an' the watch an' the ring were on top. Johnny, there weren't nobody ever buried there, an' I'm to blame—I'm to blame."

"And you did that for us," cried Aldous, and suddenly he reached over and gripped old Donald's hands. "It wasn't a mistake, Mac. I thank God you kept silent. If you had told her that the grave was empty, that it was a fraud, I don't know what would have happened. And now—She is mine! If she had seen Culver Rann, if she had discovered that this scoundel, this blackmailer and murderer, was Mortimer FitzHugh, her husband——"

"Johnny! John Aldous!"

Donald MacDonald's voice came now like the deep growling roar of a she-bear, and as he cried the other's name he sprang to his feet, and his eyes gleamed in their deep sockets like raging fires.

"Johnny!"

Aldous rose, and he was smiling. He nodded.

"That's it," he said. "Mortimer FitzHugh is Culver Rann!"

"An'—an' you know this?"

"Absolutely. Joanne gave me Mortimer FitzHugh's photograph to destroy. I am sorry that I burned it before you saw it. But there is no doubt. Mortimer FitzHugh and Culver Rann are the same man."

Slowly the old mountaineer turned to the door. Aldous was ahead of him, and stood with his hand on the knob.

"I don't want you to go yet, Mac."

"I—I'll see you a little later," said Donald clumsily.

"Donald!"

"Johnny!"

For a full half minute they looked steadily into each other's eyes.

"Only a week, Johnny," pleaded Donald. I'll be back in a week."

"You mean that you will kill him."

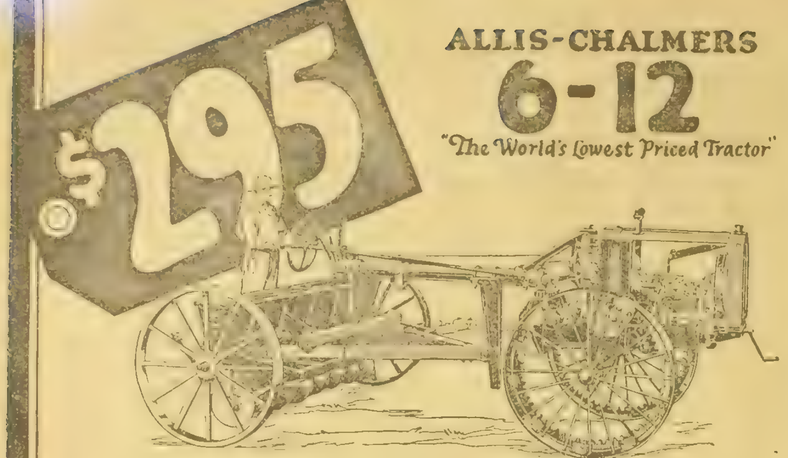
"He'll never come back. I swear it, Johnny!"

As gently as he might have led Joanne, Aldous drew the mountaineer back to the chair.

"That would be cold-blooded murder," he said, "and I would be the murderer. I can't send you out to do my killing, Mac, as I might send out a hired assassin. Don't you see that I can't? Good heaven some day—very soon—I will tell you how this hound, Mortimer FitzHugh, poisoned Joanne's life, and did his worst to destroy her. It's to me he's got to answer, Donald. And to me he shall answer. I am going to kill him. But it will not be murder. Since you have come into this room I have made my final plan, and I shall follow it to the end coolly and deliberately. It will be a great game; and I shall play it happily, because Joanne will not know, and I will be strengthened by her love.

Quade wants my life, and tried to hire Stevens, up at Miette, to kill me. Culver Rann wants my life; a little later it will come to be the greatest desire of his existance to have me dead and out of the way. I shall give him the chance to do the killing, Mac. I shall give him a splendid chance, and he will not fail to accept his opportunity. Perhaps he will have an advantage, but I am as absolutely certain of killing him as I am that the sun is going down behind the mountains out there. If others should step in, if I should have more than Culver Rann on my

(Continued on Page 12)



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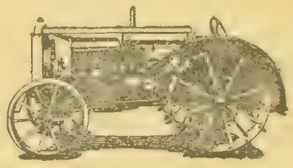
Seeding is Just One of 45 Jobs This Tractor Will Do to Perfection



IF interested in a 3 plow tractor, don't buy before getting the facts about the A-C 15-25. You will like its compact, advanced design; its dust-proof housing; its extreme accessibility. Reserve power for deep plowing. Operates 26-in. separator. PRICED BELOW ALL OTHER 3 PLOW TRACTORS OF ITS RATING. A smaller brother to the A-C 20-35 leading 4 plow job of the "grain states."

NEVER in the history of farming has an opportunity like this one been offered. The Allis-Chalmers 6-12 puts speed and thoroughness behind every operation. Hitched to a six or eight foot seeder, you can now put in from 18 to 22 acres during a ten hour day. And this is only one of 45 jobs this tractor will do with the same efficiency. Think it over—can you afford not to own one!

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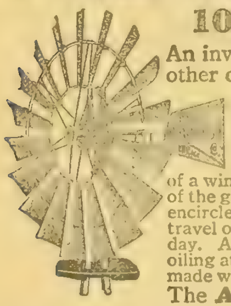

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100,000 Miles Without Stopping for Oil

An inventor who could develop an automobile, a railroad car or any other conveyance on wheels which would perform such a feat would be considered a wonder. But such is the record of regular accomplishment by the Auto-oiled Aermotor during the past eight years in pumping water.

Did you ever stop to think how many revolutions the wheel of a windmill makes? If the wheel of an Aermotor should roll along the surface of the ground at the same speed that it makes when pumping water it would encircle the world in 90 days, or would go four times around in a year. It would travel on an average 275 miles per day or about 30 miles per hour for 9 hours each day. An automobile which keeps up that pace day after day needs a thorough oiling at least once a week. Isn't it marvelous, then, that a windmill has been made which will go 50 times as long as the best automobile with one oiling?

The **Auto-oiled Aermotor** after 8 full years of service in every part of the world has proven its ability to run and give the most reliable service with one oiling a year. The double gears, and all moving parts, are entirely enclosed and flooded with oil all the time. It gives more service with less attention than any other piece of machinery on the farm. To get everlasting wind-mill satisfaction buy the Auto-oiled Aermotor, the most efficient windmill that has ever been made.

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NEW BUTTERFLY Separators are guaranteed a lifetime against defects in material and workmanship. Made also in four larger sizes up to No. 8 1-2 shown here; sold on

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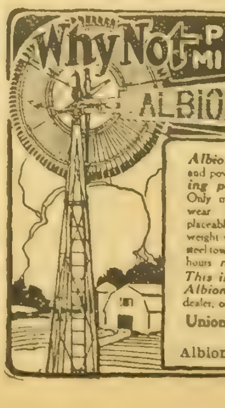

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Albion steel and wood mills are quiet and powerful. *One-third the working parts of any other mill.* Only main Pitman bearing subject to wear. This is *oilless*, and easily replaceable. Governs by dependable weight without springs. Fits any 4 post steel tower. Why not shorten your chore hours *now* with a *good* Windmill. *This is your chance—F. O. B. Albion.* Erect it yourself. Ask your dealer, or write direct to

Union Steel Products Co. Ltd.
Dept. 34
Albion, Mich., U. S. A.

Plant Certified Seed for Better Potato Crop

Growers Fail to Realize Amount of Money They Lose Through Planting Diseased Seed Potatoes

By H. C. MOORE
(Assistant Extension Specialist in Potatoes, M. A. C.)

LAST year over 1,000 growers in Michigan planted Michigan Certified Seed Potatoes in comparison with uncertified seed. A summary of the results reported by these men showed that the average increase in yield secured from the certified seed was 45 bushels per acre, and that the quality of the crop grown from certified seed was far superior to that from ordinary seed. Many growers reported that approximately 90 per cent of the potatoes produced from certified seed were marketable while only 60 per cent or so of the crop from uncertified seed could be marketed. In all cases the certified seed was planted under the same conditions and handled in the same manner as the uncertified seed. The reason for the better yield of high quality potatoes from the certified seed was that it was free from serious diseases and was from vigorous high yielding strains, while the uncertified seed was generally infested with disease and was lacking in vigor.

If growers realized how diseases such as mosiac, leaf roll, spindling sprout, etc., reduce the yields and lower the quality of potatoes, they would make every effort to plant nothing but disease free high quality seed. All of the diseases here named live over in the seed potatoes and produce weak hills and plants of abnormal growth which have low yields of poor quality tubers. It is quite common for fields planted with ordinary seed to show 25 per cent or more of these diseases.

The planting of certified seed can be considered a very good form of potato crop insurance for this seed when planted in good soil and grown under good cultural conditions will produce a satisfactory crop of good quality potatoes. Uncertified or ordinary seed potatoes contain a high percentage of diseases and may produce a very poor yield even when grown under the best conditions.

The initial cost of poor seed may be very low but the results it gives in poor yields and poor quality makes it too costly for any potato grower to plant. There is no reason this year for planting poor seed when high quality certified seed is available at very low cost.

In 1922 Michigan growers bought only 22 per cent of the certified seed that was offered for sale in Michigan. Seventy-eight per cent of the seed was sold outside of the state. Pennsylvania last year took 52 cars of Michigan Certified Seed. This seed gave the Pennsylvania planters 50 per cent greater yields than did the uncertified seed with which it was tested. This season Pennsylvania has already bought over 150 cars of certified seed from Michigan.

Ohio, Indiana, Illinois, Maryland, Virginia, Missouri, New Jersey, Connecticut and West Virginia are other states that are buying considerable quantities of Michigan seed potatoes.

Certified potatoes are shipped in bags containing 150 pounds. Each bag is sealed with a lead and wire seal to which is attached the official green tag of the Michigan Potato Producers' Association. Upon receipt of the potatoes they should be emptied from the sack and should be put in a cool well ventilated place where they will not be exposed to frost.

During warm weather seed potatoes are often injured by being left in sacks for several days. If they are spread out on the cellar or barn floor they will not become heated and their sprouts will not be injured.

There has been noted a tendency among growers to be too economical with certified seed. Since the cost of the certified seed is a little greater than that of ordinary seed many of them are apt to cut the seed so that it will cover as large an acreage as possible. Certified seed should be cut so that each "set" weighs approximately 2 ounces. Each seed piece should contain one or two strong eyes. If the sets are cut square or "blocky" they will handle well in the planter and will not dry out quickly in the soil. One should figure on planting 15 bushels or more of seed to the acre.

During the past few months several car loads of certified seed have been bought by Michigan farmers. In some of the counties the farmers have placed their orders for certified seed with their County Farm Bureau, Local Cooperative Associations of local dealers and have thus been able to get the potatoes on the basis of car load rates and have made considerable saving in freight charges.

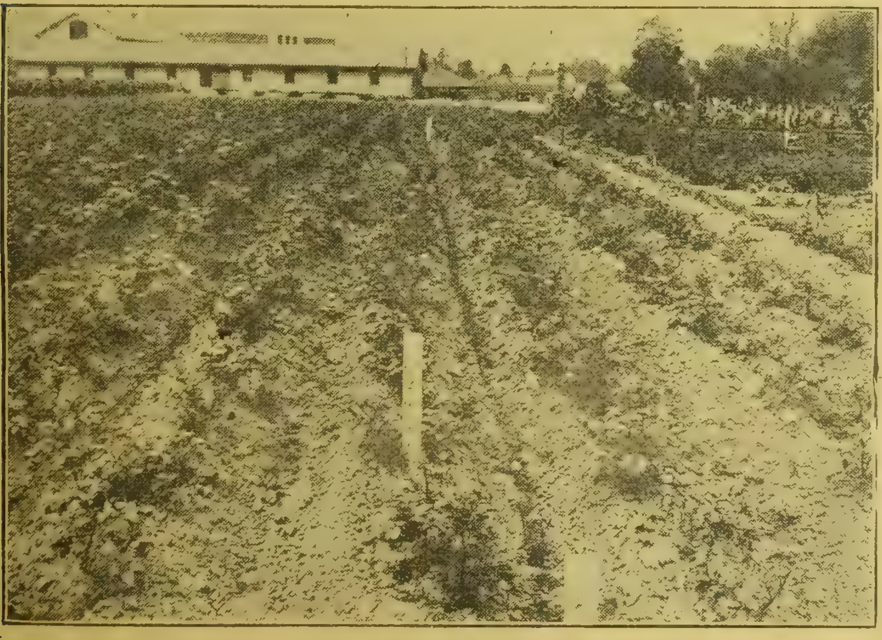
Those interested in securing certified seed potatoes should write to the Secretary of the Michigan Potato Producers' Association, East Lansing, Michigan.

SEEK LIME NEED OF FARMS

FINDING the lime requirements of every farm in the state, in order to take the "guess" out of the important work of liming Michigan soils, is the ambitious program which has been adopted this spring by the soils department at the Michigan Agricultural College.

Accomplishment of the extensive testing operation has been made possible by the perfection of a simple yet accurate method of testing soils, developed by Prof. C. H. Spurway of the college soils staff. This is called the Soiltex Method, and in using it a farmer, or his wife or children, can determine in one short operation whether or not a soil needs lime, and just about how much.

The Soiltex testing outfit, which is distributed from the college soils section on request, contains enough material for at least 200 tests, together with detailed directions.



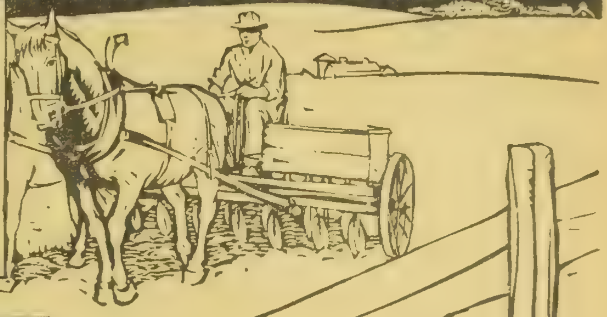
Counting from right to left the first seven rows in the field were planted without fertilizer, the others received proper application. Although one is unable to see the fertilized rows in such a way as to make a proper comparison, you can plainly tell there is a considerable difference.

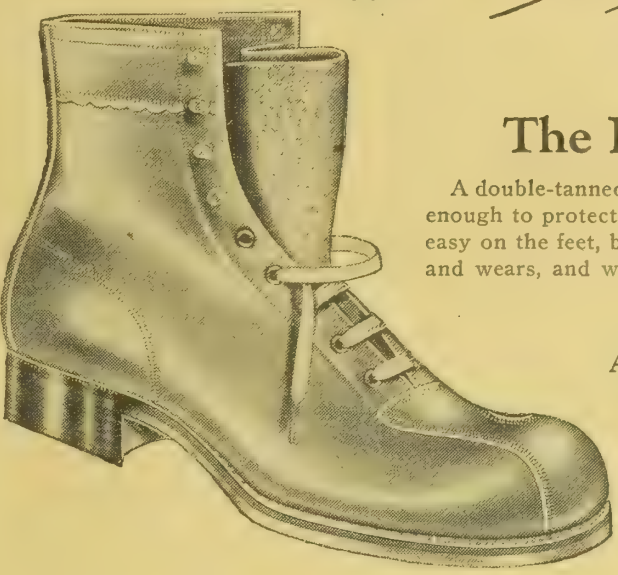
ROUGE REX
More Mileage Shoes
Double-Tanned—Double Wear

It will be three years this Fall since I bought your Rouge Rex shoes and after having put three pairs of new soles on them, they are good yet. I wore them most of the time. They are the best fitting and easiest walking shoes I have ever worn. They are certainly made to stand the wear and tear such as farmers give shoes, and are always soft and pliable summer and winter.

There are six of us and we are all going to buy your shoes. My neighbor asked me when I was going to wear this pair out and I told him that if I knew that I could get another pair, I would do so. He said he would too. Yours truly,

(Signed) WALTER HOFF,
West Saginaw, Mich., R. No. 1
Feb. 13, 1921.





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And it stays soft. Wet it, soak it, wear it through mud and water, it will dry out just as soft as when new. It never grows hard like other leathers.

We use only the choicest horsehides, and we use only the best part of each hide in making the Rouge Rex — the butts, where the fibre is closest and toughest.

Men who have worn Rouge Rex shoes say they never thought leather could last so long, or keep its softness after wetting.

You'll note how thick the leather is in Rouge Rex shoes. Then you'll marvel at its velvet-like flexibility. We make a Rouge Rex 1000 Mile Shoe for every work purpose. For field and factory, for oil field, camp or lumbering. And every shoe is horsehide through and through.

You'll say, after wearing a pair of Rouge Rex, that this is the most economical shoe you ever bought. For it outlasts all other shoes, and it gives the satisfaction of perpetual comfort and ease.

If your dealer hasn't the Rouge Rex we will see that you are supplied through our nearest dealer, Write us for his name.

Rouge Rex
Comfort Shoe

This Rouge Rex is so pliable and soft you can double it up like a moccasin. It wears like iron but you'll hardly know you have a shoe on, it is so soft and easy.

For tender feet, or where you do not encounter wet weather, wear this Comfort Shoe. You'll find it a blessing to the feet.

HIRTH KRAUSE CO.
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Dept. 248 Grand Rapids, Mich.

A Telephone Personality

In your face to face contacts with people, your appearance, your bearing and many other things help you to make the right impression. But in your telephone contacts there is only one thing by which you can be judged—your speech.

An effective telephone personality is to-day a business and social asset. Everybody appreciates the person who speaks distinctly and pleasantly, neither too fast nor too slow, with a clear enunciation of each word, with lips facing the mouthpiece and speaking into it. In business, this is the telephone personality which induces favorable action on the part of the listener. To the salesman it may mean the difference between an order and no order; between an interview granted and an interview refused.

Curiously enough, people who are careful to make themselves effectively heard and understood face to face, often disregard the need for effectiveness in their telephone speech. Perhaps they shout, perhaps they mumble, perhaps they hold the mouthpiece far from their lips. And frequently they never realize that their carelessness has defeated the purpose of their talk.

The Bell System maintains for telephone users the best facilities that science, modern equipment, skilled operation and careful management can bring to telephone speech. But these facilities can be fully effective only when they are properly used.

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One Policy, One System, Universal Service, and all directed toward Better Service

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State Experiment Stations, Horticulturists and Farm Papers now acknowledge that Nitrogen is the limiting element in successful Fruit Growing and are recommending the use of

Nitrate of Soda

2 to 10 pounds per tree to furnish this Nitrogen because it is immediately available.

Your own station will advise you how to treat your own orchard. My *Free Bulletin Service* will give you much useful advice on fertilizing all kinds of crops. If you wish to receive it send me your name and address and to identify this advertisement and the number 1719

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FRUIT AND ORCHARD

Edited by FRANK D. WELLS

SPRAY RINGS IMPROVE FARM ORCHARD PRODUCTION

THE co-operative spray ring, developed in connection with demonstrations in orchard spraying, is solving the problem of spraying the small home orchard, for an increasing number of farmers, according to reports to the United States Department of Agriculture. While the plan has been used most extensively in Iowa, farmers in Minnesota, Missouri, Wisconsin, Illinois, and Ohio find it a good method, and on the Atlantic Coast several counties in Connecticut and New Jersey organized rings in 1921. In Iowa, the number of counties reporting the organization of spray rings increased from 16 in 1921, to 31 in 1922. Seven counties in Illinois report new spray rings in 1922. Stark County, Illinois, which organized two rings in 1921, has become so interested in the care of the farm orchard that six power-machine rings and five hand-machine rings were organized in the summer of 1922, serving more than 100 home orchards.

The plan of organization of these rings is kept as simple as possible. The men interested in spraying get together at one of the extension meetings and decide to try co-operative spraying. Usually a written agreement covering the method of managing business matters and the ownership of equipment of the ring is prepared and signed. The kind of equipment, hand and power, is selected and the cost apportioned, a schedule is made out, and the members decide whether each man will do his own spraying with the co-operative equipment, whether some one member will spray all the orchards for an agreed labor price, or whether an outside person will be hired to do the work. Each of the three plans has proved satisfactory. In Poweshiek County, Iowa, they have found it most convenient to do the work individually; in Stark County Illinois, the same plan is followed. In Union County, Iowa, the sons of two farmers operated the power machine last season, one furnishing a team and the other a gasoline engine. They sprayed 14 orchards, some 1,500 trees, completing each spray in two days, the members giving little or no attention to the work. Students of Runnells Consolidated School in Polk County, Iowa, sprayed practically all the orchards in their community. Advice as to sprays and time of applying is usually obtained from the county agent.

The size of the ring varies, averaging from 3 or 4 members in the smallest ones to 20 or more in the larger. The cost of operation depends, of course, on several factors, the type of equipment, whether labor is employed or the work done by members for themselves, the distance between orchards, the number of sprays put on, and similar items. For one orchard in Webster County, Iowa, where 4 sprays were applied, the average cost of material per tree was 37c, labor 33c, depreciation on machinery 5c, making a total cost of 75c per tree for the four sprays. A Union County, Iowa, ring spent $210 for equipment, material, and the labor of two men and teams, and sprayed 1,500 trees four times. A twelve-orchard ring organized in Johnson County, Iowa, several years ago, spends about 15c per tree per spray. The results, according to the owners, more than justify the small expenditure. In every case where the spraying was done as advised last season, the work accomplished its object and the members had plenty of clean, sound homegrown apples to store for winter use. The Webster County orchard produced 99 per cent clean fruit. Fayette County, Iowa, reports in the sprayed orchards 75 per cent of the fruit as clean and sound, and 25 per cent scabby and wormy; the unsprayed orchard 15 per cent sound, clean fruit and 85 per cent scabby and wormy. Walworth County, Wisconsin, spray ring members figured in 1922 a return of $852 for each dollar spent in spraying. The bearing trees were sprayed three times.

Results of spray ring work in Hardin County, Iowa, in fact, were so good in 1922 that the disposal of the surplus fruit was a problem, as none of the members had had any experience in picking, packing, or grading apples. Twenty-five men were shown by extension workers how to pick and pack their apples, using homemade equipment, and the surplus apples were put on the market in baskets and boxes packed according to market grades.

COULD COLLECT INTEREST

(Continued from Page 6)

on October 15, 1918, and was to pay $150 every six months thereafter that would make his first payment after April 15, 1919, October 15, 1919. I dated it April 15 to October 15, 1919, but I should have dated it October 15, 1918 to April 15, 1919 therefor, giving him credit as though it was paid in advance. He took a bank mortgage on his place several days ago. I gave him deed and abstract but was unable to collect the last 5 months interest because he says it shows he paid up until April 15, 1923. Would I be able to collect interest under those conditions by going to court? It is written with pen and ink.—A Subscriber, Oakwood, Michigan.

—You say the contract was entered into on Oct. 15, 1918 and required the purchaser to pay $150.00 every six months thereafter. I don't see how that would make this first payment fall due on October 15, 1919, computing the time, as you say, from April 15, 1918.

If the contract was dated Oct. 15, 1918, and the first installment was paid on April 15, 1919, according to its terms, I am of the opinion the interest on this installment could be collected, as well as interest on all other installments which were not actually paid in advance.—Asst. Legal Editor.

RUNS INTO COW

When driving home one evening I ran into a cow with my car. I had good lights, but it was storming, and the cow was not being driven by any one. My car was damaged considerable. Can I collect damage for my car? The cow had been at liberty to run on the road for some time and in all kinds of weather. She ran in front of the car, too close for me to stop. This happened about 10:30 at night.—A. C., Milkado, Michigan.

—There is a statute in Michigan prohibiting owners from letting their cattle run at large on the highways, except in those townships in which it is permitted by the township. If the by-laws of your township do not allow cattle to run at large, I am of the opinion you could collect from the owner of the cow for damages done your car.—Asst. Legal Editor.

SKUNK HIDE TANNING FOR ROBE

Will you please let me know through your next issue how to tan skunk hides for a robe? I am a subscriber and like the paper very much. I am always ready to read when it comes.—G. V., Kingsley, Mich.

—The method recently explained for tanning small fur pelts is all right which is as follows:

Flesh the skins carefully, then soak say two hours in the following liquor: Four gallons of cold, soft water; one-half ounce borax; one half pint salt; one ounce of sulphuric acid. This will prepare the hides for the tanning liquor. Now take two gallons of cold, soft water; one-fourth pound of pulverized oxolic acid; one quart of salt. Put the skins in this and leave them there about two days or until no dense spots are to be seen. When tanned remove the skins, wring them dry, then hang them in the shade and pull and work while drying as this tends to make the hide soft. Skunk hides are usually pretty greasy yet if the hides when working with them appear harsh and dry grease with unsalted butter.

When making the first liquor add the sulphuric acid last, pouring it in slowly and stirring all the time. The quantities of the various articles mentioned are sufficient to tan from six to a dozen skunk hides depending on the size.—Fur Editor.

THE UPPER ROOM REVELATION

A SERMON BY REV. DAVID F. WARNER

Read Acts 1:6-14; 2:1-4.

TEXT: "But ye shall receive power, when the Holy Spirit is come upon you; and ye shall be my witnesses both in Jerusalem, and in all Judea and Samaria, and unto the uttermost parts of the earth."—Acts 1:8.

SUNDAY School folks for six months have been following our Lord to the "upper room." But how many entered? How many joined the inner circle with Peter, James, John, and the rest?

But interest and curosity have led many Oriental travellers to seek the location of the "upper room." Tradition has built there a Christian church. We may not know the site accurately; but we do know the Bible makes the "upper room" a place of more than ordinary interest and significance. And Acts deepens our interest if we understand that this "upper room" is the founding place of corporate Christianity, or the Church. Christianity began when John exclaimed "Behold, the Lamb of God, that taketh away the sin of the world." But the church as spiritually organized and set apart, began in the "upper room" at Pentecost. Here the disciples waited, prayed, and expected until they were endued with a spiritual revelation; the promised power.

This empowering was unto service; unto witnessing. "And they began to speak with other tongues." "O, for a thousand tongues to sing my dear Redeemer's praise." But have you put into faithful use the one tongue you have? Do you remember when you were baptized in the Holy Spirit? Did you feel personally saved? Were you satisfied with that? But we are not to be satisfied until the "uttermost parts" are saved. And now, how about your city—your "Judea and Samaria?"

Well, how may we know when the "uttermost parts" come within the horizon of our spiritual vision and within the reach of our help? The summer days were long and sometimes lonesome in a Michigan grocery store. My merchant friend, being a Christian, prayed "without ceasing." Hours were spent with his Bible. And, lo! one day there rushed in on the plane of his vision the sight of the "uttermost parts;" of sinning, suffering men. He heard the call of God to every man. But for him it meant to live and labor with a foreign folk. And he did. Even so, our horizon is to be extended as to include, sacrifically, "Greenland's icy mountains and India's coral strands." This has to do with vision; and vision has to do with providedness, and prayer. "A Christian on his knees," says Griffith Thomas, "sees farther than a philosopher on his tip-toes."

But, according to our text, we are empowered to witness to the Truth. "What it truth?" The world is ever repeating Pilate's question. Perhaps in no other day has there been such a widened quest for truth. Yet most folks are straddlers. If truth means a sacrifice of comfort, money, prestige, or pleasure, error is more welcome.

But when Christ said "I am the Truth," He did not refer, in the first intention, to what was written in text books, taught in the schools, or worked out in the laboratories. The opinions of men may and do have some truth, but Christ meant originially and now, the truth about the mission and destiny of men, about this life and the next; even the truth about God.

Now, regarding these things, the War brought a decided awakening. Bibles could hardly be made fast enough. The late war may be called one of religions. Or as vice-president Marshall said at the time, "a war between Bethlehem and Berlin." The moral forces of this war revolved about the character of God. Was he a God that had decreed that the masses of men were but chattels to be minipulated at the will of political overlords? Or was he a God who made man in his image and all men equal and brothers? That provided for the healing of the sick, the return of the prodigal, and the deliverance of the oppressed? This is the revealed Truth that we are called to vindicate.

Note the happy abandon in which the early church went to work. What an example of brotherliness! "And the things he possessed was his own ." "There is not one single race of men," said Justin Martyr, in the second century, "whether barbarians or Greeks, or whether they be called nomands or vagrants, or herdsmen dwelling in tents, among whom prayers and giving of thanks are not offered thru the name of the crucified Jesue." What magnanimous surrender to Truth! And in our day a missionary who was offered a threefold increase in salary to teach school, declined, saying "China must have the Gospel tho I starve." This is the kind of service that impresses one as devotion to Christian truth.

Does devotion to others pay? A little Welsh boy lay dangerously ill. The mother walked five miles in the night to get a doctor. The physician hesitated. "Will it pay," said he to himself. "If the baby gets well he will be but a poor laborer." But professional duty conquered and he went. The boy got well and became Lloyd George of England. Did it pay to save a prime minister, who in the time of a world crisis, made a passionate public appeal for the ushering in of the reign of the Prince of Peace on earth? Our Lord's call to every man out of this night of world confusion, is a faithful discharge of duty as Truth lights the way, and some day he shall understand it paid.

Yes, Christ is the truth. Yet, as a religious leader, he was the most calamitous failure the world has ever known; measured by the standards of his own generation. Why? Because of his adherence to Truth. "To this end have I been born, that I should bear witness to the truth," said he. (And so have you my friend). But measured in the thought of our own generation, this man is irresistable as the incarnate truth of God. To be sure, there is yet much error and a lot of pharisaism and hypocrisy. What is hypocrisy? It is burlesqueing truth before the world. It is making life a stage performance. And every man who is ambitious for his OWN success, has fallen heir to this temptation. But Jesus was not anxious for personal success nor desirous of a broad field. He cared only to be an uninterrupted channel of truth. He knew he possessed the gift of a world redemption, and unparalleled power to achieve it. He knew men stood in crying need of the personal and social salvation that he, only, could provide. (And they do yet.) So he must witness to this truth, though he had to pronounce some of the church leaders of the day as snakes, liars, and murderers; and lose the understanding and sympathy of friends. And were he to make a second advent today, can you imagine what he would say to quarreling church factions, unsocial religious leaders, and all the enemies of revealed truth?

At Camp McArthur, a regiment was at the depot to entrain for France. A good, but very ordinary man who had helped the soldier boys much, was there. He asked the commanding officer if he might pray for the boys? He did so while all was quiet. Then, stepping forward, the officer said, "Men, I have never been a Christian, but I want here and now to acknowledge my allegiance to Jesus Christ as my Lord and Savior."

This man of just the common garden variety, had been in the "upper room" with Christ. And true to its demands he became a living witness to Truth as he had experienced it, robbing life of hell in his own narrow field.

Are you ready to stand, my friends, along side of Him, who through living in the midst of error and hypocrisy, even among a set of despicable liars and murderers, stood calm and reposed upon the impregnable rock of truth? You will find power in the "upper room."

"I built my soul an upper room,
  A place of prayer;
Where, free from all disturbances,
  From doubt and care,
Serene it rests. And thou, dear Christ
  Art always there.

God grant that when I leave this room
  For tasks below;
The peace that I have found may from
  My spirit flow,
'Till those I meet build upper rooms
  And thither go."

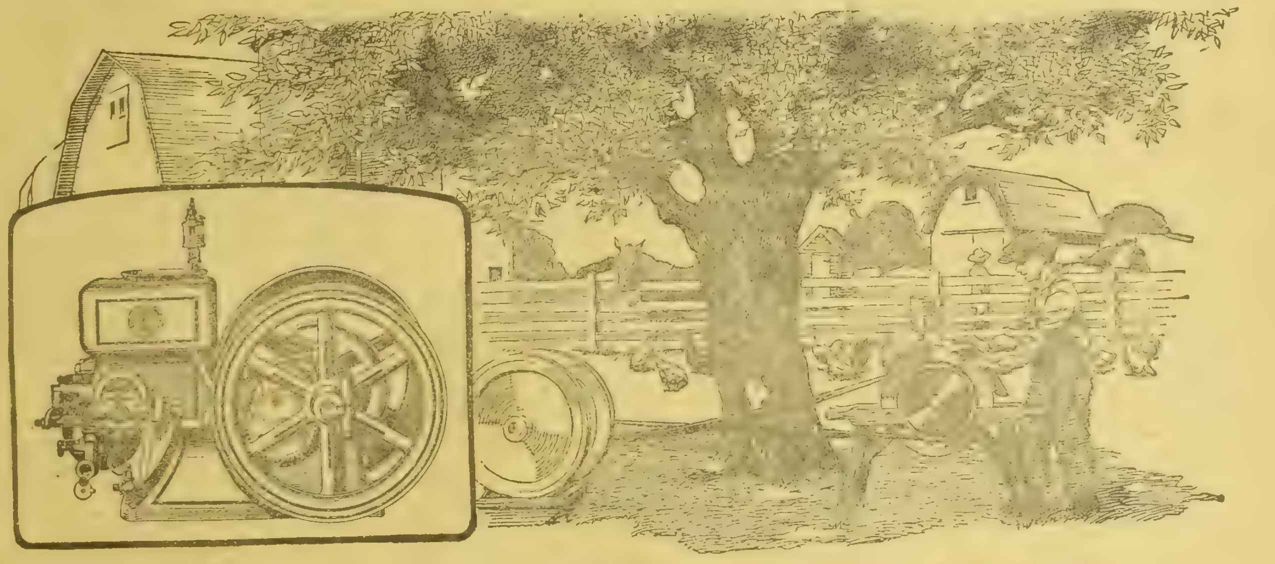
GRAIN CROPS OF ARGENTINA

FIRST official estimates of 1922-1923 grain production in the Argentine have just been received by the Department of Commerce from Consul General W. Henry Robertson and shows a production of 5,281,718 metric tons of wheat, 1,175,575 tons of linseed, oats, 793,484, barley, 130,171 and rye, 64,197. While there is a natural variation in the yields of the various provinces, the whole crop of grains is thought to be satisfactory.

A LAUDIBLE AMBITION

"I want to do something big and clean before I die."

"Wash an elephant."—News from Home.



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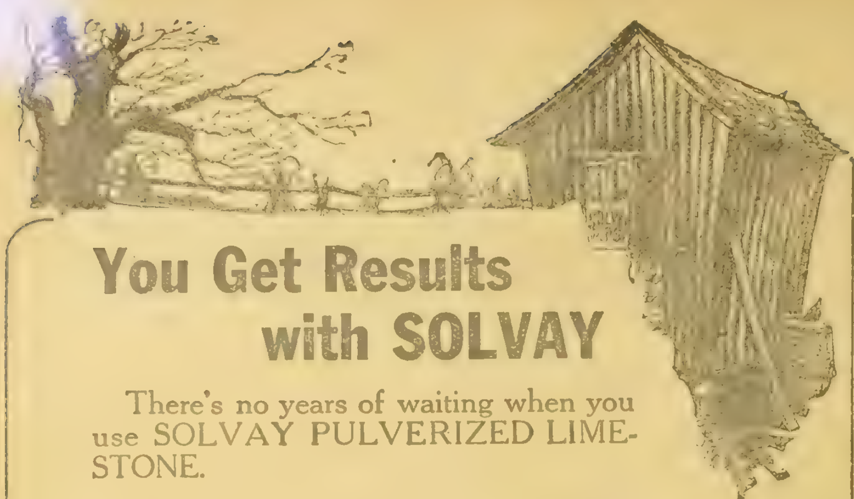

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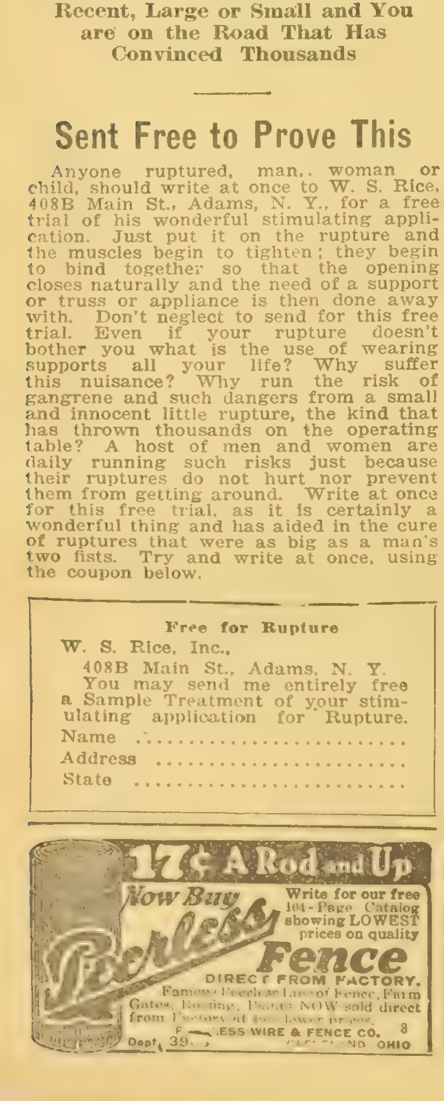

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THE HUNTED WOMAN

(Continued from Page 8)

hands—why, then you may deal yourself a hand if you like, Donald. It may be a bigger game than One against One."

"It will," rumbled MacDonald. "I learned other things this afternoon, Johnny. Quade did not stay behind. He went with Rann. DeBar and the woman are with them, and two other men. They went over the Lone Cache Pass, and this minute are hurrying straight for the headwaters of the Parsnip. There are five of 'em—five men."

"And we are two," smiled Aldous. "So there is an advantage on their side, isn't there, Mac? And it makes the game most eminently fair, doesn't it?"

"Johnny, we're good for the five!" cried old Donald in a low, eager voice. "If we start now——'

"Can you have everything ready by morning?"

"The outfit's waiting. It's ready now, Johnny."

"Then we'll leave at dawn. I'll come to you to-night in the coulee, and we'll make our final plans. My brain is a little muddled now, and I've got to clear it, and make myself presentable before supper. We must not let Joanne know. She must suspect nothing—absolutely nothing."

"Nothing," repeated MacDonald as he went to the door.

There he paused and, hesitating for a moment, leaned close to Aldous and said in a low voice:

"Johnny, I've been wondering why the grave were empty. I've been wondering why there weren't somebody's bones there just to give it the look it should 'a' had, an' why the clothes were laid out so nicely with the watch an' the ring on top!"

With that he was gone, and Aldous closed and relocked the door.

He was amazed at his own composure as he washed himself and proceeded to dress for supper. What had happened had stunned him at first, had even terrified him for a few appalling moments. Now he was superbly self-possessed. He asked himself questions and answered them with a promptness which left no room for doubt in his mind as to what his actions should be. One fact he accepted as absolute; Joanne belonged to him. She was his wife. He regarded her as that even though Mortimer FitzHugh was alive. In the eyes of both God and man FitzHugh no longer had a claim upon her. This man, who was known as Culver Rann, was worse than Quade, a scoundrel of the first water, a procurer, a blackmailer, even a murderer—though he had thus far succeeded in evading the rather loose and poorly working tentacles of mountain law.

Not for an instant did he think of Joanne as Culver Rann's wife. She was his wife. It was merely a technicality of the lay—a technicality that Joanne might break with her little finger—that had risen now between them and happiness. And it was this that he knew was the mountain in his path, for he was certain that Joanne would not break that last link of bondage. She would know, with Mortimer FitzHugh alive, that the pledge between them in the "coyote," and the marriage ceremony in the room below, meant nothing. Legally, she was no more to him now than she was yesterday, or the day before. And she would leave him, even if it destroyed her, heart and soul. He was sure of that. For years she had suffered her heart to be ground out of her because of the "bit of madness" that was in her, because of that earlier tragedy in her life—and her promise, her pledge to her father, her God, and herself. Without arguing a possible change in her because of her love for him, John Aldous accepted these things. He believed that if he told Joanne the truth he would lose her.

His determination not to tell her, to keep from her the secret of the grave and the fact that Mortimer FitzHugh was alive, grew stronger in him with each breath that he drew. He believed that it was the right thing to do, that it was the honorable and the only thing to do. Now that the first shock was over, he did not feel that he had lost Joanne, or that there was a very great danger of losing her. For a moment it occurred to him that he might turn the law upon Culver Rann, and in the same breath he laughed at the absurdity. The law could not help him. He alone could work out his own and Joanne's salvation. And what was to happen must happen very soon—up in the mountains. When it was all over, and he returned, he would tell Joanne.

His heart beat more quickly as he finished dressing. In a few minutes more he would be with Joanne, and in spite of what had happened, and what might happen, he was happy. Yesterday he had dreamed. To-day was reality—and it was a glorious reality. Joanne belonged to him. She loved him. She was his wife, and when he went to her it was with the feeing that only a serpent lay in the path of their paradise—a serpent which he would crush with as little compunction as that serpent would have destroyed her. Utterly and remorselessly his mind was made up.

The Blacktons' supper hour was five-thirty, and he was a quarter of an hour late when he tapped at Joanne's door. He felt the warmth of a strange and delightful embarrassment flushing his face as the door opened, she stood before him. In her face, too, was a telltale riot of colour which the deep tan partly concealed in his own.

"I—I am a little late, am I not, Joanne?" he asked.

"You are, sir. If you have taken all this time dressing you are worse than a woman. I have been waiting fifteen minutes!"

"Oid Donald came to see me," he apologized. "Joanne——"

"You mustn't, John!" she expostulated in a whisper. "My face is afire now! You mustn't kiss me again until after supper——"

"Only once," he pleaded.

"If you will promise—just once ——"

A moment later she gasped:

"Five times! John Aldous, I will never believe you again as long as I live!"

They went down to the Blackton's, and Peggy and Paul, who were busy over some grownig geraniums in the dining-room window, faced about with a forced and incongruous appearance of total oblivion to everything that had happened. It lasted less than ten seconds. Joanne's lips quivered. Aldous saw two little dimples at the corners of her mouth fighting to keep themselves out of sight—and then he looked at Peggy. Blackton could stand it no longer, and grinned broadly.

"For goodness sake go to it, Peggy!" he laughed. "If you don't you'll explode!"

The next moment Peggy and Joanne were in each other's arms, and the two men were shaking hands.

"We know just how you feel," Blackton tried to explain. "We felt just like you do, only we had to face twenty people instead of two. And you're not hungry. I'll wager that. I'll bet you don't feel like swallowing a mouthful. It had that peculiar effect on us, didn't it, Peggy?"

"And I—I almost choked myself," gurgled Peggy as they took their places at the table. "There really did seem to be something thick in my throat, Joanne, dear. I coughed and coughed and coughed before all those people until I wanted to die right there! And I'm wondering—"

"If I'm going to choke, too?" smiled Joanne. "Indeed not, Peggy. "I'm as hungry as a bear!"

And now she did look glorious and self-possessed to Aldous as she sat opposite him at that small round table, which was just fitted for four. He told her so when the meal was finished, and they were following the Blacktons into the front room. Blackton had evidently been carefully drilled along the line of a certain scheme which Peggy had formed, for in spite of a negative nod from her , which signified that he was to wait a while, he pulled out his watch, and said:

"It isn't at all surprising if you people have forgotten that to-morrow is Sunday. Peggy and I always do some Saturday-night shopping, and if you don't mind, we'll leave you to care for the house while we go to town. We won't be gone more than an hour."

A few minutes later, when the door had closed behind them, Aldous led Joanne to a divan, and sat down beside her.

"I couldn't have arranged it better

myself, dear," he exclaimed. "I have been wondering how I could have you alone for a few minutes, and tell you what is on my mind before I see MacDonald again to-night. I'm afraid you will be displeased with me, Joanne. I hardly know how to begin. But—I've got to."

A moment' uneasiness came into her eyes as she saw how seriously he was speaking.

"You don't mean, John—there's more about Quade—and Culver Rann?"

"No, no—nothing like that," he laughed, as though amused at the absurdity of her question. "Old Donald tells me they have skipped the country, Joanne. It's not that. It's you I'm thinking of, and what you may think of me a minute from now. Joanne, I've given my word to old Donald. He has lived in my promise. I've got to keep that promise—I must go into the North with him."

She had drawn one of his hands into her lap and was fondling it with her own soft palm and fingers.

"Of course, you must, John. I love old Donald."

"And I must go—soon," he added.

"It is only fair to him that you should," she agreed.

"He—he is determined we shall go in the morning," he finished, keeping his eyes from her.

For a moment Joanne did not answer. Her fingers interweaved with his, her warm little palm stroked the rough back of his hand. Then she said, very softly:

"And why do you think that will displease me, John, dear? I will be ready!"

"You!"

Her eyes were on him, full, and dark, and glowing, and in them were both love and laughter.

"You dear silly John!" she laughed. "Why don't you come right out and tell me to stay at home, instead of—of—'beating 'round the bush'—as Peggy Blackton says? Only you don't know what a terrible little person you've got, John. You really don't. So you needn't say any more. We'll start in the morning—and I am going with you!"

In a flash John Aldous saw his whole scheme shaking on its foundation.

"It's impossible—utterly impossible!" he gasped.

"And why utterly?" she asked, bending her head so that her soft hair touched his face and lips. "John have you already forgotten what we said in that terrible cavern—we told ourselves we would have done if we had lived? We were going adventuring, weren't we? And we are not dead—but alive. And this will be a glorious trip!—Why, John, don't you see, don't you understand? It will be out honeymoon trip!"

"It will be a long, rough journey," he argued. "It will be hard—hard for a woman."

With a little laugh, Joanne sprang up and stood before him in a glow of light, tall, and slim, and splendid, and there was a sparkle of beautiful defiance and a little of triumph in her eyes as she looked down on him.

"And it will be dangerous, too? You are going to tell me that?"

She came to him and rumpled up his hair, and turned his face up so that she could look into his eyes.

"Is it worse than fever, and famine, and deep swamps, and crawling jungles?" she asked. "Are you going to encounter worse things than beasts, and poisonous serpents, and murderous savages—even hunger and thirst, John? For many years we dared those together—my father and I. Are these great, big, beautiful mountains more treacherous than those Ceylon jungles from which you ran away—even you, John? Are they more terrible to live in than the Great African Desert? Are your bears worse than tigers, your wolves more terrible than lions? And if, through years and years, I faced those things with my father, do you suppose that I want to be left behind now, and by my husband?"

So sweet and wonderful was the sound of that name as it came softly from her lips, that in his joy he forgot the part he was playing, and drew her close down in his arms, and in that moment all that remained of the scheme he had built for keeping her behind crumbled in ruin about him.

Yet in a last effort he persisted.

"Old Donald wants to travel fast—very fast, Joanne. I owe a great deal to him. Even you I owe to him—for he saved us from the 'coyote.'"

"I am going, John."

"If we went alone we would be able to return very soon."

"I am going."

"And some of the mountains—it is impossible for a woman to climb them!"

"Then I will let you carry me up them, John. You are so strong—

He groaned hopelessly.

"Joanne, won't you stay with the Blacktons, to please me?"

"No. I don't care to please you."

Her fingers were stroking his cheek.

"John?"

"Yes."

"Father taught me to shoot, and as we get better acquainted on our honeymoon trip I'll tell you about some of my hunting adventures. I don't like to shoot wild things, because I love them too well. But I can shoot. And I want a gun!"

"Not a toy—but a real gun," she continued. "A gun like yours. And then, if by any chance we should have trouble—with Culver Rann—"

She felt him start, and her hands pressed harder against his face.

"Now I know," she whispered. "I guessed it all along. You told me that Culver Rann and the others were after the gold. They've gone—and their going isn't quite 'skipping the country' as you meant me to understand it, John Aldous! So please let's not argue and more. If we do we may quarrel, and that would be terrible. I'm going. And I will be ready in the morning. And I want a gun. And I want you to be nice to me, and I want it to be our honeymoon—even if it is going to be exciting!"

And with that she put her lips to his, and his last argument was gone.

Two hours later when he went to the coulee, he was like one who had come out of a strange and disturbing and altogether glorious dream. He had told Joanne and the Blacktons that it was necessary for him to be with MacDonald that night. Joanne's good-night kiss was still warm on his lips, the loving touch of her hands still trembled on his face, and the sweet perfume of her hair was in his nostrils. He was drunk with the immeasurable happiness that had come to him, every fibre in him was aquiver with it—and yet, possessed of his great joy, he was conscious of a fear; a fear that was new and growing, and which made him glad when he came at last to the little fire in the coulee.

He did not tell MacDonald the cause of this fear at first. He told the story of Mortimer FitzHugh and Joanne, leaving no part of it unbared, until he could see Donold MacDonald's gaunt hands clenching in the firelight, and his cavernous eyes flaming darkly through the gloom. Then he told what had happened when the Blacktons went to town, and when he had finished, and rose despairingly beside the fire, Donald rose, too, and his voice boomed in a sort of ecstasy.

"My Jane would ha' done likewise," he cried in triumph. "She would that, Johnny—she would!"

"But this is different!" groaned Aldous. "What am I going to do, Mac? What can I do? Don't you see how impossible it is! Mac, Mac—She isn't my wife—not entirely, not absolutely, not in the last and vital sense of being a wife by law! If she knew the truth, she wouldn't consider herself my wife; she would leave me. For that reason I can't take her. I can't. Think what it would mean!"

Old Donald had come close to his side, and at the look in the gray mountaineer's face John Aldous paused. Slowly Donald laid his hands on his shoulders.

"Johnny," he said gently, "Johnny, be you sure of yourself? Be you a man, Johnny?"

"Good heaven, Donald. You mean ——"

(Continued in May 26th Issue)

THE WRONG MAN

A rookie was reading an article about the kaiser which compared him to Nero. "Who was Nero, Bill?" he asked a fellow rookie. "Wasn't he a man that was always cold?"

"Naw," was the reply, "that was Zero, another guy altogether."

A NORWEGIAN BOY'S ESSAY ON THE FROG

"What a wonderful bird the frog are
When he stand he sit, almost;
When he hop, he fly, almost;
He ain't got no sense, hardly;
He ain't got no tail, hardly either.
When he sit, he sit on what he ain't got, almost."

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Edith E. Harper
San Francisco, Cal.

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Minneapolis, Minn.

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Justin G. Mayers
Chicago, Ill.

This is the eighth car I have owned and am glad to state that I have been more pleased with the Oakland than any other.
W. A. Lang
Racine, Wis.

I purchased my car March 1, 1922, and up to the present time have run 21,500 miles without grinding the valves or cleaning the carbon.
George O. Dilling
Altoona, Pa.

We made the trip to Los Angeles (3,625 miles) in 20 days. No trouble or breakage on road, except two punctures.
Harold Hunt
Lowell, Mass.

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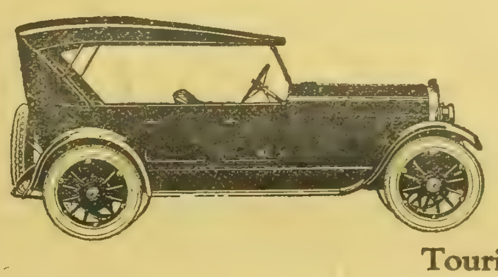

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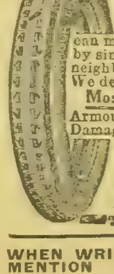

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We will not knowingly accept the advertising of any person or firm who we do not believe to be thoroughly honest and reliable. Should any reader have any cause for complaint against any advertiser in these columns, the publisher would appreciate an immediate letter bringing all facts to light. In every case when writing say: "I saw your advertisement in The Michigan Business Farmer!" It will guarantee honest dealing

"The Farm Paper of Service"

AGRICULTURAL OUTLOOK GOOD

WASHINGTON, May 5, 1923.—The general agricultural outlook now is probably the best it has been in three years says the United States Department of Agriculture in its regular monthly review issued to-day. The domestic market for farm products is reported to have improved measurably as a result of increased prosperity in urban communities, but that the prospective foreign demand for American farm products is not as good this year as it was a year ago.

"When labor is fully employed and wages high," the department says, "farm products find a readier sale and better prices. This is what has helped to sustain the price of hogs this spring,, likewise lambs, cattle, dairy products, eggs, and certain vegetables."

THE SAME OLD STORY

OF course it had to happen! They had been in session so long, and tried to do so much! But Governor Groesbeck vetoed the gasoline tax bill, (which had passed both houses with enough votes to prove that the legislature knew what they wanted) and of course, any measure which he would sponsor must be assassinated and promptly buried by the "bitter-enders."

And that was exactly what did happen in Lansing last Saturday.

The House voted down the Smith Automobile Weight Tax Bill by a vote of 56 to 41, and in so doing they sacrificed their own two pet measures, the Byrum Income Tax and the Meggison Primary School Fund Bill, because everyone knew that if the House voted down the Weight Tax Bill, the Senate would get immediate revenge in refusing the passage of the two bills mentioned.

Now it appears that in order to complete, or even to keep abreast of the highway requirements of the state, it will be necessary for the Governor to call an extra session, and before long, because the people of Michigan will demand that the expensive road system now completed be maintained, and that some of the uncompleted units in the state trunk lines be filled in.

The Business Farmer is still convinced that the most profitable of public improvements is the building of good roads, and that the maintenance of these roads is important, but we are equally convinced that some method of taxation must be arrived at, which will make those who use the roads pay the greater part of their upkeep, whether this should come from a gasoline tax, as it does in a great many states, or from an increased weight tax, is in our opinion of lesser importance than that we tolerate no costly procrastination in our good roads program.

Whether we must have a gasoline tax or a weight tax to make the automobile owner pay the greater part of the good roads tax, the fact remains that the people of Michigan will not permit this vital question to go unanswered, and it is regrettable that to answer it, the state must now be put to the expense of an extra legislative session, simply because of stubbornness.

DOCTOR FRIDAY STILL OPTIMISTIC!

DAY by day, in every way, Dr. Friday, President of the Michigan Agricultural College, becomes more convinced that the present trend of farmer boys and farm labor to the city, attracted there by the high prices paid in the automobile and other industrial plants, will in the end rebound to the improvement of agricultural conditions in Michigan and other states.

An interview just published quotes Dr. Friday as saying that present conditions "are merely verifying what I have been predicting all along, that the balance will soon be restored between the cost of what a farmer has to buy and the price he will receive for his products. And they indicate, also, that the coming season is to be one of great prosperity for the young men who are willing to remain on the farm and can produce within their own labor resources; granting, of course, that they grow crops that are in demand here in Michigan."

Probably no man in America enjoys a higher reputation than Dr. Friday as an economist, and after all, an economist is only a prophet of future conditions, based on past experience. Michigan is indeed fortunate to have such a man at the head of its agricultural college, and whether or not the average farmer has in the past believed in watching foreign markets and crop conditions throughout the world, he is doing so now after the disastrous experience which pitched him headlong into the basement of farm produce prices the past two years.

The encouraging sign is, that agricultural products are showing an increase in export, but this does not mean that the farmer in Michigan should grow any crop which depends on the export market for its sale.

Michigan is rapidly developing as an industrial state, as Dr. Friday pointed out in a recent article which we reprinted completely in The Business Farmer. There is no longer any need for our farmers trying to compete as wheat growers with Argentine and the Ukraine.

There is a market, in Detroit and other industrial centers of Michigan which are growing at an unprecedented rate, for a great proportion of the agricultural products of the state. Already a milk shortage in the Detroit area is promised should we have a dry summer.

The hopeful thing about all of this is, that the farmers of no state in America, are in a better position for making money out of their farming operations in this year, 1923, than are the farmers of our own state!

REFORESTATION IN MICHIGAN

AS Senator James Couzens so ably states on page four of this issue, one of the most necessary guarantees for the future prosperity of the state of Michigan, can be secured through reforestation.

Fortunately, the Michigan Legislature, just before closing its hectic session, joined hands in unanimously passing the Meggison-Sargant Bill, which provides for a deferred tax on forest growth.

Under the terms of this bill the owner of any timber land, or lands chiefly valuable for the growth of timber, within this state, may apply to the Commissioner of Agriculture to have such property set apart for the growth of timber. If, after investigation his application is approved by the Commissioner of Agriculture the land shall thereafter be taxed at the rate of 5 cents per acre annually.

After a twenty-five year period, the timber would be subject to cutting, under general control of the Commissioner of Agriculture, who would guard against wasteful methods. At this time the owner of the timber would be assessed a tax equal to 25% of the stumpage value of the timber cut, to be paid into the state treasury. There is a provision in the bill which would prevent it from working a hardship on any local unit, as it provides that "The State Administrative Board may, in its discretion, advance to the township in which any forest preserve lands lie, a sum each year out of the general fund of the state, as will compensate them for the amount of taxes which would be collectible from any such forest preserve lands had they not been registered."

It is seldom that a legislative body can be made to look so far ahead as twenty-five years, and Michigan has taken a forward step which will place it among the leaders of conservation in the United States.

THE CASE BILL PASSED

THE Business Farmer is being given some credit at Lansing for its last minute appeal in favor of the Case Bill to prevent unlawful discrimination in the purchase of potatoes, and very wisely an amendment was made which makes it include grain and beans. That our readers made themselves known at Lansing is proven by the fact that this bill passed the House by a vote of 85 to 3.

As was pointed out in the last issue this bill was intended primarily to protect the cooperative elevators and farmers marketing organizations from the unfair competition practiced by the old line dealers. It has been the common practice by a few unscrupulous dealers to temporarily pay more than the market price in a town where a small or cooperative elevator was trying to get a start. These dealers were able to pay this higher price, for a short time, in a few localities, because they were paying the farmer much less than the market price in localities where they had no competition.

The only thing that will make this law effective is for the farmer to report cases which infringe on this law. There will be no police force or system of inspection to make this law effective other than the direct report of the officers of marketing organizations or their members. This is, in our opinion, one of the most practical and helpful laws passed for the benefit of the farming business in Michigan by the present legislature.

FAIR CARNIVALS ARE EXPENSIVE

OUT in Oklahoma the Agricultural College made a survey of that state which showed that 41 County fairs had carnivals as part of their attractions last fall. These carnivals furnish the complete midway, a whole street of attractions on the Michigan Sate Fair midway pany and travel as a unit. These 41 carnivals took $114,800 out of the counties in which the fairs were held.

There are no available figures showing the number of these amusements held in Michigan or the amount which they take out of the country, but we would venture the statement that more than this amount was collected by the attractions on the Michigan State Fair Midway alone last year.

We do not hope to see the midway abandoned on our state or county fair grounds for the very obvious reason that they contribute largely to the support of the fair, and it will take a daring fair management to eliminate this or any other profit producing attraction.

The responsibility rests with the management of the fairs. Every feature of every show or attraction on the midway should be investigated prior to and continually during the fair by a personal representative of the management.

Too often everything appears all right for the first day or two, but if the crowds are not coming as they should and the fair management has been appeased, the barker passes along the word, "the sky is the limit" and soon the sign hangs on the outside of the tent "standing room only!"

We want to see clean, entertaining, and instructive fairs in Michigan this fall, and we make "clean" our first requirement because we beleive that it is the feature in which most of uor fair have been lax.

THE SAVING IN STANDARDIZATION

THE automobile manufacturers of America have taught the industrial world a lesson which is so far-reaching in its importance to all users of machinery that it cannot easily be measured.

The automobile manufacturer proved that by standardizing every part down to the smallest bolt or screw the machine could be manufactured at half the cost where standardization was not practiced. The automobile today is an outstanding example of what standardization has done. Compare, if you please, what a thousand dollars would buy ten years ago and you will find that your dollar today, while it will purchase only a fraction of what it would in 1913 in clothing, shoes, or what-not, will buy much greater value in an automobile or truck.

The International Harvester Company have just made the announcement that for the past two or three years they have been diligently reducing every line of their machinery to the fewest number of pieces and a standardization in parts which makes it possible to secure repairs on the shortest notice.

If the manufacturers of farm machinery generally are following the lead of the Harvester Company and bolts, nuts, screws and the hundred and one small parts of farm machinery are being made standard and thus interchangeable it will be one of the best contributions ever made to the farming business,

THE SUGAR STRIKE

WOMEN'S organizations in each state have begun a buyer's strike on sugar; the same as was practiced during the war. Sugar has climbed over the ten cent mark and President Harding has approved the efforts of the agitators to thus reduce the consumption of sugar.

We have an idea that the strike will get nicely under way about the time the beet growers have a big crop to market. At least we predict that the manufacturers will report such a condition on or about the date set to determine the price paid for the farmer's beets!

PUBLISHER'S DESK

AMERICAN HORTICULTURE COMPANY QUITS

MANY Business Farmer readers have tried to collect claims against the American Horticulture Company, of Des Moines. We have had a large number of these claims on file, and we are sorry to announce that the company has gone into bankruptsy and we are placing these claims in the hands of F. E. Campbell, of Des Moines, who has been appointed receiver.

The American Horticulture Company opened up a spectacular business career a couple of years ago and advertised in an unusual manner with puzzle pictures. They received more business than they could handle, and then the depression period struck them. Before they could adjust their affairs, they were hopelessly in arrears and altho they struggled along, hoping to be able to take care of their creditors this spring by supplying stock to compensate their customers, they had to quit.

Fred Wright, the president of the American Horticulture Company, started another company, known as the Fred Wright Company, which tried to make enough money to pay off the indebtedness of the American Horticulture Company, but had little success.

It is understood that the liabilities are around $75,000 and the assets only a few thousand, so our hope of satisfying our readers claims is meager indeed. Luckily none of the individual claims are large.

STOCK TO PAY FOR ITSELF!

Dear Mr. Slocum: Do you know anything about —— -Coal Mining Company, at ———, Michigan? An agent of theirs came here with one of our friends who claimed he had been to the mine and that they were all right, and wanted us to sign a note for stock in the company. The agent claimed we would never have to pay a cent out as the company was paying 2% a month dividends, so my husband signed a note for 100 shares, $1,000, but I did not sign the note. We have 40 acres. We have a joint deed of the place. Now they claim the agent was a fraud, and that he should not have promised the dividends. We have witnesses that he said they were paying dividends, also that we would not have to pay any money out, that the dividends would pay the note and interest. That was the 19th of January. We have not received any shares. Is there any way of getting the notes back, as I think they are a fraud? Will you please investigate? Please let me know by private letter.—Mrs. P.

—I have written my reader that she had best place this claim in the hands of a local attorney immediately, because it will be money well invested to have legal protection from such sharks. What a pity it is that people will swallow such exaggerated statements as the foregoing.

Does it not stand to reason that if a company could pay 2% per month, or even 1% per month, that their entire stock issue would be taken up in a few minutes in any money mart?

Many times a legitimate manufacturing institution will have to secure additional capital for its business and because there is an element of speculation involved they must go to the general public to raise the funds. Many men have some savings which they can afford to speculate with, wisely or unwisely, but the minute a stock salesman starts making an extravagant claim, he ought to be shown the door, and mighty quickly, too.

"THAT MAN SILVERMAN!"

A couple of years ago the Business Farmer began receiving complaints regarding a man named Silverman on the Detroit market, who was advertising for produce, accepting it and then refusing to pay for it, through one subterfuge or another.

Securing no satisfaction we took it up with the Post Office Department, because most of the business had been done by mail, and although no criminal action was secured, apparently this man has disappeared from local haunts. This will answer one or two of our readers who have recently inquired about "that man Silverman."

WARREN McRAE'S FARM AGENCY

A reader advises that she has had a letter from the Chief of Police, Loganport, Indiana, in which he advises that he could find no office of the Warren McRae Agency, that McRae was making his home at a rooming house, and that he advised her not to send any money as "they were after the money and probably would not sell the farm." Have any of our readers heard from McRae lately, or has the Business Farmer made it too hot for him to do business in Michigan?

FROM ONE UNFORTUNATE

Having read in your excellent paper the way in which you have helped your readers, I am writing to see if you can help us. We read Warren McRae's ad and thinking we might dispose of our farm we did not wish to go to the city but the farm is too large for one man to work and it is next to impossible to get help, we wrote to him and he answered saying there were several farmers in his state who wished to look at Michigan farms so we sent him $10 as a listing fee when we received the communication which I will inclose and naturally we have heard no more from him. We realize now how foolish it was to trust some one we knew nothing about and am sorry your warning came too late for us. I think we have learned so next time we will write you for advice first. Am simply writing to ask if any thing can be done to get us back our ten dollars. Please do not publish our name, we don't wish our friends to know we were so "gullible."—S. B., Washtenaw County.

WORKERS' SERVICE BUREAU, JACKSONVILLE, FLA

Regarding this and other similar companies which advertise to pay a fixed sum for home addressing, and other home work, let me repeat my advice, to have nothing to do with a company which requires a down payment in order to secure some sort of employment.

RESULTS!

Received your card that you had taken up my claim and yesterday received my check, and a letter which I am enclosing. I am very thankful for your service. We have been readers of your wonderful farm paper for many years and think it a necessity in every farm home. I again thank you for your trouble, as I am positive I should not have received my money without your assistance. —Mrs. W. H., Harvard, Mich.

You surely get results when you go after things. I just got your card and by the same mail got check paying back my money they have kept three months. We surely appreciate what you are doing for your subscribers and surely expect to always take your most excellant paper. —Mrs. A. J. P., Jones, Mich.

I want to thank you for the prompt settlement made me. They did not hesitate to come to a settlement after receiving your letter. I am glad there is a way to wake them up. Thanking you again, I remain, Mrs. A. J. V., Gaylord, Mich.

I wish to thank you again for the quick settlement you secured for me from three different firms, during the past winter, which had owed me a great sum of money. Mrs. H. M. W., Fennville, Mich.

In regard to my camera, I received it after about three weeks delay. As they could not find my own they sent me a new one. Thank you very much for your services.—Mrs. L. F., Avoca, Mich.

I have today received the enclosed letter from Dr. containing check for $4.65. Thank you very much for your trouble.—J. W. H., Chase, Mich.

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KEEP THE BUSINESS FARMER COMING
SEE PAGE 28

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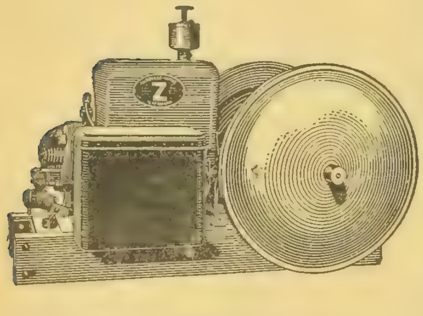

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KEEP THE BUSINESS FARMER COMING
SEE PAGE 28

What the Neighbors Say

MUCH PESSIMISM—SOME TRUTH

MAKING it easier to slide deeper in debt is not goin to cure a chronic disease gnawing at the very vitals of our agriculture, the cradle of a free people and the very first and last stand for hungry bellies. No loan or increased acreage yield will right the situation. What is needed is a cure not a deadener.

With agriculture the real giant in a business sense, and no voice in setting the price upon its products, but a never failing cost plus price upon his every purchase; bled white by marketing tolls is a real complicated disease that will not yield to cocaine treatment from Washington nor even Mr. Coue's suggestions.

With no voice in regulating the price of their products; forced willnilly to supply their wants in a home market protected by the highest tariff barriers in the world—thanks to the farm block support for which the farm world received a string of glass beads. The farmers are skinned from heel to head by the very system they helped to create with their vote.

The selling price of our products, in most cases produced by robbing the soil, contending with frosts, drowths, cyclones, floods and bugs is governed in the main by the selling price in the world's competing market under normal conditions, while our protected industries and transportation interests depend mainly upon the home market for its fat picking.

The only hope for brief periods of prosperity for our farm world is in foreign crop failures.

As our farm world must rely upon misfortune abroad for its occasional silver lining, one need not wonder why the farm game is losing its lure.

How a tree is to remain vigorous and bear fruit annually while continually starving its roots is just a little beyond my think tank.

Some how or another, the word "square deal" should carry a real meaning—and a jail sentence even in legislative halls when using it for bunk purposes.

Being half Irish, I am naturally an optimist—but not on the land question, unless I had reason to believe there was a little oil or mineral below.

I can not help but believe, unless some Moses appears upon the scene real soon, and this does not mean a plaster paris farmer, the peasant stage in America is just around the corner, and for this decaying situation, no one class of voters is more responsible than the cock-sure farmer, buncoed by the magic word "protection" in the childish belief that all property is distributed down from the top layers of society.

I haven't the least doubt but what this same view point was held sacred by old King Tut's well disciplined field slaves.—John G. Krauth, Presque Isle County.

WOW!!

THE Editor The Business Farmer—Yes, the gasoline tax went down in defeat, tho not inglorious. It was Groesbeck and Detroit who made inglorious asses of themselves. Two-thirds of the population of Michigan stood for the gas tax but Groesbeck and Detroit bullied and bossed till it was defeated.

If the weight tax becomes a law, our car stays in the garage till Michigan has a decent form of government; or we can move. We prefer to move.

Michigan boasts of progression, intelligence and good government. I wish we might see the effect of these fine qualities somewhere.—G. E. Wise, Hart, Mich.

A FOOL TARIFF TO FOOL FARMERS

NURSERYMAN Harry S. Cooper, of Wisconsin, says in the last issue of M. B. F. that practically all we need is the scum of Europe to work on our farms and we will all sit in the shade as farmers and just pick our teeth and count our money.

Now, let's look at the actual results of the present fool tariff, for and against the farmer. Hardly ten days ago the experts of the Farm Bureau Investigation Committee gave us in the Country Gentleman the exact facts.

On account of the tariff it costs the farmers of America a round million dollars a day for excess cost of manufactured goods, over a year ago. That means the farmers are "skinned" over two hundred million dollars a year on this "hos-trade."

Now I hear some protection tariff farmer say, "Oh! that supports the government," when the fact is any high school boy, even with Republican parents, knows a prohibitive tariff, (and our present one is the highest and most prohibitive every passed) never supports our government because nearly nothing moves our way under a prohibitive tariff, which gives the manufacturer's Union, (ten times more expensive to farmers than any labor union) all the monopoly they can wallow in and "wallow" is the only fit word, for if there is a bigger hog on earth than our protected manufacturer under this Harding Administration, then as the Judge says, "May the good Lord have mercy on your soul."

Of course Harding was elected largely by women who though keeping out of the front door of the League of Nations was our only world-salvation, and now he's at the back door; but Hardings campaign-millions came from the protected Manufacturers' Union of the U. S. A. and today they get those millions back every week from Friend Farmer, in exchange for political "soft-soap." How will you have your "soap," boys?—C. H. Merrifield, Van Burren County.

PRESENT CONDITIONS AND A POSSIBLE (?) REMEDY

I KNEW there was something that I missed when I got home. It comes to me now, when I received your card that it was the M. B. F. Sure thing, I must have it. Send it along and send me the bill if I'm in arrears, it will be paid.

It is a long time since I heard from you or you from me, so I'll send you a few thoughts on the signs and conditions of the times and the future outlook, for our people and the country. We all know that we are in a peculiar condition—financially, politically, and morally. We can not all agree upon the different questions that arise from time to time, we all know, we are in a precarious condition and it doesn't appear to be getting better fast, at least not for the farmers and the producters. There seem to be a lot of would be helpers—but when you come to analize their mode we discover, it is only to get us in deeper. They promise legislation to help the farmers. You get that from all of the office-seekers, and the papers from all over the country. But when you come to find it out the farmers must pay the bill, in the end, with interest.

The question is: What or where is the trouble?

In the first place interest on money is too high, and our circulating medium is not based on actual products of labor and necessities of life, which is the only actual basic wealth of the country.

Lincoln said "this nation can not exist one half slaves." We are now 90 per cent or better slaves under the bonding system, which not only enslaves us, but the coming generation, for they will have to shoulder and to pay our enormous bonded indebtedness. Now this does not only apply to the farmers, it applies to all our citizens, excepting a few speculators, financiers and grafters.

Is it possible that the people of these United States, the decendants of those men that liberated this land from a foreign yoke, and wrote that wonderful instrument of Independance and afterwards, defended that act by driving from our shores the oppressors who sought to enslave them. Are we now willing to let a group of unscrupulous grafters and profiteers enslave us and our children? Is it possible that we have so degenerated that no one among us dare to stand up for the right of the people? Are there no Washingtons or Lincolns or any of that liberty-loving spirit left in the land.

Is it possible we are all willing to stand by and see the people robbed of the fruits of their labors and products of this wonderful country by a few speculators and financiers, the majority of whom, do not even spend their time or money here at home? As a rule they travel abroad, live among royalty in foreign lands. They spend our money with lavish hand in Paris, Rome, London and Monte Carlo. Sure, they have their agents and lobyists here. They keep well posted and their business interests are well looked after and protected. We have been looking back at the monarchial form of government and congratulating ourselves on the fact that we are living under a government by the people and for the people, when in reality we are at the mercy of a more cruel, merciless and unscrupulous bunch of profiteers than any monarch that ever did exist. They employ all manner of neferious schemes and ways, bribery and even murder is not too low for them to carry out their schemes. The news-

Uncle Rube Spinach Says:

I'M AGIN SIR WM. ORPEN'S JUDGEMENT

WHEN we speak of woman's beauty there's quite a considerable to think about. Beauty—real beauty is a thing 'at natur' gives to a woman jest the same as she gives to a flower or a bird or anything 'at's as natur' makes it.

Sir William Orpen, great portrait painter of Paris, sez there's no beautiful women. "In my twenty-five years of painting," he sez, "I've never seen a perfect model nor a really pretty woman."

"Ten or fifteen years ago artists had but little trouble to select paintable arms an' legs, but now they have to search for weeks," he sez.

Well now, I wonder if arms an' legs is all there is pretty 'bout woman? Why I can show ol' Bill Orpen more beautiful women 'an he ever dreamed of—not only here in my own little town but in other places in our good ol' state. Beauty does not consist of arms an' legs entirely—it's a thing that can exist without 'em.

I am aware 'at most all the beauty contests, as shown in the papers durin' the past two or three years, has consisted of arms an' legs—that's 'bout all some young women care to have pictured these days—but friends the real beauty of women is more 'an that.

When you see the lovelight in their eyes, the motherhood in their faces—the real womanliness 'at God has given, pictured in every line of their face and features, then you've got real beauty! An' I can see it every time I go on the street. Maybe some ha[illegible] ir silvered with age, some just [illegible] outhful glow, nevertheless, if [illegible] ovelight, the motherhood, shine[illegible] out they are beautiful. Maybe they have arms, maybe legs, I never stop to think of it—it's that something that age can't take off nor paint put on 'at makes women altogether lovely. An' I know so many 'at are jest that way—wonderful women an' beautiful 'cause they live as God intended 'em to live; living for the purpose they were created for an' doin' the best they can at it.

Now maybe Bill Orpen knows a lot 'bout beauty but in my foolish judgement he don't know much 'bout the beauty of women if he judges 'em only by their arms an' legs. An' yet I'm wonderin' if some of our young women ain't kinder got some of his notions? The way they've been displayin' legs an' arms for two or three years, I'm most decided to think 'at's 'bout all they've got. An' yet I do see many most beautiful an' lovely girls, girls 'at dress nicely an' becomin'ly an' show the real beauty that lies within. They know they have somethin' besides arms an' legs to recommend 'em an' they really are beautiful in every sense of the word.

We don't care what William Orpen of Paris sez, do we women friends? He don't know everything. An' let me tell you something: the real beautiful women of the next few years will be the ones 'at keep 'emselves as natur' made 'em.—Cordially yours, UNCLE RUBE.

papers which as a rule, they either own or control and by that they practically control our elections.

Now let us look, I'll give you a few of my thoughts along remedial lines in it there may be some repetitions, but some of it surely needs repeating, so that our people may get posted on the actual existing conditions.

First, let us consider a few facts relating to our commercial and financial business—of the nation. During my 50 years of business experience I found that interest on money was the slickest and easiest way of getting it. All that is necessary is to get good security and then you can sit right on you haunches and make a fine living and plenty of money, without producing a single thing, except some trouble for the other fellow—for if you are a good money lender and collector your game is to get all you can, and if you get the right fellows in the proper shape it is your business to profit by their misfortunes. Now that doesn't only apply to the individual money lender, that is the game of all our big financial concerns. Our financial resources are controled by so very few, that it is entirely within their power to withhold and depress credit. In other words, to make money dear to the people that must have it to do their business with.

This brings me to a little investigation as to the total indebtedness of this nation.

Our debt on July 1st, 1921, was $23,427,772,447, or a per capita of $216.75. Now our interest bearing debt on that date was $23,738,900,084. The annual interest charges are $1,017,500,000. Next comes the different states, bonds, and indebtedness which amounts to $1,167,204,809. Now, these are our state and national indebtedness and does not include municipalities, such as counties, townships, highways, schools, cities, corporation bonds, etc. Next take into consideration the real estate mortgages, private and individual obligations, which will amount to many times the National and state indebtedness above referred to. Naturally, we might commence to wonder where the money is going to come from to pay even the interest, let alone the principle. It must all come out of the producer, in some shape. Now, as near as I have been able to find out by investigations, we have in actual money $1.78 for each $1,000 of our actual debt. Now, look at that, surely the thing is commencing to look like a crazy-quilt. If we were forclosed and sold out, atour assessed valuation and proceeds pro rated among the creditors, that is to say, if we took all the money in the land, our creditors could only get $1.78 on every $1,000 that we owe. (That is on a single standard measuring our wealth by gold.) Now, with such a small amount of actual money to do such and enormous amount of business, it has become an easy matter for a comparatively few to control the finances of this nation, and practically speaking, the entire civilized world has been enslaved through that system. We have become in bondage to such an extent that we couldn't pay the interest with actual cash (gold) for three months, and where has this tremendous debt fallen? What class of our people must pay? The answer, of course, is the producers, and actually we are not paying it in money, it is on paper. It is not a matter of good headwork and fine bookkeeping by the money lenders.

Now you can percieve, the producers have got some tall hustling to do. I presume that everybody that has studied upon this subject have some ideas of a remedy, I know I have and of course it is a radical proposition, but sooner or later some different system will have to be adopted. We are not going to get out of this mire by getting deeper in debt. This hollering about giving the farmers more credit will only bury him deeper. Now, I'll throw out one or two suggestions, which in my humble way of thinking might let us down a little easier and not break all the bones in the carcass, by a sudden drop like Germany got, which before that time a few, years ago was the richest and most prosperous country. I had the pleasure, a few years before that happy thought struck them, that they were the mightest power on earth, to travel through that wonderful country and I thought something like Roosevelt, but, of course, I didn't get the chance to tell his nibs over there, that I thought he could lick the world, and I guess Roosevelt did and he believed him, and, of course, "Down went McGinty' but going back to my remedy for our ills—First, get the law upon our statute books, a law strong enough to make it a criminal offence equal to the crime of highway robbery to hereafter charge over 3% per annum on any kind of indebtedness. Have that law made broad enough so that by no hook or crook anyone could hereafter make contracts in any way conflicting therewith.

Now, that surely would be royalty enough for them lord's who have not produced even a fraction of their own wealth. Now, you may say, you wouldn't get money enough to do business with at that rate. To that I will say, establish warehouses and elevators throughout the lenght and breadth of this great country, wherein to store our staple grains and produce. Issue warehouse certificates not only for the produce but for the warehouse if necessary, and make them a legal tender in the realm and then let the speculators play with the gold on the outside if they want to. Now this is not a new scheme at all, as a matter of fact, it is as old as the Bible. In the time of King Pharoah and Joseph, it was tried out, and afterwards during the time of King Frederick the 7th of Denmark, along about the year 1840. It was carried out in a very successful manner along the very lines alone stated. It was the beginning of the prosperity of that little country. Now the actual basic wealth of a nation is its force of labor, its raw material and its ability to produce the necessities of life.

Now, why should not our wealth be based upon those things? But as it looks to me, our house is built upon the sand and if we do not look after it and repair the foundation it might be washed away.

Now, you think that I, myself, am in some financial difficulty, but that is not the case at all. I have benefited to some extent financially by the existing conditions, but I did not really understand what the final results would be and from my point of view it does not look bright. Think this over and improve upon it and as Crabtree says, "Let us help one another." Success to your valuable paper.—Chas. Kerr.

KILL GAME AND POULTRY-KILLING BIRDS AND ANIMALS

THIS is the season of the year when a few days spent in shooting game and poultry-killing birds and animals will repay the effort later on. If farmers, trappers and sportsmen would concentrate on a few bad species, the chief natural enemies of useful and game birds, and poultry, would receive such a set-back that the annual saving throughout the country would run into millions of dollars.

Among predatory birds, the crow occupies the worst place. The Board of Game Commissioners of Pennsylvania say that he "destroys individually more birds of all kinds, more birds' eggs and young poultry than any other bird that ever flapped a wing". The great horned owl is another bird of prey, so voracious and destructive to useful wild life that he should be killed. This species destroys annually large numbers of partridges, pheasants, fur-bearing animals, rabbits, other game and poultry. It is especially an enemy of the quail.

Noxious hawks are another species which take a heavy toll from the farms each year. Two of these, Cooper's hawk and the sharp-shinned hawk, which might be called a miniature of Cooper's hawk, are ferocious predatory birds of prey, ranging nearly everywhere throughout the country and the damage they do is estimated, in the aggregate, to exceed that done by nearly all other birds of prey. Remains of wild birds and poultry were found in nearly every stomach of Cooper's hawk, examined by the Biological Survey. When the stomachs of them contained birds, ranging from quail, morning doves and flickers—which are as large as the sharp-skinned hawk itself—down to birds as small as warblers and chickadees.

During the next few months, game birds and other beneficial wild birds will be hatching, and great numbers of them can be saved if their natural enemies are checked now.

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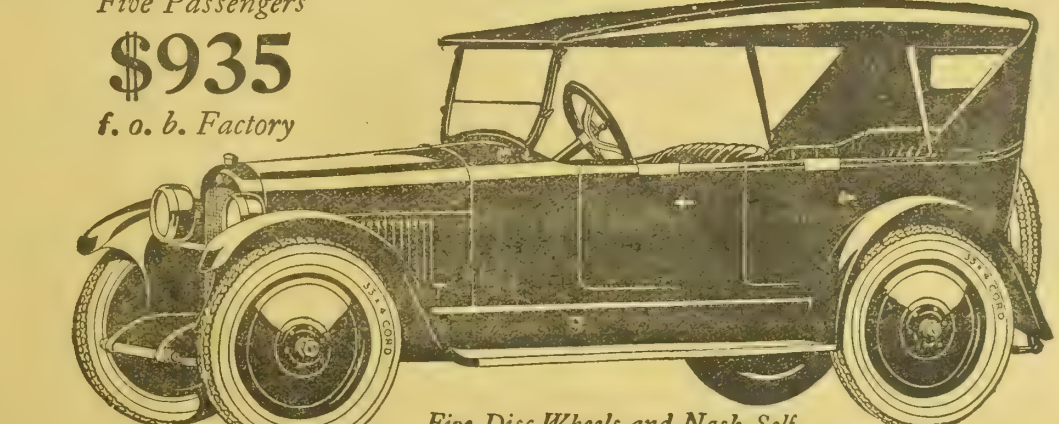

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(1564)

The Children's Hour

THE STORY OF OUR NATIONAL HYMN

It was a gloomy day in February, 1832, that Dr. Samuel F. Smith, turning over the pages of a German book of songs, came across the English air "God Save the King." He liked the tune.

Half an hour later he produced the words of the national hymn of the United States "America," or, as some called it, "My County 'Tis of Thee," which he fitted to the melody of "God Save the King."

Dr. Smith was born in Boston, 1808, and was a theological student. It was in his home town, in the old Park Street Church, that his composition was sung in public for the first time. That was on the Fourth of July, 1832.

The words of the great song were written on a scrap of paper that the composer picked up from the table near which he was sitting when he first thought to write them. They are substantially the same today as when he first jotted them down.

Never was "America" recognized generally as a song that greatly inspired patriotism until the opening of the Civil war. Since that time it has been accepted by the world as one of the greatest of national anthems.

Dr. Smith died in 1895 at the age of 87 years.

ANSWER TO PUZZLE IN LAST ISSUE

On man was a broker, another a baker, the third an engineer, and the fourth a grocer.

OUR GIRLS AND BOYS

Dear Uncle Ned—Maybe you don't think I was surprised last Friday when I came home from school and found the letter from you, saying I had won the prize. I could hardly believe it for I had always thought it was hard to win a prize. And, say Uncle, you must have known that I am taking lessons in dressmaking. I like the scissors fine and I am sure I will make good use of them. I will close thanking you for the scissors. So, good-bye, from your neice, Katie Prowant, Durand, Mich.

—I am pleased to know that the prize was appropriate. Must be some little bird told me what you wanted, eh?

Dear Uncle Ned—I am writing this letter to let you know I would like to join your merry circle, "The Children's Hour." I just adore reading the M. B. F. magazine after my work is done. I am very interested in the continued story, "The Hunted Woman," and can hardly wait for the next issue of the magazine to come. I live 2 miles west from the village of Temperance. Our house stands on a hill. Near the house is an old apple orchard. Across the road is a forest. We gather pussy willows there. I live with my mother and older sister, Mary. I also have two younger sisters. One is called Clara and the other we nicknamed "Snowball." There are five of us children but one is married and lives in Toledo, Ohio. We have two horses, one is called Patty and the other Jim. We also have 3 cows and a heifer. The cows we named Bessie, Jessie and Katie. The heifer's name is Peggy Jane. My mother and my older sister and I do the farm work during the winter and summer while my dad works in town. It is real hard to handle a team of horses and do the work a man is supposed to do, but it is better to be industrious and know how to work than to be lazy. Don't you think so Uncle Ned? I will describe myself and end this letter to you for it is getting too long. I am 16 years old, I was born October 17, 1906, am 5 ft. 3 in. tall. Have dark brown hair, and grayish blue eyes. My hair is bobbed.—Stella Voilet Nowak, R. 2, Box 106, Temperance, Mich.

—Yes it must be hard for a woman to handle horses and do the work a man is supposed to do, but as you say, it is best to be industrious.

Dear Uncle Ned and Cousins—May I enjoy your merry circle? I am five feet three inches tall, and seventeen years old. I am very much interested in the letters the children write and I would love to hear from some of them. I would surely answer their letters.

Perhaps you would like a description of myself. I have auburn "bobbed" hair, and blue eyes. We have a radio. I think this invention a wonderful thing. Don't you? Ours has a loud speaker. Well I must close now, hoping I hear from some of you very soon. With love to Uncle Ned and Cousins, Ruth Bower, North Branch, Michigan.

—Yes a radio is wonderful. In one evening you can hear talking or music from east, west, north and south, places hundreds of miles apart, while you sit in your own home. I hope some day that every farmer in Michigan can afford one.

Dear Uncle Ned—I wrote about 2 weeks ago and I have received 12 letters giving the answer to that riddle, but one was wrong and her name is Wilma McTaggart. One girl called up on the telephone, her name was Dorothy Casey. If I answered them all I would have to write 12, but I hope you will print this because I cannot answer all of the letters I received and I am going to answer them all in one and I want you to publish, Uncle Ned. The answer to that riddle I asked is "a candle." I will write a story about a trip to Detroit.

When we left Elkton, it was a nice sunshiny day, but when we got half way between Elkton and Detroit it started to rain real hard, and I saw more than one barn and house that was on fire on account of being struck by lightning. When we were going to get off the street car we told the conductor where to leave us off and I guess he misunderstood us because after he left us off the street car we had to walk 5 blocks up to my grandma's house. The third day I was their we went over to Belle Isle on a ferry boat and saw many animals such as bear, alligator, ostrich, monkey, and many others. We came back in a bus and when I got home mamma told me to go down to the store and get a bar of soap and some bananas and she gave me 75c. So I took the money and went to a store where some Italians clerked and they could not understand what I meant when I said, "I want a bar of soap and the rest of my money in bananas," So they gave me the soap and 50c worth of bananas and gave me 50c back. When I got home that time, mamma told me to go back and get the rest of my bananas, so I went and got them and when I got home I found out I had $1 worth of bananas and the soap for 75c. When we started to Detroit it was awful warm weather, but when we got back to Elkton it was cold weather and my uncle was there to meet us with coats for us all because we did not take any and we went to his place for supper and he drove us home in the car after supper. I made a mistake in the letters which I wrote to some of the girls by saying we had to walk one block when we had to walk five. Say, Uncle Ned, will you write your address at the top of the Children's Hour, because some of the girls asked me it and I am writing this letter to the M. B. F. I have 4 sisters and no brothers. Their names are: Gladys, Ilene, Hattie and Mary.—Hazel Baker, Elkton, Mich.

—I am glad to print your letter, not just so the cousins can read the answer to your riddle but because it is interesting. My name and address is just Uncle Ned, Michigan Business Farmer, Mt. Clemens, Mich., and a letter with that on will come to my immediate attention. Tell your friends that I shall be pleased to hear from them, will you?

Dear Uncle Ned—This is my first time writing to the Children's Hour. My father takes the M. B. F. and likes it very much. I like to read the letters and so I thought I would write, too. I live on a small farm just a short distance from town and I go to town school and am in the sixth grade. Our room had 100 per cent joined the Audubon Club and expect to study a book called "Bird Study." We also have studied the story entitled "The Legend of Sleepy Hollow." Thursday afternoon our room went to Alma to the theatre and saw the story in pictures. It was very interesting. Here are some riddles: Why does a man wear a large watch and a woman a small one? How does water get into a water melon? Why is a woman and the sole of a shoe alike? What is the largest word in the dictionary? If any of the cousins guess these riddles please send the answer to the Children's Hour. As my letter is getting long I will close hoping to hear from some of the nieces and nephews, Your Niece, Ferne Irvin, St. Louis, Michigan, Route 4, Box 3.

—I know you will enjoy "Bird Study" and I'll bet you found "The Legion of Sleepy Hollow" very interesting. I know I did. I have never seen the moving picture of it but as you say it is interesting. I will go the first opportunity I have.

Dear Uncle Ned—I have been a silent reader of the Children's Hour for sometime and I thought you would like to hear from another of your nieces. Would you? I will describe myself. I am a girl 12 years old and am in the 6th grade at school. I have brown eyes, dark hair and have freckles. I live an a 98 acre farm. I have 4 brothers and 2 sisters. I have 1 mile and a half to go to school. I think the best department in the Business Farmer is the Farm Home Department and the best department for a man is "Poultry for Profit." Well I will have to close now and leave room for other cousins to write. I would like to get a letter from some of my cousins. I will answer all letters I receive. My birthday is October 18. Have I a twin? I will say good-bye now, Uncle Ned and cousins.—Thelma Crosby, Edenville, Mich. Box 77.

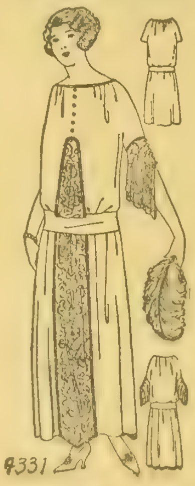
—Glad to hear from you, Thelma. Come again.

Dear Uncle Ned: I have never written to you before, but have read the Children's Hour and enjoy it very much. My father takes the Business Farmer and likes it very much. I am a girl 13 years old, am in the sixth grade at school. I live about one-half mile from school. I live on an 80-acre farm. I have one sister, her name is Mary. She is 22 years old. I also have one brother. His name is Walter and he is 25 years old. We have 2 mules, 1 horse, 4 cows, 2 calves and 65 chickens. For pets I have 2 cats. Their names are Tabby and Tom. My letter is getting a little long so will close with a riddle. Would like to have some of the cousins write to me. Use me well and I am everybody? Scratch my back and I am nobody? Answer: A looking glass. Your niece.—Ernestine Frick, Coleman, Mich., R. R. 4, Box 46.

Dear Uncle Ned:—I noticed in the Children's Hour that you are going to give prizes to the one that found the most interesting article in this issue. I thought mine would be Market Flashes, becauses the farmers all want to see the price of their crops and see if they are high or low. My Address is—Miss Gladys Hanson, R. F. D. No. 1, LeRoy, Mich

AIDS TO GOOD DRESSING

RIBBONS were never used more plentifully by the dressmakers than this season. Frocks and jaquettes are made entirely of wide ribbon fagotted together. Some of the new georgette frocks show countless bands of ribbon by way of embellishment and a very wide, substantial ribbon is often chosen to form the bustle effect on afternoon or evening frock.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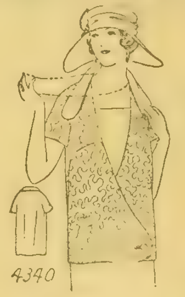
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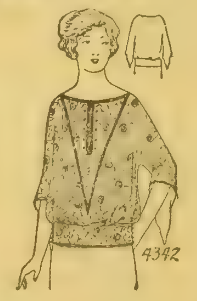
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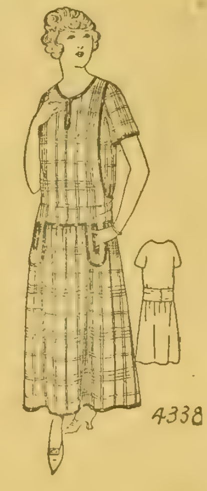
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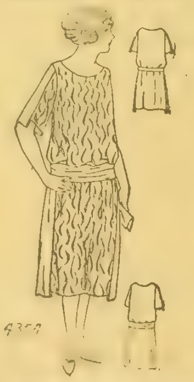
ALL PATTERNS 12c EACH—3 FOR 30c POSTPAID

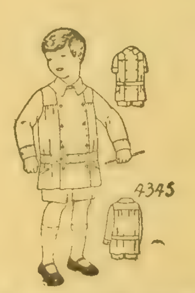
Order from this or former issues of The Business Farmer, giving number and sign your name and address plainly.

ADD 10c FOR SPRING AND SUMMER FASHION BOOK

Address all orders for patterns to

Pattern Department
THE BUSINESS FARMER
Mt. Clemens, Mich,

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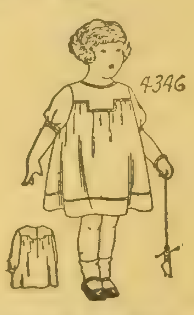
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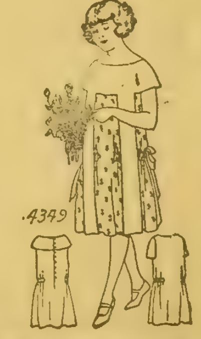
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4342. Fashions Latest Blouse Style—Charmingly developed in figured silk with bindings of crepe satin in a contrasting color, this style shows new and attractive features. It is also a good model for taffeta, printed georgtte or voile. The Pattern is cut in 7 Sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38 inch size requires 2 yards of 36 inch material.

4340. A Popular Model—This is a season of short coats. The style here portrayed will look well with a plaited skirt of plain cloth, or it may be part of a two or three piece suit. Taffeta, figured silk, pongee or linen would be attractive for its development. The Pattern is cut in 7 Sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38 inch size requires 2 ½ yards of 40 inch material. For collar and vest of contrasting material ½ yard is required.

4345. A Popular Suit Syle—For Little-Boys—This model will be fine for linen, galatea, poplin and jersey. The sleeve may be in wrist or elbow length. The trousers are made with side closing. The Pattern is cut in 5 Sizes: 2, 3, 4, 5 and 6 years. A 4 year size requires 2 ⅝ yards of 36 inch material.

4346. A Neat Little Frock For The Little Miss—For this dainty model one may use any of the wash fabrics now in vogue. The sleeve may be finished in wrist—or elbow length. As here illustrated the design was developed in pongee with fancy wash braid in colors for decoration. The Pattern is cut in 4 Sizes: 1, 2, 4 and 5 years. A 4 year size requires 2 ⅛ yards of 27 inch material.

4349. A Very Dainty Dress For "Mother's Girl"—Embroidered voile and organdy were chosen for this pleasing model. It is also nice in silk, gingham and crepe. Dotted Swiss and organdy could also be combined for this style. The bertha trimming may be omitted. The closing may be at the centre back, as illustrated or on the shoulders. The Pattern is cut in 4 Sizes: 6, 8, 10 and 12 years. A 10 year size will require 3 yards of one material 40 inches wide. If made as illustrated, ⅞ yard of contrasting material, and 2 ⅛ yards figured material is required.

4354. A Pretty Frock For The Growing Girl—Printed crepe and crepe de chine are here combined. One could use printed and plain voile in combination or tissue gingham and linen. The trimming panels may be omitted. The dress slips over the head. The Pattern is cut in 3 Sizes: 12, 14 and 16 years. A 14 year size requires 4 ¼ yards of one material 32 inches wide. To trim with contrasting matrial as illustrated requires 1 yard.

4338. A Stylish Frock—Here is a smart style in over blouse effect. The girdle section is part of the shaped front, which has small inserted pockets at the tab extensions. Tissue gingham in green and white, with bindings of green organdy will be pleasing for this model. The Pattern is cut in 7 Sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38 inch size requires 4 ⅞ yards of 32 inch material. The width of skirt at the foot is about 2 ¼ yards.

4331. A Pretty Gown—Here is a very pleasing model, with a new sleeve effect. It is a style that is attractive for combinations of material. Lace and silk, linen and gingham combined would be pleasing. The Pattern is cut in 8 Sizes: 34, 36, 38, 40, 42, 44, 46 and 48 inches bust measure. A 38 inch size will require 5 yards of 36 inch material. To make panel and sleeve draper of contrasting material, will require 1 ½ yard 36 inches wide or, 2 ⅝ yards 18 inches wide. The width of the skirt at the foot is 2 ¼ yards.

FARM MECHANICS

PROPER SIZE PULLEY

SIMPLE rule given for figuring diameter and speed needed for efficient operation.

The use of the proper-sized pulleys has a lot to do with the efficient operation of belt-driven machinery. How to select the proper sizes is not as difficult as some people think.

In every case one knows, or can find out, two facts about one of the pulleys—its diameter and its speed. One also knows at least one fact about the other pulley—either how fast it should run or how large it actually is.

An example shows how to figure the unknown quantity better than explanation.

Take an engine running at 600 revolutions a minute. The engine pulley is twelve inches in diameter. You desire to run a feed grinder at 900 revolutions a minute. What size pulley should you get? You know the engine pulley's speed is 600 revolutions and its diameter is 12 inches. You know but one thing about the grinder pulley, its speed, which is 900. How can you find the diameter?

Multiply together the two things that you know about one pulley and divide by what you know about the other pulley.

In the above example, 600 multiplied by 12 makes 7,200. Dividing this by 900 gives 8. Therefore, an eight-inch pulley is needed on the feed grinder.

The result will not always come out even, and as pulleys are sold only in certain sizes it is necessary to select the next larger or smaller pulley. When computing the diameter of a driven pulley, select the next size smaller. When computing the diameter of a driver pulley, select the next size larger.—Farm, Stock and Home.

CHANGING TIMES

By JOHN T. BARTLETT

BETTER FARM WANT ADS

I HAVE noticed this: When individual farmers advertise nowadays, their advertising is usually much better than average farm advertising of only a few years back. Take daily and weekly newspaper want ads as an illustration.

The want ads are convenient and efficient business aids, as farmers have realized for years. But there are good ways and poor ways of writing want ads. Only a few years ago, it was a most uncommon thing to find a farm want ad written with real advertising skill. The formula was about like this: Write, "For Sale," and then what you offer, in the briefest possible words. "For Sale—Cow," "For Sale—Alfalfa hay," and similar want ads were common.

Contrast these with recent want ads noted by the writer.

A farmer whose want ad on apples informs the reader that he has eight seasonable varieties, at stated prices. Moreover, that "every buyer this week receives a free pumpkin."

A farmer's "cow for sale" want ad which states the breed, age, weight, amount of milk given, when to freshen, and offers to sell on trial.

A farmer's want ad offering setting eggs for sale which informs us this farmer sold 300 settings to "satisfied customers" the year before; that his flock last year earned $2.50 per head; that 90 per cent fertility is guaranteed.

These are good want ads. They say something which makes the reader, if he is remotely in the market, feel like investigating further. They emphasize that though a want ad seems a little thing, plenty of thought and pains can be put into it, and ample reward obtained. Thus a fruit district selling fruit on the trees to city people, uses several keen want ad selling plans. One orchardist advertises he will call for customers in his flivver, and take them to his farm and at the end of the day, home. Another man features the size of his trees—how easily picked. Still another arranges with a downtown store to exhibit his fruit, and urges readers to view this exhibit—then come out and pick. All these advertisers state price in their want ads—something which always should be done if the price is reasonable, and conducive to sales.

POULTRY COLOR SCHEMES

ALWAYS, it seems there is opportunity for the individual, adapting methods to his special conditions, to gain desirable results by doing something in a novel, different way. Poultry color schemes observable at Tulare, a Western district—the single large flock, ranging through orchards, showing buff and white, or white, black and brown hens—are an interesting illustration of this. There is a reason for these flocks of these different varieties, and it is intimately associated with profits.

Big poultry flocks usually are of one color. There is a reason—it pays the poultryman best to handle one breed alone. At Tulare a single flock will contain two or three varieties. Buff and white may be Buff Leghorns and White Leghorns. White, black and brown will be White Leghorns, Anconas, and Brown Leghorns.

Tulare adopts the color schemes as part of a plan for increasing the total agricultural production of a single man. One farmer is told about who handles 70 acres of alfalfa, milks four cows, and attends to 1,000 hens. He is able to do this because of labor-saving methods with the poultry. The chickens roam over many acres. Mammoth hoppers, placed here and there, are filled only once in several days. The chicks are bought of a large hatchery, saving the farmer a great deal of labor.

One year one color will be bought, the next year another color. The early years of a hen's life are the most productive, so Tulare ships hens to market at two years or three years. If at the end of two years, then two colors are kept; if at three years, then three colors. The color identification of age is a big time-saver over the leg-band method—that is why different colors are kept. When the time comes to cull, there is no laborous examination of leg-bands. One glance at the feathers tells.

It is a mistake to believe the period of method origination is past in American agriculture. New ways of doing things are establishing themselves right along, and someone always profits.

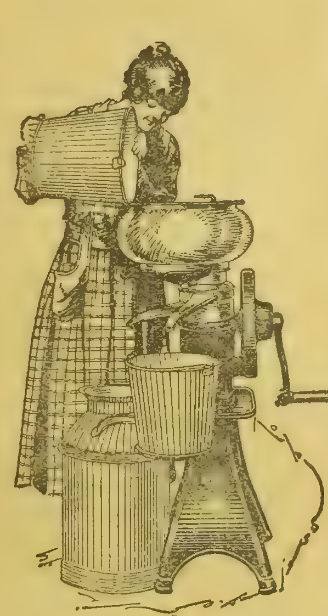
HOW SHALL FERTILIZER BE APPLIED FOR POTATOES?

(Continued from Page 4)

ways of applying fertilizer for potatoes. The first of these is by means of a fertilizer attachment on the planter. These attachments have been carefully designed by most of the manufacturers, and are the result of considerable study. Properly adjusted, they mix the fertilizer with the soil so that it does not come into contact with the seed pieces. The fertilizer attachment is generally placed ahead of the seed hopper in such a manner as to apply the fertilizer before the seed is planted. Generally adjustment can be made to either put the fertilizer below the seed with soil between, or to plant the seed in the fertilizer-mixed soil. The limited experiments that have been conducted on the exact method of placing fertilizer favor distributing it below the seed. The second method of applying fertilizer in the row is by means of a separate fertilizer distributor before the crop is planted. This method seems to be growing in favor, particularly where large quantities of fertilizer are used. A two-row distributor opens the furrows for two rows, applies the fertilizer in about any method desired in the furrow, and mixes the soil and fertilizer together. The rear coverts leave a mark to follow in planting. From the standpoint of thorough distribution this method is excellent but it has the disadvantage of involving a separate operation.

There is a common impression that fertilizer in the row causes bunching of the roots. Careful investigations carried on by both the Wisconsin and Michigan Experiment Stations on corn indicate that hill application of fertilizer on corn does not cause the bunching of the roots. While the results of these investigations cannot be applied definitely to potatoes, there is ground to believe that the objection to row fertilization is not so important as it once seemed.

McCormick-Deering Primrose
BALL-BEARING
Cream Separators



PRIMROSE Cream Separators have been making a good name for themselves in all the dairying sections of the country. Their good work is usually taken for granted, but if you will turn in wherever you see the sign "Primrose Cream Separator Used on This Farm," and make inquiries, you will find liberal praise for the Primrose. Everywhere is proof of close skimming, long wear, and easy operation. Read this evidence:

Mr. C. W. Coon, Colesburg, Ia., Feb. 26, 1923.
McCormick-Deering Dealer, Colesburg, Ia.

Dear Sir:—You will no doubt be interested in knowing about the Primrose Cream Separator which you sold me 5 years ago and is today giving such splendid satisfaction.

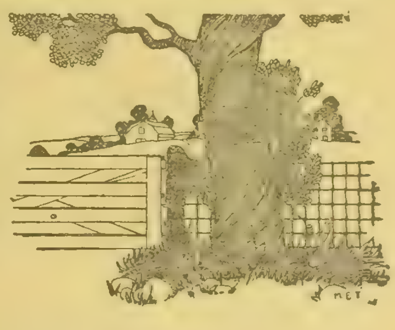
I just returned from the Colesburg creamery and was told that my cream test was the highest in a year's average over the 300 other patrons bringing their cream to this station. The cream test averaged 44% during the year 1922 which is 3% higher than the next highest average test.

At the same time our skimmilk test was less than 1-100 of 1%, so we were sure that the Primrose was getting all the cream.

The repair expense on this Primrose separator has been only $1.50. Anybody looking for a close-skimming, economical cream separator does well to buy a Primrose—for it's a machine that can't be beat. Yours very truly, [Signed] J. W. Platt & Son.

At Custer, Michigan recently the dealer held a Primrose Service Day and had a factory expert on hand to give whatever help might be needed. Of 200 Primroses sold locally in the past ten years, only 11 were brought in needing repairs or adjustment. Of this number the biggest repair bill was 89cents. Such a record speaks for itself.

THAT is the sort of work the Primrose has been doing for farmers. See the note at left also. Now, with ball bearings and other improvements, the McCormick-Deering Primrose Cream Separator is all the more qualified to save cream and money and time for new owners. Made in 5 sizes: hand and power operated. The McCormick-Deering dealer will show you this ball-bearing machine.



INTERNATIONAL HARVESTER COMPANY
606 So. Michigan Ave. of America (Incorporated) Chicago, Ill.

The Farm Home
A Department for the Women

Edited by MRS. ANNIE TAYLOR

MOTHER'S DAY

IN our last issue I mentioned Mother's Day and find it falls on Sunday, May 13th. Let us not forget Mother this year. Maybe she would just love a nice rest day and with a little effort on our part we could give her that happiness that comes with thoughtfulness I think it is wonderful to have this special Day set aside for her. It sort of checks up on every other day and if we have forgotten, which we should not, we are telling her by our actions how dear Mother is to us. Try and make some special dish or little remembrance that will tell the story of our love for her. Do not forget her if she is not with us any more. A flower or a prayer in remembrance of one we dearly love. It is the custom to wear a white flower for the mothers who have passed on and a colored flower for the living.

Your Friend,
Mrs Annie Taylor

Address letters: Mrs. Annie Taylor, care The Business Farmer, Mt. Clemens, Michigan.

MAY

MAY shall make the world anew;
Golden sun and silver dew,....
Money minted in the sky,
Shall the earth's new garmernts buy.
May shall make the orchards bloom;
And the blossoms' fine perfume
Shall set all the honey-bees
Murmuring among the trees.
May shall make the buds appear
Like a jewel, crystal clear,
'Mid the leaves upon the limb
Where the robin lilts his hymn.
May shall make the wild flowers tell
Where the shining snowflakes fell;
Just as though each snow-flake's heart,
By some secret, magic art,
Were transmuted to a flower
In the sunlight and the shower.
Is there such another, pray,
Wonder-making month as May?
—Frank Dempster Sherman.

THE PRISONER AND THE FLOWER

THERE is a beautiful story in French of a prisoner who became attached to a flower. He was put in prison by Napoleon because he was supposed to be an enemy of the government. Walking one day in the yard adjoining his cell, he saw a plant pushing up between the stones. How it came there he could not tell. Perhaps someone carelessly dropped the seed or perhaps it was blown over the wall by the wind. Charney (for that was his name) felt a great interest in the little plant, and spent much time looking at it. He soon saw some buds. He watched them as they grew larger and larger, and longed to see them open. And when the flowers came at last, he was filled with joy. They were beautiful and with a delightful fragrance.

He guarded the plant with great care from all harm, and one day shielded it from a hail-storm by bending over it as long as the storm lasted. It was something more than a pleasure and comfort to him, for it taught him some things that he had never learned before—although he was a very wise man. As he watched the development of the plant—it taught him more than he had ever learned from the wise men of the earth, it taught him that there was a God. He felt that no one but God could make that flower.

The plant proved of great service to him, for the Empress Josephine hearing of his care and love for the solitary little plant in the prison yard, and being a great lover of flowers herself, interested herself in his behalf and persuaded the Emperor to grant him his freedom.

And when Charney left the prison he took the plant with him, for he was loth to part with the little companion of his prison life, that had taught him such lessons of wisdom.

THE GARDEN LETTERS

First Prize

I WANT to tell you something about my plans for this season.

I belong to that class that are renters and it is necessary to move now and then. Most landlords have other things to think of besides setting out shrubbery and building fences to keep out the chickens, and tenants often say, "Well, who knows whether I will be here another year so if the pigs rut up the front yard and the horses and cows eat off the shrubbery and flowers, all well and good."

I like pretty things and do enjoy flowers and it surely doesn't cost a penny to keep the pigs and the cows and horses in the pasture. I want flowers for my tables and I want my children to grow up to enjoy nature and be happy and how else can this be taught better than working with clean surroundings. and flowers.

Now for our campaign. We thoroughly clean the yard. We have so much shade in front that our flowers are in the back part of the yard.

On the east side of the house about two feet from the foundation, we will spade up along the house to put in our dahliais, a few gladilious and later set in asters. We will also do the same on the west side. On the West side is a porch and we are planting morning glories here.

We build a trellis of several feet to hide the toilet and here plant climbing nasturtiuns, then we have beds of zinnias, maragolds, 4 o'clock. We have blossoms till frost, and all hardy enough that the chickens won't bother much after they get a start, until then we cover with brush. We also have a big vegetable garden. We always buy most of the garden seed and a few flower seed, but this year all we will be out is a few nails and a package of climbing nasturtiuns.—Mrs. M.

Second Prize

MOST everyone loves to see a beautiful lawn in the summer, and I know of no other place which can show the more beautiful and artistic landscape work than in the country.

The first thing to do is to rake your lawn thoroughly and free it of the small branches and other things which might have blown there during the winter, and if you are a lover of flowers, the following suggestions might add a wonderful appearance to your home.

Make a round flower bed in the middle of the lawn of Canna flowers use as a border, Forget-me-nots, or middle sized stones. For a handsome and showy display they are unrivaled. And if you do not happen to have permanent hedges, for a border around your lawn, buy a small package of Four-o'clocks, they are a handsome plant, grow very rapidly if properly taken care of. At full growth they are about two feet high, covered all summer with hundreds of bright colored, showy, sweet scented flowers.

Or, if you do not care for these, you might buy a small package of Kochra or Summer Cypress known by either name. This annual plant grows rapidly, at full growth two feet high. The leaves, very slender, of light pea green, until fall, and then changing to blood red, either plants are very beautiful for stationary borders.

And for a flower bed in front of the house, I suggest, sweet peas, pansys, a flower of the smaller type, and if you have rose bushes, don't forget to trim them this spring, also the shade trees if any and don't neglect to keep your lawn cut this summer.

The next thing is how we are going to improve our vegetable gardens. Most every farm home should have a small garden near the house separately from the one in the fields. I suggest that you have a border of astors around the garden. This looks very beautiful, especially when there is green onions, lettuce, beets, carrots, etc., vegetables of the smaller type, and don't forget to keep those horid weeds out of sight. You not only beautify your garden, but also your home, having a vase of astors on your parlor table. At the most, these flower seeds would not cost over fifty or sixty cents, and with a little labor, your home can be wonderfully improved. — Florence Hondorf, R1, East Lansing, Mich.

Third Prize

I WONDER if any of our readers have tried planting Four-o'clock seed to beautify their door-yard? I spaded a strip about 3 feet wide close to the house at the front and along one side and planted the seed as soon as ground was warm, also put a row at the side of the lawn near the drive-way, and stretched a string across until plants were well started this keeps people from driving on front lawn. It does not seem very long until we have a mass of beautiful blossoms which open every day about four o'clock and bloom until about noon the following day. These varicolored flowers will continue to bloom after most others have died, and frost often finds them still giving pleasure to all who love flowers. This seed can be had from any seed firm and costs very little. The plants are hardy and if too thick can be transplanted.—Grace Phare Davidson, R2, Fenton, Mich.

HOW TO MAKE STAIR RUG

I WILL tell how my sister made a good stair carpet that has been in daily use for about thirty years and is not worn out yet.

She cut burlap as wide as she wanted the carpet to be, when it was hemmed on the sides, then with a big hook, pull rags through the meshes. Cut the rags about two inches long and one half inch wide. Pull one end through half its length, then miss two threads of burlap and pull the other end of the rag through so they will be of equal length on the top side. Have the rags not over one half inch apart the closer together they are the better it will wear. Do not trim the top. My sister used sacks that had been covers for sugar sacks. She used hit or miss rags. If one wanted to make it more fancy one could run a white thread along the side about three inches wide the length of the carpet and use one color for that. It takes a lot of rags to make it.—M. S.

THE FARM-WIFE MAKING EXTRA MONEY

THE woman on the farm who feels she can spare the time from her family and household duties has every right to try and increase the family income. There are a great many ways that this can be accomplished.

I have received a great many letters telling about crocheting and tatting. This is a very good way and a pleasant one.

For the women folks that live near a town of any size at all, the raising of chickens and selling the eggs and making good fresh butter, has always been a safe way to make money. In our town there are quite a number of women who bring in fresh things from their gardens and sell it to a number of customers that they keep supplied from week to week. Just think of the amount of rhubarb that is starting up right now and when the flower season starts, sell pretty bunches of them. It is surprising how much money can be obtained this way.

I would like very much to receive any letters telling how some of our women folks that live away from the towns can make a few extra dollars. If you have an idea pass it on and help others with the good suggestion. A letter came into my office from Illinois and I thot it so fine that I am giving it to you.

Making Money At Home—Velvet and plush hats and Tam O'Shanters for little girls. I usually earn from $125 to $150 every fall by making little hats and tams for girls from 1 to 12 years old. I buy remnants of all colors during spring and summer of plush and velvets, fancy trimmings and tassels, by watching for special sales. I live near a city where there are two factories who make uniforms and lodge regalias and can buy small pieces by the pound of velvets and plush and linnnigs. By cutting the Tams in eight section pieces, also so many little hats are made with 6 sections and turn up rim. I also make a square top hat, always using up small pieces. Linnings are cut same as outside but of cheaper material in cotton goods. Bands are trimmed with a narrow beaded or fancy braid. A button mold covered with velvet at top and a nice tassel complets the hat or Tam. Red and black, orange and black, gray and blue, purple and gray are nice in two colors, then I also make them in solid colors of red, green, purple, black, blue, gray, etc. I usually cut my own patterns and watch for new ideas. In September and October I go to town or city with a large box usually 20 or more hats in box and stop at any house where I see little girls. I can only go Saturday afternoons when girls are not in school and usuually sell 8 or 10 and more at $1.00, $1.25 and $1.50 each. I live on a farm and am 60 years old, so I think I do fine. My hats and Tams are well made and tasty of good materials. I have made and sold them for 5 years. and can always sell again to same customers, who wait and watch for me. Any woman who is handy and tasty could make them for her own family and friends and thus save many dollars. I make them any spare time I have and by fall I have them all ready. If one lived near town they could go and sell after school. One can buy hat patterns at any pattern counter, or perhaps our Editor would furnish some.—Mrs. M.

—This article on making money at home is a good one and would like very much to thank Mrs. M. and hope more of our readers will pass along their ideas on how to make extra money.

GET YOUR FAVORITE RECIPES AND HOME REMEDIES READY

FOR Mr. Slocum has promised that if I secure enough, home-tested recipes and home remedy prescriptions, The Business Farmer will publish them in book form exclusively for our readers. I cannot tell you all the particulars in this issue, but I do know that we are going to give some recognition to the sender for each recipe published so I want you to get together your very best cooking, baking or canning recipes and your home remedy prescriptions. Just the ones that have been passed along in your family or you have used successfully for years.

I'll tell you more about this plan in the next issue, but do start getting your very best recipes ready for me. Joyfully,

MRS. ANNIE TAYLOR.

Mothers Problems

PERSISTENCY PAYS

PERSISTENCY pays—in bringing up children as well as in anything else. Many a mother has started her baby out right in life by studying every available authority on baby care and doing nothing for her child which would not come under the head of "scientific care and feeding." She has brought her baby safely through those all important first weeks of his life; she has seen him safely through his first summer, and breathed a sigh of relief when the first set of teeth has been entirely cut. And then—oh, how many times it happens!—she seems to think he has got past the period when care must be taken with him. She grows careless about the food he eats, about the condition of his stomach and bowels, about his hours of sleep and the amount of excitement to which he is "treated." The child now, she thinks, is, in a measure, big enough to take care of himself!

But no child is big enough, either at four or five or six, to take care of himself, and decide what he should eat, when he should go to bed, and how many nights he shall be up late. To have as healthy school-age children as you have fat babies, there is but one rule to follow, and that is, "keep everlastingly at it!" Don't grow lax in the care of the older ones! Train them in right eating habits so that they may not become one of that vast army of undernourished children that fill our public schools! Insist upon the early bedtime hour that nerves may not be shattered by too-little sleep. Throw windows wide at night that lungs may be filled with health-giving, health-keeping oxygen while the children sleep.

Even though your children rank high in physical examinations, even though you know they are exceptionally well, don't relax in your efforts to maintain that fine standard of health. Keep at it, at it, at it! Your duty is not done when you have seen your children safely through babyhood, nor is it done when they are safely launched in childhood. Your goal is, or should be, strong, healthy, vigorous men and women. Persistency alone will fulfil that ambition. Persistency pays!—Margaret Bartlett.

The Runner's Bible

Our lives are hid with Christ in God (Col. 3:3). We dwell in the secret place of the Most High (Ps. 91:1). His presence shall go with us (Ex. 33:14). So shall we ward off the fiery darts of evil (Eph. 6:15-18), and need not fear what man can do unto us (Heb. 13:6). We shall be safe and can enjoy peace of mind thruout the day. We shall learn, too, that by thus daily seeking the kingdom of God, not only will things be added unto us (Matt. 6:33), but that understanding, will rapidly increase because Truth will be more and more revealed. If we desire the Truth which is the remedy for every inharmonious condition, seek it with love and kindness and do not be afraid to face the bare facts.

Personal Column

Little Girl In Trouble—Your case is truly a sad one and I am afraid you will have to make the best of it by smoothing out the road with your own loving kindness. The law is that you are under age until eighteen and if you went away, your father could bring you back or send you to some school for delinquent girls. The old clothes do not mean much for unhappiness, because we all have sometime or other had a dress made over from an older sister or aunts, so little reader do not feel badly about the made over clothes. You really are young to go to dances and it is alright so long as your father is with you. I would suggest your finding some girls your own age and try associating with them. Invite them to your home. What you need is the help and companionship of some good neighborly woman and I hope you will find her. Write again.

This is a lesson for the parent readers of M. B. F. Don't put too many burdens upon our young folks and cheat them out of their childhood. It is a big problem to know how and when to scold a girl or boy of tender years, especially between the ages of twelve and eighteen. Their minds are developing fast and they need courage and lots of attentions to guide them for their future life. The girl of twelve or fourteen who works too hard at home is spoiling her future life as a mother and wife.

Request—I should like to hear from any reader who likes to piece quilts. I have some nice gingham and percale quilt pieces, more than I shall ever use. I would exchange for anything useful. —Mrs. G. W. Morgan, R. 3, Vicksburg, Mich.

Making Blankets Over—Use your thin outing flannel blankets inside of quilts in place of cotton. If double blankets are used, thin at foot and fold so thin part comes in center.—Mrs. G. W. Morgan, Vicksburg, Mich.

Briar Rose—The poem "Briar Rose" was sent to Mrs. M., and she wants to thank the subscriber who sent it in and hopes to return the favor.

Sleeveless Sweaters—I should like to receive the address of lady who makes sleeveless sweaters. —Mrs. G. M.

Canning Horseradish—I carefully clean a quantiy of horseradish roots and grind them very fine with my food chopper. I fill a quart can nearly full and add four level tablespoons of granulated sugar, one teaspoon of salt and fill the can full of good vinegar. This will keep a year if kept in a dark place.—F. A. B.

One Year's Subscription for Mrs. M. E. S.—Mrs. M. E. S. has won a year's subscription on her garden letter and if we can have your full name would be glad to award it to you.

Absent—Why did he leave me,
Could I put forth my arm and stay him—
I would not for its God's decree,
Man must work out his own destiny.

If I could but aid him now,
My sorrow would be less, my happiness more,
I'll let go. God can have him as before.

Thoughts are mighty, Truth works in Unity,
Vibrating through ethereal space,
In one grand symphony.

Prophets, Seers, Illuminati,
Voiced this long before,
Many in body, but One in mind,
Present forever more. — Baker.

—This poem was sent in by a reader of M. B. F.

—A letter asking for recipe for canned meats came into our office and the following is from a subscriber. It sounds real good.

CANNED SAUSAGE MEAT

Here is a recipe a subscriber sent in and says it has always proved successful. I have kept sausage canned this way until Fall. Grind and season meat to taste as soon as possible after butchering so that it has no chance to taint. Stuff in links or make little pats not too thick, and just large enough to go into a quart or two quart can. For a small family one quart cans are better as the meat soon taints after it is opened. Fry sausage in frying pans on the top of the stove. The sausage should be fat enough to make half the grease required. If not, melt lard. Watch carefully and turn so that it does not burn. Fry until done and not too brown. It is then ready to put into cans that are ready, of course. Cans should be packed with sausage up to the shoulder. Pour the grease from frying pan into a small granite pan which should be kept hot on the stove. Then rinse the frying pan with boiling water to get the brown liquid. When this boils fill the can half full, then fill remainder of can with hot grease from the little pan and cover sausage with grease as the grease must cover the sausage to keep. If you have plenty of grease, all grease can be used to fill cans. It is then ready to seal.

Heat oven as for baking and cover the bottom of granite baking pans with sausage and roast in oven. Watch carefully so that they do not burn, and take pans out once and turn so that all sides are browned alike. Then put into cans and do the same as above recipe. The meat will have a better flavor by this recipe. It will keep just as well. Have tea kettle filled with boiling water while canning and can all sausage hot.

Sliced meat can be canned in the same way.

—I would like very much to secure the names of people who have Buff Cochins, Partridge Cochins and Bantams to sell and their prices for same.—Mrs. Hazen Miller, Route 2, Wheeler, Michigan.

Dear Mrs. Taylor—We have had sickness all winter and are very much in need of clothing. We have two little boys, age 4 years and one 4 months. We are trying to raise our children the best we know how. If any of the readers have any garments that would help, they would be very much appreciated.—Mrs. J. C.

—Any reader that will help Mrs. J. C., can have her address upon request.

Some time ago I noticed a request for a method of removing rust stains. The lady was told to use lemon juice and salt and place in the sun. I have found that it is much easier and quicker to place the spot over the top of a steaming teakettle after dipping in the solution of salt and lemon juice. If very bad it may need a second dip. The spot will disappear in a very few moments. Ink spots may be treated the same way and then washed in the usual way to remove the color in the ink. Or they may be washed first to remove the color, then the yellow spot that is left removed with the salt and lemon.

Will some reader tell me how to mend broken dishes so that they will stay mended even when washed in warm water. I read a way to do it once with alum or ashes or both but lost the article. Also wish to ask if any of the readers have had experience in shipping rabbits or other animals to the food and fur companies in New York City and Kansas City, Mo., who offer to buy all you raise if you buy stock of them.—Mrs. E. W. B.

—Can any reader answer these questions?

The article written by Margaret Bartlett was very interesting to me. Only one thing could have made it more perfect; had the mother explained to the daughter, she was sorry she was even momentarily angry, as the daughter was suffering for a mothers mistake.

I have two daughters woman grown and we are just pals together. There has been no misunderstandings. If a difference of opinion arose, it was easily explained, because of our great love for each other. This is a secret, Love is the connecting link (not disconnecting) every time. Where love is first, there is no discord. One daughter is an artist, the other a valuable cashier for a large firm, and when they return home we trio are arm in arm as heretofore, and often they say to me, Mother, you are as young as we are, thus we have happy times together.

So much happiness is in store for us if we are not oblivious of it.

You mothers that think your heart is breaking, yes and fathers too, go within yourselves and find that glorious calm, that serenity of peace that is ever there, and see only the wonderful beauty in your sons and daughters and rest assured it will come forth and love you. This I know from my own splendid daughters. Love fulfills everything.—L. Baker.

RECIPES

CANNING SMALL FISH

"All fish must be absolutely fresh for canning. Do not attempt to can fish that has been dead more than a few hours, for it deteriorates very quickly.

"To prepare fish, scale or skin, remove head, fins and entrails. They will scale more easily if dipped for a moment into boiling water. If they are large, remove back bone. Soak fish in brine made of 2 tablespoons salt to 1 quart water, from quarter of an hour to an hour, according to the thickness of the pieces. This draws out the blood. Drain, out into lengths or pieces desirable for packing and serving. Pack into jars, add hot brine made of 1½ tablespoons of salt to 1 quart of water. Partially seal, process pint jars 60 to 90 minutes of 15 lbs. steam pressure, seal. Canned fish may be served boiled, with sauce, rolled in meal or crumbs and fried, baked and basted with butter, deviled, scalloped, crouquettes, fish cakes, salads and in many other ways. The above directions may be used for all varieties of fish."—Mich. Agri. College.

RHUBARB CONSERVE

Many people have more rhubarb in their patch than they can use up in sauce for immediate consumption. Why not convert this into conserves? The following recipes are good:

Rhubarb and Prune Conserve

One quart rhubarb cut in small pieces.
One cup prune pulp.
Three cups sugar.
One lemon, juice and grated rind.
One-half cup English walnuts, chopped. Cook the rhubarb, the prune pulp and the sugar until the mixture is thick. Add the lemon juice and rind and the nuts. Cook slowly until the conserve has a rich, red color.

Note—One cup chopped raisins may be added.

Rhubarb and Pineapple Marmalade

Three pounds red rhubarb.
Two pounds sugar.
Two lemons, juice and rind grated.
One cup grated pineapple.

Cook the mixture slowly until it is thick and clear. Turn into glasses and seal.—Home Economics, Colorado Agricultural College.

RHUBARB SHORTCAKE

Mix and sift together two cups of flour, four teaspoons of baking powder, one-half teaspoon of salt and two-tablespoons of sugar. Rub in one-third cup of shortening and add one egg and enough milk to make a very soft dough. Spread the dough evenly in two small greased layer cake pans and bake in a hot oven—400 degrees—for ten minutes. Remove from pans, cool slightly. Spread stewed rhubarb very thick between and on top of the layers and serve with hard sauce, custard sauce or whipped cream.

RHUBARB JELLY

Wash rhubarb and cut into small pieces. Mix with just enough water to keep the rhubarb from burning. To each pound of rhubarb add juice of one orange and one lemon and the finely-chopped rind and inside white peel. Cook slowly until tender and pour into a jelly bag to drip. When all the juice has dripped through, measure and allow one pound of sugar to each pint of juice. Heat to boiling point and boil five minutes. Add sugar and boil until the mixture jellies from the spoon. Pour into sterilized jars and seal with paraffine.

—if you are well bred!

In public—only in crossing the street the boy takes a girl's arm.

The man always walks on the outside, even walking with two girls or more girls.

Always acknowledge acquaintanceship with bow or slight smile.

When in town do not walk more than three abreast on the sidewalk.

Patterns will be found on page 18.

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May 16—Holsteins, E. W. McNitt, Howard City, Michigan.
May 31—Shorthorns and Berkshires—Simon G. Maichle, Middleville, Michigan.
June 14—Holsteins, Wm. F. Shehan, Howell, Michigan.
Oct. 18—Holsteins, Howell Sales Company of Livingston County Wm. Griffin, Sec'y, Howell, Mich.

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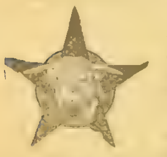

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DAIRY and LIVESTOCK

SPRINGTIME IS PIGTIME

SPRINGTIME is pigtime on most farms. It is the season when more can be done than at any other time of the year to make pork production profitable, for a pig well started may be said to be well on the way to market. After he is a few weeks old and has successfully passed the weaning period he is pretty well able to take care of himself if he is given access to plenty of the right kinds of feed. Therefore, says the United States Department of Agriculture, we should take particular care at this time in order to make the job easier later in the season and the profits greater. A pig that grows well from start to finish is always the desirable and most profitable one no matter whether the price of hogs is high or low.

It should go without saying, although, unfortunately, it still needs repetition, that first of all the pig in order to be profitable must be well bred and of good type. He must have in his veins the blood of animals that have had the capacity to turn a minimum quantity of feed into a maximum quantity of meat. But even a pig starting with these advantages may be a poor piece of property if he is badly handled or if fed improperly. He may get a bad start in competition with his litter mates; he may be stunted at weaning time; worms may sap his vitality; the pasture provided may be insufficient for his needs; or, if precautions have not been taken, cholera may whisk him to an untimely and unprofitable end. But among these possibilities there is none that can not be guarded against.

The opinions of hog raisers vary widely as to the age at which pigs should be weaned. Some of them take the youngsters away from their mothers at 5 weeks, others at 12 weeks, while still others may make them shift for themselves at any age between these extremes. In exceptional cases breeders will leave pigs with the sows even when they are more than 3 months old. Unless there is some special reason for so doing, says the department, pigs should not be weaned until they are at least 10 weeks old, and a sow that will not suckle her litter for this period is undesirable as a mother and should be discarded from the herd.

Some farmers and breeders wean the pigs at an earlier age in order to get two litters a year. The department considers it better practice to give the pigs a stronger start and raise only 3 litters in 2 years. It is better to raise fewer pigs and have them well grown than to raise a larger number and have many of them stunted.

When a litter is to be weaned attention must be given to the sow's condition as well as to the pigs. To bring about a favorable condition for weaning, the quality and quantity of her feed should be reduced for 4 or 5 days before the pigs are to be taken away. This will result in a reduced flow of milk and tend to prevent udder troubles. The sow should be removed from the pigs rather than the pigs from the sow; the youngsters being left in the quarters to which they are accustomed and having access to a self feeder which they should have learned to use several weeks earlier. In case a sow's udder after she has been taken away becomes so distended with milk that it is painful she may me returned to her family for a short time for relief. It will seldom be necessary to return her more than once.

When the pigs are weaned do not change the ration. Leave them on good pasture, with access to the self feeder containing corn and shorts or middlings. If during the suckling period or after skim milk or butter milk is added to the ration, commence feeding it in small quantities, gradually increasing it from day to day. Sudden changes are always to be avoided.

Something may as well be said here concerning the question of raising 2 litters a year, since it is closely related to weaning. Just what a hog grower's practice should be depends upon his geographical location, his equipment for handling pigs during winter, and the kind of farming he is doing. Fall pigs require a great deal of attention and most farmers are not prepared to care for as many at this time as in the spring. In the northern half of this country pigs should not be farrowed after October 15 as they must have a good start before severe weather sets in. A large percentage of spring pigs are farrowed in March and April and most of the fall pigs come in September and October.

If a sow farrows March 15 and the pigs suckle 10 weeks they will be weaned May 24. If the sow is in good condition she may be immediately rebred, that is within 3 or 4 days after the pigs are weaned. If she were rebred on May 28 she would farrow again about September 16, and the pigs would be weaned November 25, making possible rebreeding for March 20 farrow. It is not always possible, however, to keep to such a schedule, and the raising of 2 litters a year and having them all come at the proper time is impossible. If, however, the pigs are allowed to suckle 10 weeks it should be easily possible for a sow to raise 3 litters in 2 years, and it is probable that more profit would be made this way than by crowding the sows too hard.

TWO NEW CHAMPIONS IN MICHIGAN

TWO Michigan Holsteins have outclassed former records of production for their age and length of test making them new state champions, one of them taking first place in two divisions.

Canary Maid Prometheus Champion is declared highest producer in Michigan as a senior three-year-old in both the seven day and thirty day division.

She is owned by the State Hospital at Newberry. In seven days she produced 674.5 pounds of fat or 34.87 pounds of butter. Her thirty day record is 2639.1 pounds of milk and 106.796 pounds of fat or 133.495 pounds of butter.

Segis Cornucopia Pauline, owned by W. C. Cornwell, Saginaw, Michigan, is a third new state champion. At full age in the ten months division she produced 22832.8 pounds of milk and 766.71 pounds of fat equal to 958.38 pounds of butter.

PRIZE COW AT M. A. C. SETS NEW MILK RECORD

PAULINE Jane Pontiac, a pure bred Holstein-Friestian cow owned by M. A. C., has set a new high mark for seven-day milk and butter fat production among all the state agricultural college herds in the United States.

She produced 731.1 pounds of milk, containing 36.58 pounds of 80 percent butter in the seven days of her official test.

That Pauline's performance is merely the result of careful breeding is pointed out by J. E. Burnett of the M. A. C. dairy department, who supervised the testing. Pauline was sired by Pauline Sir Pontiac, one of the best of the M. A. C. herd.

Another of his daughters, Pauline Segis Fayne, produced more than 21,000 pounds of milk as a junior two-year-old and still another, Pauline Colantha Fayne, produced 19,800 pounds of milk at the same age.

VETERINARY DEPARTMENT

HORSE HAS POLL EVIL

I have a horse four years old with a sore about as big around as a small lead pencil located in the edge of maine, about four inches behind his ear. It runs probably two tablespoons of thick yellow pus in twenty-four hours. Has been like that for sometime. Am of the opinion that there is a pipe in there. It isn't sore in the least around it and the horse acts all right and is doing well. What would you advise me to do for it?—H. B. H., Brant, Mich.

—In all probability this horse is suffering from poll evil, a disease which causes necrosis of the anterior part of the ligament that passes along the top of the spine of the cervical vertebrae. Two methods of treatment are commonly used by veterinarians for this disease. The one is to enlarge the opening and pack it with a fistula paste which is left in position for about a week or until the pipe or fistulas canal sloughs out. The wounds is then allowed to heal by second intention.

The other method of treatment and the one that proves most successful in the majority of cases is a surgical operation which consists in removing the diseased portion of the ligament. I would advise you to put your horse under the care of a competent veterinarian for treatment.—John P. Hutton, Assoc. Prof. of Surg. and Med., M. A. C.

SHEEP HAVE ACUTE INDIGESTION

I am writing to you in regards to my sheep and hope you will please inform me what to do. The sheep refuse to eat, stand around and stretch their front legs out forward and the hind legs backward, and the back seems to cave in. Some live a week and some longer. Urine alright but no bowel passage. None have lambed but are with lamb. Thought at first that was the trouble but the bucks are the same as the ewes. I am feeding fine timothy hay and alsike clover mixed. I have fed bean fodder. They have plenty of salt and I am feeding bran and linseed meal.—A. P., Gladwin, Mich.

—From the symptoms which you describe, I believe that your sheep are suffering from some form of acute indigestion. This may be due to some spoiled or mouldy feed, or it may be due to timothy stalks irritating the bowels, or even penetrating them, as they sometimes do.

I would advise that you give each one of these sheep about one-half pound of epsom salts as soon as the trouble is discovered, remove the timothy hay from the ration, and feed only clover hay and bean-fodder as roughage.—Geo. A. Brown, Prof. of Animal Husbandry, M. A. C.

COW SUFFERING FROM CHRONIC MASTITIS

I have a cow, 3rd generation from purebred bull. She gave a good lot of milk twice a day. Unusual for this county. Toward end of her milk season her milk got a little stringy in right hind quarter. I milked her out good for sometime, after about 8 weeks dry she calfed. Always was an easy milker, now that same quarter gives a small stream of milk, milks very hard and seems to be sore and tender. Can you advise me?—C. M.,Roscommon, Mich.

—The cow is suffering from chronic mastitis, a chronic inflamation of the gland of that quarter. The Treatment of cases like this is often very unsatisfactory. Milk out the affected quarter every two hours, message well with a mixture of sweet oil, one ounce; turpentine, one dram; and fluid extract of phytolacca, one dram three times daily. Give internally one ounce of artificial carlsbad salts night and morning for two weeks. If you have a good veterinarian in your locality I would suggest that you put the case in his hands and let him treat it as he will be able to treat the case much more satisfactorily than can be done by mail. —John P. Hutton, Asso. Prof. of Surgery and Medicine, M. A. C.

SYMPTOMS OF PIN WORMS AND BOTS

I would be pleased to know what are the symptoms of worms in horses, both pin worms and bots, also what is best to rid them of same.—C. M. R., Elkton, Mich.

—Pin worms (Oxuris curvula) are parasites that live in the large intestine of the horses. Frequently they are found in the rectum where they sometimes produce irritation and cause the patient to rub the root of the tail and buttocks. Sometimes as a result of catarrhal inflamation of the rectum a layer of white or yellowish dried exudate is found about the anus.

Bots affect principally colts and young horses which have been running on pasture during the summer. During the winter when the animals are stabled and on dry feed they become unthrifty and show poor appetite, sometimes intermittent attacks of colic. Edematous swelling commonly appears between the jaws. Where the invasion has been very great the patient eventually becomes very much emaciated.

When the parasite (Gastrophilus hemorrhoidalis) is present in the rectum it may cause the patient to become restless and rub its tail frequently. Whitish dried crusts sometimes appear about the anus.—John P. Hutton, Associate Prof. of Surg & Med., M. A. C.

COW GIVES THICK AND STRINGY MILK

Would like to know what to do for my cow. Her milk is thick and stringy from one quarter of her udder. She has been fresh about two months. She gets three quarts of ground oats twice daily and mixed clover and timothy hay. She is in fairly good condition.—G. M. P., Mackinaw City, Michigan.

—This cow is suffering from mastitis the treatment of which is very often unsatisfactory. I would suggest that if possible you put the case in the hands of a good veterinarian if there is one in your locality and let him treat it. It is usually very unsatisfactory to try to treat a case of this kind by mail. If you, however, do not have a veterinarian in your community and will write and give me the particulars about the case I will be very glad to help you in any way that I can.—John P. Hutton, Assoc. Prof. of Surg. and Med., M. A. C.

NEW MICHIGAN HOLSTEIN CHAMPION

TRAVERSE Echo Sylvia Walker, a Holstein cow owned by the State Hospital at Traverse City, is declared new state champion producer in the junior two year class for production of butterfat in thirty days. This cow produced 2300.0 pounds of milk and 80.453 pounds of butterfat according to official announcement from the Advanced Registry office. This butterfat production equals 100.56 pounds of butter.

The new champion takes the place of Eden Hope, owned by G. W. Ridgeman at Vassar.

LIKE AMERICAN BUTTER BETTER

OVER fifty percent of the butter now imported into the Dominican Republic comes from the United States, while until three years ago 90 percent of the butter importations into that country were of European origin, a report from Mr. Francisco Fiol of the American Consulate at Santo Domingo informs the Department of Commerce. It is believed that American dairy and nut butters will have an increasing market in the Dominican Republic provided that they are given due publicity in papers pamphlets, calendars, etc.

THE EXPERIENCE POOL

Bring your everyday problems in and get the experience of other farmers. Questions addressed to this department are published here and answered by you, our readers, who are graduates of the School of Hard Knocks and who have their diplomas from the College of Experience. If you don't want our editor's advice or an expert's advice, but just plain, everyday business farmers' advice, send in your question here. We will publish one each week. If you can answer the other fellow's question, please do so, he may answer one of yours some day! Address Experience Pool, care The Business Farmer, Mt. Clemens, Mich.

CAN YOU SUPPLY THIS INFORMATION

Has any reader ever used the well boring outfit put out by the Specialey Device Co., Cincinnati, Ohio? Did it give satisfaction? Did it do all they claim it will do? I will thank anyone for any information concerning this outfit.—J. W., Mich.

WART REMOVER

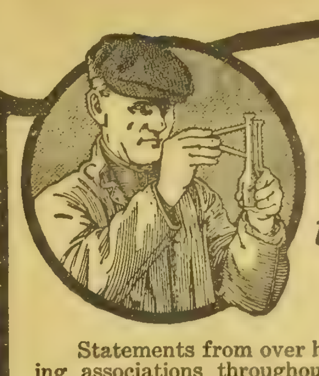
I would like to suggest a remedy for warts in the case of Mr. F. H. B., Cheboygan. If he will saturate the warts thoroughly with Castor oil every two days for a couple of weeks I think they will disappear. It might not be necessary to continue the treatment that long. I have taken them from cows teats with two applications. A neighbor told me of this 15 years ago. I have used it several times and it has never failed me yet. This will not make sores where the warts were. —Sanford McElhenie, Fremont, Ind.

BEST OF ALL HE READS

I was glad to renew my subscription for 2 years for I read several papers and believe yours to be the best of them all.—Eroul H. Roberts, Chicago, Ill.

Wife—"How many fish did you catch last Saturday, George?"
Husband—"Six, darling—all beauties."
Wife—"I thought so. That fish dealer has made a mistake again. He charged us for eight."

Ike—"Swim out here, fadder I'm sinking."
Abe—"I can't swim. Throw papa your watch and I vill pray for you."—Brown Jug.



~Cow Testers Know that De Laval Separators Skim the Cleanest

Statements from over half the cow testers employed by cow testing associations throughout the United States, reaching over 6000 farms, give additional proof of the superior skimming efficiency of De Laval Separators.

Cow testers know best of all what cream separators are used most, which skim cleanest and last longest, because they regularly test the skim-milk from the separators owned by their members. They say:

—"I find on an average De Laval Separators skim cleaner—from a trace to .04 of one per cent. Thirteen out of nineteen separators here are De Lavals."* (.01 of one per cent equals one lb. out of every 10,000.)

—"Out of 48 separator users 29 use De Lavals. I've found them the best skimmers for the longest time."*

—"26 members have separators, and 22 are De Lavals. They give the best satisfaction after considering all points."*

—"De Laval Separators have no equal for quality and efficiency. 15 out of 20 are De Lavals."*

—"90% of the separators used by my members are De Lavals. The majority skim closer than .02 of one per cent."*

—"The De Laval is a very close skimmer under any and all conditions. 95% of the separators here are De Lavals."*

—"I have 25 members and 18 use De Lavals. I have not had one test below .05 of one per cent."*

*Authorities for these statements from cow testers, together with many others equally good, are contained in a booklet entitled "Cow Testers—What They Do and What They Say About De Laval Cream Separators and Milkers." Send for it—contains information about the value of cow testing associations.

The De Laval Separator Co.
NEW YORK 165 Broadway
CHICAGO 29 E. Madison St.
SAN FRANCISCO 61 Beale St.

You Get More, Richer and Smoother Cream from a De Laval

Sold on easy terms

Over 2,500,000 in use

Sooner or later you will use a De Laval Cream Separator and Milker

Better than Whitewash

CARBOLA

It takes less than five minutes to mix the Carbola powder with water and have it ready to use as a white paint and powerful disinfectant. *No waiting or straining; no clogging of sprayer.* Does not spoil. Does not peel or flake. Disinfectant is right in the paint powder—one operation instead of two. Gives better results, costs less. Used for years by leading farms.

Your hardware, paint, seed or drug dealer has Carbola, or can get it. If not, order direct. Satisfaction, or money back. 10 lbs. (10 gals.) $1.25 and postage; 20 lbs. (20 gals.) $2.50 delivered; 50 lbs. (50 gals.) $5.00 delivered; 200 lbs. (200 gals.) $18.00 delivered; trial package and booklet 30c.

Add 25% for Texas and Rocky Mt. States

CARBOLA CHEMICAL CO., Inc.
310 Ely Ave., Long Island City, N. Y.

113 Ton Silos filled in day's run

with Dick's Blizzard. "We use Dick's Blizzard on our ranch," writes Mr. Morgan. "Just keep it supplied and the cutter does the rest."

Close up view, famous Blizzard Double Feed. Traveling Teeth on endless belt carry material direct to knives. Enormous capacity.

Dick's Blizzards save most labor. All 1923 models are self-feeding. Feed Roll Models have New Paddle Roll Self Feed; improved feed table, larger throat capacity, additional strength. Some models have automatic feed regulation. Blizzards are simple, safe, long lasting and economical of repair expense. Parts of wear all replaceable. Deliver most work per H. P. Unlimited elevating ability.

Write for Big New Circular

Describes all 1923 models with their wonderful new features. Also the Dick's "Famous" Feed Cutter for hand or power cutting. Standard for forty-nine years.

THE JOS. DICK MFG. CO.
BOX521
Canton, O.

The New Blizzard 1923

DICK'S Blizzard Ensilage Cutter

AYRSHIRES

FOR SALE—REGISTERED AYRSHIRE bulls and bull calves, heifers and heifer calves. Also some choice cows.
FINDLAY BROS., R 5, Vassar, Mich.

HAMPSHIRES

HAMPSHIRES—SPRING BOARS AND BRED gilts from 25 sows to select from. Place your order now or you may be to late. 10th year. JOHN W. SNYDER, R. 4, St. Johns, Mich.

FOR SALE: YEARLING HAMPSHIRE BOAR, Spring pigs. Look out breeding.
G. W. PADBURY, Bendon, Michigan.

DUROCS

HILL CREST DUROCS, PERRINTON, MICH. We are breeding twenty sows and eighteen gilts to a son of GREAT ORION SENSATION. Yearling, spring and fall boars. NEWTON & BLANK, Farm 4 miles straight south of Middleton, Gratiot Co., Mich.

DUROC JERSEYS Fall boars and gilts of quality, prices very low Am booking orders for March pigs to ship in May. $10. reg., short time. Satisfaction or money back. B. E. KIES, Hillsdale, Mich.

PEACH HILL FARM offers choice weanling Duroc pigs, either sex. Priced very reasonable. Write us.
INWOOD BROS., Romeo, Mich.

O. I. C.

O. I. C. 'S

Two outstanding wavy haired fall gilts weighing 175 lbs. Open $25, Bred $35 Shipped on approval. Also spring pigs. No better type and breeding. CLARE V. DORMAN, Snover, Mich.

MR. FARMER!

Mr. Dealer Mr. Jobber

IT Is THE BEST

BINDER TWINE

THE PRICE IS RIGHT

Are you remembering in purchasing your binder twine that you have a factory of your own at Jackson?

It is making the best twine that can be placed on the market and has a mixture of fiber this year. Manila is added to the sisal to give extra strength.

The State Farm Bureau and other organizations and dealers of the state are in position to handle your twine. If they do not, write direct for prices as we want you to use your own twine as we make 14,000,000 lbs. more than Michigan can use.

Michigan State Prison

HARRY L. HULBERT, Warden

JACKSON, MICH.

THIS BEAUTIFUL BRIDAL WREATH

AND 4 OTHER HARDY ORNAMENTAL SHRUBS

Planting a few shrubs this season will soon make your home a beauty spot and a greater joy to live in. Also, if you should later decide to sell it, you will find it more salable and worth a few hundred dollars more. Our collection consists of the following five most desirable varieties. They are not little, greenhouse-rooted cuttings, such as are often given in offers of this kind. These shrubs are all field grown, healthy and thrifty, and are sure to give satisfaction. We would recommend that you accept our special offer without delay, as this offer may be withdrawn at any time.

Beautify Your Home at Our Expense

SPIREA VAN HOUTTEI (Bridal Wreath)—A leader among shrubs, and a beautiful ornament at all seasons. A round and graceful bush with arching branches, covered with white flowers in early summer. No doubt the most useful of all shrubs.

ALTHEA (Rose of Sharon)—A beautiful shrub that nearly everyone is familiar with. Flowers profusely in late summer and early fall, when few other shrubs are in bloom.

Spirea Von Houttei (Bridal Wreath)

Syringa (Mock Orange)

BUSH HONEYSUCKLE—Handsome bush with pink and white flowers in the eary spring, followed by beautiful and showy red berries during summer and fall.

FORSYTHIA (Golden Bell)—The first shrub to bloom in the spring, the golden-yellow flowers appearing before the leaves; frequently while the ground is still covered with snow. Branches cut off in winter and put in a vase of water will bloom in the house.

SYRINGA (Mock Orange)—One of the finest of the tall shrubs. Valuable for backgrounds, screens, grouping and specimens. Flowers white and very fragrant. Beautiful for cutting.

These are the five grandest shrubs for all climates, and will be delivered to you, by parcel post, postpaid, as per our special offer below.

OUR SPECIAL OFFER

ALL FIVE SHRUBS, above described, shipped from our Michigan nursery, direct to your mail box, postage paid and safe arrival guaranteed, for ONE DOLLAR, which includes a One Year New or Renewal subscription to The Michigan Business Farmer. This may apply on your own renewal or add any new name ONE FULL YEAR.

Order of THE BUSINESS FARMER, Mt. Clemens, Mich.

MICHIGAN CROPS

BOOSTING THE FALL WHEAT

ROLLING the fall wheat in the spring, after the ground has become sufficiently dry, has boosted many an unfavorable field of wheat. Packers, that are now a part of the equipment on many farms, are splendid for this work. They pulverize the soil to a finer degree than an ordinary roller, and leave the top of the ground in a condition that is less subject to a crust. They break the crust that is usually forming, fill the cracks, and press the freshly pulverized earth firmly against the roots of the plants. This not only gives the wheat a start but aids in preserving moisture that is often needed later on.

Last year the writer had an opportunity to witness the benefit that resulted from harrowing a field of fall wheat. The wheat had been sowed late in the fall, with very little growing weather following. In the spring it did not appear to be worth leaving; but when a little crust began to form on the top of the ground, and before it became hard, the owner ran over the field with the spike tooth harrows. The impression the harrows made upon the ground did not appear to be sufficient to merit the time spent, the wheat soon began to show improvement, and by harvest time had attained a normal height. This field of wheat, that at one time appeared to be a failure, returned a fair yield; and it payed the owner well for the little time spent in harrowing it.

The reason that rolling or harrowing the fall wheat is not practiced on more farms is because it needs to be done at that time of the year when work is usually crowding the farmer. But, when one can increase the yield of the wheat crop from one to three bushels per acre with so little effort it would be profitable to neglect less important work in order to give the fall wheat a boost.

Running over the fall wheat with the packer or spike-tooth harrows this spring may be the making of the crop.—L. W. Silverthorn.

OAT SMUT IS PREVENTABLE

Would like to get some information regarding treatment of oats and barley smut. Has the State Department of Agriculture a formula for the treatment of oats and barley smut? If they have a formula, will they furnish the anti-smut cure? What would be the cost?—J. A. B., Tawas City, Michigan.

—This disease is caused by a parasitic fungus—a small plant which makes no food for itself but steals its living from the oat. The body of the smut fungus is made up of threads, microscopic in size, which live inside the oat plant, growing up with it, and finally producing its own kind of fruit where the oat kernel should be produced. This fruiting mass of the oat fungus is the brown "smutty" powder. It is made up of the countless thousands of exceedingly minute balls. These balls are the "seed" of the smut fungus. They are called spores.

These seed-like bodies, the spores, are mature at threshing time. They get into the crevices of the grain and adhere to the surfaces. When the grain sprouts, the smut fungus sprouts too, and bores into the young seedling. This is the only period when smut can infect the oats. Once inside, the smut grows as the oat plant grows, keeping pace with its progress. When the oat matures, the smut matures also and completely replaces the normal grain with the "smutty" powder. The seed for next year's crop becomes heavily dusted with its powder during threshing. It is not too much to say that, year in and year out, smut destroys 8 to 10 per cent of the untreated Michigan oat crop—approximately one acre out of every ten planted. This amounts to nearly four million dollars annually.

Prevention of oat smut is possible by taking advantage of the fact that the smut can only enter the grain at sprouting time, the seed grain itself being the source of infection.

Seed treatments kill the spores on the outside of the grain, without injuring the grain itself.

Smut is now so common everywhere that untreated grain gives a heavily smutted crop; treated oats give clean, healthy plants.

Clean the oats of all weeds, chaff, and light grains by means of a fanning mill.

Treat seed oats for smut either by the well known sprinkling method or by the new concentrated formaldehyde treatment.

Mix one pint fresh formaldehyde with 40 gallons of water. Clean a place on the barn floor and sprinkle with this solution. Spread the oats in a thin layer (four inches) and sprinkle with the dilute solution of the formaldehyde. Shovel over and over until every kernel is moist. Add layer after layer, sprinkling as before. Two quarts of solution is enough to allow to a bushel. When all the grain is moistened, shovel into a compact heap, cover two hours with a blanket or canvas, then spread out to dry and air. Do not let the wet grain freeze, mould or sprout.

The grain may be planted as soon as it is dry enough to run through the drill. Make allowance for the slightly swollen condition when planting. One pint of formaldehyde will treat from 50 to 60 bushels.

The treatment may be modified by dipping the grain, one-half to one bushel at a time, in a barrel or tub of the dilute solution. Drain, cover for two hours, dry and the oats are ready for planting.

Formaldehyde Treatment

Use formaldehyde at the rate of one pint to 50 bushels of grain. For smaller amounts of grain correspondingly smaller amounts of formaldehyde. It is unnecessary and unsafe to use more formaldehyde than the amount recommended. Put the right amount of fresh formaldehyde just as it comes from the druggist, into a pint or quart hand spray or atomizer and spray the grain as it is shoveled over and over. If the sprayer is kept close to the grain and if the treatment is given in a room where there is a good draft, the penetrating odor of the formaldehyde will give no discomfort.

When the right amount of formaldehyde has been applied, shovel the oats into a heap and cover for exactly four hours with a canvas or blanket.

The grain should then be spread out thinly for a thorough airing in a warm place. Rake the grain over during this airing, then plant at once.

Wheat, barley and rye may be treated in the same way as for oats.

Injury to the wheat will result if directions are not followed, or if the ragin is allowed to stand after treating. Plant the same day.

With either treatment avoid contaminating the grain with dust from old sacks or from the drill. To disinfect the sacks, soak in formaldehyde, two tablespoonfuls to a pail of water. To disinfect the drill, pour this solution through it.

Ask any druggist for fresh formaldehyde.—G. H. Coons, Botany Department, M. A. C.

White Diarrhea

Remarkable Experience of Mrs. C. M. Bradshaw in Preventing White Diarrhea

The following letter will no doubt be of utmost interest to poultry raisers who have had serious losses from White Diarrhea. We will let Mrs. Bradshaw tell of her experience in her own words:

"Gentlemen: I see reports of so many losing their little chicks with White Diarrhea, so thought I would tell my experience. I used to lose a great many from this cause, tried many remedies and was about discouraged. As a last resort I sent to the Walker Remedy Co., Dept. 687, Waterloo, Iowa, for their Walko White Diarrhea Remedy. I used two 50c packages, raised 300 White Wyandottes and never lost one or had one sick after giving the medicine and my chickens are larger and healthier than ever before. I have found this company thoroughly reliable and always get the remedy by return mail.—Mrs. C. M. Bradshaw, Beaconsfield, Iowa."

Cause of White Diarrhea

White Diarrhea is caused by the Bacillus Bacterium Pullorum. This germ is transmitted to the baby chick through the yolk of the newly hatched egg. Readers are warned to beware of White Diarrhea. Don't wait until it kills half your chicks. Take the "stitch in time that save nine." Remember, there is scarcely a hatch without some infected chicks. Don't let these few infect your entire flock. Prevent it. Give Walko in all drinking water for the first two weeks and you won't lose one chick where you lost hundreds before. These letters prove it:

Never Lost a Single Chick

Mrs. L. L. Tam, Burnetts Creek, Ind., writes: "I have lost my share of chicks from White Diarrhea. Finally I sent for two packages of Walko. I raised over 500 chicks and I never lost a single chick from White Diarrhea. Walko not only prevents White Diarrhea, but it gives the chicks strength and vigor; they develop quicker and feather earlier."

Never Lost One After First Dose

Mrs. Ethel Rhoades, Shennandoah, Iowa, writes: "My first incubator chicks, when but a few days old, began to die by the dozens with White Diarrhea. I tried different remedies and was about discouraged with the chicken business. Finally, I sent to the Walker Remedy Co., Waterloo, Iowa, for a box of their Walko White Diarrhea Remedy. It's just the only thing for this terrible disease. We raised 700 thrifty, healthy chicks and never lost a single chick after the first dose."

You Run No Risk

We will send Walko White Diarrhea Remedy entirely at our risk—postage prepaid—so you can see for yourself what a wonder-working remedy it is for White Diarrhea in baby chicks. So you can prove—as thousands have proven—that it will stop your losses and double, treble, even quadruple your profits. Send 50c for package of Walko—give it in all drinking water for the first two weeks and watch results. You'll find you won't lose one chick where you lost hundreds before. It's a positive fact. We guarantee it. The Leavitt & Johnson National Bank, the oldest and strongest bank in Waterloo, Iowa, stands back of this guarantee. You run no risk. If you don't find it the greatest little chick saver you ever used, your money will be instantly rerfunded.

WALKER REMEDY CO., Dept. 687
Waterloo, Iowa.

Send me the ( ) 50c regular size for ( ) $1 economical large size) package of Walko White Diarrhea Remedy to try at your risk. Send it on your positive guarantee to instantly refund my mony if not satisfactory in every way. I am enclosing 50c (or $1.00). (P. O. money order, check or currency acceptable.)

Name ....

Town ....

State........................R. F. D. ....

Mark (X) in square indicating size package wanted. Large package contains nearly three times as much as small. No war tax.

POULTRY

VERY SUCCESSFUL INCUBATION

Can you give me complete directions on how to hatch chicks from incubator without losing so many large full grown chicks which die in shell? I have trouble every time. I lose about 40 out of 100 chicks or I will say I sat 135 eggs and will test out about 24 and at the end of hatch I usually get about 75 to 80, the rest die. I run a hot water heating system and also one hot air system. How many geese can you breed with one gander? Does it make difference in fertility of eggs if you use your own gander from same flock? Can you incubate turkey and geese eggs?—Mrs. C. A. S., Onaway, Mich.

—Statistics gathered from every part of the state this season indicate that the average hatch has been about fifty per cent. I note you received from 75 to 80 chicks from 135 eggs set and would consider this very successful incubation especially during the months of March and early April. Later in the season when the birds are permitted free range a few dead chicks will be found in the shell and the mortality during the incubation period will be greatly lessened.

Low hatchability of the egg involves many factors. The breeding stock should of course be in the best physical condition. Artifical illumination, heavy protein feeding, and over crowding in damp and poorly ventilated buildings all have a tendency to decrease both fertility and hatchability. Immature breeding stock frequently produces a high percentage of weak germs. The fate of the chick is more easily determined before it is produced and therefore the incubator should not be too severely critized for the resultant low hatches early in the season. Hot water machines are usually the most satisfactory during the early months because the air at that time is relatively dry and the moisture machines, on an average, will produce more successful hatches. Later in the season, however, when the humidity of the air increases the hot air machines may excel the hot water type.

It is unadvisable to inbreed with either turkey or geese as the infertility usually runs much higher and the offspring is often lacking in constitutional vigor. It is not ordinarily advisable to use over three geese with one gander. Both turkey and geese eggs have been successfully incubated by artificial means although it is generally advisable to set the domestic hen early in the season thereby inducing the goose and turkey hen to produce as many eggs as possible. The latter can be used for incubation work later in the season. —E. C. Foreman, Associate Professor of Poultry Husbandry, M. A. C.

REQUIREMENTS OF WHITE WYANDOTTE

Will you please advise me the requirements of a pure-bred White Wyandotte?—S. E. D., Tustin, Mich.

—We are herewith publishing the requirements for the White Wyandotte, as given in the American Standard of Perfection.

Disqualifications: Ear lobes more than one quarter positive enamel white.

Shape: Head: short, round, broad. Beak: short, well curved. Eyes: full, oval. Comb: Rose, low, firm on head, top free from hollow center, oval, and surface covered with small rounded points, tapering to a well defined point at rear; the entire comb conforming to the shape of skull. Wattles and Ear-lobes: Wattles, moderately long, nicely rounded at lower edges, equal in length, fine in texture, free from wrinkles or folds. Ear-lobes, well defined, hanging about one third the length of wattles; smooth. Neck: short, well arched; Hackle, abundant, flowing well over shoulders. Wings: medium in size, not carried too closely to body; sides well rounded. Back: short, broad, flat at shoulders; saddle, broad, full, rising with concave sweep to tail; saddle feathers abundant. Tail: short, well spread at base; carried at an angle of fifty degrees above the horizontal; sickles, moderately long, curving

(Continued on Page 26)

Get these out at least expense

FARMERS saved thousands of dollars last year by using Dumorite to clear their land. It has approximately the same strength as 40% dynamite, stick for stick, and the slow, heaving action of "20%," yet you get 135 to 140 sticks at the same price as 100 sticks of "40%."

Dumorite is non-freezing and will not cause headache. See your dealer regarding your season's supply. The Dumorite way is the easiest, quickest and usually the cheapest way to make your waste land pay you a profit.

Write us for Farmers' Hand Book of Explosives, a free 110-page book, which gives complete information covering the use of explosives on the farm.

E. I. DU PONT DE NEMOURS & CO., Inc.
McCormick Building Chicago, Ill.
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1/3 more per dollar

NON-HEADACHE DU PONT NON-FREEZING
DUMORITE

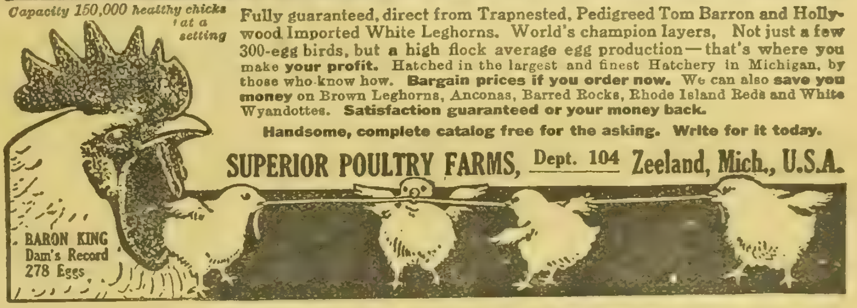
High Producing Vigorous PureBred Baby Chicks

Capacity 150,000 healthy chicks at a setting

Fully guaranteed, direct from Trapnested, Pedigreed Tom Barron and Hollywood Imported White Leghorns. World's champion layers. Not just a few 300-egg birds, but a high flock average egg production—that's where you make your profit. Hatched in the largest and finest Hatchery in Michigan, by those who know how. Bargain prices if you order now. We can also save you money on Brown Leghorns, Anconas, Barred Rocks, Rhode Island Reds and White Wyandottes. Satisfaction guaranteed or your money back.

Handsome, complete catalog free for the asking. Write for it today.

SUPERIOR POULTRY FARMS, Dept. 104 Zeeland, Mich., U.S.A.



STOP! LOOK! READ!

GUARANTEED BABY CHICKS

From WORLD'S GREATEST LAYERS and LAYING CONTEST WINNERS. TOM BARRON ENGLISH S. C. WHITE LEGHORNS. Imported stock. SHEPPARD'S FAMOUS ANCONAS. Direct. If we could show you our Flocks and have you talk with our CUSTOMERS you would order IMMEDIATELY. Our FLOCKS are all CULLED BY EXPERTS and headed with VIGOROUS PEDIGREED MALES of from 250 to 280 EGG STRAIN. Our CHICKS become wonderful LAYERS You want EGGS? GET our CHICKS. Write to-day for our free illustrated CATALOG.

SILVER WARD HATCHERY, Box 420, Zeeland, Michigan.

BABY CHICKS $10 per 100 and UP

From selected, heavy laying, vigorous hens. White and Brown Leghorns, Anconas, 50, $6.75; 100, $13; 500, $62.50. Barred Rocks, 50, $8.50; 100, $16; 500, $75 Extra Select, $2 per 100 higher. Mixed Chicks, 50, $5.50; 100, $10; 500, $50. Well hatched in modern machines. Carefully and correctly packed and shipped. Postpaid, full live arrival guaranteed. Bank reference and this guarantee makes you perfectly safe in ordering direct from this ad NOW. Get them when you want them. All orders have our careful personal attention. WE WANT YOUR BUSINESS. Catalog Free.

WINSTROM FARM & HATCHERIES, Box H 5, Zeeland, Michigan

Egg-Bred Baby Chicks

June Delivery, 10c Each. Extra selected, 11½c.

ENGLISH WHITE LEGHORNS, BROWN LEGHORNS. 11 years of breeding for egg production. Highest quality chicks from tested layers. Satisfaction guaranteed. 100% delivery guaranteed. Order now, Bank reference. Catalog free.

ROYAL HATCHERY & FARMS, R. 2, Zeeland, Mich. S. P. Wiersma, Prop.

BABY CHICKS Postpaid to your door **$9 per 100 and Up**

FROM HOGAN TESTED, FREE RANGE HEAVY LAYING FLOCKS. ALL VARIETIES.

WHITE and BROWN LEGHORNS	$12.00
BUFF LEGHORNS and ANCONAS	$13.00
BARRED ROCKS and R. I. REDS	$14.00
WHITE WYANDOTTES, WHITE ROCKS, BUFF ROCKS	$15.00
BLACK MINORCAS, BUFF ORPINGTONS	$16.00

All lots of 500 or more discounted.

EXTRA SELECTED FLOCKS .... $2.00 per 100 higher.

Large Price List for return mail.

Postpaid full live delivery guaranteed. Hatched by the most modern method of incubation from good, vigorous, pure-bred varieties carefully selected and safely packed. No catalogue. Order right from this ad and save time and disappointment. Reference Chesaning State Bank or any business in Chesaning. Address BABION'S FRUIT AND POULTRY FARM, Guy L. Babion, Prop., Chesaning, Mich.

CHICKS $12.00 per 100 and Up

100% SAFE ARRIVAL GUARANTEED

PRICES—WHITE, BROWN and BUFF LEGHORNS, 50, $7; 100, $13; 500, $60. BARRED ROCKS, S. C. and R. C. REDS, ANCONAS, B. MINORCAS, 50, $8; 100, $15; 500, $70. WHITE WYANDOTTES, WHITE ROCKS and BUFF ORPINGTONS, SHEPHARDS 331 EGG STRAIN ANCONAS, WHITE MINORCAS, 50, $8.50; 100, $16; 500, $75. MIXED, 50, $6; 100, $11; 500, $50.

Hatched from selected heavy laying flocks that are well fed and cared for, insuring strong, livable chicks that will make a profit for you. POSTPAID TO YOUR DOOR. ORDER DIRECT FROM THIS AD and SAVE TIME. Catalog free. Reference, Geneva Bank. THE GENEVA HATCHERY, Box 505, Geneva, Ind.

GUARANTEED CHICKS

Hatched from High Laying Quality Fowls on free range, properly fed and housed to insure strong Chicks.

BARRED ROCKS, S. C. REDS, MINORCAS, ANCONAS .50, $8; 100, $15; 500, $74
WHITE WYANDOTTES, BUFF ROCKS 50, $8.50; 100, $16; 500, $78
WHITE, BROWN and BUFF LEGHORNS.........50, $7.50; 100, $14; 500, $65

Postpaid to your door. 100% live delivery guaranteed. Catalog free. Bank Reference.

MORENCI HATCHERIES, Box B, Morenci, Mich. Member I. B. C. A.

CHICKS WITH PEP, $11 per 100 and up

Selected Hogan Tested Flocks. Postpaid, full live delivery guaranteed. BUFF ORPINGTONS, WH. and SIL. WYANDOTTES, 50, $9.25; 100, $18: BARRED and WH. ROCKS, S. and R. C. REDS, MINORCAS, 50, $8.25; 100, $16. ANCONAS and HEAVY BROILERS. 50, $7.25; 100, $14. WH., BR. and BUFF LEGHORNS, 50, $7; 100, $13. MIXED, ALL VARIETIES, $11 per 100 straight. On 500, 5% off; 1,000 10% off. Free Catalog. Member I. B. C. A.

HOLGATE HATCHERY, Box B, Holgate, Ohio.

CHICKS THAT MAKE PROFIT

$10 PER 100 AND UP. From vigorous, pure-bred flocks on free range, selected for heavy-laying qualities and well cared for. Low prices considering exceptional quality. WHITE, BROWN and BUFF LEGHORNS, 50, $7; 100, $13; 500, $62.50; 1,000, $120. WHITE and BARRED ROCKS, WHITE WYANDOTTES, BUFF ORPINGTONS, ROSE and S. C. REDS, ANCONAS, 50, $8; 100, $15; 500, $72.50; 1,000, $140. Mixed, all varieties for broilers, $10 per 100 straight. Postpaid to your door and full live count guaranteed. You can order now direct from this ad and get them when you want them. Bank reference. Free catalog.

BLUFFTON HATCHERY, Box L, Bluffton, Ohio

SUNBEAM HATCHERY

The Chicks that I sell are produced under my personal supervision in a good, modernly equipped hatchery which is kept in best possible condition. The parent stock is carefully selected and of best heavy laying strains, kept on free range, well-housed and handled. Free from disease and properly fed. This enables me to produce strong, growthy Chicks which will mean PROFIT to my customers. PRICES: WHITE, BROWN AND BUFF LEGHORNS, 50, $7; 100, $13; 500, $62.50. BARRED ROCKS, R. AND S. C. REDS AND ANCONAS, 50, $8; 100, $15; 500, $72.50. WHITE AND BUFF ROCKS, WHITE WYANDOTTES, AND B. MINORCAS, 50, $8.50; 100, $16; 500, $77.50. WHITE AND BUFF ORPINGTONS, SIL. L. WYANDOTTES, 50, $9; 100, $18; 500, $87.50. I guarantee full live delivery by prepaid post. Get your order in now and I will ship when you want them. Bank Reference. Catalog Free. H. B. Tippin, Box E, Findlay, Ohio. Member I. B. C. A.

DeKoster's Hatchery

Strong, vigorous Chicks from selected heavy laying ENGLISH STRAIN WHITE LEGHORNS and BROWN LEGHORNS, 100, $12.50; 500, $60. THOMPSON & HOLTERMAN STRAIN BARRED ROCKS and ANCONAS, 100, $18; 500, $87.50. Postpaid, full live delivery guaranteed. Catalog free. Bank Reference.

DE-KOSTER'S HATCHERY, Box X, Zeeland, Mich.

BABY CHICKS

Hatched from strong and vigourous flocks of ENGLISH WHITE LEGHORNS AND ANCONAS, BRED FOR HIGH EGG-PRODUCTION. We guarantee 100 per cent [illegible] live chicks on arrival. Postage PAID. Prices reasonable. Instructive Catalog and prices free on request. QUALITY HATCHERY, Box A11, Zeeland, Mich.

BABY CHICKS and HATCHING EGGS

Direct from our farm at greatly reduced prices, only 9c up. Barred Rocks, White Leghorns and Anconas. Write quick for particulars and special introductory offer. MODEL POULTRY FARM & HATCHERY, Zeeland, R. 4, Michigan.

BABY CHICKS—REMARKABLE FOR SIZE and strength. Reasonable prices. Leghorns, Anconas, Rocks, Reds, Wyandottes, Orpingtons, Minorcas, Spanish, Brahmas. TYRONE POULTRY FARM, Fenton, Mich.

BABY CHICKS 12c AND UP

Member Mid-West Baby Chick Association.
THOS. G. CALLAGHAN, Fenton, Michigan

Rheumatism

A Remarkable Home Treatment Given by One Who Had It

In the year 1893 I was attacked by Muscular and Sub-Acute Rheumatism. I suffered as only those who are thus afflicted know for over three years. I tried remedy after remedy, but such relief as I obtained was only temporary. Finally, I found a treatment that cured me completely and such a pitiful condition has never returned. I have given it to a number who were terribly afflicted, even bedridden, some of them seventy to eighty years old, and the results were the same as in my own case.

I want every sufferer from any form of muscular and sub-acute (swelling at the joints) rheumatism, to try the great value of my improved "Home Treatment" for its remarkable healing power. Don't send a cent; simply mail your name and address, and I will send it free to try. After you have used it, and it has proven itself to be that long-looked for means of getting rid of such forms of rheumatism, you may send the price of it, One Dollar, but understand I do not want your money unless you are perfectly satisfied to send it. Isn't that fair? Why suffer any longer, when relief is thus offered you free. Don't delay. Write today.

MARK H. JACKSON
265J Durston Bldg., Syracuse, N. Y.
Mr. Jackson is responsible. Above statement true.

CHICKS for June 19 Delivery

Improved S. C. English type White and Brown Leghorns, $10.00 per 100; $50.00 per 500. Extra selected $12.00 per 100; $57.50 per 500. From all good profitable layers, and our selected are from our very best layers.

This is our 12th year breeding, hatching and shipping chicks, and we are offering you chicks from the best layers at a very reasonable price.

We pay the postage up to your door and guarantee you 100% safe arrival.

Order direct from this ad to save time, for it pays to be a little ahead of time, or write for our free 32 page catalogue, Wolverine Hatchery, Zeeland, Mich.

Chicks

From select vigorous, heavy laying breeding stock. White, Brown Leghorns, Anconas, Barred Rocks. Our price is 12 cents and up. Guarantee 100% live delivery by prepaid post. Get your order in now—will ship when you want. Customers report "Big Profits" with these wonderful layers. Write today for Illustrated Catalog. It's free. Reference: State Commercial Savings Bank. Member M. B. C. A.

Queen Hatchery & Poultry Farm,
Zeeland, Michigan

BABY CHICKS

You can now order Chicks in 11 breeds of the Pure Breed Practical Poultry that is making egg records on our customer's own farms. If you want stock that will make real money, send for our description and price list. All stock guaranteed 100% post paid. We want you to try our stock this year. It is the best practical stock you can buy.

Barred Rocks
White Rocks
Rhode I. Reds
Wyandottes
Orpingtons
Leghorns—
  Wh., Br., Buff
Anconas
Minorcas

STATE FARM ASSOCIATION
202 Chase Block Kalamazoo, Michigan.

CHICKS Barron Strain Selected White Leghorns. Produced under my personal care. Strong, vigorous chicks carefully packed to go safely. Postpaid; full live delivery guaranteed 50 chicks, $6.50, 100, $12.50; 500, $60. Get your order in early. Elgin Hatchery, Box 317A, Zeeland, Mich.

Hatching Eggs & Baby Chicks

Tompkins strain. For April and May chicks, per hundred, $18.00. Eggs per hundred, $8.00. Quality breeder of Rhode Island Reds, both combs. WM. H. FROHM, New Baltimore, R. 1, Mich.

White Leghorn CHICKS

Heavy Laying, pure bred, English strain. Flocks culled and tested for laying ability. Strong, healthy chicks. 100 per cent live delivery guaranteed. Postage paid. Catalog, low price list free. Write quick.

Catalpa Grove Hatchery Box 4 R. 2, Holland, Mich.

WHEN WRITING ADVERTISERS MENTION M. B. F.

REQUIREMENTS OF WHITE WYANDOTTE

(Continued from Page 25)

gracefully and closefully over tail; coverts, abundant, filling out well in front, hiding the stiff feathers. Breast: broad, deep, round. Body and Fluff: Body, moderately short, deep, round; fluff, full-feathered, well rounded. Legs and Toes: Thighs, short, stought, showing outlines when viewed sideways, well covered with short feathers; shanks, short and stout, set well apart, well rounded; Toes, straight.—E. C. Foreman, Associate Professor of Poultry Husbandry, M. A. C.

FEEDING CHICKS AND CHICKENS—SOME OF MY RESULTS

When chicks are first received from the company or hatched by your own hens it is not best to feed them until they are thirty-six hours old, as the youk of the egg provided them with nourishment until they reach this age. Feeding before this time causes many deaths because the system is not ready to receive the food and bowel trouble results.

For their first meal a good feed would be a boiled egg, shell and all chopped fine mixed with three times its amount in bread crumbs. After a week or two a more sutiable food for growing chicks would be rolled oats or screenings. Chicks need water constantly in summer and winter. Green fed is used as an appetizer.

After the chicks are a month old they need heavier food to build up their systems. Along with this heavier feed a soft mash should be fed. The ratio being one feed of soft buttermilk mash to every two feeds of grain.

Chicks must have animal feed, when they are on free range they can pick up bugs and worms themselves, but if they are confined you must give it to them in the form of meat scrap. Another thing they must be provided with, if confined it needs chick size grit because it is important to help them digest their food. Fine scratch sand should be provided for them if it is not possible to get grit.

After the chicks have been reared cracked corn and wheat give excellent exercise, if fed in litters from 3 to 6 inches deep so they will have to scratch for it. Hens cannot get too much exercise for if they don't have to work they get too fat and can't lay.

By feeding my chicks in this way I have raised them by having only eight deaths out of eighty. My hens have produced in the month of January, 214 eggs; February, 460 eggs; and March, 1,002 eggs, making a total of 1,676 eggs. Of these I have sold 128 dozens, besides using in our home 11 2-3 dozens and selling two settings at $1.00 each. Selling the 128 dozens at an average of 40c. I have received $55.73 and $2.00 for setting making a total of $57.73. The feed used amounted to $23.45, netting me $34.28.—Grant Gallup, Member Boys' and Girls' Club, Iron County, Mich.

CULLING HENS

In many flocks a large loss is maintained every year through the keeping of unprofitable hens and it is important that culling be done regularly, but to do it right is the important thing. The two common methods resorted to for culling hens is to sell off those that have the rough, scaly legs whether or not their age is known. Scaly legs instead of indicating age, are caused by a microscopic mits known as the "scaly leg mite." This pest gets under the scales of the shank and toes and naturally the advance stages are more marked on the older chickens. This is not a reliable rule to follow in selecting the old hens.

There are two methods for marking birds, which can be followed successfully. When the chicks are newly hatched, it is an easy matter to clip the rear toenail, which if [illegible] clipped will never grow out again. This will not cause the chick any inconvenience and serves as a means of identification. To illustrate: the rear toenail of the left foot of all the chicks hatched in 1923 can be clipped. In the 1924 hatch clip the rear toenail of the right foot. In this way in the spring of 1925 all the chicks hatched in 1923 can be sold

BABY CHICKS

Best Paying, Heavy Laying, Pure Bred Tom Barron English White Leghorns, S. C. Rhode Island Reds, Park's Barred Rocks. Strong Healty Chicks hatched from greatest and best incubator known. Chicks are given full twenty-one days and hatched under proper temperature.

Mr. Frank Fulerson, Niles, Mich., writes as follows: "From the 66 pullets we raised from your stock last year along with the thirty which we had, we got 1,610 eggs in December. Can you beat it?"

We are the first and oldest importers of White Leghorns in this state.

Watch our pen number 17 in the Michigan Egg Laying Contest. It's coming strong! All flocks thoroughly culled and properly mated to pure bred cockerels. Try some real chicks this year. Order now at new low prices. Instructive catalogue free.

BRUMMER-FREDERICKSON POULTRY FARM
Box 26 Holland, Mich.

YOU CAN DO IT WITH B AND F BABY CHIX

HIGHEST QUALITY CHICKS

VAN APPLEDORN BROS. BABY CHICKS Since 1906 MICHIGAN'S OLD RELIABLE HATCHERY HOLLAND, MICHIGAN

Michigan's Old Reliable Hatchery

(The most modern and best equipped Hatchery in the state)

PURE BRED English and American S. C. W. Leghorns; S. C. Anconas; Barred Plymouth Rocks and R. I. Reds. Strong, well hatched chicks from tested Hoganized Free range stock that make wonderful winter layers.

Chicks sent by Insured Parcel Post Prepaid to your door. 100% live delivery guaranteed. Fifteen years of experience in producing and shipping chicks has given absolute satisfaction to thousands. Write for illustrated free catalog and price list. Get lowest price on best quality chicks before you buy.

Holland Hatchery, R. 7, Holland, Mich.

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289 EGGS

289 Eggs in one year, actual trap-nest record. "LADY MICHIGAN" also made record of 283 eggs in one year. She laid 294 eggs in 381 consecutive days. Sons and daughters of "LADY MICHIGAN" are now in use in our matings for 1923. If you want

Real Barron Leghorns

Single Comb Whites, get our 1923 catalog and learn full particulars in regard to our flock which we have carefully bred for high-egg records for the past 21 years. Our best matings are made up of mature females with actual trap-nest records from 200 to 289 eggs.

Chicks and Eggs for Hatching

that will put the PROFIT into your Leghorn flocks. Write postcard for catalog today and before ordering Chicks or Eggs elsewhere. STRICK POULTRY FARM, Route 4 O, Hudsonville, Mich.

WASHTENAW HATCHERY

CHICK PRICES: March 26th and following hatches: Barred Rocks and Reds, 50, $8.50; 100, $16; 500, $75. White Rocks, White Wyandottes, 50, $9.50; 100, $18; 500, $85. White, Brown, and Buff Leghorns, 50, $7.50; 100, $14; 500, $65. From hatches due March 12th and 19th add $2 per 100 to these prices. Postpaid, full live delivery guaranteed. Our flocks are carefully selected and bred for high egg production. Order from this ad. Reference, Farmers and Mechanics Bank.

WASHTENAW HATCHERY, Ann Arbor, Mich.

Day Old Chicks

From Select, Hogan Tested, Flocks on Free Range. Well-fed and handled to insure strong, vigorous chicks. Heavy Layers. PRICES: WHITE and BROWN LEGHORNS and ANCONAS, 50, $7.50; 100, $14; 500, $65. BARRED ROCKS, 50, $8.50; 100, $16; 500, $75. Hatched right and shipped right. Postpaid. 100% live delivery guaranteed. Bank Reference. Order direct from this ad. Circular free.

BORST & ROEK, Box P, Zeeland, Mich.

GREEN LAWN CHIX sent insured parcel post prepaid. Barred Rox, White Rox, R. I. Reds, and Black Minorcas, $16 per 100. Brown Leghorns, English White Leghorns or Anconas $14 per 100. Heavy Broilers $14 per 100. Odds and Ends $13.00 per 100. 5% discount on 500 or 1,000 lots. All varieties 17c each in less than 100 lots. Our 13th year producing high grade chix that please. Our method of shipping positively prevents chilling and crowding and we guarantee 100% live delivery. May, June, July 1c per chix less. Order from this ad and state just when you wish chix sent. A saving to cash customers. Deduct 5% if full cash is sent with order. Reference: Fenton State Bank.

GREEN LAWN POULTRY FARM, Fenton, Mich.
Gus Hecht, Proprietor.

Pure Bred Chicks Buy 'Em Near **Home**

Broiler Chix	11c	Wh Wyandottes Buff Orpingtons	17c
W. or B. Leghorns	13c	Light Brahmas	22c
B. Rocks or Reds	15c	Black Minorcas	16c
W. or Buff Rocks	17c		

Add 35c if less than 100 lots wanted. Circular.

LAWRENCE POULTRY FARM
Dept. 8 Good Reference R. 7, Grand Rapids, Mich.

QUALITY BABY CHICKS S. C. Brown and English strain White Leghorn Baby Chicks. Write for catalog. Cooks Poultry Farm, Holland, Michigan.

WHITTAKER'S R. I. REDS—Michigan's Greatest Color and Egg Strain. Bred from winter layers for 13 years. Chicks and eggs. Write for free catalog. Interlakes Farm, Box 4, Lawrence, Mich.

CHICKS—WE HAVE SHIPPED THOUSANDS each season since 1904 Different breeds, free booklet with guarantee and delivered price. Freeport Hatchery, Box 10, Freeport, Mich.

CHICKS—SINGLE COMB BUFF LEGHORNS only. Strong healthy chicks from good laying stock. J. W. WEBSTER, Bath, Mich.

CHICKS—ENGLISH S. C. W. LEGHORNS, $10 per 100. Park strain Barred Rocks $14 per 100. 100 live delivery guaranteed by parcel post. HENRY WATERWAY. R4, Holland, Mich.

Keep The Business Farmer Coming—See Page 28.

CHICKS

THAT GROW, LAY AND PAY Barron English White Leghorns, Brown Leghorns and Anconas.

PURCHASE THIS YEAR'S CROP OF CHICKS from tested layers, headed by large vigorous 260 to 288 Pedigreed Males.

CUSTOMERS REPORT BIG PROFITS with these wonderful layers. Write today for our large illustrated catalogue. It tells all about them, it's free.

WYNGARDEN HATCHERY
Box B, Zeeland, Mich.

400,000 Chicks

Big, strong, Well-hatched Chicks from selected to lay stock on free range, properly fed and housed to insure health and vigor. WHITE, BROWN & BUFF LEGHORNS, 50, $7; 100, $13; 500, $62.50. BARRED & WHITE ROCKS, S. C. & R. C. REDS, ANCONAS, 50, $8; 100, $15; 500, $72.50. WHITE WYANDOTTES, 50, $8.50; 100, $16; 500, $77.50. BUFF ORPINGTONS, SILVER WYANDOTTES, 50, $9.50; 100, $18; 500, $87.50. POSTPAID.

We guarantee full 100% live arrival. Reference, Citizen's Bank. Order direct from this ad. and save time. Free circular.

MODERN HATCHERY
Box F, Mt. Blanchard, Ohio

Star Hatchery BABY CHICKS

From Select, Vigorous, Heavy Laying Breeding Stock

Prices Reduced

Hatched by modern methods in best machines under our personal supervision. Carefully packed and sent postpaid and 100% live delivery guaranteed. Bank Reference. You take no chances in ordering STAR BABY CHICKS. Place your order now and get them when you want them

STAR HATCHERY, Box X, Holland, Michigan

ARISTOCRAT

STRAIN BARRED ROCKS. THE WORLD FAMOUS PRIZE WINNING AND HEAVY LAYING STRAIN.

Barron White Leghorns
Splendid, big, heavy weight, heavy laying hens.

Everlay Brown Leghorns
Beautiful business hen. Wonderful winter layers. Second to none.

ANCONAS Sheppard's Famous Strain 331 egg strain.

CHICKS From all these great strains. Postpaid and full live delivery guaranteed. Also EGGS FOR HATCHING and Breeding Stock. Reference 2 Banks. Member M. B. C. A.

Fairview Poultry Farm, Route 2 K, Zeeland, Mich.

Rosewood Farm

Healthy, Hardy Chicks

Well-hatched, carefully packed, and shipped. Select, heavy laying WHITE LEGHORNS, 50, $7; 100, $13; 500, $62.50; 1,000, $120. Select ANCONAS, 50, $7.50; 100, $14; 500, $67.50. Select BARRED ROCKS, 50, $8.50; 100, $16.50; 500, $80. Postpaid, full live delivery guaranteed. Our chicks will render you the best of satisfaction and you will COME BACK TO US. We have had long experience in producing good Chicks and our flocks are second to none. Circular free. ROSEWOOD FARM, R 12 A, Holland, Mich.

BABY CHICKS—FROM SELECTED FLOCKS Six leading varieties. Popular prices and guaranteed delivery. Write for catalog and price list.
H. H PIERCE, Jerome, Mich.

The Court of Last Appeal

YOU are the judge and the jury. Your verdict is final. There can be no appeal—for this is the High Court of Public Opinion.

The wares of the world must appear before you—the product of every factory—the merchandise of every store. Those things that fail to measure up to your requirements are quickly condemned to oblivion.

The manufacturer who advertises deliberately places his merchandise on trial. He openly courts your critical inspection. He invites comparison. He directs your attention to his goods and then forces those goods to stand on their own merits.

If he were not sure of his wares he would not dare to advertise. For advertising would put him to a test he could not meet, and thus hasten the end of his business career. It would be business suicide.

You can depend on the man who advertises. He KNOWS his product is good.

That's one reason why it pays to read the advertisements you find in this paper. It is through advertising that you are able to keep in touch with the GOOD things that progressive business men are spending their money to introduce and to keep before you.

Base your judgment on the advertisements

and the newer hatched chicks can be marked with the 1923 system.

The average hen does not lay enough eggs to pay for her keep after the second year or laying season and unless she is of exceptional value as a breeder she should be disposed of. It is during the pullet year that the majority of hens make the best egg records and therefore it is good practice to feed for egg production the first year. The second year the hens that were the best layers and of strong vitality should be used for breeding. The third year they should be disposed of.

Another reason for culling hens is to keep down disease. For example one disease in particular is more evident in farm flocks than is generally thought of and that is tuberculosis. Where the disease is present in the flock, the older fowls show the larger percentage of infection and are usually in the advance stages of the disease. So culling will be a great help in doing away with this trouble.

We would not cull now if hens are laying, but do so as soon as the laying period is over this spring.

HOW TO PREVENT DISEASE

THERE is no doubt that fowls under modern forced conditions have more ills than fowls did years ago when they roamed the fields in an almost wild state. Forcing and pampering and inbreeding in various ways has caused it. But who would be willing to give up the various improvements and go back to the woods' fowls of various types and colors and laying about 59 eggs a year and that in the late springtime?

Thousands of progressive and successful poultrymen and up-to-date farmers are faithfully striving to banish the conditions which produce disease, and are living examples of how fowls should be kept for health. Fowls kept in close confinement with no possible chance to escape the existing conditions very frequently are subject to about as many ills as their keepers, and that means legion, it would seem. The great harvest of death among the feathered tribes due to the sins of commission and omission is too great even to estimate. As someone has said, "stop sinning and attend to business," applies admirably in this case.

The secret of sickness has been discovered. Disease is due to germs of a certain kind which devlop or sprout, if you please, when the conditions are just right, when the tilth—or rather the filth—is right. The blood and tissues of the fowl are the garden for the germs. The feed in the digestive tract is very often the seed-bed for these disease germs. You may read of them as microbes, basteria, ferments and the like. We are told that there are germs in a healthy organism which devour or destroy the enemy germs so that they fail to get in their work. They are of various names and character and so numerous that the average man of practical ideas does not have the time or the inclination to study them individually enough to do him any good in his life-work. On the other hand, it is very essential for him to know that stagnant pools of water with a green scum over it, stale garbage heaps, impure air, damp chilly houses and coops are all favorable breeding places for the disease germs, and hostile to the good health of poultry.

The question then resolves itself into whether the poultry man shall look well to the sanitary conditions with which he may surround his poultry by careful work, or utterly ignore all such things, allowing his flocks to drift into a state of disease and trouble at almost any time, and depend upon doctoring to get results.

Preventative measures not only consist in sanitary measures but in starting with good stock, and if any new fowls are purchased proceeding to put them through quarantine until you are satisfied that they have no diseases which may be transmitted to your own flocks before putting them with them. The same course should be pursued in handling your own stock. If any should develop disease take it away from the balance of the flock to treat it, and do it at once. Do not put it back until you are sure that all traces of trouble have passed. Should it be badly affected the safest remedy is the hatchet and burying deep or burning. Too close confinement in small

(Continued on Page 28)

Our Business Egg-Bred Leghorns
Produce Our
Dependable Quality Chicks!
The Famous Egg Basket Strain
Single Comb White Leghorns
Mated to Hollywood
250 to 300 Egg Pedigreed Sires

Profits in Large White Eggs and Plenty of Them When Prices Are High. That's what you want, and that what you get in the *Famous Egg Basket Strain.*

Our parent stock is selected with the greatest of care by experts as to their laying ability and health. They are of large size, long, deep, wedge-shaped bodies, with keen, alert eyes, and large lopped combs.

These wonderful Pedigree-Sired Matings, combined with our fifteen years of skillful breeding produce our **Egg Basket Strain Leghorns,** famous all over the United States for their large size and great laying quality of large white eggs. **They are proven winter layers and consistent winners** for our customers at leading shows and Egg-Laying Contests. They should be the best investment you ever made in baby chicks.

Order Direct From This Ad For Immediate Delivery

Prices, for May and June delivery, on our Hollywood Pedigree-sired extra select **Grade A** chicks: **$12.00** per **100; $55.00** per **500; $100.00** per **1,000; Grade B** chicks: **$11.00** per **100; $50.00** per **500; $90.00** per **1,000;** postpaid. **100% live delivery guaranteed.** Hatches every Tuesday. **Order now!** 10% deposit books your order and assures future delivery just when you want them. Can also ship C. O. D.

FREE Our large illustrated circular describes our wonderful Leghorns and our large breeding institution, sent free.

Q. DEVRIES Grandview Poultry Farm, Box L, Zeeland, Mich.

300,000 Chicks

Guaranteed Michigan Bred and Hatched

ENGLISH WHITE and BROWN LEGHORNS, 50, $7; 100, $13; 500, $60. BARRED ROCKS, R. and S. C. REDS, 50, $8.50; 100, $16; 500, $75. 1,000 orders at 500 rate. Postpaid, full live delivery guaranteed. Strong, vigorous Chicks from heavy laying flocks. Order right from this ad. WE SATISFY OUR CUSTOMERS. Catalog free. Reference: Holland City State Bank.

KNOLL'S HATCHERY, Box L, Holland, Michigan

CHICKS, $10 per 100 and up

Postpaid to your door and full live count guaranteed

Varieties	Prices on 50	100	300	500	1,000
WHITE, BROWN and BUFF LEGHORNS	$7.00	$13.00	$38.00	$62.00	$120.00
BARRED ROCKS, BLACK MINORCAS and ANCONAS	8.00	15.00	44.00	72.00	140.00
WHITE ROCKS, WHITE WYANDOTTES and REDS	8.50	16.00	46.00	75.00	145.00

BUFF MINORCAS, 50, $13; 100, $25. MIXED CHICKS FOR BROILERS, 50, $6; 100, $11; 500, $50. Postpaid. Full live delivery guaranteed. Hatched in the best possible manner from good, vigorous, pure-bred, heavy laying flocks on free rangs. Carefully selected and packed to go safely. No catalog. Order right from this ad. and save time. Reference, Citizen's Saving Bank. You take no chances.

THE EAGLE NEST HATCHERY, Box K, Upper Sandusky, Ohio
Only 7 hours from Grand Rapids. Can reach any point in Michigan in 24 hours.

TIMMER'S HATCHERY

PROFIT-MAKING CHICKS
WHITE and BROWN LEGHORNS
ANCONAS
BARRED ROCKS and REDS

Hardy, healthy Chicks from selected, heavy-laying flocks. Carefully packed and shipped. Post paid to your door, and Full Live Count guaranteed. Send for our new, Free Catalog TODAY.

QUALITY CHICKS at REASONABLE PRICES. Bank reference.
TIMMER'S HATCHERY, Route 3A, Holland Michigan.

BABY CHICKS
White and Brown Leghorns, $13-100
Anconas, $14-100

GOING UP
ONE MILE AHEAD OF COMPETITORS IN QUALITY

GET CHICKS ON the day you want them

R. I. REDS, ROCKS and MINORCAS, $16.00 100. Extra selected $2.00 per 100 higher. 100% safe arrival guaranteed. Will ship any number of 25 or more, special prices on 500 and over.

COLONIAL POULTRY FARMS, Box B, Zeeland, Michigan.

HILLVIEW HATCHERY

GUARANTEED TO ARRIVE

Strong and Healthy. Chicks from selected heavy laying. Hogan tested flocks. ENGLISH WHITE LEGHORNS and BROWN LEGHORNS. Heavy Laying EXTRA GOOD BARRED ROCKS. Postpaid to your door and full live delivery guaranteed. Our flocks are kept on free range, properly fed and cared for insuring the vigor necessary in the Chicks to live and MAKE A PROFIT. Give us a trial and you will come again.

HILLVIEW HATCHERY, Route 12 E, Holland, Michigan.

Hardy Northern Bred Chicks

Pine Bay Farm

Barron S. C. W. LEGHORNS Parks Strain BARRED ROCKS The greatest egg producers known. Heavy winter layers. See record of our pen 16 now at the Michigan International Egg Laying Contest. Get Quality chicks at Reasonable prices from Holland's pioneer poultry farm. Catalogue free.

Pine Bay Poultry Farm, Box 56, Holland, Mich.

BABY CHICKS

Prices on our very best A-1 English White Leghorn and Ancona Chicks reduced to $11.50 per 100; $55.00 per 500; $105.00 per 1,000. Get our descriptive catalog or order from ad. Model Poultry Farm & Hatchery, Zeeland, Mich.

WHITE DIARRHOEA

Kills millions of Chicks each season. THEY CAN BE SAVED by using "FADOIL"—a guaranteed remedy and preventive. $1 per bottle. Postpaid. Enough to successfully treat 650 Chicks. Your money cheerfully refunded if not satisfactory. Bank reference. You take no chances. Send your order TO-DAY and be INSURED against loss. Circulars free. Dealers wanted.

FADOIL REMEDY CO., Box 507, Norwalk, Ohio

KEEP THE BUSINESS FARMER COMING
SEE PAGE 28

POULTRY BREEDERS' DIRECTORY

Advertisements inserted under this heading at 30c per agate line, per issue. Commercial Baby Chick advertisements 45c per line. Write out what you have to offer and send it in. We will put it in type, send proof and quote rates by return mail. Address The Michigan Business Farmer, Advertising Department, Mt. Clemens, Michigan.

PULLETS, HENS AND COCKERELS
S. C. White Leghorns and S. C. and R. C. Black Minorcas. Must make room before cold weather. Almost ready to lay.
LAPHAM FARMS, Pinckney, Mich.

JOHN'S BIG BEAUTIFUL BARRED ROCKS are hen hatched, good layers, quick growers, light and dark matings, 30 eggs $3.50; 50-$5.00 postage paid circulars. **John Northon, Clare, Mich.**

SICILIAN BUTTERCUPS. GOOD YEAR around layers of large white eggs, also White Rocks, good laying strain. Eggs $1.50 per 15.
IDA PRAUSE, R. 3, Maple City, Michigan

HATCHING EGGS

HATCHING EGGS
S. C. White Leghorns. Tom Barron Strain, 250 egg utility line. November to April, average 65 per cent. Pure white plumage. Range grown, healthy, vigorous stock. Eggs $1.50 per 15; $4.00 per 50; $7.00 per 100. Prepaid. Limited supply. Order from this ad now.
MAPLEWOOD POULTRY FARMS
C. W. Bovee, Prop. North Star, Michigan.

BUFF ROCK EGGS BY 10 LB. MALES and 1st Cincinnati, Ohio winners. Hogan tested hens, heavy layers.
J. C. CLIPP & SONS, Box M, Saltillo, Ind.

THOROUGHBRED BUFF ROCK EGGS from Blue Ribbon Winners, $1.50 per 15; $9.00 per 100.
BALDWIN & NOWLIN, R. 4, Laingsburg, Mich.

ARISTOCRAT DARK BARRED PLYMOUTH Rocks. Foundation stock direct from Holterman's choicest matings. Eggs from special pen at $8 for 15 prepaid. From other pens at $3 and $5. Satisfaction guaranteed. **R. W. BRANDT, R. 4, Box B, Saginaw, W. S., Michigan.**

White and Barred Rock Eggs for Hatching. Pure, Prize winning, utility strains, selected pens, $1.35 per setting, flock $1.00 a setting, delivered P. P. special on quantity. **Dawson's Farm, R. No. 4, Muskegon, Michigan.**

BARRED ROCK HATCHING EGGS. NORMAN Heavy Laying Strain.
MRS. JESSIE B. DEAN, R. 1, Mason, Mich.

BARRED ROCK HATCHING EGGS. PARKS 200 egg strain. $2 per 15; $5 per 50; $10 per 100 by prepaid parcel post.
R. G. KIRBY, R. 1, East Lansing, Michigan.

White Rocks. Heavy Layers, Choice Birds. Prepaid guaranteed eggs, 15, $1.50; 50, $3.50; 100 $6.50. **Mrs. Florence Howard, Petersburg, Mich.**

FOR SALE—BARRED ROCK HATCHING EGGS from good winter layers. $1.25 per 15 or $2.00 per 30 postpaid.
Mrs. Frank Millikin, R. 1, Roscommon, Mich.

PURE BRED BUFF ORPINGTON EGGS AT $2 15; $5.50-50. Prepaid.
MRS. ANNA LA NOUE, Fostoria, Michigan.

THOMPSON STRAIN BARRED ROCK EGGS by 9 lb. males, bred to lay. Dark matings $1.75 per 15; $3.00 per 30 prepaid.
MRS. FRED KLOMP, St. Charles, Michigan.

SINGLE COMB RHODE ISLAND WHITES. Eggs now $1.75 per fifteen.
JNO. A. HARTGERINK, Box W., Zeeland, Mich.

ROSE COMB RHODE ISLAND REDS. HATCH-ing eggs $1.25 per setting. Postpaid.
Mrs. Albert Harwood, R. 4, Charlevoix, Mich.

REDS: BOTH COMBS, CHESTER COUNTY and Harrison Pierce strain. Eggs $1.50 per 15 postpaid. **Leo Van Conant, New Haven, Mich.**

EGGS FOR HATCHING—UTILITY STOCK. Grand White Wyandottes—M. A. C. Champions. Good, square deal. Reasonable prices. Send for price list.
C. W. HEIMBACH, R. 5, Big Rapids, Michigan.

WHITE WYANDOTTES MARTIN STRAIN, Eggs for hatching.
WAYNE CHIPMAN, R. 2, Washington, Mich.

SILVER LACED AND WHITE WYANDOTTES Four large, beautiful roosters. Eggs $1.50 per 15.
C. W. BROWNING, Portland, Michigan.

S. C. ANCONAS (SHEPPARD STRAIN) EX-cellent layers. Eggs $1.25 per 15.
MRS. GILBERT BROWN, Wheeler, Michigan.

SILVER SPANGLED HAMBURG Eggs for Hatching, $1.50 setting. Write for prices on all varieties.
ROSEDALE FARMS, Port Huron, Michigan.

BOURBON RED TURKEYS. EGGS 50c EACH.
THOS G. CALLAGHAN, Fenton, Michigan.

Mammoth Bronze Turkey Eggs for Hatching. Large, Pure, Disease-free birds, 55c each delivered P. P. **Dawson's Farm, R. 4, Muskegon, Mich.**

MAMMOTH PEKIN DUCK EGGS FOR SETTING $2.00 or two settings $3.00. Also **Wild Mallard** Duck eggs same price. Very choicest stock. All orders prepaid. **Cedar Bend Farm, Okemos, Mich.**

ROUEN DUCK EGGS BY SETTING OR 100
Mrs. Arthur Rutledge, R. 4, Big Rapids, Mich.

LEGHORNS

LEGHORNS
S. C. Buff Leghorn Hens, Pullets and Cockerels. Hens and pullets $2.50 each; cockerels $3.00 to $5.00 each. Show birds a matter of correspondence. **LAPHAM FARMS, Pinckney, Mich.**

PULLETS BARRON ENGLISH WHITE Leghorns, eight weeks to maturity—May to October. Breeding flocks repeatedly culled by experts. Extra large and vigorous. Wedge shaped bodies, big looped combs. "Lay-bilt" in every way. Also breeding cockerels. Satisfaction and more or money back.
MORSE WHITE LEGHORN FARM,
Belding, Michigan.

TURKEYS—DUCKS—GEESE

M. BRONZE TOMS, 16 LBS. $17.00; HENS, 10 lbs. $15; 5 eggs prepaid, $4; 10, $7.50.
RALPH WISE NURSERIES, Plainwell, Mich.

HIGHEST PRICES PAID FOR LIVE AND Dressed Poultry, Veal, Eggs. A square deal always.
C. E. McNEILL & CO.,
825 W. So. Water St., Chicago, Ill.

NEW SUBSCRIPTION RATES

The Michigan
BUSINESS FARMER
(Effective April 2nd, 1923)

ONE YEAR	.60
TWO YEARS	$1
FIVE YEARS	$2

EVERY subscriber at the above rates is entitled to ALL the Departments of Service which have made The Business Farmer famous, so long as the term of subscription lasts.

You know The Business Farmer is the most practical, and fearless because it is the **only** independent farm paper published in Michigan.

- -

The Michigan Business Farmer,
Mt. Clemens, Mich.

I enclose $............... for a .... years subscription, this entitles me to every department of Business Farmer Service, without further cost for the full period of my subscription.

M.. RFD No.........

P. O.. STATE...............

(If it is a Renewal, mark X here ☐ and if possible send the address label from this or any recent issue to avoid mistakes.

HOW TO PREVENT DISEASE

(Continued from Page 27)

houses with insufficient ventilation is a very common cause of disease. Let everything be light and airy and full of sunshine.

Keep the houses and coops clean and free from mites and lice, both of which are deadly enemies to fowls. Do not wait for a sign of mites to appear but go right after them, and use methods to destroy them if they are present.

The feeding should be carefully guarded, and nothing but the finest and soundest of grain and feedstuff used. Musty grain will put a lot of fowls on the dumps about as quick as anything we can think of. They may not get sick unto death right off but they will get mightly out of condition and be hard to get right again. Good fresh, cool water and shade are real essentials.

A great preventative of disease is found in the use of Epsom salts given once in two weeks during the hot months, and once a month during the rest of the year. It should be given at the rate of one-third teaspoon to the fowl, dissolved in water and then used to wet a mash for them; fed in the morning is preferable. This item is too important to be neglected, so take notice.

A TEN DOLLAR START

"WHEN I came out here on my little acre and a half, nine years ago, I had only $10 left on which to live until I could get a start with poultry," began Mrs. C. Jewett of Auburn. "I came largely for my health, since the doctors told me I wouldn't live. I had to do all the work myself, but it was the making of me and I built up my little home, which I would not trade for the best property in Seattle.

"I began with what few ducks I could buy and three duck eggs. A friend of mine received a half dozen eggs from England and she divided with me. All I got out of the setting was a drake, but I have kept him for breeding up the flock. I also secured some good African geese and I still have a gander, which I call Jiggers, and five hens.

"A few years later I got started with China pheasants by buying a few eggs. I had to pay a license of $10 to begin and $5 each year thereafter. I find that they pay well, mostly from the sale of eggs and young pheasants, but I prefer to sell the eggs, since there is less labor involved. This spring I took a contract to hatch 200 pheasant eggs for the county game commission and will use Japanese Silky hens, since they can handle pheasant eggs better than a larger hen. They also make good mothers for the young birds after they are hatched."

Mrs. Jewett also has a pen of Light Brahmas, which she is raising for the production of capons. She has found a good demand for well-fattened capons, and has a few which have been fattened over winter and weigh six pounds at the age of 7 months, dressed and drawn. This flock will be increased this year, and a new cockeral secured with the idea of producing as many capons as possible during the next few years.

In another pen Mrs. Jewett keeps a flock of hens which are crossed between White Leghorns and Wyandottes. While she does not recommend this cross, she merely gives the figures showing the egg production for January to show what can be done with a small flock. The 50 hens produced a total of 84 dozen eggs during the month, which were sold at an average of 27 cents a dozen. This made a total of $22, $14 of which was clear profit above the cost of feed. The birds got a balanced ration of scratch feed and egg mash together with such green feeds as cabbage, carrots and other roots furnished from the home garden. This pen will be kept as a commercial flock.

A few turkeys are kept merely to supply the demand for turkey eggs, and only a few eggs are hatched under hens which are not sold immediately for setting. A number of bantams are also kept about the place, partly for curiosities, and also to supply a small demand for eggs.

"I have had better success with my ducks and geese than I had ever expected and think it is one of the most interesting games of the poultry industry," remarked Mrs. Jewett. "I have only 19 ducks and three drakes, but I have gotten as many as 17 eggs a day and never get less than 13 at this time of the year.

"There has been a good demand for setting eggs and I have sold most of the eggs for this purpose. I can also get a good price for the young goslings and have found it profitable to set a few of the Rhode Island Red hens with duck eggs. They make good mothers, but I prefer to raise the ducklings under a home-made brooder and set the hens over again.

"I have always kept the ducks and geese in the same lot and find that they do not interfere with each other. A small pond or swiming tank is always kept full of running water and they are allowed access to this at all times. I have just 10 geese now, since I just sold off some of the best stock. There are two breeds, the Toulouse and the African. There is a demand for both the young stock and for the setting eggs, but I would just as soon sell the eggs, as I can easily get 50 cents each.

"Geese are very easy to raise, since they need very little grain during the summer, but will get the biggest part of their living from grass and other green stuff that can be spared from the garden. I have a small lot in which the geese and ducks are kept and I will have it plowed and seeded to rye. This will be fenced off and the birds turned in when the grain is about six inches high.

"While both the ducks and the geese are very fond of water, it is not necessary that they have access to a pond. The ducks are what are called dry land ducks and will get along with very little water. They are better contented, however, if they can have a small pond to swim in and it is not so hard to furnish such in almost any lot. It is also a good plan to furnish boxes or small houses where the ducks can have their nests. Some of them will lay on the ground, anyway, but it is well to encourage them to use the nests.

"I have a home garden in which I raise a large part of my table supply," explained Mrs. Jewett. "This is good garden soil, and I keep it well fertilized with hen manure and can grow almost anything. The garden also furnishes a good source of green feeds for the birds, and I can keep practically all of the pens supplied during the summer. While I have a large collection of flowers about the house. I do not plan on selling anything of this kind. They are used more to add beauty to the yard and to create a more home like appearance.

"It has been hard work to build up even as small a home as this, but it has been well worth while. I have done practically all of the work myself up until last summer, am 52 years old, and was never healthier in my life. I attribute it all to the abundance of outside air and exercise which a person gets when doing hard work of this kind. I have had good offers for my place, but have refused them all because I much prefer a home to the money it would bring. I would be a long time building up another, and I would probably spend the money before another home was completed."—Washington Farmer.

DISTINCT POULTRY BRANCHES

The poultry Business, east and west, is going broken up into several distinct branches—breeding, producing market eggs, producing market fowls, hatching, selling day-old chicks, etc., and Professor A. G. Lunn of the Poultry Department of the Oregon Agricultural college believes that if the entire east develops as a market producing section the demand for stock will find its way to the Pacific coast. Then if the time ever comes when the west can not compete with the east in commercial egg production our opportunity to develop poultry farms will come along the line of breeding.

JES' THE SAME

"A lot of talk," said Uncle Eben, "don't interest nobody ceppin' de person dat's doin' it; same as what you say to a mule or a pair o'dice."
—Washington Star.

HIGH COST OF MARRIAGE

"It's got so these days that a man can hardly wed unless he can show the girl two licenses."

"Two licenses?"

"Yes, marriage and Automobile."

I wish we could have The Michigan Business Farmer come every week. I can hardly wait two weeks for my paper, but the old saying is "good things come to he who waits."—E. G. Hale, Turner, Michigan.

The Agricultural and Business Situation

Revised Monthly by the Department of Research of the American Farm Bureau Federation.

A committee of eighteen economists called by Secretary H. C. Wallace to consider the agricultural outlook and to prepare a statement which will provide a basis upon which readjustment to meet the economic situation may be made by agricultural producers, reported on foreign and domestic demand and certain leading products as follows:

FOREIGN DEMAND:

The foreign outlook, on the demand side, seems slightly less favorable to our farmers in 1923 than it was in 1922. The favorable factors with respect to demand are: First, the influence of American prosperity upon the demand for European goods; and second, the possibility that the slight business recovery that has occurred in a number of European countries may gradually gain momentum. Despite the tariff, European exports to the United States in recent months have been considerably larger than for the same period a year ago.

The unfavorable factors are: First, the progressive piling up of Government debts on the continent of Europe, with its effect upon exchange, currency and business; second, the Ruhr situation.

DOMESTIC DEMAND:

Most competent observers seem to agree that we may expect general business prosperity to last at least six to nine months longer. If this opinion is correct, demand will be distinctly more active next autumn than it was last autumn insofar as the demand for farm products depends upon the purchase of American families, not themselves on the farms.

WHEAT:

The American exports of wheat during the last two years were unusually large owing to the low exports from eastern Europe, and continued low production in some countries in Europe. These exports should not be taken as normal nor be expected to continue permanently. The European countries are making efforts to put their grain production on a pre-war basis and as they become able to accomplish this it is to be expected that our exports will decline and that our production should be readjusted to meet these changing conditions.

The condition of the winter wheat crop in the United States is unfavorable. The intended plantings of spring wheat are 94.5 per cent of last year's acreage and weather thus far has been unafvorable for spring planting.

COTTON:

The world's consumption of American cotton in 1921-22 was about 12,600,000 bales; the indicated world's consumption for the year 1922-23 is not less than 13,000,000 bales. There is no evidence at present that the consumption of 1923-24 will fall below this figure.

The available information indicates, however, that the world carry-over of all cotton on July 31, 1923, will be 6,800,000 bales (largely of foreign short staple cotton), compared with 6,700,000 bales in 1922 and 10,500,000 bales in 1921, and that the use of American cotton will be little, if any, restricted on account of foreign production.

On the basis of farmers' intentions to plant 12 per cent greater acreage than they planted in 1922, the cotton acreage harvested in 1923 would be 36,888,000 acres. If the yield per acre in 1923 should prove to be the same as the average for the five years 1918-22, the total crop would be 11,810,000 bales.

TOBACCO:

The intended plantings for 1923 exceeds the acreage of 1922 by 10 per cent, the average acreage for 1918-22 by nearly 9 per cent, and the average acreage for 1909-13 by 55 per cent. Conditions of production and supply in the main control. There is nothing in the probable demand sufficient to offset the contemplated increase of 10 per cent in planted acreage; particularly when we consider that the 1922 acreage was above the normal and that the trend of prices since 1920 has, on the whole, been downward.

CORN AND HOGS:

The corn situation at this date is about normal, stocks on farms being almost exactly the same as the 5-year pre-war average. Between now and the time the new crop is harvested there will be some tendency toward corn shortage because of the large number of hogs on feed. Hog production has been heavy and is still in a state of expansion.

The prospects which producers must face before a year has elapsed is the absorption by domestic and foreign consumers of a surplus of over six million hogs and 250 million pounds of stored products. This represents a surplus of over seven million hogs, approximately 12 per cent, above last year's production.

I. Production and Trade

1. Agriculture: U. S. Production—000,000 omitted.

	1922	1921	Average 1916-1920	1922* Per cent
Corn, bu.	2891	3069	2831	102
Wheat, bu.	856	815	799	107
Oats, bu.	1215	1078	1413	85
Barley, bu.	186	155	197	94
Rye, bu.	95	62	68	139
Buckwheat, bu.	15	14	14	107
Potatoes, bu.	451	362	373	128
Sweet Potatoes, bu.	110	99	89	123
Hay, all, tons	113	98	102	111
Cotton, bales	9.76	7.95	12	81
Tobacco, lbs.	1325	1070	1378	96
Flaxseed, bu.	12	8	11	109
Rice, bu.	42	38	42	100
Peaches, bu.	57	33	44	129
Pears, bu.	19	11	14	136
Apples, total, bu.	204	99	179	114
Apples, com'l., bbls.	31	22	27	115
Sugar Beets, tons	5	8	7	71
Cranberries, bbls.	.6	.4	.4	150
Beans, bu.	12	9	13.3	90
Onions, bu.	18	14	17	105
Cabbage, tons	1	.6	.7	143
Sorghum Sirup, gal.	37	46	40	93
Cloverseed, bu.	1.9	1.5	1.5	127
Peanuts, lb.	624	829	1043	59
Hops, lb.	26	29	32.1	81

*As percentage of average 1916-1920.

World Production—000,000 omitted.

	1922	1921	Average 1909-13
Wheat, bu (1)	3,058	3,069	2,890
Corn, bu. (2)	3,450	3,781	3,572
Rye, bu. (3)	785	773	....
Oats, bu. (4)	3,003	2,759	3,008
Barley, bu. (5)	833	818	882
Potatoes, bu. (6)	3,123	2,445	3,066
Cotton, bales (7)	16	14.1	19.6

(1) Russia and Mexico excluded.
(2) 17 countries. (3) 18 countries. (4) 27 countries. (5) 25 countries. (6) 16 countries. (7) 500 pounds net, linters excluded.

2. Mining (Federal Reserve Bank of New York):

Figures express production as a percent of normal. In estimating normal production, due allowance is made for seasonal variation and year to year growth.

	Feb., 1923	Jan., 1923	Feb., 1922
Anthracite coal	†112	108	99
Bituminous coal	† 81	83	82
Petroleum	*	124	111

3. Manufacturing (Federal Reserve Bank of New York):

	Feb., 1923	Jan., 1923	Feb., 1922
Wheat flour	109	93	105
Meat	*	104	98
Sugar	121	115	129
Cotton	108	103	92
Pig iron	103	102	57
Steel ingot	*	98	58
Wood pulp	*	100	90
Cement	159	157	82
Wool	*	138	115
Copper	† 89	94	33

* Not available. † Preliminary.

4. Building:

Contracts awarded in 27 States:

(F. W. Dodge Co.)	Mar., 1923	Feb., 1923	Mar., 1922
Number	10,546	6,338	9,250
Value (000,000 omitted)	$ 334	$230	$294

5. Transportation:

Freight car loadings:	Week Ending April 7, 1923	Same Week Month Ago	Same Week Year Ago	Week Ending April 7, 1923*
Total	895,767	905,219	714,268	125
Grain and grain products.	39,353	41,532	31,598	125
Livestock	30,883	31,039	25,024	123
Coal	164,089	186,327	69,456	236
Coke	16,076	15,240	8,599	187
Forest products	73,957	75,548	54,680	135
Ore	15,381	11,818	8,259	186
Merchandise	234,208	229,146	243,718	96
Miscellaneous	321,820	314,569	272,934	118

*As percentage of week year ago.

6. Employment:

Out of 65 industiral centers employment:	Mar., 1923	Nov., 1922
Increased over previous month in	54	54
Decreased from previous month in	11	11

7. Bank Clearings:

Units of $1,000,000,000

	Mar., 1923	Feb., 1923	Mar., 1922
New York City	$19.77	$16.78	$18.72
Outside New York City	17.58	14.17	14.04

8. Mail Order Sales:

	March 1923	March 1922	Nine Months Ending March 1923	Nine Months Ending March 1922
Montgomery Ward & Co.	$12,975,073	$ 8,031,474	$ 81,183,057	$ 58,196,570
Sears Roebuck	19,754,338	15,801,061	155,461,778	130,002,479

II. Foreign Trade

1. Exports: (000 omitted)

Commodity:	February 1923	February 1922	Eight Months Ending February 1923	Eight Months Ending February 1922
Grand total, all exports	$302,106	$246,133	$2,613,285	$2,435,848
Beef and veal, lbs.	2,567	2,579	20,791	23,359
Pork, lbs.	72,210	59,956	530,073	460,356
Lard, lbs.	89,055	75,520	600,176	597,477
Neutral lard, lbs.	2,481	2,571	17,087	14,163
Butter, lbs.	639	500	7,169	3,760
Cheese, lbs.	424	495	2,772	5,414
Hides and skins $	233	211	2,467	3,130
Corn, bu.	8,699	22,052	74,312	112,672
Meal and flour, bbls.	49	50	352	495
Wheat, bu.	5,991	5,576	126,492	172,448
Flour, bbls.	1,379	1,203	10,497	11,037
Oats, bu.	589	239	17,111	2,639
Meal and rolled, lbs.	7,238	3,778	79,029	58,101
Fruits and nuts $	4,522	4,464	59,724	49,642
Vegetable oils, fats $	973	1,243	9,218	9,028
Sugar, lbs.	65,942	135,270	422,133	789,031
Leaf tobacco, lbs.	25,978	25,846	297,103	308,564
Cotton, bales	360	338	4,112	4,522
Wool, lbs.	109	60	340	761

2. Imports:

Commodity.	December 1922	December 1921	Twelve months ending December 1922	Twelve months ending December 1921
Grand total, all imports	$293,464	$237,496	$3,112,549	$2,509,148
Beef and veal, lbs.	2,046	3,422	36,694	32,378
Pork, lbs.	100	108	818	816
Butter, lbs.	3,156	2,602	6,957	18,558
Cheese, lbs.	7,036	3,399	46,573	26,866
Hides and skins $	12,903	5,769	101,045	67,561
Corn, bu.	3	6	113	164
Oats, bu.	12	220	1,299	3,565
Wheat, bu.	2,581	2,052	22,643	23,286
Wheat flour, bbls.	51	58	694	966
Fruits and nuts $	6,472	10,116	72,394	73,487
Vegetable oils, fats $	3,859	4,320	58,606	39,880
Sugar, lbs.	317,674	394,954	9,721,620	5,967,486
Leaf tobacco lbs.	422	194	6,550	5,122
Cotton, bales	72	64	390	291
Wool, lbs.	45,817	12,520	376,795	320,666

3. Prices of Foreign Drafts:

	Nominal Gold Value Par of Exchange	Price of Demand Drafts April 23, 1923	March 19, 1923	April 24, 1922
England	$4.87 to 1 £ Sterling	$4.645	$ 4.70	$4.43
France	19.3c to 1 franc	6.66c	6.46c	9.34c
Germany	23.8c to 1 mark	.0034c	.0048c	.427c
Belgium	19.3c to 1 franc	5.76c	5.57c	8.60c
Italy	19.3c to 1 lire	4.95c	4.85c	5.45c
Spain	19.3c to 1 peseta	15.33c	15.46c	15.62c
Austria	20.3c to 1 crown	.0014c	.0014c	.0136c
Denmark	26.8c to 1 crown	18.86c	19.23c	21.25c
Norway	26.8c to 1 crown	17.73c	18.20c	18.85c
Sweden	26.8c to 1 crown	26.74c	26.62c	25.95c
Holland	40.2c to 1 florin	39.10c	39.48c	37.95c
Argentina	42.5c to 1 peso	36.60c	37.12c	35.75c
Brazil	32.4c to 1 milreis	10.85c	11.25c	13.81c
India	48.7c to 1 rupee	31.33c	31.50c	28.00c
Japan	49.9c to 1 yen	48.72c	48.50c	47.40c
Canada	100c to 1 dollar	98.31c	97.56c	99.00c

4. Discount Rate of the Bank of England:

April 18, 1923	Month Ago	Year Ago
3%	3%	4%

III. Money and Credit

1. Gold, Currency and Bank Deposits (000,000 omitted):

	March 1, 1923	Feb. 1, 1923	March 1, 1922
Stocks of monetary gold in the United States	$ 3,961	$ 3,938	$ 3,681
Total supply of currency in the United States	4,611	4,509	5,488
	Dec. 29, 1922	Sept. 15, 1922	Dec. 31, 1921
Total deposits in National Banks	$17,420	$16,599	$15,075
	March 1, 1923	Feb. 1, 1923	March 1, 1922
Deposits in New York City banks	$ 3,810	$ 3,970	$ 3,850

2. Gold Movement (000 omitted):

	March 1923	March 1922	Nine Months Ending March 1923	Nine Months Ending March 1922
Exports of gold	$10,392	$ 963	$ 46,993	$ 20,759
Imports of gold	15,951	33,488	209,311	434,104

3. Federal Reserve Ratio:

	April 11, 1923	Mar. 14, 1923	April 12, 1922
Ratio of total reserves to deposits and Federal Reserve note liabilities	76.3%	75.4%	77.7%

4. Interest Rates:

	Mar., 1923	Feb., 1923	Mar., 1922
4-6 mos. commercial paper	5.16%	4.94%	5.03%
60-90 days commercial paper	5.03%	4.62%	4.78%

5. Discount Rate of Federal Reserve Banks:

	Apr. 1, 1923	Mar. 1, 1923	Apr. 1, 1922
Range of rates for the twelve banks on commercial, agricultural and livestock paper	4½%	4-4½%	4½-5%

6. Stock and Bond Prices:

	April 13, 1923	Mar. 9, 1923	April 15 1922
20 Industrial stocks	$101.81	$104.48	$90.80
20 Railroad stocks	86.34	89.19	83.20
40 Bonds	86.40	87.09	88.13

7. Business Failures:

	Week Ending Apr. 12, 1923	Mar. 8, 1923	Apr. 13, 1922
Bradstreets	394	406	500
Duns	362	351	516

IV. Prices

1. Wholesale Prices of Farm Commodities:

Quotations at Chicago except as noted.

	April 24, 1923	Month Ago	Yeear Ago
Fat hogs, cwt., average	$ 7.70	$ 8.30	$10.30
Beef steers, good native, cwt., av.	9.10	8.75	8.10
Fat lambs, cwt., average	13.45	13.50	15.25
Fat sheep, cwt., average	7.75	8.00	9.25
Wool, Ohio delaine unwashed, lb. (Boston)	.57	.575	.47
Butter, 92 score, lb.	.4025	.4825	.36
Cheese, No. 1 twins, lb.	.20	.2325	.155
Eggs, fresh firsts, doz.	.255	.2325	.2425
Poultry, hens, lb.	.255	.25	.26
Wheat, No. 2 hard, bu.	1.27	1.20	1.415
Corn, No. 2 mixed, bu.	.825	.7425	.6075
Oats, No. 2 white, bu.	.4675	.455	.40
Rye, No. 2, bu.	.865	.8225	1.09
Barley, bu.	.665	.675	.53
Kafir, No. 2 white, cwt. (K. C.)	1.83	1.68	1.26
Hay, No. 1 timothy, ton	22.00	22.00	26.50
Flax, No. 1, bu. (Minneapolis)	3.38	3.19	2.755
Cotton, middling, lb. (New York)	.2805	.2935	.1825
Beans, white, cwt. (f. o. b. Michigan)	7.10	7.40	6.90
Potatoes, northern whites, cwt.	1.15	1.275	1.65
Onions, midwest yellow, cwt.	4.125	4.25	....
Apples, winter varieties, bbl.	5.50	6.10	8.25
Hides, No. 1 native, heavy, lb.	.19	.185	.14
Sugar, fine granulated, lb. (N. Y.)	.0985	.09	.0525

2. U. S. Department of Labor Relative Wholesale Prices:

Prices in year 1913 equal 100.

	Mar., 1923	Feb., 1923	Mar., 1922
All commodities (weighted average or general price level)	159	157	142
Farm products	143	142	130
Food products	143	141	137
Cloths and clothing	201	199	172
Fuel and lighting	206	212	191
Metals and metal products	149	139	109
Building materials	198	192	155
Chemicals and drugs	135	132	125
House furnishings	185	184	175
Miscellaneous	127	126	117

3. Prices of Farm Products at the Farm Relative to 1913:

(U. S. Bureau of Agricultural Economics)

Prices in year 1913 equal 100.

Commodity:	Feb., 1923	Jan., 1923	Feb., 1922
Cotton	224	209	128
Corn	125	119	92
Wheat	134	133	149
Hay	109	110	107
Potatoes	99	101	184
Beef cattle	94	94	86
Hogs	102	104	110
Eggs	157	174	132
Butter	155	157	129
Wool	211	211	133

4. Relative Purchasing Power of Farm Products:

(U. S. Bureau of Agricultural Economics)

The quantity of various commodities which a given amount of each farm product would purchase at prices prevailing in 1913 is put equal to 100. The figures given represent the percentage of this quantity which the same amount of farm products would purchase in February, 1923. Prices at the farm are used for agricultural products, and wholesale prices at central markets for other commodities.

	All Commodities	Cloths, etc.	Fuel, etc.	Metals, etc.	Building Mtls.	House Furn'gs
Cotton	143	113	106	161	117	122
Corn	80	63	59	90	65	68
Wheat	85	67	63	96	70	73
Hay	69	55	51	78	57	59
Potatoes	63	50	47	71	52	54
Beef cattle.	60	47	44	68	49	51
Hogs	65	51	48	73	53	55
Eggs	100	79	74	113	82	85
Butter	99	78	73	112	81	84
Wool	134	106	100	152	110	115

Average purchasing power of all farm products in terms of all other commodities. Same basis as above table.

1913	100	December, 1921	62
1914	112	February, 1922	71
1915	106	March	76
1916	89	July	69
1917	106	September	64
1918	112	October	65
1919	111	November	66
1920	86	December	68
1921	67	January, 1923	68
1922	69	February	69

MARKET FLASHES

MARKET SUMMARY

All grains are easy after declines in prices on opening day of week. Beans unchanged and inactive. Potatoes are easy with receipts fair. Butter and eggs active and firm. Receipts of live poultry exceed demand. Firm tone to dressed calves. Cattle not wanted. Hogs easy and lower. Sheep steady and higher.

(Note: The above summarized information was received **AFTER** the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press —Editor.)

FOOTE'S MARKET LETTER

By W. W. Foote

Good Agricultural Outlook

LABOR was never before so well employed throughout the United States, and wages are far the highest ever paid, with increasing wages in quite a number of lines of industry. The railroads are doing the greatest business on record; and people are spending more money than ever before, a great deal being expended for meats, flour and other farm products. Meanwhile, marketing of grain and live stock helps farmers to liquidate part of their indebtedness, and there are fewer applications received by country bankers from farmers for loans. Our exports to other countries are on a large scale, especially of provisions, these greatly exceeding such exports made a year ago. The government's forecast of planting, the first ever attempted, indicates an increased acreage of corn, oats, barley, flax, tobacco and cotton. In the southern states planters are reported to be lowering their corn acreage and materially increasing the cotton acreage. The past year was a very unfavorable one for marketing both Irish and sweet potatoes, because of overproduction, and consequently farmers are reported as lowering their acreage for these important vegetables. The spring was unusually late, and this means late seeding of crops in some places lessened planting. Naturally, there is widespread interest shown in the reports of large losses of pigs on account of the late cold, wet spring, but it is probable that these reports were overdrawn in numerous instances and losses will be partly offset by the much increased breeding in most farm districts. The recent advance in prices of lamb in Chicago and other markets was due to a great falling off in the receipts, the Colorado fed lambs having been mostly marketed, while the crop of southern spring lamb furnished by Kentucky and Tennessee will not be ready to market before June, owing to the late spring. Great interest is manifested in the sheep industry in the middle west, and farmers owning plenty of hardy breeding ewes may consider themselves in luck.

Curtailment of Wheat Acreage

Fluctuations in wheat prices during recent weeks were apt to be greater than usual, changing crop reports being the principal factor in the market. Not long ago prices were much higher, but deliveries on May contracts were about the largest on record, causing a temporary large reaction in quotations. At last the weather turned warm, after the long spell of unseasonably cold and wet weather, and crop prospects are improved. However, rains came too late, it is claimed, to make good crops in Nebraska and western Kansas, and a great many tracts of winter wheat fields of the southwest had to be abondoned. In the northwest many farmers have been insisting upon getting higher prices for their wheat, and it is reported that foreigners have been buying wheat in the Canadian northwest, oriental business being especially heavy. Our exports of wheat and flour week after week are running far ahead of last year, while prices are much lower than at that period. The visible wheat supply in the United States is not looked upon as unduly large, although it is 44,521,000 bushels, comparing with 31,281,000 bushels a year ago. Rye, which is in large demand for export, mainly to Germany, is much below the prices paid a year ago, with the visable supply up to 19,459,000 bushels, whereas a year ago it was down to 8,163,000 bushels. Corn and oats exports are much less in volume than a year ago, while supplies in sight are much less than then, the oats visible supply being only 21,932,000 bushels, comparing with 55,837,000 bushels last year. Taking a wide-spread view of general conditions, the outlook for the grain markets appears to be encouraging. Late sales for May delivery were made in Chicago of wheat at $1.20, comparing with $1.39½ a year ago; corn at 81 cents, comparing with 62 cents a year ago; oats at 44 cents, comparing with 37½ cents a year ago; and rye at 82 cents, comparing with $1.06⅝ a year ago.

The Cattle Outlook

While it is difficult to tell what the future will bring forth, from all that can be learned it may be said that better prices are expected within the next two or three months. More feeding was carried on in important cattle feeding districts last winter, and the mild weather greatly favored owners, as less corn than usual was needed. Marketings of cattle for the year so far show heavy increases over corresponding periods in recent years, and liberal supplies are expected so long as the supply holds out. But decidedly fewer stock and feeder cattle have been shipped from the western markets than a year ago, owing to the fact that many farmers thought the prices asked for well-bred stockers and feeders were too high as compared to prices prevailing for finished beef steers. The nearness of the grazing season has started up somewhat larger buying for stock cattle, but as yet shipments to country points have been only moderate in numbers. However, some of the veterans in stock feeding are going to continue in the business the same as ever, and James W. Wadsworth, United States senator from western New York, showed up in the Chicago stock yards recently for the purpose of buying about twenty car loads of thin cattle for feeding. He said farmers in his part of the country were in the habit of grazing a great many cattle for autumn marketing, and they see no reason for abandoning the custom now. Mr. Wadsworth divided his purchases pretty evenly between steers and cows. The cows average from 850 to 950 pounds, and he estimated that they would show average summer gains of about 275 pounds. Recent sales of stockers and feeders in Chicago have been largely at $7 to $8.25, a few prime fleshy lots of feeders selling up to $8.50 to $9. Beef steers have been bringing $6.75 to $7.50 for the cheaper class of light weights up to $9 to $10 for the better class of steers carrying good weight, with a few extra fine lots going as high as $10.25. The bulk of the steers go at $8 to $10. Cows and heifers sell mainly at $5.25 to $8, prime heifers going as high as $9 to $9.25. Calves sell mostly at $8.50 to $10 per 100 pounds. Milkers and springers are wanted at $60 to $95, prime Holstein cows going highest.

Abundance of Hogs

Farmers have been breeding swine to a remarkably large extent for a year, and the result is vastly larger marketings at packing points this year than for recent years. It happens that the consumption throughout the country of lard, fresh and cured meats has been almost phenomenally large for many months, and this has been an important factor in the hog market, while exports of lard and cured meats have kept on running from week to week far ahead of a year ago in volume. But the marketing of hogs in Chicago and Missouri River markets has been much larger than in other years that stocks of provisions are piling up, and this is a bearish factor that cannot fail to make itself felt in making hog values. Hogs in Chicago market show up well in quality, their recent average weight being 238 pounds, and the highest prices are obtained for prime light bacon hogs. Reactions in prices are to be expected of course from time to time, but the prevailing belief is that later on values will go lower. The advance in corn prices has caused many stockmen to hurry up shipments of cattle and hogs to market. Last week's Chicago receipts ran far larger than a week earlier, sales ranging at $6.50 to $8.30. The best light lots sold a dime higher than the best heavy butchers. Western packing for the summer season, beginning March 24, is reported as 7,464,000 hogs, comparing with 4,696,000 a year ago.

High Prices for Lambs

Most of the Colorado fed lambs have been shipped to market, and as the spring lambs of Kentucky and Tennessee will not be ready for marketing until June because of the cold, wet spring, there has been a real scarcity of fat lambs in the Chicago market lately and the highest prices of the year. The best wooled lambs have sold up to $15.35 per 100 lbs. but lambs are now mostly clipped before marketing. Heavy clipped lambs are wanted part of the time for export, and foreign buyers are the only active ones for such flocks. Exports of such lambs from Chicago for the year to recent date amount to 7,500 head. During a recent week exporters purchased about 600 shorn lambs which averaged around 105 pounds. The wool market is extremely firm. Meager receipts last week made higher prices, clipped lambs selling at $10.50 to $13.15.

WHEAT

Wheat prices show decided declines for the past week and declines were made in the face of unfavorable news which appeared on the market nearly every day of the week. Weather that helped the winter wheat outlook was mainly responsible for the weakness in the market. There was rain over a great deal of the dry country and the crop gained in many places although the rains came too late to do much good in the worst district of the southwest, where abandoned acreage makes a large total. The weather over the spring wheat states improved also, and this is too late to prevent the abandonment of much land and the substitution of other crops for wheat. The seeding of spring wheat is about three weeks late and not more than half finished in some of the important states, giving the crop a very doubtful promise. The unfavorable conditions were all known a week ago when prices were high and the better weather of last week caused much selling for the taking of profits bringing a weak tone. There are many bearish dealers in the market. They believe the pressure of cash wheat will force prices down in the absence of an active foreign demand. The export business improved during the week, but the foreigners took Canadian wheat in nearly all cases and the supply in this country seeking a market is very large. Austrailia reports an export surplus this year of less than half the previous year's exports.

Prices

Detroit—Cash No. 2 red, $1.32; No. 2 white, $1.32; No. 2 mixed, $1.32.

Chicago—Cash No. 2 red, $1.25; No. 2 hard, $1.19¾@1.20¼.

New York—Cash No. 2 red, $1.42¾; No. 2 hard, $1.32¼.

Prices one year ago—Detroit, Cash No. 2 red, $1.37; No. 2 white and No. 2 mixed, $1.35.

CORN

Corn weakened some last week but prices did not decline as much as in wheat because of small receipts and good demand from various industries. Only 971,000 bushels was received at Chicago last week while 2,397,000 bushels was shipped out. This naturally caused a decrease in stocks and had a steadying effect on the market. Corn for September delivery is weak at present as weather is generally favorable for spring work and much plowing has been done and indications are that this year's acreage will show a fair increase over last year. Export trade has been fair.

Prices

Detroit—Cash No. 2 yellow, 86c; No. 3, 85c; No. 4, 83c.

Chicago—Cash No. 2 mixed, 79½@80½c; No. 2 yellow, 80½@81c.

New York—Cash No. 2 yellow, and No. 2 white, 98½c; No. 2 mixed, 98c.

Prices one year ago—Detroit, No. 2 yellow, 67c; No. 3, 65½c; No. 4, 64c.

OATS

The oat market is somewhat improved in tone because of a good volume of business which the market has enjoyed the past week. Country offerings to arrive are practically nil.

Prices

Detroit—Cash No. 2 white, 50½c; No. 3, 49c; No. 4, 47½c.

Chicago—No. 2 white, 45½@46½c; No. 3, 45@46c.

New York—Cash No. 2 white, 55½@56c.

Prices one year ago—Detroit, Cash No. 2 white, 45c; No. 3, 43c; No. 4, 40c.

RYE

Rye seems to be in good demand and prices are holding steady at many points. The market is quiet at Detroit.

Prices

Detroit—Cash No. 2, 81½c.

Chicago—Cash No. 2, 78¾@79¼c.

Prices one year ago—Detroit, Cash No. 2, $1.08.

BEANS

There has been a small decline in the price of beans during the last week but it is believed that this is only temporary and that the price will advance in the near future. There are no more beans in Michigan than are needed and orderly marketing will bring the price up. There is a campaign on to increase bean acreage throughout the country, according to reports, and it is intended to increase consumption by educating the consumer to make beans a more important part of his food.

Prices

Detroit—C. H. P., $6.80 per cwt.

Chicago—C. H. P., $7.25@7.75 per cwt.

Prices one year ago today—Detroit, C. H. P., $7.20 per cwt.

POTATOES

Old potatoes reached the highest price level of the season during the fore part of the past two weeks but the price did not hold owing to large receipts of new potatoes. Shipments have been light. Floods have held up shipping from Maine and the growers of Michigan are inclined to wait for higher prices. Smallness of receipts has not been felt to any extent as yet as most markets had a good supply on hand. The tone of the Detroit market is easier.

Prices

Detroit—Michigan, $1.43 @ 1.50 per cwt.

Chicago—Wisconsin and Round whites, $1.10 per cwt.

Prices one year ago—Detroit, Michigan, $2.06@2.17 per cwt.

HAY

The hay markets generally have been steady especially on the top grades. Good qualities have continued firm at most markets because of light receipts, but poorer sorts are abundant and are generally dull and lower. Country shipments are diminishing on account of spring work and although the demand is of moderate volume, markets are steady at the close. Clover and mixtures are dull except in the west.

Prices

Detroit—No. 1 timothy, $17.50@18; standard $16.50@17; light mixed, $16.50@17; No. 2 timothy, $15.-

50@16.50; No. 1 clover mixed, $14 @15; No. 1 clover, $13@14.

Chicago—No. 1 timothy, $21@22; light mixed, $19@20; No. 2 timothy, $18@20; No. 1 clover, $15 @16; No. 2 clover, $13@14.

New York—No. 1 timothy, $27; standard, $13@16; No. 2 timothy, $23@26; No. 1 clover mixed, $26@27.

Prices one year ago—Detroit, standard timothy, $21@22; No. 2 timothy, $20@21; No. 1 light mixed, $21@22; No. 1 clover, $16@17.

Alfalfa—Detroit, $13@17; Chicago, $16@23.

WOOL MARKETS

Midwestern wool trade remains on about the levels recently established, with a good firm tone. Prices are about unchanged from the previous week, but reports of contracting at higher levels in the west lend a feeling of strength to the local situation.

Foreign markets are closing their sales at firm to higher levels, and the position of holders seems, in the eyes of most of the trade, to be a strong one.

Quotations on midwestern or so-called "native" wool in large lots—such prices as are obtained by the farmers' pools—are as follows (f. o. b. Chicago): Fine and medium staple, 56@57c; ½ blood staple, 54 @55c; ½ blood clothing, 51@52c.

BUSY PLOWING FOR CORN AND SEEDING OATS

Crop report for southern part of Jackson county: Weather very dry. Rain needed. Farmers very busy plowing for corn and seeding oats. Clover seeding in bad shape. Help very scarce. Many farmers leaving farms. If the bars of immigration are not let down the farmers will be without labor to run the farms, as all the farm help has left the country to work in the cities, and wages are so high that the farmers can not pay them, and make expenses.—G. S.

PRITCHARD'S
WEATHER
FORECAST
INTERPRETED BY THE STARS

Week of May 13

THE early part of the week of May 13 will be stormy and the latter part mostly fair in Michigan. Temperatures will average normal or above during first part and below last part.

During first few days winds will be strong and rainfall quite heavy in sections but during middle part of week skies will clear, air become drier and temperatures fall to or almost to frost levels. At end of week possible frost will endanger early cherries, early strawberries, grape and garden truck.

Pastures and winter wheat will not have rapid growth at this time. Germination of rye and oats will be slow. Some early corn and potatoes can be planted at end of week and plowing for beans and late potatoes can be started.

Week of May 20

Average temperatures for this week will range below normal. From the beginning of the week until the middle part they will be rising but from then until the following Sunday they will be falling.

Generally fair weather is to be expected in Michigan during early part of week but during middle days, especially Wednesday, Thursday and Friday, light to heavy showers of rain are to be expected with electrical storms in scattered sections. The week ends with fair weather.

Season Backward

The next few weeks will prove backward to the average Michigan farmer and there will be much delay in planting and other outdoor operations. Plant on well drained land. To insure proper germination plant just prior to warm periods or as late in the season as practical.

LEGISLATURE CLOSES SESSION IN WAR-LIKE ARRAY

(Continued from Page 3)

eases among bees, by the establishment of sanitory regulations and quarantine rules was passed by the Senate 30 to 0. The bill is aimed chiefly to prevent the spread of foul brood among Michigan bees.

Defeat of the Smith automobile weight tax bill by a vote of 41 yeas to 56 nays marked to climax of the closing hours of the 52nd session of the Michigan state legislature. The final vote was preceeded by one of the most intense and dramatic debates in the history of Michigan's law-making bodies.

Acting under a "call of the House," which prevented any members from leaving the chamber, the fight was waged back and forth for two hours while the members and spectators who packed the galleries and side lines to capacity went without their dinner until 2:30, when the final roll call was taken.

Debate on this bill was tinged more or less with the intense bitterness which was developed among the representatives by the Governor's gas veto. Rep. Chas. Evans, leader of the "bitter-enders" among the gas tax forces voiced this sentiment when he said "This has ceased to be a question of a gas tax or a weight tax. It is now a question of whether or not representative government shall prevail in Michigan." He said that the eyes of the people from every section of the state were riveted on the actions of the members of the House and declared that the methods used to secure the passage of the weight tax bill endangered the integrity of the state. He voiced the sentiment that when 80 representatives and 19 senators should vote for a measure which they felt that their constituents demanded, it was hardly fitting for the Governor to exercise his veto power.

Rep. Evans quoted Sen. Sligh's remark that the weight tax bill was "conceived in sin and born in iniquity" and declared that the real purpose of the bill was not to raise more revenue but to place the state highway department under the control of the State Administrative Board. Rep. John Espie of Clinton county voiced similar sentiments when he said that to pass this measure would make the state highway commissioner a mere office boy for the administrative board and would assist to build up a more powerful political machine in Michigan.

Voicing additional protests against the passage of the bill, Rep. Elijah Howarth of Royal Oak pointed out the big loss which would be sustained by the counties under the system of distributing the highway funds proposed by the weight tax, which returns only one third of the receipts to the counties instead of one half as at present. Other speakers who spoke in opposition to the final passage of the bill were Rep. David Butler of Lapeer county and Rep. Dykstra of Grand Rapids.

After calling the speaker pro tem to preside, Speaker Geo. Welsh of Grand Rapids took the floor in support of the bill. He vindicated his own stand in the matter and urged the members to vote in accordance with their convictions. He declared that if representative government were in danger in Michigan it was not because of our able Governor but because the members feared to vote as they saw fit. Finally some one moved the previous question and further debate was shut off and the representatives lined up as follows:

YEAS: Barnard, Bartlett, Braun Gus. A., Bristow, Burns, Carter, Corliss, Culver, Dacey. Farrier, Ferris, Frees, Green, Hewlett, Ray L., Howell, Jewell, Johnson, Jolly, Ladd, Lee, Little, Lennon, McKinnon, Manwaring, Miles, O'Brien, Ormsbee, Palmer, Raucholz, Read, Richardson, Sargent, Smith, Stevenson, Titus, Wardell, Watson, Geo. C., Watson, Joseph E., Wood, Woodruff. Welsh—41.

NAYS: Baxter, Bradley, Brake, Braman, Brown, Geo., Bryan, Butler, Byrum, Curtis, Dawe, Deshano, Dexter, Dykstra, Emerson, Espie, Evans, Fuller, Gillett, Haight, Holland, Hosking, Howarth, Hubbard, Hulett, Orvy, Jones, Kirby, Kooyers, Lewis, Chas. F., Lewis, Rollie L., Long, Look, MacDonald, McEachron, Meggison, Miller, Ming, Morrison, Nevins, O'Beirne, O'Connell, Odell, Osborn, Pitkin, Preston, Rasmussen, Richards, Robertson, Rowe, Roxburgh, Sanson, Strauch, Thomas, Town, Wade, Warner, Wells.—56.

It was a foregone conclusion that if the House should kill this bill that the Senate would kill the Byrum income tax and the Meggison primary school fund bill.

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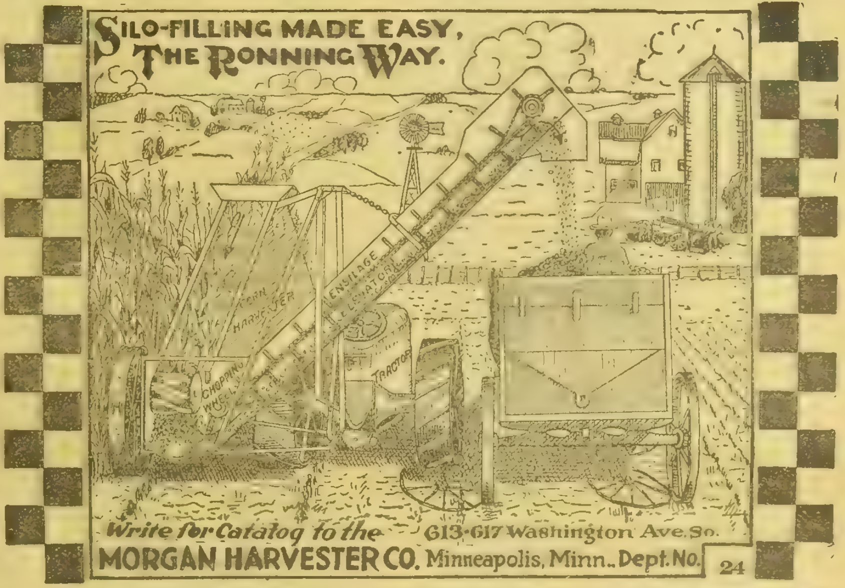
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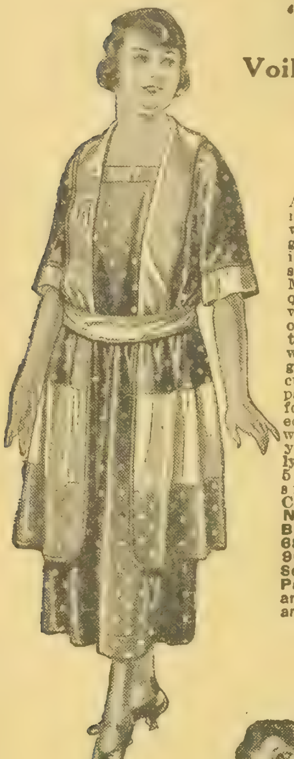

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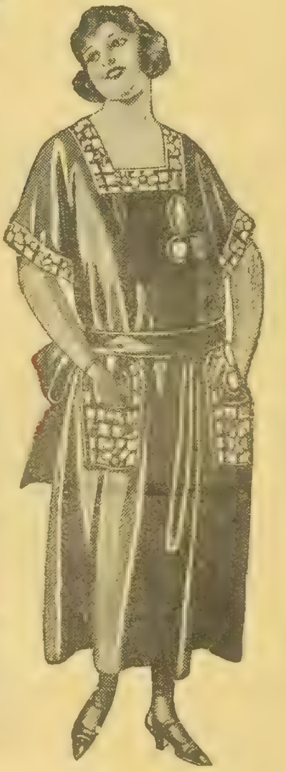
A very beautiful model in "stout" voile dress of graceful, slenderizing lines for stout women. Made of good quality polka dot voile with tunic over-skirt, attractively trimmed with pretty organdy collar and cuffs. You will pay much more for a dress of equal value elsewhere. Better get your order in early. Sizes 39 to 53 Bust. State size wanted. Choice of colors. **No. 96E6811, Black; No. 96E6812, Navy; No. 96E6813, Brown. Send no money. Pay only $2.98 and postage on arrival.**

Sateen House Dress for Stout Women



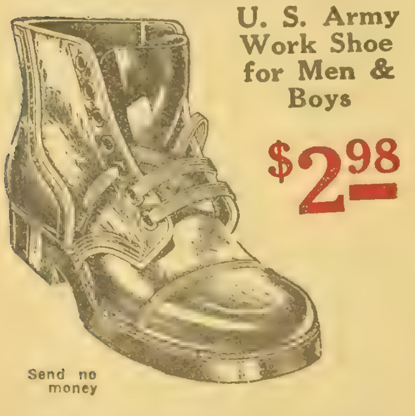
$1.98

A very attractive model of lustrous black sateen for women who require extra size dresses. This pretty house dress has attractive cretonne trimming on collar, cuffs and flower basket pockets. Also the charming applique work in harmonious colors on waist and pockets. A garment that will give splendid service beside. Sizes 39 to 53 Bust. Order by **No. 96A6054. Send no money. Pay $1.98 and postage on arrival.**

State size wanted

GUARANTEED For Six Months' Wear

U. S. Army Work Shoe for Men & Boys



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Men! Don't lose a moment in ordering this wonderful brown work shoe. It is made of leather as near waterproof as can be made—solid leather through and through with full grain leather uppers, guaranteed to wear six months. Easily worth $5.00. Two full, heavy double soles, sewed and nailed for greater strength. Extra wide, full leather counter, riveted to prevent [illegible]. Sizes 6 to 12, wide widths. **Order by No. 96A700. Send no money. Pay $2.98 and postage on arrival.**

Boys' Guaranteed Shoes—Six months' guarantee; Two green chrome leather soles, same feature quality points as shoe above. Sizes 1 to 5½. Wide widths. **Send no money. Order by No. 96A550. Pay $2.69 and postage on arrival.**

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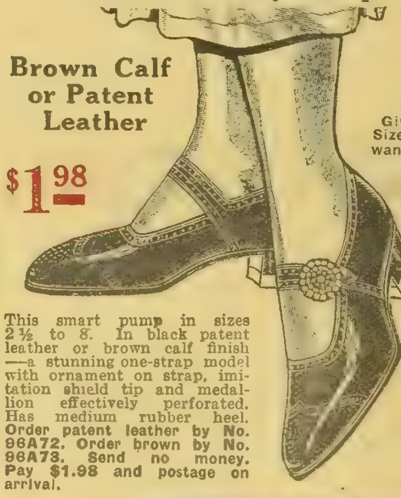
Women's Dressy Pump

Brown Calf or Patent Leather

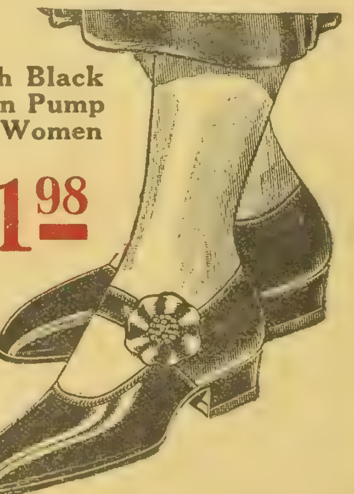


$1.98

Give Size wanted

This smart pump in sizes 2½ to 8. In black patent leather or brown calf finish—a stunning one-strap model with ornament on strap, imitation shield tip and medallion effectively perforated. Has medium rubber heel. **Order patent leather by No. 96A72. Order brown by No. 96A73. Send no money. Pay $1.98 and postage on arrival.**

Rich Black Satin Pump for Women



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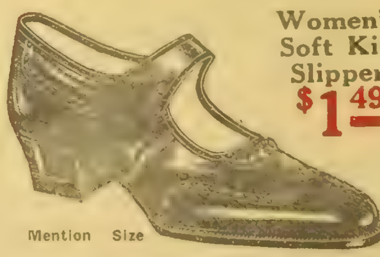
Women's black satin dress pump, one-strap, one-button style with fancy rosette and ornament on strap. Plain vamp with medium toe and close edge sole with low rubber heels. Genuine oak soles. A dressy, stylish new spring fashion that will be all the rage among the best dressed women. Sizes 2½ to 8.; wide widths. **Order black satin by No. 96A56. Send no money pay only $1.98 and postage on arrival. State size.**

Women's Soft Kid Slipper

$1.49



Mention Size

Beautiful soft kid leather slipper. Stylish strap model with two buttons. Medium round toe. Cushion soles. Black or brown kid. Sizes 2½ to 8, wide widths. **Black by No. 96A228. Brown by No. 96A229. Send no money. Pay $1.49 and postage on arrival. State size.**

Popular White Canvas Sport Slipper

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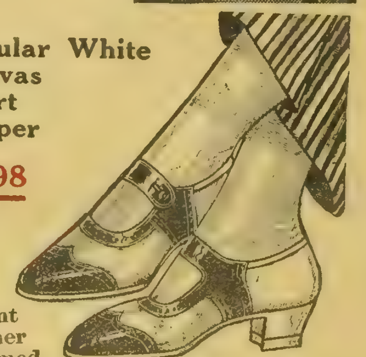

Patent Leather Trimmed

Rousing bargain in a favorite style white canvas pump for women. Patent shield tip, medallion on toe; patent leather top, color and instep strap and heel stay. Bird's eye button; fancy perforations. Enameled sole and white military rubber heel. Leather lined quarter prevents heel slipping. Sizes 2½ to 8. Wide widths. **Order No. 96A313. Send no money. Pay only $1.98 and postage on arrival. State size.**

Women's Patent Leather, Gun-Metal or Brown Calf Finished OXFORDS

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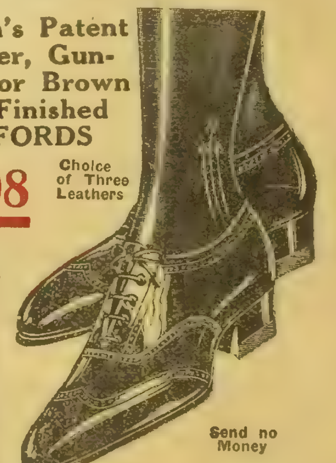
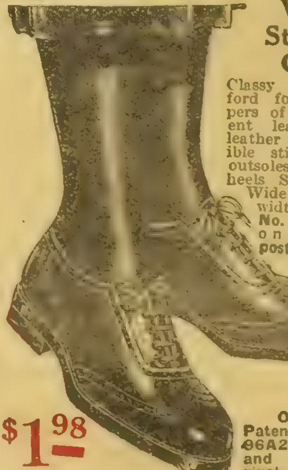
Choice of Three Leathers



Send no Money

Made with imitation shield tip and medallion perforated vamp, perforated lace stay and circular foxing. Has medium rubber heel and medium pointed toe. Sizes 2½ to 8. Wide widths. **Order patent by No. 96A64. Order gun metal by No. 96A69. Order Brown by No. 96A70. Send no money. Pay $1.98 and postage on arrival.**

Women's Stitchdown Oxfords



Classy stitchdown Oxford for women. Uppers of Brown or Patent leather. Smooth leather insoles. Flexible stitched-down oak outsoles. Low rubber heels Sizes 2½ to 8. Wide widths. **Order by** widths. **Order by No. 96A268. Pay only $1.98 and postage on arrival.**

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Order similar style Patent leather by No. 96A264. Pay $2.48 and postage on arrival.

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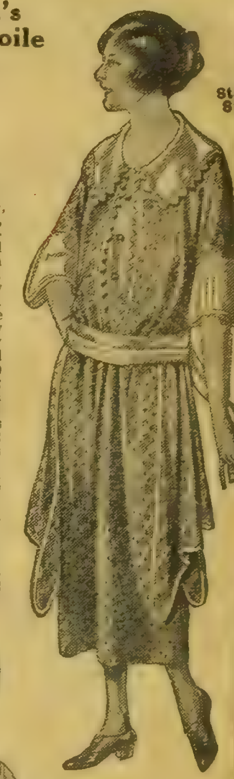
Women's Pretty Voile Dress

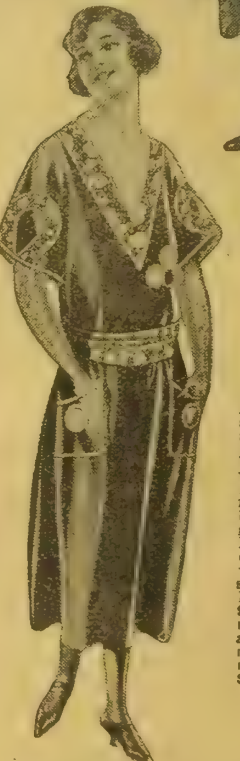


State Size

$1.98

Very attractive, dainty voile dress, with organdy trimming. Beautiful figured voile with new side panels. Youthful organdy collars and cuffs. Also pretty vestee insert of organdy and neat organdy sash. This model has all the lines of fashions selling at much more than Sharood's sale price. Misses sizes 14 to 20 years, 32 to 38 bust. Women's sizes 34 to 46 bust. Be sure to state size wanted. Choice of colors. **No. 96E6712, Navy; 96E6713, Copenhagen; 96E6714, Rose; 96E6715, Lavender. Send no money. Pay $1.98 and postage on arrival.**

Pretty Sateen Dress Apron



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Another shining ex ample of Sharoo super-bargain Splendid qualit black twill sate which wears wonde fully. Graceful V neck, sleeves an belt trimmed wit gay colored cretonne Pockets finished wit crepe applique edge with piping. Size small, medium an large. **Order No 96E6001. Send money. Pay $1.6 and postage on ar rival. Money back not satisfied. Stat Size.**

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Fine scout shoe of soft pliable brown leather. Absolutely guaranteed barnyard proof; reliable sturdy soles; low broad leather heels; leather insoles; reinforced leather back stay. Guaranteed to stand hardest wear. Wide widths.

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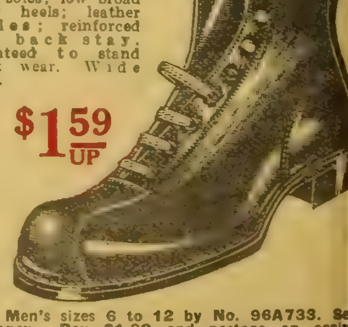

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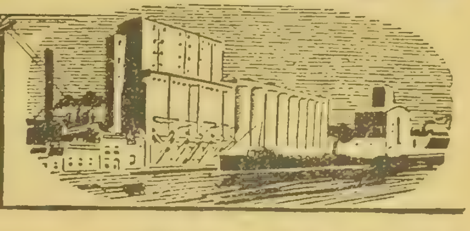

VOL. X, No. 20 SATURDAY, MAY 26, 1923 TERMS: TWO YEARS $1
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Current Agricultural News

SOIL SURVEY IN STATE TO BE CONTINUED

THREE or four government soil experts and five or six representatives of the Michigan Agricultural College will collaborate this year in continuing the soil testing work in which the soils department of the college and bureau of soils of the United States Department of Agriculture have co-operated for the last three years. A contract for the continuation of the work has just been completed between Dr. M. M. McCool of the college and a federal representative.

Presque Isle county will be the first to be considered in the work this year, the work in that county, started last year, being completed. The four or five counties to be entered in the work this year have not been selected, but one of the counties will be not far distant from the point of beginning.

In the three years the work has been in progress in the state nine counties have been covered, each year showing an increase over the amount of work done since Allegan county was entered three years ago. This year, according to the contract between Professor McCool and the government, the largest force ever working in Michigan will be in the field.

SUMMER TERM DATES AT M. A. C.

SUMMER session at M. A. C. will start June 19, the day after commencement and continue until July 27, according to the announcement made at the office of Prof. E. H. Ryder, director of the summer school. The courses available for students are outlined in the summer session bulletin which has just been issued. The popularity of the summer courses has grown since they were first instituted and it is expected by the college authorities that the enrollment this summer will surpass that of last year.

EXPECT 100,000 ACRES LAND CERTIFIED IN SIX MONTHS

THE certification of 100,000 acres of wild land in Michigan within the next six months is predicted by officials of the state department of agriculture. Since the passage of the Meggison certification bill, requests have been made for the examination of over 10,000 acres of wild land with additional applications for information as to the certification of several thousand acres in scattered tracts.

It is predicted that practically all the land to be certified will be uncultivated tracts. Nearly all the operating farms, which have been purchased during the last few years, have been bought by practical farmers from the middle states after a personal examination, and it is believed, by dealers, that such being the case, it will be unnecessary to go to the expense of certification.

EIGHT MICHIGAN MEN TO ATTEND HOLSTEIN CONVENTION

MICHIGAN Holstein breeders will be represented by eight delgates at the thirty-eighth annual convention of The Holstein-Friestian Association of America to be held in Cleveland, Ohio, June 6th. The delegates elected are: D. D. Atken of Flint; Dedley E. Waters of Grand Rapids; E. L. Smith of Adrian; H. W. Norton, Jr., Lansing; H. E. Rising of Woodland; James G. Hayes of Howell; Wm. E. Fellows, of Flint and Wm. R. Harper of Middleville.

Each state is entitled to one delegate and one additional delegate for each 200 members or major fraction thereof. The association has a total of 23,000 members. Michigan is represented on the Board of sixteen directors by H. W. Norton Jr. of Lansing.

GOVERNMENT BULLETINS OF INTEREST IN JUNE

A SMALL list of Farmers' Bulletins and Circulars of general interest during June is believed to be of value to our readers. Copies may be obtained free by addressing the Division of Publications, United States Department of Agriculture, Washington, D. C, Specify number and name and whether Farmers' Bulletin or Department Circular.

Farmers' Bulletin 838, Harvesting Hay with the Sweep Rake; 842, Methods of Protection Against Lightning; 863, Irrigation of Grain; 871, Fresh Fruits and Vegetables as Conservers of Other Staple Foods; 872; The Bollworm or Corn Earworm; 876, Making Butter on the Farm; 943, Haymaking; 956, Curing Hay on Trucks; 959, The Spotted Garden Slug; 975, The Control of European Foulbrood; 977, Hay Caps; 984, Farm and Home Drying of Fruits and Vegetables; 1120, Control of Apple Powdery Mildew; 1198, Swarm Control; 1217, The Green Bug or Spring Grain Aphis; 1225, The Potato Leafhopper and Its Control; 1290, The Bulk Handling of Grain.

Department Circular 98, The Installation of Dust Collecting Fans on Threshing Machines for Prevention of Explosions and Fires and Grain Cleaning; 214, Fusarium Tuber Rot of Potatoes; 217, Anthracnose of Muskmellons; 238, U. S. Grades for Potatoes Recommended by the Uniter States Department of Agriculture.

FROM HERE AND THERE IN MICHIGAN

Petoskey—Contracts awarded for 15 miles highway to cost $90,000, New Masonic temple purchased at cost of $25,000.

Lansing—Estimated number cattle on feed in state 12% increase over last year. Farmers increase this year acreage in corn, oats and barley. State supply of farm labor not equal to demand.

Charlotte—Site for armory chosen and $25,000 appropriation sought for building. Bids called for building new cross-state highway. Radio club organized at Olivet college.

Cedar Lake—Plans completed for Cedar Lake academy to cost $20,000.

Allegan—City Council accepts site for new community building.

Ann Arbor—New unit of nurses' home at state university to cost $650,000.

Fremont—Paving operations to be resumed.

Holland—New paving contract awarded involving $202,708. Plans being completed for six-story hotel at cost of $250,000.

Standish—First cow testing station organized in Aranac county.

Caro—Tuscola road commissioners plan new highways. Shorthorn breeders of Tuscola county organize.

Flint—Pere Marquette Railroad to build new belt line track. Business interests want extension Michigan Central Railroad.

Saginaw—Official of Pere Marquette Railroad declares traffic increasing. Work begun on new Prescott Street sewer. Pere Marquette Railroad gets permit to build new bridge over Saginaw river.

Grand Rapids—City's valuation for assessment purposes increased $11,000,000 over last year. Plans made for Apple and Potato Snow here next fall. Two new buildings to be erected on Valley City Milling Company site. New park improvement program outlined by city. Michigan fruit growers predicting tremendous crop this year.

Traverse City—Better Back-yard drive carried on here.

Lawton—New $100,000 church and tool factory to be established.

Cadillac—Greatest building boom in history under way.

Benton Harbor—New $250,000 water plant formally completed.

Munising—Local game association to feed wild deer, ducks and geese.

Manistee—City platting new residental district.

Adrian—New water power factory to be erected by Ford Motor Company.

Bay City—St. James school will build new $50,000 gymnasium.

Big Rapids—Four new lumber dry-kilns to be built by Ward Company.

Battle Creek—Work commenced on new $150,000 Masonic temple.

Detroit—Port of Detroit eighth in United States in volume of foreign trade.

Ravenna—Has light and power plant by harnessing Crockery creek.

SATURDAY
MAY 26th,
1923

VOL. X. NO. 20

Being absolutely independent our columns are open for the discussion of any subject pertaining to the farming business.

"Hew to the line, let the chips fall where they may!"

The Michigan
BUSINESS FARMER

"The Only Farm Magazine Owned and Edited in Michigan"

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Orderly Marketing to End Peak Load Problem

O. F. Bradfute, President of American Farm Bureau Federation, Speaking to Chamber of Commerce of U. S. Tells Farmers' Plan

OSCAR EDWIN BRADFUTE, president of the American Farm Bureau Federation, is one of America's best-known and most progressive farmers. He lives on the old home farm near Xenia, Ohio, in Greene County, where his grandfather was one of the early settlers.

Mr. Bradfute has served his second term as vice-president of the American Farm Bureau Federation. He is also president of the Ohio Farm Bureau Federation and one of the trustees of the Ohio State University. Mr. Bradfute is a stockman and farmer and has specialized in pure bred beef cattle.

THE new system of co-operative marketing will go far towards solving the railroad problem in America.

Speaking before the eleventh annual meeting of the Chamber of Commerce of the United States in New York on May 10, O. E. Bradfute, President of the American Farm Bureau Federation, declared that the farmer had found his own solution to the peak load question in transportation.

According to President Bradfute the farmers' new system of co-operative marketing whereby the products of the farm are moved into points of consumption in an orderly manner will give the railroads an opportunity to move the great staple farm crops gradually from the farms to the distribution centers and thus avoid the peak loads and the attendant car shortage problem which break the railroads' back.

Mr. Bradfute challenged the business men and railroad executives to join hands with the farmer in helping him perfect a co-operative marketing system providing for the storage and financing of farm products on the farms. About one-twelfth of these farm products properly stored and adequately financed on the farms can be moved into points of consumption each month.

Mr. Bradfute made it plain that organized agriculture would continue to demand early and substantial reductions in railroad freight rates "as an absolute necessity to the comeback of agriculture and the ultimate prosperity of both city and country."

President Bradfute's address is as follows:

"What do all these people do for a living? I come out of the Grand Central station or walk down LaSalle Street in Chicago. I see the throngs of folks racing hither and yon, all intent on something or other. Perhaps it is natural for a plain farmer from the open country to wonder when set down in the midst of a great city: 'What do all these people do for a living?' I have never ceased to marvel at this. A careful analysis of his problem leads one to observe that all these folks in the crowded metropolitan centers are engaged in getting three things: food, clothing and pleasure. In the third category, pleasure, I classify the creature comforts of home, luxury, amusement, etc. Now Solomon, the wisest man of all time, abjured us, with all our getting to get understanding, and I am not so sure that the denizens of the crowded market place always follow that advice.

All Are Interested

"I would have this great body which springs directly from the cities and town of America to understand, however, that two of these three driving incentives of metropolitan effort originate on the farm. Food and clothing in the raw state rank among the staple products of our farms. Happily, then, we are all city men and country men concerned about the same thing basically. Your city man is working with what the farm man originated.

"In order to get into the channel of profitable use it is, of course, necessary to focus the products of the farm in the metropolitan centers of distribution. Out of this great function arises the huge problem of transportation now confronting us as the biggest question mark in our national economy. The farmer's transportation problem begins in his field and at his barnyard gate. In our rural minds to speak of transportation brings to us thoughts of wagons, bob sleds, wheelbarrows, tractors, trucks, automobiles—devices both simple and complex which we use to carry our products from the place of their youth toward the place of their use. The farmer's interest in transportation does not stop until his products have been landed safely at the point of ultimate consumption. Therefore, our philosophy of transportation includes careful thinking about the cow path, the field road, the highway, the railroad, rivers, lakes, canals and the ocean paths. The American farmer has a transcending interest in the whole transport problem. Let us see if we can picture it in a few simple but comparative figures:

The Transportation Problem

"An immense new volume of wealth is created on the farms of America every year, running into a gigantic business total of from 12 to 14 billions of dollars. Of our farm products about 10 billion dollars worth are transported off our farms each year. This is our direct transportation problem.

"Consider railroad transportation alone: The gross freight bill of the nation is around four billion dollars per year. Of this freight bill the farmers pay one-half directly. Add to this the farmer's freight bill for horse, and wagon, and harness, highway costs, motor transport, carriage by water, etc., and agriculture pays more than four billion dollars every year to get the products of this basic industry moved into centers of consumption.

"It may surprise you to know that the cost of transportation is one-third of the farmer's production bill. The farmer comprises less than forty per cent of the population but pays more than fifty per cent of the nation's transportation costs.

"It must not be forgotten also that the farmer pays freight both ways. On the things which he sells a freight rate is deducted from the price which it brings. On the things which he buys a freight rate is added to the cost f. o. b. cars. All this is part of the farmer's direct interest in transportation.

London Fixes Wheat Price

"The man on land has another primary interest in the transportation problem which is not given the attention which it deserves by our statesmen and economists. The price of wheat in Kansas is fixed by the price of wheat in Liverpool. Under our present marketing system a demand for surplus farm products determines the price of the whole crop. Not only is that Kansas wheat farmer forced to take a world price for the small portion of his crop which goes to Liverpool, but that selfsame Liverpool price determines the returns from his entire wheat field, even though the grain is all milled in Kansas.

"The same thing is true of livestock. When I sell a fat Aberdeen-Angus bullock to be killed by the local butcher in Xenia, Ohio, he pays me the prices ruling at Pittsburgh, or Buffalo, or Baltimore, or New York City minus the freight rates from those cities to my home town. Why is the farmer so anxious for reduction in freight rates? Because the transportation bill effects the returns from his whole crop, not only his surplus.

"I have talked to many railroad experts and economists and statisticians who deal with the overwhelming problems of national transportation. They talk always in terms of bottle necks and peak loads. I think it is fair to say that they really have no solution: I think it is fair to say that they have no formula for widening the neck of the bottle or for reducing the peak loads at harvest time. To these vexing technical problems I believe that the American farmer himself has found the answer.

Orderly Marketing the Answer

The answer lies in orderly marketing of our farm products rather than in the usual seasonal glutting of the distribution centers. Since the farmer has found his voice and has learned how to use it in a national way our agricultural industry has been the recipient of some very progressive and helpful legislation. We now have on the statute books a law permitting the farmer to unite to market his product collectively for the best interest fo both producer and consumer. Some twenty states within the last two years have likewise assessed laws permitting us to undertake a certain definite type of cooperative merchandising which the American farmer has worked out to meet his own needs. In the closing days of the last Congress organized agriculture secured an approved warehousing act as well as legislation providing for a new type of credit for the farmer. When this is finally worked out the farmer will be able to store his crops in his own cribs, and bins, and root cellars, and hay mows which will be designated as approved warehouses. It is not at all beyond the range of possibility that the products of the farm stored in these approved warehouses on the farm may become the basis of sound commodity financing. Surely there is no better security for a loan than the food of the nation. We are not very wise if we cannot perfect a system whereby the farmer may hold in the storehouse of his own farm the crops which he raises and move them into channels of consumption in an orderly and regular manner. Under some such a system as this I can vision that one-twelfth of our farm product might move off the farms into the conduits of transportation each month rather than pouring the whole thing onto the market within a few days or a few weeks after harvest time. I would have you realize that these great staple food roducts are stored now in a manner acceptable to the financial system of the country. The trouble is they are stored in cities instead of on the farms where they originated.

"Eventually the adoption of a farmer's co-operative marketing program by America will do away with the peak load in farm products. We shall substitute for dumping all the products of our fields and pastures onto the market at one fell swoop when we have to have the money, a new and improved system of gradual orderly merchandising.

"I challenge here and now the business men of America, and particularly the leaders in the transportation world, to join hands with the American farmer in helping him work out his co-operative marketing program for the good and selfish reason that this will do a great deal towards solving the transportation problem.

"I cannot close this discussion and feel that I had performed my whole duty unless I state frankly to you that the American farmer regards an early and substantial reduction in railroad freight rates as an absolute necessity to the comeback of agriculture and the ultimate prosperity of both city and country."

DR. DAVID FRIDAY, VICTIM OF UNWARRANTED POLITICAL ATTACK, SAYS PRESENT TURMOIL WILL CLARIFY AGRICULTURAL ATMOSPHERE IN MICHIGAN

DURING the past week, Michigan Agricultural College, through its president, David Friday, was subjected to one of the most disgraceful and unwarranted attacks ever staged in Michigan. During the absence of Dr. Friday on a speaking tour of the east, statements were made to the daily press which not only sought to discredit his ability and loyalty, but to besmirch his character.

The attack was so underhanded and indefensible that the Governor has taken a hand in the matter and has promised to fittingly punish the politicians who were guilty of perpetrating the slander and gossiping it to the always-ready-for-sensation daily press.

In reply to a request for a statement to his 70,000 real farmer friends, who read The Business Farmer, Dr. Friday telegraphs as follows:

Because of the wise and courageous stand taken by Governor Groesbeck, the Michigan Agricultural College will shortly be in a position to serve the farmers of Michigan as never before. The present turmoil is long overdue and will do much to clarify the agricultural atmosphere of the state.—David Friday, President, Michigan Agricultural College.

Our comment on the subject will be found in the Editorial, on page twelve of this issue.

Farmers' Market in Small City an Example

A New Solution to the Producer to Consumer Problem that is Based on the Oldest Form of Commerce; the Barter and Exchange Plan Practiced in Bible Days

BLOOMINGTON, Illinois, is a city of 28,725 inhabitants. In Michigan there are 14 cities the size of Bloomington or larger. Every year Michigan becomes more of on industrial state, which means that the proportion of people who live in cities is increasing while the population on our farms is decreasing. The Business Farmer agrees with Dr. Friday, that this is nothing for the farmers of Michigan and the nearby states to cry about. It must mean higher prices and more profit for the men who stay on farms.

The farms adjacent to the growing cities and large towns in Michigan must supply a larger proportion of the food which these cities consume. The farmer within a fifty mile radius of any given market can, with good roads and modern motor truck, deliver the products of his farm direct to the consumer at a real profit.

TOO MUCH FOOD IS BEING SHIPPED INTO MICHIGAN

which ought to be supplied from the farms of this state. Our farmers must awaken to the new conditions which the past decade has brought. They are fools who raise wheat in competition with the wheat-growers of Argentine and the Ukraine. Less staples and more specialties will be grown in Michigan by the business farmers.

Here then is the story of a well run farmers' market in a city of 28,725 population. It solves the producer to consumer problem in the oldest and yet the most successful way yet discovered. City people like to buy direct from the farmer. Bloomington and other cities have proven that a lower price is less of a consideration, than that the produce be sold clean, fresh and attractive.

The Business Farmer stands ready to back the efforts to build a Farmers' Market in any town or city in Michigan or the nearby states, which has a population of two thousand or more. In villages of lesser size, we advise house to house selling or a Saturday morning market in a given location direct from the wagon.

If you know of a city which should have, but does not have a Farmer Market tell us about it and we will try to secure the cooperation of the local newspaper to encourage such a project.—The Editor.

SELLING directly from the producer to the consumer, with the elimination of all middlemen and middlemen's profits, the McLean county producer's market, Bloomington, Illinois, recently opened, is steadily growing in popularity and patronage.

On the big days the sales aggregate as high as $1,500, and rarely drop below $1,200. The farmer brings in his produce and places it in one of the 45 stalls, which rented to him for the nominal rate of $1 per day. Many sell out in a few hours, but they have the use of the stall and market building for the entire day if they desire it.

Practically everything raised upon the farm is sold. Pork in its various forms, including pork cuts and sausages; eggs, poultry, butter, cottage cheese, milk, cream, all kinds of vegetables, grain, and fruits in season, together with pastry, bread, preserves, jellies, canned fruit and, in fact, an endless variety of good things having a strong appeal to the urban shopper.

The market is opened at 9:30 a. m. and no trading is permitted prior to that time. There are usually from 100 to 200 patrons in waiting each morning for the doors to open.

No objection to the market has been filed by the city merchants. Every booth rented usually reports receipts ranging from $15 to $100. A large proportion of this money is taken over to the dry goods, clothing, millinery and shoe stores and expended for needed articles.

The business men have found that a goodly proportion of the money that is taken in at the farmers' markets soon afterwards is expended with the established firms. The market has had the result of getting the country and city people better acquainted.

Every booth renter signs an agreement to be responsible for the purity and cleanliness of the produce he markets.

Supervised by County Agent

He must also deposit the sum of $5 to the farm adviser. Should there be any complaint from a patron and the booth renter fails to settle, the farm adviser conducts an investigation. If the latter is satisfied that the customer has a legitimate complaint, he is reimbursed out of the deposit fund for the sum he claims.

So far there has not been a single case where such action was necessary, a remarkable testimonial to the harmonious trading and the good feeling that exists between the farmers and their customers. In fact, the farm bureau seeks to instill into the producer an element of pride in the market which will have a tendency to make it a place where the buyers will become permanent customers.

It has developed that many of the farmers who sold directly to the city residents at the latters' homes now go to the market and their old patrons come to them. The prices at the market compare favorably with those at the established stores, but the patrons of the farmers know that the stock is brought directly from the farm the day that it is offered for sale and there are never any stale articles on hand.

That the market has been a success to the farmer as well as the consumer is shown in the fact that practically every producer who rented the stall on the opening day has been a permanent renter.

The farmers' market seems to be filling a business niche that has long been empty and which is badly needed. Every booth renter is required to subscribe to a code of rules that promotes neatness and cleanliness and which are publicly posted so that customers can persue them. They have an excellent effect.

Here Are the Rules

"It is hard to keep hands clean, but it will help.

"Also the finger nails.

"Wash basin in the basement.

"Sweep our your booth when through.

"We don't believe that you will have time to chew or smoke.

"Don't wear your whiskers too long or your hat at all.

"A white apron, coat or cap makes a wonderful improvement.

"The state pure food inspector requests that you do not keep blankets or wearing apparel in your booth. Plenty of hooks in the basement.

"Gummed labels must be placed upon all dairy products and covered containers.

"All eggs must be candled before placed upon the market. Candle them at home. It will save time.

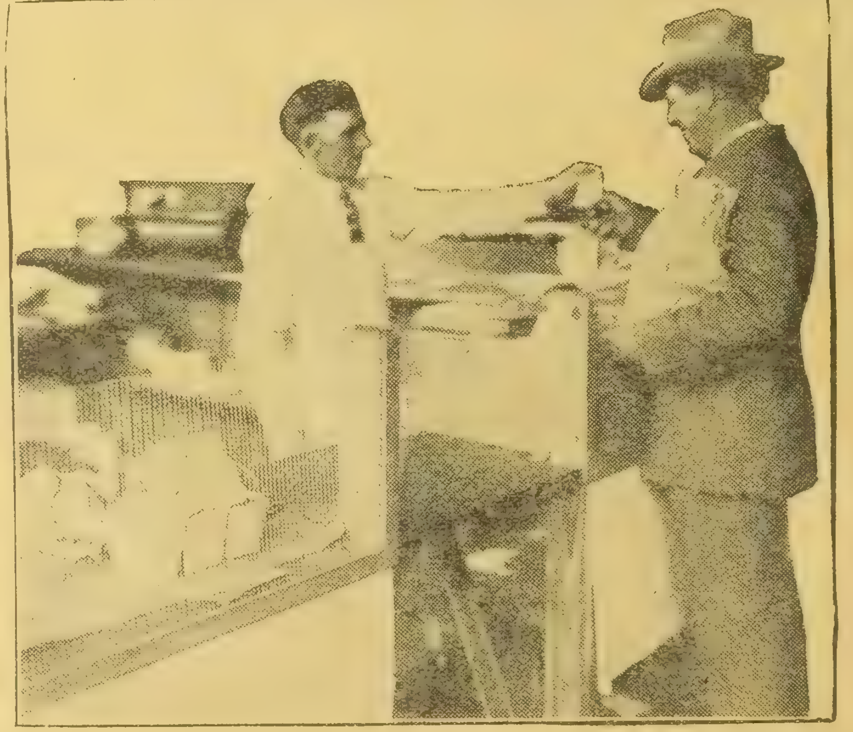
"A garbage can will be found upon the floor in which to place all waste."

Claimed a Model Enterprise

Since the market was started its fame has spread and the farm adviser is in receipt of frequent requests for information in order that arrangements can be made to take similar action. One request came from Phoenix, Ariz., and another from Fitchburg, Mass., indicating how much attention has been attracted to it.

The managers of the McLean county market believe that they have a model and one of the finest of the kind in the United States. The ground floor of the market building is utilized for the booths, while the upper floor contains the farm bureau offices and an assembly room for committee or public meetings. It is essentially a farmers' proposition.

(Editors Note—This article and picture illustrating it are used through the courtesy of the Chicago Daily Drovers' Journal.)



Although you might not suspect it, this is a farmers stall in the Farmers Market at Bloomington, Illinois, where the farmers from many miles around bring their produce and sell direct to consumer. This stall rents for $1 per day.

Farmer and Labor Mix Like Oil and Water, Says Roger W. Babson

ROGER W. BABSON, as you know, is one of America's greatest economists. His article, a part of which is reprinted here, by special permission of the "Saturday Evening Post," in which it appeared, is especially interesting to the farmers of Michigan, because of the repeated attempts to mix Labor and Farmer in a political movement. It may also confirm your suspicions regarding a certain type of so-called "friends of the farmer," who shout loud in political halls what they are doing for the farmer. Mr. Babson says the farmers are just getting over another "economic disease," which comes regularly every thirty years and takes about four years to run its course.

THE farmers are the backbone of our prosperity. This does not mean that the farmer makes prosperity any more than that a backbone makes a human being. There must be arms and legs that manufacture; there must be arteries, and a circulatory system that transports and distributes; and most of all there must be a brain that directs all parts of the body and causes each to help and supplement the others. It is the same with our nation. Statistics clearly show that to have a healthy country we must develop all sections, classes and industries together. It does not do a man any good to have merely a fine big backbone if his arteries are hardening or if his arms and legs are becoming paralized. Anything that develops one part of the body at the expense of any other is detrimental rather than helpful. One bad tooth may ruin a man's health, happiness and efficiency; and a little gallstone has sent many a man to his grave. Good health is the result of building up all parts of the body simultaneously. On the other hand, a good backbone is necessary for a healthy man and a healthy nation, and the farmers are the backbone of America.

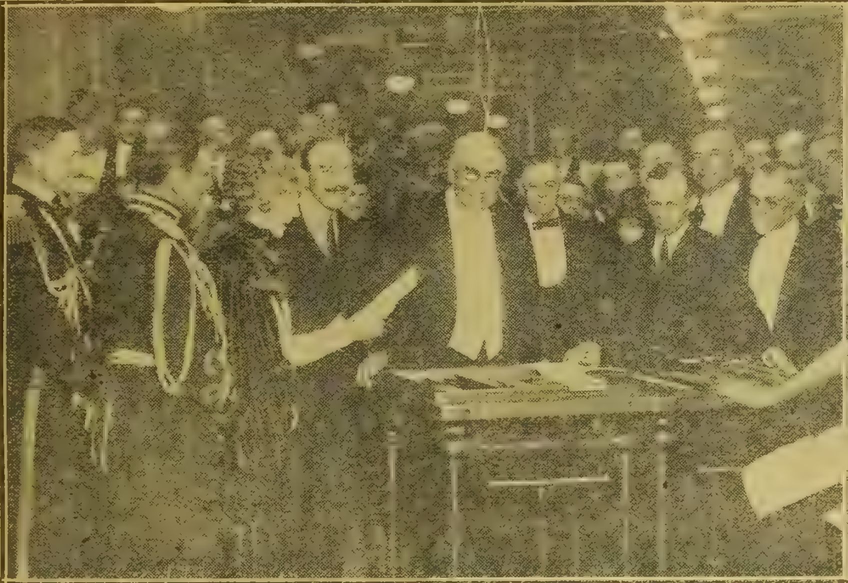
Oil and Water in Politics

Therefore I repeat my first statement: The farmers are the backbone of our prosperity. They keep it erect. The farms are the backlogs of our fires. They keep them from going out. The farms are the backstops of our great national game of business. They prevent us from going to pieces when threatened with defeat. The safety of our democracy is absolutely proportional to the number of prosperous farmers that we have. No man was ever known to hang the red flag of anarchy over his own hearthstone. History shows that the decline of nations has begun when the number of its landowners began to decrease. The best insurance against Bolshevism is more successful farm owners and home owners. Such owners, however, must be successful. It does no good to have a man a landowner if he is heavily mortgaged and in constant fear of being wiped out. There must be contentment and a feeling of security. Hence the safety of the nation is not proportional to the number of farmers, but rather to the number of successful farmers, It may be as dangerous to have too many farmers as to have too few—if the country now has all it can profitably support.

The farmer is the backbone of the nation because he is naturally a conservative. Of course he goes off at a tangent once in thirty years. Every new generation of farmers has to have the economic diseases, the same as most children have measles, chickenpox and mumps. The last generation had its dose in 1893 to 1897; the present generation is having its now. Just about thirty years apart, are they not? Whether or not it will take this generation about four years to get the poison out of its system only the future can tell. Yet, I repeat, the farmer is by nature a conservative. He is a property owner and must stand for the protection of property rights. He is an employer and must ultimately see

(Continued on Page 8)

PICTURES FROM FAR AND NEAR



EDITOR HARDING MAKES UP EDITORIAL PAGE.—With a background of printers, President Harding is shown making up the editorial page of the New York Tribune in the composing room. Left to right: Capt. Adolphus Anderson, naval aide; Col. Clarence Sherrill, military aide; Mrs. Harding, who is much amused at one of the cartoons; Ogden Reid; Pres. Harding; Postmaster General New; Mrs. Ogden Reid; H. F. Dana of the editorial staff; Chairman A. D. Lasker of the Shipping Board; Brig. Gen. Sawyer, the president's physician; George J. Christian, private secretary to the president.

LOOKS LIKE A "CIRCUS COME TO TOWN".—A herd of zebras, photographed in their native haunts, in the heart of Africa by the famous explorers, Mr. and Mrs. Martin Johnson whose experiences are now being shown on the screen. In the back can be seen some specimens of the gnu, an animal that looks as though it had been assembled from spare parts. It took weeks of watchful waiting in carefully built blinds to get the intimate pictures of wild animal life. While it was not their intention to kill any of the animals they were obliged to kill several in protecting their own lives.

COLUMBUS OHIO
TO FRISCO

HIKING TO FRISCO, PENNILESS.—Left to right: Esther Williams and Bernice Kerns, both 25 years old, and students of the Ohio State University, at Columbus, who are hiking to California. The trip is the outcome of a dare that they could travel to the Pacific Coast without a penny and work their way. They had covered 120 miles when this picture was snapped in Cincinnati.

EVERY STREET CORNER A CHURCH.—The portable pulpit has been invented by no one less well known than Dr. Roach Stratton who plans to hold open-air meetings in front of the Cavalry Baptist Church, New York City. The pulpit is built over the engine of the automobile and is removed or adjusted to suit the speaker. Photo shows Dr. Stratton speaking from his new pulpit.

RACING THE WAVES AT SANTA MONICA.—Marie Prevost and Phyllis Haver, two beautiful maidens from movieland, are enjoying a motorcycle ride along the beach at Santa Monica, California. It is claimed that they are racing the waves but what wave could be cruel enough to try to win from such fair maidens? We wonder what the wild waves are saying.

HORSE DOCTORS TAKE NOTE.—The term of "horse doctor" is not generally used as a compliment, but science has invaded that field, and at the veterinary hospital at the University of Pennsylvania the most modern and up-to-date methods are in use for operating upon horses. Some of the most valuable horses in the East have been taken here to be fixed up. It is impossible to use ether on horses—so chloroform is the anesthetic employed. Photo shows the veterinary administering the anesthetic before operating.

MARATHON CRAZE HITS THE WORLD.—Paris started it with the dance marathon and within a few days America broke out with the dance marathon like a small boy with the measles. It even got as far as Washington, D. C. where the above was taken. Then somebody started a piano playing endurance test. This was followed by a knitting marathon in Georgia. Now a lady in Pennsylvania claims the marathon dish washing record of the world, while in Paris they are holding a drum beating contest. What next?

(Copyright Keystone View Company)

Own This Modern Light-Draft Spreader

IF THE MAN without a spreader knew how he could increase the crop returns from every ton of manure by using a McCormick-Deering Manure Spreader, he would change his method mighty soon. It isn't a matter of what the other fellow is doing—it is a plain dollars and cents proposition. If you waste your time at uneven spreading you lose profits that should belong to you.

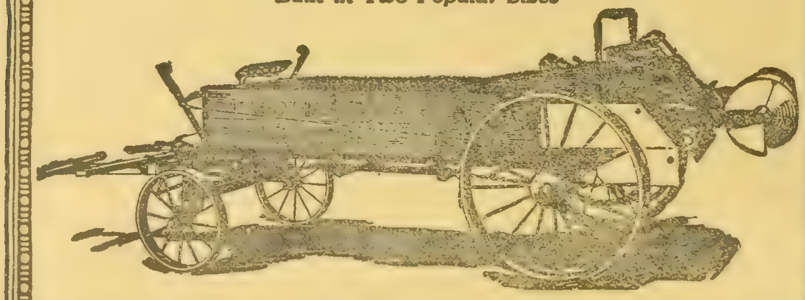
The McCormick-Deering spreader performs two important operations. First, it shreds the manure—tears it to pieces as it passes through the two steel beaters and the spiral wide-spread device; second, it spreads evenly and uniformly, in any quantity desired.

Among the features of the McCormick-Deering spreader are: An auto-steer which permits the spreader to be turned in close quarters, and which eliminates neck weight; adjustment for six feed speeds; and the all-steel frame with all appliances bolted to it direct.

Ask the McCormick-Deering Dealer to point out these features.

INTERNATIONAL HARVESTER COMPANY
OF AMERICA
(INCORPORATED)
606 So. MICHIGAN AVE. CHICAGO, ILL.

McCormick-Deering
Manure Spreaders
Built in Two Popular Sizes



There's Just One Reason

Of all the brands of cigars made in the state of Michigan 28 years ago CHAMPIONS alone remain. And that is because they are always the same, always uniform in flavor and workmanship.

The increasing popularity of CHAMPIONS is proof that honesty and loyalty pay in cigar making as in anything else.

HEMMETER'S CHAMPION CIGARS

Your Dealer Always Has Them

No blends or artificial flavoring — just good old ripe tobacco

28 Years of constant favor. Still hand-made, still the same tobacco.

2 for 15¢

THE HEMMETER CIGAR CO., DETROIT

Farmers Service Bureau

(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full name and address. Name not used if so requested.)

ENTITLED TO THREE MONTHS NOTICE

Would like to know if I rent a farm for money rent of a widow who has a life lease can I hold my crops or could the husband's relatives take possession of them or how should contract be worded?—C. J. E., Jackson, Michigan.

—Upon the death of the widow, the lessee of the farm would become a tenant by sufferance of the reminderman and would be entitled to three months notice to surrender possession. He would be entitled to his crops and if not harvested at the end of the three month period, would have a right to re-enter for the purpose of cultivating and harvesting his crops.—Asst. Legal Editor.

WHO PAYS TAXES

Would like your advice concerning this case: On July 17, 1922, A traded a store to B for a farm. The farm and store to be free from all encumbrances. The farm is assessed to B and the store to A. Will A have to pay the taxes on the farm? —Miss R., Delton, Michigan.

—In the presence of an agreement to the contrary, the purchaser of real property pays the taxes falling due Dec. 1st, if he purchases before that date. If the purchase is made after Dec. 1st, the seller pays the taxes. Under this rule, A would have to pay the taxes on the farm, and B, the taxes on the store.—Asst. Legal Editor.

CAN BE EXEMPT FOR FIRST FIVE YEARS

Can I be exempt from paying tax on wild 40 acres of land if I go to improve it? Is there any law about it?—F. J., Marion, Michigan.

—Act 208, P. A. 1913, governs the case in point. The substance of the act is that if a man buys wild land, forty acres or more, and lives on same and subdues and places under cultivation two or more acres a year, he can be exempted from taxation for the first five years on the property. A reference to the act will give you more details about it.—Chas. J. DeLand, Secretary of State.

WHO OWNS TIMBER?

A and B own farm adjoining with highway between. A claims highway is all on his land, B's deed calls for all land to center of highway. There is timber on B's side of roadway. Said roadway has been used by the public for over sixty years. Who owns timber?—R. L., Saranac, Michigan.

—The owner of land adjoining the highway owns to the center of the highway, unless his deed and abstract of title provide otherwise. If B's deed calls for all the land to the center of the highway, he would be the owner of the land and timber. —Asst. Legal Editor.

SECURING PATENT

Will you please inform me where and how to get an article which I have invented, patented?—R. B., Perrington, Michigan.

—Write to the Patent Office, Washington, D. C. for "Statutes and Rules of Practice" relating to application for patent. These are distributed gratuitously by the patent office and contain forms, etc., to be used in making application for patent.—Assistant Legal Editor.

ESTATE HELD JOINTLY

If man and wife owns a farm jointly and either of them leave can the one leaving receive their share of the property? What share would the wife get if she was the one to leave? If they each inherited money from home and the wife received, say $9,000 and the husband $3,000 can the wife get the amount she inherited over and above her share of the property if the money is tied up in the property?—T. B., Charlotte, Mich.

—Under an estate held jointly by husband and wife, each is owner of an undivided one-half interest in the whole estate. If one party leaves, or is divorced from the other, this alone does not terminate the estate, but one party may release his or her share to the other, under some mutual agreement. Whatever part of the $9,000 is invested in the farm, held jointly, would be included in the wife's undivided one-half interest. The balance of the $9,000, which she inherited would be her sole property.—Asst. Legal Editor.

CAN HE LEVY AGAINST PERSONAL PROPERTY?

I shall appreciate your advice on the following: A sells farm to B. B fails to pay full amount of interest in any of the years he has had the farm; sold on contract. The contract simply states that in case B fails to perform the ordinary duties as owner A shall declare B as his tenant holding over without permission and remove then from premises retaining all that B may have paid or done. Now my question is: Can A in any way secure himself with B's personal property for the back interest? Of course the back interest does not amount to but about one-half the amount B paid as first payment. Farm is assessed to A but B has paid taxes in full.—W. V., Climax, Mich.

—If A does not wish to exercise his right of foreclosure and to lispossess B he may maintain an action at law to recover overdue interest, and could levy upon B's personal property to satisfy his judgment, in the absence of anything in the contract requiring conveyance by vendor before bringing such action.—Asst. Legal Editor.

MISREPRESENTS COW

I am a subscriber to your paper and have been for years. Will you please answer this through your columns? I bought a cow the first of last November at an auction sale, costing $52.50. The man saying she was due to freshen February 12th. I dried her up a month before time to freshen. She isn't fresh yet and won't be for some time. I understand that property must be what it is sold for. Do you think I have a case against this man?—W. H., Central Lake, Mich.

—It is difficult to tell just when a cow will become fresh. Altho the owner should be able to determine within a month's time of the actual date, yet, unless you can show the seller deliberate misinformed you as to the date, knowing that it would be several months later than represented, it would be difficult to establish a cause of action against him.—Asst. Legal Editor.

CONSULT SUPERVISOR

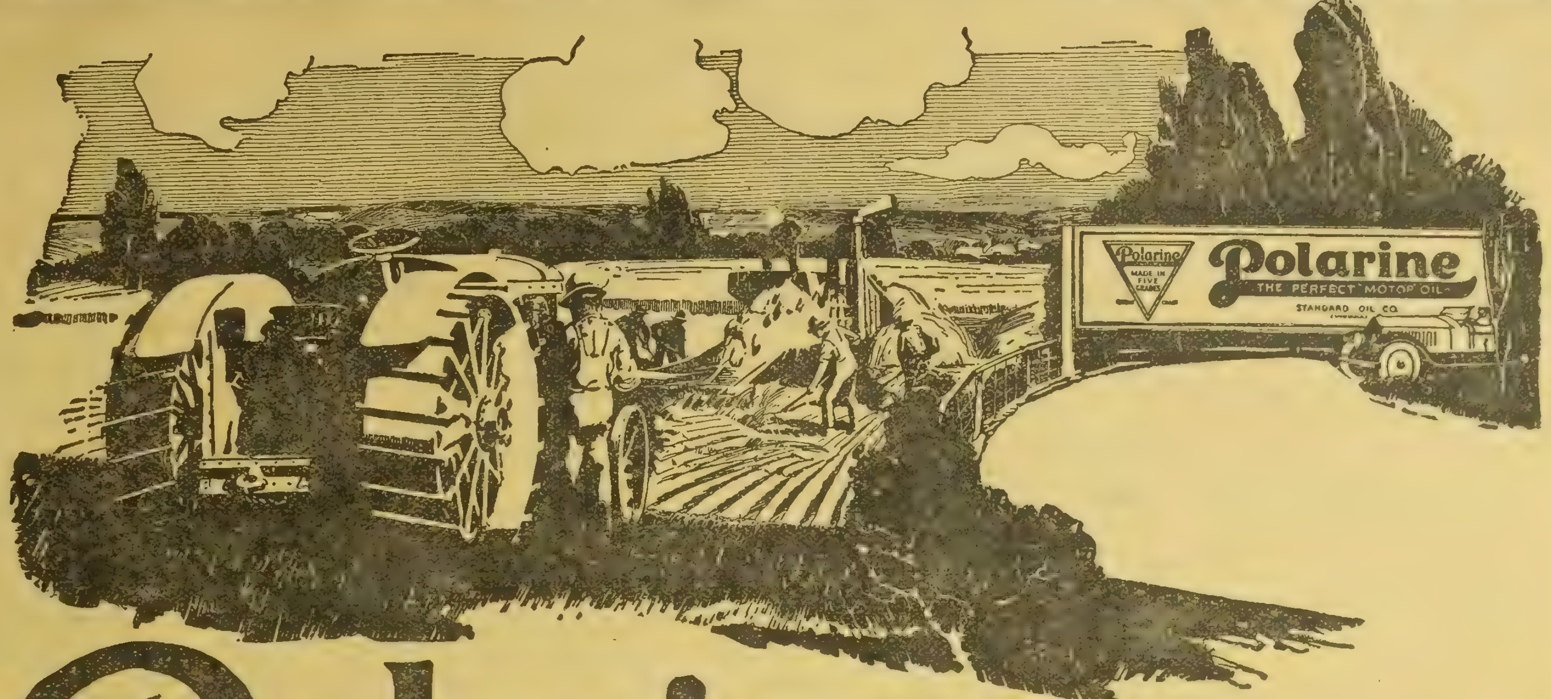
I would like to know thru the M. B. F. if Sec. 26, Art. 8 of our constitution as amended in 1916, does not say that the tax for highway purposes shall not exceed $5 per 1,000 in any one year according to previous valuation. If so, by what authority have they got to assess us over $13.00 per 1,000 for this purpose?—C. B., Allenton, Mich.

—The statutes provide for the building of certain roads, upon the application of persons to be benefitted by such roads, in which case those benefitted are subject to special assessment. Statutes also provide for state and federal reward roads, and special assessments therefor. I advise you to consult your supervisor to ascertain to what different purposes your road taxes are applied. —Assistant Legal Editor.

TEAM AND COWS EXEMPT

I own 40 acres of land, a team of horses, two cows, and have wife and family. Now can a concern seize and take any of those chattels or land or can they garnishee my wages?—A. C., Hellman, Michigan.

—If the 40 acres of land is owned and occupied as a homestead, it would be exempt, to the extent of $1500.00 of its value, from levy on execution to recover for a debt. Your team of horses and two cows would be exempt. 60% of your wages would be exempt from garnishment, provided that not more than $30.00 would be exempt and not less than $8.00.—Assistant Legal Editor.



Polarine Means Sharp Economy

THE PERFECT MOTOR OIL

MANY farmers do not realize the tremendous *waste* due to wrong lubrication. They no not charge against the motor oil such matters as scored cylinders — overheating — too much carbon — too much exhaust smoke—too high consumption of gas.

Yet the right grade of Polarine—indicated in the chart frequently corrects all these troubles. Polarine means *economy* in operation, as well as added flexibility and power.

The reason why Polarine is good, begins with fundamentals. Polarine is made from selected crudes—high in lubricating value. Polarine is manufactured in modern refineries. It is made according to the findings of the world's leading petroleum chemists in co-operation with the designers of the very tractors for which the oil is intended.

Use Polarine

THE PERFECT MOTOR OIL

Made In Five Grades

It is tested, scientifically, in hundreds of tests— in all kinds of engines—under all field conditions.

Polarine is dependable at all motor speeds—at all temperatures—because it holds together. It maintains its body, does not disintegrate under pressure, will correctly lubricate your tractor at all times, provided the grade indicated in the Chart is used.

Polarine is elastic. It forms a perfect cushion, an unbroken film between the moving metal parts. Yet it offers minimum resistance to motion and maximum flexibility. Change your motor oil very frequently and use Polarine.

Polarine
THE PERFECT MOTOR OIL

Standard Oil Company, 910 So. Michigan Ave. Chicago, Illinois
(Indiana)

3152

Tractor Chart of Recommendations

Trade Name	Motor Oil
Adaptable	H.
Allis-Chalmers, 6-12	H.
Allis-Chalmers, 15-25	S. H.
Allis-Chalmers, 18-30 and 20-35	S. H.
All Work	S. H.
Andrews-Kinkade	E. H.
Armington	S. H.
Aultman-Taylor, 15-30	S. H.
Aultman-Taylor, 22-45 and 30-60	S. H.
Automotive	S. H.
Avery, Model C	H.
Avery, 8-16, 12-20, 12-25, 14-28, 18-36, 25-50, 40-65, 20-35	E. H.
Avery Track Runner	S. H.
Bates Steel Mule, All Models	S. H.
Best Tracklayer, All Models	E. H.
Big Farmer	E. H.
Big Four E-B	E. H.
Buckeye Trundaar	S. H.
Burnoil	E. H.
Capitol, All Models	E. H.
Case, 10-18, 10-20, 12-20, 15-27, 9-18	H.
Case, 22-40	S. H.
Case, 12-25, 30-60, 40-72	E. H.
Case, 20-40	E. H.
Cletrac, All Models	S. H.
Coleman	E. H.
Dart Blue "J"	S. H.
Dill Harvesting	H.
Eagle	E. H.
E-B, All Models	S. H.
Ellwood	S. H.
Farm Horse	E. H.
Farquhar, 15-25	S. H.
Farquhar, 18-35 and 25-50	S. H.
Fitch Four Drive	E. H.
Flour City Junior	H.
Flour City, 20-35	S. H.
Flour City, 30-50, 40-70	E. H.
Fordson	H.
Fox	E. H.
Frick, All Models	S. H.
Good Field	H.
G-O	S. H.
Grain Belt	S. H.
Gray	S. H.
Great Western	S. H.
Hadfield-Penfield	S. H.
Hart-Parr, All Models	E. H.
Heider	S. H.
Holt Caterpillar, All Models	E. H.
Huber, All Models	S. H.
Indiana	H.
International, 8-16	H.
International, 15-30	S. H.
Klumb	E. H.
Lauson, All Models	S. H.
Leader	E. H.
Leonard Four Wheel Drive	S. H.
Liberty	E. H.
Lincoln	S. H.
Linn	S. H.
Little Giant, A & B	S. H.
Magnet, 14-28	S. H.
Mark VI	S. H.
McCormick-Deering, 15-30	H.
Minneapolis, 12-25 and 17-30	S. H.
Minneapolis, 22-44 and 35-70	E. H.
Mogul	S. H.
Moline Universal	S. H.
Monarch	S. H.
Montana	E. H.
Nilson Junior and Senior	S. H.
Oil Gas, 20-42 and 25-50	E. H.
Peoria	E. H.
Pioneer, 18-36 and 30-60	E. H.
Port Huron	S. H.
Quadpull	S. H.
Reed	S. H.
Rex	S. H.
Rogers	E. H.
Rumley, Oil Pull, 12-20, 16-30 and 20-40	E. H.
Rumley, Oil Pull, 30-60	E. H.
Russell "Junior", 12-24	S. H.
Russell Boss	S. H.
Russell "Giant", 30-60	E. H.
Sampson, Model M	H.
Savage A	E. H.
Shawnee, 6-12 and 9-18	H.
Shelby, All Models	S. H.
Square Turn	E. H.
Stinson	S. H.
Titan	S. H.
Topp-Stewart	S. H.
Townsend	E. H.
Traylor	H.
Trundaar	S. H.
Twin Ports	E. H.
Twin City, 12-20 and 20-35	S. H.
Twin City, 40-65 and 60-90	E. H.
Uncle Sam, All Models	S. H.
Wallis	S. H.
Waterloo Boy	S. H.
Wellington, 12-22 and 16-30	S. H.
Wetmore	S. H.
Wheat	S. H.
Western	E. H.
Wisconsin	E. H.
Yuba Ball Tread	S. H.

KEY

L.—Polarine Light.
M.—Polarine Medium.
H.—Polarine Heavy.
S.H.—Polarine Special Heavy.
E. H.—Polarine Extra Heavy.

N. B. For recommendations of grades of Polarine to use in automobile and trucks consult chart at any Standard Oil Co. (Indiana) Station.

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Good, strong, steady power is just as necessary as a good separator. A lack of steady power means poor threshing, poor separation and poor cleaning.

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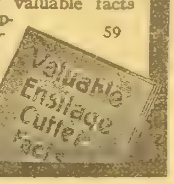

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MICHIGAN CROPS

SEED TO ALFALFA AND BARLEY

I have a lot I wish to seed to alfalfa. Soil is light. Have grown corn and cowpeas on it the last two years. Land is in fair condition. I think of liming this spring, planting early to beans, then work well and seed to alfalfa after beans are harvested, sowing a few oats for cover. Would you advise this course?—L. H., Augusta, Michigan.

—I am of the opinion that you will get much better results by seeding alfalfa this spring or early next spring, using one bushel of barley as a companion crop. There is considerable risk in seeding in late August or September after beans. Should we have as favorable a fall season as during the past year, you would get a stand but should frost come early or should the September season prove very dry, it is not likely that alfalfa would catch well.

On land such as you describe, lime should be used at the rate of two tons per acre of finely ground limestone. It is important that northern grown or Michigan alfalfa seed, preferably the Grimm be planted.—J. F. Cox, Professor of Farm Crops, M. A. C.

CHANGING TIMES

By JOHN T. BARTLETT

A MILK FOOD DRINK

AT one time in our national existance, the village milk man drove his cow to the centre of the town, beneath a friendly tree, and there served his customers, who came to him with buckets. They saw him milk and knew just what they got. It was milk distribution made as simple as the times knew how to make it. In some foreign countries today, goat milkmen drive their nannies from door to door.

The milk distribution system has been a long time changing—and the end is not yet. Recently, a Denver milk distributing organization has established a service for customers which should increase the consumption of milk in a strategic direction.

Of late years, the soda fountain has consumed greatly increasing quantities of dairy products. The soda fountain is a habit, a passion, or a necessity to millions. One of the soda fountain drinks just introduced in the west makes a delectable concoction in combination with milk. A little of the new preparation, and quite a little milk, and the consumer gets something pretty fine.

What the enterprising milk distributors did was to make an arrangement with the manufacturers of the preparation whereby the distributor could bottle it with milk, and sell it to customers along with milk. The bottled product costs only about two cents a quart more than ordinary whole milk. The dairy organization spent large sums telling Denver consumers what they could now obtain, and introducted the new service. Great quantities of the bottled milk drink are being sold in this manner.

Families drink it ice cold, or steaming hot, as they prefer. Children like it, and it has proved the solution of the milk problem in the case of many a child who refused whole milk. The child likes the rosey color of the new drink, and its distinctive flavor.

This means one more good way for increasing milk consumption.

By the way, did you know that milk is transported these days in great tank auto trucks?

A HIGHER RETAIL PRICE LEVEL

ALL the elements entering into distribution cost soared during the World War period.

Cost of container.

Freight rates.

Wages of city workers engaged in physical distribution.

And since all businesses make gross profit a percentage of cost price, all margins increased. A 50 per cent mark up on $1 is 50c—one $1.50 is 75c. Unit profits went up.

Some of these things came down in the deflation period, but they together only eased off a little, and the future is likely to see them advancing again. Distribution costs have become one of the great problems of the times. They have submerged many farmers the past two years. So great have they become that, did a sack of potatoes cost nothing as it was loaded on a Minnesota car, or a box of apples nothing as it left a Michigan siding, the cost delivered to the consumer would be considerable. It would have to be considerable. Just freight cost, handling costs, middlemen's gross profits would make it a substantial figure.

How is his going to end? From the economis standpoint, the practical solution—with a general advance in labor costs already under way—seems clearly indicated. It is a much higher level of consumer food prices. In old price levels, there is not room for modern distribution costs, and a profit to the farmer. There is room, if the consumer will pay the farmer more, as it now pays transportation companies, the middlemen, more.

A campaign for higher retail price levels is in order. The consumer is reconsiled to paying a ney high level for building materials and many other things. When he accepts a similiar high level for farm products taking it as a matter of course, distribution costs will not obtrude as a crucial problem, for there will be room for them. There is not this room, with pre-war, or near pre-war levels.

FARMER AND LABOR MIX LIKE OIL AND WATER

(Continued from Page 4)

things from an employer's point of view. It is well enough for pink professors to write about Farmer-Labor parties; but it would just as practical to expect an Oil-and-Water party. A man will love a life-preserver when he is in distress overboard; but he quickly loses his interest in the thing after he gets back on dry land. He does not think enough of it to carry it home as a souvenir, even though it saved his life. The farmers are glad to use labor to help them put through some pet scheme; but if labor thinks it can depend upon the farmers' vote to help increase wages and reduce working hours, labor will be most terribly mistaken.

During the war I assisted Secretary of Labor Wilson in the important work of increasing prodution. With wheat pegged at $2.50 a bushel the farmers were, of course, tremendously interested in our efforts. The farmers then through the Department of Labor was doing a fine work and they were very sympathetic with our efforts. Some even suggested that we should take over the Department of Agriculture because labor and agriculture were working for the same end. After the war was over, however, and the price of wheat went down with a bang, they quickly forgot the Department of Labor. Although during the war hardly a week went by when we were not visited by a complimentary farmer delegation, I doubt if one such farmer delegation has been near the department since the Armistice was signed. They were then no longer interested in increasing production. Reduced wages was what the farmers wanted in 1919 and 1920. Now, of course, it was not the function of the Department of Labor to work for reduced wages.

"The department was established for improving the welfare of the wage earners," we told the Grange officials, "hence we do not feel justified in inaugurating any campaign to lower wages, even for farm labor. Let wages take their natural course. They will anyway."

"Very well," replied the farmers. "We thought you were our friends, but we see you are not. Guess we had better stick to the Department of Agriculture, for when we farmers flirt with labor we are playing with fire and are likely to get out fingers burned."

A QUEEN'S ENGLISH

Mrs. Stevens had offered liberal wages and privileges, but still the general house-worker seemed a little undecided about coming. 'Do you do your own stretchin'?" she asked suddenly.

"Do we do our own what?" Mrs. Stevens asked, puzzled.

"Stretchin'," repeated the woman. "Do you put all the food on the table and stretch for it yourself, or do I have to shuffle it around for you?"—Successful Farming.

PORK BARREL POLITICS

"Mrs. Jones, kin Johnny go with us to see Elihu root?"

"Why, I didn't know he was to be in town."

"Whatcha mean, in town! Elihu's our big red hawg!"—Orchard and Farm.

HIS BUSY DAY

He—You know I love you; will you marry me?

She—But my dear boy, I refused you only a week ago.

He—Oh, was that you?—Orchard and Farm.

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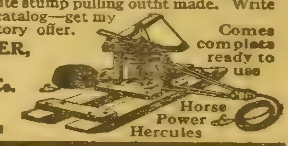
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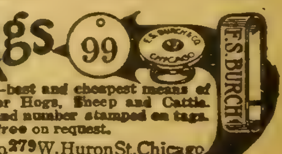
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"BECAUSE OF YOUR LITTLE FAITH"

A SERMON BY REV. DAVID F. WARNER

TEXT: Matt. 17:19, 20a. "Then came the disciples to Jesus apart, and said: 'Why could not we cast it out?" And he saith unto them: 'Because of your little faith.' "

HERE we look in on the same disciples that were given "power over unclean spirits to cast them out." Similarly, other seventy were given this power and returned one day to say, "Lord, even the devils are subject unto us thru thy name." But here, how changed! We hear them saying, "Lord, why could not we cast it out?" Has the Lord changed? No, but the disciples have and therefore suffered defeat .

There the boy stands in the very presence of the multitude challenging the reputed power of Christ thru the disciples. There is the father, pleading and importuning, but his expectancy gives way to hopelessness and disappointment in not seeing the demon cast out. The scribes and Pharisees standing by said, "I told you so." How like those formal and superficial religionists today who shriek, "Didn't I tell you so" when the on-going movements of the church apparently fail—But may I parenthesize that all Godly enterprises go forward. Growth and progress is the norm of life. And I'd rather be an enthusiast in the van than a sullen follower in the rear.—But O, how those baffled disciples, in the midst of that on looking multitude, longed for the Master to come down from the mountain! And he came , he spoke, and the demon went out and the boy was cured from that very hour. The religion of faith triumphed.

Faith is the source of sin-repelling power. There are those who say we need not expect such fullness of power today. They idealize the early church with her phenominal growth and her apostolic teachers who were direct acquaintances of Christ in the flesh. But let us see what we have to keep this faith alive.

We have the same sin-cleansing Gospel. Man's physical needs are supplied thru the same physical laws as then; and so his spiritual needs. Human spirits abide and they must be fed upon the love of God no matter what may be the superficial life of man; his race, occupation, education, or position. The atoning Gospel yet addresses itself to the needs of the heart and cures. You must believe this or you are but a stumbling-block in the on-going of the Kingdom.

We have the same spirit abiding, wooing, and comforting. He came that the greater works might be done. The same spirit that tore away a Saul from the legalism of the Pharisees and sent him out a pulsating apostle to the gentiles, is the spirit of the Wesleys, the Moodys and the Judsons. This is the same spirit that prompts the hard-working farmer to go about his labor in the enthusiasm of Christian purpose. Perspiring and blackened by the dirt of his shop, Elihu Burrit, the learned blacksmith, sang away with the music of hammer and anvil. Said one to him, "Why are you so happy?" "Oh, said he, "I am sending the Gospel to the heathen." Yes, the same spirit as of old. My friend, get out from under the "juniper tree." There are millions living who have not and will not bow the knee to Baal. And you must believe it.

We have the same Lord, yesterday, today, and forever. We saw him in his marvelous works; followed him to the tomb and ascension; only to go away vitalized with the spirit of triumph in his promise to be with us unto the end. And my personal faith is, that the masses are more sensible today of his presence and power than ever before. And you, too, must believe it, else we are in for defeat.

Even so, to find the source of our failure. we are thrown back upon ourselves. We have lacked in a profound, spiritual devotion to Christ. Give us a man of faith and we have a man tenacious in purpose, supreme in power, and married to the accomplishment of one, great dominant thing in life. It was in June in the state of Iowa. I stood looking at two of the finest corn fields I had ever seen. Each had fifty acres or more. And the entire farm was a model of neatness and prosperity. I said to a friend and ex-senator of the state, "Tell me about that farmer." "He is one of our own boys," said he, "and had only such schooling as our own country school provided. But the other day I received a letter from an agricultural college asking me to secure him for their experiment farm." "But why was he such a success?" "Well, he had faith in his job and he mixed plenty of hard work with it," said he. Verily, faith chloroforms all fear in the soul, gives it courage and daring, and fits it for great and loving deeds.

So, it is not a new church, nor a new system of government or church policy, nor organization as helpful as this is, but an implicit faith in a conquering Christ and an unwearied confidence in the power of the Gospel to regenerate that guarantees victory. And here some of us will have to seek our prayer closets and have it out with the devil before we can feel this healing power.

But what will no little faith do? It will regenerate the churches. And they need it. It will set the altar fires going in their sanctuaries. My and your church owes to the community th most helpful kind of spiritual worship. Every devotional period should be warmed with the fire and radiation of Pentecostal hearts; hearts so wrought up in faith as to convince every saint and sinner of the Bethel nature of the place. But many of us are spiritual illusions. We present to others a deceptive appearance.

And why isn't the average church a flattering success? Because the average chuch member is not such a success. He has rejected the new vision and has not allowed the spirit of Christ and the apostles to set the pace for him. He is too smugly content with his own church and society; his own gains and comforts. He is busy satisfying the personal equation while vast surges of lost men go sweeping by him. We sing, "Make me a blessing today," with not enough intelligent faith to know what that means. May I suggest it is the way of the bleeding heart, for only so did our Lord qualify to bless us. "When Zion travaileth she shall bring forth."

No, the Lord has not changed. But many modern disciples have. Why should we pride ourselves in a Gospel faith when our neighbor does not know of it? Why, he scarcely got settled before the grocer, butcher, and politician found him, and you have not found him in these years. Everywhere on the farms and streets, in the stores and markets, are people famishing for the bread of life. Though you have but a few loaves and fishes, give and the Master will bless wonderously.

But how shall vital faith be sustained? By constancy in prayer and devotion. "This kind goeth not out but by prayer and fasting." The disciples, in their busy rounds failed to keep up the devotional life and consequently lost confidence and power. Has not the same spiritual paralysis come over us? In the outwardness and activities of the Christian life, the frictions and distractions of the world are so liable to tear us loose from the fellowship of Christ and power. A good, grandfather Martin oft retired to a secluded spot on the rear of his little farm for trysting with God. He actually believed that one had to go out into the mountains and deserts with his Lord in prayer if one would work for him. "The effectual, fervent prayer of a righteous man availeth much."

And fasting. The purpose of self-denial must be strongly set in our lives. We qualify to enter the Kingdom through cutting off hand and foot, said Jesus. But in likemanner, we qualify for service and power in the Kingdom through continued self-denial. Mark those who are given over to self indulgence and there follows moral weakness and inefficiency. We must enter the gymnasium of self-control and self limitition to have our lives disciplined for strength and power.

Vital, growing faith will give us power. After the San Francisco earth-quake disaster, a Chicago daily came out with a cartoon on its front page, in which lay a powerful suggestion. The center of the picture showed a devastated city filled with grief-stricken, hungry people, sheltered in tents and being fed on charity. At one side, standing on an eminence which overlooked this ruin, stood a man. He was dressed in the clothes of the laborer. His line of vision is centered in a great cloud of smoke which overhung the ruins. In the center of this cloud he sees the restored San Francisco, beautiful and prosperous. And with the tools for the task, he descends in faith and courage to reconstruct the city of his vision.

If we stand with Christ on the Transfiguration mount, become steeped in that holy communion, and get the Master's vision of a sin-cursed humanity, it is then that we catch his spirit and descend with him in power to bless the world through a working, challenging faith.

Get a "6"—

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The Hunted Woman

By James Oliver Curwood

Michigan's Own and America's Formost Author of the Great Northwest

Copyright by James Oliver Curwood

(Continued from May 12th issue)

THEIR eyes met steadily.

"If you are, Johnny," went on MacDonald in a low voice, "I'd take her with me. An' if you ain't, I'd leave these mount'ins to-night an' never look in her sweet face again as long as I lived."

"You'd take her along?" demanded Aldous eagerly.

"I would. I've been thinkin' it over to-night. An' something seemed to tell me we mustn't dare leave her here alone. There's just two things to do, Johnny. You've got to stay with her an' let me go on alone or—you've got to take her."

Slowly Aldous shook his head. He looked at his watch. It was a little after ten.

"If I could make myself believe that she would not be safe here—I would take her," he said. "But I can't quite make up my mind to that, Mac. She will be in good hands with the Blacktons. I will warn Paul. Joanne is determined to go, and I know she will think it pretty indecent to be told emphotically that she can't go. But I've got to do it. I can't see——"

A break in the stillness of the night stopped him with the suddenness of a bullet in his brain. It was a scream—a woman's scream, and there followed it shriek after shriek, until the black forest trembled with fear and agony of the cries, and John Aldous stood as if strippe of power to move or act. Donald MacDonald roused him into life. With a roar in his beard, he sprang forth into the darkness. And John Aldous followed, a hot sweat of fear in his blood where a moment before had been only a chill of wonder and horror. For in Donald's savage beastlike cry he had caught Joanne's name, and an answering cry broke from his own lips as he followed the great gaunt form that was tearing with the madness of a wounded bear ahead of him through the night.

CHAPTER XXII

NOT until they had rushed up out of the coulee and had reached the pathlike trail did the screaming cease. For barely an instant MacDonald paused, and then ran on with a speed that taxed Aldous to keep up. When they came to the little open amphitheatre in the forest MacDonald haulted again. Their hearts were thumping like hammers, and the old mountaineer's voice came huskey and choking when he spoke.

"It wasn't far—from here!" he panted.

Scarcely had he uttered the words when he sped on again. Three minutes later they came to where the trail crossed the edge of a small rock-cluttered meadow, and with a sudden spurt Aldous darted ahead of MacDonald into this opening, where he saw two figures in the moonlight. Half a dozen feet from them he stopped with a cry of horror. They were Paul and Peggy Blackton! Peggy was disleveled and sobbing, and frantically clutching at her husband. It was Paul Blackton who dragged the cry from his lips. The contractor was swaying. He was hatless; his face was covered with blood, and his eyes were only half open, as if he were fighting to pull himself back to consciousness after a terrible blow. Peggy's hair was down, her dress was torn at the throat, and she was panting so that for a moment she could not speak.

"They've got—Joanne!" she cried then. "They went—there!"

She pointed, and Aldous ran where she pointed—into the timber on the far side of the little meadow. MacDonald caught his arm as they ran.

"You go straight in," he commanded. "I'll swing—to right—toward river——"

For two minutes after that Aldous tore straight ahead. Then for barely a moment he stopped. He had not paused to question Peggy Blackton. His own fears told him who Joanne's abductors were. They were men working under instructions from Quade. And they could not be far away, for scarcely ten minutes had passed since the first scream. He listened, and held his breath so that the terrific beating of his heart would not drown the sound of crackling brush. All at once the blood in him was frozen by a fierce yell. It was MacDonald, a couple of hundred yards to his right, and after that yell came the bellowing shout of his name.

"Johnny! Johnny! Oh, Johnny!"

He dashed in MacDonald's direction, and a few moments later heard the crash of bodies in the undergrowth. Fifty seconds more and he was in the arena. MacDonald was fighting three men in a space over which the sprucetops grew thinly. The moon shone upon them as they swayed in a struggling mass, and as Aldous sprang to the combat one of the three reeled backward and fell as if struck by a battering-ram. In that same moment MacDonald went down, and Aldous struck a terrific blow with the but of his heavy Savage. He missed, and the momentum of his blow carried him over MacDonald. He tripped and fell. By the time he had regained his feet the two men had disappeared into the thick shadows of the forest. Aldous whirled toward the third man, whom he had seen fall. He, too, had disappeared. A little lamely old Donald brought himself to his feet. He was smiling.

"Now, what do 'ee think, Johnny?"

"Where is she? Where is Joanne?" demanded Aldous.

"Twenty feet behind you, Johnny, gagged an' trussed up nice as a whistle! If they hadn't stopped to do that work you wouldn't ha' seen her ag'in, Johnny—s'elp me, God, you wouldn't; They was hikin' for the river. Once they reached the Frazer, and a boat——"

He broke off to lead Aldous to a clump of dwarf spruce. Behind this, white and still in the moonlight, but with eyes wide open and filled with horror, lay Joanne. Hands and feet were bound, and a big handkerchief was tied over her mouth. Twenty seconds later Aldous held her shivering and sobbing and laughing hysterically by turns in his arms, while MacDonald's voice brought Paul and Peggy Blackton to them. Blackton had recovered from the blow that had dazed him. Over Joanne's head he stared at Aldous. And MacDonald was staring at Blackton. His eyes were burning a little darkly.

"It's all come out all right," he said, "but it ain't a special nice time o' night to be taking a' evening walk in this locality with a couple o' ladies!"

Blackton was still staring at Aldous, with Peggy clutching his arm as if afraid of losing him.

It was Peggy who answered MacDonald.

"And it was a nice time of night for you to send a message asking us to bring Joanne down the trail!" she cried, her voice trembling.

"We——" began Aldous, when he saw a sudden warning movement on MacDonald's part, and stopped. "Let us take the ladies home," he said.

With Joanne clinging to him, he led the way. Behind them all MacDonald growled loudly:

"There's got t' be something done with these damned beasts of burriners. It's gettin' so no woman ain't safe at night!"

Twenty minutes later they reached the bungalow. Leaving Joanne and Peggy inside, now as busily excited as two phoebe birds, and after Joanne had insisted upon Aldous sleeping at the Blacktons' that night, the two men accompanied MacDonald a few steps on his way back to camp.

As soon as they were out of earshot Blackton began cursing softly under his breath.

"So you didn't send that damned note?" he asked. "You haven't said so, but I've guessed you didn't send it!"

"No, we didn't send a note."

"And you had a reason—you and MacDonald—for not wanting the girls to know the truth?"

"A mighty good reason,' 'said Aldous. "I've got to thank MacDonald for closing my mouth at the right moment. I was about to give it away. And now, Blackton, I've got to confide in you. But before I do that I want your word that you will repeat nothing of what I say to another person—even your wife."

Blackton nodded.

"Go on," he said. "I've suspected athing or two, Aldous. I'll give you my word. Go on."

As briefly as possible, and without going deeply into detail, Aldous told of Quade and his plot to secure possession of Joanne.

"And this is his work," he finished. "I've told you this, Paul, so that you won't worry about Peggy. You can see from to-night's events that they were not after her, but wanted Joanne. Joanne must not learn the truth. And your wife must not know. I am going to settle with Quade. Just how and where and when I'm going to settle with him I don't care to say now. But he's going to answer to me. And he's going to answer soon."

Blackton whistled softly.

"A boy brought the note," he said. "He stood in the dark when he handed it to me. And I didn't recognize any one of the three men who jumped out on us. I didn't have much chance to fight, but if there's any one on the face of the earth who has got it over Peggy when it comes to screaming, I'd like to know her name! Joanne didn't have time to make a sound. But they didn't touch Peggy until she began screaming, and then one of the men began choking her. They laid me out with a club, so I was helpless. Good God——"

He shuddered.

"They were river men," said MacDonald. "Probably some of Tomman's scow-men. They were making for the river."

A few minutes later, when Aldous was saying good-night to MacDonald, the old hunter said again, in a whisper:

"Now what do 'ee think, Johnny?"

"That you are right, Mac," replied Aldous in a low voice. "There is no longer a choice. Joanne must go with us. You will come early?"

"At dawn, Johnny."

He returned to the bungalow with Blackton, and until midnight the lights there burned brightly while the two men answered a thousand questions about the night's adventure, and Aldous told of his and Joanne's plans for the next day.

It was half-past twelve when he locked the door of his room and sat down to think.

CHAPTER XXIII

THERE was no longer doubt in the mind of John Aldous now. The attempt upon Joanne had left him but one course to pursue: he must take her with him, in spite of the monumental objections which he had seen a few hours before. He realized what a fight this would mean for him, and with what cleverness and resource he must play his part. Joanne had not given herself to him as she had once given herself to Mortimer FitzHugh. In the "coyote," when they had faced death, she had told him that were there to be a to-morrow in life for them she would have given herself to him utterly and without reservation. And that to-morrow had dawned. It was present. She was his wife. And she had come to him as she had promised. In her eyes he had seen love and trust and faith—and a glorious happiness. She had made no effort to hide that happiness from him. Consciousness of it filled him with his own great happiness, and yet it made him realize even more deeply how hard his fight was to be. She was his wife. In a hundred little ways she had shown him that she was proud of her wifehood. And again he told himself that she had come to him as she had promised, that she had given into his keeping all that she had to give. And yet—she was not his wife !

He groaned aloud, and his fingers dug into the flesh of his knees as he thought of that. Could he keep that terrible truth from her? If she went with him into the North, would she not guess? And, even though he kept the truth from her until Mortimer FitzHugh was dead, would he be playing fair with her? Again he went over all that he had gone over before. He knew that Joanne would leave him tomorrow, and probably forever, if he told her that FitzHugh was alive. The law could not help him, for only death—and never divorce—would free her. Within himself he decided for the last time. He was about to do the one thing left for him to do. And it was the honorable thing, for it meant freedom for her and happiness for them both. To him, Donald MacDonald had become a man who lived very close to the heart and the right of things, and Donald had said that he should take her. This was the greatest proof that he was right.

But could he keep Joanne from guessing? Could he keep her from discovering the truth until it was time for her to know the truth? In this necessity of keeping her from suspecting that something was wrong he saw his greatest fight. Compared with it, the final settlement with Quade and Mortimer FitzHugh sank into a second importance. He knew what would happen then. But Joanne—Joanne on the trail, as his wife——

(Continued June 9th Issue)

Uncle Rube Spinach Says:

IS SUGAR SCARCE?

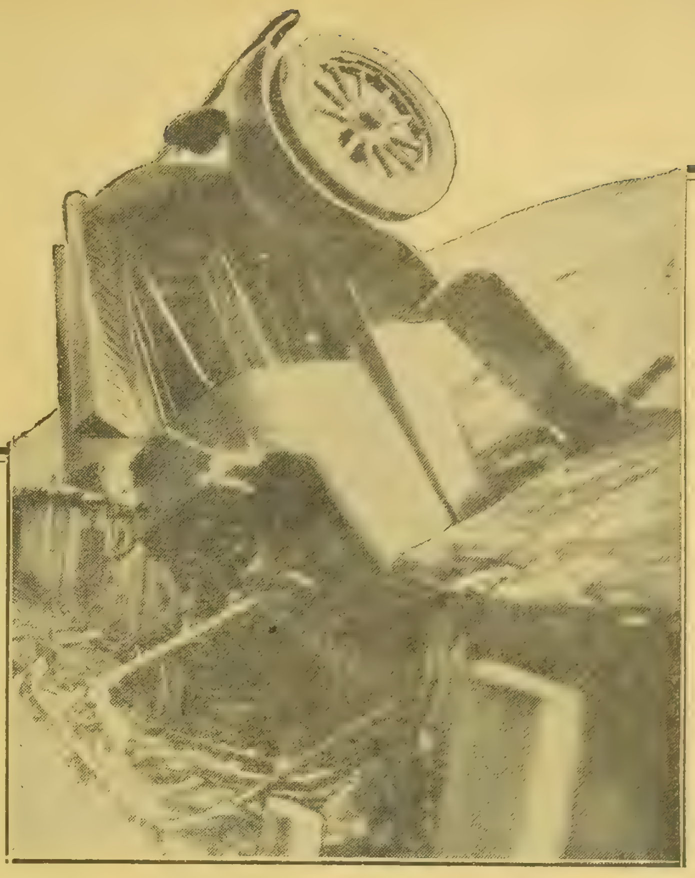
FOLKS'S, we've been told fer a long time there wuz a scars'ty of sugar, 'at the sugar crop wuz short of what it ort to be an' the price has been mountin' higher'n higher for a long time an' we've been payin' the higher prices 'thout sayin' a word, ain't we? In some places they've only let us have two or three pounds at a time; jest like war times, you know.

Well today, bein' sort o' out o' order, mentally and physically, I went snoopin' 'round as I sometimes snoop an' I found two places, retail groceries, an' I wuz lookin' into their warehouses. Well, in one, where there's been a shortage of sugar for some time, sacks of sugar piled twelve high in tiers ten wide an' extendin' back in a room I'd say, wuz 30 or 40 feet long met my gaze. In another, just a little farther down the street, I saw sugar piled eight high an' seven wide an' I couldn't see how far back it wuz. You know they don't 'low visitors in their back rooms an' only fer my snoopin' habits I wouldn't have known anything 'bout this. But folks, what I did see is enough to convince me, if it don't you, that we are bein' held up by somebody. I'm not sayin' who—mebbe I think I know—I do know this, the sugar I saw wasn't put in there yesterday nor the day before—Somebody told 'em to buy an' they bought. You are payin' for the investment, ain't you?

An' it's that way with almost everything. Apples that the farmers wuz glad to get fifty cents fer last fall have sold fer ten cents per pound all winter. Potatoes that had no market on the farm, sold fer fifty cents a peck. Even cabbages that were so plentiful an' the farmers had to almost give 'em away sold fer three an' five cents a pound.

Dear farmer friends, can't you see there's got to be a different way of sellin' your stuff? It's not a fair deal to you fer the middleman to get sixty-five cents out of every dollar's worth of stuff you sell. An' yet that's jest what they're doin'—milk, eggs, butter—everything you sell. Figure what you get an' then ask any consumer in the city what he pays.

There is no sugar shortage. If there wuz no merchant could pile up fifty or a hundred tons of it. There is no shortage of anything jest now except farm help—there is a shortage of that 'cause the city offers better wages 'an the farmer can pay. But wait a little while, jest stay where you are. Soon the tide will change, somebody'll want something to eat an' it wont be before him. Farm prices must go higher or somebody must go hungry. Jest stick to her boys fer a little while—somebody will be sick or whistle—just to keep his spirits up. Say, join some good farm organization like the Farm Bureau or somethin' an' sell your stuff in a business way. I guess it's jest 'bout all I can say. Cordially yours. UNCLE RUBE.



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With the large number of heavy trucks and automobile busses running on the highways your car may be run into and shoved off the highway into the ditch, making a complete wreck. The driver of the other car may be worthless and you will need automobile insurance to take care of your loss. On the other hand, in case of a collision in which the automobile is damaged and people injured, there is the usual argument as to who is at fault.

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FINANCIAL STATEMENT
At Close of Business, April 30th, 1923.

ASSETS		
Cash in Banks and in Office,	$ 75,261.30	
Cash in Banks, Savings Acct.,	143,000.00	
Cash in Hands of Agents,	7,150.90	
Total Cash Assets,		$225,412.20
Accrued Interest, Cert. of Deposit,		4,463.05
Office Site and Building,		27,727.44
Furniture and Equipment,		12,000.00
Salvage Department,		5,500.00
Total Assets,		$275,102.69
LIABILITIES		
Claims in Process of Adjustment, estimated,		$ 30,000.00
Accrued Salaries and Fees,		4,170.50
Current Bills,		0.00
Total Current Liabilities,		$ 34,170.50
Surplus,		$240,932.19
Total Liabilities,		$275,102.69

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The Michigan
BUSINESS FARMER

SATURDAY, MAY 26, 1923

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"The Farm Paper of Service"

DIRTY POLITICS

IT is to be hoped that few farmers were actually gullible enough to wallow in the slime of dirty gossip which was given to the city newspapers last week from Lansing, regarding the honor and character of David Friday, president of the Michigan Agricultural College.

As Governor Groesbeck said, "No more direct stab-in-the-back was ever aimed at a Michigan institution" and the pity is that it was made serious only by the amount of space, always willingly devoted to any scandal, no matter how frail its foundation, by the daily newspapers.

We believe in a free and untrammeled press, but we believe first in the foundation of all American law and order, which is, that a man is innocent, until he has been proven guilty.

By "aver" and "it is alleged" and "we understand", the daily press can print any amount of gossip or propaganda, attacking the honor and character of any citizen, no matter what his position or his past reputation, and be "within the law."

At the time the first reports from Lansing were strung across the head lines of the newspapers, Dr. Friday, was in Connecticut addressing large meetings in the indirect, if not the direct interests of Michigan agriculture.

From the point of any one familiar with the present and past history of the Michigan Agricultural College it is the most natural thing in the world that this present eruption should have happened; the regret is that it could not have been a clean, above-board, open fight. That was hardly to be expected, however, with Dr. Friday, aligned against a peanut-brained group of garden-variety politicians.

Something Wrong at East Lansing

The farmers of Michigan have known for a good many years that there was something rotten at the core of their Agricultural College. They were pacified only, when the announcement was made that a man of Dr. Fridays reputation was to be put at the head and given full authority to bring the college back to a standing, second to none, which it once boasted.

We have been no less aware of the fact that all was not right at East Lansing, even since Dr. Friday took over the reins and we began to see his fundamental policies of business farming percolating into the working of the various divisions of the college activities.

As recently as February of this year we asked Dr. Friday, privately and from this very page to use The Business Farmer as his spokesman to the real farmers of Michigan. We promised him a willing audience and a most interested one in anything he might have to say. We felt perhaps he had a load on his mind which he ought to divulge to the men and women of the farms in Michigan, to whom he was, when all is said and done, alone responsible. It is therefore to be regretted, at this time, that he did not accept this invitation and lay down before the farmers of Michigan the difficulties under which he was laboring to improve their own institution of learning.

"Hands Off—Dr. Friday!"

If the farmers of Michigan will think for a minute, they will quickly discern that Dr. Friday, has since he took over the college, in a practical way begun the investigation of several "sacred" institutions. Dr. Friday should have known that to question the price paid for milk in the Detroit area was flirting with death. Any milk producer could have told Dr. Friday that he would be safer in a den of rattlers or looking into the business end of a loaded shot gun!

The newspapers say "state agricultural leaders are not satisfied with Dr. Friday!" Who are these "leaders" and what do they lead? Are they the disgruntled bolsheviks, who find with the wave of prosperity turning towards the farmer, as Dr. Friday predicted, that their job of "organizing" and "howling" is over? Or are they the impractical theorists who have tried to make us believe that the union laborer of the city who owns nothing, except his right to strike, is entitled to the friendship and support of the farmer, who has an average investment of thousands of dollars and yet who has not been able to afford the luxuries which the dollar-an-hour city laborer has boasted these past several years.

Let's get these so-called "state-agricultural-leaders" out from under cover.

Let's find out who these men are who speak authoratively for the actual working farmers of the state of Michigan.

Let them show us their record, not of words, but of deeds!

If there is in Michigan a man who has accomplished more for the farmers business in our state, who has pointed out a saner course, or helped to stabilize farm and crop prices or helped show the boys and girls on our farms a future on the farms, or who has more diligently sought to disclose, to tired and tear-dimmed eyes of men and women after devoting the best years of their lives to farming, a silver-lining to the dark clouds that seemed almost to engulf them, than Dr. Friday, we want someone to point him out to us.

High Time for Action!

We believe the farmers of Michigan will agree that The Business Farmer has as much right to express their sentiments as any other source. We have a record for being absolutely independent and we shall continue to be, but we say, here and now, that the farmers of our home state are tired and nauseated with the cheap politician, the man who is striving to get political position by capitalizing their friendship. We have tolerated several in Michigan that ought to have been exposed years ago, but when these same individuals launch an attack on a man who has the confidence, gained by actual accomplishment against great odds, such as Dr. David Friday enjoys with the farmers of Michigan, they can get ready for our "big bertha", because it is aimed their way.

We believe that Dr. Friday will stand by the fight, now that the gauntlet has been thrown down by his opposition. We do not size him up as a "quitter". The fact that he hurried back to Lansing when the news of the attack reached him would indicate that he does not fear a fight in the open, as those who attacked him from ambush did. We know he will stick if he feels that he has the confidence and the support of the real farmers of Michigan behind him and we want him to know that he has.

MEMORIAL DAY

FORTY states in the Union now celebrate May thirtieth as a legal holiday. It is a day set aside primarily for remembering those who have given the greatest gift within their power for the honor and defence of their flag and their country. It is no less a day set aside to the memory of all whom we loved, but who have preceded us in the "great adventure."

On this day as an emblem of our love and devotion we place flowers on the graves of those who have departed as an expression of their memory which we cherish, yet Decoration Day was only an idea in the head of a young newspaperman fifty-eight years ago.

The origin of Memorial Day is an interesting one although known to few. The man to whom the idea came was John Redpath, a young newspaper reporter who had been assigned to accompany General Sherman on his march to the sea. John Redpath wrote the first news of the fall of Charleston, South Carolina, and when the troops entered that city, Colonel Woodford, who was the millitary head of the city, invited Mr. Redpath, in addition to his newspaper duties, to become the temporary Superintendent of Schools. This work was not difficult, for the people of the city were anxious to resume their lives on a peace basis. What John Redpath had to do, however, was to work on the first public schools opened in Charleston for negro children. One of these schools was just outside the town, and the road that led there passed, what had once been, the race-track of the city, but which had been used after the fighting around Charleston as a general burying-ground for the men of both the Union and Confederate forces who had fallen in battle. To make this unhappy spot more sad, the graves were sadly neglected.

One day, it was during April, which is late spring in the southern states, Mr. Redpath passed a group of children near the race-track burying-ground, and they had been picking great bunches of flowers. The idea suddenly came to him that if someone would only put a few of those flowers on the graves they would not look so forlorn. When he reached the negro school toward which he had been walking, he made a short address to the pupils, suggesting that it would be splendid if every scholar would pick a bunch of flowers whenever they could, putting the flowers on a grave.

As one little negro girl said, "Why, we all jest git armfuls of posies and smother them graves from sight!"

As he went about his work in the days that followed, John Redpath spoke of the idea of decorating the graves to a great many people. To every one with whom he talked the plan proved popular. A committee was arranged and it was finally decided that May first would be a good day for the decoration celebration. So that May first eighteen sixty-five, over ten thousand men, women and children met at a central spot, all carrying flowers, and after singing hymns marched to the race track cemetery, where the ugly mounds of sacred earth were literly covered with blossoms.

Thus came Memorial Day, one of the most cherished of American institutions.

A FARMER'S MARKET PLACE

WHAT Bloomington, Illinois, has done in creating a market place for the farmers of the adjacent country is a lesson to be taken to heart by every town and city of considerable population in the state of Michigan. There has been any number of plans suggested for the shortening of the gap between the producer and the consumer, and yet none has the practical element which makes for success as does the open market provided in cities where farmers from a distance can come and dispose of their products. The market place at Bloomington is an example, and The Business Farmer is presenting this story to our readers with the idea of encouraging the establishment of more markets in the cities of this state.

True it is that many of the large cities have so-called markets, but most of those who sell on these markets are buyers who go through the country and buy from the farmer. The markets which already exist in Michigan do not represent ten percent of the number which should be operated and operated to the profit not only of the surrounding country but to the municipalities which would provide such an establishment.

We are informed that the sale of bonds to provide for a suitable market place by any town or city in the state of Michigan is permissible and The Business Farmer would like to do all in its power to encourage during the present year as rapidly as possible the building of farmers' markets in every town and city in our state.

PAYING UP

A MAN connected with several farmers' banks in the central portion of Michigan tells us that farmers are rapidly paying up the obligations they contracted during the past few years.

It seems a little odd perhaps that debts should actually be paid up during times of depression, while debts are contracted during times of easy money, and yet it is a human trait. We are all optimists. If things are good today we believe they are going to be good tomorrow, and so we borrow for our needs today in the expectancy of tomorrow.

We have all been pressed hard during the past two years of agricultural depression, so we have adjusted our lives to using less money, we have worked harder to make more money, and with our surplus, we have been paying up the obligations which we contracted during much better days.

Nothing better could be said of the farmer than that as a class he is most anxious and will sacrifice most to rid himself of the burden of debt.

THE MAY SNOW

WHEN we awoke the other morning and found the thermometer outside registering twenty-two degrees above zero our hearts sank within us, but a statement from the Crop Survey Department says that little damage was done in Michigan and for this fact we have to thank the heavy snowfall, which protected the buds and dropped several million tons of "poor man's fertilizer" over the state.

One scientist has pointed out that because of sun spots this will be a cold summer, and so far at least we can take him seriously.

Another argues that the sun is slowly cooling off and that the world may expect lower mean average temperature as the years pass.

We know very little about astronomy and less about geology but we do know that in the history of the universe "A thousand years is but a day" so we are not getting excited over what the weather prophets tell us.

PUBLISHER'S DESK

RAISING RABBITS AND COVIES.

Dear Mr. Slocum—I have read in your paper lots of things of benefit to all, also that Mrs. E. W. B. wanted to know about selling rabbits, etc., back to companies in New York and Kansas City.

We bought two pairs of rabbits of a Food and Fur Association in New York, a few years ago and they were $7 a piece. They promised to buy back all we raised so we raised some, and after a while they bought one pair, $7 per pair they were to pay as per contract, and said they would buy the rest, if I let them know how many I had. So I did, but they weren't ready and I wrote different times, and only received $6 for the pair sent them, and they were better stock than we received but they claimed they were underweight and I had a time getting this money for them.

They are just frauds in our opinion. They figure on selling stock to you for a big price and get out of buying, and I have been going to advertise them. Anyone that buys from them will get fooled."

THIS letter gets first place at the head of the Publisher's Desk this week because I hope it will help to answer one on two inquiries that are bound to come to me every week from well meaning readers who have not noted in this column my comments on the growing of rabbits, guinea pigs, white mice, and covies for the so-called Food and Fur Associations who sell the original breeding pair at a high price with the understanding that they will buy the offspring at correspondingly high prices from the grower.

Ellis Parker Butler once wrote a book called "Pigs is Pigs." If you have not read it, go to your nearest library and borrow it if you want an evenings good enjoyment and many a hearty laugh. You can read it in an hour or two.

The foundation of the story is the rapid breeding propensities of a pair if guinea pigs, which were shipped to a small express office presided over by an Irish express clerk. As the package was not picked up by the rightful owner the pigs started to multiply so rapidly that they soon crowded the expressman out of his office and threatened to engulf the town.

I am wondering what would happen if the same thing should happen to a shipment sent out by the Fur Association. In that case, according to the alluring circulars, the expressman would find himself possessed of a growing fortune which would soon rival that of Mr. Ford.

A GOLD BRICK

AN eastern farm paper with a national circulation, which is old enough to know better, is sending crews into Michigan and nearby states, the men in which are armed with a lead pipe in the shape of a petition.

Some of these agents travel in overalls, sometimes with a retired farmer, or someone known in the community, who lends a degree of respectability to the proposal. The unsuspecting farmer is asked to sign a petition to "lower taxes, prevent labor strikes, lessen commission, men, and reduce freight rates." Naturally every farmer who sees this wants these four things to happen and is willing to sign anything that may aid in bringing them about.

The hitch comes when the agent asks for two dollars to pay for a ten years subscription to this paper so that the farmer may keep posted on just what this paper is doing in Washington to bring about the ideal conditions their petition seeks.

The scheme sounds so simple that you may consider our warning readers of The Business Farmer, as questioning their intelligence. The scheme is, however, being presented in so many different forms and so often with the apparent good faith of a neighbor accompanying the agent that we cannot help but use this space in the Publisher's Desk, with the hope that some reader with a little red in his hair will kick the agent and his friend who presents such a "gold-brick" clear out into the dust of the state highway.

What the Neighbors Say

BELIEVES HIGHWAY FUNDS ARE WASTED

I READ your statement regarding the veto of the gasoline bill by the Governor. Was surprised at your approval of it. It seems to me while it would be a little unjust to the stationary engine owners of which I have two, yet it woud be doing more justly than it is at present. Regarding the misuse of state highway money it seems to me from what little I have seen it is about as free as radio, just get your station (and there are lots of them) and take in all the time. Last summer in Farwell there was a little job of about 1 mile, yet there were two young men, I should think about 20 or 21 years old, who carried a surveyor's equipment with them in a Ford car who surveyed and resurveyed, I don't know how many times. They had the contractor take dirt out of out of one place, move it to another then put it back several times. Of course the contractor did not care, it was excess work, he got paid for moving it. And those two surveyors were here at least 2 or 3 times a week during the time that job was being done. One day I was in town last fall on my way to the board of supervisors meeting. There were 8 state men that day on that little job at Farwell. Anoter job just east of Farwell where they were putting in a bridge, there was another young man about 22 who was supposed to be inspector. He boarded in Farwell at least one month before they even started the bridge that he was supposed to inspect the work on and made his boast he was drawing his pay just the same. I was to a county fair last fall and was talking to a man who had a road job in another county. While we were talking he was looking at a bunch of people and he said, "Hello, there is my gravel inspector over there. That man is supposed to be on my job inspecting the gravel my men are putting on the road." So here are a few incidents as to some of the ways the money is being spent for nothing.—Louis Finch, Clare County.

—Editor's Note: We did not approve of the governors veto of the gasoline tax, as our reader suggests. The Business Farmer believes in presenting both sides of a serious question and letting its readers do their thinking for themselves. We printed page after page of material from the advocates and opponents of the gasoline tax. Our columns were open to all and we urged our readers to express themselves to their legislators. They evidently did, for the house passed it by a record vote and the rural vote of the senate was unaminously for it. Events have now proven, in our opinion that the Governor should NOT have vetoed the gasoline tax.

TOO MANY FARMERS FOLLOWING RADICAL LEADERS

THE great question of unemployment and poverty seems at the present time to be solved. There is work at good wages for every man and woman and when everybody can get work there is practically no poverty.

Now there is a clamor arising for more immigration. I was surprised to see a communication in the Business Farmer by a self-styled farmer for immigration as a panacea for the ills of the farmer. Now, a nurseryman may be a farmer but he is in a different class from the great majority of farmers, and I think the everage farmer will hesitate a long while before he supports a policy of more immigration. Of course there are some men who are so anxious to have people at there beck and call that they would be willing to bring on unemployment and poverty to attain that end.

To my mind the present shortage

(Continued on Page 23)

First Mortgage Real Estate Gold Bonds

Coupled with your own belief in the superiority of Federal first mortgage bonds is the comforting assurance that thousands upon thousands of other investors hold steadfastly to the same conviction.

Write for Booklet AG845

Tax Free in Michigan

Free from Federal Income Tax of 4%

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FEDERAL BONDS

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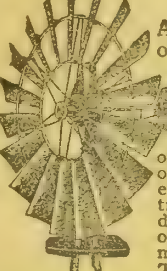


4 TIMES Around the World with ONE OILING

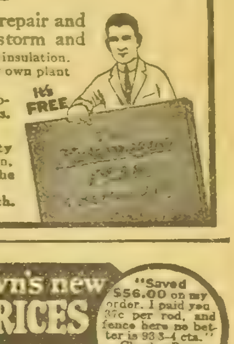
100,000 Miles Without Stopping for Oil

An inventor who could develop an automobile, a railroad car or any other conveyance on wheels which would perform such a feat would be considered a wonder. But such is the record of regular accomplishment by the Auto-oiled Aermotor during the past eight years in pumping water.

Did you ever stop to think how many revolutions the wheel of a windmill makes? If the wheel of an Aermotor should roll along the surface of the ground at the same speed that it makes when pumping water it would encircle the world in 90 days, or would go four times around in a year. It would travel on an average 275 miles per day or about 30 miles per hour for 9 hours each day. An automobile which keeps up that pace day after day needs a thorough oiling at least once a week. Isn't it marvelous, then, that a windmill has been made which will go 50 times as long as the best automobile with one oiling?

The **Auto-oiled Aermotor** after 8 full years of service in every part of the world has proven its ability to run and give the most reliable service with one oiling a year. The double gears, and all moving parts, are entirely enclosed and flooded with oil all the time. It gives more service with less attention than any other piece of machinery on the farm. To get everlasting wind-mill satisfaction buy the Auto-oiled Aermotor, the most efficient windmill that has ever been made.

For full information write AERMOTOR CO. Chicago Kansas City Dallas Minneapolis Des Moines Oakland



A Better Way of Building

Learn how "The Kalamazoo Way" is revolutionizing building methods. House your cattle, hogs and equipment under conditions that increase production, reduce expense and earn more profits. Learn about our complete building plan service.

Kalamazoo Glazed Tile Buildings and Silos

Tile Buildings are beautiful, economical, practical, everlasting. Save repair and paint bills; warm in winter, cool in summer; decay, storm and vermin-proof; will not burn. Three dead air spaces make perfect insulation. Kalamazoo Tile is made from selected quality fire clay in our own plant located in the center of the finest fire clay districts.

Let our Building Plan Department help you. Write for descriptive literature. Free estimates on receipt of your rough plans.

Kalamazoo Silos

—choice of Wood Stave or Glazed Tile. Product of thirty years' silo building experience. Give you greater production, more profit at less cost. Yield a handsome dividend on the investment year after year, Write for Free Silo Book

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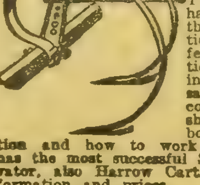
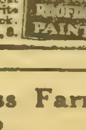


ALL AROUND SATISFACTION FOR ANY CULTIVATION PURPOSE

It's through the right kind of cultivation that foul growths are kept down and can be eradicated. THE KOVAR DIGGER has opened the field for the right kind of cultivation and having exclusive features, will give satisfaction which no other machine will produce. Thousands of farmers have been convinced and we want to show you. Write for free booklet on land cultivation and how to work foul growths. KOVAR has the most successful Spring Tooth Corn Cultivator, also Harrow Cart. Write for further information and prices.

JOS. J. KOVAR, OWATONNA, MINN.



Get Jim Brown's new FACTORY PRICES

"Saved $56.00 on my order. I paid you 37c per rod, and fence here no better is 93 3-4 cts."
—Charles Rowe, Stella, Me.

Write quick for my big new book of money-saving factory prices on highest quality Fence, Gates, Steel Posts, Paints, Roofing.

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Don't pay a penny more than Jim Brown's factory prices. Highest Quality, backed by guarantee. Write for 104-page money-saving bargain book.

Brown Fence & Wire Co., Dept. 3902 Cleveland, O.

Keep The Business Farmer Coming—See page 2.

The Farm Home

A Department for the Women

Edited by MRS. ANNIE TAYLOR

THE MAKING OF OUR COOK BOOK

THIS cook-book made up of our own recipes will have a place in every reader's home, and I want you all to feel the book is a part of your own work. We will make it attractive enough so that every farm woman reader will feel she cannot run her house without one. I want your favorite cooking, canning, and household recipes. I will treasure every one of them, including the recipes I have received in the last few months. To me a good practical cook-book is the most highly prized article in my home. Why burden our minds with remembering a recipe when all you have to do is just open to the page. Remember, simple, every day, as well as fancy cooking, recipes are what I want.

Kindly write on one side of paper, placing your full name and address at top of each sheet. I plan to use the name and county of each sender with their recipe, unless you ask me not to.

MEMORIAL Day is here and lest we forget, this reminder is just to refresh our memories for those who fought and died that we might enjoy the blessings of this beautiful country. We all must admit it is a wonderful nation altho there are times when the struggle is hard. We in this land do not know what hardships are and I hope we will all stop and pause on May 30th and give a prayer even a silent one for those who are with us no more.

Your Friend,
Mrs Annie Taylor

Address letters: Mrs. Annie Taylor, care The Business Farmer, Mt. Clemens, Michigan.

OLD SOLDIERS

Old soldiers, dressed in blue—
Here's a wreath of love for you,
As you slowly walk today
Where your comrades, sleeping, lay.

Old soldiers, dressed in blue—
Gray and stooped and limping, too;
Slow and slower, day by day,
Old age draws your strength away.

I remember, long ago,
When you went with eyes aglow—
Brave young men—brave, soldier
men—
And you knew Abe Lincoln then.

Grand Army of the Republic—how
few remain
Of your loyal, noble train!
Who kept our states in golden band,
And gave to us our happy land.

LEPHIA BRYANT LARSON,
Aberdeen, Wash., April 6, 1922.

SMART BRIDAL ACCESSORIES

THERE no longer seems to be any question of the propriety of adding a touch of color to the conventional veiled bridal gown. The predominating tone of course is white but dressmakers in this country are copying some of the French dressmakers and putting a little bit of soft green or even the palest shade of pink under the bridal dress.

The head-dress that has a diadem is the smartest of all for this spring and can be made at home very easily. Sometimes they are fashioned of artificial orange blossoms, in fact any dainty white flower would be appropriate.

If it is possible to have a home wedding, have one by all means. I do not know of any sweeter memories than an old-fashioned home wedding. Rich or poor can afford this and with the abundance of spring flowers that can be had in our own woods, our homes can be made a bower.

The white prayer-book is taking the place of the bridal boquet in a great many weddings and it makes a lovely keep-sake.

LINEN SHOWER FOR THE JUNE BRIDE

IF a girl has a few friends in her neighborhood, it is a lovely thing for one of her most intimate friends to give a linen or even miscellaneous shower. These shower affairs are very inexpensive for the giver and brings so much joy and real good to the future bride.

All our girls love to make pretty things and a towel with a few stitches of embroidery makes a very acceptable gift. Each girl making some little hand worked article—face cloths with a little crocheting around the edge, two or three kitchen towels with neat hand hemming. The handkerchief carried by the bride on her wedding day is a lovely gift.

A simple luncheon can be served so that a great deal of work does not make our hostess tired. Why not have our girls arrive around two o'clock and either sew or play cards or just chat for an hour or two and then serve a simple tea menu. The following is very good and not a great deal of labor:

Tea Menu for a June Shower

Egg Sandwitches;
Cheese Straws;
Hot Gingerbread with whipped cream;
Tea;
Raisin Opera Caramels.

Egg Sandwiches—Chop finely the whites of "hard-boiled" eggs; force the yolks through a strainer or potato ricer. Mix yolks and whites, season with salt and pepper, and moisten with mayonnaise or cream salad dressing. Spread mixture between thin slices of buttered bread. Cut crust off both sides and cut in two diagonally.

Cheese Straws—Roll, puff or plain paste one-fourth inch thick, sprinkle one-half with grated cheese to which has been added few grains of salt and cayanne. Fold, press edges firmly together, fold again, pat, and roll out one-fourth inch thick. Sprinkle with cheese and proceed as before; repeat twice. Cut in strips five inches long and one-fourth inch wide. Bake eight minutes in hot oven. Cheese straws are piled log fashion and served.

Hot Gingerbread—Two eggs, one cup sugar, one and one-third cups flour, three teaspoon baking powder, half teaspoon salt, one and one-half teaspoon ginger and two-thirds cup thin cream. Beat eggs until light, and add sugar gradually. Mix and sift dry ingredients, and add alternately with cream to first mixture. Turn into buttered cake pan, and bake thirty minutes in a moderate oven. Serve in squares on pie size plates and put whipping cream on top after it has been seasoned with sugar to taste and a drop or two of vanilla flavoring.

Raisin Opera Carmels—Two cups light brown sugar, seven-eights cup thin cream, one-half cup raisins. Put sugar and cream in saucepan, bring to the boiling point and let boil until a soft ball may be formed when mixture is tried in cold water. Turn into a large platter, cool slightly and work with a large wooden spoon until creamy. Add raisins, seeded and cut in pieces and spread evenly in a buttered pan, using hands, having mixture three-fourths inch in depth. Cool and cut in cubes. These may be passed the early part of the afternoon.

Tea should be served with sugar and cream or a dish of cloves and those who care for it this way use two or three cloves in cups and it gives a peculiar but delightful taste. Slices of lemon are also served for the tea.

The table can be made so attractive with a large fancy doily that does not quite cover the whole table or with small doilies. At a tea the custom is to either seat your guests around the room and serve them or else stand. There are so many beautiful wild flowers now that one need not be without a prétty center piece.

The shower gifts can be a surprise and just before serving a box covered with colored crepe paper can be used to hold the gifts and give them to the bride-to-be and she should open each package so that all might share in the happiness.

EMBROIDERY RINGS MADE OF METAL

FOR the women who are handy with their needle the new embroidery rings made of metal are splendid for working on heavy material, like bed spreads. They can be adjusted to the thinner materials as well and are much stronger. I just purchased one for my Mother and she is delighted with it. They cost twenty-five cents in our stores and would be pleased to send you one upon receiving this amount.

A DAISY AND BUTTERCUP WEDDING

DAISES or elderberry blossoms make as pretty decorations for a June wedding as do roses. Laurel also makes a charming ornamentation and keeps fresh, which is a decided advantage. In all decorating, avoid mixing flowers. Make it a rose wedding, a laurel wedding, a dogwood or a daisy wedding, but do not mix these all up in one. You could make your dining room one kind and another room different. An exception to this, however, is in the mixing of flowers which nature herself has a fancy for combinning, such as the early wild flowers or buttercups and daisies. These are beautiful in combination, giving the effect of cheer and sunshine.

Make garlands for the bride's and groom's chairs. If you have a special for the young folks make a center-piece for the table sticking the flowers in a bed of moss. From this center-piece let a chain of daises extend in every direction.

If you use a long table, such as a buffet, and serve your guests standing or at small tables, have a low mound of flowers in the center of the buffet with vines or feathery foliage leading from it. On either side place candles if possible with shades to match the color scheme.

These can be found in a ten-cent store and are very attractive. On each end have plates piled with napkins between. Have two or three varieties of sandwitches with plates of each kind on either end of long table, and plenty more to serve.

The bride's cake should be white and a dark brown cake with white frosting for the groom. These should be on large table with garlands of flowers around them and cut by the bride and groom so all might have a piece.

THE TWELVE GREATEST WOMEN

MRS. Maud Wood Park, president of the National League of Women Voters in the U. S., formed a committee to decide upon the twelve greatest women and after pouring over thousands of letters decided the following were the greatest living. I am giving them to you and any one of these women's lives would be worth reading.

Jane Adams—philanthropy.
Cecelia Beaux—painting.
Annie Jump Cannon—astronomy.
Carrie Chapman Catt—politics.
Anna Botsford Comstock—natural history.
Minnie Maddern Fiske—stage.
Louise Homer—music.
Julia Lathrop—child welfare.
Florence Rena Sabin—anatomy.
M. Carrie Thomas—education.
Martha Van Reusseleau—home economics.
Edith Wharton—literature.

HANDY RAINY DAY DEVICES

SOME handy things to have about for rainy days are: a clothesline that stretches across the porch with clothes-pins handy; a wire circle such as some salt barrels have about them suspended above the stove with spring pins kept on it to dry mittens, socks and other small articles; a few screweyes in the ceiling above the stove on which to hang a coat hanger and dry wet coats.

Mothers Problems

THE AFTERNOON NAP

THERE is no set limit to the age at which a child shall cease taking his afternoon nap. The time varies with different children. Sometimes a child with an exceptionally strong nervous system, can well dispense with the afternoon nap by the time he is in his third year; again, a nervous, high-strung type of child must rest and sleep a bit during the day if possible, until five years old or more. It is for every mother to decide when her child is too old for the nap.

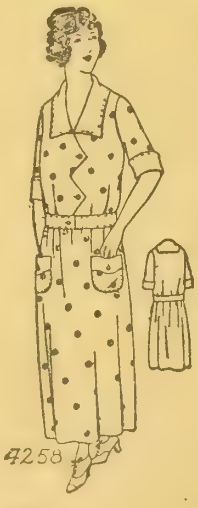
Most mothers stop the daily nap too soon. As the child gets into his second year and play becomes an all-important consideration more and more firmness and persistence are necessary to get him to "go off" each day at the regular time. If Mother is busy, and the child shows no signs of being sleepy, the temptation becomes too great to let the nap go "just for to-day." Perhaps later on the child will fall asleep on the couch or on the floor, and will be put to bed to complete his rest; but the habit of being put to bed at the regular time each day will have been weakened. It will grow easier and easier for the child to remain awake past nap-time, until soon he is going all day long without a break in his day of play.

If the child goes to bed very early, no ill effects may follow, but likely as not, bed-time will not be placed an hour ahead of its former time, and the child will merely be cheated out of an hour's needed rest.

The nervous child can never grow too old for a daily nap, or at least a daily rest. Even after school-age has been reached, it may be necessary to insist upon a few moments of quiet, lying down, each day.

Rest can never harm a child. So, be very, very careful when you say: "Oh, he's too old to take a nap!"

AIDS TO GOOD DRESSING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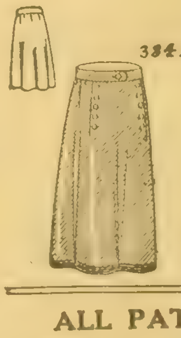

3841

3993. A Jaunty Cape—This is a splendid model to go with a one-piece dress, or with a separate blouse and skirt. It may be made of broad cloth, jersey, tweed, or taffeta. As here shown, tweed was used. One could have the scarf of brushed wool or other contrasting material.

The Pattern is cut in 4 Sizes: Medium, 38-40, and Large, 42-44 inches bust measure for Ladies, and 14 and 16 years for Misses. A Medium size will require 2¾ yards of 54 inch material.

4258. A Pretty House or Porch Frock—Figured percale and pique are here combined. Gingham, linen, lawn and crepe are also attractive for this style.

This Pattern is cut in 7 Sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38 inch size requires 5 yards of 32 inch material. The width at the foot is 2½ yards. To trim as illustrated requires 1 yard 36 inches wide.

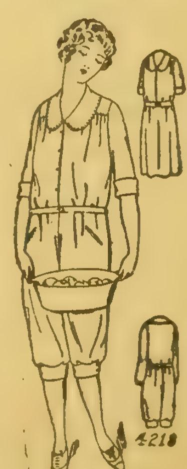
3841. A Popular Skirt Model—Here is just the right style for a utility skirt; one that has comfortable lines and very practical pockets. It is good for serge or twill, and also for velveteen, corduroy, and heather mixtures. Braid would form an attractive trimming.

The Pattern is cut in 7 Sizes: 26, 28, 30, 32, 34, 36 and 38 inches waist measure. A 30 inch size requires 2¾ yards of 38 inch material. The width at the foot is 2 yards.

4218. A Splendid "Work" Costume in Romper Style With or Without Skirt—This design fills a long felt want—combining utility, neatness and comfore, with good style lines. The "Romper" may be worn without the skirt, which can be readily fastened if desired. Serge, linen, gingham, khaki, and crepe are good materials for this model.

The Pattern is cut in 6 Sizes: 34, 36, 38, 40, 42, and 44 inches bust measure. A 38 inch size requires 6½ yards of 36 inch material. Without the skirt 4 yards will be required.

If graduation looms ahead, crepe de chine would be charming trimmed with valenciennes lace and also dotted swiss. These make a dress that can be worn all summer. The stores are full of beautiful narrow picot-edge ribbons of two-toned and single coloring. This is truly a summer of ribbons and laces. Smocking is used a great deal on the smaller childrens clothes.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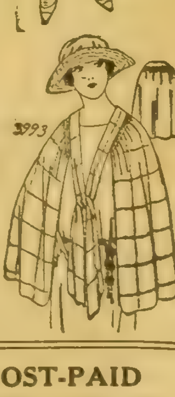

3993

ALL PATTERNS 12c EACH—3 FOR 30c POST-PAID

Order from the above or former issues of The Business Farmer, giving number and sign your name and address plainly.

ADD 10c FOR SPRING AND SUMMER FASHION BOOK

Address all orders for patterns to
Pattern Department, THE BUSINESS FARMER, Mt. Clemens, Mich.

All Husband Does is Play Cards

Dear Mrs. Taylor: I have been reading your paper for some time and watching to see if other women have the same trouble and heartaches as I have. If some of you women have a man that likes to play cards as well as mine does, God pity you. Mine could play night and day, all the time. There he is in his glory. His home and family doesn't worry him any, even if we are all sick. He can go away and stay all night and come home at 6:30 in the morning.

It is all the same to him. Many a time I have gotten supper ready and he has not come home until eight and ten o'clock. What do you think my feelings are? I have put up with this for many winters. It seems as if I can't stand it much longer. Some one write me the remedy for I have tried everything I could think of. If their is any of you women that has a man that stays at home nights as a companion, appreciate him.—A Subscriber.

—We can feel very sorry for this reader and she has our most sincere sympathy. The only remedy that I can see is to play your part and play it well. Maybe he will relent and see the wrong he is doing.

The Runner's Bible

God—there is none else. (Deut. 4:39.)

Be not discouraged because you cannot fully understand God. For mortal minds this is impossible. But as there is no good apart from Him, you can begin your spiritual life by training yourself to see Him in all good. As He is the only power, the one creator, and His work is perfect, so everything must be good, and in everything you will ultimately learn to find Him.

Personal Column

OF course no little modern bride is superstitious. Certainly not. But all the same brides of today like to know the superstitions that long have applied to brides. There are certain omens that they feel better if they know about, for some are good and some are bad, and all are quaint. Here are some rhymes you may cut out and paste under the cover of your hope chest, just to laugh about, or to show to some of your bride friends who may be a bit superstitious.

Marry when the year is new—
Always loving, kind and true.
When February birds do mate
You may wed, nor dread your fate.
If you wed when March winds blow
Joy and sorrow both you'll know.
Marry in April when you can—
Joy for maiden and for man.
Marry in the month of May,
You will surely rue the day.
Marry when June roses glow,
Over land and sea you'll go.
They who in July do wed.
Must labor always for their bread.
Whoever wed in August be
Many a change are sure to see.
Marry in September's shrine,
Your living will be rich and fine.
If in October you will marry,
Love will come, but riches tarry.
If you wed in bleak November,
Only joy will come, remember.

* * *

Another interpretation is:

Marry in January's hoar and rhyme,
Widowed you'll be before your prime.
Married in February's sleety weather
Life you'll tread in tune together.
Marry when March winds shreik and roar,
Your home will lie on a foreign shore.
Married 'neath April's changeful skies,
A checkered path before you lies.
Married when bees o'er May blossoms flit;
Strangers around your board will sit.
Married in month of roses—June;
Life will be one long honeymoon.
Married in July with flowers ablaze,
Bitterest memories in after days.
Married in August's heat and drowse,
Lover and friend in your chosen spouse.
Married in golden September's glow,
Smooth and serene your life will go.
Married when leaves in October thin,
Toil and hardships for you begin.
Married in veils of November mist,
Fortune you wedding ring has kissed.
Married in days of December cheer,
Love's star shines brighter from year to year.

* * *

Married in white, you have chosen all right;
Married in gray, you will go far away;
Married in black, you will wish yourself back;
Married in red, you will wish yourself dead;
Married in green, ashamed to be seen;
Married in blue, he will always be true;
Married in pearl, you will live in a whirl;
Married in yellow, ashamed of your fellow;
Married in brown, you will live out of town;
Married in pink, your spirits will sink.

* * *

And to guide you to the right day of the week:

Monday for health,
Tuesday for wealth,
Wednesday the best day of all,
Thursday for losses,
Friday for crosses,
Saturday no luck at all.

Or this:

Wed on Monday, always poor.
Wed on Tuesday, wed once more.
Wed on Wednesday, happy match.
Wed on Thursday, splendid catch.
Wed on Friday, poorly mated.
Wed on Saturday, better waited.
Wed in the morning, quick undoing.

I would be pleased to hear from some of the readers on opinions of "bobbed hair" for women. —A reader of the M. B. F.

Textile Leather Work—One of your readers has asked if the company selling textile leather work to be done at home was a reliable firm. I am looking this matter up, but am wondering if any reader has any experience with these companies.

MAPLE DESSERTS FOR SPRING

This is the time of year when so many lovely things can be made of maple syrup and everyone enjoys it. I might say that nothing equals hot biscuits and hot syrup for a supper. This is my favorite biscuit recipe and it has never failed me.

Baking Powder Biscuits—Two cups bread flour, five teaspoons baking powder, one-half teaspoon salt, two tablespoons butter and one cup sweet milk. Mix dry ingredients and work in butter with tips of fingers; add gradually the liquid, mixing until a soft dough. It is impossible to determine the exact amount of liquid, owing to difference in flour. Toss on a floured board, pat and roll lightly to one-half inch in thickness. Shape with a biscuit cutter or top of baking powder tin. Place on buttered pan and bake in hot oven twelve or fifteen minutes. Serve with hot maple syrup.

Maple Sauce for Ice Cream—For plain ice cream use this sauce served hot. One tablespoon flour mixed with one-eighth teaspoon salt, one cup milk. Make same as custard, adding one tablespoon butter, and one-half cup maple syrup.

RECIPES

PEANUT COOKIES

Sift one cup of sugar five times to one and one-half cups of cake flour and add two level teaspoons of baking powder, sift five times. Beat the yolks of six eggs with a pinch of salt to a cream, add the sugar gradually beating continually, then add a teaspoon of vanilla, one-half cup of hot water, and the flour gradually, beat for fifteen minutes, pour into a greased and floured dripping pan and bake in a very slow oven. When cool cut in squares, frost all sides and roll in ground peanuts being careful not to crush the squares. These keep nicely in a closed container and are delicious picnic lunches.

FROSTING

Mix two tablespoons of melted butter, four tablespoons milk, one teaspoon vanilla and enough powdered sugar to thicken, then a tablespoon of marshmallow cream. The latter may be omitted, but I do it to all fostings as it keeps them creamy and from becoming dry or hard.

PEANUT BUTTER COOKIES

Cream two level tablespoons of butter then add one-half cup of peanut butter and mix the two thoroughly. Gradually add one cup of sugar and one egg lightly then one-half cup of milk. Take one cup of sifted flour and sift again with four teaspoons of baking powder and a pinch of salt. Add the cookie mixture and when well mixed stir in flour to roll probably three and one-half cups in all. Roll out cut and bake in a hot oven. Sprinkle with sugar before baking if liked.

PEANUT COOKIES

Two tablespoon shortening, one-fourth cup of sugar, one egg, one-half cup flour, one-half teaspoon salt, two and one-half tablespoon milk, three-fourths cup chopped nuts, one tablespoon baking powdered and one-half teaspoon lemon juice. Mix as butter cakes. Drop from spoon on an unbuttered baking sheet two inches apart. Bake twelve or fifteen minutes in moderate oven. Makes about two dozen cookies.

CASTOR OIL COOKIES

Wish we'd known about them years ago.

One cup each of sugar molasses and milk, one-half cup of castor oil, one-half teaspoon salt, one teaspoon soda, two teaspoons ginger and enough sifted flour to make a dough that can be rolled. Roll out and shape, bake in quick oven. Two of these cookies are equal to one dose of castor oil. Children are fond of them. —Miss Alma Becker, Augusta, Michigan, R. 1.

PANCAKES

One quart of sour milk, a pinch of salt, one egg, one teaspoon soda and flour to make of right thickness. I use this same recipe for the Buckwheat cakes. I don't put in the egg and I use only one tablespoon of flour (wheat) and put the rest in of Buckwheat.—

GINGER DROP CAKES

One cup molasses, one-half cup melted butter, one-half cup warm water, three cups flour, one teaspoon soda, two teaspoons ginger. Stir all well together, line a dripping pan with buttered paper, drop in small spoonfulls and bake in a quick oven.—Mrs. Lesley L. Ames, Saranac, Mich.

RHUBARB PIE

Wash rhubarb and cut in pieces to make three cups. Scald and drain. Mix one cup of sugar, one-half cup of fine stale bread crumbs or four tablespoons of flour and a few grains of salt. Add the rhubarb; mix thoroughly. Line a pie plate with pastry, fill with the prepared rhubarb and cover top with strips of pastry. Bake in a hot oven—400 degrees—for half hour.

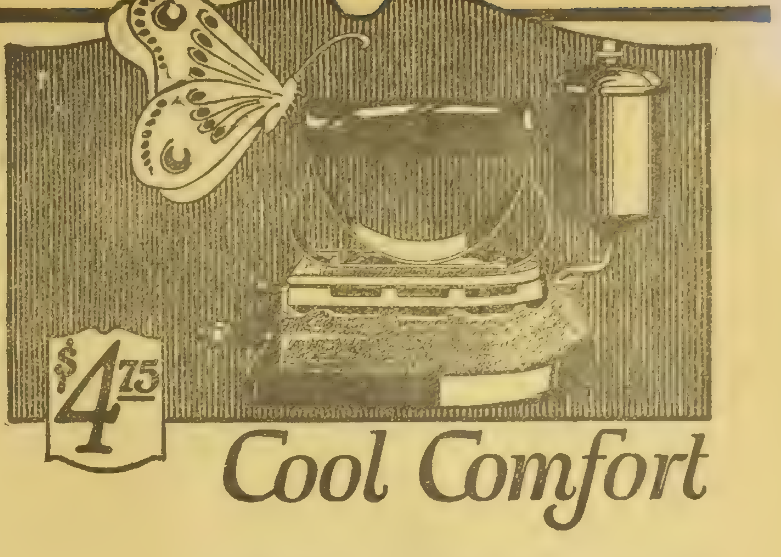
THE GROUCH

There was a man, at least he claimed that name,
  But he growled and groaned all the same.
When the weather was warm and started the sweat
  He'd hump up his back and say he was "het".
But when the wintry winds blew cold and it snowed
  He'd look from the window and say "Worst weather ever known".
And thus he complained from morning 'till night
  And the darkness alone could shut his mouth tight.
He became such a nuisance to all of his friends
  That, of plans to cure him there were no ends.
His family and his neighbors of patience were bereft
  And wished earnestly that his neighborhood he had left.
But no such good fortune was theirs to enjoy
  For this "excuse for a man" still raised the old boy"
But finally their patience being entirely exhausted,
  Onto the waiting junk heap this grouch they tosted.
And his place on Earth being thereby vacated
  And the harm he had done being justly rated,
It was found on inspection that nothing of worth
  Had resulted from this being having come from to this earth
And now that this lesson to all is apparant
  That to some mortals a sour disposition is inherent,
Let us all have charity that thinketh no ill
  And have patience to let the grouch his sour garden till.

—Written by a subscriber.

—if you are well bred!

At a Party—Do not talk gossip. Listen interestingly to what is being said. Do not use slang. Refer to brothers and sisters by first name, during conversation. Refer to your escort as your friend, not your "gentleman friend". On leaving thank the hostess for the pleasant party.



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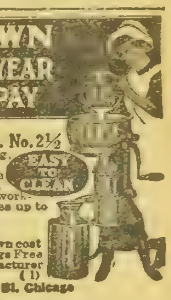

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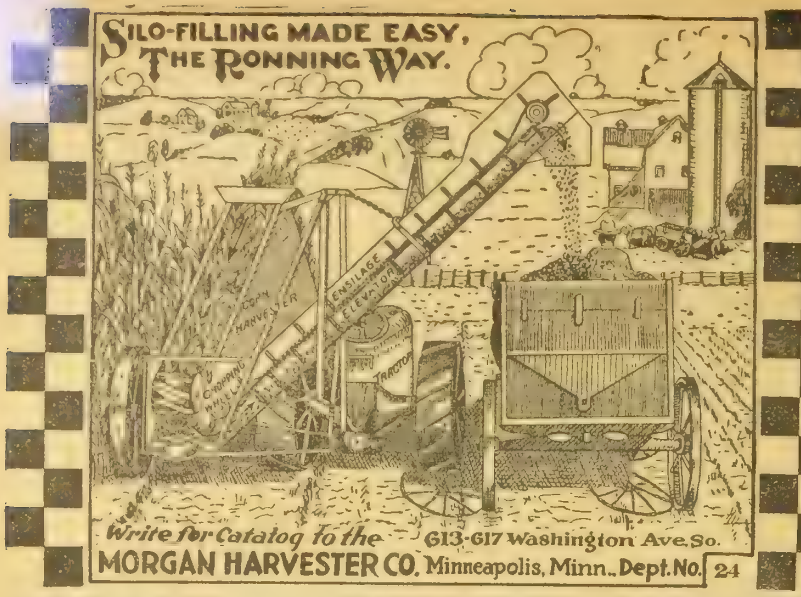

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The Children's Hour

Hello Uncle Ned—This is the second time I have written, lets hope its the last. I am to be 16 years old the 18th of October. Have I a twin brother or sister? If so, please write. I am 5 feet 4 inches tall and weigh 125 pounds, have dark bobbed hair and gray eyes.

My dad takes the M. B. F. and we all like it real well, as there are so many interesting articles in it. My dad owns a grocery and dry goods store, even so he used to be a farmer. Must make room for some of the other cousins, so all please write, twins or not. I will answer all letters I receive. With love, your niece. Isabelle Papineau, Box 8, St. Jacques, Mich.

—Let us hope it is NOT the last time you write. I hope every member of the Children's Hour feel free to write whenever they want to. The more often you write the better we get acquainted, and you stand the same chance of having your letter in print, whether you have written once or one hundred times. By all means come again, Isabell.

Dear Uncle Ned—I love everything on the farm. We will not disturbe a bird nest of any kind as we love all birds. We have little wren houses up on a post in front of our house. The birds built a nest in our mail box last summer and we took them out and put them up in a box and they stayed there all summer. We hope to see them again this summer. We like your paper.—Hattie Rusing, R. 5, Allegan, Mich.

—One should always be a friend to the birds. Many of them appear to do considerable damage but in most cases the good they do outweighs by a large margin the damage. People who like animals and are kind to them always have plenty of friends.

Dear Uncle Ned—It has been such a long time since I have written to the M. B. F., I suppose you have forgotten me. I have been so busy since I started to high school in Mt. Clemens that I could not write. The school work has been much easier for me this semester. I'm now 16 years old and in the A 9th grade. Will the girls and boys please write to me? Those of my age or older. My sister, Eunice, said she would like to join the M. B. F. but is too old. She is 18 years old and would like to have the girls and boys of her age and older write to her. I think there isn't anything nicer than to receive a letter from someone. Its also a great pastime to write letters. About two weeks ago my sisters and I went to the woods to get flowers. The mayflowers were the only ones out, now the bleeding hearts, adders tongues and violets are out. I just love to go to the woods don't you? My sister, Rose, has eighteen correspondents and I don't really see how she can keep track of all of them. I have only one. Will close with lots of love to Uncle Ned.—Iris Arnold, Box 474, R4, Mt. Clemens, Mich.

—I should say I have not forgotten you although it has been a long time since you wrote to me. Don't wait so long between letters, Iris. And tell your sister, Eunice, that she can write if she wishes. Some of the members of our merry circle are two or three years older than she is. Yes, it is great fun to gather flowers in the woods.

Dear Uncle Ned—This is the second time I have written, but I did not see my first letter in print. I think it went in the waste paper basket. The weather is nice now but the water has been high and all the ditches were full and overflowing but it went down Monday, April 16. We did not have any school for one week for the water went over the roads and the children could not come to school. I am 13 years old and in the seventh grade at school. My teacher's name is J. J. Donnelly. I wish you could see the water now and come and take a boat ride like some people are taking, for beside our house is a big ditch about twelve feet deep. We have 5 rabbits but only one is quite tame. Every time I feed the chickens he'll be right there to get his ear of corn. If you chase him away he'll get mad and take the corn away from the chickens. I think the answer to Hazel Baker's riddle is a candle. If I have guessed it right don't forget your letter, Hazel. I am going to write a few riddles. Eyes like a cannon ball, ears like a mule, tail like a cotton ball and runs like a fool. I will not tell the answer to this but I will let all of you guess it. A dish full of dainties, a dish full of flowers. Answer: Honey. What has three feet but cannot walk? Answer: A yard stick. Up and down, up and down, never touching sky or ground. Answer: A pump handle. I think that is enough for this time. The one that guesses my middle name I will write a letter to. Good-bye from Esther E. Thaut, Turner, Michigan, R2.

—"If at first you don't succeed try, try again" must be your motto. It is a good one. The waste paper basket is taking a vacation.

Dear Uncle Ned—I would like to join your merry circle. I like to read the Children's Hour. When I was reading it last week I saw a girl with same name as mine. I was going to write to her but can not find her address just now. I am 16 years old, and in the 9th grade. We live on a farm of 240 acres. We have fifteen cows to milk and I have to help. Our farm is three miles from town but my two sisters and I live in town so as to be near school. My one sister teaches the grammar room. I have another sister married. I only live about eighteen miles from Lake Huron. I have my hair bobbed, had it cut about three weeks ago. I like it much better. We don't live far from the dam that gives the power for lights in the city. The towers run by our place. I have been all through the power house. We go up there fishing real often in the spring.—Bernice Graves, R2, Hale, Michigan.

—All right, you are now a member of the Children's Hour and in order to continue to be one you must read the department and write a letter to me once in awhile.

Dear Uncle Ned—We all enjoy reading the M. B. F., but I believe I enjoy it more than the rest and look for it more eagerly because of "The Children's Hour." I like to read of what the other boys and girls are doing. We are having very stormy weather here. I live 7 miles from the "Soo" and have about a mile to walk to school. I will be twelve years old on the 19th of March. I have one sister and three brothers, we are all going to school. Your niece, Mina Miller, Sault Ste. Marie, Mich.

Dear Uncle Ned—How are you this fine spring weather? I am just fine. Well, I guess I will describe myself: I am four feet ten, so I am just two inches of having five feet I weigh seventy-five pounds, have light hair, dark complexion and dark brown eyes. I am in the sixth grade at school. I go to the Wermuth school and like my teacher very much. My favorite studies are language and arithmetic. May I join your circle please? We all like the M. B. F. Write to Irene Terpening, R1, Ithaca, Mich.

—I am just fine, thank you; or as the fellow said, "If I felt any better I would have to call a doctor." I suppose your school will soon be out. Will you be glad or sorry?

Dear Uncle Ned—I have been a silent reader of the M. B. F., for some time and am very much interested in the Children's Hour. I thought I'd write for the first time. I am a girl of 13 years of age, and a blond. I am in the eighth grade, and I like to go to school. There are 19 children going to our school. I have one brother and one sister older than I. I wish some of the readers would write to me.—Alberta Brandenburg, R1, Pratt, Michigan.

—Always room for one more, so write often.

DAIRY and LIVESTOCK

CORN SILAGE CHEAP FEED

THE cost of feed is the biggest expense item in stock farming. To produce a cheap ration is therefore one of the most important factors in the business, and the stock farmer who wishes to be successful must learn how to reduce his feed bill.

The Missouri Experiment Station recently issued a bulletin on the cost of crop production, showing the cost of putting up hay to be $3.38 per ton. They did not say whether this hay was put in stack or mow, but the figures indicate that modern labor-saving tools were used and that the hay was well housed either in stack or shed. It costs from 85c to $1.25 per ton to put corn in the silo; thus we find that silage can be put up at from one-third to one-quarter the cost of hay. The quality of silage can be contralled, while the quality of the hay depends upon the weather.

Over a half million silos are now used in this country by our stock farmers, and we find them in every state of the Union. Surely there must be a reason for this silo movement, and we should give it serious thought at this time when economy is so important.

Many farmers have put off the building of a silo on account of the work of filling. The writer believes that this hard task is mostly imagination, for no stock feed can be harvested and put up more cheaply or rapidly than corn silage. For example: alfalfa must be cut from three to four times a year and is a more laborious and expensive piece of work than the harvesting of silage. If the weather is unfavorable the cost of putting up hay often exceeds the cost of putting up silage four or five times. From this comparison I do not wish it understood that I recommend corn silage in place of alfalfa. Alfalfa should be fed with corn silage whenever it is possible. I wish simply to compare the costs of harvesting the two crops.

Where it is difficult to get labor and exchange work it is advisable to use a small filling outfit and fill the silo gradually with help found on the farm. Instead of taking one day take three or four or even a week. The rushing in of silage at the expense of many teams and men multiplies the cost and labor, and where break-downs occur the expense and annoyance are not soon forgotten. In communities where silos are numerous the filling is not dreaded but counted a farm task as haying or harvesting.

It is difficult for a stock-keeper not having a silo to compete with one who is using silage. The stock and stock products is materially lessened by silage, and since this is true the silo is not only an economic institution but a necessity for success. Corn silage is a cheap succulent ration; the crops for filling should be grown close to the silo, and silage can be stored in liberal quantities. There is little danger of getting too much on hand, for it will keep for several years. It can be used as a forage bank and drawn upon at any time when needed. The cost of producing silage is so low and it is such a good feed that it should form the bulk of the ration; and if any feed must be purchased it should be concentrates such as grains and mill feeds.—A. L. Haecker.

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BLUEBELL 3rd 73354 in the new senior two year old champion Ayrshire of Michigan. This good Ayrshire heifer completed her Advanced Registry record with 10,361 pounds of milk, 399.45 pounds of butter-fat. She is owned by Shuttleworth Bros., Ypsilanti, Mich.

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In ten months division and junior four-year-old class Silver Belmer Clare, owned by W. C. Cornwell of Saginaw, takes first place with a production of 19328.6 pounds of milk and 627.90 pounds of fat or 784.87 pounds of butter.

NOT ENOUGH ROUGHAGE IN FEED

Will you please tell me what to do for my cows. They eat bones, stones, old shoes or almost anything. They will get it in their mouth and stand and chew on it for an hour at a time. They did this a year ago and are now starting again.

The past winter I have fed corn silage night and morning, sweet clover hay once and shredded corn stalks once through the day. The shredded stalks were some moldy, the ensilage and sweet clover were nice. For grain I have fed ground oats, corn meal, wheat bran and oil meal, mixed as follows: 100 lbs. oats, 50 lbs. corn meal, 50 lbs. bran, 50 lbs. oat meal. They have had Salt before them all the time I have fed liberal with the roughage but not with the grain—about 1 lb. to 5 of milk.

Three cows are fresh, two will be soon. They all are in fair flesh, and feel good. There is no clover in the pasture and a year ago I had none for them through the winter. I will appreciate it very much if you can give me a remedy.—R. D., Petoskey, Mich.

—You do not state just what you are feeding these cows at the present time. You only stated what you had fed them during the past winter. I take it that you are a little short on roughage and if this is the case your cows may lack roughage. I am inclined to think this is what they lack more than anything else although cows sometimes lack mineral matter when they are fed a sufficant quantity of roughage even, and they will behave in the same manner as your cows are doing at the present time. As a remedy for this I would suggest that you add some mineral matter to the ration. —O. E. Reed, Professor of Dairy Husbandry, M. A. C.

FEEDING POTATOES TO MILCH COWS

Will you answer in regards to potatoes to milch cows? A neighbor says they are harmful and reduce the amount of milk, also hurt test of cream.—L. C., Sand Lake, Mich.

—Potatoes make a good feed for milch cows if they are not fed too many at a time. They are just about as valuable as corn silage. Twenty pounds per day make a good feed for the average cow and I would not advise giving more than that amount. If a cow is fed all the potatoes she wants, she will naturally eat less of other foods and her ration then will consist of more water than usual and she will naturally not get as much dry matter in her food and the milk flow may shrink some. But when fed in the same way as silage along with other roughage and grain you will not notice any reduction in the amount of milk. Often times the milk and butter will show the effect of overfeeding on potatoes. The butter is often salvy. As far as the test of the cream is concerned, they will not affect the test of cream.—O. E. Reed, Professor of Dairy Husbandry, M. A. C.

COTTON SEED MEAL ALONE WILL NOT EFFECT COW

I understand by some that if you feed a cow cotton seed meal that she will not come in heat. Is this true? I am feeding less than a pint to a meal twice a day.—L. D., Pentwater, Michigan.

—Cotton seed meal of itself will not cause cows to come in heat, but it is a well known fact that cows that are fed a good ration, and such ration may contain cotton seed meal, will come in heat more regularly and will be in better condition than cows that are not fed cotton seed meal. Cotton seed meal is a good feed for dairy cattle and is particularly valuable because of its high protein content and is ordinarily used to supply protein in balancing up a ration, but results, such as mentioned, cannot be attributed to the use of cottonseed meal alone.—O. E. Reed, Prof. of Dairy Husbandry, M. A. C.

Oldest DE LAVAL SEPARATORS

Average 24 Years of Use

The most remarkable evidence, giving additional proof of the exceptional quality and durability of De Laval Cream Separators, was disclosed by the "Oldest Users Contest" which closed on April 7th. Thousands of old De Laval Separators from all parts of the North American continent were entered. We wish to thank all who participated in this contest for their splendid co-operation in securing the data, which gives an accurate idea of just how long a De Laval will last when properly cared for.

The average life of the "Oldest De Lavals," all of which are still being used, was a little over 24 years. The oldest De Laval entered is 32 years old and is owned by Joseph Larocque of Lancaster, Ont., Canada.

In view of the fact that the average life of cream separators other than De Lavals is about five years, it can readily be seen from such unquestionable proof that the De Laval is not only the best but four to five times cheaper than other cream separators—and, remember, the 1923 De Laval is better than ever, has over four times the capacity of these old machines, is greatly improved, costs less, and will last even longer.

The Prize Winners

States are first listed in alphabetical order, followed by the name of the winner, each of whom has received the prize of $25, their address, and the age of the De Laval which won first place in that state:

Ala., R. M. Davis, Talladega, 24 yrs.; Ariz., L. L. Prouty, Casa Grande, 19 yrs.; Ark., Medlock Dairy Farm, Arkadelphia, 29 yrs.; Cal., B. M. Martin, Newark, 18 yrs.; Colo., M. Miller, Westcliffe, 24 yrs.; Conn., Mrs. E. Lanz, Rockville, 31 yrs.; Del., C. D. Lamborn, Newark, 28 yrs.; Fla., Mrs. S. R. Pyles, Ocala, 12 yrs.; Ga., C. L. Foster, Dalton, 23 yrs.; Ida., P. G. Fairman, Jerome, 20 yrs.; Ill., F. G. Palmer, Yorkville, 28 yrs.; Ind., F. Molter, Lawrenceburg, 28 yrs.; Ia., M. Wollreb, Kalona, 31 yrs.; Kans., D. W. Morrow, Blue Rapids, 30 yrs.; Ky., H. M. O'Nan, Springfield, 27 yrs.; La., P. H. Sitger, New Orleans, 12 yrs.; Me., R. C. Briggs, Freedom, 24 yrs.; Md., Mrs. E. Holbrook, Owings Mills, 24 yrs.; Mass., W. D. Smith, Buckland, 27 yrs.; Mich., F. Downs, Nashville, 24 yrs.; Minn., C. H. Brueshoff, Norwood, 29 yrs.; Miss., W. H. Reese, Sessums, 18 yrs.; Mo., L. M. Lortz, Carl Junction, 23 yrs.; Mont., M. E. Nelson, Flatwillow, 24 yrs.; Neb., L. C. Nichols, Miller, 22 yrs.; Nev., J. Huttman, Fallon, 17 yrs.; N. H., E. L. Jewett, Sullivan, 25 yrs.; N. J., M. H. Astle, Vineland, 30 yrs.; N. M., C. W. Jackard, Hayden, 20 yrs.; N. Y., Mrs. J. P. Morris, Olean, 30 yrs.; N. C., A. B. McAulay, Huntersville, 24 yrs.; N. D., Fred Jenson, Norma, 25 yrs.; Ohio, Lee Nash, Xenia, 29 yrs.; Okla., Lee Armstrong, Seiling, 20 yrs.; Ore., Clinkinheard Bros., Marshfield, 28 yrs.; Pa., M. Lazar, Sharpsville, 29 yrs.; R. I., A. F. Clark, Westerly, 28 yrs.; S. C., Mrs. J. E. McIver, Darlington, 18 yrs.; S. D., H. Moseman, White Lake, 27 yrs.; Tenn., D. B. Hancock, E. Chattanooga, 24 yrs.; Tex., Mrs. F. P. McClure, San Antonio, 22 yrs.; Utah, F. W. Cowley, Venice, 21 yrs.; Vt., Ashton Soule, St. Albans, 31 yrs.; Va., Mrs. G. Hylton, Floyd, 22 yrs.; Wash., M. Kintschi, Edwall, 23 yrs.; W. Va., J. W. Walker, Wellsburg, 27 yrs.; Wis., H. Petersen, Oconomowoc, 30 yrs.; Wyo., P. Catlin, Wheatland, 20 yrs.; Hawaii, H. Iten, Mt. View, 12 yrs.

The 1923 De Laval is better than ever

As good as these old De Laval Separators are, the 1923 De Laval is still better. Naturally much has been learned in the design and manufacture of cream separators during the past 40 years, and purchasers of present-day machines reap the benefit of such experience.

Twenty-five years ago a De Laval Separator of 250 lbs. capacity per hour cost $125—today one of the largest sized De Lavals with 1000 lbs. or four times the capacity per hour, can be bought for approximately the same amount of money, and one of about the same capacity can be bought for approximately half. In addition it has many improvements in design and construction, is made of better materials, does better work, is easier to handle and care for, and will last even longer. This applies to all sizes of present-day De Lavals.

If you are using an inferior or worn-out separator, you may be wasting enough butter-fat to pay for a new De Laval and not get it. You can buy a De Laval on such easy terms that it will pay for itself. See your De Laval Agent now or write us about getting a new one.

The De Laval Separator Company

165 Broadway New York

29 E. Madison St. Chicago

61 Beale Street San Francisco

Sooner or later you will use a De Laval Cream Separator and Milker

HEAVES Is your own horse afflicted? Use 2 large cans. Cost $2.50.

Money back if not satisfactory

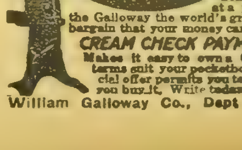
ONE can at $1.25 often sufficient. In powder form.

Most for cost
30 years' sale

NEWTON'S

A veterinary's compound for Horses, Cattle and Hogs. Heaves, Coughs, Distemper, Indigestion. Worm expeller. Conditioner. At dealers' or by parcel post.

THE NEWTON REMEDY CO., Toledo, Ohio



Our cream separator, a tried, tested, high quality separator. Famous for close skimming, modern improvements, economical operation, at a price that makes the Galloway the world's greatest separator bargain that your money can buy.

CREAM CHECK PAYMENT PLAN

Makes it easy to own a Galloway. Our terms suit your pocketbook, our special offer permits you to try it before you buy it. Write today.

William Galloway Co., Dept 363, Waterloo, Iowa

BREEDERS DIRECTORY

Advertisements inserted under this heading for reputable breeders of Live Stock at special low rates to encourage the growing of pure-breds on the farms of our readers. Our advertising rate is Thirty Cents (30c) per agate line, per insertion. Fourteen agate lines to the column inch or $4.20 per inch, less 2% for cash if sent with order or paid on or before the 10th of month following date of insertion. **SEND IN YOUR AD AND WE WILL PUT IT IN TYPE FREE**, so you can see how many lines it will fill. Address all letters,
BREEDERS DIRECTORY, MICHIGAN BUSINESS FARMER, MT. CLEMENS, MICH.

ITSAMERE---CEDAR BEND DISPERSAL SALE OF ACCREDITED HOLSTEIN-FRIESIANS

At Cedar Bend Farm, on M-16, 10 mi. East of Lansing—Okemos, Mich.

MONDAY, JUNE 4, 1923

All consignments, except those from fully accredited herds are sold subject to 60-90 day retest.

The accredited herd of E. P. Kinney consists of 23 head and is headed by a son of Carnation King Sylvia, whose dam has 24 lbs. and carries about 90% of the same blood of the world's milk producer Segis Pictertje Prospect. This bull togather with sons and daughters of his will be sold.

Itsamere herd fully accredited consists of 21 head including a 19 lb. Jr. 2-yr.-old, daughter of a 30 lb. cow, and most of the herd are sired by 30 lb. bulls.

Supplementing this sale are consignments from the following herds: H. D. Box & Sons, who enter 11 head including 24 lb. daughter of a 83 lb. cow with 772 lbs. milk, she having 3 records averaging over 39 lbs. in 7 days.

A. R. Black & Sons, of Lansing, sell a 26 lb. cow and two sons of their Grand Champion Show Bull of the Michigan State Fair 1922, and one is by a 3-yr.-old that led her class in the 305 day division last year in Michigan.

F. E. Fogld, of Okemos, will sell a well bred 3-yr.-old heifer.

H. E. Rising, of Woodland, a son of a 29 lb. cow, she a daughter of a 32 lb. cow.

Harry Schultz, of Lansing, sell a proven son of Dutchland Creanelle Korndyke Lad.

Sale will start promptly at 10 o'clock, central standard time.

Col. J. E. MACK, Ft. Atkinson, Wis.
Auctioneer

Col. S. T. WOOD, Liverpool, N. Y.
In the Box

SEND FOR CATALOGUE TO C. A. DANIELS, OKEMOS, MICH.

MICHIGAN HEREFORD AUCTIONS

100 Head. 70 Lots. 14 Bulls. 56 Cows and Heifers; 30 calves go free with their dams. Moneymakers. Fairfaxes, Disturbers, Woodfords, Anxieties. No better blood.

RAMSEY'S SALE, JUNE 7th

At Atherton Station; Pere Marquette Ry. Half-way between Harbor Beach and Port Hope on Huron Shore Road. 6 Bulls. 29 Cows and Heifers; 16 calves.

BAKER'S SALE, JUNE 8th

At St. Clair. Sotham Hereford Farm. 6 Blocks from Station of Port Huron & Detroit Electric Ry. 8 blocks from local stop. 7 Bulls. 28 Cows and heifers; 14 calves.

PRACTICAL CATTLE, kept practically to pay practical people profits under present pressing farm conditions. Learn Michigan's unique Hereford system. It pays. All Hereford breeders will ultimately join it. If you get as good individuals elsewhere you will pay more for them.

Enjoy a Michigan Trip. Motor to these sales. For **CATALOGS** giving pedigrees and particulars;—Address

T. F. B. SOTHAM & SONS
(Sales Managers. Herefords Since 1839.)
St Clair, Michigan. Phone 250.

DISPERSION SALE OF 45 HEAD REGISTERED HOLSTEIN-FRIESIAN CATTLE

Owned by **WILLIAM F. SHEHAN**, Howell, Mich.

With a draft of 20 head from other good herds at Sales Pavilion, Fair Grounds, Howell, Mich.

THURSDAY, JUNE 14, 1923, AT 12:00 O'CLOCK, NOON

3 bulls, 2 from 31 lb. dams that are fit to head high class herds.

62 females, a number that will be fresh. Fine individuals, heavy producers. Bred to High Class Bulls. A number have records, one as high as 26 lbs.

A splendid opportunity to secure good foundation stock.

(Herds under State and Federal Supervision) For catalogs (ready June 1st.)

COL. J. E. MACK, Auctioneer. Address, F. J. FISHBECK, Howell, Mich.

RED POLLED

RED POLLED CATTLE—A few choice bulls and heifers for sale.
ROYSTAN STOCK FARM,
Will Oettle, R. R. 1, West Branch Michigan

AYRSHIRES

FOR SALE—REGISTERED AYRSHIRE bulls and bull calves, heifers and heifer calves. Also some choice cows.
FINDLAY BROS., R 5, Vassar, Mich.

GUERNSEYS

FOR SALE—REGISTERED GUERNSEY HEIFERS at reasonable prices, also choice bull calves of May Rose breeding.
H. W. WIGMAN, Lansing, Mich., Box 52.

MISSAUKEE GUERNSEYS. A NEW CROP OF calves coming soon. No females for sale. Order that new bull calf A. R. Sire and Dam.
A. M. SMITH, Lake City, Michigan.

GUERNSEYS—Registered Bull Calves, Cheap, also grades. Best of breeding for production and size. George Damken, North Manchester, Indiana.

VETERINARY DEPARTMENT

TROUBLE MAY BE DUE TO TWO CAUSES

I wish to know what is the matter with my hogs. They are not feeling right. I have twenty-six hogs shut up in my hog house and they are getting poor instead of fat. I have them divided in two bunches. The hogs weigh 165 pounds apiece. They have been shut up for four weeks on corn and alfalfa and a warm drink twice a day, half milk and water mixed. In my hog house I have cement feeding floors and sleeping pen separate from feeding room and plank floor. They don't have any appetite, they don't seem to be sick or dumpish, they seem to breath like a heaving horse, their sides seem to thump in and out much harder than common. They seem to have a slight cough, but don't seem to strangle or choke. The twenty-six hogs now are eating seven bushels of corn and a small feed of alfalfa and drink 25 gallons of milk and water daily, but fail to fatten.—R. F. D., Leslie, Mich.

—It is rather difficult to tell just what ails your pigs. Your trouble is due to either one of two causes. Either these hogs are severely infected with intestinal parasites, or your quarters have not been properly ventilated, causing them to steam during the night and they have caught cold.

If the latter cause was the trouble, it would be best to open the quarters and give them air enough so that they will remain dry when piled up in the nest, and give them a laxative ration for a few days in order to assist them in getting over their present colds. This could be done by giving some bran in the milk and water which you are feeding, and adding to it one teaspoonful of epsom salts per hog.

If worms are the cause of your trouble, it would be best to buy some capsules or tablets for the purpose of eliminating the worms. These can be obtained from any reliable drug house, or perhaps thru your local drug houses. It would be best to purchase a capsule or tablet upon either santonin or oil of chenopodium.—Geo. A. Brown, Prof. of Animal Husbandry, M. A. C.

HAVE VETERINARIAN EXAMINE SOW

I have a fat sow that has been paralyzed for three months in hind parts. Does not stand on hind legs at all. One veterinary took her temperature and said it was normal and said it would be all right to butcher her. Would you please let me know whether this would be all right to market? Hog eats well and seems all right otherwise.—D. J. T., Moline, Michigan.

—It would very likely be very difficult to get any hog buyer to buy your sow in a parlyzed condition. Her carcass may perhaps be all right for humane consumption after she has been killed and dressed. I would prefer however to have the carcass inspected by a competent veterinarian after she has been killed and dressed to make sure that it is all right. It may be perfectly all right but it will depend somewhat upon what the cause of the paralysis is. —John P. Hutton, Professor of Surgery and Medicine, M. A. C.

IT BELONGED TO KITTY

"Oh, mother!" cried youthful Mildred. "I found a little flea on kitty and I caught it!"

"What did you do with it?" asked mother.

"Why, I put it back on kitty again, of course. It was her flea."

CLAIM YOUR SALE DATE

To avoid conflicting dates we will without cost, list the date of any live stock sale in Michigan. If you are considering a sale advise us at once and we will claim the date for you. Address, Live Stock Editor, M. B. F., Mt. Clemens

May 31—Shorthorns and Berkshires—Simon G. Maichle, Middleville, Michigan.
June 4—Holsteins, C. A. Daniels, Okemos, Michigan.
June 7—Herefords, Warner Ramsey, Atherton Station, Michigan.
June 8—Herefords, Robt. Baker, St. Clair, Michigan.
June 12—Aberdeen Angus, Aberdeen Angus Association, East Lansing, Mich.
June 14—Holsteins, Wm. F. Shehan, Howell, Michigan.
June 22—Shorthorns, C. H. Prescott & Sons, Tawas City, Mich.
Oct. 18—Holsteins, Howell Sales Company of Livingston County. Wm. Griffin, Sec'y. Howell, Mich.

HOLSTEINS

"YOU WILL BE PROUD OF THEM" 2 3 yr. heifers, King Segis Pontiac and 1000-1200 Maplecrest backing. With a son of 1000 butter and 101 milk bull, 3 for $500.00. Wonderful chance to start a registered herd.
DR. CHIVERS, Jackson, Michigan.

FASCINATION FARM, VASSAR, MICHIGAN. Holsteins, registered fully accredited 32½ lb sire. Write your want.

HEREFORDS

HEREFORDS

Young Cows with calves by side consisting of blood from America's foremost herds at prices that enable them under Earliripe Hereford Beef Plan to pay for themselves within a year to 18 mos. Bulls including prize winners at the larger shows at practical prices. Herds headed by Straight Edge 1169786, one of two sons of Perfection Fairfax out of a daughter of the famous Disturber.

T. F. B. SOTHAM & SONS
(Herefords since 1839) Saint Clair, Mich.

Steers For Sale

58 Herefords 880 lbs.	90 Herefords 800 lbs.
64 Herefords 720 lbs.	44 Herefords 640 lbs.
48 Herefords 500 lbs.	44 Herefords 575 lbs.

Know of other bunches. If in the market for real quality, dehorned, deep reds, good stocker order your choice one load or more from any bunch. Write stating number and weight preferred.
VAN BALDWIN, Eldon, Wapello Co., Iowa.

ANGUS

WE HAVE SOME FINE YOUNG ANGUS BULLS from International Grand Champion Stock at reasonable prices. **E. H. KERR & CO., Addison, Mich.**

SHORTHORNS

Richland Shorthorns

SPECIAL OFFER: Two choicely bred cows. One roan—One white—One with bull calf at foot by son of IMP. Rodney. This show stock of real caliber and great foundation material. A bargain at the price.

C. H. Prescott & Sons.

Office at
Tawas City, Mich.

Herd at
Tawas City, Mich.

SHORTHORNS

Home of Merry Commander, Junior Champion at the recent International. Now is the time to buy. We have several young cows and heifers, bred to this wonderful bull, for sale. Also, several bulls and heifers of breeding age, from our other noted sire, Perfection Heir 3rd. Visit or write us at once.
S. H. PANGBORN and SONS, Bad Axe, Mich.

Write Central Michigan Shorthorn Breeders Ass'n, Greenville, Michigan for list of Milking Shorthorns, all ages, priced to sell.

RAISE SHORTHORNS WITHOUT HORNS Like Kelley does. U. S. Accredited Herd No. 28945. For description and price write,
L. C. KELLY & SON, Plymouth, Michigan.

JERSEYS

REG. JERSEYS, POGIS 99th OF H. F. AND Majesty breeding. Young stock for sale. Herd fully accredited by State and Federal Government. Write or visit for prices and description.
GUY C. WILBUR, BELDING, Mich.

BROWN SWISS

FOR SALE—VEL VERDE BROWN SWISS Cattle, registered. Bull, cows and calves. Write
ED. GRISWOLD, R. 1, Bellaire, Michigan.

O. I. C.

O. I. C'S MARCH FARROWED SOW AND Boar Pigs, sired by Michigan Giant with plenty range and good backs. Dams are all over two yrs. price $20. Registered and express paid. **Maple Valley Stock Farm, North Adams, Mich.**

O. I. C.'S. 1 GILT 13 MONTHS OLD, WEIGHT 380, due June 3rd. 10 last fall gilts due Aug. and Sept. 1 last fall boar, spring pigs not akin. Record free. Citz. phone. ¼ mile west of depot.
OTTO B. SCHULZE, Nashville, Mich.

(Other Livestock Ads on Page 23)

PUBLIC AUCTION, May 31, 1923 1 P. M.

REGISTERED, TUBERCULIN TESTED

Shorthorn Cattle and Berkshire Sows

Nine cows, one with calf at side. Five heifers and nine bulls, sired by Silver Baron and High Ideal, both bred by Ben Matthews & Sons, Round Grove, Ill. Cows are hand milked. Also present herd sire four years old. White Goods by Fair Acre Goods, bred by C. H. Prescott & Sons. One aged sow, seven gilts, sired by son of Real Type, most of them will have farrowed by date of sale at my farm four miles west and one and one-half miles north of Middleville, on Michigan Central or six miles straight east of Moline, on Kalamazoo Interurban and G. R. & I.

SIMON G. MAICHELE

R. C. THOMAS, Auctioneer W. J. HOWARD, Clerk.

White Diarrhea

Remarkable Experience of Mrs. C. M. Bradshaw in Preventing White Diarrhea

The following letter will no doubt be of utmost interest to poultry raisers who have had serious losses from White Diarrhea. We will let Mrs. Bradshaw tell of her experience in her own words:

"Gentlemen: I see reports of so many losing their little chicks with White Diarrhea, so thought I would tell my experience. I used to lose a great many from this cause, tried many remedies and was about discouraged. As a last resort I sent to the Walker Remedy Co., Dept. 680, Waterloo, Iowa, for their Walko White Diarrhea Remedy. I used two 50c packages, raised 300 White Wyandottes and never lost one or had one sick after giving the medicine and my chickens are larger and healthier than ever before. I have found this company thoroughly reliable and always get the remedy by return mail.—Mrs. C. M. Bradshaw, Beaconsfield, Iowa."

Cause of White Diarrhea

White Diarrhea is caused by the Bacillus Bacterium Pullorum. This germ is transmitted to the baby chick through the yolk of the newly hatched egg. Readers are warned to beware of White Diarrhea. Don't wait until it kills half your chicks. Take the "stitch in time that saves nine." Remember, there is scarcely a hatch without some infected chicks. Don't let these few infect your entire flock. Prevent it. Give Walko in all drinking water for the first two weeks and you won't lose one chick where you lost hundreds before. These letters prove it:

Never Lost a Single Chick

Mrs. L. L. Tam, Burnetts Creek, Ind., writes: "I have lost my share of chicks from White Diarrhea. Finally I sent for two packages of Walko. I raised over 500 chicks and I never lost a single chick from White Diarrhea. Walko not only prevents White Diarrhea, but it gives the chicks strength and vigor; they develop quicker and feather earlier."

Never Lost One After First Dose

Mrs. Ethel Rhoades, Shennandoah, Iowa, writes: "My first incubator chicks, when but a few days old, began to die by the dozens with White Diarrhea. I tried different remedies and was about discouraged with the chicken business. Finally, I sent to the Walker Remedy Co., Waterloo, Iowa, for a box of their Walko White Diarrhea Remedy. It's just the only thing for this terrible disease. We raised 700 thrifty, healthy chicks and never lost a single chick after the first dose."

You Run No Risk

We will send Walko White Diarrhea Remedy entirely at our risk—postage prepaid—so you can see for yourself what a wonder-working remedy it is for White Diarrhea in baby chicks. So you can prove—as thousands have proven—that it will stop your losses and double, treble, even quadruple your profits. Send 50c for a box of Walko, or $1.00 for extra large box—give it in all drinking water for the first two weeks and watch results. You'll find you won't lose one chick where you lost hundreds before. It's a postive fact. We guarantee it. The Leavitt & Johnson National Bank, the oldest and strongest bank in Waterloo, Iowa, stands back of this guarantee. You run no risk. If you don't find it the greatest little chick saver you ever used, your money will be instantly refunded.

Walker Remedy Co., Dept. 680, Waterloo, Iowa

BRAND NEW CORD TIRES

Thousands of our customers are getting 12,000 miles out of these tires, you too can get this mileage. These tires are firsts.

SIZES	CORDS	TUBES
30x3	$ 5.95	$ .90
30x3½	6.85	.95
32x3½	8.85	1.05
31x4	8.95	1.10
32x4	10.45	1.15
33x4	11.10	1.20
34x4	11.90	1.25
32x4½	16.50	1.45
33x4½	16.75	1.50
34x4½	17.05	1.55
33x5	19.95	1.75
35x5	20.10	1.80

30X3½ $6.85 Send No Money

Write us and tell us the size of your tires and how many you want. Shipped C. O. D. with section unwrapped for inspection. If not satisfied return tire unused and money will be cheerfully refunded.

Dept. 109 STARR & STARR Chicago, Ill.

POULTRY

NOT ENOUGH OUTDOOR EXERCISE

On March 15th, I had 200 baby chicks shipped from Grand Rapids, and they arrived here in a blizzard and of course they were badly chilled, and died by tens until all were gone except forty. They did very well until about three weeks old. They were in a small compartment in large brooder house run by hard coal heaters. This compartment had a board floor but I had put sand and fine gravel on the floor but their legs and feet got all crippled up, and when they got about it was by flying and fluttering of wings. Leading out of these compartments are large runways with cement floor. I took sand and covered the cement floor about an inch and a half and dampened it, and shut chicks out there in day time, and nearly all got well and over the lameness and started growing again. And now again I have four or five that can hardly get around they are so badly crippled. They do not have acess to outside ground as the snow has been deep until the last two days. They are fed with the following: Commercial chick feed, cracked corn and some wheat, have bran, ground green alfalfa, charcoal and shell, buttermilk or thick sour milk and water in front of them at all times. Can you tell me what is wrong? Some tell me the damp sand will cause rheumatism, but I read an article a few weeks ago similar to this and the woman said she saved a flock by putting them out to paddle in the mud.—W. A. R., Petoskey, Mich.

—Your experience is typical of many others who hatched chicks early this season. Unfortunately, the spring has been cold and damp with the result that many chicks did not get sufficient outdoor exercise early in life, and leg weakness in nearly every case occurred.

Chicks cannot be confined longer than two or three weeks without developing signs of leg weakness. It is a good practice to encourage the chicks to take out door exercise when they are from ten days to two weeks of age; however, we have been able to reduce and practically eliminate this trouble by careful feeding.

Green food in some form or another such as sprouted oats, chopped cabbage, etc., furnishes dietary essentials in preventing leg weakness due to faulty nutrition. Ordinarily it is a good practice to feed green food after the fourth day and if out door exercise is furnished in addition to a diet containing leaf greens very seldom any trouble from leg weakness will develop.

We have had exceptionally satisfactory results in feeding lime water to correct excessive acidity, and supplying a mash containing equal parts by weight of bran and rolled oats moistened with tomato juice plus about one per cent cod liver oil. Chicks will usually yield to this treatment showing a marked improvement within twenty-four hours. —E. C. Forman, Associate Professor of Poultry Husbandry, M. A. C.

A NEW CORN CHAMPION

According to the Agricultural Extension Department of the Ohio State University, a farmer of Licking County, Ohio, William H. Gilmore, raised more corn last year, on ten acres of land than has ever been raised before. The record is official, having been made in connection with the annual 10-acre corn contest conducted by the university. Mr. Gilmore produced 1,343.1 bushels of air-dried shelled corn on his 10 acres, an average of 134.3 bushels per acre, 93.3 bushels greater than Ohio's average yield.

"Mr. Gilmore," said one of the university officials, "has averaged over 100 bushels per acre for three years, but this year made very special efforts to break all existing records. He plowed down a clover sod, half of which had been manured, and applied 18 per cent acid phosphate at the rate of 500 pounds per acre. The five acres without manure had an extra 2,500 pounds of an 0-10-10 fertilizer. The seed was sown three feet apart each way and thinned to three stalks to a hill."

THIS CAR FREE

Nearly everyone else owns a car! Why not you? It is not a question of money. Your spare time for a few weeks, mixed with preseverance and "gumption," is all that is necessary to win this latest model Chevrolet Touring Car.

Or, if you already own a car, get a radio set, baby chicks, pure-bred fowls, poultry books, etc.

It is the official organ of the Michigan State Poultry Association that makes this offer and our reliability is unquestioned. Someone is bound to win the car—why not you. Send post card for details.

$10.00 PER DAY CASH

If you prefer cash, drop us a post card at once, and we will send you details of our new method that enables any honest energetic person to make $10 per day, or more.

This is our own method, which we have tested for the past 6 months, and we know it gives an agent 50 to 500% better chance to earn real money, than any other ever tried.

Free Pamphlet

"VITAMINES AND CHICKS"

by

Prof. E. C. Foreman, Head of the Poultry Dept. at Michigan Agricultural College.

The big feature of our May number is Prof. Foreman's "Vitamine" article, which announces the wonderful effect of Vitamine foods on Baby Chicks. He gives actual facts and illustrations of results almost miraculous when Vitamines were supplied. Luckily, these Vitamine foods are common to every household, and Prof. Foreman explains which ones to use.

Already the demand for this article has almost exhausted our May edition, so we reprinted it in pamphlet form which we will give free to readers of the "Business Farmer" who subscribe direct from this ad., at our special trial price of 50c per year. ORDER TODAY, before the pamphlets are exhausted.

MODERN POULTRY BREEDER
Battle Creek, Mich.

High Producing Vigorous PureBred BabyChicks

Capacity 150,000 healthy chicks at a setting

Fully guaranteed, direct from Trapnested, Pedigreed Tom Barron and Hollywood Imported White Leghorns. World's champion layers. Not just a few 300-egg birds, but a high flock average egg production—that's where you make **your profit.** Hatched in the largest and finest Hatchery in Michigan, by those who know how. **Bargain prices if you order now.** We can also **save you money** on Brown Leghorns, Anconas, Barred Rocks, Rhode Island Reds and White Wyandottes. **Satisfaction guaranteed or your money back.**

Handsome, complete catalog free for the asking. Write for it today.

SUPERIOR POULTRY FARMS, Dept. 104 Zeeland, Mich., U.S.A.

BARON KING
Dam's Record
278 Eggs

BABY CHICKS—FROM SELECTED FLOCKS Six leading varieties. Popular prices and guaranteed delivery. Write for catalog and price list.
H. H PIERCE, Jerome, Mich.

TOBACCO

HOMESPUN TOBACCO. CHEWING 5 pounds $1.75; 10 pounds $3.00; 20 pounds $5.25. Smoking 5 pounds $1.25; 10 pounds $2.00; 20 pounds $3.50. Send no money, pay when received. CO-OPERATIVE TOBACCO GROWERS, Paducah, Kentucky.

NATURAL LEAF TOBACCO. CHEWING 5 pounds $1.75; 10 pounds $3. Smoking. 5 pounds $1.25; 10 pounds $2.00. Send no money. Pay when received. TOBACCO GROWERS' UNION. Paducah. Ky.

$ We can use a few earnest men and women part or full time in soliciting subscriptions and acting as our agents. Write

Circulation Manager
THE BUSINESS FARMER
Mt. Clemens, Mich.

BABY CHICKS Postpaid to your door $9 per 100 and Up

FROM HOGAN TESTED, FREE RANGE HEAVY LAYING FLOCKS. ALL VARIETIES.

WHITE and BROWN LEGHORNS	$12.00
BUFF LEGHORNS and ANCONAS	$13.00
BARRED ROCKS and R. I. REDS	$14.00
WHITE WYANDOTTES, WHITE ROCKS, BUFF ROCKS	$15.00
BLACK MINORCAS, BUFF ORPINGTONS	$16.00

All lots of 500 or more discounted.

EXTRA SELECTED FLOCKS..........$2.00 per 100 higher.

Large Price List for return mail.

Postpaid full live delivery guaranteed. Hatched by the most modern method of incubation from good, vigorous, pure-bred varieties carefully selected and safely packed. No catalogue. Order right from this ad and save time and disappointment. Reference Chesaning State Bank or any business in Chesaning.

Address BABION'S FRUIT AND POULTRY FARM, Guy L. Babion, Prop., Chesaning, Mich.

REDUCED PRICES

For May 28 and month of June. Barron type WHITE LEGHORNS, BROWN LEGHORNS, ANCONAS, PARKS BARRED ROCKS and R. I. REDS. Hardy Healthy Chicks from selected heavy laying flocks mated with strong vigorous males. Carefully packed and shipped postpaid to your door. Full live count guaranteed. Send for our free catalog and reduced prices before placing your order. Bank Reference.

TIMMER'S HATCHERY, R. 3 A, Holland, Mich.

BABY CHICKS $10 per 100 and UP

From selected, heavy laying, vigorous hens. White and Brown Leghorns, Anconas, 50, $6.75; 100, $13; 500, $62.50. Barred Rocks, 50, $8.50; 100, $16; 500, $75 Extra Select, $2 per 100 higher. Mixed Chicks, 50, $5.50; 100, $10; 500, $50. Well hatched in modern machines. Carefully and correctly packed and shipped. Postpaid, full live arrival guaranteed. Bank reference and this guarantee makes you perfectly safe in ordering direct from this ad NOW. Get them when you want them. All orders have our careful personal attention. WE WANT YOUR BUSINESS. Catalog Free.

WINSTROM FARM & HATCHERIES, Box H 5, Zeeland, Michigan

Egg-Bred Baby Chicks

June Delivery, 10c Each. Extra selected, 11½c.

ENGLISH WHITE LEGHORNS, BROWN LEGHORNS. 11 years of breeding for egg production. Highest quality chicks from tested layers. Satisfaction guaranteed. 100% delivery guaranteed. Order now. Bank reference. Catalog free.

ROYAL HATCHERY & FARMS, R. 2, Zeeland, Mich. S. P. Wiersma, Prop.

Reduced Prices BABY CHICKS

Best Paying, Heavy Laying, Purebred Strains.

YOU CAN DO IT WITH BABY CHIX

Tom Barron English S. C. W. Leghorns, 25, $2.50; 50, $5; 100, $10; 500, $45; 1000, $90.

Park's Strain Barred Rocks; S. C. Rhode Island Reds-25, $3; 50, $6; 100, $12; 500, $55; 1000, $110.

Good strong broiler chicks, $8 per 100.

Place your order at once; avoid disappointment. Get your chicks when you want them. 100% live delivery guaranteed postpaid. Instructive catalog free. Prices on mature stock, 8-12 weeks old pullets on request.

Brummer-Frederickson Poultry Farm, Box 26, Holland, Mich.

DOWNS' CHICKS

Extra Selected, English White Leghorns from my very best breeding pens, on and after June 15th at $10.00 per hundred. Book orders now. Write for my 16 page White Leghorn Catalogue.

W. A. DOWNS
Washington, Mich.

CHICKS 10c

The kind that are husky and grow fast for June delivery. Leghorns 10c, Anconas 11c, Barred Rocks 12c. Special price on eggs for hatching. We prepay all shipments. Write for our catalogue and read what our customers say.

BYRON CENTER POULTRY FARM,
Byron Center, Mich.

DeKoster's Hatchery

Strong, vigorous Chicks from selected heavy laying ENGLISH STRAIN WHITE LEGHORNS and BROWN LEGHORNS, 100, $12.50; 500, $60. THOMPSON & HOLTERMAN STRAIN BARRED ROCKS and ANCONAS, 100, $18; 500, $87.50. Postpaid, full live delivery guaranteed. Catalog free Bank Reference.

DE-KOSTER'S HATCHERY, Box X, Zeeland, Mich.

BABY CHICKS

Best laying strains S. C. W. LEGHORNS, 50, Chicks $6.50; 100, $12.00; 500, $57.50.

	50	100	500
Barred Rocks	$7.50	$14.00	$65.00
S. C. R. I. Reds	7.50	14.00	65.00
R. C. W. Wyandottes	8.50	16.00	75.00

These are last half of May and June prices. Order direct from ad. First National Bank, reference.

BLISSFIELD HATCHERY, Blissfield, Mich.

Cured Her Rheumatism

Knowing from terrible experience the suffering caused by rheumatism, Mrs. J. E. Hurst, who lives at 608 E. Douglas Street, C-439, Bloomington, Ill., is so thankful at having cured herself that out of pure gratitude she is anxious to tell all other sufferers just how to get rid of their torture by a simple way at home.

Mrs. Hurst has nothing to sell. Merely mail your own name and address, and she will gladly send you this valuable information entirely free. Write her at once before you forget.

New Way to Rid Poultry of Lice

Rev. G. R. Mente Tells of Amazing Discoverv Which Keeps Hens and Chicks Free From Vermin

Few Drops of Liquid in Drinking Water Does it—No More Dusting, Spraying or Greasing

"I have used your remarkable Lice and Mite Remedy with fine results," writes Rev. G. R. Mente, Methodist Parsonage, New Washington, Ohio. "Mentioned this at a Farmer's Institute a few weeks ago. Consequently, farmers by the dozen have been after me every since to find out where and how they could get it. It has put a stop to the poultry losses in this community. You are a great benefactor to poultry raisers."

Lice and Mites Go Like Magic

No Wonder She Doesn't Lay or Set

This remarkable new discovery which Rev. G. R. Mente, used is Imperial Lice and Mite Remedy. Just a few drops occasionally in the fowls drinking water makes Lice, Mites, Ticks and all vermin go like magic. No more disagreeable and unsanitary dusting, spraying, greasing or dipping. Equally good for Chickens, Turkeys, Ducks, Geese and Pigeons Fine for baby chicks and makes them healthier, sturdier and grow faster. All poultry raisers know that sickly, lice-infected hens cannot lay or have good hatches. Vermin sap the very life and strength of hens and baby chicks. Stop these losses now. Guaranteed not to affect eggs or flesh of fowls in any way. Also a spleidid egg tonic and blood purifier. Costs but a trifle, on money-back guarantee of satisfaction.

White Diarrhea Remedy Free

(Regular $1.00 Size Package)

At last a sure treatment for this dread disease. No muss. No fuss. Comes in condensed tablet form to be dropped occasionally in chicks' drinking water. Raise every chick hatched. Economical to use. Be prepared. These remedies should always be on hand.

SEND NO MONEY. Just your name and address to Imperial Laboratories, Dept. 6399, Kansas City, Mo., for one regular, full size $1.00 bottle of Imperial Lice and Mite Remedy (double strength), and they will include free of cost, a regular $1.00 box of Imperial White Diarrhea Remedy. Pay postman only $1.00 and few cents postage on arrival. Or, a large size Trial Package of either one of these remedies for 50c.

If you have a large flock, this Special Introductory Offer also applies on a double quantity of both remedies—two regular $1.00 bottles of Lice and Mite Remedy, and two regular $1.00 packages of White Diarrhea Remedy at an additional saving—all for $1.75. Simply specify that you be sent this regular $4.00 value for only $1.75. Readers risk no money, as Imperial Laboratories are fully responsible and will refund the cost on request any time within 30 days.

HIGHEST QUALITY CHICKS

VAN APPLEDORN BROS. HOLLAND, MICHIGAN

Michigan's Old Reliable Hatchery

(The most modern and best equipped Hatchery in the state)

PURE BRED English and American S. C. W. Leghorns; S. C. Anconas; Barred Plymouth Rocks and R. I. Reds. Strong, well hatched chicks from tested Hoganized Free range stock that make wonderful winter layers.

Chicks sent by Insured Parcel Post Prepaid to your door. 100% live delivery guaranteed. Fifteen years of experience in producing and shipping chicks has given absolute satisfaction to thousands. Write for illustrated free catalog and price list. Get lowest price on best quality chicks before you buy.

Holland Hatchery, R. 7, Holland, Mich.

TRANSFER CHICKS FROM INCUBATORS TO HENS

I wish to tell you about two queer hens I have in my flock. One Rhode Island Red and one little Bantam hen. Easter Sunday the Rhode Island Red hatched three goslings and one chick. A week later a White Rock hen hatched three goslings and two chicks and she would not have these queer looking baby goslings and pecked them until I took them to the Rhode Island Red, and she took them without a murmur, but when I gave her the extra chicks she wouldn't have them. Then the little Bantam came off with baby chicks a week later, and I gave her the two chicks and she took them. She went on the nest for a week to start with, never laid an egg and then went to setting and hatched out baby chicks. This morning I had two goslings hatch and gave them to the Rhode Island Red. I guess she would take all the goslings one would give her. But it still being too cold to keep the three little ones out of doors I brought them in and gave them to the Bantam, and she squawked about such looking babies and when I put them under her and told her she had to keep them. I guess she understood for she made no more fuss and they eat and sleep all together now and all are happy. —Mrs. T. R., Allegan, Michigan.

—It is a common practice for poultrymen to incubate eggs artificially and then induce a foster mother to raise the chicks. It is probably a more common practice to set the incubator and the hens at the same time and when the entire hatch is completed to transfer the chicks from the machines to the hens. In making this transfer, one should be very careful not to add chicks of different color to those hatched by the hen, because she will immediately detect that they do not belong to her own brood and is very liable to peck and abuse the chicks to such an extent that high mortality results altho you do not mention the color or the breed of the chicks produced.

I would surmise the reason why these hens did not adopt the chicks more gracefully was due to the variety of color. It is not a good practice to rear goslings and chicks together as their habits are so entirely different. Little difficulty is experienced in giving each hen chicks of the same color and if different breeds are being raised together, each hen should be given a few eggs from the different breeds so that she will have a variety of colors among the chicks she hatches.—E. C. Foreman, Associate Professor of Poultry Husbandry, M. A. C.

COMBINATION OF DISEASES

We are troubled with a disease among our hens. First it causes their heads to swell around the eyes, then they become lame, they get very thin and die. Could you please tell us what this disease is called and also what to do for it?—Mrs. J. S., Brown City, Michigan.

—From the symptoms described, the trouble could be diagnosed as a combination of either Chicken Pox or Roup, and Tuberculosis or some nutritional disturbance.

Ordinarily in the case of Roup a discharge is usually apparent in the nostrils and a swelling in front of the eye altho the entire eye may become affected in severe cases. In the case of Chicken Pox, brownish or blackish scabs appear on the comb and wattles and in real severe cases cankerous growths develop in the throat and mouth causing a high mortality due to difficult breathing. In the case of nutritional disturbances a puffiness usually occurs around the eye without an accumulation of puss. The birds in such cases generally possess good appetites but are usually weak and low in fertility.

Lameness is sometimes one of the external symptoms of Tuberculosis, especially when it occurs in the left leg and is accompanied by an emaciated condition. Some forms of leg weakness, however, may be due to Rheumatism caused by faulty housing conditions. It may also be due ot "spring complaint" or "Layers' cramps" both of which have their origin in faulty nutrition.—E. C. Foreman, Associate Professor of Poultry Husbandry, M. A. C.

NEW PRICE LIST FOR JUNE, JULY AND AUGUST, 1923

Prices on Quality Baby Chicks Only

Breed	50	100	500
Barred Rocks	$8.00	$14.00	$68.00
S. C. Reds	8.00	14.00	65.00
Minorcas	8.00	14.00	63.00
Anconas	8.00	13.50	63.00
White Leghorns	7.00	12.00	58.00
Brown Leghorns	7.00	12.00	58.00
Buff Leghorns	7.50	12.00	58.00

Please do not ask to have chicks shipped C. O. D.

THE MORENCI HATCHERY, Morenci, Mich.

QUALITY Chick Price Cut

Wh., Br., Buff Leghorn 10c; Br. Rock 11c; Wh. Rock, Reds, Wh. Wy., B. Orps., 12c; Assrt. 9c; Assrt. large breeds, 10c. Catalog free.

MISSOURI POULTRY FARMS, Columbia, Mo.

POULTRY BREEDER'S DIRECTORY

Advertisements inserted under this heading at 30c per agate line, per issue. Commercial Baby Chick advertisements 45c per agate line. Write out what you have to offer and send it in. We will put it in type, send proof and quote rates by return mail. Address The Michigan Business Farmer, Advertising Department, Mt. Clemens, Michigan.

PULLETS, HENS AND COCKERELS

S. C. White Leghorns and S. C. and R. C. Black Minorcas. Must make room before cold weather. About ready to lay.

LAPHAM FARMS, Pinckney, Mich.

JOHN'S BIG BEAUTIFUL BARRED ROCKS are hen hatched, good layers, quick growers, light and dark matings, 30-eggs $3.50; 50-$5.00 postage paid circulars. John Northon, Clare, Mich.

HATCHING EGGS

HATCHING EGGS

S. C. White Leghorns. Tom Barron Strain, 250 egg utility line. November to April, average 65 per cent. Pure white plumage. Range grown, healthy, vigorous stock. Eggs $1.50 per 15; $4.00 per 50; $7.00 per 100. Prepaid. Limited supply. Order from this ad now.

MAPLEWOOD POULTRY FARMS
C. W. Bovee, Prop. North Star, Michigan.

BUFF ROCK EGGS BY 10 LB. MALES and 1st Cincinnati, O., winners. Hogan tested hens, heavy layers.
J. C. CLIPP & SONS, Box M, Saltillo, Ind.

THOROUGHBRED BUFF ROCK EGGS from Blue Ribbon Winners, $1.50 per 15; $9.00 per 100.
BALDWIN & NOWLIN, R. 4, Laingsburg, Mich.

White and Barred Rock Eggs for Hatching. Pure, Prize winning, utility strains, selected pens, $1.35 per setting, flock $1.00 a setting, delivered P. P. special on quantity. Dawson's Farm, R. No. 4, Muskegon, Michigan.

BARRED ROCK HATCHING EGGS. NORMAN Heavy Laying Strain.
MRS. JESSIE B. DEAN, R. 1, Mason, Mich.

BARRED ROCK HATCHING EGGS. PARKS 200-egg strain. $2 per 15; $5 per 50; $10 per 100 by prepaid parcel post.
R. G. KIRBY, R. 1, East Lansing, Michigan.

FOR SALE—BARRED ROCK HATCHING EGGS from good winter layers. $1.25 per 15 or $2.00 per 30 postpaid.
Mrs. Frank Millikin, R. 1, Roscommon, Mich.

PURE BRED BUFF ORPINGTON EGGS AT $2-15; $5.50-50. Prepaid.
MRS. ANNA LA NOUE, Fostoria, Michigan.

THOMPSON STRAIN BARRED ROCK EGGS by 9 lb. males, bred to lay. Dark matings $1.75 per 15; $3.00 per 30 prepaid.
MRS. FRED KLOMP, St. Charles, Michigan.

ROSE COMB RHODE ISLAND REDS. HATCHing eggs $1.25 per setting. Postpaid.
Mrs. Albert Harwood, R. 4, Charlevoix, Mich.

EGGS FOR HATCHING—UTILITY STOCK. Grand White Wyandottes—M. A. C. Champions. Good, square deal. Reasonable prices. Send for price list.
C. W. HEIMBACH, R. 5, Big Rapids, Michigan.

EGGS FOR HATCHING--PURE BRED WHITE Wyandottes, 15 eggs $1.25; 30 eggs $2.00; 50 eggs $3.00; 100 eggs or more 5 cents each. Single settings prepaid. Others f. o. b. Allegan. H. M. Horton, Citz. Phone 294B, Allegan, Mich.

WHITE WYANDOTTES MARTIN STRAIN, Eggs for hatching
WAYNE CHIPMAN, R. 2, Washington, Mich.

SILVER LACED AND WHITE WYANDOTTES Four large, beautiful roosters. Eggs $1.50 per 15.
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BOURBON RED TURKEYS. EGGS 50c EACH.
THOS G. CALLAGHAN, Fenton, Michigan.

MAMMOTH PEKIN DUCK EGGS FOR SETTING $2.00 or two settings $3.00. Also Wild Mallard Duck eggs same price. Very choicest stock. All orders prepaid. Cedar Bend Farm, Okemos, Mich.

LEGHORNS

LEGHORNS

S. C. Buff Leghorn Hens, Pullets and Cockerels. Hens and pullets $2.50 each; cockerels $3.00 to $5.00 each. Show birds a matter of correspondence. LAPHAM FARMS, Pinckney, Mich.

PULLETS BARRON ENGLISH WHITE Leghorns, eight weeks to maturity—May to October. Breeding flocks repeatedly culled by experts. Extra large and vigorous. Wedge shaped bodies, big looped combs. "Laybilt" in every way. Also breeding cockerels. Satisfaction and more or money back.

MORSE WHITE LEGHORN FARM,
Belding, Michigan.

ANOTHER PROOF THAT IT PAYS TO ADVERTISE THROUGH THE BUSINESS FARMER

Have had splendid results from your paper.—Mrs. Laverne Brownell, Belmont, Mich.

Our Business Egg-Bred Leghorns
Produce Our
Dependable Quality Chicks!
The Famous Egg Basket Strain
Single Comb White Leghorns
Mated to Hollywood
250 to 300 Egg Pedigreed Sires

Profits in Large White Eggs and Plenty of Them When Prices Are High. That's what you want, and that what you get in the *Famous Egg Basket Strain.*

Our parent stock is selected with the greatest of care by experts as to their laying ability and health. They are of large size, long, deep, wedge-shaped bodies, with keen, alert eyes, and large lopped combs.

These wonderful Pedigree-Sired Matings, combined with our fifteen years of skillful breeding produce our **Egg Basket Strain Leghorns,** famous all over the United States for their large size and great laying quality of large white eggs. **They are proven winter layers and consistent winners** for our customers at leading shows and Egg-Laying Contests. They should be the best investment you ever made in baby chicks.

Order Direct From This Ad For Immediate Delivery

Prices, for May and June delivery, on our Hollywood Pedigree-sired extra select **Grade A** chicks: **$12.00** per **100; $55.00** per **500; $100.00** per **1,000; Grade B** chicks: **$11.00** per **100; $50.00** per **500; $90.00** per **1,000;** postpaid. **100% live delivery guaranteed.** Hatches every Tuesday. **Order now!** 10% deposit books your order and assures future delivery just when you want them. Can also ship C. O. D.

FREE Our large illustrated circular describes our wonderful Leghorns and our large breeding institution, sent free.

Q. DEVRIES Grandview Poultry Farm, Box L , Zeeland, Mich.

BABY CHICKS
White and Brown
Leghorns, $13-100
Anconas, $14-100

GOING UP
ONE MILE
AHEAD OF
COMPETITORS
IN QUALITY

GET CHICKS ON
the day you want them

R. I. REDS, ROCKS and MINORCAS, $16.00 100. Extra selected $2.00 per 100 higher. 100% safe arrival guaranteed. Will ship any number of 25 or more, special prices on 500 and over.
COLONIAL POULTRY FARMS, Box B, Zeeland, Michigan.

HILLVIEW HATCHERY
GUARANTEED TO ARRIVE

Strong and Healthy. Chicks from selected heavy laying, Hogan tested flocks **ENGLISH WHITE LEGHORNS and BROWN LEGHORNS. Heavy Laying EXTRA GOOD BARRED ROCKS.** Postpaid to your door and full live delivery guaranteed. Our flocks are kept on free range, properly fed and cared for insuring the vigor necessary in the Chicks to live and **MAKE A PROFIT.** Give us a trial and you will come again.
HILLVIEW HATCHERY, Route 12 E, Holland, Michigan.

150,000

CHICKS for JUNE and JULY deliveries. REDS and ROCKS, mated with M. A. C. COCKERELS. TOM BARRON W. LEGHORNS, and HEAVY TYPE B. LEGHORNS and ANCONAS at GREATLY reduced prices. 100% live arrival GUARANTEED, POSTPAID. Strong chicks from Vigorous, Heavy Laying flocks. Catalog FREE.
KNOLL'S HATCHERY, R. 12, Holland, Michigan

CHICKS $8.50 PER 100 AND UP
Postpaid to your door and full live count guaranteed

Varieties	Prices on 50	100	500
WHITE, BROWN and BUFF LEGHORNS	$5.00	$9.50	$45.00
BARRED ROCKS, S. C. REDS, ANCONAS, MINORCAS	7.00	12.00	57.50
WHITE ROCKS, WHITE WYANDOTTES	7.00	13.00	62.50
BROILERS, MIXED CHICKS	5.00	9.00	42.50

BUFF MINORCAS, 25, $5.50; 50, $10; 100, $20.

Hatched in best modern incubators from good, vigorous, pure-bred, heavy-laying flocks on free range. Carefully selected and packed to go safely. Order right from this ad with full remittance. Save time. No catalog. Reference: Citizens Savings Bank. You take no chance. Instructions for raising late Chicks with each order.
THE EAGLE NEST HATCHERY, Box K, Upper Sandusky, Ohio

CHICKS WITH PEP, $11 per 100 and up

Selected Hogan Tested Flocks. Postpaid, full live delivery guaranteed. **BUFF ORPINGTONS, WH. and SIL. WYANDOTTES, 50, $9.25; 100, $18: BARRED and WH. ROCKS, S. and R. C. REDS, MINORCAS, 50, $8.25; 100, $16. ANCONAS and HEAVY BROILERS. 50, $7.25; 100, $14. WH., BR. and BUFF LEGHORNS, 50, $7; 100, $13. MIXED, ALL VARIETIES, $11 per 100 straight. On 500, 5% off; 1,000 10% off.** Free Catalog. Member I. B. C. A.
HOLGATE HATCHERY, Box B, Holgate, Ohio.

BABY CHICKS—REMARKABLE FOR SIZE and strength. Reasonable prices. Leghorns, Anconas, Rocks, Reds, Wyandottes, Orpingtons, Minorcas, Spanish, Brahmas.
TYRONE POULTRY FARM, Fenton, Mich.

CHICKS
THAT GROW, LAY AND PAY
Barron English White Leghorns, Brown Leghorns and Anconas.

PURCHASE THIS YEAR'S CROP OF CHICKS from tested layers, headed by large vigorous 260 to 288 Pedigreed Males.

CUSTOMERS REPORT BIG PROFITS with these wonderful layers. Write today for our large illustrated catalogue. It tells all about them, it's free.

WYNGARDEN HATCHERY
Box B, Zeeland, Mich.

400,000 Chicks

Big, strong chicks from well-bred and well - kept, heavy laying hens.

White, Brown, and Buff Leghorns, 50, $5.50; 100, $10; 500, $48. Barred Rocks, Reds, Anconas, 50, $6.50; 100, $12; 500, $58. White Rocks, White Wyandottes, Buff Orpingtons, 50, $7; 100, $13; 500, $63. Silver Wyandottes, 50, $7.50; 100, $14; 500, $70. Postpaid. Live arrival guaranteed. Bank Reference. Order direct from this ad. Free Circular.

MODERN HATCHERY
Box F, Mt. Blanchard, Ohio

Star Hatchery
BABY CHICKS
From Select, Vigorous, Heavy Laying Breeding Stock

Prices Reduced

Hatched by modern methods in best machines under our personal supervision. Carefully packed and sent postpaid and 100% live delivery guaranteed. Bank Reference. You take no chances in ordering STAR BABY CHICKS. Place your order now and get them when you want them
STAR HATCHERY, Box X, Holland, Michigan

Pine
Bay
Farm

Hardy Northern Bred Chicks

Reduced Prices for June Delivery. Barron S. C. W. LEGHORNS 10c each, $90.00 per 1,000. Parks Strain BARRED ROCKS 13c each, $62.50 per 500. Parcel Post paid. 100% live delivery guaranteed. Quality is assured as we are owners and breeders of one of the leading pens at the Michigan Egg Laying Contest. 8 to 10 weeks old S. C. W. Leghorn pullets $1.00 each, $90.00 per 100.
PINE BAY POULTRY FARM, Holland, Mich.

BABY CHICKS 12c AND UP
Member Mid-West Baby Chick Association.
THOS. G. CALLAGHAN, Fenton, Michigan

CHICKS THAT MAKE PROFIT

$10 PER 100 AND UP. From vigorous, pure-bred flocks on free range, selected for heavy-laying qualities and well cared for. Low prices considering exceptional quality. **WHITE, BROWN and BUFF LEGHORNS, 50, $7; 100, $13; 500, $62.50; 1,000, $120. WHITE and BARRED ROCKS, WHITE WYANDOTTES, BUFF ORPINGTONS, ROSE and S. C. REDS, ANCONAS, 50, $8; 100, $15; 500, $72.50; 1,000, $140. Mixed, all varieties for broilers, $10 per 100 straight.** Postpaid to your door and full live count guaranteed. You can order now direct from this ad and get them when you want them. Bank reference. Free catalog.
BLUFFTON HATCHERY, Box L, Bluffton, Ohio

100,000 JUNE CHICKS

Hatched under my personal supervision from personally inspected flocks of heavy-laying, pure-bred fowls.

Varieties	Prices on 100	500
White, Brown and Buff Leghorns	$10.00	$47.50
Barred Rocks, Reds, Anconas	12.00	57.50
White and Buff Rocks, White Wyandottes, Minorcas	13.00	62.50
White and Buff Orpingtons, Silver Wyandottes	14.00	67.50

Mixed Chicks for Broilers, $9.00 per 100 straight.
POSTPAID and full live delivery guaranteed. Get your order in quickly right from this advertisement with full remittance. Bank Reference. Free Catalog.
H. B. TIPPIN Box E, Findlay, Ohio.....Member I. B. C. A.

Egg Bred White Leghorn Chicks

From our famous winterlaying English White Leghorns. Large, vigorous birds of fine utility type. Wonderful layers—the result of many years of breeding for increased production of large, white eggs. Our grade A chicks are from these selected females mated with pedigreed sires bred from 200 to 303 egg dams, descendants from Penna. Poultry Farm's egg laying contest winners, notably Lady Victory, 304 eggs and Keystone Maid, 306 eggs. Prices: 25, $3.50; 50, $6.50; 100, $12; 500, $57.50; 1,000, $110.00. Full count and live arrival guaranteed by prepaid parcel post. Order direct from ad. You can do so with absolute safety, as you are fully protected by our guarantee of perfect satisfaction. Reference, Zeeland State Bank. Catalog free.
PATER'S POULTRY FARM, R. 4, Hudsonville, Mich.

Rosewood Farm
Healthy, Hardy Chicks

Well-hatched, carefully packed, and shipped. Select, heavy laying **WHITE LEGHORNS, 50, $7; 100, $13; 500, $62.50; 1,000, $120.** Select **ANCONAS, 50, $7.50; 100, $14; 500, $67.50.** Select **BARRED ROCKS, 50, $8.50; 100, $16.50; 500, $80.** Postpaid, full live delivery guaranteed. Our chicks will render you the best of satisfaction and you will **COME BACK TO US.** We have had long experience in producing good Chicks and our flocks are second to none. Circular. free. **ROSEWOOD FARM, R 12 A, Holland, Mich.**

GREEN LAWN CHIX sent insured parcel post prepaid. Barred Rox, White Rox, R. I. Reds, and Black Minorcas, $16 per 100. Brown Leghorns, English White Leghorns or Anconas $14 per 100. Heavy Broilers $14 per 100. Odds and Ends $13.00 per 100. 5% discount on 500 or 1,000 lots. All varieties 17c each in less than 100 lots. Our 13th year producing high grade chix that please. Our method of shipping positively prevents chilling and crowding and we guarantee 100% live delivery. May, June, July 1c per chix less. Order from this ad and state just when you wish chix sent. A saving to cash customers. Deduct 5% if full cash is sent with order. Reference: Fenton State Bank.
GREEN LAWN POULTRY FARM, Fenton, Mich.
Gus Hecht, Proprietor.

BABY CHICKS
Hatched from strong and vigourous flocks of **ENGLISH WHITE LEGHORNS AND ANCONAS, BRED FOR HIGH EGG-PRODUCTION.** We guarantee 100 per cent [illegible] live chicks on arrival. Postage PAID. Prices reasonable. Instructive Catalog and prices free on request. **QUALITY HATCHERY, Box A11, Zeeland, Mich.**

WASHTENAW
HATCHERY. JUNE PRICES. Hatches Mondays and Tuesdays. **Barred Rocks, Reds, W. Wyandottes, $13.00 per 100. White Rocks, $15.00. Buff Orpingtons, $17.00. S. C. W. Leghorns, $11.00.** 500 or more, 1c less per chick. Add 50c for half and quarter hundreds.

Postpaid, full live delivery guaranteed. Our flocks are carefully selected and bred for high egg production. Order from this ad. Reference, Farmers and Mechanics Bank.
WASHTENAW HATCHERY, Ann Arbor, Mich.

Day Old Chicks

From Select, Hogan Tested, Flocks on Free Range. Well-fed and handled to insure strong, vigorous chicks. Heavy Layers. **PRICES: WHITE and BROWN LEGHORNS and ANCONAS, 50, $7.50; 100, $14; 500, $65. BARRED ROCKS, 50, $8.50; 100, $16; 500, $75.** Hatched right and shipped right. Postpaid. 100% live delivery guaranteed. Bank Reference. Order direct from this ad. Circular free.
BORST & ROEK, Box P, Zeeland, Mich.

Pure Bred Chicks Buy 'Em Near Home

Broiler Chix	9c	White Wyandottes, Buff Orpingtons	15c
W. or Br. Leghorns	11c	Light Brahmas	19c
Bd. Rox or Reds	13c	Shepherd Anconas	12c
White Rox	14½c		

Black Minorcas........14c
Add 35c if less than 100 lots wanted. Circular.
LAWRENCE POULTRY FARM
Dept. 8 Good Reference R. 7, Grand Rapids, Mich.

CHICKS for June 19 Delivery

Improved S. C. English type White and Brown Leghorns, $10.00 per 100; $50.00 per 500. Extra selected $12.00 per 100; $57.50 per 500. From all good profitable layers, and our selected are from our very best layers.

This is our 12th year breeding, hatching and shipping chicks, and we are offering you chicks from the best layers at a very reasonable price.

We pay the postage up to your door and guarantee you 100% safe arrival.

Order direct from this ad to save time, for it pays to be a little ahead of time, or write for our free 32 page catalogue,
Wolverine Hatchery, Zeeland, Mich.

Chicks

From select vigorous, heavy laying breeding stock. White, Brown Leghorns, Anconas, Barred Rocks. Our price is 12 cents and up. Guarantee 100% live delivery by prepaid post. Get your order in now—will ship when you want. Customers report "Big Profits" with these wonderful layers. Write today for Illustrated Catalog. It's free. Reference: State Commercial Savings Bank. Member M. B. C. A.
Queen Hatchery & Poultry Farm,
Zeeland, Michigan

BABY CHICKS

You can now order Chicks in 11 breeds of the Pure Breed Practical Poultry that is making egg records on our customer's own farms. If you want stock that will make real money, send for our description and price list. All stock guaranteed 100% post paid. We want you to try our stock this year. It is the best practical stock you can buy.

- **Barred Rocks**
- **White Rocks**
- **Rhode I. Reds**
- **Wyandottes**
- **Orpingtons**
- **Leghorns—**
  - **Wh., Br., Buff**
- **Anconas**
- **Minorcas**

STATE FARM ASSOCIATION
202 Chase Block Kalamazoo, Michigan.

CHICKS Barron Strain Selected White Leghorns. Produced under my personal care. Strong, vigorous chicks carefully packed to go safely. Postpaid, full live delivery guaranteed. 50 chicks, $6.50; 100, $12.50; 500, $60. Get your order in early. **Elgin Hatchery, Box 317A, Zeeland, Mich.**

Hatching Eggs & Baby Chicks

Tompkins strain. For April and May chicks, per hundred, $18.00. Eggs per hundred, $8.00. Quality breeder of Rhode Island Reds, both combs.
WM. H. FROHM, New Baltimore, R. 1, Mich.

BABY CHICKS

Prices on our very best A-1 English White Leghorn and Ancona Chicks reduced to $11.50 per 100; $55.00 per 500; $105.00 per 1,000. Get our descriptive catalog or order from ad. **Model Poultry Farm & Hatchery, Zeeland, Mich.**

WHITTAKER'S R. I. REDS—Michigan's Greatest Color and Egg Strain. Bred from winter layers for 13 years. Chicks and eggs. Write for free catalog. **Interlakes Farm, Box 4, Lawrence, Mich.**

CHICKS—WE HAVE SHIPPED THOUSANDS each season since 1904. Different breeds, free booklet with guarantee and delivered price. **Freeport Hatchery, Box 10, Freeport, Mich.**

CHICKS—SINGLE COMB BUFF LEGHORNS only. Strong healthy chicks from good laying stock. **J. W. WEBSTER, Bath, Mich.**

CHICKS—ENGLISH S. C. W. LEGHORNS, $10 per 100. Park strain Barred Rocks $14 per 100. 100 live delivery guaranteed by parcel post. **HENRY WATERWAY. R4, Holland, Mich.**

MARKET FLASHES

MARKET SUMMARY

Wheat market easy. Other grains quiet. Beans steady after recent advances. Old potatoes dull. Butter and eggs are in demand and firm. Poultry in fair supply and demand good. Dressed calves wanted. Hogs steady. Cattle quiet.

(Note: The above summarized information was received **AFTER** the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press —Editor.)

FOOTE'S MARKET LETTER

BY W. W. FOOTE

A Word to Our Readers

FARMERS and stockmen who read The Business Farmer are cordially invited to write whenever they desire any information about the markets, or when they have information to offer regarding farm matters in their neighborhood. Predictions as to the future are obviously more or less uncertain, but advice is always cheerfully given when requested. In a general way, it may be said that until farm workers become plentier and their wages are considerably reduced it seems to be advisable for farmers to avoid branching out too much, and fewer acres well cultivated and diversified farming should bring in larger profits than the old methods of a large acreage devoted to grains. Many farmers are endeavoring to grow as much food for their families as they can, instead of spending comparatively large amounts of money. Every farm should have an orchard of fruit trees, as well as grape vines, berry bushes and vegetable garden, besides plenty of hens, some cows, hogs and sheep. Fortunately, many of our Michigan farmers are already pursuing this course, with the best of results. In parts of the country where the land is level numerous farmers who were unable to hire helpers have been buying tractors. The former ambition of owning large tracts of farm lands has largely died down, and the inflated war time prices are no longer paid, except in rare instances. Many farmers are wondering how the movement started by the federal government recently to prevent wild speculation in grain on the produce exchanges of the United States is going to effect the market. Statements of purchases and sales of grain futures since May 1 are called for.

Rallies in Grain Prices

Wheat prices for several weeks followed a downward course, and corn and oats sold lower, but they declined less than wheat, while the fall in prices for oats was still less. Part of the fall in wheat was brought about at the beginning of May by extensive sales of speculators, who were taking their profits. Since then some good advances have taken place, with active speculative and export buying, and smaller advances in corn and oats. Crop reports are potential in making prices, and this is especially true of wheat. Much importance is attached to the fairly large exports of flour and wheat from the United States and Canada, and a few days ago a sale of a cargo of new crop hard wheat, the first such sale of the season, was made at the Atlantic seaboard for shipment to Germany. All along Germany has been a large buyer of rye in this country, yet our rye stocks in sight are reported as aggregating 17,370,000 bushels, comparing with only 6,208,000 bushels a year ago. Of late our exports of corn and oats have been much less than a year ago, but visible supplies of both grains are much smaller than at that time. Corn planting is late because of the cold, wet spring, and much uncertainty is felt regarding the next crop. Wheat continues to sell at much below prices paid one and two years ago; but corn is still selling much higher than last year, and oats prices are greatly lower. The sentiment in the wheat market is that prices in the coming crop year will be higher, but this is looking considerably ahead. The trouble with corn is that it is selling out of line with hogs at the present time, and many farmers talk of reducing their spring breeding. Recent sales were made on the Chicago Board of Trade of May wheat at $1.18, comparing with $1.40 a year ago, May corn at 81¾ cents, comparing with 61 cents last year; May oats at 43 cents, comparing with 37½ cents last year; and May rye at 78¼ cents, comparing with $1.08 a year ago.

Increased Consumption of Beef

During recent weeks there has been a marked increase in the consumption of beef in this country, and this has made a better outlet for beef steers, cows and heifers; so that it was possible to sell much increased supplies of cattle in the Chicago market at firm, and even higher prices, subject to temporary reactions at times. Recent sales of steers have been largely at $8.50 to $10.25, with more sales at $10 to $10.40 than at any previous time since January. The best class of steers brought $9.50 to $10.50, the best yearlings selling at $9.25 to $10.25, while common light weight steers brought $7.15 to 7.75. Butchering cows and heifers sold at $4.50 to $9.50, bulls at $4.50 to $8 and calves at $5 to $11.50. Only a moderate business was transacted in stockers and feeders, but prices were higher because of a very limited supply, sales being made at $6 to $8.75. Quality was demanded, and good lots sold at $7.75 to $8.50 mainly. A year ago common to prime steers sold at $7 to $9.25. Prospects for the future look promising.

Hogs Marketed Rapidly

There is a large demand in the Chicago market for hogs on local and shipping account, and despite continued heavy receipts, the decline in prices has been checked, late sales being as high as a week earlier, buyers paying $6.25 to $7.85, mainly $7.30 to $7.80. Prime light hogs topped the market, selling 15 cents above the best heavy butchers. A year ago hogs sold at $9.50 to $11, supplies at that time far exceeding those at this time. Hogs reaching the Chicago market are mostly good, and their average weight is 243 pounds. Combined receipts in seven western markets for the year to late date amount to 12,463,000 hogs, comparing with 8,953,000 a year ago, 9,608,000 two years ago and 10,354,000 three years ago. Further declines in prices are expected. Advices from the country show plenty of hogs left and anxiety on the part of many stockmen to get their holdings shipped to market. The domestic consumption of lard, fresh and cured hog meats continues extremely large, and exports of provisions loom up big, especially of lard, these far exceeding those of a year ago. Still, the cold storage stocks of provisions in this country are growing rapidly, and are far greater than a year ago.

Active Demand for Horses

Not enough of the higher grade horses are coming on the Chicago market to meet the present increasing demand, and suitable drafters and chunks are bringing $175 to $225, with occasional sales at $250 to $275, and once in a while a sale around $300. The heavier the better the buyer is suited, the demand being for horses weighing from 1400 to 2,000 pounds. Inferior horses are poor sellers around $25 to $50. In the east many big trucks are being replaced with horses, and recent sales have been made of matched teams at $400 to $500. A large part of the horses offered sell singly for $100 to $150. To a very large extent farmers have ceased to raise even for their own use.

Great Boom in Lambs

Insignificant Chicago receipts of spring lambs, clipped lambs and Colorado wool lambs have brought about sensational advances in prices for everything that is fat, the offerings falling greatly below the demand. The spring is late. and there is a great gap between the close of the season for marketing Colorado lambs and the delayed marketing of southern spring lambs. Farmers who are in the sheep industry these times are extremely fortunate. Recent receipts were much the smaller of the year, and prime Colorado wooled lambs advanced to $17, while the best clipped lambs brought $15.60, and California spring lambs went to $17.50.

WHEAT

Trading was lifeless last week in wheat and any attempt by bulls to cause the market to become active and prices advance was met with a flood of wheat that left dealers with more grain than they knew what to do with. However, the market declined only slightly as crop news was of a bullish nature. The reports from the majority of the winter wheat producing states were that the yield per acre will be under that of last year by quite a bit, because of poor stooling and thin fields and these reports were on the increase as the week drew to a close. But in spite of these reports the market did not strengthen as the bulls expected, giving the impression that the backward condition of winter wheat had been discounted. Dealers believe the short promise will attract the attention of the investor who will buy and hold, compared with the present purchaser who buys and then sells as soon as he sees an opportunity to make a small profit. The price of wheat is low, compared with other products, and must go up or other commodities decline. During last week the Detroit market advanced 3c and declined 1c leaving it 2c higher than on the close of the previous week.

Prices

Detroit —Cash No. 2 red, $1.34; No. 2 white, $1.34; No. 2 mixed, $1.34.

Chicago—No. 2 mixed, $1.22.

Prices one year ago—Detroit, No. 2 red, $1.37; No. 2 white, $1.35; No. 2 mixed, $1.35.

CORN

The corn market traveled much the same route as wheat during the past couple of weeks. Sales of corn to arrive showed some increase but domestic demand was slow and export trading quiet. Receipts were small. Corn planting is well under way, and while the soil in some sections is too wet to work, in general the ground is in good condition and planting is going along rapidly. The Detroit market shows a gain of 1c over a week ago.

Prices

Detroit—Cash No. 2 yellow, 87c; No. 3, 86c; No. 4, 84c.

Chicago—No. 2 yellow, 86c; No. 8 yellow, 84c.

Prices one year ago—Detroit, No. 3 yellow, 65½c.

OATS

The oat market showed a loss for the week. This was due to local and commission house selling, based on the easiness in other grains. Oats finished last week 1c lower compared to the week before, thus being the only grain showing no advance.

Prices

Detroit—Cash No. 2 white, 50c; No. 3, 48½c; No. 4, 47c.

Chicago—Cash No. 2 white, 46c; No. 3, 44c.

Prices one year ago—Detroit, No. 2 white, 45c.

RYE

The Detroit market for rye shows an advance in price of 1c over a week ago. The demand is fair but quiet with the market easy in tone.

Prices

Detroit—Cash No. 2, 81c.

Prices one year ago—Detroit, Cash No. 2, $1.09.

BEANS

The bean market developed strength the forepart of last week and prices made advances. At Detroit the total gain amounted to 45c during the past fortnight. The market is in a fairly strong position at the present time and prices are expected to go higher in the near future. However, there will undoubtedly be slight declines in the meantime. Dealers all declare they can see no reason why prices should not go still higher as the demand is good. One of the main troubles with the market for Michigan beans is that the price fluctuates within such a wide range. If a dealer or wholesale grocer goes out to buy a carload on an advancing market the price will be boosted every few minutes by some rabid speculator, and for that reason much buying is done on the "hand to mouth" basis. If the national advertising campaign now under consideration is put on it will tend to stabilize prices so that the wholesale grocer can buy a carload of beans without fear of a sudden change in price that will mean a great loss to him. The Michigan bean is rapidly approaching the place where good demand is constant, or as near as possible, becoming the favorite of the canners throughout the country and several large dealers report many of their customers buy strictly C. H. P. Michigan beans only. Indications are that a large acreage will be planted this year.

Prices

Detroit—C. H. P. $7.25 per cwt.

Chicago—C. H. P. $7.25 per cwt.

Prices one year ago—Detroit, C. H. P. $8.50 per cwt.

POTATOES

If the old potato market is going much lower it has shown no indication during the past week or so. The bottom may have been reached as the shipments of old stock are practically at a standstill. Few potatoes are left at Northern Michigan points and there is no indication that the market will soften much until the end.

Prices

Detroit — Michigan, $1.33@150 per cwt.

Chicago—Wisconsin and Round whites, $1@1.15 per cwt.

Prices one year ago—Detroit—Michigan, $1.92 per cwt.

HAY

A firm tone has prevailed in the market during the last couple of weeks, owing to light receipts. While shipments received on the markets at some points are larger than they were a week ago in general they are not sufficient to take care of the demand. Spring work is holding up country loadings.

Prices

Detroit—No. 1 timothy, $17.50@18; standard, $16.50@17; light mixed, $16.50@17; No. 2 timothy, $15.50@16.50; No. 1 clover mixed, $14@15; No. 1 clover, $13@14.

Chicago—No. 1 timothy, $22@23; light mixed, $19@21; No. 2 timothy, $18@21; No. 1 clover, $15@16; No. 2 clover, $13@14.

New York—No. 1 timothy, $25@26; No. 2 timothy, $22@25; No. 1 clover mixed, $25.

Prices one year ago—Detroit, Standard timothy, $21@22; light mixed, $21@22; No. 2 timothy, $20@21; No. 1 clover, $16@17.

WOOL PRICES MAINTAIN STEADY LEVEL

Activity in wool marketing in some sections of the range states and very little movement in other sections during the past week is reported to the United States Department of Agriculture by its field representatives. A considerable portion of the wool is reported as having been contracted for and a fair quantity pledged for sale through the various pools. Prices paid range from 30c for fall wool in california to 53½s for twelve-months' wool in other states. In some sections shearing has just commenced.

WEEKLY MARKETGRAM
U. S. Bureau of Agricultural Economics

Washington, D. C, for the week ending May 19, 1923.

FEED—Markets dull and declining. Demand very moderate. Linseed meal heavy, offerings good, demand light. Cottonseed meal easier, stocks fair, demand light. Season shipments bran and middlings offered in easter markets around $27. Production most feeds good. Stocks and interior supplies slightly in excess of present requirements. Quoted May 18; bran $26, middlings $28; flour middlings $30; Minneapolis 1; gluten feed $37.15 Chicago.

PRITCHARD'S WEATHER FORECAST
INTERPRETED BY THE STARS

Week of May 27

The first half of the week of May 27th is expected to be fair and generally warm in Michigan.

About the middle part of the week, however, skies will cloud over and general showers with some scattered rains and thunder storms are to be expected in various counties of this state. These conditions with high winds will continue over Thursday but during this day temperatures will fall lower.

There are indications that the sky will clear off about Thursday but about Friday will again become overcast, threatening and precipitating general showers during last two days of week.

Week of June 3

About Wednesday or Thursday begins a period of general showers, electrical storms and high winds that will continue throughout the balance of the week. Locally these storm conditions will be severe with very heavy rains doing considerable damage.

Better Returns from your Produce---

YOU can market your produce more profitably through the *Farm Bureau Produce Exchange.*

Many farmers and shippers are not receiving the best market prices. Increase your returns through the service of the

Farm Bureau "Mitten" Outlet

FOR BEST RESULTS ship through your local Co-operative Association. Your co-op. manager is kept thoroughly informed by us on WHEN and HOW to make shipments.

—SHIP NOW

ALL KINDS OF POULTRY
Especially Broilers, Hens and Ducks

Shipping tags and information gladly furnished on request.

Other Products Handled and Marketed

Asparagus, Strawberries, Gooseberries, Raspberries, Celery, Potatoes and all kinds of fruits and vegetables, also eggs.

Producers unable to ship through a co-op. should write us for information on how this service may be obtained.

A Dept. of Michigan State Farm Bureau

FARM BUREAU PRODUCE EXCHANGE

DETROIT, MICHIGAN
2739-31 Russell St. Cadillac 2270

Much Cooler About June 23

Notwithstanding the fact that we recently stated in these columns the three weeks centering on the summer solstice would be warm, we wish to emphasize that the few days either side of June 23rd will be quiet cool for the season and tender growth should be protected accordingly. This does not contradict our previous forecast of warm weather on the average for the three weeks. To the contrary this should serve as a warning, as a cool spell during an average warm period is more dangerous to growing crops than a long series of cool weather weeks.

WARMER WEATHER COMING

As this is a nice cool morning and this snow storm has got us beat on the bean proposition, we would like to know whether the weather man could help us out on what we could plant to avoid the cold weather and escape the hot, dry weather at blossoming time. The blight or hot, dry weather stopped us raising beans four or five years ago. Any information would be thankful to get. There are about three inches of snow on the level this morning and still snowing.—A. J. Rumbaugh, Van Buren County, Mich.

—We look for a change in temperature conditions beginning about the second or third week in June. For the balance of that month and running into July we look for warmer weather than usual for this time of year.

The rainfall will be heavier than usual or, at least, plenty of it, according to our figures. For this reason your bean crop should be planted on well drained land and we believe your crop will get a fair start.

Late plantings will probably be best this year as we figure the average temperature during blossoming time (latter part of July) will be normal to below. Therefore, blossoms will set and rapidly develop into healthy bean pods.

Temperatures during the week from June 20 to 27 will average cool and while we do not believe it will develop into frost in your section, we advise that you keep close watch of your thermometer, the sky and the wind.

TOO MANY FARMERS FOLLOWING RADICAL LEADERS

(Continued from Page 13)

of labor is only temporary and to bring in foreign labor would not only hasten unemployment but accentuate the condition when it does come.

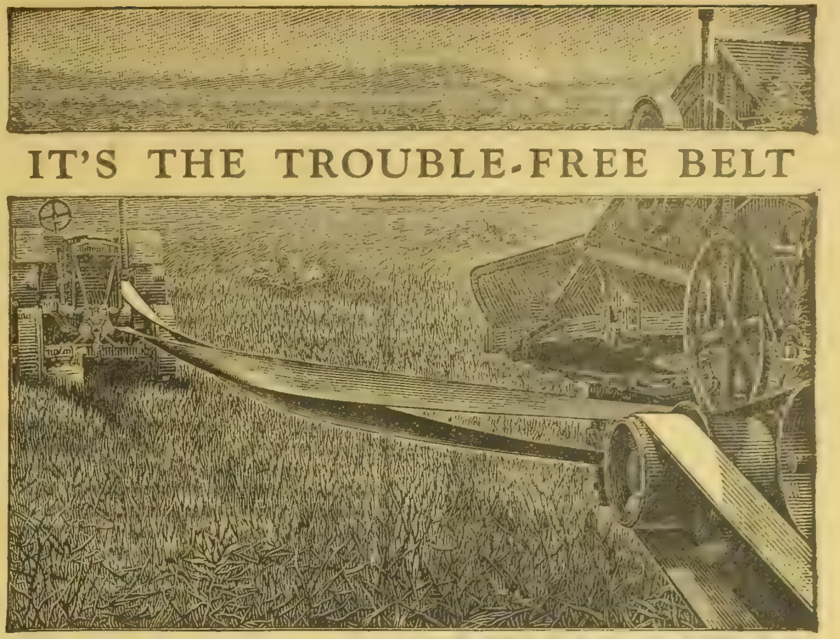
We are too familiar with the evils of emigration to reverse our present policy of restriction. We already have an immense population in this country, a large part of it congested in cities ranking among the largest in the world. Our population is increasing at a rapid rate and we know too well the conditions of the people in over-populated countries like India, China and Japan.

Times are very trying for the farmer but we must remember we are paying for the costliest war in history and it's not going to be easy. The just complaint of the farmer is that he is bearing much more than his share of the burden.

Labor unions by their powerful organizations have been able to prevent readjustment or any considerable reduction in wages. A large proportion of the farmers have backed up the unions in their attitude to their own direct detriment.

The farmers have always been noted at the great conservative class—too many of them now are following radical leaders that will get them nowhere but lead them into further difficulties. The farmers to a large extent are buncoed by their own self-styled leaders. I would ask the average farmer what benefit he has received from all the legislation supposedly passed for his especial benefit since the war.

The great problems that confront him—inadequate and excessively high transportation, high cost of manufactured articles, unequal after-war readjustments, and exorbitant taxation, have received very little practical attention.—K. S. Wood, Charlevoix County, Mich.



IT'S THE TROUBLE-FREE BELT

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"In 1921, I threshed 7,000 bushels without a bit of belt trouble. In 1922, I turned out 9,000 bushels with the same satisfaction and saving of time. My belt is a Goodyear Klingtite Belt."
—ALBERT CASLEY, Cheney, Kansas.

NO engine re-setting when you use a Goodyear Klingtite Belt, because Goodyear Klingtite Belts do not shrink. No jumping the pulleys, because Goodyear Klingtite Belts hold with a slipless grip. No overheating, because Goodyear Klingtite Belts run loosely. No messing with dressing; no breaking in.

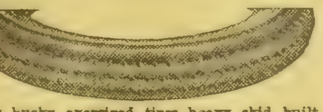
Goodyear Klingtite Belts are made in endless type for heavy duty and in cut lengths for lighter drives. They are sold by Goodyear Mechanical Goods Service Station Dealers and by many hardware dealers

VALVES · PACKING BELTS · HOSE
GOODYEAR
KLINGTITE BELTS

—GUARANTEED TIRES—

12,000 Mile Oversize Cord 30x3½ $9.95

7500 Mile Heavy N-Skid 30x3½ $6.95



New husky oversized tires heavy skid built for real wear as good as the best. By selling direct we cut out many profits. See the following low prices:

Size	Heavy N-Skid Fabric	McLeans Oversize Cord	Heavy Tubes
30x3	$ 6.45		[illegible]
30x3½	6.95	$ 9.95	1.40
32x3½	9.45	14.95	1.50
31x4	10.95	15.95	1.80
32x4	11.95	16.95	1.90
33x4	12.95	17.95	2.00
34x4	13.45	[illegible]	2.10

Other sizes in proportion. We carry full line of odd sizes in stock. Get our latest price list. Ship C. O. D. on approval.

Send no Money.

LEADER TIRE CO.
Dept. M, 1502 Hennepin Ave.
MINNEAPOLIS, MINN.

HAMPSHIRES

HAMPSHIRES: A FEW BRED GILTS LEFT. Place your order now for your Boar pig at a bargain. Pairs not akin. 10th year.
JOHN W SNYDER, St. Johns, R. 4, Mich.

DUROCS

HILL CREST DUROCS, PERRINTON, MICH. We are breeding twenty sows and eighteen gilts to a son of GREAT ORION SENSATION. Yearling, spring and fall boars. NEWTON & BLANK, Farm 4 miles straight south of Middleton, Gratiot Co., Mich.

PEACH HILL FARM offers choice weanling Duroc pigs, either sex. Priced very reasonable. Write us.
INWOOD BROS., Romeo, Mich.

ANOTHER BUNCH OF REAL DUROC PIGS Sired Sensations King 12th. At seven months old stood 34 inches high, 68 long, legs 11 inches Woodford Sensations breeding. $12.50.
FREED BROS., Elwell, Michigan.

DOGS

ANNUAL BARGAIN SALE OF REG. COLLIES. Farm raised and natural heel drivers.
SILVERCREST KENNELS, Gladwin, Michigan.

FOR SALE THOROUGHRED WHITE COLLIE PUPPIES.
CHAS. KEPNER, Carson City, Michigan.

$7 50 After 30 Days Free Trial

The Belgium Melotte Separater—with the wonderful Self-Balancing Bowl. No other like it.

30 days' free trial—then, if satisfied, only $7.50 and a few easy payments — AND — the wonderful Belgium Melotte Separator is *YOURS.*

No Money Down!

Catalog tells all—*write.*

Caution! U. S. Bulletin 201 shows that vibration of the bowl causes *cream waste!* The Melotte bowl is *self-balancing.* Positively cannot get out of balance therefore cannot vibrate. Can't remix cream with milk. *The Melotte has won 264 Grand and International Prizes.*

Catalog FREE

Write for new Melotte catalog containing full description of this wonderful cream separator and the story of M. Jules Melotte, its inventor. Don't buy *any* separator until you have found out all you can about the Melotte and details of our 15-year guarantee which is infinitely stronger than any separator guarantee. Write TODAY. How many cows do you milk?

Runs so easily, bowl spins *25 minutes* after you stop cranking unless you apply brake. No other separator has or needs a brake. Bowl chamber is *porcelain lined.*

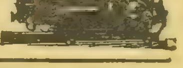
The Melotte Separator, *H. B. Babson, U S. Mgr.*
2843 W. 19th Street, Dept. 33-05 Chicago, Ill.

My Engine Will Do the Work of 6

Write now for facts about this wonder engine. Same engine gives 1½ to 6 H.P. Gasoline or kerosene, portable, light and free from vibration. No cranking. Pumps, saws, grinds and does all chores. Plenty of power for every purpose. Easy to operate.

Low Factory Price—Special Offer

Price now lower than before war. Tremendous value. Write at once for catalog and special offer on this amazing engine.



THE EDWARDS MOTOR CO.
734 Main St., Springfield, O.

Keep The Business Farmer Coming—See page 2.

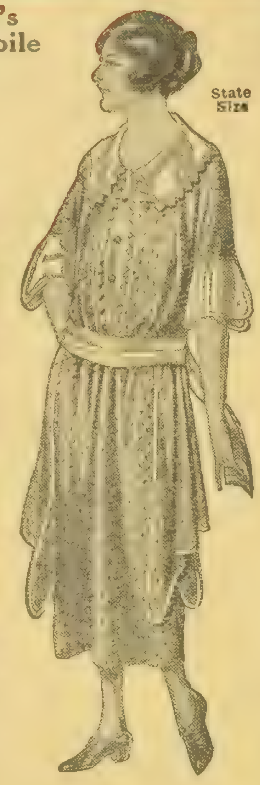
Every Item an Unequaled Bargain

LOWEST PRICES IN THE U.S.A.

Send No Money — Pay On Arrival

Women's Pretty Voile Dress

$1.98

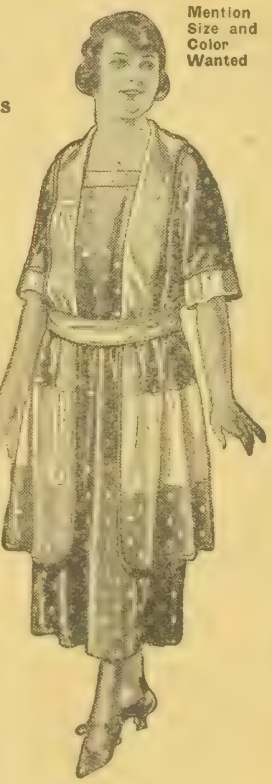


State Size

Very attractive, dainty voile dress, with organdy trimming. Beautiful figured voile with new side panels. Youthful organdy collars and cuffs. Also pretty vestee insert of organdy and neat organdy sash. This model has all the lines of fashions selling at much more than Sharood's sale price. Misses sizes 14 to 20 years, 32 to 38 bust. Women's sizes 34 to 46 bust. Be sure to state size wanted. Choice of colors. No. 96E-6712, Navy; 96E-6713, Copenhagen; 96E6714, Rose; 96E6715, Lavender. Send no money. Pay $1.98 and postage on arrival.

Women's "Stylish Stout" Voile Dress

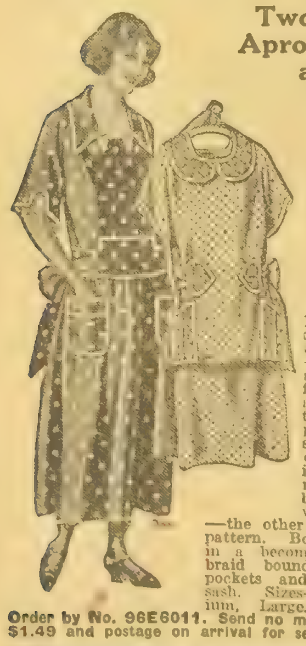
$2.98



Mention Size and Color Wanted

A very beautiful tunic model in "stout" voile dress of graceful slenderizing lines for stout women. Made of good quality polka dot voile with tunic over-skirt, attractively trimmed with pretty organdy collar and cuffs. You will pay much more for a dress of equal value elsewhere. Better get your order in early. Sizes 39 to 53 Bust. State size wanted. Choice of colors. No. 96E6811, Black; No. 96E-6812, Navy; No. 96E6813, Brown. Send no money. Pay only $2.98 and postage on arrival.

Two Percale Aprons, Light and Dark Patterns



Set of Two Only

$1.49

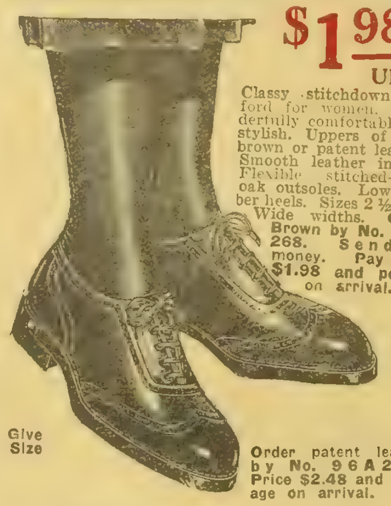
Don't fail to order this splendid combination—two charming aprons of different pattern at no more than you have paid for a single garment elsewhere. Set includes one apron of dark blue percale with white dot—the other in light floral pattern. Both are made in a becoming style with braid bound edges, large pockets and wide flowing sash. Sizes—Small, Medium, Large. State size. Order by No. 96E6011. Send no money. Pay only $1.49 and postage on arrival for set of 2 aprons.

Positively Lowest Prices in America—bar none. Sharood guarantees this. You take absolutely no chance in ordering from this advertisement because everything is shipped at our own risk. Let us prove how we save money for thousands of Sharood customers. Just select anything from the long list of super-bargains shown below. Order it on approval and when the goods arrive compare with any similar article shown elsewhere. If not convinced that our prices are positively unequaled—quality for quality—just return the goods and you will not lose a cent.

DON'T send one cent. Just letter or postcard brings any of these smashed price bargains. Absolutely no obligation and not the slightest risk to you. Merely give name and number of each article you want. Also state size and write your name and address plainly to avoid delay. Pay nothing till goods arrive—then only the amazing bargain price and postage. Then examine your selection—try it on—show it to your family and friends. Then if you are not delighted with your bargain your money will be cheerfully refunded. Order NOW.

Women's Stitchdown Oxfords
Black Patent or Brown Calf Finish

$1.98 UP



Classy stitchdown Oxford for women. Wonderfully comfortable and stylish. Uppers of dark brown or patent leather. Smooth leather insoles. Flexible stitched-down oak outsoles. Low rubber heels. Sizes 2½ to 8 Wide widths. Order Brown by No. 96A-268. Send no money. Pay only $1.98 and postage on arrival.

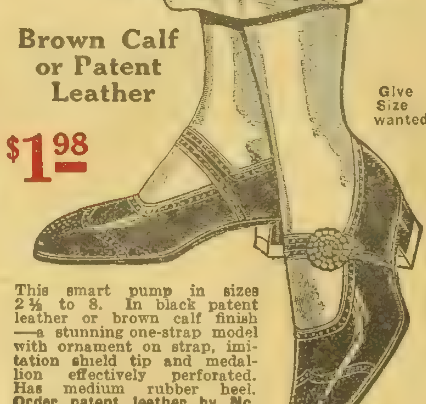
Give Size

Order patent leather by No. 96A264. Price $2.48 and postage on arrival.

Women's Dressy Pump

Brown Calf or Patent Leather

$1.98



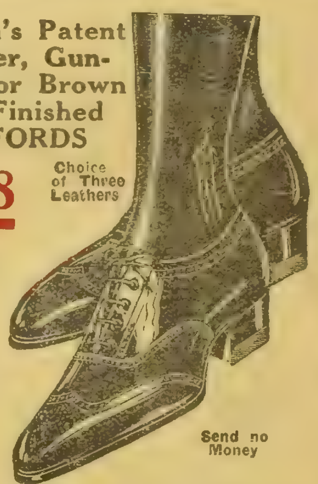
Give Size wanted

This smart pump in sizes 2½ to 8. In black patent leather or brown calf finish—a stunning one-strap model with ornament on strap, imitation shield tip and medallion effectively perforated. Has medium rubber heel. Order patent leather by No. 96A72. Order brown by No. 96A73. Send no money. Pay $1.98 and postage on arrival.

Women's Patent Leather, Gun-Metal or Brown Calf Finished OXFORDS

$1.98

Choice of Three Leathers



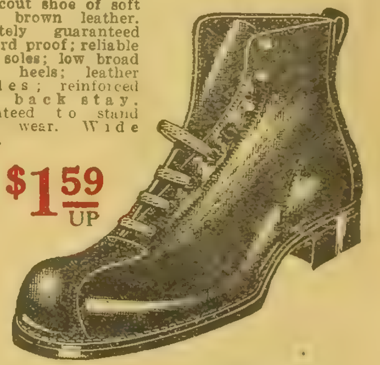
Made with imitation shield tip and medallion perforated vamp. perforated lacestay and circular foxing. Has medium rubber heel and medium pointed toe. Sizes 2½ to 8. Wide widths. Order patent by No. 96A64. Order gun metal by No. 96A69. Order Brown by No. 96A70. Send no money. Pay $1.98 and postage on arrival.

Send no Money

Men's, Boys' and Little Boys' Scout Shoes

Fine scout shoe of soft pliable brown leather. Absolutely guaranteed barnyard proof; reliable sturdy soles; low broad leather heels; leather insoles; reinforced leather back stay. Guaranteed to stand hardest wear. Wide widths.

$1.59 UP

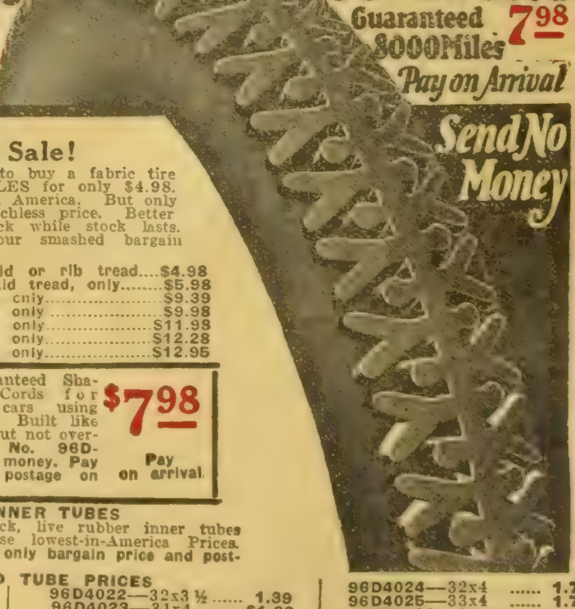


Order Men's sizes 6 to 12 by No. 96A733. Send no money. Pay $1.98 and postage on arrival. Order little boys' sizes, 9 to 13½, by No. 96A-565. Price $1.59. Order big boys' sizes 1 to 5 by No. 96A564. Price $1.79. Pay bargain price and postage on arrival.

Greatest TIRE Bargains

30×3 Fabric Guaranteed 6000 Miles 4.98 Pay on Arrival

30×3½ Cord Guaranteed 8000 Miles 7.98 Pay on Arrival



Send No Money

Sensational Sale!

Auto owners—your opportunity to buy a fabric tire GUARANTEED FOR 6000 MILES for only $4.98. Positively the Biggest Bargain in America. But only 50,000 to be sold at this matchless price. Better not delay ordering. Send quick while stock lasts. No money now. Pay only our smashed bargain price and postage on arrival.

No. 96D11040—30x3	Non-skid or rib tread	$4.98
No. 96D11041—30x3½	Non-skid tread, only	$5.98
No. 96D4042—Non-skid	tread, only	$9.39
No. D964043—Non-skid	tread, only	$9.98
No. 96D4044—Non-skid	tread, only	$11.98
No. 96D4045—Non-skid	tread, only	$12.28
No. 96D4046—Non-Skid	tread, only	$12.95

Standard Cord 30x3 1-2

8,000 Mile Guaranteed Sharood's Standard Cords for Fords and all cars using 30x3½ tire sizes. Built like the regular Cords but not oversize. Order by No. 96D-11090. Send no money. Pay only $7.98 and postage on arrival.

$7.98 Pay on arrival.

GUARANTEED INNER TUBES

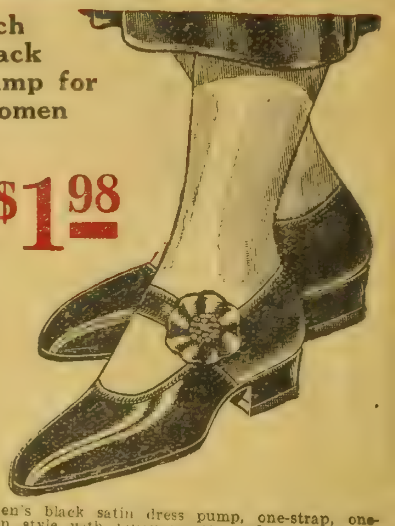
Sharood offers you extra thick, live rubber inner tubes at a big saving. Buy at these lowest-in-America Prices. How many shall we send? Pay only bargain price and postage on arrival.

GREATLY REDUCED TUBE PRICES

96D4020—30x3	$ .99
96D4021—30x3½	1.19
96D4022—32x3½	1.39
96D4023—31x4	$1.69
96D4024—32x4	1.75
96D4025—33x4	1.79
96D4026—34x4	$1.79

Rich Black Pump for Women

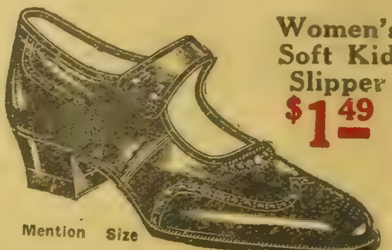
$1.98



Women's black satin dress pump, one-strap, one-button style with fancy rosette and ornament on strap. Plain vamp with medium toe and close edge sole with low rubber heels. Genuine oak soles. A dressy, stylish new spring fashion that will be all the rage among the best dressed women. Sizes 2½ to 8. Wide widths. Order by No. 96A56. Send no money. Pay only $1.98 and postage on arrival. State size.

Women's Soft Kid Slipper

$1.49

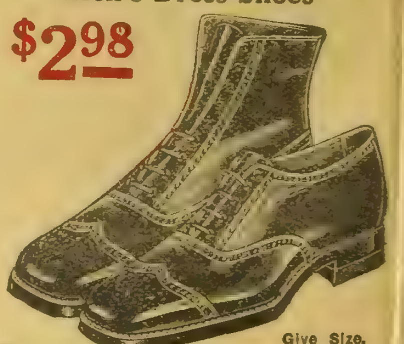


Mention Size

Beautiful soft kid leather slipper. Stylish strap model with two buttons. Medium round toe. Cushion soles. Black or brown kid. Sizes 2½ to 8, wide widths. Black by No. 96A228. Brown by No. 96A229. Send no money. Pay $1.49 and postage on arrival. State size.

Men's Dress Shoes

$2.98



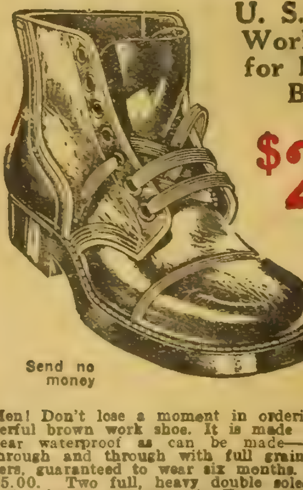
Give Size.

Men's French-toe dress shoes or oxfords in mahogany Brown calf-finished leather. Have medium toes perforated, oak soles and rubber heels. Perforated on vamp and eyelet stay. Sensatioal values. Sizes 6 to 11, wide widths. Order Oxfords by No. 96A658. Order Shoe by No. 96A660. Send no money. Pay $2.98 and postage on arrival for either style. State size.

GUARANTEED For Six Months' Wear

U. S. Army Work Shoe for Men & Boys

$2.98



Send no money

Men! Don't lose a moment in ordering this wo derful brown work shoe. It is made of leather a near waterproof as can be made—solid leath through and through with full grain leather u pers, guaranteed to wear six months. Easily wort $5.00. Two full, heavy double soles, sewed an nailed for greater strength. Extra wide, full leath er counter, riveted to prevent ripping. Sizes 6 t 12, wide widths. Order by No. 96A700. Send n money. Pay $2.98 and postage on arrival.

Boys' Guaranteed Shoes—Six months' guarante Two green chrome leather soles, same featur quality points as shoe above. Sizes 1 to 5½ Wide widths. Send no money. Order by Nc 96A550. Pay $2.69 and postage on arrival.

Be Sure to Mention All Sizes, Colors, etc., and Send All Orders From This Page Direct to

SHAROOD CO. Dept. 96 MINNEAPOLIS MINNESOTA

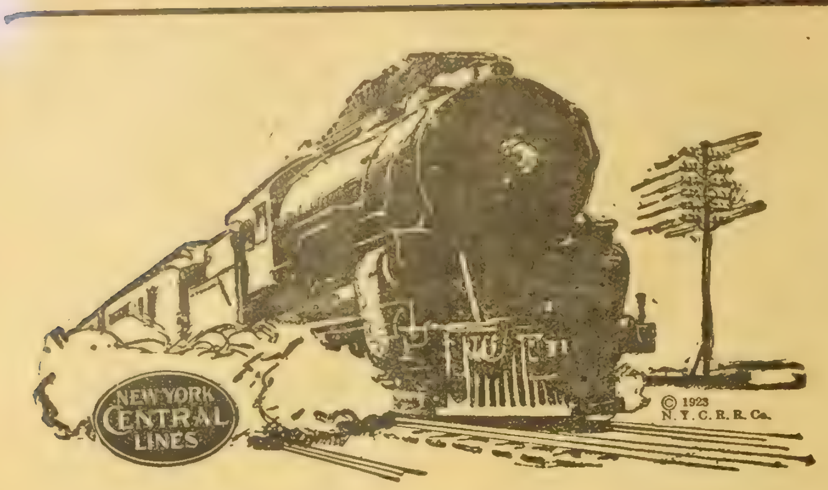
The Michigan BUSINESS FARMER

An Independent
Farm Magazine Owned and
Edited in Michigan

VOL. X, No. 21 SATURDAY, JUNE 9, 1923 TERMS: TWO YEARS $1
60c PER YEAR—5 YRS. $2

"Knee Deep in June"

Read in this issue: "Not More Farmers But More Business Farmers"—"The Passing of Dr. Friday, How and Why It Happened" by Stanley M. Powell—Also about Consolidated School Costs



In the Public Service

THE first link in the New York Central Lines was the sixteen-mile pioneer road from Albany to Schenectady, opened in 1831.

The New York Central system now comprises 12,000 miles of lines serving eleven of the leading industrial and agricultural states of the Union.

These lines carry one-ninth of the rail-borne commerce of the country, including more than a million carloads a year of agricultural products.

They pay $30,000,000 a year in taxes—four dollars in taxes for every three in dividends.

They are owned by 120,000 investors.

They are operated by 162,000 men and women, of whom 12,000 have been in the service more than 30 years.

New York Central Lines maintain high standards of public service, and are constantly striving to make this service the best in American railroading.

NEW YORK CENTRAL LINES
BOSTON & ALBANY–MICHIGAN CENTRAL–BIG FOUR–PITTSBURGH & LAKE ERIE
AND THE NEW YORK CENTRAL AND SUBSIDIARY LINES
General Offices—466 Lexingtor Ave., New York

BALD HEADS. DID YOU EVER TRY THE Mascot Scalp Ointment? If you have not order a box to-day and watch your hair grow. The Mascot Ointment is one of the most powerful stimulants for the scalp. There is no excuse for baldness or falling hair. The Mascot will relieve you of an itching scalp and dandruff. Manufactured by MRS. W. LARIVEE, 1200 Pine St., Detroit, Mich. Price $1.00 remit by money order or express.

Sir Walter and the Spud

IN IRELAND, they still point to the place where Sir Walter Raleigh planted the potatoes he brought with him from America. The venturous knight was much impressed with the edible qualities of potatoes and touted them highly to his friends. But in spite of his efforts to popularize the spud, it was half a century or more before it became an article of general consumption abroad.

Today, a new food product becomes nationally known almost overnight. Modern methods of distribution quickly place it in thousands of stores. Advertising tells the public about it. People try it, like it, and shortly it is in general use throughout the country.

By the same means American manufacturers— through advertising—are putting within your reach many of the boons of modern life. Without advertising, we would lack many of the comforts and conveniences that go to make life what it is in this year of grace.

Advertising keeps your information up-to-snuff on every article of human need, whether it be food, clothing, articles of household utility, necessities or luxuries.

Advertisers deserve your support.

SUPPORT THEM.

Lightest running ensilage cutter

Dick's principle of "Knives and elevating fans on fly wheel, makes Blizzards lighest running. Had power to spare" writes C. O. Ogle. "We doubted if our . . . . . . Tractor would pull the Blizzard, but it did —to full capacity, without using all the power."

Prices Down—Big Improvements

All Blizzard models now self-feeding. A new attachment to regulate feeding. Blizzards do most work per H.P. Many in use after 15 and 20 years. Parts of wear all replacgable at small expense. Fill highest silos. Get the big Blizzard circular. Describes also Dick's "Famous" Feed Cutter. Six hand and power models. Standard for 49 years.

THE JOS. DICK MFG. CO. Canton, Ohio
BOX 521

DICK'S
Blizzard
Ensilage Cutter
The New Blizzard 1923

Here's the NEW PADDLE ROLL SELF FEED described in
BIG NEW CIRCULAR
Gladly mailed free. Full particulars on New 1923 Blizzard Models.

WHEN WRITING TO ADVERTISERS PLEASE MENTION THE MICHIGAN BUSINESS FARMER

Current Agricultural News

OTTAWA COUNTY'S POULTRY TOUR TO BE ON JUNE 14

THE second annual poultry tour of Ottawa County will be held on June 14th, starting from Central Park, Holland, at 9 a. m. fast time and going through the thickly populated poultry centers of Holland, Zeeland, Vriesland, Drenthe, Forest Grove, Jamestown, Hudsonville, Borculo and ending at Coopersville. Mr. Foreman, Mr. Ferguson and Dr. Stafseth from the poultry department at M. A. C. will be the main speakers and demonstrators. The tourists will study poultry house construction, equipment, feeding, care, management and selection of breeding stock, culling chicks and hens, diseases and marketing. Basket dinner will be held at the Jamestown Grove.

The tour is put on by the poultry association of Ottawa county, the Ottawa County Farm Bureau and the agricultural agent. Poultry men from all over the state are expected to be present. Last year the tour consisted of over 500 poultrymen and this year should be even better. As Ottawa county poultry industry has a total value of over three million dollars it is an industry that can well be recommended with a tour.—C. P. Milham, County Agr'l. Agent.

QUARANTINE AGAINST RASPBERRY SHIPMENTS

MICHIGAN is one of the leading states in the Union when it comes to producing raspberries, over 10,000 acres being devoted to the crop, with an annual value of around $2,000,000. To keep this industry from having any set-back through disease the State Department of Agriculture has placed a quarantine on shipments of the plants and have also put into effect rules and regulations regarding raspberry inspection and certification. Both went into effect May 31st.

Under the quarantine only raspberry plants that have been inspected and certified in compliance with rules and regulations issued by the State Department of Agriculture can be shipped into the state. Plants being shipped out of this state must be accompanied by an authorized certificate of inspection issued by the State Department of Agriculture. Any person or persons desiring to propogate raspberry plants for sale or shipment must apply for inspection and certification prior to June 15th, 1923, and not later that June 1st, in years thereafter, as long as the quarantine is in force.

The rules and regulations specify that all plantitations from which plants are to be sold, exchanged, transported or shipped must be inspected twice during the summer months. Diseased plants shall be removed at once by the owner in a manner approved by the inspector; each block of plants will be considered separately, and certificate of inspection and permits to ship shall be granted after second inspection, based upon conditions as found at both inspections. These rules and regulations apply to Michigan plantations and to plantations in other states from which shipments are to be made to Michigan.

GOING ON THE SHORTHORN BREEDERS' TOUR?

THE Michigan Shorthorn Breedars' Ass'n. is going to make a three-day tour through Eaton, Branch, Hillsdale and Washtenaw counties, starting June 11 and ending June 13. The members and friends will leave the M. A. C. at 1:30 p. m., central time, and the tour will end up with a visit to Henry Ford's farm at Dearborn on Wednesday. This tour is arranged that Shorthorn Breeders and all others interested in the advancement of agriculture may have an opportunity of visiting many of the best Shorthorn herds in Michigan. It will also afford the pleasure of getting acquainted with a large number of breeders as well as conditions throughout one of the best sections of the state. Accompanying the tour will be J. L. Tormey, American Shorthorn Breeders' Assocation, Chicago; W. E. J. Edwards, Secretary, Michigan Shorthorn Breeders' Ass'n., East Lansing; V. A. Freeman, Live stock Extension specialist, M. A. C.; S. H. Pangborn, President, Michigan Shorthorn Breeders' Association, Bad Axe, and many others. A cordial invitation is extended to all interested. For further partculars, write W. E. J. Edwards, Cecretary, East Lansing, Michigan.

FOURTH ANNUAL U. P. ROUND-UP AUGUST 6 TO 11

PLANS for the fourth annual farmers' Round-Up of the Upper Penninsula of Michigan, to be held at the Chatham Experiment Station, August 6 to 11, are already in progress, and there is every indication that the program this year will be more extensive and more interesting than ever before.

FROM HERE AND THERE IN MICHIGAN

Houghton—500,000 lbs. copper leaving Lake Superior daily by rail. Use of electric power in mines is reducing costs to a minimum. Planning a new post office building. Law Institute gets $1,075,000 Carnegie funds.

Iron Mountain—Contract awarded for construction of 10,000 h. p. hydro-electric plant.

Detroit—Pennsylvania system conpletes new rail line from Toledo. 205,000 workers out of 320,000 are employed in auto plants here. Erection of big traffic tower in Highland Park planned. $40,000 site purchased for big filtration plant. To construct 13 new schools costing $4,382,217. Organization under way for new joint stock land bank. Detroit industries add 1,302 men to payrolls during past week.

Belding—Modern tourist camp being built.

Kalamazoo—Campaign started for $60,000 home for aged.

Holland—Work on $350,000 junior high school well under way. Ottawa Beach-Lake Michigan road contract let.

Saginaw—Board of commerce authorizes $120.000 bonds for new building. Excavation for $35,000 school in Buena Vista township started.

Luther—Exchange Bank installs fire and burglar alarm system.

Grand Haven—Grand Trunk railway will erect 150-ton coal dock. Local light and power plant will spend $75,000 in betterments.

Fremont—Wall-eyed pike being planted in Newago county lakes.

Muskegon—Fifth street paving contract awarded to cost $10,256.

Grand Rapids—Work starts on $300,000 Stuyvesant apartment house.

Chelsea—Heating plant to be installed in Masonic building.

Flint—Flint Weekly Review turns out remarkable tenth anniversary number. Two large new industries to erect plants in local field. To hold $1,735,000 bond election for municipal improvements.

Lansing—House passes bill against taxless bonds. Legislature cuts state building budget $13,000,000; only $5,796,637 allowed.

Windsor—$60,000 issued in building permits establishes new one day record.

Adrian—Ford Motor Co. starts construction of branch factory.

Red Jacket—Village to vote on street light.

Bessemer—11,000 employes of Oliver Iron Mining Company get 10% wage boost. Lake Superior and Van Buskirk road contracts awarded for $68,060.98. Townspeople vote $80,000 bond issue for new city hall.

St. Louis—Board of trade completes plans for town band.

St. Clair—St. Clair County farmers organize cow testing club.

Hancock—Copper Journal reports increasing demand for red metal.

Lowell—New baby cab industry of Ypsilanti Reed Company well under way.

Iron River—Work started on annex to Iron Inn, to cost $17,536.

Monroe—Dansard State Bank moves to handsome new quarters.

Albion—Plans completed to erect 12 buildings at New Starr Commonwealth for Girls at Cedar Lake.

SATURDAY
JUNE 9th,
1923

VOL. X, NO. 21

Being absolutely independent our columns are open for the discussion of any subject pertaining to the farming business.

"How to the line, let the chips fall where they may!"

The Michigan
BUSINESS FARMER

"The Only Farm Magazine Owned and Edited in Michigan"

Published Bi-Weekly
Mt. Clemens, Mich.

TWO YEARS $1

Entered as second-class matter, August 22, 1917, at the post-office at Mt. Clemens, Mich., under act of March 3rd, 1879.

Not More Farmers But-More Business Farmers

Changing Agricultural Conditions Bring New Problems to American Farmers which Can Be Answered only by Improved Business Methods

By WILLIAM D. HURD

THERE is considerable alarm expressed in several quarters because, according to statistics, something like two million people left the farms of the country last year to take up other more gainful occupations. Surprise is expressed that this should be so, and fears for the future of our food supply are evidenced.

Many people in this country have not been aware that this tendency has been constant and in existance for years in a pronounced way. If census statistics are analyzed and proper deductions are made for those living in villages who are not actually engaged in farming, it is probable that not over thirty millions of people live or work on farms, while approximately eighty millions support or try to support themselves in other occupations. This, however, is only the beginning of the story.

In those States usually considered most prosperous, agriculturally, the rural exodus has been very pronounced. During the past decade, farms in Illinois fell off by 14,365, with a decrease in rural population of 3 per cent; in Iowa there are 3604 less farms and 1 per cent less rural population than in 1910, and in Missouri during the same period there was a reduction of 14,200 farms and a consequent lessening of rural population by 5.9 per cent. The size of farms, however, in these States slightly increased.

The situation existing in farming today reflects these conditions. The future of farming in this country is purely an economic question. Young people, better educated than formerly for this vocation, will naturally drift into paying occupations. Farming, generally speaking, is not paying. A recent report of the United States Department of Agriculture shows that in a survey of 6,000 representative farms these farmers received an average return of $917 for the use of an average of $16,400 worth of capital and the labor of themselves and their families in 1922. They received less than 6 per cent on their investment and worked for nothing. Similar or even more discouraging records have been found in thousands of farm-management surveys made by individual States. Compare this with the wages of from $12 to $20 a day, with no investment of capital, being paid to laborers in the building trades and other occupations all over the northern part of the country.

It makes little difference whether the farmer's purchasing power, in terms of his products, is 69 per cent or 102 per cent as compared with 1913, as given by two different government agencies. This is purely a matter of statistical method. The important fundamental thing is the relative deflation of agriculture as compared to other industries. Farm products are being sold below the cost of production, and farmers cannot afford hired labor even though it can be secured. Many farmers have been unable to pay their taxes out of a year's production. Thousands have lost their farms.. The rural exodus will probably continue until a better balance is established.

Business Farming the Answer

There is but one answer and only one way to correct these tendencies. There must be developed a more efficient agriculture. We must get on to a basis of business farming. Secretary Hoover recently stated that many farmers individually, are more efficient than formerly. More of them must become so. There is little in the world agricultural situation which would go to show that prices for staple products will be much in excess of those now being received. Most of the attempts at "quick cures," "short-cut" methods, "artificial temporary relief measures" are proving to be failures. These are now costing the country at large millions of dollars annually. Legislation, laws, and more credit for those who are already producing at a loss are not permanent solutions. Farmers' organizations will help some, but after all each farm must be made into a self-sustaining unit and each farmer a self-supporting, self-respecting individual.

There is no new formula to suggest—just plain "horse sense" applied as never before to practical farm-management problems. Crops must be adapted to soil conditions and available markets; lands unfit for profitable production must either be turned to pastures, or other purposes, improved, or given up; soil acidity and toxic conditions must be corrected. All good and approved farming methods must be applied. Adequate equipment must be provided, but this does not mean on all farms, more expensive machinery. High priced gasoline on average farms may not be more economical than cheap feeds for farm power. Losses each year, amounting to more than 25 per cent of the total farm production, due to preventable insect pests and diseases and other leaks, must be stopped. Unprofitable animals and acres must be discarded. Improved strains of seeds of high producing power, certified when practicable, should be used. Land and labor must be used for the largest production per unit.

Producing Power Must Be Increased

But more than all of these things, the producing power of the soil, (farmer's plant or factory) must not only be maintained but increased. Production costs are first looked to by the successful business man in other lines. Low costs per bushel or per animal, with high yields and high quality, afford the opportunity to sell in competitive markets. The margin above costs of production, which farmers measure as profits (since they do not usually market their own products) along with those other things already mentioned, is to be obtained by the adequate feeding of crops. At least as much plant food must be put back by some method as has been taken out. Land has been the cheapest thing we have had in the past, and soil fertility has been wasted and exloited.

We are rapidly growing away from an agricultural nation toward one leading in industry. An adequate food supply must be produced by fewer people and perhaps on fewer farms and fewer acres. The farmer who neglects to inject into his business and adopt the same principles which those in other lines have long recognized as being necessary to success, is doomed to failure.

The Passing of Dr. Friday, How and Why It Happened

By STANLEY M. POWELL
Lansing Correspondent

"MEN may come and men may, go, but let us hope that M. A. C. will go on forever as the first and best agricultural college in America." Such we believe are the sentiments today of all former students of M. A. C. and the hosts of friends of that splendid institution, as they contemplate the acceptance by the State Board of Agriculture of the resignation of President David Friday.

Shrouded in mystery to a large extent, there appears to be much to excite the curiosity and stimulate comment on the part of the Michigan press and public. While the announcement has been made that Dr. Friday resigned voluntarily, it is generally understood that if he had not done so his resignation would have been requested (or should we say demanded) by the State Board of Agriculture, the governing body of that institution.

A conspiracy of silence seems to prevail as to just what it is all about. One thing seems certain, though, and that is that where there is so much smoke there must be some fire. The State Board of Agriculture is composed of honorable men and women, elected by the people of the State of Michigan. Most of them, by the way, were the choice of the agricultural interests of the state. It is hardly conceivable that sufficient pressure could have been brought to bear upon this body to make them do anything not in harmony with the best interests of the institution.

No one can accuse the State Board of attempting to make any "grand stand play" in their recent attitude and action regarding the presidency change in the administration of the college, and the newspaper comment which has been provoked has been far from complimentary. It is evident that the underlying motive of the Board could have been a desire to win either popularity or cheap publicity.

Considerable unfavorably and seemingly unfair comment has been made upon the action of the Board in holding a so-called "secret meeting" at which Dr. Friday's administration of the college was discussed. It seems strange that it should be regarded as out of the way for the body elected by the people to have control of M. A. C., and specifically charged with the none too pleasant duty of "hiring and firing" the college president, if that body should get together and talk over either formally or informally matters relative to the successes or shortcomings of the president's administration. And most of us, if we were the president under discussion, would not care to be present at such a meeting.

And it further seems evident that the action of Mr. L. Whitney Watkins in standing for the dismissal of Dr. Friday was not prompted by a desire to increase his personal chances for political preferment. Since Mr. Watkins has been appointed by Governor Groesbeck as Commissioner of Agriculture he has shown a desire to support the governor on most important issues. He withdrew his support of the gas tax and after the veto of this measure it is reported that he exerted himself strenuously to secure votes for the governor's pet measure, the Smith weight tax bill.

It is now reported that in standing for the dismissal of Dr. Friday, Mr. Watkins has lost the standing which he has been trying so hard to secure with Governor Groesbeck, in the hope, it is stated, that the Governor would swing the Wayne delegation in case Watkins should run for governor in 1924. So again we come back to the same old place—there must have been some strong reason for getting rid of Dr. Friday just at this time. Various observers have different opinions as to just what issue determined the Board in reaching its decision to ask for the resignation of Dr. Friday.

The theory is advanced by some that Dr. Friday, although undoubtedly a most brilliant man, is not well fitted either by nature or experience to be a college president, certainly not the president of an agricultural college.

Mr. Friday is not an ordinary man. He is a genius, and a genius is a hard man to get along with. No one can co-operate with a genius. A genius does not wish to be troubled with details, or be bored with faculty meetings, such as had been customary at M. A. C. under previous administrations. If a student committee wait upon a genius in his presidential office it is not to be wondered at if occasionally he should lose his temper with their mediocre minds and comparatively embryonic intelligence and usher them out of his presence with ugly and menacing gestures wholly unfitting of the dignity supposed to be possessed by a college president.

And furthermore not even a genius could administer all of the details of the college personally, especially when absent, so much of this nature naturally fell to his assistant, Miss

(Continued on Page 23)

TO OUR CHIEF

EVIL has trampled every honest man;
The darkest hour has come to Michigan.
From coast to coast reproach and scorn are loud,
While honest heads in bitter grief are bowed.
Insulting ignorance snuffs out the light,
And petty politicians show their spite.
Wisdom and virtue from their seats are fled,
And leering insolence controls instead.
Arrows are shot in darkness at the just,
And learning's halls are humbled in the dust.
A slinking pack has driven out our chief
With petty insult that exceeds belief:
What private cause they had the deed to do
They have not said, this hole-and-corner crew.
Who ever heard about his foes before?
With open methods they do fear to fight;
They love the darkness rather than the light.
An able man from office they have driven,
And to the world no reason for it given.
No great man's ever harmed by such a crew:
It is to us apology is due;
No damage to our Friday have they done:
Ours are the faces they have spat upon.
A gentleman and scholar he'll remain—
What is our bitter loss may be his gain.
His fame is high and far the nation's o'er;
Their incest littleness now comes to view;
The microscope reveals their greatness too.
They surely have some claim to Fame's high honor
Against her will who force themselves upon her;
For history they save an obscure name
And win an immortality of shame.

—Clarence Hotson, B. S., M. A.,
Instructor in English at M. A. C.
(Till June 30, 1923.)

Consolidated School Costs

By T. E. JOHNSON
Superintendent of Public Instruction

Here we have the up-to-date consolidated school, located at Grand Blanc, Genesee county.

A BULLETIN entitled, "Facts about Costs of Consolidated Schools in Michigan," has been published by the Department of Public Instruction. It contains a facsmile of a tax receipt of 1922 for each of the thirty-eight consolidated rural agricultural schools, similar data for a few graded districts which are not consolidated schools, and other interesting facts.

The facts and figures of a similar nature given at the foot of this page were obtained from the school superintendent and from the school director's reports of the districts.

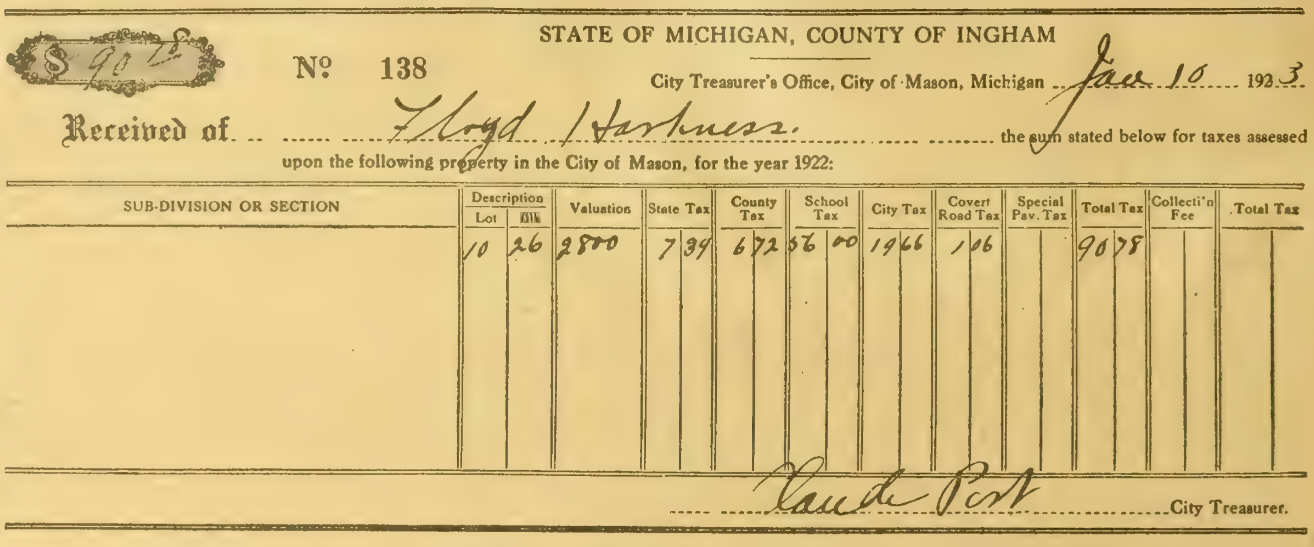
It will be noticed that a comparison is made in each case between an ordinary graded district and a consolidated school district, that is, Suttons Bay is compared with Bear Lake and Mason with Grand Blanc. The assessed valuation, number of children on the census list, number of teachers employed, and types of schools are practically the same at Bear Lake and Suttons Bay. Mason has a larger nonresident enrollment and employs more teachers than Grand Blanc but they are very similar in other respects.

In making comparisons between schools as to costs it is just as essential to take into consideration the size of the district and the character of the courses offered as it is to compare the costs of farm management between farms that are of about the same acreage and that are carrying on practically the same lines of farming. We would not compare the cost of overhead in general running expense of a forty-acre farm with that of a one hundred sixty acre farm but would make our comparison in the case of a forty-acre farm with that of another forty-acre farm and of a one hundred sixty acre farm with that of another one hundred sixty acre farm. So in making comparisons as to school costs we should compare the twelve grade school of a consolidated district with that of a twelve grade school in a graded district. Practically all of the rural agricultural schools have provided for the twelve grade course of study. We should not compare the cost of the one-room, one-teacher, primary school with the cost of the twelve grade consolidated school. In the rural agricultural school they are not only offering twelve grades of work but have a sufficient teaching force to make it unnecessary for any teacher in the grades to have more than two or three grades to teach; they have also specially trained teachers for all of the high school courses including the vocational subjects. Just as it costs more to manage a one hundred sixty acre farm than it does to manage a forty-acre farm, likewise it costs more to maintain a good up-to-date twelve grade school in which vocational education is given special consideration than it does to maintain a one-teacher elementary school for the entire eight grades.

In the second place, in making comparisons there are a few additional factors that should be taken into consideration. Among there would the number of courses offered; the amount and character of the equipment; number of special teachers employed, if any; and whether the plan of organization and course of study is well adapted to the type and use of the school. The small school district should not attempt to provide the variety of courses that are possible in the larger school system. Both in the small graded district and in the ordinary consolidated school, we should avoid duplication of courses and of equipment and adhere quite closely to the essentials. This can readily be done by alternating certain courses; by conserving the teaching force through choosing

(Continued on Page 23)

And here is the old one-room country school, the kind we attended in our boyhood days.



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STATE OF MICHIGAN, COUNTY OF INGHAM

№ 138

City Treasurer's Office, City of Mason, Michigan Jan 10 1923

Received of Floyd Harkness the sum stated below for taxes assessed upon the following property in the City of Mason, for the year 1922:

SUB-DIVISION OR SECTION	Description Lot	Description Blk	Valuation	State Tax	County Tax	School Tax	City Tax	Covert Road Tax	Special Pav. Tax	Total Tax	Collecti'n Fee	Total Tax
	10	26	2800	7 34	6 72	56 00	19 66	1 06		90 78		

Claude Port City Treasurer.

TAX RECEIPTS SHOW COSTS OF CONSOLIDATED SCHOOLS ABOUT SAME AS COSTS OF GRADED SCHOOLS.

Suttons Bay
(Not a consolidated school)

Census	156
Total Enrollment	146
Nonresident pupils	35
No. of teachers	6
No. months school	9
Assessed valuation	$312,000
Total school tax rate, 1922	$16.00

Bear Lake
(A consolidated school)

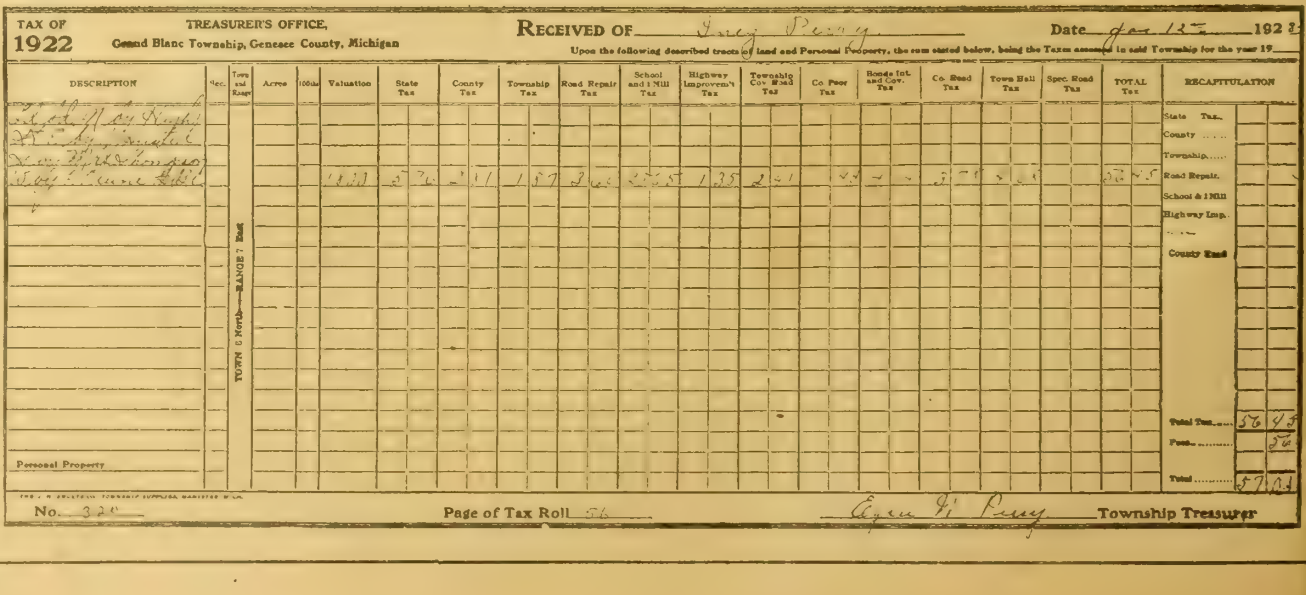
Census	210
Total enrollment	186
Nonresident pupils	24
No. of teachers	7
No. months school	9
Assessed valuation	$420,770
Total school tax rate, 1922	$17.40

Mason
(Not a consolidated school)

Census	484
Total enrollment	505
Nonresident pupils	90
No. of teachers	19
No. months school	9½
Assessed Valuation	$2,512,697
Tax rate for bonds, interest and equipment for 1922	$8.54
Tax rate for maintenance for 1922	$11.46
Total school tax rate, 1922	$20.00

Grand Blanc
(A consolidated school)

Census	450
Total enrollment	430
Nonresident pupils	24
No. of teachers	12
No. months school	9½
Assessed valuation	$2,459,875
Tax rate for bonds, and interest for 1922	$4.07
Tax rate for maintenance for 1922	$10.18
Total school tax rate, 1922	$14.25



TAX OF 1922 TREASURER'S OFFICE, Grand Blanc Township, Genesee County, Michigan

RECEIVED OF Lucy Perry Date Jan 12 1923

Upon the following described tracts of land and Personal Property, the sum stated below, being the Taxes assessed in said Township for the year 19

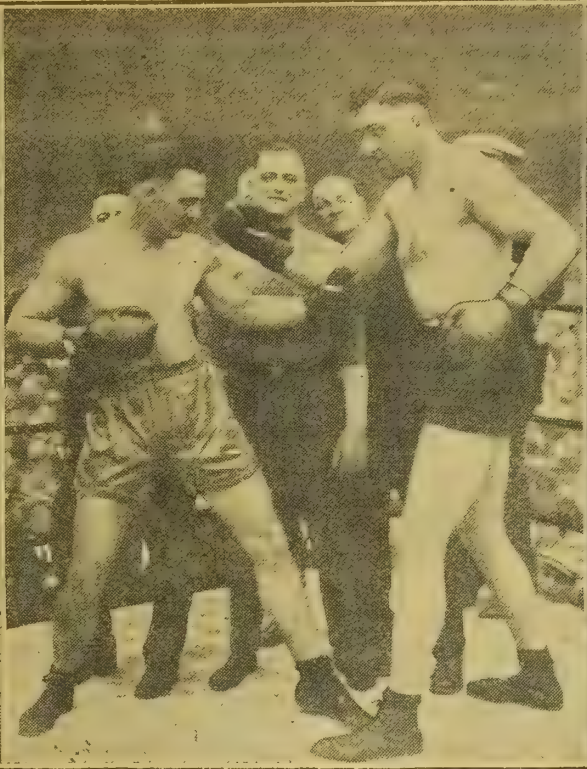
DESCRIPTION	Sec.	Town and Range	Acres	100ths	Valuation	State Tax	County Tax	Township Tax	Road Repair Tax	School and 1 Mill Tax	Highway Improvem't Tax	Township Cov. Road Tax	Co. Poor Tax	Bonds Int. and Cov. Tax	Co. Road Tax	Town Hall Tax	Spec. Road Tax	TOTAL Tax
[illegible]		TOWN 6 North—RANGE 7 East			[illegible]	[illegible]	[illegible]	1 57	[illegible]	[illegible]	1 35	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
Personal Property																		

RECAPITULATION		
State Tax		
County		
Township		
Road Repair		
School & 1 Mill		
Highway Imp.		
County Road		
Total Tax	56	45
Fees		56
Total	57	01

No. 320 Page of Tax Roll 56 Township Treasurer

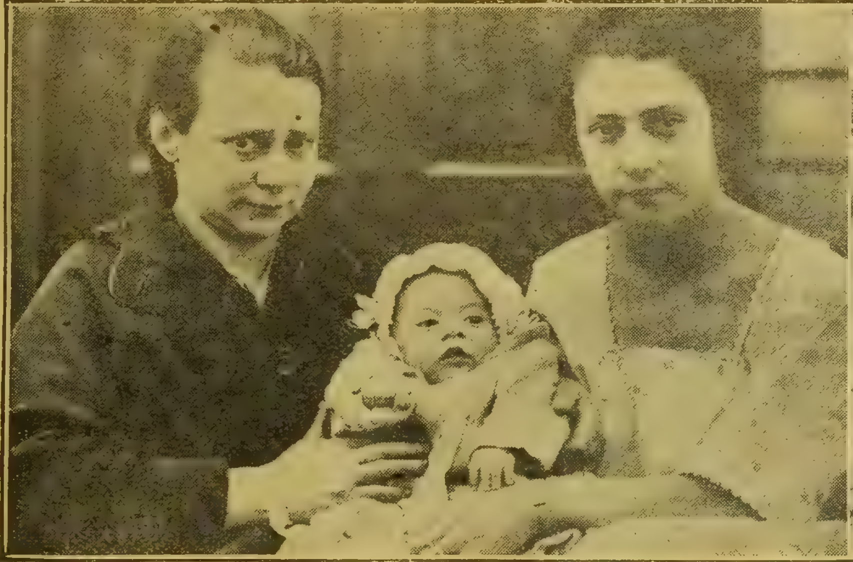
PICTURES FROM FAR AND NEAR

WORLD'S FIRST "WATER" COP.—So much water traffic has ended in a jam that the Police Department has decided to appoint a traffic cop for the wetter areas. Patrolman John A. Corcoran of the Harbor Squad, has been duly installed in a row boat and his eagle eye keeps things going in Newton Creek, Brooklyn, N. Y. We guess it'll be aerial cops next.



JUST BEFORE THE BIG FIGHT.—Floyd Johnson (left) and Jess Willard sparring just before the big battle of the Milk Fund Card. On one side was a speedy comer, a good hitter and a popular fighter, while on the other hand was a former champion and the man who was attempting a comeback. Willard knocked Johnson out in the eleventh round, and the Yankee Stadium rang with shouts and cheers.

A MODERN CINDERELLA.—It is not always that we hear only of sudden fame and fortune in fairy tales. Up to a month ago, Miss Marcelle Miller was selling cigarettes in the Hotel Knickerbocker Grill Room. Her beauty upon being observed, immediately secured her a place in the Ziegfield Follies, where she promises to develop into a successful stage career.



WORLD'S YOUNGEST GRANDMOTHER.—Mrs. Lillian Weitlesbach (left) just 36 years old, living in Cincinnati, Ohio, who claims to hold the world's title as the youngest grandmother. Her husband, also 36 believes himself to be the youngest grandfather. Their daughter Ethel (right) was married when she was 15 years old and at the age of 16 had a son.

IT'S THE DONKEYMOBILE FOR THE MOUNTAINS.—In the mountains of the Balkans, the Lizzie of the region is the donkey. Without it little travel could be done. Here is a little boy going to market, and he is just as cramped and gets just as many bumps as we recall in our many Ford travels.

SITTING A GOOD SADDLE ON THE "JUMPS."—A recent photo of the present ruler of Greece, King George, who is a keen follower of sports of all kinds, especially horseracing.

GIRL WRITER TRIES DEEP SEA DIVING.—Miss Helen Lois. noted newspaper writer, who is probably the first woman to go down under the sea in an outfit.

A NOVEL SIDE SHOW.—A professional trickster view for attention at the recent race meet at Epsom, England. Many of the stunts he executed were unusual and thrilling, and he soon had a large audience.

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ALFALFA ON SAND

I have a field of sand and gravel which I would like to seed to alfalfa. Which is the best, barley or oats to seed with and what shall I do to get a catch?—M. C., St. Johns, Mich.

—Barley is conseeded to be the best companion crop for alfalfa, since the barley plant takes much less moisture from the soil than oats. For best results with the alfalfa seeding, one bushel of barley per acre should be used rather than a heavier seeding. In order to get a catch with alfalfa it is important that northern grown seed or Michigan grown seed be used, preferably the Grimm.

On sandy soil in your region, lime is usually necessary, using two tons per acre of finely pround limestone. I wound suggest that you send a sample of your soil to the Soils Department, M. A. C., Lansing, for lime determination.

Planting should be made in April or early May, using twelve pounds of seed per acre, planting on a firm seed bed. The alfalfa seed should be allowed to go before the drill so as not to be covered to a depth of more than one-half to three-quarters of an inch.

Culture for inoculation may be secured from the Department of Bacteriology of the Michigan Agricultural College, E. Lansing. The price is 25c per bottle and one bottle contains sufficient material to inoculate a bushel of seed. Directions for application accompany the material.—J. F. Cox, Professor of Farm Crops, M. A. C.

IS PROPERTY EXEMPT?

I understand that a widow is exempt from taxes up to $1,000 on the home in which she lives. Is this so, or have I been misinformed. I have not paid the taxes for this year altho I have received notice to do so. What shall I do about it and whom should I see?—A Reader, Lyons, Mich.

—Compiled Laws of Michigan, 1915, Sec. 4001 provides that the following real estate shall be exempt from the payment of taxes: All real estate to the value of $1,000 owned and used as a homestead by the widow of any U. S. soldier or sailor who served three months or more in the Civil Mexican or Spanish American war. Such exemption would not apply to persons owning taxable property with a value of $3,000 or more.

To obtain the advantages of this exemption you should file affidavit with the township or county treasurer setting forth all the facts upon which you base your claim for exemption.—Asst. Legal Editor.

NO RIGHT TO SHOOT DOG

I am a reader of the M. B. F. and would like to know if one man has a right to shoot another man's dog if he gets out and comes on this man's land at night where he has dead stock lying?—A. K., Hart, Michigan.

—A man does not have the right to shoot another man's dog because he is trespassing on his property.—Asst. Legal Editor.

CISTERN WILL NOT HOLD WATER

I have a question I would like to have answered. I have a cement cistern, about a six inch wall, it will not hold water. It isn't cracked but steep through all over. Would like to know what I can do with it.—G. M., Hale, Michigan.

—I may say that this cistern may probably be improved by plastering and washing with a cement wash. I would suggest first cleaning the surface of the walls with a solution of one part muriatic or hydro-cloric acid to ten parts water to remove all dirt which may accumulate on the walls, after which they are thoroughly washed with water. A plaster is then mixed up of one part cement to two parts sand with about one pound of lime to each ten pounds of cement, this is plastered on the walls with a steel trowel and allowed to set for a day or two. A mixture of cement and water is then made up to about the consistency of thick cream, one or more coats of this is then applied to the surface of the plaster. If more than one coat is applied the first coat should be allowed to set before the second is applied, etc. This should render the cistern impervious to water.—H. H. Musselman, Professor of Farm Mechanics, M. A. C.

MUST GET LICENSE

Please inform us as to whether or not a person is required to get a license to peddle his own products in his county-seat town or a town outside the county in which he lives. —O. G. B., Fife Lake, Michgian.

—You would be required to obtain a license from the state treasurer to peddle your product: As to whether your county-seat town or other town would require an additional license, you should consult your prosecuting attorney, or village council.—Asst. Legal Editor.

PAYING HUSBAND'S DEBTS

Would like to know if husband and wife have joint deed, and husband should die, if wife would have to pay his debts? Could any one come and take personal property for a note eighteen years old, the party holding note claiming it had been renewed in last two years or could they put in a claim if wife should have public sale?—Mrs. O. S., Remus, Michigan.

—Upon the death of the husband, his estate is charged with the payment of his debts. The debts must be paid before the wife or other heirs are entitled to any of the estate, except the wife's dower or homestead right, which is not subject to the payment of his debts. Any land which the wife receives as survivor of her husband under a joint deed could not be taken for the payment of his debts.

If the note has been renewed within the last two years, the maker could not avoid his liability on the ground that it is 18 years old. But if it has not been renewed, he would not be liable.—Asst. Legal Editor.

RIGHT TO WATCH

I am writing you to know if there is any way of getting my watch back from a jewelryman when bought and paid for, then taken back for repair. I bought a watch last year in June from a jewelry store in Evart. After using it a few days it failed to run and I took it back for repairs. They claimed they were getting the repairs till about the first of January when the Evart Savings Bank closed their doors on a mortgage, but the goods are still there. Have they any right to hold it all this time? If you can help me get the watch I would like for you to do so.—D. B., Evart, Mich.

—The jewelryman has no title or interest in the watch, over which his creditors would have any control. He is merely a bailee of the property for the purpose of making repairs. Both the title and right of possession remain in you as against his creditors, and you, as bailor, could bring an action of replevin against the bank to recover the possession of your watch, after first making a demand upon them.—Asst. Legal Editor.

ATTACK ON HIGHWAY DEPARTMENT

In issue of April 28 you invited anyone to report unwarranted expenditures by state highway department. On the north end of trunk line No. 14, in T. 25 N. of range 7 W. or Garfield township, Kalkaska county, there is a prospected piece of work that any fair minded investigating committee ought to condem. Especially that part between section 8 and 9 in said township. This line runs for 8 or 10 miles through plains where no one lives. The only benefit will be to the tourists. There is an abandoned railroad grade paralelling this route for a number of miles which has not hills or bad swamps. While the route as surveyed has both.—I. G., Fife Lake.

—As you know, the Governor's veto message on the gas tax, which you no doubt read in the daily press, contained an attack on the State Highway Department. Rep. Evans who is regarded as very friendly to the Highway Department promptly introduced in the House a resolution calling for a thorough investigation of this department by a joint legislative committee. The rules were suspended and the resolution placed upon its immediate passage in the House and then sent to the Senate where a similar action was taken.

However, on the following day Senator Burney Brower, of Jackson, the Governor's recognized spokesman in the senate, moved that this action be reconsidered and that the resolution be referred to a committee. This was done and the resolution was never heard from again. The excuse given for such an action was that the resolution merely provided for an investigation of the people in the Highway Department and did not provide for the calling in of outside witnesses. It was felt that under such conditions the investigation would be more or less of a farce and that it could only result in a whitewashing of the department under investigation. In 1921 the State Administrative Board carried out quite a thorought investigation of this department and their report was that conditions were quite satisfactory.—Stanley M. Powell, M. S. Farm Bureau.

CAN COLLECT AMOUNT OF NOTE

Twelve years ago I backed a man's note for $100 which he neglected to pay. He worked for me which amounted to $25.00, which I payed on the note. But since there is $5.75 back interest which has been added on the note. The note now is $80.75 at 7 per cent interest. I got a new note Dec. 29, 1922. The new note reads that beginning Feb. 15, 1923, he is to pay me $10 semimonthly until it is payed. This man has worked at Ford's factory for three years, and pays no attention to the note. In the meantime he received $1,000 from his father's estate and he promised to pay it then, but didn't. The man the money was borrowed from refused to carry him any longer and the new note is drawn up to me and I had to give my note to the man the money was borrowed from first. Can this be collected and how much will it cost?—M. D., Bad Axe, Mich.

—From the facts you have given, I see no reason why you could not collect the amount of your note. If it is placed in the hands of some Detroit attorney for collection, I think he could get results for you—Asst. Legal Editor.

MUST HAVE BOTH SIGNATURES

Where a brother and sister hold a joint deed on property—the brother holding the deed lives in Ohio, the sister in Michigan, where the property is located. How is she to proceed to obtain the deed to sell the property? Both parties are willing to sell.—Mrs. C. F., Augusta, Mich.

—Both your signatures on the deed would be sufficient to convey the title, provided the deed was valid in every other respect. Merely have your brother execute the deed, sign it, and send it to you for your signature.—Asst. Legal Editor.

JUNE

TIS the glorious month of June;
Old Mother Earth is all in tune,
And we, the love of God, can tarce
In every smiling flower face.

The blue above, the green beneath,
Roses galore to make a wreath.
Velvet and red, yellow and white,
Others so pink, fragrant delight.

Pansies profuse, of the richest hue,
And every shade, wet with the dew.
Their faces shine with beauty true
Message devine from God to you.

Bevies of birds from leafy trees,
Gladden the earth and swell the breeze,
With music sweet and full of love
And thankfulness to God above.

'Tis the wonderful month of June,
Old Mother Earth is all in tune,
And we, the love of God discern
In fragrant flowers and lacy fern.

—Written for the Business Farmer by Mrs. Bessie O. Roberts.

DEFINITIONS

Waiter (serving soup): "Looks like rain, sir.

Guest (with scorn): "Yes, and tastes like dishwater."—Selected.

The Improved Binder of Today Soon Pays for Itself By What It Saves

Every year the old binder falls off a bit more in efficiency. The owner hardly realizes the gradual decline. Finally comes a time when the risk is too great. Poor cutting, faulty binding, clogged elevators, heavy draft, delays, emergency repairs, lost bushels and loss of temper—these are incidents of the harvest with a worn-out binder.

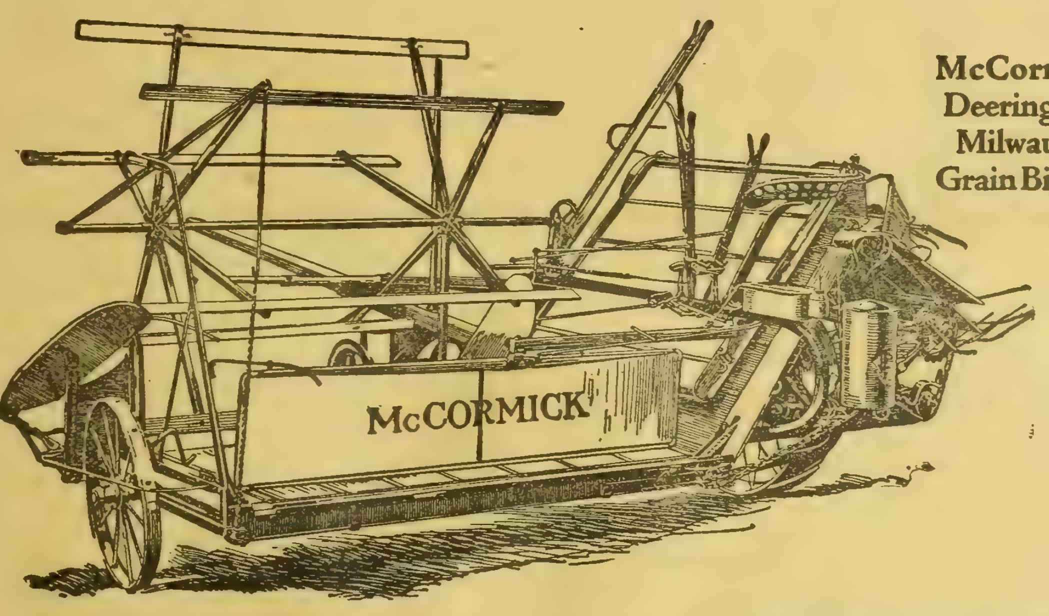
In the meantime the new McCormick, Deering or Milwaukee binder goes into neighboring fields and surprises and pleases its owners in a hundred different details. If you haven't seen the perfected binder of 1923 you can't realize what a vastly improved harvester it is. You will find it a marvel of skill and good workmanship, simpler, better made, easier to handle and ready for many years of good service.

Harvest is the critical time when all your plans and labors come to a head; go at it with trustworthy equipment. Will your binder stand the test this season? If any doubt is in your mind, invest in the crop-saving machine sold by your McCormick-Deering dealer. Look the binder over in detail at his store.

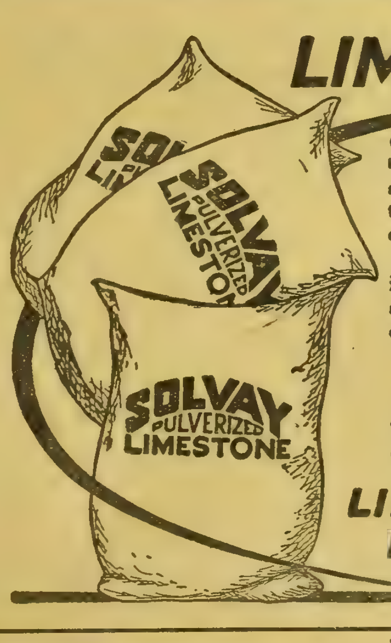
INTERNATIONAL HARVESTER COMPANY
OF AMERICA
(INCORPORATED)
606 So. Michigan Ave. Chicago, Ill.

These are a few of the strong points in the construction of the present *McCormick, Deering and Milwaukee Grain Binders:*
Better construction • Improved bearings • Lighter draft
Outside reel support • Grain-saving floating elevator
Durable woven straps for canvases • Improved bundle carrier
Tongue truck for steadying and carrying loads

Safeguard the harvest by the use of strictly high-grade twine—McCormick, Deering, International—made now in the famous "Big Ball" winding in which 6 balls do the work of 10 of the old style. Balls are of the old size but have 66% more footage. Arrange for delivery before harvest time.



McCormick, Deering *and* Milwaukee Grain Binders



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SOLVAY brings better, greater crops the first harvest. SOLVAY makes sour soil sweet and releases all fertility the land contains to hasten growing crops to full maturity.

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Every farmer should read the Solvay Booklet on Liming —sent FREE on request.

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Sales Agent, WING & EVANS, Inc., Detroit, Mich.

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See what a bargain we offer in this men's excellent tan grain leather Scout Shoe. Built with solid grain leather insoles and genuine oak leather outsoles. Wonderfully comfortable and really an astounding value.

No. 0966. Sizes 6 to 12. Price..........$1.93
Same model as above in Boys' sizes 1 to 5½. Price..........$1.83
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ACT QUICK! Don't put off sending. Order while stock lasts. No money—just give name, address, number of shoe and size wanted. Pay only our smashed bargain price and postage on arrival. Try shoes on. If not satisfied, return them and we refund your money instantly.

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Farming pays in Maryland and good farm land is still available at reasonable prices. Our catalog of farms and country estates will interest you. Sent free. Address Dept. G.

CHAS. H. STEFFEY, Inc.
336 N. Charles Street Baltimore, Md.

Suppose a Jury Gave a Verdict of $5,000 Against You?

That is a chance you take every time your automobile goes out on the road. Such a verdict means a judgement against you and unless the judgement is satisfied they can seize and sell anything you own, house, barn, horses, cattle, land, or anything you have.

In Detroit in the month of April eighteen people were killed by automobiles. Only in five cases, according to the police records, was the automobile driver to blame. In eighteen cases the investigation showed as follows:

Walking into side of autos	3
Running into street from behind parked cars,	2
Running from curb into path of autos	5
Attempting to hitch on to moving autos	2
Riding bicycle from private driveways into path of autos	1
Speeding at intersections	1
Not under control	4

In thirteen cases the blame was on the pedestrian and in only five cases was the automobile driver at fault and yet in every case it brings trouble and annoyance. With the congestion of traffic in all parts of the state, the wise man will keep his car insured and allow the company to investigate and determine which claims should be paid and which ones restricted. That is the reason of the growth in automobile insurance.

FINANCIAL STATEMENT
At Close of Business, April 30th, 1923

Total cash assets	$225,412.20
Total assets, including office site and building, etc.	275,102.69

With the state wide organization of adjusters, agents and attorneys to give you service you should insure today for tomorrow may be too late.

See local agents or write, giving the name of your car, to the

CITIZEN'S MUTUAL
AUTOMOBILE INSURANCE COMPANY
Howell, Michigan

UNCLE RUBE SPINACH SAYS

ARE OUR YOUNG FOLKS FOOLISH?

NOW it's long distance dancin'—dancin' jest to see how long a couple can keep goin'. A few years ago it wuz bicycle ridin'—six days at a time. Nothin' ever comes of it 'ceptin' somebody gits mentioned in the papers—mebbe gits their pictur' into the paper. Prize fightin' is foolish, brutal an' demoralizin' but some times brings a lot of money—'course money aint everything but it's handy to have around now and then—even money though, in too large quant'ties is debasin' lots of times. But dancin' jest to see how long one can stand up an' do it is darfoolishness.

Now fer instance, jest take the young girls an' young women 'at try this sort o' thing—ask one of 'em to tend baby fer mother 36 hours—ask one of 'em to wash dishes 52 hours, or to stand over a wash tub 5 hours, in fact ask 'em to do anything to help mother fer just one hour every day an' see what these marathoners would say.

Why don't cha' know they'd fall dead, purty nigh. They are lookin' for newspaper noteriety—nothin' else. Girls'll put on bathin' suits an' lay in snow banks to have their pictures took fer the papers—have done it an'll do it agin'—They'll walk the streets. if allowed, half clothed, jest for noteriety. I'm not sayin' young men—the little nickle-mustached fellers won't do the same thing. They will an' do do it—they don't amount to much anyhow—but our girls—our mothers-to-be! Well now ain't it jest an awful thing for them to be so foolish? Think of dancin' 92 hours jest to get her name into the papers? Nobody is benefited by it. No good has been accomplished—ain't it so? If our young women want their names printed in the papers—yes an' their pictur's too, let 'em git a reputation of bein' a homemaker, a good cook, one 'at knows how to help mother with her house work, a real she woman 'at expects sometime to be a wife an' mother an' feels cap'ble of undertakin' the job of carryin' it through.

Instead of goin' out an' tryin' to dance ninety or a hundred hours at a time let the dear little dames try helpin' mother 48 or 60 hours a week, 'stead of these little spirts of endurance once in a while, let her go to mother 'an say—"Mom'sy you have been a good mother to me all my life for 18 years"—or what ever the number of years,—"you've taken care of me without grumblin' or fault findin'—Mom'sy dear, I appreciate this an' from now on I want to show you that I am your willin' little girl, willin' to help you in every way I can. Teach me mother dear, to be as good a housekeeper as you have always been, teach me to be a homemaker an' a home lover. An' mother teach me an' tell me of mother love an' let me be your little girl for a while—jest the best little girl you ever had."

When our girls git this spirit there will be no more marathon dancers 'cause no he dancin' lizard'll dance 'thout a girl to dance with.

I am not worryin' a bit 'bout our farmer girls bein' marathon dancers as long as they stay on the farm. They make the best wives an' mothers in all the world. But they as well as the young men have heard the call of the city—when they mix with the city life—well what then? Will they be just as fine an' splendid? Some of 'em are, many are not—what will the harvest be?—Cordially yours, UNCLE RUBE.

THE NARROW WAY

"I don't see how you manage to live within your income, Jones. Aren't you cramped?"

"Cramped is no name for it! I have to go out and borrow five dollars every time I want to stretch."—Wayside Tales.

LOOKED IT

A washerwoman applied to a man for work, and he gave her a note to the manager of a certain club. It read as follows:

"Dear Mr. X: This woman wants washing."

Shortly after the answer came back: "Dear Sir: I dare say she does; but I don't fancy the job."

GET THE MONEY—AND SAVE IT

"Every man ought to save up enough money to buy a farm and get back to the land," shouted the orator with a mission.

"Yes, and then do something else with the money," remarked a sad-faced farmer in the audience.—Orchard and Farm.

Save Your Thresh Bill

by insisting that your grain shall be threshed by a Red River Special.

It beats out the grain when other makes depend upon its falling out. It separates by force and for that reason wastes less.

It has the Big Cylinder, the "Man Behind the Gun," the Beating Shakers and the Graduated Adjustable Chaffer, a combination found in no other machine.

It will thresh and do good work when conditions are bad and other makes have to stand idle.

Red River Special

is correctly designed and is built right.

It will run many years steadily without break-downs, always doing the most and the best of work.

Built in both wood and steel. A size for every need.

Roller Bearings on Cylinder and Wind Stacker shafts make it run easily.

It saves enough more of your time and grain to pay your Thresh Bill.

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Even if you are not in the market for an engine right at this moment, the book is worth sending for now. Get it and read it twice over. Use the coupon now, and mail it next time the R.F.D. man comes by.

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Please write plainly and mail this under a two-cent stamp.

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I will read your Power on the Farm book, if you send it free.

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THE MARK OF BLOOD

A SERMON BY REV. DAVID F. WARNER

TEXT: Genesis 4:15b. "And the Lord set a mark upon Cain, lest any finding him should kill him." (A.V.)

MEMORIAL Day is over. All honor to the "blue and the grey;" hats off to our brave boys in khaki; and hearts humbled at the graves of our fallen heroes. Notwithstanding, the mark of blood is upon us.

A past issue of the Literary Digest has a comment on "The Trail of the Painted Posts." This is a row of painted posts set up from the line of attack to the rear, to help the wounded soldier back to refuge and mercy. It is literally a trail of blood.

Were one asked to indicate the course of this world, one could figuratively and litterally call it a trail of blood. It has been reckoned, that in the Christian era there have been two hundred and twenty seven years of peace. Does it not appear, therefore, that bloodshed has been the chief business of man? The fondness of man to memorialize the heroes of bloodshed has been seen in the establishing of commemorative days and monuments. As the heart of the world rambles back over past centuries, it must lament that they have been so filled with blood, and pain, and sin. But, also, they stand as ever ready reminders of needed redemption. This is the two-fold mark of blood.

Note the story of Cain in Genesis, the fourth chapter. The first scene is in verse eight and leaves the hands of Cain reeking with blood—his brother's blood. But, said Jesus, "he that hateth his brother is no less a murderer." The second scene is one of remorse—remorse of conscience. The mark of his brother's blood is upon him and it cries out for vengeance. He becomes a vagabond on the earth trailed by his brother's blood. Now, therefore, brother, "Leave there thy gift before the altar, and go thy way, first be reconciled to thy brother, and then come and offer thy gift," said Jesus.

In the third scene we find Cain having a sign appointed for him (mark set upon him). This is a severe reminder of the blood that cries out for vengeance, but also, and better, a mark of redemption. Even after Cain was guilty of this foul sin, God renews his covenant with him and assures him of protection. And this is always the mercy of our Father thru Jesus Christ the Divine Reconciler.

And what was Cain to do? Why, he was to keep his brother, not kill him (hate him). And though he had sinned, through the renewal of the covenant his calling was not changed. He was yet to go out as the redeemer of men. Of course, sin couched at his door, but God said: "Do thou rule over it." That is, "Bring your sin-offering and save your brother." O, man, no matter how many and unsightly be your marks of sin, bring your sin-offering in a surrendered will and know the joy of salvation and brotherhood.

But what did Cain do? He "went out from the presence of Jehovah and dwelt in the land of Nod?" His conscience made him a coward and an outcast in the sight of God, and he sought to soothe it in money getting and self-indulgence. How like the present age! But is it like you?

Now, all the political world has followed Cain into the field of slaughter. The latent, savage instinct of humanity, first seen in Cain was released yesterday on a wide and horrible scale. And, today, a blood vengeance is upon us. We are informed that the nations are preparing to bring in the god of war to "bestride the narrow world like a colossus." No matter how many Rachels weeping for their little ones, and their sons and husbands; and no matter what the cost in pain and anguish, the destiny of nations would be decided by blood. Yet, has not the history of nations in the past been written in the red blood of their sons? But also, was not the Kingdom of righteousness founded "in the Blood?" So, therefore, is the sacrifice of your life blood in service in this impressive and critical time, too great a price to pay for the establishment of Christ's Kingdom in the earth?

For, the world has followed Cain "into the land of Nod," into the land of city-building, with its trade, its art, and its adultery. "A greater Pittsburgh," "A new Chicago,"- "Dominant Dayton;" these with their thousands of factories, numerous banks and trust companies; but these with their empty pews, war preachers, prayerless Christians, and stench of adultery, have gone to live in the "land of Nod." To day this world is baptized in the spirit of industry and commerce, of pleasure and selfishness. She is bent, primarily, on building cities and establishing art and culture, and Cain is a prominent leader. Where are you living? Who is your leader?

All the world has followed Cain "away from the presence of Jehovah," leaving it yet unChristian in large part and worshiping man and his achievments. Even as I write we are beginning to draw the sword of a militant democracy from its scabbard again and to sheathe the sword of peace. The mark of blood is upon us. But this is not the wail of a pessimist. Personally, I am joyously optimistic. And when will the olive branch of peace be propagated in our land? I don't know. It may be remote. But Faith yet proclaims the Lord is in his holy temple. Let all the earth keep silent and expectant, "expecting till his eremies be made the footstool of his feet."

We shall now listen to the Blood that speaketh better than that of Abel," (Hebrews 12:24). This is the Blood that calls us back from the field of carnage to set up a Kingdom not of this world; back from the "land of Nod" where rules the spirit of man to the realm where rules the spirit of God; that call us out of the carnal world into the "presence of Jehovah."

Cain says: "Kill your fellowmen," but the Blood of Jesus says, "Love them." If our enemies art to be conquered, it must be by bleeding hearts rather than bloody swords. And Sherwood Eddy writes just this is going on now in India under the leadership of Gandhi, who now lies silent and lonesome in the enemy's prison. When will we in America believe that it is time to non-cooperate with evil and pay the extreme sacrifice for the good? Surely, it is the business of the church today to feed, and heal, and brother our erring world. The church has been humiliated in permitting the world war and it will be to her increasing shame if she permits another. Her supreme law is that of love.

Again, the Blood says: The church must return from the "Nod" to its unique and divine mission of preparing for a reign of Gospel peace. No ostensiable pleas for national honor and justice can change her mission. It is her solemn duty now, to strike hard to bring in that newer, brighter Kingdom that is not of this world. She must rise her ideals, float the banner of pease, and establish the authority of the Spirit and not of the sword, lest she become a disappointment both to her Head and to the world, whose spiritual hunger is daily increasing and must look to her for a filling.

At any cost the church must pay the price in priestly function of bearing the world back into the presence of Jehovah, its Invisible King.

Book Review

(Books reviewed under this heading may be secured through The Michigan Business Farmer, and will be promptly shipped by parcel post on receipt of publisher's price stated.)

"Making Yourself" by Orison Swett Marden, author of "Round Pegs in Square Holes," etc. viii-320 pages, 12 mo, cloth.

Again has Dr. Marden a congenial topic, in this new pronouncement on personal training. He believes and has constantly advocated that the secret of success lies within the individual himself—that nothing can keep back the person who is determined to succeed and who fits himself for success. "Making Yourself" is a direct challenge to every ambitious person to realize to the full his God-given attributes. ($1.75) Thomas Y. Crowell Company.

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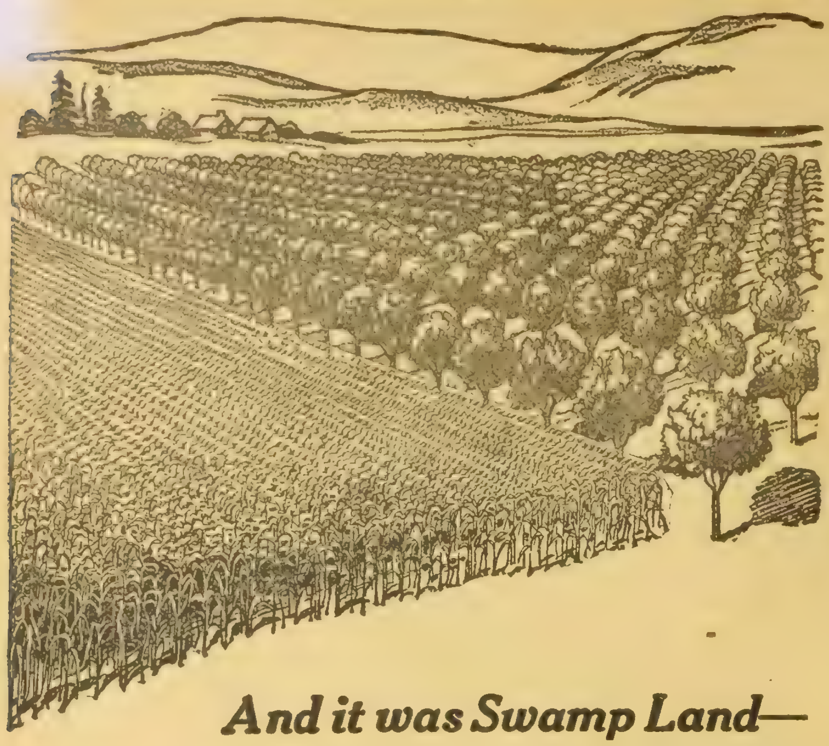

And it was Swamp Land—

MANY farms in this state are getting big crops this year from acreage that was waste swamp land. Reclaim *your* swamp land this season.

Ditching the du Pont way is a quick, out-of-season job that is inexpensive and pays big dividends. Du Pont 50% or 60% low-freezing straight dynamite is the explosive to use. Ask your dealer.

Our 100-page "Farmers' Handbook of Explosives" will give you complete information on ditching, land-clearing and tree-planting with dynamite. A copy is yours, free for the asking.

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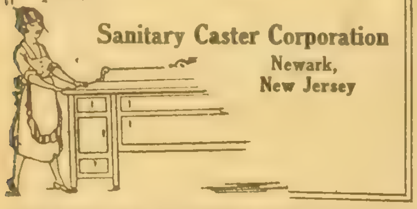

"Self Moving Furniture" would be a boon to the housewife who every day is shifting furniture in some room.

GLIDE EASY CUP CASTERS

ease the labor of moving furniture.

They also save your floors and rugs.

Avoid scratching floor surfaces, don't mar the beauty of your floors.

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The Hunted Woman

By James Oliver Curwood

Michigan's Own and America's Formost Author of the Great Northwest

(Copyright by James Oliver Curwood

(Continued from May 26 issue)

HE began pacing back and forth in his room clouding himself in the smoke of his pipe. Frequently Joanne's mind had filled him with an exquisite delight by its quickness and at times almost magic perceptiveness, and he realized that in these things, and the fineness of her woman's intution, now lay his greatest menace. He was sure that she understood the meaning of the assault upon her that night, though she had apparently believed what he and Blackton had told them—that it had been the attack of irresponsible and drunken hoodlums. Yet he was certain that she had already guessed that Quade had been responsible.

He went to bed, dreading what questions and new developments the morning might bring forth. And when morning came, he was both amazed and delighted. The near tragedy of the previous night might never have happened in so far as he could judge from Joanne's appearance. When she came out of her room to meet him, in the glow of a hall lamp, her eyes were like stars, and the colour in her cheeks was like that of a rose fresh from its slumber in dew.

"I'm so happy, and what happened last night seems so like a bad dream," she whispered, as he held her close to him for a few minutes before descending the stairs. "I shall worry about Peggy, John. I shall. I don't understand how her husband dares to bring her among savages like these. You wouldn't leave me among them, would you?" And as she asked the question, and his lips pressed hers, John Aldous still believed that in her heart she knew the truth of that night attack.

If she did know, she kept her secret from him all that day. They left Tete Jaune before sunrise with an outfit which MacDonald had cut down to six horses. Its smallness roused Joanne's question, for Aldous had described to her an outfit of twenty horses. He explained that a large outfit made travel much more difficult and slow, but he did not tell her that with six horses instead of twenty they could travel less conspicuously, more easily conceal themselves from enemies, and, if necessary, make quick flight or swift pursuit.

They stopped to camp for the night in a little basin that drew from Joanne an exclamation of joy and wonder. They had reached the upper timber-line, and on three sides the basin was shut in by treeless and brush-naked walls of the mountains. In the centre of the dip was a lake fed by a tiny stream that fell in a series of ribbonlike cataracts a sheer thousand feet from the snow-peaks that towered above them. Small, parklike clumps of spruce dotted the minature valley; over it hung a sky as blue as epphire and under their feet was a carpet of soft grass sprayed with little blue forget-me-nots and wild asters.

"I have never seen anything a half so beautiful as this!" cried Joanne, as Aldous helped her from her horse.

As her feet touched the ground she gave a little cry and hung limply in his arms.

"I'm lame—lame for life!" she laughed in mock humour. "John, I can't stand. I really can't!"

Old Donald was chuckling in his beard as he came up.

"You ain't nearly so lame as you'll be to-morrow," he comforted her. "An' you won't be nearly so lame tomorrow as you'll be next day. Then you'll begin to get used to it, Mis' Joanne."

"Mrs. Aldous, Donald," she corrected sweetly. "Or—just Joanne."

At that Aldous found himself holding her so closely that she gave a little gasp.

"Please don't," she expostulated. "Your arms are terribly strong, John!"

MacDonald had turned away, still chuckling, and began to unpack. Joanne looked behind her, then quickly held up her softly pouted lips. Aldous kissed her, and would have kissed her again but she slipped suddenly from his arms and going to Pinto began to untie a dishpan that was fastened to the top of his pack.

"Get to work, John Aldous!" she commanded.

MacDonald had camped before in the basin, and there were tepee poles ready cut, as light and dry as matchwood. Joanne watched them as they put up the tent, and when it was done, and she looked inside, she cried delightedly:

"It's the snuggest little home I ever had, John!"

After that she busied herself in a way that was a constantly growing pleasure to him. She took possession at once of pots and pans and kettles. She lost no time in impressing upon both Aldous and MacDonald the fact that while she was their docile follower on the trail she was to be at the head of affairs in camp. While they were straightening out the outfit, hobbling the horses, and building a fire, she rummaged through the panniers and took stock of their provisions. She bossed old Donald in a manner that made him fairly glow with pleasure. She bared her white arms to the elbows and made biscuits for the "reflector" instead of bannock, while Aldous brought water from the lake, and MacDonald cut wood. Her cheeks were aflame. Her eyes were laughing, joyous and happy. MacDonald seemed years younger. He obeyed her like a boy, and once Aldous caught him looking at her in a way that set him thinking again of those days years and years ago, and of other camps, and of another woman—like Joanne.

MacDonald had thought of this first camp—and there were porterhouse steaks for supper, which he had brought packed in a kettle of ice. When they sat down to the meal, Joanne was facing a distant snow-capped ridge that cut the skyline, and the last of the sun, reflected from the face of the mountain on the east, had set brown and gold fires aglow in her hair. They were partly through when her eyes rested on the distant snow-ridge. Aldous saw her looking steadily. Suddenly she pointed beyond him.

"I see something moving over the snow on that mountain!" she cried excitedly. "It is hurrying toward the summit—just under the skyline! What is it?"

Aldous and MacDonald looked toward the ridge. Fully a mile away, almost even with the skyline now, a small dark object was moving over the white surface of the snow.

"It ain't a goat," said MacDonald, "because a goat is white, and we couldn't see it on the snow. It ain't a sheep, 'cause it's too dark, an' movin' too slow. It must be a bear, but why in the name o' sin a bear would be that high, I don't know!"

He jumped up and ran for his telescope.

"A grizzly," whispered Joanne tensely. "Would it be a grizzly, John?"

"Possibly,' he answered. "Indeed, it's very likely. This is a grizzley country. If we hurry you can get a look at him through the telescope."

MacDonald was already studying the object through his long glass when they joined him.

"It's a bear," he said.

"Please—please let me look at him," begged Joanne.

The dark object was now almost on the skyline. Half a minute more and it would pass over and out of sight. MacDonald still held his eye to the telescope, as though he had not heard Joanne. Not until the moving object had crossed the skyline, and had disappeared, did he reply to her.

"The light's bad an' you couldn't have made him out very well," he said. "We'll show you plenty o' Grizzlies, an' so near you won't want a telescope. Eh, Johnny?"

As he looked at Aldous there was a strange look in his eyes, and during the supper he was restless, and ate hurriedly. When he had finished he rose and picked up his long rifle.

(Continued June 23rd issue)

CHANGING TIMES

By JOHN T. BARTLETT

APPLE COLORS OF YESTERDAY

WHEN industrial America began to develop, and with it big cities, and big bodies of population widely divorced from the farm, then an element took on growing importance in the marketing of farm products. That element was appearance. In New York State, you can find, within twenty-five miles, families who would reluctantly accept the gift of Ben Davis apples, and families who, in the market, would invariably pick the same apple first. Appearance partly explains, undoubtedly, interesting happenings in apple history.

The past fifty years has witnessed the introduction of many new apple varieties. Through tests, both production and marketing, many have been eliminated, some have staid. Note, however, what powerful influences apples predominantly of a certain color—red—have had in their favor.

For the mass of people, there can be no argument—red is the peerless apple color. Back in the days when America was largely rural, appearance was of far less importance in determining an apple's popularity. Then two other colors had equal eminence with red—russet, and green. Those colors were associated with mighty valuable qualities in apples. There was no cider like Russet cider—no apples to keep into the spring like Russets. Today, you can find people readily who never tasted a Russet apple in their lives, possibly even never saw one.

Color has a great deal to do, unquestionably, with this condition. Red apples appeal most to the eye. They sell most readily in the market, other things being equal. In the war for survival with them, russet, green, yellow apples, all have a stiff handicap at the start.

The proportion of red apples going to market—this is a prediction—will be greater twenty-five years from now. Salability is a big virtue in an apple, and a popular color contributes much to it.

A RIP VAN WINKLE VISIT TO COUNTRY STORES

THERE are two things which Rip Van Winkle, visiting country stores of today, would find distinctly different. They are changes which have come about largely within the past thirty years. Both represent steadily accentuating condition.

One is the one-price system. The old folks can recall the time when no country stores at all sold on a one-price basis. The best buyer was the most industrious haggler. The storekeeper believed there was no other practical way to sell; justly as firmly, the buyer believed there was no other practical way to buy. The one-price system came into use as merchants got a vision of the possibilities in volume, and a true idea of the relative unimportance of the individual transaction.

The one-price system wins confidence, and saves tremendous amounts of time consumed when merchant and customer wage a battle of wits over small transactions.

Not all country stores, yet, are one-price stores. Some stores which set up to be, in practice are not. But the number of inflexibly one-price stores grows greater year by year.

Farm people, in particular farm women, are known as excellent buyers. If there is far less bargaining with merchants than formerly, "shopping around," always good buying practice, has lost far less of its caste. And "shopping around," a comparison of goods and prices, is far easier today than formerly, and growing easier all the time, owing to the second great change alluded to above. That is the sale of advertised, known-quality, merchandise.

In house furnishings, groceries, clothing, farm equipment, practically everything the farm family consumes or uses, advertised brands and makes are available. They immeasurably simplify the task of retail buying.

We suspect that Rip Van Winkle, in his day, was a poor buyer. Thanks to changes which have come about, today even Rip Van Winkle wouldn't find it hard to buy to advantage in country stores.

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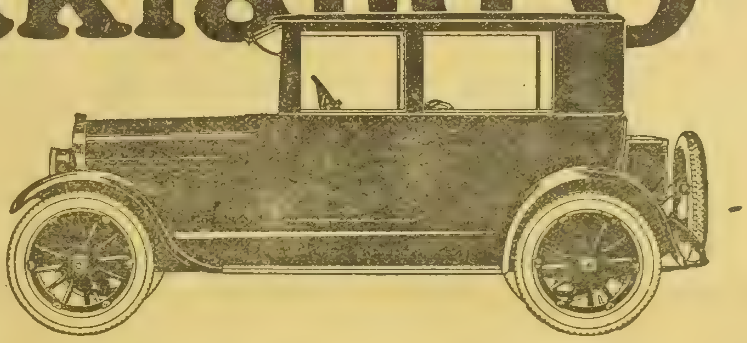

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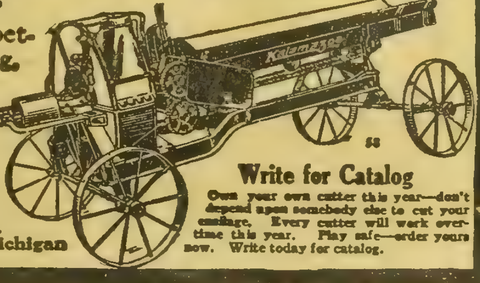

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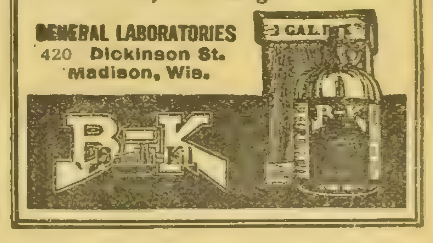

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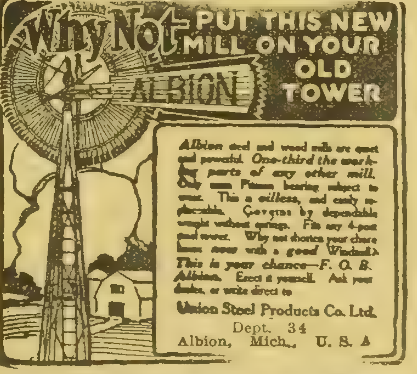

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The Michigan
BUSINESS FARMER

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"The Farm Paper of Service"

DR. FRIDAY RESIGNS

ONCE again the Michigan Agricultural College finds itself without a president. Most of our readers are familiar with the decidedly unpleasant odor which will permeate the campus for some time to come. It will not be as easy to secure a man who has a mind of his own to head the oldest farmer's school in America. The late unpleasantness got far too much publicity for the benefit of the college.

Our Lansing correspondent, Mr. Powell, who is a graduate of M. A. C. and who has given a summary of the events leading up to the acceptance of the resignation of Dr. Friday, on page three of this issue, admits that Dr. Friday is a genius, but hints that a genius is quite apt to be tempermental and headstrong. Colonel Roosevelt was credited with these same attributes. A man with new ideas is always a genius and a man who makes his ideas into realities is always headstrong, he must be to get them done.

Dr. Friday was the first president of the Michigan Agricultural College who ever took a direct and militant interest in the marketing problems of the farmers in Michigan.

We challenge any enemy of Dr. Friday to disprove this statement.

For this interest in the producer's problem he was throttled, just as every man or institution which seeks to tread on the sacred toes of the "middle-men" are bow-beaten, lied about and thus, finally put in a bad light before the very producers they are seeking to aid.

We are not concerned about Dr. Friday personally. We know he has resigned to accept a position which pays him nearly double his present salary and gives him a greater opportunity for personal gain.

What The Business Farmer is seriously concerned about is the fact that whenever a man or institution appears, seeking to solve the greatest of all the problems of the farmer—that of marketing—they become at once the target for an attack, which may be aimed from any strategic point, wheather it be the financial credit of an institution or the personal character of an individual but always with the sole object of annihilating the intruder.

Look at the record of the co-operative selling organizations which have been fostered in Michigan for the benefit of the farming business. How many have lived? None, that we know of, which are old enough to prove that they are a permanent success, strong enough to stand this continued onslaught.

And the farmers enemies have found the sure point of attack.

Destroy faith in the man or the institution and it crumbles into nothing. During the war we were taught to call it "propoganda" which is only a newer name for "lieing gossip." How easy it is to start! Like a pebble tossed into the pond, its waves reach in every direction until they beat upon the shore. Yet how gullible we all are. How quick we are to believe the untruth about the very thing we love or respect.

"My country—right or wrong—my country!"

That is the answer for the patriot. And that is the answer for the farmer who believer that there is a future in the farming business through the organized co-operative marketing of his produce.

THE WEAKEST LINK

NO one can drive over the State highways of Michigan, without wondering why it is, that there is no completed State highway, which connects any two prominent cities that is not broken into by unfinished stretches of road.

Can it be, as some of our readers have suggested, that it is the counties which have used the most political influence which have gotten the longer stretches of paved highway from the State funds available by the $50,000,000 good roads appropriation of 1919? It would appear to have been better practice for any one trunk line to have been completed by the best known method before proceeding with the next.

It also occurs to us that with the natural resources presented in certain districts of Michigan where Portland cement factories are in operation that the State of Michigan could well have afforded the purchase of such a site and the manufacturer of its own cement, if it could be done as we assume, at a lower cost than purchasing it on the competitive market. In our opinion it would have been possible to use the State Prison labor for this purpose to good advantage, and the State could have had a sufficiently large output of cement to take care of all of its building activities, not only of roads but of buildings.

We are not entirely discouraged with the road building program to date. We do not belive that graft has played a large part in the construction work, but we do know that much of the road built has cost the State more than it should, and because we need more highways and must at the same time lower the tax burden that we are carrying, a problem is presented which can be solved only by greater efficiency and a lowered cost per mile of construction.

The farmers of Michigan were right when they asked for a gasoline tax. The legislature was right when it voted the enactment of such a law, and the Governor was wrong when he vetoed it, in the face of this strong endorsment. The gasoline tax was a painless method of raising an immense amount of money, and securing a large part of it from those who are directly using the highways most. The collection of this tax was simple so long as no exemptions were made, becouse it was to have been made from the dozen or so importers of gasoline into the State. We never yet have understood why the gasoline tax was opposed by the automobile clubs.

Michigan has too many miles of road to be completed, which are really the "missing links" in our chain of good roads, for curtailment of the building program, at this time.

TOO MANY LAWS

ONE of the strangest political tendencies of our time is the suddenly increased faith of legislators in the power of laws to enforce themselves once they are reduced to writing. No belief has been so continuously and thoroughly discredited, yet none is so alarmingly alive. Every political philosopher from Montaigne's day to this hour has recognized that the best government is that conducted with the least law and machinery.

A multitude of evils attend the naive faith of legislatures in the auto-enforcement capacity of law as represented for a government on a piece of paper. One is an inevitable weakening of respect for a government born of a disregard for its more outlandish aspects. Another is the uninterrupted encroachment of government on the governed. A third and most distressing evil is the appalling expense attending the creation of multitudinous new bureaus and offices provided for.

The time may come when a candidate pledging himself to nothing but the repeal of two laws for every one created will be generally supported.

A FARMER'S MARKET AT HOWELL

ONE of our readers advises us that Howell, Michigan, offers an excellent location for a farmers' market, such as we suggested in the story of the successful market at Bloomington, Illinois, in the last issue. We have therefore appealed to Mayor Fishbeck, the newspapers and County Agent of Livingston County, to aid in the establishment of a farmers' market at that city.

Howell has a population, according to the last census, of approximately 3,000 and has shown considerable gain in the past three years, because of the rapid progress of several local manufacturing institutions. There are one hundred or more cities the size of Howell in Michigan which would be equally justified in establishing farmers' markets and thus bringing to their cities the trade and friendship of the farmers for many miles around.

It is not necessary to operate a daily market. A Saturday morning market will serve the purpose in the small city for some time until it is found profitable to open it on other days. We hope that the city of Howell will establish a market during the present season, and we hope our readers will suggest other towns and cities in Michigan where we can take up the matter, because The Business Farmer would like nothing better than to be able to point to a dozen or more successful farmers markets which were helping to solve in a practical way the century-old problem of bringing the producer and the consumer together, which it had fostered. Our readers should tell us where these markets are most needed.

RADIO ON THE FARM

IT has been some time since we mentioned radio on this page, and in that space of time such an improvement has been made in this new science that it is much more simple and practical for the isolated farm home to "listen-in" on the day's news, market reports, lectures and music from sending stations within a radius of five hundred to a thousand miles.

A simple improvement has been made whereby the storage battery for long distance receiving has been eliminated. Ordinary dry cells have taken the place and the cost of operation is so low that it is practically negligible.

Only a few evenings ago we left the supper table of a good farmer in the central part of Michigan, we went into the living room and the boy of the family, aged twelve, had already "tuned-in" and had received all of the baseball scores of the day and we sat in this living room, 15 miles from the nearest town of any size listening to a splendid concert of music and speeches being broadcasted from one of the Detroit stations.

The radio has proven one of the greatest inventions of the age for all people, but for the farmer it is a Godsend, the far-reaching importance of which has hardly been sensed, much less appreciated.

CHEAP POLITICIANS

ABOVE all things we detest a hypocrite. The cheap politician who plays to the gallery, and particularly the man who claims to be working in the interests of the farmer and who is only camouflaging, deserves more words of condemnation than we have in our vocabulary.

It seems as though the farmer particulary has been the innocent recipient of this sort of "help" during the past two years.

If we judge the present frame of the farmers' mind rightly, it is : that all he asks is a square deal, that he believes his business is as legitimate, and a little more so, than most other business, that he wants a fair price for what he grows, and demands that those who are telling most about how they are going to help him go to work at some other job.

The farmer will work out his own problems and do it much better than the so-called "leaders of agricultural thought" if they will just go back to their jobs, whatever they were, and leave us alone.

What the farmer has suffered from most is an over-production of would-be Moses, each pointing in a different direction to lead the farmer out of the pathless desert in which he has found himself the last two years.

ROAD DANGERS

WITH the number of automobiles being multiplied daily it is little wonder that the problem of traffic congestion and regulation is spreading into the rural districts.

The accidents from collisions and carelessness in country towns are much higher in proportion to the number of cars in operation than those in our larger cities where the drivers become accustomed to congestion and have thier cars at all times under control, watching out always for the other fellow who may be a "fool driver."

A suggestion or two on rural safety-first may therefore be fitting at the advent of the road congestion season. First we would urge our readers not to drive any vehicle on the road at night without a white lamp showing to the front and a red light to the rear. To drive without this precaution is risking your life in a manner most foolhardy. Many a man or woman who would die from fright at the idea of walking over Niagara Falls on a tight rope will drive on a country road on a dark night where automobile drivers racing at fifty miles per hour come within the distance of their own headlights before they see the vehicle without a rear end light for protection. Accidents from this cause are most common.

Another rule to teach your children, and yourself for that matter, is when walking on the road to walk on the side facing the approaching vehicle. This is contrary to the rule of the road when you are driving, but the padestrian can always step out of the way of the approaching automobile, while if walking on the opposite side a car may approach and run him down from the rear before he hears it or the approaching driver sees him.

PUBLISHER'S DESK

AGAIN

I THOUGHT perhaps some of my readers might be interested in the letter from Mr. Brace and my reply, because they too may have been "fed-up" on some of the insiduous propaganda which a certain type of individuals are always anxious to pass along. As we said editorially, no man or institution can begin to accomplish anything for the farming business, who is not immediately the subject of attack. But there is a smile in this sort of rot about The Business Farmer. Not later than a week ago, one of our agents was told that we had been bought out by Henry Ford! So, if you don't believe the Armour story, you can believe this later one. But listen:

Dear Mr. Slocum—I am a subscriber of the M. B. F. and have been since it started and get lots of good out of it. I think Senators Couzens is all right on the shipping Bill and think maybe he will work some for the farmer. Now, Mr. Slocum, here is a question I would like to have you answer in your next issue. It was reported and circulated that the M. B. F. was owned by Armour, the packer. Now, answer this straight and from the shoulder. You can use this if you see fit.—Wm. R. Brace, R4, Newaygo, Mich.

—My Dear Mr. Brace: I am glad to answer your kind letter of the 16th, inst, because this rumor has come to our ears before, but we have hesitated about answering it in these columns believing our readers would not in any case take it seriously.

However, Mr. Brace, you ask me for an answer "straight from the shoulder" and I do not believe The Business Farmer was ever challenged, that it did not come across immediately.

The Michigan Business Farmer is owned by the Rural Publishing Company, a Michigan corporation, incorporated in 1910 and the list of those owning 1% or more of the stock is published twice a year in accordance with the postal regulations in these columns. The list was published in our issue of April 28, on page 23 (495).

The writer, as president of this company, owns a majority of the voting stock in the corporation and to my knowledge, there is no person owning stock in this company who holds stock in or is identified with any large corporation.

I believe the confusion comes from the purchase last year of the controling interest in "The Michigan Farmer," by Senator Arthur Capper, of Topeka, Kansas, who owns also a number of farm, mail-order and political publications.

The Michigan Business Farmer is owned and edited in Michigan, by Michigan men and I repeat that if the control of this publication is ever sold by me, I will publicly announce in these columns that fact before the transaction is consumated.

In the meantime I hope you will nail this malicious lie, and advise the one who tells it to read the columns of The Business Farmer for a few weeks and then compare our independent stand with the average straddle-the-fence farm paper.

Thanking you, Mr. Brace, for your interest, I am, Yours very truly, Geo. M. Slocum, Publisher.

McRAE AGAIN!

In your Saturday's paper I notice on page 15 you say "The man who does business thru the United States mails must be honest. Uncle Sam is your attorney without cost when you have been defrauded thru the mails." Now if that's true, what can one do about Warren MeRae? I too sent him $5 and his letter to me stated the same to others "that he would send the prospective buyers to my farm, and in case these people do not buy please let me know and I will keep on sending you buyers until you make a deal."

So, I have recently written him to make good his agreement, he has had lots of time to send buyers here for the snow held off long this fall and its been a splendid winter. I also told Mr. McRae that if he didn't send us any buyers as per his agreement to return to me the $5 before corn planting and potato planting time.

I am waiting to hear from him. If the above statement is true in regard to Uncle Sam's mails, then I think Mr. McRae has something coming.—Mrs. B. G. W.

What the Neighbors Say

DISAPPOINTED OVER OUSTING OF FRIDAY

WE are greatly disappointed over the ousting of our able champion, Dr. Friday. We would feel no worse if we had lost our right arm. We have long been convinced of his wisdom and the sound policy for our agriculture which he adhered to was the cornerstone of agricultural prosperity. Let the investigation be complete. Let no villian escape the purifying effects of your "Big Bertha." May the farmers of Michigan waken to their responsibility of cleaning up the dirty gang that separated us from our able champion, Dr. Friday.—Carl C. DeWitt, Gratiot County, Mich.

THE "AGRICULTURAL PROGRAM"

I HAVE been considerably interested of late in the "Agricultural Program for an Industrial State" as advocated by Dr. Friday. The Business Farmer and others. The proposed program sounds good, but up to the present time I have looked in vain for some one to get down to brass tacks, be specific, and tell me just what I should raise on my one hundred twenty acre central Michigan farm.

This farm is located some thirty miles from Lansing and eight miles from the nearest railroad town. It is slightly rolling and fairly well drained though not tiled. The soil is clay loam and raises fairly good crops of wheat, oats, corn, beans, hay and in fact all crops adapted to this part of the country. For the past few years we have kept about forty ewes, three or four brood sows and horses enough to do the work. We raise about twenty acres of corn, ten to fifteen acres of oats, ten acres of beans, fifteen to twenty acres of wheat and cut thirty to forty acres of hay. Have also rented some additional land for pasture. We are too far from railroad to raise beets.

We realize that our wheat competes with Russia and South America, our corn, oats and hay with Ohio, Indiana and the whole corn belt, our beans with New York, California and Japan, our pork and dairy products with the whole northern half of the country, our beef with South America and the great west, our wool with Australia, and our beets with Louisiana and Cuba, so will some one please be specific and tell us just what to raise?

In a recent issue of the Business Farmer you say in effect that a Michigan farmer is a fool to raise wheat. (Ed. Note: In what issue did we make this statement, Mr. Subscriber?) I am inclined to agree with you and you may also include all the ordinary farm crops grown in Michigan. However, anyone so unfortuante as to own a farm in Michigan at the present time is up against it, and should be pitied rather than blamed. Real estate is assessed at full value, and taxes must be paid or the farm will be sold. It is possible that we would be better off to let the farm go, move to the city, and get a job, but most of us hate to leave that way so we will probably struggle along in the attempt to raise enough to pay the tax and keep alive, work the whole family, sixteen hours or more per day, when the weather is good, go fishing, when it rains, and hope for better times ahead.

Our worthy Governor has saved us two cents per gallon on all the gas we burn, and Henry Ford says that anyone can raise five dollars may soon have a flivver, so let's cheer up and be happy.—Subscriber, St. Johns, Mich.

First Mortgage Real Estate Gold Bonds

Pause for a moment and reflect upon how often you hear it said that Federal first mortgage bonds are the safest investments.

Write for Booklet AG844

Tax Free in Michigan
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FEDERAL BOND & MORTGAGE BUILDING, *DETROIT*

4 TIMES Around the World with ONE OILING
100,000 Miles Without Stopping for Oil

An inventor who could develop an automobile, a railroad car or any other conveyance on wheels which would perform such a feat would be considered a wonder. But such is the record of regular accomplishment by the Auto-oiled Aermotor during the past eight years in pumping water.

Did you ever stop to think how many revolutions the wheel of a windmill makes? If the wheel of an Aermotor should roll along the surface of the ground at the same speed that it makes when pumping water it would encircle the world in 90 days, or would go four times around in a year. It would travel on an average 275 miles per day or about 30 miles per hour for 9 hours each day. An automobile which keeps up that pace day after day needs a thorough oiling at least once a week. Isn't it marvelous, then, that a windmill has been made which will go 50 times as long as the best automobile with one oiling?

The **Auto-oiled Aermotor** after 8 full years of service in every part of the world has proven its ability to run and give the most reliable service with one oiling a year. The double gears, and all moving parts, are entirely enclosed and flooded with oil all the time. It gives more service with less attention than any other piece of machinery on the farm. To get everlasting wind-mill satisfaction buy the Auto-oiled Aermotor, the most efficient windmill that has ever been made.

For full information write AERMOTOR CO. Chicago Kansas City Dallas Minneapolis Des Moines Oakland

MONEY TO LOAN

On the 33-Year Government Amortization Plan to desirable borrowers who own good, well-managed farms in ichigan and Ohio, and wish to borrow not over 50% of the value of their land plus 20% of the appraised value of the buildings.

No commissions—Low interest rates. No stock investment. Unusually prompt and satisfactory service. If your loan will meet these requirements, write us.

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Guardian Building, Cleveland, Ohio

ALL AROUND SATISFACTION FOR ANY CULTIVATION PURPOSE

It's through the right kind of cultivation that foul growths are kept down and can be eradicated. THE KOVAR DIGGER has opened the field for the right kind of cultivation and having exclusive features, will give satisfaction which no other machine will produce. Thousands of farmers have been convinced and we want to show you. Write for free booklet on land cultivation and how to work foul growths. KOVAR has the most successful Spring Tooth Corn Cultivator, also Harrow Cart. Write for further information and prices.

JOS. J. KOVAR, OWATONNA, MINN.

HEAVES Is your own horse afflicted? Use 2 large cans. Cost $2.50. *Money back if not satisfactory* ONE can at $1.25 often sufficient. In powder form.

Most for cost NEWTON'S A veterinary's compound for Horses, Cattle and Hogs. Heaves, Coughs, Distemper, Indigestion. Worm expeller, Conditioner. At dealers' or by parcel post. *30 years' sale*

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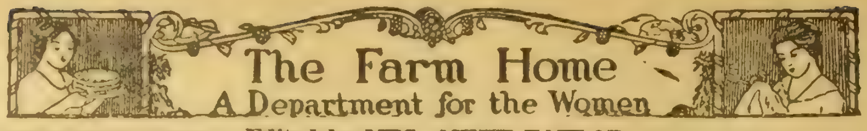

The Farm Home
A Department for the Women

Edited by MRS. ANNIE TAYLOR

CANNING RECIPES WANTED

NOW that the canning season is on I would like to receive a recipe from every reader for a new or old-fashioned method of taste in preparing the strawberry, raspberry, rhubarb or any of the fruits into either a sauce, relish, conserve or new kind of jam. All these recipes are being filed until I complete our book and by fall I want every reader of M. B. F. to have one. I will print the best of them in each issue. I am looking forward to turning out a splendid book, complete in every detail.

Your Friend,
Mrs Annie Taylor

Address letters: Mrs. Annie Taylor, care The Business Farmer, Mt. Clemens, Michigan.

CHAMPION CANNERS ON TRIP TO FRANCE

FOUR young girls, fresh from the farm and members of the two highest ranking teams in national vegetable canning championship contests, started May 16th on a trip to France to demonstrate in that country the best American methods of home canning. They are to spend three months abroad as the guests of the American Committee for Devastated France.

The girls united at Chicago, Monday, May 14th. They departed May 16th for Washington to call on the President and the Secretary of Agriculture. They went from that city to New York and sailed on May 23 for France.

The girls make an unusual quartet of national champions, but they well earned their honors. First they won their state contests; then, last fall at the international livestock exposition here,' when nine states sent up teams to the first national canning competition, they became champions among 30,000 girls hailing from every state.

To Spread Club Idea

Beulah Rodgers and Katherine Belibaugh, who came from Eddyville, Ia., with a population of between 900 and 1000, constitute the Iowa team that won first place, and their companions on the trip are Bertha Roger and Elaine Hendricks of Burlington, Col., who composed the team qualifying for second prize. With them goes Esther Belibaugh, who as local leader has the credit of training the primier canners of the country, and who looks no older than her sister. The heads of the expedition are Miss Josephine Arnquist, agent in charge of girls' club work in Iowa, and Miss Maude E. Sheridan, state club leader in Colorado.

Whatever novel fruits, vegetables or meats France may offer these slender girlish tutors, they are undismayed at the prespect. They stand ready to can anything that can be canned by the cold-pack method. Elaine and Katherine have been canning for seven years, Bertha for six and Beulah for five. Demonstrating proper canning methods is an old story with them. These farmers' daughters are going to France to work, and they expect to expound this bit of better home-making wherever the American committee or the Minister of Agriculture may send them.

Canning is but one phase of the boys' and girls' club work fostered by the extension departments of the state agricultural colleges. Six hundred thousand boys and girls are enlisted in this potent agricultural movement. The girls' side of it is devoted to home-making. It trains them as it did the prize-winning girls to take a half bushel of apples and in an hour turn out something like 17 jars of baked apples, apple sauce, sliced apples for pies and apple juice for jelly. It also teaches these farmers' daughters bread-making, cooking, making of clothing, house furnishing and poultry raising.

The four leading canners are looking forward to two weeks in school at Troyes, but the Colorado misses have their eyes especially on Lille. They belong to a clothing club at home that adopted a French orphan and perhaps their chief goal in France is this youngster, Pauline Dupeuchelle.

HOLDER FOR YOUR BROOM

AN ordinary piece of rubber hose large enough to admit the handle of a broom thru the center will make a broom or mop holder for the kitchen. Select a piece of hose 6 or 8 inches long and cut both ends slantwise, so that when the hose is placed vertically against the wall it may be nailed top and bottom thru the tabs. The holder should be 2 or 3 feet from the floor. Brooms, of course, are placed in it upside down, allowing the brush part to keep its stiffness. Simply standing it in a corner always weakens a broom.

ONE OF THE REASONS FOR HAVING EZCEMA

IN the olden days our books tell us of the horrible cases or scurvy that used to be on board ships that sailed the ocean. It took so long a time to reach the different ports that the food question was a great problem in those days. They did not have the canned vegetables and fresh fruit that gave the system the lime juices that it needed so much. All these tales of horror were told of the anaemic, scurvy bodies that were aboard these ships. This is just another form of ezcema only worse and too much cannot be said about the care of ones bodies in making it healthy. We all know how well the animals of the field are taken care of so why not give a little of this attention to ourselves. It seems to me that with eating a great deal of the fresh vegetables and fruits in summer and canning all of the different kinds for winter use and with a lot of good drinking water you will soon erase the trouble at its source. I cannot help but write you women about this, because it is up to us to watch our table and what is put upon it for the family. This spring I received so many letters asking for a cure for ezcema that I have reprinted in the personal column a cure that came to my desk last spring. It makes me think that this dreadful disease comes after a winter of eating the wrong kinds of food.

KEEPING HOME SWEET

To have harmony in the home—

1. Think before you speak.
2. Respect others feelings.
3. Don't nag or find fault.
4. Don't feel superior to your companion.
5. Do unto him or her as you would like to be done by.
6. "Ours" should be the home pronoun.
7. Let there be no boss rule.
8. Keep respect for each other's feelings.
9. Don't decieve each other.
10. Don't speak crossly when your companion is angry or vexed about something.

A little love and affection will prevent petty quarèls. The whole secret depends on love and respect. Keep this in mind and you will never disagree nor quarrel.

THE CANNING BUDGET

SET your GOAL before you start your season's work. If possible make it to fit the needs of your family rather than to achieve only the actual project requirements for your age or year of work. We should all try unselfishly to measure all home-making projects in terms of the family rather than the individual.

We should plan for at least one serving of fruits and one serving of vegetables other than potatoes for each day of the eight months when fresh products are not readily available.

The budget outlined here, approved by the nutrition specialist of the College, is based upon that principle. In this chart you will notice that one column is given over to the needs of a single person. THIS WILL HELP YOU SET YOUR GOAL. It will help you, too, in planting your garden.

Product	Per Person for 30 Weeks
1. Greens Spinach Dandelions Chard Other Greens	5 quarts (one serving per week)
2. Tomatoes	10 quarts (two servings per week)
3. Other Vegetables Peas Beans Beets Carrots	15 quarts (two servings per week)
Supplement canned vegetables with stored ones, such as cabbage, rutabagas, and onions.	
4. Fruits (including Jellies)	30 quarts
Supplement canned fruits with dried ones, such as prunes and apples.	
5. Meats	30 quarts through warm month beginning April through October.
Total	95 quarts

Ratio of Uncooked to Canned Products

1 bu. peaches 18 qts., 1 bu. pears 30 qts., 1 bu. plums 30 qts., 1 crate blackberries (16 qts.), 1 crate strawberries (16 qts.), 1 bu. tomatoes 16 qts., 1 bu. string beans 20 qts., 1 bu. sweet corn 12 qts., (six small yield one pint) 1 bu. shelled peas 8 qts., 1 bu spinach or other greens 7 qts., 1 bu. small beets or carrots 16 qts.

Any reliable seed catalog will give you the amount of seed necessary for producing the vegetables you need.

Mothers Problems

READ FOR THE CHILDREN

ALL children love stories. It matters little to them whether the story be told to them; all they ask is that they may hear a story. Where it is possible, it is fine to set aside the hour between the evening meal and bedtime for a story hour, but in every family, that hour cannot be taken. Must, then, the children go without stories? Not necessarily.

There are few mothers and fathers so busy that they cannot snatch a few minutes each day to glance though their favorite magazine, to dip into a book for a chapter or so, or to persue the daily paper. All three of these sources are rich in story-material for children. Interesting bits of information, thrilling adventures, glimpses of wild life—all these are constantly being "run across" in reading, and, retold in language easily understood by the child, they form as interesting little stories as any child could desire. At the same time they are much more likely to contain real truths than the usual children's story.

Let it become a habit of mind with you to have the children in mind whenever you read. If you have never read for the children, you will be surprised at the number of interesting stories you can run across in fifteen minutes time. Soon you will learn to pick reading for yourself, in your snatched few minutes, which will be especially adapted for re-telling to the children later on. Your own pleasure in reading will not be destroyed if you read for the children as well as for yourself; it will, on the contrary, be enhanced. Also, if you are reading with the children's pleasure in mind, you will be far less likely to waste your valuable few minutes for reading, reading trash; you will choose your stories and your articles much more wisely and thoughtfully. Thus will not only the children be benefited, but you, also, by the habit of reading for the children.

BEWARE OF THE SUGGESTIVE WARNING

I KNOW a mother who, as she started to leave the house on an errand to a neighbor's happened to remember that children sometimes are guilty of poking beans and things up their noses with disastrous results. The children had never heard of nor thought of doing such a thing, but the mother turned and, in a few words, cautioned them: "Now Bobbie and Katie, whatever you do, don't put anything up your nose!". The children promised with blank faces, the mother shut the door and hurried across to the neighbor's house. As soon as she was gone, Katie turned to Bobby: "What did Mamma mean?" she asked. "I don't know," replied Bobby. "Come on, let's do it and see what happens!" Of course, they did it, and, of course, they found out what happened. The mother, on her return, found two frightened little children. A hurry call to the doctor was necessary to remove the beans lodged in the children's noses.

Had the mother not made that suggestive warning, the children would never have thought of trying the "stunt." She didn't understand what curious little animals children are. She didn't realize how strong the power of suggestion is in people, but especially in children. They are always wanting to find out "what will happen if." Therefore, if there is anything you especially want children to avoid doing, be very, very careful how you word your warning, and be sure that it does not take the form of a suggestion.

Explain why to children. If that mother sometime when the children had been playing with buttons or some such small articles had said: "I heard of a little girl once who put a button up her nose and it stuck there and the doctor had to come and take it out. It hurt the little girl a lot, and I'm sure she never did such a thing again. It is dangerous to put things up one's nose. You'll remember never to do it, won't you?" her children would never have come to grief as they did. Beware of the suggestive warning!—Margaret Bartlett.

THE TEN REASONS

Milk strengthens the body to resist disease.

Milk contains lime which helps build healthy teeth.

Milk helps keep the digestive tract in a proper condition.

Milk contains the vitamine needed for growth and health.

Milk supplies the fuel the body needs to perform its work.

Milk helps repair the wear and tear of the body.

Milk builds strong bones.

Milk prevents malnutrition among children.

Milk gives proper balance to a diet and insures the greatest efficiency.

Milk gives more food value for less cost than any other food.

HAVE A DUSTLESS DUSTER

You can make a dustless duster for yourself by saturating cheese cloth in kerosene oil and hanging it out in the sunlight to dry.

VACATION TIME

Margaret E. Sangster

THE grammars and the spellers,
The pencils and the slates,
The books that hold the fractions
And the books that tell the dates,
The crayons and the blackboards
And the maps upon the wall,
Must all be glad together,
For they won't be used till fall.

They had to work like beavers
To help the children learn;
And if they want a little rest,
It surely is their turn.

They shut their leaves with pleasure,
The dear old lesson books,
And the crayons and the blackboards
Put on delighted looks.

So children just remember,
When you have gone away,
Your poor old slates and pencils
Are keeping holiday.
The grammars and the spellers
Are as proud as proud can be
When the boys forsake the schoolroom
And the teacher turns the key.

The Runner's Bible

SPIRIT—It is the spirit that quickeneth, (John 6:63.)

All visible life is constantly dependent upon something beside air—a finer something than even the air itself. It is the "Fullness of God"—His Holy Spirit, the life of life. In it "we live and move and have our being."

Personal Column

Dear Friend—Please tell me how to use left over potatoes instead of frying them. Please give recipes for some kind of crullers. I would like to have someone send me the whole story of "The Blood Teendr" also the poem "The Arbutus" I will pay for them if money is asked.

How can I take rust stains out of a white woolen sweater? How can you keep flies away from babies? Miss Burdena Nelson, R. 2, Cadillac, Mich.

Potate Cakes—Shape cold mashed potatoes in small cakes, and rolls in flour Butter hot omelet pan, put in cakes, brown one side, turn and brown other side, adding butter as needed to prevent burning; or pack potatoes in small buttered pan as soon as it comes from the table, and set aside until ready for use. Turn from pan, cut in pieces, roll in flour, and cook as potato cakes.

Creamed Potatoes—Reheat two cup of cold boiled potatoes, cut in dice, in one and one-half cups white sauce.

White Sauce—Two tablespoons butter, two tablespoons flour, one cup milk, one-fourth teaspoon salt, few grains pepper. Put butter in pan and stir until melted and bubbling; add flour mixed with seasonings, and stir until thoroly blended; then pour on gradually while stirring constantly the milk, bring to the boiling point and let boil two minutes. If a wire whisk is used, all the milk may be added at once.

Potatoes Au Gratin—Put creamed potatoes in buttered baking dish, cover with buttered crumbs, and bake on center grate until crumbs are brown.

Delmonico Potatoes—To potatoes au gratin add one third cup grated mild cheese, arranging potatoes and cheese in alternate layers before covering with crumbs.

Crullers—One-fourth cup butter, one cup sugar, yolks two eggs, whites two eggs, four cups flour, one-fourth teaspoon grated nutmeg, three and one-half teaspoons baking powder, one cup milk, powdered sugar and cinnamon.

Cream butter and add sugar gradually, yolks of eggs well beaten, and whites of eggs beaten stiff. Mix flour, nutmeg, and baking powder; add alternately with milk to first mixture; toss on floured board, roll thin, and cut in pieces three inches long by two inches wide. Make four one-inch parallel gashes crosswise at equal intervals. Take up by running finger in and out of gashes, and lower into hot deep fat and fry.

Flys Kept away from the Baby—I would suggest that if the baby is out doors and sleeping use cheese cloth or mosquito netting by putting a stick up the front and back of the crib or basket and throw the netting over it. Try and keep the flies out of the house entirely. Remove all food as soon as the meals are over as this attracts them, and put garbage as far away from the house as possible. If the baby is kept sweet and clean, I cannot see why the fly will be with them any more than the grown-ups. The fly is our worst enemy and too much cannot be said about the disease they carry into our homes. They breed around the barn and it pays to fight them every day.

A Cure for Salt Rheum—3 tablespoons of sulphur; 2 tablespoons of cream of tartar; 1 tablespoon of nitrate of potash or salt peter. Mix, and at night put 1 teaspoon of this mixture in a little milk, water or syrup and drink.

Use this Wash for the Affected Parts—2 tablespoons epsom salts, 1 teaspoon of carbolic acid in one quart of water, boil 5 minutes and use by washing the spots affected.

At Night Rub On—Lonoline or sweet oil one ounce with ten drops of carbolic acid. I only made half of the recipe at a time. This is a wonderful cure. I have found if one keeps at it you will get the right results.—Mrs. B. Tidy.

Dear Madam—I seen in the farm paper where you wanted to know how some of the women made extra money. We live on a 12 acre farm about 11 miles from Port Huron. Last year we put in a small piece of watermelons, some cucumbers, some sweet corn, some onions, radishes, carrots, and beets. I sold all I could spare and could have sold more so this year I am putting in more. There is never much trade in the forenoon but lots in the afternoon and evening. Some days I would sell six or seven dollars worth in a few hours. There are quite a few wild berries near here and they always sell good, then I always raise quite a few chickens. They always grow fast and bring better than a dollar apiece in the fall. I am also enclosing some of my recipes that I know to be good. Wishing you good luck, I remain—Sarah Beauchamps, R. F. D. No. 1, Goodell, Michigan.

Sleeveless Sweaters Made—Saw Mrs. G. M's. add for the address of a woman who can make sleeveless sweaters so will send my own. I also piece quilts and do crochet work, can do other work, such as rugs, tidies, etc.—Mrs. Ettie Pratt in care of J. H. Burns, Gaylord, Mich.

—Will lady who wished some one to knit sleeveless sweaters please write to I. M. E., Box 203, Chesaning, Michigan.

TO "A SUBSCRIBER"

It seems to me you have condemnation in your heart for your husband which needs be eliminated. "Neither do I condemn thee" were the Omnipotent words you know. Its keeping a man down when he's down.

Its the beautiful uplifting thoughts he needs.

Search out his true and redeeming qualities and hold him to this incessantly every moment your thought is with him, and you will find your self far happier, and your unsatiable desire will cause you to forget yourself and life will take on an added charm. Only Love, (not condemnation) can awaken him. "Love never faileth."

This error is not unlike any other, is not surmountable, and the thing that now appears fixed, will detach itself like ripe fruit and fall.

This is both ethical and practical. When husband is away remember with—Emerson, Thou art not gone being gone,

Where e'er thou art,
Thou leav'st in him thy watchful eyes,
In him thy loving heart.

When husband returns home, forget all appearances of evil and see the perfect man, and let the real of you, the Truth of you, shine forth in all its effulgent beauty, and you will attract unto yourself your mate as of yore, when boy and girl together.—L. Baker.

Wild Hairs—Will you please ask the people if any one can tell how to get rid of wild hairs in ones eyes. I am nearly blind with them and if some kind friend will tell you so that you can put the remedy in your paper I will be thankful.—G. C.

About Sale of Rabbits—I saw by your paper lots of things of benefit to all, also Mrs. E. W. B. that wanted to know about selling rabbits, etc., back to the companies in New York and Kansas City, Missouri.

I will say we bought two pairs of rabbits of the Standard Food and Fur Association of New York a few years ago and they were $7.00 apiece and they were to buy back all that we raised. So we raised some and after awhile they bought one pair for $7.00 and were to pay us as per contract and said they would buy the rest if I would let them know how many I had so I did and they said they were not ready to receive them. I wrote different times and also only recieved $6.00 for the pair sent them. They were better stock than we received but they claimed they were under weight and I had a time to get the money from them. They are just frauds to our opinion. They figure on selling stock to you for a big price and get out of buying yours back. I have been waiting to advertise them to folks so they will not be fooled by them.—A Subscriber.

Cement for Mending Broken China—Stir plaster of Paris into a thick solution of Gum Arabic until it becomes a viscous paste. Apply it to the fractured edge and draw parts closely together.—Mrs. J. I. L., Topinabee.

To Remove Rust Stain—Make a paste of cream of tartar and water, cover the spot and hang the article in the sun, when dry brush off, repeat this until the spot is removed.

A Rose to the Living—I am sending a verse to you, a favorite of mine taken from "American Motherhood" published about 1915 or 1916.

"A rose to the living is more
Than sumptous wreaths to the dead;
In filling love's infinite store,
A rose to the living is more,
If graciously given before
The hungering spirit is fled—
A rose to the living is more
Than sumptous wreaths to the dead."

Mrs. Paxton.

Would like to hear from readers who would like crocheting done. Will accept cash or anything useful for myself or family.—Box 18, Turner, Michigan.

RECIPES

Chow Chow—1 peck or green tomatoes chopped fine, 2 heads of cabbage, 1 cup of salt, mix well and let stand over night. Drain and boil in 1 quart of vinegar and 2 quarts of water, drain again. 3 quarts of vinegar, 2 pounds of sugar, 1 bunch of celery, 1 tablespoon pepper, cinnamon to taste, heat vinegar again and pour over mixture. Makes 8 quarts.—Sarah Beauchamp.

Filling for Cookies—1 pound of raisins put through chopper, 1 cup sugar, 2 cups water, cook to a jelly.

—if you are well bred!

At the Movies—The man precedes the lady down the aisle to the seats. Sit quietly and do not talk in loud whispers. Do not applaud too loudly or laugh too boisterously.

THE SIGN For Your ROWENA OF QUALITY Protection

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Although people's tastes differ, nearly everyone prefers that clean, wholesome taste in bread. This flavor is always found in breads baked with Lily White flour. Fine wheats—the finest grown in America—are the foundation of this wonderful flavor. Absolute cleanliness and scientific milling—the result of more than 60 years careful study—brings it out. When you make bread the flavor is baked into the loaf. And it pleases. That is why Lily White has been the favorite flour of the best cooks for three generations.

Milk Bread made with Lily White

Our Guarantee

We Guarantee you will like Lily White Flour, "the flour the best cooks use" better than any flour you ever used for every requirement of home baking.

If for any reason whatsoever you do not, your dealer will refund the purchase price. He is so instructed.

Have Lily White in your flour bin the next time you bake.

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GRAND RAPIDS, MICHIGAN
"Millers for Sixty Years"

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You too can have a self-heating portable iron to use *when* and *where* you wish with no electric cord, gas tube or stove to bother.

One that saves the bother of changing irons and all those weary steps to the stove and back. Heated in a jiffy by a gasoline burner in the iron itself. Attractively nickel plated. Handle always cool. Low in price. Over 1,000,000 now in use.

Ask your Hardware or General Store Dealer, or write for free descriptive booklet to

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BABY APPLE TREES Ready to Plant
20 FOR ONE DOLLAR
Dewberry's plants, largest and earliest of all blackberry. 1 doz. $1.00, 25 for $1.50. Concord grape vines 15c each. Postage paid.
MARSHALL'S VINEYARD, Ben L. Marshall, Paw Paw, Michigan.

If you have poultry for sale
put an ad in
The MICHIGAN
BUSINESS FARMER
You'll get Results!

If Ruptured Try This Free

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The Children's Hour

Dear Uncle Ned—As I saw my letter in print, I thought I would write again. I have blue eyes, medium brown bobbed hair, and am light complexioned. I passed the eighth grade when I was fifteen. I am not going to school this year. I have given up going to high school. I live on a 600-acre farm. Of course you can't farm it all. We farm some of it and the rest we pasture for cattle and horses. The back part of the place is too hilly to farm. There are quite big hills, but not so big but that I have been on top of them. There are blackberries, raspberries and gooseberries in the pasture. There used to be some blackcaps but the fire ran thru and burned them all up. There is some strawberries, too, but they are tame. I just like to pick strawberries so I can eat them. Don't you, Uncle Ned? I like to pick the wild ones, too. We have quite a lot of fun picking wild berries as we have a large place to ramble over. There are some cherry, plum and apple trees on this place. There used to be peach trees but they all froze. It is too cold here for peach trees. I think Stella Violet Nowak had a long interesting letter in last week's M. B. F. It has been raining today. We had a snow storm here last week. In some places a foot of snow fell. We have been having quite nice weather only the wind is quite cool. It is awful cold at night. It has been so cold that the crops don't grow any. There aren't many crops around here. We have our garden, onions and sweet corn in and have a field nearly already to plant to early potatoes. We are going to put in some buckwheat, beans, field corn and late potatoes. I would like to correspond with some girl that can tat or crochet. If she will send me some patterns I will send her some. Your niece, Trecel Sweeney, R. R. 2, Cadillac, Mich.

—I am very sorry that you are not going to attend high school. It would be best to go through high school if possible, because even though you intend to live on a farm all your life, you will find a good education most valuable.

Dear Uncle Ned—Hello! I knew you would let me in. How are all of you this beautiful morning? I don't expect you all are acquainted with me as I am you, as this is the very first time I have ever attempted to join your merry circle. I will introduce myself: I am a "county jay," I am 11 years old, 4 feet and 9 inches tall. I have black hair which is bobbed; brown eyes, and freckles. I am in the seventh grade and my birthday is Oct. 8th. Have I a twin? I live on an 82 acre farm and I enjoy farm life very much. Say Uncle, I wish you and about a dozen of the cousins would come down and eat peaches with me providing you would wash your own dishes. I like to chase over the hills on horse-back better than I like to work in the house. Well my letter is getting long so I will close with a riddle: "What walks like a cat, acts like a cat and looks like a cat." Whoever guesses this riddle will receive a long letter. I wish some of the cousins would write to me. Your niece, Anita Ruth Cromwell, Elizabeth, Ind.

—Well, my niece from Indiana, I am glad to hear from you and I am sure all the boys and girls are too. I like peaches and can wash dishes so maybe I will accept your invitation. Tell us more about your home and state next time.

Dear Uncle Ned—I am a girl five feet four inches in heighth. I have blue eyes, light hair and light complexion. I weigh one hundred fourteen pounds and my age is between eleven and sixteen. Will some one try and guess my age. If you guess it right, I will write you a long letter. My father owns a grocery store. We have a dance hall over our store and a dinning room over our house for the A. O. O. G. lodge. Not long ago I read a letter in this paper that a girl in Bear Lake wrote. Her name was Retta Belle. It seemed so good to read a letter from anyone so close to my home. It is only six miles from here. I have one brother whose name is Ward. He is seven years old and in the second grade. I am in the eighth grade. I will close with a riddle and please write to me and tell me the answer: "One killed 12, yet slay none." If no one can answer it and don't by the next time I write I will answer it. I wish that some boy or girl of this merry circle would write to me and send me all the riddles they know. I would be very glad.—Phyllis Gibson, Box 53, Pierport, Michigan.

—So you enjoy riddles, do you? Have you been able to answer most of those that have appeared on this page?

Dear Uncle Ned—I am writing this letter to let you know I would like to join your circle. I have never written to you, but have read the Children's Hour which I enjoy very much. I am a girl, 13 years old, and 4 ft. 9 inches tall. I have blue eyes, light brown hair, dark complexion and am in the eighth grade. I live on a 40-acre farm. My father is a merchant in a grocery store. We have 4 horses, two cows, and one calf. My birthday is March 2. I was born in 1910. Have I a twin? I will close with a riddle: "How can twenty-five children keep dry under one umberalla?" The one that guesses this riddle will receive a long letter. I will say good-bye now. Your niece, Ruby Rooksby, Laconia, R1, Indiana.

—Another niece from Indiana! Our circle is widening. We now have members in Michigan, Indiana, Illinois, Ohio, Pennsylvania and New York.

Dear Uncle Ned—May I join your merry circle? I have never written before or seen any letters from around here, so I thought I would write. I always read over the "Children's Hour." I am five feet nine and one-half inches tall and weigh one hundred and thirty-eight pounds and live on a thirty-five acre farm which is about one-half river flats. Pine river is the north line of our farm. We raise mostly fruit. We have two horses and one cow. I live about three and three quarters miles southwest of Alma—Lawrence Chapman, Alma, Michigan, Route 1.

—Come again Lawrence.

Dear Uncle Ned—May I join your merry circle? I have been a silent reader for some time. My folks like the M. B. F. I like the "Children's Hour" best. Our school will be out next Friday. We are going to have a picnic. I wish you could come to it, Uncle Ned! I will describe myself so that you will know what I look like. I am 5 feet, 3 inches tall, weigh 107 pounds. Have brown bobbed hair, and brown eyes. I am between 13 and 18 years old. Anyone guessing my age I will write a card to. Your friend, Helen Goodrow, Hale, Mich.

—I, too, wish I could attend your picnic, because if there is anything I enjoy it is going to the woods and having a picnic.

Hello Uncle Ned—I have been a silent reader of the M. B. F. and the Children's Hour, and found it very interesting. I want to ask you if I can join your merry circle? I will guess the answer to the riddle Hazel Baker put in. It is "a candle." The one that guesses the answer to this one I will write a letter to. Here it is: "Over water and under water." Uncle Ned, will you have your picture put in the M. B. F. so we will know how you look? Do you have drawing in the paper? If you do I will draw something. Or can we have a contest on drawing or something else? Good-bye, Myrtle Taylor, Box 75, Watrouzville, Mich.

—Oh, I wouldn't dare print my picture in the paper. Why we would lose most of our subscribers and we do not want to do that, you know. Send me some of your drawings, Myrtle, please. Maybe we can hold a drawing contest soon. I would like to hear from the other girls and boys as to whether they would be interested in such a contest.

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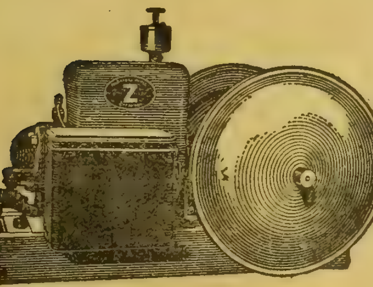

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HOW ARENAC COUNTY IS PUTTING IT OVER

THE banking interests of the country are realizing more and more the importance of dairying to the welfare of their districts and instances are multiplying where banks are establishing dairy departments to finance farmers who wish to go into the dairying business in a scientific manner. In addition to this, chambers of commerce located in county seats are awakening to the value of dairying and are realizing the power they have to get action in bringing the big interests of their community together in working for the common cause.

Take Arenac County, Michigan, as an example.

The Arenac County Farm Bureau and the Standish Chamber of Commerce have been co-operating in the development of the dairy business of that county for some time. Every two weeks the Chamber of Commerce puts on a program at which noted speakers on dairying give their experiences and their views. But they have gone further than this. In co-operation with the banks, the Chamber of Commerce offers to finance any farmer who wishes to buy pure bred or good grade dairy cows. Work has been started in the formation of a cow testing association and 28 members have already been signed up, which means that the farmers who have enlisted will soon have eliminated their boarder cows.

But the Standish Chamber of Commerce has gone further than this. It has interested the Michigan Central Railroad to the extent that three pure bred Holstein sires have been leased by the railroad to three groups of progressive farmers of the county for an indefinite period of time. With the Chamber of Commerce enlisting the interest of the banks and the co-operation of the railroads in introducing pure bred sires and the formation of cow testing associations, Arenac County is on the way to big things in dairying and presents an example for other districts to follow.

Well defined dairying programs are being introduced by banks and chambers of commerce in many parts of the country and the officials of the National Dairy Exposition are looking for a large attendance from representatives of the financial interests who realize more and more the importance of dairying in building up a community. While planning to send representatives to the Exposition at Syracuse in October, banks and chambers of commerce in every part of the country will watch Arenac County and see how the dairy cow is putting it on the map.

THE EXPERIENCE POOL

Bring your everyday problems in and get the experience of other farmers. Questions addressed to this department are published here and answered by you, our readers, who are graduates of the School of Hard Knocks and who have their diplomas from the College of Experience. If you don't want our editor's advice or an expert's advice, but just plain, everyday business farmers' advice, send in your question here. We will publish one each week. If you can answer the other fellow's question, please do so, he may answer one of yours some day! Address Experience Pool, care The Business Farmer, Mt. Clemens, Mich.

REMOVING HORNS

Sometime ago I saw in the M B. F. where D. H. of Boyne City, Mich., wanted to know whether there was any better way of removing horns than by using caustic, and I wish to say there is a better way. Get five cents worth of nitric acid and put in a large mouth vial, and broom the end of a stick the size of a lead pencil. Dip the stick in the acid and apply to the horn or button until it is wet but not so it will run. I have used this treatment for years and it never fails with one application.—A. L., Breckenridge, Michigan.

"THANK YOU MANY TIMES"

I am writing to thank you many times for the favor you did me, by answering my inquiry. I think in my case, the lawyer that holds the will is the executor. He made the will and tends all their business, but it was on my mind to know what to do, so I am thanking you again for your favor.—Mrs. P. J., Gobles, Mich.

The penny may not be the best money in the world, but it goes to church more often than the dime, quarter or dollar.

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Don't get the idea that a De Laval Cream Separator is high priced because it is the best. Considered on the basis of service a De Laval is the cheapest separator made. A De Laval costs a little more to begin with but lasts three or four times longer, and does better work all the time.

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POULTRY

CARE OF DAY-OLD CHICKS

Will you please tell me how to care for day-old chicks brought from a hatchery? What shall I feed them? Will you please give me a good feeding formula that will bring them up to the broiler stage the quickest. How shall I care for a flock of hens to make them lay? Is it better to have the flock shut up in a chicken yard or to have them run at large? Which induces the greater egg production? Is grit good for little chicks? How about oat meal? —Mrs. D. W. J., Fowlerville, Mich.

It is important that limited and retarded early feeding be practiced. Practically all chicks sent to the College so far this year, for post mortem examination have shown unabsorbed yolks. The yolk that the chick absorbs just prior to hatching is sufficient food for seventy two hours. It is generally a good practice to leave the chicks in the incubator for twenty-four hours after the hatch is completed. The second day after the completion of the hatch the chicks are removed to the brooder house that has been prepared and ready for them. A coal burning brooder is the most satisfactory because of the surplus heat that is necessary for hatching at this season of the year and the additional factor of safety. The brooder then should be so regulated that the thermometer reads 90 degrees at the outer edge of the deflector.

Sand usually makes a good covering for a board or cement floor, in addition to providing gritty material that is necessary in getting the digestive tract in working condition. The second day after the hatch is completed the chicks should receive some skim milk. This should not be fed in galvanized dishes because of the lead impurities that may be released. It should be fed only in glass, earthenware, or wooden dishes.

On the third day the chicks should receive their first feed. This consists of one raw egg mixed with two handfuls of bran and three of rolled oats. The raw egg is a natural food there fore no dietarw disturbances should result. The bran is highly laxative and high in mineral matter and the rolled oats are very nutritional. This mixture could be given five times on the third day, at intervals of two and a half hours.

From the fourth to the fourteenth day three of the egg mixture, two of commercial chick feed, and one feeding of green food should be given. After the fourteenth day the chicks can be placed on commercial chick food and buttermilk mashes, leaving it before them at all times. Chick feed can be given in the morning and at night and green food at noon.

For the laying flock I would suggest following the standard two ounces of scratch feed per bird daily, containing equal parts of cracked corn and wheat. The dry mash should be available at all times containing equal parts by weight of bran, middlings, corn meal, ground oats and meat scrap. By regulating the amount of scratch feed given the hens will consume approximately two ounces of mash, thereby balancing the ration. This ration is used by all laying contests and experiment stations and has been proven more economical than the commercial mashes. The flock can be confined if plenty of green food is supplied daily, otherwise they should be permitted free range. A slightly higher production can be secured under confinement if the birds are properly fed.—E. C. Foreman, Associate Prof. of Poultry Husbandry, M. A. C.

A SOFT JOB

"Yes," remarked Ben Gonnadooit, yawning. "When I was with the railroad company I had the best job I've ever held. I wish I had it now."

"And what was that?"

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W. A. DOWNS
Washington, Mich.

GREEN LAWN CHIX sent insured parcel post prepaid. Barred Rox, White Rox, R. I. Reds, and Black Minorcas, $16 per 100. Brown Leghorns, English White Leghorns or Anconas $14 per 100. Heavy Broilers $14 per 100. Odds and Ends $13.00 per 100. 5% discount on 500 or 1,000 lots. All varieties 1c each in less than 100 lots. Our 13th year producing high grade chix that please. Our method of shipping positively prevents chilling and crowding and we guarantee 100% live delivery. May, June, July 1c per chix less. Order from this ad and state just when you wish chix sent. A saving to cash customers. Deduct 5% if full cash is sent with order. Reference: Fenton State Bank. GREEN LAWN POULTRY FARM, Fenton, Mich. Gus Hecht, Proprietor.

BABY CHICKS Hatched from strong and vigourous flocks of ENGLISH WHITE LEGHORNS AND ANCONAS, BRED FOR HIGH EGG-PRODUCTION. We guarantee 100 per cent good live chicks on arrival. Postage PAID. Prices reasonable. Instructive Catalog and prices free on request. QUALITY HATCHERY, Box A11, Zeeland, Mich.

Pine Bay Farm

Hardy Northern Bred Chicks Reduced Prices for June Delivery. Barron S. C. W. LEGHORNS 10c each, $90.00 per 1,000. Parks Strain BARRED ROCKS 13c each, $62.50 per 500. Parcel Post paid. 100% live delivery guaranteed. Quality is assured as we are owners and breeders of one of the leading pens at the Michigan Egg Laying Contest. 8 to 10 weeks old S. C. W. Leghorn pullets $1.00 each. $90.00 per 100. Mixed broiler chicks, $8 per 100; $35 per 500. PINE BAY POULTRY FARM, Holland, Mich.

CHICKS 10c

The kind that are husky and grow fast for June delivery. Leghorns 10c, Anconas 11c, Barred Rocks 12c. Special price on eggs for hatching. We prepay all shipments. Write for our catalogue and read what our customers say.
BYRON CENTER POULTRY FARM,
Byron Center, Mich.

Pure Bred Chicks Buy 'Em Near Home

Broiler Chix	9c	White Wyandottes, Buff Orpingtons	15c
W. or B. Leghorns	11c	Light Brahmas	18c
Bd. Rox or Reds	13c	Shepherd Anconas	12c
White Rox	14½c		
Black Minorcas	14c		

Add 35c if less than 100 lots wanted. Circular.
LAWRENCE POULTRY FARM
Dept. 8 Good Reference R. 7, Grand Rapids, Mich.

CHICKS Barron Strain Selected White Leghorns. Produced under my personal care. Strong, vigorous chicks carefully packed to go safely. Postpaid, full live delivery guaranteed. 50 chicks, $6.50; 100, $12.50; 500, $60. Get your order in early. Elgin Hatchery, Box 317A, Zeeland, Mich.

Hatching Eggs & Baby Chicks

Tompkins strain. For April and May chicks, per hundred, $18.00. Eggs per hundred, $8.00. Quality breeder of Rhode Island Reds, both combs. WM. H. FROHM, New Baltimore, R. 1, Mich.

BABY CHICKS

Prices on our very best A-1 English White Leghorn and Ancona Chicks reduced to $11.50 per 100; $55.00 per 500; $105.00 per 1,000. Get our descriptive catalog or order from ad. Model Poultry Farm & Hatchery, Zeeland, Mich.

WHITTAKER'S RED CHICKS

Both Combs. Cut prices for June and July. Write for price list.
INTERLAKES FARM, Box 4, Lawrence, Mich.

CHICKS

THAT GROW, LAY AND PAY Barron English White Leghorns, Brown Leghorns and Anconas.

PURCHASE THIS YEAR'S CROP OF CHICKS from tested layers, headed by large vigorous 260 to 288 Pedigreed Males.

CUSTOMERS REPORT BIG PROFITS with these wonderful layers. Write today for our large illustrated catalogue. It tells all about them, it's free.

WYNGARDEN HATCHERY
Box B, Zeeland, Mich.

HIGHEST QUALITY CHICKS

VAN APPLEDORN BROS.
MICHIGAN'S OLD RELIABLE HATCHERY
HOLLAND, MICHIGAN

Michigan's Old Reliable Hatchery

(The most modern and best equipped Hatchery in the state)

PURE BRED English and American S. C. W. Leghorns; S. C. Anconas; Barred Plymouth Rocks and R. I. Reds. Strong, well hatched chicks from tested Hoganized Free range stock that make wonderful winter layers.

Chicks sent by Insured Parcel Post Prepaid to your door. 100% live delivery guaranteed. Fifteen years of experience in producing and shipping chicks has given absolute satisfaction to thousands. Write for illustrated free catalog and price list. Get lowest price on best quality chicks before you buy.

Holland Hatchery, R. 7, Holland, Mich.

BABY CHICKS—GET OUR REDUCED Prices. Six leading breeds. Special attention to small orders.
H. H. PIERCE, Jerome, Michigan

CHICKS—SINGLE COMB BUFF LEGHORNS only Strong healthy chicks from good laying stock. **J. W. WEBSTER, Bath, Mich.**

WOLVERINE BABY CHIX

BLOOD WILL TELL

DAY OLD CHICKS

Special For June and July

$10 and $12 per 100

THE SMART, STURDY, FLUFFY KIND

Our English Type White Leghorns and Brown Leghorns, the Greatest Laying Strains of today.

Twelve years of breeding has made this stock good. Long, deep bodies and the large combs. They have the egg production qualities in them.

Twelve years of hatching and shipping chicks assures you good, first-class chicks. We guarantee safe arrival and satisfaction, or your money back. 17,000 chicks every week till August 15th, every Tuesday.

Prices For June and July, 1923

S. C. English type White Leghorns, are good and profitable layers, and our extra selected are of the very best layers. It has never been our aim to put out cheap chicks, but to give our customers chicks that will be good layers and bring our customers a good profit. We have been in the poultry business twelve years and are offering you chicks of the best layers at a very reasonable price.

	Per 25	Per 50	Per 100	Per 500	Per 1000
S. C. English type White Leghorns, extra selected	$3.00	$6.00	$12.00	$57.50	$115.00
S. C. English type White Leghorns	2.50	5.00	10.00	50.00	100.00
S. C. Brown Leghorns, extra selected	3.00	6.00	12.00	57.50	115.00
S. C. Brown Leghorns, Standard	2.50	5.00	10.00	50.00	100.00

We ship chicks by parcel post and pay the postage up to your door, and guarantee safe arrival. Our terms are cash with order, but we will book your order if you send one-fourth of the amount with the order, and the balance just before chicks are to be shipped.

for the chicks, and also will mail you our instructive catal to save time and we will write you at once when to look
PROMPT SHIPMENT: Order from this advertisementog, or write for catalog before ordering.

The Wolverine Hatchery

H. P. WIERSMA, Proprietor :: :: :: **ZEELAND, MICHIGAN**

Sturdy Pure Bred Day Old Chicks

Buy Silver Ward choice chicks now for bigger profits

The famous Tom Barron English Imported White Leghorns and Sheppards' famous Anconas. Bred direct from our selected stocks that are headed with pedigreed males of 250 to 280 egg strain. Carefully hatched in our large, up-to-date incubators. These high grade, high producing chicks will increase your profits.

Now is the most profitable time to buy baby chicks — least care and least loss. No more cold weather, no sudden changes in temperature. Free range can be given chicks at once. They mature quickly and lay when four or five months old.

Flocks culled by experts for heavy egg laying and coloring of birds. Also choice large pullets, one and two year old hens, cocks and cockerels.

Special bargain prices for June, July and August delivery if you order ***now.*** 10% with order — balance 10 days before shipment, or we will ship C. O. D. ***Satisfaction guaranteed*** or we return your money. Our illustrated catalog of chicks free for the asking — write for your copy tonight. Or order direct from this ad. We ship now at the following extremely low prices; extra selected stock, 25–$3.00; 50–$5.50; 100–$10.00; 500–$45.00; 1000–$90.00. Write, wire or phone your order ***today.***

Silver Ward Hatchery

Dept. M. Zeeland, Michigan

BABY CHICKS

White and Brown Leghorns, $13-100
Anconas, $14-100

GOING UP *ONE MILE AHEAD OF COMPETITORS IN QUALITY*

GET CHICKS ON the day you want them

R. I. REDS, ROCKS and MINORCAS, $16.00 100. Extra selected $2.00 per 100 higher. 100% safe arrival guaranteed. Will ship any number of 25 or more, special prices on 500 and over.
COLONIAL POULTRY FARMS, Box B, Zeeland, Michigan.

HILLVIEW HATCHERY

GUARANTEED TO ARRIVE

Strong and Healthy. Chicks from selected heavy laying, Hogan tested flocks. **ENGLISH WHITE LEGHORNS and BROWN LEGHORNS. Heavy Laying EXTRA GOOD BARRED ROCKS.** Postpaid to your door and full live delivery guaranteed. Our flocks are kept on free range, properly fed and cared for insuring the vigor necessary in the Chicks to live and **MAKE A PROFIT.** Give us a trial and you will come again.

HILLVIEW HATCHERY, Route 12 E, Holland, Michigan.

BABY CHICKS Postpaid to your door $9 per 100 and Up

FROM HOGAN TESTED, FREE RANGE HEAVY LAYING FLOCKS. ALL VARIETIES.

WHITE and BROWN LEGHORNS	$12.00
BUFF LEGHORNS and ANCONAS	$13.00
BARRED ROCKS and R. I. REDS	$14.00
WHITE WYANDOTTES, WHITE ROCKS, BUFF ROCKS	$15.00
BLACK MINORCAS, BUFF ORPINGTONS	$16.00

All lots of 500 or more discounted.

EXTRA SELECTED FLOCKS .... $2.00 per 100 higher.

Large Price List for return mail.

Postpaid full live delivery guaranteed. Hatched by the most modern method of incubation from good, vigorous, pure-bred varieties carefully selected and safely packed. No catalogue. Order right from this ad and save time and disappointment. Reference Chesaning State Bank or any business in Chesaning.
Address **BABION'S FRUIT AND POULTRY FARM, Guy L. Babion, Prop., Chesaning, Mich.**

Egg Bred White Leghorn Chicks

From our famous winterlaying English White Leghorns. Large, vigorous birds of fine utility type. Wonderful layers—the result of many years of breeding for increased production of large, white eggs. Our grade A chicks are from these selected females mated with pedigreed sires bred from 200 to 303 egg dams, descendants from Penna. Poultry Farm's egg laying contest winners, notably Lady Victory, 304 eggs and Keystone Maid, 306 eggs. Prices: 25, $3.00; 50, $5.50; 100, $10.00; 500, $47.50; 1,000, $90.00. Full count and live arrival guaranteed by prepaid parcel post. Order direct from ad. You can do so with absolute safety, as you are fully protected by our guarantee of perfect satisfaction. Reference, Zeeland State Bank. Catalog free.

PATER'S POULTRY FARM, R. 4, Hudsonville, Mich.

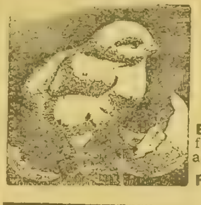
REDUCED PRICES

For May 28 and month of June. Barron type **WHITE LEGHORNS, BROWN LEGHORNS, ANCONAS, PARKS BARRED ROCKS and R. I. REDS.** Hardy Healthy Chicks from selected heavy laying flocks mated with strong vigorous males. Carefully packed and shipped postpaid to your door. Full live count guaranteed. Send for our free catalog and reduced prices before placing your order. Bank Reference.

TIMMER'S HATCHERY, R. 3 A, Holland, Mich.

Reduced Prices on June Chicks

From selected, heavy laying, vigorous hens. **White and Brown Leghorns, Anconas, 50, $5.50; 100, $10; 500, $45. Barred Rocks and R. I. Reds, 50 $6.75; 100, $13; 500, $65. Extra select, $1 per 100 higher. Mixed Chicks, 50, $4; 100, $8; 500, $40.** Well hatched in modern machines. Carefully and correctly packed and shipped. Postpaid, full live arrival guaranteed. Bank reference and this guarantee makes you perfectly safe in ordering direct from this ad NOW. Get them when you want them. All orders have our careful personal attention. WE WANT YOUR BUSINESS. Catalog Free.
WINSTROM FARM & HATCHERIES, Box H 5, Zeeland, Michigan



Egg-Bred Baby Chicks

June Delivery, 10c Each. Extra selected, 11½c.

ENGLISH WHITE LEGHORNS, BROWN LEGHORNS. 11 years of breeding for egg production. Highest quality chicks from tested layers. Satisfaction guaranteed. 100% delivery guaranteed. Order now. Bank reference. Catalog free.
ROYAL HATCHERY & FARMS, R. 2, Zeeland, Mich. S. P. Wiersma, Pres.

100,000 JUNE CHICKS

Hatched under my personal supervision from personally inspected flocks of heavy-laying, pure-bred fowls.

Varieties	Prices on 100	500
White, Brown and Buff Leghorns	$10.00	$47.50
Barred Rocks, Reds, Anconas	12.00	57.50
White and Buff Rocks, White Wyandottes, Minorcas	13.00	62.50
White and Buff Orpingtons, Silver Wyandottes	14.00	67.50

Mixed Chicks for Broilers, $9.00 per 100 straight.

POSTPAID and full live delivery guaranteed. Get your order in quickly right from this advertisement with full remittance. Bank Reference. Free Catalog.
H. B. TIPPIN Box E, Findlay, Ohio.....Member I. B. C. A.

150,000

CHICKS for JUNE and JULY deliveries. REDS and ROCKS, mated with M. A. C. COCKERELS. TOM BARRON W LEGHORNS, and HEAVY TYPE B. LEGHORNS and ANCONAS at GREATLY reduced prices. 100% live arrival GUARANTEED, POSTPAID. Strong chicks from Vigorous, Heavy Laying flocks. Catalog FREE.

KNOLL'S HATCHERY, R. 12, Holland, Michigan

BABY CHICKS 12c AND UP
Member Mid-West Baby Chick Association.
THOS. G. CALLAGHAN, Fenton, Michigan

SELECTED CHICKS from best strains. Extremely low prices after May 25th. Write for circular and price list. **Litchfield Hatchery, Litchfield, Mich.**

BREEDERS DIRECTORY

Advertisements inserted under this heading for reputable breeders of Live Stock at special low rates to encourage the growing of pure-breds on the farms of our readers. Our advertising rate is Thirty Cents (30c) per agate line, per insertion. Fourteen agate lines to the column inch or $4.20 per inch, less 2% for cash if sent with order or paid on or before the 10th of month following date of insertion. SEND IN YOUR AD AND WE WILL PUT IT IN TYPE FREE, so you can see how many lines it will fill. Address all letters,
BREEDERS DIRECTORY, MICHIGAN BUSINESS FARMER, MT. CLEMENS, MICH.

RICHLAND FARMS

THIRD ANNUAL SHORTHORN SALE

FRIDAY, JUNE 22nd, at 1:00 P. M. CENTRAL TIME

24 Open Heifers—14 Bulls—18 Cows with calves at foot

Sired by IMP. Lorne, IMP. Newton Champion, Sterling Supreme and other noted sires.

Show Cattle—Breeding Cattle—Dual Purpose Cattle

Families represented: Nonpareil—Mina—Rosebud—Missie—Jenny Lind Orange Blossom—Victoria—Gipsy Maid—Fairy Maid—Dalmeny Princess—Matchless—Lustre—Dorothy—Elize and many other good Scotch families.

Among the number are several good breeding cows and heifers bred along milking lines that will make good in herds where a milk flow is required.

At the **RICHLAND STOCK FARM** Prescott, Mich.

JUNE 22ND, 1923

Write for catalog to

Remember the Place.

C. H. PRESCOTT & SONS,
Tawas City, Mich.

Remember the Date.

Public Sale Wednesday, June 20, 1923 -:- 12:30 P. M.

52--Head of Registered Holsteins--52

7 bulls, 18 cows in milk and 27 heifers one and two years old, all straight, good individuals, strong in breeding of Hengerveld DeKol, Pontiac Korndyke, King Ona and Maple Crest Korndyke Hengerveld. The sire to which these animals are bred is Ona Sadie Vale Flint, No. 333870, one of the best individuals and highest record bulls in Michigan. Herd under state and federal supervision for tuberculosis.

SALE WILL BE HELD AT MY FARM 7 MILES EAST OF FLINT ON THE LAPEER ROAD.

Write me for catalogue, ready June 10th.

J. E. BURROUGHS, FLINT, MICHIGAN.

Auctioneer: B. V. Kelly, Syracuse, N. Y.

Michigan Aberdeen Angus Association Sale

At Michigan Agricultural College, East Lansing, Mich.
Tuesday, June 12th, 1923

Sale at 1 P. M.

The leading breeders of Michigan will offer a select draft of choicely bred cattle, sired by such noted bulls as Edgar of Dalmeny, Elcho of Harvestoun, Edgardo of Dalmeny, Enlate, and other great bulls, that have proven beyond doubt, that they have sired animals that have been shown at the leading show of America, and Canada, and achieved world wide reputation. Contributors: Woodcote Stock Farm, Ionia; Wildwood Farms, Orion; Russell Bros, Merrill; M. McCullum, Unionville; M. Kelly, Charlotte; Sommer Bros, Eau Claire; McNab Bros, Cassopolis; Hogle and Son, Parma. For Catalogues and other information, Address,

A. MINTY, Ionia, Mich.
M. A. Judy, Sales Manager. Col. J. P. Hutton, Auctioneer

DISPERSION SALE OF

45 HEAD REGISTERED HOLSTEIN-FRIESIAN CATTLE

Owned by **WILLIAM F. SHEHAN**, Howell, Mich.

With a draft of 20 head from other good herds at Sales Pavilion, Fair Grounds, Howell, Mich.

THURSDAY, JUNE 14, 1923, AT 12:00 O'CLOCK, NOON

8 bulls, 2 from 31 lb., dams that are fit to head high class herds.

63 females, a number that will be fresh. Fine individuals, heavy producers. Bred to High Class Bulls. A number have records, one as high as 26 lbs.

A splendid opportunity to secure good foundation stock.

(Herds under State and Federal Supervision) For catalogs (ready June 1st.)

COL. J. E. MACK, Auctioneer. Address, F. J. FISHBECK, Howell, Mich.

INTERESTING FACTS ABOUT LIVINGSTON TESTING ASS'N

THIS association has just finished its first four months of testing in its second year and some gratifying results have been obtained. The work for the second year was started January 23, 1923, and at the time there were twenty-seven members, with an addition of two shortly after, which more than complete the number required.

The very first month, twenty-seven of these members agreed to weigh each cow's milk separately and keep a daily record of each cow's milk production, giving them a much more accurate record than if only an average of the one day that the tester visits the farm is taken for the entire month. Also greater pains were taken in feeding according to production and this, with the daily check up on each cow, is responsible for the wonderful showings some of these cows have made.

There are about 380 cows being tested each month in this association and of this number about 85 percent are pure bred Holsteins and the rest are grade Holsteins with the exception of one splendid pure bred Jersey herd. Every member has a pure bred sire at the head of their herd, and at the present time a County Bull Association is being organized.

The average per cow for the four months of this year is 33.43 lbs. butter fat per month. The highest herd average for this time for butter fat was 53.99 lbs. High cow honors go to Eamonon's Butter Maidie, a pure bred Jersey cow, in the Smith and Parker herd, having 339.50 butter fat with a feed cost of $36.04 in 120 successive days. A pure bred Holstein owned by C. S. Heeg & Son, made a record of 270.09 butter fat in 90 days, with a feeding cost of $28.34.

Another interesting feature is the record of Bessie Beauty Walker, a cow owned by J. B. Tooley. In the month of March she producted over 2,000 lbs. of milk and 82.64 lbs. of butter fat. Her daughter, Bessie Kalmuck, a Junior three-year-old, made over 2,000 lbs. milk and 90.24 lbs. butter fat in the same month, after completing a seven day record of 501 lbs. milk and 25.04 lbs. butter fat. The registered herd owned by Merle Crandell brought him $122 above cost of feed per cow, which we consider very good for a herd of fifteen head.

The average production per cow in the United States is 3,527 lbs. of milk. The average per cow in 120 cow testing association in the United States is 6,077 lbs. of milk, which is double the amount of a cow not in the association.

Michigan is just awakening to the fact that better dairying is absolutely essential to bigger profits and better living conditions in this state. The last official reports show that Netherland leads the world in milk production with 7585 lbs. per cow. Denmark is second with 6,950 lbs. and Switzerland a third with 5,666 lbs. milk per cow. These facts plainly show that Michigan has not yet reached the highest of its ability in dairying, but with the present good prospects we expect to be one of the leading dairy communities in the world.—Yours for better Feeding, Breeding and Weeding. Carl Hornung, Tester, Livingston Co-op. Ass'n.

VETERINARY DEPARTMENT

SWELLING UNDER JAWS OF EWES

I have a flock of sheep and about two weeks ago I noticed a swelling coming under the jaw of one of the ewes. Since that time it has developed in about one-quarter of the flock of 125. All the under part of the jaw and up around side of same is swollen. It does not affect them in eating. Is it dangerous, and what is it, and what is the cause?—A. L., Hale, Mich.

—The swelling under the jaws of your ewes may be the result of internal parasites. I would suggest that you have your local veterinarian examine them and if he confirms this diagnosis have him administer the copper sulphate treatment to the whole flock.—Russel A. Russell, Asst. Prof. of Animal Path., M. A. C.

CLAIM YOUR SALE DATE

To avoid conflicting dates we will without cost, list the date of any live stock sale in Michigan. If you are considering a sale advise us at once and we will claim the date for you. Address, Live Stock Editor, M. B. F., Mt. Clemens

June 12—Aberdeen Angus, Aberdeen Angus Association, East Lansing, Mich.
June 14—Holsteins, Wm. F. Shehan, Howell, Michigan.
June 20—Holsteins, J. E. Burroughs, Flint, Michigan.
June 22—Shorthorns, C. H. Prescott & Sons, Tawas City, Mich.
Oct. 18—Holsteins, Howell Sales Company of Livingston County. Wm. Griffin, Sec'y. Howell, Mich.

G. P. PHILLIPS

THE GOLDEN RULE AUCTIONEER
Bellevue, Michigan
Pedigreed Sales a Specialty.
Write, wire or call for terms and dates.

HOLSTEINS

FASCINATION FARM, VASSAR, MICHIGAN. Holsteins, registered fully accredited 32½ lb sire. Write your want.

HEREFORDS

HEREFORDS

Young Cows with calves by side consisting of blood from America's foremost herds at prices that enable them under Earliripe Hereford Beef Plan to pay for themselves within a year to 18 mos. Bulls including prize winners at the larger shows at practical prices. Herds headed by Straight Edge 1169786, one of two sons of Perfection Fairfax out of a daughter of the famous Disturber.

T. F. B. SOTHAM & SONS
(Herefords since 1839) Saint Clair, Mich.

Steers For Sale

58 Herefords 880 lbs.	90 Herefords 800 lbs.
64 Herefords 720 lbs.	44 Herefords 640 lbs.
48 Herefords 500 lbs.	44 Herefords 575 lbs.

Know of other bunches. If in the market for real quality, dehorned, deep reds, good stocker order your choice one load or more from any bunch. Write stating number and weight preferred.

VAN BALDWIN, Eldon, Wapello Co., Iowa.

We Have Bred Herefords Since 1860
Herd established by Gov. H. H. Crapo. We have a few choice yearling bulls for sale at farmers prices. You are invited to visit our farm.
CRAPO FARM, Swartz Creek, Michigan.

ANGUS

WE HAVE SOME FINE YOUNG ANGUS BULLS from International Grand Champion Stock at reasonable prices. **E. H. KERR & CO., Addison, Mich.**

SHORTHORNS

Richland Shorthorns

SPECIAL OFFER: Two choicely bred cows. One roan—One white—One with bull calf at foot by son of IMP. Rodney. This show stock of real caliber and great foundation material. A bargain at the price.

C. H. Prescott & Sons.
Office at Tawas City, Mich. Herd at Tawas City, Mich.

Write Central Michigan Shorthorn Breeders Ass'n, Greenville, Michigan for list of Milking Shorthorns, all ages, priced to sell.

RAISE SHORTHORNS WITHOUT HORNS Like Kelley does. U. S. Accredited Herd No. 28945. For description and price write,
L. C. KELLY & SON, Plymouth, Michigan.

JERSEYS

REG. JERSEYS, POGIS 99th OF H. F. AND Majesty breeding. Young stock for sale. Herd fully accredited by State and Federal Government. Write or visit for prices and description.
GUY C. WILBUR, BELDING, Mich.

RED POLLED

RED POLLED CATTLE—A few choice bulls and heifers for sale.
ROYSTAN STOCK FARM,
Will Cottle, R. R. 1, West Branch Michigan

AYRSHIRES

FOR SALE—REGISTERED AYRSHIRE bulls and bull calves, heifers and heifer calves. Also some choice cows.
FINDLAY BROS., R 5, Vassar, Mich.

GUERNSEYS

FOR SALE—REGISTERED GUERNSEY HEIFERS at reasonable prices, also choice bull calves of May Rose breeding.
H. W. WIGMAN, Lansing, Mich., Box 52.

MISSAUKEE GUERNSEYS. A NEW CROP OF calves coming soon. No females for sale. Order that new bull calf A. R. Sire and Dam.
A. M. SMITH, Lake City, Michigan.

GUERNSEYS—Registered Bull Calves, Cheap, also grades. Best of breeding for production and size. George Damken, North Manchester, Indiana.

O. I. C.

O. I. C'S MARCH FARROWED SOW AND Boar Pigs, sired by Michigan Giant with plenty range and good backs, Dams are all over two yrs. price $20. Registered and express paid. **Maple Valley Stock Farm, North Adams, Mich.**

O. I. C.'S. 1 GILT 13 MONTHS OLD, WEIGHT 380, due June 3rd. 10 last fall gilts due Aug. and Sept. 1 last fall boar, spring pigs not akin. Record free. Citz. phone. ¼ mile west of depot.
OTTO B. SCHULZE, Nashville, Mich.

HAMPSHIRES

HAMPSHIRES: A FEW BRED GILTS LEFT. Place your order now for your Boar pig at a bargain. Pairs not akin. 10th year.
JOHN W SNYDER, St. Johns, R. 4, Mich.

(Other Livestock Ads on Page 23)

The Agricultural and Business Situation

Revised Monthly by the Department of Research of the American Farm Bureau Federation.

IS THE PERIOD OF SEMI-PROSPERITY AT AN END?

From the low point in manufacturing activity, May to July, 1921, there has been a steady and rapid increase and for the last five months output has been proceeding at a rate almost 50 per cent greater than the low.

In building expenditures, the first four months of 1923 showed a gain of 51 per cent over the same period the previous year and after allowing for the present higher prices of building materials there is a net gain of 20 per cent.

Railroad carloadings have been running about 25 per cent over a year ago.

INDUSTRIAL HALT:

There has started, recently, a decline in this industrial activity, building operations in particular being curtailed. Wholesale prices also show a decline around 2 per cent and stock prices which reflect the judgment of speculators concerning future business are off about 9 per cent since the middle of March. There is now heard on every hand the question: Is the present period of so-called prosperity now heading toward another sharp down-turn in prices?

PRICE MALADJUSTMENTS:

Maladjustment in prices if persisted in, brings cessation in demand, causing a slackening in busines which may develop into depression. It is clear that the construction industry has been getting out of hand. Compared with a year ago building material prices are 31 per cent higher and metal and metal products prices 36 per cent higher. Farm prices for the same period show a gain of 9 per cent and food prices 5 per cent.

It is fortunate, therefore, that the brakes have now been applied for the widening of the price relationship would only hasten and make more serious the day of reckoning. That business has now entered the cautious stage is a hopeful sign for the longer continuance of the present period of semi-prosperity. The more substantial the adjustment, if not so extreme as to constitute a depression, the longer the continuance.

LABOR, RAILROADS AND BANKING:

The biggest obstacles to proper adjustment lie in the labor and railroad situations. In the one case there are advancing wages and a tendency to decreasing productivity per man. In the other, there is little likelihood of immediate reduction in rates and always a possibility of congestion.

The most stabilizing influence is the favorable money and banking situation.

In summary, it may be said that recent events which have emphasized the need of caution and have led to some curtailment of production will correct to a degree the labor situation and should make more possible the expansion of needed railroad facilities at lower costs. Adding to this the banking position as a positive constructive factor, it is difficult to believe that another business depression is now starting.

PROSPERITY INCOMPLETE:

Agriculture can hardly talk about prosperity as long as the price relationships remain so unfavorable to it. Even with the third largest crop in 1922, the position of the farmer in purchasing power, in terms of volume multiplied by price, is only three-fourths of pre-war. With both agricultural and industrial output at high levels, this means that the industrial groups are receiving the larger shares of the total stock of goods produced. The quickest way to change this is for farmers to shift to the other groups. This they are doing as shown by the reports of a net loss from farms during 1922 of 1,120,000 persons, 3.6 per cent of the agricultural population at the beginning of the year.

I. Production and Trade

1. Agriculture: U. S. Production—000,000 omitted.

	1922	1921	Average 1916-1920	1922* Per cent
Corn, bu.	2891	3069	2831	102
Wheat, bu.	856	815	799	107
Oats, bu.	1215	1078	1413	85
Barley, bu.	186	155	197	94
Rye, bu.	95	62	68	139
Buckwheat, bu.	15	14	14	107
Potatoes, bu.	451	362	373	121
Sweet Potatoes, bu.	110	99	89	123
Hay, all, tons	113	98	102	111
Cotton, bales	9.76	7.95	12	81
Tobacco, lbs.	1325	1070	1378	96
Flaxseed, bu.	12	8	11	109
Rice, bu.	42	38	42	100
Peaches, bu.	57	33	44	129
Pears, bu.	19	11	14	136
Apples, total, bu.	204	99	179	114
Apples, com'l., bbls.	31	22	27	115
Sugar Beets, tons	5	8	7	71
Cranberries, bbls.	.6	.4	.4	150
Beans, bu.	12	9	13.3	90
Onions, bu.	18	14	17	105
Cabbage, tons	1	.6	.7	143
Sorghum Sirup, gal.	37	46	40	93
Cloverseed, bu.	1.9	1.5	1.5	127
Peanuts, lb.	624	529	1043	59
Hops, lb.	26	29	32.1	81

*As percentage of average 1916-1920.

World Production—000,000 omitted.

	1922	1921	Average 1909-13
Wheat, bu (1)	3,058	3,060	2,890
Corn, bu. (2)	3,450	3,781	3,572
Rye, bu. (3)	785	773	....
Oats, bu. (4)	3,003	2,759	3,008
Barley, bu. (5)	823	818	882
Potatoes, bu. (6)	3,123	2,445	3,066
Cotton, bales (7)	16	14.1	19.6

(1) Russia and Mexico excluded.
(2) 17 countries. (3) 18 countries. (4) 27 countries. (5) 25 countries. (6) 16 countries. (7) 500 pounds net, linters excluded.

2. Mining (Federal Reserve Bank of New York):

Figures express production as a percent of normal. In estimating normal production, due allowance is made for seasonal variation and year to year growth.

	Mar., 1923	Feb., 1923	Mar., 1922
Anthracite coal	§112	112	105
Bituminous coal	§ 80	81	89

3. Manufacturing (Federal Reserve Bank of New York):

Wheat flour	*	109	114
Meat	*	*	112
Sugar	*	121	142
Cotton	107	108	91
Pig iron	110	105	65
Steel ingot	99	95	71
Wood pulp	*	103	100
Cement	146	160	104
Wool	*	126	123
Copper	§ 91	§89	47

* Not available. § Preliminary.

4. Building Expenditures (Bradstreets):

(000 omitted)

	1923	1922	Per cent Increase
January, 164 cities	$194,782	$141,791	38.0
February, 164 cities	221,827	136,274	62.8
March, 165 cities	377,831	243,532	55.1
First quarter	$794,440	$521,597	52.3
April, 160 cities	$325,246	$216,886	50.0

5. Transportation:

Freight car loadings:	Week Ending May 5, 1923	Same Week Month Ago	Same Week Year Ago	Week Ending May 5, 1923*
Total	961,029	895,767	747,200	129
Grain and grain products	34,097	39,353	39,919	87
Livestock	33,508	30,833	29,944	111
Coal	175,866	164,089	75,125	235
Coke	15,100	16,076	8,134	94
Forest products	72,154	73,957	56,845	127
Ore	37,943	15,381	11,460	331
Merchandise	240,845	234,208	242,610	99
Miscellaneous	351,516	321,826	283,1[illegible]3	124

*As percentage of week year ago.

6. Employment:

Out of 65 industrial centers employment:	April, 1923	March, 1923	Nov., 1922
Increased over previous month in	38	54	54
Decreased from previous month in	26	11	11

7. Bank Debits:

Units of $1,000,000,000

	Apr., 1923	Mar., 1923	Apr., 1922
New York City	$20.50	$22.50	$20.70
Outside bank debits	18.70	19.60	15.70

8. Mail Odrer Sales:

Montgomery	April 1923	April 1922	Ten Months Ending April 1923	Ten Months Ending April 1922
Ward & Co.	$11,512,969	$ 7,357,640	$ 92,696,026	$ 65,554,210
Sears Roebuck	19,178,350	14,712,632	174,640,128	144,715,111

II. Foreign Trade

1. Exports: (000 omitted)

Commodity:	—February— 1923	1922	Eight Months Ending —February— 1923	1922
Grand total, all exports	$302,106	$246,133	$2,613,285	$2,435,848
Beef and veal, lbs.	2,567	2,579	20,791	23,359
Pork, lbs.	72,210	59,956	530,073	460,356
Lard, lbs.	89,055	75,520	600,176	597,477
Neutral lard, lbs.	2,481	2,571	17,087	14,163
Butter, lbs.	639	500	7,169	3,760
Cheese, lbs.	424	493	2,772	5,414
Hides and skins $	233	211	2,467	3,130
Corn, bu.	3,699	22,052	74,312	112,672
Meal and flour, bbls.	49	50	352	495
Wheat, bu.	5,991	5,576	126,492	172,448
Flour, bbls.	1,379	1,203	10,497	11,037
Oats, bu.	589	239	17,111	2,639
Meal and rolled, lbs.	7,238	3,778	79,029	58,101
Fruits and nuts $	4,522	4,464	59,724	49,642
Vegetable oils, fats $	973	1,243	9,218	5,028
Sugar, lbs.	65,942	135,270	422,133	789,031
Leaf tobacco, lbs.	25,978	25,846	297,103	308,564
Cotton, bales	360	333	4,112	4,522
Wool, lbs.	109	60	840	761

2. Imports (000 omitted):

Commodity:	—January— 1923	1922	Seven Months Ending —January— 1923	1922
Grand total	$329,903	$217,185	$2,023,263	$1,405,857
Beef and veal, lbs.	669	867	26,835	18,341
Pork, lb.	106	149	464	618
Butter, lb.	1,851	1,556	6,382	8,621
Cheese, lb.	4,022	2,174	34,572	20,421
Hides and skins $	13,347	5,670	78,358	42,542
Corn, bu.	24	3	46	37
Oats, bu.	20	184	222	820
Wheat, bu.	252	3,120	13,578	8,269
Wheat flour, bbls.	37	118	307	313
Fruits and nuts $	5,105	6,584	40,645	50,160
Vegetable oils and fats $	5,861	4,310	31,802	26,673
Sugar, lb.	530,910	705,312	4,181,301	3,089,412
Leaf tobacco, lb.	806	7,573	15,811	34,228
Cotton, bales	105	42	278	[illegible]91
Wool, lb.	56,313	22,152	250,306	94,560

3. Prices of Foreign Drafts:

	Nominal Gold Value Par of Exchange	Price of Demand Drafts May 21, 1923	April 23, 1923	May 22, 1922
England	$4.87 to 1 £ Sterling	$4.63	$4.645	$4.45
France	19.3c to 1 franc	6.665c	6.66c	9.03c
Germany	23.8c to 1 mark	.0020c	.0034c	.32c
Belgium	19.3c to 1 franc	5.74c	5.76c	8.32c
Italy	19.3c to 1 lire	4.85c	4.95c	5.11c
Spain	19.3c to 1 peseta	15.27c	15.33c	15.93c
Austria	20.3c to 1 crown	.0014c	.0014c	.01c
Denmark	26.8c to 1 crown	18.62c	18.86c	21.28c
Norway	26.8c to 1 crown	16.31c	17.73c	18.05c
Sweden	26.8c to 1 crown	26.70c	26.74c	25.90c
Holland	40.2c to 1 florin	39.14c	39.10c	38.80c
Argentina	42.5c to 1 peso	36.08c	36.60c	36.50c
Brazil	32.4c to 1 milreis	10.40c	10.85c	13.94c
India	48.7c to 1 rupee	31.05c	31.33c	29.25c
Japan	49.9c to 1 yen	49.02c	48.72c	47.38c
Canada	100c to 1 dollar	98.00c	98.31c	99.13c

4. Discount Rate of the Bank of England:

May 16, 1923	Month Ago	Year Ago
3%	3%	4%

III. Money and Credit

1. Gold, Currency and Bank Deposits (000,000 omitted):

	April 1, 1923	Mar. 1, 1923	April 1, 1922
Stocks of monetary gold in the United States	$ 3,969	$ 3,961	$ 3,751
Total supply of currency in the United States	4,656	4,611	4,413
	April 3, 1923	Dec. 29, 1922	Mar. 10, 1922
Total deposits in National Banks	$17,936	$18,320	$15,390

2. Gold Movement (000 omitted):

	—March— 1923	1922	Nine Months Ending —March— 1923	1922
Exports of gold	$10,392	$ 968	$ 46,993	$ 20,759
Imports of gold	15,951	33,488	209,311	434,104

3. Federal Reserve Ratio:

	May 16, 1923	Apr. 11, 1923	May 17, 1922
Ratio of total reserves to deposits and Federal Reserve note liabilities	75.3%	76.3%	77.6%

4. Interest Rates:

	April, 1923	March, 1923	April, 1922
4-6 mos. commercial paper	5.25%	5.16%	4.78%
60-90 days commercial paper	5.12%	5.03%	4.56%

5. Discount Rate of Federal Reserve Banks:

	May 1, 1923	April 1, 1923	Map 1, 1922
Range of rates for the twelve banks on commercial, agricultural and livestock paper	4½-5%	4½%	4½-5%

6. Stock and Bond Prices:

	May 11, 1923	April 13, 1923	May 12, 1922
20 Industrial stocks	$ 96.45	$101.31	$92.50
20 Railroad stocks	82.20	86.34	83.44
40 Bonds	86.76	86.40	88.88

7. Business Failures:

	—Week Ending— May 10, 1923	Apr. 12, 1923	May 11, 1922
Bradstreets	342	394	374
Duns	356	362	408

IV. Prices

1. Wholesale Prices of Farm Commodities:

Quotations at Chicago except as noted.

	May 22, 1923	Month Ago	Year Ago
Fat hogs, cwt., average	$ 7.30	$ 7.70	$10.40
Beef steers, good native, cwt., av.	9.50	9.10	8.35
Fat lambs, cwt., average	14.25	13.45	12.50
Fat sheep, cwt., average	7.25	7.75	7.35
Wool, Ohio delaine unwashed, lb. (Boston)	.575	.57	.51
Butter, 92 score, lb.	.395	.4025	.3225
Cheese, No. 1 twins, lb.	.24	.20	.175
Eggs, fresh firsts, doz.	.2525	.255	.2425
Poultry, hens, lb.	.25	.255	.26
Wheat, No. 2 hard, bu.	1.20	1.27	1.3475
Corn, No. 2 mixed, bu.	.8225	.825	.62
Oats, No. 2 white, bu.	.4575	.4675	.4037
Rye, No. 2, bu.	.79	.865	1.055
Barley, bu.	.68	.665	.68
Kafir, No. 2 white, cwt. (K. C.)	1.80	1.83	1.285
Hay, No. 1 timothy, ton	23.50	22.00	26.00
Flax, No. 1, bu. (at Minneapolis)	2.945	3.38	2.725
Cotton, middling, lb. (New York)	.2865	.2805	.2160
Beans, white, cwt. (f. o. b. Michigan)	7.65	7.10	8.50
Potatoes, northern whites, cwt.	.95	1.15	1.55
Onions, Texas Yellow Bermudas, crate	2.65	3.125	1.675
Apples, winter varieties, bbl.	6.75	5.50	8.00
Hides, No. 1 native, heavy, lb.	.135	.19	.15
Sugar, fine granulated, lb. (N. Y.)	.097	.0985	.0555

2. U. S. Department of Labor Relative Wholesale Prices:

Prices in year 1913 equal 100.

	Apr., 1923	Mar., 1923	Apr., 1922
All commodities (weighted average or general price level)	158	159	143
Farm products	141	143	129
Food products	144	143	137
Cloths and clothing	205	201	171
Fuel and lighting	200	206	194
Metals and metal products	154	149	113
Building materials	204	198	156
Chemicals and drugs	136	135	124
House furnishings	187	185	175
Miscellaneous	126	127	116

3. Prices of Farm Products at the Farm Relative to 1913:

(U. S. Bureau of Agricultural Economics)

Prices in year 1913 equal 100.

Commodity:	Mar., 1923	Feb., 1923	Mar., 1922
Cotton	229	224	129
Corn	128	125	96
Wheat	136	134	149
Hay	113	109	112
Potatoes	114	99	177
Beef cattle	95	94	93
Hogs	100	102	121
Eggs	113	157	103
Butter	153	155	128
Wool	223	211	150

4. Relative Purchasing Power of Farm Products:

(U. S. Bureau of Agricultural Economics)

The quantity of various commodities which a given amount of each farm product would purchase at prices prevailing in 1913 is put equal to 100. The figures given represent the percentage of this quantity which the same amount of farm products would purchase in March, 1923. Prices at the farm are used for agricultural products, and wholesale prices at central markets for other commodities.

	All Commodities	Cloths, etc.	Fuel, etc.	Metals, etc.	Building Mtls.	House Furn'gs
Cotton	144	114	111	154	116	124
Corn	81	64	62	86	65	69
Wheat	86	68	66	91	69	74
Hay	71	56	55	76	57	61
Potatoes	72	57	55	77	58	62
Beef cattle	60	47	46	64	48	51
Hogs	63	50	49	67	50	54
Eggs	71	56	55	76	57	61
Butter	96	76	74	103	77	83
Wool	140	111	103	150	113	120

Average purchasing power of all farm products in terms of all other commodities. Same basis as above table.

1913	100	December, 1921	62
1914	112	February, 1922	71
1915	106	March	76
1916	89	July	69
1917	106	September	64
1918	112	November	66
1919	111	December	63
1920	86	January, 1923	68
1921	67	February	69
1922	69	March	69

MARKET FLASHES

MARKET SUMMARY

Wheat and corn firm. Oats and rye steady. Beans unchanged after small decline. There is a liberal supply of eggs and the market is easy. Receipts of butter not sufficient to satisfy demand. Poultry quiet and steady. Good supply of strawberries and market is easy. Cattle steady to dull. Hogs firm to lower. Sheep mostly steady.

(Note: The above summarized information was received **AFTER** the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press —Editor.)

FOOTE'S MARKET LETTER

BY W. W. FOOTE

IMPROVED FARMING CONDITIONS

THE mail order firms report much increased sales to farmers, but smaller sales of farm implements have been made than normal, although they exceed those made a year ago. Accepting the mail order business as one of the traditional barometers of business, good times are coming. Railroads are crowded with freight, and leading lines are getting ready to expend vast sums for much needed equipment.

Farm Women Combining

There was a conference in Chicago last week of farm women from fifteen states with reference to co-operation in marketing their eggs. Grading and packing were discussed, and it was planned to establish state egg selling exchanges in the different states. It was pointed out that producers must look after the storing of eggs in the flush season and carry them over to the winter season. Claims were made that the pooling plan would save consumers from five to ten cents a dozen and cause triple profits for the owners of the hens.

The Grain Markets

There has been a marked falling off in speculation in grain on the Chicago Board of Trade since the recent federal legislation controlling speculative trading, and this is attributed by leading speculators to the new law. This is brought forward as one of the principal reasons why wheat prices have failed to move up in response to a number of bullish influences, recent prices having been much lower than a year ago and far below those paid two years ago. The exports of breadstuffs have been much smaller than early this year, and recent exports of corn, oats and rye show marked reductions from those of a year ago. Corn is in a strong position, however, with materially lessened marketings by farmers and much smaller stocks in sight than a year ago. The same is true of oats, but the visable rye supply is much larger than at this time in 1922. Rye has been selling so much below corn prices that several cars were shipped from Chicago to Indiana recently to be ground up into feed for hogs. The agricultural department announces that the increased American production of rye comes at a time when resumption of normal conditions in central and eastern Europe and the stabilizing of prices in Europe point to a time when much of the hitherto large foreign demand for American rye will cease. This would undoubtedly bring about lower rye prices. Rye has been selling far lower than a year ago for many weeks, and recent sales were made at the lowest prices of the year, going off over five cents a bushel in a single week. On the same day May corn advanced 5⅝ cents. Sales of July wheat are made in the Chicago market around $1.10, comparing with $1.18¼ a year ago; July corn at 79 cents, comparing with 62 cents last year; July oats at 41 cents, comparing with 99¾ cents a year ago.

Good Profits From Cattle

In the issue of this paper of May 12, it was stated that better prices were expected for cattle. At that time only a few prime steers were selling as high as $10.25, the bulk of the steers going at $8 to $10. There has been a marked improvement since then, and the advance has been much quicker than was expected. Prosperity makes larger call for the higher-priced cuts of beef, and this means much larger premiums paid for choice corn-fed steers and heifers. Other kinds of cattle have shared in the rise, however, and prices have ruled far higher than one and two years ago, the market being much better than was expected a month or so ago. Topnotchers have sold for $11 per 100 pounds, these being long-fed heavy steers, and prime yearlings sold up to $10.85, the better demand centering on heavy steers. One of the farmers who made an especially good showing on the Chicago market was Lee Wadleigh of Iroquois County, Illinois, who was so fortunate as to sell 112 head of prime fat steers, with weights running from 1417 to 1659 pounds at $10.65 to $10.95. These cattle were bought as feeders in the Chicago market last October, when they averaged in weight 1042 pounds and cost $7.68. The margin of profit was $3.19, with a gain of about 500 pounds in weight. They were bred on the Bartlett-Frazier ranch in New Mexico. It is noteworthy that recent substantial advances in prices have taken place in the face of very large receipts of cattle. The week was broken by the Memorial Day holiday, and there was an advance on the following day, with the top as high as any day since January, and the general average the highest since last October. On the other hand, the many ordinary cattle sold lower, and there has been a marked decline in prices for butcher cows and heifers. Top beeves at $11 stood $1.65 above the high point of May last year. Recent sales were made in the Chicago market of the better class of steers at $10 to $11, the greater part of the steers going at $8.50 to $11.85 and down to $7.50 to $8 for the commoner lots. Grassy cattle are arriving, and the range of prices is widening out, with most of the light weight steers 50 to 75 cents lower than a week ago. Stockers and feeders of desirable quality bring $7.50 to $8.85. A year ago the best beef steers brought $9.25.

Hogs Marketed Rapidly

According to all accounts from farming districts, plenty of hogs are left, and these reports are confirmed by the greatly increased marketings in western markets over those of a year ago. On Monday last week Chicago received 74,491 hogs, the largest number ever marketed in a May day, and this started another downward movement in prices, hogs accumulating rapidly from day to day in the stock yards, as many thousands were carried over unsold daily. Sales were made far below prices of one and two years ago, and it cannot be said that there is a very bright promise for a change in the market trend of prices. Eastern shippers are fair buyers, and this helps prices some, but continuous reduced receipts are necessary to bring about better prices. The extremely large consumption of lard in this country and abroad makes a big demand for heavy hogs, and the best heavy butcher lots have been selling nearly as high as the highest priced light weights. At the same time it will not pay owners to hold their hogs after they reach maturity, and buyers are not particularly anxious to buy hogs weighing over 250 pounds. Our exports of lard and cured hog meats are all the time far larger than a year ago, and lard exports from North America for ten months of the fiscal year ending with April aggregated 794,837,476 pounds. The largest shipments to foreign countries for a full year were 868,942,000 pounds in 1921. Late sales were made of hogs on the market at $6 to $7.40, comparing with $8.85 to $10.70 a year ago.

Marketing Spring Lambs

Increasing receipts of spring lambs from California and the middle west in the Chicago Stock Yards have caused big reductions in prices from those paid at the start. Aged sheep continue scarce, but they have weakened in values, and heavy ewes are almost unsalable. There is an active demand for feeders in the Chicago market, and good sized lots have gone to the country, California feeding lambs fetching $12.50, while California killing lambs brought $15.50 to $15.75. Clipped yearling wethers have gone out to feeding districts costing $11.25. Quite a number of good sized shipments of California feeder spring lambs averaging around 60 pounds have been sent to Michigan.

WHEAT

The Detroit wheat market has had a weak time of it during the past couple of weeks. The first week prices did not change to any extent but last week declines totaled 3½ cents. The weakness of the market during the forepart of last week was hard to understand as the outlook seemed to show that the new crop was in bad condition and the country apparently was confronted with a shortage of supplies. Many thought it was smallness of export demand that was causing it; however, over the holiday export business became good but this had no effect on the trend of prices. Toward the close of the week the market developed still more weakness, owing to estimates by leading crop exports that placed the 1923 yield above all dealers' expectations. Export demand also showed a decline at the close of the week. Although there are many bearish features in the market right at the present time, the belief is general on the market that this grain is in a firmer position than it has been for several weeks.

Prices

Detroit—Cash No. 2 red, $1.28½; No. 2 white, $1.28½; No. 2 mixed, $1.28½.

Chicago—No. 1 hard, $1.13½; No. 2 hard, $1.12¼@1.13.

New York—No. 2 mixed, $1.15¼.

Prices one year ago—Detroit, No. 2 red, $1.21; No. 2 white and No. 2 mixed, $1.19.

CORN

The general tendency of corn was to follow the trend of wheat, but price changes were less frequent. There were several attempts by dealers to sell quite heavily but buyers were plentiful enough to cause sellers to rush for cover. Demand as a whole is only fair while receipts are small to nothing. The Detroit market is ½c higher than it was two weeks ago.

Prices

Detroit—Cash No. 2 yellow, 89c; No. 3, 88½c; No. 4, 86c.

Chicago — Cash No. 2 mixed, 82½@83¾c.

New York—Cash No. 2 yellow, $1.04¼.

Prices one year ago—Detroit, No. 2 yellow, 65c; No. 3, 63½c.

OATS

Trading in oats was fairly active during the last couple of weeks but prices followed the wheat market. Domestic shipping demand is slow. Receipts are small and the country is offering no grain to arrive. The Detroit market finished the week quiet and off 1c.

Prices

Detroit—Cash No. 2 white, 48c; No. 3, 47c; No. 4, 45½c.

Chicago — Cash No. 2 white, 43¾c; No. 3, 42¾c.

Prices one year ago—Detroit, Cash No. 2 white, 42½c; No. 3, 40½c; No. 4, 35@38c.

RYE

This grain declined more in price than any other during the fortnight ending June 2nd, losing 3c at Detroit. There is a quiet tone to the market.

Prices

Detroit—Cash No. 2, 75c.

Chicago—Cash No. 2, 70½c.

Prices one year ago—Detroit, Cash No. 2, 98c.

BEANS

The market continued to gain during the two weeks ending June 2nd advancing at Detroit to $7.75 per cwt. and was at this level when it closed Friday of last week. Before the close on Saturday there was a decline of 35c which leaves the price 15c above that in the last issue. Dealers say that the market got too much steam on and could not hold its gain.

Prices

Detroit—C. H. P., $7.25 per cwt.

Prices one year ago—Detroit, C. H. P., $9.25 per cwt.

POTATOES

Potatoes show no change and prices are at practically the same level they were two weeks ago. Old potatoes are easy, with receipts and demand both small. New stock seems to be what the consumer wants and the market for new potatoes is firm.

Prices

Detroit — Michigan, $1.26@1.33 per cwt.

Chicago—Wisconsin and Round Whites, 75@90c per cwt.

Prices one year ago—Detroit, Michigan, $1.75 per cwt.

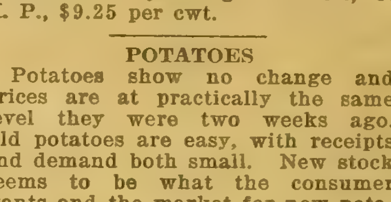
HAY

Little change is shown in market conditions. The demand is slow and trading quiet. Arrivals at most markets are reported light and a general lessening in country loadings is indicated. Best grades are firm in all markets but the general quality shown is from plain to poor.

Prices

Detroit—No. 1 timothy, $17.50@18; standard, $16.50@17; light mixed, $16.50@17; No. 2 timothy, $15.50@16.50; No. 1 clover mixed, $14@15; No. 1 clover, $13@14.

Prices one year ago—Detroit, Standard timothy, $21@22; No. 2 timothy, $20@21; light mixed, $21@22; No. 1 clover, $17@17.50.



Week of June 10

Although scattered electrical storms may occur in various parts of Michigan during most of the week, the first part is expected to be mostly fair. From Tuesday until about the end of the week conditions will be more unsettled and stormy. Heavy showers, thunder storms and brisk to high winds will form in different counties during the dates of the 12th, 13th, 14th and 15th. By Saturday brighter weather will occur and temperatures will become cool for the season.

Week of June 17

This week as a whole will average warm for the season. The week is expected to start with warm, humid weather in the state and continue more or less continuously throughout the rest of the seven days. From about Tuesday to Friday showers and thunder storms will be almost of daily occurance in many sections of Michigan. Fair weather about Saturday will also bring more seasonal temperatures into the Lake region.

We believe the weather for the next two or three weeks will be good for meadows and pasture but not so good for hay. This will not be a good corn period nor for barley, oats and rye. Grain farmers will be troubled with rust.

Better Returns
from your
Produce---

YOU can market your produce more profitably through the
Farm Bureau Produce Exchange.

Many farmers and shippers are not receiving the best market prices. Increase your returns through the service of the

Farm Bureau "Mitten" Outlet

FOR BEST RESULTS ship through your local Co-operative Association. Your co-op. manager is kept thoroughly informed by us on WHEN and HOW to make shipments.

—SHIP NOW
ALL KINDS OF POULTRY
Especially Broilers, Hens and Ducks

Shipping tags and information gladly furnished on request.

Other Products Handled and Marketed

Asparagus, Strawberries, Goosberries, Raspberries, Celery, Potatoes and all kinds of fruits and vegetables, also eggs.

Producers unable to ship through a co-op. should write us for information on how this service may be obtained.

A Dept. of Michigan State Farm Bureau

FARM BUREAU PRODUCE EXCHANGE

DETROIT, MICHIGAN
2739-31 Russell St. Cadillac 2270

POULTRY BREEDER'S DIRECTORY

Advertisements inserted under this heading at 30c per agate line, per issue. Commercial Baby Chick advertisements 45c per agate line. Write out what you have to offer and send it in. We will put it in type, send proof and quote rates by return mail. Address The Michigan Business Farmer, Advertising Department, Mt. Clemens, Michigan.

PULLETS, HENS AND COCKERELS
S. C. White Leghorns and S. C. and R. C. Black Minorcas. Must make room before cold weather. About ready to lay.
LAPHAM FARMS, Pinckney, Mich.

PULLETS—ENGLISH WHITE LEGHORNS 8 to 10 weeks old for June, July and August delivery. Write for price list.
HENRY WATERWAY, R. 4, Holland, Michigan.

HATCHING EGGS

HATCHING EGGS
S. C. White Leghorns. Tom Barron Strain, 250 egg utility line. November to April, average 65 per cent. Pure white plumage. Range grown, healthy, vigorous stock. Eggs $1.50 per 15; $4.00 per 50; $7.00 per 100. Prepaid. Limited supply. Order from this ad now.
MAPLEWOOD POULTRY FARMS
C. W. Boves, Prop. North Star, Michigan.

BUFF ROCK EGGS BY 10 LB. MALES and 1st Cincinnati, O., winners. Hogan tested hens, heavy layers.
J. C. CLIPP & SONS, Box M, Saltillo, Ind.

THOROUGHBRED BUFF ROCK EGGS from Blue Ribbon Winners, $1.50 per 15; $8.00 per 100.
BALDWIN & NOWLIN, R. 4, Laingsburg, Mich.

White and Barred Rock Eggs for Hatching. Pure Prize winning, utility strains, selected pens, $1.35 per setting, flock $1.00 a setting, delivered P. P. special on quantity. Dawson's Farm, R. No. 4, Muskegon, Michigan.

BARRED ROCK HATCHING EGGS. NORMAN Heavy Laying Strain.
MRS. JESSIE B. DEAN, R. 1, Mason, Mich.

FOR SALE—BARRED ROCK HATCHING EGGS from good winter layers. $1.25 per 15 or $2.00 per 30 postpaid.
Mrs. Frank Millikin, R. 1, Rescommon, Mich.

THOMPSON STRAIN BARRED ROCK EGGS by 9 lb. males, bred to lay. Dark matings $1.75 per 15; $3.00 per 30 prepaid.
MRS. FRED KLOMP, St. Charles, Michigan.

EGGS FOR HATCHING—UTILITY STOCK. Grand White Wyandottes—M. A. C. Champions. Good, square deal. Reasonable prices. Send for price list.
C. W. HEIMBACH, R. 5, Big Rapids, Michigan.

THE PASSING OF DR. FRIDAY

(Continued from Page 3)

Florence Middaugh. It is said that the faculty resented receiving orders from Miss Middaugh that the president had never seen, and resented still more asking Dr. Friday about any question only to have him turn to Miss Middaugh to ask about it before replying.

Michigan farmers have been undecided as to what attitude to take toward Dr. Friday. He has outlined a program which is fundementally sound in so far as it goes, no doubt, but he has stopped short just where most farmers are convinced he should begin—with the promotion of co-operative marketing and reduction of the spread between the price received by the producer and that paid by the consumer, so that the farmer might receive more than about 33 cents of the consumer's dollar.

Speeches made by President Friday at Cadillac and at the Michigan State Grange at Kalamazoo lost him many farmer friends and were a keen disappointment to may who were hoping that Dr. Friday would prove to be the Moses who would lead the farmers of Michigan out of the desert of economic depression and into the promised land of economic satisfaction.

Fear that plans favored by Dr. Friday and Governor Groesbeck relative to the control of the Extension Division of the college and the county agent system would render the extension work a polical football and entangle it in the meshes of a political machine probably was one of the factors actuating the Board in its dicision to come to the parting of the ways with President Friday.

Friday is gone, but M. A. C. remains. The master hand of Dean Robert S. Shaw is at the helm guiding that splendid institution through the troubled waters until a permanent president is selected. The State Board of Agriculture is still the governing body. The advice of Governor Groesbeck has for once been disregarded. Perhaps anyway this centralization of state government has gone far enough and the people's elected representatives charged with a specific duty should go ahead and carry out as their wisdom and conscience dictates with the full assurance that they will have the moral support of those who by popular electorial mandate charged them with the duty of administering to the best of their ability the affairs of the Michigan Agricultural College.

CONSOLIDATED SCHOOL COSTS

(Continued from Page 4)

one well adapted course of study in which very few elective subjects are included; and by avoiding all duplications in equipment.

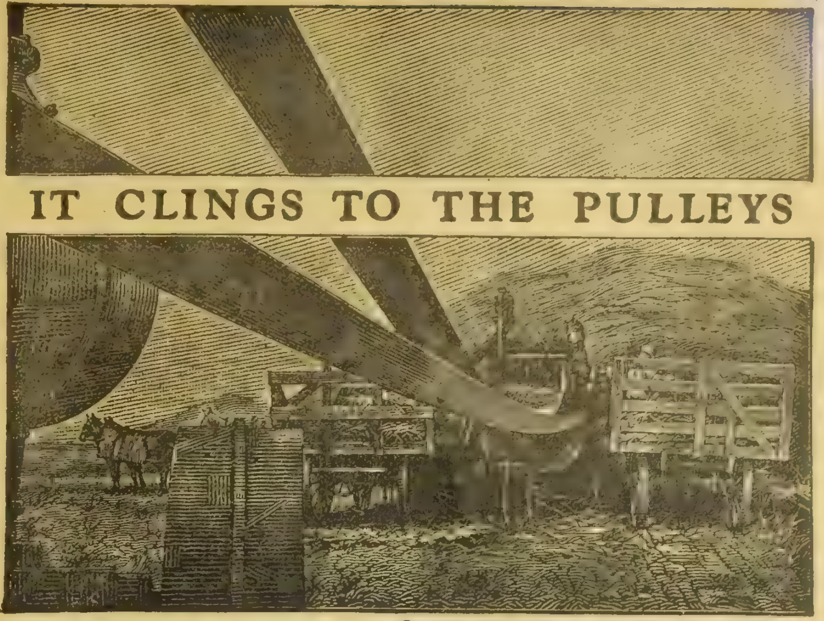
It would be considered poor farm management for a man who is operating a twenty or forty-acre farm to equip it in the same way that he would a one hundred and sixty acre farm. He must avoid too great an overhead in proportion to his farm investment and reduce the equipment to the minimum that is consistent with successful farm management on the smaller farm, whereas he might be using just as poor business judgement in attempting to operate a one hundred sixty acre farm with the twenty-acre farm equipment. Likewise, we would not expect the operating expenses of a fruit farm to be on a par with those of a dairy farm of the same acreage.

Some graded districts having a small assessed valuation offer more courses than others with double the valuation, and the overhead for the maintenance of the school is much higher than it would be if a more conservative type of program were adopted. This tendency should be advocated in the consolidated schools, and a good general course with equipment and teaching force that is in harmony with the actual needs and efficiency of the school should be the guiding principle for the management of these schools.

DOGS

ANNUAL BARGAIN SALE OF REG. COLLIES. Farm raised and natural heel drivers.
SILVERCREST KENNELS, Gladwin, Michigan.

FOR SALE THOROUGHRED WHITE COLLIE PUPPIES.
CHAS. KEPNER, Carson City, Michigan.



IT CLINGS TO THE PULLEYS

Copyright 1923, by The Goodyear Tire & Rubber Co., Inc.

"In the last four years my Goodyear Klingtite Belt has seen 113 days of threshing, with the harvest running 36,000 to 38,000 bushels a year. It grips the pulleys, stays on the job, never slips, and needs no dressing. Klingtite for mine."
—W. H. LINDEMAN, Hillsboro, N. D.

IF you want a belt that holds the pulleys in a slipless grip, delivers full power, makes the most of engine fuel and is easy on engine bearings, get the Goodyear Klingtite Belt. It is an all-weather belt, too. It requires no dressing, it needs no breaking-in.

Goodyear Klingtite Belts are made in endless type for heavy duty and in cut lengths for lighter drives. They are sold by Goodyear Mechanical Goods Service Station Dealers and by many hardware dealers

VALVES · PACKING BELTS · HOSE

GOODYEAR
KLINGTITE BELTS

150,000 JUNE CHICKS $9 PER 100 AND UP

Good, strong, vigorous Chicks from pure-bred, selected, heavy-laying hens on free range and well cared for, insuring vitality of the Chicks.

Varieties	Prices on 50	100	500	1000
White, Brown and Buff Leghorns	$5.00	$ 9.50	$45.00	$ 90.00
Barred Rocks, Reds, Anconas	$6.50	$12.00	$58.00	$115.00
White Rocks, White Wyandottes, Buff Orpingtons	$7.00	$13.00	$63.00	$125.00
Silver Wyandottes	$7.50	$14.00	$70.00	

Postpaid to your door. 100% live arrival guaranteed. Place your order quickly direct from this advertisement with full remittance. Best Bank Reference. You are not taking any chances. Circular free.
MODERN HATCHERY, Box F, Mt. Blanchard, Ohio.

CHICKS $8.50 PER 100 AND UP Postpaid to your door and full live count guaranteed

Varieties	Prices on 50	100	500
WHITE, BROWN and BUFF LEGHORNS	$5.00	$9.50	$45.00
BARRED ROCKS, S. C. REDS, ANCONAS, MINORCAS	7.00	12.00	57.50
WHITE ROCKS, WHITE WYANDOTTES	7.00	13.00	62.50
BROILERS, MIXED CHICKS	5.00	9.00	42.50

BUFF MINORCAS, 25, $5.50; 50, $10; 100, $20.
Hatched in best modern incubators from good, vigorous, pure-bred, heavy-laying flocks on free range. Carefully selected and packed to go safely. Order right from this ad with full remittance. Save time. No catalog. Reference: Citizens Savings Bank. You take no chance. Instructions for raising late Chicks with each order.
THE EAGLE NEST HATCHERY, Box K, Upper Sandusky, Ohio

CHICKS WITH PEP
BIG REDUCTION FOR JUNE AND JULY
YOU CAN'T BEAT OUR PRICES AND CHICKS.
Try Our Full of Pep and Bred to Lay Chicks. They will pay you in June and July. Leghorns and Mixed 10c; Rocks Reds, Anconas, Minorcas, White Wyandottes 13c; Orpingtons and Silver Wyandottes 15c. Safe delivery. Postpaid. Illustrated Catalog free.
HOLGATE HATCHERY, Box B, Holgate, Ohio.

PURE BRED BUFF ORPINGTON EGGS AT $2-15; $5.50-50. Prepaid.
MRS. ANNA LA NOUE, Fostoria, Michigan.

ROSE COMB RHODE ISLAND REDS. HATCHING eggs $1.25 per setting. Postpaid.
Mrs. Albert Harwood, R. 4, Charlevoix, Mich.

EGGS FOR HATCHING—PURE BRED WHITE Wyandottes, 15 eggs $1.25; 30 eggs $2.00; 50 eggs $3.00; 100 eggs or more 5 cents each. Single settings prepaid. Others f. o. b. Allegan. H. M. Horton, Citz. Phone 294B, Allegan, Mich.

SILVER LACED AND WHITE WYANDOTTES Four large, beautiful roosters. Eggs $1.50 per 15.
C. W. BROWNING, Portland, Michigan.

SICILIAN BUTTERCUPS. GOOD YEAR around layers of large white eggs; also White Rocks, good laying strain. Eggs $1.50 per 15.
IDA PRAUSE, R. 3, Maple City, Michigan.

FOR SALE—A FEW RINGLET STRAIN Barred Rock Eggs, dark, $1.00 per 15.
MRS. TERPENING, Ithaca, Michigan, R. 1.

BOURBON RED TURKEYS. EGGS 50c EACH.
THOS G. CALLAGHAN, Fenton, Michigan.

MAMMOTH PEKIN DUCK EGGS FOR SETTING $2.00 or two settings $3.00. Also Wild Mallard Duck eggs same price. Very choicest stock. All orders prepaid. Cedar Bend Farm, Okemos, Mich.

LEGHORNS

LEGHORNS
S. C. Buff Leghorn Hens, Pullets and Cockerels. Hens and pullets $2.50 each; cockerels $3.00 to $5.00 each. Show birds a matter of correspondence. LAPHAM FARMS, Pinckney, Mich.

PULLETS BARRON ENGLISH WHITE Leghorns, eight weeks to maturity—May to October. Breeding flocks repeatedly culled by experts. Extra large and vigorous. Wedge shaped bodies, big looped combs. "Laybilt" in every way. Also breeding cockerels. Satisfaction and more or money back.
MORSE WHITE LEGHORN FARM, Belding, Michigan.

(Livestock Ads Continued from Page 20)

DUROCS

HILL CREST DUROCS, PERRINTON, MICH. We are breeding twenty sows and eighteen gilts to a son of GREAT ORION SENSATION. Yearling, spring and fall boars. NEWTON & BLANK, Farm 4 miles straight south of Middleton, Gratiot Co., Mich.

PEACH HILL FARM offers choice weanling Duroc pigs, either sex. Priced very reasonable. Write us.
INWOOD BROS., Romeo, Mich.

ANOTHER BUNCH OF REAL DUROC PIGS Sired Sensations King 12th. At seven months old stood 34 inches high, 68 long, legs 11 inches. Woodford Sensations breeding. $12.50.
FREED BROS., Elwell, Michigan.

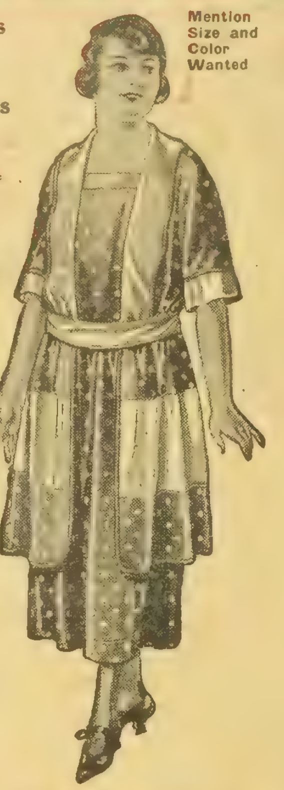
Astounding Values!

Send No Money---Pay On Arrival!

Dollar for dollar, there is not a single offer in this advertisement that is equalled today anywhere else in America. Let us prove this claim at our own risk—not yours. Don't send one cent. Just letter or postcard brings any of these smashed price bargains. Absolutely no obligation and not the slightest risk to you. Merely give name and number of each article you want. Also state size and write your name and address plainly to avoid delay. Pay nothing till goods arrive—then only the amazing bargain price and postage. Then examine your selection—try it on—show it to your family and friends. Then if you are not delighted with your bargain your money will be cheerfully refunded. Order NOW!

Women's "Stylish Stout" Voile Dress

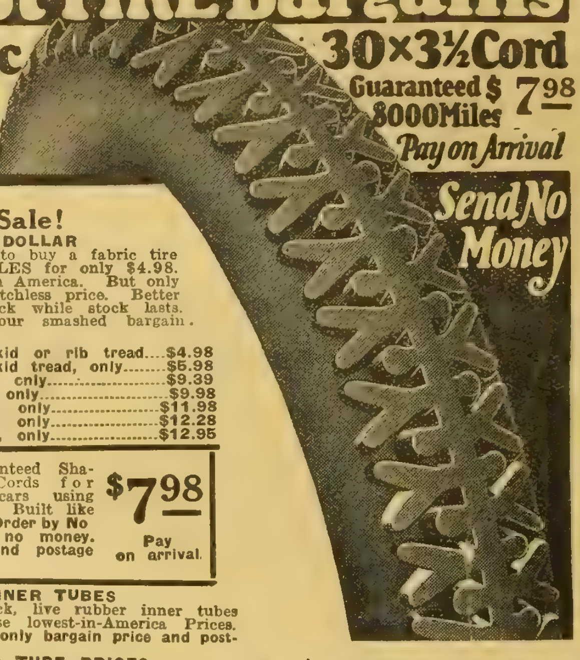
Mention Size and Color Wanted



$2.98

A very beautiful tunic model in "stout" voile dress of graceful slenderizing lines for stout women. Made of good quality polka dot voile with tunic over-skirt, attractively trimmed with pretty organdy collar and cuffs. You will pay much more for a dress of equal value elsewhere. Better get your order in early. Sizes 39 to 53 Bust. State size wanted. Choice of colors. **No. 96E6811, Black; No. 96E-6812, Navy; No. 96E6813, Brown. Send no money. Pay only $2.98 and postage on arrival.**

Greatest TIRE Bargains



30x3 Fabric
Guaranteed 6000 Miles $4.98
Pay on Arrival

30x3½ Cord
Guaranteed 8000 Miles $7.98
Pay on Arrival

Send No Money

Sensational Sale!

1,000 MILES PER DOLLAR

Auto owners—your opportunity to buy a fabric tire GUARANTEED FOR 6000 MILES for only $4.98. Positively the Biggest Bargain in America. But only 50,000 to be sold at this matchless price. Better not delay ordering. Send quick while stock lasts. No money now. Pay only our smashed bargain price and postage on arrival.

No. 96D11040—30x3	Non-skid or rib tread	$4.98
No. 96D11041—30x3½	Non-skid tread, only	$5.98
No. 96D4042—Non-skid	tread, only	$9.39
No. 96D4043—Non-skid	tread, only	$9.98
No. 96D4044—Non-skid	tread, only	$11.98
No. 96D4045—Non-skid	tread, only	$12.28
No. 96D4046—Non-Skid	tread, only	$12.95

Standard Cord 30x3 1-2

9,000 Mile Guaranteed Sharood's Standard Cords for Fords and all cars using 30x3½ tire sizes. Built like the oversize Cords. **Order by No 96D11090. Send no money. Pay only $7.98 and postage on arrival.**

$7.98 Pay on arrival.

GUARANTEED INNER TUBES

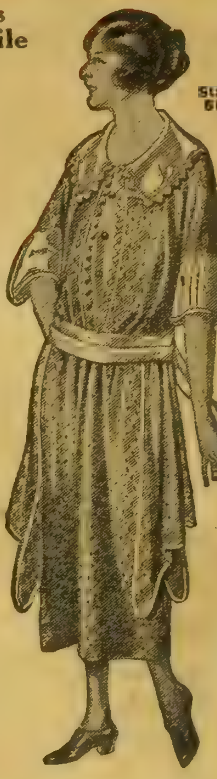
Sharood offers you extra thick, live rubber inner tubes at a big saving. Buy at these lowest-in-America Prices. How many shall we send? **Pay only bargain price and postage on arrival.**

GREATLY REDUCED TUBE PRICES

96D4020—30x3	$ .99
96D4021—30x3½	1.19
96D4022—32x3½	1.39
96D4023—31x4	$1.69
96D4024—32x4	1.75
96D4025—33x4	1.79
96D4026—34x4	$1.79

Women's Pretty Voile Dress

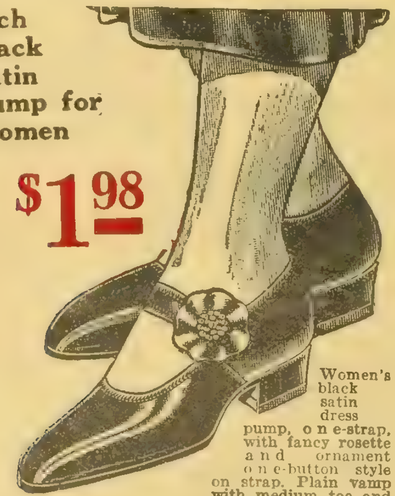
State Size



$1.98

Very attractive, dainty voile dress, with organdy trimming. Beautiful figured voile with new side panels. Youthful organdy collars and cuffs. Also pretty vestee insert of organdy and neat organdy sash. This model has all the lines of fashions selling at much more than Sharood's sale price. Misses sizes 14 to 20 years, 32 to 38 bust. Women's sizes 34 to 46 bust. Be sure to state size wanted. Choice of colors. **No. 96E-6712, Navy; 96E-6713, Copenhagen; 96E6714, Rose; 96E6715, Lavender. Send no money. Pay $1.98 and postage on arrival.**

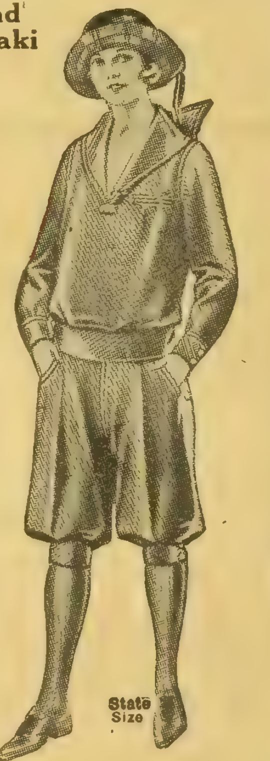
Rich Black Satin Pump for Women



$1.98

Women's black satin dress pump, one-strap, with fancy rosette and ornament one-button style on strap. Plain vamp with medium toe and close edge sole with low rubber heels. Genuine oak soles. A dressy, stylish new spring fashion that will be all the rage among the best dressed women. Sizes 2½ to 8 wide widths. **Order by No. 96A56. Send no money. Pay only $1.98 and postage on arrival. State size.**

Ladies' and Misses' Khaki Outfits

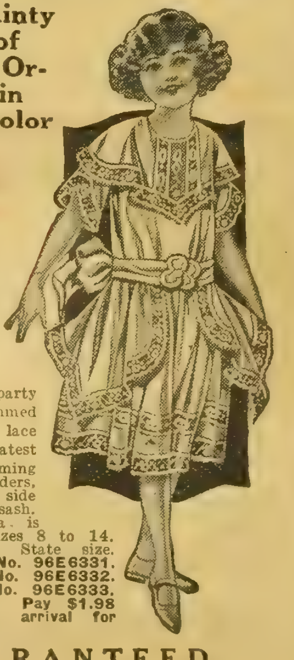


$1.98

This is beyond a doubt the greatest offer of this type that you have ever had the good fortune to see. Never have we been able to make such radical reductions in face of a rising market. This khaki outfit will give good service. It is made for rough wear. The suit consists of tailored middy with long sleeves and sailor collar. Has tie loop in front. Knickers are made with fitted waistband, side openings trimmed with buttons and two front slash pockets. Fitted kneebands. Misses' sizes 14 to 20, 32 to 38 bust. **Order by No. 96E-6800. Price $1.98.**

State Size

Girls' Dainty Frock of Sheerest Organdie in Popular Color

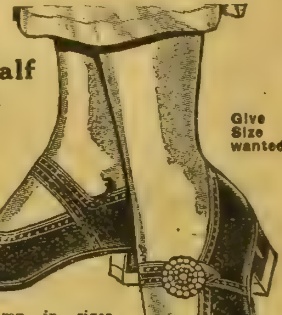


$1.98

It's seldom that even Sharood finds it possible to offer such an unequalled bargain as this fetchingly beautiful organdie party dress. Trimmed throughout with lace edging, with latest large collar coming over the shoulders, two panels at side and rosette on sash. The panel idea is entirely new. Sizes 8 to 14 years for girls. State size. **Order white by No. 96E6331. Order blue by No. 96E6332. Order rose by No. 96E6333. Send no money. Pay $1.98 and postage on arrival for either color.**

Women's Pump of Brown Calf or Patent Leather

Give Size wanted

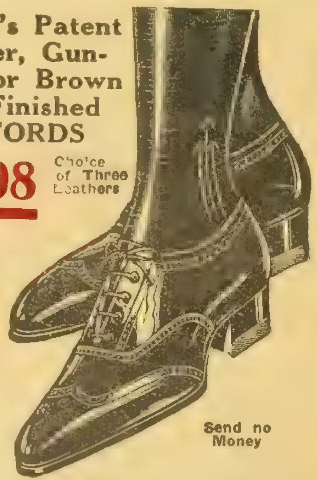


$1.98

This smart pump in sizes 2½ to 8. In black patent leather or brown calf finish—a stunning one-strap model with ornament on strap, imitation shield tip and medallion effectively perforated. Has medium rubber heel. **Order patent leather by No. 96A72. Order brown by No. 96A73. Send no money. Pay $1.98 and postage on arrival.**

Women's Patent Leather, Gun-Metal or Brown Calf Finished OXFORDS

$1.98 Choice of Three Leathers

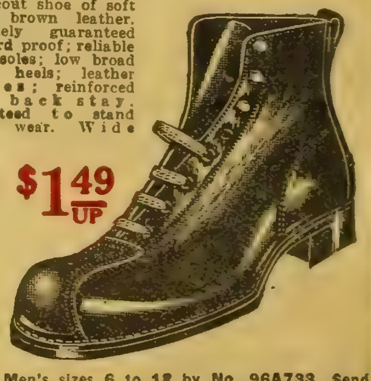


Made with imitation shield tip and medallion perforated vamp, perforated lacestay and circular foxing. Has medium rubber heel and medium pointed toe. Sizes 2½ to 8. Wide widths. **Order patent by No. 96A64. Order gun metal by No. 96A69. Order Brown by No. 96A70. Send no money. Pay $1.98 and postage on arrival.**

Send no Money

Men's, Boys' and Little Boys' Scout Shoes

Fine scout shoe of soft pliable brown leather. Absolutely guaranteed barnyard proof; reliable sturdy soles; low broad leather heels; leather insoles; reinforced leather back stay. Guaranteed to stand hardest wear. Wide widths.

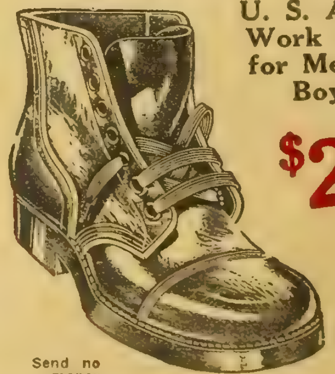


$1.49 UP

Order Men's sizes 6 to 12 by No. 96A733. Send no money. Pay $1.98 and postage on arrival. Order little boys' sizes, 9 to 13½, by No. 96A-565. Price $1.49 Order big boys' sizes 1 to 5 by No. 96A564. Price $1.79. Pay bargain price and postage on arrival.

GUARANTEED For Six Months' Wear

U. S. Army Work Shoe for Men & Boys



$2.98

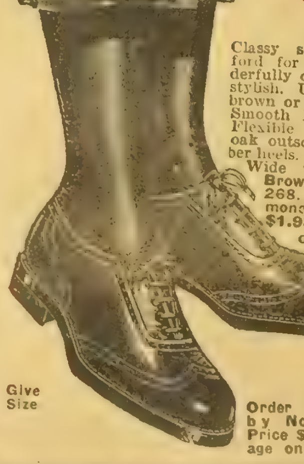
Send no money

Men! Don't lose a moment in ordering this wonderful brown work shoe. It is made of leather as near waterproof as can be made—solid leather through and through with full grain leather uppers, guaranteed to wear six months. Easily worth $5.00. Two full, heavy double soles, sewed and nailed for greater strength. Extra wide, full leather counter, riveted to prevent ripping. Sizes 6 to 12, wide widths. **Order by No. 96A700. Send no money. Pay $2.98 and postage on arrival.**

Boys' Guaranteed Shoes—Six months' guarantee; Two green chrome leather soles, same feature quality points as shoe above. Sizes 1 to 5½. Wide widths. **Send no money. Order by No. 96A550. Pay $2.69 and postage on arrival.**

Women's Stitchdown Oxfords

Black Patent or Brown Calf Finish



$1.98 UP

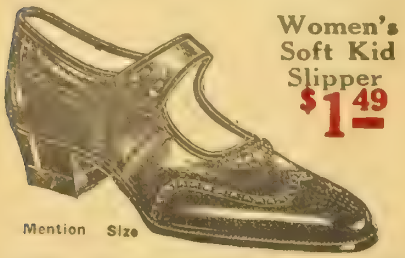
Classy stitchdown Oxford for women. Wonderfully comfortable and stylish. Uppers of dark brown or patent leather. Smooth leather insoles. Flexible stitched-down oak outsoles. Low rubber heels. Sizes 2½ to 8 Wide widths. **Order Brown by No. 96A-268. Send no money. Pay only $1.98 and postage on arrival.**

Give Size

Order patent leather by No. 96A264. Price $2.48 and postage on arrival.

Women's Soft Kid Slipper

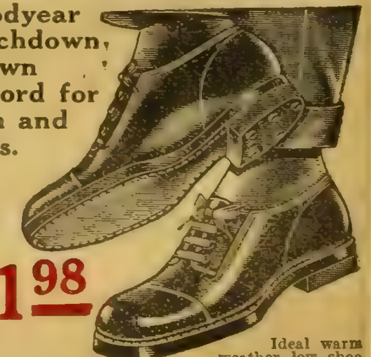
$1.49



Mention Size

Beautiful soft kid leather slipper. Stylish strap model with two buttons. Medium round toe. Cushion soles. Black or brown kid. Sizes 2½ to 8, wide widths. **Black by No. 96A228. Brown by No. 96A229. Send no money. Pay $1.49 and postage on arrival. State size.**

Goodyear Stitchdown, Brown Oxford for Men and Boys.



$1.98

Ideal warm weather low shoe. Brown elk finished uppers; flexible Goodyear stitchdown oak soles. Leather insoles; rubber heels. Wide widths. **Men's sizes 6 to 11. No. 96A-690. Price $2.48. Boys' sizes, 1 to 5½. No. 96A560. Price $1.98. Send no money. Pay bargain price and postage on arrival. State size.**

Be Sure to Mention All Sizes, Colors, etc., and Send All Orders From This Page Direct to

SHAROOD CO. Dept. 96 MINNEAPOLIS MINNESOTA

The Michigan
BUSINESS FARMER

An Independent
Farm Magazine Owned and
Edited in Michigan

VOL. X, No. 22

SATURDAY, JUNE 23, 1923

TERMS: TWO YEARS $1
60c PER YEAR—5 YRS. $2

A Golden Crop
Michigan ranks third in the production of strawberries in the United States.

Read in this issue: Michigan Takes Lead at National Holstein Sale—President Lowden Asks Holstein-Friesian Association Pointed Question—Tests Proves Normal Silage Superior to Stover Silage.

Ideal Park at Endicott, the recreation center for everyone
America's Standard
BOYS & GIRLS SHOES
Endicott Johnson Shoes
OUTING SHOES
MEN'S WORK SHOE
MEN'S DRESS SHOES
WOMEN'S SHOES

125,000 pairs a day!

what it means to your family on summer shoe bills

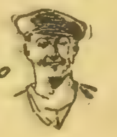
Remember, 125,000 pairs means all grades of shoes—for work, dress or play. They all have E-J wear, style and comfort—a big point with summer coming on.

For children especially E-J's fill the bill. We know, for there are lots of kiddies here in the Valley of Fair Play, and they all wear E-J's always.

For a "free-from-shoe-trouble" summer we recommend E-J's for you all. There's wear, style, low price and a smile of satisfaction in every pair you put on your feet. Why not? We *made* them with smiles!

Look for the E-J trade-mark on the box-ends on your dealer's shelves.

The E-J Workers



At any shoe dealer's with an E-J sign in the window.

ENDICOTT-JOHNSON SHOES

Made With Smiles

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The Michigan
BUSINESS FARMER
(Effective April 2nd, 1923)

ONE YEAR .... .60
TWO YEARS $1
FIVE YEARS $2

EVERY subscriber at the above rates is entitled to ALL the Departments of Service which have made The Business Farmer famous, so long as the term of subscription lasts.

You know The Business Farmer is the most practical, and fearless because it is the only independent farm paper published in Michigan.

- -

The Michigan Business Farmer,
Mt. Clemens, Mich.

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Current Agricultural News

RATE REDUCTION SECURED BY BUREAU

THE Pere Marquette railroad has granted freight rate reductions ranging from 3½ to 6½ cents per hundredweight on grain by-products from Toledo to a number of Michigan points. The reduction was secured through the efforts of the Michigan State Farm Bureau Traffic department.

The new rate is effective July 1 and applies to such products as cottonseed meal, linseed oil meal, linseed oil cake, gluten feed, beet pulp, etc. The rates also apply to intermediate stations and will effect a good savings to buyers of these products. On the carload minimum weight of 40,000 lbs. for such products, the savings to such buyers at such reductions may range $14 to $26 per car. Following is the list of stations where reductions were made and the amount of the reduction per hundredweight in each instance: Almont and Sandusky—3½ reduction; Beaverton, Elk Rapids and Petosky—5½c; Harrison—6c; Brarytan, Grindstone City, Port Hope and Weidman—6½c.

STATE VETERINARY ASSN. MEET AT M. A. C.

THE members of the Michigan State Veterinary Medical Association will hold their forty-first annual meeting at the M. A. C., East Lansing, beginning June 26th and ending June 28th. In the afternoon of the first day several addresses will be delivered but the evening will be given over to entertainment. The following forenoon the members will listen to many interesting and instructive talks and after a recess for luncheon at noon several more talks will be given followed by meetings of local organizations. The interesting talks continue throughout Thursday forenoon and after lunch there will be a Question Box following which there will be a business session. And the ladies are to attend with their husbands, the officials of the Association promising them an interesting time during the meeting.

$12,000 IN CASH PRIZES AT HAY AND GRAIN SHOW

AT a meeting of the Agricultural Committee of the Chicago Board of Trade and the management of the Grain Show, a cash premium list for the Fifth International Grain and Hay Show was set at $12,000. In addition to this a special appropriation was made of $500 to make possible the Student Grain Judgeing contest. The following classes were approved:

Ten Ear Corn, $5,000; Single Ear Corn, $615; Flint Corn, $230; Wheat, $1,535; Oats, $965; Special Early Oats, $90; Rye, $360; Barley, $400; Hay, $800; Kafir & Milo, $250; Small Seed, $525; Soybeans, $430; Cowpeas and Field Peas, $160; Field Beans, $74; Junior Corn Contest, $336; For Special Ribbons & Soybean Trophy, $230.

FARMERS STILL SOLID FOR GAS TAX

INASMUCH as the legislature adjourned without passing either a gas tax or a weight tax and it is now reported that the Governor is planning to call a special session of the law makers to consider funding legislation, it is extremely interesting and timely to learn the attitude of the farmers of the state on this important issue.

Letters received at the Lansing headquarters of the Michigan State Farm Bureau indicate that farmer sentiment in favor of a two cent gas tax has only been strengthened by the executive veto which prevented the Warner gas tax act, supported by 99 of the 132 legislators, from going into effect in Michigan.

Farmers can scarcely see the justice of the present system under which they pay the main cost of improved highways which are largely used by commercial trucks, traveling men, tourists and city pleasure seekers. They are equally opposed to an automobile weight tax which ignores the mileage driven by the car and fails to derive any revenue from the ever-increasing tourist traffic or the highway-destroying fleets of drive-away cars.

Sentiments expressed in letters received from individual Farm Bureau members and local organizations are plainly and convincingly stated and leave no doubt as to the attitude of the writers. The attitude of many of the most thoughtful farmers is reflected in a letter from a leading Barry County Farm Bureau members who is the president of his township organization. He writes:

"Our members stand solidly for a gas tax and would favor no other measure. We would not favor the weight tax under any consideration. It would not catch the out of state autoist who uses his auto one day in the week and one who uses it seven days in the week. We do not believe in any compromises."

FROM HERE AND THERE IN MICHIGAN

A grade Holstein was the high cow in a recent report of the North Clinton Cow-Testing association, Clinton county.

Seventy schools in land clearing are being held in the upper peninsula this year, the schools continuing until the end of June.

The International Baby Chick Association will hold its annual convention at Washington, D. C., this year on Wednesday, Thursday and Friday, August 1st, 2nd, and 3rd.

Prof. E. H. Ryder, head of the history and sociology sections, M. A. C., has been granted a six months' leave of absence. During that period he is going to tour the world.

Chippewa county farmers are planning on asking their Board of Supervisors to engage a county agricultural agent for their county, the request to be made at the June meeting of the board.

There are 1,158 dairy herds in Michigan holding memberships in 58 different cow-testing associations, according to figures recently compiled by Prof. A. T. Baltzer of the Mich. Agricultural College.

The veterinary department of the M. A. C. is being reorganized under the direction of Ward Giltner, new dean of this department, to become, in addition to its teaching function, a thorough-going institution for the investigation of animal diseases.

As a result of the dairy and alfalfa campaign put on in Eaton county over a year ago, a large acreage of alfalfa seeded last year and nearly an equal amount again this year. The M. A. C. believes the tour is the best way of increasing acreage.

That the farm poultry flock is still the most popular and widely distributed "crop" in Michigan is shown by statistics at the Michigan Agricultural college which indicate that 180,000 of the state's 190,000 farms, or 92 per cent, maintain a poultry flock.

Farmers in the southwestern part of Michigan held their fourth annual Southwestern Michigan Soils Field day at the Cass county farm near Cassopolis, June 9th. The meeting was called for the investigation of the soils experiments conducted on this farm for several years.

Mr. Elton J. Van Leuven of Mt. Pleasant, Mich., has been made a member of the board of directors of the Seventh District Federal Land Bank. Mr. Van Leuven will represent Michigan and Wisconsin on the board of this land bank that serves the states of Minnesota, North Dakota, Michigan and Wisconsin.

Ridding the Isle of Crete of the famous bandit, Barbounis, and his band of 30 followers, who have terrorized islanders for 15 years is the feat credited to a Michigan girl, Miss Margaret Robinson. Miss Robinson, a near east relief worker, entered into negotiations with the bandit and his followers and before she was through they agreed to surrender to the Greek government, and join the army in return for their pardon.

SATURDAY
JUNE 23rd,
1923

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Being absolutely independent our columns are open for the discussion of any subject pertaining to the farming business.

"How to the line, let the chips fall where they may!"

The Michigan
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Michigan Takes Lead At National Holstein Sale

Animals from Michigan Bring Highest Average and Michigan Breeders Pay Highest Prices for Best Offered at Annual Meeting at Cleveland

By J. G. HAYS

Dairy Department, Michigan Agricultural College

Frank O. Lowden was again elected president of the Holstein-Friesian Association of America at the 38th annual meeting in Cleveland, Ohio, June 6th.

MICHIGAN Holstein breeders surely can be proud of the part their state played in the national consignment sale held last week in Cleveland, for it can be truthfully stated that without the Michigan Holsteins and the Michigan breeders the sale would not have been quite the success that it was.

The bunch of black and whites representing Michigan in the ring last week brought more per head than did those representing other states, with the exception of California which sent only two heads, a bull calf which brought $3,100.00 and a heifer $600.00. This consignment is manifestly too small in numbers to figure against states sending five or more head, altho California should be complimented in sending such a good pair so far across the continent.

Michigan sold 14 head for $12,500.00, for an average per head of $894.28; Ohio sold 25 head for $15,800.00, for an average per head of $632.00; Wisconsin sold 15 head for $10,250.00, for an average per head of $616.66; Minnesota sold 6 head for $3,488.00, for an average per head of $580.83; Pennsylvania sold 13 head for $7,420.00, for an average per head of $570.76.

Furthermore, Michigan had the high honor of breeding and consigning the cow that topped the sale. She was Lakewood Maplecrest Amy No. 593,411, a 26.83 lb. two year old daughter of Maplecrest Korndyke Hengerveld, the only living century sire. Her dam, Belle Pietertje Hartog, is now on test and already has better than 34 lbs. to her credit. "Amy" came from the Battle Creek Sanitarium herd, W. W. Wentworth, owner. She sold for $1,850.00. Then the second highest selling bull of the sale, bringing $3,750.00, Sir Charlevoix Ormsby Finderne No. 377,019, yearling son of Kolrain Marion Finderne, 35,339.5 lbs. milk in a year, the second highest cow for milk in the world, was bred, raised and consigned by Loeb Farms of Charlevoix. This bull was topped only by Avon Pontiac Echo Lad No. 318,575, the son of the certain-to-be world's champion cow for butter production for all breeds, DeKol Plus Segis Dixie. Incidently this Dixie bull could almost be claimed as a Michigan bull altho consigned by Wisconsin, because he has been used during the last two years in this state by Dr. Consaul of Mt. Pleasant. He sold for $4,100.00.

Another point regarding the sale to exult over is that Michigan not only sold its cattle to the best advantage, but Michigan breeders also headed the list as buyers.

Out of 111 head sold in the sale for $69,375.00, an average per head of $625.00, Michigan bought 41 head for $30,795.00, an average per head of $751.00.

Next to our state as a buying state came Pennsylvania, taking 32 head at an average price paid of $612.34, then Ohio buying 16 head at an average of $461.25, Missouri took 6 head at an average of $390.00, and New Jersey 5 head at an average of $544.00.

The Michigan buyers were: Detroit Creamery Co., Mt. Clemens, 10 head, average $851.00; J. T. Berkheimer, Homer, 13 head, average $513.07; J. B. Jones, Detroit, 4 head, average $445.00; Battle Creek Sanitarium, Battle Creek, 2 head, average $825.00; Loeb Farms, Charlevoix, 2 head, average $662.50; W. R. Roach, Grand Rapids, 2 head, average $250.00; Wm. Tyson, Washington, 2 head, average 225.00; Lakefield Farms, Clarkston, 1 head, average $200.00; Mac Hart, Wilmot, 1 head, average $210.00; D. D. Aitken, Flint, 1 head, average $600.00; Newberry State Hospital, Newberry, 1 head, average $1,050.00; E. L. Bayne & J. B. Jones, Detroit, 1 head, average $3,750.00; W. W. Wentworth, Battle Creek, and Dudley Waters, Grand Rapids, 1 head, average $4,100.00.

Among the animals bought by these men was included the top bull of the sale, Avon Pontiac Echo Lad, bought by Wentworth and Waters and the top female, Lakewood Maplecrest Amy, bought by the Detroit Creamery Company, who also bought Canary Maid Promethus Champion No. 516212, a 34.87 lb. three year old consigned by the Newberry State Hospital, the third highest selling female; also the second high bull of the sale, the Loeb bull, bought by Jones and Bayne.

F. L. Houghton has done such good work as secretary of the association that he was re-elected to that position without opposition.

There certainly is nothing wrong with the Holstein industry of Michigan when breeders have the courage to consign a large number of cattle that top the sale in average selling price, and also when upwards of half of the total number of animals sold, were bought into the state by Michigan buyers.

The annual meeting on the day preceeding the sale days was marked by harmony throughout. The business was more or less routine. Important matters pertaining to amendment of the By-Laws were referred to a committe for thorough study and for report at the next Annual Meeting. The old officers and retiring directors were re-elected, and in the places of Messers. Davidson and Schroeder who resigned, were elected R. E. Chapin of Illinois, by the board, and Fred Peasley of Connecticut, by the meeting. Fifty Michigan men attended the meeting and sale.

President Lowden Asks Holstein-Friesian Association Pointed Questions

1. Shall a cow be denied advanced registry if her milk contains less than three per cent butter fat?
2. Shall the seven-day record be abolished?
3. Shall we follow up more fully the subsequent breeding record of cows which have made exceptionally high records in production?
4. Shall milking four times a day be encouraged?

PROBABLY the most important single factor in the development of the Holstein cow in America has been the Advanced Registry Department of the Association's work. There are some unanswered questions now before the Association for solution. I would briefly indicate some of the more important ones: Shall a cow be denied advanced registry if her milk contains less than three per cent butter fat? Shall the seven-day record be abolished? Shall we follow up more fully the subsequent breeding record of cows which have made exceptionally high records in production? Shall milking four times a day be encouraged? There are other questions of far-reaching importance to the breed.

During the last few years we have had a very able committee composed of the best scientific men and successful breeders at work upon the question of type. I happen to know that this committee has devoted an almost incredible amount of time to this important question. That committee has made its final report and we now have for the first time in the history of the breed a definite picture of what the Holstein cow and bull should be in the opinion of those best qualified to say. That represents a decided step in advance. It is a notable achievement. The question I now submit is, has not the time arrived when a like committee should be appointed thoroughly to revise the rules of advanced registry. The questions now before the Association would be considered by them. They could systematize rules and make of them a harmonious whole. Let it be remembered that the type as finally agreed upon by our able committee is always subject to revision. Final approval of that type depends upon the records at the pail of succeeding generations of cows which most nearly conform to the type. There must, therefore, be the closest relation possible between type and production.

Many experienced breeders felt for a time that we over-emphasized production at the expense of type. They believed that while the individual cow was producing unusual results we were deteriorating the breed. Now isn't it possible that we may go to the other extreme? At any rate we must study production closely—and generation after generation—if we would either prove conclusively that we have hit upon the perfect type, or, what is equally important, if we would prove its defects. These questions cannot be disposed of in a moment. They require extended study and investigation. They demand some painstaking work, which the committee upon type has so well performed. I recommend, therefore, that a committee be authorized to undertake this work.

The subject which has received the most consideration during the past year has been extension work. Little had been done during the preceeding year because of lack of funds. The increase in the transfer fee, however, authorized at the annual convention in Kansas City last year made possible the taking up of this work in a broad and comprehensive way. Calf club work has been carried forward until it now radiates into all the dairy sections of the United States. Over four thousand boys and girls have been actively enrolled in that work and the majority of them own purebred Holsteins. The Association keeps in touch with these boys and girls monthly through correspondence and the Calf Cub News, a little publication which we have started in the interest of calf club work. In order to avoid duplication, we are co-operating closely with the collegs of agriculture and with the local farm bureaus. We have proceeded on the theory that a county agent should be the actual head of all farm activities within the county and our calf club work in the county therefore is made in effect a sub division of the county farm bureau. The results already obtained show to my mind clearly that the calf club can be made a most effective agency in promoting the interests of the breed.

High Records From Common Cows

We, of course, believe in pressing the campaign for pure-bred sires. To that end, the chief feature of our exhibit at the National Dairy Show at St. Paul last October was the exhibit of the descendants of common cows where purebred sires were used. Among these cows were two which had made records of 950 and 1,025 pounds of butter, respectively, under practical farm conditions. They aroused great interest and became one of the most popular features of the show. We believe that no more effective way could be found of proving to the farem the value of purebred sires than this ocular demonstration of what their offspring would actually accomplish at the pail. These cows belonged to a cow-testing association, and they were also a demonstration of the value of

(Continued on page 23)

Pioneer Helps New Settlers

John G. Krauth, of Presque Isle County, Himself a Northern Michigan Pioneer, Tells of Settler's Problems and How He Has Helped to Meet Them

John G. Krauth, A Pioneer Settler.

WITH a frontier residence in northeastern Michigan of twenty-three years, coming here from Minnesota with a band of sheep, a first-hand experience with a settler's problem, in all its phases, leaving a lasting conviction on my mind as to the one course I should follow, and which I finally followed, in placing settlers upon cut-over land, well recognized for its fertility and diversity of crops, there were many points in my favor as a starter.

To start with, the fact must be recognized that stump land seldom attracts home seekers with swollen wallets or near swollen wallets, not when they can so readily finance the purchase of improved land.

Stump land is the last hope of a lean pursed settler urged by a consuming desire to possess his own fireside,—just as the lean in purse is the first and last hope of the possessor of stump land, and by the way, the only class that ever tamed a jungle, a fact lost sight of by many owners of wild land whose terms call for a stiff down payment, and prompt yearly payments, regardless of circumstances. Unless unimproved land owners display a real cooperative spirit with the home seeker, their land will not interest him.

It is not helping the new settler by simply permitting his payments and interest to lapse. Unless he receives an occasional lift, with no Shylock's toll attached, and in which the settler is secured by chattels, or by added improvements, in most cases of a permanent nature, the land owner has killed hope in the settler, his very best asset; and by this short sighted policy discouraged other buyers, thereby injuring the whole community.

There is nothing so depressing, so discouraging, so destructive to one's efficiency as a maturing debt on the roof that shelters, with no prospect in sight for meeting it promptly, or even reasonably promptly, thereby jeopardizing all at the mercy of a creditor, who is likely to develop shark traits, or who perhaps habitually banks on misfortune for his harvest.

In my early experience, I too, waited and watched for cash, or near cash buyers only, to storm the front door of my log shack in the brush, but the rush failed to materialize. Day by day, I was absorbing the bitter lesson that you can't connect a fat or near fat wallet with wild land to farm.

During this night sweating adventure, unpaid taxes grew and grew until they reached such a stage I was obliged to sprint like the old Harry in order to nose out the tax title sharks the last day of redemption each year of my watching and waiting campaign. The situation appeared so desperate that the shake of a banker's hand, during office hours, chilled me to the marrow.

In picturing lean pursed settlers, do not get the idea I am alluding to down-and-outers, but those only who are not circumstanced to meet yearly payments and interest for at least five years, however, who can at least make a small down payment on land, command a work team and a few necessary implements, means to erect temporary shelter and have money left for household requirements for at least six months.

While building material is high, and likely to remain so, the settler can get by for shelter. One of the most servicable log houses in my township did not cost $75.00 for low grade lumber, roofing, windows, plaster, etc. While it does not betoken opulence, nevertheless it is cozy and comfortable, and will answer for years if necessary. Later on, a finer building will take its place, but it will not be more comfortable.

There are no quick returns in the colonization or placing settlers upon stump land. It is a waiting game at best, but if properly managed and the agricultural conditions are favorable, which of course is understood, the returns are as sure as death and taxes; furthermore, it is not a business to be directed from a swivel chair in some distant office. The "head beetle" should be on the ground, or in his place, a representative with power to say yes or no, help, direct, etc.

As my operations center in the greatest yielding legume seed belt in Michigan, the success of the settler is in his own hands. A square peg will no more fit a round hole on northeast Michigan's farm land than elsewhere.

Forty-acre sales were never encouraged. Every cleared acre in northeastern Michigan should be backed by two to five acres of pasture. The settler that fails to capitalize grass in northeastern Michigan is not farming just because he happens to live on a farm. Intending settlers who could not visualize the value of a good pasture, received very little encouragement from me as our quota of square pegs is filled, with a waiting list.

In my method of encouraging settlers, they are not tied down to yearly cash payments. They can, however, if they so prefer, do so, or elect in any year, to grow a stipulated acreage of certified potatoes, grain, clover, alfalfa or vetch, for its seed value, with the understanding that the returns are to be applied on the purchase of the land. The amount received, be it large or very small, is to represent the only payment required the said year. A crop failure automatically postpones any payment the said year, but as this has not happened in my time we do not look for it to happen. "We" bank on the seed returns to dent the mortgage, for my success is linked with that of the settlers. I never lose sight of the fact that the settler is more important to my success than I am to his; but with him it is just the other way around, so naturally we lean on each other. Just as it should be.

No settler is going to improve property purchased on time that is likely to slip away from him for delinquent payments, during his trying years of building a farm from the wilds.

With the average settler, the critical stage arrives when his last dollar has been expended for first payment on land, (from five to ten per cent.) for temporary shelter which will serve for storage quarters for grain, machinery, with the bottom of the flour barrel in sight, no crops to speak of the first year save a garden patch, and the livestock to be provided for during the winter period, and no winter work near home that is dependable; the crisis has arrived. There is but one glue-pot that will hold the settler to the land, and that is credit. A short time loan on his personal effects at 12% or more, is not the proper glue. He must have a year's time at low interest, and a privilege of renewing several years, if necessary.

The first payment on land is loaned to the settler for cows at 6% for one year, with privilege of renewing annually for five years. If any reasonable financial assistance is required for seed, fencing, dynamite, or livestock, I feel it my duty to go to the rescue, notwithstanding the money I advance indefinitely at 6% may cost me 7%. It is this cooperative spirit that is so inspiring to the farm builder. A real business proposition even though the dividends are not just around the corner.

It won't do to say that poor settlers are no help to a new country. This is all bunk. The writer can not recall a single successful pioneer in Presque Isle county from banker

(Continued on Page 17)

Tests Prove Normal Silage Superior to Stover Silage

THE Michigan Agricultural College, through steer feeding experiments conducted during the past winter and forepart of this spring, again proves the superiority of good corn ensilage, containing a large amount of corn, over stover ensilage. The daily gain per steer of 2.77 pounds for the steers fed on normal silage, 1.99 pounds for the steers fed on stover steers silage, with some corn returned to it show without question the difference in the feeding value.

The experiments conducted by the Department of Animal Husbandry of the College began December 22, 1922, and ended May 15 of this year. Twenty-seven steers were used in the feeding experiments, being divided into three lots of 9 each. The cattle fed were the second prize lot of feeders purchased at the time of the International Live Stock show last fall, the prize-winning carload of twenty costing $9.00 per hundredweight and seven other steers which had been sorted from this carload previous to the show were bought at 8c, making the cost of the carload about $8.60 in Chicago. Weighted into the feed lot at the College the cost was $9.36 per hundredweight.

To produce one pound of grain it was necessary to feed lot 1: normal corn silage, 13.896 pounds; linseed meal, .759 pounds; clover hay .9270 pounds; shelled corn, 2.159 pounds. Lot 2 was fed the following to make a pound gain: 18.449 pounds of corn stover silage; 1.055 pounds of linseed meal; 3.225 pounds of shelled corn; and 1.689 pounds of clover hay. Lots 1 and 2 received shelled corn only the last 102 days of the experiment. Lot 3 received the following amounts to produce one pound gain: 16.453 pounds of corn stover silage; linseed meal, .983 pounds; shelled corn, 4.439 pounds; clover hay, 1.573 pounds. The total amount of feed required to produce a pound of gain was smaller in all three lots than last year.

The total amount of feed consumed in the 144 days by the three lots were: Lot 1, 49915 pounds of normal corn silage, 2728 pounds of linseed meal, 7758 pounds of shelled corn, and 3330 pounds of clover hay; cost $295.29. Lot 2, 47673 pounds of corn stover silage, 2728 pounds of linseed meal, 8334 pounds of shelled corn, 4365 pounds of clover hay; cost $245.98. Lot 3, 45643 pounds of stover corn silage, 2728 pounds of linseed meal. 12316 pounds of shelled corn, and 4365 pounds of clover hay; cost $294.12. Lot 3 received an amount of shelled corn approximately equal to that removed from the stover silage they were consuming for the first 42 days and in addition to this the same amount as lots 1 and 2 for the last 102 days.

To arrive at the cost of feeds the following prices were used; normal corn silage, $4 per ton; corn stover silage, $1.60 per ton; shelled corn, 70c per bushel; linseed meal, $60 per ton; clover hay, $10 per ton.

And in spite of the fact that there was such a wide difference in the cost of normal corn silage and corn stover silage the steers fed on normal silage returned a profit of $5.30 per head, while both of the other lots showed a marked loss, namely $5.35 per head for lots 2 and $9.02 per head for lot 3.

The financial statement covering the experiments recently issued by the College does not include labor costs or interest and gives the total costs of the three lots as: Lot 1, $912.58; lot 2, $860.37; lot 3, $919.74. Hogs were run with the steers and were fed tankage worth $70 per ton in addition to what they were able to pick up. It cost $8.22 to produce a hundred pounds gain, not crediting pork produced, in lot 1, $9.52 in lot 2 and $10.60 in lot 3. Crediting the value of the pork pro-

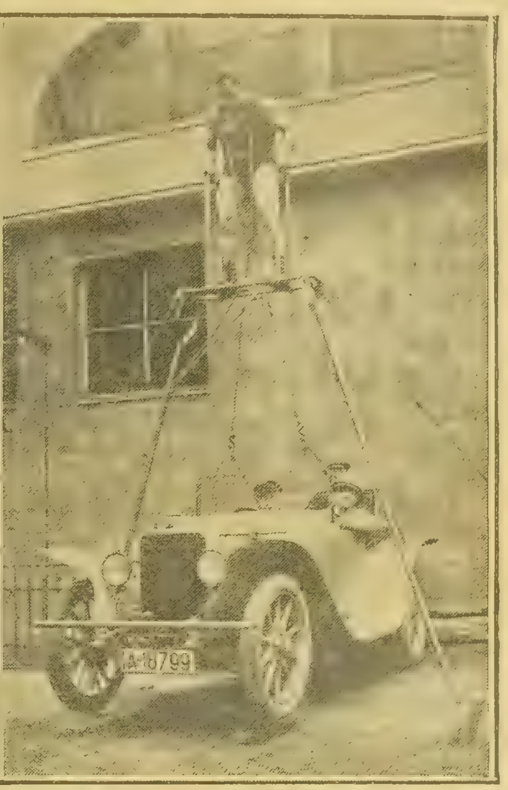
(Continued on Page 19)

FROM FIELD TO SILO—Ronning ensilage harvester, drawn by a tractor cuts the corn and delivers it as ensilage direct to the wagon hauled alongside. This shows the outfit at work on the Detroit Creamery Company farm in Macomb County, Mich. Mr. Schultz, manager of this farm gives his opinion of its operation on page 19 of this issue.

PICTURES FROM FAR AND NEAR

AMERICAN VENUS THRIVES ON SUNDAES AND CANDY.— Miss Gertrude Artelt, picked as having the most perfect athletic figure, has delt a blow to the idea that a perfect figure means the loss of sweets. Miss Artelt, not only eats sundaes and candy but keeps "late hours" into the bargain.

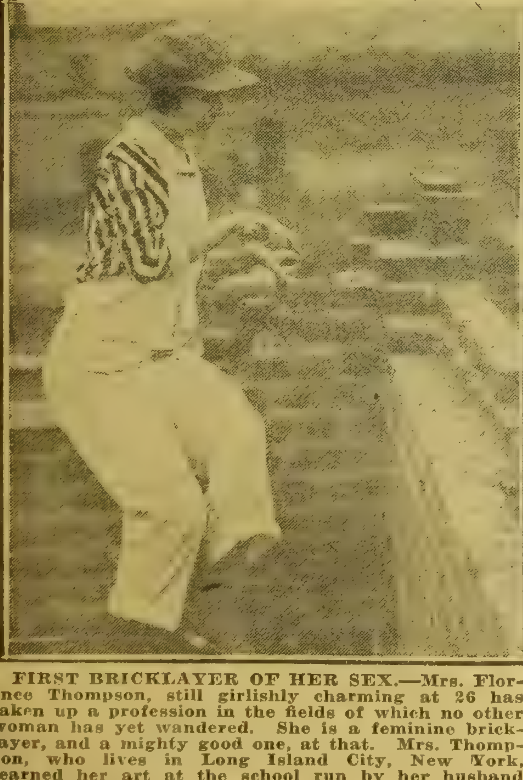
STAND UP THERE, LIKE A GOOD FELLER.—Its not ordinary mounts that the Mounted State Police use in their work. The animals, who are endowed with almost human intelligence, are taught all manner of tricks to test their speed and obedience. Photo shows the training of recruits, both men and horses, at the Commonwealth Armory Grounds, Boston, Mass.



AN ITALIAN HERCULES.—Cronos, known throughout the length and breadth of Italy for his unusual strength, is seen here lifting a four passenger car with the men in it. Hundreds of girls from Italy and nearby countries have fallen in love with this "cave-man". Moral: Be strong and the girls will be "strong" for you.

"VAMPS" AT DOG SHOW.—It is rather unusual for cats to appear at dog shows, but Bob, this beautiful canine, refused to appear without his two charmers. Photo shows the dog and his "lady friends" at the dog show held recently at San Francisco, California.

OH! CAN IT!—That will be the motto of the quartette of champion girl fruit canners, who sailed May 31 for France where they will teach the housewives American methods of fruit canning. Left to right:—Esther and Katherine Boligaugh of Iowa; Bertha Boger and Elaine Hendricks of Colorado.



FIRST BRICKLAYER OF HER SEX.—Mrs. Florence Thompson, still girlishly charming at 26 has taken up a profession in the fields of which no other woman has yet wandered. She is a feminine bricklayer, and a mighty good one, at that. Mrs. Thompson, who lives in Long Island City, New York, learned her art at the school run by her husband for bricklayers, and she claims it has made her economically independent.

WHERE AUTOMOBILES ARE FORBIDDEN.—Yes, there is such a place. Here carrying on their life as did their ancestors hundreds of years ago, the citizens of Veisingso, a remarkable little island community on Lake Vatern, Sweden's most lonely and picturesque lake, preserve their ancient habits and customs and have guarded against innovation by absolutely prohibiting automobiles within the bounds of their village.

THE OLDEST FARMER IN AMERICA.—That is the title claimed by George Elkins of Buncombe, Indiana. He is 98 years old and is still active in his farm work, doing plowing and other work around the property. He claims his longevity can be credited to keeping cool and not worrying, which tends to cut down a persons years. Also, it is his contention that some people push themselves into an early grave by being mean and always on the lookout to even up with the next man.

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Better Returns
from your
Produce---

YOU can market your produce more profitably through the
Farm Bureau Produce Exchange.

Many farmers and shippers are not receiving the best market prices. Increase your returns through the service of the

Farm Bureau "Mitten" Outlet

FOR BEST RESULTS ship through your local Co-operative Association. Your co-op. manager is kept thoroughly informed by us on WHEN and HOW to make shipments.

—SHIP NOW
ALL KINDS OF POULTRY
Especially Broilers, Hens and Ducks

Shipping tags and information gladly furnished on request.

Other Products Handled and Marketed

Asparagus, Strawberries, Gooseberries, Raspberries, Celery, Potatoes and all kinds of fruits and vegetables, also eggs.

Producers unable to ship through a co-op. should write us for information on how this service may be obtained.

A Dept. of Michigan State Farm Bureau

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DETROIT, MICHIGAN
2739-31 Russell St. Cadillac 2270

SAVED $30.00 Get Brown's New CUT PRICES

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During my sixteen years of drug experience, of which over four years I served under the Naval Bureau of Medicine & Surgery, hundreds have benefited from my dispensing of this wonderful remedy.

Originally, one of the foremost surgeons of the U. S. Navy perfected and prescribed this treatment in his practice with marvelous success.

If you wish to secure for yourself the amazing results that my remedy gives, fill out the coupon below.

References to my reliability, any bank of Greenville.

COUPON AND GUARANTEE

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Dear Sir:—You may send me your Rheumatic Remedy under your guarantee. Unless you find $2 enclosed with this coupon, it is understood that I am to pay $2 and the postage when the parcel is delivered, but if I am not satisfied with the results produced by your remedy within ten days, you are to refund the purchase price upon request.

Name ....Age ....

P. O. ....State ....

Farmers Service Bureau

(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full name and address. Name not used if so requested.)

RAISING POTATOES ON 50-50 BASIS

I am growing certified potatoes on a 50-50 bases and would like to be informed what the custom is in the potato district in regard to what share of the expense the land owner should stand in growing, harvesting and marketing the crop?—C. C. S., Charlotte, Mich.

—I fail to find but very little material on farm lease plans for growing certified seed potatoes.

In figuring out any lease system the base depends on costs and general practices. The following data will give the reader a very good idea of what enters into the costs of growing potatoes and furnishes a basis for dividing these costs between landlord and tenant.

Data taken from Quarterly Bulletin Vol. 4, No. 3 of this station:

Cost of growing one acre potatoes—1921:

Seed	$ 4.54
Com. Fertilizer	.39
Manure	7.20
Seed treatment	.30
Poison & Spray Material	1.57
Storage Costs	.51
Selling Comm.	.17
Land rent	5.39
Equipment costs	2.00
Misc. costs	.60
	$22.67
Regular man labor	$19.49
Horse labor	8.76
Special labor	2.16
Piece work hired	.93
	$31.34
Total Cost	$54.01

The above costs are on ordinary potatoes yielding 155 bu. per acre.

Certified seed is worth from 50c to 75c per bu. more than ordinary stock. They will also yield much heavier than ordinary stock (estimated state average certified seed—1922—167 bu. per acre) and sell at approximately 50c more per bushel for table purposes.

The potato crop requires such a large amount of labor that the tenant cannot afford to spend much more on the crop and make it a profitable enterprise.—F. T. Riddell, Extension Service, M. A. C.

NOT REQUIRED TO PAPER HOUSE

I rent my farm for money rent. The tenant was to occupy one part of the house, and the other part I reserved for my own use. Later I moved to town and to accommodate tenant I let him occupy the whole house. Nothing was said about keeping the house papered. Now do I have to paper it, if they ask me to? They want part I reserved for myself papered. — K. McK., Millington, Mich.

—You would not be required to paper or otherwise improve the part of the house which you reserved for yourself in the lease.—Asst. Legal Editor.

CAN B COLLECT DAMAGES?

A's horses run away. B is driving in a cutter and as the horses run past the sleigh gets caught in the cutter and break the cutter. Can B collect damages?—A. K., Glennie, Mich.

—If A's horses were ordinarily gentle, and were being driven with proper care, B could not collect damages from A. A would not be liable for the injury, which was due to accidental circumstances, and not to his negligence.—Asst. Legal Editor.

CARING FOR LILAC BUSH

Would you tell me how to care for a lilac bush? Should the sprouts be dug away from the main bunch this spring or not until fall? What can I put around the roots to keep it thrifty and should the sod be taken away from it?—A Subscriber, Standish, Mich.

—It is very important with the specia varieties of lilacs that have been propagated by grafting on to common lilacs or on to privet, to keep the sprouts away. This may be done early in the spring and at such intervals during the summer and early fall as they appear. When the lilacs, however, are grown upon their own roots, that is having been propagated from cuttings, or when simply the old lilac from that is grown, it is not so essential to keep the sprouts dug away. It will encourage the growth of the plants to keep the soil well cultivated around the base of the shrub rather than allowing sod to grow there—C. P. Halligan, Professor of Landscape Gardening, M. A. C.

NO "COMMON LAW DIVORCE"

If a man's farm is sold under mortgage in August and he stays on the place, puts in crops, the next spring, could the holder of mortgage take crops that were not harvested at the time, one year from date of sale, or would they belong to the farmer?

I saw in the paper about the common law marriage. Is there a law for divorce the same way? Being separated for 5 years could the parties marry without going through the divorce court?—M. B. D., Mt. Pleasant, Mich.

—I am of the opinion the unharvested crops on the farm at the expiration of the redemption period would belong to the purchaser under the mortgage foreclosure sale. It is otherwise in the case of a tenant under a lease for an uncertain period of time, but here the mortgagor knew when his right to possession would terminate in the event he failed to redeem, and should have considered this when planting crops. Upon the mortgagor's failure to redeem the purchaser's title reverts back to the date of the foreclosure sale.

There is no "common law divorce" in Michigan. The only way a divorce can be obtained is by an order of the court, and the remarriage of either party without such an order, or decree, would be bigamy, and punishable as a crime.—Asst. Legal Editor.

LOAN FROM FEDERAL LAND BANK

Sometime ago you mentioned in your excellent paper that farmers who tried to obtain a federal loan and were turned down to report the case to you, so at this time I am availing myself of this opportunity and writing my experience to you. In March I made a application for a loan of $3,000 through the secretary of local association at Lansing and after following instructions, going through the red tape and paying a fee of $10, I waited for results. In April I received a reply from the federal land bank of St. Paul saying that they were unable to allow any loan on my application. This is what I cannot understand, when I have ample security and means of meeting the interest and payments. Not far from here a loan was made on a farm for $4,000. The place is the same size as mine and the buildings and land are no better. Neither have they any better security or means of making the payments. Also a neighbor of mine made an application for a loan but was refused.

I was lead to believe that if I didn't get my $3,000, I would get something anyway, but I did not.—Reader, Ingham County, Mich.

—Concerning the case of —— ——, I can do no better than to enclose copy of at letter written to these applicants by myself under date of May 2nd. I might say in addition that the applicants purchased this farm within a year.

In commenting on the property, the appraiser says, "This is a very poor seventy acres. It is in a run down condition, very poor soil. Farm is stony, has a number of bad depressions and brush is growing premiscuously and I would not recommend a loan for any amount. There is a large ditch tax against this farm spreading over a period of years that does not benefit the farm materially."

I presume you understand that the Federal Appraisers are appointed by the Farm Loan Board and we are not under any circumstances permitted to make a loan when their report is unfavorable. Therefore, there is absolutely nothing we can do under the circumstances. — H. K. Jennings, Secretary, Federal Land Bank, St. Paul.

"In reference to your application for a loan of $3,000, I have given same a careful reading.

"It appears from your letter that you are laboring under a delusion as to the ownership of this bank, inasmuch as you say the Government is now refusing the loan to you and —— ——, after he enlisted and served as a soldier in the late war. This bank is not a Government bank any more than a national bank is a Government Bank. The Federal Land Bank was organized by authority of an act of Congress and is regulated by the Farm Loan Board, which is a bureau in the United States Treasury Department. The Government, however, owns none of the stock in the bank and has no monetary interest in it in any way, shape or form.

"I find on looking over your application and the appraiser's report that there is nothing we can do under the circumstances, as the application was rejected by the appraiser. These appraisers are appointed by the Farm Loan Board in Washington and are supposed to represent public interest and to make an appraisal of all properties offered as security, recommending whatever loan they think is advisable under the circumstances. It so happens that the appraiser who made this appraisal is a resident of your county and has been for many years and for that reason we feel that the appraisal is probably one that could not be critized. I am sorry that the circumstances are not such as would enable us to make you the loan asked for."—H. K. Jennings, Secretary, The Federal Land Bank of St. Paul.

WHO IS LIABLE FOR FENCE?

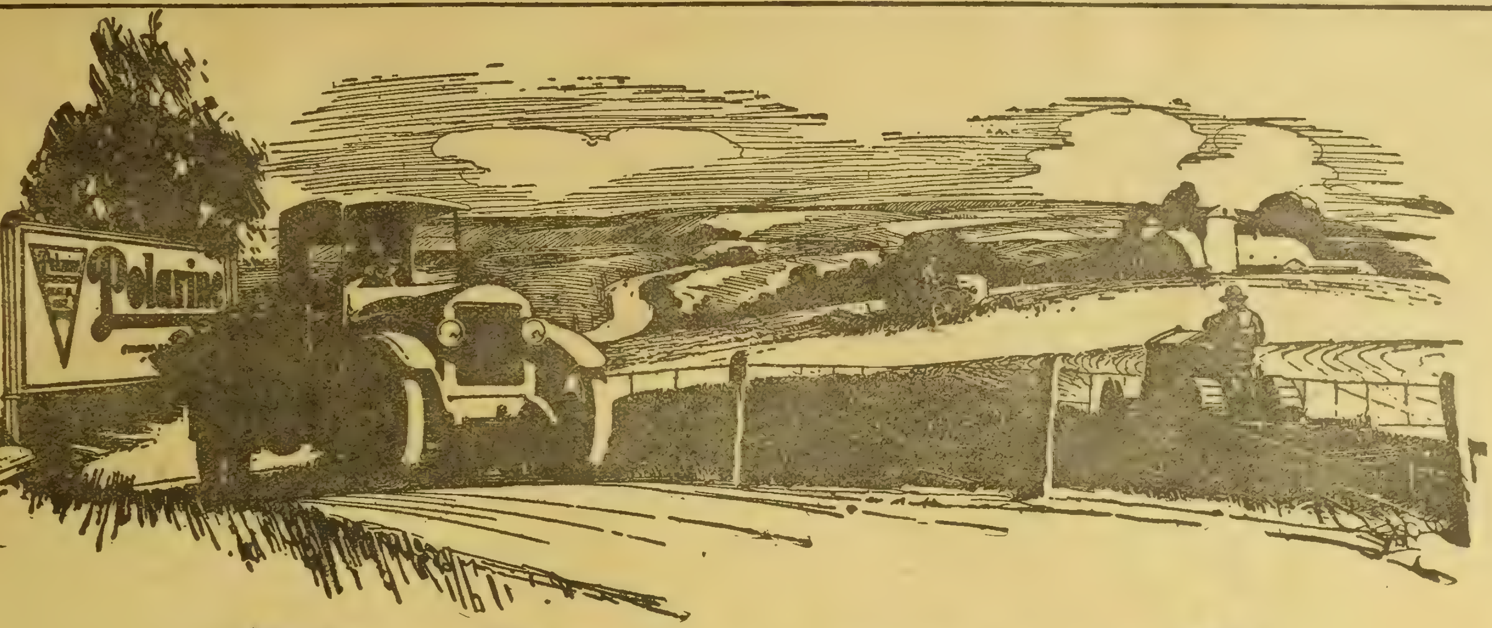
The county commissioner told a certain man to cut and burn the brush along the roadside. He employed another man to do the work and ordered him to set the fire on a certain day. The day happened to be windy and the fire burned 40 rods of fence on my farm. Now who will be held responsible for the damage to the fence?—M. H. J., Millington, Mich.

—The person setting the fire would be liable for the damage done but damage could not be charged to his employer or to one directing his employer unless it could be shown that the ordering or directing by the employer or the county road commissioner directing the employer carried with it the instructions for doing the work in such a way as to constitute negligence chargeable to them. There are not sufficient facts stated in your inquiry to give an opinion of any merit pertaining to any one other than the person setting the fire who would be liable in damages for the destruction of the fence.—H. H. Partlow, State Hightway Dept.

STARTING HEDGE

I would like to start a hedge fence and saw an article a few years ago in the M. B. F. as how to start the brush cuttings but have lost the copy of the paper. Would you please tell me how to start the hedge brush?—G. S., Gaylord, Mich.

—A hedge may readily be developed from willow cuttings by taking the shoots of past season's growth about the thickness of a lead pencil, cutting the base of each cutting just below a bud and inserting the same in a soil that is fairly moist, preferably of a sandy loam character. Dogwoods, such as the Red Bark Dogwood, and populars may be started in a similar way. Most of the cuttings, if inserted to a depth of four to six inches, will produce roots and tops, providing an unusual drouth does not occur before the roots are formed. It is only the kinds of plants, however, that root most readily, such as the above named, that may be started in this way, and hence the formation of a hedge by inserting these cuttings in a line at about a distance of one foot apart is a very cheap and easy way of producing a hedge.—C. P. Halligan, Professor of Landscape Gardening, M. A. C.



Drivers of Tractors

Tractor Chart of Recommendations

Trade Name	Motor Oil
Adaptable	H.
Allis-Chalmers, 6-12	H.
Allis-Chalmers, 15-25	S. H.
Allis-Chalmers, 18-30 and 20-35	S. H.
All Work	S. H.
Andrews-Kinkade	E. H.
Armington	S. H.
Aultman-Taylor, 15-30	S. H.
Aultman-Taylor, 22-45 and 30-60	S. H.
Automotive	S. H.
Avery, Model C	H.
Avery, 8-16, 12-20, 12-25, 14-28, 18-36, 25-50, 40-65, 20-35	E. H.
Avery Track Runner	S. H.
Bates Steel Mule, All Models	S. H.
Best Tracklayer, All Models	E. H.
Big Farmer	E. H.
Big Four E-B	E. H.
Buckeye Trundaar	S. H.
Burnoil	E. H.
Capitol, All Models	E. H.
Case, 10-18, 10-20, 12-20, 15-27, 9-18	H.
Case, 22-40	S. H.
Case, 12-25, 30-60, 40-72	E. H.
Case, 20-40	E. H.
Cletrac, All Models	S. H.
Coleman	E. H.
Dart Blue "J"	S. H.
Dill Harvesting	H.
Eagle	E. H.
E-B, All Models	S. H.
Ellwood	S. H.
Farm Horse	E. H.
Farquhar, 15-25	S. H.
Farquhar, 18-35 and 25-50	S. H.
Fitch Four Drive	E. H.
Flour City Junior	H.
Flour City, 20-35	S. H.
Flour City, 30-50, 40-70	E. H.
Fordson	H.
Fox	E. H.
Frick, All Models	S. H.
Good Field	H.
G-O	S. H.
Grain Belt	S. H.
Gray	S. H.
Great Western	S. H.
Hadfield-Penfield	S. H.
Hart-Parr, All Models	E. H.
Heider	S. H.
Holt Caterpillar, All Models	E. H.
Huber, All Models	S. H.
Indiana	H.
International, 8-16	H.
International, 15-30	S. H.
Klumb	E. H.
Lauson, All Models	S. H.
Leader	E. H.
Leonard Four Wheel Drive	S. H.
Liberty	E. H.
Lincoln	S. H.
Linn	S. H.
Little Giant, A & B	S. H.
Magnet, 14-28	S. H.
Mark VI	S. H.
McCormick-Deering, 15-30	H.
Minneapolis, 12-25 and 17-30	S. H.
Minneapolis, 22-44 and 35-70	E. H.
Mogul	S. H.
Moline Universal	S. H.
Monarch	S. H.
Montana	E. H.
Nilson Junior and Senior	S. H.
Oil Gas, 20-42 and 25-50	E. H.
Peoria	E. H.
Pioneer, 18-36 and 30-60	E. H.
Port Huron	S. H.
Quadpull	S. H.
Reed	S. H.
Rex	S. H.
Rogers	E. H.
Rumley, Oil Pull, 12-20, 16-30 and 20-40	E. H.
Rumley, Oil Pull, 30-60	E. H.
Russell "Junior", 12-24	S. H.
Russell Boss	S. H.
Russell "Giant," 30-60	E. H.
Sampson, Model M	H.
Savage A	E. H.
Shawnee, 6-12 and 9-18	H.
Shelby, All Models	S. H.
Square Turn	E. H.
Stinson	S. H.
Titan	S. H.
Topp-Stewart	S. H.
Townsend	E. H.
Traylor	H.
Trundaar	S. H.
Twin Ports	E. H.
Twin City, 12-20 and 20-35	S. H.
Twin City, 40-65 and 60-90	E. H.
Uncle Sam All Models	S. H.
Wallis	S. H.
Waterloo Boy	S. H.
Wellington, 12-22 and 16-30	S. H.
Wetmore	S. H.
Wheat	S. H.
Western	E. H.
Wisconsin	E. H.
Yuba Ball Tread	S. H.

KEY

L.—Polarine Light.
M.—Polarine Medium
H.—Polarine Heavy
S.H.—Polarine Special Heavy.
E.H.—Polarine Extra Heavy.

N. B. For recommendations of grades of Polarine to use in automobiles and trucks consult chart at any Standard Oil Co. (Indiana) station.

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WHY? Because a tractor, being run for profit, undergoing hard use, simply cannot afford the piling up of damage and the waste incidental to wrong lubrication. Polarine reaches and protects every friction point. The grade of Polarine indicated in the Chart as the correct lubricant for your machine has been determined scientifically *after* study of the oiling system in your particular make of tractor. Pump — screen — oil pipes — grooves of the bearings—piston clearance—all these factors have been considered.

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THE PERFECT MOTOR OIL

Made in Five Grades

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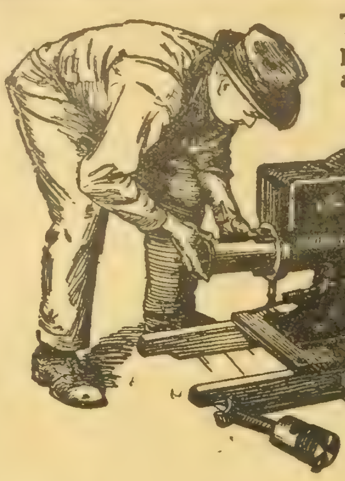

This illustration shows the replaceable cylinder, a feature in all International Kerosene Engines.

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Makes it easy to own a Galloway. Our terms suit your pocketbook, our special offer permits you to try it before you buy it. Write today.
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What the Neighbors Say

FARMER CONTROL PRICES OF HIS PRODUCTS

HAVE been very interested in "What the Neighbors Say" from time to time as to the deplorable condition in which the farmer finds himself. Most of us know there is a screw loose somewhere and have different ideas as to what particular screw it is. One farmer said a whole lot, when he stated that it was the inability of the farmer to strike and thereby set a price on his product, as under the present economic system he is entitled to the same privilege as any other business, but as he is now situated he cannot control production, and through that way control price. But I think it could be brought about by co-operative organizations.

The Editor seems to think that reduction of wages to labor together with some form of easier farm credits and lower freight rates would do the trick. I think his reduction of wages is all wrong, as a pauper labor market is the last thing we want. Lower freight rates would be of some benefit and easier credits only enables the average farmer to more easily get into debt. What he needs is the power to set a price above cost of production the same as other business interests do.

Mr. Joseph Warnock submits a plan in your March 31st number, which would apparently cut the cost to the farmer in what he has to buy and thereby relieve him to a great extent in his living and operating cost, and in lieu of his power to set his selling price has the most to commend it of anything I have so far seen set forth. But that would be hurting the middleman and that isn't considered good form in the best society, and all the so-called farm leaders endeavor to steer him away from that dangerous ground. They are willing to help him in any way but the only way that will be of material benefit to him. "Why, Alice, how you talk!" What you need, Mr. Farmer, is to become efficient, make two potatoes grow where one grew before, so as to bring down the living cost to labor so wages can be cut and furthur curtail your market and prices. I presume the latter advice is considered "safe and sane" and would venture to say that ninety-nine out of a hundred bankers and businessmen would subscribe to it as just the proper caper and all that went before as treason and revolution of the rankest sort. Be that is it may, something will have to be done as a poverty strickened farming class will react and the whole business structure will take a tumble. — H. H. Lister, Oceana County, Mich.

WHAT ARE FARMERS TO DO?

I HAVE read with interest the different articles on rented farms in Michigan, and as I am a farmer and a renter I thought I would write you a few lines and if they will be any good to my fellow farmers just pass them along through your columns. So, here goes.

Four years ago my wife and I rented an 80-acre farm on the 50-50 plan. We owed just $25.00 to the world. As we had nothing to go on, excepting two cows and one horse, we had to buy half of the stock, horses and farming machinery. Well, I had to borrow the money from the bank, which I did at 12 per cent interest, and have paid that since then. The first year we did pretty well, the second year we raised better crops than the first year but when we sold the crop we just made our expenses. The season of 1921 we didn't raise anything on account of the awful drought up here. We bought over $300 worth of feed for stock, also $100 for seed this spring. I worked on the road to buy part and borrowed the balance. We had good crops this last year but here came a crisis. My creditors lost confidence in my ability to pay. They crowded me so hard that I sold all that I could sell and still farm, and still they are anxious. Now, I find that to finance this year I must have around $200. I also find by taking an inventory that I have personal property to the amount of $1,000 at present prices and $2,000 in debts, which leaves me $1,000 behind after four years hard work and a scant living. Now here is the vital question. Should I stay here and try to pay these debts or make an assignment to my creditors, go elsewhere and make a new start. I have always tried to play the game square. This is my home since boyhood. But without credit with a $1200 deficit, also $200 interest to pay if I stay, can I make good? I still believe in the old adage "do as you wish to be done by." Here is a proposition that I am unable to solve

I am willing to go down fighting, but am I doing justice to my good wife and our three children by actually denying them the necessities of life? As I look around I count a lot of farmers in Gladwin county and elsewhere in our state who are in the same predicament in which I find myself. What are we going to do? Any advice from you will be gratefully received. If my mistake will help others you can publish this without using my name.—A Renter, Gladwin County, Mich.

SECRET DIPLOMACY

THERE seems to be an effective effort to keep the public in the dark regarding the truth of the David Friday controversy. Neither President Friday nor the Board of Agriculture will talk and again the farmers are left in the dark regarding "the farmers' college." When the facts are withheld suspicions arise. In the short sojourn of Pres: Friday at M. A. C. farmers have been favorably impressed and led to expect great things. But the papers say he was opposed by a "certain farm organization." We know that was not the Grange, the Gleaners have protested against his removal. We can't think it was the Farmer's Clubs. The State Farm Bureau may be "the nigger in the wood-pile." It is a strong organization dominated not by its membership, which is merely a source of revenue, but by over a hundred well paid agricultural advisors and extension workers strong enough to thwart the desire of the farmers for a law to permit them to vaccinate their own hogs.

This County Agent-State Farm Bureau is already powerful and building for the future. It needs the control of the Agricultural College and Pres. Friday was not controllable. It would be very convenient if they could put a man of their own choosing in the President's chair. Clark Brody is mentioned. We will wait and watch developments.—M. N. D., Lenawee County, Mich.

MUSINGS OF A PLAIN FARMER

HO HUM! Digging post holes is hard work. I don't like these fussy jobs. Straight work is what I enjoy most.

I was informed by my dealer that fence has gone up in price, which is bad news.

I wonder what kind of a car Judge Gary drives, and while I was wondering, I got a post hole a foot out of line. Well! I must apply myself more to my business.

That's the bravest hawk ever I saw. He settled to the ground near me; within a stone's cast, and I hurled the diggers at him with great force. Wish I might throw them away for good.

Here comes two agents. If they offer me a cigar I'll take it and dismiss them. I am getting very apprehensive when I see that dotted line.

I would have given those fellows an order for that car if my wife hadn't appeared on the scene and given me that look I know so well.

When I start out on a buying campaign, she usually lassos me before I get any ink stains on my fingers.

Well I'll have to get a new car next year any way. Nothing will stop me! Nothing!

People will begin to think I don't know my own business.

I would sign an order for a lower price on sugar, a reduction in taxes, and a little good warm sunshine.

Nature tells me it is about supper time. I have set the last post for today. This is all.—A. P. Ballard.

OUR NATIONAL SAFEGUARD

A SERMON BY REV. DAVID F. WARNER

TEXT: "Righteousness exalteth a nation; but sin is a reproach to any people."—Proverbs 14:34.

ANTICIPATING Independence Day, it is, not our purpose as a preacher, to discuss politics, national rights, or patriotism, as commonly conceived; but rather, that which constitutes uprightness in a nation's life; that which will secure and maintain liberty; that which will make for national integrity. And that is told simply and with straightforwardness in the words of our text.

"Righteousness exalteth a nation." Here is a soundness, a condition in which all things are right and straight. Men in right relation to one another; in which case they must be rightly related to God. This renders a people—their business and social relations, their laws and judiciaries, their international status—as just and justified. And why not? This is every nation's divine opportunity. Righteousness is the constant and insistent demand of Isaiah, the statesman-prophet. And said Micah to the Jewish nation, "What does Jehovah require of thee but to do justly, and to love kindness, and to walk humbly with thy God." So it augurs well to have had President Harding say to the Shriners in Washington the other day, that the peace of this country depends not upon the sign, grip, or password of secret fraternal organizations, but fraternal feelings and relationships among all men. This he denominated as "political righteousness." And this Jesus of Nazereth called the "Kingdom of Heaven" on earth.

But what cowards! Why don't we confess it? The other day I fell into conversation with a fraternity man and a friend of labor. According to his own statement, he was a member of ten different organizations, all of which, said he, stand for the brother-hood of man. But, I interjected, "Where did your 'brotherhood' idea originate and in whom did it have its perfect expression?" But he hesitated. O, yes, he knew. But he had no mind to confess. I said, "Why?" "O," said he, "I don't believe it is time yet." Shades of darkness! Not time yet for the Kingdom of Heaven when coal and sugar combines and other monied monopolies are safeguarded by law? Not time, with protected bootlegging in high places and low? Not time, when the courts of our land hold the rights of property above the rights of man? "And ye would not," said Jesus to the Jewish nation. "Behold your house is left unto you desolate." And it is today. But what of America?

Fortunate for our thought and our being as a country, our system of American government was founded by those who had some acquaintance with the principles of the Christian's Bible, and many of whom professed them, and all of whom, we believe, are honest and just, and would have all men become more righteous and Godly in their political relations as they (the founders) understood them. In much of our early history church life was primary. Of course we have no sympathy today with the folly that tried to enforce a rigid sameness in practices and customs. But the Bible was the text-book of life and worship. Our forefathers came here to establish a government in which there would be liberty coordinated with justice. A fine conception, for we know at least today, that liberty without justice is a despotic thing. And this is declared in the preamble to our constitution.

To the fathers of our Americanism, it was a dream to be fulfilled, that this land should be a blessing to posterity and a home for the oppressed. This they consider to be the establishment of righteousness. But this pre-supposed well-night perfect humans. And they had no less a privilege than we. But have we established it? Have we when the privileges of wealth and position are robbing thousands of young men and women of their right to become educated and trained citizens? Have we when many are compelled to live in an indecent environment and wealth and privilege live in brown stone fronts on roomy, airy boulevards, and barricaded behind iron fences and cordons of servants? Have we when humans are but chattels to be manipulated at the will and caprice of capalistic overlords? Have we when farms are being deserted and men are becoming urbanized in taste and desire?

"Ill fares the land, to hastening ills
a prey,
Where wealth accumulates and men
decay.
Princes or lords may flourish or may
fade,
A breath can make them as a breath
has made;
But a bold peasantry, their country's
pride,
When once destroyed, can never be
supplied."

Though some men are fondly saying that the spirit of a free republic will some day achieve for us truth and honor, liberty and justice, integrity and righteousness; the humble, Godly man believes that it can be done only as that spirit is like unto the spirit of Him who dedicated in favor of all the nations, the Republic of the Golden Rule.

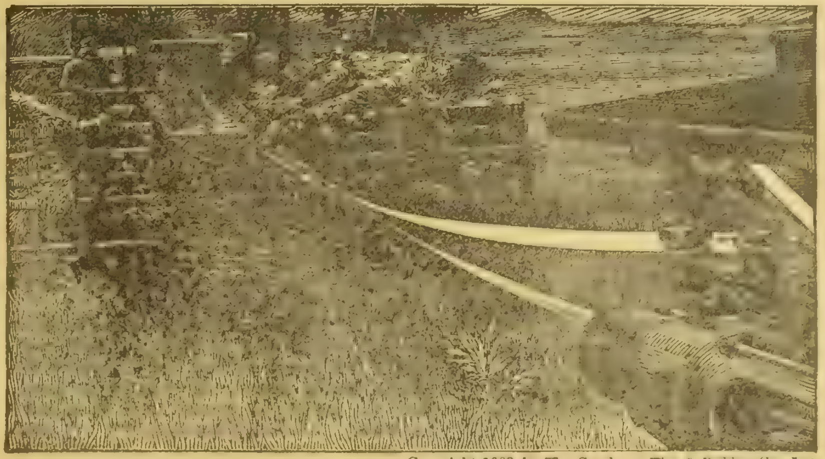
"Sin is a reproach to any people." So said the sages and the prophets. But the Jewish nation stubbornly plunged into captivity. Most of us have enough purity in our hearts and honesty in our purposes to sense the great sins of our day. But we differ on how to cure them. Our fathers, intoxicated in the atmosphere of their new-found freedom, differed on how to maintain social freedom. This was evidenced by the rules of restraint that obtained in some places as over against liberty of conscience in others. Briefly, this finally developed into a liberty of class and privilege; a liberty in which individualism flourished; which was divorced from righteousness and justice to all; and which through political manipulation has brought about our national evils. And this is our national reproach.

But back of all these evils the major cause stands out: SIN. For instance, sin couched at Cain's door and he slew his brother. And sin at our nation's door is slaying brothers upon brothers. Such is the inglorious reign of war and oppression. And we are head-on for another spell of unleashed savagery. Why? Because treating the symptoms of a disease will not cure it. We have been putting our trust in laws and courts, in conferences and treaties which involved force and secret alliances. And our judgment is certain. "And this is the judgment," said Jesus, "that men love darkness rather than light because their deeds are evil." So shall it ever be as long as the principle of force instead of social righteousness reigns in our political system. Will we place our confidence in Jesus Christ and the sermon on the Mount? Then we may have a social millenlum. –

"Why does not the West now after 1900 years, try the experiment of founding a state on the teachings of its Christ? I attack not your religion, nor would I compare it unfavorably with our Confucianism. You, however, do not practice your religion. With you a commercial relation comes first in all things; the moral relation is forgotten. Lasting peace will come only when you accept honestly the teachings of the Christ whom you now only pretend to worship." This is the challenge of a Chinaman, Li Moy Foo, to our so-called Christian America.

But how shall we establish this righteous state? Again we ask it. Say our Republican friends, "Have patience with us. We'll do it. We stand for justice, 'a full dinner pail,' and contentment." But G. O. P. farewell, your sun is setting. We have seen your business revival and full dinner pail, and have been disappointed; for we find in much of it but a respectable way of sinning. And we can say no more for any other selfishly partisian politics. The sooner we relegate unsocial politics to all the wrecked human ideals of the past, the better. God, help us to pray and work for that Isaiah-like man "who shall become a hiding

(Continued on Page 17)



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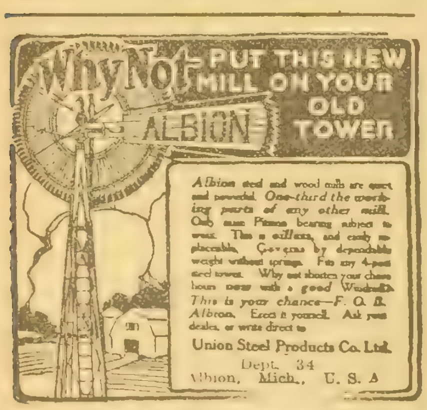
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The Hunted Woman

By James Oliver Curwood

Michigan's Own and America's Formost Auther of the Great Northwest

(Copyright by James Oliver Curwood

(Continued from June 9th issue)

"There's sheep somewhere near this basin, Johnny," he explained. "An' I reckon Joanne-'ll scold us if we don't keep here in fresh meat. I'm goin' to bring in some mutton if there's any to be got, an' I probably won't be back until after dark."

Aldous knew that he had more to say, and he went with him a few steps beyond the camp.

And MacDonald continued in a low, troubled voice:

"Be careful, Johnny. Watch yo'rself. I'm going to take a look over into the next valley, an' I won't be back until late. It wasn't a goat, an' it wasn't a sheep, an' it wasn't a bear. It was two-legged! It was a man, Johnny, an' he was there to watch this trail, or my name ain't Donald MacDonald. Mebby he came ahead of us last night, an' mebby he was here before that happened. Anyway, be on your guard while I look over into the next range."

With that he struck off in the direction of the snow-ridge, and for a few moments Aldous stood looking after the tall picturesque figure until it disappeared behind a clump of spruce. Swiftly he was telling himself that it was not the hunting season, and that it was not a prospector whom they had seen on the snow-ridge. As a matter of caution, there could be but one conclusion to draw. The man had been stationed there either by Quade or FitzHugh, or both, and had unwittingly revealed himself.

He turned toward Joanne, who had already begun to gather up the supper things. He could hear her singing happily, and as he looked she pressed a finger to her lips and threw a kiss to him. His heart smote him even as he smiled and waved a hand in response. Then he went to her. How slim and wonderful she looked in that glow of the setting sun, he thought. How white and soft were her hands, how tender and fragle her lovely neck! And how helpless—how utterly helpless she would be if anything happened to him and MacDonald! With an effort he flung the thought from him. On his knees he wiped the dishes and pots and pans for Joanne. When this was done, he seized an axe and showed her how to gather a bed. This was a new and delightful experience for Joanne.

"You always want to cut balsam boughs when you can get them," he explained, pausing before two small trees. "Now, this is cedar, and this is a balsam. Notice how prickly and needlelike on all sides these cedar branches are. And now look at the balsam. The needles lay flat and soft. Balsam makes the best bed you can get in the North, except moss, and you've got to dry the moss."

For fifteen minutes he clipped off the soft ends of the balsam limbs and Joanne gathered them in her arms and carried them into the tepee. Then he went in with her, and showed her how to make the bed. He made it a narrow bed, and a deep bed, and he knew that Joanne was watching him, and he was glad the tan hid the uncomfortable glow in his face when he had finished tucking in the end of the last blanket.

"You will be as cozy as can be in that," he said.

"And you, John?" she asked, her face flushing rosily. "I haven't seen another tent for you and Donald."

"We don't sleep in a tent during the summer," he said. "Just our blankets—out in the open."

"But—if it should rain?"

"We get under a balsam or a spruce or a thick cedar."

A little later they stood beside the fire. It was growing dusk. The distant snow-ridge was swiftly fading into a pale and ghostly sheet in the gray gloom of the night. Up that ridge Aldous knew that MacDonald was toiling.

Joanne put her hands to his shoulders.

"Are you sorry—so very, very sorry that you let me come, John?"

"I didn't let you come," he laughed softly, drawing her to him. "You came!"

"And are you sorry?"

"No."

It was deliciously sweet to have her tilt up her head and put her soft lips to his, and it was still sweeter when her tender hands stroked his cheeks, and eyes and lips smiled their love and gladness. He stood stroking her hair, with her face laying warm and close against him, and over her head he stared into the thickening darkness of the spruce and cedar copses. Joanne herself had piled wood on the fire, and in its glow they were dangerously illuminated. With one of her hands she was still caressing his cheek.

"When will Donald return?" she asked.

"Probably not until late," he replied, wondering what it was that had set a stone rolling down the side of the mountain nearest to them. "He hunted until dark, and may wait for the moon to come up before he returns."

"John——"

"Yes, dear——" And mentally he measured the distance to the nearest clump of timber between them and the mountain.

"Let's build a big fire, and sit down on the pannier canvases."

His eyes were still on the timber, and he was wondering what a man with a rifle, or even a pistol, might do at that space. He made a good target, and MacDonald was probably several miles away.

"I've been thinking about the fire," he said. "We must put it out, Joanne. There are reasons why we should not let it burn. For one thing, the smoke will drive away any game that we may hope to see in the morning."

Her hands lay still against his cheek.

"I—understand, John," she replied quickly, and there was the smallest bit of a shudder in her voice. "I had forgotten. We must put it out!"

Five minutes later only a few glowing embers remained where the fire had been. He had spread out the pannier canvases, and now he seated himself with his back to a tree. Joanne snuggled close to him.

"It is much nicer in the dark," she whispered, and her arms reached up about him, and her lips pressed warm and soft against his hand. "Are you just a little ashamed of me, John?"

"Ashamed? Good heaven——"

"Because," she interrupted him, "we have known each other such a very short time, and I have allowed myself to become so very, very well acquainted with you. It has all been so delightfully sudden, and strange, and I am—just as happy as I can be. You don't thing it is immodest for me to say these things to my husband, John—even if I have only known him three days?"

He answered by crushing her so closely in his arms that for a few moments afterward she lay helplessly on his breast, gasping for breath. his brain was afire with the joyous madness of possession. Never had woman come to man more sweetly than Joanne had come to him, and as he felt her throbbing and trembling against him he was ready to rise up and shout forth a challenge to a hundred Quades and Culver Ranns hiding in the darkness of the mountains. For a long time he held her nestled close in his arms, and at intervals there were silences between them, in which they listened to the glad tumult of their own hearts, and the strange silence that came to them from out of the still night.

It was their first hour alone—of utter oblivion to all else but themselves; to Joanne the first sacrament hour of her wifehood, to him the first hour of perfect possession and understanding. In that hour their souls became one, and when at last they rose to their feet, and the moon came up over a crag of the mountain and flooded them in its golden light, there was in Joanne's face a tenderness and a gentle glory that made John Aldous think of an angel. He led her to the tepee, and lighted a candle for her, and at the last, with the sweet demand of a child in the manner of her doing it, she pursed up her lips to be kissed good-night.

And when he had tied the tent-flap behind her, he took his rifle and sat down with it across his knees in the deep black shadow of a spruce, and waited and listened for the soming of Donald MacDonald.

CHAPTER XXIV

For an hour after Joanne had gone into her tent Aldous sat silent and watchful. From where he had concealed himself he could see over a part of the moonlit basin, and guard the open space between the camp and the clump of timber that lay in the direction of the nearest mountain. After Joanne had blown out her candle the silence of the night seemed to grow deeper about him. The hobbled horses had wandered several hundred yards away, and only now and then could he hear the thud of a hoof, or the clank of a steel shoe on rock. He believed that it was impossible for any one to approach without ears and eyes giving him warning, and he felt a distinct shock when Donald MacDonald suddenly appeared in the moonlight not twenty paces from him. With an ejaculation of amazement he jumped to his feet and went to him.

"How the deuce did you get here?" he demanded.

"Were you asleep, Johnny?"

"I was awake —and watching!"

The old hunter chuckled.

"It was so still when I come to those trees back there that I thought mebby something had 'appened," he said. "So, I sneaked up, Johnny."

"Did you see anything over the range?" asked Aldous anxiously.

"I found footprints in the snow, an' when I got to the top I smelled smoke, but couldn't see a fire. It was dark then." MacDonald nodded toward the tepee. "Is she asleep, Johnny?"

"I think so. She must be very tired."

They both drew back into the shadow of the spruce. It was a simultaneous movement of caution, and both, without speaking their thoughts, realized the significance of it. Until now they had had no opportunity of being alone since last night.

MacDonald spoke in a low, muffled voice:

"Quade an' Culver Rann are goin' the limit, Johnny," he said. "They let men on the job at Tete Jaune, and they've got others watching us. Consequently, I've hit on a scheme—a sort of simple and onreasonable scheme, mebby, but an awful good scheme at times."

"What is it?"

"Whenever you see anything that ain't a bear, or a goat, or a sheep, don't wait to change the time o' day—but shoot!" said MacDonald.

Aldous smiled grimly.

"If I had any ideas of chivalry, or what I call fair play, they were taken out of me last night, Mac." he said. "I'm ready to shoot on sight!"

MacDonald grunted his satisfaction.

"They can't beat us if we do that, Johnny. They ain't even ordinary cut-throats—they're sneaks in the bargain; an' if they could walk in our camp, smilin' an' friendly, and brain us when our backs was turned, they'd do it. We don't know who's with them, and if a stranger heaves i nsight meet him with a chunk o' lead. They're the only ones in these mountains, an' we won't make any mistake. See that bunch of spruce over there?"

The old hunter pointed to a clump fifty yards beyond the tepee toward the lake. Aldous nodded.

"I'll take my blankets over there," continued MacDonald. "You roll yourself up here, and the tepee'll be between us. You see the system, Johnny? If they make us a visit during the night we've got 'em between us, and there'll be some real burrying to do in the morning!"

Back under the low-hanging boughs of the dwarf spruce Aldous spread out his blanket a few minutes later. He had made up his mind not to sleep, and for hours he lay watchful and waiting, smoking occasionally, with his face close to the ground so that the odour of tobacso would cling to the earth. The moon rose until it was straight overhead, flooding the valley in a golden splendour that he wished Joanne might have seen. Then it began sinking into the west; slowly at first, and then more swiftly, its radiance diminished. He looked at his watch before the yellow orb effaced itself behind the towering peak of a distant mountain. It was a quarter of two.

With deepening darkness, his eyes grew heavier. He closed them for a few minutes at a time; and each time the interval was longer, and it took greater effort to force himself into wakefulness. Finally he slept. But he was still subsconsciously on guard, and an hour later that consciousness was beating and pounding within him, urging him to awake. He sat up with a start and gripped his rifle. An owl was hooting softly, very softly. There were four notes. He answered, and a little later MacDonald came like a shadow out of the gloom. Aldous advanced to meet him, and he noticed that over the eastern mountains there was a streak of gray.

"It's after three, Johnny," MacDonald greeted him. "Build a fire and get breakfast. Tell Joanne I'm out after another sheep. Until it's good an' light I'm going to watch from that clump of timber up there. In half an hour it'll be dawn."

He moved toward the clump of timber, and Aldous set about building a fire. He was careful not to awaken Joanne. The fire was crackling cheerily when he went to the lake for water. Returning he saw the faint glow of candle light in Joanne's tepee. Five minutes later she appeared, and all thought of danger, and the discomfort of his sleepless night, passed from him at sight of her. Her eyes were still a little misty with sleep when he took her in his arms and kissed her, but she was deliciously alive, and glad, and happy. In one hand she had brought a brush and in the other a comb.

"You slept like a log," he cried happily. "It can't be that you had very bad dreams, little wife?"

"I had a beautiful dream, John," she laughed softly, and the colour flooded up into her face.

She unplaited the thick silken strands of her braid and began brushing her hair in the firelight, while Aldous sliced the bacon. Some of the slices were thick, and some were thin, for he could not keep his eyes from her as she stood there like a goddess, buried almost to her knees in that wonderous mantle. He found himself whistling with a very light heart as she braided her hair and afterward plunged her face in a bath of cold water he had brought from the lake. From that bath she emerged like a glowing Naiad. Her eyes sparkled. Her cheeks were pink and her lips full and red. Damp little tendrils of hair clung adorably about her face and neck. For another full minute Aldous paused in his labors, and he wondered if MacDonald was watching them from the clump of timber. The bacon was sputtering when Joanne ran to it and rescued it from burning.

Dawn followed quickly after that first break of day in the east, but not until one could see a full rifleshot away did MacDonald return to camp. Breakfast was waiting, and as soon as he had finished the old hunter went after the horses. It was five o'clock, and bars of the sun were shooting over the tops of the mountains when once more they were in the saddle and on their way.

Most of this day Aldous headed the outfit up the valley. On the pretext of searching for game MacDonald rode so far in advance that only twice during the forenoon was he in sight. When they stopped to camp for the night his horse was almost exhausted, and MacDonald himself showed signs of tremendous physical effort. Aldous could not question him before Joanne. He waited. And MacDonald was strangely silent.

The proof of MacDonald's prediction concerning Joanne was in evidence this second night. Every bone in her body ached, and she was so tired that she made no objection to going to bed as soon as it was dark.

"It always happens like this," consoled old Donald, as she bade him good-night. "Tomorrow you'll begin to get broke in and the next day you won't have any lameness at all."

(Continued in July 7th issue)

Uncle Rube Spinach Says:

AND A LITTLE CHILD SHALL LEAD THEM

FOLKS, I've often wondered what a childless home was like. A home where little ones never creep over the carpets, never upset things; where the laughter or the cries of a little one is never heard. I've often wondered what a home could be like without the little ones in it.

An' yet I find that many of our young friends are gittin' married with just one idea—"No babies for us. We want to have a good time, go where we please an' come back when we get ready."

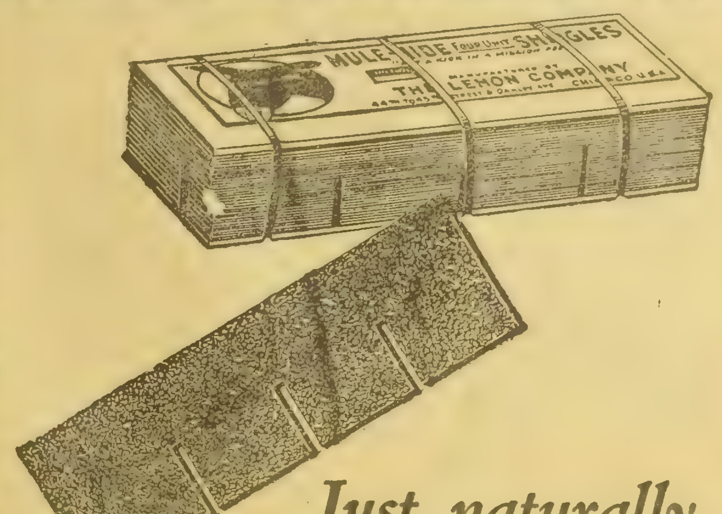
Well, of course, to most of 'em—many of 'em anyway—babies will come whether they want 'em or not—natur' has wisely provided fer that. But to think of a little one coming into a home where it is not wanted—can you imagine anything more horrible than that?

I wuz up town today an' I see somethin' quite a little out of the ordinary. A lovely, splendid young mother wheeling three little ones in a cab built 'specially for the little group. I had never seen the mother before—may never see her again, although I hope I may, but I stopped right in front of that cab, took my hat off to her, she smiled and said "Quite a nice little family, isn't it?" And folks, I had to admit that it wuz. An' she wuz so nice to talk to—she told me they were 4 months old. "Oh, yes," she sez, "they cause a lot of work, so many all at once you know, but I don't mind it a bit an' my husband is so good. If meals are not always quite on time he laughts an' says 'Ah, the kiddies have kept you busy have they,' an' we laught it off together an' that's all there is about it." Wonderful little mother! An' yet Bill Orpen of Paris, sez there are no beautiful women.

But to come back to where I started. What are these childless people goin' to do when the years count up onto 'em an' they begin to git old an gray? What will home be to 'em then? Will love fer each other endure the test when there is nothin' to think about only jest themselves? What would we do, we of middle life, were it not fer the sons and daughters—the children we have loved an' taken care of fer so many years? An' folks you know there is no time in a child's life when they are most interesih' when they are jest little bits of humanity, when we hear their first cry an' we take then in our arms to love 'em fer the first time. We think that is the time they are jest 'bout the necest they'll ever be. At six months they're still nicer, ain't they now? When they take their first totterin' steps—well what's finer 'an that? An' then they begin to lisp words an' our hearts beat a little faster jest 'cause baby is beginin' to talk. An' so it goes, an' now my oldest baby is 29 years old has a little girl 7 years old an' yet good friends she has been a comfort to me an' to her mother every minute since the day she first came into our lives, looked around a bit and went to sleep only to wake up an' look around again. An' so it has been with all the little ones—there are five—that have come into our lives an' they are ours—mother's an' mine—yes we've worked to take care of 'em but we've been glad to do it an' when we are old an' there is nothin' else we've got them an' that's enough.

But what will the folks that want no children do when they git old? Of course I am aware there are some childless homes where children would be more'n welcome—my heart goes out in sympathy to such—but to those who would not have the little ones in their homes—well I can't express my feelin's without breakin' some of the commandments so I'll quit. Cordially yours—UNCLE RUBE.

NOT A KICK IN A MILLION FEET



Just naturally wear longer

THE LEHON COMPANY
MANUFACTURERS
44th to 45th St. on Oakley Ave.
CHICAGO, ILLINOIS
"Not a Kick in a Million Feet"

MULE-HIDE

Herold-Bertsch Michigan-Made Shoes

30 years of Honest Shoe Values Behind this Footwear.

Scout
Light-weight
cool and roomy for summer wear

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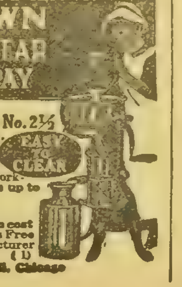
at your shoe store

Lots of service for little money in this sturdy shoe. Made of all leather. Good grade of upper stock and quality sole. Michigan farmers have been wearing it for years. Try it on and see how cool and comfortable it feels. Boys' sizes also.

Herold-Bertsch Shoe Co.
Grand Rapids
Send for Booklet

Only $2 DOWN ONE YEAR TO PAY



$44 Buys the New Butterfly Jr. No. 2½ Light running, easy cleaning, close skimming, durable. NEW BUTTERFLY Separators are guaranteed a lifetime against defects in material and workmanship. Made also in four larger sizes up to No. 5 1-2 shown here; sold on
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Filled with illustrated, interesting practical stories of success with "Money Crops." To encourage a more general planting of Grapes we make this liberal offer, and a silver Quarter takes it all. Send name and address today to
THE FRUIT BELT
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WHEN WRITING TO ADVERTISERS PLEASE MENTION THE MICHIGAN BUSINESS FARMER

The Michigan
BUSINESS FARMER

SATURDDAY, JUNE 23, 1923

Edited and Published by
THE RURAL PUBLISHING COMPANY, Inc.
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ONE YEAR 60c. TWO YEARS $1. FIVE YEARS $2.

The date following your name on the address label shows when your subscription expires. In renewing kindly send this label to avoid mistakes. Remit by check, draft, money-order or registered letter; stamps and currency are at your risk. We acknowledge by first-class mail every dollar received.

Advertising Rates: 45c per agate line. 14 lines to the column inch, 772 lines to the page. Flat rates.
Live Stock and Auction Sale Advertising: We offer special low rates to reputable breeders of live stock and poultry; write us.

RELIABLE ADVERTISERS
We will not knowingly accept the advertising of any person or firm who we do not believe to be thoroughly honest and reliable. Should any reader have any cause for complaint against any advertiser in these columns, the publisher would appreciate an immediate letter bringing all facts to light. In every case when writing say: "I saw your advertisement in The Michigan Business Farmer!" It will guarantee honest dealing.

"The Farm Paper of Service"

A SAFE AND SANE FOURTH

IN their anxiety to protect the life and limb of men and boys on America's great holiday, well-meaning, but ill-advised individuals have tried to make of Independence Day a celebration which is hardly in keeping with the spirit in which it was created.

A "safe and sane Fourth" is all right and we heartily endorse it, but it should well be remembered by some elders that this day of all the national holidays is a day of celebration—a day when we ought to be proud of the old flag and all that it stands for which is good, upright, and red-blooded. There are enough days in the year when we can curb the younger generation and tell them to be quiet, but this is the one day when they should be allowed to make all of the noise they want to and have all the fun possible.

To deprive a boy or girl of a cap-pistol, a package of small firecrackers, and some torpedoes with which to frighten Aunt Molly half out of her skin, would be curbing something which we like to point to in our men and women as distinctly American.

There is a class of blue-nosed individuals in America who would prohibit anything that brought fun to the heart of a child or a smile to the face of a grown-up. Unfortunately they are the ones who are promoting the "Safe and Sane Fourth." We are glad we had the opportunity of setting off giant fire-crackers, lighting whistling sky rockets and running like mad away from the two anvils which announced the coming of the fourth in our old county seat home up in Michigan, before the kill-joys arrived on the scene.

A COLD SEASON.

FROM all appearances the month of June is running a race with May to break all local weather records in the matter of average cold temperature.

Everything in Michigan and the nearby states is from two to three weeks retarded in growth, and not one-half of the corn planting was completed in Michigan within two weeks of the time the seed is usually in the ground. Reports come from several sections where re-planting was necessary because of the continued cold, wet weather.

Wheat and rye are in only fair condition. Oats are very backward. The growth is short and in Michigan and Wisconsin the crop is poor. Hay alone has shown a great improvement during the past two weeks, and pastures throughout Michigan are in good shape. The condition of the fruit is also very encouraging as this kind of a season does not mitigate against the productivity and quantity of orchards and vines.

Taken all in all there is nothing to be particularly discouraged about in the crop reports from Michigan and with higher prices which we fully anticipate this fall, the farmers of Michigan should receive a great many million dollars more for their products than they did last year, even though the quantity which they are able to harvest may not be as large as last.

POLITICS AND ECONOMICS

THE Commissioner of Agriculture in Idaho, Mr. M. A. Means, says, "The great trouble with our people today is that they have mixed two great problems—politics and economics." This, according to Mr. Means, "is not the solution of any farm perplexity, but well-balanced farming, where the farmer makes frequent sales from the farm, pays off his debts and stops paying interest and other overhead charges, is the problem we have to meet." By well-balanced farming the Commissioner means "cultivation that will not destroy the productivity of the soil by the continuous raising of wheat. Idaho farmers have gone to wheat so long that the soil has deteriorated in productivity 50 per cent. The humus in the soil has been lowered by raising small grains."

There is not a farmer in the Central West who does not realize that Mr. Means has stated a fact which must be confronted. Certain well-meaning individuals have so mixed politics and economics that they now believe the two to be one and the same thing. If the people think they want something it is good policy to give it to them whether or not it is sound economics.

We have felt for some little time that the farmers of America were waking up to the fact that they have been misled and have followed blindly directions which have not worked to their profit during the past two or three years.

Mr. Means in closing his statement confirms this in a pointed paragraph, "The political agitation to provide more farm credit is absolutely against sound principles of building citizenship. What the farmer needs more is time to pay off some of the debts he has already contracted. If the demagogue is brushed aside, the farmer himself can solve the problem by the old American spirit of industry and thrift."

And we might add that Mr. Means does not need to worry about the "old American spirit of industry and thrift, because that is a part and parcel of every good farmer. There is no lack of work on the farm nor desire on the part of the farm family to work. They have been working harder than the average city man these past two or three years, but against odds they have not been able to make the net amount which the laboring man did with no investment whatever, except his own time and energy.

HANDS OFF FARM PRICES!

AMERICA is facing agricultural suicide as a result of the loss of man power on our farms, says Senator T. H. Caraway, Democrat, of Arkansas, and he points out that the large number of farm folks going to the city is bound to bring a food shortage which will send the prices of agricultural products sky high at the expense of the public!

This is not exactly a new discovery. We have been pointing out for upwards of a year that the inevitable result of the migration of country folks to the city factories could result in only one condition and that was a shortage of food products and a consequent rise in prices, which we have hoped would put the farmer back on an equal basis with his city cousin in net earnings.

Senator Caraway, like some other misguided senators, would have the government step in at this time and fix farm prices so that the public would be protected. He claims that it would be to the benefit of the farmer and yet, it is our observation, that when the government steps in, practical business profits step out, and we believe that the farmer is today suffering more from misguided leadership and government interference than he is from a lack of market for his product.

There is a law which operates with the same precision and is as unvarying as that of gravitation. That law is the law of supply and demand.

The farmers of America are about to step into their own after two or three of the most depressing years in their history. They are going to step into this period of prosperity if the government and those who claim to represent the farmer will adopt the policy of "Hands Off!"

We have not noticed during the past two or three years that the government has been particularly active in keeping down the prices paid to union labor, the brick-layer, plasterer, carpenter, plumber, railwayman or factory worker?

Arkansas is an agricultural state, not of very great importance, but still there should be enough farmers down there to ask Senator Caraway to leave things alone and let the farm work itself out without political assistance. This same advice might be passed along to the senators of one or more states adjacent to Arkansas.

JOINING M. A. C. AND U. OF M.

ONE of the men outspoken in the matter of linking (through a joint administration board) the Michigan Agricultural College and University of Michigan is Eugene Davenport, former dean of the University of Illinois, now residing at Woodland, Michigan. Dr. Davenport is, as most of our readers know, a graduate who received three degrees from M. A. C. and was assistant Botanist at the Experiment Station, Professor of Practical Agriculture, and Superintendent of the farm, then left to become President of a Spanish agricultural college in Brazil, and returned to America to become dean of the agricultural college of the University of Illinois, from which he returned to his boyhood home only last year, since which time he has taken considerable interest in his alma mater.

In a recent interview Dr. Davenport points out that if a co-ordination of Michigan's two great educational institutions is to be made, and there are many good reasons, he says, for such a move, now is the idea time while the Agricultural College is without a president and directing head. "The college needs to catch the university spirit." says Dr. Davenport. "The function of the university primarily is research; teaching is but incidental. The college seldom has this point of view. I used to tell my students that the institution did not exist for them; that it existed for all the people—for the state. I said to them, 'In going out from this college, you are merely a sort of bulletin, taking to the people the message of the college.' Agriculture is not an individual or a class interest; it is a primary interest of the entire commonwealth. If an insect pest ravages the crops, the damage is as important to the consumers as to the producers. It is of more importance to the state than to the owner of the land that the fertility of the soil should be conserved. The owner will die probably within 50 years and he may expect the soil to produce during his life-time even if he abuses it. But the state must take thought for 1,000 years ahead."

To the average farmer in Michigan the present discussion as to the relative merits of linking the university with the college for the educational benefits which will be derived are not exactly clear, nor are they to us. But that some change must be worked out, however, was made apparent by the recent turmoil, and The Business Farmer is determined that politics must be taken out of the control of this college. If in doing so and to bring the college up to its former high standing it is advisable to co-ordinate its work with that of the university at Ann Arbor, well and good. This is a matter for practical educationalists to work out, and is certainly not one to be discussed by those who are not thoroughly familiar with present day educational methods.

This plan of co-ordination is, we understand, being carried out at Illinois, Iowa, New York, and in other important states with the same problems as Michigan. It should not be hard, therefore, to get the facts from these states and to apply them to the situation as is exists here. We are glad that Michigan has a man of Dean Davenport's ability and experience who will come out on so important a proposition and we commend to the Governor the highly valuable services of Dr. Davenport to guide him in this important discussion now under way.

HATS OFF H-F BREEDERS

OUR hats are off to the Holstein-Friesian breeders of the state of Michigan. Once again they have brought back to the peninsula state honors which places them in first position in the livestock development of Michigan. At Cleveland last week, at the Thirty-eighth Annual Meeting of the Holstein-Friesian Association of America, Dudley Waters, of Grand Rapids, paid $4,100 for Avon Pontiac Echo Lad, consigned by the Carnation Farms, whiles the Loeb Farms at Cheboygan sold a bull for $3,750. The buyers from Michigan carried off first honors in the number of cattle bought and the amount paid, buying forty animals, while Pennsylvania, the second state, bought thirty-three, and Ohio kept only seventeen of those offered.

Michigan was the birth-place of Holstein-Friesian popularity in the United States, and that we are going to maintain the lead in this important breed is proven by the business foresight of our breeders who bought last week.

How do you account for this, Mr. Pessimist? "I drove through five Michigan counties early last week and in my twenty-seven years among Michigan farms I never saw the farms better cultivated or in better condition! There may not be as many acres under cultivation this year, but there are more acres well cultivated!" The speaker was a man who is known to nine out of every ten farmers in Michigan by his first name.

Silos mean dairies. Dairies mean milk checks. Milk checks mean prosperity. Prosperity means more silos. More silos mean bigger dairies. Bigger dairies mean larger milk checks. And so on, ad finem!

Only two states in America have more silos than Michigan; Wisconsin and New York and the latter state leads us by so few silos that we imagine by this time, Michigan is second.

Every time the gasoline pump handle goes down, there ought to be two cents dropped into the good roads fund, at least most farmers think so!

PUBLISHER'S DESK

YOUNG ROOSTERS WANTED

$2 to $3 can be had for each young rooster you can spare. There is a poultry buyer near you who will gladly pay you these prices or more. All you have to do is to write the breed you have, being sure to state how many young roosters you can spare in first letter. George Beuoy, Poultry Expert, Kansas.

A READER kindly called my attention to the advertisement above which is appearing in some of the farm papers and wanted to know what I thought of it. Well, I will bet my last summer's straw hat that there is a catch in this propositon somewhere! I have written Mr. Beuoy and asked him to send me his proposition because I am sure it would be interesting to a great many of our readers, who usually have more than enough roosters which they would be glad to dispose of at $2 or $3 each. I have not had a reply from this gentleman as yet. If his propositon is one which we ought to relay to our readers it will appear on this page in the next issue, otherwise we would not advise saving any of your cockerels for the high prices which he mentions.

ANOTHER SCHEME NAILED!

A READER wrote me from Milford about the middle of May asking about a concern in St. Louis, Missouri, which sold a complete stock of goods to supply a retail store, asking me to look them up, and find out if they were reliable, because he had the idea of putting all of his money into a store and retiring from the farm.

We had our St. Louis representative look up this concern, found that they had no place of business except a desk in the office of a medical specialist, and from every appearance the scheme looked like a fly-by-night. In a circular which we secured, we find that this company was asking 25% down in cash, the balance to be accepted in trade of land or other property. For sheer audacity their statement that "we will accept good property in exchange, but interest and taxes must be paid to date, and abstract showing a good title must be furnished," is just about the limit.

We hope we saved this one reader the nest-egg which he has accumulated in many years of hard work on a farm, and which he was thinking of putting into a retail business. We have no idea how much he expected to invest but it must have run into several thousand dollars.

It is surprising how green the fields at a distance look to some folks, and we intend to repeat and repeat over and over again to our readers of this page our timely warning not to enter into any contract, or agree to pay large sums of money to anyone until you have made a thorough investigation, and have convinced yourself of their honesty.

It is easy enough to get pictures of big buildings or printed matter which gives the appearance of a concern of large size. If people would take the time to make a trip to headquarters, size them up with their own eyes, they might find what our St. Louis representative found in this case; a desk tucked away in a corner of an office, and operated by a man whom the average farmer would not trust with a silver quarter if he came to his front door.

* * * *

Several readers have written recently regarding a coal company located near Owosso, and said to be selling stock to farmers in Michigan. I asked our friend, A. B. Cook, Master of the State Grange, who lives near Owosso, regarding this company, and he replies as follows: "I know very little about the Owosso Coal Company. I know that several companies have tried on that location and with small success seemingly. The officers are strangers to me. If any person takes seriously a promise of 2% a month from an unknown stock salesman, a guardian should at once be appointed or there will soon be nothing to guard."

CHASING RAINBOWS

In the April 14, 1923, Business Farmer, I saw an article about the "Anneka Jan Bougardus" estate. There is also a similar estate in Holland from the same person. Can you tell me where I can write concerning the estate. My old grandmother who claimed and was taught to believe she was a direct heir. About 15 years ago she received a letter from a New York lawyer saying she was an heir and that they were sending in a dollar each to settle the estate. Tho I think that was just a scheme of some lawyer to get money. But it seems to me that grandmother's name must be on record of the lawyer would not have known where to write. My grandmother's parents came from somewhere near Elmira, New York. Any information will be gratefully received.—Mrs. S. W.

—This scheme for separating a large number of people from small sums of money is one of the most consistant forms of graft practiced in Europe. In England, where postal laws for some reason do not appear to be as strict, there are publications which devote columns of space to small advertisements for "Lost Heirs," most of which are plainly fraudulent. We repeat our warning to send no lawyer money who offers to prove your claim to a lost estate, at least until you have talked with a good local attorney in whom you have confidence. A recent estate consisted of most of the property on which Wall Street and lower Broadway, are built! The title to most valuable property has long ago been proven.

The Week's Editorial

THE FARMER: RICH OR POOR?

IF the debate between Mr. Borah and Lloyd George falls through, an interesting substitute might be a forensic fight to the finish between Senators Capper and Curtis on the subject of rural prosperity in Kansas. After a tour of the West, Senator Curtis, in company with colleagues, has returned to Washington to say that the people of Kansas particularly are interested at the moment in nothing but their own prosperity.

He intimates that when such matters as foreign relations and American entry into the World Court are mentioned back home a blank, dull expression crosses the Kansan's face and no intelligible reply is forthcoming. Senator Curtis avers that this fellow has his own little troubles, but that just now he is more intent on the close cooperation of a plow with the sod than on national contact with the world.

What makes this report interesting is that the reporter comes from the home of the farmer's professional mourner. Mr. Capper is the defender of the farmer on the way to crucifixion. He thinks up stays of sentence in the shape of rural credit and so on. Whether he believes it or not he gives the impression that the wolf's breath is always hot on the farmer's neck and that only men like Mr. Capper stand between him and bankruptcy and predatory forces. Senator Curtis says the Kansas farmer is going big. This is heresy in the Capper scheme of things, for no farmer must succeed in that philosophy, no farmer but is imposed upon by bankers and other powerful influences, no farmer who isn't losing money with marked precision year after year.

The matter should be threshed out between these men. The country doesn't want to go into such proposals as the one that the Government be selling agents for his crops, nor cut up his meet and dress him and tie his tie, if he is so devoted to considering his own prosperity that he has dismissed national affairs from mind.—Detroit News.

First Mortgage Real Estate Gold Bonds

The most discriminating investors are the staunchest advocates of Federal first mortgage real estate bonds.

Write for Booklet AG842

Tax Free in Michigan
Free from Federal Income Tax of 4%

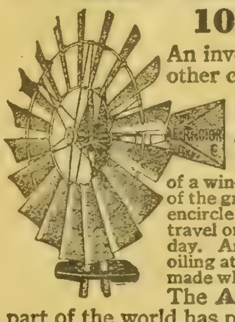
6½%

FEDERAL BONDS
Are Better Bonds

(842)

FEDERAL BOND & MORTGAGE COMPANY
FEDERAL BOND & MORTGAGE BUILDING, *DETROIT*

4 TIMES Around the World with ONE OILING
100,000 Miles Without Stopping for Oil



An inventor who could develop an automobile, a railroad car or any other conveyance on wheels which would perform such a feat would be considered a wonder. But such is the record of regular accomplishment by the Auto-oiled Aermotor during the past eight years in pumping water.

Did you ever stop to think how many revolutions the wheel of a windmill makes? If the wheel of an Aermotor should roll along the surface of the ground at the same speed that it makes when pumping water it would encircle the world in 90 days, or would go four times around in a year. It would travel on an average 275 miles per day or about 30 miles per hour for 9 hours each day. An automobile which keeps up that pace day after day needs a thorough oiling at least once a week. Isn't it marvelous, then, that a windmill has been made which will go 50 times as long as the best automobile with one oiling?

The **Auto-oiled Aermotor** after 8 full years of service in every part of the world has proven its ability to run and give the most reliable service with one oiling a year. The double gears, and all moving parts, are entirely enclosed and flooded with oil all the time. It gives more service with less attention than any other piece of machinery on the farm. To get everlasting wind-mill satisfaction buy the Auto-oiled Aermotor, the most efficient windmill that has ever been made.

For full information write AERMOTOR CO. Chicago Kansas City Dallas Minneapolis Des Moines Oakland

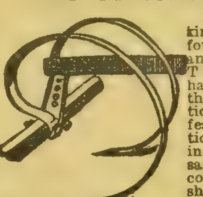
MONEY TO LOAN

On the 33-Year Government Amortization Plan to desirable borrowers who own good, well-managed farms in Michigan and Ohio, and wish to borrow not over 50% of the value of their land plus 20% of the appraised value of the buildings.

No commissions—Low interest rates. No stock investment. Unusually prompt and satisfactory service. If your loan will meet these requirements, write us.

FIRST JOINT STOCK LAND BANK OF CLEVELAND
Guardian Building, Cleveland, Ohio

ALL AROUND SATISFACTION FOR ANY CULTIVATION PURPOSE



It's through the right kind of cultivation that foul growths are kept down and can be eradicated. THE KOVAR DIGGER has opened the field for the right kind of cultivation and having exclusive features, will give satisfaction which no other machine will produce. Thousands of farmers have been convinced and we want to show you. Write for free booklet on land cultivation and how to work foul growths. KOVAR has the most successful Spring Tooth Corn Cultivator, also Harrow Cart. Write for further information and prices.

JOS. J. KOVAR, OWATONNA, MINN.

$

We can use a few earnest men and women part or full time in soliciting subscriptions and acting as our agents. Write

Circulation Manager
THE BUSINESS FARMER
Mt. Clemens, Mich.

THE COUNTRY DOCTOR

By Anne Campbell

THE neighbors often saw his rig go by,
When dawn first painted pictures in the sky.
"There's sickness down at Stirling's place," they said,
Or "Guess the doc's been dressin' Andy's head."
And sometimes they would see him ridin' past,
An' leave their buckwheat cakes to run an' ast,
"Hey, doc, is Mrs. Hillock doin' right,
An' did you bring a girl or boy last night?"
The dear ol' doc's fine face would beam with joy
As he pronounced the tidin's, "Its a boy!
Just what they wanted, Bill,—an' doin' fine!"
An' then he'd go a joggin' down the line.

A sorta drawlin' voice he had, but kind;
A kinder man you'd almost never find.
Not much on bookkeepin,' his bills piled high.
He allus meant to send 'em by an' by,
But never bothered much. When crops were good,
He knew he'd get his money as he should,
Or if the price o' beel was up, he 'llowed
He'd get his office ready for a crowd.

Still doctorin' he is, where I was born,
But now I s'pose he sounds a motor horn.
Time's mebbe changed the buggy to a car,
But he himself's as changless as a star.
Still ridin' through the quiet country lanes,
A-healin' souls, as well as aches an' pains!—Detroit News.

—I am sure a goodly number of my readers will remember Ann Campbell Stark, when she so excellently piloted the editorial destinies of this very page. Some of her first poems appeared exclusively in The Business Farmer and marked the beginning of her popularity with the verse-loving public. Her poems now appear daily in a large number of American newspapers, where they are eagerly awaited. Herself a typical American mother, Anne Campell's poems come from the very heart of the home, oftimes mingle a tear with a chuckle; and are as tender and pure as her own three babies whom she adores.

CANNING CLUB WORK

Barbara Van Heulen, Assistant State Club Leader

EVERY girl is a potential homemaker. As such she should hold as her ideal, perfection in every phase of home-making. Much concerning the standards of the housekeeper is told by a peep into her canning and preserving cupboard, for well filled shelves indicate not only a general pride in all phases of household duties, but a regard for the health and consequent happiness of the family. The canning club offers to a girl the double opportunity to learn this type of home work in a pleasurable and scientific way, and at the same time to relieve her mother of some of the busy season's duties.

Canning, drying and brining are the principal methods resorted to in the preservation of food stuffs; of these, canning is the most desirable, for it keeps the products in a condition more like that of food freshly cooked, and furthermore, ready to be served on short notice.

The One-Period Cold-Pack method of canning, which is considered the best and safest for all meats, vegetables and fruits, is outlined in the bulletin for the use of the canning club members. In this process the products are sterilized in the closed jar, thus retaining their original flavor and form.

—I might add that the canning clubs are doing wonderful work and if any of our younger readers are interested, for further details write to me and I will send you one of these bulletins and you can read of the work that is being carried on for our mutual benefit in our own state.

The Farm Home
A Department for the Women

Edited by MRS. ANNIE TAYLOR

DEAR FOLKS: The Fourth of July is here with us once more and I am wondering if it would not be a splendid plan to use this day for a family gathering. Make it a co-operative affair so that all the burden and expense does not fall upon the one family. Maybe all the children could plan and return to the old follks with food prepared and altho we want a sane and safe Fourth, if there are any little ones it almost seems right to have a few of the pretty lights for the evening entertainment. Some one member of the family can go to town and buy just a few of these. The Fourth of July means a great deal to a real thinking American citizen and I know it will be impressed upon our minds during these adjusting years It is not a solemn day but should be one of rejoicing and hilarious but sane fun.

Your Friend,
Mrs Annie Taylor

Address letters: Mrs. Annie Taylor, care The Business Farmer, Mt. Clemens, Michigan.

THE USES OF VEGETABLES IN THE DIET

VEGETABLES, as well as milk, are listed as "protective" foods necessary to health.

First, vegetables constitute our main mineral supply for they contain many mineral salts such as iron, calcium and phosphorus, which are needed by the bones, muscles, nerves and blood.

Second, many of them contain vitamins which promote growth, protect us against such diseases as scurvy and some nerve disorders, and which help to prevent general malnutrition.

Third, the cell walls of the vegetable are bulky, and they increase our bodily efficiency by the laxative action which they induce.

Spinach, turnip tops, young carrots and tomatoes rank high among the vegetables, for canned as well as dried fresh, they fill some essential diet requirements.

THE USES OF FRUITS IN THE DIET

HAND in hand with vegetables in our diet plans go fruits. They yield mineral salts for proper functioning of the blood, and their acids stimulate the digestion of the rest of our food. Their color lends attractiveness to the meal, and they make ideal simple desserts.

Since vegetables and fruits are so necessary to our diet needs, we should so plan our meals that we have at least some fruit and a generous serving of vegetables other than potatoes, at least once a day. Furthermore, since it is not economical to buy fresh products throughout the year, we must try to can, dry or otherwise preserve them preceding the eight months during which the high prices prevail.

CANNING EQUIPMENT

1. Hot Water-Bath Outfit: A home-made outfit may be made by using a washboiler, a new garbage pail, a lard pail, a tin pail or any other receptacle with a tight fitting cover, deep enough to permit the water to stand at least one inch over the top of the jars. A false bottom or rack should be made to fit the canner. This should be so constructed as to permit free circulation of water beneath the jars. It should keep the jars one inch from the bottom of the canner. For a wash-boiler, the simplest rack is made of strips of lath with a cleat nailed across the under side of each end. Attaching a small piece of iron will aid materially in weighing down the wooden frame. For round corners a false bottom may be made by punching holes in an ordinary tin kettle or cake tin.

Avoid using straw or towels in the bottom, which will not permit water to circulate under jars. In using this type of canner the water should be heated before the filled jars are put in place. If the cover for your canner does not fit tightly, place a cloth over the canner and press the cover over this. If the water boils away during the processing, replace with boiling water.

2. Steamers: Any steamer which maintains a temperature equal to that of boiling water may successfully be used as a canner, Be sure that the steamer is practically air tight and allows no escape of steam, otherwise too low temperature will result. These cookers do not exert pressure. Therefore the time for processing products in these cookers is the same as that required for hot water bath outfits, and the processing time is counted FROM THE TIME THE LIQUID BOILS IN THE JARS.

ANTS

ANTS are attracted by various foods substances, especially fats and sugars; therefore, these foods should be kept in closed containers and crumbs or small amounts spilled on shelves or tables cleaned off at once.

The most effective way of ridding a house of ants is to find and destroy the nest by treating it with carbon bisulphid, benzine, gasoline or kerosene, or, if the nest itself cannot be found, often times the ants may be traced to the opening or crack through which they enter. Squirting kerosene into it or plugging it with cotton saturated with the oil will in many cases drive them away.

A temporary expedient for controlling ants is to moisten small sponges with sweatened water and place them where the ants are most numerous. Attracted by the sugar they will crawl into the sponge and may be killed by dropping into boiling water. The sponges should be baited again with the sweetened water, and if necessary, set in different places until the colony leaves the house.

A move effective but also more dangerous method is to moisten the spongue with sirup made by dissolving one pound of sugar in one quart of hot water and adding 125 grains (about ¼ ounce) of arsenate of soda. Some of these ants apparently carry this poisoned liquid back to the nest and feed it to the others there, thus gradually killing the entire colony. This mixture must be used with the greatest of care, as it is poisonous to both human beings and domestic animals.

Mothers Problems

SUMMER SLEEP

SUMMER-TIME spelles vacation-time, rest-time, recreation-time. It should mean a glorious period of growth, of body-building. During the months of freedom from school, every child should prepare himself for the next period of study and confinement. Fall should find every child in better condition physically than when school closed for the long vacation.

But does fall find all the children "fit?" It does not. Hundreds of children return to school in September worn out and run down by their summer vacation.

What is the cause of this? Many, many times the answer is: "Insufficient sleep." Children require as much sleep in summer as in winter, but many, many are the children who do not get so much by from one to three hours. If much earlier rising is in order, why, the bed-time hour for the young, growing child should be set ahead. Daylight-saving, as practiced in certain communities, is very, very detrimental to the health of children, inasmuch as it robs them of the sleep their bodies demand.

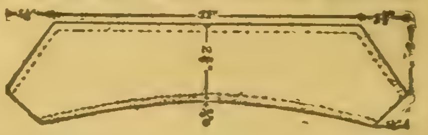
Real work and good, hard play are of great benefit to children, so long as the work is tempered to the strength of the child, and the hours of labor are not too long. If the future man and woman be considered, neither work nor play should be allowed to rob the child of the sleep Nature demands. For children under ten years of age, ten hours of sleep should be the minimum; after ten, nine hours are required for four or five years when eight hours a night will be sufficient.

Small children and nervous children should be required to take an afternoon nap during the summer when hot evenings may make it advisable to remain up after the regular bed-time hour.

Brilliant sunshine is enervating, so, also, are hot days. Sleep, and sleep alone can counteract the ill effectes of those two agents. If you value your children's health, see to it this summer that they have sufficient sleep.

Personal Column

A Cap for Large Ears—To whom it may concern: I have had a great deal of trouble getting something to hold the babys ears back. One of the twins grew up with big ears, the baby is 4 months old and has trouble with her ears. I tried many ways and then I saw an ear cap costing fifty cents. I got it but it did not fit so I copied it as close as I could and cut it to fit the baby's head, it works fine. The next one I'm going to lace in the back instead of sewing. I feel so good over it that I would like to pass the pattern on to some one in the same pickle I was in with my little boy.



He is six years old now and I am trying to fit him to a cap. I do not like to see children with big ears. The little cap inclosed fitted baby when she was two months old, now I have to add two inches on the top. I have a little stocking pattern I can pass along if wanted. They are all right for every day in the country. —Mrs. D. Mc.

Making Money at Home—My letter in May 12th issue, on hats and tams was fine and dandy. I should like to add a little more to it. Not all women are situated so they can sell such things on account of family ties and little ones at home. But if a woman is saving in all things, she can keep her money in her pocket. Many mothers have plush capes, velvet hats and coats hanging in clothes closets, which could be made into smaller coats and hats and tams, by ripping them up, brushing and steaming them. If neatly made they will do as well as new ones bought at a high price in the stores. And when her neighbors see how handy she is they will gladly let her make some of them for her at a fair price. Or I would do so or furnish the patterns for eight different designs of hats and tams at reasonable prices. If any mothers are interested and will send me a stamped envelope and full particulars I will gladly help them.—Mrs. G. W. Morgan.

THE WHITE LILY

O beautiful lily free from care,
Shedding your fragrance everywhere;
Tell me dear lily why you grow,
Tell me for I want to know.

I look with awe upon your stately form,
Fit to grace the halls of a nobleman born,
Your unspeakable glory reveves in me,
That wonderful presence, Divinity.

I know your secret dear lily fair,
That Omnipresence is everywhere,
Else you could not bear that royal grace,
And wear the beauty I see in your face.

Sacred lily I hold in my hand,
Your mission here I now understand,
Out of the depths of me now I know,
Wonderful lily why you grow.
—L. Baker.

Can washable flat finish wall paint be successfully applied over Alabastine? Would the Alabastine be apt to brush in with the paint or would it chip or peel off? I have several large rooms done with Alabastine and find it unsatisfactory as it soils so easily and cannot be washed. If I have to wash the Alabastine off before applying the flat finish it will mean several weeks of hard work, as the surfaces has to be gone over several times in order to remove all the finish—Mrs. V. C., Cass City.

—In regard to the use of oil paint over water tint on walls, if the tint is quite thin and is not peeling off at any place, I think you would be perfectly safe in putting oil paint on top of it. I happen to know of a case where a professional painter is putting two coats of oil paint over a very thin water tint. The removel of the tint is very laborious and if it is perfectly smooth it seems unnecessary.

For Burns—White of egg and olive oil, mix about half and half. This is very good for burns and prevents blisters and stops the burning.—C. J.

RECIPES

Hard Soap—3 pounds washing soda, 3 pounds lime and 7 pounds of clear grease. Put the lime and soda in six gallons of soft water. Let boil up good. Pour in tub and let settle over night. In morning pour off clear liquid in kettle, add grease and boil until it is about as thick as strained honey.—Sarah Beauchamp, St. Clair County, Michigan.

Cough Remedy—1 ounce peppermint, 1 ounce chloroform, 1 ounce oil of onions, 2 cups molasses and ½ cup water. Put all in a basin and stir until well mixed. Put in bottles. Cork tight and shake well before taking. This has cured horses of distemper.—Sarah Beauchamp, St. Clair County, Michigan.

Dill Pickles—Wash the cucumbers and let lay in water over night. In the morning pack in glass jars, and put one teaspoon of dill seed to each quart. Pour over brine made as follows: 3 quarts water, 1 quart vinegar and 1 large cup of salt. Boil all together and while hot, pour over the pickles and seal the jars. —Mrs. Agness Allen.

Rhubarb Conserve—4 pounds of rhubarb, 5 pounds of sugar, 1 pound seeded raisins, 2 oranges and 1 lemon. Wash and pull stalks of rhubarb and cut in one inch pieces. Put in kettle, sprinkle with sugar and add raisins and lemon. Mix, cover and let stand one hour. Place on range, bring to boiling point and let simmer forty-five minutes, stirring almost continuously. Fill jelly glasses with mixture, cool and seal.—M. S., Macomb County, Michigan.

Strawberry Short Cake—3 cupfuls flour, ½ cupful of butter or lard, ½ teaspoon baking powder, 1 egg, 2 tablespoonfuls sugar, 1 cupful milk, 1½ pints strawberries and 1 cupful whipped cream. Sift the flour with the baking powder, salt and sugar, then mix the butter or lard with a fork or tips of finger; add egg, well beaten and milk. The dough should be a soft one. Roll in two layers, spread in two greased pans and bake in a hot oven until light brown color. Mash and sweeten one cupful of the strawberries, put on one layer, then place second layer on top. Sweeten remainder of strawberries, spread on top layer and cover with the whipped cream. Decorate with whole ripe strawberries.

Pan Cakes—1 teaspoon butter, 1 teaspoon sugar, one egg, one cup sour milk, ½ teaspoon soda in milk, 1 cup sifted flour, ½ teaspoon baking powder. Mix dry ingredients except soda. Dissolve soda in milk. Add to dry mixture and then melted butter and beaten egg.—C. J.

The Runner's Bible

God is love (1 John 4:16) He that dwelleth in love dwelleth in God, and God in him. Devine Love has one infallible sign, it works good in every way upon all. It does not rob one to bless another, but "in blessing one it blesses all."

For I am persuaded, that neither death, nor life, nor angles, nor principalities, nor powers, nor things present, nor things to come, nor height, nor depth, nor any other creature, shall be able to separate us from the love of God, which is Christ Jesus, our Lord. (Rom. 8:38-39.)

—if you are well bred!

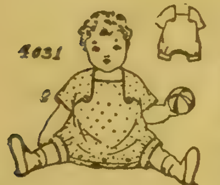
Dress—For Morning Wear: A simple wash dress in summer; one-piece wool in winter.

For Afternoon: Light voile, organdy or crepe in summer, dark silk or woolen in winter.

For Parties or Dances: Silk, chiffon or organdy; simple in style.

For Outdoor Sports: Separate skirt of wash goods, homespun or flannel with blouse or sweater.

AIDS TO GOOD DRESSING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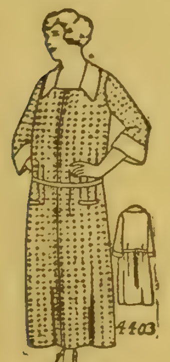
For Our Baby—The simplest kind of clothes are the best kind in summer for the baby. The little one-piece jumpers for the children cannot be equaled in any other kind of garment to play in. The one in this issue is splendid made out of any good, strong, washable material in colors. Sleeves are very short in the summer dresses for the younger girl and lots of ruffling and plaiting. Lace is used a great deal in the large surplice collars on the young girls' dress.

4031. A Comfortable Play Frock—The good features of this style is readily apparent. It may be attractively developed in percale with bindings of a contrasting color, or in chambray, pongee or crepe. The Pattern is cut in 3 Sizes: 6 mos., 1 year and 2 years. A 1 year size requires 2⅛ yards of 36 in. material.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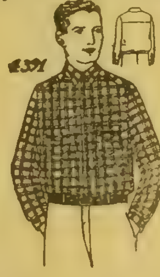
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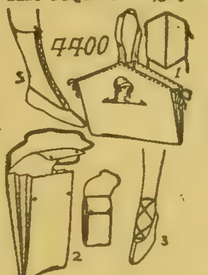
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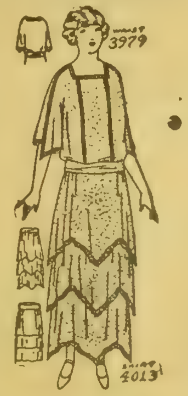
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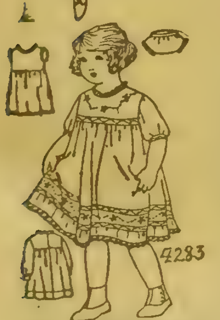
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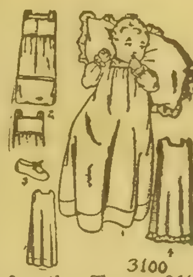
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4403. A Simple Comfortable House Dress—Figured percale and linene are here combined. This is a good style for gingham, voile or chambrey. The closing is under the tucks at the centre front.

The Pattern is cut in 7 Sizes: 36, 38, 40, 42, 44, 46 and 48 inches bust measure. A 38 inch size requires 5 yards of 32 inch material. The width at the foot is 2 yards.

4391. A Popular, Practical Model—This style has good and comfortable lines. The closing is in coat style. Madras, gingham, jean, drill or flannel could be used for this model.

The Pattern is cut in 9 Sizes: neck measure: 14, 14½, 15, 15½, 16, 16½, 17, 17½ and 18 inches. A 15 inch size requires 4⅛ yards of 27 inch material.

4400. A Group of Bathing Accessories—Here is a good model for bathing shoes in either of two lengths, and a set of bags to hold a bathing suit. The shoes may be made of drill, satin, chamoisette or rubberized cloth. The bags also are good for the same materials.

The Pattern is cut in One Size for the Bags—and in 4 Sizes for the Shoes—3½, 4½, 5½ and 6½. The shoes will require ½ yard, 36 inches wide for one pair, size 4½. Bag No. 1 will require ¾ yard and Bag No. 2, ½ yard of 36 in. material.

3979-4013. A Frivolous Frock for Summer Weather—Charmingly youthful and with all up to date is this cool looking "flounced" dress. The skirt may be cut in pointed or straight outline. Dotted Swiss with bands of "Val" lace is here depicted. The new tub silks or foulard would be equally suitable. Organdy with hemstitching or crepe de chine with fagotting or drawn work, would be very pleasing. The waist Pattern 3979 is cut in 7 Sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. The Skirt Pattern 4013 is cut in 7 Sizes: 25, 27, 29, 31, 33, 35 and 37 inches waist measure. The foundation of the skirt could be of lining, and would require 1¾ yard, 32 inches wide. To make the dress for a medium size as shown in the large view, requires 9¼ yards of 32 inch material. The width at lower edge of the lower flounce is about 2½ yards.

4283. A Dainty Set for the "Little Girls" Wardrobe—This comprises a neat yoke dress that may be finished with or without the rufle, and a petticoat and comfortable drawers. One may use voile, lawn, batiste or crepe for the dress and cambric or nainsook for petticoat and drawers. It will require 1⅝ yard for the Dress, ⅝ yard for the Drawers, and 1⅛ yard for the Petticoat, of 36 inch material for a 2 year size. The Pattern is cut in 4 Sizes: 6 months to 1 year, 1, 2, 3, and 4 years.

3100—A Practical Set of Infants Clothes—This Pattern is cut in one size. It comprises a Dress, a Petticoat, a Barrie-coat or Pinning Blanket and a Slipper. Muslin, lawn, cambric, batiste, nainsook and silk are suitable for the Dress. The Petticoat may be cambric or lawn. The Barrie of flannel or flannelette with band of cambric or muslin. The slipper of kid, satin, suede, felt or eiderdown. It will require 2⅜ yards of 36 inch material for the Dress, 2¼ yards of 27 inch material for the Petticoat with 2 yards of embroidery for the ruffle. The Slippers will require ⅜ yard of 18 inch material and the Barrie-coat ⅜ yard of 27 inch material for Band, and 1 yard 40 inches wide for the Skirt.

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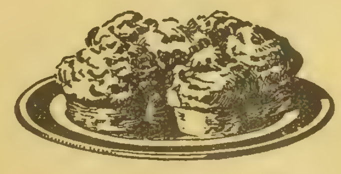

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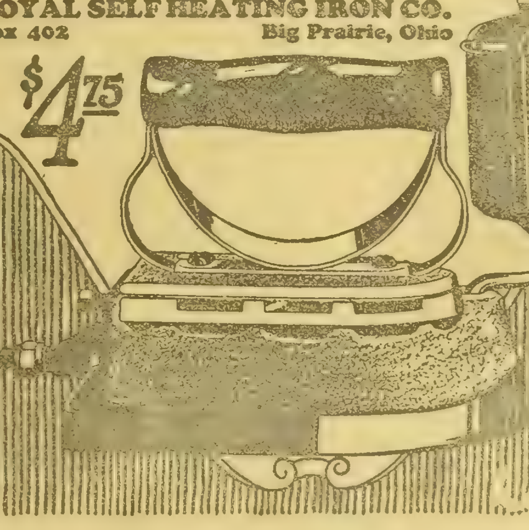

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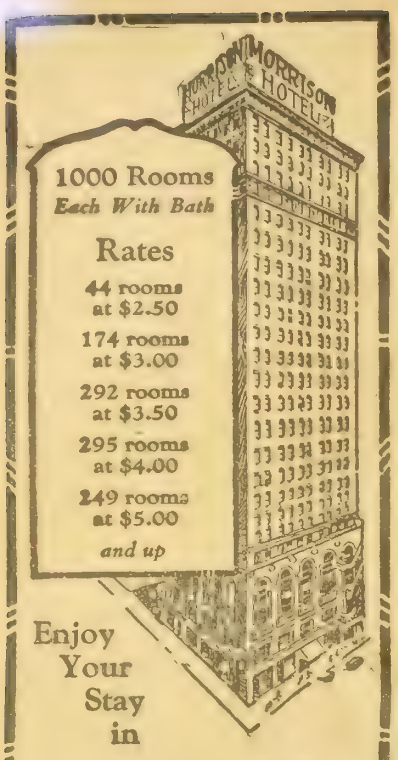

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The Children's Hour

A WEDDING!

DEAR UNCLE NED:—Last September or October Ilah Hemminger sent a letter to the Children's Hour and you printed it. She asked the boys and girls to write to her. She hardly expected to hear from anyone but in a few days the letters began to come. She received some very nice letters from girls and boys in different parts of the state. A young man from Detroit wrote thanking her for her nice letter he had read in the M. B. F. She answered and they continued to write and at Thanksgiving time he came to see her and at several other times, and the pleasant friendship grew into a beautiful love that culminated in their marriage Saturday, May 19.

They often spoke of "Uncle Ned" and that they must write and tell him all about it and thank him, but I am afraid they are too happy now to remember to write and thank you so I will do it for them. For I thought you would like to know of the happiness you have brought into the lives of these two young people.

When the young man in the city read the little country girl's letter a strange new lonliness possessed him and he longed to visit the girl on the farm and share with her the beautiful out of doors with its birds and butterflies and wild flowers she loved so well.

I have often read that love transforms the features and makes a woman beautiful, and I am sure you would be very glad you printed that letter that made it possible for these two very young people to meet, if you could have looked upon the sweet face of this little bride made beautiful by a great love. Sending you their thanks and best wishes, I am sincerely Mary A. Johnson Blanchard, Michigan.

—Just like in fairytales, isn't it, girls and boys? She wrote a letter to the Children's Hour little thinking that it would be read and answered by her "Prince Charming." And he replied, choosing her letter from the many on the page, without the slightest idea undoubtedly that within one year she would become his wife, his queen. I am glad to know of the union of this couple and the part that Uncle Ned and the Children's Hour played in bringing it about. May their love for each other grow as the years pass.

Dear Uncle Ned:—I have written once or twice before. I don't know whether you remember me or not. I am writing to let you all know that we are back to Michigan and how glad we all are. It is surely better than New York state. We have a very nice place to live. It is about seven miles from Flint, and five miles from Davison. I received eight letters in answer to the one which I wrote the last time, and I surely enjoyed them all. I will close with a riddle: What time is it when you wake up in the middle of the night and scratch your head? Your friend, Miss Fairy Dunkles, R. No. 2, Davison, Michigan.
—So you like Michigan better than you do New York. Most of us think Michigan is the best state in the Union, I guess; I know I do. Please write and tell us about your trip. I am sure you have an interesting story to tell.

Dear Uncle Ned:—May I join your merry circle? I just read the Children's Hour and saw that few boys had written recently to you so I thought that I would write a little letter. My mother and brother James went to the show and my other two brothers went to the store and I had to watch the smaller children at home. I have 6 brothers. My father said all he wants is two more and he will have a ball team. I have two sisters, one is seven and one is married and has a baby boy. Our school was out today and we didn't have any school for two days because they are moving the school house fifty rods, because we are going to have a new school house next year. It is going to be made out of brick. It is going to have six rooms in it. Now I will describe myself. I am 5 feet and 2 inches tall and weigh 107 pounds, and I am 15 years old on March 2, 1924. Have I a twin? If I have one please write to me. I live on a farm of 40 acres. We have 3 horses, 4 pigs, 7 cows, 5 calves and 50 chickens, and we have a nice orchard. My dad and my oldest brother are working out and I have to do the farm work. Tomorrow I am going to drag the cornfield and then disc. The best job on the farm is milking. My sister and three brothers are playing on the coucg. They make a lot of noise. Say, Uncle Ned, I will get a picture of Alabaster Quarry and send it to you and show you how our big quarry looks. If I have a twin brother please write and I will be glad to answer your letter. Well, I saw a lot of riddles in the Children's Hour so I will put one in. 12 pans hanging high, 12 princes riding by, each took one, how many hung? There is a girl who wants us to send as many riddles as we can so I will put in a few more and some more the next time. Well, girls and boys the one that guesses the most answers will receive a present. What goes in the water and out of the water and never gets wet? What goes around the house and only makes one track? What is round as an apple and as deep as a cup, the thing in the middle goes flippity flop What is three cornered, square, black as a bear, guess this riddle or I will pull your hair. That's a pretty hard job to pull your hair because I won't be able to catch you. Well I think I'll close with this riddle. What has a long neck and no head? Will close for this time. Your new member,—Harry Rescoe, Box 151, Alabaster, Michigan.
—You are right, Harry, I haven't received many letters from boys during the past few weeks. Must be the boys are too busy with school and work about the farm to write. I hope that your letter gets them to writing again. I should like to see a picture of the quarry so be sure to send me one.

Dear Uncle Ned:—I would like to join your merry circle. I like to read the Children's Hour very much. I am to be 16 years old the 31st of July. I have dark bobbed hair, and brown eyes. We live on a farm of 163 acres. We have 6 cows to milk and I have to help. Our farm is two miles from town. For pets I have a pigeon, kitten, and two rabbits. I like pets. Don't you, Uncle Ned? With love,—Margaret Jackowiak, R. 3, Sherwood, Michigan.
—Yes indeed, I do like pets and I always have some about my home. But I do not like to milk cows. That is one thing I must confess I do not like about farming.

My Dear Uncle Ned—I wrote to you some time ago and thought I would like to see my letter in print again. Was down to Alpena, (that's a city about twenty miles from here) to write on the eighth grade examination, the 17th, and 18th of May, and wasn't I surprised when I found out that I had passed. Our graduation exercises are this month. My sister and her husband are going to take me with them for a trip to Utica, for a week. Won't that be nice? I will write and tell you all about it when I get back. Do you like to live in the country, Uncle Ned? I have always lived in the country but will have to go to the city on account of school. I think the answer to Esther E. Thaut's riddle is an automobile. Is it right, Esther? Uncle Ned and cousins, I wish you could see our orchard. The trees are all in bloom and everything so pretty. We have fifty trees in our orchard. Lovingly your niece,—Eleanor D. L. Stovel, Hubbard Lake, Michigan.
—Now do not forget, Eleanor, we will be expecting to hear from you as soon as you get back from New York State. Yes I like to live in the country. And I would not live in a big city unless the welfare of my loved ones or myself depended upon it.

Dear Uncle Ned:—May I join your merry circle? I am a reader of the M. B. F. and like it very much. I wrote a letter some time ago and saw it in print so I thought I would try it again. I received about 26 letters and I did not get to answer them all. Well, Spring is here with her sunny days and birds. It seems good to see the birds again after such a long winter. Don't you think so, too? Well I will describe myself. I am five feet tall, have dark brown eyes and hair, and am 14 years old. I live on a farm 9 miles from Cadillac and like the farm pretty well but I lived in town for 10 years and would like to go back. My birthday is the 12th of October. Have I a twin? Well I think I have taken up enough space so will close, hoping everyone is enjoying the Spring. From Rosalie Dupaw, R. No. 2, Cadillac, Michigan.
—I enjoy winter but I too like to see spring come and the birds return. I also like summer and fall, as all of the seasons are beautiful in their own way. I would not care to live where it was summer the year around or winter the entire 12 months, would you?

CHANGING TIMES

By JOHN T. BARTLETT

FARM OBSERVANCE OF HOLIDAY

IN OLD-TIME, rural America—not so very old-time, either—the almanac neglected to give two genuine, thoroughly observed holidays, and punctiliously made note of several which often had little holiday significance. Two holidays universally embarked on in true holiday spirit were Circus Day, and Country Fair. Those were red-letter days!

You have heard present-day fathers, instructing children in the real size of their blessings, tell of old-time Christmases, Fourth-of-July's, birthdays. In the old-time rural America, Christmases were often barren of giving, and Independence days barren of much exploding of fireworks. It was the town which developed the giving-at-Christmas habit. It was the town which put pep in the fireworks trade.

The farm did forget itself on Circus Day and Country Fair Day. Then, to use language of the youthful element of today, it "dolled up." To use expressive language of years ago, it "shelled out."

This is changing, and it is right that it should. Occasionally, on a Fourth of July nowadays, you see rockets blazing into the rural sky. Farm boys, too, are good customers of the fireworks department. There is vastly more giving at Christmas.

The size of a cent has grown smaller, physically and in the eyes of farm folks. There is room for celebration of holidays, while still farming the farm as it should be farmed, while still thriftily having regard for the future.

We have a neighbor who takes a half holiday each week in summer to play baseball. And he farms a first-class farm in a first-class way. He says he can work much harder through the week, get far more done, with that weekly ball game ahead of him.

The money and time which real holidays cost buys cheaply the mental and physical relaxation. And farmers need the latter just as much as anyone—who won't say, more?

1870 FARM BUSINESS KNOWLEDGE, AND TODAY'S

VISITING with friends in the next county last week, we were given an unexpected treat. At the request of our host, one of the children hied to the attic, and returned shortly with several bulky files of periodicals — farmpapers of fifty years ago. The big difference in editorial contents immediately obtruded on the attention—articles were chiefly on the cultural side of farming, field methods, animal husbandry. There was little about farm business methods.

In 1923, and the same has been true for several years, farmpapers give a great deal of attention to business aspects of farming. As time goes on, it can readily be foreseen, farmpapers will give still greater attention to farm business methods. Farmpapers will become more and more business papers.

There is a reason for this—not the commonly accepted reason. It is flattering for us to believe that the race of farmers has evolved greatly in the past fifty years, and farmers of fifty years ago used business methods with whiskers on them.

The fact of the matter is that average farm business knowledge of fifty years ago met current requirements very well, indeed. In thinking most about cultural methods, the farmer showed himself a good business man. Distribution in those days was a simple, uncomplicated problem. Implements of production were few and simple.

Just as the profitable operation of a department store is far more complex than the profitable operation of a peanut stand, though both are businesses, so the profitable operation of a modern farm is far more complex than the profitable operation of an 1870 farm. Consumption of farm products in markets hundreds of miles from their source; big cities; specialized farming; heavy capital investments in land and equipment—these are changed conditions produced by underlying economic trends. They have raised the farm from a simple business enterprise to one demanding a far greater order of business ability.

FARM MECHANICS

CEMENT TILE

What do you think of cement tile? Will they last if they are made right? I heard some say the acid in the ground destroys the cement and the tile will crumble.—J. S., Rhodes, Michigan.

—Many cement tile made several years ago failed under certain conditions, those which we have examined were laid in muck and sometimes in sandy ground. Some studies which we have made of the action of acid and water in the tile seem to indicate that the breaking or disintegrating of the tile is due partly to the passage of water through the walls of the tile as well as any acid which might be present.

We have, therefore, come to the conclusion that cement, tile, to be satisfactory, should be made watertight and this is possible with careful methods of manufacture. Tile of this kind, I am confident, will stand up under ordinary conditions of soil, but I think time is necessary to determine whether they can be adapted to muck and sandy soil.

We do not recommend that you attempt to manufacture your own tile, there are so many possible ways in which failure may occur would be so expensive of time as well as material so that it would scarcely be a profitable adventure, if your own time was considered of any value.—H. H. Musselman, Prof. of Farm Mechanics, M. A. C.

PIONEER HELPS NEW SETTLERS

(Continued from Page 4)

down or up, just as you choose to grade him, who did not land here busted, or with borrowed capital. Opportunity attracted them also.

With many early settlers, a bread and butter job came first in pineries and cedar swamp. Only pine and cedar were salable forest commodities; beautiful hardwood tracts were hardly salable during the pine age and went begging. However, many hardwood homesteads were taken up by camp followers and others with the idea of making the timber crop pay the expense of building the farm, but only in rare instances did the returns equal the wage of the lumberjack. In the eyes of the lumberjack the moseback settler was looked down upon with pity. Acres and acres of as fine hardwood as ever grew were purposely destroyed by fire to make way for field crops.

At this writing, the vast belts of hardwood which extended along the Huron shore from Bay City to Machinac broken only by stretches of plains land is no more. Gone with the carrier pigeon and the dodo. In its place, however, many fertile fields are yielding a variety of products, surpassed in volume per acre and quality by no section of Michigan, notwithstanding the dismal picture drawn of present conditions, and of future prospects of the round-shouldered, low-browed man with the hoe, swill pail and milking machine, in the upper part of Michigan by Russell Watson, Assistant Professor, University of Michigan, in his otherwise laudable plea in behalf of reforestation.

'Tis true, in the early days many well meaning settlers attempted to establish farms on the pine barrens because of the easier clearing, rather than face the task of subduing green hardwood land, notwithstanding virgin hardwood tracts could be homesteaded or acquired by direct purchase at prices ranging from two to five dollars per acre. It is mostly of these deserted plains farms we are now reading columns and columns about. Gee! How chronic kickers, who just naturally want to believe that the whole upper Lower Michigan is one barren waste, must gloat to read half facts, unfortunately emanating from such high authority to the detriment of our farm communities, as if our rose bushes grew only thorns.

With heavy marketing tolls, shanghaied by padded prices for his every purchase, with major farm crops representing in exchange value around thirty-five cents per dollar, handicapped by a custom that permits the Liverpool quotations for his exported surplus to govern the selling price in his home market, plus cartage, why in Sam Hill expect the farmer to look like a million dollars, even in the slashings of northern Michigan? As well damn the bird with the clipped wing for being unable to soar with the eagle. To aggrevate the situation, our cheap home grown labor is no longer secure. Just as soon as our boys grow into long pants and the girls grow into short skirts, they fly the nest for the hives of industry. The lure is even reaching the college professors.

Notwithstanding 57 varieties of draw backs in the farm game, the world must be fed and crops go in as usual, and when depression lays off the boys, those who are fortunate to have a dad on a farm in northeastern Michigan will beat it back to the old man's well-filled pork barrel and chicken coop, and they usually arrive busted.

In reading of northern Michigan's barren wastes, just remember there are progressive farming communities along the Huron shore from Bay City to Mackinac, and room for more desirable settlers.

You will pass red clover fields such as many sections in lower Michigan cannot grow dependably. Here too, alfalfa and sweet clover, Michigan's salvation, find a natural home, no hit or miss crop.

Where this great trio of soil builders, bone and muscle makers, can be depended upon year after year, let no pessimist tell you northeastern Michigan has no agricultural future.

OUR NATIONAL SAFEGUARD

(Continued from Page 9)

place from the winds." That man who shall drive the money-changers from the temples, and force political liars, crafty diplomats, and social looters into "in the sweat of thy face shalt thou eat thy bread" line. God forgive us for this jazz civilization. "Vanity of vanities, saith the Preacher; all is vanity."

Doesn't it seem, friends, that justice seems harder to administer year by year? In the courts there are so many precedents, technicalities, evasions, that justice seems thwarted. The man who is best protected and who gets the most rights is the man with the biggest pocketbook. Dr. Brumbaugh, ex-governor of Pennsylvania, says, "In litigation in courts we shall never get justice; but only when men learn to settle their difficulties according to the eighteenth chapter of Matthew." This is the principle of arbitration put to use in the settlement of difficulties. And this is a most practical way to make the theory of Christianity fit these modern times. But when shall this principle become authorative? When men are willing to give up sinning and become honest, sincere, pure, and sympathetic, in a word, brotherly.

Even so, only personal regeneration will safeguard us. If our country is to be righteous, every man must become true and righteous. How our unclean lips need the touch of the coal off the altar! Our moral sensibilities are stunned at the crying evils about us of corruption, theft, and brazen defiance of law. But not by suffrage or ballot plus all the enactments of laws and the decisions of courts, can we enthrone a converted conscience in the heart of the nation. This only when men and women are willing to walk faithfully in the "old paths" of righteousness. The final strength of a country consists of the sum-total of character in its subjects.

Now, therefore, may I inject a new spirit into the forthcoming Independence Day by saying until we get right with God and love to pursue the Christian way, our nation will never be exalted.

"Our fathers' God, to thee,
  Author of liberty,
To Thee we sing:
  Long may our land be bright
With freedom's holy light;
Protect us by thy might,
  Great God, our King.

AMBITION

"You will never get anywhere unless you have higher ideals than this," preached the woman at whose door the tramp had applied for assistance. "Are you really content to spend your life walking around the country begging?"

"No, lady," answered Weary Willie. "Many's the time I've wished I had an auto."—The American Boy.

An Eastern judge declares that "women's dress is the calamity of the ages". He must have paid for a few.

MR. FARMER!
Mr. Dealer Mr. Jobber

IT Is THE BEST

THE PRICE IS RIGHT

Are you remembering in purchasing your binder twine that you have a factory of your own at Jackson?

It is making the best twine that can be placed on the market and has a mixture of fiber this year. Manila is added to the sisal to give extra strength.

The State Farm Bureau and other organizations and dealers of the state are in position to handle your twine. If they do not, write direct for prices as we want you to use your own twine as we make 14,000,000 lbs. more than Michigan can use.

Michigan State Prison
HARRY L. HULBERT, Warden
JACKSON, MICH.

Glide Easy Cup Caster
PATENTED

IN HOMES OF REFINEMENT

You will find that every precaution is taken to preserve the beauty of each room. The carpets, rugs and floors are carefully protected. Thousands of homes to insure protection to their carpets, rugs, floors and furniture use GLIDE EASY CUP CASTERS, because they glide easily over the floors, without maring—glide easily over rugs and carpets without harm or rumpling, and most important, women can move the heavier pieces of furniture without danger to their health. GLIDE EASY CUP CASTERS are manufactured for every piece of furniture in your home from chairs to beds and their cost is small with a large saving. Prices range from forty cents a set to eighty cents. If your dealer cannot supply you send to us for information.

SANITARY SAFETY CASTER CORP.
28 SCOTT STREET, NEWARK, N. J.

BUSINESS FARMERS EXCHANGE
Ads Under this Head 10c per Word, per Issue

FARM AND LANDS

NEAR LAKE RESORTS BIG MICHIGAN farm with 200 apple trees, 3 cows, team, hogs, poultry, cream separator, spraying outfit, full implements, crops; owner unable to handle makes special reduction for quick sale; 200 acres in prosperous district near lakes and resorts; schools, stores, churches, convenient transportation, city markets; 90 acres machine worked fields, 20-cow spring-watered pasture, estimated 1500 cords wood, 50,000 feet of timber; heavy bearing orchard; attractive 10-room house, 10-cow barn, silo. Reduced price, $4400 takes all, part cash. Details page 33 Illus. Catalog Bargains—many states. Copy free. STROUT FARM AGENCY, 427KJ Marquette Bldg., Chicago, Ill.

GENERAL

BALD HEADS. DID YOU EVER TRY THE Mascot Scalp Ointment? If you have not order a box to-day and watch your hair grow. The Mascot Ointment is one of the most powerful stimulants for the scalp. There is no excuse for baldness or falling hair. The Mascot will relieve you of an itching scalp and dandruff. Manufactured by MRS. W. LARIVEE, 1200 Pine St., Detroit, Mich. Price $1.00 remit by money order or express.

EARN $110 to $250 MONTHLY, EXPENSES paid, as Railway Traffic Inspector. Position guaranteed after 3 months' spare time study or money refunded. Excellent opportunities. Write for Free Booklet-G-165. STAND. BUSINESS TRAINING INST., Buffalo, N. Y.

MONEY TO LOAN ON FIRST CLASS Central Michigan farms, 5½% interest net to Co. amounts of $5,000 and up. CONVIS & SMITH, Ithaca, Michigan.

GUARANTEED USED AUTO PARTS FOR most any make of car. We can save you 50 to 75% of the list price. E. BERMAN & SONS, Ithaca, Michigan.

HELP WANTED

GOVERNMENT NEEDS RAILWAY MAIL Clerks, $133 to $192 month. Write for free specimen questions. COLUMBUS INSTITUTE, 0-4. Columbus, Ohio.

YOUNG OR MIDDLE AGED WOMAN wanted for house work in small family in new home near Detroit. No washing or ironings. Highest wages. Address, MRS. HARLEY D. WARNER, Farmington, Michigan.

IS YOUR FARM
FOR SALE?
AN AD IN M. B. F.
WILL SELL IT.

Millions and Movies

THROUGH the medium of slender strips of celluloid an actor appears simultaneously on thousands of screens in as many different towns. On the same evening, he entertains great armies of film fans who eagerly pay their money to see his performance.

So the movie star commands a king's ransom for a salary, and a fortune is spent profitably, to provide a proper background for his art. The movie multiplies personality—and earning power.

Advertising does the same thing for a manufacturer. It takes his message into thousands of homes—to tell folks why they should have his goods and how to get them. Advertising endows him with a thousand voices with which to tell his story.

But the value of advertising is by no means confined to the advertiser. It has a very definite value to YOU.

A glance through the advertising pages enables you to sift out the things that interest you. Sitting in your easy chair you can compare values and prices. You can select merchandise of indisputed worth—for only GOOD goods can stand the test of advertising.

Yes, advertising pays you, and pays you big.

Read the advertisements

THIS CAR FREE

Nearly everyone else owns a car! Why not you? It is not a question of money. Your spare time for a few weeks, mixed with preseverance and "gumption," is all that is necessary to win this latest model Chevrolet Touring Car.

Or, if you already own a car, get a radio set, baby chicks, pure-bred fowls, poultry books, etc.

It is the official organ of the Michigan State Poultry Association that makes this offer and our reliability is unquestioned. Someone is bound to win the car—why not you. Send post card for details.

$10.00 PER DAY CASH

If you prefer cash, drop us a post card at once, and we will send you details of our new method that enables any honest energetic person to make $10 per day, or more.

This is our own method, which we have tested for the past 6 months, and we know it gives an agent 50 to 500% better chance to earn real money, than any other ever tried.

Free Pamphlet

"VITAMINES AND CHICKS"
by

Prof. E. C. Foreman, Head of the Poultry Dept. at Michigan Agricultural College.

The big feature of our May number is Prof. Foreman's "Vitamine" article, which announces the wonderful effect of Vitamine foods on Baby Chicks. He gives actual facts and illustrations of results almost miraculous when Vitamines were supplied. Luckily, these Vitamine foods are common to every household, and Prof. Foreman explains which ones to use.

Already the demand for this article has almost exhausted our May edition, so we reprinted it in pamphlet form which we will give free to readers of the "Business Farmer" who subscribe direct from this ad., at our special trial price of 50c per year. ORDER TODAY, before the pamphlets are exhausted.

MODERN POULTRY BREEDER
Battle Creek, Mich.

BREEDERS DIRECTORY

Advertisements inserted under this heading for reputable breeders of Live Stock at special low rates to encourage the growing of pure-breds on the farms of our readers. Our advertising rate is Thirty Cents (30c) per agate line. per insertion. Fourteen agate lines to the column inch or $4.20 per inch, less 2% for cash if sent with order or paid on or before the 10th of month following date of insertion. SEND IN YOUR AD AND WE WILL PUT IT IN TYPE FREE, so you can see how many lines it will fill. Address all letters, BREEDERS DIRECTORY, MICHIGAN BUSINESS FARMER, MT. CLEMENS, MICH.

CLAIM YOUR SALE DATE

To avoid conflicting dates we will without cost, list the date of any live stock sale in Michigan. If you are considering a sale advise us at once and we will claim the date for you. Address, Live Stock Editor, M. B. F., Mt. Clemens

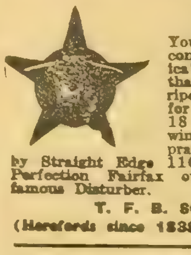
Oct. 18—Holsteins, Howell Sales Company of Livingston County. Wm. Griffin, Sec'y. Howell, Mich.

G. P. PHILLIPS
THE GOLDEN RULE AUCTIONEER
Bellevue, Michigan
Pedigreed Sales a Specialty.
Write, wire or call for terms and dates.

HOLSTEINS

FASCINATION FARM, VASSAR, MICHIGAN. Holsteins, registered fully accredited 82½ lb sire. Write your want.

HEREFORDS



HEREFORDS

Young Cows with calves by side consisting of blood from America's foremost herds at prices that enable them under Earliripe Hereford Beef Plan to pay for themselves within a year to 18 mos. Bulls including prize winners at the larger shows at practical prices. Herds headed by Straight Edge 1169786, one of two sons of Perfection Fairfax out of a daughter of the famous Disturber.

T. F. B. SOTHAM & SONS
(Herefords since 1839) Saint Clair, Mich.

We Have Bred Herefords Since 1860

Herd established by Gov. H. H. Crapo. We have a few choice yearling bulls for sale at farmers prices. You are invited to visit our farm. CRAPO FARM, Swartz Creek, Michigan.

ANGUS

WE HAVE SOME FINE YOUNG ANGUS BULLS from International Grand Champion Stock at reasonable prices. E. H. KERR & CO., Addison, Mich.

DAIRY and LIVESTOCK

AN IDEAL CERTIFIED DAIRY FARM

THERE is a certified dairy farm near Rochester, New York, which is unique in the degree to which intensified dairy farming may be successfully carried on. The 41 grade cows, giving on the average of 2¾ gallons per day, are kept in the stable throughout the season. The farm consists of 220 acres, of which 45 acres are given over to silage corn, 50 acres to winter wheat, 35 acres to hay, and 15 acres to potatoes. There are 40 acres of woods, 5 of which are given over to pasture and there are 14 acres given over to rotated pasture. Silage and hay furnish the roughage during the summer, while grain is fed throughout the season. With the extreme intensity used it is not economical to raise an young stock, for every cow in the barn must be a producer. Under these conditions, grade cows are best adapted for as soon as there is a decline in her milk production the cow may be promptly sold without great loss. The equivalent of 3½ men is required to operate this dairy.

Dairy farmers who are interested in certified milk plants will find much to study at the National Dairy Exposition which takes place at Syracuse, New York, October 5th to 13th inclusive. The exhibit of the United States Department of Agriculture will occupy 7,500 sq. ft. Factory and machinery exhibits will be displayed on a floor space approximately 65,000 sq. ft., while 25,000 sq. ft. of floor space will be occupied by the exhibit of supplies and equipment for the dairy and barn.

An added feature of interest in the Exposition this year is the World's Dairy Congress which holds two days' sessions at Washington, October 2nd and 3rd, followed by a day at Philadelphia under the auspices of the National Dairy Council, then adjourning to Syracuse where the remaining sessions of the Congress will be held at the Exposition.

RAMSEY AND BAKER HEREFORD SALES

TWO most important Hereford sales were held week before last. One was held by Warner Ramsey of Atherton and the other by Robert Baker of St. Clair, both sales being conducted under the very able direction of T. F. B. Sotham and Sons. The Ramsey sale was held on Thursday, June 7th, and the offering was composed of 35 head of high quality Herefords. The high price paid was $260 and the lowest $85 After the sale there was a wienie roast and moving pictures at the Ramsey farm cottages on Lake Huron. Those who wished remained at the Ramsey farm throughout the night. Many did this and then drove to the Baker sale on Friday. There were 35 head sold at the Baker sale, $277.50 being the top paid and $60 the lowest. The attendance was only fair at both auctions but all were there to buy. At both places before the sales interesting and instructive talks were given by T. F. B. Sotham, Commissioner of Agriculture L. Whitney Watkins, Prof. George A. Brown head of the Department of Animal Husbandry, M. A. C., and Col. Fred Reppert, who cried the sales. Lunches of Earliripe beef were served at both places.

CREAM SHOULD TEST 35 PER CENT OR MORE

Will you please tell me at what testing point is there the most money in Cream for the farmer who does sell his cream to the creamery, and why? Some say when cream tests from 25 to 35 per cent there is the most in it for the farmer, others say from 35 to 50 per cent. I am very much interested and would like to know at exactly what point.—W. H. L., Belding, Mich.

—From a general standpoint it is decidedly in the farmer's favor to separate cream that tests 35 per cent or above. The reasons are as follows:

1st. The average separator will separate just as cleanly and deliver 35 per cent cream just as well as it will a lower per cent, but beyond this point there is likely to be more loss of butterfat in the skim milk.

2nd. It is better to separate cream at 35 per cent instead of lower because there is more skimmilk left on the farm.

3rd. There is not so many pounds to ship and to pay express or freight on. Then, too, we find that 35 per cent cream is a little better than a cream that only contains 20 per cent butter fat.—O. E. Reed, Professor of Dairy Husbandry, M. A. C.

SLIME IN CREAM SEPARATOR

I have some cows that have been fresh for some time. Milk seems all right only when I wash the separator it is so slimy can hardly get it out of the dishcloth. It goes through a strainer all right. What is the cause and is there a cure?—W. S., Morley, Mich.

—We get the idea that the milk is not slimy when drawn and the slime is difficult to remove from the separator. I know only a few things that could cause such conditions. First, that the separator bowl has been standing in the sun and is hot at the time the milk is run through or that the slime is allowed to dry on the bowl. In the case the milk is slimy before drawn, the cow is evidently suffering from some udded inflamation or the milk has become contaminated with the ropy milk organism. Be sure to scald the separator bowl thoroughly after washing and wash bowl after each separation. All utensils should be thoroughly scalded, especial care being given to the seams.—P. S. Lucas, Associate Professor of Dairy Manufactures, M. A. C.

VETERINARY DEPARTMENT

PIGS SEEM TO BE SUFFERING FROM ECZEMA

I am seeking information in regard to a litter of five pigs just two weeks old. They are growing nicely and apparently doing well with the exception of one thing. They seem to have a sort of eczema inside the flaps of their ears, this does not run into the canal of the ear but seems to seat in the inside of the flaps of ears and also slight signs of the malady appear directly along the back bone and around the roots of tail. It looks very much like dirt and dirt scabs and has a tendency to crack. They are beded in oat straw and have free run and are not in muddy place. Sow shows no signs of this disease and it is her first litter and she had 12 and raised 10 and is in good condition.—F. D. M., Cedar Springs.

—In all probability these pags are suffering from a squamous eczema, sometimes called "soot of young pigs." This form of eczema is usually seen in pigs which are kept in unsanitary quarters. I would suggest the application of zinc oxide ointments to the affected parts once daily, usually two or three applications will suffice.—John P. Hutton, Assoc. Prof. of Surg. and Med., M. A. C.

MARE SUFFERING FROM TUMOR

I have a valuable brood mare that has something wrong with her throat and has been troubled for a year. I thought it was her mouth and I have had two different veternarys look at her and her mouth is all right. She has a baggy swollen throat back of the larnyx. She cannot swallow her food right. She will chew her feed and spit some of it out. Both the Drs. gave me medicine to syringe back in her throat but done no good. She is coming 9 years old and is ready to drop her 6th colt at any time. Would like to know what to do for her as she is failing on me no matter what I feed.—L. J. B., Coleman, Mich.

—In all probability this mare is suffering from a tumor affecting the pharnyx. The treatment is very difficult and unsatisfactory. A diagnosis can usually be arrived at by palpation through the mouth, the use of the laryngascope or an exploratory opening of the larynx. The treatment is surgical and consists in the extirpation of the tumor.—John P. Hutton, Assoc. Prof. of Surg. and Med., M. A. C.

FRUIT and ORCHARD

EDITED BY FRANK D. WELLS

PEACHES IN THE NORTH

IT IS possible to grow peaches much farther north than a commercial orchard of the fruit would be profitable. A writer in the Cyclopedia of American Horticulture tells how it can be done:

"Secure a very young tree, preferably a seedling from seed planted where a tree is desired, and train the trunk of it horizontally 8 or 10 inches from the ground, and suffer no branches to grow. Break off the tender branches when they are not more than three inches long by bending them sideways, not down over the leaf, as that would be likely to break off the leaf also. The trunk is kept horizontal by tying it loosely to a slender pole, which is fastened horizontally. Of course the tendency of the tree is to grow upward at the end, and therefore one must look to it about once a week that the branches are broken off and the trunk tied down. When trained in this way the tree will continue to grow vigorously until frost stops it, but it is necessary that the young wood has time to ripen sufficiently to endure the winter. If one ceases to break off the branches for four to six weeks before the usual time of frost, the wood at the end of trunk will be sufficiently ripened to stand the winter when protected."

During the winter the tree may be protected by placing some evergreen boughs under it, then covering the trunk from root to tip with boards nailed together at the edges like an eave-trough. Over this place more evergreen boughs.

In the spring the boughs are removed and the tree tied to the pole. The trunk is kept covered with the trough so as to prevent the sun from killing the bark.

Keep the tree growing horizontally for one or two seasons more, when the trunk should be from 10 to 15 feet long. Then allow it to grow upward and form a top. The long trunk will be flexible enough to allow the top to be bent over sideways sufficiently to be covered during the winter. It is placed on evergreen branches so as to keep the limbs off the ground, then covered with evergreens. Lastly but on boards to keep out the snow. Mice are kept out by a little ridge of earth thrown up about the tree.

Trees grown in this way are said to bear well and regularly. However, such culture is for the garden. It would hardly be thought of as an orchard venture.

In place of bending the little tree to form a trunk it might be better to have a branch about six inches above the ground and grow the trunk from this by cutting away the remainder of the top. A peach tree can be grown in such a way as this easily.

Perhaps some of our readers in northern Michigan have evolved a successful method of growing peaches. We shall be glad to hear from any such.

GIRDLING TO INDUCE BEARING

IN THE days before the midsummer market was flooded with peaches from the South, it was a practice among some northern fruit growers to girdle trees. By this process an increase of yield was obtained, also a product earlier and more highly colored than that allowed to ripen in its regular season.

This was easily done. A limb was selected for the purpose and a wire drawn around it tight enough to cut completely through the bark. After the fruit was harvested the limb was cut away, since the process would kill it.

Such a way of doing resulted in fruit that brought an extra price, but was hard for the trees. Southern fruit brought it into disuse.

The process with some modifications can often be used with good results in case of apple trees to induce early bearing or to force unprofitable trees to become productive. A narrow ring of bark, one-fourth of an inch or less in width, is removed from the trunk or a limb, care being taken that the connection is completely severed, so the flow of sap will be entirely cut off. The time for doing this is the latter part of June, the 20th of the month is a good date to remember. No injury will result, as the wound will close up during the summer. An abundand crop should result the following year.

TESTS PROVE NORMAL SILAGE SUPERIOR TO STOVER SILAGE

(Continued from Page 4)

duced at $7.20 per hundredweight the cost per hundred pounds gain in the three lots were $7.98, $9.26 and $10.18 respectively.

The steers sold on the Detroit market May 23rd at $10 per hundredweight straight, the top price for a carload of cattle on the Detroit market this year, after which several commission men and packers were asked to appraise the three lots. Lot 1 was appraised at $10.25 and lots 2 and 3 at $9.85 per hundredweight, the figures on profits and loss being based on these appraised values. The total profit or loss on the lots, not crediting pork produced, were: Lot 1, $39.05 profit; lot 2, $54.86 loss; lot 3, $92.84. Crediting the pork produced the gain for lot 1 was $47.74, the loss for lot 2 was $48.18, and the loss for lot 3, $81.16. The hogs following the steers were sold at $7.20 per hundredweight.

The finish of the steers and the actual dressing percentage of the three lots, namely 58.99 for lot 1, 54.72 for lot 2, and 56.45 for lot 3, indicate clearly that it is not desirable to endeavor to finish steers on stover silage; further, that contrary to the opinion often expressed, corn in the silo is worth just as much, if not slightly more than corn fed in the crib.

SILO FILLING NO LONGER A DRUDGERY

SILO filling is generally conceded the hardest and most disagreeable work on the farm. At least we have found it so on the Detroit Creamery Company farms, where we fill 24 large silo's to feed 800 head of dairy cattle.

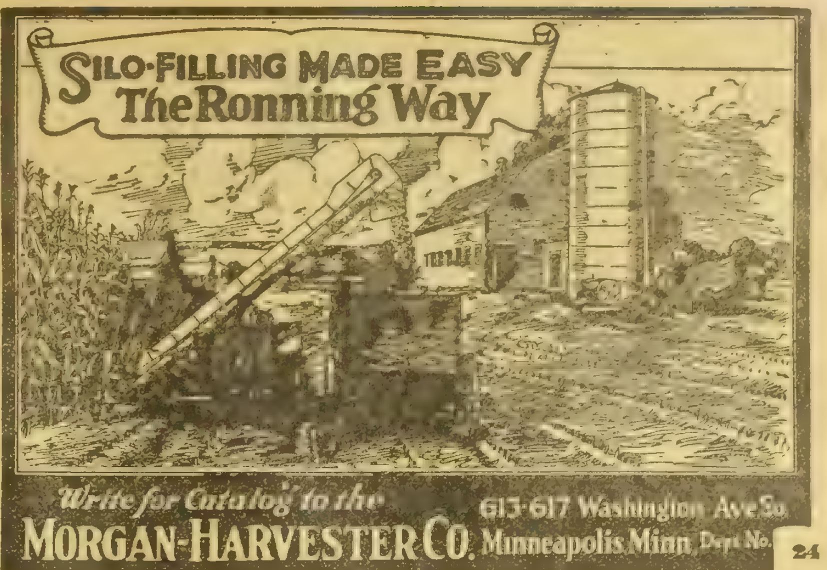
Occasionally, some discouraged farmer writes an article, deploring the fact that silo filling is a back breaking and usually a nasty wet job. On this farm we no longer consider silo filling a drudgery, as for the last three years we have used the Ronning Ensilage Harvester, manufactured by the Morgan Harvester Co., of Minneapolis, Minn., which takes out the disagreeable part of putting up ensilage. Not only that, but from an economical standpoint, these harvesters constitute a saving that is well worth consideration. The eighteen men we had in the field, pitching and loading cornstalks, prior to the use of these machines have been eliminated. The saving of twine is also a big item.

The harvester cuts the corn into silage in the field and elevates it into high board wagons and thus entirely does away with all handling of the corn bundles. When one box is filled, another wagon drives up and the filled one is hauled into the silo, into which the silage is blown. Another advantage is that the corn in the form of silage is taken away as it is harvested, which is far ahead of the old method of having corn bundles left in the field to become wet and dirty. The corn does not touch the ground to mix with dirt; the sun has no chance to dry it after it is cut; when operations cease for the noon hour, or a shower of rain, the field is clean.

We consider the silo filling problem solved with this machine, and farmers will welcome it not alone for its labor saving propensities, but as a medium for making better ensilage and doing it with less cost.

One of the great savings we found in this machine is, it takes less power to operate it, than the old binders, there is no tying and packing of bundles, no slipping on wet ground. Two years ago, our corn was down and in bad shape to cut, it was a very heavy crop and the ground was wet. Without the Ronning machine it would have been impossible to have harvested all our corn.

We usually start filling our silo's the latter part of August, or the first week in September. We will be glad to have anyone come out to the farm and watch these machines in operation. These machines are now priced reasonable enough for any farmer to own one.—A. A. Schultz, Sup't. of Farms.


SILO-FILLING MADE EASY
The Ronning Way

Write for Catalog to the
MORGAN-HARVESTER CO. 613-617 Washington Ave So. Minneapolis Minn. Dept No. 24

Write for free booklets on Farm Sanitation

They contain practical suggestions for the prevention of diseases common to livestock and poultry and describe in detail the many uses of

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HEAVES Is your own horse afflicted? Use 2 large cans. Cost $2.50. *Money back if not satisfactory*
ONE can at $1.25 often sufficient. In powder form. *Most for cost*
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Richland Shorthorns
SPECIAL OFFER: Two choicely bred cows. One roan—One white—One with bull calf at foot by son of IMP. Rodney. This show stock of real caliber and great foundation material. A bargain at the price.
C. H. Prescott & Sons.
Office at Tawas City, Mich. Herd at Tawas City, Mich.

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Shorthorn cows and heifers at a bargain. Representatives of the Oxford, Pere, Young Mary and Venus (Ruby Pheonix). Bred for general usefulness and all T. B. tested. An inspection of the herd is invited.
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Write Central Michigan Shorthorn Breeders' Ass'n, Greenville, Michigan for list of Milking Shorthorns, all ages, priced to sell.

RAISE SHORTHORNS WITHOUT HORNS Like Kelley does. U. S. Accredited Herd No. 28945. For description and price write,
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REG. JERSEYS, POGIS 99th OF H. F. AND Majesty breeding. Young stock for sale. Herd fully accredited by State and Federal Government. Write or visit for prices and description.
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FOR SALE—REGISTERED GUERNSEY HEIFers at reasonable prices, also choice bull calves of May Rose breeding.
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MISSAUKEE GUERNSEYS. A NEW CROP OF calves coming soon. No females for sale. Order that new bull calf A. R. Sire and Dam.
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GUERNSEYS—Registered Bull Calves, Cheap, also grades. Best of breeding for production and size. George Damken, North Manchester, Indiana.

RED POLLED

RED POLLED CATTLE—A few choice bulls and heifers for sale.
ROYSTAN STOCK FARM,
Will Cottle, R. R. 1, West Branch Michigan

AYRSHIRES

FOR SALE—REGISTERED AYRSHIRE bulls and bull calves, heifers and heifer calves. Also some choice cows.
FINDLAY BROS., R 5, Vassar, Mich.

BROWN SWISS

REG. BROWN SWISS 6 FEMALES AND 2 YOUNG BULLS for sale. E. T. Spencer, R. R. 1, Sunfield Mich.

SWINE

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O. I. C'S MARCH FARROWED SOW AND Boar Pigs, sired by Michigan Giant with plenty range and good backs. Dams are all over two yrs. price $20. Registered and express paid. Maple Valley Stock Farm, North Adams, Mich.

O. I. C.'S. 1 GILT 13 MONTHS OLD, WEIGHT 380, due June 3rd. 10 last fall gilts due Aug. and Sept. 1 last fall boar, spring pigs not akin. Record free. Citz. phone. ½ mile west of depot.
OTTO B. SCHULZE, Nashville, Mich.

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HAMPSHIRES: A FEW BRED GILTS LEFT. Place your order now for your Boar pig at a bargain. Pairs not akin. 10th year.
JOHN W SNYDER, St. Johns, R. 4, Mich.

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HILL CREST DUROCS, PERRINTON, MICH. We are breeding twenty sows and eighteen gilts to a son of GREAT ORION SENSATION. Yearling, spring and fall boars. NEWTON & BLANK, Farm 4 miles straight south of Middleton, Gratiot Co., Mich.

PEACH HILL FARM offers choice weanling Duroc pigs, either sex. Priced very reasonable. Write us.
INWOOD BROS., Romeo, Mich.

The Famous Superior Vigorous PureBred Baby Chicks
At SPECIAL·REDUCED·PRICES for June, July & August Delivery

All fully guaranteed, direct from our high producing Tom Barron English White Leghorns, Anconas, Barred Rocks, Rhode Island Reds and White Wyandottes. The same high grade stock that sold earlier in the season for much higher prices. All pure bred, pedigreed-sired, free range stock, free from disease and full of life and vigor. Not just a few high producing birds, but a high average egg production—that's where you make *your profit.* Hatched in the largest and finest hatchery in Michigan by men who know how. This is your chance to get high grade, superior quality chicks direct from our 150,000 capacity incubators at the price of ordinary stock. We pay the postage and guarantee 97% live arrival. We will book your order on receipt of 25% of the amount—balance before shipment. *Satisfaction guaranteed or your money back.* Order *today, direct from this advertisement.*

Handsome, complete catalog free for the asking—write for it today.

PRICE LIST OF SUPERIOR BABY CHICKS
For June, July and August Delivery

	25	50	100	500	1000
S. C. White Leghorns	$3.00	$5.50	$10.00	$50.00	$95.00
S. C. Tom Barron English W. Leghorns *Star Mating*	$4.50	$8.50	$15.00	$70.00	$135.00
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S. C Mottled Anconas. *Extra selected flock*	$3.25	$6.00	$11.00	$55.00	$105.00
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Broilers, Mixed Chicks, Odds and Ends	$2.25	$4.00	$8.00	$37.50	$70.00

SUPERIOR POULTRY FARMS & HATCHERY
ZEELAND MICHIGAN, U.S.A
Address Dept-104

Sturdy Pure Bred Day Old Chicks

Buy Silver Ward choice chicks now for bigger profits

The famous Tom Barron English Imported White Leghorns and Sheppards' famous Anconas. Bred direct from our selected stocks that are headed with pedigreed males of 250 to 280 egg strain. Carefully hatched in our large, up-to-date incubators. These high grade, high producing chicks will increase your profits.

Now is the most profitable time to buy baby chicks — least care and least loss. No more cold weather, no sudden changes in temperature. Free range can be given chicks at once. They mature quickly and lay when four or five months old.

Flocks culled by experts for heavy egg laying and coloring of birds. Also choice large pullets, one and two year old hens, cocks and cockerels.

Special bargain prices for June, July and August delivery if you order *now.* 10% with order — balance 10 days before shipment, or we will ship C. O. D. *Satisfaction guaranteed* or we return your money. Our illustrated catalog of chicks free for the asking — write for your copy tonight. Or order direct from this ad. We ship now at the following extremely low prices; extra selected stock, 25–$3.00; 50–$5.50; 100–$10.00; 500–$45.00; 1000–$90.00. Write, wire or phone your order *today.*

Silver Ward Hatchery
Dept. M. Zeeland, Michigan

Special Sale of June Chicks

Here is your opportunity to buy good quality Chicks at these remarkably low prices. LOOK—Assorted lots of chicks $70.00 per 1000, $36.50 per 500, $7.50 per 100, $4.00 per 50 lot. Guaranteed live delivery to your door. Write for Special and regular price list and free catalog. Order early, direct from ad.

Holland Hatchery & Poultry Farm, R. 7, Holland, Mich.

POULTRY

CANABALISM AMONG CHICKENS

Will you please tell me what could be the trouble with our two neighbors' hens. They have meat scraps, milk and different grains to eat but they eat each other. Sometimes they begin in the thigh and around the vent and pick so the intestines drag on the ground. They are Rhode Island Reds.—O. H. G., Manton, Mich.

—The form of Canabalism that is appearing among your neighbors flocks is not uncommon. The trouble originates where individuals in the flock develop a condition known as Inversion of the Uterus due to the strain of production, or it may be Inversior of the Cloaca caused by intestinal parasites. This reddened area attracks the birds and once the hens get a taste of blood this trouble may become quite prevalent.

It is usually a good practice to give the whole flock Epsom salts at the rate of one pound per hundred hens. If the trouble is induced by constipation, the salts will usually reduce the mortality and if there are one or more individuals in the flock that appear to be straining one of these birds should be killed and diagnosed for intestinal worms. The worms will usually be found in the Ceca or in the intestinal tract. Oil of American worm seed and turpentine using one teaspoonful of each to every twelve birds, is recommended for this latter trouble. Epsom salts should immediately follow this treatment and lime should be liberally used on the dropping boards two or three days following.—E. C. Foreman, Associate Professor of Poultry Husbandry, M. A. C.

FIRELESS BROODERS

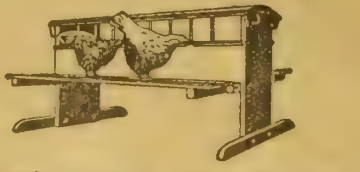
THE fireless brooder is very useful in its place. Chickens have been ruined by it thru the lack of thought of their owner, and chickens have been saved by it. For example, one over-anxious amateur piled the blankets on top of her fireless, and when a plaintive cheep disterbed her rest at night, she found the chicks wet with their own breath under the weight and warmth of the blankets. Another lady used felt to cover the top of her brooder, and thus shut out ventilation. Fireless brooders are meant for small groups of chicks. They must not be overcrowded. For the small brood they have a place to fill.

We like the round cheese box. It will hold fifteen chicks nicely, has no corners and is easy to work with. If a square box is used, the corners should be rounded with heavy cardboard. (Some types of smooth roofing, if it does not smell, are useful.) Tin may also be used, but the sharp edges must be folded down if this is used. A tomato tin with edges turned is about the righ size.

The idea of the fireless brooder is to make a temporary mother. Chicks like to feel the warmth and pressure on their backs of their mother's breast. The fireless substitute is a box with a few holes cut for ventilation just below the pad, and a sagging cheese-cloth on top on which are placed according to the weather, pads of old wool blankets or light comforters of cheese-cloth padded loosely with cotton as a baby's quilt is made. This retains the chick's own body heat and gives ventilation. The cheesecloth is shaped to fit the box, and is preferably held in place by a wire running around the outside of the box, with its ends looped together. The principle is the same as tying a cloth on a bottle, but the cloth bags in the middle. Cleats on the inside of the box are placed there to hold the pad up. Some people put a hem in the cheesecloth, and run the wire thru this like a drawstring. Then the wire is placed on the cleats and fastened securely, making as it were a mattress resting on the cleats.

This brooder is placed inside a box enough larger to give the chicks some runway in front. The two are kept in the house. When ready to use, the floor of the brooder is covered for an inch or two with clover or alfalfa chaff, hollowed out in the center like a nest. A fringe of wool or any cloth that will not ravel is tacked across the opening cut for a door. A box about an inch high filled with mellow earth is the barri-

Kelly's Poultry Feeder



The modern scientific invention—absolutely no waste, sanitary—built on practical common sense ideas. For feeding wet or dry mash, grit, shell, charcoal, grains, meal or sprouted oats. Cover and trough of 28 gauge galvo steel with ⅛-inch rolled edges—end uprights selected No. 1 grade cypress dipped in wood preservative stain—Has combination rack with projecting lips and two partitions forming three compartments—all lifting out when cleaning trough. Cover tipping back to refill trough. Side sections folding shutting out vermin at night. Fowls eat from either side. Equally as serviceable on the range as in the pens—feed being fully protected from dirt, litter or storm. Capacity 25 to 150 fowls. Size 36 inches long, 20 inches high, trough 9¼ inches wide, 5 inches deep. Weight, crated about 25 pounds. The price to you only $5.00 f. o. b. Saranac, Michigan. Order direct from this ad or send for free booklet to-day. We guarantee satisfaction.

LEWIS KELLY & SON, Manufacturers
Saranac, Michigan.

Reduced Prices BABY CHICKS

YOU CAN DO IT WITH
BABY CHIX

Best Paying, Heavy Laying, Purebred Strains.

Tom Barron English S. C. W. Leghorns, 25, $2.50; 50, $5; 100, $10; 500, $45; 1000, $90.

Park's Strain Barred Rocks; S. C. Rhode Island Reds-25, $3; 50, $6; 100, $12; 500, $55; 1000, $110.

Good strong broiler chicks, $8 per 100.

Place your order at once; avoid disappointment. Get your chicks when you want them. 100% live delivery guaranteed postpaid. Instructive catalog free. Prices on mature stock, 8-12 weeks old pullets on request.

Brummer-Frederickson Poultry Farm,
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BABY CHICKS 12c AND UP
Member Mid-West Baby Chick Association.
THOS. G. CALLAGHAN, Fenton, Michigan

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Advertisements inserted under this heading at 30c per agate line, per issue. Commercial Baby Chick advertisements 45c per agate line. Write out what you have to offer and send it in. We will put it in type, send proof and quote rates by return mail. Address The Michigan Business Farmer, Advertising Department, Mt. Clemens, Michigan.

PULLETS, HENS AND COCKERELS
S. C. White Leghorns and S. C. and R. C. Black Minorcas. Must make room before cold weather. About ready to lay.
LAPHAM FARMS, Pinckney, Mich.

PULLETS—ENGLISH WHITE LEGHORNS 8 to 10 weeks old for June, July and August delivery. Write for price list.
HENRY WATERWAY, R. 4, Holland, Michigan.

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HATCHING EGGS
S. C. White Leghorns. Tom Barron Strain, 250 egg utility line. November to April, average 65 per cent. Pure white plumage. Range grown, healthy, vigorous stock. Eggs $1.50 per 15; $4.00 per 50; $7.00 per 100. Prepaid. Limited supply. Order from this ad now.
MAPLEWOOD POULTRY FARMS
C. W. Bovee, Prop. North Star, Michigan.

BUFF ROCK EGGS BY 10 LB. MALES and 1st Cincinnati, O., winners. Hogan tested hens, heavy layers.
J. C. CLIPP & SONS, Box M, Saltillo, Ind.

THOROUGHBRED BUFF ROCK EGGS from Blue Ribbon Winners, $1.50 per 15; $9.00 per 100.
BALDWIN & NOWLIN, R. 4, Laingsburg, Mich.

BARRED ROCK HATCHING EGGS. NORMAN Heavy Laying Strain.
MRS. JESSIE B. DEAN, R. 1, Mason, Mich.

FOR SALE—BARRED ROCK HATCHING EGGS from good winter layers. $1.25 per 15 or $2.00 per 30 postpaid.
Mrs. Frank Millikin, R. 1, Roscommon, Mich.

THOMPSON STRAIN BARRED ROCK EGGS by 9 lb. males, bred to lay. Dark matings $1.75 per 15; $3.00 per 30 prepaid.
MRS. FRED KLOMP, St. Charles, Michigan.

EGGS FOR HATCHING—UTILITY STOCK. Grand White Wyandottes—M. A. C. Champions. Good, square deal. Reasonable prices. Send for price list.
C. W. HEIMBACH, R. 5, Big Rapids, Michigan.

SILVER LACED AND WHITE WYANDOTTES Four large, beautiful roosters. Eggs $1.50 per 15.
C. W. BROWNING, Portland, Michigan.

MAMMOTH PEKIN DUCK EGGS FOR SETTING $2.00 or two settings $3.00. Also Wild Mallard Duck eggs same price. Very choicest stock. All orders prepaid. Cedar Bend Farm, Okemos, Mich.

LEGHORNS

LEGHORNS
S. C. Buff Leghorn Hens, Pullets and Cockerels. Hens and pullets $2.50 each; cockerels $3.00 to $5.00 each. Show birds a matter of correspondence. LAPHAM FARMS, Pinckney, Mich.

PULLETS BARRON ENGLISH WHITE Leghorns, eight weeks to maturity—May to October. Breeding flocks repeatedly culled by experts. Extra large and vigorous. Wedge shaped bodies, big looped combs. "Laybilt" in every way. Also breeding cockerels. Satisfaction and more or money back.
MORSE WHITE LEGHORN FARM,
Belding, Michigan.

cade we use for the doorway, since it holds in the chaff and gives the chicks a soft spot to scratch in. We like a box of earth, renewed from fresh soil that chickens have not run over, for baby chicks. They scratch in it, and seem to get something from the soil which they need. It is also good for their feet.

We have used the fireless brooder out of doors in mild weather by putting it in a covered coop.—Wallaces' Farmer.

MICHIGAN CROPS

NEVER USE POTATO PEELINGS FOR SEED PURPOSES

A few, maybe four, years ago, we got some seed potatoes, mostly small cuttings and peelings of Petoskey russets with a few white potato peelings mixed in. We experimented with these and saved the seed until we have raised several crops from it. The first crop did not get ripe before it was frost biten. Since then we had several crops, sometimes fair, sometimes not so good. Never on the best of potato ground. Several times they have been blight stricken. Last year's crop was hit by both frost and blight. The potatoes are of very poor quality. They are small in size. From this description would you advise they could be planted again and expect them to yield good and be a better quality potato if given better soil and better care? What would the certified Petoskey russets cost per bu.? Also state name, and price on some earlier potato if you can.—O. E. W., Wilmot, Michigan.

—Under field conditions it is never satisfactory to use potato peelings for seed purposes. It is true that under ideal soil conditions such as might be maintained in a well cultivated garden that fair yields can oftentimes be secured by planting the peelings to which are attached small pieces of potato with eyes. It is recommended that under field conditions, seed pieces average at least 1½ to 2 ounces in weight and that they be cut blocky or compact so that they will not dry out quickly in the soil. Every seed piece should have at least one or two strong eyes.

I would recommend that you secure a new lot of seed this year, preferrably seed that was certified in 1922. Such seed was grown under very careful cultural conditions and was inspected twice during the growing season by men trained in potato diseases. It was also inspected in the bin for uniformity of size, trueness to type, freedom from scab, etc. The planting of certified seed is a very good form of potato crop insurance since it has been proven by many demonstrations and tests in Michigan as well as in other states that certified seed outyields uncertified stock by approximately 60 bushels per acre. Furthermore, the quality of the product grown from certified seed is ordinarily far superior to that grown from common potatoes.

No doubt the poor yields that you have been securing from your potatoes is due to the fact that your potatoes are infested with diseases known as mosaic, or leaf roll which live over from year to year in the seed and produce inferior yields of poor quality.

Certified seed can be procured at a very reasonable price and this is an unusually good opportunity to invest in this high class seed. It is doubtful if the seed will be as low priced another season. You can procure certified seed of the Late Petoskey (Russet Rural) variety from the Seed Department of the Michigan State Farm Bureau, Lansing, Michigan or from the Michigan Potato Growers' Exchange, Cadillac, Mich. These two organizations are the official selling agencies for Michigan Certified Seed Potatoes.

For an early potato I would recommend the Irish Cobbler variety. Certified seed of this variety can be secured from the Michigan Potato Growers' Exchange, Cadillac. The price of certified Cobblers is approximately $1.75 per bushel f. o. b., shipping point, that of the Russet Rurals is approximately $1.25 per bushel for small lots—H. C. Moore, Extension Specialst, M. A. C.

More people work at singing, than sing at working.

Nothing keeps a secret like a tombstone.

DAY OLD CHICKS

Special For June and July

$10 and $12 per 100

THE SMART, STURDY, FLUFFY KIND

Our English Type White Leghorns and Brown Leghorns, the Greatest Laying Strains of today.

WOLVERINE BABY CHIX

BLOOD WILL TELL

Twelve years of breeding has made this stock good. Long, deep bodies and the large combs. They have the egg production qualities in them.

Twelve years of hatching and shipping chicks assures you good, first-class chicks. We guarantee safe arrival and satisfaction, or your money back. 17,000 chicks every week till August 15th, every Tuesday.

Prices For June and July, 1923

S. C. English type White Leghorns, are good and profitable layers, and our extra selected are of the very best layers. It has never been our aim to put out cheap chicks, but to give our customers chicks that will be good layers and bring our customers a good profit. We have been in the poultry business twelve years and are offering you chicks of the best layers at a very reasonable price.

	Per 25	Per 50	Per 100	Per 500	Per 1000
S. C. English type White Leghorns, extra selected	$3.00	$6.00	$12.00	$57.50	$115.00
S. C. English type White Leghorns	2.50	5.00	10.00	50.00	100.00
S. C. Brown Leghorns, extra selected	3.00	6.00	12.00	57.50	115.00
S. C. Brown Leghorns, Standard	2.50	5.00	10.00	50.00	100.00

We ship chicks by parcel post and pay the postage up to your door, and guarantee safe arrival. Our terms are cash with order, but we will book your order if you send one-fourth of the amount with the order, and the balance just before chicks are to be shipped.

for the chicks, and also will mail you our instructive catal to save time and we will write you at once when to look PROMPT SHIPMENT: Order from this advertisementog, or write for catalog before ordering.

The Wolverine Hatchery

H. P. WIERSMA, Proprietor :: :: :: ZEELAND, MICHIGAN

BABY CHICKS Postpaid to your door $9 per 100 and Up

FROM HOGAN TESTED, FREE RANGE HEAVY LAYING FLOCKS. ALL VARIETIES.

WHITE and BROWN LEGHORNS	$12.00
BUFF LEGHORNS and ANCONAS	$13.00
BARRED ROCKS and R. I. REDS	$14.00
WHITE WYANDOTTES, WHITE ROCKS, BUFF ROCKS	$15.00
BLACK MINORCAS, BUFF ORPINGTONS	$16.00

All lots of 500 or more discounted.

EXTRA SELECTED FLOCKS .... $2.00 per 100 higher.

Large Price List for return mail.

Postpaid full live delivery guaranteed. Hatched by the most modern method of incubation from good, vigorous, pure-bred varieties carefully selected and safely packed. No catalogue. Order right from this ad and save time and disappointment. Reference Chesaning State Bank or any business in Chesaning.

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PURE BRED English and American S. C. W. Leghorns; S. C. Anconas; Barred Plymouth Rocks and R. I. Reds. Strong, well hatched chicks from tested Hoganized Free range stock that make wonderful winter layers.

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Hardy Northern Bred Chicks

Reduced Prices for June Delivery. Barron S. C. W. LEGHORNS 10c each, $90.00 per 1,000. Parks Strain BARRED ROCKS 13c each, $62.50 per 500. Parcel Post paid. 100% live delivery guaranteed. Quality is assured as we are owners and breeders of one of the leading pens at the Michigan Egg Laying Contest. 8 to 10 weeks old S. C. W. Leghorn pullets $1.00 each. $90.00 per 100. Mixed broiler chicks, $8 per 100; $35 per 500.

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SELECTED CHICKS from best strains. Extremely low prices after May 25th. Write for circular and price list. Litchfield Hatchery, Litchfield, Mich.

CHICKS—SINGLE COMB BUFF LEGHORNS only Strong healthy chicks from good laying stock. J. W. WEBSTER. Bath. Mich.

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THAT GROW, LAY AND PAY Barron English White Leghorns, Brown Leghorns and Anconas.

PURCHASE THIS YEAR'S CROP OF CHICKS from tested layers, headed by large vigorous 260 to 288 Pedigreed Males.

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Hatched from strong and vigourous flocks of ENGLISH WHITE LEGHORNS AND ANCONAS, BRED FOR HIGH EGG-PRODUCTION. We guarantee 100 per cent good live chicks on arrival. Postage PAID. Prices reasonable. Instructive Catalog and prices free on request. QUALITY HATCHERY, Box A11, Zeeland, Mich.

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Hatched by modern methods in best machines under our personal supervision. Carefully packed and sent postpaid and 100% live delivery guaranteed. Bank Reference. You take no chances in ordering STAR BABY CHICKS. Place your order now and get them when you want them

STAR HATCHERY, Box X, Holland, Michigan

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Extra Selected, English White Leghorns from my very best breeding pens, on and after June 15th at $10.00 per hundred. Book orders now. Write for my 16 page White Leghorn Catalogue.

W. A. DOWNS

Washington, Mich.

CHICKS 10c

The kind that are husky and grow fast for June delivery. Leghorns 10c, Anconas 11c, Barred Rocks 12c. Special price on eggs for hatching. We prepay all shipments. Write for our catalogue and read what our customers say.

BYRON CENTER POULTRY FARM, Byron Center, Mich.

Pure Bred Chicks Buy 'Em Near Home

Broiler Chix 9c
W. or B. Leghorns 11c
Bd. Rox or Reds 13c
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White Wyandottes, Buff Orpingtons 15c
Light Brahmas 19c
Shepherd Anconas 12c
Black Minorcas 14c

Add 35c if less than 100 lots wanted. Circular.

LAWRENCE POULTRY FARM

Dept. 8 Good Reference R. 7, Grand Rapids, Mich.

CHICKS Barron Strain Selected White Leghorns. Produced under my personal care. Strong, vigorous chicks carefully packed to go safely. Postpaid, full live delivery guaranteed. 50 chicks, $6.50; 100, $12.50; 500, $60. Get your order in early. Elgin Hatchery, Box 317A, Zeeland, Mich.

GREEN LAWN CHICKS AFTER JUNE 15. White Rox, Barred Plymouth Rox, R. I. Reds or Black Minorcas 13½c each. White Leghorns, Anconas or Broilers 12c each in 100 lots. All chix less than 100 lots 14c. Order now for June, July and August. Our 13th year producing chix that please. Sept. chix 15c straight.

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South of High School, Fenton, Michigan.

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Prices on our very best A-1 English White Leghorn and Ancona Chicks reduced to $11.50 per 100; $55.00 per 500; $105.00 per 1,000. Get our descriptive catalog or order from ad. Model Poultry Farm & Hatchery, Zeeland, Mich.

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BABY CHICKS—GET OUR REDUCED Prices. Six leading breeds. Special attention to small orders.

H. H. PIERCE, Jerome, Michigan

SELL YOUR PURE-BRED POULTRY THROUGH THE BUSINESS FARMER.

MARKET FLASHES

MARKET SUMMARY

Wheat easy after sharp decline on opening day of week. Corn shows no change. Oats and rye weak after small decline. Beans unchanged. Poultry steady. Butter and eggs firm. Strawberries easy. Trade in cattle market is slow. Hogs active to higher.

(Note: The above summarized information was received AFTER the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press —Editor.)

FOOTE'S MARKET LETTER

BY W. W. FOOTE

FARMERS who own their farms clear from mortgages are much more hopeful than a year ago, but they realize that many things can happen to the crops and unusual interest is felt in the corn crop of the great corn belt. The most important recent event in Michigan is the permanent organization of the Michigan Fruit Growers, Inc., a state fruit exchange, with headquarters to be opened at once. Delegates from twenty-seven fruit shipping associations in western Michigan were appointed to attend the meeting in Benton Harbor. The boom in prices for spring lambs affects one of the leading Michigan industries, as does the animated demand for spring wool clips. Wool is being contracted in the west largely at 45 to 50 cents a pound and northern California wool is going on the market as high as 55 cents. There is a lively call in the range country for breeding ewes, but most of them are held off the market for future breeding. The domestic trade of the country is extremely large, while the foreign trade of the United States shows the balance of trade against us. Total merchandise exports for the five months ending with May were valued at $1,628,175, 477, while the imports were valued at 1,765,757,586, showing a balance against us of $137,-582,109. The total net imports of gold and silver for the five months amounted to $91,241,635. The total mechandise and gold and silver balance against us was $228,823,744.

Stockman have good reason to feel encouraged over recent sharp advances of prices for cattle, hogs and sheep, due to materially reduced receipts in the Chicago market. Within a week prime hogs advanced 50 cents, while prime spring lambs went from $14.85 to $16.35, and cattle rose as much as 25 to 50 cents.

Wheat Trade Broadens

For several weeks the volume of speculative business in wheat and other grains on the Chicago Board of Trade has shown a marked falling off, but recently trade in wheat has broadened out, and prices have been sensitive to crop reports. The buying side of wheat has been more favored much of the time, and fair advances have taken place on some days, prices at last having risen higher than a year ago. Corn, however, was in the strongest position of all the cereals, due to the disappearance of the greater part of the corn in sight and a good demand. A well-informed newspaper man with agricultural experience who is back from an automobile trip through the corn districts of Illinois, Indiana and Iowa, says that in about every place in these states farmers and grain dealers reported no corn left for shipment. He added that in many places where at this time of the year about 10 per cent of the corn is usually left, they are shipping it in to meet the feeder demand. There is a great deal of grinding going on by owners of attrition mills, the usual mixture being about three parts oats and one part corn. The feeders claim, however, that this does not make a satisfactory substitute for straight corn. The foreign demand for American wheat and flour has been much greater than a year ago, while exports of corn are unusually small as are those of oats. A short time ago the visible corn supply in this country was down to around 4,000,000 bushels, comparing with 30,313,000 bushels a year ago. That of oats wa about 11,-000,000 bushels, comparing with 47,272,000 bushels a year ago; and that of rye 16,000,000 bushels, comparing with 4,568,000 bushels last year. Corn planting has been unusually late, and this is, of course, a bullish feature. Late sales were made on the Chicago Board of Trade of July wheat at $1.11, the same price as a year ago. July corn sold at 82¼ cents, comparing with 62 cents last year; July oats at 42 cents, comparing with 34 cents last year; and July rye at 71 cents, comparing with 88 cents a year ago.

Choice Cattle Sell High

The general employment of labor at the highest wages ever known tends to increase the demand for the choicer cuts of beef, and the better offerings of beef cattle have been selling extremely high at times when the numerous lots of light weight grassy cattle were slow at weak prices. Last week's Chicago receipts of cattle fell much short of those for the preceding week and for the corresponding week last year, and a normal local and shipping demand brought about advances in the greater part of the consignments, although the best beeves failed this time to show the rise that took place in the principal part of the steers. Prime heavy steers sold at $11 to $11.25, and choice yearlings brought $10.50 to $11.25. A liberal share of the steers found buyers at $9 to $11, good lots going at $10 and upward, medium to good steers at $8.75 to $9.95 and common to fair steers at $8 to $8.70, while inferior little steers sold for $5 to $7.90. Butcher cows and heifers sold respectively at $4 to $8.50 for the former and $6 to $10 for the latter, while canner and cutter cows went at $2 to $3.95 and bulls at $3.50 to $8.50. Calves found an outlet at $5 to $11, and there was a limited call for inferior to choice stockers and feeders at $5.50 to $8.75, largely at $6.25 to $7.75. The best feeders were hard to find and were held at higher figures. Looking backward, it is recalled that a year ago the best beef steers sold at $9.75, two years ago at $9.15 and five years ago at $18.

Rally in Hog Prices

Following the recent numerous declines in prices brought about by the largest marketings ever seen in corresponding weeks in past years, the receipts fell off to such an extent that sellers were able to obtain several advances, the demand being better. As usual, Monday is the day of much the largest supplies in the market, and the opening of the week is almost certain of lower prices. There is little that is new in the hog industry, and everybody knows that early estimates of the supply in hog growing districts were far too low. It is possible, of course, that marketings will fall off to such an extent as to bring about a higher scale of prices, but such large supplies as have been offered in recent weeks can hardly fail to lower values. There has been a marked narrowing of prices of late, and both prime light and the best heavy butcher hogs sold at top prices. More hogs than usual have been received in eastern packing points of late, and this explains the smaller purchases made in the Chicago market by eastern shippers. A great many hogs of light weight are going to market because owners fear further reductions in prices, and most stock feeders are not disposed to hold their hogs after they weigh 200 pounds. Relatively low prices favor consumption of hog products, fresh and cured, and exports of lard and cured hog meats continue for heavier than a year ago. The stocks of meats in cold storage are far heavier than a month ago or a year ago, but the lard supply is far smaller. Short ribs are selling greatly below prices of a year ago, but lard is nearly as high as then. Lard substitutes are used far more largely than in former years. In many farming districts farmers are talking of breeding fewer sows, as at the higher price of corn, feeding swine is a losing game. The week closed with hogs selling at $6 to $7.30, the top being 50 cents higher than a week earlier. A year ago hogs brought $8.85 to $10.80.

Scarcity of Lambs

Recent receipts of spring lambs in Chicago were extremely meager, being the smallest ever seen in June, and sharp advances in prices took place. Far too few lambs are marketed to meet trade requirements, and at times prices have advanced to a point that checked sales in the retail meat markets of the country. The first shipment of Idaho spring lambs of the year arrived on the Chicago Market recently and sold for $16.25 per 100 pounds, their average weight being 66 pounds. Idaho flock masters are in the habit of marketing high-grade lambs, and they are sure of meeting with a good demand. Native lambs have been selling at $11 to $16.25, according to quality, and prime western range lambs sold up to $16.35, whereas a year ago prime lambs sold at $12.50. Following the yearly custom, the prefix "spring" is now omitted in speaking of this year's lambs, while last year's lambs are termed yearlings. Sheep are scarce, and ewes sell at $3.25 to $6.10, breeding ewes being in demand at $5.50 to $6.50. Yearling wethers sell at $11.25 to $14.75. There is a growing demand for good breeders, with not many on sale.

WHEAT

Wheat continued weak during the fortnight closing June 16th, and prices are lower, although several advances were made during the period. There is a dull tone in all markets but it seems to be more pronounced at Detroit and advances when they did come were not as great as the upturns in other markets. A decrease in the milling demand is blamed for the dullness at Detroit. The flour market at this point has been dull for the past several weeks and millers are buying only enough grain to take care of immediate needs. The Detroit market has had a good demand from the east and south for wheat for milling but there has been a serious falling off in this demand during the past few weeks. This added to the decrease in local cash demand has given the market quite a set-back. Dealers found they could not follow the advances made in Chicago and make sales. Aside from the lack of cash demand everything in the market favored higher prices. The crop outlook is about the worst on record and not improving as far as the winter crop is concerned. From Kansas the news shows the promise to be a little worse every day. There appears to be no end to the rain and fields are flooded. A great deal of the acreage is entirely destroyed and much of the state will not produce better than seed. Over the northwest recent rains have improved the outlook, but weather must be about perfect until harvest if there is to be given a fair crop of spring wheat. The European outlook, until recently one of the bearish features, is said to have had a setback, but there is some doubt in the minds of the trade as to the extent of the injury to the French crop as that country is not showing any anxiety to buy in the American market and Liverpool has not been strengthened by the crop scare.

Courage on the part of the bulls is greatly needed. This has been absent since the passing of the recent market law to regulate grain. The speculators were frightened off and the government has since been telling the trade that the law is not intended to drive out dealers, but simply to keep track of the business. The market is in great need of the support that formerly came from speculate buying and bulls are in hopes that there will be a return of buying sufficient to support the market and carry an advance past the first lot of profit-taking.

Prices

Detroit—Cash No. 2 red, $1.23; No. 2 white, $1.23; No. 2 mixed, $1.23.

Chicago—No. 2 red, $1.14.

New York—No. 2 red, $1.36¾.

Prices one year ago—Detroit, No. 2 red, $1.18; No. 2 white and No. 2 mixed, $1.16.

CORN

Week before last corn made a gain of 1c on the Detroit market and during the forepart of last week there was an advance but before the close of last Saturday the market down to closing price on Saturday of the previous week. Chicago reports an increase in commission house buying and a decline in country offerings but the price showed only a slight change owing to the dullness in the wheat market. Cash demand is reported to be moderate. Crop news is mixed, with some complaint of excessive moisture and weedy fields coming from the southwest.

Prices

Detroit—Cash No. 2 yellow, 90c; No. 3, 89c; No. 4, 87c.

Chicago—Cash No. 2 mixed, 83¾@84¼c.

New York—Cash No. 2 yellow, $1.01½.

Prices one year ago—Detroit, Cash No. 2 yellow, 65c; No. 3, 63½c No. 4, 62c.

OATS

The oat market shows very little activity and prices move within a narrow range being influenced by the trend of other grains. Domestic shipping trade was improved during the past fortnight and country offerings to arrive were light. Crop news is favorable.

Prices

Detroit—Cash No. 2 white, 48c; No. 3, 47c; No. 4, 46c.

Chicago—Cash No. 2 white, 42¼@44c; No. 3, 41@43c.

New York—Cash No. 2 white, 54@54½c.

Prices one year ago—Detroit, Cash No. 2 white, 40c; No. 3, 38c; No. 4, 34@35c.

RYE.

The demand for rye at Detroit declined during the past two weeks and the price is off 1 cent for the entire period. At Chicago the market had strong tone and prices are higher than they were two weeks ago. The market is steady to firm with receipts small.

Prices

Detroit—Cash No. 2, 72c.

Chicago—Cash No. 2, 70@71c.

Prices one year ago—Detroit, Cash No. 2, 90c.

BEANS

The bean market at Detroit took a bad fall week before last and although it tried to recover its losses last week it was 25c below the previous week's close when the market closed last Saturday. There is good demand for Michigan beans all over the country and the supply is not as large as some folks like to have the public believe. A dealer at Gratiot county, one of the largest bean producing counties in the state, writes to the Bean and Pea Journal as follows:

"A state jobber had on opportunity to place a number of cars of Michigan pea beans yesterday and at a price that would permit them to pay the country elevator 30c per cwt. more than the Detroit market. They put in telephone calls and talked with 33 elevators but only succeeded in buying 100 bags. Michigan beans have steadily been going into consumption notwithstanding reports by certain interests that the supply is in excess of the demand with very little consumption. We feel confident that the point has now been reached where the natural law of supply and demand will govern and that supplies are actually so low that when the planting of the new crop is over it will be impossible to buy Michigan beans freely and then only at materially higher prices.

"It is well understood that Michigan pea beans cook freely for the reason that they are all this season's crop. It is reported that some unscrupulous dealers are mixing foreign beans and that foreign beans do not cook up properly. We are convinced that this practice is only resorted to in isolated cases and we understand the Michigan Bean Jobbers' Association, main office, Lansing, will be glad to have samples of such mixtures and stand ready to prosecute to the limit.

"Ninety per cent of the new crop will be put in from the first to the 15th of June and we believe the acreage will be very large.

"The first of the new crop will not be available for four months so that the present small supplies will have to answer until that time. We predict that the supply of Michigan pea beans will be exhausted before the new beans are obtainable and it's our judgment that the market will gradually advance until that point is reached."

This seems to be the feeling on all sides, even dealers outside of Michigan state they believe Michigan beans are going to go higher. It is to be hoped that there will be no sudden sharp gains but a steady improvement in the tone and a gradual advance in prices. Rapid advances would undoubtedly do more harm than good.

Prices

Detroit—C. H. P., $7 per cwt.

Chicago—C. H. P., $7.65@7.90 per cwt.

Prices one year ago—Detroit, C. H. P., $9.65 per cwt.

POTATOES

The demand for old potatoes is decreasing daily as an increasing supply of new stock comes to market. The interest in the old crop has reached the point where many markets are not reporting on them. Prices on nearly all markets show a decline over two weeks ago.

Prices

Detroit — Michigan, $1.08@1.30 per cwt.

Chicago — Wisconsin and Round Whites, 80@90c per cwt.

Prices one year ago—Detroit, Michigan, $2.50 per cwt.

PRITCHARD'S
WEATHER
FORECAST
INTERPRETED BY THE STARS

Week of June 24

TEMPERATURES for the week beginning June 24th will average above the usual seasonal amount. However, temperatures will fall as low as 45 to 48 degrees in western part of Michigan and in other sections accordingly. The greater part of the week's rainfall will occur during first half of this week.

The lowest temperatures will occur at very beginning of week but from then until near the close they will be gradually rising, although at no time do we expect temperatures to be very high during this week. From Thursday to end of week temperatures will be falling.

Local rains and thunder storms will occur in this state during early days of this week and during middle part of week the winds will be strong in force. Last half of week will be sunshiny with cool nights and mornings.

Week of July 1

This week begins with fair weather but beginning about Monday and continuing for most of the week there will be light rains, electrical storms and some high winds in various parts of the state. Rains are expected to become heavier and storminess more severe as the end of this week approaches. The weather will be fair at end of week.

Cool Summer; Average Rain

The average temperature during July, August, September, October and November will be below normal. The rainfall will average about normal during this summer but in October and November moisture conditions will tighten up restricting many areas to a proper amount of moisture for the fall planted crops.

HAY

The light receipts reported in most markets are causing a continuation of the firmness shown in hay prices. Slight advances are reported in several markets. Flood condition is restricting the movement of both new and old alfalfa in the west and southwest. As a whole markets are steady to firm with prices well sustained at the close.

Prices

Detroit—No. 1 timothy, $17@18; standard, $16.50@17; No. 2 timothy, $15@16; No. 1 clover mixed, $14@15; No. 1 clover, $13@14.

Chicago—No. 1 timothy, $22@23; light mixed, $19@21; No. 2 timothy, $18@21; No. 1 clover, $15@16.

Prices one year ago—Detroit. Standard timothy, $21.50@22; No. 2 timothy, $16@17; light mixed, $21@22; No. 1 clover, $16@17.

WEEKLY MARKETGRAM

U. S. Bureau of Agricultural Economics

Washington, D. C.—For the week ending June 15, 1923.

FEED—Markets quiet, prices irregular. Moderately firmer tone in spot and nearby bran. Demand continues slow especially for deferred shipment offerings. Western jobbers bidding around $18.50 for July, August and September shipment bran in Kansas City market. Alfalfa meal 50c to $1 lower, offerings increasing. Quoted June 15; bran $19, middlings $23, flour middlings $28, rye feed $22.50, Minneapolis; gluten feed $37.15 Chicago; white hominy feed $32.50 St. Louis, $33.50 Chicago; 36 per cent cottonseed meal $35.50 Memphis, $36.50 Atlanta; 32 per cent linseed meal $38.50 Minneapolis, $39.50 Buffalo.

DAIRY PRODUCTS—Butter markets unsettled during week and both advances and declines have occurred. Foreign arrivals include butter from Denmark, New Zealand, Argentine and small lots from Ireland and Esthonia. Closing prices 92 score butter;—New York 38¾c; Chicago 39c; Boston 40c.

CHEESE—Markets about steady. No active buying for storage has developed. Hot weather has affected quality of current productions of pastures are not the best despite recent rains. Wisconsin production close to peak. Some 1300 cases of New Zealand cheese arrived at New York yesterday. Prices at Wisconsin Primary Cheese Markets June 14;—daisies 24c; double daisies 23½c; Young Americas 24c; longhorns 24c.

PRESIDENT LOWDEN ASKS SOME POINTED QUESTIONS

(Continued from page 3)

such associations. As I have said before, I think the breeders of purebred cattle have been remiss in not themselves joining cow-testing associations. In fact, I think that wherever there is a purebred herd, its owner should take the initiative, if there be no association in his community, and make his herd the nucleus of such an association. I believe as time goes on the average farmer who is looking forward for a purebred sire will prefer to buy from a herd which belongs to a cow-testing association. He knows that the great official records made are made under extraordinary conditions which it is not practicable for him to duplicate. In the past, therefore, he has too often been disappointed when he has purchased a bull produced under these conditions. He more and more wants to know what he may expect from a bull under the every-day conditions which surround him. Indeed, if a purebred herd cannot make a profit at the pail—and this can be best shown by cow-testing association records—isn't he likely to reason that the purebred is not for him. I do not mean for a moment to detract from the importance of our Advanced Registry work. That work will always be essential for the selection of seed stock. I mean only to supplement and carry it forward where it can be made available to the man who is actually engaged in the production of milk for the market. There is, therefore, in my opinion no more important work than encouraging and fostering cow-testing associations wherever possible.

STATE GUERNSEY BREEDERS' PICNIC

MR. W. J. Brown, of Detroit, has most willingly offered to all Guernsey Breeders of Michigan a treat that will prove extremely interesting and instructive. The event will be in form of an all day get-to-gather on June 28th at his delightful farm, "Peaceful Vista," Redford, Mich. The farm is located 3-4 mile north of Grand Lawn Cemetery which is at the intersection of the 13 mile road and Grand River road. Or inquire at the Redford Ford Garage for specific directions. Mr. Brown has one of the most completely equipped Guernsey Farms in Michigan and a herd well above the average. The forenoon will be spent socially, lunch served at noon, after which a program will be given. All interested in Guernseys can profit by attending this meeting—C. Faye Myers, Sec'y.

AN ERROR.

In the fourth paragraph of the article on Dr. Friday appearing on page 3 of the June 9th issue of the Business Farmer, an error occurs in that the word "not" was left out of the paragraph which should read, "It is evident that the underlying motive could not have been a desire to win popularity or cheap publicity." Mr. Powell, our correspondent, has called our attention to this error. We have investigated his copy as submitted and find that the error was made in our own typography.—The Editor.

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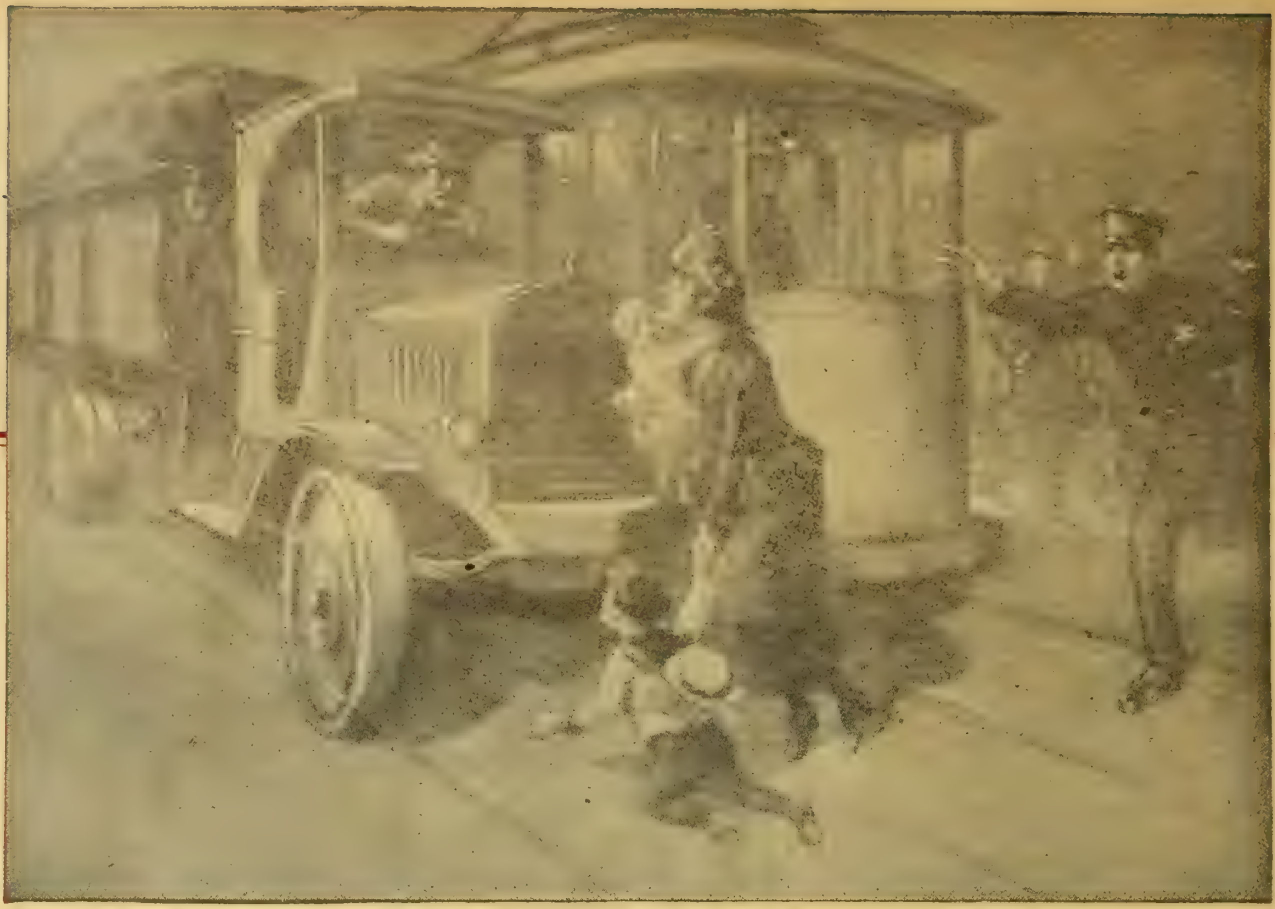

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THE Citizens' Mutual Automobile Insurance Company of Howell, is continuing its remarkable record. The company is now starting its ninth season and has met all of its claims promptly, having paid over 12,600. It is a Michigan company and has carried insurance for such men as ex-Governor Rich, the late Governor Warner, ex-Governor Sleeper, and many of the leading bankers, lawyers, county officers, business men and farmers. It has saved its polity holders, in comparison with stock rates, many million dollars since its organization.

Mutual insurance has proven a success in America. The first American fire insurance company was a mutual company organized by Benjamin Franklin in Philadelphia in 1752. It has been continuous in operation and highly successful and now has net assets of more than a million dollars. Professor John A. Gilmore of Virginia, after careful study, announces that there were about 1550 stock fire insurance companies started business in the United States and 1300, or 84 per cent, have either failed, retired or reinsured. He announces further that there has been about 2900 mutual fire insurance companies organized and 700 of these have failed, retired or reinsured, leaving about 2200 still in existance and doing business today. 84 per cent of the stock companies have failed or retired and only 24 per cent of the mutuals, a splendid showing for the mutuals. An authority on insurance has said that no mutual company that accumulated gross assets of $200,000 or a cash surplus of $100,000 has ever failed in the history of the country.

For example, **You can insure your Dodge car for fire, theft and liability for $10.50** and collision at a small additional cost, other makes at equally low cost.

See local agent or write to

Citizens Mutual Auto Insurance Co.,
Howell, Michigan,
Without obligation tell me what it will cost for the various types of insurance offered by your company, on the following autos or trucks:

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....	....	....

NAME ....

Postoffice.................................... R. F. D. No................

County ....MICHIGAN.

The Citizens' Mutual Automobile Insurance Company

Howell, Michigan

The Michigan

BUSINESS FARMER

An Independent
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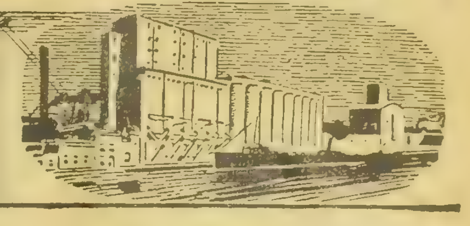
Edited in Michigan



VOL. X, No. 23 SATURDAY, JULY 7, 1923

TERMS: TWO YEARS $1
60c PER YEAR—5 YRS. $2

"Under the Spreading Chestnut Tree"

***In this issue:** Fruit Growers to Compete in World's Markets—Don't Worry About Money. Michigan Has $10,000,000, Says Fuller—N. Y. Dairy League Has Successful Year—Expert Explains Sugar Market*

Current Agricultural News

FARMERS' DAY AT M. A. C. JULY 27TH

Initiated during the war when Michigan farmers were called together in 1918 to consider the possibility of greater wheat production, Michigan Farmers' day, which will be celebrated July 27th of this year, has become one of the farm institutions of the state. Last year 5,000 persons attended the meeting and this year the day, which coincides with the ending of summer school, is expected to bring as many to the local campus.

This year the morning probably will be given over to an inspection of the college farm, the experiment plots, the herds and flocks and other items in which the actual tillers of the soil are interested. In the afternoon, following a picnic dinner, some of the best known men of the country will be present to discuss conditions of agriculture.

LIVE STOCK EXCHANGE HAS 181 LOCALS

Since the Michigan Live Stock Exchange organized its Co-operative commission house at Detroit a little more than a year ago, the membership of the Exchange had grown from 112 locals to 181 locals, thirty-one locals of this number have joined the Exchange since March 1, 1923. Successes of the Michigan Live Stock Exchange Co-operative Commission Merchants and the splendid service being given the shippers is steadily adding members to the Live Stock Exchange. It is reported that every live stock shipping association that investigates the Michigan Live Stock Exchange proposition joins up without further loss of time and starts shipping to the co-op. at Detroit. Just recently the Michigan Live Stock Exchange's Commission House at Detroit prorated a patronage dividend of about $7,000 on its first year's business, representing a ten per cent refund on all commission charges. Nothing like this ever happened when the old line commission firms handled all the business.

POTATO GROWERS ANNUAL MEETING

The regular annual meeting of the Michigan Potato Growers' Exchange will be held August 15th and 16th in the city of Cadillac. This meeting marks the conclusion of five years of successful sales service for this big commodity organization. Delegates from 130 local marketing associations will be present at this convention, besides many visiting members and others who are interested in the operations of the exchange.

LOOK OUT FOR INFERIOR CLOVER

A German firm informs the State Farm Bureau that Europe has very good prospects for a big red clover crop. Conditions are very promising in Austria, Hungary and Roumania. These countries expect to be great exporters of red clover, alsike and timothy in 1923. They are prospecting for markets. Michigan Agricultural College and Michigan farm tests have shown that this seed is far behind our Michigan or northwestern grown clovers. It winter kills. Millions of pounds of this inferior stuff is bound to come in and will be mixed with good seed by some distributors. The Michigan State Farm Bureau Seed Dept. handles only northern grown Michigan and northwest seed. When you plant Farm Bureau brands, you can't go wrong.

RAILROADS TO SPEED FARM SUPPLIES

Special service in transporting farm supplies has been guaranteed co-operative buying associations in the eastern and middle-west states by 12 big railroads as the result of a conference held between representatives of the roads and the farmers' organizations in Cleveland last week. Eight co-operative associations distributing farm supplies were represented, including the Michigan, Indiana and Ohio State Farm Bureaus. The combined purchasing power of the eight organizations, it was estimated at the conference, will reach 25,000 cars this year, including supplies of feed, seed and fertilizer.

WHEAT CROP IN EIGHT FOREIGN COUNTRIES SHOWS INCREASE

The 1923 wheat crop in eight foreign countries that last year produced more than one-fifth the total world crop is forecast at 750,785,000 bushels as compared with 656,988,000 bushels in 1922 according to radiograms received by the United States Department of Agriculture from the International Institute of Agriculture at Rome. The countries include Spain, Bulgaria, Poland. India, Japan, Egypt, Algeria and Morocco.

POTATO EXCHANGE OPENS BRANCH OFFICE

On July 1st the Michigan Potato Growers' Exchange opened a branch sales office at Edmore in Montcalm County to take care of the rapidly increasing business in the Montcalm-Mecosta territory. Mr. George Wagner, well known potato buyer and broker, holds the position of branch manager.

FROM HERE AND THERE IN MICHIGAN

Freemont to have $46,000 modern hotel.

Ewen—New bank building to be erected.

Pickford—New high school to be erected.

Ann Arbor—$1,000,000 library building being erected.

North Adams—Work started on construction of Main street.

Marlette—Much work being done on improvement of water system..

Kalamazoo—Western normal college to have new $190,000 gymnasium.

Laingsburg — Consumers Power Company to furnish light and power here.

Port Huron—Canal to be opened between Lake Huron and Black river.

Ironwood—National charter granted to Merchants & Miners' National Bank, capital $100,000.

Lansing—$5,000,000 bonds issued for road improvements. M. A. C. to build $160,000 stadium. Work started on widening Woodward ave.

Manistee—New water pump to be installed on north side of city. Work started on new band stand on River Street. Gas struck in drilling for oil.

Apprentices are needed in all lines of skilled labor. There is an increasing shortage of competent workers in the building industry and many others.

Growing scarcity of common labor and education of the coming generations toward professional lines will continue to effect our country in the direction of higher cost of living.

Grand Rapids—$150,000 paper company organized here. W. O. Boyle to erect large office building on Lake Drive. Many improvements to be made in sewer system. State Street to be widened soon. Work started on paving Ninth Street.

Saginaw—$500,000 bonds issued for street improvements. Shriners to erect a new temple. Contract let for construction of new club house. Institution for Blind to be enlarged at cost of $40,000. Community house to be erected soon. $12,000 orphan billet to be constructed. Saginaw in midst of building boom.

The National Electric Association is making a survey to determine the location of power plants and transmission lines in Minn., Ia., Mo., Ill., Wisc., Mich., Ind. and Ky. for the purpose of providing for the development of electric current throughout the entire Middle West according to a plan that will avoid duplication and waste.

Detroit—Air freight service to Cleveland to be inaugurated by end of month, three hydroplanes with capactiy of 1200 lbs. freight each to make daily trips. Masonic order to erect $5,000,000 temple, covering entire block and using 8,000 tons structural steel. Tent colony during last fortnight has grown from a handful of open-air residences to a small city containing hundreds of families, who have taken this means of fighting the home shortage and attendant high rentals. Rents in many parts of the city have almost doubled within last month. Ford Motor Company now turning out 6,700 cars a day, expects to maintain same output through 1923 and 1924.

Three thousand carloads of potatoes have been sold for its members this season by the Michigan Potato Growers Exchange. This is 500 cars more than were handled last year.

Kris P. Bemis of Scottville represented the Michigan Potato Growers' Exchange on the recent seed potato growers' tour of Long Island. This island, just at the front door of New York City, is the largest seed potato market in the world, using 500,000 bushels of seed annually.

Summer Cut Price Clean Up Sale

HEAVY O.D. BLANKETS $2.98

Genuine army pure wool blankets worth at least $7.00, full bed size about 66 x 84 inches. The ideal blanket for the home or camping, motoring, etc. Gives more warmth than two ordinary blankets. Sale price only $2.98 plus postage.

BOYS' BREECHES $1.19

Good quality new medium weight khaki cloth laced bottoms. Double patched well made, serviceable breeches. Sizes 10 to 18. Our low price $1.19 Plus Postage.

O.D. WOOL BREECHES $1.98

Army regulation all woo O. D. breeches, made of the finest wool serge and melton materials. Sizes 28 to 36. $1.98 Plus Postage. Slightly used.

NEW O. D. WOOL WRAP LEGGINS 75c

NEW ARMY CANVAS LEGGINS 39c

NAINSOOK ATHLETIC STYLE UNION SUITS Each 48c TWO SUITS 95c

Loose fitting, cool and comfortable. This style suit is the favorite material with many men. All seams are flat sewed, neck and back yoke faced with same material, buttons are securely sewed on and an elastic knit belt across the lower part of the back gives with every movement of the body. Sizes 34 to 46 inch chest measure. White only.

ARMY PONCHO $1.19 Plus Postage

Kahki Rubberized Canvas size 58x72 inches. Guaranteed to shed water. Has opening through the center, allowing it to be thrown over the head like a raincoat, which buttons up and make it absolutely waterproof. practically brand new. It is ideal for drivers of wagons and automobiles, as it completely covers the body and protects the knees and legs like a blanket, leaving the arms free without being cumbersome At only $1.19 Plus Postage

SEND NO MONEY

Examine goods and if you are not conoinced that you have more than your money's worth we will gladly return your money. Don't delay. Order now before the article you want is sold out.

ARMY COATS (BLOUSES) 39c PLUS POSTAGE

Army regulation cotton khaki coats reclaimed by the government. Just the thing for out door wear as hunting, camping, farm work, mechanics, etc. Four pockets, metal buttons. Sizes 32 to 38 only. A dollar value at our special price Plus Postage of.......... 39c

BRAND NEW ARMY KHAKI BLOUSES 89c PLUS POSTAGE

Brand new khaki cotton coats, sizes 34 to 40. Only. Plus Postage.......... 89c

O. D. WOOL COATS

$8.00 would not duplicate this value. U. S. Army regulation O. D. wool army blouses. They are slightly used but in perfect condition, in fact practically as good as new. They are made of fine wool serge and melton, with four pockets. This coat is very neatly tailored. Sizes 34 to 37. Order yours at the low price of Plus Postage.............................. 98c

CAMPAIGN HATS 99c Plus Postage Give Sixe

U. S. Army campaign hats made of pure wool felt. A very serviceable and practical hat for farmers, campers and Boy Scouts. The best grade of wool felt was used in making these hats. Sizes 6½ to 7½. Easily worth our price of 99c.

LADIES AND MISSES KNICKERS $1.39

Extra fine khaki gaberdine knickers, made with slash pockets. Buttoned side openings, loops for belt, fitted waistband, knee bands with adjustable buckles. For misses and women. Waistband sizes 26 to 36. Price $1.39 Plus Postage

ARMY PUP TENTS NEW FOLDING POLES FREE $1.68

Regular United States army issue Pup tents, consisting of two shelter halves. Everyone knows the quality of regular army issue tents, waterproof and of best longest wearing material. Tent is large enough to hold two people. At $1.68 plus postage they are a wonderful bargain.

GUARANTEED TO WEAR ONE YEAR $2.98

U. S. Army Field Shoes, at less than one half the price originally paid by the government. Made of the best leather obtainable, soft toe, bellows tongue; glove finish inside; solid leather counter, steel heel plates. Three full super quality soles, almost impossible to wear them out. Sizes 8 to 11½. Special price Plus Postage...... $2.98

ARMY HOB NAIL SHOES

Same as above but have hob nails in sole and heel. Sizes 8 to 12. $2.89 Plus Postage $2.89

CHAMBRAY SHIRT 59c PLUS POSTAGE

Here men is a good strong shirt of splendid quality Chambray—a shirt that looks neat and gives lots of wear. All seams doubled stitched. Interlined collar. Faced sleeves. One pocket. A wonderful bargain at this price. Sizes 14½ to 17. At 59c each Plus Postage. 3 for.. $1.69

AUTO TOW LINES 79c

Extra fine quality Russian hemp, ⅝-inch, waxed and oiled, has six times the strength of ordinary rope by tests. About 27 ft. long with steel loops and slips on each end, used also for hitch rein, pulley rope, lariat, etc. Extra special 79c Plus Postage.

U. S. SALVAGE CO. Wabasha St., B. Corner 10th ST. PAUL, MINNESOTA

SATURDAY
JULY 21st,
1923

VOL. X, NO. 23

Being absolutely independent our columns are open for the discussion of any subject pertaining to the farming business.

"Hew to the line, let the chips fall where they may!"

The Michigan
BUSINESS FARMER

"The Only Farm Magazine Owned and Edited in Michigan"

Published Bi-Weekly
Mt. Clemens, Mich.

TWO YEARS $1

Entered as second-class matter, August 22, 1917, at the post-office at Mt. Clemens, Mich., under act of March 3rd, 1879.

Fruit Growers To Compete in World's Markets

Important Meeting At Benton Harbor Links All Leading Fruit Shipping Associations into One Big Fruit Selling Organization Under Guidance of Michigan State Farm Bureau

NO one is more aware of the sleeping- sickness which has hovered over the Michigan fruit industry than the fruit growers themselves. When they found their own children buying apples wrapped in Pacfiic coast trade-marked wrappers, they began to rub their eyes —now they are wide-open, and we predict that five years will see Michigan apples, peaches, cherries, grapes and pears in control of the markets. Michigan fruit has that unbeatable quality called "Flavor"—everyone here knows it, now the fruit growers will tell the world about it!

DETERMINED that they will get to the bottom of the question of why California fruit can be placed on the market at Detroit so that it will sell for less money than fruit from the fruit belt of Michigan delegates from 25 of Michigan's leading fruit shipping associations met at Benton Harbor on June 19th. The outcome of this meeting was an organization known as the Michigan Fruit Growers, Inc., a state-wide co-operative fruit selling agency for local associations and their members.

Officers and the Executive Committee were chosen and the Exchange will begin doing business shortly. Central headquarters will be located in Benton Harbor while temporary offices will be established in Grand Rapids during the winter apple shipping season.

The new Exchange will be affiliated with the Michigan State Farm Bureau under the commodity type of organization in the same way that the Michigan Elevator Exchange, the Michigan Potato Growers Exchange, Michigan Milk Producers Association, Michigan Livestock Exchange and the Michigan Produce Exchange are now connected with the State Farm Bureau for the promotion of their mutual interests.

Strong for Organization

The Benton Harbor meeting proved that the fruit growers are thoroughly convinced as to value of co-operative organization and realize that they will never obtain the full return from their crops until they unite and work together in merchandising their crop.

The Michigan Fruit Growers, Inc., is interested in promoting better market returns for Michigan fruit men through co-operative selling, grading, packing and advertising of the whole Michigan fruit crop. The Fruit growers are also interested in better and cheaper transportation service.

One of the biggest problems confronting the new organization is a shortage of refrigerator cars for moving the 1923 crop. A census of the refrigerator requirements of each of the local associations represented at the organization meeting was taken with a view of informing the railroads of just what the actual requirements will be for the coming season. Mr. E. L. Ewing, traffic manager of the Michigan State Farm Bureau, will handle all questions of car supply and other transportation problems for the Michigan Fruit Growers, Inc.

Officers of the Exchange are: President, James Nicol, South Haven; vice-president, M. D. Buskirk, Paw Paw; secretary and treasurer, F. L. Bradford. The officers and Henry Weltman, Stevensville, and Herbert Nafzinger, Millsburg, constitute the executive committee.

Mr. James Nicol, former head of the Michigan State Farm Bureau expressed himself as very enthusiastic over the new organization.

To Fight Competitors

"We found it necessary to organize," said Mr. Nichol, "because there are problems with which we cannot deal through the national organization. We shall continue to make use of the national organization wherever our interests are identical with those of other sections of the country. We are willing to agree with the national marketing agencies not to dump our products into markets already supplied, or we are willing to accept aid in promoting the interests of our industry in a national way, such as by advertising or in the opening up of new marketing areas.

"But we have problems which we cannot expect the national organization to help us in. We cannot hope that the national organization will take sides with us in sectional questions, for it is the function of such an organization to represent the industry as a whole.

"But the Michigan fruit growers, having come into the markets more recently, find that the fruit growing districts which have long been organized have things pretty much their own way.

"This is particularly true of the California fruit growers, who have perfected a most efficient organization. We have to hand it to them; whatever they want they seem able to get. It is because of their efforts and the influence they exert in Washington that we find our industry so discriminated against in the matter of freight rates.

"The fruit growers of Georgia, also enjoy many such preferential arrangements. This they have attained through organization. Now the South is rapidly developing into a favorable market for our products, but we find that it costs us more to send our fruit to Georgia than it costs Georgia growers to market their fruit in our markets.

"At present we are not strong enough to render an effective protest, but within a year or so we are going up to the Interstate Commerce Commission with our complaint and we expect to have united support from the fruit growing interests of Michigan and the powerful co-operation of the Michigan Farm Bureau.

Going After Railroads

"The problem of immediate importance to us is that of refrigerator cars. There are not enough of these cars to meet the needs of the fruit shippers. Accordingly the best organized districts have had more than their just proportion of this service. We are going to serve notice on the railroads of the needs of our industry this year and make a demand for the needed number of cars.

"If we do not receive proper consideration from the railroads we shall be prepared to present our case before the Interstate Commerce Commission. We are informed that we have cause for damages if the railroads refuse to give us adequate service after we have given them them proper notice of the amount of commodities we are prepared to ship.

"The utmost of our energy will be exerted to improve the quality of the Michigan fruit output. In this respect Michigan is at a disadvantage as compared with such highly organized fruit-shipping districts as California and Florida. Those states ship only their best fruit. They can not afford to let poor stuff go to market. In consequence of their systems of grading the quality of their output is always uniform, and the reputation of their product is established in every market.

"We want Michigan fruit to be as favorably known wherever it is offered for sale, and the only way to attain this is to grade the output and offer only articles of approved standards.

Not Against Retailers

"It is no part of our plan to curtail production or to increase prices to the consumers, or to do away with retailers. We recognize that the men engaged in retail trade perform a valuable service. We want to increase the demand for our products by making them more desirable, for that is the only effective way to build business."

The fruit growers already have taken an advanced step toward improving the condition of their products on the market by establishing pre-cooling stations. These are plants having cold storage equipment in which the fruits are chilled and reduced to the proper moisture content before packing in refrigerator cars. It is said that fruit so treated can be marketed in perfect condition anywhere in the country. The fruit growers' exchange now has four of these stations in the fruit belt and expects to increase the number perhaps to 20 or more.

Associations which ratified the by-laws of the Exchange are located at the following shipping points: St. Joseph, Stevensville, Bridgeman, Millsburg, Sodus, Lawrence, Bangor, Fennville, South Haven, Paw Paw, Decatur, Grand Haven, Hart, Shelby, Onekama, Kibbie, Grand Rapids, Saugetuck and Benzonia. Delegates from the Byron Center and Coloma associations were present but lacked home authority to vote. Associations at Sawyer, Hartford, Fremont, Brunswick, Scottville, Dowagiac and Frankfort, are expected to affiliate with the Exchange later in the season.

Don't Worry About Money, Michigan Has $10,000,000, Says Fuller

IF you have been worrying about how to pay your banker, tax-collector and undertaker, forget it, because your own state of Michigan has more cash on hand in its general funds, at the close of its fiscal year, June 30th, than it has had in years.

The exact figures will not be available for a few weeks, as the accounting division of the State Administrative Board will not close its books until July 10. But, reckoning from the last monthly balance sheet up to June 1, the approximately correct figures are that the State will enter the new fiscal year with $9,273,000 cash in the General Fund.

Other items in the assets of the General Fund are:

Deposit to the credit of the State Fuel Administration, being the money set aside for the administrator early last winter but not used, $50,000; bankers' trust deposit for sinking fund interest, $132,172.50; loan to industrial funds, $377, 102.63; due from other funds, $1,160,450; public utility appraisals receivable, $185,987.46; automobile license fees available for the State Highway Department but not apportioned, $491,960; uncollected State tax levy for 1922, $4,000,000.

Total Assets $16,200,000

The total of the General Fund assets is $16,200,000. The liabilities of the General Fund are about $10,000,000, the largest item being between $6,000,000 and $7,000,000 of legislative appropriations made in 1921 but not paid out.

Others of the larger of the State's financial assets not in the General Fund are: In the war loan sinking fund, $658,000; in the soldiers' bonus sinking fund, $1,631,000; in the highway bond sinking fund, $1,650,000; in the auto theft fund, so-called, being moneys received for motor car title certificates, $733,000; in the fund in which is kept moneys received at branch offices for auto licenses, $215,000; fees received from motor car operator licenses, $343,000; in the highway construction fund, $1,717,000; motor car license moneys not yet transferred to the general fund, $1,949,000.

The fiscal year 1922-23 is the first to close in which a balance sheet was made at the end of each month showing the condition of the General Fund.

The State Board of Tax Commissioners has the preliminary work pretty well in hand for the annual meeting of the State Board of Equalization, which convenes the first Monday in August. On that date the tax board will present to the equalization board its valuation of each county. Official notification of these valuations being furnished to the counties, each county, beginning the third Monday in August will have a chance to give reasons, if it has any, why its new valuation should be reduced. Detroit's assessed valuation this year is about $200,000,000 higher than the assessed valuation of 1922.

Commissioner George Lord, of the tax board—the equalization board is composed of the three tax commissioners, Commissioner L. Whitney Watkins, of the State Department of Agruculture, and Auditor-General Oramel B. Fuller—being a resident of Detroit, has been given the work of looking after Wayne County's valuation. All of the 83 counties are grouped in three lots with one tax commissioner looking after valuations in each group.

A table compiled by Commissioner Lord shows that of the $5,622,913,389 assessed valuations reported this year by the 83 counties, about 80 per cent is real property and 20 per cent personal, the exact figures being: Real, $4,490,284,601; personal, $1.132,628,788. Last year the State was equalized at $5,000,000,000.

Information at the tax board's offices is that the valuations of the 83 counties submitted to the equalization board will show total valuations close to $6,000,000,000.

N. Y. Dairy League Completes Successful Year

Did a Gross Business of Over $82,130,000 and Establishes Twenty-Seven New Plants During Second Year of Operation

THE Business Farmer is giving space to the major part of the president's report to members of the Dairymen's League of New York state, at the close of their second successful year, because it is of vital interest to the dairymen of Michigan and other dairy states. New York is blazing the way for successful co-operative milk distributing. It is a gigantic undertaking, as you will see by reading this report. It means going into Big Business, against odds and opposition. It takes men, brains and money, and plenty of each to make a success of co-operative marketing. The New York milk shed is first, but Detroit is Fourth City. Our dairymen must be prepared for the inevitable!—Editor.

THE Dairymen's League Cooperative Association, Inc., has just completed its second successful year as a commercial organization.

We, who are managing your affairs are conscious of the great handicap under which you men are laboring. We know that there has never been a time in the history of this country when the purchasing power of farm products, including milk, was as low as it has been for the past few years. This condition has been with us so long that our patience is very apt to give way. We are worried about our investments and our future and those who have been most progressive are the hardest hit. For many, many years farming including dairying, has been extremel discouraging and for two generations we have watched the boys and girls leave the farm because of the many unattractive conditions. I say unattractive when compared to the more attractive environment of the cities, for the cities have taken the best youth in the land and have prospered. Why? Because they have had the benefit of the wonderfully fertile farms of America and the low prices which the consumers have paid for farm products. City groups have organized, country groups have tried to work as individuals. We cannot help but observe our great disadvantage.

These are all facts which you have known. You all know we have hit bottom, therefore, I could have easily passed them over, but I believe it is better for us to face the facts, firm in the conviction that the way we are following leads to the only logical solution of our economic problem.

Look Into the Future

The turn of the tide is here, so let us look for a moment into the future. Although during the past two years we have been burdened with a great milk surplus, which has brought about ruinously low prices, it is perfectly evident that right now we have one of the most active milk markets that we have known since the war. At the same time every other business is prosperous. Our slogan "Cost of production plus a reasonable profit" is now within the realm of possibility, and I ask this question, "Why are we not getting it—why was the price of milk reduced last month and this—why were four millions of dollars taken from the incomes of the dairymen of this territory in just two months?" Why? Because some farmers still believe in going out alone or in competing groups.

Review Progress

Your organization has proceeded along lines always progressive, and at the same time conservative,—conservative in that it still refuses to plunge into new and untried fields without careful consideration and preparation.

The adoption of a fixed marketing program is decidedly a progressive move. FIRST came the development and expansion of our fluid business. New plants have been built, or acquired, plants have been improved and put under the New York Board of Health. A year ago we had only 400 cans of direct fluid trade, while today we have over 8,000, and of this only 2,000 were obtained by purchase. On June 13th, this reached a new high level, when our own plants shipped into New York City 10,257 cans of milk and 110 cans of cream.

SECOND, the development and expansion of our evaporated milk business. During the past year our plants have been brought up to the highest point of efficiency in production and sanitation with greatly increased capacity. Our policy is to turn out the best evaporated milk in the world. It was upon this plan, permanently fixed in our minds that our new selling and advertising campaign was based, putting Dairylea milk on the same price level with other leading advertised brands of evaporated milk.

Fluid Milk First, Evaporated Second

We have selected these two lines of production in which your association has a distinct competitive advantage. Fiuld milk always first, and evaporated milk second. This does not mean that future changes in marketing conditions may not lead us into other endeavors. For this coming year, however, our whole efforts are being thrown into selling these two leading products.

In having these great evaporating plants, our farmers are kept constantly under the New York Board of Health supervision and a great volume of class one milk is available for shipment on a moment's notice and at times, when it is not needed for fluid consumption, we are diverting this high grade product, not into butter and cheese, but into the much more profitable by-product, evaporated milk. In the selection of the new trade name "Dairylea," we have a different idea with but little change. This name is unique, and all our own.

Subject to Attack

During the past year, cooperative associations have been subject to attacks from certain interests that still seem to cherish the hope that they will be able to break up these farmers' organizations. The League has, of course, had to withstand its share of these attacks. In its marketing operations, it has been a popular target. Much of this criticism, we know, has been due to a lack of understanding of what the association is trying to do. However, recent months have witnessed a decided weakening of this hostility toward the organization. Business men, bankers, and the public generally are beginning to recognize your association, not only as a progressive business concern but as an institution destined to accomplish a great work in lifting farm life to a higher level than it has ever attained before.

In all its business relationships, the association has maintained a business-like attitude. Your officers and directors have felt that only by adhering strictly to constructive policies can any co-operative enterprise hope to achieve real and lasting success. This attitude, perhaps, more than any one thing is gradually winning for the association stronger support from its members and from the general public.

In short, we are beginning to realize more fully our responsibilities to each other as members of one great enterprise. We also recognize, as an association, our responsibilities to all other co-operative marketing and buying associations throughout the length and breadth of this land. They have many things in common. The misfortunes of one has its sympathetic reaction in all the others. Likewise, the successes of one of them carry encouragement and hope to all the others.

More than this, we recognize our great responsibilities as a big service organization to the general public, especially the consuming public. Our great purpose is not to fix the price of the commodity which we have to sell, but to so work out the problem of distribution and marketing that the farmer will get a fair price for his milk and the consumer will get all the benefits of uniform quality and service that orderly marketing can provide.

Within one year the League has put its own plants in a position where they can do their part in tak-

(Continued on page 17.)

Expert Explains What is Happening in the Sugar Market

By SIMON G. PALMER, Sugar Statistician, Washington, D. C.

THE recent spectacular rise in the price of sugar, the second within the past three years has attracted universal attention and condemnation. Responsibility for such perpendicular market movements usually is traceable to the parties who have most to gain by them. Normally, all of our sugar comes from two sources; domestic, including beet, Louisiana cane and insular, and foreign sugar from Cuba. Inasmuch as the domestic crop had all been harvested and most of it marketed before the rise came, most of the domestic producers had nothing to gain, however high prices might go. The reverse of this condition existed in Cuba, which had just started grinding a crop estimated at about 4,000,000 long tons, of which only 343,663 tons had been made and exported when the rise began.

From late in December and all through the first three weeks of January while domestic beet sugars were being marketed the N. Y. price of imported raws and of refined made from them was falling, the total amounting to ½c per pound. All of a sudden the price of both raw and refined shot upward, raws advancing $3.19 and refined $3.33 per hundred.

One of the reasons which our seaboard refiners assign for the rise is that the tariff on sugar was increased late last year. They do not allude to the steady decline which preceded the rise, nor do they explain how an increase of duty of sixteen one-hundredths of one cent per pound could be responsible for an increase of over $3.00 per hundred in the price of sugar.

The other reason given by the seaboard refiners is that one of the four leading sugar statisticians of Cuba reduced his earlier estimate of the Cuban crop now being harvested to 3, 670, 000 long tons. The three other statisticians adhere to their estimates of 3, 725,000; 4,000,000 and 4,119,000 long tons, respectively. It is worthy of note that during all this sugar shortage excitement, Willett & Gray our most reliable sugar crop statisticians have not reduced their Cuban crop estimate of 4,000,000 tons and on the world crop, their latest figures show an increase of 513,182 tons over last year's crop. It thus would appear that both reasons given are mere camouflage, used for the purpose of fooling the American people.

Present Price and Production Cost

Nor does it appear that the present high price of sugar bears any relation to the cost of production. At the time the sensational perpendicular rise began, Cuban sugar was selling at prices more than one-third higher than the average price Cuba had received for her sugar for 10 years prior to the war and hence it is to be assumed that her producers already were making a handsome profit. Sugar has gone up considerably over 3c per pound and since the rise set in Cuba has exported 2,108,000 tons, on which a rise of 3c would net her producers an extra profit of $126,000,000. But this is only beginning. On May 19, the port warehouses of Cuba were bulging with 812,000 tons of sugars, on which 3c a pound represents an extra profit of over $49,000,000. In addition to this, on May 19 there were 532,000 tons of manufactured sugar at plantations and in transit to shipping ports, on which an extra profit of 3c per pound means an additional $32,000,000. In addition to this, based on the lowest crop estimate yet made by any sugar statistician, they will produce another 248,000 tons before they cease grinding, on which an extra 3c per pound will yield them still another $15,000,000. So that altogether, the 3c rise will have cost the American people the enormous sum of $222,000,000 and will have added a like sum to the net profits of producers of sugar in Cuba.

It is not to be assumed however, that this $222,000,000 of extra profit bled from the American people goes to enrich the people of the Island of Cuba, for the Cuban sugar industry is no longer Cuban. Ever since the Cuban reciprocity 20 years ago American seaboard refining and other American interests have gradually been acquiring Cuban caneland and sugar mills and erecting new mills until to-day they admit that two-thirds of the crop now is produced by Americans. They admit that the American investment in

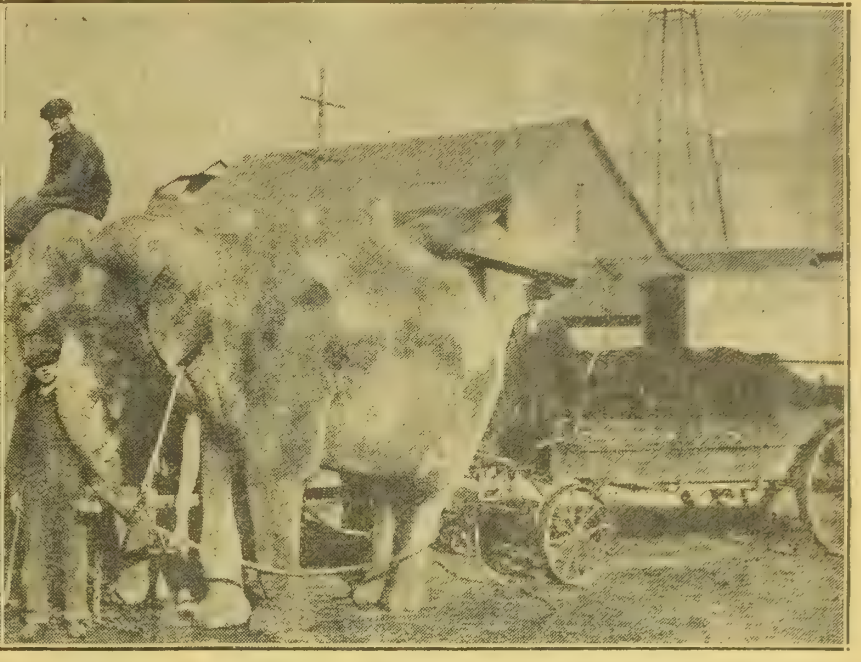
(Continued on page 19.)

STEERS IN LOT 1 IN M. A. C. FEEDING EXPERIMENT

Here we have the nine steers that were fed normal silage in the feeding experiments conducted by the M. A. C. last winter. This lot was appraised at $10.25 per cwt. at the Detroit market.

PICTURES FROM FAR AND NEAR

WORLD'S LARGEST SHIP RETURNS FROM TRIAL RUN.—Uncle Sam's giant liner, the Leviathan, on the recent trial run to the Bahamas and return acquired the title of "Queen of the Seas" by proving herself the fastest liner afloat, establishing the record of 28.04 knots in one hour. It will be remembered that the Leviathan is the former German Vaterland and that the United States has been reconditioning the liner. This month it will make its first trans-Atlantic trip under the flag of the United States Shipping Board. Officials are pleased with the performance of the Leviathan on her trial trip and state that she will do even better in crossing the Atlantic.



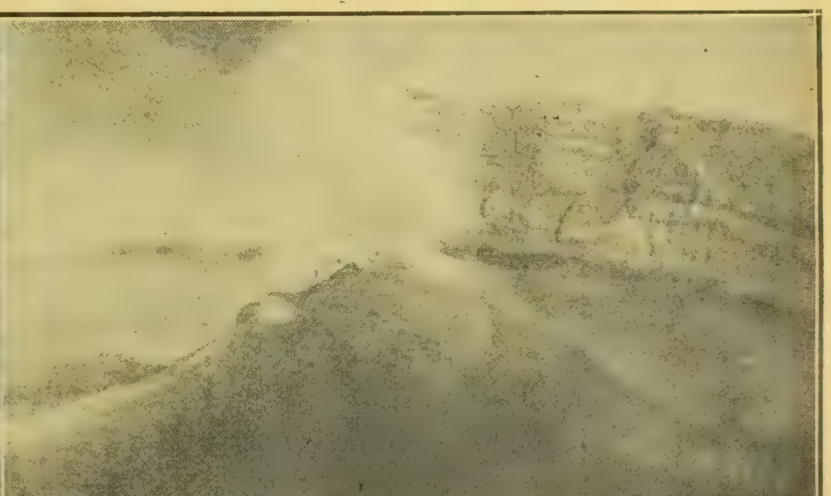
ELEPHANTS PULL MACHINERY ON CIRCUS FARM.—On the Wallace farm which was established by the late B. E. Wallace, founder of the Hagenbeck-Wallace circus, such sights are common during the winter months. This farm is the winter quarters of the John Robinson and Sells-Floto circuses, is composed of 550 acres and located near Peru, Indiana. Five manure spreaders like the one shown here are used on this farm and many times they are pulled by elephants as the spreaders are loaded so heavily that often horses or mules cannot pull them. It is through the courtesy of the International Harvester Company that we are able to publish this photograph.

NEW PREMIER ARRIVING AT No. 10 DOWNING STREET.—Here we have the latest picture of Premier Stanley Baldwin arriving at his new home in London, No. 10 Downing Street, to begin the business of prime ministering. Although he accepted the position only a short time ago he is filling the place of the former prime minister very satisfactorily and his friends predict that he will become one of England's greatest premiers.

HUNDREDS VIEW WEST POINT GRADUATION EXERCISES.—High military officials helped make the graduation exercises at West Point, New York, memorable. Parades, drills, etc., were the order of the day, and the men acquitted themselves as good soldiers should. Photo shows Gen. Pershing congratulating Cadet Francis Rarick Johnson, of Tacoma, Washington, the honor student of the class of 1923.

NEED A GOOD TINNING JOB DONE?—Here is Mrs. Catherine Fellers of Cincinnati, Ohio, who at sixty-five, is just beginning to get a little fun out of life. She is the only woman tinner we ever heard of, and has been in the business for forty years. She first started as a helper to her husband after they were married, and when he died she took over the job alone. Mrs. Fellers is just as spry today as she was years ago.

CEMENTING THE FRIENDSHIP BETWEEN AMERICA AND FRANCE.—American and French soldiers took part in the unveiling ceremonies of a beautiful monument erected at Chaumont, France, depicting the aid and friendship given by the Americans during the World War, to the French. Its symbolic artistry is truly beautiful.



MOUNT ETNA ERUPTS AGAIN.—Europe's greatest volcano, Mount Etna, has just completed an eruption that caused damage amounting to over $14,000,000. Towns were wiped out and hundreds of lives lost during the few days the burning lava poured down the sides of this great mountain which is located in Sicily. Many new craters were opened.

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To support herself and child.
Because he had no insurance.
See page 24 right now.
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CAN CONTROL BLACK KNOT OF PLUM

Is there any cure for Blackknot on plum trees?—W. M., Clayton, Mich.

—The Black Knot of plum can be controlled by carefully cutting out and removing from the orchard all of the diseased parts. The best time to do this trimming is in the winter or spring before growth starts. If the disease is well started, the cutting out of knots must be continued through the summer and close inspection will be necessary the first year to eradicate the new knots which will appear. After the disease is well in check a single annual inspection will keep it under control. Sprays help to some extent but will not take the place of cutting out the knots.—C. W. Bennett, Research Assistant in Plant Pathology, Michigan Agricultural College.

NOTE OUTLAWS IN SIX YEARS

Suppose one party has a note against another for a certain amount of money, without any security only names of husband and wife owing the money. The note has been running three and four years already. But is only made for one year. Little is being done in keeping up the interest. About one and a half years interest has been paid so far. I would like to know if there is any such thing as the note becoming outlawed according to Michigan laws? Is there such laws in effect? What is the time limited? What should one do to keep the note from being outlawed if there is a danger and what is your best advice to collect any on the note?—G. H. S., Boyne City, Mich.

—The time within which suit must be brought on a note in Michigan is 6 years. Payment of interest would revive the debt, however, and the 6 year time limit, in that event, it would probably be advisable to be figured from the date of the last interest payment. If there is no prospect of collecting in any other way sue on the note.—Asst. Legal Editor.

MARKETING MOHAIR

Will you please tell me a reliable place to market Angora goats wool or Mohair and how much more should it bring per pound than sheep's wool?—V. N., West Branch, Mich.

—I believe that you could market this through the wool pool of the State Farm Bureau to excellent advantage. The Secretary of the American Angora Goat Breeders' Association is C. E. DeGoff, Reed Springs, Missouri, and he could no doubt give you valuable information as to mills which are purchasing mohair. The value of mohair per pound varies a great deal, even more than sheep's wool. Where one takes excellent care of his goats and produces a first class quality of mohair, it brings a higher price per pound. On the other hand, where the goats are not well cared for and properly handled, it is worth very little more than wool.—Geo. A. Brown, Professor of Animal Husbandry, M. A. C.

WANTS TO COLLECT STORAGE CHARGES

I would like a little information on this subject. An agent came to my place on the 18th of July, 1921, with a second-hand separator and asked me to buy it. I told him "no" I did not want it. But he wanted to put it in the house for a while as he said he didn't have room in his auto to take it home, so I let him leave it. He said "use it if you want to." In three months he came back and I told him again I didn't want it. We were going to move in a few days and he asked me if I would take it with me to help him out. So I told him I would. He said "if you can sell it I will give you $5." Now after bothering with it he doesn't want to pay me anything for my trouble. He wrote me last week he had sold it and the man would be after it. I wrote him and said when he came and paid for taking care of it he could have it. Now we haven't any use for it. He says we used it and that paid us for our trouble. Can he take it without paying storage on it?—E. B., Bentley, Mich.

—In absence of any expense or implied agreement it would be assumed that your use of the separator would be your compensation for keeping it. In order to recover a greater amount, it would be necessary to show that the agent expressly agreed to so compensate you, or that the circumstances were such as to imply such an agreement.—Asst. Legal Editor.

SPRAY TO USE ON PEAR, PLUM AND PEACH TREES

I am writing to ask your advice about a suitable spray solution to be used for pear, plum, cherry and peach trees. I use lime sulpher and arsenate for apple trees but I have set out some of the above named fruit trees this spring and would like to know what to spray them with.—E. R., Standish, Mich.

—The pear, plum and peach trees should receive the dormant application of lime-sulphur solution. The cherry does not ordinarily need to be sprayed with the dormant application. It is too late now, however, to make this application on any of the trees and it is probable that there was not much need for the spray except possibly on the peach trees for leaf curl. They should all be sprayed early next Spring in order to prevent injury from San Jose scale and from leaf-curl on peaches. We will send you our bulletin giving directions for spraying all kinds of fruits.—W. C. Dutton, Research Associate, Dept. of Horticulture, Mich. Agricultural College.

TAXING CATTLE

On the 7th day of May of this year I had 300 steers shipped here to graze. Will sell and ship them out this fall. Will I be compelled to pay taxes on them here? At that late date would they not be assessed where I bought them, near Bad Axe, Michigan? How long would cattle have to be in a township before they can be assessed?—J. C., Gaylord, Michigan.

—Uuder the provisions of the Tax Law of the State of Michigan, it is presumed that all property will be assessed. Section 17 of the General Tax Law provides that "no change of location or sale of any personal property after the first day of May in any one year shall affect the assessment made in such year", yet this does not mean that the assessing officer is limited to the first day of May in making his assessment. It only provides that a change in location or sale of property after the first day of May shall not affect the assessment.

Some years ago we requested an opinion from the Attorney General as to whether or not an assessing officer could add to his assessment roll personal property brought into the assessing district after the second Monday in April. In his opinion, the Attorney General said that "assessing officers are not obliged to assume that property which comes into their assessing district after the sceond Monday in April, or even after the first day of May, has been assessed for taxation in some other district. In a good many cases delays in transit occur, or delays in the actual work of assessing in the district from which the property came, or in other cases property coming in from some other state where the time of assessment is different from that of Michigan, might vitally affect the question. Where, however, the owner of the property feels he has been wrongfully assessed, he should undoubtedly make his showing to the board of review and obtain such relief as he is entitled to. Unless you can show that the cattle were actually assessed for this year in the locality where they were purchased, we believe the assessing officer will be justified in in placing them upon the assessment roll.—Board of State Tax Commissioners.

WEEVILS IN BEANS

Two years ago I raised beans. They were all right. Planted seed last year and my beans were nearly all full of bugs. Some have told me it was the time you planted them. If this is true I would like to know what is the cause and what time of the year they should be planted?—W. W. W., Quincy, Mich.

—I believe that much of the trouble arising from bean weevils is due to carelessness in sowing "boggy" beans. The treatment recommended now-a-days, is really quite cheap. It consists in fumigating with carbon disulphide which costs about 6c per pound now, if purchased of the makers in fifty pound drums. To be sure it costs ten or twelve times that much if purchased at the drug stores in one or two pound lots. One can pay for the drum and get his money back after returning the drum.

This material can be used to kill woodchucks, gophers and other vermin about the farm. Use about one pound to fifty bushels in a tight bin, and take every precaution possible to avoid accident by fire or by breathing the fumes. The fumigation should be put on during warm weather since no fumigant works well when the temperature is down. This fumigation should be done at a distance from barns and other buildings since the fumes from the carbon disulphide might work down and kill animals in the barn. Also the insurance lapses during the operation if done in the barn. Air the beans well after the operation is completed in order to rid the beans of the oder.

The bean weevil will continue to work in dried beans until they are completely destroyed. Fumigation should be carried on not more than forty-eight hours since a longer exposure is likely to injure the germinative power of the seeds.

As a final warning, great care must be exercised to avoid accident from an explosion or from anything breathing the fumes.—R. H. Pitt, Professor of Entomology, M. A. C.

WHAT SHARE SHOULD B GIVE?

If A furnishes a brood sow for B to raise pigs or hogs on shares what share should he give if pigs were sold when old enough to wean, and what share should he give if he fitted them for market (light weights)?—Reader, Byron, Mich.

—If the pigs were sold at the weaning age B should receive whatever share would reasonably compensate him for his labor in taking care of them and for the feed required from the time he received the brood sow. If they were fitted for the market B would be entitled to a greater share because of his greater expense in fitting them for the market. A should give B whatever share is reasonable according to the circumstances and the general custom observed in the community.—Asst Legal Editor.

HORSESHOE PITCHING

I SUPPOSE you horseshoe pitching fans are planting 'em right next to the stake (those that aren't ringers) figuring on trying for the big silver loving cup given by the Business Farmer to the champion pitcher of Michigan, decided at the State Fair. Last year it was won by Mr. L. M. Wilks of Battle Creek but he must win it two times more before it belongs to him permanently so you have ample opportunity to wrestle it from him, that is providing you "slipper slammers" get busy and practice. There is no question in my mind but that there is a farmer in Michigan who can win from Mr. Wilks but don't forget, this man from Battle Creek was in Florida last winter playing, finishing seventh in the national tournament, while you were wallowing through snow banks. So you better practice. And say, don't argue, just send to the Horseshoe Editor of the Business Farmer for a free copy of the National Rules and carry it in your hip pocket. Then if your partner starts arguing prove it to him. No doubt many of you have held local tournaments already and I would like to hear about them. What is your best record in a game? How many ringers can you get in 50 points, pitching 40 feet? Come on boys, let's have a farmer state champion this year.—Horseshoe Editor.

State Fair is Now a $5,000,000 Project

A BIG step forward in the Michigan State Fair's race not only to hold supremecy but to win international supremecy is predicted by Secretary-Manager George W. Dickinson for this year's exposition which will be held in Detroit from August 31 to September 9.

The Michigan State Fair is now a $5,000,000 project. The premiums will go over $100,000 and $50,000 worth of free attractions will be offered for the entertainment of visitors in addition to the many exhibitions and the twenty-two big shows on the "Midway."

The live stock and agricultural exhibits are constantly growing and the fair officials are struggling with the problem of accomodating them. Within the next year, however, spacious new buidings will be erected under the latest $1,000,000 bond issue, which was authorized by the legislature this year.

These exhibits this year are expected to excel in quantity and quality the exhibits of former years.

An interesting action of the fair management this year is the increase in accomodations and premiums for horses. Horse lovers and horse breeders have felt that this subject had not received enough attention in years past so the fair board decided to do everything possible from now on to encourage the breeding of fine horses of every class.

Mr. Dickerson is now in correspondence with the state and federal governments in an effort to bring on even more extensive exhibits this year. The federal government has already pledged an excellent dairy exhibit which should prove of great value to every dairyman.

The 1923 dog show should be a "thriller." Dogs of all kinds will be exhibited but the big attraction will be the demonstrations by trained Police Dogs. They will show how they guard property, find lost objects and catch fleeing criminals.

Cat show, poultry show, domestic science and manual training exhibitions, gardening exhibit, apiary exhibit and many others have been arranged. The electrical and mechanical exhibits are expected to be quite complete and very interesting.

"All work and no play makes Jack a dull boy" is something Mr. Dickerson believes in. As a result he has arranged an entertainment program that will be without equal in the nation.

On the "Midway" where there will be twenty-two snappy shows, life will be one round of pleasure. In selecting these shows Mr. Dickerson and members of the business committee made a special trip to Indiana in order to make sure that the shows were not only real high class, worth while attractions, but also that there would be nothing in any of them that might offend the wives and children of fair visitors.

The shows, which have been highly praised by the press in many cities passed the Michigan State Fair's inspection with flying colors.

The entertainments classed as free attractions include many of the best acts in the country. There will be horse races featuring the famous trotter, Peter Manning, driven by America's Premier reinsman, Thomas W. Murphy.

Peter Manning will race against the Michigan State trotting record of 1:59¾ and Mr. Dickerson predicts that a new mark will be set.

Three great bands have been engaged for concerts and other musical numbers. The 91st Highland band of Canada, an organization that made an enviable reputation before and during the war will appear under the direction of Lieutenant Stares. Cervonis concert band and a military hussar band also have been engaged.

There will be auto polo matches, thrilling balloon and parachute races, a girl will ride a horse in a 40-foot dive and there will be a number of tumbling and exceptionally good aerial acts. Two great fireworks demonstrations have been arranged. One will be given twice daily during the fair. The burning of Smyrna will be depicted the first three days and from then on the spectacular feature "India," which includes live elephants driven by Hindus in native costumes, will hold forth.

In the automobile races half a dozen or so high powered machines, piloted by crack drivers, will be entered. Keen competition is promised and it is hoped records will be set for this track.

Both from the agricultural and entertainment viewpoints the fair this year will excel any that has been held in the country and fully half a million persons are expected to attend during the ten days. Arrangements are being made to accomodate each day 1,000 automobile tourists. They may pitch their tent within the fair grounds and "keep house" there for a reasonable sum.

MICHIGAN FAIR DATES

FAIR	PLACE	DATE
Aloona	Harrisville	
Allegan	Allegan	Aug. 28-31
Alpena	Alpena	
Arenac	Standish	Sept. 18-21
Armada	Armada	Sept. 18-21
Baraga	Baraga	
Calhoun	Marshall	Sept. 18-21
Caro	Caro	Aug. 20-24
Charlevoix	East Jordan	
Cheboygan	Wolverine	Sept. 25-28
Chippewa	S. Ste. Marie	Sept. 10-13
Chippewa	Pickford	Sept. 17-19
Clare	Harrison	Sept. 18-21
Clinton	St. Johns	Sept. 3-6
Cloverland	Stephenson	
Copper	Houghton	Sept. 25-29
Croswell	Croswell	Sept. 11-14
Delta	Escanaba	Sept. 18-21
Dickinson	Norway	Aug. 31-Sept. 3
Eaton	Charlotte	Sept. 25-28
Emmet	Petoskey	Sept. 11-14
Flint River	Montrose	
Fowlerville	Fowlerville	
Genesee	Davidson	Aug. 27-31
Gladwin	Gladwin	
Gogebic	Ironwood	Aug. 28-31
Grange Fair	Centerville	Sept. 17-22
Grangers, Gleaners' and Farmers' Fair	Big Rapids	Sept. 25-29
Gratiot	Ithaca	Aug. 28-Sept. 1
Greenville	Greenville	
Hillsdale	Hillsdale	Sept. 24-29
Huron	Bad Axe	Aug. 28-31
Imlay City	Imlay City	Sept. 11-14
Ionia	Ionia	Aug. 14-17
Iosco	Tawas City	Sept. 11-14
Iron	Iron River	
Isabella	Mt. Pleasant	Sept. 4-8
Jackson	Jackson	Sept. 10-15
Lenawee	Adrian	Sept. 17-21
Livingston	Howell	Aug. 28-31
Luce	Newberry	Sept. 4-6
Mackinac	Allenville	Sept. 20-22
Manistee	Onekama	
Marquette	Marquette	Sept. 10-15
Mason	Scottville	Sept. 12-14
Mich. State	Detroit	Aug. 31-Sept. 9
Midland	Midland	
Missaukee	Lake City	
No. Branch	North Branch	Sept. 18-21
N. W. Mich.	Traverse City,	Sept. 17-21
Northern Dist.	Cadillac	
N. E. Mich.	Bay City	Aug. 27-31
Oakland	Milford	Sept. 12-15
Oceana	Hart	Sept. 18-21
Ogemaw	West Branch	Sept. 5-7
Otia	Brahman	Sept. 15
Otsego	Gaylord	Sept. 18-21
Ottawa, Kent	Marne	
Presque Isle	Millersburg	Sept. 12-14
St. Clair	Yale	Sept. 25-28
Saginaw	Saginaw	Sept. 10-16
Sanilac	Sandusky	Sept. 4-7
Schoolcraft	Manistique	Sept. 25-27
Shiawassee	Owosso	Aug. 21-24
South Ottawa & W. Allegan	Holland	Sept. 11-14
Stalwart	Stalwart	Oct. 4-5
Tri-Co. Fair	Buckley	
Tuscola, Huron & Sanilac	Cass City	Aug. 14-17
VanBuron	Hartford	Sept. 25-29
Washtenaw	Ann Arbor	Sept. 18-22
Wayne	Northville	Sept. 25-29
West. Mich.	Grand Rapids,	Sept. 17-21

TRAINING TOMATO VINES

ONE tomato vine properly pruned and trained to a support of some kind will produce as much fruit as two that are allowed to grow at will. The tomatoes will also be of better quality and ripen more uniformly. By pruning, I mean the removal of surplus growth which appears usually at the base of each branch after fruit has begun to set. There is a general opinion that the ground for tomatoes should not be manured; but if the shoots which heavy manuring causes to grow so readily are removed, the strength that would otherwise take the form of excessive growth goes into the maturing fruit. Either a trellis of wire or one straight stake as is some times used for grapes, should be provided, and the vine tied to it with soft strings. It is often desirable to use three light stakes driven down in the form of a triangle and tied together at the top. A tomato vine that is trained to one straight trunk should reach a height of four or five feet, depending on the variety. The sun can reach every part of it, and there will be little cause for rotten fruit.—H. F. Grinstead.

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THE Government does not guarantee us any income.

The rates fixed by the Interstate Commerce Commission are intended to be such as will enable the railroads as a whole to earn at least 5¾% on the value of their properties. Out of this net income they must meet interest on debt, pay dividends to the stockholders and build up a surplus as required by prudent business management.

The railroads earned 3.31% in 1921, and 4.14% in 1922. This year they hope to do better. They must do better if necessary new capital is to be attracted to railroad development.

It was only during the period of Government operation that railroad net income was guaranteed. That income was based on pre-war earnings, and averaged 5⅓% on the value of railroad property.

If any railroad fails to earn 5¾% on its investment, the Government doesn't make up the difference; and the law provides that anything earned above 6% must be equally divided with the Government.

As stated by the Interstate Commerce Commission in a recent decision, the rate provision of the Transportation Act "carries with it no guarantee", but "it is, instead, a limitation".

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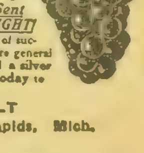

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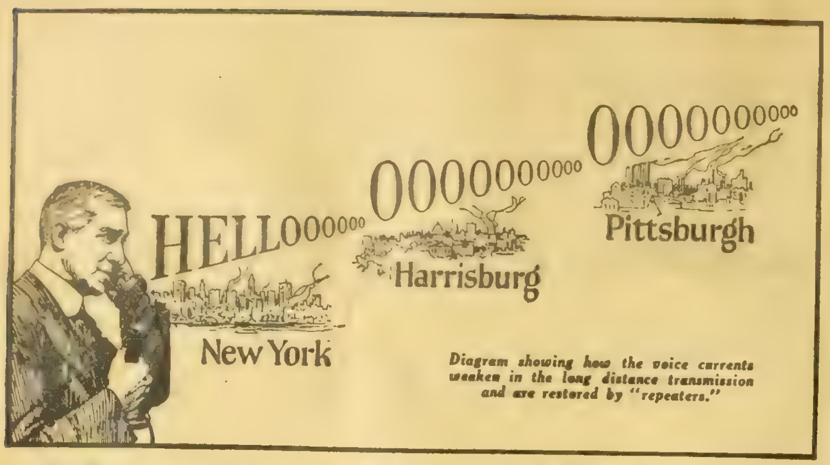

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What the Neighbors Say

DOES ONAWAY NEED A MARKET?

I HAVE read with a great deal of interest your articles on Farmers' Markets and I see no reason why a Farmers' Market could not be established in our little city of Onaway and be run successfully.

Onaway has a population of 3,000 and labor is well employed here. One factory here employs 1000 to 1200 men and of course there are other smaller institutions. Laboring men are so completely employed by the factory that it is next to impossible for a farmer to hire a man.

I have taken this matter up with our county agent, Mr. I. J. Sours, and he is going to take it up with the Chamber of Commerce, the editor of our paper the Outlook, and others. A word of encouragement from you might help the matter along. Anything you can do along this line will be greatly appreciated. —E. G. Storm, Onaway, Mich.

—Our readers near Onaway, ought to get busy right away if they want to get a farmers' market in operation there this season. We suggest a Saturday morning market to start with. Mr. E. G. Storm deserves the active help of the business farmers near Onaway and we are sure he will get it.—Editor.

DOESN'T LIKE WORK OF HIGHWAY DEPARTMENT

WOULD you like to know something about Branch Trunk Road No. 57, Boyne Falls to Boyne City and then to Walloon Lake? Why has the state been over five years on part of this road? Why does the state spend money on road across private property which has not been condemned but which must be before they can get title? Why do they abandon good road along settled and cleared farms which has been used and kept up at a cost of $1,800 per year by state and county for years for an almost impossible route through swamp for three miles with no family on same and one-half mile longer? Why fight? Court battled over three years and they started work before the outcome of the court proceedings. Have they the advantage of pre-court decision? Do you think it is right for private money to have to foot the bills for those proceedings? When finished it will be just a gravel road but it has already cost enough to have made the old road a 20-ft. cement driveway. The building of this road is in a sinking swamp. Rebuilding it this spring and again next spring as will be necessary will cost more than the entire old route would. Rogers turned this route down and it was given up in favor of the old route before the war, but two men were powerful enough to have it reconsidered. So at last Rogers said in letter that he would build on proposed new route if right of way was got and they are still fighting for that right of way. But they have fooled Rogers into thinking they had it, so he let contract. He knows now that one of the many suits that have been brought is pending in the Supreme Court and also some talk of investigation. He has, for awhile, at least, quit work on road and refused to gravel but the powers-that-be here in county regardless of state actions are going ahead on the two most disputed farms so as to get travel on it this summer. The two farms are ruined by road as was promised they would be if owners fought the road. Nearly $100,000 has been wasted so far. Would you like all the facts or history of this road back over 15 years? This is not very much of this history but enough to find out if you are interested. The deal has been rotten, the facts as stated and many more and worse can be proven. Went to see Rogers last June, personally, and he promised me that he would stop all work on disputed farm until they got title, if ever. He let work go on three weeks, spent over $6,000 on this farm and got the work in such shape that when they come to condem it again, no three men would dare say it was not necessary. And besides they took good care not to let it be seen by commissioners in summer when damage to farm could be easily seen but brought them here in middle of winter when everything was burried under three feet of snow. If you look into this matter don't do as the ——— ——— did by writing to men here. It got a very brief answer that there was nothing to it. Their one big worry has been that their methods and the facts would leak out. Court actions have been kept very quiet, nothing in local papers and never a word in any outside paper and yet a big story here of dirt, fraud and misunderstanding. Hope you will take time to figure this out, have done the best I could under present conditions.—C. L. G., Boyne City, Mich.

SOMERSET FARMERS FAVOR A THEORETICAL EDUCATION

THE Tri-County Grange of Somerset, Mich., held a debate as the Literary part of their program, Friday evening, June 22nd. The question was: "Resolved, that a practical education is better than a theoretical one!"

Col. E. H. Kerr, Master of the Grange acted as chairman. The judges selected were J. M. Bowyer, DeWitte Sawyer and Mrs. Henry Herrald. The affirmative was supported by Samuel LeMaster and Floyd H. Smith and the negative side by Shirley L. Burr and George B. Smith.

The affirmative contended that the most successful men, including Abraham Lincoln did not go to school beyond the eighth grade, that the prisons are full of college graduates, and that students from the agricultural college are at a disadvantage when placed in competition with practical farmers. A case was cited where an agricultural student who hired out on a farm, tried to harness a team of mules by putting the crupper straps around the mules necks. They also contended that taxes paid to support our high schools are putting the farmers in the hole financially, causing bankruptcy in many cases.

In the opinion of the judges the negative effectually tore down the arguments of the affirmative by citing actual statistics, regarding the percentage of college graduates in prison, and also the percentage of college graduates in prison, and also the percentage of successful men who are college graduates, having acquired theoretical training before entering upon business.

They contended that the farmers financial troubles are caused rather by a neglect of theoretical training in the principles of economics and government. They pointed out that theoretical training along mechanical lines, has produced great labor saving devices on farm and in factory, but that a lack of proper theoretical training in economics and government, had brought about an unfair distribution of the benefits derived, the result being that 65% of the present wealth of the country is in present wealth of the country is in the hands of 2 per cent of the population. They maintained that this condition could be corrected by supporting the schools through excess profit taxes and surtaxes instead of direct taxes as at present.

They charged that neglect of theoretical education among the masses on the subject of taxation, is fostered by millionaires who endow colleges and contribute campaign funds to both political parties, in order that they may keep the voters in ignorance or confused on these important subjects, so that in the last session of Congress such taxes were reduced rather than increased.

They even expressed the belief, that, with an increase of theoretical education on this one subject, an industrial millenium can be brought about by one decisive election, possibly that of next year, that the farmer can be freed from his present heavy burden of taxes by throwing it upon those better able to pay, that currency deflation brought about by the money power can be checked, if farmers will study theory and give less attention to propaganda given out by those claiming to be practical politicians.—F. H. Smith, Secretary.

"Say, young feller, d'ye know how clost ye come to shootin' my prize Holstein? Ye knocked the hat offen the hired man when he wuz milkin' of 'er."—Judge.

THE SECRET OF SIMPLE LIVING

A SERMON BY REV. DAVID F. WARNER

TEXT: "Be not therefore anxious, saying, 'What shall we eat?' or 'What shall we drink?' or, 'Wherewithall shall we be clothed?' for after all these things do the gentiles seek. * * But seek ye first his kingdom, and his righteousness, and all these things shall be added unto you."—Matt. 6:31-33.

"SUFFICIENT unto the day is the evil thereof." And there is enuf in this day to test well our outlook on life; to test its simplicity. With "wars and rumors of wars" added to all other disorders of modern life; its intemperance, luxury, gaeity, and artificiality; we are in much confusion. And we are looking for an escape? We shall find it in the secret of simple living. One who cares to live the life that lifts is fondly longing to discover this secret.

Someone has said this generation is given over to "food and fun." What folly! And how far retired from the Christian ideal! Being anxious, distracted about what we shall eat, drink, and wear is the spirit of the heathen world, said Christ. Have you never visited the folks with apparently simple wants and manners, who lived out in the peace of the hills, and by murmuring rivers, and with all nature to calm their souls? And haven't you said to yourself surely this is the simple life? Did our Lord refer to such as these? Or did he refer to those who live in the environment of art and culture? No matter, so long as the bite of food or the outer garment claims the prime attention and intention of life. No matter, so long as life is lived for "food and fun." Here one's plans are brief and sensual and life is easily disturbed and given over to anxiety. "Be not anxious for your life." And yet for many of us, life is narrow and anxious, not broad and free. We live in bewilderment and confusion because we live for the present and for ourselves instead of living for two worlds and for others. Therefore life loses genuine simplicity.

But what is the secret of simple living? Paul found it in a certain "goal" toward which he was pressing; in a specific type of character which he called the "high calling of God." This he calls a secret of such comparative value as to count all other things as but refuse. In Emersonian thought and figure, he had hitched his wagon to a star. Life was not eating and drinking but a high-orderd purpose to establish the Reign of God.

Then that life is simple which is long-sighted in its vision, and which runs along the far-reaching plans of our Father in heaven. That life is complex and wordly which is short-sighted in its vision; out of touch with God and his plans for the ages; cumbered about with temporal things instead of being urged with an eternal purpose; and which is concerned with fleeting appearances instead of spiritual experiences.

When shall we see that the simple life is one controlled by the inner law? In proportion as we have to be controlled by external law; by outward restraints; in that proportion is our life complex and disorderly. Of course, immature life is regulated, for the most part, by an external law of restraint, as for instance, the life of children. But do we want to remain as children in mind and morals. Then control must come from within. And this is our only salvation from anxious, worried living. It is the only thing which makes you plain in your living, high in your thinking, and exalted in your resolves and purposes. In World War days I took a party of friends to visit the Wright aviation field at Dayton. We appeared at the gates but I had forgotten my pass. Were we to be admitted? I spoke to a soldier on guard. But he refused. Then he spoke to a corporal higher up. They were weighing the matter. This was an irregularity. Who knows but what this party might be here to prey upon Uncle Sam's soul and spread disorder in the camp. But we were admitted. Just so, many complexities and disorders get into our life because a selfish you stands guard; a you of pagan interests and tastes. The "corporal higher up" is not consulted; that sovereign, inner law of the Spirit; that writing upon the heart. And the whole world needs a dedication to this life principle of seeking first the love of God and the love of one's neighbor, to exalt her to a state of harmony and peace. That we have the opposite of peace means that we are at cross-purposes with God.

So when life is centered in the love of God and our fellow man; eating, drinking, and dressing are but incidents in our passing. And in these there is modesty and simplicity. Certainly, there is a demand for a growing consciousness of the real value of simple dressing. The demand of the Spirit for modest attire is that we might be "a typical instance of all who were to believe in him (Christ) and gain eternal life."—Moffat. This ideal will rid us of much of the vanity and snobbishness shown in present day dressing. Says Miss Blood, of the Columbia School of Oratory, culture will do this. Certainly, Christian culture will for Christ says that such pride and guadiness is but the hangins-on of paganism.

Neither, defile your body thru foods. Here again, is demanded the inner law of restraint. Even Topsy, the old family mare had it, for father said, no matter if she gets to the oats bin she will eat no more than she needs. This kind of horse sense is much need by some humans. Know ye not that your body is not an experimental labratory? But "Know ye not that your body is a temple of the Holy Spirit which ye have from God"? Defile it not thru intemperance in eating or drinking.

But simplicity touches all phases of living and is meant to be both a personal and a social asset to the world. It has to do with our home life, our pleasures, and our business. But one cannot be simple in the detailed outer life until simplicity touches one's thinking and one's resolves; the aspirations and loves of one's heart. So again, the secret is discovered in Isaiah 26:3, "Thou wilt keep him in perfect peace whose mind is stayed on thee".

"The mind is its own place and can make a heaven of hell or a hell of heaven". And says the Infinite Purpose, "As a man thinketh in his heart so is he". With a mind stayed on the purpose of God, there is security and fine prospect. Ideally, with this man, there should be no worry about what to-morrow might bring forth. "Sufficient unto the day is the evil thereof." This is the secret of simple living.

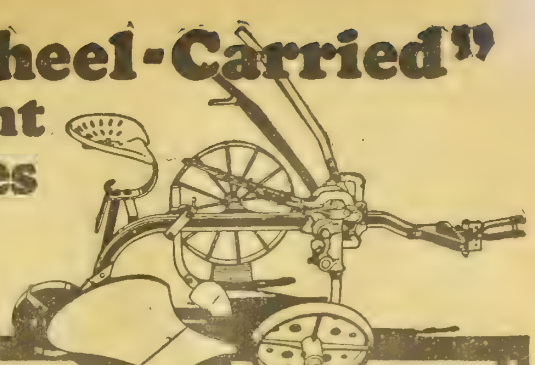
But many of us have not yet reached this celestial plane in life. Yet it is enough to be reaching after it. Still, multitudes of folks have their minds stayed on self. And some of them live in the M. B. F. parish. Day after day you have gone to your fields and your kitchens depending upon our own right arm, our own strength; in a word, self-confident. You did it yesterday and succeeded. Why not today? Yesterday your body was strong, brain was clear, and foot was sure. You depended on our own self and was not disappointed. Why not today? And so it happens that today again you easily cope with all the daily demands. And why not tomorrow?

Well, tomorrow comes with the first illness, the first gray hair, the first revelation of the loss of strength. And what disappointment! You had not seen yourself before as becoming enfeeble. You had stayed your mind on what you supposed to be a perfectly able self. Now, your support is going, your life is shrinking, occasioning a bitter surprise. Your house is beginning to fall. And are you still anxious for tomorrow? Learn the secret of simple living, which is a God-reliance instead of a self-reliance. "Come now, ye that say, today or tomorrow we will go into the city and spend a year there, and trade, and get gain; whereas ye know not what shall be on the morrow. What is your life? For ye are a vapor that appeareth for a little while, and then vanisheth away." And James says further that "all such glorying is evil" when God is left out of our plans.

Here is the essential, "Seek first

(Continued on Page 17)

"All Wheel-Carried" Pulls Light and Makes a Good Seed Bed



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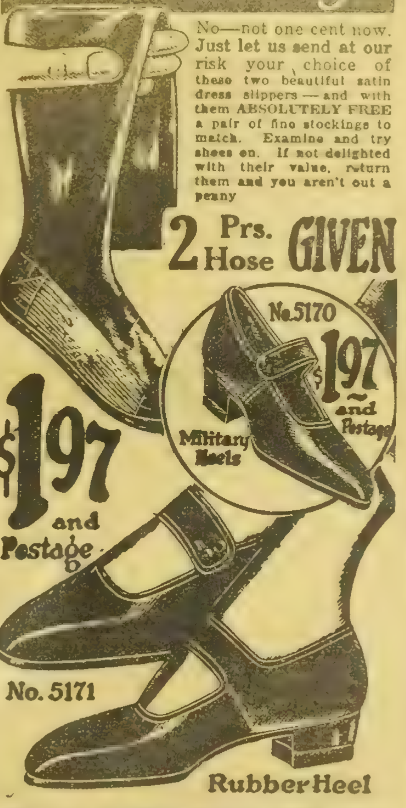

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YOU'LL BE INTERESTED IN WHAT WE HAVE TO OFFER IT'S ON PAGE 24

The Hunted Woman

By James Oliver Curwood

Michigan's Own and America's Formost Auther of the Great Northwest

(Copyright by James Oliver Curwood

ntinued from June 23rd Issue)

SHE limped into the tepee with John's arm snugly about her slim waist. MacDonald waited patiently until he returned. He motioned Aldous to seat himself close at his side. Both men lighted their pipes before the mountaineer spoke.

"We can't both sleep at once tonight, Johnny," he said. "We've got to take turns keeping watch."

"You've discovered something today?"

"No. It's what I haven't discovered that counts. There weren't no tracks in this valley, Johnny, from mount'in to mount'in. They haven't travelled through this range, an' that leaves just two things for us to figger on. They're behind us—or DeBar is hitting another trail into the north. There isn't no danger ahead right now, because we're gettin' into the biggest ranges between here an' the Yukon. If Quade and Rann are in the next valley they can't get over the mount'ins to get us. Quade, with all his flesh, couldn't climb over that range to the west of us inside o' three days, if he could get over it at all. They're hikin' straight for the gold over another trail, or they're behind us, an' mebby both."

"How—both?" asked Aldous.

"Two parties," explained MacDonald, puffing hard at his pipe. "It there's an outfit behind us they were hid in the timber on the other side of the snow-ridge, and they're pretty close this minute. Culver Rann—or FitzHugh, as you call him—is hustling straight on with DeBar. Mebby Quade is with him, an' mebby he ain't. Anyway, there's a big chance of a bunch behind us with special instructions from Quade to cut our throats and keep Joanne."

That day Aldous had been turning a question over in his own mind. He asked it now.

"Mac, are you sure you can go to the valley of gold without DeBar?"

For a long half minute MacDonald looked at him, and then his voice rumbled in a low, exultant laugh in his beard.

"Johnny," he said, with a strange quiver in his voice, "I can go to it now straighter an' quicker than DeBar! I know why I never found it. DeBar helped me that much. The trail is mapped right out in my brain now, Johnny. Five years ago I was within ten miles of the cavern—an' didn't know it!"

"And we can get there ahead of them?"

"We could—if it wasn't for Joanne. We're makin' twenty miles a day. We could make thirty."

"If we could beat them to it!" exclaimed Aldous clenching his hands. "If we only could, Donald—the rest would be easy!"

MacDonald laid a heavy hand on his knee.

"You remember what you told me, Johnny, that you'd play the game fair, and give 'em a first chance? You ain't figgerin' on that now, be you?"

"No. I'm with you now, Donald. it's——"

"Shoot on sight!"

"Yes."

Aldous rose from his seat as he spoke.

"You turn in, Mac," he said. "You're about bushed after the work you've done to-day. I'll keep first watch. I'll conceal myself fifty or sixty yards from camp, and if we have visitors before midnight the fun will all be mine."

He knew that MacDonald was asleep within fifteen minutes after he had stationed himself at his post. In spite of the fact that he had had almost no sleep the previous night, he was more than usually wakeful. He was filled with a curious feeling that events were impending. Yet the hours passed, the moon flooded the valley again, the horses grazed without alarm, and nothing happened. He had planned not to awaken old Donald at midnight, but MacDonald roused himself, and came to take his place a little before twelve. From that hour until four Aldous slept like dead. He was tremendously refreshed when he arose, to find that the candle was alight in Joanne's tepee, and that MacDonald had built a fire. He waited for Joanne and went with her to the tiny creek near the camp, where both bathed their faces in the snow-cold water from the mountain tops. Joanne had slept soundly for eight hours, and she was as fresh and as happy as a bird. Her lameness was almost gone, and she was eager for the day's journey.

As they filed again up the valley that morning, with the early sun transfiguring the great snow-topped ranges about them into a paradise of colour and warmth, Aldous found himself mentally wondering if it were really possible that a serious danger menaced them. He did not tell MacDonald what was in his mind. He did not confess that he was about ready to believe that the man on the snow-ridge had been a hunter or a prospector returning to his camp in the other valley, and that the attack in Tete Jaune was the one and only effort Quade would make to secure possession of Joanne. While a few hours before he had almost expected an immediate attack, he was now becoming more and more convinced that Quade, to a large extent, had dropped out of the situation. He might be with Mortimer FitzHugh, and probably was—a dangerous and formidable enemy to be accounted for when the final settlement came.

But as an immediate menace to Joanne, Aldous was beginning to fear him less as the hours passed. Joanne, and the day itself, were sufficient to disarm him of his former apprehension. In places they could see for miles ahead and behind them. And Joanne, each time that he looked at her, was a greater joy to him. Constantly she was pointing out the wonders of the mountains to him and MacDonald. Each new rise or fall in the valley held fresh and delightful surprises for her; in the craggy peaks she pointed out castlements, and towers, and battlemented strongholds of ancient princes and Kings. Her mind was a wild and beautiful riot of imagination, of wonder, and of happiness, and in spite of the grimness of the mission they were on even MacDonald found himself rejoicing in her spirit, and he laughed and talked with them as they rode into the North.

They were entering now into a hunter's paradise. For the first time Joanne saw white, moving dots far up on a mountain-side, which MacDonald told her were goats. In the afternoon they saw mountain sheep feeding on a slide a half a mile away, and for ten breathless minutes Joanne watched them through the telescope. Twice caribou sped over the opens ahead of them. But it was not until the sun was settling toward the west again that Joanne saw what she had been vainly searching the sides of the mountains to find. MacDonald had stopped suddenly in the trail, motioning them to advance. When they rode up to him he pointed to a green slope two hundred yards ahead.

"There's yo'r grizzly, Joanne," he said.

A huge, tawny beast was ambling slowly along the crest of the slope, and at sight of him Joanne gave a little cry of excitement.

"He's hunting for gophers," explained MacDonald. "That's why he don't seem in a hurry. He don't see us because a b'ar's eyes are nearsighted, but he could smell us half a mile away if the wind was right."

He was unslinging his long rifle as he spoke. Joanne was near enough to catch his arm.

"Don't shoot — please don't shoot!" she begged. "I've seen lions, and I've seen tigers—and they're treacherous and I don't like them. But there's something about bears that I love, like dogs. And the lion isn't a king among beasts compared with him. Please don't shoot!"

"I ain't a-goin' to," chuckled old Donald. "I'm just gettin' ready to give 'im the proper sort of a handshake if he should happen to come this way, Joanne. You know a grizzly ain't partic'lar afraid of anything on earth as I know of, an' they're worse'n a dynamite explosion when they come head-on. There—he's goin' over the slope!"

"Got our wind," said Aldous.

They went on, a colour in Joanne's face like the vivid sunset. They camped two hours before dusk, and MacDonald figured they had made better than twenty miles that day. The same precautions were observed in guarding the camp as the night before, and the long hours of the vigil were equally uneventful. The next day added still more to Aldous' peace of mind regarding possible attack from Quade, and on the night of this day, their forth in the mountains, he spoke his mind to MacDonald.

For a few moments afterward the old hunter smoked quietly at his pipe. Then he said:

"I don't know but you're right, Johnny. If they were behind us they'd most likely have tried something before this. But it ain't in the law of the mount'ins to be careless. We've got to watch."

"I agree with you there, Mac," replied Aldous. "We cannot afford to lose our caution for a minute. But I'm feeling a deuced sight better over the situation just the same. If we can only get there ahead of them!"

"If Quade is in the bunch we've got a chance of beating them," said MacDonald, thoughtfully. "He's heavy, Johnny—that sort of heaviness that don't stand up well in the mount'ins; whiskey-flesh, I call it. Culver Rann don't weigh much more'n half as much, but he's like iron. Quade may be a drag. An' Joanne, Lord bless her!—she's facing the music like an' 'ero, Johnny!"

"And the journey is almost half over."

"This is the fourth day. I figger we can make it in ten at most, mebby nine," said old Donald. "You see we're in that part of the Rockies where there's real mount'ins, an' the ranges ain't broke up much. We've got fairly good travel to the end."

On this night Aldous slept from eight until twelve. The next, their fifth, his watch was from midnight until morning. As the sixth and the seventh days and nights passed uneventfully the belief that there were no enemies behind them becamse a certainty. Yet neither Aldous nor MacDonald relaxed their vigilance.

The eighth day dawned, and now a new excitement took possession of Donald MacDonald. Joanne and Aldous saw his efforts to suppress it, but it did not escape their eyes. They were nearing the tragic scenes of long ago, and old Donald was about to reap the reward of a search that had gone faithfully and untiringly through the winters and summers of forty years. He spoke seldom that day. There were strange lights in his eyes. And once his voice was husky and strained when he said to Aldous:

"I guess we'll make it to-morrow, Johnny—jus' about as the sun's going down."

They camped early, and Aldous rolled himself in his blanket when Joanne extinguished the candle in her tent. He found that he could not sleep, and he relieved MacDonald at eleven o'clock.

"Get all the rest you can, Mac," he urged. "There may be doings tomorrow—at about sundown."

There was but little moonlight now, but the stars were clear. He lighted his pipe, and with his rifle in the crook of his arm he walked slowly up and down over a hundred-yard stretch of narrow plain in which they had camped. That night they had built their fire beside a fallen log, which was now a glowing mass without flame. Finally he sat down with his back to a rock fifty paces from Joanne's tepee. It was a splendid night. The air was sweet and cool. He leaned back until his head rested against the rock, and there fell upon him the fatal temptation to close his eyes and snatch a few minutes of the slumber which had not come to him during the early hours of the night. He was in a doze, oblivious to movement and the softer sounds of the night, when a cry pierced the struggling consciousness of his brain like the sting of a dart. In an instant he was on his feet.

In the red glow of the log stood Joanne in her long white night robe. She seemed to be swaying when he first saw her. Her hands were clutched to her bosom, and she was staring—staring out into the night beyond the burning log, and in her face a look of terror. He sprang toward her, and out of the gloom beyond her rushed Donald MacDonald. With a cry she turned to Aldous and flung herself shivering and half-sobbing into his arms. Gray-faced, his eyes burning like the smouldering coals in the fire, Donald MacDonald stood a step behind them, his long rifle in his hands.

"What is it?" cried Aldous. "What has frightened you, Joanne?"

She was shuddering against his breast.

"It—it must have been a dream," she said. "It—it frightened me. But it was so terrible, and I'm—I'm sorry, John. I didn't know what I was doing."

MacDonald had drawn very close.

Joanne raised her head.

"Please let me go back to bed, John. It was only a dream, and I'll tell it to you in the morning, when there's sunshine—and day."

Something in MacDonald's tense, listening attitude caught Aldous' eyes.

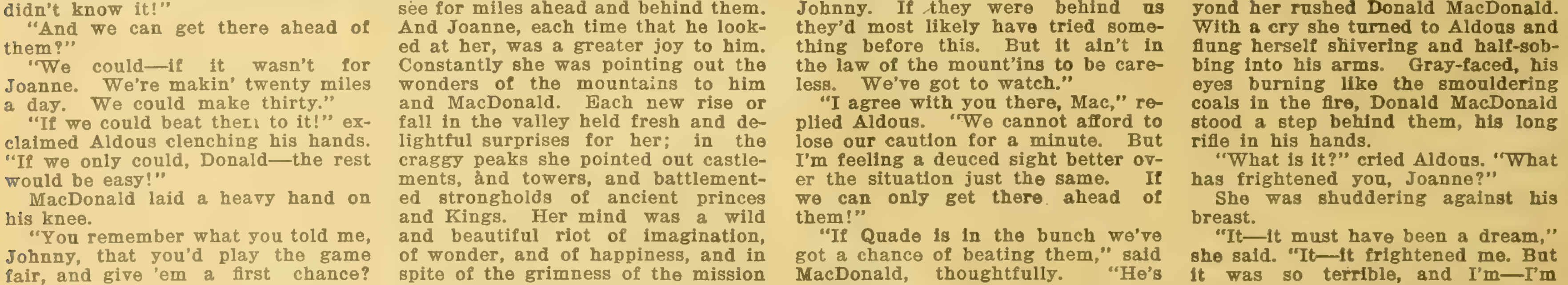
"What was the dream?" he urged.

She looked from him to old Donald, and shivered.

"The flap of my tepee was open," she said slowly. "I thought I was awake. I thought I could see the glow of fire. But it was a dream—a dream, only it was horrible! For as I looked I saw a face out there in the light, a white, searching face—and it was his face!"

ALL IN A DAY'S WORK WITH THE COUNTY AGENT

By Tyson


6 A.M.
AN HOUR OF OFFICE WORK—AND THEN—
HENRY-WON'T HE SET UP OUR RADIO SO WE CAN HEAR THAT CONCERT TO-NIGHT?
8 A.M. NEW SALEM—COAXES A CRANKY TRACTOR INTO GOOD HUMOR AGAIN
10 A.M. PRESCOTT—HELPS FARMER STONE DRAW UP HIS WILL.
12 M—FREESTONE—LEADS A FIELD MEETING IN WILL JOHNSTON'S ORCHARD.
2 P.M. SALISBURY: LAYS OUT A FERTILIZER DEMONSTRATION IN TOM ARTHUR'S FIELD CORN
4 P.M. STOVER: FARMER JONES IS BUYING A NEW BULL.
8 P.M. LANCASTER: TALKS "BETTER FARMING" TO THE GIRL AND BOY SCOUTS.
2 A.M. EN ROUTE— JOHN BROWN IN PINETREE (10 MILES AWAY) HAS JUST PHONED FOR HELP WITH A SICK HORSE

"Whose face?"

"Mortimer FitzHugh's," she shuddered.

"Yes, it was surely an unpleasant dream, dear," he comforted her. "Try and sleep again. You must get all the rest you can."

He closed the flap after her, and turned back toward MacDonald. The old hunter had disappeared. It was ten minutes before he came in from out of the darkness. He went straight to Aldous.

"Johnny, you was asleep!"

"I'm afraid I was Mac—just for a minute."

MacDonald's fingers gripped his arm.

"Jus' for a minute, Johnny—an' in that minute you lost the chance of your life!"

"What do you mean?"

"I mean"—and old Donald's voice was filled with a low, choking tremble that Aldous had never heard in it before—"I mean that it weren't no dream, Johnny! Mortimer FitzHugh was in this camp tonight!"

CHAPTER XXV

DONALD MacDONALD'S startling assertion that Mortimer FitzHugh had been in the camp, and that Joanne's dream was not a dream, but reality, brought a gasp of astonishment and disbelief from Aldous. Before he had recovered sufficiently from his amazement to speak, MacDonald was answering the question in his mind.

"I woke quicker'n you, Johnny," he said. "She was just coming out of the tepee, an' I heard something running off through the brush. I thought mebby it was a wolverine, or a bear, an' I didn't move until she cried out your name an' you jumped up. If she had seen a bear in the fire-glow she wouldn't have thought it was Mortimer FitzHugh, would she? It's possible, but it ain't likely, though I do say it's mighty queer why he should be in this camp alone. It's up to us to watch pretty close until daylight."

"He wouldn't be here alone," asserted Aldous. "Let's get out of the light, Mac. If you're right, the whole gang isn't far away!"

"They ain't in rifle-shot," said MacDonald. "I heard him running a hundred yards out there. That's the queer thing about it. Why didn't they jump on us when they had the chance?"

"We'll hope that it was a dream," replied Aldous. "If Joanne was dreaming of FitzHugh, and while still half asleep saw something in camp, she might easily imagine the rest. But we'll keep watch. Shall I move out there?"

MacDonald nodded, and the two men separated. For two hours they patrolled the darkness, waiting and listening. With dawn Aldous returned to camp to arouse Joanne and begin breakfast. He was anxious to see what effect the incident of the night had on her. Her appearance reassurred him. When he referred to the dream and the manner in which she had come out into the night, a lovely confusion sent the blushes into her face. He kissed her until they grew deeper, and she hid her face on his neck.

And then she whispered something, with her face still against his shoulder, that drove the hot blood into his own cheeks.

"You are my husband, John, and I don't suppose I should be ashamed to let you see me in my bare feet. But, John—you have made me feel that way, and I am—your wife.

He held her head close against him so that she could not see his face.

"I wanted to show you—that I loved you—that much," he said, scarcely knowing what words he was speaking. "Joanne, my darling——"

A soft hand closed his lips.

"I know, John," she interrupted him softly. "And I love you so for it, and I'm so proud of you—oh, so proud, John!"

He was glad that MacDonald came crashing through the bush then. Joanne slipped from his arms and ran into the tepee.

In MacDonald's face was a grim and sullen look.

"You missed your chance, all right, Johnny," he growled. "I found where a horse was tied out there. The tracks lead to a big slide of rock that opens a break in the west range. Whoever it was has beat it back into the other valley. I can't understand, s'elp me God. I can't, Johnny! Why should FitzHugh come over into this valley alone? And he rode over! I'd say the devil couldn't do that!"

He said nothing more, but went out to lead in the hobbled horses, leaving Aldous in half-stunned wonderment to finish the preparation of breakfast. Joanne reappeared a little later, and helped him. It was six o'clock before breakfast was over and they were ready to begin their day's journey. As they were throwing the hitch over the last pack, MacDonald said in a low voice to Aldous:

"Everything may happen today, Johnny. I figger we'll reach the end by sundown. An' what don't happen there may happen along the trail. Keep a rifle-shot behind with Joanne. If there's onexpected shooting, we want what you might call a reserve force in the rear. I figger I can see danger, if there is any, an' I can do it best alone."

(Continued in July 31st Issue)

Uncle Rube Spinach Says:

WHAT'S COMIN' NEXT?

IT'S gettin' to be a pretty lively ol' world, now, ain't it? We've pretty night got to go armed even to go up town. Well mebbe it ain't so bad as that here in my home town but when I read of the things that're goin' on in other places I'm gettin' scart just a bit—I'm takin' not so many chances an' go out in daylight an' not very far then.

When I read the papers and learn that 15 year old girls have commenced shootin' ol' fellers, killin' 'em deader'n a door nail, I'm just lettin' lots of daylight shine between me an' all kinds of women.

Anna Daidoue, age 15, shot an' killed her suitor, Frank Loranto, aged 40. At 15 Anna should not have had a suitor—she should be playin' with her dolls an' livin' like a girl of that age ort to live.

At 40 Frank Loranto ort to have known better'n to be foolin' around with young girls of 15 years of age.

Killin' a man like that mebbe is helpin' society some—any way we can git along without men like that, but it ain't always Frank Loronto's that's bein' killed.

You know it's gittin' to be rather a common thing for a woman to shoot a man—always, or most generally its 'cause the man has done her a wrong—that's always her plea—she has "been betrayed by him" an' she kills him an' a jury will usually aquit her of the murder charge an' she is free to go out an' be betrayed agin an' mebbe shoot up some other guy who happens to fall for her kind of love.

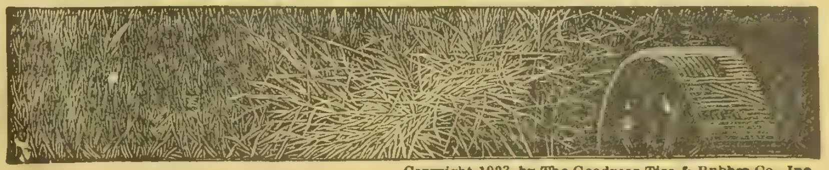
I'm not sayin' but what some men should be shot an' even killed—some of 'em deserve it—I'd like to shoot a few of 'em myself—but jest the same I don't believe women should have a monopoly on the shootin' business. An' so you see I'm kinda keepin' sly of meetin' 'em 'cause they're gettin' too handy with their arm'aments. Women are all right in their proper place if you get what I mean. I sort of kinda like 'em an' all that, but I don't like the idea of 'em bein' so handy an' being ready to snuff a man's life out without a minute's notice.

No man should ort to be killed without a little chance to git ready for the change. It's a serious sort of a thing to jump out of this world into another—one we don't know a thing about, an' so I sez there should be a curb of some sort put onto our women. Make 'em take out a license for killin' or do sim'lar, so's we'll know what to expect an' when to expect it.

Now you know I ain't sayin' a word agin women—not reg'lar women so to speak, but with so many killin's an' everything I'm gettin' afraid.

An' so, for fear I might say something that would rile some female woman up a little, I'll jest stop right here. Cordially yours, UNCLE RUBE.

THEY MAKE EVERY MINUTE COUNT



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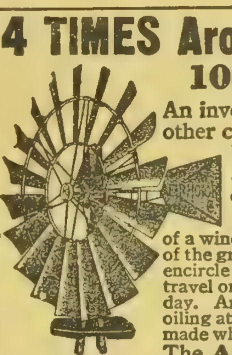

An inventor who could develop an automobile, a railroad car or any other conveyance on wheels which would perform such a feat would be considered a wonder. But such is the record of regular accomplishment by the Auto-oiled Aermotor during the past eight years in pumping water.

Did you ever stop to think how many revolutions the wheel of a windmill makes? If the wheel of an Aermotor should roll along the surface of the ground at the same speed that it makes when pumping water it would encircle the world in 90 days, or would go four times around in a year. It would travel on an average 275 miles per day or about 30 miles per hour for 9 hours each day. An automobile which keeps up that pace day after day needs a thorough oiling at least once a week. Isn't it marvelous, then, that a windmill has been made which will go 50 times as long as the best automobile with one oiling?

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BUSINESS FARMER

SATURDAY, JULY 7, 1923

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"The Farm Paper of Service"

STATE TREASURY FLUSH

ABOUT the most welcome news that we could hope to spread from this page is the report from Mr. O. B. Fuller, Auditor General, that the state of Michigan closed the fiscal year on June 30th with nearly $10,000,000.00 in cash in its state funds.

Farmers are going to begin to wonder right away if it is not possible to reduce the tax burden which has been around their necks for the past few years, and The Business Farmer wants to go right on record that this is no time for the state to accumulate a cash reserve when the farmers of the state have been suffering from so long a depression.

Mr. Fuller issues another hopeful note in that the 1923 state tax is likely to be $16,000,000 which would represent a reduction of $1,300,000 from the 1922 levy. During the past few months Wayne, Macomb, and St. Clair Counties have been entirely reassessed and it is said that the increased assessment in Wayne County alone amounts to $200,000,000, which indicates in a small way, at least, the growth and prosperity of Michigan's metropolis.

With the increased valuation and the lowering of state expenditures which Governor Groesbeck has worked so diligently on, it is to be hoped that the yoke may be lightened at least somewhat during this year. There is absolutely not the slightest question but what increasing taxes were arriving at a point where agriculture in this state could not bear the load which it was asked to carry. The news of lowered taxes is therefore most gratifying and will do much to rebuild a sound agriculture in Michigan.

NEW YORK DAIRY LEAGUE A SUCCESS

IF you are a milk producer shipping in the Detroit area you ought to be interested in the president's report which is practically a summary of the second successful year of the New York Dairymen's League which has gone into the milk situation in America's greatest milk market in a manner that is strikingly commendable.

Nearly one-tenth of all the men, women and children in the United States of America live in the New York Milk area, and each morning must find on their doorstep fresh milk for their daily food requirements. The problem of producing this milk and getting it to them fresh and economically is one which staggers the imagination, and that the dairymen themselves, after years of unsuccessful dealings through middlemen, in this market, should have come to the solution of operating their own business and providing a means of outlet for their by-products is an object lesson for the dairymen of Michigan.

Our milk-producers must not overlook the fact that Detroit is now fourth city and that other metropolitan districts of Michigan are increasing in population more rapidly than any other similar section of the United States. The problems of New York state are or will be identical with our own. Our dairymen might as well be prepared for the inevitable.

Like every other cooperative marketing association, the Dairymen's League has been subjected to a consistent attack which is aimed (as all other similar attacks are aimed) at the morale of its members. If the enemy of cooperative marketing can destroy the faith of the individual member in the officers or leaders of the enterprise in which they are engaged, there is no question but that they can spell its ruin.

The foundations of great business are not built in a minute. Only experience can guide the footsteps of these courageous leaders, who are pioneering the distribution of milk by the producers themselves, in the world's greatest milk market.

It might be possible for those now in control of the milk distribution in the Detroit area to work out a practical plan with the milk producer, which would split the possible profit fifty-fifty and to formulate a workable plan which would not require the milk producer to actually go into the business of distribution. However, those in control of the situation do not seem willing to recognize the inevitable and so in justice to their own business the milk producers of Michigan must be studying the plan which New York state has been working out with the success indicated in this article.

We advise every milk producer to take time now, or lay this copy aside until he has time, to read and digest this report.

WHAT IS HAPPENING TO SUGAR BEETS?

IF you have been wondering what is going to happen to the sugar beet industry now that the sugar profiteers once again have in their control the price of sugar in these United States, you will be interested in the article by Simon G. Palmer in this issue.

The beet sugar industry in America is facing a crisis. Not that the crisis is any more acute today than it was five years ago, but it is more apparent. As has been pointed out, the United States, which could raise all the sugar needed in the world in its own beet fields, now supplies less than two-fifths of its own consumption, and depends on the cane growers of Cuba and other foreign countries for the principal supply of one of it greatest necessities. Unless this industry is protected it is easy to predict that within five years bats will be flying through factories in Michigan, Colorado and California, and the towering smoke stacks will be only monuments to an industry which once promised so much to both the producer and the consumer.

M. A. C. POT STILL BOILING

WE predicted that the ousting of Dr. Friday, former president of the Michigan Agricultural College, would hardly clear the atmosphere or prove to be a step in the right direction unless it be that his martyrdom should mark the ending of politics in the administration of our college.

Now reports tell us that the state administrative board has withheld all extension funds until the college authorities give the board the information it desires regarding the connection between the extension fund expenditures and activities of the Michigan State Farm Bureau. This order withholds approximately $150,000 appropriated for the college by the last legislature, and means that so long as this horn-locking continues all extension work at the college will have to cease.

Some time ago the state administrative board decided to investigate the claim that the partial payment of the county agent by the State Farm Bureau was leading to a virtual control by that farmers' organization. The Secretary of State was empowered to investigate and his claim now is, that he has not been able to get the information which is desired from Farm Bureau officials. Of course all of this is a petty squabble, in which the innocent by-stander, which happens in this case to be our own agricultural college, is the only one that will particularly suffer. Right now, at a time when extension work is most important; in a season of the year when the farmers of Michigan most need its services and when they are beginning to cash-in on the work which the extension department can do for them, there arises a political squabble which makes this department entirely inactive and impotent.

Over in Oklahoma, as you will note by reading "This Week's Editorial" they are having the same kind of trouble where politics has crept into the administration of the state's agricultural college. If you get any consolation out of others' troubles similar to your own, you can read that with some satisfaction.

In the meantime news items tell us of the weakening of the excellent faculty which M. A. C. was building up. Today we read that Professor C. A. Conger, acting head of the department of zoology and physiology has resigned and is leaving for Wesleyan University. How can they expect the farmers of this state to be patient in the face of such conditions?

BANK COMMISSIONER OPTIMISTIC

WE get accustomed to reading a lot of more or less irresponsible information as to the farmer's condition. Often we are inclined to give credence to these statements directly in proportion as they compare to our own condition.

No man in Michigan, not excepting the government and agricultural crop reporters and statisticians, is in as good a position to judge the actual business condition of the farmers of Michigan as is the state banking commissioner. The local bank is the barometer of the farmers' condition, and while we have on several occasions pointed out localities in the state where the local bank was either not in a position or preferred not to take care of the farmers' needs in his community, we will go on record, now that the worst of the crisis is over, by saying that the bankers of Michigan, as a whole, have by extending credit, counsel and advice helped our farmers to get back on a safe and sound footing.

The farmers are not the only ones who had to go through this period of adjustment following the war-time conditions. We have heard it said that few businesses were able to catch step with the slowing down of the demand which followed the war, and nearly every business found itself loaded up with more expense that it could carry if it were to show a profit. The farmers of this country have had to go through this same sort of deflation, have had to lay off the hired help which they found necessary through the war, have had to strictly economize in order to bring their expenses within the margin of their receipts.

This year, 1923, is the year in which we have predicted the farmers of America, and particularly of Michigan, the state which we know best, will stage a come-back which will be felt in business circles everywhere.

It gives us a feeling of stability, therefore, to have Mr. Hugh A. McPherson, state banking commissioner, endorse our optimism when he says, "The farmers of Michigan as whole, are in pretty good financial shape. Of course, there are some communities that have been hit harder than others. But as a whole, the farmers' bank deposits have not kept step in decrease in comparison with the price he has received from his product. The farmer is gradually getting himself back in good financial shope, and with a good summer, he will be back to where he was in 1920, if records of bank deposits may be taken as a basis for the assertion."

FRUIT GROWERS AWAKEN!

HISTORY was written at Benton Harbor last week when the fruit growers organized a state-wide cooperative fruit selling agency under the title of "The Michigan Fruit Growers, Inc.," with James Nicol, former head of the Farm Bureau, as president.

This is not the first state-wide fruit growers organization. We have had horticultural societtes for years back without number, but this is the first time that an organization has been formulated, the sole purpose of which is to secure a wider and better market for Michigan fruit.

The example set by the fruit growers of California and the Pacific Coast have not passed unnoticed by those who are familiar with the quality of Michigan fruit and recognize the position it should occupy on the markets of the world. If the fruit growers in other states can accomplish a demand for their products which raises the price to a point where it is profitable to the grower then it can be done in Michigan and the organization of the fruit growers into a solid, well financed and well managed business organization is necessarily the first step in the right direction.

HIGHWAY FUNDS ABOUT GONE!

A report submitted to the state Administrative Board today by the State Accounting Division shows that the State has tentatively authorized highway work which exceeds by $111,597 the money it will have available this year, including the $5,000,000 bond issue recently authorized but not yet sold.

The report shows that the State owes $2,854,039 on uncompleted contracts and $3,544,344 on projects contracted since June 1 and those authorized by the board but for which contracts have not yet been placed. Other contingencies will cost the State $285,403, making a total tentative indebtedness of $6,683,787. Against this the State has in the highway fund $1,572,190 and $5,000,000 to be raised from the sale of bonds leaving a deficit of $111,597.—News Item.

THIS means that many of the projects about half completed through the state will have to remain untouched the balance of 1923. It means also that parts of some roads will be ready to be rebuilt, by the time they are completed from end to end. It means more than this however—it means that some manner of getting a larger share of the road funds from those who use the roads most, must be devised.

The strange thing about it is, that those who use the roads for hauling or pleasure are perfectly willing to pay the necessary cost of building good roads and keeping them up. When a class are so willing to "pay-the-piper," why is the state so reticient about putting the tax where it should be? We give up!

PUBLISHER'S DESK

DON'T SAVE 'EM!

FOR the information of the thousands of our readers who have been breathlessly counting their young roosters preparatory to shipping them to George Beuoy, of Kansas who advertised in other farm papers under the heading, "Young Roosters Wanted" and offered to pay $2 to $3 for each young rooster that could be spared, we have secured some information.

In the first place, Mr. George Beuoy, is the manufacturer of instruments for caponizing poultry, and in the letter which he sends in answer to your reply as to how many roosters you have ready for shipment, and of what breed, he tells you that he will send a complete caponziing outfit for $5, that is, if you order within two weeks. We have no doubt but that the method of caponizing is sound and the instruments valuable, but there is no excuse for a manufacturer stooping to advertising which misrepresents the facts in order to get inquiries, and it is up to the publisher who accepts this advertising to investigate it before it runs in his columns.

You can let your young roosters go. George Beuoy of Kansas doesn't want them!

REGARDING THE ANNEKA JANS BOGARDUS ESTATE

EVERY day our readers are sending in additional information regarding the Anneka Jans Bogardus Estate, which as we under stand it, owns the lower part of New York City. They tell us it only remains for a few shrewd lawyers to properly present their claims and the courts will return a fortune to the estate which will make Mr. Henry Ford's ready-cash look like a Sunday school collection.

We learn, for instance, that there is an Anneka Jans Bogardus Society in Michigan, of which L. C. Tefft, of Leslie, is president, and Ethel Kelsey of Jackson is secretary and treasurer. We mention in particular the fact that this society has a treasurer, and dues, which we understand for the state society is only 50 cents, but for the national society is five dollars "for registration" $2.00 per month forever afterwards. This ought to build up a considerable estate for someone, if there are enough direct or indirect descendants, and it should not be hard to prove at this price per head that there are a great number. For instance, if there were five hundred descendants who paid in $2 per month, not to mention the original $5 registration fee, this would create a fund of $1000 per month, or if there are 5000, which we would more readily expect, this would create a fund of $120,000 per year, which would in time, if properly invested, create a nice little nest egg for those who are piloting the destiny of the society.

In a printed circular which comes to our hands, we notice that what the National Committee is most worried about, is that their plans are getting some publicity, and they beg of each member of this society to keep as quiet as possible as to the amount they are paying in and what they are doing.

Perhaps we haven't taken this matter seriously enough, but recently we were in New York and we did not notice that they were particularly worried down on Wall or Broad Street, in fact they seemed to be contentedly going ahead building thirty and forty story buildings on property which, if we are to believe the letters we get, belong to folks scattered all over Michigan.

Apparently the investors in these sky-scrapers are taking a long chance on the faulty title which the heirs of one Anneka are about to prove!

FINANCING THE FINANCIERS

A LARGE amount of money has been invested in the so-called mortgage and loan companies, and we have received several inquiries during the past few weeks from farmers who have recently been asked for further investments. My advice is, to ascertain at what price these stocks are being quoted on the Detroit market. Most of them are selling way below par, as you will notice for example, in a special report just received regarding one of them, which we believe to be reliable.

"The Bankers Mortgage & Loan Co., is not listed on the Detroit Stock Exchange but is traded quite actively here in Detroit as an unlisted stock The market at the present time i uoted at $3 bid, and $3.50 asked for the unit. The preferred has paid their dividends since the organization of the company but we believe there has been a delay of from 10 to 20 days in mailing the checks. The company is well managed and we feel that at the present market value the stock is quite attractive."

If you are thinking of buying any loan or mortgage stock we will be glad to get you a special report regarding the company and the price at which the stock is being sold on the Detroit market.

The Week's Editorial

IN OKLAHOMA TOO!

ANOTHER political explosion at the Oklahoma Agricultural College. Out goes the president appointed two years ago and with him will doubtless go a large percentage of the present teaching staff. In comes another president with new ideas and a new bunch of faculty members.

The new president will stay until another turn of the wheel of politics. Then he, too, will go into the discard and there will be a new deal all around.

This sort of thing has been happening right along. There have been five presidents at the Oklahoma Agriculture College within 11 years. The longest term of service of any director of the experiment station since the college was founded has been three years. The average term of service of other faculty members has been scarcely longer.

A condition like this is not good for the school. Teachers like to stay put. They want to be measured in terms of usefulness, not of politics. For many years it has gradually become increasingly harder to get good teachers to come to the college at all, and the courage of the teaching staff itself has been steadily declining.

At the college is a great experiment station in which both the state of Oklahoma and the United States government invest annually tens of thousands of dollars to find out things about farming. No experiment can be proved in less than five years. No director of the station can do much in the three years which is his maximum term of office. It is a safe bet that, regardless of the best efforts of the teachers and experiment station workers themselves, half of the annual appropriation has been wasted every year by the frequent changes of plan and method. Neither can any man do his best work when he lives under the shadow of a sudden dismissal without cause.

I am quite willing to assume that every man who takes a job there goes in with high ideals of service and a desire to do his best for the farm boys and girls of Oklahoma. But none of them, from the president down, gets very far toward a realization of his ideals. The college is too much the football of politics for that. Educators in either agricultural colleges speak of it as a sort of a joke. They know that no colege run as this one can deliver the goods.

What is the trouble? Fundamentally it is merely that the college and all its works are controlled by a political-minded board of agriculture, the majority of whose members are appointed by the governor and may be removed at any moment with or without cause. The presi-

(Continued on Page 23)

First Mortgage Real Estate Gold Bonds

For investment of July funds there are no finer securities than Federal first mortgage bonds.

Write for Booklet AG916

Tax Free in Michigan
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On the 33-Year Government Amortization Plan to desirable borrowers who own good, well-managed farms in Michigan and Ohio, and wish to borrow not over 50% of the value of their land plus 20% of the appraised value of the buildings.

No commissions—Low interest rates. No stock investment. Unusually prompt and satisfactory service. If your loan will meet these requirements, write us.

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EVERY subscriber at the above rates is entitled to ALL the Departments of Service which have made The Business Farmer famous, so long as the term of subscription lasts.

You know The Business Farmer is the most practical, and fearless because it is the only independent farm paper published in Michigan.

The Michigan Business Farmer,
Mt. Clemens, Mich.

I enclose $.............. for a .... years subscription, this entitles me to every department of Business Farmer Service, without further cost for the full period of my subscription.

M.. RFD No........

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(If it is a Renewal, mark X here ☐ and if possible send the address label from this or any recent issue to avoid mistakes.

The Farm Home
A Department for the Women

Edited by MRS. ANNIE TAYLOR

THRESHING TIME RECIPES

THE recipes for our cook book have been splendid and I feel that our readers have really taken a keen interest in the work and hope to have a splendid book for the farm women of M. B. F. I would like to receive some of your tried recipes for the threshing season that will be with us in so short a time. I would like to have some letters upon simplifying the work for the farm women during these days. I will pay one dollar each for every letter accepted for use in the paper. Remember I am still working and saving all the letters received. Let us all take an interest in this work. Help one another.

Your Friend,
Mrs Annie Taylor

Address letters: Mrs. Annie Taylor, care The Business Farmer, Mt. Clemens, Michigan.

"WAIT TILL YOUR PA COMES HOME"

"Wait till your Pa comes home!" Oh, dear!
What a dreadful threat for a boy to hear.
Yet never a boy of three or four
But has heard it a thousand times or more.
"Wait till your Pa comes home, my lad,
And see what you'll get for being bad.

"Wait till your Pa comes home, you scamp!
You've soiled the walls with your fingers damp,
You've tracked the floor with your muddy feet
And fought with the boy across the street;
You've torn your clothes and you look a sight!
But wait till your Pa comes home to-night."

Now since I'm the Pa of that daily threat
Which paints me as black as a thing of jet
I rise in protest right here to say
I won't be used in so fierce a way;
No child of mine in the evening gloam
Shall be afraid of my coming home.

I want him waiting for me at night
With eyes that glisten with real delight;
When it's right that punished my boy should be
I don't want the job postponed for me;
I want to come home to a round of joy
And not to frighten a little boy.

"Wait till your Pa comes home!" Oh, dear,
What a dreadful threat for a boy to hear.
Yet that is ever his Mother's way
Of saving herself from a bitter day;
And well she knows in the evening gloam
He won't be hurt when his Pa comes home.

(Copyrighted: Edgar A. Guest.)

CANNING THE "COLD-PACK"

THE last issue told how to use a boiler for the new cold-pack method that is being used by all the modern housewives and I am going to give you a few simple rules to follow.

Points to Remember:

Use absolutely fresh products only.

To prepare preserved peaches, pears, apricots, plums, strawberries, raspberries, etc., follow the general directions for canning fruits.

1. Wash the fruit in cold water.
2. Blanch—that is, scald in boiling water, from five to ten minutes, or steam from fifteen to twenty minutes.
3. Plunge into cold water for two minutes.
4. Peel or skin—as needed.
5. Remove seeds, stems and blossom ends according to common sense.
6. Pack as much as possible into absolutely clean scalded jars.
7. Cover with a heavy syrup made of the following proportions of sugar and water—two and a half pounds of granulated sugar to three quarts of water—boiled together for five minutes.
8. Place a new rubber on each jar, and partly close down the covers.
9. Place the cans in the boiler, cover with cold water until the jars are submerged at least two inches.
10. Put on boiler lid, bring to boiling point, and boil steadily the length of time allowed in the canning table.
11. Then remove, close permanently without opening, no matter how much the material in the can may have shrunk. If more convenient, cool in the water.
12. Turn upside down on a cloth and cool, away from draughts. If the jars leak, new rubbers will have to be put on and the process repeated.
13. Store in a dark place, moderately cool.

Various blends of flavoring may be used in preserving, as a little stick cinnamon or a few whole cloves in the syrup for citron, apples, pears, peaches, currants, or fresh figs; lemon or orange rind with that for apples, pineapples, prunes, figs or blackberries, etc. Sometimes in preserving, it is possible to blend fruit flavors by using a contrasting fruit juice instead of water in making the syrup.

SAVE WILD FRUIT

IN these days the automobile and trolley bring the countryside within reach of all, and wild fruits are easily obtainable an almost every leisurely trip to the open. Get into the habit, therefore, of always including a basket with your impedimenta when you take excursions afield.

Spiced Wild-Apple Jelly—To make this jelly, cut up any desired amount of wild apples or tame ones. Put in a kettle and add cold water and vinegar (three-fourths water to one-fourth vinegar) until you can just see the apple, boil until a mush, stirring and mashing. Strain through jelly-bags, measure. Allow three-fourths cup of sugar to each cup of juice. The pectin test may be used if desired. Boil the juice with a muslin bag of mixed spices very rapidly for twenty minutes; then add sugar which has been heated and boil five minutes or until it sheets from a spoon. Pour into sterilized glasses, cool, seal the glasses with hot paraffin and cover.

Monadnoc Blueberry Pudding—For this puding, stew one quart of fresh berries—or same amount of canned ones—sweeten to taste, and fill a mold with alternate layers of berries and sliced buttered bread; pack closely, fitting the bread into the mold so that it may be perfect when turned out. Be sure that the bread, berries and juice are so proportioned that the bread may be well soaked. Stand over-night, if possible. Eat cold with whipped cream.

OKLAHAMA HOUSEWIFE JELLIED WHOLE CHERRY ORCHARD

JUST as the cherries were ripe a severe hail storm came up and so damaged the entire crop that it was not worth picking, so far as the general market was concerned. The wife of the owner of the cherry orchard had witnessed a demonstration of concentrated fruit pectin and knew that with its use cherry juice could be converted into pure, delicious cherry jelly. So she gathered the entire crop, promptly made juice of it and little by little, as she found time, she converted the cherry juice into jelly. The cherry is a fruit so deficient in pectin arrived to help out the housewife, she was unable to make a single glass of cherry jelly, much less "jell" an entire orchard.

—Pectin, as you know, is the gelatinizing principal of certain ripe fruits and it is on the market now for use in making jellies from fruit that never would jell without it.

CAMP COOKING

FOR cooking, the following utensils are necessary. Be sure to take a large fryingpan, kettle for cooking vegetables, a coffee-pot, and a knife, fork, spoon, plate, cup and bowl for each person. If you are to camp in a rocky country, it is better to take plates , cups and bowls of aluminum or heavy tin, for enamel ware will chip if dropped.

When you go into camp, take enough supplies with you to last several days so that, although you may be near enough to town to run in at any time, you do not have to do so. The relief from the necessity of preparing the daily schedule for marketing is wonderful. The fact that you do not have to make a definite effort to go somewhere and talk to people adds more than you think it does to the rest and repose of camp life and the benefit that you will receive from it throughout the year.

You can take a far greater variety of canned vegetables and fruit into a camp near home than is possible when the camp lies at the end of a long day's paddle through the wilderness lakes with several "portages" or "carries" between. There every ounce counts, for you carry your entire supply of food as well as everything else on these lake and forest camping trips.—The Designer.

CLOTHES TO TAKE ON A CAMPING TRIP

A MOTHER packs a knicker suit if she has one or bloomers and middy. She needs also a warm skirt and sweater, a rain-coat and hat, rubber boots or storm rubbers, and comfortable shoes and sneakers. Don't forget the favorite sunburn remedy. A bottle of iodine, a package of gauze, a roll of bandage and a spool of adhesive plaster practically complete the first-aid kit.

The men of the family will take what-ever outdoor clothing they have, including khaki and wool trousers, a flannel as well as cotten shirt, a sweater and a rain outfit. It is entirely practical to dress both the younger boys and girls in boys' khaki suits of "shorts" with flannel shirts and woolen trousers if it is cool in summer in your part of the country.

Every one should have a complete rain outfit. Do not allow any member of the family to go about in wet clothing. It is just as easy to be comfortable in camp as it is at home.—The Designer.

Mothers Problems

DAD LOVES THE CHILDREN, TOO

DON'T forget that Dad loves the children, too! They are not his alone to punish and scold, and yours to love and enjoy. All day long you have them—when they are good, when they are naughty, when they are mischievous. Dad sees them for a much shorter time each day, and he ought to see them at their best. But do you let him? Many mothers do not. For Dad they store up every childish misdeed that has occurred; they "fill him up" with stories of how naughty his boys and girls are, how mischievous, how saucy, how disobedient, till Dad's idea of his children becomes sadly warped. Perhaps he becomes "Lord High Executioner", punishing the offenders till they learn to fear him; or perhaps he remains silent, regarding them with such a stern eye of authority and disapproval that they shrink from him and endeavor to keep out of his way.

When Dad comes in from the field, let him find his children happy and glad to see him. Let him take them as they are, and get acquainted with them with an unbaised mind. There's time enough after the little folks have been tucked in bed to talk over their various misdeeds—and Dad and Mother should talk them over, for the children belong to both parents and two heads are required to solve the problems that arise in the raising of children. You, the mother, have seen them so much and have become tired by the care of them, you cannot think clearly the best and the proper means of overcoming some fault, some habit, some actual misdeed, but Dad, whose mind all day has been on different matters, can give a clear, unwearied mind to child problems.

Sometimes, it is true, Dad must punish, but never, never let him become, "The Punisher." It destroys his happiness in his children; it destroys their happiness in him. He may not see them many hours a day, but surely when he does see them he should be allowed to see them as they are, not as they are pictured by their tired mother's eyes. Remember, Dad loves the children, too!—Margaret Bartlett.

THE CHILD WHO REFUSES MILK

SOMETIMES, even on the farm where there is generally milk in abundance, the child weaned from his wholly milk diet and initiated into the delights of solid food, will refuse to drink milk. Or, sometimes, at the age of two or three, he will suddenly rebel against drinking milk. All too many times he is allowed to drink it or not as he chooses. If he refuses to drink it, no effort is made to bring back his taste and enjoyment of it.

This attitude, however, is wrong. Milk is needed, and needed in abundance, by the growing child. No other food can take its place in the child's diet. Somehow he must again acquire the habit of drinking milk. But how?

There are many ways of making milk attractive to a child. Sometimes a pretty cup or class, never used for anything else, will make a child willing to drink milk, just for the pleasure of handling the attractive bit of glass or china. Drinking the milk through straws nearly always appeals to children, especially if two or three drops of flavoring extract has been added to the milk. One mother succeeded in winning back her child's lost appetite for milk by tinting it delicately with pure vegetable colors.

Pasting a pretty picture on the bottom of the glass (outside) for her little girl to see when she had drained the glass was the ingenious method employed by another mother. A piece of hard candy dropped in the glass, or a stick of gum, has served the same purpose: the child would drink the milk in order to obtain the "sweet."

No tea or coffee should ever be allowed children, but cocoa and cereal coffee are beneficial. These can be made entirely of milk, except for the small quantity of water needed to dissolve the powder.

Such "encouragements" need usually be used but a short time. Soon the habit of drinking milk in one form or another will be re-established, and, with a little care on the part of the mother, it never again need be broken.—Margaret Bartlett.

Personal Column

Remedy for Removing Wild Hairs—Here is a remedy I have saved from another paper we take, for the subscriber who asked for a remedy for wild hairs in the eyes. I do hope G. C., or any one needing such a remedy will try this. I suffered for 18 years with them, tearing and scratching my eye spending hours with my hand glass and tweezers in removing those little needlelike irritants until I was in despair. One day I had an inspiration—alum and vaseline! I drew out every hair in my eyelid, moistened the alum and gently rubbed it over each lid until they felt puckered, then at night a tiny bit of vaseline on the tip of my little finger was rubbed in thoroughly. I procured a tube of the white vaseline, but I suppose any clear vaseline would do as well. I rubbed this in every night for a week, and whenever I had to use my tweezers I followed with alum. In less than a month the irritation grew less, and almost before I realized it a new growth of eyelashes was in evidence. Now for more than two years I have taken such comfort, seldom having to use the tweezers.—A Subscriber.

Can Anyone Help this Girl?—This letter was received the latter part of May and I am giving you folks the important parts of it and you can have the writers name upon request. A subscriber sent it to me.

In reading our last M. B. F. I see you want to exchange your quilt pieces for something useful. Now as I am a stranger to you I would say that my circumstances are such that I'm badly in need of bedding at the present time. I live on a farm and have three children. My oldest daughter is a mute, also she is crippled in her arms to such an extent as to make hard work for her impossible. She does wonderful crochet work in any patterns that are called fillet crochet. And as we are in very poor circumstances she crochets and does odd sewing (plain) to help her go to the Flint school for the deaf. We could make good use of your pieces either on shares or in exchange for needle work. We have tried several friends who we thought would do this but never could get enough to piece each one and could not buy. My parents and sisters keep her in thread and what clothes they can. She will be home June 4th. Could we in any way make a deal for her sake. I can refer you to any one almost, in Clare county. She has been born and raised here. Can also use any clothing we get for two girls 15 and 17 and a boy 2 years. Sickness and a tubercular father has caused these conditions.—A Subscriber.

Sent in by a Subscriber—We will be waiting for you all in the summer time to come, when the whip-poor-wills will awaken you from nine o'clock to one. You will miss the street-cars and busses when the hills loom up in view, but I don't believe you'll regret it, yet you'll think that you really do.

You have simply formed a habit that the tasks you must perform must surely be complied with from the day that you were born. 'Tis true, we all must labor but not as some can see, for labor should be a pleasure it appears that way to me.

The change from shop to freedom, the sunshine, and the hills, will surely make a difference when it comes to comparing ills. Just a habit boys I tell you a habit pure and strong, all it needs is the scent of clover, then you'll see where you are wrong.

Just a change a change will show you, just one glance in freedom's clime will make up for the difference, and the years you have left behind. The evergreens will charm you lads as you were never charmed before, and old gray haired dad and mother will be waiting at the door. Old Spot he too will welcome you, your playmate of years ago, he also, will be waiting for the comrades he used to know.

Sleeveless Sweaters Made—In the M. B. F. of May 12, I saw that Mrs. G. M. would like the address of a lady who could make sleeveless sweaters. I made a number of them for the soldiers. I was complimented on my knitting the other day. As I have some spare time I would like to get something along that line to do.—Mrs. Genevieve Vanderberg, Plainwell, Michigan.

For Colds that have not gone too far—One cup sugar, one-half cup water, cook until like a molasses, cool and add one-half ounce paragoric and ten cents worth of glycerine and stir. Dose: One-half spoonful for children and one spoonful for adults.—Mrs. Julia Hipkins, Macomb County, Michigan.

Pine Tar and Honey for Cough—Would like to ask you to tell me how to prepare homemade pine tar and honey as a cough syrup. Four of our children are coughing similar to whooping cough, but do not whoop. They contracted this in the wake of measles. Would appreciate your advice.—Mrs. I. H., Allegan County.

The Runner's Bible

(Copyright by Houghton-Mifflin Co.)

Be Ye Thankful: Col. 3:15— Begin to give thanks even before you open your eyes in the morning. As consciousness creeps over you, follow it with a thankful prayer for life, that a new day, another chance, is yours, and be glad in your heart of hearts that you have faith in God, and at least a partial understanding of devine law. Be thankful for the beauty of the morning, that you have eyes to see it and the faculty to enjoy it, and as the day advances, forget not to be grateful over the small joys as well as the large ones,—the new flower, the book, the letter, the meeting with friends, the kindly word; be thankful for knowledge, for the lessons that come through mistakes and misfortune; be glad that the misfortune is no worse; in fact be thankful for everything. The least you must give is a thankful heart, and a thankful heart is a fertile field; the Lord plants the seeds of his richest blessings in just such a field.

RECIPES

For Bumps and Bruises—Butter and brown paper.—Mrs. M. E. K., Grand Ledge, Michigan.

Cup Cakes—This is my best cup cake recipe: One and one-half cups sugar, one-half cup shortening, one-half cup sweet milk, two cups flour, three eggs, one-half teaspoon cream tartar, one-fourth teaspoon soda and one teaspoon vanilla. Beat sugar and shortening to a cream, add beaten yolks and beat again, add milk and flour alternately. Flour should be sifted three times, add soda dissolved in a very little water, add egg whites beaten very stiff with cream tartar beaten in them at the last.—Mrs. C. W. James.

Rancid Lard—A subscriber asked for a cure for rancid lard. Heat and boil raw pared sliced potatoes in lard and it will completely take away the rancid odor. For a large spider full I use three or four potatoes.—A reader.

Pea Timbales—Cook one quart of peas or the equivalent of one can of peas. Rub through a sieve. To one cup of pea pulp add two beaten eggs, two tablespoons melted butter, two-thirds teaspoon salt, one-eighth teaspoon pepper, a few grains of cayenne, and a few drops of onion juice. Turn into buttered molds, set in pan of hot water, cover with buttered paper, and bake until firm. Serve with one cup of white sauce to which is added, one-third cup cooked peas drained and rinsed.

Spinach—Cook required quantity of spinach in its own juice, drain, chop fine, season with salt, pepper, a pinch of sugar and liberal butter to taste. Heap in a mound, smooth, garnish with a ring of egg slices, and surround with a hot, rich tomato sauce; serve at once.

Canning Rhubarb—For canning rhubarb for pies, wash, cut into inch pieces, put in glass cans, fill up with cold water, one teaspoon of salt to a can and seal.

Canning Strawberries—While making your syrup fill cans with berries and set in oven and you'll find you can get in many more berries, without crushing too. Have ready some boiling water, pour on syrup and fix your cans as you would for cold pack. Then set your cans in the boiling water off the stove and leave untill water is cool, take out and seal tight.—Mrs. M. E. K., Grand Ledge, Mich.

Brown Cake—One cup sugar, one-half cup shortening, one-half cup molasses, pinch of salt, one teaspoon cinnamon, one-half teaspoon cloves, one-half teaspoon ginger, two eggs, one cup boiling water, two teaspoons soda, two and one-half cups flour. Bake in a moderate oven.—Mrs. R. H., Allegan County.

Steam Brown Pudding—Two tablespoons butter, two tablespoons sugar, cream together, one egg, one-half cup of boiling water one-half cup molasses, one teaspoon soda, one and one-half cups of flour. Add dates or nuts and steam one and one-quarter to one and one-half hours.—Mrs. R. H., Allegan County.

Salmon Loaf—After removing the bones from one can of salmon, add two tablespoons of butter, two eggs, one cup of bread crumbs, one cup milk, salt and pepper to taste, put in tin and steam for one hour.—Mrs. J. W., Sinlac County.

Sauce for Salmon Loaf—One cup of boiling milk one tablespoon of cornstarch, one egg, boil till it thickens, pour over salmon loaf and serve while hot.—Mrs. J. W., Sinlac County.

Chocolate Pie—Two tablespoons grated chocolate, one and one-half cups milk, beaten yolks of three eggs, stir one tablespoon of flour until smooth with a little milk one-half cup sugar, stir all in boiling milk and cook until it thickens, bake crust first, put in filling, whip the whites of eggs with a little sugar and flavoring, spread on top and brown in oven.—Mrs. J. W., Sinlac County.

Cherry Conserve—Three cups of cherries, three cups of pineapple, three cups of red raspberries, three oranges, twelve cups of sugar. Grind cherries, pineapple and oranges. Boil slowly until it thickens. Add any other fruit desired; for every extra cup add a cup of sugar.—Mrs. L. V. Johnson.

Cream of Pea Soup—Four cups of milk, one quart of peas, one-half small onion, salt and pepper, one tablespoon of butter, enough boiling water to cook peas and onions. Boil peas and onions in very little water until done. Remove onions and pass peas through colander. Have milk scalding in a double boiler and add butter and flour after blending them together. Add peas and serve with a spoonful of whipped cream.—Mrs. L. V. Johnson.

Salmon Salad—One can red salmon, two large potatoes (diced), two hard boiled eggs chopped fine, three small onions chopped fine, two or three stalks of celery improves it. Mix together and season with pepper, salt and vinegar to taste, if there happens to be no salad dressing made and no time to make it. Mrs. Carpenter.

Dumplings that are always light—When making chicken and dumplings, instead of boiling the dumplings take part of the gravy, put in a kettle or in bake dish that can be covered tightly then put in the dumplings and bake in fairly hot oven. For a small family take two cups of flour, one-half teaspoon of salt, one large teaspoon baking powder and add sweet milk to make a soft dough. Divide into eight or ten dumplings and drop into gravy and bake.—Mrs. Carpenter.

Chicken Diarrhea—Sweet oil applied to the vent of a little chicken that shows signs of white diarrhea will save its life, if it is bad the remedy will need to be used several times, and feed raw white of egg in water if real weak.—Mrs. N. Lindley.

To Whiten Curtains—Towels, pillowcases or wash cloths, put a tablespoonfull of cream of tartar in the boiler and boil up as usual.—K. L.

—if you are well bred!

Traveling-Dress—Dark suit or dark one piece dress or the new tweed sports suits with a blouse to either match or white tailored waist. With dress a wrap, close fitting hat, dark gloves, dark shoes.

Accept no attention from strangers. Stay in seat and read, write, or nap. Do not walk up and down aisles.

THE SIGN For Your ROWENA OF QUALITY Protection

Lily White

"The Flour the Best Cooks Use"

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From the finest wheat one has reason to expect the best flour. From the finest flour one may well expect the best baking.

Lily White is milled from the finest wheat grown in this country and not surpassed anywhere. It is scrupulously cleaned, scoured and washed, and milled by the famous six-break system to a granulation that is perfect. Its volume, color and flavor are just right for the making of appetizing, wholesome breads. From Lily White you may expect the best baking. We guarantee it. You will produce better baking and like it better than with any flour you ever used.

Parker House Rolls made with Lily White

Our Guarantee

We Guarantee you will like Lily White Flour, "the flour the best cooks use" better than any flour you ever used for every requirement of home baking.

If for any reason whatsoever you do not, your dealer will refund the purchase price. He is so instructed.

You are protected while trying out Lily White.

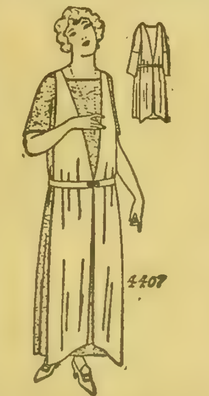
Call your grocer now.

VALLEY CITY MILLING COMPANY

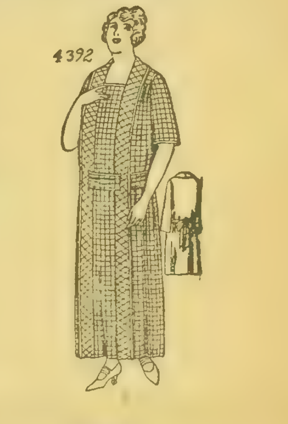
GRAND RAPIDS, MICHIGAN

"Millers for Sixty Years"

AIDS TO GOOD DRESSING



4407



4392

A Stylish Afternoon Gown

4407. Satin crepe was used for this model, the under dress being beaded in an all over design, and the reversed side of the crepe used for the panels. This is a smart style, that will lend itself to various combinations of material.

The Pattern is cut in 6 Sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. A 38 inch size requires 4 ⅝ yards of 36 inch material for the dress and 2 ⅝ yards for the panels. The width at the foot is about 2 yards. To make dress with short sleeves ½ yard less material is required.

A Comfortable Top Garment

4093. For cool days of all seasons, and for all materials for all seasons, this model is very appropriate.

Gabardine and taffeta are nice for a light weight garment of this kind. For more warmth, one could have broad cloth, velours or serge.

The Pattern is cut in 4 Sizes: 6 months, 1 year, 2 and 3 years. A 2 year size requires 1 ⅝ yard of 40 inch material.

A Popular One Piece Dress

4392. This style has slenderizing lines and is becoming to youthful and mature figures. Gingham with linen would be fine for this, or ratine with binding in a contrasting color. Taffeta too will be attractive for this style.

The Pattern is cut in 8 Sizes: 36, 38, 40, 42, 44, 46, 48 and 50 inches bust measure. A 38 inch size requires 6 ⅛ yards of 32 inch material. The width at the foot of the dress is 2 ½ yards.

A Comfortable "Smock"

4415. This model reflects the most popular of this season's dresses for young girls. It has a comfortable raglan sleeve, which may be finished in wrist or elbow length, and a jaunty collar. Dotted percale with facings of white linen is here illustrated.

The Pattern is cut in 4 Sizes: 6, 8, 10 and 12 years. A 10 year size requires 2 ⅞ yards of 32 inch material. Collar and sleeve facings of contrasting material require ⅝ yard.

A Practical Undergarment

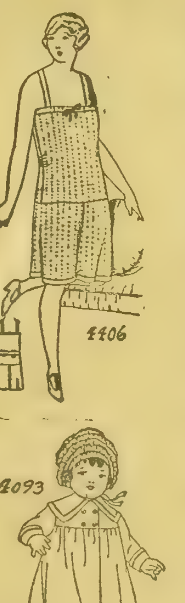
4406. Nainsook, crepe, silk and muslin are good for this model. It is especially suitable for stout figures affording comfort and ease.

The Pattern is cut in 4 Sizes: Small, 34-36; Medium, 38-40; Large, 42-44; Extra Large, 46-48 inches bust measure. A Medium size requires 2 yards of 36 inch material.

A Smart Dress for the Growing Girl

4413. Striped and plain ratine are combined in this instance. Figured and plain woolen, crepe, and linen are also attractive for this model.

The Pattern is cut in 3 Sizes: 12, 14 and 16 years. A 14 year size requires 3 ⅝ yards of one kind of material 32 inch wide. To make as illustrated requires 2 yards of plain and 1 ⅝ yard of figured material.



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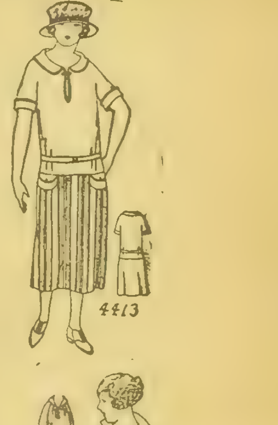

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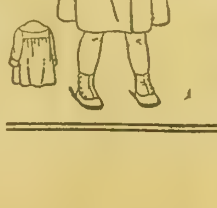

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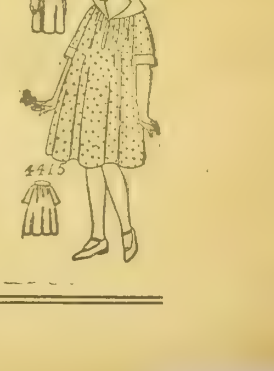


4415

ALL PATTERNS 12c EACH, 3 FOR 30c POST-PAID

Order from the above or former issues of The Business Farmer, giving number and sign your name and address plainly.

ADD TEN CENTS FOR SPRING AND SUMMER FASHION BOOK

THE BUSINESS FARMER

Pattern Department, Mt. Clemens, Mich.

The Children's Hour

A CLUB SONG

There are boys that take to banking,
There are boys that like the law;
There are boys that think the busy doctor
Is the one whose life has not a flaw—
There are boys that strive to make big fortunes
But for us you need not feel alarm,
For the boys that we want in the future
Are the boys on the good old farm.

There are girls that think the city
Is the only place to go;
There are girls that do not care for cooking,
Who have never time to knit or sew:
There are girls that think the joy of living
Is an auto or a dress so fine:
But the girls that we want in the future
Are the girls with the 4-H sign.

There are clubs for girls in sewing,
There are clubs in canning, too;
There are clubs that teach us to feed poultry
As the best of poultry breeders do—
There are clubs for raising corn and taters,
Feeding pigs, or sheep, or baby beef:
All these clubs to make us better farmers
Are the clubs of 4-H leaf.

There are clubs to spend your money,
There are clubs to join for fun;
There are clubs to chase along the cattle,
Or with clubs sometimes a game is won—
There are clubs we often swing for dumb-bells,
There are clubs that father took to me,
But the finest club you e'er could mention
Is the Boys and Girls Club for me.

Dear Uncle Ned:—May I join your merry circle. I wrote before but I guess it went in the wast-paper basket. My father has taken the M. B. F. for several years. I have brown bobbed hair and gray eyes. But I'm not very fleshy. I have five sisters and three brothers, Mae, Grace, Gertrude, Edna and Thelma, Arthur, William and Thomas. The first four mentioned are married. I am in the seventh grade. We had a picnic the 25th of May at Sand Lake about 9 miles from here. We took our dinner and had a good time. I went in Freeman McCrory's car. Coming home we came around by the Hemlock Road and up through Reno to Hale. There was Grace Graves, Audrey Harris and my sister Edna and I in Freeman's car. I live on a farm of fifty acres. We have 12 cows, 9 calves, 11 pigs, and about 85 chickens. I will close by asking some riddles. What is the most beautiful piece of furniture? What reaches from New York to Boston without moving. Will close, your niece, —Erma White, Hale, Michigan.

—My, I'll bet you had a fine time at your picnic. I often think that I would like to hold a picnic and have all the members of the Children's Hour attend it. It would be some jolly crowd wouldn't it?

Dear Uncle Ned:—May I join your merry circle? Have been a silent reader for some time, so thought I would write. But I'll bet my letter will never escape the waste basket. I will describe myself: I am 10 years old, four feet seven inches tall, light complexioned, brown eyes and brown hair. I live on the Iosco County Farm, of which there is 160 acres of land. We will be here two years this coming year. We have all the conveniences like they have in the city. We have thirty head of cattle, two horses and one sheep. The sheep belongs to my brother Herbert. For a pet I have a dog named Rex. I have three sisters and three brothers. My two youngest brothers and myself are going to school. Our school let out May 12th. We liked our teachers real well. Their names are Mr. Curry and Miss Lietz. I have a nice home, Uncle Ned. You ought to see it. My mother and father are both good to us children. They give us anything we want. My sisters are all good to us. We can stay with them any time. I like birds, Uncle Ned, and I wouldn't harm them on a bet. I must close. Will some of the nieces and nephews write to me? I will answer all letters received. We like your paper. Your niece, Floreen Miller, R. 1, Tawas City, Michigan.

P. S.—I don't know your address so am sending it to the Michigan Business Farmer. Hope you get it. Would you state your address in the paper.

—You must be a happy girl with everyone so good to you. I am sure you appreciate it and do everything to show that you do. My address is: Uncle Ned. Michigan Business Farmer, Mt. Clemens.

Dear Uncle Ned:—I have been a silent reader of your merry circle for some time and enjoy reading it very much. May I join your merry circle? I am 5 feet 3 inches and a half tall, have black hair and blue eyes. I am 17 years of age. I live on a 10 acre farm. I wish some of the girls and boys would write to me. I will try and answer all the letters I receive. Your niece.—Julia M. Bindon, North Branch, Michigan.

Dear Uncle Ned:—May I join your merry circle as I have never written before? I am fourteen years old, my birthday is April 6th. Have I a twin? Am 5 feet and 1 inch in height. Have light hair and blue eyes. Am in the ninth grade as I just got my diploma. If the boys and girls of my age write to me I will answer them. I am going to send Phyllis Gibson some riddles. Now I will close with a riddle: Black and white and read all over? Your niece—Gladys Harris, R. No. 5, Paw Paw, Mich,

P. S.—I think the answer to Anita Ruth Cromwell's riddle is a cat.

—Surely you may join the Children's Hour. I hope you are going to attend high school this fall. Are you?

Dear Uncle Ned:—I thought I would try my luck in writing again. I suppose everybody is wondering how old I am. Well I am going to tell. I was 17 the eleventh of January 1923. Have I a twin? If so I wish they would write me a letter. Uncle Ned you said maybe we could hold a drawing contest, now would we draw anything we wanted to or everyone draw the same thing? I would like to have a drawing contest. Uncle Ned do you like cherries and raspberries? If so, this is the place to get them. I am your Nephew,—Lawrence Chapman, Alma, Mich., R. F. D. No. 1.

—Well, well, Lawrence, I am glad to hear from you again. Yes, I think we will be able to hold a drawing contest in the near future. According to my present plans you would all make a drawing of the picture on the front page of the issue in which I announce the contest. More details soon.

Dear Uncle Ned:—It's raining to-day. We haven't had rain up here for so long that I think the swamp must be drying up and the ladyslippers are surely looking rather sad. You can see from this, Uncle Ned, that I must live up in northern Michigan where they have lakes and swamps. In fact I can claim a mile of beautiful lake shore and arbutus and ladyslipper beds for my very own and a ramshackle old dock with one redeeming feature—a spring board. My home is on the edge of the resort region and a little to the northwest lies Lake Michigan with its chain of beautiful summer colonies—Charlevoix, Petoskey, Roaring Brook and Harbor Springs, the little Indian town where Father Marquette erected a cross and where later a convent was built, is not unattainable. A road winding in and out among the maples along the shore connect it with Harbor Springs. Right here in our own little lake is an island where the Mormans held the Feast of Fruits. If you have ever been here you know how wonderful it all is. I seem to have gotten this letter a little mixed up. Perhaps you would like to know something about who is writing this but I won't say much except that I am sixteen, a senior in high school and swim. Sometimes I amuse myself by making baskets. I shouldn't like to have an Indian see them though. They might bob my hair a little too close to my head and I don't want it bobbed. at all. I haven't any brothers or sisters and so sometimes I get just a wee bit lonesome and I would like to have some of the other boys and girls write to me. Do you suppose they would? Your niece, Virginia Lehmann, R. 2, East Jordan, Michigan.

—My, what a very interesting letter. I hope you will write often. I like to read your letters and know that the members of our circle will too and will want to hear more about the country around your home.

Dear Uncle Ned:—Here I am again. I'm rather lonesome so thought I would write to you for pastime. It's certainly fun to write letters and I enjoy it. The last time I wrote to you I mentioned my sister who wanted the girls and boys to write to her, so they did but never thought about me. She received over three-fourths of the letters. That wasn't hardly fair, was it Uncle Ned? I go in swimming quite often and enjoy the water very much. Diving bothers my nose but I dive in spite of it, although it chokes me. Next month my brother Leander is going to take our family to Ann Arbor when he gets a cast for his back. He has tuberculosis of the spine and the doctors order him to wear a cast. He suffers driving this terrible warm weather, I wish it could rain. If any of the cousins have the words to "Star of the East" would you please write them and send them to me as I'd like to know the words when my sister plays the piano? With love to Uncle Ned and all the cousins.—Iris Arnold, R. 4, Box 474, Mt. Clemens, Michigan.

—So your sister got nearly all of the letters. Well, that did not seem exactly fair. But you never can tell, maybe you will get all of them the next time. If you will wet the inside of your nostrils with your fingers when going into the water you will find that diving will not bother you as much. Wet the inside of your ears also if they bother you.

Dear Uucle Ned:—I have been a silent reader of the boys' and girls' page for three years or more. I was fifteen years old on June 10th, I am a blonde, have blue eyes and natural curly, bobbed hair. I will take up eleventh grade work next year. I live on a one hundred and ten acre farm, two and one-half miles from the nearest school. I have four brothers and one sister older than I and little twin brothers, four years old. I wish some of the boys and girls would write to me. I will answer all letters received. As this is my first attempt I will close. Your niece, Henel Marsh, Brown City, Michigan.

—So you have read the Children's Hour for three years or more and have never written. You have been silent too long I would say. Let us hope you do not wait another three years before writing again.

Dear Uncle Ned:—I have been reading the Children's Hour and I liked it. May I join your circle? I am eleven years old, my birthday is September 19th. I have bobbed dark brown hair. I am in the seventh grade. I go to country school and take music lessons. I have been to my friends home. She said she wrote and had her letter put in the Children's Hour and is corresponding with a girl. I have a pet kitten, its name is Snippy. We have seven cows. I milk one. We raised a nice lot of chickens. We have a pet colt, its name is Ruby. We have another colt named Pansy. I feed and water them. I would like to have some girls write to me.—Miss Edna Brown, R. F. D. No. 2, Carson City, Michigan.

—You must have a great time with the two little colts. You have given them very nice names.

Dear Uucle Ned:—I have been reading the Children's Hour and I found some pretty interesting letters. Myrtle Taylor, Watronzville, Michigan, suggested having a drawing contest. I think this is a good suggestion and that it would be a lot of fun. I for one, love to draw and will send in some drawings if you will have the contest. I am fifteen years old and will be a sophomore when school begins. I have dark brown eyes. I am writing this letter just to let you know that I am very much interested in the drawing contest, but I hope to write a longer one the next time. Will some of the boys and girls please write to me? I will try to answer all letters. Edna Weifenbach, Box M, Beulah, Michigan.

—Another young artist who wants us to hold a drawing contest. We will soon, so begin practicing in real earnest.

Hello Uncle Ned:—May I join your merry circle? I have been a silent member for quite a while. I have written a few times before, but only one of my letters was in print. Last Sunday it was my birthday, the tenth of June. My age is between ten and fourteen. Who ever guesses my age will receive a card or letter from me. Uncle Ned, I certainly would like you to hold a drawing contest. I like to draw very much, and I will surely join the contest. It seems as though we were going to have plenty of tame and wild strawberries this year, our pasture is white with strawberry blossoms. I love to pick strawberries or any kind of berries. Don't you want to come over and pick strawberries with me? Well I see that waste waste paper basket eyeing my letter, and I am afraid he will catch it. I enjoy reading the children's Hour. Your niece,—Dorothy Postma, R. 1, Rudyard, Michigan.

—I guess we will have to hold a drawing contest sometime soon. If I can not come and help you pick strawberries how would it be if I help you eat them? I like that kind of a job.

Dear Uncle Ned:—I always enjoy reading the girls and boys letters and thought I would write too. I am sixteen years old, am I too old to join the merry circle Uncle Ned? I am 5 feet and 1 inch tall. I have medium brown hair and it is bobbed and I have a fair complexion and wear "specks". I have three sisters and two brothers. I will be a junior in High School next year. I am going to take the following subjects: English III, French I, Modern History, and Book-keeping. I have 8½ credits so far. I go to school at Charlevoix. I live on a farm of 80 acres and love farm life. We have a good view of Lake Michigan and receive the cool lake breeze in the summer time and the cool wind in the winter. We can see the Manitou and Missouri go by nearly every day. Northern Michigan is the place to live in the summer time on account of its cool and healthy climate. Many resorters come up to Charlevoix every year. Well I am going to do some guessing. The answer to Anita Ruth Cromwell's riddle is a "kitten", and Helen Goodrow's age is sixteen. I agree with you Myrtle Taylor, I wish Uncle Ned would let us have a drawing contest for I love to draw. Well, I will have to ring off Uncle Ned, or you will not want me to write any more.—Edith E. Chew, Bay Shore, Michigan.

—You are indeed lucky to live so near the lake as the lake breeze is so cool and refreshing. I live a little over two miles from Lake St. Clair.

RADIO DEPARTMENT

EDITED BY J. HERBERT FERRIS

VACUUM TUBES THAT OPERATE ON DRY CELLS

You say the radio to the farmer is a Godsend. You probably can imagine what it is to an invalid farmer confined to his home, isolated from his family. I have an outfit, my problem is the storage battery. Can you give me more information about the improvement you mention in your editorial in the issue of June ninth or tell me where I can get all details and oblige.—M. I. T., Birch Run, Mich.

—The improvement referred to in the editorial in our June 9th issue is vacuum tubes that operate on dry cell batteries instead of a storage battery. One new tube is called UV-201-A or C-301-A according to the company that makes the tube. This tube is a five volt tube and can be worked on a six volt storage battery if you wish but I find it better to use three dry cell batteries, making 4½ volts. It is possible to do this as the tube draws only one-quarter ampere, so three dry cells on one tube last for about a month if set is used two hours a day. The tube fits the standard socket and you need no vernier on your rheostat; however if your rheostat is the vernier type you need not change it. Also you do not need a potentiometer as the tube is not sensitive to plate voltage. There is a slight difference in the hook-up but this is explained in the literature that comes with the tube. With a one-tube set using this tube I had very good results last winter, receiving from Georgia, Kentucky, Tennessee, Alabama, Nebraska, Iowa, Missouri, Minnesota, Illinois, Ohio, Pennsylvania, New York, New Jersey; and I also had Texas and Cuba—only once though.

Another tube is the WD-11 or "peanut tube" as it is called. This tube requires a special socket so if you already have your set built you would have to get an adapter. The WD-12 tube operates the same, the only difference is that it is made to fit a standard socket. The "peanut tube" draws only one-quarter ampere and is designed to operate on a single dry cell battery of 1½ volts. One dry cell will operate one of these tubes intermittently from 60 to 90 hours depending upon the length of intervals the tube is used. I have used one of these tubes with very good results and at the present time am using a WD-12 tube for a detector and a UV-201-A tube for an amplifier. Of course the first tube is operated by one dry cell while the other is operated by three. With the WD-11 or WD-12 a vernier on your rheostat is very useful but there is no advantage gained through using a potentiometer. You will find with this tube that a slight turn of the rheostat or vernier will make a difference in your receiving while with the UV-201-A or C-301-A the signals or music come in just as strong when the filament current is just turned on as when turned on in full. The "peanut tube" does not light up like the other tubes. When the current is first turned on you can not see that the filament is burning but when current is turned on full it shows a slight glow.

A new tube on the market is the UV-199 made by the General Electric company. I have never tried it but many experts say the tube works fine. This tube requires so little filament energy that an ordinary dry cell battery will operate one tube for a long time. The tube seems to be very delicate and needs to be handled with care.

All of the vacuum tubes I have discussed can be used as detectors or amplifiers, but the UV-201-A tube is declared to prove the best amplifier of the three kinds. All of these tubes sell for $6.50 each and you should be able to secure them from your local dealer in radio supplies. Information on the difference in hook-up comes with the tubes. If we can furnish any other information write us; we are always at our readers' service.

N. Y. DAIRY LEAGUE COMPLETES SUCCESSFUL YEAR

(Continued from page 4)

ing care of New York City's maximum demands for fluid milk at any time.

On March 31, 1922, the association was operating eighty-four plants, of which number forty-six were shipping milk or cream or were in position to do so. Eleven were manufacturing case goods, twenty-five were making butter or cheese. On March 31, 1923, the association was operating one hundred and eleven plants and out of this number eighty-three were under board of health inspection, either shipping or ready to ship fluid milk into New York City at a moment's notice.

And the Test Came!

Probably never again in the history of the association will there be so remarkable an example of the possibilities of organization and plant control as was furnished, when on April 1, 1922, a considerable group of the dealers who had formerly bought of us refused to sign the association contract. The production department was called upon to divert and handle through its own operation a million pounds a day more on April 1 than was handled on March 31. But with the aid of field men the emergency was successfully met so that less than one tenth of one percent of all the milk withdrawn was left on the farms to be hand skimmed or otherwise disposed of.

Five veterinarians have been employed by the association during the past year and have been kept very busy making the required examinations of dairies and dairy barns throughout the territory.

The great increase in our selling activities, especially in view of the stress the League has put upon the high quality of its products, has made our central laboratory at Utica one of the most important parts of the organization. The laboratory has kept a daily check on the character and quality of every product that has been put upon the market. No consignments are released for shipment from any plant until an analysis has been made, not only at the plant but at the central laboratory at Utica .

Advertising and Selling "Dairylea"

All sales and advertising activities have been planned with a view to increasing the farmers' net return per hundredweight on raw milk delivered. To accomplish this, two distinctive objectives have been set up; first, better marketing facilities for fluid milk, and second, better merchandising of by-products. Gradually, we have been working toward the time when we will sell a maximum proportion of our milk directly to the channels which serve the consumer. By adopting "Dairylea," which is applicable to all our products, as our new brand name we have emphasized our transition from the bartering stage of collective bargaining into the field of propriety brand merchandising. Because we know that unbranded merchandise never commands more than the bulk market price, we have already taken steps to co-ordinate our manufacturing and sales effort so that we produce nothing but the highest quality of merchandise worthy of bearing the League's brand.

Heretofore, the League has sold from fifteen cents to seventy cents below the market due to lack of advertising and sales effort.

Ice cream has been advanced fifteen cents per gallon above other dealers within the last few weeks without loss of business, and it is our belief that it is only a question of time when all other by-products of the association will bring the highest market price to which their high quality entitles them. In order to get the full value of our cheese operations, however, it will be necessary eventually, we believe, to manufacture a high grade package article under our own brand.

The fluid milk department comprises the greatest field for future development. The New York problem, however, remains to be solved, and we believe the League must become a larger factor in the direct to consumer business before it will have a sufficiently great influence on the meptropolitan market to increase the farmers 'net return. Your officers and directors believe this is the big problem which faces the League and should be solved during the next twelve months.

The League a Large Exporter

The export department has made distinct improvement in its field of operations during the past six months. Over 100,000 cases have been sold since the first of January. A large part of this has been shipped to Germany, which netted from five cents to fifteen cents per case above our domestic price. League milk is now on sale in Germany, England, South Africa, West Africa, Palestine, Syria, Cuba, and Panama.

During the coming year we will have a man in England who will be in close touch with our heaviest export markets, and will be in the closest possible touch with the situations which may be turned to our advantage in the above mentioned countries.

15 Schools Feed Milk Gladly

The bureau of nutrition has been mainly occupied the past year in inaugurating in several schools of the city the program of milk feeding. The children in fifteen public schools in the city are now drinking from one-half pint to one pint of milk at recess time every day.

The results are already beginning to show that the children thus fed are better and stronger both physically and mentally and that the consumption of milk in the homes of these children has been increased.

Milk in Tank Cars.

The traffic department has been experimenting during the past year with the transportation of milk in tank cars. If these experiments finally prove successful, it will probably revolutionize the transportation of fluid milk to consuming centers. The tank which we have used is built on the idea of a thermos bottle and requires no ice and it would do away with the present method of handling these thousands of heavy milk cans every day.

Our legal department has seen a very busy year and has been successful in every stand it has made for the association. You are all familiar with the several court decisions made during the year establishing the League's right to do business as a co-operative association and recognizing the fairness of its methods. You are also familiar with the decisions of the courts establishing the legality of your pooling contract. Every suit in which the legality of the general operations of your association was involved has been decided by the trial courts in your favor, and while some of these cases are now pending in the appellate courts, your directors have entire confidence that the judgments already will be affirmed.

During the fiscal year just closed the gross sales of milk and milk products made by your association amounted to $82,130,902.17. The total deduction for certificates of indebtedness for the year amounted to $4,622,579.76, or five and three-fifths percent of the total sales. The total amount of deductions for administrative expenses for the year was $2,335,192.63, or two and four-fifths percent of the total amount of sales.

In the history of mankind are certain milestones that denote the time and the place where humanity, as a whole, took a forward step towards better living conditions, sometimes towards better understanding of spiritual matters, and sometimes toward better economic conditions that vitally affect us. Such a forward step towards better economic conditions is now being taken throughout this entire land in the cooperative marketing movement. We have been leaders from the start and we shall never falter.

THE SECRET OF SIMPLE LIVING

(Continued from Page 9)

the Kingdom of God." Faith in this principle will tear one away from the rubbish of life and the surface satisfactions of our day and make certain one's possibilities for happiness and success. And when we get back to the simple, modest tastes of true life we are doing much to unify and simplify the social life about us. To be "in tune with the Infinite" is to radio the secret of true living.

HIS OWN FAULT

Hubby—"Your'e three-quarters of an hour late. What do you mean by keeping me standing around like a fool?"

The Wife—"I can't help the way you stand." —Chapparal.

Better Crops Less Work WITH

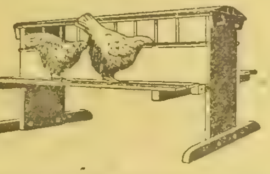
SOLVAY PULVERIZED LIMESTONE

SOLVAY is so easy to handle, so safe, so economical that it makes less work but bigger crops wherever used.

Make this year a bigger year—in crops, in profits. You can do it with SOLVAY.

THE SOLVAY PROCESS CO.
Sales Agent, Wing & Evans, Inc.
Real Estate Exchange Building
Detroit, Mich.

Write for the new lime booklet—sent free! Tells you interesting profitable facts you should know about lime.
SOLVAY PULVERIZED LIMESTONE
SOLVAY PULVERIZED LIMESTONE
SOLVAY PULVERIZED LIMESTONE


Kelly's Poultry Feeder

The modern scientific invention—absolutely no waste, sanitary—built on practical common sense ideas. For feeding wet or dry mash, grit, shell, charcoal, grains, meal or sprouted oats. Cover and trough of 28 gauge galvo steel with ½-inch rolled edges—end uprights selected No. 1 grade cypress dipped in wood preservative stain—Has combination rack with projecting lips and two partitions forming three compartments—all lifting out when cleaning trough. Cover tipping back to refill trough. Side sections folding shutting out vermin at night. Fowls eat from either side. Equally as serviceable on the range as in the pens—feed being fully protected from dirt, litter or storm. Capacity 25 to 150 fowls. Size 36 inches long, 20 inches high, trough 9½ inches wide, 5 inches deep. Weight, crated about 25 pounds. The price to you only $5.00 f. o. b. Saranac, Michigan. Order direct from this ad or send for free booklet to-day. We guarantee satisfaction.

LEWIS KELLY & SON, Manufacturers
Saranac, Michigan.

LEGHORNS

LEGHORNS

S. C. Buff Leghorn Hens, Pullets and Cockerels. Hens and pullets $2.50 each; cockerels $3.00 to $5.00 each. Show birds a matter of correspondence. LAPHAM FARMS, Pinckney, Mich.

DO IT NOW
BEFORE IT IS TOO LATE!
See Page 24

POULTRY BREEDER'S DIRECTORY

Advertisements inserted under this heading at 30c per agate line, per issue. Commercial Baby Chick advertisements 45c per agate line. Write out what you have to offer and send it in. We will put it in type, send proof and quote rates by return mail. Address The Michigan Business Farmer, Advertising Department, Mt. Clemens, Michigan.

PULLETS, HENS AND COCKERELS

S. C. White Leghorns and S. C. and R. C. Black Minorcas. Must make room before cold weather. About ready to lay.
LAPHAM FARMS, Pinckney, Mich.

PULLETS—ENGLISH WHITE LEGHORNS 8 to 10 weeks old for June, July and August delivery. Write for price list.
HENRY WATERWAY, R. 4, Holland, Michigan.

HATCHING EGGS

BARRED ROCK HATCHING EGGS. NORMAN Heavy Laying Strain.
MRS. JESSIE B. DEAN, R. 1, Mason, Mich.

THOMPSON STRAIN BARRED ROCK EGGS by 9 lb. males, bred to lay. Dark matings $1.75 per 15; $3.00 per 30 prepaid.
MRS. FRED KLOMP, St. Charles, Michigan.

SILVER LACED AND WHITE WYANDOTTES Four large, beautiful roosters. Eggs $1.50 per 15.
O. W. BROWNING, Portland, Michigan.

MAMMOTH PEKIN DUCK EGGS FOR SETTING $2.00 or two settings $3.00. Also Wild Mallard Duck eggs same price. Very choicest stock. All orders prepaid. Cedar Bend Farm, Okemos, Mich.

THAT CURIOUS DEVICE FOR MAKING FIRE

It was only seventy-five years ago that a woman of the Middle West wrote to her cousin in New York:

> "Last winter I was told of a curious new device for making fire. It consisted of small splinters of wood with tips of some substance that bursts into flame when rubbed on a rough surface. If you can procure some of them for me I shall be grateful."

Matches were in general use in Europe for years before they were seen in this country. There was no means for spreading such news rapidly. Today, the new invention that contributes to comfort or convenience is quickly known the country over. Advertising conveys the information. The farmer's wife in Texas or Idaho is as well posted on these things as the city woman of the East.

Don't overlook the advertisements. They are heralds of progress with real news for you and your family. They save you time, lighten your work and enable you to obtain the utmost in value for the money you spend.

TIME GIVEN TO READING THE ADVERTISEMENTS IS WELL SPENT

THIS CAR FREE

Nearly everyone else owns a car! Why not you? It is not a question of money. Your spare time for a few weeks, mixed with preseverance and "gumption," is all that is necessary to win this latest model Chevrolet Touring Car.

Or, if you already own a car, get a radio set, baby chicks, pure-bred fowls, poultry books, etc.

It is the official organ of the Michigan State Poultry Association that makes this offer and our reliability is unquestioned. Someone is bound to win the car—why not you. Send post card for details.

$10.00 PER DAY CASH

If you prefer cash, drop us a post card at once, and we will send you details of our new method that enables any honest energetic person to make $10 per day, or more.

This is our own method, which we have tested for the past 6 months, and we know it gives an agent 50 to 500% better chance to earn real money, than any other ever tried.

Free Pamphlet

"VITAMINES AND CHICKS"

by

Prof. E. C. Foreman, Head of the Poultry Dept. at Michigan Agricultural College.

The big feature of our May number is Prof. Foreman's "Vitamine" article, which announces the wonderful effect of Vitamine foods on Baby Chicks. He gives actual facts and illustrations of results almost miraculous when Vitamines were supplied. Luckily, these Vitamine foods are common to every household, and Prof. Foreman explains which ones to use.

Already the demand for this article has almost exhausted our May edition, so we reprinted it in pamphlet form which we will give free to readers of the "Business Farmer" who subscribe direct from this ad., at our special trial price of 50c per year. ORDER TODAY, before the pamphlets are exhausted.

MODERN POULTRY BREEDER
Battle Creek, Mich.

BREEDERS DIRECTORY

Advertisements inserted under this heading for reputable breeders of Live Stock at special low rates to encourage the growing of pure-breds on the farms of our readers. Our advertising rate is Thirty Cents (30c) per agate line, per insertion. Fourteen agate lines to the column inch or $4.20 per inch, less 2% for cash if sent with order or paid on or before the 10th of month following date of insertion. SEND IN YOUR AD AND WE WILL PUT IT IN TYPE FREE, so you can see how many lines it will fill. Address all letters,
BREEDERS DIRECTORY, MICHIGAN BUSINESS FARMER, MT. CLEMENS, MICH.

CLAIM YOUR SALE DATE

To avoid conflicting dates we will without cost, list the date of any live stock sale in Michigan. If you are considering a sale advise us at once and we will claim the date for you. Address, Live Stock Editor, M. B. F., Mt. Clemens

Oct. 18—Holsteins, Howell Sales Company of Livingston County. Wm. Griffin, Sec'y. Howell, Mich.

G. P. PHILLIPS
THE GOLDEN RULE AUCTIONEER
Bellevue, Michigan
Pedigreed Sales a Specialty.
Write, wire or call for terms and dates.

HOLSTEINS

FASCINATION FARM, VASSAR, MICHIGAN. Holsteins, registered fully accredited 32½ lb. [illegible] Write your want.

HEREFORDS

HEREFORDS

Young Cows with calves by side consisting of blood from America's foremost herds at prices that enable them under Earliripe Hereford Beef Plan to pay for themselves within a year to 18 mos. Bulls including prize winners at the larger shows at practical prices. Herds headed by Straight Edge 1169786, one of two sons of Perfection Fairfax out of a daughter of the famous Disturber.

T. F. B. SOTHAM & SONS
(Herefords since 1839) Saint Clair, Mich.

We Have Bred Herefords Since 1860

Herd established by Gov. H. H. Crapo. We have a few choice yearling bulls for sale at farmers prices. You are invited to visit our farm.
CRAPO FARM, Swartz Creek, Michigan.

ANGUS

WE HAVE SOME FINE YOUNG ANGUS BULLS from International Grand Champion Stock at reasonable prices. E. H. KERR & CO., Addison, Mich.

DAIRY and LIVESTOCK

HOLSTEIN MEN PLANNING TOURS

BREEDERS of Holsteins are planning a series of tours to start July 24th and to cover 25 of the main Holstein counties of the State. The plan is to spend one day in each county visiting farms where matters of Holstein interest are to be found—a boy's calf, a prominent sire, a well arranged barn, a profitable cow testing association bunch, a herd of good individuals, cows with creditable A. R. C. or semi-official records, etc. The tourists will halt at noon for basket lunch and a speech or two. Amongst the corps of speakers secured for the several counties are D. D. Aitken, Ex-President of the National Holstein Association; Earl Cooper, Calf Club leader, and C. M. Long, manager of Field Work, both of the Extension Service of the National Holstein Association; E. L. Smith, President, and H. W. Norton, Secretary of the State Holstein Association; A. C. Anderson, former head of the Dairy Department of M. A. C., etc. The tours are being arranged by the local Holstein officials and the County Agents in co-operation with J. G. Hays, the Holstein Field man for Michigan. Full details will be announced later, meanwhile Holstein fans should start grooming the old flivver for the chase.

MICHIGAN SHORTHORN BREEDERS' ASSOCIATION TOUR

THE three day tour arranged by the Michigan Shorthorn Breeders' Association, covering parts of Ingham, Eaton, Calhoun, Branch, Hillsdale, Lenawee and Wayne Counties, proved to be very valuable to the breeders who made the trip and deepened the interest in the breed along the entire route.

The tour started from the Michigan Agricultural College, where their fine herd of Shorthorns and other breeds of live stock were inspected with considerable interest. The remainder of the day was spent in Eaton County, visiting the following herds: I. P. Zimmerman, Dimondale; Wm. Geisenhafer, Dimondale; L. P. Otto, Charlotte; and Simpson Brothers, Charlotte.

The last stop was made at Simpson Brothers, Charlotte, where lunch was served and a number of short talks given by the breeders and others present. The Eaton County breeders are a live bunch, there being over twenty cars out and about eighty people present at the last stop.

The next morning the hikers gathered at the Branch County Farm where a good herd of Polled Shorthorns has been maintained for several years. From here, J. E. Sanderson's herd at Coldwater was inspected after which the following Hillsdale County Herds were seen: Ralph Wheeler, Quincy; Ed. Franks, Montgomery; Wm. Ossius, Hillsdale.

During the afternoon a short time was spent at J. R. Rogers & Sons, Morenci, dispersal sale of their herd of Shorthorns. This herd has for many years been developed along dual purpose lines and while many of the cows offered had records of from eight to eleven thousand pounds of milk yearly, they also showed a blockiness and thickness of fleshing that was very commendable. The prices realized were not high, but good cattle sold where they can be raised at a profit. R. J. Bidwell's herd, Tecumseh, was visited the same evening, where their sale cattle, sold a few days ago, were inspected with considerable interest.

The third day was devoted largely to Washtenaw County herds. Calls were made on the following breeders: Ferman Clemens, Saline; Adam Knapp, Manchester; M. P. Alber, Manchester; Jay Smith, Ann Arbor; H. W. Hayes, Chelsea; Thos. Smith, Ann Arbor.

A picnic dinner was served on the lawn of Mr. Hayes, after which a short meeting was held and talks given by Prof. W. E. J. Edwards, An. Husb. Dept., M. A. C., East Lansing; P. P. Pope, Mt. Pleasant; V. A. Freeman, Livestock Ext. Spec., M. A. C.; H. S. Osler, County Agent, Washtenaw County; and others. At this time the Southeastern Michigan Shorthorn Breeders' Association was organized with the following officers: President W. H. Hayes, Chelsea, Vice-President, J. Smith, Ann Arbor; Sect.-Treas., Ferman Clemens, Saline; Directors, Thos. Smith, Ann Arbor; Nathan Alber, Manchester; Wm. Kelley, Plymouth; and L. C. Kelly, Ypsilanti. A great deal of enthusiasm was shown, fully 140 being present. During the day more than thirty cars were in line at one time. This made quite an impressive array and elicited considerable comment along the route. Later in the afternoon, the cavalcade directed its progress toward Henry Ford's farm at Dearborn. On the way a stop was made to see L. C. Kelly & Son's herd at Ypsilanti, who maintain herds of Shorthorn and Polled Shorthorns.

The visit to Ford's farm was of particular interest. Mr. Ford purchased the DeGarmo, Highland, Michigan, herd, last fall. Practically all of these cattle are of Duchess breeding and it is understood that Mr. Ford plans upon developing this herd still furthur along dual purpose lines.

Many fine individuals and herds were seen on this tour, so many that space will not allow of particular mention.

The hospitality exhibited by the breeders visited and the enthusiasm shown by the large number who took in the trip demonstrated that they still have great confidence in the reds, whites and roans and that the Shorthorn is one of the most solid stones for building the foundation of a permanent agriculture.

FEEDING TOO WIDE A RATION

We have a flock of sheep and fed them all the ensilage they would eat and cornstalks and hay (clover and timothy mixed). When the lambs came they would get the scours when a few hours old and die in two or three days. What was the cause?
—H. S., Harrison, Mich.

—The trouble which you are having with your sheep is due to the fact that you are feeding too wide a retion, that is, one containing too much carbohydrate material and not enough protein material.

With all the silage they would eat, cornstalks and mixed hay, the sheep would eat larger proportion of silage and would take only a very small amount of the clover from the mixed hay.

The amount of silage fed to breeding ewes should be limited to not to exceed two and one-half pounds per head daily and in addition they should receive a good amount of clover or alfalfa hay and a small amount of grain for the last thirty days preceding lambing.

As a grain ration, there is nothing better than oats, which should be fed to the extent of one-half pound per head daily.—Geo. A. Brown, Professor of Animal Husbandry, M. A. C.

MICHIGAN'S NEW CHAMPION HOLSTEIN

EMPRESS Prilly Rosewood, a Holstein cow owned by E. M. Bayne of Romeo, Mich, has surpassed all former records of butter-fat production for the breed in 305 days as a Junior four year old, and is declared new state champion by the Advanced Registry. In 305 days she produced 20746.9 lbs. of milk and 650.23 lbs. of butterfat. This fat production is equal to 812.78 lbs. of butter.

VETERINARY DEPARTMENT

RINGWORM

I have a barn full of cows and steers and heifers and a few of these seem to have a skin disease that seems to be catching. It looks similar to ring worm and is around the eyes. The hair comes off and it is a greyish color, sort of scurf, no matter comes from it. Afterwards it comes on the body. It is rough like a wart but does not bunch up like a wart. Can you tell me what it is and what I can do for it?—S. McD., Sparta, Mich.

—These cattle are in all probability suffering from ringworm, a contagious skin disease due to a fungus the

SO EASY TO USE

Carbola
Paints and Disinfects
Dries White

CARBOLA
The Disinfecting White Paint

It takes less than five minutes to mix the Carbola powder with water and have it ready to use as a white paint and powerful disinfectant. *No waiting or straining; no clogging of sprayer.* Does not spoil. Does not peel or flake. Disinfectant is right in the paint powder—one operation instead of two. Gives better results, costs less. Used for years by leading farms.

Your hardware, paint, seed or drug dealer has Carbola, or can get it. If not, order direct. Satisfaction, or money back. 10 lbs. (10 gals.) $1.25 and postage; 20 lbs. (20 gals.) $2.50 delivered; 50 lbs. (50 gals.) $5.00 delivered; 200 lbs. (200 gals.) $18.00 delivered; trial package and booklet 30c.

Add 25% for Texas and Rocky Mt. States

CARBOLA CHEMICAL CO., Inc.
310 Ely Ave., Long Island City, N. Y.

Carbola
Paints and Disinfects
Dries White

400 Gallons of Sterilizer for $3

B-K
Bacili-Kil
Trade Mark

One ounce of B-K is diluted with three gallons of water to sterilize cans, pails, strainers, separators, etc.

B-K kills the germs that sour milk and cream. Makes things sweet and pure. *B-K is the dependable, recognized standard. None genuine without the big blue label and trade mark. Money back if not satisfied.* At your dealer. Write for bulletin 320A giving information.

General Laboratories
420 Dickinson St., Madison, Wisconsin

SHORTHORNS

Richland Shorthorns

SPECIAL OFFER: Two choicely bred cows. One roan—One white—One with bull calf at foot by son of IMP. Rodney. This show stock of real caliber and great foundation material. A bargain at the price.

C. H. Prescott & Sons.

Office at Tawas City, Mich. Herd at Tawas City, Mich.

Maple Ridge Farm Offers For Sale

Shorthorn cows and heifers at a bargain. Representatives of the Oxford, Pere, Young Mary and Venus (Ruby Pheonix). Bred for general usefulness and all T. B. tested. An inspection of the herd is invited.
J. E. TANSWELL, Mason, Michigan.

RAISE SHORTHORNS WITHOUT HORNS Like Kelley does. U. S. Accredited Herd No. 28945. For description and price write,
L. C. KELLY & SON, Plymouth, Michigan.

GUERNSEYS

FOR SALE—BRYCE FARMS OFFER TO THE highest bidder the Herd Bull Rupert of Thorn Hill No. 50133 advanced registered Guernseys. Photo and pedigree furnished.
GIDEON T. BRYCE, Romeo, Michigan.

FOR SALE—REGISTERED GUERNSEY HEIFers at reasonable prices, also choice bull calves of May Rose breeding.
H. W. WIGMAN, Lansing, Mich., Box 52.

MISSAUKEE GUERNSEYS. A NEW CROP OF calves coming soon. No females for sale. Order that new calf of A. R. Sire and Dam.
A. M. SMITH, Lake City, Michigan.

GUERNSEYS—Registered Bull Calves, Cheap, also grades. Best of breeding for production and size. George Damken, North Manchester, Indiana.

Trichopyton tonsurans. The treatment depends somewhat on the extent and form of the eruption. When feasible it is advisable to clip off the hair and soften up the crusts with soap and warm water. This may be followed by painting the areas with tincture of iodine. Most cases yield to treatment with any disinfectant.—John P. Hutton, Asso. Prof. of Surg. & Med., M. A. C.

CASE OF MASTITIS

I have a cow which came in about one week ago. From the first there was something wrong with one of her front teats. When milking this teat gave only two or three squirts at a time. In about ten minutes she would give a little more. Her teat does not seem to be soft and spongy like the rest and a hard tube has formed inside of the teat. There is also a small bunch where the tube goes up into her bag. The bag is also a little bit caked in the quarter where the sore teat is. She gives about twelve quarts of milk from the other three. I have tried a milk tube but it doesn't help. Will be much obliged for any information on what to do for her.—W. G., LeRoy, Michigan.

—I am very much afraid that the cow will lose the teat. You have a case of mastitis where treatment will do very little good. When the teat canal becomes thickened and the quarter gives but little milk treatment is usually very unsatisfactory. The milk glands of the affected quarter change into connective tissues so that they do not function any more and there is no treatment that will restore them to a normal condition again. The best thing perhaps that you can do is to dry the quarter up as soon as possible. Should you decide to try treatment I would suggest that you put the case in the hands of a competent veterinarian who can give the case his personal attention.—J. P. Hutton, Associate Professor of Surgery and Medicine, M. A. C.

FARM MECHANICS

STORING DYNAMITE

ONE of the most serious problems to the farmer who is anxious to make use of dynamite as a labor-saving device on the farm is the question of the safe storage of his explosives and accessories. Where only a small amount of explosives is used from time to time, and where a dealer is conveniently located who has storage facilities, it is probably best to buy only the quantity of explosives required for the day's work. Of course, the dealer charges a profit on his explosives sales so that the farmer in this case has to pay part of the dealer's storage charges. If the farm is large enough to support a magazine of its own, the farm owner can save a considerable amount on his explosives by building a small magazine at a safe distance away from roads and dwellings where the dynamite can be kept under lock and key and where it will be protected from fire and flying bullets.

Neither dynamite nor detonators, which latter term includes both blasting caps and electric blasting caps, should be kept in any dwelling house whatever. Neither should the blasting caps or electric blasting caps be stored in the same building with dynamite. It must never be forgotten that it is in the combination of the two that the greatest storage hazard exists. If dynamite alone is set on fire, it generally burns up peacefully without exploding, and while the caps would explode if they were in a burning building, the damage that they would do is relatively small as their action is very local. However, if dynamite and caps stored together should take fire, the exploding caps would detonate the dynamite which would do an immense amount of damage. The only other way of exploding dynamite is to fire a rifle or pistol bullet into it. Therefore the dynamite should be stored in a place where a stray bullet cannot penetrate.

Dry storage is necessary for both caps and explosives. Moisture is bound to spoil dynamite in time. Therefore dynamite should never be stored in a dug-out, cellar, or underground box or room of any kind. The storage place should be dry and well ventilated. The old injunction to keep the powder dry applies with equal force to twentieth century high explosives and blasting caps as it did to the black powder of Cromwell's time.

It is hardly necessary to add that dynamite and detonators should be kept under lock and key at that, as it gives one an uncomfortable feeling to have dynamite stolen, and it is certainly not a safe plaything for children.

Care should also be taken to keep dynamite out of the reach of cattle, as it has a sweetish taste which cattle seem to like, but dynamite should be labeled "for external use only". Taken internally, it is decidedly poisonous.—Arthur LaMotte, , Mgr. Technnical Section, Explosives Dept., E. I. du Pont de Nemours & Co.

EXPERT EXPLAINS WHAT IS HAPPENING IN SUGAR MARKET

(Continued from Page 4)

Cuba exceeds one billion dollars and that they own four and one-half million acres of cane land capable of producing 11,000,000 tons of sugar annually when all of it shall have been planted. The Sugar Trust alone now producing 180,000 tons of raw sugar in Cuba, owns no less than 32,000 acres of virgin tropical cane land. It thus will be seen that the bulk of the profit arising from the present sugar gouge is finding its way to the plethoric pockets of our seaboard refiners who would not dare unduly to increase the margin between raw and refined for fear of our anti-trust and trade regulatory laws. But owning sugar estates in Cuba they can without fear, raise the price of raw sugar at will, making their inordinate profits out of production instead of refining in America and snap their fingers at our Department of Justice.

Cuba Produces Sugar at Lower Cost

By reason of various local conditions which prevail in Cuba, that island produces sugar at a lower cost than it can be produced at home, in our insular possessions, or elsewhere in the world and hence a reasonable duty must be maintained on sugar if the domestic industry is to continue to exist. The removal of this duty is the measure for which the refiners have been persistently working for more than 20 years. With the removal of this duty the seaboard refiners would be able to "dump" Cuban sugar onto our market, at so low a price as to destroy the domestic industry in one season, after which with no competition to fear, they could raise the price at will. The price the American people would have to pay for sugar can be judged by the price which now prevails and the price which prevailed in 1920 when they pegged the price of raw sugar at 2c per lb. f. o. b. Cuba.

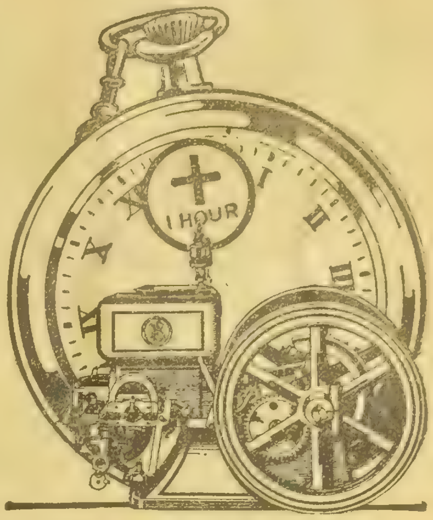
In the United States we have sufficient sugar beet area from which to produce the sugar of the world but we produce at home only about two-fifths of the sugar we consume; importing the balance from Cuba which is beyond the reach of our trade regulatory laws.

The extra $222,000,000 which the present sugar gouge is costing the American people is a sufficient sum with which to erect nearly 200 one-thousand ton beet sugar factories with a capacity of producing 2,000,000 tons of sugar a year. Not only would this insure the American people against future sugar gouges, but under normal conditions of 6c sugar and $6.00 beets the 17,000,000 tons of beets required to make this 2,000,000 tons of sugar would annually turn $102,000,000 into the pockets of American owners instead of its going to the exploiters of Cuba who never miss an opportunity of robbing the American people.

However, much or little sugar we produce at home, American producers, dealers and speculators all are amenable to every United States law which has been or which may be enacted to protect consumers from extortion. The solution of the sugar question would appear to be plain.

Radio is revolutionizing Mississippi river shipping and speeding up the arrival and departure of freight putting the skipper and the boat companies in close touch with each other, thus obviating delays in loading and unloading freight or in waiting on the arrival of departure of boats.

"What's an hour worth to a farmer?"



WOULD you pay two cents for an hour's spare time a day? Would your wife? It doesn't cost that, even, to gain an hour on pumping water alone—with a Hercules Engine.

Saves so much time on so many chores!

Suppose you pump 60 gallons of water from a well 50 feet deep, and carry the water 100 feet. Time you've done that little job, you've lugged 500 pounds a quarter of a mile. And it will take you all of fifteen minutes to do it.

For less than two cents, a 1½-h. p. Hercules will pump 60 gallons a minute for sixty minutes—and deliver it 100 feet or more away.

It will saw wood, or grind feed, or run a separator, or a fanning-mill, or do any of a dozen other muscle-racking chores just as easy—and just as cheaply!

And still you worry along without a Hercules! Why don't you send for the book that tells you what one can actually SAVE you and gain for you?

THE HERCULES CORPORATION
Engine Division, Dept. L, Evansville, Ind.

HERCULES ENGINES

HEAVES Is your own horse afflicted? Use 2 large cans. Cost $2.50. *Money back if not satisfactory* ONE can at $1.25 often sufficient. In powder form.

Most for cost
30 years' sale

NEWTON'S
A veterinary's compound for Horses, Cattle and Hogs. Heaves, Coughs, Distemper, Indigestion. Worm expellor. Conditioner. At dealers' or by parcel post.
THE NEWTON REMEDY CO., Toledo, Ohio

JERSEYS

REG. JERSEYS, POGIS 99th OF H. F. AND Majesty breeding. Young stock for sale. Herd fully accredited by State and Federal Government. Write or visit for prices and description.
GUY C. WILBUR, BELDING, Mich.

AYRSHIRES

FOR SALE—REGISTERED AYRSHIRE bulls and bull calves, heifers and heifer calves. Also some choice cows.
FINDLAY BROS., R 5, Vassar, Mich.

BROWN SWISS

REG. BROWN SWISS 6 FEMALES AND 2 YOUNG BULLS for sale. E. T. Spencer, R. R. 1, Sunfield Mich.

SWINE

O. I. C.

O. I. C'S MARCH FARROWED SOW AND Boar Pigs, sired by Michigan Giant with plenty range and good backs, Dams are all over two yrs. price $20. Registered and express paid. Maple Valley Stock Farm, North Adams, Mich.

O. I. C.'S. 1 GILT 13 MONTHS OLD, WEIGHT 380, due June 3rd. 10 last fall gilts due Aug. and Sept. 1 last fall boar, spring pigs not akin. Record free. Citz. phone. ½ mile west of depot.
OTTO B. SCHULZE, Nashville, Mich.

HAMPSHIRES

HAMPSHIRES: A FEW BRED GILTS LEFT. Place your order now for your Boar pig at a bargain. Pairs not akin. 10th year.
JOHN W SNYDER, St. Johns, R. 4, Mich.

DUROCS

HILL CREST DUROCS, PERRINTON, MICH. We are breeding twenty sows and eighteen gilts to a son of GREAT ORION SENSATION. Yearling, spring and fall boars. NEWTON & BLANK, Farm 4 miles straight south of Middleton, Gratiot Co., Mich.

PEACH HILL FARM offers choice weanling Duroc pigs, either sex. Priced very reasonable. Write us.
INWOOD BROS., Romeo, Mich.

Sturdy Pure Bred Day Old Chicks

The famous Tom Barron, English, Imported White Leghorn and Sheppard's famous Anconas. Bred direct from our thoroughly culled selected stocks that are headed with pedigreed males of 250 to 289 egg strain. Carefully hatched in our large up-to-date incubators. These high grade, vigorous chicks will increase your profits. *Special bargain prices for June, July and August delivery* if you order now. 10% with order—balance ten days before shipment. 100% live delivery guaranteed. *Satisfaction guaranteed or we return your money.* Our illustrated catalog of chicks free for the asking, write for your copy tonight. Or order direct from this ad enclosing remittance in full. We will ship immediately at the following extremely low prices; Extra selected stock 25-$3.25; 50-$5.50; 100-$10.00; 500-$45.00; 1000-$90.00.

Silver Ward Hatchery, Dept. B Zeeland, Michigan, U. S. A.

150,000

CHICKS for JUNE and JULY deliveries. REDS and ROCKS, mated with M. A. C. COCKERELS. TOM BARRON W LEGHORNS, and HEAVY TYPE B. LEGHORNS and ANCONAS at GREATLY reduced prices. 100% live arrival GUARANTEED, POSTPAID. Strong chicks from Vigorous, Heavy Laying flocks. Catalog FREE.

KNOLL'S HATCHERY, R. 12, Holland, Michigan

CHICKS WITH PEP

BIG REDUCTION FOR JUNE AND JULY

YOU CAN'T BEAT OUR PRICES AND CHICKS.

Try Our Full of Pep and Bred to Lay Chicks. They will pay you in June and July. Leghorns and Mixed 10c; Rocks Reds, Anconas, Minorcas, White Wyandottes 13c; Orpingtons and Silver Wyandottes 15c. Safe delivery. Postpaid. Illustrated Catalog free.

HOLGATE HATCHERY, Box B, Holgate, Ohio.

REDUCED PRICES to Sept. 1st, 1923

Variety	Price on 50	100	500
White, Brown, Buff Leghorns	$5.00	$9.00	$42.50
Barred Rocks, S. C. Reds, White Wyandottes, Black Minorcas, White Rocks, Anconas	$6.00	$11.00	$52.50
Buff Orpingtons	$7.00	$13.00	
White Minorcas, Sheppard Strain Anconas	$8.50	$16.00	
Assorted, All Varieties	$4.50	$8.00	$38.50

Postpaid to your door, full live delivery guaranteed. ORDER DIRECT FROM THIS AD TO SAVE TIME. Reference: Bank of Geneva.

THE GENEVA HATCHERY, Box 505, Geneva, Indiana

Star Hatchery BABY CHICKS

From Select, Vigorous, Heavy Laying Breeding Stock

Prices Reduced

Hatched by modern methods in best machines under our personal supervision. Carefully packed and sent postpaid and 100% live delivery guaranteed. Bank Reference. You take no chances in ordering STAR BABY CHICKS. Place your order now and get them when you want them

STAR HATCHERY, Box X, Holland, Michigan

DOWNS' CHICKS

Extra Selected, English White Leghorns from my very best breeding pens, on and after June 15th at $10.00 per hundred. Book orders now. Write for my 16 page White Leghorn Catalogue.

W. A. DOWNS
Washington, Mich.

BABY CHICKS

Hatched from strong and vigourous flocks of ENGLISH WHITE LEGHORNS AND ANCONAS, BRED FOR HIGH EGG-PRODUCTION. We guarantee 100 per cent good live chicks on arrival. Postage PAID. Prices reasonable. Instructive Catalog and prices free on request. QUALITY HATCHERY, Box A11, Zeeland, Mich.

GREEN LAWN CHICKS AFTER JUNE 15. White Rox, Barred Plymouth Rox, R. I. Reds or Black Minorcas 13½c each. White Leghorns, Anconas or Broilers 12c each in 100 lots. All chix less than 100 lots 14c. Order now for June, July and August. Our 13th year producing chix that please. Sept. chix 15c straight.

GREEN LAWN POULTRY FARM
South of High School, Fenton, Michigan.

WHITTAKER'S RED CHICKS

Both Combs. Cut prices for June and July. Write for price list.

INTERLAKES FARM, Box 4, Lawrence, Mich.

BABY CHICKS—GET OUR REDUCED Prices. Six leading breeds. Special attention to small orders.

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QUALITY Chick Price Cut

Wh., Br., Buff Leghorn 10c; Br. Rock 11c; Wh. Rock, Reds, Wh. Wy., B. Orps., 12c; Assrt. 9c; Assrt. large breeds, 10c. Catalog free.

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HIGHEST QUALITY CHICKS

Michigan's Old Reliable Hatchery

(The most modern and best equipped Hatehery in the state)

VAN APPLEDORN BROS. MICHIGAN'S OLD RELIABLE HATCHERY HOLLAND, MICHIGAN

PURE BRED English and American S. C. W. Leghorns; S. C. Anconas; Barred Plymouth Rocks and R. I. Reds. Strong, well hatched chicks from tested Hoganized Free range stock that make wonderful winter layers.

Chicks sent by Insured Parcel Post Prepaid to your door. 100% live delivery guaranteed. Fifteen years of experience in producing and shipping chicks has given absolute satisfaction to thousands. Write for illustrated free catalog and price list. Get lowest price on best quality chicks before you buy.

Holland Hatchery, R. 7, Holland, Mich.

Reduced Prices BABY CHICKS

YOU CAN DO IT WITH B-F BABY CHIX

Best Paying, Heavy Laying, Purebred Strains.

Tom Barron English S. C. W. Leghorns, 25, $2.50; 50, $5; 100, $10; 500, $45; 1000, $90.

Park's Strain Barred Rocks; S. C. Rhode Island Reds-25, $3; 50, $6; 100, $12; 500, $55; 1000, $110.

Good strong broiler chicks, $8 per 100.

Place your order at once; avoid disappointment. Get your chicks when you want them. 100% live delivery guaranteed postpaid. Instructive catalog free. Prices on mature stock, 8-12 weeks old pullets on request.

Brummer-Fredericksen Poultry Farm,
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Pure Bred Chicks Buy 'Em Near **Home**

Broiler Chix....9c White Wyandottes,
W. or B. Leghorns 11c Buff Orpingtons 15c
Bd. Rox or Reds....13c Light Brahmas....19c
White Rox....14½c Shepherd Anconas 12c
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Add 35c if less than 100 lots wanted. Circular.

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Dept. 8 Good Reference R. 7, Grand Rapids, Mich.

BABY CHICKS

Tompkins Strain $15.00 per hundred. Last hatch August 22nd. Quality breeder of Rhode Island Reds.

WM. H. FROHM, R. 1, New Baltimore, Mich.

BABY CHICKS 12c AND UP

Member Mid-West Baby Chick Association.
THOS. G. CALLAGHAN, Fenton, Michigan

S. C. WHITE LEGHORN BABY CHICKS of high quality, $9.00 per 100. For prompt delivery order direct from this ad.

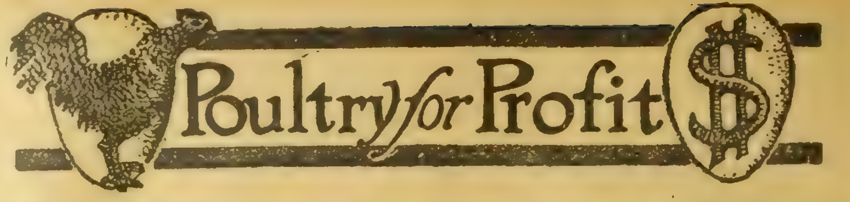
RALPH S. TOTTEN, Pittsfield, Michigan.

RESULTS!

Your paper brought us a great deal of business, and we are well satisfied.

Holland Hatchery and Poultry Farm, Holland, Mich.

What have you for sale?



Poultry for Profit

HENS GET LAME AND DROOPY AND THEN DIE

My hens get lame and droopy and then die. I thought you could print in the Business Farmer what would be good for them.—Mrs. M. S., Harrisonville, Mich.

—Lameness and droopiness are common manifestications of various diseases. For this reason it is difficult to make an accurate diagnosis on the basis of symptoms alone. The fact that there are a number so involved in the flock would indicate the presence of disease.

Lameness is one of the clinical symptoms of Tuberculosis. Fowls may have this infection for a long time without showing any external symptoms. The following symptoms, however, are present in so affected birds: Emaciation, leg weakness, or lameness, pale comb and wattles, ruffled feathers, and finally droopiness. The appetite of the fowl usually remains good until shortly before death. Upon opening the affected birds, the liver in many cases will appear spotted with white nodutes or areas. The fact that lesions are present, however, is not always an indication of Tuberculosis and for this reason it sometimes requires a laboratory examination to make sure of diagnosis.

Practically all domesticated birds are more or less susceptable to this trouble and the healthy birds should not be exposed to the affected stock. The germs are disseminated thru droppings which contaminate the premises, food, and drinking water, thus communicating the infection to other birds.

In preventative treatment, the houses should be maintained in as sanitary a condition as possible. Dropping boards should be used and plenty of light and ventilation supplied. It has been the writer's experience on many extention trips throughout the State, that this disease prevails more commonly where dirt floors are in use and where dropping boards are absent.

Thorough cleaning and disinfecting is of course, necessary in controling this disease. Sunlight should be made possible in the yards and houses and lime should be liberally used in the runways in the cleaning up process. The young stock should be raised away from the parent flock because this disease is not transmitted thru the egg and if a high mortality results in the parent flock the young stock can be raised on a new soil absolutely free from this trouble.

It may be necessary to dispose of the entire old flock and allowing the poultry houses and yards to remain unused until the disease is thoroughly cleaned up. A reliable disinfectant used in a three or five per cent solution should be liberally applied. The drinking utensils, roosts, floors, hoppers, etc., should also be thoroughly soaked with disinfectant. The young stock can be introduced after a thorough disinfecting of the house and yards, with the assurance that further trouble will seldom break out if sanitary conditions prevail.—E. C. Foreman, Associate Professor of Poultry Husbandry, M. A. C.

PURE BRED BARRED PLYMOUTH ROCK

Kindly furnish me the requirements of a pure-bred Barred Plymouth Rock.—A. W., Stockbridge, Michigan.

The common disqualifications for the Barred Plymouth Rock are as follows: Red in any part of the plumage; two or more solid black feathers in the primaries, secondaries, or maintail feathers: shanks other than yellow, dark spots do not disqualify; side springs on the comb or feathers on the shanks; comb other than single.

Color: comb, face, wattles, and ear lobes: bright red; beak: yellow; eyes: reddish bay; shanks and toes: yellow; plumage: grayish white, each feather crossed by regular narrow parallel sharply defined dark bars that stop short of positive black free from shafting, brownish tinge or metallic sheen; the light and dark bars to be of equal width, in number proportionate to the length of feathers and to extend through out the length of feathers in all sections of the fowl; each feather ending with a narrow dark tip; the combination of overlaping feathers giving the plumage a bluish appearance and of even shade throughout.

Weight: cock 9½ lbs.; cockeral 8; hen 7½; pullet 6.—E. C. Forman, Associate Professor of Poultry Husbandry, M. A. C.

THE EXPERIENCE POOL

Bring your everyday problems in and get the experience of other farmers. Questions addressed to this department are published here and answered by you, our readers, who are graduates of the School of Hard Knocks and who have their diplomas from the College of Experience. If you don't want our editor's advice or an expert's advice, but just plain, everyday business farmers' advice, send in your question here. We will publish one each week. If you can answer the other fellow's question, please do so, he may answer one of yours some day! Address Experience Pool, care The Business Farmer, Mt. Clemens, Mich.

HOW TO SET A TRAP FOR WEASELS

LAST year during my dinner hour a litter of weasels attacked and killed about half my flock of turkeys and this is the way we caught them:

We shot two and five of them we caught in a trap. I found three of the little dead turkeys after they had made their raid and one I used for bait and two I tied in a sack. This is the way I set the trap: I saw a weasel in an old smoke house where I had a hen setting in a box. There was a hole under the sill that they used for a runway so I drove a stick about eighteen inches long in the ground near the sill and set my trap between the stick and sill and tied the little turkeys feet to the top of the stick, allowing the head to hang eight or ten inches above the ground. The weasel will rare to get his prey. He is cautious not to get in the trap when he goes up but when he comes down he is not watching where he lands. Of course the trap must be set on the side of the stick where the head hangs down. With the three little turkeys and a sparrow I caught four in this place. I placed a loose coil of old barbed wire around the stick to keep out the poultry. The seventh one I caught in the chicken house. Upon noticing a commotion among the chickens at roosting time I went out there. As I entered the house I saw a dead chicken and caught the scent of a weasel. I used just the head and all the neck and set the trap same as before except that I leaned boards up around the trap leaving spaces at the bottom for weasels to get in.—M. M. C.

FRUIT and ORCHARD

EDITED BY FRANK D. WELLS

NOTES AND COMMENTS

Some good varieties of black sweet cherries are wanted for Southern Michigan. Of all fruits suitable to this climate, the black cherry is the hardest tree to grow. It persists in dying at the slightest provocation, or with apparently no excuse at all. No better service could be done the horticulture of this section than to discover some variety that will be satisfactory. Who knows of some seedlings that are promising?

* * *

The peach may be budded on either peach or plum stock, and grow. At one time the plum was used because it was supposed to be hardy, so was a point for the tree agent with an easy conscience. But the tree is slow in growing and never really does well, so most nurserymen have abandoned the plum for this purpose, the peach stock being so much more desirable. But it still remains a talking point for some salesmen.

* * *

There is a small demand for plum grafted on peach stock. For orchards on light soil that are to be grown in a hurry this kind of a tree may be of use, but is short-lived. On heavy soil, which is best fitted for the plum, a tree on stock of its own kind may be slower of growth, but it will live longer and in the end should be more satisfactory.

The Agricultural and Business Situation

Revised Monthly by the Department of Research of the American Farm Bureau Federation.

WHEAT—

Wheat is a sore spot with agriculture and has been constantly growing worse since the termination of the war. Wheat prices, this spring, have been averaging close to $1.20 compared with $1.35 for the corresponding months a year ago and $1.70 two years ago.

Acreage this season was reduced five and one-half per cent from last year and June forecasts indicate production five per cent under 1922 and two per cent less than the 1917-22 average.

Of the 1920 crop, 44 per cent was sent abroad; the 1921 crop, 34 per cent; and by June 30, 1923, the exports of the 1922 crop will probably show about 26 per cent.

The coming crop will face more serious competition abroad if Broomhall's prediction of increased European production (Russia included) this year is correct. Canada's output also promises to be as large as the record of last season. India has produced an exportable surplus of fifty million bushels over 1922.

Efforts are under way to stimulate domestic wheat consumption which has been declining. Per capita consumption around 1840 averaged 3.8 bushels; around 1880, 4.9 bushels; and 1910, 5.6 bushels. From this high point it has fallen to 4.8 bushels for the four year average 1919-22 and 4.5 bushels for 1922.

Exports to the extent of 20 per cent of the crop and per capita consumption on the basis of pre-war would equal 1923 production as now forecasted.

PORK—

Fat hogs are now around $7.00 compared with $10.50 a year previous. There is a surplus of about 12 per cent above last year's production to be absorbed. Exports which since the war have been taking about 15 per cent of the pork output, are now running 40 per cent higher than the corresponding months in 1922.

Per capita consumption of pork for four post-war years averages 71 pounds compared with 72 for four pre-war years. Per capita consumption of beef, however, has been declining, the average since the war running at 59 pounds compared with 75 pre-war. The livestock industry has laid plans for a campaign to increase the use of meat.

PRICES—

Prices of farm products are 5 per cent higher than a year ago and food prices 4 per cent higher. This compares with an increase of 15 per cent for clothing; 28 per cent for metals; and 26 per cent for building materials. The purchasing power figure for farm products in terms of all commodities is 70, which is 5 less than the corresponding month last year.

I. Production and Trade

1. Agriculture: U. S. Production—000,000 omitted.

	1923 Forecast	1922	Average, 1917-1921	1923* Per Cent
Winter wheat, bu.	581	586	590	99
Spring wheat, bu.	236	276	245	96
All wheat, bu.	817	862	835	98
Oats, bu.	1256	1201	1378	91
Barley, bu.	196	186	192	102
Rye, bu.	72	95	70	103
Hay, all, tons	99	113	99	100
Apples, bu.	187	201	160	117
Peaches, bu.	47	57	43	110

*As per cent of average 1917-1921.

2. Mining (Federal Reserve Bank of New York):

Figures express production as a percent of normal. In estimating normal production, due allowance is made for seasonal variation and year to year growth.

	April, 1923	March, 1923	April, 1922
Anthracite coal	§102	112	.3
Bituminous coal	§117	105	34

3. Manufacturing (Federal Reserve Bank of New York):

Wheat Flour	110	122	95
Meat	*	119	96
Sugar	122	132	124
Cotton	101	107	80
Pig iron	114	110	67
Steel ingot	99	99	74
Copper	§ 90	91	59
Gasoline	*	121	95
Wood pulp	*	100	92
Cement	133	146	111
Wool	*	136	95
Tobacco	*	91	79

* Not available. § Preliminary.

4. Building Expenditures (Bradstreets):

(000 omitted)

	1923	1922	Per cent Increase
January, 164 cities	$194,782	$141,791	38.0
February, 164 cities	221,827	136,274	62.8
March, 165 cities	377,831	243,532	55.1
First quarter	$794,440	$521,597	52.3
April, 165 cities	$327,606	$217,912	50.3
May, 151 cities	255,829	243,546	5.0

5. Transportation:

Freight car loadings:	Week Ending June 2, 1923	Same Week Month Ago	Same Week Year Ago	Week Ending June 2, 1923*
Total	932,041	961,029	750,645	124
Grain and grain products	32,340	34,097	37,931	84
Livestock	29,399	33,508	27,792	104
Coal	171,248	175,866	86,626	197
Coke	14,389	15,100	8,927	156
Forest products	73,637	72,154	58,923	126
Ore	73,390	37,943	31,552	228
Merchandise and Miscel.	537,638	592,361	498,894	108

*As percentage of week year ago.

6. Employment:

	May, 1923	April, 1923	May, 1922
Out of 64 industrial centers employment:			
Increased over previous month in	31	38	48
Decreased over previous month in	33	26	16

7. Bank Debits:

Units of $1,000,000,000

	May, 1923	April, 1923	May, 1922
New York City	$20.70	$20.48	$21.65
Outside bank debits	19.37	18.82	16.32

8. Mail Order Sales:

	May 1923	May 1922	Eleven Months Ending May 1923	Eleven Months Ending May 1922
Montgomery Ward & Co.	$10,796,431	$ 6,377,076	$103,492,457	$ 71,931,286
Sears Roebuck	18,465,379	14,477,692	193,105,507	159,192,883

II. Foreign Trade

1. Exports: (000 omitted)

Commodity:	April 1923	April 1922	Ten Months Ending April 1923	Ten Months Ending April 1922
Grand total	$318,357	$311,331	$3,264,857	$3,070,345
Beef and veal, lb.	2,053	2,169	22,069	25,532
Pork, lb.	75,686	46,396	678,815	575,530
Lard, lb.	85,475	42,459	794,837	704,314
Neutral lard, lb.	3,126	1,270	23,168	16,689
Butter, lb.	810	922	8,510	5,535
Cheese, lb.	1,664	478	7,635	6,535
Hides and skins	1,832	3,608	18,029	30,954
Corn, bu.	5,270	18,485	87,082	153,825
Meal and flour, bbls.	91	83	509	644
Wheat, bu.	4,943	4,856	135,726	184,949
Flour, bbls.	1,167	1,243	13,093	13,776
Oats, bu.	484	1,725	17,965	6,574
Meal, rolled, lb.	13,259	5,967	101,971	74,818
Fruits and nuts $	2,775	3,856	65,894	60,054
Vegetable oils and fats $	874	1,192	11,444	11,877
Sugar, lb.	88,087	274,430	581,075	1,306,422
Leaf tobacco, lb.	40,186	40,190	368,586	381,720
Cotton, bales	260	598	4,691	5,581
Wool, lb.	28	38	412	818

2. Imports (000 omitted):

Commodity:	March 1923	March 1922	Nine Months Ending March 1923	Nine Months Ending March 1922
Grand total	$ 398,178	$ 256,177	$2,724,837	$1,877,778
Beef and veal, lb.	947	1,004	28,347	19,881
Pork, lb.	171	57	678	786
Butter, lb.	3,057	174	11,263	9,398
Cheese, lb.	3,142	2,046	40,215	24,404
Hides, skins, lb.	51,414	30,394	502,384	277,722
Corn, bu.	15	26	78	91
Oats, bu.	31	244	265	1,263
Wheat, bu.	345	2,673	14,133	11,142
Wheat flour, bbls.	5,180	10,907	72,882	84,847
Fruits and nuts $	5,497	5,754	49,822	60,602
Vegetable oils and fats $	4,766	7,133	41,701	38,182
Sugar, lb.	1,294,919	1,280,720	6,027,046	5,374,213
Leaf tobacco, lb.	4,480	7,215	61,131	46,816
Cotton, bales	53	60	298	316
Wool, lb.	63,706	43,809	371,123	166,263

3. Prices of Foreign Drafts:

	Nominal Gold Value Par of Exchange	Price of Demand Drafts June 18, 1923	May 21, 1923	June 19, 1922
England	$4.87 to 1 £ Sterling	$4.62	$4.63	$4.28
France	19.3c to 1 franc	6.195c	6.665c	8.51c
Germany	23.8c to 1 mark	.0006c	.002c	.31c
Belgium	19.3c to 1 franc	5.245c	5.74c	8.15c
Italy	19.3c to 1 lire	4.53c	4.85c	4.78c
Spain	19.3c to 1 peseta	14.90c	15.27c	15.50c
Austria	20.3c to 1 crown	.0014c	.0014c	.0072c
Denmark	26.8c to 1 crown	17.84c	18.62c	21.20c
Norway	26.8c to 1 crown	16.51c	16.31c	16.65c
Sweden	26.8c to 1 crown	26.51c	26.70c	25.45c
Holland	40.2c to 1 florin	39.25c	39.14c	38.20c
Argentina	42.5c to 1 peso	39.90c	36.08c	35.63c
Brazil	32.4c to 1 milreis	10.45c	10.40c	12.63c
India	48.7c to 1 rupee	31.05c	31.05c	29.00c
Japan	49.9c to 1 yen	49.00c	49.02c	47.80c
Canada	100c to 1 dollar	97.80c	98.00c	99.06c

4. Discount Rate of the Bank of England:

May 16, 1923	Month Ago	Year Ago
3%	3%	4%

III. Money and Credit

1. Gold, Currency and Bank Deposits (000,000 omitted):

	May 1, 1923	April 1, 1923	May 1, 1922
Stocks of monetary gold in the United States	$ 3,982	$ 3,969	$ 3,767
Total supply of currency in the United States	4,668	4,656	4,385
	April 3, 1923	Dec. 29, 1922	Mar. 10, 1922
Total deposits in National Banks	$17,036	$17,420	$15,390

2.—Gold Movement (000 omitted):

	April 1923	April 1922	Ten Months Ending April 1923	Ten Months Ending April 1922
Exports of gold	$ 655	$ 1,578	$ 47,640	$ 22,337
Imports of gold	9,188	12,243	218,499	466,347

3. Federal Reserve Ratio:

	June 6, 1923	May 16, 1923	June 7, 1922
Ratio of total reserves to deposits and Federal Reserve note liabilities	75.7%	75.3%	77.6%

4. Interest Rates:

	May, 1923	April, 1923	May, 1922
4-6 mos. commercial paper	5.25%	5.25%	4.52%
60-90 days commercial paper	5.12%	5.12%	4.28%

5. Discount Rate of Federal Reserve Banks:

	June 1, 1923	May 1, 1923	June 1, 1922
Range of rates for the twelve banks on commercial, agricultural and livestock paper	4½-5%	4½-5%	4½-5%

6. Stock and Bond Prices:

	June 8, 1923	May 11, 1923	June 9, 1922
20 Industrial stocks	$96.66	$96.45	$93.60
20 Railroad stocks	83.31	82.20	83.37
40 Bonds	87.58	86.76	88.86

7. Business Failures:

	Week Ending June 7, 1923	May 31, 1923	June 8, 1922
Bradstreets	277	247	394
Duns	334	268	440

IV. Prices

1. Wholesale Prices of Farm Commodities:

Quotations at Chicago except as noted.

	June 19, 1923	Month Ago	Year Ago
Fat hogs, cwt., average	$ 7.15	$ 7.30	$10.30
Beef steers, good native, cwt., av.	10.00	9.50	8.30
Fat lambs, cwt., average	15.85	14.25	12.40
Fat sheep, cwt., average	5.65	7.25	6.60
Wool, Ohio delaine unwashed, lb. (Boston)	.575	.575	.575
Butter, 92 score, lb.	.395	.395	.32
Cheese, No. 1 twins, lb.	.2275	.24	.1812
Eggs, fresh firsts, doz.	.2225	.2525	.2211
Poultry, hens, lb.	.21	.25	.22
Wheat, No. 2 hard, bu.	1.085	1.20	1.15
Corn, No. 2 mixed, bu.	.845	.8225	.615
Oats, No. 2 white, bu.	.425	.4575	.3675
Rye, No. 2, bu.	.68	.79	.8625
Barley, bu.	.61	.68	.585
Kafir, No. 2 white, cwt. (K. C.)	1.66	1.80	1.41
Hay, No. 1 timothy, ton	23.50	23.50	23.00
Flax, No. 1, bu. (at Minneapolis)	2.835	2.945	2.41
Cotton, middling, lb. (New York)	.2780	.2865	.2330
Beans, white, cwt. (f. o. b. Michigan)	7.10	7.65	9.50
Potatoes, northern whites, cwt.	.95	.95	1.375
Onions, Texas yellow Bermudas, crate	2.875	2.65	1.875
Apples, winter varieties, bbl.	6.50	6.75	...
Hides, No. 1 native, heavy, lb.	.165	.185	.17
Sugar, fine granulated, lb. (N. Y.)	.095	.097	.06

2. U. S. Department of Labor Relative Wholesale Prices:

Prices in year 1913 equal 100.

	May, 1923	Apr., 1923	May, 1922
All commodities (weighted average or general price level)	156	159	148
Farm products	139	141	132
Food products	144	144	138
Cloths and clothing	201	205	175
Fuel and lighting	190	200	216
Metals and metal products	152	154	119
Building and materials	202	204	169
Chemicals and drugs	134	136	122
House Furnishings	187	187	176
Miscellaneous	125	126	116

3. Prices of Farm Products at the Farm Relative to 1913:

(U. S. Bureau of Agricultural Economics)
Prices in year 1913 equal 100.

Commodity:	Apr., 1923	Mar., 1923	Apr., 1922
Cotton	217	229	128
Corn	145	128	95
Wheat	140	136	154
Hay	115	113	118
Potatoes	126	114	142
Beef cattle	98	95	94
Hogs	100	100	118
Eggs	117	113	109
Butter	149	153	129
Wool	235	223	148

4. Relative Purchasing Power of Farm Products:

(U. S. Bureau of Agricultural Economics)

The quantity of various commodities which a given amount of each farm product would purchase at prices prevailing in 1913 is put equal to 100. The figures given represent the percentage of this quantity which the same amount of farm products would purchase in April, 1923. Prices at the farm are used for agricultural products, and wholesale prices at central markets for other commodities.

	All Commodities	Cloths, etc.	Fuel, etc.	Metals, etc.	Building Mtls.	House Furn'gs
Cotton	136	106	108	141	106	116
Corn	91	71	73	94	71	77
Wheat	88	68	70	91	69	75
Hay	72	56	57	75	56	61
Potatoes	79	61	63	82	62	67
Beef cattle	62	48	49	64	48	52
Hogs	63	49	50	65	49	54
Eggs	74	57	58	76	57	63
Butter	94	73	74	97	73	80
Wool	148	115	117	153	115	125

Average purchasing power of all farm products in terms of all other commodities. Same basis as above table.

1913	100	December, 1921	62
1914	112	February, 1922	71
1915	108	April	75
1916	89	July	69
1917	186	September	64
1918	112	November	66
1919	111	December	68
1920	86	February, 1923	69
1921	67	March	69
1922	69	April	70

MARKET FLASHES

MARKET SUMMARY

Wheat quiet. All other grains are easy. Butter and eggs in good demand and steady. Poultry wanted and market firm. Dressed calves steady. Vegetables easy and active. Fruits in fair demand. Hay scarce and firm. Cattle trade sluggish and prices off. Hogs active at unevenly higher prices. Good demand for sheep turns prices upward.

(Note: The above summarized information was received **AFTER** the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press.—Editor.)

FOOTE'S MARKET LETTER

BY W. W. FOOTE

Advertising Michigan Fruits

MICHIGAN Agricultural College is planning a campaign to bring the famous fruits and berries of the state into greater popular favor, although they already are well known and highly regarded in this part of the country. Its nearness to Chicago, Milwaukee and other cities and Lake Michigan steamers render the peaches, strawberries, plums, cherries, etc., easily obtainable; to say nothing of the delicious Michigan grapes, which since the prohibibtion amendment to the United States constitution have been even more popular than heretofore. Michigan's need is to identify its products, and a campaign of advertising may be expected to be of material help.

Duluth Rye in Chicago

A cargo of 240,000 bushels of Duluth rye has been unloaded in Chicago, and another cargo of 280,000 bushels was shipped there a little later. A large acreage was devoted to rye in the United States last year, the main object in view with most farmers being to meet the expected big European demand. Unfortunately, the foreign outlet failed to equal the surplus supply, and prices suffered a great decline, July rye selling a short time ago 26 cents below the high time of the season. The fall in prices started up a fresh foreign demand, and Norway bought in a recent day 500,000 bushels at a very low price. Rye is now being substituted for corn as stock feed, it being cheaper than corn, with the visible corn supply of insignificant proportions, while rye stocks in sight a short time ago aggregated 15,420,000 bushels, comparing with only 2,580,000 bushels a year ago. The while the visible corn supply at the same date was down to 3,165,000 bushels, comparing with 31,326,000 bushels a year ago. Germany is the principal buyer of our surplus rye, but up to a short time ago that country had imported 70,000,000 bushels less than we expected. Rye for July delivery sells in the Chicago market at 63 cents, comparing with 85½ cents a year ago.

The Fall in Wheat

Extremely sensational declines have taken place in wheat prices in recent weeks, sales for July delivery in the Chicago market being made close to $1 per bushel—the lowest prices touched in a very long time and too low a figure to make growing this cereal at all profitable for farmers. A marked falling off in speculative trading is generally understood to be the main cause of the cheapness of wheat, sales being made at much lower prices than in recent years. It has gone well below the prices of one year ago, while it is far off as compared with other years, having sold a little more than two years ago around $1.33. Naturally, crop conditions exert their influence in establishing prices for wheat, but the prospective foreign demand is probably a more powerful factor. Owing to the fluctuations in foreign money values and other conditions abroad, Europe is to buy a month's supply of wheat at a time, instead of two months' as of late. This will cut out purchases of around 50,000,000 bushels per month in the world's markets, it is estimated, and it promises to be a highly important factor in depressing prices. Little that was not already known was brought out by the recent wheat conference in Chicago. Wheat harvesting is working its way northward, having began some time ago in the southwestern winter wheat states, where the weather has been forcing, while it has been hot in the northwestern spring wheat states. Wheat and flour exports are still exceeding those of a year ago, but exports of corn, oats and rye are much smaller than at that time. The visible supply in the United States is decreasing weekly, but it is larger than a year ago by about 6,000,000 bushels. Oats are a few cents higher than a year ago, the visible supply in this country being reduced to about 9,000,000 bushels, comparing with over 44,000,000 bushels last year. Late sales were made of July wheat at $1.02, comparing with $1.14⅜ a year ago; July corn at 78½ cents, comparing with 62 cents last year; and July oats at 40½ cents, comparing with a year ago.

Hogs Go Up and Down

Fluctuations in hog prices of late have been greater than usual, with rather sharp advances at times when the receipts fell off materially, followed by as severe declines when higher values brought in much larger supplies. According to all accounts, plenty of swine are left in feeding districts, and the tendency is to get them marketed whenever prices undergo any considerable advance. Eastern shippers are large buyers on some days, thus far their operations have not been large enough from one week to another to maintain prices on a higher level. In short, existing conditions show no marked change, with the average quality of the Chicago market receipts much poorer than several weeks ago and a consequent widening out of prices, the bulk of the sales showing a spread of 75 cents per 100 pounds. Consumption of fresh and cured hog products continue on an extremely large scale, with especially heavy sales of lard, stocks of which are far from large. Still, prices of lard are lower than last year, and cured hog meats are far lower, with weekly exports of provisions greatly ahead of a year earlier. Grass hogs are comprising increasing proportions of the marketings, and they sell at a big discount. The recent appearance of cool weather meant a great deal to farmers who were marketing their hogs, as the previous extremely hot spell was hard on hogs in transit, large numbers of dead hogs being taken from the stock trains arriving in the Chicago stock yards. Chicago received last week 215,096 hogs, comparing with 184,713 a week earlier and 177,493 a year ago. Combined receipts in twenty markets for the year to late date aggregate 21,707,000 hogs, comparing with 16,956,000 for the same time last year. There were late sales in Chicago of hogs at $5.80 to $7.25, the top being 20 cents lower than a week earlier and comparing with $11 a year ago. Light hogs sold highest, with the best heavy butchers a dime under them.

Grass Cattle Go Lower

As the season advances grassy cattle comprise an increasing proportion of the receipts in western markets, and Chicago is getting its share of these, the result being the usual decline in prices. The cattle receipts have been reaching generous proportions, and the declining percentage of good corn-fed beeves has made them sell very well, although they had to go at generally lower prices than during the previous week. Even prime cattle sold lower as a rule, while yearlings of all kinds sold materially lower. Weather conditions had a great deal to do with the market, the terrific heat of several days causing a great falling off in the consumption of beef, followed by increased consumption after it turned cool. The week's top price, $10.40 was paid on Monday for prime heavy cattle, being a dime lower than the highest price paid during the previous week. Fat butcher stock was sold much better than grassy cows and heifers, being in good demand, while the latter were away off, undesirable cattle, including steers, being as much as 75 cents lower. There was a small stocker and feeder trade, most lots selling much lower, with the bulk going at $6.25 to $7.75. The best beef steers sold after Monday at $11.10 to $11.20, the bulk of the steers bringing $8.65 to $10.85 and good to choice steers being 25 to 40 cents lower. Common steers sold at $6.50 to $7.50, and cows and heifers brought $4 to $8.50, while canner and cutter cows went at $1.50 to $3.50. Calves brought $4 to $10.75. A year ago the best beef steers sold at $10.10 and two years ago at $8.85.

Lambs Scarce and High

The meager supplies of native lambs offered on the Chicago market last week sold readily, the desirable flocks selling much lower, however, than a week earlier, while ordinary lots sold badly. The main trouble with the lamb market is the serious check given to the consumption of mutton because of its dearness. The southern lambs have been mostly marketed, and western range flocks have hardly started to move freely, the season being very late. A few feeding lambs sell at $11.75 to $13, and breeding ewes are taken as fast as offered at $5.50 to $10, yearlings going highest. The lamb market was firm at $9 to $15.75.

WHEAT

The weakness in the wheat market increased during the two weeks ending June 30 and prices declined. At Detroit the market closed 9c below what it was on the opening a fortnight before. During the last week at one time a firmer tone came because of the taking of a couple of million bushels for future export and for a short time it looked like an end of the long slump. Probably a majority of dealers favored higher prices and the little advance was well received only to prove a fizzle. There was not enough buying power behind the talk of strength to hold the advance let alone put prices higher. The market lacks investment buying and there is not enough demand to take care of the sales of new wheat from the southwest. Everything favors an easy market excepting the fact that prices are already too low to give the producer a profit on his work. New wheat is in the market competing with the carry-over from last year's crops and offerings are heavy. Other exporters are selling to Europe under American prices and the market lacks life. Dealers are greatly discouraged by the long slump and are afraid it may be a great deal longer. The new winter wheat crop is being harvested and threshed under favorable conditions while the spring crop is growing well with the best of weather. Some of the winter wheat is of fine quality, but the southwest will have a great deal of light grain according to recent reports from Kansas, Oklahoma and Nebraska. The new rules under which the grain trade is to operate have been published and appear to amount to nothing much aside from the fact that all dealings are to be reported and this is expected to make people a little more careful about speculating in case they do not wish their identity to be known.

Prices

Detroit—No. 2 red, $1.14; No. 2 white, $1.14; No. 2 mixed, $1.14.

Chicago—No. 2 hard, $1.05¼.

Prices one year ago—Detroit, No. 2 red, $1.19½; No. 2 white and No. 2 mixed, $1.17½.

CORN

Advances took place in the corn market during the week ending June 23rd and there was a steady tone to the market. The steady tone continued up to the closing days of last week and then the market weakened and prices declined leaving the prices at many points only slightly above what they were two weeks ago. Receipts seem to be on the increase while consumption is declining. Demand for the industries has been reduced considerably during the last week or two and several manufacturing plants have closed down claiming that they cannot make money with raw material so high.

Prices

Detroit—No. 2 yellow, 91c; No. 3, 90c; No. 4, 88c.

Chicago—No. 2 mixed, 79½@80¾c; No. 2 yellow, 81¾@82¼c.

Prices one year ago—Detroit, No. 2 yellow, 67½c; No. 3, 66c; No. 4, 64½c.

OATS

Oats followed the trend of corn and on the close of last week the prices at several points were higher than they were two weeks previous. Trade has not been large.

Prices

Detroit—No. 2 white, 48½c; No. 3, 47½c; No. 4, 46½c.

Chicago—No. 2 white, 42½@43c; No. 3, 41½@42½c; No. 4, 41¼c.

Prices one year ago—Detroit, No. 2 white, 41¼c; No. 3, 39½c; No. 4, 35½@37½c:

RYE

Regarding this market we have no further information than Mr. Foote has already given you in his letter in this issue. He has covered this market thoroughly and we would advise that you read again that part of his letter so as to be sure and get all the information contained in it.

Detroit—No. 2, 68c.

Chicago—No. 2, 62c.

Prices one year ago—Detroit, Cash No. 2, 88½c.

BEANS

The present market for beans is hard to understand. In spite of all indications that prices should go higher the Detroit market was continuously headed downward during the past two weeks and the total loss amounts to 90c. Conditions in the market are practically the same as they were two weeks ago. Importations continue to come in but they are not getting the attention they commanded a few months ago. Many of the large dealers of the state are of the opinion that Michigan beans at $7 or less per hundredweight are a good buy and state if price does not go above $7 the old crop will be well taken care of before the harvest this fall. If the price should go above, and stay above $7 per hundredweight for a time they anticipate a carry-over into the new crop. While we can not tell what the trend of the market will be for the next few weeks we feel that prices can not remain at the present low level for long and we hope to see them return to at least $7 in the near future.

Prices

Detroit—C. H. P., $6.10 per cwt.

Chicago—C. H. P., $7@7.50 per cwt.

Prices one year ago—Detroit, C. H. P., $9.00 per cwt.

POTATOES

Old potatoes are fast becoming extinct as far as the consumer is concerned, new stock being within reach at slightly higher prices. There was a slight advance in prices of old stock in the east during the past two weeks but new potatoes are getting practically all of the attention. The advance was due no doubt to reports on the new crop. Reports show that the crop is somewhat below normal and the yield reduced through drouth which has been prevailent in these sections for several weeks.

Prices

Detroit—Michigan, $1.07 @ $1.27 per cwt.

Prices one year ago—Detroit, Michigan, $2.83 per cwt.

HAY

The 1922 hay crop has been practically all marketed, according to a survey just completed by the United States Department of Agriculture. On June 15, 1923, the date of the survey, the reports indicate that about 90 per cent of the marketable surplus of the 1922 crop had been marketed, 98 per cent of the alfalfa, and 97 per cent of the prairie. The timothy surplus is slightly larger than at the corresponding time last year, while the amount of alfalfa and prairie is slightly less than remained unsold on June 15, 1922.

All of the important timothy producing States, with the exception of New York and Wisconsin, and possibly Michigan, will ship out practically all of the 1922 crop before the new crop arrives.

New York reports stocks of timothy yet to be marketed at 25 per cent of the surplus, and Wisconsin 15 per cent, while Michigan apparently will have a slightly larger carry-over than last year.

Remaining supplies of alfalfa hay in shippers' and producers' hands are unusually light, Colorado and Idaho being the only States reporting as much as 5 per cent of the 1922 crop yet to be disposed of. All the other important producing States have sold, or will sell, all of the old crop by the time the new hay is ready for market. The same condition applies to to prairie hay situation. Very little old hay remains unsold. Missouri reports about 8 per cent, while the surplus in the other important States ranges only from 2 per cent to 3 per cent.

Reports from the principal consuming areas indicate that dealers' stocks of hay are generally below normal for this season of the year. Considerable local forage is available in most sections but the amount probably is not so much as last year because of dry weather in some sections of the East and South. Commercial industries are reported to be slightly more active than last year, and southern consumers are said to be in a better financial condition on account of higher cotton prices than they were at the beginning of the 1922 crop year.

The quality of the 1923 crop, as reported by shippers throughout the United States, will be only fair, with the exception of a few of the important alfalfa producing States in the Southwest, where hay is produced almost entirely by irrigation.

Timothy hay will be short in many sections because of insufficient moisture, while in sections where the moisture has been excessive, it will be rather weedy.

Throughout Kansas, Nebraska, and Oklahoma the first cutting of alfalfa has been seriously damaged by wet weather, and most of the hay from this cutting will be of inferior quality. This excessive moisture, however, has been beneficial to the prairie hay in that territory, and reports indicate that an increased acreage to be harvested was reported as follows: Missouri, 5 per cent; Oklahoma, 10 per cent; Kansas, 10 per cent; and Nebraska, 20 per cent.

Prices

Detroit—No. 1 timothy, $17.50@18; standard, $16.50@17; No. 2 timothy, $15.50@16.50; No. 1 clover mixed $14@15; No. 1 clover, $12@14.

Chicago—No. 1 timothy, $23@24; light mixed, $20@22; No. 2 timothy, $19@22; No. 1 clover, $16@17.

New York—No. 1 timothy, $25@25; light mixed, $25@25; No. 2 timothy, $21@24.

Prices one year ago—Detroit, Standard, $19@20; No. 2 timothy, $18@19; Light mixed, $19@20; No. 1 clover, $15@16.

WOOL MARKET

Apathy still characterizes the wool situation in the West, according to reports received by the United States Department of Agriculture from its field representatives. During the two weeks ended June 23 only a few small sales have been reported in Montana, where producers apparently are holding firm or are making arrangements to consign. The same period has seen practically no sales of importance in California, either by growers or dealers, the former being unwilling to release holdings at the prices offered while the latter are not active.

Reports from Wyoming indicate the existance of a practical deadlock, with buyers offering around 43 cents while growers are holding for 45 cents and more. Advices from Texas report little trading at 40 to 45 cent offers. The various reports show that approximately 18 per cent of the Montana clip, 45 per cent of the Wyoming clip, 75 per cent of the California clip, and practically all of the Washington, Arizona and Utah clips have been sold or shipped.

WEEKLY MARKETGRAM

(U. S. Bureau of Agricultural Economics)

Washington, D. C.—For the week ending June 29, 1923.

FEED—Markets rather quiet with offerings and demand nearby shipments evenly balanced and prices a shade lower. Interior buyers showing little interest. South-western offerings wheat-feeds deferred shipments quite plentiful but Northwestern offerings not so heavy. Linseed meal holders asking higher prices. offerings good, demand fair. Cottonseed meal slightly easier and firm, bids under the market are accepted. Hominy feed quoted lower, demand and offerings light. Gluten feed prices steady, offerings by re-sellers good. Larger mills have withdrawn July-August offerings. Receipts and supplies good.

Quoted bran $20, middlings $25, flour middlings $29.50, rye middlings $24.50, Minneapolis; gluten feed $37.15 Chicago; 32 per cent linseed meal $38 Minneapolis, $39 Buffalo; 36 per cent cotton seed meal $36 Memphis; $36 Atlanta; white hominy feed $32.50 Chicago.

DAIRY PRODUCTS—Butter markets unsettled during the week and weak at the close. Approximately 8 million pounds have gone into storage in the 4 markets during the week but there is a lack of confidence attached to this class of trading. It is generally felt that production is close to peak for this season. Closing prices 92 score butter; New York 38c; Philadelphia 39c; Boston 39c; Chicago 38c. CHEESE markets dull following declines which occurred during the week. Some storing being done but it appears to be mostly temporary protection against loss, more New Zealand cheese and relatively heavy shipments reported as prospect. Prices at Wisconsin primary cheese markets June 28; flats 22¾c; twins 21¾c; daisies 22c; double daisies 21⅜c; Young Americas 21½c; twins 21¾c; square prints 22½c.

PRITCHARD'S
WEATHER
FORECAST
INTERPRETED BY THE STARS

Week of July 8

DURING Sunday, Monday and Tuesday of this week the weather is expected to be generally fair and the temperatures moderately cool for the season, especially during the nights and mornings.

About Wednesday or Thursday temperatures will again begin rising in Michigan which will be the signal that scattered showers and thunder storms will occur about Thursday and Friday.

Temperatures will again fall about Friday and by Saturday will be low for the month. The weather at end of this week will be fair.

Week of July 15

Fair weather during last part of last week will continue during the first half of this week. During this same period temperatures are not expected to be overly high for the season.

During last half of week temperatures will be rising, reaching the high point about Saturday of this week. No sudden changes in temperature are expected although readings will be above normal by end of week.

Scattered electrical storms and showers will occur in Michigan during last three days of this week, but there will be a noticeable lack of moisture.

During next three or four weeks temperatures in Michigan will average below the July normal. Rainfall for the same period will average a little above normal but do not believe this condition will become noticeable until first part of August.

MISCELLANEOUS MARKET QUOTATIONS

Detroit, Monday, uly 2nd.

BUTTER—Best creamery, in tubs, 25@27c per lb.

EGGS—Candled, firsts, 23@24c; current receipts, 20½@21½c per dozen.

CHERRIES—Early Richmond, $2.75@3 per 24-quart case.

PEACHES—Georgia, early rose, A, $4.50@4; B, $4@4.25 per bushel.

APPLES—Good, $3.25@4 per bushel; western boxes, $4@4.50.

HONEY—Comb, 23@25c per lb.

POPCORN—4@4½c; Little Buster, 7½@8c.

LETTUCE—50@60c per bushel; California iceburg, $5.50@6; Washington, $5@6 per case.

DRESSED CALVES—Best country dressed 14@15c per lb; ordinary grades, 12@13c; city dressed. 17@18c per lb.

CELERY—Kalamazoo, 75 @ 90c per doz; California, in the rough, $18@20 per case.

ASPARAGUS—Michigan, $2.75@3 per case.

LIVE POULTRY—Broilers, fancy rocks, 2 lbs up, 45@48c; leghorn broilers, 30@34c; stags, 13c; hens, 23@25c; leghorns, 17@19c; roosters, 13c; geese, 12c; small ducks, 18c; large ducks, 24@25s; spring ducks, 5 lbs and up, 28@30c per lb.

IN OKLAHOMA TOO!

(Continued from Page 13)

dent of the board is a party candidate elected by the people and must play the game in order to keep in good standing with the party workers. So whenever a new administration comes in the resulting political earthquake is felt to the uttermost confines of the appointive power.

There is a general feeling in Oklahoma, especially among the farmers, that all educational institutions should be taken out of politics. The thought is especially strong in regard to the agricultural college. But it cannot be done without amending the constitution. It is strictly within the law to make a political plaything out of the sacred job of educating the boys and girls.

The only remedy is an amendment to the constitution of the state of Oklahoma. It should provide that the governing boards of educational institutions shall be appointed for terms so long that a majority of the members will never go out of office during the administration of any one governor, that no governor shall have power to remove them except with the consent of the legislature itself, and that these board members shall have no job except that of making good schools.

The wording of the amendment is immaterial. Its purpose should be plainly to take the schools entirely out of politics and keep them out.

If such a result can come, the present upheaval in the administration of the state schools in Oklahoma will be thoroughly worth while.—The Oklahoma Farmer-Stockman.

AGRICULTURAL BULLETINS OF INTEREST DURING JULY

A SMALL list of Farmers' Bulletins and Circulars of general interest during July is believed to be of value to our readers. Copies may be obtained free by addressing the Division of Publications, United States Department of Agriculture, Washington, D. C., as long as the supply lasts. Specify number and name and whether Farmers' Bulletin or Department Circular.

Farmers' Bulletin 707, The Commercial Grading, Packing, and Shipping of Cantaloupes; 766, The Common Cabbage Worm; 825, Pit Silos; 842, Methods of Protection Against Lightning; 850, How to Make Cottage Cheese on the Farm; 871, Fresh Fruits and Vegetables as Conservers of Other Staple Foods; 900, Homemade Fruit Butters; 943, Haymaking; 959, The Spotted Garden Slug; 984, Farm and Home Drying of Fruits and Vegetables; 1007, The Control of the Onion Thrips; 1112, Culling for Eggs and Market; 1115, Selection and Preparation of Fowls for Exhibition; 1145, Handling and Transportation of Cantaloupes; 1211, Home Canning Fruits and Vegetables; 1217, The Green Bug or Spring Grain Aphis; 1225, The Potato Leafhopper and Its Control; 1246, The Peach Borer: How to Prevent or Lessen Its Ravages, 1258, Webworms Injurious to Cereal and Forage Crops and Their Control; 1266, Preparation of Peaches for Market; 1290, The Bulk Handling of Grain; 1310, The Corn Earworm.

Department Circular 98, The Installation of Dust Collecting Fans on Threshing Machines for Prevention of Explosions and Fires and Grain Cleaning; 217, Anthrachose of Muskmelons; 274, Dusting for the Cotton Boll Weevil.

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? See Page 24

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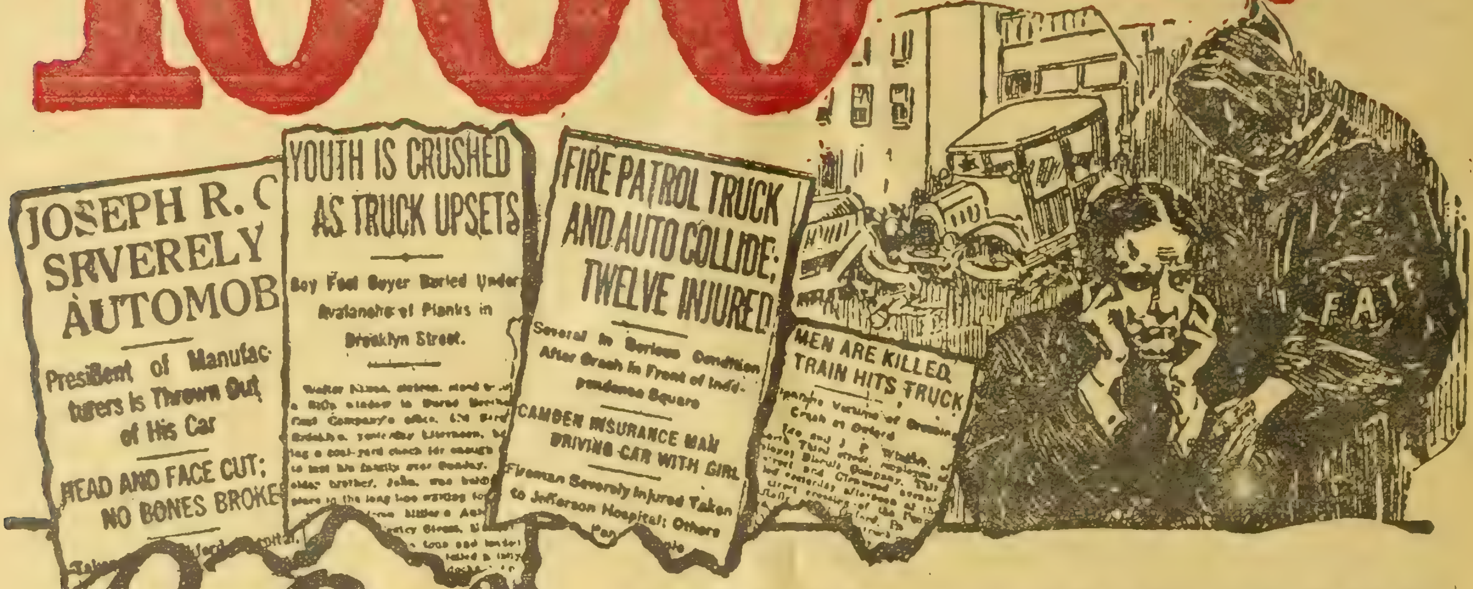
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"Hers"

Read in this issue: *Beans to be Advertised by National Association—President of Live Stock Producers Association Tells What Happened to Market—Shall I Thresh From the Shock or the Stack ?*

Current Agricultural News

$70,000,000 IS VALUE OF 1922 MICHIGAN DAIRY

T. H. BROUGHTON, Director of the Bureau of Dairying of the State Department of Agriculture, has just completed compiling figures on the milk produced in Michigan in 1922.

His figures show that the total milk produced in Michigan in 1922 was 3,495,627,169 pounds, or an increase of 391,929,079 pounds over the 1921 production. His figures show the amount of milk used for each dairy purpose and indicates that there was an increase in the amount of milk consumed for every purpose except for cheese manufacture.

There was a marked increase in the quantity of creamery butter manufactured from Michigan milk, although the dairy butter dropped off. There was a marked reduction in the manufacture of brick cream cheese and farm made cheese although an increase in the amount of cottage cheese was reported. An increase of nearly 100 per cent in the amount of milk evaporated in the state is shown from 1921 to 1922. The amount of milk used for direct consumption and that used on farms for calf and swine feeding was also much larger in 1922 than 1921.

"Michigan is fortunate in being able to obtain these figures so accurately," says Mr. Broughton, who is authority for the statement that Michigan is the only state which has a system whereby they can check up on the milk used for every purpose by every creamery and milk peddler in the state. This is made possible through the state's licensing system which requires total reports from handlers and distributors of dairy products before licenses may be granted.

WALTON PETEET TO SPEAK AT POTATO MEET

THE Michigan Potato Growers' Exchange has secured Walton Peteet, head of the department of co-operative marketing, American Farm Bureau Federation, to speak at the fifth annual meeting, Wednesday afternoon, August 15th. George Wager, manager of the branch sales office at Edmore will also appear on the Wednesday program. When the banquet for delegates to the annual meeting of the Michigan Potato Growers' Exchange is held in Cadillac, Wednesday evening, August 15th, the Hon. Herbert F. Baker of Cheboygan will preside as toastmaster. Dr. Eben Mumford of the Michigan Agricultural College will be the leading speaker on the evening program.

MANY BREEDERS TOURS WITHIN THE NEXT TWO WEEKS

THERE will be a Hereford Tour and conducted by the Michigan Hereford Breeders' Association through the southwest part of the state July 24th and 25th, and ending at the Watkins Hereford sale near Manchester July 26th.

The Tuscola County Duroc Jersey Breeders are planning a tour about their county July 30th, and the Michigan Chester White Breeders' Association are going to tour the thumb district July 31st. Mrs. Levi P. Moore, representing the Chester White Swine Record Association will attend this tour. The Calhoun County Duroc Jersey Breeders' Association are planning to tour their county, August 1st.

The State Poland China Breeders tour that will cover southern and central Michigan has been planned for August 1st, 2nd, and 3rd. Mr. C. G. McChan, President of the Poland China Breed Promotion Committee, has promised to attend this tour. The tour will end with a general get-together meeting and potluck dinner near St. Louis, with the Central Michigan Poland China Breeders' Association acting as host.

The Lenawee County Duroc Jersey breeders are planning a tour about their county August 7th, Hillsdale county breeders August 8th and Branch County Breeders' August 9th. Mr. R. J. Evan. Secretary of the American Duroc Jersey Association has promised to be present at these tours and possibly another one the same week. Breeders and others interested are most cordially invited to attend any of these tours.—V. A. Freeman, Extension Specialist in Animal Husbandry, M. A. C.

ALFALFA AND DAIRY CAMPAIGN IN MIDLAND COUNTY

MIDLAND County farmers, twenty-five of 'em, including mother, father, son and daughter, June 27th, toured Bay, Saginaw and Midland counties in the interests of better dairying and alfalfa raising. They visited the farm of George Bergtold, Frank Trombley, James Wilder, T. F. Marston, and George H. Hicks for a study of modern dairy methods and the ideal dairy cow. Plots of alfalfa were pointed out on the return to Midland. It rained in the afternoon but such trival things could not dampen the ardor of the Midlanders. Jim Hayes and County Agent McMurtry sponsored the tour and followed it through to the end with any amount of enthusiasm and peppy speeches.

M. A. C. HORSES TO SHOW AT FAIRS

BLUE ribbon horses from M. A. C. will be shown this year at the live stock shows at Columbus, Ohio, and Syracuse, New York, for the first time, according to H. H. Halladay, secretary of the college. They will also form one of the feature exhibits in the big "style review" of live stock to be paraded before the crowd on Farmers' Day, July 27. The animals will be entered in the International Live Stock Exposition, at Chicago, and at the Michigan State Fair at Detroit, as usual,

FROM HERE AND THERE IN MICHIGAN

Alma—New $100,000 plant manufactures auto parts.

Spring Lake—$2,000 to be spent on new water system.

Detroit—Jewett automobile plant to build 500 cars daily.

St. Louis—Bollstrom plant to manufacture auto bodies.

Wayland—Construction of new school building to start soon.

Westphalia—Construction of new gravel road nearing completion.

Edmore—Roach & Company to make improvements at factory.

Manistee—New box factory considering location of plant in this city.

Ontonagon—Contract let for construction of new hall costing $70,000.

South Lyons—Detroit Panel and Plywood Company to erect factory here.

Zilwauzee—Work on Consumers Power Company's plant progressing rapidly.

Munising—$30,000 contract let for remodeling First National Bank building.

Flint—Plans made for construction of new $1,000,000 municipal building.

Cleveland—Contract let for improvements of First National Bank Building.

Manistique—City Fuel Company buys and will operate Indian Lake Blue Ice plant.

Ironwood—Work started on paving Tula Road between Gogebic and Copper counties.

Ann Arbor—Work on new library completed. $200,000 school building to be erected.

Adrian—Work started on resurfacing country roads. $31,375 building contracts issued last month.

Pontiac — Oakland Motor Car Company to build a Fisher Body Corporation factory, costing $2,000,000.

Lansing—Masonic order to build $600,000 temple. Contract awarded for construction of new addition to school for blind, costing $100,000.

Michigan was sixth on the list of states in the number of plants which in 1921 were engaged in manufacture of paper and wood pulp. Of the 726 establishments engaged in the business 39 were located in Michigan.

Muskegon—Brunswick tire plant to reopen and give employment to 200 men. Construction of addition to Hackly hospital under way. $2,000,000 improvement program inaugurated in northwestern region of Pennsylvania System.

Holland — Improvements nearing completion on Alpena beach road. $75,000 contract let for construction of Christian high school. Marine Rubber Corporation to move tire factory from Sparta to this city. New hard-surfaced road to be constructed to Jenison.

Saginaw—Work to start on dredging Saginaw river July 1, to cost $60,000. Plans made for remodeling Eagle lodge house. Repairing of P. M. Docks in progress. $600,000 contract awarded for paving city streets. Improvements on west side roads under way. Contract awarded for paving Prescott street.

Grand Rapids—Addition being erected at Grand Rapids Chair Company plant. $35,000 contract let for construction of new theatre. Comstock Park Lumber Company starts operation, capital $10,000. $125,000 contract let for building new dormitory at Calvin college. Plans made for improvement of entire river front. Widening of Fulton Street in progress. $4,575,000 building permits issued during last month.

Business Contact and Good Telephone Service

The Manager of your Telephone Exchange is responsible for a good business relationship between you and the Telephone Company.

He is responsible to you for the proper billing for your service. In spite of the many safeguards used throughout the telephone billing system, errors and misunderstandings sometimes occur, but when they do, the Manager wants to know about them and to correct them. You never will find him arbitrary.

In case of error, take your bill to the manager. If he is absent, there are in his department trained men and women who will receive you courteously and will adjust any misunderstanding.

Cooperation on your part will help the telephone people render efficient service. Bills paid promptly are dealt with easily and opportunity for error is greatly lessened.

The Telephone Manager and his representatives are anxious to maintain a good, clear-cut business relationship with all subscribers.

MICHIGAN STATE TELEPHONE CO.

SATURDAY
JULY 21st,
1923
—
VOL. X, NO. 24
—
Being absolutely independent our columns are open for the discussion of any subject pertaining to the farming business.

"Hew to the line, let the chips fall where they may!"

The Michigan
BUSINESS FARMER

"The Only Farm Magazine Owned and Edited in Michigan"

Published Bi-Weekly
Mt. Clemens, Mich.
—
TWO YEARS $1
—
Entered as second-class matter, August 22, 1917, at the post-office at Mt. Clemens, Mich., under act of March 3rd, 1879.

Beans to be Advertised by National Association

Michigan, New York and California Bean Interests will Push Sale of Navy Beans to Consumer on Same Plan as Citrus Fruit, Raisins and Prunes Growers Operate

ONCE a week every American family ought to pull up to the table for a good, old-fashioned pan of baked pork and beans! Every bean grower will agree to that statement without argument. As a matter of fact, if every family in America, baked a pan or opened a can of beans, every week, there wouldn't be half enough now grown and the price would be where it was when the boys were in uniforms. Telling people, through advertising, to eat more raisins, walnuts, oranges and various other farm products has doubled and trebled their old time market. Beans offer the greatest strength and body building food known to man and we welcome this practical plan to make this fact known to the hundred million folks in America alone.

MEMBERS of the New York State Bean Shippers' Association by a unanimous vote have agreed to underwrite its quota for a national advertising campaign to educate the buying public to demand domestic beans in preference to the inferior imported article, with which the American market has been flooded ever since war days. After the vote by every man present to support the campaign, 70 per cent of the New York quota of $5,805 was subscribed in written pledges. The national campaign calls for an expenditure of $51,210 in national magazine advertising.

Bean shippers in the states of California, Colorado, Michigan, New Mexico, Arizona and Idaho, the other principal bean growing states, are banding together with the New York men in similar action under the direction of the National Bean Shippers' Association. The campaign will be undertaken next fall, if the other states follow the lead.

Accuse Retailers of Mixing

Previous to the meeting all the large bean shippers of New York were determined that some action must be taken to stop the practice of unscrupulous importers and retailers of mixing inferior oriental beans, imported from Japan, China and Mongolia, with American-grown beans of recognized quality. According to food experts, the imported beans do not cook well and when mixed with domestic beans it is practically impossible to obtain a satisfactory dish. These mixed beans have been sold in many places as domestic grown.

Under the plan of the association, every bag of beans will be stamped with an American label and the name of the state in which they were produced. The association will guarantee each bag so marked to cook satisfactorily, a warranty which the importers of foreign beans have constantly refused to make under any circumstances, say the shippers.

O. L. Deming of the staff of the New York Commercial, a trade journal which has fostered the idea of advertising the bean industry, was present at the meeting and spoke to the shippers on "The Value of Advertising." Benjamin Gerks, who spoke recently before the Michigan Bean Jobbers' Association meeting in Flint, reviewed the work of that meeting and told of the enthusiasm of the California and Colorado jobbers for the advertising campaign.

Under the plan adopted, the shippers pledged themselves to pay $300 each toward the campaign with the understanding that the number of bag beans, purchased first hand from growers and shipped, is to be recorded and that each man is to pay nine-tenths of a cent towards advertising for each bag of beans he ships, which he purchased directly from the grower. At the end of six months the shippers either pay the difference between half of the $300 subscribed and the amount they owe on the basis of number of bags shipped, or if they have shipped less than the quota, the association refunds them the difference.

The known bean production of the several states for 1921 was taken, and the national quota worked out on the basis of nine-tenths of a cent per bag. The quota for each state was established by the amount of beans it produced during the same year.

Spread News of Success

Word of the success of the New York program was wired to the Michigan, California and Colorado associations. The campaign, if undertaken, will run for ten months from October, 1923, to August, 1924 The advertising copy will emphasize the value of the bean as a body and tissue-building food. According to statistics presented at the meeting, the bean represents a 23 per cent protein content, a ratio much higher than in almost all foods. In this connection, an effort will be made to demonstrate the value of getting beans of good quality

Michigan Member Expelled

That the bean industry intends to bring about merchandising reforms along with the advertising campaign is indicated in the announcement of the Michigan Bean Jobbers' Association that Hart Brothers of Saginaw, Mich., were expelled from the association on a charge of having shipped a carload of beans to Ragon Bros., Evansville, Ind., as Michigan grown beans which contained beans foreign to Michigan. The beans were personally inspected by the association's inspector, Burkhart, in the warehouse of Ragon Brothers, Evansville, and were found not to be Michigan grown. Samples were submitted to the arbitration committee, which has sustained Inspector Burkhart.

MICHIGAN FIRST IN NAVY BEAN PRODUCTION!

THE bean growers of Michigan ought to be proud of the fact that altho the various state and federal agencies have been handing the palm of first place in the production of navy beans to other states these past two or three years, when it came to passing the hat for contributions to the very commendable fund for national advertising and it was apportioned on the basis of 9-10 of one cent per hundred pounds, based on the 1921 crop estimates, Michigan won first place, to-wit:

1922 CROP—100 Pound Bags		
California (other than Limas)	1,480,000 bags	$13,320.00
California (Limas)	820,000 bags	7,380.00
Colorado, New Mexico, Arizona	745,000 bags	6,705.00
Idaho	200,000 bags	1,800.00
Michigan	1,800,000 bags	16,200.00
New York	645,000 bags	5,805.00
	5,690,000 bags	$51,000.00

President of Live Stock Producers Ass'n Tells What Happened to Market

IN recent interviews to the Press, Everett C. Brown, President of the National Live Stock Exchange, is quoted as saying that a large part of the blame for hogs being $1.00 under the cost of production is due to "co-operative selling agencies."

He further points out that while hogs are losing money, cattle and sheep are making money and that hog prices are high in Canada. Since the co-operative selling agencies have handled relatively few cattle and sheep as compared with hogs and since there are no "co-ops" in Canada, he concludes they are the cause for the low price of hogs, and urges them to return to the "old line" commission firms.

The absurd statement is made that the concentration of large numbers of stock in the hands of a co-operative selling agency acts as a club on the market. Such a statement is contrary to good business principles. Any trader knows that the man who controls a large percentage of any commodity on a market can do more to hold up prices than a man who controls only a small percentage of the supply of the commodity, and hence must engage in a peddling process in order to sell it.

Mr. Brown says in effect, that the business of his former customers is so successful that they cannot handle it as well as he or the firms he represents. His opinion regarding the present low hog market is wholly at variance with the facts he presumably had at hand.

Market statistics show that local cattle receipts for the month of June were the smallest since 1917. Light receipts make for higher prices. Likewise the receipt of sheep for June were the lightest in more than 30 years, so these good prices were due to sensationally light runs and not to the fact that the "co-ops" have not yet invaded those departments of the market as fully as they have the hog department.

The same market statistics show that more hogs were on the Chicago market this June than ever before in the history of June markets. A similar condition occurred in 1911, with similar effect, and that was long before co-operative marketing was thought of. Too many hogs for the entire market and not just too many hogs for the competitor of the National Live Stock Exchange, was the true cause of the break in prices. Canadian markets received only 50,000 hogs during June. Canadian bacon is always at a premium, hence the light runs caused good prices there.

Between last November and the last day of June, seven Western markets received 5,000,000 more hogs than in the same period in either of the two years just preceding. Hog shipments from eleven corn belt states to all markets increased 32.2 per cent this year as compared with the year preceding in the period from November 1st to June 1st.

The spokesman of the old line commission companies asserts in his interviews that most of the hog salesmen for the cooperative commission companies have not graduated from the farm. The truth is that cooperative salesmen have been chosen for their ability to sell stock regardless of where that training was received, be it with an old line commission firm, buying for the packers, or speculating for themselves. They are hired for the results they can obtain in making sales, and they are retained because they do obtain results. Practically every co-operative agency has in its files, applications from salesmen now with old line commission firms who wish to become members of cooperative selling staffs. If their selling talent is of the right standard and their co-operative spirit sincere, they will be called as needed. The success of co-operative live stock marketing has given financial independence. Funds are available to hire the best.

We who make up and manage the cooperative selling agencies have all been customers of some member of the National Live Stock Exchange. We are not unschooled in market practice. We raise live stock to sell, we sell it through our own organization at the terminal markets, and are pleased with our own handling of our own stock. We are returning this year, as high as 30c on every dollar that we have charged for commissions, so we have ample funds to hire the best selling talent, and have done so. Furthermore, we have proven to ourselves that controlling as we do, an enormous amount of live stock offered for sale, we stabalize the price much more than if we were 15 firms doing one-fifteenth of the business we now do. We handle from 10 per cent to 35 per cent of the total receipts in markets where we operate.

The National Live Stock Producers Ass'n. has yet much work to do. It is destined to play an important part in bringing about orderly marketing. The time is not far distant when it will be of the greatest assistance in diverting the shipments of live stock from crowded markets and putting them instead on a market that needs them, and will pay a good market price.—J. G. Brown.

Shall I Thresh From the Shock or the Stack?

Experience of Grain Growers of Iowa Show That It is More Profitable to Stack Small Grains and Thresh Later in Season Than to Haul Right to Machine From Field

By WALTER J. HUNT

OUT in Iowa there were many farmers asking this question which is no doubt uppermost in the minds of many of the farmers in our own state. A canvass was made of the veteran grain growers of Iowa to find out what their experiences had been and the Iowa Homestead published this article on the results. The veteran grain growers of that state in the great wheat belt have found that results are in favor of threshing from the stack. Every reader who raises much small grain should read this article with interest as the grain growers state in detail why they find it more profitable to stack their small grain. We would like to hear from any of our readers who have noted their experience over a period of years.

WHETHER stacking small grain and threshing later in the season is a better policy to follow than threshing from the shock is a question of much importance among many farmers in Iowa at the present time. It is true that a large number of farmers in the state rely too much on threshing from the shock when they do not have a machine of their own or are not certain of getting one within a reasonable length of time, according to "old-timers" who a few years back stacked almost entirely and threshed later in the year. With a large number of threshing machines used over the state which are propelled by steam, the uncertain outlook of the miners' strike at a time when coal reserves are low offers a strong argument for stacking as a more profitable means of taking care of Iowa's small grain this year, or even a factor which may save the crop.

The older farmers have proof for their faith in stacking over shocking and point out advantages which seem to prove it a more desirable way. M. L. Soeth, of Wallingford, Iowa, in Emmet county, who has farmed 1,360 acres for several years and now lives on 160 acres, says that the great advantage of stacking comes in wet weather such as we have seen recently. About an average Iowa acreage of grain is raised on the Soeth farm—50 acres having been seeded this year.

"When the grain is stacked we go ahead on our place hauling manure and getting the fall plowing started early," says Mr. Soeth. "The straw turns out better for feed and bedding when the grain goes through the 'sweat' in the stack and the grade of the grain after it is threshed is found to be improved. Provided the land is seeded to grass, the sooner the shocks are removed the better are conditions for the grass.

"We have not noticed much difference in the cost of shock and stack threshing, considering everything on our farm, and believe it would be nearly the same in both cases, with a chance that stacked grain would bring a better price on the market. But there is one thing about stacking, which may prove an eliminating factor for the method on some farms. This is that it seems to be a lost art. Too many men are not able to build a good stack. That is why shock threshing has gradually become more common."

Frank Erickson, a veteran farmer of Hamilton county, has operated his 120-acre place for over 30 years and has had experience with stack and shock threshing which leads him to be partial to the former. Mr. Erickson has raised on an average from 40 to 50 acres of grain per year. Farmers in his part of the state plan to stack for the most part, as far as he has been able to observe, a condition partly due to the coal shortage. "For farms where the grain acreage is around 100 acres or over, stacking is not desirable because a large number of stacks prove rather bothersome to handle both at threshing time and the time of putting them up,". says Mr. Erickson. "But for the average farm is the better plan. I have found that the grain threshed from the stack will weigh more and make better seed than the other. If it is allowed to 'sweat' in the stack there will be no trouble of heating in the bins and the presence of the straw during the 'sweating' will be beneficial. After stacks are made, of course, it is cheaper to thresh from them than from shocks. Many people say that two extra handlings necessary in the former method make it a more expensive proposition. However the latter requires about six or seven more men with wagons and about that many more pitchers in the field. Often it is necessary to help around the neighborhood for two weeks in changing work with the chance also of delay from bad weather, yet two or three farmers can go together and stack and later thresh with less expense. I have found the expense clear through with both ways to be about the same.

Even Well Built Shocks do Not Remain in Good Condition Indefinitely.

"It is true," asserts Mr. Erickson, "that stacking is a lost art. But there is no reason why the art should be difficult. Any farmer can learn how to construct a stack which will give ample protection against the weather by following a few plain instructions.

"I like to do it and would rather stack than do anything else on the farm I know. I use a fork and never walk on the outside tier of bundles, staying in the center and keeping the middle full. Any loose grain picked up can be cared for in the center. About eight loads of bundles should be set up in the form of a large shock beginning at the middle of the stack and setting them in regular order until the confines of the stack are reached. Beginning next at the edge, lay a double tier of bundles around the whole stack, the butts of the first row reaching the ground, with the butts of the second row just flush with those of the first row. A single row with the butts reaching just past the bands of the first should be placed next—continuing this method row after row until the middle is reached.

"The rows may be lapped a little more toward the middle of the stack in order to keep this part full, keeping a slope toward the edge, and lay the first row of bundles with the butts flush with the original first row or extend them a trifle and then work toward the center as before.

"Some people are of the opinion that a 'bulge' in a stack is for good looks, but its real purpose is for capacity. Stacks should be built to stand wind and rain and not made for appearance's sake. If the edges are kept level there will be sufficient slant from the middle when the stack settles to take care of water.

"The 'bulge' is started after four or five rows have been placed. One side of the butt end of most bundles will be found to be longer than the other, due to the way they sat in the shocks. These can be put either up or down to provide 'bulge' as well as to permit them to overlap the others for the effect. From the bulge the stack can be drawn in gradually to the top which will need to be well-capped."

In addition to being a farmer for several years, Mr. Erickson owned for a time a partnership in a threshing machine. "We found oftentimes that the bottom of stacks were very damp and were threshed with difficulty. To get away from this it would be well to plow the ground on which they are build, build them on old posts or a layer of straw.

"It is advisable, it seems, to take a view toward locating stacks with regard to the prevailing winds. Some threshers think they can do cleaner work by quartering the winds instead of setting the machine broadside to them or in their direct line. The location for stacks should be in a well drained area."

The sides of a finished stack should be raked down with a garden rake so that all loose material can be saved. This is placed in the bottom of the next stack to advantage. Fire and tornado insurance on the lot would be an expensive luxury. A safety ring plowed around the grain may prove valuable. Some farmers like to have a lightning rod on a tall pole near the group.

Besides what the two farmers have had to say about the advantages of shock and stack threshing the farm crops department of the Iowa State College offers some worth-while suggestions and considerations based upon their years of experimentation.

The department contends that the two additional handlings of grain necessary to stack cost about 1 cent per bushel more than the cost of shocking. On the other hand, additional labor to thresh from the shock costs about 1 cent per bushel more than that required to thresh from stacks.

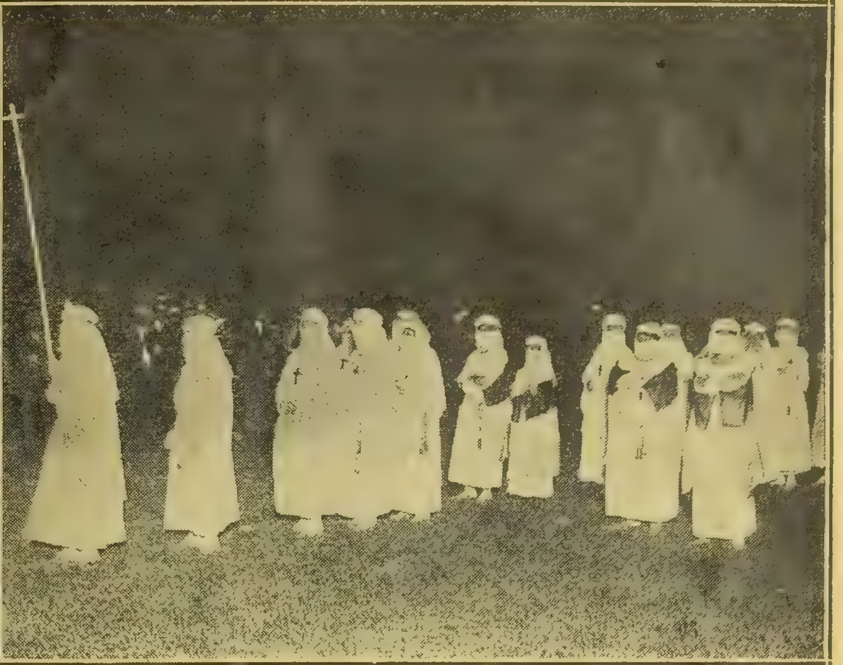
He Who Has Grain Stacked in This Fashion Need Not Worry About Wet Weather.

U. S. G. G. GOES AHEAD; BUREAU PLANS CO-OP.

THE U. S. Grain Growers, Inc., will fund its debts and proceed to set up sales agencies in the various terminal markets. The American Farm Bureau Federation will formulate a national grain marketing policy based on organization of producers by states, with long - term contracts, pooling by grades on the basis of milling values, corn to be handled separately. This is the net result of the action taken in Chicago on meeting of Mid-West Farm Bureau President and Secretaries, called to consider the grain marketing problem. The states of Ohio, Indiana, Michigan, Illinois, Iowa, Minnesota, Missouri, Nebraska, Kansas and North Dakota were represented, by their respective Farm Bureau executives.

PICTURES FROM FAR AND NEAR

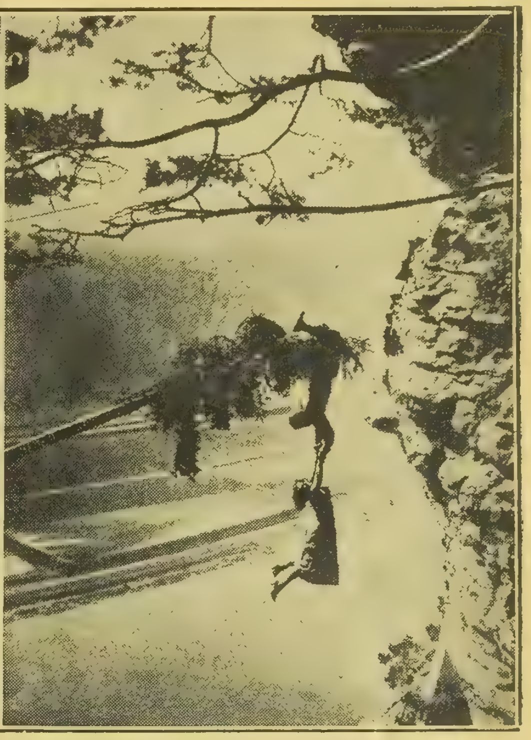
A PORTIA FOR POOR.—Mrs. Julia Morris Van Dernoot, who has joined the law firm of her husband in New York City in order to assist those who are without means of seeking legal redress. Mrs. Van Dernoot's admission to the bar is the consumation of an idea she thought out several years ago, namely to become a lawyer and give her services to the poor who might be deprived of their legal rights because they were without means to retain counsel. This will be her work exclusively.



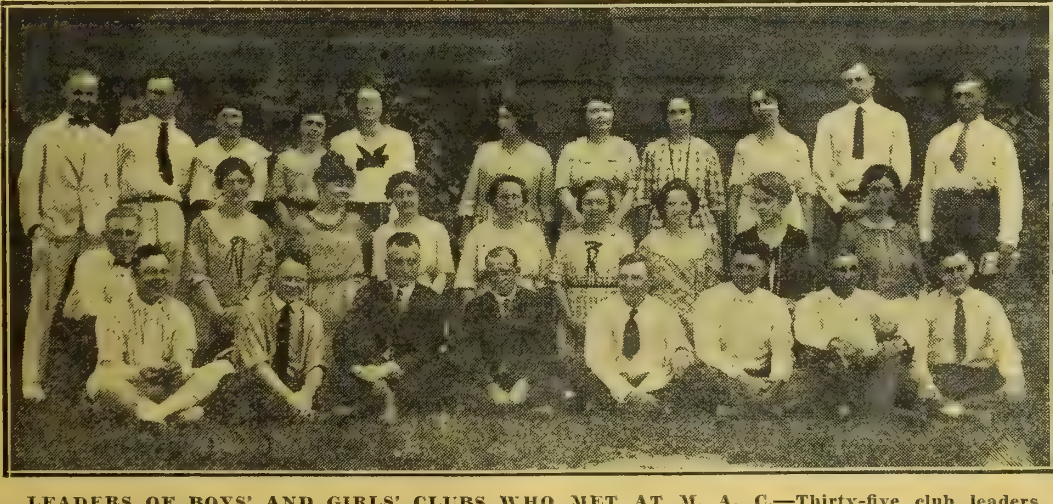
JERSEY WOMEN AID EAST'S FIRST PUBLIC KLAN INITIATION.—Residents of New Jersey were given a thrill they will not soon forget, when, for the first time in the east, the Ladies of the Invisible Empire and the Royal Riders of the Red Robe participated in a parade of the Ku Klux Klan thru the streets of Point Pleasant, New Jersey, preceding the "naturalization" of 300 candidates in a field adjoining Clark's Landing, on the Manasquan River. Fully 5,000 visitors witnessed the initiation ceremonies.

A NEW STUDY OF THE PONTIFF.—Pope Pius XI graciously allowed himself to be photographed in the gardens in the back of the Vatican in Rome in spite of the fact that he is really the most modest of men—and camera shy to boot. Photo shows the Pontiff, in his every day robes, taking a walk in the garden.

GIVES UP PLEASURES TO BECOME MISSIONARY TO LEPERS.—Miss Ethel Canary, a Tennessee girl, who is accompanying her lover, Arthur Tylee, of Worcester, Mass., on his trip to Paraguay, South America, where he will live and help the lepers. Miss Canary will wed her lover after they have lived two years amongst the lepers.



THE THRILL OF A LIFE TIME.—How would you like to change places with either of these dare-devils? The man, Lucieno Albertini, known as the "Fairbanks of Europe," is hanging by his feet, onto the branch of a tree suspended thousands of feet above the ground, while he holds up a girl with his hands. One slip, and their careers are ended.



LEADERS OF BOYS' AND GIRLS' CLUBS WHO MET AT M. A. C.—Thirty-five club leaders gathered at the Michigan Agricultural College, June 19-22, holding their annual conference under the direction of State Club Leader R. A. Turner. Mr. Turner is in the back row at the extreme left. There was much good accomplished at the meeting and many interesting facts brought out. Results of the club work, as given, shows that Michigan rates as follows: 3rd in number of clubs organized in U. S.; 4th in number of club members completing work in 33 north and western states; 12th in number of club members completing work in United States.

PRESIDENT RUNS TRACTOR IN KANSAS WHEAT FIELD.—While on his tour of the western states President Harding visited a wheat field near Hutchinson, Kansas, and showed the people that he had not forgotten how a tractor or binder operates. This photograph is furnished through the courtesy of the International Harvester Company.

(Copyright Keystone View Company)

Farmers Service Bureau

(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full name and address. Name not used if so requested.)

BACKING NOTE

Has the husband the right to back notes for other people without the consent of his wife or without even telling her about the transaction? Understand, we have all our property, insurance and everything, jointly. I am very much opposed to backing notes for anybody, particularly when I know they are not reliable parties. Can he legally do this without consent?—W. S., Bad Axe, Mich.

—The law does not require the wife's consent to enable the husband to indorse promissory notes for other people. However, in the event the husband becomes liable to pay the amount of the note, no real property which he holds jointly with his wife can be taken for the payment of the obligation.—Asst. Legal Editor.

TESTING STRENGTH OF BORDEAUX MIXTURE

Will you please tell me what acid is used to test Bordeaux mixture to determine if it is strong enough with time to prevent the burning of tree foliage?—G. C. K., Summit City, Michigan.

—I do not know of any acid which is used to test bordeaux mixture to determine if enough lime is present. Potassium ferrocyanide is used for this purpose. After the lime and copper sulphate are combined a few drops of this solution are dropped into the bordeaux and if a brown precipitate is formed, lime should be added to prevent the formation of the brown precipitate. I do not know what this bordeaux is to be used for but if it is for fruit trees the general practice now is to use a mixture containing considerable excess of lime so that there will be no need of testing for acidity.—N. C. Dutton, Research Associate, Dept. of Horticulture, M. A. C.

WIFE MUST SIGN OFF

A man has a common law wife. They have been living together over twenty years and have raised a family and are living together now. I bought 40 acres of land from the man but the common law wife didn't sign the deed. Is my deed any good?—J. B., Caspian, Mich.

—The wife would have to sign the conveyance in order to release her homestead and dower rights. The purchaser should procure a subsequent deed in which the wife joins the husband, or a subsequent deed executed by the wife alone, in which she should express her intent to bar her dower right.—Asst. Legal editor.

DID TREE BELONG TO B?

If A cuts timber along the line and B claims A has cut one of his trees and makes A pay for same and later A finds that B never owned this tree can A sue B and make B pay back after three years?—F. W. R., Hawks, Mich.

—If the tree actually belonged to A and he was coerced to pay B for it, I am of the opinion he could recover his money back from B. However, if B forced A to pay for the tree by suing him and obtaining judgment against him, A could not recover the money back after three years time had elapsed.—Asst. Legal Editor.

A FLY REPELLANT

We have a large horse fly here that bites or stings the horses so they are almost unable to work. Common fly dope does not keep them off. Do you know of anything that will keep them off?—A. G., Sigma, Michigan.

—The best fly dope with which I am familiar is: 12 oz. oil tar, 12 oz. turpentine, 12 oz. crude carbolic acid, 10 to 15 cents worth of tannin, Make up 5 gallons with kerosene and apply lightly with atomizer. It is not any too good of course but really there is no ideal fly repellant to use on live stock so far as I know.

It will interest you, however, to know that horse flies, all of them, breed in standing water over mud and even in pretty thick mud at times.. The eggs are laid on objects overhanging the water and the maggots drop into the water on hatching out.

Some twenty-five years ago Dr. Porchinsky of Russia discovered that the placing of kerosene oil on the surface of pools where these creatures breed not only killed the larvae as they drop down through the oil and as they came out to the surrounding dry land to pupate but also that it killed the adults which have a habit of hovering over the water just before dawn in the morning and dipping themselves on the surface, much as swallows will play over the water in the evening.

Dr. Porchinsky reports that the spreading of oil killed the horse flies when they indulged in this species of play and that he saw their bodies floating on the surface of the ponds in numbers as a result of the treatment.

I have not had an opportunity to test this out here but if horse flies are very common at Sigma, Michigan, it might be profitable to try out this method and see what comes of it—R. H. Pettit, Professor of Entomology, M. A. C.

HAVE RIGHT TO ACTION

A, a farmer of Osceola County decided to quit farming last spring, arranged with his banker, B, for his public auction on these terms: B to furnish the advertising, auctioneer, clerk and adjuster; to take all notes, cash, including what A may see fit to bid in, discounting the total 10 per cent, paying A cash for the balance, which was done, all but one cow, which C bought for $51.00. C, thinking he gave too much for his cow got A to write B that he, A, would take $40, cash, for the cow. As all notes were made to B, C gave B his note and kept the cow. The last A heard from the cow or $40 was a letter from B dated May 31st that led A to think that his money would soon be forthcoming.

A has written B several times since which B ignores. What is your advice to A. The date of the sale was April 26. The notes were given for 8 months.—W. H., Ann Arbor, Mich.

—It is my opinion that you would have a right of action against B on his agreement in which he was to take the notes, discount them and pay you the balance in cash.—Asst. Legal Editor.

CAN SELL REMEDY THROUGH MAILS

I have a medicine that is a sure cure for white scours in calves. I would like to advertise and sell through the mail with a money back guarantee if not satisfactory. I have used it for years and know it is all O. K. Is there any law to stop me selling through the mail?—R. P., Harrisville, Mich.

—There is no law prohibiting you from selling this kind of a remedy through the mails.—Asst. Legal Editor.

WOULD HAVE RIGHT TO TAX LAND

I want your opinion on taxing property direct on town and county ditches. Now I own the southeast quarter of section 27 and there has been five ditches dug and I had to pay a direct tax on all five. There are two on the north half running west and two on the south half running west, and one running east. Now they are digging one on the north half, eighty rods apart. Now this first ditch is 80 rods north of my north line and this one they are letting is 80 rods north of the first one. Now what I want to know is, can they tax me on this ditch, since I have paid two direct taxes on the eighty already.—E. C., AuGres.

—If your land would be benefited by the ditch, the county would have the right to levy a tax against your land for its construction. If you feel that the assessment against your land, made by the drain commissioner, is unjust, you may appeal to the probate court to have a board of review appointed to pass on your claim.—Asst. Legal Editor.

CAN ALL PROPERTY GO TO HUSBAND?

Will you please tell me if in a case where there are no children and there is no joint deed, and in case the wife dies first, if her relatives can claim the wife's share, if she doesn't leave a will? Kindly answer in the Business Farmer, and thank you.—Mrs. O. P. D., Stanton, Mich.

—If there are no children, nor the issue of a deceased child, then the residue of the estate after payment of debts and expenses of administration would be distributed as follows: One half to the husband and one half to the father, mother, brother, sister, nephew or niece of the wife. If neither of the above are living, then the entire estate would go to the husband.—Asst. Legal Editor.

SHIPPED MORE THAN ORDERED

In the fall of 1922 I ordered a half barrel of liquid Asbestos roofing. The pamphlet stated it was sold in one gallon, five gallon, half barrel and one barrel lots at so much per gallon. Thinking a half barrel would meet my need I ordered a half barrel and was sent forty gallons. Is that a legal half barrel? Will I have to pay for it all? I sent pay for 16½ gallons, the amount I supposed I had ordered.—C. W., Beulah, Michigan.

—You would not be required to pay for more asbestos than you ordered, provided you didn't accept the additional amount. Unless there was an understanding as to what would be considered a half barrel, the regulation half barrel, or 15¾, would be the proper amount.—Asst. Legal Editor.

IS HE ENTITLED TO ALL PRODUCE

When I pay cash rent, in the way of taxes, insurance and so much in money to make a certain amount same as cash, can I reap all the harvest such as wheat,, rye and speltz that was sown in the fall? This is heirship property owned by a number of heirs, of which I am one. My time of rent expired April 1st. 1923. And what about the straw from same? The heirs think they can get a share of the grain crop.—Mrs. J. W. B., Leonidas, Michigan.

—If you have an agreement with the other heirs, whereby you are to pay the taxes, insurance, etc., and an additional amount in money, as consideration for your right to use the farm, you would be entitled to all the produce you raise on said farm, the same as if you were renting the place on a usual money rent basis. —Asst. Legal Editor.

ANTS IN HOUSE

We are having considerable trouble with ants. They are in our house, they get into cupboards and on the food. Can you tell me how to get rid of them? Thank you.—Saginaw Reader, Saginaw, Mich.

—The ants that infect houses in Michigan may, for control purposes, be divided into two classes: those that like sweets and those that like grease, the latter being the very tiny red ants that love to collect on bacon rinds and on other greasy objects. The sweet-eating ants include the large carpenter ants, which are black, and several species of brown ants of varying size but all of them larger than the tiny grease-eating species.

In order to permanently rid a dwelling of these nuisances it is necessary that their nests be destroyed, and the easiest way to destroy these nests is to induce the ants themselves to do the work for you. A mixture of tarter emetic and extracted honey at the rate of one part of the poison to twenty of the honey seems about the right combination for the sweet loving ants, it kills the ants eventually but not quickly enough to hinder their getting back home and destroying their nests. We find that very thick honey is best, we even like to thicken it with powdered sugar and all mixing should be done without heat so as to keep the honey thick. The reason is that if the honey is thin the poison will settle out and the ants will not get it.

Get your druggist to mix up an ounce or so of this material and place it where nothing but the ants can get to it. I would invert an empty wooden box over the dish containing the poison or label it and put it away in some such manner that neither children nor any other creatures can get to it or mistake it for food. If it is impossible to take such precautions then it is better not to attempt to get rid of the ants in this manner. The ants will come to the poisoned honey and usually all that is necessary is to leave the poison-bait exposed for a few days or weeks until the ants have all had an opportunity to partake. Large ant-nests in the lawn may be treated in a similar manner. Place the poison-bait in a piece of tin or in a shallow dish on the nest and invert an empty wooden box over the dish and ant-hill, to prevent anything other than ants from getting at the poison.

Remember, that tartar emetic is a violent poison and extremely dangerous and just as effective against humans and pets as against insects. Take every precaution possible in its use and as soon as it has accomplished its purpose bury the remainder or take precautions which will prevent its being the cause of an accident later on.—R. H. Pettit, Prof. of Entomology, M. A. C.

HAS TOWNSHIP GOOD TITLE TO LAND?

A road is made on the line on A's land. The township has a deed of 66 feet of road on A's land. There is a fence on A's land, 33 ft. from the line, which was built 13 years ago. A agreed to give 33 ft. for road to the township; but the township made a deed of 66 ft. of road on A's land, without saying anything to A about it, which was recorded 12 years ago. Now the township wants to deed back to A 33 ft. What I want to know is: Must the deed go through the court before A should except it? In other words, must the deed go through the court before the township can deed back the 33 ft. to A?—A. M., Vulcan, Mich.

—If the township has a good title to the strip of land it could deed it to you, the same as one individual could deed land to another, and it would not have to go through the court.—Asst. Legal Editor.

FARM MECHANICS

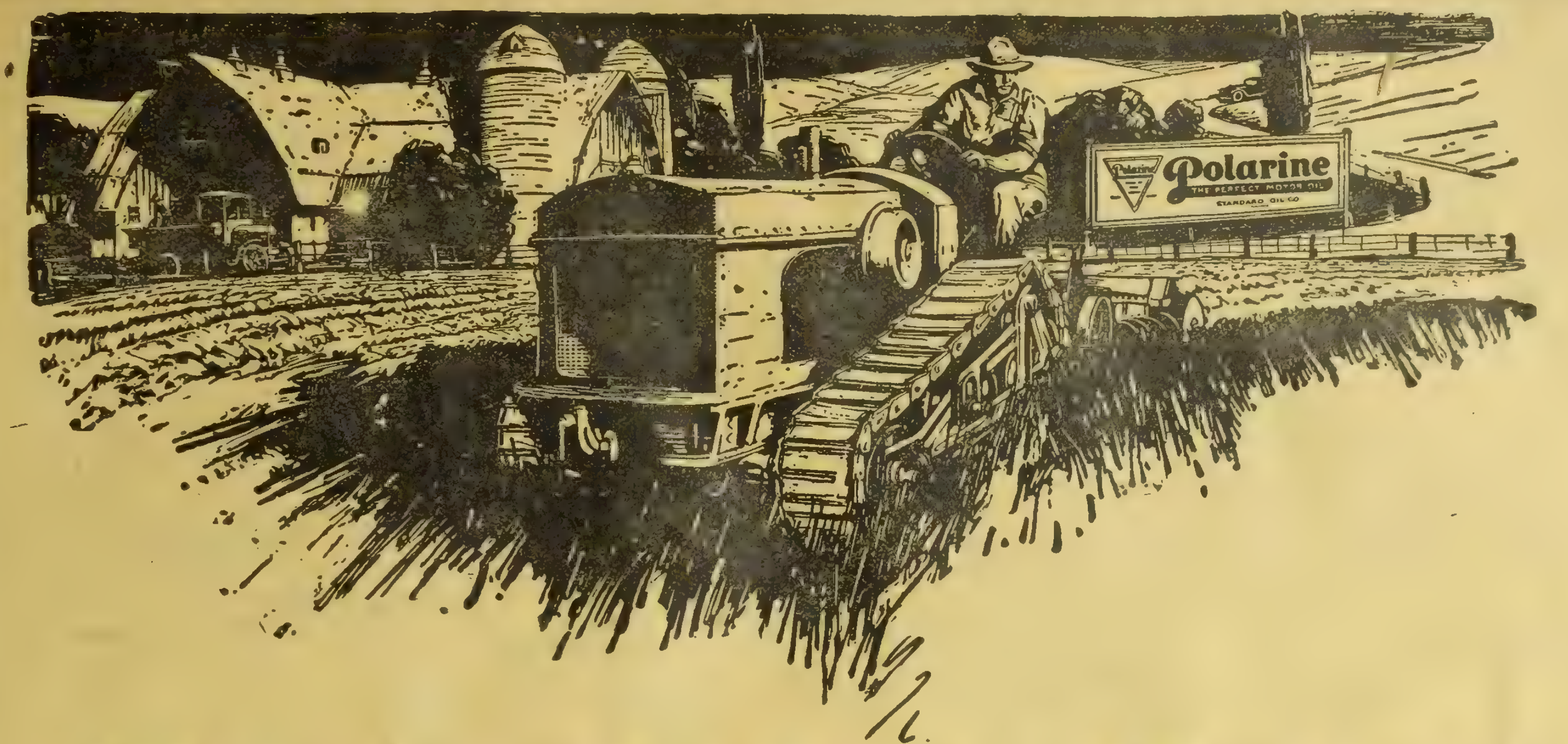
TO KEEP WATER OUT OF CELLAR

I have a small cellar which has water in it every spring. It is part stone and part cement but has been plastered with cement but does not keep the water out. Is there a way to plaster it to keep water out? Cement will hold water in, why won't it keep it out?—H. C. O., Reed City, Mich.

—One difficulty which might occur in attempting to plaster a stone cellar to keep out water is that it is difficult to place the plaster to resist the pressure of water and also somewhat difficult to place the plaster so that it is really applied in single coat. It must be remembered that a job of this kind must be 100 per cent perfect to be made water-proof. One hole the size of a pin head is practically enough to render the work imperfect.

It is possible that, by cleaning the walls of the cellar with a solution of one part hydro-chloric acid and ten parts of water after which washing thoroughly with water then plastering with a mixture of one part cement to two parts sand with one pound of lime added to each ten pounds of cement, the cellar might prove effective. Increased insurance against water may be had by washing the additional coat with a wash of cement and water mixed to the consistency of cream and applied.

The only way to insure a job of this kind is by a method which would entail considerable expense. It is to first cover the floor and walls with two or three thicknesses of tar paper which has been painted with asphaltum. The material is lapped somewhat like the roofing on a house, after which the entire surface is painted with asphaltum or mopped with hot pitch. The surface coat of two inches to four inches of concrete is then placed over this to protect it. We then have a thin membrane of asphaltum or pitch between the original floor and the new floor.—H. H. Musselman, Professor of Farm Mechanics, M. A. C.



Thinned Out Motor Oil Means Thinned Out Power

Tractor Chart of Recommendations

Trade Name	Motor Oil
Adaptable	H.
Allis-Chalmers, 6-12	H.
Allis-Chalmers, 15-25	S. H.
Allis-Chalmers, 18-30 and 20-35	S. H.
All Work	S. H.
Andrews-Kinkade	E. H.
Armington	S. H.
Aultman-Taylor, 15-30	S. H.
Aultman-Taylor, 22-45 and 30-60	S. H.
Automotive	S. H.
Avery, Model C	H.
Avery, 8-16, 12-20, 12-25, 14-28, 18-36, 25-50, 40-65, 20-35	E. H.
Avery Track Runner	S. H.
Bates Steel Mule, All Models	S. H.
Best Tracklayer, All Models	E. H.
Big Farmer	E. H.
Big Four E-B	E. H.
Buckeye Trundaar	S. H.
Burnoil	E. H.
Capitol, All Models	E. H.
Case, 10-18, 10-20, 12-20, 15-27, 9-18	H.
Case, 22-40	S. H.
Case, 12-25, 30-60, 40-72	E. H.
Case, 20-40	E. H.
Cletrac, All Models	S. H.
Coleman	E. H.
Dart Blue "J"	S. H.
Dill Harvesting	H.
Eagle	E. H.
E-B, All Models	S. H.
Ellwood	S. H.
Farm Horse	E. H.
Farquhar, 15-25	S. H.
Farquhar, 18-35 and 25-50	S. H.
Fitch Four Drive	E. H.
Flour City Junior	H.
Flour City, 20-35	S. H.
Flour City, 30-50, 40-70	E. H.
Fordson	H.
Fox	E. H.
Frick, All Models	S. H.
Good Field	H.
G-O	S. H.
Grain Belt	S. H.
Gray	S. H.
Great Western	S. H.
Hadfield-Penfield	S. H.
Hart-Parr, All Models	E. H.
Heider	S. H.
Holt Caterpillar, All Models	E. H.
Huber, All Models	S. H.
Indiana	H.
International, 8-16	H.
International, 15-30	S. H.
Klumb	E. H.
Lauson, All Models	S. H.
Leader	E. H.
Leonard Four Wheel Drive	S. H.
Liberty	E. H.
Lincoln	S. H.
Linn	S. H.
Little Giant, A & B	S. H.
Magnet, 14-28	S. H.
Mark VI	S. H.
McCormick-Deering, 15-30	H.
Minneapolis, 12-25 and 17-30	S. H.
Minneapolis, 22-44 and 35-70	E. H.
Mogul	S. H.
Moline Universal	S. H.
Monarch	S. H.
Montana	E. H.
Nilson Junior and Senior	S. H.
Oil Gas, 20-42 and 25-50	E. H.
Peoria	E. H.
Pioneer, 18-36 and 30-60	E. H.
Port Huron	S. H.
Quadpull	S. H.
Reed	S. H.
Rex	S. H.
Rogers	E. H.
Rumley, Oil Pull, 12-20, 16-30 and 20-40	E. H.
Rumley, Oil Pull, 30-60	E. H.
Russell "Junior", 12-24	S. H.
Russell Boss	S. H.
Russell "Giant," 30-60	E. H.
Sampson, Model M	H.
Savage A	E. H.
Shawnee, 6-12 and 9-18	H.
Shelby, All Models	S. H.
Square Turn	E. H.
Stinson	S. H.
Titan	S. H.
Topp-Stewart	S. H.
Townsend	E. H.
Traylor	H.
Trundaar	S. H.
Twin Ports	E. H.
Twin City, 12-20 and 20-35	S. H.
Twin City, 40-65 and 60-90	E. H.
Uncle Sam All Models	S. H.
Wallis	S. H.
Waterloo Boy	S. H.
Wellington, 12-22 and 16-30	S. H.
Wetmore	S. H.
Wheat	S. H.
Western	E. H.
Wisconsin	E. H.
Yuba Ball Tread	S. H.

KEY

L.—Polarine Light.
M.—Polarine Medium
H.—Polarine Heavy
S.H.—Polarine Special Heavy.
E.H.—Polarine Extra Heavy.

N. B. For recommendations of grades of Polarine to use in automobiles and trucks consult chart at any Standard Oil Co. (Indiana) station.

ARE you sinning against your tractor by using a thinned out motor oil? If so, stop now—before the bearing surfaces are worn and cut. An oil of poor body and wrong viscosity thins out very quickly in summer. Thinned out motor oil means short life to the bearings and frequent renewal. It means an insufficient oil film between all metal surfaces, and a consequent leakage of power. Follow the chart.

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You will be delighted to find that Polarine lessens carbon deposit—lessens power waste—cuts cost of cleaning valves and spark-plugs—saves cylinders to longer life.

Trained chemists have co-operated with trained Lubricating Engineers to find just the grade of Polarine your tractor should have. That is why Polarine lubricates correctly every frictional surface under all mechanical and thermal conditions. Polarine is made from crude oils selected exclusively for their high lubricating values.

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Chicago, Ill.

3234

Send No Money!

LADIES—We claim this is the biggest summer dress pump bargain in America. But don't take our word for it and don't send one cent Just order your size and judge for yourself. If not delighted with your saving return the shoes and you will not lose one cent.

2 PAIR of Stockings GIVEN
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Sizes 3 to 8

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Sizes 3 to 8. Order by P 5165. No money now. Just tell us your size and when shoes arrive pay only the smashed bargain price, $1.97 and postage. (1 pair good white hose included free.) If not satisfied for any reason at all return them and we will refund your money instantly. Send quick—today!

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30 days' free trial—then, if satisfied, only $7.50 and a few easy payments—*and*—the wonderful Belgium Melotte Separator is *yours*.

No Money Down!
Catalog tells all—WRITE!

Caution! U. S. Bulletin 201 shows that vibration of the bowl causes *cream waste!* The Melotte bowl is *self-balancing*. Positively cannot get out of balance therefore cannot vibrate. Can't remix cream with milk. Runs so easily, bowl spins 25 *minutes* after you stop cranking unless you apply brake. No other separator needs a brake Bowl chamber is *porcelain lined*.

Catalog FREE
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And bidders are legion. Look through the advertisements and you will find them—every one. They shout, beckon or nod to you thru the medium of type and picture. Each seeks to outdo the others in the attractiveness of his offer. Each vies with the others for the privilege of your attention.

Competition is keen, if you only realized it. Each advertisement in this paper is an offer made directly to you. Each is worthy of your interest in some degree.

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Know what your money is worth
Advertisements tell you

YOU'LL BE INTERESTED IN WHAT WE HAVE TO OFFER IT'S ON PAGE 20

What the Neighbors Say

DOES PROHIBITION WORK?

Am sending you a clipping from Farm and Fireside which accurately describes the liquor or booze situation in my section of Michigan and I will gamble that the situation is as bad everywhere in the United States as it is here, or perhaps worse. Prohibition just simply does not prohibit. I have been practically a teetotaler all my life and my vote helped to make it dry, but in voting to make it dry I made a terrible mistake, so did every one else who voted to make it dry. What has prohibition done for us? It has deprived us of a market for our rye and barley. It has deprived our government of the liquor tax which was an immense sum which went to help pay the cost of government.

Has prohibition done any good? No. It has done great harm. There is more booze in my territory and I believe everywhere else than there ever was under the open saloon. I think I am well within the truth in saying there are from two to four moonshine stills on every square mile in the country districts and there are barrels and barrels of moonshine being made in our cities, towns and villages, and it never can be stopped. The profits in making moonshine and bootlegging are so enormous there is a large class of our citizens who have and always will take a chance of making and selling it. Where one man gets pinched and imprisoned there are a dozen more ready to take his place.

Has prohibition removed the temptation to drink booze by our young men? No. It is worse than ever before. Let anyone who does not believe this go to our country resorts where they run dancing pavilions all night, and stay around a while and keep their eyes open and they will soon be convinced.

There are more people being killed and others being made physical wrecks from drinking booze at the present time than there ever was under the open saloon. The open saloons were all wrong. Had the prohibitionists closed the saloons and then quit, the booze situation would have been a million times better than it is today. Had we, today, the army we sent to France and commissioned it to make this country dry it (the army) couldn't do it. Every farmer who has kept his eyes open will say the same thing —A. A. Lambertson, Kent County.

WHAT ABOUT MARKETING YOUR CROP?

THE old marketing routine is something like this: Sell the crop to a local buyer or to the casual visiting buyer. If neither of these provide a market then trust that the Lord will take care of "nit wits" and fruit growers by dumping the crop when harvested into the nearest central market.

A fruit grower who consigns his crop in an indiscriminate way has himself trained to feast on air, water and landscape and will be fortunate it he gets more.

Now I fancy some of my grower friends are saying, "Don't worry yourself Mr. Townsend, we were "soaked" last year and the year before but we will not consign any more to the same people." Reminds me of two young farmers in Sauk county who had lost their father and were bewailing their misfortunes, recounting them to a visiting uncle.

"I tell you, Uncle John, it is something worse every year."

"That's too bad," says uncle John. "What all has hapened?"

"Well, four years ago the chickens all died, and I tell you Uncle John it is something worse every year."

"What happened worse the next year?"

"Three years ago the hogs all died of the hog cholera. It's something worse every year!"

"That's dreadful. What calamity happened next."

"Something worse every year. Last year Pa died and this year the bull."

There is a good chance in consigning to the central markets that it will be "something worse every year." Take a square look at what consigning involves. All consignees are honest. Always were honest and always will be honest, though my neighbor says there are two exceptions: they are all honest except week days and Sundays.

Of course consignees are efficient but if a buyer visits you from the central markets for goodness sakes don't give him any pre-Volstead cider. If you do he will possibly tell you how much better it is to sell out right to him, than consign because if there is a lot of stock in the market "they just slaughter things." Now we are all convinced that consignees are honest and efficient. What next?

The citrus growers were a plucky lot. They were more than that—They were both plucky and plucked and that too in a near innocent sort of a way. They shipped to Strausheimer on East River Street and Panatelli on West River Street. They were hustlers and had a variety of things to sell. Naturally they wanted to keep the retailers coming.

Mr. Retailer runs his truck down to Strausheimers to buy supplies but is looking for an "inducement." Now cutting prices on goods that are owned or handled at a fixed price is a sacrifice of profits but there is a way. You want some oranges and lemons. We can shade the list on those. The dealer who bought lemons at a shaded price on Tuesday visits Panatelli Wednesday and tells about the cut in price. Panatelli "sees" Strausheimers cut and goes him one better and so each consignee in the struggle to get business keeps cutting the price to meet some other distributor until the price scarcely pays the freight. If there is stock in competition consigning means price cutting at consignors expense and expense to all other growers—loss to all because of flat markets.

Produce and fruit merchants often have retail stores or are directly interested in such stores but of course they would never, never buy consigned goods for their own stores. If they bought of themselves they might cheat themselves and soon go broke but if there were no other stock quite as available it would really be an honor to the shopper to supply stock good enough for the jobbers own retail store.

Some jobbers as consignees might feel that if they paid eighty per cent of the value of a consignment and allowed themselves twenty per cent for the honor done the consignee by retailing his stock, that they had done quite well by the shipper.

A dealer must keep stock or go out of business. If the consigned supply is insufficient he must go out and buy stock to keep trade going. Suppose you consign a big lot just after the dealer has bought a large supply. Of course he will let his own stock rot, rot, rot, and hustle out and sell the consigned goods. There is a chance though, that you might consign to someone whose ethical sense had been paralyzed by spinal menigitis or something not quite so bad. In such cases the consigned stock would take second place in selling and may all spoil before the consignee can sell it.

Visible supply greatly affects markets. If a large number of cars are in the central markets at the same time buyers are apt to conclude that there will be lower prices and buy little and this furthur disturbs the market. If a considerable part of the crop was distributed to outlying markets the central markets would not be over stocked and the market would be stable.

Anyone who will allow his brain to function a little bit will see that commission merchants are probably as honorable as other business men but that no matter how honest the system is interwoven — fabricated — with vicious competition, irregular and often excessive supply, plus a number of other features that make it a ruinous marketing system.

The growers now have their own national organization and if they support it, distribution must improve and costs between the producer and the consumer reduced so that the outlet will be ample for any crop. —G. H. Townsend, Madison, Wis.

AMERICAN FARM PRODUCE AND EUROPEAN MARKET

IT is said if we would help Europe get on her feet she would furnish a market for our agricultural products and farmers would be able to sell their products at a good price. Now I believe as Europe approaches normal conditions she will become more self-supporting instead of less so as regards food supplies.

Trade between nations is a matter of exchange of goods. No nation can go on continually buying without selling. If this country with its vast wealth should buy $500,000,000 more goods than it sold and pay in money, in six or seven years its enormous gold supply would be exhausted.

This, of course, does not take into account the debit and credit situation. Before the war, Europe had investments in this country of approximately $5,000,000,000 with an annual interest charge of probably $250,000,000. This, of course, was paid in goods or agricultural products and made a market to that extent in excess of the regular exchange of goods. Now the position is reversed. Europe has borrowed from private sources in this country sums estimated from five billion to seven billion dollars with an interest charge of from two hundred and fifty to three hundred and fifty million dollars. This will be paid by imports in excess of the regular exchange of products.

Already, in March and April, imports in this country have exceeded exports. Aside from this, European countries owe this country eleven or twelve million dollars which we are pressing them for payment. One of our great unappreciated blessings is that Europe can't pay us either in goods or gold this vast sum. To do so would so disarrange our economical situation as to be disastrous.

As Europe gets back to normalcy she will require gold to back up her financial system. We have the gold and she will draw on us for gold in exchange for goods, enhancing the value of gold and lowering the price of goods. In all this I see little chance of any considerable or permanent rise in the price of agricultural products.

If this is so farmers are wasting time and energy in promoting legislation for the purpose of raising the price of agricultural products, as economic laws are much more powerful than legislative enactments. The farmer lost an opportunity last summer in not getting solidly behind the government in its attempt to settle the railroad and coal miners strikes.

It was supposed that as soon as railroad earnings permitted there would be a reduction in freight rates. Instead the railroads are now increasing the wages of the railroad men. This is natural as railroad workers are well organized and can make the railroads trouble, while the farmers are divided and a good share of them are backing railroad workers in their demands. Of course this will further postpone rate reduction.

As long as a considerable portion of farmers follow such leaders as La-Follette, Frazier, Brookhart, and our own Herbert Baker, they will play into the hands of those who are trying to prevent after-war readjustments.—K. S. W., Boyne City, Mich.

Book Review

(Books reviewed under this heading may be secured through The Michigan Business Farmer, and will be promptly shipped by parcel post on receipt of publisher's price stated.)

Gardening With Brains—By Henry T. Finck. "The best that has so far been written on garden subjects," the world's most famous gardener, Luther Burbank, wrote to the author of this book.

"You get the facts in such a pleasing, human way," Burbank added, "that they are irresistible. Your articles suggest to me the difference between living, moving, growing plant life, and the dead, dry, flat specimens which one sees in herbariums."

The important facts are all here, mingled with wise and witty remarks, and enlivened with anecdotes that open to you a whole world of delights to be found in your garden.—Harper & Brothers, ($2.50)

Bill Junior—"Pa, can we see sound?"
Bill Senior—"No, my son."
Bill Junior—"Then what did you mean by saying that mama's new hat looked like thunder?"
—Princeton Tiger.

THE FROWARD TONGUE

A SERMON BY REV. DAVID F. WARNER

TEXT: "If any man thinketh himself to be religious while he bridleth not his tongue, this man's religion is vain."—James 1:26.

WHETHER the Business Farmer readers liked the sermon on "The Secret of Simple Living" or no, we all can agree that greater emphasis should be placed on personal righteous living. Christ placed his emphasis here. And anent this, the apostle James says, "If any man thinketh himself to be religious and bridleth not his tongue, this man's religion is vain." O, yes, this means you, too, good sister.

What is there that seems to be more immaterial, more unsubstantial than speech? Yet, what reaction is attendant upon it. What a soft, weak member physically speaking, is the tongue. Yet, what power in life it commands. Said the wise man of the froward tongue, "That soft tongue breaketh the bone." And again, "There is that speaketh rashly like the piercings of a sword."

Words have to do with the current of others' lives as well as our own. We have learned that on the use of the tongue, many times, depend large issues in individual and community life. "The mouth of the fool is present destruction to the individual," but according to James, it also sets on fire the whole round of nature. Let us notice the effect of the disobedient tongue under three heads: first, free and idle criticisms; secondly, gossiping; and again, grudges.

Sometime ago, I approached an office door in one of our cities which had on it these words, "Come in without knocking and leave without knocking." Yet, coming or going, we have the chronic "knockers". In most communities there are habitual critics. "Honest criticism always benefits". But I am referring to those who indulge in free and idle criticism. To them, human frailty in others is an invitation to point out and emphasize the defects. And the temptation is so alluring that they continue until their own vision is so blurred they can scarcely see anything good. They become alert and sensitive and go after their victim like a cat leaps after its prey.

Now, anyone who does this is doing profound harm to himself. Reaction is heaviest upon him and "his religion is vain". The one criticised may be suppressed in the enthusiasms of life, but only temporarily. The springs of his life will come back to glorify virtue and truth. And yet the rippling criticism spreads and spreads until the whole neighborhood is affected. What parasitical tongues about us! But I insist that the one who delights in finding flaws in others, who feels a sense of elation in dealing in keen criticisms of others, has taken a deadly poison that has no known antidote save the spirit of Jesus Christ. The apostle says that no mere man can tame such tongue.

In the home the man is usually the critic. He prides himself in it. I suppose his coming by a kind of self-righeousness qualifies him for this lordly thing. His wife, fearing criticism, doesn't come to him with her plans as she used to. Does she, brother farmer? The children have a certain fear of dad's harshness. "Ye fathers, provoke not your children to wrath". But this is the tyranny of the male and the reaction makes for progressive crustiness. "If any man stumbleth not in tongue the same is a perfect man". And the community pastor must bare his bosom to the arrows of criticisms. His looks, dress, wife, children, finances; his sermons are too short or too long; he speaks truth too severely; and so on. Well, a community that freely indulges in this pastime is cultivating a spirit of mind and heart that makes it quite impossible to retain a wise, qualified preacher. This easy censuring will breed distrust and doubt. Certainly every church with such tendencies needs to have revived in it trust and loyalty to its chosen leader.

Now, what of gossiping? Well, this critical spirit encourages gossip. to express ones self about others' faults is soon taken up as idle talk. And here, the Gospel is keenly discriminating when it calls us to account for idle words. "They say" lives in every neighborhood. She throws on her shawl and drops into your home every now and then. Feignedly, it is but a neighborly borrowing of a cup of sugar. But her practice is her only reward "The words of a whisperer are as dainty morsels which go down into the chamber of the belly". But, socially, this keeping rumors playing on the tongue is a deep-dyed iniquity. "Rumor next—and Chance, and Tumult, and Confusion, all embroiled", says Milton. It pollutes the community, kindles passion, and drives out love. The Pentecostal fire can not settle down when and where a church and a community are set on fire by the tongue.

"There is so much good in the worst
 of us,
And so much bad in the best of us,
That it hardly behooves any of us
 To talk about the rest of us".

And grudges and offenses? Blighting as they are, they must needs come says the Book; but woe unto the one by whom they come. "It is profitable for him that a great mill stone be hanged about his neck and that he should be sunk in the depths of the sea". At least this is better than the final retribution that awaits this moral tripping-up of others. But where did this enmity start? You will remember you observed some passing attitude or remark you did not like. You criticised it audibly. It sounded so good to your titillating ears that you encored yourself. Then you found yourself really liking it and you harbored it so long that it hatched out in genuine grudge. And did you say that it was your nature to hold grudges? But the teaching from Above is, that if anyone be a Christian he has a new nature. And now, in our better moments, when we are looking in the right direction, we discover it would have been much better to have passed unnoticed the careless word or even the meant offense.

Surely, this occasions much stumbling. And the gravity of this sin but emphasizes the virtue of self-denial. After all, doesn't life everywhere need to enter into a new era of self-denial? And until it comes Jesus Christ will be pained and heart-broken. Not the conquering of the other fellow, but of yourself, makes you a militant victor in your moral life. And regarding all this, Christian teaching stays the foot as it stumbles over the occasion, the hand as it grasps it, the eye as it gloats over it,—all these are the agents of the inner life, and disclose its impure loves, and pleasures, and desires; and must be cut off that evil may not work through them. So, must we apply this rule to our tongue. This is rigorous means but the demand is stringent. Only this can bring about love and good-will in our community.

How happy we would be if we were not so sensitive and blundering; if we were able to see the good in others and love and forgive much! But our Savior did. And to let his love and mercy steal our hearts in all its largeness, is to make the slights and affronts of others seem small indeed. Friends, we shall find that grudging and hating are deep-seated in defective thinking about God and in a starved experience of his love. The Apostle says that with the same tongue we cannot bless the "Lord and Father" and curse men "who are made after the likeness of God".

The Chinese have a saying, "that an unlucky word dropped from the tongue cannot be brought back again by a coach and six horses". And now we are ready to accept the charge to bridle the tongue. When the baptism of fire sets upon it then it will be chastened and purified for the Master's use. This is well, for the purity of the home and the integrity of the community need guarding. And we need a host of folks who are set on disarming offenses and making peace. "If wisdom's ways you widely seek, five things observe with care: of whom you speak, to whom you speak, and how, and when, and where".

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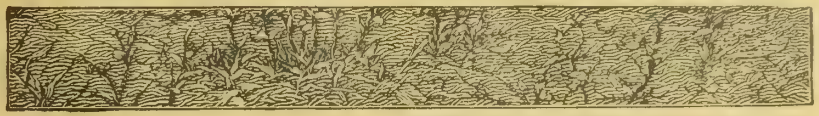

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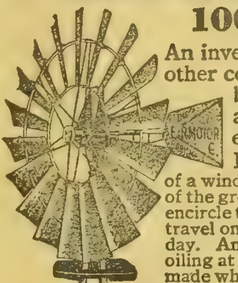

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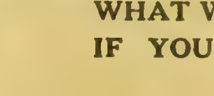

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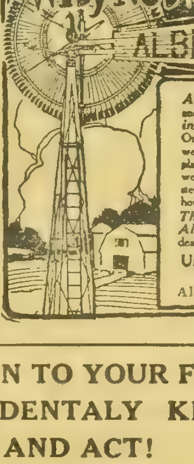

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WHAT WOULD HAPPEN TO YOUR FAMILY IF YOU WERE ACCIDENTALY KILLED?
SEE PAGE 20 AND ACT!

The Hunted Woman

By James Oliver Curwood

Michigan's Own and America's Formost Author of the Great Northwest

Copyright by James Oliver Curwood

(Continued from July 7th issue)

ALDOUS knew that in these last hours MacDonald's judgment must be final, and he made no objection to an arrangement which seemed to place the old hunter under a more hazardous risk than his own. And he realized fully that these were the last hours. For the first time he had seen MacDonald fill his pockets with the finger-long cartridges for his rifle, and he had noted how carefully he had looked at the breech of that rifle. Without questioning, he had followed the mountaineer's example. There were fifty spare cartridges in his own pockets. His .303 was freshly cleaned and oiled. He had tested the mechanism of his automatic. MacDonald had watched him, and both understood what such preparations meant as they set out on this last day's journey into the North. They had not kept from Joanne the fact that they would reach the end before night, and as they rode the prescribed distance behind the old hunter Aldous wondered how much she knew. They had given her to understand that they were beating out the rival party, but he believed that in spite of all their efforts there was in Joanne's mind a comprehension which she did not reveal in voice or look. Today she was no different than yesterday, or the day before, except that her cheeks were not so deeply flushed, and there was an uneasy questing in her eyes. He believed that she had sensed the nearness of tragedy, that she was conscious of what they were now trying to hide from her, and that she did not speak because she knew that he and MacDonald did not want her to know. His heart throbbed with pride. Her courage inspired him. And he noticed that she rode closed to him—always at his side through the day.

Early in the afternoon MacDonald stopped on the crest of a swell in the valley and waited for them. When they came up he was facing the north. He did not look at them. For a few moments he did not speak. His hat was pulled low, and his beard was twitching.

They looked ahead. At their feet the valley broadened until it was a mile in width. Half a mile away a band of caribou were running for the cover of a parklike clump of timber. MacDonald did not seem to notice them. He was still looking steadily and he was gazing at a mountain. It was a tremendous mountain, perhaps three miles away. Aldous had never seen another like it. Its huge shoulders were of almost ebon blackness, and glistened in the sunlight as if smeared with oil. Between those two shoulders rose a cathedral-like spire of rock and snow that seemed to tip the white fleece of the clouds.

MacDonald did not turn when he spoke. His voice was deep and vibrant with an intense emotion. Yet he was not excited.

"I've been hunting for that mount'in for forty years, Johnny!"

"Mac!"

Aldous leaned over and laid a hand on the old mountaineer's shoulder. Still MacDonald did not look at him.

"Forty years," he repeated, as if speaking to himself. "I see how I missed it now, just as DeBar said. I hunted from the west, an' on that side the mount'in ain't black. We must have crossed this valley an' come in from the east forty years ago, Johnny——"

He turned now, and what Joanne and Aldous saw in his face was not grief; it was not the sorrow of one drawing near to his beloved dead, but a joy that had transfigured him. The fire and strength of the youth in which he had first looked upon this valley with Jane at his side burned again in the sunken eyes of Donald MacDonald. After forty years he had come into his own. Somewhere very near was the cavern with the soft white floor of sand, and for a moment Aldous fancied that he could hear the beating of MacDonald's heart, while from Joanne's tender bosom there rose a deep, sobbing breath of understanding.

And MacDonald, facing the mountain again, pointed with a long, gaunt arm, said:

"We're almost there, Johnny. God ha' mercy on them if they've beat us out!"

CHAPTER XXVI

THEY rode on into the Valley of Gold. Again MacDonald took the lead, and he rode straight into the face of the black mountain. Aldous no longer made an effort to keep Joanne in ignorance of what might be ahead of them. He put a sixth cartridge into the chamber of his rifle, and carried the weapon across the pommel of his saddle. He explained to her now why they were riding behind—that if their enemies were laying in wait for them, MacDonald, alone, could make a swift retreat. Joanne asked no questions. Her lips were set tight. She was pale.

At the end of three quarters of an hour it seemed to them that MacDonald was riding directly into the face of a wall of rock. Then he swung sharply to the left, and disappeared. When they came to the point where he had turned they found that he had entered a concealed break in the mountain—a chasm with walls that rose almost perpendicular for a thousand feet above their heads. A dark and solemn gloom pervaded this chasm, and Aldous drew nearer to MacDonald, his rifle held in readiness, and his bridle rein fastened to his saddle-horn. The chasm was short. Sunlight burst upon them suddenly, and a few minutes after MacDonald waited for them again.

Even Aldous could not restrain an exclamation of surprise when he rode up with Joanne. Under them was another valley, a wide-sweeping valley between two rugged ranges that ran to the southwest. Up out of it there came to their ears a steady, rumbling roar; the air was filled with that roar; the earth seemed to tremble with it under their feet—and yet it was not loud. It came sullenly, as if from a great distance.

And then they saw that MacDonald was not looking out over the sweep of the valley, but down. Half a mile under them there was a dip—a valley within a valley—and through it ran the silver sheen of a stream. MacDonald spoke no word now. He dismounted and levelled his long telescope at the little valley. Aldous helped Joanne from her horse, and they waited. A great breath came at last from the old hunter. Slowly he turned. He did not give the telescope to Aldous, but to Joanne. She looked. For a full minute she seemed scarcely to breathe. Her hands trembled when she turned to give the glass to Aldous.

"I see—log cabins!" she whispered.

MacDonald placed a detaining hand on her arm.

"Look ag'in—Joanne," he said in a low voice that had in it a curious quiver.

Again she raised the telescope to her eyes.

"You see the little cabin—nearest the river?" whispered Donald.

"Yes, I see it."

"That was our cabin—Jane's an' mine—forty years ago," he said, and now his voice was husky.

Joanne's breath broke sobbingly as she gave Aldous the glass. Something seemed to choke him as he looked down upon the scene of the grim tragedy in which Donald MacDonald and Jane had played their fatal part. He saw the cabins as they had stood for nearly half a century. There were four. Three of them were small, and the fourth was large. They might have been built yesterday, for all that he could see of ruin or decay. The doors and windows of the larger cabin and two of the smaller ones were closed. The roofs were unbroken. The walls appeared solid. Twice he looked at the fourth cabin, with its wide-open door and window, and twice he looked at the cabin nearest the stream, where had lived Donald MacDonald and Jane.

Donald had moved, and Joanne was watching him tensely, when he took the glass from his eyes. Mutely the old mountaineer held out a hand, and Aldous gave him the telescope. Crouching behind a rock he slowly swept the valley. For half an hour he looked through the glass, and in that time scarce a word was spoken. During the last five minutes of that half-hour both Joanne and Aldous knew that MacDonald was looking at the little cabin nearest the stream, and with hands clasped tightly they waited in silence.

At last old Donald rose, and his face and voice were filled with a wonderful calm.

"There ain't been no change," he said softly. "I can see the log in front o' the door that I used to cut kindling on. It was too tough for them to split an' burn after we left. An' I can see the tub I made out o' spruce for Jane. It's leaning next the door, where I put it the day before we went away. Forty years ain't very long, Johnny! It ain't very long!"

Joanne had turned from them, and Aldous knew that she was crying.

"An' we've beat 'em to it, Johnny—we've beat 'em to it!" exulted MacDonald. "There ain't a sign of life in the valley, and we sure could make it out from here if there was!"

He climbed into his saddle, and started down the slope of the mountain. Her eyes were blinded by tears.

"It's terrible, terrible," she whispered brokenly. "And it—it's beautiful, John. I feel as though I'd like to give my life—to bring Jane back!"

"You must not betray tears or grief to Donald," said Aldous, drawing her close in his arms for a moment. "Joanne—sweetheart—it is a wonderful thing that is happening with him! I dreaded this day—I have dreaded it for a long time. I thought that it would be terrible to witness the grief of a man with a heart like Donald's. But he is not filled with grief, Joanne. It is joy, a great happiness that perhaps neither you nor I can understand—that has come to him now. Don't you understand? He has found her. He has found their old home. To-day is the culmination of forty years of hope, and faith, and prayer. And it does not bring him sorrow, but gladness. We must rejoice with him. We must be happy with him. I love you above all else on earth or in heaven. Without you I would not want to live. And yet, Joanne, I believe that I am no happier today than is Donald MacDonald!"

With a sudden cry, Joanne flung her arms about his neck.

"John, is it that?" she cried, and joy shone through her tears. "Yes, yes, I understand now! His heart is not breaking. It is life returning into a heart that was empty. I understand—oh, I understand now! And we must be happy with him. We must be happy when we find the cavern—and Jane!"

"And when we go down there to the little cabin that was their home."

"Yes—yes!"

They followed behind MacDonald. After a little a spur of the mountain side shut out the little valley from them, and when they rounded this they found themselves very near to the cabins. They rode down a beautiful slope into the basin, and when he reached the log buildings old Donald stopped and dismounted. Again Aldous helped Joanne from her horse. Ahead of them MacDonald went to the cabin nearest the stream. At the door he paused and waited for them.

"Forty years!" he said, facing them. "An' there ain't been so very much change as I can see!"

Years had dropped from his shoulders in these last few minutes, and even Aldous could not keep quite out of his face his amazement and wonder. Very gently Donald put his hand to the latch, as though fearing to awaken some one within; and very gently he pressed down on it, and put a bit of his strength against the door. It moved inward, and when it had opened sufficiently he leaned forward so that his head and a half of his shoulders were inside; and he looked—a long time he looked, without a movement of his body or a breath that they could see.

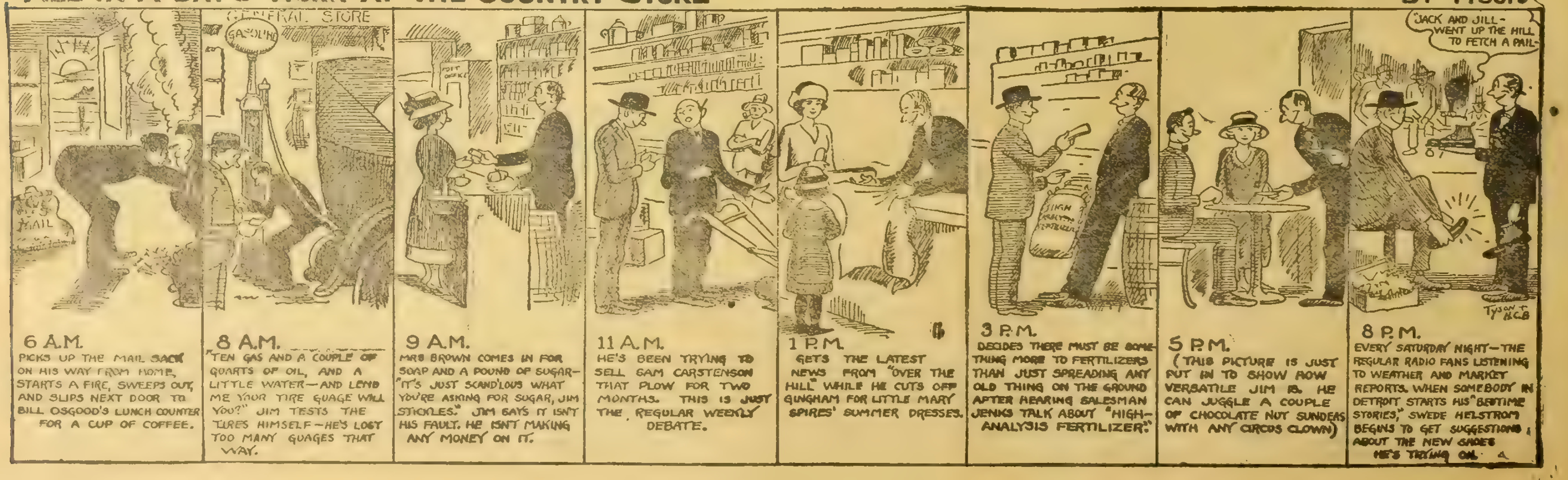
And then he turned to them again, and his eyes were shining as they had never seen them shine before.

"I'll open the window," he said. "It's dark—dark inside."

He went to the window, which was closed with a sapling barricade that had swung on hinges; and when he swung it back the rusted hinges gave way, and the thing crashed down at his feet. And now through the

ALL IN A DAY'S WORK AT THE COUNTRY STORE

BY TYSON


GENERAL STORE
GASOLINE
MAIL
POST OFFICE
"JACK AND JILL— WENT UP THE HILL TO FETCH A PAIL—
Tyson + H.C.B
6 A.M.
PICKS UP THE MAIL SACK ON HIS WAY FROM HOME, STARTS A FIRE, SWEEPS OUT, AND SLIPS NEXT DOOR TO BILL OSGOOD'S LUNCH COUNTER FOR A CUP OF COFFEE.
8 A.M.
"TEN GAS AND A COUPLE OF QUARTS OF OIL, AND A LITTLE WATER—AND LEND ME YOUR TIRE GUAGE WILL YOU?" JIM TESTS THE TIRES HIMSELF—HE'S LOST TOO MANY GUAGES THAT WAY.
9 A.M.
MRS BROWN COMES IN FOR SOAP AND A POUND OF SUGAR—"IT'S JUST SCAND'LOUS WHAT YOU'RE ASKING FOR SUGAR, JIM STICKLES." JIM SAYS IT ISN'T HIS FAULT. HE ISN'T MAKING ANY MONEY ON IT.
11 A.M.
HE'S BEEN TRYING TO SELL SAM CARSTENSON THAT PLOW FOR TWO MONTHS. THIS IS JUST THE REGULAR WEEKLY DEBATE.
1 P.M.
GETS THE LATEST NEWS FROM "OVER THE HILL" WHILE HE CUTS OFF GINGHAM FOR LITTLE MARY SPIRES' SUMMER DRESSES.
3 P.M.
DECIDES THERE MUST BE SOMETHING MORE TO FERTILIZERS THAN JUST SPREADING ANY OLD THING ON THE GROUND AFTER HEARING SALESMAN JENKS TALK ABOUT "HIGH-ANALYSIS FERTILIZER."
5 P.M.
(THIS PICTURE IS JUST PUT IN TO SHOW HOW VERSATILE JIM IS. HE CAN JUGGLE A COUPLE OF CHOCOLATE NUT SUNDEAS WITH ANY CIRCUS CLOWN)
8 P.M.
EVERY SATURDAY NIGHT—THE REGULAR RADIO FANS LISTENING TO WEATHER AND MARKET REPORTS. WHEN SOMEBODY IN DETROIT STARTS HIS "BEDTIME STORIES," SWEDE HELSTROM BEGINS TO GET SUGGESTIONS ABOUT THE NEW SHOES HE'S TRYING ON.

open window the sun poured in a warm radiance, and Donald entered the cabin, with Joanne and Aldous close behind him.

There was not much in the cabin, but what it held was earth, heaven, and all else to Donald MacDonald. A strange, glad cry surged from his chest as he looked about him, and now Joanne saw and understood what John Aldous had told her—for Donald MacDonald, after forty years, had come back to his home!

"Oh, my Gawd, Johnny, they didn't touch anything! They didn't touch anything!" he breathed in ecstasy. "I thought after we ran away they'd come in——"

He broke off, and his hat dropped from his hand, and he stood and stared; and what he was looking at, the sun fell upon in a great golden splash, and Joanne's hand gripped John's, and held to it tightly. Against the wall, hanging as they had hung for forty years, were a woman's garments; a hood, a shawl, a dress, and an apron that was half in tatters; and on the floor under these things were a pair of shoes. And as Donald MacDonald went to them, his arms reaching out, his lips moving, forgetful of all things but that he had come home, and Jane was here, Joanne drew Aldous softly to the door, and they went out into the day.

Joanne did not speak, and Aldous did not urge her. He saw her white throat throbbing as if there were a little heart beating there, and her eyes were big and dark and velvety, like the eyes of a fawn that had been frightened. There was a thickness in his own throat, and he found that it was difficult for him to see far out over the plain. They waited near the horses. Fifty yards from them ran the stream; a clear, beautiful stream which flowed in the direction from which the mysterious rumble of thunder seemed to come. This, Aldous knew, was the stream of gold. In the sand he saw wreckage which he knew were the ancient rockers; a shovel, thrust shaft-deep, still remained in the cabin. Then he came out. Very carefully he closed the door. His shoulders were thrown back. His head was held high. He looked like a monarch.

And his voice was calm.

"Everything is there, Johnny—everything but the gold," he said. "They took that."

Now he spoke to Joanne.

"You better not go with us into the other cabins," he said.

"Why?" she asked softly.

"Because—there's death in them all."

"I am going," she said.

From the window of the largest cabin MacDonald pulled the sapling shutter, and, like the other it fell to his feet. Then they opened the door, and entered; and here the sunlight revealed the cabin's ghastly tragedy. The first thing that they saw, because it was most terrible, was a rough table, half over which lay the shrunken thing that had once been a man. A part of its clothes still remained, but the head had broken from its column, and the white and fleshless skull lay facing them. Out of tattered and dust-crumbing sleeves reached the naked bones of hands and arms. And on the floor lay another of these things, in a crumpled and huddled heap, only the back of the skull showing, like the polished pate of a bald man. These things they saw first, and then two others; on the table were a heap of age-blackened and dusty sacks, and out of the back of the crumbling thing that guarded them stuck the long buckhorn hilt of a knife.

"They must ha' died fighting," said MacDonald. "An' there, Johnny, is their gold!"

White as death Joanne stood in the door and watched them. MacDonald and Aldous went to the sacks. They were of buckskin. The years had not aged them. When Aldous took one in his hands he found it was heavier than lead. With his knife MacDonald cut a slit in one of them, and the sun that came through the window flashed in a little golden stream that ran from the bag.

We'll take them out and put 'em in a pannier," said MacDonald. "The others won't be far behind us, Johnny."

Between them they carried out the seven sacks of gold. It was a load for their arms. They put it in one of the panniers, and then MacDonald nodded toward the cabin next the one that had been his own.

"I wouldn't go in there, Joanne," he said.

"I'm going," she whispered again.

"It was their cabin—the man an' his wife," persisted old Donald. "An' the men was beasts, Joanne! I don't know what happened in there—but I guess."

"I'm going," she said again.

MacDonald pulled down the barricade from the window—a window that also faced the south and west, and this time he had to thrust against the door with his shoulder. They entered, and a low cry came from Joanne's lips—a cry that had in it horror, disbelief, a woman's wrath. Against the wall was a pile of something, and on that pile was the searching first light of day that had fallen upon it for nearly half a century. The pile was a man crumpled down; across it, her skeleton arms thrown about it protectingly was a woman. This time Aldous did not go forward. MacDonald was alone, and Aldous took Joanne from the cabin, and held her while she swayed in his arms. Donald came out a little later, and there was a curious look of exultation and triumph in his face.

"She killed herself," he said. "That was her husband. I know him. I gave him the rock-nails he put in the soles of his boots—and the nails are still there."

He went alone into the remaining two cabins, while Aldous stood with Joanne. He did not stay long. From the fourth cabin he brought an armful of the little brown sacks. He returned, and brought a second armful.

"There's three more in that last cabin," he explained. "Two men, an' a woman. She must ha' been the wife of the man they killed. They were the last to live, an' they starved to death. An' now Johnny——"

He paused, and he drew a great breath.

He was looking to the west, where the sun was beginning to sink behind the mountains.

"An' now, Johnny, if you're ready, an' if Joanne is ready, we'll go," he said.

CHAPTER XXVII

AS THEY went up out of the basin into the broad meadows of the larger valley, MacDonald rode between Aldous and Joanne, and the pack-horses, led by Pinto, trailed behind.

Again old Donald said, as he searched the valley:

"We've beat 'em, Johnny. Quade an' Rann are coming up on the other side of the range, and I figger they're just about a day behind—mebby only hours, or an hour. You can't tell. There's more gold back there. We got about a hundred pounds in them fifteen sacks, an' there was twice that much. It's hid somewhere. Calkins used to keep his'n under the floor. So did Watts. We'll find it later. An' the river, an' the dry gulches on both sides of the valley—they're full of it! It's all gold, Johnny—gold everywhere!"

He pointed ahead to where the valley rose in a green slope between two mountains half a mile away.

"That's the break," he said. "It don't seem very far now, do it, Joanne?" His silence seemed to have dropped from him like a mantle, and there was joy in what he was telling. "But it was a distance that night—a turrible distance," he continued, before he could answer. "That was forty-one years ago, coming November. An' it was cold, an' the snow was deep. It was bitter cold—so cold it caught my Jane's lungs, an' that was what made her go a little later. The slope up there don't look steep now, but it was steep then—with two feet of snow to drag ourselves through. I don't think the cavern is more'n five or six miles away, Johnny, mebby less, an' it took us twenty hours to reach it. It snowed so heavy that night, an' the wind blowed so, that our trail was filled up or they might ha' followed."

Many times Aldous had been on the point of asking old Donald a question. For the first time he asked it now, even as his eyes slowly and searchingly swept over the valley for signs of Mortimer FitzHugh and Quade.

(Continued on Page 17)

Guaranteed for Life!

McCormick-Deering Tractor Crankshaft and Main Bearings

THE crankshaft and the crankshaft ball bearings of the McCormick-Deering 10-20 and 15-30 tractors are guaranteed against breakage, not for a month or a year, but *during the entire life of the tractor.*

This guarantee covers breakage from any cause whatsoever, and in the case of the ball bearings guarantees them from wearing out or burning out during the life of the tractor.

Read this SPECIAL TRACTOR WARRANTY, which every purchaser gets in writing:

The seller agrees to replace free the TWO-BEARING CRANKSHAFT in any 10-20 or 15-30 McCormick-Deering tractor, should it break during the life of the tractor, provided the broken parts are promptly returned to the factory or one of the branch houses.

Further, the seller agrees to replace free any CRANKSHAFT BALL BEARING in the 10-20 or 15-30 McCormick-Deering tractor, which may break, wear out, or burn out during the life of the tractor, provided that the defective ball bearing is promptly returned to the factory or one of the branch houses.

BALL BEARING
BALL BEARING

THINK of it! Never before in the history of the automotive industry—with automobiles, motor trucks, engines, or tractors—has such a warranty been given. You have never before seen nor heard of so liberal a tractor guarantee. This is convincing proof of the indestructibility of the crankshaft and the crankshaft ball bearings in the McCormick-Deering tractors, and you will find the machines of uniform quality throughout.

In addition, the Company continues its policy of providing tractors with all necessary equipment—throttle governor, belt pulley, platform, fenders, brake, etc. No extras to buy.

Your McCormick-Deering dealer will show you the many valuable features of these tractors, such as ball and roller bearings at 28 points, unit frame, replaceable wearing parts, etc. He will show you the size of the guaranteed crankshaft and demonstrate how easily it runs in the guaranteed main ball bearings. When you buy a tractor, be sure this valuable guarantee is written into the contract!

INTERNATIONAL HARVESTER COMPANY
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The Michigan
BUSINESS FARMER

SATURDAY, JULY 21, 1923

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RELIABLE ADVERTISERS
We will not knowingly accept the advertising of any person or firm who we do not believe to be thoroughly honest and reliable. Should any reader have any cause for complaint against any advertiser in these columns, the publisher would appreciate an immediate letter bringing all facts to light. In every case when writing say: "I saw your advertisement in The Michigan Business Farmer!" It will guarantee honest dealing.

"The Farm Paper of Service"

WHAT THE FARMER WANTS

THE July issue of the Locomotive Engineers Journal is devoted entirely to "What the Farmer Wants", and comes from the headquarters of one of the greatest labor unions in America. It covers every point of the "Farmers Revolt" excepting that it fails to mention that the one thing the farmer wants more than anything else is lower freight rates. It is a little hard for a farmer to hold the plow handles straight in a rocky field with the sun broiling down on the back of his neck, wondering whether or not the crop he is planting will come safely through and net him a few dollars profit, or whether possibly it will be a total loss, when he looks across the field at the locomotive engineer, in his upholstered cab, and realizes that the eigineer with no investment of capital draws about $1.00 an hour for his time, with time and a half for overtime and double time for holiday work!

It is rather interesting to see so powerful a labor union taking so considerate a view of the greatest industry in America. The farmer, however, is not one who forgets so easily the laws that were hurried through Washington during the very critical days of the war to satisfy the demands of the railway labor unions. The farmer does not forget that during the past two years when his crops have been selling at prices which did not pay for the actual cost of production, the labor unions have demanded the "last pound of flesh."

If the locomotive engineers want to know "what the farmer wants" and they will go to the actual working farmers in the fields and not the political leaders who claim to champion the farmer's cause but serve only to befog his issues, they will find that what the farmer wants most, is to know how they "put-it-over." So far the farmer seems to be a dismal failure in getting what he needs through organization. He gets what he "wants", or what the politicians think he wants, but far from what he needs, which is, as we see it, a guaranteed return on his investment like Capital gets and a guaranteed wage for his time like Labor gets.

GOOD-BYE FOREVER

THERE will be no wheels-of-chance on the Michigan State Fair Grounds this year. This announcement just made by George W. Dickinson, Secretary and Manager, will send a chill up the backs of thousands of city men and women who have apparently, heretofore, depended on "Lady Luck" for their food and raiment. We wonder how they will get along!

At former fairs it has been possible to take a chance on the wheel and win anything from a poor, little, wild yellow bird in a reed cage, to a basket of sawdust carefully camouflaged over the top with a layer of fruit. When you consider that there were from one to two hundred chances on the spin of a wheel, that each chance was sold for ten cents, and that the value of the prize was seldom more than a dollar, you can appreciate why there were nearly two city blocks of these stalls at the last State Fair, and why the space at $60 per foot for the ten days fair was sold immediately and at a profit to the fair which we understood to have been $29,000!

The passing of the wheel-of-chance marks one of the last steps in cleaning up the State Fair. Much credit for which should be given to Mr. Dickinson who has so ably managed and built up the wonderful exposition which the state acquired last season. It must be remembered that within the term of office of the present management a saloon was operated under the grandstand, and public betting on the horse races was allowed and the privilege sold. On the midway everything from the Egyptian dance to the snake eating wild-man was permitted, and the lemonade was only sweetened water with a drop of red paint in it.

The present board of managers of the State Fair are therefore to be credited with the mark of progress which they have made in doing away with one of the last of the objectionable features, even at the cost of $29,000 for a season. We predict that this money will be spent in other quarters or will increase the attractions of the fair in such a way that this amount will be made up.

The Business Farmer cannot help but feel that as the present plans of the management are consumated Michigan will, without doubt, have the finest exposition of its kind on the American continent, if it does not enjoy this position today.

Every indication points to the fact that this year's fair will be one of the greatest ever held in Michigan. It is easy to say "Bigger and Better" but we make the above assertion with a knowledge of only a few of the improvements which have been made for your approval this year. Better plan ahead now to bring the folks and spend one day at least at the State Fair. It is not too early to start planning to come and if you can come for a night or two there will be camping space with running water and all conveniences on the grounds. Tell the folks now you'll come and bring the whole family!

BETTER POTATO PRICES

THERE is a ray of hope, at least, for the potato growers of Michigan who have gambled again against the elements and the even worse effect that comes from a glutted market, in the statement just issued by the Michigan Potato Growers Exchange, which predicts a higher price for this years' potato crop.

Only three states, they point out; Maine, Ohio and Nebraska, have larger crops than last year, and only Maine is an important contender with Michigan in the production of this staple. All other states show a decrease in predicted production, and there is a shortage of over 47,000,000 bushels from the estimate of 1922 taken at this time.

It is not yet safe to predict but that conditions may change and produce an even greater shortage. We hope so for the sake of the potato growers of Michigan who have had the courage to gamble on this precarious crop.

The potato market suffers more from overproduction than it does from bugs and blight. The Agricultural College and other specialists ought for this reason to give potato marketing a greater share of their attention.

FEDERAL AID FOR STATE ROADS

ANNOUNCEMENT has just been made in Washington of the mileage of good roads which will be given federal aid under the existing bills for that purpose.

Michigan, with 4,582 miles leads her neighboring states in the mileage of good roads which we have available for federal aid. Ohio having 4,506 miles and Indiana, only 3,957 miles. This would indicate that Michigan has in reality made some progress in good roads since the fifty million dollar plan was undertaken.

The total mileage of good roads in the United States receiving federal aid, will approximate 187,406 miles, and will connect nearly every city in the country having a population of over five thousand. It has been stated that these roads comprise a network which will bring good roads within ten miles of 90% of the entire population of the country.

Good roads are expensive, but America with good roads is prosperous, while China which has no roads whatever, is a pauper country, with millions of people living shoulder to shoulder in closely congested cities, while millions of acres stretch toward the Great Wall, uncultivated and uninhabited.

If the difference between America and China is good roads, then the price we pay is of little consequence.

HOW OLD IS ANNE?

A SALT LAKE CITY chemist, Dr. Paul Baltinke, says that men and women ought to live to be a hundred and fifty years old, and will someday learn to live that long.

We meet a lot of folks that we would like to have on earth with us a hundred and fifty years, but once in a while we meet one that we would just as soon have pass on at the normal age.

Dr. Baltinke is serious, however, in his statement because he believes that better living conditions and social hygiene is changing the physical condition of the race. As men learn to live right they learn to live long.

FARM LABOR IS SCARCE

THERE is a shortage of farm labor all over the United States. It has been attracted to the city by the high prices being paid in the industrial plants.

There seems to be no remedy which can be offered for this situation. Like all other commodities, labor depends upon supply and demand. There is a greater demand in the metropolitan centers and the farmers cannot at the present selling price afford to pay anywhere near the amount that would be necessary for them to attract labor back to the farm where it belongs.

All of the investigations that can be made will only arrive back at this same conclusion, because there is a natural condition here to overcome which operates as surely as the laws of gravitation.

We have predicted that the shortage of labor would decrease the total of the crop production this year to a point where a farmer could get more for his products and thus meet some of the losses he has had to take during the past few years.

Indications seem to point to the fact that this will be a year of small production. The present low price of wheat does not indicate in any respect the possible production. It is, manipulation pure and simple, which may be due to the insistent demand from some quarters that the Government step in and control the price of wheat. If it were possible for the United States Government to control the production of wheat grown in the Argentine and Ukraine, we might be in a position to set the price of the world's market for wheat, but inasmuch as that is impractical, the control of world's wheat price is no less a "will-o-the-wisp!"

THE ROADSIDE MARKET

WITH the rapid development of Michigan as an industrial state a large proportion of our farms are in proximity to cities and towns or lie along the network of state highways so that thousands of automobiles pass their gates daily. This change has brought an opportunity for the individual farmer to sell the perishable and other products of his farm direct to the consumer and at a larger profit to himself. A recent investigation of this growing and profitable business points out two or three facts which should be brought to the attention of farmers who are thus fortunately located.

In the first place, our farmers must build for themselves a reputation for fair and square dealing. It is obvious that the farmer can make much more for himself and yet sell at a price slightly under the retailer in the city. For the farmer, therefore, to charge the same or a higher price is only defeating his own best interests. If the city customer buys strawberries at 25 cents a box from the farmer and finds they are selling for 20 cents at his corner grocery store he is not going back to the country. On the other hand, if the conditions are reversed, that farmer has secured for himself a steady cash customer who comes out to the farm and buys his products, not only for the slight saving that is made, but because the products purchased, direct from the farm are fresh, and therefore, more desirable.

Another weakness is the attempt on the part of some to combine with their sales of farm products the sale of "pop", candy, tobacco and "hot dogs." It is obvious that this small storekeeping is seldom done by legitimate farmers, and is usually attempted because a request is had once in a while for these articles. Our investigations show that this is seldom profitable to the farmer because his family uses up more of the knick-knacks which he buys for re-sale than he actually sells at a profit. While the better class of his legitimate customers for farm products pass his place by because it does not look like a real farm and they are not interested in trading at an imitation corner store.

We know of many farmers who are selling all of the green vegetables they can convenitnely raise direct from the roadside. The children like to do this and it gives them a good business training. It brings in ready cash for the household expenses and usually more than just "pin money." The automobile has made this new roadside market possible, and if our farmers will protect their own interests by fair and square dealing, offering the best they have at a fair price and keeping their premises clean and inviting, this business can be doubled with each passing year.

There are any number of by products of the farm such as cider, maple syrup, honey, vinegar, cottage cheese, etc., which can be made and sold at even larger prafits. It is also easy to build for the winter a parcel-post trade in butter, eggs and other products from these summer roadside customers. We would be glad to pass along to our readers any other ideas on the roadside market which any of you have found profitable.

PUBLISHER'S DESK

The Collection Box

The purpose of this department is to protect our subscribers from fraudulent dealings or unfair treatment by persons or concerns at a distance.

In every case we will do our best to make a satisfactory settlement or force action, for which no charge for our services will ever be made, providing:

1.—The claim is made by a paid-up subscriber to The Business Farmer.

2.—The claim is not more than 6 mos. old.

3.—The claim is not local or between people within easy distance of one another. These should be settled at first hand and not attempted by mail.

Address all letters, giving full particulars, amounts, dates, etc., enclosing also your address label from the front cover of any issue to prove that you are a paid-up subscriber.

THE BUSINESS FARMER, Collection Box
Mt. Clemens, Mich.

Report Ending July 16, 1923

Total number claims filed	2303
Amount involved	$22,268.82
Number of claims settled	838
Amount secured	$12,605.06

THE COLLECTION BOX GROWING

SUMMER time may bring some lull in the other departments of a farm paper but the Collection Box is busier than ever, if possible, trying to keep up with the complaints we receive.

The surprising thing is however, how few of the complaints which are registered with us we are not able to collect. Most mail-order houses acknowledge our claims within ten days and usually forward the amount direct to our reader. Some take longer. A few require many letters and sometimes a personal call from one of our representatives but where the claim is clear and unquestioned, we never let go until our subscribers claim is satisfied.

THE AUTO KNITTER

THERE is never an end to the letters regarding the auto knitter, which are advertised to lift the mortgage on the old homestead and make it possible for the woman to sit comfortably in her rocking chair and with a simple twist of the wrist turn out hosiery which finds a sale even before it is manufactured.

Somewhere, someday, we expect to find one fo these machines in successful operation. There seems to be no question but that in the hands of an expert they will work, but whether they can be made to produce profitably and are worth the $50 to $75 which they cost, is another question altogether, and we still contend that we could have to have some mighty conclusive evidence before we would care to recommend them for a widow lady or an invalid, and yet it is most often someone of this type who is interested in this so-called home money-making machine.

JONES OF OLNEY

EVERY month brings us several inquiries regarding a gentleman who signs himself "Jones, the real estate salesman, Olney, Illinois." We have before us his circular matter now, and he gives four bank references and letters from cashiers who says he lives up to his promises.

His agreement, however, consists only of promising to print 1000 circulars, send you 200, keep the other 800 for mailing to interested farm buyers, and printing an advertisement for you in the Farm Buyers Guide, in addition to which he will write personal letters to parties interested in farms for sale, and in other ways endeavor to aid you in selling your property." For this you are to send Mr. Jones $7.25 in advance, the balance of the commission $22.75, you are to pay him when the farm is sold. It is not easy to sell farms these days, and there are plenty of them for sale, so that Mr. Jones' business might be profitable even though he was not successful in selling any great proportion of those from whom he collected the $7.25.

He has been doing business in Michigan for several years. If any of our readers have had any dealings with him we would be glad to hear from them including those for whom he sold farms.

BUYING DETROIT REAL ESTATE

FROM recent letters I take it that the real estate operators have for some reason forsaken Detroit which is in the throes of a season of prosperity, the like of which has not been known for some years, and in the face of this have gone out to the farmers in the state selling subdivision lots.

The property adjacent to Michigan's metropolis, as far north as Saginaw Bay, south to Ohio line, somewhat west of Lansing and Jackson, to say nothing of lower Ontario, in subdivision lots, the value of which as farm land or resort proparty is unquestioned, but as home sites for Ford, Dodge and General Motors workers, we cannot be so enthusiastic. If conditions were reversed, and the farmers were highly prosperous, with city men out of work, we might understand why the country was being worked so thoroly, but under existing circumstances we certainly advise any farmer to look very, very carefully before he leaps into Detroit real estate (so-called).

MORE ABOUT McRAE

DEAR Mr. Slocum—We are much interested in the talks concerning Warren McRae, and we would like to tell our experience with him. We had a farm for sale so answered his ad. He wrote us the same as he did the others. Offered to take five dollars seeing we would not send ten. We asked for references before sending any money. He sent us the bank at that place. He probably thought he would fool us that way, but not so, We wrote the bank and they replied he had had a small account there at one time, further they knew nothing about him. So we kept our money thanks to our farm paper for its advice. We believe farmers appreciate having these things exposed thru The Business Farmer. We enjoy our paper very much. Yours truly, Mrs. S. C., Calhoun County, Mich.

The Week's Editorial

DO YOU LIKE MICHIGAN FRUIT?

WHEN the Michigan fruit-growers find themselves at a disadvantage in shipping and marketing their product everyone within the zone of that market and who eats fruit is concerned about it.

It is manifestly preposterous that it should cost more to bring fruit from the Michigan fruit belt to Detroit than from Kansas City to Detroit. Nor is is reasonable that it should cost more to ship Michigan grapes to California than to ship California grapes to Michigan. And there are other perplexities.

The situation has been met in other parts of the country, and doubtless similar processes will succeed here, by organization among the fruit growers on a district basis, working separately from the national organization. The immediate objective of such associations is twofold, first the railroads, and second efficiency among the growers in handling and shipping. Usually both these factors need close attention and constant watchfulness.

Michigan is particularly rich in its fruit. The Wenatchee and Yakima apples, large and rosy and highly polished, look like masterpieces, but their flavor does not match that of the Michigan product. When the first strawberries appear on the market everyone immediately rejoices, with the qualification, that when the Michigan strawberries appear, then will be tasted strawberries de luxe. And none can traverse that wonderful western shore district along the sand dunes without profound respect for the prolific supply of delicious fruits of all kinds.

Flavor is the highest point in Michigan fruit products and Michigan people, as a whole, prefer them to any other. It should be possible for the people of this state to get possession of them, for present eating and for preserving, at a price commensurate with proximity to the market. The public will watch the progress of the Michigan Fruit Growers, Incorporated, with a personal interest and a waiting supply of preserving jars.—Detroit News.

First Mortgage Real Estate Gold Bonds

Think of the glow of satisfaction you would experience in being able to say, *"I own $5000 worth of Federal first mortgage bonds."*

Write for Booklet AG913

Tax Free in Michigan

Free from Federal Income Tax of 4%

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FEDERAL BONDS

Are Better Bonds

(913)

FEDERAL BOND & MORTGAGE COMPANY
FEDERAL BOND & MORTGAGE BUILDING, *DETROIT*

MONEY TO LOAN

On the 33-Year Government Amortization Plan to desirable borrowers who own good, well-managed farms in Michigan and Ohio, and wish to borrow not over 50% of the value of their land plus 20% of the appraised value of the buildings.

No commissions—Low interest rates. No stock investment. Unusually prompt and satisfactory service. If your loan will meet these requirements, write us.

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Guardian Building, Cleveland, Ohio

Beginning in the August 4th Issue of The Business Farmer

A Complete Short Story by O. HENRY *America's Greatest Short Story Writer*

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This will be good news for every reader of The Business Farmer, but great news to the fortunate ones who have ever read any of the famous short stories by O. Henry.

Each story will be complete in the issue in which it is printed. None will be continued, but all are like a slice from life itself. You read the innermost secrets of preacher and teacher, cowboy and barroom tough, the whole gamut of human emotions which go to make up the people of the world.

You'll want to save up every issue of The Business Farmer!

Don't Miss This Great Feature in Every Issue. Renew Now At the New Low Rates—60c per year, Two Years for $1 and Send in a Friend's Subscription With Your Own!

The Farm Home
A Department for the Women

Edited by MRS. ANNIE TAYLOR

DEAR FOLKS—I know everybody is busy these days canning, making jelly and jams for the winter, right now, and I am writing this article and running to my kitchen watching some current jelly that just had to be fixed this morning. It is a busy time for every woman keeping house. I do want you to read and notice how simple and inexpensive the new method of cold-pack canning can be made in every farm home. Read about our bobbed-hair girls and some one write me her opinion. This is a big subject and is going to be this summer more than ever. I am still looking for some more threshing letters. Hoping to hear from some of our readers upon these subjects, I am

Your Friend,
Mrs Annie Taylor

Address letters: Mrs. Annie Taylor, care The Business Farmer, Mt. Clemens, Michigan.

THE SONG OF A FARMER'S WIFE

I'M A Farmer's wife!
It's a glorious life,
Wholesome and clean that I lead.
To help with the work,
And never to shirk;
This has become my creed.

Sights of ne'er ending toil.
And vast richness of soil,
Surround me and thrill me each day;
Stiring dreams in my heart
For a still greater part
In this battle of life to play.

In the twilights I sigh
O'er the beauties of sky,
And the sunsets I see o'er the hill.
While the dawn with its ray
Brings another glad day,
And I set to my task with a will.

* * *

So, work as you can
For it's God's own plan,
That our lives should come out of the soil.
No nobler task
Shall I ever ask,
Than to live and to love as I toil.

—Charlene Weathers Hopson.

IS IT WRONG TO HAVE BOBBED HAIR?

A GREAT deal has been said for and against bobbing the head of our girls. I have listened to so many of my younger girl friends pleading with their parents to consent to this cutting that I am wondering if the same problem has reached the girls on the farm. Is it wrong for them to have their hair cut? What have the morals or virtues of our girls got to do with bobbing? I have noticed that some of the girls say they will never go back to long unsanitary hair again. It is so comfortable that the freedom from doing up long hair is a thing of the past with the coming generation. Again I notice where one girl has the courage to bob she brings into the circle of bobbed heads all her friends and each one has a number of other girls that bob their heads and so all these families are upset until they get used to seeing their daughter and sister with her hair cut.

I can remember when I first wanted to wear a corset and my mother held up her hands in horror at the grown up idea I had on my mind. And oh how glad I was with that first pair. I got them on upside down and did not know it until my older sister laughed and told me. I am wondering if the same feelings come to the bobbed-haired girl. Does it make her move flippant and saucy or is it just an expression of freedom, no more corsets, no more hair. In the olden days we wore wigs and ruffles, silk stockings, garters, ribbons and laces. They have gradually brought their dressing down to a very simple and plain outfit that can be gotten into quickly. Are the girls of to-day trying for the same goal? I would like very much to get a few opinions about the bobbed head girl and see if our mothers on the farm feel as the city and town mothers do.

CLOTHES PIN APRON

I OFTEN see women out hanging up their washing, stooping over two or three times a minute to get the clothes pins out of a basket that they move along on the ground. If they only knew what a help a clothes pin apron is, they would never bend to the basket again.

The pocket is practically all there is to the apron. It goes clear across, is twelve inches deep, and comes to within an inch or two of the band. In this way I don't have to stoop to reach into the bottom of it.

Ticking or blue denim is best for one of these aprons if you are buying new material. They will wear for years. However, I usually use just something I have around the house. It may wear out in a year or two but the making is so simple that I don't mind if it does. An old pillow ticking can be used and, if you care to, bind the edges with a bright tape.

LETTUCE AS A BLOOD BUILDER

DO not forget the greens and fresh vegetables are our best friends in keeping our health all thru the summer months. Lettuce is one of the most cooling foods and purifier of our blood. It does not have a filling feeling but if we can form the habit of eating it at least twice a day with our meals, you will find a great improvement in clearing up the complexion. I try and have a fresh salad all during the summer and it just seems as tho our systems demand this sort of food.

When the hottest days come lettuce growing in the open gets tough and bitter. To overcome this plant some seed for mid-summer lettuce in the shade of a tree or plant it in the open and cover with a thin piece of cloth.

FLOWERS IN OUR HOMES

TRY putting a piece of blotting paper under the doily before setting vase of flowers upon it and you will find it can be put upon the choicest polished piece of furniture.

Keep the home supplied if possible with a vase or two of flowers. It makes a room look so cheerful with the bright colors.

HINTS FOR OUR FLOWER GARDEN

LET no seeds form and mature on sweet peas and nasturtiums. Pick at least every other day.

The Petunia is a most pleasing annual and gives so freely of blossoms until late fall. Keep the dead blossoms snipped off. I have my window boxes filled with pink and purple petunias with sweet Elysium between the plants and it makes a beautiful sight from the room inside and is beautiful from the lawn.

SERVING HOT WEATHER MEALS NICELY

DURING these warm days a good plan is to give the family all the vegetables growing but serve them attractively so they will be inviting to eat.

Beets can be cut in nice slices and served with butter, pepper and salt, or with vinegar, pepper and salt. To serve hot make a sour sauce.

Melt two tablespoons butter, add two tablespoons flour and pour on the beet juice that has formed from the beets having been cut in cubes. Add one-fourth cup, each, vinegar and cream, one teaspoon sugar, one-half teaspoon salt and a few grains pepper. Serve in a vegetable dish any of these ways of fixing beets and with a large serving spoon one can have them upon their dinner plates and save dishes.

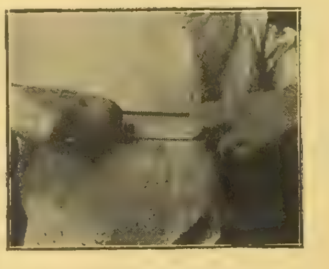
Peas can be served hot with just butter, pepper and salt. If you wish to cream them, add enough cream to suit taste and thicken with just a little flour. This should be served in small vegetable dishes.

FRUIT JUICES FOR WINTER USE

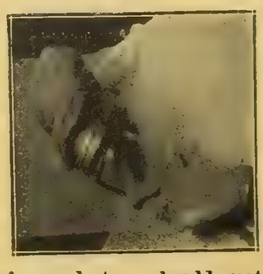
WITH sugar high in price, why not put away some fruit juices for winter use? Juices from the raspberry, blackberry and grape may easily be canned when the fruit is in season and stored for winter use. If preferred, the boiled juices may be made when required. The way to do this to to wash and stem the berries or grapes and place in a preserving kettle. Crush lightly with a wooden spoon, cover with water and cook very slowly for 30 minutes, stirring frequently. Remove from the fire and pour the juice through a moistened cloth (preserve the pulp for a butter or marmalade mixture).

Pour the strained juice into a clean kettle, boil for five minutes and skim. If the fruit juice is being prepared for a beverage add a cup of sugar to each quart of juice, boil five minutes. Pour into hot sterilized jars, filling the jars to overflowing. Close immediately and set inside to cool. Store in a dry, dark place. If currant juice is being prepared in this way use one-third as much sugar as juice.

Doing Your Canning By Cold Pack Method



A good rubber can be stretched without breaking



A good top should not permit thumb nail to be inserted

TOPS for screw-top jars must not be screwed on tightly during the processing. Screw the tops as tightly as possible, using only the thumb and little finger, or until juice does not run out when jar is inverted. Screw top tightly after jars are taken from the canner.

It is economy to buy the best rubbers obtainable. Rubbers should not be used a second year. The following tests should be applied to rubbers used for the cold pack method of canning:

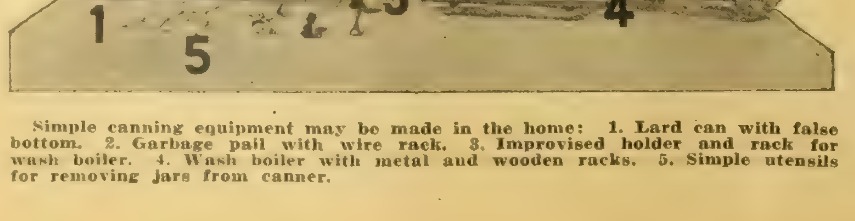
a. A rubber should stand a reasonable amount of stretching and pulling without breaking or permanently losing shape.

b. Rubbers should be about 1-12 of an inch thick. A pile of one dozen rings should measure one inch.

c. The inner diameter of the rubber ring should be 2¼ inches; the flange 5-16 of an inch. This does not blow out.

d. A rubber should stand pinching between the thumb and forefinger, and when pressure is removed should not show the effects.

e. The color of the rubber ring is no index to the quality. Good rings may be either red, white or black.



Simple canning equipment may be made in the home: 1. Lard can with false bottom. 2. Garbage pail with wire rack. 3. Improvised holder and rack for wash boiler. 4. Wash boiler with metal and wooden racks. 5. Simple utensils for removing jars from canner.

FRUIT BUTTERS

Fruit butters are made from fruit cooked to a smooth consistency. It is frequently found to be cheaper to make fruit butters from fruit pulp left after the first extraction of the pectin in jelly-making.

General rules for butters:

1. Put the pulp of the cooked fruit through a sieve; remove seeds and skins.
2. Use half as much sugar as pulp.
3. Cook altogether, slowly, until thick.
4. Store as for jelly or canned fruit.

CONSERVES

Conserves are cooked like jam, but raisins or nuts, sometimes both, are added, together with oranges cut in small sections.

General rules for making conserves:

1. Cook rapidly.
2. Add nuts about five minutes before removing conserves.
3. Store as for jelly or canned fruit.

Plum Conserve

6 pounds plums; 2 oranges sliced; 1½ pounds large table raisins, seeded; ½ pound nut meats; 3 pounds sugar.

Prepare the oranges as for marmalade, let stand in water to cover over night. Cook the plums without water till soft and press the pulp through sieve. Cook oranges till tender, add with raisins to the plums and sugar and let cook till the mixture is like marmalade. Add the nuts near the end of the cooking.

MARMALADE

To each pound of fruit add one-half pound of sugar. Boil from one to three hours, or until the jelly stage is reached. Pour into hot glasses and seal at once.

Carrot Marmalade

2 cups ground carrot, 1½ cups sugar, 2 lemons, 2 tp, ground ginger root.

Cook carrot until tender. Add the sugar and lemons, quartered and cut in thin slices. Cook slowly until thick. Pack in hot jars and process. The ginger root may be omitted if desired. This marmalade does not have the jelly-like consistency of orange marmalade.

PRESERVES

A preserved fruit is one which has been cooked in a cane sugar syrup until it is clear, tender and transparent. It will keep its form and plumpness and be crisp.

Preserved Spiced Peaches

1 peck peaches, peeled and cut in half, 3 pints cider vinegar, 3½ lbs. brown sugar, 1 oz. cloves, ½ oz. nutmeg, 1 oz. cinnamon (spices tied in a cloth and boiled with the peaches.).

When the vinegar, spices and sugar are boiling, add the peaches. When transparent, seal in fruit jars. Serve one-half peach with juice for dessert.

Preserved Ginger Apples

4 lbs. apples, pared, cored and sliced thin; 4 lbs. sugar; 1 cup water; 4 lemons, sliced; 2 oz. ginger root.

Boil altogether until as thick as marmalade. Skim out the ginger root, and pack as you would jelly or jam.

Preserved Ginger Pears

Substitute pears for apples in recipe given above.

Mothers Problems

THE BABY IN THE FAMILY

ADORABLE as the baby in the family always is it is not right to make of him, or of her, a little tyrant. It is neither good for the baby, nor good for the elder children, if Baby's every wish has to be granted. At the same time a generous spirit toward the weaker, younger member of the family must be encouraged. Between this spirit of generosity and the habit of indulgence, it is often hard to draw a line.

Certainly, however, it is unwise indulgence that allows a mother to let the baby play with Big Sister's Christmas doll until she breaks it, or tear down the toy radio Big Brother has so painstakingly constructed, and then scold the older brother and sister if they are angry because the baby did it! When Baby is allowed such liberties, it is little wonder if the older children express the wish that a baby had never come to their house!

Sometimes, of course, a baby will get away from Mother's watchful eye and accidentally destroy some treasured possession of an older brother or sister. Then must the older children learn a hard lesson. They must learn to forgive the little child who couldn't understand that he was doing wrong. The mother must calm them, and guide them along the paths of patience and forgiveness.

"Give it to Baby;" "Let Baby have that;" "Baby wants that;" are commands heard all too frequently in many families. Baby soon learns if he can order the household around; if he finds he can, he proceeds to run things with a high hand.

Be careful in issuing such commands as the above. Consider the baby's welfare and consider the older children's rights. A child does not have to be very old to have a sense of injustice.

TEACH HUMANENESS TO YOUR CHILDREN

CONTRARY to an altogether too commonly accepted idea, just because a child is a boy is no excuse or reason for him being cruel. Cruelty has no place in God's scheme of things. Though Man has been given dominion over the birds of the air and the beasts of the field, he has not been given license to practice cruelties upon them.

Boy nature and girl nature are two distinct types. A little girl is the embryo mother. Her mission in life is to give life, not to take life: therefore, if she be a normal little girl, she shrinks from doing anything that hurts or kills. Little boys, on the other hand, are incipient husbands and fathers—providers, in other words—and in their blood there runs a trace of the blood of their ancesters who, to provide food for their family, must first go forth and kill it. Taking life to them has no horrors. And, since they can contemplate killing without a qualm, it is only to be expected that they lack the finer sensibilities of their sisters when it comes to hurting dumb creatures.

The trouble is, when a boy practices cruelty on birds or animals, that he has never been taught to feel for them. A little girl seldom needs training along that line; a little boy practically always does.

A boy's training in humaneness should begin as soon as he is able to creep. A love for all living creatures must be taught, an interest in their life and habits must be aroused and in their hearts must be instilled the knowledge that all living creatures suffer pain just as we humans do.

Until children have reached an age of understanding, keep them away from the slaughter-pen. The early years of life are highly impressionable; let not the sight of beasts suffering make its mark on the child-mind. It is not effeminate for a boy to be humane, unwilling to inflict needless suffering; it is an ideal manliness. If your boy is cruel, there is someone to blame. Is that someone you?

The Runner's Bible

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Put on therefore*humbleness of mind. Col. 3:12. Before honor is humility. Prov. 15:33.** It is of utmost importance to possess humility. It means that one is receptive, teachable; growth and achievement follow naturally. Without humility the world lags, even retrogrades. The lack of this divine attribute accounts for the commonplaceness of the world in general. One who hugs his precious opinions to himself clips his own wings. The great ones of the earth are humble. Greatness tho, knocks at every door, but the door is usually barred, and double barred by old beliefs, pride or opinion, or selfish contentment. Real humility values nothing as it does the truth, and is ever ready to receive it. 34. **The reward of humility and the fear of the Lord is riches, and honor and life. Prov. 22:4.**

Personal Column

Red Stain from Lavender Dress—Could you tell me how to take a red stain that has gotten into a lavender dress from a red dress. It is a good dress and I hate to have it spoiled.—M. I., Brown City.
—Maybe some reader has had a similar accident and I would appreciate hearing from her.

Raising Flowers for Market—Would you please send me the address of some good place where I may obtain books on raising flowers for market. I have been a reader of The Business Farmer for some time but have not found anything along this line.—Mrs. M. G., Fruitport, Michigan.

—The book called "Garden Guide" by T. A. De LaMarl is about as fine a text book for information regarding the making of our grounds more beautiful, and it tells how to grow and care for nearly every flower, plant and shrub that is not a freak specimen. It costs seventy-five cents.

RECIPES

Cocoa Cake—One and one-half cup brown sugar; one cup sour milk; two eggs; two tablespoons cocoa; piece of butter size of an egg; cinnamon; cloves and nutmeg to suit taste; one teaspoon soda; one teaspoon baking powder; two cups sifted flour. This makes a delicious cake and can be baked in a sheet or in layers.—Mrs. E. B., Ionia County, Mich.

Spice Cake—One cup butter or lard; four cups brown sugar; one cup milk; eight eggs; two teaspoons cinnamon; one teaspoon cloves; one teaspoon nutmeg; two teaspoons baking powder and one and one-half teaspoon salt. Flour to make as stiff as you like.—Mrs. J. W. H.

Molasses Cookies—Two eggs; two cups molasses; one cup sugar; one cup lard; one cup sour milk; four level teaspoons soda; one teaspoon ginger and one teaspoon salt. Flour to make stiff enough batter to roll out. May be made without eggs.—Mrs. J. W. H.

Spanish Pickles—Four heads of cauliflower; dozen large green cucumbers; six bunches of celery; one gallon vinegar; one tablespoon tumeric; one-half pound ground mustard; one tablespoon whole cloves; one peck tomatoes; one-half dozen large sweet peppers; one quart small pickling onions; five pounds brown sugar; one-half cup white mustard seed one-half cup wheat flour and one tablespoon ground cinnamon. Coarsely dice vegetables, leaving onions whole. Soak for 12 hours in brine made up of one gallon of water and one and one-half cups salt. Drain. Boil vegetables and vinegar and sugar for one-half hour. Then make a paste of spices, mustard, flour and a little vinegar; add to boiling vegetables, boil for five minutes, stirring carefully until all is thickened. Seal hot in clean, hot jars.

Sweet Pickled Peaches—one-half peck peaches; two pounds brown sugar; one ounce stick cinnamon; a few cloves and one pint of vinegar. Remove skins from peaches. Stick cloves into peaches, make a syrup by boiling the sugar, vinegar and cinnamon for twenty minutes. Add only one-half of the peaches at the beginning and cook until soft. Remove and put into jars and repeat for the other half of the peaches. Fill the jars with hot vinegar and seal.

Hot Water Dumplings—May be used with chicken or beef stock. Take enough flour to make what you need for a meal. Say one quart of flour, one teaspoonful of salt in a dish having your teakettle boiling hard, pour right on flour and salt and roll out and put in stock while hot. They are always flaky and good.—Mrs. J. W. H.

Chili Sauce—Twelve ripe tomatoes; one red pepper; one green pepper; one large onion; two cups vinegar; one cup brown sugar; one tablespoon salt; one teaspoon whole allspice; one teaspoon cinnamon; one teaspoon ground nutmeg and one teaspoon ground ginger. Remove skins from tomatoes and chop with the peppers and onions. Add the vinegar and spices and bring to a boil. Stir to prevent burning. Boil until sauce begins to thicken (about one hour.) Pour the chili sauce into hot jars and seal at once.

Corn Relish—Eighteen ears corn; one pepper, ground or chopped; three teaspoons mustard; one quart vinegar; three--fourths cup sugar; four onions, ground and one cabbage, sliced very thin. Cut corn from cob, mix with other ingredients and cook thirty minutes.

—if you are well bred!

When one is at the table eating it is not necessary to keep the hands busy every minute. Rest awhile and chew what one has in one's mouth before struggling with utensils to keep putting more food into the mouth. Elbows should not be on the table. Rest one hand in your lap while using fork or spoon in the other in conveying food to mouth.

THE SIGN For Your ROWENA OF QUALITY Protection

"Make Me a Child Again, Just for Tonight"

Can't you remember how wonderful a slice of bread tasted when you were a child? Maybe it was piled high with brown sugar! An in-between meal smack! Perhaps it was swimming in fresh maple syrup—the kind with the flavor running clear back to the tree.

Even now bread tastes just as good—if you use the Lily White flour in baking. Even when you were a child with your bread and butter after school, Lily White was satisfying thousands of the best cooks who knew what the flour would do.

And through all these years Lily White quality has never varied Always high grade, always regarded as the very best for all baking Lily White today is a standard household necessity in many thousands of homes.

Lily White

"The Flour the Best Cooks Use"

Our Guarantee

We Guarantee you will like Lily White Flour, "the flour the best cooks use" better than any flour you ever used for every requirement of home baking.

If for any reason whatsoever you do not, your dealer will refund the purchase price. He is so instructed.

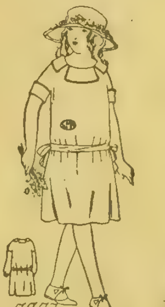
HOW TO MAKE MILK BREAD

Three quarts of Lily White Flour, 3 pints of lukewarm milk, 1 cake of Fleischmann's yeast. Set in morning in warm place and rise until light. 3 teaspoons of salt, 1 tablespoon of sugar, 1 tablespoon of melted butter or lard. Mix with Lily White Flour until stiff, or from 20 to 25 minutes. Set in warm place and let rise until light. Make in loaves and work each loaf from six to eight minutes. Set in warm place until light. When light take warm milk and sugar and put over top. Keep good fire and bake slow one hour and when baked wash over again to make nice smooth brown crust.

Lily White will Surprise You--Delightfully.

VALLEY CITY MILLING COMPANY
GRAND RAPIDS, MICHIGAN
"Millers for Sixty Years"

AIDS TO GOOD DRESSING



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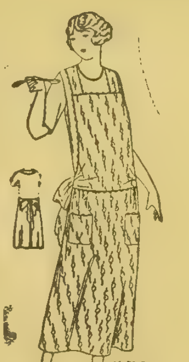

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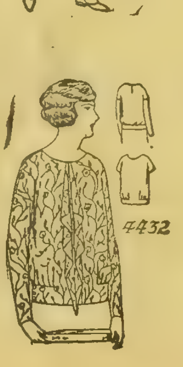

4432

The model 4434 to be used for a corset is very fine for the average woman of 125 to 145 pounds weight. I use them entirely now and find so much comfort. I never have a backache. It seems to strengthen all the muscles that ordinarily a corset would support. Nearly all the younger girls in or out of school are wearing this type of corset and they have a big sale in the Detroit stores.

Colored bands folded around the crown of a hat are very smart for our mid-summer wear. Such combinations of silk or georgette, of pale pink or lavender, blues and yellows make a very striking color scheme.

4434. A Comfortable Practical Model—Here is a "corset" style that affords ease and comfort to the wearer. It may be made of jean, muslin, linen, brocaded silk or mercerized materials, satin or drill. Gussets set in at the sides give freedom in movement. These may be of elastic webbing. The Pattern is cut in 4 Sizes: Small, 34-36; Medium, 38-40; Large, 42-44; Extra Large, 46-48 inches bust measure. A Medium size requires 1⅛ yard of 36 inch material. For gussets of elastic or webbing ⅜ yard 9 inches wide or wider is required.

4447. An Up-To-Date Frock—Mustard color linen was chosen for this pretty model, the collar and cuffs are edged with white bias banding. This is a good model for taffeta, silk, gingham or ratine. The sleeve may be finished with a turned back cuff as in the large view, or, the peasant portion may be added. The Pattern is cut in 4 Sizes: 6, 8, 10, and 12 years. A 10 year size requires 2⅞ yards of 32 inch material.

4432. A Stylish Blouse—The model has the new hip band finish, and the popular "front drape" in cascade effect. The Pattern is cut in 7 Sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38 inch size requires 2½ yards of 40 inch material.

4441. A Pretty Undergarment—Nainsook, cambric or crepe may be used for this style. The Pattern is cut in 5 Sizes: 2, 4, 6, 8 and 10 years. A 10 year size requires 1¾ yard of 36 inch material.

4420. A Pretty Apron Model—Figured percale edged with rick rack braid is here portrayed. The Pattern is cut in 4 Sizes: Small, Medium, Large and Extra Large. A Medium size requires 4 yards of 27 inch material.

4425. An Attractive Negligee—Foulard is here portrayed with girdle and bindings of satin in a contrasting color. This model is good also for crepe, printed voile or crepe de chine. The Pattern is cut in 4 Sizes: Small 34-36; Medium, 38-40; Large, 42-44; Extra Large, 46-48 inches bust measure. A medium size requires 4¼ yards of 40 inch material. The width at the foot is 2⅝ yards.

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3 FOR 30c POST-PAID

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ADD TEN CENTS FOR SPRING AND SUMMER FASHION BOOK

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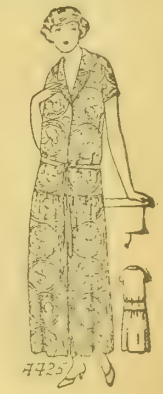

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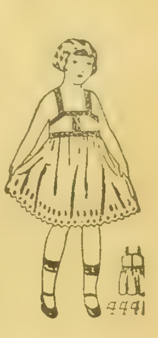

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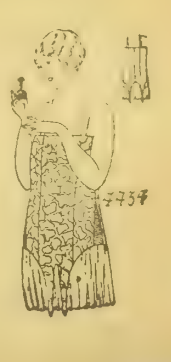

4434

The Children's Hour

THE BOASTFUL PIGS

ONCE the horses and the cattle, the aristocrats of the farmyard, took a democratic turn and invited the pigs to a New Year feast. But, when the pigs came, they treated them haughtily.

The pigs protested at this treatment, and said,

"You claim to be important! But are you? The master of the farmyard lets you find your own food in the fields and makes you work until you are old. But the master sends us our food every day and his servants clean out the places where we live. We do not have to work. We play all day. See how fat we are."

So the pigs had the best of the argument. But the master, who had heard it all, said,

"If the pigs knew what happened after they were fattened, they would not be so ready to boast."

Those who grow fat and do not work are like pigs. And—do they know what will happen to them?

OUR BOYS AND GIRLS

Dear Uncle Ned:—I have been reading the Children's Hour in the Michigan Business Farmer so I decided to write a letter. I am a farmer girl between the ages of 11 and 17. Whoever guesses my age right will receive a letter or card from me. I have brown hair, gray eyes, and I am about five feet and one and one-half inches high. I am light complexioned. I passed the eighth grade this year. I was sick with scarlet fever last year, and couldn't take the eighth grade examinations. I have five brothers and two sisters, and my mother and father are both living. My brother and I have been having the measles. The baby is sick and I think that she is coming down with them. I can tat, crochet, knit, embroider and sew. I wish some of the cousins that can crochet, would send me some new patterns. If they would I would send them some. We have a Ford car that I can drive and I like to drive very much. We have a lot of cattle, a truck, tractor, Overland touring car, and a lot of other things that I will not name. As I have written quite a lot I will close. I would like to correspond with some of the cousins. Someone put this riddle in the paper. What walks like a cat, looks like a cat, and acts like a cat? I think that the answer is a cat. She said that she would write a letter to the ones that guessed it right, so I will hope that I get it right, as I like to get letters. Your niece.—Evelyn Soper, R. F. D. No. 1, Gregory, Michigan.

—I am sure many of the girls will be glad to exchange patterns with you as many of them are real experts at crocheting and have a great variety of patterns or designs.

Dear Uncle Ned:—I don't suppose there is much use in writing because just as sure as you or I are living it will land in the waste paper basket. But what's the difference? I can say I have written to you again any way. I wrote to you some time ago and believe me I was surprised to see my letter printed. I received a lot of letters, from cousins too, they just poured in. I had almost forty correspondents in all during the first week. Then some stopped writing for unknown reasons so that at the present time I only have seven correspondents. I love to write letters don't you, Uncle Ned? I like to receive them, too. You must receive a lot in one day. I wish I might help you read them. Some of the other cousins are "cordially invited" to write to me. It's quite lonesome in the summer time and you have'nt anything to do. In the winter time there is a lot to do, for instance school work. Your niece, Halcetia Currier, Algonac, Michigan.

—This is the time you got fooled; your letter is printed after all. Well, I like to write letters but like better to receive them. Yes, I receive a great many letters every day and every one is welcome. I read them all with a great deal of interest and hope some day that we can spare space enough to print them all.

Dear Uncle Ned:—Oh my, the weather is warm. We certainly would welcome a rain at the present. The crops are sorely in need of rain too. I live in a small town, or rather a railroad junction and the population is about three hundred. The South Shore and St. Paul railroads cross here. About the only work going on in the summer is the work on the section; but in the winter there is plenty in the camps around here. We have some very beautiful lakes around here. South of Sidnaw is a lake called Norway. It certainly is a pretty lake. It is in the midst of Norway pines. You can imagine how nice it is to sit around a camp fire and listen to the whispering among the pines. We camp fire girls went for a two weeks camping trip out there about two years ago. My folks own a one hundred and eighty acre farm north of Sidnaw, so you see I know what it is to be a farmer's daughter. I suppose I should give a sketch of myself. I am seventeen years of age. I have dark hair and eyes and have a dark complexion. I will be a senior next year. It has always been my plans to take up teaching and go out west to teach. I would like to hear from both boys and girls of my age. I will ring off. Your loving niece,—Marie Powell, Sidnaw, Michigan.

—You may find it lonesome at present but shortly after the nieces and nephews read this they will begin to write letters to you and you will be so busy answering them all that you will forget all about being lonesome. Write again.

Dear Uncle Ned:—I wrote to you and the letter was in the M. B. F. last week. I put in some riddles for the boys and girls to answer and I received 27 letters and one card and I am so busy on the farm that I can't write to them all so I will thank them all for trying to answer the riddles. Out of the 27 letters there was only one that got them right and that was Ruby E. Fletcher, R. 1, Pellston, Michigan. I will give the address so if any one wants to know what she received they may write and ask her. Our crops are coming dandy. My brother is cutting hay. A friend of mine wants some girls to write to him, and also some boys. His address is William Grant, R. F. D. No. 3, Tawas City, Mich. I thank the girls and boys for trying to answer the riddles. Say Uncle Ned you put my age wrong I will be 16, March the 3rd, 1924. Well Uncle Ned I will send you the picture of the quarry. Good-bye, Harry Rescoe, Alabaster, Michigan.

—It was fine of you to send me the picture of the quarry. Thank you. No that picture on your letter does not look like me.

Dear Uucle Ned:—May I join your merry circle. I have been a reader of the Children's Hour for nearly a year. When we first took the M. B. F. we lived at Oxford, Michigan, but we moved a year ago last may. Some move! We live about a half mile from Saginaw Bay. The water is fine. I was 15 years of age the 29th of last January. Have I a twin? Will the girls and boys write to me? I will gladly answer all letters. I am 5 feet and ½ inch tall, have medium brown bobbed hair and brown eyes. Your niece,—Gladys Classman, R. 1, Sebewaing, Michigan.

Dear Uncle Ned:—I have never written to the Childrens' Hour before but I have often thought I would like to belong to your merry circle. I am 13 years old. I am in the eighth grade. I go to a consolidated school. I have three miles to ride. We have a nice bus to ride in I am the youngest of the family. I have blue eyes and brown hair. I live on a forty acre farm. I am glad we did not put in any pickles this year as I don't like to pick them and I never did. The answer to Harry Rescoe's riddles are as follows: 1st, 11 pans; 2nd, a duck; 3rd, a wheelbarrow; 4th, a churn; 5th, a flat iron and 6th, a bottle. I will close with some riddles. Black upon black, black upon brown, four legs up and six legs down. As I was going across a bridge I met my Susie Anne. I pulled off her head and drank her blood and let her body stand. Your niece,—Eva Ruth Soper, R. 1, Copemesh, Michigan.

—So you are glad that you do not have to pick pickles this year. I do not blame you, I never liked to do such work when I lived on the farm. If you were picking strawberries it would be different, wouldnt it? You could eat some of the berries but one does not care for the pickles as they come from the vines.

Dear Uncle Ned:—May I join your merry circle? I have been a reader of the M. B. F. for some time, and have especially enjoyed the Children's Hour page. My father has taken the M. B. F. for several years. I will describe myself now. I am five feet in height. I have light brown hair, and dark blue eyes. I am sixteen years of age. I live on a farm of 210 acres near the Muskegon river. We girls, and boys are going to raise pickles this summer, and we are to receive two-thirds of the crop. Say, would not some of your cousins enjoy helping pick them?. I think I have written quite enough for the first time, so I will close with a riddle, and whoever guesses the answer will receive a card or letter from me. A duck, a frog and a skunk went to the fair. The duck and frog got in but the skunk did not. Why didn't the skunk get in? I hope to hear from some of the girls and boys.—Lovingly, your niece,—Alice Kempton, R. 1, Box 63, Grant, Michigan.

—I'll bet I can guess the answer to your riddle. He left his (s)cent at home and he could not pay his admission. Am I right? I hope that the crop of pickles is large and you receive lots of money for your share.

Dear Uncle Ned:—How are you these fine days? I am just fine, I have not written to the Children's Hour for a year, so I thought I would write a few lines. It is raining here today so it is pretty wet. Well Uncle Ned, the cherries are getting ripe down here. Do you like cherries? Come down here and you can get all you want. There are acres and acres of cherry orchards around here. There is also a canning factory near Northport where the cherries are canned, and shipped to other places. It is interesting to see when the factory is running. My sister is going to work there this summer. I will describe myself. I have brown, bobbed hair, blue eyes and weigh about eighty-five pounds. I am eleven years old. My birthday is on October tenth. Have I a twin? If I have, write to me, and I will answer. I think Dorothy Postma's age is about thirteen. Did I guess right? Will close with a riddle: Spell blind pig with two letters. With love to Uncle Ned and all the cousins.—Gladys Carlson, Box 49, Omena, Michigan.

—I should say it has been a long time since you wrote to the Children's Hour. Aren't you ashamed to neglect us so long? If I could find the time to get away from my office I would come up and help you pick and eat cherries. Do you like cherry pie or cherry pudding? I do, very much.

Dear Uncle Ned:—This is the first time I have ever written to you. We are having pretty warm weather out here. I live on a farm of 117 acres. We have five cows, one calf, three horses and fifty chickens. For pets I have a dog, two rabbits, and ten little ones and one kitten. I am 12 years old and weigh 113 pounds. I have brown hair and eyes and am five feet and three inches tall. I am in the seventh grade at school. We have two lakes on our farm. The largest lake is Potter. It is a summer resort. The other lake is marshy and has no bottom. It has a high bank around it which is very pleasant. It has a nice woods about 30 feet from it. Potter lake is about 4 rods from it. We have geese that live on the lake most of the time. The one that guesses this riddle will receive a card from me. As round as an apple as deep as a cup and all the king's horses can't pull it up. Your friend,—Miss Doris Margaret Scott, R. F. D. No. 3, Davison, Michigan, Box 144.

—We too are having warm weather. I do not like it to be too warm, do you?

Dear Uncle Ned:—I would like to join your merry circle. My father has taken the M. B. F. for several years. I live on an 80-acre farm one mile from town on the stone road. I am 14 years old. My birthday is the 17th of May. I am in the seventh grade. I have bobbed hair, blue eyes and am not very fleshy. I have three sisters and three brothers. We have 7 cows, 6 calves, 50 chickens, 8 little pigs, 1 old pig and two horses. For pets I have a cat and a dog. Will close for this time. Will some of the nieces and nephews write to me. I will end with a few riddles. When may a pocket be empty and yet have something in it? What must you add to nine to make it six?—Etta Bannister, Box 404, Hale, Michigan.

Dear Uncle Ned:—I did not know what to do tonight so I thought I would write my first letter to the M. B. F. May I join the merry circle? I have been reading the Children's Hour and like it very much. Will you please have the drawing contest? I just love to draw and I will send some of my drawings when we have the contest.—Helen Herbert, Box 33, Port Austin, Michigan.

—Watch our page and read it each week so you will not miss the announcement of our drawing contest. I expect to announce it shortly.

Dear Uncle Ned:—As I am feeling sort of lonesome I happened to think of you and thought that maybe if I'd write you a letter it may get printed and bring me some correspondence. I sure am yearning for correspondence, as I am a lover of writing. I sure would answer every letter sent to me. I am 16 years old and will be 17 on the 28th of next month. I am 5 feet 4½ inches tall and weigh about 180 pounds. Altho I am stout, I sure am full of fun. I am here in Rose City taking my vacation, but my home town is Bay City. I have written you before and I did appreciate it very much as my letter was printed. I have no mother but my dad was married last month so I got a step-mother now, but I cannot get used to calling her mother as it seems impossible for me to do so. I would like to have correspondence from nieces and nephews of the age of 16 or over. Your niece.—Miss Meta Miller, 205 N. Linn St., Bay City, Michigan.

—I can not tell you how sorry I am that your mother is no longer on earth. I do not wonder that you are lonesome but hope that in time you will learn to love your step-mother enough to call her mother. Write when ever you feel like it.

Dear Uncle Ned:—I saw my letter in print and am delighted to know you have permitted me to join your merry circle. It is rather warm out here. The sun is shining bright and the green grass and the beautfiul trees are a wonderful sight to look at. Uncle Ned I love the birds and the flowers and everything thats beautiful. In the evening I love to sit out in the swing and hear the whip-poor-will singing. Uncle Ned I, saw in the last issue of your magazine that a girl from Cadillac, Michigan by the name of Trecel Sweeney, writing you that I wrote a very interesting letter. I want to thank her for her compliment. I will close with a few riddles: What is the longest and yet the shortest thing in the world; the swiftest and the most slow; the most divisible and the most extended; the least valued, and the most regretted; without which nothing can be done, which devours everything however small and yet gives life and spirit to all things however great.—Stella Violet Nowak, Temperance, Michigan.

Uncle Rube Spinach Says:

THE "GLORIOUS FOURTH"

AN' TODAY is the Fourth of July! Everybody seems to be havin' a high ol' time, noise is everywhere an' firecrackers an' such is more so. An' what is it all about? How many of our folks know why we celebrate this one day more'n any other day?

Well, there's a whole lot'a folks, mebbe they don't know why we celebrate but they know we do an' they are the ones what sell fireworks. Oh no, they aint the only ones either. Our big politicians know its a great day with our folks an' they scramble out an' make a few speeches, many speeches if I may be allowed to say so, an' they try to tell us why we have saved the country, by jest puttin' them in office.

An' now comes Mr. Couzens, our latest senator, or one of the latest, appointed to fill the vacancy of a man elected—well mebbe without without qualifications 'ceptin' money Anyway Senator Couzens sez "The Volstead Act is ridiculous an' the folks that passed that law are back numbers," or words to that effect.

Well now we've always kinder admired Mr. Couzens. As manager of the Ford business, mayor of Detroit an' a few little things like that, Mr. Couzens was quite a feller. Mebbe he did as well at that as anybody could do. But when our Senator Couzens sez 'at 5 per cent beer aint an intoxicatin' drink, when he sez any drink containin' 5 per cent alcohol aint intoxicatin', then it goes to show 'at our new senator aint never had much experience with 5 per cent beer or else he's tryin' to hoodwink somebody. Mebbe the big beer interests have whispered to our new senator, mebbe he likes 5 per cent beer. No matter which way he thinks, no matter what he does or is, good friends, any law that permits 5 per cent beer, light wines or any other 5 per cent stuff, is jest an openin' wedge for all the drinks 'at we've ever had.

Mr. Volstead might'a been out of his head a little when he got the law passed shuttin' out all the stuff men an' women had been usin'—mebbe he wuz a little wild at that time, but good folks, there aint hardly a man, woman or child today but'll say its a good law. Oh, excuse me, there are a lot of 'em 'at sez it aint, but what an' who are they? Lickker sellers—well they don't like the law so much—drunkards, old hard shells 'at thought 'at they had to have it—oh my sakes they like the law alright; most of 'em are now workin' an' savin' money. Who then aside from the new senator wants 5 per cent beer an' any other 5 per cent stuff? Oh hol'on a minute an' I'll tell you. The big beer interests, an' that includes all likker interests; the casual drinkers, an' that includes many of our best church members; the bum who doesn't care what happens if he can get his hootch; an' the one who would like the privilege of sellin' all these 5 per cent drinks, he could add a little 40, 60 or 90 per cent stuff an' nobody would be any the wiser.

Mr. Couzens may be an awful nice man—he probably is—but if he ever tries the 5 per cent stunt in Congress—well, Mr. Couzens can be a private cit'zen as nicely as anybody else. Cordially yours,—UNCLE RUBE.

Crops Benefited by Recent Rains

OUR county correspondents write us that the Michigan hay crop is about all taken care of and the crop averages from light to good, with a fair average for the state. The wheat harvest is under way and a fairly good yield is expected. Corn and oats are looking good. Beans, taking the state as a whole, look fine while the stand of potatoes averages fair. Rains during the last three weeks have helped crops in most sections according to reports. The following reports were sent to us by our correspondents under date of July 13th:

OGEMAW—Farmers have no potatoes or corn to sell. Hay light, wheat not good but other crops looking fine.—James Anderson.

CALHOUN—Ideal harvest weather. Plenty of rain. Crops looking good. Wheat half cut, lots of straw but going to be a disappointing yield and quality. Lots of short oats.—Geo. Rundle.

CLINTON—Hay short crop. Large acreage of beans. Oats short, 70% of average crop. Corn acreage same as last year, stand is fairly good. Wheat acreage is smaller than last year, crop is about 70% of normal.—Theo. Bengel.

LAPEER—Crops as a rule are looking good. Wheat is fair, corn and beans are looking fine, oats are short but are growing good now. Has been too dry until now. Haying is delayed on account of rain.—Callan Bryant.

GRAND TRAVERSE—Crops look good considering late planting. Grasshoppers are bad in some localities. We need more rain. Small fruit looks fair. Quite a lot of hay and it is a fair crop.—Chas. Button.

TUSCOLA—Hay very short and light crop. Weather bad to put up. Beans and corn looking good considering how late they were planted. Oats are poor, too dry forepart of the spring. Wheat and rye good.—Robt. B. Chambers.

BRANCH—Corn is looking fine. Oats good. Hay poor to fair. Wheat good. Rye fair. Fruit good. Alfalfa mostly good. Crops in general are fairly good. We have had some good rains lately. It was quite dry before the 4th. Some road work being done.—W. W. Cook.

MISSAUKEE—Haying nicely begun, good weather and good crop. Most corn looking good. Potatoes small, a poor stand and plenty of bugs. Oats very poor. Fruit falling, caused by the hot dry weather. Pastures are drying up.—H. E. Nowlin.

INGHAM—All crops coming fine. The wheat harvest is going on where ground is not too soft. The heavy rains softened the ground many places too much for binder. Corn and oats good. Beans fine, large acreage. Hay crop fair. Work of haying, harvesting and cultivating all coming together and help scarce and high priced.—C. I. Miller.

ST. CLAIR—Hay on old meadows light, new good. Wheat is a heavy crop and filling fine, about ready to cut. Oats only fair on account of weather being dry and cold the forepart of season. Corn is looking fine, will be a good crop. Beans are looking good but not far enough along to say much about. Sugar beets are a little late but growing.—Isaac Justin.

MONTCALM—The weather is quite dry, with hot days and cool nights. Farmers very busy, some planting, others cultivating and others working in hay. Grain almost ready to harvest. The crop will be light in most places. Cultivated crops looking none too well on account of late spring. Plenty of most kinds of fruit.—Geo. B. Wilson.

SANILAC—Crops are looking very good in most places. Farmers are busy haying. The new seeding from 1922 is a fair crop, older meadows are not so good. The wheat on most farms is looking very good. Beans and corn on the low land are looking very good. Have had a few local showers. In some localities there seems to be just enough rain and not enough in others.—Aaron Bartley.

JACKSON—Weather warm. Crops have been helped by last Saturday's rain. farmers are finishing up haying. Hay crop is very light and many farmers will dispose of their young stock before winter. No help. Farmers are harvesting their wheat which is fair to good crop this year. Oats light on account of dry weather. Big crops of huckle berries. Apples and pears scattered.—G. S.

ST. JOSEPH—Crops are looking fine. Plenty of rain to make them so. Hay is about all made and was very light. Wheat is a fairly good crop and rye good. Potatoes are looking fine so far. Corn is as high as the fences. Some loss of stock from lightning. Plenty of work for all who want to work, only the farmer has to go it alone on account of low prices for his produce.—W. Wyant.

CRAWFORD—Rains have been enjoyed here and there throughout the county and were needed too. Everyone is working at hay and the crop is fair. Potatoes seem to be in good condition but corn is not what it should be for this time of year.—A. H.

OAKLAND—Having lots of rain lately. Haying going slow and a very light crop excepting alfalfa which is good. Wheat is about ready to cut and there is some very good wheat. Oats will be short but are improving. Corn is doing well. There is about the usual amount planted. The same with potatoes, which are coming up and look like a good stand. No beans planted in this locality. Pastures are poor.—E. Foster.

BAY (C)—Farmers have their hay crop secured, which is a good crop this year. Wheat harvest has begun. Cherry picking is at full blast now. Growers are getting 5 and 6 cents per pound. Corn is very good, also beans. In many localities the stand of late potatoes is light owing to excessive hot and dry weather at planting time.—Fred Andrews.

BAY (S. E.)—The weather is fine now. We had some nice rains. Caught some hay but other crops benefited. All crops have gained wonderfully during the last month. Haying going on. Wheat and barley nearly ripe. Wheat looking fine. All farmers are working short handed and have more work than they can do. Can not get help at any price. Road building taking all extra labor.—J. C. Armour.

BERRIEN—Weather fine with plenty of rain. Hay about one-half a crop. Corn looking good. Fruit farmers harvesting an enormous raspberry crop. The strawberry crop scarcely paid expenses and the raspberry crop promises to do the same. Oats are short. Grapes promise a good yield.—O. C. Y.

(Editor's Note—We would be pleased to hear from any of our readers who would care to send us a report every two weeks of conditions in their territory. Let us hear from you and we will send you report cards by return mail.)

THE HUNTED WOMAN

(Continued from Page 11)

"I've often wondered why you ran away with Jane," he said. "I know what threatened her—a thing worse than death. But why did you run? Why didn't you stay and fight?"

A low growl rumbled in MacDonald's beard.

"Johnny, Johnny, if I only ha' could!" he groaned. "There was five of them left when I ran into the cabin an' barricaded myself there with Jane. I stuck my gun out of the window an' they was afraid to rush the cabin. They was afraid, Johnny, all that afternoon—an' I didn't have a cartridge left to fire! That's why we went just as soon as we could crawl out in the dark. I knew they'd come that night. I might ha' killed one or two hand to hand, for I was big an' strong in them days, Johnny, but I knew I couldn't beat 'em all. So we went."

"After all, death isn't so very terrible," said Joanne softly, and she was riding so close that for a moment she laid one of her warm hands on Donald MacDonald's.

"No, it's sometimes—wunnerful—an' beautiful," replied Donald, a little brokenly, and with that he rode ahead, and Joanne and Aldous waited until the pack-horses had passed them.

"He's going to see that all is clear at the summit," explained Aldous.

They seemed to be riding now right into the face of that mysterious rumble and roar of the mountains. It was an hour before they all stood together at the top of the break, and here MacDonald swung sharply to the right, and came soon to the rock-strewn bed of a dried-up stream that in ages past had been a wide and rushing torrent. Steadily, as they progressed down this, the rumble and roar grew nearer. It seemed that it was almost under their feet, when again MacDonald turned, and a quarter of an hour later they found themselves at the edge of a small plain and now all about them were cold and towering mountains that shut out the sun; a hundred yards to their right was a great dark cleft in the floor of the plain, and up out of this came the rumble and roar that was like the sullen anger of monster beasts imprisoned deep down in the bowels of the earth.

MacDonald got off his horse, and Aldous and Joanne rode up to him. In the old man's face was a look of joy and triumph.

"It weren't so far as I thought it was, Johnny!" he cried. "Oh, it must ha' been a turrible night—a turrible night when Jane an' I come this way! It took us twenty hours, Johnny!"

"We are near the cavern?" breathed Joanne.

(Continued in August 4th issue)

Sunday School Teacher: "Ernest, who defeated the Philistines?"

Ernest (roused from day-dreams): "Dunno. I don't follow none o' them bush league teams."
—The Passing Show (London).

MORE PROFITS

The promotion of agriculture, which means certain increase in profits for the farmer, is the big idea back of the Michigan State Fair.

This great exposition is the clearing house of agricultural knowledge. Here the state and federal governments, agricultural institutions, practical farmers display their latest discoveries.

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BREEDERS DIRECTORY, MICHIGAN BUSINESS FARMER, MT. CLEMENS, MICH.

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1:30 P.M. AUCTION; 1st Annual Watkins Farm Sale of 63 HEREFORD CATTLE.

65 Lots (18 calves presented free with their dams) 5 Bulls including an excellent son of the King of Hereford Sires Perfection Fairfax, and another out of a great daughter of Beau Mischief. 40 Cows and Heifers. All the best Hereford blood represented. First Class individuals. Prices are sure to be low in keeping with present farm conditions. Sale under cover rain or shine. For Illustrated Catalog, address.

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HAMPSHIRES: A FEW BRED GILTS LEFT. Place your order now for your Boar pig at a bargain. Pairs not akin. 10th year.
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FROM the time the first cows were brought to this country by the early settlers, there has been a steady , and at times a rapid, increase in the dairy business, until there are now more than 30,000,000 dairy cattle in the United States, producing indispensable food products which form a large and important part of the diet of our entire population and for which consumers pay more than $[illegible],000,000,000 a year, or about $30 per person. The vital importance of the dairy industry and its relation to the prosperity and health of the American people have been reviewed by the United States Department of Agriculture in the 1922 Yearbook.

While there were more beef cattle in the United States in 1920 than dairy cattle, the latter led in value all classes of livestock; and the farm value of dairy products in 1921 represented 45.1 per cent of the total value of all animal products. Dairy production is important for a number of reasons, but chiefly because of its favorable relation to the production of crops, the maintenance of soil fertility, and the seasonal distribution of labor; because of its large total income from the sale of products; because of its stabilizing effect on agriculture in general; because of the large part of our meat that is supplied as a by-product of dairying; and because milk and its products are so important in the proper nourishment of our people.

Dairy products form an important part of the diet of the American people, and records show a noticeable increase in consumption during recent years. The per capita consumption of milk alone in the United States has increased from 42 gallons in 1914 to 49 gallons in 1921. Dietary studies made by the department show that of the total amount of money paid for food, a little more than one-fifth—or, to be exact, 20.7 per cent—was spent for dairy products. Of this nearly one-third was for butter, and the remainder principally for milk, with a little for cream and cheese.

The consumption of butter has been increasing. For the year 1921 the consumption was 16.1 pounds per capita, which is a 10 per cent increase over the previous year.

Compared with Europeans, the American people are small consumers of cheese, the amount used per person being approximately 3.8 pounds, while in some European countries the consumption is 4 or 5 times this amount. Increasing the consumption of cheese offers large opportunities for development of the dairy industry. If the people of this country would consume as much cheese per capita as the Dane, the Englishman, the Hollander, the German, or the Frenchman, or half as much as the Swiss, it would create a market for 9,000,000,000 pounds of milk more than is required at the present time.

In discussing the development of the dairy industry in the United States it is shown that there has been a steady increase in the total production and value of dairy products, the number of dairy cows has not kept pace with the growth in population. In 1850, there were 275 cows per 1,000 population, while in 1920 there were only 215 per 1,000 persons.

The period of 20 years from 1870 to 1890, however, was one of rapid development in the dairy industry in the United States. Scientific methods were applied to all branches of dairying. The use of the thermometer became general. The centrifugal separator was invented in Sweden and brought to the United States in 1882. Large numbers of dairy organizations were started. The Babcock test for measuring the quantity of fat in milk was given to the world in 1890. Silos were first constructed in 1873 in the United States, and refrigerator cars were first used in 1875.

The average number of dairy cows per farm varies greatly. Wisconsin has 13.6 per farm, Vermont 11.3 per farm, followed by New York with 8.9, Minnesota 8.3, California and South Dakota each with 7.6. The average decreases to 1.6 cows per farm in South Carolina.

The efficient dairy herd must be composed of high-producing cows. A study of yearly butterfat and income records of 18,014 cow-testing association cows showed rapid and almost uniform increase in income over cost of feed as production increased. These records showed that the cows giving 100 pounds of butterfat a year produced an average income for the farmers above feed cost of about $10; at 200 pounds of butterfat a year the income above feed cost averaged about $42; at 300 pounds a year the income averaged about $72; and at 400 pounds of butterfat the average income over cost of feed was about $106 a year per cow.

From these records and others the conclusion drawn is that in the economical production of milk and butterfat, the largest gains are to be obtained through the culling out of those cows that produce less than 4,000 pounds of milk containing less than 160 pounds of butterfat. This figure has been estimated as the yearly production of the average dairy cow in this country. Selection, feeding, and breeding could double this low average. With double the present average production, fewer cows would furnish the present supply of dairy products at much less cost.

In spite of the general recognition of the value of purebred dairy cattle and their efficiency in breeding up a herd for greater production, they constitute only 2.92 per cent of the dairy cattle reported on farms in 1920. These purebred cattle are widely distributed over the United States, there being very few states that do not have representatives of all five of the breeds. There would be a tremendous economic gain to the dairy industry if more of our grade cattle could be replaced by purebreds. The scrub and grade cattle are, however, being gradually though slowly improved by the use of purebred bulls.

In 1921 there were less than 80,000 purebred bull calves registered by the breed associations. But there were probably as many more born that were not registered for various reasons, many of which were slaughtered because their breeders were not able to market them profitably. This is because the average farmer is not yet convinced of the advantages to be derived from the use of purebred sires. If every purebred bull calf born in this country were raised, it would take a three or four years' crop of calves to replace the 600,000 scrub and grade bulls now being used in dairy herds.

HOLSTEIN TOURS ROUNDING INTO SHAPE

COUNTY Agents in the twenty-five Holstein Counties in which the tours are to be staged, as mentioned in a recent issue, are arranging for the line of march and for the noon meetings.

Roy W. Weinberg, County Agent of Hillsdale, was the first man to send in his schedule. He writes:

"For the combined Holstein Breeders and Calf Club Tour to be held July 31st, Mr. Matthias and I have decided on five places to call, as follows:

"8:30 a. m., Leave Court House, Hillsdale; 9:30 a. m., B. S. McFate, 1 mile south, 2 west of Prattville; 10:30 a. m., Eli Bennett & Son, East of Prattville; 11:30 a. m., Picnic Dinner on Bailey Lawn, Elisha Bailey, Pittsford. Talk by Earl Cooper, Calf Club Leader for National Holstein Ass'n., D. D. Aitken, Ex-Pres. National Holstein Association. 2:15 p. m., Wm. McCully, East Bason St.; 3:15 p. m., Glenn Benedict."

Eaton County, R. W. Tenny, Co. Agent, bobs up next with a program for his day—July 30th. Tenny writes as follows: "The plan, tentatively outlined in my own mind, would start us from Charlotte about 8 o'clock in the morning and hit Claude Reeder's about 7 miles southwest of Charlotte; thence to Noble & Sons, east of Eaton Rapids; thence to Mr. C. E. Burk's, north of Eaton Rapids; thence to Balduf's and Warren's, north of Diamondale; thence to the picnic ground at Grand Ledge.

After the stuffing contest and the hot air wind and dance we can traverse to Pardee's west of the Ledge; thence to J. T. Chaplin's, southwest of the Ledge; thence to C. I. Brunger's and John Strang's, south of the Ledge and wind up at Loucks & Sons on the Lansing Road just out of Charlotte."

The old bus will surely have to be hitting on all four to follow Tenny on a race such as he has planned!

The dates for the tours arranged by the State Holstein Association cooperating with the Dairy Department of M. A. C., and the County Agents and local Holstein breeders in the several counties, are as follows:

July 23, Macomb; July 24, Washtenaw; July 25, Wayne; July 26, Monroe; July 28, Ingham.

July 30, Eaton; July 31, Hillsdale;; Aug. 1, Lenawee; Aug. 2, Oakland; Aug. 3, Livingston.

July 31, Jackson; Aug. 1, Barry; Aug. 2, Calhoun; Aug. 3, Allegan; Aug. 4, Ottawa.

Aug. 7, Gratiot; Aug 8, Saginaw; Aug 9, Tuscola; Aug. 10, Sanilac.

Aug. 7, Shiawassee; Aug. 9, Clinton; Aug. 9, Ionia; Aug. 10, Kent; Aug. 11, Genesee—Grand Round-up at farm of D. D. Aitken, Ex-Pres. National Hol. Ass'n.

SPECIAL SWINE REPORT

AN increase of nine tenths of one per cent in number of pigs saved from farrowings in the six months ended June 1, 1923, as compared with the number saved during the same period last year, is indicated in reports gathered by rural mail carriers of the Post Office Department for the United States Department of Agriculture, from 140,000 hog raisers in all parts of the country.

For fall pigs, hog raisers have expressed an intention to breed 28.3 per cent more sows than farrowed last fall. For the corn belt states the increase is indicated as 25.5 per cent. The Department points out, however, that last year the actual farrowings ran less than the intentions to breed. Producers in the corn belt states last June (1922) expressed an intention to increase fall breeding 49.3 per cent, but the actual increase in farrowings was 27.8 per cent. In December, they expressed an intention to breed 15.6 per cent more sows for spring pigs, but the actual increase in sows farrowing in the spring was 8 per cent. For the United States the December intention was 13.1 per cent, but the actual farrowings were 3.9 per cent greater.

The present survey shows a probable continuance this year of the tendency to increase fall breeding proportionately more than spring breeding. This tendency has been evidenced both by the market receipts and farm reports for the past two years, especially in the corn belt, and is making for a more uniform monthly distribution of market receipts throughout the year.

NATIONAL MILK WEEK OR DAIRY WEEK

WHY not a National Milk Week or Dairy Week? It's not a new idea by any means and enough has been done in some localities to show that it is possible to interest the public generally in dairy products. In St. Paul the fourth Thursday of every month is that city's official Dairy Day, and although it is as yet a new venture, it has been pronounced a success. The St. Paul newspapers carry front page material featuring the food value of dairy products and boosting dairying generally. One paper conducts a recipe contest. The hotels and restaurants draw attraction to the significance of the day on their menu cards and serve special dairy dishes. The large department stores cooperate by carrying a reference to Dairy Day in their advertisements. One of their window displays featured the preparation of dairy dishes. The crowd that gathered on one occasion to see a domestic science expert pull off a demonstration blocked the traffic several times during the day.

A National Dairy Week beginning on the opening of the National Dairy Exposition, wherever it might be held, has been offered as a suggestion. During this week, individual cities could celebrate their local Dairy Days in a manner to suit their own local interests. The effect of such a National Dairy Week would be to concentrate the public mind upon the food value of milk and to bring appreciation of a great source of our national wealth. The public would be benefited and the dairy industry would profit from its enterprise.

This year the Exposition will be held at Syracuse, New York, from October 5th to 13th. Why not make the week of October 8th, National Dairy Week, and then invoke every means and method to acquaint the public with the value of milk and its products and pay homage to the dairy cow in a manner fitting her high station in our scheme of life?

While the nation would be celebrating its National Dairy Week, the dairy cow, unperturbed, would chew her cud and deliver her usual output of milk which last year averaged 270,000,000 lbs. per day.

MICHIGAN JERSEY COW WINS A. J. C. C. SILVER MEDAL

PANSY'S Bogis Lassie 525188 owned by J. K. Hatfield, Remus, Michigan, has broken into the list of Silver Medal winners. This Jersey started test at 2 years 8 months of age and in one year produced 10132 lbs. of milk and 600.29 lbs. of butter fat exceeding the required yield for a medal by a wide margin. Her sire, Pansy's Pogis of Riverside 174549 is a grandson of the great Gold and Silver Medal bull, Pogis 99th of Hood Farm 94502; and her dam is Hero's Buttercup 508859.

HEIFERS UNDER SIZE

I purchased three Jersey heifers at a registered Jersey sale. They are now twenty months old and they have just freshened. When would be the best time to have them bred back? These heifers are too small to suit me and how can I get a better growth in body before they freshen again and not injuring them as cows?—R. P. F., Vicksburg, Mich.

—I would suggest that these heifers be allowed to milk a full twelve months with their first calf and then breed them so that they will calve about 15 months from the date they freshened the last time. If they have just freshened, this would mean that they be bred so as to have their calves a year from this fall. In this way they will have an opportunity to grow, but after they have been stunted as calves you can never expect them to get the full growth they would have had otherwise.—O. E. Reed, Professor of Dairy Husbandry, M. A. C.

MICHIGAN CROPS

CROP FOR BURNED OVER LAND

I have some land that was burned over last fall. Will it raise corn or buckwheat? Would it be best to plow it or disk? I put five acres in oats and it is coming up nice now. I also sowed some clover seed and it is up.—J. W. B., Homer, Mich.

—You do not state whether your burned over soil is sand, sandy loam, or muck, consequently it is impossible to give a very definate answer to your question. If muck, it probably would not pay to plow for corn. If the soil is low in fertility buckwheat would be more likely to prove successful.—C. R. Megee, Farm Crops Dept., M. A. C.

HOW 40 OHIO FARMERS RAISED 100 BUSHELS OF CORN PER ACRE

EXTENSION specialists at Ohio State University have compiled the experience of the 40 Ohio farmers who in the past six years have succeeded in growing 100 or more bushels of corn to the acre on 10 acres.

The tabulation shows that of all those who have made the "Hundred Bushel Club", 68 per cent have planted corn following clover; 48 per cent have manured the land; 65 per cent have used mixed fertilizer; 48 per cent have used acid phosphate; and 35 per cent have used acid phosphate and manure.

55 per cent of the successful contestants planted their corn in checks, and 45 per cent in hills; 65 per cent planted yellow corn, and 35 per cent planted white varieties.

"Rather sad about that friend of yours who was killed in an auto acciddent."

"Very. He allowed his life insurance policy to lapse in order to have enough money to buy the car."—Judge.

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STAND THIS END UP
GREEN
Heavy Weight
90 LBS
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THE unequalled durability of Mule-Hide roofing is not an accident but the result of a sincere desire to make the best overhead protection on earth!

That toughness for which it is famous is built into it through the careful selection of genuine Mexican ashpalt, *all rag long* fibred felt and skilled workmanship of exceptional character.

Mule-Hide SlateKote Roofing is made in two weights, 90 lbs. per roll of 108 square feet and 105 lbs. per roll of 108 square feet. Furnished in unfading red and green colorings. Nails, cement and directions for applying packed with each roll.

Re-pair Re-build Re-roof NOW!

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"NOT A KICK IN A MILLION FEET"

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They contain practical suggestions for the prevention of diseases common to livestock and poultry and describe in detail the many uses of

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Kreso Dip No. 1 is Sold in Original Packages at all Drug Stores.

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FOR SALE THOROUGHBRED WHITE COLLIE PUPPIES.
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ARE YOUR LOVED ONES PROTECTED?
SEE PAGE 20

KEEP BACTERIA OUT OF MILK

B-K Bacili-Kil Trade Mark

B-K kills germs on utensils, in milk house, in barns, on cows, on calves — at *every step* in production.

Remarkable results. 70% of farmers shipping milk to large cities with less than 10,000 bacteria per c. c.

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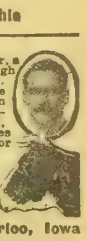

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TOM LYNCH AND WIFE BOTH KILLED!

Only last month, Thomas Lynch, a farmer, and his wife, Mary Lynch, were riding to town in their automobile, when it was struck by a train. Both father and mother were killed and several children injured. Both Mr. and Mrs. Lynch had North American Accident Policies for which they had paid only 75c each! Their children received $1,000 in cash from each policy or $2,000 to keep the wolf from the door!

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We Want Every Business Farmer Reader To Be Insured!

THE Business Farmer has made is possible for every single reader to carry $1,000 Accident Insurance for the trifling sum of 75c per year!

This is the total cost of the insurance policy here described and it is issued by the well-known North American Accident Insurance Company of Chicago.

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This is YOUR opportunity to do what you have been putting off so long.

There is no red tape—no medical examination—just sign the Application Blank in the corner of this page and send it in with the required amount—Seventy-Five Cents (75c) for each policy.

Just one requirement—ONE MEMBER OF YOUR FAMILY MUST BE A PAID-UP SUBSCRIBER TO JULY, 1924, or longer—and you must enclose the address label from this or any recent copy of The Business Farmer to prove it.

If your subscription is not paid-up to July, 1924, or longer, add SIXTY CENTS for a renewal to July, 1924, and send 75c for each policy desired.

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Any or all members of a family from 16 to 70 years of age may secure this policy, providing they live at one address, at which one member of the family is a paid-up subscriber to The Michigan Business Farmer.

What the Policy Gives You

It is only because The Business Farmer has contracted for thousands of these policies that we are able to offer them at this low price. It is a genuine travel accident policy that gives you the very protection you need. It may pay you or your family hundreds of dollars, it costs but 75c for a whole year's protection. Under the terms and conditions outlined in this policy it pays for death or injury of the insured sustained by the wrecking or disablement of any public or private vehicle while riding as a free or fare paying passenger.

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FOR THE LOSS OF BOTH HANDS	1,000.00
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DISABILITY, 13 WEEKS OR LESS	$10.00 Per Week
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$100.00 for relief of policy holders if injured or taken sick away frmo home.

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READ WHAT THIS POLICY GIVES YOU AND THEN ACT! DELAY IS DANGEROUS!

ORDER AND REGISTRATION FORM

The Michigan Business Farmer, Date..............................1923
Insurance Department, Mt. Clemens, Mich.

I hereby apply for a $1,000.00 TRAVEL ACCIDENT INSURANCE POLICY of the North American Accident Insurance Company, for which I enclose Seventy-five cents (75c) in check, money-order or registered letter.

☐ I also enclose my address label from a recent issue of The Business Farmer to prove that my subscription is paid-up for one year.

☐ I enclose SIXTY CENTS (60c) in addition ($1.35 in all) and my old address label, for which you are to mark my subscription paid in advance One Full Year.

SIGNED.. Age..................

Post Office.. R. F. D. No..............

State.. Occupation....................................

☛ In consideration of my subscription I may also wish to secure............... additional $1,000.00 Travel Accident Policies for other members of my immediate family, send necessary Order and Registration forms with my policy.

CHANGING TIMES

By JOHN T. BARTLETT

THE CONDITION OF COUNTRY NEIGHBORLINESS

BUT is it so? We hear this assertion wherever we go—"Neighbors are not what they used to be." In olden times—not so very old, either—neighbors were neighbors. They rejoiced with one another in prosperity, and gave sympathy and support to one another in misfortune. There was always time for a pleasant social evening together. Every farmer "changed work" with his neighbor.

And the community gatherings—the barnraisings—the cornhuskings—the old-time country fair. Ah! those were the happy days.

Yes, those were happy days. But what of ours today?

There is one great fundamental difference between olden times and 1923 times. That is transportation. First, it was the steam locomotive. Now, it is the automobile.

When transportation facilities were much less favorable than they are now, communities were thrown together within themselves much more. Each neighborhood was a world unto itself. There was no escape. Contact was close by compulsion — whether one liked the contact or not. And since human nature was human nature, then as now, occasionally, one can't help but surmise, this contact was not wholly pleasant or desirable in its consequences. Farm feuds such as were common in the old days are far less common today.

"The way to have good neighbors is to be one." There is no place anywhere which less forgets or better remembers that great truism than the country.

Contact in the country is still close enough to lend itself to the development of real neighborliness. And yet there is always, today, some escape from the little world. The married daughter upstate is seen several times a year; in olden times she might have been seen only once in several years. The stimulating, rejuvenating influence of contact with new people, new scenes, is easily obtained.

Coming back from an auto trip away, who says it isn't easier rather than harder to be a good neighbor?

SPENDING MONEY TO MAKE MONEY

WE can see old Grandmother now, thrifty, shrewd 85-year-old, as she claimed, "I knew it! I knew Ham Brown would end in debt and failure." And the rest of us didn't press her for her explanation. We knew what it was. Ham Brown had adopted progressive modern dairying practices. He was the first in the township to "grain." As events worked out, poor management in other things had put Ham down and out.

Grandmother didn't believe in graining. She was a type, some of whom, among the very old, are still found in farming communities. Plenty of good well-cured hay and fodder—yes. Grain? Only when you are fattening for slaughter.

It is hard for the present generation to realize the widespread farm prejudice against "graining" for milk which existed for years after that practice was first introduced. Many of the thriftiest and the shrewdest held out against it. And there was a reason for it—an inground farm trait which today still holds a great many farmers back.

Feeding grain to cattle for milk was a form of spending money to make money. That was why it came hard—it was spending. The race of farmers had learned this secret of accumulation: Do without. Spend as little as possible. Save as much as you can.

To open up and spend freely seemed in conflict with a fundamental law of thrift. True, there was a chance of greater profit, but why abandon a sure thing for a chance?

Economic conditions in recent years have changed. The man who has made the most money is the man who has spent money to make money. He has been thrifty, too—careful, cautious, in his spending. But he has been willing to spend, realizing what far greater profit possibilities there were in the economic instruments and agencies which money could buy than in the money put in savings bank at 4 per cent.

One of these days we hope the agricultural colleges will introduce a course in "farm spending." Successful spending has a heap to do with successful farming!

THE EXPERIENCE POOL

Bring your everyday problems in and get the experience of other farmers. Questions addressed to this department are published here and answered by you, our readers, who are graduates of the School of Hard Knocks and who have their diplomas from the College of Experience. If you don't want our editor's advice or an expert's advice, but just plain, everyday business farmers' advice, send in your question here. We will publish one each week. If you can answer the other fellow's question, please do so, he may answer one of yours some day! Address Experience Pool, care The Business Farmer, Mt. Clemens, Mich.

SLIME IN SEPARATOR

IN THE issue of June 23rd, W. S., of Morley, Mich., asks the cause of slime in the cream separator. Will you please pardon me if I answer that question for them as Professor Lucas did not answer just to my satisfaction. If W. S. is very careful to thoroughly rinse each part of the separator in plenty of warm (not hot) water before putting it in the water containing any soap or soap powder then wash and scald as usual, I know they will have no further trouble. I know from experience. The milk and the cows are perfectly all right as far as the slime is concerned. The trouble lies in the method of washing separator.—Mrs. L. S., Milford, Mich.

MUSINGS OF A PLAIN FARMER

THERE was only two families remained home June 21st in Sanilac county. The whole population turned out to the annual farm bureau picnic at Sanilac Park on the shores of Lake Huron.

I understand the members of these two unfortunate households were quarantined or they too would have been present.

Someone said there was eight t—housand people there but I happen to know they were wrong because I counted ten thousand cars and surely every car would have to have a driver.

But anyway we all set the table under the trees and satisfied the inner man.

I drank 2 quarts of cold tea flavored with lemon and ate ½ pound of picnic ham besides a liberal helping of salad, pie, cake, etc. I was short of breath all the afternoon.

Crowding, I believe the doctors call it.

The band played "Hail! Hail! The gang's all here!" And we gathered around the platform.

"Honest" Dare Knight made the address of welcome, and introduced the speakers.

County Agent J. D. Martin outlined the progress the bureau has made and said he was tickled to see us.

Then came Mr. Quame of the Federal Farm Loan Board of St. Paul. Mr. Quame gave a splendid talk and farmers should not miss an opportunity to hear him.

He was followed by our state representative, Philip O'Connell, who gave an instructive talk on taxation problems.

Then came our old standby, Dr. Mumford. The mosquitos swarmed on my back in mass formation, but I stayed and heard Doc out. I lost some blood but was well paid for it.

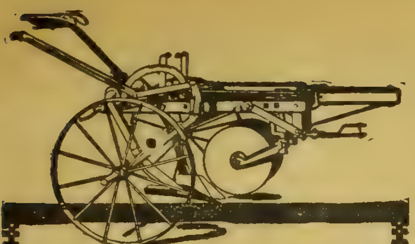
The picnic was a gala affair all through. Good speaking, lots of water,; plenty of heat and everything.

I would write more about it but that old cuss of a black cow is making the wire squeak. The other sixteen are waiting for her to make a road.

I'll have to chase them down the lane, and in the morning chase them back up again.—A. P. Ballard.

A TRIP ON A MERRY-GO-ROUND

A colored gentleman at a county fair had spent all his money on the merry-go-round. When he alighted from his last ride, his thrifty wife confronted him with: "Now you spent yoh money, niggah, wha's you bin?"—Everybody's.



Saves Money Harvesting Beets

Fewer beets are damaged, fewer are left in the field, the work is done much easier and quicker and it is easier to retain hired help when you use a

JOHN DEERE
No. 20 Riding Beet Lifter

Lifting blades, shaped so as not to cut or damage the beets, run along the row and lift the beets a short distance, leaving them upright and loose, so that they are easily handled for topping. The beets are protected so that frost does not damage them, and the sun does not dry them out. Remember—you sell beets by their weight.

Only two wheels—easy to operate—no heavy tongue truck to drag over the tops of the beets or to lift at ends of rows.

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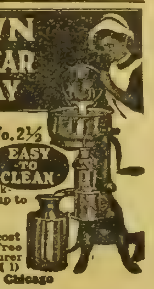

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BARRED ROCK HATCHING EGGS. NORMAN Heavy Laying Strain.
MRS. JESSIE B. DEAN, R. 1, Mason, Mich.

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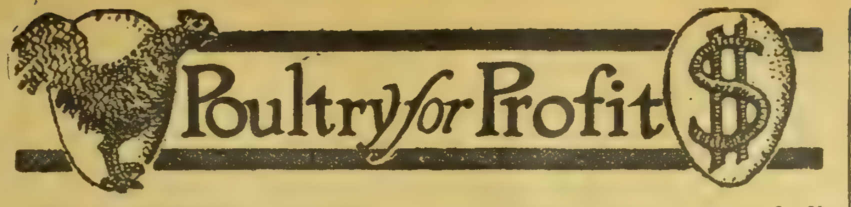

Poultry for Profit

MANY DISEASES IN FLOCK

I wish to ask a little advice about my hens. There are so many of them that the feathers come out or break off their backs. (They are Rhode Island Reds.) They seem to be healthy. A while ago two hens started dumping and they had diarrhea and their combs turned purple, and they died—one did and I killed the other one. Now there are several seem to be all right, combs red, but they get big bunches on their feet between their toes and they break and matter comes out, one is a little lame but the rest are not. I feed good corn and oats, lots of fresh water and they run out and get all the green stuff and gravel they want.—H. S., Caro, Mich.

—Evidently you have a number of unrelated symptoms in your poultry flock that are causing these various troubles. The loss of feathers over the back is a common occurrance in the breeding pen and may be due, either to the presence of male birds in the flock during the breeding season or to wearing out the feathers in gaining entrance to the nests. The former trouble, however, is very common. There is no cure for this complaint. The birds will usually moult and lose their feathers during the regular moulting period. The two birds that were lost undoubtedly died of apoplexy. This is a common trouble during the spring and summer, especially among large fat hens. The fact that the combs turned purple indicates a congested circulation, possibly due to the accumulation of internal fat. Severe culling and proper feeding is the only method to eliminate losses among this particular type of fowl. The appearance of so-called bunches on the feet and between the toes of the fowl is known as bumble foot. This is supposed to be due to hens flying from high roosts or in case of shallow coops, the hens jumping directly to the floor. Some hens are more sensitive in this respect and develop bumble foot very readily. These bunches should be lanced, releasing the pus after which any good disinfectant could be used. The trouble is not considered very serious and it will affect only one or two individuals.—E. C. Foreman, Associate Professor of Poultry Husbandry, M. A. C.

BABY CHICK MEN TO HOLD ANNUAL MEET IN WASHINGTON

THE eighth annual convention of the International Baby Chick Association will be held in Washington, D. C., Wednesday, Thursday, and Friday, August 8th, 9th, and 10th. The following is the tentative program as arranged. You will note especially that the dates have been changed from the 1st, 2d, and 3rd to the 8th, 9th, and 10th, in order to bring the International Baby Chick Association and the American Poultry Association conventions on adjoining weeks and thus facilitate the joint attendance of persons at both conventions.

On Tuesday, the day preceding the convention, there will be a meeting of the Welfare Committee and the Board of Directors, Wednesday will be devoted to the business of the convention, reports of important committees, Boards, and the President's address, and, in the evening, a most important address by Edward Brown of England on the subject "The Poultry Outlook in Europe." Thursday morning will be devoted to a discussion followed by addresses covering some of the most important problems which are facing the baby chick producer today. The afternoon will be given over to a business session followed by a banquet with informal discussion of the transportation problem at which representatives of the Post Office Department will be present. Friday afternoon one of the features will be a sail on the Potomac River and a trip to Mount Vernon. On Saturday special arrangements are being made with the Bureau of Animal Industry for a trip to the Government Poultry Farms at Beltsville.

FRUIT AND ORCHARD

Edited by FRANK D. WELLS

THE BERRY MENACE

THIS is the time to look for raspberry diseases. Afflicted plants can usually be detected without much difficulty and should be removed at once.

Orange rust is frequently found on wild raspberries and blackberries, from which it is transmitted to cultivated plants. It is easily recognized by the orange colored spores on the leaves and young growth. Plants thus affected are weakened and in a year or two die. There is no cure. The plants should be promptly dug out.

Mosaic and blue stem are apparently the same. The disease is not yet well understood, but it is evidently something that should receive prompt treatment. Affected plants should be cut out at once as the disease spreads rapidly. If a cone has dark leaves with light green spots it is to be looked upon with suspicion. If the leaves, or some of them, curl downward and are undersized, while the new cones are bluish near the base, the whole plant having a sickly look, it is best to dig it out.

Leaf curl is not confined to red raspberries, but is not frequent on others. The foliage is dark and, as may be inferred from the name, curly. It is causing much damage to Cuthberts and some other kinds, while Kings are not often afflicted. The fruit of diseased plants is small and crumbly.

There is no remedy for either the mosaic or the leaf curl, but much can be done to prevent the spread of the diseases by cutting out all weak and sickly plants as soon as noticed. Care should also be taken to secure stock from healthy cones when setting new fields.

Hundreds of acres of raspberries will be grubbed up this year, not only in Michigan but in Ohio and New York, where the growers have become considerably alarmed over the situation. An effort is being made to get rid of the trouble by the states mentioned, but at present it looks like trying to lock the door after the horse has been stolen.

TO MAKE TREES BEAR

I have a Siberian crabapple tree ten years old that has never had a blossom. Can you tell me what to do, if anything?—N. B., Grandville.

Try girdling. Select a limb, if you do not wish to risk the whole tree, remove a narrow ring of bark completely around it, as narrow as you can, but be sure that you go entirely through the bark, so as to sever the connection between the bark above and that below the ring. Do this between the latter part of June and the middle of July. The wound will close up and next year there should be fruit.

This treatment should induce bearing if anything will. Even a Spy has been made to bear at seven or eight years old, though ordinarily it does not produce fruit till ten or twelve. If you try this we shall be pleased to hear about it next year.

NO NOURISHMENT IN SUCKING GLASS

An old darky from Georgia was sent to a hospital in Charleston. One of the nurses put a thermometer in his mouth to take his temperature. Presently, when one of the doctors made his rounds, he asked,

"Well, Nathan, how do you feel?"

"I feel right tol'ble, boss."

"Have you had any nourishment?"

"Yassir."

"What did you have?"

"A lady done gimme a piece of glass ter suck boss."—Everybody's.

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THE "powerful compression" Automatic-feed of the 1923 Papec takes the place of an extra man at the feeding table. It handles heavy corn and crooked stalks. It will cut your silo-filling cost and enable you to fill with a smaller crew.

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Tompkins Strain $15.00 per hundred. Last hatch August 22nd. Quality breeder of Rhode Island Reds.
WM. H. FROHM, R. 1, New Baltimore, Mich.

WHITTAKER'S RED CHICKS

Both Combs. Cut prices for June and July. Write for price list.
INTERLAKES FARM, Box 4, Lawrence, Mich.

BABY CHICKS 12c AND UP

Member Mid-West Baby Chick Association.
THOS. G. CALLAGHAN, Fenton, Michigan

S. C. WHITE LEGHORN BABY CHICKS of high quality, $9.00 per 100. For prompt delivery order direct from this ad.
RALPH S. TOTTEN, Pittsford, Michigan

SELL YOUR PURE-BRED POULTRY THROUGH THE BUSINESS FARMER.

MARKET FLASHES

MARKET SUMMARY

Bullish crop news checks price declines in wheat market. Corn wanted. Oats dull. Beans easy after recent declines. Butter and eggs in demand and receipts under requirements. Potatoes firm. Vegetable market active. Cattle market active. Hogs and sheep slump.

(Note: The above summarized information was received **AFTER** the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press —Editor.)

FOOTE'S MARKET LETTER

BY W. W. FOOTE

Diversify Your Crops

THIS is what many wise farmers are going to do more than ever, it being the part of prudence at a time when some farm products make so much betters returns than others. Some farmers say they intend to cease growing wheat, but this does not seem generally advisable, although lowering the wheat acreage might be a good thing. It is true, wheat has sunk to an unremunerative price, but perhaps next year prices will go much higher because of lowered acreage. Hogs have had an enormous fall in prices, and it does not pay out to feed the present high-priced corn after the pigs reach a moderate size, but men who have prospered for a long period of years by feeding hogs are not going out of business, even if they do breed fewer sows. A discouraging feature of the farming industry is found in the boom in wages paid to helpers, but this is met in part at least by reducing the acreage to what one man can handle, harvest time excepted, and then quite a number of farmers are increasing the yield per acre by using more manure and other fertilizers. Many men who paid extreme prices for farms during the inflated war period now regret doing so, and the farmer who owns clear of mortgage a nice little farm and raises a little of everthing is not going to fail. Most Michigan farmers do not need to be reminded that a small flock of sheep is a handy thing to own, the manure alone being a valuable article, and some cattle, with hogs following them in the pasture, are well worth owning. Of course, a silo is indispensible for stock feed, and the farmer's wife can be trusted to see that there are plenty of hens, while a vegetable garden, orchards and grape vines help out a lot. In the territory near Chicago more farmers than ever before are keeping hives of bees, and many of them cultivate flowers to encourage them to manufacture honey, while stands holding honey are offered for sale to the thousands of automobilists traveling through the farming districts.

Enlarged Corn Acreage

The Department of Agriculture in its July crop report states that the hay crop of the United States is only 94,000,000 tons, comparing with 113,000,000 tons raised last year. The corn acreage is placed at 103,310,000 acres, comparing with 102,428,000 acres in 1922; and while it is early to talk definitely about the crop, it estimates the yield at 2,877,000,000 bushels, which compares with 2,891,000,000 bushels harvested last year. A year ago the coming corn crop was estimated at 2,860,000,000 bushels. Corn was planted about two weeks later than usual in a large part of the corn belt but it has been shooting ahead rapidly under hot, forcing weather, with fair rainfalls. The report indicates a promise of plenty of all grains for home consumption, as well as for export, there being a promise of 5,249,000,000 bushels, or 6,000,000 bushels over the finals returns in 1922. The wheat crop is estimated at 821,000,000 bushels, or 41,000,000 bushels less than the final returns last year. The spring wheat crop of the four northwestern states is placed at 167,000,000 bushels, comparing with 220,000,000 bushels harvested last year. The oats crop is estimated at 1,284,000,000 bushels, or 83,000,000 bushels more than that of 1922. The rye crop is estimated at 69,000,000 bushels, being less than last year; while the barley crop is estimated at 198,000,000 bushels, or 12,000,000 bushels ahead of 1922. On the first of July the farmers of the United States held, it was estimated, 35,684,000 bushels of wheat, comparing with 32,359,000 bushels a year ago.

Wheat Sells Below $1

The July government crop report was a help in putting prices for wheat still lower, sales being made below $1, and there was not much confidence on the part of holders, with a much smaller export trade in wheat and flour of late than a year ago and no large buying of wheat by American millers. The United States visable wheat supply exceeds that of a year ago, but it is not extremely large, being about 25,000,000 bushels. In striking contrast, the visible corn stocks are down to the insignificant amount of about 3,000,000 bushels, comparing with 28,779,000 bushels a year ago, and so much corn has been converted into lard and meats that there is going to be a shortage in all probability before the growing crop can be harvested.

Obviously, corn is in a strong position, prices still tending upward and ruling far higher than in recent summers. Corn, as well as oats, is in much smaller export demand than a year ago, but considerable rye and barley are being shipped to European countries. The visable oat supply is down to about 7,000,000 bushels, comparing with 42,400,000 bushels a year earlier; while the visible rye supply aggregates 15,450,000 bushels, comparing with only 1,195,000 bushels a year ago. Speculative interest centers in wheat, and expansion in the wheat area of the principal exporting countries and the decreased buying power of western Europe have caused present low wheat prices, according to a report by a committee of economists and statisticians who had assembled at the invitation of Secretary of Commerce Wilson. It was recommended that American wheat growers take steps during the coming autumn to lower the winter wheat acreage, now about 14,000,000 acres above the pre-war average. It was pointed out that a corn shortage may develope by the summer of 1924, a heavy hog production having wiped out large corn surpluses. July wheat sells in the Chicago market at 99½ cents, comparing with $1.15½ a year ago; Juy corn at 84 cents, comparing with 62¾ cents last year; July oats at 38¾ cents, comparing with 34⅜ cents last year; and July rye at 63½ cents, comparing with 84¾ cents a year ago.

People Are Eating Beef

Much has been said of late about advocating eating more meats, but it would appear that beef is already a popular article of food, for large marketings of beef cattle are going into consumption rapidly, and prices for all good to prime beeves have held up surprisingly well, with reactions following weak spots when supplies happen to be unusually liberal. Cattle are selling at much higher prices than one and two years ago, and good profits are being returned to men who understand the game. Prices are far below the inflated war figures, but all fat cattle are selling far higher than in pre-war times, and turning back to 1913, it is recalled that common to prime steers were selling at $3.60 to $7.85, these prices comparing with $6.75 to $11.50 paid in the Chicago market recently. The bulk of the steers have been selling at $9 to $11, with good lots taken at $10.25 and upward and choice beeves at $11 and upward. Middling kinds sold at $9 and over, with sales down to $6.75 to $8.75 for common to fair light steers. The best yearlings were not any too numerous and sold at $11 to $11.25, with too large a percentage of poorly finished yearlings and light weight cattle. Limited numbers of inferior little steers sold at $5 to to $6.50. Butcher stock that graded well sold high, with not any over large supplies, heifers that graded well fetching $8.25 to $10.25, but less attractive heifers brought $5.50 to $7.50, while plenty of cows sold at $3.35 to $5.25. Canner and cutter cows brought $2 to $3.50, bulls $4 to $8 and calves $5 to $12,50, while there was a small trade in stockers and feeders at $4 to $8.25, mainly at $5.25 to $7.25. Last week's Chicago cattle receipts were much smaller than a year ago, and prices were well maintained. Large numbers of prime weighty steers brought $11.50. A year ago common to prime steers brought $6.80 to $10.60 and two years ago at $5.50 to $9.50.

Hogs Marketed Liberally

The hogs are in the country, and they are moving to market rapidly, owners not caring to hold after they are in fair marketable condition. At times, as happened in Fourth of July week, supplies are held back, but the following week saw a high record for a July day, the Chicago receipts for Monday mounting up to 86,714 hogs, causing a drop of about 40 cents per 100 pounds. Later in the week, however, large supplies were well taken at advanced prices. buyers of the better class of hogs, and their operations helped to steady prices. Many grassy sows were marketed, and prices have widened out materially, the bulk of the transactions covering a range of over $1. Prime light hogs sell highest, with the best heavy butchers about 20 cents below them. The domestic consumption of fresh pork products and cured meats and lard continues extremely large, but lard exports are running much short of a year ago. According to the recent government report, the spring pig crop was as large as last year in the corn belt, when the number exceeded all past records. Last week's Chicago hog receipts reached unusually large proportions, and at the close sales were made of common to prime grades at $5.70 to $7.55, comparing with $6.20 to $8.05 a week ago and $8 to $11.05 a year ago. At this time in 1915 hogs sold at $6.50 to $7.85. Receipts in twenty markets for the year aggregate 23,164,000 hogs, comparing with 18,092,000 a year ago and 18,718,000 two years ago.

Larger Lamb Supplies

The Chicago market has been receiving much larger supplies of lambs, free shipments being made from the ranges of Idaho and Washington, and much lower prices were paid than a short time ago or one and two years ago. Prices are far below war values, but they are far above pre-war times, the best lambs having brought $8.20 eight years ago and $7.55 twelve years ago. An active demand exists for feeders and breeding ewes, but very few are offered, and good lots sell high, Within a week lambs have sold off as much as $1 per 100 pounds, buyers paying $8.50 to $15.25, with feeder lambs at $12 to $13. Ewes sold at $1.50 to $7, wethers at $5 to $8, bucks at $2.50 to $3 and breeding ewes at $5.50 to $9.50. A year ago the best lambs sold at $13.85, two years ago at $11.75 eight years ago at $8.20 and twelve years ago at $7.55.

WHEAT

There is a growing belief that the recent decline in the wheat market has gone far enough, that the broadcasting of bearish conditions has been overdone, that there is no oversupply of wheat, at least, there will be no oversupply a little later, that the world can easily consume the world's supply. This feeling is growing and the number of bulls increasing although they have not yet enough courage to do any active buying. They say the returns are all in on the bear side of the market. The Armour Grain Co. has issued a circular showing only a normal carryover at the end of the wheat year and expressing a belief that prices are low enough.

Those who believe they see the end of the slump in wheat prices and probably an advance to a higher level are basing their faith on less favorable crop conditions. They think rust is doing some harm, that returns will be disappointing. Nebraska reports wheat not turning out well and it is scarcely to be expected that both winter and spring wheat will turn out first class crops. They believe export demand must improve because European supplies are low, and should the Ruhr trouble be settled it is believed demands will increase, although it is reported that Russia is ready to fill the needs of Germany at very low prices.

The market lacks speculation. Buyers who usually invest in wheat when it begins to move are finding some other employment for their money this season. Millers report a moderate increase in the domestic flour trade and there is active demand for all the feedingstuffs the mills can produce.

Prices

Detroit—Cash No. 2 red, No. 2 white and No. 2 mixed, $1.12½.

Chicago—Cash No. 2 red, $1.05½; No. white and No. 2 mixed, $1.01.

Prices one year ago—Detroit, Cash No. 2 red, $1.16; No. 2 white and No. 2 mixed, $1.14.

CORN

Prices in the corn market were affected some by the slump in the wheat market at Chicago but by the end of last week there was considerable firmness to the tone of the market and prices closed the week at Detroit higher than they were two weeks previous. Hot and dry weather over Texas and Oklahoma for some weeks past has lent a bullish note to the trend of the market as dealers feel that the yield will be very small in that section. Country offerings to arrive show a decline while receipts at many points increased. Demand is fair to good and the market firm at most terminals.

Prices

Detroit—Cash No. 2 yellow, 93c; No. 3, 92c; No. 4, 90c.

Chicago—Cash No. 2 yellow, 90c; No. 3, 84c.

Prices one year ago—Detroit, Cash No. 2 yellow, 71c; No. 3, 69½c; No. 4, 68c.

OATS

The oat market has just passed through one of the dullest seasons in the year. Price changes were limited to a very narrow range and selling was very scattered. Domestic shipping demand was fair during the past fortnight and country offerings to arrive were at a standstill. Crop news was favorable.

Prices

Detroit—Cash No. 2 white, 47c; No. 3, 46c; No. 4, 45c.

Chicago—Cash No. 2 white, 45c; No. 3, 40½c.

Prices one year ago—Detroit, No. 2 white, 41½c; No. 3, 39½c; No. 4, 35½@37½c.

RYE

Rye experienced an increase in demand on the Detroit market during the early part of last week but by the closing day there was a decline of ½c and the market was easier. This left the price at Detroit ½c higher than it was two weeks previous.

Prices

Detroit—Cash No. 2, 68½c.

Chicago—Cash No. 2, 65c.

Prices one year ago—Detroit, Cash No. 2, 85c.

BEANS

The bears seem to have the bean market completely under their control at the present time and prices continue their way downward. The Detroit market declined 35c week before last and last week the total was 25c, or 60c lower in the two weeks. It is plainly evident that the present market is not controlled by the law of supply and demand; prices would not be going downward as they are if it was.

Prices

Detriot—C. H. P. $5.50 per cwt.

Chicago—C. H. P. $5.85@6.25 per cwt.

Prices one year ago—Detroit, C. H. P. $8.80 per cwt.

POTATOES

Chicago reports a dull market and declining while Detroit and points east have a firm and active market. Receipts are of good size and dealers who have a supply on hand are ready sellers.

Prices

Detroit — Michigan, $1.00@1.08 per cwt.

Chicago — Early Ohios, $2.25@2.50 per cwt.

Prices one year ago—Detroit, Michigan, $2.50 per cwt.

HAY

Markets generally are strong on good hay but are slow and irregular on the poorer sorts. Farm work is curtailing country shipments and some reports show that not enough hay arrives to test the market. As a whole, markets are steady to firm, especially for good hay. New hay is reported as generally fair quality.

Prices

Detroit—No. 1 timothy, $17.50@18; standard, $17@17.50; No. 2 timothy, $15.60@16.60; light clover mixed, $17@17.50; No. 1 clover mixed, $15@16; No. 1 clover, $13@14.

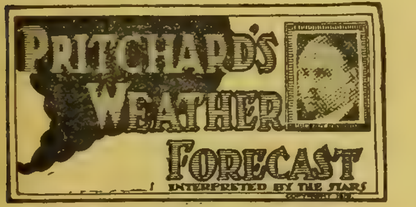
Chicago—No. 1 timothy, $23@24; No. 2 timothy, $19@20; light clover mixed, $21@23; No. 1 clover, 17@18; No. 2 clover, $14@16.

New York—No. 1 timothy, $27@28; standard, $15@18; No. 2 timothy, $25@26; light clover mixed, $27@28.

Prices one year ago—Detroit, Standard timothy, $19@20; No, 2 timothy, $18@19; light mixed, $19@20; No. 1 clover, $15@16.

WOOL

The wool market feeling is a little better than during the past few weeks. Inquiry has increased, especially in the east, and some sales have been made fully up to the quoted basis. The market in general is steady to firm, with trade just fair, but many holders optimistic as to future trend, and inclined to hold for steady to higher bids.



Week of July 22

IMMEDIATELY after the first part of this week storminess will increase in Michigan with very strong winds and locally heavy rains.

About Thursday it is expected that the temperatures will fall for a brief spell but will change to much warmer before the end of the week has arrived.

These warm temperatures will be the forerunner to series of thunder storms that will continue into next week.

Week of July 29

The average temperature for this week will be below normal and cool weather will remain until about Friday or Saturday.

During the entire week we are expecting little or no rainfall in this state but generally pleasant sunshiny days and comfortable, moonlight nights.

Not until the end of this or beginning of next week will the sky become seriously overcast and threatening. At this time some general showers may be expected.

Warm and Dry in August

We do not look for any storm to carry a general rain period into this state until about or after the 10th of August. The first six or seven days of August will average warmer than normal but rainfall will be below normal. This will probably prove to be a critical time for the growth of corn and as we see the conditions, do not believe the Michigan corn crop will be a full one.

OFFICIAL U. S. MARKETGRAM

(U. S. Bureau of Agricultural Economics)

Washington, D. C. for the week ending July 13, 1923.

FEED—Markets quiet. Interior demand slow, prices hold fairly steady, as mill offerings for future deliveries are light. Hominy feed offerings small, demand slow, prices easier. Gluten feed quiet, prices unchanged. Demand and offering light. Quoted Minneapolis, bran $19, middlings $24, flour middlings $28, red-dog $30. Gluten feed Chicago $37.15, white hominy feed St. Louis $31, Chicago $32. 32 per cent linseed meal Minneapolis $38, Buffalo $39.

FRUITS AND VEGETABLES—Virginia Irish cobbler potatoes irregular leading markets for the week; slightly weaker at shipping points. South Central bliss triumphs tend lower. Watermelon markets decline. Georgia Hiley peaches generally steady. Cantaloupes show an upward tendency in most leading markets. Prices reported July 12: Georgia Tom Watson watermelons, medium sizes $200-$475 bulk per car, top of $650 in New York, 22-30 lb. average $100-$375 f.o.b. cash track to growers. Labelled stock $225-$400. South Carolina melons $275-$650 eastern markets, $175-$400 f.o.b. Texas Tom Watson melons 28-30 lb. average $400-$450 in Chicago and Kansas City, $75-85 f.o.b. usual terms at shipping points. Georgia peaches, Hileys $2-$3 per 6-basket carrier leading cities. Belles $1.60-$2.50, top of $3 in New York, $1.40-$1.65 f.o.b. usual terms. Virginia and Maryland, Eastern Shore cobbler potatoes mostly $5.50-$6.75 per bbl. eastern markets, Norfolk section stock $4.50-$6 consuming centers, $5.50 to $5.75 f.o.b. Kansas Early Ohio $2.25-$2.60 sacked per 100-lbs. in Chicago and Kansas City, $1.60-$1.75 f.o.b. South Central bliss triumphs $2.25-$2.75 midwestern markets. South Carolina green meats, standards 45's $1-$1.25 in Baltimore. California salmon tints standards 45's $2.25-$3.50 eastern markets. Arizona stock $3.-$3.50.

DAIRY PRODUCTS—While butter gained strength most of the week and price advances occurred, the tone at the close was barely steady to weak, poor quality due to hot weather defects has had the effect of cutting down the percentage of top grades, causing a scarcity of these and some accumulation of undergrades.

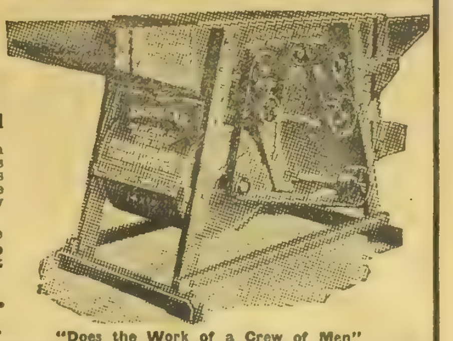
Closing prices of 92 score butter—New York 39; Chicago 38; Philadelphia 40; Boston 39¼. Cheese markets fairly firm and active following advances of around 1c in Wisconsin on Monday which placed trading generally on a higher price level. Considerable quantities have been bought for storage. Rains and cooler weather in some of the principal producing sections resulted in quality showing considerable improvement during the week. Cheese prices in Wisconsin Primary Markets July 12—flats 22c; twins 21½c; single daisies 22c; double daisies 21½c; Young Americas, longhorns and square prints 22¾c.

BETTER BOOK-KEEPING REQUIRED

In order to encourage greater attention to good book-keeping methods among the local marketing associations, the directors of the Michigan Potato Growers' Exchange have recently ruled that no credit will be extended and no loans made to locals unless a monthly financial statement is made and filed with the Exchange accounting department.

A YEAR-AROUND BUSINESS

According to records in the office of the Michigan Potato Growers' Exchange at Cadillac that organization sold late crop potatoes during every month for the past year. Fourteen cars were sold during the last week of August, 1922, and twenty-eight cars have been sold during the first two weeks of July, 1923.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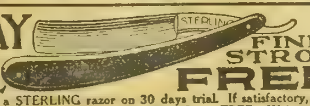
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HAVING LOST MY HUSBAND I OFFER MY 88 acre farm for sale. Ogemaw county, situated 4 miles south of West Branch. Buildings consisting of ten room house, full basement; frame barn, 46x72, full basement. Flowing well at house and barn. Well fenced. Bearing orchard. All under cultivation except 7 acres. Easy terms. MRS. THERESIA SCHEELE, 118 Hector Street, Flint, Michigan.

FOR SALE—POULTRY AND SMALL FRUIT farm, 1½ acres with new six room bungalow and garage. Write J. NORMAN RAGAN, 146 E. 16th Street, Traverse City, Mich.

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YOUNG OR MIDDLE AGED WOMAN wanted for house work in small family in new home near Detroit. No washing or ironings. Highest wages. Address, MRS. HARLEY D. WARNER, Farmington, Michigan.

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CORN HARVESTER CUTS AND PILES ON harvester or windrows. Men and horse cuts and shocks equal Corn Binder. Sold in Every state. Only $25 with fodder tying attachment. Testimonials and catalog FREE showing picture of harvestor. PROCESS HARVESTER CO., Salina, Kansas.

GENERAL

GOVERNMENT NEEDS RAILWAY MAIL Clerks, $133 to $192 month. Write for free specimen questions. COLUMBUS INSTITUTE, 0-4. Columbus, Ohio.

FOR SALE—J. I. CASE THRESHING Machine, in good condition. Will sell cheap. Inquire at RAY J. MILLIGAN'S, R. 2, Onaway, Michigan.

FOR SALE CHEAP—CASE ENGINE, CASE Separator, Huber Beaner, in good condition. EDW. LITWILLER, R. 2, Ithaca.

FORDSON TRACTOR, NEW CHEAP. LOUIS BOOTHBY, R. 1, Elmira, Michigan.

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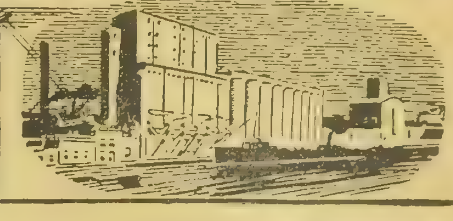

VOL. X, No. 25 | SATURDAY, AUGUST 4, 1923 | TERMS: TWO YEARS $1
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The Old Swimmin'-Hole

By James Whitcomb Riley

Oh! the old swimmin'-hole! whare the crick so still and deep
Looked like a baby-river that was laying half asleep,
And the gurgle of the worter round the drift jest below
Sounded like the laugh of something we onc't ust to know
Before we could remember anything but the eyes
Of the angels lookin' out as we left Paradise;
But the merry days of youth is beyond our controle,
And it's hard to part ferever with the old swimmin'-hole.

Oh! the old swimmin'-hole! In the happy days of yore,
When I ust to lean above it on the sickamore,
Oh! it showed me a face in its warm sunny tide
That gazed back at me so gay and glorified,
It made me love myself, as I leaped to caress
My shadder smilin' up at me with such tenderness,
But them days is past and gone, and old Time's tuck his toll
From the old man come back to the old swimmin'-hole.

Oh! the old swimmin'-hole in the long, lazy days
When the hum-drum of school made so many run-a-ways,
How pleasant was the journey down the old dusty lane,
Whare the tracks of our bare feet was all printed so plane
You could tell by the dent of the heel and the sole
They was lots o' fun on hands at the old swimmin'-hole.
But the lost joys is past! Let your tears in sorrow roll
Like the rain that ust to dapple up the old swimmin'-hole.

Thare the bullrushes growed, and the cattails so tall,
And the sunshine and shadder fell over it all;
And it nottled the worter with amber and gold
Tel the glad lillies rocked in the ripple that rolled;
And the snake-feeder's four gauzy wings fluttered by
Like the ghost of a daisy dropped out of the sky,
Or a wounded apple-blossom in the breeze's controle
As it cut ocrost some orchud to'rds the old swimmin'-hole.

Oh! the old swimmin'-hole! When I last saw the place,
The scenes was all changed, like the change in my face;
The bridge of the railroad now crosses the spot
Whare the old divin'-log lays sunk and forgot.
And I stray down the banks whare the trees ust to be—
But never again will theyr shade shelter me!
And I wish in my sorrow I could strip to the soul,
And dive off in my grave like the old swimmin'-hole.

Current Agricultural News

REDUCE WHEAT ACREAGE SAY GROWERS AT CONFERENCE

REDUCTION of acreage, diversified farming and co-operative marketing are the keynotes of the resolutions adopted by the Wheat Producers Conference of the Southwest at Wichita, July 16. The Southwestern wheat growers have put an organization into the field that is going to work for immediate results, they declare, as well as for methods to prevent distress to wheat growers in future years. At the close of the sessions it was stated that vigorous carrying out of the conference's program would go a long way toward putting the wheat industry on a sound basis "before snow flies this year."

The Wheat Producers Conference of the Southwest is composed of representatives from the hard wheat states of Kansas, Colorado, Missouri, Texas, Nebraska and Oklahoma. These states represent 8,236,000 acres now in wheat in excess of the acreage of 1913, or eight elevenths of the total acreage of the United States in excess of that of 1913.

No mention of government price fixing is made in the resolutions. As one delegate pointed out, "The subject of political action was not mentioned in the debate. The hard wheat men know that their only salvation is by economic means." The features that stood out most prominently in the discussions were, summer fallowing in the hard wheat states, reduced acreage, improved cultural methods on the reduced acreage, diversified crops and raising of home food necessities, and recognition that the increasing world output of wheat meant disappearance of a world market for American wheat at a profitable price.

In the order of their adoption, the resolutions state that present wheat prices make future "normal" production impossible. Farmers, bankers and millers are called on to cooperate to solve the problem. Fifty to one hundred percent increase in taxes and other production costs are cited. Use of rural credits and the federal warehouse act are urged to prevent dumping of the wheat crop. Feeding to stock of low grade wheat in place of dollar corn is recommended. Grading of wheat by protein content is recommended.

Speedy curtailment of acreage, diversified farming, dairy and stock raising and growing of feed crops for their maintenance are adopted as basic principles. Organization of wheat growers into co-operative units governed by "valid, long term marketing agreements" is declared essential. The organization was made permanent with a board of not less than ten directors representing the farm organizations and the state board of agriculture of the member states.

Unconditional endorsement of the resolutions of the southwestern conference was given by Grovenor Dawe, executive vice-president of the Wheat Council of the United States, who attended the conference as a delegate.

E. E. Frizzell of Larned, Kas., was made president of the permanent organization of the Wheat Producers Conference of the Southwest. L. Gould of Amarillo, Tex., is secretary.

STATE POULTRY MEN LAUNCH ASSOCIATION

THE Michigan Poultry Producers' Association, an organization devoted to the interests of the poultry breeders of the state, was organized and launched upon its career on July 13, when 150 representatives of the industry in the state met at M. A. C., and completed preliminary organization steps. The new association will plan eventually to get into the co-operative marketing field, it is understood. An effort will be made to help stabilize poultry commodities. Eventual grading of eggs will be one of the definite goals toward which the organization will work.

BETTER SEEDS POPULAR IN MICHIGAN

PEDIGREED seed from improved farm crops varieties was sown on thousands of acres of Michigan farm land this year, according to a report just issued by H. C. Rather, secretary of the Michigan Crop Improvement association and extension specialist at M. A. C.

The certified seed is grown by members of the crop improvement association from varieties developed by the M. A. C. experiment station. Many of the varieties included in the list of Michigan certified grains have won fame throughout the entire country by their winnings at national shows and exhibits. Rosen Rye, first released from the M. A. C. station in 1912, is probably the best known of these pure strains, while Red Rock wheat, Worthy and Wolverine oats, Robust beans, and corn varieties are rapidly winning a national reputation for Michigan growers.

MAKES FINE 30-DAY BUTTER RECORD

WE take great pleasure in writing you in regard to a splendid 30-day butter record made by our junior 2-year-old heifer. Charlevoix Ormsby Zwelle No. 681455, by Sir Pieterje Ormsby Mercedes 40th, out of Maple Lane Zwelle Riblet.

Our great son of Sir Pietertje Ormsby Mercedes is proving his prepotency beyond the shadow of a doubt, and we will have a large number of his daughters to freshen this fall and next spring, all of which makes the future look very bright.

Charlevoix Ormsby Zwelle made 25.15 pounds of butter in 7 days from 327.9 pounds of milk, which lacks only about one pound of the state record. Zwelle shattered the 30-day state butter record as follows: 103.013 pounds of butter from 1,842.2 pounds milk. (The former state record was 100.566 pounds of butter).—Loeb Farms.

TOO MANY ACRES WHEAT BLAMED FOR LOW PRICES

"WHAT'S behind the big slump in the wheat markets?" This is the all important question which is being asked by wheat growers everywhere as they face the prospect of selling their 1923 crop at prices well below the dollar mark.

Considerable interest attacks, therefore, to the recently announced report of the committee of 12 economists and statisticians selected by Secretary Wallace to study this and similar problems.

In their report they declare, "The expansion in the wheat area of the chief exporting countries, coupled with the decreased buying power of Western Europe, is responsible for the price situation which now prevails." They go on to show that the five chief wheat exporting nations are now growing 28,000,000 acres of wheat more than the pre-war average, and declare that there is no buying power in the world capable of absorbing this tremendous surplus, which in the United States alone amounts to some 14,000,000 additional acres.

The report concludes that only drastic reductions in the wheat acreage in all the chief wheat exporting countries can bring relief to the present world wheat situation.

TO DEVELOPE A "MICHIGAN'S OWN" SUGAR BEET

DEVELOPMENT of a "Michigan's Own" sugar beet variety—a strain which will be better adapted to conditions in the state than those now grown, is the goal toward which extensive experiments started this year at M. A. C., in co-operation with the recently transferred U. S. Department of Agriculture beet station, is aimed.

"While most of the sugar beet companies feel that it does not now pay to raise our own seed here in Michigan, because foreign seed can be bought so cheaply, the price of the seed would be but a comparatively small matter if a variety could be developed which would increase the tonnage production of sugar per acre," explains E. E. Down, research assistant in charge of suger beet work at the M. A. C. station, in commenting on the experimental program which he and the government men have started. "It is the aim of our work to develop such a variety."

GRATIOT PIG AND CALF CLUB PICNIC AUG. 4

BOYS and girls of Gratiot county, who are conducting pig and calf club projects, will have a big picnic and school of instruction at the Gratiot County Fair Grounds, August 4. Mr. Nevels Pearson, state Live Stock club leader, will be present and have charge of the program which will include judging instruction, fitting and showing and other live stock work. Some time will be devoted to games and forms of recreation and each member is to bring along eats for the noonday luncheon. It will be a full day program.

FOUR MICHIGAN COUNTIES FREED OF T. B.

AMENDMENT of the federal cattle tuberculosis eradication regulations, as announced by the department of agriculture, provides for classification of counties, where a complete test of all cattle shows less than one half of one per cent to be affected with tuberculosis as modified-accredited areas.

These areas will be recognized and freed from certain inhibitions which are necessary in other territory. No cattle may be taken in unless from an accredited herd if they have passed a satisfactory tuberculosis test except for slaughter or feeding and grazing under certain conditions.

Counties classified as modified-accredited areas included:

Michigan — Hillsdale, Charlevoix, Antrim, Emmet.

INTERNATIONAL EGG LAYING CONTEST

A GENERAL decline in production is noticed in the report for the week ending July 24, when all groups show a decrease in production.

Production for the week amounted to 3,639 eggs making a total to date of 119,482.

The pens have held up remarkably well however, and the contest management had looked for this slump to take place even early this summer. Some of the pens are showing some moult and others considerable broodiness.

In the Barred Rock section the standing remains the same as last week, Brummers' Poultry Farm, Mrs. Chilson holding first and second place and tieing for weekly production.

The Wyandottes have dropped in production and no changes occur in their standing.

In the Ancona section Beckwith's pen with 48 eggs leads, followed by Van Bree with 46 for the week.

Mr. Shaw's pen of W. Leghorns are continuing to keep up their good work, finishing this week with 53 eggs for the week and 1,765 to date.

FROM HERE AND THERE IN MICHIGAN

Holland—New Masonic temple to be completed August 4.

Iron Mountain—Work to start soon on new Ford dock.
building progressing rapidly.

Grandville—$12,000 to be spent on boulevard lighting system.

Grand Rapids—Abattoir company plans location on old Wallin tannery site.

Manistique—New 75-ft. lookout fire tower to be erected in this township.

Ionia — Contract awarded for Ypsilanti reed warehouse to be erected soon.

Houghton—Old copper tailings dumps to be worked over in Calumet & Hecla section.

Flint—20,000 skilled employes of Buick Motor Company turn out 17,000 cars monthly.

Ypsilanti—Paving of Washtenaw avenue road and Whitmore Lake road to begin soon.

Pontiac—Fisher automobile body plant being created in this city at cost of $2,000,000.

Laignsburg — Consumers Power Company given franchise, substation to be erected at Ovid.

Marysville—Wills motor plant to be operated as Wills Sts. Claire Motor Company, Inc., capital $15,000,000, production to be increased.

Manistee—Work on local prospective oil well to continue day and night within a short time. Paving of 5½ miles Ludington-Scottville to be completed September 1.

Saginaw — Washington avenne Presbyterian church to be enlarged by $5,000 addition. Construction of new Board of Commerce building well under way. 50,000 gals. oil to be used on roads in this vicinity.

Detroit—Belle Isle bridge over Detroit river to be completed August 24. Cadillac Motor Car Company ready to start construction of 3 large groups of factory buildings. Ford Motor Company distributing $1,000,000 to 30,000 employes.

Lansing—Contract let for paving 30 miles of state trunk line highway. Durant Motors to erect two large additions to local factory at cost of $350,000, to increase production from 400 to 550 cars a day. 75 miles of state highway authorized built at cost of $1,000,000.

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SATURDAY
August 4th
1923

VOL. X, NO. 25

Being absolutely independent our columns are open for the discussion of any subject pertaining to the farming business.

"Hew to the line, let the chips fall where they may!"

The Michigan
BUSINESS FARMER

"The Only Farm Magazine Owned and Edited in Michigan"

Published Bi-Weekly
Mt. Clemens, Mich.

TWO YEARS $1

Entered as second-class matter, August 22, 1917, at the post-office at Mt. Clemens, Mich., under act of March 3rd, 1879.

Urges U. S. Advance Cash On Farmers' Wheat

American Farm Bureau Urges Secretary Wallace to Take Advantage of Recent Credit Legislation and Allow Farmers to Warehouse their Own Wheat and Other Products

FARM BUREAU PLAN WOULD ENABLE FARMER TO HOLD WHEAT OFF MARKET

A PLAN to withdraw 200,000,000 bushels of wheat from the market and store it on farms is outlined by the American Farm Bureau Federation in an official statement signed by President O. E. Bradfute. Under the new Intermediate Credit Act and the amended Warehouse Act the Farm Bureau proposes that the grower borrow three-fourths of the market price of his wheat and hold it for a satisfactory price. It is estimated that $150,000,000 of Intermediate Credit would be ample to enable the farmer to store 200,000,000 bushels of wheat and thereby remove it from the present below-a-dollar market.

The Farm Bureau plan would have the Secretary of Agriculture designate sound farm wheat bins as government-bonded warehouses, and would provide for the issuance of the usual bonded warehouse receipts against such wheat stored on the farm. The grower could borrow through the Intermediate Credit System with the warehouse receipt as collateral. This would enable him to hold his wheat until prices advanced.

The Wichita, Kansas, Intermediate Credit Bank is already advancing $100,000 a day to growers under this plan, and the prospects are for applications totalling a daily peak of $2,000,000. This money is available at 5½ percent.

It is believed that the withdrawal of 200,000,000 bushels of wheat from the market and locking it up under government seal in farm warehouses will have an immediate and tremendous effect on the price.

The official statement, signed by President O. E. Bradfute of the American Farm Bureau Federation and detailing the storage plan is printed herewith.

WHEAT selling below $1 per bushel is a national tragedy in America. It is tragedy not only to the farmer who grows the wheat at a loss, but also to the consumer—the business man and the laborer—who must ultimately depend on that farmer's wheat dollar for their continued prosperity and happiness.

The American Farm Bureau Federation believes that co-operative marketing is the ultimate solution to the national wheat price problem. We are now at work on a national co-operative grain marketing policy, being formulated upon instructions from our members. Under this plan the growers of the nation will in effect place their grain in a common bin and will merchandise it in an orderly way over the consumptive period, instead of dumping it on an already overloaded market during the four months following harvest. Co-operative marketing of wheat will unquestionably solve the price problem to the benefit of both producer and consumer. But except in a few sections, the southwest and northwest, co-operative marketing is not ready to meet the present wheat crisis.

USE NEW CREDIT ACT

Fortunately we have ready at hand the machinery which, if permitted to function, will enable our farmers to store their wheat and hold it for orderly distribution. We refer to the new Intermediate Farm Credit, provided by the last session of Congress at the insistance of the Farm Bureau and the Farm Bloc, to be used in conjunction with the amended U. S. Warehouse Act.

Under the Warehouse law the Secretary of Agricultlure may rule if he sees fit that a proper farm storehouse, a wheat granary in this case, be designated as a U. S. bonded warehouse. The Department of Agriculture, cooperating with the Colleges of Agriculture and the Farm Bureaus, has a representative in every county. He is known as the county agricultural agent or farm advisor. The county agent or some other official representative of the Department of Agriculture may properly be delegated to the task of inspecting storehouses. The farmer may then put his wheat in a bonded bin on his own farm, lock it, and deliver the key to the county agent, who can serve as the official warehouseman and give the farmer a lawful bonded warehouse receipt for his grain. These farm warehouses, together with terminal and line warehouses, have sufficient capacity to store the crop.

NO BETTER SECURITY

Is there any better security for borrowed money than wheat in the bin? The soundness of this particular collateral is proverbial.

Under the Intermediate Credits Law, 12 intermediate credit banks are set up on conjunction with the 12 Federal Land Banks, at Springfield, Mass.; Baltimore, Md.; Columbia, S. C.; Louisville, Ky.; New Orleans, La.; St. Louis, Mo.; St. Paul, Minn.; Omaha, Nebr.; Wichita, Kans.; Houston, Tex.; Berkeley, Cal.; and Spokane, Wash. The United States Treasury is authorized to advance each of these banks a capital of $5,000,000 or a total of $60,000,000. Each of the Intermediate Credit Banks is authorized to loan to farmers on proper security, such as bonded warehouse receipts, a total of 10 times its capital or $600,000,000. This money is obtained through the sale of debentures, which are tax-free and which have back of them the wheat in bonded bins. This provides a total of $660,000,000 to enable the farmer to remove any farm surpluses as they develop as price-breaking factors and feed them gradually into the market. Assume 200,000,000 bushels of wheat was stored and financed on farms in this way. Suppose the farmer borrowed the legal limit as prescribed by law of the market price on this bonded wheat to carry on his business. This would require not more than $150,000,000. The money is available, the law is on the statute books, and the plan is capable of meeting the present situation. All we need is the proper regulations from the Department of Agriculture and the Federal Farm Loan Board, and the prompt administration of the Intermediate Credit and Warehouse Act.

Now, therefore, the American Farm Bureau Federation calls upon all banks, farm organizations, co-operative marketing associations, and individual farmers to make full and free use of the Intermediate Credit Act so as to prevent the dumping of the wheat crop and to retain its control in the hands of the grower himself rather than in the hands of the speculator.

The American Farm Bureau Federation urges the Secretary of Agriculture under the powers conferred upon him by the amended Warehouse Act to designate proper warehouses on farms as government-bonded warehouses, and to set up machinery at once to provide proper inspection and warehouse administration. The U. S. Warehouse Act and the corresponding state warehouse laws should be used by the commodity organizations and individual farmers to the end that storage of the wheat crop may be made under grower control, either on the farms, in the country elevators, or in terminal warehouses.

The American Farm Bureau Federation believes that such action on the part of the organized farmers of the nation would demonstrate that there is nothing in the wheat situation on the supply side of the market which can justify the present disasterous price. Recent reports have emphasized acreage instead of output. Additional acres that are now put into wheat are the poorer acres and production does not increase at a corresponding rate.

Output of wheat in the United States has increased since prewar at the same rate as population. World surpluses for the postwar years average only 7 million bushels more than for the average of five prewar years. This means that the other exporting nations have only filled the gap left by Russia. European wheat importing countries are producing at least 200 million bushels less than before the war. These facts in regard to domestic and world wheat supply should be supporting factors in the market. The only possible explanation for falling prices must be found in demand.

There are more people than before the war to eat wheat in all the importing countries as well as in the present exporting countries. In both Europe and the United States there has been a decline in the per capita consumption. Europe, however, took 26 per cent of our wheat in the year ending June 30, 1923, at an average price to the farmer of 98 cents. There is no reason to believe that Europe's buying power will be substantially less in the coming year. Consumption in the United States increased 12 per cent in the fiscal year just ended over the previous year. With industrial activity and employment at a high level there is good promise that our consumption will continue to expand, possible equal to prewar. Exports to the extent of 20 per cent of the crop and per capita consumption on the basis of prewar would equal 1923 production as now forecasted.

PURCHASING FOR EXPORT

One major reason that demand for wheat is not now properly sustained is the changed method of purchasing for export. Before the war purchases for foreign account were made in large volume at harvest and immediately thereafter. Due to the weakened financial situation abroad and the uncertainty concerning the prices of foreign drafts, foreign buying is now largely on a hand to mount basis.

This emphasizes the necessity for American agriculture to press to a conclusion its program of orderly marketing over the crop year. Orderly marketing instead of dumping can turn the wheat crop from the loss which now threatens into a profit.

Producers themselves have the major responsibility in avoiding such situations as now confront the wheat growers. In intelligently planning production and in providing adequate storage facilities for orderly financing and cooperatively marketing can be found the key to the permanent solution of the wheat situation.

Six Thousand Attend Annual Farmers' Day

By R. C. GROESBECK

(Special to Business Farmer)

THOUSANDS of farmers from every section of the state gathered at the Michigan Agricultural College, July 27, for the sixth annual summer Farmers' Day. The crowd, estimated by college officials to number 6,000, was slightly larger than that of last year in spite of a steady drizzle of rain which fell throughout the day.

O. E. Bradfute, president of the American Farm Bureau Federation, was the principal speaker at the big afternoon meeting held in the college gymnazium. He made a strong plea for greater organization and co-operation among the farmers of the nation in order that they might play a more important part in the solution of the problems that are facing the country at this time. Mr. Bradfute said that transportation and marketing are the two greatest problems before the farmers today, pointing out that they pay fifty-five per cent of the nation's transportation costs.

Close co-operation between federal and state agricultural extension forces and local county farm organizations was urged. Mr. Bradfute pointed out the closely allied aims of all agricultural agencies and organizations, and urged that any measure which served to bring about closer business and social bonds should be fostered.

Prof. Eben Mumford followed Mr. Bradfute on the speaking program giving an inspiring and forceful talk on the important things of farm life.

A long line of pure bred livestock owned by the college was exhibited to the vistiors in the annual livestock parade. State and national prize winners as well as several blue ribbon winners at the International Livestock Exposition were shown in the parade, which included dairy cattle, beef cattle, horses, sheep, hogs, and poultry.

The farmers were taken on tours of inspection over the experimental plats covering 150 acres, the college orchards, the forestry nurseries, and the college farms. Special exhibits on timely agricultural subjects were displayed in outdoor booths.

College specialists in all branches of agriculture met with the farmers throughout the day for individual conferences on the crop and farm problems which confronted them.

Making Church Biggest Thing in Farm Community

Members of Country Church in Illinois Form Clubs to Improve Crops and Back Boys' and Girls' Club Work, as Well as Put On Plays, Stage Athletic Contests and Hold Parties

YOU can take your automobile and drive any direction into the country and you will see churches with windows covered with boards, doors locked and nailed shut, and weeds nearly waist high in the yard as though man had not entered them for years. No doubt you have one in your own community. If you have many of you can remember when a few years ago you and you family, or maybe you and your girl, attended the services and Sunday school. But for some reason interest in the church seemed to decline and there was not enough money to continue hiring a minister so finally it was decided to close the church until there was more interest and financial assistance. And, in many cases, the church is still closed. In Illinois, in a little rural community known as Ontario Corners, the same thing took place and the church remained closed for seven years. But three years ago it was reopened and the parish has shown a steady growth since that time. These farmers made the church the biggest thing in their community and now they would be lost without it. You and your neighbors can make your church of great value to your community. Why not try it?

DOWN in Ontario county, Illinois, only a few years ago the farmers were experiencing the same thing that many other communities are today—a lack of interest in the church. The early settlers built two churches and parsonages on what is known as Ontario Corners, a Congregational church and a Baptist church, and both of them drew large crowds every Sunday for many years as religion was a large part of the make-up of these early settlers. But as the older leaders moved away or died and the younger generation took their places there was a decline in the attendance, the type of work being done by the churches not appealing to the younger people. Finally, it was decided that one place of worship was enough for the community and the Baptist church was moved to a nearby town. Interest continued to decline until in 1912 regular services were discontinued and over seven years passed before sufficient interest was taken to continue weekly services.

During the entire period, however, a few members of the community held Sunday school and occasionally had a sermon. Each year saw a slight increase in the interest but it was not until 1920 that any real progressive steps were taken. One evening in June of that year eight farmers and their wives held a meeting at the home of one of the members to discuss the matter of securing the services of a minister and holding regular services again. After a general discussion it was decided to resume activity and a committee was appointed to look over the parsonage to see if it was inhabitable. The committee declared it was not, so the old one was torn down and work was started a short time later on a new one.

The men and women of Ontario had visions of greater things than the common little country church. They wanted to see the church made the big thing in the community, not just a place of worship that you visited on Sunday, and with a clear vision of the work to be done they started out to secure a leader who would help them realize their vision. Due largely to their viewpoint in this matter they succeeded in securing Rev. M. Guy Van Buskirk, who at the time of the call was engaged in interdenominational religious work in the capacity of the young people's superintendent for West Virginia. Since his coming, Sept. 1, 1921, pastor and people have met the needs of the community in such a way that today the church at Ontario Corners is again wielding a most welcome influence in the community. In fact, the influence is extending far beyond the borders of Ontario parish.

After several months of services the congregation felt that the old church building should be remodeled, not only to increase the seating capacity but especially to enable the building to more nearly serve the needs of the community.

The church was raised, a basement dug and later equipped with committee rooms, kitchen and dining room, which could also be used for other purposes. The main auditorium was enlarged and decorated. Some members were doubtful about the wisdom of enlarging the auditorium, because, as one remarked, "the church never has been full and perhaps never will be." The first Sunday night in the remodeled building, however, found not only a crowded house but about 50 people were unable to get in.

The need of a new light plant was apparent and the members of the Women's league agreed to purchase this. Here again we see the vigor with which a proposition is pushed when all are agreed that a certain thing should be done. The decision to order a light plant was reached late Monday afternoon; immediately the plant was ordered by wire to be shipped by express from Ohio. On Thursday evening of the same week the plant was installed and the electric lights burning.

A moving picture plant will be installed in the near future. The money for this was raised by means of a combination sale; the pastor saved expenses by crying the sale himself. It might be added in this connection that he has performed a similar service at a purebred sale held in the community.

Many factors have contributed to the splendid success of the work at Ontario parish. The pastor, of course deserves a full share of credit, because the gospel which he has been preaching has reached down into the hearts and lives of his parishioners in such a way that their daily lives are indeed fuller and richer.

A well-rounded program of work, which includes the men and women, the young people, and last, but not least, the boys and girls, is also a contributing factor of vital importance.

Men Have Club

The men, for instance, have their Men's club. This club sponsors the movie plant project, and last year conducted an intensive experimental plot on corn diseases in co-operation with the United States department of agriculture and the Knox County Farm Bureau.

It is interesting to know that every farmer, either land owner or tenant, who is a member of the church is also a member of the farm bureau. The Men's club during the past two years has conducted the largest local corn shows in Knox county.

In 1921 the pastor was a strong contender for first honors, and last year succeeded in getting the blue ribbon in a contest with about 40 other samples. Just now the Men's club is financing the Boys' and Girls' club work, especially the sow and litter project.

The women have regular semi-monthly meetings of their league. One of their number is superintendent of the Sunday school, which reaches 80 to 85 per cent of the people living in the community. The Sunday school is very closely graded and the aim throughout is to keep the instruction at least up to the standard of public school instruction. Quarterly reports dealing with department interest and progress in the work are sent to parents.

No one who has watched the work at Ontario Corners will question the fact that the women have made a distinct contribution toward the success of the church; as all too frequently happens, a woman has been one of the leaders in keeping up the religious interest in the community This woman, Mrs. J. J. Clearwater, who is also superintendent of the Sunday school gives her conception of the importance of a church in a rural community in the statement which follows:

Creed for Broad Service

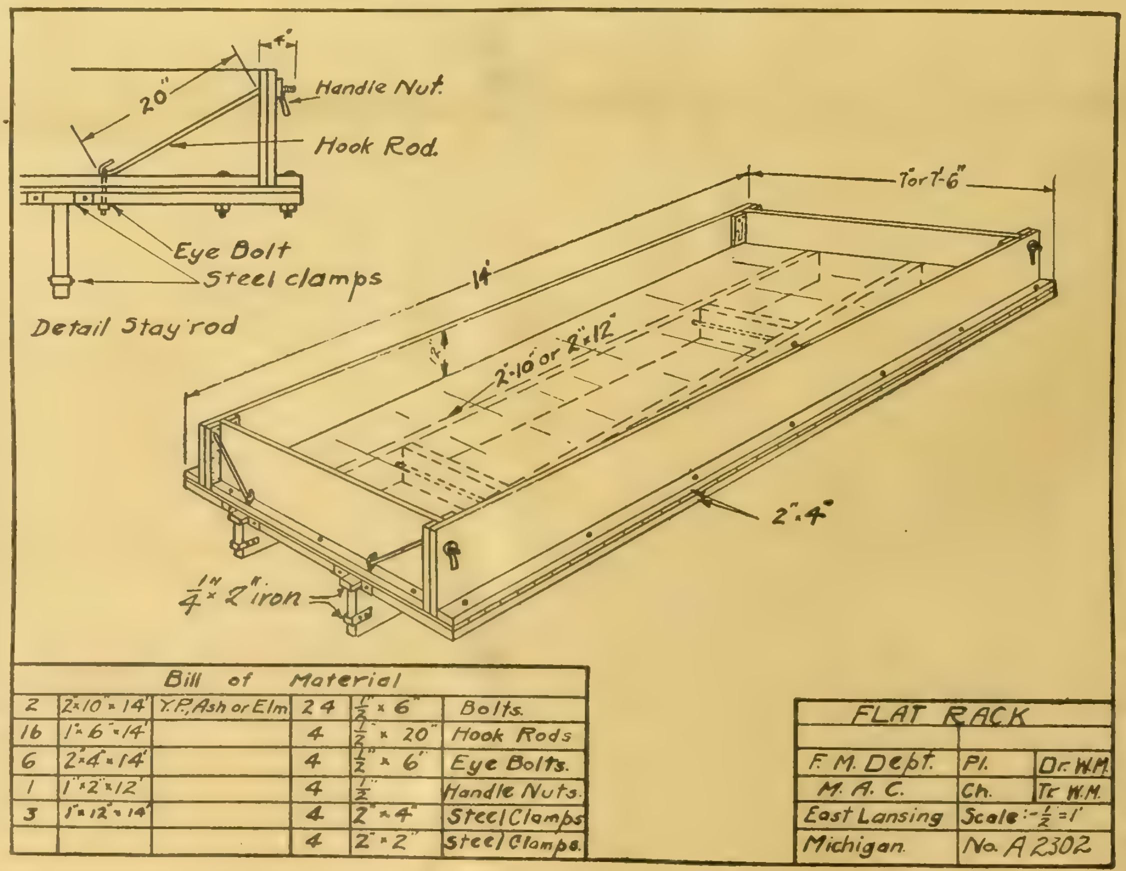
"Religious workers today are stressing the Christian life as the fourfold life, touching the physical, mental, social and religious life of

(Continued on page 19)

The Flat Rack is Easily Made and Has Many Uses on the Farm

By H. H. MUSSELMAN, Prof. of Farm Mechan ics, M. A. C.

THE flat rack serves so many purposes on the farm that it is scarcely possible to say which it serves best. For loading hay, with the hay loader, it gives the man on the load a sense of security because there are no openings in the floor through which he can slip. For grain bundles it gives an excellent base on which to build a load in which the corners will not slip, provided end standards with cross pieces extending the width of the rack and spaced a few inches apart are used. For grains or seed which shatter in hauling it will save a considerable percentage of the grain. For hauling threshed grain, it may be made tight by using matched lumber, or a canvass or tarpaulin may be used to cover the floor and sides. In hauling coal, wood, corn, sugarbeets, and miscellaneous loads, the loads are both easily loaded and unloaded. For much of this work, the sideboards are necessary and easily put on and removed. By providing a stock crate, one may also carry animals on this rack. For hogs and sheep the sides and ends can be built up on the order of fencing.



Bill of Material

2	2"x10"x14'	Y.P., Ash or Elm	24	1/2"x6"	Bolts.
16	1"x6"x14'		4	1/2"x20"	Hook Rods
6	2"x4"x14'		4	1/2"x6"	Eye Bolts.
1	1"x2"x12'		4	1/2"	Handle Nuts.
3	1"x12"x14'		4	2"x4"	Steel Clamps
			4	2"x2"	Steel Clamps.

In building this rack, use only strong timbers for bed pieces. Southern pine and elm are excellent. If purchased, they may be bought in the full two-inch width, or in the rough. In this form they have considerably more strength than when dressed to the standard 1¾ inch thick .

The floor should be of a material which will stand both wear and weather. Southern pine is good but somewhat heavy. The floor may be laid matched, with the joints between the boards filled with white lead for preservation if desired. Six inch flooring is generally used where matched joints are desired.

The bed pieces may be laid parallel or brought closer together at the front end to allow room for the front wheels to make short turns. The floor may be nailed directly to the bed pieces, which makes for simple construction.

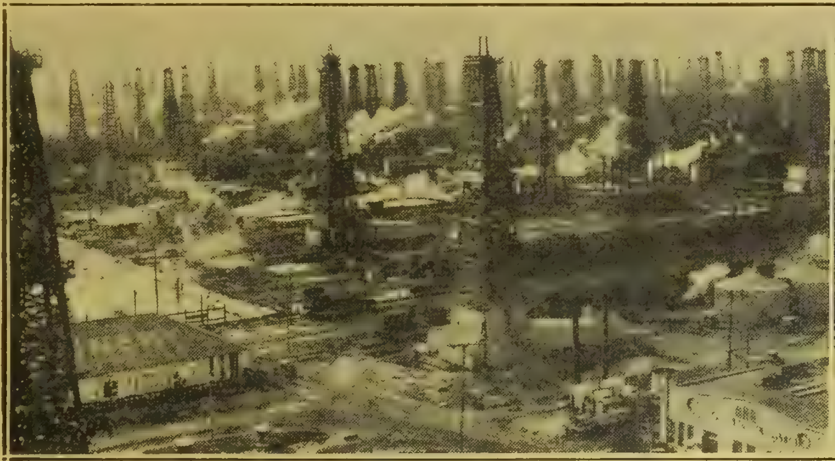
Care should be taken to obtain firm, standard supports. In loading both hay and grain these are highly stressed. Round poles make excellent standards or stakes. If these are used, the iron clamps or sockets should, of course, be made to receive them.

PICTURES FROM FAR AND NEAR

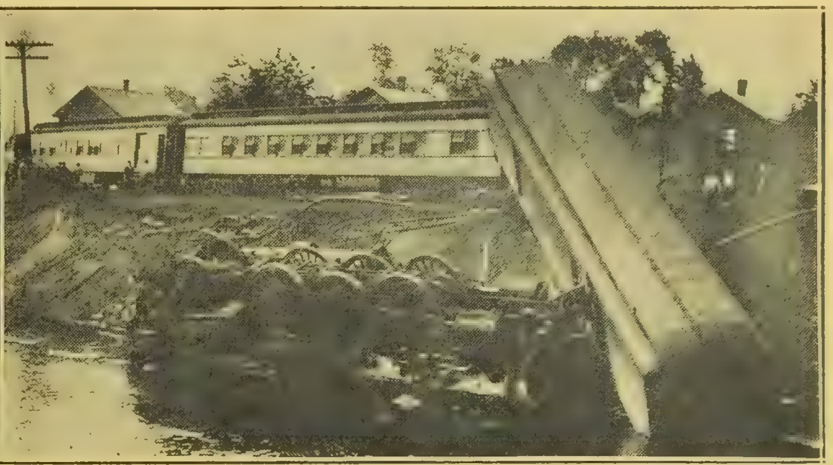
IS YOUR'S THERE?—Joseph F. Mikulac, 45, and a native of Croatia, who is not a mere globe-trotter. On his various travels he carries this book with him and it holds the signature of nearly every prominent person in the world. The book contains 2896 pages and weighs nearly 40 pounds. There are several signatures to each page and it is nearly filled with the autographs of world-famous persons.

HONORS "T. R." AS ROUGH RIDER.—James Earle Fraser, sculptor, at work on the bust of Theodore Roosevelt, which is to be placed on a granite pedestal in the vicinity of San Juan Hill to commemorate the Colonel's participation in the battle. Roosevelt said he regarded the day he led the charge as the greatest in his life. The monument will be unveiled early next January.

SAW "ELIZA WHO CROSSED THE ICE"—Mrs Meeky B. Coffin, aged 83, living in Cincinnati, Ohio, confirms the fact that the "Eliza who crossed the ice" is no myth. Mrs. Coffin states that when first married she lived with her father-in-law, Levi Coffin, famous abolitionist, and that Eliza and her baby came to this house to hide. Later Eliza escaped by crossing the ice on the Ohio River.



A CITY OF OIL WELLS.—It may not be lovely but it is productive of the greatest wealth of this country. Here is a view of the Santa Fe oil fields in Los Angeles county, California, where the precious fluid is taken out day and night. This is one of the richest oil fields in California and fortunes are made here daily.



FAST EXPRESS WRECKED.—The crack flyer on the Central Railroad of New Jersey, running between Philadelphia and Scranton, Pa., was derailed half a mile from the latter city. One man was killed when the engine and mail car plunged down a forty foot embankment into the Lackawanna River. The engineer was perhaps fatally injured while the fireman was slightly hurt.

NO WONDER CLAM DIGGING IS SO POPULAR IN JAPAN.—With pretty bare-legged girls of this type wading in the water for the clams, it is no wonder that clam digging is very popular at the seaport section in Cherry Blossom Land. At the coast, women fishers and clam diggers are the rule and young girls, like this one, are to be seen every morning fishing for the clams.

SOCIETY WEDDING MARKED BY EXTREME SIMPLICITY.—The bride, groom and guest of honor, left to right: Mr. and Mrs. William Painter Meeker and William Jennings Bryan, snapped at the wedding which took place at the bride's home in Cape May, N. J. The ceremony, attended by Bryan and other notables, was marked by extreme simplicity. The bridal couple are popular favorites in social circles of several cities and the groom is a Yale student.

FORMER CROWN PRINCE MAY RUN FOR PRESIDENCY.—Ex-Crown Prince Frederick William of Germany, who is expected to run for the presidency at the coming election. It is believed that there is nothing in the German Constitution to keep him out of the presidential race, but an awkward situation might arise in the refusal of the Allies to permit him to return to Germany. He is still in exile.

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Farmers Service Bureau

(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full name and address. Name not used if so requested.)

DEED LAND TO ONE SON

Please answer this in your paper. I gave my oldest son a deed to my forty acres of land and gave deed to our banker, and at my death he shall give it to oldest son, upon payment of $1000.00 each to my other two sons, who live in Detroit. I only have the three sons, wife is dead. I have no debts. I want the oldest son to have old home. Will my deed stand in law after I am dead?—W. H. L., Vicksburg, Mich.

—What you want to do is to deed this property to your banker in trust for your son, but in order for such a trust to be valid, the deed must prescribe some duty to be performed by the trustee other than merely to convey the land to the son. Passive trusts, that is, trusts in which the trustee has no duty to perform except to merely convey the property to the beneficiary at the appointed time, are abolished in Michigan. If you do not want the property conveyed to your son until your death, you could make a will in which you devise this farm to your oldest son, upon condition that it should not vest in him until he has given to each of the other sons $1000.00.—Asst. Legal Editor.

CAN HE SELL OR REMOVE SHANTY?

As I am a subscriber to the M. B. F. I would like to ask one question. B buys a farm from A. A reserves all wood. A hires wood cutters to cut this wood and tells them he will furnish lumber for a shanty. They can build shanty and live there while they are cutting the wood, so they did. A did not ask permission to put the shanty on B's farm or take it away. Now can A move or sell this shanty?—N. F. C., Covert, Mich.

—A's reservation of all wood gives him an implied license to enter upon the land and do all things reasonably necessary in the cutting and hauling away of the wood. If the building of the shanty for the workers' is a reasonable means of doing this work, he would have the right to erect such a shanty, and could sell it or remove it upon completion of the work.—Asst. Legal Editor.

FARMERS SUGAR COMPANY

What do you know about the Farmers Sugar Company, Defiance, Ohio?—E. A., Macomb County, Mich.

—We are organized under the corporation laws of the State of Ohio. It is strictly a farmer's company in that our stockholders are farmers. We sold $1,000,000 worth of stock to 1200 farmers. We started building in 1921, but the panic of that year forced us to stop building. We would not go in debt consequently are alive and as soon as our stockholders are able to meet their notes we will go on with the enterprise.

We soon discovered we had something else to think about besides building. The question soon came forcibly to our attention whether our farmers were going to have the opportunity to grow beets. The opposition to the American sugar industry is well organized, rich and influential. I attended the Farm conference in January, 1923, and it did not take me long to realize that if the farmers of America, not only in Ohio and Michigan, but all over the United States were to have the opportunity to grow this important crop they would have to fight and fight hard.—C. H. Allen, President.

HOLD "A" LIABLE

I am writing for advice about a deal I made. I sold timber to a party and gave him two years to cut and haul timber, and A let another party B handle said timber which they were to buy and haul away so A has turned the deed over to B, but my contract is made with A. B hired men and teams to cut and skid said timber and has not paid for the help. Now what I want to know is, do I have to pay for cutting said timber when the contract is made between A and myself and B sends men to cut the timber. I had nothing to do with cutting the timber. I was to get paid for it on the stump. That is, they were to do all cutting and hauling and I was to get $16.00 per M log measure. Some of the men put a laborers lien on the timber. Can they sell the timber for their pay without me getting my pay for the timber? A came and made the contract with me and B took out the property and sent the men to work. I hope you can give me some information on this.—F. Y., Kinde, Michigan.

—If A entered into a contract with you to buy timber and afterwards sold the timber, or assigned the contract to B without your consent, you could still hold A liable on his contract, for the amount he agreed to pay. If you did not agree to cut the timber, you would not be required to do so hor pay anyone else to cut it. The workmen would have a lien on the logs which would have priority over your claim, and they could sell the logs for payment of their wages. This would not prevent you from recovering from A the price of the logs, out of other property he may have. If, instead of assigning the contract, A brought B would be liable to you for into an entirely new agreement, then B would be liable to you to for for the logs according to the terms of such agreement.—Asst. Legal Editor.

WOULD NOT BE HOUSEHOLDER

As I am a subscriber to your paper I would like to ask you a question in regard to the taxation of personal property. I think the law reads like this—"Personal property owned and used by an householder in connection with his business is exempt from taxation to the value of two hundred dollars." Our supervisor did not give me the two hundred dollar exemption for he said I was not a householder. So I will state the conditions and ask you if he was right. For the past eight years I have worked a farm and had as my housekeeper, my sister, for I am single, but the past year I have been alone. I worked the farm the same having the same amount of livestock and poultry. Everything is done the same except that I drive over to my father's, about ¾ mile away for nearly all meals and stay there ninety per cent of the time nights.

Should I have the two hundred dollar exemption or not?—X. Y., Kalamazoo County.

—Your question is not one of law, but one of fact, as to whether or not you are a householder under the circumstances. If you take all your meals away from home, and spend most of your nights away from what you call home, you would not, in my opinion, be considered a householder.—Asst. Legal Editor.

HAS NO DEED TO LAND

Suppose S owns eighty acres along side of W, also 40 acres at the back of W's place. There is no building on this 40 acres of S's. S was granted the privilege of a corner to get to his 40 acres but there was no writing to show that he owns this corner. Now S is saying that it is outlawed and that he rightfully owns this corner for a roadway into this 40 acres. Said opening was made seven years ago. Please let me know what you think about it.—W. W. R., Imlay City, Mich.

—If S has never received a deed to this strip of land, he could not gain title to it, except by adverse possession. In order to obtain title by adverse possession he would have to hold it for 15 years, and his possession would have to be adverse, or hostile, to that of the owner. Obviously this could not be true if W gave his permission to use it. So long as S is using this corner of land with W's permission, he could never gain title by adverse possession.—Asst. Legal Editor.

COW REACTS TO T. B. TEST

On May 5th we had an auction sale and sold everything we had, including our cattle. We had some fine looking cows that had all freshened within a few weeks before the sale. The cows were far and as nice looking as any cows you run across. They were not thoroughbreds but we had bred them up and they were nearly full blooded Shorthorns. Among the people that bid on the cows was a fellow thet called himself a string butcher. He bought a cow with the notion of selling her again and making a good profit. The man he was to sell her to wanted her tested for T. B. They tested her and she reacted. Now the butcher comes back and says we have to give him one-half what he paid for the cow. Now they never tested cows around here and there was nothing said at the sale if they were tested cows or not. We told him it was a public auction sale and he took his chance. He says the cow is ours yet and we are obliged to take her back six months after the sale. He paid and took the cow the night of the sale. There was nothing said at the sale about if the cows weren't any good we were to take them back. We were selling out.—Mrs. L. E., Honor, Mich.

—If the buyer had reasonable opportunity to inspect the cow, and you made no false representations regarding her condition, he would have no right to a refund of one half of the purchase price. You would not be liable to the purchaser in any way on account of the cow's condition.—Asst. Legal Editor.

EACH MUST GIVE HALF ROAD

We take the M. B. F. and would like to ask one question in reguard to road law. If A driving a car and going east meets a team going west (said team is on A's side of the road), does A have to give road to B because he has a load?—Mrs. G. M., Lake Odessa, Mich.

—The State Road Law stipulates that when two vehicles meet on the road, each shall turn to the right of the middle of the road, so as to allow the other to pass, and makes no exception to heavily loaded vehicles. However, if any damages result to either because of the failure of the other to do so, the fact that one is heavily loaded would bear on the question of negilgence.—Asst. Legal Editor.

WIFE'S PERSONAL PROPERTY NOT LIABLE

I see so many letters in the M. B. F. and all wanting help so I thought I would come and ask for help also. First let me say will find enclosed 60c for a year's subscription. We feel as though we can not get along without the M. B. F. and we know you can not put the paper out without money. Now I wish to explain. A rented a farm from B. B has a lien on the produce. Now A's personal property is all in his wife's name. Can they take that if A can not make the rent? About 18 months after the farm was rented by A from B, B's daughter got A's wife to sign the contract. Does that make it any more binding and can B make A sign notes to the amount of the rent? Now if one give a second chattel mortgage is it any good after the first chattle mortgage is paid? Or will it have to be renewed before it is good?

Can a lawyer collect fees from a man where everything is in his wife's name and all covered by mortgage? If not what can he do?—A. V. A., Corunna, Mich.

—The wife's personal property would not be liable for the payment of the rent, even if she signed the contract with her husband. However, if the husband purchases property after the rent, or any other debt accrues, and has title vested in his wife, for the purpose of avoiding his obligations, such property would be subject to the payment of the debt. B could not compel A to sign notes for the payment of the rent. A second mortgage is good after the first is discharged, and may be foreclosed against the property after the first is satisfied. A lawyer could not collect his fee for services rendered the husband, out of the wife's personal property. There are a number of things he might do to collect his fee, depending on the circumstances, and if anyone is trying to avoid paying a just attorney's fee, I would advise him not to wait to find out what the attorney can do to collect what is due him.—Asst. Legal Editor.

CROPS NOT SUBJECT TO LEVY

Own 40 acres of land, a team of horses, 2 cows, have a wife and family. Now can a certain company, come and take any of those things mentioned above such as cattle, land or garnishee my wages? I hold a note against a man without any endorser only his name. Him and his wife are owners of a small place with a joint deed, no personal to speak of. Could I sue and get a judgement and take away crops raised on the place?—C. A. D., Ionia County, Mich.

—The estate of a husband and wife, holding land under a joint deed is known in law as an estate by the entireties, and in such case, crops raised on the land are not subject to levy upon execution for any debt of the husband.—Asst. Legal Editor.

Subsoiling and Erosion Control

WHERE level farm land is underlaid by an impervious stratum of cemented gravel, clay or hardpan, which in turn rests on loose gravel or more or less open sand, wonderful results are obtained by firing small charges of dynamite in the impervious stratum to break it up so that drainage of the top soil is established during the rainy season, and moisture is stored in the lower strata to be available in times of drought. In some parts of the country the farming land is, on a large scale, like a few inches of soil in a china dish left out of doors. It is either too wet or too dry. Subsoiling corrects this condition by allowing the rain to run down into the subsoil instead of being held up by it and ruining the crops, and to form a reserve of the moisture under the hardpan for nourishment of the plant roots in dry seasons. Subsoiling is one of the least spectacular blasting operations. The method is somewhat as follows:

The land is laid off in fifteen foot squares and at each intersection a hole is bored by means of a dirt auger half way through the hardpan, cemented gravel or impervious stratum. In the bottom of each hole is placed a half stick or a whole stick of 20 per cent low freezing ammonia dynamite primed with a cap and a piece of fuse. If the impervious stratum is under eighteen inches in diameter, a half cartridge is ordinarily sufficient to break it up thoroughly. If this is more than eighteen inches thick, it may require as much as a cartridge in each hole. The fuse should be cut long enough to extend at least two inches above the surface of the ground. The holes should be well tamped with sand, loam or clay to confine the charge. The explosion is very mild, ordinarily blowing up only a small hump and not throwing any material more than a few inches.

The best results are obtained when subsoiling is done in the dry season, especially when the impervious material is clay, as dry clay pulverizes and shatters much better than wet clay. Do not be too economical in the use of dynamite and space the holes too far apart. I have seen meadow land which had been subsoiled on thirty-foot centers and afterwards sown to buckwheat where the buckwheat when mature stood up twice as high at the points where the shots were fired as it did half way between. Subsoiling is of no particular value in well drained, loose mellow soil.

In rolling countries where a heavy rain fall results in washing away a quantity of the top soil, making gullies and small ravines after very heavy rain, and especially where the crops are sown in terraces, great benefit has been secured by subsoiling these terraces. This causes the rain water to sink into the soil as into a sponge instead of running off as it would from an inverted dish. Not only are better crops obtained by supplying more moisture to the roots in the dry season, but the surface erosion is very much lessened and the formation of gullies largely eliminated. The method of blasting is similar to that described above, but the holes should be placed about eight feet apart. Experiments made several years ago in the control of surface erosion by subsoiling terraces showed in every case a decided improvement in both the growth of the crops and the prevention of the washing away of the top soil.—By Arthur La Motte, Manager Technical Section, Explosives Dept., E. I. Du Pont de Nemours & Co.

The Guardian of the Accolade

A Complete Short Story by O. HENRY America's Greatest Short Story Writer

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NOT the least important of the force of the Weymouth Bank was Uncle Bushrod. Sixty years had Uncle Bushrod given of faithful service to the house of Weymouth as chattel, servitor, and friend. Of the color of mahogany bank furniture was Uncle Bushrod—thus dark was he externally; white as the uninked pages of the bank ledgers was his soul. Eminently pleasing to Uncle Bushrod would the comparison have been; for to him the only institution in existence worth considering was the Weymouth Bank, of which he was something between porter and generalissimo-in-charge.

Weymouth lay, dreamy and umbrageous, among the low foothills along the brow of a Southern valley. Three banks were in Weymouth-ville. Two were hopeless, misguided enterprises, lacking the presence and prestige of a Weymouth to give them glory. The third was The Bank, managed by the Weymouths—and Uncle Bushrod. In the old Weymouth homestead—the red brick, white porticoed mansion, the first to your right as you crossed Elder Creek, coming into town—lived Mr. Robert Weymouth (the president of the bank), his widowed daughter, Mrs. Vesey—called "Miss Letty" by every one—and her two children, Nan and Guy. There, also in a cottage on the grounds, resided Uncle Bushrod and Aunt Mandy, his wife. Mr. William Weymouth (the cashier of the bank) lived in a modern, fine house on the principal avenue.

Mr. Robert was a large, stout man, sixty-two years of age, with a smooth, plump face, long iron-gray hair and fiery blue eyes. He was high-tempered, kind, and generous, with a youthful smile and a formidable, stern voice that did not always mean what it sounded like. Mr. William was a milder man, correct in deportment and absorbed in business. The Weymouths formed The Family of Weymouthville, and were looked up to as was their right of heritage.

Uncle Bushrod was the bank's trusted porter, messenger, vassal and guardian. He carried the key to the vault, just as Mr. Robert and Mr. William did. Sometimes there was ten, fifteen, or twenty thousand dollars in sacked silver stacked on the vault floor. It was safe with Uncle Bushrod. He was a Weymouth in heart, honesty, and pride.

Of late Uncle Bushrod had not been without worry. It was on account of Marse Robert. For nearly a year Mr. Robert had been known to indulge in too much drink. Not enough, understand, to become tipsy, but the habit was getting a hold upon him, and every one was beginning to notice it. Half a dozen times a day he would leave the bank and step around to the Merchants and Plants' Hotel and take a drink. Mr. Robert's usual keen judgment and business capacity became a little impaired. Mr. William, a Weymouth, but not so rich in experience, tried to dam the inevitable backflow of the tide, but with incomplete success. The deposits in the Weymouth Bank dropped from six figures to five. Past-due paper began to accumulate, owing to injudicious loans. No one cared to address Mr. Robert on the subject of temperance. Many of his friends said that the cause of it had been the death of his wife some two years before. Others hesitated on account of Mr. Robert's quick temper, which was extremely apt to resent personal interference of such a nature. Miss Letty and the children noticed the change and greived about it. Uncle Bushrod also worried, but he was one of those who would not have dared to remonstrate, although he and Marse Robert had been raised almost as companions. But there was a heavier shock coming to Uncle Bushrod than that caused by the bank president's toddies and juleps.

Mr. Robert had a passion for fishing, which he usually indulged whenever the season and business permitted. One day, when reports had been coming in relating to the bass and perch, he announced his intention of making a two or three day's visit to the lakes. He was going down, he said, to Reedy Lake with Judge Archinard, an old friend.

Now, Uncle Bushrod was treasurer of the Sons and Daughters of the Burning Bush. Every association he belonged to made him treasurer without hesitation. He stood AA1 in colored circles. He was understood among them to be Mr. Bushrod Weymouth, of the Weymouth Bank.

The night following the day on which Mr. Robert mentioned his intended fishing-trip the old man woke up and rose from his bed at twelve o'clock, declaring he must go down to the bank and fetch the pass-book of the Sons and Daughters, which he had forgotten to bring home. The bookkeeper had balanced it for him that day, put the cancelled checks in it, and snapped two elastic bands around it. He put but one band around other pass-books.

Aunt Mandy objected to the mission at so late an hour, denouncing it as foolish and unnecessary, but Uncle Bushrod was not to be deflected from duty.

"I done told Sister Adaline Hoskins," he said, "to come by here for dat book tomorrer mawnin' at sebin o'clock, for to kyar' it to de meetin' of de bo'd of 'rangements, and dat book gwine to be here when she come."

So, Uncle Bushrod put on his old brown suit, got his thick hickory stick, and meandered through the almost deserted streets of Weymouthville. He entered the bank, unlocking the side door, and found the pass-book where he had left it, in the little back room used for private consultations, where he always hung his coat. Looking about casually, he saw that everything was as he had left it, and was about to start for home when he was brought to a standstill by the sudden rattle of a key in the front door. Some one came quickly in, closed the door softly, and entered the counting-room through the door in the iron railing.

That division of the bank's space was connected with the back room by a narrow passageway, now in deep darkness.

Uncle Bushrod, firmly gripping his hickory stick, tiptoed gently up this passage until he could see the midnight intruder into the sacred precincts of the Weymouth Bank. One dim gas-jet burned there, but even in its nebulous light he percieved at once that the prowler was the bank's president.

Wondering, fearful, undecided what to do, the old colored man stood motionless in the gloomy strip of hallway, and waited developments.

The vault, with its big iron door, was opposite him. Inside that was the safe, holding the papers of value, the gold and currency of the bank. On the floor of the vault was, perhaps, eighteen thousand dollars in silver.

The president took his key from his pocket, opened the vault and went inside, nearly closing the door behind him. Uncle Bushrod saw, through the narrow aperture, the flicker of a candle. In a minute or two—it seemed an hour to the watcher—Mr. Robert came out, bringing with him a large hand-satchel, handling it in a careful but hurried manner, as if fearful that he might be observed. With one hand he closed and locked the vault door.

With the reluctant theory forming itself beneath his wool. Uncle Bushrod waited and watched, shaking in his concealing shadow.

Mr. Robert set the satchel softly upon a desk, and turned his coat collar up about his neck and ears. He was dressed in a rough suit of gray, as if for traveling. He glanced with frowning intentness at the big office clock above the burning gas-jet, and then looked lingeringly about the bank—lingeringly and fondly, Uncle Bushrod thought, as one who bids farewell to dear and familiar scenes.

Now he caught up his burden again and moved promptly and softly out of the bank by the way he had come, locking the front door behind him.

For a moment or longer Uncle Bushrod was as stone in his tracks. Had that midnight rifler of safes and vaults been any other on earth than the man he was, the old retainer would have rushed upon him and struck to save the Weymouth property. But now the watcher's soul was tortured by the poignant dread of something worse than mere robbery. He was seized by an accusing terror that said the Weymouth name and the Weymouth honor were about to be lost. Marse Robert robbing the bank! What else could it mean? The hour of the night, the stealthy visit to the vault, the satchel brought forth full and with expedition and silence, the prowler's rough dress, hissolicitous reading of the clock, and noiseless departure—what else could it mean?

And then to the turmoil of Uncle Bushrod's thoughts came the corroborating recollection of preceeding events—Mr. Robert's increasing intemperance and consequent many moods of royal high spirits and stern tempers; the casual talk he had heard in the bank of the decrease of business and difficulty in collecting loans. What else could it mean but that Mr. Robert Weymouth was an absconder—was about to fly with the bank's remaining funds, leaving Mr. William, Miss Letty, little Nan, Guy, and Uncle Bushrod to bear the disgrace?

During one minute Uncle Bushrod considered these things, and then he awoke to sudden determination and action.

"Lawd! Lawd!" he moaned aloud, as he hobbled hastily toward the side door. "Sech a come-off after all dese here years of big doin's and fine doin's. Scanlous sights upon de yearth when de Weymouth family done turn out robbers and 'bezzlers! Time for Uncle Bushrod to clean out somebody's chicken-coop and eben matters up. Oh, Lawd! Marse Robert, you ain't gwine do dat. 'N Miss Letty an' dem chillum so proud and talkin' Weymouth, Weymouth,' all de time! I'm gwine to stop you ef I can. 'Spec you shoot Mr. Nigger's head off ef he fool wid you, but I'm gwine stop you ef I can."

Uncle Bushrod, aided by his hcikory stick, impeded by his rheumatism, hurried down the street toward the railroad station, where the two lines touching Weymouthville met. As he expected and feared there Mr. Robert, standing in the shadow of the building, waiting for the train. He held the satchel in his hand.

When Uncle Bushrod came within twenty yards of the bank president, standing like a huge, gray ghost by the station wall, sudden perturbation seized him. The rashness and audacity of the thing he had come to do had struck him fully. He would have been happy could he have turned and fled from the possibilities of the famous Weymouth wrath. But again he saw, in his fancy, the white, reproachful face of Miss Letty, and the distressed looks of Nan and Guy, should he fail in his duty and they question him as to his stewardship.

Braced by the thought, he approached in a straight line, clearing his throat and pounding with his stick so that he might be early recognized. Thus he might avoid the likely danger of too suddenly surprising the sometimes hasty Mr. Robert.

"Is that you, Bushrod?" called the clamant, clear voice of the gray ghost.

"Yes, suh, Marse Robert."

"What in the devil are you doing out at this time of night?"

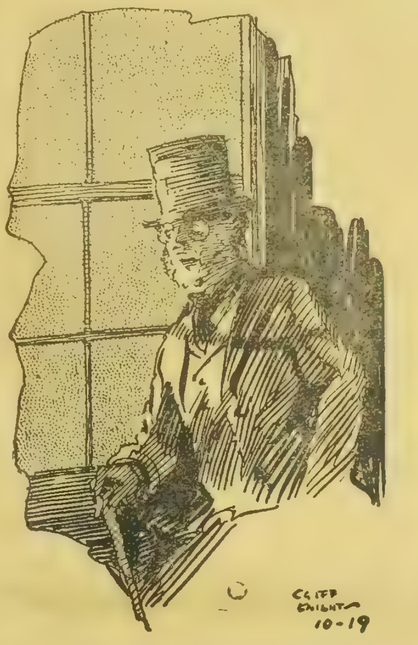
For the first time in his life, Uncle Bushrod told Marse Robert a falsehood. He could not repress it. He would have to circumlocute a little. His nerve was not equal to a direct attack.

"I done been down, suh, to see ol' Aunt M'ria Patterson. She taken sick in de night, and I kyar'ed her a bottle of M'lindy's medercine. "Yes, Suh."

"Humph!" said Robert. "You better get home out of the night air. It's damp. You'll hardly be worth killing tomorrow on account of your rheumatism. Think it'll be a clear day, Bushrod?"

"I 'low it will, suh. De sun sot red las' night."

Mr. Robert lit a cigar in the shadow, and the smoke looked like his gray ghost expanding and escaping into the night air. Somehow, Uncle Bushrod could barely force his reluctant tongue to the dreadful subject. He stood, awkward, shambling, with his feet upon the gravel and fumbling with his stick. But then, afar off—three miles away, at the Jimtown switch—he heard the faint whistle of the coming train, the one that was to transport the Weymouth name into regions of dishonor and shame. All fear left him. He took off his hat and faced the chief of the clan he served, the great, royal, kind, lofty, terrible Weymouth—he bearded him there at the brink of the awful thing that was about to happen.



The old colored man stood motionless in the gloomy strip of hallway.

"Marse Robert," he began, his voice quavering a little with the stress of his feelings, "you 'member de day dey-all rode de tunnament at Oak Lawn? De day, suh dat you win in de ridin', and you crown Miss Lucy de queen?"

"Tournament?" said Mr. Robert, taking his cigar from his mouth. "Yes, I remember very well the—but what the deuce are you talking about tournaments here at midnight for? Go 'long home, Bushrod. I believe you're sleep-walking."

"Miss Lucy tech you on de shoulder," continued the old man, never heeding, "wid a s'ord, and say: 'I mek you a knight, Suh Robert—rise up, pure and fearless and widout reproach.' Dat what Miss Lucy say. Dat's been a long time ago, but me nor you ain't forgot it. And den dar's another time we ain't forgot—de time when Miss Lucy lay on her las' bed. She sent for Uncle Bushrod, and she say: Uncle Bushrod, when I die, I want you to take good care of Mr. Robert. Seem like'—so Miss Lucy say—'he listen to you mo' dan to anybody else. He apt to be mighty fractious sometimes, and maybe he cuss you when you try to 'suade him but he need somebody what understand him to be 'round wid him. He am like a little child sometimes'—so Miss Lucy say, wid her eyes shinin' in her po', thin face—'but he always been'—dem was her words—'my knight, pure and fearless and widout reproach.' "

Mr. Robert began to mask, as was his habit, a tendency to soft-heartedness with a spurious anger.

"You—you old windbag!" he growled through a cloud of swirling cigar smoke. "I believe you are crazy. I told you to go home, Bushrod. Miss Lucy said that, did she? Well, we haven't kept the scutcheon very clear. Two years ago last week, wasn't it, Bushrod when she died? Confound it! Are you going to stand there all night gabbing like a coffee-colored gander?"

The train whistled again. Now it was at the water tank, a mile away.

"Marse Robert," said Uncle Bushrod, laying his hand on the satchel that the banked held. "For Gawd's sake, don' take dis wid you. I knows what's in it. I knows where you git it in de bank. Don' kyar' it wid you. Dey's big troubles in dat walise for Miss Lucy and Miss Lucy's child's chillun. Hit's bound to destroy de name of Weymouth and bow down dem dat own it wid shame and triberlation. Marse Robert, you can kill dis ole nigger ef you wil, but don't take away his er valise. If I ever crosses over de Jordan, what I gwine to say to Miss Lucy when she ax me: 'Uncle Bushrod, wharfo' didn' you take good care of Mr. Robert?"

Mr. Robert Weymouth threw away his cigar and shook free one arm with that peculiar gesture that always preceded his outbursts of irascabilitl. Uncle Bushrod bowed his head to the expected storm, but he did not flinch. If the house of Weymouth was to fall, he would fall with it. The banker spoke, and Uncle Bushrod blinked with surprise. The storm was there, but it was suppressed to the quietness of a summer breeze.

"Bushrod," said Mr. Robert, in a lower voice than he usually employed, "you have overstepped all bounds. You have presumed upon the leniency with which you have been treated to meddle-unpardonably. So you know what is in this satchel! Your long and faithful service is some excuse, but—go home Bushrod—not another word!"

But Bushrod grasped the satchel with a firmer hand. The headlight of the train now lightening the shadow about the station. The roar was increasing, and folks were stirring about at the track side.

"Marse Robert, gimme dis 'er' valise. I got a right, suh, to talk to you dis 'er' way. I slaved for you and 'tended to you from a child up. I went th'ough de war as yo' body-servant tell we whipped de Yankees and sent 'em back to de No'th. I was at yo' weddin', and I was n' fur away when yo' Miss Letty was bawn. And Miss Letty's chillun, dey watches today for Uncle Bushrod when he come home ever' evenin'. I been a Weymouth, all 'cept in color and entitlements Both of us is old, Marse Robert. 'Tain't goin' to be long tell we gwine to see Miss Lucy and and has to give an account of our doin's. De ole nigger man won't be 'spected to say much mo' dan he done all he could by de fambly dat owned him. But de Weymouths, dey must sey dey been livin' pure and fearless and widout reproach. Gimme dis valise, Marse Robert—I'm gwine to hab it. I'm gwine to take it back to the bank and lock it up in de vault. I'm gwine to do Miss Lucy's biddin'. Turn 'er loose, Marse Robert."

The train was standing at the station. Some men were pushing trucks along the side. Two or three sleepy passengers got off and wandered away into the night. The conductor stepped to the gravel, swung his lantern and called: "Hello, Frank!" at some one invisible. The bell clanged, the brakes hissed, the conductor drawled: "All aboard!"

Mr. Robert released his hold on the satchel. Uncle Bushrod hugged it to his breast with both arms, as a lover clasps his first beloved.

"Take it back with you, Bushrod," said Mr. Robert, thrusting his hands into his pockets. "And let the subject drop—now mind! You've said quite enough. I'm going to take this train. Tell Mr. William I will be back on Saturday. Good night."

The banker climbed the steps of the moving train and disappeared in a coach. Uncle Bushrod stood motionless, still embracing the precious satchel. His eyes were closed and his lips were moving in thanks to the Master above for the salvation of the Weymouth honor. He knew Mr. Robert would return when he said he would. The Weymouths never lied. Nor now, thank the Lord! Could it be said they embezzled the money in banks.

Then awake to the necessity for further guardianship of Weymouth trust funds, the old man started for the bank with the redeemed satchel.

* * * * *

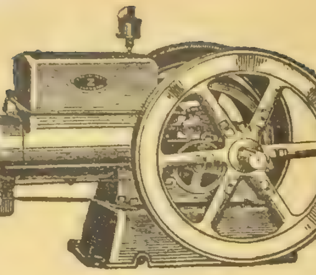
Three hours from Weymouthville, in the gray dawn, Mr. Robert alighted from the train at a lonely flag-station. Dimly he could see the figure of a man waiting on the platform and the shape of a spring-wagon, team and driver. Half a dozen lengthy bamboo fishing-poles projected from the wagon's rear.

"You're here, Bob," said Judge Archinard, Mr. Robert's old friend and schoolmate. "It's going to be a royal day for fishing. I thought you said—why, didn't you bring along the stuff?"

The president of the Weymouth Bank took off his hat and rumpled his gray locks.

"Well, Ben, to tell you the truth, there is an infernally presumptious old nigger

(Continued on Page 19.)



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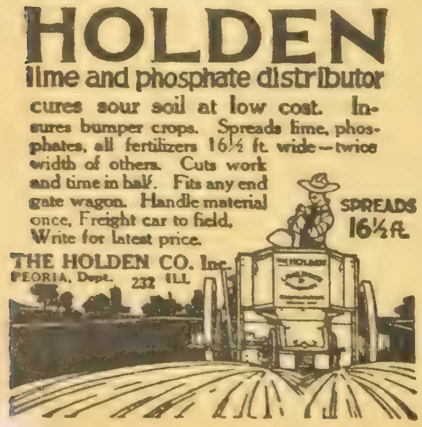

SPREADS 16½ ft.

What the Neighbors Say

FARMER MUST JOIN LABORER

OUR farmer friend asks if someone would tell what to raise. This question reminds me of the pioneer time of Iosco County. After the Civil War settlers were coming from all directions assuming they had found the promised land. A large portion of Ioso county consisted of plains land covered with huckleberry brush, many of the home seekers could start plowing as there was nothing in their way. Timber fields were found along the stream, game was abundant and lumbering was started at full blast. But this did not last long. When the settlers started to leave again a Canadian settler we call him Joe, pulled stakes to leave. When he struck town many a friends ask him, "Could you not raise enough to make a living on your new farm?" Joe replied, " I raised good corn, I raised good beans, I raised good potatoes and last of all I raised —— and left."

Many of our farmers today can not raise a disturbance and must leave. High taxes and interest drive them off the farm. There will be no relief. The only salvation is for the farmer and laboring man to join hands at the ballot box, the only lawful weapon at our command, to meet his management, corrupt politics, profiteering and graft. China is always considered to be in the rear in progress and civilization, but it appears they have some very good laws. If a Chinese is found guilty of profiteering he must stand in front of his place of business and ring a bell and hold a banner in one hand which tells the crime he committed.. If such a law be enacted in our country and enforced we could not hear oneself for all the jingle of bells. They also have a banking law which seems to cover their whole banking system. If a banker fails he is beheaded and it seems to prove good. Only one bank failed in 400 years. How many headless bankers could we show up with such a law enforced. We have too many laws and should petition for a full session of our legislature to repeal laws in place of making more.

Why is there always high rewards offered for bank and train robbers? And at no time a single dollar offered to bring the coal or sugar trust or any other profiteering corporation to justice? Is it because the safe crackers don't steal enough? Who can give a definate answer?—C. H., Tawas City, Michigan.

GAS TAX UNJUST

I MOST heartily support your fearless policy of "hewing to the line" even if I don't always agree with you on all points of discussion. Your most commendable editorial on the Michigan state highway situation entitled "The Weakest Link" in the June 9th issue is mighty good with one exception, taking a farmer tax-payer's view of the subject, that is the following statement: That the farmers were right when they asked for a gasoline tax and the Governor was wrong when he vetoed it. I have never been a supporter either at the polls or much of anywhere else of Gov. Groesbeck, but that does not mean that when he does come across with a policy of merit that I should not give him due credit for the same. I think the gasoline tax bill that passed both houses of the legislature was the most unjust form of taxation ever attempted upon the farmers of this state. You say that the farmers were strong for it (or words to that effect) which seems to be a fact, but for what reason it is beyond my power of comprehension. The farmers are one and all kicking like the proverbial bay steer about high taxes and justly so too. But for these same voters to stand practically solid for a measure that will increase the taxes they are already paying a tidy sum, is sure the limit. To begin with our present license law is unjust inasmuch as the neighbor who drives a super six pays less than twice the fee on a $1400 car that I pay on a $400 lizzie. Why not correct the old law rather than enact a new one that will increase the taxation at about the same ratio. For instance, he says he gets from 10 to 12 miles per gallon of gas with the $1400 car while I get from 15 to 20 miles per gallon with my $400 lizzie. Now then suppose I do average twice the miles per gallon of gas as he; he is paying only twice the tax that I would and it would be upon property worth three and one half times what mine is. Is that justice? If so it sure is a new brand. The gas-taxers say I should pay at that rate because I use the highway more per gallon than he. If that be the case let us suppose again, that he owns a fine driving horse worth $200 with a $50 harness and a $150 carriage a total worth of $400. I own a $25 horse, a $10 harness and a $15 carriage, a total of $50. Bought for the purpose of my daughter and son to drive five miles to high school five days a week for ten months of the year or a total of 2,000 miles, while he drives his outfit an average of 10 per week for twelve months or 520 miles. At the gas tax ratio I should pay practically twice the tax on a $50 valuation as he would on a $400 valuation or sixteen times as high a tax rate as he, for the simple reason that my property uses the highway more than his at the rate of 4 to 1. In other words a 16 to 1 tax rate for a 4 to 1 service. Of course no fair minded person of average intelligence would consider anything of the kind as just but that is just about what the majority of the farmers of Michigan wanted when they supported the gasoline tax of two cents per gallon. Then on top of that every time the little engine pumps water, does the family washing, makes juice for light, sprays the orchard and milks the cows, or friend wife uses a little gasoline to clean my Sunday breeches or the tractor gets cold feet in the winter and refuses to pop with kerosene in the tank when we saw wood or grind feed, we would pay the same little two cents per gallon for using the highway.

But what highway? As I understand it all this money would go only to the state reward roads. If that is so the township in which I reside sure would get a whole lot out of the gasoline tax as there is not a mile of state reward road within its boundry lines, although a state road does lie on the eastern boundry for a distance of some five miles which is very seldom used by at least four-fifths of the residents or taxpayers of said township. A gasoline tax of two cents per gallon would increase the taxes of this farm from $25 to $30 per year as we have a lizzie, a one-ton truck, a tractor and two small engines which we use as the occasion demands, while none of them travel an average of 150 miles on state reward road per year.

How in the name of common sense a taxpayer can support such a measure just to make the city man pay more taxes is absolutely beyond any sane thinking that my brain can master.

Take the case of R. F. D. carrier that drives from our post office. A two cent gas tax last year would have caused him to dig over fourteen dollars and the roads on his route are none too good either, and would not have been benefited one cents worth. Is that justice? Our mail carriers are as good friends and faithful servants as we have too. I can see no reason why our present license law could not be corrected in such a way so that the man that can afford an expensive car would have to pay a tax in proportion to its valuation, rather than penalize the poor neighbor who cannot afford the big car, or if he had one, he could not afford the gas and tires to keep it going. The measure would not have been quite so bad if it contained a referendum clause so the voters could have studied the question more thoroughly and voted upon it. To sum the whole thing up, it looks like this to me: Our governor is the shrewdest politician that ever filled the office, I am sure. And we have about the biggest bunch of genuine boobs in the legislature that Michigan every elected I don't have any idea what the governor's motive was in vetoing the gas tax measure and supporting the weight tax measure, unless it was to gain more power. We all know he wants and always has got it. He knew he could kill the gas tax bill which he did and I am mighty glad of it. He also could be very sure that the legislature would not pass the weight tax bill and he guessed right again. He also knew that if he could keep them running in a circle like a puppy chasing its tail, that they would eventually get dizzy and while staggering, so to speak—at least according to the press report, while the house was throwing paper and acting like a bunch of kids instead of looking after the welfare of the folks back home (that is supposed to be what are elected for)—he could put one over which he did as we all know, in the form of a joker giving him just what he was after; absolute control of the state highway department. If our members of the state legislature had used just common ordinary business judgement and had had confidence in the voters by referring the gas tax measure back to them the highway funds might have been in different shape and the power would have been where it should be with the voters of Michigan rather than in the hands of the shrewdest of politicians Michigan ever produced.—Ralph H. Jones, Shiawassee County, Mich.

FRUIT and ORCHARD

EDITED BY FRANK D. WELLS

BLIGHT IN APPLE TREES

When the twigs die during the summer it is something that should receive attention. The disease can be stopped if it receives prompt attention, otherwise it may keep spreading till it kills the tree. Cut back from 6 inches to a foot beyond the blighted portion, dipping the knife in some disinfectant every time it is used. It is also advisable to apply the disinfectant to the wound, using a brush or swab. Copper sulphate solution is good for the purpose. A teaspoonful to a quart of water is strong enough. A weak solution of carbolic acid is good, so is formalin. Unless the knife is treated there is danger that the disease may be transferred from an affected limb to healthy bark, so doing more harm than good by the pruning.

OUR BOOK REVIEW

(Books reviewed under this heading may be secured through The Michigan Business Farmer, and will be promptly shipped by parcel post on receipt of publisher's price stated.)

"The Tyranny of Power" by D. Thomas Curtin. A novel of force and absorbing interest, having the West Virginia coal fields for its background. This is the story of a man's supreme effort against destructive powers to live down the stigma of a criminal record and to carry out the spirit of the brotherhood of man instilled in him by the one whose name he has taken.

"The Tyranny of Power" has more substance than most novels. It is a story of the times, with strong characterization and ample love interest. ($2). Little, Brown and Company.

GOVERNMENT BULLETINS OF INTEREST IN AUGUST

A SMALL list of Farmers' Bulletins and Circulars of general interest during August is believed to be of value to our readers. Copies may be obtained free by addressing the Division of Publication, United States Department of Agriculture, Washington, D. C., as long as the supply lasts. Specify number and name and whether Farmers' Bulletin or Department Circular.

Farmers' Bulletins 766, The Common Cabbage Worm; 834, Hog Cholera; 900, Homemade Fruit Butters; 943, Haymaking; 959, The Spotted Garden Slug; 970, Sweet Potato Storage; 991, Efficient Operation of Threshing Machines; 1049, Baling Hay; 1073, Growing Beef on the Farm; 1075, Unfermented Grape Juice—How to Make It; 1080, Preparation of Barreled Apples for Market; 1120, Control of Apple Powdery Mildew; 1145, Handling and Transportation of Cantaloupes; 1159, Fermented Pickles; 1160, Diseases of Apples in Storage; 1175, Better Seed Corn; 1176, Root, Stalk, and Ear Rot Diseases of Corn; 1250, Green Manuring; 1264, Farm Manufacture of Unfermented Apple Juice; 1265, Business Methods of Marketing Hay; 1266, Preparation of Peaches for Market; 1290, The Bulk Handling of Grain; 1310, The Corn Earworm. Department Circulars 74, Points for Egg Breakers: How to Break Eggs for Freezing; 217, Anthracnose of Muskmelons; 238, U. S. Grades for Potatoes Recommended by the United States Department of Agriculture.

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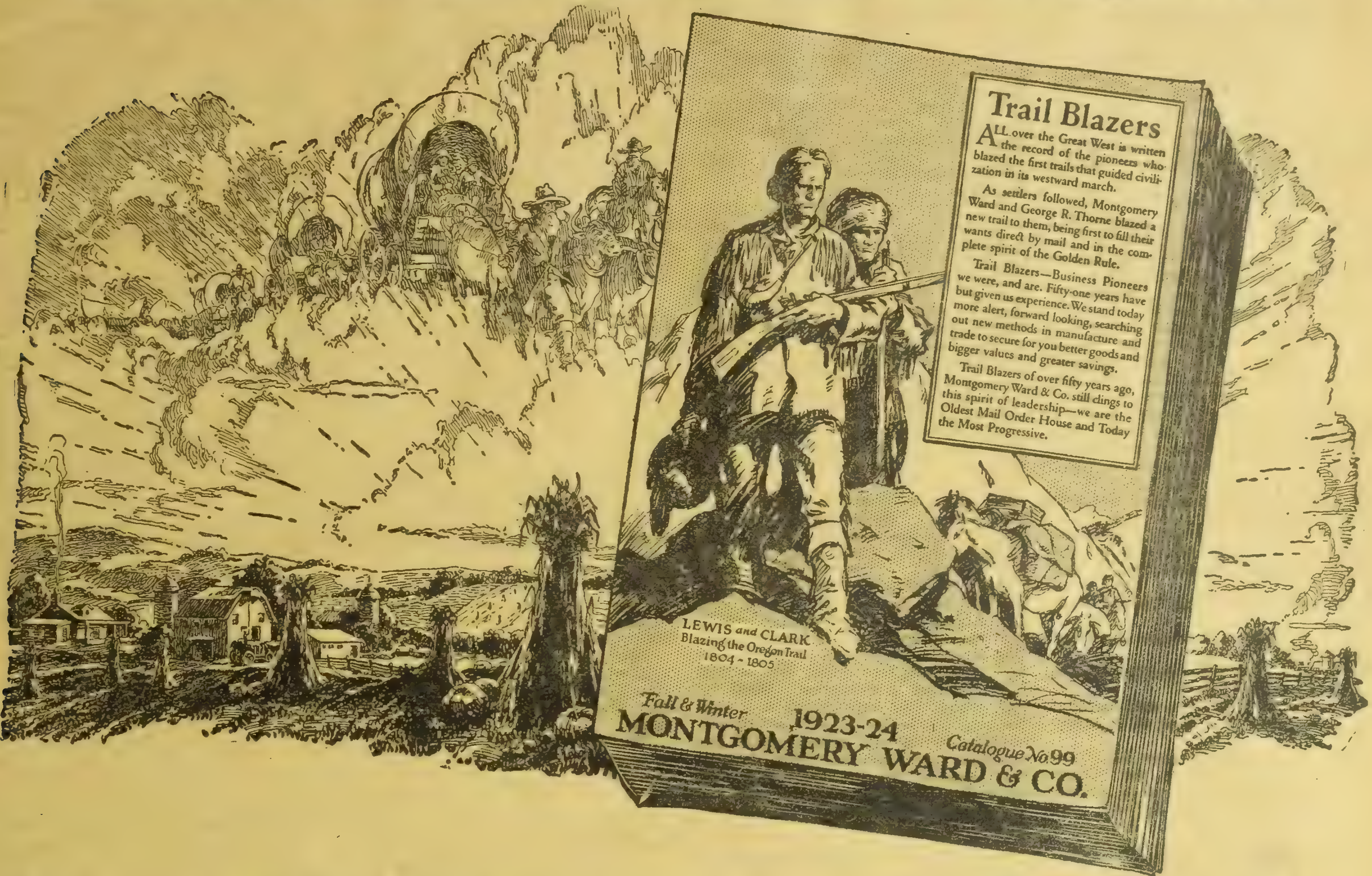

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The Hunted Woman

By James Oliver Curwood

Michigan's Own and America's Formost Author of the Great Northwest

Copyright by James Oliver Curwood

(Continued from July 21st Issue)

"IT ain't more'n half a mile farther on, I guess. But we'll camp here. We're pretty well hid. They can't find us. An' from that summit up there we can keep watch in both valleys."

Knowing the thoughts that were in MacDonald's mind, and how full his heart was with a great desire, Aldous went to him when they dismounted.

"You go on alone if there is time to-night, Mac," he said, knowing that the other would understand him. "I will make camp."

"There ain't no one in the valley," mused the old man, a little doubtfully at first. "It would be safe—quite safe, Johnny."

"Yes, it will be safe."

"And I will stand guard while John is working," said Joanne, who had come to them. "No one can approach us without being seen."

For another moment MacDonald hesitated. Then he said:

"Do you see that break over there across the plain? It's the open to a gorge. Johnny, it do seem onreasonable—it do seem as though I must ha' been dreamin'—when I think that it took us twenty hours! But the snow was to my waist in this plain, an' it was slow work—turrible slow work! I think the cavern—ain't on'y a little way up that gorge."

"You can make it before the sun is quite gone."

"An I could hear you shout, or your gun. I could ride back in five minutes—an' I wouldn't be gone an hour."

"There is no danger," urged Aldous.

A deep breath came from old Donald's breast.

"I guess—I'll go, Johnny, if you an' Joanne don't mind."

He looked about him, and then he pointed toward the face of a great rock.

"Put the tepee up near that," he said. "Pile the saddles, an' blankets, an the panniers around it, so it'll look like a real camp, Johnny. But it won't be a real camp. It'll be a dummy. See them thick spruce an' cedar over there? Build Joanne a shelter of boughs in there, an' take in some grub, an' blankets, an' the gold. See the point, Johnny? If anything should happen——"

"They'd tackle the bogus camp!" cried Aldous with elation. "It's a splendid idea!"

He set at once about unpacking the horses, and Joanne followed close at his side to help him. MacDonald mounted his horse and rode at a trot in the direction of the break in the mountain.

The sun had disappeared, but its reflection was still on the peaks; and after he had stripped and hobbled the horses Aldous took advantage of the last of day to scrutinize the plain and the mountain slopes through the telescope. After that he found enough dry poles with which to set up the tepee, and about this he scattered the saddles and panniers, as MacDonald had suggested. Then he cleared a space in the thick spruce, and brought to it what was required for their hidden camp.

It was almost dark when he completed the spruce and cedar lean-to for Joanne. He knew that to-night they must build no fire, not even for tea; and when they had laid out the materials for their cold supper, which consisted of beans, canned beef and tongue, peach marmalade, bread, bannock, and pickles and cheese, he went with Joanne for water to a small creek they had crossed a hundred yards away. In both hands, ready for instant action, he carried his rifle. Joanne carried the pail. Her eyes were big and bright and searching in that thick-growing dusk of night. She walked very close to Aldous, and she said:

"John, I know how careful you and Donald have been in this journey into the North. I know what you have feared. Culver Rann and Quade are after the gold and they are near. But why does Donald talk as though we are surely going to be attacked by them, or are surely going to attack them? I don't understand it, John. If you don't care for the gold so much, as you told me once, and if we find Jane to-morrow, or to-night, why do we remain to have trouble with Quade and Culver Rann? Tell me, John."

He could not see her face fully in the gloom, and he was glad that she could not see his.

"If we can get away without fighting, we will, Joanne," he lied. And he knew that she would have known that he was lying if it had not been for the darkness.

"You won't fight—over the gold?" she asked, pressing his arm. "Will you promise me that, John?"

"Yes, I promise that. I swear it!" he cried, and so forcefully that she gave a glad little laugh.

"Then if they don't find us to-morrow, we'll go back home?" she trembled, and he knew that her heart was filled with a sudden lightness. "And I don't believe they will find us. They won't come beyond that terrible place and the gold! Why should they, John? Why should they follow us—if we leave them everything? Oh-h-h!" She shuddered and whispered: "I wish we had not brought the gold, John. I wish we had left it behind!"

"What we have is worth thirty or forty thousand dollars," he said reassuringly, as he filed his pail with water and they began to return. "We can do a great deal of good with with that. Endowments, for instance," he laughed.

As he spoke, they both stopped, and listened. Plainly they heard the approaching thud of hoofs. MacDonald had been gone nearer two hours than one, and believing that it was him, Aldous gave the owl signal. The signal floated back to them softly. Five minutes later MacDonald rode up and dismounted. Until he had taken the saddle off, and had hobbled his horse, he did not speak. Neither Joanne nor Aldous asked the question that was in their hearts. But even in the darkness they felt something. It was as if not only the torrent rushing through the chasm, but MacDonald's heart as well, was charging the air with a strange and subdued excitement. And when MacDonald spoke, that which they had felt was in his voice.

"You ain't seen or heard anything, Johnny?"

"Nothing. And you—Donald?"

In the darkness, Joanne went to the old man, and her hand found one of his and clasped it tightly; and she found that Donald MacDonald's big hand was trembling in a strange and curious way, and she could feel him quivering.

"You found Jane?" she whispered.

"Yes, I found her, little Joanne."

She did not let go of his hand until they entered the open space which Aldous had made in the spruce. Then she remembered what Aldous had said to her earlier in the day, and cheerfully she lighted the two candles they had set out, and forced Aldous down first upon the ground and then MacDonald, and began to help them to beans and meat and bannock, while all the time her heart was crying out to know about the cavern—and Jane. The candle-glow told her a great deal, for in it Donald MacDonald's face was very calm, and filled with a great peace, despite the trembling she had felt. Her woman's sympathy told her that his heart was too full on this night for speech, and when he ate but little she did not urge him to eat more; and when he rose and went silently and alone out into the darkness she held Aldous back; and when, still a little later, she went into her nest for the night, she whispered softly to him:

"I know that he found Jane as he wanted to find her, and he is happy. I think he has gone out there alone—to cry." And for a time after that, as he sat in the gloom, John Aldous knew that Joanne was sobbing like a little child in the spruce and cedar shelter he had built for her.

CHAPTER XXVIII

IF MacDONALD slept at all that night Aldous did not know it. The old mountaineer watched until a little after twelve in the deep shadow of a rock between the two camps.

"I can't sleep," he protested, when Aldous urged him to take his rest. "I might take a little stroll up the plain, Johnny—but I can't sleep."

The plain lay in a brilliant starlight at this hour; they could see the gleam of the snow peaks—the light was almost like the glow of the moon.

"There'll be plenty of sleep after to-morrow," added MacDonald, and there was a finality in his voice and words which set the other's blood stirring.

"You think they will show up tomorrow?"

"Yes. This is the same valley the cabins are in, Johnny. That big mountain runs out an' splits it, an' it curves like a horseshoe. From that mount'in we can see them, no matter which way they come. They'll go straight to the cabins. There's a deep little run under the slope. You didn't see it when we came out, but it'll take us within a hundred yards of 'em. An' at a hundred yards—"

He shrugged his shoulders suggestively in the starlight, and there was a smile on his face.

"It seems almost like murder," shuddered Aldous.

"But it ain't," replied MacDonald quickly. "It's self defense! If we don't do it, Johnny—if we don't draw on them first, what happened there forty years ago is goin' to happen again—with Joanne!"

A hundred yards," breathed Aldous, his jaws setting hard. "And there are five!"

"They'll go into the cabins," said MacDonald. "At some time there will be two or three outside, an' we'll take them first. At the sound of the shots the others will run out, and it will be easy. Yo' can't very well miss a man at a hundred yards, Johnny?"

"No, I won't miss."

MacDonald rose.

"I'm going to take a little stroll, Johnny."

For two hours after that Aldous was alone. He knew why old Donald could not sleep, and where he had gone and he pictured him sitting before the little old cabin in the starlit valley communing with the spirit of Jane. And during those two hours he steeled himself for the last time to the thing that was going to happen when the day came.

It was nearly three o'clock when MacDonald returned. It was four o'clock before he aroused Joanne; and it was five o'clock when they had eaten their breakfast, and Mac-Donald prepared to leave for the mountain with his telescope. Aldous had observed Joanne talking to him for several minutes alone, and he had also observed that her eyes were very bright, and that there was an unusual eagerness in her manner of listening to what the old man was saying. The significance of this did not occur to him when she urged him to accompany MacDonald.

"Two pairs of eyes are better than one, John," she said, "and I cannot possibly be in danger here. I can see you all the time, and you can see me—if I don't run away, or hide." And she laughed a little breathlessly. "There is no danger, is there, Donald?"

The old hunter shook his head.

"There's no danger, but—you might be lonesome," he said.

Joanne put her pretty mouth close to Aldous' ear.

"I want to be alone for a little while, dear," she whispered, and there was that mystery in her voice which kept him from questioning her, and made him go with MacDonald.

In three-quarters of an hour they had reached the spur of the mountain from which MacDonald had said they could see up the valley, and also the break through which they had come the preceding afternoon. The morning mists still hung low, but as these melted away under the sun mile after mile of a marvellous panorama spread out swiftly under them, and as the distance of their vision grew, the deeper became the disappointment in MacDonald's face. For half an hour after the mists had gone he neither spoke nor lowered the telescope from his eyes. A mile away Aldous saw three caribou crossing the valley. A little later, on a green slope, he discerned a moving hulk that he knew was a bear. He did not speak until old Donald lowered the glass.

"I can see for eight miles up the valley, an' there ain't a soul in sight,' said MacDonald in answer to his question. "I figgered they'd be along about now, Johnny."

A dozen times Aldous had looked back at the camp. Twice he had seen Joanne. He looked throught the telescope. She was nowhere in sight. A bit nervously he returned the telescope to MacDonald.

"And I can't see Joanne," he said.

MacDonald looked. For five minutes he levelled the glass steadily at the camp. Then he shifted it slowly westward, and a low exclamation broke from his lips as he lowered the glass, and looked at Aldous.

"Johnny, she's just goin' into the gorge! She was just disappearin' when I caught her!"

"Going into—the gorge!" gasped Aldous, jumping to his feet. Mac——'

MadDonald rose and stood at his side. There was something reassuring in the rumbling laugh that came from deep in his chest.

"She's beat us! he chuckled. "Bless her, she's beat us! I didn't guess why she was askin' me all them questions. An' I told her, Johnny—told her just where the cavern was up there in the gorge, an' how you wouldn t hardly miss it if you tried. An' she asked me how long it would take to walk there, an' I told her half an hour. An' she's going to the cavern, Johnny!"

He was telescoping his long glass as he spoke, and while Aldous was still staring toward the gorge in wonderment and a little fear, he added:

"We'd better follow. Quade an' Rann can't get here inside o' two or three hours, an' we'll be back before then." Again he rumbled with that curious chuckling laugh. "She beat us, Johnny, she beat us fair! An' she's got spirrit, a wunnerful spirrit, to go up there alone!"

Aldous wanted to run, but held himself down to MacDonald's stride. His heart trembled apprehensively as they hurriedly descended the mountain and cut across the plain. He could not quite bring himself to MacDonald's point of assurance regarding Quade and Mortimer FitzHugh. The old mountaineer was positive that the other party was behind them. Aldous asked himself if it were not possible that Quade and FitzHugh were ahead of them, and already waiting and watching for their opportunity. He had suggested that they might have swung farther to the west, with the plan of descending upon the valley from the north, and MacDonald had pointed out how unlikely this was. In spite of this Aldous was not in a comfortable frame of mind as they hurried after Joanne. She had half an hour's start of them when they reached the mouth of the gorge, and not until they had travelled another half-hour up the rough bed of the break between the two mountains, and

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TO THE FARMER BOY

AND so you are an American farm boy? This is a distinction that you should fully appreciate.

For the American farm boy enjoys advantages that no other youth in all the wide world possesses.

His daily diet, in nine times out of ten, is fit to grace the table of a king.

He breathes an atmosphere that develops growth of the brawniest type and takes exercise of a variety that produces a symmetry that an athlete would covet.

His schooling is of the most practical sort, for his teachers are usually true-hearted ladies and gentlemen of simple taste and worthy ambition, hence his mind is filled with useful knowledge, knowledge that is imparted to the few rather than to the many.

He is not taught that schooling is simply an opportunity to grasp a few facts that will enable him to meet the world with a weapon of defense or agressiveness.

Out of school, the farm boy is taught to find pleasure in helping the world along. When he takes a horseback ride, he probably carries a message to some neighbor or possibly a jug of water to the man in the field.

He reads of the farmer boys that have gone to congress or even become presidents and he has faith in himself and somehow or other the world soon learns that he can be trusted and has faith in him, for here is a type that early learns responsibility.

Independence, manliness, honor and integrity are so thoroughly and close-fitted into his nature that his splendid physical body is a fit temple for his wonderful mind.

He sees the corn put forth a tiny blade in the early spring and watches it until it reaches a lusty prime.

He sees the young colt start out on its weak, crooked legs and in a few months becomes a being of superb form and wonderful strength.

He is encouraged by these lessons and is not surprised that he grows swiftly into successful manhood that has been his anticipation. The world knows his opportunities as she has never known them before. She realizes his ambitions and makes room for his achievements.

Boys, do not be in a hurry to leave the farm. It is conducive to a happy, useful present and wonderful future.—From Western Farmer.

MacDonald pointed ahead, and said: "There's the cavern!" did he breathe easier.

They could see the mouth of the cavern when they were yet a couple of hundred yards from it. It was a wide, low cleft in the north face of the chasm wall, and in front of it, spreading out like a flowing stream, was a great spatter of white sand, like a huge rug that had been spread out in a space cleared of its choatic litter of rock and broken slate. At first glance Aldous guessed that the cavern had once been the exit of a subterranean stream. The sand deadened the sound of their footsteps as they approached. At the mouth of the cave they paused. It was perhaps forty or fifty feet deep, and as high as a nine-foot room. Inside it was quite light. Halfway to the back of it, upon her knees, and with her face turned from them, was Joanne.

They were very close to her before she heard them. With a startled cry she sprang to her feet, and Aldous and MacDonald saw what she had been doing. Over a long mound in the white sand still rose the sapling stake which Donald had planted there forty years before; and about this, and scattered over the grave, were dozens of wild asters and purple hyacinths which Joanne had brought from the plain. Aldous did not speak, but he took her hand, and looked down with her on the grave. And then something caught his eyes among the flowers, and Joanne drew him a step nearer, her eyes shining like velvet stars, while his heart beat faster when he saw what the object was. It was a book, open in the middle, and it lay face downward on the grave. It was old, and it looked as though it might have fallen into dust at the touch of his finger. Joanne's voice was low and filled with a whispering awe.

"It was her Bible, John!"

He turned a little, and noticed that Donald had gone to the mouth of the cavern, and was looking toward the mountain.

"It was her Bible," he heard Joanne repeating; and then MacDonald turned toward them, and he saw in his face a look that seemed strange and out of place in this home of his dead. He went to him, and Joanne followed.

MacDonald had turned again—was listening—and holding his breath. Then he said, still with his face toward the mountain and the valley:

"I may be mistaken, Johnny, but I think I heard—a rifle-shot!"

For a full minute they listened.

"It seemed off there," said MacDonald, pointing to the south. "I guess we'd better get back to camp, Johnny."

He started ahead of them, and Aldous followed as swiftly as he could with Joanne. She was panting with excitement, but she asked no questions. MacDonald began to spring more quickly from rock to rock; over the level spaces he began to run. He reached the edge of the plain four or five-hundred yards in advance of them, and was scanning the valley through his telescope when they came up,

"They're not on this side," he said. "They're comin' up the other leg of the valley, Johnny. We've got to get to the mountain before we can see them."

He closed his glass with a snap and swung it over his shoulder. Then he pointed toward the camp.

"Take Joanne down there," he commanded. "Watch the break we came through , an' wait for me. I'm goin' up on the mount'in an' take a look!"

The last words came back over his shoulders as he started on a trot down the slope. Only once before had Aldous seen MacDonald employ greater haste, and that was on the night of the attack on Joanne. He was convinced there was no doubt in Donald's mind about the rifle-shot, and that the shot could mean but one thing—the nearness of Mortimer FitzHugh and Quade. Why they should reveal their presence in that way he did not ask himself as he hurried down into the plain with Joanne. By the time they reached the camp old Donald had covered two thirds of the distance to the mountain. Aldous looked at his watch and a curious thrill shot through him. Only a little more than an hour had passed since they had left the mountain to follow Joanne, and in that time it would have been impossible for their enemies to have covered more than a third of the eight-mile stretch of valley which they had found empty of human life under the searching scrutiny of the telescope! He was right—and MacDonald was wrong! The sound of the shot, if there had been a shot, must have come from the other direction!

He wanted to shout his warning to MacDonald, but already too great a distance separated them. Besides, if he was right, MacDonald would run into no danger in that direction. Their menace was to the north—beyond the chasm out of which came the rumble and roar of the stream. When Donald had disappeared up the slope he looked more closely at the rugged walls of rock that shut them in on that side. He could see no break in them. His eyes followed the dark streak in the floor of the plain, which was the chasm. It was two hundred yards below where they were standing; and a hundred yards beyond the tepee he saw where it came out of a great rent in the mountain. He looked at Joanne. She had been watching him, and was breathing quickly.

"While Donald is taking his look from the mountain, I'm going to investigate the chasm," he said.

She followed him, a few steps behind. The roar grew in their ears as they advanced. After a little solid rock replaced the earth under their feet, and twenty paces from the precipice Aldous took Joanne by the hand. They went to the edge and looked over. Fifty feet below them the stream was caught in the narrow space between the two chasm walls, and above the rush and roar of it Aldous heard the startled cry that came from Joanne. She clutched his hand fiercely. Fascinated she gazed down. The water, speeding like a millrace, was a lather of foam; and up through this foam there shot the crests of great rocks, as though huge monsters of some kind were at play, whipping the torrent into greater fury, and bellowing forth thunderous voices. Downstream Aldous could see the tumult grew less, from the rent in the mountain came the deeper, more distant-rolling thunder that they had heard on the other side of the range. And then, as he looked, a sharper cry broke from Joanne, and she dragged him back from the ledge, and pointed toward the tepee.

Out from among the rocks had appeared a human figure. It was a woman. Her hair was streaming wildly about her, and in the sun it was as black as a crow's wing. She rushed to the tepee, opened the flap, and looked in. Then she turned, and a cry that was almost a scream rang from her lips. In another moment she had seen Aldous and Joanne, and was running toward them. They advanced to meet her. Suddenly Aldous stopped, and with a sharp warning to Joanne he threw his rifle to his shoulder, and faced the rocks from which the speeding figure had come. In that same instant they both recognized her. It was Marie, the woman who had ridden the bear at Tete Jaune, and with whom Mortimer FitzHugh had bought Joe DeBar!

She staggered up to them, panting, exhausted, her breath coming in gulps and sobs. For a moment she could not speak. Her dress was torn; her waist was ripped so that it exposed her throat and shoulder; and the front of her waist and her face were stained with blood. Her black eyes shone like a madwoman's. Fiercely she fought to get her breath, and all the time clung to Joanne, and looked at Aldous. She pointed toward the rocks—the choatic upheaval that lay between the tepee and the chasm—and words broke gaspingly from her lips.

"They're coming!—coming!" she cried. "They killed Joe—murdered him—and they're coming—to kill you!" She clutched a hand to her breast, and then pointed with it to the mountain where MacDonald had gone. "They saw him go—and they sent two men to kill him; and the rest are coming through the rocks!" She turned sobbingly to Joanne. "They killed Joe!" she moaned. "They killed Joe, and they're coming—for you!"

The emphasis on that final word struck like a blow in the ears of John Aldous.

"Run for the spruce!" he commanded. "Joanne, run!"

Marie had crumpled down in a moaning heap at Joanne's feet, and sat swaying with her face in her hands.

"They killed him—they murdered my Joe!" she was sobbing. "And it was my fault! I trapped him! I sold him! And, oh, my God, I loved him—I loved him!"

"Run Joanne" commanded Aldous a second time. "Run for the spruce!"

Instead of obeying him, Joanne knelt down beside Marie.

He went to speak again, but there came an interruption—a thing that was like the cold touch of lead in his own heart. From up on the mountain where the old mountaineer had walked into the face of death there came the sharp, splitting report of a rifle; and in that same instant it was followed by another and still a third—quick, stinging, whiplike reports—and he knew that not one of them had come from the gun of Donald MacDonald!

And then he saw that the rocks behind the tepee had become suddenly alive with men!

(Continued in August 18th issue.)

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The Auto-oiled Aermotor is the Genuiue Self-oiling Windmill, with every moving part fully and constantly oiled.

The Auto-oiled Aermotor has behind it 8 years of wonderful success. It is not an experiment. The double gears run in oil in a tightly enclosed gear case. They are always flooded with oil and are protected from dust and sleet. Oil an Aermotor once a year and it is always oiled. It never makes a squeak.

You do not have to try an experiment to get a windmill which will run a year with one oiling. The Auto-oiled Aermotor is a tried and perfected machine. Our large factory and our superior equipment enable us to produce economically and accurately. Every purchaser of an Aermotor gets the benefit from quantity production. The Auto-oiled Aermotor is so thoroughly oiled that it runs in the lightest breeze. It gives more service for the money invested than any other piece of machinery on the farm. The Aermotor is made by a responsible company which has been specializing in steel windmills for more than 30 years.

Aermotor Towers are Towers of Strength

For full information write **AERMOTOR CO.** Chicago Kansas City Dallas Minneapoils Des Moines Oakland

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On the 33-Year Government Amortization Plan to desirable borrowers who own good, well-managed farms in Michigan and Ohio, and wish to borrow not over 50% of the value of their land plus 20% of the appraised value of the buildings.

No commissions—Low interest rates. No stock invcstment. Unusually prompt and satisfactory service. If your loan will meet these requirements, write us.

FIRST JOINT STOCK LAND BANK OF CLEVELAND
Guardian Building, Cleveland, Ohio

HEROLD-BERTSCH MICHIGAN-MADE SHOES HB

Resists Water • Resists Wear

Soles made of best part of hide. Uppers specially retanned.

H-B HARD PANS
wear like iron.

RADIO SET FREE

Boys and girls, you can have a radio outfit of your own and have the fun of listening to broadcast concerts and news—all in exchange for a little easy work during vacation.

To every boy or girl who will get 20 people to subscribe to the Detroit Daily Ledger, the wonderful new picture newspaper, will be given a complete radio set, ready to install in your home.

Write today for sample paper and subscription blanks.

Detroit Daily Ledger,
Dept. A 304 Murphy Bldg., Detroit

The Michigan
BUSINESS FARMER

SATURDAY, AUGUST 4, 1923

Edited and Published by
THE RURAL PUBLISHING COMPANY, Inc.
GEORGE M. SLOCUM, President
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ONE YEAR 60c. TWO YEARS $1. FIVE YEARS $2.

The date following your name on the address label shows when your subscription expires. In renewing kindly send this label to avoid mistakes. Remit by check, draft, money-order or registered letter; stamps and currency are at your risk. We acknowledge by first-class mail every dollar received.

Advertising Rates: 45c per agate line. 14 lines to the column inch, 772 lines to the page. Flat rates.

Live Stock and Auction Sale Advertising: We offer special low rates to reputable breeders of live stock and poultry; write us.

RELIABLE ADVERTISERS

We will not knowingly accept the advertising of any person or firm who we do not believe to be thoroughly honest and reliable. Should any reader have any cause for complaint against any advertiser in these columns, the publisher would appreciate an immediate letter bringing all facts to light. In every case when writing say: "I saw your advertisement in The Michigan Business Farmer!" It will guarantee honest dealing.

"The Farm Paper of Service"

"COME ON, LOOSEN UP!"

IN the last issue of The Business Farmer we told the story of the plan to advertise Michigan beans and increase the consumer demand for this staple article of diet which should be on the working man's table at least once a day, and in every home one or more days each week.

This plan fostered by New York, California, and Michigan bean interests, proposes a fund of fifty thousand dollars to be expended in advertising beans, the same as the products of California, oranges, prunes, raisins, etc., are advertised so efficiently and with such amazing results.

On very good authority, we learn that some of the bean jobbers in Michigan have refused to put their name "on the dotted line," although the amount required is only one tenth of one cent per hundred pounds of beans. In other words these jobbers or elevators are going to try to get the benefit of this advertising without doing their share toward paying for it.

The Business Farmer has advocated an advertising campaign for beans a great many years. We know that there is no product grown in our state which will lend itself so readily to an increase of sales from a campaign of intensive advertising such as is now proposed. This is the first time that a practical attempt has been started with every indication that it will be carried through, and for any short-sighted bean interests in Michigan to stand out at this time is well worthy of the attention of our bean growers.

We believe that the rank and file of the bean growers in our state are of sufficient caliber to recognize the value of this proposed campaign, and that there are none among them so narrow as to not be willing to contribute their mite toward the accomplishment of the goal. In this they show more breadth and depth than some of the jobbers who have been waxing fat off the products which they raise, and we sincerely hope that the business farmers of our state will stand to a man in condemning any miserly group of jobbers or dealers who will not contribute their share toward this campaign.

We promise that we will print in our columns a list of those who have contributed, or have not, as the occasion may require, so that the bean growers of Michigan can give due credit to those who are cooperating with them in this campaign. In the meantime we hope you will talk it over with the man to whom you have been selling your beans. Perhaps he is one of those who are holding out.

WHY NOT?

MANY opulent citizens of Michigan's Metropolis, are much wrought up over the fact that Detroit will this year, according to their figures, pay 40% of the state taxes, although this is really a decrease from 1922, when Detroit paid 42% of the state tax.

We have not seen the figures compiled, but we feel safe in saying that even though Detroit (which by the way includes Hantramck, Highland Park, Dearborn, and Springwells) is paying 40% of the state tax, it is paying only its just share, and has been able to shave off a margin of what should rightly be charged to it.

Detroit enjoys the benefits of a state which supplies it with a large part of its raw materials, food products, dairy products, not to mention the brains of the young men from up-state who rise to leadership and control its destiny.

Detroit is a great city, and every citizen of Michigan is proud of it. The prosperity of Detroit is represented in the prosperity of the state, and as one prospers, so must the other: It would appear therefore, that those who are becoming unduly excited over the facts as they exist on the tax records have the regular channels through which they can go to secure a reduction if the present tax appraisement is unfair.

We are reminded of the remark of the man on the street "that he wouldn't mind how much his income tax was if he were only making more money." It is a fact that Detroit is in the midst of a wave of prosperity, the like of which it has never seen before, even during war times. Detroit is one of the most prosperous cities in the country, and it ought to pay the state tax without batting so much as an eyelash.

TEN MILLION DOLLAR FARM CREDIT

REPORTS from Washington say that the Farm Credit Plan is already beginning to function, and the first ten million dollars of the sixty million dollars in debentures of the new Intermediate Credit Bonds has been sold.

The Farm Loan Board has been asked by agricultural leaders to loan this money on warehouse certificates covering grain stored in the farmers own warehuoses. The board has stated that they are under the advisement of the Department of Agriculture and would be guided by their instructions.

It is to be hoped, that this vast amount of money which could do so much good if used to hold a surplus crop for orderly marketing, will go directly to the farmers who need it. If so, this credit legislation will be of great value, but if it is to be used to the advantage of the established line of elevators and the other old-line warehouses, it will not directly benefit the independent farmer, and it will fall far short of the mark which was set for it to accomplish.

The wheat growing states are facing a serious condition. More serious than here in Michigan where wheat is only one of our major crops, but it is no less true that a part of this money should go to farmers who diversify their crops as do the farmers in Michigan, and would be particularly acceptable in the case of beans and potatoes in this state.

Our farmers will of course, be obliged to furnish suitable warehouse facilities on their farms. Their grain bins must be dry and well ventilated to be accepted by representatives of the board before any money would be loaned on the products to be stored therein.

If the benefits of the credit legislation, for which so much credit has been taken, will come directly to the farmer it will be a long step in the right direction, but if as we have said, it is to be scattered over the old system of marketing, it will do the individual farmer little good.

A PLAN, SO SIMPLE IT MIGHT WORK.

JUST before sailing from New York this week for Europe, where he will make a complete study of reforestation, Senator James Couzens, made the following statement:

"I believe that the government very properly could control and regulate all stock exchanges and produce exchanges throughout the country. Of course there is a need in our civilization of these instrumentalities, but government regulation would eliminate the opportunities for gambling, and therein is there evil.

The farmer suffers greatly from this. The government during the war limited the profit of the middlemen in coal to 25 cents a ton. The government should limit the commission of the man handling the products of the farm.

Then we would have abolished the motive for the self-interest that now causes the manipulators of these products to depress prices before the crops are harvested, thus gouging the farmer and boosting prices after the crops are in, thereby robbing the consumer."

So far as we know this is an original idea, and it is the first time a man in public life has advanced the theory that the actual commission paid to the broker in farm products should be limited, the same as it was during the period of the coal shortage. This idea which our new Senator is advancing in behalf of the farmers of Michigan and other states will not be expected to make him any more popular with a certain class of market speculators but we believe most farmers will agree with him.

The least that can be said about Senator Couzens is that he is a fighter who is not afraid to express his own convictions and to stand by them in the face of what would appear to be an attempt at political suicide. If, as the Senator suggests, the commission man will be allowed to add only a percentage above the net amount paid the farmer, it is pretty safe to assume that the buyer would see that the price paid the farmer was as high as possible so as to enhance his own profits.

All in all, it sounds like a sensible suggestion, and with the backing of the farmers of the country, it might be possible for our Senator to make a name for himself as the originator of a practical solution to the farmers marketing problem, which is unique largely because it is so simple any of us can understand it.

"REPAIR—REBUILD—REROOF NOW!"

IN Michigan during August comes a period when the good business farmer will take an inventory of the condition of his buildings, because preceding the heavier work of harvest and the coming of early fall rain, it behooves him to make preparations for winter.

If there is a leak in the roof of the house, barns or other buildings, now is the time to repair them. If there are odd jobbs outside, now is the time to get the work out of the way.

The job that is put off adds something to its own cost of doing it later. Old fence posts for instance, rot away, letting stock into a field of growing grain where the destruction caused by the animals in one night, would cost many times what rebuilding the fence would.

Sometimes it does us good to be jarred into doing something by a suggestion from the outside, and this is our reason for appealing to your better judgement to repair, rebuild and reroof now!

MICHIGAN ELEVATOR EXCHANGE

WE feel that the men behind the Michigan Elevator Exchange should have some word of approval from the farmers of this state for the excellent report which they made at their third annual meeting, July 17th.

The Elevator Exchange reported a strong financial surplus and during the past year it has marketed 4450 cars of grain, hay and beans, for 107 local elevators representing 25,000 grain growing farmer members.

This would mean to give the lie to the man who says that cooperation among farmers is impractical and cannot be carried out successfully. The past two years have been very trying ones and that the officers of this association should have been able to so direct its operations and its policy that they have come through with a substantial surplus and report a large increase of business each year is certainly to their credit.

We believe that flowers are often more appreciated when handed to the living, and this may be a suggestion for some of you the next time you happen to meet the manager of your local exchange elevator.

17 STATES HAVE GAS TAX

TOURISTS, commercial truck and transportation companies and all automobilists in 17 states are paying a gasoline tax and are doing their share to pay for the construction and maintenance of good roads. In these states farmers are being relieved of the injustice of keeping up the roads almost single handed for a travel which is very often two-thirds commercial and pleasure cars from the cities. The following states now have gasoline taxes, with a maximum of two cents a gallon:

Alabama
Colorado
Connecticut
Delaware
Indiana
Maine
West Virginia
Massachusetts
New Hampshire
N. Dakota
Oklahoma
Oregon
S. Dakota
Tennessee
Utah
Vermont
Washington

Similar statutes are pending in California and Illinois. A gasoline tax law was defeated in Michigan by Governor Groesbeck's veto after both Houses in the Legislature had passed the bill by an overwhelming vote, but the farmers say that is far from being the end of the gas tax in Michigan.

If the highway financing burden in Michigan were distributed among the 700,000 automobile owners, in proportion to the amount which they used their autos, as is automatically done through a gas tax, no one would feel the tax burden, and the present injustice to farmers and other general property owners would be removed.

Yesterday we saw a shocking picture! It was of a young lady, climbing rapidly over a split-rail fence, parasol in hand, her huge red picture hat carelessly tilted to one side in her excitement, as an ugly bull could be seen pawing the earth in the background. Her ankle was exposed two inches above her dainty slippers. It was copyrighted 1898. The world sure do move!

No fight is ever lost if it is made in the right spirit, for if the fight itself goes against one, the fighting has been worth while and has made the heart stronger and the spirit cleaner.

Senator James Couzens says 5% beer will defeat the boot-legger! Maybe so, or maybe it might defeat the senator! Who knows?

The trouble is that when you let tomorrow take care of itself, it may not take of you.

Steve says: Henry Ford never started anything yet that didn't kick up an awful commotion.

PUBLISHER'S DESK

ON THE BANKS OF THE WABASH —THE NILE CO.

"Can you tell me if the Nile Art Company, 2207 Spy Run, Ft. Wayne, Indiana, is reliable? They wish me to send them $7.75 for their New Art Coloring Process and material to work on and instructions for the work. Then a two year contract will be signed stating that the prices stated in payment for my work painting will not decline, that I am to be shown by mail any part that I do not understand in the instructions without any further charge, and that I will be kept supplied with materials. I would greatly appreciate any information you might be able to give me concerning the reliability of this company. Respectfully."

NO, my dear young Beaverton reader, I do not know anything of the Nile Art Company of Ft. Wayne, Indiana, but from your description of their proposition I certainly could not advise you to go into it until I had talked or written to some of their satisfied students.

It is a pretty safe rule to follow that when money is asked in advance for an employment proposition that there is something wrong with it. There is usually a good market for labor, and any institution which can profitably employ labor is always on the lookout for it, and good employees cost them something to secure, so if this company had a proposition in which they needed home labor, it would be possible for them to send out their outfit and instructions and take the chance of finding persons with sufficient talent to furnish them with a supply of the finished material which they need. If any of our readers have had experience with this company, I would be glad to hear from them, so that we can advise our inquiring friend. In the meantime I can only advise her to make a thorough investigation before she sends the seven-seventy-five.

THE TRADE ACCEPTANCE

"Thanking you for information concerning the asbestos company. I wish to explain why we are interested and ask a further question. My husband took an agency for them from their agent, Mr. ——, signing a trade acceptance which when I read it seemed to me to be nothing more than a negotiable note for $272.00. They were to send on an expert roofer and send the literature for advertising to the list of possible purchasers which we would send in. All this expense has fallen on my husband contrary to agreement. Freight an liquid asbestos and all. So far no experienced salesman has arrived. Note is due in 60 days from June 19th. If they do not live up to agreement will we have to pay this note? What is a trade acceptance? Gratefully yours, ——— ——."

A TRADE-ACCEPTANCE, is to all intent and purpose a note and is considered practically the same in law. My opinion is that if the company does not live up to their agreement you will not have to pay the note. On the other hand you will find that they have deposited this note in one of your local banks. I would suggest you see a local attorney so you may be protected in this matter.

HEIRS WANTED!

"Heirs to estates here and abroad can obtain valuable information by writing for free bulletin.—Claim Agency, Pa., U. S. A. (adv.)

THE above advertisement was received by us the other day. The company sending it offered to pay for its insertion at our regular advertising rate. We are inserting the above without charge, because we want Business Farmer readers to be warned against sending money to concerns which advertise for lost heirs, and make a charge for sending a list of these persons. This is one of the oldest schemes worked on the unsuspecting public. In Europe it is very common, and even on this side you often see an advertisement like the above signed by some foreign concern, usually from England.

They play on the human emotion which rises in every individual that some time or other some unknown relative may die and leave us a fortune. It is nice to read about in fiction, but seldom happens in real life. Usually where an estate of this kind is left, it is not difficult to locate the rightful heirs, as few persons are lost so completely to their relatives that they cannot be traced by one means or another. It is of course, possible for a claim agency like the above to secure a list of unclaimed estates which may, or may not be authentic, or of any value, and sell these lists to gullible persons at a great profit to themselves. We would gamble that the amount they collect from this source is more than they have ever secured for rightful heirs.

MAILING MUSIC

EVERY few days I receive an inquiry regarding the American Music Publishing Company, 1658 Broadway, N. Y., and I have before me now their proposition in which they offer to pay 10 cents each for mailing circulars and music, that is, if you will send then $2.00 in advance for their material.

I receive so many inquiries regarding this company that many of our readers must have had some experience with them, and I would be glad to know what it has been, good or bad? Please let me hear from some of you who have sent them the two dollars which they seem so anxious to get.

OUR INSURANCE POLICY

EVERY day we are issuing an increasing number of accident policies through our arrangement with the North American Accident Insurance Company, which makes it possible for us to furnish any reader of The Business Farmer with a $1,000 accident policy for 75 cents in addition to the subscription price of our paper.

Two questions have been asked by a great number of persons, which we evidently did not answer in our announcement. One is whether the policy is limited in the location of the accident; in other words, does the policy protect outside of Michigan? The answer is, that it does cover the insured anywhere in the United States and would pay the benefits to the insured if he lived or if his estate if he died.

The second question asked is whether the company is a mutual company or the insured can be assessed any more than the original cost. The answer is "No", the company is a stock company, and the policies are non-assessable. The 75 cents covers the full cost of all the insurance guaranteed in the policy for the period of one year, and may renewed at the end of the year at the same price and will then give one hundred dollars additional insurance up to the fifth year, or a total of $1500. I will be glad to send a sample policy to any reader who will write me, and enough blanks to cover each member of your family. Any one between the ages of 16 and 70 can be covered by this insurance and we will issue as many policies as there are members of your family providing, you are a paid up subscriber to The Business Farmer.

I received my money back from the —— Shoe Co. and thank you for your kind assistance in this matter. I am sure I never could have got a settlement with them without your help.—F. L., Gowen, Mich.

The Collection Box

The purpose of this department is to protect our subscribers from fraudulent dealings or unfair treatment by persons or concerns at a distance.

In every case we will do our best to make a satisfactory settlement or force action, for which no charge for our services will ever be made, providing:

1.—The claim is made by a paid-up subscriber to The Business Farmer.

2.—The claim is not more than 6 mos. old.

3.—The claim is not local or between people within easy distance of one another. These should be settled at first hand and not attempted by mail.

Address all letters, giving full particulars, amounts, dates, etc., enclosing also your address label from the front cover of any issue to prove that you are a paid-up subscriber.

THE BUSINESS FARMER, Collection Box
Mt. Clemens, Mich.

Report Ending July 31, 1923

Total number claims filed	2315
Amount involved	$22,325.43
Number of claims settled	838
Amount secured	$12,605.06

First Mortgage Real Estate Gold Bonds

First save, then invest safely in Federal first mortgage bonds. That is the way to acquire independence.

Write for Booklet AG914

Tax Free in Michigan
Free from Federal Income Tax of 4%

6½%

FEDERAL BONDS
Are Better Bonds
(914)

FEDERAL BOND & MORTGAGE COMPANY
FEDERAL BOND & MORTGAGE BUILDING, *DETROIT*

Send No Money!
2 PAIRS HOSE FREE
Boys' $1.73
Little Gents $1.63
Men's $1.83
CHASE SHOE CO. Dept 198 Minneapolis Minn.

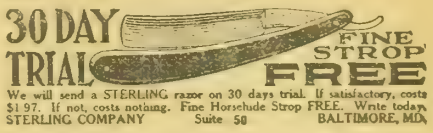
Think of it, men! Genuine Tan, Grain leather Scout Shoes built with solid Grain leather insoles and Oak tanned leather outsoles! An out-and-out good Quality shoe at this unheard of bargain price, and 2 pairs of good Hose Free Hose free with men's shoes only.
No. Q-0966 —SIZES 6 to 12 ....$1.83
Send no money—just give name, address, size and number of shoe. Pay only our bargain price and postage on arrival.

Boys' shoes just like Dad's.
Same shoes as those above but in smaller sizes. Parents will save money buying their boys' shoes right NOW!
No. Q-9661--Boys' shoes, sizes 1 to 5½. Price $1.73
No. Q-9660--Little Gents', sizes 9 to 13½. Price $1.63
Send no money—just name, address, size and number.
If not satisfied return shoes and we'll return your money.

GET MOST FOR YOUR DOLLAR NOW!
GALLOWAY

BUY NOW
Highprices are busted, my wonderful bargains are surprising everybody, they bring back the old time 100 cents value to your dollar. Get Galloway's new low prices and save one fourth to one-half
THREE BIG BARGAINS
Cream Separators, Engines, Spreaders and other farm necessities never were so cheap, terms were never easier, dollar values never were as big as Galloway offers now. Prices cut clear to the bone, which means two articles for the price you usually pay for one.
Big Jumbo Lucky Pencil and latest book of bargain FREE. Write.
WM GALLOWAY COMPANY
Box 367 Waterloo, Iowa

TAKE THE D. & C. WATERWAY trip to Buffalo. Restful, economical, all conveniences.



We will send a STERLING razor on 30 days trial. If satisfactory, costs $1 97. If not, costs nothing. Fine Horsehide Strop FREE. Write today.
STERLING COMPANY Suite 50 BALTIMORE, MD.

HELP WANTED

YOUNG OR MIDDLE AGED WOMAN wanted for house work in small family in new home near Detroit. No washing or ironings. Highest wages. Address, MRS. HARLEY D. WARNER, Farmington, Michigan.

CORN HARVESTER

CORN HARVESTER CUTS AND PILES ON harvester or windrows. Men and horse cuts and shocks equal Corn Binder. Sold in Every state. Only $25 with fodder tying attachment. Testimonials and catalog FREE showing picture of harvestor. PROCESS HARVESTER CO., Salina, Kansas.

The Farm Home
A Department for the Women

Edited by MRS. ANNIE TAYLOR

DEAR FOLKS—State Fair time is here and with it all the year's labor and the feeling that your work is well done. I cannot tell you in words how much I feel the State Fair has for us all. Every detail is worked out to the best advantage for us by the folks in charge.

I would just love to have all my readers send in to get all the information possible and send in your work, whether it is sewing, cooking, or raising some special product. Remember this is your Fair and we all want to come down. Make it a lark and just treat yourself to the vacation of one or two or more days. There will be so much for you to take home in knowledge gained by seeing what others have accomplished.

I want to thank our many readers who have so generously responded to the helping of our deaf reader.

Your Friend,
Mrs Annie Taylor

Address letters: Mrs. Annie Taylor, care The Business Farmer, Mt. Clemens, Michigan.

A MIDSUMMER SONG

O, Father's gone to market-town, he was up before the day.
And Jamie's after robins, and the man is making hay,
And whistling down the hollow goes the boy that minds the mill,
While mother from the kitchen-door is calling with a will:
"Polly—Polly—The cows are in the corn,
O, where's Polly?"

From all the misty morning air there comes a summer sound—
A murmur as of waters from skies and trees and ground,
The birds they sing upon the wing, the pigeons bill and coo,
And over hill and hollow rings again the loud halloo:
"Polly—Polly—The cows are in the corn,
O, where's Polly?"

Above the trees the honey-bees swarm by with buzz and boom,
And in the field and garden a thousand blossoms bloom,
Within the farmer's meadow a brown-eyed daisy blows,
And down at the edge of the hollow a red and thorny rose.
"But Polly—Polly—The cows are in the corn,
O, where's Polly?"

How strange at such a time of day the mill should stop its clatter,
The farmer's wife is listening now and wonders what's the matter.
O, wild the birds are singing in the woods and on the hill,
While whistling up the hollow goes the boy that minds the mill.
"But Polly—Polly—The cows are in the corn,
O, where's Polly?"

—Richard Watson Gilder.

THRESHING LETTER

The following letter is just full of ideas and suggestions and although the threshers have been in some of our counties, some are just starting and others are still at it. I took a trip thru the southern part of our state and it made me so happy to see all the crops so plentiful and the threshing going on. I thot of our letters and realized how busy every one of my readers were. I think Mrs. Jewett has sent in a nice long newsy and practical letter:

I HAVE read the Home Department of the Business Farmer for a long time with great interest, and as we are now asked to write our experience in simplifying the work of the threshing season, I will suggest a few little things which I have found helpful.

If threshers are known to be on the way, bake cookies and doughnuts the day before. They will keep nicely in the cellar. Also bake bread if possible, although if one lives near a town the bread may be bought. It is a little more expensive but a considerable saving of labor. Also have a good big mess of beans looked over and ready to cook. Then on the day the threshers come one can put the beans over to cook the first thing after breakfast, and at the same time start a roast, or a boiled ham. Ham may be easier to get if one lives some distance from market as it will not spoil as easily as fresh meat. Then clear away the kitchen work and set both kitchen and dinning room in order. There will then remain little to prepare except pies and potatoes. Even pies may be prepared the day before if made of mince or some material which does not soak the crust.

In setting the table place a cup and saucer and a glass by the side of each plate, and put the plates around so that food may be passed and coffee or tea, and water distributed with the fewest possible motions. sometimes in hot weather the men enjoy cold tea, which of course must be started in the morning and if this is served only glasses are needed which saves on the dishwashing.

Do not serve many things which require individual dishes, but sometimes when there is little time to prepare, a rice pudding will take the place of pie.

Place in large pan about 1½ cups of rice, or 2 cups if the cups are small. Cook in hot salted water until tender. Fill the pan with milk, sweeten and flavor to taste, add a cupful of raisins, stir well and bake slowly 2 or 3 hours or until of the consistency of thick cream. This is hearty, and the only trouble I have ever had is in getting enough of it. If one has been able to bake the day before their pies and fried cakes will be pastry enough for dinner and cookies and friedcakes for supper, or one may use cookies for supper and add a sheet of fresh gingerbread baked during the afternoon.

If there has been no notice, a rice pudding and a sheet of gingerbread will make a quick and satisfactory dinner dessert. Cook enough potatoes at noon so that you can warm them over for supper.

Creamed potatoes are nice; also have enough ready for breakfast if you are to have the men over night. The cold baked beans left from dinner are also acceptable for supper and breakfast, as I have found that the men do not require a great variety, or fussy food but they do want a reasonable number of good hearty dishes—well cooked and enough of it. A sour cream cake may take the place of gingerbred—made by mixing together 1 egg, 1 cup thick sour cream, one cup sugar, 1 teaspoon soda (level), one teaspoon ginger or nutmeg, stir rather thick with flour. This is quick and good.

For ordinary meals cook things in the same kettle as much as possible—for example: a head of cabbage and a piece of salt pork boiled together is an easy dish that the men like.

Hoping some one may find in this long letter some little thing that will help, I am, Mrs. Alton L. Jewett.

SHORT CUTS FOR THRESHING DAY

I ALMOST always include baked beans in my menus for threshers. We find in our neighborhood that the men always prefer them to other vegetables. There is no need to stand over the stove so many hours making fancy dishes. A well-balanced wholesome meal is always relished most. Here is one of my favorite dinner menus. Mashed potatoes, beef loaf, baked beans, bread, butter, coffee, cottage cheese, cold sliced tomatoes, sliced cucumbers, jam or jelly, apple pie.

Here is my favorite cake receipt: 1 egg, 1 cup brown sugar, 1 cup sour cream, 1 teaspoon soda dissolved in cold water, 2 cups flour. Season with spices according to taste. I use a little nutmeg. When cake is baked and cool enough frost with brown sugar frosting made with 1 cup brown sugar with enough cream to dissolve. Let boil until it will make a soft ball when a little is dropped in cold water. Take from fire and beat until right consistency to spread on cake. Cake stays moist a long time.—Mrs. LeRoy Thrush.

Mothers Problems

BE POLITE TO THE CHILDREN

JUST because a child ought to shut the door when he is told to, or ought to run up stairs after a handkerchief, or ought to do every one of a dozen of things he is asked to do in the course of a day, is no excuse for the parents to neglect to say, "Please" and "Thank you" to him. Nine times out of ten the very parents who are issuing orders all day long without the polite prefix, "Please" or the courteous, "Thank you," are the ones who are most insistent that their children speak politely to them!

The time may have been when children were expected to bow to the will of the parents, like slaves before their masters, but that attitude is no longer taken. Children, nowadays, have rights, just as grown-ups have. If courtesy demands that children say "Please" and "Thank you" to their elders, it also demands that the fathers and mothers use the same terms to their children.

Then, too, there is no greater teacher than Example. If father and mother speak politely to each other and to the children, it will come natural to the children to reply in kind. Away from home they will still retain those little courtesies of speech which it has become almost second nature for them to use. On the other hand, the child forced to speak politely to parents who never speak politely to him will quickly forget to be gracious and courteous when the parents are out of hearing.

"Please" and "Thank you" are but little words, yet they can matterially lighten the heaviest tasks. Even a little two-year-old will glow warmly if thanked for the performance of some tiny task, and the hardest-headed man will experience a tiny thrill if genuinely thanked for some performance of duty.

We all delight in polite children: we take pleasure in their very presence. But politeness is not reserved for them alone. It is right for you to be polite for them: also it is good example.

TEACH CHILDREN TO BE CAREFUL

TEACH your children early the need of being careful. Accidental deaths are the hardest in the world to bear, not so much because of the horribleness of them as because of the needlessness of most of them. By far the larger percentage of such deaths are the result of ignorance or carelessness. We cannot always prevent the carelessness, but we can prevent the ignorance.

Accident prevention should be taught by example at home. Are you, yourself, careful? For the sake of the children, learn to be, if you are not. When you strike a match, be careful not to strike it near some flimsy drapery or clothing, and when you are through with it, blow it OUT, and then throw it in the stove or metal receptacle made especially for burned matches. Bright little eyes are always watching and unconsciously absorbing your ways of doing things.

Occasionally let the children light matches for you: it will satisfy their craving to handle fire, and at the same time, under your guidance, it will accustom them to the handling of it.

If you refuse to start fires with coal oil, telling your children how dangerous you consider such a practice, they will not be tempted sometime when you are away to hurry up a slow fire in this way.

Be careful with scissors, knives and other sharp implements. Have a safe place to keep them and return them to it when not in use. If firearms are handled use every precaution to avoid accidents and explain the reason for your carefulness.

Boys must be boys: they must climb trees, chop wood and go in swimming. To curb those impulses is to kill something vital in the boys make-up. A wise mother will not forbid, but, with all the wisdom of her years she will endeavor to teach her children to be careful—and she will begin when her children are but little tots first getting their taste aroused for fire and water, sharp

Personal Column

Are the Bobbed Heads Alright?—I am giving you two of our readers ideas on bobbed heads and I feel they are right on this subject. If anyone feels differently I would like to hear from them.

Dear Mrs. Taylor:—As to bobbed haired girls. Now I'm practically an old woman in looks, but I do not feel old or act old in my work, out of doors or in, but I'm not old enough but that I can realize that times are just as good morally among our girls and boys as they were 25 years ago. I am dull tho in not being able to see why there is such a howl about bobbed hair for the young people. After a good swim, the hair is soon dried, which also applies to a shampoo, tangles are scarce, and on dress ocassions the hair that was cut off and made into a switch or puffs, etc., can be used to help out in dressing the hair as pre-bob, if we were accustomed to that style, or would make up our minds to look at the motive for the act of bobbing their wouldn't be so many bad (?) girls. And knickers is another awful (?) style. Men used to wear long flowery garments. Why did they discard them? Is a person a criminal because he or she wants to dress for comfort?—Mrs. Lillie Smith.

Dear Mrs. Taylor:—What's all this controversey about bobbed heads? Surely bobbed hair does not contribute to immorality. Would we want little girls scarcely in their teens to have skirts reaching nearly to their ankles, long sleeves, (as it was considered immodest to show their elbows,) as they dressed years ago?

Now with the sanitary dress reform, why not let them have their hair bobbed, if they prefer it, and it is so much easier to take care of it, besides it adds a more youthful appearance. And who knows more than a mother, that one gets old soon enough. But wait maybe they will allow us to bob ours too.

Why can't comfort, freedom and modesty be combined, to make the girls happier? And surely they feel happier if they don't have to look different from the rest. I have three growing girls and with their moral and spiritual welfare in mind, have no fear, they would be any more indescreet in thought or action, than with long unsanitary locks. I do know that since bobbing eleven year old daughter's hair two weeks ago, she is able to take care of it, without any assistance from me, and considering the help it is when getting ready to go away, I would not change for anything. Her hair is very fine and snarls easily and the daily task of caring for it, wasn't a joy by any means.

Let us hear from other mothers.

Now just a word for the Woman' Department. Its the best ever, and touches on nearly every subject of interest to the busy housewife.—Mrs. E. L. Johnson.

Suggestions For The Home.—I always turn eagerly to the Farm Home page of the Business Farmer. There it seems is always one full page. So many helpful things in it. I like its atmosphere, its christian spirit. Of course it is selfish to be always taking from it and never giving so I'm going to try to help it on. I'm enclosing some ideas I would like to pass on and hope they will be worthy of publication.

On hot days when the busy housewife wants as little heat as possible in the house, set a clean tub out in the sun and fill with water you wish to use for washing dishes. If set out in the morning it will be warm enough to wash both dinner and supper dishes. It will then take only one burner to heat the scalding water to rinse with. In summer when windows need to be washed so often I find it a great help to use an old piece of gingham cloth (or any kind that has no lint) to wash with. When windows are clean I wring the cloth as dry as possible and wipe them off. Be sure to change the water often so that the windows will not be streaked. This saves the labor of wiping with a dry cloth and polishing so long. You would be surprised how nice the windows look when dry. Youngsters always wear the seat and legs of underwear and panties out first before the tops. To save making buttonholes cut off lower parts well above worn places and make new bottoms and attach to old uppers. The uppers will wear as long as both lower parts. Mrs. LeRoy Thrush.

A Reader Expresses Appreciation of Home Department.—Truly we enjoy the M. B. F. very much. I think the Home Department real interesting. Where we have the chance to discuss our ideas. I like to read the letters from the sisters in regard to our homes which I feel we need so much these days, on how we bring up our children. Of course I love to see them have good times but have it in the right way and in the right company. I feel we mothers ought to be one of them in their plans of pleasure as well as work. I do not believe in bringing up children in idleness, see that they have an amount of work to do, for the children can save so many steps which helps mother so much. I will close with a real good bun recipe:

One cup of can yeast, one scant cup of sugar, one-half cup of lard, two cups of warm water, pinch of salt. Stir this all together in the morning and add enough flour to mix a stiff loaf. Let this raise till evening then roll out on a board as tools and speed.

you would biscuit, one-half inch thick, cut the same and place in greased pans free from each other. Let raise until morning then brush the tops with sweet milk before baking. This will make thirty buns and are very good for lunches.—Mrs. T. V. W.

Cottage Cheese For Marketing.—I wish to make cottage cheese at home to sell. Will you be kind enough to send me a recipe for making and how to prepare it for market? What should I charge for it?—Mrs. L., Cedar Springs, Mich.

—To make cottage cheese take one quart of thick sour milk, two teaspoonfuls of butter, one-fourth teaspoon salt. Heat the milk in a stew pan or double boiler; as soon as the curd separates from the whey, strain the milk through a cloth. Squeeze the curd in the cloth until rather dry. Put in a bowl and with a fork mix it to a smooth paste with the butter, salt and cream. Cheese should not be cooked long enough to make it tough but should have a smooth feeling when pinched with the fingers. I would suggest that you make it the day before or early the morning you take it to town and the cheese should be kept very moist. One of the chief reasons for buying cheese from the creamery is because they keep their cheese so moist. It sells for ten cents a pound.

Please Send Stocking Pattern.—We would like stocking pattern, Mrs. D. Mc., that you mentioned in your letter telling about the cap for large ears. All these practical suggestions are needed by our readers.

The Runner's Bible

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Agree with thine adversary quickly, while thou art in the way with him; lest at any time the adversary deliver thee to the judge, and the judge deliver thee to the officer, and then be cast in prison. Verily I say unto thee, thou shalt by no means come out thence, till thou hast paid the uttermose farthing.—Matt. 5;25-26.

When any difference arises between another and yourself, if possible agree with him at once, surrendering, if necessary and at all consistent, your claims. It is important that you do not offend him. The value you put upon some material condition may become a stumbling block in his pathway to higher things. Show him instead, that your faith in God tell you that man cannot take away from you anything which God cannot give; and that peace of mind is really the one most desirable possession upon earth. If, on the contrary, you do strive merely for the sake of gaining your own point, you will pay a very dear price for it in the end.

RECIPES

One Good Turn Deserves Another.—As I have got so many of my best recipes from the M. B. F. it is hard to pick any to send you but here are some which I have found good elsewhere.

Cup Cakes.—Break two eggs in a cup finish filling cup with sweet milk. Into a bowl sift one cup flour, one cup sugar, one rounding teaspoon baking powder, then pour contents of cup into dry mixture and beat hard then add two tablespoons lard or butter and beat well.

Apple Sauce Cake.—One cup granulated sugar, one cup apple sauce, one-half teaspoon cinnamon, allspice and cloves, one-half cup shortening, one egg, one teaspoon soda, one-half cup nuts, one-half cup raisins, one and three-fourths cups flour. Cream the butter, add sugar and apple sauce, mix spices, and soda with flour. Add raisins and nuts which have been floured to first mixture. Then add dry ingredients.

Coffee Jelly.—One pint coffee, three tablespoonfuls sugar, bring to boiling point together. Add three tablespoonfuls powdered gelatine. Strain, put in molds and serve with whipped cream.

Chocolate Cake.—Yolk of one egg, one-fourth cake of unsweetened chocolate, one-half cup milk, cook until thickens over water, then cool and add one cup sugar, one tablespoonful butter (cold), one-half cup milk, one small teaspoon soda, one teaspoon vanilla, one and two-thirds cups of flour and one teaspoon baking powder. This makes fine loaf cake for any occasion.

Hermits.—One cup sugar, two-thirds cup lard, one cup cream not too rich, one cup raisins, two cups flour, two cups oatmeal, 1 tablespoon salt, soda, cinnamon, nutmeg, two eggs. Drop with spoon, pat out with fork.

Layer Cake.—Three eggs, beat white very light, butter size of large egg, beat yolks together, one large cup of sugar, ten tablespoonfuls cold water, add beaten whites, two tablespoonfuls baking powder, flour enough for medium dough. For center layer add two tablespoonfuls of molasses, a pinch of soda, one tablespoonful sour milk and a little flour.

Macaroni Salad.—Three cups of cooked macaroni, one bottle olives or a few cucumber pickles cut fine, three hard boiled eggs. Mix lightly with salad dressing. Garnish with lettuce or parsley.

Salad Dressing.—One teaspoonful salt, one teaspoonful mustard, one tablespoonful sugar, one tablespoonful flour, a little cayanne or paprika, yolks of two eggs, one and one-half tablespoonfuls melted butter, one-fourth cup vinegar, three-fourths cup of milk. Mix dry ingredients, then add yolks and butter. Stir thoroly, then add milk and vinegar. Cook over hot water.—Helena M. Sutphen.

Pear Butter.—Pare and core pears, cook until tender in a very little water. Strain through a colander. To each gallon of pulp add about two pounds sugar, one scant teaspoon ginger, and two lemons cut in small pieces, and the rind of one lemon, boiled separately until tender, also the water in which it is boiled. The lemon rind should be cut in small pieces. Stir well, and place in a common stone crock. Bake slowly until thick. Can and seal while hot being careful to have all air bubbles out of the can.

Eggless Cookies.—One cup butter, one cup lard, two and one-half cups white sugar. Cream together. Add two cups buttermilk (or sour milk), two level teaspoons soda, and one rounding teaspoon baking powder. Mix to a soft dough. They may be varied by the addition of chopped raisins or nuts.—Mrs. Alton L. Jewett.

Fruit Cookies.—Four eggs, two cups brown sugar, scant one-half cup butter, one cup raisins, one cup currants, one teaspoon each of cinnamon, nutmeg, soda, pinch of salt, three cups flour. Mix and drop in small teaspoonfuls. Cream sugar and butter together. Mix in dry ingredients, beat eggs light and stir in last. This makes about thirty-six medium cookies.

Curing Salt Pork.—This is a good recipe for curing pork. Everyone says the fat is as good as the lean. Ten pounds salt to each one hundred pounds of pork, 3 pounds sugar, two ounces of salt petre, two ounces black pepper. Boil all together except pepper stirring often, skim and add pepper. Pour on meat boiling hot. We rub each piece of pork lightly with salt before packing in barrel and we also smoke barrel with corn cobs. This adds to the flavor.

For Pears, Peaches or Sweet Apples.—Take ten pounds fruit, five pounds brown sugar, two quarts vinegar slightly weakened, two tablespoons cinnamon, one tablespoon cloves. Tie in muslin bag. Boil vinegar and sugar with spices until sugar is dissolved. Then put in fruit and cook until transparent being careful not to cook too soft. Seal in jars.

Cucumber Relish.—Twelve large green cucumbers chopped fine and drain over night in one-half cup salt, four large onions, four green peppers, one-half cup grated horseradish, one tablespoon white mustard seed, one teaspoon celery seed, one cup sugar, cover with vinegar and seal.—Mrs. C. T. M.

GRANDMOTHERS DISHES

I would like to see printed in the very good Business Farmer some good recipes for mothers' and grandmothers' days so I will begin by sending you a few used in our childhood days.

Farmers Rice.—Heat to boiling point one and one-half quarts of sweet milk in which have been added salt, pepper, and a small piece of butter. Have ready one and one-half cups of flour, in which one egg has been stirred till it is in small particles, add to milk, let boil up once, and it is ready to eat. Can add some sugar, which improves it.

Pap.—One quart sweet milk, one tablespoon sugar, salt and pepper to taste. Bring to boiling point. Have ready one level cup flour in which one cup sweet milk has been stirred to make smooth batter. Stir in boiling milk, boil one minute and serve. Can be eaten with milk and sugar or as it is.—Mrs. M. A. K., Kalamazoo, Michigan.

DISH FOR HOT WEATHER

I'm sending a recipe for the hot weather days which needs no fire and we think very good:

Apple Salad.—Pare as many apples as required and slice. Then dice in small pieces with cutter, add enough vanilla and sugar to suit taste. In another bowl make a thickening of flour and cream as for gravies. With apples, dates and nut meats are fine. Over apples, dates and nuts pour your thickening and stir thoroughly. After add whipped cream if desired. This may be served at once, to be eaten with other vegetables. For two I use from five to six apples, about two teaspoons vanilla, one-fourth cup of sugar (more if sour apples are used) snow apples preferred, 4 tablespoon flour and cream enough for thin batter. We like your paper very much and look forward to its coming. Love to all.—Mrs. P. C. K.

—if you are well bred!

Christening Ceremonies.—Formerly the persons who called to congratulate the happy possessor of the new boy or girl were offered mulled wine and plum cake. But now-adays one can have light refreshments for any callers. A plate of cookies or lemonade, or cider in the fall.

A baby should have at least one godfather and one godmother and these be chosen with care as it is considered a great compliment to be asked to hold this position.

In old countries this relationship lost thru life, kindly help and counsel being given to the child by the godfather—even to adoption in many instances, should the parent die.

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Famous for Flavor

Poor bread for dinner won't help out Friend Husband's disposition after a hard day at the office. Neither will medium good bread. But an excellent bread, a bread that is delicious to the taste, good to eat, and satisfying all the way through brings forth a smile where only a grouch grew before.

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A GOOD RECIPE FOR NUT BREAD

1 egg, 1 cup sugar, 1 cup sweet milk, 1 teaspoon salt, 1 cup nuts, 4½ cups Lily White Flour, 4 level teaspoons baking powder. Mix well and let stand twenty minutes in two pans nine inches long, four and three-quarters inches wide, three inches deep. This amount just fills these two pans. Grease pans and over top of loaves with melted butter; bake in moderate oven until done. (Use one-half cup of flour to knead in soft dough.)

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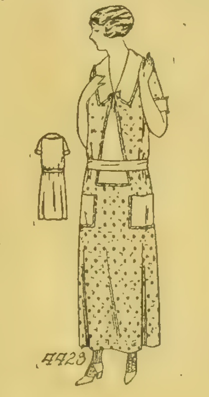
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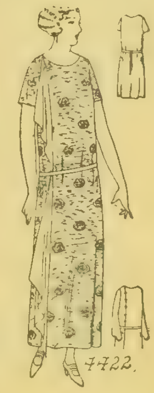
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4426. A Popular House Dress Model (with Inserted Pockets.)—The slenderizing features of this style, will appeal to the stout woman, while the practical points will make the style attractive to all figures. Figured percale with trimming of mercerized poplin is here shown. Gingham, with an edging of rick rack would be good—or, damask, with organdy for collar and cuffs.

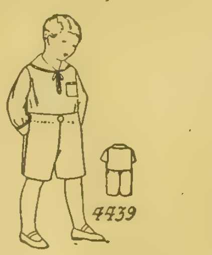
The Pattern is cut in 7 Sizes: 36, 38, 40, 42, 44, 46, and 48 inches bust measure. A 38 inch size requires 5 yards of 32 inch material. To trim with contrasting material as illustrated requires ⅝ yard. The width of the skirt at the foot is 2½ yards.

4422. A Pretty and Becoming Frock.—Embroidered voile, or crepe could be used for this model. The drapery may be of self or contrasting material. As here shown figured foulard was used, with georgette for the drapery. The sleeve may be in wrist length, or short as illustrated in the large view.

The Pattern is cut in 7 Sizes: 34, 36, 38, 40, 42, 44, and 46 inches bust measure. A 38 inch size requires 5 yards of 40 inch material. To make the drapery of contrasting material requires 1¼ yard. The width at the foot is 2½ yards.

4428. A Pretty Frock for House or Porch.—This is a simple one piece model with centre closing under the plastron. Percale with trimming of linene would be attractive for this style. Gingham too could be used, or crepe.

The Pattern is cut in 7 Sizes: 34, 36, 38, 40, 42, 44, and 46 inches bust measure. A 38 inch size requires 5 yards of 36 inch material. To trim as illustrated requires 1 yard. The width at the foot is 2¼ yards.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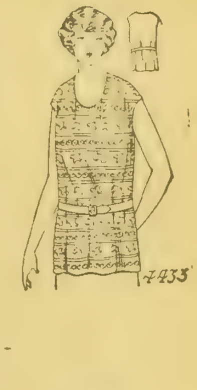
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4444. A Dainty Frock for A Little Miss.—Grace and attractive lines are here portrayed. This is a good style for linen, jersey cloth, silk, or voile.

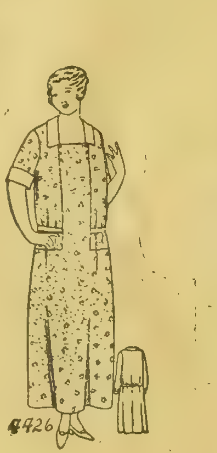
The Pattern is cut in 4 Sizes: 4, 6, 8, and 10 years. A 6 year size requires 1⅞ yard of 36 inch material. A pleasing development would be mustard color jersey cloth with embroidery in green yarn. Or white linen or crepe with cross-stitching in blue.

4439. A Good Play Suit for a Small Boy.—To be comfortably dressed, adds much to the joy of your boys playtime. This suit is easy to develop, and is suitable for flannel, linen, gingham and khaki. For warm weather, pongee or lineue would be attractive.

The Pattern is cut in 3 Sizes: 2, 4, and 6 years. A 4 year size requires 2⅜ yards of 32 inch material.

4433. A Popular Style.—This is a splendid sports model. It lends itself well to jersey weaves, and to silk, or linen.

The Pattern is cut in 7 Sizes: 34, 36, 38, 40, 42, 44, and 46 inches bust measure. A 38 inch size requires 2⅛ yards of 32 inch material.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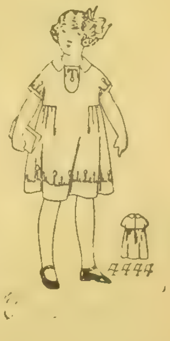
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The Children's Hour

A FEW RIDDLES AND THEIR ANSWERS

What does a marble do when it stops rolling?—Looks 'round.

How does the water get into the watermelon?—By its being planted in the spring.

Where did the cock crow where all the people in the world could see him?—In Noah's Ark.—Golden.

Where was Washington when he blew the candle out?—In the dark.

Where did Noah strike the first nail in the Ark?—On the head. (I wonder!)

What tree catches cold?—The ho(a)rse chestnut.

Why is an island like the letter "T"?—Because it is in the middle of "water,"

If you threw a man out of a window, what would he be certain to fall against?—His will.

Who whistled the first tune and what was it?—The wind whistled "Over the Hills and Far Away."

If a barrel weighs 10 pounds empty, what can you fill it with to make it weigh seven?—Holes.

Why are hogs like trees?—They root for a living.

Dear Uncle Ned:—May I join your merry circle of happy boys and girls? I have been a reader of the Children's Hour for three years, and at last I have decided to write. My father takes the M. B. F. and likes it real well. Daddy and two of my brothers are working our two farms and pasturing cattle on another. We have twelve acres of potatoes this year. Uncle Ned have you ever been to Florida? Mother and father went there once to spend the winter. Daddy got dreadfully sick on account of the change of climate. I guess Michigan beats all other states for being healthy. Don't you think so Uncle Ned? There are six of us children in the family, three boys and three girls. My oldest brother is eighteen, his name is Ralph. Next is Edna, she is sixteen years old, she is spending the summer at Bert Lake. She stays with grandma. Next is myself, I am twelve years old and will be thirteen the second of August. Warren is eight, Corlista ten, and Ferris eight. We have twenty-seven head of cattle, six head of horses, some pigs and some pet pigeons. We have a large red barn and a five-room bungalow. Uncle Ned and cousins excuse my selfishness for taking up so much space, but I tried to get all in one letter. I will write and tell you the rest sometime if Uncle Ned doesn't mind. I would like to hear from some of the boys and girls.—Ruth Kilpatrick, R. F. D. No. 1, Severing, Michigan, in care of Nathan Kilpatrick.

—Florida is one state where I have never been. But from what traveling I have done I am sure Michigan is the best state in the Union.

Dear Uncle Ned:—Was just reading the Children's Hour and thought I would write. I am corresponding with another girl who is also 16 years of age and her birthday is on the 15th of April as mine is. Aren't the woods beautiful now, Uncle Ned? I think they are lovely. I went for a drive through the forest today and enjoyed the trip very much. We have two pairs of canaries and one pair of mocking birds in our yard. They are always singing early in the morning. I love most kinds of birds and also there are some I hate too. Harry Rescoe, I will try and answer your riddles, the 1st, Eleven hung, the man's name was; 2nd, egg in side of duck; 3rd, the wind; 4th, a bell; 5th, an old-fashioned flat iron. I always watch the children's Hour for riddles and ask the family. That is if I get the paper first. How many cousins like nature? As soon as the snow goes off I get spring fever and nothing will help but to get out to the woods with Mother Nature and her butterflies and birds.—Elsie L. Mahler, R. 1, Harbor Springs, Michigan.

—I too love nature and enjoy nothing better than a stroll through the woods, especially when a stream flows through. Write often.

Dear Uncle Ned:—May I join your merry circle? I have been a silent reader of the M. B. F. for some time, so I thought I would write. I will describe myself: I am 16 years old, four feet and eleven inches tall, dark complexioned, gray eyes and medium brown hair. I live on a sixty-acre farm. We will be three years this coming December. We have sixteen head of cattle, two horses, one sheep, five pigs, two cats, one hundred and fifty chickens, nineteen turkeys and seventeen ducks. For a pet I have a sheep named Betty. I have five brothers and two sisters. I must close. Your neice,—Maxilla Riggs, R. 1, Box 53, Lake Ann, Michigan.

Dear Uncle Ned:—May I join your merry circle? I have been a silent reader of the M. B. F. for a long time. I am 4 feet 10 inches tall, have light brown hair and brown eyes. My hair is bobbed but I am letting it grow out. I will be 14 years old on the 22nd of October. Have I a twin? If I have I wish they would write to me. I am in the 8th grade at school. I live on a 120 acre farm in Northern Michigan. We have 7 head of cattle, 4 head of horses. We have about 10 acres of oats, they stand 4 feet tall in some places. We have clover that is 3 feet tall. It is raining. This season we have Wintergreen berries. Won't you come up and help me eat them, Uncle Ned? I have 6 sisters and 2 brothers. They are all married except one. I will close with some riddles. Who guesses these riddles will receive a card. What must you add to nine to make it six? Why is a room full of married people like an empty room? I believe the answer to Phyllis Gibson's riddle is "Yet" is a man's name. Will close hoping to hear from some of the cousins. Your neice,—Edith Merritt, R, 3, Harrison, Michigan.

—I would like to help you eat those wintergreen berries but as you live quite a ways from here I am afraid I will have to decline your invitation, but I thank you for it. Can you eat some for me?

Dear Uncle Ned:—I have written before, but I thought Uncle Ned would not care if I wrote again. Do you Uncle Ned? I am visiting my aunt and uncle for a while. I have been here since Sunday. I am going home tonight. I have been driving my uncle's car. I am going to drive it home tonight. Next week I am going to have company from Grand Rapids for a week and then my sister and I are going home with them for a week and then they are going on a long trip. Uncle Ned, where are you going on your vacation this summer? The last time I wrote there was two girls wrote to me. Their names were: Jane Mark and Mildred Nailure. I have written to Jane but not to Mildred because I lost her address. Will somebody please write and tell me her address? I would be very pleased to receive it. Before I close I will describe myself. I have light brown bobbed hair and have a light complexion and blue eyes. I am 12 years old and in the 7th grade. Well I will have to close now hoping some of the girls and boys will write to me. Your neice.—Ruth Nelson, R. 2, Grant Michigan.

—I am glad to hear from you again and hope you will write whenever you are in the mood for writing letters. I have not decided where I will spend my vacation this year.

Dear Uncle Ned:—I've written twice before and saw one of my letters in print. Although I have been a silent reader for sometime, that drawing contest that you intend to start interests me very much as I like to draw. I not only draw but also paint. I give most of my pictures away though. My teacher receives most of them for I feel as though I owe him very much. I always see so many interesting letters printed that I feel like writing to the writers but I'm always too tired at night as that is about the ouly time I get a chance. I haven't described myself and don't care to do so. If anybody is interested in me why not write me. I'm waiting impatiently for those apples to ripen. We were blueberry picking this week and had a most delightful drive through the woods. In the evening we went wading. I tried to swim and hit my foot against a stone that I did not see. Also stepped in poison ivy, but even so I'd like to go again. Hoping now that the drawing contest will soon be started I remain, A sincere friend,—Hedwig Bucholz, Elkton, Michigan.

—I had no idea that there were so many young artists who were members of the Children's Hour. We must have the contest soon. In the meantime you can all send in drawings to me if you wish, I will enjoy looking at them.

Dear Uncle Ned:—May I join your merry circle? I have been a silent reader for some time, so thought I would write. I will describe myself: I have light brown hair, am eleven years old and in the sixth grade. We live two miles from school and it is a pleasant walk in the summer time. I think the answer to Gladys Harris' riddle is a news paper. I live on a farm of 160-acres. For pets I have a dog named Bud, a cat named Nig and a pony. We have lots of fun with the pony. Will some of the boys and girls write to me? I will answer all letters. Your neice,—Marion Cox, Kinde, Michigan.

Dear Uncle Ned:—I have been a silent reader of the M. B. F. for a long time. May I join your merry circle? We are having nice weather aren't we? All kinds of flowers are in bloom. I like to go flowering. I think it is lots of fun. I live on a 160-acre farm, about two miles from Temple. I have about one mile to go to school. I am between 12 and 17 years old, the one that guesses my age will receive a long letter from me. I have four brothers and two sisters. For pets I have one cat named Tim, and one dog named Shep. Will close with love to all. Your neice.—Mary Schneide, R. R. No. 1, Harrison, Michigan.

Dear Uncle Ned:—I have been a silent reader for several years, so I think it is time I wrote, don't you think so? May I join your merry circle? Myrtle Taylor, Watronzville, Michigan, suggested having a drawing contest. That would be lots of fun. I for one sure would try. I would like to live up by Virginia Lehmann, R. 2, East Jordan, Mich., I would be in swimming all the time. I think I could live in the water. I'm like a fish. I am not going to write much this time. The Club song is just fine. I think Dorothy Postma, R. 1, Rudyard, Mich., is 13 years old. If I guess it right, don't forget, Dorothy Postma, be sure and write me a long letter. I would like to have some of the boys and girls write to me. I will answer all letters I get.—Edna McIntyre, R. 1, Kawkawlin, Michigan.

—We are going to have a drawing contest sometime soon.

Dear Uncle Ned:—May I join your merry circle? I am a farmers girl. My father takes the M. B. F. I like to read it. As soon as the paper comes I read the Children's Hour. I live on an 80 acre farm. We have 7 cows, 2 horses and a colt, 41 chicks, 29 big hens, and for pets I have 2 cats and a kitten. I like to have pets. My brother had two pigeons and the cats killed one, and the other one went away. It would always sleep with the chickens. I am thirteen years old and I have dark brown eyes and hair. Have I a twin? I wish some of the girls and boys would write to me. Well I will close now. Your neice,—Annie Stimac, Box 101, Engadine, Mich.

Dear Uncle Ned:—Hello! May I come in? I have written once or twice but did not see my letter in print. I wrote on the examination the 17th and 18th of May, and believe me I certainly was glad when I received my diploma. I will describe myself. I have medium brown hair, blue eyes, and I am 14 years old. My birthday is August 6th. Have I a twin? If I have, please write to me and I will answer. We went to Flint the 26th of June and then over to Corona. We drove through with a car. I just read in the M. B. F. the letter Harry Rescoe wrote. He said the one that could answer the most of the riddles he put in would get a present so I thought I would try. The first is, 12 left hanging because there were 12 pair, and they just took one of each pair. The answer to the next is water. The next is a wheel barrow, I think. The next is an old fashioned well. The next is an old fashioned flat iron. The last one is a violin, I think. How many have I right, Harry? Well I suppose I will have to go to supper. My brother went and got some strawberries for a short cake for supper. I wish you and cousins were here to have supper with me. I suppose you all like strawberry short cake. I will close with love and best regards, your neice and cousin,—Leona Green, R. No. 1, Prescott, Michigan.

—You bet I like strawberry short cake. And I am sure the one you made was very good.

Dear Uncle Ned:—May I join your merry circle. I have been a silent reader ever since my father subscribed last fall, and as I have never seen a letter in the M. B. F. from out here I thought I would try. I have often read that letters quite often hit the waste paper basket, but I hope this one escapes. Perhaps you would like to know something about my appearance. Well, I am 15 years old, and my birthday is May 11th. Have I a twin? I have brown hair, blue eyes and am 5 feet 5 inches tall, and weigh 114 pounds. Well how many of our cousins have already picked huckleberries? I have picked 16 quarts and we have forty-eight quarts of them canned, and my mother and sisters are out again today. Well I was just playing "Star of the East" on the organ, and remembered that Iris Arnold wanted the words so I'll close with a few riddles, and then copy the song. Write four nines so as to equal 100. When was beef the highest? Well I will close, I am your neice,—Cora Spartons, McBaine, Michigan, Box 48, R. 2. P. S.—The answer to Gladys Harris' riddle is a news paper.

—Thank you so much for sending the words to "Star of the East" to forward to Iris Arnold, but she has already received them from another cousin. I will hold them and maybe some other cousin will want them.

Dear Uncle Ned:—I have started to write two or three letters to you before, but they all reached my waste paper basket before they could find yours. I would like to become a member of the Children's Hour. I am fourteen years old and my birthday is the eleventh of May. Have I a twin? I wish some of the boys and girls would write to me. I live on a seventy-five acre farm. I have nine little chicks. We have a small patch of strawberries, and my but they taste good. I will close with a riddle. A man rode over London bridge, and yet, he walked. The one who guesses this riddle will receive a letter from me. From a would-be neice,—Olive Sanderson, Applegate, Michigan.

Dear Uncle Ned:—I am another reader of your paper who would like to join your merry circle. I am a farmer boy 13 years old, and have passed the eighth grade this year. I am very busy now while we are getting our hay in. We have 14 acres of corn, 6½ acres of potatoes, 19 acres of oats, 6 acres of wheat, and 4 acres of beans, so don't you think we have something to do? I do like to live on the farm where you can have all the good milk you want. You can have all the breeze there is on a hot day, while in the city you are cooped up in a factory all day long. In the country you can have fun feeding all animals and see how fast you can make them grow. Your nephew,—Harold Van Kampen, Remus, R. 1, Michigan.

—You certainly must be busy alright with all that farm work to do. However. I hope you find time every now and then to let us know how you are getting along with it.

Uncle Rube Spinach Says:

EQUAL RIGHTS FOR WOMEN

MRS. Sabila Nitti Crudelle is in the Chicago jail waitin' to be hanged October 12. Anna Buzzi, another woman, is in Auburn prison waintin' to be electrocuted when the state gits ready to snuff out her light.

Both women were found guilty of murder in the first degree. They are both supposed to pay the same penalty that a man pays for the same crime. An' yet from all over the U. S. goes out protests against the takin, the lives of these two women jest because they are women. Nobody doubts their guilt—there is no question 'bout that—but 'cause they are women they should not have their lives takin' from 'em.

'Course their victims are jest as dead as though they had been killed by men, an' they'll stay dead jest as long, but their murderers happened to be women. One wanted to marry and did marry the man who helped kill her husband. The other one killed in a spirit of revenge. No matter what the motive was, these women are murders jest the same, and why should women share a diff'rent fate than men convicted of the same crime?

Now I've got jest as much respect for women as any man could possibly have. I love 'em an' respect 'em for the womanhood an' motherhood that's born into 'em. They are the greatest mark of God's own hand, but, dear friends, when they so far forget their womanhood that they take the life of another human bein,' why should they not suffer the same penalty a man suffers for the same thing?

It's gettin' altogether too frequent that a woman snuffs out the life of a man jest to make her self free to marry some other man or to satisfy a spirit of revenge for some real or fancied wrong and then trust to a jury of weak minded or sentimental men an' women to let 'em go free.

After a few women have been put to death for murder—when the dear creatures learn that they can an' will be convicted of such awful crime, jest take it from me—there'll be less of shootin' an' poisonin' goin' on.

Women don't like hangin' any more'n men do—nobody likes to have it happen to 'em more'n once, but you an' I know how its been in the past. A woman could shoot a man into kingdom come an' go into court an' a jury would say "Not guilty" an' they come to look on murderin' a man as a sort of pasttime. Almost every daily paper tells us of some man bein' killed by some woman. We read of it at breakfast an' we read of it at supper, but how many women are ever punished for it?

Now I don't believe in takin' human life in any way. Don't believe the state has any more right than the individual to do it, but if it has the law to do it, then I sez serve 'em all alike—hang 'em all or else hang none. It's said that Mrs. Crudelle is a very homely woman an' a foreigner—too bad for her—mebbe if she'd been nice lookin,' the jury would have freed her—so much for bad looks. Nevertheless she is a woman an' if women are to go free for murder she should go the same as the good lookin' ones. If she is hanged, then every woman that commits murder in Illinois should hang also regardless of looks, or any other consideration. Now folks what do you think about the matter? Cordially yours, UNCLE RUBE.

THE LOGIC OF THE HEART

A SERMON BY REV. DAVID F. WARNER

TEXT: "Having the eyes of your heart enlightened."—Ephesians 1:18 a.

THE Revolutionary War was on. There lived than one Peter Miller, a Baptist minister. This man walked sixty miles to the city of Philadelphia to ask from General Washington the life of a man who had been sentenced to death for treason. But his plea seemed unavailing. Washington said he was sorry he could not pardon his friend. "My friend," exclaimed Peter Miller, "I have not a worse enemy in the world." And Washington asked in amazement, "Tell me why you walked sixty miles to plead for your enemy's life?" The minister said, "I am trying to carry out my Savior's commands." The general was so impressed with this genuine Christian spirit that he wrote out the prisoner's release and handed it to the suppliant When Mr. Miller put the release into his enemy's hands and he learned how it had been done, he broke down and shed tears like a child. The reasoning of the head failed, but the logic of the heart conquered the "Father of our country" and broke down the foe in penitential tears.

Looking at our scriptural context, we find St. Paul in prayer. How different from his Galatian letter! There, there is righteous vindictiveness. Here is mellowness, tenderness, sympathy. Why? Well, he writes from a Roman prison, chained and alone. When the deepest sorrows and shadows of life settle down upon us, then we have our profoundest reasonings and revelations. Longfellow was travelling in Europe when his young wife died. Soon after, he gave to the world his "Psalm of Life" and "The Reaper and the Flowers." In prison the great apostle is mystical, contemplative, brooding. Perhaps tear drops are wetting his manuscript as he writes, and hallowing it as a sacred missile to the churches. The inward, self-conscious Paul, the heart of Paul, is over at Ephesus praying.

"I cease not to make mention of you in my prayers," says this man of God. Why? But why do you pray for mother, YOUR mother? And why are her letters so welcome though written by a wrinkled and unsteady hand? The answer does not come from the head but out of the enlightenment of the heart. There is a heart intimacy with mother in faith and love. So there was between the apostle and these Ephesian saints: a quality of faith that made them one in sympathy and purpose, and a "love for all the saints." That is, not partial and selective, but a social love.

But what does Paul pray for? Not freedom from the prevailing persecution nor to have any material desire granted. But, that they might have the eyes of their heart opened. The sacred writer had come by a "spirit of wisdom and revelation" in the prophecies and mysteries of Christ and he would have others to see the "granduer and wealth of their religion." And all this inspiration must work "in the knowledge of God." The materialistic philosophy of Paul's day said "Know thyself," but the apostle was dealing in a philosophy which said "Know God." Without this, life is nil; life is hell. This knowledge will open up the eyes of the heart.

The other day a united church wrote into their covenant this declaration: "We believe that God has revealed himself in nature, in history, and in the heart." Certainly the knowledge of God in nature is fine inspiration. Some time ago, with some friends, I was motored over our Eastern mountains by way of the National Highway. We were rolled along over mountain tops and into lowland depths. Such a panorma of nature I had not seen before. Those great hills bounding the quiet valleys! Sometimes there were frowning chasms and then great warning rocks. Here and there were gentle slopes of green embroidered with herbage and laurel. And then, away below, were sleek cows feeding in luscious grass by cool, clear-water brooks, all unconscious of the granduer and divinity of those magnificient hills the eyes of my heart were feasting upon.

And so the poet hies away to the hills to muse, and the painter to paint. Here they get inspiration. Here there descend upon their souls visions of splendor and beauty, which are put into verse and placed on the canvas to bless future generations. The eyes of their heart are enlightened and there is given to them the spirit of wisdom and revelation of God in nature. The inspiring painting, "The Birth of the Prince of Peace" was done in the hills of old Bethlehem.

Now, it is our knowledge of a thing, what we put our soul into, that inspires us; even some of the most ordinary things. James Whitcomb Riley had the happy faculty of imparting the imaginative, poetic touch to the most common of things. Some years ago William Hawley Smith was reading some of Riley's poems to an Illinois audience. A typical American farmer, with his trousers in his boots and coat on his arm came into the well-filled hall and took a front seat. Smith read Riley's farm ballad, entitled "Clover." And the old farmer, forgetting himself and his surroundings, exclaimed "My God." Why? The divinity of his heart was stirred. So yours will be. Here is the poem:

"Some sings of the lily, and daisy, and rose
And the pansies and pinks that summertime throws
In the green, grassy lap of the medder that lays
Blinkin' up at the sky through the sunshiny days;
But what is the lily and all the rest
Of the flowers, to a man with a heart in his breast
That was dipped brimmin' full of the honey and dew
Of the sweet clover blossoms his boyhood knew?

I never set eyes on a clover field now,
Er fool 'round a stable, er climb in a mow,
But my childhood comes back just as clear and as plain
As the smell of the clover I am sniffin' again;
And I wunder away in a barefooted dream,
Where I tangle my toes in the blossoms that gleam
With the dew of the dawn of the morning of love
Ere it wept o'er the graves I'm weepin' above.

And so I love clover—it seems like a part
Of the sacredest sorrows and joys of my heart;
And wherever it blossoms, O, there, let me bow
And thank the good God as I'm thanking him now;
And I pray to him still for the strength when I die,
To go out in the clover and tell it good-bye,
And lovin'ly nestle my face in its bloom
While my soul slips away on a breath of perfume."

Now, isn't it true, that some hearts are tuned to see just things, and other hearts, the Creator of things.

But our hearts need also to see that God is in all history; markedly, the great crises. Yet, some men read failure in the signs of the times. They see in history only a long series of calamities. In the World War they see rivers red with blood, hear the cries of the oppressed, see the sufferings of the innocent and the destruction of the pure and good, and say, "Where is God?"

But Faith says that Christ has his eye on the human slaughterings of history. He has seen the gore of all the world's battlefields. His ear has been sensitive to the groanings of the ages as they carried their burden of suffering. He has seen the rejection and cruel treatment of his prophets. And yet he believed that God is near. And we must believe, that the world is standing at all today, is due to the Father's

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TOM LYNCH AND WIFE BOTH KILLED!

Only last month, Thomas Lynch, a farmer, and his wife, Mary Lynch, were riding to town in their automobile, when it was struck by a train. Both father and mother were killed and several children injured. Both Mr. and Mrs. Lynch had North American Accident Policies for which they had paid only 75c each! Their children received $1,000 in cash from each policy or $2,000 to keep the wolf from the door!

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FOR SALE—REGISTERED AYRSHIRE bulls and bull calves, heifers and heifer calves. Also some choice cows.
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O. I. C.

O. I. C.'S. 1 GILT 13 MONTHS OLD, WEIGHT 380, due June 3rd. 10 last fall gilts due Aug. and Sept. 1 last fall boar, spring pigs not akin. Record free. Citz. phone. ½ mile west of depot.
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WM. COX, Williamston, Michigan.

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FOR SALE THOROUGHBRED WHITE COLLIE PUPPIES.
CHAS. KEPNER, Carson City, Michigan.

The Man Who Talked at Random

HE sat in the window-corner of the Pullman's smoking-compartment and breathed flatly as he uttered his large opinions. It grew late, as so often it does; and he put the quietus on a discussion with the ponderous statement:

"I don't read advertisements. They have no effect on me at all. I'd never miss them if they stopped printing 'em."

Then he glanced at his advertised watch and sought his lower berth.

In the morning the ad-skeptic contorted himself out of his advertised pajamas into his advertised underwear, drew on his advertised socks, adjusted them with his advertised garters, got into his advertised suit, laced his advertised shoes and added himself to the congestion in the wash-room.

There he shaved with an advertised razor, using advertised shaving soap; brushed his teeth with an advertised toothbrush and advertised dental cream, washed with advertised soap, and brushed his hair with an advertised brush. Fastened his advertised collar on an advertised button, he neatly knotted his advertised tie, gave his advertised suspenders a tug or two and finished dressing.

Let us leave him there, this man who never reads advertisements!

Everything worth using is advertised. Everything that isn't, rarely is.

Read the advertisements for value's sake

DAIRY and LIVESTOCK

INTEREST IN COW TESTING GAINING RAPIDLY

IN a report to the Dairy Extension Department, M. A. C., from the fifty-four cow testing associations operating in Michigan under date of July 10th, 1923, many interesting facts are to be learned. Comparing the number of associations operating in Michigan under date of July 10th, 1922, with those operating under date of July 10th, 1923, there is a growth of 300 per cent—from eighteen associations to fifty-four; likewise in the total number of cows under test in these fifty-four associations, 12,584 compared to 3,690 cows indicates that a big advance has been made for better dairy conditions in Michigan. For the month of June, 1923, seventy-five unprofitable cows were sold out of the fifty-four cow testing associations and thirteen purebred sires were purchased by association members.

The highest monthly association average on ten cows was made by Lapeer County; Mr. P. F. Peabody, cow tester. This association, with 472 cows, had a monthly average of 27.8 pounds of fat and 773 pounds of milk. Hillsdale County and Genesee No. 3, both comparatively new associations, came in second and third place with a ten high cow average of 67.5 and 67.2 pounds of fat respectively.

FIVE HUNDRED FARMERS GIVE OPINIONS ON STOCK FEEDING

PRODUCING or otherwise obtaining their feed economically is the most troublesome feeding problem of farmers who keep livestock. This was brought out emphatically through a questionaire sent out by the United States Department of Agriculture which was answered by nearly 500 farmers scattered over the entire country. The replies showed that general economy of rations, the cost of grain, and the cost of protin represent about 52 per cent of the difficulties in feeding.

These men classed balancing of rations next in importance. Other problems, such as labor, increasing production, difficulties in wintering stock, short pastures, and variety and palatability of feeds apparently were thought of only in connection with the principal difficulties. That these opinions are worth considering is borne out by the fact that all of the men questioned were progressive farmers and breeders and the average period of their experience was 20 years.

Adopt Balanced Ration

During the two decades these stock raisers have been working to get ahead, many changes have taken place in the ways of feeding animals. The outstanding progressive step taken has been the wide adoption of the balanced ration. Other improvements in the order given by most of the five hundred farmers are more liberal feeding, feeding more legumes, better water supply, providing minerals, feeding according to production, feeding more protein, and more regular feeding. At the same time they list the common errors in feeding which are responsible for poor results, poor combinations of feeds being the one most frequently mentioned, followed by underfeeding as the next most effective reducer of profits. Following these in regular order, based on the number of times mentioned in the answers, come lack of protein, lack of water, lack of legumes, sudden changes of feed, poor housing, parasites, lack of salt, waste of feed, poor equipment, and over feeding. Practically all of these troubles are easily preventable.

Almost all of these 500 farmers had raised at one time or another scrubs, grades, and purebreds, and almost to a man they joined in a paean of praise of the purebred. Only 1 per cent of them reported that they had failed with improved stock. Most replies contained specific estimates showing the superiority of well-bred over random-bred animals, and when averaged it was brought out that these men consider that purebreds make about 40 per cent better returns on feed used than common stock. It is interesting to note here that another questionaire sent out by the department a year ago and answered by several hundred farmers showed that in their opinion purebreds have a general utility value a little more than 40 per cent greater than common stock.

Many Use Self-Feeders

The report prepared by the department on the results of this feeding investigation contains many more interesting sidelights on feeding ad corroborates a number of tendencies that good observers must have suspected. For instance, of 400 who answered questions regarding the use of self-feeders, 41.5 per cent had used this method of feeding, having about three-fifths yet to take up this economy. At present the self-feeder seems to be used mostly in hog raising districts and for poultry. In the middle west more than half the farmers reporting used it. The general sentiment seems to be that this piece of equipment is especially suited to hogs and chickens, but a few farmers used it for feeding calves and sheep.

Neary all of those who replied made comment on the feeding of silage and practically 50 per cent of them use this feed. In the northeastern states where dairying is very generally followed, two-thirds of the farmers in the list have silos. Although most of the silage is fed to dairy cows, the list of animals to which it is fed, according to the questionaire, included also steers, breeding ewes, and brood sows. A few men reported feeding it in limited quantities to horses, hogs, and lambs.

It is worth while to note that more than 22 per cent of these farmers who answered the government questions credited farm papers as the principal source of their knowledge of feeding problems. Other important sources mentioned were: Experience on home farm, general observation, bulletins, and books and records.

HOLSTEIN MEN PLANNING BIG PICNIC

THE Michigan Holstein-Friesian Association are working together on plans for a Grand Round-up and Picnic of Holstein farm of D. D. Aitken, just west of farm of D. D. aitken, just west of the city of Flint, Michigan, on Saturday, August 11, 1923.

Mr. Aitken was president of the Holstein-Friesian Association of America for seven years, from June 3, 1914, to June 1, 1921, and has done more for the Holstein industry than any other man, and it is proposed to hold a great meeting in his honor.

Coming as it does as the last day in a series of tours through twenty-four Southern Michigan Holstein counties, it is expected that this will be the greatest gathering of Holstein breeders and dairymen that Michigan has ever seen. A cordial invitation is extended to all who are interested in dairying and Holstein cattle breeding to attend this great round-up.

The forenoon will be spent in inspecting the herd, which has produced many noted animals, including a number of world's record holders. For the afternoon program, Editor A. J. Glover, of Hoard's Dairymen, will be the principal speaker and will have a real message for the breeder and dairymen. Arrangements have been made with the extension Service for a pair of models of True Type Holsteins which the True Type Committee has been working on for the past year. These models, the work of the Japanese sculptor Gozo Kawamura, have never been exhibited before except at the animal meeting of the Holstein-Friesian Association of America held at Cleveland last June, and the breeders will be greatly interested in them. It is hoped that Judge "Bill" Moscrip, chairman of the True Type Committee, may be in attendance to explain and demonstrate the models.

Another feature of the program will be a demonstration of the work of the cow testing associations. Genesee County, in which the Aitken farm is located, has seven cow testing associations, the record number for any county in the United States and only one other county has this number. Other features are being arranged for the program, and Mr. James G. Hays, who is a very versatile master of ceremonies, promises that there will be something doing all the time.

A large tent with tables and chairs will be provided for the basket lunch at noon and for the afternoon program, so that every one may be taken care of regardless of the weather.

ACID PHOSPHATE AND LIME STONE FOR HOGS

Have read a great deal about bone meal, acid phosphate and lime stone as mineral feeds for hogs and would like to know if these are the same as what we buy for fertilizer?—L. Y., St. Johns, Mich.

—The acid phosphate and limestone which you read about as minerals for hogs are the same as you buy for fertilizer. 16 per cent acid phosphate and finely ground agricultural lime may both be used as hog minerals.

In purchasing bone meal as a mineral for animals, it is usually desired to get a special steamed bone meal or a precipitated bone flour, as the ordinary bone meal which is often used for fertilizer quite often develops a very unpleasant odor and becomes objectionable to the animals. —Geo. A. Brown, Professor of Animal Husbandry, M. A. C.

MAKING CHURCH THE BIGGEST THING IN FARM COMMUNITY

(Continued from Page 4)

the individual. In a farming community where all are interested in the same business a church should co-operate with the school along educational lines, with the farm bureau to promote the efficiency of the farming enterprise, and it has the great opportunity to build up a sane, wholesome social life.

"Parties, plays, athletic sports and moving pictures make life attractive to young people. Through the church channels talented speakers, singers and entertainers may be brought before our rural audiences A musician from a near-by town may be secured to conduct an orchestra. This contact with city and town leaders bring country and city life closer together. The church in a rural community is of supreme importance—combating isolation, monotony and selfishness and upholding love, friendliness, culture, efficiency, as well as interest in world affairs."

The boys and girls who will shortly assume places of leadership in the work of Ontario parish are now conducting a sow and litter project of 25 entries; seven members of this project are girls. If the present plans carry, a two days' show and sale will be held next fall. The members of the club borrow the money in a regular businesslike way from the Men's club.

Directs Athletics

A Saturday afternoon play time was maintained last summer; the older men, the young men and the boys of Scout age each had their baseball teams.

The young people's service not only makes a distinct contribution to the religious life of its individual members but it contributes much toward a wholesome social life in the community. Practically all of the young people are reached by this organization, which holds regular monthly parties and special class in between.

You may be sure that the pastor of this rural church is an exceedingly busy man. Nevertheless, he finds time to lend a helping hand in the conduct of other organizations. He is, for instance, the representative of his township on the executive committee of the farm bureau; he is prominent in boys' and girls' conferences, not only in this but in other states.

Minister's View of Work

Rev. Mr. Van Buskirk sums up his viewpoint toward the work of a rural chuch in the following statement:

"There are thousands of communities in which there are as great, or even greater, possibilities than there are in Ontario parish. What has been done here can be duplicated in every county, if not in every township of the nation.

"What is the secret? Vision, cooperation and hard work. Ontario parish believes in itself, but it is not unaware of its shortcomings. It believes in the practical application of the teachings of Jesus to everyday life. It has planned and is carrying out a program of activty which will eventually make it possible for every boy and girl to live at his or her best and to develop four-square symmetrical manhood and womanhood.

"There is no mollycoddling nor any time-worn adult conception of youth in the program. It is a red-blooded, square-shouldered, two-fisted conception of life that is set forth. The life of Jesus is put at the center. To follow Him means that one must show by word, action and heroic endeavor that he is in earnest about living his life at its best. Any community willing so to see and plan and work to make the will of God dominent in every life can solve its problem."

THE LOGIC OF THE HEART

(Continued from Page 17)

long-suffering and mercy. So, teachers and heralds continue to be sent out to proclaim the message of goodwill and brotherhood.

Now, on a close reading of our text and context, we hear St. Paul praying that this church might have a heart enlightenment of God's revelation in Christ; that is that each one might know "the hope of his calling" and his "riches in the saints." To be sure, the Christian's calling is a life of social service; a life-vocation in a "grand pursuit" of Christ. To love, to follow, to cherish Christ, is to have one's heart wrapped up in him. And the hope of such a calling is a deliverance from evil and a safe refuge in the fellowship of our Heavenly Father.

The apostle asserts that such spirits as these constitute God's rich inheritance. However unprofitable, we are to be counted through his rule of measurement which is moral. God puts a premium on character—not upon farms, homes, or intellect. He is concerned about the character and destiny of men. "Hast thou considered my servant Job? There is none like him, perfect and upright." Only such as these can reciprocate the love of God.

But this is the outgrowth of the resurrection power, writes the apostle Paul. Jesus came back to beautify character and work his idealism in a sinful world. This verity has altered the whole course of many natures, changing night into day, [illegible]h into life, and earth into heaven.

The infidel's lecture had closed. He inquired whether any would contest his argument. An old lady in old-fashioned bonnet and homely apparel, in her bent and tottering manner, made her way to the platform. Putting down her basket and umbrella, she said, I paid my money to come in here tonight to hear something better than Jesus Christ. Now, you have cheated me out of my money. I have been thirty years a widow. I reared ten children and they are respectable. I know what poverty and heartaches are. But Jesus has sustained me all along. Now, if you can not tell me anything, better you have cheated me out of my money." The lecturer was not used to grappling with such heart experiences and he merely said to the audience that the old woman was so happy in her delusion he did not wish to try to change her. This is logic invincible. This is the testing and proving the love of God and having it shed abroad in our heart.

THE GUARDIAN OF THE ACCOLADE

(Continued from Page 7.)

belonging in my family that broke up the arrangement. He came down to the depot and vetoed the whole proceeding. He means all right, and—well, I reckon he is right. Somehow, he had found out what I had along—though I hid it in the bank vault and sneaked it out at midnight. I reckon he has noticed that I've been indulging a little more than a gentleman should, and he laid for me with some reaching arguments.

"I'm going to quit drinking," Mr. Robert concluded. "I've come to the conclusion that a man can't keep it up and be quite what he'd like to be—pure and fearless and without reproach'—that's the way Bushrod quoted it."

"Well, I'll have to admit," said the judge, thoughtfully, as they climbed into the wagon, "that the old darky's argument can't conscientiously be overruled."

"Still," said Mr. Robert, with a ghost of a sigh, "there was two quarts of the finest old silk-velvet Bourbon in that satchel you ever wet your lips with."

(EDITOR'S NOTE:—Another O. Henry story complete in the August 18th issue.)

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CULLING ACCORDING TO MOULTING TEST

I wish you would tell me whether it is the early moulters that are winter layers and in what month do the best layers moult? They are from one to two years old or more. When and how can the old hens best be picked out? What is the best ration for the summer for chickens out on range? What is a good ration for young chicks? Is it best to mark the old and non-layers with colored leg bands if only one coop can be provided so they will be known, when clean-up time comes? How can hens best be gotten over their broody stage? Half of ours would like to set. How soon will they start laying?—G. J. B., Grand Rapids, Mich.

—In culling according to the moulting test we usually advise the segregation and sale of the slow and early moulters. Hens that undergo a slow body moult in June, July, or early August are usually inferior producers restricting their production to the spring and early summer months entirely. The better type of winter layer moults sometime subsequent to September 15th and moults very rapidly. Ordinarily the feathers drop out at one time and the body appears similar to a pin cushion with the pin feathers growing in every section of the body.

Occasionally a hen will moult and lay at the same time. This type is referred to as the "seasonal moulter." I would really class intermediate between the more intensive produceds that moult later in the fall and the early and undesirable moulters.

This is the proper season of culling and the less productive individuals usually show a course heavy head and are inclined to deposit internal fat which can readily be detected by the thick meaty condition of the egg sack or the abdominal region. These birds usually have yellow legs which is a distinct aid in segregating the poor layers.

In breaking up broody hens which are quite prevalent at this particular season, the most satisfactory method is to confine the bird in a slat or wire bottom coop for a period of three days. The coop should be located in a shaded and cool place and the bird fed regularly during the three days of confinement.

By breaking the hen immediately after she has developed this maternal instinct they can usually be brought back into production in from twelve to fifteen days. If however, the hens are neglected and remain in the nests several days, the ovary takes on a dormant condition and it may require a month before the hen is back into production.—E. C. Foreman, Professor of Poultry Husbandry, M. A. C.

SYMPTOMS ARE GENERAL

Our chickens droop around for a week or so, some have looseness of the bowels, their combs get dark, their legs are weak, they sit around, won't eat. Have tried a good many remedies but still they are getting sick and dying.—L. A. S., Newport, Mich.

—The symptoms which you describe are very general and do not give us sufficient information to make an accurate diagnosis. I am of the opinion that the trouble is largely nutritional. **The fact that** the comb turned dark indicates a form of liver trouble which can usually be corrected by furnishing an abundance of green food and greater variation in the ration. We ordinarily recommend the use of Epsom Salts as the first treatment for fowls that are out of condition. The Epsom Salts can be given to the matured stock at the rate of one pound to 100 hens and to the younger stock at the rate of one quarter-pound to one-half pound, depending upon the age and maturity of the chicks. If the young stock are raised in buildings poorly ventilated or are overcrowded during the hot summer months similar conditions are liable to occur, the entire flock develops a run down condition as indicated by leg weakness, lack of appetite, emication and slow growth. These chicks are very liable to develop colds and never do make serviceable or profitable stock. A large number of people neglect green food during the summer months for growing chicks and this is certainly the greatest necessity if the flock is to be retained in a healthy and growing condition.—E. C. Foreman, Associate Professor of Poultry Husbandry, M. A. C.

CHANGING TIMES

By JOHN T. BARTLETT

IT IS EASY TO FIND OUT

IF you don't know, don't guess. Find out! These are days in which it is easy to find out.

A fruit grower and shipper received an attractive postcard price schedule from J. Smith & Co. He didn't know J. Smith & Co. Was the house reliable? Did it really pay the quoted prices, or was it one of those crooked enterprises which sometimes enter the produce field to fleece shippers? Was it prompt pay? The grower-shipper didn't have to guess in this situation. No shipper has to guess. All he need do is call up his bank and ask it to obtain for him a quick report on J. Smith & Co. It is easy in these days to find out.

High school and college students of today are skilled in "finding out." They have been taught how to use the resources of good libraries. Outside of books, however,—and books are mighty valuable—there are many sources of information which every farmer should use as he has need. These include:

His bank, for business information, dealing with credit, collections, business outlook, etc. Each local bank has correspondent banks throughout the country. It will obtain an expert impartial report on any person in business anywhere, and if you are a regular customer will probably charge you nothing for the service.

Your county agent, for expert advice on farming operations. When you are interested in operations not covered by the agent's general training and experience, get in touch with the government extension service expert. The Federal department at Washington has many experts, too, glad to help you.

If you don't know, don't guess; don't experiment: Find out! Nowadays it is easy to find out.

VANISHING APPLE STICKS

EVEN after the advent of automobiles—so short a time is it since the new status of the cider apple—was a cider apple's longest journey in most localities a couple of miles to a mill. Cider apples were of negligible value—they sold by the dumpcart-full, and most of the value was put there by the human labor invested in collecting. Great sport among farm boys was had with apple-sticks—lithe, pointed sticks which with a vigorous whirl and a quick snap would hurl an impaled apple a great distance.

On some farms, as many cider apples were utilized the apple stick way as the cider press way!

Now, in most years, apple sticks are taboo; soon, they always will be taboo. The cider apple has achieved a new status. Some parts of the country ship them in the fall by the scores of carloads, to points hundreds of miles away. The old-time waterpower cider mill has largely vanished.

In its place have come, for individual farmers, small home cider presses. These, and the big central plants to which, for conversion into cider, apples are now shipped hundreds of miles.

The price has gone up. Cider apple prices bear a sensitive relation to market prices, naturally. A glut in market apples will hit cider apples. 75c a hundred is not the highest prices for cider apples, in the history of the last few years.

The Agricultural and Business Situation

Revised Monthly by the Department of Research of the American Farm Bureau Federation.

Low prices of wheat are now giving major concern to agricultural and business interests. The average price at Chicago for No. 2 Red Winter wheat for the years 1909-14 was $1.04. Last year the average was $1.23. During this July it has gone as low as 99 cents and is now quoted around $1.01.

WHEAT PROVIDES TEN PER CENT OF INCOME.

Wheat for the last five years has made up from 9 to 12 per cent of farm sales of all crops, animal products and live stock. Wheat sales by farmers for the 1922 crop year amounted to 725 million dollars. Each of the following groups brought in more income in the 1922 crop year than wheat: Cattle, 1,000 million dollars; hogs, 900; dairy products, 1,150; and cotton, 1,270. Fruits and nuts, vegetables and poultry each had an income value a little more than half as much as wheat.

Sales of corn run from 35 to 45 per cent as much as wheat. Oats, barley and rye, together, bring slightly less income than corn.

The collapse of the wheat market is particularly disastrous in Kansas and North Dakota, which produce more than 25 per cent of the country's crop, both volume and value. Wheat sales comprise from one-fourth to one-third of all farm sales in Kansas and from 40 to 50 per cent in North Dakota.

Cattle prices are a little better than a year ago. Hogs are decidedly lower. Cotton is stronger. Corn is around 15 per cent higher and oats 12 per cent. Dairy prices are considerably stronger and poultry products are holding about even.

TOTAL FARM INCOME WILL NOT BE LESS.

For the country as a whole and for products in general the present situation is not discouraging compared with last year, but for those sections in the near West and Northwest, which rely more on wheat, the outlook is disheartening. Preliminary estimates by this Department indicate that for the coming crop year gross income from farm sales will be about 100 to 200 million dollars more than the previous year.

Unfavorable wheat statistics have been unloosed in a deluge, almost obliterating more encouraging developments and carrying the price lower than seems necessary.

According to present official forecasts, exporting countries have 75 to 100 million bushels more carry-over now than last year, but will produce 60 million bushels less new crop. This includes Russia. From this is figured a surplus over last year of 40 million bushels. Add to this Broomhall's estimate of 60 million bushels smaller requirements in Europe, and the excess is only 100 million bushels, which might easily be taken care of by expanding consumption in exporting countries and adding a little more to next year's carry-over. These facts do not appear to justify the extremely low price now prevailing.

PRODUCERS CAN CORRECT UNBALANCED MARKET.

One major reason that demand for wheat is not now properly sustained is the changed method of purchasing for export. Before the war purchases for foreign account were made in large volume at harvest or immediately thereafter. Due to the present financial conditions abroad and the uncertainty concerning prices of foreign drafts, foreign buying is now on a hand-to-mouth basis. Gradual feeding into the market by producers will do more than anything else to correct the immediate unbalanced market.

For the future nothing short of a readjustment of acreage downward seems able to insure sufficient rebound in price to make wheat growing profitable to the majority of American producers.

I. Production and Trade.

1. Agriculture: U. S. Production—000,000 omitted.

	July, 1923 Forecast	1922	Average, 1917-1921	1923* Per Cent
Winter wheat, bu.	586	586	590	99
Spring wheat, bu.	235	276	245	96
All wheat, bu.	821	862	835	98
Corn, bu.	2877	2891	2931	98
Oats, bu.	1284	1201	1378	93
Barley, bu.	198	186	192	103
Rye, bu.	68.7	95.5	70.3	98
White potatoes, bu.	382	451	388	98
Sweet potatoes, bu.	93.7	110	94.3	99
Tobacco, lb.	1425	1325	1361	105
Flaxseed lb.	18	11.7	9.7	186
Rice, lb.	33.1	42	41	81
Hay, all tons	99	113	99.5	100
Cotton, bales	11.4	9.8	11.2	102
Apples, total	189	201	160	118
Apples, com'l, bbls.	33.1	31	25.7	129
Peaches, total	48.4	56.7	42.7	113

* As per cent of average of 1917-1921.

2. Mining (Federal Reserve Bank of New York):

Figures express production as a percent of normal. In estimating normal production, due allowance is made for seasonal variation and year to year growth.

	May, 1923	April, 1923	May, 1922
Anthracite coal	98	102	.4
Bituminous coal	114	117	52

4. Manufacturing (Federal Reserve Bank of New York):

Wheat flour	113	110	101
Meat	...	116	108
Sugar	118	122	146
Cotton	108	101	88
Wool	...	120	82
Pig Iron	124	114	76
Steel Ingots	105	99	84
Copper	95	89	70
Gasoline	...	115	98
Wood pulp	...	102	108
Cement	133	134	117
Lumber	...	119	102
Tobacco	93	89	91

5. Building Expenditures (Bradstreets):
(000,000 omitted)

	1923	1922	Per cent Increase
January, 164 cities	$194	$141	38.0
February, 164 cities	221	136	62.8
March, 165 cities	377	243	55.1
First quarter	$794	$521	52.3
April, 165 cities	327	217	50.3
May, 165 cities	263	248	5.7
June, 153 cities	225	234	3.9*
Second quarter	$815	$700	16.3
Six months	$1,610	$1,222	31.7

* Decrease

6. Transportation (000 omitted):

Freight car loadings:	Week Ending July 7, 1923	Same Week Month Ago	Same Week Year Ago	Week Ending July 7, 1923*
Total	854	1,013	707	121*
Grain and grain products	31	34	34	89
Livestock	25	32	21	114
Coal	160	190	70	225
Coke	13	14	9	156
Forest products	54	76	44	123
Ore	73	76	56	132
Merchandise	209	242	209	100
Miscellaneous	287	345	260	111

* As percentage of week year ago.

7. Employment:

	June, 1923	May, 1923	June, 1922
Out of 64 industrial centers employment:			
Increased over previous month in	31	31	52
Decreased over previous month in	33	33	12

8. Bank Debits:

Units of $1,000,000,000

	June, 1923	May, 1923	June, 1922
New York City	$21.0	$20.70	$22.06
Outside bank debits	19.53	19.37	17.17

9. Mail Order Sales:

	June 1923	June 1922	Twelve Months Ending June 1923	Twelve Months Ending June 1922
Montgomery Ward & Co.	$11,612,004	$ 8,655,443	$115,104,461	$ 80,586,729
Sears Roebuck	13,233,2[illegible]	[illegible]	[illegible]433,856	170,102,911

II. Foreign Trade.

1. Exports (000 omitted):

Commodity:	May 1923	May 1922	Eleven Months Ending May 1923	Eleven Months Ending May 1922
Grand total	$309,669	$301,926	$3,574,342	$3,372,271
Beef and veal, lb.	2,283	2,446	28,069	31,520
Pork, lb.	69,930	47,448	748,744	622,978
Lard, lb.	95,343	51,993	913,348	772,995
Butter, lb.	447	1,053	8,950	6,408
Cheese, lb.	440	491	8,075	7,025
Hides and skins $	171	280	3,202	4,163
Corn, bu.	5,064	10,914	92,146	164,739
Meal and flour, bbls.	74	98	583	743
Oats, bu.	508	2,686	18,473	9,260
Meal and rolled, lb.	10,767	8,023	112,738	82,840
Wheat, bu.	9,973	9,366	145,699	194,315
Flour, bbls.	983	1,089	14,076	14,865
Fruits and nuts $	3.261	3,433	69,215	63,487
Veg. oils and fats $	637	783	12,077	12,660
Sugar, lb.	97,842	328,053	678,917	1,634,475
Leaf tobacco, lb.	28,421	39,844	395,409	421,565
Wool,, lb.	958	928	6,280	4,401
Cotton, bales	160	469	4,851	6,051

2. Imports:

Grand total	$ 373,253	$ 252,817	$3,461,692	$2,347,618
Beef and veal, lb.	1,485	2,756	31,423	24,858
Pork, lb.	108	87	927	903
Butter, lb.*	1,177	90	12,839	9,471
Cheese, lb.*	3.832	3,119	47,480	29,800
Hides and skins $	13,946	7,738	126,957	70,679
Corn, bu.	19	8	116	120
Oats, bu.	16	126	285	1,606
Wheat, bu.	946	1,231	17,891	12,856
Flour, bbls.	19	61	412	555
Fruits and nuts $	7,504	7,749	63,668	73,928
Veg. oils, fats $	8,216	6,159	56,546	49,852
Sugar, lbs.	823,746	1,000,336	7,728,270	7,434,200
Leaf tobacco, lbs	4,299	7,133	72,187	59,485
Cotton, bales	25	15	480	362
Wool, bales	47,173	32,956	495,343	238,147

* Inculdes substitutes.

3. Prices of Foreign Drafts:

	Nominal Gold Value Par of Exchange	Price of Demand Drafts July 23, 1923	June 18, 1923	July 17, 1922
England	$4.87 to 1 £ Sterling	$4.59	$4.62	$4.43
France	19.3c to 1 franc	5.99c	6.195c	8.33c
Germany	23.8c to 1 mark	.0002c	.0006c	.222c
Belgium	19.3c to 1 franc	4.97c	5.245c	7.88c
Italy	19.3c to 1 lire	4.375c	4.53c	4.58c
Spain	19.3c to 1 peseta	14.31c	14.90c	15.51c
Austria	20.3c to 1 crown	.0014c	.0014c	.0037c
Denmark	26.8c to 1 crown	17.50c	17.84c	21.40c
Norway	26.8c to 1 crown	16.24c	16.51c	16.52c
Sweden	26.8c to 1crown	26.65c	26.51c	25.95c
Holland	40.2c to 1 florin	39.21c	39.,25c	38.75c
Argentina	42.5c to 1 peso	34.15c	39.90c	35.75c
Brazil	32.4c to 1 milreis	10.35c	10.45c	13.70c
India	48.7c to 1 rupee	30.80c	31.05c	29.25c
Japan	49.9c to 1 yen	48.70c	49.00c	47.88c
Canada	100c to 1 dollar	97.44c	97.80c	99.00c

4. Discount Rate of the Bank of England:

July 11, 1923	Month Ago	Year Ago
4%	3%	3½%

III. Money and Credit.

1. Gold, Currency and Bank Deposits (000,000 omitted):

	June 1, 1923	May 1, 1923	June 1, 1922
Stocks of monetary gold in the United States	$ 4,023	$ 3,982	$ 3,774
Total supply of currency in the United States	4,706	4,668	4,370
	April 3, 1923	Dec. 29, 1922	Mar. 10, 1922
Total deposits in National Banks	$17,036	$17,420	$15,390

2. Gold Movement (000 omitted):

	May 1923	May 1922	Eleven months ending May 1923	Eleven months ending May 1922
Exports of gold	$ 824	$ 3,406	$ 48,473	$ 25,745
Imports of gold	45,356	8,994	263,856	455,342

3. Federal Reserve Ratio:

	July 11, 1923	June 6, 1923	July 12, 1922
Ratio of total reserves to deposits and Federal Reserve note liabilities	75.4%	75.7%	77.3%

4. Interest Rates:

	June, 1923	May, 1923	June, 1922
4-6 mos. commercial paper	5.12%	5.25%	4.28%
60-90 days commercial paper	4.88%	5.12%	4.03%

5. Discount Rate of Federal Reserve Banks:

	July 1, 1923	June 1, 1923	July 1, 1922
Range of rates for the twelve banks on commercial, agricultural and live stock paper	4½-5%	4½-5%	4-5%

6. Stock and Bond Prices:

	July 6, 1923	June 8, 1923	July 7, 1922
20 Industrial stocks	$88.65	$96.66	$94.63
20 Railroad stocks	77.99	83.31	87.16
40 Bonds	86.47	87.58	89.75

7. Business Failures:

	Week Ending July 5, 1923	June 7, 1923	July 6, 1922
Bradstreets	268	277	309
Duns	241	334	306

IV. Prices.

1. Wholesale Prices of Farm Commodities:
Quotations at Chicago except as noted.

	July 24, 1923	Month Ago	Year Ago
Fat hogs, cwt., average	$ 7.20	$ 7.15	$ 9.65
Beef steers, good native, cwt., av.	9.65	10.00	9.25
Fat lambs, cwt., average	13.25	15.85	12.45
Fat sheep, cwt., average	5.75	5.65	5.85
Wool, Ohio delaine unwashed, lb. (Boston)	.56	.575	.555
Butter, 92 score, lb.	.395	.395	.325
Cheese, No. 1 twins, lb.	.2175	.2275	.185
Eggs, fresh firsts, doz.	.23	.2225	.195
Poultry, hens, lb.	.2025	.21	.22
Wheat, No. 2 hard, bu.	1.00	1.085	1.1225
Corn, No. 2 mixed, bu.	.89	.845	.6425
Oats, No. 2 white, bu.	.4325	.425	.3525
Rye, No. 2, bu.	.655	.68	.81
Barley, bu.	.66	.61	.62
Kafir, No. 2 white, cwt. (K. C.)	1.505	1.66	1.85
Hay, No. 1 timothy, ton	23.50	23.50	23.50
Flax, No. 1, bu. (at Minneapolis)	2.725	2.835	2.48
Cotton, middling, lb. (New York)	.2465	.2780	.2165
Beans, white, cwt. (f. o. b. Michigan)	5.20	7.10	8.70
Potatoes, new, cobblers, cwt	1.35	2.50	1.50
Onions California yellows cwt	3.05	2.90	2.87
Apples, summer varieties, bu	1.25	1.85	1.35
Hides, No. 1 native, heavy, lb	.15	.165	.185
Sugar, fine granulated, lb. (N. Y.)	.087	.095	.0675

2. U. S. Department of Labor Relative Wholesale Prices:
Prices in year 1913 equal 100.

	June, 1923	May, 1923	June, 1922
All commodities (weighed average or general price level)	153	156	150
Farm products	138	139	131
Food products	142	144	140
Cloths and clothing	198	201	179
Fuel and lighting	186	190	225
Metals and metal products	148	152	120
Building materials	194	202	167
Chemicals and drugs	131	134	122
House furnishings	187	187	176
Miscellaneous	123	125	114

3. Prices of Farm Products at the Farm Relative to 1913:
(U. S. Bureau of Agricultural Economics)
Prices in year 1913 equal 100.

Commodity:	May, 1923	Apr., 1923	May, 1922
Cotton	207	217	151
Corn	143	140	104
Wheat	136	140	149
Hay	118	115	115
Potatoes	119	126	162
Beef Cattle	98	98	97
Hogs	95	100	120
Eggs	113	117	110
Butter	143	149	124
Wool	250	235	174

4. Relative Purchasing Power of Farm Products:
(U. S. Bureau of Agricultural Economics)

The quantity of various commodities which a given amount of each farm product would purchase at prices prevailing in 1913 is put equal to 100. The figures given represent the percentage of this quantity which the same amount of farm products would purchase in May, 1922. Prices at the farm are used for agricultural products, and wholesale prices at central markets for other commodities.

	All Commodities	Cloths, etc.	Fuel, etc.	Metals, etc.	Building Mtls.	House Furn'gs
Cotton	133	103	109	136	103	111
Corn	92	71	75	94	71	76
Wheat	87	68	72	90	67	73
Hay	76	59	62	78	58	63
Potatoes	76	59	64	78	59	64
Beef cattle.	63	49	52	64	48	52
Hogs	61	47	50	62	47	51
Eggs	72	56	59	74	56	60
Butter	92	71	75	94	71	76
Wool	160	124	132	164	124	134

Average purchasing power of all farm products in terms of all other commodities. Same basis as above table.

1913	100	December, 1921	62
1914	112	February, 1922	71
1915	106	May	73
1916	89	September	64
1917	106	November	66
1918	112	December	68
1919	111	February, 1923	69
1920	86	March	69
1921	67	April	[illegible]
1922	69	May	[illegible]

"Your monthly review of agricultural and business conditions is worth its weight in gold to any farmer!"—J. P. A.

MARKET FLASHES

Unfavorable crop report from Canada causes wheat to become firm and prices advance. Corn dull and lower at Chicago but firm in Detroit. Oats easy. Rye in demand. Beans lifeless at Detroit and down 10c. Butter and eggs firm. Berries steady. New potatoes higher. Poultry quiet. Cattle from active to dull. Sheep trade slow. Hogs slow to lower.

(Note: The above summarized information was received **AFTER** the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press —Editor.)

FOOTE'S MARKET LETTER

BY W. W. FOOTE

Sale of Army Horses

MOST of the time the demand for horses is far from large, with prices much lower than in recent years, and inferior kinds are hard to sell around $25 to $50. Horses are so low priced, choice kinds excepted, that most farmers have ceased breeding any, even for their own requirements, finding it cheaper to buy. About 375 horses were sold in the Chicago auctions last week, including 300 army horses from Camp Custer, fairly good prices being paid. The army horses were light weight chunks, weighing from 1200 to 1400 pounds, and were not heavey enough to suit most eastern buyers. Most of the horses were purchased by Michigan and Wisconsin farmers, for $75 to $125, while good heavy chunks weighing up to 1600 pounds were valued at around $200, with a choicer kind salable at $225 or more.

Eat Baked Beans Weekly

The suggestion made by the Michigan Business Farmer that once every week the families of this country enjoy a feast of good, old-fashioned baked pork and beans is a good one; and every Michigan family should do its part, the farmers setting the example. A good sized bean pot costs very little and is handy for the purpose. Have a good sized piece of salt pork in the middle of the beans, and many people like a little sweetening. Parboil the beans first, and cook them all day slowly, taking care that the water does not all evaporate; and serve them with Boston brown bread. Canned beans are good in their way, but not enough pork is used, and they are not nearly as good as home baked beans.

Bean Market Outlook

Michigan beans have been selling around the $6 mark, and they are getting scarce in some sections. Fields of beans in Michigan are looking well, and Michigan's government crop reporter estimates the acreage at approximately 585,000 acres, an increase of 110,000 acres over last year.

The Bean and Pea Journal says: "Acreage figures indicate more beans than ever to be sold this fall and winter. There has been fully a 25 per cent acreage increase in Michigan, and large increases in Colorado, New Mexico, Idaho, and Montana. California will show acreages fully up to normal and so will New York. So the final yields will be larger, provided weather conditions are what they should be. Latest reports indicate favorable weather in all producing states. A trip around Michigan shows beans looking fine, the fields seem larger than ever, and they're growing beans 'way to the south of Michigan and even northern Indiana—sections which have either never before grown beans, or haven't for many years. The crop has proven such a money maker for most bean growers that farmers in adjacent sections have got the fever now."

The Wheat Outlook

Too much wheat in the world for the trade requirements and promise of too generous harvests in this and other countries have been the principal weakening factors on both sides of the Atlantic for weeks. For the first time in many years, it is claimed that France will not be obliged to import wheat for August, as its crop of grain is much larger than was expected. The recent rally in prices was taken advantage of by many farmers to sell part of their new wheat, this being especially the case in the southwest, where prices were lowest—around 75 to 80 cents a bushel. At the same time the lowered prices for flour served to bring about larger buying and a rally in values. Statistics on wheat are not favorable for better prices. The world's crop has been estimated recently at 3,210,000,000 bushels, or 119,000,000 bushels more than last year; and Broomhall has reduced his estimate on import requirements to 592,000,000 bushels. Before the war dollar wheat looked like a good price, but since the boosting of railroad freight rates by the government this means very small returns for farmers. There were late sales on the Chicago Board of Trade of July wheat at 96¾ cents, comparing with $1.11½ a year ago; July oats at 41½ cents, comparing with 32½ cents last year; and July rye at 63¼ cents, comparing with 79½ cents a year ago.

High Prices for Corn

The advance in corn prices has been in sharp contrast to the fall in prices for wheat, and although a fall in values is likely to result from the large crop now growing, the chances are that fair prices will be derived from converting it into meats. For a period of five years before the war farm prices for Iowa corn averaged 55½ cents a bushel. In June, 1921, it was off to 44 cents, while recently it was around 75 cents, while cash sales of No. 2 yellow corn have been made on the Chicago Board of Trade at 90 cents. Stocks of corn are meager in the extreme, and the new crop will come on a market swept clean of old corn. It is stated that in southwest Iowa corn prices on the farm are better than wheat prices, pound for pound. This may result in heavy feeding of wheat to live stock unless wheat prices improve. July corn sales on Chicago Board of Trade at 86½ cents, comparing with 64½ cents a year ago; and December corn at 64 cents, comparing with 59½ cents last year.

Prime Cattle Still Higher

The spread in cattle prices is widening, with lower values for the many offerings of cattle fed on grass, while the choicest weighty steers offered on the Chicago market have advanced from $11.60 to $11.70 per 100 pounds, the top being within 15 cents of the highest price paid since 1922 and 20 cents higher than a week earlier. There are not many beef steers selling below $8, and there has been a very good showing of the choicer steers sold at $11 to $11.50. Good steers have been selling at $10 and upward, with the better class of yearlings at $10 to $11 and sales down to $6 to $7.75 for common to fair yearlings. A year ago $10.80 paid for the best steers; two years ago they brought $10; eight years ago $10.40, and twelve years ago $7.50. So far as choice beef cattle are concerned, there is a very firm undertone, and predictions are heard that they will advance to $12, and perhaps to $13, later on. Butcher stock has been selling freely at $3.75 to $8.25 for cows and at $4 to $9.50 for heifers, while sales are made of canner cows at $2.50 to $3.60 and bulls at $3.50 to $7.50. There was a good calf trade at $5 to $11.75, while stockers and feeders were slow and lower, selling at $3.25 to $8.25, mainly at $5 to $7. Dairy cows sold at $40 to $90. Limited sales are made of inferior little steers as low as $4 to $5.50. Because of too large receipts of grass and short fed cattle, they are 50 cents to $1 lower than a week ago.

Hog Buyers Discriminate

Many of the hogs now moving to market make a poor showing in quality, and numerous lots of half fed out swine are shipped that should be held on the farm two months longer and fed out on clover. An Indiana farmer who is the owner of two hundred acres, says that with good clover pasture he believes there is a good profit in feeding hogs, provided they are kept in a healthy condition. He lives in a farming district where farmers diversify their farming, and keep dairy cows, poultry, a few sheep, as well as hogs and cattle. Experienced stockmen believe that shotes should be kept on the farm and grown economically providing plenty of forage and a medium ration of grain. Well grown shotes may be expected to pay a good price for their board. Such extremely large supplies of hogs as have come on the market recently could hardly fail to bring about declines at times in prices, but on the whole the Chicago market has been much better for sellers than could be expected, the local and shipping demand being very animated. The consumption of fresh and cured hog products is the largest ever known, and good exports are made. Recent sales were made of hogs at an extreme range of $5.75 to $7.85, comparing with $5.60 to $7.70 a week earlier with $7.60 to $10.60 a week ago. At this time in 1915 hogs sold at $5.90 to $7.67½. Light hogs sell highest, the best of these going 30 cents above the best heavy butchers. Combined receipts of hogs in twenty markets for the year to late date amount to 24,765,000 head, comparing with 19,225,000 for the same time in 1922.

Western Lamb Crop of 1923

The lamb crop saved in the western range states during the lambing season this year is estimated by the Department of Agriculture as 77 per cent of the ewes, being based upon reports from state representatives of the department in all the states whose information was derived from special investigation and from reports direct from producers. Because of lack of comparable data, no exact comparison can be made with last year, but in most of these states all conditions were more favorable than last year. Ewes entered the winter in strong condition, winter feed was ample, and winter weather not severe. Weather conditions during lambing generally were highly favorable, with only a few storms of short duration. While grass was somewhat late in starting, ample moisture produced abundant spring and summer range. Losses of lambs were small. The poorest condition and the smallest lamb crop was in Arizona, where conditions after lambing reduced considerably an early promising crop. In Texas and New Mexico drouth conditions of last autumn were reflected in the failure of an unusually large number of ewes to breed, but favorable spring conditions resulted in a large percentage of lambs dropped being saved. In the inter-mountain and Pacific states conditions were generally very favorable, and the number of lambs saved was large except in Utah and Nevada, where local conditions somewhat lowered the percentage as compared to the other states in this area. In the Rocky Mountain states the lamb crop saved was above the average, and the lambs have made excellent growth.

Lambs Sell Much Lower

Owing largely to bad eastern markets, Chicago lamb prices broke last week to the lowest since September, 1922, being $3.40 under the high time of three weeks earlier. They sold at $7 to $12.85, the top being 65 cents lower than a week earlier. Feeder lambs were salable at $12 to $12.50 and breeding ewes at $5.50 to $9.50. Sheep were very scarce.

WHEAT

The wheat market seems to be in a bad way and dealers in general are taking a gloomy outlook of its future trend for the next several months. Dealers state that in looking over the foreign situation they fail to see anything to help the American market. There is demoralization in all directions and Germany looks like an early collapse, all suggesting inability to purchase grain from this country. Markets in general are weak and a feeling of discouragement prevails among the traders. All dealers are anxious to see prices go higher it is reported but most of them are of the opinion that there will be no advance in the near future and doubt if there will be any for several months. One grain of comfort to farmers of the U. S. is the reports from the spring wheat states and Canada. Rust is causing considerable damage and in the Canadian fields it is said to be on the increase. We doubt very much if this bears much weight in the trend of the market as the rust scare is an annual event and unless it continues to increase the market will not pay much attention to the reports. The demand is confined almost entirely to millers. Export business is at a standstill. The Detroit market declined a total of 5c last week and finished the week with an easy tone. Receipts are expected to be larger this week.

Prices

Detroit—Cash No. 1 red, $1.02; No. 2 white, No. 2 red and No. 2 mixed, $1.01; No. 3, 98c.

Chicago—Cash No. 1 red, 98c; No. 2, 96¾@97½c.

Prices one year ago—Detroit, Cash No. 2 red, $1.10; No. 2 mixed and No. 2 white, $1.08.

CORN

In spite of the trend of other grains, corn made several advances during the past two weeks. July corn made new high levels but September corn is easy and lower as dealers believe that the present level of prices is too high compared to other grains and that there will be a decline soon. Local supplies are small. Rains over the corn belt during the past few weeks have improved the crop considerably.

Prices

Detroit—Cash No. 2 white, 48c; No. 3, 46½c; No. 4, 45c.

Chicago—Cash No. 1 mixed, 89½@90c; No. 1 white, 90½c; No. 2, 88½c.

Prices one year ago—Detroit, Cash No. 2 yellow, 72c; No. 3, 71c; No. 4, 70c.

OATS

There is very little to report on the oat market. This grain was affected by the action of wheat during the past fortnight. However, prices gained slightly at Detroit during this period. The market is quiet and steady.

Prices

Detroit—Cash No. 2 white, 48c; No. 3, 46½c; No. 4, 45c.

Chicago—Cash No. 2 white, 41½@44½c; No. 3, 39@41¾c; No. 4, 39c.

Prices one year ago—Detroit, No. 2 white, 39c; No. 3, 37c; No. 4, 33@35c.

RYE

There was a fair demand for rye last week but there was not much business done owing to lack of offerings. The market is quiet.

Prices

Detroit—Cash No. 2, 69c.

Chicago—Cash No. 2, 64½@65c.

Prices one year ago—Detroit, Cash No. 2, 83c.

BEANS

The beans continue in the saddle in the Michigan bean market and prices declined during the last two weeks in this state. At Chicago and several other points there are no changes compared with two weeks ago.

Prices

Detroit—C. H. P., $4.90 per cwt.

Chicago—C. H. P., $5.85@6.25 per cwt.

Prices one year ago—Detroit, C. H. P., $8.60 per cwt.

POTATOES

Potatoes continue steady at Detroit. At Chicago trading in the market increased during the past two weeks until demand met receipts and the market took on a steady tone. Prices at Detroit are at the same level they were two weeks ago while at Chicago there were several declines the forepart of the past fortnight and these losses have not been regained. There is a moderate supply of old potatoes on the Detroit market but of new stock there is more than enough to satisfy the demand. The market is strong at this point.

Prices

Detroit — Michigan, $1.00@1.17 per cwt.

Chicago—Kansas and Missouri Cobblers, $2.00@2.15; Early Ohio, $1.75@2.00 per cwt.

Prices one year ago—Detroit, Michigan, $1.90 per cwt.

HAY

The demand continues good in all markets for old hay that is of the supper qualities but these are in very small receipt, in fact it is very rare to find any one car grading strictly one grade. Most cars are a mixture of several grades and show that the mows are getting cleaned up for the new crop. New hay is arriving in appreciable quantities but a great deal has been improperly cured and this unsound hay tends to accumulate, especially in the west.

Prices

Detroit—No. 1 timothy, $18.50@19; standard, $17.50@18; No. 2 timothy, $16@17; light clover mixed, $17.50@18; No. 1 clover, $15@16.

Chicago—No. 1 timothy, $23@24; No. 2, $19@22; light clover mixed, $19@22; No. 1 clover, $17@19.

New York—No. 1 timothy, $27@28; standard, $12@17; No. 2 timothy, $23@27; light clover mixed, $27@28.

Prices one year ago—Detroit, standard timothy and light clover mixed, $20@21; No. 2 timothy, $19@20; No. 1 clover, $15@16.

WOOL

Wool sellers continue confident of better demand and see slow but sure improvement in the wool market, although there is very little wool being offered and little changing hands. Inquiry has increased, especially in the east. The market in general is steady to firm.

Quotations on midwestern or so-called "native" wools in large lots—such prices as are obtained by the farmers' pools—are as follows (f. o. b. Chicago): Fine and medium staple, 56@57c; ½ blood staple, 54@55c; ½ blood clothing, 51@52c; ⅜ blood staple, 55@56c; ¼ blood 52@53c; low ¼ blood, 47@48c; braid, 40@41c. Western ("territory") wools sell, Chicago basis, at about these same prices for corresponding grades. Individual lots, and small or mixed lots, of midwestern wools are quoted by dealers at 3c to 10c lower than these price levels, f. o. b. Chicago.

PRITCHARD'S
WEATHER
FORECAST
INTERPRETED BY THE STARS

Week of August 5

DURING the early part of the week of August 5 residents of Michigan may expect local thunder storms but during last half of week storminess will subside to a minimum in this state.

The lack of prominent or decisive storms during the summer months are the general rule rather than the exception and in this respect we believe this week will be normal.

Week of August 12

We look for just an ordinary summer week at this time—plenty of sunshine and scattered thunder showers. The very early part of the week and again at its close will probably be the most active period from a weather standpoint.

During middle days of the week the weather in Michigan is expected to be fair with the exception of the local heat thunder storms that so quickly arise at this time of year.

Cool About Labor Day

Temperatures will probably show a slight or temporary moderation during early days of next week but a cooler spell is to be expected in this state about 23d or 24th. Still another cool spell is to be expected about Labor day or a day or so later.

At this time there is really some danger of a bad frost for sections of the northern part of the state. It need not necessarily cause much loss, however, if proper precautions are taken. If the sky is clear, the wind calm and the night temperature falls to 42 degrees or below at this time prepare for frost.

MISCELLANEOUS MARKET QUOTATIONS

Detroit, Tuesday, July 31st.

BLACKBERRIES — $2@2.50 per 15-quart case.

CHERRIES—Michigan sour, 16-quart cases, $2.25@2.50; 24-quart cases, $3.50@4; sweet cherries, $2.75@3 per 16-quart case.

HUCKLEBERRIES — $7@8 per bu.

MELONS—Watermelons, 60@90c each; Arizona cantaloupes, $5.25@5.75 per standard crate; pink meats, $2.50@3 per flat; honeydew, $3.50@4; Arkansas, $4.50@5 per standard crate.

RASPBERRIES — Red, $3@3.50 per 24-pint case, $7@7.25 per 24-quart case and $9@9.50 per bu; black, $7.50@8 per bu. and $5.50@6 per 24-quart case.

APPLES—New, $2.50@3 per bu.

HONEY—Comb, 23@25c per lb.

CABBAGE—Home grown, $1.15@1.25 per bu.

GREEN CORN—40@50c per doz.

POPCORN—Little Buster, 7½@8c per lb.

LIVE POULTRY—Broilers, fancy rocks, 2 lbs. up, 38c; medium broilers, 35@36c; leghorn broilers, ½ pounds and up, 28@30c; small leghorns, 25@26c; stags, 14c; hens, 25c; leghorns, 18@20c; roosters, 14c; geese, 12c; ducks, 25@26c; spring ducks, 5 lbs. and up, 26@27c per lb.

DRESSED CALVES—Best country dressed, 14@15c per lb.; ordinary grades, 12@13c; city dressed, 16@17c per lb.

REPORTS SHOW CROPS LOOKING GOOD

TUSCOLA—Crops looking better, have had two good rains and the rye and wheat is in the shock with some hay to cut yet. Beans and potatoes don't grow as they should for there are too many cold nights. Corn is fair. Big time at Caro Farmers Picnic held July 25th. Next big week will be Caro fair held August 24th.—Robt. B. Chambers.

MONROE—General condition of crops good, weather fine, had a bad storm a week ago. Hay and wheat all harvested, oats ripe, but mostly badly lodger and will be hard to cut. Help is very scarce, wages high, some hay will not be cut, no help. Pastures are good, stock looking good.—Geo. L. Sype.

OGEMAW—Haying about finished and 80 per cent of crop. Rye is good. Sugar beets poor but corn is doing fine. Weather is rainy.—Jas. Anderson.

GRAND TRAVERSE—Have had nice rain, crops all look fine, seems to be lots of hay.—Chas. Button.

CALHOUN—We have been a little short of rain in this section but corn and potatoes are looking good, oats are looking fine, hay was a short crop but got it in in good shape.—G. E. Beardsley.

ST. CLAIR—Wheat all cut; not much threshing, yet it is thought the yield will be good. Lots of hay to cut yet. Help scarce. Oats will soon be ready to cut, they are turning fast. Corn is doing fine. Sugar Beets are looking good. Beans are looking fine and promise a good yield.—Isaac Justin.

WEXFORD—Hay all cut; just a fair crop, better hay on new seeding. Wheat all cut, somewhat short. Oats looking good but need rain. Grasshoppers pretty thick. Corn looking good considering late planting.—J. H. Campbell.

BRANCH—We are having fine weather for harvesting and threshing. Nights a little cool for corn to make good. Good showers, had a good rain Friday night. —W. W. C.

BUSINESS FARMERS EXCHANGE
Ads Under this Head 10c per Word, per Issue

FARM AND LANDS

40-ACRE FARM NEAR LAKE, STOCK, crops, tools, only $2000. Aged owner to sell at once makes big sacrifice; near live R. R. town and beautiful lake; good markets; heavy cropping loam fields; variety fruit; good 2-story 7-room house, delightful view, 42 ft. barn, granary, poultry house. If taken now horse, cow, poultry, implements, tools, and interest in 8 a. corn, 2 a. beans, 8½ a. rye, 2 a. potatoes, 3 a. hay, 4 a. buckwheat, 4 a. Hungarian grass, etc., included; all only $2000, part cash. Come now. G. N. GOULD, Harbor Springs, Mich.

GENERAL

10X30 STAVE SILO FOR SALE. SAGINAW make, new, never erected, complete with roof. When I sold my farm the purchaser declined to buy my new silo and I will sell at a great sacrifice. R. N. LONG, RFD No. 1, Holly, Mich.

FORDSON TRACTOR, NEW CHEAP. LOUIS BOOTHBY, R. 1, Elmira, Michigan.

TOBACCO

HOMESPUN TOBACCO. 5 LBS. CHEWING $1.75; 10 lbs. $3.00. 5 lbs. smoking $1.25; 10 lbs. $2.00. Pipe and recipe free. COOPERATIVE FARMERS, Paducah, Ky.

TO LATE TO CLASSIFY

— WILL SELL —
Four Grade Jersey Cows
for $125.00 each. Give your choice from herd of nine. All tested Jerseys.
H. E. BEECHER, New Baltimore, Michigan

WANTED TO HEAR FROM PARTY HAVING 5 to 20 cows for sale, preferably Holsteins. W. CALDWELL & SON, Springport, Mich.

LOW RATES TO CLEVELAND
by the D. & C. Waterway. Refreshing. All conveneniences.

A Review of the Corn-Hog Situation

FROM November 1, 1922, to July 1, 1923, more hogs were marketed than in any like period in history—30 per cent above the corresponding period for 1909-13. This unusually heavy marketing reflected the large number of pigs farrowed in the spring of 1922.

The special government hog report of June 1 indicates that in the spring of 1923 there was one per cent more spring pigs saved in the entire United States than there were in 1922; while in the corn belt there were 6 per cent more spring pigs saved. Furthermore, the report indicates that the farmers have bred sufficient sows to increase materially their number of fall pigs over the very large fall pig crop of a year ago. However, recent developments may cause farmers to market during July and August a considerable number of sows bred for fall little.

The corn crops of the past three years have been unusually heavy and the price has been very low. To utilize the large surplus of cheap corn, hog production has been greatly expanded. This increase in hog production has now cleaned up the unusual surplus with the result that the stocks of 1922 corn on farms at present are about the pre-war average and corn prices have recovered from their extremely low point.

In view of probable continued heavy hog production and barring either an unusual cholera outbreak or a marked improvement in the corn crop prospects during late July and August, a corn shortage may develop by the summer of 1924.

The history of the past fifty years indicates that there is a rough general tendency toward overproduction and underproduction of hogs in cycles of about two years from the high point to the low point and two years from the low to the high. From the fall of 1920 until the fall of 1922 hog prices were high in terms of corn. This high corn-hog ratio stimulated heavy breeding with the result that hog prices fell until now they are 25 below their 50-year ratio with corn. From the spring of 1922 to the midsummer of 1923 the corn-hog ratio declined from approximately 18 to 8 bushels. In spite of this sharp decline during the past year heavy breeding has continued with the prospect that the unfavorable corn-hog ratio of the past six months will last into 1924.

Our export trade takes approximately 10% of our total production of pork products. During the first five months of 1923 the European nations have taken a decidedly larger percentage of our pork products at a higher price than would have seemed probable last January. England and Germany still remain our principal customers, with relatively large quantities going to Belgium and the Netherlands. Should Great Britain keep up the rate of bacon, ham and shoulder imports she maintained during the first five months of 1923, our exports to her during the year would be slightly in excess of 1922. Her imports of lard, however, have decreased. There has been a lessening in her demand the last few weeks that throws doubt as to what her totals for the year will be. Since her general import trade has been very "spotty," the present inactivity may prove unimportant. On the other hand, German to a large degree, and Belgium, the Netherlands and Cuba to a lesser degree, have taken greater volume of lard than any time during the post-war years. During the first five months of 1923 a total of 823 million pounds of pork products moved out of the United states, which is approximately two one-half times the average of the corresponding months of 1909-13, and one-fourth greater than the average of the war period, 1914-1918.

Good Domestic Demand for Pork

At this time the figures on total cold storage holding of July 1 are not available. On June 1, there were in public cold storage warehouses and in packing establishments, 906 million pounds of pork as compared to 636 million pounds June 1, 1922 (a year notable for its light stocks) and also as compared to an average of 879 million pounds for the five years 1918-1922 inclusive. That there was a reasonable reduction in these stocks by July 1 is evidenced by the fact that holdings in seven principal western cities declined from 372 to 355 million pounds, or 4.8 per cent. Since in spite of a 30 per cent increase in hog marketings, the total stocks of the country were only 3 per cent above the last five year average on June 1, there seems to be nothing seriously alarming in the pork storage situation.

Lard is even more encouraging. On June 1 the stocks on hand were 85 million pounds, while the total on June 1, 1922, was 124 million pounds and the five-year average, 1918-22 inclusive, was 129 million pounds. In the face of the large number of hogs as compared to the corn crop and the probability that this will result in thin hogs, the lard outlook is quite favorable.

Based on Federal inspected slaughter for the first five months of 1923 the excess of consumption over the same period in 1922 is apparently 28 per cent. From the per capita standpoint our population has already eaten 5.2 pounds more than in the same months of 1922, and if this advantage is even reasonably maintained we may expect the annual per capita figure to approach 85 pounds.

This heavy consumption may be expected without a further serious decline in prices, since the active employment of labor has supported the pork market far beyond what might have expected on the basis of the heavy hog production, and there is no suggestion of a serious reduction of employment conditions before the last of 1922 pig crop is marketed.

While the foregoing situation indicates that the last of the 1922 hog crop will be readily absorbed by the present market due to the favorable industrial conditions and full employment of labor, the selling of this year's pig crop at a price on a level with the crop of 1922 is more problematical, and will depend on the continuance of the very heavy rate of hog production of the past year does not seem to be warranted to the corn situation. — American Farm Bureau Federation.

MILK PRICE PAID PRODUCER INCREASED AUGUST FIRST!

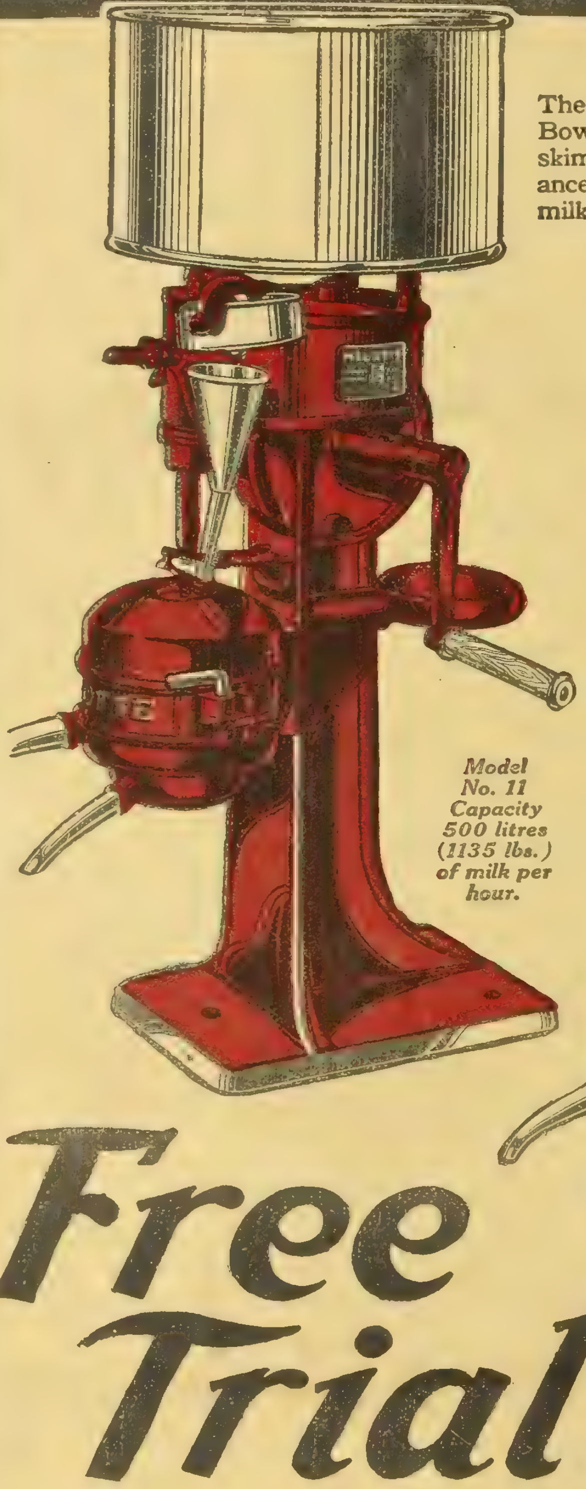
Detroit, July 31—Michigan Milk Producers Association and representatives of creameries in the Detroit milk area to-day agreed on an increased price paid producers for August and September, $3.30 per hundred, with no price set on surplus milk. Previous price was $3 per hundred and $1.64 on surplus milk. Detroit creameries are today announcing retail prices as follows: Milk, pints 9c, quarts 15c; Jersey Milk, quarts, 17c; Cream, half-pints, 17c; Butter-milk, quarts, 11c. This represents a raise of 1c per quart to consumers. The producers won their fight because of dry pasturage, increased cost of milkers, because of labor leaving the farms and the necessity of buying feed.

Prof. J. T. Horner, of M. A. C., Dr. Friday's former assistant, acted as arbritrator, assisted by Mr. Earl Hemenway, of the college.

Belgium Melotte
Imported Separator

Self-Balancing Bowl

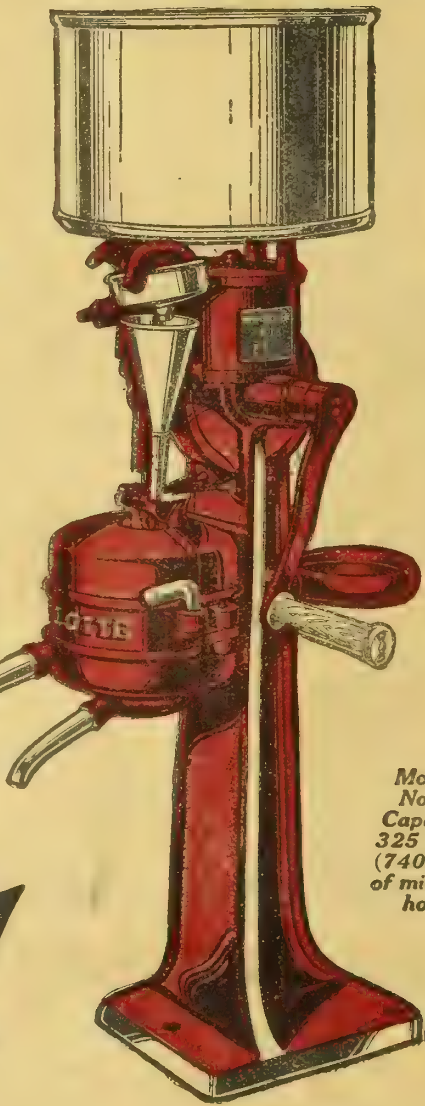
The Belgium Melotte is the only single-bearing-bowl separator ever made. This patent Bowl hangs from one frictionless ball bearing and spins like a top. It is *self-balancing*. It skims as perfectly after 15 years of use as when new. Positively cannot ever get out of balance—cannot vibrate and thus cause cross currents which waste cream by remixing with milk. Send coupon below today. Get the Free Book that tells about this great Melotte.



Model No. 11 Capacity 500 litres (1135 lbs.) of milk per hour.

$7.50 After Trial

We will send an imported Belgium Melotte Cream Separator direct to your farm on 30 days' absolutely Free Trial. Use it just as if it were your own machine. Put it to every possible test. Compare it with any or all others. The Melotte is easy to keep clean and sanitary because it has only one-half the tinware of other separators. Turns so easily that bowl spins 25 minutes after you stop cranking unless brake is applied. No other separator has or needs a brake. After you have tried it for 30 days and you know it is the separator you want to buy, pay $7.50 down and balance in small monthly payments.



Model No. 7 Capacity 325 litres (740 lbs.) of milk per hour

Free Trial

Your choice of any of these three models. NO MONEY DOWN—FREE TRIAL—SMALL MONTHLY PAYMENTS—DUTY FREE. This wonderful Belgium Melotte Separator has been picked by a jury of thousands of farmers—picked by dairy experts throughout the world to be the "king" of all separators ever manufactured. It has broken all records for Efficiency of Skimming, Ease of Turning, Convenience of Operation and Durability. Send coupon below for Big Free Book.

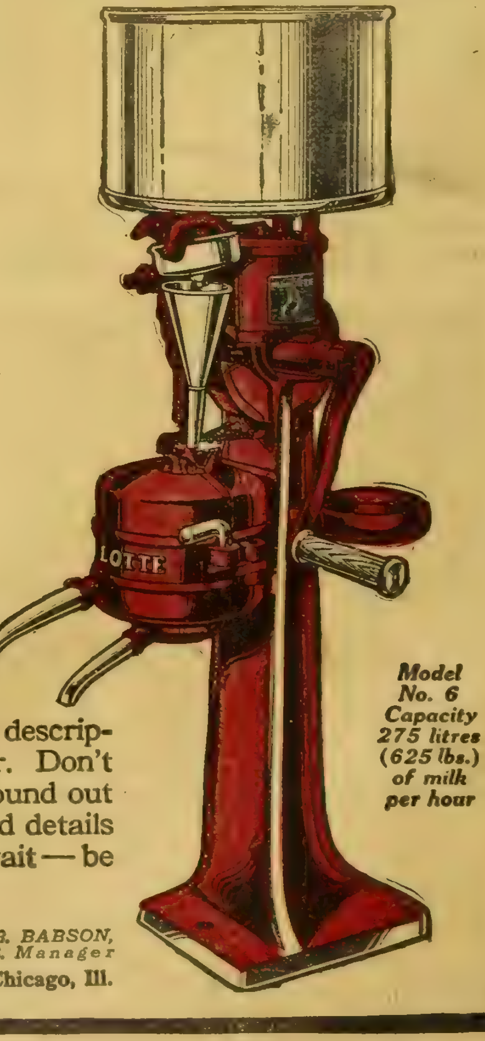
The Melotte Separator, *H. B. Babson, U. S. Mgr.*
2843 West 19th Street, Dept. C-330, Chicago, Ill.
2445 Prince Street, Berkeley, Calif.

Without cost to me or obligation in any way, please send me the Melotte catalog which tells the full story of this wonderful separator and M. Jules Melotte, its inventor and hundreds of letters from American farmers.

Name..

Post Office..

County.................................... *State*..................



Model No. 6 Capacity 275 litres (625 lbs.) of milk per hour

Write

Mail coupon for catalogue giving full description of this wonderful cream separator. Don't buy any separator until you have found out out all you can about the Melotte and details of our 15-year guarantee. Don't wait—be sure to mail coupon TODAY!

MELOTTE SEPARATOR, *H. B. BABSON, U. S. Manager*
2843 West 19th Street, Dept C-330 Chicago, Ill.
2445 Prince Street, Berkeley, Calif.

The Michigan BUSINESS FARMER

An Independent
Farm Magazine Owned and
Edited in Michigan

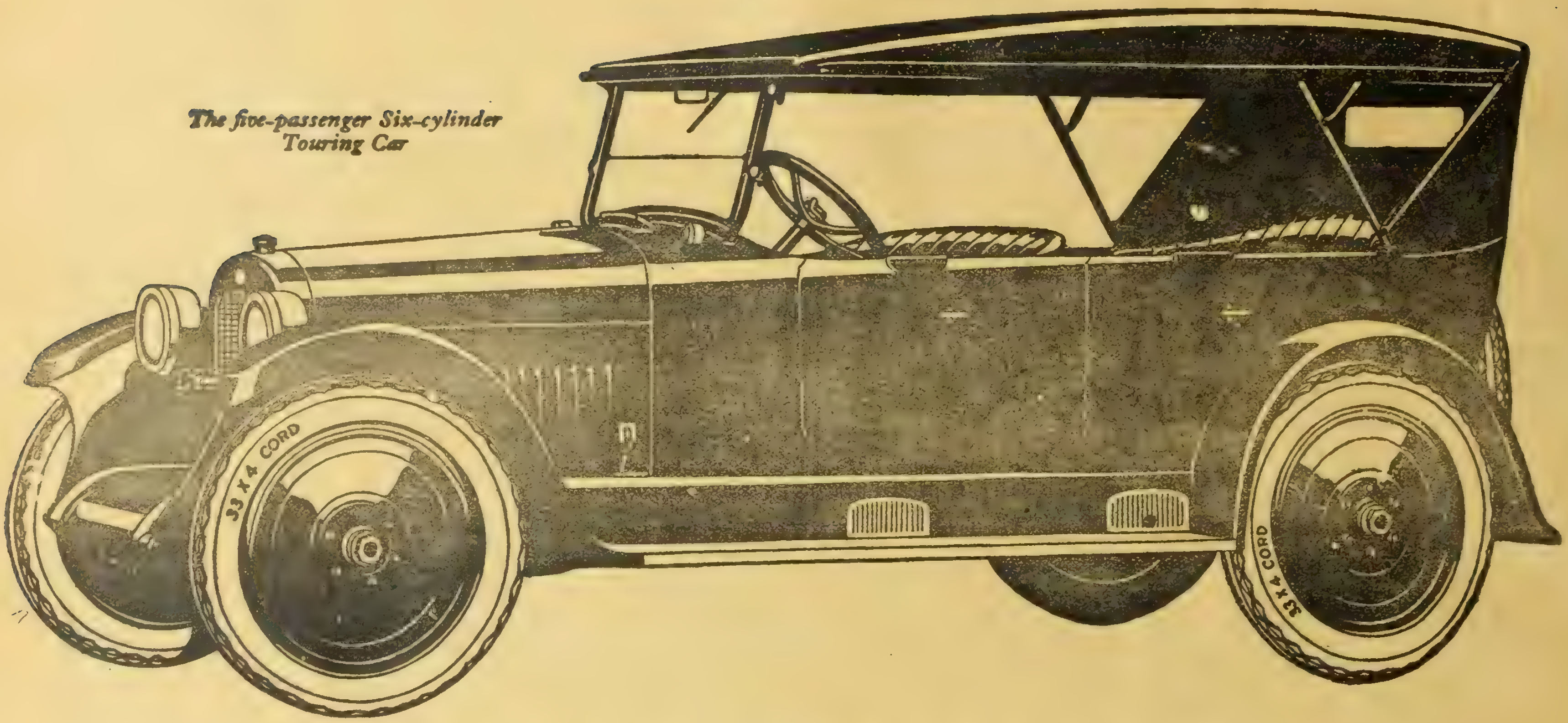
VOL. X, No. 26 SATURDAY, AUGUST 18, 1923 TERMS: TWO YEARS $1
60c PER YEAR—5 YRS. $2

Threshing the Golden Grain

Read in this issue: Farm Bureau Head Explains Plan to Store Wheat—Michigan Bean Interests Backing Advertising Plan—Hillsdale Farmers Cash In On T. B. Eradication—Will Michigan's 1924 Wheat Acreage Show Increase Over This Year's?—And many other interesting features.

NASH

The five-passenger Six-cylinder Touring Car



ANNOUNCING

A Wonderful Group of New Fours and Sixes

Never before in a long history of fine achievement has Nash resourcefulness and creative originality revealed itself with such downright decisiveness as in this *complete new line of open and enclosed models.*

They offer in point of appearance a dignity and beauty of body line that is of arresting and distinctive individuality.

They provide a performance so brilliant and so remarkable as to engage your immediate and unqualified admiration.

And from the seriously practical investment viewpoint they can truthfully be said to set a new and far higher standard of motor car value.

All that Nash engineering stands for, all that Nash factory practice represents in the way of accuracy and excellence, is embodied in these new cars in advanced and distinguished degree.

The new Six group includes the *Roadster*, five-passenger *Touring*, seven-passenger *Touring*, *Sport* model, *Victoria*, five-passenger *Sedan*, Four-door *Coupé*, and *Sedan* for seven.

And the new Four line embraces the *Roadster*, the five-passenger *Touring*, the *Sport* car, the *Carriole*, and the *Sedan*. (1[illegible]

The Nash Motors Company, Kenosha, Wis.

SATURDAY
August 18th
1923

VOL. X, NO. 26

Being absolutely independent our columns are open for the discussion of any subject pertaining to the farming business.

"Hew to the line, let the chips fall where they may!"

The Michigan
BUSINESS FARMER

"The Only Farm Magazine Owned and Edited in Michigan"

Published Bi-Weekly
Mt. Clemens, Mich.

TWO YEARS $1

Entered as second-class matter, August 22, 1917, at the post-office at Mt. Clemens, Mich., under act of March 3rd, 1879.

Farm Bureau Head Explains Plan to Store Wheat

Former Secretary of U. S. Department of Agriculture and President Bradfute of Farm Bureau Say Effect of Dollar Wheat Greatly Exaggerated

"THE Farm Bureau proposal that farmers withhold 200,000,000 bushels of wheat from the market is an emergency measure seeking immediate relief of the present market situation," according to O. E. Bradfute, president of the American Farm Bureau Federation. "This does not mean indefinate storage," continued Mr. Bradfute.

"We are urging farmers to hold their wheat for orderly distribution over the entire consumptive period instead of dumping it on the present low market.

"In doing this the American Farm Bureau Federation is counseling sound business policy. Storage will have a tendency to relieve the present situation and if a considerable portion of grain remains in the farmer's hand as a daily reminder of unprofitable surplus, plans for next season's planting will more likely be curtailed. Adjustment of acreage in line with world supply and demand is the permanent solution and our proposal is aimed toward that objective."

Mr. Bradfute continued: "A flood of unfavorable statistics has taken speculative support from the market and financial conditions abroad prevent the heavy customary purchases for foreign account during the harvest season. Farmers must meet this situation by feeding the market gradually and it has been our hope that all the machinery created by the last Congress would be geared with all possible speed, to and in this endeavor.

"The Secretary of Agriculture is empowered to designate suitable warehouses which may be licensed and bonded and which may issue receipts to be used as collateral in obtaining loans in those cases in which the individual farmer finds credit necessary.

"It is our suggestion that a warehouse association be organized in each community or county and act in its corporate capacity as the official warehouseman under the federal law, leasing such storage houses as may be available at the country shipping points and such farm granaries as may be adequately constructed for designation as licensed houses. We believe this plan thoroughly feasible of administration in a way that will involve only the soundest business practice. We do not ask the Secretary of Agriculture to license unsafe granaries or the banks to extend loans not thoroughly protected. We do believe that Congress contemplated the fullest use of all facilities to obviate the very difficulties in which we now find ourselves and expected prompt action in making the warehouse and intermediate credit acts effective. This the American Farm Bureau Federation is asking and is offering its fullest co-operation in helping to achieve this result.

Undue Pessimistic Hysteria

"In face of official statistics which show only forty million bushels greater surplus in exporting countries this year than last and only sixty million bushels less requirements in importing countries the price has been carried twenty-five cents lower than the average for 1922. This additional surplus might easily be taken care of by expanding consumption in exporting countries and adding a little more to next year's carryover. The excessively low price, we feel, cannot be justified by the facts and has come partly as a result of undue pessimism and hysteria. The prospective buyer is pressive his advantage to the full by staying out of the market.

"We think that the present emergency can be wonderfully aided by the procedure we have outlined. However, each individual farmer must understand that he is using his own judgement in offering for or withholding from immediate sale. We cannot guarantee higher prices. But, as a matter of consistent policy we have advised from the beginning of our organization more even distribution of marketing by farmers over the consumptive period. Now that the machinery of orderly marketing has been made ready insofar as laws can prepare it, we want it put into motion through the administration of the laws.

"While the present price of wheat, far below the cost of production, is a calamity to certain sections of our country which rely quite largely on their one income, we are glad to note that the prices of some products are as good or better than last year. Cotton is higher; dairy prices are better; poultry products are holding even; cattle prices are running about the same; oats are stronger; corn is decidedly higher but pork, in which form corn is most largely sold, is decidedly lower.

"From careful estimates, made by our Department of Research, of sales of farm products by farmers it was found that wheat furnished from nine to twelve per cent of total income from crops, livestock and animal products. For the crop year 1922 income from wheat was estimated at 725 million dollars; cattle brought in 1,000 million dollars; hogs 900; dairy products 1,100; and cotton 1,270. Fruits and nuts, vegetables and poultry each had an income value a little over half as much as wheat. Sales of corn run from 35 to 45 per cent as much as wheat. Preliminary estimates by our Research Department indicate that for the coming crop year gross income from total farm sales of crops, livestock and animal products will be about 100 to 200 million dollars more than the previous year."

EFFECT OF LOW WHEAT PRICE EXAGGERATED—MEREDITH

THE general effect of the drop in wheat prices to below $1 a bushel has been exaggerated in the minds of many people, both as regards its effect on farmers generally and upon business other than farming, declared E. T. Meredith, Secretary of Agriculture during President Wilson's Administration, in a statement to The Associated Press. He said:

"Those that grow wheat exclusively, or nearly so, and consequently are dependent upon the return from their wheat crop almost entirely for their income, have had their incomes cut by the recent decline in wheat prices; the seriousness of the situation, so for as they are concerned, is a matter of interest and importance to every other interest of the Nation, Labor and business being concerned as well as the farmer. Certainly steps should immediately be taken to prevent such a situation being again forced upon a group of people who are producing one of our staple products.

"The entire income American farmers receive from wheat, however, represents but 10 per cent of the total income of the farmers as a group. Then that commodity which represents 10 per cent of the total income is only 10 per cent lower in price than it was a year ago. It appears, then, that so far the price of wheat alone is concerned, the present price of corn is as much higher than the price for that grain a year ago as wheat is lower, and inasmuch as there are more than three times as many bushels of corn produced as there are of wheat, this very increase in the price of corn greatly exceeds the shrinkage in wheat. Whether corn will maintain its high price I do not know, but if it does, those who are both corn and wheat growers—which is a very large number—are, at least, in no worse condition than they were a year ago, and many of them are in a much better situation.

"It is interesting to note that a 10 per cent drop in wheat is only equal to but 8¼ per cent of the wealth produced each year by our dairy cows, and that the American hen produces more new wealth than the total wheat crop alone.

"I firmly believe that a practical method can be devised and put into operation, whereby wheat growers and other farmers can produce their crops with an assurance of receiving at least a certain price per unit of their production, as is the situation with those who manufacture certain products, so that those who cannot produce at that price may know it in advance rather than afterward.

In other words, the law of supply and demand, which means supply, productive possibilities, and consumptive demand, shall be interpreted to the farmers in advance, rather than obliging them to operate in the dark, as is now the case. It is a passing demand of national importance."

Michigan Bean Interests Backing Advertising Plan

Elevator Man Commend Business Farmer On Stand and Pledge Loyalty

I HAVE read with very much interest your editorial headed "Come On Loosen Up" in Aug. 4th issue of your paper. You are to be complimented on the stand you are taking and the frank and clear manner in which you present this to the farmers.

I attended the advertising meeting in Flint when Mr. Clendenin explained before the shippers present the possibilities of a Bean advertising campaign. When the call came for signing of pledges to subscribe Michigan's quota, I am glad to say that I signed the first pledge that I know of being signed in Michigan and was the first one to advance to the desk to sign. I am told that New York state have pledged their quota. Reports come from California that are very favorable that their quota will be pledged and also favorable reports from Colorado. Michigan would only assume one-third of the total advertising cost, while she produces about one-half the Beans which are now known over the country as the best prepared, best cookers and best flavored of all domestic beans and if Michigan can't get her share of the country's bean business with national advertising, it will be our own fault, and unless Michigan takes hold and assumes her one-third, the entire advertising campaign will be dropped as all others await Michigan's action to put it over and the whole campaign will depend on Michigan.

In our opinion if there ever was a year that advertising might be of benefit to all of the Michigan bean interests, it would be this year with the present splendid crop prospects. There are not many elevators in Michigan whose advertising cost on the basis of 9-10 of a cent per bag, would be over $300.00 for one year. We have no way of knowing, of course, that the advertising will obtain the results expected nor that it would be a cure-all for the condition that the Michigan bean market has been in, but its cost to each elevator throughout the state would not be of an amount that would work any serious hardship on any one elevator and is surely worth a trial. On the other hand, should it stimulate the demand that would be expected from advertising, all elevators would benefit in a reasonable increase in market prices that should more than make up the advertising cost as compared with no advertising and the growers would receive a better price than is now evident they are going to receive based on some of the quotations at which new crop beans are being offered for October shipment.

It is my opinion that some of the opposition to the advertising might develop that those who are indifferent and uninterested in the advertising have quite a comfortable lot new crop futures sold that at present appear to show them a handsome profit and particularly if the crop comes through without any damage and they, of course, could not be interested in any advertising campaign that might have any influence toward advancing prices to the farmers for their beans that speculative elevators have sold short and for which the farmer will get no benefit if the market goes down to where the short sellers want it and you can bet your life they will pound it down as hard as they can.

We know of an instance where an elevator manager last winter drove through the country soliciting beans from farmers to be placed in storage in their elevator and offered the extra inducement for hauling when the roads were good that they would store them free of charge, no storage, no insurance and no shrinkage—the elevator assumed all that. You can appreciate that if they secured a large quantity of beans which they evidently did and then sold those farmers stored beans short, they would not be interested in an advertising campaign that might advance prices, particulary to those farmers who still hold storage slips. It may develop later that the opposition to advertising may lie in those two factors — speculators short selling farmers new crop beans and speculation in farmers stored beans.

Those two factors might be worthy of thorough investigation and an effort to get at the bottom of the real reason for the indifference and opposition to the advertising might disclose that the very ones who are blocking the whole campaign may be the shorts and we

(Continued on Page 23)

Hillsdale Farmers Cash In On T. B. Eradication

Two Consignments from Hillsdale County First in U. S. For Which Premium Was Paid Because Hogs Were Bred and Fed in Tuberculin Tested Accredited County

THERE are at least two farmers in Michigan who have had it fully proven to them that it pays to have their live stock tested for tuberculosis; that it pays well to live in a tuberculin tested county. These farmers, Charles Bowditch of Osseo and Andrew Reynolds of Hillsdale, are looked upon with envy by their neighbors in Hillsdale county. These two farmers each sold a carload of hogs and collected a premium of 10 cents per hundredweight on top of the selling price. And this was because the county has been recognized by the United States Department of Agriculture as being practically free from bovine tuberculosis.

Each man had a load of hogs on the Buffalo market Monday, July 30, for which they received the premium which the packers of that and other markets have agreed to pay for carloads of hogs from counties that are designated by the government as being free from animal tuberculosis.

News of the county's recognition by the government as a tuberculin tested accredited county brought to its farmers through the official order from Washington created great interest, especially in view of the fact that the county is the first one in the corn belt proper to be so recognized. Thirteen other counties were recognized but the others were in northern Michigan, southern Indiana, Tennessee and North Carolina.

When the word reached here that Hillsdale county had been recognized it was late in the week and several local folks got busy right away to make up a shipment for the Buffalo market.

Committee Gets Busy

The men who assisted in one way or another in this enterprise were F. E. Haynes, president Hillsdale Live Stock Breeders' association; Charles Kimball, chairman of the county board of supervisors; A. Z. Nichols, president county farm bureau; Col. E. H. Kerr, master of a local grange and a war veteran; G. B. Smith, secretary local Federal Farm Loan association, and Jabin Strong, Red Polled breeder. H. R. Smith, live stock commissioner of the National Live Stock Exchange at Chicago, was also present to assist in getting up the shipment of hogs and seeing it through to market. Mr. Smith had taken a very active part in starting the tuberculosis eradication program in the county two years previously, which resulted in placing it in the healthy list.

Here is a picture of the Hampshires taken just before loading at Osseo. The men on the fence are, left to right: F. E. Haynes, president Hillsdale County Live Stock Breeders' association; Chas T. Kimball, chairman county board of supervisors, who signed the certificate authorizing the payment of the premium; H. R. Smith, commissioner National Live Stock Exchange and a native of the county; Fred Bowditch, son of owner of hogs; Jabin Strong, Red Polled breeder; A. Z. Nichols, president County Farm Bureau; G. B. Smith, secretary Farm Loan association and E. H. Kerr, grange official. The insert is a fine likeness of Mr. Chas. Bowditch.

Mr. Bowditch was the only man who had a carload of hogs in the county which was anywhere near ready to market, as the hogs had been shipped out pretty closely this spring. He had expected to keep his for a while yet, as they were under 200 pounds, but being a public spirited man and wanting to see his county the first to cash in on its new distinction he agreed to ship his carload of hogs. The hogs were Hampshires, being the culls from his herd of purebreds. He also breeds Shorthorn cattle and has always been in the forefront of live stock improvement plans in the county.

The hogs were loaded in due time and landed at Buffalo in good shape. The Hampshires were sold at $8.25 per hundredweight, which was the top of the market. A few other hogs sold at the same price. The 39 head averaged 195 pounds and were a very smooth, attractive lot. They were bought by the Dold Packing company, whose buyer did not know that the hogs were to receive a premium. The premium was paid in a separate check to Mr. Bowditch later.

This is the plan which is to be followed in paying the premium on all such shipments, according to a statement by Commissioner Smith of the National Live Stock Exchange, who was first to suggest that the packers pay the premium, and who witnessed the sale in Buffalo.

The other shipment from Hillsdale county to command a premium was made up of Poland Chinas and Duroc-Jerseys. They were bought by the Klinck Packing company, a little below the top price, and were considered a good sale, as they were somewhat uneven.

This load was also sold without the packer buyer knowing that they had a right to a premium. For the sale of these and also the Hampshires the certificates were presented by the commission company to the packers which was their authority to to pay the premium. The certificate presented covering the carload sold by Mr. Bowditch read as follows:

"Hillsdale, Mich., July 28, 1923
"To Whom It May Concern:

"This is to certify that Hillsdale county, Michigan, has been officially designated by the United States Department of Agriculture and State of Michigan as a modified accredited area, all cattle having been tuberculin tested according to regulations prescribed and that this consignment of hogs thirty-nine (39) in number of the Hampshire breed, weight 7600 pounds, was bred and fed by Chas. Bowditch and Son in Jefferson Township, P. O. Osseo, Hillsdale County, Michigan, who are entitled to receive the premium of ten cents per hundred pounds live weight above selling price.

"Chas. T. Kimball, Chairman, Board of Supervisors, Hillsdale County."

This certificate for Mr. Reynolds' premium read the same with the exception of names used.

In this step just taken by the United States Department of Agriculture more has been done to increase interest in the testing of herds for tuberculosis than at any time heretofore and every farmer who raises live stock to any extent will be anxious to have his own county fall in line so that he can get a premium of his shipments.

Will Michigan's 1924 Wheat Acreage Show Increase Over This Year's?

By H. R. SMALLEY

(Special to The Business Farmer.)

WHEAT is now grown on one acre out of every ten in Michigan or in other words just about 10 per cent of the total crop acreage is seeded to wheat and this means practically one million acres. The total crop produced is not sufficient to feed the population of the state—now approaching four million. In fact, with average yields the acreage could be increased from 40 to 50 percent without producing more than enough to supply the state with home-grown flour. Better than this, however, would be to sow the same acreage and increase the acre yield by 40 to 50 per cent. At any rate, Michigan farmers are certainly justified in growing a million acres of wheat, which is only slightly in excess of the pre-war figure and only two thirds as much as was grown in the state 30 years ago.

It will be of some interest to Michigan farmers to know whether or not other states are getting back to normal in wheat production. Some wheat is grown in 42 states and the crop now being harvested is 11 million acres or 24 percent in excess of the average pre-war acreage. Minnesota and South Dakota have reduced by more than three million acres and 11 other states are growing less wheat than in the years from 1909-1913.

In 29 states, however, the wheat acreage shows an increase over the pre-war figure, but the big increases are found in seven states—Kansas, Montana, Oklahoma, Illinois, Colorado, Missouri and Texas. The combined increases in these seven states amount to almost 12,000,000 acres or more than the total increase for the whole United States over the pre-war acreage. These are the states that are entirely out of line as far as wheat production is concerned and it seems reasonable to assume that these states will be most likely to make further reductions, although it is not possible to make any accurate prediction as to how extensive these reductions will be.

The large increase in spring wheat acreage in Montana will probably be maintained for some time. This crop—once important in Wisconsin and now leaving Minnesota—has been gradually moving West and North for many years, and the recent increased acreage in Montana may be regarded as a normal and expected development. The tendency toward a more diversified and safer type of farming will undoubtedly result in a reduction of the winter wheat acreage in Kansas and in parts of Oklahoma, Texas and Colorado. On the other hand, the increase in wheat production in Illinois and Missouri is leading in the direction of a better balanced cropping system and little, if any, reduction in acreage can be expected in these states.

One half or this field was fertilized when planted to wheat while the other half was not. This arrangement has been carried on for several years and the unfertilized half of the field has averaged, during the last nine years, 12.4 bushels of wheat per acre. The half that was fertilized, part of which is shown above, has averaged 25.2 bushels per acre during the same period.

From the standpoint of financial returns, wheat is perhaps the most important small grain grown in Michigan. More than two million acres are seeded to oats, rye and barley each year, but these crops are grown principally for feed. Moreover, wheat just naturally fits into the crop rotation on many Michigan farms. The labor required in its production is well distributed with respect to corn, oats, rye, barley, and hay. Preparation of the soil in late summer after harvest, seeding in the early fall before the corn is ripe; cutting just after rye and ahead of oats and barley and after hay making and corn cultivation are about done, are big advantages in favor of wheat. Of course, these facts are not new to any farmer but they are often overlooked by the advocates of radical changes in the established cropping system and so well known to the farmer that he almost forgets to mention them.

Then wheat is an excellent "nurse" crop for clover. It shades the ground less completely than oats and is cut earlier. Young clover, therefore, is able to get a good start when seeded in wheat, provided that sufficient plantfood and lime are present in the soil.

When all its advantages are properly considered, it seems probable that the Michigan wheat acreage is more likely to increase somewhat than to decrease.

Wheat Production has Progressed

Michigan farmers have learned much about wheat production in recent years. New and much improved varieties—notable Red Rock—

(Continued on Page 19)

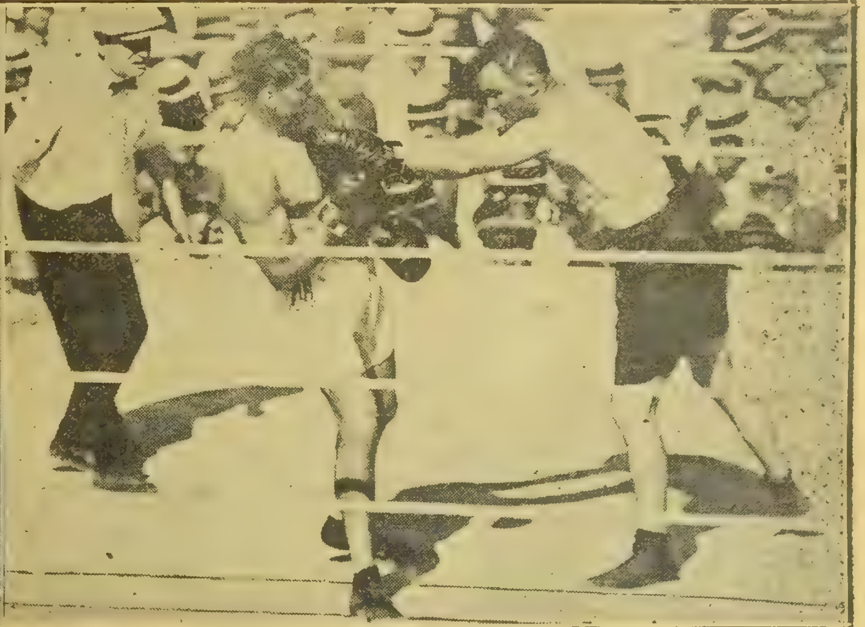
PICTURES FROM FAR AND NEAR

THE LATE PRESIDENT IN ALASKA—Was presented with a gigantic salmon, typical of the industry which flourishes in that territory. Note the president's interest in the fisherman's remarks regarding it. Warren G. Harding was the first President of the United States to visit Alaska during his term of office.

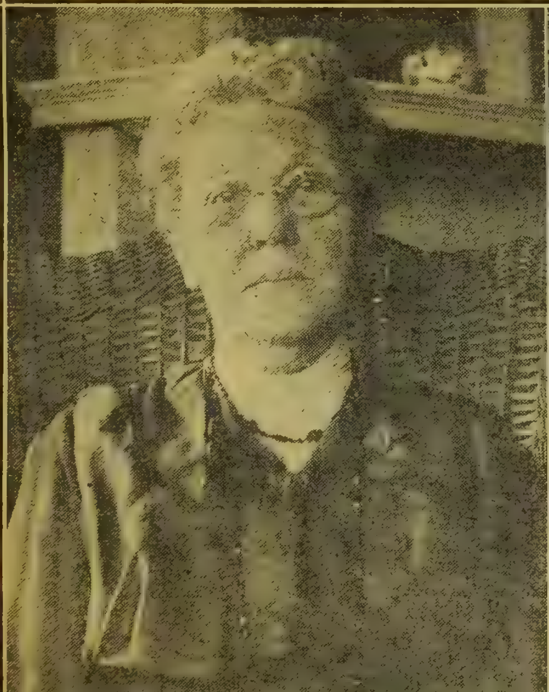
THE LAST PICTURE OF PRESIDENT AND MRS. HARDING—Taken in Salt Lake City, on the presidents way west, when he was acclaimed on every hand. That he was a tired man, who would have welcomed rest more than plaudits is plainly written in his face in this picture, while Mrs. Harding shows rapid recuperation. The lady to the left is Mrs. Stapley, the first woman born in the state of Utah, August 9th, 1847.

THE PRESIDENT BELIEVED IN POWER FARMING—And proved it by running this tractor pulling a combined harvester and thresher, through the wheat fields which he inspected near Hutchinson, Kansas. The President expressed great interest in the wheat problem.

"LIZZIE" KING BUYS OLD WAYSIDE IÑN—Henry Ford has bought the famous Wayside Inn, at South Sudbury, Mass., and will preserve it as a historical museum. The furnishings and settings which have been familiar to travelers for 200 years will be kept as long as they can be made to hold together. Hallowed by the names of Washington, Longfellow, Webster and Lafayette, the peaceful old hostelry will slumber serenely for generations to come.

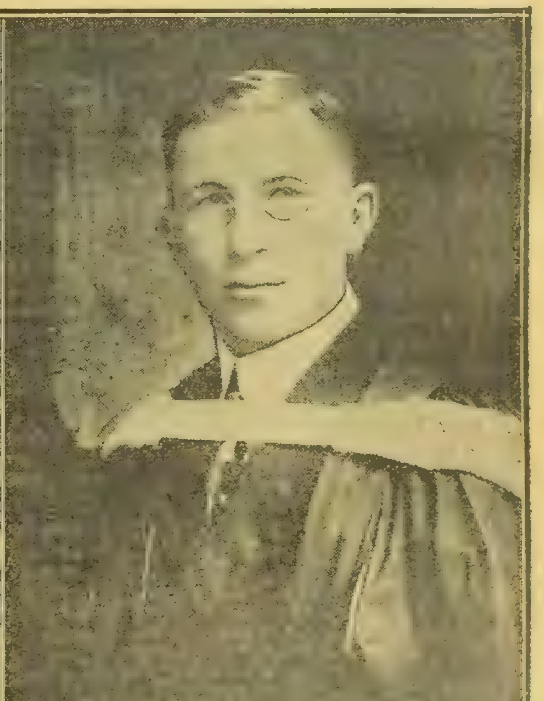


THE DEMPSEY-GIBBONS BOUT—Gibbons steps out. Here the valiant St. Paul battler is seen landing a terrific left swing high on Dempsey's body in the eleventh round of their battle at Shelby. This is one of the three rounds in which the contender was credited with having an advantage over the champion. That Dempsey felt the blow is evident from the expression on his face as he was shoved back on his heel. Jimmy Dougherty, the referee can be seen in the foreground.



FIRST WOMAN TELEPHONE OPERATOR IN THE WORLD—Miss Emma M. Nutt of Chelsea, Mass., who is said to be the first woman telephone operator in the world. She started her work in 1878, receiving a very low wage, with a 50 cent raise at the end of six months and 50 cents a year raise—some years. She worked from 8 in the morning until 6 at night, and every other Sunday. The switchboard she operated was a crude affair and looked like a sewing machine. It was not until 1880 that the present style of board was developed.

OIL KING BESTOWS LARGESSE—John D. Rockefeller, who on his eighty-fourth birthday, dispensed nickles, this year instead of dimes, to the little boys in the neighborhood. Here is Robert Irving Hunter, two years old, receiving a nice new nickle from the oil king of the world, as the two leave the vestibule of the little Community Church near the Rockefeller home in the Pocanito Hills, New York. Newspaper men say John D. is "camera shy" and in this case he would not pose unless the camera man attended the services in the church.



FATHER OF DIABETES CURE—Dr. Frederick Grant Banting is discoverer of a cure for diabetes. He has found that the pancreas, if not functioning properly, allows diabetes to set in. His new cure consists of taking a serum from the tissues of fresh pancreases, called Insulin, and as a remedy, it has been an instantaneous success. Dr. Banting has been allowed $7500 a year for the rest of his life by the Canadian Parliament in order to allow him to continue. his research work.

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Farmers Service Bureau

(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full name and address. Name not used if so requested.)

AN ANALYSIS OF MEDICINE

I am writing to ask if there is a way to analyze a small amount of medicine and get the ingredients and the amount of each it would take to make a larger amount, say a pint. If so where could I send a sample to? I have or had a very valuable prescription to use on a sweeny. It takes nearly a pint and I only have a little, not enough to cure a sweeny. In some way I have lost the prescription.—Mrs. B., Rhodes, Mich.

—May I say that it is possible to make an analysis and determine the ingredients of a mixture, and if sufficient time and sample is at hand, a quantitative determination may be made for duplicating any desired quantity.

On the other hand, in compounding such preparations oftentimes there are many medicinal plants or drugs used which, so far as we know, we have no methods for their quantitative determination and in such cases it is almost impossible to exactly duplicate a given prescription; and, if a given medicament has been used and found to be effective in treatment, it is necessary to duplicate exactly, otherwise the desired results will not be obtained.

It seems as though a veterinarian of ability could prescribe a satisfactory treatment for sweeny.—W. C. Geagley, State Analyst.

MAY COLLECT NOTE

Have been a reader for years of your paper and should like to know how I can get out of paying a note which I have signed for several years for a neighbor? He renews it every three months. His place is up for mortgage sale and of course I have no hold on any real estate or any chattles, only a plain note. I expect when he has to move I will be compelled to pay it up.—F. E. S., Rhodes, Mich.

—If the holder of the note is not able to collect the amount from the maker, he could hold the endorsers liable, and, after giving proper notice, could collect the amount from them.—Asst. Legal Editor.

LIABLE FOR PAYMENT OF LATE HUSBAND'S DEBTS

Am writing you for advice. Now if a husband took shares in a stock company and gave his note for same and before note came due he died leaving all money and mortgage in point with his wife, can they make the wife pay the note? He has no property. Please answer me if possible. Enclosed you will find a stamp for same. Please do not publish my name or town and oblidge. Thanking you in advance.—F. S., Tuscola County, Mich.

—Property devised or bequeathed to any devisees or legatees of the testator is liable to the payment of his debts, after allowance is made by the probate judge for the maintenance of the widow and children during settlement of the estate. If your husband had no other property and bequeathed all his money and his interest in the joint mortgage to you, the money and mortgage interest so bequeathed would be liable to the payment of his debts, including the note. However, your original interest in the mortgage which you held jointly could not be taken for the payment of the debts. You do not say what disposition was made of his shares of stock. If they were disposed of by the will, they would be charged with the payment of the debts, along with the other bequests.—Asst. Legal Editor.

WRITE TO PUBLISHER

What steps would I have to take to correct a double subscription to a paper to have them hold over one remittance for next year? I paid subscription for paper and a little later a daughter living in another part of state sent $1.00 for same paper to be sent to me at my address not knowing I had already sent for one year. I have written asking them to stop one and hold remittance for next year but they still send me the two papers. There being no other one by my name at Evart known they are sending both subscriptions to me and I wish I might stop one.—H. W., Evart, Mich.

—When you subscribed for the paper, you entered into contract with the publisher which would bind both parties, and you would have no remedy at law to have your money refunded or to have it applied on some other year than the year for which you subecribed. However, if you write the publisher, stating just what you want, I see no reason why they should not be willing to grant your request.—Asst. Legal Editor.

FIRE AND TORNADO INSURANCE POLICY

Insurance agents writing policies for old line companies are offering us farmers a combined policy covering fire, lightning and cyclone. One of the mutual agents tells me that such a policy cannot be issued, that it is against the Michigan Laws. Can you give me any information that we farmers may depend upon.—A Subscriber, Clare County, Mich.

—This condition was recently reported to the State Insurance Department and their answer was: "Michigan Standard Policy Law makes no provision for the issuance of combined fire and tornado policies. This law is specific. The entire wording of the contract being included, and such other provisions as may be included in the contract are therein specified.

"We have been informed that some business is being written as a combined policy, but no specific insurance has been brought to our attention. When ever an inquiry concerning the matter has come up we have invariably informed the inquirer that it could not be done."

It would seem that the information given by the department of insurance is conclusive, and it would seem the better plan not to insure under the proposed combined policy until such time as such action has been approved by the State Insurance Commissioner, and in the meantime it will be well to hold the policy which you now have in force.

WOULD BE AN INFRINGEMENT

Please inform me if a patented article can be reproduced for ones individual use?—L. R. C., Alma, Michigan.

The unauthorized making or reproducing of a patented article by any person for his own practical use would be an infringement of the patent.—Asst. Legal Editor.

WANTS TO GET MONEY THAT WAS WILLED MOTHER

My mother's grandfather made a will about 50 years ago and willed the four children $5 each so they couldn't break the will. They lived in Pennsylvania at the time. When mother was 8 years old she stayed with her grandfather and grandmother until mother's father and aunt came to Michigan then she came with them. The grandmother has been dead about 15 years and my mother has been dead 6 pears but she never got the money willed her. Would like to know if anything could be done to get it.—Mrs. J. R., Edmore, Mich.

—I would suggest that you write the probate court of the county in which your grandfather died to ascertain if his will has been probated and what became of the property. If it has not been probated, you would have to find the will and proceed to have it probated, and if the property can be found, you might be able to recover it.—Asst. Legal Editor.

PLANTING BUTTERNUTS AND WALNUTS

Could you please tell me what time of year to plant butternuts or black walnuts for seedling trees and how thick to plant them?—Miss E. R., Bay City, Michigan.

—Butternuts and black walnuts can either be planted in the fall or stratified in moist sand until spring. Fall planting is to be recommended save in such cases where rodents are troublesome. If the trees are to be grown in nursery bens and later transplanted eight per running foot. If planted directly in field place seed spots six feet apart. This spacing will give the greatest timber yield.—Paul A. Herbert, Instructor in Forestry, M. A. C.

SHARE OF PROPERTY TO HALF SISTER

Where the only heirs to an estate are two sisters and one half sister what then by law would go to the half sister? This property did not descend from either parent. I am a subscriber and read the M. B. F. and will greatly appreciate any information you will give me on this question.—J. M. P., Alma, Mich.

—Compiled Laws of Michigan 1915, Sec. 11799, provides that the kindred of half blood shall inherit equally with those of whole blood in the same degree, unless the inheritance comes to the intestate by descent, devise or gift of some one of his ancestors, in which case all those who are not of the blood of such ancestor shall be excluded from such inheritance.—Asst. Legal Editor.

DR. FRIDAY AND THE DETROIT MILK SITUATION

In an article published in several local papers recently—in fact an "open letter"—it was stated that, during the controversy between the milk producers and distributors at Detroit, Dr. Friday, then president of M. A. C., "threatened to investigate and find out if the farmers could not produce the milk cheaper." The letter also asks "why did he not try to find out whether the distributor could also cut out his profit? Can you tell in your column if Dr. Friday did not by request of both parties, make a thorough investigation of the situation and publish the results obtained? Also did Dr. Friday make the above threat?—G. N. J., Laingsburg, Mich.

—Dr. Friday sat in conference with both distributors and producers of milk in the Detroit area at the time the whole milk question was receiving chief attention last spring. The producers at that time were receiving a low price per hundred pounds for their milk. This price was about $2.60 a hundred when Mr. Friday entered the negotations, and had been as low as $2.25 earlier in the year.

As a result of an agreement reached by the distributors and producers, largely on Mr. Friday's recommendation, the price paid producers for their milk, delivered at Detroit, was raised to $3.00 a hundred pounds, and it has remained there since.

Certain adjustments of the retail price of milk were made at this time by the distributors. Lack of exact information on cost factors entering into distribution made it very difficult to determine the exact price at which distributors could retail milk with the wholesale price at $3.00 a hundred pounds. Mr. Friday found that numerous factors, among them the independent distributor and the retail grocery milk depot, had to be taken into consideration in figuring distribution costs.

Mr. J. T. Horner, a member of the M. A. C. economics department, spent considerable time in gathering data in the Detroit area for the purpose of helping to determine distribution cost. On May 1st, Mr. E. L. Hemenway, formerly of the M. A. C. economics staff, started on full time investigation of distributing cost factors in the Detroit area. Results of this work are, of course, not yet definate.

I know of no occasion upon which Mr. Friday "threatened" to see if the farmers could not produce milk more cheaply. I believe that Mr. Friday promised both distributors and producers to make a thorough study of all factors entering into production and distribution, in order that the most just and equitable basis for both wholesale and retail prices might be arrived at.

The fact that the price paid farmers for their milk was raised to $3.00 a hundred pounds, and that it has remained there since, would seem to indicate that Mr. Friday's negotiations did not discriminate in any way against the producer. He may possibly have said at some time that the most economical production of milk possible would be a necessary factor in future and permanent settlement of the whole milk question. The future will undoubtedly throw more light upon the whole question, and make possible a solution of what is admittedly a perplexing economic problem. Investigation has apparently shown that there are two sides to the question, and that the distributors are not making the tremendous profits accredited to them, under the present system of distribution, at least.—J. B. Hasselman, Supervisor of Publications, M. A. C.

RAT-TAILED MAGGOT

What is the name of things that look much like a cut worm but have a long tail, about as long as the body? They are found in damp places. I found them last summer in a small house built around a well and other damp places.—M. W. N., Cheboygan, Mich.

—This description leaves little doubt that the insect in question is known as a rat-tailed maggot, otherwise the larvae of a fly belonging to the Syrphidae and bearing the name Eristalis. This maggot breathes through the long slender tail and when they burrow in decaying vegetable or animal matter they leave the tail sticking out at the surface so that they get a supply of air at all times, unless they go down too deeply for their natural air tube to reach to the surface. The adult fly looks very much like a honey bee and flies with a droning sound, very much like the buzz of a bee. They are therefore called drone flies. They are entirely harmless at all times.—B. H. Pettit, Professor of Entomology, M. A. C.

Uncle Rube Spinach Says:

"FLOWERS IN OUR HOMES"

YOU know I read in a recent issue of M. B. F. a headin' jest like this one an' I was int'rested the minnit I saw it. I've always been a believer of such things an' jest natcherly I started to read the little article—"started" is right! First thing I read wuz this—"try puttin' a piece of blottin' paper"—I got no further 'an that 'cause, don't you see, the flowers wuz bein' blotted out 'fore they had a chance to even start.

Sure I b'lieve in flowers in the house but not in to much blottin' paper. An' now dear folks what is flowers anyway?

Well now, it kinda seems to me 'at jest 'bout the finest flowers 'at can ever be had or found in any home would be the lastin' flowers, not the kind that requires blottin' paper or tables or pots nor pans, but the most beautiful of all flowers—kindness, love, good cheer, pleasant smiles and pleasant words—even a kiss, yes many of 'em—now an' them an' even more often. All these things are jest lovely flowers an' could easily grow in any home. An' they're the kind of flowers I'd like to see everybody raisin' in their homes, no blottin' paper needed—nothin' out of the ordinary—jest love an' good fellowship—the love every man should have fer his wife—the love every woman should have fer the man who had picked her out of the many he has known, to be the one to put flowers into his home and into his life.

Yes, good friends, its flowers to a man to be met after a hard day's work by a pleasant an' a smilin,' cheerful woman. It's flowers for a wife when the husban'—the supposed head of the house, notices how hard the dear wife has tried to make his home pleasant an' tells her he realizes what she is doin' for him. Yes, there are flowers and flowers—but the nicest an' best, the kind at gets right hold of us, 'at grips the heart strings of summer, night or day—we've got 'em with us, no blottin' paper's needed to set 'em onto—they show in the dark as well as in the light an' are everlastin,' always beautiful an' lovely an' will do more to keep a house in order 'an any other kind of flower I ever heard of. Cordially yours,

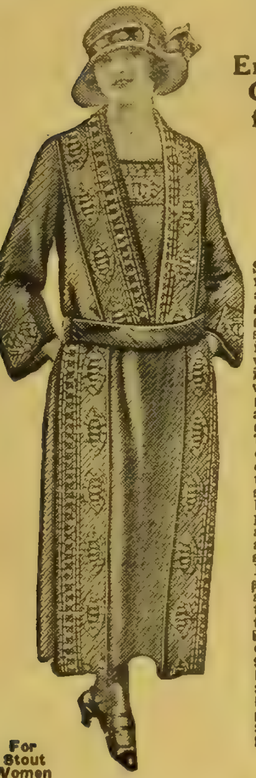
UNCLE RUBE.

Brand New Fall Merchandise at Lowest Prices in America

Send No Money

These prices for brand new fall styles will positively amaze you—They are so low! But wait until you have seen the actual merchandise. Just make your selection now and order at our risk. Don't send one cent now. We cheerfully send your choice of these bargains for examination and approval right at home.

Just letter or postcard brings any of these astounding bargains. Merely give name and number of each article you want. Also state size and write your name and address plainly. Pay nothing till goods arrive. Then only the bargain price and postage. If not satisfied, you may return the goods and we refund your money.


For Stout Women

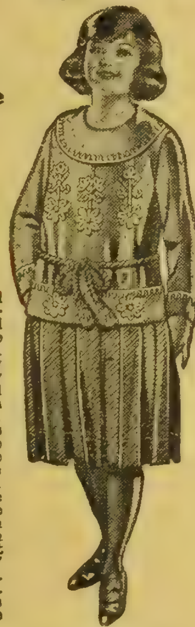
Popular Model Embroidered Gabardine for Stouts

$3.48

Sharood heartily recommends this attractive frock of good quality cotton gabardine. It is designed along slenderizing lines for stout women. The skirt is finished with two wide, loose panels attached at waist and bottom. The edges are bound in black and embroidered in contrasting color. Collar is in the new long roll shawl effect, embroidered to match panels on skirt, as are also the vestee and tabs on bell-shaped sleeves. Dress is gathered at waistline at back, and finished with tie sash. Sizes 44 to 54 bust measure. State length desired. **Order Navy by No. 96E7610, brown No. 96E7612. Send no money. Pay $3.48 and postage on arrival. State size and length.**

Child's Middy Dress Attractive Two-Tone Combination

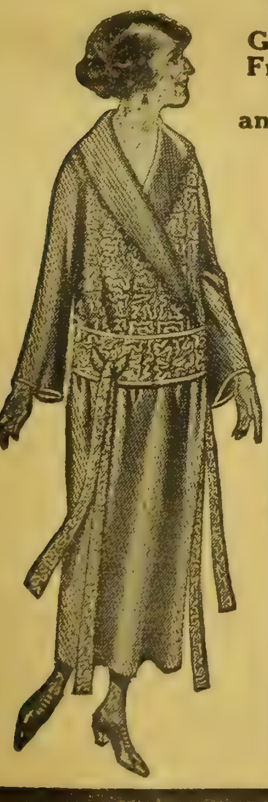
$1.98



One of the most novel and attractive children's garments ever produced, and sure to be a big favorite for fall and winter. A charming two-piece middy dress, including snappy Balkan middy of all red flannel cotton warp with round collar and cuffs. The front, collar, cuffs and Balkan bottom are embroidered in exquisite contrasting colors. Rope girdle with tassels at waist. Skirt of navy blue serge in clustered plaited style hangs from a white muslin under-waist. Furnished in red blouse and blue skirt combination only. Sizes 7 to 14 years. **Order No. 96E8326. Send no money. Pay $1.98 and postage on arrival. Be sure to state size.**

Bulgarian Effect Gabardine Frock For Women and Misses

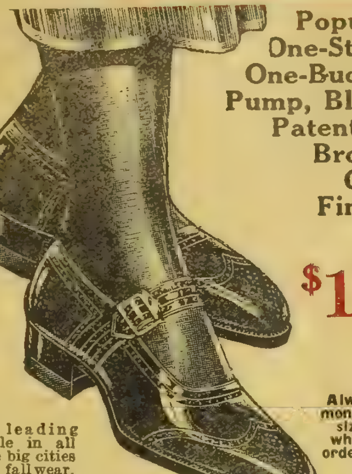
$2.98



An exceptionally attractive fine quality cotton gabardine dress for women and misses. Long roll collar in shawl effect, sleeves and belt piped in red. Entire front of blouse enhanced with exquisite all-over embroidered design in Bulgarian effect with rich harmonious colors. Two streamers at both sides and front. Wide belt embroidered to match blouse. Sizes for women, 34 to 44 bust; for misses 32 to 38 bust. State length desired. Colors, navy or brown. **Order navy by No. 96E7500. Brown No. 96-7502. Send no money. Pay $2.98 and postage on arrival for either color. State size.**

Popular One-Strap One-Buckle Pump, Black Patent or Brown Calf Finish

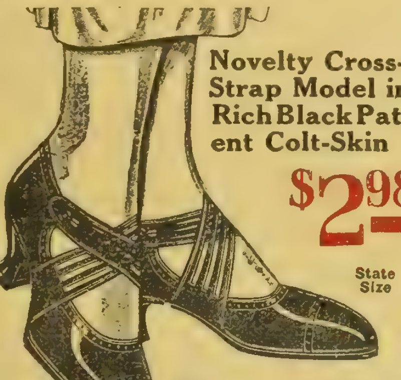
$1.98


Always mention size when ordering.

A leading style in all the big cities for fall wear. One-strap, one buckle pump of rich black patent or Brown Calf finished leather. Is well made with perforated sewed tip and medallion toe. Fancy perforation on vamp, strap and quarter. One-piece medium extension oak sole; low flapper walking heel with rubber top lift. Sizes 2½ to 8; wide widths. **Black patent No. 96-A20. Brown Calf finish, No. 96A21. Send no money. Pay $1.98 and postage on arrival for either leather. State sizes.**

Novelty Cross-Strap Model in Rich Black Patent Colt-Skin

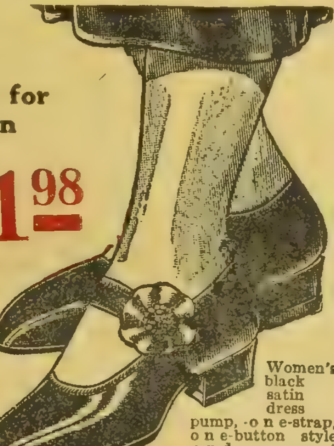
$2.98


State Size

Everyone will admire this early fall style cross-strap pump. The vamp and quarter are of selected black patent leather with rich black suede four-bar effect cross straps. Medium pointed dress toe has imitation perforated tip. Vamp is quarter neatly perforated. Straps fasten on each side with buttons. One-piece leather sole with Baby Louis leather heel and metal plate. Sizes 2½ to 8; wide widths. **No. 96A12. Send no money. Pay $2.98 and postage on arrival. State size.**

Rich Black Satin Pump for Women

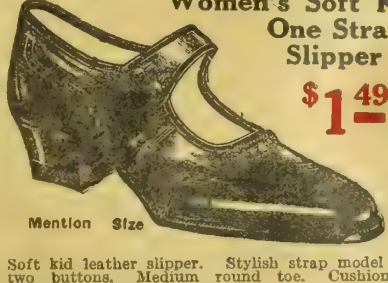
$1.98



Women's black satin dress pump, one-strap, one-button style and ornament with fancy rosette on strap. Plain vamp with medium toe and close edge trim sole with low rubber heels. Genuine oak soles. A dressy stylish new spring fashion that will be all the rage among the best dressed women. Sizes 2½ to 8; wide widths. **Order by No. 96A252. Send no money. Pay only $1.98 and postage on arrival. State size.**

Women's Soft Kid One Strap Slipper

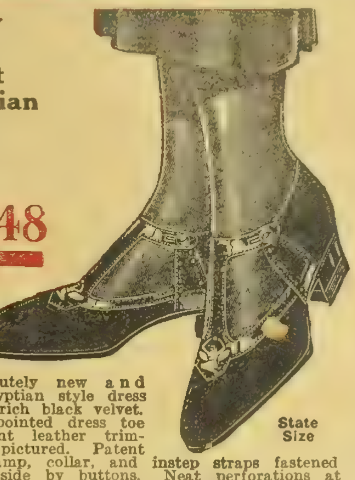
$1.49


Mention Size

Soft kid leather slipper. Stylish strap model with two buttons. Medium round toe. Cushion insoles. Medium rubber heels. Solid oak leather soles. A bargain at our slashed price. Sizes 2½ to 8. Wide widths. **Order black by No. 96A-365. Order brown by No. 96A366. Send no money. Pay $1.49 and postage on arrival.**

Pretty Black Velvet Egyptian Strap Pump

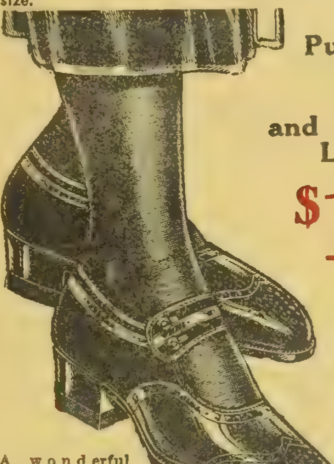
$2.48


State Size

An absolutely new and novel Egyptian style dress pump of rich black velvet. Medium pointed dress toe and patent leather trimming, as pictured. Patent leather vamp, collar, and instep straps fastened on each side by buttons. Neat perforations at sides. Fancy carved Egyptian slave ornament on vamp. Leather insole; genuine Oak outsoles; medium height, rubber tipped leather heel. Sizes 2½ to 8; wide widths. **No. 96A257. No money now. Pay $2.48 and postage on arrival. State size.**

Strap Pump of Rich Velvet and Patent Leather

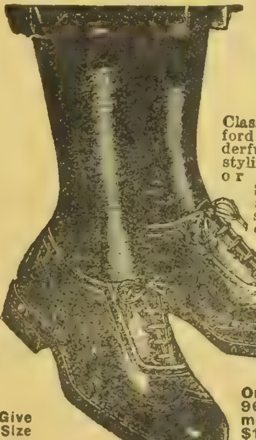
$1.98


Be Sure to Give Size Wanted

A wonderful shoe bargain in new one-strap, two button dress pump. Has patent leather vamp and black velvet quarter and cross strap. Perforated velvet tip with medallion on toe. Neat perforations on vamp and also on patent leather piping which trims the quarter and strap. Medium extension oak sole with military rubber heel. Sizes 2½ to 8, wide widths. **No. 96A256. No money now. Pay $1.98 and postage on arrival. State size.**

Women's Classy Stitchdown Oxfords

$1.98 UP

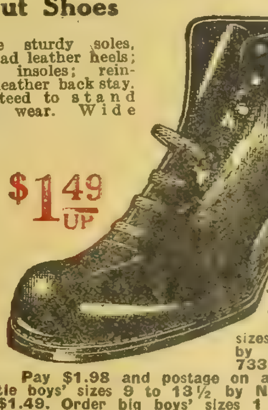

Give Size

Classy stitchdown Oxford for women. Wonderfully comfortable and stylish. Uppers of brown or patent leather. Smooth leather insoles. Flexible stitched down oak outsoles. Low rubber heels. Sizes 2½ to 8. Wide Widths. **Order brown by No. 96A273. Send no money. Pay only $1.98 and postage on arrival. Order patent leather by No. 96A274. Pay only $2.48 and postage on arrival.**

Men's, Boys' and Little Boys' Scout Shoes

Reliable sturdy soles, low broad leather heels; leather insoles; reinforced leather back stay. Guaranteed to stand hardest wear. Wide widths.

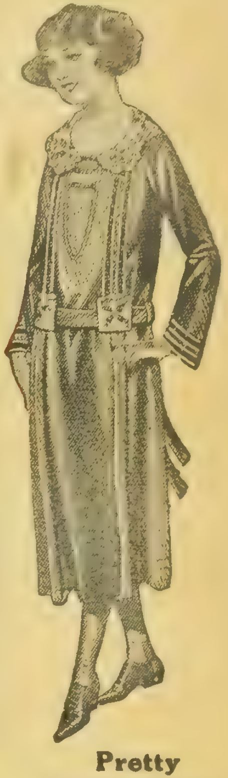
$1.49 UP



Be sure to give size. Order men's sizes 6 to 12 by No. 96A-733. Send no money. Pay $1.98 and postage on arrival. Order little boys' sizes 9 to 13½ by No. 96A565. Price $1.49. Order big boys' sizes 1 to 5½ by No. 96A564. Price $1.79. Pay bargain price and postage on arrival. State size.

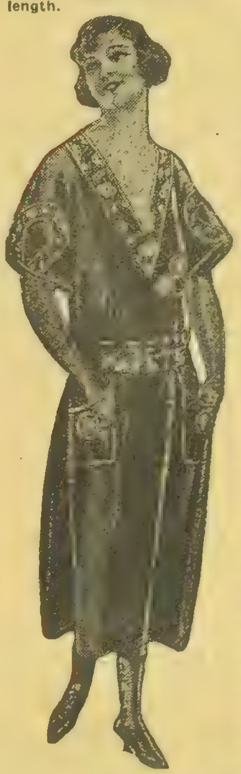
Richly Trimmed Gabardine Dress for Misses and Juniors

$2.98



No prettier frock has been designed in many seasons than this charming model for misses and juniors. The material is a fine quality cotton gabardine with collar and tabs at waistline of contrasting materials, attractively scalloped and embroidered. The front, vestee and sleeves are trimmed with rows of red and tinsel novelty braid. Skirt is finished with two panels and has self material sash tying in back. Sizes for misses and juniors, 14 to 20 years, 32 to 38 bust measure. **Order Navy by No. 96E7650. Brown No. 96E7652. Send no money. Pay $2.98 and postage on arrival. State size and length.**

Pretty Sateen Dress Apron



Another shining example of Sharood super bargains. We claim this handsome dress apron at our special price is unequaled anywhere in America today. Send and see for yourself. Order at our risk—not yours.

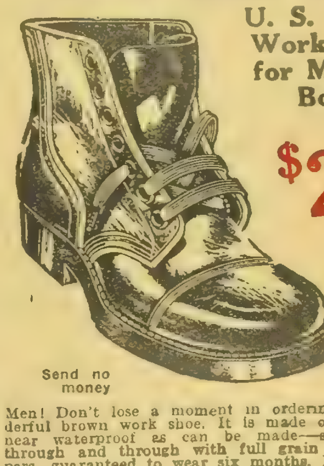
$1.59

Splendid quality black twill sateen which wears wonderfully. Graceful V-neck, sleeves and belt trimmed with gay colored cretonne. Pockets finished with crepe applique edged with piping. Sizes small, medium and large. **Order by No. 96E-6001. Send no money. Pay $1.59 and postage on arrival. Money back if not satisfied. State size.**

GUARANTEED For Six Months' Wear

U. S. Army Work Shoe for Men & Boys

$2.98


Send no money

Men! Don't lose a moment in ordering this wonderful brown work shoe. It is made of leather as near waterproof as can be made—solid leather through and through with full grain leather uppers, guaranteed to wear six months. Easily worth $5.00. Two full, heavy double soles, sewed and nailed for greater strength. Extra wide, full leather counter, riveted to prevent ripping. Sizes 6 to 12, wide widths. **Order by No. 96A700. Send no money. Pay $2.98 and postage on arrival.**

Boys' Guaranteed Shoes—Six months' guarantee; Two green chrome leather soles, same feature quality points as shoe above. Sizes 1 to 5½. Wide widths. **Send no money. Order by No. 96A550. Pay $2.69 and postage on arrival.**

Be sure to Mention All Sizes, Colors, etc. and Send All Orders From This Page Direct to **SHAROOD CO.** Dept. 96 MINNEAPOLIS MINNESOTA

Michigan State Fair

Nation's Greatest Show

August 31 to September 9

The promotion of agriculture, which means certain increase in profits for the farmer, is the big idea back of the Michigan State Fair.

This great exposition is the clearing house of agricultural knowledge. Here the state and federal governments, agricultural institutions, practical farmers display their latest discoveries.

The great yearly growth of the fair during its 74 years of life is powerful testimony to its value as an educational institution.

$50,000 Free Shows!

This year will see probably the greatest program of entertainment ever witnessed.

A $50,000 free attraction scheduled is one of the "eye-openers."

Auto races and horse races. The world's greatest trotter, Peter Manning.

Two stupendous fireworks spectacles, "The Burning of Smryna" and "India." Educational and inspiring!

Half a dozen groups of the most skilled and daring acrobats.

Balloonists will race from the clouds in parachutes. Every dive a thrill.

Three famous bands and many other big acts.

Many Other Features!

Police dogs running down "criminals" will be one of the startling features of the all-breed dog show.

A great Better Babies Contest, in which every baby will be given a thorough medical examination.

The lecturers at the art exhibit will tell you how to make your home and yard beautiful. There you will see how artists work from living models in their studios.

Twenty-two great shows on the "Midway." Clean, attractive and packed full of fun.

And scores of other activities any one of which is worth coming many miles to see.

At DETROIT

August 31 to September 9

What the Neighbors Say

THE FARMER PROBLEM AND ITS SOLUTION

INTERFERENCES with the welfare of the farmer reacts on the people as a whole. Our great need today is real representative government, and the all important problem is to restore such a government to the people and see that it is perpetuated in this fair land of ours.

The voters are becoming more and more aware of this. Recent opportunities at the polls furnish reliable evidence of this.

They need more and more to take personal charge of their own interests, and they have made up their minds to do so. They know now that the markets in which they sell and buy, are controlled by private monopoly. They know also that this control of the markets was brought about by monopoly and is maintained by this power over our government, congress and the courts.

No wonder that the servants of private monopoly are being defeated at the polls one after another. The voters are learning more and more to spot the traitors to the cause of a free and representative people.

The fine beginning the voters are making speaks well for the future. They know that in proportion as they rid the halls of congress from the evil influences of lobbyists sent there by private wealth, and free the government from the control of the combined power of organized private monopoly, can they free their markets and their homes from this sinister power of economic despotism.

Here, brother farmer, we have found the underlying cause of all our economic troubles, that have been seeking to engulf us more and more. Here we must seek the only solution possible. We have no choice. We must act promptly. We must do it wisely and nobly. The great interests of a free government are in the balance. We must prove equal to our opportunities and not shrink our responsibilities.

Our homes, our markets, our beloved country look to us for a real and lasting solution of this great problem of the farmers and the people in general.—A. J. Raftshoe, Leelanau County, Mich.

AMERICA'S PROHIBITION AN EXAMPLE

DEAR EDITOR: Your letter in answer to mine just received. Am very glad to know that in the past you worked for prohibition, but after reading your letter several times I am unable to tell just where you are at now. You had a fine chance to show just where you stood when you printed the Lambertson aritcle. Are you just waiting now and only shooting so as to hit? You have not been slow in the past to try and correct people who have gone wrong and what you would say would have a thousand times as much influence as a Lambertson.

We have the Lambertsons here, though not by that name. I can go out and argue with them, but it is a waste of time. They seem to lose sight of everything but dollars. The moral side of the question can go hang.

The bootlegging in this section is largely among the foreign emmigrants. Shall we give up and let a few whiskeyites ruin this country just because the law does not work perfectly in every place? I say "No." A chronic waiter might say Christianity does no good, but we know better.

Now, Mr. Editor, I firmly believe the good Lord has set this nation for an example for all the world and if we fail on prohibition we will be looked upon as a dead failure by other nations. God will surely punish the nation that will not work for him and he does not do things by halves.

Perhaps I have written too long for your patience, so will say goodbys, from your hayseed friend, Merritt Muscott, Gratiot County, Mich.

—The letter referred to by friend Muscott in his reply above, read as follows:

Dear Mr. Muscott: Thank you for your letter of the 24th. If you are living in a section of Michigan where the prohibition problem is not a serious one at the present moment, you are indeed fortunate.

We published the letter from Mr. Lambertson because it was an honest conviction of his views, and we will be equally glad to publish a letter from you defending prohibition or conditions as they exist in the state at the present time.

Only the ostrich sticks its head in the sand when a storm approaches. There is no use trying to avoid the issue. Prohibition is a vital question, at least the kind of prohibition which has brought about the disregard of the law and bootlegging which is prevalent and becoming more so every day.

The Business Farmer fought hard for prohibition. It was the only farm paper in this part of the country that took a stand on this question. We did not comment on Mr. Lambertson's views because we want good readers like yourself to answer him.

The Business Farmer has always stood for laying the cards on the table, face up. We have never avoided an issue by going around the corner, and we don't propose to start now.

Thanking you for writing me as you did, and assuring you that I would appreciate a reply from you to Mr. Lambertson for use in an early issue, I am, believe me.—The Editor.

STICK TO THE FARM

THE time has come to speak a word to brother farmers. The time has come to show what kind of stuff farmers are made of. Our revolutionary fathers were farmers and they taught the British autocrats a lesson and if they will do so they can teach our own autocrats a lesson by standing together. Just let us quit buying, let us patch and wear old clothing and machinery, and, if need be, let us wear the skins of calves which bring fifty cents green and which we pay fifteen dollars for made into shoes. Let us quit buying flour and with a handmill grind out wheat and make the best and healthiest food man ever ate. It would also save thousands of doctor bills. We can sell such flour direct as soon as farmers catch the vision and begin to assert their rights. Farm help will be easier to get. Farmers are the potential aristocrats and can draw more respect wearing cowskin caps than middlemeddlers wearing sealskins. Those who are deserting farms are making a mistake. Stay by the land and educate your children with the best books. We can fill the legislators with our own sons and daughters and ask them to put a stop to unfair legislation. Hurrah for the farmer! he holds the reins and can guide the team.—J. S. Hughes, Ottawa County, Mich.

DO NOT CONDEMN LAWMAKERS TOO MUCH

I WAS much interested in article, "Gas Tax Unjust," by Ralph R. Jones. I beg leave to suggest a few thoughts for same page.

Gov. Blaine of Wisconsin has recently withheld his approval of a gas tax bill on the grounds that the constitution of Wisconsin makes no provision for the collection of a sales tax. This reminds us that our governor stated his opinion of the probable defect in our own constitution. This again reminds us of article 2 sec. 10 of the national constitution that states shall not leve imports except under certain restrictions, perhaps noted by our governor. And the gas tax of Indiana, I understand, is now before the courts. Therefore is it not the part of wisdom for the farmers to examine our basic laws more carefully before we clamor before and condemn too much, lawmakers?—E. Richardson, Huron County, Mich.

Tom and Bill were late for school and were called to account for it. "What made you late, Bill?" asked the teacher.

"Please sir, I was dreaming I was going to California, and I thought the schoolbell was at the steamboat I was going on," exclaimed Bill.

"You did, eh!" said the teacher. "And now, sir" turning to the second boy, "what have you to say for yourself?"

"Please, sir, I—I was just waiting to see Tom off."—Onward.

THE EDUCATION OF WAR

A SERMON BY REV. DAVID F. WARNER

TEXT: "And he will judge between the nations, and will decide concerning many peoples;. . and they shall beat their swords into plowshares and their spears into pruning hooks; nation shall not lift up sword against nation, neither shall they learn war anymore." Isaah 2:4.

ALL men who have pointed the way upward and onward have been idealists. Isaih was no exception to this human dreaming; for according to our text, he visions a warless world that has its fulfilment in some Utopian future. Perhaps it was the ideal of the age, for Micah has the same picture. At least, it is to be the ideal of the Christian dispensation. "The meek shall inherit the earth" in this age says the Galilean prophet; and we shall learn war no more.

The World War has aroused us to greater thought and activity along lines that make for meekness and peace among men. Sudden crises bring use to ourselves. More than ever are we now reminded that great and bloody wars are possible; and more than ever would we endeavor to avert the complications that impend disaster for us. We are reminded of past neglect. Our thought is being sobered, our vision sharpened, and our conscience aroused—the conscience of the nation. And just now while we are at peace, yet in peril, shall we not take a common sense look at what constitutes the elements of a people's honor and character. This is, in part, a moral reflex of the recent war.

War emphasizes our duty to future citizens—those to whom shall be transmitted the responsibility of maintaining the honor and integrity of the state. Militarism in our teaching, means militarism in our nation's conscience and life. This has been a great general cause of wars and the consequent submerging of righteousness in national life. The ultimate strength of a nation is not in the exhibition of great military power, encouraged by military schools and training camps; but in the sum total of its character kept healthy in its boys and girls, and promoted in Christians schools, churches and homes. The Bible recognizes this thought in the words, "Righteousness exalteth a Nation." This implies that this condition must come thru the individual, since a nation is but an aggregation of individuals, politically organized. We note that Abraham's faithfulness in the teaching of his household was made the ground of his becoming a great and mighty nation.

The media thru which character is secured and maintained are the state, the church, and the home. The state, to fulfil its righteous mission must provide a condition under which churches and schools may operate unhindered in teaching the elements of civic righteousness. I am pained to remember the little city of A,—4,000 people—where several hundred children had no school privileges because of the lack of housing room. But there was room for seventeen drinking places, besides tobacco shops, pool-rooms, and cheap movies. What a travesty on the good (?) government of one of our great states!

Then, in exalting righteousness, the church shares with others her message of peace, reaching a third or more of our population. But, first of all, the home should be a teacher of obedience and "the way of the Lord." Young people are subject to seductions to enter a life, the issue of which they do not understand. Young men are well-night carried away by the mouthings of some militaristic demagogue. Right here the discipline of a Christian home would say, "Count the cost," "Aim higher."

Should we say then, that war, is educative and good because it arouses the public conscience to higher ground, on the one hand, and developes many good qualities of manhood on the other? No, NEVER, because a battleless and bloodless substitute for war activities is to be found in the highest and noblest achievements of man; and a far superior educative agency than that of war is to be found in the home, the school, and the church. For both it has moral and significant counter-forces, and to propagate these is the responsibility of a Christian civilization.

We have, in the industries, a moral force of very great value in the making of strong men. War is claimed to be a great leveler. Those of unequal rank fight side by side on equality. We are told that this develops sterling qualities of manhood, such as obedience, promptness, unity, and endurance; but at what a frightful cost in health, purity and life; and what of the stronger and more spiritual qualities? What of tenderness, sympathy, and brotherly love? Instead of inducing our young men to seek soldier life for their training, let us call them to turning swords into plowshares and guns into pruning hooks, even to the farms, mines, and other industries that lie at the basis of our integrity as a nation. These will develope manhood minus the debauchery and bloodshed of soldier life. Besides, we thus, are conserving the agents of production — feeding instead of starving the hungry, and mainating many happy homes.

But war, also, has its moral counterpart in social Christian service. War is said to be a call to state service. And during the recent war all classes responded with seeming heartiness and alacrity. A thousand times better would it be to fight wrong doing and social injustice everywhere. The making of this world better for God's creation is a moral warfare, not carnal (Rom. 8:-9), and our weapon is the "sword of the spirit," not the carnal sword. Then, too, moral courage is much rarer and higher than physical courage.

This moral warfare comprehends individual and collective responsibility. The Christian must teach and live the "life that is Christ" wherever his labor extends. The church also must match, in faith and works, her responsibility in this fight. A non-spiritual commercialism and nationalism in invading the world. Let the militant church march fully armored (Ephesians 6:10-18) to the attack. And finally, we shall rid the world of "wars and rumors of wars."

"Peace hath her victories no less renowned than war." And this is the victory, "the mountain of Jehovah's house shall be established on the top of the mountains, and shall be exalted above the hills; and all nations shall flow unto it.—And he will judge between the nations, and will decide concerning many peoples; and they shall beat their swords into plowshares and their spears into pruning hooks; nation shall not lift up sword against nation, neither shall they learn war anymore."

ST. CLAIR FARM BUREAU HOLDS SECOND ANNUAL PICNIC

THE second annual picnic of the St. Clair County Farm Bureau will be held in the County Park at Goodells on Friday, August 17th. A program of interest to every farmer in the Thumb District in Michigan has been arranged for the day.

The Executive Committee of the St. Clair County Farm Bureau was indeed fortunate in securing Mr. Walton Peteet, Director in Marketing of the American Farm Bureau Federation for the main address of the day.

A special interest to St. Clair County people will be the appearance of Mr. C. L. Brody, Secretary-Manager of the Michigan State Farm Bureau, and former County Agricultural Agent for St. Clair County.

An added feature of the program will be an address by Mr. Johnson MacAdams of Sarnia, Ontario, representing the Onternational Plowing Contest, to be held in Lampton County, Ontario, this coming October. An effort is being put forth to interest Michigan farmers in this contest.

Band concerts, base ball games, bathing, etc., will round out the day's program.

County Agent, C. M. Kidman says that present indications point to a much larger crowd than attended last year's picnic.

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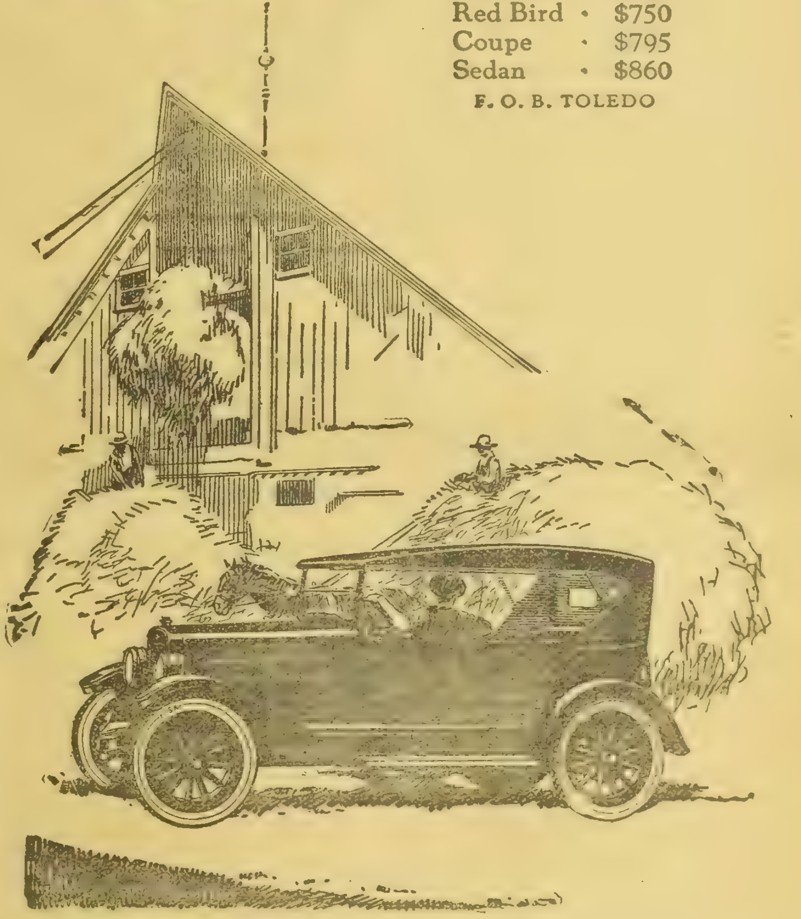

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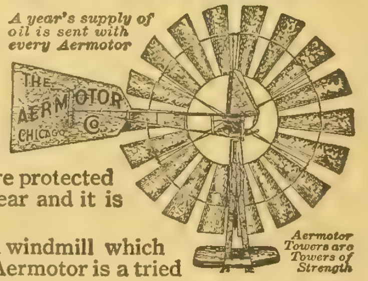

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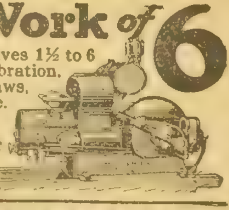

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The Afternoon Miracle

About a Mexican Bad Man, an American Ranger and a Girl.

A Complete Short Story by O. HENRY America's Greatest Short Story Writer

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AT the United States end of an international river bridge, four armed rangers sweltered in a little 'dobe hut keeping a fairly faithful espionage upon the lagging passengers from the Mexican side.

Bud Dawson, proprietor of the Top Notch Saloon, had, on the evening previous, violently ejected from his premises one Leandro Garcia, for alleged violation of the Top Notch code of behavior. Garcia had mentioned twenty-four hours as a limit, by which time he would call and collect a plentiful indemnity for personal satisfaction.

This Mexican, although a tremendous braggart, was thoroughly courageous, and each side of the river respected him for one of these attributes. He and a following of similar bravoes were addicted to the pastime of retrieving towns from stagnation.

The day designated by Garcia for retribution was to be further signalized on the American side by a cattlemen's convention, a bull fight, and an old settler's barbecue and a picnic. Knowing the avenger to be a man of his word, and believing in prudent to court peace while three such gently social relaxations were in progress, Captain McNulty, of the ranger company stationed there, detailed his lieutenant and three men for duty at the end of the bridge. Their instructions were to prevent the invasion of Garcia, either alone or attended by his gang.

Travel was slight that sultry afternoon, and the rangers swore gently, and mopped their brows in their convenient but close quarters. For an hour no one had crossed save an old woman enveloped in a brown wrapper and a black mantilla, driving before her a burro loaded with kindling wood tied in small bundles for peddling. Then three shots were fired down the street, the sound coming clear and snappy through the still air.

The four rangers quickened from sprawling, symbolic figures of indolence to alert life, but only one rose to his feet. Three turned their eyes beseechingly but hopelessly upon the fourth, who had gotten nimbly up and was buckling his cartridge-belt around him. The three knew that Lieutenant Bob Buckley, in command, would allow no man of them the privilege of investigating a row when he himself might go.

The agile, broad-chested lieutenant, without a change of expression in his smooth, yellow-brown, melancholy face, shot the belt strap through the guard of the buckle, hefted his sixes in their holsters as a belle gives the finishing touches to her toilette, caught up his Winchester, and dived for the door. There he paused long enough to caution his comrades to maintain their watch upon the bridge, and then plunged into the broiling highway.

The three relapsed into resinged inertia and plaintive comment.

"I've heard of fellows," grumbled Broncho Leathers, "what was wedded to danger, but if Bob ain't committed bigamy with trouble, I'm a son of a gun."

"Peculiarness of Bob is," inserted the Nueces Kid, "he ain't had proper trainin'. He never learned how to get skeered. Now, a man ought to be skeered enough when he tackles a fuss to hanker after readin' his name on the list side of survivors, anyway."

"Buckley," commented Ranger No. 3, who was a misguided Eastern man, burdened with an education, "scraps in such a solemn manner that I have been led to doubt its spontaniety. I'm not quite onto his system, but he fights, like Tybalt, by the book of arithmetic."

"I never heard," mentioned Broncho, "about any of Dibble's ways of mixin' scrappin' and cipherin'."

"Triggernometry?" suggested the Nueces infant.

"That's rather better than I hoped from you," nodded the Easterner, approvingly. "The other meaning is that Buckley never goes into a fight without giving away weight. He seems to dread taking the slightest advantage. That's quiet close to foolhardiness when you are dealing with horse-thieves and fence-cutters who would ambush you any night, and shoot you in the back if they could. Buckley's too ful of sand. He'll play Horatius and hold the bridge once too often some day."

"I'm on there," drawled the Kid; "I mind that bridge gang in the reader. Me, I go instructed for the other chap—Spurious Somebody—the one that fought and pulled his freight, to fight 'em on some other date."

"Anyway," summed up Broncho, "Bob's about the gamest man I ever see along the Rio Bravo. Great Sam Houston! If she gets any hotter she'll sizzle!" Broncho whacked at a scorpion with his four-pound Stetson felt, and three watchers relapsed into comfortless silence.

How well Bob Buckley had kept his secret, since these men, for two years his side comrades in countless border raids and dangers, thus spake of him, not knowing that he was the most arrant physical coward in all that Rio Bravo country! Neither his friends nor his enemies had suspected him of aught else than the finest courage. It was purely a physical cowardice, and only by an extreme, grim effort of will had he forced his craven body to do the bravest deeds. Scourging himself always, as a monk whips his besetting sin, Buckley threw himself with apparent recklessness into every danger, with the hope of some day ridding himself of the despised affliction. But each successive test brought no relief, and the ranger's face, by nature adapted to cheerfulness and good-humor, became set to the guise of gloomy melancholy. Thus, while the frontier admired his deeds, and his prowess was celebrated in print and by word of mouth in many camp-fires in the valley of the Bravo, his heart was sick within him. Only himself knew of the horrible tightening of the chest, the dry mouth, the weakening of the spine, the agony of the strung nerves—the never-failing symptoms of his shameful malady.

One mere boy in his company was wont to enter a fray with a leg perched flippantly about the horn of his saddle, a cigarette hanging from his lips, which emitted smoke and original slogans of clever invention. Buckley would have given a year's pay to attain that devil-may-care method. Once the debonair youth said to him: "Buck, you go into a scrap like it was a funeral. Not," he added, with a complimentary wave of his tin cup, "but what it generally is."

Buckley's conscience was of the New England order with Western adjustments, and he continued to get his rebellious body into as many difficulties as possible; wherefore, on that sultry afternoon he chose to drive his own protesting limbs to investigation of that sudden alarm that had startled the peace and dignity of the State.

Two squares down the street stood the Top Notch Saloon. Here Buckley came upon signs of recent upheaval. A few curious spectators pressed about its front entrance, grinding beneath their heels the fragments of a plate-glass window. Inside, Buckley found Bud Dawson utterly ignoring a bullet wound in his shoulder while he feelingly wept at having to explain why he failed to drop the "blamed masquerooter," who shot him. At the entrance of the ranger Bud turned appealingly to him for confirmation of the devastation he might have dealt.

"You know, Buck, I'd 'a' plum got him, first rattle, if I'd thought a minute. Come in a masque-rootin', playin' female till he got the drop, and turned loose. I never reacher for a gun, thinkin' it was sure Chihuahua Betty, or Mrs. Atwater, or anyhow one of the Mayfield girls comin' a-gunnin' which they might, liable as not. I never thought of that blamed Garcia until—"

"Garcia!" snapped Buckley. "How did he get over here?"

Bud's bartender took the ranger by the arm and led him to the side door. There stood a patient grey burro cropping grass along the gutter, with a load of kindling wood tied across its back. On the ground lay a black shawl and a voluminous brown dress.

"Maspuerootin' in them things," called Bud, still resisting attempted ministrations to his wounds. "Thought he was a lady till he give a yell and winged me."

"He went down the side street," said the bartender. "He was alone, and he'll hide out till night when his gang comes over. You ought to find him in that Mexican lay-out below the depot. He's got a girl down there—Pancha Sales."

"How was he armed?" asked Buckley.

"Two pearl-handled sixes, and a knife."

"Keep this for me, Billy," said the ranger, handing over his Winchester. Quixotic, perhaps, but it was Bob Buckley's way. Another man—and a braver one—might have raised a posse to accompany him. It was Buckley's rule to discard all preliminary advantage.

The Mexican had left behind him a wake of closed doors and an empty street, but now people were beginning to emerge from their places of refuge with assumed unsconsciousness of anything having happened. Many citizens who knew the ranger pointed out to him with alacrity the course of Garcia's retreat.

As Buckley swung along upon the trail he felt the beginning of the suffocating constriction about his throat, the cold sweat under the brim of his hat, the old, shameful, dreaded sinking of his heart as it went down, down, down in his bosom.

* * * * *

The morning train of the Mexican Central had that day been three hours late, thus failing to connect with the I & G. N. on the other side of the river. Passengers for Los Estados Unidos grumblingly sought entertainment in the little swaggering mongrel town of two nations, for, until the morrow, no other train would come to rescue them. Grumblingly, because two days later would begin the great fair and races in San Antone. Consider that at that time San Antone was the hub of the wheel of Fortune, and the names of its spokes were Cattle, Wool, Faro, Running Horses, and Ozone. In those times cattlemen played crackloo on the sidewalks with double eagles, and gentlemen backed their conception of the fortuitous card with stacks limited in height only by the interference of gravity. Wherefore, thither journeyed the sowers and the reapers—they who stampeded the dollars, and they who rounded them up. Especially did the caterers to the amusement of the people hasten to San Antone. Two greatest shows on earth were already there, and dozens of smallest ones were on the way.

On a side track near the mean little 'dobe depot stood a private car, left there by the Mexican train that morning and doomed by an ineffectual schedule to ignobly await, amid squalid surroundings, connection with the next day's regular.

The car had been once a common day-coach, but those who had sat in it and cringed to the conductor's hat-band slips would never have recognized it in its transformation. Paint and gilding and certain domestic touches had liberated it from any suspicion of public servitude. The whitest of lace curtains judiciously screened its windows. From its fore end drooped in the torrid air the flag of Mexico. From its rear projected the Stars and Stripes and a busy stovepipe, the latter reinforcing in its suggestion of culinary comforts the general suggestion of privacy and ease. The bachelor's eye, regarding its gorgeous sides, found interest to culminate in a single name in gold and blue letters extending almost its entire length—a single name, the audacious privilege of royalty and genius. Doubly, then, was the arrogant nomenclature here justified; for the name was that of "Alvarita, Queen of the Serpent Tribe." This, her car, was back from a triumphant tour of the principal Mexican cities, and now headed for San Antonio, where, according to promissory advertisment, she would exhibit her "Marvellous Dominion and Fearless Control over Deadly and Venomous Serpents. Handling them with ease as they Coil and Hiss to the Terror of Thousands of Tongue-tied Tremblers!"

One hundred in the shade kept the vicinity somewhat depeopled. This quarter of the town was a ragged edge; its denizens the bubbling forth of five nations; its architecture tent, jacal, and 'dobe; its distractions the hurdy-gurdy and the informal contribution to the sudden stranger's store of experience. Beyond this dishonorable fringe upon the old town's jewel rose a dense mass of trees, surrounding and filling a little hollow. Through this bickerer a small stream that perished down the sheer and disconcerting side of the great canon of the Rio Bravo del Norte.

In this sordid spot was condemned to remain for certain hours the impotent transport of the Queen of the Serpent Tribe.

The front door of the car was open. Its forward end was curtained off into a small reception-room. Here the admiring and propitiatory reporters were wont to sit and transpose the music of Senorita Alvarita's talk into the more florid key of the press. A picture of Abraham Lincoln hung against a wall; one of a cluster of school-girls grouped upon stone was in another place; a third was Easter lillies in a blood-red frame. A neat carpet was under foot. A pitcher, sweating cold drops, and a glass stood upon a fragile stand. In a willow rocker reading a newspaper, sat Alvarita.

Spanish you would say; Andalusian, or, better still, Basque; that compound, like a diamond, of darkness and fire. Hair, the shade of purple grapes viewed at midnight. Eyes, long, dusky, and disquieting with their untroubled directness of gaze. Face, haughty and bold, touched with a pretty insolence that gave it life. To hasten the conviction of her charm, but glance at the stacks of handbills in the corner, green, and yellow, and white. Upon them you see an incompetent presentment of the senorita in her professional garb and pose. Irresistable, in black lace and yellow ribbons, she faces you; a blue racer is spiralled upon each bare arm; coiled twice about waist and once about her neck, his horrid head close to hers, you perceive Kuku, the great eleven-foot Asian python.

A hand drew aside the curtain that partitioned the car, and a middle-aged, faded woman holding a knife and a half-peeled potato looked in and said:

"Alviry, are you right busy?"

"I'm reading the home paper, ma. What do you think! that pale tow-headed Matilda Price got the most votes in the 'News' for the prettiest girl in Gallipo—lees."

Shuh! She wouldn't of done it if you'd been home, Alviry. Lord knows, I hope we'll be there before fall's over. I'm tired gallopin' round the world playin' we are dagoes, and givin' snake shows. But that ain't what I wanted to say. That there biggest snake's gone again. I've looked all over the car and can't find him. He must have been gone an hour. I remember hearin' somethin' along the floor, but I thought it was you."

"Oh, blame that old rascal!" exclaimed the Queen throwing down her paper. "This is the third time he's got away. George never will fasten down the lid to his box properly. I do believe he's afraid of Kuku. Now I've got to go hunt him."

"Better hurry; somebody might hurt him."

The Queen's teeth showed in a gleaming, contemptuous smile. "No danger. When they see Kuku outside they simply scoot away and buy bromides. There's a crick over there between here and the river. That old scamp'd swap his skin any time for a drink of running water. I guess I'll find him there, all right."

A few minutes later Alvarita stepped upon the forward platform, ready for her quest. Her handsome black skirt was shaped to the most recent proclamation of fashion. Her spotless shirt-waist gladdened the eye in that desert of sunshine, a swelling oasis, cool and fresh. A man's split-straw hat sat firmly upon her coiled abundant hair. Beneath her serene, round imprudent chin a man's four-in-hand tie was jauntily knotted about a man's high, stiff collar. A parasol she carried of white silk, and its fringe was lace, yellowly genuine.

I will grant Gallipolis as to her costume, but firmly to Seville or Valladolid I am held by her eyes; castanets, balconies, mantillas, serenades, ambuscales, escapades—all these their dark depths guaranteed.

"Ain't you afraid to go out alone, Alviry?" queried the Queen-mother anxiously. "There's so many rough people about. Mebbe you'd better—"

"I never saw anything I was afraid of yet, ma. 'Specially people. And men in particular. Don't you fret. I'll trot along back as soon as I find that runaway scamp."

The dust lay thick upon the bare ground near the tracks. Alvarita's eye soon discovered the serrated trail of the escaped python. It led across the depot grounds and away down a smaller street in the direction of a little canon, as predicted by her. A stillness and lack of excitement in the neighborhood encouraged the hope that, as yet, the inhabitants were unaware that so formidable a guest traversed their highways. The heat had driven them indoors, whence outdrifted occasional shrill laughs, or the depressing whine of a maltreated concertina. In the shade a few Mexican children, like vivified stolid idols in clay, stared from their play, vision-struck and silent, as Alvarita came and went. Here and there a woman peeped from a door and stood dumb, reduced to silence by the spect of the white silk parasol.

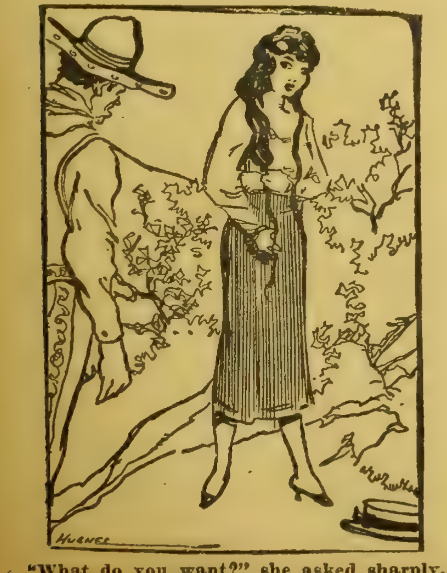
A hundred yards and the limits of the town were passed, scattered chaparral succeeding, and then a noble grove, overflowing the bijou canon. Through this a small bright stream meandered. Park-like it was, with a kind of cockney ruralness further indorsed by the waste papers and rifled tins of picknickers. Up this stream and down it, among its pseudo-sylvan glades and depressions, wandered the bright and unruffled Alvarita. Once she saw evidence of the recreant reptile's progress in his distinctive trail across a spread of fine sand in the arroyo. The living water was bound to lure him; he could not be far away.

So sure was she of his immediate proximity that she perched herself to idle for a time in the curve of a great creeper that looped down from a giant water-elm. To reach this she climbed from the pathway a little distance up the side of a steep and rugged incline. Around her chaparral grew thick and high. A late-blooming ratama tree dispensed from its yellow petals a sweet and persistent odor. Adown the ravine rustled a sedative wind, melancholy with the taste of sodden, fallen leaves.

Alvarita removed her hat, and undoing the oppressive convolutions of her hair, began to slowly arrange it in two long dusky plaits.

From the obscure depths of a thick clump of ever-green shrubs five feet away, two jewel-bright eyes were steadfastly regarding her. Coiled there lay Kuku, the great python; Kuku, the magnificent, he of the plated muzzle, the grooved lips, the eleven-foot stretch of elegantly and brilliantly mottled skin. The great python was viewing his mistress without a sound or motion to disclose his presence. Perhaps the splendid truant forefelt his capture, but, screened by the foliage, thought to prolong the delight of his escapade. What pleasure it was, after the hot and dusty car, to lie thus, smelling the running water, and feeling the agreeable roughness of the earth and stones

(Continued on Page 19.)



"What do you want?" she asked sharply.

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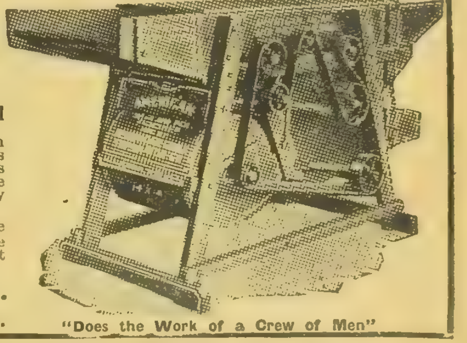

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"The Farm Paper of Service"

FORBES ON WHEAT

"A GREAT many people are talking and writing, for example, as if the only product of America's farms were wheat.

"The truth is that wheat constitutes quite a small percentage of the total value of American agricultural products. Wheat normally isn't half as valuable as our corn crop. Hay and forage are three times as valuable as the total wheat crop. Cotton nowadays represents as many millions of dollars in market value as wheat.

"When you take into the reckoning other crops, such as oats, potatoes, tobacco, wool and barley, you find that wheat represents about 5 per cent of the total value of farm crops, not 50 per cent, as one might assume from the present agitation.

"The prices farmers are receiving for several, if not most of the more important crops, are reasonably satisfactory.

"This brief statement will help to explain why mail order houses and other concerns catering to our farming population are reporting notable increases in their sales.

"Pessimism being fashionable at the moment, the disposition is to attract attention to the hole in the doughnut, not to the doughnut itself."—B. C. Forbes, Aug. 4th., 1923.

A SAD WARNING TO AMERICA

THERE are several hundred thousand words in the English language, yet there are in the breasts of Americans today, sentiments which cannot find words for their interpretation.

Within the span of a decade, we of the present generation have watched two presidents, crucified on the cross of political and governmental leadership, which we have built up.

When Warren Harding went into the White House to take over the complex reins of office from a man who had withered under the eight years strain, he was a hardy, rugged Ohioan in the prime of health. A series of his photographs from the day he was inaugurated to those taken on the ill-fated trip to Alaska (see picture page in this issue) tell a dramatic story of what the present job of being president of these United States really means.

Therefore the wholly unexpected death of President Harding has a double meaning to every thinking American. We feel with our deep grief a certain sense of responsibility for what happened. It is, as if we, individually had watched a friend sinking into the quick-sands and had lifted no finger to thwart its grasp.

The presidency of the United States, as it is understood to-day, is in our humble opinion, physically impossible for any one man to handle. No other country in the world asks so much of its leader. France and England, for example depend on figure-heads to attend the flag-raisings, make pleasing speeches and entertain foreign visitors, while somewhere in seclusion from these public demands, their prime-ministers work out the nations problems.

Calvin Coolidge, who steps into the arena, is not a big, hearty, full-faced man, who radiates health as did his lamented predecessor. He is a short, wiry, pinched-faced man who speaks with a rasping voice, but makes his decisions quickly and finally. His health must be guarded as a national asset.

In the name of humanity and for the good of these United States we pray that our future presidents, may be so relieved of their tremendous responsibility that never again will we have to witness the collapse of our honored chief under the strain of it.

PICK YOUR OWN BEANS

NO less an authority than Benjamin Gerks, of Rochester, is responsible for the statement in this issue that the farmers ought to handpick their own beans.

The writer of this page has for many years harbored the idea that the winter months could be well employed by the bean growers of Michigan and their families in the handpicking of their own beans, providing they were equipped with the same machinery which the local elevator has.

The hand bean picking machine is not an expensive outfit and in fact is one that could be easily made by any farmer who is ordinarily handy with tools. If some reader of The Business Farmer can give us a simple plan for building a hand bean picking machine that has proven satisfactory over a period of years, we will pay $5 for the suggestion and the working plan. But we must know that it is practical and efficient.

There is, of course, the double advantage of handpicking beans on the farm. The culls are saved and may be fed to stock with profit. This subject opens up a line of thought which we would like to have our readers who have had practical experience with it discuss freely in these columns.

THE LABOR-FARMER FALLACY

IN a recent statement, Henry A. Wallace, of Des Moines, cracks the nut and gives us all the milk in the cocoanut at one swallow, when he says: "The one reason why farm product prices average only 30 to 40 per cent above pre-war, whereas wages are twice the pre-war, is that there is a surplus of farm products to be sold on the European market, whereas Labor, because of immigration restrictions and tariffs, is sheltered from Europe. The farmer is on the international market, while Labor is off the international market."

That is why we contend that farmers and laborers cannot mix or fight for equal privileges on the same ground. Their interests are opposed when it comes to an economic condition such as we find existing at the present time.

We are not pessimistic, because although the agricultural conditions have been slowly recovering, while labor has taken a quick recovery, largely due to the conditions which Mr. Wallace mentions above, it is no less true that the return of prosperity to agricultural America will be much more stable and on a more lasting foundation.

The farmers not so many years ago were unharassed by financial matters and their larders were well filled with food products when bread lines and soup kitchens were being operated in the centers of population in this country.

The farmer's business is returning to a normal and satisfactory basis. Prices are going to be higher this fall than they have been in several previous years. The farmer is going to get a share of the higher prices which the city laboring man has been receiving, and the city laboring man is going to have to take less money because there is going to be more labor on the market than the market will absorb. This does not mean that we are in any fear of a depression. The best posted financial prophets of America can foresee nothing but a continuous wave of better times, and our observation of the farming situation bears out this same contention.

HOWLING DOWN LAND VALUES

WE sometimes wonder if the professional politicians and the gloom-howlers for the farmers realize that:

There are two sources of profit in any business. One is the daily operation of the business which means carrying on the buying and selling of labor and material at a profit. The other is the accumulated value of a property which makes it more valuable as a business as it is improved and becomes organized as a going property.

This is no less true of the farming business than of any other. What do you think would happen to automobile stock if a whole bunch of clamoring pessimists should tomorrow morning begin to point out that there was a great overproduction of automobiles, that foreign competition was coming into the American market, that the foreigner would no longer pay the price of the American car because of his depreciated currency, and that the companies themselves because of these facts were nearly bankrupt?

Why, you know what would happen as well as I do. Automobile stocks would go down to nothing. There would be a crash that would be heard around the financial world. The ultimate result of it probably would be that the consumption of automobiles would be decreased and automobile plants shut down and laboring men by the thousands thrown out of employment.

The value of farm property in the United States is disparaged with every pessimistic remark that is passed on from one farmer to another, and by every piece of sob-stuff which appears from the press of the scandal-monger or from the lips of a political demagogue.

The only hopeful sign in all of this is that like rats that leave a floundering ship, the ninkapoos in the farming business are being driven back to the congested cities where they belong, and this is going to cut production down to a point where the sturdy American business farmers, whom we are proud to label as such and to associate with, are staying by our farms and will, with the aid of labor saving machinery, produce enough food products for the great market at their doors, if they can be assured of a fair profit.

IT'S UP TO YOU, MR. BEAN BUYER!

THE national advertising campaign for beans is being held back by the reticence of some Michigan bean jobbers who hold a dollar so close to their eyes that they cannot see past it. The sooner this type of bean buyer is eliminated in Michigan the better for the grower and the better for the jobber.

In California where the citrus, prune, nut, and other growers have organized to advertise and sell their products cooperatively, the associations are organized by the growers themselves and operated by them.

The present bean plan differs from this in that the advertising and the cooperative selling effort is carried on by the bean buyers. Whether or not this will prove a satiisfactory means to the growers is yet to be proven, and that is up to the jobbers themselves.

The Business Farmer would like to go on record right now with the bean jobbers of Michigan, California, Colorado and New York State, that if they are not big enough to see the light and go through with the present campaign in a manner that will be satisfactory to the growers they can look for a national bean growers association which will eventually eliminate the present jobbers and bean buyers.

This is an age of efficiency in business, and if the present jobbers and buyers can prove that they are the most efficient means of handling this business; that they are alive to present day situation and willing to carry on the necessary propaganda to keep this product before the 110,000,000 food buyers in America alone, they can hold the job. If they fall short of these requirements or are controlled by a few weak-kneed and jelly-spined individuals who don't belong in any business that requires more brains than making change, they might as well get ready to retire gracefully before they get kicked out.

We have for years watched with interest the growth and success of the western growers of fruit and other products in their advertising campaigns. We see their names on warehouses in our principal markets and on the doors of city office buildings where their goods are being pushed for sale. We contend that the navy bean offers the best possible product to be advertised to the consuming public because it is the cheapest form of vegetable food on the market today and should be included in the every day diet of the workingman's table, and as a delicacy which would be relished in the best homes in the land at least once a week. Advertising is the great American panacea for most business ills. Advertising will take any legitimate product and multiply its sales over and over. Advertising never has and never will make a permanent success of a proposition which is not fundamentally honest and economically worthy.

It's up to the bean buyers and bean jobbers of Michigan, and we repeat that we will follow their individual actions in connection with this present campaign and see that the farmers of Michigan are properly informed of their individual action in regard to it.

INDUSTRIAL ACTIVITY MEANS PROSPERITY

SPEAKING in New York recently, Frederick J. H. Kracke, U. S. Appraiser, said that the United States Treasury will collect this fiscal year over a half billion dollars in customs duties, which is the largest sum ever collected by the Federal Government.

We will import close to $3,000,000,000 worth of raw materials in twelve months, which means that we will have spent three billions in foreign countries, and this Mr. Kracke says, is the greatest act of economic reconstruction performed by any one country since the armistice.

Our nation wide demand for raw materials and finished goods has been so great that foreign manufacturers and producers have been able to share with the people of this country the period of industrial and commercial prosperity.

PUBLISHER'S DESK

MAKING PICTURE ENLARGEMENTS

SEVERAL letters recently tell us that the picture enlargement sharks are again in Michigan, and we want to warn our readers against them.

These grafters come to your door and ask if you have a particularly good photograph of a child or relative that you would like to preserve. When you show it to them they are enthusiastic over its possibilities and show you an enlarged picture in a frame which they agree to deliver to you for a fixed amount, the particular instance we have in mind being $4.25.

You are asked to sign an agreement, which, while it does not bind you to accept a picture in a frame, it does obligate you to pay for the enlargement. When the delivery man brings the frame and picture you are asked to pay a fancy price for the picture frame, sometimes as high as $15.00. Some of our readers who have refused to accept the picture in the frame at this price have bought it as low as $3.00.

It is a sharper's game, and we warn our readers against dealing with this kind of an agent. You will save money by showing him the door and going to a reliable photographer in your own town and asking him for a price on a suitable enlargement.

If any of our readers have had recent experiences further than we have mentioned or if these agents are practicing any other schemes we would like to hear about them.

THE AMERICAN MUSIC AND NILE ART COMPANIES

Last week I asked for information from our readers regarding the American Music Publishing Company and the Nile Art Company, both of whom offered home employment on receipt of a certain down payment from the prospective employee.

I said then that I did not know anything about these companies but that I am sure from the number of inquiries we have received that some of our readers ought to be able to give us the information. Well, they have, and I am reprinting a few letters here, which I hope may save our own readers some money.

I WAS just reading the Publisher's Desk in the Michigan Business Farmer and as I saw your inquiry regarding the American Music Publishing Co., 1658 Broadway N. Y., and as I was one that sent in two dollars to get their working outfit. I was very disappointed when I received it. In the first letter I got from them they wanted me to send two dollars for the working outfit. They said they would give 10c for all copies I mailed and an additional 5c to cover mailing expenses. They also told me they would send me a list of names and places where I was to send them. But when I got the working outfit there was no list. I had to make the list myself. I have enclosed the last letter with instructions and after reading it I think you will agree with me and tell those that have made inquiries to keep their two dollars.—S. R.

SAW your article in the M. B. F. concerning the American Music Co., N. Y. Some time ago I sent them the two dollars and in return received their working outfit which consisted of about 20 pieces of music and about 25 circulars, with instructions to mail the circulars and for every piece of music that was ordered from those mailed circulars I was to get about 10 cents. Well, I mailed the circulars and did not receive an answer from any of them. They will not take back the music if you can not sell it.—A. R.

HELP ME SHOW 'EM UP

WHEN you run across a fake or somebody hands you a gold brick, don't be afraid to write the Publisher about it. I am even going to make the exception and say that you need not sign your name, although if you do I will promise not to use it if you ask me not to. No one likes to admit when they are stung but it ought to give you some satisfaction to know that you can warn most of the good farmers in Michigan.

The Week's Editorial

SIGN STARTS NO RUSH TO FARMS

THERE is a dusty sign that hangs conspicuously but hopelessly in the front window of the State Department of Labor's free employment bureau in Detroit.

It reads:

"Wanted farmers!"

It is more than an offer to work, however, to the hundreds of young men who pass it each day to ask for an automobile assembling job, a place at a core-maker's bench or a chance to operate some whirring, screeching, automatic lathe.

It is a far cry from hundreds of deserted farm-houses that are surrounded by fields of tall, rank weeds and half cultivated crops, ripening and blistering and raining grain for lack of men to man a reaper.

Last March every agricultural county in the State was asking for men. Forty-one thousand farmer boys, according to statistics compiled by the U. S. Department of Agriculture, had left Michigan during the preceeding year to become residents of cities and those that remained were too few to do the Spring plowing. Moreover, it was known that many of the 41,000 were in Detroit and out of work.

Consequently the "Wanted Farmers!" sign was stenciled and hung in the local employment office window. It seemed a bit incongruous, looking out on a busy street in downtown Detroit, but there were some Department of Labor employes who predicted that it would exert a sort of lunarian magic and turn the city-flooding tide into a farmward ebb.

Boys would see it and forsake the adopted machine shop with its noises and its grease for a native meadow with its buttercups and crystal brook.

Goodbye to the drop forge and a welcome to the harrow?

Wooded lanes instead of pavements?

Quail instead of factory whistles?

Farm-house cream instead of cafeteria coffee?

Well not by any means! Since that day last March when the little sign first went up, jaunty and fresh, there have been only four men in the State's employment office who could milk a cow. At least, only four who would.

To be sure several score have spoken about the sign, intimating that perhaps they would like to become farmers. But they were not of the 41,000. They were city boys, out of work and discouraged, who did not know oats from rye.

"The farmer boys who have come here," says the employment secretary at 461 Larned west, "seem to cling to the city no matter how roughly the city treats them. They come back here day after day, asking for a job in an automobile factory and when we say no, 'No, not to-day, but we can send you upstate to a farm,' they leave insulted."

Moreover the Detroit representatives of the adventuring 41,000 are invariably reticent when asked about life on the farms.

"Oh, I worked in Grand Rapids last," is the usual answer when a newcomer is questioned about his agricultural experience.

Or Petoskey, Saginaw, or Flint—

And not until cross-examined closely, the employment secretary says, will it be disclosed that the stay in the smaller city was merely a sort of apprenticeship in city life, served not far—by automobile or interurban—from the boyhood home where the speaker weeded onions, trapped muskrats, attended a little red, brick school and was in truth a barefoot boy.

First Mortgage Real Estate Gold Bonds

Every Federal first mortgage bond you purchase is, in effect, an insurance policy against poverty or dependence.

Write for Booklet AG915

Tax Free in Michigan
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TRADE MARK
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REGISTERED
Wheat needs a quick start

Liberal use of Royster's Fertilizer insures the quick start that winter wheat needs. It makes the wheat sturdy and vigorous to resist the rigors of winter. It increases the yield and ripens the crop early. Feed your wheat this plant food and learn the difference between fertilizer made to be rich in plant food and fertilizer made from cheap materials to sell at a price without regard to quality.

We are proud of the Royster reputation for successful crops, and anxious that farmers should always use it correctly. Take pains to use the analysis best adapted to your land, and for the protection of your fertilizer investment, insist that it be made by Royster. For advice, or help, write Farm Service Department, F. S. Royster Guano Company, Toledo, Ohio.

AGENTS WANTED IN OPEN TERRITORY

ROYSTER
Field Tested Fertilizers

The Farm Home
A Department for the Women

Edited by MRS. ANNIE TAYLOR

LABOR DAY ON THE FARM

DEAR FOLKS:—It is hard not to think that everyday is not a labor day. We all must work in order to be happy. It is the way of this old world of ours; but I was wondering if when our Labor Day comes, it would not be a good thing to plan a picnic for the family and get away from the house. Seeing new and different scenery is a great medicine for tired, overworked nerves. If this sounds like more work than getting a meal at home, the effort is not worth it To me it is a pleasure to get together some wholesome food and picnic along a stream or lake. Getting out of the house is a relief sometimes.

Remember our page is for you and me to use for our personal wants and I answer all my letters personally. No one sees them but me. I hope you all will make use of this privilege, and write.

Your Friend,
Mrs Annie Taylor

Address letters: Mrs. Annie Taylor, care The Business Farmer, Mt. Clemens, Michigan.

IN AUGUST

ALL the long August afternoon,
The little drowsy stream
Whispers a melancholy tune,
As if it dreamed of June,
And whispered in its dream.

The thistise show beyond the brook
Dust on their down and bloom,
And out of many a weed-grown nook
The aster flowers look
With eyes of tender gloom.

The silent orchard aisles are sweet
With smell of ripening fruit,
Through the sere grass, in shy retreat
Flutter, at coming feet,
The robins strange and mute.

There is no wind to stir the leaves,
The harsh leaves overhead;
Only the querulous cricket grieves;
And shrilling locust weaves
A song of summer dead.
—William Dean Howells.

"GOING TO THE STATE FAIR?"

DEAR FOLKS—Last week I called upon Mr. Dickinson and Mrs. Eisenbrey, manager and secretary of our State Fair, to find out what the fair had for my women readers.

There are so many attractions that are so educational and useful for every one of us.

The better baby contest is worth the trip and the folks in charge say: "There is a great underlying idea to this contest; it is the State's effort to do everything in its power to see that future citizens of Michigan are strong and healthful."

Naturally the selection of the better babies and the awarding of prizes will hold great interest for all parents, but the really big thing in this department of the fair is the careful, scientific examination which each baby receives.

Then they have a women's rest room, equipped with all modern conveniences.

The nursery is a blessing for the family that comes to the fair. Do not fail to use this department and check the baby You will be able to enjoy the Fair and I feel sure the baby would enjoy either playing in the hill of sand or sleeping rather than go around with Mother or Father and this department is handled by competent women who have had special training in caring for children.

The sewing exhibit in the woman's building is one of the most facinating rooms. Every woman reader will find a good suggestion to take home. I can hardly keep my fingers off the beautiful articles on display.

There, too, is the baking and canning exhibit.

The State Fair is one year's work being displayed and to me I feel every farm woman and husband owes it to themselves to come down and see our work well done.

Send your name to Mr. Dickinson and receive their "Premium List" and read about the advantages the Fair holds for you.

FRESH, CANNED, AND DRIED GREEN CORN

THE half-ripe ears of corn make a very favorite vegetable in this country. The so-called sweet varieties, which contain more sugar and less starch than those grown primarily for making meal or hominy, are especially prized for this purpose because of their better flavor and more delicate texture, but the other varieties are sometimes used in this way.

Green corn, like many other vegetables, is at its best when freshly gathered. Corn on the cob is not very convenient to serve or eat, and this method of cooking it would doubtless have been abandoned long ago if cutting the kernels from the cob before cooking did not materially modify the flavor. The most convenient way of cooking corn on the cob is ordinarily by boiling, but in old-fashioned fireplaces roasting was a favorite method. This still survives as a common household practice in some localities and also in camp-fire cookery.

The season of fresh corn is more nearly limited to the season of maturity in a given region than that of almost any other common vegetable, for it can not be stored for any considerable time in good condition, even with modern appliances, and corn grown in warm climates and shipped long distances to our winter markets is very expensive and rather uncertain as to its quality. Corn, however, may be readily canned either at home or on a commercial scale, and when this is properly done the corn retains many of its desirable qualities. It is not surprising, therefore, to find that canned corn is one of the most popular canned vegetables.

Canned corn is used not only by itself but is also made into a variety of soups, fritters, puddings, and other dishes.

Corn and Its Uses as Food

The preservation of green corn by drying has long been practiced in the household and dried corn is to a limited extent prepared commercially. The ears of corn are first scalded for about 5 minutes, then cooled and the kernels cut from the cob. Unless the corn is very young and tender the resulting dried corn will be much more satisfactory if only the tips of the kernels are removed by the first cut and the remaining pulp scraped out with a dull knife, leaving the most of the hulls behind on the cob. Even in the case of young corn the cutting should not be so close as to include the base of the kernel.

The corn may be dried by any convenient method. Where a large quantity is being prepared it may be spread upon a table covered with muslin. Of course it must be protected from flies. The corn should be well stirred from time to time until thoroughly dry.

When wanted for use the dry corn should be rinsed quickly in cold water and put to soak for several hours in a small amount of water in which it is to be cooked. The cooking should be done slowly and water added as needed. Cooked dried corn may be used in any of the ways in which canned corn is served. Dried corn has a sweet, nutty flavor, and is especially liked for making cream of corn soup or in succotash.

Corn is sometimes combined with other vegetables. Succotash, a mixture of unripe corn and beans, is a dish borrowed, name and all, from the American Indians and has been a favorite since colonial times. To vary their winter diet, the colonists often cooked dry ripe corn and beans together, but such a dish does not possess the palatability of that made from green corn. Corn with tomatoes is another mixture which many persons like and which is quite commonly served. Small, immature ears of unripe corn are sometimes used in mixed pickles, particularly in Europe, and relishes are also made in the United States from green corn, both as a domestic article and commercially.

PREPARING THE LITTLE TOT FOR SCHOOL

YOU have heard the story, perhaps, of the little boy who cried when informed that he was to start in school in September. "I don't want to go to school," he wailed, "'cause—'cause I don't know anything!"

There are many teachers who will tell you that that is the very kind of child they want to greet the morning school opens—the child who doesn't know anything," meaning, of course, the child who has not been taught "readin,' 'ritin' and 'rithmetic" at home. Modern methods of teaching differ so from the old-time methods that many children have to "unlearn" all they have been taught along those lines at home—and the "unlearning," according to most teachers, is nine times harder than the learning.

Children go to school to be taught by a teacher who has been trained in the best, most approved, most up-to-date methods. Leave the reading and writing and arithmetic to her, but send your child to school prepared to take his place as a pupil under her and to realize why he is there.

Before school starts, impress upon him the fact that he is going to school so he can learn how to read stories out of books, how to write letters to Grandma and how to count the eggs Biddy lays each week. Talk kindly of the teacher who is to help him learn these things. See that his mind is not poisoned against her by the things other older children tell him. Give him to understand that the teacher will be his friend, that he will like her and that she will like him if he is good and tries to do what she wants him to.

Be rather more particular than usual to see that toys are picked up, clothes hung up, face and hands washed clean and little feet made to walk quietly. Such preparation will fit your child for school excellently. It is for greater importance than the mastery of the alphabet.

Mothers Problems

THE VALUE OF CHORES

THE city boy who has no chores to to do is a boy to be pitied, not envied. He is being cheated out of something that every boyhood needs. He is sowing the seeds of idleness and laziness and downright shiftlessness if time hangs heavy on his hands. He is growing up without having the habit of work forced upon him.

Such is the big benefit derived from chores—chores that come as regularly as the sun rises and sets. Other work may be extracted from a boy, but it is generally more or less of a painful job; but chores, once they are fully established, give the boy that most-valued of habits—the habit of work.

I know a farm mother who complained that she never had a drop of water in the house, a stick of kindling or a hod of coal unless she brought them in herself. Yet she had boys big enough to keep her supplied with all three. "I know," she said, when the wasted boy power was suggested, "but I'd rather do the work myself than to keep continually after the boys to do it for me."

A mother does feel that way when she has to be constantly "after" the children to get work done, but she shouldn't let the feeling carry her off her feet. She should face the facts and decide on some better course than constant nagging. Invariably that course lies along the path of chores.

Ten cents a week to form a good habit is buying such a habit cheap; yet ten cents, or even a nickel, paid every Saturday night, is sufficient incentive for most boys to perform certain duties day after day. Even though the boys work about with Dad, helping him with his morning and evening chores, they should devote a certain period to doing chores for Mother. A reservoir full of water each evening, a wood-box piled high with well-prepared wood and hods of coal will send Mother off to a glorious start in the morning. And once those duties have become chores, they will have become habits —and the kind of habits that do a boy a world of good later on in life.

Personal Column

TO A FLAPPER

If she should want a simple thing,
A simple foolish thing,
Like a powdered nose, or silken hose,
Or skirts abbreviated,
If she should want to do a thing,
A simple little foolish thing,
Bob off her locks or roll her socks,
If that makes her elated;
If I don't get her point of view,
Because I'm old, and wrinkled too,
I'll take a look back through the years
When I was young and gay;
I'll think just as I used to do,
When sweet sixteen and giddy, too,
And I will say, Yes daughter, dear, you may!

For youth was made for foolish ways
And happy thoughtless giddy days;
It's time to sing and have your fling;
More sober days are waiting;
If I indulge her foolishness,
And give her lots of happiness,
She'll settle down without a frown,
She'll not be hesitating.
With years, responsibility
Will come a sit has come to me,
If she accepts it when it comes,
That's the important thing,
But now I want her to be gay,
And laugh and sing the livelong day!
It's wise to let the flapper have her fling!
—Anne Campbell, Detroit News Poet.

Bobbed Hair Beats Bustles!—To be sure the problem of wearing bobbed hair has reached the girls on the farm. I think it perfectly proper for girls to wear bobbed hair.

It is no worse to wear bobbed hair than to wear bobbed skirts. It is far better to bob the hair than to snarl it then yank and tear at it until it is all broken and uneven.

Years ago the girls had a fad of shingling their hair and there was not much fuss about it as there is these days over the bobbed hair.

When I was a girl we wore hoopskirts and bustles. How we girls would practice "sitting down" without our hoopskirts flopping up in front.

How ridiculous we looked with those big bustles, the bigger the better.

But it was the style; and one might as well be out of the world as out of style.

Let the girls bob their hair and wear the short skirts, they look both comfortable and sweet.—A Farmers Wife.

A Young Lady of Twelve Thinks Bobbing Alright—I am only a little over twelve years old, so you must not expect much of an opinion from me. But I will tell you what I think.

If ones hair is thick leave it alone; do not have it bobbed, but, as it does the hair much good by making it much thicker, if it is thin, provided you have your parents consent, have it bobbed.

When one's hair is short it is much easier to comb, brush, wash and keep in order, than if it were long. Then, too, the air and sunshine get in it, and through it, making it more sanitary.

Lots of girls look more becoming with bobbed hair than if it were long.

Years ago, it was just as much the craze to have shingled hair as it is now to have bobbed hair. Many girls had long hair then. But times have changed and it seems that everything has changed with it.

I have long hair, and as it is quite thick, I do not care to have it bobbed. There are two sides to this question as there is to every one. Hoping the best side will come out first, I am your friend. —E. I. C., Fenton, Michigan.

The Runner's Bible

Study to be quiet and to do your own business with your own hands. Thes. 4:11.

Because he thinks he knows best, many a parent not only dictates the way his child's message is to be delivered, but even the message itself. All of which leads to confusion, discouragement, and finally to failure. Instead the parent should ever encourage the good in his child, patiently removing every obstacle in its way, remembering that each one's message comes from God—is devine; and that his child's true self, like his own, is from eternity—two rays of devine light of exactly the same value, but pointing in different directions.

He that troubleth his own house shall inherit the wind. Prov. 11:29.

—if you are well bred!

You will never discuss the family with your friends or acquaintances.

If guests are at your home, make them feel at home by talking about the things that you have in common. Some may be personal but never speak of the other members of the family in a slighting way.

RECIPES

Tomato Ketchup—Skin the tomatoes, and cook them well. Press them thru a sieve, and to each five pints add three pints good cider vinegar. Boil slowly a long while (about two hours), until it begins to thicken; then add one tablespoon of ground cloves, one tablespoon of allspice, one tablespoon of ppeper and three grated nutmeg. Boil until very thick (between six and eight hours) and add two tablespoonfuls fine salt. Bottle, cork and seal it.

Grape Ketchup—Pick over, wash drain and remove stems from grapes. Put in a preserving kettle, add cold water to barely cover, bring to the boiling point and let simmer until fruit is soft; then press thru a sieve, discarding skin and seeds. Put ten pounds of the fruit pulp in a preserving kettle and add five pounds sugar, one tablespoon allspice, two tablespoons cloves and one grated nutmeg. Bring to the boiling point and let simmer until reduced to the consistency of a ketchup. Fill bottle to overflowing, adjust stoppers and seal.

Corn Soup—One can or two cups of corn, one pint boiling water, one pint milk, one slice onion, two tablespoons butter, two tablespoons flour, one teaspoon salt, dash of pepper, dash of paprika. Fry the onion in the butter and stir in the flour. If raw corn is used, place it in boiling water and boil five to ten minutes. Add the milk to the corn and bring to the scalding point. Thicken with the onion and the flour, and butter mixture and add seasoning.

Corn Chowder—One cup fresh corn, one and one-half inch cube salt pork, diced, one onion, sliced, one quart of potatoes, sliced, one cup milk or cream, salt and pepper and eight crackers. Fry the salt pork and add the onion, and cook until the onion is tender. Boil the potatoes five minutes in one quart of boiling water, add the fat, and cook until the potatoes are soft. Add the corn and milk and bring to the scalding point. Add the butter and seasonings. Pour over the crackers and serve hot.

Stuffed Green Peppers—Six green peppers, two and one-fourth cups fresh corn, one-half onion cut up fine, one and one-half cups of meat chopped or ground up fine, one and one-half cups meat stock thickened with two tablespoons flour, one and one-half cups bread crumbs, one-half teaspoon salt and dash of pepper. Remove the tops and seeds from the peppers and parboil in boiling water for two minutes. Remove from the water, drain, and put in a casserole. Stuff the peppers with a mixture of the corn, meat, bread crumbs, thickened stock mixture, and seasoning and bake. The mixture may be varied by using other materials such as rice and tomatoes.

Corn Souffle—One cup fresh corn, one cup white sauce (see following recipe). Three eggs, one-half teaspoon salt, dash pepper. Add the well beaten egg yolks to the sauce and fold in the corn. Fold in the stiffly beaten egg whites and place in a buttered baking dish, set the dish in a pan of hot water, and bake in a moderate oven (350 degrees F.) thirty to forty minutes.

White Sauce for Souffle—One cup milk, three tablespoons flour, one-half tablespoon salt, two tablespoons butter. Melt the butter and stir in the flour and salt. Add the scalded milk and stir until the mixture thickens and the flour is cooked. The white sauce may be made in a double boiler or directly over the flame. If the latter is used, care must be taken that the product is not scorched.

Tomato Sauce for Beans—Will you publish a recipe for tomato sauce, like that which is on canned pork and beans. —Miss M. B.

—Tomato. Sauce (without stock)—One half can tomatoes or one and three-fourths cups of fresh stewed tomatoes, one slice onion, three tablespoons butter, three tablespoons flour, one-fourth teaspoon salt, one-eighth teaspoon pepper. Cook onion with tomatoes fifteen minutes, rub thru strainer, and add to butter and flour (to which seasoning has been added), cook together. If tomatoes are very acid, add a few grains of soda. If tomatoes are to retain their red color it is necessary to brown butter and flour together before adding the tomatoes.

Tomato Sauce with Meat Stock—One-half can tomatoes, one teaspoon sugar, eight peppercorns, bit of bay leaf, one-half teaspoon salt, four tablespoons flour, one cup brown stock. Cook tomatoes twenty minutes with sugar, peppercorns, bay leaf and salt, rub thru a strainer and add stock. Brown the butter, add flour, and when well browned, gradually add to liquid.

These sauces can be added to beans and canned; also they can be prepared with your canned tomatoes any time in the winter.

PICKLING

Pickling is preserving in any salt or acid liquor.

Sweet Pickled Peaches—One-half peck peaches, two pounds brown sugar, one pint vinegar, one ounce stick cinnamon, and cloves. Boil sugar, vinegar and cinnamon twenty minutes. Dip peaches quickly in hot water, then rub off the fur with a towel. Stick each peach with four cloves. Put into syrup and cook until soft, using one-half peaches at a time.

Sweet Pickled Pears—Follow recipe for Sweet Pickled Peaches, using Pears instead of Peaches.

Tomato and Celery Relish—One onion and one large bunch celery and two and one-half cups fresh tomatoes, chopped fine, one tablespoon salt, two tablespoons sugar, two allspice berries and two-thirds cup vinegar.

Mix ingredients, heat gradually to the boiling point, and cook slowly one and one-half hours. Cayanne or mustard may be added if liked more highly seasoned.

Spanish Pickle—One peck of green tomatoes thinly sliced, four onions thinly sliced, one cup salt, half dozen cloves, half dozen allspice berries, one-half cup brown mustard seed, half dozen pepper-cores, one pound brown sugar, four green peppers, finely chopped, and cider vinegar. Sprinkle alternate layers of tomatoe and onions with salt and let stand over night. In the morning drain, and put in a preserving kettle, adding remaining ingredients, using enough vinegar to cover all. Heat gradually to boiling point and boil one-half hour.

A New Discovery in Milling

Better Baking Now Possible.

During the past three months a new process for milling flour has been perfected. It revolutionizes the making of flour.

To the home baker it means better, whiter bread, bread that is better looking, will stay moist longer, that will bake easier, and have better texture and flavor. Today the Lily White leased mill is the *only mill* producing flour milled by this new system.

Lily White

"The Flour the Best Cooks Use"

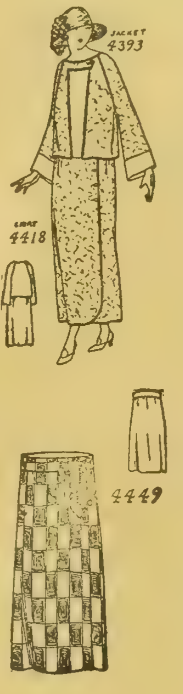
continues the undisputed leader of quality flours, and now even Lily White has been improved.

It is an established fact that 30% of the efficiency of protein in flour is destroyed when the wheat is crushed or flattened by smooth rolls. Under this new milling method, however, the efficiency of the protein content of the flour is increased 30 per cent. This permits free action of the yeast on 100% of the flour instead of only 70% in making good bread.

For 25 years efforts have been made to perfect this new system. Now, all that we ask is that you try Lily White. Better all around results are positively guaranteed.

Now Sold by More Grocers.

VALLEY CITY MILLING COMPANY
Millers for Sixty Years
GRAND RAPIDS, MICHIGAN



AIDS TO GOOD DRESSING

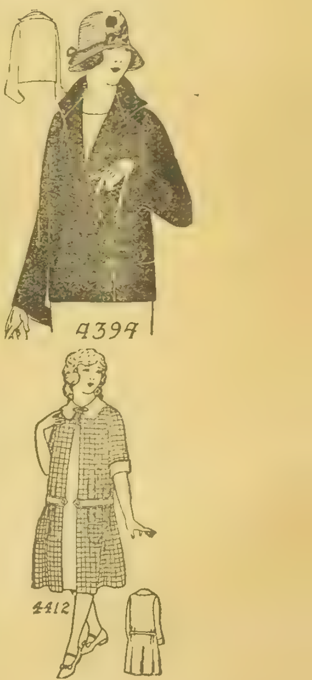
4393-4418. A Smart Suit Style—This style owes its originality to the smart Eton jacket and the equally attractive wray skirt. The vest may be omitted. Sports crepe was used in this instance. Linen, pongee, ratine or twill would also be attractive. The Jacket Pattern 4393, is cut in 4 Sizes: 14, 16, 18 and 20 years. The Skirt 4418 in 7 Sizes 16, 18 and 20 years for Misses, and 31, 33, 35 and 37 inches waist measure for Ladies. To make this suit for an 18 year size will require 4⅛ yard of 40 inch material. To make vest and sleeve facings of contrasting material requires ⅝ yard. The width of the skirt at the foot is about 2 yards.

4412. A New Version of One Piece Dress—Checked gingham and linen are combined in this style. It could be made up in cretonne or chintz with crepe or sateen or in jersey cloth with flannel or suede for trimming. Ratine in plaid and plain, or plain ratine with linen would also be attractive. The Pattern is cut in 4 Sizes: 8, 10, 12 and 14 years. A 10 year size requires 4 yards of 32 inch material.

4449. A New "Wrap" Skirt—This model has the belt at slightly raised waistline. It is excellent for a sports or separate skirt, and will develop well in all sports materials, and in serge, broad cloth, linen and other wash fabrics. The Pattern is cut in 6 Sizes: 25, 27, 29, 31, 33, and 35 inches waist measure. A 29 inch size requires 2⅝ yards of 54 inch material. The width at the foot is 1⅞ yard.

4394. A Jaunty Top Garment—For cool days, for sports wear, and for all jacket materials, this is a very desirable model. The sleeve has a very unique shaping. The collar is a new and stylish feature. This Pattern is cut in 6 sizes: 36, 38, 40, 42, 44 and 46 inches bust measure. A 38 inch size requires 2¾ yards of 40 inch material.

Order from the above or former issues of The Business Farmer, giving number and sign your name and address plainly.



ALL PATTERNS 12c EACH,
3 FOR 30c POST-PAID
ADD TEN CENTS FOR FALL AND WINTER FASHION BOOK
THE BUSINESS FARMER
Pattern Department, Mt. Clemens, Mich.

Own This Modern Light-Draft Spreader

IF THE MAN without a spreader knew how he could increase the crop returns from every ton of manure by using a McCormick-Deering Manure Spreader, he would change his method mighty soon. It isn't a matter of what the other fellow is doing—it is a plain dollars and cents proposition. If you waste your time at uneven spreading you lose profits that should belong to you.

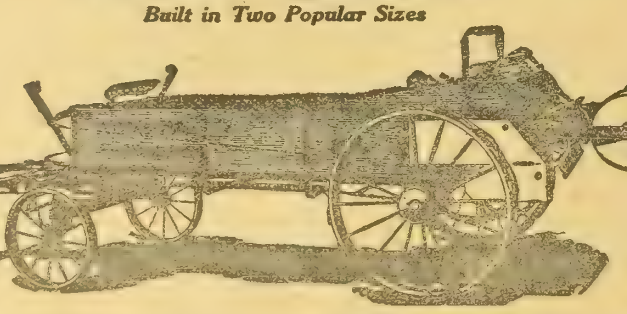
The McCormick-Deering spreader performs two important operations. First, it shreds the manure—tears it to pieces as it passes through the two steel beaters and the spiral wide-spread device; second, it spreads evenly and uniformly, in any quantitv desired.

Among the features of the McCormick-Deering spreader are: An auto-steer which permits the spreader to be turned in close quarters, and which eliminates neck weight; adjustment for six feed speeds; and the all-steel frame with all appliances bolted to it direct.

Ask the McCormick-Deering Dealer to point out these features.

INTERNATIONAL HARVESTER COMPANY
OF AMERICA
(INCORPORATED)
606 So. MICHIGAN AVE. CHICAGO, ILL.

McCormick-Deering
Manure Spreaders
Built in Two Popular Sizes



BABY CHICKS

Tompkins Strain $15.00 per hundred. Last hatch August 22nd. Quality breeder of Rhode Island Reds.
WM. H. FROHM, R. 1, New Baltimore, Mich.

STAMMERING *PERMANENTLY CORRECTED*
Most Successful speech correction school in America. You can learn to talk naturally in a few weeks. Information Free.
Reed School, *1429 Hubbard Avenue* **Detroit, Mich**

POULTRY BREEDER'S DIRECTORY

Advertisements inserted under this heading at 30c per agate line, per issue. Commercial Baby Chick advertisements 45c per agate line. Write out what you have to offer and send it in. We will put it in type, send proof and quote rates by return mail. Address The Michigan Business Farmer, Advertising Department, Mt. Clemens, Michigan.

PULLETS, HENS AND COCKERELS
S. C. White Leghorns and S. C. and R. C. Black Minorcas. Must make room before cold weather. About ready to lay.
LAPHAM FARMS, Pinckney, Mich.

LEGHORNS

LEGHORNS
S. C. Buff Leghorn Hens, Pullets and Cockerels. Hens and pullets $2.50 each; cockerels $3.00 to $5.00 each. Show birds a matter of correspondence. **LAPHAM FARMS, Pinckney, Mich.**

RHODE ISLAND REDS

WHITTAKER'S R. I. REDS. MICHIGAN'S greatest color and egg strain. Cockerel price list ready in September. Improve your flock with [illegible] cockerels.
INTERLAKES FARM, Box 4, Lawrence, Mich.

BUFF ROCKS

Buff Rock Cocks, Hens, Ckl's and Pullets, big, rich buff, low combs, rich yellow shanks, from our National winners and "Hogan" tested layers.
J. C. CLIPP & SONS, Bx M, Saltillo, Ind.

STERILIZER
One Cent a Gallon

B-K Bacili-Kil Trade Mark

Sterilize pails, milker, cans, strainer and separator with B-K in rinse water. Kills germs that sour milk and cream—makes utensils sweet. Helps protect stock. *Very cheap—one gallon B-K makes 400 gallons sterilizer.* Write for bulletin 320-B. Money back if not satisfied—at your dealer. *None genuine without our big blue label and trade mark.*

General Laboratories
420 Dickinson Street
Madison, Wisconsin

HEAVES Is your own horse afflicted? Use 2 large cans. Cost $2.50.
Money back if not satisfactory
ONE can at $1.25 often sufficient. In powder form.

Most for cost
30 years' sale

NEWTON'S
A veterinary's compound for Horses, Cattle and Hogs. Heaves, Coughs, Distemper, Indigestion. Worm expeller. Conditioner. At dealers' or by parcel post.
THE NEWTON REMEDY CO., Toledo, Ohio

LOW RATES TO CLEVELAND
by the D. & C. Waterway. Refreshing. All convenenienes.

The Children's Hour

Dear Uncle Ned:—This is the first time that I have written to the corner. I have been a silent reader for over a year. I am 17 years old. My birthday is May the 7th. If I have a twin, please write me. I suppose my letter will go in the waste paper basket. My parents are both dead and so are my sisters and brothers. I am living with my father's mother and his oldest brother. We had a cyclone down here last Saturday. It did lots of damage. It killed two horses for one of our neighbors. Well I guess it is about time for me to close. Your niece,—Bessie Brown, Frontier, Michigan. P. S.—Have some of the boys and girls write to me for I get lonesome.

—The boys and girls who are members of the Children's Hour are always glad to write letters to any member who are sick or lonesome and I am sure you may expect to receive letters within the next two or three weeks. How about it boys and girls?

Dear Uncle Ned:—I have been reading the Children's Hour for some time, so thought I would like to join your merry circle. You seem to be having so much fun and such a good time reading each others letters. Well I will tell you something about myself and where I live. I am 19 years old the 24th day of June. Am five feet, seven inches tall, and live on a farm located eleven miles from Traverse City. We have a sixty-acre farm. It fronts on Grand Traverse Bay. There are a lot of large pine trees along the shore and quite a wide beach. Just a dandy good place to go swimming on the hot summer days when it is about 90 degrees in the shade. The road runs between the house and shore, so we have a beautiful view both winter and summer. There are a lot of trees around the house, so we are well protected in the winter and shaded in the summer. We have about two hundred sweet cherry trees and between five and six hundred sour cherry trees, a few peaches and apples. On the rest of the farm we raise corn, oats, and beans, and sometimes potatoes when they are so cheap they won't break the city folks to buy them. We have four head of cattle, two horses, 12 sheep, six hogs, and about 100 chickens. So you see we have plenty of work to keep us busy. Well I think I have said enough for this time, so will close hoping to become your nephew soon. Hope the rest of the girls and boys will write to me.—Selden C. Fowler, R. 1, Box 79, Traverse City, Michigan.

—From your description I would say it is very beautiful around your place and, as you seem to be a lover of nature, I am sure you appreciate how fortunate you are. I would like to own such a home and live there all the rest of my life.

Dear Uncle Ned:—May I join your merry circle? I have never written before but always read the Children's Hour. One reason I never did write was because I could not find your address. There hasn't been anyone who has written you from Clarkston, I guess. I think I am the first one to write but I have waited long enough, don't you think so, Uncle Ned? My father has taken the M. B. F. for several years. I suppose I must begin to describe myself, but I am not going to tell you my age, you may think I am too old to join the merry circle. My age is between 13 and 16 years. Whoever guesses my right age will receive a letter from me. I have light hair, dark eyes and light complexion. I am 5 feet tall. I will be in the 10th grade next year. I live on a farm of 305 acres. We have nine horses. I milk three cows every night. I like to work out doors in the hay and oats and other crops. It is like a circus, don't you think so? I have two sisters and one brother. I wish some of the boys and girls would write as I would try and answer all letters received. I like to write letters. I think a drawing contest is just the thing to have. Of course, I am not any drawer but would try. You never can do anything until you try, try again.—Miss Helen Bird, R. 3, Clarkston, Mich.

—You surely did wait long enough before writing. I thought every one who read the Children's Hour knew my address. It is: Uncle Ned, The Children's Hour, Michigan Business Farmer, Mt. Clemens, Michigan.

Hello, Uncle Ned:—How are you these days? May I join your merry circle? I wrote before but I guess it went in the waste paper basket. I am 13 years old and in the 8th grade. My birthday is June 2nd. I have a little pet kitten. It is black and white. We also have a black one. I live on a 120 acre farm. We have 2 horses, 3 cows, a heifer, 2 calves and 1 pig. Her name is Peggy. I have 3 brothers and 2 sisters. I live about 1½ miles from a small lake. It isn't very safe though. A boy got drowned 3 weeks ago. I have been living on a farm over two years now. I lived in the city the rest of the time. I like to live there pretty well too. The answer of Gladys Harris' riddle is a newspaper. I will close with a riddle: When is a cow not a cow?—Anna Trevan, R. 2, Mancelona, Michigan.

Dear Uncle Ned:—May I join your merry circle? We take the M. B. F. and enjoy it very much, especially the Children's Hour. I am sixteen years old, five feet, two inches tall, and I have dark hair and eyes. I am in the tenth and eleventh grade at school. We live in the country. Hoping to hear from the boys and girls soon, I remain, I hope, one of the many cousins.—Julia Bindon, Silverwood, Michigan. P. S.—I will answer all letters written to me.

Dear Uncle Ned:—Have just been reading the letters in the M. B. F. which we received today and thought I would write you a few lines and tell you about the place where I live. It is a very small place in winter, but in summer it is quite large. Resorters from all around come here. It is located about thirty miles from Straits of Mackinaw and is on Little Traverse Bay, in Lake Michigan. Right across the Bay is Petosky, which is also a resort. Roaring Brook, Wequetonsing, and the other Indian names are little resort towns and are really a part of Harbor Springs, but of course are closed in the winter. The resorters start coming in May and go about the last of October. They say the shore drives and places connected with Harbor Springs are some of the prettiest places in America. The shore drive from Harbor Springs to "Old Trail Tavern" is one of the most beautiful drives in America. Old Trail Tavern is a large log house and also tthere are many resort cottages, most of them covered with white birch bark. They certainly are pretty. They serve chicken dinners at Old Trail Tavern, and it is very lovely out there. Some friends own a cottage there and we go and have great times, going bathing, etc. It is right on the shore. The shore drive is on the bluff overlooking the lake. Well I must close as I see this letter already starting toward the honorable waste basket. I wrote before and described myself and I am now corresponding with a girl who is sixteen and her birthday is on the fifteenth of April, the same as mine. As ever, your niece,—Elsie L. Mahlers, R. 1, Harbor Springs, Mich.

—There is a road between Mt. Clemens and Detroit known as the Lake Shore drive and it too is a very beautiful drive. There are houses along this drive that cost over a million dollars to build so you can imagine that they and the ground about them would be well worth going quite a distance to see. Most of the houses cost much less but nearly all of them are built by rich people.

Dear Uncle Ned:—It has been such a long time since I have written to you so thought I would write. I did not see my letter in print, but wanted to join the merry circle if you will let me. I went flowering last Sunday and while I was back in the woods I found two large mushrooms, and I brought them up to the house and my folks wanted some so we all went back in the woods and picked more, enough for supper. My age is between 10 and 18. The one who guesses it will receive a letter from me. I am fond of writing, so would like to receive lots of letters. Well I will close with a riddle: Round as an apple, busy as a bee, prettiest little thing you ever did see. Answer "A watch." Your want to be niece,—Reva Skinkle, Sunfield, Michigan, R. 1.

Dear Uncle Ned:—It is very warm here but it is the kind of weather that we need to make the corn grow. We have our haying all done and our wheat is all cut and shocked. We expect to have threshers next week. Say, Uncle Ned, when you were a boy did you like to watch the big engine and the separator working? The oats will soon be ready to cut. I had 46 young ducks and I sold 14. It soon will be time for school to start again. I will be a "freshie". Goodbye everybody until the next time.—Myrtle L. Luce, Flushing, Michigan.

—Yes, when I was a boy I used to stand in awe and watch the threshing machine. The threshing machine at that time was somewhat different than the ones you see throughout the country now.

Dear Uncle Ned:—Here is another cousin trying to squeeze between the others. I have never written before so I thought I would try it. I always read the Children's Hour and I think it is very interesting to read letters from the different cities and countries. We live on a small farm of 60 acres, one mile from a village and about three miles from a city (Calumet). Well I guess now I shall describe myself. I am a farmer girl of 16 years of age. I have dark brown hair and eyes. Fair complexion and am 5 feet, four and one-half inches tall, and weigh 130 pounds. Do you think I am heavy and tall for my age, Uncle Ned? I will be 17 years old on the 10th of March. Have I a twin? Well I guess now I shall close. Will write more the next time. Hoping some of the boys and girls will write to me. I surely will answer every one. Your niece,—Amelia Riederich, Hubbell, Mich., Box 74.

Current Agricultural News

MICHIGAN FRUIT GROWERS SIGN UP 2,000 CARS

MORE than 2,000 cars of tree fruits, grapes and small fruits are under sales service contracts with the Michigan Fruit Growers, Inc., as the result of a meeting of local associations recently held at Bangor when associations at South Haven, Paw Paw, Stevensville, Sodus, St. Joseph and Lawrence signed up with the Michigan Fruit Growers and the national Federated Fruit and Vegetable Growers Inc., on behalf of their membership. Many other western Michigan fruit locals are ready to sign up with the state-wide co-operative fruit marketing service.

The Michigan Fruit Growers, Inc., represents the co-operation of western Michigan fruit associations for a central sales office where by they can improve their net returns for members by eliminating competition between themselves, standardizing their goods and packs, build a valuable reputation for their fruit, advertise it and benefit by the enormius volume they could control by working together.

The Michigan Fruit Growers is entirely grower-owned and controled. The Michigan State Farm Bureau has given a great deal of help in its organization, which has been on the plan offered by the markets department of the Agricultural College. Mr. Tennant has been counselling the Fruit Growers in their organization work.

When organized the Michigan Fruit Growers will be a commodity exchange affiliated with the State Farm Bureau, like the Potato, Livestock, Elevator, and Milk Producers Exchanges.

Marketing fruit means reaching the markets of the nation and for this purpose the Michigan Fruit Growers locals have at their command the Federated Fruit and Vegetable Growers, organized by the American Bureau. This organization took over one of the best, going national fruit marketing institutions in America and has tried and proved machinery selling fruit every day. Just recently it marketed 25 carloads of cherries for the Hart Marketing Association at Shelby and did very well by them.

Members of the Grand Rapids Growers Association, a powerful organization, have voted to join the Michigan Fruit Growers, Inc. Associations already signed up are St. Joseph, Mich., Fruit Growers Association; Lincoln Fruit Growers Association; Sodus Fruit Growers Association; Paw Paw Co-operative Association; Bangor Fruit Exchange; South Haven Fruit Exchange; Lawrence Co-operative Company. In all 16 associations are members of the Fruit Growers and will sign their marketing contracts.

GAS TAX IN INDIANA

THE state gasoline tax which went into effect June 1 brought $317,954.04 into the state treasury the first month it was effective. The tax returns for June may have been somewhat smaller than they will be in the future as there is a possibility that consumers may have had supplies on hand when the law began to operate. The cost of collecting the June installment of the tax was $375 or about one-tenth of 1 per cent of the amount collected. One of the chief objections to the law when it was being considered was that a large part of the tax would be consumed in its collection. The revenue produced by the tax goes into the state highway fund.—Indiana Farmers Guide.

ALSIKE YIELD IS LESS BUT QUALITY BETTER

WITH clover hulling nicely under way, prospects are that Michigan's alsike seed production will be about 75 to 80% of last year's total, according to Mr. Nicolson, manager of the State Farm Bureau Seed Department, who recently spent several days making a personal investigation of the clover seed situation in the alsike producing sections of the state.

Mr. Nicolson found that the quality of the seed produced this year was better than last, due somewhat to economic conditions which rendered it unprofitable to harvest the lower grades of seed. The operation of the Farm Bureau Seed Department has impressed the farmers with the fact that quality seed now brings the best price. The old system of uniform price, which penalized the grower of good seed and pensioned the producer of poor seed, is being displaced in Michigan by a more just system wherein each farmer's lot of seed sells upon its individual merit.

FROM HERE AND THERE IN MICHIGAN

Lake Odessa—New building for American Legion proposed.

Flint—Dixie highway near city to be resurfaced. City ranks fourth in state in home construction.

Detroit—$4,963,800 building permits issued in June. Western Union Company rebuilding lines between this point and Grand Rapids. Construction of new $14,000,000 29-story hotel on Cadillac hotel site under way.

Lansing—East Lansing road to be widened. New bridge planned for M. A. C. campus to connect staduim with armory, $50,000 available.

Bessemer—Local American Legion contemplates building new club house. Skud Goldman & Company erecting new store building.

Richville—New $12,000 St. Micheals Evangelical Lutheran parish school completed.

Saginaw—Eagles' home to be improved and enlarged. New school house on Wadsworth road under construction. New addition to Washington avenue Presbyterian church under construction. Copper Coal Company, organized with $500,000 capital to sink shafts in several townships and open three mines.

St. Louis—Contract for paving from this point to Breckenridge to be let. New coal vein discovered on Dell Bush farm near town.

Ionia — New additions being made to dining hall at refarmatory.

Gratiot—Road work between Tittabawassee bridges completed.

Grand Haven — Extensive improvements made at First Reformed church. 376-ft. car ferry to operate between this city and Milwaukee.

Mt. Pleasant—Berry and fruit crop in this county exceptionally large.

Greenville—Brass foundry, formerly of Grand Rapids, to establish business here.

Grand Rapids—New sewer system to be constructed, $5,000,000 bonds to be issued. Western Union Telegraph Company plans direct wire between this city and New York. Butter production in state for 1922 totaled 87,161,633 lbs.

Cadillac — Michigan State Telephone Company completes new automatic system at cost of $3,000,000.

Cheboygan—New fish plant being constructed on river front. New waterworks system proposed.

Lakeview — Has new pumping plant assuring city adequate fire protection. $15,000 garage under construction.

Hancock—To have fireproof store building.

Owosso — City's newest industry, The Owosso Garment factory, growing rapidly, capacity to be doubled.

Indian River — Bridge across Indian river to be replaced with modern concrete structure.

East Lake—Operations to be resumed at Manistee oil well, new pipe for drilling installed.

Mason—Storm drains being laid in West Ash street. Milk production in Michigan in 1922 aggregated 3,495,627,169 lbs. an increase of 391,929,078 lbs. over 1912.

Frankfort—To have new local telephone exchange.

Al Falfy looked up from the morning paper.

"It says here of a man," he said to his wife, "who's be'n married thirty years an' spends every evenin' at home."

"He oughta be an example to you, Al Falfy," declaimed his wife. "He's the right kind of a husband. He's got love."

"Love nothing," snorted Al. "It says here he's got paralysis."

"NOT A KICK IN A MILLION FEET"

Re-pair
Re-build
Re-roof
Now!
© 1923
The Lehon Co.

Delays Never Pay!

Just another way of saying, "A stitch in time saves nine."

THE small job soon grows into the big job, while the roof with a little leak may not be long in destroying the interior of the home which it was intended to protect.

Sit down and figure it out for yourself. Every day the job is put off adds something to the cost of doing it later on. Old fence poles may rot away letting stock into a field of growing grain where the trampling of the animals for one night would ruin the entire crop. The drafty hog house may cause the loss of a valuable sow for the want of insulation.

MULE-HIDE "NOT A KICK IN A MILLION FEET" ROOFING AND SHINGLES

THE LEHON CO.
MANUFACTURERS
44th to 45th St. on Oakley Ave.
CHICAGO, ILL.

MULE-HIDE

MONEY TO LOAN

On the 33-Year Government Amortization Plan to desirable borrowers who own good, well-managed farms in Michigan and Ohio, and wish to borrow not over 50% of the value of their land plus 20% of the appraised value of the buildings.

No commissions—Low interest rates. No stock invcstment. Unusually prompt and satisfactory service. If your loan will meet these requirements; write us.

FIRST JOINT STOCK LAND BANK OF CLEVELAND
Guardian Building, Cleveland, Ohio

BUSINESS FARMERS EXCHANGE
Ads Under this Head 10c per Word, per Issue

HELP WANTED

YOUNG OR MIDDLE AGED WOMAN wanted for house work in small family in new home near Detroit. No washing or ironings. Highest wages. Address, MRS. HARLEY D. WARNER, Farmington, Michigan.

WANTED: MARRIED MAN FOR DAIRY and farm work. EDD KING, Sodus, Michigan.

FARM AND LANDS

WASHINGTON LANDS—SEND FOR FREE booklet descriptive of section free from floods, and temperature extremes—fruit, berry and poultry culture, markets fine—opportunities travel, hunting, fishing and home life ample. Our lands priced right—with terms to suit. NORPIA-Z Olympia, Washington.

80 ACRES FOR SALE—IMPROVED, RICH soil, all under cultivation. Berries, grapes, other fruit. 3½ miles Bad Axe. H. MORGAN, Route 8, Bad Axe, Michigan.

40 ACRES NEAR LAKE WITH HORSES, 9 cattle, 36 acres crops, including 8 a. wheat, 2 a. alfalfa, 12 a. clover, 5 a. oats, 5 a. barley, 4 a. corn, large garden, poultry, tools, ice, hay, feed, cream separator, etc.; big demand at farm for poultry, truck, dairy products; 40 acres near beautiful lake, 32 acres tillage, pasture, woodland; 32 fruit trees, berries; good 5-room house, porches, delightful view; 50-ft. barn, stables, granary, store building, etc. Owner called away makes low price all $3800, only $1500 needed. Details page 108 Illus. Catalog Bargains—many states. Copy free. STROUT FARM AGENCY, 427KJ Marquette Bldg., Chicago, Ill.

FOR SALE 170 ACRES IN OGEMAW CO. Michigan, partly improved near school, lakes and resorts. $3,000, terms. FRANK STANLAKE, Garden Grove, Michigan.

MICHIGAN BUSINESS FARMER
"The Farm Paper of Service"

The Genius of Man Has Created Marvels in Farm Machinery

Two continuous miles of farm and dairy machinery will be displayed at the 1923 National Dairy Exposition. This great exhibit will contain new and improved cream separators, milking machines, barn, equipment, churns, and a thousand and one other articles to lighten labor and increase profits of the dairy farm. Here in a few days the ambitious dairy farmer will be able to learn more about labor saving machinery than he could learn in a lifetime in any other way. An unusual opportunity to combine business with pleasure.

Other Things You Will Want To See

World's Finest Pure-bred and Grade Cattle—U. S. Department of Agriculture's Wonderful Panoramic Exhibit, "Dairying Past and Present"—Boy and Girl Club Exhibits, Contests and Demonstrations—Human Welfare and Nutrition Displays.

Conventions, Meetings, and Conferences

During Exposition week conventions will be held by the National Milk Producers Federation, all of the National Cattle, American Dairy Science, International Association of Milk Dealers, National Creamery Buttermakers' and many others. Here you will meet face to face, the leaders of all branches of dairying and can without cost secure the benefit of their experience in your business, from building a cattle barn to equipping a creamery.

Come—For Pleasure and For Profit

NATIONAL DAIRY EXPOSITION

Syracuse, N. Y., OCTOBER 5th to 13th, 1923

BREEDERS DIRECTORY

Advertisements inserted under this heading for reputable breeders of Live Stock at special low rates to encourage the growing of pure-breds on the farms of our readers. Our advertising rate is Thirty Cents (30c) per agate line per insertion. Fourteen agate lines to the column inch or $4.20 per inch, less 2% for cash if sent with order or paid on or before the 10th of month following date of insertion. SEND IN YOUR AD AND WE WILL PUT IT IN TYPE FREE, so you can see how many lines it will fill. Address all letters,
BREEDERS DIRECTORY, MICHIGAN BUSINESS FARMER, MT. CLEMENS, MICH.

CLAIM YOUR SALE DATE

To avoid conflicting dates we will without cost, list the date of any live stock sale in Michigan. If you are considering a sale advise us at once and we will claim the date for you. Address, Live Stock Editor, M. B. F., Mt. Clemens

Oct. 18—Holsteins, Howell Sales Company of Livingston County. Wm. Griffin, Sec'y. Howell, Mich.

Aug. 31—Herefords, Thumb Hereford Cattle Breeders Ass'n, Bad Axe Fair, T. F. B. Sotham & Sons, Sales Mgrs.

G. P. PHILLIPS
THE GOLDEN RULE AUCTIONEER
Bellevue, Michigan
Pedigreed Sales a Specialty.
Write, wire or call for terms and dates.

HOLSTEINS

FASCINATION FARM, VASSAR, MICHIGAN. Holsteins, registered fully accredited 32½ lb sire. Write your want.

3 Fine Holstein Bulls

ready for light service in October from heavy milking Dams and sired by Romeo King Pontiac Segis Korndyke. The price is very reasonable. Better drive over and see them.
SCHAFFER BROS., R. 4, Oxford, Mich.

HEREFORDS

HEREFORD FACTS

8 Public Sales of Purebred Registered Herefords in this state during June and July, consisting of 115 lots, sold for an average of $150.00, most of which were yearlings. WHAT IS THE REASON FOR THESE SUCCESSFUL SALES? It is this. Purebred Herefords under the Sotham Earliripe Beef Plan are making money for farmers producing Earliripe Hereford Baby Beef. Write and acquaint yourself with a plan that has proven profitable.
Herefords at Practical Prices
T. F. B. SOTHAM & SONS
(Herefords since 1839) Saint Clair, Mich.

STEERS FOR SALE

70 Herefords 700 lbs. 86 Herefords 550 lbs.
80 Herefords 600 lbs. 48 Herefords 500 lbs.
Each bunch even in size, dark reds, good grass flesh. Also know of other bunches. If in the market for real quality, well marked Hereford steers one load or more your choice. Write stating number and weights preferred. Some pastures getting short.
V. BALDWIN, Eldon, Wapello Co., Iowa

FOR SALE REGISTERED HEREFORD Bull. Yearling.
KARL BUESCHEN, Hale, Michigan.

Thumb Hereford Cattle Breeders' Ass'n

Hereford Auction

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At 10 o'clock, a. m.

Friday, Aug. 31st, 1923

Last day of Fair

Five Bulls, 27 Cows and Heifers. Fifteen Calves go free with their dam. A choice lot of money making cattle. All T. B. tested and passed. If you are interested in a most profitable branch of farming involving the least labor, study the Hereford Baby Beef plan. Ask those who have profited by it. Many Hereford Baby Beef growers will be at the Fair. Buy these practical profitable cattle.

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Herefords since 1839
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--HEREFORDS--

5 extra nice Repeater heifers one year old for $500.00. Also 10 cows with ten nice lusty calves by side for sale.
If in want of bulls, write us.
ALLEN BROS.
616 So. West St. Kalamazoo, Mich.

We Have Bred Herefords Since 1860

Herd established by Gov. H. H. Crapo. We have a few choice yearling bulls for sale at farmers prices. You are invited to visit our farm.
CRAPO FARM, Swartz Creek, Michigan.

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FOR SALE: BULL CALF BORN IN MARCH. Right every way. Dam is dam of Belle Missaukee Beauty A. R. 6th cow in Class D. D. and State Champion in Class. Sire has ⅞ of same breeding as "Red Rose" and Missaukee Sally Class leading in G. G. Price for quick sale $150.00. Buy type and production.
A. M. SMITH, Lake City, Michigan.

FOR SALE—REGISTERED GUERNSEY HEIFERS at reasonable prices, also choice bull calves of May Rose breeding.
H. W. WIGMAN. Lansing, Mich., Box 52.

FOR SALE: REGISTERED GUERNSEY BULL calves for $35.00 each. May Rose Breeding.
E. A. BLACK, Howard, City, Michigan.

ANGUS

WE HAVE SOME FINE YOUNG ANGUS BULLS from International Grand Champion Stock at reasonable prices. E. H. KERR & CO., Addison, Mich.

SHORTHORNS

RAISE SHORTHORNS WITHOUT HORNS Like Kelley does. U. S. Accredited Herd No. 28945. For description and price write,
L. C. KELLY & SON, Plymouth, Michigan.

FOR SALE: SEVERAL REGISTERED Shorthorn Cattle. Tubercular tested. Inquire
PIPER & GOODALE, East Tawas, Michigan.

JERSEYS

REG. JERSEYS, POGIS 99th OF H. F. AND Majesty breeding. Young stock for sale. Herd fully accredited by State and Federal Government. Write or visit for prices and description.
GUY C. WILBUR, BELDING, Mich.

AYRSHIRES

FOR SALE—REGISTERED AYRSHIRE bulls and bull calves, heifers and heifer calves. Also some choice cows.
FINDLAY, BROS., R 5, Vassar, Mich.

SWINE

O. I. C.

O. I. C.'S

8 last fall gilts to farrow in Aug. and Sept. 60 spring pigs, not akin, recorded free. Good stock.
OTTO B. SCHULZE, Nashville, Michigan.

HAMPSHIRES

HAMPSHIRES: A FEW BRED GILTS LEFT. Place your order now for your Boar pig at a bargain. Pairs not akin. 10th year.
JOHN W SNYDER, St. Johns, R. 4, Mich.

DUROCS

Hill Crest Farms, Perrington, Mich.

Duroc-Jerseys and Black Top Delaine Sheep. 35 stock rams to pick from. Farm 4 mi. straight south of Middleton. Gratiot Co.
NEWTON & BLANK.

PEACH HILL FARM offers choice weanling Duroc pigs, either sex. Priced very reasonable. Write us.
INWOOD BROS., Romeo, Mich.

BIG TYPE DUROCS, SPRING PIGS, BOARS and Bred Sows. Write us your wants.
SCHAFFER BROS., R. 4, Oxford, Michigan.

GOATS

GOAT FOR SALE—YEARLING TOGGENBERG Buck. Cheap. Classy fellow. Write
M. H. BIRD, Lansing, Mich., R. 6.

DAIRY and LIVESTOCK

TUSCOLA DUROC BREEDERS TOUR TWO COUNTIES

ON Monday, July 30th, the Tuscola County Duroc Breeders Ass'n. held a very interesting tour through Genessee and Oakland Counties visiting the farm of Heines and Son, Davison, Mich., where they saw some of the finest Durocs in the state. From there they went to Moffats Grove and enjoyed their noonday lunch and then to Schaffer Bros., and inspected the new hog house. Mr. V. A. Freeman of the extension department then gave the members a talk on Durocs and used Schaffer Bros. new herd boar as a model for the correct type breeders should use. The party then left for Rush Bros., Romeo, to inspect their herd and also the Inwood Bros. herd. Everybody in the party was more than pleased with the tour and believed the day well spent. Mr. Fred J. Schaffer, sec'y. of the Mich. Duroc, Jersey Breeders' Ass'n., also attended the tour.

VETERINARY DEPARTMENT

FEED NOT CAUSING TROUBLE

My pigs were about two months old when I weaned them. Began feeding ground wheat and sweet milk. After two feeds of this the pigs began to act as if their backs were weak and their hind legs give way under them when they walk. One pig died and was opened and we found some light colored spots on the liver and some purple spots on the large intestine. All the pigs eat well.—J. C. W., Clarksville, Mich.

—I do not think the ground wheat and sweet milk is causing the trouble in these pigs. I would suggest that you send one of the sick pigs to the Animal Pathology Department at the College, East Lansing, for autopsy and diagnosis.—John P. Hutton, Assoc. Prof. of Med. & Surg., M. A. C.

HAVE VETERINARIAN EXAMINE CALF

Calf is two months old and it has always been hard to get it to drink milk and when given dry or green feed it will eat fairly well but after it has laid down and starts chewing its cud there is a dropping or slobber comes from its mouth which when collected on the floor of its stall looks like the scours and has an offensive odor. Have given castor oil and epsom salts H. B. J., Wolverine, Mich.

From the description given of this case, it sounds very much like the calf might be suffering from a diverticulum of the esophagus, a rupture of the muscular walls of the esophagus, allowing a stretching of the mucous membrane through the opening and the collection of food in it. I would suggest that you have your veterinarian make a thorough examination of this calf. If diverticulum of the esophagus be the trouble, very little can be done in the way of treatment.—John P. Hutton, Assoc. Prof. of Med. and Surg. M. A. C.

SUGGESTS CHANGE OF FEED

Will you kindly publish a reason for cattle insisting on eating pieces of board and old bones? What is the cause and also what can be done to cure them of it? What food value apparently must be supplied?—O. W. S., East Jordan, Michigan.

—The cause of this preverted appetite is not understood. I would suggest a change of feed. See that the cattle are kept in stables that are clean and well ventilated. Appo morphine in doses of two to three grains given three times daily for three days in succession has given good results in some outbreaks, Keeping cattle out of doors in well drained pasture and keeping cattle from eating food which is spoiled, will tend to avert the disease. You might try feeding to these affected animals one ounce of Artificial Carlsbad Salts night and morning and continue for several weeks.—John P. Hutton, Assoc. Prof. of Med. and Surg., M. A. C.

CANNOT STOP LOSS OF MILK

Our cow loses her milk every night. When we bring her from the pasture the milk just runs out. Will you please tell us what to do with her?—Mrs. I. K., Bad Axe, Mich.

—I will say that there is nothing that we know of that you can do to remedy a condition of this kind.—John P. Hutton, Assoc. Prof. of Med. and Surg., M. A. C.

How I Outwitted the Crow

THE crows outwitted me for some time but I believe I have succeeded in matching them. At a reasonable estimate they have destroyed and eaten 400 bushels of corn in the last 10 years on one of our farms. They pick open the ends of the upright ears so the water gets in and they rot. This farm adjoins timber on the Missouri Rver where the crows nest and roost and go out by the hundreds into the cornfields. The crow is a very smart bird. One of our neighbors years ago hired a boy of 15 to come to his home to shoot crows, agreeing to pay him 50 cents for each crow and for the ammunition he used. After two weeks he reported having shot two crows and went home with one dollar besides getting his board.

I have taken my shotgun and gone to our cornfields about a quarter of a mile away and when I got about half way, the pickets that were always on guard on the fence posts that surround the field, would give the alarm and up would rise a cloud of crows out of the cornfield. Later I conceived the idea that the way to catch the crows was to place steel rat traps on top of the fence posts where the guards were in the habit of taking their positions. I fastened the traps to the posts so the crows would not fly off with them.

Uses Traps on Posts

Well I remember the first crow I caught. The traps had not been out more than an hour until I heard the crows squalling and I could see at least 300 crows circling about that post. It in one way reminded me of a swarm of bees. I killed the crow; tied him by one leg to the end of a pole and stood the pole in the middle of a 40-acre cornfield near the timber. The top of the pole was three feet above the corn. I watched to see the results next morning and early out came a flock of about two hundred. When they came to see the dead crow they circled around it a few times then went back to the timber. They kept coming out in such flocks until about 11 o'clock when they began to move out in flocks to the southwest and the next morning there were not more than 50 crows to be seen in that locality. It was about time for them to migrate so this fright gave them an excuse to move.

Since then when the corn gets to be roasting ears, I get out my traps and keep them out until I get my fields well picketed with dead crows on poles

Crows Carry Disease

I want to tell you something more about crows. It is clamed that crows, other birds, also dogs and other animals carry cholera from one hog feed lot to another and in that way spread the disease very rapidly in a vicinity. I have no doubt but that the farmers of this country have lost millions of dollars through birds and animals conveying the disease from one farmer's feed yard to his neighbor's.

When I see crows picketed on posts about my feed yard I get out my traps and get a few and put them on poles one by one and when the crows come and see their dead relatives they make a few hawk-hawks, go up in the air and move on.—Dakota Farmer.

WILL MICHIGAN'S 1924 WHEAT ACREAGE SHOW INCREASE?

(Continued from Page 4)

have been developed by the Expriment Station and given a wide distribution over the state. The importance of early plowing, and of thorough preparation of the plowed land before seeding are now appreciated as never before. Michigan wheat growers also know how to outwit the Hessian Fly by means of delayed seeding and the majority at least have learned the value of proper fertilization. Without fertilizer wheat would soon become a crop of much less importance in Michigan. Fertilizer gives the young wheat a good start in the fall in spite of delayed seeding to avoid the Fly. In fact, fertilizer really makes late seeding possible. It prevents winter-killing to a large extent, encourages "stooling," and gives the wheat a boost in the spring that sends it along to maturity several days ahead of unfertilized wheat. The yield is unusually increased from 5 to 20 bushels per acre and the quality improved accordingly.

Prof. McCool of the Agricultural College reports an experiment which was conducted near Coldwater, in which fertilizer increased the yield by 10 bushels per acre and raised the grade from No. 3 to No. 1. In a similar test near Vicksburg the yield was increased by 16 bushels per acre and the grade raised from No. 3 to No. 1. In addition to the direct benefits to the wheat crop there is an indirect benefit to the clover seeded in the wheat which is usually sufficient to pay the entire cost of fertilizing.

For specific information on wheat production — fertilizers, varieties, etc.—consult the County Agent or write to the Michigan Agricultural College at East Lansing.

THE AFTERNOON MIRACLE

(Continued from Page 11)

against his body! Soon, very soon the Queen would find him, and he, powerless as a worm in her audacious hands, would be returned to the dark chest in the narrow house that run on wheels.

Alvarita heard a sudden crunching of the gravel below her. Turning her head she saw a big, swarthy Mexican, with a daring and evil expression, contemplating her with an ominous, dull eye.

"What do you want?" she asked as sharply as five hairpins between her lips would permit, continuing to plait her hair, and looking him over with placid contempt. The Mexican continued to gaze at her, and showed his teeth in a white, jagged smile.

"I no hurt-y you, Senorita," he said.

"You bet you won't," answered the Queen shaking back one finished, massive plait. "But don't you think you'd better move on?"

"Not hurt-y you—no. But maybeso take one beso—one li'l kees, you call him."

The man smiled again, and set his foot to ascend the slope. Alvarita leaned swiftly and picked up a stone the size of a cocoanut.

"Vamoose, quick," she ordered peremptorily, "you coon!"

The red of insult burned through the Mexican's dark skin.

"Hidalgo, Yo!" he shot between his fangs. "I am not neg-r-o! Diablo bonita, for that you shall pay me."

He made two quick upward steps this time, but the stone, hurled by no weak arm, struck him square in the chest. He staggered back to the foot-way, swerved half around, and met another sight that drove all thoughts of the girl from his head. She turned her eyes to see what had diverted his interest. A man with red-brown, curling hair and a meloncholy, sunburned, smooth-shaven face was coming up the path, twenty yards away. Around the Mexican's waist was buckled a pistol belt with two empty holsters. He had laid aside his sixes—possibly in the jacal of the fair Pancha—and had forgotten them when the passing of the fairer Alvarita had enticed him to her trail. His hands now flew instinctively to the holsters, but finding the weapons gone, he spread his fingers outward with the eloquent, abjuring, deprecating Latin gesture, and stood like a rock. Seeing his plight, the newcomer unbuckled his own belt containing two revolvers, threw it upon the ground, and continued to advance.

"Splendid!" murmured Alvarita, with flashing eyes.

As Bob Buckley, according to the mad code of bravery that his sensitive conscience imposed upon his cowardly nerves, abandoned his guns and closed in upon his enemy, the old, inevitable nausea of abject fear wrung him. His breath whistled through his constricted air passages. His feet seemed like lumps of lead. His mouth was dry as dust. His heart, congested with blood, hurt his ribs as it thumped against them. The hot June day turned to moist November. And still he advanced, spurred by a mandatory pride that strained its uttermost against the weakling flesh.

The distance between the two men slowly lessened. The Mexican stood, immovable, waiting. When scarce five yards separated them a little shower of loosened gravel rattled down from above the ranger's feet. He glanced upward with instinctive caution. A pair of dark eyes, brilliantly soft, and fierly tender, encountered and held his own. The most fearful heart and the boldest one in all the Rio Brave country exchanged a silent and inscrutable communication. Alvarita, still seated within her vine, leaned forward above the breast-high chaparral. One hand was laid across her bosom. One great dark braid curved forward over her shoulder. Her lips were parted; her face was lit with what seemed but wonder—great and absolute wonder. Her eyes lingered upon Buckley's. Let no one ask or presume to tell through what subtle medium the miracle was performed. As by a lightning flash two clouds will accomplish counterpoise and compensation of electric surcharge, so on that eyeglance the man received his complement of manhood, and the maid conceded what enriched her womanly grace by its loss.

The Mexican, suddenly stirring, ventilated his attitude of apathetic waiting by conjuring swiftly from his boot-leg a long knife. Buckley cast aside his hat, and laughed once aloud, like a happy school-boy at a frolic. Then, empty-handed, he sprang nimbly, and Garcia met him without default.

So soon was the engagement ended that disappointment imposed upon the ranger's warlike ectasy. Instead of dealing the traditional downward stroke, the Mexican lunged straight with his knife. Buckley took the precarious chance, and caught his wrist, fair and firm. Then he delivered the good Saxon knock-out-blow—always so pathetically disastrous to the fistless Latin races—and Garcia was down and out, with his head under a clump of prickly pears. The ranger looked up again to the Queen of the Serpents.

Alvarita scrambled down to the path.

"I'm mighty glad I happened along when I did," said the stranger.

"He—he frightened me so!" cooed Alvarita.

They did not hear the long, low hiss of the python under the shrubs. Wildest of the beasts, no doubt he was expressing the humiliation he felt at having so long dwelt in subjection to this trembling and coloring mistress of his whom he had deemed so strong and potent and fearsome.

Then came galloping to the spot the civic authorities; and to them the ranger awarded the prostrate disturber of the peace, whom they bore away limply across the saddle of one of their mounts. But Buckley and Alvarita lingered.

Slowly, slowly they walked. The ranger regained his belt of weapons. With a fine timidity she begged the indulgence of fingering the great .045's with little "Ohs" and "Ahs" of newborn, delicious shyness.

The canoncito was growing dusky. Beyond its terminus in the river bluff they could see the waning glory of sunset.

A scream—a piercing scream of fright from Alvarita. Back she cowered, and the ready, protecting arm of Buckley formed her refuge. What terror so dire as to thus beset the close of the reign of the never-before-daunted Queen?

Across the path there crawled a caterpillar—a horrid, fuzzy, two-inch caterpillar! Truly, Kuku, thou wert avenged. Thus abdicated the Queen of the Serpent Tribe—viva la reina!

Gave Him a Hoarse Voice

"Say, Frank, you knew I was in the army, didn't you?"

"Yes, I did George."

"Well, do you know we had horse meat?"

"How did you know it was horse meat?"

"Well, one day we were all eating at the table, some one said, 'Whoa', and a piece of that meat stopped right in the middle of my throat."—Boys' Life.

The Truth in Feeds
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200 lbs—Corn Distillers' Grains
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2000 lbs—Michigan Milk Maker
The above formula is approved by Nutrition Experts and Professors of Dairying and Animal Husbandry
Manufactured for
MICHIGAN STATE FARM BUREAU
Lansing, Mich.

Fed on Milkmaker— Breaks County Test Record

THIS cow belongs to Mr. and Mrs. Gordon T. Warren of Dimondale, Mich. Last winter they were feeding their own grains and attempting to balance them with cottonseed meal. Having a few cows on test and looking for the best feed, they started feeding Milkmaker, with a result that the cow shown above broke the Eaton County Cow Testing Association record by **producing 93.53 lbs. of butterfat in 30 days.** The whole herd increased its production. Mr. Warren says:

> "Soon after feeding Milkmaker we discovered we were getting better results and saving money. If we had fed it throughout the entire test period last winter, I am convinced our records would have been better. We plan to depend entirely on Milkmaker next winter."

What Milkmaker Is

Michigan Milkmaker is a 24% protein, public formula dairy feed made by the Michigan State Farm Bureau. It is the best dairy ration for Michigan. Every one of the 10 milk-making ingredients is listed on every bag, pound for pound. You know exactly what you are buying. Not an ounce of filler in Michigan Milkmaker.

Cows fed Milkmaker give more milk and are healthier and stronger animals,—and your feed costs are lower.

How to Feed Milkmaker Next Winter at Summer Prices

You can contract now your winter feed requirements of Milkmaker through the Farm Bureau, for delivery in equal monthly shipments from September through March at **summer feed prices.** The price to you is guaranteed. Last February many wise buyers were feeding Milkmaker at September low prices and saving from $10 to $12 per ton. Last year Michigan farmers fed more than 8,000 tons of Milkmaker.

Pay for Milkmaker as You Get It

Under this plan the Farm Bureau buys Milkmaker ingredients in huge volume at summer low prices, mixes them at the best mill in the country and delivers Milkmaker fresh to you every month as you want it. You pay for the feed as it is delivered. This plan enables you to buy your winter feed at the lowest prices; it relieves you of a big cash outlay, storage expense, and insures fresh feed.

Your local co-operative association will contract your Milkmaker requirements, same as last year. See your local manager at once and arrange for your supply. If you have no co-operative association, write our Purchasing Department for information on how to co-operate with your neighbors in buying carlots of Milkmaker for car-door delivery. Write for our booklet on Milkmaker and feeding suggestions.

The time for this offer is limited. Later Milkmaker must be bought at prevailing market prices. Order now.

The Public Formula Feed

MICHIGAN STATE FARM BUREAU
Lansing, Michigan

FEED MILKMAKER NEXT WINTER AT SUMMER PRICES

100 ft x 60 steps
— pails x 3 gals —
x 8 lbs = ?
Anybody can do this sum

WHEN the July drought came along, one Iowa farmer tells us he had this little job day after day. He pumped two pailfuls (3-gallon pails) at a time, lugged them 100 feet, and trudged back to do it over again—and over and over and over again, till he had pumped and toted 250 gallons of water a day. What was his time worth?

It takes a HERCULES to get rid of the answer

That farmer lifted a ton and carried it a mile and a quarter. But a Hercules Engine would have done it all for about five cents—and done many another chore besides!

You haven't any clear idea at all what heavy work a Hercules Engine will do on your farm for a few cents a day. And it just about runs itself.

But you COULD get an idea, if you will just read the new book about the right power-plant for the farm—for any farm—for YOUR farm in particular. The book costs you nothing but asking for it. Where shall we mail it to reach you quickly?

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WHEN WRITING ADVERTISERS MENTION M. B. F.

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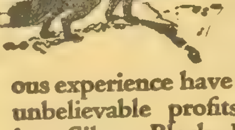

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The Hunted Woman

By James Oliver Curwood

Michigan's Own and America's Formost Author of the Great Northwest

(Copyright by James Oliver Curwood

(Continued from August 4th issue.)

SHEER amazement made Aldous hold his fire in that first moment. Marie had said that two men were after MacDonald. He had heard three shots nearly a mile away, and she was still sobbing that DeBar was dead. That accounted for three. He had expected to see only Quade, and FitzHugh, and one other behind the tepee. And there were six! He counted them as they came swiftly out from the shelter of the rocks to the level of the plain. He was about to fire when he thought of Joanne and Marie. They were still behind him, crouching upon the ground. To fire from where he stood would draw a fusillade of bullets in their direction, and with another warning cry to Joanne, he sped twenty paces to one side so that they would not be within range. Not until then did the attacking party see him.

At a hundred and fifty yards he had no time to pick out Quade or Mortimer FitzHugh. He fired first at a group of three, and one of the three crumpled down as though his skull had been crushed from above. A rifle spat back at him and the bullet sang like a ripping cloth over his head. He dropped to his knees before he fired again, and a bullet clove the air where he had stood. The crack of rifles did not hurry him. He knew that the six had cartridges, and only six, and he aimed deliberately. At his second shot the man he had fired at ran forward three or four steps, and then pitched flat on his face. For a flash Aldous thought that it was Mortimer FitzHugh. Then along his gun barrel, he saw FitzHugh—and pulled the trigger. It was a miss.

Two men had dropped upon their knees and were aiming more carefully. He swung his sight to the foremost, and drove a bullet straight through his chest. The next moment something seemed to have fallen upon him with crushing weight. A red sea rose before his eyes. In it he was submerged; the roar if it filled his ears; it blinded him; and in the suffocating embrace of it he tried to cry out. He fought himself out of it, his eyes cleared and he could see again. His rifle was no longer in his hands, and he was standing. Twenty feet away men were rushing upon him. His brain recovered itself with the swiftness of lightning. A bullet had stunned him, but he was not badly hurt. He jerked out his automatic, but before he could raise it, or even fire from his hip, the first of his assailants was upon him with a force that drove it from his hand. They went down together, and as they struggled on the bare rock Aldous caught for a fraction of a second a scene that burned itself like fire in his brain. He saw Mortimer FitzHugh with a revolver in his hand. He had stopped; he was staring like one looking upon the ghost of the dead, and as he stared there rose above the rumbling roar of the chasm a wild and terrible shriek from Joanne.

Aldous saw no more then. He was not fighting for his life, but for her, and he fought with the mad ferocity of a tiger, as he struck, and choked, and beat the head of his assailant on the rock, he heard shriek after shriek come from Joanne's lips; and then for a flash he saw them again, and Joanne was struggling in the arms of Quade!

He struggled to his knees, and the man he was fighting struggled to his knees; and then they came to their feet, locked in a death-grip on the edge of the chasm. From Quade's clutch he saw Joanne staring at Mortimer FitzHugh; then her eyes shot to him, and with another shriek she fought to free herself.

For thirty seconds of that terrible drama Mortimer FitzHugh stood as if hewn out of rock. Then he sprang toward the fighters.

In the arms of John Aldous was the strength of ten men. He twisted the head of his antagonist under his arm; he braced his feet—in another moment he would have flung him bodily into the roaring maelstrom below. Even as his muscles gathered themselves for the final effort he knew that all was lost. Mortimer FitzHugh's face leered over his shoulder, his demonias intention was in his eyes before he acted. With a cry of hatred and of triumph he shoved them both over the edge, and as Aldous plunged to the depths below, still holding to his enemy, he heard a last piercing scream from Joanne.

As the rock slid away from under his feet his first thought was that the end had come, and that no living creature could live in the roaring maelstrom of rock and flood into which he was plunging. But quicker than that he dashed thru space his mind worked. Instinctively, without time for reasoning, he gripped at the fact that his one chance lay in the close embrace of his enemy. He hung to him. It seemed that they turned over and over a hundred times in that distance of fifty feet. Then a mass of twisting foam broke under him, and up out of it shot the head of one of the roaring monsters of rock that he and Joanne had looked upon. They struck it fairly, and Aldous was uppermost. He felt the terrific impact of the other's body. The foam boiled upward again, and they slipped off into the flood.

Still Aldous held to his enemy. He could feel that he was limp; he no longer felt the touch of the hands that had choked him, or the embrace of the arms that had struggled with him. He believed that his antagonist was dead. The fifty-foot fall, with the rock splitting his back, had killed him. For a moment Aldous still clung to him as they sank together under the surface, torn and twisted by the whirling eddies and whirlpools. It seemed to him that they would never cease going down, that they were sinking a vast distance.

Dully he felt the beat of the rocks. Then it flashed upon him that the dead man was sinking like a weighter thing. He freed himself. Fiercely he struggled to bring himself to the surface. It seemed an eternity before he rose to the top. He opened his mouth and drew a great gulp of air into his lungs. The next instant a great rock reared like a living thing in his face; he plunged against it, was beaten over it, and again he was going down—down—in that deadly clutch of maelstrom and undertow. Again he fought, and again he came to the surface. He saw a black, slippery wall gliding past with the speed of an express train. And now it seemed as though a thousand clubs were beating him. Ahead of him were rocks—nothing but rocks.

He shot through them like a piece of driftwood. The roaring in his ears grew less, and he felt the touch of something under his feet. Sunlight burst upon him. He caught at a rock, and hung to it. His eyes cleared a little. He was within ten feet of a shore covered with sand and gravel. The water was smooth and running with a musical ripple. Waist-deep he waded through it to the shore, and fell down upon his knees, with his face buried in his arms. He had been ten minutes in the death-grip of the chasm. It was another ten minutes before he staggered to his feet and looked about him.

His face was beaten until he was almost blind. His shirt had been torn from his shoulders and his flesh was bleeding. He advanced a few steps. He raised one arm and then the other. He limped. One arm hurt him when he moved it, but the bone was sound. He was terribly mauled, but he knew that no bones were broken, and a gasp of thankfulness fell from his lips. All this time his mind had been suffering even more than his body. Not for an instant, even as he fought for life between the chasm walls, and as he lay half unconscious on the rock, had he forgotten Joanne. His one thought was of her now. He had no weapon, but as he stumbled in the direction of the camp in the little plain he picked up a club that lay in his path.

That MacDonald was dead, Aldous was certain. There would be four against him—Quade and Mortimer FitzHugh and the two men who had gone to the mountain. His brain cleared swiftly as a part of his strength returned, and it occurred to him that if he lost no time he might come upon Joanne and her captors before the two men came from killing old Donald. He tried to run. Not until then did he fully realize the condition he was in. Twice in the first hundred yards his legs doubled under him and he fell among the rocks. He grew steadily stronger, though each time he tried to run or spring a distance of a few feet his legs doubled under him like that. It took him twenty minutes to get back to the end of the plain, and when he got there it was empty. There was no sign of Quade or FitzHugh, or of Joanne and Marie; and there was no one coming from the direction of the mountain.

He tried to run again, and he found that over the level floor of the valley he could make faster time than among the rocks. He went where he had dropped his rifle. It was gone. He searched for his automatic. That, too, was gone. There was one weapon left—a long skinning-knife in one of the panniers near the tepee. As he went for this, he passed two of the men whom he had shot. Quade and FitzHugh had taken their weapons, and had turned them over to see if they were alive or dead. They were dead. He secured the knife, and behind the tepee he passed the third body, its face as still and white as the others. He shuddered as he recognized it. It was slim Baker. His rifle was gone.

More swiftly now he made his way into the break out of which the assailants had come a short time before. The thought came to him that he had been right, and that MacDonald, in spite of all his years in the mountains, had been fatally wrong. Their enemies had come down from the north, and this break led to their hiding-place. Through it Joanne must have been taken by her captors. As he made his way over the rocks, gaining a little more strength with each step, his mind tried to picture the situation that had now arisen between Quade and Mortimer FitzHugh. How would Quade, who was mad for possession of Joanne, accept FitzHugh's claim of ownership? Would he believe his [illegible]. Would he even believe Joanne if, to save herself from him, she told him FitzHugh was her husband? Even if he believed them, would he give her up? Would Quade allow Mortimer FitzHugh to stand between him and the object for which he was willing to sacrifice everything?

As Aldous asked himself these questions his blood ran hot and cold by turns. And the answer to them drew a deep breath of fear and of anguish from him as he tried again to run among the rocks. There could be but one answer: Quade would fight. He would fight like a madman, and if this fight had happened and FitzHugh had been killed Joanne had already gone utterly and helplessly into his power. He believed that FitzHugh had not revealed to Quade his relationship to Joanne while they were on the plain, and the thought still more terrible came to him that he might not reveal it at all, that he might repudiate Joanne even as she begged upon her knees for him to save her. What a revenge it would be to see her helpless and broken in the arms of Quade! And then, both being beasts——

He could think no farther. The sweat broke out on his face as he bobbled faster over a level space. The sound of the water between the chasm walls was now a thunder in his ears. He could not have heard a rifle-shot or a scream a hundred yards away. The trail he was following had continually grown narrower. It seemed to end a little ahead of him, and the fear that he had come the wrong way after all filled him with dread. He came to the face ef tho mountain wall, and then, to his left, he saw a crack that was no wider than a man's body. In it there was sand, and the sand beaten by footprints! He wormed his way through, and a moment later stood at the edge of the chasm. Fif'y feet above him a natural bridge rock spanned the huge cleft through which the stream was rushing. He crossed this, exposing himself openly to a shot if it was guarded. But it was not guarded. This fact convinced him that MacDonald had been killed, and that his enemies believed he was dead. If MacDonald had escaped, and they had feared a possible pursuit, some one would have watched the bridge.

The trail was easy to follow now. Sand and grassy earth had replaced rock and shale; he could make out the imprints of feet—many of them—and they led in the direction of a piece of timber that apparently edged a valley running to the east and west. The rumble of the torrent in the chasm grew fainter as he advanced. A couple of hundred yards farther on the trail swung to the left again; it took him around the end of a huge rock, and as he appeared from behind this, his knife clutched in his band, he dropped suddenly flat on his face. and his heart rose like a lump in his throat. Scarcely fifty yards above him was the camp of enemies! There were two tepees and piles of saddles and panniers and blankets about them, but a soul that could he see. And then, suddenly, there rose a voice bellowing with rage, and he recognized it as Quade's. It came from beyond the tepee, and he rose quickly from where he had thrown himself and ran forward, with the tepee between him and those on the other side. Close to the canvas he dropped on his knees and crawled out behind a pile of saddles and panniers. From here he could see.

So near that he could almost have touched them were Joanne and Marie, seated on the ground, with their backs toward him. Their hands were tied behind them. Their feet were bound with pannier ropes. A dozen paces beyond them were Quade and Mortimer FitzHugh.

The two men were facing each other, a yard apart. Mortimer FitzHugh's face was white, a deadly white, and he was smiling. His right hand rested carelessly in his hunting-coat pocket. There was a sneering challenge on his lips; in his eyes was a look that Aldous knew meant death if Quade moved. And Quade was like a great red beast ready to spring. His eyes seemed bulging out on his cheeks; his great hands were knotted; his shoulders were hunched forward, and his mottled face was ablaze with passion. He was alone with Quade and Mortimer FitzHugh.

Then FitzHugh spoke, very quietly, a little laughingly; but his voice trembled, and Aldous knew what the hand was doing in the hunting-coat pocket.

"You're excited, Billy," he said. I'm not a liar, as you've very impolitely told me. And I'm not playing you dirt, and I haven't fallen in love with the lady myself, as you seem to think. But she belongs to me, body and soul. If you don't believe me—why, ask the lady herself, Billy!"

As he spoke, he turned his sneering eyes for the fraction of a second toward Joanne. The movement was fatal. Quade was upon him. The hand in the coat pocket flung itself upward, there followed a muffled report, but the bullet flew wide. In all his life Aldous had never heard a sound like the roar that came from Quade's throat then. He saw Mortimer FitzHugh's hand appear with a pistol in it, and then the pistol was gone. He did not see where it went to. He gripped his knife and waited, his heart beating what seemed like smothered explosions as he watched for the opportunity which he knew would soon come. He expected to see FitzHugh go down under Quade's huge bulk. Instead of that, a

August a fist shot upward and Quade's back as if broken from his [illegible] sprang a step backward, and in the movement his heel caught the edge of a pack-saddle. He stumbled, almost fell, and before he could recover himself Quade was at him again. This time there was something in the red brute's hand. It rose and fell once—and Mortimer FitzHugh reeled backward with a moaning cry, swayed for a second or two on his feet, and fell to the ground. Quade turned. In his hand was a bloody knife. Madness and passion and the triumphant joy of a demon were in his face as he glared at his helpless prey. As Aldous crouched lower his shoulder touched one of the saddles. It slipped from the pile, one of the panniers followed it, and Quade saw him. There was no reason for concealment, and as Quade stood paralyzed for a moment Aldous sprang forth into the space between him and Joanne. He heard the cry that broke strangely from her lips but he did not turn his head. He advanced upon Quade, his head lowered, the long skinning-knife gleaming in his hand.

John Aldous knew that words would avail nothing in these last few minutes between him and Quade. The latter had already hunched himself forward, the red knife in his hand poised at his waistline. He was terrible. His huge bulk, his red face and bull neck, his eyes popping from behind their fleshy lids, and the dripping blade in the shapeless hulk of his hand gave him the appearance as he stood there of some monstrous gargoyle instead of a thing of flesh and blood. And Aldous was terrible to look at, but in a way that wrung a moaning cry from Joanne. His face was livid from the beat of the rocks; it was crusted with blood; his eyes were partly closed, and what remained of his shirt was drenched with blood that still ran from the deep cuts in his arms and shoulders. But it was he who advanced, and Quade who stood and waited.

Aldous knew little or nothing of knife-fighting; and he realized, also, that there was a strange weakness in his arms and body caused by his battle with the maelstroms in the chasm. But he wrestled a great deal with the Indians of the north, who fought as their half-wolf sledge dogs fought, and he employed their methods now. Slowly and deliberately he began to circle around Quade, so that Quade became the pivot of that circle, and as he circled he drew nearer and nearer to his enemy; but never in a frontal advance. He edged inward, with his knife-arm on the outside. His deadly deliberateness and the steady glare of his eyes discomfited Quade, who suddenly took a step backward.

It was always when the Indian made this step that his opponent darted in; and Aldous, with this in mind, sprang to the attack. Their knives clashed in midair. As they met, hilt to hilt, Aldous threw his whole weight against Quade, darted sidewise, and with a terrific lunge brought the blade of his knife down between Quade's shoulders. A straight blade would have gone from back to chest through muscle and sinew, but the knife which Aldous held scarcely pierced the other's clothes.

Not until then did he realize the tremendous odds against him. The curved blade of his skinning-knife would not penetrate! His one hope was to cut with it. He flung out his arms before Quade had fully recovered, and blind luck carried the keen edge of the knife across his enemy's pouchy cheek. The blood came out in a spurt, and with a terrible cry Quade leaped back toward the pile of saddles and panniers. Before Aldous could follow his advantage the other had dropped his knife and had snatched up a four-foot length of a tepee pole. For a moment he hesitated while the blood ran in a hot flood down his thick neck Then with a bellow of rage he rushed upon Aldous

(Continued September 1.)

CHANGING TIMES

By JOHN T. BARTLETT

THE FALLACY OF CHEAP LAND

DON'T be sad—when you go to buy a farm in your section—that good land costs real money. Be glad!

Anyone can react, humanly, to the lure of a cheap price. It is easy to see the "bargain" there. What requires keen, business judgement is the ability to see a bargain in land that is high in price. The men that do nowadays, are often the farmers who prosper most.

I have just had, in mountain sections of Colorado, visited by automobile, a text and a whole sermon in the fallacy of cheap land, and human frailty before the lure of it. In mountain valleys, there are, scattered here and there, patches of varying area of excellent agricultural land. Available, free, under a homestead act, the land-hungry rushed in to occupy it. Some of it made economic farming units. Some did not.

Before the land hunger of a nation, the good free land was exhausted. After many families had eagerly occupied land they could not possibly make a decent living on, owing to distance from town or other difficulties, the government classified land, and refused to permit homesteading where there was not economic opportunity for it.

Scattered about in many corners of the Rockies now are abandoned homesteads, the log cabins rotting, which became the property of the homesteader FREE. The land cost the settler nothing, yet he could not make a living. And on similar such land, because it would be FREE, people constantly are clamoring to go, storming the government offices writing letters. In all literature, so advertisers say there is no word that pulls like FREE. FREE land to most people is as loco to livestock.

"Bargain" land in the older farming communities has something of the same appeal, and inherently it is usually just as treacherous.

We buy land for what we can make out of it. And farm real profits, you'll notice if you will observe, have a way of lurking in land which costs real money.

"A GREAT PLACE TO GROW UP"

I MEET three kinds of people as regards the farm. One kind has always lived on the farm, still does. Another kind came to the farm after life in the city. Still another kind now lives in the city, after living for years on the farm. Some of these are dissatisfied where they are, and some are satisfied. But all the thoughtful parents, I find, are agreed in this: The farm is a great place for boys and girls to grow up.

A big city bank president remarked to me last week, actually with wistfulness in his voice, "The farm is a great place for children to grow up. I wish mine were growing up on one!"

He knew of the desirable farm things that his own children were missing—and of undesirable city things which they were getting.

The farm is a mighty good place for growing children—especially if we take pains to make it just as good as we can make it.

And it is true whether you plan to have your boy grow up a farmer or to enter a town business or profession. Many of the country's most successful and wealthy business men were farm boys. There is a reason. There is no place like the farm, where Father and Mother are constantly trading in fluctuating markets, to teach youngsters from the bottom up the fundamental principles of trade. They are bound to pick up a lot, hit or miss. They'll pick up much more if you'll take pains to talk to them at opportune moments on the subject.

The farm is a great place for our boys and girls to grow up. And while we're about it, let's make it better still!

THE EXPERIENCE POOL

Bring your everyday problems in and get the experience of other farmers. Questions addressed to this department are published here and answered by you, our readers, who are graduates of the School of Hard Knocks and who have their diplomas from the College of Experience. If you don't want our editor's advice or an expert's advice, but just plain, everyday business farmers' advice, send in your question here. We will publish one each week. If you can answer the other fellow's question, please do so, he may answer one of yours some day! Address Experience Pool, care The Business Farmer, Mt. Clemens, Mich.

"SLIME IN SEPARATOR"

I READ this article in M. B. F. July 21st issue and as I have an easier way I'm sending it along. I have to use hard water but I never use soap or any kind of soap powder on milk dishes. I use one tablespoon of common baking soda in the warm wash water sufficient to wash separator clean, and never bother to rinse it before washing. I have no trouble whatever with slime forming on dish cloth or in wash water. It is best for rinsing the strainers. It also keeps them white and soft, using a small wash board just large enough to use in the milk pail if you can buy one. I would like to get one about ¾ size. If some of the readers can give me information at to where I can purchase that size I will be very grateful.—Mrs. L. S., Pierson, Mich.

FIRE EXTINGUISHERS FREE

For All New Gleaner Fire Insurance Members

Insure your farm buildings and personal property with the Gleaner Fire Insurance Company, Detroit. This company is operated on the plan of paying assessments in advance. All members must pay three months in advance, but if they prefer they may pay, six, nine or twelve months. That is optional with the members. The highest rate we ever assessed in the Rodded Class was $3.30 per $1,000 and the lowest $1, and only six assessments were made in seven years. The advance rate as established, which may be paid every three months is at the rate of 82 cents; six months rate $1.63; nine months rate $2.45; one year $3.26 for each $1,000 insurance carried. Any member can pay as far in advance as he prefers. We hope eventually to decrease this rate.

In placing the business on the advance assessment basis we get rid of those who insure their property and then sneak out leaving their assessments for others to pay. All the "deadwood" is eliminated. We shall have less losses because the fellows who insure and then don't pay their assessments ob the company insuring them. We have cleaned house and have made room for the honest farmer who wants full blanket policy protection at the lowest possible cost; who wants to be associated only with those who are insured for an honest purpose and pay their honest obligations.

The Gleaner Fire Insurance Company insures personal property anywhere or in any building on the farm described in the application and livestock anywhere in the State. Losses are paid just as soon as adjusted in the full amount agreed upon by the insured and adjuster. We have no interest to pay on borrowed money. Assessments being paid in advance keeps plenty of money on hand to meet all losses and expenses promptly.

We have built a reserve fund of over $9,000 from the membership fees paid the company by new members. Other mutual companies insuring farm risks give all this to the officers and agents of the company. This money is in the Savings Department of the National Bank of Commerce, Detroit, drawing interest. It is growing and when it reaches the amount of one yearly assessments, thereafter all money received from new members will go toward lessening the assessments of the members.

The financial condition of the company is the best since it was organized. All losses paid and plenty of money to meet all obligations as they occur. Our losses are much lower than during years previous which means that assessments will eventually be lower.

Our plan of going on the cash in advance basis has been commended by the State Insurance Department, and the laws governing the company was submitted to them for suggestion before adopting by the Board of Directors. We should be pleased to have any prospective member to make ull inquiry as to our standing in every respect before joining if he so desires.

The cost of joining our company is small. The policy and membership fee, also each member pay a small amount into the reserve fund, the amount being based upon the amount of insurance taken. Now that we have over $9,000 laid away at interest, in our reserve fund, it would be unfair to let new members come in and share this splendid reserve fund start without also contributing something to the fund. But remember that new members have only one-fourth of a years advance assessment to pay. This plan is original with us. It sometimes comes mighty hard to pay for a full year at one time. Anyone can always pay his assessments when it is split up in four payments. It is easy to pay our way.

We insure buildings for three-fourths of the value as they stand today, with due allowance for depreciation and use since built. We do not insure old buildings for enough to replace them new. We are always glad to carry full value on all personal property. Only farmers with a good standing in their community as to honesty and integrity may become members. We have two classes, rodded and unrodded. Only one policy fee is charged where the property is insured in both classes.

We want every insurance risk we are carrying protected against the ravages of fire in every possible manner. Farmers are outside the reach of fire departments. When a fire starts in or about any farm building, unless it is checked immediately, such headway is gained that the building and contents is soon reduced to a heap of smouldering ashes. No help at hand to save the buildings.

Thousands of buildings are equipped with lightning rods to save their destruction from lightning. Few buildings have fire extinguishers. They are fully as essential as lightning rods. We want our members to own them that our losses may be reduced and assessments be lessened. We can say unhesitatingly that fully fifty per cent of the fires for which we pay thousands of dollars to settle, might have been prevented had a good fire extinguisher been near by. All fires are small when they start. No farm should be without a few dependable extinguishers placed conveniently about the buildings so that they may be quickly put into service in case of fire.

After a long and thorough investigation of the different makes and the prices charged we have finally decided on the "Safety-First" extinguisher using dry powdered chemical. It is the simplest and most reliable extinguisher we have seen. It can be used by women and children, and is positively guaranteed to put out fire. It does not deteriorate but retains its strength forever. Is not affected by the weather. Does not destroy fabrics and is perfectly harmless to persons. No acids, no gas or chemicals. Will extinguish gasoline, oil, naphtha and other fires instantaneously.

The "Safety-First" extinguisher is 2x22 inches and weighs three pounds. Hang anywhere in the house or barn. The top has a ring attached. The ring hangs on a nail or hook. When wanted for use, simply pull the extinguisher down and the top hangs to the ring and nail or hook and is thus automatically opened and ready for instantaneous use. The extinguisher is metal and can be refilled.

The price of this extinguisher is $3.00. We will send every new member joining this company one of these extinguishers absolutely free of charge for every $2,000 insurance taken out. If you take out $4,000 you get two extinguishers, and $6,000, three, and so on. The Gleaner Fire Insurance Company is interested only in furnishing its members with these extinguishers for the sole purpose of better protection of its risks and not for profit. We want to cut down losses and save the buildings of our members. It will mean a tremendous saving to our company. It will lessen our losses and your assessments greatly.

Join our company now. It is in the best condition financially and otherwise that it has ever been. It is getting better every day in every way. If you are interested, fill out the enclosed coupon and mail to us and we will have our nearest agent call on you and more fully explain the advantages of our fire insurance protection.

JAMES SLOCUM, Secretary:
I am interested in Gleaner Fire Insurance and would be pleased to have further information. My
property is located in the Township of.........................,
County of......................., Section No.........................
Name ....
P. O.., R. F. D.....................

$28,000,000 At Risk $9,000 in Reserve Fund

GLEANER FIRE INSURANCE CO.
5705 Woodward Avenue : : Detroit

MARKET FLASHES

MARKET SUMMARY

Wheat and oats gain on opening day of week. Corn declines 1c. Oats unchanged. Beans advance. Potatoes easy. Demand good for butter and eggs and market firm. Berries firm and scarce. Poultry easy. Dressed calves in demand. All lines of live stock active on opening of current week and prices advance.

(Note: The above summarized information was received AFTER the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press —Editor.)

FOOTE'S MARKET LETTER

BY W. W. FOOTE

From the Farmer Standpoint

CONDITIONS vary widely in farming sections, the most unsatisfactory reports coming from districts where wheat is the principal crop grown, although prices for hogs have undergone a mighty fall, due to overproduction. There does not appear to be much probability that the farmers will materially lower their numbers of sows bred although some reductions may be expected, and there is danger of another year of large production, with promise of a fine, large crop of corn and fodder in most of the corn states. There is reason to believe that less acreage will be devoted to wheat owing to the fall in prices to a level that leaves no profit, but most farmers will doubtless devote a fair number of acres to this grain. In most parts of the country crops are doing finely, favored by the weather, and, making due allowance for the damage to crops in some sections, the outcome looks promising. It cannot be too often repeated that diversified farming is the way to avoid disastrous years, the one crop farmers being always in danger of suffering severe losses. In several states farmers have good reason for regretting that they bought tracts of land at greatly inflated war prices, such land having declined materially in value, while taxes have increased. Dairy industries are doing well, and large lines of prime creamery butter have been sold at good prices and placed in cold storage for later consumption at high quotations. The government reports a great falling off in honey production, the yield up to a month ago having been little more than half of that of a year ago for the same time. The poultry industry is growing in importance, and it is bringing in lots of money, the consumption of chickens and eggs being greater than ever before. Grapes are in the largest demand by far ever known, and California growers of wine grapes report sales at $50 to $90 a ton. Michigan farmers are producing large quantities of fruits and berries, and there is a ready market in Chicago.

A message from Topeka, Kansas, says: "Middle west retailers handling the line of Hart Schaffner & Marx are accepting wheat elevator receipts at $1 a bushel in exchange for merchandise here. The arrangement is reported to be popular. Barter is limited to 100 bushels to a grower.

Commission Rates Lower

Reductions in live stock commission rates at the Chicago, Omaha, Kansas City and St. Paul markets, estimated to mean a saving approximately of $750,000 annually to live stock producers and shippers, is announced by arbitrators of the packers and stockyards administration of the Department of Agriculture. The new rates on cattle for Kansas City, Omaha, and St. Paul represent a reduction of from $1 to $2 a car and from 10 to 15 cents a head and for Chicago from $1 to $3 a car and 15 cents a head. The reduction on calf rates at the four markets ranges from $1 to $4 a car and from 5 to 10 cents a head, and on hogs from $1 to $4 a car and 13 to 15 cents a head. The sheep rates at Kansas City and St. Paul are made the same as those now obtaining at Omaha and Chicago, which are unchanged.

The Wheat Outlook

It seems to be generally admitted that further extension of credits will fail of improving the European market for American wheat, and until things undergo a change for the better over there our farmers must depend mainly upon the home demand. Speculation has become far smaller than it was before federal legislation was enacted controlling such trading, and the market most of the time has been more bearish than bullish. Our population is growing steadily through births and immigration, and in time this is bound to tell in increasing home consumption of wheat and other farm crops. Meanwhile buying by foreigners except in England is expected to be mainly for current requirements. Considerable wheat is being fed to hogs in severable states, its cheapness being the reason. Marketing the new crop of wheat goes on actively, and the visable supply is growing at a rapid pace. During a recent week there was an increase of 7,884,000 bushels in the wheat stocks in sight in the United States, running the supply up to 36,693,000 bushels, comparing with 22,433,000 bushels a year ago. Fair amounts of wheat and flour are being exported, and considerable quantities of oats are going out of the country, but corn exports have almost ceased as the supply of old corn is about exhausted. Rye is so low priced that it is being exported extensively to Germany and Scandinavian countries. In parts of the country farmers are planning on raising a better grade of wheat, one that will grade higher and yield more grain to the acre. The government crop report for August makes a fine showing for corn, and the combined crops of all grains are estimated at 5,358,000,000 bushels comparing with 5,243,000,000 bushels harvested last year. The wheat crop is given as 793,000,000 bushels, being 69,000,000 bushels less than last year. The rye crop is the smallest in five years, while the barley crop is larger, and the oats crop is 115,000,000 bushels larger than last year. The corn crop is estimated at 2,982,000,000 bushels, comparing with last year's crop of 2,891,000,000 bushels. Business in alfalfa meal is much larger than a year ago, sales extending to all over the country.

Boom in Cattle Prices

Although the receipts of cattle in western markets of late have been fairly large, the local and shipping demands have been so unusually large for well finished beef cattle that prices have undergone a rather unexpected boom quite recently, landing prime beeves carrying plenty of weight at the highest prices paid since December, 1922. Barring war time period, prices have been unusually high, with choice to prime steers selling at $11 to $12.45 and the best yearlings at $12.15, while steers grading as good sold at $10.25 and upward and medium grade steers at $9 to $10.20. A common to fair class of steers sold at $6.50 to $8.95, and inferior little steers brought $4.50 to $6.40, the bulk of the steers bringing $9 to $12. Advances in prices did not include the multitude of grassy lots, these selling slowly. Butcher stock shared in the advance, cows and heifers going at $3.40 to $10.65, with canners and cutters selling at $2 to $3.35 and bulls at $3 to $7.50. Calves of the better class advanced sharply, common to prime lots bringing $5 to $12.75. Stockers and feeders averaged 25 cents higher, although buying was not at all brisk, common to choice lots going at $3.50 to $7.65. Fair numbers of northern range cattle sold at $6 to $8.25, the commoner lots selling as feeders. Some good feeders brought $7, and range cows and heifers sold at $3.50 to $5.25.

Good Demand for Hogs

While recent Chicago receipts of hogs ran far ahead of a year ago, they fell far below those for the previous week, and this checked weakness in prices, as there was a good demand. The choicer lots showed greatest firmness, as they were the most wanted by local packers and eastern shippers, and there was a wide range in prices, the best prices being paid for light hogs, with the best heavy butchers selling 30 cents below them. Chicago receipts average around 240 pounds in weight, and many heavy old sows sell around bottom prices. The consumption of fresh and cured hog meats was never larger, and lard is particularly active, with large recent exports to Germany and Holland. Recent Chicago receipts of hogs were much smaller than a week earlier, while far larger than a year ago. Good local and outside buying made a little higher prices, with late sales at $5.75 to $8, comparing with $7 to $10.50 a year ago. Combined receipts in twenty markets for the year to late date amount to 25,248,000 hogs, comparing with 20,278,000 a year ago. At this time in 1915 hogs sold at $5.75 to $7.75. If your hogs are doing well, make them good before selling, provided you have feed.

Breeding Ewes Wanted

There is a big call in the Chicago market for feeding lambs, with nowhere near enough to go around, and sharp advances in prices have taken place, country buyers paying about as high figures for the best feeders as were paid for prime killers. The demand for breeding ewes is greatly increased, and prices are soaring because of their scarcity. Heavy lambs are selling at a sharp discount, some of them weighing over 100 pounds. Lamb and sheep receipts last week were unusually small, but late sales of lambs were made at $11 to $12.75, the top comparing with $13 not long back. Feeding lambs sold at $12 to $12.75 and breeding ewes at $6 to $11.

WHEAT

Wheat prices continue to remain around to dollar mark, but in the majority of cases it is above instead of below as two weeks ago. Most markets show a gain of around 2 cents. Wall Street is becoming alarmed over the fact that wheat is selling for a dollar and below and a careful study of the situation is being made. Wall Street knows that the farmers as a whole have not made any money since 1919; that many of them lived on the surplus accumulated during the war period when their products found a ready market at a good price; that when this surplus was gone many of them secured loans from their banks, and in many states these loans have not been paid; that conditions indicate that the wheat farmer will not get enough out of his crop this year to pay his debts. Of course all of this would not apply in all states where wheat is raised because the banks in several states, Michigan included, state that farmers have paid their notes as they came due and in only a few cases have they been asked to renew notes. The price turned upward slightly toward the end of last week owing to reports of considerable damage to grain standing in the shock in one of the largest wheat producing states in the Union. Whether the damage is enough to affect the market to any extent remains to be seen. The domestic cash wheat situation is strong at present. Millers are the most active bidders for the current run of wheat because of its quality. Country offerings to arrive are light and decreasing almost daily. Export trade is slow.

Prices

Detroit—Cash No. 1 red, $1.06; No. 2 red, No. 2 white and No. 2 mixed, $1.05; No. 3 red, $1.02.

Chicago—Cash No. 2 red, $1.00¾@1.02½; No. 2 hard, $1.00¾@1.04½.

New York—Cash No. 2 red winter, $1.17; No. 2 hard winter, $1.15.

Prices one year ago—Detroit, Cash No. 2 red, $1.06; No. 2 white and No. 2 mixed, $1.04.

CORN

There is little interest shown in corn. Some buying is reported but there were enough sellers to offset any strength that appeared in the market. Country offerings to arrive have been nil. Crop news is favorable in general but some damage is reported to have resulted from recent heavy rainfall.

Prices

Detroit—Cash No. 2 yellow, 93c; No. 3, 92c; No. 4, 90c.

Chicago—Cash No. 2 mixed, 87½@88c; No. 2 yellow, 88¼@88½c.

New York—Cash No. 2 yellow and No. 2 white, $1.05¾; No. 2 mixed, $1.04¾.

Prices one year ago—Detroit, Cash No. 2 yellow, 70c; No. 3, 69c; No. 4, 68c.

OATS

Oats have followed the trend of other grains and there has been little change in prices at some points while at others prices are the same as they were two weeks ago. Domestic shipping demand has been fair at Chicago and country offerings to arrive nil. Liberal receipts are expected this week which will have a bearish influence on the trend of the market.

Prices

Detroit—Cash No. 2 white, 48c; No. 3, 46½c; No. 4, 45c.

Chicago—Cash No. 2 white, 37¼@38½c; No. 3, 36¼@37½c.

New York—Cash No. 2 white, 52c.

Prices one year ago—Detroit, Cash No. 2 white, 35c; No. 3, 33c.

RYE

The demand for rye increased during the two weeks ending August 11th and prices advanced for the first time in some weeks and advances held in each case. Gains at Detroit last week amounted to 2 cents.

Prices

Detroit—Cash No. 2, 71½c.

Chicago—Cash No. 2, 65@66c.

Prices one year ago—Detroit, Cash No. 2, 75c.

BEANS

Michigan beans occupy an unusually strong position in the Nation's crop this year, according to the August report issued by Verne H. Church, Agricultural Statistician and L. Whitney Watkins, Commissioner of Agriculture. Our state is credited with 45 per cent of the total crop of 15,270,000 bushels, or 6,825,000 bushels. California is second with 4,359,000; Colorado is third with 1,486,000; New York is fourth with 1,479,000; Idaho is fifth with 607,000; New Mexico is sixth with 313,000; and Wisconsin is seventh with 143,000 bushels.

The greater part of California's crop and a large portion in other western states is made up of varieties other than the white pea bean, and it is probable that about 65 per cent of the entire production of this variety will come from Michigan this year. With orderly marketing and moderate prices the competition from foreign beans will be largely eliminated and a strong domestic consumption created. Such a condition should warrant fair prices throughout the marketing season.

The average price paid on July 15, for the country as a whole, was $3.67. New York farmers received an average price on that date of $4.40 per bushel; Michigan farmers, $3.65; Wisconsin farmers, $4.55; Colorado farmers, $4.60; California farmers, $3.30; Idaho farmers, $4.-30; and New Mexico farmers, $5.40.

Prices

Detroit—C. H. P., $5.00 per cwt.

Chicago—C. H. P., $5.10@5.50 per cwt.

Prices one year ago—Detroit, C. H. P., $8.75 per cwt.

POTATOES

The discouraging price conditions that farmers experienced last year in connection with their potato crop are not likely to be duplicated this year. A crop of 451,185,000 bushels was produced in the United States in 1922, and if it had all been moved there would have been no spring market at any price. High freight rates and car shortage in some sections prevented large quantities being shipped, particularly from the Western states where the largest increase in production took place. The existence of the large crop being known, many Michigan farmers began feeding their potatoes to live stock which also benefited the market situation. These conditions enabled the eastern market to be cleaned up fairly well in the spring and produced a marked advance in price, something that was scarcely expected and which only lasted until the consuming markets were again filled with a large supply.

The outlook is quite different this year. The severe losses sustained by growers in the western states caused them to reduce the acreage planted and Michigan and Wisconsin growers made a moderate reduction in their acreages. While the crop depends upon future moisture conditions, the present prospect is for a production of 379,558,000 bushels which does not exceed the country's normal consumption.

The Michigan crop is placed at 29,297,000 bushels as compared with 37,842,000 grown last year, according to the August report issued by L. Whitney Watkins, Commissioner of Agriculture and Verne H. Church, Agricultural Statistician for Michigan. The figures for the other leading potato states are as follows: Maine, 26,045,000; New York, 30,365,000; Wisconsin, 27,-211,000; Minnesota, 37,510,000; North Dakota, 12,621,000; Montana, 4,754,000; Colorado, 16,671,000; Idaho, 12,081,000 bushels.

Prices

Detroit—Michigan, $1.30 @ 1.35 per cwt.

Chicago—Kansas & Missouri, $2 @2.20 per cwt.; Early Ohio, $1.50 @1.65 per cwt.

Prices one year ago—Detroit, Michigan, $1.65 per cwt.

HAY

Markets show a decidedly firmer tone due to lighter receipts. The supply of good merchantable hay is below requirements in most markets and prices are steady and firm. Trading is fairly steady with good grades purchased immediately on arrival. Lower grades move slowly except where better sorts are in scant supply.

Prices

Detroit—No. 1 timothy, $19.50@20; standard, $18.50@19; No. 2 timothy, $17.50@18; No. 3, $13@15; Light clover mixed, $18.50@19; No. 1 clover mixed, $17@18; No. 1 clover, $15@16.

Chicago—No. 1 timothy, $25@26; No. 2, $21@24; No. 3, $15@18; No. 1 light timothy & clover mixed, $21@24; No. 1 clover, $18@20.

New York—No. 1 timothy, $29@30; No. 2, $27@28; No. 3, $24@25; No. 1 light clover mixed, $28; No. 2, $26@27.

Prices one year ago—Detroit, Standard timothy, $20@21; No. 2 timothy, $19@20; light mixed, $20@21; No. 1 clover, $14@15.

PRITCHARD'S
WEATHER
FORECAST
INTERPRETED BY THE STARS

Week of August 19

EARLY days of this week will be fair with moderate temperatures during the day but cool nights and mornings.

About Monday or Tuesday temperatures will be rising decidedly in Michigan. The barometer will be low and as a result light showers and high winds will be in evidence.

About the middle of the week temperatures will take a sudden drop in this state with a possibility of light frosts in northern lower peninsula of Michigan. Last half of this week will average bright, fair and settled weather.

Week of August 26

First half of this week will be warm with scattered showers and thunder storms but increasing to heavy amounts in large local sections. Coupled with these rain storms will be high and destructive winds.

After the middle of this week an area of high barometric pressure will move over the state inducing a sudden change to cooler. This condition most always causes several days of unseasonably cool, fair weather in Michigan, especially during the nights and mornings.

Next Six Months Cool

Going over the weather conditions for the coming six months in a general manner, we believe, that from now until early part of next year, at least, the weather will average cool to cold with the temperature in Michigan during this period ranging below normal. This does not mean there will be no warm weather during this period but that the cool or cold weather will out-weigh the former when normals for this period are taken into consideration.

MICHIGAN BEAN INTERESTS BACK ADVERTISING PLAN

(Continued from Page 3)

as well as the bean growers of Michigan will be very much interested in the promise you make in the last paragraph of your article to print the names of those who have not signed as well as the names of those who have and if there is anything you want us to do by assisting you to secure any data or information that will be of assistance to you, please feel free to call on us.—Art Goulet, Mgr., Orr Bean and Grain Company, Midland, Mich.

BUISCH COMMENDS M. B. F.

AS one of the committee representing the Michigan interests in the proposed national advertising campaign to help and increase the consumption of domestic grown beans, I want to compliment you on the thoroughness and direct manner in which you expressed the sentiment of the majority in your recent editorial.

Your suggestion to print the names of contributors in your paper is a very good one. Personally I can think of no good reason why a Michigan dealer should refuse to sign the agreement because as a matter of fact, the cost comes out of the consumer and the dealer acts only as an agent handling the funds and at the same time benefits by increased business. — Christian Buisch, Lansing, Mich.

CROP REPORTS

GENESEE—Farmers are busy threshing oats and barley. Oats are turning out quite good. The second cutting of alfalfa has not been very heavy. Corn is looking good at this time. There is an extremely large acreage of beans planted this year but the crop is only looking fair to good on the average farm. —Clarence Schwanebeck.

MONTCALM—Farmers are nearly done with the oat harvest now and some threshing is being done. We have cool nights but very hot days. Getting very hot now. There has been several deaths, some fires, and plenty of places for amusement such as picnics, shows, barbecues, home-comings, chautauquas, and family reunions. Something for each day but farmer too busy to attend.—Geo. B. Wilson.

CALHOUN—Weather is dry, but crops are looking good. It looks very much like rain today.—G. E. Beardsley.

GENERAL

W. H. S. WOOD, HOWELL, MICHIGAN, one time superintendent of Michigan State Reform School, 8 years postmaster, Howell, and who has talked on the platform with Bryan, Ferris and Pattengill is open after August 12th to give addresses to clubs, societies, etc. Mr. Wood ran for office 16 times, was elected 8 times and never asked a man to vote for him or gave away an election cigar.

10X30 STAVE SILO FOR SALE. SAGINAW make, new, never erected, complete with roof. When I sold my farm the purchaser declined to buy my new silo and I will sell at a great sacrifice. R. N. LONG, RFD No. 1, Holly, Mich.

WANTED TO HEAR FROM PARTY HAVING 5 to 20 cows for sale, preferably Holsteins. W. CALDWELL & SON, Springport, Mich.

TOBACCO

HOMESPUN TOBACCO, 5 LBS. CHEWING $1.75; 10 lbs. $3.00. 5 lbs. smoking $1.25; 10 lbs. $2.00. Pipe and recipe free. COOPERATIVE FARMERS, Paducah, Ky.

Larro
THE READY RATION
FOR DAIRY COWS
Larro
THE LARROWE MILLING CO.
DETROIT, MICH. U.S.A.

Cows dried off now for freshening should be fed a daily ration of at least four to six pounds of Larro.

Look for the feeding instructions in every sack.

Just Like a Million Other Bags of Larro

Every sackful of Larro is exactly the same. The Larro you feed today is just like the Larro you'll feed a year from now — just like the Larro in a million other sacks.

Larro results are as uniform as Larro quality. And like Larro quality, the results are guaranteed. Larro satisfies you or you get your money back.

There are no fillers in Larro. Weed seeds, oat hulls, oat clippings and all other fillers are absolutely barred.

Each Larro ingredient is separately processed and standardized before mixing. Every pound of finished Larro passes over electro-magnets, safeguarding the cow against the danger of nails and wire in feed.

Larro is made by specialists whose sole work is to make this one brand of dairy feed. Its results and uniformity are being constantly checked at the Larro Research Farm.

Feed Larro and make a greater profit from your cows. For many years Larro has been the year-round ration for thousands of feeders. Let us tell you what they say.

The Larrowe Milling Company — Detroit, Michigan

Manufacturers of
Larro
The Safe Ration for Dairy Cows

FREE "Preparing Cows for Winter" is the title of an article that will appear in the September issue of The Larro Dairyman. If you are not receiving this excellent, free magazine for cow-owners, fill out and mail this coupon now, or take it to your Larro dealer.

The Larrowe Milling Company
49 Larrowe Bldg., Detroit, Mich.

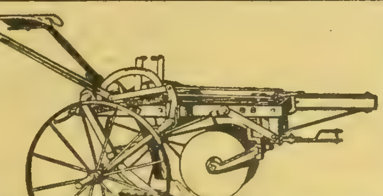
Gentlemen:

I am now feeding........cows and I want to receive, without cost, your magazine—"The Larro Dairyman".

Name..

St. or R. F. D..................................

Town......................State..............



Remember--

Sugar Beets are sold by their weight

You can make considerably more money by harvesting beets so that they are not left exposed to the frost, and are protected so that the sun cannot dry them out. Remember, you sell beets by weight. You get extra tons of beets from the same field by using

JOHN DEERE

No. 20 Riding Beet Lifter

Lifting blades shaped so that they do not injure the beets, but loosen and lift them, leaving them upright in the ground, where they are easily and quickly handled for topping. The John Deere Beet Lifter gets all the beets, even in crooked rows, because a push of the foot causes it to dodge quickly. No beets are left in the field by your hired help because too hard to pick up. This machine is also very easy to handle, and very easy on horses, because it has only one lever and two wheels, no tongue truck is needed.

FREE BOOKLET describes this lifter. Write today, address John Deere, Moline, Illinois, and ask for Booklet IC-133

JOHN DEERE
THE TRADE MARK OF QUALITY MADE FAMOUS BY GOOD IMPLEMENTS

It's NATURAL for a hog to wallow
Provide a wallow and add
DR. HESS DIP and DISINFECTANT
then—

1. Your hogs will be free from lice.
2. They will have clean, healthy skins.
3. Disease germs will be destroyed.
4. Foul odors will be kept down.

If you do not have a wallow, use the sprinkling can freely. Sprinkle the animals — the sleeping quarters and pens.

Sprinkle the cow barns to keep them healthful and clean-smelling—

The poultry-house to kill the mites and lice.

Use it about the house—in the closets, sinks and drains. Excellent for the sickroom.

Standardized Guaranteed

DR. HESS & CLARK, Ashland, Ohio

TAKE THE D. & C. WATERWAY trip to Buffalo. Restful, economical, all conveniences.

WHEN WRITING TO ADVERTISERS PLEASE MENTION MICHIGAN BUSINESS FARMER

If Your Tractor Could Speak

IT would tell you why, at times, it seems to hesitate, drag and fail to deliver that steady, even flow of rhythmic power which is so necessary to heavy pulling. It would tell you that a tractor can run smoothly only when the frictional parts are amply protected by a cushion of good lubricating oil, thus permitting free, easy, noiseless action.

It would tell you that the wrong oil almost invariably causes excessive carbon, loss of power, transmission troubles, fouled spark plugs, and overheating. The right oil for your tractor—the grade of Polarine indicated in the chart—means minimized repairs, fewer renewals of parts, greater flexibility, and more power.

Tractor Chart of Recommendations

Trade Name	Motor Oil
Adaptable	H.
Allis-Chalmers, 6-12	H.
Allis-Chalmers, 15-25	S. H.
Allis-Chalmers, 18-30 and 20-35	S. H.
All Work	S. H.
Andrews-Kinkade	E. H.
Armington	S. H.
Aultman-Taylor, 15-30	S. H.
Aultman-Taylor, 22-45 and 30-60	S. H.
Automotive	S. H.
Avery, Model C	H.
Avery, 8-16, 12-20, 12-25, 14-28, 18-36, 25-50, 40-65, 20-35	E. H.
Avery Track Runner	S. H.
Bates Steel Mule, All Models	S. H
Best Tracklayer, All Models	E. H.
Big Farmer	E. H.
Big Four E-B	E. H.
Buckeye Trundaar	S. H.
Burnoil	E. H.
Capitol, All Models	E. H.
Case, 10-18, 10-20, 12-20, 15-27, 9-18	H.
Case, 22-40	S. H.
Case, 12-25, 30-60, 40-72	E. H.
Case, 20-40	E. H.
Cletrac, All Models	S. H.
Coleman	E. H.
Dart Blue "J"	S. H.
Dill Harvesting	H.
Eagle	E. H.
E-B, All Models	S. H.
Elwood	S. H.
Farm Horse	E. H.
Farquhar, 15-25	S. H.
Farquhar, 18-35 and 25-50	S. H.
Fitch Four Drive	E. H.
Flour City Junior	H.
Flour City, 20-35	S. H.
Flour City, 30-50, 40-70	E. H.
Fordson	H.
Fox	E. H.
Frick, All Models	S. H.
Good Field	H.
G-O	S. H.
Grain Belt	S. H.
Gray	S. H.
Great Western	S. H.
Hadfield-Penfield	S. H.
Hart-Parr, All Models	E. H.
Heider	S. H.
Holt Caterpillar, All Models	E. H.
Huber, All Models	S. H.
Indiana	H.
International, 8-16	H.
International, 15-30	S. H.
Klumb	E. H.
Lauson, All Models	S. H.
Leader	E. H.
Leonard Four Wheel Drive	S. H.
Liberty	E. H.
Lincoln	S. H.
Linn	S. H.
Little Giant, A & B	S. H.
Magnet, 14-28	S. H.
Mark VI	S. H.
McCormick-Deering, 15-30	H.
Minneapolis, 12-25 and 17-30	S. H.
Minneapolis, 22-44 and 35-70	E. H.
Mogul	S. H.
Moline Universal	S. H.
Monarch	S. H.
Montana	E. H.
Nilson Junior and Senior	S. H.
Oil Gas, 20-42 and 25-50	E. H.
Peoria	E. H.
Pioneer, 18-36 and 30-60	E. H.
Port Huron	S. H.
Quadpull	S. H.
Reed	S. H.
Rex	S. H.
Rogers	E. H.
Rumley, Oil Pull, 12-20, 16-30 and 20-40	E. H.
Rumley, Oil Pull, 30-60	E. H.
Russell "Junior", 12-24	S. H.
Russell Boss	S. H.
Russell "Giant," 30-60	E. H.
Sampson, Model M	H.
Savage A	E. H.
Shawnee, 6-12 and 9-18	H.
Shelby, All Models	S. H.
Square Turn	E. H.
Stinson	S. H.
Titan	S. H.
Topp-Stewart	S. H.
Townsend	E. H.
Traylor	H.
Trundaar	S. H.
Twin Ports	E. H.
Twin City, 12-20 and 20-35	S. H.
Twin City, 40-65 and 60-90	E. H.
Uncle Sam All Models	S. H.
Wallis	S. H.
Waterloo Boy	S. H.
Wellington, 12-22 and 16-30	S. H.
Wetmore	S. H.
Wheat	S. H.
Western	E. H.
Wisconsin	E. H.
Yuba Ball Tread	S. H.

KEY

L.—Polarine Light.
M.—Polarine Medium
H.—Polarine Heavy
S.H.—Polarine Special Heavy.
E.H.—Polarine Extra Heavy.

N. B. For recommendations of grades of Polarine to use in automobiles and trucks consult chart at any Standard Oil Co. (Indiana) station.

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THE PERFECT MOTOR OIL

Made in Five Grades

for all makes of tractors, at all motor speeds and temperatures. It meets every tractor lubricating need. Polarine is made in five grades. The one specified in the chart is the correct grade for your tractor and will insure perfect lubrication. Polarine is of the right viscosity to maintain a perfect film under the extreme of working conditions. This means assured compression and maximum power.

Polarine lubricates thoroughly every frictional surface and will not break down. It seals your pistons against loss of power.

The essence of true economy is to drain your crank case very frequently and fill up with the correct grade of Polarine. Your tractor will give you better service and it will last longer.

Polarine
THE PERFECT MOTOR OIL
MADE IN FIVE GRADES
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The Michigan
BUSINESS FARMER

An Independent
Farm Magazine Owned and
Edited in Michigan

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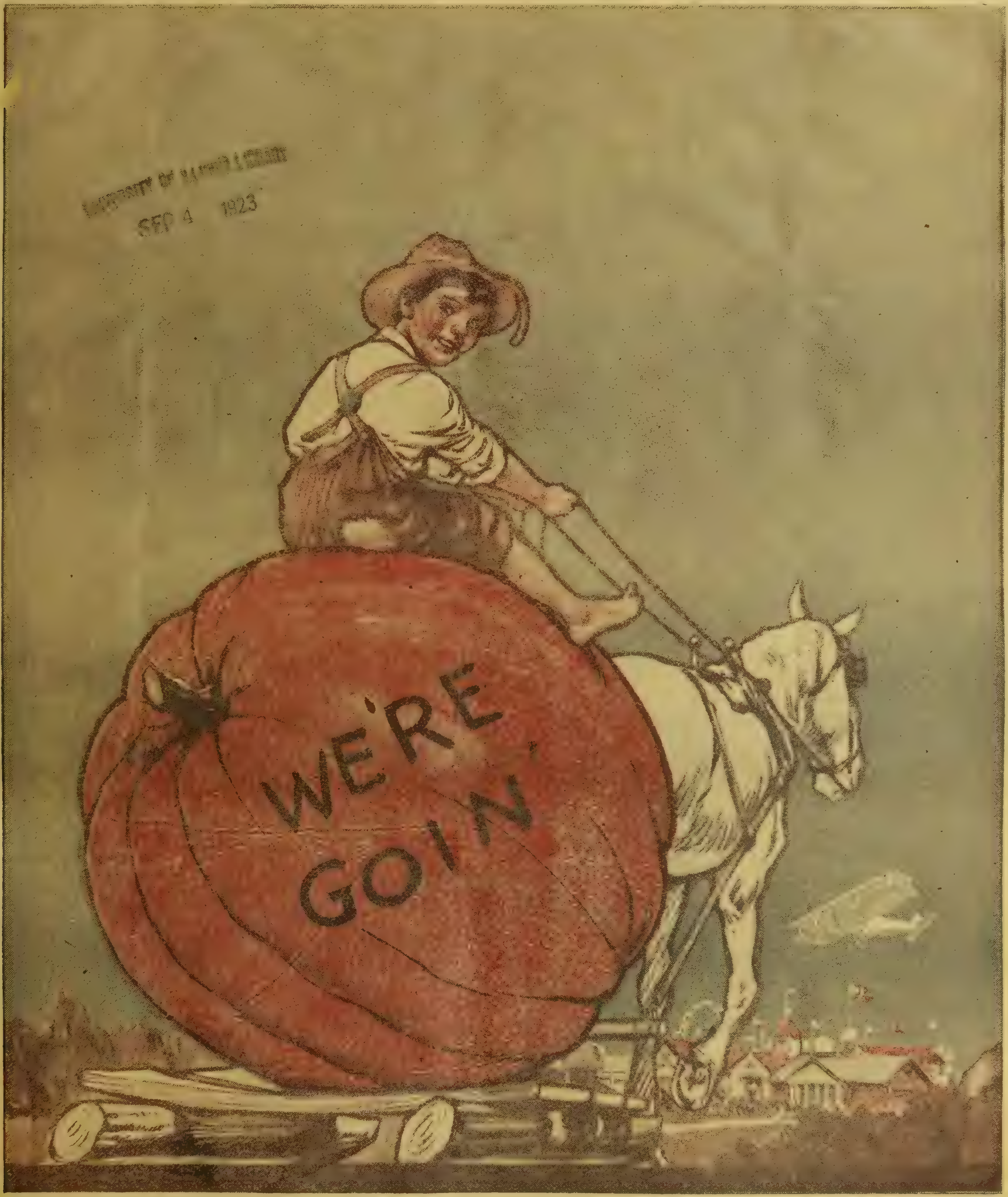


Michigan Fairs' Annual, 1923

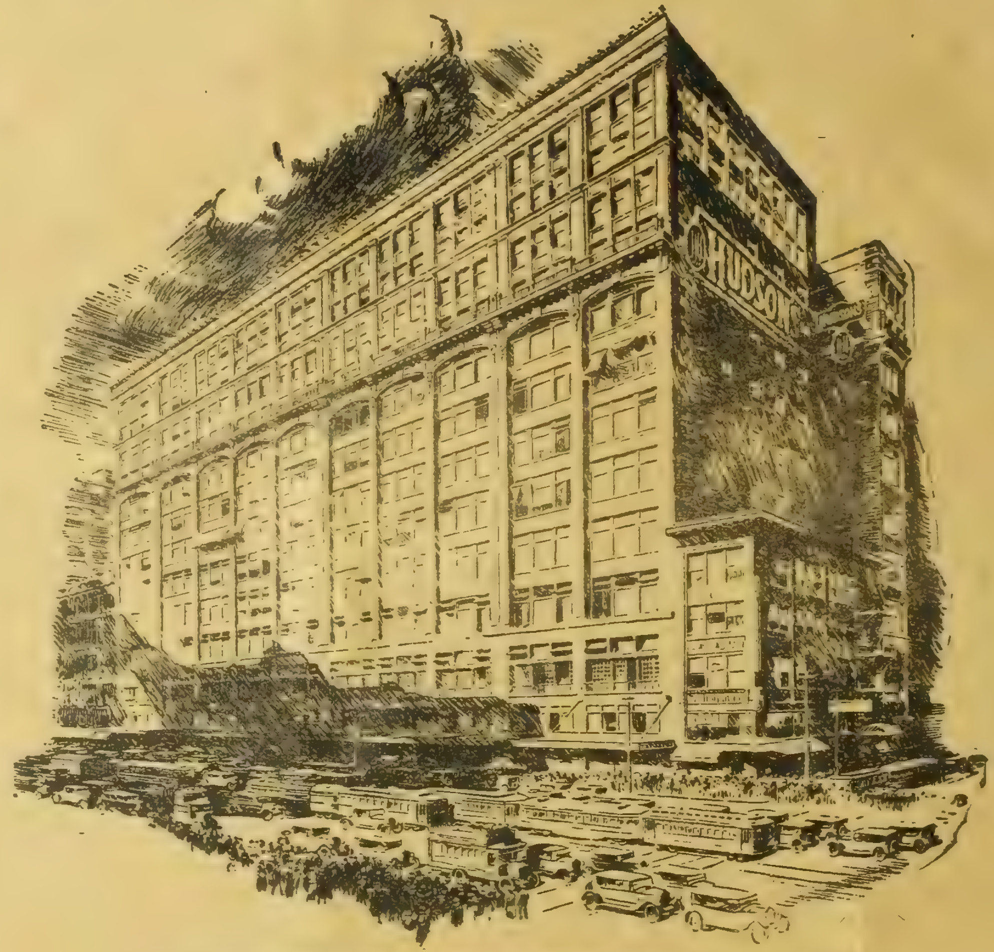
The Michigan State Fair—August 31st to September 9th

The 100th Anniversary Year of the writing of John Howard Payne's immortal song—"Home, Sweet Home"

Hudson's 42nd Anniversary Sale

Begins on Tuesday, September 4th

This great sale has been planned to enable you to purchase everything needed for the home as well as new Fall and Winter Clothing and all wearables for Men, Women and Children. Each day will be a memorable one for the remarkable opportunities presented. Every item carefully selected to measure up to *Hudson Quality.* Plan now to visit the State Fair and shop at Hudsons.



The Newly Enlarged Store Showing the Woodward Avenue Front

42 Years of Service

This sale celebrates our 42 years of service to the people of Detroit and vicinity—and we have brought together under the one roof, merchandise from practically all over the world, offering economies that will make it well worth your while to share in this event.

Visitors to the State Fair

will find every convenience of this great establishment at their service—plan to meet your friends here.

Those Who Will Stay at Home

may also share in the savings to be made in this 42nd Anniversary Sale, by having the Personal Service Bureau shop for them. Give a careful and accurate description of the merchandise you desire and we will shop for you.

The Sale Will Continue Until September 22nd

Seventeen days of remarkable offerings—*read the daily newspaper advertisements* and take advantage of the savings which this Anniversary Sale offers.

THE J. L. HUDSON COMPANY

WOODWARD, GRATIOT, FARMER STS. DETROIT, MICHIGAN

SATURDAY
September 1st,
1923
VOL. XI, NO. 1

Being absolutely independent our columns are open for the discussion of any subject pertaining to the farming business.

"Hew to the line, let the chips fall where they may!"

The Michigan
BUSINESS FARMER

"The Only Farm Magazine Owned and Edited in Michigan"

Published Bi-Weekly
Mt. Clemens, Mich.
TWO YEARS $1

Entered as second-class matter, August 22, 1917, at the post-office at Mt. Clemens, Mich., under act of March 3rd, 1879.

Michigan Tax Rate for 1923 to Be Cut 75 Cents

Lowered Administative Expenses and Increased Valuation Given as Reasons for Welcome Relief —Northern Counties Given Larger Share of Melon Because of Impoverished Conditions— Wayne County Now Pays 40% of State Tax

STATE Tax Commissioner George Lord has just announced that the state tax for 1923 will be about $1,300,000 less than it was in 1922 and the state tax rate will be around 75 cents per $1,000 valuation lower.

There are two factors responsible for the prospective cut in the tax rate. One, according to Mr. Lord, is that state expenses have been so reduced that the total amount to be raised will probably not exceed $16,000,000. The state tax last year was $17,300,000. The other is the increase in the state valuation for tax purposes, fixed by the State Board of Equalization late yesterday.

The billion and one-half dollar increase in valuation would naturally lower the rate, even if the amount to be raised were the same as last year. The decrease of $1,300,000 in the amount to be raised further cuts the rate.

The 1922 state tax rate was approximately $3.08 per thousand. The prospective new tax rate is about $2.32 per thousand.

Record Valuation Jump

The Board of Equalization increased the valuation of the state for tax purposes $1,540,000,000 over the 1922 equalized valuation of $5,000,000,000. The new equalized valuation of $6,540,000,000 is a reduction of $5,065,000 from the State Tax Commission's recommended valuation for this year.

The increase in the value of the state's taxable property is the largest jump ever decided upon by a board of equalization for a single year. The advance was largely attributed to the fact that the 1923 legislature enacted laws limiting the mill tax appropriations for the University of Michigan and the Michigan Agricultural College to $3,000,000 and $1,000,000 a year, respectively. Heretofore the mill tax appropriations have increased in proportion to the valuation.

The $1,500,000,000 increase will have little effect on the proportion of the state tax to be paid by any county. The increase is spread horizontally, except in the case of 10 northern counties. They are given reductions. The effect of the increase will be to raise whatever the amount of the state tax amounts to on a larger valuation, which means lower rates. The total amount to be paid out by any individual or county is not altered.

Wayne Slightly Increased

The $5,065,000 reduction from the State Tax Commission's recommended valuation was arrived at by cutting $50,000 from Crawford, $109,000 from Delta, $50,000 from Huron, $50,000 from Iosco, $50,000 from Lake, $95,000 from Luce, $50,000 from Manistee, $150,000 from Newaygo, 50,000 from Roscommon, and $94,000 from Schoolcraft. These counties, in the opinion of the board, were the hardest hit agricultural and mining counties and were entitled to a reduction. The remainder of the $5,065,000 cut will be spread equally over all the counties and will not affect the proportions of the state tax to be paid.

Under the new equalization Wayne will have a valuation of approximately $2,666,500,000, and will pay about 40.74 percent of the state's tax, as compared with $2,032,796,000 and 40.66 per cent last year, an increase of $633,704; Kent will have a valuation of $330,193,000 and pay 5.04 per cent of the state tax, as compared with $251,938,000 and 5.04 per cent last year; Jackson, $131,847,000, and 2.01 per cent as compared with $100,645,000 and 2.01; Saginaw, $144,600,000 and 2.20 as compared with $111,584,000 and 2.23.

Rural Districts Get Benefit

The reduction in the levy on the rural districts and the raise to the industrial centers is all the more noteworthy because of the tremendous effort which was made by Detroit representatives to show that city levies should be reduced or at least kept down to present levels. The decision of the board is a splendid tribute to the supervisors and others who so ably represented the rural districts.

It is well to recall that in the hearings recently held before the State Board of Equalization to determine the State's equalized value and to re-apportion the tax levy among the several counties of the state, Michigan farmers and the Michigan State Farm Bureau were ably represented by Melville B. McPherson, of Lowell, member of the Board of Directors of the State Farm Bureau, and an acknowledged authority on taxation matters.

Mr. McPherson presented evidence to prove what is commonly known to be true, namely that in Michigan today rural property is valued relatively higher than is city property. He declared before the Tax Board that Wayne county should remain at its recommended value for 1923 while the rest of the state should be reduced an average of 10.87 per cent.

McPherson declared that farm property is either assessed too high or the utilities of the state and city property are assessed too low and he gave figures to show that while the tax commission had increased the general property valuation of the state 78 per cent since 1916, mining properties from 1915 to 1922 were increased only 25 per cent, and for the same period the railroads and other corporations paying the primary school interest fund specific tax were increased only 19 per cent.

Mr. McPherson said real estate and corporate property in Detroit

(Continued on Page 23)

Thirty-Six States Tax Gas to Maintain Good Roads

IT may be that the farmers of Michigan were not such moss-backed reactionaries as they were pictured by the city papers when they ask for a gasoline tax last spring. The fact that a majority of the states have now gone on record or are collecting a gasoline tax to maintain their good roads, means that now Michigan will have to follow the crowd, instead of being one of the leaders.

One prominent state official, in an address before a farmers picnic in Michigan last week, went on record as favoring a gasoline tax of 3 cents per gallon and a flat rate of $2 for the automobile license fee.

The farm bureau and other farm organizations are keeping up the agitation and the fact that the state highway fund is now almost a memory, means that some method of bringing in the necessary funds to keep up the elaborate, but apparently necessary good-roads program, must be adopted and at once.

The gasoline tax, claim its sponsors, is the only direct method of taxing the automobile and truck for their destruction of the paved roadways. The light car, burning less gasoline, pays only its proportionate share as against the heavy truck that burns a gallon to the mile. The bus lines, all using heavy motors will also come in for their just dues.

The president of one of the largest truck lines in Michigan is on record as favoring a gasoline tax as high as ten cents a gallon, if necessary, to keep up the paved roads and he says it will be economy for his company. This is applicable as well to every individual owner of automobile or truck, as a road in bad condition can do more damage in a dozen miles of hard-going than the gasoline tax would amount to in a year.

Forty-One Millions From Gas Tax

State gasoline taxes in the United States this year are expected to bring in $41,607,835 additional revenue, according to a compilation made by Dow, Jones & Company. Eighteen states imposed the tax in 1922, and thirty-six states will be taxing gasoline with a levy of from 1 cent to 3 cents a gallon before December 31.

The revenue raised by the gasoline tax in 1922 was $11,923,442, of which $6,474,178 was applicable to state road work.

Last year 12,239,144 automobiles were registered, giving a revenue of $152,047,823, of which $117,093,116 was used for road construction and repair. More than 2,000,000 new cars were produced in the first six months this year, and their registration and licensing will increase highway revenue.

2,607,000,000 Gallons Taxed

Estimated total gasoline consumption in 1922 in the states which passed gasoline tax laws was 2,607,000,000 gallons out of a total domestic consumption of 5,366,000,000 gallons in that year, according to the information. Estimated yield of gasoline taxed in 1924, levied in thirty-six states out of forty-eight, is $41,607,890, based on 1922 registration of 12,239,114 cars and trucks and an annual consumption for each vehicle of 424 gallons, the average estimated by the National Automobile Chamber of Commerce. Estimation is 1,000 gollons for each truck and 358 gallons for each passenger car, but 10,793,930 passenger cars greatly outnumbered trucks, thereby lowering the combined average. Cars and trucks now in use number about 13,500,000, according to latest estimates. With the license tax only, owners of cars pay no tax for use of roads outside their own states, but payment for such use can be collected by means of a gasoline tax.

GASOLINE TAX YIELD BY STATES

The states which have adopted a gasoline sales tax, the estimated annual consumption, the rate imposed and the estimated yield of the tax is as follows:

STATE	Estimated Consumption	Tax a gal.	Estimated yield
Alabama	38,182,048	2c	$ 763,641
Arizona	16,126,416	1c	161,264
Arkansas	35,868,704	2c	717,374
California	365,406,168	*2c	7,208,123
Colorado	68,827,072	†2c	1,376,541
Connecticut	64,862,248	1c	648,622
Delaware	10,413,440	1c	104,134
Florida	47,256,080	3c	1,477,682
Georgia	60,811,352	1c	608,113
Idaho	22,842,676	3c	685,280
Indiana	199,254,136	‡2c	3,985,083
Kentucky	65,304,904	1c	673,049
Louisiana	43,368,416	1c	673,049
Maine	39,236,536	1c	392,365
Maryland	70,224,576	§2c	1,404,492
Massachusetts	163,337,944	¶2c	3,266,759
Mississippi	32,890,104	1c	328,900
Montana	26,563,600	2c	531,272
Nevada	5,137,184	2c	102,744
N. Hampshire	20,524,144	§2c	410,483
New Mexico	10,800,552	1c	108,000
North Carolina	77,401,200	1c	774,000
North Dakota	41,998,048	1c	420,000
Oklahoma	105,855,416	1c	1,058,554
Oregon	56,869,000	3c	1,706,000
Pennsylvania	351,808,488	**1c	3,518,084
S. Carolina	40,694,672	3c	1,220,840
South Dakota	53,102,184	2c	1,002,043
Tennessee	57,513,584	2c	1,002,043
Texas	223,124,912	1c	2,231,240
Utah	20,745,536	2½c	518,638
Vermont	18,505,544	1c	185,055
Washington	89,343,584	§2c	1,786,871
West Virginia	47,811,512	1c	478,115
Wyoming	12,990,088	1c	129,900
Total	2,607,032,068		$41,607,835

*After September 30, 1923.
†After August 1, 1923.
‡After June 1, 1923.
§After January 1, 1924.
¶Subject to referendum if 15,000 voters sign petition within ninety days after May 24, 1923.
**Bill passed increasing tax to 2c a gallon.

Jackson County Holstein Breeders Have Big Day

Over Seventy-Five Members of Jackson County Holstein Breeders Association Attend Second Annual Tour and All Report a Good Time

Arthur J. Perrine, is second from left; W. R. Harper, vice president of the State Holstein Association, is third from left; E. J. Noon, owner of the champion cow of Jackson county for milk and butter-fat, is ninth from left, and Corey J, Spencer, president of Jackson County Holstein Association is tenth from left.

TUESDAY, July 31st, was the big day of the year for the Holstein breeders of Jackson county. It was the day of the second annual tour of the Jackson County Holstein Breeders Association and members were out in full force before the close of the day. However, the tour started from the courthouse in Jackson at 8 o'clock with only a few cars in line but before it arrived at its first destination the number had multiplied threefold. The man at the head of the tour was Corey J. Spencer, president of the county association. Well known men who accompanied it were: U. R. Harper, vice president of the state association; James Wells, M. A. C. Dairy Extension Department; C. M. Long, of the National Holstein Breeders Association, and R. E. Decker, county agricultural agent. Herds were inspected on eight different farms and a fine picnic dinner was served at one.

The first stop was made at Walnut Grove Stock Farm, owned by W. W. Wyckoff and located in Napoleon township. Here the members inspected a fine herd of 45 purebreds, perhaps unlike any other herd in Michigan; every animal in the herd is a descendant of one cow that is now 18 years old and just recently gave birth to a fine calf. All cattle in the herd have A. R. O. records.

From the Wyckoff place, the breeders went to the farm of M. L. Noon & Sons, Michigan Center. Mr. Noon is vice-president of the Michigan State Farm Bureau. He has a herd of eighteen cows which had high record in the Rives Cow Association for the year ending May 15, 1923. Mr. Noon has some heifers which show promise of developing into fine cattle to fill the ranks of his herd.

After viewing the herd, the party repaired to the apple orchard where the effects of fertilizer upon apple trees was viewed. Mr. Noon had put amonia phosphate fertilizer upon several strips of ground in the 16-acre apple orchard, and where the fertilizer had been laid, and where it had been omitted, the difference was plainly marked. While in the orchard, Decker and Noon gave several talks on the value of fertilizer, and Noon stated that before long there might be an announcement made that would revolutionize fertilization. "Then all college men in America and Europe will take off their hats to a Jackson county man," he said.

The Prison farm, north of the city, was the third stop on the route. There were thirty-five head of pure-bred Holstein cattle in the prison barns, brought from Livingston and Shiawassee counties last fall. The bull, the head of the herd, is a fine 4-year-old gotten from the state farm at Ionia, and his dams have a record of 24 pounds of butterfat a week. The prison has three dairies with 150 cattle and nearly all are Holsteins, according to Geo. Bretherton, farm supertendent.

Dinner at Layton's Corners

Inspection of the herds already mentioned occupied the entire morning and the tourists drove to Mr. Bretherton's place at Layton's Corners for a picnic dinner. After the seventy-five people present had satisfied their hunger with great quantities of farm cooking, Mr. Spencer introduced Mr. Decker as toastmaster. Mr. Decker in his opening speech made the statement that "best satisfied farmers are dairymen" and it was echoed and expanded by every succeeding speeker. W. R. Harper, state vice-president, was introduced as the first speaker. Mr. Harper explained that in order to make the breeders' association more democratic the membership dues had been changed from a per capita tax on females in the herd to a flat rate of two dollars a breeder. He said that due to depression after the war and lack of a reliable help, many

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This is by far the best bull seen on the tour at the Michigan State Prison farm. It was recently purchased by Warden H. H. Hulbert from H. W. Horton Jr., director of Animal Industry, State Department of Agriculture, at Lansing, Michigan.

C. M. Long of the Holstein association talking it over with James Wells and R. E. Decker.

Inez Piertertje on farm of W. W. Wyckoff at age of eighteen years and still milking. The entire herd of W. W. Wyckoff descended from this cow. 53 are now in the barn, and he has sold 47 head. This is an example of what a farmer can do if he persistently sticks.

Why Should We Go Out of Our Country to Buy Sugar?

By C. H. ALLEN

THE writer of this article, Mr. C. H. Allen, is the president of a farmer-owned sugar company at Defiance, Ohio, and has spent considerable time studying the sugar market and conditions governing it. This article is the result of his work. Most of you will remember the article on the sugar market by Mr. Simon G. Palmer, sugar statistician, that appeared in a recent issue of the Business Farmer. You will find that both of these market experts have arrived at the same conclusion, and that is to produce our own sugar and not depend on Cuba. What is your idea?

THE recent sensational increase in the price of sugar has caused a howl of indignation to go up all over the country.

Accusations of profiteering have been hurled right and left; the tariff has been blamed; investigations have been ordered; "Some one should go to jail," say some people. Learned (?) editorials have been written by writers whose only knowledge of the subject is that sugar is a white powder they put in their coffees in the morning to sweeten it.

There has been such a confused mass of stuff put out that the majority of people are mystified and wonder what the real facts are.

We in the United States last year consumed 5,700,000 tons of sugar. This is nearly a million tons more than we had ever consumed before in the same time.

From its large production and its peculiar connection with our tariff laws, which will be explained further along in this article, Cuba controls at certain times of the year the entire supply coming into this country.

Sugar used in the United States was grown in the following places:

Hawaii, 520,000 tons; Porto Rico, 350,000 tons; United States (cane and beet), 1,310,000 tons; Philippine Islands, 240,000 tons; miscellaneous countries, 40,000 tons; Cuba, 3,240,000 tons; total, 5,700,000 tons.

This consumption includes some sugar, both beet and cane, grown in 1921 and carried over to 1922.

In February of this year, in accordance with its usual custom, the Department of Commerce made an estimate of the sugar available for consumption in 1923. This estimate showed a "carry over" of 477,000 tons from 1923 to 1924. As the "carry over" of Cuban sugar alone from 1921 to 1922 was 1,600,000 tons this is a decided decrease in the future visible supply. Remembering with anything but pleasure their painful position when sugar was scarce, buyers immediately jumped in and the "war was on." Prices soared.

The bulletin of the Department of Commerce was confessedly merely an estimate; it could not have been anything else. It was compiled from the best information they could get.

The Department of Agriculture now comes out with another estimate. Still later one is given out by the Secretary of Agriculture of the Republic of Cuba. These all give different figures. Practically every sugar dealer makes his own estimates, and it is the opinions formed by these estimates that make a difference in the views people hold of what the price should be.

Geographically our sugar supply comes from two sources:

First: From the United States and its dependencies; beets in the United States; cane from Hawaii, Porto Rico, Philippine Islands, and Louisiana and Texas in the United States.

Second: From the Republic of Cuba; all cane.

Most of our sugar comes from Cuba.

All sugar made from cane must go through a refining process to make it thoroughly white. Refining does not "make" sugar, it merely washes the dirt and molasses away from it. A sugar refinery is a laundry for sugar.

The refineries that handle the sugar extracted from cane coming from Cuba for American consumption are, for convenience and profit, built along the sea coast.

The beet sugar grown in the United States does not go through this refining process. Each beet sugar factory granulates and washes its own sugar, making it ready for the table.

It is important to understand this difference as because of it a very bitter competition is maintained between the beet sugar farmer and factories extracting the sugar from the beets on one side, and the sugar refineries refining Cuban cane sugar on the other. The same thing is true between the cane sugar farmers of Louisiana and the Cuban cane sugar farmers represented by the refining companies.

It has been acknowledged by every one if it were not for the tariff there would be no American sugar industry, neither the cane nor the beet could exist without protection against the cheaply grown cane of the tropics. The amount of this tariff should be, or whether there should be any at all, has been warmly contested and is a continual bone of contension, much to the detriment of the home grown production.

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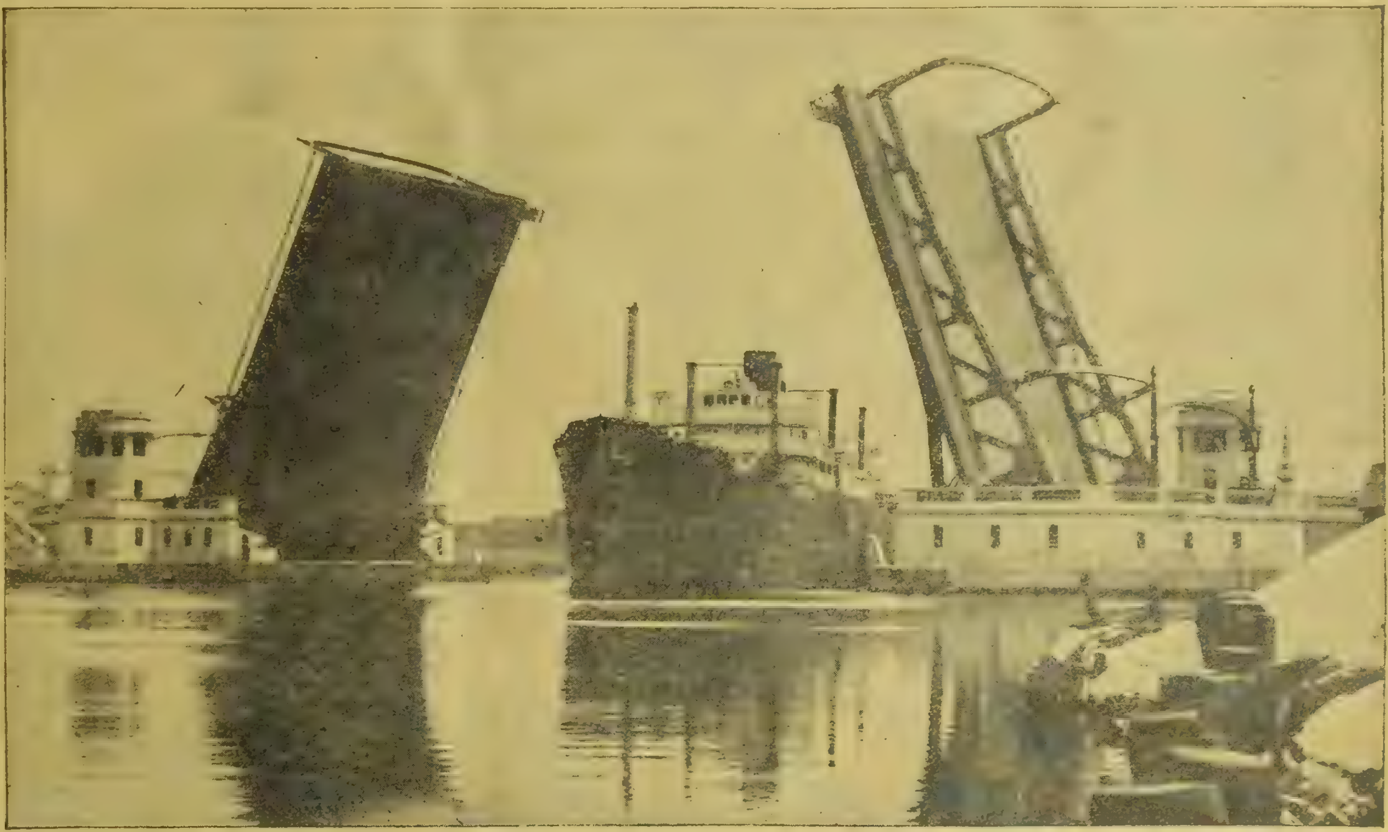
PICTURES FROM FAR AND NEAR

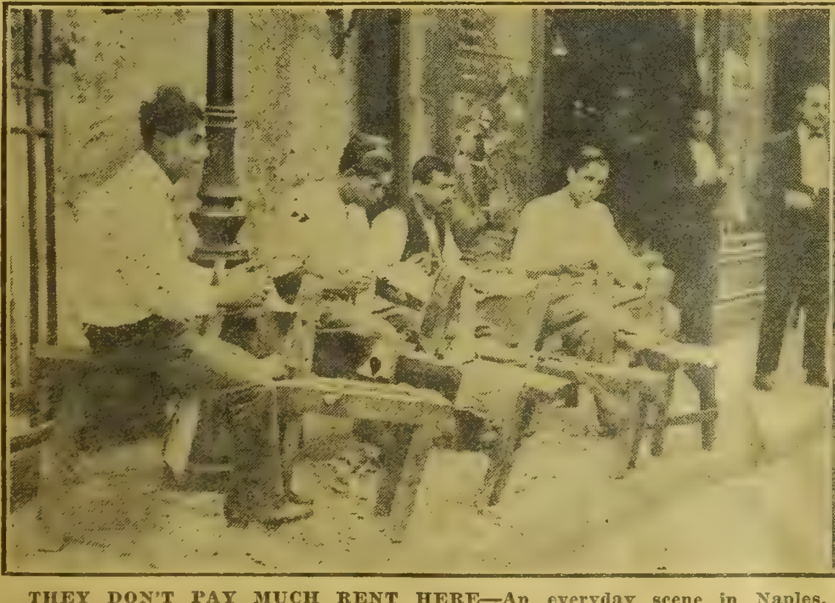
OUR NEW PRESIDENT—Calvin Coolidge, who took the oath as President of the United States at the farm home of his father near Plymouth, Vermont, where he was spending a short vacation. President Coolidge was sworn in by his father who is a notary public. The elder Mr. Coolidge had the honor of being the only man ever to swear his son in as President of the United States. President Coolidge is expected to do big things.

TWO SONS OF PRESIDENT COOLIDGE—John and Calvin Jr., the two sons of the 30th president of the United States. One of the boys is attending the Citizens' Training Camp while the other with several boy friends is spending his vacation working for a farmer picking tobacco. The latter boy, working from daylight to dusk for $3 per day, asked his parents if he might remain as he enjoyed the work.

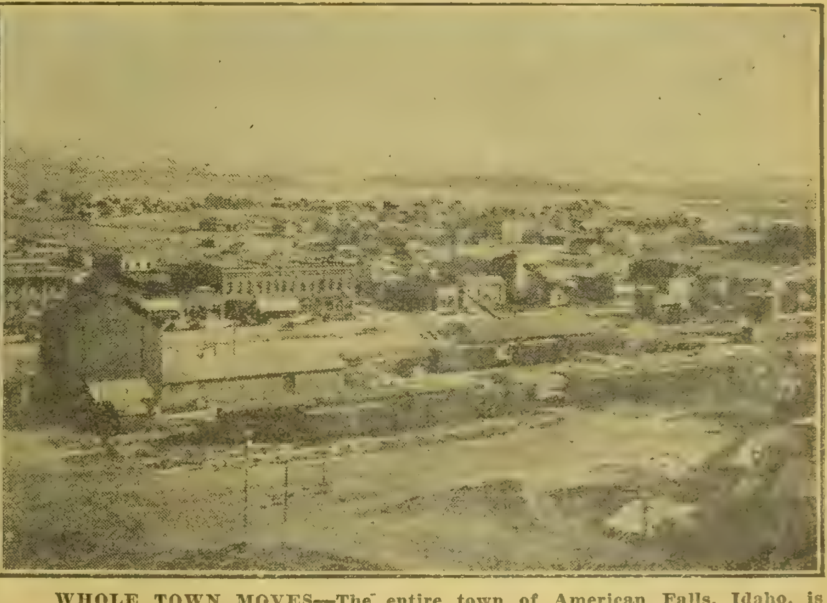
NEW "FIRST LADY" OF THE LAND—Mrs. Calvin Coolidge, wife of the newly sworn president. President and Mrs. Coolidge left the farm at Plymouth, Vermont, belonging to the President's father, as soon as they received news of Harding's death. President Coolidge and his family have lived for years in an apartment that rented for $30 per month so it will be quite a change for Mrs. Coolidge to take charge of the White House.

FIRST STEAMER TO GO TO FORD TURNING BASIN—The U. S. Merchant Marine steamer "Oneida" was the first to make the trip up the new River Rouge development from the Detroit River to the Ford Turning Basin. The new channel is crossed by six modern bridges, all being the bascule type, like the one shown to the right. This channel has been created in conjunction with the River Rouge from the Ford Motor Company's properties through the Detroit River, a distance of about 3½ miles, it is 21 feet deep throughout, is 300 feet wide at water level and 200 feet wide in the channel bed. The point of greatest interest in connection with this new channel is that seven or more miles of water front have been created and made available for port development, and it will quickly become the center of extensive industrial enterprises. This whole project is a direct result of Henry Ford's decision to locate one of his large manufacturing plants on the River Rouge. Because of the nature of the land adjacent to the Rouge it was feasible to dump the material dredged into the land adjoining the channel and thus fill it up for better industrial uses. The government has paid only $610,000 for the work done, while Ford has paid between four and five million dollars. (Photo loaned by courtesy "The Detroiter.")





THEY DON'T PAY MUCH RENT HERE—An everyday scene in Naples, Italy, is this one. Here the natives prefer to do their work out-of-doors in spite of the heat of the glaring sun. Here we have a quartet of shoe manufacturers at work. They do their work this way so that those who pass can see how the shoes are made.



WHOLE TOWN MOVES—The entire town of American Falls, Idaho, is to move to a new site. The present site will be inundated together with 83,000 surrounding acres to make way for the gigantic American Falls reservoir to be constructed by the government which will be the 4th largest in the world, with a capacity of 1,500,000 acre-feet of water.

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Farmers Service Bureau

(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full name and address. Name not used if so requested.)

CANNOT FORCE MAN TO REMOVE BRUSH

I would like to get information in regards to a bush on the line fence. I have been fighting poison ivy and brush for the last ten years. I keep my side clean the full length. Can I enforce them to clean up their side? What steps shall I take? I have bees near this fence and how many feet does the law require them to be away from the line fence?—A. K., Ann Arbor, Mich.

—Nothing in the statute provides for compelling an adjoining property owner to keep his side of the line fence free from brush or shrubbery. There is nothing in the statute which limits the distance that bees shall be kept from the line of an adjoining property owner.—H. H. Partlow, State Highway Dept.

BEST TO EMPLOY ATTORNEY

Will you please tell me through your valuable paper how I may enter the patent office at Washington, D. C., without an attorney?—J. E., Fife Lake, Mich.

—If you are seeking a patent on some invention, it is well to employ a regular patent attorney to make application for you, although it is not necessary. The U. S. Patent Office, at Washington, D. C., will send you information on the procedure in applying for a patent.—Asst. Legal Editor.

RETAIN OUT OF PURCHASE PRICE

Three years ago we bought a registered Durham bull. We had about twenty stockholders at that time, we elected our officers which was put in for a term of three years. Two years ago I was hired by the board of trustees to keep the bull that year. One year ago I was rehired to keep the bull for the year 1922, for $150. This year at the annual meeting the company voted to sell the bull. The board of trustees sold the bull to me for $90.50. I collected some money for outside cows that did not belong to the company. This leaves me a balance due of $25.00. To whom will I look for my pay and how will I go about to collect my money? The bull is in my possession yet. Will I have the right to sell same? Who is held responsible for damages done by bull at present time, as the company has not signed any papers over to me?—J. O'M., Blanchard, Mich.

—If you have not paid for the bull, you may retain the $25.00 out of the purchase price. If, however, they owe you $25.00 more than the $90.50 which you owe them, then the only recourse would be to sue the company for the balance. You may sell the bull if necessary to collect what is due you, even if the papers haven't been signed over to you, as you have a lien on it for your services. So long as it is in your possession and under your care, you are liable for damages done by it.—Asst. Legal Editor.

BORDEAUX MIXTURE

I would like to know about Bordeaux mixture, where it can be purchased, if it is very effective, etc. Thank you.—B. K., Remus, Mich.

—Bordeaux mixture is a combination of copper sulphate commonly called "blue stone," with equal parts of lime diluted with water. The home made mixture is prepared by dissolving the copper and lime separately diluting the solutions and pouring them together in the diluted form which makes a combination that spread and sticks fast with what is known as the "bordeaux film." Nearly any hardware or drug store or implement dealer handles the spray in some form.

The effective use of bordeaux in the protection of plants from insect and foliage diseases depends upon the thoroughness with which the material is applied to effectively cover the whole plant.—J. W. Weston, Extension Specialist, M. A. C.

SPARKS FROM ENGINE DESTROY CROP

The railroad runs through my farm and sparks from the engine set fire to my clover seed. Can I collect damage?—B. H., Howell, Mich.

—Your recovery against the railroad company would depend on the question of negligence. If the company could prove that they exercised the proper amount of care, used spark arresters on their engine as required by the statute, etc., and that they were guilty of no negligence, you could not recover. If they could not prove these things, they would be liable to you for damages.—Asst. Legal Editor.

DUTIES OF ADMINISTRATOR

Does an administrator have to give a copy of what is paid out and what is paid in of the estate to the heirs, to show where the money goes?—A. G., Fife Lake, Mich.

—It is the duty of the administrator to render to the probate court an account of all money and other property collected and disbursed by him. If he does not do this, it is the duty of the probate judge to order such an account, upon the petition of the heirs.—Asst. Legal Editor.

SCHOOL OFFICERS NOT TAXPAYERS

Has a school board where none of them are taxpayers, their names not on the tax roll, a legal right to raise a school tax?—A. W., Van Buren County.

—The law provides that if an officer ceases to be a taxpayer the office becomes vacant immediately and if the same is not filled within twenty days the township board fills such vacancy. It also requires that a person to be qualified to hold office shall have property assessed for school taxes and shall have his name on the tax roll of the township where the district is located. The law does not provide, however, that the office becomes vacant immediately if such person's name is not upon the assessment roll. If officers have qualified and entered upon the duties of office under such circumstances it would be necessary that a court declare an office vacant before it would be vacant. A question of this kind is difficult to answer because there may be facts that are not disclosed that would somewhat vary the answer to be given.—W. L. Coffey, Dept. of Public Instruction.

PROCEED TO COLLECT WHAT IS DUE YOU

Could you please give me your advice on this problem? We have been living on the farm we are on for two years, and it consists of nearly 200 acres of cultivated land. The land company gets half of the profits and the other half goes to tenants. There has been an unmarried man in partnership with us, and everything has been done in his name, as he claims there was no lease drawn up on the farm in 1921. After harvest he came up and settled with us, and we just came out even. I doubted his honesty then, but could not convince my husband of his dishonesty as the crops were not as good as they might have been, but in 1922 our crops were pretty good, and we would have made some money but as all checks and everything came in his name and he went away after he got all the money and we have not seen him since. Other people have, and he told them he did not owe us anything as we did not get anything at all this year. We haven't the money to get the law to help in any way. We may not be able to get our share, but don't you think my husband can draw so much a day, say $5.00 a day for himself and team during all the time he worked in 1922? This man says he has no money, but was seen putting money in one of the banks in Detroit. What would you do about it?—Mrs. T. Q., Owendale, Michigan.

—You say the other tenant settled with you in 1921. If this settlement was made on the basis of a partnership relation between you, and if you cultivated the farm in 1922 on the same basis as the previous year, I am of the opinion your partner could be required to settle with you the same as in 1921. If you are not able to reach an amicable settlement with your partner, I would advise you to retain a lawyer and proceed to collect what is due you.—Asst. Legal Editor.

COULD NOT BE COMPELLED TO PAY OVER 7%

I bought some farm machinery on one year's time. I gave a note. The face of the note amounted to $145 drawing 7 per cent interest from maturity. When the note came due I could not pay it so had it renewed for three months, they charged me $4 interest. Now the way I figure the interest at 7 per cent it amounts to $2.54 for three months.—N. C., Muir, Michigan.

—The interest on $145.00 for three months at 7 per cent would be $2.54 and the holder of the note could not compel you to pay more than this amount.—Asst. Legal Editor.

DID NOT PAY FOR LABOR

A works for B and B hasn't paid A for his labor. Can A go and work a few days again for B and file a labor claim on logs for the new account and old account?—I. G. C., Kenton, Mich.

—Compiled Laws of 1915, Sec. 14846 provides that the statement of a labor lien for services on logs, timber, etc., shall be filed within 30 days after the work is completed. If you have failed to do this on the old account, your lien is lost. Filing a labor claim on the new account would not cover that old account so as to create a lien on it also.—Asst. Legal Editor.

CAN WIFE SUE FOR NOTES?

Have read some interesting information in the M. B. F., and would like a little myself. My brother had some money, he told me to let it out. I let it out. He was sickly and he had me make the notes payable to himself or myself. He married and died about a month after. His wife is going to sue me for the notes. Can she do it? These notes were fixed this way, as he had made his home with me off and on for eight years.—O. F.M., Riverdale, Mich.

—If your brother authorized you to make the note payable to yourself in consideration for the services you had rendered him, intending that you should receive the money from the holder, I am of the opinion his wife would have no right of action against you to recover the amount of the note.—Asst. Legal Editor.

FENCE ALONG R. R.

A railroad company last January let job to take down their fence and build a new one. The man has taken down the old fence and now won't build the new fence. I have been after them to build the fence all spring. They say "yes, we will build," but nothing has been done yet. The field next to the railroad is my pasture and I wish to turn my cattle out and there is no fence. Is there any way to make them build it or can I build it and make them pay for it.—P. C. C., Arcadia, Mich.

—Railroad companies are required by law to maintain fences along their right-of-ways. When any company fails to comply with this law, complaint may be made to the Michigan Railroad Commission at Lansing, Mich.—Asst. Legal Editor.

A HIRES BARN OF B

A hires a barn of B to feed sheep in. Sheep are confined in barn. A furnishes all feed and bedding. Does the manure belong to A or B? Please answer and oblidge.—C. S. B., Coruna, Mich.

—The manure would belong to A.—Asst. Legal Editor.

Uncle Rube Spinach Says:

JEST 'N ANSWER

I'VE been gettin' letters lately askin' me why I didn't do this and that an' t'other to make things right an' settle a lot of things 'at our senators an' congressmen are supposed to settle—'lected by the people—or mebbe 'pointed by our gov'nor to fill vacancy or somethin'—anyway, they're s'posed to do the business fer us. Jest today I received a letter from a very lovely lady—I know she is jest by the way she writes, know she is one of the kind of women God intended all women to be an' she asks me to try 'n answer Mr. A. A. Lambertson, who wrote an article in M. B. F. recently.

Dear "Sincere Subscriber" there ain't a thing any one can say to any thing like that. The man is simply given expre-tion to his own desores an' anything that you or I could say-'ll not change him in the least.

He sez he's "been practically a teetotaler all his life!" Dear "Sincere Subscriber," don't it seem kinda suspic'ous to you 'at its our "practically teetotalers" that's doin' most of the hollerin' fer 5 per cent beer an' light wines an' such?

An' don't you see its jest such men as that'd put all the ol' things back onto us? No dear subscriber, I wouldn't dast to try to answer Mr.—well, now, what's his name—no matter—he's jest puttin' up the same argument that lots of other beer swillers puts up. They want beer with alcohol into it—they don't want to git drunk, you know. An' alcohol—only jest 5 per cent is not intoxicatin'. Mr. Couzens sez it ain't an' it must be true. But dear lady, the only difference twixt 5 per cent an' 6 per cent is this—one has only to drink a little more of the 5 per cent an' it takes longer an' costs more money.

No, I don't want to answer Mr.—well now, ain't that queer 'at I can't remember his name an' I remember yours so well—no matter 'bout the "voted to make it dry but he made an awful mistake when he did it." Dear friends, if he never makes a worse mistake an' that then he'll never go far wrong, will he?

An' then he sez—"has prohibition done any good" an' he answers his own question an' sez "no, it's done great harm." Mebbe it's cut off his supply—mebbe he didn't want but little but wanted that little bad. An' dear friend, I'll say it'll be bad enough if he gits it—any thing at all.

You know we had 50 or 60 years of high license saloons reg-lated by govr'ment control. Did it reg'late? I ask the world if any liquor law we ever had reg'lated the liquor business, kept men from gettin' drunk, beatin' up their fam'lies, spendin' their wages, stayin' out all night, makin' fools an' beasts of themselves an' commitin' murder, adultry an' everything else 'at could be thought of? After all the years of high license the saloon was finally outlawed jest 'cause the gover'ment could not control 'em. Now we've got prohibition an' its in its infancy jest now. Give it 10 or 15 years—not askin' for 50 or 60—jest give it ten years an' see what comes an' now dear "Sincere Subscriber" while I was glad to get your nice letter an' I sure appreciate the nice things you said, still an' all I'm jest a poor ol' feller 'at can only write things I see or believe to be true. An' so I would not dare to try to answer Mr. "what's-his-name's" letter. You see he is very wise an' a ol' feller what's passed his years of understandin' don't have no kind of a show with such a man an' so—while I'm truly sorry 'at I can't come back still an' all you'll see how it is an' you'll excuse me, want you dear lady from Caro, Mich.? Cordially yours, UNCLE RUBE.

P. S.—There is one little thing in Mr. Lambertson's letter 'at I take exception to. He sez our young folks are bein' tempted an' are fallin'—I never called a man a liar 'ceptin' when I thought I could handle 'im, but—well I live in a place where temptation is jest as strong as it is in any city. I've lived here five years—I've known the place fer many years, I know 'at when saloons wuz runnin' there wuz streets where it wasn't safe for a decent woman to go after 6 p. m. I also know the same streets today are our busy business streets. There are no boys or girls learning to drink beer. 1st the price prohibits—2nd nobody is offerin' it to 'em 'count of price.

I don't think of any more jest now but some day when I fell right I'll ans'er the gentleman.—Jest UNCLE RUBE.

SAVE MONEY

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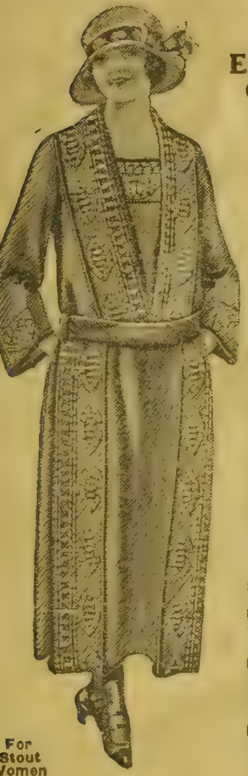

For Stout Women

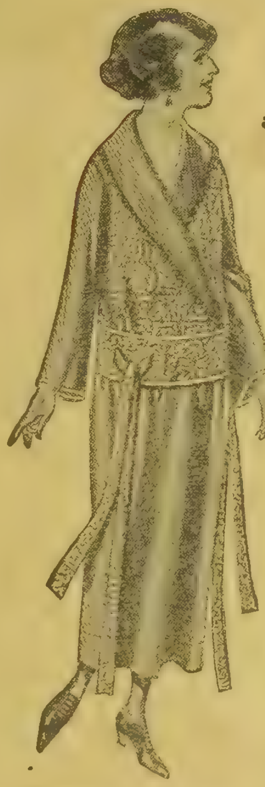
Popular Model Embroidered Gabardine for Stouts

$3.98

Sharood heartily recommends this attractive frock of good quality cotton gabardine. It is designed along slenderizing lines for stout women. The skirt is finished with two wide, loose panels attached at waist and bottom. The edges are bound in black and embroidered in contrasting color. Collar is in the new long roll shawl effect, embroidered to match panels on skirt, as are also the vestee and tabs on bell-shaped sleeves. Dress is gathered at waistline at back, and finished with tie sash. Sizes 44 to 54 bust measure. State length desired. **Order Navy by No. 96E7610, brown No. 96E7612. Send no money. Pay $3.98 and postage on arrival. State size and length.**

Send No Money

Here is the very pick of the choicest of Fall styles—the most fetching garments of the season at positively unequalled bargain prices. Sharood challenges the world to match these values. Order right from this page. Get the most fetching advance styles at the lowest prices in America.



Bulgarian Effect Gabardine Frock For Women and Misses

$2.98

An exceptionally attractive fine quality cotton gabardine dress for women and misses. Long roll collar in shawl effect, sleeves and belt piped in red. Entire front of blouse enhanced with exquisite all-over embroidered design in Bulgarian effect with rich harmonious colors. Two streamers at both sides and front. Wide belt embroidered to match blouse. Sizes for women, 34 to 44 bust; for misses 32 to 38 bust. State length desired. Colors, navy or brown. **Order navy by No. 96E7500. Brown No. 96-7502. Send no money. Pay $2.98 and postage on arrival for either color. State size.**

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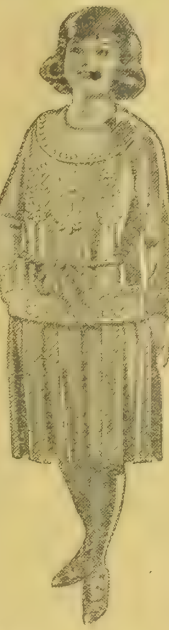
Don't send one cent. Just letter or postcard brings any of these smashed price bargains. No obligation or risk. Merely give number and sizes of each article you want. Pay nothing till goods arrive, then only the smashed price and postage. If not delighted with your bargain after examination and try-on, return goods and we cheerfully refund your money instantly. Don't put it off. Send now.

Child's Middy Dress Attractive Two-Tone Combination

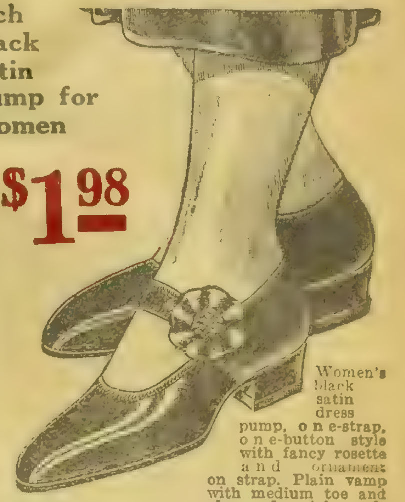
$1.98



One of the most novel and attractive children's garments ever produced, and sure to be a big favorite for fall and winter. A charming two-piece middy dress, including snappy Balkan middy of all red flannel cotton warp with round collar and cuffs. The front, collar, cuffs and Balkan bottom are embroidered in exquisite contrasting colors. Rope girdle with tassels at waist. Skirt of navy blue serge in clustered plaited style hangs from a white muslin under-waist. Furnished in red blouse and blue skirt combination only. Sizes 7 to 14 years. **Order No. 96G8326. Send no money. Pay $1.98 and postage on arrival. Be sure to state size.**

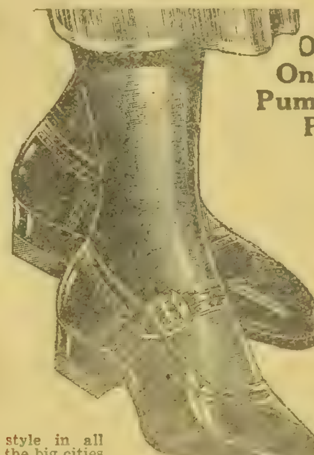
Rich Black Satin Pump for Women

$1.98



Women's black satin dress pump, one-strap, one-button style with fancy rosette and ornament on strap. Plain vamp with medium toe and close edge trim sole with low rubber heels. Genuine oak soles. A dressy stylish new spring fashion that will be all the rage among the best dressed women. Sizes 2½ to 8; wide widths. **Order by No. 96A252. Send no money. Pay only $1.98 and postage on arrival. State size.**

Popular One-Strap One-Buckle Pump, Black Patent or Brown Calf Finish

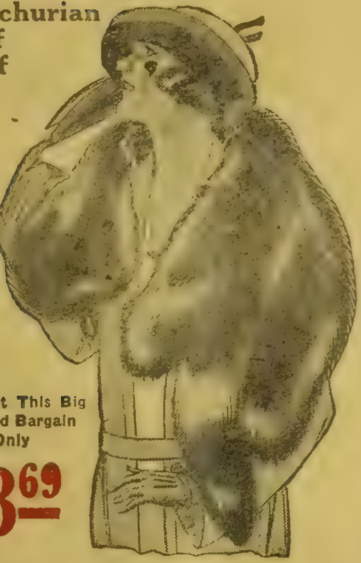


$1.98

Always mention size when ordering.

style in all the big cities for fall wear. One-strap, one buckle pump of rich black patent or Brown Calf finished leather. Is well made with perforated sewed tip and medallion toe. Fancy perforation on vamp, strap and quarter. One-piece medium extension oak sole; low flapper walking heel with rubber top lift. Sizes 2½ to 8; wide widths. **Black patent No. 96-A20. Brown Calf finish, No. 96A21. Send no money. Pay $1.98 and postage on arrival for either leather. State sizes.**

Manchurian Wolf Scarf



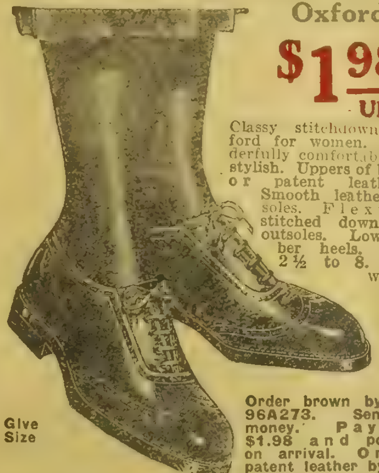
Look At This Big Sharood Bargain Only

$3.69

Beautiful, soft, inexpensive Manchurian Wolf scarf lined with Messaline silk. Length about 44 inches. Width about 12 inches. Tail about 13 inches, long and bushy. **Order Black Scarf by No. 96K9000. Order Brown Scarf by No. 96K-9001. Send no money. Pay only $3.69 and postage on arrival.**

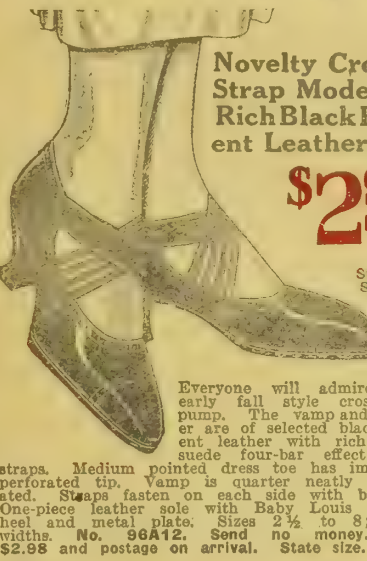
Women's Classy Stitchdown Oxfords

$1.98 UP



Give Size

Classy stitchdown Oxford for women. Wonderfully comfortable and stylish. Uppers of brown or patent leather. Smooth leather insoles. Flexible stitched down oak outsoles. Low rubber heels. Sizes 2½ to 8. Wide widths. **Order brown by No. 96A273. Send no money. Pay only $1.98 and postage on arrival. Order patent leather by No. 96A274. Pay only $2.48 and postage on arrival.**

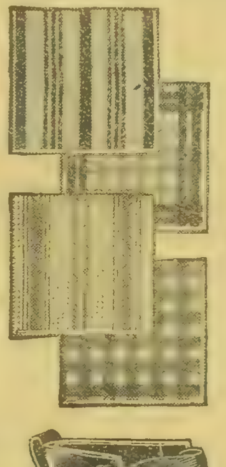


Novelty Cross-Strap Model in Rich Black Patent Leather.

$2.98

State Size

Everyone will admire this early fall style cross-strap pump. The vamp and quarter are of selected black patent leather with rich black suede four-bar effect cross straps. Medium pointed dress toe has imitation perforated tip. Vamp is quarter neatly perforated. Straps fasten on each side with buttons. One-piece leather sole with Baby Louis leather heel and metal plate. Sizes 2½ to 8; wide widths. **No. 96A12. Send no money. Pay $2.98 and postage on arrival. State size.**



Outing Flannel 10 Yds. for

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Blue and pink check; pink, blue and gray stripe; attractive plaids in navy, grey and brown and also pink and blue plaid on white ground ten yards only. Be sure to state color and pattern wanted. **Order by No. 96F3642. Send no money. Pay $1.89 and postage on arrival.**

Women's Patent Leather, Gun-Metal or Brown Calf Finished OXFORDS

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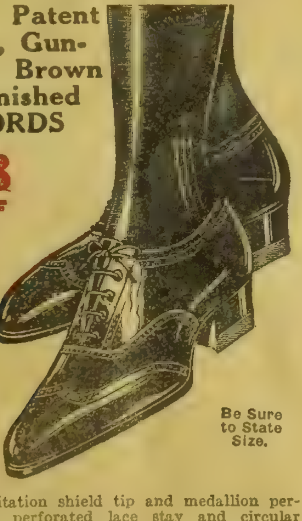
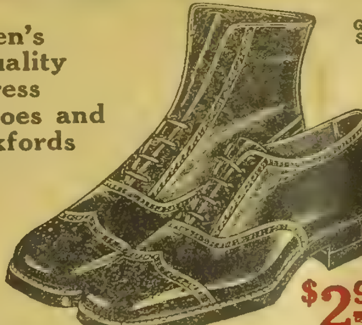


Choice of Three Leathers

Be Sure to State Size.

Made with imitation shield tip and medallion perforated vamp, perforated lace stay and circular foxing. Has medium rubber heel and medium pointed toe. Sizes 2½ to 8. Wide widths. **Order patent by No. 96A121. Order gunmetal by No. 96A122. Order brown by No. 96A123. Send no money. Pay $1.98 and postage on arrival.**

Men's Quality Dress Shoes and Oxfords

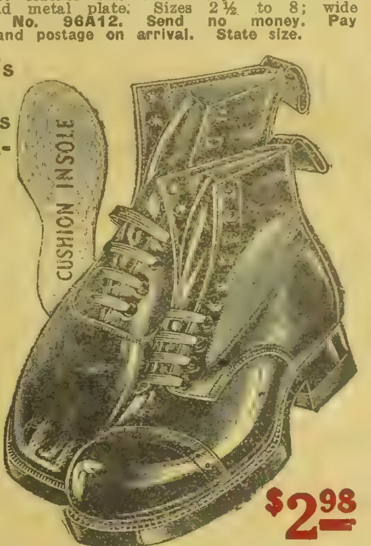


Give Size

$2.98

Men's French toe dress shoes or oxfords in Brown calf finished leather. Have medium toes perforated, oak soles and rubber heels. Perforated on vamp and eyelet stay. Sensational values. Sizes 6 to 11, wide widths. **Order oxford by No. 96-A658. Order shoe by No. 96A660. Send no money. Pay $2.98 and postage on arrival for either style. State size.**

Men's Vici Shoes Cushion Insoles

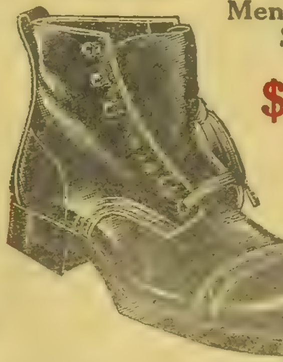


$2.98

An absolute rock-bottom price on men's Black comfort and dress shoes. Have cushion soles and rubber heels. Sizes 6 to 12. **Order soft toe model by No. 96A618. Order bluecher cut with Tip toe by No. 96A617. Send no money. Pay $2.98 and postage for either style. State size.**

Men's Work Shoes

$1.98



Brown or Black work shoe of durable leather. Solid leather inner soles. Heavy double soles. Green chrome outsole. Leather heel. Sizes 6 to 12. Wide widths only. **Order Brown by No. 96A758. Order Black by No. 96A760. Send no money. Pay $1.98 and postage on arrival. Order Boys sizes 1 to 5½ by No. 96A554. Price $1.98. Order Little Boys sizes 9 to 13½ by No. 96A555. Price $1.79.**

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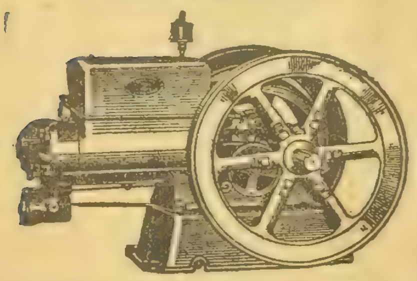

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What the Neighbors Say

PICK BEANS ON FARM

I REGARD a recent article by Mr. Ford, covering the inefficiency of the labor occupation on the farm as timely and applicable to the bean business. It is Mr. Ford's idea to work farmers in his factories upon the days that they cannot work on their farms and it is his idea to use farmers to build machinery that they use on the farm during the period that they are not busy on the farm.

In line with this the farmers can be of great service to the bean industry by picking their beans at home during the winter months, and thereby earn wages for time that would otherwise be unproductive and accordingly increase the income from the farm. There are many other reasons in favor of this—among them are the difficulty to get help in which to orderly market the crop, as the substitution of machinery and corresponding reduction in the quality has not been at all conducive toward increasing the consumption of beans and improving the quality The whole family could join in picking beans with slight expense for equipment.

The difficultly of drawing fair samples from farm stocks is evident to all so that in either event, somebody losses. We have known farm tests of 10% to show only 1½ actual shrink in the elevators and we have seen it the other way.

Labor becomes more and more scarce all the time and it will soon be impossible to get the picking work done on a reasonable basis. The farmer has to pay the price of picking and handling and the shrink so why shouldn't he do the work. The progressive farmers will quickly see the advantage of doing all of the work on the farm necessary to prepare the beans for market. The progressive dealers will also welcome a movement of this kind, because it will prevent their competitors from paying unprofitable prices by not getting the full pick which always ends in passing on to the consumer an inferior product. Now if the farmer wants to put out a strictly high grade CHP article, he does not have to depend upon the country elevators to do it for him. He can do it at a great deal less expense himself than they can do it for him, and by so doing he can improve the efficiency and income of his farm.—Benjamin Gerks.

THE FARM

AGRICULTURE in this day is considered a far greater vocation than it was forty years ago. Great progress is being made and prospects are favorable for young men who are contemplating farming as a profession.

The nation realizes the great need of lending a helping hand to the farmer and we understand better the phrase, "for the farmer is the man that feeds us all."

It behooves the farmer of the twentieth century to be enlightened and scientific; we are living in an age of progress and one of great achievements. We have Agricultural Colleges throughout the land, and opportunities are open to young men who are willing to respond and dare to make great accomplishments. "Experimentation" in many instances has proved successful by men who are scientific farmers, and who have had training in some of our Agricultural schools.

As a rule, farmer's sons drift into the cities. Their main reason for going seems to be that the farm demands too hard work. Modern improvements in machinery are a great asset. Contrast, if you will, the times of today with those of thirty or fifty years ago. What did our fathers have to face? Low prices of produce and inadequate machinery. As we listen to the stories of our parents concerning farming then, we are almost thrilled. Yet, young man and young women on the farms today are dissatisfied. The times are as different as day and night. Consider the good marketing of today and then ask your father what wheat, oats, corn, and butter and eggs sold for forty years ago, or even twenty-five. Then talk about "Hard Times." We realize that we must classify according to conditions during war times. During the late war prices were discouraging to the farmer. Present indications, however, encourage one's heart for a brighter future. The writer himself sold butter and eggs for sixty and seventy cents at times, while working the farm of his father.

Talk about work—we must work wherever we go. The work in the country does not get as monotonous as the work in the city for the fact that on the farm one is apt to undertake four or five different kinds of work in one day whereas, in the city he works at the same thing over and over again. Furthermore, one is strictly independent on the farm and can consider himself as his "Own Boss."

Consider if you will! Suppose the father of a home in the city is confined to his home by illness. From whence does the resource come? On the farm, the wife with either the children or hired man may manage to keep the stone rolling. And in case of death, where can money be better invested than in the farm, where those who survive have something to fall back upon.

The United States Government is very much in sympathy with the farmers of today, for the reason that people are leaving the farms in a steady stream to go to the towns and cities. A survey by the Department of Agriculture shows that nearly 460,000 persons left farms in 1922. The farm labor supply is only about 88 per cent of the demand. Last year at this time the supply was 11 per cent more than the demand.

The automobile is another great advantage to the farmer. Twenty-five years ago, March 24, 1898, the first horseless carriage was sold and was delivered one week later. Then twenty cars were sold during the first year, whereas, today there are more than ten million registered car owners in the United States alone. The bright future there is for farmers to sell their produce by the use of trucks!

On April, this year, there was a shortage of 12 per cent for employment on the farm. The movement from the farm to the city last year is estimated by the Department of Agriculture to have been 2,000,000 persons. As some 880,000 persons indulged in the "Back-to-the-Farm" movement, there was a net shift in farm population of approximately 1,120,000 or 3.6 per cent in our rural agricultural population. The excess of births over deaths reduced the net loss to 460,000. Several causes have combined to bring about this "On-to-the-city" movement. The fear has often been expressed that the movement away from the agricultural districts offers a continuous thread to our food supply, and so to ones national life.

The movement from the farm to the city certainly can not go on forever, although we are reminded that the increased use of farm machinery may be expected to do much toward making up the labor shortage.

Restricted immigration has resulted in a stringency of common labor. Building operations, highway constructions, railway betterments and extensions, and public works demand tens of thousands of "pick-and-shovel" men. Wages by the hours for unskilled labor are nearly double what they were two years ago. Congress at present is considering the influx of unskilled workers into the United States. "Advice is almost as dangerous as prediction," but there are certain cautions which ought to be definitely placed before the farmer. Beyond all question, he would be wise to think twice before he undertakes a program of large production at greatly enhanced costs. Needless to say, this suggestion bears no relationship whatever to the advice that some have in times past govern the farmer to curtail his output in the hope that in this manner, he would be able to force prices up unduly. For him to decline to grow a larger crop than he can at reasonable unit cost, would be but conservative business policy, which under similar conditions is the policy regularly followed by forward looking producers everywhere.

The educational system is a still greater advantage, than it was years ago. The country school as a whole is given as much consideration as the city school. There is a greater opportunity which the country pupils enjoy that the city pupils cannot enjoy, and this is, "nature in her fullest sense." As a rule, temptations are not as great for the country boy and girl. The boys and girls in most homes on the farm, are given something to do as soon as they are able, which tends to keep them out of mischief. Contrast the young boys and girls in the city who drift around the city streets, with those in the country—"An idle brain is the Devil's workshop."

Let us ask the question and be frank with ourselves, from what place do the most of our great men come? Consider our presidents, politicians, preachers.

I contend that we have a right to say that farm life has a tendency to elevate one more for the better than has city life. Statistics show that young men from the farm are better fitted for strenuous work. Young men from the country, however, seem to have more appreciation of life in nature and are more preserving. —John F. Link, Bay County.

BEAN CROP WILL BE LESS THAN EXPECTED

I TAKE notice there is a great howl going up about the over-supply of wheat. Snow, the greatest by far crop statistican on earth, says it is no such thing. The carry-over is but very little larger if any, than usual, no more than enough to be safe. Wait until the speculators and elevator men get a hold of the heft of the crop, then see the price of wheat and flour jump. I take notice the middle men get more hoggish from year to year. In a few more years they will expect the farmers to smile and kindly thank them for taking the goods off of their hands without any remuneration whatever.

See where the price of beans has gone to, all owing to printers' ink, too much publicity. Every man, woman, and child in our state knows or thinks we are going to have a bumper crop of beans. The real facts are, if the whole state is like western Michigan we are not going to have more than one-third the crop we thought we were going to have a month ago. On account of hot, dry weather, the blossoms are blasted and fall off making no pods and even lots of the small pods fall off and what pods there are left on the vine are short and will contain but few beans.

We will have to have rain pretty soon if we get a third of a crop. All the good rain will do now is to fill out what pods there are left. It can't restore pods and blossoms which have fallen off. If we don't get rain pretty soon, all there will be in the line of spuds is just the vines.—A. A. Lambertson, Kent County.

PAMPHLET GIVES HINTS FOR CONQUEST OF T. B.

THE general essentials of modern tuberculosis treatment are summarized for the guidence of consumptives and their families in "Getting The Best Of T. B.," a pamphlet just issued by the Michigan Tuberculosis Association. For the individual advice essential to each case, the booklet refers the patient to his physician.

Rest and more rest is the secret of recovery from tuberculosis, the reader is assured. As first aids to rest come plenty of fresh air and enough nourishing food.

The problem of living comfortably out of doors in cold weather is given considerable attention, and the illustrations show a home made sleeping porch, a cure chair, and other devices which insure the patient's comfort. A brief discussion of the consumptive's diet is included.

The publication will be especially useful as a reference for patients who must take treatment in their own homes, without the benefit of constant medical supervision. Single copies will be sent free upon application to the Michigan Tuberculosis Association, 209 W. Shiawassee St., Lansing, Michigan.

THE GOSPEL OF PERSECUTION

A SERMON BY REV. DAVID F. WARNER

TEXT: "Blessed are they that have been persecuted for righteousness' sake, for theirs is the Kingdom of Heaven." Matthew 5:10.

THE Master was outlining the basic principles of his government. Persecution was inevitable. The apostles understood it so. Peter afterward said, "If ye are reproached for the name of Christ, blessed are ye." Now is the day of salvation, says Scripture. But this is to say too, that now is the day of persecution. The two days concur. Persecution and suffering are incident to Christianity. "They that would live Godly in Christ Jesus must suffer persecution." How long? As long as there are enemies to conquer And this is the testimony of history.

But persecution is not the only, nor the large, present tense of this text. It is but an accompaniment of blessedness. And blessedness is a consequence of an inward characteristic of loyalty to the Heavenly government. Much of "churchianity" places its emphasis upon outward characteristics. But Christ emphasizes the inward.

Jesus spoke for the disciples then living. He gave them fair warning of what they might expect from the world. The disciple's life then was spent "in journeyings, in labor, and in distresses." He always was fronting danger like some doomed criminal. Paul relates, "We are fools for Christ's sake." We are "as men doomed to death." Like their Master, they had no dwelling place or local ties. The Galilean had no place to lay his head. "There is but one price for human freedom—blood." True. But the blood spilled in a moral resistance to a worldly antagonism. Here is where Love meets persecution and suffering and sacrifices her life to atone for hatred. Don't you believe it? Hear that burning word on the Cross, "Father, forgive them, for they know not what they do."

But Jesus proclaims an all-time principle. History has proved it and the future will evidence it wherever sin abounds. "I stood in their dark dungeons with their rusty implements of torture devised by man for the punishement of man, and in the damp cellars where their victims who were found with Bibles, were chained naked to be eaten by armies of hungry rats." so writes Sherwood Eddy from Central Europe. But, says he, "The spirit of John Huss triumphs." Even so, "He that endureth to the end shall be saved." This too, is the last message of the apostle John in the "The Revelation," where we have a pictorial description of conflict and persecution thruout the Christian age; but all of which is to result in a rebirth of the nations and the establishment of the New Jerusalem." So, roll on, O wheels of Time!

To sketch the beattitudes is to see Christian idealism as always antagonistic to worldly standards. They are foreign to the habits and notions of sinful men. When you are a friend to Grace, you are a foreigner to the world. And a foreigner is watched, restricted, and often severely persecuted. Said the soldier on guard in the recent war, "Who are you?" "What is your nationality?" Why all this? Because a German citizen living in the United States then, was, theoretically, an enemy. Politically, he was held to be a standing rebuke to American principles. And a true Christian, a citizen of the Kingdom of Heaven, must be a standing rebute to the world. His conscience will register things worldly as evil; and this provokes antagonism.

As yet, the practice of righteousness makes us unpopular. We may hold religious opinions or make a profession and suffer little. But to practice the idealism of Christ is to invite persecution. Take your religion seriously, Christian friend, and go into Society and test here conventionalities, or into Industry and trust her practices, and at once you become obnoxious. Only the other day, an ex-chief-of-police of an Eastern city, told me of an attempt made by him to get the pastor of a large Methodist church to help him "put across" a law-enforcement program. "Why," said the minister, "if I should advocate, seriously, your program from my pulpit, I would lose my job." And instances might be multiplied. But listen! The indolence, self-righteousness, and inactive conservatism of the church, is part of the relentless force borne down upon those who would be Gospel enthusiasts. But in this day when the destinies of nations are being decided in human blood, is your life-blood, your personal or church interest, too great a price to ask to set up the Society of the Golden Rule.

When religion walks around with concealed weapons, little conflict need be expected. If Christians are not suffering as they ought to, is it because of the leaven of churchliness in the world or the leaven of worldliness in the church? Maybe both. But certainly the churches cannot afford to haul down the Christian flag when the devil fires across the Gospel boat. All honor to the boat that beached herself rather than surrender to the enemy. All glory to the Christian men and women who would keep their banners floating and sent their craft upon the rocks of persecution rather than surrender to the powers of evil.

Persecution, not for your own faults or temperament; not for harsh judgement or intolerance of others; but for "righteousness' sake" makes the Kingdom assured to you. Immediately, you recognize your calling is not of this world. It brightens your hope and increases your vision. Paul and Silas had their backs lashed to blood, but made the prison resound with their praises. Hear the Armenians' sickening moan! "The blood of the martyrs is the seed of the church."

But there is a future Kingdom for all those who receive the Kingdom ideals here. The Kingdom spirit here is the germ pledge of that more perfect reign to come. Polycarp said to his persecutors, "Eighty-six years have I served him and he has done me nothing but good. How then can I revile him, my Savior and King?" He joyfully went to the stake for "righteousness' sake." But burning at the stake or having our names recorded on history's pages, in itself, does not count. There is a large company of just plain folks who have become immortalized on the books of Heaven, but whose names, and mention of whose deeds, have not occured on human pages. They are men and women, who by toil, sacrifice, and kindness, have helped to build the community of Christian good-will.

"They have no place in storied page,
  Nor rest in marble shrine;
They are past and gone with a perished age;
  They died and made no sign.

"They healed sick hearts while their own were broken,
  And dried sad eyes till their's lost sight;
We shall know at last by a certain token
  How they fought and fell in the fight."

To be sung about in this way for "righteousness' sake," is more blessed than to have silver and gold, and vast possessions. Even yet "The way of the world is to praise dead saints and persecute living ones."

PROF. HARRISON HUNT CHOSE M. A. C. ZOOLOGY HEAD

PROF. HARRISON R. HUNT has been named head of the department of zoology and geology at M. A. C., succeeding Prof. Walter B. Barrows, who died in February, 1923, according to the announcement of Robert S. Shaw, acting head of the college. Prof. A. C. Congor, who has served as acting head of the department since the death of Professor Barrows, resigned some time ago to accept a similar position at Ohio Wesleyan university. Professor Hunt comes to M. A. C. from the University of Mississippi, where he has been head of the department of biology for the past four years.

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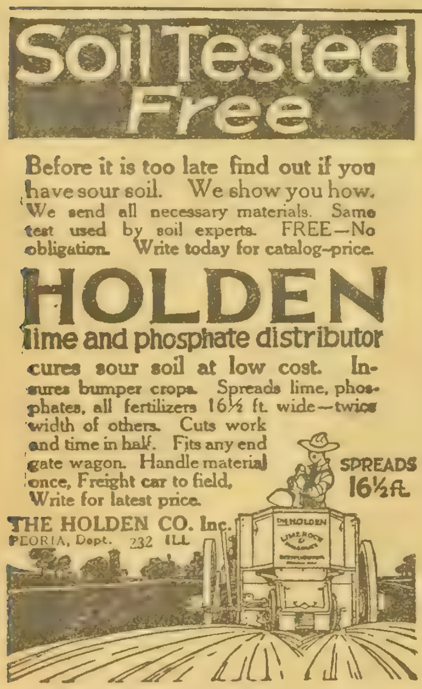
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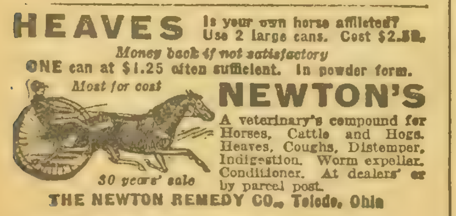
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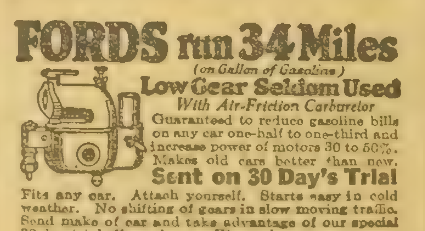
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Telemachus, Friend

Two Close Friends Court the Same Woman

A Complete Short Story by O. HENRY America's Greatest Short Story Writer

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RETURNING from a hunting trip, I waited at the little town of Los Pinos, in New Mexico, for the south-bound train, which was one hour late. I sat on the porch of the Summit House and discussed the functions of life with Telemachus Hicks, the hotel proprietor.

Perceiving that personalities were not out of order, I asked him what species of beast had long ago twisted and mutilated his left ear. Being a hunter I was concerned in the evils that may befall one in the persuit of game.

"That ear," said Hicks, "is the relic of true friendship."

"An accident?" I persisted.

"No friendship is an accident," said Telemachus; and I was silent.

"The only true case of true friendship I ever knew," went on my host, "was a cordial intent between a Connecticut man and a monkey. The monkey climbed palms in Barranquila and threw down cocoanuts to the man. The man sawed them in two and made dippers, which he sold for two reales each and bought rum. The monkey drank the milk of the nuts. Through each being satisfied with his own share of the graft, they lived like brothers.

"But in the case of human beings, friendship is a transitory art, subject to discontinuance without further notice.

"I had a friend once, of the entitlement of Paisley Fish, that I imagined was sealed to me for an endless space of time. Side by side for seven years we had mined, ranched, sold patent churns, herded sheep, took photographs and other things, built wire fences, and picked prunes. Thinks I, neither homicide nor flattery nor riches nor sophistry nor drink can make trouble between me and Paisley Fish. We was friends in business, and we let our amicable qualities lap over and season our hours of recreation and folly. We certainly had days of Damon and nights of Pythias.

"One summer me and Paisley gallops down into these San Andres mountains for the purpose of a month's surcease and levity, dressed in the natural store habiliments of man. We hit this town of Los Pinos, which certainly was a roof-garden spot of the world, and flowing with condensed milk and honey. It had a street or two, and air, and hens, and a eating-house; and that was enough for us.

"We strikes the town after supper-time, and we concludes to sample whatever efficacy there is in this eating-house down by the railroad tracks. By the time we had set down and pried up our plates with a knife from the red oilcloth, along intrudes Widow Jessup with the hot biscuit and fried liver.

"Now, there was a woman that would have tempted an anchovy to forget his vows. She was not so small as she was large: and a kind of welcome air seemed to mitigate her vicinity. The pink of her face was in hoc signo of a culinary temper and warm disposition and her smile would have brought out the dogwood blossoms in December.

"Widow Jessup talks to us a lot of garrulousiness about the climate and history and Tennyson and prunes and the scarcity of mutton, and finally wants to know where we came from.

" 'Spring Valley,' says I.

" 'Big Spring Valley,' chips in Paisley, out of a lot of potatoes and knucklebone of ham in his mouth.

"That was the first sign I noticed that the old fidus Diogenes business between me and Paisley Fish was ended forever. He knew how I hated a talkative person, and yet he stampedes into the conversation with his amendments of syntax. On the map it was Big Spring Valley; but I had heard Paisley himself call it Spring Valley a thousand times.

"Without saying any more, we went out after supper and set on the railroad track. We had been pardners too long not to know what was going on in each other's mind.

" 'I reckon you understand,' says Paisley, 'that I've made up my mind to accrue that widow woman as part and parcel in and to my hereditaments forever, both domestic, sociable, legal, and otherwise, until death us do part.'

" 'Why, yes,' says I, 'I read it between the lines, though you only spoke one. And I suppose you are aware,' says I, 'that I have a movement on foot that leads up to the widow's changing her name to Hicks, and leaves you writing to the society column to inquire as to whether the best man wears a japonica or seamless socks at the wedding.

" 'There'll be some hiatuses in your program,' says Paisley, chewing up a piece of a railroad tie, 'I'd give in to you,' says he, 'in 'most any respect if it was secular affairs, but this is not so. The smiles of woman,' goes on Paisley, 'is the whirlpool of Spuills and Chalybeates, into which vortex the good ship Friendship is often drawn and dismembered. I'd assault a bear that was annoying you,' says Paisley, 'or I'd indorse your note, or rub the place between your shoulder-blades with opodeldoc the same as ever; but there my sense of etipuette ceases. In this fracas with Mrs. Jessup we play it alone. I've notified you fair.'

"And then I collaborates with myself, and offers the following resolutions and by-laws:

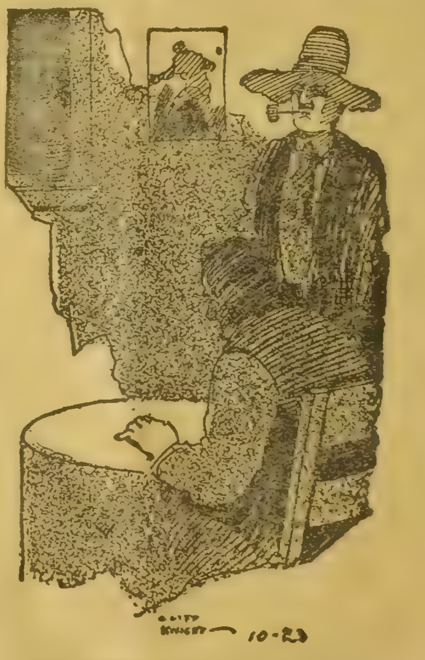
" 'Friendship between man and man,' says I, 'is an ancient historical virtue enacted in the days when men had to protect each other against lizards with eighty-foot tails and flying turtles. And they've kept up the habit to this day, and stand by each other till the bell-boy comes up and tells them the animals are not really there. I've often heard,' I says, 'bout ladies stepping in and breaking up a friendship between men. Why should that be? I'll tell you Paisley, the first sight and hot biscuit of Mrs. Jessup appears to have inserted a oscillation into each of our bosoms. Let the best man of us have her. I'll play you a square game, and won't do any underhanded work. I'll do all of my courting of her in your presence, so you will have an equal opportunity. With that arrangement I don't see why our steamboat of friendship should fall overboard in the medicinal whirlpools you speak of, whichever of us wins out."

" 'Good old hoss!' says Paisley, shaking my hand. 'And I'll do the same,' says he. 'We'll court the lady synonymously, and without any of the prudery and bloodshed usual to such occasions. And we'll be friends still, win or lose.'

"At one side of Mrs. Jessup's eating-house was a bench under some trees where she used to sit in the breeze after the south-bound hed been fed and gone. And there me and Paisley used to congregate after supper and make partial payments on our respects to the lady of our choice. And we was so honorable and circuitous in our calls that if one of us got there first we waited for the other before beginning any gallivantery.

"The first evening that Mrs. Jessup knew about our arrangement I got to the bench before Paisley did. Supper was just over, and Mrs. Jessup was out there with a fresh pink dress on, and almost cool enough to handle.

"I sat down by her and made a few specifications about the moral surface of nature as set forth by the landscape and the contiguous perspective. That evening was surely a case in point. The moon was attending to business in the section of sky where it belonged, and the trees was making shadows on the ground according to science and nature, and there was a kind of conspicuous hullabaloo going on in the bushes between the bull-bats and the orioles and the jack-rabbits and other feathered insects of the forest. And the wind out of the mountains was singing like a jew's-harp in the pile of old tomato-cans by the railroad track.



"We strikes the town after supper-time."

"I felt a kind of sensation in my left side—something like dough rising in a crock by the fire. Mrs. Jessup had moved up closer.

" 'Oh, Mr. Hicks,' says she, 'when one is alone in the world, don't they feel it more aggravated on a beautiful night like this?"

"I rose up off the bench at once.

" 'Excuse me, ma'am,' says I, 'but I'll have to wait till Paisley comes before I can give a audible hearing to leading questions like that.'

"And then I explained to her how we was friends cinctured by years of embarrassment and travel and complicity, and how we had agreed to take no advantage of the other in any of the more mushy walks of life, such as might be fomented by sentiment and proximity. Mrs. Jessup appears to think serious about the matter for a minute, and then she breaks into a species of laughter that makes the wildwood resound.

"In a few minutes Paisley drops around, with oil of bergamot on his hair, and sits on the other side of Mrs. Jessup, and inaugurates a sad tale of adventure in which him and Pieface Lumley has a skinning-match of dead cows in '95 for a silver-mounted saddle in the Santa Rita valley during the nine months' drought.

"Now, from the start of that courtship I had Paisley Fish hobbled and tied to a post. Each one of us had a different system for reaching out for the easy places in the female heart. Paisley's scheme was to petrify 'em with wonderful relations of events that he had either come across personally or in large print. I think he must have got his idea of subjugation from one of Shakespeare's shows I see once called 'Othello.' There is a colored man in it who acquires a duke's daughter by disbursing to her a mixture of the talk turned out by Rider Haggard, Lew Dockstader, and Dr. Parkhurst. But that style of courting don't work well off the stage.

"Now, I give you my own recipe for inveigling a woman into that state of affairs when she can be referred to as 'nee Jones.' Learn how to pick up her hand and hold it, and she's yours. It ain't so easy. Some men grab at it so much like they were going to set a dislocation of the shoulder that you can smell the arnica and hear 'em tearing off bandages. Some take it up like a hot horseshoe, and hold it off at arm's length like a druggist pouring tincture of asafoetida in a bottle. And most of 'em catch hold of it and drag it right out before the lady's eyes like a boy finding a baseball in the grass, without giving her a chance to forget that the hand is growing on the end of her arm. Them ways are all wrong.

"I'll tell you the right way. Did you ever see a man sneaw out in the back yard and pick up a rock and throw at a tomcat that was sitting on a fence looking at him? He pretends he hasn't got a thing in his hand, and that the cat don't see him, and that he don't see the cat. That's the idea. Never drag her hand out where she'll have to take notice of it. Don't let her know that you think she knows you have the least idea she is aware you are holding her hand. That was my rule of tactics; and as far as Paisley's serenade about hostilities and misadventure went, he might as well have been reading to her a time-table of the Sunday trains that stop at Ocean Grove, New Jersey.

"One night when I beat Paisley to the bench by one pipeful, my friendship gets subsized for a minute, and I asks Mrs. Jessup if she didn't think a 'H' was easier to write than a 'J.' In a second her head was mashing the oleander flower in my button-hole, and I leaned over and —but I didn't.

" 'If you don't mind,' says I, standing up. 'we'll wait for Paisley to come before finishing this. I've never done anything dishonorable yet to our friendship, and this won't be quite fair.'

" 'Mr. Hicks,' says Mrs. Jessup, looking at me peculiar in the dark, 'if it wasn't for but one thing, I'd ask you to hike yourself down the gulch and never disresume your visits to my house.'

" 'And what is that, ma'am?" I asks.

" 'You are too good a friend not to make a good husband,' says she.

"In five minutes Paisley was on his side of Mrs. Jessup.

" 'In Silver City, in the summer of '98,' he begins, 'I see Jim Bartholomew chew off a Chinaman's ear in the Blue Light Saloon on account of a cross-barred muslin shirt that—what was that noise?"

"I had resumed matters again with Mrs. Jessup right where we had left off.

" 'Mrs. Jessup,' says I, 'has promised to make it Hicks. And this is another of the same sort.'

"Paisley winds his feet around a leg of the bench and kind of groans.

" 'Lem,' says he, 'we been friends for seven years. Would you mind not kissing Mrs. Jessup quite so loud? I'd do the same for you.'

" 'All right,' says I. 'The other kind will do as well.'

" 'This Chinaman,' goes on Paisley, 'was the one that shot a man named Mullins in the spring of '97, and that was——'

"Paisley interrupted himself again.

" 'Lem,' says he, 'if you was a true friend you wouldn't hug Mrs. Jessup quite so hard. I felt the bench shake all over just then. You know you told me you would give me an even chance as long as there was any.'

" 'Mr. Man,' says Mrs. Jessup, turning around to Paisley, 'of you was to drop in to the celebration of mine and Mr. Hick's silver wedding, twenty-five years from now, do you think you could get it into that Hubbard squash you call your head that you are nix cum rous in the business? I've put up with you a long time because you was Mr. Hicks's friend; but it seems to me that its time for you to wear the willow and trot off down the hill.'

" 'Mrs. Jessup,' says I, without losing my grasp on the situation as fiance, 'Mr. Paisley is my friend, and I offered him a square deal and a equal opportunity as long as there was a chance.'

" 'A chance!' says she. ' Well, he may think he has a chance; but I hope he won't think he's got a cinch, after what he's been next to all the evening.'

"Well a month afterwards me and Mrs. Jessup was married in the Los Pinos Methodist Church; and the whole town closed up to see the performance.

"When we lined up in front, and the preacher was beginning to sing out his rituals and observances, I looks around and misses Paisley. I calls time on the preacher. Paisley ain't here,' says I. We've got to wait for Paisley. A friend once, a friend always—that's Telemachus Hicks,' says I. Mrs. Jessup's eyes snapped some; but the preacher holds up the incantations according to instructions.

"In a few minutes Paisley gallops up the aisle, putting on a cuff as he comes. He explains that the only dry-goods store in town was closed for the wedding, and he couldn't get the kind of a boiled shirt that his taste called for until he had broke open the back window of the store and helped himself. Then he ranges up on the other side of the bride, and the wedding goes on. I always imagined that Paisley calculated as a last chance that the preacher might marry him to the widow by mistake.

"After the proceeding was over we had tea and jerked antelope and canned apricots, and then the populace hiked itself away. Last of all Paisley shook me by the hand and told me I'd actedsquare and on the level with him and he was proud to call me a friend.

"The preacher had a small house on the side of the street that he'd fixed up to rent; and he allowed me and Mrs. Hicks to occupy it until the ten-forty train the next morning, when we was going on a bridal tour to El Paso. His wife had decorated it all up with hollyhocks and poison ivy, and it looked real festal and bowery.

"About ten o'clock that night I sets down in the front door and pulls off my boots a while in the cool breeze, while Mrs. Hicks was fixing around in the room. Right soon the light went out inside; and I sat there a while reverberating over old times and scenes. And then I heard Mrs. Hicks call out, 'Ain't you coming in soon, Lem?'

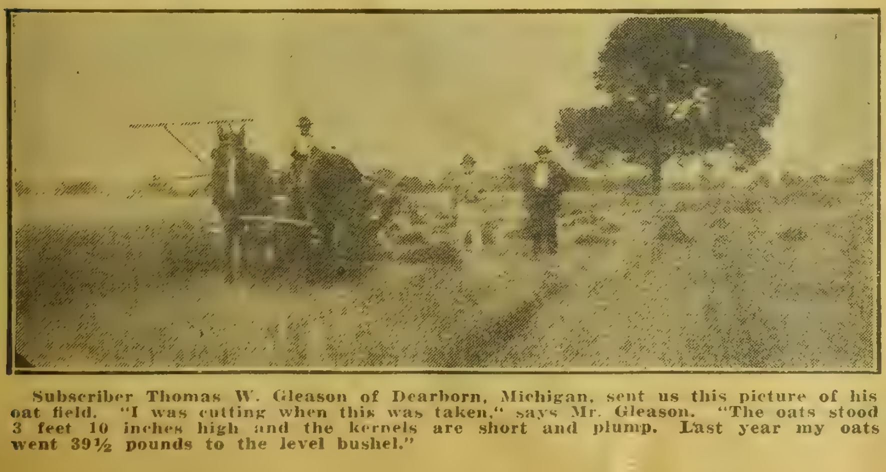
"Well, well," says I, kind of rousing up. "Durn me if I wasn't waiting for old Paisley to——"

"But when I got that far," concluded Telemachus Hicks, "I thought somebody had shot this left ear of mine off with a forty-five. But it turned out to be only a lick from a broomhandle in the hands of Mrs. Hicks."

OUR BOOK REVIEW

(Books reviewed under this heading may be secured through The Michigan Business Farmer, and will be promptly shipped by parcel post on receipt of publisher's price stated.)

"Trodden Gold" by Howard Vincent O'Brien. The book is a splendid study in contrasts as it unfolds the lives of the two sisters, the spiritual and financial progress of their husbands, the ultimate rewards of their efforts and the resulting effect on the whole Ball family. It questions the philosophy of a life that makes the accumulation of riches for their own sake its one aim and reveals the quite tangible advantages in depth and richness of character and fineness of spirit that accrue to him who devotes himself to the betterment of mankind, to bringing new knowledge to the world's science, and to a life of service to his fellow men. ($2.) Little, Brown and Company.



Subscriber Thomas W. Gleason of Dearborn, Michigan, sent us this picture of his oat field. "I was cutting when this was taken," says Mr. Gleason. "The oats stood 3 feet 10 inches high and the kernels are short and plump. Last year my oats went 39½ pounds to the level bushel."

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More than one-fourth of all the families in the United States buy from Sears, Roebuck and Co., because our big catalog is packed with bargains like this. You can save in 28,000 ways, and get top-notch value on everything you buy, when you shop from our Big Book.

This Boys' Sweater is medium weight all wool pullover style. Contrasting colored cuffs, bottom and collar stripe. A wonderful value—worth far more than our money saving price.

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If there isn't a copy of this great "Thrift Book of a Nation" in your home, write for one.

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It is easy to clean milkers and separators with a few spoonfuls of B-K in water. It penetrates to every part, cleansing and sterlizing and kills the germs that sour milk. Will not harm rubber or metal parts. Clean, clear, destroys all odors—*not poisonous*—but very powerful. At your dealers. Write for free booklet on dairy sterilizing.

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Bulldog Pipeless Furnace
Comes Completely Erected

You install it yourself in two hours. Goes through any door, fits any basement, burns practically any fuel. Gives marvelous heat — saves you money. $10 down; $10 a month.

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Old fashioned stoves and worn out furnaces waste money! The Bulldog cuts down your fuel bills. Write for free book now.

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$10 Puts it in your home

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Book of Factory Bargains in Stoves, Ranges, Furnaces, Furniture, Refrigerators, Farm and Home Needs.

Let me send you my new free catalog and show you how to make great savings at wholesale—direct from factory, at money saving prices. *Everything guaranteed*—set in your home on

30 Days Trial—Don't Risk a Penny
Your money back without question or quibble. More than 500,000 satisfied customers.

Easy Terms—Write at Once
Just send name and address. A postal will do. W. S. Dewing, "The Stove Man."

Kalamazoo Stove Company
676 Rochester Ave.
Kalamazoo, Mich.

"A Kalamazoo Direct to You"

Why Not PUT THIS NEW MILL ON YOUR OLD TOWER
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Albion steel and wood mills are quiet and powerful. *One-third the working parts of any other mill.* Only main Pitman bearing subject to wear. This is *oilless*, and easily replaceable. Governs by dependable weight without springs. Fits any 4 post steel tower. Why not shorten your chore hours *now* with a *good* Windmill? *This is your chance—F. O. B. Albion.* Erect it yourself. Ask your dealer, or write direct to

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Dept. 34
Albion, Mich., U. S. A.

STAMMERING *PERMANENTLY CORRECTED*
Most Successful speech-correction school in America. You can learn to talk naturally in a few weeks. Information Free.
Reed School, *1429 Hubbard Avenue* Detroit, Mich

CORN HARVESTER cuts and piles on harvester or windrows. Man and horse cuts and shocks equal Corn Binder. Sold in every state. Only $25 with fodder tying attachment. Testimonials and catalog FREE showing picture of Harvester. PROCESS MFG. CO., Salina, Kan.

The Michigan
BUSINESS FARMER

SATURDAY, SEPTEMBER 1, 1923

[illegible]
THE RURAL PUBLISHING COMPANY, Inc.
GEORGE M. SLOCUM, President
[illegible]
Represented in New York, [illegible] and Minneapolis by
[illegible]
Member of Agricultural Publishers Association
Member of Audit Bureau of Circulations

Milon Grinnell .... Managing Editor
Mrs. Annie Taylor .... Farm Home Editor
Frank D. Wells .... Fruit Editor
J. Herbert Ferris .... Radio Editor
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ONE YEAR 60c. TWO YEARS $1. FIVE YEARS $2.

The date following your name on the address label shows when your subscription expires. In renewing kindly send this label to avoid mistakes. Remit by check, draft, money-order or registered letter; stamps and currency are at your risk. We acknowledge by first-class mail every dollar received.

Advertising Rates: 45c per agate line. 14 lines to the column inch, 772 lines to the page. Flat rates.

Live Stock and Auction Sale Advertising: We offer special low rates to reputable breeders of live stock and poultry; write us.

RELIABLE ADVERTISERS

We will not knowingly accept the advertising of any person or firm who we do not believe to be thoroughly honest and reliable. Should any reader have any cause for complaint against any advertiser in these columns, the publisher would appreciate an immediate letter bringing all facts to light. In every case when writing say: "I saw your advertisement in The Michigan Business Farmer!" It will guarantee honest dealing.

"The Farm Paper of Service"

THE FAIR

THEY brought the best and sleekest of their flocks
The milkiest cow, the squarest-shouldered ox;
The bull, with mimic thunder in his cry.
And lightning in each eager, wicked eye;
The sheep that had the heaviest garments worn,
The cock that crowed the loudest in the morn;
The mule, unconscious hypocrite and knave,
The horse, proud high-born Asiatic slave;
The playful calf, with eyes precocious-bright,
The hog—grim quadrupedal appetite;
The Indian corn-ears, prodigal of yield,
The golden pumpkin, nugget of the field;
The merriest-eyed potatoes, nursed in gloom,
Just resurrected from their cradle-tomb;
Rich apples, mellow-cheeked, sufficient all
To 've tempted Eve to fall—to make them fall;
The grapes, whose picking served strong vines to prune,
The peach—rich alto of the orchard's tune;
The very best the farmers' land had grown,
They brought to this menagerie of their own.

—Will Carleton.

THE 1923 STATE FAIR

THE Michigan State Fair at Detroit opened its gates yesterday and they will not close until the evening of September 9th, so that every citizen of this great state will have an opportunity in viewing its every department in detail.

There are two ways of coming to the State Fair at Detroit and the value of either is measured exactly by the desire which prompts the individual in his decision to come.

The first way is to make a hurried one-day visit to the Fair and try to crowd into it as much amusement as is possible with only a fleeting glance here and there at the exhibits of an educational nature which have taken months to prepare. Then to make a canvass of the midway, renew acquaintances with the ancient freaks and hurry to the grandstand for the afternoon and evening performances, followed by the grand display of fireworks.

The other individual and his family come to the Fair and prepare to stay at least one night, which gives them two full days into which they pack a carefully and well planned examination of the various exhibits, particularly those in which they are specializing in their own daily work.

There is not a single department of the fair from better babies to the display of Michigan wild life which is not worth a careful and thorough examination. There is something for every man, woman and child who comes to the Michigan State Fair. It is today, more than an ordinary fair and must not be compared even with its own exhibitions of five years ago. You, who have visited the fair at Detroit during the past two or three years, will readily grant that this fair has now become a real exposition and that it actually ranks among the three greatest fairs held on the American continent will be no surprise to you.

Provisions have been made for automobile tourists who bring their own camping outfits, and there are accomodations on the grounds for not less than a thousand cars, and running water and toilet facilities have been provided within the grove which will make this an attractive place to stop for one or more nights.

No other fair enjoys the favorable location which this fair does in its proximity to America's fourth city. The Michigan State Fair enjoyed the largest attendance of any fair on the American continent in the year 1922, and there is every indication that the year 1923 will far surpass in attendance any previous year.

It is to be remembered that the State Fair is now entirely owned by the state of Michigan and that all profits from it, together with a liberal appropriation which was made this year, are being invested in making it the finest possible exposition to the agricultural and industry of our state.

Every good business farmer in Michigan owes it to his family to give them an outing at the Michigan State Fair this year, and we hope that the attendance from the country may double that of previous years. We would not give this our full recommendation if we were not sincerely enthusiastic over the present educational and recreational value of the Michigan State Fair at Detroit.

STATE TAX LOWERED

THERE is cheering news coming from Lansing to confirm the belief which we expressed on this page earlier in the season that the state tax rate would be cut this year.

The 1922 state tax rate was approximately $3.08 per thousand. The prospective new rate will be, it is hoped, $2.32 per thousand, a cut of 75 cents per thousand.

Two factors it is claimed are responsible for the lowering of the state tax. First, that the operating expenses of the state have been cut from $17,300,000 to $16,000,000; second, because the increase in state valuation for tax purposes as fixed by the state board of equalization, has increased the valuation of the state over one billion and a half dollars.

There is cheering news to the ten northern counties in the fact that they are getting a larger slice of the melon, but there is a reduction throughout the state of approximately ten percent.

We have contended right along that time alone could efface the post-war conditions and that gradually but surely conditions would readjust themselves and the farmer would find himself on a firmer business foundation than he has been at any time in the history of this country.

One of the things that we knew must happen was that state and national taxes would have to be lowered. At the last election both parties promised that the greatest single purpose they would attempt to attain during their administration would be the lowering of taxes. It would appear from the information which has just come from Lansing that the present administration at least had made a sincere attempt to live up to their pre-election promise.

THE SHORT SIGHTED BEAN JOBBER

WE have it on good authority that there are one or two prominent bean jobbers in Michigan who do not like our statement that we intend to inform the farmers of Michigan as to who are contributing and who are not contributing to the campaign for advertising navy beans to the consumer.

We did not make this statement in the nature of a threat. We made it because we believe the farmers of Michigan are entitled to know who their friends are and we are anxious to find out the names of the reactionary gentlemen who do not see things through modern eyeglasses.

There should be no factions in the bean industry in Michigan. There was a time when the bean jobbers association as a whole were looked upon by the bean growers of Michigan as directly opposed to their interests.

Thanks to the farsightedness of some big men on both sides of this controversey, these days have passed, and all realize now that the Michigan navy bean will find its rightful place in the market and that all interests concerned in its welfare will benefit most by carefully planned and coordinated cooperative work.

We are intensely interested in this plan to advertise beans to the American consumer the same as California associations are advertising prunes, citrus fruit, raisins and other staples with such great success.

We are endeavoring to prove our sincerity by using ample space in THE BUSINESS FARMER to tell the bean growers of Michigan about these plans and thus to encourage the farmer himself to cooperate with the buyer of his beans.

We intend to leave no stone unturned by which it is possible for us to extend any help to this cause which may be within our power.

AMERICA'S SWEET TOOTH

ON another page in this issue Mr. C. H. Allen, who is president of the farmer-owned sugar company at Defiance, Ohio, asks why it is necessary for the United States to go beyond our own border lines to buy sugar, and the reading of this article is well worth the time of every farmer who grows now or may in the future, grow sugar beets.

As is well known the consumption of sugar per capita in the United States is practically double that of any other country in the world. The American demand for sweet things seems to be unsatiable.

To supply this want Uncle Sam has leaned on his foster-child, Cuba, and the sugar barons in that fertile island of paradise which lays hardly a stone's throw from Key West have rolled in the lap of luxury because their cheaply paid labor can compete and force the American sugar beet grower and the Louisiana cane grower out of business.

We have never changed our opinion that the sugar market is a manipulated market to the detriment of both producer and consumer in the United States. That this is a fact seems to be proven by the present price of sugar which is going lower, it seems, in preparation for the time when the ton price of beets, under the Michigan contract is determined.

THE WHEAT PRICE AND FARM PROSPERITY

WHILE half the people have been scaring the other half about wheat prices and the awful outlook for the future prosperity, many of us have overlooked the fact that the price of corn has gradually advanced until on July 31st, it reached a figure which, with the exception of the three years 1917-1919, is the highest on record, at least since 1868.

We have long been accustomed to thinking of one dollar as the standard price of wheat and fifty cents for corn. To-day, while wheat has fallen a few cents below its standard, corn is worth within a few cents of twice its standard, value. Is the present price of wheat, then, the catastrophe we have been told it is, particularly when we remember that for every bushel of wheat raised in this country, we produce over three bushels of corn? In other words for every bushel of wheat which is off a few cents in value, there are three bushels of corn, on each of which farmers will collect nearly twice the standard value.

Then, too, we find that oats and barley are worth, rather more today than they were a year ago. Two years ago cotton brought only eight cents a pound, and corn but 18 cents a bushel in Nebraska and Iowa. Now cotton is worth 25 cents a pound and corn 90 cents a bushel. Tobacco has advanced from five to 35 cents a pound.

According to former Secretary of Agriculture, E. T. Meredith, the value of corn, wheat, oats and barley crops on the farms was approximately $500,000,000 more July 1 of this year than on the same date a year ago.

Apparently, the current price of wheat is not the most important, nor indeed, the only aspect of interest in the present farm situation. Its importance, however, has been exaggerated until it doubtless, overshadows every other factor in the minds of most people. It would seem that those who have been most energetic in the propaganda of discouragement have been those who hope, ardently, to retain their political seats, by the now worn-out method of howling calamity to the farmer.

FROM FARM TO CITY

NO less an authority than Dr. R. M. Olin, health commissioner of the state of Michigan, in a full page article in one of the Detroit dailies points out that the present migration of farmers to the city must result in a curtailment of food products which will force prices up and make farming again the most remunerative and pleasant of man's occupations.

We have been pointing out right along that this condition was bound to exist sooner or later and that the boy or girl who hastened to the city and abandoned the farm of their parents was not necessarily going to make the greatest profit over a ten year period.

Recently a survey was made in Ohio which proved that the actual living expense of a family was some $1,200 per year greater in the city than in the country. That is, that the farmer would have to earn $1,200 more per year in the city simply to make up for the food and living accommodations which he finds on his farm. That is something to think about before you move!

Dr. Olin points out in another part of his article that strange as it may seem, the city is rapidly outdistancing the country as a healthy place in which to live, and that this is largely responsible because of two important factors,—first because of the large number of flies which come from livestock kept too close to the home, causing dysentery and other kindred diseases, and second, because it is hard for the farmer to learn that when the winter season comes with its slack period of manual labor, he must cut down his food requirements.

Because the farmer is accustomed to consume large quantities of food during the busy days of manual labor which his body has been able to assimulate and care for, does not mean he can continue on the same ration when his labors are cut in half. This statement is undoubtedly true, as the record of any farming community will prove that it is the inactive months which take their greatest toll of life and health among country people, particularly among the men as, (Lord help 'em!) the women folks seem to have to work about as hard one time of year as another.

PUBLISHER'S DESK

A NEW ONE

THANKS to a reader from Armada, Michigan, I am able to tell you of a new "Two-dollars-in-advance for employment" scheme which is being worked by the International Exchange Corporation, 8941 Commercial Avenue, Chicago. I have their circular matter before me.

This company, in a letter signed by I. W. Brandwein, president, agrees to send our reader for the $2 she is asked to send them "simply as an evidence of good faith and to protect us from curiosity seekers," "Polish, German, Austrian and Russian money, the pre-war value of an equivalent amount of which was $506,350.00."

This is by far the biggest offer we have ever been able to announce from this page and it is quite possible that this amount of foreign paper money would be worth more than $2 if sold for waste paper and certainly much more if used to paper your house.

But this is not all that Mr. Brandwein promises our reader, because the real point is that if she will copy letters for him and send them to her friends, supposedly suggesting to them that investment in foreign currency and bonds may prove a profitable speculative investment, she will be paid not less than $10 per hundred for copying the letters and it is also possible to earn as high as $100 per hundred letters.

The letter contains a guarantee that if our reader cannot earn from $25 to $75 per week, she may return all the material they have sent her and receive her $2 back, so if it were possible to collect all of the Russian rubles, German marks, and Austrian kronen, which she had received, providing baby had not torn up some of it, friends taken it for souvenirs, or father used it for shaving paper, there would be a fair chance of getting her $2 back.

The Publisher is curious enough to want to see one of the letters which Mr. Brandwein is asking to have copied, so if any of our readers happen to be a "local correspondent" for the International Exchange Corporation and have a copy of this letter, we would appreciate their sending it and we promise not to use their name or initials in any comments we make on it in the future.

OUR FRIEND McRAE

WARREN McRAE of Logansport, Indiana, says we have done him a great injustice in stating that he did not have an office and that he was rooming in a rooming house. That statement came to us in a letter from a reader who stated that the Chief of Police of Logansport had so reported to her, but whether it is true or not has little bearing on the facts in the case.

The facts are that Warren McRae advertised in Michigan newspapers for farms for sale, stating that he had buyers ready and waiting. When the owner of a farm wrote him he sent a printed circular letter stating that to list the farm with his agency would require a down payment of $10 and in this letter and various follow-up letters which we have on file in this office, Mr. McRae stated he was sending buyers to Michigan and gave their names.

Mr. McRae has now published a booklet which apparently contains the listing of several hundred farmers who have paid him a ten dollar fee and he states that he has published one thousand copies of this book. Mr. McRae states that The Business Farmer has done him an injustice, so we here state that if Mr. McRae con prove to us that he has sold a single farm to any prospective buyer whom he listed specifically in one of his circular letters to one of our readers or any other farm owner in Michigan we will so state the facts and thus give him a free advertisement in these columns.

Mr. McRae says we uphold the scheme worked by Mr. Jones, of Olney, Illinois. This is news to us and we suggest Mr. McRae reread our comment on the Jones scheme published in the issue of July 21st. We have never knowingly accepted the advertising of anyone who publishes blind ads asking for farms for sale and then sends out a scheme where advance payments are required, and we will continue to warn our readers to be on the lookout for any advertisement headed "Wanted, Farms" and under no circumstances to make any down payments whatsoever for the sale of a farm until the deal is consumated.

SOLD FOUR IN TWO MONTHS

IN reading the last Business Farmer I noticed your inquiry about the American Music Publishing Co., 1658 Broadway, N. Y. Will say that I answered their advertisement and it reads that they will pay 10c for every circular mailed out. Their equipment consists of 20 copies of music, lots of circulars, envelopes included, and you are to mail these circulars to your music loving friends and pay the postage on them yourself and if your friend buys this music from you, you are to charge 25c a copy for it. And in this way you get your $2.00 back you sent them, but if you can not sell the music you have it on your hands, and money out is the way I look at it. It is about 2 months now and I have sold 4 copies and I expect to lose the other dollar.—P. C. M., Holton, Mich.

ON THE NILE AGAIN

DEAR Mr. Slocum:—I saw inquiries in your paper about Nile Art Co., Ft. Wayne, Indiana, and as I have had some experience with them I thought I would write. I sent them $5.50 for their outfit—it consisted of some small bottles of color like ink, some little pine sticks, a wad of absorbant cotton, four thumb tacks and four designs stamped on unbleached muslin. The idea was to fill in the design with the different colors by smearing it on with absorbant cotton wrapped around sticks. I did this very carefully and sent them to the company. They wrote back that I was doing very nicely for a beginner but that I would have to have perseverance as "Rome wasn't built in a day." In the meantime they would be only too glad to furnish me the unbleached muslin squares at 60c per and the little bottles of coloring at 25c per bottle. I didn't send for any more, needless to say. They could put one off indefinitely by saying their work was unsatisfactory and still be making big money by selling their worthless material.—Mrs. S.

PLEASE SEND LABEL

IF our readers would attach the address label from a recent copy of The Business Farmer when writing for service from any department of this paper it would save time and expense all around. We like to accomodate our friends quickly and we want to be of service to all, but inasmuch as we make no charge for any service rendered by a paid-in-advance subscriber, we must know you are one.

The date on your address label on the front tells the story. If it reads (Sept23) or any date thereafter you are paid in advance, but if it reads (Aug23) or any date before that, you are in arrears and you must send Sixty Cents for one year or a Dollar for Two years.

Our subscription rate is low enough, Goodness knows, and the service we render readers for sixty cents a year, is many times worth sixty dollars!

The Collection Box

The purpose of this department is to protect our subscribers from fraudulent dealings or unfair treatment by persons or concerns at a distance.

In every case we will do our best to make a satisfactory settlement or force action, for which no charge for our services will ever be made, providing:

1.—The claim is made by a paid-up subscriber to The Business Farmer.
2.—The claim is not more than 6 mos. old.
3.—The claim is not local or between people within easy distance of one another. These should be settled at first hand and not attempted by mail.

Address all letters, giving full particulars, amounts, dates, etc., enclosing also your address label from the front cover of any issue to prove that you are a paid-up subscriber.

THE BUSINESS FARMER, Collection Box
Mt. Clemens, Mich.

Report ending August 28, 1923

Total number claims filed	2334
Amount involved	$22.549.90
Number claims settled	862
Amount secured	$12,881.02

First Mortgage Real Estate Gold Bonds

The tremendous number of Federal first mortgage bond buyers indicates the high regard in which they are held by the American public.

Write for Booklet AG917

Tax Free in Michigan
Free from Federal Income Tax of 4%

6½%

FEDERAL BONDS
Are Better Bonds
(917)

FEDERAL BOND & MORTGAGE COMPANY
FEDERAL BOND & MORTGAGE BUILDING, *DETROIT*

TRADE MARK
F.S.R.
REGISTERED

Harvest early and escape rust

Fertilize your winter wheat with Royster's Fertilizer and harvest your crop ahead of the destructive rust and the deadly drought. Royster's Fertilizer will also give the wheat an early and sturdy start; will increase the yield and the quality, and leave more straw. Royster's motto is "How good?" not "How cheap?" You can bank on its quality.

At the Ohio Experiment Station, wheat on unfertilized land gave a yield of 10.7 bushels per acre while on land treated with complete fertilizer the yield was 24 bushels per acre. Unfertilized, about 49 per cent. of kernels were shrunken, while the fertilized wheat had only 16 per cent. shrunken. For information, write F. S. Royster Guano Company, Toledo, Ohio.

AGENTS WANTED IN OPEN TERRITORY

ROYSTER
Field Tested Fertilizers

The Farm Home
A Department for the Women

Edited by MRS. ANNIE TAYLOR

WOMEN'S EXCHANGE

DEAR FOLKS—During the last six months since I have had this department, I have received letters asking for help and suggestion to aid the women on the farm to either make money or how she might obtain the things most desired. In taking this matter up with Mr. Slocum, we have schemed out a plan to be used only for and by the woman readers of this page. The new department will be under the heading of "Women's Exchange." I want you to read it thru and know that I want our page to be for each and every one of my women readers. Our cook-book is slowly being constructed and although it takes time for all good things I hope to have a thorough book when completed.

Your Friend,
Mrs Annie Taylor

Address letters: Mrs. Annie Taylor, care The Business Farmer, Mt. Clemens, Michigan.

SCHOOL BEGINS TO-DAY

I'm glad vacation's over, and school is called again!
For thirteen weeks I've counted the sultry days away—
I'm glad vacation's over and school begins to-day.

They say that teachers cannot teach, that scholars cannot learn,
Thro' all the days of summer—the days that fairly burn;
I wonder if they ever ask how mothers get along
With romping boys who find their joys in doing something wrong.

There's John, Joe and Jimmy—their clothes were nearly new
When they come home from school that day, and said the term was through;
Now John, and Joe, and Jimmy, with sun-brown hands and feet,
Come in at night about plight of beggars on the street.

There is no order in the house; I cannot find a thing;
The drawers were tumbled up side down with six hands hunting string;
The chairs are always in a row; the whole house fairly jars
With Jimmy jumping off and on, to run his train of cars.

My bran-new carving knife, I found out in the grass, here Joe
Had used it making arrows for Jimmy's little bow;
And John came home from fishing—came whistling through the gate—
With father's best tobacco box filled up with worms for bait.

The hens have had a frightful time the whole vacation through;
They could not hide a nest away, the best that they could do;
I heard the rooster crow this morn; to me it seemed to say
I'm glad vacation's over and school begins today!"

"All work," they say, "without some play, makes Jack a stupid boy."
Well, that's a good old adage, and gives the urchin joy;
But if the man who wrote it lived now and owned a son,
He'd sit up late and scratch his pate, to write a different one.

There, there, I'm not complaining! Tho' weary of the noise,
I love as only mothers can, my rattling, romping boys;
And I shall watch for four o'clock through every coming day,
When I can see my darlings out in the yard at play.

I've one dear boy now sleeping beneath the summer sod;
He took a long vacation when he went home to God.
When life's rough school is over, I'll meet him, by and by,
Where graves ne'er hide our treasures—where dear ones never die.

—John H. Yates.

AWAY TO SCHOOL

Life on the farm is one struggle after another; this same rule applies to the city and town folks and only solution to this is the trying to better our lives; but how? The following editorial was written in one of the Chicago dailies and I am giving it to you:

A GOOD many boys and girls, along with their parents, are struggling with the problem of whether they are to go away to school this fall. We think there is only one solution. That is to go, unless the financial burden, in addition to that already existing, is too great to bear. Attention is frequently called to the fact that the boys who go away to school these days seldom if ever come back to the farm. In spite of that it is best for them to go. There has been lots of foolishness projected about keeping the boys on the farm. They should never be kept there unless they prefer farm life to anything else. And if they are going to the city to live by all means give them a training that will help them to be successful. City life is hard enough at best. It is drudgery for the man not able to do better than the average, with mighty little accumulated after long years of hard work. Some farm folks are not inclined to believe this, but they have not seen the seamy side of city life.

But there really is a more important consideration than that of dollars and the scale of living. If college education pays, it pays best in the outlook on life it gives. Life is worth living only for what we get out of it, and for what we can contribute to the happiness of others. College training broadens the outlook. Education is merely acquaintance with the experience of others, with the polish that comes from contact with others. The best that college training gives is the ability to enjoy life, and to add to the joy others find in life. And here is where parents come in. The boy or the girl they send to college will never cease to bless them. This is the rule. There are exceptions to it, and so there will be as long as ingratitude is a trait of some human beings. But by and large there is nothing parents can do for their children that will mean more in later years than providing the opportunity to go away to school.

College life is expensive now, altogether too expensive. A lot of unnecessary frills add to the expense, and not a few of them could be eliminated. The selection of the school is important. It should be a school that provides a high standard of training, and real democracy in student life, where a youngster is accepted for what he is rather than for what he wears or has to spend.

Sending boys and girls away to school is no small problem, but there is really little chance for a mistake if they are made up of the right kind of timber.

MAKING MONEY AT HOME

If one is near a town of any size flowers are good money makers. I personally know a girl living outside Detroit and she raises all kinds of cut flowers and makes beautiful bouquets and sells them in the city. She has built up a good trade, keeping some of the Detroit offices supplied with fresh bouquets three times a week. This idea might be of help to some of our readers living near the larger towns.

The following letter came to me and it has a good suggestion for making this extra money in a very pleasant way.

VERY sorry indeed that I cannot help the many farmers' wives by telling them of something definate they can do to make money. I know many of them are needing help in that direction.

If the average woman had been taught to love and know the growing things they could do so much to help themselves when misfortunes befall them. Some day we are going to have an educational system that will fit every boy and girl when they enter manhood or womanhood for the life that will bring health, happiness and efficiency and because our present one does not do that we see human wrecks and unhappy lives all around us.

I have an acre and a half of peonies that help financially very much. So many things one could do if one only knew how.

So many of our home bureau members are asking the same thing for the farm home in the last few years have felt keenly the low prices of all farm products.

Hoping better times are coming for all farmers, their wives and daughters, I am Nora Burt Dunlap, Roray Home, Savoy, Illinois.

Mothers Problems

THERE'S ALWAYS A REASON

HENRY ALBERT was naughty. Yes, there was not denying it. He was as naughty as a little boy could be. He cried over the least little bump; he wouldn't do a thing his mother asked him to do; he threw all his toys on the floor and then lay down and kicked and bellowed. His mother was exasperated. "Henry Albert," she said, jerking him none too gently from the floor, "I wish to goodness I knew what ailed you! Every single day at this time in the afternoon you have one of these cranky spells!"

There was something ailed Henry Albert. Do you know what it was? The child needed a nap. He was only two years old, but he had given up naps some time ago—and he still needed a nap after dinner, even though he did rebell at taking one. Every afternoon he was tired, and that made him irritable. After he had lain on the floor and kicked and howled and whined for an hour, more or less, he began to wake up, and the last of the afternoon he would be a very different boy.

Many time it is lack of sufficient sleep that will cause a child to have periodic naughty spells. Again it is an upset stomach—too much cake and candy and too little milk and vegetables. Proper feeding, with perhaps a good dose of physic, will overcome such spells of naughtiness.

Too much excitement is another cause of naughtiness in little children. Being out late nights, taking long auto rides, going to exciting moving pictures, will tire even an adult after a while; is it unreasonable to expect that they will overtire a child?

A certain amount of naughtiness crops out in any child, but when a naughty disposition seems to be coming to the fore, look for the cause of it. You will be pretty sure to find that the child needs a nap or a dose of physic, followed by a proper diet, or a period of rest and quiet. There is always some reason for such naughty spells. Ferret them out—and see your child's happy nature return!

THE CHILDREN'S PETS

A NEIGHBOR had given seven year old Elizabeth a rabbit. It was just a plain, ordinary rabbit, but it was the first pet of her very own that Elizabeth had ever had. She loved her Bunny!

But Elizabeth's father thought pets foolish things to have around, eating up good food and bringing in no return—in cash, at least. Once the rabbit dug out of his pen and nibbled various vegetables in the garden. Elizabeth's father scolded her and told her she wouldn't have that rabbit if it did any more damage. Of course, it did get out again, one day when Elizabeth was in school. When she came home for dinner, there was—rabbit-pie! Her father had killed her Bunny!

Now there aren't many parents so heartless as to do a thing like that—though I have met some who would!—but there are many who fail to consider a child's rights when animals or birds that have been given to them are concerned.

Boy's Clubs have done a great deal to show fathers that when a boy has been given a calf or a young pig to raise, and he has raised it to salable age the returns from it belong to the boy. But no club yet has shown a father that he has no right to kill a boy's dog without the boy's sanction.

If for some reason a child's pet must be killed, inform the child of the fact. Make him understand why and then make the death as painless as possible, and have it performed in the absence of the child unless he requests to be present. There is enough of hardness and cruelty in this world without inflicting memories of such on a child. Some of the bitterest memories men have had have beed of the "day they killed my dog."

Better to persuade a child to sell or give away a pet he can no longer keep than fill his heart with sorrow and bitterness over the killing of it. After all the pet is the child's own property; what right have you to say what shall be done with it?

Personal Column

One Who Believes in Being Kind.—Am sending in my views on bobbed hair as requested. First, I will say I am a woman who has lived nearly sixty years and looking back over that time I can remember several women who have worn their hair cut short, and all have been noble women, and have done their life's work as well and better than many who have kept their hair long. It seems to me that it makes no difference in our character, whether we wear our hair long or short, but it would certainly give us more time for our other work and be much easier to keep clean and I for one wish all women would adopt the style of short hair. What do you say, sisters? Who will be the first among us older ones? Not so long ago I heard a man and woman talking about bobbed haired girls and they were very loud in their denunciation of girls who wore their hair that way. Well, I looked at the woman's head and it looked unclean and was unbecomingly combed, and the man's hair was sadly in need of a comb and cut, and I thought if they would go home and clean up their own heads they would not have so much time to criticise young girls, so let us older ones be very sure that our own heads look all right and don't judge the young folks by the way they cut or comb their hair. You know we are being judged the same as we judge others and none of us would like to be judged immoral because we did not wear our hair just as someone thought we should. So let us encourage and help our young folks instead of criticising them unkindly. Remember a good name is better than riches and we have to give others a good name if we ourselves wish one. From one who loves and believes in the virtue of our young people.—L. K.

There are Always Two Sides to a Question.—Is it wrong to have bobbed hair? I will tell you what I think. First, What are they doing it for; cleanliness. No, it is for another purpose. Show of course. Oh, how rude for a woman or young lady to cut her hair. We were taught it was a shame for a woman to have short hair. Now they are not only trying to take the place of men, but to appear like one. I do not admire the bobbed hair or the half dresses.

If the only excuse I could give for bobbed hair would be for little girls where there is large families or in sickness. But not any for sleeveless dresses.

I would like to hear what some good living mothers honestly believe. I am trying to bring my family up right. I am the mother of seven girls and I like all the good advice I can get. We like the M. B. F.

From One Who is Willing to Change.—I am sending in a few words concerning bobbed hair. I think it is a wise idea, not only for girls in their teens but for women also, for comfort and time saving. How much more comfortable it would be for all. We all know that things have changed since mother was a girl; some of those old folks think girls and women of today should dress as they did years ago, but we all know things are bound to change and will. It isn't necessary to have puffs made of your hair which was cut off for dress wear, as it is just fine with just the ends curled a little. You can purchase bobbed hair curlers with little expense which answers very nicely, why wear puffs and combs and make it more uncomfortable than before your hair was cut. If you have your hair cut for comfort, why not have it that way. It looks fine when you get used to it and we all soon will. So let us hope we will have comfort. I hope I did not write too much. We sure enjoy the M. B. F.—A Constant Reader.

A Mother's Grateful Thanks.—We wish to thank the M. B. F. readers for the generous response to our call for pieces and work. Also the M. B. F. and Mrs. Taylor for getting our wishes before so many people. I have written most of you personally but in case I have missed anyone please believe it an oversight. Will say to those who sent bedding to be made up will get their work just as soon as this berrying rush is over, and those who want crochet work in exchange for goods my daughter has received, she is working on orders and has just completed one. Many thanks for all the favors which you all have bestowed upon us. We beg to remain yours for the right.—Deaf Girl and Mother.

The Runner's Bible

The Lord's servant must not strive but be gentle toward all, apt to teach, forbearing, in meekness instructing them that oppose themselves; if peradventure God may give them repentance unto the knowledge of the truth.—2 Tim.2:24-25.

Never be drawn into an argument. Your work will not always be with the well-bred (who do not argue). The world deals summarily with the sins of impoliteness, but you must take another course. Nothing but evil ever comes of controversey, for the spirit back of it is never humble, and truth gains access only thru humility.

RECIPES

Marble Cake.—Three eggs, one cup sugar, one tablespoon butter, one teaspoon of vanilla, three-fourths cup milk, two and one-half cups flour and two teaspoons baking powder. Cream butter and sugar, add beaten eggs, then vanilla and milk, and flour with baking powder. Take half of this and mix with one-half cup molasses, one-half teaspoon cloves, one-half teaspoon cinnamon. For dark part put a spoonful of dark then light mixture in pan.

Apple Sauce Cake.—One and one-half cups apple sauce, one cup sugar, one-half teaspoon cloves, one-half teaspoon nutmeg, one-half teaspoon salt, one-half cup citron, one-half cup dates, one and one-half cup nuts. Cut up last three items and mix with flour. Three cups flour and two teaspoons soda.

Summer Cake.—Cream one fourth cup of butter gradually cream in one-half cup of sugar and then add one well beaten egg. Measure one and one-half cup of sifted flour and sift again with two and one-half teaspoons of baking powder. Add this alternately with one-half cup of milk to the butter mixture. Beat hard. Bake in layers in a moderate oven.

Frosting.—Beat the whites of two eggs and sweeten and beat in mashed berries. Spread between layer and top.

Molasses Cookies.—One cup sugar, one cup lard, one cup molasses, two eggs, one teaspoon ginger, two teaspoons baking soda dissolved in seven teaspoons hot water, add flour. You can make the cookies with or without eggs.—Alma Becker.

Chunk Pickles.—Soak seven pounds of cucumbers, cut in chunks one inch length, in strong brine for three days, then soak in clear water three days, drain well then take weak vinegar enough to cover and add piece of alum size of hickory nut. Cook slowly, but not boil, in vinegar for two hours. To seven pounds of cucumbers use three pounds of brown sugar, three pints vinegar, one ounce of whole spice, one ounce of cassia buds, one ounce of celery seed, heat and pour over pickles boiling hot. Let them stand for seven days and on the seventh day boil the syrup quite thick and pour over, then can and seal.

Spiced Currants—7 pounds currants; five pounds brown sugar; three tablespoons cinnamon; three tablespoons of cloves and one pint of vinegar. Pick over currants, wash, drain and remove stems, put in a preserving kettle, add sugar, vinegar and spices tied in a piece of muslin. Heat to boiling point and cook slowly one and one-half hours. Store in stone jar in a cool place. Spiced currants are a delicious accompaniment to cold meat.

MY FAVORITE RECIPES

Unripe Cucumber Pickles (Gherkins)—Wipe four quarts small unripe cucumbers. Put in a stone jar and add one cup of salt dissolved in two quarts of boiling water and let stand three days. Drain cucumbers from brine, bring brine to the boiling point, pour over cucumbers, and again let stand for three days; repeat. Drain, wipe cucumbers, and pour over one gallon boiling water in which one tablespoon alum has been dissolved. Let stand six hours, then drain from alum water. Cook cucumbers ten minutes, a few at a time, in one-fourth the following mixture, heated to the boiling point and boil ten minutes: One gallon vinegar, two sticks cinnamon, four red peppers, two tablespoons allspice berries and two tablespoons cloves. Strain the remaining liquor over pickles which have been put into a stone jar.—Annie Taylor.

Red and Green Pepper Relish.—Twelve onions, twelve green peppers, (sweet), twelve red peppers, (sweet), one teaspoon mustard seed, three cups granulated sugar and two pints of vinegar. Chop onions and peppers and let stand in boiling water for fifteen minutes. Drain and add other ingredients then boil fifteen minutes. Can.

Indian Relish—Six large cucumbers, one quart of onions, six green tomatoes, two large cauliflower, four green peppers. Cut fine. Cover with hot brine and let stand over night. Drain and add one-half gallon of vinegar, 8 cups brown sugar, one-half cup white mustard seed. Make a paste of one-half cup flour, one-half cup mustard, a large one-half teaspoon of tumeric powder. Pour in very slowly and boil for ten minutes.—Annie Taylor.

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Good Manners in Play.—If you are invited to play a game, do not give as your reason that you don't play it. It is always courteous to give a reason for declination. It is a sure way of being a part of the fun your hostess has provided for you by attempting to play, unless it is injurious to your health or one you do not approve of. In case it is the latter do not voice yourself but gracefully decline and give some slight excuse.

WOMEN'S EXCHANGE

If you have something to exchange, we will print it FREE under this heading providing: First—it appeals to women and is a bonifide exchanges, no cash involved. Second—it will go in three lines. Third—You are a paid-up subscriber to The Business Farmer and attach your address label from a recent issue to prove it. Exchange offers will be numbered and inserted in the order received as we have room. —MRS. ANNIE TAYLOR, Editor.

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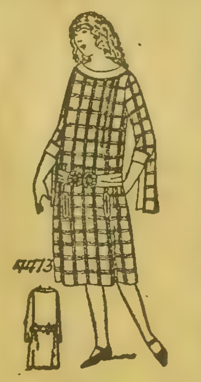
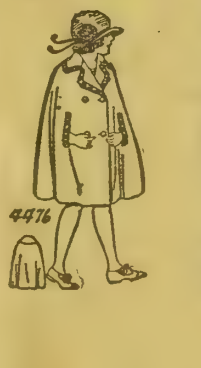




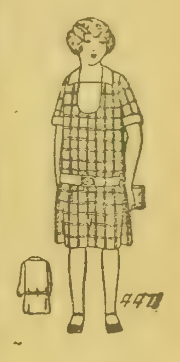
The simple dresses are always the better taste for our school girl and you will find a couple of good numbers to choose from. Brown will be the prevailing color this fall. Mrs. Coolidge, the first lady of our land, wears brown a great deal and this will have a big influence in helping to make this our main fall coloring. If brown is unbecoming there are lovely shades of dark green and greys.

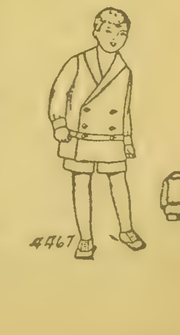
4473. A Smart Frock for the Growing Girl—Plaid gingham and linene are here combined. This style is attractive in ratine, pongee, taffeta or jersey cloth. Mustard color ratine with facings of white or green would be nice. The Pattern is cut in 3 Sizes: 12, 14 and 16 years. A 14 year size requires 3 ⅝ yards of 36 inch material. For collar, facings and girdle of contrasting material ¾ yard is required.

4471. A Simple Popular Model—This is a good style for gingham, printed voile, and other cotton goods now in vogue. The sleeve may be finished in wrist or elbow length. The Pattern is cut in 4 Sizes: 6, 8, 10 and 12 years. A 10 year size requires 3 ⅛ yards of 27 inch material. For collar and cuffs of contrasting material ¾ yard is required.

4476. A Jaunty Cape for a "Little Miss"—Practical and all together comfortable is this design. The fronts are double breasted, and rolled to form revers that meet a broad collar in notches. The Pattern is good for any of the cloakings now in vogue, also for fur, velvet and other pile fabrics. The Pattern is cut in 5 Sizes: 4, 6, 8, 10 and 12 years. A 10 year size requires 2 ⅝ yards of 40 inch material.

4467. A Smart Blouse Suit for the Small Boy—Linen, drill, pongee and chambrey as well as serge, cheviot and twill may be used for this model. The Pattern is cut in 4 Sizes: 3, 4, 5 and 6 years. A 4 year size requires 3 ⅛ yards of 27 inch material.





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Fair rates and good service

This country has enjoyed railroad transportation on practically a cheaper basis than any other civilized country.—*Report of the Congressional Joint Commission on Agriculture.*

Shippers of farm products on the New York Central Lines know from experience that the quality of railroad service is of greater importance than the price.

Inadequate, inefficient freight service is dear at any price. Rates that leave no margin of earnings on railroad investment dry up the sources of new capital, without which the carriers cannot provide the new equipment and facilities their shippers must have.

This necessary margin of receipts above expenditures, so vital to the life of the railroads, is a small fraction of railroad rates. In 1922 the railroads earned the largest net income in five years, a return of 4.14% on their property investment. But a reduction of 16% in the rates charged in 1922 would have taken all this net.

The Congressional Joint Commission of Agricultural Inquiry estimated that the average proportion of freight rates to the value of goods carried was 6%. If this were reduced to 5%, a reduction so small that the consuming public would detect no difference in living costs, most of our railroads would starve.

Living rates for the railroads—insuring healthy growth of railroad facilities—are vital to agricultural prosperity.

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The Children's Hour

SO MANY have requested that we hold a drawing contest that I have decided to start one with this issue. I am offering three pencil boxes for the three best drawings. Each pencil box contains four pencils and a penholder, things you will need when school starts, which in most cases will be next week. Now I will tell you about what to draw so pay close attention and be sure that you understand before you make your drawing.

September is the month of fairs in Michigan, both county and state, and nearly everyone of you will spend at least one day at some fair during this month so I have decided that our pictures will be of something that you saw at the fair. If you see two friends meet at the fair draw a picture of how they looked to you and send that, or if there were certain exhibits, such as a prize cow or horse, appealed to you, draw a picture of that; maybe you went to a show and there was a fat boy that you would like to send a picture of, or you could draw a picture of the horseshoe pitchers in action at your fair. It matters not what you show in your picture if it is something that was at the fair.

There are a few rules that you should remember and they are: Each drawing must be in black and white (no water colors); if you have black ink trace the pencil lines in your drawings but if you haven't make your drawing with a pencil only; drawings should be on a smooth, white sheet of paper, no lines or marks outside of those that are a part of the drawing; make drawings not more than five inches deep or wide; put name and address on the back of the drawings.

The contest will close Saturday, September 29th, and all drawings received after 1:00 p. m. of that day will not be entered in the contest so be sure to send yours in to arrive before that time. If you have attended a fair already this year you can send in your drawing tomorrow and it will receive as careful consideration as it would if you wait until the last day. Do not delay but forward your drawing as soon as it is done.

I hope every one of you may be able to go one day to some fair but in case you are not you may draw a picture of what you saw at last year's fair, so you can try for the prizes. If your care to you may submit several drawings and I will choose the best one to use in competition with others. Now do not forget the rules and do your best. The drawings by the winners will appear on our page so if you would like to see your drawings printed you must work hard as there are many, many boys and girls who are going to try to win. —UNCLE NED.

Hello Uncle Ned:—I thought I would drop in for a nice friendly chat this evening. The birdies are chirping so sweetly. One bird has built its nest in a Lilac bush. There are three blue eggs in it. I love the birds, don't you Uncle Ned? I will describe myself so you will know what I look like. I am 4 feet, 10 inches tall and weigh 83½ pounds. I have dark brown bobbed hair, blue eyes, and some naughty freckles across my nose. My age is between 12 and 16. The one who guesses it will receive a nice long letter from me. My birthday is May 3rd, and I am in the 8th grade. If you have a drawing contest as Myrtle Taylor suggested I will send in a picture. Well good-bye. Your niece,—Luella Marie Nelson. P. S.—I enjoyed my visit very much and may I come again some time?

—Drop around again some evening for another visit, but next time be sure to give your complete address.

Dear Uncle Ned:—Having seen in the paper where you asked me to tell you about my trip from New York to Michigan, I thought I would write again. I am sure there is nothing to tell about my trip only that I enjoyed it very much, although I was tired when I got here. We had but very few changes to make and an hour was the longest we had to wait, which was in Buffalo. We intended to spend a part of our time at Niagara Falls, but we could not make connections so that we could arrive in Flint during the day, so we couldn't go to the Falls yet. We came through Canada where we saw some of the grape country. The answer to the riddle which I put in the paper: "What time is it when you wake up in the middle of the night and scratch your head" is, five after one (Five fingers after one cooty). I think the answers to the riddles which Eva Ruth Soper put in the paper are: A negro riding on a horse with a kettle turned bottom side up on his head. And the second is a beer bottle. Also I think the answer to the riddle which Gladys Carlson put in the paper is a pig. Well I think I had better close for this time, your niece, —Miss Fairy Dunkle, R. 2, Davison, Mich.

Dear Uncle Ned:—As I have never written to you before I made up my mind that I would write for the first time, and see if my letter will be printed. I am a farmers daughter too. I have medium brown hair, blue eyes, fair complexion, and am 5 feet 4½ inches tall, weigh 128 pounds. Guess I'll let you guess my age. Do you like to milk cows? I don't suppose you do. I would rather milk cows than wash dishes, but I have to wash dishes. We live on the main road M13, and there is lots of travel. Is the weather warm enough for you Uncle Ned? My I pretty nearly roast it is so warm here. My mother and I have been picking huckleberries and red raspberries. Do you like them? I do, but I don't like to eat the raspberries for fear of eating some worms. I suppose they would help to fill up, but I don't care anything about them. Were you ever up to Kalkaska? If you haven't been you have missed a lot, because it is an awful big town, Ha! Ha! Well I guess I will close and give the rest some room. Would like to have some of the boys and girls write to me. Good bye, from your niece,—Miss Mary Drake, Star Route, Kalkaska, Michigan.

Dear Uncle Ned:—I am going to write to you as I see so many of the cousins are writing. I see that Evelyn Soper has promised a card or letter to the one who guesses her right age. I think that Evelyn will be 13 her next birthday. Meta Miller has written me some real nice letters during the past year. I am a farmer girl, 17 years old. I am 5 feet 3 inches tall, weigh 130 pounds. I have medium brown hair. (Oh yes I had it bobbed on the 23rd of July). My eyes are blue and I have a light complexion. My birthday is on the 23rd of December. Have I a twin? I have not attended school for two years, but I would be a junior in high school if I could go. I live near Oak Grove, or north of Howell. I am working in Howell 4½ days a week, but I am home the rest of the time. My letter is getting so long that it won't miss the waste paper basket if I don't close. I hope that some of the cousins will write as I will be glad to hear from them. I am reading The Hunted Woman, and like it very much. —Idah Knapp, R. 2, Oak Grove, Mich.

Dear Uncle Ned:—I bet you have been wondering where that "Katy-did" went to. Well here I am again. I like my scissors fine and sure do use them a great deal. Now maybe you and my cousins wonder what I look like so I will describe myself. I have dark brown hair, brown eyes, and I am 4 feet, 2 inches tall. I weigh 102 pounds, and was 17 years old last January, so you see I am rather small for my age. I wonder if I have a twin. If I have I surely wish they would write to me. Lawrence Chapman, of Alma, Michigan, I wonder if he has a twin. If he was about six days younger he probably would have one, Ha! Ha! I think the answer to the one riddle that Erma White asked is a road. Is that right, Erma? I don't know the other. I also think that Dorothy Postma is 13 years of age. Well now Uncle Ned, I am very interested in that drawing contest you speak of, as I love to draw. I think I better stop as it is getting late and time for good girls to be in bed. Good bye Uncle,—Katie M. Prowant, Durand, Michigan.

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A new oil lamp that gives an amazingly brilliant, soft, white light, even better than gas or electricity, has been tested by the U. S. Government and 35 leading universities and found to be superior to 10 ordinary oil lamps. It burns without odor, smoke or noise—no pumping up, is simple, clean, safe. Burns 94% air and 6% common kerosene (coal oil).

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The Hunted Woman

By James Oliver Curwood

Michigan's Own and America's Formost Author of the Great Northwest

Copyright by James Oliver Curwood

(Continued from August 18th)

IT was no time for knife-work now. As the avalanche of brute strength descended upon him Aldous gathered himself for the shock. He had already measured his own weakness. Those ten minutes among the rocks of the chasm had broken and beaten him until his strength was gone. He was panting from his first onset with Quade, but his brain was working. And he knew that Quade was no longer a reasoning thing. He had ceased to think. He was blind with the passion of a brute, and his one thought was to crush his enemy down under the weight of the club in his huge hands. Aldous waited. He heard Joanne's terrified scream when Quade was almost upon him—when less than five feet separated them. The club was descending when he flung himself forward, straight for the other's feet. The club crashed over him, and with what strength he had gripped Quade at the knees. With a tremendous thud Quade came to earth. The club broke from the grip of his hands. For a moment he was stunned, and in that moment Aldous was at his throat.

He would have sold the best of his life for the skinning-knife. But he had lost it in gripping Quade. And now he choked—with every ounce of strength in him he choked at the thick neck of his enemy. Quade's hands reached for his own throat. They found it. And both choked, lying there gasping and covered with blood, while Joanne struggled vainly to free herself, and scream after scream rang from her lips. And John Aldous knew that at last the end had come. For there was no longer strength in his arms, and there was something that was like a strange cramp in his fingers, while the clutch at his own throat was turning the world black. His grip relaxed. His hands fell limp. The last that he realized was that Quade was over him, and that he must be dying.

Then it was, as he lay within a final second or two of death, no longer conscious of physical attack or of Joanne's terrible cries, that a strange unforseen thing occurred. Beyond the tepee a man had risen from the earth. Me staggered toward them, and it was from Marie that the wildest cry came now. For the man was Joe DeBar! In his hand he held a knife. Swaying and stumbling he came to the fighters—from behind, Quade did not see him, and over Quade's huge back he poised himself. The knife rose; for a fraction of a second it trembled in mid-air. Then it descended, and eight inches of steel went to the heart of Quade.

And as DeBar turned and staggered toward Joanne and Marie, John Aldous was sinking deeper and deeper into a black and abysmal night.

CHAPTER XXX

In that chaotic night in which he was drifting, light as a feather on the wind, John Aldous experienced neither pain nor very much of the sense of life. And yet, without seeing or feeling, he seemed to be living. All was dead in him but that last consciousness, which is almost the spirit; he might have been dreaming, and minutes, hours, or even years might have passed in that dream. For a long time he seemed to be sinking through the blackness; and then something topped him, without jar or shock, and he was rising. He could hear nothing. There was a vast silence about him, a silence as deep and as unbroken as the abysmal pit which he seemed to be softly floating.

After a time Aldous felt himself swaying and rocking, as though tossed gently on the billows of a sea. This was the first thought that took shape in his struggling brain—he was at sea; he was on a ship in the heart of a black night, and he was alone. He tried to call out, but his tongue seemed gone. It seemed a very long time before day broke, and then it was a strange day. Little needles of light prickled his eyes; silver strings shot like flashes of weblike lightning through the darkness, and after that he saw for an instant a strange glare. It was gone in one big, powderlike flash, and he was in night again. These days and nights seemed to follow one aonther swiftly now, and the nights grew less dark, and the days brighter. He was conscious of sounds and buffetings, and it was very hot.

Out of this heat there came a cool, soft breeze that was continually caressing his face, and eyes, and head. It was like the touch of a spirit hand. It became more and more real to him. It caressed him into a dark and comfortable oblivion a still brighter day roused him. His brains seemed clear. He opened his eyes. A white cloud was hovering over them; it fell softly; it was cool and gentle. Then it rose again, and it was not a cloud, but a hand! The hand moved away, and he was looking into a pair of wide-open, staring, prayerful eyes, and a little cry came to him, and a voice.

"John—John——"

He was drifting again, but now he knew that he was alive. He heard movement. He heard voices. They were growing nearer and more distinct. He tried to cry out Joanne's name, and it came in a whispering breath between his lips. But Joanne heard; and he heard her calling to him; he felt her hands; she was imploring him to open his eyes, to speak to her. It seemed many minutes before he could do this, but at last he succeeded. And this time his vision was not so blurred. He could see plainly. Joanne was there, hovering over him, and just beyond her was the great bearded face of Donald MacDonald. And then, before words had formed on his lips, he did a wonderful thing. He smiled.

"O my God, I thank Thee!" he heard Joanne cry out, and then she was on her knees, and her face was against his, and she was sobbing.

He knew that it was MacDonald who drew her away.

The great head bent over him.

"Take this, will'ee, Johnny boy?"

Aldous stared.

"Mac, you're alive," he breathed.

"Alive as ever was, Johnny. Take this."

He swallowed. And then Joanne hovered over him again, and he put up his hands to her face, and her glorious eyes were swimming seas as she kissed him and choked back the sobs in her throat. He buried his fingers in her hair. He held her head close to him, and for many minutes no one spoke, while MacDonald stood and looked down on them. In those minutes everything returned to him. The fight was over. MacDonald had come in time to save him from Quade. But—and now his eyes stared upward through the sheen of Joanne's hair—he was in a cabin! He recognized it. It was MacDonald's old home. When Joanne raised her head he looked about him without speaking. He was in the wide bunk built against the wall. Sunlight was filtering through a white curtain at the window, and in the open door he saw the anxious face of Marie.

He tried to lift himself, and was amazed to find that he could not. Very gently Joanne urged him back on his pillow. Her face was a glory of life and of joy. He obeyed her as he would have obeyed the hand of the Madonna. She saw all his questioning.

"You must be quiet, John," she said, and never had he heard in her voice the sweetness of love that was in it now. "We will tell you everything—Donald and I. But you must be quiet. You were terribly beaten among the rocks. We brought you here at noon, and the sun is setting—and until now you have not opened your eyes. Everything is well. But you must be quiet. You were terribly bruised by the rocks, dear."

It was sweet to lie under the caresses of her hand. He drew her face down to him.

"Joanne, my darling, you understand now—why I wanted to come alone into the North?"

Her lips pressed warm and soft against his.

"I know," she whispered, and he could feel her arms trembling, and her breath coming quickly. Gently she drew away from him. "I am going to make you some broth," she said then.

He watched her as she went out of the cabin, one white hand lifted to her throat.

Old Donald MacDonald seated himself on the edge of the bunk. He looked down at Aldous, chuckling in his beard; and Aldous, with his bruised and swollen face and half-open eyes, grinned like a happy fiend.

"It was a wunerful, wunerful fight, Johnny!" said old Donald.

"It was, Mac. And you came in fine on the home stretch!"

"What d'ye mean—home stretch?" queried Donald leaning over.

"You saved me from Quade."

Donald fairly groaned.

"I didn't, Johnny—I didn't! DeBar killed 'im. It was all over when I come. On'y—Johnny—I had a most cur'ous word with Culver Rann afore he died!"

(Continued September 15th.)

1923 SEPTEMBER 1923
SUN MON TUE WED
1923 OCTOBER 1923
SUN MON TUE WED THU FRI SAT
NOVEMBER 1923
TUE WED THU FRI SAT
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Sept. 21—Holstein, B. S. Gier, Lansing, F. J. Fishbeck, Sales Manager, Howell, Mich.
Sept. 27—Holstein, Grand River Stock Farm, Eaton Rapids, Mich.
Oct. 18—Holsteins, Howell Sales Company of Livingston County. Wm. Griffin, Sec'y. Howell, Mich.

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Herd established by Gov. H. H. Crapo. We have a few choice yearling bulls for sale at farmers prices. You are invited to visit our farm.
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FRANK TANNER RALEIGH, 2 yrs. 4 months. 1st. Prize, Junior Calf, 1921; 1st. Prize, Junior Yearling, 1922; Reserve Jr. Champion, 1922, Mich. State Fair. Dam: Ida Raleigh Karnak. Record, milk 6,784.2; fat 383.39, as 3 year old.

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BULL CALF, 8 months. Dam: Millies Karnak. Record, milk, 6,156 lbs.; fat 393.36.

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All records made on twice a day milking.

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JOHN W SNYDER, St. Johns, R. 4, Mich.

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Hill Crest Farms, Perrington, Mich.
Duroc-Jerseys and Black Top Delaine Sheep. 35 stock rams to pick from. Farm 4 mi. straight south of Middleton, Gratiot Co.
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PEACH HILL FARM offers choice weanling Duroc pigs, either sex. Priced very reasonable. Write us.
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BIG TYPE DUROCS, SPRING PIGS, BOARS and Bred Sows. Write us your wants.
SCHAFFER BROS., R. 4, Oxford, Michigan.

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FOR SALE 400 BREEDING EWES. For Prices Write
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AN AD IN THE MICHIGAN
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WILL SELL IT!

DISPERSION SALE

30 — Head Registered Holstein Cattle — 30
The Entire Herd of
B. S. GIER, - - Lansing, Mich.
FRIDAY, SEPT. 21, 1923, at 2 o'clock, P. M. (fast time)
At the Farm 1 mile West of City Limits on St. Joseph Street.
(Herd under State and Federal Supervision)

4 young bulls, including the Herd Sire who is a Show Bull, is by a son of May Echo Sylvia, and out of the Show Cow, May Walker Skylark, who won Sweepstakes over all Breeds, and All American Honors over all 4-yr.-old Holstein Cows in the United States in 1922. 3 other young bulls from good record dams. 26 females, including several Prize Winners at leading Michigan Fairs in 1922. Cows with records of 28-27-26-24-23 lbs., two 20 lb. 2-yr.-olds and daughters of these cows.

Don't Fail To Come.
For Catalogs, address F. J. FISHBECK, Howell, Michigan.

DAIRY and LIVESTOCK

U. S. BEEF SUPPLY CONSUMED AT HOME

GROWTH of population in the United States to a point at which the domestic market has become large enough to absorb the country's normal beef production is the chief reason why American beef is no longer an important source of supply for Great Britain, says Chas. J. Brand, marketing specialist for the Department of Agriculture, who recently studied the meat trade situation in Europe. Another factor working against an increase in our beef exports, he declares, is the lower cost of beef production in countries like Argentina which are still in the pioneer stage.

Mr. Brand points out that from 1891 to 1921 the human population of the United States increased from 62,948,000 to 107,833,000, while the number of cattle in the country increased only from 51,363,572, to 66,652,559. It is thus obvious that the growth in population has absorbed the increased beef production and the same is true of mutton. Our increased production and exports of beef during the war proved, according to Mr. Brand, that given the stimulous of a profitable market the American livestock grower can and will quickly expand his beef output, but many factors are at present diminishing his incentive to do so.

Among these factors the most important, in Mr. Brand's opinion, is the relatively high cost of beef production in the United States compared with its cost in countries now in the pioneer stage. This fact, he says, has convinced the meat trade of Great Britain that the future will see greater and greater production in Argentina, until the supply from that country overshadows that from any other source. Next in importance as sources of additional supplies are Austrailia and New Zealand.

At the present time the United States is almost exactly self-sufficient in the matter of its beef supply. As the country becomes more industrial, home consumption will be increased. Whether in that case the livestock grower will have any strong motive to engage in competition for the export trade will be determined, says Mr. Brand, by many factors, among which he cites the possibility of more efficient beef production methods coming into use, the younger age at which beef cattle are now slaughtered, and the relation of the dairy industry to cattle raising generally.

As an exporter of pork and pork products, the United States is likely to retain its pre-eminence for many years, Mr. Brand says. He believes, however, that with the rehabilitation of agriculture in Europe, our exports of these commodities, which have been very large in the last few years, will be adjusted to past-war conditions. Average shipments of American pork and pork products to the United Kingdom from 1910 to 1914 were about 450,000,000 pounds. In 1919 the total was 1,369,000,000 pounds, while in the fiscal year ending June 30, 1922, the shipments were 676,000,000 pounds. Some modifications of these figures are to be looked for, Mr. Brand says, but energetic trade development work will greatly minimize reduction.

MICHIGAN'S HIGH COW IN TESTING WORK

MR. E. M. STEWART, Inkster, Michigan, had the high cow in both milk and butterfat production in Michigan Cow Testing Association work. This cow, Detroit Pontiac Pietertje No. 391047, made 20,548 pounds of milk and 663.4 pounds of fat for the cow testing association year in Wayne County C. T. A., according to Mr. J. H. Mathiesen, cow tester. Mr. Mathiesen mentions that this cow was milked four times daily for five months of her lactation period and three times daily for five months. She was dry for two months.

Detroit Pontiac Pietertje consumed during her year's record 12,336 pounds of silage, 714 pounds of beet pulp, 3,704 pounds of alfalfa, 310 pounds of molasses, 834 pounds of oil meal, 1,614 pounds of gluten feed, 477 pounds of corn and cob meal, 1,331 pounds of ground oats, 124 pounds of cotton seed, and 862 pounds of commercial feed.

The total cost of feed was $211.42 and the total value of product was $403.25, leaving a return above the feed cost of $191.83.

In addition to having the high cow in both milk and butterfat production, Mr. Stewart also has the high herd average completed on four purebred Holstein cows. This average is 17,449 pounds of milk and 561.17 pounds of fat.

The second highest herd average went to Mr. H. W. Atwater of the West Allegan C. T. A. Mr. Atwater, with four purebred Jerseys, averaged 10.066 pounds of milk and 531 pounds of butterfat. Mr. Atwater has, for a number of years, been very carefully breeding up a small but high-class herd of Jerseys. The results that he has obtained, indicate the success of good feeding and breeding in obtaining a high-class dairy herd.

Other herds that follow in the summaries for a year's C. T. A. work are Mr. C. S. Stuart of the South VanBuren Cow Testing Association with five purebred Holsteins averaging 12,633 pounds of milk and 464.7 pounds of fat. Mr. Sam Park of the Lapeer C. T. A., with ten grade Guernseys and Jerseys, averaged 82-81 pounds of milk and 462.9 pounds of fat. Mr. A. C. Reek of the same association, with ten purebred Holsteins, averaging 12,311 pounds of milk and 441.7 pounds of fat.—A. C. Baltzler, Extension Spec. in Dairying, Michigan Agricultural College.

NO ENTRIES TO DAIRY EXPOSITION AFTER SEPT. 15

ENTRIES in the cattle classes at the National Dairy Exposition close on Saturday, September 15th. Exhibitors who are planning to show at the Exposition must have their entries in the mail not later than that date. All entries are checked up by the various breed associations and are then cataloged before the opening of the Exposition on October 5th. This makes it imperative that entries be mailed by the closing date.

Exhibitors who have not received the prize list and entry form can secure them by addressing the National Dairy Association at Syracuse.

A total of $30,700 is offered in prizes for cattle at the Exposition. The Show Association offers $5,990 on Holsteins and the Holstein-Friesian Association of America offers $2,750 in special prizes. In the Ayrshire, Brown Swiss, Jersey and Guernsey classifications, the Show Association offers $5,240 for each breed.

Prizes in all grade cow classifications have been increased to a total of $850 for each breed.

Entries in the special classes for calf club calves also close on September 15th. The Association offers $1,100 in prizes and the Holstein-Friesian Association and the American Jersey Cattle Club have each offered $500 in specials for calf club exhibits of their respective breeds.

VETERINARY DEPARTMENT

SHOULD CALL VETERINARIAN

I have ten cows and I bred four of them to a neighbors bull and they seemed to catch all right but all the way from 60 days to four months they come in heat again. I got me a registered bull and bred the same cows over three of them caught and all due next December and have bred the rest of my herd and cannot seem to get them with calf. Some come in heat every 21 days and others go from 42 to 48 days. Our local veterinary says my bull is not any good. I think he is as three of my cows are with calf from him and the man I bought him from has 18 cows all with calf from him.—F. B. McD., Lapeer, Mich.

—We can hardly do more than guess at the cause of sterility in any specific case without making a personal examination of the herd. It is likely that the trouble is due to infection of the reproductive organs. It is within the realm of possibility that the four cows bred to the neighbor's bull acquired some infection from the bull and transmitted it to the bull purchased later. It is a fact certain infections causing sterility may be transmitted from male to female and from female to male through copulation. The only satisfactory way of determining and correcting the cause of sterility is to have a veterinarian who is familiar with the diseases of the reproductive organs to make an examination of the herd.—E. T. Hallman, Asso. Prof. of Animal Path., M. A. C.

HAVE COW POX

Please do tell me what to use for my cows as they seem to have a disease in their teats. They turn black and fester up at the opening and are very sore. One had it at first but now others seem to be coming down with it. I have one cow that has warts so bad that I can hardly milk her and I have been using caster oil about two weeks but it does not seem to take them off.—V. Q., Burt, Mich.

—These cows in all probability are suffering from cow pox. The disease is transmissible from the hands of the milker from one cow to the other. It is a disease that generally yields quite readily to treatment. I would suggest that you wash off the affected part of the udder and teats with a one-half of one per cent lysol solution, dry thoroughly, and then apply zinc oxide ointment night and morning to the affected parts.—John P. Hutton, Assoc. Prof. of Med. and Surg., M. A. C.

TREATING CATS FOR LICE

I am seeking information in regards to my cats. They are covered with small white lice with dark heads. Is there a way to destroy them and not harm the cats? I have tried insect powder but did not get results.—Mrs. E. R., Davison, Mich.

—Cats being very susceptable to the toxic action of any disinfectant, makes it difficult to treat them for lice and other skin diseases. I would suggest that you try the application of sulphur ointment to the affected parts of the cats body. If it be necessary to cover the entire surface of the body, apply the ointment to about one-third of the body the first day, on the third day another third, and so on until the surface is completely covered.—John P. Hutton, Assoc. Prof. of Med. and Surg., M. A. C.

HIGH RECORD MADE BY MICHIGAN JERSEY

A MOST creditable record has just been completed by Sensational Iris 392391, owned by Chas. Kraus, Hart, Michigan. This cow started test at 5 yrs. 2 mos. of age and in one year produced 12,805 lbs. of milk and 714 lbs. of butterfat. Her average test being 5.58 per cent. Iris was sired by Noble Sensational Lad 118536, AJCC Silver Medal bull; and was out of Matie Lavinia 251084.

BULLETIN TELLS OF MANY SWINE DISEASES

THE diseases and ailments which are important factors in reducing the profits of hog raisers, particularly the old enemy, hog cholera, are described and prescribed for in a new Farmers' Bulletin, 1244, Diseases, Ailments, and Abnormal Conditions of Swine, prepared by T. P. White of the United States Department of Agriculture.

Although the ravages of hog cholera have been reduced to 60 percent below the worst years, lack of attention to herds and failure to apply all the precautions available leave it still the greatest menace to the industry. Much of the bulletin is devoted to this disease and to a number of diseases which in the time of cholera outbreak go unnoticed or are diagnosed as cholera. These other diseases include anthrax, epilepsy, gastroenteritis, necrobacillosis, pleurisy, pneumonia, poisoning, swine plague, (hemorrhagic septicemia), tuberculosis, and worms.

Many other diseases and abnormal conditions, including such common troubles as thumps, sore mouth, sunstroke, rickets, paralysis of the hind quarters, and rheumatism, are described and proper treatments are given. There are also chapters on the prevention of disease and on the causes of losses during shipment.

Copies of the bulletin may be had by addressing the Department of Agriculture, Washington, D. C., as long as the supply lasts.

JACKSON COUNTY HOLSTEIN BREEDERS HAVE BIG DAY

(Continued from Page 4)

breeders were closing out their herds but he advised all those present to stick. Mr. Harper made two significant statements in closing; one, that on his farm the only paying things were cows, hens, and sheep, and the other that old men were largely running the farms with few young men taking up agriculture. Both these conditions seemed to him to be ominous for the future. James Wells was next introduced and he described the itinerary of the group of officials present on the Jackson county tour. W. B. Burse, Secretary of the Jackson County Fair Association, was introduced and invited the breeders to begin preparing their exhibits for the coming fair.

National Official a Speaker

The last speaker was C. M. Long of Chicago, manager of field work for the National Holstein Association, who joined the party at Layton's Corners. Mr. Long has just returned from a six weeks' trip through the West, and said that dairy farming is rapidly becoming very popular in that section. He spoke of the great opportunity for Michigan Holstein breeders in the West as the dairymen there must have eastern cattle to start their herds. According to this speaker, Wisconsin breeders have advertised extensively in such states as Idaho and Utah, but Michigan has failed in this line in the past. As means for procuring publicity, Mr. Long recommended a dairy train to tour the western field, the sending of all Holstein news to the Associated Press, the use of pictures of the true-type Holstein bull and cow, in advertising matter. He particularly stressed the importance of the fair exhibit.

Immediately following the program, the Bretherton herd was inspected. There are thirty-five head in this herd, half of which are pure-bred. The next point on the tour was the farm of E. R. Perrine in Rives township. A pure-bred bull, one and one-half years old, attracted special attention. Nine men of the Rives Holstein Association bought this bull at Howell and gave Rives the honor of having the first association bull in the county. There are fifteen pure-bred females in the Perrine herd, giving an average of 385 pounds of butterfat for a lactation period. As a recognition of the work of the Rives Association in promoting Holstein raising, a committee consisting of E. R. Perrine, W. S. Wood, and Ben Smith was appointed to begin immediate selection of a Holstein exhibit for the Jackson county fair. These men are all in the Rives Association.

The party next stopped at the Darling and Behm farm in Tompkins township, where there are twenty - eight pure-bred Holsteins. Here, W. S. Wood was elected an honorary member of the County Holstein Association, although mainly a shorthorn breeder. Mr. Wood is a fair director and has been very prominent among Jackson county breeders.

On the way back to Jackson, the farm of Ben Smith, in Rives Township was visited. Mr. Smith has six pure-bred Holsteins, five of whom are descended from the same bull. His herd averaged 10,247 pounds of milk and 341.6 pounds of butterfat for the last lactation period (about a year) and his cows have surely proved that a small herd with high quality is just as profitable as a large herd of medium or grade rating.

The last stop was made at the Boardman farm in Blackman township, owned by Judge Harry D. Boardman and John W. Boardman. The milk for the Michigan Central dining cars is procured from the herd of fifty-five Holsteins on this farm. After inspecting the Boardman herd, the party broke up.

CROWD your HOGS
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EARLY MARKET

Keep them healthy—
Free from worms—
Their bowels active—
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DR. HESS STOCK TONIC
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It contains *Tonics*—That give a hog a healthy appetite—keeps his digestion good.
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Little chance for disease—every reason for thrift!
Tell your dealer how many hogs you have. He has a package to suit. GUARANTEED.

25-lb. Pail, $2.25 100-lb. Drum, $8.00
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Honest goods—honest price—why pay more?
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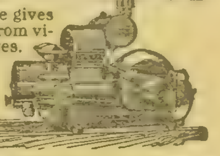

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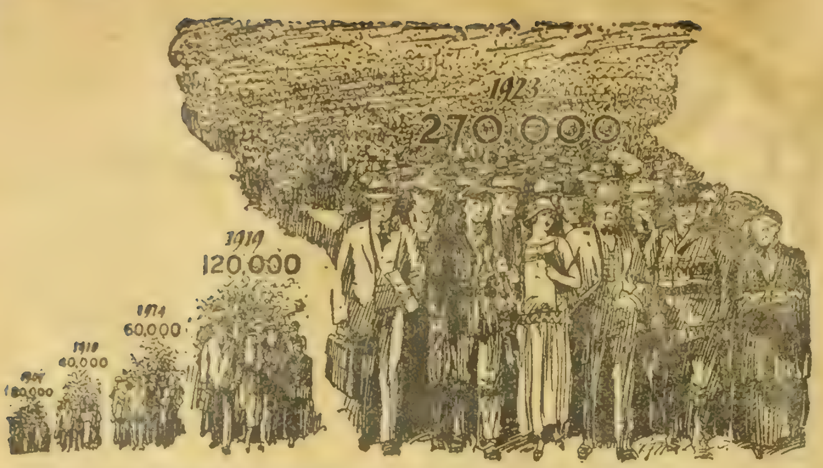

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S. C. White Leghorns and S. C. and R. C. Black Minorcas. Must make room before cold weather. About ready to lay.
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S. C. Buff Leghorn Hens, Pullets and Cockerels. Hens and pullets $2.50 each; cockerels $3.00 to $5.00 each. Show birds a matter of correspondence. LAPHAM FARMS, Pinckney, Mich.

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Buff Rock Cocks, Hens, Ckl's and Pullets, big, rich buff, low combs, rich yellow shanks, from our National winners and "Hogan" tested layers.
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Tompkins Strain $15.00 per hundred. Last hatch August 22nd. Quality breeder of Rhode Island Reds.
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HIGHEST CASH PRICES PAID FOR LIVE Poultry all kinds, Veal, Eggs, and Butter. A square deal always. Write for tags, etc.
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TAKE THE D. & C. WATERWAY trip to Buffalo. Restful, economical, all conveniences.

Poultry for Profit

GOSLINGS NEED GOOD PASTURE

I would like to know if you can tell me what ailed my goslings last spring. They grew and seemed to be all right until they were about ten days old when they began to stand humped up and their wings drooped. Inside of a day or day and a half they died. Their appetite was good until about 24 hours before they died. I fed them grass, bread and milk, boiled eggs and oatmeal and gave them fresh water to drink. I gave castor oil to some of them but it did not save them and greased them for lice but it did no good either. I fed them a small amount of feed four times a day. By the time they were two weeks old they were all dead. Last year I lost the last eighteen that I hatched out. This year I lost three out of seven.—Mrs. A. W., St. Louis, Mich.

—From the symptoms given, I am of the opinion that the goslings were denied the range conditions necessary for growth and development. The intimation that grass was supplied in the ration leads me to conclude that the goslings were confined in bare runs or that little pasture was available. Poultrymen ordinarily consider that the rearing of geese or ducks is quite a simple practice because they are less susceptable to dietary disturbances, diseases, and internal parasites, as compared with chicks.

The essential requirements for rearing goslings are, plenty of shade and good pasture. The feeding method may consist of a moistened mash containing rolled oats, corn meal, bran, middlings, and moistened with either skim milk or water. This should be fed about three times daily until the goslings are nearly feathered. After they are feathered whole or cracked grain can be given. A soft feed should form the basis of the ration during the growing period.

I can understand how goslings would show a lack of ambition and stunted growth if confined in bare runs and yards. Under such conditions it would be almost impossible to induce a normal growth and under such conditions a rather high mortality is almost certain to prevail.—E. C. Foreman, Asso. Prof. of Poultry Husbandry, M. A. C.

DUCKS SUFFERING FROM SUNSTROKE

I wish you could tell me what is the trouble with my young ducks. They will draw their head around under them and fall over backwards and their heads will turn clear around and they can not stand up. When they first are taken they will turn their heads up sideways. They get worse all the time. I keep plenty of clean water for them to drink. I also have a place for them to bathe. I feed them corn meal ground feed and bran and poultry feed. They will eat when I turn their heads right side up and hold it for them. But they can not do it themselves.—B. P., Fenwick, Mich.

—The symptoms which you have described as effecting your ducklings are characteristic of the symptoms induced by sun stroke. Thousands of ducks are lost each year due to sunstroke and these losses seem to occur very suddenly.

As far as possible, the duck range should be located in a well shaded pasture and the drinking water should be given in utensils of sufficient depth to permit the duck to entirely submerge the head. This is their only method of keeping the eyes and nostrils clean, which of course is necessary in the maintenance of health.

The young ducklings should be fed wet mashes only until they are almost completely feathered after which they can be given a small quantity of cracked corn and wheat. The dry mash should consist of 40 per cent corn meal, 20 per cent oat meal, 15 per cent wheat middlings, 15 per cent bran, and 10 per cent meat scrap. This should be fed three or four times daily. Green food, of course, should be available at all times on the range. We would not anticipate any serious mortality from this system of feeding and management.—E. C. Foreman, Professor of Poultry Husbandry, M. A. C.

CHANGING TIMES

By JOHN T. BARTLETT

THE DESIRE FOR SOCIAL APPROVAL

THE instigating, psychological explanation of that great town game you've perhaps heard of—"Keeping up with the Joneses"—is what the psychologists have termed, "The desire for social approval." Human beings instinctively want to have the approval and goodwill of the people around them. The instinct of self-preservation is probably at the root of the desire.

In the caveman days, if the rest of the tribe didn't like a special individual, they severally took a stone hatchet to him.

It is human, accordingly, and it one time in racial history it was exceedingly wise, to want to have the favorable opinion of one's fellows. In standard of living, dress, manners, automobiles, and thousands of things, modern people, in their buying and conduct, are actuated to an extent by an instinctive desire to win social approval.

Right at present—the current trend only goes back a very few years—something big is happening to the desire for social approval in the farming country. This fact always has been true—the closer together you get people, the stronger motivating force becomes the social approval desire. In cities, it often moves people to rediculous lengths. Go into mountain country, many miles from the railroad, and, considering the people, you might feel that a more powerful social approval resire would be a good thing. There are many things, usually, that the lone prospector could gain from stimulating contact with the world.

On the farm, desire for social approval never has been a force which drove families to undue lengths for the sake of "appearances." That has been one aspect of the great thing we call farm independence. I notice this nowadays markedly: Not in an undue manner, farm folks are getting to have greater interest in appearances than they used to have.

The causes, I believe, are partly economic and partly psychological. The automobile is bringing communities into closer contact than they used to be, for one thing; the social approval desire tends to be stimulated somewhat. Then we have the second condition—greater farm buying power. Farmers can indulge desires in many directions closed to them a few decades ago.

WE STOPPED "HERDING SHEEP"

THE pleasant man by the side of the road—I had asked directions to Wildcat Creek—had told me the way three times, through two cross roads and three turns. I looked unconvinced still—from past sad experience with a memory none too good for many corners and turns.

"O, Shucks," said the stranger finally, "I've been herding sheep. Get down with me!"

I got down with him" while in the dirt of the road he sketched a quick road map. "You do this—and this—and this—and this—" he said. Instantly I knew the way.

A lot of us, I believe, waste much time in giving verbal directions, when a diagram in dirt or on paper would convey our idea far better and far quicker.

One of my good friends, Johnny Peebles, of Mule Valley Farm, goes far with the idea. Something goes wrong with the car, or the reaper, or something else about the place. He must send to town. He doesn't know how to describe that needed part in words, but he has learned to do this—draw a picture or two, put on it measurements if necessary. He gets the idea over in jig-time.

WHY SHOULD WE GO OUT OF OUR COUNTRY TO BUY SUGAR

(Continued from Page 4)

The tariff, under the Fordney-McCumber Bill, passed September 22, 922, is $2.20 a hundred pounds gainst all raw sugar except that coming from Cuba, which is allowed reduction of 20 per cent, making he tariff $1.76 per hundred pounds.

The Fordney-McCumber Bill only ncreased the tariff sixteen cents a hundred pounds.

The little 20 per cent reduction effectually prevents any foreign sugar outside of that coming from Cuba being sold in this country. It is a protective tariff for Cuba.

These are the facts we all should know before we can judge of what caused the increase in sugar prices n February of this year.

Let us return now to the conditions governing production of sugar in this country during last year.

At the beginning of 1922 the Fordney-McCumber tariff bill was before the United States Senate, the price of sugar was down to less than ive cents per pound. The price the beet sugar factories could pay the farmers for their beets grown in 1922 depended upon sugar prices.

If the price of sugar remained low he farmer's returns would be greatly affected by the tariff.

Because of the low price and the uncertainty of what the new tariff would offer the beet sugar factories delayed just as long as they could offering a contract to the farmer.

Contract Price Too Low

When this contract did not come out it offered a guarantee of $5.00 a on for beets grown during 1922. This was not enough to meet the competition of other crops for possession of the land consequently a very small crop of beet sugar was grown during 1922. For like reasons and because of his inability to obtain money to finance his plantings due to low price of sugar, the sugar grower of Louisiana also had a small crop.

In the fall and winter of 1922-23 he American grown sugar was quickly sold and eaten; it was practically all gone by the middle of February or the first of March.

All the sugar we now get, until ugar grown on American farms during the summer of 1923 comes on he market in October of this year, will be from Cuba.

It is significant that prices advanced rapidly after the beet sugar was gone on the first excuse that could be offered, which happened to be the report issued by the Department of Commerce. American farmers and American sugar companies did not profit by the high price now prevailing.

They have always contended their ndustry, although at the present ime only producing 20 to 25 per per cent of our needs, kept the price down while they had sugar to sell.

Those who gain from these high prices are those who have the sugar on hand. Right here is where the refining companies come in.

The sugar that has produced fortunes for its owners is all in Cuba. Fifty-three per cent of the total output of sugar grown in Cuba in 1921 was extracted by mills owned by Americans.

Of these eighty-five factories, forty-nine producing 2,331,000 tons were owned outright or by interlocking officers or directors of the sugar refining companies of the Atlantic seaboard.

The other thirty-five factories independently owned only produced 786,000 tons.

There are nine refining companies on the Atlantic seaboard handling almost exclusively Cuban sugar; six of these refining companies own these forty-nine sugar companies operating in Cuba.

Because all sugar destined for American consumption must come through there Atlantic refineries they have a tremendous control over all the sugar coming into this country.

It is easy to see who gained by this sudden increase in the price of sugar.

Through the publicity organizations these refiners maintain, they have attempted to charge the tariff with the cause of this increase.

The Fordney-McCumber Tariff Bill was passed September 2, 1922. There was no increase in the price of sugar at that time, and it surely would have occured if the tariff had anything to do with it.

The increase in the Fordney-McCumber bill was only sixteen cents a hundred pounds.

To maintain that an increase occurring five months after of nearly $3.00 a hundred pounds was caused by this slight increase in the tariff is certainly the heighth of absurdity.

Any child would know better, yet this was swallowed whole by some who wish us to believe that they wrote intelligent (?) editorials on the subject.

All the interviews and arguments placed before the American people having as a basis the elimination or reduction of the tariff means a proposal for the destruction of 1,300,000 tons of American grown sugar. How this would reduce the price of sugar is beyond the comprehension of ordinary sensible people. This might be replaced by the cheaper grown sugar from Cuba, but this does not mean any cheaper sugar to the American consumer as our experience at the present time and during 1920, when all the sugar we are going to get is in their hands, has so clearly demonstrated.

We would by this method place ourselves regarding our supply of sugar in the same position we are in regarding rubber.

Because we suddenly find that England owns all the rubber plantations and can charge us what she pleases for this important product, we have been running around in circles calling upon rich men like Firestone and Ford to help us out, and frantic efforts are being made to find some place under American territory where rubber trees can be grown so we can be free from this intolerable position of being dependent upon another country and having to pay what she dictates. The American people are not ready to place themselves in this position regarding their sugar bill.

Why should we go out of our country to buy one ounce of sugar? The American farmer can grow every particle we need and we would rather trust the beet farmer of the North, and the cane grower of Louisiana and the thirty-four independent beet sugar factories who are not affiliated with or controlled by any trust or refinery for our sugar at reasonable prices than we would the present foreign control who are making fortunes off of us at the present time.

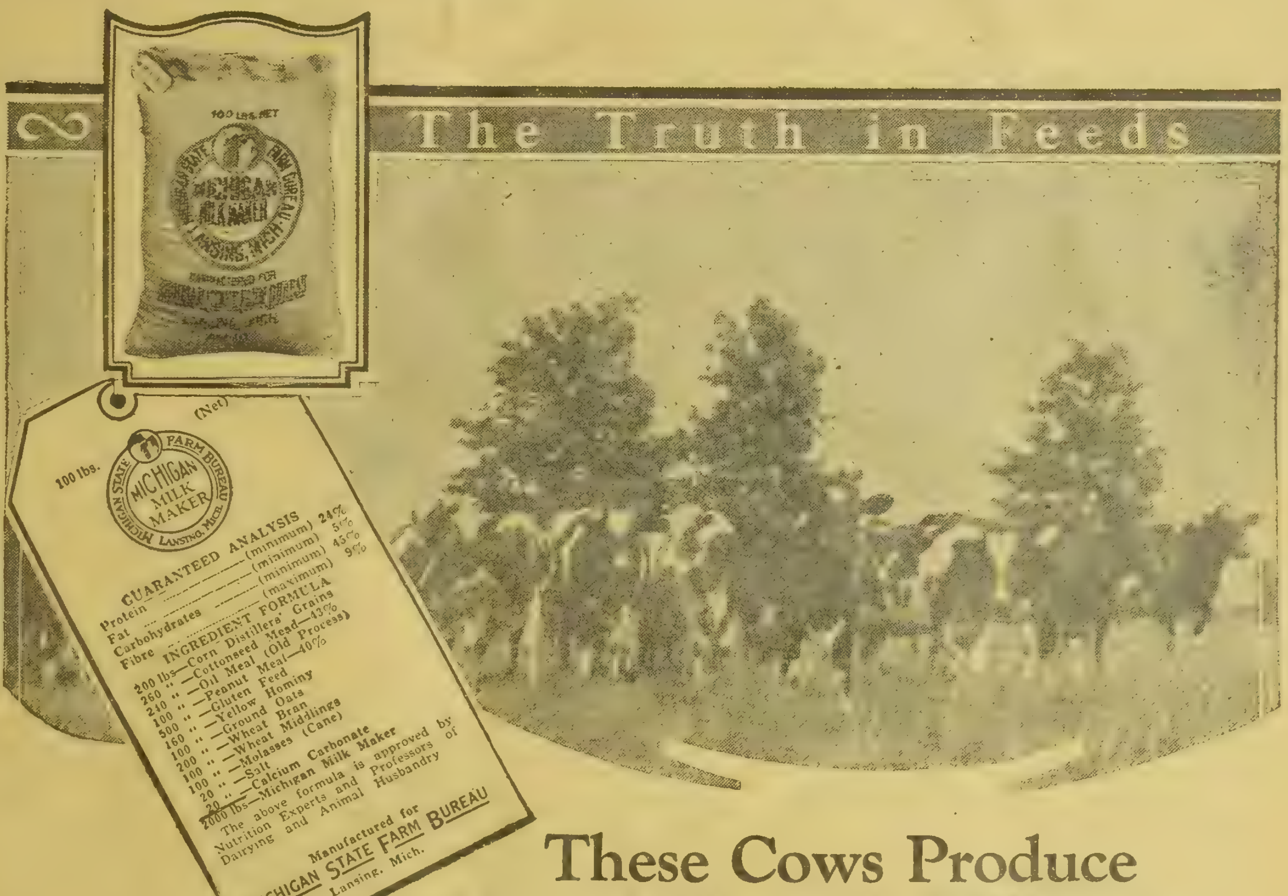
WARNS AGAINST GALVANIZED IRON UTENSILS

DO not allow food or drink to stand for even a short time in a galvanized iron vessel and do not use such utensil in making preserves or jellies or as a container for cider or other fruit juices, is a warning issued by officials of the Bureau of Chemistry, United States Department of Agriculture. Some of the zinc with which the bucket will be dissolved and will not only give the food an unpleasant taste but is very apt to cause sudden and intense illness.

A recent instance of poisoning apparently resulted from the presence of zinc in food. Twelve men at the Guam Naval Station each drank a bottle of root beer and immediately began vomiting. Chemical examination of the contents of three bottles transmitted to the Bureau of Chemistry for analysis disclosed the presence of substantial quantities of a salt of zinc in each bottle. It is the opinion of the officials that even one-half the contents of one of the bottles would have caused vomiting. The sale of bottles from this shipment has, of course, been stopped and an investigation started to definitely locate the source of the contamination with zinc.

Experiments carried on by Federal chemists with quantities of lemonade, orangeade, milk, carbonated water, Washington City tap water and distilled water held over night in galvanized iron buckets proved that zinc contamination occured in each case. The officials, therefore, warn against the use of such utensils as containers for food or drink.

Hank Pohns says: "A lot of folks get inter trouble, jest tryin' to avoid it!"



These Cows Produce More Milk with Milkmaker

THIS splendid herd of pure-bred Holsteins belongs to J. B. Strange of Grand Ledge, one of the many up-to-date Michigan dairymen who are feeding Milkmaker the year 'round. He says:

"I have used a wide variety of dairy feeds in my time. I got started on Milkmaker more or less by accident. I heard about Milkmaker and got some. My cows were on test and I wanted the best. The results speak for themselves. On this feed one of my cows produced 5,554 lbs. of milk in two months and over 93 lbs. of butterfat in 30 days.

"When my cows are in the barn I feed Milkmaker straight; when on grass, half Milkmaker and half corn and oats. Milkmaker is very palatable."

Michigan Milkmaker is a 24% protein, public formula dairy feed made by Michigan State Farm Bureau. It is Michigan's best dairy ration. The ten milk making ingredients are listed on the bag, pound for pound. You know exactly what you are buying.

How to Feed Milkmaker Next Winter At Summer Prices

You can contract your winter feed requirements of Milkmaker through the Farm Bureau, for equal monthly shipments from September through March at summer feed prices. The price is guaranteed.

The Farm Bureau buys Milkmaker ingredients in huge volume at summer low prices, mixes them at one of the largest and best equipped mills in the country and delivers Milkmaker to you every month. You pay as it is delivered. This plan enables you to buy your winter feed at the lowest prices; it insures fresh feed.

See your local co-operative association for your Milkmaker requirements. If you have no co-op., ask us how to co-operate with your neighbors in buying carlots of Milkmaker for car-door delivery. Write for our booklet on Milkmaker. The time is short. Later Milkmaker must be bought at prevailing market prices. Order now.

The Public Formula Feed

MICHIGAN STATE FARM BUREAU
Lansing, Michigan

FEED MILKMAKER NEXT WINTER AT SUMMER PRICES

MARKET FLASHES

MARKET SUMMARY

Wheat active. Corn and oats steady. Rye and beans firm. Butter and eggs in demand. Potatoes scarce. Hay firm and supply small. Good demand for poultry. Market for dressed calves firm. Cattle in demand. Hogs and sheep higher.

(Note: The above summarized information was received **AFTER** the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press.—Editor.)

FOOTE'S MARKET LETTER

BY W. W. FOOTE

PRACTICALLY all businesses of America are on an active money making basis at present and a gleam of prosperity is apparent everywhere. Agriculture, the biggest and fundamental industry of the country, has been reported to be failing at all times and the farmer has been hoodwinked into the idea that he was down and out. It is true that he is not getting a just proportion of whât he produces but he is far from being broke. Most farm products are at a profitable level at present and further improvement is undoubtedly going to develop in argicultural markets before the year is ended.

If gloomy stories about the down trodden farmer are true, how is it then that he is able to keep on producing year after year on a losing market? There are apparently thousands of prosperous farmers throughout the corn belt and other agricultural states of the union who are totally oblivious of the fact that they have failed in business. It is true that certain agricultural commodities have recently lost money and specialization has been a risky practice. But diversified farming has generally yielded good profits to the farmer.

Increased business in the mail order houses and larger output of automobiles and tractors, a large percentage of which business represents the buying power of the American farmer; savings bank deposits, which show a tremendous increase; improvements in schools, roads and rural communities in general all go to show that fundamentally the business of the American farmer is on a healthy basis and there is little fear of the purchasing power of the agricultural community in general being seriously impaired.

The great majority of our people are employed and are making good money. However, there is a general tendency to use a streak of economy in buying, this being the result of the lessons learned during the boom in 1920. Most businesses are carried on with a bit of cautiousness which only goes to put the country on a sounder footing. According to reports from the Department of Labor recently, the average weekly wage today is $27.22 or 121 percent above wages before the war and only $2.72 less than wages during the peak in 1920.

At the peak of 1920 our dollar was worth but 40.5 cents but today it has the buying power of more than fifty per cent in excess over the 1920 dollar and at the same time wages are practically as high as they ever were. Commodity prices are generelly below what they were three years ago and indications point toward further reduction all the time. A settlement in European affairs would certainly be a good tonic to all industries in America and outlet for the surplus manufactured goods and raw materials would be wider. Conditions abroad are very serious at present, Germany being in complete economic disruption and both England and France feeling the depression keenly.

The Wheat Outlook

The wheat outlook has been of a disturbing nature to the wheat farmer of the country during the last few weeks. Prices sank to the lowest levels since before the war. This decline was the result of an exaggerated estimate of the 1923 crop. Later investigations however, made the exaggeration obvious in the fact recent figures show that the whole of North America has approximately 89,000,000 bushels less wheat than in 1922. This report as well as fear of early frosts in north west Canada, has boosted wheat prices materially since the low spot a few weeks ago and more business has taken place in the wheat markets lately than for several months. Frost was reported in the Canadian north west this week but in places where wheat is so far advanced that it is out of danger. The fact that frost occurred, however, had a bullish effect on the market owing to the possibility that localities beyond the danger line would be touched. The market undoubtedly will show further strength although sharp upturns are not expected. The winter wheat crop is practically all harvested and prices are above the $1.00 mark with Chicago September wheat at $1.02½ and No. 1 Hard up to $1.08½. Much is talked about creating a wider foreign outlet for the cereal. Exports in 1922 were four times as large as they were prior to the war and while foreign credit and money is not able to take as much as they need this year, exports are not expected to fall off materially.

The infamous cotton pest of the south, namely bool-wevil, has cut deep into this year's production. The bool-vevil costs cotton planters of Dixie from half a million to a billion dollars annually. Dry weather in Texas also has decreased the yield, However, these unfavorable influences in the cotton industry have created a better market for the product and prices are generally on a money making level. There has been a strong undertone in the corn market for a good many months and recently sensational advances have carried prices to new high levels at Chicago since 1920. Contract grades of corn have reached 90c at least with No. 2 yellow making 92c this week. Outside points also report higher markets on corn. Oats are in a strong position and most gains are in fairly healthy shape.

Hogs and Cattle at New High Level

Reflecting general industrial improvement, consumptive demand for meats has been broad during the past week or two and prices for live stock have been on the upgrade for several weeks. Hogs and cattle are at new high levels for the year to date and predictions are general that they have farther to go before the year's peak will have been reached. While hogs have been losing money for the farmer during past months, they are making a little now and cattle have been profitable to feeders throughout the year. At present from $3.00 to $6.00 margins over initial costs are general for feeders to realize when they see their steers going to the scales. Countrymen are clamoring for thin lambs to go on the pastures this fall and at present are paying more for lambs of feeding flesh and killers are willing to pay for fat lambs. A buoyant undertone prevails generally in the live stock trade.

On August 6th, the $12.00 steer made his appearance at Chicago and this week they sold at $13.00 showing a full $1.00 gain in less than three weeks. Top cattle are within 50c of the practical limit last October and at present are selling $2.00 above tops a year ago. Only a few finished heavy steers are eligible to these high figures they show what killers are willing to pay for strictly choice cattle. There is a general report of scarcity of finished beeves throughout the corn belt and the premium they command over short-fed cattle will undoubtedly stimulate feeders to ripen their stock more thoroughly before marketing them. Predictions of traders at the Chicago Yards are that $14.00 steers will be here before many more weeks and some are even willing to risk money on $15.00 cattle before the year is over. The largest percentage of cattle coming consist of young stock of medium good grades. Only choice and prime steers are selling above the $12.00 mark at present with a spread of $9.25 to $12.50 representing the great bulk of offerings. Strictly common, ill-bred steers go for slaughter down to $6.50 with those on the western order under $6.00. Demand for feeding cattle has been in evidence, but at Chicago, the quality is not good enough to meet requirements and business has been handicapped. However, as soon as the run of western range cattle starts coming in large numbers, there will be more offerings and the trade is expected to improve materially. Most business done lately ranged from $6.00 to $7.25 with a few loads of well-bred, meaty steers, suitable for a short turn on corn at $8.00 and above.

Butcher Stock Market Strong

Butcher stock and bulls met stronger markets during the past week and gains of 25c were general. Most cows and heifers cleared from $4.35 to $6.85 although some prime kosher cows were eligible to $9.00 and above and strictly baby beef heifers at $10.00 to $10.50. One shipment of fancy yearling heifers sold at $11.00. Bologna bulls sold largely at $4.50 to $4.75 with the best heavies up to $5.00. Veal calves advanced $1.00 during the last six days and closed the week on a $12.00 to $13.00 basis with choice handyweight vealers at $13.25 and above. Cows of canner and cutter grade found ready outlet at $2.75 to $3.25.

Advances in hog values lifted choice 190 lb. butchers to $9.30 late in the week at Chicago and to $10.50 at Buffalo. Some traders expect $10.00 hogs before many weeks at Chicago. A year ago top hogs were selling at $9.70. The average price of hogs during the week ended August 25, was $8.10 the highest since last April. The market has gained $1.45 since the low time six weeks ago. A range of from $6.00 to $9.30 represented hogs late this week, common heavy packing sows bringing the former figure with choice lights the latter. Stronger markets on hogs and grain have been factors in advancing the lard market and recently August lard was quoted at $11.10.

Feeder buyers took lambs away from the killers this week paying from 15c to 25c more for lambs suitable to take out to the pastures and feed lots. Extreme top during the period was $14.15 against a top of $14.00 to killers. Countrymen certainly have faith in the future lamb market and predictions for the fall market are favorable, generally. Most lambs went for slaughter at $13.25 to $13.85 this week while a spread of $13.50 to $14.00 represented the feeder business. Sheep were not numerous and sold generally from $6 to $7 all week. Wool markets have been undergoing a seasonal mid-summer dullness but expectation for the fall market reflect optomism. Hide and leather markets have been dull recently but are considerable better than they were last spring.

WHEAT

After a period of weakness and inactivity the wheat market opened last week with a steady tone prevailing and higher prices seemed to be but a short distance away. This proved true and from a slow start the upward trend to prices increased in speed daily. Late last week there was considerable news in the market of a bullish nature. There was a large reduction in the estimate of the Canadian crop as well as in that of Kansas. Frost in Canada gave traders a scare and reports showed that hogs in Kansas were being fed wheat instead of corn. All this made a reduction of over 70 million bushels in the wheat available for ordinary uses. There is a growing belief that there will not be as much good wheat produced in this country as the people expect because much of the grain now coming to market is below the best milling grade. Good wheat is reported to be scarce, and this is said to apply to Canada as well as United States. Wheat is not moving freely in this state. Millers in some cases have been obliged to go outside the state to get enough grain to keep running steady. Foreign markets are becoming a little more active, and flour in England is reported to be in brisk demand. Some wheat is reaching France from Russia but nothing definitely is known about the export possibilities of Russia. Some say that we can expect to see heavy exports from that country while others say that it has little to spare. Foreigners are doing little bidding in the American market as prices have been too high but recent advances in Liverpool brings prices nearing to a working basis.

Prices

Detroit—Cash No. 1 red, $1.06; No. 2, $1.05; No. 3, $1.02; No. 2 white, $1.06; No. 2 mixed, $1.05.

Chicago—Cash No. 2 red, $1.04¾ @1.06; No. 3, $1.02@1.05.

Prices one year ago—Detroit, Cash No 2 red, $1.08; No. 2 white and No. 2 mixed, $1.07.

CORN

Corn has moved in sympathy with wheat and prices are higher. The Detroit market closed last Saturday 1½c higher than the week previous and the tone was steady. Domestic trade was good and country offerings to arrive continued light.

Prices

Detroit—Cash No. 2 yellow, 95c; No. 3, 94c.

Chicago—Cash No. 2 yellow, 89½ @90¾c; No. 3, 90c.

Prices one year ago—Detroit, Cash No. 2 yellow, 70c; No. 3, 69c.

OATS

Oats followed the trend of other grains but with reluctance. Country offerings were moderate. A bit of bullish news in the market is the forecast of probable rain over the belt which would interfere with threshing operations not yet completed as well as delay the movement to market. Cash oats were in good demand at a steady price.

Prices

Detroit—Cash No. 2 white, 43c; No. 3, 41c; No. 4, 39c.

Chicago—Cash No. 2 white, 40@41½c; No. 3, 38¾ @41.

Prices one year ago—Detroit, Cash No. 2 white, 36c; No. 3, 34c; No. 4, 31c.

RYE

Rye has been enjoying a good demand the past ten days and prices have advanced some. The Detroit market is 3½c higher.

Prices

Detroit—Cash No. 2, 75c.

Chicago—Cash No. 2, 69@70c.

BEANS

The bears were not so active in the Detroit bean market the last two weeks and as a result prices advanced. Week before last advances totaled 30 cents and last week the gain amounted to 10 cents, making the price 40 cents above that quoted in our last issue. The supply is said to be moderate and dealers report an increase in the buying.

Prices

Detroit—C. H. P., $5.40 per cwt.

Chicago—C. H. P., $5.40 per cwt.

Prices one year ago—Detroit, C. H. P., 6.50 per cwt.

POTATOES

The potato market in general seems to be stronger and higher prices are noted at several points. The supply is scarce and market firm in tone.

Prices

Detroit—Cobblers, $1.25 @ 1.31 per cwt.

Chicago—Kansas and Early Ohios No. 1, $2.20 per cwt.

Prices one year ago—Detroit, Michigan, $1.80 per cwt.

HAY

Markets show more strength. Country loadings are very small and the movement of new hay has been very light as yet, due to a great extent to the scarcity of labor. Stocks on hand are becoming depleted, the poorer sorts moving readily in the absence of better varieties and a good clearence is reported in most markets. Choice hay of all kinds commands a premium over quoted values. This strong condition will probably hold into September, when a larger movement of hay can be expected.

Prices

Detroit—No. 1 timothy, $19.50@20; standard, $18.50@19; light mixed, $18.50@19; No. 2 timothy, $17@18; No. 1 clover mixed, $17@18; No. 1 clover, $15@16.

Chicago—No. 1 timothy, $28@29; No. 2 timothy, $25@27; light timothy & clover mixed, $24@27; No. 1 clover, $22@24; No. 2, $18@19.

CROP REPORTS

CALHOUN—Farmers are threshing, grain is very good, not so much going in this fall. Soil is in good shape but weather very cold. Potatoes are not looking very good, can get no price for wheat or beans—C. E. Beardsley.

ST. CLAIR—Cold, heavy rains broke long drouth here; but they came too late to do the late planted corn much good. There was danger of frost on the nights of August 21 and 22, and it is reported that freezing occurred on lower grounds. Threshing is progressing rapidly. Very little grain remains in the fields and the farmers are shocking or hauling their oats into the barn. Oats are a very poor crop, the yield being between 20 and 30 bushels per acre. Beans were damaged by drouth and a short crop is . pected. St. Clair H. S., Agricultural Dept.

PRESQUE ISLE—Farmers are very near through harvesting, grain very poor, not even half crop. Potatoes looked fair so far but too dry to make any headway. Corn is at a standstill. New Clover that was seeded in spring is dried up nothing to be seen of it. Pastures poor. Everybody around here is so disgusted feel like quitting.—Fred Fulyetske

OGEMAW—On 21st had good rain. Harvesting done and threshing going on. Corn nearly fit to cut. All crops has been good except potatoes but rains will help them now.—Jas. Anderson.

BRANCH—There was little rain lately, very hard plowing for wheat. Corn well eared but is not out of way of frost yet and is so cold nights. Some are shipping stock. A lot of traffic, road just lousy day and night.—Will Cook.

GENESEE—Farmers are plowing and threshing oats and barley. Some have started harvesting beans and are filling their silos. Weather has been quite cold during the past week but no damage has been done by frosts yet. There is a very large acreage of beans planted this year but the average yield will not be very high.—Clarence Schwansbeck.

MONROE—Weather dry, no plowing for wheat done. Harvest about done except some oats out yet. Yields of grain fair, quality good, if weather is right a larger amount of alfalfa seed will be harvested. Corn is suffering some from drought, but it looks like rain was coming soon. Hay buyers are offering the same old prices of hay, some moving at around $12.00 baled.—Geo. L. Sype.

SHIAWASSEE—The drought of the past two months did seem very injurious to crops as grains were of good yield and of good quality. Wheat on the average gave 25 bushels per acre. Oats 50 bushels. The rains of the past weeks gave new life to corn and potatoes. Threshing is nearly all finished, farmers seem to be well satisfied with the yield but not with the prices.—D. H. Morris

PRITCHARD'S
WEATHER
FORECAST
INTERPRETED BY THE STARS

Week of September 2

DURING the early part of this week in Michigan the weather will be generally fair and sunshiny with clear, starlight nights. About Tuesday a change in the storm conditions will start the temperatures upward. By the middle part of the week residents of this state may expect the usual late summer type of weather; that is, light showers and probably thunder and lightening.

These conditions will last but a couple of days. About Thursday the temperature will begin a rapid decent and continue on a downward trend to the end of the week at which time quite unseasonably cool weather will settle into most parts of the state.

Light to heavy frosts may be expected in numerous counties throughout the northern part of the state near the close of this week.

Week of September 9

High winds and locally heavy rains will open up this week followed about Monday with an appreciable drop in temperature. This condition will not last long, however, and each day will see it a little warmer the day before.

For the balance of the week we see very little general rainfall although showers may be heavy in Michigan about 12th and 13th. Several days of cool, early fall weather—bright, sunny days and starlight nights—will follow after the unsettled condition of middle part of week.

September Warm and Wet

For the coming three or four weeks we believe Michigan weather will average warmer than normal with plenty of moisture. On the whole, however, we are expecting a moderately dry fall.

POTATO EXCHANGE ACTIVE ON STATE ISSUES

COOPERATIVE marketing aims to substitute the orderly selling of farm products for the wasteful practice of dumping these products on the market shortly after the harvest or selling them without knowledge of market conditions, grades desired and other matters, Walton Peteet told 300 delegates of 130 Potato Marketing Ass'ns., gathered at the fifth annual meeting of the Michigan Potato Growers Exchange, held at Cadillac August 15.

The Exchange reported surplus of $50,000 and voted to increase that to $100,000 during the next few years by deducting a small share from the patronage dividends it pays to its members.

Resolutions adopted petitioned the state to adopt U. S. standard grades from potatoes and to furnish shippers with loading point inspection so that potatoes are properly graded and certified at the shipping point instead of depending upon inspection at the point of delivery.

Strong For Gas Tax

A gasoline tax was endorsed for road financing purposes, the state administrative board was censured for apparently seeking to usurp the functions of the State Board of Agriculture in the administration of the Michigan Agricultural College. The Board of Agriculture was commended for the way it has discharged its duties to Michigan farmers. Railroads were called upon to conform with the law and furnish sufficient cars for coop movement and meet evident needs as determined by the experince of the seasons past.

President Henry Curtis of Cadillac, was unanimously elected director to succeed himself. J. T. Bussey of Provement, succeeds A. B. Large as director and Herbert F. Baker of Vadock, was defeated by J. D. Robinson of Levering.

MICHIGAN TAX RATE FOR 1923 TO BE CUT 75 CENTS

(Continued from Page 3)

showed an assessed value of about 61 per cent of its actual value, while rural property showed 85 per cent of that value. Later, in reply to Mr. Nagel of Detroit, he cited a number of tracts of farm land in Kent county showing by their sale prices they were either purchased recently or offered for sale at less than the assessed valuation. Nagel claimed that only in Detroit could property be bought at less than its assessed valuation.

GET YOUR COAL FREE
Special offer to Michigan Business Farmer Readers—A large, successful, 16 year old coal company, The Peoples Coal Co., 1120 W. 35th st., Dept. K, Chicago, Ill., shipping direct from mine to user, is offering this unusual opportunity to one coal user in every neighborhood who has a few hours spare time. This is its method of quickly introducing the finest grade, freshly mined, free-burning coal, which is being sold direct to user, at remarkably low prices. Man of good standing in his community can get his coal free. Write this firm today, and ask them to explain this offer.—(Adv.)

Cow hides and calf skins are converted into shoe leather by a process called tanning. This process preserves the natural oil and toughens the hide. The wear in your shoes depends upon it.
Good Tanning means Long Wear
Easier than choosing sides—
to choose the best in school shoe values
SCHOOL shoes used to be a problem for mother. Not any more. She has learned to get the utmost in value by demanding E-J's.
Endicott-Johnson, the World's Largest Tanners and Shoemakers, have specialized on children's shoes. In producing them every bit of their skill and knowledge in tanning, shoemaking and reducing manufacturing costs has been employed. Every means that will keep down prices to you without sacrificing quality has been used. And the result—shoes your boy can wear and wear; prices that mean a big saving on family shoe bills.
School days are here again. It's high time to think about shoes. Be sure to see the new E-J's for boys and girls.
The man who has no worries and knows matters at home are all right does the best work. E-J workers have everything to make them happy and contented.
Popular Priced—Dealers Everywhere
ENDICOTT-JOHNSON SHOES
"Better Shoes for Less Money"

Write for free booklets on Farm Sanitation
They contain practical suggestions for the prevention of diseases common to livestock and poultry and describe in detail the many uses of
Kreso Dip No. 1
(STANDARDIZED)
Parasiticide and Disinfectant
For all Livestock and Poultry
FREE BOOKLETS ON FARM SANITATION:
No. 151—FARM SANITATION. Describes and tells how to prevent diseases common to livestock.
No. 157—DOG BOOKLET. Tells how to rid the dog of fleas and to help prevent disease.
No. 160—HOG BOOKLET. Covers the common hog diseases.
No. 185—HOG WALLOWS. Gives complete directions for the construction of a concrete hog wallow.
No. 163—POULTRY. How to get rid of lice and mites, also to prevent disease.
Kreso Dip No. 1 is Sold in Original Packages at all Drug Stores.
ANIMAL INDUSTRY DEPARTMENT OF
Parke, Davis & Co.
DETROIT, MICHIGAN

Detroit Beef Company
offers its services to the *Farmers of Michigan* as a high class, reliable commission house for the sale of *Dressed Calves* and live poultry. Write us for information how to dress and ship calves to market. $250,000 capital and surplus. 34 years in business in the same place and same management.
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Now, a more dependable, durable, powerful engine Direct from Factory at Low Price. 2½, 3½, 5 and 7 horse-power sizes also at a Big Saving.
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EASIEST ENGINE TO START.
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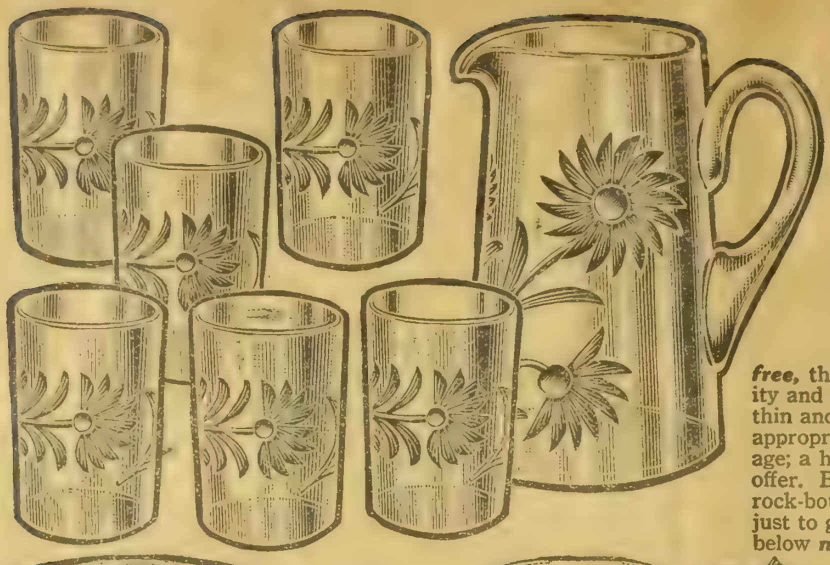
REGISTERED MILKING SHORTHORN CATTLE, Shropshire and Delaine sheep. Stock and prices right. Write wants. Also car load feeding cattle. CLOVER CREST RANCH, Tawas City, R3, Mich.

CHESTER WHITES FOR SALE—SPRING Boars of right type with quality. Shipped on approval. WILBER JONES, Reese, Michigan.

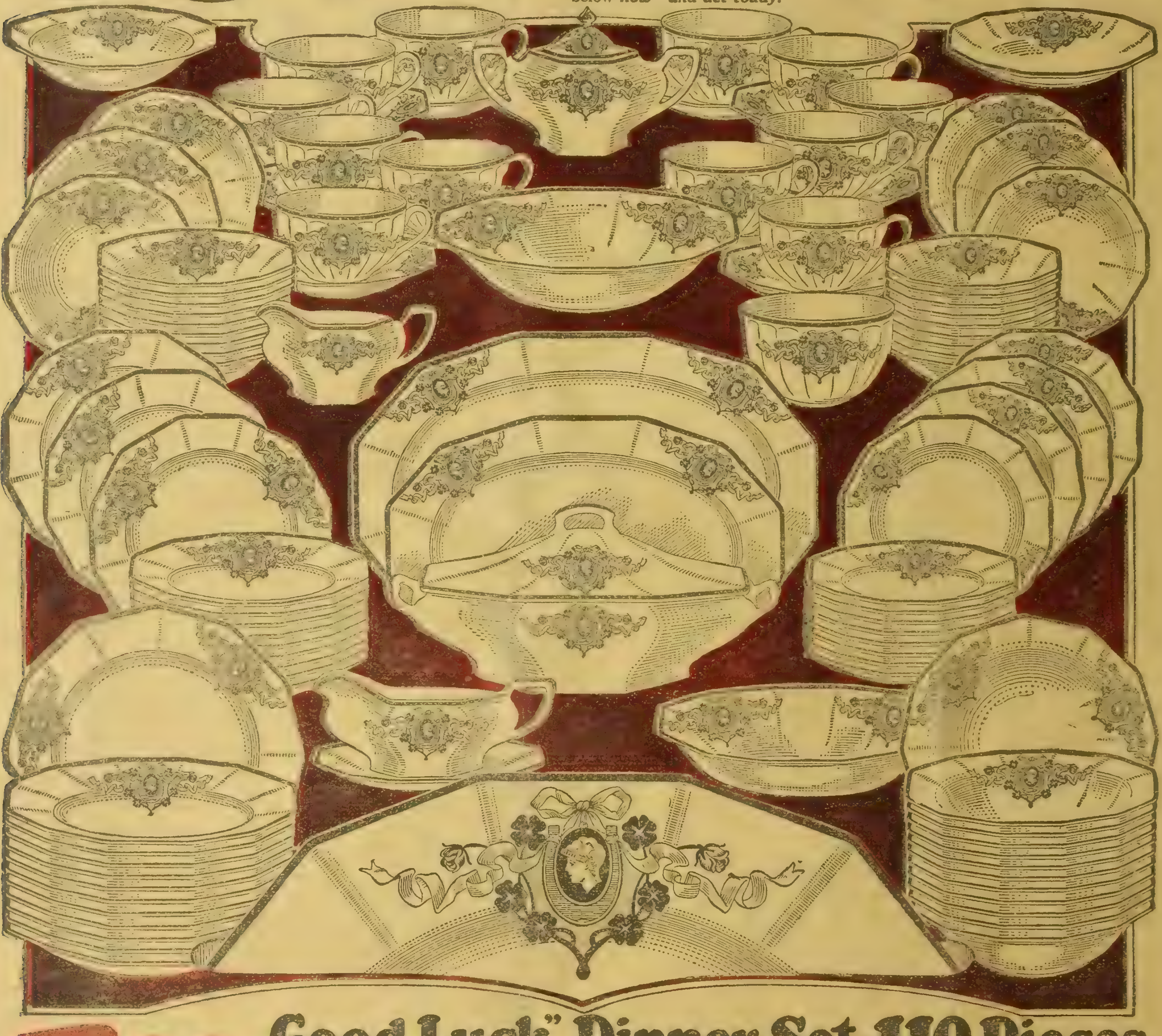
THE MICHIGAN BUSINESS FARMER
"The Farm Paper of Service"
Tell Your Friends About It



FREE!

Genuine Cut Glass 7-Piece Set

As an **extra special offer** to those who *hurry* their order for the handsome 110-Piece Good Luck Dinner Set which we are offering below on such an amazing, slashed price offer, we shall include, *absolutely free,* this entire 7-piece set of GENUINE CUT GLASS: Pitcher of 2 qt. capacity and 6 tumblers of 9 oz. capacity. Each piece is pure, sparkingly clear, thin and dainty; **hand cut decorations** consisting of large floral design with appropriate foliage. A useful set for water, lemonade or other home beverage; a handsome display among your other glassware. Given ***FREE*** on this offer. But remember, this offer is entirely special. Our prices are figured at rock-bottom. A limited number of these Genuine Cut Glass Sets given free just to get new customers. Get yours while this offer lasts. Read our offer below ***now—and act today.***



"Good Luck" Dinner Set-110 Pieces

Gold Decorated Colonial Design

Madam, here's a dinner set worthy to grace the table of the most refined homes—on a simply amazing smashed price, easy payment offer. Yes, only $1.00 brings this 110-piece set to your home on trial. Now don't judge these dishes by that amazingly low price. They have that beautiful everlasting snow-white glaze that you see only in the highest grade chinaware; and that beautiful new "Good Luck" pattern with a design composed of the well known emblems which, since olden times, many have believed bring good fortune to all who possess them; and that rich, artistic Colonial design with the gold decorated edges and many-sided shape which is everywhere the choice of people with taste. *This* is your opportunity to get, on a bargain offer, a dish set that will give you wonderful everyday service and that you will be proud of. **Special Now — FREE —** *7-Piece Set of Genuine Cut Glass with hand cut decorations, if you send at once.*

$1.00 Down

Complete Service for 12 People:

This splendid set consists of:

- 12 dinner plates, 9 inches
- 12 breakfast plates, 7 1-4 in.
- 12 coupe soups, 7 1-2 in.
- 12 fruit saucers, 5 1-4 in.
- 12 oatmeal dishes, 6 1-4 in.
- 1 oval open vegetable dish, 9 1-2 inches
- 1 round vegetable dish, 9 1-2 inches
- 1 sugar bowl and cover (2 pieces)
- 1 butter dish, 7 inches
- 12 cups
- 12 saucers
- 12 bread and butter plates, 6 1-4 in.
- 1 platter, 11 1-2 in.
- 1 platter, 13 1-2 in.
- 1 covered vegetable dish (2 pieces)
- 1 gravy boat
- 1 gravy boat stand
- 1 bowl, 1 pint
- 1 cream pitcher
- 1 pickle dish

Beautiful new "Good Luck" pattern showing the Goddess of Good Luck framed in a lucky horseshoe pendant, hanging from a blue ribbon bow and surrounded by a wish-bone and six green four-leaf clovers, all emblems of Good Luck—all tied together with lavender roses by a pretty ribbon scroll. Colonial design with gold decorated edges and many-sided shape; each piece fired in the glaze and guaranteed not to check or craze. That splendid English finish is applied to the clay before firing and gives that everlasting snow-white glaze. With ordinary care will last a lifetime. Weight packed about 100 lbs.

Order by No. G7603A. Send $1 With order. $2.70 monthly. Price of 110 pieces, $29.90.

30 Days Trial! — $2.70 a Month!

The coupon with only $1.00 brings the 110 piece set of "Good Luck" dishes to your home on 30 days trial. Use them, examine them, compare our price with equal value ***anywhere*** else. After 30 days, decide: If you don't agree that these are simply beautiful dishes and amazing quality at the price send them back and we'll refund your $1.00 cheerfully plus any transportation charges you paid. But if you decide to keep them, start paying only $2.70 a month until you have paid—what do you think? —***only $29.90*** for a 110-piece set of dishes of ***such*** superb quality! You risk not a cent on this trial offer. What family isn't willing to lay aside a few cents a day for something that is needed in the home? We trust honest people anywhere in the U. S. No discount for cash; nothing extra for credit; ***no C. O. D.***

Cut Price—Send NOW!

Free Bargain Catalog

Shows thousands of bargains in home furnishings: furniture, jewelry, carpets, rugs, curtains, silverware, phonographs, stoves, dishes, aluminum ware, porch and lawn furniture, etc. All sold on easy terms. Catalog sent free, with or without order. See coupon.

We have only a limited number of these sets for this bargain offer—so act quick while they last. If you are going to need dishes any time within the next six months, *don't let this opportunity pass now.* Remember, the 7-piece set of Genuine Cut Glass FREE if you hurry your order. Send the coupon now

Straus & Schram, Dept. 4696 Chicago, Ill.

Straus & Schram, Dept. 4696 Chicago, Ill.

Enclosed find $1.00. Ship special advertised 110-Piece "Good Luck" Pattern Dinner Set No. G7603A, with 7-Piece Genuine Cut Glass Set, Free. I am to have 30 days free trial. If I keep the set I will pay $2.70 monthly, $29.90 in all. If not satisfied, I am to return the dinner set and cut glass set within 30 days and you are to refund my money and any express or freight charges I paid.

Name ______________________

Street, R.F.D. or Box No. ______________________

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If you want ONLY our free catalog of home furnishings mark X here: ☐

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SEP 15 1923

The Michigan BUSINESS FARMER

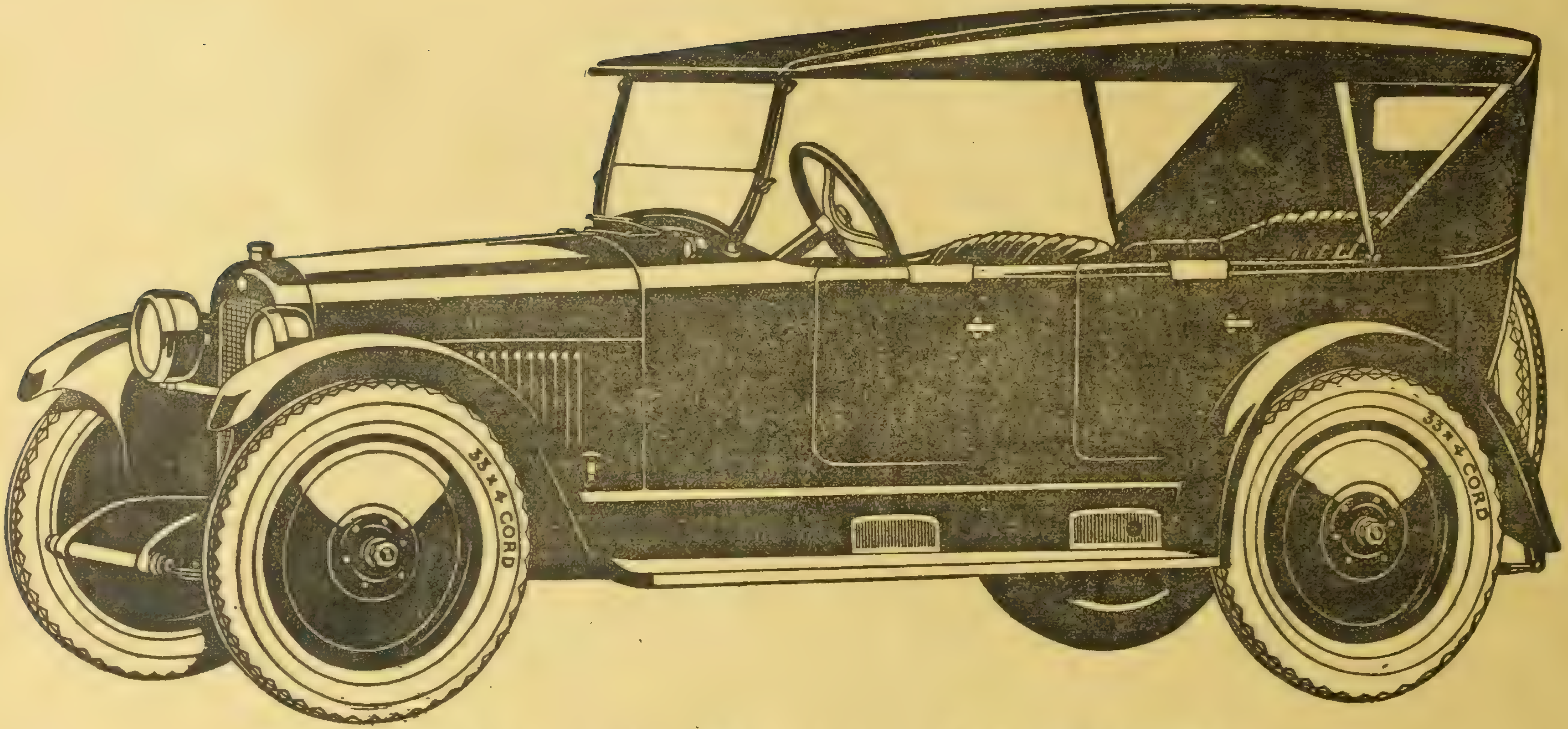
An Independent Farm Magazine Owned and Edited in Michigan

VOL. XI, No. 2 SATURDAY, SEPTEMBER 15, 1923 TERMS: TWO YEARS $1 60c PER YEAR—5 YRS. $2

When Michigan Dons the Royal Purple!

In this issue: A page of pictures showing Michigan convicts building roads and an article, "Prison Labor May Solve the Good Roads Riddle"—"Shall We Hand Pick Our Beans on the Farm?"—"M. A. C. Attacks Helme's Stand on Tuberculin Test of Dairy Cattle"—and many other interesting articles.

NASH



PRESENTS

The New Four-Cylinder Touring Car

In the development of this new Four touring car Nash focused engineering effort directly upon those elements of performance of most vital importance to the farmer.

So you find in this car a structural ruggedness and solidity well calculated to accept the sternest kind of employment without faltering or weakening.

And so aptly and scientifically is the car sprung and balanced; so ably has the motor and carburetor been refined; that upkeep figures kept from week to week will show clearly that Nash Four economy in gas and oil is a very considerable saving.

The braking system has been given even greater sureness, power, and efficiency by reason of a special Nash application of time-tried and positively proved braking principles.

In addition, Nash has included in the extensive equipment a number of new and practical features that serve to give the car even broader value as an investment.

The Nash Motors Company, Kenosha, Wis.

"Hew to the line, let the chips fall where they may!"

SATURDAY
September 15th,
1923

VOL. XI, NO. 2

Being absolutely independent our columns are open for the discussion of any subject pertaining to the farming business.

The Michigan
BUSINESS FARMER

"The Only Farm Magazine Owned and Edited in Michigan"

Published Bi-Weekly
Mt. Clemens, Mich.

TWO YEARS $1

Entered as second-class matter, August 22, 1917, at the post-office at Mt. Clemens, Mich., under act of March 3rd, 1879.

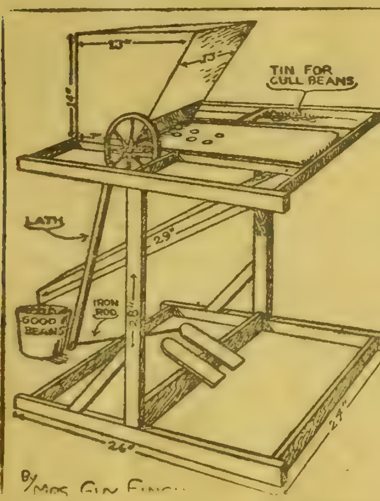
Shall We Hand Pick Our Beans On the Farm?

Readers Offer Plans for Making Home Bean-Picking Machines and Reasons For and Against Saving of Present High Cost at Elevator. More Plans and Letters from Readers Wanted

MOST women and girls on the farm would like to find some sort of work to make pin money. The manufacturers of home knitting outfits and other so-called home working machinery are flooded with business and yet we know that few of those who buy expensive outfits, costing in the neighborhood of $50 to $75, ever make even a fraction of this first cost from the material they make for re-sale to the manufacturer.

It has been our opinion for some time that beans should be hand-picked on the farm and sold by the farmer as choice, hand-picked, cutting out the expensive labor employed in the town or city elevators and keeping this money on the farm in the hands of the farm women.

There are many idle hours for all hands on the farm that could be employed in hand-picking the season's bean crop and it would result in a better controlled marketing because the beans would be more evenly fed to the markets during the winter months.



With this in mind The Business Farmer offered a prize of five dollars for the best plan of making a home bean picking machine, and several plans have already been submitted, two of which we have illustrated and appear below.

PICKING BEANS AT HOME CONTEST

IN the August 25th issue The Business Farmer offered five dollars for the most practical description of a bean picking machine that could be built by any farmer at home. Two of those sent in are illustrated on this page.

Remember it is not necessary to be an artist, simply explain how you made the outfit and draw it as simply as possible. Our own artist will make the finished drawing.

Benjamin Gerks, of Rochester, has added five dollars to the prize, making it ten dollars for the best plan and description submitted. We also offer a year's subscription, new or renewal, for every letter published, either illustrating a machine or giving experience with hand picking beans at home.

No less an authority on this subject than Benjamin Gerks, of Rochester, N. Y., says the grower can profitably hand-pick his own beans and Mr. Gerks doubles our original prize offer in order to stimulate our readers to give us their plans and their experience.

Keep Culled Beans

It goes without saying that keeping the culled beans on the farm for profitable use in feeding stock would alone repay the labor and it would seem that there is every good reason why farmers should adopt this plan, and do it this year with the 1923 crop of beans, which, if properly marketed, is sure to bring a good price.

In reading the description of the machines illustrated, kindly remember that they could be changed to meet the requirements of the material you have on hand, and there is no reason why any man who is handy with tools cannot make one of the simple sets illustrated. We hope to have many more to offer in the September 29th issue.

Plan from Mrs. Guy Finch

Having noticed your request for a simple home-made bean picker, in the August 18th issue of The Business Farmer, thought I would take a chance toward winning the $5.00 you are giving for a description of one. Am sending a rough sketch of the one my husband made about five years ago, and which has proven very satisfactory to us, and also our neighbors. It is very simple to make and can be made of any material strong enough, that is on hand. The legs of our were of an old bedstead, the balance wheel from an old cream separator, the belt from a grain bag cut in a strip 5 inches wide and sewed together. The rollers for canvas are cut from a broom handle. The hopper and other parts from thin material. The pans for the poor beans, on either side of canvas are square cake pans of the right size to fit. The hopper has a wide hinge arranged on back so it may be tipped back if necessary. A tin is fitted into the bottom part of hopper, above the bottom board, in a slanting position, to be adjusted as desired, to let the beans run out, fast or slow.

As the dimensions are given on the sketch, this will be as plain as I can make it. If it is not plain enough will be glad to answer any questions concerning same. Hoping this will be what you are looking for and satisfactory to you, am sending it in. My husband was too busy to do this, so left the job for me. A reader of Michigan Business Farmer, Mrs. Guy Finch, Berville, Michigan.

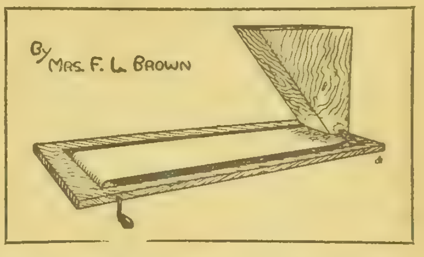
Mrs. Brown's Simple Plan

Here are directions for hand bean picker that my father made, and used to pick 50 bushels of beans one winter. A hopper holding about 2 bushels had a corrogated roller in the bottom and was elevated above and at one end of a rolling canvas table, 12 to 14 inches wide and 5 or six feet long. The hopper roller was connected with one of the end rollers of canvas table by a narrow belt and a crank on the other end roller of the table operated the whole machine. We used heavy factory double for canvas table.—Mrs. F. L. Brown, Gobles, R No. 1, Michigan.

Hand Picking Hard Job

Have been reading Mr. Gerks' articles on bean picking on the farm and am going to give my experience. Two years ago I took samples of my beans to the elevator and found they would pick 10 to 12 per cent. Realizing what a loss this meant I started to hand pick them. I soon found out what a job I had. It was impossible to work with a hand picking machine until they were cleaned through a fanning mill to remove pods and the fine particles of clay. After doing this I made better headway but the job still proved too slow and tedious and I gave it up as a bad job. I noticed that a great number of culls were flat or irregular shaped and would not roll like the perfect beans so started doing a little experimenting. I soon had a crude maching that seemed to be removing a great many culls and after taking a sample of these beans run through this machine to the elevator discovered that it reduced them from 10 per cent to 4½ per cent or a little over 50 per cent. That year I had 460 bushels and by reducing them from 10 and 12 per cent to 5 per cent which they averaged it is easy to figure what I made and cleaned them at the rate of 4 bushels an

(Continued on Page 25)



M. A. C. Attacks Helme's Stand on Tuberculin Test of Dairy Cattle

ACCORDING to a press report under date of August 26th Mr. James W. Helme addressed a group of farmers at Jackson on the previous day in opposition to tuberculin testing of cattle. Many of his statements concerning the nature of the disease were so erroneous, misleading and at variance with the findings of present day investigators that the writer feels they should not uncontradicted. Following, therefore are several statements concerning tuberculosis which should set the right in regard to his knowledge concerning this disease in case Mr. Helme's remarks have bewildered him.

First, there are three types of germs producing this disease, namely, human, bovine and avian.

1. The human type may be transmitted from tuberculous persons to other persons but is transmitted with difficulty to farm animals.

2. The bovine type is quite easily transmitted from tuberculous cattle to other cattle, to hogs, to people, especially children drinking infected milk, and possibly also to poultry.

3. The avian type is readily transmitted from infected fowls to other fowls, but not easily transmitted to farm animals or people.

Second, in making statements regarding the percentage of tuberculosis in human beings caused by the bovine type, most students of the disease quote Park and Krumwiede in America who made bacteriological analyses of 1511 cases and report as follows:

75 percent of gland cases in children is bovine.

66 percent of generalized tuberculosis in children is bovine.

18.2 percent to 26 percent of deaths from tuberculosis in children are caused by the bovine germ.

Often, too, the findings of the British Royal Commission are cited, which are to the effect that

37.5 percent of tuberculosis in children under 5 years of age is bovine.

29.5 percent of tuberculosis in children between 5 and 10 years of age is bovine.

Milk Unsafe, Meat O. K.

Third, the milk from an infected cow may be unsafe to drink but her carcass may be fit for food. Milk from a cow with tubercules in the udder is unsafe for human consumption because the germs probably will be present in the milk. Milk from a cow with no tubercules in the udder but which has tuberculous nodules in the digestive, respiratory or genito-urinary organs may be just as badly contaminated with the germs, not because they pass out of the udder in the milk, but because they get into the milk pail during the process of milking. It is difficult to keep the exterior of the body of a cow 100 percent free from the infectious discharges that may come from any one or all of the three above-mentioned body tracts. But if the hypothetical cow just mentioned were slaughtered and upon examination it was found that the tubercules in her body were not numerous, were slight in extent, walled off or calcified, and there was no evidence of the germs having gained entrance to the blood stream, her carcass could safely be consumed for food after cutting out the affected areas. The same logic would be applied as is applied by one wishing to eat an apple with a bad spot or a bunch of grapes containing a few spoiled grapes—cut out the bad spot, or throw away the spoiled grapes, and eat the remainder. Of course if the tubercules in a cow are numerous, extensive, shows evidence of acute inflamation or liquefacation, the whole carcass is condemned and rendered into fertilizer.

Tests 96% Efficient

Fourth, the tuberculin tests used in the testing of cattle are reliable. They are considered to be about 96 percent efficient when run separately, and a trifle higher when run in combination. When it is stated that the tests are 96 percent efficient it means that 96 out of every 100 reactors show visible lesions. The other 4, however, could quite possibly have invisible lesions or minute lesions located in remote parts of the body that can not be examined or detected at the time of slaughter. Any person having any experience at all in the examination of carcasses for tuberculosis must admit that there are a thousand and one places in the animal's body that he never examines.—R. A. Runnells, Assistant Prof. of Animal Pathology, M. A. C.

Prison Labor May Solve the Good Roads Riddle

Experiment Now in Full Operation Seems to Prove Success of Plan---480 Men Now Employed ---Will Mean 500 Miles of New Roads in 1924 Says Governor Groesbeck

THE Sphinx gazing over the sands of the Sahara never faced a greater problem than the riddle which confronted the officials of the state of Michigan when the 1923 legislature adjourned without providing adequately for the construction and maintenance of the good roads program which the people of the state of Michigan had in 1919 given their approval at the polls.

No one blamed the legislature for keeping "hands off" this problem. On one side was the great popular sentiment, both from rural and city owners of automobiles and trucks, for a carrying out of the paved road program, while on the other side stood the overwhelming sentiment of the people that taxes must be lowered.

The politicians did not know which way to jump, and no one was there to tell them. Even the gasoline tax which was offered as a possible solution because it taxed the man who used the roads according to the use he gave them, went down to an inglorious defeat when it was vetoed by the governor.

Then in the midst of the black clouds which seemed to overhang the whole road building program in Michigan came forward a ray of light in the suggestion that the state's great prisons, already overcrowded, be called upon for their wasting labor to work directly in the interests of the people of the state, who were being taxed that these men might be properly confined, during their period of reconstruction.

Employing Convict Labor

All manner of plans have been perfected for employing the labor of the thousands of men who are serving their terms in the state prisons. Contract labor, usually employed in manufacturing work for which the prisoners found little call when they left the prison walls, was once a favorite method of employing this labor. It was neither profitable to the state nor beneficial to anyone except the profiteering contractors who secured the contracts through political connivance.

Several of the southern states have employed convict labor on the roads, and at least ten years ago the writer recalls having visited a prison camp in Florida where practically all of the prisoners were colored men and he vividly remembers the surly overseers with their blacksnake whips and rifles slung across their shoulders, watching the men, many of whom were working on the roads with a huge ball of iron and a chain around their leg. This picture of modern slavery recalled "Uncle Tom's Cabin" and from recent developments it would appear that the conditions in these southern prison camps can scarcely be called better today. How different is the present experiment of employing prison labor on the roads being constructed by the State Highway Commission of the State of Michigan!

Michigan's Experiment

At the present time there are 460 prisoners engaged in road-building on the following state highways: At the new Hudson camp on Grand River Avenue, State Highway Route M-16, there are 145 prisoners engaged in the work of grading, laying concrete, running all machinery, and caring for the needs of the camp.

At the Grand Blanc camp on the Dixie Highway, in Genessee County, the work is being done entirely with prison labor, and early in this month there were 285 men employed on the nine miles of which two and one half miles have already been completed, and will compare favorably with the best contract road construction in the state.

A small group of thirty-eight prisoners are engaged at Galesburg on the Camp Custer road where they are completing two and one half miles.

This marks only the beginning of construction work by prison labor on the roads of this state. Already the state has found it possible to increase the pay of these trusty prisoners from $1 to $1.25 per day and yet this compares with the $5 to $7 per day which contractors have had to pay for similar labor, and for which the state has been charged plus a profit to the contractor.

Prisoners Like it

A visit to any of the convict camps above will surprise and delight anyone who is interested in the reconstruction of men during their period of confinement.

It is obvious that any prisoner is anxious to leave the gray walls of the prison confines such as at Jackson, Ionia or Marquette, and join a group of men in a military camp doing construction work and moving on from time to time in God's open country.

When you consider that the larger proportion of the men now confined in Michigan's state prisons are from the larger cities, principally Detroit, it is not hard to understand how these men are softened and receive a new perspective on life from the open country in which road building is done. It makes for better discipline in the state institutions, because it is a mark of honor to be allowed to go out and work in one of the prison road camps.

Practically every man employed in the work is a trusty, although the camps are guarded and the men checked in night and morning, which procedure is hardly different than is employed in the United States army or navy.

Every convenience is afforded the men and the efficient management of the camp is largely in the hands of men with army experience, so that the camp takes on all the appearance of a millitary post and they are swarming hives of industry.

Governor Pleased With Results

Although the plan of prison labor did not get well under way until early in August, sufficient progress has been made to date to prove that the plan is a practical one and most of the tax payers of Michigan are glad to see it adopted and are commending Governor Groesbeck for his distinct interest in it, because there have arisen any number of discouragements connected with it which would have weakened a less determined man in his desire to see it made a success.

Expansion of the highway construction program to 500 miles of new pavement to be completed during 1924 is now being planned by Governor Groesbeck and Frank F. Rogers, state highway commission. Such a mileage of new pavement will be double that ever contemplated in the past.

Included in this paving program will be M-29, from Lansing to Charlotte, and M-14, from Lansing to Mason. These are two of the most congested trunk line highways leading to and from the state capitol.

The biggest job to be included in the 500-mile program for next year will be the Grand River road, known as M-16. When paving work now in progress along this route is completed this year there will be left unpaved about 80 miles, of which approximately 30 will be between Lansing and Detroit, and 50 between Lansing and Grand Rapids. This highway will have some relocations between Lansing and Grand Rapids which it is said will shorten the distance between the two cities at least 12 miles. This entire state boulevard, which will run from Detroit across the state to points on the east Shore of Lake Michigan ,will have a right-of-way 100 feet wide with a 20 foot pavement in the middle. It is said all the needed right-of-way has been obtained for this work.

Another one of the longer stretches to be paved next year will be about 30 miles running through Lenawee and Washtenaw counties. The remainder of this huge program will consist of shorter gaps to connect present pavements and improved state trunk line and federal aid roads.

A Thousand Prisoners for Road Work

At least a thousand state convicts will be put to work on this highway construction next year. The governor and state highway commissioner estimate that the state can build at least 200 miles of paving next year with the prisoners and its own organization. The other 300 miles will be let to private contractors.

That the cost of paving being done this year by state convicts will radically reduce the cost of such highways to the state, will be shown conclusively when the repaving now being done on M-10, the Dixie highway, in Genesee county, is completed, says the governor. The state now has close to 500 convicts at

(Continued on Page 27)

Why the "Farm Hand" and His Family Are Going Back to City to Live

By THE "FARM HAND'S" WIFE

THERE are thousands of "farm hands" like this one throughout the country. He is going back to the city this fall and so are many of the others, some will return at a later day and others will not No doubt his employer had to "count his pennies" but if this farmer had followed the rules laid out in the agreement to the best of his ability his "farm hand" would have stayed by him and done his part. "Encourage them into taking a real interest in your business by showing them that you are interested in them," is the motto of some of our most successful farmers and it seems to be a pretty good rule to go by. If the "hired help" is the valuable kind they will soon show it under this kind of treatment. If they aren't the right kind you don't want them. What's your idea?

MY HUSBAND returned to a farm in March of the present year, after working four years in a factory. He returned joyously, as one coming home after an enforced absence, for farming is to him the profession above all others; the profession that combines interest and pleasure and profit and health; in short the profession in which one lives a full and delightful life while earning a good living. I will admit that I believe the definition is correct, in theiry. A farm should combine all these things, and life on a farm should be a delightful life.

We do not own a farm but we continue to hope that we shall sometime own one. We even dare to hope that our farm will be a sample of the nearest thing to paradise that an earthly home can be.

In the meantime, however, until we can squeeze from the amount of money which the high cost of living demands enough to somehow start for ourselves, we have come back to a farm as members of that class, now all too scarce, called farm labor. Perhaps I may be able, in this short article, to tell to the farmers who read it some of the many reasons why farm labor is scarce and dissatisfied and unreliable; why it does not stay put.

My husband is a man who loves his family and desires their comfort and happiness. He does not want his wife to get along with a house which has no sink and no bath and no heating or lighting systems. He does not want our three children to grow up without good advantages for education and the ability to associate with refined people. Still less does he want any other man to give himself or his family the things they should have.

He wants a bank account made from the surplus of money he earns, not the uncertain bonus his employer hands shim as a gift but which would never be given unless earned. He wants to start his two sons and his daughter with chickens, or pigs, or lambs, himself; not to have his employer give them something from those owned on the farm. He desires to put all his interest and his work into his employer's farm and he feels that if he does that his employers can afford to pay him enough so that nothing we receive from the farm will be in the farm of charity and we shall be as independent as the owner himself. He does not want his employer to "give" him a vacation, cr take him "on a trip." He feels that he earns a vacation, which he is perfectly willing to take at the time when the farm can spare him without suffering for need of his services.

There are on the farm where we are now living, and on which the owner also lives, ninety head of stock, cattle, horses, swine; and numerous fowl, chickens, ducks, geese, and turkeys. None of these are ours, nor do we want them. They belong to the owner of the farm. If, however, by his care and feeding and fore-thought, my husband saves more of the young pigs or chickens than the owner has been able to save before; if he works constantly and intelligently to improve the dairy stock and to cull out the unprofitable ones; if he makes feed carriers and other devices hitherto not used; all these things should make him a more valuable man, and, when he has proved himself capable and willing to increase the profits of the owner, the owner should, in turn, increase his salary or pay him a commission, and also let him know that his interest is noticed and appreciated.

The agreement when we came to this farm was that we were to have the use of a horse and buggy, the privilege of attending church services in the village two miles away on Sundays, house rent and milk free, feed for our hens, and in the fall 200 pounds of meat. All needed repairs on the house were to be begun at once. The money salary was $100 per month. It sounded good. Rent in town was high, food was high, the houses we were able to afford were few and offered very limited opportunity for gardens or for raising poultry; two things we have always had.

So we came to the farm. I shall never forget that March day. My husband left at about ten o'clock in the morning after we had packed most of the goods, to fetch a team from the farm to haul the goods out there. At twelve, when I was still gathering up things, the gas man came and took out the meter. From then until after three the children and I waited in the house with no heat except that furnished by a small krosene heater. As I was obliged to go to other rooms for things not yet put up, the doors could not be kept shut and the room was uncomfortably cold. When the teams came, for the employer came too and drove the second one, they took

(Continued on Page 23)

Where Michigan Convicts Are Building Roads

Actual Photographs Here Tell Story of Building of Concrete Roads on Michigan State Highways by Trusted Prisoners From State Penal Institutions. See Complete Story on Preceding Page.

Front view of the prisoners mess hall, with kitchen shown in back. Prison Camp on Grand Blanc road.

General view of prison camp on Grand Blanc Road, laid out in regulation army camp style.

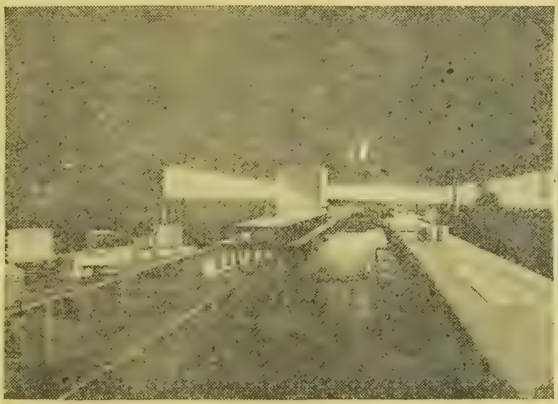
Field kitchen leaving camp with dinner for 250 men who are fed on the job.

Rear view of the open-air mess room and kitchen at the camp on the Grand Blanc road.

Concrete laying gang at work with roller for smoothing surface.

View of stables for horses used in construction work at the prison camp on the Grand Blanc road.

Turntable for trucks which allows the truck to proceed to the job and be turned within narrow cuts.



Interior of the prisoners dining hall at Novi, where three hundred men can be seated at meal times without crowding.

General view of a stretch of concrete road near Grand Blanc on Dixie highway which shows the high class of work the prisoners are doing.

Portable repair shop for trucks and machinery used in the construction camps. Good mechanics are always available among the prisoners.

Covering the newly laid concrete with canvas to protect it from the hot sun. The best engineering practices are employed by the state.

Roads are carefully graded by prison labor using the latest types of grading machinery and often progressing at a surprising rate.

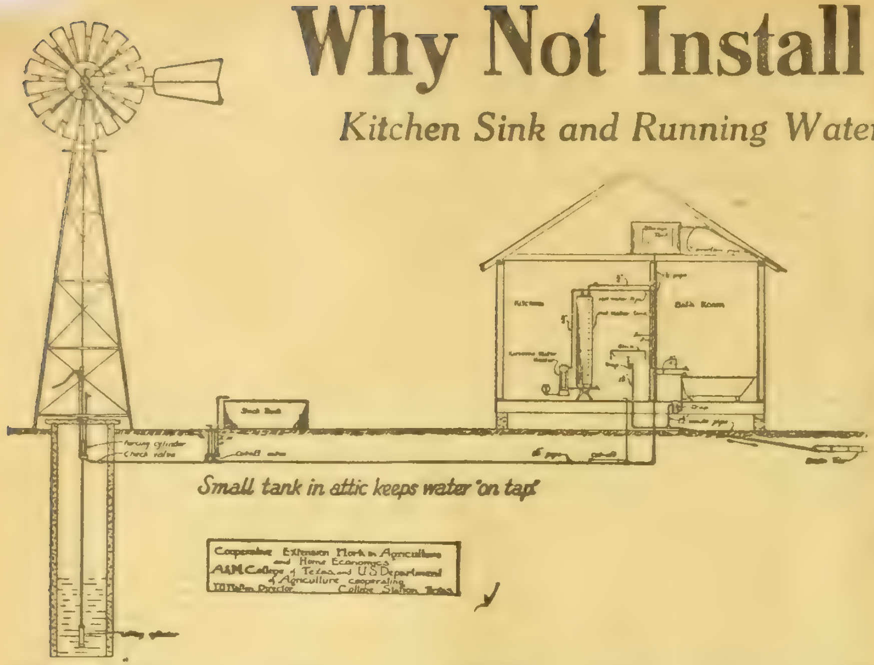
The open-air military tents are a contrast to the stuffy cell-block of the prison and the men appreciate its advantages.

Gate for checking prisoners in and out of camp, showing the rack of photographs of each prisoner, which prevents deception.

Sketch of partially completed highway at Farmington on the state highway, M-16, showing the detachable steel curbing which is removed.

Why Not Install a Home Water System?

Kitchen Sink and Running Water Saves Many Steps and Cost of Installing is Small


Small tank in attic keeps water "on tap"

Cooperative Extension Work in Agriculture and Home Economics
A&M College of Texas and U.S. Department of Agriculture cooperating
T.O. Walton Director College Station Texas

MANY folks do not think of a farm home water system as a means of increasing the efficiency of the housekeeper, but are inclined to think of it as a luxury, if they think of it at all.

A kitchen sink with a waste pipe and running water at the faucet will save more work than a seat on the cultivator, and in many instances will not cost any more.

Probably the carrying in of fresh water and the carrying out of waste water is the most burdensome task the average farm woman has. A little discussion of a few of the simple ways of developing a water system may give some folks ideas that will put them at this important job.

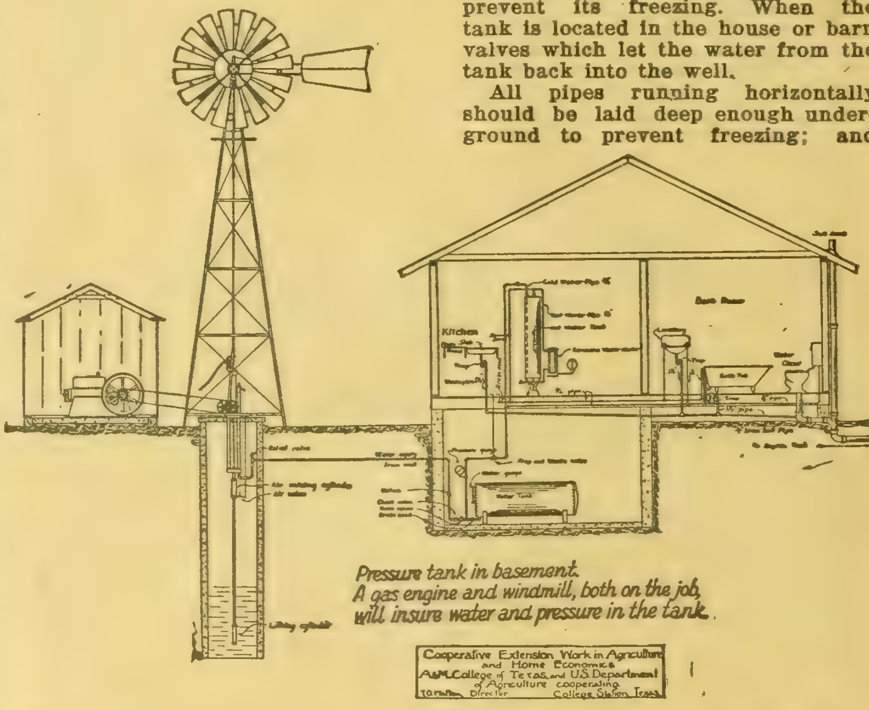
Many farmers have a windmill, or a gas engine, and an elevated tank to supply water at the barn and have never thought of piping the water into the house. It is a comparatively easy matter for them to lay a pipe to the house and run water into a kitchen sink. It is surprising how much this one convenience will lighten the house work.

For those who do not have an elevated supply tank a few of the numerous ways of arranging one will be mentioned. The most common, probably, is the galvanized iron tank on a wooden tower. A more permanent tank can be built of concrete. A concrete tank to hold water from the ground up makes a very good reservoir if properly constructed. The supply may enter from the bottom and eliminate danger of freezing. Such tanks should have a good foundation, that is, should start 18 to 24 inches below the ground level, and should be well reinforced. The water from some wells in the State seems to destroy poor concrete. It is therefore well to use nothing but good concrete for this kind of work, such as one part cement, two parts of sand, four parts of gravel or crushed stone.

Utilizing Nearby Hill

A concrete tank built underground on a hill high enough to give adequate pressure makes an excellent reservoir. It tends to keep the water warm in winter and cool in summer. Where there is a convenient hill a wooden or metal tank may be placed on it also, and save the expense of a tower. A very useful reservoir for use near the house is one of concrete with a cooling room and milk-cooling trough below the tank; with the water fresh from the well running around the milk pails and thence to the hogs or horses.

A tank may be placed on top of a concrete or masonry silo so as to give a good pressure, unless the house is on higher ground than the silo. In order to keep the cost low, sometimes the elevated tank is put in the attic of a onestory house. This does not give as much pressure as is desirable, but is far better than not having running water. It has an advantage over the outdoor tank in that there is very little danger of its freezing. Only a small tank of two to four barrels capacity should be put in an attic, on account of the weight. It should be placed over a partition so it will be well supported it should have an overflow large enough to keep the tank from running over.


Pressure tank in basement.
A gas engine and windmill, both on the job, will insure water and pressure in the tank.

Cooperative Extension Work in Agriculture and Home Economics
A&M College of Texas and U.S. Department of Agriculture cooperating
T.O. Walton Director College Station Texas

A good arrangement to have rainwater handy is obtained by placing a good big tank under the eaves of the house as high as possible, and piping the water to the kitchen. For piping water from an elevated tank into the house a ¾-inch pipe is generally used. It gives a good flow if the tank is 10 feet or more above the faucet in the house and not too far away. Under some conditions it will pay to use a 1-inch pipe.

The pipe from the pump to the tank is usually 1 ¼-inch where the ordinary size pump is used. Sometimes to keep the cost of pipe down on a pipe line 1,000 feet or so in length, 1-inch pipe is used by pumping the water slowly through it. In running water from the well to the tank it is just as well to pump the water in and let it out through the one pipe in the bottom of the tank and this usually saves some pipe. A check valve should be used at the well to prevent the water from leaking back. Some prefer to run the supply pipe over the top of the tank to avoid trouble with leaky check The tank is sometimes put in the barn loft and covered with hay to prevent its freezing. When the tank is located in the house or barn valves which let the water from the tank back into the well.

All pipes running horizontally should be laid deep enough underground to prevent freezing; and where the pipe is brought up to a hydrant or into the house a valve should be put in, which in freezing weather may be used to cut the water off from the tank and which permits the water to leak out of the exposed pipe through the valve. Freezing of the pipe from the elevated tank to the ground may be prevented in the usual winters of this climate by packing paper or straw in a box built around the pipe. Some farmers extend the pipe a few inches up into the tank and attach a shut-off valve operated by a lever with a wire from it. When the section of the pipe where it attaches to the tank may be drained and prevent troublesome freezing there.

A water system without a reservoir may be had at a very small cost where the water in the well or cistern is not more than 14 or 16 feet below the floor of the house. A pitcher pump may be placed at the kitchen sink and a pipe run from it to the water in the well or cistern. If the lift is rather high the pump cylinder may be placed under the floor of the house to decrease the suction lift. When the well is not near the house and the water must be drawn through a long horizontal pipe, the possible vertical suction lift will be correspondingly less on account of the increase of friction by the long pipe.

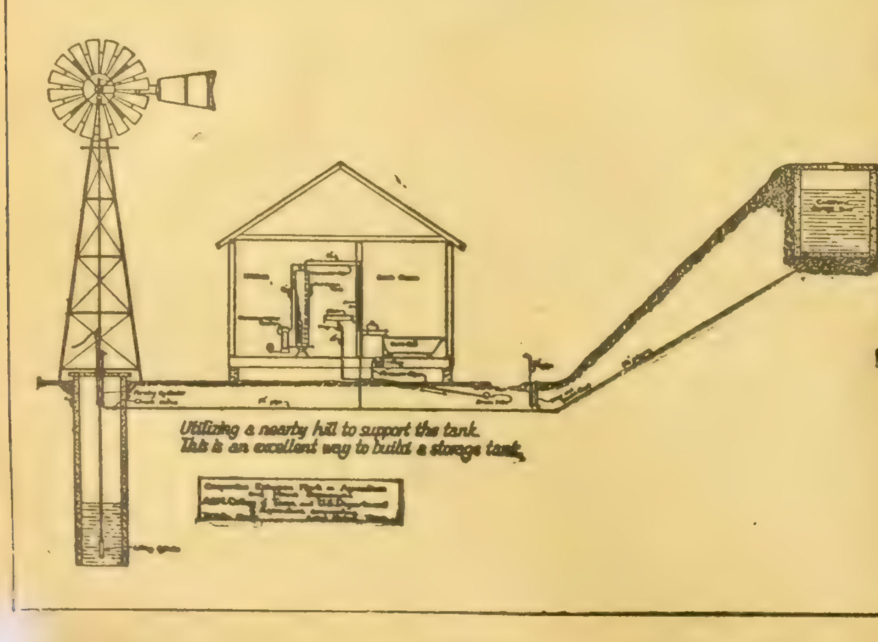
Disposal of Waste Water

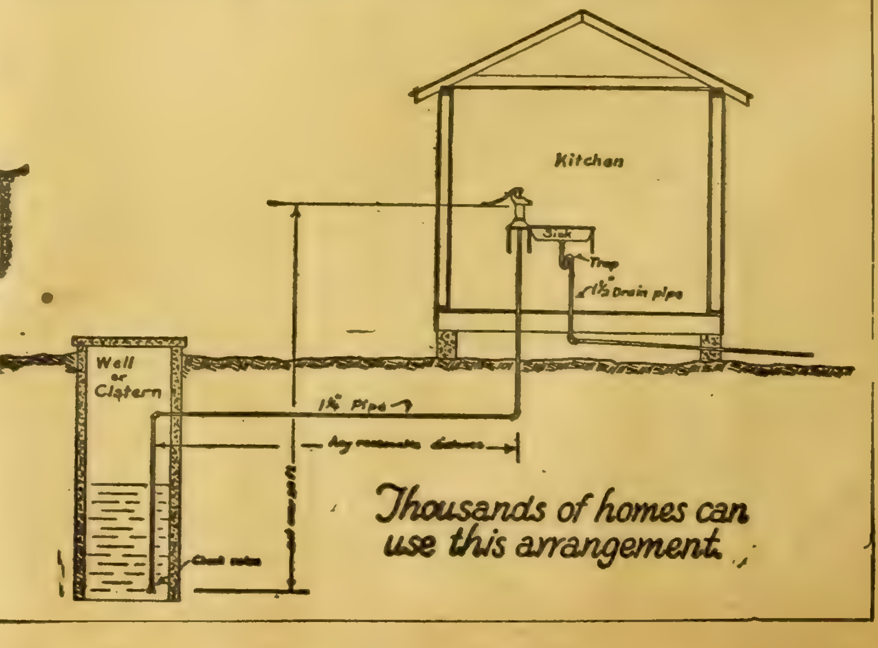
The waste water from a kitchen sink may be handled in any way that dish water is disposed of; however, it is better to run it into an underground drain so it will not keep a wet spot in the yard. The waste pipe should be 1½ inches in diameter and should have a trap in it just below the sink. The trap consists of an S-shaped bend in the pipe which holds a little water and prevents obnixious odors coming from the waste pipe. The waste water should be carried 20 or 30 feet from the house in a tight-jointed pipe. It may then be emptied into open jointed drain tile and used for subirrigation a garden. Where only the water from a kitchen sink is emptied into the underground tile about 50 or 100 feet of 4-inch tile will be enough; the larger amount being necessary in tight soil.

When a complete set of plumbing fixtures are used, including a water closet, a septic tank must be used for the disposal of the sewage. A septic tank sewage disposal system is not expensive, and should not block the installation of a complete set of fixtures in the house.

A good feature of any water system is a hot-water heater. This usually includes a 30 to 50-gallon galvanized iron tank capable of withstanding a high pressure. Where natural gas is available the tank is omitted. The heater may be used with almost any kind of fuel. Where a wood or coal cook stove is used regularly a water front may be placed in it to heat the water in the tank. In this climate, where the cooking is done on a kerosene or gasoline stove most of the year, it is better to have a kerosene or gasoline heater for the hot-water system, separate from the cook stove.

If you do not now have running water in your house, the installation of some of the systems mentioned may keep your boys and girls from moving to town at the first opportunity, and will certainly leave the housewife more strength and time for work in the garden, milking the cows, and her various other regular duties.—Farm and Ranch.


Utilizing a nearby hill to support the tank.
This is an excellent way to build a storage tank.



Thousands of homes can use this arrangement.

Farmers Service Bureau

(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full name and address. Name not used if so requested.)

PAY TUITION

In this district the parents have had to pay tuition for the year of 1921-1922. The tuition for 1921 was $60, district paying $50 and parents $10; for the year 1922-1923 the district paid $60 and the parents $15. We have read that the district is supposed to pay all. Our director informed us that he had looked up the school law and that the district was supposed to pay up to $60 and no more. I want to know if there is any way we can compel this district to reinburse us for the tuition money we have already paid out? There are seven children from this district attending high school.—W. V. B., Plainwell, Mich.

—The non high school districts must pay the tuition up to the actual cost of the same in high school districts but not to exceed sixty dollars a year. This applies to eighth grade graduates.—T. E. Johnson, Superintendent of Public Instruction.

GROUNDS FOR SUIT

On March 28, 1922, my husband bought a team for $235 paying $100 down and giving a note for balance with article purchased written on the face of note. When the note came due, December 1, 1922, he asked to have it renewed, he paying the accrued interest. The bank refused to accept the interest. The man who sold us the team wanted his money or the team. He took the team and also kept the $100 we paid down. We would like to know if he can legally do this as we are just starting farming and we cannot afford to lose this money if we can possibly recover it? When the team went we had no means of traveling except on foot, nor any way to get our winter's wood to the house.—Mrs. C. C. W., Sandusky, Mich.

—The man who sold you the team could not recover the team and also keep the $100. I think you had better consult a lawyer, with a view to starting suit for the recovery of your $100.—Asst. Legal Editor.

SELLING VINEGAR

Can you tell me how to test vinegar so as to know when it is right to sell? How do you color vinegar to make it a nice color? Ours is too light?—A. I., Mt. Pleasant, Michigan.

—We presume you refer to cider vinegar. "Cider vinegar" is construed to mean vinegar derived by the alcholic and subsequent acetous fermentation of the expressed juice of apples, the acidity, solids and ash of which have been derived exclusively from apples and which contains not less than 4 per cent of absolute acetic acid. Cider vinegar which, during the course of manufacture, develops in excess of 4 per cent acetic acid, may be reduced to a strength of not less than 4 per cent and sold as "cider vinegar" without having the product regarded as adulterated. Before selling, every manufacturer or producer of cider vinegar must brand each cask, barrel or keg, or other container, with his name, place of business and the words "Fermented Cider Vinegar."

In order to determine the acetic acid content it is necessary that a representative sample be taken and the usual chemical method employed for the determination of acetic acid. Without standard glassware and standardized chemical reagents it is impossible to make this test. Ordinarily the home is not equipped with sufficient apparatus or chemicals to do the work. There are on the market so-called hydrometers which indicate the strength of vinegar; however, they are notsufficiently accurate to be depended upon.

This Department in the past has endeavored to give this service when individuals submit home made vinegar and ask for the acetic acid content. We shall be glad to do the work for you.

The color of vinegar ordinarily is dependent upon raw material and manufacturing processes. In other words, in the average vinegar establishment color can be obtained by varying the details of manufacture and either light or dark vinegar be produced. When produced in the home this is difficult to control and usually home made vinegar is lighter colored than that manufactured in vinegar facturies. For use in the home, vinegar may be colored any desired color. Sugar coloring or caramel coloring may be used to produce the desired shade. However, section 6 of the vinegar law, C. L. 6463, reads as follows:

"No vinegar shall be sold or exposed for sale in which foreign substances, drugs ar acids shall have been introduced. No vinegar shall contain and artificial coloring matter, and all vinegar shall have an acidity of not less than four per cent by weight of absolute acetic acid. If vinegar contains any artifical matter, or less than the required amount of acidity, it shall be deemed to be adulterated."

Under this section, it is illegal to color vinegar for sale in this State and it is one of the duties of this Department to prevent such practice and to enforce this particular section of the vinegar law.—W. C. Geagley, State Analyst.

ESTATE SHOULD BE PROBATED

I am a reader of the M. B. F. and sure think it a grand paper. I wouldn't think of being without it and as I know you have a Service Bureau for your readers and answer all kinds of questions I would be very much pleased if you would answer the questions I am going to ask you.

My mother-in-law died 2 years ago July 16th leaving no will and six sons as her only heirs, and at the time of her death she had her farm rented on shares to her oldest son until April 1, 1922. The mother was to have done the general housework for her son and what help he hired to help him on the farm. After the mother died the son hired a housekeeper and went on farming, in the fall harvested the crop and continued staying on the farm keeping the housekeeper all winter. Can the son make the heirs pay this housekeeper or must he pay her himself as long as he hired her? After April 1, 1922, the son made no arrangements with the other heirs in regards to renting the farm for another year but went on farming just as though the mother was alive, using everything about the farm as he pleased and planting crops wherever he liked selling the cream, the returns from which he used for keeping the house. The cows belonged to the mother, the furniture in the house all belonged to the mother, which the son has used ever since her death. The home being furnished complete by the mother. Now as long as he made no arrangements to stay and work the farm and use everything can he do so as long as the rest of the heirs allow him to? Can't they collect rent for a furnished house since April 1 ,1922? There is about five acres of woods on mother's farm.

At the time of the mother's death there was wood enough on hand cut which has lasted until about December 1, 1922. How about wood he cuts for his own use? Can he cut wood for his own domestic use or cut any green wood without consent from the other heirs? I also understand that the son made arrangements with his brother, one of the heirs, a year ago and the two worked the mother's farm together the son getting a certain share. Can the son do this without consent from the other four heirs? What share could the brother hold in such a case? The son also gave the housekeeper what chickens she raised there on the farm and sold the chickens belonging to the mother. The son never gave account of what has been raised or sold on the farm since mother died. The property has never been probated yet. The housekeeper married one of the sons and they continued staying on the farm.—Mrs. H. B., Williamsburg, Mich.

—The rights and obligations of the mother under the lease would become, upon her death, the rights and obligations of her estate, or heirs. Her agreement to do the general housework would have to be carried out by the heirs, and if the son hired a housekeeper, all the heirs, himself included, would have to pay their share of what was a reasonable amount for such services, up until the termination of the lease, April 1st, 1922. After that he would have to pay her himself. The heirs would be entitled to the rent due the mother under the lease.

So long as the other heirs do not object, he could stay on the farm after April 1st and cultivate the land, but would be liable to the others to pay a reasonable rental for the use of such farm and house. The wood cut for his own domestic use would be taken care of in the rent. For any wood cut above that amount, he would have to account to the rest of the heirs. The son and his brother could work the farm under an arrangement of their own, so long as the other heirs did not object, and in that case would both be liable for the rent.

The estate should be probated as soon as possible so the rights of the respective heirs could be legally determined.—Asst. Legal Editor.

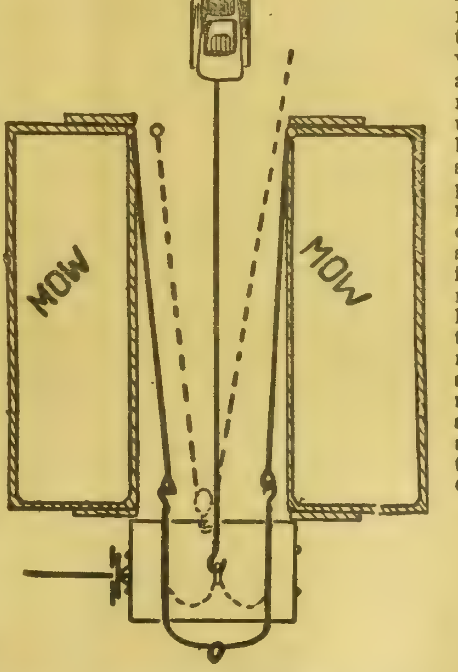
HAVE WILL PRODUCED AT ONCE

I saw by your paper where you help people. I would like to know, does a will ever outlaw? When my father died seven years ago he left my mother a joint deed of their farm. She sold the farm and moved to town. She died, it will be four years the 23rd of next August. She left a will to my only brother for all her property. My only sister and myself didn't get a thing. The will has never been read only as I went to see if she had a will. Their lawyer has the will. He told me he didn't have any will or papers of hers. He told me that twice, and I had been told by my cousin that she saw it in his office. I told him what she said and he finally went and got it and cut it open and read it just to me. I didn't see what it said, but he read it this way. Her property and personal had all been left to my brother, she said she had not forgotten the girls but wanted my brother to have it because he had always lived with her. Now the will has never been read in public, nor been probated. The farm she sold was sold on contract and isn't paid for yet and it isn't on record in my brother's name. I have thought it over a lot and just thought I would drop you a line and see what you had to say. If this outlaws, how is it then? —Reader from Southern Michigan.

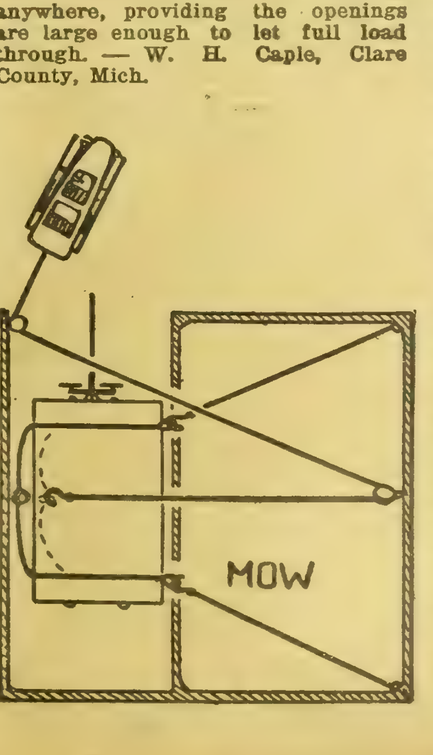
—Complied Laws of 1915, Sections 13776 and 13778 provide that every person, other than the judge of probate, having custody of any will, shall within 30 days after he has knowledge of the death of the testator, deliver it to the probate court or to the executor, and that every person who shall neglect to do this, without reasonable cause, shall be liable to each and every person interested in such will in the sum of $10 damages for each and every month that he shall neglect to deliver the will, after 30 days from the death of the testator. I would petition the probate judge to notify the person having custody of the will to produce it at once so it may be properly probated.—Asst. Legal Editor.

How To Save Time When Unloading Hay

TAKE a piece of three-quarter inch rope long enough to lay across your wagon twice. Place one end across the front end of the wagon about three feet from the end if you use a loader and four feet if you do not. Have the two ends extend over the side of the rack about three feet while the center of the rope which is on the other side of rack should extend over at least five feet. You have a large ring in the center of the rope and one on each end. This makes your sling. Then get two ropes long enough to reach to the farthest posts from the side of your wagon over which the two rope ends hang (see drawing). Put a grab hook on one end. This hook is to hook into the ring in the center of your sling over the top of your load in the drawing. When you drive in to unload hook the two long ropes, which have been fastened to the posts, to the ends of your sling, fasten the hook of the hay rope into the ring in the center of the sling and hitch your team, tractor or auto to the other end and roll the load off the wagon. You then unhook the slings from the long ropes, unfasten the long ropes from the post and draw them out. They come very easily if you do not place knots in the ropes. Your second load rolls off next to the first and so on until you reach the back of the now, then roll the next loads clear back. If you are filling the driveway of your barn a straight haul will do, if filling the sides fasten your ropes as shown in the drawing. On the straight haul when the hay is piled too high for you to haul load off with success you can fasten one end of the pull rope high up in the barn and use a pulley in the center (see dotted line in drawing).



I used by automobile to do the hauling in place of team as it was so much faster. From the time the team stopped at the barn until they were ready to start for the field again it has taken us less than two minutes; that is to fasten the ropes, unload the hay and place the slings back on the wagon again ready to start, or less than one minute to place the load in the barn after the ropes were fastened. We timed ourselves on four loads—they were short hauls—and we made four trips in one hour, with one team and two men loading. We placed over two hundred tons of hay in one barn by this method. Use a third man in the mow. When you get the idea, by a little practice you can change the ropes about and place the hay most anywhere, providing the openings are large enough to let full load through. — W. H. Caple, Clare County, Mich.



Jeff Peters As A Personal Magnet

A Complete Short Story by O. HENRY *America's Greatest Short Story Writer*

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JEFF PETERS has been engaged in as many schemes for making money as there are recipes for cooking rice in Charleston, S. C.

Best of all I like to hear him tell of his earlier days when he sold liniments and cough cures on street corners, living hand to mouth, heart to heart with the people, throwing heads or tails with fortune for his last coin.

"I struck Fisher Hill, Arkansaw," said he "in a buckskin suit, mocassins, long hair and a thirty-carat diamond ring that I got from an actor in Texarkana. I don't know what he ever did with the pocket knife I swapped him for it.

"I was Dr. Waugh-hoo, the celebrated Indian medicine man. I carried only one best bet just then, and that was Resurrection Bitters. It was made of life-giving plants and herbs accidently discovered by Ta-qua-la, the beautiful wife of the chief of the Choctaw Nation, while gathering truck to garnish a platter of boiled dog for the annual corn dance.

"Business hadn't been good at the last town, so I only had five dollars. I went to the Fisher Hill druggist and he credited me for half a gross of eight ounce bottles and corks. I had the labels and ingredients in my valise left over from the last town. Life began to look rosy again after I got in my hotel room with the water running from the tap, and the Resurrection Bitters lining up on the table by the dozen.

"Fake? No, sir. There was two dollars' worth of fluid extract of cinchona and a dimes' worth of aniline in that half-gross of bitters. I've gone through towns years afterwards and had folks ask for 'em again.

"I hired a wagon that night and commenced selling the bitters on Main Street. Fisher Hill was a low, malarial town; and a compound hypothetical pneumocardiac anti-scorbutic tonic was just what I diagnosed the crowd as needing. The bitters started off like sweet-breads-on toast at a vegetarian dinner. I had sold two dozen at fifty cents apiece when I felt somebody pull my coat tail. I knew what that meant; so I climbed down and sneaked a five-dollar bill into the hand of a man with a German silver star on his lapel.

" 'Constable,' says I, 'it's a fine night.'

" 'Have you got a city license,' he asks, 'to sell this illegitimate essence of spooju that you flatter by the name of medicine?"

" 'I have not,' say I. 'I didn't know you had a city. If I can find it tomorrow I'll take one out if it's necessary.'

" 'I'll have to close you up till you do,' says the constable.

"I quit selling and went back to the hotel. I was talking to the landlord about it.

" 'Oh, you don't stand no show in Fisher Hill,' says he. 'Dr. Hoskins, the only doctor here, is a brother-in-law of the Mayor, and he won't allow no fake doctor to practice in town.'

" 'I don't practice medicine,' says I, I've got a State peddler's license, and I take out a city one whenever they demand it.'

"I went to the Mayor's office the next morning and they told me he hadn't showed up yet. They didn't know when he'd be down. So Doc Waugh-poo hunches down again in a hotel chair and lights a jimpson-weed regalia, and waits.

" 'By and by a young man in a blue necktie slips into the chair next to me and asks the time.

"Half-past ten, says I, 'and you are Andy Tucker. I've seen you work. Wasn't it you that put the Great Cupid Combination package on the Southern States? Let's see, it was a Chilian diamond engagement ring, a wedding ring, a potato masher, a bottle of soothing syrup nad Dorothy Vernon—all for fifty cents.'

"Andy was pleased to hear that I remembered him. He was a good street man; and he was more than that—he respected his profession, and he was satisfied with 300 per cent profit. He had plenty of offers to go into the illegitimate drug and garden seed business; but he was never to be tempted off the straight path.

"I wanted a partner, so Andy and me agreed to go out together. I told him about the situation in Fisher Hill and how finances were low on account of the local mixture of politics and japal. Andy had just got in on the train that morning. He was pretty low himself, and was going to canvass the town for a few dollars to build a new battleship by popular subscription at Eureka Springs. So we went out and sat on the porch and talked it over.

"The next morning at eleven o'clock when I was sitting there alone, an Uncle Tom shuffles into the hotel and asked for the doctor to come and see Judge Banks, who was the Mayor and a mighty sick man.

" 'I'm no doctor,' says I. 'Why don't you go and get the doctor?'

" 'Boss,' says he. 'Doc Hoskins am done gone twenty miles in de country to see some sick persons. He's de only doctor in de town, and Massa Banks am powerful bad off. He sent me to ax you to please, suh, come.'

" 'As man to man,' says I, 'I'll go and look him over.' So I put a bottle of Resurrection Bitters in my pocket and goes up on the hill to the mayor's mansion, the finest house in town, with mansard roof and two cast iron dogs on the lawn.

"This Mayor Banks was in bed all but his whiskers and feet. He was making internal noises that would have had everybody in San Francisco hiking for the parks. A young man was standing by the bed holding a cup of water.

" 'Doc,' says the Mayor, 'I'm awful sick. I'm about to die. Can't you do nothing for me?'

" 'Mr. Mayor,' says I, I'm not a regular preordained disciple of S. Q. Lapius. I never took a course in a medical college,' says I. 'I've just come as a fellow man to see if I could be of assistance.'

" 'I'm deeply obliged,' says he. 'Doc Waugh-hoo, this is my nephew, Mr. Biddle. He has tried to alleviate my distress, but without success. Oh, Lordy! Ow-ow-ow! !' he sings out.

"I nods at Mr. Biddle and sets down by the bed and feels the Mayor's pulse. 'Let me see your liver—your tongue, I mean,' says I. Then I turns up the lids of his eyes and looks close at the pupils of 'em.

" 'How long have you been sick?' I asked.

" 'I was taken down—ow-ouch—last night,' says the mayor. 'Gimme something for it, doc, won't you?'

" 'Mr. Fiddle,' says I, 'raise the window shade a bit, will you?'

" 'Biddle,' says the young man. 'Do you feel like you could eat some ham and eggs, Uncle James?'

" 'Mr. Mayor,' says I, after laying my ear to his right shoulder blade and listening, 'you've got a bad attack of superinflammation of the right clavicle of the harpischord!'

" 'Good Lord!' says he, with a groan. 'Can't you rub something on it, or set it or anything?'

"I picks up my hat and starts for the door.

" 'You ain't going, doc?' says the Mayor with a howl. 'You ain't going away and leave me to die with this superfluity of the clapboards, are you?'

" 'Common humanity, Dr. Whoa-ha,' says Mr. Biddle, 'ought to prevent your deserting a fellow-human in distress.'

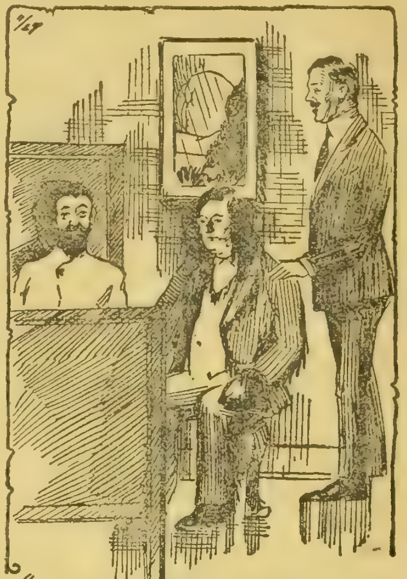
" 'Dr. Waugh-hoo, when you get thru plowing,' says I. And then I walks back to the bed and throws back my long hair.

" 'Mr. Mayor,' says I, 'there is only one hope for you. Drugs will do you no good. But there is another power higher yet, although drugs are high enough,' says I.

" 'And what is that?' says he.

' "Scientifio demonstrations,' says I. 'The trumph of mind over sarsaparilli. The belief that there is no pain and sickness except what is produced when we ain't feeling well. Declare yourself in arrears. Demonstrate.'

" 'What is this paraphernalia you speak of, Doc?' says the Mayor. 'You ain't a Socialist, are you?'



"YOU'RE UNDER ARREST, DR WAUGH-HOO, ALIAS PETERS," SAYS HE.

" 'I am speaking,' says I, 'of the great doctrine of psychic financiering—of the enlightened school of long-distance, subconscientious treatment of fallacies and meningitis—of that wonderful in-door sport known as personal magnetism.'

" 'Can you work it, doo?' asks the Mayor.

" 'I'm one of the Sole Sanhedrims and Ostensible Hooplas of the Inner Pulpit,' says I. 'The lame talk and the blind rubber whenever I make a pass at 'em. I am a medium, a coloratura hypnotist and a spiritous control. It was only thru me at the recent seances at Ann Arbor that the late president of the Vinegar Bitters Company could revisit the earth to communicate with his sister Jane. You see me peddling medicine on the streets,' says I, 'to the poor. I don't practice personal magnetism on them. I do not drag it in the dust,' says I, 'because they haven't got the dust.

" 'Will you treat my case?' asks the Mayor.'

" 'Listen,' says I. 'I've had a good deal of trouble with medical societies everywhere I've been. I don't practice medicine. But, to save your life, I'll give you the psychic treatment if you'll agree as mayor not to push the license question.'

" 'Of course I will,',' says he. 'And now get to work, doc, for them pains are coming on again.'

" 'My fee will be $250.00, cure guaranteed in two treatments,' says I.

" 'Alright,' says the Mayor. 'I'll pay it. I guess my life's worth that much.'

"I sat down by the bed and looked him straight in the eye.

" 'Now,' says I, 'get your mind off the disease. You ain't sick. You haven't got a heart or a clavicle or a funny bone or brains or anything. You haven't got any pain. Declare error. Now you feel that pain that you didn't have leaving, don't you?'

" 'I do feel some little better, doo,' says the Mayor, 'darned if I don't. Now state a few lies about my not having this swelling in my left side, and I think I could be propped up and have some sausage and buckwheat cakes.'

" 'I made a few passes with my hands.

" 'Now,' says I, 'the inflammation's gone. The right lobe of the perihelion has subsided. You're getting sleepy. You can't hold your eyes open any longer. For the present the disease is checked. Now, you are asleep.'

"The Mayor shut his eyes slowly and began to snore.

" 'You observe, Mr. Tiddle,' says I 'the wonders of modern science.'

" 'Biddle,' says he, 'when will you give uncle the rest of the treatment, Dr. Pooh-pooh?'

" 'Waugh-hoo,' says I. I'll come back at eleven tomorrow. When he wakes up give him eight drops of turpentine and three pounds of steak. Good morning.'

"The next morning I went back on time. 'Well, Mr. Riddle,' says I, when he opened the bedroom door, 'and how is uncle this morning?'

" 'He seems much better,' says the young man.

"The mayor's color and pulse was fine. I gave him another treatment, and he said the last of the pain left him.

" 'Now,' says I, 'you'd better stay in bed for a day or two, and you'll be all right. It's a good thing I happened to be in Fisher Hill, Mr. Mayor,' says I, 'for all the remedies in the cornucapia that the regular schools of medicine use couldn't have saved you. And now that error has flew and pain proved a purjurer, let's allude to a cheerfuller subject—say the fee of $250. No checks, please, I hate to write my name on the back of a check almost as bad as I do on the front.'

" 'I've got the cash here,' says the mayor, pulling a pocket book from under his pillow.

"He counts out five fifty-dollar notes and holds 'em in his hand.

" 'Bring the receipt,' he says to Biddle.

"I signed the receipt and the mayor handed me the money. I put it in my inside pocket careful.

" 'Now do your duty, officer,' says the mayor, grinning much unlike a sick man.

"Mr. Biddle lays his hand on my arm.

" 'You're under arrest, Dr. Waugh-hoo, alias Peters,' says he, 'for practising medicine without authority under the State law.'

" 'Who are you?' I asks.

" 'I'll tell you who he is,' says Mr. Mayor, sitting up in bed. 'He's a detective employed by the State Medical Society. He's been following you over five counties. He came to me yesterday and we fixed up this scheme to catch you. I guess you won't do any more doctoring around these parts, Mr. Fakir. What was it you said I had, doc?' the mayor laughs, 'compound—well it wasn't softening of the brain I guess, anyway.'

" 'A detective,' says I.

" 'Correct,' says Biddle. 'I'll have to turn you over to the sheriff.'

" 'Let's see you do it,' says I, and I grabs Biddle by the throat and half throws him out the window, but he pulls a gun and sticks it under my chin, and I stand still. Then he puts handcuffs on me, and takes the money out of my pocket.

" 'I witness,' says he, 'that they're the same bills that you and I marked, Judge Banks. I'll turn them over to the sheriff when we get to his office, and he'll send you a receipt. They'll have to be used as evidence in the case.'

" 'All right, Mr. Biddle,' says the mayor. And now, Doo Waugh-hoo,' he goes on, why don't you demonstrate? Can't you pull the cork out of your magnetism with your teeth and hocus-pocus them handcuffs off?'

" 'Come on, officer,' says I, dignified. 'I may as well make the best of it.' And then I turns to old Banks and rattles my chains.

" 'Mr. Mayor,' says I, 'the time will come when you'll believe that personal magnetism is a success. And you'll be sure that it succeeded in this case, too.'

"And I guess it did.

When we got nearly to the gate, I says: 'We might meet somebody now, Andy. I reckon you better take 'em off, and—' Hey? Why, of course it was Andy Tucker. That was his scheme: and that's how we got the capital to go into business together.

What would YOU do
if you received
a check for
$100,000
in the mail?

For the best letter of not over 250 words from a reader telling what he or she would do with a gift of $100,000 we will pay $5 and give a one year new or renewal subscription for each other letter published. Write plainly on one side of paper and sign your full name and address which will not be used in publication if you so request.

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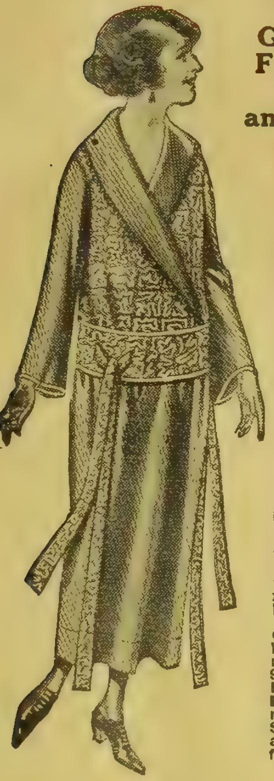
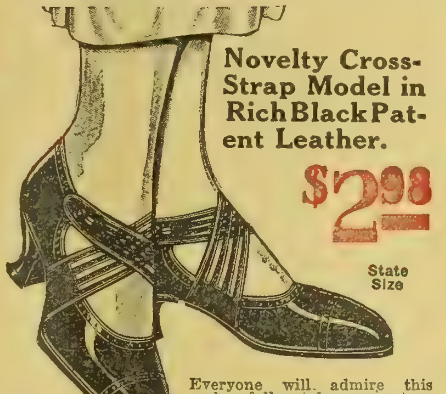
Bulgarian Effect Gabardine Frock For Women and Misses



$2.98

An exceptionally attractive fine quality cotton gabardine dress for women and misses. Long roll collar in shawl effect, sleeves and belt piped in red. Entire front of blouse enhanced with exquisite all-over embroidered design in Bulgarian effect with rich harmonious colors. Two streamers at both sides and front. Wide belt embroidered to match blouse. Sizes for women, 34 to 44 bust; for misses 32 to 38 bust. State length desired. Colors, navy or brown. Order navy by No. 96E7500. Brown No. 96-E7502. Send no money. Pay $2.98 and postage on arrival for either color. State size.

Novelty Cross-Strap Model in Rich Black Patent Leather.

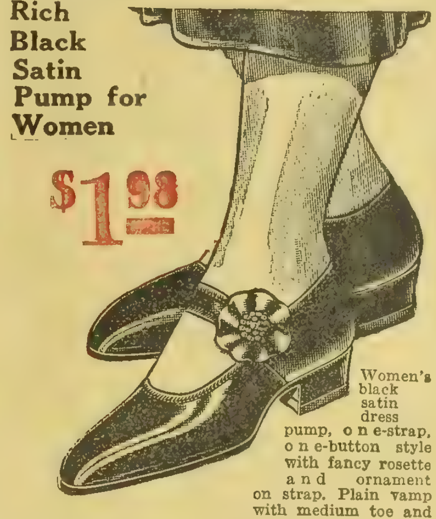


$2.98

State Size

Everyone will admire this early fall style cross-strap pump. The vamp and quarter are of selected black patent leather with rich black suede four-bar effect cross straps. Medium pointed dress toe has imitation perforated tip. Vamp and quarter neatly perforated. Straps fasten on each side with buttons. One-piece leather sole with Baby Louis leather heel and metal plate. Sizes 2½ to 8; wide widths. No. 96J12. Send no money. Pay $2.98 and postage on arrival. State size.

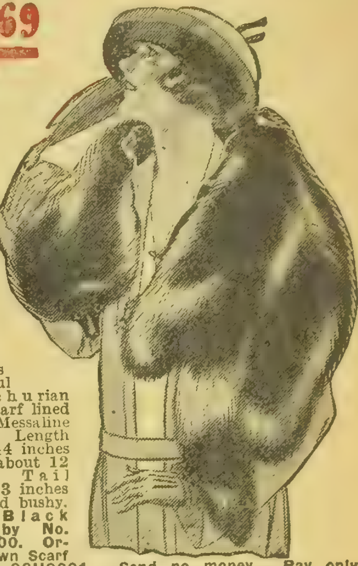
Rich Black Satin Pump for Women



$1.98

Women's black satin dress pump, one-strap, one-button style with fancy rosette and ornament on strap. Plain vamp with medium toe and close edge trim sole with low rubber heels. Genuine oak soles. A dressy stylish new spring fashion that will be all the rage among the best dressed women. Sizes 2½ to 8; wide widths. Order by No. 96J252. Send no money. Pay only $1.98 and postage on arrival. State size.

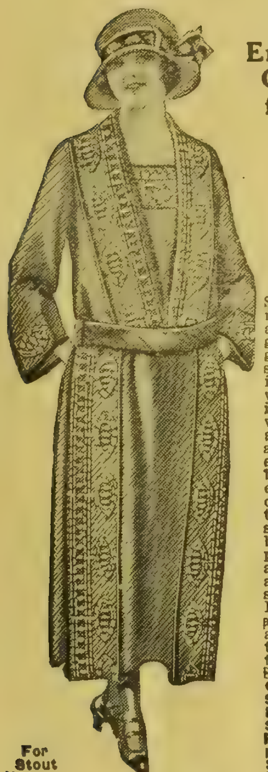
Manchurian Wolf Scarf



$3.69

Only $3.69 for this beautiful Manchurian Wolf scarf lined with Messaline silk. Length about 44 inches Width about 12 inches. Tail about 13 inches long and bushy. Order Black Scarf by No. 96H9000. Order Brown Scarf by No. 96H9001. Send no money. Pay only $3.69 and postage on arrival.

Popular Model Embroidered Gabardine for Stouts

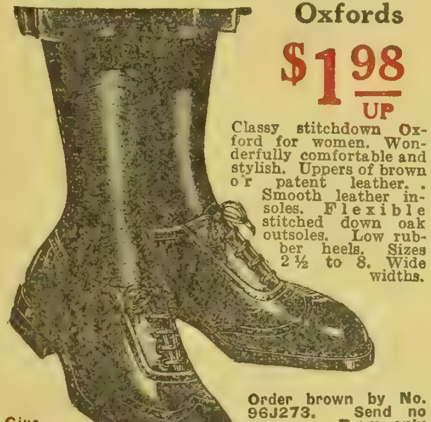


For Stout Women

$3.98

Sharood heartily recommends this attractive frock of good quality cotton gabardine. It is designed along slenderizing lines for stout women. The skirt is finished with two wide, loose panels attached at waist and bottom. The edges are bound in black and embroidered in contrasting color. Collar is in the new long roll shawl effect, embroidered to match panels on skirt, as are also the vestee and tabs on bell-shaped sleeves. Dress is gathered at waistline at back, and finished with tie sash. Sizes 44 to 54 bust measure. State length desired. Order Navy by No. 96E7610, brown No. 96E7612. Send no money. Pay $3.98 and postage on arrival. State size and length.

Women's Classy Stitchdown Oxfords



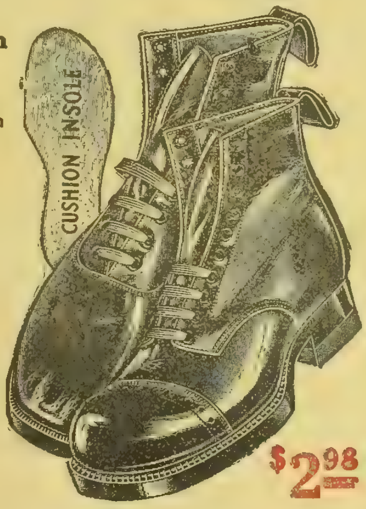
$1.98 UP

Classy stitchdown Oxford for women. Wonderfully comfortable and stylish. Uppers of brown or patent leather. Smooth leather insoles. Flexible stitched down oak outsoles. Low rubber heels. Sizes 2½ to 8. Wide widths.

Give Size

Order brown by No. 96J273. Send no money. Pay only $1.98 and postage on arrival. Order patent leather by No. 96J274. Pay only $2.48 and postage on arrival.

Plain or Tipped Toe Style Genuine Vici Kid Shoes For Men

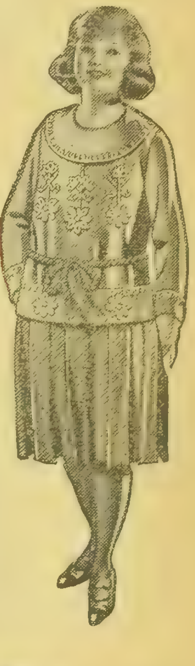


Cushion Insoles

$2.98

An absolute rock-bottom price on men's comfort dress shoes. Have cushion soles and rubber heels. Sizes 6 to 12. Order plain toe model by No. 96A618. Order bluecher cut with English toe by No. 96A617. Send no money. Pay $2.98 and postage for either style. State size.

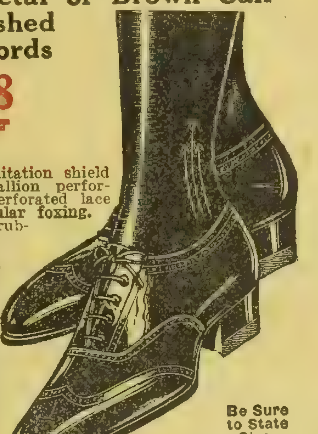
Child's Middy Dress Attractive Two-Tone Combination



$1.98

One of the most novel and attractive children's garments ever produced, and sure to be a big favorite for fall and winter. A charming two-piece middy dress, including snappy Balkan middy of all red flannel cotton warp with round collar and cuffs. The front, collar, cuffs and Balkan bottom are embroidered in exquisite contrasting colors. Rope girdle with tassels at waist. Skirt of navy blue serge in clustered plaited style hangs from a white muslin under-waist. Furnished in red blouse and blue skirt combination only. Sizes 7 to 14 years. Order No. 96G8326. Send no money. Pay $1.98 and postage on arrival. Be sure to state size.

Women's Patent Leather, Gunmetal or Brown Calf Finished Oxfords



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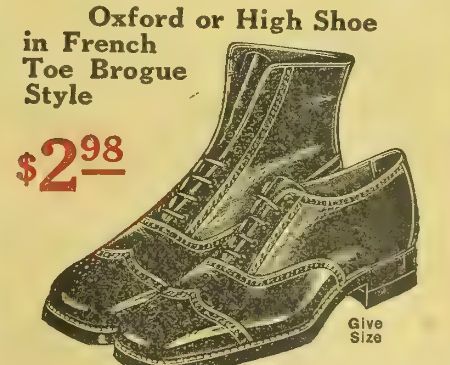
Made with imitation shield tip and medallion perforated vamp, perforated lace stay and circular foxing. Has medium rubber heel and medium pointed toe. Sizes 2½ to 8, wide widths. Order patent by No. 96J121. Order gun metal by No. 96J122. Order brown by No. 96J123. Send no money. Pay $1.98 and postage on arrival.

Be Sure to State Size.

Oxford or High Shoe in French Toe Brogue Style



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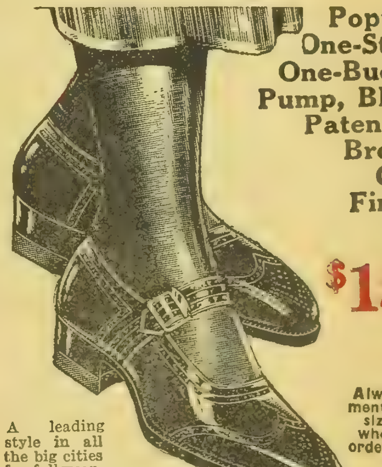
Give Size

Men's French toe dress shoes or oxfords in Brown mahogany calf finished leather. Have medium toes oak soles and rubber heels. Perforated on vamp, tip and eyelet stay. Sensational values. Sizes 6 to 11, wide widths. Order oxford by No. 96-A658. Order shoe by No. 96A660. Send no money. Pay $2.98 and postage on arrival for either style. State size.

Popular One-Strap One-Buckle Pump, Black Patent or Brown Calf Finish



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Always mention size when ordering.

A leading style in all the big cities for fall wear. One-strap, one buckle pump of rich black patent Colt Skin or Brown Calf finished leather. Is well made with perforated sewed tip and medallion toe. Fancy perforation on vamp, strap and quarter. One-piece medium extension oak sole; low flapper walking heel with rubber top lift. Sizes 2½ to 8; wide widths. Black patent No. 96-J20. Brown Calf finish, No. 96J21. Send no money. Pay $1.98 and postage on arrival for either leather. State sizes.

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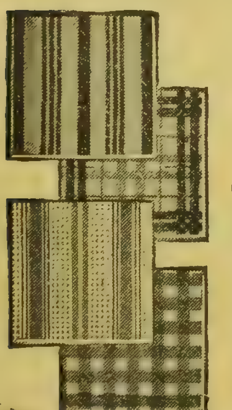

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Width About 27 Inches

Ideal for nightgowns, petticoats, bloomers, etc. Good weight with soft fleecy nap both sides. Comes in Blue or Pink check—Pink, Blue or Gray stripe—Pink, Blue, Gray, Navy or Brown plaid. Be sure to state color and pattern wanted. Order No. 96F3642. Send no money. Pay $1.89 and postage on arrival for 10 yards.

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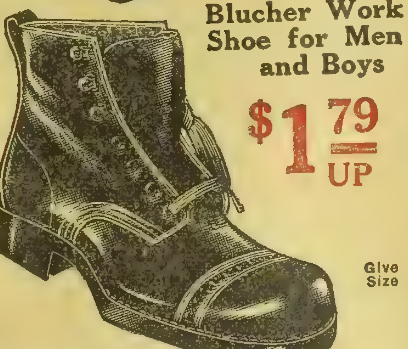

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Brown or Black work shoe of durable leather. Solid leather inner soles. Heavy double soles. Green chrome outsole. Leather heel. Sizes 6 to 12. Wide widths only. Order Brown by No. 96A759. Order Black by No. 96A760. Send no money. Pay $1.98 and postage on arrival. Order Boys' sizes 1 to 5½ by No. 96A554. Price $1.98. Order Little Boys' sizes 9 to 13½ by No. 96A555. Price $1.79.

Standard Quality Apron Gingham

Width, about 26 inches. Fine, closely woven, fast color Indigo blue apron gingham. Choice of large, medium or small check. State preference. Tremendous bargain. Order No. 96F-3469. Send no money. Pay $1.49 and postage on arrival for 10 yards. Money back if not satisfied.

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Your order from this Ad brings you our beautifully illustrated 160 page catalog of more than 4000 bargains in everything to wear. You get a new Bargain Catalog every 6 weeks. This is Sharood's way of keeping you supplied with fresh up-to-date merchandise at the lowest prices in America—a method vastly superior to the old way of sending out a big catalog only once or twice a year. Sharood's goods are always the newest prices guaranteed the lowest.

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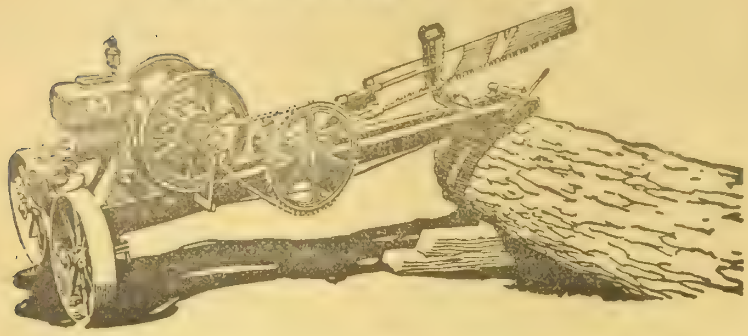

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Write us for full particulars. Let us show you why it will pay you to own a HERCULES Drag Saw, a HERCULES BUZZ SAW Rig, or some other HERCULES money-saver. Any of these outfits will also do all kinds of heavy chores about the farm. Ask us for details and special autumn offer through your nearest dealer.

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THE PEACEMAKERS

A SERMON BY REV. DAVID F. WARNER

THE PEACEMAKERS

TEXT: "Blessed are the peacemakers: for they shall be called the children of God." Matthew 5:9.

THESE are days when our hearts are anxious and expectant; when human emotion is tense; and when our concern for world peace is so ardent as to demand our best diplomacy, editorials, sermons, and prayers. But a vicious teaching and a repudiation of human brotherhood goes wickedly on.

Some had hoped that human culture had made war intolerable; but no. It was hoped again that Socialism might provide a congenial means for propagating the "olive branch of peace;" but often, where Socialism is most at home there militarism raises her bloody head highest. Others thought that our peace propaganda,—such as conventions, tribunals, and treaties—would avert any impending war. But did it? And why not? And why are they now telling us that the doorsteps of The Hague Peace Palace may yet be drenched in human blood? When are we to hear the cry for a vital Christianity as sounded by our late President and in a recent call from the heart of Woodrow Wilson? Not yet awhile when a foreign statesman of prominence is telling American leaders that Mr. Wilson's ideals are premature and we ought yet to be guided by the doctrine of self-interest and the suggestion of "America First."

But we are still to depend on Christianity to obliterate warfare. Why? Because Christianity stands for loving your neighbor as yourself, and for doing unto him as you would have him do unto you. It stands for justice, not injustice; for humanity, not inhumanity; for peace, not war.

However, we have witnessed, recently, a strange anomaly. Nations that supposedly, are enlightened and Christianized, are in deadly combat, and the Christian's God, rather than being invoked to prevent the strife, is being implored for victory. But is God at variance with himself? Impossible. And this carnal strife has robbed our Christianity of much of its life and vitality. Surely, the imps of darkness must have gloated over this gigantic exhibition of human strife and pain! Then, what is the matter with our Christianity? Just this,—it lacks "peacemakers."

Who is our beatific peacemaker? Not he who has only nature's lovely gift "to pour oil on troubled waters." Not he who is passive and does nothing to provoke resistance. These "do nothings" little know that they are giving the devil more time to mobilize and strengthen his forces. He, however, is the peacemaker of our text who has climbed the flight of the Beattitudes and has taken his redoutable position high on the exalted table-lands of the Kingdom. Here, unentangled by the things of this world, he is given a true outlook on all its strife, and is in a position to see the way out. His new perspective gives him that unbiased instinct of brotherhood which qualifies him to bring the world a message of peace and good-will. Now, brother, you who have climbed this beatific ascent are Christ's pacific "light of the world" and Paul's "bond-servant" to work out this peace and fraternity. If you are not doing this you are giving the world a stage-play; and this is hypocrisy.

When worked out, what will this peace do? It will help to put the world into right relations with God. That we are at cross-purposes with Christian ideals is the cause of all our strife. God purposes in Christ to bless the world with love and harmony thru us. But we, in our intoxicated zeal for the promotion of our own ends, are out of joint with his divine plan of Christian brotherhood. God was in Christ reconciling the world unto himself, and he is yet as the "mind of Christ" becomes incarnated in men. Otherwise, men are too capricious.

It will give a heavenly atmosphere to church life. And God knows we need more of this fragrant spirit. War is said to be hell. But war, we know, is selfishness. Then selfishness is hell. But is there an inferno in the church? Have we arrogant selfishness and hypocrisy there? This is a clue, follow it. What, universal peace? Never, as long as we have unfriendly rivalry and strife in and among the churches; and in your heart and mine. Never mind Balaklava, Waterloo, Gettysburg, and the Argonne. Study well the battle-ground of your own heart. There you may win your greatest laurels.

It will neutralize the spirit of literal warfare. "Do you want to know the cause of war,—the cause of the murder in Europe, the cause that will bring war to America if it ever comes? It is capitalism, greed, the dirty hunger for dollars. Take away the capitalist and you will sweep war from the earth. Take it away today and the war in Europe will stop to-morrow. Take it away and the world will have seen the end of barbarism." These were the reported words of Henry Ford a few years ago. But a recent reporter represents Mr. Ford as having had a change of mind. If this be true whence comes this spirit? Out of the essence of self-interest and unholly profit in the instance of war; and out of the poisoned thought and vicious propaganda that the American soldier is our "greatest pacifist." We know better. The verdict of history and the teaching of experience is, that carnal soldiery kills and crumbles nations. But the Kingdom of Heaven is yet at hand, and some day God will show what he can do with nations as he is showing today what he can do with individuals.

Mr. Bryan asks, "Why do not nations as well as individuals apply the law of love brought to us by the Man of Nazareth?" And Mr. Bryan knows. Because many individuals are not applying it. A nation is but an aggregation of individuals politically organized. The writer believes that most individual soldier combatants would fraternize and become brothers if let alone. But other individuals (political rulers) will not let them. So, peace and brotherhood, traced to their deepest and lasting dependence, are only found in the heart of the individual.

The world has never been able to work out the problems of right and wrong nor to keep out of the wrong. In the recent war there has been a colossal and practical acknowledgement of this. Then what an appeal to Christianity! The Christian only has had committed to him the duty and glory of bearing to the world the law of love, the message of justice, fraternity, and peace. And, methinks if Christians had done their duty, that long ere this the night of war might have given way to the bright, new day. Yet, now, the peace movement is stronger than ever before, notwithstanding a pose of "preparedness," a "citizen soldiery," and other "big stick" signs of the times. And let peacemakers keep busy that Christianity may be vindicated for the sake of now and eternity.

What is the reward of peace-making? We shall be called the "sons of God." No, not by the world. By it we shall be called impractical, and even "degrading" and "silly." But this is only the judgement of man. That does not matter so long as God says we are his sons. To enter the sonship of God, and enjoy eternal harmony and peace, is ours thru becoming a peace-maker in all the areas of life. Blessed are those who enter into the spirit and temper of the Great Peacemaker.

LIKES SERMONS

I note among the many good articles in the Business Farmer the excellent sermons now being published.—J. T. Daniells, Clinton County, Michigan.

THANK YOU!

....We can always rely on your paper to guide us in selling our farm produce and when to sell. Thanking you for the good work of your paper, I remain yours truly, Chas. Arnold, Delta County, Mich.

UNCLE RUBE SPINACH SAYS

MORAL SWASION—AS SHE IS

YOU know, friends, I don't never hardly like to enter into any kind o' argiment. I'd ruther keep out of it 'cause I'm a peaceable minded sort of old cuss 'at don't like to squabble aroun' an' make a fuss—kinda like quietness an' ever'thing but jest the same—while I didn't intend or expect to say much 'bout the lickker bis'ness an' would of kept my jaw shut if preachers of the gospel hadn't took a notion to shoot into the gen'ral mess. "Cut out the Volstead Act" sez one noted Divine. "It's humuliatin' an' debasin' men can not have laws to correct their brothers' appetites"—or words to that effect. Give them Moral swasion," says this angel-like minister. "Moral Swasion"—course I don't know jest what he means by it—"is the only way to reach men's souls" (soles might be better). An' then this here feller goes on an' tells how alcohol is a sort of a necessity. Tommyrot and then some—Mr. Senator Couzens notwithstandin' the preacher, reformers an' every other class of would-be reformers, have had five hundred years an' more to work the Moral Swasion Act. Five hundred years folks, to make people quit wantin' drinks with 5 per cent alcohol into it. If moral swasion has been worth a darn nobody be hollerin' for 5 per cent stuff. Now after five hundred years of preachin' an' everything that human mind could do to stop the awful curse of liquor.

Take it in any shape, watch the affects of it, in fact, jest see what the stuff'll do to a home an' send me the man that'll say't 5 per cent beer, wine, anything 'at contains alcohol is good for the human system.

Dear, good friends, sometime I may go down to the depths of that region of eternal darkness—none of us know jest where we're goin' to land when we ship from here but this I know—if I do land down in that awful place it will not be 'cause I've advocated 5 per cent beer nor any other drink containin' alcohol.

An' more'n that if I do take a jump down there I ain't goin' to be alone. I'll meet a whole lot of the 5 per-centers, preachers included. An' why should'nt they be there?

To make it a perfect place we've got to have all kinds of folks. 5 per cent preachers'll be jest as good as any to start things goin' cause there'll always be enough of others for the preachers to try the moral swasion act on. Allus has been an' allus will be.

Now good folks, jest look'it here for a minuit. If the preachers of this great land of ours believe in moral swasion why don't they try it on bandits, hold-up men, murderers—male an' female—grafters, loan sharks, prize fighters an' anything besides the lickker business.

Five hundred years of moral swasion an' yet folks hanker for alcohol! Now five hundred years is a long time, aint it folks? An' its been more'n five hundred years, too.

Preachers may preach, talkers'll talk an' th world'll go on. But folks, when any 5 per cent drink is sold out on market openly—well then the devil'll laugh.—Cordially UNCLE RUBE.

TO THE FARMER BOY

Father and son how grand they look.
Planning and working together,
They're farmers too and give to the world
The best of their life's labor.

What would we do in this grand world of ours,
If the farmers, the ones who feed us,
Would follow the course, the trend of the times
And hie to the city and leave us.

We bow and kow tow to the Earl and Duke,
Assumed nobility of the race,
But I'll take off my hat to the farmer and son
When I meet them face to face.

Then let us wake up to the truths of life,
And place honor where honor is due,
Or the broad shouldered boy who is following the plow
Will not deign to notice you.

What then would become of the lives that live,
When the strengthening arm is gone,
Then take off your hat in reverence
And keep the farmer boys at home.

L Baker, a subscriber.

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Transportation is the big problem of today in manufacturing, merchandising and farming.

No matter what you make, grow or stock, it brings no profit until moved to the place of sale.

Modern, progressive farmers, being also business men, now depend on fast economical motor transportation to save time, save products and get the money.

Chevrolet Superior Light Delivery, with four post body was built especially for farm needs. Although not a heavy-duty truck, it has the space and power for a big load, which it moves fast at a very low cost per mile. Its engineering features are modern and complete: powerful motor, electric starter, standard transmission—3 speeds forward and one reverse, demountable rims and extra rim, etc.

For heavy work, Chevrolet Utility Express Truck at only $550, chassis only, offers remarkable value. Fits any standard truck body.

Prices f. o. b. Flint, Michigan

Superior 2-Pass. Roadster -	$490	Superior 5-Pass. Sedan -	$795
Superior 5-Pass. Touring -	495	Superior Light Delivery -	495
Superior 2-Pass. Utility Coupe	640	Superior Commercial Chassis	395

Utility Express Truck Chassis $550

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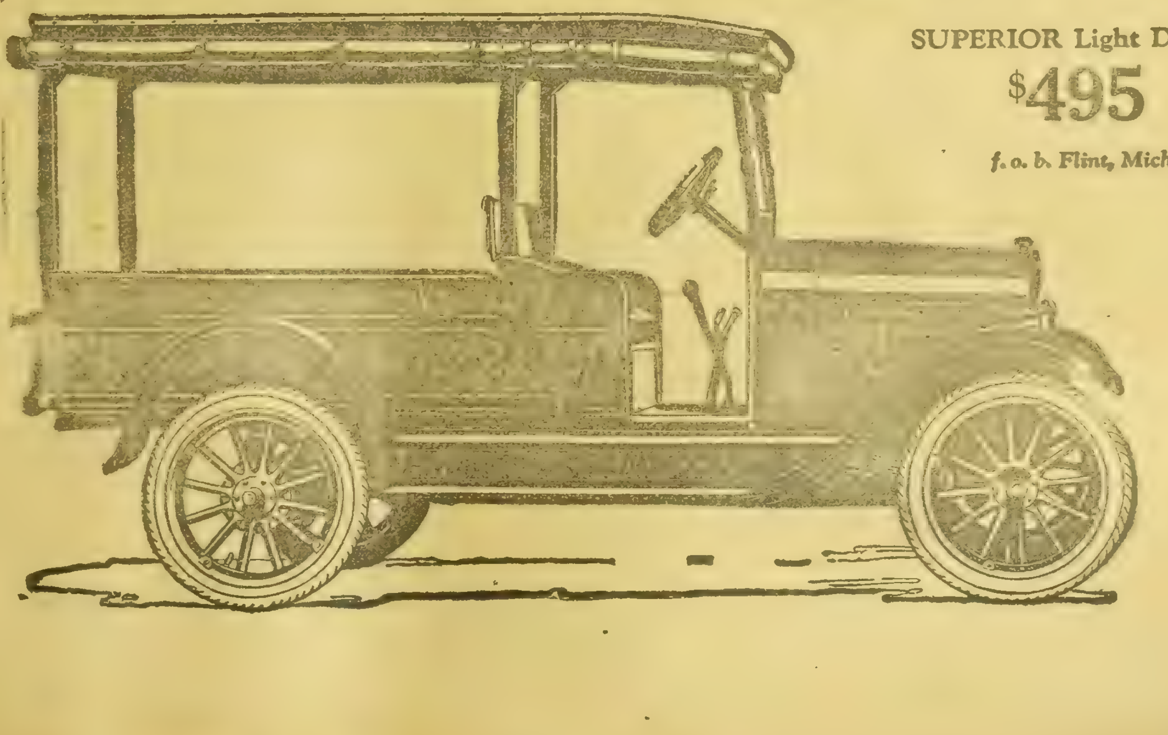
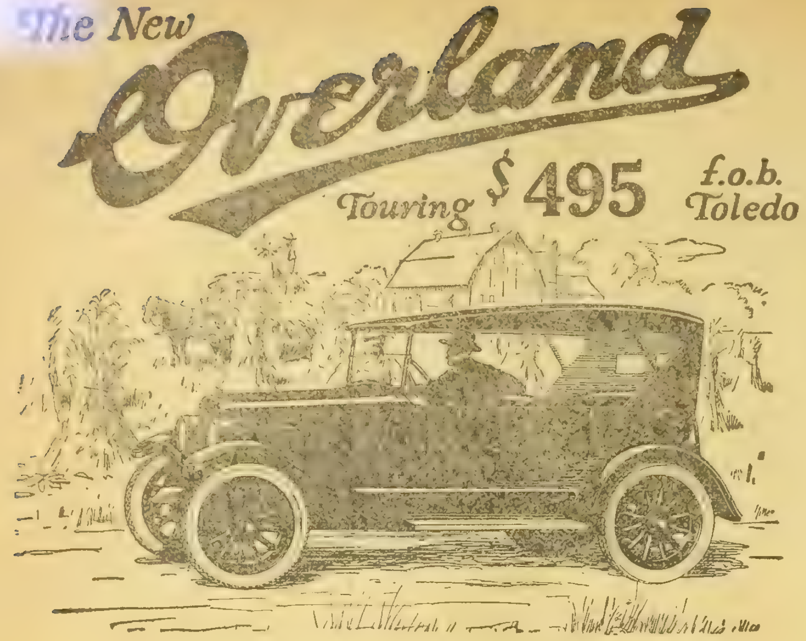


SUPERIOR Light Delivery

$495

f. o. b. Flint, Mich.



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Triplex springs (Patented) which give great riding ease, an immensely strong rear axle, a powerful, dependable engine that returns 20 miles and more to the gallon of gasoline—

These are *added* values which combine to make owners call the Overland "the most automobile in the world for the money."

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Willys-Overland Ltd., Toronto, Ont.

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Write now for facts about this wonder engine. Same engine gives 1½ to 6 H. P. Gasoline or kerosene. Portable, light, and free from vibration. Requires no anchorage. Easy starting—no cranking. Pumps, saws, grinds and does all chores. Plenty of power for every purpose.

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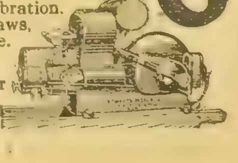
Tremendous value. Thousands of satisfied users. Write now for details and free trial offer on this amazing engine.

Edwards Motor Co., 334 Main St., Springfield, Ohio



Michigan has a Bountiful Fruit Crop

FRUIT AND ORCHARD

Edited by FRANK D. WELLS

THE FUTURE FOR THE GRAPE

DURING the past three years the high prices received by grape growers for the fruit has resulted in a large increase in the area devited to vinyards. Nurserymen have been unable to supply the demand at times. And the end is not yet.

A trip through what is known as the Michigan grape belt, shows that many acres will next spring be added to the already large number planted to vines. In this district, which may be rather roughly located as extending from Grand Rapids to Indiana and from about Kalamazoo to Lake Michigan the grape is rapidly becoming the leading product. The peach which made these counties famous has taken a secondary place. Raspberries are losing in favor compared with the vine. This does not mean that other fruits are being neglected, but the area given to them is not increasing at a ratio to equal the grape.

There are reasons for this besides the unprecedented prices for grapes. Diseases among raspberries have been causing considerable loss, besides no little anxiety and uncertainty regarding the future. Will it be possible to control these troubles or will the growers meet the fate of those in Ohio and New York, where many have given up raising this fruit? The labor problem, too, is serious. It is difficult to get pickers enough during the hot days of June and July. Then there is the transportation and the marketing. These have been discouraging factors in berry growing, till now the comment heard everywhere is that "There's no money in berries!"

Grapes offer some advantages over raspberries. More time is required to get a vineyard into bearing, but it continues profitable much longer. Work among the vines is less disagreeable than among the brambles. The harvest is in the cool days of autumn. The wages are more attractive since skilled labor is at a premium. Grapes are not as perishable as strawberries and raspberries, so can be handled and sold at smaller loss. All of which appeals strongly to the producer.

To be sure the grape has its enemies. There are insects and diseases. But those known to the grape belt are kept fairly under control. There are others that may some day come, among them the much dreaded phil-loxera, but they are still in the future.

There is a revival of interest in the peach, but the diseases and the winters are discouraging factors. The land suitable for this tree is limited and much less in area than that which can profitably be used for the grape. So the vineyard is encoaching upon the orchard.

East of the grape belt the number and size of vineyards have increased somewhat, but have probably not kept pace with the orchards. Nevertheless, a large addition to the yield of this fruit may be expected in a year or two, though at that it will be insignificant as compared to West Michigan.

Now what about the future? That is the question which the prospective vine grower is asking. Is there too much planting? Will there soon be an overproduction? An important point, deserving careful attention.

Unless some potent enemy arises, some insect or disease, there will be a larger increase in production, and that within two or three years. Will the demand be large enough for the supply?

First of all let it be asserted that Michigan grapes are as good as any in America and better than most. (The California man will not agree to this, but then he will not admit that his state ever had an earthquake.) The market for Michigan grapes is extending. A letter received this summer by a fruit buyer in West Michigan from a broker in Scranton, Pa., may be taken as illustration. Formerly it was stated the market there wanted California and New York grapes, but now it was not satisfied with anything except Michigan fruit. So he wanted to be supplied with it. This is only one. How many more such markets there may be east of the Rockies no one knows. But the country should be full of them.

As a wine grape Michigan fruit is claimed to be better than that from California. However objectionable the use of wine may be, the fact remains that thousands of tons of grapes will every year go to the press. Will the product cause more harm than the poison of pre-war days?

The use of pure, unfermented grape juice is increasing. There seems to be no reason why it should soon decrease. Juice factories are numerous in the grape belt, and there is also the home product. In thousands of families it is a part of the regular canning, as well as the regular plums or peaches.

As a dessert fruit the grape has not begun to be appreciated. Where is there a better table grape than the Michigan grape, grown anywhere between Port Huron and Muskegon?

There are enough who want grapes to eat up all that Michigan will grow for years to come. If the fruit becomes too cheap for profit it will be because producer and consumer are not brought near enough together. Here is the real problem. Isn't it the real problem with all the fruits? Not overproduction, but underconsumption. O, well, that is the hardest nut of all to crack.

WILL SPRAY TREE NEXT TIME

IN your Aug. 4th paper, page 18, column 4, is a little article, "Blight in Apple Trees." Well, I had a tree that acted that way and I nearly cut it to nothing, then one day I discovered some bugs and I started to pick them off and then the blight quit spreading. If I have any more trees that blight or bug as I call it I will spray instead of prune.—E. B. S., Woodville, Mich.

The constable of Milk Corners received by post six Rogues' Gallery photographs, taken in different positions, of an old offender wanted by the police of the big city. Two weeks later he sent this message to the city chief of police:

"Got five of the men. Am going after the sixth tonight. Hold reward."

What the Neighbors Say

THAT GAS TAX AGAIN

THE M. B. F. for August 4th contained a letter by Mr. Ralph H. Jones under the heading "Gas Tax Unjust," also you had an editorial on the same subject headed "17 States Have Gas Tax." Now I do not see how Mr. Jones as a farmer can take the stand that he does. His test of machines that use gasoline indicates that he is the operator of a good fair sized farm, provided that he has not other business that is responsible for the machines.

The gas tax law that the Governor vetoed may not have been a good one in its make-up but that does not seem to be the point with Mr. Jones for he clearly indicates that he is against the gas tax in principle.

Means of communication and means of transportation have had a very large part in the progress of civilization. Most changes were slow in motion and no great changes took place in the life of one generation of men. But the automobile has come up in fifteen years from being a rich man's plaything to a universal means of transport.

Canals and railroads at the time of their building received much help from public sources. But their operation expenses have been paid as well as the profits from the receipts of the office. The operating expense includes the up-keep and replacements on tracks, road beds, canalways, locks and soforth.

As it stands today automobile traffic is heavily subsidized as such. Certainly Mr. Jones will not dispute the statement that the automobile should pay its way and not live off of other business. Probably there is now not a single state in the union in which there is not now some long distance bus lines operating in many cases in competition with the railroads. An advertisement in a late date popular weekly says in part, "Three billion people travelled one billion miles last year in fifty thousand motor busses. Though still an infant, bus transportation already boasts an invested capital of one hundred million dollars." That hundred million dollars does not include one dollar for cost of right of way or road bed or tracks. True license fees are a feeble attempt to tax according to probable wear upon the roads.

Mr. Editor, your list of states having gas tax included seventeen, among them Florida, Idaho, Oregon and South Carolina have a three cent tax. A few days ago I saw in a carefully prepared article the statement that the estimated income from auto license taxes and gas taxes for 1923 would be about half the estimated road expenditures for this year. Our road laws enacted up until the last few years have nearly all been clearly based on the theory that the public roads were a community necessity and mostly an asset or liability, depending upon their quality. Public roads were a social institution built and kept up by taxes levied more or less pro rate according to property values and nearness to the improvement. Some roads were built and maintained at state expense wholly or in pare as a social benefit to the state as a state.

Present road building programs in many cases bear but slight relation to the primary needs of the inhabitants of the section through which the road runs. People always have, and especially so since the war, been more interested in trying to push the tax off onto the other fellow, rather than to have any just tax system devised and put into working order. The farmer has largely by his own help had the value of farm land increased out of all proportion to its earning power. Just as truly "watered" as the stock value of the railroads and many industrials. But the difference is that the other fellow's "water" helps him making rates for service, that is increasing the earnings while the only net result of the water in farm values is to increase the farmers' tax. For a while it sort of fed his vanity and increased the size of his air castles and enhanced their colors, but the cold facts of the "morning after" show but little beyond increased taxes, while the market situation is entirely beyond his controll.

The farmer has sweat his old shirt till the color is most gone but he has to let go of some of that rare product which we all possess more or less of but are great misers for sometimes called mental sweat. You can always tell the community that sweats very much mentally. They have co-operative enterprises that are supported. A little politics will help. But when it gains too large a place it gets worthless.—H. C. Matheson, Box 597, West Palm Beach, Florida.

THE FARMERS ARE GETTING READY

DEAR EDITOR—Sometimes it takes considerable preparation in getting started. This preparation work is now pretty well under way. We have had several years in observing corporate greed in the political saddle, using its wealth, lobbies and kept press, to secure legislation favorable to their interests, but correspondingly detrimental to the people in general and the farmers in particular.

The Esch-Cummins law, the Fordney-McCumber law and other measures were passed at the request of exploiters, and for their benefit.

They tell us that our government cannot help the farmers in a legislative way. The exploiters of the people have got too much the upper hand for that. The sad affair of the Federal Reserve Board is still fresh in our mind, and the millions that the privileged class made through the defiation of the farmer class will not soon be forgotten.

The law of supply and demand is being more and more set aside through the constantly increasing power of monopoly. Illustrations of this we have in the manipulations of the markets by the bond and oil companies, the packers, the steel trust and other concerns of the same class.

Thus we have to buy in a market that is high and sell in a market that is low. Monopolies have been built up by perferential tariffs, concessions and other special privileges to such an extent that they can not tell us at what prices we must buy and sell. No government can change such a situation as long as it is controlled by monopoly. The child cannot dictate to the father.

We must have a government responsive to the people and not only to a privileged few. The farmers, the laborers and the people in general are entitled to a hearing in the halls of Congress just as well as the moneyed class.

Sometimes we have been sleeping when important public questions were decided, but as a matter of self-preservation we must hereafter keep awake and go at the matter in dead earnest. We are going to stir as a class in a movement which is right. We can get along without flattery, but we cannot get along without justice. Those who so long have been interfering with our welfare, better show forth fruits, meet for repentance before it is too late.

Although special interests yet control the daily press with but a few exceptions, it no longer holds true that the majority of the people are reactionaries. On the other hand the rank and file of the voters are now fairly well informed as to the leading issues of the day.—A. J. Raftshol, Leelanau County, Mich.

ROAD WORK

DEAR EDITOR—I would like to know how the people in general feel about the way the county road commissioners expend the county money. Everyone knows the men they hire to work on the road don't do one day's work in four days, yet they draw their five and one-half dollars or more a day and laugh at how much time they can get in, doing to little and still draw full pay. I don't doubt but they do as much for this money as the commissioners, but isn't their some way of making them all earn at least half what they get? One man with a tractor and truck would do more work in one day than the man with a team does in a week.—D. T., Williamston.

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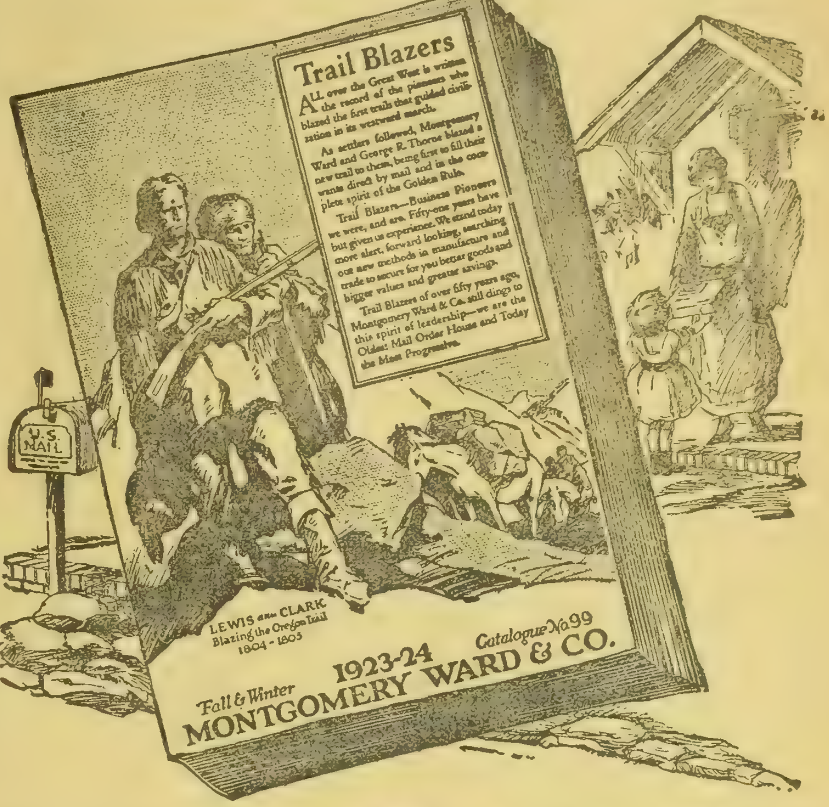

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The Michigan
BUSINESS FARMER

SATURDAY, SEPTEMBER 15, 1923

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We will not knowingly accept the advertising of any person or firm who we do not believe to be thoroughly honest and reliable. Should any reader have any cause for complaint against any advertiser in these columns, the publisher would appreciate an immediate letter bringing all facts to light. In every case when writing say: "I saw your advertisement in The Michigan Business Farmer!" It will guarantee honest dealing.

"The Farm Paper of Service"

USING PRISON LABOR TO BUILD ROADS

IT behooves every thinking reader to digest the facts and figures given in the article on the employment of convict labor on the state roads of Michigan in this issue.

It may be that a solution has to this dilemma been reached of such far reaching effect that the road problem in Michigan will eventually be solved by it.

For countless years prisoners in our state penal institutions have been employed on labor, most of which, up to recent years, was in competition with the labor employed on the outside or was of such a nature that it taught the prisoner little and was thus of little value to anyone, except the profiteering contractor who played politics to get it.

Good roads are of greater general benefit to all people, than any other single expense of government, unless it be that of education. The employment therefor of the thousands of prisoners who would be confined at less profitable work, means the release of common labor to the farms and other channels where it is much more needed. It means that without taxing unmercifully the property of the state, a paved road system may be maintained which will link every corner of Michigan.

If the plan works as successfully as it apparently has started out in Michigan it will doubtless be extended into other states and may mean a solution to the whole national problem of good roads and their maintenance.

It is, in any event, an interesting experiment and Governor Groesbeck and the state highway commissioner, Frank Rogers, are to be congratulated on the deep interest they have taken in the subject and the zest which they have shown in making it a success against the usual number of obstacles and discouragements which have presented themselves in making the theory work out on a practical basis.

Only a Chinaman does not believe in good roads! Good roads mean increased property value, better education, a means of keeping the young folks in the rural communities, and uniting all corners of the commonwealth into one.

Particularly will the farmers of the state of Michigan watch this plan because they have been most interested in knowing the solution of this problem which means so much to them, and which, while beneficial from the standpoint of bringing them nearer to market and inceasing their enjoyment of the better things of life, still had arrived at a point where they must seriously consider the cost.

As we recall it, the Appian Way was built with prison labor, but that can hardly be held against it inasmuch as it is still standing, some 5000 years later!

THEY WHO ARE THE GOVERNMENT

WE get accustomed to thinking of the Government as something at Washington or Lansing, which taxes us unmercifully, gives us too much protection, watches too closely our morality and sits generally as a parent or a policeman, in our daily lives.

President Coolidge, when he was officially notified, at Northampton, Mass., of his nominatoin as the candidate of his party for the office of Vice President, used the following words in closing his speech of acceptance, July 27, 1920:

"We have been making counsel together concerning the welfare of America. We have spent much time discussing the affairs of government yet most of the great concourse of people around me hold no public office, expect to hold no public office. Still in solemn truth they are the government, they are America. We shall search in vain in legislative halls, executive mansions, and the chambers of the judiciary for the greatness or the government of our country. We shall behold there but a reflection, not a reality; successful in proportion to its accuracy. In a free republic a great government is the product of a great people. They will look to themselves rather than government for success. The destiny, the greatness of America lies around the hearthstone. If thrift and industry are taught there, and the example of self sacrifice oft appears, if honor abide there, and high class ideals, if there the building of fortune be subordinate to the building of character, America will live in security, rejoicing in an abundant prosperity and good government at home, and in peace, confidence and respect abroad. If these virtues be absent there is no power that can supply these blessings. Look well then to the hearthstone, therein all hope for America lies."

Mr. Coolidge was visualizing humble homes, but filled with simple faith and love and respect and honor—homes representing the common people of this great country; the people who are the government.

"At night returning, every labor sped,
He sits him down, the monarch of a shed;
Smiles by his cheerful fire, and round surveys
His children's looks, that brighten at the blaze;
While his loved partner, boastful of her hoard,
Displays her cleanly platter on the board."
—Goldsmith.

COMMON FOLKS

LINCOLN once said, "God must have loved the common folks,—he made so many of them." Sometimes we get to thinking that the rich in worldly goods are those who receive the greater share of the world's blessings, and yet very often when we visit the home of a neighbor we see how little he has to envy the city man of wealth.

Recently we visited a farm which borders the shores of Lake Huron. It is only a small farm of forty acres, and the family who operate it are anything but rich in the sense of gold and silver, but in those things which go to make for contentment and happiness, Henry Ford himself might envy them their possessions!

From their front porch one can see the green water of Lake Huron sparkling in the morning sun, and at night they are lulled to sleep by the wash of its waves along the graveled shore.

We sat down to their table heaped with good things to eat and watched them enjoy it because it was seasoned with a sauce for which John D. Rockefeller would gladly pay them a thousand dollars a bottle if he could pour it over the food that is served him on silver plates. The name of that sauce is "Hunger sauce" and it cannot be obtained in the most expensive food shops, but our friends enjoy it at every meal and yet their supply of it never seems to diminish.

Emerson once wrote an essay on "Compensation." When all is said and done, we sometimes wonder that men will struggle and strive as they do to surpass each other when the God of compensation must sit back and smile at their fallacy.

Have you ever envied Henry Ford? You shouldn't. Because I know he must often envy the things you possess!

A FRIEND IN NEED

POSPERITY and peace may bring arrogance and the other products of greed which lead to embroilments and finally to war. The sight of even an enemy in great distress will, in contrast, bring forth the best in human nature and those characteristics which we commonly express as "Christian."

Japan, which the jingoist would have us believe is our mortal enemy, waiting only for the opportunity to jump at our throat, was within the past two weeks visited by what will undoubtedly prove the greatest catastrophe in our time. The greatest cities in Japan laid low by an earthquake and how many thousands of lives were swept into the chasms or burned in the fallen cities is yet to be told. Navigators report that a whole island has sunk into the sea and at another point a volcanic island has risen from it. Nature is proving what puny things men and the things of men are after all.

The news of the catastrophe to Japan had no more than reached our shores before the American Red Cross and similar agencies were sending relief ships and contributions were being accepted in every city in the United States for the suffering Japanese.

Misery thus brings sympathy and sympathy is after all the greatest pacifier in the world!

We, of this generation, witnessed a human earthquake in Europe, the awfulness of which is not yet wiped away and rumblings of its possible reoccurence still haunt us. Better would it have been if some nations could have been swept by the natural catastrophe which visited Japan. They would have lost no more property, probably no more lives and they would have received the sympathy of the world which would have brought peace and contentment.

And after all what is there in the world for either men or nations than peace and contentment, which means happiness,—the supreme goal of all!

HENRY FORD IS HUMAN

LAST year, at the Michigan State Fair, Mr. Ford in his splendid exhibit had a full size locomotive which must have recalled to him a keen desire of his boyhood, for what boy has not wished at some time in his life above all other things to pull the throttle of a railway locomotive?

This year, in the Ford exhibit, Mr. Ford personally supervised the installation of a standard locomotive, gay in polished Japan and nickel. It was mounted on roller bearings and from early morning until the last gate was closed at night, a never-ending stream of boys climbed the steps of their heart's desire and pulled the throttle which set the wheels of the locomotive spinning. Some even more brazen than the others who knew the inside workings of the locomotive cab, reached up and pulled the whistle, thus scaring the daylights out of envious sisters who were looking on!

We do not give Mr. Ford credit for being a super-man, but we do believe that few men in history who arose to such power as he possesses ever retained their touch with common people and common emotions.

Henry Ford is a grandfather but he remembers the desires of a boy. Perhaps that accounts for a good many of the broader principles of humanity which he has introduced into the everyday conduct of his business.

THE 1923 STATE FAIR

ALTHOUGH the figures have not yet been officially announced it is expected tha tthe 1923 Fair at Detroit surpassed in attendance any former exposition and will thus maintain its position of having the largest attendance of any fair held in the United States.

Naturally the bulk of the attendance at the Michigan State Fair is from Detroit and its environs, which means that three-fourths of the people in attendance are not country folks, but it is probably a good thing that the city people get an idea of how their food is produced and why it costs them at least part of what it does when they go to the store to buy it.

The lottery wheels were conspicuous by their absence this year and we heard no complaints of the shows on the midway. They looked rather hopeless and helpless to us, like a rattlesnake without its fangs, or a polecat without its odor. What is the midway after all without an Egyptian dance, a wild man from Borneo, or a Scot Cardiff giant? Barnum was right when he said that the American public liked to be humbugged. So this year's State Fair must have sent a lot of folks away disappointed.

There is a continued improvement in every department of the Stat Fair, and this means something when the high standard of improvement year by year is contemplated. The State Fair as a state owned property now invests its profits entirely in its improvement and has a fine line of permanent buildings that undoubtedly will compose the finest group of state fair buildings in the world if Secretary Dickinson, the man who is largely responsible for it, lives long enough.

Taken all in all, you folks who didn't come, missed something and perhaps you had better be making plans now for next year!

THE TAX PROBLEM

WE believe the greatest problem before the American people today is the problem of taxation, says the Shenandoah, Iowa, Sentinel Post.

Two sane methods of relief are open. First discourage new government fads and fancies which add unnecessary laws to our statute books with increased numbers of employes and more government overhead. Officialism spreads like the green bay tree if left to its own course, so trim it down to essentials.

Second, see that all property pays taxes equally, which it does not do at present. Under our present existing laws any person is at liberty to convert his property into non-taxable bonds and thus escape all forms of taxation.

The necessity (if it ever existed) for tax exempt bond is past and the day is here when no such loophole as this should remain to enable those most able to pay to escape taxation.

Every dollar that tax-exempt bonds absorb cuts two-ways—it doubles the tax on other people and removes a dollar from the industries which need it for expansion and development.

PUBLISHER'S DESK

D. F. BUSH, OF MINNEAPOLIS

I AM writing to ask information in regards to the honesty of the Western Sales Agency, Phoenix Bld., Minneapolis, Minn., managed by D. F. Bush. They ask a $7.50 fee with the description of your property and a per cent when the property is sold. Will you please inform me if they are fakers or a reliable company?—An Old Subscriber, Levering, Mich.

—We will not accept the advertising of D. F. Bush in the Business Farmer, altho it has been offered to us many times and we see it appearing in several Michigan papers. He may be honest, but he works the old scheme of advertising under the caption "Wanted to buy a Farm," when as a matter of fact he wants to sell you, $7.50 worth of possibilities. He gets his cash in advance, but you may be warming your hands by the stove a good many winters before you sell your farm. If this type of so-called "farm agencies" were as successful in selling farms as their advertising matter leads you to believe, they would make Henry Ford look like a piker and they would not need to ask for the $7.50 in advance, their commissions would be plenty and then some.

Lets see—ten times $7.50 is $75, ten times $75 is $750, ten times $750 is $7500 and yet it ought not to be so hard to find a thousand farms for sale in the United States, had it?

AN INSURANCE SCHEME EXPOSED

DEAR Mr. Slocum.—We read in the Publisher's Desk in The Business Farmer some of the shrewd practices of unscrupulous men to defraud people and get their hard-earned money away from them. It is unnecessary to say that the farmer has hard enough sledding without being taken in by the many schemes we read about in The Business Farmer. I for one am thankful that The Business Farmer is good enough, and fearless enough to expose and publish these evil practices, for the farmers of Michigan to read. If every farmer or person who has been "bit" or has been the victim of unfair dealings, would write The Business Farmer, telling of the scheme worked upon him, perhaps others would read of it and not get taken in by the same trick.

Here is one that was worked on myself and many other farmers of this section, by an insurence agent. He meets the farmer, introduces himself as the authorized agent of the ——— Insurance Company of ———, telling the farmer of the great advantages and saving that his company has over other companies. After a long and windy argument and most convincing talk, he gets the poor farmer whom he wishes to do something for (?), to sign an application for his insurance policy. The farmer sees no bylaws, not one in a hundred ever reads them, and he is influenced and led by the agent whom he has confidence in, that he is telling him the true facts in regard to his insurance.

This agent who wrote me up, as well as many others in this territory informed us that if we took out a five-year policy, paying for it in advance that that would be all we would be required to pay for five years, that would be absolutely all we would have to pay, the insurance costing us a good round sum. In just a little over two years, we were notified of another assessment nearly as large as the original five-year payment. We interviewed some insurance men, wrote the company, also the Commissioner of Insurance, and they informed us that the assessment must be paid. "Didn't you read your bylaws?" Why no, never saw them till the application was sent in and the policy sent to me, then we never read them. Who does?

Can The Business Farmer give its readers any rule to go by so that they won't get "bit?" I had some correspondence with Mr. McRae, with whom we have made our acquaintance thru the good old Business Farmer. Wishing to sell my farm, I answered his ad but did not remit the $10 listing fee. It pays to read the Business Farmer. Please find enclosed one dollar to apply on my subscription.—H. E. Root, Van Buren County.

OLIVER OIL-GAS BURNER

DO you or any of your readers know anything about the Oliver Oil-Gas Burner, manufactured by The Oliver Oil-Gas Burner & Machine Co., 21st & Pine St., St. Louis, Mo.? They have a burner which you put either in a cook stove, heating stove or furnace using coal oil. Their advertising matter surely recommends them but before buying one I should like to know what others have found out about them.

Another thing I wonder if you could find out for me is this: In 1902 we bought of the Detroit Engineering Co. a sewing machine called "The Matron." With it came a repair list and guarantee for five years, but no address of maker anywhere. The machine is in fine condition yet but I cannot just find the right needles to fit it and nowhere can I find "The Matron" machine listed.

—We have had several inquiries lately regarding oil burners for stoves and furnaces. Our readers ought to form a pool and give others the benefit of their experience. I will gladly reprint them on this page and will use neither name nor address.

The Detroit Engineering Company is not listed in the Detroit telephone directory so we have no way of finding out where you can buy parts for "The Matron."

THE OLD CONTEST WINNER SCHEME

"I AM enclosing a letter which I received from the Radio Message and by the reading of it I am at a loss to know the meaning of it, as I have entered no contest to my knowledge that is connected with the Radio Message, so think it a "fake" way to get subscriptions to the Radio Message. If it is all right, and I have won as a contestant would like the benefit of the radio set so I am asking your advice on the matter as I have but 10 days to send the remittance of $3.00 for the Radio Message."

Here is the letter our reader received, I am giving space to it, because it is a scheme with which I would like to make the readers of my desk familiar:

Dear Friend:

This must be your "Lucky Day" for we have taken over the names of Prize Contestants and you get the offer of a radio set.

The Radio Set will be sent you upon receipt of the enclosed memorandum signed by you with your present address and your yearly subscription to the Radio Message. No further obligation on your part.

It will be necessary for you to claim the Radio Set within ten days from the time you receive this final notification or you will have no further claim on same. If you are not satisfied we will return the remittance in full.

Congratulating you upon the pleasures you will enjoy from "listening in" every day and evening to the World's Greatest Music, Bands, Orchestras, Songs, Lectures, Plays and Entertainments on your own Radio, we remain Yours very truly, The Radio Message.

—Of course, it is just a catch-penny scheme. Our reader was in no contest or if she was, the prize was to have cost her nothing. The last time we heard of this scheme it was being worked up in Montreal, Canada, and that time it was for a beautiful set of silverware for which the victim was asked to send 99 cents, simply to pay the postage and packing on the wonderful prize they had won. The U. S. post-office authorities issued a fraud order which stopped some of the mail at the border, but thousands of dollars poured into the office, even after the Canadian inspectors had closed it up and the schemer had flown to parts unknown with his ill-gotten gains.

First Mortgage Real Estate Gold Bonds

Were Federal first mortgage bonds not entirely worthy of the preference they enjoy they would not be Michigan's most eagerly sought real estate security.

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More an tter Wheat

For forty years farmers have proven that Royster Fertilizer grows more bushels of wheat per acre, makes plumper kernels, and more straw. Ask your County Agent, or the Royster Farm Service Department, what analysis to use on your land, and then insist upon Royster's to guarantee yourself the highest quality materials and manufacture. The name "Royster" on a bag is like "sterling" on silver.

Experiments in Indiana by Perdue University in ten counties resulted in an increase of 11.6 bushels of wheat per acre, showing a profit of nearly 200 per cent. on the money invested in fertilizer. Fertilizer differs like seed potatoes differ. Insist upon Royster's to get the utmost satisfaction. F. S. Royster Guano Company, Toledo, Ohio.

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Field Tested Fertilizers

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SOLVAY brings better, greater crops the first harvest. SOLVAY makes sour soil sweet and releases all fertility the land contains to hasten growing crops to full maturity.

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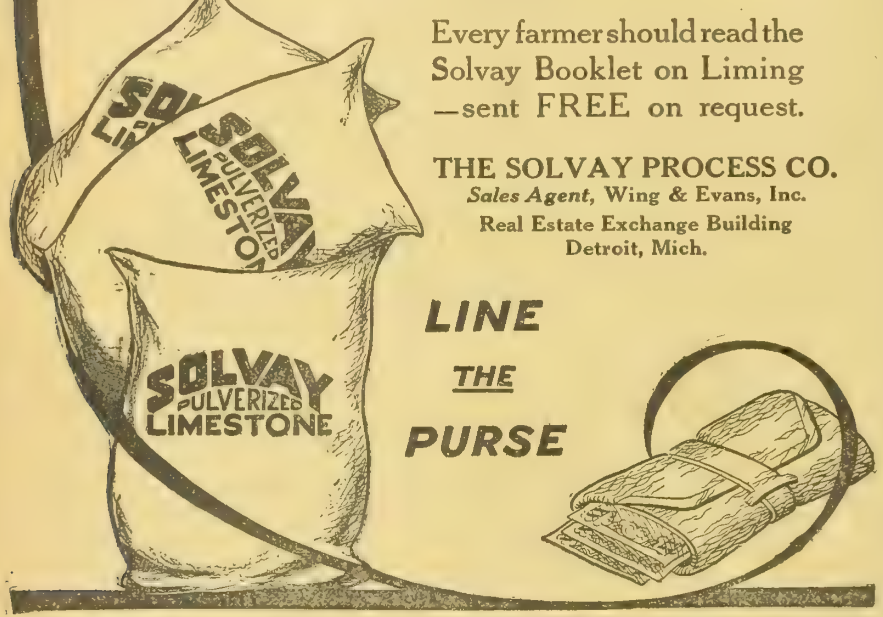

THIS PAIR OF FOXES

Were Winners at the *Muskegon Fox Show.* I have several of their equal to select from. Meet me at the West Michigan State Fair in Grand Rapids and buy a prize winner. Every Fox guaranteed. Nothing but registered stock. For more information, write

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SAVE $5.00 to $40.00 On Your New Range or Heater —direct from manufacturers—and get the finest quality and newest improvements made? See our beautiful new design blue and gray porcelain enamel ranges that you can buy for less money than others ask for just ordinary stoves.

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677 Rochester Ave., Kalamazoo, Mich.

The Hunted Woman

By James Oliver Curwood

Michigan's Own and America's Formost Author of the Great Northwest

Copyright by James Oliver Curwood

(Continued from August 18th)

In his eagerness Aldous was again trying to sit up when Joanne appeared in the doorway. With a little cry she darted to him, forced him gently back, and brushed old Donald off the edge of the bunk.

"Go out and watch the broth, Donald," she commanded firmly. Then she said to Aldous, stroking back his hair, "I forbade you to talk. John, dear, aren't you going to mind me?"

"Did Quade get me with the knife?" he asked.

"No, no."

"Am I shot?"

"No, dear."

"Any bones broken?"

"Donald says not."

"Then please give me my pipe, Joanne—and let me get up. Why do you want me to lie here when I'm strong like an ox, as Donald says?"

Joanne laughed happily.

"You are getting better every minute," she cried joyously. "But you were terribly beaten by the rocks, John. If you will wait until you have the broth I will let you sit up."

A few minutes later, when he had swallowed his broth, Joanne kept her promise. Only then did he realize that there was not a bone or bruise in his body that did not have its own particular ache. He grinned when Joanne and Donald bolstered him up with blankets at his back. But he was happy. Twilight was coming swiftly, and as Joanne gave the final pats and turns to the blankets and pillows, MacDonald was lighting half a dozen candles placed around the room.

"Any watch to-night, Donald?" asked Aldous.

"No, Johnny, there ain't no watch to-night," replied the old mountaineer.

He came and seated himself on a bench with Joanne. For half an hour after that Aldous listened to a recital of the strange things that had happened—how poor marksmanship had saved MacDonald on the mountainside, and how at last the duel had ended with the old hunter killing those who had come to slay him. When they came to speak to DeBar, Joanne leaned nearer to Aldous.

"It is wonderful what love will sometimes do," she spoke softly. "In the last few hours Marie has bared her soul to me, John. What she has been she has not tried to hide from me, nor even from the man she loves. She was one of Mortimer FitzHugh's tools. DeBar saw her and loved her, and she sold herself to him in exchange for the secret of the gold. When they came into the North the wonderful thing happened. She loved DeBar—not in the way of her kind, but as a woman in whom had been born a new heart and a new soul and a new joy. She defied FitzHugh; she told DeBar how she had tricked him.

"This morning FitzHugh attempted his old familiarity with her, and DeBar struck him down. The act gave them excuse for what they had planned to do. Before her eyes Marie thought they had killed the man she loved. She flung herself on his breast, and she said she could not feel his heart beat, and his blood flowed warm against her hands and face. Both she and DeBar had determined to warn us if they could. Only a few minutes before DeBar was stabbed he left off his rifle—an accident, he said. But it was not an accident. It was the shot Donald heard in the cavern. It saved us, John! And Marie, waiting her opportunity, fled to us in the plain. DeBar was not killed. He says my screams brought him back to life. He came out—and killed Quade with his knife. Then he fell at our feet. A few minutes later Donald came. DeBar is in another cabin. He is not fatally hurt, and Marie is happy."

She was stroking his hand when she finished. The curious rumbling came softly in MacDonald's beard and his eyes were bright with a whimsical humour.

"I pretty near bored a hole through poor Joe when I come up," he chuckled. "But you bet I hugged him when I found what he'd done, Johnny! Joe says their camp was just over the range from us that night FitzHugh looked us up, an' Joanne thought she'd been dreamin'. He didn't have any help, but his intention was to finish us alone—murder us asleep—when Joanne cried out. Joe says it was just a devil's freak that took 'im to the top of the mountain alone that night. He saw our fire an' came down to investigate."

A low voice was calling outside the door. It was Marie. As Joanne went to her a quick gleam came into old Donald's eyes. He looked behind him cautiously to see that she had disappeared, then he bent over Aldous, and whispered hoarsly:

"Johnny, I had a most cur'ous word with Rann—or FitzHugh—afore he died! He wasn't dead when I went to him. But he knew he was dyin'; an' Johnny, he was smilin' an' cool to the end. I wanted to ask 'im a question, Johnny. I was dead cur'ous to know why the grave were empty! But he asked for Joanne, an' I couldn't break in on his last breath. I brought her. The first thing he asked her was how the people took it when they found out he'd poisoned his father! When Joanne told him no one had ever thought he'd killed his father, FitzHugh sat leanin' against the saddles for a minit so white an' still I thought he 'ad died with his eyes open. Then it came out Johnny. He was smilin' as he told it. He killed his father with poison to get his money. Later he came to America. he didn't have time to tell us how he come to think they'd discovered his crime. He was dyin' as he talked. It came out slobberingly, Johnny. He thought they'd found 'im out. He changed his name an' sent out the report that Mortimer FitzHugh had died in the mount'ins. But Johnny, he died afore I could ask him about the grave!"

There was a final note of disappointment in old Donald's voice that was almost pathetic.

"It was such a cur'ous grave," he said. "An' the clothes were laid out so prim an' nice."

Aldous laid his hand on MacDonald's.

"It's easy, Mac," he said, and he wanted to laugh at the disappointment that was still in the other's face. "Don't you see? He never expected any one to dig into the grave. And he put the clothes and the watch and the ring in there to get rid of them. They might have revealed his identity. Why, Donald!"

Joanne was coming to them again. She laid a cool hand on his forehead and held up a warning finger to MacDonald.

"Hush!" she said gently. "Your head is very hot, dear, and there must be no more talking. You must lie down and sleep. Tell John good-night, Donald!"

Like a boy MacDonald did as she had told him, and disappeared through the cabin door. Joanne levelled the pillows and lowered John's head.

"I can't sleep, Joanne," he protested.

"I will sit here close at your side and stroke your face and hair," she said gently.

"And you will talk to me?"

"No, I must not talk. But, John——"

"Yes, dear."

"If you will promise to be very, very quiet, and let me be very quiet——"

"Yes."

"I will make you a pillow of my hair."

"I—will be quiet," he whispered.

She unbound her hair, and leaned over so that it fell in a flood on his pillow. With a sigh of contentment he buried his face in the rich, sweet masses of it. Gently, like the cooling breeze that had come to him in the hours of darkness, her hand caressed him. He closed his eyes; he drank in the intoxicating perfume of her tresses; and after a little he slept.

For many hours Joanne sat at his bedside, sleepless, and rejoicing.

When Aldous awoke it was dawn in the cabin. Joanne was gone. For a few minutes he continued to lie with his face toward the window. He knew that he had slept a long time, and that the day was breaking. Slowly he raised himself. The terrible ache in his body was gone; he was still lame, but no longer helpless. He drew himself cautiously to the edge of the bunk and sat there for a time, testing himself before he got up. He was delighted at the result of the experiments. He rose to his feet. His clothes were hanging against the wall, and he dressed himself. Then he opened the door and walked out into the morning, limping a little as he went. MacDonald was up. Joanne's tepee was close to the cabin. The two men greeted each other quietly, and they talked in low voices, but Joanne heard them, and a few minutes later she ran out with her hair streaming

about her and went straight into the arms of John Aldous.

This was the beginning of the three wonderful days that yet remained for Joanne and John Aldous in Donald MacDonald's little valley of gold and sunshine and blue skies. They were strange and beautiful days, filled with a great peace and a great happiness, and in them wonderful changes were at work. On the second day Joanne and Marie rode alone to the cavern where Jane lay, and when they returned in the golden sun of the afternoon they were leading their horses, and walking hand in hand. And when they came down to where DeBar and Aldous and Donald MacDonald were testing the richness of the black sand along the stream there was a light in Marie's eyes and a reliance in Joanne's face which told again that world-old story of a Mary Magdalene and the dawn of another Day. And now, Aldous thought, Marie had become beautiful; and Joanne laughed softly and happily that night while Marie and DeBar talked for a long time alone out under the stars, and came back at last hand in hand, like two children. Before they went to bed Marie whispered something to Joanne, and a little later Joanne whispered it to Aldous.

"They want to know if they can be married with us, John," she said. "That is, if you haven't grown tired of trying to marry me, dear," she added with a happy laugh. "Have you?"

His answer satisfied her. And when she told a small part of it to Marie, the other woman's dark eyes grew as soft as the night, and she whispered the words to Joe.

The third and last day was the most beautiful of all. Joe's knife wound was not bad. He had suffered most from a blow on the head. Both he and Aldous were in condition to travel, and plans were made to begin the homeward journey on the fourth morning. MacDonald had unearthed another dozen sacks of the hidden gold, and he explained to Aldous what must be done to secure legal possession of the little valley. His manner of doing this was unnatural and strained. His words came haltingly. There was unhappiness in his eyes. It was in his voice. It was in the odd droop of his shoulders. And finally, when they were alone, he said to Aldous, with almost a sob in his voice:

"Johnny—Johnny, if on'y the gold were not here!"

He turned his eyes to the mountain, and Aldous took one of his big gnarled hands in both his own.

"Say it, Mac," he said gently. "I guess I know what it is."

"It ain't fair to you, Johnny," said old Donald, still with his eyes on the mountains. "It isn't fair to you. But when you take out the claims down there it'll start a rush. You know what it means, Johnny. There'll be a thousand men up here; an' mebby you can't understand—but there's the cavern an' Jane an' the little cabin here; an' it seems like desecratin' her."

His voice choked, and as Aldous gripped the big hand harder in his own he laughed.

"It would Mac," he said. "I've been watching you while we made the plans. These cabins and the gold have been here for more than forty years without discovery, Donald—and they won't be discovered again so long as Joe DeBar and John Aldous and Donald MacDonald have a word to say about it. We'll take no claims, Mac. The valley isn't ours. It's Jane's valley and yours!"

Joanne, coming up just then, wondered what the two men had been saying that they stood as they did, with hands clasped. Aldous told her. And then old Donald confessed to them what was in his mind, and what he had kept from them. At last he had found his home, and he was not going to leave it again. He was going to stay with Jane. He was going to bring her from the cavern and bury her near the cabin, and he pointed out the spot, covered with wild hyacinths and asters, where she used to sit on the edge of the stream and watch him while he worked for gold. And they could return each year and dig for gold, and he would dig for gold while they were away, and they could have it all. All that he wanted was enough to eat, and Jane, and the little valley. And Joanne turned from him as he talked, her face streaming with tears, and in John's throat was a great lump, and he looked away from MacDonald to the mountains.

So it came to pass that on the fourth morning, when they went into the south, they stopped on the last knoll that shut out the little valley from the larger valley, and looked back. And Donald MacDonald stood alone in front of the cabin waving them good-bye.

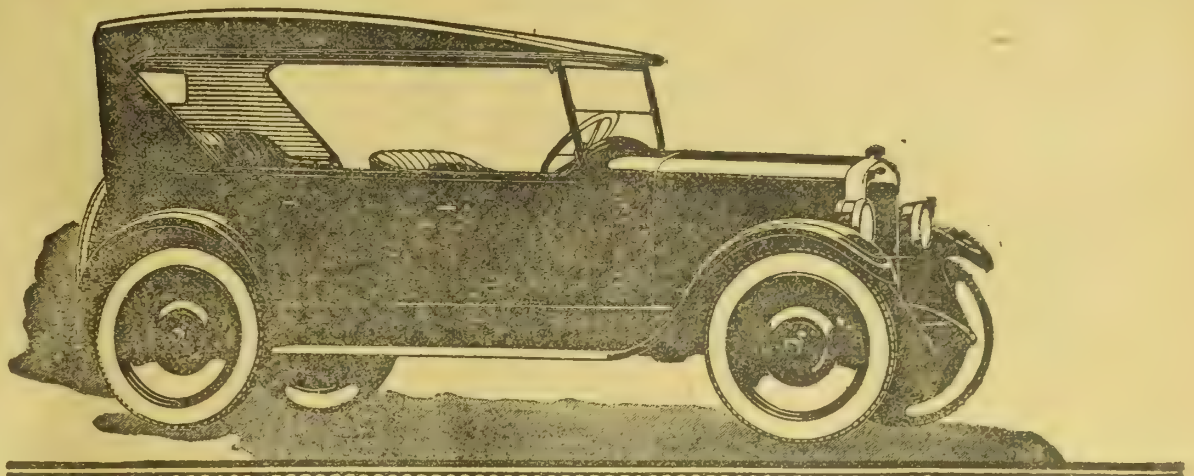
THE END.

OUR BOOK REVIEW

(Books reviewed under this heading may be secured through The Michigan Business Farmer, and will be promptly shipped by parcel post on receipt of publisher's price stated.)

"Heroes of the Farthest North and Farthest South" by J. Kennedy Maclean. The romance of exploration in the ice-capped extremities of our globe has always held the imagination.

Mr. Maclean's story is not merely a chronicle of names and dates, but a story replete with heroism, adventure, and thrill. ($1.75.) Thomas Crowell Co.



Announcing the 1924
Oakland "6"
Brand New and True Blue

Embodying Exclusive Features of Engineering Design and Superior Coachwork Never before Associated with Cars of Moderate Price

This True Blue Oakland was deliberately planned to be the most perfectly balanced, the most accurately engineered and the finest built light-six in the world.

Two years have been devoted to its design, manufacture and test. Two years—plus the wealth of Oakland experience gained through many other years of exclusive light-six manufacture and the limitless resources of the General Motors Corporation in money, machinery, materials and men.

From axle to axle—it's new! It embodies features of mechanical superiority—of beauty and comfort and performance—heretofore unheard of in cars of its price! Every single part—from the new engine to the new bodies—was designed and built to fit and function in perfect harmony with every other part.

And because it has been so carefully designed, so soundly built and so thoroughly tested—Oakland places upon it, without hesitation, the same written 15,000 mile engine performance guarantee and the same Mileage-Basis gauge of value that have proved the quality and the value and the excellence of Oakland cars for years!

Four-Wheel Brakes—Brand New Engine—New Bodies—Centralized Controls—Disc Steel Wheels

The finest light-six is now also the safest! Four-wheel brakes are on the True Blue Oakland! But four-wheel brakes—remarkable as they are on a car of Oakland's price—are only one of the many improvements and refinements built into this new and true blue car!

It has a brand new engine—smoother, quieter and more powerful than even its highly successful predecessor, the Six-44.

Its beautiful new blue bodies—built by Fisher—are wider, deeper, and more luxuriously upholstered. The top is permanent, accommodating a distinctly new type of door-opening side curtains comparable in snugness and utility to the door of a closed car.

A satin-wax finish stamps the open models with an individuality never before attained in cars so moderately priced.

Instruments are grouped on a single glass-covered panel, indirectly lighted. Controls are centralized on the steering wheel. Disc steel wheels are standard equipment, at no added cost.

See this new Oakland—see it at once! Come with a critical mind—because the more exacting you are, the more quickly will you realize that no other light-six in all the world approaches it in dollar-for-dollar merit.

Roadster Touring Car Sport Roadster Sport Touring Business Coupe 4-Passenger Coupe Sedan

OAKLAND MOTOR CAR COMPANY, PONTIAC, MICHIGAN
Division of Oakland General Motors

A Fleet of "True Blue Travelers"
—of which the 1924 Oaklands are exact counterparts—is engaged in a nation-wide demonstration! With thousands of miles of test service already on their speedometers—they are out to demonstrate, at first hand, the high quality of Oakland construction, and the remarkably efficient performance buyers may expect from their True Blue Oaklands.

The Children's Hour

Address all letters to the Children's Hour as follows:

UNCLE NED,
The Business Farmer,
Mt. Clemens, Mich.

Dear Uncle Ned:—I would like to join your merry circle. I like to read the Children's Hour very much. We live on the farm of 80 acres. We have three horses, thirteen pigs, thirty-eight head of cattle, many chickens and two dogs. Last year we had two kittens and they burned by the fire. Someone set fire to the barn and outer buildings. My dad had just bought a new harness and saddle for me to use with my pet pony which is called "Chief". I often ride on him. We picked fifty quarts of huckleberries last Sunday. Do you like them? Did you ever go to hunt for a deer? I will go this fall and do hope I will have good luck and get a deer. I lived in Frederick, Maryland and go to school there, but spend my summer in Michigan with my parents. I have a little sister and I am pals with mother and dad. I like Michigan very much but have to travel a great deal about 42 states as my parents are show folks and it means getting about. I am 14 years old the 12th of February. Have I a twin? Will some one of my cousins write to me? I will answer all their letters. Wish you would have a drawing contest for I would like to enter it. Will close for this time. Your nephew—John Davis, R. 1, Rose City, Michigan.

—Write and tell us about some of your travels, John. I am interested.

Dear Uncle Ned:—I have never written to you before. My father has taken the M. B. F. for a number of years and every summer when I come home from school I read them. We just came up here to upper Michigan about a year ago and as I have been home during my vacation only I have became acquainted with a few people as yet. Our home is at a summer resort on one of the most beautiful lakes in upper Michigan. There are three resorts on White Fish Lake. We live near another lake also which is much larger. It is Manistique Lake. This resort is the most beautiful place in the summer time but when winter comes the teams drive over the tops of the fence posts and mail boxes in the country, and in the forests it is even worse. I have spent one winter here and I have seen enough snow to last me the rest of my life. Altho the winters are terrible cold and there is so much snow, the beautiful summer with the picnics, fishing, swimming, boating and such sports quite overbalance the unpleasantness of winter. I am home only twice during the winter, the rest of my time until summer vacation is spent at a town about fifty miles away. I will graduate from Manistique High School next June. Manistique, as you probably know is on the north shore of Lake Michigan. I am between sixteen and twenty years of age. My hair is black and I wear it bobbed. My complexion is dark. I am five feet tall. I would like very much to hear from young people of my own age. My parents and two brothers are leaving soon for a time and I will be left alone with my little brother and younger sister to care for the home until my parents return. I shall be very lonesome indeed unless someone will spare a few minutes of their time now and then and write to me. I will close with love to Uncle Ned and all the cousins.—Pauline Painter, Curtis, Michigan.

—So you do not like the winters where you live but think that the summers more than make up for the unpleasantness of winter. Have you ever noticed that some people are like that? When you first become acquainted with them there are so many things about them that you dislike but after you know them for a while you discover they have so many good points that you forget your dislike for them. I have often had this experience, haven't you?

Dear Uncle Ned:—Altho I do not live on a farm I am interested in the farms. I used to live on a farm. This year my mother and I went to a cherry orchard to pick cherries. They had horses and one day I drove home and unhitched it. That is quite a lot for a girl living in town. I thought that was quite a treat. Of course a girl on a farm would think nothing of it, but girls in town like animals also. For pets I have a dog, his name is Fip. He will play hide-and-go-seek with my brother and I. I also have a cat but I guess she is going to die for she is sick. I think the answer to the riddle one of the cousins wrote is "kitten". The riddle was was what walks like a cat, looks like a cat and acts like a cat? They said they would write a letter to the one guessing right. I hope I receive the letter. I think the answer to the riddle Doris Scott wrote is "A well". I hope I receive the card. I think the answer to Etta Bannister's riddles are: 1st. A pocket may be empty and yet have something in it when it has a hole in it. 2nd. Add the letter S to nine equals six (SIX). Well I hope to see my letter in print. Here is a hint to the girls on the farm. Invite a friend from town to come to your farm for a few days and show them the things on the farm. I'm sure they would enjoy it. Well as my letter is getting long I will close with a riddle. The one who guesses the answer right will receive a letter from me. What has holes in it and yet holds water? My age is between ten and fifteen. The person who guesses it correctly will also receive a letter. Well I hope my letter is not too long to be printed. Love to all. —Blanche Ward, Mesick, Michigan.

—The girls and boys living in the city who do not enjoy going to the country are few and far between. Some of them say that they would not care to live in tthe country but we all notice they like to visit some friend or relative who lives on a farm, and my, what an appetite they get after they have been out in the open air for a few days.

Dear Uncle Ned:—Tap, Tap, Tap! May I come in? I won't stay long, not long enough to take my hat off. I have been over to the park today to see the animals. There were two wild cats there. Imagine meeting one of those savage beasts out in the jungles. I have been told they will run from a person rather than fight, but it hardly seems possible. The state has put in a park at the Cheboygan lake near here. Resorters go there during the summer to fish and hunt, also for boat riding and bathing. I am a sophomore in high school. I live on the farm during the summer vacation. That time always comes with a welcome. Not that I dislike school, but because I love to be in the country. I have often wondered who first oorganized the Children's Hour and who some of the first members were. If there are any left will you please write to me? Your letters will be appreciated. There I saw Uncle Ned scowl because my letter is getting long. Will some and everyone write to: —Lela Mercer, Onaway, Michigan.

—Members of the Children's Hour are boosters, not knockers, so do not stop to knock but just walk right in and make yourself to home. Drop in again some day Lela, when you can take your hat off and stay a little while.

Dear Uncle Ned:—Why hello, hello! My but is seems good to be back with you all again. I suppose you are rather surprised to hear from me again, aren't you? Well I was giving all others a chance to write. Say our school starts the fourth of September and we have nine and one-half months of school this year instead of only nine months. We are going to have a new school building here, but I do not think there will be any school in it this year as they only started working on it last Tuesday or Wednesday. We will have school in our old building during this school term. We have been having some quite cold weather, but it has been some warmer today. I only wish this weather would stay like this all winter. Say Uncle and Cousins, what what do you all think about girls wearing knickers and having bobbed hair? Well, I think knickers are all right in their places, like going hiking or camping, but when it comes to wearing them on the streets I don't like them. Bobbed hair I think is perfectly alright. Say now speak up, one and all and give your opinion of them, don't be afraid of hurting any ones feelings. Well, I guess I will give a little idea of what Sidnaw is or looks like.

Well, it is a small railroad junction where both the Duluth, South Shore and Atlantic, also the Chicago, Milwaukee, and St. Paul railroads cross each other. It is about two hundred in population. There is one hotel, one lunch room and ice cream parlor, (an ideal hotel and restaurant), one pool room, two stores, also Standard Oil station, also a handle factory. Mr. Henry Ford has camps about three miles south of Sidnaw, that run during winters, but close during the summers, although he keeps men working during the summer but they don't stay at the camps. Mr. Ford has had five special apartments made for him and his friends to stay when they come up to visit. Mr. Ford, Mr. Edison and Mr. Firestone and their wives were up here last week and stayed a day or two. This makes about the third time Mr. Ford was up here. Say, but it surely is nice out there. I guess my letter is getting rather long, and as I am lonesome, won't the girls and boys, one and all, write to me as letters sure are a lot of company. Hoping you do so, I remain as I always did and always will, Your niece.—"Peggy" or Alma Powell, Sidnaw, Michigan.

—Well "Peggy", it was fine of you to tell us about Mr. Ford's camps. I quite agree with you regarding knickers and bobbed hair. Come again.

My Dear Uncle Ned:—Well here I am back again. My sister and husband from Utica, New York, were up here a week and then they took me back with them. We left here July 7th. It was about 6:30 a. m. It certainly was a lovely day for driving. You know how nice it is in the morning about six. So cool and it had rained in some places the night before, as the roads were not a bit dusty. We arrived in Detroit about a quarter to nine in the evening. We were quite tired of riding all day so just as soon as we could we went to bed. The next morning we got up early and got things ready to start for the long trip to Utica. Louis, my brother-in-law's brother took us in his car to the boat, as my brother-in-law took his car to the boat about three o'clock. While we went on about five p. m. We had a lovely stateroom on the fourth deck. We walked around on the boat until seven and then we ate our supper. We bought some cards on the boat. I sent some to my parents, and some to my nieces and nephews, and I sent one to you Uncle. Did you get it? Hope you did. There was nice music on the boat which I enjoyed very much as there is nothing I like better than music. We walked around on the boat that evening for a long time. It was about nine when we retired. We arrived in Buffalo about a quarter to ten the next morning. We certainly enjoyed the trip from Buffalo to Utica. It was just a beautiful day. The scenery in New York is something wonderful. We arrived in Utica about nine thirty p. m. We spent a few days in Utica visiting friends and my brother-in-law's parents. We started back on Thursday the 12th, and stayed over night in Batavia at the Richmond hotel. The next morning we started for Buffalo which we reached at 12 that noon. From there we went to Niagara Falls. Have you ever been there? We were there about a half hour, took pictures and had a nice time. We then went back to Buffalo and got on the boat. We had a lovely trip coming back. We arrived in Detroit the next morning glad to be back in dear old Michigan again. I think New York State is very nice but I think Michigan is the best of all. Don't you Uncle? I spent three weeks with my sister and her husband and came back with my brother and his wife the second of August. I had such a wonderful trip and enjoyed it real well. Now after such a nice vacation I'm ready to start to school and work. I will be in the ninth grade this year. Well its getting pretty late so guess I will close. Love to Uncle and all the cousins. Your affectionate niece,—Eleanor D. L. Stovel, Hubbards Lake, Michigan.

P. S.—Please excuse me for taking up so much space. I won't write so a long letter the next time.

—My, what an interesting letter. I am sure all of the cousins will forgive you for taking so much space. Yes, I received your card and was pleased to get it. Thank you. I too, have seen the Falls and think they are beautiful.

Dear Uncle Ned:—I will write to you once more. I wrote before but it is quite a while ago since I have, so I thought I would write again. We still take the M. B. F. and enjoy it very much. I thought of something that I would like to do, so I'm going to tell you about it, and maybe it can be done if this letter doesn't visit the waste paper basket. Will all of the Arnold's write to me? If they can, also if they are my age or older. I am 14 years old, my birthday is the twenty-fifth day of September. Have I a twin? I had a twin before, her name is Mildred Dommer. I passed the 8th grade country examinations at the Mt. Clemens High School last May. I saw the Michigan Business Farmer building nearly straight across from the High School. I could have called on you Uncle Ned, if I would have thought of it, but I suppose I had different things on my mind when I left school. I got out early enough to go. Am sorry I never thought of it. I live on the East Jefferson road and we have a good road all the way to Mt. Clemens, also to Detroit. We have a loud speaker for our radio, the tube set and crystal set both work very loud on it. I am glad now because every one can enjoy it. I wish you all could hear it. We can hear from Kentucky, New York, and all different places far away from here. There is an awful lot of static in the air. My brother says he will be able to hear better when winter comes. My brother made the radio all by himself, but of course he bought the parts. It looks like a chinese puzzle to me. Who can guess this riddle? "I have a wife, her name is Elizabeth, she has two kids, what have I? The one who guesses it will receive a letter from me. I hope all of the Arnold's will read my request, if they do I will be very much pleased. With love, from your niece,—Rose M. Arnold, R4, Box 474, Mt. Clemens, Michigan.

—Your suggestion is very good and I hope you let me know how many letters you receive from the "Arnold family." I do not wonder that you enjoy the radio. I do, and I believe every one else does if they have ever listend to one. I have a tube set but no loud speaker. I use the phonograph for that purpose and it works very satisfactorily.

Dear Uncle Ned:—I have been much interested for sometime in your Children's page and I thought my letter might interest some other boy or girl. We live on a farm of 120 acres on the shore of Lake Michigan. It is a beautiful place in the summer but in winter it is very cold. I would like to know how many cousins have Indian playmates? Our school numbers 30 pupils and two-thirds of them are Indians and I like them very much. We have sheep and shorthorn cattle. We have four horses. I have four pet lambs. I am twelve years of age and in the eighth grade at school and third grade in music. I think the answer to Doris Margaret Scotts riddle is "A well". Here is a riddle: Why is a newspaper like a lazy dog? I hope you will print this. Your niece—Irene Miller, R. 1, Box 5, Good Hart, Mich.

Dear Uncle Ned:—I have never written to you before but I have always been very much interested in the boys' and girls' department. I live three miles from the school which I attended. I say attended because I graduated this June. There were 56 in my class; mostly girls. When departing from the school we left a trophy case in remembrance of the class of '23. I have light hair and light blue eyes, and I have neither brother nor sister so you see I have my own way as far as mother will let me. Will some of the older cousins please write to me? Well Uncle Ned I must say good-bye.—Helen H. Bland, R6, Holland, Michigan.

Teaching Your Dog To Carry

CARRYING is one of the most popular accomplishments of every trained dog. It is useful too. Canine messengers were of great value during the war, and every year many lives are saved in remote places by dogs that have been taught by their owners to carry letters, etc.

Puppies learn more readily than mature dogs. For that reason begin training early. Begin when he is teething; his gums are sore, and he gets considerable relief from holding things in his mouth. At this period of life he will often "mouth" hard objects, for no other purpose than to help nature develop his teeth. It is instinct. Certainly dogs will learn carrying at any age, but it is far easier to teach them when they are teething.

A glove is the very best thing to begin with. Drawing it through his mouth makes his gums feel better, and secondly, the scent of his master one the glove makes it more interesting.

Movement interests animals of all kinds more than anything else. Even an object unattractive in itself will secure a dog's notice, if thrown a little distance, with a gesture for him to get it. Sometimes a pretense to race him for the object will awaken the desired response; and it is very natural for him, when he reaches the object, to grab it up in his mouth.

Talk to the dog very kindly, and success will be achieved much sooner, while he is learning. When you begin to use various articles, he must understand your caution of "Gently, boy," etc. I read of a dog's bringing a freshly laundered collar to his master without soiling it. It had fallen from a desk into the waste basket, and this observant dog knew that it did not belong there, and that it was something that he should handle with care.

The way to train a dog to go after things alone, or to do any trick without your supervision, is to go through the performance with him exactly many, many times always using the same words to start the things. In this way, with patience on the part of the trainer, a smart dog may be taught to take a basket and go alone for some article. Generally, too, he will know whether he has been given the usual thing. If you have the merchant instructed to put what you want into the basket, the dog, if well taught, will do his part and bring the basket back to you.

You should teach the carrier dog not to give up his package or message to any stranger. Have some person with whom your pet is not acquainted start to take the object from the dog's mouth, then change his mind. Let this be repeated a few times; then come up yourself, take the object (as though you valued it) and praise the dog. This method was first recommended by Bruette, of the greatest "dog-ologists" of this country. A dog, like a person, dislikes being fooled, and clings to the person who seems to appreciate his efforts.

KETCHEM SPOKE AT MONROE FARM BUREAU-GRANGE PICNIC

THE Monroe County Farm Bureau -Grange picnic held at the Raisinville Grange hall, August 23, was a real success. With games and sports for the youngsters, a baseball game and quoit pitching for the men, the day was well spent. The ball game between Ida and Frenchtown Grange was won by the former by a large score. The old folks had to take a back seat when the quoit pitching contest was won by two youngsters both under fourteen years of age. This contest was won by Tracy Knapp of Raisinville and Verlin Barr of Raisinville, each receiving a pair of steel quoits as a prize. R. Halburstead and A. Halburstead, both of Monroe, won second place in the contest. The attendance was around a thousand.

By far the most important part of the program was the address by Hon. J. C. Ketchem, Congressman from the fourth Mich. District and former Master of the Michigan State Grange, also a member of the Farm Bloc in Congress.

Mr. Ketchem soon warmed up to his subject so that it was necessary for him to remove his coat although the weather seemed a little cold to most of the audience. He minced no words whatever but spoke direct from the shoulder. He told his hearers that he did not believe in class legislation for the farmer or anyone else. He does believe, however in the legislation already enacted to put the farmer on the same plane with other lines of business. It is a deplorable fact that agriculture has fallen to its present condition. The American farmer must join hands with his neighbors in the cooperative movement in marketing or descend to the state of peasantry as we now have it in the older countries of Europe. Agriculture produces annually $77,000,000,000 worth of farm products and employs 27 per cent of our total population. Should the agricultural industry descend to the state of peasantry it would be the greatest calamity that this nation has ever been called on to face.

Another important point brought out by Mr. Ketchem in regard to our farms is the subject of home ownership. With home ownership goes the stability that is necessary to maintain a democratic government such as we now have. Statistics show that only 10 per cent of the population of New York city own their own homes. 40 per cent of the total population including both city and rural districts own their own homes which shows that the percentage of home ownership runs very high in the country. The number of people in the country if negroes and indians are included, who came from native born parentage is nearly 90 per cent while the number of native born white of native parentage is 66 per cent. These facts should be a source of comfort to any red blooded American as it is the home owners that are the ones upon whom any nation must depend in time of strife. This one fact alone makes it well worth what it will cost the nation to put the farmer back on his feet regardless of what the cost may be.

In viewing the economic condition in which the farmer finds himself, pig iron and corn were two comodities chosen to represent industry and agriculture. In 1914 it took 18 bu. of corn to buy one ton of pig iron. During the war period 27 were required, during deflation period 47 bu. and today 29 bu. are required to buy the same amount of iron. Summing up all these facts we find that the farmers dollar compared to other industries, is only worth 71c. The farmers economic condition will not improve until his dollar is as valuable as any other.

In summing up the whole situation it was pointed out that co-operative marketing properly managed is the solution to the whole trouble. Farmers must learn that it is foolhardiness to produce more than the market wants and then dump the whole thing within a few days after harvest. Orderly merchandising throughout the whole season and producing only what the market will absorb is the solution to the whole trouble.—F. H. Dexter, Sec'y-Treas., Monroe County Farm Bureau.

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Geographical isolation makes the Railroads of Michigan a transportation system like that of no other state. Most of our traffic either originates or ends in Michigan.

Bridge the Great Lakes with car-ferries and tunnel under the mighty connecting rivers, though we may, such accomplishments merely better our service to you; we are Michigan Railroads more than transcontinental traffic lines. Our train schedules are for Michigan, not for New York and San Francisco.

To a degree greater than any other state, Michigan's welfare, and the welfare of her Railroads, are therefore one and inseparable. *You* cannot fall back on trans-continental lines for emergency help; *we* must always rely on you for our chief support.

We can prosper only together.

Because of this mutual dependence, the twenty-four Railroads operating in Michigan have formed this Association with the purpose of strengthening the relations of the Railroads with the People of the State, by providing you with a clearing house for the exchange of ideas, relative to the transportation problems so vital to the prosperity of our Peninsular State.

We invite your suggestions toward bringing about a better understanding and closer cooperation between the Public and the Railroads. Communicate with this Association.

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Michigan Railroad Association

Railway Exchange Bldg., Detroit

The Farm Home
A Department for the Women

Edited by MRS. ANNIE TAYLOR

DEAR FOLKS—Now is the time to plan your fall sewing and all the new patterns are in. Give your dress a little tho't this fall and it will be money saved to have picked the right style suited to your type.

Remember Hallowe'en is next month and what could be nicer than to plan a party for this fun loving night. Any questions upon this or any other home subject I will gladly answer. Do write me, I want to help you.

Your Friend,
Mrs Annie Taylor

Address letters: Mrs. Annie Taylor, care The Business Farmer, Mt. Clemens, Michigan.

SEPTEMBER

The goldenrod is yellow,
  The corn is turning brown,
The trees in apple orchards
  With fruit are bending down;

The gentian's bluest fringes
  Are curling in the sun;
In dusty pods the milkweed
  Its hidden silk has spun;

The sedges flaunt their harvest
  In every meadow nook,
And asters by the brookside
  Make asters in the brook;

From dewy lanes at morning
  The grapes' sweet odor rise;
At noon the roads all flutter
  With yellow butterflies.

By all these lovely tokens
  September days are here,
With summer's best of weather
  And autumn's best of cheer.
—H. H.

SEEN AT THE STATE FAIR—

WHERE shall I begin? So many lovely and wonderful things for us all. The many beautiful helpful departments were all there. The woman's building, always a great attraction to me had so many wonderful hand made articles that would fit into the best or the most humble of homes. Laces made by hand. I marveled at it all. Embroidery work of the most difficult kind, they were all there; hanging row on row, vieing for first place on the premium list.

The baby exhibit, held wonders for our future race and it seemed to me the crowd never tired of looking at the measuring of so much beauty and health as was displayed in that big glass room with a competent doctor and nurse in charge.

From there I strolled over to the Art building and those of us who were interested in making and painting pretty articles for our homes, could find out a lot of new ideas and ways to make them for the attendants there were pleasant instructors, who wanted to help and please.

The main building had a great many display rooms showing the wrong and right way of living and fixing up the home to make it easier for our work. I saw a new kitchen stove demonstrated for the farm home that looked just like our city gas stoves and had powerful heating qualities. It was an oil burner.

The sewing machine department had a demonstrator showing how to hemstitch with a very simple attachment; also how to darn on the sewing machine. I brought one of these. They seemed to do the work nicely and fast.

For those of us who have electricity the building given over to display electric appliances, contained appliances too numerous to mention. Everything for the home was there.

I am sure the school work was a revelation to some of us. It was to me. In the Educational building the "Hot Lunch" idea was demonstrated; also the cold-pack method done by the Girls Canning Clubs.

The only thing I was disappointed in was the poor way the "Household and Kitchen Food Products" were displayed. I had to climb up on the case in order to see the display of baked goods. Maybe next year we might have at least a lower shelf. Next year I want to see more of the names of my readers on the cards telling me they are interested in their own State Fair.

NEXT YEAR GARDEN

NOW is the time to think and plan and order our fall garden. Maybe some of my readers will feel I have said too much about gardening, but in this new country of ours, we need a little coaxing to realize that the beautiful gives back to us so much more than we put into it. The work is well spent for the results we get, and I feel sure that looking at a bright clump or row of flowers will create a certain amount of happiness for the beauty that it gives out and the lesson we learn bringing a wonderful bed of flowers forth, even if it is only wild flowers.

For those who wish lovely Crocuses, Daffodils, Tulips and Hyacinths, order your fall bulbs now, if you want to be sure of the best stock. Early orders are never unwise. You can have plenty of time to prepare for the stock, and are doubly sure of getting what you want. I am ordering my bulbs today and I know I receive more pleasure from my flowers than the amount of work I put on them. Read our personal in the last issue and know what one woman did to make extra money. Fall is the time for planting these flowers.

A KIND DEED EACH DAY

I WAS talking to a neighbor the other day and he was telling me how his mother taught them, a family of twelve, to do a kind deed each day. I am wondering how many of us try and live up to this golden rule. This neighbor of mine has tried to live up to the rule until, he says that if the kind deed has not been done before twelve o'clock he gets nervous and restless. It is a wonderful thot that has a hold of human beings to such an extent that we become uncomfortable until the deed is done. I must confess I did not try and live up to this rule, but I am now, and I just feel that I must pass this same thot along to you my readers.

USING OLD FLOUR SACKS FOR CLOTHING—

AN interesting phase of the flour milling industry of certain parts of China is the manufacture and various uses of the flour sacks. The cloth for the bags is made and cut in the correct sizes at the mill and the pieces are then sent out to the homes of the country people of the district who sew them together. The finished bags are then stamped with a dye that is easily washed out. The bags are given as a commission to the dealers, who wash them out and sell them to the town people for use as clothing. The dealers rarely sell the bags with the flour as only very small amounts of flour are purchased at one time by the Chinese.

Mothers Problems

ASKING PERMISSION

"HEY, Bob, come on down in the swamp and catch frogs!"

"Sure! Just wait till I ask Mother."

"Hmph! Do you have to ask your mother before you can do anything? I never ask mine. If I'm not home when Mom wants me she knows I've gone somewhere."

"I know, but Mother says she always likes to know where I am, and then she doesn't worry. She always lets me go wherever I ask, and it only takes me a minute to hunt her up, so I don't mind."

"Probably not, but—say, I'll beat you to the old oak tree!"

* * *

Which boy is your son like—Bob or his companion? Does he ask your permission to go out of sight of home, or do you fret and worry and wonder when he is too long away?

Asking permission means more than begging mother's consent: it means informing her of the proposed jaunt or visit. It means quieting any needless alarms that might arise should the time away be unusually long. Boys are thoughtless. they cause a great deal of unnecessary worry merely because they don't realize how easy it is for mothers to worry. Perhaps you cannot cure the thoughtlessness, but you can make it second nature for them to run in and tell of their proposed plans.

Begin when the children are very little. Never allow them to run over to a neighbor's without first asking your permission. Impress them with the fact that you only want to know where they are in case you should want them immediately. Make it a habit with them to ask your permission to leave the home-yard. Then even though they are old enough to look out for themselves, even though they are not tied so tightly to Mother's apron-strings, they will let you know where they are going and often relieve you of many anxious moments.

Asking Mother's permission to go somewhere is not babyish; it merely shows that a boy has been taught how to be thoughtful of his mother.

WHEN SCHOOL IS OUT

IT is as natural for children to run and play and laugh and shout as it is for kittens to frolic. If strong and healthy they are full of good spirits, and good spirits demand an outlet. For the little child who has never known the restraint of school, who has been able to spend hours and hours in play and exercise, the confinement of the school-room is a severe strain. If he is at first shy, there will be no let-down of account, during recess periods. From the time he leaves home in the morning till he returns at night, every nerve and every muscle is held in check. THAT is why, when school is out, many a little beginner comes home cross and disagreeable and as full of noise as a machine-shop.

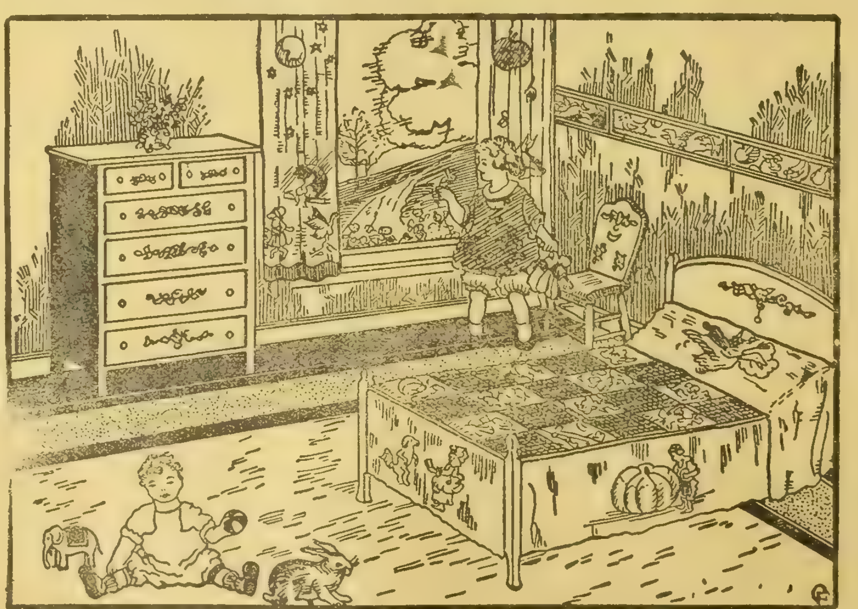
It is trying on the mothers who have to hear the noise and quiet and soothe the apparently out-of-sorts child, but when school is out is one of the many times when patience must be exercised continually. Then must a mother strive to get the child back into his normal state of mind. Sometimes a glass of milk and slice of bread and butter will "sweeten him up" like magic, for, the chances are, not being used to eating lunch with other children, he will slight the dinner he carries, and his stomach will be craving food, and when there is hunger, there is seldom good nature.

If it is found that he will not play nicely with his younger brothers and sisters, separate him from them for a time. In his heart, he thinks they are the finest children anywhere, but at school he has been a "beginner," looked down upon by the older children, and it pleases him to treat the "little ones" the same way. He'll soon be glad to play with them on any terms, if only he can play with them!

As for his voice, stuff your ears with cotton! The young animal in the civilized child must assert itself. Let him "holler like a wild Indian" till his pent-up energy is exhausted.

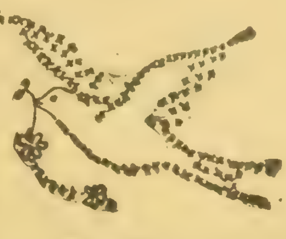
Don't bewail that school is teaching him all sorts of bad habits. It is merely holding a wild young thing in check, and at home he is "letting off steam."

Attractive Quilt Design for Children's Room

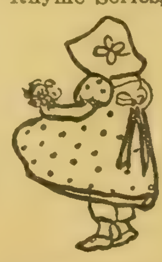


What little boy or girl would not be delighted to be tucked to bed under a nursery quilt like this, to dream about Boy Blue, Little Bo Peep, and the rest of the Nursery Folk so dear to the heart of every child? The gool old nursery jingles can be told in other ways than by words, and what better place to tell a needle-and-thread story than on a little boy's or girl's very own bed set?

These quilt blocks can be furnished for outline embroidery, on good quality linen finished white muslin in three designs. Nursery Rhyme Series, 12 assorted designs. The blocks are nine inches square and ten stamped blocks, combined with ten plain blocks of pink or blue sateen, makes a 36x45 Baby Quilt or Crib Blanket. Ten blocks 50c; 30 blocks (Sufficient for both crib blanket and full-sized quilt), $1.00. Address: The Business Farmer, Pattern Department Mt. Clemens, Michigan.



Cross-Stitch Bluebird



Sunbonnet Series

Personal Column

Can Any Reader Answer Our Subscriber With More Information?—I enjoy the Home Department in M. B. F. very much. I like the cooking recipes. I am asking about a little information about flowering bulbs. This spring I planted twenty-eight healthy looking gladiola bulbs and five of them rotted in the ground. The large bulbs I planted about six inches deep and the smaller ones about four. I prepared the soil by digging holes and putting in two pails of good rich dirt from near the manure pile. I have watered them as often as they needed it, but some did not grow as well as I thought they should and some rotted in the ground. I planted them the last week in April.

I am going to plant some crocus, tulip and hyacinth bulbs this fall and would like to know what kind of soil is best suited for them, how far apart they should be, and all about the care of them, also how to store Canna bulbs for winter. Will try to return the favor Mrs. Wm. Hoffman.

—The best soil for the Gladiolus is a medium loam. It appreciates good fertility, but seems sensitive to any manure in contact with the bulbs. Manure is good if applied in the autumn previous to planting. The best fertilizer for general use is one that would be called a potato fertilizer, rich in potash, and phosphoric acid, both chemicals being useful in the proper formation of good bulbs. Bonemeal is also extensively used. Liquid manure, when the buds are

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forming seem beneficial. Gladioli are not hardy and require a little protection against frost in our northern states. Planting should be after all danger of frost is past. A well planned succession in planting is advisable. The depth to plant is determined by the character of the soil. In the lightest soil seven or eight inches is not too deep, but in a heavy clay four or five inches would be a sufficient depth. There are two reasons why bulbs should be planted as deep as the character of the soil will permit. First, the Gladiolus is moisture-loving, and in deep planting its roots are in the cooler moisture soil; Second the soil acts as a support, no other support for the stem being necessary ordinarily. In the fall before frost remove the bulbs, leave the stems on. Store in an airy place to dry thoroughly. After several weeks the stock can be cleaned by removing stems and the old bulb, leaving new stock for next year. You should get from one to six new bulbs off of old one each year.

Crocus—Must be planted in an open place where they can get the sun in order to have them flower. New bulbs are produced above the old ones each year and the plant becomes higher and higher in the soil. They should thus be transplanted every third year. A layer of sand to place the bulb on insures good drainage and keeps the bulb from rotting. They can be grown in ground near trees and should be planted in clumps to be attractive. Plant about four inches in ground.

Hyacinth.—Treat the same as Crocus. They, of all the bulbs, need protection in winter. Plant six inches deep. Tulips, like the Hyacinth should be planted six inches or more in rich sandy loam and a good plan is to put them in rows about four inches apart. Plant in early October. or before frost.

Cannas—Digging and Storing.—When the tops are killed by the frost, the roots can be dug in the morning, and if the day is sunny, they can be left to dry. They must be stored where they can be kept warm, for if they are cold and damp, they decay. They may either be buried in sand or soil, although sand is preferable. If a green house is available he roots may be stored under the benches. It is really unnecessary to wait until the tops die down, because the beds may be wanted for fall bulb planting, in which case let the Cannas grow as long as possible and then dig them.

"To My Son"—Can you tell me where I can obtain a copy of the motto that has appealed to so many mothers the past few years, "To My Son" by Margaret Johnston Grafflin? For a time it was on sale at stores where these mottos were sold but am now unable to find them. If any of our readers can advise me I will very much appreciate it. or if you can do me the same favor.

The lines of the first verse are:

"Do you know that your soul of my soul is such part,
That you seem to be fibre and core of my heart?
None other can pain me as you dear, can do
None other can please me or praise me as you."

Thanking you in advance.—Katherine.

—The motto can be obtained thru the Detroit Library and the book of poems is called "Heart Throbs." The second and third stanzas are:

Remember the world will be quick with its blame,
If shadow or stain ever darken your name.
"Like Mother, like Son", is a saying so true.
The world will judge largely of Mother by you.

Be yours, then, the task, if task it should be,
To force the proud world to do homage to me.
Be sure it will say when its verdict you've won,
She reaped, as she sowed, Lo! This is her son.

WOMEN'S EXCHANGE

IF you have something to exchange, we will print it FREE under this heading providing: First—It appeals to women and is a bonifide exchanges, no cash involved. Second—It will go in three lines. Third—You are a paid-up subscriber to The Business Farmer and attach your address label from a recent issue to prove it. Exchange offers will be numbered and inserted in the order received as we have room. —MRS. ANNIE TAYLOR, Editor.

Exchange Notice—Patterns of girls velvet or plush hats, tam-o'shanters, bonnets, also man's mitten pattern for thread, aprons, velvet pieces or anything useful. Send list.—Mrs. G. W. Morgan, Route 3, Vicksburg, Michigan.

The Runner's Bible

They helped everyone his neighbor: and every one said to his brother, Be of good courage. So the carpenter encouraged the goldsmith, and he that smootheth with the hammer him that smote the anvil, saying, It is ready for the smoldering; and he fastened it with nails, that it should not be moved. Isa. 41:6-7.

It is the Christian's imperative duty to give encouragement whenever and wherever he is able; yet how many of those who call themselves followers of

(Continued on Page 22.)

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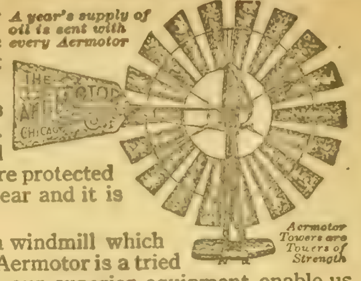

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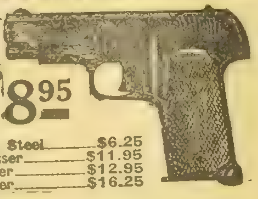

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Christ take any pains to say a sympathic, appreciative work? On the contrary, it often appears that the Christian feels it his duty to say that which is discouraging or disagreeable, deeming everything else flattery, and of evil. We little know how near to despair our neighbor may be even though he masks it with smiles. An adverse remark may fell him to the ground, whereas he might rise on wings of hope because of our appreciation. There is always something good one way. Say (Prov. 16;20) something to lessen the sting of criticism if that seems to be needful. Remember that just praise is a smile of God, and loving criticism, his guarding hand.

RECIPES

Chopped Pickles—Four quarts chopped green tomatoes, two-thirds cup salt, two teaspoons pepper, three teaspoons mustard, three teaspoons cinnamon, three teaspoons allspice, three teaspoons cloves, one-half cup white mustard seed, four green peppers, sliced and two chopped onions, and two quarts vinegar. Sprinkle alternate layers of tomatoes and onions with salt, and let stand over night. In the morning drain, and put in preserving kettle, adding remaining ingredients, using enough vinegar to cover all. Heat gradually to boiling point and boil one-half hour.

Green Tomato Relish—One peck green tomatoes; four lemons; 6 pounds or one and one-half pounds sugar and one-half pound corn syrup; four or five pieces of ginger root, more if desired. Wash and cut tomatoes into pieces; slice lemons very thin; put all into acid proof kettle and cook until clear.—Elvis Alford.

Peach Conserve—25 nice yellow peaches and one pound of white grapes, ten red plums, one pineapple, one orange, one-fourth pound of almond meats. Cut each fruit in small pieces, cook all together for about one-half hour. Measure and allow three-fourths cup of sugar to every cupful fruit. Cook very gently about twenty minutes, then add the nut meats cut in pieces; continue to cook slowly for two hours or longer. Pour in glasses and seal when cool.—Mrs. H. C.

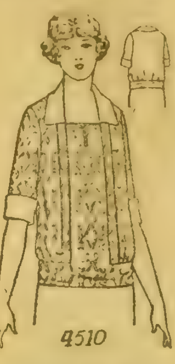
Potato Puffs—Mix together one pint mashed potatoes, one teaspoon salt, one teaspoon black pepper, yolk of two eggs. one-quarter cup milk or cream, one tablespoon butter, one tablespoon onion juice and one cup of walnuts cut fine. Shape in small balls. dip each in beaten egg, roll in crumbs and fry brown in deep fat. One tablespoon chopped parsley may be added before shaping if wished.—Alma B., Augusta, Michigan.

Three Egg Angel Cake—Take one cup of sugar, one and one-third cups flour, one-half teaspoon of cream tartar, one-third teaspoon salt, three teaspoons of baking powder, two-thirds cup scalded milk, one teaspoon of vanilla, whites of three eggs. Mix and sift the five ingredients four times, add the milk slowly while still hot stirring constantly. Add vanilla and fold in the whites of eggs beaten light and stiff.—Alma B., Augusta, Michigan.

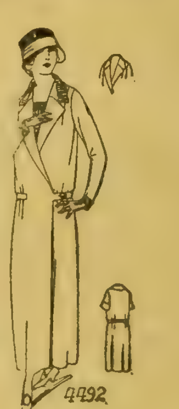
—if you are well bred!

You will not laugh or talk loudly. Modulate your speaking voice until it is low and sweet for your hearers. Never monopolize the whole conversation. Maybe the other fellow has something worth while to tell you.

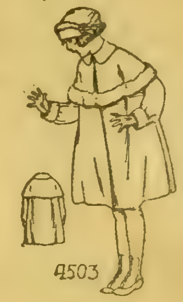
AIDS TO GOOD DRESSING


4510

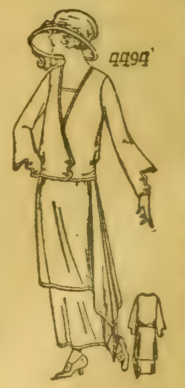
4510. A Smart Blouse—Figured silk was used for this model with faille in a contrasting color for cuffs and collar. Velveteen and moire are also good for this style. The Pattern is cut in 6 Sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. A 38 inch size requires 2⅞ yards of 32 inch material. For collar and cuffs of contrasting material ½ yard 40 inches wide will be required.


4492

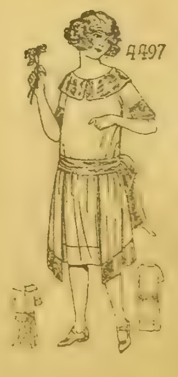
4492. A Stylish Dress Coat—This fashionable model will develop well in kaska cloth or ni satin. As illustrated soutache braid was used for trimming on collar and cuffs, a vest of embroidery in Oriental colors makes a very attractive finish. The Pattern is cut in 6 Sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. A 38 inch size requires 3¾ yards of 54 inch material. To make the vest of contrasting material requires ¼ yard 9 inches wide or wider. The width at the foot is 1⅞ yard.


4503

4503. A Simple Practical - Coat Style—Broad cloth, polo cloth, heather mixtures, tweed or velvet as well as other pile fabrics are good for this model. Fur, braid or or braiding will be suitable for decoration. The Pattern is cut in 5 Sizes: 2, 4, 6, 8 and 10 years. A 6 year size requires 2¾ yards of 40 inch material.

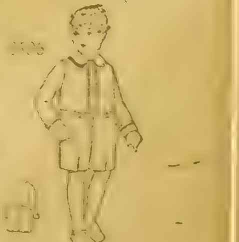

4494

4494. The Latest Expression of a Smart Style—The new tiered skirt and side drapery, topped by a smart blouse is here portrayed. Satin in a pretty shade of brown was employed to develop this style, with a finish of bias self bands. The model is also attractive for crepe weaves, taffeta, and broad cloth. The Pattern is cut in 3 Sizes: 16, 18 and 20 years. An 18 year size requires 6¼ yards of 40 inch material. The width at the foot is 1¾ yard. To make the concealed part of the skirt of lining requires 1¼ yard, 32 inches wide.


4497

4497. A Becoming Frock for the Growing Girl—Youthful lines, and popular style features are expressed in this model. Crepe satin with facings of the satin side and the dress portions of the reversed side, is here pictured. This is a pretty style for voile and organdy. It may also be developed in one material with embroidery or braid for decoration. The Pattern is cut in 4 Sizes: 8, 10, 12 and 14 years. A 14 year size requires 4⅝ yards of 40 inch material. Without tunic, bertha and cuffs 1⅝ yard less is required. To trim with contrasting material as illustrated requires 1⅛ yard 40 inches wide.

4506 A Popular Style for the "Little Man"—One could have this in jersey weaves, in flannel or serge; It. is also a good model for linen, seersucker and gingham. The Pattern is cut in 3 Sizes: 2, 4 and 6 years. A 4 year size requires 2¼ yards of 36 inch material.



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WHY THE "FARM HAND' AND HIS FAMILY ARE GOING BACK

(Continued from Page 4)

until about five loading. Then, there being no convenient place for us to ride, my husband suggested that the children and I walk ahead. The roads we had to travel at that season of the year are mud, deep, clinging mud. Our two-mile walk through it might be taken as a symbol of the discomforts and disappointments to follow.

We ate our supper that night in the kitchen around the kitchen table, and for weeks after the kitchen was, for the greater part of the time, the only comfortable room in th house. We found that the room off the kitchen which we wished to use for a dining room had no pipe hole, so we could not put our coal heater in it. The sitting room was down a sort of hall from the kitchen and opened into the dining room at a door clear at the farthest corner. A fire in it would have to be very hot indeed to make the dining room comfortable. So we did the only thing left; put up the heater along with the cookstove in the kitchen.

The agreement which the farmer made with my husband promised that the kitchen drain which was out would be fixed as soon as the ground thawed in the spring. It has never been fixed at all. Once or twice I have suggested to my husband that he might tell the farmer that if he did not want to have it done we would do the work ourselves and he could allow the time, but my husband had already made suggestions which were not followed and so at last, in June, he put in a pipe which runs along on top of the ground and empties into the pig pasture which lies just beside our yard. The windows all over the house needed to be puttied but my husband has found time to do only one. The rain comes in and is making spots on the walls in every room except the kitchen. It ruined the ceiling of the dining room and there is a large piece of paper loose and partly hanging. Both the farmer and his wife promised to get new paper but haven't. They both asked about the screens, but our house has only one screen door that is not ragged, and the windows are partly covered with old netting. I cannot keep out the flies.

The only horse among sixteen that I can drive is crippled so badly that I would rather walk than drive it, and when my husband suggests taking one of the others when he is going to drive the owner nearly always makes some excuse for taking the lame one. Neither of us drive unless we have so much to carry that we must. When we walk to church and Sunday School the children come home cross and tired.

When we came the working hours were to be from five in the morning to seven at night, and the owner counted himself as one of three men who did the work. Oweing chiefly to his own tardiness and irregularity, the men were all late to all meals most of the time during the first month we were here. Instead of getting supper for all of us at seven I often got supper at seven, waited until seven-thirty for my husband to come in, and then gave the children their supper and put them to bed, while I waited until my husband came in, sometimes as late as eight-thirty or nine. I do my cooking on a gasoline stove and each reheating of food uses more fuel and adds to our expenses. After the first month my husband began quitting at quitting time—seven o'clock—always being at the barn at five in the morning, though the other two men continued to be late. When he was there first he had all the feeding of the cows to do alone before milking, which was very hard as all the food had to be carried to the cattle.

One morning the owner told my husband to stay at the barn nights until all the chores were done and Jack reminded him of their agreement as to hours, and declared that he would quit at seven as a general rule or quit for good. The owner made excuses but, finding Jack firm, agreed that they would usually quit at seven. But the injustice of his demand added to our resentment on account of his failure to repair the house.

It is now mid-summer. All the horses are at work in the fields nearly every day. The farmer or his wife go to town about once a week and Jack can go on Saturday night after seven. If I need anything at any other time I can walk after it. Getting to town so infrequently as we have and do costs money in various ways. In town I could buy fresh meat as I used it; here I have to get ham or bacon or canned meats, all of them expensive. In town we used gas for cooking and lighting, here the gasoline for cooking and kerosene for lighing comes to considerable more.

We are finding life on this farm, to which we came with so many hopes and plans, nothing more than a discouraging failure. Jack started in with enthusiasm, with desire to earn his money and please his employer. He started with real knowledge and ability to do his work well. He is an honest, upright, sober, intelligent man, who desires and intends to make farming a life work.

There are farms all over the country needing such men, and I am sure there are in towns and cities many men like Jack, who feel that they can succeed on a farm if they can only get a good opportunity.

It seems to me that it is up to the owners who are complaining about the inability to secure or keep farm help because of the longer hours on the farm and the higher wages in the cities and towns, or to the government, itself, to offer such men the sort of living conditions, the commission on profits they help to make, and the appreciation, which will enable the farm laborer who has it in him to become a real farmer to get a start in farming without the money investment for land and stock and equipment which a family man working for wages finds it impossible to make.

The factory worker and the railroad employee and the majority of all town and city workers are living in conditions similar to those of their neighbors, who are for the most part their fellow-workers. The Unions help them to get justice, and they live in comfort with some, at least, of the modern conveniences. Most of them have some time to call their own and can use it for trying out on a small scale some hobby, such as chicken raising, gardening, etc. On the other hand many of the men, both married and single, who go to the farms as laborers, find the hours so long and the conditions which they thought they would like, so unsatisfactory, that they are giving up their desire for a farm life and are returning to the factories. Unless these conditions are changed the problem of sufficient help on the farms will grow worse until the government finds the solution one which it must undertake in order to produce sufficient food for the nation.

We are going back to the city this fall. The house in which we live would be very uncomfortable in winter. The garden, which we got in late because Jack was so busy, yielded hardly anything so we need not stay to harvest it.

Time flies—and is especially fleet when you owe a note due in thirty days.

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F. H. Johnson, 609 W. Lake Street, Chicago, Ill. He also wants local distributors and has a very unique selling plan to offer agents. He is even offering to give one free to the first user in each locality who will help introduce this new light.—(Adv.)

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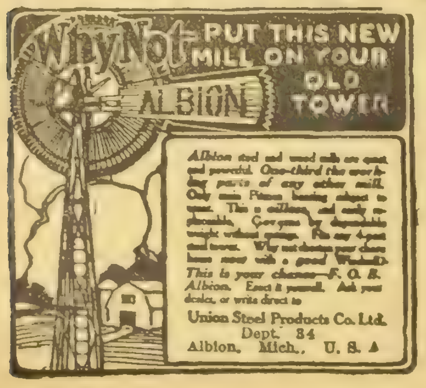
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FARM MECHANICS

PURITY OF WATER SUPPLY

I have a never-failing well about 18 ft. from back door. My sink is 9 ft. east and 14 ft. south from back door. Is there any way a pump by the sink can draw water easily from this well; is deep, cold and delicious water; has not been cleaned out in years. The last cleaner said when he got through with it there was still 6 ft. of mud in the bottom of it. Another cleaner said he might be able to clean it in a dry season, when water is correspondingly low. We have had no illness from this water and it is certainly good. Should anything be put in it to make it doubly safe? How close to a well is it safe for an outdoor toilet? Ground is level.—Enquirer, Michigan.

—Whether or not water could be pumped as you suggest depends entirely upon the distance of the permanent water level below the pump if installed as described. Twenty-five feet is about the practical working distance; that is, the maximum distance that a pump cylinder can be placed above the water and have it work properly. If the vertical distance from the pump cylinder to low-water level in the well is not greater than this a pump could be put in as you suggest.

It is impossible to say whether or not the water from your well is pure; some of the coldest, sparkling water is contaminated. From a sanitary standpoint the location of the well near the back door is bad, as refuse is likely to be thrown out here, especially where the house is not provided with a sewer system, that is likely to find its way into the well as seepage. This of course need not necessarily be true, as precautions can be taken in the disposal of dishwater and other house waste that prevent any of it finding its way into the well.

No definite distance can be set down as a "safety distance" for a well from a source of pollution. The above applies to dug wells, as they are perhaps most susceptable to pollution. The character of the soil and the source of pollution as well as the general slope of the ground and the character of the subsoil all have a bearing on this "safety distance." As a general rule in clay or other tight soils and where the pollution is at the ground surface 100 feet is a sufficient distance to guarantee a pure water supply as far as the particular source of pollution under consideration is concerned. If the contaminating matter is beneath the ground's surface, as in the case of a cesspool, a much greater distance may be required.

Simple precautions toward securing a safe water supply from a dug well are either to make the upper 10 to 15 feet of the casing water-tight by the use of concrete, brick or tiling, or by simply filling in behind the stonework with tightly packed puddled clay. This casing should be carried high enough above the surrounding surface to give good drainage and to prevent the entrance of any surface water, and the top covered by a good concrete curb.

Pollution of well waters by seepage from private or similar source of contamination is usually indicated by the presence of chlorine in the water. The presence of chlorine can be detected by the following test: Thoroughly wash and rinse in water from the well to be tested a glass tumbler. Fill the tumbler half full of the well water and add six drops of a solution of five grains of nitrate of silver in one ounce of distilled water. ' This solution can be made up at a drug store. If chlorine is present in any appreciable amount the water will appear cloudy when held up against a dark surface. If there is reason to doubt the purity of drinking water and chlorine is found to be present it is advisable to have it tested by a laboratory examination.—R. H. S,

BLASTING BOULDERS

THERE are three kinds of boulders from a blasting standpoint —one which is not a boulder at all, but a ledge of rock extending up through the ground; second, a boulder proper which is not imbedded in the ground so deep but that a charge can be placed under it; and third, a boulder which rests on the surface of the ground with some depression in the top which makes it possible to break it up by firing a charge of high explosives placed directly on the rock with a quantity of soft mud on top to give confinement.

Suppose for this demonstration that the rock is of the second class, and about four feet long, three feet wide and two feet high, without visable seams or cracks. It would take too long to drill a hole into it, as we would have to do with the ledge rock, and it is imbedded in the ground too deeply to mudcap economically, so we will punch a hole with a crowbar or pointed piece of drill steel at such an angle that the end of the hole is close up under the rock. This, you will notice, is different from our proceeding with the stump we blasted in the last article where we got the charge down about two feet below the base of the stump. We do not want to blow this boulder out entire; we want to break it up. As there are no buildings in sight, we will put about three 1¼" x 8" cartridges under this boulder the last on being the primer. Although there no buildings in sight, the boulder is alongside a fairly well traveled road, so we will fire it electrically.

We make the primer in the same way as with cap and fuse, placing the electric blasting cap in a hole punched in the side of the cartridge and tying a piece of string about eight inches long first to the wire and then around the cartridge so that the cap cannot pull out. After pressing this primer down against the other two cartridges with our sawed-off broom stick, we fill up the hole with soil scraped up in the neighborhood in order to confine the explosive and prevent it from blowing out the bore hole. We then connect the two wires sticking out of the hole to the two free ends of our duplex leading wire, being careful that the joints do not touch each other and being particularly careful to wind the cap wires around the well scraped leading wire ends, bending these latter over into a hook to prevent their pulling loose. We next uncoil the leading wire as far as it will go—in this case 250 feet—and connect the two free ends of the leading wire to the two binding posts on the blasting machine. It does not matter which wire goes to which post. Just as we get ready to fire, a team is seen coming up the road. This shows the advantage of electric firing, because if we had lighted the fuse when we left the boulder we should have had to go down the road and warn all vehicles to stop, a thing they do not particularly like. With the electric blasting, however, we merely wait until the team has passed. Then we lift the rack bar of the blasting machine up as far as it will go and push it down with a sudden, quick, powerful movement as hard as we can. This generates an electric current which travels down through the leading wires and fires the cap, which in turn explodes the dynamite, and if we have gauged the charge correctly the boulder is broken in pieces of a size which can readily be loaded on a stone boat and taken away.—Arthur La Motte, Mgr. Technical Section, Explosives Dept., E. I. du Pont de Nemours & Co.

DON'TS FOR TRUCK DRIVERS

DON'T try racing with a touring car; your truck was built for strength not for speed.

Street car tracks are nice on springs, but hard on tires—and steel costs less than rubber.

Don't neglect a loose part, even though it seems to operate more freely that way.

Don't forget to watch the other fellow ahead; a slow stop on your part nearly always costs you a punctured radiator.

Use your brakes when getting "spotted;" platforms were built to load from not for bumping posts.

Don't drive too close to the curb; edge-trimming is a fine institution for pie crusts, but to expensive for truck tires.

MICHIGAN CROPS

HISTORY OF THE IRISH POTATO

THE potato is not a root, as many are inclined to think. It is an underground stem which has become thickened, and which is a storehouse of food for the new plant. The eyes are auxiliary buds from which the stems and roots come when the potato begins to grow.

So many authentic evidences of the nativity of the potato in temperate South America, from Chili to Colombia, that this region is indisputably considered its original home. It is said that potatoes grow wild in Chili at present.

The Irish potato, Solanum tubyrosum, belongs to the Solanacae. Solanum is the Latin for nightshade, hence it is a member of the nightshade family; to this family also belong our good friend the tomato, the ground-cherry and the beautiful winter flower the bittersweet.

Also some we do not like so well, as the nightshade and the tobacco. The genus Solanum contains a great many species now distributed all over the world, but most abundant in the south temperate zone.

From Virginia to Europe

The potato was introduced into the colonies in the latter part of the 16th century, but just how it was brought there is not exactly known. It is possible that it was obtained from the Spanish traders as the Spanish were using it quite commonly as a food at that particular time.

Undoubtedly the Spaniards had become acquainted with the potato during their conquest of Peru during 1532-1585. Our best authorities say that there is no positive evidence to show that the potato was utilized by the Indians before the arrival of the white people. From Virginia it was taken to Europe.

First a Cattle Food

When the potato was first discovered and used for food it did not make the palatable and appetizing dish it does today. It was much smaller and somewhat bitter in its taste. It was first, both in England and in other parts of Europe, thought that it might serve as food for cattle. Later it was decided that it might be used as a food for the poorer classes of people, and that it might be cultivated for a food for use during emergencies, such as famines and when grain crops would fail.

Now Indespensable

For a long, long time it was cultivated indifferently. People evidently were skeptical and the result was the potato did not improve very rapidly. It is only during the latter age of scientific cultivation that the potato really did improve, and this was through better cultivation, breeding and cross-breeding. Thru this it has reached its present state of perfection and become an indispensable dish for rich and poor.

Although the potato can now be grown in almost all temperate and sub-tropical regions, the climate sets an irrevocable stamp upon it. The potato raised in the warm climates bring a high price in our markets in the spring, but it cannot in the least compare with the much superior article grown in the North where climatic conditions are the more nearly like those where it originally grew—South American temperate regions. It prefers cool climates with rich, fertile soils and reached the climax of perfection in the north and northwestern states and Canada.

Murphy's Father

The potato was not generally cultivated in the United States until after 1800. The people of the United States are greatly indebted to the efforts of Rev. Chauncey E. Goodrich of Utica, New York, for the present high state of perfection the potato bears. In 1842, in the hope of improving the potato, Rev. Goodrich sent to South America for some wild tubers and during the following sixteen years he conducted experiments. The results were that he originated about a half-dozen new varieties of great value, among which were the forerunners of some of the present leading varieties which we enoy so much today, one of them being the Early Rose.

Why Irish?

Where did the potato acquire the name of Irish potato? This question is often asked. The name is certainly misleading, for Ireland is not its native home. It is true that Ireland opened her doors to the lowly potato and had succeeded in bringing about many improvements on the crop before the rest of the European countries realized its value and good qualities.

It is also said that colonists had taken potatoes along back to Europe after they had in some way been introduced into the American colonies from South America, and after they had been cultivated for a time had been brought to America as Irish potatoes. It is possible that they never will know exactly how the name originated.

BEST KIND OF CLOVER FOR HAY

I would like to know through your paper which kind of clover makes the best quality of hay. The Red clover or the Alsike? Which can be most successfully raised on all kinds of soil and whether alsike is hard on land?—N. K., Midland, Mich.

—Alsike is a hardier, longer lived plant and adapted to a wider range of conditions than Red Clover. Alsike will grow on land that is too wet and too acid for Red clover. There is but little difference in the feeding value for hay. The following table from Henry's Feeds and Feedings shows the digestive nutriments in one hundred pounds of each:

Dry matter: Alsike 87.7, Red clover 87.1; Crude Protein: Alsike 7.9, Red clover 7.6; Carbohydrates: Alsike 36.9, Red clover 39.3; Fat: Alsike 1.1; Red clover 1.8; Total: Alsike 47.3, Red clover 50.9.—C. R. Megee, Farm Crops Dept., Mich. Agricultural College.

HOW MUCH MARL SHOULD BE USED?

Can you please tell me where I can get material to inoculate sweet clover seed? Also, how much marl should one use to the acre, using the marl test, 95 per cent lime?—A. L. L., Traverse City, Mich.

—Material for the inoculation of sweet clover seed may be secured from the Department of Bacteriology, M. A. C., East Lansing. The price is 25c per bottle and one bottle contains sufficient material to inoculate a bushel of seed. Directions for application accompany the material.

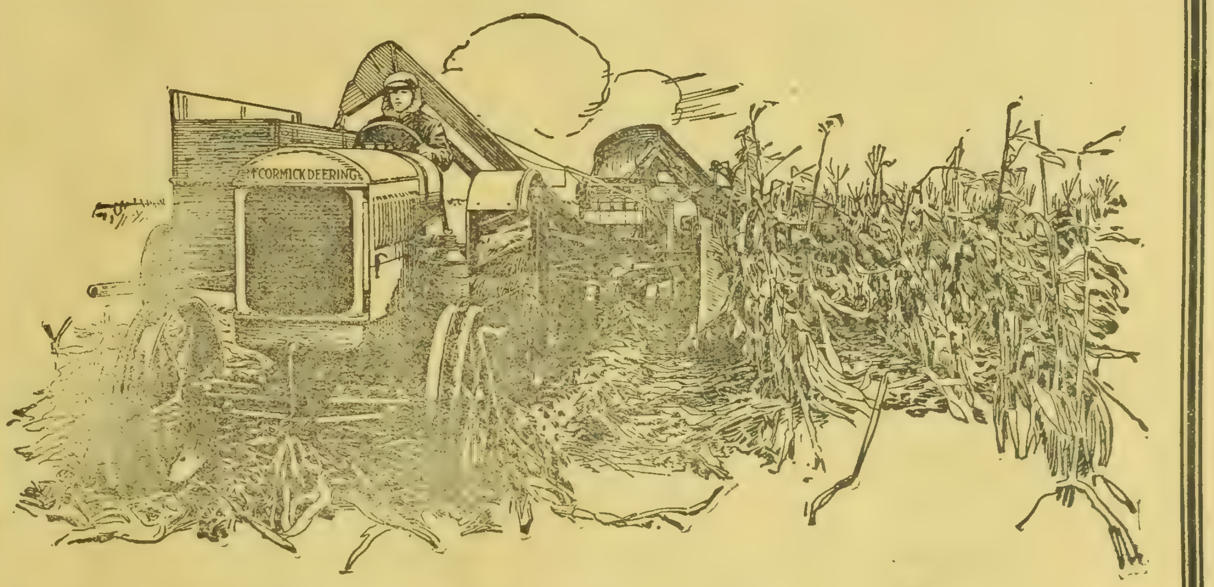
The amount of marl that should be used will depend largely upon the acidity of the soil. In general from four to six cubic yards should be used. There are a few soils that require a higher application.—C. R. Megee, Associate Prof. of Farm Crops, M. A. C.

SHALL WE HAND PICK OUR BEANS ON THE FARM?

(Continued from Page 3)

hour. Could give you statement from several friends that I cleaned a few for them just to show what it would do and for one neighbor cleaned the screenings which he brought back from the elevator and thought worthless, which he returned and sold for $25. This took about three hours. The machine also proved to be the best for cleaning seed beans, except hand picking which few of us have time to do.

After finding a way to increase the capacity to 30 or 40 bushels per hour and realizing that the farmer should have a chance to clean his own beans for market, applied for patent. This is as far as I ever got have not had time to build a complete machine for myself as the other farm work takes all of my time. Have talked with some manufacturing concerns but they seem to think that the elevators should have the chance to pick the beans and take it away from the farmer or they find fault because there would be very few repairs or the bean growers are losing thousands of dollars by not having proper ways of cleaning seed and paying the elevators for hand picking their beans while they do a greater part with mechanical pickers and keep the profit. Here is hoping that this will be stopped some day.—Lee A. Medcalf, Fairgrove, Mich.



Let Livestock Put Your Corn Crop in the Bank

The corn crop will soon be ready—and there is one best way to turn the crop into money. Sell your corn on the hoof! Low-priced grain produces cheap pork and beef, yet the livestock market promises fair. By harvesting your corn with the least possible man labor, and putting both ear and stalk into shape for feeding, you can fatten livestock this winter and sell it at a profit.

Big factors in the success of this plan will be McCormick-Deering corn machines. Corn binders and ensilage cutters are doing the early work on many farms. Later you can pick the corn with a mechanical picker that enables two men to do the work of from five to seven men. Pick your own crop quickly, then pay for your McCormick-Deering Corn Picker by helping some of your neighbors with their crops.

Many acres of fodder will be fed in the coming winter. As soon as the corn has dried in the shock, put it through a McCormick-Deering Husker and Shredder. You can gauge your feeding better when you feed ear corn and roughage separately. McCormick-Deering Huskers and Shredders are built in sizes for home or custom work.

This fall hundreds of enterprising farmers will feed the corn and sell the crop on the hoof. And they will have McCormick-Deering Corn Machines ready for many more years of good work—both at home and in the fields of their neighbors. Good machines save man power, cutting your operating costs and adding to your profits. Talk it over with the McCormick-Deering dealer in your town.

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Imported Cows of Choicest Island blood
Bred and Unbred Heifers of Superb Quality
Three Choicely Bred Bulls

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Sept. 21—Holstein, B. S. Gier, Lansing, F. J. Fishbeck, Sales Manager, Howell, Mich.
Sept. 27—Holstein, Grand River Stock Farm, Eaton Rapids, Mich.
Sept. 28—Holsteins, Poland Chinas, Percherons, J. M. Hicks & Sons, Williamston, Michigan.
Oct. 9—Holsteins, Art Bogart and D. B. Pinkerton, Vassar, Michigan.
Oct. 18—Holsteins, Howell Sales Company of Livingston County. Wm. Griffin, Sec'y. Howell, Mich.

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THE GOLDEN RULE AUCTIONEER
Bellevue, Michigan
Pedigreed Sales a Specialty.
Write, wire or call for terms and dates.

HOLSTEINS

FASCINATION FARM, VASSAR, MICHIGAN. Holsteins, registered fully accredited 32½ lb sire. Write your want.

3 Fine Holstein Bulls

ready for light service in October from heavy milking Dams and sired by Romeo King Pontiac Segis Korndyke. The price is very reasonable. Better drive over and see them.

SCHAFFER BROS., R. 4, Oxford, Mich.

HEREFORDS

Are You Considering What to Feed This Fall That Will Prove Profitable

Before purchasing feeders investigate the Sotham Earliripe HEREFORD Beef Plan. A proven, profitable system of beef production of great benefit to the producer. Realize the utmost from your feeding operations. Write for information. HEREFORDS, Yearlings, Two-year-olds, Young cows with calves, all registered and T. B tested at practical prices for producing Earliripe HEREFORD Baby Beeves. Terms granted upon proper credentials.

T. F. B. SOTHAM & SONS
(Herefords since 1839) Saint Clair, Mich.

Steers For Sale

70	Herefords	780	lbs.	76	Herefords	700	lbs.
80	Herefords	610	lbs.	86	Herefords	650	lbs.
56	Herefords	500	lbs.	80	Herefords	820	lbs.

Each bunch even in size, dark reds, dehorned, good grass flesh. Some bunches fair flesh account short pastures. If in the market for real quality, one load or more your choice. Write stating number and weight preferred.

V. V. BALDWIN, Eldon, Wapello Co., Iowa

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5 extra nice Repeater heifers one year old for $500.00. Also 10 cows with ten nice lusty calves by side for sale.
If in want of bulls, write us.

ALLEN BROS.
616 So. West St. Kalamazoo, Mich.

We Have Bred Herefords Since 1860

Herd established by Gov. H. H. Crapo. We have a few choice yearling bulls for sale at farmers prices. You are invited to visit our farm.

CRAPO FARM, Swartz Creek, Michigan.

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FOR SALE: BULL CALF BORN IN MARCH. Right every way. Dam is dam of Belle Missaukee Beauty A. R. 6th cow in Class D. D. and State Champion in Class. Sire has ⅞ of same breeding as "Red Rose" and Missaukee Sally Class leading in G. G. Price for quick sale $150.00. Buy type and production.

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FOR SALE—REGISTERED GUERNSEY HEIFERS at reasonable prices, also choice bull calves of May Rose breeding.

H. W. WIGMAN, Lansing, Mich., Box 52.

FOR SALE: REGISTERED GUERNSEY BULL calves for $35.00 each. May Rose Breeding.

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SHORTHORNS

YOUR CHOICE OF MY ENTIRE HERD OF Shorthorns, several heifers, and young bulls in the bunch. Also cows and calves. Priced at fifteen cents per pound. One percheron mare. Priced at ten cents per pound.

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REGISTERED MILKING SHORTHORN CATTLE, Shropshire and Delaine sheep. Stock and prices right. Write wants. Also car load feeding cattle.

CLOVER CREST RANCH, Tawas City, R3, Mich.

RAISE SHORTHORNS WITHOUT HORNS Like Kelley does. U. S. Accredited Herd No. 28945. For description and price write,

L. C. KELLY & SON, Plymouth, Michigan.

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PIPER & GOODALE, East Tawas, Michigan.

Polled Shorthorn Bulls. Some ready for Service. Heifers 1 to 4 mos. old. O. I. C. and C. W. young boars. Frank Bartlett, Dryden, Mich.

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SECOND ANNUAL SALE

The Get of
MODEL KING SEGIS GLISTA
Famous for Show Type and Milk Production

GRAND RIVER STOCK FARMS
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Thursday, September 27th

Sale will begin at 10 A. M.
43—SELECTED REGISTERED HOLSTEINS—43
Composed of 22 Y[illegible] Bulls and 21 Females
Fully Accredited Herd
Approved Bankable Paper of Nine Months Will Be Accepted.

111 E. Main St.—COREY J. SPENCER, Owner—Jackson, Mich.

DAIRY and LIVESTOCK

HOLSTEIN TOURS WELL ATTENDED

WHEN the dust had settled away the Holstein Tours staged by the county agents, Dairy Department, M. A. C., and the State Holstein Association had covered twenty-two counties, visiting 131 farms and the number of breeders who toured totaled 661. In addition to this attendance there was held a noon meeting in Clinton county in connection with the Looking Glass Farmers' Club with a point gathering of 200, and a night meeting in Livingston county at the lake on the Brouse Farm where 300 Holstein enthusiasts took in the bathing, boating, movies and program. So well over 1,000 breeders were reached.

High honors for attendance and interesting program lay between Kent, Clinton and Livingston counties.

The Grand Round-up at the farm of D. D. Aitken, Flint, was indeed a success. Over 350 breeders were in attendance, coming from practically every nearby county. The editor of Hoard's Dairyman, A. J. Gllover, was the principal speaker of the afternoon. Other imported talent included Fred Koeing, Director of Extension for the National Holstein Association and W. B. Barney, the first Holstein breeder west of the Mississippi. The surprise of the occasion came when following a gift to Mr. Atken of a silver loving cup from Genesee neighbors the costly set of True Type models of the breed were presented to him by Holstein cattle breeders of Michigan.—J. G. Hays, Ext. Spec. for Mich. State Holstein Ass'n. and Dairy Dept., M. A. C.

CATTLE SALE AT WEST MICHIGAN FAIR

ON Thursday, September 20th, about thiry cows with cow testing association records of 300 pounds of butterfat or better will be sold at the West Michigan Fair, Grand Rapids, Michigan.

This fair is unique in the history of Michigan Dairy Cattle Sales. It is the first effort that is being made to sell, at public sale, cows an a straight cow testing association basis. Very much interest in evident thruout the cow testing association area of Michigan.

The requirements for entry in this sale is a year's record in a Michigan cow testing association. The record must be three hundred pounds of butterfat or better, the cow to be T. B. tested, and definite information will be given concerning the total feed consumed, the value of her product, and the returns above cost of feed remaining to the owner. Both purebred and grade cows will be included in this sale. Farmers will be able to buy, at their own prices, cows on a definiee basis of actual dollars and cents returned for feed consumed by each cow.

Considerable interest is evident in a number of associations to make entry in to this sale. The Fair management at Grand Rapids is offering free stall space, bedding and feed, and additionally is furnishing a high-class auctioneer free of charge. With sixty-one cow testing associations in Michigan totaling about eighteen thousand dairy cows and representing eighteen hundred cow testing association members, it can readily be understood that a great number of men appreciate the value of a cow testing association record on a cow. Hence the sale value, while no record prices are expected, will no doubt hold up with some of the best sales held in Michigan during the past months.

The records of the cows entered in this sale will be verified by a number of the Dairy Extension Department, M. A. C.—A. C, Baltzer, Extension Specialist in Dairying.

MICHIGAN'S FIRST PURE BRED SIRE SALE IS PLANNED

A NEW venture in livestock improvement work is the proposed pure bred sire sale which is being promoted by the Ionia County Farm Bureau. The sale is to be held September 22nd in the splendid new sales pavillion which was recently erected and placed at the disposal of Ionia county farmers by the National Bank of Ionia.

The idea is believed to be a new one, and credit for it is given to B. F. Hall, of Belding. On his suggestion the Ionia County Farm Bureau is featuring the sale, the first of its kind, and is expected that it will lead the way to other sales of a similar nature that will result in great benefit to the live stock industry.

According to County Agent R. L. Helm, the proposed sale is novel and has the peculiar feature of being the first sale of the kind ever attempted in the state. It is to be a sire sale exclusively. There are no "equal rights" about it. The females of the species will not take part.

The plan briefly is this: Only sires are to be sold. Two to four good registered male animals of all breeds of dairy cattle, beef cattle, hogs and sheep being raised in the county are to be consigned by the various breeders and breed associations and sold at auction at this sale.

It is believed that most of those who come to this sale to buy will be farmers of Ionia and adjoining counties who are in the market for good pure bred males to improve their grade herds and flocks, and the purpose of this sale is to offer them an opportunity to get this kind of a male at an auction where prices are sure to be right. The movement will ultimately, it is declared, result in great improvement to the grade herds of Ionia county farmers by the more general use of pure bred sires.

The details of the sale are being arranged as rapidly as possible, Mr. Helm states, and nearly all of the consignments it is possible to handle have been made. The services of Col. J. P. Hutton, of Lansing, have been secured for the sale.

THE SILO ON THE RENTED FARM

RENTED farms are on the increase, according to the U. S. Department of Agriculture. In some states they represent nearly fifty per cent of the holdings. The land owner as well as the tenant is interested in making the farm pay, and it is well worth while to consider factors which cater to a dependable revenue from the land.

A silo on a rented farm not only makes it more attractive to a good renter but also encourages a longer period of renting, and all land owners know it is better to keep a good tenant for a term of years than to experiment by changing each year. Farm renting naturally favors crop farming, which is not only hazardous but tends to deplete soil fertility and fails to build up the land. General or stock farming requires more working hours of the tenant, but it is more sure of reward, especially if a good herd of milking cows is a part of the equipment. A renter who is willing to care for live stock should be encouraged, and the land owner will find a silo is one of the main factors toward popularizing stock farming and making it pay.

A Minnesota farmer, Mr. Patchen by name, recently reported to a farm paper an interesting comparison between a farm having a silo and one without such equipment. Mr. Patchen has a herd of Jersey cows and keeps careful record of each animal. He found on his rented farm with a silo that the average annual production was 325 lbs. of butterfat per cow. The next year on a farm not having a silo he was only able to get 260 lbs. of butterfat per cow. The third year he occupied a farm with a silo and increased the annual butterfat per cow 65 lbs.. The silo gave this farmer an increase that represented a good profit, and with a herd of twelve cows and butterfat at 40c per pound it would equal $312, which would about pay for a silo.

When we consider that the silo will not only feed the dairy herd but all other stock on the place including calves, steers and stock cattle besides colts, horses and mules, it is easy to figure how it will pay for itself in one year.

Both land owner and renter can depend on the silo as an economic means of producing stock and stock

It's NATURAL for a hog to wallow
Provide a wallow and add
DR. HESS DIP and DISINFECTANT
then~

1. Your hogs will be free from lice.
2. They will have clean, healthy skins.
3. Disease germs will be destroyed.
4. Foul odors will be kept down.

If you do not have a wallow, use the sprinkling can freely. Sprinkle the animals — the sleeping quarters and pens.

Sprinkle the cow barns to keep them healthful and clean-smelling—

The poultry-house to kill the mites and lice.

Use it about the house—in the closets, sinks and drains. Excellent for the sickroom.

Standardized Guaranteed

DR. HESS & CLARK, Ashland, Ohio

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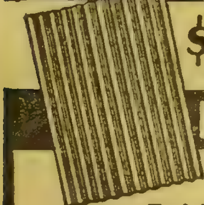

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Galvanized Roofing
These GALVANIZED sheets are suitable for roofing or siding, free from holes, squarely trimmed, recorrugated and given a coat of Red Paint free of charge.
No. SD-111—Heavy weight overhauled GALVANIZED 2½-inch Corrugated sheets—per square of 100 square feet $3.75

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No. SD-113—Medium weight overhauled painted 2½-in. Corrugated sheet—for roofing of better siding —per square of 100 square feet $2.85

New Govenment Corrugated Sheets
No. SD-114—BRAND NEW PAINTED 2½ inch CORRUGATED SHEETS in 22 Gauge—purchased from the United States Government. A wonderful value —per square of 100 square feet $4.25

Red and Gray Slate Coated Roll Roofing
No. SD-115—NEW Slate Coated Roofing in rolls of 108 square feet complete with nails and cement. Weight 85 pounds. Red or gray. Per roll $2.00
No. SD-116—New Heavy Smooth Surfaced Roofing—Sound and durable—easily taken care of—Adopted to every roofing need. Complete with nails and cement—per roll $1.65

HARRIS BROTHERS CO.
35th and Iron Streets, CHICAGO

MAIL THIS COUPON NOW!

HARRIS BROTHERS CO., Chicago, Ill.
Dept. SD-400
Fill out coupon below and we will send you our estimate of cost for your building without obligation on your part.

NAME ....
ADDRESS ....
Size of Building or Roof Dimensions ....
Kind of Roofing Preferred ....

products. The silo is literaly a necessity on the stock farm. It is a dependable forage bank and an insurance for a forage crop. Any corn which has been grown can be saved, even when injured by hail or frost. The silo saves labor in feeding, and furnishes a food which stimulates growth and milk production. It makes possible to carry more stock on the farm and saves much expensive grain feeding. It will encourage and keep the best tenant on the farm which means profit to both land owner and renter.—A. L. Haecker.

VETERINARY DEPARTMENT

LEGS GIVE OUT

I have a yearling ewe that is heavy with lamb and there is something wrong with her and I cannot find out what it is. She seems in good health, eats good and moves spry for a few minutes then acts as though her legs gave out and lies down. Bowels and kidneys seem alright. Can you tell me what is wrong with her and what to do for her?"—S. A. M., Mancelona, Mich.

—I think the trouble with the ewe is due to her being heavy with lamb. Trouble like this sometimes occurs in ewes late in the gestation period, the cause has never been definately determined. The trouble generally disappears when the ewe lambs.—John P. Hutton, Assoc. Prof. of Med. and Surg., M. A. C,

PRISON LABOR MAY SOLVE GOOD ROADS RIDDLE

(Continued from Page 4)

work on highway construction and their labor is proving efficient and most satisfactory.

The Human Side

We have mentioned the value of this plan to the individual convict, and this must not be lost sight of in the consideration of the use of convicts in highway construction. We would be less than human if we did not consider the rights of the individual who is confined for some misdemeanor against society.

The purpose of a prison and the purpose of prison confinement is to reconstruct the individual whose misdeeds are all too often the result of the degenerated physical body which preys on his mental processes.

It is undoubtedly true that with fresh-air, wholesome food, the environment of the great out doors, the sence of accomplishing something for the good of society or of paying a penance, as it were, by creating something which all people may enjoy, all these things must have their mental and physical effect on the individual convict. To know that he is earning $1.25 a day is being credited to him for the day when he leaves the prison, must give him a feeling of accomplishing something for himself and remove from him the hopeless feeling that must come over the prisoner who sits alone within the confines of a prison cell and hopelessly views the future.

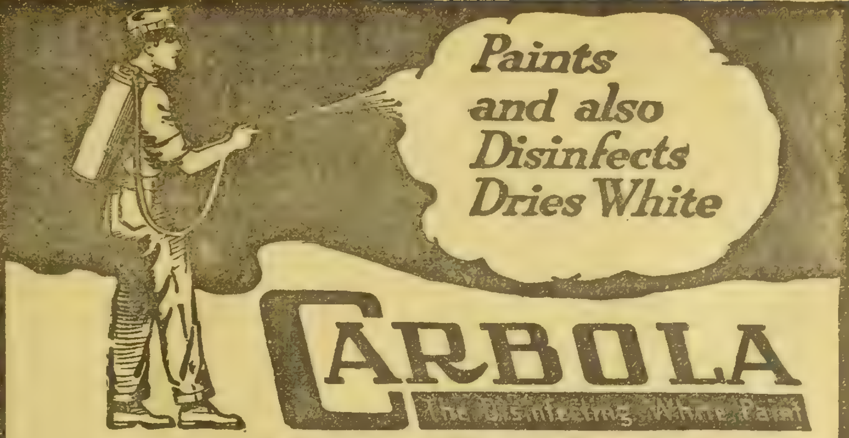
Communities Praise Work

The people in the communities where prison camps are being operated express themselves as not only highly pleased with the type of work being done, but with the conduct of the men who are employed in the camps having given them no cause for complaint.

At Grand Blanc the motion picture theatre owner invited the prisoners in for an evening of entertainment and the churches in that village have entered into the spirit and are doing all possible for the comfort and upbuilding of the men employed near them.

The tax payers in the state of Michigan can well be proud of the accomplishment which has been made to date, and with the enlarged plans for the coming year it may be that the riddle of the Sphinx has been solved and Michigan can have its system of paved highways joining every community, thus making all farm land more valuable, adding to the comfort, entertainment and education of every citizen of the state, and yet accomplishing it without a cost which is unbearable.

And it is well to remember that the fellows who cheer you today will be just as ready to jeer you tomorrow.



Paints and also Disinfects Dries White

The Disinfecting White Paint

So Easy to Use
—In Poultry Houses, Cow Barns, Etc.—

Carbola is a white paint and powerful disinfectant combined in powder form. Simply stir the powder in a pail of water and it is ready for brush or sprayer—no waiting or straining. *Does not clog sprayer. Won't peel or flake.*

The powerful disinfectant does not evaporate but keeps its strength on the walls. Carbola will not spoil even in water and may be kept standing in pail to be used as wanted. One pound covers about 100 square feet.

Results Are Sure and Certain

Carbola is neither poisonous nor caustic—harmless to the smallest chick or stock that licks a painted surface. It gives walls and ceilings a smooth, white finish, increases the light, improves the appearance, and helps make buildings clean, sweet-smelling and free from mites and contagious disease germs. There is nothing better than Carbola for dairies, poultry houses, cellars, dog kennels, rabbit hutches, garages, tree trunks, etc.

It has been used for years by more than 100,000 dairy and poultry farmers and by agricultural colleges and experiment stations. We have a big file of letters from farmers and storekeepers praising it. Give it a trial—you will never regret it.

AS A LOUSE POWDER for use on cattle, poultry, horses, hogs, dogs, etc., the dry powder will be found most satisfactory. The dry powder is applied like any other louse powder, and is very effective—a first-class louse powder at 10c a pound.

Your hardware, feed, seed, poultry supply or drug dealer has Carbola or can get it. If not, order direct—prompt shipment by parcel post or express.

5 lbs. 75c and 10c postage 10 lbs. $1.25 and 15c postage 20 lbs. $2.50 delivered
50 lbs. $5.00 delivered 200 lbs. $18.00 delivered

CARBOLA CHEMICAL CO., Inc., 310 Ely Avenue Long Island City, New York

HEAVES Is your own horse afflicted? Use 2 large cans. Cost $2.50.
Money back if not satisfactory
ONE can at $1.25 often sufficient. In powder form.
Most for cost

30 years' sale
NEWTON'S
A veterinary's compound for Horses, Cattle and Hogs. Heaves, Coughs, Distemper, Indigestion. Worm expeller. Conditioner. At dealers' or by parcel post.
THE NEWTON REMEDY CO., Toledo, Ohio

DOG BOOK FREE
32 page book—how to keep your dog well — how to care for him when sick. Result of 35 years' experience with every known dog disease. Mailed FREE. Write today. Dept. 1099
H. CLAY GLOVER, V. S.
129 West 24th St. New York

ANGUS

WE HAVE SOME FINE YOUNG ANGUS BULLS from International Grand Champion Stock at reasonable prices. E. H. KERR & CO., Addison, Mich.

SWINE

O. I. C.

O. I. C.'S
3 last fall gilts to farrow in Aug. and Sept. 60 spring pigs, not akin, recorded free. Good stock. OTTO B. SCHULZE, Nashville, Michigan.

FOR SALE—EXTRA FINE BIG TYPE O. I. C. pigs at farmers prices. Both sex. E. E. SALISBURY, Mendon, Michigan.

HAMPSHIRES

HAMPSHIRES: A FEW BRED GILTS LEFT. Place your order now for your Boar pig at a bargain. Pairs not akin. 10th year. JOHN W SNYDER, St. Johns, R. 4, Mich.

DUROCS

Hill Crest Farms, Perrinton, Mich.
Duroc-Jerseys and Black Top Delaine Sheep. 35 stock rams to pick from. Farm 4 mi. straight south of Middleton. Gratiot Co. NEWTON & BLANK.

PEACH HILL FARM offers choice weanling Duroc pigs, either sex. Priced very reasonable. Write us. INWOOD BROS., Romeo. Mich.

BIG TYPE DUROCS, SPRING PIGS, BOARS and Bred Sows. Write us your wants. SCHAFFER BROS., R. 4, Oxford, Michigan.

BERKSHIRES

TALCOA FARM OFFERS A VERY GOOD selection of bred Berkshire sows and sows with litters at farmers prices. R7, Lansing, Mich.

CHESTER WHITES

CHESTER WHITES FOR SALE—SPRING Boars of right type with quality. Shipped on approval. WILBER JONES, Reese, Michigan.

SHEEP

FOR SALE 400 BREEDING EWES. For Prices Write A. F. LONGPRE, Curran, Michigan.

WEST MARION OXFORDS. 25 YEARS Breeding. The best stock for sale. Both sex. WM. VAN SICKLE, Deckerville, Michigan

REGISTERED SHROPSHIRE SHEEP, 40 EWES 1 to 4 years, 50 ewe and ram lambs first class. Priced right. Flock Established 1890. C. L. LEMEN & SONS, Dexter, Michigan

GOATS

GOATS—TOGGENBERG BUCK IN STUD. Terms Reasonable. Write M. H. BIRD, R6, Lansing, Michigan

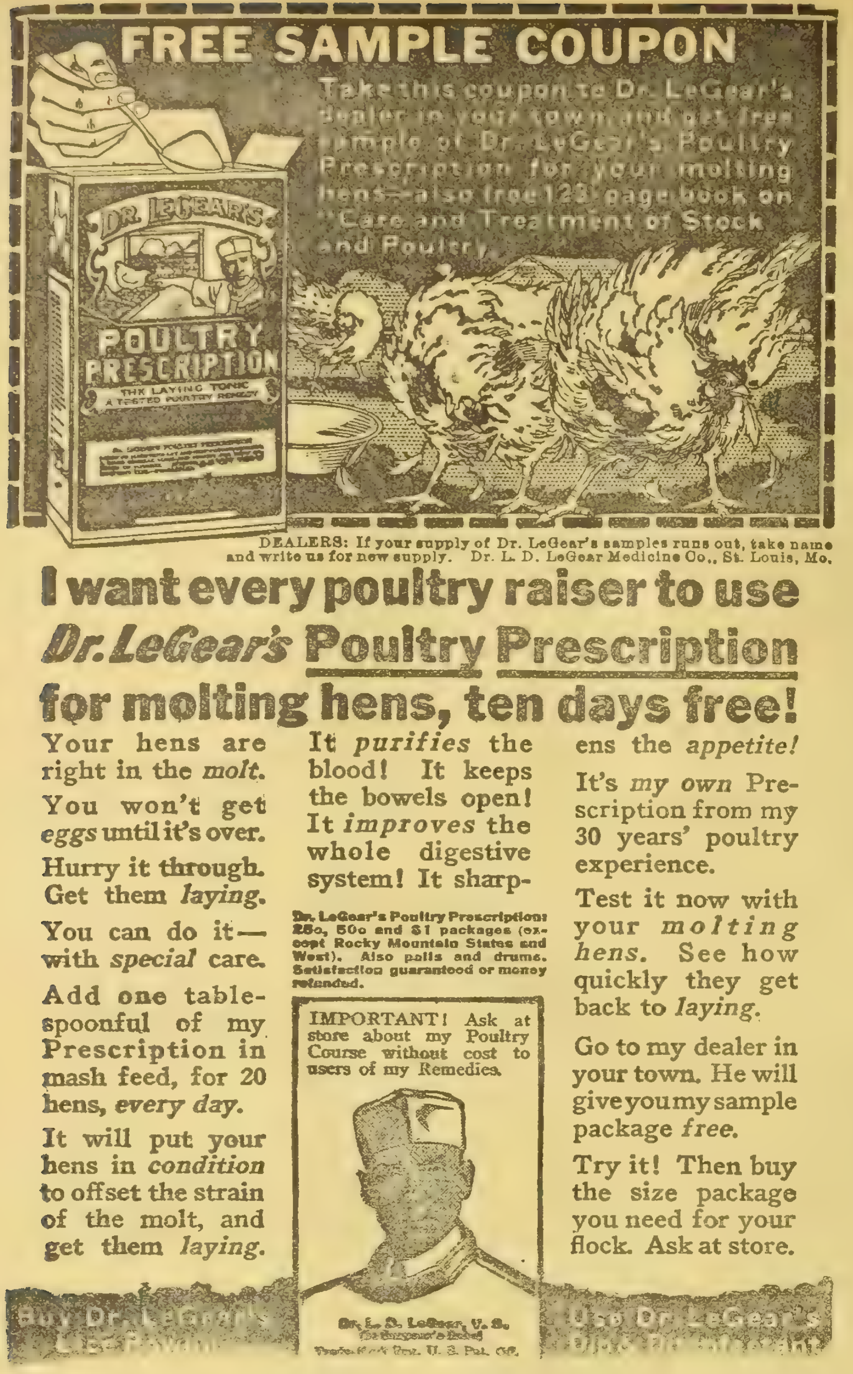
DOGS

For Sale -- Fox, Coon & Rabbit Hound
JOHN ATCHISON, Harrisville. Mich., R. 3.

German Shepherd, Airdales, Collies; Old English Shepherd dogs; Puppies; 10c illustrated instructive list. W. B. Watson, Box 27, Macon, Mo.

$ We can use a few earnest men and women part or full time in soliciting subscriptions and acting as our agents. Write
Circulation Manager
THE BUSINESS FARMER
Mt. Clemens, Mich.

AUCTION SALE
Having sold our farm we will sell at the farm 7 miles East of M. A. C. on M-16 Friday, September 28th, the following Registered Stock.
14 PERCHERON HORSES —All mares excepting 3 stud colts. One 1900-lb. dark gray 4 year old stallion.
15 HOLSTEINS —Registered and T. B. tested. All females. 10 cows under 5 years of age, due to freshen in October.
Poland China hogs and a few breeding ewes. Farm tools and machinery. Usual sale terms.
For Full Particulars Write To
J. M. HICKS & SON, Williamston, Mich.


FREE SAMPLE COUPON

Take this coupon to Dr. LeGear's dealer in your town and get free sample of Dr. LeGear's Poultry Prescription for your molting hens—also free 123 page book on "Care and Treatment of Stock and Poultry."

DEALERS: If your supply of Dr. LeGear's samples runs out, take name and write us for new supply. Dr. L. D. LeGear Medicine Co., St. Louis, Mo.

I want every poultry raiser to use *Dr. LeGear's* Poultry Prescription for molting hens, ten days free!

Your hens are right in the *molt*.

You won't get *eggs* until it's over.

Hurry it through. Get them *laying*.

You can do it—with *special* care.

Add one tablespoonful of my Prescription in mash feed, for 20 hens, *every day*.

It will put your hens in *condition* to offset the strain of the molt, and get them *laying*.

It *purifies* the blood! It keeps the bowels open! It *improves* the whole digestive system! It sharpens the *appetite!*

Dr. LeGear's Poultry Prescription: 25c, 50c and $1 packages (except Rocky Mountain States and West). Also pails and drums. Satisfaction guaranteed or money refunded.

IMPORTANT! Ask at store about my Poultry Course without cost to users of my Remedies.

Dr. L. D. LeGear, V. S.
[illegible]
Trade-Mark Reg. U. S. Pat. Off.

It's *my own* Prescription from my 30 years' poultry experience.

Test it now with your *molting hens*. See how quickly they get back to *laying*.

Go to my dealer in your town. He will give you my sample package *free*.

Try it! Then buy the size package you need for your flock. Ask at store.

Buy Dr. LeGear's [illegible]

Use Dr. LeGear's [illegible]

POULTRY BREEDER'S DIRECTORY

Advertisements inserted under this heading at 30c per agate line, per issue. Commercial Baby Chick advertisements 45c per agate line. Write out what you have to offer and send it in. We will put it in type, send proof and quote rates by return mail. Address The Michigan Business Farmer, Advertising Department, Mt. Clemens, Michigan.

PULLETS, HENS AND COCKERELS

S. C. White Leghorns and S. C. and R. C. Black Minorcas. Must make room before cold weather. About ready to lay.
LAPHAM FARMS, Pinckney, Mich.

LEGHORNS

LEGHORNS

S. C. Buff Leghorn Hens, Pullets and Cockerels. Hens and pullets $2.50 each; cockerels $3.00 to $5.00 each. Show birds a matter of correspondence. LAPHAM FARMS, Pinckney, Mich.

Yearling Hens: English and American White Leghorns and Anconas. Reasonable prices.
M. D. WYNGARDEN, Zeeland, Route 4, Mich.

BUFF ROCKS

Buff Rock Cocks, Hens, Ckl's and Pullets, big, rich buff, low combs, rich yellow shanks, from our National winners and "Hogan" tested layers.
J. C. CLIPP & SONS, Bx M, Saltillo, Ind.

RHODE ISLAND REDS

WHITTAKER'S R. I. REDS. MICHIGAN'S greatest color and egg strain. Cockerel price list ready in September. Improve your flock with Whittaker's red cockerels.
INTERLAKES FARM, Box 4, Lawrence, Mich.

BABY CHICKS

Tompkins Strain $15.00 per hundred. Last hatch August 22nd. Quality breeder of Rhode Island Reds.
WM. H. FROHM, R. 1, New Baltimore, Mich.

HIGHEST CASH PRICES PAID FOR LIVE Poultry all kinds, Veal, Eggs, and Butter. A square deal always. Write for tags, etc.
C. E. McNEILL & CO.
325 W. South Water St., Chicago

TAKE THE D. & C. WATERWAY trip to Buffalo. Restful, economical, all conveniences.

NEW SUBSCRIPTION RATES

(Effective April 2nd, 1923)

ONE YEAR .... .60
TWO YEARS $1
FIVE YEARS $2

The Michigan Business Farmer,
Mt. Clemens, Mich.

I enclose $............... for a .... years subscription, this entitles me to every department of Business Farmer Service, without further cost for the full period of my subscription.

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(If it is a Renewal, mark X here ☐ and if possible send the address label from this or any recent issue to avoid mistakes.

Poultry for Profit

MERITS OF WHEAT AS POULTRY FEED

WITH the price of wheat in several states lower than, or about equal to, the price of corn, poultry specialists in the United States Department of Agriculture point out the desirability of giving wheat an important place in poultry rations. The influence of war-time conservation of wheat is still evident, according to specialists of the department, but there are no longer any economic reasons for conserving wheat or using it solely as a human food. On the other hand, it is so plentiful and cheap in many localities that it is a more economical livestock and poultry feed than corn.

Corn and wheat are the best grains for poultry and are about equal in value for this purpose, although wheat can be fed alone better than corn, which is inclined to be fattening. Best results are obtained when wheat and corn are combined about equally in egg-laying rations. Following is a good scratch mixture: 1 pound cracked corn, 1 pound wheat, 1 pound oats.

While wheat is an excellent feed for dairy cows and meat animals. it needs to be ground for best results with such stick, whereas poultry relish it and utilize it as whole grain.

The department points out also that wheat at 89 cents per bushel, which was the approximate current price recently in seven Middle Western States, is $29.66 per ton, which is a lower price than prevails for various other feeds having no greater nutritive value. The department's recommendations for putting wheat back on a pre-war basis as a stock feed are reinforced by action already taken by some farmers. A cooperative association of Michigan farmers recently published a list of feeds for which wheat could be economically substituted. This association contends that the local wheat market was below the cost of production and that local wheat would bring more when fed to livestock than when sold on the open market.

POULTRY FARMER'S BUSINESS IN NEED OF STANDARDIZATION

THE farmer has always been a poultryman. The fowl is more at home on a farm than in any other place in the world. There isn't a single feature about the poultry business that does not make it peculiarly adaptable to the farm life. The hen is native to the open country and always has been.

There is a good reason for this.

There is no place in the world where the opportunities are more abundant and inviting for poultry culture than on the farm. The broad open fields, the largeness of room for houses and yards, the limitless chances for the production of everything that is needed for the feeding and the care of birds—everything in fact appears to invite the man of the soil to engage in this great business of raising fowls on a large scale. These statements will surely not be doubted nor disputed.

There is need of standardization of the farmer's poultry business.

What do I mean? This is my thot—there are too many farmers who are conducting the poultry end of their calling in practically the same old way as it was done on the average farm a hundred years ago. They may keep more hens; but they are not down to date in their methods.

Standardization means reducing your business to a system or standard corresponding to the best science that has been discovered for that particular work. Its the average former doing this? Is he adopting the most efficient means and methods for getting the largest profits out of a flock of 250 hens? I believe we must all admit that there is still much for the average farmer to do in this respect.

Many are coming along in fine form. But there is still a feeling that the keeping of hens is rather a trifling side line, unworthy of the sedious attention of the men of the ranch. Accordingly, either the women have to take care of the birds and raise the chicks and market the eggs or that whole department of the farm job goes by default.

This ought not so to be. I know apparently very inteligent farmers who have been declaring for the last five years that the poultry business "is being overdone," and that the bottom will all fall out of it "next year." But each season these men have seen thousands of other people making fine little fortunes from their hen yards while they themselves have continued to scrape along milking cows and raising corn and potatoes at what they declare to be a loss. Why not try losing along some other line?

Many farmers are on this job; but I insist there are too many who are not making the best of a good thing. They need not only information, but inspiration. They need to come more down to date in hatching and housing, in caretaking and in marketing.

WEST MICHIGAN FAIR TO BE BEST EVER

MAKING farming pay! That in short, is the slogan of the officials who are behind the big educational program which will be presented at the coming West Michigan State Fair, Grand Rapids, September 17 and 21.

A visit to the fair will be like taking a short course at an agricultural college. It will give visitors many new ideas. The farmer, who is anxious to keep in step with the progress that is being made in agricultural and live stock breeding, will find much of interest to him. He will have a chance to study the various exhibits, make comparisons, and learn ways of improving his own crops and livestock.

One of the most interesting departments of the fair will be the machinery show. Machines of many different types, that will perform every conceivable task on the farm, will be exhibited. Factory experts will be on hand to explain their workings and tell exactly how much man-power each machine will replace.

The livestock show, with hundreds of head of fine cattle, sheep, swine and horses, valued at thousands of dollars, will be one of the show places on the grounds. Premiums totaling $18,000 will be awarded to the owners of prize winning animals.

The West Michigan Fair this year will be the best ever staged according to Secretary L. A. Lily. Both the educational and entertainment ends of the program will be of the very highest standard.

NEW POULTRY COURSE COMPLETED BY NOTED EXPERT

DR L. D. LE GEAR, V. S. of St. Louis, has just completed an extensive Poultry Course of 12 volumes and 33 lessons, in which he has given the practical knowledge of his 30 years of poultry raising experience.

Dr. LeGear is known throughout the United States as a National Poultry Expert. and it is the practical handling of the back yard flock that Dr. LeGear particularly covers in his Poultry Course studies.

Volume No. 12 of Dr. LeGear's Course is of particular interest at this time because it covers every phase of the molting period and gives complete instructions on how to get hens back to egg laying quickly.

This complete Poultry Course is not for sale but it being offered by Dr. LeGear without cost to users of his remedies. These volumes can be secured through any store where Dr. LeGear Remedies are sold.—(Adv.)

Calamity Ed had just taken his son back of the woodshed and thought the time ripe for a heart-to-heart talk.

"Eddie," said he as impressively as he could, "suppose I should be taken away suddenly, what would become of you? Eh?"

"Well, I'd stay here, I guess. Question is, what would become of you?"

"JUST WHAT I WANTED"

Your answer to inquiry No. 2183 at hand. The information is just what I wanted. Thank you.—E. S., Pittsford, Mich.

The Agricultural and Business Situation

Revised Monthly by the Department of Research of the American Farm Bureau Federation.

An understanding of the figures on this page as they are revised and presented each month, enables the farmer to see the position of the important factors which indicate the trend of business and prices and give a basis for judgment concerning future agricultural operations.

PRODUCTION AND TRADE:

August forecasts indicate a yield of wheat 8 per cent less than last year. Corn remains the same. Potatoes show a decline of 16 per cent. Cotton an increase of 17 per cent. The commercial apple crop promises an output 6 per cent greater than last season and peaches 17 per cent less. Comparisons with the five year average for eighteen crops may be noted in the accompanying table.

Industrial production is continuing at a high rate. In the first seven months of 1923 the output of automobiles almost equaled the output for the record year 1922. Total production for this year promises to be four million cars which is about one-third of the automobiles in use at the beginning of the year.

Building expenditures, the first six months of 1923, have been 32 per cent more than for the corresponding period in 1922. Prices of building materials during this period averaged 24 per cent higher than the same months last year.

Freight car loadings are at high levels except for grain and grain products. Railroads have added to their equipment and are meeting the demands made upon them without the congestion of a year ago.

Mail order sales, January to July this year, are 37 per cent above the same months in 1922.

11. FOREIGN TRADE:

Total exports in dollars for the twelve months ending June, 1923, were 5 per cent over the previous year while imports jumped 45 per cent. Pork exports, in volume, were 18 per cent greater this year; wheat exports were 20 per cent less; cotton 22 per cent less; tobacco practically the same.

European money with the exception of England, Holland and Sweden, is quoted lower than last year.

III. MONEY AND CREDIT:

Interest rates on four to six months commercial paper have made a steady advance since the low point of 4.25% in July, 1922, the rate now standing at 5.19%. The rate in August, 1920, at the beginning of the depression, was 8.25%.

IV. PRICES:

The latest figure on farm purchasing power, as published by the United State Department of Agriculture, is 71 compared with 72 for a year ago. For the first half of 1923 the figure averaged 69 compared with 72 for the same period last year.

Prices of many products are improving. Cattle, hogs and lambs are higher than a year ago. Wool is holding even. Dairy and poultry products are stronger. Corn is 25 cents higher. Wheat, although below the average for last year, is the same price as for the corresponding date a year previous. Cotton is 3 cents higher. Potatoes have taken a big jump.

Out of 25 commodities 17 are above a year ago; 5 are below and 2 remain unchanged. Compared with last month, 17 are higher and 7 lower.

I. Production and Trade.

Agriculture: U. S. Production—000,000 omitted.

	August, 1923 Forecast	1922	Average, 1917-1921	1923* Per Cent
Winter wheat, bu.	568	586	590	96
Spring wheat, bu.	225	276	245	92
All wheat, bu.	793	862	835	95
Corn, bu.	2982	2891	2931	102
Oats, bu.	1316	1201	1378	96
Barley, bu.	202	186	192	105
Rye, bu.	64.8	95.5	70.3	92
Buckwheat, bu.	13.5	15	14.9	91
White potatoes, bu.	380	451	388	98
Sweet potatoes, bu.	93.1	110	94.3	99
Tobacco, lbs.	1474	1325	1361	108
Flaxseed, bu.	19.1	11.7	9.7	197
Rice, bu.	32.9	42	41	80
Hay, tame, tons	81.3	96.7	83.3	98
Hay, wild, tons	16.0	16.1	16.2	99
Cotton, bales	11.5	9.8	11.2	103
Sugar beets, tons	6.5	5.2	6.9	94
Apples, total, bu.	188	201	160	118
Apples, com'l, bbl.	32.9	31	25.7	128
Peaches, bu.	47.3	56.7	42.7	111
Peanuts, lbs.	684	624	1025	67
Grain sorghums, bu.	113	90.4	103	110

* As per cent of average of 1917-1921.

2. Mining (Federal Reserve Bank of New York):

Figures express production as a percent of normal. In estimating normal production, due allowance is made for seasonal variation and year to year growth.

	June, 1923	May, 1923	June, 1922
Anthracite coal	98	98	1
Bituminous coal	109	114	43

3. Manufacturing (Federal Reserve Bank of New York):

	June, 1923	May, 1923	June, 1922
Wheat flour	107	113	104
Meat	...*	120	112
Sugar	79	118	135
Cotton	96	108	92
Wool	...*	118	116
Pig iron	122	124	79
Steel ingots	114	122	82
Copper	97p	95	75
Gasoline	...*	108	101
Cement	128	133	120
Wood pulp	...*	120	110
Lumber	...*	125	91
Tobacco	...*	93	97
Automobile	159	150	...*

* Not available; p, preliminary.

Building Expenditures (Bradstreets):

(000,000 omitted)

	1923	1922	Per cent Increase
January to June, six months	$1,625	$1,239	31.0
July, 160 cities	202	193	4.5

5. Transportation (000 omitted):

Freight car loadings:	Week Ending Aug. 4, 1923	Same Week Month Ago	Same Week Year Ago	Week Ending Aug. 4, 1923*
Total	1,033	855	843	123
Grain and grain products	53	31	58	91
Livestock	31	25	26	119
Coal	191	160	79	242
Coke	13	14	8	163
Forest Products	76	54	55	138
Ore	84	76	67	125
Merchandise	240	209	228	105
Miscellaneous	345	287	320	108

* As percentage of week year ago.

6. Employment:

	July, 1923	June, 1923	July, 1922
Out of 64 industrial centers employment:			
Increased over previous month in	37	31	43
Decreased over previous month in	27	33	21

7. Bank Debits:

Units of $1,000,000,000

	July, 1923	June, 1923	July, 1922
New York City	$18.32	$21.04	$19.71
Outside bank debits	18.18	19.53	16.34

8. Mail Order Sales:

	July 1923	July 1922	Seven Months Ending July 1923	Seven Months Ending July 1922
Montgomery Ward & Co.	$ 7,491,908	$ 5,110,163	$ 71,928,658	$ 46,910,634
Sears Roebuck	14,960,939	12,244,961	121,737,196	94,748,186

II. Foreign Trade.

1. Exports (000 omitted):

Commodity:	June 1923	June 1922	Twelve Months Ending June 1923	Twelve Months Ending June 1922
Grand total, all exports	$312,239	$327,639	$3,886,550	$3,699,909
Beef and veal, lbs.	2,319	2,760	28,262	30,768
Pork, lbs.	65,921	60,897	814,665	683,875
Lard, lbs.	64,605	57,249	952,642	812,379
Neutral lard, lbs.	1,182	1,708	26,494	19,573
Butter, lbs.	460	1,104	9,410	7,512
Cheese, lbs.	372	447	8,446	7,471
Hides and skins $	294	410	3,496	4,573
Corn, bu.	1,918	11,646	94,064	176,386
Meal and flour, bbls.	51	34	634	776
Wheat, bu.	9,252	14,006	154,951	208,321
Wheat flour, bbls.	806	932	14,883	15,797
Oats, bu.	100	6,727	18,574	15,987
Oatmeal, rolled oats, lbs.	10,377	11,650	123,115	94,491
Fruits and nuts $	3,449	3,141	72,665	66,629
Vegetable oils, fats $	655	786	12,732	13,446
Sugar, lbs.	70,938	367,564	749,855	2,002,038
Leaf tobacco, lbs.	49,730	30,324	445,186	451,888
Cotton, bales	215	491	5,066	6,542
Wool, lbs.	1,040	717	7,320	5,118

2. Imports:

	June 1923	June 1922	Twelve Months Ending June 1923	Twelve Months Ending June 1922
Grand total, all imports	$320,257	$ 260,461	$3,781,259	$2,608,079
Beef and veal, lbs.	1,058	3,143	32,481	28,001
Pork, lbs.	71	27	998	930
Butter, lbs.	2,933	80	15,772	9,551
Cheese, lbs.	7,075	4,471	54,555	34,271
Hides and skins $	13,434	8,220	140,392	78,899
Corn, bu.	21	5	138	125
Wheat, bu.	122	1,610	18,013	14,466
Flour, bbls.	18	64	429	619
Oats, bu.	8	127	293	1,733
Fruits and nuts $	6,897	6,503	70,563	80,431
Vegetable oils, fats $	8,032	5,176	64,479	55,028
Sugar, lbs.	694,213	1,030,129	8,422,483	8,464,329
Leaf tobacco, lbs.	3,534	4,741	73,794	65,225
Cotton, bales	14	13	494	375
Wool, lbs.	30,129	16,940	525,473	255,087

3. Prices of Foreign Drafts:

	Nominal Gold Value Par of Exchange	Price of Demand Drafts Aug. 20, 1923	July 23, 1923	Aug. 21, 1922
England	$4.87 to 1 £ sterling	$4.54	$4.59	$4.48
France	19.3c to 1 franc	5.55c	5.99c	7.98c
Germany	23.8c to 1 mark	.000014c	.0002c	.09c
Belgium	19.3c to 1 franc	4.43c	4.97c	7.58c
Italy	19.3c to 1 lire	4.30c	4.375c	4.53c
Spain	19.3c to 1 peseta	13.45c	14.31c	15.64c
Austria	20.3c to 1 crown	.0014c	.0014c	.0014c
Denmark	26.8c to 1 crown	18.07c	17.50c	21.63c
Norway	26.8c to 1 crown	16.37c	16.24c	17.43c
Sweden	26.8c to 1crown	26.59c	26.65c	26.51c
Holland	40.2c to 1 florin	39.31c	39.21c	38.93c
Argentina	42.5c to 1 peso	32.60c	34.15c	36.38c
Brazil	32.4c to 1 milreis	10.00c	10.35c	13.45c
India	48.7c to 1 rupee	30.30c	30.80c	29.13c
Japan	49.9c to 1 yen	48.88c	48.70c	47.80c
Canada	100c to 1 dollar	97.75c	97.44c	99.876c

4. Discount Rate of the Bank of England:

Aug. 15, 1923	Month Ago	Year Ago
4%	4%	3%

III. Money and Credit.

1. Gold, Currency and Bank Deposits (000,000 omitted):

	July 1, 1923	June 1, 1923	July 1, 1922
Stocks of monetary gold in the United States	$ 4,049	$ 4,023	$ 3,786
Total supply of currency in the United States	4,730	4,706	4,374
	April 3, 1923	Dec. 29, 1922	Mar. 10, 1922
Total deposits in National Banks	$17,036	$17,420	$15,390

2. Gold Movement (000 omitted):

	June, 1923	June, 1922	Twelve months ending June 1923	Twelve months ending June 1922
Exports of gold	$ 548	$ 1,600	$ 49,021	$ 23,345
Imports of gold	19,433	12,968	284,089	468,318

3. Federal Reserve Ratio:

	Aug. 18, 1923	July 11, 1923	Aug. 16, 1922
Ratio of total reserves to deposits and Federal Reserve note liabilities	77.3%	75.4%	80.2%

4. Interest Rates:

	July, 1923	June, 1923	July, 1922
4-6 mos. commercial paper	5.19%	5.12%	4.25%
60-90 days commercial paper	4.94%	4.88%	3.94%

5. Discount Rate of Federal Reserve Banks:

	Aug. 1, 1923	July 1, 1923	Aug. 1, 1922
Range of rates for the twelve banks on commercial, agricultural and livestock paper	4½-5%	4½-5%	4-5%

6. Stock and Bond Prices:

	Aug. 9, 1923	July 6, 1923	Aug. 11, 1922
20 Industrial stocks	$89,11	$88.65	$97.06
20 Railroad stocks	78.11	77.99	89.32
40 Bonds	87.31	86.47	91.14

7. Business Failures:

	Week Ending Aug. 9, 1923	July 5, 1923	Aug. 10, 1922
Bradstreets	296	268	368
Duns	268	241	402

IV. Prices.

1. Wholesale Prices of Farm Commodities:

Quotations at Chicago except as noted.

	Aug. 21, 1923	Month Ago	Year Ago
Fat hogs, cwt., average	$ 8.15	$ 7.20	$ 8.00
Beef steers, good native, cwt., av.	10.75	9.65	9.50
Fat lambs, cwt., average	13.00	13.25	12.80
Fat sheep. cwt., average	6.75	5.75	6.75
Wool, Ohio delaine unwashed, lb.	.54	.56	.55
Butter, 92 score, lb.	.44	.395	.34
Cheese, No. 1 twins, lb.	.2375	.2175	.19
Eggs, fresh firsts, doz.	.2575	.23	.2275
Poultry, hens, lb.	.23	.2025	.225
Wheat, No. 2 hard, bu.	1.04	1.00	1.035
Corn, No. 2 mixed, bu.	.90	.89	.6225
Oats, No. 2 white, bu.	.405	.4325	.33
Rye, No. 2, bu.	.66	.655	.695
Barley, bu.	.62	.66	.545
Kafir, No. 2 white, cwt. (K. C.)	1.565	1.505	1.64
Hay, No. 1 timothy, ton	28.00	23.50	22.50
Flax, No. 1, bu. (at Minneapolis)	2.32	2.725	2.225
Cotton, middling, lb. (New York)	.2575	.2465	.2280
Beans, white, cwt. (f. o. b. Michigan)	5.60	5.20	8.25
Potatoes, cobblers, cwt.	2.35	1.35	1.50
Onions, Washington yellows, cwt.	2.35	3.05	2.35
Apples, summer varieties, bu.	1.35	1.25	.85
Hides, No. 1 native, heavy, lb.	.1475	.15	.20
Sugar, fine granulated, lb. (N. Y.)	.0755	.087	.07

2. U. S. Department of Labor Relative Wholesale Prices:

Prices in year 1913 equal 100.

	July, 1923	June, 1923	July, 1922
All commodities (weighed average or general price level)	151	153	155
Farm products	135	138	135
Food products	141	142	142
Cloths and clothing	193	198	180
Fuel and lighting	183	186	254
Metals and metal products	145	148	121
Building materials	190	194	170
Chemicals and drugs	128	131	121
House furnishing goods	187	187	173
Miscellaneous	121	123	114

3. Prices of Farm Products at the Farm Relative to 1913:

(U. S. Bureau of Agricultural Economics)
Prices in year 1913 equal 100.

Commodity:	June, 1923	May, 1923	June, 1922
Cotton	211	207	164
Corn	146	143	105
Wheat	121	136	131
Hay	106	118	108
Potatoes	129	119	160
Beef Cattle	99	98	99
Hogs	85	95	122
Eggs	108	113	106
Butter	138	143	121
Wool	248	250	104

4. Relative Purchasing Power of Farm Products:

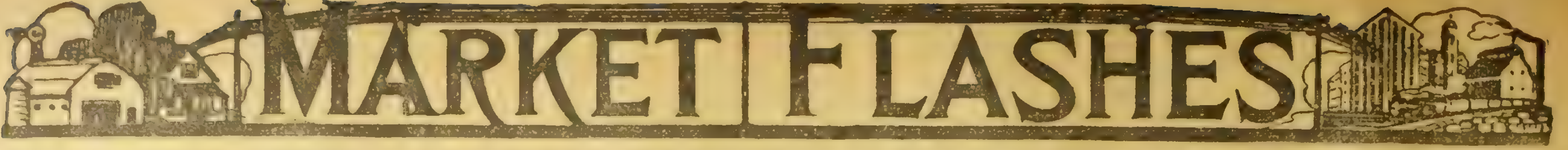
(U. S. Bureau of Agricultural Economics)

The quantity of various commodities which a given amount of each farm product would purchase at prices prevailing in 1913 is put equal to 100. The figures given represent the percentage of this quantity which the same amount of farm products would purchase in June, 1922. Prices at the farm are used for agricultural products, and wholesale prices at central markets for other commodities.

	All Commodities	Cloths, etc.	Fuel, etc.	Metals, etc.	Building Mtls.	House Furn'gs
Cotton	138	107	113	142	109	113
Corn	95	74	78	98	75	78
Wheat	79	61	65	82	62	65
Hay	69	54	57	72	55	57
Potatoes	84	65	69	87	67	69
Beef cattle.	65	50	53	67	51	53
Hogs	56	43	46	57	44	45
Eggs	71	55	58	73	54	58
Butter	90	70	74	93	71	74
Wool	162	125	133	168	128	133

Average purchasing power of all farm products in terms of all other commodities. Same basis as above table.

1913	100	December, 1921	62
1914	112	February, 1922	71
1915	106	May	73
1916	89	September	64
1917	106	December	68
1918	112	February, 1923	69
1919	111	March	69
1920	86	April	70
1921	67	May	71
1922	69	June	72



MARKET FLASHES

MARKET SUMMARY

Milling demand holds wheat firm. Moderate demand for corn. Oats steady. Rye quiet after decline. Beans firm. An oversupply of fruit on the market and prices are declining. Butter and eggs steady to firm. Poultry not wanted. Cattle trade active. Sheep higher in price. Hog trade active but prices lower.

(Note: The above summarized information was received **AFTER** the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press —Editor.)

FOOTE'S MARKET LETTER

BY W. W. FOOTE

Business Conditions Good

MARKETS are in good shape compared with a few months ago and business is reported better from all industrial circles. It seems that the mid-summer lull has passed and there is a growing expansion of consuming and purchasing power everywhere. The population of the United States has increased around 14,000,000 during the last ten years and our yearly national income has increased around $16,000,000,000 compared with ten years ago. The total of our savings deposits has grown from $6,000,000,000 to $14,000,000,000. The wide spread apprehension which has prevailed throughout all industries earlier in the year, has given way to more confidence and the outlook for the remainder of the period is more or less optomistic. Foreign trade balances are much in our favor, railroads report the heaviest volume of business in history, stock markets have improved materially within the last two weeks, and everything points toward further expansion and betterment of all businesses.

A recent act producing much good feeling in industrial world was the recognition of Mexico by the United States. That apparently small country is virutally an undeveloped area and there are vast resources of wealth yet to be found.

The purchasing power of the agricultural population continues to grow as indicated by increasing sales of those who cater to the rural districts. With the exception of the one crop man, the wheat raiser, most producers are reporting favorably as to their year's work. The cotton planter in the south has been hard hit but he learned the lesson of diversified farming a few years ago and now his condition is not so serious as the specialized wheat farmer. The cotton industry as a whole however, is of much concern to the United States who for many years controlled the world production of that staple product. Reduction in this year's crop is so great there is possibility that our country may lose the lead in production and Great Britian, who has long hoped to gain in that commodity is bending her efforts to lead in the world production.

The coal strike has passed without serious damage to business and peace generally exists in this country contrasted to the turmoil in Europe and the great calamity which has recently befallen the Japanese people. Here, we are busily laying up enormous sums of money for rainy days and still have immense amounts to send over to aid the Japs in their unfortunate predictment. True it is, that there is a certain class of farmers who have lost and seldom ever gain much. According to statements made by many bankers from all over the country at a meeting of the Land Banks Association recently, the American farmer is enjoying the best period in the history of agriculture. It was estimated that the value of agricultural land was $67,000,000,000 and the estimated value of this year's crops was $8,500,00,000, which is not a bad return even when the cost of production is deducted. More than 50 per cent of the farms in America are clear of debt and around 95 per cent are in sound financial condition.

The Weather Factor

There has been much rainfall in the corn belt states, and small grains have been damaged considerably. The corn crop is still growing and there is a possibility of much of it maturing late. Unless mild dry weather comes soon, there will be danger of early frosts. On the other hand there are some localities which have suffered from long dry spells. There has been a drouth in the bean growing areas of Michigan to such an extent that the crop has been cut in half. Inland potato growing sections have also been dry but along the lake shore this crop has done well. Another pest which has caused much damage to the Michigan crops is the grasshopper. Innumerable of this foliage eating insect has invaded certain regions and stripped the trees and legumes of their foliage leaving the country devastated and driving many farmers from their land. In the fruit growing sections of the western part of the state, crops are good but there is a shortage of labor for harvesting the fruit. Labor in the near by cities is so dear that it is hard to find any one willing to work on farms. The dairy industry is rapidly growing in Michigan and most dairy men are doing business on a small scale which eliminates the need of much help.

Wheat Situation

Eastern wheat farmers have not experienced the great worry that western wheat men have suffered. Farming is more diversified in the east and when one crop proves unprofitable, others take its place. Recently there has been an uncertain trend in the wheat market and there is no reason to believe that big advances will come nor is there reason to think that prices will decline sharply. The market fluctuates but at present is still above the dollar mark and some choice grades of cash wheat are quoted from $1.10 to 1.16. Reports from abroad have influenced the market at times and there will have to be an increase of foreign demand to absorb the surplus of this grain. The decrease in export business is apt to more than offset the reduction in this year's crop as compared with last year. People who have been abroad recently report that very inch of tillable soil is under cultivation and crops are in exceptionally fine condition. Europe will undoubtedly raise a great part of what she will consume this year. In this country farmers are storing their wheat in enormous quantities and are feeding and intend to feed most of the low grade wheat. Millers of this country apparently are aware of the fact that there will be but a little over production, if any, of choice wheat and they are now willing to pay good big prices for the best. An estimate of the 1923 wheat crop for countries north of the equator, which produce around four fifths of the world crop, was made recently by the United States Department of Agriculture. As compared with 2,566,510.000 in 1922 and 2,477,638,000 in 1921, this year's crop is estimated at 2,683,396,000 bus. The increase is the result of wide spread acreage in Europe and particularly France.

Corn markets at present are high and are making up for lost profits in wheat sections. Some of the best corn is now quoted at 90c. Oats also show higher prices than a year ago. An outstanding feature in the whole grain situation is that coarse grain values are higher than last year while meat is about the same. This, in face of all bearish propaganda, is surely surprising.

Meat Consumption

Consumption of dressed meat in the United States has been tremendous during the first half of this year and undoubtedly will continue on the gigantic scale for the rest of the year and as long as people are working. According to figures published by the research department of one of the largest meat packers, domestic consumption during the first six months of this year totals 2,494,000,000 lbs. of beef and veal against 2,375,,000,000 lbs. during the same period last year. The consumption of mutton and lamb was 229,000,000 lbs. as compared with 209,000,000 lbs. the year previous and of pork, 3,330,000,000 lbs as compared with 2,633,000,000 lbs. during the corresponding months in 1922. Pork consumption increased 26 percent over last year. Pork prices have been considerably lower taking the year as a whole and like wise the price on hogs. However, recent markets on hogs have made money for the farmer. This enormous consumption of meat products indicates industrial activity.

Live Stock Declines

During the last two weeks, live stock values have suffered a set back, but most traders are firm in their belief that the decline is but temporary and with light receipts prices on most stock will go higher. Most severe turndowns were registered on hogs and cattle. Today's prices however are at money making levels and still higher prices are looked for before the year is over. Choice light weight hogs reached $9.75 early this week, that being the highest of the year. Strictly finished steers sold up to $13.00 but closed with $12.85 taking the best. Fat lambs sold late at $13.40 with choice feeding lambs at $13.60. Producers have been gambling on live stock recently paying very high prices for cattle to take out for short feeding periods and giving from 25 to 50c more for lambs than killers were willing to pay. At Chicago countrymen bought fat steers of choice quality at $9.50 to 10.50 during the past week intending to put the cattle in the feed lots for two or three months and bring them back in the fall and cash them at high prices. This is a dangerous game of chance but there is always someone who like the thrill. The same condition exists at the Missouri River markets and steers have left that market for a short feed in the country costing $10.00 and above. There has been a broad country outlet for thin stock recently and as a movement of western range cattle comes into full swing, the trade in stocker and feeder is expected to show further volume.

Shortfed cattle have been offered on the market in large numbers lately, while strictly finished beeves have been comparatively scarce. Receipts were too much for the needs of the trade and declines were forced almost daily. During the last ten days beef steers have been on a downward trend and as compared with the high time then, closing values this week were from 75c to $1.50 lower. Finished steers however, were in a class by themselves and did not show more than 25c loss during that time. Thousands of cattle good enough for beef making went for slaughhter at $8.50 to 12.00 with some thin, ill-bred steers going as low as $6.50. Many western rangers found killer outlet at $7.50 to $8.50 and to feeders at $7.00 to $8.00. A few meaty western steers found feeding outlet at $8.50 to 9.00. Butcher stock also suffered in line with steers although the best corn fed offerings received the least decline. Most cows and heifers turned within a spread of $4.25 to 6.50 with the best at $8.00 to 9.00. Canners and cutter cows cleared largely from $2.50 to 3.00 and good dairy cows sold by the head from $60 to 90. Veal calves strengthened and closed at $11:00 to 12.00 levels. Bologna bulls found outlet mostly within a spread of $4.25 to 4.60.

On closing sessions hogs showed a little reaction from the low spots when the best went at $9.00. Most of the desirable light hogs sold late at $8.75 to 9.10 with tops at $9.15. Desirable medium weight hogs cleared largely from $8.40 to S.65 and heavy butchers went at $8.25 to 8.50. Rough, heavy packing sows closed on a $7.00 basis for bottom, and pigs also sold as low as $7.00 with the best around $8.25.

While the bulk of feeding lambs went at $13.00 to 13.50 all week, packers bought the best fat lambs downward from $13.25 to 12.75 mostly. Late in the week the best fat lambs sold up to $13.40. Common lambs sold down to $11.00 with culls as low as $9.00. Sheep values dropped sharply 75c to $1.50 on heavy offerings. Even the best light ewes were worth downward from $7.00 and heavies cashed at $5.00 and under. These prices were the lowest since last June. Slow demand for heavy cuts of mutton were responsible for the decided break in sheep values.

WHEAT

The wheat market continued steady during the two weeks ending Saturday, September 1st, and prices advanced on some markets during that period. Foreign news has been of a bearish nature but demand at home has been sufficient to keep the market from weakening. The demand has been mostly from the millers. Mills have been good buyers ever since the crop started moving. There were times that it was reported that they were filled up but at no time did it appear that they were out of the market, and the demand has been on the increase for some time. The market at Detroit seems to be in a very healthy condition. Flour is moving freely for domestic and foreign consumption. Good wheat is not plentiful and farmers are not inclined to sell readily, preferring to hold and see if prices will not advance. The holding is being done by both winter and spring wheat growers. Friends of lower prices are trying to use the large Canadian crop to bear the market. The American visible supply is very large and the hedging of it taxes the volume of speculation quite severely. The Canadian movement is heavy and this wheat is to a great extent hedged in Chicago as fast as it reaches the Lake Superior terminal elevators. Should the hedging be as great as usual it is feared the offerings may swamp Chicago and demoralize the whole North American market. Some grades of Canadian wheat have already been marketed in Minneapolis, duty paid. This makes an advance in prices appear difficult, if not impossible, while the marketing is on. The scarcity of corn has determined many wheat farmers to feed wheat largely and it is in this feature that bulls expect a stronger situation later on.

Prices

Detroit—Cash No. 1 red, $1.07; No. 2, $1.06; No. 3, $1.03; No. 2 white, $1.07; No. 2 mixed, $1.06.

Chicago—Cash No. 3 red, $1.04; No. 2 hard, $1.05½@1.13.

New York—Cash No. 3 red, $1.17¾; No. 2 hard, $1.15¾.

Prices one year ago—Detroit, Cash No. 2 red, $1.08; No. 2 white and No. 2 mixed, $1.06.

CORN

Trading in corn has been slow and the market affected by the action of wheat. September has continued to act independently and prices have been higher on short covering. Shipping demand has been rather slow. Weather conditions have not been favorable throughout the corn belt and there is some fear of damage by frost to the crop. Dry, hot weather is needed over a large portion of the corn growing territory. Any bullish influence that weather conditions might have on the market have been offset by the government crop report which was quite bearish. Receipts are only moderate. Export trade appears to be looking to Argntine for its supply. Students of the market state that corn and oat prices are about as high as they can go with prices of other grains at present levels.

Prices

Detroit—Cash No. 2 yellow, 96c; No. 3, 95c.

Chicago—Cash No. 2 mixed, 89@89¼c.

New York—Cash No. 2 yellow and

No. 2 white, $1.08; No. 2 mixed, $1.07.

Prices one year ago—Detroit, No. 2 yellow, 68c; No. 3 yellow, 67c; No. 4 yellow, 66c.

OATS

Oats have followed the trend of the wheat market. A fair trade has been noted and the price has fluctuated some. Chicago reports receipts during the past few weeks have been considerable larger than a year ago.

Prices

Detroit—Cash No. 2, 42½c; No. 3, 40½c; No. 4, 38½c.

Chicago—Cash No. 2 white, 40¼@40½c; No. 3, 38@40c.

New York—Cash No. 2 white, 51c.

Prices one year ago—Detroit, Cash No. 2 white, 39c; No. 3, 37c; No. 4, 34c.

RYE

Rye went from steady to easy at Detroit after an advance of 1 cent and the easy tone continues at this time.

Prices

Detroit—Cash No. 2, 75c.

Chicago—Cash No. 2, 72½@73c.

Prices one year ago—Detroit, Cash No. 2, 74c.

BEANS

Dealers in beans are alarmed over the recent weather. Heavy rains in some sections has done considerable damage to the crop and it is now estimated that the crop will be much smaller than previously estimated. Michigan beans are expected to be about one-half of a normal crop. Dry weather during the growing season hurt the crop in this state. The price at Detroit advanced 10 cents last week.

Prices

Detroit—C. H. P., $5.50.

Chicago—C. H. P., $5.40@5.85.

Prices one year ago—Detroit, C. H. P., $4.75.

POTATOES

The people are beginning to realize that the potato crop in Michigan will not be as large as was expected owing to continued dry weather and as a result demand is better. Prices at Detroit and other points have made several advances during the past fortnight. The market is firm in tone.

Prices

Detroit—Michigan, $2.83@3, cwt.

Chicago—Wisconsin, $2 @ 2.15 per cwt.

Prices one year ago—Detroit, Michigan, $1.42 per cwt.

HAY

Hay markets remain firm but with prices working a trifle lower. Increased receipts have weakened the central western markets but stocks have been cleaned up from day to day and condition as a whole is healthy. The recent rains in the southwest checked the demand for alfalfa and the market is a shade easier.

Prices

Detroit—No. 1 timothy, $20.50@21; standard, $19.50@20; light mixed, $19.50@20; No. 2 timothy, $18@19; No. 1 clover mixed, $17@18; No. 1 clover, $15@18.

Chicago—No. 1 timothy, $26@27; No. 2 timothy, $23@25; No. 1 light timothy & clover mixed, $24@26; No. 1 clover, $22@23; No. 2 clover, $15@17.

Prices one year ago—Detroit, Standard timothy and light clover mixed, $16@16.50; No. 1 clover, $14@15.

FROM HERE AND THERE IN MICHIGAN

Grand Rapids — Nelson-Mather building to have 4-story addition for furniture exhibit building. Railroad shopment of the Pere Marquete railroad given wage increase of 3 cents per hour effective September 1. City plans new pumps and supplementary conduit as further expansion of water distribution service.

Saginaw—Michigan Central builds new spur track to provide better shipping facilities for Saginaw Products Company. Local shops of Pere Marquette turn out 4 steel frame way cars, first of new kind ordered by Interstate State Commerce Commission. City awards contract for Mackinaw street paving. Also plans to buy 50 automatic voting machines at cost of $45,000. Local ladder factory organization increases capital from $25,000 to $75,000. Work on addition to Eagles temple making rapid progress. New Central school for east side children completed.

Bessemer — Hercules Powder Company building three new powder magazines near town. Three new contracts awarded for Gogebic county bridge and highway work.

PRITCHARD'S
WEATHER
FORECAST
INTERPRETED BY THE STARS

Week of September 16

THE unsettled weather in the West the past few days will rapidly develop into a more intense storm and reach Michigan early this week. During Monday and Tuesday the winds will be strong and the rainfall plentiful. These storm conditions will weaken towards the middle part of the week. clouds gradually break away and fair weather set in for a few days.

Temperatures will rapidly fall about Wednesday and very low temperatures for the season are expected, especially the nights when frosts will also occur.

Near the end of the week there is a probability of a showery period but nothing severe is expected from this storm.

Week of September 23

While unsettled conditions are expected during early part of this week with some fair weather, we believe that showery weather will predominate over most of the state through the 25th. General rains may be expected about 27th and 28th but will be closely followed with higher barometer and much cooler weather. The weather will also remain unsettled in most parts of Michigan during last part of this and beginning of next week.

The price of butter depends a great deal upon flavor, body, color and salt and 50 per cent of these conditions depend upon the weather during previous weeks.

At this time we believe the butter market will be easy and the quality good, judging from a weather stand point only. We also figure that late supplies of cheese will also be good.

CROP REPORTS

WEXFORD—Threshing time past, grain a fair average. Plenty of rain. Grass growing good, making good pasture. Some wheat sowed and some plowing for wheat. Potatoes looking fine but not a large acreage. Lots of apples. Light frost Sunday night but no damage.—Jos. H. Campbell.

CALHOUN—Not much doing in this section. Farmers are getting ready for their fall seeding. Late potatoes are looking good. Soil is in good shape.—C. E. Beardsley.

OGEMAW—Getting too much rain for new potatoes. Tri-county fair is over and I must say that Tuscola, Roscommon and Ogemaw can boast of some of the best cattle in the state. I have never seen a better lot, the sheep and hogs were the best they have shown in years. James Anderson.

OAKLAND—Harvesting all finished and threshing being rushed. Wheat is a good sample, so are oats. Corn is getting ripe and some of it cut. Potatoes are looking well and no signs of blight. Pastures are gone. No rain of any account for a long time. Some orchards have a good show for apples but more have but a few. Not much fruit of either kind here.—E Foster.

CLARE—Beans harvest on two-thirds of a crop. Corn good crop.—W. C. Fuller.

SHIAWASSEE—Farmers are very busy filling silos and pulling beans. Heavy rains during the past week have damaged beans to some extent. Quite a hard frost on September 2nd but was not a killer. Corn and potatoes promise good. Clover seed is well filled and of good quality. No wheat seeding is reported as yet but many farmers have their ground nearly fitted.—D. H. Morris.

CLINTON—Plenty of rain now, bean harvest being held up on account of rain. Bean yield cut by dry weather. Grain threshing nearly finished. Farmers are plowing for wheat. Low prices on wheat will cut acreage. Some corn being cut. Corn down bad by recent wind.—O. R. Richard.

MECOSTA—Weather was real wet and warm up to September 7, but it is quite cold at present. Corn is only a half crop. Threshing is all done. Potatoes are looking good but need at least three weeks to get their growth. Beans only a half crop. Some are doing fall plowing. Help is hard to get. Eggs and butter are on the raise. Farmers are real busy. —Frank DeBoer.

World's Greatest Dairy Cattle at the National Dairy Exposition

Great exhibit of 1,500 head of selected dairy cattle—pure bred, grade and Club calves—from every section of the country, representing all the dairy breeds. An opportunity for you to inspect them—in one big barn—compare their good qualities and learn to produce the most milk at the least expense. See the world's most famous bulls and cows that produce the most milk and the richest

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NATIONAL DAIRY EXPOSITION

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GENERAL

I WISH TO GET IN TOUCH WITH GROWER who has 100 bushels or more good peaches for sale. Prefer one living near Turner. E. O. ENSIGN, Turner, Michigan.

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The Michigan Business Farmer, Date..............................1923
Insurance Department, Mt. Clemens, Mich.

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State.. Occupation..................................

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NATIONAL GARAGE. ROY ATKINSON, PROP.
GARAGE IN AUSTRALIA OWNED BY SWEENEY STUDENT

Own Your Garage or Business

LOOK at these pictures. Twenty thousand Sweeney trained men own garages, tire shops, vulcanizing and service shops, just like these. **You can be your own boss.** You can be independent. It is easy to start in business for yourself. Then you don't have to bow down to some employer and do work you don't like.

Sometimes it looks like carpenters, plasterers, etc., get big wages, but when hard times come they are out of work. I say work for yourself. Then you are not bothered by strikes, lockouts, factories closing down. **Own your own business;** work for yourself with enthusiasm, not drudgery. It's the yearning of every young man TO BE HIS OWN BOSS, and Sweeney makes it possible.

How would you like to see your name above the door of a neat and profitable garage like one of those shown in the pictures?

Sweeney trains men in eight weeks in the auto and tractor business. I have had over 60,000 graduates. I estimate 20,000 are in business for themselves.

You don't need previous experience. These men had no previous experience. You don't need any capital to speak of. These men hadn't much money. But they had Sweeney's training and made good. There are opportunities everywhere. Other fellows with money are often looking for trained men to handle the the mechanical end as partners.

Look at Clayton Eden's nice garage at Ainsworth, La. Clayton says: "We operate the leading garage. Have all the business we can do. Also handle Hudson, Essex and Buick cars. Owe my present success to the wonderful training received at the Sweeney School."

Look at the National Garage. Roy Atkinson sent me this picture from Everett, Mo. "Worked on a farm," says Roy. "At nineteen had only $14.00. Got father to send me to the Sweeney School. Three days after I came home I fixed a neighbor's Ford car. That was my start. Today this garage is worth $4,785.00. My business takes three men to handle. I never worked in any other garage. I used my Sweeney training. If you want to get that start, do as I did and go to the Sweeney School."

Look at John Boyer's garage at Milford, Illinois. John says: "Having a good business; busy all the time."

From far off Australia S. A. Noller writes "Business is fine."

What these boys have done you can do. If you like mechanics write me today Get my Big FREE catalog. There is a fortune for you in the pages of this book. You have a right to make a success of your life. Make the start right now. I'd like to show you what thousands of men just in your position have done as a result of the **SWEENEY SYSTEM OF PRACTICAL TRAINING.** Learning is a real pleasure in the Sweeney School. World's finest equipment. Fine associates. Healthful surroundings. Entertainment after working hours. Instructors who take a personal interest in you.

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Is the ONLY WAY to learn if you want to save time and money and be properly trained. You get this at the World's Greatest Trade School, the MILLION DOLLAR SWEENEY SCHOOL and you get it nowhere else. I will also give you a FREE RADIO COURSE. **Sweeney Broadcasting Station Call WHB.** One of the finest in the world. Talks anywhere in the U. S. Cost $50,000 to erect. Remember you don't need previous experience. I teach with tools not books. You learn by actually doing the work. I am making a SPECIAL THIRTY DAY OFFER. That is why you should not delay. The first step is to send for my big Free Catalog—a post card will do.

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The Michigan BUSINESS FARMER

An Independent
Farm Magazine Owned and
Edited in Michigan

VOL. XI, No. 3 SATURDAY, SEPTEMBER 29, 1923 TERMS: TWO YEARS $1
60c PER YEAR—5 YRS. $2

There is Always a Market for Sorted Fruit

In this issue: "Both Sides in M. A. C. Fight Shout 'Politics!'"—"What Ails Mutual Fire Insurance Companies?"—"Is Your Local Banker the Chief Aid to Farmers in Your Community?"—Opening chapters of our new serial "Oh, Money! Money!"—Agricultural and Business Situation page.

Starting Ninth Year

Non-Assessable Policy by Experience

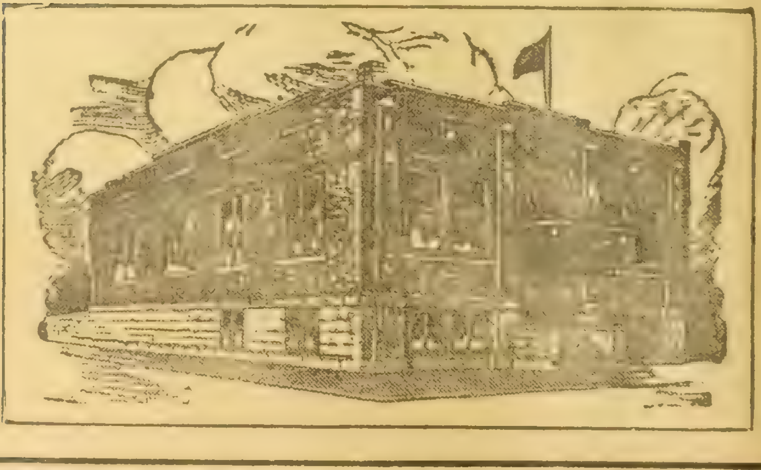
Assets Over $375,000.00

THE Citizens' Mutual Automobile Insurance Company of Howell has had a remarkable growth. Over 12,000 members were insured within a year from date of organization. The company has now finished eight years and is starting on the ninth season. The company has never had to borrow a dollar and has increased its assets each year. The policy holders pay one renewal each year. In a mutual company the money accumulated is left in the treasury for the benefit of all policy holders. No dividends are paid. With about 45,000 policy holders the company has a state-wide organization of adjusters, agent and attorneys in every county seat and town in the state of Michigan to give them service.

See Local Agent or Write

The Citizens' Mutual Automobile Insurance Co.

Howell, Michigan



Current Agricultural News

DETROIT CONCERNS PAY PREMIUM FOR GRADED POTATOES

ONE of the most interesting facts gleaned by the casual reader from the premium-list of the Top O' Michigan Potato Show which will be held in Gaylord on the 7th, 8th and 9th of November, is that several prominent Detroit concerns are willing to pay a large premium above market price for potatoes, provided they can be assured of proper grading and selecting. The Detroit Association of Commerce, Crowley Milner Co., Newcomb Endicott Co., and several other Detroit business houses have offered to buy over a half of a carload of carefully selected and graded potatoes at $2 a bushel from those growers who win first prizes in certain classes of exhibits at the Gaylord Show.

So desirous is the consumer to have potatoes that are well-graded and carefully selected that they are willing to pay a large premium to get them. In this case, the premium will probably amount to over a dollar a bushel, which will make a very handsome prize for the grower who places first in that particular class at the Show.

The Detroit News also offers a special prize to those exhibiting potatoes at the Top O' Michigan Potato Show by offering to purchase 300 bushels of specially graded potatoes from the grower who wins first prize in the class calling for a 150 lb. sack of graded potatoes. They offer to pay 50 per cent above the market price at the time of the Show.

With the consumer putting forth such inducements to Michigan growers to place quality stuff on the market, it will probably not be long before shipments from other states will be crowded out.

FROM HERE AND THERE IN MICHIGAN

Lawton — Devel pump factory seeking factory site at this point.

Paw Paw—New school house under construction rapidly nearing completion.

Ironwood—New municipal Memorial building costing $750,000 complete.

Lansing — Economic surveys of Antrim and Ogemaw counties nearing completion.

South Haven—Chicago Syndicate to build $750,000 "Edgemers Beach Hotel" in this city.

Alma—Alma Grain-Lumber Company purchased by local business men, operation to be continued.

Cheboygan—Iosco Land Company buys Gerow estate Pigeon river property to develop water power project.

Cassopólis—Michigan Gas & Electric Company making headway securing rights of way along pike between here and Edwardsburg.

Wakefield—Estimated 12,000,000 tons iron ore to be shipped from Wakefield and Plymouth mines before season closes.

Albion — National Spring and Wire Company installing machinery to manufacture automobile cushions, factory to be opened soon.

Cadillac—Assets and business of Detroit Veneer & Panel Company sold to new corporation, Gluetite Panel Company of Cadillac.

Grand Rapids—Citizen Telephone Company properties transferred to Michigan State Telephone Company. New Fountain street Baptist church nearing completion.

Muskegon—Brunswick Tire Company sells business to B. F. Goodrich Company, moving plant to Akron, Ohio; Buildings of Brunswick Company to be utilized for manufacture of other products.

Detroit—American Bond Company purchases real estate and bond business of United Trust & Mortgage Company. Contracts amounting to $1,000,000 awarded to electrify Detroit, Toledo and Ironton Railroad.

Ludington—Pere Marquette Railroad Company's car-ferry business employs 250 men drawing $251,000 annually in wages. Pere Marquette Railroad to inaugurate new fast freight trains between Toledo and this city.

Flint—New home of Industrial Savings Bank and that of First National Bank nearing completion. New "Flint Six" plant of Durant Motor Company to turn out 300 cars daily. Contract to be let for erection of nurses home for Hurley hospital.

Fruit Ass'ns Combine Into Strong Organization

THE Michigan Fruit Growers, Inc., is making wonderful progress in the organization of Michigan's co-operative fruit marketing industry. Within the past few months it has organized 75 per cent of the co-operative packing house output in the state and today controls a tonnage of more than 4,000 cars of peaches, apples, grapes and pears. It is working forward to a goal of 5,000 cars of fruit to be marketed through the farmer-owned and controlled Michigan Fruit Growers, Inc.

The Michigan Fruit Growers, Inc., is affiliated with the Michigan State Farm Bureau under the commodity control type of organization. Offices at Benton Harbor have been opened with Secretary F. L. Bradford in charge.

Seek Organization Benefits

The organization of this state-wide co-operative sales agency for Michigan Fruit is proceeding in the right manner. The central sales organization is being builded upon already existing and successful local marketing associations. They are getting together for the benefits that come from an organized marketing of their products. These are: eliminating murderous competition between the co-ops. themselves, and protecting themselves against the raids of speculators who seek to beat down the price. The fruit growers see in the Michigan Fruit Growers an opportunity to market their fruit throughout the country in an orderly manner as the big California Exchanges do, and profit accordingly.

The Michigan Fruit Growers will enable these same co-operatives to organize their capital and other resources for standardization of varieties, grades and packs, a powerful, far-reaching sales organization which will be backed by proper advertising and other sales helps.

The Fruit Growers have marketed more than 100 cars to date and expect to be handling 50 to 100 cars daily in a short time. Eighty per cent of all tree fruit handled is graded and packed through associations and 66 per cent of all grapes are handled through associations.

Fruit Ass'ns. Flock In

During the past few weeks nearly all of the powerful fruit marketing associations north of Grand Rapids have joined the Michigan Fruit Growers and have contracted the sale of their fruit through that organization. New members of the Fruit Growers are:

Grand Rapids Growers' Association, Fremont Co-operative Produce Company, Hart Co-op. Marketing Association, Onekama Farm Bureau Local, Benzie Co-op. Fruit and Produce Association at Beulah, Benzie Co-operative Fruit Exchange at Elberta, Mason County Fruit and Produce Exchange at Ludington. The Grand Traverse Packing Company and the Tri-County Co-op. Marketing Association at Brunswick are considering memberships in the Fruit Growers.

The Southern Crop

Other members of the Michigan Fruit Growers, Inc., most of them South of Grand Rapids, are as follows:

Kibbie Fruit Exchange, South Haven Fruit Exchange, Lawrence Co-op. Mktg. Ass'n., Bangor Fruit Exchange, Paw Paw Co-op. Ass'n., Benton Center Fruit Growers Ass'n., St. Joe (Mich.) Fruit Growers Ass'n., Lincoln Fruit Growers Ass'n. at Stevensville, Bridgman Fruit Growers Ass'n., Lake Shore Fruit Growers Ass'n. at Sawyer, Decatur Co-op. Ass'n., Sodus Fruit Growers Ass'n., Grand River Fruit Ass'n. at Spring Lake. The Fennville Fruit Exchange will be affiliated with the Michigan Fruit Growers.

SATURDAY
September 29th
1923

VOL. XI, NO. 8

Being absolutely independent our columns are open for the discussion of any subject pertaining to the farming business.

"Hew to the line, let the chips fall where they may!"

The Michigan
BUSINESS FARMER

"The Only Farm Magazine Owned and Edited in Michigan"

Published Bi-Weekly
Mt. Clemens, Mich.

TWO YEARS $1

Entered as second-class matter, August 22, 1917, at the post-office at Mt. Clemens, Mich., under act of March 3rd, 1879.

Both Sides in M. A. C. Fight Shout "Politics!"

Veteran and Unbiased Political Observer States Facts in Present Turmoil Which Begun With Ousting of Dr. Friday and Which Has Upset All Factions in Lansing

By JOHN FITZGIBBON

(Veteran Lansing Correspondent of the Detroit News.)

UNIQUE in the history of Michigan is the bitter controversy between Gov. Groesbeck and his associates on the State Administrative Board on one side, and the Michigan Agricultural College Board and the State Farm Bureau on the other.

It is a controversy in which leading allegations are, to quote the Governor, "that the management of the college has drifted into the domain of petty politics," and that a farmers' organization, the Farm Bureau, without any semblance of legal right, is not only doing considerable in the way of directing certain activities of the college, but is contributing to the financing of these activities, and, to quote the college board, that the Administrative Board, of which the Governor is the head, is usurping constitutional prerogatives of the college board.

Also it is a controversy that has broken some close political friendships. The six members of the college board are a unit in charging what they term interference, in defiance of the Constitution, by the Administrative Board in college affairs. Yet three of the members received important appointments from Gov. Groesbeck and in the past have been his ardent supporters. They are L. Whitney Watkins, whom the Governor last year appointed state commissioner of agriculture, and Clark L. Brody and Jay R. McColl, who were placed by him on the college board to fill vacancies. Herman H. Halladay, who was the Governor's first commissioner of agriculture and was, with his cordial approval, transferred to the secretaryship of the college at a better salary, the transfer being made at the solicitation of Dr. David Friday when the latter was appointed president, has also turned from a friend to a critic and lined up with the college board.

Dates Back to 1921

Melvin R. McPherson, another member of the college board, who is a Kent County farmer, used to say that Mr. Groesbeck was the best Governor Michigan ever had. Now he is telling farmers' meetings that the Governor has an ulterior political motive in trying to hold the purse strings of the college.

The controversy had its inception during the legislative session of 1921, when Rep. Arlie Hopkins, Manistee County farmer, who was in charge of the college's appropriation bill, brought about an exhaustive investigation of the college management. At last Wednesday's meeting of the Administrative Board it was mentioned that the substance of Rep. Hopkins' report was that the business methods of the college were very poor and that no progress was being made towards development. His criticism extended to all branches of the management, and the outcome was that the Legislature placed a clause in the college's appropriation bill that the moneys for the different purposes specified in the bill should be expended under the general supervision of the Administrative Board.

The board proceeded to exercise this supervision without objection by the college board and, in the words of Gov. Groesbeck, solely to build up the college and to carry out the legislative mandate. There were rumors that the college board did not like this supervision, but there was no open resentment. In part, the college board appealed to the Administrative Board to undertake the construction of a home economics building and a library building, for which the Legislature had appropriated about $400,000. The college board had been unable to secure bids within the appropriation, but the Administrative Board, by purchasing the material and eliminating contractors, is now finishing both buildings for considerable less than the appropriation.

Then the Dr. Friday Affair

The proposal that Dr. Friday be appointed president originated, as was widely recorded at the time, with Gov. Groesbeck. The Governor was supremely confident that the prestige of the new president as an educator and economist, in conjuction with his avowed policies, would place the college in the foremost rank of agricultural colleges of the country. The circumstances of how the college board and the Farm Bureau leaders broke with President Friday last May over agricultural development plans, the two more important questions of difference being co-operative marketing and farm organization, and his resignation, are too recent to need recounting at this time. Anyhow, the propaganda of the college board and Farm Bureau leaders against Dr. Friday before he retired from the president's chair resulted in open hostilities between these two groups, on one side, and the Governor and the Administrative Board on the other.

Now, as to the activities of the Farm Bureau leaders in affairs of the college. According to these leaders, these activities are solely speaking in general terms, to make farming more profitable. Those who resent the bureau's affiliations with the college, take the ground that the farmers' organization is using the college through the county agricultural agents in more or less of the 64 counties that have such agents, as well as through others who have positions, both with the college and the bureau, to keep its members in good salaried situations, as well as for political purposes.

County farm agents, whose duties are to instruct farmers and fruit growers how to meet problems that will make their fields, their orchards, their herds and their flocks earn more money, were authorized under the Smith-Lever Federal Act of 1915. By the terms of this act the Federal Government gives $600 towards providing an agricultural instructor, or agent, for any county if the State matches it with a like amount. Boards of supervisors may vote as much as they feel conditions warrant to add to the $1,200. Some boards vote a few thousand dollars annually so as to secure a highly trained agent. If supervisors do not vote funds county organizations of the Farm Bureau may do so under authority of a legislative act of 1919.

Farm Bureaus Pay $124,000

A report submitted to the Administrative Board shows that the farm bureaus in 39 counties have contributed $47,720 towards the salaries of county agents, and $77,586.69 for agents' expenses. The Legislature last spring voted $150,000 for each of the two fiscal years beginning July 1, this year, for farm extension work, which the descriptive designation of the services rendered by county agents and like work by men sent out from the college. County farm bureaus sometimes, while not contributing anything to agents' salaries, provide their office and traveling expenses Some of the wealthier counties have not only an agricultural agent but, in addition, a home demonstrator as well as a farm boys' and girls' leader. County farm agents are appointed by the college board on recommendation of R. J. Baldwin, extension director of the college, and, according to an investigator's report to the Administrative Board, county bureau leaders are consulted in making appointments.

There are four inspectors of the county agents, Hale Tennant, who is also market director of the college, salary $6,000; R. G. Carr, salary $4,500; C. X. Ballard, salary $4,200; E. G. Amos, salary $3,600. Three of the six members of the college board, Mr. Watkins, Mr. Brody and Mr. McPherson, are directors of the State Farm Bureau, Brody being secretary and manager. A former office employe of the board says that Brody's salary from the Farm Bureau a few years ago was $7,000 and that it has been raised since. Watkins is discussed, though not by those in his confidence, as likely to be the bureau's candidate for the Republican nomination for Governor but he himself says that he is not yet prepared to talk about the matter.

In 1920 a story was printed that Mr. Watkins had been told that he would be designated as the farmer candidate in the Republican primaries for Governor, but that some of the leaders met in a hotel in Detroit one day without his knowledge and selected the late Milo D. Campbell. Mr. Campbell was the farmers' candidate in the primaries, finishing second to Gov. Groesbeck.

Would Oust Farm Bureau

The Farm Bureau's income is derived from $10 a year dues, of which $6 goes to the county organization, $3.50 to the State Bureau and 50 cents to the American Farm Bureau Association. At State headquarters of the bureau, Lansing, the information is that the bureau's membership is now about 60,000. Several years ago statements were printed representing the membership to be nearly 100,000.

Gov. Groesbeck is emphatic in declaring, and the other six members of the Administrative Board support him, that the college board must dissolve all relations with the Farm Bureau, and that county agricultural agents shall receive their entire salary and expenses from the Federal and State governments, and the counties, "but from no other sources," and until they agree to these terms the Administrative Board will refuse the college board the right to draw any of this year's $150,000 appropriation for farm extension work.

The college board, while it is on record as conceding that the Administrative Board has general supervision as to how other items in the college's appropriation shall be expended, refuses so far to yield to the ultimatum of the Administrative Board that it renounce all connection with the Farm Bureau. The college board informs the Administrative Board that "as to the suggestion that county agents receive all their salary and expenses from Federal, State and County funds, we have for some time recognized this as desirable and look forward to some arrangement whereby sufficient funds from these sources will be provided."

Unless the college board yields the Supreme Court may be invoked to settle the controversy. The last word from the Administrative Board to the college board is that the courts have repeatedly sustained its position, and that the courts are still "open and in session if the college board wishes another expression."

SAYS BEAN PICKING MACHINE MADE HIM $460 LAST YEAR

I NOTICED your article in September 15th issue of Michigan Business Farmer about hand picking beans on the farm. It would have been impossible to have handled my beans last year by any such method as your article suggests, although you have the right idea.

Last year my neighbors and myself began discussing different methods of cutting out the enormous hand picking charges which are so high that they are taking the life and profits out of the bean growing industry.

I looked around for a machine which would pick out the stones, dirt, and partially rotted beans. Our hardware dealers finally ordered a machine for me which certainly worked way beyond my expectations.

On a thousand bushels of my beans that picked 12 lbs. per hundred pounds by running them on this machine I reduced them and sold them to the elevator at 2 lb. pickers. The machine took out 10% or 6,000 pounds of culls from the lot at 8 cents a pound, which the elevator charges for picking a pound of culls, or saved me $480.

Besides I didn't have to load up and haul and give to the elevator three tons of culls. Futhermore, I didn't have to make a couple of trips to town to pay $15 a ton to get the culls back on the farm where they belong. Neighbors brought beans to be picked from as far as eleven miles away and were well satisbeans to be picked as far as eleven miles away and were well satisfied with the work the machine did for them. In about twelve days I earned in charges to neighbors $225 which leaves me a balance, after paying for my machine, of $435 on the picking of the 1922 bean crop. Several people nearby have bought the same make of machine I have and also think it is the proper way of handling the bean marketing profitably.

I think it funny since so many of these machines were sold around here and it is such a success that this information hasn't gotten into either yours or some other Michigan publication before. My picker will surely be valuable to me this year as I have about 45 acres, some of which are damaged by rain, but this does not trouble me near as much as it used to when I did not have the picker.

I paid $300 for my picker last year but understand the new price is $200 for this year.—J. Shay, Jr., Saginaw County, Mich.

What Ails Mutual Fire Insurance Companies?

Business Farmer Investigator Finds Farmers Dissatisfied With Present Methods and Increasing Cost of Insurance in 93 Mutual Fire Insurance Companies Operated in Michigan

IT is high time something was being said about the rapidly mounting cost of fire, hail and other insurance to the farmers of Michigan. The mutual companies which once boasted of efficient management and low costs are the ones Which most directly affect the farmer. There are 93 mutual fire insurance companies alone in Michigan. They carry three-quarters of a billion dollars at risk for their farm members. This is a subject we are sure Business Farmer readers will be glad to have brought out in the open.

Editor Business Farmer:—The readers of your valuable paper are practically all farmers. Every one of us carries insurance for the protection of our property, and yet we seldom read anything in your columns about mutual insurance.

Never in my remembrance has so much dissatisfaction been expressed by the farmers in my locality about insurance as now. Every year our assessments are climbing and we don't seem to get any more or greater protection. What is wrong with mutual fire insurance? From your observation can't you give us some information?—J. C. R., Greenville, Mich.

WE are frank to admit that we have published very little relative to mutual fire insurance as carried by companies insuring farm risks exclusively, other than to answer inquiries from time to time, and probably the matter is of sufficient importance to devote some space thereto.

In looking over the last statement issued by the State Insurance Department we find that the mutual companies are carrying nearly three-quarters of a billion dollars, divided among 93 mutual companies, most of which are covering only counties in which they are located, others two or three counties and but a very few carrying risks anywhere in Michigan, outside of cities with less than 5,000 population. The most any company has at risk is $98,892,420 and the smallest $100,400.

The total amount of losses paid was $2,411,884,84.

This is a wonderfully big business in which the farmers of Michigan are greatly interested, and thus we are glad to express our views as to its standing and betterments. There is not any business in the State, in which the farmers are so vitally interested, in a more chaotic condition. Of all of these 93 mutual companies we can safely say that no two have the same set of governing by-laws. So long as they do not conflict with the State laws and the plans of the State Insurance Department, any company can adopt laws to suit the fancies of its members.

We say members, and really they have but little voice in the formation of the laws governing their company. The laws and the changes which are made thereafter are usually drafted by some officer or officers, and when the meeting is called for the purpose of passing upon same, the attendance does not represent one in every hundred. While it is the privilege of every member to attend these meetings and have a voice, yet they do not, and instead of being the result of a united membership vote it is but fulfilling the requirements of the many by few.

The Forgotten Purpose

One lamentable fact in the operation of mutual insurance companies is that laws are enacted for the government of the company which are made to suit the requirements of the officers in charge instead of making them for the most liberal protection possible to render its members. The officers seem to lose sight of the fact that a mutual fire insurance company is nothing more or less than a number of farmers banded together to pay each other's losses caused by fire and lightning, and the cost of operation of the company, but they so form the governing laws as to perpetuate those in charge in good positions. In so doing the rights of the insured member is so lessened that the protection afforded becomes of uncertain value. Instead of making the laws in the interests of the insured many companies seem to see how little can be furnished in case of loss.

The laws of these farm mutual insurance companies consist of the articles of association and the by-laws of the company usually printed on the policy. The usual plan of organizing a company is to take the articles of association and by-laws of some company already in operation and revise them to suit the fancy of the organizers of the new company.

No Two Alike

There are not two farm mutual fire insurance companies in the state of Michigan with the same set of by-laws. Some are liberal and fair and some are not. Some companies carry what is known as the blanket policy, which has been in force by only a few companies for the past few years.

In order that our readers may thoroughly understand what we mean by blanket policies, many companies indicate in their policy the amount of insurance on each individual building, the amount on hay, grain and produce, the amount on farm implements, the amount on livestock, etc. This is what is termed a specified policy. Some companies even go so far as to say how much insurance they will carry on the contents of a certain barn, how much on the contents of all other buildings, specifying separately each one. In the way of explanation will say that if the policy of insurance placed $1,500 on barn No. 1 and $500 on the contents of same, then no matter how large the loss might be on the contents of that barn, the insured would only get $500 by the specified policy.

The blanket policy came to light about ten years ago and while it is in force with a few companies, many are reluctant to adopt it because it will very materially increase the amount paid the insured in case of loss, and therefore, necessitates larger assessments. A blanket policy usually indicates the amount of insurance on each separate building, and on personal property, comprising hay, grain, produce, implements, vehicles, live stock, poultry, etc., only one amount is indicated. For instance, it might be $2,000 regardless of in what buildings this property might be located, the company carrying the blanket policy would pay the full amount of the loss. The blanket policy would pay any amount on the contents of a barn, granary or any other building, in case of loss, if it did not exceed the amount of insurance, whereas in the granary there might be 1000 bushels of wheat worth $1,000 and on the policy specified only $300 on the contents of the granary which would be all the farmer would get in case of loss, whereas if the blanket policy were in force, the insured would get the entire loss, $1,000. It seems hardly fair to ask a member who is paying $1,500 on insurance, possibly $500 on live stock, $500 on hay, grain and produce, and $500 on implements and machinery to accept $500 in case of loss of $1,500, the contents of barn No. 1, because he saved his implements and live stock. In such case the member is paying for $1,500 protection and while his loss may be a great deal more than that he receives but $500 compensation in case of loss.

The Business Farmer believes that there should be a uniform blanket policy adopted by all of the mutual

(Continued on Page 17)

Is Your Local Banker the Chief Aid to Farmers in Your Community?

By MR. S. T. KIDDOO,
President of the Live Stock Exchange National Bank, Chicago.

MR. S. T. KIDDOO, the author of this article, gained his first fame as a banker in the live stock regions of the Northwest, where his activities secured so much attention that he was called to the presidency of the Live Stock Exchange National Bank. Mr. Kiddo is in a peculiarly fortunate position to keep his fingers upon the pulse of the live stock industry and also keep an eye on those factors that intimately concern the welfare of the farmer.

I DO not know what you, as a farmer, think of your local banker. You may consider him as the chief aid to agriculture in your neighborhood. On the other hand, you may look upon him as an individual whose strong hand is blocking agricultural progress and barring the gate between you and prosperity. Whatever your opinion, it probably is based upon the same foundation that governs the opinions of most of us, namely, a personal experience.

I, as a banker, may have little respect for a fellow business man purely because of a personal and isolated experience with that man. He may do business in a way that is fundamentally sound, and at the same time be rendering a definite service to the people who patronize him.

Nearly every business is the lengthened shadow of the man who runs it, and sometimes we are inclined to judge a business more by the personality of its president than by the actual service it is rendering. That is why a hale fellow who is a good mixer is often a great asset to a business: Customers of that business keep their eyes on him because of his admirable sociability, give the business a better deal and more favorable judgment. On the other hand, the head of a business who has a grim, cold nature may cause his institution to develop a reputation which is unfair to it and not at all in line with the service it renders. This is true of banks as of all other businesses, and since practical service rendered is the criterion of a business's usefulness, it will pay patrons of any institution, whether it be a bank or not, to look beyond the personality of the management and determine honestly whether the business itself renders a wholesome, economical service.

All of this is preface to a question which I am about to ask, and inasmuch as I hope it will be answered fairly, I felt it necessary to set the stage for the inquiry.

What service is your banker rendering you?

Theoretically, your bank should be a combination of the following activities:

1. It should safe-guard your money and valuables, by providing facilities that will free you from the risk of burglary, carelessness, fire and other mishap.

2. It should encourage thrift and habits of saving by paying you interest on monies you deposit in its savings department.

3. It should provide the expert information that you need on all major financial transactions that you engage in.

4. It should likewise be a clearing house of financial information which it can secure from its correspondents and from similar institutions in other parts of the country.

6. It should definitely carry on a campaign to instruct your children in habits of saving and provide ways and means for developing such habits.

7. It should co-operate so far as possible with local schools in campaigns to inculcate thrift.

8. It should be active in every movement that has to do with the sound economic development of the territory it serves.

Most of these activities can be accepted as the duties of a normal healthy bank, and as such, can be expected and demanded by the depositors of all normal, healthy banks. The experience of the writer leads him to believe, and to say, that very few bankers fail to carry out such activities to the limit of their abilities. However, it is the writer's belief that banks can go still further in rendering service to individuals and communities, provided the banks receive the moral support and active co-operation of the farmers around them.

I refer particularly to the following types of activity:

A. Movements that will lead to the agricultural and industrial development of the community.

B. Movements for the betterment of live stock, soil and other natural resources.

C. Assistance—not financial—in the solution of the local farmers marketing problems.

It goes without saying that a bank may have the finest building, vaults and personnel in the world; be located in a land of milk and honey, and at the same time be a failure in the midst of failures.

The money deposited in a bank depends not altogether upon the accuracy of the bank's accounting system, the honesty of its personnel, the strength of its vaults or the beauty of its building. In a farming community, for example, all these things will go for naught if the farmers are unable to market their products at a profit. Also, if farm lands are gradually deteriorating; if such scourges as tuberculosis are permitted to run riot among the local herds.

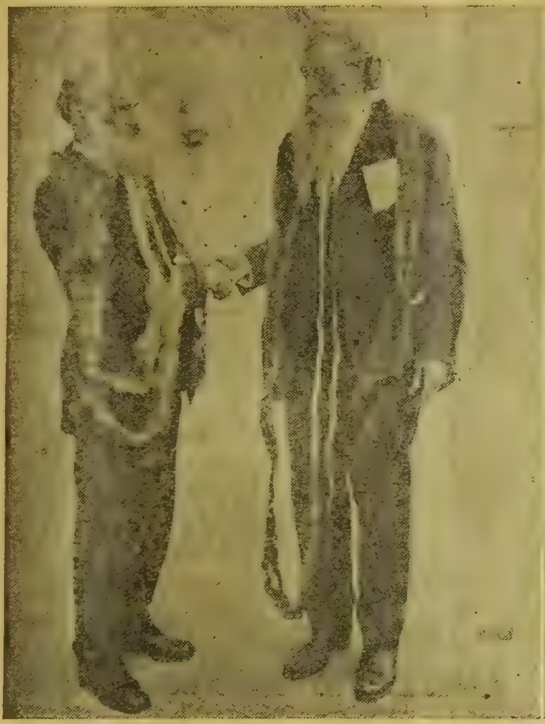
It is simply a matter of self-preservation for a bank to engage in activities such as I have listed arbitrarily under A. B. and C., above, but—

The banker should not be the sole one held responsible for doing these things.

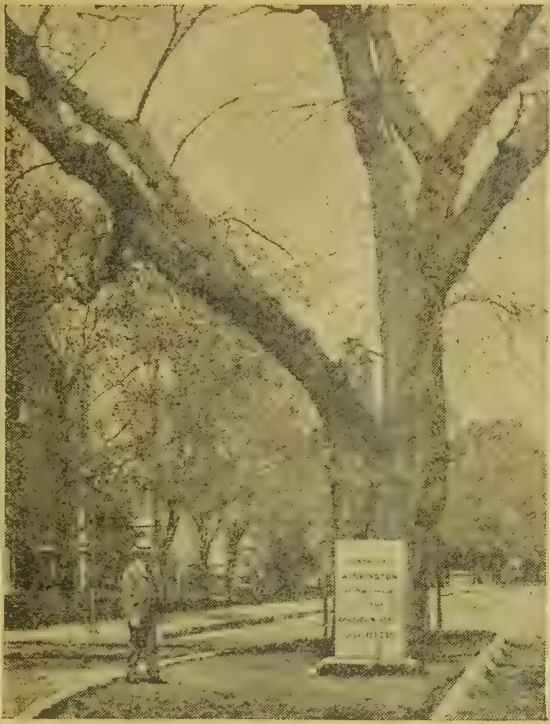
He is perhaps as well fitted and in as good position as anyone in a community to foster such activities. He, moreover, can get out such work with less antagonism. But he is by no means the expert in agricultural matters that the farmer is, and unless some of these things are initiated and pushed by the farmer himself, the banker is helpless.

It is with the idea of starting something along this line, that this article is prepared, and with the permission of the editor of this publication, we will continue the discussion in a future issue.

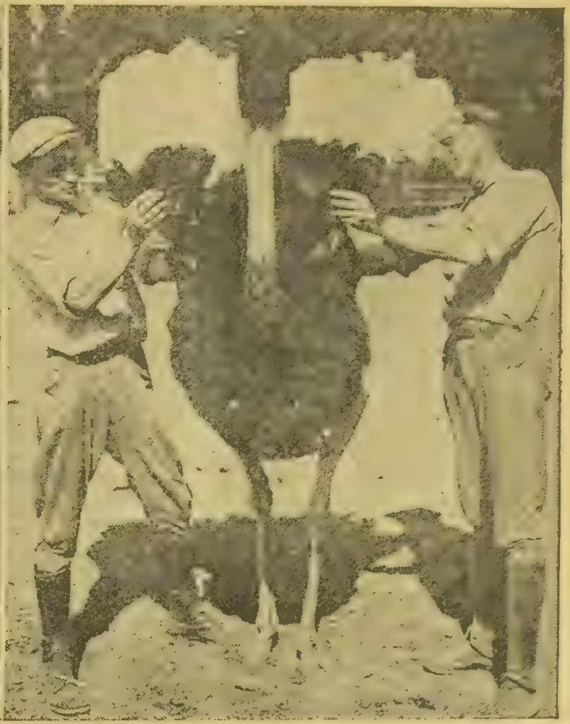
PICTURES FROM FAR AND NEAR



ALL HAIL TO THE GRAND WHISKERINO.—Hans W. Langseth (right) 77 years old, of Barney, N. D., who has the longest beard in the world. It is 17 feet long, and at the recent annual convention of the International Association of Specialty Salesmen, Pres. Burns of the convention declared that Hans would be crowned King Whiskerino of the world. The man at the left has a beard 11 feet, seven inches long.

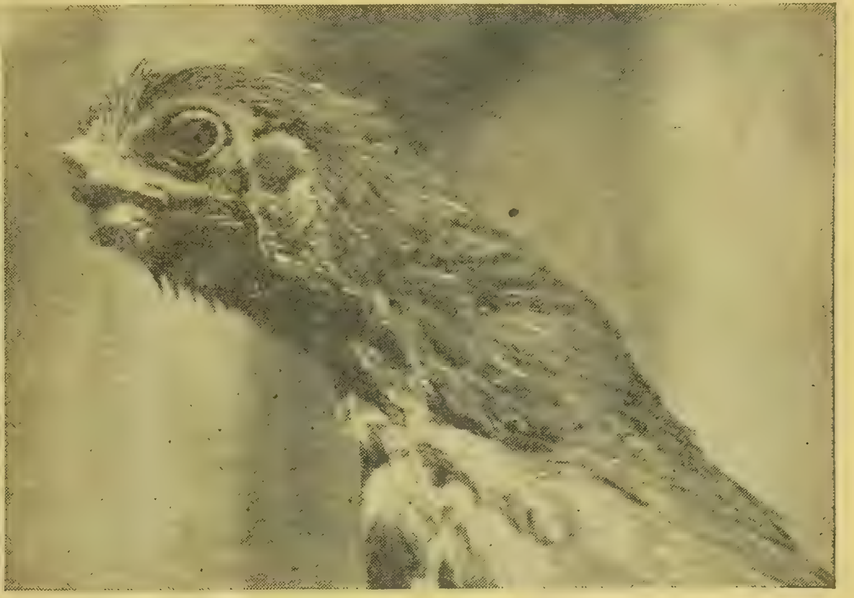


WASHINGTON ELM TREE IN CAMBRIDGE DIES.—The Washington Elm Tree, Cambridge, Mass., under which George Washington took command of the American Army, which has been pronounced dead by experts. A shoot from this tree, cut off several years ago and now thriving, has been suggested to be put in its place, while Mayor Quinn, of Cambridge, has started a drive for funds to erect a monument on the spot.



PULLING THE WOOL OVER HIS EYES.—Plucking the ostriches at the Cawston Ostrich Farm, South Pasadena, Calif., is one of the most interesting sights vouchsafed to tourists. Contrary to general opinion the feathers are clipped and not pulled out, as the term of plucking would imply. To render the bird docile it is necessary to pull a hood or stocking over its head for when blindfolded the bird gives no trouble.

DISCUSS FARM FINANCIAL SITUATION WITH PRESIDENT.—Members of the Federal Farm Loan Board paid a visit to President Coolidge and discussed the financial situation of the farmer throughout the country. Left to right:—Commissioner R. A. Cooper, M. L. Corey, E. E. Jones, L. J. Pettijohn, J. H. Guill.



WHAT A COMBINATION.—Cats hate chickens, and vice versa. Here is a strange chicken with a cat like head, property of a Philadelphia, Pa., man. It meows, climbs trees and likes milk. Wonder what would happen if the cat half got mad with the other half?

THERE IS NOBILITY IN THE POULTRY WORLD.—Illinois claims the queen of the poultry world, Lady Anne, a real scion of the feathered nobility. She holds the record for laying among living hens, having reached the 1300 mark. She expects to soon exceed the world's record of 1355—made by a hen who has long since passed to chicken heaven. Lady Anne is 10 years old, a white Leghorn, of English ancestry, incubator bred.

FIRPO, THE VANISHED.—On September 14th at the Polo Grounds, New York City, Jack Dempsey proved himself to be a real champion by knocking out Luis Angel Firpo of Argentine, South America, in the second round of their scheduled 15 round go, making it one of the shortest championship bouts ever fought. The South American gave Dempsey a hard battle knocking the champion through the ropes during the first round.

A MODEL OF INDUSTRY.—A view of the baby's carraige blanket, made by Mrs. Calvin Coolidge and which was an entry into a National Knitting Contest. The blanket, which Miss Lena Lorris is holding, was made while Mrs. Coolidge and her husband were on the Vermont farm, before the death of the late President Harding. Mrs. Coolidge states that the blanket will go to her first grandchild—but that event is a long way off.

(Copyright, Keystone View Co.)

EXTERMINATING SAND BURS

Would you please tell us how to get rid of sand burs? We have about one-half acre that we have to fight every year.—Mrs. M. W., Midland, Mich.

—We are fortunate in Michigan in having only one species of sand bur, Cenchrus carolinianus. In the more southern portions of the country they are blessed (?) with 4 or 5 kinds, some with large, some with medium sized, and some with small burs. All these, however, are annual plants, i. e. they do not have roots that live through the winter, so that they have to depend on their seeds to carry them over until next year.

The method of combating them that has been shown to be the most successful is that of pulling them up, placing them in a pile and burning them when dry, the burning being for the purpose of killing the seeds which otherwise will continue to ripen after the plants are pulled up and will then break free and become scattered.

The difficulties in carrying out this method are (1) that the burs are allowed to break loose and fall to the ground, thus reseeding the patch; (2) that in pulling up these plants small portions of the plants are allowed to remain which quickly develop new roots and new stems so that within a short time the plant appears as vigorous as before.

The sand bur does not enjoy competition so that if the soil is rich enough to support a thick growth of some other plant such as millet, sorghum or buckwheat, provided the stand of the latter is very good, it will be unable to develop to maturity that season. Putting the field to a hoed or cultivated crop will settle the difficulty if the hoeing or cultivating is done at frequent enough intervals, which is, however, usually not the case.—E. A. Bessey, Professor of Botany, M. A. C.

MEN SHOULD RENDER ACCOUNT

A number of farmers formed a cooperative farmers elevator and as they gave their notes each one also signed a collateral note. A board consisting of seven members was appointed to take charge of affairs. A man from another city was hired to run the business at an exorbitant salary. He hired extra help and spent the money until finally the collateral notes had to be paid. Then within a few months bankruptcy was declared, three men were appointed to sell the elevator and it has been sold but none of the stockholders know for how much or anything about the business. An auditor came and looked over the books but no report has been given and the stockholders, at least those who were not on the board, are wondering where the money has slipped to. The elevator was a paying business when owned by individuals. Can a few of the members do business in that way and give no account of the auditing, the sale or the delinquency of the manager and board?—L. M., Clifford, Mich.

—The three men appointed, in the bankruptcy proceedings, to sell the elevator would be required to render an account of their proceedings.

I suggest that you take this matter up with the referee in bankruptcy. If that is not sufficient, you could file a petition to have an accounting, which would probably necessitate the services of an attorney. —Asst. Legal Editor.

CUT WEEDS ALONG HIGHWAY

Has a farmer a right to let wild carrot grow on his farm or on the road side? We have been keeping it down on our farm but the neighbors have it all around us and we would to know how to go about it to have them cut it down before it goes to seed.—A.H., Brown City, Michigan.

—The statute specifically provides that every owner, possessor or occupier of land shall cut or cause to be cut and destroyed all Canada thistles, milk weed, wild carrot, oxeye daisies and other noxious weeds growing thereon at least once in each year, before July 1 in townships south of R 16 N and before July 15 in townships north of R 16 N and as much oftener as is necessary to prevent their going to seed. Failure to comply with this law makes such person liable to a fine of $10.00 and for the cost of cutting the weeds and in such case the weeds would be cut by the township highway commissioner or by men in his employ and the cost would be levied against the property owner in the same manner as other taxes are levied and collected.

This law is interpreted to mean that the abutting property owner is required to cut such noxious weeds on his land and the center of the highway abutting same. It is the duty of the township highway commissioner to post proper notices and to see that all violations of this act that come to his knowledge are prosecuted. Reference, Act No. 66, P. A. 1919 as amended.—Frank F. Rogers, Highway Commissioner.

Farmers Service Bureau

(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full name and address. Name not used if so requested.)

COPYRIGHT FARM NAME

Please advise me regarding the registering of a farm name or copyrighting of same. It seems I read something in reference to this some time ago but do not remember the substance now.—W. C. B., Mattewan, Mich.

—If you wish to transact business under the farm name, it would be necessary to register it with the county clerk. However, if you wish to give it a name merely for designation or for distinction, it would not be necessary to have it registered.—Asst. Legal Editor.

OBLIGED TO MAINTAIN FENCE

"When a feller needs a friend" he looks about, considers the nature of his affliction and then, if he is an M. B. F. reader, he will, in all probability, send his S. O. S. towards Mt. Clemens.

And now could you give me the meaning of Michigan law governing railroads in respect to the maintenance of fence along its right-of-way. I live near Romulus and our pasture field abuts the Wabash Railroad and the fence is so poor the cattle can go back and forth at will. The section foreman knows about this but makes no effort to repair the fence. Have been to see station agent and he kindly informed me that the Wabash railroad declined to fix its fence where the property owner did not maintain a good fence over his farm. —S. D. E., Romulus, Mich.

—Railroad companies are required by the laws of Michigan to maintain suitable fences along their right-of-way, to protect stock from injury by trains.—Asst. Legal Editor.

BUG ON PUMPKIN VINES

Last year our pumpkin and squash vines were eaten up by a bug and this year there is a lot of them. Would you please tell me if there is any thing that will kill them? Am sending specimen.—C. L., Whitehall, Mich.

—The insects turn out to be the common squash bug or stink bug. This creature likes to hide under bits of board during the cold nights and if one places small pieces of board or shingles on the ground near the squash vines the bugs will crawl under these boards and can be jarred off into a bucket of water and kerosene early in the morning before the air starts to warm up. This is called trapping them. It is also the very best of practice to clean up rubbish in the fall since these bugs go through the winter under rubbish.—R. H. Pettit, Professor of Entomology, M. A. C.

NOT COMPELLED TO SERVE AFTER RESIGNING

If the governor of Michigan should hand in his resignation and it was not accepted, would he have to go on being governor just the same even though he did not want to?—A. P., Weidman, Michigan.

—The Governor could not be compelled to serve after resigning, even if his resignation were not accepted. —Asst. Legal Editor.

EACH PARTY FURNISH HALF

We rented a farm, each to furnish half and take half. There were nine acres of rye on the farm which we were to cut with the understanding that we were to leave the same amount of ground sowed to rye when we left. Who should furnish the seed to plant this ground?—E. A., Elwell, Mich.

—When a farm is let on the fifty-fifty basis, that is, the landlord gets one half of farm income and tenant one-half, such expenses as seed, twine, fertilizer, etc., are borne in the same proportion as income is divided. In the above case the landlord would furnish one half of the seed and the tenant one half, providing the same number of acres are sown as were on the place when leased. This works out the same as any crop the tenant put in and harvested during the cropping season as potatoes, corn, etc.—F. T. Riddell, Research Asst. in Farm Management, M .A .C.

"D" LIABLE FOR DAMAGE

You have always helped your readers when in trouble and now I would like to have you help me in my problem. This spring R. made a new line fence, placing oak posts 10 ft. apart and nailed on a new woven wire. R planted corn in his field 3 feet from his line fence. D had clover hay on his field across from R's cornfield and now after D harvested his hay he put his cattle into the clover field, and they broke down posts and trampled over wire and ate a considerable amount of corn and broke down and tramped up a lot. R told D to repair line fence R made as it was just put up new or pay for damages and D says it's not his fence and he is not going to repair it or pay damages. Does D have to pay for damages or fix fence or does R have to repair fence and stand the damage D's cows made?—Reader, Bay City, Mich.

—Under the circumstances, I am of the opinion D would be liable to you for the damage done by his cattle to your land and the fence.—Asst Legal Editor.

NOT OBLIGED TO TRANSPORT CHILDREN TO SCHOOL

At our annual school meeting we voted to close our school, each scholar to go to the school nearest to their home. Two miles and twenty rods is the farthest any one of the children has to go. Some claim we cannot close the school without arranging transportation for the scholars to some other school. Is this true?—H. S. S., Midland, Mich.

—The State does not undertake to compel a district to maintain a school or to transport its children to another school district. It is within the power of the electors in the district to vote to have no school, according to their discretion. But if no school is maintained, and no provision made for sending its pupils to another school, the district loses its share of the primary school interest fund.

SEE ATTORNEY

Please advise if in your opinion there is any way to force payment of $28.00 wages due me for operating a tractor, threshing last fall? This party has repeatedly promised payment but all his holdings are mortgaged, even the threshing outfit is not paid for. Can I attach the machine which is left here in my neighborhood?—A. H. P., Gould City, Mich.

—Compiled Laws 1915, Section 13,-029, sets forth the requisite conditions to attachment proceedings. Under the circumstances, you will likely require the service of an attorney to collect your debt, so I suggest you turn it over to a good lawyer, who will proceed by whatever means is most advisable. The facts you have given me are not, within themselves, sufficient to justify attachment proceedings.—Asst. Legal Editor.

RIGHT TO ACTION FOR DAMAGES

Can anyone collect pay from anyone for running over a hen that is in the road when he could of missed her if he had of slowed down a little?—C. McQ., Greenville, Mich.

—I am of the opinion you would have a legal right of action for damages against the person who ran over your hen.—Asst. Legal Editor.

MICHIGAN CROPS

SOW ALFALFA WITH WHEAT

What would you advise about seeding alfalfa in fall wheat, that is sowing alfalfa seed in the spring? Is there any difference in alfalfa seed and if there is which is the best kind to sow? I have ten acres I want to put to wheat and thought maybe it would make a difference in the amount of wheat to put on to the acre if I seeded it to alfalfa.—R. S., Harrison, Mich.

—Wheat usually makes an excellent companion crop for alfalfa when planted at the usual rate of six pecks of wheat per acre. Lighter rates of planting will benefit the companion crop of alfalfa to some extent. It certainly is not advisable to plant at a heavier rate than the customary six pecks if a good stand of alfalfa is to be expected.

There is a great difference in alfalfa seed and varieties from various sources. The Grimm, Michigan Grown Lebeau, and northern grown common are dependable in Michigan. The Grimm is hardier and longer lived than the common. For heavy lands either the Grimm or Michigan grown Lebeau are recommended. Twelve pounds per acre, applied early next spring, properly inoculated, is sufficient. If your soil is acid lime should be applied for best results with alfalfa when fitting the seed bed this fall.—J. F. Cox, Professor of Farm Crops, M. A. C.

VARIETIES OF RAPE

I would like to know if there is any difference in rape and if there is, what is the best kind for hog pasture?—R. S., Harrison, Michigan.

—There is a great difference in rape varieties and in seed secured from various sources. The Dwarf Essex from Holland has long been recognised as the best for hog pasture, or for pasture use for other live stock. The crop produced from the Dwarf Essex rape is more rapid and more even in growth. The yield is greater and the crop is much more palatable and succulent than is the crop from the Japanese, a stemmy, coarse, lighter yielding rape which has been largely distributed in the United States, particularly during the war period, when there was a great shortage of Dwarf Essex rape. It is usual to plant rape at the rate or two or three pounds per acre to a depth of one-half to three-quarters of an inch on a well prepared seed bed.—J. F. Cox, Professor of Farm Crops, M. A. C.

DO NOT SOW ALFALFA NOW

Will you kindly tell me if I can sow alfalfa on wheat ground now and have it do any good? I seeded five acres this spring and got a very poor catch only in spots. Would like very much to get this piece of ground in to alfalfa.—L. H. C., Ithaca, Mich.

—Alfalfa seeded during late August and early September is likely to winter kill badly. For best results I would recommend that you hold over until spring. The spotted condition of last spring's seeding may be due to soil acidity or it might be due to poor drainage.—C. R. Megee, Associate Prof. of Farm Crops, M. A. C.

JAPANESE PERSIMMONS

I saw an article in a farm magazine about Japanese Persimmons and would like to know more concerning them. Can they be grown in muck? If so where can I get trees and instructions on planting and care?—O. S., Decatur, Mich.

—We do not recommend the culture of Japanese persimmons in this state. Without doubt many of the soils in the state would be found suitable for raising this fruit, but the Japanese persimmons are tender to winter cold and they would be sure to winter-kill here.—V. R. Gardner, Professor of Horticulture.

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Yes, prices that are absolutely rock-bottom. Sharood invites you to order any of these amazing bargains on approval. Don't send one cent. Just letter or postcard brings you any of these smashed price bargains. Merely give Name and Number of each Article You Want. Also State Size and Write Your Name and Address Plainly to Avoid Delay. Pay nothing till goods arrive—then only the amazing bargain price and postage. If you are not delighted with your bargain for any reason at all, simply return the goods and your money will be cheerfully refunded. ORDER NOW.

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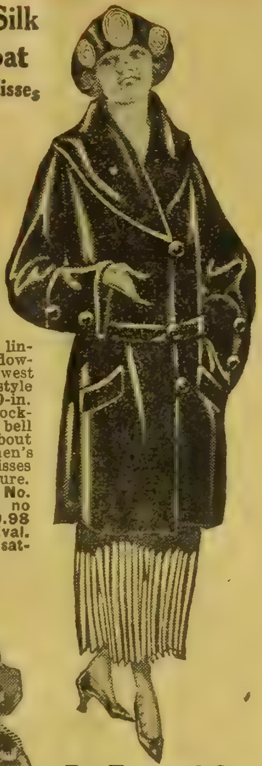
Sporty Style Silk Seal Plush Coat

For Women and Misses

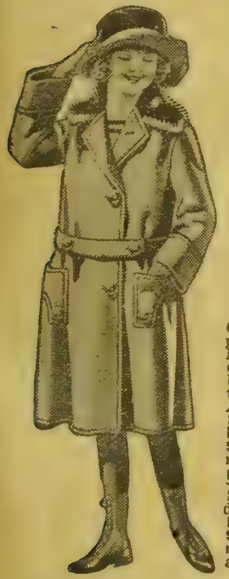
$10.98



Where else can you buy a genuine silk seal plush coat of this jaunty style and splendid quality for such a low price? Beautifully modeled of soft, warm, lustrous, deep pile silk plush with full lining of beautiful flowered sateen. Newest loose back flared style with belt. Wide 10-in. shawl collar, two pockets and roomy bell sleeves. Length, about 34 inches. Women's sizes 34 to 44; Misses 32 to 38 bust measure. State size. Order No. 96E7000. Send no money. Pay $10.98 and postage on arrival. Money back if not satisfied.

Fur Trimmed Coat For Girls and Children

$3.48 UP

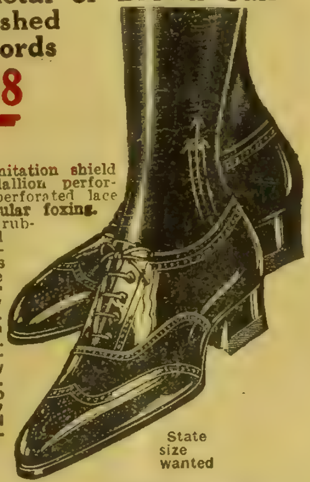


Girl's stylish coat of polo with warm Coney Fur Collar. Two novelty pockets. All-around belt. Novelty buttons trim pockets and belt. An amazingly low price. Sizes 7 to 14 years. Navy 96E7308. Brown 96E7310. Send no money. Pay $4.48 and postage on arrival.

Same quality for children, sizes 2 to 6 years. Navy 96E7458. Brown 96E7460. Send no money. Pay $3.48 and postage on arrival. State Size.

Women's Patent Leather, Gunmetal or Brown Calf Finished Oxfords

$1.98

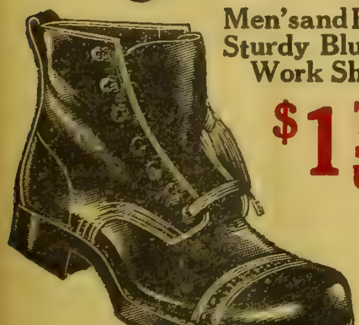


Made with imitation shield tip and medallion perforated vamp, perforated lace stay and circular foxing. Has medium rubber heel and medium pointed toe. Sizes 2½ to 8, wide widths. Order patent by No. 96J121. Order gun metal by No. 96J122. Order brown by No. 96J123. Send no money. Pay $1.98 and postage on arrival.

State size wanted

Men's and Boys' Sturdy Blucher Work Shoe

$1.79 UP

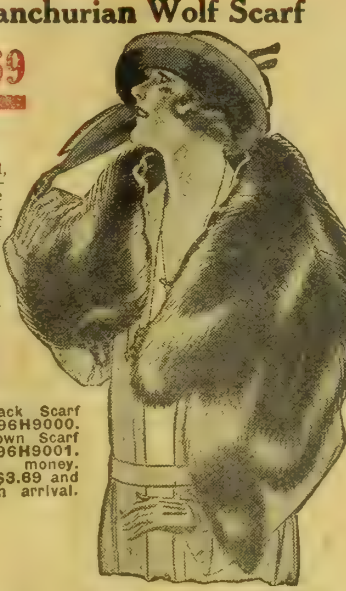


Give Size

Brown or Black work shoe of durable leather. Solid leather inner soles. Heavy double soles. Green chrome outsole. Leather heel. Sizes 6 to 12. Wide widths only. Order Brown by No. 96A758. Order Black by No. 96A760. Send no money. Pay $1.98 and postage on arrival. Order Boys' sizes 1 to 5½ by No. 96A554. Price $1.89. Order Little Boys' sizes 9 to 13½ by No. 96A555. Price $1.79.

Manchurian Wolf Scarf

$3.69

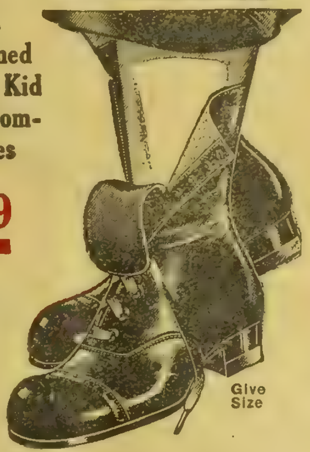


Beautiful, soft, inexpensive Manchurian Wolf scarf lined with Messaline silk. Length about 44 inches. Width about 12 inches. Tail 13 inches, large and bushy.

Order Black Scarf by No. 96H9000. Order Brown Scarf by No. 96H9001. Send no money. Pay only $3.69 and postage on arrival.

Women's Fleece Lined Soft Black Kid Finished Comfort Shoes

$2.29

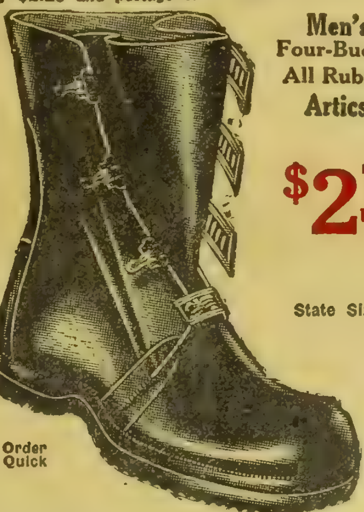


Give Size

Positively America's greatest bargain in a woman's shoe of this kind. Soft kid finished pliable leather uppers have heavy splendid lining that keeps feet warm as toast in the most severe winter weather. Excellent grade natural oak leather soles and low rubber heels. A roomy last that is also dressy in appearance. Simply unbeatable value at Sharood's low price. Women's sizes 3 to 9, wide widths. Order No. 96J880. Send no money. Pay $2.29 and postage on arrival.

Men's Four-Buckle All Rubber Artics

$2.79



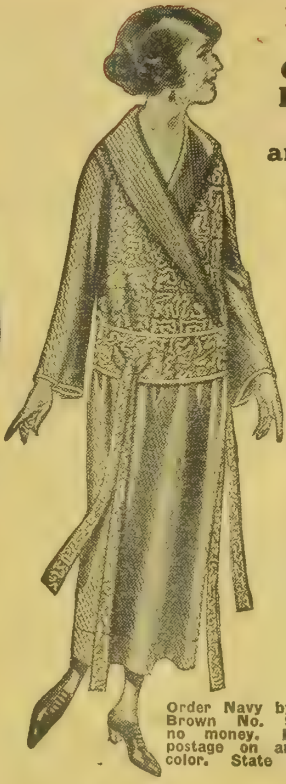
State Size

Order Quick

Guaranteed best quality all rubber 4-buckle hi-cut artic for men. Made with double thick soles and seams reinforced. Snow excluding tongue. Furnished in men's sizes 6 to 15. Wide widths. Sensational value. Send quick. Order by No. 96A990. Send no money. Pay $2.79 and postage on arrival.

Bulgarian Effect Gabardine Frock For Women and Misses

$2.98

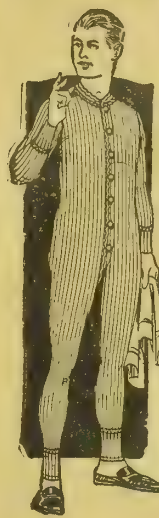


An exceptionally attractive fine quality cotton gabardine dress for women and misses. Long roll collar in shawl effect, sleeves and belt piped in red. Entire front of blouse enhanced with exquisite all-over embroidered design in Bulgarian effect with rich harmonious colors. Two streamers at both sides and front. Wide belt embroidered to match blouse. Sizes for women, 34 to 44 bust; for misses 32 to 38 bust. State length desired. Colors, navy or brown.

Order Navy by No. 96E7500, Brown No. 96E7502. Send no money. Pay $2.98 and postage on arrival for either color. State size.

Heavy Fleeced Union Suit

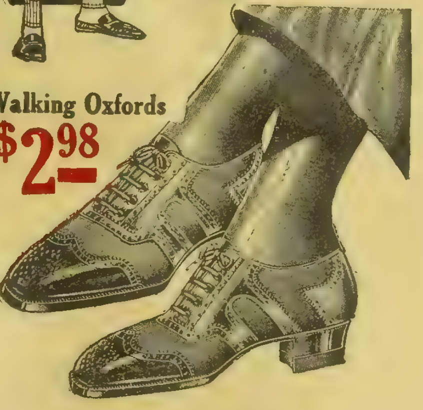
89c UP



Men's heavy flat knit union suit of good quality cotton yarn, with heavy fleece lining. A sure protection from cold. Closed crotch, flap seat, flat seams. Knit cuffs at wrist and ankle. Sizes 34 to 46. Order Tan Jarger Color by No. 96C1279. Send no money. Pay $1.29 and postage on arrival. Order Gray Random Color by No. 96C-1280. Send no money. Pay $1.29 and postage on arrival. Order Boys' sizes 22 to 34. Tan Jaeger color by No. 96C1358. Pay 89c and postage on arrival.

Walking Oxfords

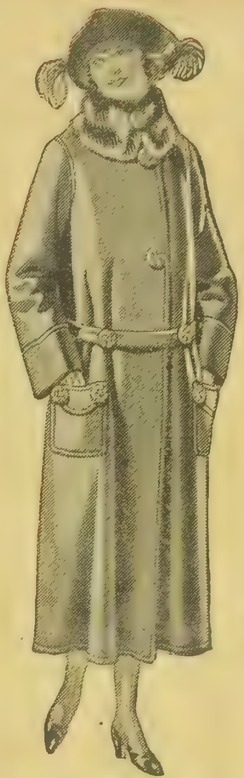
$2.98



Women's combination sport oxford with Log Cabin or gray suede vamp and quarter with contrasting brown calf or Patent Leather trimming at tip, lace row and quarter. One-piece genuine oak sole; low walking heel with rubber top lift. Sizes 2½ to 8. Wide widths. Order brown by No. 96J119. Order gray by No. 96J120. Send no money. Pay $2.98 and postage on arrival.

Fur Trimmed Thibet Coat For Women

$5.98



Another sensational value in a warm winter coat. This becoming model is of splendid Thibet cloth in choice of rich brown or navy blue. The ample collar is of genuine brown Coney fur Coat is finished with all-around self material belt and two patch pockets trimmed with pretty buttons. Imitation cuff is also button trimmed. Coat measures about 48 inches long, and comes in sizes 34 to 44 bust.

Order Brown by No. 96E7094. Navy by 96E7096. Order Black by No. 96E-7095. Send no money. Pay $5.98 and postage on arrival. State size.

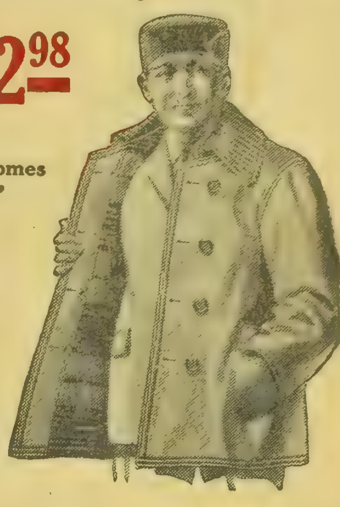
Men's Sturdy Duck Coat

$2.98

Also Comes in Boys' Sizes

AT $1.98 UP

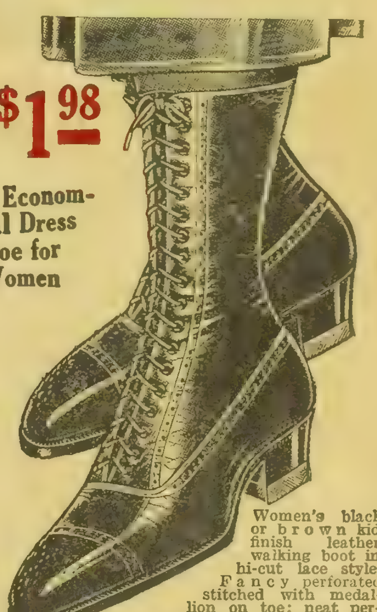
Always State Size



Strongly made of serviceable dark brown duck with heavy blanket lining. 2 large set-in pockets with flaps. Wide corduroy collar. Patent riveted-on buttons. Double stitched seams. Length 32 inches. Men's sizes, 36 to 46 chest. Order No. 96B2314. Price $2.98. Same style in boys sizes 6 to 9 years, No. 96B2358. Price, $1.98. Boys sizes 10 to 14 years, No. 96B2359. Price $2.49. Send no money. Pay bargain price and postage on arrival. State Size.

An Economical Dress Shoe for Women

$1.98



Women's black or brown kid finish leather walking boot in hi-cut lace style. Fancy perforated stitched with medallion on toe; neat perforations at vamp and lace row. Medium extension oak sole with proper height walking heel rubber tipped. A distinct Sharood bargain, suitable for dress or street wear. Soft kid finish leathers are dressy and comfortable. Sizes 2½ to 8. Wide widths. Order Brown Kid Finish by No. 96J195 $1.98. Order Black Kid Finish by No. 96J194.

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NEW O. D. WOOL WRAP LEGGINS..... 75c Plus Postage

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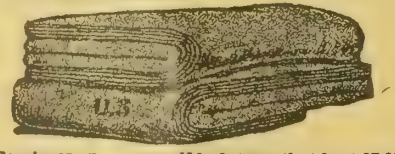

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THE MICHIGAN BUSINESS FARMER, Mt. Clemens, Michigan

What the Neighbors Say

HAVE COUNTY OFFICIALS DO ABSTRACT WORK

DEAR EDITOR:—Feeling that I have been imposed upon by the charges that were recently made when I had occasion to have some abstracting done, I want to ask you, and any others who may happen to have had a similar experience, why should every county have an abstract office composed of persons who are not county officials?

Not to have the county officials do this work which is in a nature public work, at least the public is interested in it, seems to me to be the wrong system. After the abstracting is done you are not sure that it is correct and unless the work is done by a concern that guarantees its work there may be grevious mistakes with no come-back by the one who had to pay the high abstracting fees.

I cannot but think that our system is fundamentally wrong and should be corrected. The two glaring faults with our present method is that of the outrageous charges, and then of the fact that you do not know that your abstract is correct. I recently had occasion to get an abstract of eight acres of land which lays partly in the village of Cass City. I went to Caro and called at the recording office only to be told that I would have to go to the abstract office. These people wrote the abstract and then forwarded it to one of the Cass City banks with a charge of fifty dollars. Now money talks and it is this charge of fifty dollars that is making me talk because such a charge can only be described as exorbitant, and even then what I have isn't worth much and I am not sure that it is correct.

Now I want to ask you, what is the value of this abstract, and wasn't the charge of fifty dollars altogether too much? Let some interested person answer this, even some practical abstracter.

A certain good business man has just told me that I should have had the abstract cover only the last twenty years. That seems strange to me, it is like telling them what to do, that is to tell them just what to put in the abstract; to my mind such a paper would not be at all complete and would not tell the whole story of that particular piece of land. I may be wrong, and if so I am ready to be enlightened; that's why I have solicited answers to my questions. To have the abstract curtailed would no doubt also curtail the cost, but it would also curtail the narrative as to whose hands the land has gone through and this might be objectionable to some future buyer.

I can not see why the clerks in the abstract office could not have gone to the recorder's office and there secured the records regarding the piece of land and then transferred these records to the abstract books in a very short time; in regard to my eight acres I'm sure this could have been done in much less than one-half day and that much work certainly would not have cost anything like fifty dollars. If it would the abstracting charges certainly need revising downward.

Other lands have different systems which work out perfectly and with none of the abuses which I have tried to point out which are so apparent in our American way of doing this work. Ontario has a much more direct and responsible method and when you get an abstract there from the proper government office you know you have something that is correct and will stand any test. I am not a knocker to tear down, but a constructive one, and when I think I see an evil I want to be shown that I am wrong or else do something to remedy the defect. That's what we all should do, and I think you will agree with me. Abstracting costs our people millions of dollars annually with no adequate return as I can see.

None of us sheuld object to paying well for a real service but when we have to hand out our dollars for a piece of work that seems to be of no practical value I think it is time we made a change. But even granting that an abstract is necessary, and also that it is executed correctly, why cannot some means be adopted so we can have an abstract made without the present exorbitant charges being attached to it? That is the crux of the whole question and the whole country is ready to give any man a high place who can suggest some adequate and practical scheme whereby abstracts can be obtained that are dependable and at a reasonable cost.—E. K., Cass City, Mich.

DO NOT BLAME FARMERS FOR LEAVING FARM

DO you blame farmers for quiting the farm? I do not. There are too many farmers now. We farmers raise too much, more than we can sell at a profit. Why ask a man to work on the farm for $1.25 per day (many a man get less) when he can get from $5.00 to $8.00 per day in the city. Money talks.—E. B., Mecosta, Mich.

Uncle Rube Spinach Says:

WHERE ARE WE AT ANYWAY?'

HERE jest a little while ago me an' men an' various wimmin wuz sorta advocatin' the short skirt for the female of the species, so to speak. We sed they wuz cool, co-table an' convenient, an' they wuz all of that an' more. More is what I ain't goin' to talk 'bout now but may later on in this letter.

Anyway, reformers, — ol' maids with nothin' to brag about, preachers an' divers an' various folks sed short skirts wuz redic-lus an' ? mor'-lizin' an' everything. There didn't seem to be much of anything left unsaid 'bout 'em did there? Girls, young women, even older women, wore 'em up to the knees or, sometimes, upperan' that . Well, we old fellers an' most of the young lads got sorta used to seein' 'em that way an' didn't think much about it.

But now—oh Jeremiah's Jumpin' Ghost! Long skirts—I saw this very day hittin' the sidewalk—bright blue stockin's and bright blue shoes. An' I see 'em in red an' green shoes an' stockin's to match. An' skirts with so many scallops into 'em that with all the high colors on their underpinnin' you see more'n anybody ever dreamed of seein' with short skirts.

An' now what will our reformers—ol' maids, ministers of the Gospel, what will any of 'em have to harp about? The long long skirts are with us—not to stay long but they are with us now. Bobbed hair an' long skirts. Long skirts, bobbed hair an' green stockin's an' green shoes. Long skirts an' short minds—we've got 'em an' we're all wearin' 'em or seein' 'em which is 'bout the same.

An' now 'at we've got 'em down what have we reformers of women's wear got to holler 'bout? 'Course we'll soon have the bustle—mebbe hoop-skirts. You older fellers remember bustles an' hoops, don't you? We'l anyway I remember 'em — also I member when most every woman was a street sweeper with her long skirts.

An' I am just wonderin' right now if we ain't goin' back to where we come from 30 or 40 years ago? Women heve looked purty good to me fer a long time—short skirts didn't make 'em look any less attractive to me. They got around nice in 'em, could get into a street car or an auto handy—didn't have to pull their dress up to their — well to their knees if they met a wet place on the side walk, an' gen'raly speakin' they looked purty comfortable. Long skirts—skirts like I seen today on a fashionable young woman, may be fine—mebbe so fer folks older'n I. But they don't look good to me—I may get used to 'em when I git old but when I git old they won't wear 'em that way.

In a year or less they'll be much shorter 'an ever—but time flies an' I'm gittin older every year. Let's have sense an' short skirts now while we can enjoy 'em. Yes, what say? Cordially yours, UNCLE RUBE.

JESUS' PASSION TO HELP MEN

A SERMON BY REV. DAVID F. WARNER

> Text: "Jesus of Nazareth, how God annointed him with the Holy Spirit and with power: Who went about doing good, and healing all that were oppressed of the devil; for God was with him." Acts 10:38.

JESUS' so-called week of passion was but typical of his entire earthly life to do good unto men. His was the model social life. He, only, has interpreted to the world genuine love and neighborliness. Brotherhood, without him, is unreal, impossible. With him, it is real and vital.

But, you say men were created to be brotherly, and socially helpful. Yes, that is the creational idea. And into this natural brotherhood came Jesus as the "Son of Man." Yet he met no helpful, brotherly responses among his fellows. He encountered no social passion such as his. For thirty years with a true brother's heart he stood sorrowfully alone. The world would not receive him and his own countrymen rejected him. Men were veiled in sin and hence the Gospel builds no hopes on a natural brotherhood.

But God annointed the Nazarine with the Holy Spirit and with power. This Man of Galilee travelled the hills and dales of Palestine living out a new passion morn of the Spirit. His was to be, and is, a spiritual brotherhood; a new creation; a life of new and sinless desire; a Cross of social passion. For this Man, it went slowly. But he swerves not from his purpose and gathers around him a handful of men and women whom he had helped as the Big Brother, and who were unionized and fraternized in him.

Jesus dedicates himself, formally, to this life of social purpose at baptism. Here, the "Love your neighbor as yourself" life took on a new meaning. Can't you hear the Baptist saying, "Why, my baptism is for sinners. You don't need it?" But Jesus says "suffer it to be so for I want to be a friend and brother to man." In Jesus' passion to be light and life to man he took his place by the side of man, and paid the price in misunderstandings, sufferings, and death. Why is a well-known, modern apostle of the Cross burning up his life and consuming a fortune to help men? A brother-passion is the answer. The threshingmachine had just pulled into farmer A's barn, when, lo! Mr. A heard the rumble of thunder and saw the rain clouds forming. Hurriedly, he gave orders to the threshermen to pull out and go thresh his neighbor's grain which was in the field. Said he, "My grain is in the dry and can wait." Why did he do this? Because of an unusual type of neighborliness. Do you have this secret passion, brother farmer? Behold, contemplate, the Peasant of Galilee.

Again, Jesus illustrates this principle of life by eating with social outcasts. "Ah," said the elite of society, "a friend of publicans and sinners." But this showed the far-reaching sympathy of his heart. These publicans were a low, despised set. The religious folks of the day hated them. Public opinion held out no sympathy for them. And Jesus' intimacy with them created a furor among the best people of the land. But this Man was different. He could not help it. His great heart went out to all classes. He sympathized and felt for them. He did not care a whit if he must violate the rules of etiquette and society slammed her door in his face; he must be a brother to men. Now, we can the better understand Tolstoi and Ghandi. We can understand the spirit that drove Theodore Roosevelt to eat lunch in the White House with Booker T. Washington, tho Washington's society folks protested. Friends, when you make a dinner, dare you, as Jesus teaches, call in the poor and the outcast, as well as your friends and kinsfolk?

The miracles of Jesus are a standing testimony to his life of "brothering." His age saw in them evidence of super-greatness and power. We see in them his compassion. Pain and sickness everywhere appealed to him. He could not pass them by. Suffering drew virtue from his heart. Does it from your life and mine? A funeral is on across the street. One hundred automobiles are parked. The casket is being banked high with flowers. Today the lady is dead and has many friends(?). Yesterday she was living, but with few friends. Alas! When will mortals learn the simple, neighborly, understanding of life's realities as Jesus taught and lived.

Jesus' love for men was international and interracial. He was preaching his first sermon, and too, in the town of his boyhood. The home folks were out to hear him. He discoursed on social and physical salvation for all peoples. He told his audience that there were needy widows in Palestine, but it pleased God to give special attention to an outside widow. And, that there were many lepers in Palestine but God, thru healing Namaan, heaped special honor upon the Gentiles. In other words, Jesus' sympathy takes wings, and he endeavors to push out the social horizon of his hearers so that they might see and feel the need of other nations. But they rejected his teaching and even made an infamous attempt to kill him. However that was sixty generations ago. But what are you doing today? Do you at this moment hear, sympathetically, the call of a stricken Japan? Are you a friend or a Pharisee to the foreigner in your community?

Peter asked of his Master one day, how oft he should forgive his brother, "until seven times?" The rule of the rabbis was three times. Peter exceeded this by four. Surely this is aplenty. But Jesus' seventy times seven makes the rule of love and forgiveness as unlimited. Peter was coldly calculating. But Jesus says the heart has no table of figures and arithmetic is foreign to its affection. Love cannot be bounded. One day he amazed His hearers by saying, "Love your enemies." When you are hated, don't throw love overboard. Keep it on top. "Bless them that curse you and do good unto them that hate you." And just for this men nailed him to the Cross. But his life ebbs out in the passionate words, "Father, forgive them for they know not what they do." But we know better today. And, says Scripture, "He that knoweth to do good and doeth it not, to him it is sin."

So Jesus passes down to us the true spirit of helpfulness and brotherhood with the command to keep it working. Christian friend, this is your work and mine. Jesus could not do it alone nor in a few years. So, he forms his society, the church; annoints it with his spirit and sends it out to neighbor mankind We are to go about doing good. We must not be found with divided purpose or doubtful action. Blessed is the man who has caught the vision of a redeemed race in a spiritual brotherhood in Christ. And, if before the sun descends low upon your day, you are enthusiastic in the work of making your vision real, you are misunderstood and maligned, remember, so was Jesus for your salvation.

OUR BOOK REVIEW

(Books reviewed under this heading may be secured through The Michigan Business Farmer, and will be promptly shipped by parcel post on receipt of publisher's price stated.)

The Sea-Hawk—by Rafael Sabatina author of "Saramouche," "Captain Blood," "The Snare," etc. Elemental in its record of unrepressed loves and hates is the story of how Sir Oliver Tressilian, Cornish gentleman and sometimes commander of one of Her Majesty's ships which dispersed the Spanish Armada, became a follower of Mahmud, and a Barbarycorsair, winning for himself the title of Sakr-el-Bahr—Hawk of the Sea. He adopts the picturesque Barbary costume and becomes a favorite of the Basha.

Finally on a captured Spanish ship he invades the coast of England and carries away the girl whose unforgiving hate had kept him from returning to his home. To save her from the harem of the Basha, he defies his commander, and determines to escape. Undoubtedly, this is one of the most dramatic moments in any of Mr. Sabatina's books, and the story of their subsequent adventures makes a superb and thrilling epic of romance.

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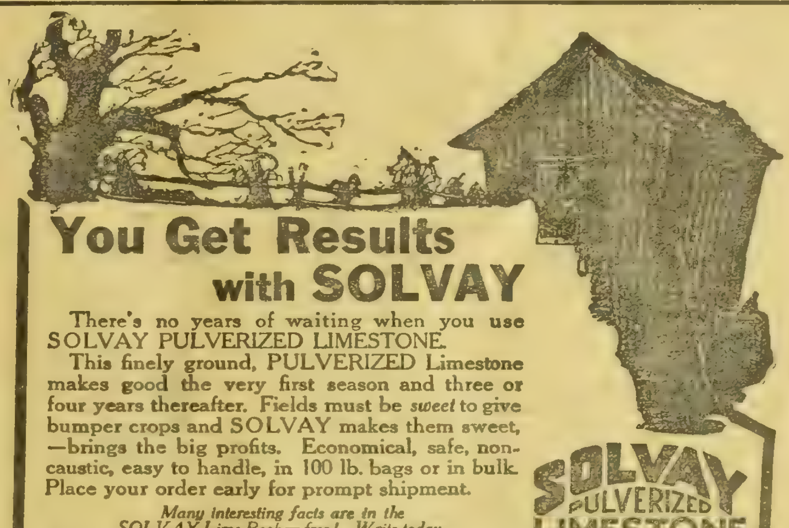

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Oh Money! Money!

by ELEANOR H. PORTER

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CHAPTER I

Exit Mr. Stanley G. Fulton

THERE was a thoughtful frown on the face of the man who was the possessor of twenty million dollars. He was a tall, spare man, with a fringe of reddish-brown hair encircling a bald spot. His blue eyes, fixed just now in a steady gaze upon a row of ponderous law books across the room, were friendly and benevolent in direct contradiction to the bulldog, never-let-go fighting qualities of the square jaw below the firm rather thin lips.

The lawyer, a youthful alert man of sixty years, trimly gray as to garb, hair, and moustache, sat idly watching him, yet with eyes that looked so intently that they seemed to listen.

For fully five minutes the two men had been pulling at their cigars in silence when the millionaire spoke.

"Ned, what am I going to do with my money?"

Into the lawyer's listening eyes flashed, for a moment, the keenly scrutinizing glance usually reserved for the witness on the other side. Then quietly came the answer.

"Spend it yourself, I hope—for some years to come, Stanley."

Mr. Stanley G. Fulton was guilty of a shrug and an uplifted eyebrow.

"Thanks. Very pretty, and I appreciate it, of course. But I can't wear but one suit of clothes at a time, nor eat but one dinner—which, by the way, just now consists of somebody's health biscuit and hot water. Twenty millions don't really what you might call melt away at that rate."

The lawyer frowned.

"Shucks, Fulton!" he expostulated, with an irritable twist of his hand. "I thought better of you than that. This poor rich man's 'one-suit, one-dinner, one-bed-at-a-time' hard-luck story doesn't suit your style. Better cut it out!"

"All right. Cut—it is!" The man smiled good-humoredly. "But you see I was nettled. You didn't get me at all. I asked you what was to become of my money after I'd done spending it myself—the little that is left, of course."

Once more from the lawyer's eyes flashed that keenly scrutinizing glance.

"What was it, Fulton? A midnight rabbit, or a wedge of mince pie not like mother used to make? Why, man alive, you're barely over fifty, yet. Cheer up! It's only a little matter of indigestion. There are a lot of good days and good dinners coming to you yet."

The millionaire made a wry face.

"Very likely—if I survive the biscuits. But, seriously, Ned, I'm in earnest. No, I don't think I'm going to die—yet awhile. But I ran across young Bixby last night—got him home, in fact. Delivered him to his white-faced little wife. Talk about your maudlin idiots!"

"Yes, I know. Too bad, too bad!"

"Mm-m; well, that's what one million did—inherited. It set me to thinking—of mine, when I get through with them."

"I see." The lawyer's lips came together a little grimly. "You've not made you will, I believe."

"No. Dreaded it, somehow. Funny how a man'll fight shy of a little thing like that, isn't it? And when we're so mighty particular where it goes while we're living!"

"Yes, I know; you're not the only one. You have relatives—somewhere, I surmise."

"Nothing nearer than cousins, third or fourth, back East. They'd get it, I suppose—without a will."

"Why don't you marry?"

The millionaire repeated the wry face of a moment before.

"I'm not a marrying man. I never did care much for women; and—I'm not fool enough to think that a woman would be apt to fall in love with my bald head. Nor am I obliging enough to care to hand the millions over to the woman that falls in love with them, taking me along as the necessary sack that holds the gold. If it comes to that, I'd rather risk the cousins. They, at least, are of my own blood, and they didn't angle to get the money."

"You know them?"

"Never saw 'em."

"Why not pick out a bunch of colleges and endow them?"

The millionaire shook his head.

"Doesn't appeal to me, somehow. Oh, of course it ought to, but—it just doesn't. That's all. Maybe if I was a college man myself; but—well, I had to dig for what education I got."

"Very well—charities, then." There are numberless organizations that—" He stopped abruptly at the other's uplifted hand.

"Organizations! Good Heavens I should think there were! I tried 'em once. I got that philanthropic bee in my bonnet, and I gave thousands, tens of thousands to 'em. Then I got to wondering where the money went."

Unexpectedly the lawyer chuckled.

"You never did like to invest without investigating, Fulton," he observed.

With only a shrug for an answer the other plunged on.

"Now, understand. I'm not saying that organized charity isn't all right, and doesn't do good, of course. Neither am I prepared to propose anything to take its place. And maybe the two or three I dealt with were particularly addicted to the sort of thing I objected to. But, honestly, Ned, if you'd lost heart and friends and money, and were just ready to chuck the whole shooting-match, how would you like to become a 'Case,' say, number twenty-three thousand seven hundred and forty-one, ticketed and docketed, and duly apportioned off to a six-by-nine rule of 'do this' and 'do that,' while a dozen spectacled eyes watched you being cleaned up and regulated and wound up with a key made of just so much and no more pats and preachments carefully weighed and labeled? How would you like it?"

The lawyer laughed.

"I know; but my dear fellow, what would you have? Surely, unorganized charity and promiscuous giving is worse—"

"Oh, yes, I've tried that way, too," shrugged the other. "There was a time when every Tom, Dick, and Harry, with a run-down shoe and ragged coat, could count on me for a ten-spot by just holding out his hand, no questions asked. Then a serious-eyed little woman sternly told me one day that the indiscriminate charity of a millionaire was not only a curse to any community, but a corruption to the whole state. I believe she kindly included the nation, as well, bless her! And I thought I was doing good!"

"What a blow—to you!" There was a whimsical smile in the lawyer's eyes.

"It was." The millionaire was not smiling. "But she was right. It set me to thinking, and I began to follow up those ten-spots—the ones that I could trace. Jove! what a mess I'd made of it! Oh, some of them were all right, of course, and I made those fifties on the spot. But the others—! I tell you, Ned, money that isn't earned is the most risky thing in the world. If I'd left half those wretches alone, they'd have braced up and helped themselves and made men of themselves, maybe. As it was—Well, you never can tell as to the results of a so-called 'good' action. From my experience I should say they are every whit as dangerous as the bad ones."

The lawyer laughed outright.

"But, my dear fellow, that's just where the organized charity comes in. Don't you see?"

"Oh, yes, I know—Case number twenty-three thousand seven hundred and forty-one! And that's all right, of course. Relief of some sort is absolutely necessary. But I'd like to see a little warm sympathy injected into it, some way. Give the machine a heart, say, as well as hands and a head."

"Then why don't you try it yourself?"

"Not I!" His gesture of dissent was emphatic. "I have tried it, in a way, and failed. That's why I'd like some one else to tackle the job. And that brings me right back to my original question. I'm wondering what my money will do, when I'm done with it. I'd like to have one of my own kin have it—if I was sure of him. Money is a queer proposition, Ned, and it's capable of—'most anything."

"It is. You're right."

"What I can do with it, and what some one else can do with it, are two quite different matters. I don't consider my efforts to circulate it wisely, or even harmlessly, exactly what you'd call a howling success. Whatever I've done, I've always been criticised for not doing something else. If I gave a costly entertainment, I was of showy ostentation. If I didn't give it, I was accused of not putting money into honest circulation. If I donated to a church, it was called conscience money; and if I didn't donate to it, they said I was mean and miserly. So much for what I've done. I was just wondering—what the other fellow'd do with it."

"Why worry? 'Twon't be your fault."

"But it will—if I give it to him. Great Scott, Ned! Think what money does for folks, sometimes—folks that aren't used to it! Look at Bixby; and look at that poor little Marston girl, throwing herself away on that worthless scamp of a Gowing who's only after her money, as everybody (but herself) knows! And if it doesn't make knaves and martyrs of them, ten to one it does make fools of 'em. They're worse than a kid with a dollar on circus day; and they use about as much sense spending their pile, too. You should have heard dad tell about his pals in the eighties that struck it rich in the gold mines. One bought up every grocery store in town and instituted a huge free grab-bag for the populace; and another dropped his hundred thousand in the dice box before it was a week old. I wonder what those cousins of mine back East are like!"

"If you're fearful, better take Case number twenty-three thousand seven hundred and forty-one," smiled the lawyer.

"Hm-m; I suppose so," ejaculated the other grimly, getting to his feet. "Well, I must be off. It's biscuit time, I see."

A moment later the door of the lawyer's sumptuously appointed office closed behind him. Not twenty-four hours afterward, however, it opened to admit him again. He was alert, eager-eyed, and smiling. He looked ten years younger. Even the office boy who ushered him in cocked a curious eye at him.

The man at the great flat-topped desk gave a surprised ejaculation.

"Hullo, Fulton! Those biscuits must be agreeing with you," he laughed. "Mind telling me their name?"

"Ned, I've got a scheme. I think I can carry it out." Mr. Stanley G. Fulton strode across the room and dropped himself into the waiting chair. "Remember those cousins back East? Well, I'm going to find out which of 'em I want for my heir."

"Another case of investigation before investing, eh?"

"Exactly."

"Well, that's like you. What is it, a little dectective work? Going to get acquainted with them, I suppose, and see how they treat you. Then you can size them up as to hearts and habits, and drop the golden plum into the lap of the worthy man, eh?"

"Yes, and no. But not the way you say. I'm going to give 'em say fifty or a hundred thousand apiece, and—"

"Give it to them—now?"

"Sure! How'm I going to know how they'll spend money till they have it to spend?"

"I know; but—"

"Oh, I've planned all that. Don't worry. Of course you'll have to fix it up for me. I shall leave instructions with you, and when the time comes all you have to do is to carry them out."

The lawyer came erect in his chair.

"Leave instructions! But you, yourself—?"

Oh, I'm going to be there, in Hillerton."

"There? Hillerton?"

"Yes, where the cousins live, you know. Of course I want to see how it works."

"Humph! I suppose you think you'll find out—with your watching their every move!" The lawyer had settled back in his chair, an ironical smile on his lips.

"Oh, they won't know me, of course, except as John Smith."

"John Smith!" The lawyer was sitting erect again.

"Yes. I'm going to take that name—for a time."

"Nonsense, Fulton! Have you lost your senses?"

"No." The millionaire still smiled imperturbably. "Really, my dear Ned, I'm disappointed in you. You don't seem to realize the possibilities of this thing."

"Oh, yes, I do—perhaps better than you, old man," retorted the other with an expressive glance.

"Oh, come, Ned, listen! I've got three cousins in Hillerton. I never saw them, and they never saw me. I'm going to give them a tidy little sum of money apiece, and then have the fun of watching them spend it. Any harm in that, especially as it's no one's business what I do with my money?"

"N-no, I suppose not—if you can carry such a wild scheme through."

"I can, I think. I'm going to be John Smith."

"Nice distinctive name!"

"I chose a colorless one on purpose. I'm going to be a colorless person, you see."

"Oh! And—er—do you think Mr. Stanley G. Fulton, multi-millionaire, with his pictured face in half the papers and magazines from tthe Atlantic to the Pacific, can hide that face behind a colorless John Smith?"

"Maybe not. But he can hide it behind a nice little close-cropped beard." The millionaire stroked his smooth chin reflectively.

"Humph! How large is Hillerton?"

"Eight or ten thousand. Nice little New England town, I'm told."

"Hm-m. And your—er—business in Hillerton that will enable you to be the observing fly on your cousins' walls?"

"Yes, I've thought that all out, too; and that's another brilliant stroke. I'm going to be a genealogist. I'm going to be at work tracing the Blaisdell family—their name is Blaisdell. I'm writing a book which necessitates the collection of an endless amount of data. Now how about that fly's chances of observation. Eh?"

"Mighty poor, if he's swatted—and that's what he will be! New England housewives are death on flies, I understand."

"Well I'll risk this one."

"You poor fellow!" There was exasperation and amusement in the lawyer's eyes, but there was only mock sympathy in his voice. "And to think I've known you all these years, and never suspected it, Fulton!"

The man who owned twenty millions still smiled imperturbably.

"Oh, yes, I know what you mean, but I'm not crazy. And really I'm interested in genealogy, too, and I've been thinking for some time I'd go digging about the roots of my ancestral tree. I have dug a little, in years gone. My mother was a Blaisdell, you know. Her grandfather was a brother to some ancestor of these Hillerton Blaisdells; and I really am interested in collecting Blaisdell data. So that's all straight. I shall be telling no fibs. And think of the opportunity it gives me! Besides, I shall try to board with one of them. I've decided that."

"Upon my word, a pretty little scheme!"

"Yes, I knew you'd appreciate it, the more you thought about it." Mr. Stanley G. Fulton's blue eyes twinkled a little.

With a disdainful gesture the lawyer brushed this aside.

"Do you mind telling me how you happened to think of it, yourself?"

"Not a bit. 'Twas a little booklet got out by a Trust Company."

"It sounds like it!"

"Oh, they didn't suggest exactly this, I'll admit; but they did suggest that if you were fearful as to the way your heirs would handle their inheritance, you could create a trust fund for their benefit while you were living, and then watch the way the beneficiaries spent the income, as well as the way the trust fund itself was managed. In this way you could observe the effects of your gifts, and at the same time be able to change them if you didn't like results. That gave me an idea. I've just developed it. That's all. I'm going to make my cousins a little rich, and see which, if any of them, can stand being very rich."

"But the money, man! How are you going to drop a hundred thousand dollars into three men's laps, and expect to get away without an investigation as to the why and wherefore of such a singular proceeding?"

"That's where your part comes in," smiled the millionaire blandly. "Besides, to be accurate, one of the laps is—er—a petticoat one."

"Oh, indeed! So much the worse, maybe. But—And so this is where I come in, is it? Well, and suppose I refuse to come in?"

"Regretfully I shall have to employ another attorney."

"Humph! Well?"

"But you won't refuse." The blue eyes opposite were still twinkling. "In the first place, you're my good friend—my best friend. You wouldn't be seen letting me start off on a wild-goose chase like this without your guiding hand at the helm to see that I didn't come a cropper."

"Aren't you getting your metaphors a

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trifle mixed?" This time the lawyer's eyes were twinkling.

"Eh? What? Well, maybe. But I reckon you get my meaning. Besides, what I want you to do is a mere routine of regular business , with you."

"It sounds like it. Routine, indeed!"

"But it is—your part. Listen. I'm off for South America, say, on an exploring tour. In your charge I leave certain papers with instructions that on the first day of the sixth month of my absence (I being unheard from), you are to open a certain envelope and act according to instructions within. Simplest thing in the world, man. Isn't it?"

"Oh, very simple—as you put it."

"Well, meanwhile I'll start for South America—alone, of course; and, so far as you are concerned, that ends it. If on the way, somewhere, I determine suddenly on a change of destination, that is none of your affair. If, say in a month or two, a quiet, inoffensive gentleman by the name of Smith arrives in Hillerton on the legitimate and perfectly respectable business of looking up a family pedigree, that also is none of your concern."

With a sudden laugh the lawyer fell back in his chair.

"By Jove, Fulton, if I don't believe you'll pull this absurd thing off!"

"There! Now you're talking like a sensible man, and we can get somewhere. Of course I'll pull it off! Now here's my plan. In order best to judge how my esteemed relatives conduct themselves under the sudden accession of wealth, I must see them first without it, of course. Hence, I plan to be in Hillerton some months before your letter and the money arrive. I intend, indeed, to be on the friendliest terms with every Blaisdell in Hillerton before that times comes."

"But can you? Will they accept you without references or introduction?"

"Oh, I shall have the best of references and introductions. Bob Chalmers is the president of a bank there. Remember Bob? Well, I shall take John Smith in and introduce him to Bob some day. After that, Bob'll introduce John Smith. See? All I need is a letter as to my integrity and respectability, I reckon, so my kinsmen won't suspect me of designs on their spoons when I ask to board with them. You see, I'm a quiet, retiring gentleman, and I don't like noisy hotels."

With an explosive chuckle the lawyer clapped his knee.

"Fulton, this is absolutely the richest thing I ever heard of! I'd give a farm to be a fly on your wall and see you do it. I'm blest if I don't think I'll go to Hillerton myself—to see Bob. By George, I will go and see Bob!"

"Of course," agreed the other serenely. "Why not? Besides, it will be the most natural thing in the world—business, you know. In fact, I should think you really ought to go, in connection with the bequests."

Why, to be sure." The lawyer frowned thoughtfully. "How much are you going to give them?"

"Oh, a hundred thousand apiece, I reckon."

"That ought to do—for pin money."

"Oh, well, I want them to have enough, you know, for it to be a real test of what they would do with wealth. And it must be cash—no securities. I want them to do their own investing."

"But how are you going to fix it? What excuse are you going to give for dropping a hundred thousand into their laps like that? You can't tell your real purpose, naturally! You'd defeat your own ends."

"That part we'll have to fix up in the letter of instructions. I think we can. I've got a scheme."

"I'll warrant you have! I'll believe anything of you now. But what are you going to do afterward—when you've found out what you want to know, I mean? Won't it be something of a shock, when John Smith turns into Mr. Stanley G. Fulton? Have you thought of that?"

"Y-yes, I've thought of that, and I will confess my ideas are a little hazy, in spots. But I'm not worrying. Time enough to think of that part. Roughly, my plan is this now. There'll be two letters of instructions: one to open in six months, the other to be opened in, say, a couple of years, or so. (I want to give myself plenty of time for my observations, you see.) The second letter will really give you my final instructions as to the settling of my estate—my will. I'll have to make some sort of one, I suppose."

"But, good Heavens, Stanley, you—you—" the lawyer came to a helpless pause. His eyes were startled.

"Oh, that's just for emergency, of course, in case anything—er—happened. What I really intend is that long before the second letter of instructions is due to be opened, Mr. Stanley G. Fulton will come back from his South American explorations. He'll then be in a position to settle his affairs to suit himself, and—er—make a new will. Understand?"

"Oh, I see. But—there's John Smith? How about Smith?"

The millionaire smiled musingly, and stroked his chin again.

"Smith? Oh! Well, Smith will have finished collecting Blaisdell data, of course, and we'll be off to parts unknown. We don't have to trouble ourselves with Smith any longer."

"Fulton, you're a wizard," laughed the lawyer. "But now about the cousins. Who are they? You know their names, of course."

"Oh, yes. You see I've done a little digging already—some years ago—looking up the Blaisdell family. (By the way, that'll come in fine now, won't it?) And an occasional letter from Bob has kept me posted as to deaths and births in the Hillerton Blaisdells. I always meant to hunt them up some time, they being my nearest kith and kin. Well, with what I already had, and with what Bob has written me, I know these facts."

He paused, pulled a small notebook from his pocket, and consulted it.

"There are two sons and a daughter, children of Rufus Blaisdell. Rufus died years ago, and his widow married a man by the name of Duff. But she's dead now. The elder son is Frank Blaisdell. He keeps a grocery store. The other is James Blaisdell. He works in a real estate office. The daughter, Flora, never married. She's about forty-two or three, I believe, and does dressmaking. James Blaisdell has a son, Fred, seventeen, and two younger children, Frank Blaisdell has one daughter, Millicent. That's the extent of my knowledge, at present. But it's enough for our purpose."

"Oh, anything's enough—for your purpose! What are you going to do first?"

"I've done it. You'll soon be reading in your morning paper that Mr. Stanley G. Fulton, the somewhat eccentric multimillionaire, is about to start for South America, and that it is hinted he is planning to finance a gigantic exploring expedition. The accounts of what antiquities to the source of the Amazon. I've done a lot of talking today, and a good deal of cautioning as to secrecy, etc. It ought to bear fruit by to-morrow, or the day after, at the latest. I'm going to start next week, and I'm really going exploring, too—though not exactly as they think. I came in to-day to make a business appointment for to-morrow, please. A man starting on such a hazardous journey must be prepared, you understand. I want to leave my affairs in such shape that you will know exactly what to do—in emergency. May I come to-morrow?"

The lawyer hesitated, his face an odd mixture of determination and irresolution.

"Oh hang it all—yes. Of course you may come. To-morrow at ten—if they don't shut you up before."

With a boyish laugh Mr. Stanley G. Fulton leaped to his feet.

"Thanks. To-morrow at ten, then." At the door he turned back jauntily. "And, say, Ned, what'll you bet I don't get so I can eat real meat and 'taters again?"

CHAPTER II

Enter Mr. John Smith

It was on the first warm evening in the early June that Miss Flora Blaisdell crossed the common and turned down the street that led to her brother James' home.

The common marked the center of Hillerton. Its spacious green lawns and elm-shaded walks were the pride of the town. There was a trellised band-stand for summer concerts, and a tiny pond that accommodated skaters in winter. Perhaps, most important of all, the common divided the plebian East Side from the more pretentious West, James Blaisdell lived on the West Side. His wife said that everybody did who was anybody. They had lately moved there, and were indeed barely settled.

Miss Blaisdell did dressmaking. Her home was a shabby little rented cottage on the East Side. She was a thin-faced little woman with an anxious frown and near-sighted, peering eyes that seemed always to be looking for wrinkles. She peered now at the houses as she passed slowly down the street. She had been only twice to her brother's new home, and she was not sure that she would recognize it, in spite of the fact that the street was still alight with the last rays of the setting sun. Suddenly across her worried face flashed a relieved smile.

"Well, if you ain't all out here on the piazza!" she exclaimed, turning in at the walk leading up to one of the ornate little houses. "My, ain't this grand!"

"Oh, yes, it's grand, all right," nodded the tired looking man in the big chair, removing his feet from the railing. He was in his shirt-sleeves and was smoking a pipe. The droop of his thin mustache matched the droop of his thin shoulders—and both indefinably but unmistakably spelled disillusion and discouragement. "It's grand, but I think it's too grand—for us. However, daughter says the best is none too good—in Hillerton. Eh, Bess?"

Bessie, the pretty, sixteen-year-old daughter of the family, only shrugged her shoulders a little petulantly. It was Harriet, the wife, who spoke—a large, florid woman with a short upper lip, and a bewilderment of bepuffed light hair. She was already on her feet, pushing a chair toward her sister-in-law.

"Of course it isn't too grand, Jim, and you know it. There aren't any really nice houses in Hillerton except the Pennocks' and the old Gaylord place. There, sit here, Flora. You look tired."

"Thanks. I be—turrible tired. Warm, too, ain't it?" The little dressmaker began to fan herself with the hat she had taken off. "My, 't is fur over here, ain't it? Not much like 't was when you lived right 'round the corner from me! And I had to put on a hat and gloves, too. Someway, I thought I ought to—over here."

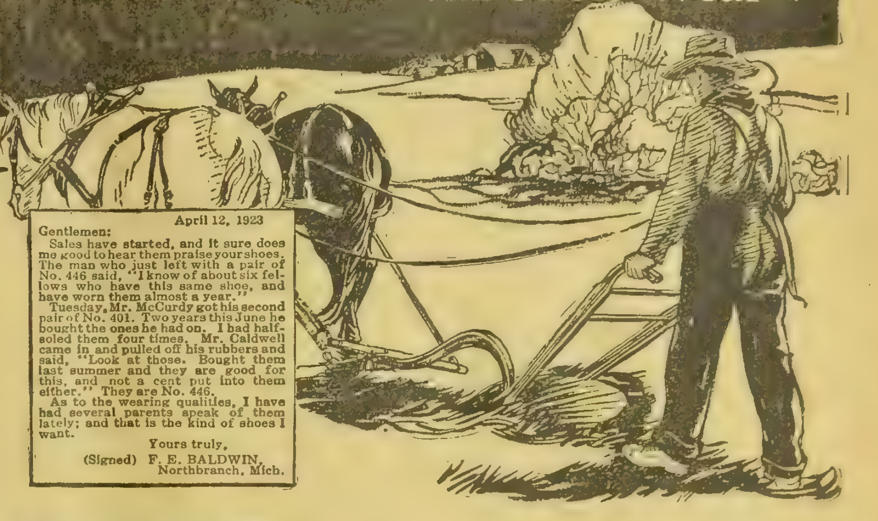
Condescendingly the bepuffed head threw an approving nod in her direction.

(Continued in October 13th Issue.)

ROUGE REX

The 1,000-Mile Shoe

Double-Tanned—Double Wear



April 12, 1923

Gentlemen:

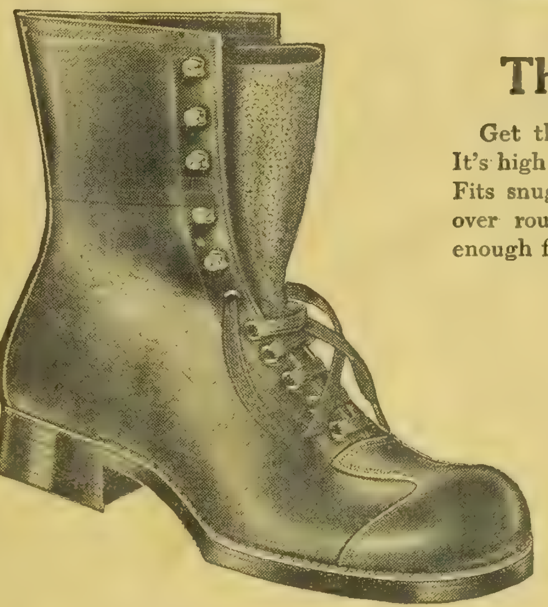
Sales have started, and it sure does me good to hear them praise your shoes. The man who just left with a pair of No. 446 said, "I know of about six fellows who have this same shoe, and have worn them almost a year."

Tuesday, Mr. McCurdy got his second pair of No. 401. Two years this June he bought the ones he had on. I had half-soled them four times. Mr. Caldwell came in and pulled off his rubbers and said, "Look at those. Bought them last summer and they are good for this, and not a cent put into them either." They are No. 446.

As to the wearing qualities, I have had several parents speak of them lately; and that is the kind of shoes I want.

Yours truly,

(Signed) F. E. BALDWIN,
Northbranch, Mich.



The Plowboy

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Plowboy

Grain Cuff
470—Double Sole Tan
446—Single Sole Tan

Split Cuff Single Sole
458—Chocolate
455—Smoke
452—Tan

1,000 Miles of Wear

Always Dries Out Soft

Here's a double-tanned horsehide work shoe that will never get stiff or hard. Many leathers dry out hard after they get wet. But this horsehide, double-tanned by our own private process in our own tanneries, dries out as soft as velvet. You can soak these shoes in mud, water and slush. They will always dry out soft and pliable.

We are work shoe specialists. Our goal is to make the world's strongest shoes. To get the best leather we do our own tanning. We use horsehide exclusively. For it is the toughest leather known. For centuries the fine saddles of the hard-riding Cossacks were horsehide covered. Big league baseballs are covered with it too—because it is the only leather that withstands such hard knocks.

And our special double tanning makes this leather soft and pliable as buckskin. Note its extra thickness. Feel its flexibility. Even after soaking it dries out soft as velvet. You'll get a new idea of foot comfort from Rouge Rex horsehide shoes.

You'll also be surprised by their long wear. They usually wear at least 1,000 miles. But customers tell us they wear 3,000 and 4,000 or more. We are frequently told they outwear three ordinary pairs.

If you are naturally hard on shoes, you'll say these are the most economical shoes you ever wore. See how tough and thick this horsehide is—and how soft. Then you'll understand why Rouge Rex wear like iron and do not tire your feet.

For every job there's a special Rouge Rex shoe model that fits your need exactly. For farm, mill or mine, for woods, field and camp we make a shoe that suits the conditions. And all are the same tough, pliable double-tanned horsehide.

If your dealer cannot supply you with Rouge Rex, we'll see that you are supplied from our nearest dealer. Write for catalog.

Rouge Rex Comfort Shoe

Tenderfeet welcome these shoes. They're soft and flexible as a moccasin, yet wear like iron. A typical factory or dry weather shoe so light you don't realize they are on duty. Ask for 435 in chocolate, 434 in tan. Both outing models. Ask for 495 in chocolate bluches.

HIRTH-KRAUSE COMPANY

Shoe Manufacturers and Tanners

Grand Rapids, Mich.

"Dept. 300"

The Michigan
BUSINESS FARMER

SATURDAY, SEPTEMBER 29, 1923

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RELIABLE ADVERTISERS

We will not knowingly accept the advertising of any person or firm who we do not believe to be thoroughly honest and reliable. Should any reader have any cause for complaint against any advertiser in these columns, the publisher would appreciate an immediate letter bringing all facts to light. In every case when writing say: "I saw your advertisement in The Michigan Business Farmer!" It will guarantee honest dealing.

"The Farm Paper of Service"

ROOSEVELT ON FALSE DOCTRINES

"ALL over the country," said T. R. Roosevelt, Jr., at Syracuse, N. Y., "there are sincere, but mentally limited fanatics and self-seeking politicians peddling false doctrines. These comprise such things as government price fixing and unsound loans. Steer clear of them. Remember that in the long run, anything which hurts the country hurts the farmer, just as surely as anything which hurts the farmer hurts the country."

POLITICS IN LANSING

LANSING is in the throes of a political situation which, according to no less an authority than Mr. John Fitzgibbon, veteran correspondent, is unparallelled in the history of the state.

The situation has arisen over the partial payment of the county agent's salaries by the Michigan State Farm Bureau, at least that is what is supposed to be at the bottom of it.

Although it affects the Agricultural College and should be of some concern to the farmers in Michigan we must admit that we have heard little or nothing about it from the farmers themselves, although their would-be spokesmen have arisen to remark both from the platform and the daily press that the farmers of the state were all wrought up about it.

That our readers may have a clear statement of the facts in the case and thus form their conclusions we are publishing on page 3 of this issue a complete statement by the competent political authority mentioned above, which is simply a clear statement of the case and we leave it to our readers themselves to make their decision as to who is right and who is wrong, if they are enough interested to tell us about it.

"EAT-MORE-BEANS"

NAVY beans are a major crop in the state of Michigan, and the position which the choice, hand-picked Michigan bean occupies on the American market, places it at the head of the list. Buyers pay a fancy price for our beans in competition with Colorado, California, and a few other states where they are grown.

Every division of the bean industry in Michigan, whether it be from the grower, the elevator, or the jobber, should be equally interested in the proposed advertising campaign to carry the message "Eat-More-Beans" to the American consuming public.

The scheme to advertise beans is not a new one but the practical plans for its accomplishment were never more nearly complete and ready to put in operation than they are today. There seems to be no question in anyone's mind but that the consumer demand for beans can be greatly strengthened by bringing their merits to the attention of the consumer, the same as the California growers have in the instance of citrus fruit, nuts, prunes, raisins, and other products of the Golden State. Anyone who is at all familiar with their plan of operation will readily subscribe to the proposed plan of increasing the demand for beans by intelligent national advertising.

We understand there is one party in the business in Michigan who is holding out of the present campaign because he believes that Michigan should advertise Michigan beans exclusively and therefore, eliminate the other states which are contributing. In the present plan, Michigan is asked to contribute only $16,000 out of a total of $50,000 to be spent in advertising. Our share, therefore, would not go very far in a national advertising plan, and we believe that Michigan would profit much more by the expenditure of $50,000 for the good of the entire bean industry than it would by a petty, though exclusive campaign which only scratched the surface of the market.

It is our prediction that if a $50,000 campaign is put on this year that this amount will be doubled within another year, and that the price of beans will be strengthened materially by the demand which this advertising is bound to create.

Advertising is simply bringing a thought to a prospect's mind at the physological time. If the housewife when she opens her morning paper saw the picture of an attractive pan of baked beans or a spread of beans laid out for the family dinner, accompanied by an attractive recipe for the preparation, it is safe to assume that she and a good percentage of those who read the advertisement would be eating beans that very evening.

We have always taken a great interest in the proposition to advertise this one product of Michigan which lends itself so well to a campaign of this kind, and we have done all within the power of this publication to present the facts to the farmers and others interested in Michigan so that they might understand the proposition when it was presented to them.

We had hoped to announce in this issue that the campaign had been closed and was under way with the full support of the Michigan jobbers who have been asked to contribute, but up to the moment of going to press we cannot get this assurance because there are, we understand, one or two who are holding out. We certainly trust they may see the light and soon, because this, of all years, with exceptional prosperity in every manufacturing community is the time to push the sale and increase the consumer demand of this great food product.

FOR CAUSE OR FOR EFFECT

THE more we read, and the more we hear, of the politicians who claim to be representing the farmer, the more we are led to the conclusion that most of what they write, and most of what they say, is to throw a smoke screen about their real aims and purposes.

Let's get down to business for just a minute!

Does the present high protective wall about American industry keep us from a world market for our products? The answer is: that it undoubtedly does, and will continue to do so (as it has in past history) so long as it is in operation.

Can anything actually be done about the present low prices of farm products? The answer is: that something can be done and is being done, and it is not being done by windy politicians or wordy editors. It is being done by the farmers themselves, who are organizing into strong selling organizations which do not play politics, but depend on sane marketing methods for bringing about the higher prices that they demand. These same business farmers, because of the scarcity of farm labor and for other good reasons, are curtailing their production this year to a point where the natural demand of a prosperous market is going to raise prices of farm products as only a few of the more optimistic market prophets even dare predict.

When the farmer gets back to a normal position, begins making money and the trend of population again starts toward the country will these same politicians and editors who are now doing nothing but spout about what ought to be done through legislation or some other dreamy-eyed will-o-the-wisp scheme, will they take credit for bringing farming back to a stable position? The answer is: that they certainly will, and the real business farmers who are doing the job of getting the old boat of agriculture back on a safe keel will get no credit, but the best part of it is they will ask none nor expect it.

Our hats off to you gentlemen! You don't say much, we don't see your pictures, we don't hear that you are going to talk at the next picnic, we don't read what you say in the political sheets which clutter our mail box but we know that you are hard at work and we begin to see the results which we knew would follow your efforts.

THE WHEAT SCARE-CROW

THEY were hardly less than traitors to the farming business, who raised the scare-crow of ruination to farmers because wheat had dropped below a dollar per bushel. So far we have failed to hear any clamor except from politicians or others who are living directly on the farmer, and these originated mostly in the states west of the Mississippi.

Wheat is of course, not the important crop in Michigan that it is in the western states, but if farmers there have been foolish enough to depend upon one crop, if by making no provision for the time when with curtailed European market and an increased production in other parts of the world, wheat growing on expensive American land can no longer be operated in competition, then they, in common with business men in other classes, must temporarily take their loss and make provision for changing their methods of farming in the future.

Michigan grows practically no spring wheat, the total crop of 1922 being only 130,000 bushels. Our winter wheat crop last year amounted to 14,196,000 bushels, and while valued at $16,325,000 did not equal the value of our bean crop. Our wheat crop was only slightly higher in value than our potato crop, even in a disastrous season, and the total value of all Michigan grown wheat was only a third of our corn or hay crop!

The actual result, therefore, of all the clamor over dollar wheat has been to dishearten our farmers, lower the price of their farm land and make every boy and girl on the farm anxious to get away from it into the city as soon as they can don long dresses or breeches!

If you will take the time to look over the Agricultural and Business Survey as prepared by the Department of Research, American Farm Bureau, which is reprinted in full on page 23 of this issue, you can learn from actual figures exactly where the farming business stands and where all other lines of endeavor stand in relation to it.

You will find for example, that seven major staples sold by the farmer are selling at higher prices than they did one year ago, (September 20th, 1922), and if you will read between the lines, you will see that the farming business is getting better every day and that the value of your farm, your equipment and your business is increasing.

If you had rather be cajoled with, cried over, and filled with hot air by those who are looking for political office, or some other soft snap, you will not read the actual figures as they are given.

We publish this department as a regular feature of The Business Farmer once a month because the kind of folks who like The Business Farmer want the facts, and we do our best to try and get them for them.

THE FARMER LABOR MOVEMENT

THERE is indeed some food for thought in the figures which have been given some publicity in the daily press, and whether they are accurate or not may be laid at the door of Mr. J. S. Wanamaker, President of the American Cotton Association, who we understand prepared them. They are as follows:

63½ dozen, or 760 eggs, pay a plasterer for one day's work of eight hours. 17½ bushels of corn, or a year's receipts from half an acre, pay a bricklayer. 32 chickens, weighing 3 pounds each, pay a painter in New York. 42 pounds of butter, or the output from 14 cows, fed and milked 24 hours, pay a plumber $14.00 a day. 175 lbs of hog, eight months' feeding and care, pay a carpenter.

Whether you believe in an alliance of farmer-labor or not, as has been suggested by so many well meaning persons, it is obvious that labor at present high prices and the farmer after the period of depression he has been forced through, the past three years, make strange bed fellows.

If we were a cartoonist we would draw an opulent citizen labeled "labor" occupying about three-quarters of the bed labeled "prosperity", and a thin gaunt person marked "farmer" occupying the small space at the other side and hardly covered by the blankets of home comforts which the laboring man enjoys. That cartoon, in our opinion, would just about express the present situation as relates to farmer and labor.

We do not begrudge labor its present prosperity, its right to work and honest employment, its right to secure as short a working day as is commensurate with good and healthy living and enjoying the luxuries and comforts of home life to which men are entitled, but we do begrudge labor occupying most of the bed and at the same time calling on the farmers to help fight their battles for more than they are entitled to. If there is to be an alliance between farmer and labor it ought to be an alliance by which labor agrees to bring the farmer and his business up to their standard, because to advance equally would still leave the ratio too lopsided. It would look like the bed we have pictured above.

POTATOES STILL FAVORABLE

THE United States Department of Agriculture predicts a crop of 389,674,000 bushels of potatoes this year, which compares with a five year average of 390,173,000 and last year's big crop of 451,185,000.

This is late enough in the season so that the crop is pretty well set and if anything, there is more apt to be a lessened than an increased crop. This would seem to be a ray of sunshine for our potato growers who were hit so hard in 1922.

With the labor of the country well employed at high wages and consuming large amounts of food stuffs there is no reason why the potato grower should not get a fair price for his product this year, and we only hope that our growers will hold back enough of their products so that at no time will the market be flooded to a point where it drops from this unnatural cause.

PUBLISHER'S DESK

HOME WORK

Do you know of any other companies that are reliable where I can get work to do at home as I am very anxious to get some work that I can do at home, for I have quite a lot of spare time that I could work if I had something I could do at home, as we do not like to break up our home. I would be very thankful if you could send me addresses of some companies that you know are reliable.—Mrs. E. T., Mayville, Mich.

THE above is a fair sample of several inquiries that come to my desk almost every week from sincere women who wish to find some means of employing their spare time on the farm, and usually it is someone who is harassed by poverty and handicapped by some physical deformity.

I wish I could offer some suggestion to these worthy readers, and could tell them of some sort of home employment that we could recommend.

Some papers accept the advertising of home knitting machines, and other contraptions which are sold with the expectancy that they can be paid for by home work, but we have never yet found where this worked out continuously satisfactory, so that it would be the last thing in our minds to advise any of our readers to invest the 50 to 75 dollars necessary to purchase a home knitting outfit, neither will we accept the advertising of these concerns, in the Business Farmer, because we believe that although not fraudulent, they are misleading.

We are suggesting to the farmers in Michigan that they employ the spare time on the farm in picking beans, because this class of work has for years been done in the small towns and cities, and lately by expensive female help, because of the competition for this class of labor from manufacturing institutions. We now have a prize offer of $10.00 for the best plan for a home made bean picking machine, and we have already published two simple plans in the September 15th issue. In this issue on page 3, you will find a letter from a Saginaw county farmer who bought an expensive bean picking machine, which has made him a nice profit. This of course is machine picking and not hand picking which the women on a farm could do. Even a cripple or anyone who has the use of their hands could pick beans, and not only save the cost of picking, but keep the culls on the farm.

We want to say just a word to the men folks about this home work of farm girls and women. If it is done on the farm, for goodness sake, let the women have all or part of the money you save over having it done in town. Nothing so disheartens a woman as to have the man of the house hold on to every penny he can get. The modern and usually successful married couple have a single purse, and their relations form a partnership in which all of the good things are split 50-50.

The Publisher's Desk is open for any suggestions for the home employment of our farm women, and we would be glad to publish any suggestions from our readers.

"JUST ANOTHER"

DEAR Sir: In some way my letter to you must have been overlooked. The very day (about June 23) I received my settlement and I sent you a letter on our afternoon mail. It was some joke how you folks woke ——— up. Indeed it was such an awakening they sent me my order and money, too. I sent back the check as I only wanted what was rightly mine. I have friends who have had just such trouble with the same company.

Have been reading your article for the last two weeks and also the replies regarding the people who have gotten stung by the American Music Publishing Co. and other companies and I wish to warn them that it also goes under the name of the L. Wolfe Gilbert Music Corp., 1658 Broadway, N. Y. I was not so good as to send them the two dollars which they ask for, but I did get stung by the Underwood Art Goods Company conducted by a woman named Ruth Underwood. I was to send them a dollar which they were to hold until I had done twelve dollars worth of work then it was to be returned to me. They sent me a cheap handkerchief which I was to keep and make a sample for their inspection of my work, which I did. If it passed inspection I was to get twenty-five cents apiece for all I could make, but, of course, my work did not pass, as the handkerchief they sent me was machine made while mine was hand made. My work has been very highly recommended but I do think one dollar an awful price to pay for a ten cent handkerchief. Don't you? Hope to see this in print.—Just Another Darn Fool, Howell, Mich.

THE ——— TIRE COMPANY

IF you can will you please tell me if the ——— Tire Company of Bay City is a safe company to buy stock in? Agents have urged us hard to buy in this company and several of my neighbors have done so. I would like to invest if you thought it safe.

—I certainly could not advise the purchase of any industrial stock as an investment unless you can afford to gamble on the amount you invest.

Any industrial is a business speculation, and no man has a right to advise another to purchase it. The only safe place for savings is in government securities or farm mortgages, or reliable bonds. The above statements refer to all industrial speculations and not necessarily to the one you mention. It is always best not to put all of your eggs in one basket.

MADE 'EM SIT UP!

In today's mail I received my money from ——— Company. To say I am thankful is not enough. I am doubly so. They surely sat up and took notice when you wrote. They clipped the letter you wrote to their check so I see how you brought it about. Again I say thank you and wish you all success to be had. A Subscriber and always one.—Mrs. F., Woodland, Mich.

HOME TANNING OF LEATHER AND SMALL FUR SKINS

DIRECTION for tanning hides on the farm are given in a new bulletin just published by the United States Department of Agriculture, and issued as Farmers' Bulletin 1334, Home Tanning of Leather and Small Fur Skins. This bulletin was prepared in response to the thousands of requests received from the farmers for information that will enable them to make use of the hides produced on their farms and for which there is often no market. Sometimes hides can scarcely be given away, yet farmers must pay from $1 to $1.50 a pound for leather in small pieces. Under such conditions farmers naturally feel that they must either work up their raw materials or do without finished leather.

While it is possible to do a fairly satisfactory job of tanning on the farm it requires some skill and a considerable amount of experience. Only in the event that the margin of price between the raw hide and the finished product is such as to warrant the farmer in tanning for himself is it advisable to attempt home tanning. The inexperienced can not hope to make leather equal in appearance, or possibly in quality, to that obtainable on the market, but farmers and ranchmen should be able to make serviceable leather for most farm purposes by carefully following the directions given in the bulletin.

It is never advisable for an inexperienced person to try to tan valuable fur skins or large hides to be made into coats, robes, or rugs. The results would be disappointing, both in appearance and quality. Small fur skins of low market value, however, can be tanned for home or country use, according to directions given in the bulletin, a copy of which may be obtained from the United States Department of Agriculture, Washington, D. C., as long as the supply lasts.

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Mt. Clemens, Mich.

I enclose $............... for a .... years subscription, this entitles me to every department of Business Farmer Service, without further cost for the full period of my subscription.

M.. RFD No.........

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(If it is a Renewal, mark X here ☐ and if possible send the address label from this or any recent issue to avoid mistakes.)

The Farm Home
A Department for the Women

Edited by MRS. ANNIE TAYLOR

DEAR FOLKS—Now is the time to pick the bitter-sweet and paint weeds for the home during the winter months, when the flowers are asleep. Just a few mullin in a corner painted in bright shades give an attractive look to that part of the room, that looked bare and dark. Swamp berries, and barberry make delightful looking baskets. Paint some common milkweed pods and stand in a vase on the table or book-case.

Remember our recipes for the cookbook and our personal column is for you and I want you to use it. Read our "Exchange" and feel that it is your very own to advertise your wants.

Your Friend,
Mrs Annie Taylor

Address letters: Mrs. Annie Taylor, care The Business Farmer, Mt. Clemens, Michigan.

SELLING THE HOUSE

By Anne Campbell

I did not mind the thought so much.
  To sell the house was fine!
All houses were the same to me.
  They painted up a sign
And hung it so that passersby
  Could hardly fail to see
That here there was a house for sale
  And please apply to me.

Some folks came in to criticize
  And some came in to praise;
And some came in to chat awhile,
  And some came in to gaze.
They lingered in the cozy rooms,
  And I could almost cry
When they dropped in to speak of terms,
  So scared I was they'd buy!

I did not mind the thought so much,
  It would be fun to sell!
To move into another place
  Would please me mighty well;
But when they tried to close the sale
  Somehow I never could.
I couldn't bring myself to leave
  The dear old neighborhood.

I couldn't move the little print
  Of hands along the stair.
I couldn't move the dreams that hung
  In every corner there.
I couldn't move the love and joy
  Behind each time-worn wall,
And so I just took down the sign
  And did not sell at all!

(Copyright 1923, Detroit News.)

THE HOME SEWING CLUB

SUMMER is over and so many pleasant tasks are before us with the coming holidays and if we get the right start it will be so much more pleasant and the work will be a joy. I started a sewing club of just six women and we meet every Tuesday at two o'clock and work on different articles and our conversation is upon all subjects. We just spend a lovely three hours together. At four o'clock the hostess for the day serves a very simple tea. It is against the rules to be extravagant. This summer I have made a complete luncheon set of five pieces and feel that I have accomplished something worth while, and at the same time enjoyed the pleasant company of some dear friends. It is surprising the help you can get from so many different minds. Each one has some suggestion when you get stuck on a certain stitch. We discuss dress and this fall hope to make a great many of my Christmas gifts.

In making a lampshade, which is quite common to a great many folks now, you might have a member who could show you how to make one of these delightful shades that just seem to make a living-room more inviting.

There are always a few friends who are fond of sewing and the afternoon is one well spent and not wasted.

You have the companionship of your neighbors and it takes you out of your own home at least one afternoon a week. If this is too often make your sewing club every other week.

NAPKINS TO SAVE YOUR LINEN

THE best housewives no longer feel they must have pure linen for their table service. In the last few years this fabric has become so expensive that it was necessary to look to other materials for the making of lunch cloths and napkins. So many pretty and durable cloths are found that even the most careful and conscientious choose the cheaper materials for at least part of their napkin supply. The laundries are hard on linen and these less expensive napkins last as long and perhaps a little longer even if one cannot launder them at home.

Unbleached muslin never fails to fill a need and when used to make up a lunch cloth and napkins, there is no comparison to linen in the price. Make them generous, trim them with bands or hems of gingham, percale, or cretone and they will look much like unbleached linen when laundered. A little applique in colors to match the china and an edge of blanket stitch makes a fancier napkin, quite acceptable as a gift.

The various lovely ginghams offer no end of possibilities for napkins which launder easily and well. A yard will make nine if an edge is crocheted or a band set on. Or it will make four eighteen-inch ones. Cross-stitch in bright colors—carefully chosen as fast—makes an interesting finish for both the edge and a corner. An initial in cross-stitch looks well, especially if a few French knots are used to decorate. A set of blue napkins with a small yard-square cloth makes an excellent breakfast set which one can wash out and keep fresh with little effort.

Perhaps there is nothing which gives a smarter touch to an afternoon tea of luncheon than black-and-white napkins. These might be of the striped percale edged with half-inch lace, white cross-barred muslin with an inset border of black and white stripe, or crepe voile with a black cross-stitch edge and a design outlined in black in the corner.—E. M. Paige.

VALUABLE HOUSEHOLD HINTS

WHEN using a meat-grinder for crumbling dry bread, a paper bag over the end of the grinder will catch the crumbs and prevent them from being scattered.

To keep a large piece of cheese for any length of time without molding, pour melted paraffin over the cut surface.

When boiling a number of small articles, make a cheese-cloth bag and put them in it. In this way none will be lost and all can be removed quickly from the suds.

When boiling old potatoes, add a slice of lemon to the water in which they are to be cooked and you will find that the potatoes will not discolor. A teaspoon of vinegar will also help.

If glass-curtains are dipped in a little starch when laundered, put back on the curtain-rods while wet and hang at the windows, they will look like new without ironing.

Slip-covers of washable material for pan-holders can be easily washed often and slipped back on the pad. This prevents the necessity for making or buying new holders frequently. The covers are more easily laundered than a thick holder.

Mothers Problems

OFF TO BED

TO most mothers there is no sweeter time than the end of the day when she tucks her little folks off for the night. It is the time of day when Mother and the children get very, very close, and no mother, no matter how eager she may be to get the evening's work out of the way, should hesitate to take a little time at bed time to draw near to her children.

The youngest boys and girls may drop off to sleep at once, but the older ones of or approaching school age are full of questions their curious little minds want answered. Sometimes they are of a very intimate nature, such as they could not talk without embarrassment in the daytime. They are questions that should be answered and answered by Mother alone, but if Mother has no time to remain by the bedside a few minutes for a little talk, the chances are they will never be put to Mother, and eventually their information will come in a way exceedingly undesirable.

Be your children's confidante. Let them feel that there is no one nearer and dearer to them, and no one more desirous of answering their puzzling questions and telling them the truth no matter what others may have told them. Keep yourself close to them just as long as you can. Daytimes when work presses in on every side, it is hard to give full attention to the children and their problems, but in the evening, at bedtime, it is easy to win their confidence.

Too many mothers stop going up to bed with their children long before they should. So far as necessity goes, why the children can get into their nightclothes unassisted, and crawl between the sheets but Mother should be there to hear the prayers, to kiss away the disappointments of the day, to suggest ways to make the next day better and happier. And most of all she is needed to answer the questions that the cool, empty darkness bring to the fore in the child's brain. Better by far to let the dishes stand unwashed a while than to risk your child's confidence by giving him no time to talk freely and openly with you. Lie down on his bed to-night and let him talk!

THE TEN-MINUTE LESSON

THERE is a difference between having a child help with the work, and teaching him how to work. A girl may be told to dust a room, yet never learn how properly to dust. She may be told to make the beds, yet never learn how properly to make them. Children are observant, it is true, and "pick up" a great deal of learning just by watching; still, without a real lesson, they are very apt to get only a surface knowledge of the work they do, and grow up without acquiring more.

It is an excellent idea—and one that has been carried out effectively by more than one mother—to take a stated time each day for a home-lesson period. During that period, the child should be taught all the whys and wherefores connected with his task. His work should be performed under the watchful eye of the mother and Mother should not be satisfied with anything short of a perfect performance.

There is, we have all been told, a right and a wrong way to do everything. The child, left to himself, may learn only the wrong way—and the wrong way invariably is full of handicaps. Since a child must learn various forms of work, why not begin early to teach the way that is right, and therefore best?

Sometimes, oppressed as we are by work, we slight tasks, regretfully, yet knowingly. The child, observant always, learns also to slight things. Yet that is exactly what a child should not learn to do. That is why time should be taken to teach him the way that to the best of our knowledge is correct. Ten minutes a day for such valuable training is little time indeed to give, yet ten minutes a day spent faithfully and regularly teaching a child how to wash dishes correctly, do simple ironing correctly, fill the water-tank correctly, or do correctly whatever tasks the child is old enough to undertake, will prove in later years the most valuable daily ten minutes ever given to his upbringing.

When Washing Your Lamp Chimneys, lift them out of the water and set them on the hot stove; they will not break. Let them steam; then wipe on a clean cloth and they will be as clear as crystal.

Personal Column

Bobbed Hair—A long letter and written with a great deal of thought upon the writer's part came to me on the subject of "Bobbed Hair" and I must give you some of the article. Our reader says:—"Because Mother Eve wore her hair long, must all women go back to the primitive age for style. Eve wore her hair always hanging down her back. Do you? The men wore long hair long ago, why not now? There is nothing in the ten commandments that says 'Thou shalt not wear bobbed hair.' 'A woman's hair is her crowning glory.' Then wear it bobbed and show the crown and live in glory." I am the mother of three fine girls grown to young womanhood and all have their hair bobbed.—Maud L. Peet.

Another Reader's Opinion—I would like very much to say that I for one think bobbed hair an ideal thing. I am 29 years old and the mother of four little children, and have bobbed hair. Now, that I know the comfort of it I do not want long hair for some time. Not only the comfort, one can keep tidied up all the time, and the children like it too. I heard women say it takes years and years for it to become long again, but I think different. A girl friend of mine had bobbed hair last summer, and now she has long thick beautiful hair. I think if girls want bobbed hair, let them have it. I was a girl once, and know how it is to want for something and not be allowed to have it; so give her a chance. Let her have bobbed hair one summer and see how you like it.—E. M. S.

Let Us Inspire Our Girls With Lofty Ideals—This sordid word flapper was devised by the London hooligan for the purpose of showering his contempt upon the friendless English working girls. May we forget it.

She's the daughter of my neighbor,
Who, with strivings, waxeth old,
And she'll make a home for daddy
When the dear old home is sold.

She will rise above the turmoil,
Refute the poison pen;
Chastise the leering gargoyle—
And be the mother of great men.
—George J. Barrie, Huron County.

Where Do We Find Mendets?—Would you kindly tell me where I can buy some mendets; the soft lead plugs for repairing holes in milk pans by putting the plug in the hole.—Mrs. A.

—Mendets can be bought in any five and ten cent store or in a hardware store. If you are too far away, write to the nearest town, address Five and Ten Cent Store and name of town.

Cleaning Grey Suede Slippers—I would like to know how to clean gray suede slippers. I have some and do not know what to clean them with.—C. L. N.

—Brush the slippers first with a stiff brush, clean with a cloth dampened with gasoline or carbona, which is in any drug store. Buy a grey powder the shade you want and dust on slippers. I keep mine clean this way. The powder can be bought in the shoe store.

Has Any Reader Tried This With Success—Will you please tell me thru your columns how to wash a chamois vest so that it will not get hard after it is dry? I think the Business Farmer is a fine paper, we look forward to its coming each time.—Mrs. A. W. J., Edmore, Michigan.

—Personally I have never had any luck with cleaning chamois gloves. They are always hard and much smaller after washing, even when I kept them on my hands. A great deal depends upon the quality of chamois that is in your vest and will entail some risk if you launder it at home. If you prize it very much I would suggest sending it to a dry cleaner and then it will be like new when returned. If any reader has had success with this work, let us have the benefit of your experience.

Water Spots on Varnished Table—The rain beat in on my library table that is highly polished mahogany. I did not notice it for twelve hours and a large white spot was left. I washed the spot with ivory soap and luke warm water and rubbed hard until the white started to disappear. I rubbed O'Cedar oil on the spot and polished it again. It made the top look just the same as before.—Annie Taylor.

White Wood Lice—Now may I ask a favor through this column? I wonder if others are bothered the same with the little white wood lice on furniture and upholstering, also on clothing that is put away. They were first seen on the furniture. Can anyone tell me what to do to get rid of them? Ever a reader of M. B. F.,—Mrs. G. T. H.

—You may obtain a bulletin from the United States Department of Agriculture on lice and other insects that infest the home.

Mirror Resilvered—Some time ago a reader asked how to resilver her mirror. I wrote to different concerns, but no answer. There is a shop in Detroit that does this work and the name is "City Mirroring and Beveling Works," 5449 12th Street, Detroit, Michigan.

The Runner's Bible

Title Registered in the U. S. Patent Office

Let your speech be always with grace, seasoned with salt, that ye may know how ye ought to answer every man.—Col. 4:6.

Every man shall bear his own burden.—Gal. 6:5. There are diversities of gifts, but the same spirit.—1 Cor. 12:4.

But now are they many members, but yet one body. ' ıe eye cannot say to the hand, I have no need of thee, nor again the head to the feet, I have no need of you.—1 Cor. 12:20-21.

It takes all the light in a sunbeam to fill its own angle; each spoke in a wheel can lift but its share of the weight; each child of God carries a different message. Hence there must be no shrinking, nor interference with the duty of another, that the whole may be perfect, divine. In the light of all this, how foolish is jealousy.

RECIPES

Apple Pie with Quince Flavor—One quince, three-fourths cup sugar, a little nutmeg and a little cinnamon. Chop the ripe quince, cook until tender in just enough water to cover, and mix it with enough thinly sliced apples to fill one pie; add the sugar, the nutmeg and cinnamon. Bake with one or two crusts.—From The Designer.

Elderberry Jelly.—Have any readers ever made elderberry jelly? By using very tart apples to supply necessary pectin, and using only enough of the elderberry juice to nicely flavor it is delicious. Elderberries are very deficient in pectin, and will not jell alone.—Mrs. E. L. Johnson.

Baked Quinces—Wipe, quarter, core and pare eight quinces. Put in a baking dish, sprinkle with three-fourths cup sugar, add one and one-half cups water, cover, and cook until soft in slow oven Quinces require a long time for cooking.

Quince Marmalade—Wipe quinces, remove blossom ends, cut in quarters, remove seeds; then cut in small pieces. Put into a preserving kettle, and add enough water to nearly cover. Cook slowly until soft. Rub thru a fine sieve, and add three-fourths its measure of heated sugar. Cook slowly twenty minutes, stirring occasionally to prevent burning. Put in tumblers.

Citron Peel—Can any of the readers tell me thru the paper how to make citron peel like we buy. Would like to try and make some. I enjoy this department and get such good recipes and advice from it.—Mrs. W. C. P., Rives Junction, Michigan.

Gold Cake—Beat to a cream one cup of sugar, one-half cup of butter. Beat very light, two whole eggs, the yolks of four eggs, one-half cup of milk, two and one-half cups of flour, two teaspoons of baking powder. Flavor to taste.

Silver Cake—Beat one-half cup of butter with one cup of sugar. The whites of four eggs beaten to a stiff froth. One-half cup of milk, two and one-half cups of flour, two teaspoons of baking powder. Flavor to taste.

Lemon Filling for Cake—One lemon, juice and grated rind, one cup of cold water, one cup of sugar, one egg and one tablespoon of cornstarch.

MY FAVORITE RECIPES

Sailor Duff Desert—Four tablespoons sugar, two eggs, one cup molasses, four tablespoons melted butter, beat well. Two teaspoons soda dissolved in a little hot water; add three cups flour beat well, one cup boiling water, steam one and one-half hours.

Sauce—Four yolks of eggs, two cups pulverized sugar, two teaspoons vanilla. Add this to one pint of whipping cream just before serving.—Annie Taylor.

—if you are well bred!

The Manners of a Hostess—First of all a hostess must show each of her guests equal and impartial attention.

Also, altho giving one of the guests her undivided attention, she must be able to notice anything amiss that may occur. If a glass is broken by a guest and it is one of your choice pieces, you should remove it and appear more concerned about your guest and her comfort at the table than over the broken glass.

WOMEN'S EXCHANGE

IF you have something to exchange, we will print it FREE under this heading providing: First—It appeals to women and is a bonifide exchanges, no cash involved. Second—It will go in three lines. Third—You are a paid-up subscriber to The Business Farmer and attach your address label from a recent issue to prove it. Exchange offers will be numbered and inserted in the order received as we have room. —MRS. ANNIE TAYLOR, Editor.

102—Woman with two children wants position as housekeeper.—Mrs. Sadie Fell, R. 1, Lyons, Michigan.

103—Good home for boy about 12 years old who will do chores for schooling and clothes.—Mrs. Myrtle Reid, Main, Michigan.

Although people's tastes differ, everyone desires tender, wholesome, nutritious, well flavored bread and flaky palatable pastries, which accounts for the widespread popularity of **LILY WHITE FLOUR,** *"The Flour the Best Cooks Use."*

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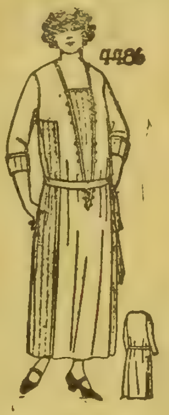
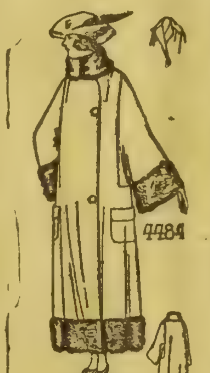
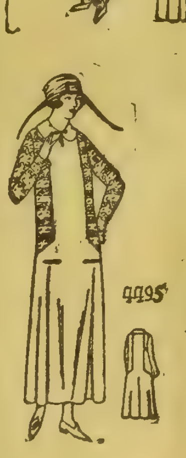
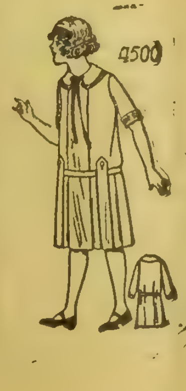
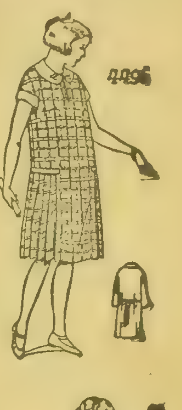
AIDS TO GOOD DRESSING

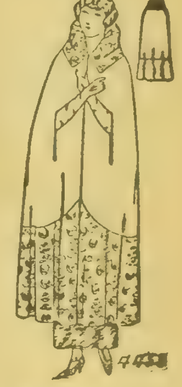


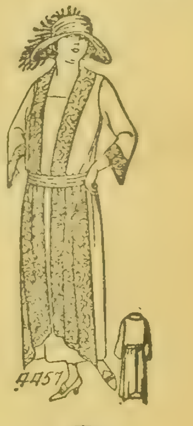












IN planning the fall sewing I might add that the straight unbelted line is the most popular; of course, the belt is used because there are some figures that need a break in the line. The Coats are long with large buttons fastening on one side. Fur is used on nearly every coat. The short coat is still very good and a great many are shown in the shops. Brown, cinnamon, and beige are the most popular shades.

Coat No. 4451 is a very smart style.

4495. A Stylish One Piece Dress—This model has youthful lines, and new style features. It portrays an attractive combination of plain and striped material. One could use braided or embroidered fabric for waist and sleeve, and taffeta, satin or kasha for the panel and skirt portions and for the collar. The Pattern is cut in 3 Sizes: 16, 18 and 20 years. An 18 year size requires 3 ¾ yards of 40 inch material. To make sleeves and waist portions of contrasting material as illustrated requires 1 ⅝ yard. The width at the foot is 2 ⅝ yards.

4484. A Stylish Seasonable Coat—This is a model good for all cloakings, for velours, kasha, plush, and other pile fabrics, and for fur. The collar may be closed high at the neck, or rolled low with the fronts forming revers. The Pattern is cut in 4 Sizes: Small, 34-36; Medium, 38-40; Large, 42-44; Extra Large, 46-48 inches bust measure. A Medium size requires 5 ½ yards of 44 inch material.

4480. A Set of Smart Waist Accessories—This group comprises several attractive collar styles, and a quaint new cuff. Collar No. 1 and the Cuff would be pleasing in taffeta or organdy, with bands of velvet ribbon, or bandings in a contrasting color. Corded self tucks, and an edge band in contrasting material would be effective. No. 3 is good for any of the dress materials now in vogue. For firmness it may be interlined with coarse canvass, or the edges may be wired. No. 4 is a pretty "bertha" style, worn low on the shoulders. It may be of crepe, crepe de chine, silk or satin, and finished with any preferred trimming. The Pattern is cut in 4 Sizes: Small, Medium, Large and Extra Large. No. 1 requires ⅜ yard, No. 2 requires ⅜ yard (for one pair of cuffs), No. 3 requires ⅜ yard. No. 4 requires ⅝ yard of 36 inch material.

4509. A Popular Blouse in Slip On Style—An old friend with new features is this stylish model. The fullness of the front, makes this style attractive for slender figures. The sleeve may be in wrist or elbow length. The Pattern is cut in 6 Sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. A 38 inch size requires 2 ⅝ yards of 32 inch material. If made with short sleeve 2 ¼ yards will be required.

4496. A Dress with New Features for the Growing Girl—Plaid gingham with linen in a contrasting color would be attractive for this style. Printed cotton, crepe or ratine are also pleasing. The waist portions are cut with skirt sections, that are joined to plaited side portions. The short sleeve is cut in one with the waist. The long bell shaped sleeve is added. The Pattern is cut in 4 Sizes: 8, 10, 12 and 14 years. A 12 year size requires 3 ½ yards of 36 inch material. To trim as illustrated with contrasting materials requires ½ yard 36 inches wide.

4451. A Stylish Top Garment—Heather mixture, caracul and other pile fabrics, polo cloth, bolivia, and fur are good for this style. The model shows the popular side closing, and a new collar. The Pattern is cut in 7 Sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38 inch size requires 4 ½ yards of 54 inch material.

4504. A Neat and Pleasing Frock—The stylish side closing and the pretty basket pockets will please the little girl for whom this dress may be selected. The sleeve may be in wrist or elbow length. Gingham with collar, vest pockets, belt and cuffs in contrasting material will be good for this design. Brown linen with tan or white for trimming is also attractive. The Pattern is cut in 4 Sizes: 4, 6, 8 and 10 years. A 6 year size requires 3 yards of 27 inch material.

4486. A Good Model for Mature Figures—The combination of plain and striped material here portrayed is very appropriate for this style. The long lines and "V" shaped vest, are especially becoming to women of mature figure. Ratine and linen or gingham and chambrey could be used for this model. The Pattern is cut in 7 Sizes: 36, 38, 40, 42, 44, 46 and 48 inches bust measure. A 38 inch size requires 5 ⅜ yards of one material 36 inches wide. To make as illustrated requires 2 yards of plain material and 3 ⅜ yards of striped material. The width at the foot is 2 ¼ yards.

4453. A Stylish Wrap—This model shows the circular effect that marks many of the new models. It is attractive for velours, kasha cloth, faille, velvet and other pile fabrics, also for fur. Brocade silk, and embroidered chiffon could also be used. For service and utility wear, double faced coatings, twill or heather mixtures would be desirable. The Pattern is cut in 4 Sizes: Small, 34-36; Medium, 38-40; Large, 42-44: Extra Large, 46-48 inches bust measure. A medium size requires 5 ⅜ yards 40 inches wide. For collar and flounce of contrasting material 3 yards 40 inches wide is required for a Medium size.

4500. A Good Model for a School Dress—This is a splendid style for linen, gingham or jersey. The closing is effected under the panel in front. The sleeve may be in wrist or elbow length. Brown linen suiting, with ratine bindings in a contrasting color would be attractive for this model. The Pattern is cut in 4 Sizes: 6, 8, 10 and 12 years. A 10 year size requires 4 yards of 36 inch material.

4457. A Stylish Costume for the Woman of Mature Figure—Navy blue satin with braiding in black silk would be attractive for this style, or one could combine plain or figured silk as illustrated. The panel tunic and Tuxedo collar give length of line to the figure. The bell shaped sleeve is a popular model. This Pattern is cut in 7 Sizes: 36, 38, 40, 42, 44, 46 and 48 inches bust measure. To make the dress of one material will require 6 ⅜ yards 40 inches wide for a 38 inch size. To make as illustrated requires 2 ⅜ yards of figured and 4 ⅜ yards of plain material. The width of the skirt at the foot is 2 yards. To make tunic, collar and sleeve facing of contrasting material, requires 2 ½ yards 40 inches wide.

4501. A Comfortable Overcoat for a Growing Boy—Scotch Mist, heather mixtures, serges, cheviot and other coatings are good for this style. The Pattern is cut in 5 Sizes: 6, 8, 10 12 and 14 years. A 12 year size requires 2 ⅜ yards of 54 inch material.

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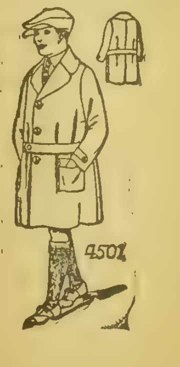
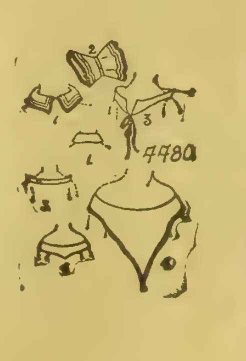
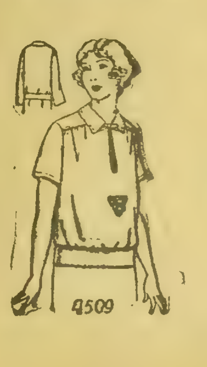
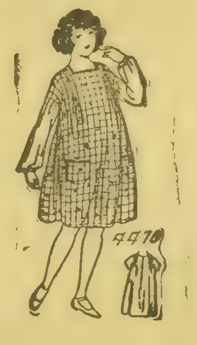
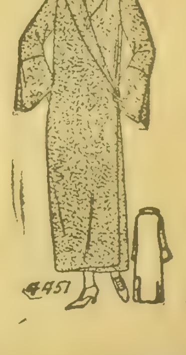










The Children's Hour

Address all letters to the Children's Hour as follows:

UNCLE NED,
The Business Farmer,
Mt. Clemens, Mich.

THE JUMPING WILD PIG

A WILD Pig, or Peccary, once boasted of his jumping ability and challenged a Hare. The test was to be which could jump across a wide river.

The Hare made a wonderful leap. but missed the further bank by a few inches.

The Peccary jumped and fell in the middle of the stream.

Both asked the Fox which had won.

"Neither," said the Fox, "for you both fell in the water. A failure is a failure, whether by only a few inches or half the width of the stream."

Almost to do a thing means little.

OUR BOYS AND GIRLS

Dear Uncle Ned:—May I join your merry circle? I have never written before and have never seen any letters from around here so thought I would write. However, I hope this letter does not get an introduction to the honorable Mr. Waste Paper Basket. We take the M. B. F. and papa thinks it is such a nice paper because it is so helpful. I always read it through and enjoy reading the Children's Hour. How many of the cousins have a scrap book? I have one with two hundred and seventeen pages in it, and I have it nearly filled with stories, poems and pictures. They are as handy in school too. Have any of the cousins the song by the name of "My Papa's the Engineer." If any have it will they please send me the words? I suppose I should give a sketch of myself. I was eighteen years old on the 30th day of July. Have I a twin? I am five feet in height, weigh one hundred pounds, and have medium brown hair and dark blue eyes. I will send in a few riddles for the cousins to guess: A man married a woman by the name of Elizabeth. She had two children when he married her. What did he get? Why is a lame dog like a school boy adding six and seven? What benefit can be derived from a paper of pins? What do lawyers do when they die? I will give a present to the one who answers the most riddles. I would also like to hear from boys and girls of my age and over. I will promise to answer all I receive. The answer to Etta Bannister's riddle is "Holes." I will close now with a riddle for Uncle Ned to guess. Why is a true and faithful friend like a garden seed? Will close with love to Uncle Ned and cousins. From your niece,—Mildred Parker, R2 Cass City, Michigan.

—I can't guess the answer to your riddle although I realize there is a likeness. Write and tell us the answer.

Dear Uncle Ned:—I have been a silent reader of the Children's Hour for quite a long time but have never written. May I join your merry circle? I hope you will permit me to. I love to read the letters because most of them are so interesting. I am a girl eleven years of age, weigh about 75 pounds, have blonde hair, brown eyes, and my hair is curly and quite long. Maybe I will have it bobbed. My mother wants me to. I will be in the seventh grade when school starts. I have about two miles to go to school. I am going to tell you about three of my pets, a dog, a sheep, and a lamb. My dog is still a puppy, but is quite big. His name is Shep or Sheppie. These are a few of his tricks. We tell him to speak and he will bark, he will roll over when we tell him to, he will shake hands, and jump through a tire when we hold it up for him. My sheep was a lamb only one day old when we got her, a funny looking thing she was. Mostly legs. We named her Nanny. We got her from a neighbor and because we had no sheep, we had to feed her with a bottle. We kept her in a big box in the kitchen because it was winter when we got her. She would always jump out of the box. She is big now and has a lamb. A very fat lamb it is. We named it Bessie and we keep them in the orchard. The minute the mother hears her name spoken she will blat. I think the answer to Miss Doris Margaret Scott's riddle is a "Well." I hope I guess it right because I love to receive letters and answer them too. Will some of the cousins please write. I will answer all letters received. I don't see how this letter can escape the waste paper basket. Your niece, [illegible], Cass City, Mich.

—So your mother wants you to have your hair bobbed. You are lucky as many girls want to wear their hair bobbed but their mothers will not let them. Write again.

Dear Uncle Ned:—I haven't written to you in quite a while so I guess I will write a few words. I'm living in town now. I am going to live here in town this winter. Well how is the weather down there now? It has been kind of hot around here lately, but is a little cooler today. Everything is growing around here this hot weather. Well as my letter is getting kind of lengthy, I guess I will close, hoping to see this in print.—Lawrence Chapman, 92½ North Pine Street, Alma, Michigan.

—We have been having nice weather here but today it is raining and I guess it is going to continue through the night.

Hello Uncle Ned:—As I haven't anything special for tonight I thought I would write and let my first letter reach the waste paper basket. I have seen only one letter from up this way so thought I'd try this time. Perhaps there are some who wonder who I look like, so I'll try and describe myself. I have medium brown hair, blue eyes, and I am five feet five inches tall. Guess I'll let you cousins guess my age. I live on a farm, although my brother rented it. I have two sisters and two brothers, and I am the youngest of them. Have you been to the Fair this year, Uncle Ned? I went to the Lake City Fair last week and this week I went to the Cadillac Fair. I was visiting my sister, who lives at McBain, she wanted me to go along, so we went on the train. Oh, but it was cold, and it rained part of the time. I am going to be a ninth grader as soon as we can get the books, but we haven't them yet. Our school started two weeks ago, but of course I haven't went yet. Well, as my letter is getting rather long, I will close and give the rest some room. Would like to hear from some of the boys and girls. Good-bye, your niece,—Helena Hoekwater, R. 2, Box 35, McBain, Mich.

—I attended the State Fair at Detroit and enjoyed it very much. Have you ever attended the State Fair?

Dear Uncle Ned:—This is not the first time that I have ever written to you, and say, I certainly got a lot of enjoyment out of the other one I wrote. I received letters from Zella Moffit, and Lena Baker, and we have kept up correspondence ever since. I have been corresponding with Eunice Butler for quite a while and I also correspond with Lizzie Butler. I think it is great fun to correspond with girls and boys in other parts of Michigan. Don't your other readers think that too? My brother has installed a radio in our house. We get concerts given by the Detroit News and Detroit Free Press. At night he gets other stations out of Michigan. He has got St. Louis, Mo., Troy and Schenectady, New York and Chicago, Illinois. Have any of you readers a radio? They're certainly nice aren't they? I was twelve years old the ninth day of July, will be in the seventh grade this year. I have light hair and it is bobbed and I certainly like it better than I did when it was long. My oldest sister and her two little boys, and her mother-in-law drove through to New York last week. I would rather like to see the boys. I am taking piano lessons. My letter is getting rather long so will not write any more this time. I will close with a riddle. "In marble wall as white as milk, lined with a skin as soft as silk; within a fountain crystal clear, a golden apple doth appear. No doors there are to the strong hold,—but thieves break in and steal the gold." An egg. Your niece,—Eunice N. Traver, Williamston, Michigan, R5, Box 68.

Dear Uncle Ned:—May I come in and have a little chat with you and the cousins this morning. I have written three different times, but only saw one letter in print. I saw Bessie Brown's letter in the M. B. F. a few days ago. She is an old school mate of mine, and we correspond with one another. Please Uncle Ned, will you print this, for, I am lonesome and wish some one would write to me. I would like to hear from Selden Fowler, Traverse City, Michigan, and also from Katie M. Prowant, Durand, Michigan. Well I guess I better describe myself so you'll know what I look like: I am five feet five, and have brown hair (which is bobbed) brown eyes and fair complexion. I won't tell my age, but I'm between 14 and 18. If Selden Fowler and Katie Prowant write to me, please send me your pictures. Uncle Ned, why don't you print your picture on the page some time. I'd love to see it. As I have some sewing to do, I'll close, Good-bye, your niece,—Lena Ables, R. 3, Montgomery, Michigan.

Dear Uncle Ned:—I am a new birdie. I will describe myself. I am 4 feet 2 inches tall, and weigh 87 pounds. I have dark brown hair, blue eyes of course. I am a "Blue eyed beauty, do your mother's duty," and am light complexioned. Ha! Ha! Uncle Ned, are you light or dark complexioned. That's what I would like to know. I hope this letter will be in print. We have geese and they stay around the dooryard so much of the time, and are always making some kind of a noise. I like to look at the "pictures from far and near." I like the M. B. F. very much. Bye bye. Your niece,—Marguerite Smith, Freeland, Michigan.

Dear Uncle Ned:—May I join your merry circle? I am a farmers girl. I will describe myself. I have dark brown hair and eyes. I have dark complexion, my hair is bobbed. For my pets I have a dog named Sandy and four cats. We have three horses, five cows and one pig. We live on a 89 acre farm. We have one one mile and a half to Parshallburg.

I have one sister, she is thirteen years old. Her name is Anna. My age is between nine and fifteen and who guesses it right will receive a letter from me. We have pickles on contract this year and I like to pick them. I am nearly always busy on the farm. I was in Detroit once and I like it out there. Uncle Ned, were you ever in Detroit? I would like to see my letter in print. I never wrote before so I don't know very much about it. I will write more next time if you wish me to. Do you like grapes? I will close now. Goodbye. Please girls and boys, write to me. Your friend—Josephine Soukeys, Box 8, Oakley, Mich.

—Yes, Josephine, I have been in Detroit, not only once but several times. It is only a few miles from where I live. I like grapes more, I believe, than any other fruit. I am referring to Michigan grapes and not those grown in California.

Dear Uncle Ned:—Isn't it fine weather this year for people to go vacationing? Last year it was wet and rainy at this time. I know because a bunch of "Glee Club" girls were out camping and it rained all but two days while we were gone, but this year the weather was nice all the time. We rented a cottage this year. We were camping on Lake Missauka, one of the nicest lakes in Michigan, we think. The lake about 10 miles around it, and about 5 miles across. It has a resort on the south side where we were. One of the girls that was with us from Grand Rapids said it had the nicest bathing beach of any lake she had been at this summer. We all had a great time, all of us got our shoulders nicely sunburned, and one girl had the toothache two days, but nevertheless we had a nice time. We had a heavy rain between our place and Cadillac last Sunday. It washed our corn field awfully. My dad has a large field of melons this year. Somewhere around 2030 hills and we expect to have ripe melons by the 15th of August. People come from all around to our melon patch. We live 8 miles north of Lake City, on the M66 State Trunk Line. As my letter is getting rather long I will close hoping to see my letter in print and also that some of the readers of the Children's Hour will write to me. Your friend.—Leata Lamb, R. 2, Box 79, Lake City, Michigan.

Dear Uncle Ned:—I have been reading the Michigan Business Farmer for three years and have been a silent one so I decided to write now. I am a farmer boy between the ages of 14 and 18. Who ever guesses my age will receive a letter from me. I am 5 feet 1½ inches tall, can swim, hunt deer, or any game. I like to hunt very much. Our farm consists of 80 acres. I live near a large river and have good swimming places. I think I will go to college next fall. I like to drive a car and tractor very much. I hope some of the boys and girls would write to me. I will answer all the letters I receive. Good-bye.—Wayne Carlow, Chassell, Michigan, R2, Box 70.

Dear Uncle Ned:—I wrote to you some time ago and thought I would like to see my letter in print again. I am a boy of nine years and in the fifth grade. I have two sisters named Thelma and Martha. Thelma is married and Martha is in the ninth grade. My folks have an Overland automobile. We have two dogs named Pet and Jiggs, three cats, eight cows and, four calves and three horses named Beauty, Flora and Prince. As my letter is getting long I will ring off. I would like to have some members of the M. B. F. write to me. Your friend—Phillip Bell, R. 1, Box 60, Freeland, Michigan.

Dear Uncle Ned:—I read the letters of the Children's Hour and would like to join your merry circle. I am fifteen years old, am five feet five inches tall, my hair is dark brown, and my eyes are gray. My folks have not a very large farm. The fowls we raise are: turkeys, chickens, geese and ducks. I am in the eighth grade at school. My folks have taken the M. B. F. for 1 year and think it a very good paper. This is my first letter to you. I would like to have some cousins write to me. Your niece,—Marion Myers, Sandusky, Michigan, Star Route, in care of H. C. Diem.

A Visit With A Famous Circus Clown

"IT ain't no snap being utility man in a circus, take it from me!" said John Slater, the old-time circus clown, as he completed the transformation of a seamed but kindly face to the whitened grotesque requirements of a funmaker's mask.

"Yep, I've gotta drive the poney police wagon in the opening parade, then hustle this make-up off—and into another—I gotta make nine changes tonight. Some life, eh, pal?

"It's this way—I been in the show business thirty-five years, clowning all the time. If I'd stuck to just one thing I might 'a made more money, but I can take a stab at a little of everything, so I'm utility man. They don't call me that, but that's what I am. And, believe me, it ain't like being utility with a baseball team, no sitting on a bench half the season and watching the other guys play the game. Every night for little John—and then some.

"I got my regular clowning to do, but if some guy is sick or gets hurt, I put on his togs and fill in. Tonight I gotta take Pete's place in that riding act in the end ring. Horse stepped on his toe and Doc says nothing doing for him for three or four days. Then I gotta let John toss me 'round in that rough house rastling act of his and, take it from me, kid, he ain't gentle."

You may not recognize John Slater if you visit the world's greatest circus. When you think you have him spotted in his funny clown make-up, you may find an entirely different John Slater balancing precariously on the back of a mule. Or the rider in the Roman race may be John Slater again. But John is mostly clown, and at his best when doing absurd stunts that make the kidlets and grown-ups laugh.

NEW LAMP BURNS 94% AIR

Beats Electric or Gas

A new oil lamp that gives an amazingly brilliant, soft, white light, even better than gas or electricity, has been tested by the U. S. Government and 35 leading universities and found to be superior to 10 ordinary oil lamps. It burns without odor, smoke or noise—no pumping up, is simple, clean, safe. Burns 94% air and 6% common kerosene (coal oil).

The inventor, A. R. Johnson, 609 W. Lake St., Chicago, Ill., is offering to send a lamp on a 10 day's FREE trial, or even to give one FREE to the first user in each locality who will help him introduce it. Write him to-day for full particulars. Also ask him to explain how you can get the agency, and without experience or money make $250 to $500 per month. (Adv.)

WHAT AILS MUTUAL FIRE INSURANCE COMPANIES

(Continued from Page 4)

companies insuring farm risks in the state, that the member is entitled to full protection so long as he pays his assessments for a certain amount.

There is an association in the state known as the Association of Michigan Mutual Insurance Companies which holds meetings annually at different points. However, only a part of the companies have been sufficiently interested to take out memberships. At every meeting a discussion is indulged in along the lines of a uniform policy, but no headway has ever been made. There seems to be too much jealousy existing as to the encroachment of one company upon the territory of another.

There isn't any question but what there is great need of uniform policies among mutual insurance companies, and if the officers of these companies are not able to get together and agree upon a uniform policy which would protect its members adequately, then the State Insurance Department should insist upon action along this line, and if it is not within his power to do so, then laws should be enacted making it compulsory that Michigan Farm Mutual companies should adopt the uniform policy.

Some of these mutual companies insure a building for a stated amount, for instance, a barn for $2,000, and a member pays assessments based on the insurance carried, $2,000, but in case of loss, that company pays but 75 per cent or $1,500. This is unjust and wrong and the company should be compelled to pay the amount of the insurance indicated in the policy if the building is not over-insured.

Cancelling Policy

Our attention has been frequently called to the fact that some insurance companies will not cancel a policy until the insured has paid for his share of the losses and expenses to the date of cancellation, regardless of how long the time may be. We have gone into this matter quite fully and we find incorporated in the by-laws of some of the companies, a law governing which covers this point. The officers say that without this the insured frequently disposes of his property or lets his insurance go by default and does not pay what he is rightfully owing the company, and in order to get it that this club must be held over the member.

A member should pay for the full time for which he is protected and without putting the company to the expense of making the collection. On the other hand, he should not be asked to pay his share of the losses and expenses when his policy is suspended when he could not recover in case of loss. This publication has gone into this matter very fully and we find that even though it seems unjust and unfair, where it is incorporated in the by-laws, there is no redress for the member and he must pay this amount, regardless of the fact that his property has not been protected during the certain part of the period for which he is charged.

The laws, rules and regulations as laid down in the articles of association and by-laws of the company are held valid unless they conflict with the laws of the State, and the Courts have frequently upheld the position taken by the company, and it would seem that the only redress that the member has is to pay his insurance assessment for the time he has been a member promptly when due and send in his policy for cancellation. The State Insurance Department will insist upon cancellation of the policy without the accumulation of further indebtedness.

In behalf of the officers of mutual insurance companies having this plan in force, will say that the matter of insured members leaving properties and assessments unpaid to be reassessed against other members has caused very great annoyance. When any member desires to cancel his insurance, he should pay up his share of the losses and expenses and surrender his policy for cancellation. He owes that to the company, but just so long as insurance companies collect for their losses and expenses at the end of the year for the year previous, they are going to meet with difficulty in making their collections, and a certain percentage will retire without paying for the protection they have enjoyed, and what these members have failed to pay will be reassessed against the members in good standing in the following assessment. It would seem that the ideal way of making payments would be in advance. Then, when the time for which the assessment has been paid has elapsed, the policy would be suspended. The insured would owe the company nothing and no accumulation of indebtedness would occur. However, very few farm mutual companies in Michigan are operated on the assessments paid in advance plan.

Most of the farm mutual companies compensate their officers with a salary entirely inadequate for the service performed, but they do permit such officers to convert to their own good commissions such as policy and membership fees paid by new members, amounting to quite large amounts during the year, depending entirely upon the size of the company and its growth. This plan is all wrong. The person in charge should be paid a salary commensurate with the service rendered. If he is under-paid, he knows it, and it is quite human for him to get all he can from the other sources—new members, and in so doing he is very apt to accept applications which are not desirable, and instead of being an assett to the company are positively a hazard, and undesirable members are taken in and over-insurance accepted because of the commission coming from such application to the person in charge. Just a few dollars added to the salary of the officer in charge and the placing of the fees into the treasury of the company, where it rightfully belongs, will eliminate, to a great extent, the undesirable over-insured risk, which is the greatest menace to any mutual insurance company. When a new applicant asks for admission to the company his application should be carefully scrutinized instead of being received without question for the small sum that would go to the officer who passes upon the desirability of the application.

Rivalry Between Companies

The rivalry between mutual companies to get business has also been detrimental to the business to a very great extent. In order to get business means have been resorted to that has honey-combed the foundation of mutual insurance. Over-insurance and undesirable risks have entered into the building of some mutual companies to the extent imperiling their very foundation. It has caused excessive losses, which means heavy assessments and finally a dissatisfied membership deserting the company built upon a foundation which could endure.

The successful mutual insurance company must eventually prepare for the building of a reserve fund which will care for excessive assessments when they occur. With a reserve fund, when assessments are high, from which to borrow, to be replaced when losses are lessened, the company is building a foundation which will endure. Just how this fund should be provided we are not advocating, as there are many ways, but nevertheless preparations should be made for emergencies as they occur.

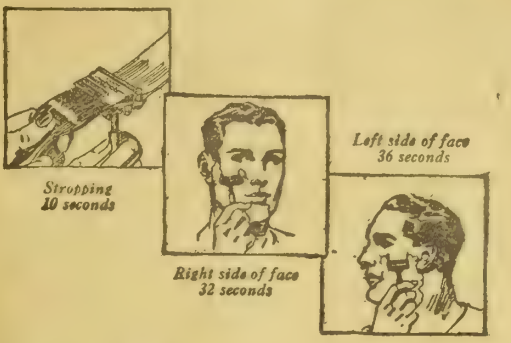
Costs Increased

Insurance costs have increased materially during the past two years and some of the mutual companies carrying farm risks have been compelled to increase their rates to such an extent that the old line companies have taken advantage of the situation and made heavy inroads in the farm mutual field. Farm mutuals should be able to carry insurance much cheaper than old line companies, but they must materially strengthen their plan of operation or else make way for such companies as can afford a full measure of protection and at a marked saving in costs.

The subscribers of the Business Farmer own farms and farm buildings, and, as good business men, naturally protect them from fire and lightning. The are deeply interested and concerned in mutual insurance as they are heavy contributors to the cause, and therefore are interested in dependable insurance information, and while we have devoted considerable space in this article to the matter, yet in so doing we

(Continued on Page 19)

The World's Fastest Shave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Right side of face 32 seconds
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Established nearly Eight years ago. Two Classes, Rodded and Unrodded.

Highest rate ever assessed, Rodded $3.30, Unrodded Class $4.50 per $1,000 per year. Only one special assessment ever called and that was 15 cents per $1,000 insurance.

Only six assessments called in the Rodded and seven in the Unrodded classes since organized.

Now on the advance assessment plan, permitting members to pay three, six, nine or twelve months in advance as they may prefer.

The estimated rate upon which assessments are being collected is $3.26 per $1,000, per year in the Rodded Class and $3.80 in the Unrodded Class.

Issues the broad and liberal blanket form of policy. Adjusts and pay all losses promptly. Accepts only the better class of risks and those who do not want over-insurance.

Has $9,000 in a reserve fund deposited in the National Bank of Commerce, Detroit, drawing interest, which money has not been raised by assessing members, but saved from the money new members have paid to join the company, which is usually taken by officers of mutual insurance companies as their commissions.

Every new member joining the Gleaner Fire Insurance Company is given absolutely free a first-class fire extinguisher, valued at $3, for every $2,000 insurance taken out. These are sent prepaid.

A mutual insurance company operated on the "Golden Rule" plan, to furnish its members with the best possible form of insurance at the lowest possible cost, with all grafts and commissions eliminated. Built upon honor with the determination to endure.

If you are interested in placing your insurance in a company which can and will furnish you the best form of insurance at the least possible cost, fill out the coupon below and mail to us and we will send you complete information.

JAMES SLOCUM, Secretary:

I am interested in Gleaner Fire Insurance and would be pleased to have further information. My

property is located in the Township of..................

County of......................, Section No..................

Name ....

P. O..., R. F. D. ....

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HEALTHY MICHIGAN CATTLE AT PUBLIC AUCTION SALE

You can buy one cow or a carload

52 head of New Milch Cows and Springers to select from, all carefully selected by one of Michigan's best Judges of Holstein Cattle.

Straight top lines and good shaped udders, selected for both type and profitable production.

A number of well bred heifers and heifer calves of good type and breeding.

10 good Bulls and Bull Calves, chosen from some of the best Holstein Herds in West Michigan.

One young Bull out of a cow on Semi-official yearly test that has produced 17,429 lbs. of milk and 733 lbs. of butter in 8 months.

Young Bulls out of A. R. O. Dams with Records from 27 lbs. to 30 lbs. of Butter in 7 days, and sired by some of Michigan's Best Bulls.

Cows with good A. R. O. Records.

Cows and Heifers out of good A. R. O. Dams with 7 day Records up to 28 lbs. and sired by Bulls out of Dams with Records up to 34.71 lbs.

The buyer will not be limited to just a few good animals to choose from. Undesirable animals have been rejected by our inspector.

You can find what you want in this Sale.

If you want New Milch Cows or Springers for profitable Winter Milk and Butter Production, you will have 52 head to select from.

If you want a high-class Herd Bull of good type and Breeding, you will have 10 Bulls to choose from.

79 Head of Cattle in the Sale.

The Cattle all come from Healthy Michigan Herds, and are sold with the usual 60 day Tuberculin Retest Guarantee.

This is our thirteenth annual West Michigan Holstein Breeders' October Consignment sale.

Our Aim is, "SATISFIED BUYERS."
Our Motto is "HONESTY AND PROGRESS."

REMEMBER THE DATE
WEDNESDAY, OCT. 10, 1923
THE PLACE
WEST MICHIGAN STATE FAIR GROUNDS
GRAND RAPIDS, MICHIGAN

IF INTERESTED, WRITE FOR SALE CATALOG
W. R. HARPER, Sales Manager
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CLAIM YOUR SALE DATE

To avoid conflicting dates we will without cost, list the date of any live stock sale in Michigan. If you are considering a sale advise us at once and we will claim the date for you. Address, Live Stock Editor, M. B. F., Mt. Clemens

Sept. 29—Holsteins, Fascination Farm, Vassar, Michigan.
Oct. 2—Shorthorns, Arthur Schoch, Corunna, Michigan.
Oct. 2—Shorthorns, Southern Michigan Shorthorn Breeders' Association, W. C. Osius, Sec'y., Hillsdale, Michigan.
Oct. 2—Washtenaw County Holstein-Friesian Breeders', Walter L. Spaulding, Sec'y., Ann Arbor, Michigan.
Oct. 9—Holsteins, Art Bogart and D. B. Pinkerton, Vassar, Michigan.
Oct. 10—Shorthorns, W. E. Cummings, Coleman, Michigan.
Oct. 17—Poland Chinas, Wesley Hile, Ionia, Michigan.
Oct. 18—Holsteins, Howell Sales Company of Livingston County. Wm. Griffin, Sec'y. Howell, Mich.
Oct. 18—Poland Chinas, Hunn Bros., Chesaning, Michigan.
Oct. 20—Poland Chinas, A. D. Gregory, Ionia, Michigan.
Oct. 30—Shorthorns, Wm. Geisenhafer and Sons, Dimondale, Michigan.
Oct. 19—Poland Chinas, E. A. Clark, St. Louis, Michigan.
Nov. 6—Holsteins, Eaton County Holstein Breeders' Association, A. N. Loucks, Secretary, Charlotte, Michigan.

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THE GOLDEN RULE AUCTIONEER
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Pedigreed Sales a Specialty.
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CATTLE

HOLSTEINS

AUCTION SALE
20—HEAD REGISTERED HOLSTEINS—20
FULLY ACCREDITED

32½ two year old bull. Full sister to 1922 world champion senior two year old 305 day division, a 31.16 lb. cow and her offspring. Several due this fall. Sale begins at 1:00 p. m., rain or shine, Saturday, September 29, 1923. Auctioneer: Bill Atkins. Bankable paper taken.
Fascination Farm, South Main St., Vassar, Mich.

FOR SALE—45 Head Reg. Holsteins T. B. Tested at farmers prices. Reason for sale, poor health. H. L. BOWERMAN, Romeo, Michigan.

3 Fine Holstein Bulls

ready for light service in October from heavy milking Dams and sired by Romeo King Pontiac Segis Korndyke. The price is very reasonable. Better drive over and see them.
SCHAFFER BROS., R. 4, Oxford, Mich.

HEREFORDS

FIRST PUBLIC AUCTION
Caberfae Herefords
Caberfae Ranch, Boon, Mich.
Property of Ira Nelson Morris, Chicago
At Chicago International Sales Pavilion
Union Stock Yards
Thursday, October 11, '23
50 Cows with their 50 Sucking Calves
25 Bred Cows and Heifers
25 Choice Yearling Heifers
25 Rugged Yearling and 2-year Bulls
1 Harris-bred Repeater Bull
1 Engle-bred Son of Beau Blanchard

Caberfae herd represents Fairfax, Anxiety, Disturber, Columbus, Corrector, and other great bloods, bred from America's best herds. Females bred to, and young cattle sired by, Repeater and Beau Blanchard Sires. TUBERCULIN TESTED, Caberfae never had a reactor.

BABY-BEEVES are bred and fed more profitably than any other. For this purpose the pure-bred Hereford has no equal. Those who breed their own feeders go safe, avoiding speculation.

BEEF IS A STAPLE NECESSITY. Herefords produce it best. A valuable necessity like Hereford Cattle will always be wanted. 50 years has witnessed three low tides in pedigree cattle prices, each followed by higher tides. The present low tide is sure to turn to the inevitable rise. Profit by it.

PRESENT CONDITIONS FAVOR BUYERS. Good notes will be taken.

Let's talk things over further in the catalog and at the sale. For Catalog address

T. F. B. SOTHAM, Sale Manager,
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Are You Considering What to Feed This Fall That Will Prove Profitable

Before purchasing feeders investigate the Sotham Earliripe HEREFORD Beef Plan. A proven, profitable system of beef production of great benefit to the producer. Realize the utmost from your feeding operations. Write for information. HEREFORDS, Yearlings, Two-year-olds, Young cows with calves, all registered and T. B. tested at practical prices for producing Earliripe HEREFORD Baby Beeves. Terms granted upon proper credentials.

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TENTH ANNUAL PUBLIC SALE
REGISTERED HOLSTEINS
HOWELL SALES CO. OF LIVINGSTON COUNTY, HOWELL, MICH.
Thursday, Oct. 18, 1923, at 10 o'clock A. M.
SALES PAVILION FAIR GROUNDS

80 head consisting mostly of cows that will be fresh or due soon. A 29 lb. cow that has made three records above 27 lbs. and her 24 lb. 4 year old daughter. A daughter of a 30 lb. 8 year old cow and others with good records. A large percentage are by bulls whose dams have records from 25 to 30 lbs. 4 bulls, three of them tried Herd Sires, all from dams with records above 30 lbs. For catalogs, address,

WM. L. GRIFFIN, Secretary, Howell, Michigan.

DAIRY and LIVESTOCK

SHEEP INDUSTRY RECOVERING RAPIDLY FROM DEPRESSION

RAPID recovery from the depression which struck it three years ago is being made by the American sheep industry under the stimulus of tariff protection, fairly good prices, and improved credit facilities, say reports to the Department of Agriculture. Sheepmen generally are optimistic and in good financial shape, and mutton and wool production, though still below normal, is increasing.

Proof that the industry is getting back on its feet is seen in the fact that the number of sheep in this country according to an estimate as of January 1, has increased by 882,000 over the total on the corresponding date in 1922. It is still 243,000 below the 1921 total of 37,452,000, but the rate of increase suggests that the losses of the liquidation period will soon be made up. Officials of the Department of Agriculture do not, however, think that the high figures of war years will be reached again for some time. The peak of the war period was touched at 49,956,000 head in 1915.

Effect of Open Ranges

Settlement of grazing lands for farming purposes has proceeded so rapidly in the last few decades that it is improbable the United States will ever again be as big a sheep producer as it was in the days of the free open ranges. Countries of sparce population and low-priced lands are best suited to sheep raising, and the United States has emerged from that category. The number of sheep dropped from 63,965,000 in 1903 to 51,482,000 in 1913 largely owing to the diversion of grazing lands to farming. There is room for considerable expansion of the sheep industry from its present position, however, if only as a natural swing-back from the extreme depletion it underwent in 1920 and 1921.

The liquidation in that period was the greatest ever known. Flocks were reduced approximately 12,000,000 head. Income from wool wiped out, returns from mutton and lamb were greatly reduced, and hundreds of flockmasters were ruined. From so drastic a shake-up, which diminished wool and mutton production far below current needs, some recovery was inevitable. When Congress placed a duty of 2½ cents a pound on fresh mutton, 4 cents a pound on lamb, and 31 cents a pound on wool of clean content, sheepmen were encouraged to build up their flocks again, and a foundation was laid for reestablishment of the industry on a normal footing.

Wool and Lamb Prices Good

Precisely what effect the tariff has exercised on the sheep industry cannot be ascertained, because the tariff is only one of the factors in the recovery now in progress. It is noteworthy, however, that wool prices began to advance shortly after the emergency tariff went into effect in 1921. For a time domestic wool prices advanced while world wool prices declined. Wool today has a higher relative purchasing power in this country than any other commodity, and lambs are one of the few agricultural commodities that are running substantially above the 1913 level.

In attempting to guess what the immediate future holds in store for the American sheep industry, it is necessary to bear in mind, say officials of the Department of Agriculture, that the enterprise has a dual character. Sheep raising involves the production of both wool and mutton, and market conditions for each must be favorable to ensure stability and progress. The wool outlook seems favorable. Americans use more wool than any other people. Per capita consumption has risen from about 3 pounds in our early history to about 6½ pounds. Although a heavy producer of wool, the country is nevertheless obliged to import of its supply. Home producers are therefore assured of a broad domestic market.

Less certainty exists in regard to the market for mutton and lamb. Lamb and mutton are high-priced, and are considered as luxuries by most people. In consequence sheep and lamb prices show greater sensitiveness to variations in general economic conditions than any other important commodities, and in recessions, as well as in advances, have usually preceded other meat products by substantial periods. How to assure a stable and broadening market for mutton and lamb is therefore one of the most difficult problems of the sheep industry. Officials of the department are making studies to see what can be done toward preventing seasonal gluts and shortages, and toward increasing the popularity of mutton and lamb.

Prospects Appear Satisfactory

Immediate prospects for both wool and mutton consumption in the United States seem fairly satisfactory. Permanent prosperity for the sheep industry, in the opinion of department officials, will depend largely on the success attained in stabilizing production and consumption. Hitherto the industry has usually been up in the clouds or down in the valley, and it has consequently been hazardous and speculative.

Evidence of a trend toward better system, and therefore toward greater stability, are seen in the growing organization of the industry, in the better financing arrangements made available for it under the new agricultural credits act, in stricter use of scientific methods by sheep raisers, and in progress made toward cooperative marketing, particularly of wool. It is believed present prices for sheep, lambs and wool show a profit to competent sheepmen, and that farmers with small flocks can make money provided they give necessary care to their stock. In short, the view of experts in the Department of Agriculture is that, while the competition of other countries still in the pioneer stage may prevent our sheep industry from attaining the proportions it had thirty years or so ago, it has a good prospect of moderate progress.

MEET YIELDS OF FOOD ANIMALS SHOW WIDE VARIATIONS

STATISTICAL studies just completed by the United States Department of Agriculture, showing meat yields of various classes of animals in proportion to live weight, bring out clearly the importance of good breeding. In the work conducted, all the principal kinds of market livestock are included, the grades varying from common stock to animals slaughtered in the carcass competitions of the International Livestock Exposition. Figures were obtained from a number of government sources and from the packing industry.

Good Breeding Shows Its Value

The difference in dressing yield for various grades of cattle ranged from 48 to 66 per cent, meaning that that proportion of the animal was the dressed carcass. For sheep and lambs the dressing yield varied from 42 per cent for common market ewes to 58.3 per cent for International Show wethers. The figures for swine show dressing percentages ranging from 75 to 85.3 per cent. The relatively high figures for swine are due in part to the fact that the skin and head commonly remain on the carcass. The International Show animals in each case are chiefly purebreds, fed specially to produce an ideal carcass.

The results in the judgment of specialists in the Bureau of Animal Indctry, are clear-cut evidence that the types of animals shown and recognized as best by judges of livestock are much superior to poorly bred stock from a meat standpoint.

The practical side of the study just completed is shown by the following statement by John Roberts, of the Bureau of Animal Industry, who made the compilation

Steer Carcasses Compared

"The difference in dressing yield between a 'good' and a 'common' steer, according to the figures collected, is 6 per cent. For a 1,000-pound steer this would mean 60 pounds more of marketable meat. Nor is this all, since the meat of the higher-class animal is superior in quality throughout, as well as being better distributed among the choicer cuts. In other words, the well-bred steer makes a more profitable use of his feed than the inferior one. These things are taken strictly into account by the experts who price the animals in the stockyards; they are, indeed, the factors that determine the market value of one class as compared with another.

VETERINARY DEPARTMENT

KITTEN HAS HICCOUGHS

Could you please tell me what would cause kittens to have hiccoughs?—M. A. S., Bennington, Mich.

—The cause is probably due to irritation of the nervous system produced by toxines excreted by intestional parasites as well as by the irritation of the intestines they produce.—John P. Hutton, Assoc. Prof. Surgery and Medicine, M. A. C.

"MOON BLINDNESS"

I have a nine year old mare which has trouble with her eyes. At times one will seem to be cloudy, something like a film, and then the other will become affected and sometimes both at the same time. I took her to our local veterinary and he said nothing could be done for her and that eventually she would go blind. I am very anxious about her and would like to know if there is a cure.—R. F., Elsie, Mich.

—From the description given of this case I am of the opinion that the mare is suffering from "Periodic Opthalmia" commonly called ""Moon Blindness," and that your local veterinarian is right in his prognosis. The disease is incurable so far as we know. A great many horses go completely blind after several attacks, others will have two or more attacks and partially retain their eyesight for the rest of their life.—John P. Hutton, Assoc. Prof. Surgery and Medicine, M. A. C.

HORSE WIND BROKEN

I have a horse that is wind broken. Can you kindly tell me a cure?—J. A., Cass City, Mich.

—The horse that is wind broken may be cured by performing a surgical operation on his throat. The operation needs be performed by a veterinarian who has had experience performing the operation. Not all cases are cured by the operation but a very great percent of them are either benefited or cured completely after the operation.—John P. Hutton, Assoc. Prof. of Surgery and Medicine, M. A. C.

JACKSON COUNTY FAIR

WITH a record of having one of the most interesting county fairs in the state, Jackson county opened its 1923 county fair during the week ending September 15th. Before the close of the week those who attended declared that it was the best fair that had ever been held in that county. Every day it seemed that the crowd grew larger and the last couple of days it seemed that the crowd grew larger and the last couple of days it was impossible to seat all in the grandstand that wanted admission—and the stand holds 10,000 people. Tuesday was Children's Day and a holiday was declared in the schools in the county so the children might attend the fair. Exhibits at the fair this year were very good and they were plentiful. Then to amuse you there were races and a good vaudeville program, the latter being held on a stage in front of the grandstand. On Friday evening the returns from the Dempsey-Firpo championship fight were broadcasted in front of the grandstand. Everyone went away from the grounds well satisfied with what they had seen and heard and the general verdict was, "We'll be back next year and spend an extra day."

BOY GROWS 384 BUSHELS OF POTATOES PER ACRE

"THE best potato demonstration in years," is the way Club Agent J. R. Miltimore describes the work of Cristy Pettee, of Francestown, N. H. This 13-year-old champion grew 384 bushels of potatoes to the acre, with practically no rot.

His method was simple but comprehensive. He took no chance of failure. Following the advice of the College Extension Department thruout, Cristy used certified seed, treated with corrosive sublimate, and "greened" for two weeks before planting.

A half ton of commercial fertilizer per acre at planting and another half ton cultivated in later on, insured a well-fed crop. Four cultivations, three hoeings, and four sprayings (or dustings) kept the crop in fine condition, prevented late blight, and brought an unusually profitable crop to harvest.

U. S. BULLETINS OF INTEREST IN OCTOBER

A SMALL list of Farmers' Bulletins and Circulars of general interest during October is believed to be of value to our readers. Copies may be obtained free by addressing the Office of the Secretary, Publications, United States Department of Agriculture, Washington, D. C., as long as the supply lasts. Specify number and name and whether Farmers' Bulletin of Department Circular.

Farmers' Bulletin 900, Homemade Fruit Butters; 926, Some Common Disinfectants; 927, Farm House Conveniences; 970, Sweet Potato Storage; 992, Use of Machinery in Cutting Corn; 1067, Feeding Hens for Egg Production, 1080, Preparation of Barreled Apples for Market; 1096, Frost and the Prevention of Damage from It;1160 Diseases of Apples in Storage; 1172, Slaughtering and Use of Lamb and Mutton; 1175, Better Seed Corn; 1186, Pork on the Farm: Killing, Curing and Canning; 1194, Operating a Home Heating Plant; 1223, The Chinch Bug and Its Control; 1250, Green Manuring; 1264, Farm Manufacture of Unfermented Apple Juice; 1265, Business Methods of Marketing Hay.

WHAT AILS MUTUAL FIRE INSURANCE COMPANIES

(Continued from Page 17)

have touched the matter but lightly, and we shall be glad to give any of our readers such information as we may possess on matters pertaining thereto in which they may be directly interested. We are hopeful that mutual companies insuring farm risks will come to the realization that there is a great opportunity for their betterment and that they will eventually come to understand that there can be but one objective, and that to furnish the farmers of Michigan the best and most liberal form of fire and lightning insurance at the least possible cost.

PRITCHARD'S
WEATHER
FORECAST
INTERPRETED BY THE STARS

THE first day or so of this week will feel the tail end effects of the storm mentioned in last forecast. These conditions will disappear about Monday or Tuesday in Michigan giving place to cooler temperatures, clearing skies and higher barometer.

We really do not expect much change in temperature during early part of week and as the latter part comes, it is expected to be considerably warmer than is usually the case for this time of year.

About Tuesday or Wednesday rains will be in progress in this state and probably continue with unsettled conditions in most parts of Michigan through Friday or Saturday.

Week of October 7

Early part of this week is expected to be fair with a gradual warming up until about middle. About 10th showery, threatening conditions will begin and continue until about Friday during which time there will also be much wind.

Temperatures will drop immediately following middle of week and where crops are protected from wind frosts are quite liable. The week ends cool and sunshiny.

October to be Cool

Temperatures will average cool this week but will have an upward tendency until about 26th followed by a sudden drop for a few days. The average temperature for the month will be below normal.

The greatest rainfall period will come between 16th and 20th with an average of more moisture after this period than before. For the month as a whole, however, we believe that precipitation will be below the average and that there will be many pleasant, sunshiny days.

BEFORE YOU BUY A WINDMILL

Carefully consider the following facts: *A year's supply of oil is sent with every Aermotor*

The Auto-oiled Aermotor is the Genuiue Self-oiling Windmill, with every moving part fully and constantly oiled.

The Auto-oiled Aermotor has behind it 8 years of wonderful success. It is not an experiment. The double gears run in oil in a tightly enclosed gear case. They are always flooded with oil and are protected from dust and sleet. Oil an Aermotor once a year and it is always oiled. It never makes a squeak.

You do not have to try an experiment to get a windmill which will run a year with one oiling. The Auto-oiled Aermotor is a tried and perfected machine. Our large factory and our superior equipment enable us to produce economically and accurately. Every purchaser of an Aermotor gets the benefit from quantity production. The Auto-oiled Aermotor is so thoroughly oiled that it runs in the lightest breeze. It gives more service for the money invested than any other piece of machinery on the farm. The Aermotor is made by a responsible company which has been specializing in steel windmills for more than 30 years.

Aermotor Towers are Towers of Strength

For full information write **AERMOTOR CO.** Chicago Kansas City Dallas Minneapolis Des Moines Oakland

Steers For Sale

70 Herefords 780 lbs. 76 Herefords 700 lbs.
80 Herefords 610 lbs. 86 Herefords 550 lbs.
56 Herefords 500 lbs. 30 Herefords 820 lbs.

Each bunch even in size, dark reds, dehorned, good grass flesh. Some bunches fair flesh account short pastures. If in the market for real quality, one load or more your choice. Write stating number and weight preferred.
V. V. BALDWIN, Eldon, Wapello Co., Iowa

--HEREFORDS--

5 extra nice Repeater heifers one year old for $500.00. Also 10 cows with ten nice lusty calves by side for sale.
If in want of bulls, write us.
ALLEN BROS.
616 So. West St. Kalamazoo, Mich.

We Have Bred Herefords Since 1860
Herd established by Gov. H. H. Crapo. We have a few choice yearling bulls for sale at farmers prices. You are invited to visit our farm.
CRAPO FARM, Swartz Creek, Michigan.

AYRSHIRES

FOR SALE—REGISTERED AYRSHIRE bulls and bull calves, heifers and heifer calves. Also some choice cows.
FINDLAY BROS., R 5, Vassar, Mich.

JERSEYS

REG. JERSEYS, POGIS 99th OF H. F. AND Majesty breeding. Young stock for sale. Herd fully accredited by State and Federal Government. Write or visit for prices and description.
GUY C. WILBUR, BELDING, Mich.

SHORTHORNS

Auction Sale
October 2, 1923
Dispersal sale of the property of
Arthur Schoch, of Corunna, Michigan.
Consisting of
20 Head of Registered Shorthorn Cattle, Cows and Heifers.
Due To Freshen Soon.
Also some other choice young bulls and other personal property.
Warm Lunch at Noon.
Auctioneer: CLEM CHALKER, Ovid, Mich.

SHORTHORN SALE
10—HEAD OF SHORTHORN—10
The undersigned will sell at public auction on
WEDNESDAY, OCTOBER 10, 1923
His entire herd of Shorthorns.
Write for Catalogues.
W. E. CUMMINGS,
Coleman, Michigan

YOUR CHOICE OF MY ENTIRE HERD OF Shorthorns, several heifers, and young bulls in the bunch. Also cows and calves. Priced at fifteen cents per pound. One percheron mare. Priced at ten cents per pound.
R. G. PALMER, R. 4, Belding, Michigan

REGISTERED MILKING SHORTHORN CATTLE, Shropshire and Delaine sheep. Stock and prices right. Write wants. Also car load feeding cattle.
CLOVER CREST RANCH, Tawas City, R3, Mich.

RAISE SHORTHORNS WITHOUT HORNS Like Kelley does. U. S. Accredited Herd No. 28945. For description and price write,
L. C. KELLY & SON, Plymouth, Michigan.

FOR SALE: SHORTHORN CATTLE. IMPROVED Black Top Delaine Merino Sheep.
FRANK ROHRABACHER, Laingsburg, Michigan.

FOR SALE: SEVERAL REGISTERED Shorthorn Cattle. Tubercular tested. Inqure
PIPER & GOODALE, East Tawas, Michigan.

GUERNSEYS

FOR SALE: BULL CALF BORN IN MARCH. Right every way. Dam is dam of Belle Missaukee Beauty A. R. 6th cow in Class D. D. and State Champion in Class. Sire has ¾ of same breeding as "Red Rose" and Missaukee Sally Class leading in G. G. Price for quick sale $150.00. Buy type and production.
A. M. SMITH, Lake City, Michigan.

FOR SALE: REGISTERED GUERNSEY BULL calves for $35.00 each. May Rose Breeding.
E. A. BLACK, Howard, City, Michigan.

ANGUS

WE HAVE SOME FINE YOUNG ANGUS BULLS from International Grand Champion Stock at reasonable prices. E. H. KERR & CO., Addison, Mich.

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3 last fall gilts to farrow in Aug. and Sept. 60 spring pigs, not akin, recorded free. Good stock.
OTTO B. SCHULZE, Nashville, Michigan.

FOR SALE—EXTRA FINE BIG TYPE O. I. C. pigs at farmers prices. Both sex.
E. E. SALISBURY, Mendon, Michigan.

HAMPSHIRES

HAMPSHIRES: A FEW BRED GILTS LEFT. Place your order now for your Boar pig at a bargain. Pairs not akin. 10th year.
JOHN W SNYDER, St. Johns, R. 4, Mich.

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Hill Crest Farms, Perrinton, Mich.
Duroc-Jerseys and Black Top Delaine Sheep. 35 stock rams to pick from. Farm 4 mi. straight south of Middleton. Gratiot Co.
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PEACH HILL FARM offers choice weanling Duroc pigs, either sex. Priced very reasonable. Write us.
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SCHAFFER BROS., R. 4, Oxford, Michigan.

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TALCOA FARM OFFERS A VERY GOOD selection of bred Berkshire sows and sows with litters at farmers prices. R7, Lansing, Mich.

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LARGE TYPE POLAND CHINAS. ONE FALL Gilt by Ohio Liberator. Spring boars and gilts now ready to ship. Write your wants.
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FOR SHROPSHIRE RAMS WRITE OR CALL ON
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FOR SALE 400 BREEDING EWES. For Prices Write
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WEST MARION OXFORDS. 25 YEARS Breeding. The best stock for sale. Both sex.
WM. VAN SICKLE, Deckerville, Michigan

REGISTERED SHROPSHIRE SHEEP, 40 EWES 1 to 4 years, 50 ewe and ram lambs first class. Priced right. Flock Established 1890.
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GOATS

GOATS—TOGGENBERG BUCK IN STUD. Terms Reasonable. Write
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German Shepherd, Airdales, Collies; Old English Shepherd dogs; Puppies; 10c illustrated instructive list. W. B. Watson, Box 27, Macon, Mo.

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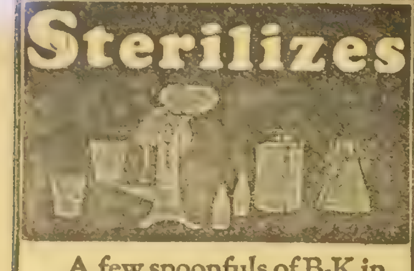

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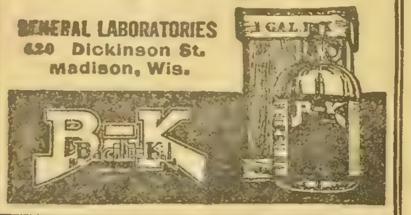

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Free Trial of Method That Anyone Can Use Without Discomfort or Loss of Time.

We have a method for the control of Asthma, and we want you to try it at our expense. No matter whether your case is of long standing or recent development, whether it is present as Chronic Asthma or Hay Fever, you should send for a free trial of our method. No matter in what climate you live, no matter what your age or occupation, if you are troubled with Asthma or Hay Fever, our method should relieve you promptly.

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ONE can at $1.25 often sufficient. In powder form.

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AN AD IN THE MICHIGAN BUSINESS FARMER WILL SELL IT.

"What You Want"

About a Rich Old Man Who Tries to Help a Young Man

A Complete Short Story by O. HENRY America's Greatest Short Story Writer

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NIGHT had fallen on that great and beautiful city known as Bagdad-on-the-Subway. And with the night came the enchanted glamor that belongs not to Arabia alone. In different masquerade the streets, bazaars and walled houses of the occidental city of romance were filled with the same kind of folk that so much interested our interesting old friend, the late Mr. H. A. Rashid. They wore clothes eleven hundred years nearer to the latest styles than H. A. saw in the old Bagdad; but they were about the same underneath. With the eye of faith, you could have seen the Little Hunchback, Sinbad the Sailor, Fitbad the Tailor, the Beautiful Persian, the one-eyed Calenders, Ali Baba and Forty Robbers on every block, and the Barber and his Six Brothers, and all the old Arabian gang easily.

But let us revenue to our lamb chops.

Old Tom Crowley was a caliph. He had $42,000,000 in preferred stocks and bonds with solid gold edges. In these times, to be called a caliph you must have money. The old-style calip business as conducted by Mr. Rashid is not safe. If you hold up a person nowadays in a bazaar of a Turkish bath or a side street and inquire into his private and personal affairs, the police court'll get you.

Old Tom was tired of clubs, theatres, dinners, friends, music, money and everything. That's what makes a caliph—you must get to despise everything that money can buy, and then go out and try to want something you can't pay for.

"I'll take a little trot around town all by myself," thought old Tom, "and try if I can stir up anything new. Let's see—it seems I've read about a king or a Cardiff giant or something in old times who used to go about with false whiskers on, making Persian dates with folks he hadn't been introduced to. That don't listen like a bad idea. I certainly have got a case of humdrumness and fatigue on for the ones I do know. That old Cardiff used to pick up cases of trouble as he ran upon 'em and give 'em gold—sequins, I think it was—and make 'em marry or get 'em good Government jobs. Now, I'd like something of that sort. My money is as good as his was even if the magazines do ask me every month where I got it. Yes, I guess I'll do a little Cardiff business tonight, and see how it goes."

Plainly dressed, old Tom Crowley left his Madison Avenue place, and walked westward and the south. As he stepped to the sidewalk, Fate, who holds the ends of the strings in the central office of all enchanted cities, pulled a thread, and a young man twenty blocks away looked at a wall clock, and then put on his coat.

James Turner worked in one of those little hat-cleaning establishments on Sixth Avenue in which a fire alarm rings when you push the door open, and where they clean your hat while you wait—two days. James stood all day at an electric machine that turned hats around faster than the best brands of champagne ever could have done. Overlooking your mild impertinence in feeling a curiosity about the personal appearance of a stranger, I will give you a modified description of him. Weight, 118; complexion, hair and brain, light; height, five feet six; age, about twenty-three; dressed in a $10 suit of greenish-blue serge; pockets containing two keys and sixty-three cents in change.

But do not misconjecture because this description sounds like a General Alarm that James was either lost or a dead one.

Allons!

James stood all day at his work. His feet were tender and extremely susceptible to impositions being put upon or below them. All day long they burned and smarted, causing him much suffering and inconvenience. But he was earning twelve dollars per week, which he needed to support his feet whether his feet would support him or not.

James Turner had his own conception of what happiness was, just as you and I have ours. Your delight is to gad about the world in yachts and motorcars and to hurl ducats at wild fowl. Mine is to smoke a pipe at even-fall and watch a badger, a rattlesnake, and an owl go into their common prairie home one by one.

James Turner's idea of bliss was different; but it was his. He would go directly to his boarding-house when his day's work was done. After his supper of small steak, Bessemer potatoes, stooed (not stewed) apples and infusion of chicory, he would ascend to his fifth-floor-back hall room. Then he would take off his shoes and socks, place the soles of his burning feet against the cold bars of his iron bed, and read Clark Russell's sea yarns. The delicious relief of the cool metal applied to his smarting soles was his nightly joy. His favorite novels never palled upon him; the sea and the adventures of its navigators were his sole intellectual passion. No millionaire was ever happier than James Turner taking his ease.

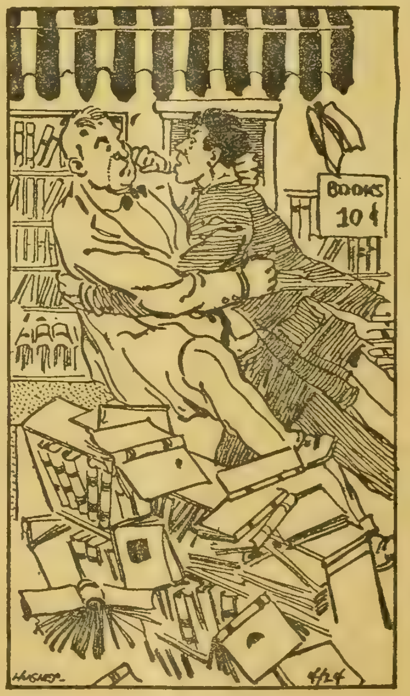
When James left the hat-cleaning shop he walked three blocks out of his way home to look over the goods of a second-hand bookstall. On the sidewalk stands he had more than once picked up a paper-covered volume of Clark Russel at half price.

While he was bending with a scholarly stoop over the marked-down miscellany of cast-off literature, old Tom the caliph sauntered by. His discerning eye, made keen by twenty years' experience in the manufacture of laundry soap (save the wrappers!) recognized instantly the poor and discerning scholar, a worthy object of his caliphanous mood. He descended the two shallow stone steps that led from the sidewalk, and addressed without hesitation the object of his designed munificence. His words were no worse than salutatory and tentative.

James Turner looked up coldly, with "Sartor Resartus" in one hand and "A Mad Marriage" in the other.

"Beat it," said he. "I don't want to buy any coat hangers or town lots in Hankipoo, New Jersey. Run along, now, and play with your Teddy bear."

"Young man," said the caliph, ignoring the flippancy of the hat cleaner, "I observe that you are of a studious disposition. Learning is one of the finest things in the world. I never had any of it worth mentioning, but I admire to see it in others. I come from the West, where we imagine nothing but facts. Maybe I couldn't understand the poetry and illusions in them books you are picking over, but I like to see somebody else seem to know what they mean. Now, I'd like to make you a proposition. I'm worth about $40,000,000, and I'm getting richer every day. I made the height of it manufacturing Aunt Patty's Silver Soap. I invented the art of making it. I experimented for three years before I got the right quantity of chloride of sodium solution and caustic potash mixture to curdle properly. And after I had taken some $9,000,000 out of the soap business I made the rest in corn and wheat futures. Now, you seem to have the literary and scholarly turn of character; and I'll tell you what I'll do. I'll pay for your education at the finest college in the world. I'll pay the expense of your rummaging over Europe and the art galleries and finally set you up in a good business. You needn't make it soap if you have any objections. I see by your clothes and frazzled necktie that you are mighty poor; and you can't afford to turn down the offer. Well, when do you want to begin?"



"The hat cleaner rallied and clinched."

The hat cleaner turned upon old Tom the eye of the Big City, which is an eye expressive of cold and justifiable suspicion, of judgment suspended as high as Haman was hung, of self-preservation, of challenge, curiosity, defiance, cynicism, and, strange as you may think it, of a childlike yearning for friendliness and fellowship that must be hidden when one walks among "stranger bands." For in New Bagdad one, in order to survive, must suspect whosoever sits, dwells, drinks, rides, walks or sleeps in the adjacent chair, house, booth, seat, path or room.

"Say, Mike," said James Turner, "what's your line, anyway—shoe laces? I'm not buying anything. You better put an egg in your shoe and beat it be-

ROOFING
Special Snaps For Quick Keen Buyers

Order From This List

We are offering a limited quantity of roll roofing in various grades for immediate acceptance and shipment as follows:

Smooth Surfaced Roofing

This material is built on three different weights of felt, well saturated, and surfaced smooth. It is easy to lay on any roof, and can be adapted to any conditions as follows:

No. SC-1 Light weight, per roll of 108 sq. ft. $1.00
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No. SC-4 This material is brand new 85 to 90 pound stock, built on a heavy felt, and surfaced with red or grey-green crushed slate. Price per roll of 108 square feet............ $1.50

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No. SC-6 Lot TM-4. This material is put up in full rolls, running from three to four lengths to the roll. Suitable for small roofs, repair jobs, patching, and lining. It is known as repair job, or spliced roofing. Price per roll of 108 square feet............ 85c

NOTE: Nails and cement will be furnished at 10c per roll extra, for any of the above material.

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SEND NO MONEY
20-Shot Automatic Pistol

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Worth $35

20 SHOT, 32 CAL.

The biggest bargain ever offered. Built of best blue steel, checkered grip safety. Every one brand new and inspected. Shoots all standard 32 cal. cartridges. 10 shot, with extra magazine, making 20 quick, hard and straight shots. Buy several while they last, at our unheard price $9.50 (regular $35.) (Pocket Size, 25 cal. 7 shot $7.80.)

Send No Money Pay on arrival, our bargain price plus few cents postage. Satisfaction guaranteed, or money back. Order today NOW.

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If Ruptured Try This Free

Apply it to Any Rupture, Old or Recent, Large or Small and You are on the Road That Has Convinced Thousands

Sent Free to Prove This

Anyone ruptured, man, woman or child, should write at once to W. S. Rice, 529C Main St., Adams, N. Y., for a free trial of his wonderful stimulating application. Just put it on the rupture and the muscles begin to tighten; they begin to bind together so that the opening closes naturally and the need of a support or truss or appliance is then done away with. Don't neglect to send for this free trial. Even if your rupture doesn't bother you what is the use of wearing supports all your life? Why suffer this nuisance? Why run the risk of gangrene and such dangers for a small and innocent little rupture, the kind that has thrown thousands on the operating table? A host of men and women are daily running such risk just because their ruptures do not hurt nor prevent them from getting around. Write at once for this free trial, as it is certainly a wonderful thing and has aided in the cure of ruptures that were as big as a man's two fists. Try and write at once, using the coupon below.

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W. S. Rice, Inc.,
529C Main St., Adams, N. Y.

You may send me entirely free a Sample Treatment of your stimulating application for rupture

Name ....
Address ....
State ....

fore incidents occur to you. You can't work off any fountain pens, gold spectacles you found on the street, or trust company certificate house clearings on me. Say, do I look like I'd climbed down one of them missing fire escapes at Helicon Hall? What's vitiating you, anyhow?"

"Son," said the caliph, in his most Harunish tones, "as I said, I'm worth $40,000,000. I don't want to have it all put in my coffin when I die. I want to do some good with it. I seen you handling over these volumes of literature, and I thought I'd keep you. I've given the missionary societies $2,000,000, but what did I get out of it? Nothing but a receipt from the secretary. Now, you are just the kind of young man I'd like to take up and see what money could make of him."

Volumes of Clark Russell were hard to find that evening at the Old Book Shop. And James Turner's smarting and aching feet did not tend to improve his temper. Humble hat cleaner though he was, he had a spirit equal to any caliph's.

"Say, you old faker," he said, angrily, "be on your way, I don't know what your game is, unless you want change for a bogus $40,000,00 bill. Well, I don't carry that much around with me. But I do carry a pretty fair left-handed punch that you'll get if you don't move on."

"You are a blamed impudent little gutter pup," said the caliph.

Then James delivered his self-praised punch; old Tom seized him by the collar and kicked him thrice; the hat cleaner rallied and clinched; two book-stands were overturned, and the books sent flying. A cop came up, took an arm of each, and marched them to the nearest station house. "Fighting and disorderly conduct," said the cop to the sergeant.

"Three hundred dollars bail," said the sergeant at once, asseveratingly and inquiringly.

"Sixty-three cents," said James Turner with a harsh laugh.

The caliph searched his pockets and collected small bills and change amounting to four dollars.

"I am worth," he said, "forty million dollars, but—"

"Lock 'em up," ordered the sergeant.

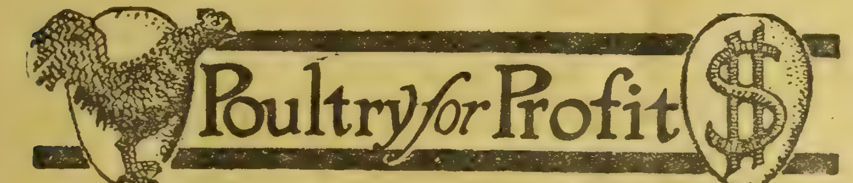
In his cell, James Turner laid himself on his cot, ruminating. "Maybe he's got the money, and maybe he ain't. But if he has or he hasn't, what does he want to go 'round butting into other folk's business for? When a man knows what he wants, and can get it, it's the same as $40,000,000 to him."

Then an idea come to him that brought a pleased look to his face.

He removed his socks, drew his cot close to the door, stretched himself out luxuriously, and placed his tortured feet against the cold bars of the cell door. Something hard and bulky under the blankets of his cot gave one shoulder discomfort. He reached under, and drew out a paper-covered volume by Clark Russell called "A Sailor's Sweetheart." He gave a great sigh of contentment.

"Say, kid, that old gazabo that was pinched with you for scrapping seems to have been the goods after all. He 'phoned to his friends, and he's out at the desk now with a roll of yellowbacks as big as a Pullman car pillow. He wants to bail you, and for you to come out and see him."

"Tell him I ain't in," said James Turner.



TEN RULES FOR POULTRY FATTENING

WHETHER for home use or for sale fatten all birds before killing.

2. Pen up about three weeks before killing.

3. Keep in a clean, dry, shady place.

4. Feed three or four times a day.

5. Feed all the birds will clean up in twenty minutes, then empty troughs.

6. Keep fresh water, grit and charcoal before birds at all times.

7. A good mixture consists of 4 parts cornmeal, 2 parts wheat middlings and 1 part beef scrap. Mix with sour milk or buttermilk and feed moist enough to drip from spoon.

8. Do not omit the animal food. Thirty pounds skimmilk, 10 pounds cut bones or 5 pounds beef scrap are estimated as being of the same value.

9. A small amount of lard or suet chopped through the mash gives good results.

10. Do not feed the birds for 12 hours before killing but see that they have plenty of water.

PURCHASE DRAKES EVERY SECOND YEAR

I have last year's ducks and this year's and want to keep some for breeding stock. Which ones and from which year's do you advise me to keep? Do you also think that the drakes must be from different nests or can they be from the same as ducks?—J. O., New Haven, Mich.

—The most successful duck raisers in this country purchase drakes every second year. It has been our experience in out crossing, that an increase in production, vigor, and growth is immediately registered. Where larger units are running together at large, every second year would be often enough to induce new blood. A young drake is usually preferred, providing he is large, vigorous, and well matured, to the older stock. The possibility of close inbreeding is somewhat remote if you are keeping a number of breeding stock, and no detrimental effects should be noticeable in using young drakes on yearling stock the first year.—E. C. Foreman, Professor of Poultry Husbandry, M. A. C.

AUGUST HATCHED CHICKS FOR FEBRUARY MARKET

Is it profitable to hatch heavy broilers in August for February market?—A. L. H., Jasper, Mich.

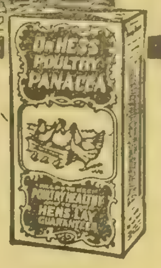
—I do not know of anyone that has successfully and profitably raised broilers in August for February market. The hatches late in the season ordinarily are very unsatisfactory and the chicks come into the world at the wrong season to make an economic growth. The extremely warm weather of August has the most depressing effect on the appetite and vitality of the chick so that they become stunted with the usual high mortality. An August hatched chick would become quite stagy by February and would be well above the broiler size, in fact, some of the pullets would be approaching a laying condition and the cockerels that lived would probably average from three to four pounds in weight. The August broiler would really come on the market the early part of December at a time when our markets are flooded with roasters, and all sorts of cull fowls. This means the broilers would have too much competition which would greatly reduce the quotations for such stock. I know of a number that have attempted this work and ordinarily one year's experience lasts a life time.—E. C. Foreman, Professor of Poultry Husbandry, M. A. C.

THE WONDER OF AN EGG

THE shell is composed of three distinct and porous layers protected somewhat by an outside covering of a mucilaginous substance. The outer layer of shell is very delicate and in a strictly fresh egg has a characteristic bloom-like appearance. Directly in contact with the inner layer of the shell is a tough shell membrane and surrounding the contents of the egg is another.

While the egg is still warm, just after being laid, these membranes lie next to each other throughout but as the egg cools, these two tough membranes separate at the large end of the egg and form what is known as the air-space. The yolk is divided from the white by a delicate membrane which is continued at each end of the yolk in the form of small cords which are fastened at each end of the shell, holding the yolk evenly suspended in the center of the shell. The germ of the infertile egg, or the embryo of the fertile egg can usually be seen as a tiny speck lying close to the yolk.

The white of the egg is put on in layers and specialists have secured red and white layers by feeding harmless but highly colored dyes and then withholding the coloring matter. Surely the egg "showeth His handiwork." One feels like taking off one's hat, bowing one's head and repeating the nineteenth psalm. Boil an egg for ten minutes, take it apart with seeing eyes and delicate fingers and observe the marvels of it.



Help your MOULTERS MOULT

If you want your hens to moult naturally—

If you want them back on the egg job promptly—fall and winter laying—

Then you must make sure that your moulters are healthy and hungry.

They must eat lots, and be able to digest what they eat.

That's just what

Dr. Hess Poultry

PAN-A-CE-A

does for your moulting flock.

It's a tonic that begins with the appetite—improves a hen's whole system.

It has Iron that keeps the paleness away, makes the combs and wattles red—the blood rich.

Pan-a-ce-a starts the food the egg way as soon as the moult is over.

No time lost.

No dormant egg organs after the moult, where Pan-a-ce-a is fed.

Tell your dealer how many hens you have. There's a right-size package for every flock.

100 hens, the 12-lb. pkg. 200 hens, the 25-lb. pail
60 hens, the 5-lb. pkg. 500 hens, the 100-lb. drum
For fewer hens, there is a smaller package.

I spent 30 years in perfecting Pan-a-ce-a.
GILBERT HESS
M.D., D.V.S.

GUARANTEED

DR. HESS & CLARK Ashland, O.

Dr. Hess Instant Louse Killer Kills Lice

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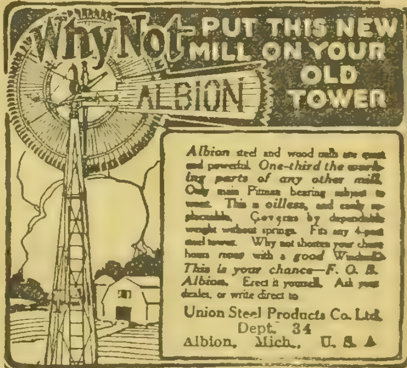
- BIG PROFITS -

Energetic man with car can make $50 to $60 a week selling Heberling's medicines, extracts, spices, toilet articles, stock tonic and veterinary remedies direct to consumers on farms. Old established company—large line giving complete satisfaction. Steady repeats. Liberal profits.

Experience or Capital Not Required
We furnish you complete stock on credit and allow you to pay as you get paid. Write quick for full particulars and secure your home county.

$50. A WEEK

Heberling Medicine & Extract Co.
Dept. 2-B Bloomington, Ill.



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Union Steel Products Co. Ltd.
Dept. 34
Albion, Mich., U. S. A.

BABY CHICKS

Tompkins Strain $15.00 per hundred. Last hatch August 22nd. Quality breeder of Rhode Island Reds.
WM. H. FROHM, R. 1, New Baltimore, Mich.

HIGHEST CASH PRICES PAID FOR LIVE Poultry all kinds, Veal, Eggs, and Butter. A square deal always. Write for tags, etc.
C. E. McNEILL & CO.
325 W. South Water St., Chicago

TAKE THE D. & C. WATERWAY trip to Buffalo. Restful, economical, all conveniences.

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PULLETS, HENS AND COCKERELS

S. C. White Leghorns and S. C. and R. C. Black Minorcas. Must make room before cold weather. About ready to lay.
LAPHAM FARMS, Pinckney, Mich.

LEGHORNS

LEGHORNS

S. C. Buff Leghorn Hens, Pullets and Cockerels. Hens and pullets $2.50 each; cockerels $3.00 to $5.00 each. Show birds a matter of correspondence. LAPHAM FARMS, Pinckney, Mich.

COCKERELS, S. C. W. LEGHORNS, TOM Barron strain, 250 egg utility line, April hatched. $1.35. Satisfaction guaranteed.
CECIL W. BOVEE, North Star, Michigan.

Yearling Hens: English and American White Leghorns and Anconas. Reasonable prices.
M. D. WYNGARDEN, Zeeland, Route 4, Mich.

BUFF ROCKS

Buff Rock Cocks, Hens, Ckl's and Pullets, big, rich buff, low combs, rich yellow shanks, from our National winners and "Hogan" tested layers.
J. C. CLIPP & SONS, Bx M, Saltillo, Ind.

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WHITTAKER'S R. I. REDS. MICHIGAN'S greatest color and egg strain. Cockerel price list ready in September. Improve your flock with Whittaker's red cockerels.
INTERLAKES FARM, Box 4, Lawrence, Mich.

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MAMMOTH BRONZE TURKEYS. HENS $7.00, Toms $9.00.
D. F. MARSHALL, Beulah, Michigan.

SELL YOUR PURE-BRED POULTRY THROUGH THE BUSINESS FARMER.

MARKET FLASHES

MARKET SUMMARY

Wheat strong in face of bearish reports. Corn and oats follow trend of wheat. Rye and beans unchanged. Butter and eggs easy after small decline. Poultry wanted and supply moderate. Fruit market firm. Potatoes easy. Cattle slow and lower. Hog trade steady. Sheep trade slow and market steady.

(Note: The above summarized information was received AFTER the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press.—Editor.)

FOOTE'S MARKET LETTER

BY W. W. FOOTE

General Business Conditions

ENORMOUS sums of money are being invested in bonds throughout the country with municipals especially favored, while the recent issue of United States 4½ per cent treasury certificates maturing next March was greatly over-subscribed. Industrial employment is on a satisfactory basis, and the outlook for the future is one of the brightest in recent years, according to the monthly review of the United States employment service. A slight decrease in the number of employes, but an increase in the total amount paid in wages is indicated by the monthly report of the bureau of labor statistics. The building trades are fully employed, and there is no slowing down in this industry. Georgia has been the hardest hit by the exodus of the negroes from the south to the north, and it is estimated that 80,000 have left that state since New Year's, and that number will reach 100,000 by Christmas, the migration is said to be the cause of more loss than Sherman's march to the sea. It is pointed out that Tennessee, Kentucky, Virginia and other states with anti-lynching laws are suffering little from migration. The high cost of living is still with us, and for months past the trend of prices has continued in an upward direction, with most farm productions bringing unduly high prices to consumers. Farmers are not getting a fair deal, the middlemen pocketing too generous a share of the profits. Regarding the freight charges made by the railroads, President Markham of the Illinois Central Railroad says that the farmers can pay the freight charges on corn from Omaha to Chicago and have left about 9 to 16 cents a bushel more of the price he receives than he could ten years ago.

Eastern Farming

Most of the great bargains in eastern farms have been sold, and farms offered at $900 to $1,500 are scarce, but it is still possible to buy good farms in the New England states at prices that would surprise a westerner. A recent vacation passed in Maine and among the White Mountains brought out many interesting facts concerning farming, one of which was that wonderful progress has been made in the last few years in dairying, farmers having stocked up their farms with the better class of cows, while numbers of hens are owned, the market for dairy products being large and steadily growing. Summer visitors make a large home market and great quantities of butter, eggs, poultry, apples, berries, etc., are purchased for the Boston market. Potatoes and apples are sure of a ready market, while remaining forests are fast disappearing before the portable saw mills, the greater part being used for pulp for paper. It was a very dry summer in more than one respect, little rain having fallen, and grass and vegetation generally suffered greatly.

Exports of Grain

The average pre-war exports of wheat grain from the United States amounted to 57,000,000 bushels a year, with an annual average value of $55,000,000, and exports of flour averaged 10,678,000 barrels, with an average value of $51,000,000, according to a statement given out on world trade in agricultural products by the department of commerce. The value of wheat exports during the last three years has been over 600 per cent greater than pre-war, and those of flour 190 per cent. In 1922 the value of exports of wheat were 250 per cent greater than pre-war and that of flour 60 per cent greater, showing that wheat exports are growing much more rapidly than flour exports.

The Grain Markets

Improvement in wheat prices is slow at best, prices being lower than a year ago and far below two years ago. Statistics cut a big figure in the wheat trade, great stress being laid on the fact that reports agree that the world has produced much more wheat than is needed to meet the wants of importing countries, while much wheat is carried over to the new crop year. Grain exports from this country are running much below those of a year ago, and the visible supply of wheat and oats is growing, but corn stocks are insignificant. Rye stocks are far larger than last year, but oats supplies are much less. Complaints are heard regarding the poor quality of the northwestern wheat, and it seems certain that if the mills want choice wheat they will have to pay a handsome premium for it. The clover seed crop is short, and prices may be expected to go higher. It sells now at $16 to $21 per 100 pounds. September wheat sells in Chicago at $1, comparing with $1.09 a year ago.

Outlook for Corn Prices

A large corn crop is promised, but the prevailing opinion is that it will not prove excessive, with no heavy carry-over of old corn, which has been marketed freely recently, as prices have looked attractive to owners throughout the corn belt states. Frost nipped some of the late corn in Iowa, Illinois and Indiana, and this will make some soft grain, but the outlook is for a large crop of good corn. The soft corn will largely be fed to live stock, and with the usual abundance of fall feed on farms, the consumption of good corn will be on a limited scale during the first part of the corn season, running from November. The recent government report points to a corn crop aggregating 3,076,000,000 bushels, comparing with 2,891,000,000 bushels last year, and an average of 2,931,000,000 bushels. The ten leading corn states promise to harvest 2,034,000,000 bushels, or 243,000,000 bushels more than in 1922. It is pretty generally conceded that all the corn grown this year will be consumed by the end of November next year. Corn prices are much higher than a year ago and far above those of two years ago. September corn sells in the Chicago market at 85½ cents, comparing with 64¼ cents a year ago.

The Oats Market

Farm consumption of oats is on a large scale because of low prices for oats and high prices for corn. The oats crop of 1,321,000,000 bushels is 110,000,000 bushels larger than that for last year. September oats sell in Chicago at 39 cents, comparing with 39⅞ cents a year ago. September rye sells at 66½ cents, comparing with 72¼ cents a year ago.

The Cattle Market

Despite the greatly increased receipts this year in the markets of the country over recent years, prices are much higher than one and two years ago, the consumption of beef being unusually large throughout the country. Prime yearling steers and heifers have been high sellers, although selling lower than prime heavy steers. Many western rangers have been coming to market of late, with good prices paid for the better class. Common stockers are not much wanted, even at extremely low prices, the demand being mostly for the more desirable kinds of stockers and feeders. Unsatisfactory prices have been paid for poorly finished range cattle, as well as for their native competitors, there being altogether too much second grade beef on the market. Some heavy receipts of cattle recently sent prices down materially, the Chicago "run" on Monday aggregating the enormous number of 32,932 head, the largest of the year. Top sales last week were at $13 for heavy steers, the best yearlings bringing $12.50. Aside from a few lots of prime cattle, the general market was 50 to 75 cents lower, the bulk of the steers going at $8.75 to $12. Sales ranged down to $7 to $8 for common steers, with good steers selling at $9.75 and over and choice lots at $11 and upward. Cows and heifers sold mainly at $4 to $7.50 and calves at $10 to $14, while stockers and feeders sold at $4.50 to $9.15. A year ago beef steers sold at $6.50 to $11.95 and twelve years ago at $4.50 to $8.35. Western range steers sell at $4.50 to $9.75. Combined receipts of cattle in twenty markets for the year aggregate 9,792,000 head, comparing with 9,166,000 a year ago.

Milkers and Springers

Of late there has been an excellent demand for good close up springers, but sales of backward cows dragged. Sales were made of the best heavy springers at $90 to $100, while the bulk of the dairy cows went at $60 to $75, with numerous sales of heavy Holsteins at $80 to $90. Common backward cows are going largely at $40 and under.

Plenty of Hogs

Prices for hogs of late have been as high as could be expected in view of the enormous gains in receipts in the markets of the country this year over recent years. With an abundance of corn and other feed, owners have been making their droves of hogs quite weighty, and recent Chicago receipts have averaged around 244 pounds. The consumption of fresh and cured hog products is prodigious, and although 48,250,000 swine were slaughtered during the last fiscal year, about 4,250,000 more than ever before in the like period, prices made a seasonable improvement. Recent weeks have brought about a widening out of prices for hogs, with a good premium paid for choice light bacon and butcher lots. Charles A Mallory, for many years prominent as a hog seller in the Chicago market, advises stockmen to market their hogs of the old crop as fast as possible, and feed the new crop or else buy stock hogs for "hogging down" corn or feeding in other ways. He points to the too large offerings of thin hogs of all weights of late, and as the demand for these and for common hogs generally is very limited, they are slow of sale even at large discounts. It is usual as about this time of the year for many farmers to feed green corn to their hogs, and there is always danger of bad results from furnishing it too generously, instead of starting in a small way and gradually increasing the amount. Exports of cured hog meats and lard continue large despite the unsatisfactory financial conditions in several European countries.

Hogs Sell Lower

About 157,000 hogs were dumped on the Chicago market last week, comparing with 117,766 a year ago and enormous supplies made lower prices, closing sales being made at $7.10 to $8.90, the top comparing with $9.30 a week earlier and $10.40 a year ago. Pigs brought $5 to $8. Combined receipts in twenty markets for the year to late date amount to 30,093,000 hogs, comparing with 23,425,000 a year ago.

Excessive Lamb Receipts.

Last week's receipts of lambs were far greater than usual, and prices suffered severe reductions, with feeders especially depressed by the vast number of thin flocks. Prime flocks were not numerous enough, and they sold higher after early weakness. Late sales were made in the Chicago market of lambs at $9.25 to $14.50, feeders going at $12.50 to $13.60. Close to 143,000 head were received in Chicago for the week, comparing with 106,120 a week earlier and 83,215 a year ago. Breeding ewes are wanted at $6.50 to $11.75.

WHEAT

Up to the closing day of last week the Detroit wheat market did not go above level it was two weeks previous but improved milling demand caused the price to advance 1c on the closing day. It seems that eastern mills want Michigan white wheat and they can not get enough to fill their needs. This fact gave strength to the market for red wheat.

Prices

Detroit—Cash No. 1 red, $1.08; No. 3, $1.05; No. 2 white, $1.09; No. 2 mixed, $1.08.

Prices one year ago—Detroit, Cash No. 2 red, $1.12; No. 2 white and No. 2 mixed, $1.10.

CORN

Bullish reports from the corn belt did not influence the trend of the Detroit corn market last week. While many other markets were strong there was nothing doing at Detroit and the price did not change.

Prices

Detroit — Cash No. 2 yellow, 95½c; No. 3, 94½c.

Prices one year ago—Detroit, Cash No. 2 yellow, 70c; No. 3, 69c; No. 4, 67c.

OATS

Oats are steady and inactive at Detroit the price at the close of last week being one-half cent higher than two weeks ago.

Prices

Detroit—Cash No. 2 white, 41c; No. 3, 42c.

Prices one year ago—Detroit, Cash No. 2 white, 43c; No. 3, 41c; No. 4, 38c.

RYE

During the fortnight ending Saturday, September 22nd, the price in the Detroit rye market declined but before the close of the period it was back to 75c. There is a small supply.

Prices

Detroit—Cash No. 2, 75c.

Prices one year ago—Detroit, Cash No. 2, 75c.

BEANS

Pea beans have been steady and the price has made several gains during the past couple of weeks. Offerings of choice stock are small and many dealers see higher prices in the future. A firm tone prevails at Detroit.

Prices

Detroit—C. H. P., $5.85 per cwt.

Prices one year ago—Detroit, C. H. P., $5.25 per cwt.

POTATOES

There is a liberal supply of potatoes and consumers are reluctant buyers. We believe that they will be sorry before the year is up because there will be a smaller supply of potatoes than many expect owing to the dry weather. Farmers should hold a good share of their surplus until later in the year. All indications are that they will make money by doing so.

Prices

Detroit—Michigan, $2@2.33 per cwt.

Prices one year ago—Detroit, Michigan, $1.50 per cwt.

HAY

While prices in general are unchanged, the demand for timothy hay is reported active, especially for the choice grades. Lower grades continue slow.

Prices

Detroit—No. 1 timothy, $20.50@21; standard and light mixed, $19.50@20; No. 1 clover mixed, $17@18; No. 1 clover, $15@16, per ton.

Prices one year ago—Detroit, Standard timothy and light clover mixed, $15.50@16; No. 1 clover, $14@14.50 per ton.

The Agricultural and Business Situation

Revised Monthly by the Department of Research of the American Farm Bureau Federation.

An understanding of the figures on this page as they are revised and presented each month, enables the farmer to see the position of the important factors which indicate the trend of business and prices and give a basis for judgment concerning future agricultural operations.

PRODUCTION AND TRADE:

September crop forecasts show only moderate change from August except for cotton a decline of 700,000 bales. This, together with continued unfavorable weather and sharp increase in demand due largely to the effect of the Japan disaster on the silk industry, has brought the price of cotton up to thirty cents, an abrupt increase of about five cents per pound.

Wheat, from its low point last month rebounded nine cents per bushel and then began to decline when the larger crop estimates from Canada were published. Figures of exportable surplus for the United States and Canada, now current in the grain trade, range as high as 650 million bushels compared with around 500 million bushels last year. There appears no foundation for this present high estimate of surplus in face of a total supply for the two countries, including both crop and carryover, of 1369 million bushels this year compared with 1360 last year.

Industrial production shows no let-up. Manufacturing output which was 28 per cent below normal in the middle of 1921, the period of low activity, is now about 15 per cent above normal. Building operations which gave some sign of slumping two and three months ago, are now showing a greater gain over last year. Freight car loadings continue at record levels.

FOREIGN TRADE:

Imports, the first seven months of this year have been more than enough to pay for the exports. Exports for this period, show only a slight increase over the previous year. Cotton, during this calendar year has been going abroad at a ten per cent slower rate than last year; wheat 16 per cent slower; pork and lard 38 per cent faster; and tobacco, 11 per cent faster.

PRICES:

Central market prices of farm products as reported by the U. S. Department of Labor, are 3 per cent above last month and 6 per cent higher than last year. Decline from last year in the prices of non-agricultural commodities came exclusively in the fuel and lighting group. The gain, over a year ago, in farm purchasing power in terms of the price ratio, is therefore largely theoretical since farmers' purchases of these items are comparatively small. Trends covering the last three or four months are more favorable and are slowly narrowing the gap between farm and other prices at points that will yield practical benefits.

Out of 24 commodities 14 are above a year ago; 9 are below and 1 remains unchanged. Compared with last month 14 are higher, 7 are lower and 3 are the same.

INCOME:

Total cash income gives promise of being greater this present crop year than last for the following commodities: corn and other cereals except wheat, cotton, potatoes, dairy products and poultry products. Hogs will probably yield less income. Tobacco, cattle, sheep and wool should bring about the same gross receipts this crop year as last.

I. Production and Trade.

1. Agriculture: U. S. Production—000,000 omitted.

	September, 1923 Forecast	1922	Average, 1917-1921	1923* Per Cent
Winter wheat, bu.	568	586	590	96
Spring wheat, bu.	221	276	245	90
All wheat, bu.	789	862	835	95
Corn, bu.	3076	2891	2931	105
Oats, bu.	1312	1201	1378	95
Barley, bu.	199	186	193	104
Rye, bu.	64.8	95.5	70.3	92
Buckwheat, bu.	13.5	15	14.9	91
White potatoes, bu.	390	451	388	101
Sweet potatoes, bu.	93.5	110	94.3	99
Tobacco, lb.	1551	1325	1361	114
Flaxseed, bu.	19.4	11.7	9.7	200
Rice, bu.	32.6	42	41	80
Hay, tame, tons	81.9	96.7	83.3	98
Hay, wild, tons	16.1	16.1	16.2	99
Cotton, bales	10.8	9.8	11.2	97
Sugar beets, tons	6.5	5.2	6.93	94
Apples, total	190	201	160	119
Apples, commercial, bbls.	33.4	31	25.7	130
Peaches, total	45.4	56.7	42.7	106
Grain sorghums	101	90.4	103	98
Peanuts, lb.	655	624	1025	64

* As per cent of average of 1917-1921.

2. Mining (Federal Reserve Bank of New York):

Figures express production as a percent of normal. In estimating normal production, due allowance is made for seasonal variation and year to year growth.

	July, 1923	June, 1923	July, 1922
Anthracite coal	100	98	1
Bituminous coal	106	109	41

3. Manufacturing (Federal Reserve Bank of New York):

Wheat flour	122	107	121
Meat	...*	111	99
Sugar	70	79	131
Cotton	83	96	84
Wool	...*	113	89
Pig iron	121	122	81
Steel ingot	106	114	91
Copper	102p	[illegible]	77
Gasoline	...*	111	109
Cement	135	128	126
Lumber	...*	123	101
Automobiles	161p	159	131

* Not available; p, preliminary.

4. Building Expenditures (Bradstreets):

(000,000 omitted)

	1923	1922	Per cent Increase
January to June, six months	$1,625	$1,239	31.0
July, 167 cities	224	206	8.5
August, 150 cities	239	213	12.5

5. Transportation (000 omitted):

Freight car loadings:	Week Ending Sept. 1, 1923	Same Week Month Ago	Same Week Year Ago	Week Ending Sept. 1, 1923*
Total	1093	1033	924	111
Grain and grain products	53	53	54	98
Livestock	39	31	32	122
Coal	207	191	149	139
Coke	14	13	8	175
Forest products	77	76	58	133
Ore	78	84	62	126
Merchandise	247	240	233	106
Miscellaneous	376	345	326	115

* As percentage of week year ago.

6. Employment:

	August, 1923	July, 1923	August, 1922
Out of 64 industrial centers employment:			
Increased over previous month in	29	37	39
Decreased over previous month in	35	27	26

7. Bank Debits.

Units of $1,000,000,000

	August, 1923	July, 1923	August, 1922
New York City	$16.17	$18.32	$18.29
Outside bank debits	17.17	18.18	15.85

8. Mail Order Sales:

	August, 1923	August, 1922	Seven Months Ending— August, 1923	Seven Months Ending— August, 1922
Montgomery Ward & Co.	$ 8,425,433	$ 5,552,906	$ 80,354,091	$ 52,473,540
Sears Roebuck	13,909,309	12,156,190	125,646,496	106,904,376

II. Foreign Trade.

1. Exports (000 omitted):

Commodity:	July 1923	July 1922	Seven Months Ending July 1923	Seven Months Ending July 1922
Grand total	$290,551	$296,488	$2,202,987	$2,081,295
Beef and veal, lb.	2,470	2,503	16,497	18,682
Pork, lb.	71,374	65,180	578,698	391,794
Lard, lb.	69,478	66,058	618,786	429,674
Neutral lard, lb.	812	2,189	16,070	11,450
Butter, lb.	490	2,451	3,753	7,242
Cheese, lb.	374	363	6,798	3,347
Hides and skins $	253	300	1,872	2,441
Corn, bu.	1,130	14,244	36,747	119,403
Meal and flour, bbls.	50	51	435	414
Wheat, bu.	8,843	14,979	50,590	66,466
Flour, bbls.	884	921	7,810	7,989
Oats, bu.	143	4,181	2,406	17,882
Oatmeal, rolled, lb.	13,698	8,640	70,488	56,438
Fruits and nuts $	3,593	4,596	26,596	30,395
Vegetable oils $	611	692	6,519	8,030
Sugar, lb.	7,128	199,103	411,357	1,690,201
Tobacco, lb.	44,105	32,310	259,775	233,754
Cotton, bales	171	373	1,958	3,208

2. Imports:

(000 omitted)

Grand total	$287,335	$ 251,772	$2,375,255	$1,671,180
Beef and veal, lb.	1,650	3,576	7,964	14,103
Pork, lb.	47	18	687	478
Butter, lb.	1,663	144	12,904	2,571
Cheese, lb.	5,050	3,418	29,056	19,442
Hides and skins $	12,337	6,877	87,718	48,905
Corn, bu.	5	2	121	93
Wheat, bu.	1,836	3,070	6,522	12,386
Flour, bbls.	3,565	8,990	34,691	91,988
Oats, bu.	....	82	91	1,179
Fruits and nuts $	5,148	4,407	40,166	41,262
Vegetable oils $	5,863	5,030	43,969	37,694
Sugar, lb.	479,842	1,009,725	5,260,934	7,089,954
Tobacco, lb.	3,754	4,747	40,414	43,316
Wool, lb.	13,422	33,591	344,901	216,270

3. Prices of Foreign Drafts:

	Nominal Gold Value Par of Exchange	Price of Demand Drafts Sept. 18, 1923	Aug. 20, 1923	Septt. 18, 1922
England	$4.87 to 1£ sterling	$4.53	$4.54	$4.42
France	19.3c to 1 franc	5.78c	5.55c	7.57c
Belgium	19.3c to 1 franc	4.83c	4.43c	7.15c
Italy	19.3c to 1 lire	4.40c	4.30c	4.19c
Spain	19 3c to 1 peseta	13.48c	13.45c	15.13c
Denmark	26.8c to 1 crown	18.12c	18.07c	20.78c
Norway	26.8c to 1 crown	16.05c	16.37c	17.13c
Sweden	26.8c to 1crown	26.55c	26.59c	26.38c
Holland	40.2c to 1 florin	39.28c	39.31c	38.66c
Argentina	42.5c to 1 peso	33.10c	32.60c	35.75c
Brazil	32.4c to 1 milreis	9.80c	10.00c	12.50c
India	48.7c to 1 rupee	30.63c	30.30c	28.35c
Japan	49.9c to 1 yen	48.40c	48.88c	48.30c
Canada	100c to 1 dollar	97.67c	97.75c	99.94c

4. Discount Rate of the Bank of England:

Sept. 12, 1923	Month Ago	Year Ago
4%	4%	4%

III. Money and Credit.

1. Gold, Currency and Bank Deposits (000,000 omitted):

	Aug. 1, 1923	July 1, 1923	Aug. 1, 1922
Stocks of monetary gold in the United States	$ 4,079	$ 4,049	$ 3,825
Total supply of currency in the United States	4,696	4,730	4,337
	June 30, 1923	April 3, 1922	June 30, 1922
Total deposits in national banks	$16,898	$17,036	$16,321

2. Gold Movement (000 omitted):

	July, 1923	July, 1922	Seven months ending July 1923	Seven months ending July 1922
Exports of gold	$ 522	$ 645	$ 22,814	$ 10,788
Imports of gold	27,929	42,986	159,861	165,999

3. Federal Reserve Ratio:

	Sept. 15, 1923	Aug. 18, 1923	Sept. 16, 1922
Ratio of total reserves to deposits and Federal Reserve note liabilities	75.9%	77.3%	78.3%

4. Interest Rates:

	August, 1923	July, 1923	August, 1922
4-6 mos. commercial paper	5.25%	5.19%	4.25%
60-90 days commercial paper	5.02%	4.94%	3.88%

5. Discount Rate of Federal Reserve Banks:

	Sept. 1, 1923	Aug. 1, 1923	Sept. 1, 1922
Range of rates for the twelve banks on commercial, agricultural and livestock paper	4½-5%	4½-5%	4-5%

6. Stock and Bond Prices:

	Sept. 7, 1923	Aug. 9, 1923	Sept. 8, 1922
20 Industrial stocks	$92,84	$89.11	$101.22
20 Railroad stocks	79.93	78.11	93.51
40 Bonds	87.11	87.21	91.71

7. Business Failures:

	Week Ending Sept. 6, 1923	Aug. 9, 1923	Sept. 7, 1922
Bradstreets	281	296	280
Duns	247	268	329

IV. Prices.

1. Wholesale Prices of Farm Commodities:

Quotations at Chicago except as noted.

	Sept. 18, 1923	Month Ago	Year Ago
Fat hogs, cwt., average	$ 8.25	$ 8.15	$ 8.85
Beef steers, good native, cwt., av.	10.30	10.75	10.25
Fat lambs, cwt., average	13.85	13.00	13.85
Fat sheep, cwt., average	6.90	6.75	6.40
Wool, Ohio delaine, unwashed, lb.	.535	.54	.55
Butter, 92 score, lb.	.475	.44	.385
Cheese, No. 1 twins, lb.	.239	.2375	.20¾
Eggs, fresh firsts, doz.	.33	.2575	.285
Poultry, hens, lb.	.21	.23	.24
Wheat, No. 2 hard, bu.	1.04	1.04	1.05
Corn, No. 2 mixed, bu.	.8675	.90	.644
Oots, No. 2 mixed, bu.	.4175	.405	.39¼
Rye, No. 2, bu.	.6875	.66	.73¼
Barley, bu.	.625	.62	.61
Kafir, No. 1 white, cwt. (K. C.)	1.805	1.565	1.95
Hay, No. 1 timothy, ton	26.50	28.00	21.00
Flax, No. 1, bu. (at Minneapolis)	2.32	2.32	2.35
Cotton, middling, lb. (New York)	.2975	.2575	.214
Beans, white, cwt. (f.o.b. Michigan)	6.00	5.60	5.00
Potatoes, Northern Whites, cwt.	1.70	2.35	1.31
Onions, Washington yellows, cwt.	3.15	2.35	1.50
Apples, summer varieties bu.	1.35	1.35	1.50
Hides, No. 1 native, heavy (Chicago)	.145	.1475	.21
Sugar, fine granulated, lb. (N. Y.)	.0835	.0755	.0625

2. U. S. Department of Labor Relative Wholesale Prices:

Prices in year 1913 equal 100.

	Aug., 1923	July, 1923	Aug., 1922
All commodities (weighed average or general price level	150	151	155
Farm products	139	135	131
Food products	142	141	138
Cloths and clothing	193	193	181
Fuel and lighting	178	188	271
Metals and metal products	145	145	126
Building materials	186	190	172
Chemicals and drugs	127	128	122
House furnishing goods	183	187	173
Miscellaneous	130	121	115

3. Prices of Farm Products at the Farm Relative to 1913:

(U. S. Bureau of Agricultural Economics)
Prices in year 1913 equal 100.

Commodity:	July, 1923	June, 1923	July, 1922
Cotton	190	211	167
Corn	147	146	108
Wheat	107	121	124
Hay	108	106	100
Potatoes	191	129	179
Beef cattle	97	99	98
Hogs	89	85	122
Eggs	119	108	106
Butter	136	138	123
Wool	229	248	194

4. Relative Purchasing Power of Farm Products:

(U. S. Bureau of Agricultural Economics)

The quantity of various commodities which a given amount of each farm product would purchase at prices prevailing in 1913 is put equal to 100. The figures given represent the percentage of this quantity which the same amount of farm products would purchase in July, 1922. Prices at the farm are used for agricultural products, and wholesale prices at central markets for other commodities.

	All Commodities	Cloths, etc.	Fuel, etc.	Metals, etc.	Building Mtls.	House Furn'gs
Cotton	126	98	104	131	100	102
Corn	97	76	80	101	77	79
Wheat	71	55	58	74	56	57
Hay	72	56	59	74	57	58
Potatoes	126	99	104	132	100	102
Beef cattle	64	50	53	67	51	52
Hogs	59	46	49	61	47	48
Eggs	79	62	65	82	63	64
Butter	90	70	74	94	72	75
Wool	152	119	125	153	121	122

Average purchasing power of all farm products in terms of all other commodities. Same basis as above table.

1913	100	December, 1921	62
1914	112	July, 1922	69
1915	106	August	64
1916	89	September	64
1917	106	February, 1923	69
1918	112	March	69
1919	111	April	70
1920	86	May	71
1921	67	June	71
1922	69	July	71

CO-OPERATIVE BUYING DIRECT FROM THE MINES

YOU, as a farmer, understand the principles of "Co-operative Buying." You know what big savings can be made by that method. It is just as sound in principle as co-operative marketing. Here is a wonderful opportunity for you, not only to get your own coal for next winter *absolutely free*, but also for you to save real money for many of your friends and neighbors, thereby doing a genuine service for your community. Read below the details of our great money-saving offer.

I Will Fill Your Coal Bin FREE

A Straight Business Proposition from the President of the Peoples Coal Co.

Hundreds of Farmers Got Their Coal This Way Last Year

THIS is not a new and untried plan, but one that has been thoroughly tried out and found entirely practical and satisfactory. Hundreds of farmers in Illinois and other states got their coal from us last year through this plan and are again taking advantage of it this year. Their letters testify to their enthusiasm over the soundness of our method, the quality of our coal, and to the money that they saved. Read on. This is only one of hundreds we have received.

Onarga, Ill., Feb. 26, 1923.

Peoples Coal Company,
Chicago, Illinois.

Gentlemen:—Let me advise you what I think of the coal I have had from you the last month. I sent a load up to the high school last Friday to try out, and today I went up to see the janitor about it, and here's the answer he gave me:—

"Koon, I can get as much steam out of one ton of your coal as I can get out of two tons of the coal I have been using."

I thought that good enough, and think they ought not to turn me down on another car. Here's hoping the Indiana Egg that I have now rolling will even be better. Yours very truly,

(Signed) J. H. KOON.

(We have the original of this letter in our files.)

WE HAVE been successful coal shippers for the past 16 years, handling the outputs of the best mines in Illinois, Indiana and Kentucky and selling direct to the user. This method of conducting the coal business has enabled us to reduce the price and save the consumer $1.50 to $2.00 per ton. As the average family consumes 15 tons of coal per year, this means an important saving. We have found, through experience, that when we can ship in carload lots, we can reduce the cost still further, but as a car of coal runs from 40 to 50 tons, no one family is likely to use that amount. There is usually enough coal in one car to supply three or four families.

Help Your Friends Buy Coal at Wholesale

An experiment quickly showed that families would readily club together and buy coal by the carload in order to make this big saving. You see, we are wholesalers. We have no local yards, no local agent, or representatives. We are not equipped to reach individual consumers personally and interest them in getting together to buy a car of coal. In order to carry out the plan, we began to organize Peoples Coal Clubs, appointing an organizer for each club and giving him his coal free for his trouble in organizing the club.

You now have that chance. It will be a very simple matter for you to get your winter's coal supply free. You will find that your friends and neighbors will be delighted to club with you to get a carload of coal. They will thank you for the opportunity.

Own a Lucrative Coal Business

You needn't confine the offer to friends and neighbors. You can sell to storekeepers, banks, churches, hospitals, office buildings, or other large users of coal. You can order as many carloads as you want to and after you have all the coal that you can use, we will give you a big cash commission for each ton which you sell. This offer may start something "real big" in your life.

Best Quality of Coal

Our coal is all hand-picked, guaranteed coal, selected only from the choicest mines in Illinois, Indiana and Kentucky. It is all freshly mined, clean and free burning, makes very little soot, and is guaranteed to give perfect satisfaction. You will be amazed that such coal can be bought at the prices we offer. You will hear nothing but praise for it. You do not have to pay for the coal until the car arrives.

Fill out the coupon below and send it to us today and we will send you a price list with full descriptions and with complete instructions so that you can start right out and begin to line up your club. Ask your friends and neighbors if they want to save money on their coal supply. The answer is always "Yes," when our plan of co-operative buying is explained. A little effort in your spare time and you will quickly have a carload order made up. Here's a chance for you to build up a profitable business on the side.

Send the coupon today.

Our Responsibility

TO WHOM IT MAY CONCERN:

March 23, 1923.

We take pleasure in testifying to the responsibility and dependability of the Peoples Coal Company of Chicago, valued customers of this bank. The owners of this company are well and favorably known to us, impress us as possessing integrity and business acumen, and it is our opinion that any commitments made by the company will be fulfilled as agreed. A statement submitted to us of recent date shows them to possess a net worth in excess of $200,000.00. In our opinion this company is entitled to the confidence of those with whom they do business.

Very truly yours,
CENTRAL MFG. DISTRICT BANK,
WM. N. JARNAGIN, President.

ACT QUICK

Now Is the Time to Get Your Coal

It's Easy, but Don't Delay a Minute

The labor situation, car shortages, and other conditions indicate that the price of coal will be just as high next winter as last year if not higher. Check over your last winter's coal bills and see how much money you shoveled into your furnace and stoves.

THIS IS THE WAY OUT. Get your coal free, and save money for your neighbors by supplying them direct from the mines at wholesale prices, and in the summertime when prices are always lower.

THE PEOPLES COAL CO.
1118 W. 35th St., Dept. 597, Chicago, Illinois

Gentlemen—Please send me order blanks and instruction sheets in connection with your Peoples Coal Clubs. I want to try out your plan but I understand that this request carries with it no obligation of any kind on my part.

....

....

....

....

MAIL THIS COUPON

FREE

YOUR NEXT WINTERS COAL

Read What Our Readers Would Do
With $100,000—Page 6

Are You Reading "Oh, Money! Money!" Our Latest ~~Serial~~—Page 7

The Michigan
BUSINESS FARMER

An Independent
Farm Magazine Owned and
Edited in Michigan

VOL. XI, No. 4 SATURDAY, OCTOBER 13, 1923 TERMS: TWO YEARS $1
60c PER YEAR—5 YRS. $2

OCT

I find sweet peace in the depths of autumn woods,
Where grow the ragged ferns and roughtened moss;
The naked, silent trees have taught me this—
The loss of beauty is not always loss!
—Elizabeth Stoddard.

Read: Representation On Basis of Citizenship—Hints On Harvesting and Storing Seed Potato Crop.

Potato Grades Will Boost Michigan Products

MICHIGAN took another step forward in its fight to place the products of the Michigan farms foremost on the markets when the enforcement of the potato grade in this state by the Department of Agriculture went into effect Monday, September 29th. Market experts declare that it is particularly difficult to bring about uniform grading of potatoes because they are grown over such a large territory and shipped at so many different points. There is no question that some potatoes not up to specifications will be shipped to New York and other eastern markets, but while nothing formerly could be done about it now the inspector of the U. S. Bureau of Markets can, and no doubt will, make trouble for shippers found to be misrepresenting their stock.

Mr. William P. Hartman, who is deputy commissioner of agriculture in this state, declares that the importance of the use of grades by the farmers of Michigan cannot be overestimated. He goes on to say that standardization is one of the major facts in the solution of the market problem and the farmers can organize until doomsday but if their products are not good and dependable, they won't get very far. This is a fact all too true, and much to their grief a few cooperative associations have started out without giving this proper consideration. Needless to say, they have not been a success. Of course it is to be realized that organization, storage and advertising are needed just as well as standardization. These four are cardinal factors in the market system, but if any one of these is weak the whole system is weak.

"Mandatory grades mean much to the shipper and indirectly to the grower," says Mr. Hartman. "When the shipper knows that only good of certain quality are being offered to him he does not hesitate to pay the top price for that grade. But when poor stuff is included along with the high quality products the grower receives the bottom price for the whole."

The first step in this state to be taken in the effort for better marketing was in 1917 when the Michigan legislature passed a law creating the office of Director of Markets. Then in 1921 this office was placed under the commissioner of agriculture. The law regarding the director of markets reads that "he shall assist in the organization of cooperative and other associations, for improving the relations and services among producers, distributors and consumers, and afford them such services under adequate rules and regulations as relate to standardizing, grading, packing, handling, storage and sale of products within the law of Michigan not contrary to law, and enforce such rules and regulations by actions and proceedings in any court of supreme jurisdiction."

Up to date the department of agriculture has confined itself almost entirely to work of standardization and inspection, and establishment of a market news service as the Michigan Agricultural College has assisted in the formation of the market organization. Market information on grapes, peaches, apples and onions is sent out from the market news club office at Benton Harbor. This office is maintained jointly by state and federal funds. The address will be changed to Grand Rapids after October 15th, where the office will be maintained until May, as it chiefly concerns potatoes during the winter months.

Present Grades in Effect

At present mandatory grades for apples, peaches, grapes and potatoes are in effect. The apple law was passed in 1917 and was amended in 1919 and 1921. Last winter it was almost completely rewritten. The grades consist of "Michigan Standard Fancy," Michigan Standard A," "Michigan Under Color," "Michigan B," and "Michigan Unclassified."

Grape grades were promulgated by the department a year ago at the request of the growers, when it was found that California and New York grapes were receiving preference over their own. Up to that time no other state had adopted grades on grapes, and hence the men who devised the grape rulings were required to blaze an entirely new trail. Three grades were adopted—"Choice Table Grapes," "Choice Grapes," and No. 2 Grapes." Last winter these were enacted into law. This season the department has four men and the growers five men performing the inspection service in Southwestern Michigan.

United States grades on peaches were promulgated only four weeks ago. Though only rulings of the department, they are as binding as law. These grades consist of "U. S. Fancy No. 1," "U. S. No. 1," "U. S. No. 2," and "U. S. No. 3."

Growers Want Grades

The petition for the promulgation of potato grades was signed by the Michigan Potato Growers' Exchange, the Michigan Shippers' Association, the Michigan Potato Producers' Association and the Michigan Agricultural College. The grades adopted were those already established by the United States Bureau of Markets, with the addition of an "ungraded" class. The Michigan Potato Growers' Exchange plans to ship only U. S. Fancy No. 1 potatoes under its "Chief Petoskey" brand.

Last year Michigan shipped 19-527 cars of potatoes across the state line, but on eastern and central western markets many Michigan potatoes were underbid because they were not up to the standard of those of other states. The low prices received by Michigan table stock were in direct contrast to the fancy prices received by Michigan certified potatoes.

"Some people would like to have the Department of Agriculture cooperate with the Federal Bureau of Markets and put on an inspection service at every shipping point," said Mr. Hartman. "This would be desirable, but the department has not enough men or money to do so. If the growers and shippers get together and see that their goods conform strictly to the grading rules, there will be no kicks at the other end."

FIRE PREVENTION WEEK ON THE FARM

AMONG the most serious drains on our national resources is our appalling and rapidly mounting fire waste, according to Secretary of Agriculture Wallace in a statement just issued. The amount of this fire waste for last year has been reported as in excess of $500,000,000. The big individual items in this sum arise, of course, from large fires and conflagrations in cities and towns. No complete figures are available for the annual loss of farm property by fire, according to the Secretary, but enough information is said to be on hand to show that is it also on the increase and that the sum now materially exceeds $50,000,000—the actual figure may be nearer $100,000,000.

President Coolidge has designated October 9 as Fire Prevention Day, while prominent national organizations interested in conservation of our national wealth are urging that the entire week of October 7-13 be observed as Fire Prevention Week. During this day and week much will be said from the platform, as well as through the press, on the necessity for greater care and effort in the prevention of fire losses. Less of this publicity will reach the farmer than the city dweller. In any case, it will all be in vain unless the owners and users of property individually take heed and give personal thought to the fire menace.

CORN BORER QUARANTINE EXTENDED

EXTENSION of the Federal quarantine against the European corn borer to include additional cities and towns in New England, New York, Pennsylvania, Ohio, and Michigan, effective October 1st, was announced by the Federal Horticultural Board, United States Department of Agriculture recently. As the pest gradually spreads to new fields, the area under quarantine is widened. The new territory becomes subject to the quarantine regulations aimed to keep the pest in check. The new townships in Michigan that go under quarantine October 1 are: Ash, Dundee, and Raisinville, in Monroe county; Taylor, in Wayne county.

Invest in a McCormick-Deering for Fall Plowing and Belt Work

The remarkable new warranty covering the crankshaft and the crankshaft ball bearings in McCormick-Deering Tractors has shown the farmer more clearly than ever that he can best depend on these tractors for real value and economy. This is a guarantee for the entire life of the tractor and that means much.

It may well prove the deciding factor in your own investment. The ironclad agreement, printed below, provides you with a lasting security covering these important parts of the tractor. It is evidence of quality in the entire tractor. It is an indicator of practical design, accurate assembly, generous size of parts, and long life.

The fall season is ahead—a season of many power jobs, both drawbar and belt. Do your plowing speedily and well with a McCormick-Deering and fit your tractor to fall and winter work. McCormick-Deering Tractors are designed to handle belt jobs as you want them handled. And McCormick-Deering machines are made to work right with tractors. The combination can't be beat.

Stop at the McCormick-Deering dealer's and go over the construction and the features of these tractors. Study the value of replaceable wearing parts, the unit main frame, ball and roller bearings at 28 points, etc. And remember this important point: When you buy a McCormick-Deering Tractor you get all necessary equipment—throttle governor, belt pulley, platform, fenders, brake, etc. No extras to pay for. Make your power investment safe from every point of view by placing an order for a McCormick-Deering 15-30 or 10-20 Tractor.

SPECIAL WARRANTY
given every purchaser

The seller agrees to replace free the Two-Bearing Crankshaft in any 10-20 or 15-30 McCormick-Deering tractor, should it break during the life of the tractor, provided the broken parts are promptly returned to the factory or one of the branch houses.

Further, the seller agrees to replace free any Crankshaft Ball Bearing in the 10-20 or 15-30 McCormick-Deering tractor, which may break, wear out, or burn out during the life of the tractor, provided that the defective ball bearing is promptly returned to the factory or one of the branch houses.

INTERNATIONAL HARVESTER COMPANY
606 So. Michigan Ave. of America [Incorporated] Chicago, Ill.

McCORMICK DEERING

SATURDAY
October 13th,
1923

VOL. XI, NO. 4

Being absolutely independent our columns are open for the discussion of any subject pertaining to the farming business.

"Hew to the line, let the chips fall where they may!"

The Michigan
BUSINESS FARMER

"The Only Farm Magazine Owned and Edited in Michigan"

Published Bi-Weekly
Mt. Clemens, Mich.

TWO YEARS $1

Entered as second-class matter, August 22, 1917, at the post-office at Mt. Clemens, Mich., under act of March 3rd, 1879.

Asks for Representation On Basis of Citizenship

Mrs. Dora Stockman of State Board of Agriculture Says People Want Educational Qualifications for Voters of Michigan

REPRESENTATION in state affairs on the basis of citizenship rather than on the basis of mere nondescript population is an idea that is winning support from unexpected sources and in unlooked for volume, according to Mrs. Dora Stockman, member of the state board of agriculture.

"Now it is evident that people are so strongly for the idea of citizenship representation let us go a step further and more closely and painstakingly define what citizenship shall be," said Mrs. Stockman, Monday, when asked further concerning her ideas for meeting the re-apportionment issue.

Asks Educational Test

'Let us have representation in our legislative councils on the basis of citizenship, and let us see to it that the citizenship which is to be represented is an intelligent citizenship—to put the matter bluntly it is high time that we had an educational qualification for citizenship in this state.

"There is not only good reason for this view, but there is ample precedent. Nearly a third of the state now have educational qualifications and the tendency in that direction has been increasing in recent years. The increase has come in the south and the west. It may be objected that the limitation of suffrage in the south, through aneducational qualification, was not quite bonafide and done in a spirit of extreme partisanship, but that does not by any means discount the whole tendency. Massachusetts and Connecticut have long had educational requirements for voters and those laws have worked well. They were passed early in the '50's, before the Civil war, and experience has shown no reason to let down the bars. The educational qualifications worked so well for the states mentioned that Maine copied the law, and both Wyoming and Washington have fallen in line.

"Washington requires that a voter shall both speak and read the English language. This is a requirement which strikes pretty closely home to what many earnest-minded citizens are thinking these days. Another state with an intelligent electorate is California, Delaware and New Hampshire also require literacy. The southern states requiring an educational qualification are Alabama, Arizona, New Mexico, Georgia, Louisiana, Mississippi,, North Carolina, South Carolina, Virginia, and Oklahoma. Arizona and New Mexico are more western and are doubtless animated by progressive rather than racial feelings in the matter of restricting the privilege of voting.

"It seems to me that we are all pretty well agreed that democracy, if it means anything, means an intelligent participation in goverment. We are so firmly of this view as a people that we spend millions of dollars annually, in educating our young people. Why does the state spend so much on education?—Is this state expenditure a gift to the individual? Essentially it is not—the state makes these large educational appropriations to the end an intelligent citizenship. Since, then, we require so much of ourselves, why throw the point of our large expenditures to the wind, and discretion as well, and give the ballot to new comers almost without question?

"Extension of the right of suffrage has gone forward in the last century, particularly in the last part of it, in an unprecedented way. On the whole this has been right and wholesome so far as it has tended to bring intelligence to the affairs of the nation, in the widest way; but, since we have been so prodigal in this extension, is it not high time that we begin to trim the raw edges that have resulted from this wide inclusion of voters?

"In limiting the vote to those who can read and write or otherwise manifest a fair degree of intelligence, there cannot be any possible thought of building up an oligarchy of education, for the reason that, on every hand, we provide means of overcoming the handicap of illiteracy. Any new comer who cares enough about our government and our ways to learn to read and write surely will be welcome as a citizen, and, furthermore, the second generation of the illiterate ought certainly to be able to read and write if they are to be accounted desirable citizens.

"Democracy in America is coming to its real testing in the years that are immediately ahead—let us trust to real intelligence and not to mere numbers when we come to the difficulties."

State to Continue to Make Binder Twine

MANUFACTURE of binder twine is to continue at the Jackson penitentiary, reports to the contrary from Lansing being emphatically denied by officials of Michigan State Prison.

Charles A. Blaney, chairman of the Michigan State Prison Commission, and Warden Harry L. Hurlburt vigorously refute Lansing dispatches stating the manufacture of binder twine is to cease at the local penal institution. The denial, as issued by Chairman Blaney, of the prison commission, is as follows:

"We note by dispatches from Lansing in the state papers articles to the effect that Jackson prison is to discontinue the manufacture of binder twine.

"Speaking as chairman of the Michigan State Prison Commission I wish to say that the commission has never considered any such move, nor do they contemplate any such action. I can not understand where this rumor originated.

"The binder twine industry at Jackson has always been the big money maker of all the industries in our prison. The sale has always been profitable and freight rates have nothing whatever to do with our inability to meet competition in western markets, due to the fact this is equalized.

"Our sales for the year 1923 amounted to $1,506,615.22, showing a profit to the state of $151,307.59. All raw materials are purchased and on hand for the 1924 harvest and 12,000,000 pounds will be made.

"This is one of the industries that has been of great benefit to the farmers of the state, keeping down the price of binder twine to the consumer, for which they would pay a great deal more were it not for their own industry at Jackson. The farmers of this state have purchased nearly 6,000,000 pounds this year."

The Warden also declared that the state can manufacture the highest grade of twine and sell it at a much lower price to the farmer, but that it is necessary to turn it out in large quantities and dispose of the surplus in other states in order to do that. The Warden said:

"Our twine is up to the highest grade of any goods on the market—there is none better. To make profits, production must be had. It is not practical to run a binder twine plant of just sufficient size to fill Michigan's requirements. This is the reason we sell in other states. This is done by every prison that makes binder twine and our tonnage last year of fourteen millions enabled us to sell at a price that saved the farmers money. We not only sell to the jobber, but to the dealer and to the consumer.

"With our binder twine plant closed it would only cause other prisons to sell into our state and leave the field open for the big manufacturers to hold the price sky high and I am conscious in saying that this industry should be kept moving at all times. I also insist that the governor has never at any time ad-

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Valuable Hints On Harvesting and Storing of Michigan's Seed Potato Crop

By H. C. MOORE

Extension Specialist, Michigan Agricultural College

BY adopting more careful methods of harvesting and storing the potato crop, Michigan growers can save thousands of dollars annually.

The keeping quality of potatoes and the appearance which they present when placed on the market is determined very largely by the care used in harvesting and storing them.

Potatoes should be dug when they are well matured so that the skin is not easily broken in handling. Immature potatoes are easily bruised and skinned. Such stock takes on a dark color which renders them undesirable on the market. Furthermore immature potatoes are apt to rot in storage and the shrinkage loss is heavy.

If possible the digging should be done on bright cool days and when the soil is comparatively dry. When harvested under those conditions the potatoes will maintain a brighter color and will keep better in storage than when dug in warm rainy weather.

One of the main criticisms on the markets against Michigan potatoes is that many lots show too high a percentage of mechanical injuries. Growers are urged to use more care in digging. When digging with a fork or potato hook, pains should be taken not to stab the potatoes. Fork prick injuries are serious since they not only spoil the market value of the potatoes but every fork pricked potato when placed in storage is apt to serve as a host for various molds and potato rotting organisms which spread through the bin and cause great losses. The use of the mechanical diggers is becoming more general throughout the state. When properly operated these machines dig the crop with a minimum amount of injury. The shovel point should be adjusted deep enough to avoid cutting the tubers. In very light dry soil it may be necessary to place the shovel point quite deep so that sufficient soil can be run over the elevator chain to prevent serious injury to the potatoes. In most cases three or four horses are required to draw a digging machine. It is very important that the machine be driven at a slow uniform pace. Fast driving will greatly increase the amount of injury to the potatoes.

After the potatoes have been dug leave them on the ground for an hour or so to dry and toughen their skins.

Storage

Potatoes should be stored in a dark, frost proof cellar that is well ventilated, and where a uniform temperature of 34 to 40 degrees F. can be maintained. Before placing potatoes in storage they should be carefully graded and all cut, fork punctured and ill-shaped stock should be discarded.

The mechanical graders of the continuous belt type are very effective in grading for size, but it will be necessary for the operator to throw out by hand all undesirable potatoes. The grader should be operated at a moderate speed so that effective sorting can be done and serious injury to the potatoes be prevented.

The potatoes should be dumped carefully on the grader and burlap sacks or other suitable material from the grader to the bin or container. The potato is a perishable product and should be handled as such.

Potatoes that have been exposed to frost should not be placed in permanent storage since they are likely to rot during the storage period.

Every year considerable loss is sustained by growers who store their potatoes early in the fall when the weather is warm. Much of the early stored stock is immature and when placed in large piles in poorly ventilated houses is very apt to heat and spoil.

During mild weather in the fall the windows and doors of the storage cellar should be left open nights so that the temperature of the storage celler can be lowered quickly. During the first few weeks of storage potatoes go through a sweating process giving out large amounts of moisture. This moisture with the heated air must be taken out of the storage by means of ventilators in the top of the storage. Do not place potatoes in large piles without providing adequate ventilation for the pile. Potatoes must have free access to air or they will develop black heart, button rot and other types of break down, and will be spoiled for eating and seed purposes.

When filling large bins with potatoes, place at intervals of 6 or 8 feet false partitions or ventilating frames that reach from the floor to the top of the bin. These frames can be made from 2-in. x 6-in. uprights with 1-in. x 4-in. strips nailed on either edge. A one inch space should be left between each strip.

Harvesting and storing are two factors that must be given more consideration by growers, warehousemen and others before the best results can be secured. Detailed information on these subjects can be procured from the Michigan Agricultural College, East Lansing, Mich.

How Many Stumps Are You Plowing Around?

One Man Walked 45 Miles in Nine Years Plowing Around a Stump. Another Blew Out a Stump At Cost of 75 Cents and Raised $1.50 Worth of Potatoes on Spot Same Year

By A. J. McADAMS

Land Clearing Division, Michigan Agricultural College

IN the farming community in which he lived and conducted his business, Banker Abbot occupied much the same place in that community as the good doctor who practiced there. Which means simply, that Banker Abbot made regular and frequent trips about the district ministering to the financial needs of the tillers and encouraging them to greater effort in the reduction of their "paper."

It was Farmer Bill Smith's turn on the routine lecture. So it was that Banker Abbot and Farmer Smith stood, leaning against a fence rail at the rear of the eighty, sizing up the season's crop and speculating on the possible financial return. They had just about figured out how Farmer Smith would easily clear the mortgage that year when, quite without warning, Banker Abbot said:

"Bill, I see you are troubled a lot with tramps out here," and he turned to Farmer Smith inquiringly.

"Tramps?"—Bill looked up surprised, shifted his chew, and remarked: "Why no, Mr. Abbot, we don't have no tramps around here to amount to much. 'Casionally they drift in, but I give 'em one look at the wood pile and they're gone again 'thout ez much as a word of thanks," and he chuckled heartily at his own joke.

Banker Abbot shook his head. "No Bill—not that kind." He pointed out across the field before them. "Bill, do you see those old white and Norway pine stumps out there on those plowed fields?"

Bill looked up. "Reckon so—been looking at 'em just thataway fer nigh onto ten years now."

"Correct you are," and Banker Abbot brought his fist down with a resounding whack on the fence rail, "and those are the 'tramps' I'm talking about. They're worse than the other kind, Bill. You don't think you're feeding them, because you can't see them eat, but you ARE—and if you would be honest with me you would lay out a good healthy bill of expense, directly chargeable to them."

"Lookee here, Mr. Abbot," and Farmer Bill took on a much abused air, "you're a sittin' down there in your office every day, and I'm out here a plowin' my fields fer the sowin.' Now I ain't a tryin' to tell you how to run your bank, 'n 'f I know it, you ain't a goin' to tell me how to run my farm. I'll pay them notes—I'll clear that mortgage—I'll —I'll—" and Bill suddenly ran out of things he'd do.

Banker Abbot expected it. He reached in his pocket for his pad and pencil—the same pad on which but a moment before they had figured how to lift the mortgage from Bill's farm—rested it on a fence post, and said: "Here, Bill, let me show you, on paper.

"First of all, you have, say, eight stumps on an acre—that's a fair average, isn't it?"

Farmer Smith allowed as how it was.

"Surely you realize that the ground occupied by these stumps represents in itself, a considerable crop area. That's just the first point, and THAT'S true—how about it, Bill?"

"Surely you realize that the ground occupied by these stumps represents, in itself, a considerable crop area. That's just the first point, and THAT'S true—how about it, Bill?"

Bill shifted uneasily; he couldn't deny it, so he rather reluctantly "guessed it was."

Abbot grabbed his chance, and went right on. "Now you not only lose the ground occupied by the stumps, but there is always a certain area around each stump that is lost because you can't get your plow close to that stump. Figure THAT up at the rate of eight stumps to the acre, and that amounts to something, doesn't it?"

Once more the argument was faultless, and Bill "um-m-med" his rather hesitant approval. Bill was human—and he didn't like his own case battered down so thoroughly—and quickly.

"Very well," Banker Abbot steamed ahead—"Year after year, that represents a considerable area, and a more considerable loss of crop. Bill, I know a farmer who had just one white pine stump on his farm. He left it there, year after year—until he finally got to figuring just what it was costing him. He doped it out that it not only meant a loss in crops of several hundred dollars over that period, but that, figuring in the breakage of material, loss of his own time, and the time of his team, that stump was a positive draw-back, and he blew it out.

"It cost that farmer seventy-five cents to blast that one stump. He planted that exact area in potatoes, and realized $1.50 on their sale that year. He made fifty percent on his investment for explosives. Not a bad percentage of profit, was it, Bill?"

Bill was clearly stumped—and interested to boot. Furthermore, there was a perceptable distance between his upper and lower lips, denoting surprise, and the expression didn't escape Banker Abbot's notice. He tightened his hold with another illustration:

"Why, Bill, I can take you to another farmer who has worked the same field for nine years. During that nine year period he has walked forty-five miles around one stump. Just ONE stump, Bill, and here you have a whole field of them. Think of that extra effort. Think of the extra time—and all of it unnecessary, and the money, Bill—it's precious time and energy you're losing here, and it all costs money."

Bill's eyes were popping just a bit —that forty-five-mile-walk had hit home.

"I'll wager," went on Banker Abbot, cinching his argument like a seasoned salesman, "that you have broken several sickle bars, rake teeth, cultivator shoes and plow points—to say nothing of harnesses and whiffle trees, just working around those stumps. How about the time involved in making those repairs? How about the money lost

(Continued on page 22)

Farming Emerging From Serious Depression and Is Very Much on Mend

By JOHN H. KRAFFT

IN this article, which is the first of a series of four, the writer discusses the changes that have taken place in agriculture the last few years and what is being done to help the farmer finance his business. This article will be followed with three others discussing the three distinct classes of financing agriculture: 1. Short Time Loans through the farmer's local banker, and the additional facilities offered through the Federal Reserve Bank; 2. Intermediate Credit Loans to finance the production and marketing of crops and live stock, either through local bank or cooperative marketing organization; 3. Long Time Loans for the purchase of land, through the banks operating under the Federal Farm Loan Act. The first one will appear in an early issue. Watch for it.

EVERY farmer, as well as every other business man, is always interested in the financing of his business. Unfortunately, there is not much thought given to the proper financing of agriculture during prosperous years as there should be, but invariably when business slackens and agriculture becomes less profitable, this matter is given a great deal of thought, and there is invariably a great deal said and written, and recommendations made for legislators, and often by men who are not thoroughly qualified, or by those who are not primarily interested in the welfare of the farmer and agriculture generally, but in their own individual welfare.

Often this is the case with legislators who are primarily interested in mobilizing votes by promising impossible things. Legislation of the right type is very important to any business. However, legislation in itself will never improve economic conditions, and further legislation which is agitated will not benefit farming one iota.

There already have been established, by Acts of Congress, instrumentalities or agencies for the extension of credit to the farming industry, which offer the American farmer better facilities and better credit than is true in any other country in the world. Some of these agencies are comparatively new and, due to the fact that they have not been put to the use they should have been owing to a lack of understanding of the farmers, and often the bankers, have not shown their real worth.

It is true that up until recent years the facilities available to the farmer, in financing his business, were many years behind facilities offered other types of business. This fact was thoroughly realized by our Government, with the result that this fact has been changed. This was not only brought about by the farmers' interest in this matter, but on account of the public's interest. The business of feeding the world undoubtedly was our first business, and at the present time is the biggest and most important business in the world. An adequate food supply is the first and greatest concern of every nation. Our Government is looking into the future with the idea of providing for, and insuring, the continued production of food in abundance, and to make the production of this food as profitable as is possible and consistent with economical conditions.

Farming, like all industries, has its periods of prosperity and depression. During the period of war, and the hectic time which followed immediately after the war, agriculture flourished. During the period of depression agriculture, in common with other industries, suffered severely.

Study History of Agriculture

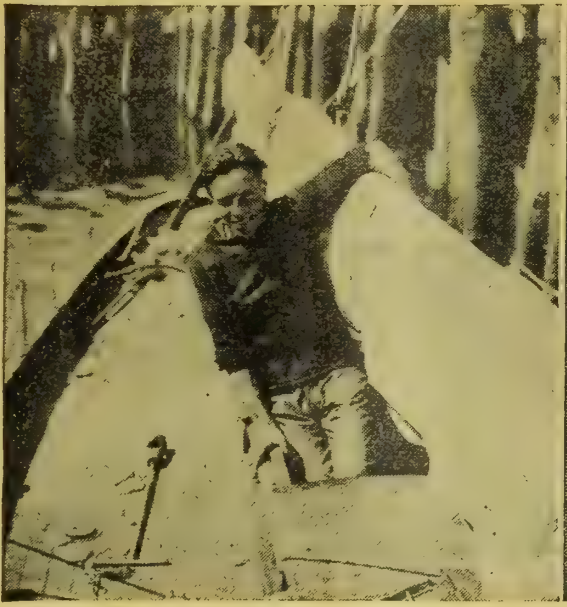
Every farmer can profit very materially by studying the history of agriculture and the history of financing. Perhaps the farmer had need for additional credit facililties from the beginning of time, but in this, as in all matters of progress, the need had to be sharply felt before it could be defined and before a remedy could suggest itself. For twenty years American agriculture had been undergoing a basic change. The tremendous growth of the United States to its present position of wealth and power was due, to a great extent, to the economical and political policies which made possible and encouraged the rapid and continued extension and development of new agricultural areas.

When our country was opened to settlers there was a great area of very fertile land available, and this invited men of ambition and industry. These free lands meant to the settler, who had brought his tract under cultivation, an ample reward for his labor and hardship, by the fact that he owned the land. As these free lands disappeared a brief area of cheap lands followed, which with the rapid increase in population was soon followed by a rise in land values. With the free lands entirely gone and with no cheap lands left, excepting those which cannot be cultivated, and those that require the investment of large capital for drainage or irrigation, or large expenditure for fertilization, the Government found that the development of farming could no longer be left to chance, but called for both money and organizing genius.

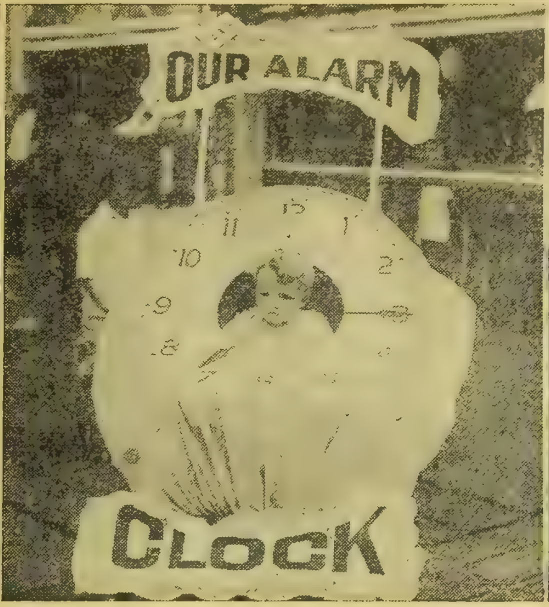
As long as there was undeveloped frontier it was possible to grant free land to settlers. The farming frontier was rapidly pushed from the Atlantic Coast to the Allegheny Mountains, and through the Ohio into the great Northwestern territory, through Kentucky and Tennessee, across the Mississippi to the Rockies, over the Great Divide and across the Great American Desert to the Pacific Coast. The limit has been reached. The frontier has gone and there is no more free land. The greatest

(Continued on page 19)

PICTURES FROM FAR AND NEAR

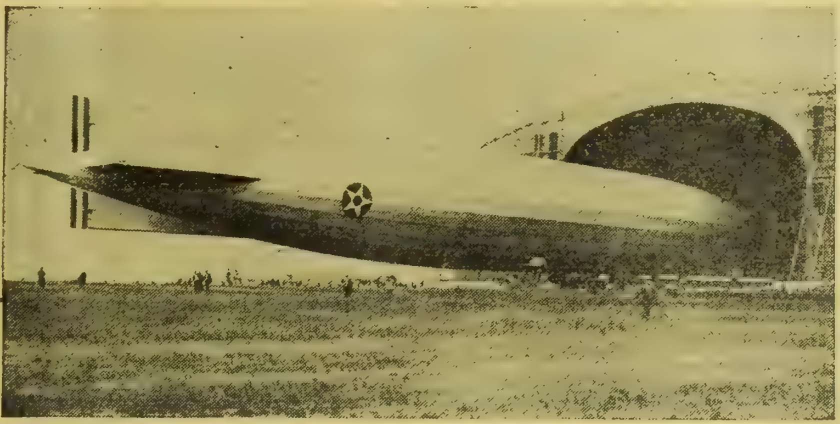


SAILS ALONE ACROSS ATLANTIC.—Alain Gerbault, French sportsman, who made a single handed voyage from Gibraltar to Fort Totten, Long Island, N. Y. He made the trip in a 30-foot boat in 100 days.



WHO SAID WE DON'T WANT A CLOCK WATCHER?—Tiny Audrey Vincent of Montclair, N. J., who won a prize as the "Alarm Clock" in a baby parade held recently at Keansburg, N. J.

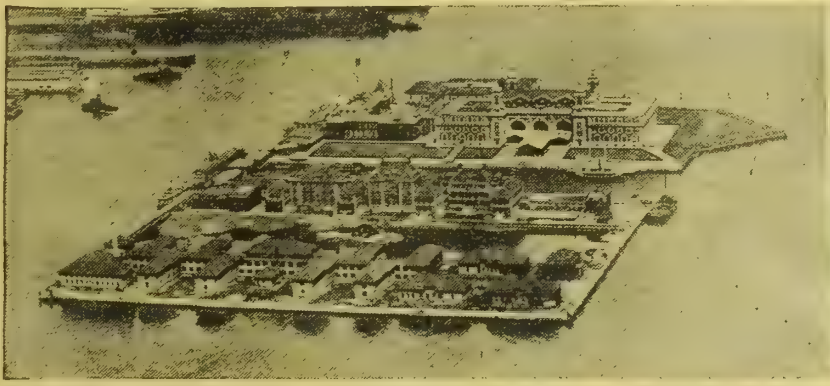
ON INTERESTING EXPEDITION.—Capt. Roger Pocock, commander of SY Frontiersman, is scouting round the world, to locate supply stations for two English aviators to fly around the world.



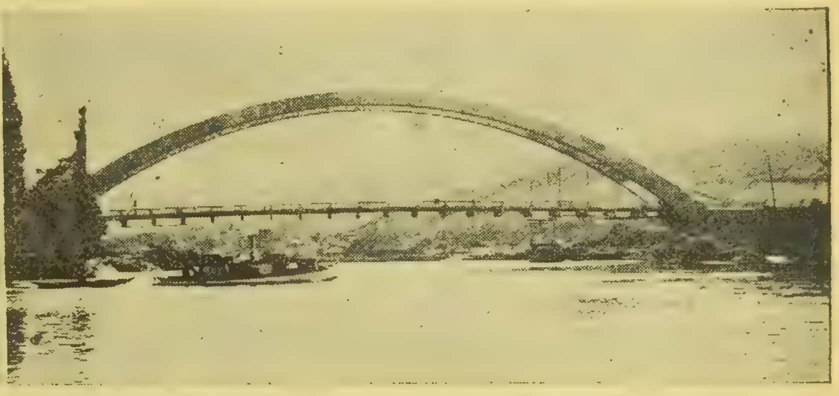
LEVIATHAN OF AIR MAKE SUCCESSFUL FLIGHT.—A view of the ZR-1, the first American-made rigid dirigible, leaving her immense hanger at Lakehurst, N. J., just before making her first flight, which was a complete success.

THE SHACKLETON FOLDING BOAT

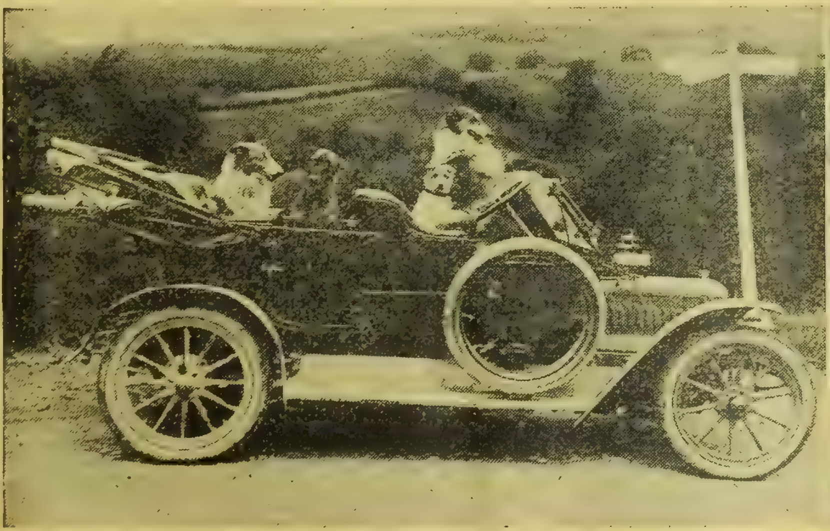
IT FITS INTO A SUITCASE.—Ernest Shackleton in the Shackleton folding boat. The boat can be folded up like a suitcase. As it is made of hide it is absolutely waterproof and weighs a little over ten pounds.



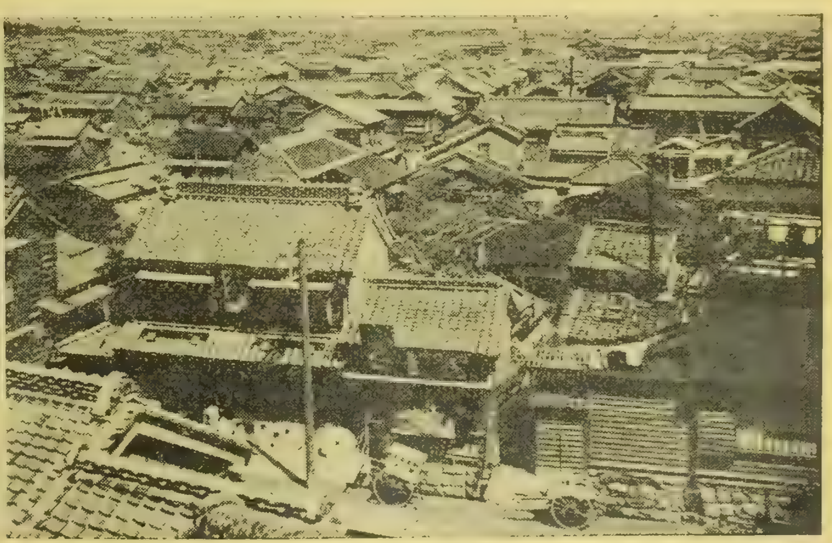
ELLIS ISLAND, N. Y.—This immigration inspection island, has in the last month been very much in the public conversation, due to the reports that it was to be done away with and inspections made in the countries from which the immigrants are coming.



LARGEST SINGLE ARM IN THE WORLD.—Here is the world's largest single arm bridge, at St. Pierre-du-Vauvray, on the River Seine, France. It was opened by President Millerand on October 14th. The bridge is 393.7 feet long, and 98.4 feet wide.



JUST TOURING.—A troupe of dog actors and actresses touring the country. One dog drives their petrol wagon while the others take their ease. Nothing hard about leading a dog's life in this instance, we'd say.



JAPAN SWEPT BY EARTHQUAKE.—A general view of Tokyo, Japan, which has been devastated by earthquake, fire and tidal wave, resulting in heavy loss of live. Many other cities were destroyed.

(Copyright, Keystone View Co.)

What Our Readers Would Do With $100,000

THE Money Editor is completely swamped with letters from our readers telling what they would do with $100,000 if it was their own. Within a few days after our September 15th issue was off the press they started coming, a few at first but each day the number increased and today we received fifty letters. They come from all directions and from women, men and children, the ages being from eight to eighty. And what a fine lot of letters they are. It is a mighty big job to choose the best.

We did not realize before that there were so many ways to spend money. As one man said, "If I received a check for $100,000 in the mail I'd drop dead!" A school boy wrote that he would buy 25 sheep, while one woman, a cripple herself, would use all of the money to help others who suffered like she did.

The most interesting thing about the letters is the spirit of self-sacrifice. With only a few exceptions the writers thought of the comfort of others before their own. The greater number of letters come from farmwives and in most cases they write of improvements in the barn and new machinery to use in the fields before any mention of improvements in the house. Husband and children before self is the spirit that predominates. Another interesting fact is that without exception the writers would pay their debts and purchase a farm. In not one single letter does the writer declare a preference for the city. Nor have any a desire to stop work and live on the interest of the money. Let the petty politicians and large-mouthed calamity howlers continue to wail that the world is going to the dogs but as long as the present class of level-headed farmers continue to follow the plow we need not worry.

While there are letters that contain more suggestions on how to spend the money to good advantage, writers who would use the money for many different purposes, we have awarded first prize to Mrs. M. R., Freeland, Michigan. After you have read her letter we are sure that you will agree with us that she has earned it. We regret that shortage of space will not permit our printing all of the letters as all contain such good thoughts but it is impossible.

I AM a cripple, have been for 22 years past and I am also blind in one eye. I am now 29 years old and have suffered each day for 22 years and all because I did not get help soon enough after an accident. If I received $100,000 in a check by mail I would use every penny of it to help other cripples who suffer pain each day and haven't the means to get help. I am crippled in a way that there is pain both day and night. I am in hopes of another operation this winter which I hope and pray will end my suffering. I have no parents and so I am sorry for all motherless cripples more than for any one else. My mother died before I was a cripple and blind. I wish I could take all cripples' pain and bear it for them for I am used to it now but some days are bad ones. Please do not publish my name.—Mrs. M. R., Freeland, Michigan.

Would Make Farm Modern.—When the mail brings me $100,000, if when such a miracle ever happens, I am afraid for a few minutes I would think I were dreaming and I believe in my dreams is as near to the fortune as I will ever get. But if such a miracle should ever happen a modern farm with all the conveniences is what I would wish for. A good farm of 200 acres would keep the three boys and father busy. A registered herd of Holstein cattle would live on the ever green alfalfa. Prize winning sheep and hogs would also be in our possession. A tractor and two good teams would furnish power to work the fields. A truck would draw the produce to market. A touring car would be for pleasure. The house would be equipped with all labor-saving devices, such as running water, electric lights, gas engines for numerous uses, furnace and other things for comfort and convenience. I think after the farm home were put in running order there would be considerable of the $100,000 left, the children would have the privilege of a college course and the remainder would be banked for a rainy day. —Mrs. G. F., Middleville, Michigan.

Buy Fine Farm.—What I would do if I received a check for $100,000: As I am a young man of 25, I would buy me a farm of 60 or 70 acres of good soil and put up nice buildings and make it my home and work for myself. What money I had left I would give to the poor, that is, if they were working and trying to succeed. But I have no use for a person who thinks this world is made to play in and beg in, and not work in. There is many a person today that if they had left booze alone they would be a lot better off, and then there are others who are rich, and worse than the poor. Money will never make a man anything, it takes labor and brains to make a man or woman. For money has spoiled many a home, and of the young men and ladies going to cities and leaving the farm it is nothing only money that has put them there.—Mr. P. Z., Azalia, Mich.

Have Aunt's Sight Restored.—I want to tell you what I would do if I would receive $100,000 in the mail. First of all I would pay my debts as we are poor and have eight children, five boys and three girls, and beside my husband and myself we also have my aunt living with us who is 72 years old and has been blind for two years. Well, after I had my debts paid I would take my aunt to some hospital to see if her eyesight could be restored again. Then I would build a nice barn, and build our house larger as it is small for so large a family as ours. I also would give a good share of the money towards building a new church as our church is getting too small, and I would give some of the money towards building a poorhouse, and some of the money I would give to the orphans homes. Then if I had some money left I would send the rest across the ocean to the poor starving children over there.—Mrs. G. F., Herron, Mich.

Pay All Debts.—Should I receive a check for $100,000, first I would pay up all debts. Then I would buy forty acres of good land, build a good comfortable house but not too large as there is only my husband and myself, also build other necessary buildings. The rest of the money I would loan to young married people or anyone who were trying to get a home of their own, at four per cent interest. The interest I would also loan in the same way. In this way I could help a great many people and still have plenty myself.—Mrs. A. K., Kingsley, Michigan.

Buy a Home First.—What would I do with $100,000? I would buy me a home first. Not a grand one but just a cozy and comfortable one and then my little daughter and I would be together again. I could have the education I am trying so hard to earn. I could help my sister and her husband who live on a farm and have tried to overcome the many disappointments each season. And last, but not least I could help those in the city that need help so badly in the winter. Money given with kindness brings a glow to every heart that is in financial distress more than any other thing. Oh, there are just hundreds of good things I could do for everyone. Instead of just a quarter now and then, I could give the Salvation Army, who does so much good for the poor, a great deal more. The old blind man who sells papers could receive more than the mere three cents I hand him each night. In $100,000 is a fortune of good to the one who has it and those they could help.—Mrs. O. R. L., Lansing, Michigan.

Put Money in Federal Reserve Bank.—What I would do with $100,000. First, I would place it in four federal reserve banks, not putting my eggs all in one nest. Second, I would set aside one tenth for a good religious cause. Third, I take enough to clear my property of any encumbrance, and enough to tide me over for six months. Fourth, I would watch my opportunity to invest in government, state, county or city bonds with good legal advice. Fifth, I would live within my income. I would raise and introduce certified seeds, and pure bred stock, for the good of my community lending a helping hand financially, wherever deserving.—B. H. T., Bellevue, Mich.

Establish State Park.—What I would do with $100,000. Well! Well! If some one would leave me $100,000 what would I do with it? Well, there a great many ways in which one could use money, but a few days ago I saw something that struck me more forcibly than anything else, and I think if someone were to leave $100,000 on my doorstep this is what I would do with it: I would go up in S. E. Manistee County and buy up three or four sections of land. It is covered with beautiful second growth timber, and has a creek running thru it. I would clean up the brush and rubbish, trim the trees, supply the stream with fish, build bird houses, and transplant wild flowers of all kinds in the shady nooks. Deer and other wild animals should have free range in this big, wonderful free-for-all playground, or park. Then I would put some of the money into roads, so there would be good roads to it from every direction. What money I had left I would put out at interest, the income to be used, each year, during the best part of the summer months to bring children from the large cities all over the country, to enjoy the beauties of nature with me.—H. L., Tustin, Mich.

Home for Boys.—We have a 160-acre farm, mostly unimproved—good fruit land—on which if I had $100,000 I would establish a home for boys that leave the farm, lured by a mind picture of wealth and pleasure of the city, that find themselves in the city broke and out of work, with an unpaid board bill. I would rescue them before the "first offense." In our humble way we have "rescued" six. If I had $100,000 I would make this and kindred work, my work, the remainder of my time on earth.—An M. B. F. Booster.—J. L. C., Shelby, Michigan.

Devote Life to Homeless Children.—My life's interest has always been children. Therefore, if I should come into possession of $100,000 I should first buy a large comfortable home, with an orchard, fields, a place to raise cattle and chickens, plenty of lawn, ground for vegetable and flower gardens, near either village or city where there are good schools and churches. Next I would take unfortunate children, those who have no home, father nor mother and raise as I would my own. While I would need a kitchen, laundry and other help, I would be the one to care for the children, teach them their prayers and tuck them in bed. The older ones I would teach to work, to play, how to make the vegetables and flowers grow, how to earn, spend and save money and do my best so they would be useful citizens of our own United States. I would give to the church, Red Cross, and other organizations beneficial to mankind, but my main interest would be for children as I feel it my calling, as the minister is to the ministry, the banker to the bank. It may not give me dividends in dollars and cents but what bigger, nobler investment can anyone make than children and what would the harvest be?—H. M. M., Oakley, Michigan.

Solicit Subscriptions to M. B. F.—Referring to your offer in The Michigan Business Farmer of September 15th, 1923, concerning the subject, "What would you do if you received a check for $100,000 in the mail?" First, I would buy a Ford runabout, secure three counties of the Thumb and work for The Business Farmer, as I would like to see every farmer of the state take this paper as it is one of the best in the country. Second, I would get me a little home and a little business of some kind, then I would take treatments for my hip and leg. I have had neuritis and sciatica rheumatism since the 21st of last month. I am up and around walking with a cane, as the doctor thought I was going to lose the use of them. As the flesh had practically gone from the bone. It will take time and care to rebuild and may never be as before.—P. L. M., Saginaw, Michigan.

Money for Repairing Roads.—I will tell you what I would do with $100,000. First I would make the home comfortable and would have a car or horse to go to the city with. I also would give some of the money to our county to repair roads in places where they need it. I would also get a good education to become a teacher in a country school or a city school. I would also sow the lawn to lawn seed and keep it wet all the time. I would have electric lights installed in the home and would also have an electric light plant installed so that other people could get light from that plant. I would have the pier built up again on Carp Lake and also have little minnows and small sized fish put in the lake for the good of the resorters and the people who go fishing at the lake. I would also have the farm all plowed up and seeded with sweet clover or alfalfa. I would also have the school yard plowed and plant flowers in it.—Miss E. H., Traverse City, Michigan.

Return Favors.—Should I receive a check for $100,000 I feel sure I would hunt up every person in the world who had ever shown me a favor or a kindness, when in need, and reward them. I would educate my two children, and instead of using my money to gain notoriety I should give that part to those in need, and to those who nad never experienced the joy of being on "easy street."—Mrs. Mac., Detroit, Mich.

Buy Farm for Each Child.—If I was to have $100,000 I'd first pay my debts, and as we have eleven children and one farm I would buy ten more good 80-acre farms with stock and tools. Give one to each of my children, subject to this condition, that they pay the wife and I $200 a year as long as we live and they were not to dispose of these farms.—J. H. C., Fenwick, Michigan.

Buy Poultry Farm.—I am sure that I should be so shocked I scarcely know just what I would do, if I should receive $100,000, but I believe that I should invest in a nice little poultry farm, as I like running incubators and hatching the fine fluffy little chicks. I should want real "full-bloods" of different breeds. I believe there is real money in raising poultry from what experience I have already had, although I have only gone into the business on a small scale, as compared to a real poultry farm. Of course I should not use all of this amount to start a poultry farm. I should be very careful in my plans and what was really not necessary to use in my poultry business, should be invested in a good reliable bank for future use.—Mrs. F. V., Woodland, Michigan.

One Tenth to Starving Children.—Only two hundred and fifty words to tell all I would do with $100,000. Well, all right but I'll have to crowd. First, a tenth to the starving children in foreign lands. Second, enough to make my mother, who is a widow, comfortable for the rest of her life. Also the same for father-in-law and mother-in-law who are old and alone. Now for the rest, I will have to tell you a little of our history first so you can see how welcome such a gift would be. Two years ago we bought a piece of uncleared land six miles east of Onaway. I would use enough of this gift to put this farm in first class shape. I'd provide music, flowers and books for my family of children; we have six. I'd give them all a good education and thus put them in a position to be self-supporting. And if that $100,000 were only like the widow's cruet of oil I'd give every child in the country a musical education, for a musical people are a happy people. Happiness is contentment and contentment peace. O, for a thousand words to tell of all the things I'd do, but since you have allowed us only two hundred and fifty I will close with many good wishes to you.—L. B. C., Onaway, Mich.

Give At Christmas Time.—I am a reader of your paper, and always look forward to its coming, and enjoy every page of it from cover to cover, especially the editorials and the questions and answers which are given. Have just read the story "Oh, Money! Money!" and would like to express my thoughts as to what I would do if I had $100,000. My first, would be to help the needy poor. Especially children and old people that haven't anyone to care for them. My one wish thru my life has been that at Christmas time I might be able to have money enough to make someone happy that would not be remembered. Spending money for clothes would be my last thought. Would like to have enough money and when asked to donate for any worthy cause would be able to do so. As for spending money on myself would first build a modern home (which I have always wanted and never been able to have.) That and spending money to make someone else happy is what I would do with $100,000.—Mrs. R. S., Onsted, Mich.

Have Sister Cured of Asthma.—I saw your offer in the M. B. F. and thought I would try for the prize. I am eleven years of age and am in the seventh grade at school. If I had $100,000 I would pay off all our debts and get the things we all need ourselves. My little sister who has the asthma very badly every year needs a different climate. I would have

(Continued on page 19.)

Now that you have read about what our readers would do with $100,000 you will be more interested in our new serial, "Oh, Money! Money!" The second installment and a synopsis of the first appear on the opposite page. How Frank Blaisdell, the grocer, and family spend their $100,000, how James Blaisdell and his family use their $100,000, what Miss Flora Blaisdell does with her share, all goes to make a most interesting story.

Oh Money! Money!

by ELEANOR H. PORTER

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THE STORY TO DATE

MR. STANLEY G. FULTON, 50-year old bachelor and possessor of twenty million dollars, calls on his lawyer and they discuss the disposition of this large fortune after its owner's death. The lawyer is in favor of giving the money to colleges or charities while Fulton is opposed to these ideas. He remembers that he has some distant cousins and decides to leave the money to one of them, but first he determines to learn which one will use it to the best advantage. To find out who is the worthy one he, through his lawyer, gives each cousin $100,000 to use as they will. He then grows a beard and, under the name of Mr. John Smith, goes to the town where these cousins reside to observe how they spend the $100,000. This is what the first installment covered. The more you read of the story the more interested you will be so you better start with this issue so you will not regret later that you missed the first part.

(Continued from September 29th issue)

"QUITE right Flora. The East Side is different from the West Side, and no mistake. And what will do there won't do here at all, of course."

"How about father's shirt-sleeves?" It was a scornful gibe from Bessie in the hammock. "I don't notice any of the rest of the men around here sitting out like that."

"Bessie!" chided her mother wearily. "You know very well I'm not to blame for what your father wears. I've tried hard enough, I'm sure!"

"Well, well, Hattie," sighed the man, with a gesture of abandonment. "I supposed I still had the rights of a free-born American citizen in my own home; but it seems I haven't." Resignedly he got to his feet and went into the house. When he returned a moment later he was wearing his coat.

Benny, perched precariously on the veranda railing, gave a sudden indignant snort. Benny was eight, the youngest of the family.

"Well, I don't like it here, anyhow," he chafed. "I'd rather go back an' live where we did. A feller can have some fun there. It hasn't been anything but 'Here, Benny, you mustn't do that over here, you mustn't do that over here!' ever since we came. I'm going home an' live with Aunt Flora. Say, can't I, Aunt Flo?"

"Bless the child! Of course you can," beamed his aunt. "But you won't want to, I'm sure. Why, Benny, I think it's perfectly lovely here."

"Pa don't."

"Indeed I do, Benny," corrected his father hastily. "It's very nice here, of course. But I don't think we can afford it. We had to squeeze every penny before, and how we're going to meet this rent I don't know." He drew a profound sigh.

"You'll earn it, just being here—more business," asserted his wife firmly. "Anyhow, we've just got to be here, Jim! We owe it to ourselves and our family. Look at Fred to-night!"

"Oh, yes, where is Fred?" queried Miss Flora.

"He's over to Gussie Pennock's, playing tennis," interposed Bessie, with a pout. "The mean old thing wouldn't ask me!"

"But you ain't old enough, my dear," soothed her aunt. "Wait; your turn will come by and by."

"Yes, that's exactly it," triumphed the mother. "Her turn will come—if we live here. Do you suppose Fred would have got an invitation to Gussie Pennock's if we'd still been living on the East Side? Not much he would! Why, Mr. Pennock's worth fifty thousand, if he's worth a dollar! They are some of our very first people."

"But, Hattie, money isn't everything, dear," remonstrated her husband gently. "We had friends, and good friends, before."

"Yes; but you wait and see what kind of friends we have now!"

"But we can't keep up with such people, dear, on our income; and—"

"Ma, here's a man. I guess he wants—somebody." It was a husky whisper from Benny.

James Blaisdell stopped abruptly. Bessie Blaisdell and the little dressmaker cocked their heads interestedly. Mrs. Blaisdell rose to her feet and advanced towards the steps to meet the man coming up the walk.

He was a tall, rather slender man, with a close cropped, sandy beard, and an air of diffidence and apology. As he took off his hat and came nearer, it was seen that his eyes were blue and friendly, and that his hair was reddish-brown, and rather scanty on top of his head.

"I am looking for Mr. Blaisdell—Mr. James Blaisdell," he murmured hesitatingly.

Something in the stranger's deferential manner sent a warm glow of importance to the woman's heart. Mrs. Blaisdell was suddenly reminded that she was Mrs. James D. Blaisdell of the West Side.

"I am Mrs. Blaisdell," she replied a bit pompously. "What can we do for you, my good man?" She swelled again, half unconsciously. She had never called a person "my good man" before. She rather liked the experience.

The man on the steps coughed slightly behind his hand—a sudden spasmodic little cough. Then very gravely he reached into his pocket and produced a letter.

"From Mr. Robert Chalmers—a note to your husband," he bowed presenting the letter.

A look of gratified surprise came into the woman's face.

"Mr. Robert Chalmers, of the First National? Jim!" She turned to her husband joyously. "Here's a note from Mr. Chalmers. Quick—read it!"

Her husband, already on his feet, whisked the sheet of paper from the unsealed envelope, and adjusted his glasses. A moment later he held out a cordial hand to the stranger.

"Ah, Mr. Smith, I'm glad to see you. I'm glad to see any friend of Bob Chalmers'. Come up and sit down. My wife and children, and my sister, Miss Blaisdell. Mr. Smith, ladies—Mr. John Smith." (Glancing at the open note in his hand.) "He is sent to us by Mr. Chalmers, of the First National."

"Yes, thank you. Mr. Chalmers was so kind." Still with that deference so delightfully heart-warming, the newcomer bowed low to the ladies, and made his way to the offered chair. "I will explain my business," he said then. "I am a genealogist."

"'What's that?" It was an eager question from Benny on the veranda railing. "Pa isn't anything, but ma's a Congregationalist."

"Hush, child!" protested a duet of feminine voices softly; but the stranger, apparently ignoring the interruption, continued speaking.

"I am gathering material for a book on the Blaisdell family."

"The Blaisdell family!" repeated Mr. James Blaisdell, with cordial interest.

"Yes," bowed the other. "It is my purpose to remain some time in your town. I am told there are valuable records here, and an old burying-ground of particular interest in this connection. The neighboring towns, too, have much Blaisdell data, I understand. As I said, I am intending to make this place my headquarters, and I am looking for an attractive boarding-place. Mr. Chalmers was good enough to refer me to you."

"To us—for a boarding-place!" There was an unmistakable frown on Mrs. James D. Blaisdell's countenance as she said the words. "Well, I'm sure I don't see why he should. We don't keep boarders!"

"But, Hattie, we could," interposed her husband eagerly. "There's that big front room that we don't need a bit. And it would help a lot if—" At the wrathful warning in his wife's eyes he fell back silenced.

"I said that we didn't keep boarders," reiterated the lady distinctly. "Furthermore, we do need the room ourselves."

"Yes, yes, of course; I understand," broke in Mr. Smith, as if in hasty conciliation. "I think Mr. Chalmers meant that perhaps one of you"—glanced uncertainly at the anxious-eyed little woman at his left—"might—er—accommodate me. Perhaps you, now—" He turned his eyes fell upon Miss Flora Blaisdell, and waited.

As a reader of "Oh, Money! Money!" you will be interested in the letters published on the opposite page. In these letters several readers of The Business Farmer tell what they would do with $100,000 if they were to suddenly fall heir to it. I suppose that you would spend it differently than the Blaisdell family of this story or any of the readers whose letters appear opposite this page.

The little dressmaker blushed painfully.

"Me? Oh, mercy, no! Why, I live all alone—that is, I mean, I couldn't, you know," she stammered confusedly. "I dressmake, and I don't get any sort of meals—not fit for a man, I mean. Just women's things—tea, toast, and riz biscuit. I'm so fond of riz biscuit! But, of course, you—" She came to an expressive pause.

"Oh, I could stand the biscuit, so long as they're not health biscuit," laughed Mr. Smith genially. "You see, I've been living on those and hot water quite long enough—as it is."

"Oh, ain't your health good, sir?" The little dressmaker's face wore the deepest concern.

"Well, it's better than it was, thank you. I think I can promise to be a good boarder, all right."

"Why don't you go to a hotel?" Mrs. James D. Blaisdell still spoke with a slightly injured air.

Mr. Smith lifted a deprecatory hand.

"Oh, indeed, that would not do at all—for my purpose," he murmured. "I wish to be very quiet. I fear I should find it quite disturbing—the noise and confusion of a public place like that. Besides, for my work, it seemed eminently fitting, as well as remarkably convenient, if I could make my home with one of the Blaisdell family."

With a sudden exclamation the little dressmaker sat erect.

"Say, Harriet, how funny we never thought! He's just the one for poor Maggie! Why not send him there?"

"Poor Maggie?" It was the mild voice of Mr. Smith.

"Our sister—yes. She lives—"

"Your sister!" Into Mr. Smith's face had come a look of startled surprise—a look almost of terror. "But there weren't but three—that is, I thought—I understood from Mr. Chalmers that there were but three Baisdells, two brothers, and one sister—you, yourself."

"Oh, poor Maggie ain't a Blaisdell," explained the little dressmaker, with a smile. "She's just Maggie Duff, father Duff's daughter by his first wife, you know. He married our mother years ago, when we children were little, so we were brought up with Maggie, and always called her sister; though, of course, she really ain't any relation to us at all."

"Oh, I see. Yes, to be sure. Of course!" Mr. Smith seemed oddly thoughtful. He appeared to be settling something in his mind. "She isn't a Blaisdell, then."

"No, but she's so near like one and she's a splendid cook, and—"

"Well, I shan't send him to Maggie," cut in Mrs. James D. Blaisdell with emphasis. "Poor Maggie's got quite enough on her hands, as it is, with that father of hers. Besides, she isn't a Blaisdell at all."

"And she couldn't come and cook and take care of us near so much, either, could she," plunged in Benny, "if she took this man ter feed?"

"That will do, Benny," admonished his mother, with nettled dignity. "You forget that children should be seen and not heard."

"Yes'm. But, please, can't I be heard just a minute for this? Why don't ye send the man ter Uncle Frank an' Aunt Jane? Maybe they'd take him."

"The very thing!" cried Miss Flora Blaisdell. "I wouldn't wonder a mite if they did."

"Yes, I was thinking of them," nodded her sister-in-law. "And they're always glad of a little help,—especially Jane."

"Anybody should be," observed Mr. James Blaisdell quietly.

Only the heightened color in his wife's cheeks showed that she had heard—and understood.

"Here, Benny," she directed, "go and show the gentleman where Uncle Frank lives."

"Alright!" With a spring the boy leaped to the lawn and pranced to the sidewalk, dancing there on his toes. "I'll show ye, Mr. Smith."

The gentleman addressed rose to his feet.

"I thank you, Mr. Blaisdell," he said, "and you, ladies. I shall hope to see you again soon. I am sure you can help me, if you will, in my work. I shall want to ask—some questions."

"Certainly, sir, certainly! We shall be glad to see you," promised his host. "Come any time, and ask all the questions you want to."

"And we shall be so interested," fluttered Miss Flora. "I've always wanted to know about father's folks. And are you a Blaisdell, too?"

There was the briefest of pauses. Mr. Smith coughed again twice behind his hand.

"Er—ah—oh, yes, I may say that I am. Through my mother I am descended from the original immigrant, Ebenezer Blaisdell."

"Immigrant!" exclaimed Miss Flora.

"An immigrant!" Mrs. James Blaisdell spoke the word as if her tongue were a pair of tongs that had picked up a noxious viper.

"Yes, but not exactly as we commonly regard the term nowadays," smiled Mr. Smith. "Mr. Ebenezer Blaisdell was a man of means and distinction. He was the founder of the family in this country. He came over in 1647."

"My, how interesting!" murmured the little dressmaker, as the visitor descended the steps.

"Good-night—good-night! And thank you again," bowed Mr. John Smith to the assembled group on the veranda. "And now, young man, I'm at your service," he smiled, as he joined Benny, still prancing on the sidewalk.

"Now he's what I call a real nice pleasant-spoken gentleman," avowed Miss Flora, when she thought speech was safe. "I do hope Jane'll take him."

"Oh, yes, he's well enough," condescended Mrs. Hattie Blaisdell, with a yawn.

"Hattie, why wouldn't you take him in?" reproached her husband. "Just think how the pay would help! And it wouldn't be a bit of work, hardly, for you. Certainly it would be a lot easier than the way we are doing."

The woman frowned impatiently.

"Jim, don't please! Do you suppose I got over here on the West Side to open a boarding house? I guess not—yet!"

"But what shall we do?"

"Oh, we'll get along somehow. Don't worry!"

"Perhaps if you'd worry a little more, I wouldn't worry so much," sighed the man deeply.

"Well, mercy me, I must be going," interposed the little dressmaker, springing to her feet with a nervous glance at her brother and his wife. "I'm forgetting it ain't so near as it used to be. Good-night!"

"Good-night, good-night! Come again," called the three on the veranda. Then the door closed behind them, as they entered the house.

Meanwhile, walking across the common, Benny was entertaining Mr. Smith.

"Yep, they'll take ye, I bet ye—Aunt Jane an' Uncle Frank will?"

"Well, that's good, I'm sure."

"Yep. An' it'll be easy too. Why, Aunt Jane'll just tumble over herself ter get ye, if ye just mention first what you'll pay. She'll begin ter reckon up right away then what she'll save. An' in a minute she'll say, 'Yes, I'll take ye.' "

The uncertainty in Mr. Smith's voice was palpable even to eight-year-old Benny.

"Oh, you don't need ter worry," he hastened to explain: "She won't starve ye; only she won't let ye waste anythin'. You'll have ter eat all the crusts to yer pie, and finish 'taters before you can get any puddin', an' all that, ye know. Ye see, she's great on savin'—Aunt Jane is. She says waste is a sinful extravagance before the Lord."

"Indeed!" Mr. Smith laughed outright this time. "But are you sure, my boy, that you ought to talk—just like this, about your aunt?"

Benny's eyes widened.

"Why, that's all right, Mr. Smith. Ev'rybody in town knows Aunt Jane. Why, Ma says folks say she'd save terday for ter-morrer, if she could. But she couldn't do that, could she? So that's just silly talk. But you wait till you see Aunt Jane."

"All right. I'll wait, Benny."

"Well, ye won't have ter wait long, Mr. Smith, 'cause here's her house. She lives over the groc'ry store, ter save rent, ye know. It's Uncle Frank's store. An' here we are," he finished, banging open a door and leading the way up a flight of ill-lighted stairs.

CHAPTER III

The Small Boy at the Keyhole

At the top of the stairs Benny tried to open the door, but as it did not give at his pressure, he knocked lustily, and called "Aunt Jane, Aunt Jane!"

"Isn't this the bell?" hazarded Mr. Smith, his finger almost on a small push-button near him.

"Yep, but it don't go now. Uncle Frank wanted it fixed, but Aunt Jane said no; knockin' was just as good, an' 't was lots cheaper, 'cause 't would save mendin', and didn't use any 'lectricity. But Uncle Frank says—"

The door opened abruptly, and Benny interrupted himself to give eager greeting.

"Hullo, Aunt Jane! I've brought you somebody. He's Mr. Smith. An' you'll be glad. You see if yer ain't!"

In the dim hallway Mr. Smith saw a tall, angular woman with graying dark hair and high cheek bones. Her eyes were keen and just now somewhat sternly inquiring, as they were bent upon himself.

Perceiving that Benny considered his mission as master of ceremonies at an end, Mr. Smith hastened to explain.

"I came from your husband's brother, madam. He—er—sent me. He thought perhaps you had a room that I could have."

"A room?" Her eyes grew still more coldly disapproving.

"Yes, and board. He thought—that is, they thought that perhaps—you would be so kind."

"Oh, a boarder! You mean for pay, of course?"

"Most certainly!"

"Oh!" She softened visibly, and stepped back. "Well, I don't know. I never have—but that isn't saying I couldn't, of course. Come in. We can talk it over. That doesn't cost anything. Come in; this way, please." As she finished speaking she stepped to the low-burning gas jet and turned it carefully to give a little more light down the narrow hallway.

(Continued on page 23.)

The Theory and the Hound

A Complete Short Story by O. HENRY America's Greatest Short Story Writer

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NOT many days ago my old friend from the tropics, J. P. Bridger, United States consul on the island of Ratona, was in the city. We had wassail and jubilee and saw the Flatiron building, and missed seeing the Bronxless menagerie by about a couple of nights. And then, at the ebb tide, we were walking up a street that parallels and parodies Broadway.

A woman with a comely and mundane countenance passed us, holding in leash a wheezing, vicious, waddling, brute of a yellow pug. The dog entangled himself with Bridger's legs and mumbled his ankles in a snarling, peevish, sulky bite. Bridger, with a happy smile, kicked the breath out of the brute; the woman showered us with a quick rain of well-conceived adjectives that left us in no doubt as to our place in her opinion, and we passed on. Ten yards farther an old woman with disordered white hair and her bankbook tucked well hidden beneath her tattered shawl begged. Bridger stopped and disinterred for her a quarter from his holiday waistcoat.

On the next corner a quarter of a ton of well-clothed man with a rice-powdered, fat, white jowl, stood holding the chain of a devil-born bulldog whose forelegs were strangers by the length of a dachshund. A little woman in a last-season's hat confronted him and wept, which was plainly all she could do, while he cursed her in low, sweet, practiced tones.

Bridger smiled again—strictly to himself—and this time he took out a little memorandum book and made note of it. This he had no right to do without due explanation, and I said so.

"It's a new theory," said Bridger, that I picked up down in Ratona. I've been gathering support for it as I knock about. The world isn't ripe for it yet, but—well I'll tell you; and then you run your mind back along the people you've known and see what you make f it."

And so I cornered Bridger in a place where they have artificial palms and wine; and he told me the story which is here in my words and on his responsibility.

One afternoon at three o'clock, on the island of Ratona, a boy raced along the beach screaming, "Pajaro ahoy!"

Thus he made known the keeness of his hearing and the justice of his discrimination in pitch.

He who first heard and made oral proclamation concerning the toot of an approaching steamer's whistle, and correctly named the steamer, was a small hero in Ratona—until the next steamer came. Wherefore, there was rivalry among the barefoot youth of Ratona, and many fell the victims to the softly blown conch shells of sloops which, as they enter the harbor, sound surprisingly like a distant steamer's signal. And some could name you the vessel when its call, in your duller ears, sounded no louder than the sigh of the wind through the branches of the cocoanut palms.

But today he who proclaimed the Pajaro gained his honors. Ratona bent its ear to listen; and soon the deep-tongued blast grew louder and nearer, and at length Ratona saw above the line of palms on the low "point" the two black funnels of the fruiter slowly creeping toward the mouth of the harbor.

You must know that Ratona is an island twenty miles off the south of a South American republic. It is a port of that republic; and it sleeps sweetly in a smiling sea, toiling not nor spinning; fed by the abundant tropics where all things "ripen, cease and fall toward the grave."

Eight hundred people dream life away in a green-embowered village that follows the horseshoe curve of its bijou harbor. They are mostly Spanish and Indian mestizos, with a shading of San Domingo Negroes, a lightening of pure-blood Spanish officials and a slight leavening of the froth of three or four pioneering white races. No steamers touch at Rotano save the fruit steamers which take on their banana inspectors there on their way to the coast. They leave Sunday newspapers, ice, quinine, bacon, watermelons and vaccine matter at the island and that is about all the touch Ratona gets with the world.

The Pajaro paused at the mouth of the harbor, rolling heavily in the swell that sent the whitecaps racing beyond the smooth water inside. Already two dories from the village—one conveying fruit inspectors, the other going for what it could get—were halfway out to the steamer.

The inspectors' dory was taken on board with them, and the Pajaro steamed away for the mainland for its load of fruit

The other boat returned to Ratona bearing a contribution from the Pajaro's store of ice, the usual roll of newspapers and one passenger—Taylor Plunkett, sheriff of Chatham County, Kentucky.

Bridger, the United States consul at Ratona, was cleaning his rifle in the official shanty under a breadfruit tree twenty yards from the water of the harbor. The consul occupied a place somewhat near the tail of his political party's procession. The music of the band wagon sounded very faintly to him in the distance. The plums of office went to others. Bridger's share of the spoils—the consulship at Ratona—was little more than a prune from the boarding-house department of the public crib. But $900 yearly was opulence in Ratona. Besides, Bridger had contracted a passion for shooting alligators in the lagoons near his consulate, and he was not unhappy.

He looked up from a careful inspection of his rifle lock and saw a broad man filling his doorway. A broad, noiseless, slow-moving man, sunburned almost to the brown of Vandyke. A man of forty-five, neatly clothed in homespun, with scanty light hair, a close-clipped brown-and-gray beard and simplicity.

"You are Bridger, the consul," said the broad man. "They directed me here. Can you tell me what those big bunches of things like gourds are in those trees that look like feather dusters along the edge of the water?"

"Take that chair," said the consul, reoiling his cleaning rag. "No, the other one—that bamboo thing won't hold you. Why, they're cocoanuts--green cocoanuts. The shell of 'em is always a light green before they're ripe."

"Much obliged," said the other man, sitting down carefully. "I don't quite like to tell the folks at home they were olives unless I was sure about it. My name is Plunkett. I'm sheriff of Chatham County, Kentucky. I've got extradition papers in my pocket authorizing the arrest of a man on this island. They've been signed by the President of this county, and they're in correct shape. The man's name is Wade Williams. He's in the cocoanut raising business. What he's wanted for is the murder of his wife two years ago. Where can I find him?"

The consul squinted an eye and looked through his rifle barrel.

"There's nobody on the island who calls himself 'Williams,'" he remarked.

"Didn't suppose there was," said Plunkett mildly. "He'll do by any other name."

"Besides myself," said Bridger, "there are only two Americans on Ratona—Bob Reeves and Henry Morgan."

"The man I want sells cocoanuts,' suggested Plunkett.

'You see that cocoanut walk extending up to the point?" said the consul, waving his hand toward the open door. 'That belongs to Bob Reeves. Henry Morgan owns half the trees to loo-ard on the island."

"One month ago," said the sheriff, "Wade Williams wrote a confidential letter to a man in Chatham county, telling him where he was and how he was getting along. The letter was lost; and the person that found it gave it away. They sent me after him, and I've got the papers. I reckon he's one of your cocoanut men for certain."

"You've got his picture, of course," said Bridger. "It might be Reeves or Morgan, but I'd hate to think it. They're both as fine fellows as you'd meet in any all-day auto ride."

"No," doubtfully answered Plunkett; "there wasn't any picture of Williams to be had. And I never saw him myself. I've been sheriff only a year. But I've got a pretty accurate description of him. About 5 feet 11; dark hair and eyes; nose inclined to be Roman; heavy about the shoulders, strong, white teeth, with none missing; laughs a good deal, talkative; drinks considerably but never to intoxication; looks you square in the eye when talking; age thirty-five. Which one of your men does that description fit?"

The consul groaned broadly.

"I'll tell you what you do," he said, laying down his rifle and slipping on his dingy black alpaca coat. "You come along, Mr. Plunkett, and I'll take you up to see the boys. If you can tell which one of 'em your description fits better than it does the other you have the advantage of me."

Bridger conducted the sheriff out and along the hard beach close to which the tiny houses of the village were distributed. Immediately back of the town rose sudden, small, thickly wooded hills. Up one of these, by means of steps cut in the hard clay, the consul led Plunkett. On perched a two-room wooden cottage with a thatched roof. A Carib woman was washing clothes outside. The consul ushered the sheriff to the door of the room that overlooked the harbor.

Two men were in the room, about to sit down, in their shirt sleeves, to a table spread for dinner. They bore little resemblance one to the other in detail; but the general description given by Plunkett could have been justly applied to either. In height, color of hair, shape of nose, build and manners each of them tallied with it. They were fair types of jovial, ready-witted, broad-gauged Americans who had gravitated together for companionship in an alien land.

"Hello, Bridger!" they called in unison at sight of the consul. "Come and have dinner with us!" And then they noticed Plunkett at his heels, and came forward with hospitable curiosity.

"Gentlemen," said the consul, his voice taking on unaccustomed formality, "this is Mr. Plunkett—Mr. Reeves and Mr. Morgan."

The cocoanut barons greeted the newcomer joyously. Reeves seemed about an inch taller than Morgan, but his laugh was not quite as loud. Morgan's eyes were deep brown; Reeves's were black. Reeves was the host and busied himself with fetching other chairs and calling to the Carib woman for supplemental table ware. It was explained that Morgan lived in a bamboo shack to "loo'ard," but that every day or two friends dined together. Plunkett stood still during the preparations, looking about mildly with his pale-blue eyes. Bridger looked apologetic and uneasy.

At length two other covers were laid and the company was assigned to places. Reeves and Morgan stood side by side across the table from the visitors. Reeves nodded genially as a signal for all to seat themselves. And then suddenly Plunkett raised his hand with a gesture of authority. He was looking straight between Reeves and Morgan.

"Wade Williams," he said quietly, "you are under arrest for murder."

Reeves and Morgan instantly exchanged a quick, bright glance, the quality of which was interrogation, with a seasoning of surprise. Then, simultaneously they turned to the speaker with a puzzled and frank deprecation in their gaze.

"Can't say that we understand you, Mr. Plunkett," said Morgan, cheerfully. "Did you say Williams'?"

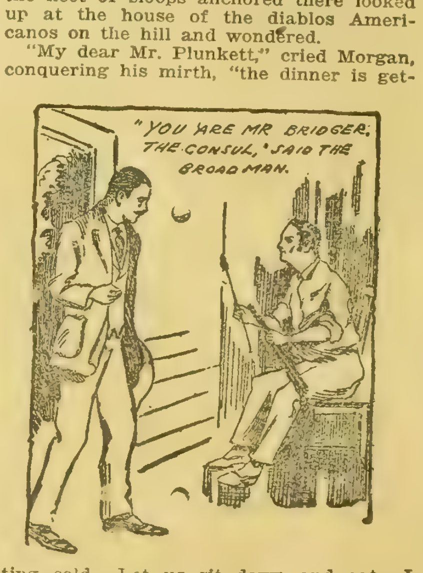
"What's the joke, Bridgy?" asked Reeves, turning to the consul with a smile.

Before Bridger could answer Plunkett spoke again.

"I'll explain," he said, quietly. "One of you don't need any explanation, but this is for the other one. One of you is Wade Williams of Chatham County, Kentucky. You murdered your wife on May 5, two years ago, after ill-treating and abusing her continually for five years. I have the papers in my pocket for taking you back with me, and you are going. We will return on the fruit steamer that comes back by this island tomorrow to leave its inspectors. I acknowledge, gentlemen, that 'Im not quite sure which one of you is Williams. But Wade Williams goes back to Chatham County tomorrow. I want you to understand that."

A great sound of merry laughter from Morgan and Reeves went out over the still harbor. Two or three fishermen in the fleet of sloops anchored there looked up at the house of the diablos Americanos on the hill and wondered.

"My dear Mr. Plunkett," cried Morgan, conquering his mirth, "the dinner is getting cold. Let us sit down and eat. I am anxious to get my spoon into that sharkfin soup. Business afterward."


"YOU ARE MR BRIDGER; THE CONSUL," SAID THE BROAD MAN.

"Sit down, gentlemen, if you please," added Reeves, pleasantly. "I am sure Mr. Plunkett will not object. Perhaps a little time may be of advantage to him in identifying—the gentleman he wishes to arrest."

"No objections, I'm sure," said Plunkett, dropping into his chair heavily. "I'm hungry myself. I didn't want to accept the hospitality of you folks without giving you notice; that's all."

Reeves set bottles and glasses on the table.

"There's cognac," he said, "and anisada, and Scotch 'smoke,' and rye. Take your choice."

Bridger chose rye, Reeves poured three fingers of Scotch for himself, Morgan took the same. The sheriff, against much protestation, filled his glass form the water bottle.

"Here's to the appitite," said Reeves, raising his glass, "of Mr. Williams!" Morgan's laugh and his drink encountering sent him into a choking-splutter. All began to pay attention to the dinner, which was well cooked and palatable.

"Williams!" called Plunkett, suddenly and sharply.

All looked wonderingly. Reeves found the sheriff's mild eye resting upon him. He flushed a little.

"Se here," he said, with some asperity, "my name's Reeves, and I don't want you to—" But the comedy of the thing came to his rescue, and he ended with a laugh.

"I suppose, Mr. Plunkett," said Morgan, carefully seasoning an alligator pear, "that you are aware of the fact that you will import a good deal of trouble for yourself into Kentucky if you take back the wrong man—that is of course, if you take anybody back!"

"Thanks for the salt," said the sheriff. "Oh, I'll take somebody back. It'll be one of you two gentlemen. Yes, I know I'd get stuck for damages if I make a mistake. But I'm going to try to get the right man."

"I'll tell you what you do," said Morgan, leaning forward with a jolly twinkle in his eyes. "You take me. I'll go without any trouble. The cocoanut business hasn't panned out well this year, and I'd like to make some extra money out of your bondsmen."

"That's not fair," chimed in Reeves. "I got only $16 a thousand for my last shipment. Take me, Mr. Plunkett."

"I'll take Wade Williams," said the sheriff patiently, "or I'll come pretty close to it."

"It's like dining with a ghost," remarked Morgan, with a pretended shiver. "The ghost of a murderer, too! Will somebody pass the toothpicks to the shade of the naughty Mr. Williams?"

Plunkett seemed as unconcerned as if he were dining at his own table in Chatham County. He was a gallant trencherman, and the strange tropic viands tickled his palate. Heavy, commonplace, almost slothful in his movements, he appeared to be devoid of all the cunning and watchfulness of the sleuth. He even ceased to observe, with any sharpness or attempted discrimination, the two men, one of whom he had undertaken with surprising self-confidence, to drag away upon the serious charge of wife-murder. Here, indeed, was a problem set before him that if wrongly solved would have amounted to his serious discomfiture, yet there he sat puzzling his soul (to all appearances) over the novel flavor of a broiled iguana cutlet.

The consul felt a decided discomfort. Reeves and Morgan were his friends and pals; yet the sheriff from Kentucky had a certain right to his official aid and moral support. So Bridger sat the silentest around the board and tried to estimate the peculiar situation. His conclusion was that both Reeves and Morgan, quickwitted, as he knew them to be, had conceived at the moment of Plunkett's disclosure of his mission—and in the brief space of a lightning flash—the idea that the other might be the guilty Williams; and that each of them had decided in that moment loyally to protect his comrade against the doom that threatened him. This was the consul's theory and if he had been a bookmaker at a race of wits for life and liberty he would have offered heavy odds against the plodding sheriff from Chatham County, Kentucky.

When the meal was concluded the Carib woman came and removed the dishes and cloth. Reeves strewed the table with excellent cigars and Plunkett, with the others, lighted one of these with evident gratification.

"I may be dull," said Morgan, with a grin and a wink at Bridger, with want to know if I am. Now, I say this is all a joke of Mr. Plunkett's concocted to freighten two babes-in-the-woods. Is this Williamson to be taken seriously or not?"

"'Williams,'" corrected Plunkett gravely. "I never got off any jokes in my life. I know I wouldn't travel 2,000 miles to get off a poor one as this would be if I didn't take Wade Williams back with me. Gentlemen!" continued the sheriff, now letting his mild eyes travel impartially from one of the company to another, "see if you can find any joke in this case. Wade Williams is listening to the words I utter now; but out of politeness I will speak of him as a third person. For five years he made his wife lead the life of a dog—No; I'll take that back. No dog in Kentucky was ever treated as she was. He spent the money that she brought him—spent it at the races, at the card table and on horses and hunting. He was a good fellow to his friends, but a cold, sullen demon at home. He wound up the five years of neglect by striking her with his closed hand—a hand as hard as a stone—when she was ill and weak from suffering. She died the next day; and he skipped. That's all there is to it. It's enough. I never saw Williams; but I knew his wife. I'm not a man to tell half. She and I were keeping company when she met him. She went to Louisville on a visit and saw him there. I'll admit that he spoilt my chances in no time. I lived then on the edge of the Cumberland mountains. I was elected sheriff of Chatham County a year after Williams killed his wife. My official duty sends me out here after him; but I'll admit that there's personal feeling too. And he's going back with me. Mr.—er—Reeves, will you pass me a match?"

"Awfully imprudent of Williams," said Morgan, putting his feet up against the wall, "to strike a Kentucky lady. Seems to me I've heard they were scrappers."

"Bad, bad Williams," said Reeves, pouring out more "Scotch."

The two men spoke lightly, but the consul saw and felt the tension and the carefulness in their actions and words. "Good old fellows," he said to himself; "they're both all right. Each of 'em is standing by the other like a little brick church."

And then a dog walked into the room where they sat—a black-and-tan- hound, long-eared, lazy, confident of welcome.

Plunkett turned his head and looked

(Continued on page 22.)

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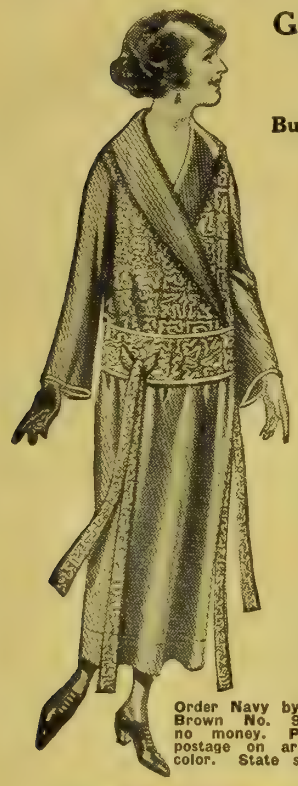

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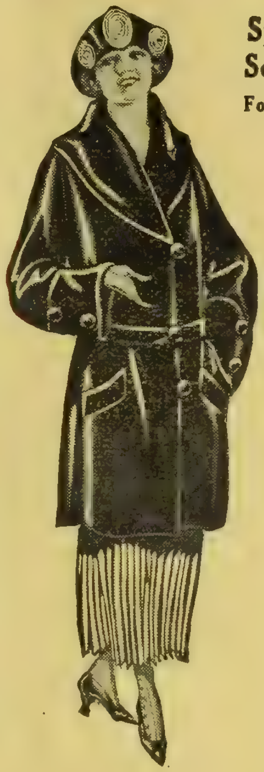

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Men's Sturdy Duck Coat

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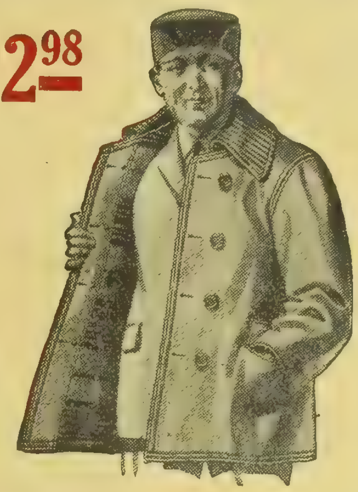

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Another sensational value in a warm winter coat. This becoming model is of splendid Thibet cloth in choice of rich brown or navy blue. The ample collar is of genuine brown Coney fur. Coat is finished with all-around self material belt and two patch pockets trimmed with pretty buttons. Imitation cuff is also button trimmed. Coat measures about 48 inches long, and comes in sizes 34 to 46 bust.

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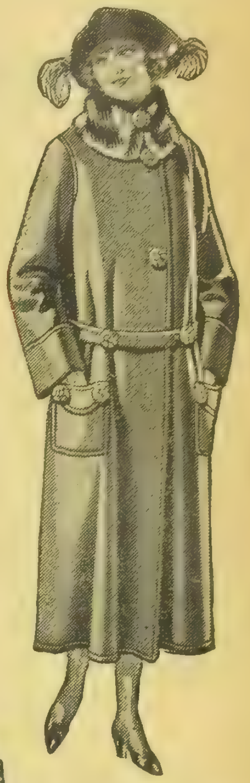

Dressy Kid Finish Walking Boot

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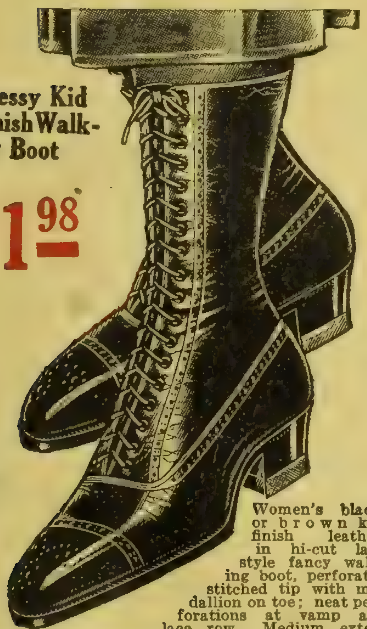
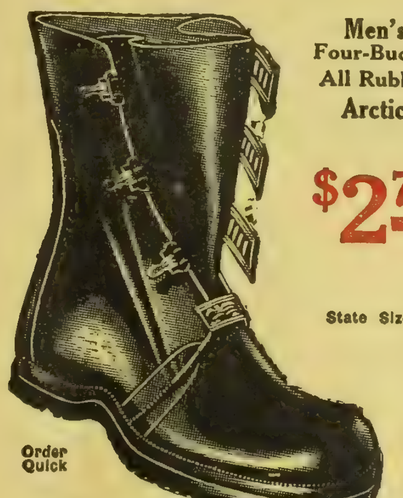


Give Size

Women's black or brown kid finish leather in hi-cut lace style fancy walking boot, perforated stitched tip with medallion on toe; neat perforations at vamp and lace row. Medium extension oak sole with proper height walking heel rubber tipped. A distinct Sharood bargain, suitable for dress or street wear. Soft kid finish leathers are dressy and comfortable. Sizes 2½ to 8. Wide widths. **Order Brown Kid Finish by No. 96S195, $1.98. Order Black Kid Finish by No. 96S194. $1.98**



Men's Four-Buckle All Rubber Arctics

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State Size

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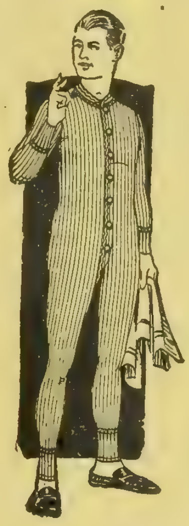

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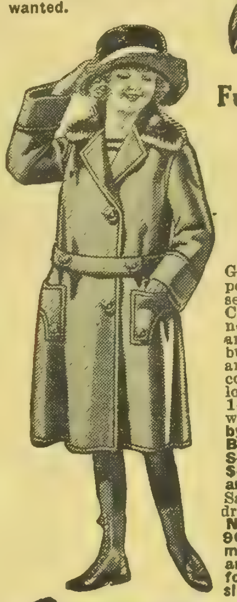

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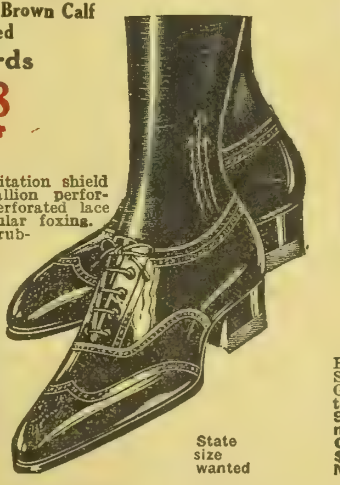

State size wanted

Men's and Boy's Work Shoe

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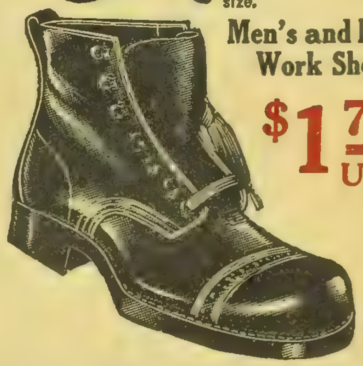

Give Size

Brown or Black work shoe of durable leather. Solid leather inner soles. Heavy double soles. Green chrome outsole. Leather heel. Sizes 6 to 12. Wide widths only. **Order Brown by No. 96A759. Order Black by No. 96A760. Send no money. Pay $1.98 and postage on arrival. Order Boys' sizes 1 to 5½ by No. 96A554. Price $1.89. Order Little Boys' sizes 9 to 13½ by No. 96A555. Price $1.79.**

Log Cabin Brown Suede Walking Oxfords

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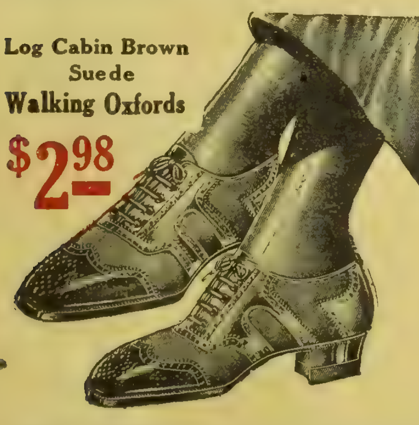

Women's combination sport oxford with Log Cabin or gray suede vamp and quarter with contrasting brown calf or Patent Leather trimming at tip, lace row and quarter. One-piece genuine oak sole; low walking heel with rubber top lift. Sizes 2½ to 8. Wide widths. **Order Log Cabin with brown calf trimming by No. 96S119. Order gray with patent trimming by No. 96S120. Send no money. Pay $2.98 and postage on arrival.**

Women's Fleece Lined Soft Black Kid Finished Comfort Shoes

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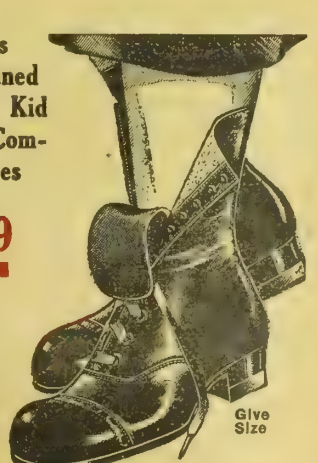

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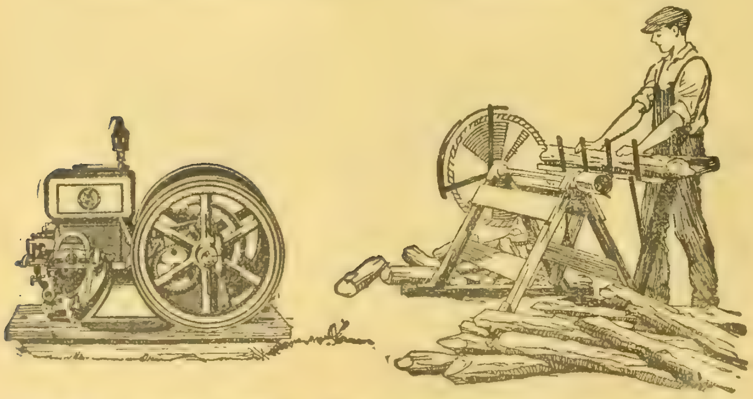

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U. P. Boys' Calf Club Visits Wisconsin Farms

THIRTY-SIX boys recently returned to thirty-six homes, in the Upper Peninsula of Michigan, entirely sold on the ideas and ideals of better dairying, and pledged to the methods and practices which they had witnessed during the ten day inspection tour through the dairy region of northern Wisconsin. The trip was arranged under the direction of the extension department of the Michigan Agricultural College, and the Upper Peninsula Development Bureau of Michigan, being financed entirely by the latter organization.

Chiefly important because it represented an intensive short course of practical dairy training for each of the boys and the leaders who accompanied them, the tour stands out as one of the most distinctive features of the better-dairying campaign now in progress throughout the Upper Peninsula of Michigan.

Space here will not permit a detailed account of the trip. Here, however, are a few terse facts which will suffice to impress upon the minds of even the most skeptical the fact that the calf club tour presented to these thirty-six boys a rare opportunity and a training which, if reckoned in dollars, would have meant a considerable investment to any one of the fortunate young farmers.

The tour was the first of its kind ever attempted in the history of boys' club work throughout the United States, according to R. A. Turner, state club leader for Michigan.

The trip covered 1400 miles, and ten cars made up the caravan.

The personnel included thirty-six boys from twelve counties.

About fifty dairy farms—the largest and most thoroughly developed that could be found along the route—were visited and a careful inspection made of each.

At the close of each day's work, "quizzes" were conducted by the leaders in charge, and the lessons of the day were firmly fixed in the minds of each of the boys.

Each boy was requested to keep a note-book, in which he jotted down everything of interest occurring along the route.

Among the outstanding establishments visited enroute were:

The Ferndell Guernsey Farm, Oneida, Wisconsin—220 head of pure-bred Guernseys and owners of one of the largest bulls of the breed. Supplies milk to the William Larsen Canning Company.

F. E. Fox, Guernsey Farm, Waukesha, Wisconsin—the most ideal and practical dairy farm seen on the tour. Producers of high-quality dairy products and pure-bred livestock. Now selling 400 quarts of milk and 90½ pints of cream daily to local market.

Anoka Farms, Waukesha. One of the leading Shorthorn farms in the United States. Farm has held nineteen livestock sales and averaged $810 a head for the nineteen sales. One animal alone from the herd brought $2,600 at last fall's sale.

Adam Seitz & Son, Ayreshire Farm, Waukesha. Declared the best Ayreshire farm in the world. Has herd of 130 animals.

Pabst Farms, Waukesha. Some of the world's greatest Holsteins seen on the farms of the wealthy Pabst brothers.

Hoard's Dairy Farm, Fort Atkinson, Wisconsin. Declared to be the finest model dairy farm in the country. Boys given an opportunity here to study some of the most "typey" of dairy animals.

And these are only a few of the outstanding establishments to which the boys were directed on their trip.

The Michigan Calf Club Boys' Tour was, without question, an epoch in the dairy industry of the Upper Peninsula of Michigan.

Three U. P. Club Boys Make Unusual Record

THREE of 'em—count 'em—three of 'em. There's Grant, James and Richard, and they're "The Three Musketeers" of Iron county, Upper Michigan, as far as boys' club work is concerned.

The three Gallups, energetic sons of Mr. and Mrs. Gaunce Gallup, of Gaastra, Iron county, upper Michigan, are setting a mighty rapid pace for other club members throughout the peninsula. In fact, the three Gallups are typically representative of the energy and spirit which has placed club work in upper Michigan on par with any similar effort throughout the country.

Here's the dope on the Gallups:

Grant Gallup has for the past three years been a member of the poultry club in Gaastra, Iron county, and has been one of the outstanding boys in poultry club work in Michigan. In 1921, he was declared Michigan State Poultry Club Champion in the first year project. In 1922, he was given second place for State Honors in second year poultry work. In 1922 also he received high individual honors for poultry culling in the contest held at the Upper Peninsula Club Camp at Chatham, Michigan. At this encampment he was also a member of the first prize culling team, which was given a free trip to the State Fair at Detroit, where they conducted a demonstration in culling.

In 1923, at Chatham, Grant was awarded the same honor and represented the upper peninsula on the first prize culling team at the State Fair contest. The valuation of poultry owned by Grant is $488.91; cost of operations, $269.83; yielding a net profit of $219.28 for the period of one year.

James Gallup joined the Cloverland calf club in 1922 and has been a diligent worker for the success of that organization. This was evidenced by the fact that at the organization meeting in 1923 he was elected president. He has conducted the affairs of the club in a commendable manner. At the Club camp at Chatham he was placed on the dairy judging team to represent Iron county which won a free trip to the State Fair at Detroit.

At the State Fair judging contest, in which the boys were required to judge a ring of Holsteins, Guernseys, Ayrshires and Jerseys, James Gallup won second highest individual honors in the state, notwithstanding the fact that he had to compete against boys who had practiced on all classes of animals. The only breeds James had worked on in his home county were Guernseys and Holsteins. Because of the position that he obtained through his work at the state fair, he, with six other boys, will be given a thorough course in dairy judging work at the Michigan Agricultural College, during the last week in September. From there the six boys will journey to Syracuse, New York, to represent the state of Michigan in the dairy judging contest at the National Dairy Show.

Richard Gallup, a younger brother of his brother James, joined the calf club this year. He has devoted all his spare moments toward making this work a success, but did not fare quite as well as his older brothers at the contest at Chatham. However, because of the experience which he had at these places, it proved a great benefit to him at the judging contests at the county fair. Richard was the boy who topped the list and was one of the three boys given a free trip to the International Livestock Show at Chicago, during the first week of December next.

And there you are—not bad for one family, is it?

VETERAN NOT DISCOURAGED OVER LOSS OF ARM

BEING handicapped after having lost an arm while serving at the Argonne Forest with the 132nd Infantry did not stand in the way of the success of Eugene J. Iberg, of Highland, Ill., who before the war was a farmer having only a seventh grade education and who, since his discharge, has stepped into general managership of the Highland Farms Dairy Company. Upon his discharge the outset looked bad for Iberg who was unable to resume his pre-war occupation. But having an arm shot off at the left shoulder did not cause him to despair. He applied to the U. S. Veterans' Bureau and received a course in vocational training which he took at University of Michigan and the University of

Illinois, where he was taught dairying. In connection with this course he also studied bookkeeping at a business college. After two years and four months under the supervision of the Veterans' Bureau Iberg was giving placement training as a bookkeeper with the aforementioned company. In a few months time he was in charge of the other clerks in the company's employ. Later he was appointed general manager.

RADIO DEPARTMENT

THINGS I HAVE LEARNED ABOUT RADIO

IN the past year I have learned quite a few things about making radio sets that might be helpful to other plans if printed in The Business Farmer.

In the first few weeks, I had to buy three new tubes. One tube didn't last over ten days. What was the trouble? $15.00 paid out before I learned. Instead of turning your light or rheostat on slowly, it should be flashed on quickly. Just the same as the lights on a car or your electric lights. I used to turn the rheostat on a little, then leave it for a while, so the filament would heat up; then turn it on slowly until I could hear the music, etc. This should not be done (except when using set for the first time, to see where to run it) as it makes the filament brittle and a little jar will break it.

Place a common knife switch between the A battery and filament. Do not burn the filament any brighter than is needed for to get the signals as loud as possible without squeals. Underheating is just as bad as overheating. A tube will last a year if used right. When a freshly charged battery is put in, the rheostat should be turned back a little because it has to be turned on more as the battery runs down. In wiring up a set, use flexible wire, such as light wire or Ford coil wire, (that's what I use) the size doesn't seem to make much difference. I used stiff No. 14 wire at first. Every time anybody would step a little heavy, it would jar it out of tune and I would have to tune in again, so I got some secondary wires from a flivver and rewired the set and everything was O. K. I placed the tube socket on a bracket made of spring brass and that made it jarproof. About tubes—don't let anyone tell you that you can hear just as far with a dry cell tube as you can with a 6-volt tube. They are not quite as sensative and they lack distance. But they save the cost of a storage battery and for winter use they are quite satisfactory. I tried the W. D. 12, but to get good results, I use the U. V. 200 Radiotron, and storage battery. Buy the best materials you can afford.—C. C. G., Harvard, Mich.

RADIO HELPS HIGHWAYS

A farmer in Northern Illinois, is located on a dirt road which is impassable during the winter if a frost comes when the road is in a rough condition. Last fall when the road was at its worst he got a radio warning of an immediate and heavy frost. Calling in his neighbors by telephone, they all got out and rolled the road. When the freeze came, it proved to be permanent, and the radio owner and his neighbors had a boulevard to town all winter.

WHY HE QUIT

"That's Bill Fligh, the aviator. He's the guy that used to write ads in the sky in smoke."

"Isn't he doing that any more?"

"No, he had to give it up. He got writer's cramp."—American Legion Weekly.

HOW TO DO IT.

This is the way to write a thoroughly angry business letter:

"Sir—My typist, being a lady, can not take down what I think of you. I being a gentleman, can not write it. You being neither, can guess it all."—Brisbane Daily Mail.

PRESENCE OF MIND

Ethel was sitting on the sofa with a friend of hers. On her knee was her little niece. The door to the next room, which was full of people, was wide open. The people in the other room heard this:

"Kiss me, too, Aunt Ethel."

"Certainly, dear, but don't say 'two,' say 'twice;' 'two' is not good grammar."—The Black and Blue Jay.

for Economical Transportation

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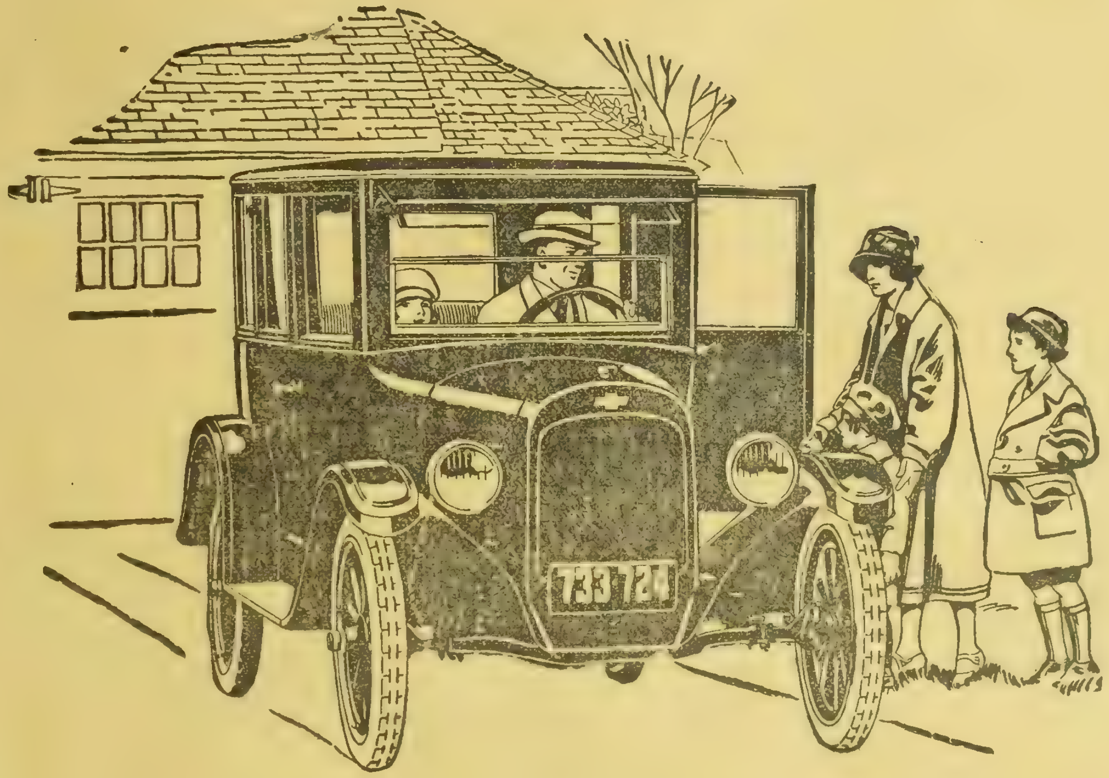

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Superior Roadster	$490
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Superior Commercial Chassis	395
Superior Light Delivery	$495
Utility Express Truck Chassis	550

Chevrolet Motor Co., Detroit, Mich.

Division of General Motors Corporation

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$85,265 a day for taxes

Railroads, of course, should pay a proper amount of taxes, but it must be remembered that whatever they pay must be passed on to the public through rates.—*Congressional Joint Commission on Agriculture.*

New York Central Lines paid taxes last year averaging $85,265 a day, an increase of 221% as compared with 1910. For the year the tax bill was $31,121,832, an amount considerably greater than the total dividends paid to the stockholders.

For the railroads of the entire country the increase in taxes as compared with dividends since 1913 has been as follows:

	1913	1922
Taxes	$127,725,809	$301,003,227
Dividends	$322,300,406	$271,576,000

Taxes are a part of the cost of railroad operation, which must be provided for in freight and passenger rates, just as are expenditures for wages, coal and materials. New York Central Lines pay more than one-tenth of the railroad taxes of the country.

NEW YORK CENTRAL LINES

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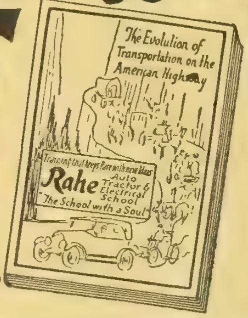
AND THE NEW YORK CENTRAL AND SUBSIDIARY LINES
General Offices—466 Lexington Ave., New York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"I got a fine job the day after I left school."—W. C. Wyatt, Mt. Sterling, Ky.

"I thank Rahe training for a great job in the best garage in Lima."—Howard Metzger, Lima, Ohio

"Rahe Training was the best investment I ever made."—Colby Lord, Oakland, Maine

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WHEN WRITING TO ADVERTISERS, PLEASE MENTION THE BUSINESS FARMER

What the Neighbors Say

RAISE MORE SUGAR BEETS

THE world production of sugar which before the war reached 20,000,000 tons of 2,000 lbs. and during the war dropped off several million tons, again is up to 20,000,000 of which 2,200,000 of 11% was produced in the United States and its possessions.

The U. S. consumption of sugar which before the war amounted to 4,000,000 tons, reached 4,600,000 in 1921 and in 1922 jumped to 5,700,000, an increase of 25 per cent in one year. The United States now consumes 28 per cent of all the sugar produced in the world.

Prio to the war our maximum per capita consumption of sugar was 84 lbs. In 1922 it jumped to 103 lbs. Only Australia and New Zealand now exceed us in this respect. Meanwhile, due to and because of the war, the per capita consumption in the United Kingdom has fallen from 90 to 70 lbs.; Germany from 75 to 54; and Russia from 29 to 5 lbs.

Excepting Norway and Portugal all the countries of continental Europe produce sugar from beets and before the war they annually exported a surplus of some 3,000,000 tons.

The European production of beet sugar which before the war exceeled 9,000,000 tons and in 1919-20 had fallen to 2,900,000, last year reached 5,200,000 tons. Nevertheless, in 1922 Germany, normally Europe's larger producer and exporter of sugar imported 180,000 tons against exports of only 17,000 tons.

Altlhough possessing a sufficient sugar beet area from which to produce the sugar of the world, the United States continues to be the world's greatest importer of sugar. Our imports for consumption in 1922 amounted to 3,300,000 tons. During the 5-year period 1917-1921 our total imports of sugar amounted to 16,000,000 tons, for which we paid foreign nations $2,545,000,000 or an average of $509,000,000 annually, a sum sufficient to erect 330 one-thousand ton beet sugar factories which would supply us annually with 3,300,000 tons of beet sugar from beets grown by American labor on American farms.—Truman G. Palmer, Sugar Statistician, Washington, D. C.

DOESN'T LIKE LAW ON LINE FENCE

EDITOR:—I protest against one bad and unjust law in Michigan which I believe farmers ought to resist at the polls with the ballot. It is the law on line fences. Michigan law does not require me to build a fence on the public highway if I have no stock. My woods, orchards and meadows are protected by the requirements of the law to confine stock within one's own territory. But this general law has a special feature that requires me to build half my neighbor's line fence to keep my grass or trees from getting on his premises.

It must be a stock fence but I have no stock and the stock fence which the legislature calls upon me to help build does not keep out the chickens, turkeys, guineas and pigeons which my neighbor keeps by thousands.

On the public highways all kinds of stock may be driven with the presence of a master to keep and care for the same on the public right. Why should I be forced to support a fence between some other's place and the highway? Unless I have stock why should I be required to help another to confine his stock? If he is required to fence against poultry the stock fence will serve no purpose and even a poultry fence is not protection against a pigeon farm.

Here is a situation. The east and west sides of my orchard lie open to the public highway. On the north is the division line without a fence because the owner raises only grain and has no need of fence and the owner on the south is all meadow and needs no fence. But one of these changes and begins raising stock and orders me to build half of the fence he needs and the other changes and goes to raising poultry and orders me to build one half of our division line. Depreciation of my farm follows. We need a better law on line fences.—J. S. H., Michigan,

ONE MAN'S OPINION

DEAR EDITOR:—You want to know what some of us farmers think about that College-Farm Bureau-Governor trouble at Lansing. For myself, will say that I hope the Governor kicks the Farm Bureau clean out of Michigan. I don't understand that he cares to take over any authority over the college funds, but does insist they cut out the Farm Bureau. I hope he makes it go. I wish he could also cut out a lot of those useless demonstrators that are making an easy living holding meetings, that but very few attend or want.—Clare D. Scott, Master Riverside Grange No. 741.

"BIG BUSINESS" IN THE SADDLE

ENCLOSED find check to extend the subscription to my wife's M. B. F. for two years. I think it is the best farm paper that I see. I enjoy the editorials and "What the Neighbors Say"—hugely. Also the markets and in fact the whole tenor of the paper is for the common folks. I would like to see an editorial on what is the cause of universal unrest everywhere. It seems to me that "Big Business" is in the saddle and intends to hold the seat, by playing politics to the detriment of those less fortunate than themselves. Is this so?—F. H. Carpenter, Allegan County, Mich.

FARMER AND LABORER TO SUFFER

DEAR EDITOR—As I have not said anything in a long time, I though it was about time for me to open up, so here goes. Big land holders in Germany have agreed to meet the big industrialist and put up $200,000,000 for reparation payments. This means that the farmers, who farm the farms and the workers who work the works, not only in Germany, but thruout the world, will be sweating harder than ever, will have to give up more of their life-blood than ever before, to pay—whom? Not they, the toilers, will get what is taken from them but the parasites who always and alone profit by the "glories" of war and empire. Let the farmer and worker think.—S. H. Slagle, Wexfor County, Mich.

Good Buildings Soon Pay for Themselves

UNCLE RUBE SPINACH SAYS

IT IS TO LAUGH, SOMETIMES

YES, folks, I sure do have to laugh sometimes when I think of the farmers of this state. And not only of this state but of all our states. Now I know just what you're goin' to say—its jest 'bout this—"Laugh you ol' fool—laugh all you want to—it don't cost you nothin' to laugh but it cost us a lot to do business for nothin'." Yes, dear farmer friends, I know somethin' of your problems, your worries, and all you would say to me. I've been through a good deal of it—was a farmer fer many years—more than 40 an' that's tellin' more about my age 'an I've ever told before. But friends, in 40 years a man, if he keeps his eyes open, learns consid'able. I learned my little lesson years ago—that would insinuate I waz gettin' old, now would'nt it? Well I'm not so old—I'm jest growin' up now—but I have a chance to see things that you don't see. Now f'r instance, you know what you git fer wheat? Do you know, 'at gen'raly, bread is the same as it waz when wheat brought you a fair return fer your labor an' cost of production? Take hogs, cattle, anything you raise, you know whut you git fer 'em, 'bout 7 cents fer good hogs, not any more if so much fer cattle, an' yet we are payin' up to 30 cents fer either kind a meat. Oh yes some of it at 24 cents, glesan' neck—why then is it to laugh?

Well, I'm jest goin' to tell you—it's jest cause you want to go it alone—want to sell your own stuff as you see fit. You don't want to join any society—any org'nization that wants to help you, somethin' like the co-ops or the Farm Bureau—an' by the way the Farm Bureau is doin' good work. We have a branch—and office—more 'an an office here in Battle Creek. I say more 'an an office 'cause they had an office an' a large warehouse on South McCamby Street an' have had to change locations 'cause their business outgrew the place they had) an' I know the man that runs the place an' I knew he helps the farmers that belong to the org-nization. He is straight as they ever make them an' does a wonderful business fer the farmers that employ him.

An' so I laugh when I think of the thousands of farmers what don't believe in any such thing. Yes, I have to laugh—long and loud, 'cause I know they are jest beatin' themselves an' blamin' it onto somebody else. Now, se here, ol' farmer friends, you can't do business alone as well as you can collectively. Why do labor unions hold out fer collective bargainin' if it ain't a good thing? Now let me tell you somethin', don't git the idea 'at you know all there is to know, don't think that every man 'at tries to help you is a thief. Mebbe you don't like the men at the head of the farmers' orgnization in your community—no matter about that—if he is doin' the right kind of business, likes or dislikes don't cut any figger. You jest git into the game, try collective bargainin' fer a while, buy an' sell through your orgn-zation and then in 6 months write to me through M. B. F. an' let me know if I shall stop the laugh. But honestly, folks, right now I have to laugh a little an' you don't really blame me, do you? Cordially yours, UNCLE RUBE.

KNOW YOUR STATE

DO you know that the state of Michigan ranks first in the following agricultural products: cucumbers, mint, chicory, white beans, and small fruit? That it ranks second in all beans and sugar beats? That it ranks third in rye, celery, commercial apples, raspberries, and silage crops? —fourth in total apples, buckwheat, potatoes, green peas, strawberries, and butter sold? —fifth in clover seed, pears, blackberries, maple syrup, and butter fat sold?

Willie—Mamma, will you answer just one more question? Then I won't bother you any more.

Mother—All right, then, What is it?

Willie—Why is it that the little fishes don't drown before they learn to swim.

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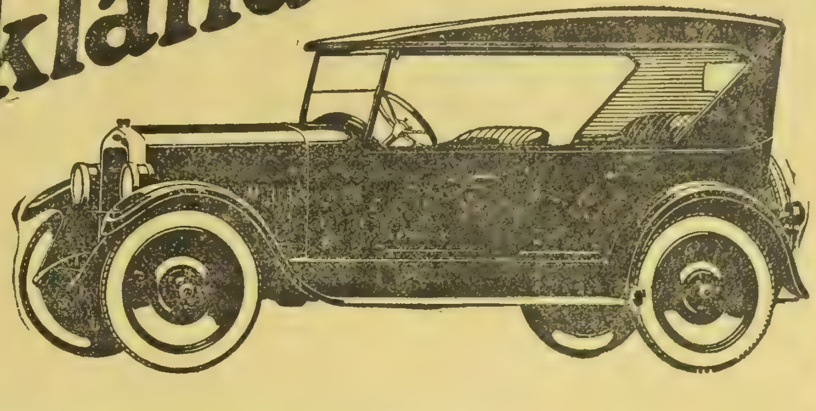

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Beautiful new blue bodies built by Fisher;

Hand controls centralized on steering wheel;

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Five-Passenger Touring Car . .	$ 945
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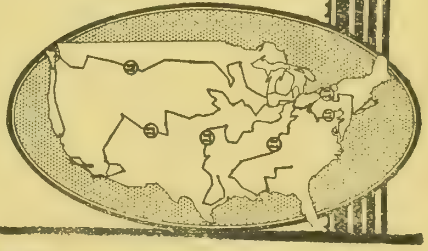
"True Blue Travelers"—with thousands of miles of test duty on their speedometers—are touring the country to demonstrate the high quality of Oakland construction and the remarkable efficiency buyers of these 1924 Oaklands will receive, even after months of the most gruelling service.



The True Blue Oakland "6"

Oakland

The Michigan
BUSINESS FARMER

SATURDAY, OCTOBER 13, 1923

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We will not knowingly accept the advertising of any person or firm who we do not believe to be thoroughly honest and reliable. Should any reader have any cause for complaint against any advertiser in these columns, the publisher would appreciate an immediate letter bringing all facts to light. In every case when writing say: "I saw your advertisement in The Michigan Business Farmer!" It will guarantee honest dealing.

"The Farm Paper of Service"

POLITICAL BUNKUM

THERE is an old joke that has become almost a national fable. It concerns the worthy gentleman who for some infraction of the law is rudely bustled into a patrol wagon, taken to jail and thrown into a cell. He begs for an opportunity to call his lawyer, and is finally given permission to use the telephone. He tells the lawyer his predicament. The lawyer says, "They can't put you in jail for that!"

The man in jail felt just about as the farmer feels now when he hears the typical political spell-binder inform him that he cannot be put in the position in which he has found himself the past two years.

Fortunately, the farming situation is clearing up and the day will come as surely as you are reading this page, when farming and labor will again stand on an equal footing in the matter of the price paid for their products in the market. As it is today labor is getting twice as much as the farmer is for the same amount of work, and yet labor is flirting with the farmer to organize a political party so they can get more.

ARE WE GUILTY?

THE farmers in Michigan, or those farmers who grow sugar beets have a skeleton in their closet which must be brought to light or else they must submit their closet to the closest scrutiny, because in the eyes of the public they are being given a place alongside of the child-slavery cotton mill operators of the South.

Only last week at the meeting of the Michigan Tuberculosis Association at Flint, Mr. Owen R. Lovejoy, Secretary of the National Child Labor Committee, made the following statement: "It is time the people of Michigan know what the report claims to show. It shows that we found 1,358 children at work; that 976 of these in the pulling season were 13 years old or less; that 17 of them were 5 years old and 52 were 6; that our agents actually covered over 10,500 acres, or about one-seventh of the area of beets last year; that children under 16 years were able to work from four to seven acres apiece; that the terms under which these contract laborers work are such that many men feel they cannot make a decent living without the labor of their children. The hours of work for these children are often excessive, being from 8 to 12 hours a day during the harvest and from 12 to 15 in blocking, thinning and weeding. The housing provided for these families often is indecent. These children are deprived of schooling. Contract labor children lost 63 per cent of their total school time while children of owners and tenants lost 29 per cent. The instructions from the state department of education expressly omits a census of these migrant children so that school officials have no means of knowing how many children of trancient families are in their country. The work of these little children is work, not play. Many of the processes required a physical posture, which, according to an expert of the United States Children's Bureau, is a direct and serious menace to health. All this is contained in our report. Accidents are not unknown, though our report emphasizes that the monotony, exhaustion, long hours, exposure and insanitary living conditions are far more serious."

There was a legislative investigation made last winter to determine whether or not the statements made regarding child labor in the beet fields of Michigan were true or false. No one seems to have been satisfied by the hurried series of public meetings which this junketing committee held, and even the daily newspaper reporters who accompanied it made a farce of the manner in which it was conducted.

Now the farmers in the state of Michigan who raise sugar beets know what the facts are. There is no need for and we resent, as does every man or woman interested in Michigan agriculture, the shadow which this kind of propaganda is casting all over the United States.

Michigan is being pointed to as a state where child slavery is practiced as it has been in the cotton mills of the south. Michigan has laws which prevent such conditions as exist in southern states, and it is high time those vested with the authority in our state take the necessary steps to correct this criminal condition if it does exist.

This is not a matter for the state legislature. It is a matter for the state police to handle, and if they are doing their duty they will see to it that the beet section of Michigan is properly patrolled to prevent any semblance of a condition which is claimed to exist.

We would be glad to publish letters from our readers in the heart of the beet country who know the facts, and we will use no names, if so requested. The important thing is to raise the stench before it has permeated too far.

WELL, THAT'S THAT!

WE got all het up this week as you probably did when you read that they were going to close the twine plant at Jackson State Prison because of the high freight rate which made it impossible for them to compete with large manufacturers.

We jumped at the conclusion, as you undoubtedly did, that the prison was going to sell out to the benefit of the independent manufacturers of binder twine and that they would, once the plant was closed at Jackson, make a football of binder twine prices in this state.

We publish on page 3 of this issue, a statement from Charles A. Blaney, Chairman of the Michigan State Prison Commission, and also a statement by Warden Harry L. Hulburt, which would seem to indicate that the press reports were without foundation, and that the farmers of our state need not worry, at least on this one score.

If there is any other prison, or other industry, conducted by the state of Michigan which produces a profit of over $150,000 annually, we do not know of it, and if this profit can be made and at the same time, sell the farmers of Michigan a superior product at less cost than they can buy elsewhere, there would be some rumpus before the doors of the prison twine plant could be closed and the machinery sold on the auction block.

So we have cooled off!

WORTH READING

JOHN H. KRAFFT, an authority on financing agriculture, begins in this issue an exclusive series of articles in which he attempts to explain the various forms of finance as they apply to the farmer.

He will cover in this series, the farmer's relation to the bank, the farmer's relation to the local banker, and the many forms of government aid which have been effected, supposedly to make the farmer's financial problem easier. We hope every reader who makes a business of farming will read this series through, because it has been our opinion for some time that there was no subject in which the farmer was actually less acquainted or sure of his footing than that of the present day finance.

Mr. Krafft has offered to answer any questions that occur to our readers while they pursue this series, and we hope you will take advantage of the opportunity of clearing the mists away from the present problem of agricultural finance. We confess that we will read this series with equal interest because there have been so many plans proposed and so many laws enacted that we feel, as you probably do, like "Babes-in-the-Wood" when we approach the subject.

THE AIR IS ALIVE

HOW many of the readers of this page heard the police band from Mexico City when it played at Arcadia Hall, Detroit, last Thursday evening? If you didn't hear it, it was your own fault. The entire program from first to last, encores and applause, were all broadcasted by the Detroit radio station, WCX, and a receiving set would have brought you as near this famous band as a seat in the hall itself would have given you.

How can we impress upon our readers what radio will mean to you and your family this winter? It is not difficult to build a set from the parts which can be secured at comparatively low cost, and the new bulb sets need no longer be operated by storage batteries, which are cumbersome and have to be recharged at a central station, but can be operated by dry cell batteries. Our own set has three pairs of dry batteries which have been in use since last May, and the "B" battery will last upwards of a year.

Some of the mail order houses now sell a complete outfit with battery and headset for less than $25. An extra head-set can be had for around $5. With this outfit you can hear any concert from Chicago, Detroit, Cleveland, Pittsburgh or Schenectady, or you can listen to the reports during the day and the market advice broadcasted each evening.

We wish that every home into which The Business Farmer goes might have a radio set this winter. Perhaps if you would pool all of your Christmas money that you naturally would spend in your family you would have a sufficient amount to purchase a set, as we know of no greater boon which has come to the farmer in our present generation, and particularly the farmers in Michigan are fortunate in being within easy range of all of the principal sending stations.

There is something doing in the air every minute, and the very room in which you read this now is charged with music, entertainment and information.

You don't believe it? Hook up a radio receiving set and see.

O, MONEY! MONEY!

YOU might have imagined that some of our readers thought we were trying to pick a lively prospect for a check for $100,000. Our new serial story by Mrs. Porter, which we believe our readers will find to be one of the best we have ever run, is a story of a man who gives $100,000 to some of his relatives and then watches the result. To introduce the story we asked for letters from our readers on what they would do with $100,000 and the best of these letters appear in the issue. We are sure you will find them very interesting as we did.

A reading of these letters left one outstanding impression in our minds, we are surprised to find that the old world is getting better all of the time, and if these letters indicate the trend of thought it is a pity that some of the poorer folks of this world cannot be blessed with the money with which to do the good that they would like to do.

We all get $100,000 in the mail every morning. That is, those of us who have two eyes, two hands, two legs, and a good appetite. If you could ask a blind man, a cripple or a bed-ridden patient which they would rather have, a day of twenty-four hours of good health, or to remain in their present condition and have $100,000, I will venture that most of them would spurn the money or what it would bring them in the future, for one day of health.

You, then, receive $100,000 every day, in their valuation of happiness and that is all you could expect to buy with the money if you had it.

Are you making as good use of the new day as if it were a check for $100,000?

BEET GROWERS LUCKY

A. B. COOK, of Owosso, Master of the State Grange and a leader in the beet growers' association, is authority for the statement that if the price of raw sugar stays where it is now the farmers who raise beets under the flat rate contract will get $9.25 for their beets, while those who raise them under the so-called 50-50 contract will get $10.31 for them.

We hope the price of sugar remains at its present level long enough to demonstrate that the 50-50 contract, as originally proposed by Mr. Cook, is a sound proposition and one which the beet growers of this state can well afford to stand solidly behind. If Mr. Cook's figures are correct this will net the beet grower who raised beets under the cooperative plan $1.06 per ton more than those who raised them on the flat rate contract.

Luckily, the price of raw sugar has held up well into the fall, and we see no reason why the beet outlook in Michigan is not brighter than it has been for many years. We will keep our fingers crossed, Mr. Cook!

MAKES WORK WORTH WHILE

IT is not drudgery to work with a good piece of machinery or with good tools. Neither is it drudgery to work with high class live stock. You can hardly blame a boy for leaving a farm if he has to get along with a scrubby team or a gallon-a-day cow. But enable him to take pride in what he has and what he works with and he will take pride in the accomplishments for which he strives.

Former Representative Patrick H. Kelley, of Lansing, said, "In my judgement, there is no person now living who will see the Eighteenth Amendment either modified or repealed. There is no doubt pre-prohibition beer intoxicated many, even with an alcoholic percentage of only 3½%. Legalization of 5% beer would, in effect, nullify the Eighteenth Amendment."

PUBLISHER'S DESK

AN AUTO KNITTER FOR SALE CHEAP

DEAR MR. SLOCUM—Noticing in the past of your help to farmer folks in solving their problems, I wish to ask you if you could sell my auto hosiery knitter for me.

I purchased it last fall late, but found my eyes would not allow me to do the work well as I have far sight and my glasses glance on the needles so I cannot get the stitch easily, or quick enough. It is positively new, never sent out one pair of socks, although we made some for home. It is perfect in every respect. Triplex $72.00 with yarn. Could you sell it and retain commission or let me get some of your names? Although you will have the best luck with the money, get a reasonable price and retain $10.00.

—If any of my readers are in the market for an auto knitter after reading the fabulous claims in their advertising, here is a chance to get one cheap. I will be willing to throw off the commission she has offered me and will be glad to forward it to this unfortunate woman.

OPEN SEASON FOR CATCH-PENNY SCHEMES

THIS is the open season for all kinds of schemes, and because there is a little more money in the country than there was a year ago, the mail boxes are being flooded with all kinds of catch-penny schemes, and I want to issue a warning to my readers to think twice before they leap into something that is going to cause them trouble in the future.

The safest rule to keep in mind is "Look twice before you leap." Don't go into some sort of a scheme when you do not know the company or the men behind it.

Usually the company which does not advertise in legitimate publications, and by legitimate I mean the class of publications which will not accept cheap medical and other kinds of advertising, secure large lists of farmers names or rural route names and use these with penny postage circular matter. They are a pretty safe class to keep away from, and I say this partly from selfish motives because we get so many of these claims in our Collection box and they are just about the only kind that we cannot make a settlement with.

They are crafty boys, these fellows who hide in the mailbox and pounce out with a piece of lead pipe to knock down a dollar here and there.

SOME OLD FRIENDS EXPOSED

DEAR EDITOR—As my subscription has expired, here is $1 for my renewal. I think the M. B. F. is the best paper printed for the good of the farmers. As you wish us subscribers to help expose some of these fake advertisers I will tell you of some of my experience with what I have written to.

I wrote to the Auto Knitter Hosiery Company for information concerning their machines, and what prices they would pay for goods that were knit for them. Their cheapest knitting machines are $50.00 each. You buy your own yarn to knit with at whatever price they choose to charge for it and they only pay $1.75 for every dozen pairs of No. 1 socks that you knit. Is that a square deal? I also wrote to the American Music Publshing Company, Nile Art Company, and the Tapestry Paint Company, at LaGrange, Indiana, whose work was painting pillow tops. I was to buy the cloth at so much per square, and buy my own paints at 25c per vial, and the price they paid for the work was so small it would not pay for refilling my paint bottles.

Two years ago we wished to sell our farm so we wrote to Leslie Jones, of Olney, Illinois. He asked us for $4.50 and we sent it but we still have the farm, so then we wrote to Warren McRae and he also asked for $4.50 but we did not send it to him. A number of people got "stung" by those two gentlemen so the more they are exposed the quicker they will quit business. These kind of people are living on the cream of everything just because the farming class of people are in such bad financial circumstances they are compelled to try some way of earning honest money outside of the farm to meet the increasing expenses. Hoping to see this in print, I remain, C. W. L., Maple City.

PLEASE TELL US

SURPRISING as it may seem, a good many of our friends who send us claims do not notify us when they receive a settlement from the company with whom we are corresponding. When you stop to think that the BUSINESS FARMER offers this collection box service without any charge, although each letter we write costs not less than twenty-five to fifty cents in postage and labor. This may sound high, but it has been figured in many big offices that the cost of overhead, actual typewriting labor, postage, stationery, and so forth, figures from twenty-five to fifty cents on a letter, and yet on some claims for our readers we have written as many as a half a hundred letters and followed it up innumerable times, and yet sometimes a reader will receive a settlement or voluntarily settle with the concern and never notify us of the fact so that our efforts are being wasted.

The whole idea back of the BUSINESS FARMER is service. We make no charge to any paid up subscriber for any service that we can render, no matter how expensive it is to us, but we do like to know that this service is appreciated and especially do we feel that in the case of the Collection Box that we are only asking the right thing when we ask you to notify us when the claim is settled.

ANOTHER "WORK AT HOME" SCHEME

My two boys read the advertisement of the Metal Products Company, Boston Road, New York City, recently and were much interested. The company sells casting forms for these toys and promises to buy all you make. The boys thought that they might make some pocket money that way. What do you think of it? —J. B., Howell, Mich.

LIKE all "work at home schemes" their proposition reads very nice and you are led to think that you can soon become wealthy if you just listen to them. It it desired the toys to sell to the public the company could make them much cheaper than to have individuals all over the country make them. Leave it alone.

WRITING SONGS

DEAR MR. SLOCUM—Am sending you some papers sent me by The New York Melody Corporation. Sent them the song poem while living in Lansing. Are they just after my money or would there be any money in it for me? They have made me several offers before. Respectfully, Mrs. W. C., Kent Co.

—If you have a lyric of sufficient value, I do not believe it will be necessary for you to pay to have it set to music. I would suggest that you write one of the standard music publishing companies, such as: Jerome-Remick Company, Detroit, Mich., they will tell you whether or not the lyric you have is of sufficient value to set it to music. It is pretty safe to assume that if you had something the New York house wanted they would be offering you something for it, not asking you for something!

The Collection Box

The purpose of this department is to protect our subscribers from fraudulent dealings or unfair treatment by persons or concerns at a distance.

In every case we will do our best to make a satisfactory settlement or force action, for which no charge for our services will ever be made, providing:

1.—The claim is made by a paid-up subscriber to The Business Farmer.
2.—The claim is not more than 6 mos. old.
3.—The claim is not local or between people within easy distance of one another. These should be settled at first hand and not attempted by mail.

Address all letters, giving full particulars, amounts, dates, etc., enclosing also your address label from the front cover of any issue to prove that you are a paid-up subscriber.

THE BUSINESS FARMER, Collection Box
Mt. Clemens, Mich.

Report ending October 8, 1923

Total number claims filed	2859
Amount involved	$22,721.48
Number claims settled	881
Amount secured	$13,094.24

First Mortgage Real Estate Gold Bonds

You can invest your savings in Federal first mortgage bonds with absolute assurance of its entire safety—*always.*

Write for Booklet AG1045

Tax Free in Michigan
Free from Federal Income Tax of 4%

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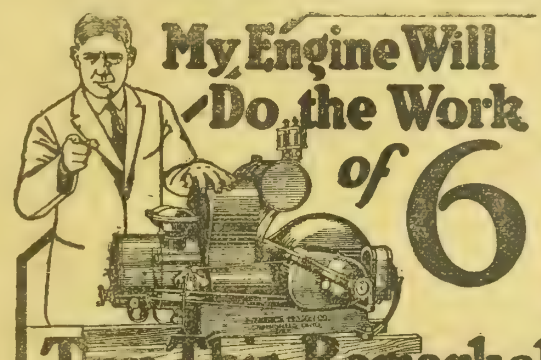

My Engine Will Do the Work of 6

"I set out to build a farm engine that would have every feature the farmer wanted and none he didn't want. It has now been on the market six years. Thousands of satisfied users tell me I've succeeded. I'm proud to have this engine bear my name."
—A. Y. EDWARDS

EDWARDS FARM ENGINE

Try This Remarkable Engine FREE

There is no other farm engine like it. Simple in construction and easy to operate. It is only one engine, yet it takes the place of six engines. It will give from 1½ to 6 H. P., yet it is so light that two men can carry it easily. Set it anywhere and put it to work.

Change Power as Needed

It is a 6 H. P. when you need 6, or 1½ H. P. when you need only 1½, or any power in between. Fuel consumption in proportion to power used and remarkably low at all times. Adjustment from one power to another is instantaneous.

Burns Kerosene

Operates with kerosene or gasoline. Easy starting, no cranking. The greatest gas engine value on the market. And you can prove all of these statements to your own satisfaction.

What Users Say

Ivan L. Blake, of Hannibal, New York, says: "Only engine economical for all jobs. I run a 28-inch cord wood saw, a 24-inch rip saw, a washer, a pump, and a grinder, and it sure runs them fine. It has perfect running balance, and it sets quiet anywhere."

Clarence Rutledge, of Manitoulan Island, Ontario, says: "Have given my Edwards four years' steady work and like it fine. It uses very little fuel. I run a 28-inch cord wood saw, also a rip saw, 8-inch grinder, ensilage cutter, line shaft for shop, churn, washer, separator and pump. Have had ten other engines and the Edwards beats them all."

Frank Foell, of Cologne, New Jersey, says: "It's a great pleasure to own an Edwards engine. I run a wood saw, cement mixer, threshing machine, etc. Do work for my neighbors. Easy to move around and easy to run. I would not have any other."

Free Trial Offer

Now—I want to prove my claims to you. I want to send you an Edwards Engine for absolutely free trial. Just write your name and address on coupon and mail. I will send at once complete details about my farm engine and about my free trial offer. No cost or obligation. Mail coupon now.

MAIL THIS COUPON

EDWARDS MOTOR CO.
534 Main Street, Springfield, Ohio
Without cost or obligation, send me complete description of your engine, also details of your free trial offer.

Name.................................
Address.................................

BUSINESS FARMERS EXCHANGE
Ads Under this Head 10c per Word, per Issue

FARM AND LANDS

60 ACRES ON IMPROVED ROAD, STOCK, tools, crops; Only $3700. Income starts at once; pleasant year round home assured; 55 acres level loamy tillage, creek-watered wire-fenced pasture; woodlot; 35 apple trees, pears, cherries; 1½ acres strawberries; good 2-story 8-room house, porch, barn, granary, poultry and hog houses. Owner unable to operate, all for $3700 and if taken now horses, 4 cows, heifer, hog, poultry, implements, vehicles, tools included. Part cash. Details page 152 New Illus. Catalog Bargains many states. Copy free. STROUT FARM AGENCY, 427KJ Marquette Bldg., Chicago, Ill.

GENERAL

RAILWAY POSTAL CLERKS: START $133 Month. Railroad pass; expenses paid; questions free. COLUMBUS INSTITUTE, O-4, Columbus, Ohio.

EARN $110 TO $250 MONTHLY, EXpenses paid as Railway Traffic Inspector. Position guaranteed after completion of 3 months' home study courses or money refunded. Excellent opportunities. Write for Free Booklet G-165 STAND. BUSINESS TRAINING INST., Buffalo, N. Y.

I WILL PAY FROM 25 CENTS TO $1.00 A pound for common roots and barks direct from farmer. Particulars Box 235 MICHIGAN BUSINESS FARMER.

FOR SALE—GLADIOLA BULBS DURING October. Choice named, 20 for $1.00 postpaid. P. G. OGDEN, Montgomery, Michigan, R. 2

Cow hides and calf skins reconverted into shoe leather by a process called tanning. The wear in your shoes depends upon it. By tanning their own leather E-J *know* the wearing qualities of their shoes.

On their feet all day long—

what is the secret of their shoe wear and comfort?

Pound, pound. pound—millions of steps a year How do feet and shoes ever stand the strain?

The answer is E-J shoes. Men who are constantly on their feet have found that for Wear, Comfort and Price, no other shoes can equal them. They know that the name Endicott-Johnson on a shoe means the most skillful workmanship of expert, happy workers. They know that Endicott-Johnson, (the world's greatest tanners), make their own leather. And they have discovered that by eliminating all extra costs, Endicott-Johnson sell shoes at lower prices.

These same qualities are in every pair of E-J Shoes whether shoes for work or a snappy pair of oxfords for dress up. It's the same in styles for men, women and children. Dealers everywhere. Insist that you get

"Made with Smiles"

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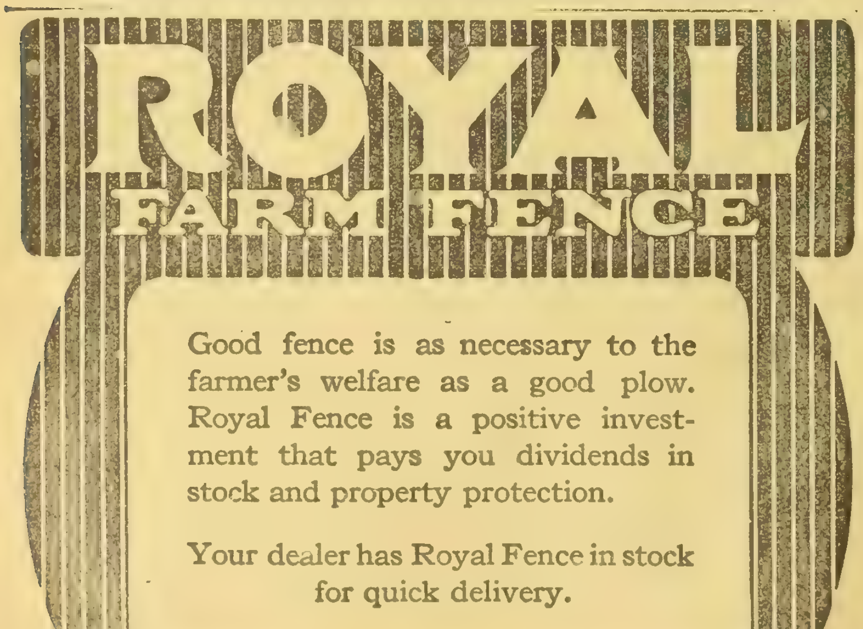
ENDICOTT-JOHNSON SHOES

"Better Shoes for Less Money"



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—direct from manufacturers—and get the finest quality and newest improvements made? See our beautiful new design blue and gray porcelain enamel ranges that you can buy for less money than others ask for just ordinary stoves.

MAIL A POSTAL TODAY—for the greatest money saving bargain book of our 22 years. Any stove, range, heater or furnace on 30 days' trial. Quick, safe delivery guaranteed. Easy payments. 500,000 pleased customers. Send us your name today.

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30 Days' Trial

THE MORAL CHALLENGE OF THE HOUR

A SERMON BY REV. DAVID F. WARNER

TEXT: "Avenge not yourselves, beloved, but give place unto the wrath of God; for it is written, Vengeance belongeth unto me, I will recompense, saith the Lord. But if thine enemy hunger, feed him; if he thirst give him drink; for in so doing thou shelt heap coals of fire upon his head. Be not overcome of evil, but overcome evil with good."—Romans 12:19-21.

IT is human to hate. It is divine to love. It is human to seek vengeance. It is divine to let God do this. It is human to love those who love you. It is divine to love those who do not love you. The other day a dog wagged his tail when I would pet him; but he gnashed at me when I would strike at him. Some humans have the instinct of a dog.

Today's challenge to Christian men and nations, stated negatively, is "Avenge not yourselves." In civic life have you been wronged in body or property? Have you suffered under personal resentment? Then, God says we shall not take the law into our own hands, for he has a civil minister for this work. "He is an avenger for wrath to him that doeth evil." To violate this principle is to bring on civil disorder, as anarchism and mob violence. This is anti-social and certainly opposed to what Jesus did do, and would do today.

Here we are warned against the unbrotherly methods of intolerance and cruelty. But this idealism does not live among us yet in any large way. If it did our children would not glorify the bloody tale of successful battle with its terrible physical strain and suffering. They would not stand in such respectful awe before the martial achievements of war. If it did we would not have such group outbreakings of men as the Klu Klux Klan. It is regretable that we are having a revival of this organization, with its anti-Christian policies. But we may be sure that the violent eruptions of the social order in various sections of the country, the masked secrecy under which it is generating, will in time scatter it in dishoner. Are we to hold it to be Christian, or even American, for any mob or class to arrogate to itself the right to punish crime or enforce law? Even under the days of the cruel Nero, the apostle Paul, under inspiration, writes, "The powers that be are ordained of God." "Let every soul be in subjection to the higher powers." "For he (the emperor) is a minister of God to thee for good." And "he is an avenger for wrath to him that doeth evil." This teaching glorifies the authority of the state and must be adhered to to preserve social order. As I write these words, Oklahoma is under martial law, struggling with the Klan. Shall we have law enforcement by masked mobs or by the constitutional authority of the state? There is but one sane answer.

But the teaching of our text prohibits not only external acts of violence, but the desire, even, to do them. It deals with our thoughts and feelings. It says, "Owe no man anything save to love one another." And, "Render to no man evil for evil." It proscribes that feeling which says, "I'd like to pay him off in his own coin." Whatever ye would that men should do to you—" well, you know the rest. You see, don't you, that Christianity is the life of a new and brotherly desire. And in this day of bitter social and religious factionalism, we need so much the calming influence of Christian ministries.

As for vengeance, it belongs to God thru his ordained ministers of state. Not that God hates or is after passionate resentment. God is love. Yet, love recoils against studied sin and infidelity. And correction and chastisement seem to be a part of God's soverignity and government. He has his agencies and ways to punish those who do evil. His moral laws are irrevocable and in some way retribution falls upon the transgressor. Only God knows when evil has run its course and is past changing. When it has the laws of punishment become operative. "Wheresoever the carcass is, there will the eagles be gathered together," says Jesus. Therefore, because of Jerusalem's persistant formalism. her moral tyranny, and her refusal of the bondage-breaking Christ, God sent the Roman eagles down upon her in judgement under Titus. If nations will not come under the rule of love and brotherhood, they must submit to the law of political force. This is why God is said to have anointed worldly rulers to punish his own people.

But we, who have espoused the cause of the New Kingdom of peace and good-will among men as announced by the angels and proclaimed by Jesus, would not choose this way. Yet, ours is the greatest chadlenge in world history. What is it? It is perfectly clear. We can not be mistaken or neutral. This: WE MUST ABSTAIN FROM VENGEANCE. But, WE MUST DO SOMETHING. We must soften and melt with coals of fire. We are to "overcome evil with good." We have the opportunity thru private and personal ways, and thru the church, the Y. M. C. A. and the Red Cross, and thru various constructive lines offered by the state. The Christian must feed and promote the Golden Rule life in friend and foe; and urgently so, in this day of frantic need.

We are challenged to lend ourselves to the suppression of the liquor traffic and industrial oppression thru constituted and orderly means.

We are challenged to bequeath to the world a next following generation that will be a practical guardian of the human soul, of its rights and liberties. Such a Christianity is democratic at its core. It will know not the present day alignments of religion and race.

We are challenged to guard the foundations of faith in God. The writer does believe that men are coming to themselves; and we must hold them there by a Christianity that is not merely mystical and ceremonial, but that is also ethical and practical; that works, loves, and suffers. A Christianity that has lost its racial and religious bitterness, and is bent on fanning the smoking flax and tenderly caring for the bruised reeds.

We are challenged to establish the law of fraternity and peace and not a reign of disciplined violence and cruelty. We must do this or prepare for a reign of cultured paganism and militarism.

What can bring India, China, and Africa into the light? Christianity. What can cleanse England, France, America? The Christianity of Christ. The establishment of a world consciousness of the need of Christ, outranks all other needs of the hour. Then here is our challenge.

BIBLE THOUGHTS

GOD'S PROMISES KEPT.—There hath not failed one word of all his good promises.—I Kings 8:56.

SURE DELIVERANCE: — Surely he shall deliver thee from the snare of the fowler, and from the noisome pestilence.—Psalm 91:3.

DEPENDENCE:—Thine, O Lord, is the greatness, and the power, and the glory, and the victory, and the majesty; for all that is in the heaven and in the earth is thine; thine is the kingdom, O Lord, and thou are exalted as head above all.—I Chronicles 29:11.

TIME NO OBJECT:—But, beloved, be not ignorant of this one thing, that one day is with the Lord as a thousand years, and a thousand years as one day.—II Peter 3:8.

PRAYER IN THE MORNING:—My voice shalt thou hear in the morning, O Lord; in the morning will I direct my prayer unto thee, and will look up.—Psalms 5:3.

THY WILL, NOT MINE:—Teach me to do thy will; for thou art my God; thy spirit is good; lead me into the land of uprightness.—Psalm 143:10.

A WISE THOUGHT:—Let us search and try our ways, and turn again to the Lord.—Lamentations 3:40.

HUMILITY OF CHRIST:—Let this mind be in you, which was also in Christ Jesus. Let nothing be done through strife or vain glory; but in lowliness of mind let each esteem one another better than themselves.—Phil. 2:5, 3.

Farmers Service Bureau

(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full name and address. Name not used if so requested.)

STATE DOES NOT PENSION WIDOWS

I would like to know thru your paper if there is any law in Michigan allowing a widow's pension to an elderly woman who has been a mother but now whose husband and children are all dead. Or is there any way provided for the support of such persons, except town or county support? The woman in question is 63 years old and is a cripple, can scarcely walk with a crutch. I would be very grateful for any information that might help her.—Mrs. S. E. H,, Onaway, Mich.

—There is no law in Michigan providing for the pensioning of a widow by the state If her husband was a war veteran, she may be entitled to a military pension.—Asst. Legal Editor.

NONE OF SCHOOL BOARD TAXPAYERS

Can a school board, none of them taxpayers, use the district's money as they see fit when they are already burdened with high taxes? — Subscriber, Gobles, Mich.

—A school board whose members are not taxpayers would not be a legal school board and the law provides that in such case the office becomes vacant immediately and if more than twenty days have elapsed from the time that the vacancy occurred by virture of the statute the township board fills the vacancy until the next annual meeting.—W. L. Coffey, Dept. of Public Instruction, Lansing.

WIFE COULD NOT BE FINED

My wife took both our children, said she was going to my sister on a visit and I can not find them now. Can she be fined for doing a thing like that?—M. M. B., Blanchard, Mich.

—This would not be regarded as a crime, and would not be punishable by fine or otherwise. Your only recourse would be in an action for divorce, in which you could ask for the custody of the children.—Asst. Legal Editor.

NO RIGHT TO CUT TREE

Could you give me any information on the following? I have found a bee tree on another person's property. Have I the right to cut the tree and take the honey or have I not? Will you please tell me what right I have if any?—F. C., Midland, Mich.

—You would not have the right to cut the tree and take the honey without the permission of the owner of the land on which the tree grows. —Asst. Legal Editor.

TAX TO OPERATE THEATRE

I have a moving picture machine and desire to show pictures to the public with it. Will there be a war tax to be paid? If so, how much? Admission will be 25c. Will I have to have a license to show the pictures? To whom will the war tax have to be sent if one is collected? —A. P., Weidman, Mich.

—Section 800 of the Revenue Act of 1921 imposes a tax on all admissions of more than ten cents. On an admission of 25c the tax would be 3c. The tax must be collected from those paying for admission and paid over to the Government by the operator of the theatre. If the theatre is located in the First District of Michigan (Weidman, Mich., is) the tax must be received in this office accompanied with form 729 properly executed not later than the last day of the month following that during which the tax was collected, which in the case of September, 1923, tax would be October 31st, 1923.

Registration on form 752 would be necessary within ten days after commencement of business, otherwise a penalty is incurred.

The law also imposes on theatres including motion picture houses a Special Tax based on the seating capacity of the place and the population of the town:

Seating capacity not more than 250, tax would be $50 per year; not more than 500, tax $100 per year; not more than 800, tax $150 per year; over 800, tax would be $200 per year.

If the population of a town is not more than 5,000, the Special tax will be one-half the amount above stated.

. Regulations 43 and 59, also forms 11, 729 and 752 will be furnished by this office upon request.—Fred L. Woolworth, Collector Internal Revenue.

FENCE NOT ON LINE

A line fence runs about 1½ rods out of line, according to the original survey, across 40 acres. A rail fence has been maintained in this irregular manner for a number of years, probably 20 or more. While to my knowledge, there has been no direct demand to have this fence straightened, it has been talked off and on, and I understand that about 12 years ago the neighbors affected had a survey taken and then did not abide by it from the fact that some did not like the idea of giving up a small strip of ground. The quarter line original stake we understand cannot be found. We would like to know if there is any way that this fence can be straightened.—M. A. S., Vassar, Mich.

—If the line, according to the original survey, cannot be found, I would suggest that a majority of the adjoining land owners get together and have the county surveyor survey and re-establish the correct line. Ten days notice would have to be given all land owners concerned, and the expense would be shared among them.—Asst. Legal Editor.

WHO BUILDS CULVERT?

I live on a public road the ground in front of my driveway is high, to the north side of it a low spot that holds the water when there is a heavy rain and then dries up when the weather is dry. The highway overseer graded this piece of road in front of my house this summer and dug a ditch through my drive way which changed the water course. Now the question is who has to furnish the culvert do I have to furnish it or does the township furnish it? —H. G., Croswell, Mich.

—Your question can not be satisfactorily answered without complete knowledge of the lay of the land. Ordinarily the highway commissioner is repuired to construct such culverts as are necessary to carry the water from one side of the highway to the other side and if any culverts are needed or desired by an adjoining land owned for the purpose of draining his land, he must build them himself.—State Highway Department.

MUST BE NOTIFIED

A gives his note for thirty days. B signs the note with A. Can the note be collected from B after thirty days provided B is not notified that A has not paid the note within the thirty days? For instance, the holder of A's note notified B some three months after 30 days note was given that A had not paid. If A does not pay can they still hold B or is he liable only for the 30 days?—H. H., Cadillac, Mich.

—B as indorser of the note would not be liable to pay it unless he was given notice within 24 hours that the maker failed to pay it, provided notice was not waived.—Asst. Legal Editor.

REFUSE FROM LIGHTING PLANT AS FERTILIZER

Can you tell me if the refuse from carbide lighting plant has any value as a fertilizer? Would it take the place of lime?—L. E. C., Howell, Mich.

—The refuse from a carbide lighting plant is largely calcium carbonate which can be used for sweetening sour soils. Before this refuse is used for agricultural purposes it should be allowed to lie out in the open for some time until the entrapped gas escapes. If applied to the soil as soon as taken from the reservoir the entrapped gas might be injurious to plant growth.—G. M. Grantham, Research Associate, M. A. C.

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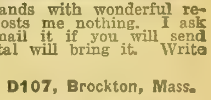

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I have returned home after 2 years' service in France with the A. E. F.

While in France I obtained from a noted French physician a prescription for the treatment of Rheumatism and Neuritis. I have given it to thousands with wonderful results. The prescription costs me nothing. I ask nothing for it. I will mail it if you will send me your address. A postal will bring it. Write today.

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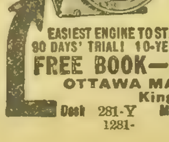

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The Children's Hour

Address all letters to the Children's Hour as follows:

UNCLE NED,
The Business Farmer,
Mt. Clemens, Mich.

DEAR girls and boys: Our drawing contest closed September 29th and I know you are anxious to know who the lucky ones are. They are LaVendee Adolph, Union City; Alice Erickson, Lake City; and Margaret Jackowiak, Sherwood, Michigan. I intend to publish the drawings in our next issue. There are several other drawings that I received that I want to publish also. This contest was so popular that I think we will hold another soon. Shall we?

How many of you wrote to Helen H. Bland, Holland, Michigan? Well, you got your letter back unopened, didn't you? And the reason is that Helen lives on R6, at Howell, Michigan, instead of Holland. It was through an error that her address appeared wrong so change the address on your letter and send it again as Helen is anxious to hear from the "Cousins."—UNCLE NED.

OUR BOYS AND GIRLS

Dear Uncle Ned:—Tap, tap, may I come in and join your merry circle? I have never written to you before. I think before I am ready with my letter it will land in the wastebasket. I am twelve years old and will be thirteen the 20th of February. I have blue eyes and bobbed hair. Have I a twin? We take the M. B. F. Oh, I like to read it, especially the Children's Hour. My father is dead, he was killed in a gravel pit. We have rented the place where we are now. My uncle is working the other farm. We have four children going to school. It is very much trouble to get the lunch fixed in the morning. It is raining all these days. I will close with a riddle, the one who guesses it right will receive a letter. What side of the house does it rain the most?—Your niece, Lillian Rademacher, R. F. D. 3, Fowler, Mich.
—I get the letter! It rains most on the outside.

Dear Uncle Ned:— May I join your merry circle? I will be 15 years old the 26th of Jan. Have I a twin? I have written to you before and saw my letter in print. We take the M. B. F. and like it very much. I am 5 feet 2 inches tall and have light brown bobbed hair. I passed the 8th grade examination last spring and graduated June 26th. I am taking music lessons and like it just fine. I am nearly through the first grade. We are having rainy weather these days. It rained almost every day this week. As my letter is getting quite long I will close with two riddles. Why do girls like to look at the moon? What always eats and never gets enough? The one who knows them correctly will receive a letter from me. Sending my best regards to Uncle Ned and cousins, I am, Your niece,—Mary Arens, R. F. D. 3, Fowler, Mich.

Dear Uncle Ned:—How are all of the cousins? May I join the merry circle? I wrote once before but did not see my letter in print. I think Shelden Fowler's place is just beautiful by the way he has described it. I just love the lake. We live 30 miles from the lake, but go very often. We have some neighbors that come from Traverse City. Uncle Ned, don't you think when we have the drawing contest that we draw a picture and write a good long story about it? I just love to make up stories and draw pictures. I have been reading the cousins letters for quite a long time. I am 14 years old. My birthday is the 27th day of August. Is there any one of the cousins that have or have not written whose birthday is the same as mine. We have a new house and barn. We live on a farm of 80 acres. We have some woods on the back of our farm. In the summer time in the afternoons we go back to the woods and play Indian and make wigwams. I have 3 brothers and no sisters. I had to work out in the field this summer and got tanned quite a lot. I am 5 feet 6 inches tall. In our school we have eleven subjects to study in the 8th grade. I wrote last year but did not pass. I passed the 7th and have only 5 subjects this year. Quite a change, isn't it? Every one of the cousins please write to me. I get lonesome for letters and someone to write to. Your want-to-be niece.—Esther Calster, Decker, Mich.

Dear Uncle Ned:—Well a girl friend and I have just been down town. We went to two ice cream parlors and then brought home an extra pint. We feel as though we might need the doctor most any time. We then settled down to read a stack of letters which my friend received from various members of the Children's Hour which were very interesting. Thereupon I decided to write because I want to get some letters too. I don't want you to think me a two year old or anything like that because I'm a dignified(?) junior, fifteen years of age, have sparkling blue eyes, long dark eye lashes, dark brown, straight bobbed hair, and an impish disposition. My name is really Anne Jardine although for short I get "Sonny" and "Shorty". I get rather lonesome over here in this wonderful (large) city of Boyne and although I am in town I would like to get some letters to cheer me up. Your niece,—Anne Jardine, 519 S. Lake St., Boyne City, Mich.

Dear Uncle Ned:—This is my first letter to you, although I have been reading the Children's Hour for a long time. I live on a farm and go to a country school with my two brothers. I have a little sister who will be two years old in November. I named her Wanda Louise. How do you like her name? I am very fond of riddles. I believe the answer to Blanche Ward's riddle is a sponge because it holds water and has holes in it. Will some of the cousins write me and send me some riddles I will close with a couple of riddles. First, it is a green house then it is a white house, and next it is a red house with lots of little niggers in it. If it took two years for a hen to lay a golden egg, how long would it take a rooster to lay a door knob? The ones that guess these riddles will receive a letter.—Evelyn Hawley, North Star, Mich.

Dear Uncle Ned:—I wrote once before and saw my letter in print, so I thought I would write again and see if you would print this also. When I asked the children to write to me I had no idea how many would write and I kept getting letters for easily two weeks. Sometimes two a day, and it took me about two weeks to answer them all, but it seemed I got more letters from Gladys Harris. Just think cousins and Uncle Ned, I got a letter from my own cousin, one I never knew about before. Her name is Ethel Eagly. I go to high school this year. School started September 3rd, and I go to Bear Lake high school, so if you children want to write me, my address is Bear Lake, Michigan, in care of Mrs. Will Richmond. Must close as my letter is getting long, and will take up quite a bit of space on the Children's Page. My cousin guessed my age correctly, I am 13 years old. Kate Prowant have you read the book of "What Katie Did"? I've enjoyed my visit as well as Luella Nelson. Good-bye to you all.—Phyllis Gibson, Bear Lake, Michigan.

Dear Uncle Ned:—How are all of your cousins? My father and mother take the M. B. F. I always read the Children's Hour the first thing. I am a farmer girl. My birthday is on the 9th day of November. I will be 14 years old. What have you been doing this rainy weather? I have been looking at the Sears-Roebuck catalog. Have you ever been fishing? I have. I have three brothers and two sisters. My mother is in Illinois now, visiting her brothers and sisters. My youngest sister and brother are with her. It is raining here today. My two oldest brothers are going hunting. You ought to be here and eat squirrel with me. One morning they got 8. They are 15 and 16 years old. We have seven cows. Uncle Ned, you will have to come in and help me milk awhile. Our school begins on the 17th of this month. I am in the 8th grade this winter. I will put in two riddles. Over doors, wall, I heard an old man squall, his beard was flesh, his nose was horn. I've never heard the old man squall since I've been born. What runs around over the pasture all day, and sets on the shelf at night? With love,—Miss Edna McCauley, Elizabeth, Ind., R. 3.

THE RED ANTS AND MEHCHANT-INSECT

THE Red Ants of Africa are very small, but very strong. Also, they can bite very hard.

It happened that the Merchant-Insect was going to market, and his bags were heavy. So he asked the Red Ants to help him carry his bags and promised to pay them when he came back. But, on his return, when he saw how small the Ants were, he would not pay them.

Now the Merchant-Insect fell sick of a fever and lay under a tree. At once thousands of Red Ants came, and with their strong jaws, they soon killed him.

The other insects complained to the King, but the King answered:

"It is just. A debt of honor is as sacred as life. Who fails in the one must lose the other."

Nothing is meaner than to evade a debt.

THE MICHIGAN BUSINESS FARMER
"The Farm Paper of Service"
Tell Your Friends About It

TOBACCO

LEAF TOBACCO. FIVE POUNDS CHEWING $1.75, Ten $3.00. Five pounds smoking $1.25; Ten $2.00; Twenty $3.50. Send no money: Pay when received, pipe and recipe free. CO-OPERATIVE FARMERS, Paducah, Ky.

HELP WANTED

FARM GIRL WANTED FOR GENERAL housework. No washing. Plain cooking. MRS. C. A. CARLISLE, Jr., South Bend, Indiana.

WHEN WRITING TO ADVERTISERS MENTION THE M. B. F.

FARMING EMERGING FROM SERIOUS DEPRESSION

(Continued from Page 4)

incentive for engaging in the business of farming has disappeared.

From now on the profits from farming must be made from the products of the farm, and in order to make farming more profitable it has been necessary to give the farming industry as favorable financing as have other businesses, and this has been done. Too many farmers have been led to believe, through ill-advised and unsound speech and written matter, that the farmer himself is the only one who has an interest in seeing that agriculture is placed on the soundest possible footing. When we consider the fact that farming represents a very large percentage of our total wealth, and that the buying power of the farmer is larger than that of any other class, it would be unreasonable to assume that others would not be interested in the prosperity of agriculture, even though it were only from a selfish stand point.

Three Classes of Financing

The financing of agriculture comes into three distinct classes:

1. Short Time Loans for operating capital, which are made by the local banker, and which the banker can re-discount with the Federal Reserve Bank.

2. Intermediate Credit Loans to finance the production and marketing of crops and live stock. These loans can be made either by the local bank or by a farmers' cooperative marketing organization, and re-discounted through the intermediate credit banks.

3. Long Time Loans for the purchase of land, which can be made through the Joint Stock Land Banks and Federal Land Banks, operating under the Federal Farm Loan Act.

By the use of these facilities, and proper cooperation of the farmer in the marketing of his own products, farming is being placed in the proper condition. Within the last few years it has been brought home to the farmer, the banker, and the public at large that it is absolutely necessary that there be improvement in the marketing of farm products.

The proper marketing of farm products will go a long way towards increasing the profits of farming. It will always be true that the products from the farms will always be sold on a world market, and this means that the food stuffs produced by the American farmer will always be placed on the market in competition with the same products produced by other nations, whose farming population is working under and living on an entirely different standard than is the American farmer.

This country has proved, however, that it can maintain a higher standard of wages and better living conditions in certain other industries which come into direct competition with other countries. This has been due to superior organization, methods of production and method of marketing. There is a great deal of room for similar work in farming. Agricultural schools have done much to show the large returns that are to be had from proper soil cultivation. These demonstrations have already brought great profits to farmers. Even our best farming sections can be made to yield greater profits through better knowledge of handling.

Most Counties Have Agents

Most of our counties, at the present time, have County Farm Agents, who are instrumental in helping the farmer and his family from the old habits into the more satisfactory methods of the present day. The good results from this work can hardly be over-estimated. County Agents have often been instrumental in interesting capital for mutually profitable investment. Often the farmer realizes that he should be using more improved methods in operating his farm and raising his crops. Very often the bank is ready to consider granting a loan when the County Agent approves the plan.

There is, at the present time, a very consistent effort on the part of the bankers in cooperating in every manner possible with farming. The wide-awake banker is studying the farmers' problems, and is cooperating with the farmer in the establishment and financing of County Farm Bureaus. He is helping to finance seed shipments, the purchase of pure bred stock, and is promoting in every way possible the farmers' interests.

The farmer is essentially an individualist and a capitalist. He is generally considered conservative and with some vision. Nevertheless, his position is essentially individualistic and he undoubtedly is the bulwark for individual liberties and representative Government as against the socialistic tendency of throngs of people who live in modern cities, trancient and tied to no one place as their home, with no real stake in the country.

This frame of mind on the part of the farmer has been brought about by the conditions under which he is living, and has its very satisfying phases. However, the farmer must consider that he cannot remain an individualist in a period of organized civilization and that he is compelled to associate himself with other farmers in order to live in a country in which labor and other businesses are thoroughly organized. An organization can either be condemned or lauded by what it has accomplished. If it is an organization which is improving the conditions of its membership and not doing any harm to others, it is very beneficial. If, however, it is only promoting the interests of its membership, to the detriment of everybody else, it can be justly condemned.

This is particularly true of some of the labor organizations at the present time. The object of some of these organizations seems to be to get all they can irrespective as to what they are delivering or the justice of their demands. This attitude on the part of labor organizations is, without question, by far the largest factor in determining the purchasing power of the farmers' dollar. As their position, however, is not based upon a sound business footing we can, with a degree of certainty, consider this position a temporary one, and that every re-action will be a decided factor in increasing the purchasing power of the farmers' dollar.

Need Not Fear About Farmer

We, however, need not fear about the farmer taking the attitude which some branches of organized labor have taken. The city laborers, as a class, have only one interest and that is their wage. With them there is no business investment, with the result that they can only see one side of an issue. However, the farmer is not only interested in the price of his labor, but also has a very substantial business investment, which gives him the same view of both sides of the situation.

We have periods of prosperity and depression in the farming business the same as we have in any other line of business. At the present time farming is emerging from a serious depression, and is very much on the mend. Conditions this year are very much better than they were last, and last year very much better than they were in 1921. Farmers generally have reasons for optimism in this respect. The farmers' purchasing power is gradually meeting the price of the commodities which he sells. After these two points have met, any further movement will undoubtedly be in favor of the farmer, and then we will have a tendency on the part of the city dweller to go back onto the farm, as against the tendency of the farmer to move into the city.

To the average man the farm is a better place to be than in the city. The average savings of the farming population over a period of years is far in excess of the average savings of the city population, and after all the amount a man is able to save determines, in a degree, his success. Periods such as we have had in the last few years invariably eliminate a lot of farmers, but usually not the best type. The time to stick by a thing is when the other fellow is quitting. Invariably the man who sticks at a period of this kind comes out on top. Our farming population, as a whole has shown this quality of stick-to-it-ive-ness in a surprisingly large degree, and this fact cannot help but work to their interest.

With this condition prevailing, and with the improved general conditions and facilities which the farmer has not had before, his business is coming back into its own.

WHAT OUR READERS WOULD DO WITH $100,000

(Continued from page 7.)

her and mama take a trip a long way off for about three years. I think the different climate would cure her from the dreadful disease that she has. I would get us all insured for a thousand dollars at least. Also as I love horses and cows I would buy two or three of each. I would put the money that remained in the bank. I would always take the M. B. F. for I think it is the best paper I ever read in my life.—Miss M. E. S., Reed City, Michigan.

Fix Church First.—Now this is what I would do if I received a check for one hundred thousand dollars. I would fix up my home church with all the modern conveniences. Then I would go to the county poor house and make the people happy, also help the poor little orphan children. I would put up a library so that they would have city privileges. Also send some for charity purposes. I would visit different parts of the United States and give where it is needed. Then I would return to dear old Michigan, and visit at Detroit, Mt. Clemens and other cities.—E. P., Palms, Mich.

Moving Your Coal

The 24 steam railroads operating in Michigan are already well advanced in their yearly task of bringing in the coal that will keep Michigan warm and working through the winter.

We are better prepared for this job than ever before.

Our repair shops contain only current work; there is no accumulation of crippled rolling stock. Our construction operations have been purposely pushed to release all equipment for this emergency. For four months we have been accumulating our own coal supplies until they are now at their highest point in history—79% of our entire storage requirements filled.

Best of all, we are swinging into use the record-breaking addition of 175 new locomotives, and 21,344 new freight cars, all bought during 1923. More improvements and additions are planned if you will back us by giving your support.

From the gateways, and the junction points, where we receive your coal, we are promptly carrying it on to you. Unload promptly and release our car for us to use in serving your neighbor's needs.

Are we doing this job as you want it done? We ask your criticism or approval.

Michigan Railroad Association
Railway Exchange Bldg., Detroit, Mich. (2)

"We Serve Michigan"

The Farm Home

A Department for the Women

Edited by MRS. ANNIE TAYLOR

DEAR FOLKS—How about the hot lunches for our growing boys and girls. This year a great deal has been accomplished by our M. A. C. with the Home Demonstration and they are still working out this big problem for you and me. If any of you have found some easy and short cuts in making up the lunches let us have them and give all the readers the benefit of your experiences. Start the sewing club. Christmas will be with us before we realize it.

Your Friend,
Mrs Annie Taylor

Address letters: Mrs. Annie Taylor, care The Business Farmer, Mt. Clemens, Michigan.

THE INVITATION

Come and bob for apples,
'T will be the greatest fun!
The witch will tell your fortune
When the bobbing is all done.
Perhaps to be the President,
Or rich, will be your fate
You'd better ask your mamma
If you can stay up late.

THE HALLOWE'EN PARTY

SURELY everybody likes to go to a Hallowe'en party. There, we have the kind of fun, no other day allows. It is an evening of laughter and mystery. A cooperative party can be very successful if the plans are laid right and each one does her part.

The suggestions I give can be used for either a home party or carried out with a large one. Maybe the Grange or Gleaner organization in your community has a small building that would make a splendid place for a Hallowe'en.

Decorations

In decorating for this occasion, one should bear in mind that it is on autumn festival, and arrange to emphasize the idea as much as possible. The berries and leaves are effective, fastened to the curtains and draperies in one's home. Your whole color scheme should be in brown, black and orange. The crepe paper found in the ten-cent store can be made into all sorts of cats, owls and witches.

The lights should always be candles, if possible, especially at the table. Use apples, turnips, carrots, and any of the vegetables, cut in grotesque faces for candlesticks.

If lamps or electric lights are used, make special shades of brown or yellow crepe paper or use stiff brown paper and cut into faces like Jack-o'-lanterns. The effect is very wierd and "spooky."

If there is a fence, place a row of Jack-o'-lanterns along the top. On the gate post seat two pumpkins with faces cut into them and candles lit inside.

Black cats, owls, bats, and spiders may be cut from paper and pinned on different walls. If practical, cut holes for eyes and place a candle behind.

The hostess—or those in charge of the evening could either have some member or themselves greet the guests upon arrival in a darkened entrance with a sheet over their heads, and with wet gloves on shake hands. Take your guest's hand and put it down in a pail of cooked cold noodles. This has a very slimy feeling as you all know.

Use pumpkins for the center of table and decorate with either fall leaves still left on the twig or chrysanthemums.

Refreshments—The menu should be foodstuffs in season. Sandwiches made of meat, cheese, and nuts, doughnuts, pumpkin pie and sweet cider.

The **Hallowe'en Cake** has held the place of honor since the beginning here in America. It should be a white cake with white frosting and can be improved with chocolate frosting lettering on top. The cake should contain the ring, key, thimble, penny, and button baked inside to foretell, respectively, speedy marriage, a journey, spinsterhood, wealth, and bachelorhood.

Games For Hallowe'en

Although a few new and untried games may be interspersed on Hallowe'en, the old ones that have been handed down are the very life of the celebration and must never be omitted.

Sailing Walnut Boats—The boats are empty half shells of English walnuts. In each is fastened a short piece of bright-colored Christmas candle, named for some member of the party, lighted, and set afloat with others in a big tub of water. The action of these little craft reveals the destiny of their owners, sometimes gliding smoothly along their way together, sometimes drifting apart. To be a bachelor or maid will be the fate of the one whose candle goes out first.

The Three Lugies—Three dishes are placed in a row. The players are blindfolded then allowed to dip a finger in one of the dishes. Clear water in the first denotes a long and happy married life; milky water in the second, early separation; the third, alas—is empty.

An Owl and Pussy-Cat Party—This will furnish a very novel and amusing evening. When the guests arrive, present the boys with No. 22 Owl Hats and the girls with No. 23 Cat Caps. Give each boy a walnut shell boat painted pea-green and boasting a paper sail. He is to write the name of a lady on a slip of paper, fold it and place it in his boat. The boat must blow across the water of a tub. If it reaches harbor, well and good; if not, he can expect only trouble on the sea of matrimony.

As the clock nears the hour of twelve, each girl is handed a paper cat tail. Guests sit on the floor in a circle, girls and boys alternating, then in order the tails are opened and read aloud. The hostess may prepare these or each girl may be asked to bring her own.

Pass out pencils and paper and ask guests to write down all the superstitious signs, good and bad, that they know. For instance, breaking a mirror means seven years' bad luck; counting the cars of a freight train has its ill effects; a wish made after seeing a load of empty barrels comes true, etc. At least two other people must have heard of the sign to make it count.

A prize should be given to the one who can remember the greatest number.

The witch takes a piece of paper about 8 inches square and tears it into eight pieces 4x2. She then gives out the papers, four to each side of the room. She asks one side to write the names of living people on their paper and the other to write the names of four who are dead. Papers are folded and collected in a hat, then the witch takes them out one at a time and tells whether the paper she holds has the name of a living person or dead.

The trick lies in the fact that she gives out the papers with three rough edges to one side, and papers with two rough and two smooth edges to the other side.

All she has to remember is that the names of the living are written on papers with two smooth edges. These edges she can feel as she holds the paper and thinks.

Blowing Out the Candles—Blindfolded players, in turn, blow out a lighted candle. The number of blows indicates the num- of years before the wedding day. A row of candles may be used instead, with one blow; the number left lighted will tell the same story.

The Cellar Stairs Test—This test is for a girl and consists of backing downstairs with a mirror in her hand, trying meanwhile to see within it the face of her future mate.

The Apple Paring Charm—The apple must be pared with the paring in one long piece. It must then be thrown over the left shoulder, whereupon it will fall into the form of the initial of the favored one.

A Party of Departed Spirits—Ask each guest to come as the ghost of some famous character. When all guests are assembled announce that the first game will be guessing the ghosts. Number each one, then furnish paper and pencil for the contest.

Miscellaneous Progressive Party—The same idea as in progressive card games. Instead of cards, various contests are arranged for each table. Some of them as follows:

1. Flipping cards into a hat from a certain distance.
2. Tiddlywinks.
3. Fish pond.
4. Jack straws.
5. Spearing peanuts.
6. Lifting beans with a lead pencil.
7. Making words out of one long word.

This list can be added to indefinitely, for any child's game can be made one of the events.

If there is music and folks to dance, this to my mind is always a sure way of entertaining.

Again, I want to say the evening of October 31st is one of fun and mystery and so much can be done to make a happy evening in your neighborhood.

Mothers Problems

THE FOOD THEY EAT

AN incident of my early motherhood bears repeating, I think, for the benefit of other young mothers. I was all alone with my baby, relatives and friends being on the opposite coast from me, and I had prided myself on raising my baby strictly according to Holt; His feeding, the first year, was simple; in his second year I encountered difficulties. There was a certain cereal "the book" said he should have. I myself hated that particular cereal, could hardly get it down, in fact, but I was determined my baby should eat it, "because it was good for him." It took nearly a whole morning for me to get him to consume his small dishful. It was

obnoxious to him: each mouthful fairly made him gag.

Eventually I won out—but it was the last time I ever forced a child to eat food that was obnoxious to them. I have grown older since them; I have raised more babies. I have come to realize that I have certain food prejudices myself, that there are certain things I cannot swallow easily. And some of my food prejudices I now have I attribute wholly to the fact that, as a child, I was forced to eat and scolded into eating foods that were naturally distasteful to me. Many other foods which I didn't like as a child, but which were not forced into me, I now relish.

Of course, there are sometimes whims which must be overcome, but even they should not be overcome by "forced feeding." Use patience and ingenuity. A pretty, odd-shaped dish will sometimes coaxe food into a whimsical child. A new presentation of it—prettily garnished, prettily moulded—may likewise induce that first taste which will tare down the prejudice.

Food that is enjoyed does a person a tremendous amount more of good than food that is detested. The sensative nerves of the stomach are easily affected by the mental attitude of the partaker of food. In stead of poisoning the mind, and to an extent, the stomach, by insisting on certain foods being eaten, choose agreeable ones which can be happily eaten and therefore easily digested.

Personal Column

Girl of Eighteen in Trouble.—Dear Mrs. Taylor: Will you please print the answers to the following questions in the personal column of the Michigan Business Farmer at as early a date as possible?

(1.) How old must a girl be before she can marry without her parents' consent?

(2.) If a girl leaves her home when she is 18 years of age can her folks bring her back?

(3.) If a boy friend promises a girl a ring, is it right to remind him of that promise? If a girl receives a ring can her parents force her to return it?

(4.) If a girl's parents do not like a young man is that any reason why a girl should not continue to care for him?

I hope the answers as soon as possible. Thanking you in advance for your information, I remain, "A Reader".

—A decision made recently by one of our judges was: "The common law which holds that a child is responsible to the father until the age of 21. The law holds the father responsible for the maintenance of his children until they are 21 and also is liable for the debts contracted by them. The court interprets the law that in return the children are responsible to the parents for their behavior until 21. The exception to this rule is that a girl can marry at 18, without her parents' consent, which emancipates her from further legal responsibility to her parents for her behavior and future.

Modesty prevents a girl frrom reminding a young man to keep his promise of giving a ring. Either he cannot afford it just now, or else he has other intentions, and maybe he is not sure of his feelings and wants more time.

Sometimes our parents knowledge and experience tells them a great many things that we do not see because of our infatuation for a certain person. I say, sometimes, they know best and then again sometimes, love will make up for a lot of shortcomings.

I would suggest that you listen to pour parents and also the young man and let your heart and head work out your problem.

Calling on the Sick.—We have been told to visit the sick, but just what does that word "visit" mean? Sometime ago I called on an old gentleman who had been in bed quite a while with a broken limb and he said he was feeling worse that week, because he got so tired the Sunday before on account of so many visitors. He said they kept coming in carloads all day and he could not sleep that night, and he felt worse ever since. I once heard a man very harshly criticised because he would not let some neighbor women in to see his wife and young babe. He said he wished to keep her quiet a week or two and the women said there was no use of that, they had company when their babes were one day old. And on the other hand I have heard invalids complain because no one came to see them. I think we need some enlightenment on this subject. Cannot our editor give us some rules to go by, or perhaps some trained nurse who reads this helpful page would be glad to tell us something. This to me at least is a very important subject, as it generally falls to the lot of the hard working wife and mother on the farm to care for the sick in the home, and as they seldom have any training along this line, in fact not many of us seem to understand much about the how, when, and why of visiting the sick, and as farmers in most cases cannot afford trained help, I am sure some talk along this line would be helpful. Should the one who cares for the sick be taken into account? I wonder if the daughter of the man spoken of above was tired that night; and, by the way, the company in that case was mostly from the city. Now we all wish to do what is right so let us hear from several, both from the country and city.—From one who wishes to learn

—To express one's sympathy with a call upon the sick does not necessarily mean seeing the patient. It all depends upon the nature of the illness and also on the patient's feelings. It is a very delicate situation and one has to use their own judgement in matters of this kind. If they need help you may extend your services or else bring some tempting dish for the patient.

"Birth-control"—Can you tell me where I can obtain a copy of Margaret Sangers book on Birth Control, also the price? I enjoy the Business Farmer very much and think the woman's page alone worth the price of the paper..—A reader.

—"Women's Morality and Birth Control" is twenty cents and can be purchased thru the New York Women's Publishing Company, 104 5th Avenue, New York.

Has Any Reader Saved this Recipe?—The one which I write for is a recipe for preparing the tomatoes, a half bushel I believe, with salt, pepper, onion and other ingredients in the right proportion and the canned product is all ready to add to stock or milk for soup. It is just what I wanted but had finished my canning when it came in the paper and I gave the paper to someone, forgetting about the recipe. I do so much want to get it. I am quite sure it came in October, 1922, possibly the last number in September or the first one in November. If you cannot find it on file would you please send a call for it through the paper?—Mrs. Dan Cronin, Lapeer, Mich.

Has Any Reader this Poem?—I am writing to ask if you know the name of the author of an old poem called "The Country Schoolhouse." Our teacher says it was by Nathaniel Hawthorne, but we cannot find it in our library.—Helen E. McKay.

—I have looked all thru Hawthorne's works and cannot find a poem by this name. Mr. Hawthorne wrote prose and not poetry. I cannot find a poem entitled "The Country Schoolhouse". Maybe the title is incorrect.

Books Can Be Bought.—Can you obtain for me the following books of poems? "I'm Glad I Met You." and "When All Is Sun Within." These books used to be published by the Saalfield Publishing Company, of somewhere in Ohio. Also I would like to get one called "Heart Throbs". Thanking you in advance, I remain,—W. C. M.

—The Saalfield Publishing Company is located in Akron, Ohio. I would advise you writing them for these books. "Heart Throbs" can be purchased thru the Chapple Publishing Company, Boston, Mass.

Good for Colds.—Take one teaspoonful hoarhound to one-fourth teaspoonful of lobelia and make into a weak tea. This is an old-fashioned remedy and a sure cure.—A reader.

—if you are well bred!

A church should be entered with a most reverent feeling. The object of attending divine service is to improve the spiritual nature, and hence business and everything of a secular character should be left behind when you enter the church portals.

If a stranger, you will wait in the vestibule, until the arrival of the usher, who will conduct you to a seat.

RECIPES

Green Tomato Mince Meat.—One gallon tomatoes, chopped, one gallon apples, chopped, two packages of raisins, two and one-half pounds of brown sugar, one cup of vinegar, two tablespoonfuls cloves, two tablespoonfuls of cinnamon and two tablespoonfuls of salt. Will make two-gallon jar.—Mrs. Lucius Fuller, Fife Lake, Michigan.

Chicago Muffins—Mix together one and one-half pints flour, half pint corn meal, two teaspoonfuls baking powder, one tablespoon sugar, one teaspoonful salt. Work in one tablespoonful butter, beat and add three eggs and one pint of milk and beat the whole quickly to a firm batter. Have the griddle hot and well

(Continued on page 22.)

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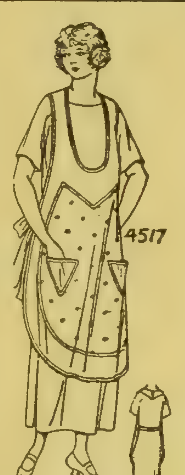

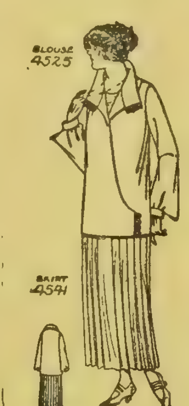

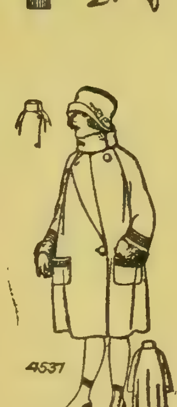

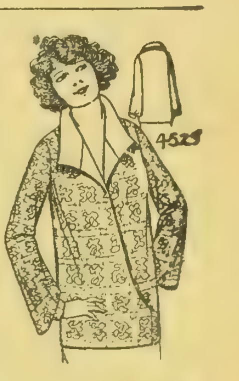

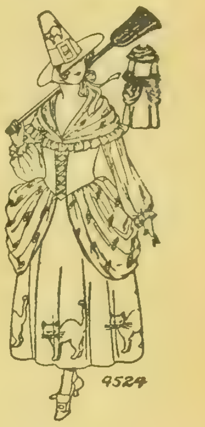

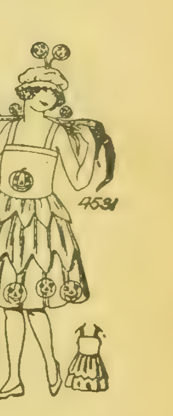

4519. A Stylish Frock.—Here is a youthful girlish design, that will lend itself readily to a development in satin, taffeta, crepe or kasha. The panel may be omitted. The Pattern is cut in 3 Sizes: 16, 18 and 20 years. An 18 year size requires 4¼ yards of 40 inch material. The width at the foot is 2¼ yards.

4525-4541. A Popular Style.—This attractive suit comprises Blouse 4525, and Bodice Skirt 4541. Twill, broadcloth or satin could be used for this style. One could have the blouse of figured or braided material. The Blouse Pattern is cut in 7 Sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. The skirt is cut in 4 Sizes: Small, 34-36; Medium, 38-40; Large, 42-44; Extra Large, 46-48 inches bust measure. To make the suit for a Medium size requires 8 yards of 36 inch material.

4537. A Jaunty Top Garment for the Growing Girl.—Velours, boliva, chinchilla, plush and other pile fabrics are attractive for this model. The fronts may be closed in double breasted style, or in revers effect as illustrated. Braid trimming and fur form a smart finish for this desirable model. The Pattern is cut in 4 Sizes: 8, 10, 12 and 14 years. A 10 year size requires 2⅜ yards of 54 inch material.

4525. One of the Season's Popular Styles.—The grace and comfort of this model has made it one of the "best sellers." It is a style that is good for flannel, velveteen, satin, silk and wash fabrics. In satin with loops in self or contrasting color it is smart with an accompanying sports skirt. The Pattern is cut in 7 Sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38 inch size requires 2⅝ yards of 40 inch material. To trim as illustrated with contrasting material will require ⅛ yard 32 inches wide.

3743. A Comfortable Set—Child's Coat and Cap.—Pattern 3743 is here illustrated. It is cut in 4 Sizes: 6 months, 1 year, 2, and 4 years. A 2 year size will require 2½ yards of 27 inch material for the coat and ¾ yard for the cap. Velvet, corduroy, serge, Bedford cord, silk, gabardine and broad cloth are appropriate for the coat and the same material may be used for the cap which is also nice for lawn, crepe, batiste, chiffon, faille and taffeta.

4517. A New and Pleasing Apron Style.—This model may be made wthout the facings. It is suitable for all apron material. Linene and percale are here featured. One could have chintz and sateen, or crepe in two colors, or, damask and organdy. The Pattern is cut in one size—Medium. To make as illustrated requires 1⅝ yard of plain, and the same amount of figured material.

4544. A Group of attractive Head Gear for Festive Occasions.—The styles here portrayed are readily developed in crepe paper, muslin, tarlatan, silk or satin, as the ocassion may require. The Pattern is cut in 3 Sizes: 22, 23, and 24 inches head size. It will require ⅞ yard for No. 1, ½ yard for No. 2, and ⅝ yard for No. 3 in 32 inch material for any size. To make crown of No. 1 of contrasting material requires ⅛ yard of 18 inches wide or wider.

4543. A Practical Corset Substitute.—Here is a splendid style for the growing girl and the young women of slender figure. It may be made of drill, jean, muslin, cambric, sateen or satin. Its lines are comfortable and admit of freedom in breathing and movement. The Pattern is cut in 4 Sizes: 12, 14, 16 and 18 years. A 16 year size requires 1¼ yards of 36 inch material. For gussets of elastic or webbing ¼ yard 9 inches wide or wider is required.

4532. A Practical Undergarment.—Cambric, nainsook, sateen, crepe and silk are suitable for this style. The Pattern provides for round neck outline or camisole top. Lace and insertion or embroidery will be suitable for decoration. The Pattern is cut in 5 Sizes: 6, 8, 10, 12 and 14 years. A 12 year size requires 2⅛ yards of 36 inch material.

4531. A Smart "Carnival or Masquerade Costume"—This may be inexpensively developed in crepe paper, which may be purchased already printed with various designs. The model would be nice in tarlatan, sateen, taffeta, or unfinished cambric. A decoration of gold or silver stars on tarlatan would be effective. The Pattern is cut in 5 Sizes: 6, 8, 10, 12 and 14 years. A 12 year size requires 4⅞ yards of 36 inch material. If upper flounce is omitted ½ yard less is required. The hat alone requires ½ yard.

4515. A Popular Apron Model.—Checked percale and linene are here combined. Crepe in two colors or gingham and chambray together would be pleasing. This is also a good model for sateen and chintz in combination or alone. If made of one material, piping or binding of figured or material in a contrasting color would be attractive. The Pattern is cut in 4 Sizes: Small, 34-36; Medium, 38-40; Large, 42-44; Extra Large, 46-48 inches bust measure. A medium size requires 4⅛ yards of 36 inch material. For waist portions, pockets and belt of contrasting material 1⅝ yards is required.

4524. A Very Attractive Costume for Masquerade, Fancy Dress Affairs, Etc.—This could be developed as "Mother Witch," "Mother Goose" or similar characters. It is also desirable as a Colonial Costume. Crepe paper would be the most inexpensive material; crepe and silk or cotton, cretonne or chintz and sateen, brocade and plain material, all are desirable combinations. The sleeve may be short and finished with a deep ruffle of lace or contrasting material; or they may be in peasant style, with gathers and heading at the wrist. The Hat may be in contrast to the costume or of self material. This Pattern is cut in 4 Sizes: Small, 34-46; Medium, 38-40; Large, 42-44; Extra Large, 46-48 inches bust measure. A Medium size requires 11⅛ yards 36 inches wide. For drapery and fichu of contrasting material 4½ yards 36 inches wide is required. Hat alone requires ⅝ yard. Without long sleeves ⅝ yard less is required.

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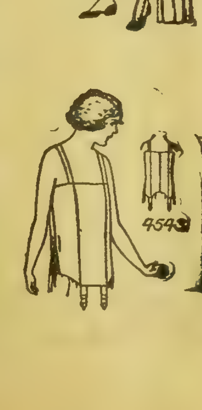

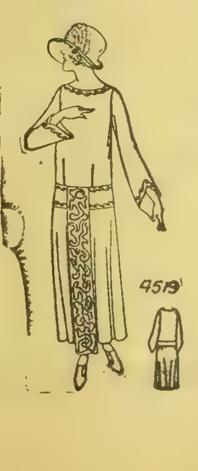

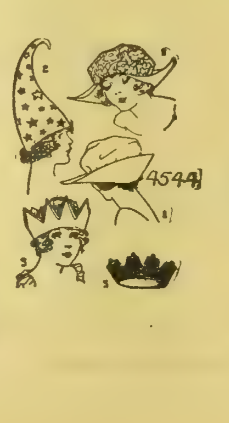

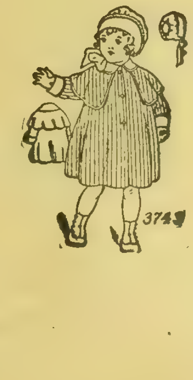

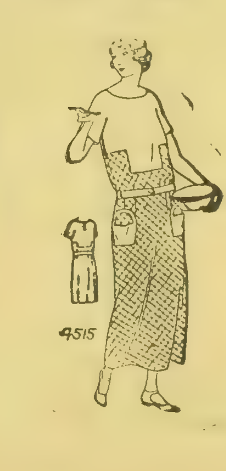

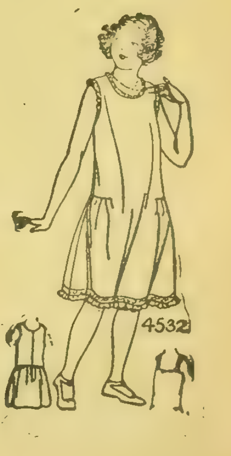

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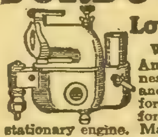

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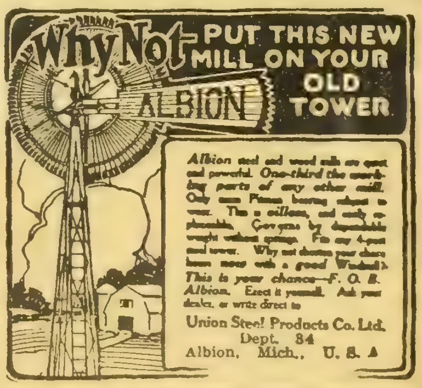

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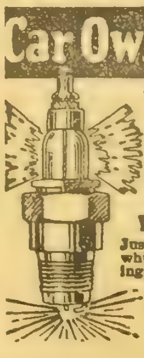

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THE PAUL RUBBER CO. (15)
69 Paul Park Salisbury, No. Car

RECIPES

(Continued from page 21.)

greased to receive the muffin rings and cook to a nice brown.

Kisses—Two cupfuls powdered sugar, the whites of three eggs, two cupfuls of cocoanut, two tablespoonfuls baking powder; mix all together. Drop upon buttered paper and bake until slightly brown in a brisk oven.—Miss Burdena N., Cadillac, Michigan.

MY FAVORITE RECIPES

Pumpkin Pie.—One and one-half cups of steamed and strained pumpkin, two-thirds cup of brown sugar, one teaspoon cinnamon, one-half teaspoon ginger, one-half teaspoon salt, two eggs, one and one-half cups milk, one-half cup cream. Mix ingredients in order given and bake in one crust.

The Runner's Bible

Be ye kind one to another, tenderhearted, forgiving each other, even as God, also in Christ forgave you. (Eph. 4:32.)

If each one knew how much to his advantage, his profit, his happiness, how, upon this earth, it would be if he obeyed the commands of God, he would certainly strive with all of his power to obey. When we realize this, it is easy to forgive a brother his perverse actions, and to pity him because of his lack of understanding, helping him with love to understand.

WOMEN'S EXCHANGE

IF you have something to exchange, we will print it FREE under this heading providing: First—It appeals to women and is a bonifide exchanges, no cash involved. Second—It will go in three lines. Third—You are a paid-up subscriber to The Business Farmer and attach your address label from a recent issue to prove it. Exchange offers will be numbered and inserted in the order received as we have room. —MRS. ANNIE TAYLOR, Editor.

104—Do you know of good boy about 13 years old that wants good home?—Mrs. Myrta Reid, Muir, Mich., R. F. D.

105—If you have address of anyone wishing a housekeeper will you please send it to me?—Mrs. Sadie Fell, Lyons, Mich., R. 1.

To clean wall paper, make a paste of three cupfuls of flour, three tablespoonfuls of ammonia and one and one-half cupfuls of water. Roll it into balls and rub it over the paper. It will make it as clean as when new.

Embroidery Hoops and Cheesecloth for Cooling Dishes.—When putting puddings or other dishes out of doors to cool, use a cover made of embroidery hoops of proper size with cheesecloth put in as a piece of embroidery is. The contents will be safe from dust and at the same time the air can circulate freely. The hoops will keep the cloth from getting into the contents and also weigh just enough to keep it from blowing off.

STATE TO CONTINUE TO MAKE BINDER TWINE

(Continued from Page 3)

vised me of any change to be made nor any reduction in output and neither has the prison commission had any thought in their mind of closing this plant.

"I wish to state also that in the manufacture of twine for the 1924 harvest the raw materials are purchased in the months of May, June, July, August and September of 1923 as these are the buying months on raw materials. Our raw materials are purchased and practically delivered and a large tonnage is already made for the 1924 harvest, so there is certainly no closing of the binder twine plant this year.

"It is only propaganda that is being spread by our competitors in the manufacture of binder twine and this should be stopped. It is spread over the entire United States and if not stopped the state will suffer a big loss in the next year to come."

HOW MANY STUMPS ARE YOU PLOWING AROUND?

(Continued from page 1)

in buying new parts and equipment? How about the time and money lost while the team is laid up?"

"Not only that Bill—but do you know you're running a personal risk in addition to all this? I can take you to men who have ribs and jaws broken; teeth knocked out; shins cracked and who have suffered any number of different injuries from the sudden snapping of a sickle bar or a whiffle tree. Don't smile old boy—probably it hasn't happened to you yet, but it will, just as sure as you're standing there."

"Ye-e-es, but jes' th' same——" Bill offered feebly, but Banker Abbot wasn't through, by any means.

"Here's another thing. Look at that first stump. What's the meaning of that pile of stone around it? Think I don't know? You bet I do. It means that every time your plow or breaker turns up a stone, you pick it up and heave it at the nearest stump. In a couple of years time your field is dotted with 'em—tons of rock, thrown against the stumps, and left there. They not only spoil the appearance of the field, but they simply cut off some more tillable land and—worse than that—they provide a natural and ideal breeding place for rodents, grasshoppers, weeds and other pests.

"Yes, Bill, old boy—I'm the town banker, that's true. I'm not supposed to know much about farming —and to tell you the truth, I don't. I'm not talking farming, I'm talking MONEY, cold, hard, American dollars, and if you tell me I'm wrong I'll tell you which one of us is bluffing."

Bill shifted his chew; looked out across the field; thought long and hard—then turned to Banker Abbot and said:

"Mr. Abbot, I ain't the kind that gives up easy, but durn me and durn you too—that's the rightest kinda talk I've heard fer a long time." Banker Abbot climbed into his "flivver" and was heading up the lane when Bill called after him:

"By the way, Mr. Abbot—get me some figures on some good explosive.

THE THEORY AND THE HOUND

(Continued from page 8.)

at the animal, which halted, confidently, within a few feet of his chair.

Suddenly the sheriff, with a deep-mouthed oath, left his seat and bestowed upon the dog a vicious and heavy kick, with his ponderous shoe.

The hound, heart-broken, astonished, with flapping ears and incurved tail, uttered a piercing yelp of pain and surprise.

Reeves and the consul remained in their chairs, saying nothing, but astonished at the unexpected show if intolerance from the easy-going man from Chatham County.

But Morgan, with a suddenly purpling face, leaped to his feet and raised a threatening arm above the guest.

"You—brute!" he shouted, passionately; "why did you do that?"

Quickly the amenities returned, Plunkett muttered some indistinct apology and regained effort controlled his indignation and also returned to his chair.

And then Plunkett with the spring of a tiger, leaped around the corner of the table and snapped handcuffs on the paralyzed Morgan's wrists.

"Hound-lover and woman-killer!" he cried; "get ready to meet your God."

When Bridger had finished I asked him:

"Did he get the right man?"

"He did," said the Consul.

"And how did he know?" he inquired, being in a kind of bewilderment.

"When he put Morgan in the dory," answered Bridger, "the next day to take him aboard the Pajaro, this man Plunkett stopped to shake hands with me and I asked him the same question.

" 'Mr. Bridger,' said he, 'I'm a Kentuckian, and I've seen a great deal of both men and animals. And I never yet saw a man that was overfond of horses and dogs but what was cruel to women.' "

INVENTS NEW LAMP

Said to be Whiter and Cheaper Light than Electric or Gas.

WASHINGTON. Patents have been granted by the Government to a lighting engineer by the name of Johnson, on a new lamp for burning ordinary kerosene oil. This lamp produces a vapor from the oil which makes a blue flame that incandesces a mantel, and thus creates a very strong, soft, pure white light. As it consumes only 6% oil mixed with 94% air, it is exceedingly economical. Said to be very simple to operate, odorless, noisless, and dangerless.

F. H. Johnson, 609 W. Lake Street, Chicago, Ill. He also wants local distributors and has a very unique selling plan to offer agents. He is even offering to give one free to the first user in each locality who will help introduce this new light.—(Adv.)

OH, MONEY! MONEY!

(Continued from page 7.)

"Thank you," murmured Mr. Smith, stepping across the threshold.

Benny had already reached the door at the end of the hall. The woman began to tug at her apron strings.

"I hope you'll excuse my gingham apron, Mr.—er—Smith. Wasn't that the name?"

"Yes." The man bowed with a smile.

"I thought that was what Benny said. Well, as I was saying, I hope you'll excuse this apron." Her fingers were fumbling with the knot at the back. "I take it off, mostly, when the bell rings, evenings or afternoons; but I heard Benny, and I didn't suppose 't was anybody but him. There, that's better!" With a jerk she switched off the dark blue apron, hung it over her arm, and smoothed down the spotless white apron which had been beneath the blue. The next instant she hurried after Benny with a warning cry. "Careful,, child, careful! Oh, Benny, you're always in such a hurry!"

Benny, with a cheery "Come on!" had already banged open the door before him, and was reaching for the gas burner.

A moment later the feeble spark above had become a flaring sputter of flame.

"There, child, what did I tell you?" With a frown Mrs. Blaisdell reduced the flaring light to a moderate flame, and motioned Mr. Smith to a chair. Before she seated herself, however, she went back into the hall to lower the gas there.

During her momentary abseuce the man, Smith, looked about him, and as he looked he pulled at his collar. He felt suddenly a choking, suffocating sensation. He still had the curious feeling of trying to catch his breath when the woman came back and took the chair facing him. In a moment he knew why he had felt so suffocated—it was because that nowhere could he see an object that was not wholly or partially covered with some other object, or that was not serving as a cover itself.

The floor bore innumerable small rugs, one before each chair, each door and the fireplace. The chairs themselves and the sofa, were covered with gray linen slips, which, in turn, were protected by numerous squares of lace and worsted of generous size. The green silk spread on the piano was nearly hidden beneath a linen cover, and the table showed a succession of layers of silk, worsted and linen, topped by crocheted mats, on which rested several books with paper-enveloped covers. The chandelier, mirror, and picture frames gleamed dully from behind the mesh of pink mosquito netting. Even through the doorway into the hall might be seen the long, red-bordered white linen path that carried protection to the carpet beneath.

"I don't like gas myself." (With a start the man pulled himself together to listen to what the woman was saying.) "I think it's a foolish extravagance, when kerosene is so good and so cheap; but my husband will have it, and Millicent, too, in spite of anything I say—Millicent's my daughter. I tell 'em if we were rich, it would be different, of course. But this is neither here nor there, nor what you come to talk about! Now just what is it that you want, sir?"

"I want to board here, if I may."

"How long?"

"A year—two years, perhaps, if we are mutually satisfied."

"What do you do for a living?"

Smith coughed suddenly. Before he could catch his breath to answer Benny had jumped into the breach.

"He sounds something like a Congregationalist only he ain't that, Aunt Jane, and he ain't after money for missionaries, either."

Jane Blaisdell smiled at Benny indulgently. Then she sighed and shook her head.

"You know, Benny, very well, that nothing would suit Aunt Jane better than to give money to all the missionaries in the world, if she only had it to give!" She sighed again as she turned to Mr. Smith. "You're working for some church, then, I take it."

Mr. Smith gave a quick gesture of dissent.

"I am a genealogist, madam, in a small way. I am collecting data for a book on the Blaisdell family."

"Oh!" Mrs. Blaisdell frowned slightly. the look of cold disapproval came back to her eyes. "But who pays you? We couldn't take the book, I'm sure. We couldn't afford it."

"That would not be necessary, madam, I assure you," murmured Mr. Smith gravely.

"But how do you get money to live on? I mean, how am I to know that I'll get my pay?" she persisted. "Excuse me, but that kind of business doesn't sound very good-paying; and you see, I don't know you. And in these days—" An expressive pause finished her sentence.

Mr. Smith smiled.

"Quite right, madam. You are wise to be cautious. I had a letter of introduction to your brother from Mr. Robert Chalmers. I think he will vouch for me. Will that do?"

"Oh, that's all right, then. But that isn't saying how much you'll pay. Now, I think—"

(Continued in October 27th issue.)

MICHIGAN CROPS

CUTTING ALFALFA

We have a field of alfalfa one year old. We have made two cuttings this year and the third growth is about ten inches high and would like to know how late it would be advisable to make this cutting? Would it be proper to pasture this off? It is a very good stand of Grimm alfalfa.—G. H. R., Bay City, Mich.

—Your stand of alfalfa will be greatly benefited by not attempting to take a third cutting this year. A substantial top growth will aid in protecting the field during the winter and next year's crop should benefit to a more greater extent than the third cutting that could be secured this season.

After the third year alfalfa may be pastured to a considerable degree if judgment is used in not allowing stock to pasture too closely. Pasturing a stand of alfalfa in its second year is likely to do considerable damage.—J. F. Cox., Professor of Farm Crops, M. A. C.

LEARNING BY DEGREES

Foreman—"Yes, I'll give ye a job sweepin' an' keepin' the place clean."

"But I'm a college graduate."

"Well, then, maybe ye better start on somethin' simpler."—Life (New York).

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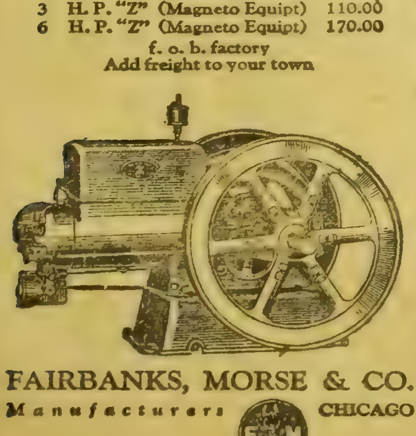

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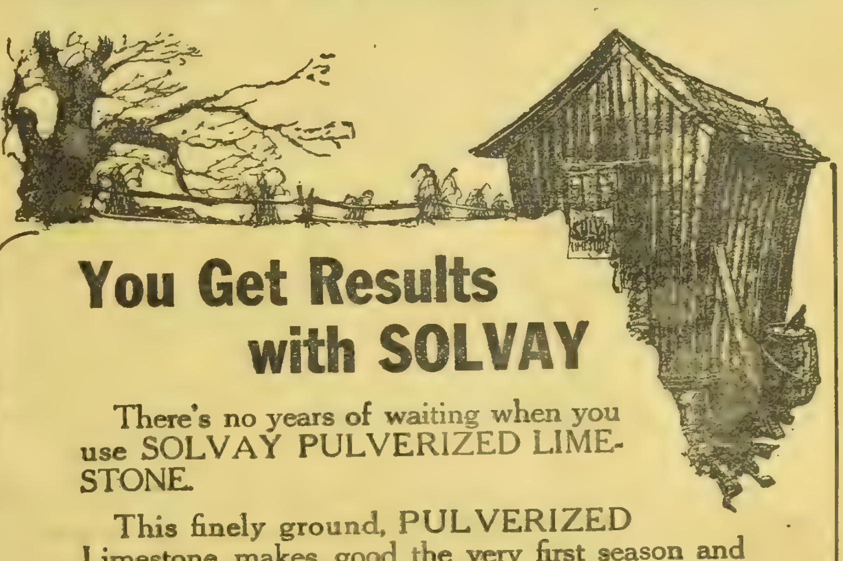

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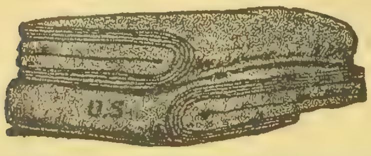

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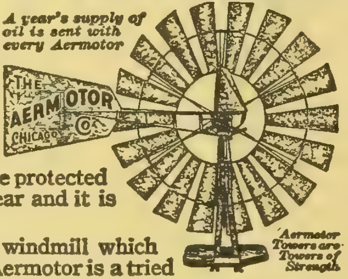
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FARM MECHANICS

BLASTING OUT STUMPS

WITH the possible exception of blasting ditches, more dynamite is used for clearing land of stumps than for any other agricultural use. In the Pacific Northwest and in the Northern Middle West, where valuable timber land has been cut over leaving a fertile soil, dynamite by the carload is used by farmers and professional blasters for blowing out the stumps so that the land can be tilled and put to valuable uses.

In some of the Southern states dynamite is used by the carload for blowing out stumps for another purpose; viz.: to recover the turpentine that is in these stumps, the land on which the stumps are growing being very sandy and it is not of great value from a farming standpoint. So, from the blasting angle there are two ways of blowing stumps—for the sake of the land and for the sake of the wood in the stump. This article should be considered as applying only to the first named, as stumping for turpentine is done by large and well financed companies with a full equipment for doing the work in a most economical manner.

Outside of the cut-over timber lands, there are moderate sized going farms all over the country that have a number of stumps which are crying to be removed, so the subject of blasting stumps is one which should interest a large number of farm owners.

Paste this in your hat: Every stump is a problem in itself. It is almost impossible to lay down any rule for blasting which applies to the same stumps on the same farm, much less all stumps in all parts of the country.

The age of the stump, that is, the number of years since it was cut, the kind of the stump, whether oak, pine, maple or whatever; the kind of soil in which it is rooted, the ground conditions at the time of blasting, i. e., whether the soil is wet or dry, the topography of the ground, the roots' system and the equipment the farmer has; all must be taken into consideration when devising the best and most economical method of removing stumps.

The most favorable conditions are when the stump is old and rotten, the soil resistant, fairly wet, where there are no tap roots, on level land and where heavy tractors are available for helping in the operation.

Most unfavorable from a blasting standpoint are those stumps which have only recently been cut from deeply rooted trees in light, dry sandy soil on rolling ground and where no power equipment is available for helping the dynamite.

For this reason, it is impossible to get up any table which would be of sufficient accuracy to be a real help to stump blasters to show the charge of dynamite per foot diameter of stump.

For instance, a two foot, twenty year old maple stump in a heavy loam soil on level ground might easily be blasted out with one pound of 20 per cent low freezing Amonia dynamite, whereas a two foot, side hill hemlock, such as are found in the state of Washington, recently cut, might easily require sixty times as much. I grant that this is an extreme case but it illustrates the point.

The following table gives a fair idea for the beginner. It is based on old but solid stumps in fairly heavy soil on level land:

Diameter of stump in inches	No. of cartridges of Dynamite
12	3
18	4
24	6
30	7
36	8
42	12
48	15

There are two general systems of blasting stumps, one in which the least possible quantity of dynamite is used for loosening up the soil, cracking the stump, but without attempting to blow it and its roots all out of the ground. This necessitates the use of a team of horses, mules or oxen, or a tractor, after the blast, for pulling out the loosened pieces of stump either with or without the aid of a stump puller. Where teams or tractors or a stump puller are available and where labor is not expensive, and where the farmer himself has plenty of time, this method is probably the cheaper. A small charge of dynamite is placed high up, as close under the stump as possible; the effect of the charge being to blow perhaps the center part of the stump out, leaving the outside with the roots attached to, but loosened somewhat from, the soil.

The other method is to place the dynamite well below the bottom of the stump in such a way that the entire stump, roots and all are blown out at once. The only labor required in this, outside of putting down the hole and firing the charge, is to fill up the hole and pile up the fragments of roots where they can be dried and subsequently burned. This is the cheapest method where power in the shape of team or tractor is not available, but requires much larger charges of dynamite.

The relative advantages of these methods must be carefully considered by the farmer when he starts out to blast out his stumps, as the method which is most expensive for one, would be cheaper for another.

A wealthy farmer with all kinds of machinery and help would probably select the cracking method as it is called, while one not so fortunately equipped would find it much cheaper to let the dynamite do the work than to invest in stump pullers, tractors and teams.—Arthur La Motte, E. I. du Pont de Nemours & Company.

BUSHEL OF WHEAT WORTH DAY'S LABOR

THE old idea that a bushel of wheat should be worth as much as a day of labor had its origin back in the days when a great deal more labor was required to produce wheat then is required at the present time.

An accurate estimate of the labor necessary for seeding, harvesting and threshing wheat about the year 1830 indicates that about three hours of man labor were required per bushel of grain produced. Today, with modern machines for seeding, harvesting, and threshing wheat only about 30 minutes per bushel are required under average conditions. Where large acreages are handled with gang plows, tractors and combine harvesters, the human labor represented by a bushel of wheat is probably reduced to 10 minutes.

At present a bushel of wheat will buy only two or three hours of common or only about one hour of skilled labor. Is it not possible that the very efficiency with which wheat is now produced may account in large measure for its present low purchasing power? Land is a much greater factor in production today than it was in 1830, otherwise the price of wheat would undoubtedly be still lower.

FREE BOOK ABOUT CANCER

The Indianapolis Cancer Hospital, Indianapolis, Indiana, has published a booklet which gives interesting facts about the cause of Cancer, also tells what to do for pain, bleeding, odor, etc. A valuable guide in the management of any case. Write for it today, mentioning this paper. (Adv.)

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912, of The Michigan Business Farmer, published biweekly at Mount Clemens, Mich., for October 1, 1923. 1. That the names and addresses of the publisher, editor, managing editor and the business managers are: Publisher, Geoorge M. Slocum, Mount Clemens, R. F. D. No. 4, Mich. Managing Editor, Milon Grinnell, Mt. Clemens, Mich. That the owners are: Give names and addresses of individual owners, or, if a corporation, give its name and the names and addresses of stockholders owning or holding 1 per cent or more of the total amount of stock. The Rural Publishing Co., Inc., Geo. M. Slocum, M. H. Slocum, W. W. Slocum, Mt. Clemens; C. Allen, Lake; Aug. & E. Amos, Owosso; E. Ellsworth, Oden; N. Powell, Oden; C. J. Pratt, Charlevoix; J. Ritzler, Rogers; F. R. Schalck, Chicago; F. A. Lord, Gaylord; W. Schriner, Marine City; A. Voss, Luther; B. Wolff, Riggsville; F. Yost, Bridgeport. 3. That the known bondholders, mortgagees and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none so state.) Citizens Savings Bank, Mt. Clemens; R. R. Olds, Detroit, Mich. George M. Slocum, Publisher. Sworn to and subscribed before me this 28th day of September, 1923. Robt. A. Donaldson. My commission expires March 5, 1926.

FRUIT AND ORCHARD

Edited by FRANK D. WELLS

HOW PEACH TREES ARE STARTED

Will you tell the best way to handle peach pits for growing young trees? Also time of budding, and what kind of buds used?—F. H. M., Michigan.

—In the propagation of peach trees the first step is the securing of the seeds and their storage in the manner that will give the best germination. Nurserymen obtain their pits either from canning factories or from regions in which peaches grow wild, such as the mountain sections of North Carolina. Salway and Morris White are two varieties the seeds of which are especially esteemed for planting.

Regardless of from where the pits come, they should be treated in the same way. A safe rule to follow is to approximate nature's method of handling as closely as possible. Consequently the pits should be kept moist and put in a place where they will be kept at a low temperature. Just why this is so is not yet definitely determined but it appears that the seeds of the peach, unlike those of corn and wheat, must go though a rest period, or after-ripening process, before they will germinate. These processes go on best under the conditions specified, although it is still held by some that pits need be frozen to crack them.

No matter what the explanation of the result, the seeds are handled in one of two ways, either planted out of doors in the fall or "stratified." If they are planted, they are covered to a depth of 4 to 6 in. If they are stratified, they are best placed in a box in alternate layers of soil and pits, covering the pits an inch or two, hence the word "stratify" or "stratification." Leaves or damp moss may be used instead of soil, and the whole should be placed out of doors, or better, buried shallowly.

In the spring of the year before the seeds have germinated they are removed from their place of stratification and planted. Most of the pits will have cracked; in case they have not they may be cracked carefully by hand. By the first of July the peach seedlings that have grown up from the seed will be big enough to bud, probably 24 in. or more in heighth. The exact time is not overly important, for the peach can be budded over a number of weeks. The expert budder in the nursery begins his work so that he can complete the block of seedlings before they have set their bark; the longer the job, the earlier he begins and the later he works. If the bark will not slip, it is almost impossible to set the bud. A safe rule is to watch the growth of the seedlings; as long as they are growing the bark will slip. On the other hand, they must not be budded too early or the flow of sap will "flood" the bud and "drown" it. Most budding is done some time in August or early September.

Buds are taken from the current season's growth. Now it must be remembered that the peach has two kinds of buds — flower buds and leaf buds. On a fruiting tree the buds are normally in threes, a central leaf bud flanked on either side by a fruit bud. It blossoms, and that is the end. A leaf bud produces a shoot, which is what we want for our new tree.

In the nursery there is little trouble from this point, because the bud wood is taken from the one and two-year-old trees in the nursery row where practically all the buds are leaf buds. But in propagating from a fruiting tree expert nurserymen pass buds that are in threes and select rather the single buds from water sprouts or from other vigorous growing shoots. These are for the most part leaf buds.

Usually there will be 10 or a dozen buds on a "bud stick." The leaves are removed, leaving a bit of the leaf petiole by which to handle th bud. The two or three buds at the base of the stick are not used, for they are apt to lie dormant. Budding is accomplished by making a light "T" shape cut in the bark an inch or two above the crown and slipping a bud under it, on the north side of the tree if possible. The bud is then tied in place with raffia or coarse twine until it has set, which will be in 10 days or two weeks, when the string is cut. The new bud will lie dormant the remainder of the season. but the next year the seedling top is cut away and the bud will make a strong, vigorous growth—occasionally as much as 6 ft.—H. B. T.

NOTES AND COMMENTS

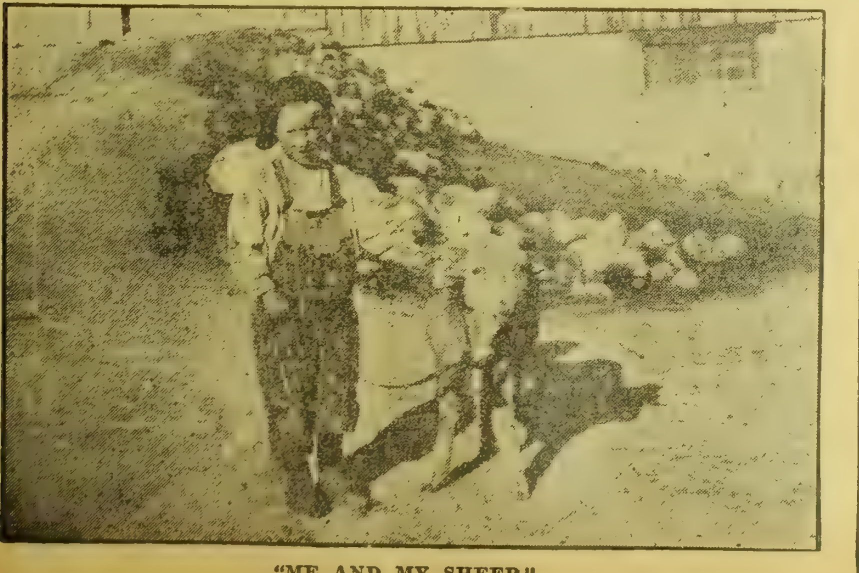
Red raspberry plants may be set in the fall if they can be moved with soil covering the roots. Some growers prefer this time to the spring.

It was formerly the practice to plant a strawberry bed in the fall. This may do if there is moisture enough. However, most growers prefer the spring to taking chances with fall planting.

If the raspberries are cleared of old bearing wood many insects will be destroyed and diseases kept in check. But then the old canes catch leaves and hold snow about the plants, so helping to protect them. In some cases this is worth while, but hardly advisable now, with Leaf Curl, Blue Stem, and other diseases threatening the berries.

It has not been many years since the Himalaya berry was introduced with great claims for merit. It was said to be thrifty, hardy, and of excellent quality and a heavy yielder. A year or two proved that it was tender, a shy bearer, though abundant enough for the quality which was poor. It was, however, thrifty, as the poor fellow who planted it found to his sorrow, tender it might be at the top, but tough enough at the root to make it a nuisance, for it was wonderfully luxuriant. It has gone its way, like many another of its kind and is now well nigh forgotten.

The J. H. Hale peach is one of the largest grown, as well as one of the firmest and best shippers. In flavor it is second rate, but better than the Elberta, which is not much to its credit, but it has one weakness alongside of the large fruit it produces some of the littlest, scrawniest pits, covered with scarcely more than fuzz and ripening the last of October, utterly worthless. The older the tree gets the worse it behaves, otherwise than this the J. H. Hale is a valuable variety.



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To avoid conflicting dates we will without cost, list the date of any live stock sale in Michigan. If you are considering a sale advise us at once and we will claim the date for you. Address, Live Stock Editor, M. B. F., Mt. Clemens

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Oct. 30—Shorthorns, Wm. Geisenhafer and Sons, Dimondale, Michigan.
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70	Herefords	780	lbs.	76	Herefords	700	lbs.
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Each bunch even in size, dark reds, dehorned, good grass flesh. Some bunches fair flesh account short pastures. If in the market for real quality, one load or more your choice. Write stating number and weight preferred.
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Herd established by Gov. H. H. Crapo. We have a few choice yearling bulls for sale at farmers prices. You are invited to visit our farm.
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DAIRY and LIVESTOCK

HANDLING DAIRY COWS IN WINTER

THE cow that gives a full pail of milk, then kicks the bucket toward the other side of the barn, is a nuisance; but she is no more detrimental to profits than the cow that consumes a full ration, and refuses to pay for her keep. This is why dairymen are industriously weeding boarder cows from their herds. It is also true that general farmers, who keep cows as a side line, are showing renewed interest in improving their herds. This is a favorable indication of better dairy profits in the future. Each boarder cow that is removed to her proper sphere becomes an asset instead of a liability. There are few farm undertakings which pay better returns than the task of testing cows regularly, and working persistently to improve the herd.

It is more important to weed out boarder cows today than was the case in past years. Dairying, like other major undertakings, is becoming a specialized business, which means that hit or miss methods cannot be followed with any assurance of success.

Real Producers Wanted

A cow is no longer just a cow. She is either a beef, dairy or dual purpose type, or merely a scrub. And where dairying is the issue, real dairy cows are essential to success. This is especially true during the autumn and winter months when expensive feeds make up the ration. Exhaustive experiments have been conducted in order to determine whether scrub cows will pay for their feed, and leave absolutely nothing in the form of profit to pay for the labor of feeding and caring for them.

This is why dairymen and general farmers are anxious to eliminate boarder cows from their herds. The only way to proceed with any assurance of success is to test the cows systematically (keeping a record of each cow's production), then move the boarders to the stockers' corral, or to market. Some cows don't give a profitable flow of milk because the nourishment from their ration goes into beef. Other cows will eat greedily, give little milk, and still refuse to fatten. Where the nourishment goes is a mystery. But there is no mystery connected with the fate of such a cow when she is owned by a man who is putting his dairy business on a profitable basis.

Get Rid of "Boarders"

When cows are running on pasture, and getting their fill of cheap, succulent feed, the presence of boarders isn't so serious a menace to profits; but when the winter feeding season approaches, every boarder in the herd should be removed as speedily as possible. Last winter a farmer was milking twenty cows, and stated that he wasn't making any money. Later on his attention was directed to five boarder cows in the herd. He marketed these animals, and found his expense for feeding the herd showed a substantial reduction, while his net profit showed a proportionate increase. Today he is testing his cows regularly.

After the boarders are eliminated, the value of a well balanced ration becomes apparent. Where there are any number of cows in the herd, the best of rations will not balance the inevitable loss due to the presence of boarders.

On the farm where cows are kept as a side line it is desirable to feed home grown products as far as possible. This plan furnishes a market for surplus grain and hay, and reduces the cash outlay for feed. Silage and legume hay form an effective combination for dairy cows, and the growing popularity of silos is one of the most favorable indications for better profits from dairying.

Silage Useful Feed

There are several reasons why silage is the greatest "all around" feed for dairy cows. Its succulent nature is decidedly beneficial to the production of milk, and at the same time is better than "patent medicine" for toning up the cow's digestive tract, and her entire system as well. Those who have fed dairy cows without including succulent feed in the ration appreciate the difficulty of keeping up the milk flow, without excessive outlay for expensive feed. Silage is not only an economical feed; but also is unsurpassed for milk production.

Providing mouldy or spoiled silage is kept from the cows, there is no danger of indigestion. They may not eat silage freely at first; but will soon acquire a taste for it, and will be silage enthusiasts throughout the winter.

"The first year I fed silage to dairy cows I made the mistake of not balancing the ration properly," explained a farmer. "I believed silage could be fed alone with good results; but later experience showed me the necessity of combining it with protein feeds so the ration would be balanced. I fill my silo with corn or sorghum crops, which make a succulent feed, rich in carbohydrates, and by including alfalfa hay in the ration, I secure heavy milk production. I find any legume hay is suitable for balancing the silage ration. It is highly important to feed an abundance of rough feed. Millet hay, stover, fodder, etc., makes good roughness for milk cows. The animals appreciate a variety of feed. Giving a variety of rough feeds is especially important where silage is not included in the ration.

"I grind corn, before mixing the grain rotation for cows. I used to feed whole grain; but too much of it was wasted, and the cows didn't thrive as they do on a ration of ground grain. It's much easier to feed a balanced ration when the grain is ground. Bran and linseed meal are excellent for balancing the grain ration. Linseed meal is one of the best conditioners I have used. It is also a valuable aid for increasing and maintaining the milk flow.

"Reduce feeding costs by providing adequate shelter for my cows. A dry, well bedded stall assists a cow to produce a profitable milk flow. When cows stand out in a cold rain, and lack a dry place to sleep, the best ration obtainable won't counteract the detrimental effects of exposure."—Farm and Ranch.

EATON DAIRY FARMERS MAKE PROGRESS

DAIRY progress is on a firm foundation in Eaton county. The county will soon have three cow testing associations, which will weed out the slackers and spot the high producers. The North Eaton association is to be divided into two organizations. One of these will function around Milliken, Vermontville and Belleville, while the other will operate in the townships of Oneida, Delta or Windsor.

In addition to the cow testing association, the bovine tuberculosis campaign now being launched will eliminate the diseased cattle. With the low producers and diseased cattle eliminated, Eaton county will be a long way on the road toward better dairying.

VETERINARY DEPARTMENT

HORSE OVERHEATED

I have a horse that was overheated. She was a four years old colt when broke and worked on a farm that summer and last spring about six weeks, but as to whether the mare was hurt last spring or this summer do not know. But, after working six weeks this spring, the work being completed, she was turned into the pasture field and let run till the second week in July. She was then taken from the field and put on a gravel haul on the road. All went fine for a week and the team sweat good but a week to the day they quit sweating and went panting. I fed her soda, salts and saltpeter and she quit it for a while but when it is a hot day she will pant a lot.—J. A., Cass City, Mich.

—This is a condition that usually disappears after the horse gets to be five or six years of age. There is not much that you can do in the way of giving medicine to remedy this condition. Whenever the mare gets to panting badly, go slow with

Aspirin

Say "Bayer" and Insist!

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Unless you see the name "Bayer" on package or on tablets you are not getting the genuine Bayer product prescribed by physicians over twenty-two years and proved safe by millions for

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No. 185—**HOG WALLOWS.** Gives complete directions for the construction of a concrete hog wallow.
No. 163—**POULTRY.** How to get rid of lice and mites, also to prevent disease.

Kreso Dip No. 1 is Sold in Original Packages at all Drug Stores.

ANIMAL INDUSTRY DEPARTMENT OF

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her and do not overdo her or it might result in heat stroke.

The following has been used with apparent success in some cases: Potassium acetate, two ounces; milk sugar, four ounces; powdered resin, four ounces; and powdered juniper berries, four ounces. Mix the above and give one ounce of the mixture three times daily.—John P. Hutton, Associate Prof., Dept. Surg. and Med., M. A. C.

GROW NEW HOOF ON HORSE

Will you kindly give me a remedy to grow a new hoof on a horse. He had a stone bruise a year ago and it stopped the growth of the hoof in one place. Now he cannot be shoed until a new hoof can be grown.—C. V. D., Auburn, Mich.

—Rapidity of the growth of the hoof wall varies, amounting in a month to from one-sixth to one-half of an inch. The average monthly growth in both shod and unshod horses of both sexes, is about one-third of an inch.

The three principal things necessary to stimulate the growth of horn are moisture, cleanliness and exercise. I would suggest that you clean out the hoof once daily and sponge it with cold water. If the hoof is sponged once daily it will absorb enough moisture to keep it elastic. The hoof should also be dressed about every four weeks to keep it level. It requires from nine months to one year for complete hoof renewal in the horse. No hoof ointment has any direct influence upon the growth of horn.—John P. Hutton, Associate Prof., Med. and Surg., M. A. C.

THE EXPERIENCE POOL

Bring your everyday problems in and get the experience of other farmers. Questions addressed to this department are published here and answered by you, our readers, who are graduates of the School of Hard Knocks and who have their diplomas from the College of Experience. If you don't want our editor's advice or an expert's advice, but just plain, everyday business farmers' advice, send in your question here. We will publish one each week. If you can answer the other fellow's question, please do so, he may answer one of yours some day! Address Experience Pool, care The Business Farmer, Mt. Clemens, Mich.

CURE FOR COW THAT LOSES MILK

IN your issue of August 18th I saw where Mrs. L. K., Bad Axe, had trouble with cow losing her milk. Would say if they would milk the cow three times a day and get a box of Kow Kare at the drug store, price 65c, and give according to directions it is the best thing to do that I know of. We have tried it and it will most always effect a cure, anyhow it is worth trying out, if it is a good cow and they most always are when they lose their milk.—C. N. L., Avoca, Mich.

WOULD STOP LOSS OF MILK

I would say to Mrs. L. K., of Bad Axe, if she would soak the cow's teats after milking in strong alum water I think it would be a great benefit. If she wants to learn more about it write me a private letter and I will give our experience.—Mrs. H. T. H., Remus, Mich.

GOING RABBIT HUNTING?

ON October 15 the rabbit, the snow-shoe rabbit, and the fox squirrel hunting season will open. Ardent hunters might well persue the regulations of the State Department of Conservation regarding the hunting of these animals: "It is unlawful to use ferrets or other rodents in hunting. (Farmers and fruit growers may use ferrets to hunt rabbits on their own lands on permit issued by the Director of Conservation). It is unlawful to sell snow-shoe rabbits—commonly called jack rabbits. It is unlawful for residents to ship game animals to any part thereof out of the state.

A doctor, an architect and a bolshevik were discussing as to the priority of their occupations.

The doctor said:

"When Adam's side was opened and a rib removed to make a woman, there was a surgical operation—medicine was the oldest trade."

The architect said:

"Yes, but when the earth was made, out of chaos, there was a building process, the use of materials according to a plan. The architect's is still older."

The bolshevik smiled and said:

"But who supplied the choas?"—Exchange via The Standard.

Some fellows never think they are having a good time unless they do something they shouldn't.

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Keep them healthy—
Free from worms—
Their bowels active—
Fit for thrift.

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DR. HESS STOCK TONIC

Conditioner—Worm Expeller

I spent 30 years in perfecting this Tonic.
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M.D., D.V.S.

It contains *Tonics*—That give a hog a healthy appetite—keeps his digestion good.

Vermifuges—To drive out the worms.

Laxatives—To regulate the bowels.

Diuretics—To help the kidneys throw off the poisonous waste material.

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Little chance for disease—every reason for thrift!

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O. I. C.'S

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JOHN W SNYDER, St. Johns, R. 4, Mich.

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Hill Crest Farms, Perrinton, Mich.
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SCHAFFER BROS., R. 4, Oxford, Michigan.

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INWOOD BROS., Romeo, Mich.

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F. A. LAMB & SON, Cassopolis, Michigan.

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Rust and corrosion eat up and destroy many thousands of rods of wire fence every year. The zinc coating on ordinary fence doesn't last as long as it really should,—soon cracks or peels off, letting the fence go to rust and ruin. The makers of SQUARE DEAL FENCE have now perfected a new process for treating fence wire which is guaranteed to resist rust,—which will not crack or peel and makes fence wire last much longer than before.

This new process is called **"GALVANNEALING"** and it means just what it says. Square Deal **"GALVANNEALED"** wire passes through a gigantic heat treating furnace where the zinc is literally welded right on to the wire, producing a tough, elastic rust resisting covering that sticks as tight as the skin on your fingers and will not clip or peel off. Our new fence catalog explains all about this new **"GALVANNEALING"** process and also illustrates the famous line of Square Deal Fence with its picket-like, one-piece stay wires and big, sturdy, crimped strand wires which keep it tight and trim the whole year round,—known by "The Knot That Never Slips."

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PATENTS

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Poultry for Profit

DEVELOPING POULTRY INDUSDUSTRY ALONG SAFE LINES

PROGRESS in poultry breeding has suffered somewhat from the tendency on the part of utility and standardbred breeders to develop their stocks along somewhat different lines. Many utility breeders, in their efforts to develop heavy-laying strains, have overlooked standardbred qualities and frequently their stocks have suffered through deterioration in constitutional vigor. The standardbred breeder, on the other hand, sometimes has laid undue emphasis on standard points of minor importance irrespective of the development of the egg-laying proclivities of his stock.

The danger to the poultry industry because of the inclination toward two extremes is noted by Dr. Morley A. Jull, a new man in charge of poultry investigations of the United States Department of Agriculture. So far as the great majority of standardbred and utility breders are concerned, Dr. Jull is of the opinion that everyone should agree that the maintenance of standardbred qualities is fundamentally important. One might really say that the poultry industry of the United States is founded on the standardbred industry. Not only should practically every poultry raiser keep purebred poultry, but his stock should signify something more. It should signify standard quality to a fairly high degree, and should be free from the more important disqualifications. It is desirable above all else, for the best development of the industry, to maintain the more significant standard qualities of the breeds , even where egg production is the principal object in view.

Extreme Care Is Necessary

It is obvious, as Dr. Jull points out, that when one is breeding for standard points and egg production at the same time progress must be relatively slower than where only a single objective is sought. That perhaps is the crux of the whole breedwont to develop one line to the total exclusion of the other. In this connection, two important things must always be kept in mind. First, since seperate breeds and varieties long since have received official recognition, all poultry breeders should exercise reasonable efforts to maintain breed and variety characteristics. Second, since the continued expansion of the poultry industry depends in a very large measure upon the productive capacity of the birds kept, standardbred breeders naturally should be expected to give some consideration to economic qualities.

The chief difference between the practice of some standardbred breeders and utility breeders is largely a matter of degree. The object in view should determine the method of procedure in breeding operations. If the breeder wishes to develop Silkies, Frizzles, or certain varieties of Games, for instance, to the highest possible state of perfection in respect to body type and feathering characteristics, he is certainly justified in adopting as standard points whatever may please his fancy. In fact, breeding for fancy points has done much to stimulate interest in the science and art of breeding. On the other hand, if the strictly commercial poultryman is interested exclusively in egg production he may be justified in running his plant more or less on the factory plan. The keeping of birds that are just "chickens" in order to make a living is justifiable, as long as a living can be made. These two phases of the breeding industry, however, are incidental to the principal point which Dr. Jull discusses in this article.

Standard Qualities Important

The poultry industry of the United States, which has atained a magnitude of such great value, has been developed for the most part through the extensive breeding of Brahmas, Anconas, Leghorns, Orpingtons, Plymouth Rocks, Rhode Island, Wyandottes, and other breeds. It is in connection with the breding of these breeds particularly that there must eventually be more or less common ideals as between the utility and standard breeds. The safe line of development in the breeding industry would seem to be to preserve the beautiful while developing the useful. Those who admit that we must have pure breeds must also admit, to be logical, that we must try to maintain certain standard qualities of those pure breeds. Those who insist upon maintaining all standard qualities as nearly perfect as possible must surely admit that the economics of the poultry industry demand that the great majority of the stock of the country must lay enough eggs to make keeping profitable.

The very keen demand for heavy laying strains has sometimes led to injudicious practices and has frequently produced harmful results. In many cases breed type and other characteristics have been neglected and constitutional vigor has been lowered. Sometimes, also, the size of the birds is below standard and there has been evidence of decreased egg size. The value of high individual egg records from a breeding standpoint has often been overemphasized. In this connection the fact should not be overlooked that flock averages are much more insignificant than individual records.

There have been certain features in the management of many flocks which seem open to question. There has been very extensive use of pullets as breeders when it is becoming more apparent that yearling birds lay larger eggs, which produce larger and stronger chicks. Constitutional vigor is certainly inherited, but the extremely poor hatches of the past season would indicate that breeders in general are not paying enough attention to this important problem. Then again, many breeders feed rather heavy rations to their layers to force production and then use the eggs for incubation purposes, and this practice may be a major cause of poor results.

Room for Better Results

On the other hand, Dr. Jull believes that breeders can adopt a system in the management of the breeding stock that will give much better results. The breeding stock on the investigational plant at Beltsville, Md., over which Dr. Jull has charge, is not fed a forcing ration. Electric lights are not used and the breeders are given as much free range as possible. In fact, the plant is being so arranged that certain parts will be allowed to lie idle once every three or four years. Moreover, every effort is being made to maintain high standard quality while developing laying abilities, this having been the custom for the past several years.

If breeders were more moderate in their demands in respect to increased egg production, Dr. Jull contends that it would be possible to maintain standard qualities and to conserve constitutional vigor to a greater extent than is now being done in so many cases. The poultry industry of the United States should be developed along stable lines. Breeders should endeavor to build on a solid foundation of combined standard and utility qualities. Such seems to be the safe line of development of the poultry industry.

JERSEY BLACK GIANTS

I would like all the information I can get on Jersey Black Giants. I would like to hear from some who had experience with them. Are there any characteristics peculiar to the breed that make them hard to raise? Are the prices asked for eggs and stock in keeping with the value of mature birds?—H. E. C., Washington, Mich.

—We have endeavored to get some information on the history of this breed but very little is known as to its origin. A majority of breeders seem to think that they are closely related to the Black Java and others seem to think there is Orpington blood infused in this breed because quite a high percentage of certain strains throw white skinned and white shanked stock. There are sev-

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82 Jeff St. Lancaster, Wis.

eral breeders in this State now specializing in this breed.

The Jersey Black Giants are heavier than any of the American breeds and will frequently attain a weight of nine or ten pounds in the case of matured males. From the standpoint of production they have not been developed sufficiently to offer very keen competition with other general purpose breeds such as the Plymouth Rock, R. I. Red, and Wyandotte. The fact that the typical specimens, are yellow fleshed, grow rapidly, and finally attain a heavier weight than any general purposes breed, makes them practical for either roasters or capons. The price demanded for stock at most times is not in keeping with the true value of this breed unless in turn one intends to sell eggs for hatching, and breeding stock only.—E. C. Foreman, Professor of Poultry Husbandry, M. A. C.

FUR DEPARTMENT

THE YEARLY CROP YOU DON'T HAVE TO PLANT

LONG ahead you have planned to plant crops that will make your farm pay every dollar that is in it. Otherwise, you would go broke. You make the pigs, chickens and cows raise their crops right on through winter, when the ground is not producing. You have to, these days.

But even then, are you getting the most of every crop that the place grows?

The fur crop, for instance—for it is a crop, and is so handled and regarded. Perhaps you have thought that this is a kid's crop, but as far as that goes, you have undoubtedly heard men say that "butter and eggs are the wife's little side line" when your experience will show that this contemptable little side line has meant to may farmers the difference between a square meal and a mighty lean one.

Now winter time is coming along. The fur crop has been growing on your farm all summer. With the harvest time right in front of you, you may not be giving it a thought. That is simply wasteful.

We all know the pestiferous skunk—like the poor he is ever with us. Take a little journey along the creek; maybe the mink family is neighboring with you, too. And Br'er 'possum—easy picking. Also little Henry Raccoon—you probably know him—he's well thought of. Likewise Mr. Muskrat. They all are valuable to you.

Does it keep you scratching your head to find work to chink in the hours for that hired man you've simply got to keep through the winter? Well, it would not be surprising if he likes to trap. So you have at hand the elements for making a tidy bit of money that is either going to waste, or being paid to some-one else.

And there's no fun in that!

Why not send to one of the big fur houses for full information about trapping and prices? The reliable ones will be more than glad to steer you right. Study the matter. Learn the simple methods of setting traps for the different animals, and —this is important—the proper ways to handle and prepare the pelts you will get. Get ready now. Order your baits and the sizes of traps suited to the kind of animals that live near you.

If you don't think that anybody is picking up money at this business, observe the thousand and one ways that fur is now being used in the making of women's apparel. A world of money is being spent that way!

The crop grows, of itself. You only have to harvest it and ship it.

Mrs. Sylvester's sister was visiting at the farm one day. At dinner young Billy Sylvester started cutting up.

"If that were my boy I wouldn't stand his nonsense at meal times," said the sister. "I'd give him a good spanking."

"But you can't spank a child on a full stomach," remonstrated Mrs. Sylvester.

"You don't have to. Simply turn him over."

The way some fellows save for a rainy day, you'd think they expected to wear rubber boots and carry an umbrella for quite a while.

NOTICE!
AUGUST 1924
OCTOBER 1923

Land-Clearing is Cheaper and Easier this Fall

THE fall months between harvest-time and winter are the time to add more productive acres to your farm.

It's easier and cheaper this fall! The reason is Dumorite, the new du Pont explosive. It doesn't freeze—no bothersome and dangerous thawing necessary. You get 135 to 140 sticks at the price of 100 sticks of 40% dynamite—and Dumorite does even better work, stick for stick. Ask your local dealer.

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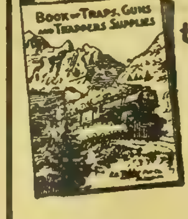
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MARKET FLASHES

MARKET SUMMARY

Wheat and corn active. Other grains unchanged. Beans steady. Butter and eggs quiet. Poultry weak and unsatisfactory. Supply large. Vegetable market quiet and inclined to be easy. Apples in good supply and steady. Good cattle active, others move Slowly. Trading in sheep steady to strong with prices higher. Hogs steady to lower.

(Note: The above summarized information was received AFTER the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press —Editor.)

FOOTE'S MARKET LETTER

BY W. W. FOOTE

The Farmer's Outlook

FARMERS who diversify their crops are in much better shape financially than the single crop farmers, and many of our Michigan wheat farmers have been hard hit by the fall in prices for that grain. Farmers who grow corn extensively expect to obtain good prices for the new crop, and undoubtedly there will be very large numbers of cattle, hogs and sheep prepared for the future market, for the great bulk of the crop is always used mostly in the farms where grown. "The direct consequences of abundant crops is the immediate increase in the purchasing power of the farmer," Armour & Company say in their monthly review. The packing industry had a good month during September. The demand for meats is active. The outstanding feature of the present price situation is a narrowing of the spread between general commodity prices and prices of farm products, according to the monthly letter of the National Association of credit men. "A year ago in August general commodity prices were 18 per cent above the prices for farm products," the letter states. "In August, this year, general commodity prices were only 8 per cent above the prices for farm products. The position of the farmer as a whole has improved vastly over a year. ago. Credit men look for better business for the remainder of the year, as compared with 1922."

Wheat Prices Rally

More hopeful conditions surrounding the wheat market explain the recent advance in prices, and it has been suggested that wheat farmers can help matters by being in no hurry to get their holdings marketed, while feeding some wheat on the farms will lower the available supply to some extent. Statistically, the situation shows no particular changes, and it is universally admitted that American farmers have raised entirely too much wheat, forgetting that war crops are no longer needed and that a return to pre-war crops is the only proper course. Wheat prices have moved up to above those of a year ago, but they are much lower than two years ago and are decidedly too low to afford a living return to our farmers. Our wheat exports are falling far below those of a year ago, while the visable supply in the United states is up to 64,000,000 bushels, comparing with 32,350,000 bushels a year ago. Late week advances in the Chicago market put December wheat up to $1.09⅝, comparing with $1.06½ a year ago, holders feeling much encouraged. Cash lots of No. 2 hard sold for $1.16.

The Wheat Outlook

An encouraging feature of the wheat market is the recent formation of co-operative organizations to export wheat from this country, these to be promoted by the directors of the war finance corporation, with the approval of the administration. The plan does not contemplate any new legislation. The director of the corporation has left Washington for the west to canvass the possibilities of inducing financial and agricultural interests to join in organizing associations or corporations such as proposed. It is suggested that one or more corporations be formed under the state laws in states where marketing of wheat at satisfactory prices is a serious problem. Such corporations would be able to obtain loans either from the war finance corporation, from ordinary banks, or from the new intermediate credit banks.

Corn, Oats and Rye

The visible corn supply in this country is down to insignificant proportions, and prices are much higher than a year ago with meagre exports. Much of the corn of the new crop is soft, but it will be largely utilized for stock feeding purposes. It is recalled that in 1917, when early frosts worked incalculable injury to corn, cash lots advanced to $2.89 in November, breaking to $1.85 at the month's close. Oats have been fed lavishly on the farms owing to relatively low prices, and much was wasted. The oats visible supply is placed at 16,514,000 bushels, comparing with 35,968,000 bushels a year ago; that of rye at 15,188,000 bushels, comparing with 8,180,000 bushels last year. Exports of oats and rye are much smaller than last year. Cash sales of No. 2 yellow corn are reported on the Chicago Board of Trade at $1.03, while December corn sells at 76 cents, comparing with 60⅞ cents a year ago. December oats sell at 4½ cents, comparing with 38½ cents a year ago; and December rye at 72¾ cents, comparing with 70½ cents last year.

Cattle Feeding Popular

On the whole, the year has been a prosperous one for the cattle feeding industry when conducted right, but prices obviously cannot stand up under such enormous supplies as were received during recent weeks in Chicago and other markets, and big breaks took place from the previous high values. There has been a very wide spread in prices, as was natural under such an influx of ordinary grassy offerings, but even the better class shared in the fall. Unusually large numbers of western range grass cattle arrived in the Chicago market, and these added greatly to the depression, coming into competition with the farm-fed cattle of similar grading. Quite recently there was a marked falling off in the cattle receipts, due to the fall in prices, and this caused quite a rise. Following the sensational declines in prices in the Chicago market caused enormous receipts in recents weeks, the receipts for the first week of October fell off to 61,800 head, comparing with 79,681 a week earlier, and prices moved up 50 cents to $1. Beef steers sold at $7 to $9 for the cheaper lots and up to $11.75 to $12.75 for the better class, several sales being made at the top price. There was not much trading below $9 nor above $12.75. Butcher cows and heifers sold largely around $3.75 to $8.10, the best heifers bringing $11.25. Canner cows sold as low as $2.25 to $3, and stockers and feeders sold fairly at $4.50 to $8.25, few selling as high as $7.50. Calves sold at $6 to $12.75.

The Hog Industry

As happens every year, hog marketing during the autumn period has been on a big scale, and prices have had the usual declines. Prices have widened out of late, with choice heavy butcher hogs topping the market because of their gowing scarcity, the receipts running very largely to the lighter weights of undesirable grading. The best heavy and light butchers sold at the same prices, being considerably above the best light bacon hogs, and inferior lots of light hogs showed especial weakness. The late receipts of hogs in the Chicago market averaged in weight 243 pounds, being eight pounds less than a year ago, and it is evident that scarcity of old corn and its dearness have caused farmers to curtail the hogs' daily rations. Meanwhile the domestic and foreign consumption of American hogs is unusually large, lard selling higher than a year ago and cured meats lower. Combined receipts in twenty markets for the year to late date amount to 31,407,000 head, comparing with only 24,529,000 for the corresponding time last year. There is a little improvement in the Chicago market due to somewhat smaller receipts, hogs selling at $6.85 to $8.40, comparing with $6.90 to $10 a year ago; $6 to $8.50 two years ago; $7.85 to $8.90 eight years ago; and $4.35 to $5.27½ eighteen years ago.

Stocks of Provisions

Official figures make the aggregate stocks of pork in Chicago and other western packing points on the first of October amount to 32,094 barrels, comparing with 37,795 barrels a month earlier and 31,348 barrels year ago. Combined lard holdings amounted to 48,902,000 pounds, comparing with 79,433,000 pounds a month earlier and 47,904,000 pounds a year ago. Stocks of cured hog meats aggregated 251,486,000 pounds, comparing with 314,231,000 pounds a month earlier and 207,817,000 pounds a year ago.

Farmers Buy Feeding Lambs

During recent weeks range lambs have been received in Chicago and other western markets in extremely large numbers, and great numbers were taken by feeders at about as high prices as those paid for the best killers, while breeding ewes had a large sale, many farmers taking up the sheep industry. Late Chicago sales were made of mutton lambs at $9 to $13.75, feeder lambs going at $12.50 to $13, breeding ewes at $6.25 to $12.50 and bucks at $2 to $2.75. Wethers sold at $5 to $9, ewes at $2 to $6.75 and yearlings at $8 to $10.85. No Michigan farmer should remain out of the sheep industry at this time.

WHEAT

Farmers who are holding their 1923 crop of wheat have gleaned considerable comfort out of the fact that the wheat market at Detroit has been on the upper trend during the past fortnight, the price advancing from $1.09 to $1.14 for No. 2 white. During most of the period the wheat market was quiet and had a steady tone. The country is full of dealers who are inclined to be bears, believing in lower prices in the immediate future, but in spite of these the market continues to advance. The strong feeling was due to the talk of government help and also to the strength of the corn market. Country offerings to arrive continue small as farmers are not inclined to sell believing that prices will go higher, and mills all over Michigan are reported to be in need of wheat. Feed and flour are some stronger and prices higher. The foreigners at present are apparently not interested in our wheat. Chicago reports receipts for last week amounted to 677,000 bushels and shipments were 316,000. According to market students, on the face of the wheat situation the world over it looks like a weak market. There is an abundance of wheat and buying is moderate. American wheat being higher in price than Canadian, Europe has given us very little business the past few weeks, making most of her purchases from our northern neighbor.

Prices

Detroit—Cash No. 1 red, $1.14⅛; No. 2, $1.13⅛; No. 3, $1.10⅛; No. 2 white, $1.14⅛; No. 2 mixed, $1.13½.

Chicago—Cash No. 2 red, $1.12¾; No. 2 hard, $1.11½@1.14⅛.

New York—Cash No. 2 red, $1.26½; No. 2 hard winter, $1.23½.

Prices one year ago—Detroit, Cash No. 2 red, $1.16; No. 2 white and No. 2 mixed, $1.14.

CORN

Corn followed the trend of wheat during the past few weeks and as a result the price at Detroit is now well above a dollar and this gain is strong in tone on all markets. The gain at Detroit last week amounted to nine cents. Advances in price were noted on all markets, and at Chicago cash corn reached a high peak for the past three years. Dealers at Chicago also report dealing in future deliveries was very active, stimulated by a shortage of old corn and the delay in getting the new crop in condition to be marketed. Rainy weather has caused the farmers considerable trouble in harvesting their crops and it is said there is much soft corn.

Prices

Detroit—Cash No. 2 yellow, $1.09; No 3, $1.08;

Chicago—Cash No. 2 mixed, $1.04@$1.04¾; No. 2 yellow, $1.04@1.05.

New York—Cash No. 2 yellow and No. 2 white, $1.24½; No. 2 mixed, $1.23½.

Prices one year ago—Detroit, Cash No. 2 yellow, 73c; No. 3, 72c; No. 4, 70c.

OATS

Oats have also shared in the strength shown by the wheat market and prices at Detroit are nine cents higher than two weeks ago. However, dealers are not expecting oats to continue to hold their present level. Receipts are large while the country offerings to arrive remain small. Receipts at Chicago last week were larger than those one year ago.

Prices

Detroit—Cash No. 2 white, 50c; No. 3, 47½c.

Chicago—Cash No. 2 white, 43¾@46c; No. 3, 43@44½c.

New York—Cash No. 2 white, 54@54½c.

Prices one year ago—Detroit, Cash No. 2 white, 47c; No. 3, 45½c; No. 4, 43c.

RYE

Active milling has caused rye to come to the front during tthe past week and heavy sales of rye flour have been reported. The trade considers rye the cheapest grain on the list, and foreigners feel that rye flour is the best buy. Gains at Detroit last week amounted to two cents for cash No. 2. Other large markets showed about the same gain.

Prices

Detroit—Cash No. 2, 78c.

Chicago—Cash No. 2, 72c.

Prices one year ago—Detroit, Cash No. 2, 77c.

BEANS

The tone is firm on pea beans at most markets but prospects of higher prices in the near future are not considered very good. Trade last week was as good as sellers anticipated and it was an easy matter to sustain prices. According to reports, the 1923 crop has been damaged quite severely by rain, and the farmers in many sections report their beans will be heavy pickers. It is said that the rains during September and the early part of this month cut the bean crop down several hundred thousand bushels in Michigan. The Michigan crop is expected to represent at least 65 per cent of all of the white beans grown in United States this year.

Prices

Detroit—C. H. P., $5.75 per cwt.

Chicago—C. H. P., $6@6.30 per cwt.

Prices one year ago—Detroit, C. H. P., $5.50 per cwt.

POTATOES

The research department of the American Farm Bureau Federation has made a careful study of the potato market outlook and we are quoting their conclusions below:

"The total commercial movement of potatoes thus far this year has been about 20 per cent less than to the same date last year. In the last five weeks there has been the usual fall increase in shipments and they have been more nearly equal to the corresponding time last year than heretofore. As a result, prices have declined and are the lowest of the season but there is reason to believe that the market is close to bottom and should rebound.

"On a per capita basis, the estimated yield is 3.5 bushels. The average in the last twenty years has been 3.6 bushels, while last year it was 4.1 bushels. In the past, a yield of less than 3.6 bushels per capita has usually resulted in an advance in prices from the heavy marketing season in the fall to the following winter while the reverse trend has generally characterized years when the per capita output was above that figure.

"Since there is no opportunity to carry a potato surplus over from one year to the next and export demand is negligible, potato prices tend to rise with small yields and decline with large ones with more regularity than is true of most other crops. Last year the white potato yield was the largest on record and about 60 million bushels above average consumption. The sweet potato yield also was a record breaker. Prices were extremely low throughout the fall and winter so that some potatoes were left undug, many were fed to live stock and others got out of marketable condition while in storage. The total carlot movement from producing sections was only 6 per cent larger than in the preceding year when prices were much higher.

"Because of the disastrous returns on the 1922 crop, the acreage planted this year was reduced ten per cent. The latest forecast of a yield of 390 million bushels is fourteen per cent less than a year ago and practically the same as the 1917-1921 average. Frosts are reported to have done considerable damage to late-planted potatoes in Minnesota, Wisconsin, and Michigan since the government's estimate was compiled.

"Compared with last year, the crop is larger in the intermediate states such as Ohio, Indiana, Illinois, Missouri, Kansas and Kentucky. New Jersey and Virginia, however, show decided reductions. The late states, such as New York, Michigan, Wisconsin, Minnesota, North Dakota, Nebraska, Colorado and Idaho have crops from 10 to 33 per cent less than last year. Maine is an exception with an increase of 27 per cent.

"Since the main crop is dug chiefly in September and October, and since local warehouses are inadequate to take care of a full crop in order to distribute it through the season, the carlot movement from producing sections rises to a decided peak in October. Many of the potatoes so shipped go into storage elsewhere so that unloads at the leading consuming centers do not increase commensurate with the gain in loadings at country points. On January 1, 1923, there were reported to be 125 million bushels of merchantable potatoes in storage in the United States, of which 15 per cent were held by dealers and 85 per cent by growers.

"With prospects of a smaller commercial movement and maintenance of urban purchasing power, the prevailing price level should remain considerably higher than last fall and winter. Export demand cuts but little figure. In the year ending June 30, 1923, 3 million bushels were exported, or about the usual amount. In the same twelve months, 613,016 bushels were imported. This is less than the average due to unattractive prices here and to tariff restrictions."

It is said that considerable quantities of good quality potatoes from Minnesota and North Dakota are coming into the state and hurting the market for Michigan producers by forcing the price down in certain Michigan cities as well as in the territory outside the state in which Michigan producers have to sell. These northern potatoes have put the price down to a level that farmers of this state declare they cannot dispose of their crop now without taking a loss and they are witholding shipment. Jobbers claim that the crop in this state will run short of that of a year ago by about twenty per cent.

Prices

Detroit—Michigan, $1.33 @ 1.66 per cwt.

Chicago—Northern whites, $1.15 @1.35; Red River Ohios, $1@1.20 per cwt.

Prices one year ago—Detroit, Michigan, $1.30 per cwt.

HAY

Light receipts during the past couple of weeks have caused the hay market to remain firm. The demand continues good for the best grades of all kinds of hay, while the low grades and damaged hay is not wanted. Farmers are too busy with fall work to haul hay to market, and most of the hay that is being sold is of the poorer grade.

Prices

Detroit—No. 1 timothy, $21.50@22; standard and light mixed, $20.50@21; No. 2 timothy, $19@20; No. 1 clover mixed, $18@19; No. 1 clover, $18@19 per ton.

Chicago—No. 1 timothy, $27@28; timothy and clover mixed, $24@26; No. 2 timothy, $24@26; No. 1 clover, $22@24; No. 2 clover, $18@20 per ton.

Prices one year ago—Detroit, Standard timothy and light clover, $15.50@16; No. 1 clover, $14@14.50 per ton.

APPLE MARKET OUTLOOK

Prospects for marketing the 1923 commerical apple crop are about the same as for last year's crop. The yield is not enough larger than in 1922 to indicate an overloaded market, the percentage of late varieties which usually sell best appears to be greater, wage and employment conditions point to an excellent domestic demand and Europe is said to have a poor crop so that export sales should run large.

Domestic demand should be as good or better than last year. Wage and employment conditions in the towns and cities where most of the commercial crop is consumed are excellent. In addition, there is a normal annual increase of one or two per cent in total population and even more in urban population which offsets part of the increase in this year's commercial crop.

Export demand should be better than last year. Great Britain, the chief foreign buyer has a small crop of inferior quality and much the same is true on the Continent. The South American market is quite promising. In the year ending June 30, 1923, 3,491,244 boxes and 592,581 barrels of apples were exported plus 12,827,250 pounds of dried apples, making a total equivalent to around 7 per cent of the commercial crop.—American Farm Bureau.

PRITCHARD'S
WEATHER
FORECAST
INTERPRETED BY THE STARS

Week of October 14

THIS week begins with fair, cool weather but about Monday temperatures will begin moderating considerably in Michigan and by Tuesday, the latest, unsettled and threatening weather is expected.

Showery weather, some high winds and in sections some very heavy down pours of rain are to be expected during the middle part of week, especially Wednesday and Thursday.

Fair weather will begin in this state about Friday and during Saturday the temperatures will be on the increase, this latter condition continuing until the middle of next week.

Week of October 21

Temperatures will be rising during the first part of this week, the weather becoming quite warm for the season about Monday. This condition will be partially due to the storm period that will drop considerable rain or snow fall in its journey across the United States and will affect Michigan the first three days of this week.

A rapid change to cooler is expected in this state about Tuesday with a further drop Wednesday and during the middle part of the week the weather will be fair and cool.

Thursday and Friday will be rainy and stormy in this state but as the barometer is expected to be rising again on this latter day, we look for a rapid clearing up and settled, clear weather for the end of the week.

For the balance of October we look for fair, settled weather in the state but during early part of November a moderately strong wind storm may be expected to sweep Lakes Michigan, Huron and Superior and the adjoining lands.

Look for the feeding instructions in every sack.
Question – What is a uniform dairy ration?
Answer – A uniform dairy ration is one in which – the kind of ingredients – the quality of ingredients – the quantity of each ingredient and the feeding value of the finished product are never changed
Question – Do you know of a dairy ration that can really be called uniform?
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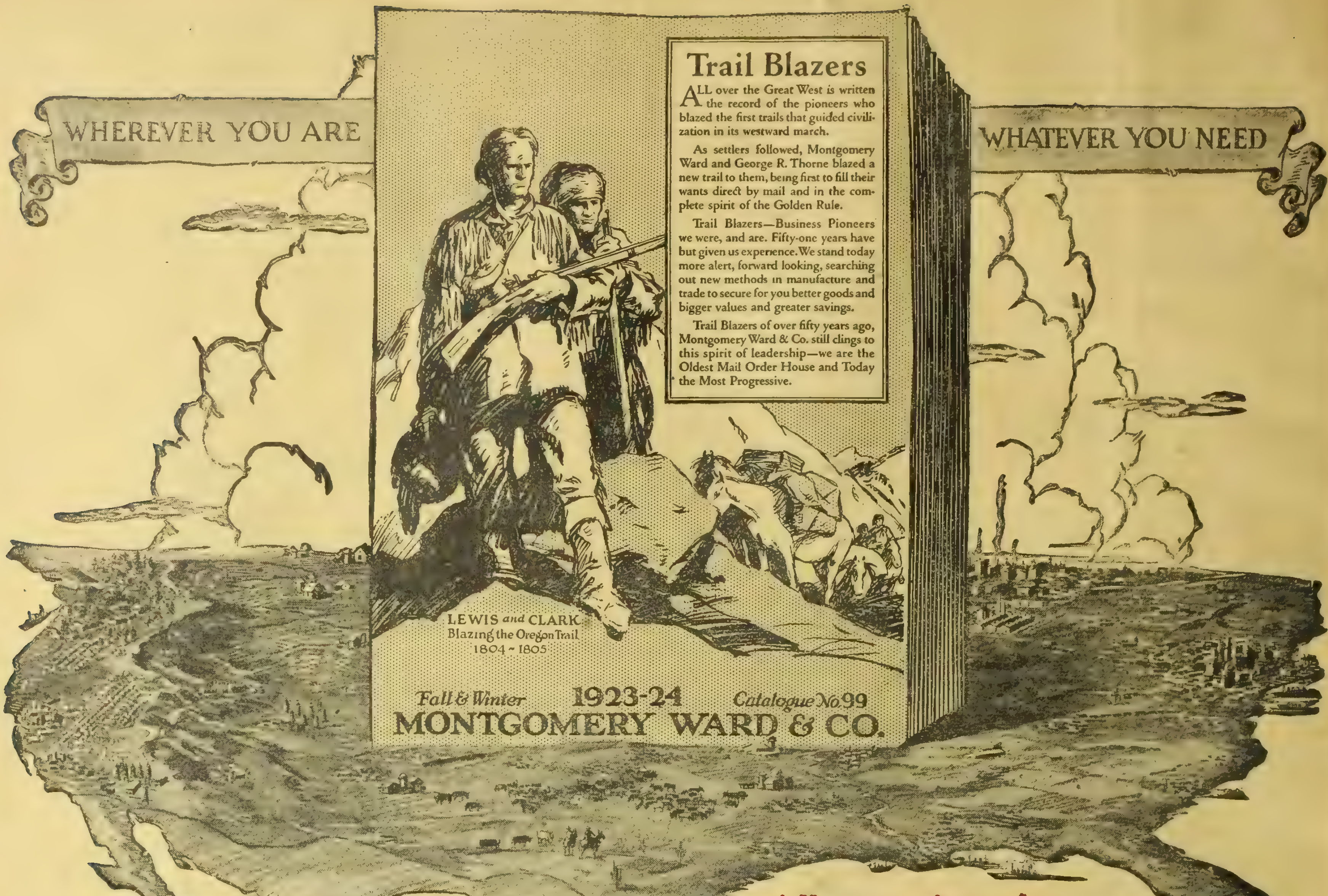

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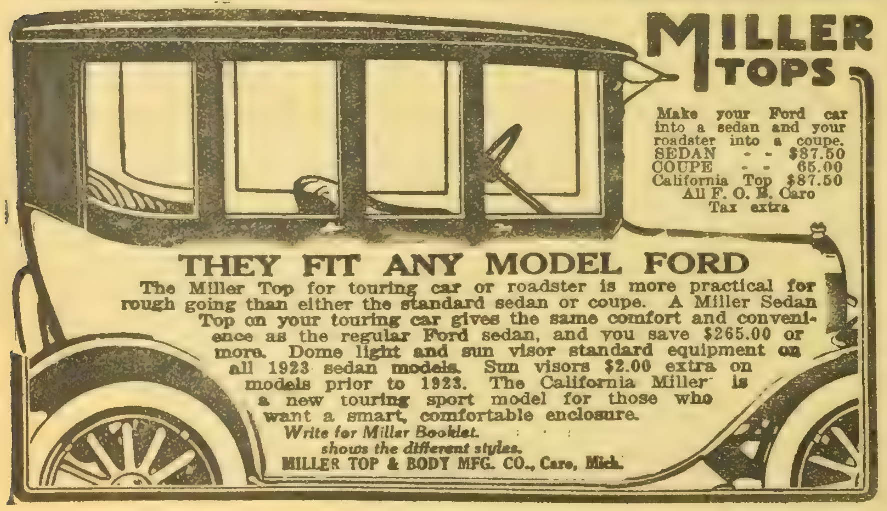

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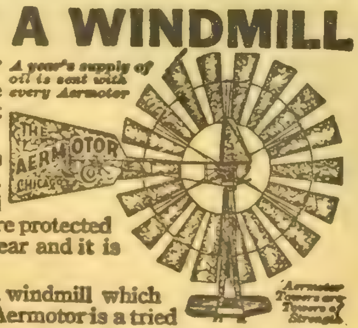
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Current Agricultural News

MICHIGAN BOY WAS CHAMPION JUDGE AT DAIRY SHOW

AT the recent National Dairy Show held at Syracuse, New York it was a Michigan boy that proved to be the best college student judge of dairy cattle. Competing against 87 of the best college student judges in the country, Charles D. Miller, of Eaton Rapids, stood first with both Holstein and Jersey cattle and ranked high enough with the other breeds to win first place with the highest percentage ever turned in at the show. The Michigan Agricultural team, of which Miller was a member, finished in seventh position.

While M. A. C. teams have stood high before in the national competition, this is the first time that the premier honors among individuals have been brought back to the state.

The Michigan club boys judging team also won high laurels at the big show finishing third among 20 teams from states scattered all over the country, Illinois and Connecticut won first and second places, respectively.

The Michigan team was composed of James Gallup of Gaastra, Iron county; Starr Northup, Northville, Wayne county; Rolland Stein, Ann Arbor, Washtenaw county; and Glenn Livermore, Romeo, Macomb county. A fitting team at the same show was composed of Wayne Clark, of Sand Creek, Lenawee; and Harland Andrews, of Adrain, Lenawee county.

TOP COW AT DAIRY SHOW COMES TO MICHIGAN

Although prices crossed the $1,000 mark several times in the Holstein sale at the National Dairy Congress, the average price of the sale was $324.05 for 119 head. Berlwood stock Farms of California sold a cow for $1,450 and a heifer for $1,500. A butt calf only a few weeks old from the above farm brought $1,305. The heifer was bought by John Winn of Rochester, Mich., and the cow by the Detroit Creamery Co., Detroit, Mich.

ENTRIES FOR HAY AND GRAIN SHOW CLOSE NOVEMBER 10

ENTRIES in the International Grain and Hay Show which will be held in connection with the International Live Stock Exposition in Chicago, December 1st to 8th, close on November 10th.

Classifications are offered for Ten Ears of Corn, Single Ears of Corn, Flint Corn, Junior Members Corn, Wheat, Oats, Rye, Barley, Kafir, Milo, Soy Beans, Field Beans, Cow Peas, Field Peas, Red Clover, Alsike Clover, Sweet Clover, Alfalfa, Timothy and several varieties of hay. The premium list, offered by the Chicago Board of Trade, amounts to $12,000,00 in cash prizes in addition to a large number of valuable trophies and ribbons.

In order to equalize the competition, the United States has been divided into eight regions and only crops grown in the same region will compete in the preliminary classes. A new division is in effect this year which it is expected will bring out a much larger number of entries, especially in the corn division.

The growth of this department of the world famous International has been phenomenal. In 1919 it was inaugurated with 1,500 entries. The following year this was increased to 2200 to be followed in 1921 by a record of 3312. At the last show the entry books showed 4039 exhibits in competition, from practically every state in the Union and Province of Canada. It is expected that at the coming show more than 5000 samples will be on display.

Detailed information can be secured by addressing Grain & Hay Show Dept., International Live Stock Exposition, Union Stock Yards, Chicago, Ill.

POULTRY SHOW AT GRAND RAPIDS

The Michigan Poultry Exposition will be held at Grand Rapids, Michigan, from November 27th to December 1st. Complete information on exhibits, etc., can be had by writing J. A. Hannah, Secretary, R6, Grand Rapids, Michigan.

FROM HERE AND THERE IN MICHIGAN

Lake Linden—Two new smelters, each having capacity of 200,000 lbs. daily, under construction, costing $2,000,000.

Grand Rapids—Construction of Richard Storage Company's large warehouses completed. New Naylor Furniture Company building on Grandville avenue completed.

Greenville—Contract let for erection of $20,000 glove factory.

Holland—Dutch Plant Food Laboratory Company with capital stock of $100,000 to build factory, 75 people to be employed. Construction of new railway depot under consideration.

Manistee—Work of dredging local harbor completed.

Mackinaw City—Construction of new $40,000 dock to be started.

Detroit—Ford Motor Company has accepted bids of American Shipbuilding Company and Great Lakes Engineering Works for two 600-ft. ore boats to be used between Lake Superior ports and the River Rouge. Pere Marquette's capital expenditures for equipment, improvements and betterments in current fiscal year will exceed $11,000,000. Third avenue between LaBelle avenue and Midland avenue to be opened and paved.

St. Johns—Building construction on Silver Black Fox Farm nearing completion.

Reed City—Extensive improvements on streets progressing rapidly.

Hart—Storage plant with capacity of 5,000 bbls. nearing completion.

Belding—New St. Patrick's Catholic church completed.

Mt. Pleasant—Central Gas Company constructing 100,000 cu. ft. storage tank at local plant.

Lapeer—Contract let for construction of new high school.

Saginaw—Contract to be let for erection of $80,000 Methodist church on Jefferson avenue.

Lansing—Grand Ledge highway to be improved.

Monroe—County has heavy grape crop, first time in many years. Toledo road under construction to be finished in December.

COUNTRY PARISH ENJOYS RADIO SERMONS, SAYS A. B. COOK

AS to our experience with the radio say that we have had one in our home ever since they first became available. We have lately placed one in the County Church. It is entirely practical in home or church. I just came home from church where I and my family and my hired helps' families and a lot of other county families heard a ten thousand dollar minister just as plainly and just as satisfactorily, unless we would study the cut of his clothes, as did those who sat in the church; in fact a rather old lady told me after church that it was the first sermon in twenty years that she had heard every word of. She is a little "hard of hearing." We had Herbert Hoover at our church Monday evening. The church music today was simply grand and every Wednesday evening we open the church and give selections from various programs which are available in the evening. The very best in thought, given by the thinker via the expressed word and the best in music by the best musician is available to us all. Anyone who appreciates the best in these lines will appreciate the radio. The price of the outfit in our church is $365.00. To the best of our knowledge it includes every improvement known to the business. None better at any price. Yours for all that goes to advance conditions of country life.—A. B. Cook.

EDITOR'S NOTE: The church referred to by Mr. Cook is the one discussed in the story on page 4.

SATURDAY
October 27th, 1923
1923

Vol. XI, No. 5

Being absolutely independent our columns are open for the discussion of any subject pertaining to the farming business.

"Hew to the line, let the chips fall where they may!"

The Michigan
BUSINESS FARMER

"The Only Farm Magazine Owned and Edited in Michigan"

Published Bi-Weekly
Mt. Clemens, Mich.

TWO YEARS $1

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Bean Prices Lower Till February, Then Higher

Michigan Dealer Reviews Trend of Prices On 1922 Crop and Declares Conditions Warrant Opposite Trend This Year

By B. A. STICKLE

VERY few business men manifest an interest in the past of any commodity except in so far as what has happened may have an influence on, or contain a basis for, drawing an opinion as to what to expect in the future. Accordingly, before we make any statements as to market conditions for the present and future, we think it advisable to hurriedly review what happened in a marked way on the 1922 crop.

The 1922 acreage showed considerable increase over 1921; growing conditions were favorable right up until harvest time. In fact, a small percentage, possibly 15 per cent of the crop, was harvested under ideal conditions. Then, covering the period between September 1 and September 19, we had intermittent heavy rains. The rainfall at Saginaw, approximating 5 per cent, during this period is typical of the entire state. There were not long enough dry periods between the rains to enable the farmers to take their crop off the field; after the 19th there were no rains and it was then that the beans were harvested.

With the first few deliveries the market declined very rapidly; prices to the grower reached as low as $3.75 and prices to the trade as low as $4.50. The trade "tasted blood" of the new beans, and accordingly demand started. Everything was held up during the period of rains, and for three weeks virtually nothing was sold; by that time demand, particularly for high price futures and due to the fact that the old stocks had been reduced to the minimum by the buying trade on account of the extremely high prices of the summer of 1921, was extremely heavy.

Elevators Overpaid Growers

The Michigan elevators overpaid the grower; that is, they paid the farmer more than the market would warrant on the particular day that they bought the beans. The only way, therefore, that they could realize a profit on their purchases was to force the market higher. Accordingly, we experienced a decided advance up until the first of the year. By January 1, 1922, prices averaged as high as they did any time during the year. Of course all of the elevators, and farmers remember what happened a year previous, when during June and July prices advanced to approximately $10 in Michigan. Elevators, accordingly, carried more beans than they should have, and the growers in turn retained on the farm a large percentage of the beans which they raised, in hopes that the spring and summer of 1922 would show a repetition of 1921. What happened?

Prices being forced so high early reduced consumption of Michigan beans and invited the importation of Rumanians and Kotenashis. These were brought in in large quantities and offered at a price sufficient under Michigan to get the business, particularly along the Atlantic Seaboard. A good many cars of Danubians were consigned to interior markets where even when they were not sold acted as a club over consumption and caused the buyers to purchase domestic beans very cautiously. As the season progressed and the Michigan shippers commenced to realize that beans were not moving out fast enough to clean out the old crop before the 1923 crop would be ready, price cutting started and we had just as marked a decline as we had an advance earlier in the season. The whole situation could be attributed to two factors; first, elevators paying more to the growers than the beans were worth on the day they bought them; second, elevators and growers both holding for an anticipated advance in the spring, which was made impossible by the reduced consumption, foreign competition and too many beans.

Whenever a situation like this arises certain Michigan interests and brokers start the cry of manipulation. It is only at times like this when you hear of need of advertising to market the Michigan crop, or of sales agencies, or some proposed reform or another. There was no manipulation; it simply was due to the short sighted policy on the part of the Michigan interests.

Possibilities of 1923 Crop

We now come down to where we can view the possibilities if the 1923 crop more intelligently.

The average acreage is approximately 23 per cent larger than the 1922, whereas the 1922 acreage was in turn approximately 63 per cent greater than the 1921. Yields per acre this year will average no higher than last year, but the increase in acreage will give us a million and a half or two million bushels more this year as compared to last, or, reducing this in terms of Michigan cars, we ought to have this year around 2,250 to 3,000 cars more than a year ago.

A number of factors influencing this crop can be contrasted to conditions as they existed when the 1922 crop started to move.

First.—There were not as many future beans sold this year as there were a year ago; whereas beans for September last year were sold at around $6.50 to $7, this year they were sold at $5.50 to $6. Elevators having them sold, therefore, feel more like sitting back and waiting for decline rather than to jump in and buy hurriedly as they did a year ago, for then they could even advance the market over what it was during September and still have a handsome profit in their futures.

Second.—The old crop of beans in Michigan this year were not cleaned up as they were last season. Stocks in the terminal elevators were not as light this year as they were last. In addition there were several hundred cars of imported beans lying around in different markets waiting for a sales opportunity and in addition, the same as last year, new crop foreign beans, particularly Kotenashis, are being quoted at attractive prices for deferred shipment.

Third.—Demand for beans has not started as heavily as yet as it did a year ago, and if beans are delivered freely by the growers in Michigan now we could not help but have considerable decline, for there is hardly enough demand to take care of the few beans which have been delivered to date.

Fourth.—Last year over a period of approximately nineteen days we did not have five consecutive drying days; this year we had five consecutive drying days from September 13 to 17 inclusive. During this period a good percentage of the Michigan crop was taken care of.

Fifth.—This year as contrasted to last, both the elevators and growers realized that there is an extremely big crop of beans, and notwithstanding the damage from dry weather during the summer and damage from rains during harvest we will have a big crop of Michigan beans to market.

Sixth.—Both growers and elevators also realize that if prices get above $5.50 to $6 we will again be inviting heavy importation of imported beans, which will naturally result in reducing the consumption of domestic varieties.

Seventh.—Last year there were substitution of white beans in a good many markets (which prefer to use pintos) on account of the extremely short pinto crop, and resultant high prices on the Colorado and New Mexico product. This year pintos in Colorado and New Mexico have been growing under almost ideal conditions and the shippers there believe they will have approximately three times as many beans as they did a year ago.

Eighth.—Michigan bean men, particularly the jobbers, realize that there is considerable big acreage of white beans being raised this year in Idaho and Montana. They also realize that the production of small whites in Colorado is approximately the same as it was a year ago, whereas there is a considerable increase in the production of large whites.

Ninth.—The elevators realize that the quality of the Michigan beans this year will approximate that of last.

As we sit down and review the above contrast we cannot help but believe that the trend of the market this year will be just about the opposite of what it was a year ago. In other words, we look for lower prices to rule between now and say February 1, and higher prices after that date. We are hesitant, however, about making any definite predictions, for there are approximately 40 to 50 per cent of the Michigan beans still unsecured, and weather will have considerable bearing as to the condition in which these are harvested. We believe firmly, however, that the trade would not rush in and buy beans on an advancing market; on the other hand, we believe that if Michigan prices are held at a reasonable basis there will be absolutely no difficulty in marketing our bean crop at fair prices. By fair prices we have in mind $5@5.50 Michigan.

Price Fixing By the Government Holds No Hope for Wheat Farmers

DEMAND has developed in some of the wheat sections for the United States Government to set a fixed price for wheat. In the minds of those who desire it, this usually means a guaranteed minimum price. If the natural price set by supply and demand was below the guaranteed price, the Government would purchase and store enough wheat to bring the natural price up to level of the guaranteed price. If it was necessary for the Government to dispose of its purchases at a loss, the deficit would be met out of taxation.

The guaranteed price, according to its proponents, would be based on cost of production plus a profit. Costs of production vary. If average costs were used as a basis, only a little over half of the farms would receive a fair profit. Presumably the price would be adequate to cover the costs of the bulk of the producers, say 75 to 80 per cent.

The high cost producers would be forced into other lines of production. Usually this would most affect the states which appear anxious for a fixed price, namely, the Dakotas and Minnesota. They are among the states where cost of production per bushel are likely to be high because yield per acre is likely to be low. Yield per acre is the biggest factor in determining costs per bushel.

The guaranteed price might be put just high enough to induce the growing of the proper volume of wheat. This would yield a profit to the low cost producers but would not satisfy the high cost producers who are the ones demanding the fixed price.

A guaranteed price to be of any benefit to those who want it, would most certainly be higher than the present price and would cause additional planting when it is generally agreed that there is already excess production and that there must be a readjustment of farming which will include a smaller wheat acreage.

Penalty for Overproduction

Some proposals meet the certainty of overproduction by including a penalty on producers in the form of a tax graded according to the size of the carryover. One such plan proposes:

1. A minimum or base price calculated in advance of each crop season for the four crops—wheat, corn, oats and cotton—according to the fixed formula:

Average general price index number 1906-1914 divided by average price of crop 1916-1915 equals.

Average general index number in year of production divided by X (base or minimum price).

2. A corporation chartered by the Federal Government for the purpose of buying any amount of each commodity offered for sale to it at the base price.

3. A tariff adjusted to prevent the import of each commodity to sell below the base price.

4. All sales for export to be made or controlled by the corporation.

5. The funds to finance the operations of the corporation to be obtained by a loan or tax contributed pro rata by each bushel or bale, etc., of each crop when and as sold by the farmer.

6. The tax to be collected under and required by federal statute and the collections to be turned over to the corporation by the Government,

7. The size of the tax to be announced before planting season of the crop on which it will be assessed and to depend upon the size of the carryover from the previous crop.

Another plan, in the words of the proposer, is stated as follows:

"Granting that we need 600,000,000 bushels of wheat a year to take care of our domestic requirements and possibly a small exportable surplus, I have ascertained that about 45,000,000 acres will, one year with another, produce this amount.

"Now my idea is to have the Government say that it will buy whatever surplus there is from this acreage a.., let us say for illustration, $1.75. Then for every 200,000 acres put in above the amount called for, take 10 cents off the guarantee. I think the psychology of this would be to cause farmers to get together

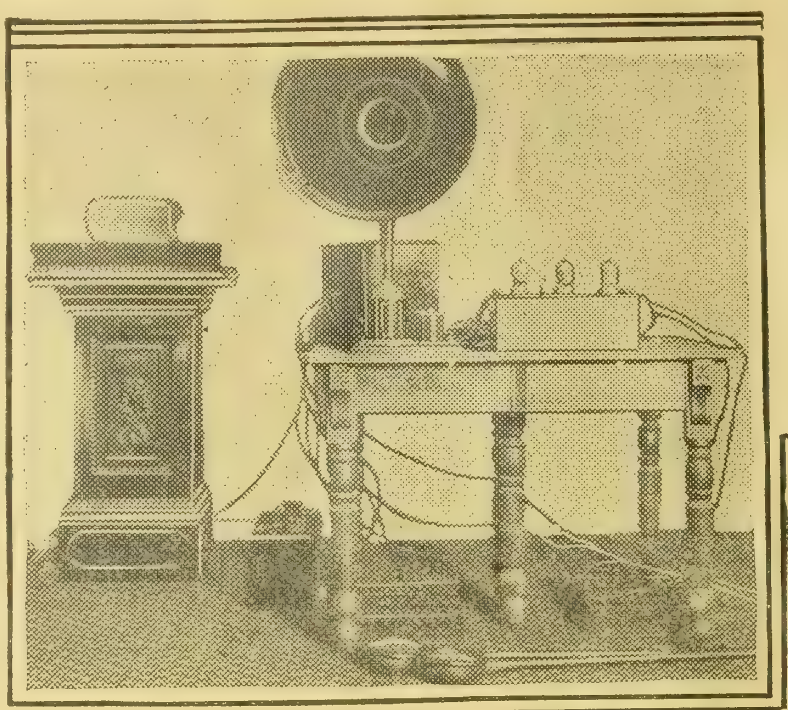
(Continued on Page 23)

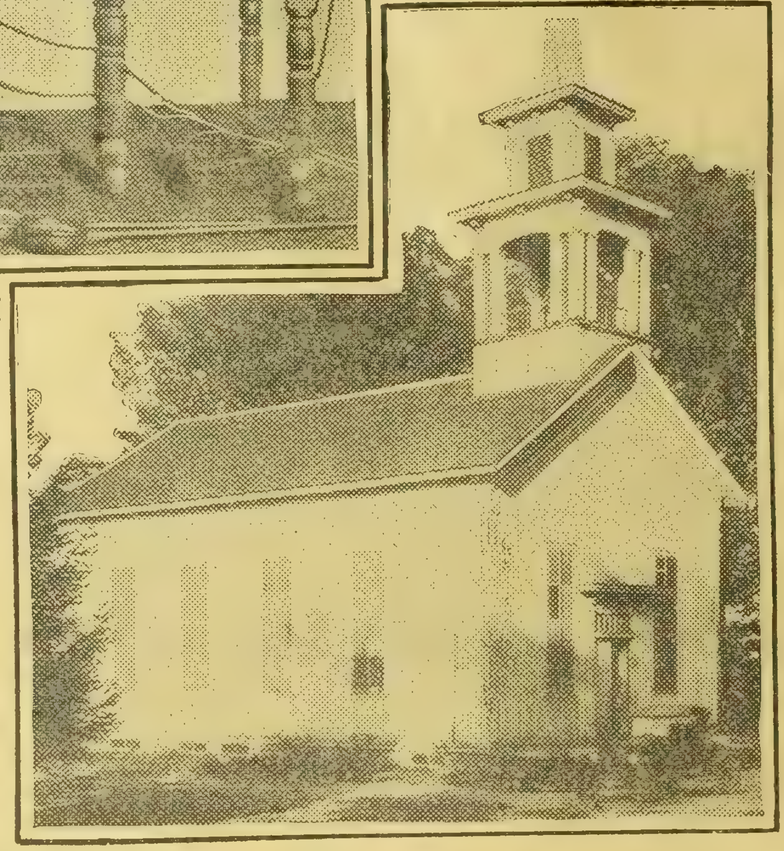
Radio Becomes Preacher in Country Church

Members of Maple River Parish Could Not Afford to Hire Pastor So They Purchased Radio Receiving Set and Loud Speaker and Now Listen to Sermons from Detroit

SEVERAL different times we have read articles regarding radio in which ministers have been quoted as saying that radio was the work of the devil as it kept people away from church; they stayed home and listened to services over their radio receiving set instead of going to church. These ministers are rather short-sighted and I think they would admit as much if they visited some Sunday a little church located several miles southwest of Owosso, Michigan.

The Maple River church was organized eight years ago on the community basis under the control of the Maple River Sunday School Association and up to six months ago had a pastor. Since that time they have been trying to hire another minister but, according to members of the community, they could not secure the services of an able man for the amount of money the community was able to pay. Several weeks ago Mr. A. B. Cook, master of the Michigan State Grange suggested to the leaders that they install a radio receiving set in the church and receive some of the fine sermons broadcasted from Detroit and other large cities. The idea sounded good to them and several got together to defray the cost and less than a month ago the set was installed. Now on Sunday morning the members of the little parish assemble for services as of old but instead of the minister stepping behind the pulpit and announcing the first hymn one of the leaders in the church steps to the receiving set on a table beside the pulpit, turns the current on, adjusts the apparatus and the congregation listens in on the services from one of Detroit's largest churches, as broadcast by one of the two powerful stations in that city.


LEFT: The radio receiving set used by the pastorless Maple River parish to get sermons from Detroit.


RIGHT: The radio equipped Maple River Church near Owosso, Michigan.

Near the pulpit is a large loud speaker through which the voice of the Detroit pastor comes in such volume that it can be heard in all corners of the room. No eloquent gestures drive home the good points of the sermon as of yore. Some inventor in the future may devise some apparatus that will not only reproduce the voice of a preacher several hundred miles away but will pound the pulpit for emphasis as well. Then the next inventor will have to contrive some kind of a radio receiving set that will hurry to the door at the conclusion of the services to shake hands with the members of the congregation as they file out. However, in spite of the few shortcomings, the Maple River Parish claim they were well pleased with what they heard. At the conclusion of the first radio sermon one of the members was asked by an outsider how the congregation liked it and he replied, "We enjoyed the service very much and I shouldn't wonder if we'd continue. It costs a whole lot less to maintain a radio set that to hire a good minister."

The passing of years has seen the number of country churches with barred doors and boarded-up windows increase until in many sections farmers who go to church are obliged to drive to the nearest town. And many live at such a distance from town that they cannot go to church every Sunday. It looks like the folks of Maple River church have solved their problem in a way that any congregation in Michigan might follow. Farm leaders believe that radio will solve the country church problem and that within a few years there will be hundreds of radio equipped country churches in Michigan. And the day may come when all country churches will have a radio receiving set on the pulpit instead of a minister behind the pulpit and each state will have a central broadcasting station and each Sunday a sermon by a nondenominational minister will be broadcast—who can tell?

Sunday need not be the only time when the receiving set is of use. The church can be made a community center and the young folks can get together one, two or three nights a week. An older member of the church can come with them and they can sing some hymns, read some from the Bible and then turn on the radio and listen to good music, singing, or a lecture. One station may be broadcasting an opera; another dance music; another, a lecture by some famous man; or you may hear those songs that were popular fifty years ago; the air is full of music and voices all evening. It will be good amusement for the rural girls and boys and make life on the farm more of a pleasure.

(Continued on page 19)

When Will Dollar Now Worth Sixty Cents Be Worth Hundred Cents Again?

WE dare say there isn't a man in this country that has not asked himself and his neighbor this question: "When will the dollar be worth a dollar again?" And the answer was, "I don't know." The man who gives his answer in this article, Mr. George E. Roberts, is perhaps better qualified to give a correct answer than any other man in the country. Regardless of whether you agree with him or not his opinion is of interest.

WHEN will the dollar be worth a dollar again?

That was the problem for the solution of which I went to George E. Roberts, vice-president of the National City Bank of New York, formerly Director of the United States Mint under five administrations and internationally famous as an economist.

I put my question to him in this fashion: "According to the financial authorities the dollar is now about 60 points above pre-war par or, in other words, it takes $1.60 today to buy what you could buy for a dollar in 1914. When is a dollar going to be worth a dollar again?"

Must Produce

"When we produce enough goods to restore the balance," replied Mr. Roberts promptly. "Money is simply a measure of production and the answer to high prices is simply- produce more goods."

"Is there not a limit? Is there not a point at which we reach over-production?" I queried.

"There is no such thing as over-production. It is an impossibility." There was a finality about the tones of that answer which did not encourage argument but if you want information you cannot afford to be discouraged.

"It is something that is talked about a great deal at least," I suggested.

"That is unfortunately true and is due to the fact that people use words loosely and do not do much thinking about economic subjects. A very little reflection will show how absurd it is to talk about over-production. Are the wants or desires of any ordinary human being ever satisfied? Does not the man who lives in a four-room apartment want to move to a six-room apartment and the man in the six-room apartment to a larger one? Does every family that wants a piano or an automobile own one? Did you ever hear of a woman (the twinkle was very obvious now) who had enough clothes? Human wants are infinite and grow unceasingly. If they ever were satisfied life would become stagnant and civilization would make no further progress."

The Armory at Muskegon, Michigan where the Michigan State Grange is holding sessions this week.

"Well," I persisted, "what do people mean when they talk about over-production?"

"They mean that production is not properly balanced, that labor is not properly distributed. They mean that too many people are engaged in one industry and too few in another. During the war prices of everything went up fairly evenly because there was a huge demand for practically every commodity. But prices have not come down evenly because the demand for some things has been greater than that for others. The farmer has suffered because agriculture was the first industry to get back on its feet in Europe and that was at once reflected in a falling off in demand for American farm products. On the other hand the demand for houses has been greater than the limited supply with the result that we have had a serious condition in that direction."

"How can we get a better distribution of labor and restore the balance to production?" I asked.

Unions Could Aid

"The labor unions and labor leaders could give powerful help in solving that problem," answered Mr. Roberts. He swung around in his chair and looked thoughtfully out of the window toward the skeleton of a great office building that was slowly and noisily taking shape. "I do not want to harshly criticize any-

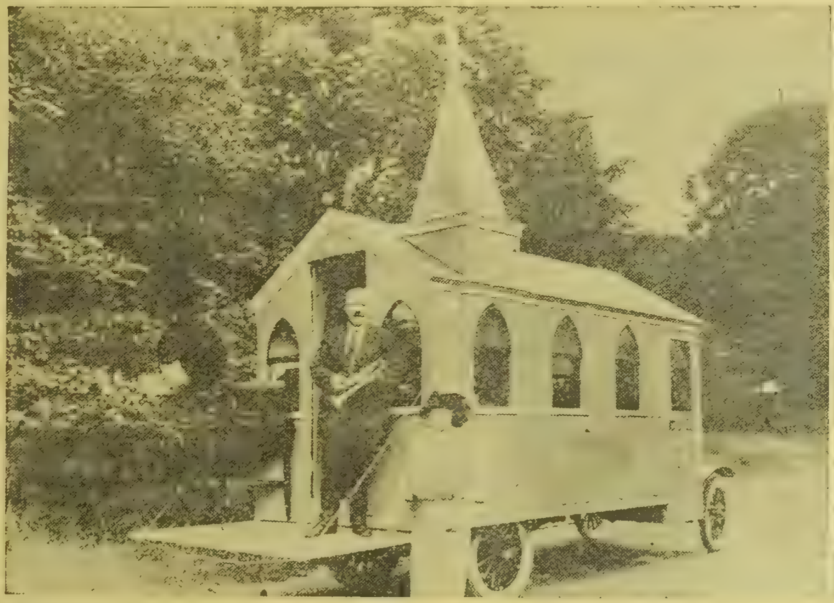
(Continued on Page 17)

PICTURES FROM FAR AND NEAR

CURES INSANE BY WORK.—E. J. Fogarty, warden of the Indiana state prison, who is transforming insane men and women into highly competent workers in the asylum by giving them certain tasks to do.

ASH CAN BABY IN LUCK.—Eighteen months ago this baby was found in an ash can in San Francisco, California, by a policeman and taken to the station where it remained for several days. Later it was turned over to the orphan asylum and recently a wealthy couple adopted it.

QUEEN OF LADY HORSESHOE PITCHERS.—Mrs. Mayme Francisco, of Muskegon, Michigan, who retained her crown as women's horseshoe pitching champion of the United States in the recent tournament held in Cleveland.



FIRST RADIO CHURCH ON WHEELS.—Boston has this latest bit of ecclesiastical architecture. It is complete—even to the cross which is illuminated at night. From the platform sermons and music are sent out—frequently to two thousand persons.

RUSHING OPERATIONS AT FORD PLANT.—A general view of the high dam on the Mississippi River between the Twin Cities, showing the Ford power plant under construction, and the locks of the dam. A new tail race and a channel is being cut to be used as anchorage and discharge and loading place.

THE JOYS OF GLIDING.—A pastoral scene, taken during one of the gliding trials in the Rhone Valley, Germany. The cattle continue to graze on the hills, undisturbed by the swift passage of the giant glider over their heads.

BROWN GOLD.—Coffee in the bean, at Costa Rica, Central America. The piles of brown beans in the background are piled for drying and will soon be on their way all over the world to fill the cups of coffee drinkers.

"TOP OF THE WORLD" IN THE EAST.—Summit House, atop Mount Washington, New Hampshire, which is known as the highest point East of the Rocky Mountain range. Photo shows the House on top which thousands visit yearly.

(Copyright, Keystone View Co.)

Oh Money! Money!

by ELEANOR H. PORTER

Copyright by Houghton Mifflin Company

THE STORY TO DATE

MR. STANLEY G. FULTON, 50-year old bachelor and possessor of twenty million dollars, calls on his lawyer and they discuss the disposition of this large fortune after its owner's death. The lawyer is in favor of giving the money to colleges or charities while Fulton is opposed to these ideas. He remembers that he has some distant cousins and decides to leave the money to one of them, but first he determines to learn which one will use it to the best advantage. To find out who is the worthy one he, through his lawyer, gives each cousin $100,000 to use as they will. He then grows a beard and, under the name of Mr. John Smith, goes to the town where these cousins reside to observe how they spend the $100,000.

(Continued from October 13th issue.)

THERE came a sharp knock at the door. The eager Benny jumped to his feet, but his aunt shook her head and went to the door herself. There was a murmur of voices, then a young man entered the hall and sat down in the chair near the hat-rack. When Mrs. Blaisdell returned her eyes were very bright. Her cheeks showed two little red spots. She carried herself with manifest importance.

"If you'll just excuse me a minute," she apologized to Mr. Smith, as she swept by him and opened a door across the room, nearly closing it behind her.

Distinctly then, from beyond the imperfectly closed door, came to the ears of Benny and Mr. Smith these words, in Mrs. Blaisdell's most excited accents:—

"Mellicent, it's Carl Pennock. He wants you to go auto-riding with him down to the Lake with Katie Moore and that crowd."

"Mother!" breathed an ecstatic voice.

What followed Mr. Smith did not hear, for a nearer, yet more excited, voice demanded attention.

"Gee! Carl Pennock!" whispered Benny hoarsely. "Whew! Won't my sister Bess be mad? She thinks Carl Pennock's the cutest thing going. All the girls do!"

With a warning "Sh-h!" and an expressive glance toward the hall, Mr, Smith tried to stop further revelations; but Benny was not to be silenced.

"They're rich—awful rich—the Pennocks are," he confided still more huskily. "An' there's a girl—Gussie. She's gone on Fred. He's my brother, ye know. He's seventeen; an' Bess is mad 'cause she isn't seventeen, too, so she can go an' play tennis same as Fred does. She'll be madder'n ever now, if Mell goes auto-riding with Carl, an'—"

"Sh-h!" So imperative were Mr. Smith's voice and gesture this time that Benny fell back subdued.

At once then became distinctly audible again the voices from the other room. Mr. Smith forced to hear in spite of himself, had the air of one who finds he has abandoned the frying pan for the fire.

"No, dear, it's quite out of the question," came from beyond the door, in Mrs. Blaisdell's voice. "I can't let you wear your pink. You will wear the blue or stay at home. Just as you choose."

"But mother, dear, it's all out of date," wailed a young girl's voice.

"I can't help that. It's perfectly whole and neat, and you must save the pink for best."

"But I'm always saving things for best, mother and I never wear my best. I never wear a thing when it's in style! By the time you let me wear the pink I shan't want to wear it. Sleeves'll be small then—you see if they aren't—I shall be wearing big ones. I want to wear big ones now, when other girls do. Please, mother!"

"Mellicent, why will you tease me like this, when you know it will do no good? —when you know I can't let you do it? Don't you think I want you to be as well-dressed as anybody, if we could afford it? Come, I'm waiting. You must wear the blue or stay at home. What shall I tell him?"

There was a pause, then there came an inarticulate word and a choking half-sob. The next moment the door opened and Mrs. Blaisdell appeared. The pink spots in her cheeks had deepened. She shut the door firmly, then hurried thru the room to the hall beyond. Another minute and she was back in her chair.

"There," she smiled pleasantly. "I'm ready now to talk business, Mr. Smith."

And she talked business. She stated plainly what she expected to do for her boarder, and what she expected her boarder would do for her. She enlarged upon the advantages and minimized the discomforts, with the aid of a word now and then from the eager interested Benny.

Mr. Smith, on his part, had little to say. That that little was most satisfactory, however, was very evident; for Mrs. Blaisdell was soon quite glowing with pride and pleasure. Mr. Smith was not glowing. He was plainly ill at ease, and, at times, slightly abstracted. His eyes frequently sought the door which Mrs. Blaisdell had closed so firmly a short time before. They were still turned in that direction when suddenly the door opened and a young girl appeared.

She was a slim little girl with long-lashed star-like eyes and a wild-rose flush in her cheeks. Beneath her trim hat her light brown hair waved softly over her ears, glinting into gold where the light struck it. She looked excited and pleased, yet not quite happy. She wore a blue dress, plainly made.

"Don't stay late. Be in before ten, dear," cautioned Mrs. Blaisdell. "And Mellicent, just a minute, dear. This is Mr. Smith. You might as well meet him now. He's coming here to live—to board, you know. My daughter, Mr. Smith."

Mr. Smith, already on his feet, bowed and murmured a conventional something. From the starlike eyes he received a fleeting glance that made him suddenly conscious of his fifty years and the bald spot on the top of his head. Then the girl was gone, and her mother was speaking again.

"She's going auto-riding—Mellicent is with a young man, Carl Pennock—one of the nicest in town. There are four others in the party. They're going down to the Lake for cake and ice cream, and they're all nice young people, else I shouldn't let her go, of course. She's eighteen, for all she's so small. She favors my mother in looks, but she's got the Blaisdell nose, though. Oh, and t'was the Blaisdells you said you were writing a book about, wasn't it? You don't mean our Blaisdells, right here in Hillerton?"

"I mean all Blaisdells, wherever I find them," smiled Mr. Smith.

"Dear me! What, us? You mean we'll be in the book?" Now that the matter of board had been satisfactorily settled, Mrs. Blaisdell apperently dared to show some interest in the book.

"Certainly."

"You don't say! My, how pleased Hattie'll be—my sister-in-law, Jim's wife. She just loves to see her name in print—parties, and club banquets, and where she pours, you know. But maybe you don't take women, too."

"Oh, yes, if they are Blaisdells, or have married Blaisdells."

"Oh! That's where we'd come in, then, isn't it? Mellicent and I? And Frank, my husband, he'll like it, too,—if you tell about the grocery store. And of course you would, if you told about him. You'd have to—'cause that's all there is to tell. He thinks that's about all there is in the world, anyway,—that grocery store. And 'tis a good store, if I do say it. And there's his sister, Flora; and Maggie— But there! Poor Maggie! She won't be in it, will she, after all? She isn't a Blaisdell, and she didn't marry one. Now that's too bad!"

"Ho! She won't mind." Benny spoke with conviction. "She'll just laugh and say it doesn't matter; and then Grandpa Duff'll ask for his drops or his glasses, or something, and she'll forget all about it. She won't care."

"Yes, I know; but—Poor Maggie! Always just her luck." Mrs. Blaisdell sighed and looked thoughtful. "But Maggie knows a lot about the Blaisdells,' she added, brightening; "so she could tell you lots of things—about when they were little, and all that."

"Yes. But—that isn't—er" Mr. Smith hesitated doubtfully, and Mrs. Blaisdell jumped into the pause.

"And, really, for that matter, she knows about us now, too, better than 'most anybody else. Hattie's always sending for her, and Flora, too, if they're sick, or anything. Poor Maggie! Sometimes I think they actually impose upon her. And she's such a good soul, too! I declare, I never see her but I wish I could do something for her. But of course, with my means—But, there! Here I am running on as usual. Frank says I never do know when to stop, when I get started on something; and of course you didn't come here to talk about poor Maggie. Now I ll go back to business. When is it you want to start in—to board, I mean?"

"To-morrow, if I may." With some alacrity Mr. Smith got to his feet. "And now we must be going—Benny and I. I'm at the Holland House. With your permission, then, Mrs. Blaisdell, I'll send up my trunks to-morrow morning. And now good-night—and thank you."

"Why—but Mr. Smith!" The woman, too, came to her feet, but her face was surprised. "Why, you haven't even seen your room yet! How do you know that you'll like it?"

"Eh? What? Oh!" Mr. Smith laughed. There was a quizzical lift to his eyebrows. "So I haven't, have I? And people usually do, don't they? Well—er —perhaps I will just take a look at— the room, though I'm not worrying any, I assure you. I've no doubt it will be quite right," he finished, as he followed Mrs. Blaisdell to a door halfway down the narrow hall.

Five minutes later, once more on the street, he was walking home with Benny. It was Benny who broke the long silence that had immediately fallen between them.

"Say, Mr. Smith, I'll bet ye you'll never be rich!"

Mr. Smith turned with a visible start.

"Eh? What? I'll never be—What do you mean, boy?"

Benny gigled cheerfully.

" 'Cause you paid Aunt Jane what she asked the very first time. Why, Aunt Jane never expects ter get what she asks, pa says. She sells him groceries in the store, sometimes, when Uncle Frank's away, ye know. Pa says what she asks first is for practice—just ter get her hand in; an' she expects ter get beat down. But you paid it, right off the bat. Didn't ye see how tickled Aunt Jane was, after she'd got over bein' surprised?"

"Why—er—really, Benny," murmured Mr. Smith.

But Benny had yet more to say.

"Oh, yes, sir, you could have saved a lot every week, if ye hadn't bit so quick. An' that's why I say you won't ever get rich. Savin' 's what does it, ye know —gets folks rich. Aunt Jane says so. She says a penny saved 's good as two earned and better than four spent."

"Well, really, indeed!" Mr. Smith laughed lightly. "That does look as if there wasn't much chance for me, doesn't it?"

"Yes, sir." Benny spoke soberly, and with evident sympathy. He spoke again, after a moment, but Mr. Smith did not seem to hear at once. Mr. Smith was, not a little abstracted all the way to Benny's home, though his good-night was very cheerful at parting. Benny would have been surprised, indeed, had he known that Mr. Smith was thinking, not about his foolishly extravagant agreement for board, but about a pair of starry eyes with wistful lights in them, and a blue dress, plainly made.

In the hotel that night, Mr. John Smith wrote the following letter to Edward D. Norton, Esq., Chicago:

My Dear Ned,—Well, I'm here. I've been here exactly six hours, and already I'm in possession of not a little Blaisdell data for my—er—book. I've seen Mr. and Mrs. James, their daughter, Bessie, and their son Benny. Benny by the way, is a gushing geyser of current Blaisdell data which I forsee, I shall find interesting, but embarrassing, perhaps, at times. I've also seen Miss Flora, and Mrs. Jane Blaisdell and her daughter, Mellicent.

There's a "Poor Maggie" whom I have not seen. But she isn't a Blaisdell. She is a Duff, daughter of the man who married Rufus Blaisdell's widow, some thirty years or more ago. As I said, I haven't seen her yet, but she, too, according to Mrs. Frank Blaisdell, must be a gushing geyser of Blaisdell data, so I probably soon shall see her. Why she's "poor" I don't know.

As for the Blaisdell data already in my possession—I've no comment to make. Really, Ned, to tell the truth, I'm not sure I'm going to relish this job, after all. In spite of a perfectly clear conscience, and the virtuous realization that I'm here to bring nothing worse than a hundred thousand dollars apiece (with the possible addition of a few millions on their devoted heads—in spite of all this, I yet have an uncomfortable feeling that I'm a small boy listening at the keyhole.

However, I'm committed to the thing now, so I'll stuff it out, I suppose,— though I'm not sure, after all, that I wouldn't chuck the whole thing if it wasn't that I wanted to see how Mellicent will enjoy her pink dresses. How many pink dresses will a hundred thousand dollars buy, anyway,—I mean pretty pink dresses, all fixed up with frills and furbelows?

As ever yours,
Stan—er John Smith.

CHAPTER IV

In Search of Some Dates

Very promptly the next morning Mr. John Smith and his two trunks appeared at the door of his new boarding-place. Mrs. Jane Blaisdell welcomed him cordially. She wore a high-necked, long-sleeved gingham apron this time, which she neither removed nor apoligized for —unless her cheerful "You see, mornings you'll find me in working trim, Mr. Smith," might be taken for an apology.

Mellicent, her slender young self enveloped in a similar apron, was dusting his room as he entered it. She nodded absently, with a casual "Good-morning, Mr. Smith," as she continued at her work. Even the placing of the two big trunks, which the shuffling men brought in, won from her only a listless glance or two. Then, without speaking again, she left the room, as her mother entered it.

"There!" Mrs. Blaisdell looked about her complacently. "With this couch-bed with its red cover and cushions, and all the dressing things moved to the little room in there, it looks like a real sitting-room in here, doesn't it?"

"It certainly does, Mrs. Blaisdell."

"And you had 'em take the trunks in there, too. That's good," she nodded, crossing to the door of the small dressing-room beyond. "I thought you would. Well, I hope you'll be real happy with us, Mr. Smith, and I guess you will. And you needn't be a mite afraid of hurting anything. I've covered everything with mats and tidies and spreads."

"Yes, I see." A keen listener would have noticed an odd something in Mr. Smith's voice; but Mrs. Blaisdell apparently noticed nothing.

"Yes, I always do—to save wearing and soiling, you know. Of course, if we had money to buy new all the time, it would be different. But we haven't. And that's what I tell Mellicent when she complains of so many things to dust and brush. Now make yourself right at home, Mr. Smith. Dinner's at twelve o'clock, and supper is at six—except in the winter. We have it earlier then, so's we can go to bed earlier. Saves gas, you know. But it's at six now. I do like the long days, don't you? Well, I'll be off now, and let you unpack. As I said before, make yourself perfectly at home, perfectly at home."

Let alone, Mr. Smith drew a long breath and looked about him. It was a pleasant room., in spite of its cluttered appearance. There was on old-fashioned desk for his papers, and the chairs looked roomy and comfortable. The little dressing-table carried many conveniences, and the windows of both rooms looked out upon the green of the common.

"Oh, well, I don't know. This might be lots worse—in spite of the tidies!" chuckled Mr. John Smith, as he singled out the keys of his trunks.

At the noon dinner-table Mr. Smith met Mr. Frank Blaisdell. He was a portly man with rather thick mutton-chop whiskers. He ate very fast, and a great deal, yet he still found time to talk interestedly with his new boarder.

He was plainly a man of decided opinions—opinions which he did not hesitate to express, and which he emphasized with resounding thumps of his fists on the table. The first time he did this, Mr. Smith, taken utterly by surprise, was guilty of a visible start. After that he learned to accept them with the serenity evinced by the rest of the family.

(Continued in November 10th issue.)

RADIO DEPARTMENT

145,000 FARM RADIO SETS

THE speed with which farmers have taken up radio is shown in a recent survey made by the United States Department of Agriculture. County agricultural agents estimate that there are approximately 40,000 radio sets on farms in 780 counties. This is an average of 51 sets per county. Applying the average to 2,850 agricultural counties a total of more than 145,000 sets on farms throughout the country is estimated.

The county agent's estimates cover every state. In New York it is estimated that in 37 agricultural counties there are 5,502 sets on farms. The county agent for Saratoga County, New York, reported 2,500 sets in the county. In 51 counties in Texas there are 3,085 sets. Forty-three counties in Illinois show 2,814 sets; 26 counties in Missouri, 2,861 sets; 42 counties in Ohio, 2,620 sets; 40 counties in Iowa, 2,463 sets, and 26 counties in Kansas, 2,054 sets. New Jersey, Pennsylvania, Michigan and Minnesota have between 1,000 and 2,000 sets each.

INSTALLS BROADCASTING SET

APPANOOSE County, Iowa, Farm Bureau has installed a radio broadcasting outfit. This is the first county organization in the United States to install a sending apparatus.

Station XYZ, as it is known, has attracted wide attention in Iowa. The broadcasting outfit, 100-watt telephone, has an antenna current of 4 amperes. The maximum range is 1,200 miles; the normal range, 250 miles.

There are eighty receiving sets on Appanoose County farms. Each day at noon the latest news and market reports are broadcasted. This system takes the place of tedious hours at telephone sending market news and like information to individuals.

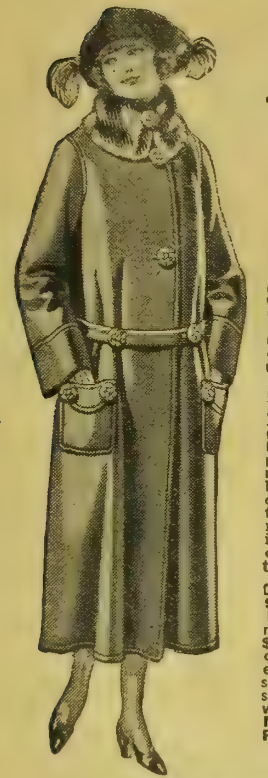
Any Bargain Shipped On Approval!

Send No Money

Not only do we claim that these are the biggest bargains in the U. S. A.—we are ready to prove it at our own risk—not yours. We don't ask you to take our word. We invite you to select any articles on this page and order them entirely on approval. You be the judge when goods arrive. If you are not delighted with their quality and positively amazed at their dollar-for-dollar value, simply return the shipment and you will not lose a cent.

Don't send one cent. Just letter or postcard brings you any of these smashed price bargains. Merely give Name and Number of Each Article You Want. Also State Size and Write Your Name and Address plainly to Avoid Delay. Pay Nothing till goods arrive—then only the amazing bargain price and postage. If you are not delighted with your bargain for any reason at all simply return the goods and your money will be cheerfully refunded. **ORDER NOW.** If you buy NOW, you'll BUY RIGHT.

PAY ONLY WHEN GOODS ARRIVE

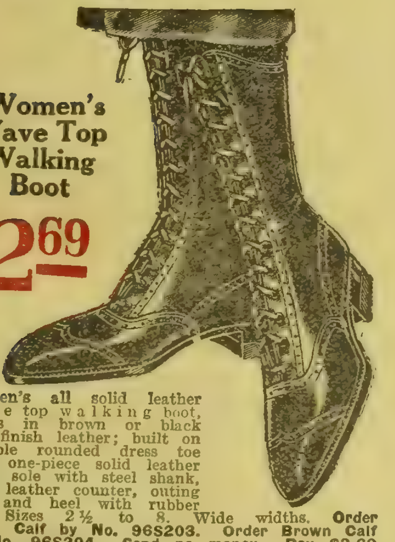


Fur Trimmed Thibet Coat For Women

$5.98

Another sensational value in a warm winter coat. This becoming model is of splendid Thibet cloth in choice of rich brown or navy blue. The ample collar is of genuine brown Coney fur. Coat is finished with all-around self material belt and two patch pockets trimmed with pretty buttons. Imitation cuff is also button trimmed. Coat measures about 48 inches long, and comes in sizes 34 to 44 bust.

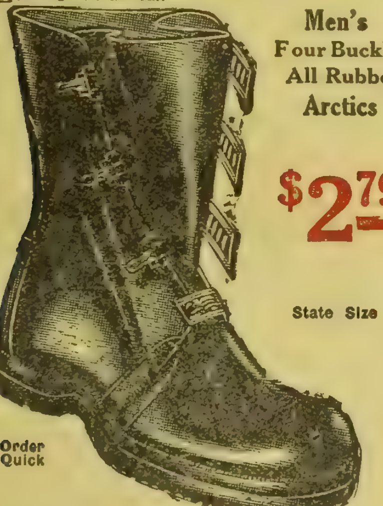
Order Brown by No. 96E7094. Navy by No. 96E7096. Send no money. Pay $5.98 and postage on arrival for either color. State size wanted. Order similar style Black with plush collar by No. 96E7097, Price $3.98.



Women's Wave Top Walking Boot

$2.69

Women's all solid leather wave top walking boot, comes in brown or black calf finish leather; built on sensible rounded dress toe last; one-piece solid leather inner sole with steel shank, solid leather counter, outing sole and heel with rubber tip. Sizes 2½ to 8. Wide widths. **Order Black Calf by No. 96S203. Order Brown Calf by No. 96S204. Send no money. Pay $2.69 and postage on arrival.**



Men's Four Buckle All Rubber Arctics

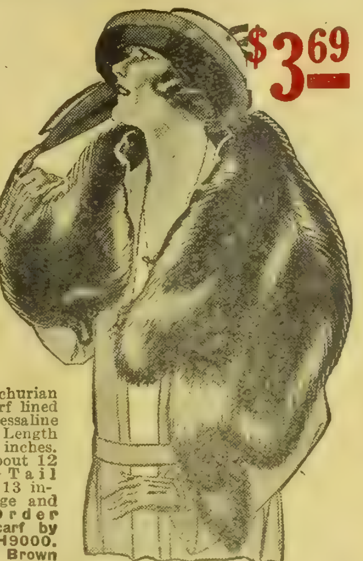
$2.79

State Size

Order Quick

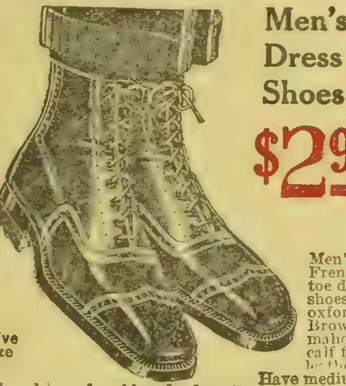
Guaranteed best quality all rubber 4-buckle hi-cut arctic. Made with double corrugated soles and reinforced seams. Snow-excluding tongue. Men's sizes 6 to 15. Wide widths. Can be washed and cleansed. Send quick. **Order by No. 96A990. Send no money. Pay $2.79 and postage on arrival.**

Manchurian Wolf Scarf



$3.69

Manchurian Wolf scarf lined with Messaline silk. Length about 44 inches. Width about 12 inches. Tail about 13 inches, large and bushy. **Order Black Scarf by No. 96H9000. Order Brown Scarf by No. 96H9001. Send no money. Pay only $3.69 and postage on arrival.**



Men's Dress Shoes

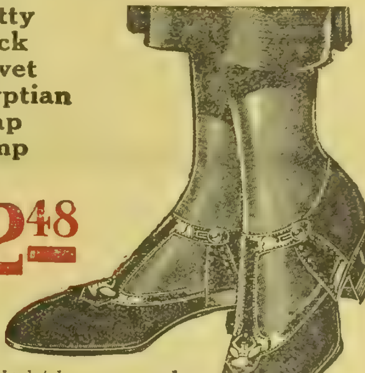
$2.98

Give Size

Men's French toe dress shoes or oxfords in Brown mahogany calf finished leather. Have medium toes oak soles and rubber heels. Perforated on vamp, toes and eyelet stay. Sensational values. Sizes 6 to 11, wide widths. **Order by No. 96A660. Send no money. Pay $2.98 and postage on arrival for either style. State Size.**

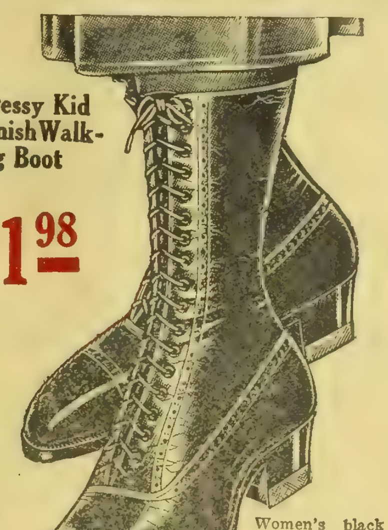
Pretty Black Velvet Egyptian Strap Pump

$2.48



State Size

An absolutely new and novel Egyptian style dress pump of rich black velvet. Medium pointed dress toe and patent leather trimming, as pictured. Patent leather vamp, collar, and instep straps fastened on each side by buttons. Neat perforations at sides. Fancy carved Egyptian slave ornament on vamp. Leather insole; genuine Oak outsoles; medium height, rubber tipped leather heel. Sizes 2½ to 8; wide widths. **No. 96S257. No money now. Pay $2.48 and postage on arrival. State size.**



Dressy Kid Finish Walking Boot

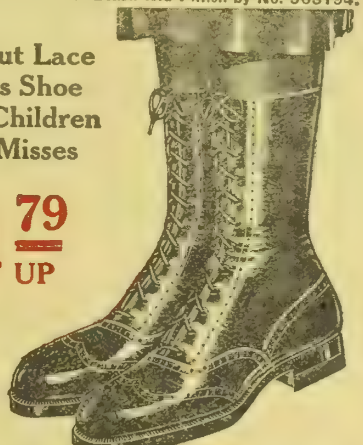
$1.98

Give Size

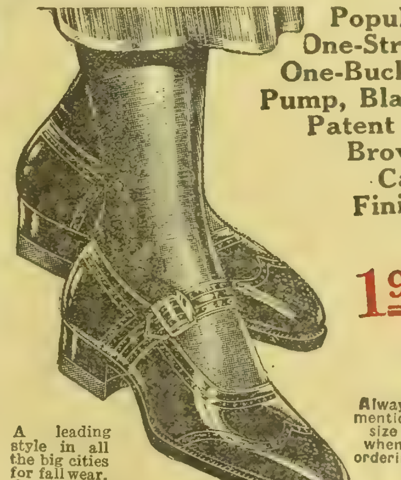
Women's black or brown kid finish leather walking boot in hi-cut lace style. Fancy perforated stitched tip with medallion on toe; neat perforations at vamp and lace row. Medium extension oak sole with proper height walking heel rubber tipped. A distinct Sharood bargain, suitable for dress or street wear. Soft kid finish leathers are dressy and comfortable. Sizes 2½ to 8. Wide widths. **Order Brown Kid Finish by No. 96S195. Pay $1.98 and postage on arrival. Order Black Kid Finish by No. 96S194.**

Hi-Cut Lace Dress Shoe for Children and Misses

$1.79 UP



Extremely dressy boot of serviceable brown calf finished leather. Pretty tip with medallion on full rounded toe, perforated vamp, quarter and eyelet rows. One-piece extension oak sole and low heel with rubber top lift. Wide widths. **Child's sizes 8½ to 11, No. 96S439. Price, $1.79. Misses' sizes 11½ to 2, No. 96S440. Price, $1.98. Growing Girls' sizes 2½ to 8, No. 96S441. Price, $2.48. Send no money. Pay bargain price and postage on arrival State size.**



Popular One-Strap One-Buckle Pump, Black Patent or Brown Calf Finish

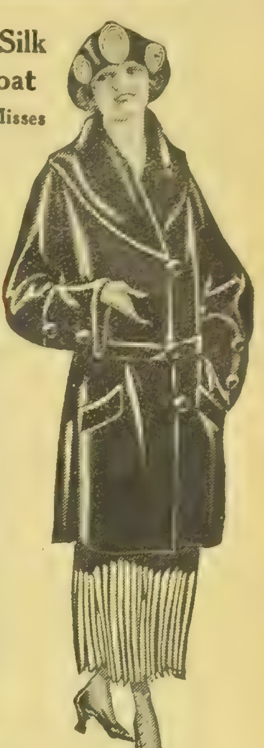
1.98

Always mention size when ordering.

A leading style in all the big cities for fall wear. One-strap, one buckle pump of rich black patent leather or Brown Calf finished leather. Is well made with perforated sewed tip and medallion toe. Fancy perforation on vamp, strap and quarter. One-piece medium extension oak sole; low flapper walking heel with rubber top lift. Sizes 2½ to 8; wide widths. **Black patent No. 96-S20. Brown Calf finish, No. 96S21. Send no money. Pay $1.98 and postage on arrival for either leather. State sizes.**

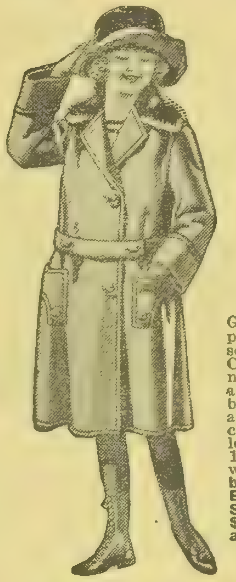
Sporty Style Silk Seal Plush Coat

For Women and Misses



$9.98

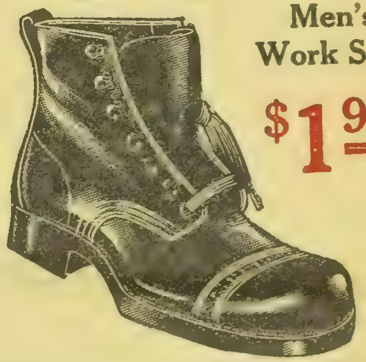
Where else can you buy a genuine silk seal plush coat of this jaunty style and splendid quality for such a low price? Beautifully modeled of soft, warm, lustrous, deep pile silk plush with full lining of beautiful flowered sateen. Newest loose back flared style with belt. Wide 10-inch shawl collar, two pockets and roomy bell sleeves. Length, about 34 inches. Women's sizes, 34 to 44; Misses, 32 to 38 bust measure. State size. **Order No. 96E7000. Send no money. Pay $9.98 and postage on arrival. Money back if not satisfied.**



Fur Trimmed Polo Coat

$4.48

Girl's stylish coat of polo that insures real service. Has warm Coney Fur Collar. Two novelty pockets. All-around belt. Novelty buttons trim pockets and belt. A durable coat at an amazingly low price. Sizes 7 to 14 years. State size wanted. **Order Navy by No. 96E7308. Brown No. 96E7310. Send no money. Pay $4.48 and postage on arrival.**



Men's Work Shoe

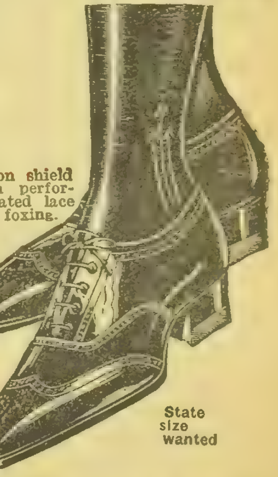
$1.98

Give Size

Brown or Black work shoe of durable leather. Solid leather inner soles. Heavy double soles. Green chrome outsole. Leather heel. Sizes 6 to 12. Wide widths only. **Order Brown by No. 96A758. Order Black by No. 96A760. Send no money. Pay $1.98 and postage on arrival.**

Women's Patent Leather, Gun Metal or Brown Calf Finished Oxfords

$1.98



Made with imitation shield tip and medallion perforated vamp, perforated lace stay and circular foxing. Has medium rubber heel and medium pointed toe. Sizes 2½ to 8, wide widths. **Order patent by No. 96S121. Order gun metal by No. 96S122. Order brown by No. 96S123. Send no money. Pay $1.98 and postage on arrival.**

State size wanted

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$3.75 Per Square Freight Paid —as Follows

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No. SD-116—New Heavy Smooth Surfaced Roofing—Sound and durable—easily taken care of—Adopted to every roofing need. Complete with nails and cement—per roll.......... $1.65

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BABES IN THE JUNGLE

A Complete Short Story by O. HENRY America's Greatest Short Story Writer

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MONTAGUE SILVER, the finest street man and art grafter in the West, says to me once in Little Rock: "If you ever lose your mind, Billy, and get too old to do honest swindling among grown men, go to New York. In the West a sucker is born every minute; but in New York they appears in chunks of roe—you can't count 'em!"

Two years afterward I found that I couldn't remember the names of the Russian admirals, and I noticed some gray hairs over my left ear; so I knew the time had arrived for me to take Silver's advice.

I struck New York about noon one day, and took a walk up Broadway. And I run against Silver himself, all encompassed up in a spacious kind of haberdashery, leaning against a hotel and rubbing the half-moons on his nails with a silk handkerchief.

"Paresis or superannuated?" I asks him.

"Hello, Billy," says Silver; "I'm glad to see you. Yes, it seemed to me that the West was accumulating a little too much wiseness. I've been saving New York for dessert. I know it's a low-down trick to take things from these people. They only know this and that and pass to and fro and think ever and anon. I'd hate for my mother to know I was skinning these weak-minded ones. She raised me better."

"Is there a crush already in the waiting-rooms of the old doctor that does skin grafting?" I asks.

"Well, no," says Silver, "you needn't back Epidermis to win today. I've only been here a month. But I'm ready to begin; and the members of Willie Manhattan's Sunday School class, each of whom has volunteered to contribute a portion of cuticle toward this rehabilitation, may as well send their photos to the Evening Daily.

"I've been studying the town," says Silver, "and reading the papers every day, and I know it as well as the cat in the City knows an O'Sullivan. People here lie down on the floor and scream and kick when you are the least bit slow about taking money from them. Come up in my room and I'll tell you. We'll work the town together, Billy, for the sake of old times."

Silver takes me up in a hotel. He has a quantity of irrelevant objects lying about.

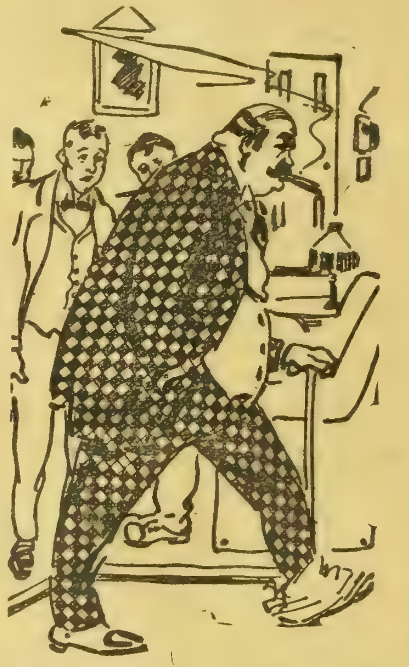
"There's more ways of getting money, from these metropolitan hayseeds," says Silver, than here is of cooking rice in Charlestown, S. C. They'll bite at anything. The brains of most of 'em commute. The wiser they are in intelligence the less perception of cognizance they have. Why didn't a man the other day sell J. P. Morgan an oil portrait of Rockefeller, Jr., for Andrea del Sarto's celebrated painting of the young Saint John!

"You see that bundle of printed stuff in the corner, Billy? That's gold mining stock. I started out one day to sell that, but I quit it in two hours. Why? Got arrested for blocking the street. People fought to buy it. I sold the policeman a block of it on the way to the stationhouse and then I took it off the market. I don't want people to give me their money. I want some little consideration connected with the transaction to keep my pride from being hurt. I want 'em to guess the missing letter in Chic—go, or draw to a pair of nines before they pay me a cent of money.

"Now there's another little scheme that worked so easy I had to quit it. You see that bottle of blue ink on the table? I tattooed an anchor on the back of my hand and went to a bank and told 'em I was Admiral Dewey's nephew. They offered to cash my draft on him for a thousand, but I didn't know my uncle's first name. It shows, though, what an easy town it is. As for burglars, they won't go in a house unless there's a hot supper ready and a few college students to wait on 'em. They're slugging citizens all over the upper part of the city and I guess, taking the town from end to end, it's a plain case of assault and Battery."

"Monty," says I, when Silver had slacked up, "you may have Manhattan correctly discriminated in your perorative, but I doubt it. I've only been in town two hours, but it don't dawn upon me that it's ours with a cherry in it. There ain't enough rus in urbe about it to suit me. I'd be a good deal much better satisfied if the citizens had a straw or more in their hair, and run more to velveteen vests and buckeye watch charms. They don't look easy to me."

"You've got it, Billy," says Silver. "All emigrants have it. New York's bigger than Little Rock or Europe, and it frighten's a foreigner. You'll be all right. I tell you I feel like slapping the people here because they don't send me all their money in laundry baskets, with germicide sprinkled over it. I hate to go down the street to get it. Who wears the diamonds in this town? Why, Winnie, the Wiretapper's wife, and Bella, the Buncosteerer's bride. New Yorkers can be worked easier than a blue rose on a tidy. The only thing that bothers me is I know I'll break the cigars in my vest pocket when I get my clothes all full of twenties."



Mr. Morgan begins to walk up and down swearing in a loud tone of voice.

"I hope you are right, Monty," says I; "but I wish all the same I had been satisfied with a small business in Little Rock. The crop of farmers is never so short out there but what you can get a few of 'em to sign a petition for a new post office that you can discount for $200 at the county bank. The people here appear to possess instincts of self-preservation and illiberality. I fear me that we are not cultured enough to tackle this game."

"Don't worry," says Silver. "I've got this Jayville-near-Tarrytown correctly estimated as sure as North River is the Hudson and East River ain't a river. Why, there are people living in four blocks of Broadway who never saw any kind of a building except a skyscraper in their lives! A good, live hustling Western man ought to get conspicious enough here inside of three months to incur either Jerome's clemency or Lawson's displeasure."

"Hyperbole aside," says I, "do you know of any immediate system of buncoing the community out of a dollar or two except by applying to the Salvation Army or having a fit on Miss Helen Gould's doorstep?"

"Dozens of 'em," says Silver. "How much capital have you got, Billy?"

"A thousand," I told him.

"I've got $1,200," says he. We'll pool and do a big piece of business. There's so many ways we can make a million that I don't know how to begin."

The next morning Silver meets me at the hotel and he is all sonorous and stirred with a kind of silent joy.

"We're to meet J. P. Morgan this afternoon," says he. "A man I know in the hotel wants to introduce us. He's a friend of his. He says he likes to meet people from the West."

"That sounds nice and plausable," says I. "I'd like to know Mr. Morgan."

"It won't hurt a bit," says Silver, "to get acquainted with a few finance Kings. I kind of like the social way New York has with strangers."

The man Silver knew was named Klein. At three o'clock Klein brought his Wall Street friend to see us in Silver's room. "Mr. Morgan" looked some like his pictures, and he had a Turkish towel wrapped around his left foot, and he walked with a cane.

"Mr. Silver and Mr. Pescud," says Klein. "It sounds superfluous," says he, "to mention the name of the greatest financial—"

"Cut it out, Klein," says Mr. Morgan. "I'm glad to know you gents; I take great interest in the West. Klein tells me you're from Little Rock. I think I've a railroad or two out there somewhere. If either of you guys would like to deal a hand or two of stud poker I—"

"Now, Pierpont," cuts in Klein, "you forget!"

"Excuse me, gents!" says Morgan; "since I've had the gout so bad I sometimes play a social game of cards at my house. Neither of you ever knew One-eyed Peters, did you, while you was around Little Rock? He lived in Seattle, New Mexico."

(Before we could answer, Mr. Morgan hammers on the floor with his cane and begins to walk up and down swearing in a loud tone of voice.)

"They have been pounding your stocks today on the Street, Pierpont?" asks Klein, smiling.

"Stocks! No!" roars Mr. Morgan. "It's that picture I sent an agent to Europe to buy. I just thought about it. He cabled me today that it ain't to be found in all Italy. I'd pay $50,000 tomorrow for that picture—yes, $75,000. I give the agent a la carte in purchasing it. I cannot understand why the art galleries will allow a DeVinchy to—"

"Why, Mr. Morgan," says Klein; "I thought you owned all of the De Vinchy paintings?"

"What is the picture like, Mr. Morgan?" asks Silver. "It must be as big as the side of the Flatiron Building."

"I'm afraid your art education is on the bum, Mr. Silver," says Morgan. "The picture is 27 inches by 42; and it is called 'Love's Idle Hour.' It represents a number of cloak models doing the two-step on the bank of a purple river. The cablegram said it might have been brought to this country. My collection wil never be complete without that picture. Well, so long, gents; us financiers must keep early hours."

Mr. Morgan and Klein went away together in a cab. Me and Silver talked about how simple and unsuspecting great people was; and Silver said what a shame it would be to try to rob a man like Morgan; and I said I thought it would be rather imprudent myself. Klein proposes a stroll after dinner; and me and him and Silver walks down toward Seventh Avenue to see the sights. Klein sees a pair of cuff links that instigate his admiration in a pawnshop window, and we all go in while he buys 'em.

After we got back to the hotel and Klein had gone, Silver jumps at me and waves his hands.

"Did you see it?" says he. Did you see it, Billy?"

"What?" I asks.

"Why that picture that Morgan wants. It's hanging in that pawnshop, behind the desk. I didn't say anything because Klein was there. It's the article as sure as you live. The girls are as natural as paint can make them, all measuring 36 and 25 and 42 skirts, if they had any skirts, and they're doing a buck-and-wing on the bank of a river with the blues. What did Mr. Morgan say he'd give for it? Oh, don't make me tell you. They can't know what it is in that pawnshop."

(Continued on Page 17)

What the Neighbors Say

APPROVES OF USING CONVICTS TO BUILD ROADS

DEAR EDITOR—I was much interested in the article in your issue of the Business Farmer of September 15th, on the subject of the use of convict labor on the public highways, and your editorial comment thereon. The plan is a good one, and it has been in successful use in Colorado for a number of years. I was surprised that no reference was made to Colorado's experience since that state was a pioneer in that particular method of using its convict labor.

For many years I have had a very firm conviction that every state should provide work on highways, or elsewhere when conditions are such that work on highways cannot be done, for all men who are without employment and in need of financial assistance. The state in such cases should pay a wage that would make it possible for the men to provide for themselves and their families the absolute necessities of life when used in the most economical way, but the wage should be much below that paid by private enterprise so that every laborer would seek a position with a private employer and get off the public payroll just as soon as possible. With this provision made for the unemployed charity in other forms should be discontinued. The man who would refuse to work should be refused food and clothing. If he had a family and refused to work to provide for them under this plan, he should be placed under arrest as a vagrant and dealt with as such.

I realize that this plan would not meet with favor with organized labor, but I have no sympathy whatever with the idea that a man must have work in a particular selected trade at a wage fixed by a union, or not work at all. My idea is that every man should be required to earn what he gets, and if he gets charity he should pay for it in the one way in which he can pay—with his labor. But labor provided as charity should not compete with private enterprise in point of wages.

I believe this is good common sense, and that is the kind that should guide us in all business transactions, and especially in matters of a public character. We must not allow ourselves to get into such position as England finds herself today. That country is paying out millions to maintain men who are doing nothing, and many of whom want to do nothing. There are those in this country who will force this situation upon us if possible, and we cannot afford to permit it.

And I want to say that I enjoy your publication, and I am sure you are giving your readers much of value in each and every issue. Very truly yours—W. E. Menoher, Lake Worth, Fla.

TWO WIDELY DIFFERING ACCOUNTS

A SERVANT of the profiteers writes in his letter of September 15th: "Here, we are busily laying up enormous sums of money for rainy days—the American farmer is enjoying the best period in the history of agriculture."

The above are undoubtedly samples of the new formula now being given to the farmers by the press agents of monopoly in an effort to arrest the discontent that prevails in the rural districts. Evidently the special interests are already beginning to feed the public such campaign food as shall, if possible, save the Esch-Cummins law and the Fordney-McCumber law from being repeated at the next session of Congress. To the above excerpts from the market letter we desire to subjoin one from a Minneapolis editor of September 18th:

"We are aware of the fact that the farmers in the Northwest are not so prosperous as before. Many have not made anything the last two or three years. Some have gone bankrupt, and others are on the verge of bankruptcy. That is why they have meetings all over the country and discuss all kinds of means and methods to improve the situation. It seems strange that in a rich and prosperous country like ours the farmer producing the foodstuffs should be brought to such a position that he cannot make a living. It is, of course, self-evident that there is something wrong with the distribution of the wealth of the nation. Someone is receiving too much for his services, and others too little. We cannot place the blame on Europe and foreign countries and say it is because they cannot and do not buy our products. Government statistics show that the average annual exports of 15 food products before the war amounted to 9,203,056,874 pounds, the fiscal year of 1923 shows an export of 25,053,036,160 pounds. The farmers are selling more than ever in the foreign market, and there is no reason why there should be such a spread between what the farmer sells and what he buys. Somebody must be juggling with the prices and discriminating against the farmer and interfering with the law of supply and demand. While we have plenty of coal, sugar, and gasoline, the prices have remained the same, except on gasoline, which recently was forced down. There has been too much price fixing by private corporations. It may be possible that the centralized control of money and credits and the fixing of the discount rates may have considerable to do with the prices in the open markets. It is beyond the power of the government to give rain and sunshine, to make the shiftless and indolent prosperous, but it is within the power of the government to protect the people against excessive profiteering and so to control the distribution of the nation's wealth that the producing class and the honest laborer receive a fair share. Farmers, small town bankers, professional men, and merchants in the Northwest are unanimous in demanding some kind of relief for the farmer, for the basic industry of the nation.

What has been said in the statement from the Minneapolis editor about the Northwest applies equally as well to the farming sections of Michigan.—A. J. Raftshol.

IN THE GOOD OLD DAYS

HAVE been a reader of the M. B. F. for a long time and have seen many good things that were of interest to the farmer. I am a farmer. I was raised on the farm but I live in town. Have lived in Gratiot county all my life which is over fifty years. Have seen Gratiot county in its good old pioneer days, when farming was not what it is today. Wheat was around a dollar. I have gone with my father to mill and would get about forty pounds of flour for a bushel of good wheat. Why can't we now? Wheat is as good today as it was fifty years ago. Well, the comeback is: It costs more to build the grist mill today than it did the old stone mill. I will admit that. No argument there but this is what I don't understand why the farmer don't have anything to say. He cannot go to the grist mill and get his wheat ground and get his flour and bran and middlings; it is all one-sided. The miller will pay, suppose, one dollar a bushel, and sell his flour for $1.15 for 24½ pounds, when wheat should make from 36 to 40 pounds of flour and have some bran and middlings, and his sack back, which my father did not sometimes. I have attended lots of mass meetings and have never heard it spoken of. Must be a graft somewhere. Somebody says the millers' association. It may be so, I don't know.

I should like to hear from some of the other farmers as to their views of this little talk. This should be given consideration as a serious proposition and not as a joke.— J. E. H., Ithaca, Mich.

There had been a difference of opinion in the preacher's family and youthful Elizabeth thought she had received the worst of it.

So at prayer time she was resentful and unhappy, but she went through her usual petitions.

"O Lord," she finally prayed, "make all the bad people good. And, God, if you can, please make all the good people nice."World Outlook.

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BLUING GUN BARREL

Will you be kind enough to tell me how to blue a gun barrel? I want to blue the barrel of my shotgun and thought you could help me?—M. E., Shiawassee County, Mich.

—The parts you intend to blue should be carefully cleaned and polished, using a very fine emery cloth for polishing and finishing with crocus cloth. Great care should be taken to see that no finger marks are left on the steel. The barrel bore and magazine bore should then be plugged with cork so that the acid cannot get inside and injure the parts. Next dip the parts to be blued into nitric acid, taking care to keep the acid off hands and clothing. Leave in the acid until the proper blue color appears, then remove, rinse with clear water and oil to prevent rusting. Do not expect a first class job the first time you do this as it is really quite difficult to produce a good finish.

RIGHT TO GARDEN

I would very much like your advice concerning small matter that is troubling me at the present time. We have rented a house and lot by the month here for over a year and have a very fine garden. Recently we bought a place and expect to move soon and I wonder if I am entitled to my garden that I have cared for until it is near maturity or if I give up possession of the house I lose control of my garden.—Mrs. M. H., Ann Arbor, Mich.

—If you are renting the house on a monthly basis, I am of the opinion that after you have once given up possession you could not re-enter for the purpose of harvesting your garden, unless you can make some arrangement with the next tenant whereby he would allow you to do so.—Asst. Legal Editor.

HAVE RIGHT TO CHANGE ROAD

We have a State Reward Road which goes through our farm and now the road authorities want to make this road wider and cement it. It is 18 feet gravel and 30 foot road bed. It is gravel and dirt now. They want to change this road in some places and make it on an old stage road. Some of this road is closed now, most of it has been for years. The road authorities claim they have the right to go where they like and make roads and we as land owners have nothing to say nor get any pay for our land. I understand a road must be four rods wide. Most of them are not that wide. We hear we must give land enough to make this road 100 feet wide and if we refuse to give it they have the authority to take it and we have nothing to say about it.—Wm. S., Portland, Mich.

—The authorities having control and jurisdiction over this highway have the authority to change its location. Whether the "old stage road" may now properly be used for highway purposes without compensation to the adjoining landowner depends upon whether the old stage road has ever been abondoned for highway purposes. If so, the adjoining landowners is entitled to compensation if it is to be taken for public use. The question might also arise as to the width of the road. Assuming that the old stage road has not been abandoned but that it is less than 100 feet wide, and assuming also the correctness of the statement that it is proposed to make the new road 100 feet wide, then the adjacent landowners are entitled to compensation for the value of the land to increase the width of 100 feet.—State Highway Department.

LARGE WHITE GRUBS

What will destroy those large, white grubs that work on both strawberries and potatoes? We plowed over an acre last fall and replowed it this spring and fitted it up and set to strawberries. It was heavily fertilized with home fertilizer, but those grubs have worked in the plants and in some places have cut them out completely. The plants were worked and cultivated and weeds kept down. The grubs are also working in the potatoes, this ground before plowing had been in corn, quite heavy land and the plants that are left are looking fine. Would also like to ask if lime is good to use on strawberry ground and if so, how much?—Mrs. E. N., Charlevoix, Mich.

—The large white grub that works in strawberries and potatoes is the larva of the June beetle. These creatures take three years in the ground and, therefore, the beetles appear every third year in numbers.

Now, the damage is done by the white grubs the year after the beetles fly since that is the year the white grub gets most of its growth. The beetles lay their eggs in grass-sod and in strawberry beds by choice, and it is therefore good policy to avoid putting strawberries, potatoes or corn or anything that is very susceptible to white grub attacks on land that was in strawberries or grass-sod the year previous, provided that was a year in which the beetles were numerous.

If one studies this statement carefully they will find the whole matter explained. One may have to read it carefully two or three times to get the meat out of the nut but the whole principal of white grub control is stated in this paragraph.

Unfortunately it is impossible to kill the white grubs when they are in the soil. Fertilizers have little effect and there is rally almost nothing that one can do to improve the situation except by so managing his rotation as to avoid putting crops likely to be attacked in land that was in strawberries or grass-sod the year previous.

Another unfortunate feature of the white grub situation is that the white grubs seem to appear every third year and one gets confidence in between attacks and forgets that they are due again three years from the last attack. With this explanation it is usually easy to get by and to put in something not likely to be injured. Land that was in grass-sod the year the bettles flew can be utilized for raising small grains because small grains get by pretty well in spite of the grub. There are also many natural enemies of the white grub which gradually thins them down so that in a few years time they will be well weeded out.—R. H. Pettit, Professor of Entomology, M. A. C.

MINOR'S WAGES

I would like to know if an orphan past eighteen can draw his own wages or must he be twenty-one. I have one working for me and the people who adopted him claim the money. I would like to know if I pay one party would I be compelled to pay the other party?—A Subscriber, Harbor Beach, Mich.

—If the boy has been legally adopted, the adopting parents would have a right to collect his wages.—Asst. Legal Editor.

LAW WILL COMPEL PARENT TO SUPPORT CHILD

Can you tell me if there is any way to make a man give his daughter, who is not 18 years old, enough money to clothe herself. This girl gets two dollars a week in the summer from him to buy everything she has, but at least six months out of the year she has nothing. He is not a poor man but owns a productive farm of some hundred or more acres. Has $1,650 in bank, besides bonds and other money not on deposit. Can there be anything done about this matter and what are the rights of a girl 18 years of age? She does all his housework on his farm as her mother isn't living, also he has no one but her to support.—A Subscriber, Deckerville, Mich.

—The law will compel a parent, who is able to do so, to support his children until they reach the age of majority. I would advise you to consult your local prosecuting attorney in regard to your case.—Asst. Legal Editor.

KILL CABBAGE LICE

Could you tell me how to kill cabbage lice? My cabbage is just covered with lice and I have tried different things but nothing helps.—H. M., Utica, Mich.

—Cabbage lice are difficult to kill although they may be killed by a strong spray of nicotine and soap suds at this season of the year. We have also been successful in controlling them in the past by a spray of one ounce of pyrethrum, or Persian insect powder, to a gallon of water. This is a little expensive and each louse must be hit to be killed in any case.—R. H. Pettit, Professor of Entomology, M. A. C.

FUR DEPARTMENT

TRAPPERS "TUNE UP"

WHEN a man puts his rifle away in the spring, not to be used until fall, he coats it heavily with grease and lays it up in a safe place. Then when the good old snap gets back into the air, and he gets the itch to be shooting again, he gets it out and cleans away all of the heavy grease and inspects every moving part and the inside of the barrel to see that it is in true fighting trim—not a speck of dust or rust or gummy grease anywhere.

He shoots it a few times to get his hand in—and usually learns that it is surprising what strangers he and a gun have become through the inactive months. That's inevitable.

Take trapping now. Just as a man loses the "feel" with a rifle he does with the woods and the habits and doings of the animals that wear the money-making pelts. And this is time for the trapper to be unlimbering for the season.

Get out into the woods where your trap line will soon be. You will find that there have been a lot of little changes that you ought to know about before you get down to business. Where you knew of such-and-such a fur-bearing family last season, there's an entirely different one today. You'll want to remember that. Creeks that were full last year may be pretty dry this year. Runways, slides, dens, that you knew about may be deserted. Time to be spotting the new ones.

Another thing. The smell, the feel, the looks of the woods, is going to tune you up for just the right start. A record year!

Overhaul your traps, and see that they are working smooth as grease. See that your supply of stretchers is complete for every kind of pelt. And the baits. It you make your own, it's high time to be about it. Or, if, like most trappers, you have been successful with the prepared baits, lay in a supply of fresh, strong ones. The paste baits are meeting with favor, owing not only to their powers of attraction, but to the convenience and safety with which they may be carried.

Watch your favorite magazines for new hints and shortcuts. Be loaded for bear, this year, the minute the season opens.

From present indication your best efforts in preparing furs will be well worth while. Already the mogratory birds have been moving south for several weeks. Blue birds were seen on their way back south far earlier than usual. Reports from the great lakes region told of returning ducks as early as the nineteenth of August. The fur market has a husky look to the wise ones. It ought to have when we remember the shortage in certain lines, and the general prosperity that always makes the fur business good.

The stores that sell women's apparel also tell a mighty encouraging story. Fur collars predominate on women's cloth coats. Fur trimmings for gowns of all sorts. Even veils with mink tails on them! Can you imagine it?

Get that woods-tang back into your blood. Lay out your campaign like the general you are. Have everything shipshape for the opening gun, for man the going will be good this year!

A CLOUD OF WITNESSES

A SERMON BY REV. DAVID F. WARNER

TEXT:—"Therefore, let us also, seeing we are compassed about with so great a cloud of witnesses, lay aside every weight, and the sin which doth so easily beset us, and let us run with patience the race which is set before us, looking unto Jesus, the author and finisher of our faith."—Heb. 12:1, 2a.

RECENTLY, a Philadelphia businessman was asked for a contribution to Sunday school work. "No," said he, "the day of the Sunday school has gone by." And, friendly reader, if you have any such notion, and were, as I am writing this, sitting with me in the great state convention of Sunday school folks of Pennsylvania,—well, you would have a renewing of mind. I hear Dr. Fisher now on"Our Educational Ministry." He is telling us that the outstanding emphasis of the church today should be on Christian education. And the aroused, living Church is seeing that not only the Sunday school, but the vacation church school, and week-day religious instruction, are needed adjuncts of the church.

I am sitting in an arena among multitudes of witnesses, listening to some gladiators of Christ instructing how to strip for the Christian race, how to lighten up the weights, and how to lay aside sins by keeping one's eyes on Jesus, the Author and Finisher of our faith. And under the inspiration you are "pressing on toward the mark."

Well, just to think of it, words are significant things, aren't they? By words thou shalt be justified, or condemned. By reading the words of the Book we may know its heart. By considering your words, we know your heart. Words carry with them the imprint of character. "The Word became flesh and dwelt among us." And we behold the character of Jesus' life and the "stamp of His genius." Aye, day by day, in this convention, "Quiet Folks" Gordon has been assuring us "softly," that "The Master is here;" that we shall quietly slip our hand into the Unseen Hand, knotted and torn, to know that our Lord "lived again," and "lives."

And so, these words of the Covenant in our text, are saying that life must have definiteness of aim. All the fabric of life goes to pieces without this. All aims are shabby aside from the incarnating of the words and spirit of Jesus. And then the race track of life is laid out. And by whom? Then again, we must run with "patience," with steadiness.

But now, I am looking at the great and challenging motto of the convention. Greatness! Do I want it? Well, in the spirit of this motto lies the way. Will I pay the price? Aye, listen, "Not to be ministered unto, but to minister." This is the motto. Here is the mystery of greatness. This is why the Countryman of Galilee was, and is forevermore, great. But there are other mottoes and I am reading. "They shall grow who believe they can." "Only dead fish float with the tide." "It is not the leap at the start, but the steady going-on that gets there." "Service is not so much a thing to be talked about as it is a thing to perform." And so on.

Now, I hear Dr. Gordon on "The Ministering Teacher." Yes, that is what the motto said. And, incidentally I hear these words, a too "closely mortised theology" today; and "what a man really is, is what he is when it is dark and the lights are out;" and again, "You scratch the skin of the usual skeptic and you'll find a dirty sinner underneath." Right here we go into a short Wanamaker memorial service. And who was Jno. Wanamaker? A great merchant. Yes, but listen. Someone is just now reporting that when Jno. Wanamaker was a boy he bought a Bible and paid for it on the installment plan. "This," said Mr. Wannamaker, "was the greatest investment of my life."

Well, all this is mountain-top inspiration. We have been soaring "as on eagles' wings." But someone is just now saying, "It is not so necessary for the church to be fitted with wings, as to be fitted to men." And again, "That the church is a laboratory rather than a place for oratory." Really, M. B. F. folks, does that interpret our task? Is it true that the church is not close enough to men? That we are not ministering to our neighbor as we do to ourselves? Well, I am now hearing Mr. Herman Eldredge, of Erie, relate this incident. The tide in the bay of Fundy had gone out and had taken with it a little girl. Many men saw her struggling in the surf. They gathered on the shore. But they said that they dare not go in. And suddenly, there rushes up a young high school athlete. He throws one end of the life line down at the feet of the men, and the bouy out into the tide. He strips and plunges in and gets the bouy to the little girl; then—ah, then, but the men forgot to pull. The brave swimmer, with the little girl, went down! The monument to his heroism is standing there today. But, men of the church of the living God, are you forgetting to pull.

It is now evening, and three thousand people are hearing Dr. Marion Lawrence of Chicago, emphasize "Cooperation" in his characteristic manner. Do you believe him when he says, "Denominationalism does not reach to heaven?" And that we must cooperate more intensely if we are to get every boy and girl. And that canvas in front of me is telling a sad tale, this:—that fifty-seven per cent of the population of this great state is not in any church. Here is a clear challenge to friendly and urgent cooperation.

And now, the music of our heart is carried along with that of the soloist in the "Ninety and Nine." Then there followed Dr. Hugh Magill, of Chicago, who, it seemed to the writer, struck the living notes that go to make up the symphonic challenge of Christian life. "Under an adequate program," he said, "We are on the eve of a great religious awakening." And broadened and intensified his appeal by reporting favorable attitudes on the part of representative Jews and foreigners, and finally quoted Harry Lauder as saying at a Rotary banquet, "Who leans his head on the breast of eternal truth and hears the heart-beats of the Son of God, he is the man of vision who can lead the way."

And to-night there is to speak such men as Frank B. Willis, U. S. Senator from Ohio, and Dr. Chas. L. Goodell of New York City. And I am sure they will sound again the call to girdle ourselves to lead the world out into a knowledge of and devotion to God as revealed in Jesus Christ. But, it is a matter of strength for our weakness to know that the church is making a progress in Godward vision and manward sympathy. But, said the late president, Warren G. Harding, we must hurry.

BIBLE THOUGHTS

THE GOODNESS OF GOD:—Thou openest thine hand, and satisfiest the desire of every living thing.—Psalm 145:16.

WHENCE COMES TROUBLE?—When he givieth quietness who then can make trouble?—Job 34:29.

WITH ALL YOUR HEART.—And ye shall seek me and find me when ye shall search for me with all your heart.—Jeremiah 29:13.

SHALL DO EXPLOITS:—The people that do know their God shall be strong, and do exploits.—Daniel 11:32.

PERSONAL SELF GOVERNMENT:—He that hath no rule over his own spirit is like a city that is broken down, and without walls.—Proverbs 25:28.

BE IN EARNEST:—Whatsoever thy hand findeth to do, do it with thy might.—Ecclesiastes 9:10.

REAL SERVICE:—By love serve one another.—Galations 5:13.

YEA, YEA, AND NAY, NAY:—Let your communication be, Yea, yea; Nay, nay: for whatsoever is more than these cometh of evil.—Matthew 5:37.

BE SURE YOU ARE RIGHT:—There is a way which seemeth right unto a man, but the end thereof are the ways of death.—Proverbs 14:12.

ROUGE REX
1,000-Mile Shoes
Cordovan Horsehide Double-Tanned

Nashville, Mich., May 19, 1923
Hirth-Krause Co.,
Grand Rapids, Michigan
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I am sending you the shoes in question. The size is 7 1-2.

These shoes were purchased from George Dean in September, 1919, and have been worn every day at hard work ever since. They have given me excellent service, in fact the best service of any shoe I ever wore. I have had four pairs of taps put on them, and you can see that the uppers are good for several more pairs.

The Hirth-Krause Rouge Rex Brand will be my brand from now on, and I am always glad to recommend them to anyone. I am

Yours truly,
(Signed) HALE B. SACKETT

Ask for

The Forester

407- 6 in. Smoke
477-14 in. Smoke
414-16 in. Smoke
467-18 in. Smoke

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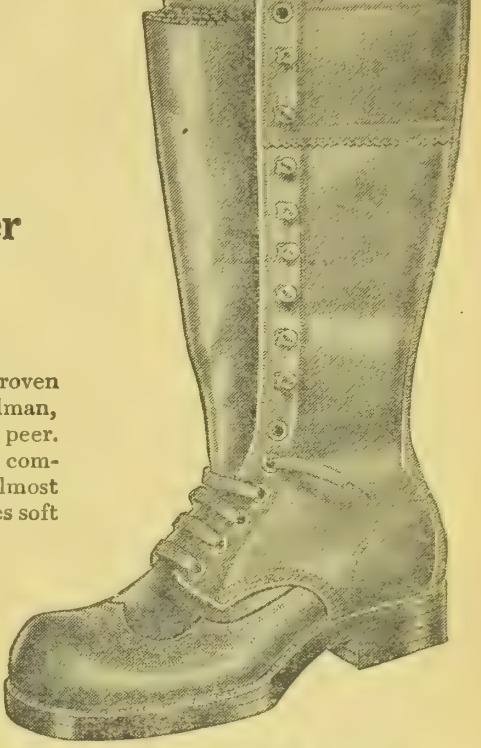

Dries Out Soft After Wetting

Easy to Wear but Hard to Wear Out

All leather used in Rouge Rex 1,000-mile horsehide work shoes is double-tanned by our own private process in our own tanneries.

We make no other shoe. Our entire organization is devoted to producing the world's strongest work shoe. We do our own tanning because it assures us the best leather. Horsehide is naturally the toughest leather used by man. For centuries it has been known as the strongest leather for dress shoes. Big league baseballs have horsehide covers because it is the only leather strong enough to stand such hard knocks. So we use it exclusively in Rouge Rex work shoes.

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We buy select horsehides for our leather. And only the choice Cordovan cut is used in Rouge Rex 1,000-mile shoes. Notice how thick the leather is—yet how soft it feels. Double-tanning means double wear and double comfort, too. You can wear these shoes in all kinds of weather. No matter how wet they get they dry out soft and pliable.

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There's a Rouge Rex horsehide shoe for every need. For farm or railroad, mines, oil field or woods, there's a special model that exactly suits conditions. And all are the same tough, pliable double-tanned horsehide.

If your dealer cannot supply you with Rouge Rex 1,000-mile shoes we'll see you are supplied by our nearest dealer. Write for catalog.

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Tender feet welcome these shoes. They're soft and flexible as a moccasin. Yet wear like iron. A typical factory or dry weather shoe so light you don't realize they are on duty. Ask for 435 in Chocolate; 434 in Tan. Both are outing models. 495 in Chocolate Blucher.

HIRTH-KRAUSE COMPANY
Shoe Manufacturers and Tanners
Dept. 302 Grand Rapids, Michigan

The Michigan
BUSINESS FARMER

SATURDAY, OCTOBER 27, 1923

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"The Farm Paper of Service"

CHILD LABOR IN BEET FIELDS

IN the last issue we pointed out the obligation which was placed upon the beet growers of Michigan to clear their skirts of the charges which are being given wide publicity that children are employed in the beet fields of Michigan and constitute a national scandal which is comparable only to the employment of child labor in the cotton mills of the south. Mr. A. B. Cook, master of the Michigan State Grange, and a member of the state board of agriculture, issued a long statement in Lansing last week in which he indicated that the charge was being made against the Michigan beet-grower himself for the employment of his own children in this work.

What statements we have read were largely directed to the employment of the children of imported labor, and the facts which Mr. Cook brought out that the illiteracy of children between ten and sixteen years of age in Saginaw County was only four and three-tenths per cent, did not, we believe, take into consideration the fact that it is impossible to keep a check on the children of labor imported to do this work and who migrate from one point to another during the season.

Otherwise the statement by Mr. Cook is to be commended, and it would be fortunate if other beet growers would come forth and state the facts. We offered in our last issue to publish these facts in THE BUSINESS FARMER because we believe they are of vital interest and should be given publicity. We would like to hear from beet growers themselves as to conditions in their own neighborhood, because this is a matter which must be brought from under cover and we consider it a direct aspersion at the state of Michigan, a state which has maintained a reputation for being one of the foremost agricultural states in America in the point of culture and education. Certainly the state which founded the first agricultural college on the American continent cannot afford at this late date to be blemished by a charge such as that now made regarding the employment of child labor in our beet fields.

THE "SEVENTEEN YEAR" WAR

IF we went to press daily we might keep our readers informed as to the status of the open war between the state board of agriculture and Governor Groesbeck.

As it is, we can only report the latest news from the front which is, that Herman H. Halliday, secretary of the board and of the Michigan Agricultural College, was instructed to make formal requisition upon O. B. Fuller for $75,000 of the $150,000 appropriated by the last legislature for extension work of the college.

As the auditor general cannot issue a voucher without the approval of the administrative board which will undoubtedly be refused, it is expected that the next move of the state board of agriculture will be to force this into the supreme court of the state and decide for all time the issue involved, which is, as we have stated many times, based on whether the county agents can be paid in part by organizations or other than the state or federal governments. The Governor claims they cannot be, and severely criticizes the former plan under which the Michigan state farm bureau has largely contributed to the salaries of the various county agents.

Apparently our readers are little interested in the battle being waged and are rather waiting for the smoke to clear away, to find out what it is all about. We have had little correspondence regarding it and were it a matter of great interest to the farmers of Michigan our mail would be loaded.

LLOYD-GEORGE IN AMERICA

ONLY this week in the great pavilion at Chicago where are held the International Livestock Shows, we listened with some fourteen thousand others to the remarks of a distinguished visitor to this country and one of the truly great men of our generation, Mr. David Lloyd-George, wartime Prime Minister of Great Britain.

His message to the American people was one which gave small credit to the present occupation of the Rhur district by the French and Belgians, and he stated clearly England's position in opposing this drastic action against which he is very bitter.

He thoroughly approves the suggestion of our Secretary of State, Mr. Hughes, that a committee composed of all the Allies, including the United States, be organized to meet and formulate a fair amount of reparation which Germany could and would pay.

He pointed out that previous to the occupation of the Rhur district, which contains all of the iron and coal deposits which were left to Germany under the Treaty of Versailles, that Germany had paid in actual gold to the Allies for reparations and occupation expense over two billions of dollars, and this in addition to the thousands of tons of ships, of railroad material, and other merchandise which she had delivered to France and Belgium.

The present drastic action, he said, could only force upon all classes of the German people a bitter resentment which at this very hour is fomenting into a red wave which may sweep, supported by the temperamental mass of Russians, the whole of Europe into a wild abyss.

No one could listen to the Honorable Lloyd-George and not be impressed with the broad vision and the sincereity of this little Welshman, who has held the fate of the world in his very fingers and has had kings and queens at his call!

WANTED: MORE EGGS FROM MICHIGAN!

ALTHOUGH Michigan has made an enviable reputation in the production of baby chicks and altho they are largely from egg-producing breeds does not seem to bring up the average of egg shipments from this state, if we are to take the record of the number of eggs received in New York during the month of August, when out of a total of 527, 751 cases only 7,867 cases came from the state of Michigan, while Illinois supplied 95,371 cases and Iowa supplied 94,782 cases. Either of these states supplying more than ten times as many as came from Michigan, and even far away California shipped 35,566 cases over three thousand miles to place them on the New Yorker's breakfast table!

There ought to be a lesson in this. Can it be that the growth of the metropolitan cities in Michigan has taken our supply of eggs so that we are no longer exporters? It would be interesting to see the figures on egg receipts for the city of Detroit. It is our prediction that Michigan poultry men are supplying only a small proportion of the eggs consumed in this market.

There is no excuse for any farmer in the state of Michigan not producing a generous quantity of eggs for market in view of the price which this commodity has maintained and from all indications will maintain, over a long period.

Eggs and dairy products are the two surest cash producers on the farm today, and with the rapid development of Michigan's metropolitan sections and our proximity to the great centers of population in this country there is no reason why either Illinois or Iowa should surpass us in the number of eggs produced for the New York market.

No one can produce eggs at so low a cost as can the farmer who supplies most of the feed from by-products or from his fields. There is of course a limit to the number of hens which should be kept on each farm, but it is our prediction that not one Michigan farm in a hundred is overstocked with poultry at this time, and not one in ten is keeping half as many as could be maintained at a profit.

HELP FROM ARGENTINE

WITHIN the past week it has developed that leaders in a radical movement can be of benefit; but to some other country than their own. Argentine, that great proressive country south of the Equator, has passed a price fixing law which it is expected will redound to the direct benefit of the livestock producers in the United States.

In late years the Argentine with its millions of acres of grazing land has come into the world's meat market with livestock produced at such low cost that it was a serious competitor with the product of our own land and has seriously influenced our prices.

This recent bit of radical legislation has forced the price of these products upward to the direct benefit of the producer in the United States, and already the Chicago packers have gone on record that they will buy no product from the Argentine until the present law is repealed. There must therefore, follow an immediate period when the United States will be called upon to supply the meat needs of the greater part of the world's market.

The world is getting smaller all the time. Perhaps some day the producers of all lands will get their heads together in a sort of a league of nations and then they can fix prices which will allow a fair profit above the actual cost of production, but until that day arrives there is no profit to be gained by price fixing except to someone else than whom it was intended to benefit. The result of price-fixing in Argentine would seem to demonstrate this as a fact.

....

MR. HOOVER AND MR. CHAPLIN

TWO distinguished gentlemen well known to most Americans arrived on the same train in Detroit the other morning. The one has been decorated by every nation engaged in the Great War for having accomplished valiant service in feeding the unfortunate; since the War he has been a member of the President's Cabinet and is at the present time. The other gentleman had only one decoration—that was "Champion Laugh Maker of the World!", for probably Charlie Chaplin from the silver screen has made more people laugh than any other man who ever played jester to the masses.

On arrival, it is said, Mr. Hoover, had a difficult time to find a porter for his luggage and he passed unnoticed through the great station, while all manner of folks from lowly porters to a distinguished committee of Detroit citizens welcomed with open hearts, Charlie Chaplin.

The very progress of the comedian through the streets of Detroit was a demonstration such as has been accorded few men in this generation. Bald-headed men and grey-haired grandmas argued with the children of all ages for points of vantage from which they could see "Charlie" in real life.

There is a moral in all of this.

The world loves a man who can make it laugh. Mr. Hoover, was here to tell us of those in trouble and how he was helping them. The world and all the struggling mass of humans on it have troubles of their own. We need our Hoovers, but no less do we need our Chaplins!

The world has been changed a lot during the last century but there is an older adage which is as true today as the day it was spoken:

> "Laugh and world laughs with you,
> Weep and you weep alone!"

HUNDRED CENT DOLLAR COMING BACK

ACCORDING to George W. Roberts, Vice President of the National City Bank of New York, better known as the former director of the United States Mint, and an economist of international fame the present day dollar which is worth only sixty cents is coming back to a hundred cent valuation, and the time is not far distant.

A complete interview with Mr. Roberts begins on page 4 of this issue which you hold in your hands and is worth the reading of every farmer who has been puzzling to find out how he is going to adjust his own purchases with the dollar he receives from his crop.

There is every indication these days that a change is not only certain but may come sooner than the average farmer has suspected. There is every indication that farm prices are on the upward trend, and one need not be a wild-eyed optimist to predict that before a year from now those who have remained on the farm will be glad they have stayed there and many of those who have gone into the cities to work will be sorry they did not stay on the farm and wait for the readjustment to come.

As it is, we don't want too many of those who left the farm to come back until those who remained have had a chance to recuperate!

* * *

Even our daily mail has taken on a brighter atmosphere. We hope that every farm community is planning on having a harvest festival and home-coming this year, the like of which they have not had in many past years. The outlook deserves it.

* * *

Henry Ford and Charlie Chaplin had their pictures taken together the other day. Both are millionaires because they have made millions happy!

PUBLISHER'S DESK

THE "PETITION" SCHEME

WHEN so good a paper as the "Lansing State Journal," falls circulation scheme employed by the "Farm Journal", a national farm paper published at Philadelphia, it is high time that something should be said about it, and although we mentioned the scheme in a recent issue we did not mention this venerable publication and its agents' connection with the scheme involved.

We do not believe that any legitimate subscriber to THE BUSINESS FARMER who is fit to bear that title, would fall for these slick subscription agents' schemes, but when a well known state newspaper publishes a long editorial article headed, "Farm Journal Circulating Unique Petition Among State Farmers," we think it is high time to set them right.

The "Farm Journal" agent, we understand, presents a petition which asks for a lowering of taxes. This scheme is not unique. It has been worked over and over and is almost as old as this venerable farm paper itself.

The "Farm Journal" has been working this scheme in all parts of the country for two or three years. We have never seen nor heard of the petitions going to Washington, as promised, and if they have been sent there, they certainly did not cause very much of a ripple.

They are based on the barest kind of a platitude. Asking a man to sign a petition to have taxes reduced is exactly the same as asking a hobo to sign a petition for no work and sure pay.

Can you reasonably expect any number of signatures to such a petition is going to have any effect on a sincere and well meaning representative or congressman, especially when he knows it has been collected by a farm paper in connection with its solicitation of subscription?

If any reader of THE BUSINESS FARMER has ever been presented with a "Farm Journal" petition and HAS NOT been asked by the agent presenting it to subscribe or renew his subscription to the "Farm Journal" we would like to hear from him.

This petition scheme is a subscription scheme, pure and simple, and the agents who handle it make big money—more than the average farmer can make. A good place to make your mark when such a petition is presented is just under the coat tails of the man who presents it with a well-shod toe of your boot!

THE OIL HEATER

IN our last issue we asked from this page for our readers' experience with the Oliver oil burner and others of similar make, because we are daily in receipt of inquiries regarding these heaters which are being entensively advertised and largely purchased by people in rural districts who have not the facilities of natural or artificial gas.

In the Experience Pool below you will find a number of letters selected from those that have been received, some of which are favorable and some unfavorable to this method of heating. We will have to leave it to our readers to gather from this experience the respective merits of these machines.

I cannot help but believe that this is one of the most valuable services which we can render to our many thousands of readers, and the Experience Pool should be one of the largest and best read departments in this weekly, because if you will bring your problems in we will publish them where not less than 100,000 people, most of them farmers on farms in Michigan, will read and if they have had experience pass it along to you.

This ought to help take some of the gamble out of farming and farming methods. The Experience Pool is a wide open department. You can ask any kind of a question and get the experience of other farmers, their wives or families without any cost to yourself. On the other hand, when you see a question in the Experience Pool which concerns something that you have had experience with you ought to be just as willing to take the time to give your experience. This is the kind of cooperation that cannot help but pay all concerned. We hope our readers will make more and more use of the Experience Pool department.

THE EXPERIENCE POOL

You asked about the Oliver Oil Gas Burner. We bought a No. 10 Burner and put it in our Renown cook stove last November and have used it every day since. Like it fine for cooking and baking. Perhaps it would not work well in all cook stoves. Would not care to have one in the heater in the living room as it makes too much noise. Wish to say they give a lot of heat. Even heats the water in the reservoir. Only light one burner unless I am in a hurry.—Mrs. Theo. Bulgrin, Marine City, Mich.

It will give plenty of heat in a cook stove or range but to bake with it you must remove the back wall. The worst feature is the tremendous noise. You cannot hear anyone at the door nor hear the telephone while the burner is in operation. These are objections which they are silent on. We have had one but have discarded it. Respectfully, G. Sprang, White Pigeon, Mich.

I have one of the burners and use it in my cook stove and will say it is the worst fuel eater known. It takes at least four gallons every ten hours to run it if you use it for heat and then keep it turned low just so it don't smoke. I tested it out and found it took five times the oil they said it did. I only use it in summer now to bake with. It makes the best heat to bake with that can be found, but a dirty smoky, greasy thing, hard to generate but after you fuss a long time and get it going it bakes fine. That is all I care for it. It is no good to use in coal stove or furnace as they recommend. It would smoke the glass black. If I had not bought it I would not have it in the house. I hope this will be of benefit to your readers. Respectfully, Mrs. A. G. McDavis, Oxford, Mich.

We sent for two burners, one for the range and one for the heating stove. We gave them a thorough trial and found they were not what we wanted or would not do what they said they would so we created them up and sent them back. We had paid for them in advance and understood that if they were not satisfactory we would get our money back, which I think was $19.00. I won't be sure about the price but that was it or near it, and we have never heard from them since. That was five years ago. They were not honest then so I don't believe they are now. We are now using an oil burner called "The Gloria." I have a burner in the range and one in the furnace. The one in the furnace is for summer use only, to heat the water in the tank. That is not hot enough for winter use, but the one in the range is fine for heating or baking or boiling clothes. Have had it nearly a year. Respectfully, Mrs. W. H. Buskirk, Grandville, Mich.

We have lots of wood, so will burn the Oliver only in hot weather but will say the burner is all right and does just what they claim it will do. I have it in my range and can bake anything I have ever tried to. If we had to buy our fuel I believe it would be as cheap as anything. We have had so many benefits from your valuable paper I though it would be nice to pass some along. Mrs. J. L. Pratt, R4, Ionia, Mich.

We purchased one this spring and can't afford to burn it because it uses so much oil and is dirtier than soft coal. If one writes anything about it to the company they have some excuse that we do not understand running it. We had to take it out of the stove entirely and they won't take it back as they agreed. We installed it as they directed and couldn't get any satisfaction. Yours sincerely, W. P. Fender, Lake Odessa, Mich.

I have one, the first summer it did all right but the next summer I only used it a short time and it wouldn't burn well. There are other oil burners better than this. My neighbor has one called the Thomas, I liked

(Continued on page 23.)

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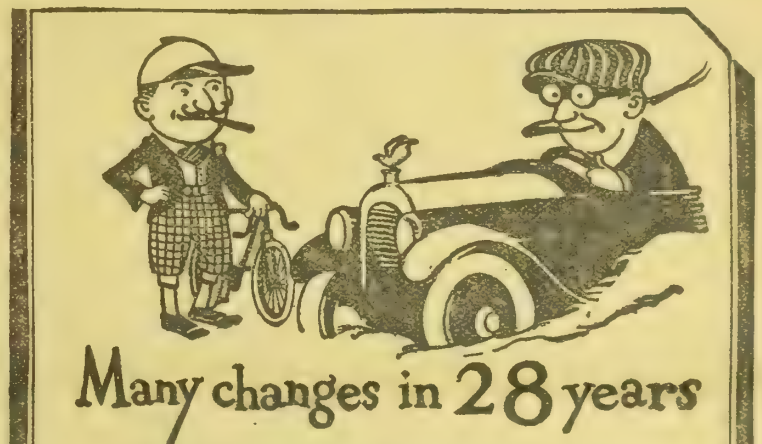

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The Farm Home

A Department for the Women

Edited by MRS. ANNIE TAYLOR

DEAR FOLKS—I am wondering if you would be interested in sending in any article and pictures that you might have that tells about the work you are carrying on in your community. I am sure we all would be interested in any work that the different groups of women are doing and use our dept. as a means of reaching 70,000 women. Read what the government is doing to help the child welfare in our country. I would be pleased to receive any quilt pattern or any home-made device that helps make the work easier. Let me hear from you. I still want some recipes on canning meats for our cookbook.

Your Friend,
Mrs Annie Taylor

Address letters: Mrs. Annie Taylor, care The Business Farmer, Mt. Clemens, Michigan.

"WHEN THE FROST IS ON THE PUNKIN"

WHEN the frost is on the punkin and the fodder's in the shock,
And you hear the kyouck and gobble of the struttin' turkey cock,
And the clackin' of the guineys, and the cluckin' of the hens,
And the rooster's hallylooyer as he tiptoes on the fence;
O, it's then's the time a feller is a-feelin' at his best,
With the risin' sun to greet him from a night of peaceful rest,
As he leaves the house, bareheaded, and goes out to feed the stock,
When the frost is on the punkin and the fodder's in the shock.

* * *

Then your apples all is getherd, and the ones a feller keeps
Is poured round the cellar-floor in red and yeller heaps;
And your cider-makin's over, and your wimmen-folks is through
With their mince and apple-butter, and theyr souse and sausage, too!
I don't know how to tell it—but ef sich a thing could be
As the angels wantin' boardin', and they'd call around on me—
I'd want to 'commodate 'em—all the whole-indurin' flock—
When the frost is on the punkin and the fodder's in the shock.

CHILD WELFARE WEEK

THE health of the American child has at last become recognized as one of the most important problems the nation has to deal with. The women interested in childwelfare have been fighting for this recognition ever since we had a chance to speak for ourselves.

This last week in Detroit the annual convention was held and those of you that have radio receiving sets must have heard Mr. Herbert Hoover, Secretary of Commerce and Dr. Geo. E. Vincent, President of the Rockefeller Foundation give their splendid talk on what is being done to help save our babies for better manhood and womanhood. If I am not mistaken the funds laid aside for this work by the government is $350,000.00.

CONSOLIDATION OF SCHOOLS

THERE are now over 12,000 consolidated schools in the rural districts, towns, and small cities of the United States. They have taken the place of approximately 50,000 little one-teacher schools. During the year 1919-20 over 1,000 new consolidated schools were established. This is truly a hopeful sign for the future.

Consolidated schools equalize educational opportunities. Those of standard type are rapidly becoming the strongest schools in our educational system. They are all the result of an attempt to equalize from the bottom up. They have been created by concentrating the wealth and energy of areas that before consolidation dissipated their efforts on very poor kinds of schools. They withdraw nothing from the top of the school system. On the contrary, they have added much to it. They equalize by bringing the poorest schools up not only to the average but to the best.

The consolidated school provides for children in the rural districts, large, new, modern buildings, with auditoriums, gymnasiums, and rooms for science, agriculture, shop work, cooking, etc., in addition to classrooms, and good modern heating plants. Large consolidated schools offer to all boys and girls in these small districts, no matter how poor they may be, the privilege of an accredited four-year high school when they have completed the grades.

The larger schools, too, do not deprive parents of the help, comfort and companionship of their boys and girls during the high school age, the age when adolescents can be most useful about the home; the age when parental protection and guidance are most needed.

In strictly rural communities consolidated schools generally offer every educational advantage known in our well-graded city schools. We need more of them if we expect to give our country boys and girls a fair chance. The consolidated school offers not only the usual standard course of study and book knowledge, but also a social training impossible in the one-teacher school. Literary societies and debating clubs vitalize the program of studies. Team work on the athletic field, under the direction of competent coaches, instructors, and directors, are just life's greatest lessons of fair play, the "golden rule," cooperation, and, finally, success.

The consolidated school provides school buildings and grounds designed to safeguard and promote the children's health, supplies them with an abundance of mechanical means necessary for work and recreation, and develops in them an idea of the aesthetic. In this respect, the consolidated school of the country has many natural advantages over the best of the city schools. More room for play space, gardens, and outside laboratories may be had for less expense.

The consolidated school gives a considerable choice of subjects, in addition to the essential ones, so that the child may follow the lines of his own interests or necessities. It provides a group of professionally trained, experienced, and supervised teachers with whom he may become acquainted.

The services of a physician or nurse, or both, are sometimes provided to prevent or stop in its inception and sickness among the children. The school is the means of interesting the community in the betterment of its own life to keep pace with the ideals set before the children.

Transportation, sanitary and safe, to and from school is furnished for all children residing any great distance from the school plant.

The consolidated school may cost more because it is necessary to transport the pupils from their homes to the school. If, however, we count costs in terms of better schools and happy children, we certainly receive much greater returns for the money we spend. Would the patrons of these consolidated schools go back to the old way? In Iowa 1,400 farmers living in 56 consolidated school districts were asked this question, and 9 out of every 10 answered "No."

There are 186,000 one-teacher schools in the United States and some of them are so small that only two or three pupils were in regular attendance. In one of the States during the school year of 1922 over 1,300 of these small schools had an enrollment of 10 pupils or less per school, and over 2,200 more of the same small schools had an average enrollment of not more than 11 to 15 pupils. To maintain a school for only 15 pupils is a very expensive proposition for the taxpayer.

It is a poor investment and a waste of public-school funds to pay a teacher a good salary and then provide them with only one-half the number of pupils he can easily instruct.

Of course, no one would for a moment think that the 186,000 one-teacher schools could or even should all be consolidated in a short time, but ultimately the one-teacher school must give way in most cases to the consolidated school.

WHERE DOES HEALTH EDUCATION BEGIN?

THE man in the car stopped to look at the good-looking farm. The fields were yielding large crops; the stock was in fine condition. Well-made sheds housed the newest and most efficient farm machinery and an auto for travel.

"How many pigs have you?" asked the traveler.

"Just a hundred and nine," said the farmer. "That boar over yonder took first prize at the country fair. He's a full-blooded Duroc."

"You certainly know how to raise pigs, Mr. Farmer."

"I ought to; I've sure made a study of raising hogs. You have to get good stock and then raise them right."

"Your corn looks fine, too."

"Yes, it's going to be a bumper crop."

"I suppose anybody could raise corn around here," ventured the traveler.

"Anybody that's a mind to learn how and willing to work. You have to know how to raise corn; you have to know about the soil, and the seed, and how to raise the crop. I've got the best machinery anywhere around; and it pays. A man can't afford these days to buy inferior stock or tools; and then he's got to keep everlastingly on the job."

A child came running out into the yard, brown as a berry, but thin and sleepy looking.

"How many children have you?" asked the traveler.

"Nine!" replied the raiser of prize pigs. "Some family, eh?"

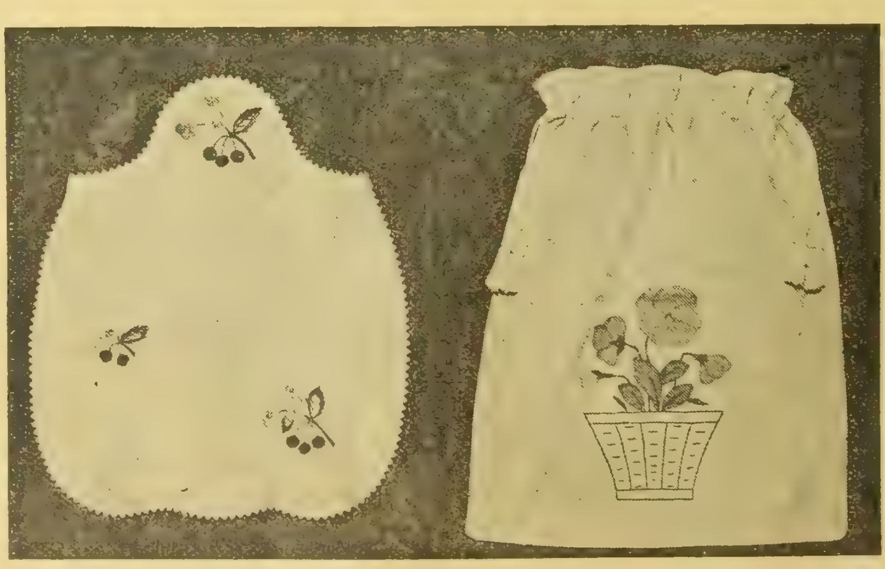
"And I suppose you and your wife have made a study of how to raise a prize family of children?"

"Now you're kiddin' me! I reckon what's good enough for their dad is good enough for them."

"But is it? You don't expect your small pigs to eat what your big hogs eat. You don't make prize hogs that way. When you're growing a prize pig you don't say 'It's going to get no more than its mother had,' but 'what does this pig need?'"—and that pig won't get it unless you give it to him. You know every point of a prize hog; do you know every point of a prize 6-year old girl or boy? Or a 10-year old? Or a 2-year old?"

" 'Pears as if it's goin' to rain," said the farmer. "I'll have to be getting the cultivator under the shed. It's new this year and I don't want it to get wet and rust. If you want to keep good machinery you just have to take care of it."

For Our Christmas Sewing



The illustrations above are very attractive gifts to make for our Christmas remembrances and who wouldn't like one of these adorable appliqued unbleached muslin laundry bags and the ladies tea apron with bright silk ribbon ties.

405—Laundry Bag—Size 20x27. This bag is made of Unbleached Muslin. Applique patches included. Takes one skein of each of the following colors to embroider: Purple, Lavender, Brown, Yellow and Green. Price, 50c.

406—Ladies' Tea Apron—Stamped on Unbleached Muslin. Floss to complete. Price, 50c.

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Mothers Problems

HOME-WORK

NO sooner does a child start in school than he wants to bring his book home. He wants to show Mamma and Daddy his lesson, and, if he is ambitious, he wants to be helped a little on his lesson so that he may have a perfect recitation the next day.

Such an attitude is highly commendable. Help at home has sent many a child skipping through the grades. But home-help must be wisely and carefully given, else it proves detrimental, rather than beneficial, to the child.

Ascertain first of all the methods your child's teacher uses in the different studies. If she does not teach the alphabet, but instead teaches reading wholly by sounds, do not tear down her good work by laboring with your little child over the alphabet. She'll never thank you for such hindrance to her system, and, worst of all, your child will not be benefitted.

However anxious you are for your child to get ahead, do not do his work for him. As he gets into the higher grades and is confronted by real problems in arithmetic and by compositions to write, do not, in your eagerness to help him, do his work for him and expect him to receive a 100 per cent grade when examinations come.

I know a mother who cut and made a bungalow apron for her little girl who was supposed to cut and make one as home-work in her sewing class. The girl took the apron to school, expecting to receive full credit for the work she hadn't done. The teacher, however, was suspicious. She didn't accuse. Instead, however, she asked this little girl to demonstrate the cutting and making of an apron to the class! The child was all at sea. She ended up in a tearful confession. It was not her fault she had been dishonest; it was the fault of her mother who had easily persuaded her that she could make the apron and the child would receive her credit.

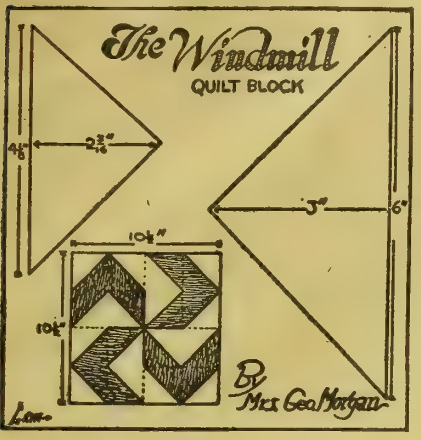
Home-help properly given is of untold value to both the ambitious and the backward child—but it must be both properly and conscientiously given.

HARD ON THE NERVES

Red patterned wall paper, glaring lights and shiny furniture are three things that are responsible for many attacks of nerves. The neutral walls, soft indirect lighting, with shaded lamps for reading, and of quiet furniture in good taste is greater than any one can quite realize.

Personal Column

Back Issues of Magazine—Could you help me through the Farm paper if any readers would sell or let me read two back numbers of the "People's Home Journal" April and May 1923? —Mrs. G. Shouwink, Sparta, Mich., R. 2.



THE WINDMILL QUILT

The design above and directions were sent in by one of our readers and I hope it will be a great help to you in planning your next pattern.

Any two colors are nice or one can use mixed colors. It is very simple to cut and can all be sewed on machine, it is the way four blocks are sewed together that form windmill. One can use all pieced blocks or every other one plain goods to set together with.—Mrs. Geo. Morgan, R3, Vicksburg, Mich.

The Runner's Bible

(Copyright by Houghton-Mifflin Co.)

Pleasant words are as a honey-comb sweet to the soul, and health to the bones. Prov. 16:24.

A word fitly spoken is like apples of gold in pictures of silver. Prov. 25:11.

For out of the abundance of the heart the mouth speaketh a good man out of the good treasure of the heart bringeth forth good things. Matt. 12:34-35.

Finally be ye all likeminded, sympathetic, loving as brethren, tender hearted, humble minded. - Pet. 3:8.

—You need the message your brother carries, be receptive of it. A critical attitude on your part will give him cause to say, "I do not know why but I am never my best with that person." Be lovingly expectant, and without effort the message will come that will bless both him and you.

—if you are well bred!

Enter the church quietly, removing the hat, and never replacing it until the door is reached again at the close of the service.

If a stranger, and accompanied by a lady, you will precede her, and follow the usher up the aisle until the pew is reached, when you will pause, allow her to pass in, and you will follow, taking seats at the further end if you are first, so that you will not be disturbed by later arrivals. It is no longer a custom, as formerly, for the gentleman to step into the aisle and allow the ladies that are strangers to pass to the inside.

WOMEN'S EXCHANGE

IF you have something to exchange, we will print it FREE under this heading providing: First—It appeals to women and is a bonifide exchanges, no cash involved. Second—It will go in three lines. Third—You are a paid-up subscriber to The Business Farmer and attach your address label from a recent issue to prove it. Exchange offers will be numbered and inserted in the order received as we have room. —MRS. ANNIE TAYLOR, Editor.

106—Lovely percale and gingham quilt pieces also plush and wool pieces to exchange for anything useful.—Mrs. Geo. Morgan, Vicksburg, R3, Michigan.

107—Room and board for girl or woman in exchange for assisting in work. Must love children. Write Michigan Business Farmer., Sunshine.

RECIPES

Soda Crackers—Several months ago I saw in the Business Farmer a request for a recipe for home made soda crackers. I watched eagerly for an answer but have never seen any. I am sending one, which we think is very good.

For sponge use one-half yeast cake (one-third ounce), one pint warm water (scant), six or seven cups flour (one and three-quarter pounds), pinch of salt. Mix together about six or seven o'clock in the evening. Sponge should be quite stiff. Rub little lard over the top and cover with a cloth. Set away over night to raise. If flour is very cold warm it some in the oven. Next morning about eight o'clock you add the following ingredients to make a firm stiff dough: one-half cup warm water, one-third cup lard (three ounces), two cups flour (10 ounces), one and one-half even teaspoons

(Continued on page 17.)

It is significant that more **LILY WHITE FLOUR**, *"The Flour the Best Cooks Use,"* than any other high-grade flour, is used by Michigan women.

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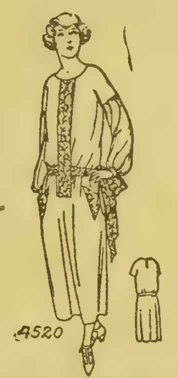
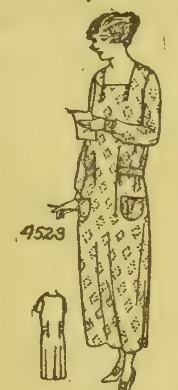
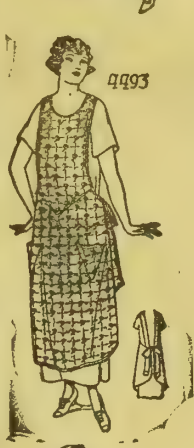
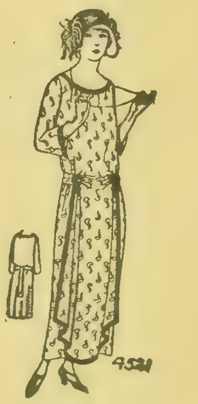
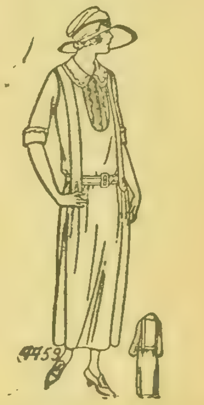
AIDS TO GOOD DRESSING

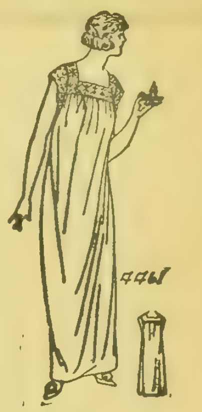












4461. A Pretty Night Gown.—This is a very attractive model, that lends itself well to a development in batiste, voile, crepe, crepe de chine, silk or satin. The yoke could be of lace or embroidery. Hemstitching or drawnwork would be attractive for decoration on plain material. The Pattern is cut in 4 Sizes: Small, 34-36; Medium, 38-40; Large, 42-44; Extra Large, 46-48 inches bust measure. A Medium size requires 3⅝ yards of 36 inch material. For yoke and sleeves of contrasting material, ½ yard 36 inches wide is required.

4542. A Smart Skirt Style.—This model is good as a suit skirt, or for separate wear. Moire, satin or twill as well as all sports materials could be used for its development. The Pattern is cut in 7 Sizes: 25, 27, 29, 31, 33, 35 and 37 inches waist measure. A 29 inch size requires 5¾ yards of 36 inch material. The width at the foot is 3½ yards.

4493. An Attractive Apron Style.—Pretty English chintz was used for this model, with bindings of black sateen. This is a good model for gingham, percale and also for rubberized materials. The Pattern is cut in 4 Sizes: Small, Medium, Large and Extra Large. A Medium size requires 3½ yards of 27 inch material.

4523. A Simple Serviceable Morning Dress.—This is a very pleasing and comfortable model. It will develop well in gingham or percale, and is also good for damask, jersey, serge and other wool fabrics. The sleeve may be finished in wrist or short length. The Pattern is cut in 7 Sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38 inch size requires 4¼ yards of 40 inch material. The width at the foot is 2 yards.

4538. A Smart Frock for Juniors.—Kasha cloth in a new shade of brown, with banding of satin would be good for this style. Taffeta too would be appropriate also rep in any of the colors now in vogue. The sleeve may be finished in wrist or elbow length. The Pattern is cut in 3 Sizes: 12, 14 and 16 years. A 14 year size requires 3¾ yards of 40 inch material.

4459. A Pretty Frock.—Here is a model that will look well in silk or crepe and also in printed cotton, linen or gingham. The guimpe is finished separately, and the sleeveless dress may be worn without it, if so desired. It is in "slip on" style. One could have the guimpe of contrasting material. The Pattern is cut in 7 Sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38 inch size requires 6⅛ yards of 32 inch material. To make the guimpe of contrasting material will require 1¾ yard 40 inches wide. Width at the foot is 2¼ yards.

4520. A Simple Frock for Many Occasions.—Youthful and pleasing is the model here depicited. The "peasant" sleeve is a newly revived feature. As here shown figured and plain voile are combined. One could have satin or taffeta with georgette for the full sleeves. The width of the skirt at the foot is 1¾ yard. The dress may be finished without the full sleeve portions and without the plastron, making a very serviceable and practical model. The Pattern is cut in 3 Sizes: 16, 18, and 20 years. An 18 year size requires 5⅛ yards of 40 inch material. For sash plastron and pockets of contrasting material ⅞ yard is required.

4468. A Practical Simple Play Dress.—Comfort is the principal feature expressed in this model. It slips on over the head, and provides for an opening at the inner seam. The sleeve may be finished in wrist or elbow length. The Pattern is cut in 4 Sizes: 6 mos. 1, 2 and 3 years. A 1 year size requires 1¼ yards of 36 inch material.

4522. A Popular Style for Stout Figures.—Here is a good model for mature figures. The panel front is finished with concealed pockets. The sleeve shows the new circular cuff. Wool rep with facings of satin or moire would be appropriate for this dress. The Pattern is cut in 7 Sizes: 36, 38, 40, 42, 44, 46, and 48 inches bust measure. A 38 inch size requires 3¼ yards of 54 inch material. The width at the foot is 1⅞ yard.

4521. Ladies Costume.—Figured silk or crepe could be used for this model. It is charming in its style lines, very graceful, and becoming to most figures. The skirt is independent of the waist, which is in "sliip on" style. The Pattern is cut in 6 Sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. A 38 inch size requires 5⅝ yards of 40 inch material. The width at the foot is 2 yards.

4536. A Pretty Frock for Mother's Girl.—Figured and plain foulard is here combined. This is a pretty style for crepe de chine, with trimming of plaited frills on the panels and waist. The sleeve may be in short, or wrist length. The Pattern is cut in 4 Sizes: 8, 10, 12, and 14 years. A 12 year size requires 3⅝ yards of 40 inch material. To make as illustrated will require 2⅛ yards of plain and 1⅛ yard of contrasting material.

4526. A Stylish Blouse with New Features.—Flannel, satin or moire could be used for this design. Bands of embroidery, brading or piping would be good for trimming. The Pattern is cut in 6 Sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. A 38 inch size requires 2½ yards of 40 inch material.

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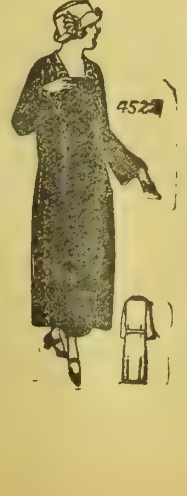

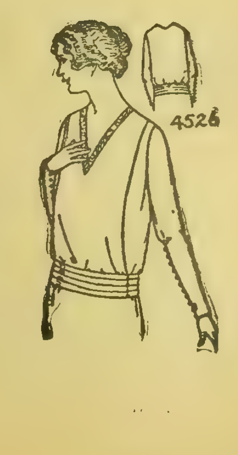

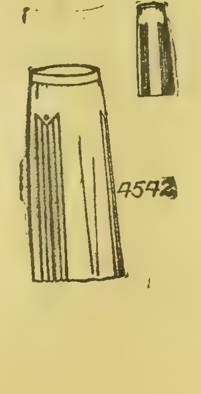

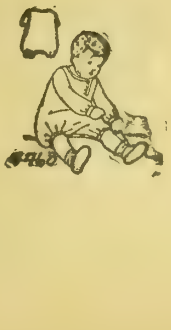

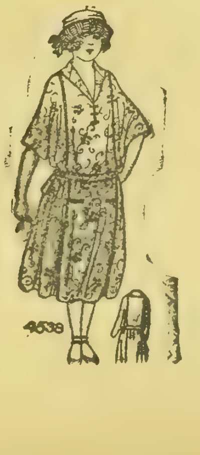

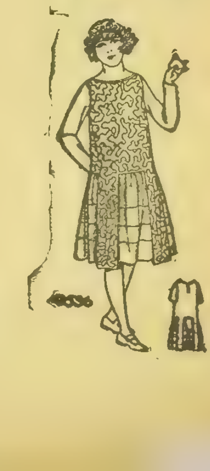

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The Children's Hour

DEAR girls and boys:—How time does fly. Here it is less than a week from Hallowe'en and it seems that but a very short time ago we were celebrating the fourth of July. Next will come Thanksgiving, then Christmas; in fact, only a few weeks and it will be 1924.

I suppose you are planning on having a party or attending one Hallowe'en evening. What great fun we had at country parties when I was a boy. I do not mean that on the evening of Hallowe'en we would go around the neighborhood and play mean tricks on people. No indeed, I never could see any fun in doing that. The fun we had was at the party where we played all kinds of games such as fortune telling, bobbing for apples, etc. And the room would be decorated with jack-o-lanterns, witches, cats and moons cut from black paper, then in each corner was a small shock of corn, while jack-o-lanterns made from pumpkins, with candles in them, were used to light the room. My how spooky it seemed! But everybody was happy and enjoyed the feeling of mystery and ghosts.

This issue we are publishing the drawings that won the prizes in our recent contest. I think they show that some of the readers of the Children's Hour have considerable talent, don't you?—UNCLE NED.

THE DOG'S CHOICE

IN the early days, the Earth was divided by a chasm. On one side lived Man, the Animal Who Thinks, on the other side lived the Animals Who Do Not Think. It did not occur to any of the animals, not even the Wise Elephant, to try and jump across the chasm.

Except one.

Dog sat on the edge of the chasm, ears cocked, and whined. He crouched as though to leap. The other animals paid no heed.

"Come!" cried Man.

The chasm was very wide. Yet a look of answer came in Dog's brown eyes, and he lept. Too wide was the chasm! Only Dog's forepaws struck the further side of the abyss.

But Man stooped down, lifted Dog firmly and placed him on the hither side of the chasm, among the Animals Who Think.

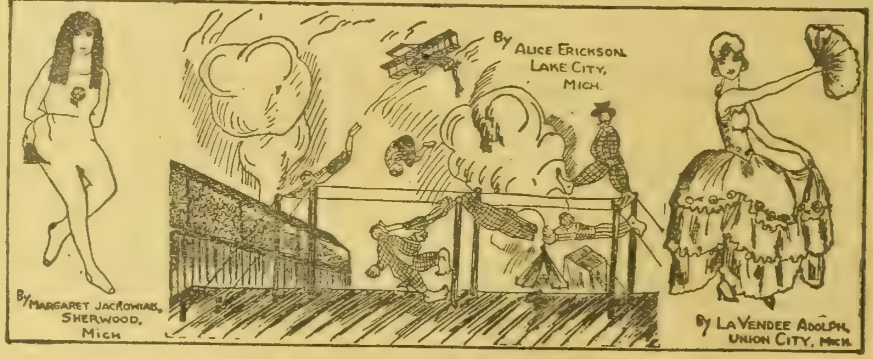
A daring attempt for a good ambition will always have some success.

OUR BOYS AND GIRLS

Dear Uncle Ned:—May I come in? I wrote to you once before but it was not in print. I am ten years old. My birthday was the 21st of January. Have I a twin? I have a big brother in Greenville, Pa. I have been through the state of Michigan from north to south and it was sure a nice trip. I have one sister and two brothers. We have 80 acres of land, and for pets I have a cat named Tom and a calf named Polly. There is no school this week as we have beet vacation. I wish some of the cousins would write to me for it is very lonesome. Well as my letter is getting long I will close with a riddle. What eats and eats and never gets full? The one who guesses it I will write to. Your loving niece—Onahlee Lockwood, Pompeii, Michigan.

Dear Uncle Ned:—It is said that when the nest becomes crowded that some of the birds are pushed over the edge, but I hope that I won't be the one that is pushed over the edge this time. I had one of my letters published when I was about ten years old. I have written several times since but I guess I was pushed out of the nest each time. Isn't the weather getting cold? All of the flowers are frosted and it seems so lonesome when the leaves fall from the trees. My sister younger than me likes autumn, but I suppose it's because her birthday is in October. But I love spring. Don't you, Uncle Ned? I guess I'd better describe myself. I am five feet two and one-half inches tall, have brown hair, black eyes and am dark complexioned. I was fifteen years old on the 11th day of May. Have I any twins? I know of one. Her name is Cora Spaelma. We have been corresponding since August. We have sent each other our pictures, so we nearly know each other even though we haven't seen one another. Now, Uncle Ned, I want to ask you a question. Couldn't we have a space on the children's page each week for a few pieces of poetry? I for one, love poetry and I think there are others that do too. The children that write letters could send any good poem they find. Now, boys and girls and Uncle Ned how do you like the idea? I graduated from the tenth grade this June, but as we haven't a twelfth grade here I quit, for I didn't want to go away from home, much as I wanted to go through the twelfth grade. Then my mother needs me at home as my father is working on a dam at Bamfield. I was reading Eleanor Stovel's letter, where she was telling about her visit to the Niagara Falls. I also have seen the Falls, but I was only five years old when I was there, so I don't remember it very well. Two years ago this summer my mother and two of my sisters went out to Kansas and Missouri. They went for one of my sisters' health, as she has been sickly since she was five years old. I stayed with my married sister. Oh! but I was lonesome. Well, Uncle Ned, I must close or you surely won't print my letter. Your loving niece,—Gladys Corbin, Stanwood, Michigan.

—Yes, I guess we can spare some space for one or two pieces of poetry each issue if the cousins want us to. Maybe some of the girl and boy poets who are members of the Children's Hour can send some original poems. Who will be the first one to do that?


By Alice Erickson, Lake City, Mich.
By Margaret Jackowiak, Sherwood, Mich
By LaVendee Adolph, Union City, Mich.

THE PRIZE WINNING DRAWINGS

Dear Uncle Ned:—Your delightful Children's Hour interests me so much that I have decided to join your merry circle. I am just a small town girl of the northern part of Michigan. I am a lover of the woods and I enjoy many tramps and camping trips in the woods. The spring of the year seems so fresh looking. It seems like everything is coming to life after being dead all winter. In the fall of the year, the woods are so pretty and delightful. Just like a kid, I love to drag my feet in the fallen leaves. The spring and fall are my favorite seasons, I am also a lover of reading and I read a lot. My favorite authors are Zane Grey, Harold Bell Wright, and Henry Knibbs. Those who have read "Rambling Kid", how did you like it? Didn't you fall in love with the "Kid"? I did, and I thought the whole story was just fine. Another story I like very much is "Heart of the Desert." If any girl between the ages of sixteen and twenty who lives in Mesick, Michigan, would care to write to me I would appreciate it very much. Also other members who would write to me, will receive an answer to their letters. Best wishes to Uncle Ned and all the cousins. Sincerely yours,—Josephine Damon, Box 86, Sidnaw, Michigan.

Dear Uncle Ned:—I wrote once before but I guess the letter found the waste basket. So I am going to try it again. I will describe myself before I tell anything else. I am 4 feet 11 inches tall, weigh 90 pounds, have blue eyes, and red hair. I am light complexioned so I have freckles. I am 11 years old. My birthday is the 6th of March. Have I a twin? If I have I wish he or she would write to me. I will answer every letter I get. I am in the sixth grade but I may take the seventh grade test next spring. Our school started a month ago. I like to go to school and wish everybody would, don't you, Uncle Ned? This is the first year we have had the twelfth grade. I have a mile and a half to walk to school. We had our first test last Friday. I got 80 in spelling and grammar, 97 in arithmetic, 85 in geography. Haven't gotten the other papers yet. I I hope I pass. There are six in our class. There are 16 in our room; six 6th graders, eight 8th graders, and two 7th graders. Our 7th graders are dumb. They are just like me. Ha, ha. I live on a 280 acre farm. We have several cows, and four horses, three cats, one dog. Well I guess I will give room for other letters. Will close. Your Nephew,—Harry Firestone. P. S.—I hope this letter will jump over the waste paper basket.

Dear Uncle Ned:—I was surprised to see my letter in print, so after all the waste paper basket did not catch my letter. Gladys Carlson and Edna McIntyre did not guess my age right, so they better try again. For two weeks my mother went for a visit with my brother and his wife, her sister and husband, in an auto. Cora Spartons, sent in the words of "Star of the East." for Iris Arnold, and you, Uncle Ned said she had them, would you please send the words to me? I know the tune, but not the words. I like that song don't you Uncle Ned? I also have been taking music lessons, but I stopped taking them because my teacher was so busy. But I will take them again after a while. Just think Uncle Ned, I have three nieces, their names are Goldie, Ethel and Doris. My one sister is married and two brothers, they each have a baby girl. Ethel calls me Dusty, and Doris calls me Dot-ta. I will have to ring off and let some of the other cousins use the line once. I am getting rather selfish. Good-bye. Your loving niece,—Dorothy Postma, R. 1, Box 8, Rudyard, Michigan.

Dear Uncle Ned:—Here comes another jolly farmer girl of eleven years to join your merry circle. I have read the Children's Hour many, many times. I have a girl friend who wrote a letter over four years ago to the M. B. F. asking the boys and girls to write. Several wrote and she is now corresponding with four. So I am going to ask the boys and girls to write to me and see if I can do as well. I will be in the 5th grade when school starts. We are getting a new state trunk line past our house so there is lots of work around here for men. Don't you want a job? Ha! Ha! It has been terribly hot and dry up here for some time but it is raining tonight and we are all very glad. We have some nice lakes up this way to go bathing in. My two girl chums and I went swimming yesterday and we had a glorious time. One lake is a resort, people come from far and near and live in the cottages during their vcations. Your niece,—Miss Nellie Watkins, West Branch, Michigan, R2, Box 65.

Dear Uncle Ned:—May I join your merry circle? We take the M. B. F. and enjoy it very much. I have read the Children's Hour for over a year. I am in the 8th grade at school. My age is between 13 and 17. Who guesses my age will receive a long letter from me. My birthday is on the 7th day of September. Have I a twin? My home is 2½ miles from Argyle, but I work at my sister's in Argyle. I am testing cream for the Shedd Creamery, and like it fine. I have long brown hair, blue eyes, and light complexion. I am five feet tall. My father lives on an 80 acre farm, has a large cottage, and a big barn. We have 8 cows, 6 calves, 4 cats, 1 hog, 4 horses, 100 chickens and about 60 little chicks. I have seven sisters and two brothers. One of my sisters live at Tyre. She also has a cream station. Four of my sisters are married. Two of them home and my two brothers are home also. I have two sisters in Detroit, one is married. I think I have said enough for this time, so will close, hoping to become your niece soon. Will some of the boys and girls write me a letter soon?—Helen Darr, Argyle, Michigan.

Address all letters to the Children's Hour as follows:

UNCLE NED,
The Business Farmer,
Mt. Clemens, Mich.

RECIPES

(Continued from page 15.)

salt, one even teaspoonful soda. Dissolve the soda in the warm water and pour it over the sponge. Break sponge up well, mix in the salt. Work the dough well and set aside in warm place for two and one-half hours until it starts to break on top. Now turn the dough onto the flour dusted board on table, pound with rolling pin and roll out to a thin sheet and fold over from both ends. Repeat this rolling and folding over a number of times, until the dough feels quite smooth and pliable. Then you can roll it out quite thin and prick or dot with fork. Cut out now with small round cutter or into square crackers and bake in ungreased pans in a hot oven. However the pans must be thoroughly heated in the oven before you lay the crackers on them as this makes the crackers light and flaky. If the crackers are placed on the hot pans quickly and put in oven immediately, they will require only a few minutes for baking.

Sour Milk Cake—I find good things in our paper so I am going to send my choice cake recipe. One cup of sugar, one-half cup of cocoa; then add one-fourth cup of butter in one-half cup of hot water and stir, add three-fourths teaspoon soda in one-fourth cup of sour milk or buttermilk, one cup flour; add last, one egg white beaten to a stiff froth. Flavor with vanilla and pinch salt and bake in moderate oven. You will find this a very good cake. Any frosting can be used. When frying chicken place spider in oven and see how nice your chicken will be.—Ethel Short.

MY FAVORITE RECIPES

Fresh Apple Pie—Five or six sour apples, one-third cup sugar, one-fourth teaspoon grated nutmeg, one-eighth teaspoon salt, one teaspoon butter. Pare, core and cut apples in eights, put around a plate one-half inch from edge, and work towards center until plate is covered, then pile on remainder, mix sugar, nutmeg, salt, lemon juice, and grated rind and sprinkle over apples. Dot over with butter. Wet edges of under crust, cover with upper crust, and press edges together. Bake forty to forty-five minutes in moderate oven. A very good pie may be made without lemon. Cinnamon may be used instead of nutmeg.

WHEN WILL DOLLAR BE WORTH ONE HUNDRED CENTS AGAIN?

(Continued from Page 4)

one," he went on after a pause, "but the labor unions have been very shortsighted in their policy of trying to restrict the numbers in indivilual organizations. I believe in the American working man. I believe in his patriotism and in his desire to be fair and generous, but he does not understand and the result is that he too often acts in defiance of his own best interests.

"The average American worker centers all his attention on a struggle for higher wages. He thinks that money is something that is of value in itself and does not realize that it is only a convenient means of exchange and is worth only just as much as the goods behind it. It ought to be easy to see that it is better to get $20 for which you can get $20 worth of goods, than to receive $30 which can be exchanged for only $15 worth of goods.

"I was talking to a man in the building industry today and he was telling me about the extraordinary way the unions have placed restrictions about apprentices and their persistant efforts to keep men out of their organizations. Of course, they are merely trying to improve their condition and in that they have my fullest sympathy. The trouble is that they are going exactly the wrong way about it. They are really making things worse for themselves. They have forced wages up, it is true, but they have also forced up the expense of living for not only themselves but for everyone else. this kind of artificial and false prosperity in one industry means depression in other industries, which means in turn a falling off in production and a lessened value for the dollar. If the building industry could command all the workers it needed wages might not be so high, but they would buy more and that would bring prosperity to a hundred other industries.

"The same thing holds true in the coal industry. The anthracite unen policy of the building trades bodies with the result that there is a shortage of labor in the anthracite fields and a great surplus in the soft coal regions. That kind of thing is happening all over the country with equally disasterous results. We can never get the proper balance in production until there is a free interchange of labor so that men can move without restriction in those directions where their services are most needed."

The Russian Way

"Can the Government offer any help in solving that problem?" I asked.

"No," said Mr. Roberts, with unions have followed the same mistakusual emphasis. "This is the kind of thing that has happened in Russia. People are always wanting to lay all their troubles on the Government and think that a law will remedy anything. You can not dictate to a man what kind of work he is to do and where he is to do it. He must be given a free choice."

"Then what is the remedy?"

"Education. The fundamental principles of economics are very simple and do not require any great mental ability to grasp. The first thing Americans have got to learn is the meaning of money. This foolish idea that high wages mean prosperity must be gotten out of their heads. The only real prosperity is spelled production and everything that interferes with production interferes with prosperity. That ought to be easy to understand but apparently it is not. Before a man is elected head of a labor organization he should be required to take an examination in the first principles of economics. The Government might help by making simple economics an obligatory subject in our schools."—The Detroit News. (Copyright by United Publishers News Service.)

BABES IN THE JUNGLE

(Continued from Page 8)

When the pawnshop opened the next morning me and Silver was standing there as anxious as if we wanted to soak our Sunday suit to buy a drink. We sauntered inside, and began to look at watch-chains.

"That's a voilent specimen of a chromo you've got up there," remarked Silver, casual, to the pawnbroker, "But I kind of enthuse over the girl with the shoulder-blades and red bunting. Would an offer of $2.25 for it cause you to knock over any fragile article of your stock in hurrying it off the nail?"

The pawnbroker smiles and goes on showing us plate watch-chains.

"That picture," says he, was pledged a year ago by an Italian gentleman. I loaned him $500 on it. It is called 'Love's Idle Hour,' and it is by Leonard de Vinchy. Two days ago the legal time expired, and it became an unredeemed pledge. Here is a style of chain that is worn a great deal now."

At the end of half an hour me and Silver paid the pawnbroker $2,000 and walked out with the picture. Silver got into a cab with it and started for Morgan's office. I goes to the hotel and waits for him. In two hours Silver comes back.

"Did you see Mr. Morgan?" I asks. "How much did he pay you for it?"

Silver sits down and fools with a tassel on the table cover.

"I never exactly saw Mr. Morgan," he says, "because Mr. Morgan's been in Europe for a month. But what's worrying me, Billy, is this: The department stores have all got the same picture on sale, framed, for $3.48. And they charge $3.50 for the frame alone—that's what I can't understand."

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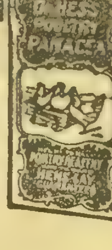

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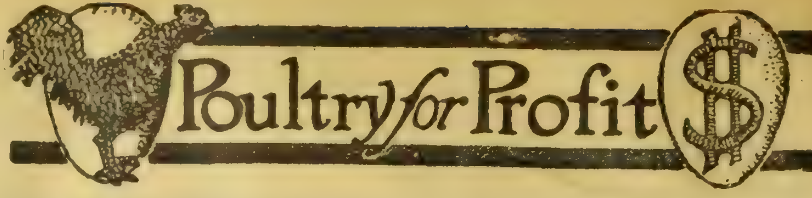

Poultry for Profit

HINTS ON MARKETING TURKEYS

TURKEY time's a-coming! If you want top prices for your birds, here's a few tips from the United States Department of Agriculture.

Range fattening is more satisfactory than pen fattening, the department says. Begin fattening about three weeks or a month before marketing, and proceed gradually by feeding lightly on corn in the morning and again in the evening a short time before the turkeys go to roost. Increase the quantity of corn fed gradually until the birds are getting all they will eat. Be careful not to feed new corn too heavily until the turkeys have become accustomed to it, to prevent digestive troubles.

Good sized, well matured birds in good condition for fattening can often be marketed to best advantage at Thanksgiving. Small, immature turkeys should be held until Christmas, for further fattening, but if the birds are unthrifty market them at once. Sales outlets to raisers within express shipping distance of good markets are local consumers, local buyers and dealers, more distant buyers or dealers and carlot shippers, and receivers or commission merchants of live or dressed poultry in the large cities. To determine the best available outlet study shipping charges and keep in touch with both local and distant buyers as to price. Distant buyers will mail quotations on request.

Most producers market their turkeys alive. Shipping dressed turkeys to markets is justified only when making local sales or there is an unusually favorable outlet for the dressed product. Shipping coops should be high enough to enable the birds to stand up. A coop three feet long, two feet wide and twenty inches high will accommodate five or six turkeys. Overcrowding may result in bruising which detracts from the market value; overcrowding may also cause death and complete loss.

If the birds are on the road only a few hours, do not feed before shipping. If they are on the road a longer time water and feel liberally to prevent shrinkage in weight. Ship in time to place the turkeys on the market a day or two before the holiday. Late arrivals may reach on overstocked market, and arrival after the holiday usually means lower prices.

Killing and dressing birds is simple when properly done. Hang up the turkeys by their legs and with a single stroke push the point of a sharp knife up through the roof of the mouth into the brain. When properly done this operation paralyzes the bird and loosens the feathers so that they come out easily Then sever the veins in the throat just beyond the skull for bleeding. The turkey should be dry picked, and plucked clean. Thoroughly cool the carcass after plucking, inasmuch as failure to remove all animal heat promptly will result in early spoilage. Cool either by hanging outdoors if the temperature is between 30 and 45 degrees, or by immersing in cold running spring water or ice water.

When thoroughly chilled, the carcasses are ready for shipment. A barrel is a convenient shipping container. Place a layer of cracked ice in the bottom of the barrel, then a layer of turkeys, followed alternately by layers of ice and turkeys, and topped off with a layer of ice. Tack burlap over the top of the barrel.

Caution! If you are building up a permanent turkey business be sure to retain as many of the finest, largest, quickest growing young birds needed to rear the next year's flock and send the rest to market.

QUALITY OF EGGS

HOW many eggs does your flock average? What was the highest individual production?

How much do your eggs weigh per dozen? How shapely are they? Is their color uniform or is it a bit uncertain?

The foregoing are two sets of questions worthy the consideration of any poultryman. The former set usually receives the bulk of thought, and hens are bred with a view to number of eggs rather than size, shape and color. Quality of course, includes much besides size, shape and color, but these are prominent points and go a long way toward determing the market value.

It is exceedingly common to find small eggs in the nests along with the medium and large. It is just as common to find eggs with certain very noticeable characteristics that render them unattractive for the market. For instance, among the white eggs there is one that shows distinct touches of brown. There is one that shows a tendency toward being speckled—a shower of little brown spots on it. There is one with a rough, unfinished point to the shell. Among the brown eggs there are pales and darks; eggs with even coloring or uneven.

Now it may be plain prejudice on the part of city folks that use our eggs, but they want uniformity. They want a white egg they want it beautifully white. If they like the brown they want it uniformly colored.

Likewise, they want eggs that fill the little compartments of the cartons reasonably snugly. Every purchaser of eggs at the grocery store feels that he is cheated if he can feel and hear the eggs roll about in the carton; even one loose egg gives an uncomfortable feeling.

The point at issue is that number of eggs is not the only evidence of a valuable hen. The producer of 200 eggs in a year that grade No. 1 or fancy is worth more than the producer of 210 or even 225 that grade low.

Therefore, is it not time for more attention to be paid to the second set of questions at the head of this article? Is it not time for the poultryman to become as careful about the size, shape and color and general quality of the eggs laid by individual hens in his breeding flock as about the number of eggs they lay?

As stated before, quality includes much more than size, shape and color, but the other elements are more easily controlled. Feeding and care of the eggs after laying are outstandingly important in the matter of getting quality. The feeding is more of a scientific matter than the care, perhaps, but plenty of fresh water, plenty of green feed, a grain and mash ration balanced and fed, according to the many experiment station recommendations, and charcoal, grit and oyster shell are the fundamentals of feeding. Care means among other things, frequent gathering during warm weather, keeping in well-cooled quarters and early delivery to market.

Did you ever break an egg into a saucer and try to pick it up with the thumb and fingers of one hand? Try it. You can not pick up a saucerful of water that way. If you can lift the entire egg, leaving only a little moisture in the saucer, the likelihood is that it will qualitfy as a first-class egg. At least, the cook in the high-class restaurant or hotel depends to a large extent upon this test when considering an offering of eggs. But you may depend upon it that an egg that has been held a long time and become stale will not thus pick up. Neither will it if it has remained in the nest several hours after being laid. Nor does quality hold up when improper feeds are given, though usually a hen goes on a strike and will not lay at all if she gets feed that is lacking in some essential in the production of good eggs. Hens do not cheat you; they will not put poor material in their products if there is a chance to avoid it.

FREE BOOK ABOUT CANCER

The Indianapolis Cancer Hospital, Indianapolis, Indiana, has published a booklet which gives interesting facts about the cause of Cancer, also tells what to do for pain, bleeding, odor, etc. A valuable guide in the management of any case. Write for it today, mentioning this paper. (Adv.)

Pit Necessity to Properly Protect Manure

THE loss of fertilizing elements in barnyard manure amounts to millions of dollars every year on American farms. This is a direct loss, suffered by the individual farmer, although in many cases he has not been aware of it because he was not thoroughly conversant with the fertilizing value of manure, and consequently did not take the proper precautions to conserve it. But through the work of agricultural experiment stations and agricultural colleges, the enormity of this loss has been definately established, and lack of information is no longer a valid excuse for a farmer losing large sums of money on his manure.

The Indiana Agricultural Experiment Station estimates that one-third of all the manure is wasted. In the opinion of this institution Indiana farmers alone lose more than $24,000,000 a year in fertilizing elements of farm manure. This loss comes from the failure to save the liquid content; uncontrolled fermentation of the manure; and leaching, or the washing out of soluble plant food. Pound for pound the liquid content is worth more than the solids and the greatest single item of loss is the liquid content. Where the manure is thrown outside the barn, with no protection, the liquid content soaks into the ground, the plant food is washed out by the rain, and uncontrolled fermentation largely destroys the value of the remainder. The New Jersey Agricultural Experiment Station found in a test case, that over half of the fertilizing value of barnyard manure was lost by exposure, while in Maryland a test of eighty tons of manure showed a loss of two-thirds of its value in one year.

MANURE VALUES

	Tons Yearly	Value Per Ton	Annual Value
Horse	5.2	$6.09	$31.67
Dairy Cow	8.5	4.56	38.76
Other Cattle	4.0	5.47	21.88
Sheep	0.4	9.66	3.86
Hog	0.6	6.19	3.71

To give proper protection to barnyard manure, leak-proof pits are a necessity. Frequently farm work makes it impossible to haul manure out on the field daily, so such a pit is required to properly store it. If thrown on the ground, liquid content is lost, but if kept in a proper pit this valuable part of the manure is saved, and may be kept indefinitely.

Concrete pits will not leak. A simple and inexpensive form of concrete pit may be built like a shallow enclosure alongside the barn, located so that it is easy to throw manure out of barn windows into the pit and likewise easy to load from the pit into the manure spreader. As it is usually not practical to use enough bedding to absorb all liquids, a cistern should be built near the pit to hold the unabsorbed portion. For the cistern and pit floor use concrete mixed in the proportion of one sack of portland cement to two cubic feet of pebbles. The proportion for the walls should be 1:2½:4. The walls of the pit should be built first. When the floor is placed a one-half inch space should be left around the edge which is later filled with tar to make a watertight joint. For ten cows a pit 16 feet long by 16 feet wide and 4 feet deep is large enough. For 20 cows the pit should be 24 feet long by 20 wide and 4 feet deep.—W. G. Kaiser, Agricultural Engineer.

RADIO BECOMES PREACHER IN COUNTRY CHURCH

(Continued from page 4)

Parties can be held in which both old and young participate and thus revive that friendly, neighborly spirit that is fast disappearing in our rural communities. Talk it over with your neighbors and then open that little church down on the four corners that has been closed for several years.

(EDITOR'S NOTE:—The illustration appearing with this article is used through the courtesy of The Detroit News.)

DAIRY and LIVESTOCK

BREEDS OF DAIRY CATTLE

BEGINNING with this issue The Business Farmer will publish a series of articles on the five breeds of dairy cattle that have attained considerable prominence in the United States. These articles are prepared by a specialist in dairy husbandry of the U. S. Department of Agriculture and were recently issued in bulletin form. The first to be discussed is the Holstein-Friesian cattle. Watch for these articles.

Origin and History

In the low countries bordering on the North Sea, especially in the northern part of Holland, Holstein-Friesian cattle have been bred for centuries. The land is rich and fertile and pastures are exceptionally good. Different names have been used to designate the breed, both in Europe and America, among which the following are the more common; North Hollander, Holland, Netherland, Holstein - Friesian, Dutch, Dutch-Friesian, and Holstein. The last is the name usually used in this country, although Holstein-Friesian is the official name.

Importations and Distribution

The Dutch settlers in the State of New York probably were the first to import individuals of the Holstein-Friesian breed, but the first importations of which records exist were made between 1857 and 1862 by W. W. Chenery, of Massachusetts, and many of our present-day animals are descended from these importations. For a time the trade in imported Holsteins flourished, but in recent years very few animals have been imported, owing largely to the quarantine which, on account of contagious animal diseases, has been in effect a large part of the time against continental European countries.

Holsteins have grown greatly in numbers and popularity in recent years, owing in a great degree to the increased demands of large cities for market milk. Cattle of the breed are most numerous in the Eastern and Middle Atlantic States, with the Middle Western and Pacific sections next in order. With the exception of the Jersey, there are more Holstein cattle in the United States than of any other dairy breed.

Characteristics

A universal characteristic of the Holstein-Friesian cattle is the black and white color of their coats. The sharply defined and contrasting colors of jet black and pure white give them a very striking appearance. Although either color may predominate, black below the knees is objectionable. Purebred animals with any red or gray in their coats are ineligible to registry.

In disposition Holsteins are docile, even tempered, and not excitable; in fact, they are rather lazy in general habits, as shown in their poor "rustling" ability in grazing scanty pastures. They are large consumers of feed, especially roughage, and do best when plenty is readily available.

The Holstein is the largest of the dairy breeds. It has a large, bony frame, which often is smoothly covered over all parts. Cows at maturity vary in weight from 1,100 to 1,800 pounds (average about 1,250 pounds); bulls range from 1,500 to 2,500 pounds (average about 1,800 pounds). The calves are usually thrifty and vigorous at birth and make rapid growth. The birth weight varies from 70 to 110 pounds, in some cases exceeding even the latter figure. Heifers reach maturity in frame at about 4 years, although increases in body weight occur up to 6 or 7 years of age. As a breed the Holstein shows good constitutional vigor.

Production

From the point of view of quantity of milk produced, Holsteins average higher than any other breed. The percentage of butterfat, however, which averages lower than that of any other dairy breed, tends to counterbalance the advantage of a greater milk production. The butterfat of Holstein milk is in the form of very minute globules, and

BREEDERS DIRECTORY

Advertisements inserted under this heading for reputable breeders of Live Stock at special low rates to encourage the growing of pure-breds on the farms of our readers. Our advertising rate is Thirty Cents (30c) per agate line per insertion. Fourteen agate lines to the column inch or $4.20 per inch, less 2% for cash if sent with order or paid on or before the 10th of month following date of insertion. SEND IN YOUR AD AND WE WILL PUT IT IN TYPE FREE, so you can see how many lines it will fill. Address all letters,
BREEDERS DIRECTORY, MICHIGAN BUSINESS FARMER, MT. CLEMENS, MICH.

DO YOU WANT choice 35.73-lbs. King Segis blood in your herd

From dams by Maplecrest De Kol Hengerveld, whose three sisters have each produced over 1200 pounds of butter in a year, two of them former WORLD'S CHAMPIONS?

40-Head will be Sold at Auction-40

Wednesday, November 14th

At Fair Grounds, Allegan, Mich.

Most of them bred to our CARNATION BULL, whose sire is own brother to that wonderful cow SEGIS PIETERJE PROSPECT—WORLD'S CHAMPION MILK PRODUCER—37,381 lbs. milk and 1448 lbs. butter in a year, and whose dam is a 32.38-lb. four-year-old daughter of AVON PONTIAC ECHO, a son of MAY ECHO SYLVIA, 1005 lbs. of milk and 41 lbs. of butter in a week. A GREAT OPPORTUNITY to secure a choice young bull for your herd from cows with records up to 25 lbs.

REMEMBER THE DATE—WEDNESDAY, NOVEMBER 14TH

HILLCREST FARM

HEREFORD AUCTION

At SOTHAM'S HEREFORDIA FARMS

ST. CLAIR, MICHIGAN

FRIDAY, NOVEMBER 2nd, 1923

One O'clock Sharp

Perfection Fairfax, Beau Donald, Repeater, Disturber, Fred Real, Bonnie Brae, and Anxiety breeding; Useful; Practical; Breeding Herefords; The kind that prove most profitable to purchasers. All Tuberculin tested.

53 Lots totaling over 75 head of Purebred Registered Herefords.
30 Cows with their 26 sucking calves Free with them.
10 Bred Two-Year Old Heifers.
10 Open Yearling Heifers.
3 Bulls including the intensely bred Beau Donald bull Beau Kingstone that was Grand Champion at six different 1923 Fairs and stood eighth at Chicago International Livestock Show in a class of over 30 two-year-olds in 1922. Also Glencoe an exceptional well bred Anxiety bull.

Production of Hereford Baby Beeves have proven exceedingly profitable for those producing them. Eliminate speculation by raising your own feeders. Make your roughage valuable by letting it winter your purebred Hereford cow. Attendance at this sale and acquaintance with Hereford Baby Beef Producers will convince you of the proven profitableness in raising them. This sale is an exceptional opportunity to obtain practical cattle for Baby Beef Production at your own price. Purchase your purebred Herefords now when you can do so on the safe and sane production of Baby Beef profitable basis. Attend this sale; Inform yourself, whether you buy or not. For illustrated catalog write.

T. F. B. Sotham & Sons, (Herefords since 1839) St. Clair, Mich.

AUCTION!

NOVEMBER 15, 1923

30 head Registered Polled Herefords
50 head Large Type Registered Poland Chinas
50 head Registered Shropshire Sheep

C. A. STIMSON

Eaton Rapids, Michigan.

G. P. PHILLIPS

THE GOLDEN RULE AUCTIONEER
Bellevue, Michigan
Pedigreed Sales a Specialty.
Write, wire or call for terms and dates.

Have You LIVE STOCK For Sale? An Ad in THE MICHIGAN BUSINESS FARMER Will Sell It!

Three Uneeda Orion Sensation Boars

Outstanding Duroc Jersey Sons of Uneeda Orion Sensation, grand champion at Iowa, Nebraska and Illinois State Fairs. Dam is a Pathfinder sow. Large, rangy, 16 mo. old; $40 each, crated and registered.
EDMUND THORP, Ann Arbor, Michigan, Route 7, Box 9.

SHEEP AND HOGS AT AUCTION

On the KINCH FARMS, Grindstone City.
Grindstone City is 5 miles east of Port Austin—Good gravel roads to all parts of state.

Wednesday, October 31

SALE BEGINS AT 10 A. M. FREE LUNCH AT NOON

There is always money in sheep. Note these comparative prices on the Buffalo market for 17 years—cattle and sheep, as reported by the Buffalo Stock Review.

Year	Lambs Top	Year	Lambs Top	Year	Top Steers	Year	Top Steers
1905	$7.75	1915	8.35	1905	$5.75	1915	9.00
1906	8.10	1916	9.00	1906	6.25	1916	10.75
1907	7.35	1917	13.25	1907	6.25	1917	17.50
1908	5.85	1918	16.50	1908	6.50	1919	16.00
1909	7.25	1919	15.75	1909	7.00	1920	14.50
1911	5.75	1920	12.50	1911	7.25	1920	12.00
1912	7.75	1921	11.00	1912	9.00	1921	9.00
1913	7.80	1922	11.50	1913	8.25	1922	14.75
1914	8.15			1914	9.75		

This is probably the greatest sheep sale ever held in the Thumb, and is the best chance Thumb farmers have ever had to get into the sheep game.

We are not going out of the sheep business. The sale includes surplus stock only from our flock of 1000 choice sheep.

SHEEP

25 Registered Rambouillet Bucks
50 Registered Rambouillet Ewes
13 Registered Romney Bucks, from imported stock
100 Delaine Breeding Ewes, purebred but not registered
125 Feeding Wether Lambs

TAMWORTH HOGS

The only real bacon hog in existence and the most profitable to raise. Will sell from our registered herd of 100, the following:—

4 Aged Tamworth Boars
4 Tamworth Sows and litters
6 Tamworth Sows, will be bred for March Farrow
10 Tamworth Gilts, open
2 Hampshire Boars
1 Hampshire Sow and litter

RAIN OR SHINE

Sale will be under cover in Huron County's biggest barn. Parties coming from a distance will be cared for at night if they bring cots.

Sale will be conducted by these famous auctioneers: Col. Dwight Lincoln, of Marysville, Ohio and Col. T. A. Stahlburn, of Michigan.

TERMS—Credit will be extended to parties desiring same.

FRANK KINCH, Proprietor

H. F. FINAN, Clerk. Grindstone City

Write for free booklets on Farm Sanitation

They contain practical suggestions for the prevention of diseases common to livestock and poultry and describe in detail the many uses of

Kreso Dip No. 1

(STANDARDIZED)

Parasiticide and Disinfectant

For all Livestock and Poultry

FREE BOOKLETS ON FARM SANITATION:

No. 151—**FARM SANITATION.** Describes and tells how to prevent diseases common to livestock.

No. 157—**DOG BOOKLET.** Tells how to rid the dog of fleas and to help prevent disease.

No. 160—**HOG BOOKLET.** Covers the common hog diseases.

No. 185—**HOG WALLOWS.** Gives complete directions for the construction of a concrete hog wallow.

No. 163—**POULTRY.** How to get rid of lice and mites, also to prevent disease.

Kreso Dip No. 1 is Sold in Original Packages at all Drug Stores.

ANIMAL INDUSTRY DEPARTMENT OF

Parke, Davis & Co.

DETROIT, MICHIGAN

CLAIM YOUR SALE DATE

To avoid conflicting dates we will without cost, list the date of any live stock sale in Michigan. If you are considering a sale advise us at once and we will claim the date for you. Address, Live Stock Editor, M. B. F., Mt. Clemens

Oct. 30—Shorthorns, Wm. Geisenhafer and Sons, Dimondale, Michigan.
Oct. 31—Sheep, Tamworth Hogs, Frank Kinch, Grindstone City, Michigan.
Oct. 31—Holsteins, R. P. Clement, Adrian, Michign.
Nov. 2—Herefords, T. F. B. Sotham & Sons, St. Clair, Michigan.
Nov. 6—Holsteins, Eaton County Holstein Breeders' Association, A. N. Loucks, Secretary, Charlotte, Michigan.
Nov. 14—Holsteins, Hillcrest Farm, Allegan, Michigan.
Nov. 15—Herefords, Poland Chinas, Shropshires, C. A. Stimson, Eaton Rapids, Michigan.

CATTLE

HEREFORDS

Are You Considering What to Feed This Fall That Will Prove Profitable

Before purchasing feeders investigate the Sotham Earlripe HEREFORD Beef Plan. A proven, profitable system of beef production of great benefit to the producer. Realize the utmost from your feeding operations. Write for information. HEREFORDS, Yearlings, Two-year-olds, Young cows with calves, all registered and T. B. tested at practical prices for producing Earliripe HEREFORD Baby Beeves. Terms granted upon proper credentials.

T. F. B. SOTHAM & SONS
(Herefords since 1839) Saint Clair, Mich.

--HEREFORDS--

5 extra size Repeater heifers one year old for $500.00. Also 10 cows with ten nice lusty calves by side for sale.
If in want of bulls, write us.

ALLEN BROS.
616 So. West St. Kalamazoo, Mich.

We Have Bred Herefords Since 1860

Herd established by Gov. H. H. Crapo. We have a few choice yearling bulls for sale at farmers prices. You are invited to visit our farm.
CRAPO FARM, Swartz Creek, Michigan.

RED POLLED

FOR SALE—REGISTERED RED POLLED Cattle. Both Sex.
PIERCE BROS., R. 1, Eaton Rapids, Michigan.

ANGUS

WE HAVE SOME FINE YOUNG ANGUS BULLS from International Grand Champion Stock at reasonable prices. E. H. KERR & CO., Addison, Mich.

AYRSHIRES

FOR SALE—REGISTERED AYRSHIRE bulls and bull calves, heifers and heifer calves. Also some choice cows.
FINDLAY BROS., R 5, Vassar, Mich.

for that reason the cream does not rise rapidly on the milk. The small globules are an advantage, because the milk is not liable to churn in shipping. Holstein milk has little color.

Families

The families of Holsteins are very numerous, and it is difficult to determine which are the more important. Probably the following are among the more widely known: Aaggie, Abbekerk, Artis, Beets, Burke, Butter Boy, Carlotta, Clothilde, Colantha, De Kol, Fayne, Gerben, Hartog, Hengerveld, Johanna, Korndyke, Mechthilde, Mercedes, Mutual, Netherland, Ormsby, Pietertje, Pietje, Pontiac, Sarcastic, Segis, Spofford, Vale, and Veeman.

FALL DAIRYING

OCCASIONALLY we hear objections urged against dairy farming due to the fact that it is a year-a-round job. While this is in a sense true, it is offset by the fact that the income is as continual as the labor. To make fall dairying successful, there are a number of things that must be taken into consideration. If fall dairying is looked after at this season of the year, a splendid opportunity for profitable production is offered during the latter months of the year. Now is a good time to get everything ready in the way of stable quarters and the food supply. It is also a good time to get together the late fall and winter herds. Keep the cows now coming fresh in the best milking condition and they will be the ones of greatest profit during the next nine months.

If you have not enough cows look about for more and be careful to select those that will freshen soon. Feed them well until they calve and then give them all the food they want. This is a good time of the year to test the cows and find out what they are doing in the way of production. It does not pay to keep a poor cow in the herd if a good one can just as well take her place. Neither does it pay to carry on winter dairying with a lot of strippers unless they have been good milkers all spring and summer, and you are keeping them out of respect for what they have been.

This is a good season of the year to look around for a good dairy sire if you are needing one. You will have him to use in December and January, the best time for breeding cows intended for milking. Get, if possible, a sire out of a very good milker as he is more likely to transmit the qualities of his dam than his sire.

At this season of the year it is a good time to get together the winter feed for the stock. Provide plenty of good hay and fodder. The silo should be filled. Have plenty of good straw close at hand. It can't be put to better use than under the milk cow often during the winter. A good warm stable with plenty of windows for light and ventilation is necessary where cows are kept for winter dairying and it is quite as necessary to have a good floor in the stall so that the animals can be kept in comfort and in a clean condition.

Plan a yard close to the barn where the cows can be kept to themselves and not be bothered by colts and steers. In this yard have water, salt and hay always on hand so that the cows can get at it when they feel so inclined.

We have suggested a pretty good program for one season. There is no danger that it will all be done, but there are some things that can be done this fall, which will make fall dairying a successful undertaking.

WASTE BY POOR STORAGE

THERE is a fearful waste in this country caused by poor storage of grain on the farm. The principal loss is caused by moisture and rodents. Old makeshift bins and cribs that have long passed their usefulness are still housing valuable grain. By water and snow leaking in much grain is damaged by mould, must and decay, and little holes on every corner admit rodents that destroy great quantities of grain every year. It is estimated that two hundred million dollars worth of grain is destroyed annually by rodents.

The housing of our grain is of the greatest importance because it not only prevents a fearful loss but also protects the price, allowing a crop to come on the market as it is used or needed, and avoiding the dumping of grain either in a warehouse or on the market speculators which tends to lower the price.

Sheet metal bins and cribs have been tested out for several years and are giving splendid satisfaction. They have the advantage of being fire, rat and moisture proof, and grain housed in them can be used as collateral on loans or advances. Nothing is safer than good grain housed in a safe place. These bins can be locked up and the key turned over to the banker or party who makes the loan. The renter can divide his crop with the land owner, and each can hold his share in a safe and secure place until it reaches the market. The time has come for better and more permanent buildings, and we will see more of these metal storage bins used in the future, for they are filling every requirement.—A. L. Haecker.

GOVERNMENT BULLETINS OF INTEREST IN NOVEMBER

A SMALL list of Farmers' Bulletins and Circulars of general interest during November is believed to be of value to our readers. Copies may be obtained free by addressing the Office of the Secretary, Publications, United States Department of Agriculture, Washington, D. C., as long as the supply lasts. Specify number and name and whether Farmers' Bulletin or Department Circular.

Farmers' Bulletin 754, The Bedbug; 847, Potato Storage and Storage Houses; 910, Sweet Potato Storage; 1091, Lining and Loading Cars of Potatoes for Protection from Cold; 1096, Frost and the Prevention of Damage from it; 1105, Care of Mature Fowls; 1160, Diseases of Apples in Storage; 1186, Pork on the Farm: Killing, Curing, and Canning; 1194, Operating a Home Heating Plant; 1210, Measuring and Marketing Farm Timber.

Department Circular 238, U. S. Grades for Potatoes Recommended by the United States Department of Agriculture.

RAISING THE SKIMMILK CALF

GOOD results in calf raising require that the milk fed be fresh. One of the common causes of indigestion, and its most pronounced symptom, scours, is feeding stale milk. It is possible to use sour milk successfully if the calf is once accustomed to it and if it is fed in the same condition regularly. Feeding milk that has been standing 24 hours, or even 12 hours, is dangerous. Milk that is not really sour but old and stale is far more dangerous than milk that is soured with a pure acid taste. The younger the calf the more sensitive it is to the condition of the milk.

Fortunately the farm separator has solved the problem of getting good milk for calf feeding wherever cream is sold.

Another cause of sickness in hand raised calves is feeding from dirty pails or cans. Every utensil that comes in contact with milk which is to be used for calf feeding should be kept as clean and scalded as thoroly as tho the food was to be used by the family. We have seen a farmer take a can of skimmilk out to the calf lot, take the pail off the top of a post and proceed to feed the calves. When he was through the bucket was again turned over the post. Feeding a bunch of calves in a pig trough is sometimes done. Sooner or later calves compelled to drink milk under such conditions will be sick with a bad case of scours and the owner will probably say he never did have any luck with skimmilk calves.

It is just as important to keep the pen clean in which calves are kept in the barn. Experience has taught many men that calves will not do well in a damp, dirty pen or stall. Under such conditions pneumonia is almost certain to give trouble. The calf needs all the sunlight it can get. In arranging the barn do not put the calf pen in a dark corner because the space is difficult to use for other purposes. The calf pen should be given the sunniest place in the barn.

An abundance of water should be available at all times. The calf needs come water in addition to that contained in the milk and wants to

HOLSTEINS

86 Head Registered Holsteins

PUBLIC SALE

ADRIAN, MICH.

OCTOBER 31, 1923

10 A. M. at A. C. Furman Farm, 6 miles west on road M-34.

Nearwood Farm Herd

R. P. CLEMENT

HERD SIRE FOR SALE AT FARMERS PRICES. T. B. Tested guaranteed every way. Pontias Romeo Dutchland DeKol No. 270204 H. F. H. B. sire Pontiac Dutchland 2'd Dam Pontiac Osiris. H. S. BOWERMAN, Two Miles South of Romeo, Michigan.

GUERNSEYS

FOR SALE: BULL CALF BORN IN MARCH. Right every way. Dam is dam of Belle Missaukee Beauty A. R. 6th cow in Class D. D. and State Champion in Class. Sire has ⅞ of same breeding as "Red Rose" and Missaukee Sally Class leading in G. G. Price for quick sale $150.00. Buy type and production.
A. M. SMITH, Lake City, Michigan.

JERSEYS

REG. JERSEYS, POGIS 99th OF H. F. AND Majesty breeding. Young stock for sale. Herd fully accredited by State and Federal Government. Write or visit for prices and description.
GUY C. WILBUR, BELDING, Mich.

FOR SALE: JERSEY BULLS, HOOD FARM BREEDING.
J. E. MORRIS, Farmington, Michigan

SHORTHORNS

FOR SALE: REGISTERED SHORTHORN Bull, 4 years old, of good size and dark red in color. Kind and gentle. Wonderful herd sire. Price right. If interested address
L. A. KING, R. 1, Harbor Springs, Michigan.

FOR SALE: FOUR REGISTERED BRED two year old Shorthorn heifers. Tubercular tested. Ten cents per pound. Inquire
PIPER & GOODALE, East Tawas, Michigan.

REGISTERED MILKING SHORTHORN CATTLE, Shropshire and Delaine sheep. Stock and prices right. Write wants. Also car load feeding cattle. CLOVER CREST RANCH, Tawas City, R3, Mich.

RAISE SHORTHORNS WITHOUT HORNS Like Kelley does. U. S. Accredited Herd No. 28945. For description and price write,
L. C. KELLY & SON, Plymouth, Michigan.

FOR SALE: SHORTHORN CATTLE. IMPROVED Black Top Delaine Merino Sheep.
FRANK ROHRABACHER, Laingsburg, Michigan.

SWINE

O. I. C.

O. I. C'S: 75 LAST SPRING PIGS, PAIRS not akin. From 3 good strong sires. Also fall pigs. Recorded free. ½ mile west of depot.
OTTO SCHULZE & SONS, Nashville, Mich.

O. I. C. Breeders. I Offer You 10 Weeks Old Boar Pig shipped subject to your approval for $12. pedigree furnished. A few sow pigs at same price. Sired by Michigan Giant. Order yours now for future use. Maple Valley Stock Farm, North Adams, Michigan.

HAMPSHIRES

Hampshire Boars and Fall Pigs Now Ready to ship. Bred gilts in season, 11th year.
J. W. Snyder, St. Johns, Michigan, R. 4.

DUROCS

Hill Crest Farms, Perrinton, Mich.
Duroc-Jerseys and Black Top Delaine Sheep. 35 stock rams to pick from. Farm 4 mi. straight south of Middleton. Gratiot Co.
NEWTON & BLANK.

AT THE STATE FAIR WE SHOWED ONE of the largest boars. He won 3rd in his working clothes (no fitting). He is back home and we want you to have a gilt or sow bred to this fine Colonial Boar. Write us.
SCHAFFER BROS., R. 4, Oxford, Michigan.

PEACH HILL FARM offers choice weanling Duroc pigs, either sex. Priced very reasonable. Write us.
INWOOD BROS. Romeo, Mich.

A FEW CHOICE DUROC SHOATS, THE BIG long kind. Either sex. Price $10 each registered.
F. A. LAMB & SON, Cassopolis, Michigan.

Duroc Inn Offers Choice Duroc Pigs Either Sex priced reasonable. Sired by "Walz Sensation."
John L. Walz, Reese, Michigan, R. 4.

CHESTER WHITES

CHESTER WHITES FOR SALE—SPRING Boars of right type with quality. Shipped on approval. WILBER JONES, Reese, Michigan.

POLAND CHINA

LARGE TYPE POLAND CHINAS. ONE FALL Gilt by Ohio Liberator. Spring boars and gilts now ready to ship. Write your wants.
W. CALDWELL & SON, Springport, Mich.

SHEEP

FOR SHROPSHIRE RAMS WRITE OR CALL ON
DAN BOOHER, R. 4, Evart, Michigan.

WEST MARION OXFORDS. 25 YEARS Breeding. The best stock for sale. Both sex.
WM. VAN SICKLE, Deckerville, Michigan

FOR SALE—Reg. Oxford Rams and Ewes. Satisfaction guaranteed. Write your wants to Geo. T. Abbott, Palms, Mich. Phone Deckerville 73-3.

AMERICAN DELAINE SHEEP BOTH SEXES for sale. Rams good ones. Both Polled and Horned.
F. H. CONLEY & SON, Maple Rapids, Michigan.

REGISTERED HAMPSHIRE RAMS AND Ewes. Size, type, quality and good breeding.
W. W. CASLER, Ovid, Michigan.

(Continued on page 23.)

drink a little at a time at frequent intervals during the day. This need for water is often overlooked and the calf is thirsty as well as hungry and gorges itself with milk when it has a chance.

Salt should also be kept within reach of calves old enough to eat hay and grain.

There are a number of advantages in having calves to be raised by hand in the fall. The fall calf can be kept growing nicely on skimmilk until grass comes, then weaned and turned out to pasture without checking its growth in the least. The disadvantages of winter feeding are more than offset by the hot weather and annoyance from flies experienced by the spring calf. For the calf under six months it does not make much difference whether the roughage be grass or hay. Some prefer hay, but for the second six months grass gives much better results. In the winter season the young calf is also more certain to get the careful attention it needs than it is during the busy summer season.

Summer calves are greatly annoyed by flies and can be made more comfortable by allowing access to a darkened stable during the day time. Breeders of valuable pure-bred calves find it a good practice to inclose a small pen with fly screen for the very young calves.

If there is any other good use for the skimmilk, the skimmilk calf should be weaned at the age of six months. If the milk is needed especially for other purposes it may be cut out of the ration at five months. When the calf reaches this age it is capable of eating enough grain and hay to continue its growth unchecked after the milk is taken out. Weaning should be made gradually. The milk allowance is cut perhaps one-fourth, then after three or four days to one-half, and finally eliminated. The grain ration should be continued for some time at least after the milk feeding is discontinued. The mistake is sometimes made of cutting off both the milk and grain at once and turning the calf out to pasture to shift for itself. This is too great a change to be made at once and results in the growth of the animal being checked for two months or more.

Uncle Rube Spinach Says:

JEST TO RESUME

YES, an' mebbe to presume, or whatever the word is—I ain't writ anything in some little time 'cause my pen wuz out o' order an' I didn't have any ink an' my mind wuz—well you know what it wuz. With all the bootleg' stuff goin 'round, a man's mind might be anything but a swill bar'el. You know there's nice things 'bout hogs 'sides jest bacon an' hams? They won't drink bootleg whisky. All right, class me with 'em if you like, but I won't drink either. An' I ain't hollerin' for no five per cent stuff to take the place of the licker we used to have neither.

But, while you've been readin' my letters right along, I ain't been writin' so often. You see I am like the ol' Methodist preachers—when the "sperrit" calls say somethin'. Oh yes, the sperrit has called but bein' out of ink I couldn't answer the call.

But now that a kind friend has given me part of a bottle o' ink I'm at it agin. It won't be much to brag of 'cause I want to save my ink. But folks, there's a lot of things goin' on that riles me an' mebbe riles you. In Oklahoma the Klu Kluxes are tryin' to run things. So is Gov. Walton—they're hevin' a hot time of it taken altogether. Well, that ain't all—Detroit an' Wayne County kinda wants to run the state of Michigan—ain't it? An' they say child labor ain't used in the sugar beet fields—look up the records of these men an' mebbe you'll find they're interested in the sugar beet bizness—ets allus wise to know a man 'fore you place too much faith into 'im. In Kentucky convicts are holding a jail—a siege is on an to a day or two ago the convicts were havin' the best of it.

Farmers are at the mercy of speculators an' are losin' money on most everything they raise.

Two thousand people are killed in a year by poisoned hootch—if they didn't drink it they wouldn't be killed but that's neither here nor there so we'll say nothin' 'bout it. 45 or 50 thousand are killed by automobiles every year—some of our able statesmen, preachers an' such, want to amend the liquor laws an' make the stuff easier to git, but heve you heard one of 'em say a word 'bout easin' up on the motor laws? An' jest here let me ask what effect it would have on bootleggin' bizness if we had five per cent beer, light wines an' all the trash the five percenters advocate. They don't believe it would stop, bootleggin' neither do you or I. We had lots of 'em when s'loons wuz runnin' wide open—we would still heve 'em if the country was flooded with five per cent beer an' light wine—yes, or any other so-called light stuff. An' the congressmen are talkin' of passin' laws to help the farmer—somethin' like fixin' a price for his output. Folks, don't you see how foolish such talk is? As soon as a price wuz fixed by law to make a thing prof'table everybody would be raisin' that commodity an' the world—or government would be swamped.

I work and deem it an honor to work for the largest food factory in the world. When the supply exceeds the demand they immediately cut down the supply. If the farmers would do the same there would be no call for help from the gover'ment or from any other source—supply never has an' never will create demand. Let demand govern your work—give it a couple years' trial an' see how you come out.

An' even that ain't the worst—marriages are exceedin' births—purty nigh—an' divorces are exceedin' both—purty nigh too.

An' yet we are livin' in a free and enlightened country, what's the matter with it? The only way to help everybody 'ceptin' gamblers is to stop gamblin'. The laws won't let me shoot a in'cent little game o' craps or play a game of poker nor bet on a horse race for mebbe two bits or four bits a game, but it 'lows men to bet millions on your wheat crop, stock, cotton—the very things that make the nation rich an' honest and great. Yes they do it every day—they ain't no law agin' that so in conclusion I say—if you're goin' to be a thief be a big one—or if you're goin' to be a big'mist get 15 or 20 wives or husban's, gamble on a big scale an' the law protects you, steal a hot dog to keep your baby from starvin' an' get 20 years to life imprisonment—if you have a penknife onto you or a corkscrew it's life an' mebbe more. Now ain't it the fact?

An' yet farmers ask fer farm loans from a gover'ment that is financed by—well from farmers. Does 35 cents out of a dollar appeal to you? Dear farmer friends, that's what you are gettin' of every dollar I pay fer your stuff. Cordially yours—UNCLE RUBE.

Hundreds of Breeders Write:
"Your Remedy Cured My Herd of Contagious Abortion"

The Bowman Abortion Remedy has wiped out the old idea about Contagious Abortion being incurable. The remarkable record made by this remedy with both cattle and hogs proves that it is master of the most terrible disease known to livestock men.

Here is One of the Letters

Dec. 22, 1922.
Erick Bowman Remedy Co.,
Owatonna, Minn.

Gentlemen: In answer to your inquiry will say that we have had no trouble since our herd was treated. All cows are safe in calf and this is the first time in a great many years that we have not had trouble with cows retaining the after-birth. They are giving more milk this winter than they ever did. Yours respectfully,
JOHN G. HENDERSON.
Albert Lea, Minn.

I make no unsupported claims for the Bowman remedy. I guarantee it to be a positive cure for Contagious Abortion, retained placenta, white scours and calf pneumonia.

Nothing I could say for the Bowman Remedy would be so convincing as the testimony of men who have used it. That's why I invite full investigation.

Write me today

If there is Abortion in your herd, I have the remedy that will get rid of it for you. Find out for yourself. The sooner you act, the sooner your losses are stopped. Send a postal today.

Guarantee

I guarantee to bring every cow or sow that is a breeder back to normal, healthy delivery if treated with Bowman's Remedy according to directions. In exceptional cases, where additional treatments are needed, I will furnish these free, except for shipping cost. For every animal Bowman's Remedy does not cure of Contagious Abortion, I will refund the cost of treatment.
ERICK BOWMAN, President.

ERICK BOWMAN
Discoverer Bowman's Remedy

Erick Bowman, President
Erick Bowman Remedy Company
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Filth and lice cannot accumulate—bigger returns are positively assured.
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offers its services to the *Farmers of Michigan* as a high class, reliable commission house for the sale of *Dressed Calves* and live poultry. Write us for information how to dress and ship calves to market. $250,000 capital and surplus. 34 years in business in the same place and same management.
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MARKET FLASHES

MARKET SUMMARY

Wheat easy and demand slow. Corn quiet. Oats and rye unchanged. Beans firm and demand satisfactory. Receipts of butter large and demand small. Eggs higher and firm. Fair demand for poultry. Cattle strong to slow. Sheep steady. Hogs lower.

(Note: The above summarized information was received **AFTER** the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press.—Editor.)

FOOTE'S MARKET LETTER

BY W. W. FOOTE

Improved Business Outlook

REPORTS from business houses, manufacturers and bankers show a hopeful feeling, and were it not for the extreme difficulty experienced in lifting the price of wheat to a level allowing a living profit for owners, the situation would be fairly satisfactory. Everywhere it is recognized as a matter of the greatest importance that farmers should abandon the one-crop policy which is so dangerous to those who practice it, and it is fortunate that so many Michigan farmers are engaging in other lines, such as fruits, berries, grapes, poultry, etc. Huge shipments of apples are being made from Benton Harbor to Chicago, and a few days ago a train of thirty-five cars of apples, the largest that ever left Michigan, reached Benton Harbor on its trip from Bangor, Michigan, to Chicago, each car containing from three hundred to four hundred bushels of choice apples. Some of the enterprising farmers of northern Indiana are accomplishing great results from onion culture, and a farmer of Kosciusko County has grown 8,000 crates of onions on thirteen acres, which are worth $3.20 per 100 pounds delivered at the railroad. The muck land thereabouts is admirably adapted for growing onions.

A Chicago grain man who has been over the northwest says that the corn crop in Minnesota and South Dakota is in fairly good shape to move. There is a large yield there, and Minnesota is becoming a dairy state to an extent that will absorb the greater part of the coarse grains. Farmers in Minnesota, he says, are doing well where they have diversified their crops and gone into dairying. In North Dakota where they have followed this rule they are also doing better.

Advanced Farming Methods

The National Geographical Magazine for October has an intensely interesting article showing the methods that are revolutionizing farming operations. It contains a picture of a "combine" at work on a Canadian farm. This gigantic machine cuts, threshes and delivers to the wagon alongside more than one hundred acres of wheat a day. Many elderly people can remember the time when it would have required the labor of about three hundred men to accomplish the work in the same time, to say nothing of twenty-eight horses to haul the grain. Even the binder and threshing machine would call for about sixty men and forty horses for cutting, hauling in and threshing a hundred acres of wheat in a day. Another picture of bonanza farming in Canada shows work on a seven-thousand-acre farm, illustrating the character of the competition the American farmer must meet in the future. One tractor and six men do the work of twenty-eight horses and fourteen men, with horse-drawn binders. The article points out that the high cost of labor will do more than any other agency to bring about lower production costs on the farm by necessitating an increased substitution of machines for hands.

The Grain Markets

It is evident that putting wheat on a higher price basis cannot be done by applying the law of supply and demand, the farmer being out of all proportions, and after waiting for hoped for outside help, prices lost much of their recent advance. World's available stocks of wheat increased nearly 53,000,000 bushels in September, and are now estimated at 215,000,000 bushels, or 38,000,000 bushels more than last year. Europe shows no disposition to buy freely, and exports are still running far below a year ago. Minneapolis mills are grinding at 62 per cent of their capacity, against 68 per cent last year, and mill feed in that market is off $1.50 to $2 a ton. Excellent crop reports are coming from the southwest, plenty of rains having fallen. The visable wheat supply in the United States is up to 66,000,000 bushels, comparing with 33,411,000 bushels a year ago. It is obviously impossible to tell just what the future will develope, but perhaps it would be a good plan to hold back part of the crop and see what takes place. The bears place much stress upon the appearance of Russia as an exporter of wheat. With rye selling as much as 37 cents below wheat, it fails of a good export movement. Late sales were made in the Chicago market of December wheat at $1.05, comparing with $1.12½ a year ago, showing a marked recent decline.

Farmers Sell Corn

Old corn is a mighty scarce article, but the new crop is a big success, and there is a growing tendancy among farmers of the corn belt to sell as much old corn as they can spare, the prevailing impression being that market prices are good and worth taking. While predictions are fallible, it seems not unlikely that corn will settle later on a lower price basis. At any rate, the country shows more disposition to sell new corn to arrive. Not long ago yellow corn was sold in the Chicago market at $1.14 a bushel, being 11 cents higher than during the previous week, and the highest price paid since September, 1920. In recent years it sold as high as $1.85 to $2.36. Oats are not selling very high, and much is being fed on farms. All the grains are exported much less freely than a year ago; yet the visible oats supply is but half that of last year. On the other hand, that of rye aggregates 15,880,000 bushels, comparing with 9,555,000 bushels a year ago. December corn sells on the Chicago market at 75 cents, comparing with 67½ cents a year ago, while December oats sold at 42 cents, or the same as a year ago.

"Corn is selling above a profitable feeding basis as compared with the price of hogs," said Herbert J. Blum, "Government reports show that in September the ratio of the number of bushels of corn required to buy 100 pounds of live hog was 8.5 to 1, the lowest for that month in over fourteen years. In July the ratio was 7.7 to 1 and in June 7.51 to 1. The annual average for thirteen years is 11.2 to 1, and it is usually figured that when the ratio drops below 10 to 1 that feeding is not profitable. I look for farmers to sell both corn and hogs unless there is a marked widening of the difference, and corn will probably have to decline."

The Hog Problem

To feed or not to feed is the question which is bothering many stockmen owning young hogs, and a short time ago an Indiana farmer wanted to know whether he should mature his bunch of 40 youngsters averaging in weight 150 pounds. Much depends upon whether the farmer is well equipped for fattening his hogs; and it is always easy to make mistakes, but where the farmer has plenty of corn and other feeds and the pigs are healthy, and thriving, most experienced farmers, it would seem, would feel like taking a chance and wait until they tip the scales at around 200 pounds at least before marketing. If feed must be bought, it is another matter. Of course, the farmer must do a little figuring, setting down the probable cost of the corn consumed and the probable price the hogs will bring when sold. It is well to consider the enormous hog supply in the country, and lower prices for the remaining months of the year are looked for. Last week's Chicago receipts were overwhelming, and prices fell with a vengeance, large numbers being carried over nightly, with a poor eastern shipping demand. Light weights sold much lower than the heavies. The week's hog receipts were the largest since early in July, and prices were the lowest since then, closing sales being at $6.15. Heavy butchers sold highest, being 20 cents above prime bacon lots. A year ago the best hogs brought $9.65. Combined receipts in twenty markets for the year to date amount to 33,148,000 hogs, comparing with 25,802,000 a year ago.

Excessive Cattle Receipts

Last week's, Chicago cattle receipts were enormous, and after early sharp advances in prices due to moderate supplies, the later big runs sent values down at a rapid pace. Last week's receipts reached 81,600 cattle, the largest of the year, and prices were 50 to 75 cents lower. Steers sold largely at $8.75 to $11,75, the week's top being $12.85 and closing top $12.25. The better class sold at $11 and over, with pretty good lots at $9.50 to $10 and common kinds at $6.75 to $7.50. Stockers and feeders were off largely 25 to 50 cents, selling at $4.50 to $8.25, good lots being taken mainly at $5.50 to $7. The best calves sold at $11 to $12.25 and cows and heifers at $4.50 to $9.

Large Sales of Feeding Lambs

This has been a great year for the sale of range feeding lambs, and in addition to the large purchases made in the Chicago and other markets, extensive buying has been carried on in the range country. These purchases do not show up in the market receipts, so that the published statements of shipments of lambs from western markets are misleading. Michigan is a heavy buyer and feeder of lambs this year, the big corn crop raised this season acting as a stimulus, while Indiana and Illinois are going to feed heavily. The recent government report on the feeder sheep and lamb business for the year up to October 1 shows 33 per cent more gone to the country during July, August and September than last year. The present indications are that the far west will feed less lambs this year and the corn belt more. Colorado is expected to feed the usual number of lambs, and it is now thought that the aggregate number fed in the country will be much the same as last year. Feeding lambs going to the country cost less than a year ago. Breeding ewes have had a large demand all the fall, with nowhere near enough to go around, and high prices are paid, a few yearlings going as high as $12 per 100 pounds. There is no danger of over-doing the sheep business at present. The number of sheep in the United States on January 1 was only 37,209,000 head comparing with 61,504,000 in 1900, while our population increased 30,000,000. Last week's Chicago lamb market showed a decline of $1 to $1.50 sales being the lowest since a week earlier and the lowest since August. Late sales of lambs were at $9 to $12.80, feeder lambs fetching $12 to $13.

World's Potato Crop Short

The world's production of potatoes this year was more than 5,000,000,000 bushels exclusive of Russia. The fifteen countries reporting to date the crop this year is 79 per cent of last year's. Northwestern Europe produces the largest crops of potatoes, the soil being especially adapted to such production.

WHEAT

Less talk on government for the wheat farmers accounts for a weakness in the wheat market during the past week. Other conditions remained about the same as they were two weeks ago. The trade still feels that the government intends to do something to help the farmer but the buyers who loaded up during the past months have become a little nervous and are selling. The result has been lower prices. The ones who do not believe that the government will help can see nothing but lower prices in the future while there are others who will buy the moment a new plan is suggested. World news gives the market a bearish outlook. Canada is disposing of a large crop. Argentine claims to have a heavy crop while Russia is reported to be ready to feed most of Europe. In spite of these reports the market has not weakened as much as many have expected.

Prices

Detroit—Cash No. 1 red, $1.14; No. 2, $1.13; No. 3, $1.10; No. 2 white, $1.14; No. 2 mixed, $1.13.

Chicago—Cash No. 3 red, $1.05; No. 2 hard, $1.07@1.11.

Prices one year ago—Detroit, Cash No. 2 red, $1.22; No. 2 white and No. 2 mixed, $1.20.

CORN

The Detroit corn market was quiet last week and prices declined on the closing day of the week. However for the last two weeks the price at Detroit has advanced a total of six cents. Buyers expect large receipts this week as they believe that farmers are willing to sell at present price levels.

Prices

Detroit—Cash No. 2 yellow, $1.14; No. 3, $1.13.

Chicago—Cash No. 2 mixed, $1.05 @1.07; No. 2 yellow, $1.06@1.08½.

Prices one year ago—Detroit, Cash No. 2 yellow, 78½c; No. 3, 77½c; No. 4, 76½c.

OATS

There has been little change in the oat market during the past fortnight and prices at Detroit are 2 cents below what they were two weeks ago. Receipts are small and the market quiet in tone.

Prices

Detroit—Cash No. 2 white, 48c; No. 3, 46c.

Chicago—Cash No. 2 white, 42¼ @44c; No. 3 white, 40¾ @43c.

Prices one year ago—Detroit, Cash No. 2 white, 49c; No. 3, 47½c; No. 4, 45c.

RYE

Rye was steady at Detroit last week but the price was one cent lower. Demand has slowed up some according to reports. However, this seems to be a temporary lull only, and leaders in the market expect to see increased demand in the near future and higher prices.

Prices

Detroit—Cash No. 2, 77c.

Prices one year ago—Detroit, Cash No. 2, 84c.

BEANS

The bean market at Detroit became easy the forepare of the past fortnight and prices declined. Now the market seems to be again on the road to recovery. Demand has improved and the price gained on the closing day at Detroit last week. The market appears to have considerable strength. Reports reach us from the bean growing sections of the state that the new crop is yielding well, the high yields being from 25 to 30 bushels to the acre. As to the future trend of this market you will be interested in the article by B. A. Stickle appearing on page 3 of this issue. You may not agree with him but it will be well worth your time to read it. Elevators report new beans coming to market in large quantities.

Prices

Detroit—C. H. P., $5.40@5.50 per cwt.

Prices one year ago—Detroit, C. H. P., $6.60 per cwt.

POTATOES

Potatoes are easy at Detroit and in liberal supply with prices unchanged. The new crop is going to market quite rapidly and most markets report supply in excess of demand. The New England potato crop is turning out well and is of excellent quality. Reports from all sections of the country where potatoes are grown, with the exception of the west, indicate that the crop is of good quality. In the west there are several sections that report yield and quality disappointing. Farmers

Prices

Detroit—Michigan, $1.33@$1.36 per cwt.

Chicago—Wisconsin, round white, 90c@$1.10 per cwt.

Prices one year ago—Detroit, Michigan, $1.20 per cwt.

HAY

The demand for the better grades has continued good but lower grades are moving slowly. Hay prices have flucuated with supply and demand at the principal markets. While some markets are reporting a supply exceeding the demand, as a rule the opposite is the case and more strength is shown and the general average of prices is a little higher.

Prices

Detroit—No. 1 timothy, $21@$22; standard and light mixed, $20.50@$21; No. 2 timothy, $19@$20; No. 1 clover mixed, $12.50@$13; per ton.

Chicago—No. 1 timothy, $25@$28; No. 2, $22@$25; No. 1 light timothy and clover mixed, $23@$25; No. 1 clover, $21@$23; No. 2, $17@$19, per ton.

Prices one year ago—Detroit, standard timothy and light clover, $16.50@$17; No. 1 clover, $15@$16, per ton.

THE EXPERIENCE POOL

(Continued from page 13.)

better and it was three dollars cheaper. They are a fine thing if they will work right, they heat the whole stove, oven and water in reservoir. The Roberts Metallic Bath Tub Company has the best one I have seen. It costs more. I think it is worth the extra you have to pay for it. The Oliver has a small tank that has to be put six foot above the stove. It is nasty to fill. The Roberts you can put any place, and has a pump attached to tank to pump the air. The Oliver has no pump. I wish I had my fifteen dollars out of mine. I hope I am not too late to do some good. Mrs. W. E. Stevenson, R3, Milford, Mich.

There are several Oliver burners in this vicinity—some in ranges, some in heating stoves and some in big heating stoves in stores, and the owners think they are just fine, would not think of exchanging them for coal or wood now. Some have had trouble with their burners but have found that it was through their own fault—that the tank was not water tight where the outdoor tank was used, or the tank was not high enough above the burner, etc., but whenever one follows directions carefully I think he or she will like the burner very much. Of course a change to something new is harder for some than for others and if things do not go just right all the time some get discouraged, but if they will use patience and judgment and especially the Oliver directions, I believe the burner will be entirely satisfactory. Sincerely, Mrs. Norman Moyle, Mattawan, Mich.

PRITCHARD'S
WEATHER
FORECAST
INTERPRETED BY THE STARS

Week of October 28

AVERAGE conditions for this week in Michigan are not expected to vary much from seasonal although if there is any difference temperature will be a little above normal and precipitation (rain or snow) will be a little below.

Wind currents will be such during the first part of this week to induce an inflowing of air with the result that the most part of the first half will be fair with cool nights and mornings.

About Wednesday the weather will become unsettled and the temperature warmer. These conditions will intensify during Thursday at which time we expect showers and high winds. These conditions will be general during the greater part of the remainder of the week but the showers will be mostly light in character.

At the end of this week the temperatures will fall to much lower readings.

Week of November 4

The early days of this week will experience cold, fair weather in Michigan.

These conditions will gradually weaken so that by the middle of the week light showers and high winds will have reached the state and continue over Thursday when showers will be general but mostly light. Winds will also be strong, rapidly shifting to the northwest and inducing clearing skies. However, rising temperature on Friday will induce more cloudiness and during the last two days of the week unsettled weather will prevail with light rain or snow flurries general.

Moderate December

November will be an average late fall month and December will be moderately warm but wet.

PRICE FIXING HOLDS NO HOPE FOR WHEAT FARMERS

(Continued from Page 3)

to make sure that the acreage called for was not exceeded."

If the price of wheat were fixed, it is natural to assume that the prices of flour and bread would be controlled. It is also logical to assume that demand would develop for a profit to be guaranteed producers of other commodities; cotton, tobacco, and dairy products. Another step, and price fixing would be carried over into the industrial field. Where will it end? There is no line that marks a definite stopping place.

Economic Solution

The American Farm Bureau Federation has considered the wheat question an economic problem calling for an economic solution. Legislation can help and has helped by laying the foundation upon which to build the economic solution. The Farm Bureau took the leadership in demanding storage and credit legislation at Washington that would permit farmers to store their products, if in their judgment that was the profitable thing to do and finance the selling of them over the consumptive period instead of "dumping" them at harvest. The Farm Bureau has been instrumental in the passage of laws removing the legal obstructions in the path of co-operative associations. Thus, through legislation, the way has been opened for farmers to use their own initiative and intelligence in making farming profitable. The responsibility for success rests on them and not on political representatives. The American Farm Bureau believes that the responsibility is resting where it belongs.

The situation might be illustrated thus: The Government builds the concrete highways upon which merchants, bankers and farmers may operate their automobiles but it does not presume to operate the automobile of any of these individuals. It maintains the highways and enforces the traffic rules equitably to all. The Government also builds the economic highways along which the business of the merchant, the banker and farmer is carried. The responsibility of the Government is to see that the business of each may be transacted on a basis of equality. There its responsibility ends.

A price, fixed by the Government, is here taken to mean a guaranteed minimum price.

If the supply was so large that the natural price, set by supply and demand, would be lower than the guaranteed price, the Government would buy in the surplus.

It the Govenment had to dispose of its purchases at a loss, the deficit would be met by taxation.

A price satisfactory to the high-cost producers would be high enough that these producers would continue to produce wheat and the low-cost producers would plant additional acreage when it is generally agreed that the world supply of wheat is too large to sell at a profit to large numbers of farmers.

Acreage which ought to be devoted to other purposes would be used for wheat and higher taxes would be necessary.

Some proposals include provisions putting penalty for excess supply upon producers. This is proper if workable. It may be pointed out that under tho present arrangement, without a fixed price, the penalty for overproduction falls upon the growers.

Price fixing, once started, would naturally extend to numerous commodities. There is no logical stopping place. Heretofore, price regulation in the United States has been held in the field of monopoly as in th ecase of railroads or has been subject to voluntary arbitration as in the case of milk (war measures excepted.)

Price fixing would subject economic relationships to politics. Production and distribution would be controlled by government commissions. We would have a kind of socialism. With prices under political control, the farmer would find himself outvoted three to one.

The American Farm Bureau Federation considers the wheat question an economic problem that can best be solved by economic measures. Legislation can and should be and has been used in removing obstructions in the way of the economic program. This is all that should be expected from it. On farmers, and not on political representatives, rests the responsibility for profitable farming.

Lady Motorist—"Oh, Mister Policeman, when I tell you why I speeded, you'll let me go."

Officer—"Why were you speeding?"

Lady Motorist—"I was trying to catch up with that lady to see how her hat is trimmed."—Dry Goods Economist.

GET YOUR COAL FREE

Special offer to Michigan Business Farmer readers. A large successful 16-year old coal company, The Peoples Coal Company, 1120 W. 35th St., Dept. 675, Chicago, Ill., shipping direct from mine to user, is offering this unusual opportunity to one coal user in every neighborhood who has a few hours spare time each month. This is its method of quickly introducing the finest grade, freshly mined, free burning coal which is being sold from mine direct to user, thereby saving the profits of all middle men. Man of good standing and well known in his community can get his coal free. We suggest that you write this firm today. —Adv.

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Wayne County and Home Savings Bank.
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Lunch at noon. Plan to attcnd this sale.
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J. E. MACK, Auctioneer, - - - S. T. WOOD, Pedigree Man.

LOOK! ONLY 17¢ Per Rod & Up Direct From Factory
Peerless Fence
Think of it! the well-known high grade Peerless Fence sold for as low as 17c a rod; it's because we now sell direct from factory at factory prices. This means a big saving for farmers everywhere. Write for free 104 page catalog of Fence, Farm Gates, Steel Posts, Barb Wire, Roofing, Paints—the low prices will astonish you—save you 40%.
PEERLESS WIRE & FENCE CO.
Dept. 3906, CLEVELAND, OHIO
Factories at Cleveland, Ohio, Adrian, Mich., Memphis, Tenn.

BREEDERS' DIRECTORY
(Continued from page 20.)

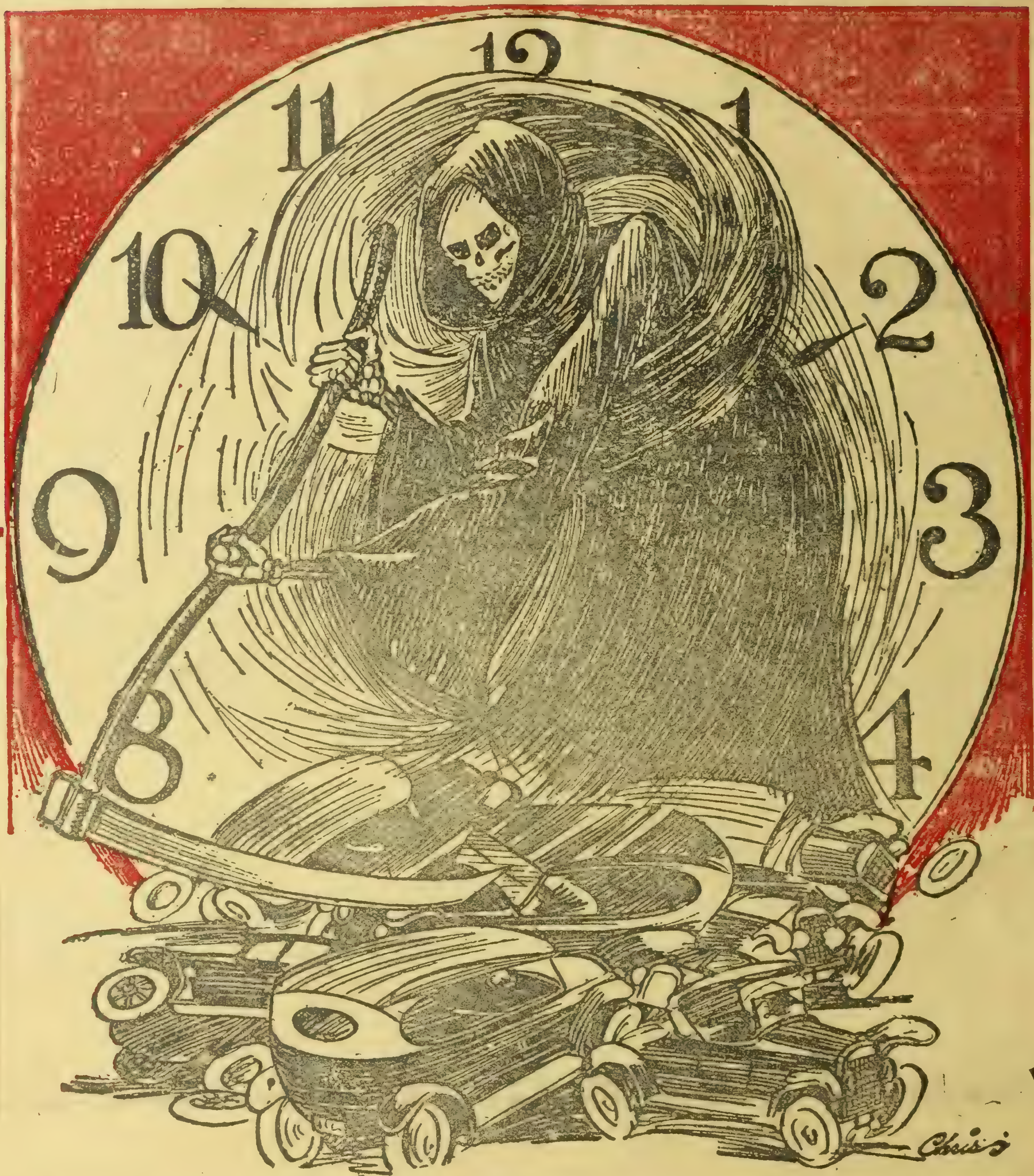
DOGS

FOR SALE: ONE MALE AND ONE FEMALE Pup five months old, one quarter Blood Hound and three quarters English Fox Hound trained on rabbits. My dogs are extra good on Racoon, Skunk, Fox or any fur bearing animals. Write for particulars.
DONALD ANDERSON, Harrisville, Mich., R. 3.

Fire Having Destroyed Our Kennels, We Are offering for quick sale Reg. Collie Puppies at reduced prices. Silvercrest Kennels, Gladwin, Mich.

German Shepherd, Airdales, Collies; Old English Shepherd dogs; Puppies; 10c illustrated instructive list. W. B. Watson, Box 27, Macon, Mo.

Fate Plays a Hand in Every Man's Game!



Your Accident May Happen Any Hour, Any Day!

Play Safe — Don't take the chance of being caught without Automobile Insurance. Come to an old established and Reliable Company that is now STARTING NINTH YEAR. Non-Assessable Policy by experience.

Total Assets, December 31, 1921, $137,392.51
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Citizens' Mutual Auto Insurance Co.,
Howell, Michigan.

Without obligation tell me what it will cost for the various types of insurance offered by your company, on the following autos or trucks:

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NAME ....
Postoffice.............................. B. F. D. No...............
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The policy holders have paid but one renewal each year. The company has never borrowed a dollar and has increased its assets each year. In this mutual company the policy holders obtain a very reasonable rate in comparison with old line companies, as the assets have increased each year at such a rapid rate as to make the policy non-assessable by experience. The year 1923 has brought forth the largest volume of business in the experience of the company. With about 45,000 policy holders, we have a state-wide organization of adjusters, agents and attorneys in every county seat and city in the state of Michigan to give service.

See Our Nearest Local Agent or Write to

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HOWELL - - MICHIGAN

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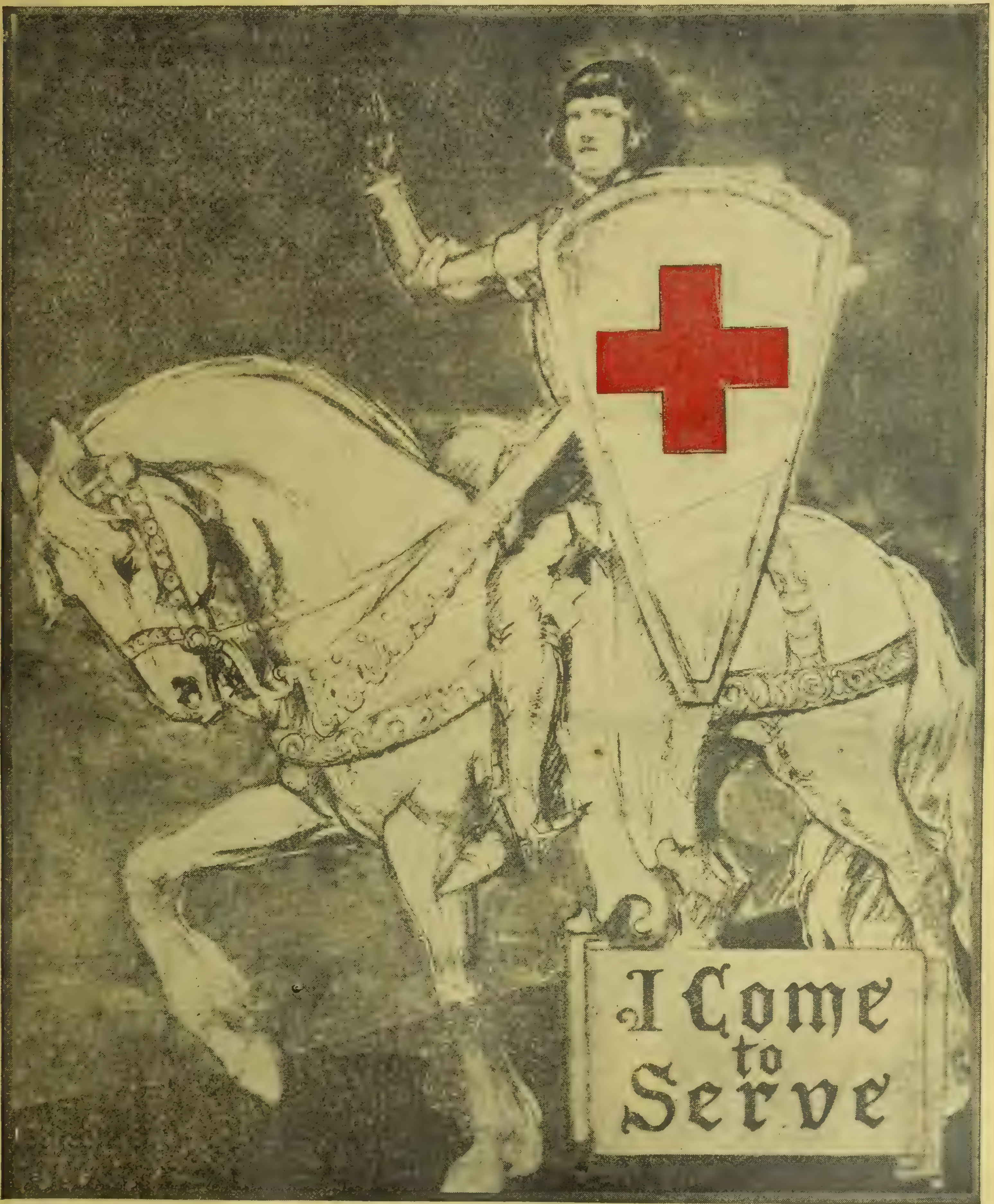
The Michigan BUSINESS FARMER

An Independent
Farm Magazine Owned and
Edited in Michigan

VOL. XI, No. 6 SATURDAY, NOVEMBER 10, 1923 TERMS: TWO YEARS $1
60c PER YEAR—5 YRS. $2



Remember the Red Cross Roll Call, November 11th to 29th

In this issue: Grange Approves of Prisoners Building Roads at Muskegon Meeting—Krafft's Second Article Explains How Federal Reserve Makes Short Time Loans Possible—Don't miss these and other big features

Fordson

"To make farming what it ought to be—the most pleasant and profitable profession in the world."

This is Henry Ford's vision of the Fordson.

Not a mere machine of so much horsepower, so many cylinders or so much drawbar pull. All are important. But much more than that—an opportunity to make farm life, your life, more productive and more worth living.

This vision of a better day on the farm has become more than a dream. The Fordson has made farming more pleasant and profitable.

How well the spirit of the builder is moulded into the Fordson through years of patient testing is proven by experience of a host of owners.

With operations organized on a more profitable basis, work done when it should be, labors lighter in proportion to results, the drudgery gone, life is really more pleasant on Fordson Farms.

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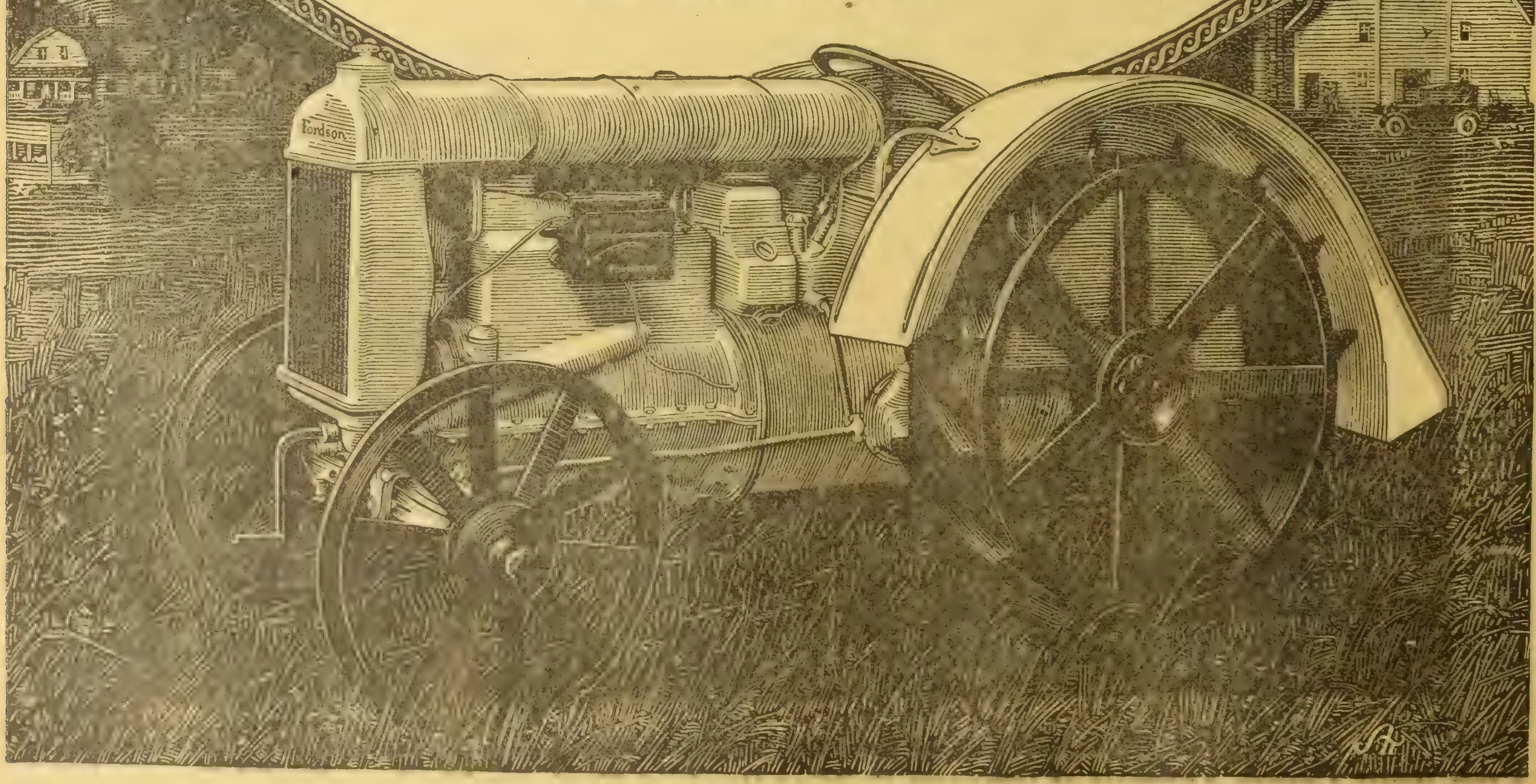


SATURDAY
November 10th,
1923
—
VOL. XI, NO. 6
—
Being absolutely independent our columns are open for the discussion of any subject pertaining to the farming business.

"Hew to the line, let the chips fall where they may!"

The Michigan BUSINESS FARMER

"The Only Farm Magazine Owned and Edited in Michigan"

Published Bi-Weekly
Mt. Clemens, Mich.
—
TWO YEARS $1
—
Entered as second-class matter, August 22, 1917, at the post-office at Mt. Clemens, Mich., under act of March 3rd, 1879.

Board of Agriculture Sues Administrative Board

Long Drawn-out Battle at Lansing Comes to Head When Petition for Writ of Mandamus is Filed Before Supreme Court

Playing Political Checkers at Lansing

(Last Minute Wire from the "Front".)

Lansing, Nov. 5.—The next move in the case is up to the administrative board as a result of an order issued by the state supreme court Monday compelling the administrative board to show cause on or before November 8 why a writ of mandamus should not be issued compelling Auditor General O. B. Fuller to turn over $75,000 of the extension work money required by the agricultural board.

Clare Retan, assistant attorney general, who will handle the case for the administrative board, declared Monday he probably would have his brief ready for filing Wednesday. The position of the state will be that the legislature has power to direct how appropriated funds shall be expended and can delegate authority to the state administrative board or any other state agency to see how such funds are expended.

WHAT we have been looking for over at Lansing happened last Friday when the Supreme court was formally asked to decide the issue which has befogged the situation there ever since David Friday left in the midst of a hot battle, the presidency of the Michigan Agricultural College.

There are many points, personal and political involved, but the direct issue to be decided is whether the farm bureau can, by contributing some $190,000 to the salaries of county agents in Michigan, demand a part of their services to further their own organization ends. The Governor claimed not and because the state board of agriculture refused to meet his demands finally, through the state administrative board, cut off all extension funds.

In this brief for a writ of mandamus filed by Judge William L. Carpenter, it is claimed that the Governor and his board thus assumed to exercise most unusual powers over the appropriation of the 1923 legislature for extension work by the agricultural college, in the face of the provisions of Section 8 of Article 11 of the state constitution which provides that "supervision of the college and the direction and control of all agricultural college funds shall be by the state board of agriculture."

The petition, which is made on behalf of the state board of agriculture, with Governor Groesbeck and the other members of the state administrative board as defendants, sets forth at length the complete history of this controversy between the two official bodies, and asks for a writ of mandamus to compel the administrative board to compel its instructions to the auditor general forbidding him from issuing a warrant for $75,000 to the state board of agriculture and other warrants which may properly be requested and also to compel the auditor general to issue the warrant in question.

No Order Yet

There was not a quorum of the supreme court present Friday to sit in the matter and issue an order for the administrative board to show cause why the writ should not issue. A quorum might be obtained Saturday, but it is not expected before some time next week.

"Respondent (administrative) board has assumed to command relator (board of agriculture)" declares the brief of Judge Carpenter in support of the petition. The reasons for this conclusion as set forth are:

(a) "To remove the director of extension work who has been duly appointed by relator and approved by federal department of agriculture, and to appoint in his stead another person not chosen by relator and not approved by said department of agriculture.

(b) "To invest in the person thus chosen by respondent board the exclusive power to employ all county agents and other employes engaged in said extension work, to prescribe their duties and fix their salaries.

(c) "To cut off more than $190,000 of the funds derived from private contribution and available for said extension work, although the use of such funds has been expressly authorized by said Smith-Lever act."

Stress Federal Act Effect

Much stress is laid by Judge Carpenter and John W. Beaumont, his associate counsel in the case, on the part played in this issue by the federal government under the Smith-Lever act, by which M. A. C. receives $160,000 annually for extension work from the federal department of agriculture by its matching this amount with $150,000 more, which was the object of the $150,000 appropriation for this year and next made by the 1923 legislature.

It is pointed out in the brief that Prof. Robert J. Baldwin was selected as director of extension work for the college, which is expressly approved by the United States secretary of agriculture, that in June of this year Prof. Baldwin submitted his plan of the work for the next year and that on June 15 it was approved by the federal chief of extension work, and on June 20 by the federal director of states, relations service.

That budget totaled $597,317 divided as follows: State of Michigan, $150,000; United States government, $160,000; various counties, $95,828; county farm bureaus, $191,489.

Support Farm Bureau Aid

Contracts and engagements have already been entered into for county agents and other extension workers, and that organization is now in operation, says the brief, on the basis of the budget presented. It is insisted that contributions by the local farm bureaus are beneficial and that "this is the design of the department of agriculture (federal) in order to intensify the local interest of the farmer in said extension work and to induce him to pay directly a large portion of the expense of the work that is wholly for his benefit."

Then the brief recites the various actions of the state administrative board which finally culminated in its adoption of the report by Charles J. DeLand, secretary of state and a board member, which provides that this year's state appropriation of $150,000 for extension work be withheld until the state board of agriculture comply with the following demands:

(1) That the extension division be placed in the hands of the dean of agriculture at M. A. C.

(2) That county agents receive their salaries and expenses from state, federal and county funds, "but from no other source," thus cutting out the local farm bureaus' support.

(3) That the dean of agriculture submit to the administrative board a revised budget on that basis, and then if funds are not sufficient to meet all expenses "the matter be referred to this (administrative) board for further attention."

Relative to the provision in the 1923 state appropriation act which gives the administrative board "general supervisory control" of the fund in question, the brief contends that the legislature obviously intended that the appropriation should be used "in accordance with the constitution and federal and state laws in carrying on said extension work." The attorneys maintain that the authority of the administrative board which it has assumed would interpret the state legal provision as follows:

"The appropriation made in this act shall not be turned over to the state board of agriculture unless that board agrees to expend the same in whatever way the state administrative board may determine, even though thereby the applicable constitutional provision and the federal and state laws are violated."

Owosso Farmer Makes $1500 From Ten Acres of Michigan Robust Beans

By H. C. RATHER

Extension Specialist, Farm Crops, Michigan Agricultural College.

FIFTEEN hundred dollars from ten acres of beans, numerous fields which returned $100 to $150 per acre, the exceptional achievement of an Owosso grower whose high yield went in the peak market and brought $185 per acre. These are numbered among the 1922 achievements of Michigan growers of Robust beans.

While farmers in the Wolverine state have partaken in a measure of the hardships which are the lot of agriculturists with ninety per cent wheat the great crop of navy beans, for which Michigan is famous, have been a means of averting a good deal of the disaster which has come upon the one crop farmers further west. Particularly is this true with the class of bean growers who have employed every means to produce their crop economically, for while the average grower in Michigan produced only ten and one half bushels per acre, worth on the seven dollar market about $44, the average grower of Robust beans in Michigan produced twenty-one bushels per acre and his acre income on the same basis was over $90.

Made First Bow in 1915

Robust beans first made their bow to farmers in 1915. The variety is a result of plant breeding work at the Michigan Agricultural College. For years men engaged in this work were seeking a means of combatting the ravages of bean diseases which were taking a heavy toll from the farmers' profits. The most plausible control seemed to be a variety immune or at least resistant to the diseases which caused this serious loss.

Accordingly, when Professor F. A. Spragg in his numerous trials of commercial white navy beans found a very bushy disease-free plant completely surrounded by disease stricken neighbors, he carefully increased and tested its progeny and found he had something of real merit.

The bean itself was typical of the usual run of Michigan white navy beans showing no appreciable difference in appearance, quality, or cooking character. It fitted right in with the regular run of commercial beans of this kind which have made beans from Michigan so desirable.

The habits of growth, however, proved to be distinctly individual. While not possessing entire immunity, the Robust bean, the name given to this new variety, has proven very resistant to blight and anthracnose, and mosiac seems to not trouble it.

The plant has a characteristic bushy habit of growth and retains its leaves until almost complete maturity thus receiving fullest use of leaf functions in attaining vigorous growth. Then as the crop reaches maturity the leaves fall almost in a day and a well-vined and podded plant, easily handled on the fork is left.

From three to seven days longer growing season is required for Robust beans than for some of the earlier navy beans, but early June plantings have proven very dependable in this State.

"In my first experience with this variety," says Sam Conke, a prominent bean grower in Michigan's Thumb district, "I sowed half of a large field to Robusts and the other half to my own commons. The Robusts yielded 37 bushels per acre while the commons produced 25."

Another Thumb district farmer sowed Robust and common beans in alternate rows across the center of his field and harvested them separately. The Robust outyielded the commons by nine bushels per acre. E. C. McCarty of Bad Axe was one of the original Robust growers and has conducted several variety tests under supervision of the Michigan Agricultural College. Robust beans have invariably been returned winners by from 25 to 40 per cent. Farmers from every bean growing section of the state have reported equal advantage in this improved variety and trials in New England, New York, Minnesota, and California have all indicated this superior productivity and disease resistance of Robust beans.

Disease Resistance Factor

The disease resistance is not only an important factor in yield, but decreases the picking percentage when the beans are marketed. Michigan elevators almost invariably report Robust beans as brought in by their farmers, to be the lighter pickers.

At one time some elevators believed wrinkling of beancoats to be characteristic of this variety, but a careful survey of the situation by the writer indicated this to be somewhat of an illusion. While Robust beans when wet may wrinkle and cause loss over picking machinery the same is true of commons. In fact elevators in districts which handled no Robust beans whatever. reported as much of this trouble as any, while the Finde Cooperative Elevator, a prominent member of the Michigan Elevator Exchange and whose volume runs nearly 90 per cent to Robust beans reported no excessive difficulty whatever. Robust and commons harvested under the same conditions have proved to be about alike so far as this characteristic is concerned. It is inter-

(Continued on Page 31)

Delegates and visitors to the Fiftieth Annual Session of the Michigan State Grange assembled in front of the Muskegon Armory where the meetings were held

Grange Approves of Prisoners Building Roads

Decided Stand Taken On Important Questions of the Day at Fiftieth Annual Meeting of the Michigan State Grange at Muskegon

By CARL H. KNOPF

(Special Correspondent of The Michigan Business Farmer.)

WHERE THE STATE GRANGE STOOD AT ITS FIFTIETH ANNUAL MEETING

Endorsed:

Law enforcement.
Consolidated Schools.
Income tax amendment.
A system of uniform text books.
Private Peat's "Plan for Peace."
Use of convict labor to build roads.
Stand of State Board of Agriculture.
Work of county agricultural agents.
Enforcement of Eighteenth Amendment.
Only taxpayers shall vote on bond issues.
Establishment of state-owned cement plant.
Establishment of state-owned fertilizer plant.
All voters be able to read and write English language.
To prohibit hunting, fishing or trapping on posted land.
The Meggison system for distribution of primary school funds.

Condemned:

Tax exempt bonds.
Veto of gas tax bill.
One-man government.
Further propogation of Chinese pheasants.
False reports concerning child labor in the beet fields.

ROUNDING out a full half-century of meetings, the 1923 session of the Michigan State Grange, held at Muskegon, October 23-26, was pronounced one of the best in the history of the order. Three hundred and seven delegates were present representing seventy-five counties of Michigan. These delegates, together with the many visitors, brought the total attendance above the seven hundred mark.

Enthusiasm and determination dominated the meeting. Enthusiasm over the record made by the Grange during the past year and a determination to carry out a program of Grange organization and extension work which shall secure even greater results during the coming year.

It is very commedable of the Grange that the women have equal representation with the men. Fully half the delegates at this session were farm women. They did their share of organization and committee work and were prominent in the discussion of the various issues considered. As a meeting of earnest, progressive farm leaders, both men and women the State Grange for 1923 had no superior.

Four Big Issues in Michigan

There is no doubt as to the temper of the Grangers of Michigan. They are determined and mighty determined, especially concerning the four big issues of the present time in Michigan, namely, Income Tax, Gas Tax, Prohibition, and the State Board of Agriculture.

From the very beginning of the meeting, resolutions concerning these four subjects began pouring in from all parts of the state and left no question whatever as to what the Grange thinks. And the action taken by the delegates leaves no doubt as to what the Granges proposes to do in regard to these live questions of the day.

The address of State Master A. B. Cook of Owosso gave the keynote of the meeting. Gov. Groesbeck and the State Administrative Board were denounced for their attempt to usurp power. State Master Cook stated, "The Administrative Board seems to be supreme from the fact that it is so organized as to control very largely the legislative appropriations, and this, of course, gives it a strangle hold on all state activities. The State Board of Agriculture has had difficulty exercising its constitutionaal perogatives in directing the college's affairs. The makers of the constitution contemplated no such interference."

Gov. Groesbeck was pictured as attempting the rôle of a dictator, especially in connection with the gas tax, which measure was vetoed without regard to the wishes of the people of Michigan.

The stand taken by U. S. Senator Couzens in favor of a modification of the Volstead Act was criticised by Mr. Cook who said: "The attitude of one of our United States senators who declares in effect that the eighteenth amendment is unenforceable, a joke, and who asks for the return of old time beer, is astounding. We regard the attitude of indifference taken by many of our highest public officials in regard to prohibition enforcement as constituting the greatest reflection upon our system of government with which it has ever been confronted."

Work less hours per day and spend more time at recreation was an outstanding recommendation made by the State Master. "Does it seem the part of wisdom to work our heads off producing a surplus which others will not pay us a fair price for?" he asked. "People in other lines determine their hours of labor and the power of public opinion enforces the decision. We can, and should, do the same. With reasonable modern working hours and conditions for the farmer, no oversupply would come. One hour of labor would stand against one hour of our brothers in other industries. Our market, relieved of its overburden, could be placed on a compensatory basis and kept there. Then the farm would be a good place for young and old. Mr. Cook recommended a ten hour day, including chores, for the farm saying that it would about equal an eight hour day in the city where considerable time must be spent in going to, and returning from, work.

Higher Scale for Farm Family

The State Master also spoke of the splendid results being secured through co-ordinating the efforts of the Grange with those of the Farm Bureau and other organizations.

Mr. Cook closed his address with an appeal to the farm folks to put farming on a higher plane, to establish play grounds on the farms and to take more recreation. He stressed the importance of an increased farm income which he believes can be obtained by reducing the number of working hours and through cooperative marketing.

He asked for a square deal for the women of the farms and asserted that the boys and girls of the farms must have the opportunities and advantages which truly belong to them.

For Prohibition Enforcement

The Grange has always been one of the bulwarks of the prohibition movement and they still stand foursquare on the proposition. The first resolution to be introduced called for the strict enforcement of the Eighteenth Amendment and asserted that the only modification should be such as would make it stronger and more drastic. The vote was unanimous for the resolution.

Left: C. H. Bramble, State Overseer. Center: Mrs. Dora M. Stockman. Right: State Master A. B. Cook and wife.

Still another resolution called for strict enforcement of the law and condemned the laxity of some public official, notably those judges who are not living up to their trust.

The Grangers also promised to make law enforcement an issue whenever officials are to be elected.

Groesbeck and Administrative Board

Whenever the State Administrative Board or Gov. Groesbeck were mentioned, the fireworks immediately started. There probably has never been a convention which was more in accord on a subject than are the Grangers on the present situation in Michigan. They know exactly what they want and they intend to get what they want. If there was the slightest sentiment for the other side, it certainly never showed itself.

The Grangers did not hesitate to condemn the Governor for his veto of the Gas Tax Bill, which veto they feel was in direct opposition to the wishes of the people of Michigan. Neither did they fail to denounce the one-man government which has been built up through State Administrative Board and under the camouflage of efficiency and economy. In a resolution directed against the present system the Grange asks that a two-thirds vote of the Administrative Board be sufficient to over-ride any veto which the governor may attempt to put on their actions. At present the Governor's veto is final.

The State Grange emphasised, however, that their criticism of Gov. Groesbeck was for certain things which he has done and was not intended as political condemnation. As proof of this they passed a resolution commending the Governor for using convict labor to build roads. Further commendation was given in the form of a telegram pledging him Grange support in whatever action he takes to secure law enforcement.

Behind Board of Agriculture

Sentiment of the Grange is about 100 per cent with the State Board of Agriculture in its controversy with the State Administrative Board. Resolutions endorsing the stand of the Agricultural Board were received from all parts of the state. The convention finally passed a resolution expressing full confidence in the State Board of Agriculture and demanding that they be allowed the full exercise of the powers conferred upon them by the state constitution.

Endose County Agent Work

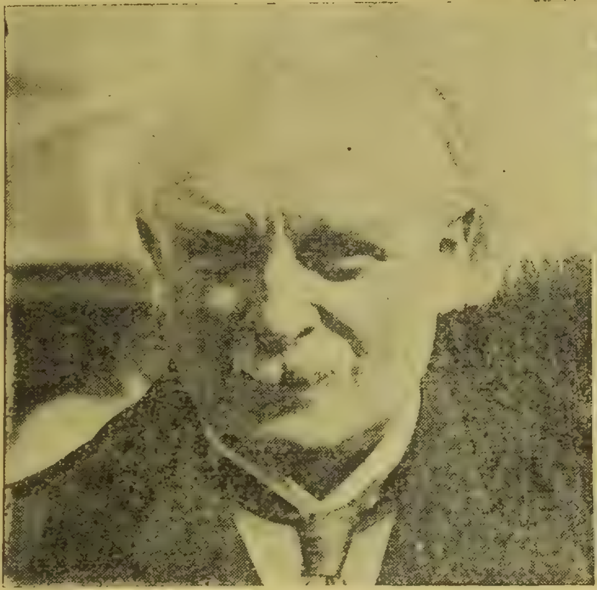
A resolution endorsing the present system of Agricultural Extension work in the counties started a lengthy discussion. Probably never before in Michigan has a representative body given stronger endorsement to County Agricultural Agent work than did the Grangers. Thirteen different counties were represented in the discussion and the delegates from each approved the work being done in their particular county. There was nothing but praise for the work being done by the Agricultural Agents and the resolution was passed by a unanimous vote.

Will Initate Income Tax

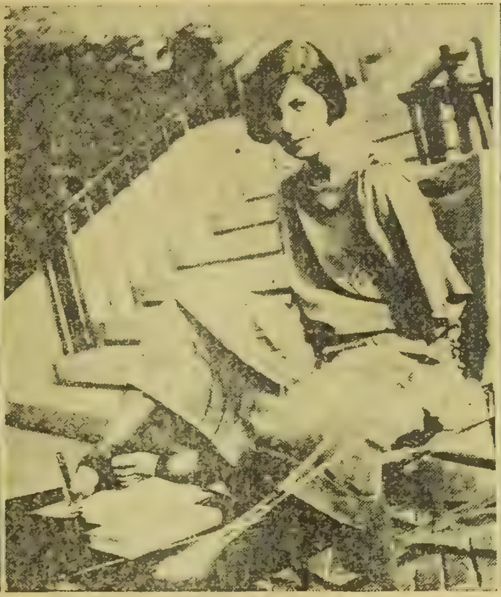
"Levy the taxes on those who are able to pay them," is the stand taken by the State Grange. It was decided to start petitions to initate a constitutional amendment providing for a graduated personal income tax. The proposed amendment provides that each person shall be allowed an

(Continued on Page 27)

PICTURES FROM FAR AND NEAR

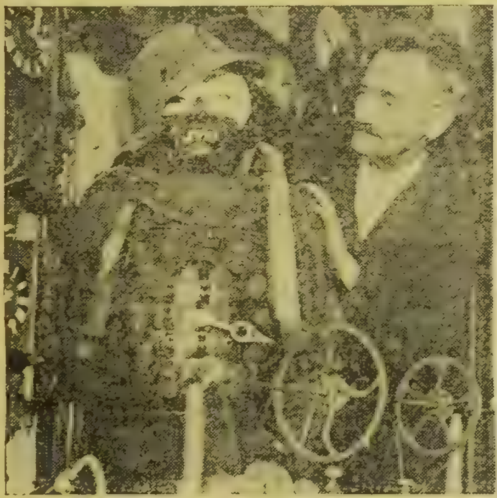


DAVID LLOYD GEORGE IN U. S.—The famous little Welshman has just completed a tour of this country and wherever his train stopped he was greeted by thousands.



WRITES WITH HER TOES.—Miss Martha Hale of the University of California, makes her toes do the work intended for hands.

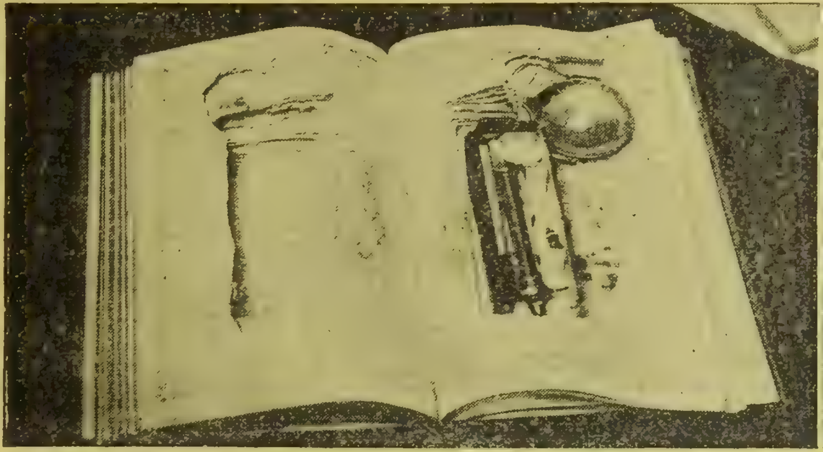
THE "JOHN D." OF ENGLAND.—Major W. H. Pearson is known as the "Oil King of Great Britain." He has oil wells in all parts of the world.



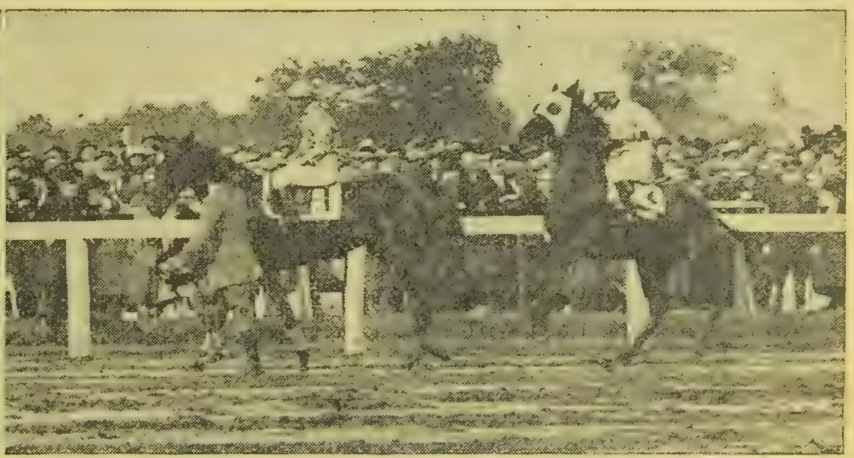
A CLOCKMAKING WIZ.—Frederick Jensen, New York watchmaker, with a suit of armor made into a clock, with the chest for a dial, and the eyes and teeth move when it strikes.

"LISTEN TO THE RADIO."—That old phase of "Watch the birdie" is going out of date. An enterprising photographer in New York City has found the radio a great help to get the kiddies to sit still.

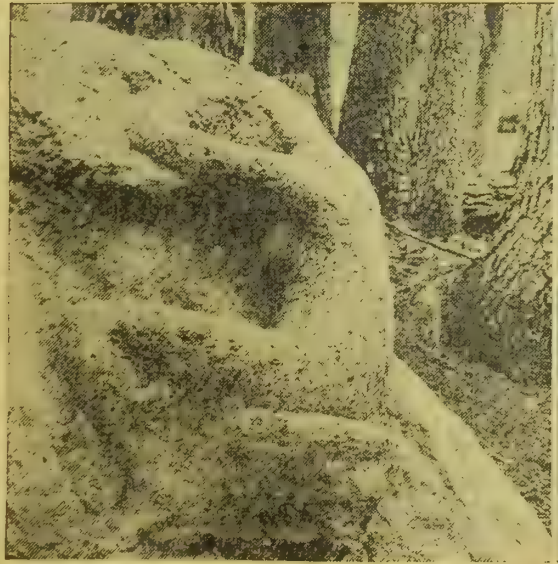
A SAMPLE OF "MARINE POLO."—Here we have two pretty girls mounted on "wooden horses" playing a game called "Marine Polo" on the deck of the S. S. President Harding.



EVEN THE BIBLE ISN'T IMMUNE.—Here is a Bible that was confiscated by the Bureau of Internal Revenue. Drug smugglers used this to bring narcotics into the country.



ZEV WINS INTERNATIONAL RACE.—Zev, the American horse, won the International race by 4 lengths from the English Derby winner, Papyrus. The purse was $100,000. Photo shows Papyrus first from left and Zev second.



CAN YOU EXPLAIN IT?—Surveyors for a new short cut of the Southern Pacific R. R. between Klamath Falls and Eugene, Oregon, came upon this figure of a woman in the side of a large rock. It is the cause of much speculation among artists, scientists and archaelogists.

LOOP-THE-LOOP QUEEN.—Mme. Adrienne Bolland, well known French aviatrix, looped the loop 98 times within 58 minutes and established a world's record. In April, of 1921, Mme. Bolland flew over the Andes Mountains. Photo shows Mme. Bolland and Aviator Maicon.

HE'S AN INDIAN FIGHTER.—Capt. O. C. Applegate, veteran Indian fighter, who was one of the principals in the "Passing of the Covered Wagon" celebration held at Klamath, Ore., recently. Capt. Applegate, who speaks several Indian dialects fluently, was a hero of the Modoc Indian War.

(Copyright, Keystone View Co.)

Oh Money! Money!

by ELEANOR H. PORTER

THE STORY TO DATE

MR. STANLEY G. FULTON, 50-year old bachelor and possessor of twenty million dollars, calls on his lawyer and they discuss the disposition of this large fortune after its owner's death. The lawyer is in favor of giving the money to colleges or charities while Fulton is opposed to these ideas. He remembers that he has some distant cousins and decides to leave the money to one of them, but first he determines to learn which one will use it to the best advantage. To find out who is the worthy one he, through his lawyer, gives, each cousin $100,000 to use as they will. Before giving them the money grows a beard and, using the name of Mr. John Smith, goes to the town where they live to find out what kind of people they are. Upon arriving in town he visits James Blaisdell, one of the cousins, where he tries to hire board and lodging. While there he meets Miss Flora Blaisdell, another cousin who is a dressmaker. They decide they cannot rent a room to him and supply him board and refer him to Frank Blaisdell's, the third cousin. He gets a room there and, passing as a writer gathering material for a book on the Blaisdell family in this country, he starts out.

(Continued from October 27th issue.)

WHEN the dinner was over, Mr. Smith knew (if he could remember them) the current market prices of beans, corn, potatoes, sugar, and flour: and he knew (again if he could remember) why some of these commodities were higher, and some lower, than they had been the week before. In a way, Mr. John Smith was well aware. That stocks and bonds fluctuated, he was well aware. That "wheat" could be cornered, he realized. But of the ups and downs of corn and beans as seen by the retail grocer he knew very little. That is, he had known very little until after that dinner with Mr. Frank Blaisdell.

It was that afternoon that Mr. Smith began systematically to gather material for his Blaisdell book. He would first visit by turns all the Hillerton Blaisdells, he decided; then, when he had exhausted their resources, he would, of course, turn to the town records and cemeteries of Hillerton and the neighboring villages.

Armed with a pencil and a very businesslike looking notebook, therefore, he started at two o'clock for the home of James Blaisdell. Remembering Mr. Blaisdell's kind permission to come and ask all the questions he liked, he deemed it fitting to begin there.

He had no trouble in finding the house, but there was no one in sight this time, as he ascended the steps. The house, indeed, seemed strangely quiet. He was just about to ring the bell when around the corner of the veranda came a hurried step and a warning voice.

"Oh, please, don't ring the bell! What is it? Isn't it something that I can do for you?"

Mr. Smith turned sharply. He thought at first from the trim, slender figure, and the waving hair above the gracefully poised head, that he was confronting a young woman. Then he saw the silver threads at the temples, and the fine lines about the eyes.

"I am looking for Mrs. Blaisdell—Mrs. James Blaisdell," he answered, lifting his hat.

"Oh, you're Mr. Smith. Aren't you Mr. Smith?" She smiled brightly, then went on before he could reply. "You see, Benny told me. He described you perfectly."

"Oh, he did? The young rascal! I fancy I should be edified to hear it—that description.'

The other laughed. Then, a bit roguishly, she demanded:—

"Should you like to hear it—really?"

"I certainly should. I've already collected a few samples of Benny's descriptive powers."

"Then you shall have this one. Sit down, Mr. Smith." She motioned him to a chair, and dropped easily into one herself. "Benny said you were tall and not fat; that you had a wreath of light hair 'round a bald spot, and whiskers that were clipped as even as Mr. Pennock's hedge; and that your lips, without speaking, said, 'Run away, little boy,' but that your éyes said, 'Come here.' Now I think Benny did pretty well."

"So I judge, since you recognized me without any difficulty," rejoined Mr. Smith, a bit dryly. "But— you—? You see you have the advantage of me. Benny hasn't described you to me." He paused significantly.

"Oh, I'm just here to help out. Mrs. Blaisdell is ill upstairs—one of her headaches. That is why I asked you not to ring. She thinks it's callers, and that she won't be ready to receive them; and she hurries up and begins to dress. So I asked you not to ring."

"But she isn't seriously ill?"

"Oh, no, just a headache. She has them often. You wanted to see her?"

"Yes. But it's not important at all. Another time, just as well. Some questions—that is all."

"Oh, for the book, of course. Oh, yes, I have heard about that. too." She smiled again brightly. "But can't you wait? Mr. Blaisdell will soon be here. He's coming home early so I can go home. I have to go home."

"And you are—."

"Miss Duff. My name is Duff."

"You don't mean—'Poor Maggie'!" (Not until the words were out did Mr. Smith realize quite how they would sound.) "Er—ah—that is—" He stumbled miserably, and she came to his rescue.

"Oh, yes, I'm—'Poor Maggie.' " There was an odd soothing in her expressive face that Mr. Smith could not fathom. He was groping for something—anything to say, when suddenly there was a sound behind him, and the little woman at his side sprang to her feet.

"Oh, Hattie, you came down!" she exclaimed as Mrs. James Blaisdell opened the screen door and stepped out on to the veranda. "Here's Mrs. Blaisdell now, Mr. Smith."

"Oh, it's only Mr. Smith!" With a look very like annoyance Mrs. Blaisdell advanced and held out her hand. She looked pale, and her hair hung a bit untidily about one ear below a somewhat twisted pyramid of puffs. Her dress, though manifestly an expensive one, showed haste in its fastenings. "Yes, I heard voices, and I thought some one had come—a caller. So I came down."

"I'm glad—if you're better," smiled Miss Maggie. "Then I'll go, if you don't mind. Mr. Smith has come to ask you some questions, Hattie. Good-bye!" With another cheery smile and a nod to Mr. Smith, she disappeared into the house. A minute later Mr. Smith saw her hurrying down a side path to the street.

"You called to ask me some questions?"

Mrs. Blaisdell sank languidly into a chair.

"About the Blaisdell family—yes. But perhaps another day, when you are feeling better, Mrs. Blaisdell."

"Oh, no." She smiled a little more cordially. "I can answer to-day as well as any time—though I'm not sure I can tell you very much, ever. I think it's fine you are making the book, though. Some way it gives a family such a standing, to be written up like that. Don't you think so? And the Blaisdells are really a very nice family—one of the oldest in Hillerton, though, of course they haven't much money."

"I ought to find a good deal of material here, then, if they have lived here so long."

"Yes, I suppose so. Now, what can I tell you? Of course I can tell you about my own family. My husband is in the real estate business. You knew that, didn't you? Perhaps you see 'The Real Estate Journal.' His picture was in it a year ago last June. There was a write-up on Hillerton. I was in it, too, though there wasn't much about me. But I've got other clippings with more, if you'd like to see them—where I've poured, and been hostess, and all that, you know."

Mr. Smith took out his notebook and pencil.

"Let me see, Mrs. Blaisdell, your husband's father's name was Rufus, I believe. What was his mother's maiden name, please?"

"His mother's maiden name? Oh, 'Elizabeth.' Our little girl is named for her—Bessie, you know—you saw her last night. Jim wanted to, so I let him. It's a pretty name—Elizabeth—still, it sounds a little old-fashioned now, don't you think? Of course we are anxious to have everything just right for our daughter. A young lady soon coming out, so—you can't be too particular. That's one reason why I wanter to get over here—on the West Side, I mean. Everybody who is anybody lives on the West Side in Hillerton. You'll soon find that out."

"No doubt, no doubt! And your mother Blaisdell's surname?" Mr. Smith's pencil was poised over the open notebook.

"Surname? Mother Blaisdell's? Oh, before she was married. I see. But, dear me, I don't know. I suppose Jim will, or Flora, or maybe Frank—though I don't believe he will, unless her folks kept groceries. Did you ever see anybody that didn't know anything but groceries like Frank Blaisdell?" The lady sighed and shrugged her somewhat heavy shoulders with an expressive glance.

Mr. Smith smiled understandingly.

"Oh, well, it's good—to be interested in one's business, you know."

"But such a business!" murmured the lady, with another shrug.

"Then you can't tell me Mrs. Rufus Blaisdell's surname?"

"No. But Jim—Oh, I'll tell you who will know," she broke off interestedly; "and that's Maggie Duff. You saw her here a few minutes ago, you know. Father Duff's got all of Mother Blaisdell's papers and diaries. Oh, Maggie can tell you a lot of things. Poor Maggie! Benny says if we want anything we ask Aunt Maggie, and I don't know but he's right. And here I am, sending you to her, so soon!"

"Very well, then," smiled Mr. Smith. "I don't see but what I shall have to interview Miss Maggie, and Miss Flora. Is there nothing more, then, that you can tell me?"

"Well, there's Fred, my son. You haven't seen him yet. We're very proud of Fred. He's at the head of his class, and he's going to college and be a lawyer. And that's another reason why I wanted to come over to this side—on Fred's account. I want him to meet the right sort of people. You know it helps so much! We think we're going to have Fred a big man some day."

"And he was born, when?" Mr. Smith's pencil was still poised above an almost entirely blank page.

"He's seventeen. He'll be eighteen the tenth of next month."

"And Miss Bessie, and Benny?"

"Oh,, she's sixteen. She'll be seventeen next winter. She wants to come out then, but I think I shall wait—a little, she's so very young; though Gussie Pennock's out, and she's only seventeen, and the Pennocks are some of our very best people. They're the richest folks in town, you know."

"And Benny was born—when?"

"He's eight—or rather nine, next Tuesday. Dear me, Mr. Smith, don't you want anything but dates? They're tiresome things, I think—make one feel so old, you know, and it shows up how many years you've been married. Don't you think so? But maybe you're a bachelor."

"Yes, I'm a bachelor."

"Are you, indeed? Well, you miss a lot, of course,—home and wife and children. Still, you gain some things. You aren't tied down, and you don't have so much to worry about. Is your mother living, or your father?"

"No. I have no near relatives." Mr. Smith stirred a little uneasily, and adjusted his book. "Perhaps, now, Mrs. Blaisdell, you can give me your own maiden name."

"Oh, yes, I can give you that!" She laughed and bridled self-consciously. "But you needn't ask when I was born, for I shan't tell you, if you do. My name was Hattie Snow."

" 'Harriet,' I presume." Mr. Smith's pencil was busily at work.

"Yes—Harriet Snow. And the Snows were just as good as the Blaisdells, if I do say it myself. There were a lot that wanted me—oh, I was pretty then, Mr. Smith." She laughed, and bridled again self-consciously. "But I took Jim. He was handsome then, very—big dark eyes and dark hair, and so dreamy and poetical-looking; and there wasn't a girl that had set her cap for him. And he's been a good husband to me. To be sure, he isn't quite so ambitious as he might be, perhaps. I always did believe in being somebody, and getting somewhere. Don't you? But Jim— he's always for hanging back and saying how much it'll cost. Ten to one he oesn't end up by saying we can't afford it. He's just like Jane,—Frank's wife, where you board, you know,—only Jane's worse than Jim ever thought of being. She won't spend even what she's got. If she's got ten dollars,- she won't spend but five cents, if she can help it. Now, I believe in taking some comfort as you go along. But Jane—greatest saver I ever did see. Better look out, Mr. Smith that she does not try to save feeding you at all!" she finished merrily.

"I'm not worrying!" Mr. Smith smiled cheerily, snapped his book shut and got to his feet.

"Oh, won't you wait for Mr. Blaisdell? He can tell you more, I'm sure."

"Not to-day, thank you. At his office some time, I'll see Mr. Blaisdell," murmured Mr. Smith, with an odd haste. "But I thank you very much, Mrs. Blaisdell," he bowed in farewell.

CHAPTER V

In Miss Flora's Album

It was the next afternoon that Mr. Smith inquired his way to the home of Miss Flora Blaisdell. He found it to be a absolutely shabby little cottage on a side street. Miss Flora herself answered his knock, peering at him anxiously with her near-sighted eyes.

Mr. Smith lifted his hat.

"Good afternoon, Miss Blaisdell," he began with a defenertial bow. "I am wondering if you could tell me something of your father's family."

Miss Flora, plainly pleased, but flustered, stepped back for him to enter.

"Oh, Mr. Smith, come in! I'm sure I'm glad to tell you anything I know," she beamed, ushering him into the unmistakably little used "front room." "But you really ought to go to Maggie. I can tell you some things, but Maggie's got the bible. Mother had it, you know, and it's all among her things. And of course we had to let it stay, as long as Father Duff lives. He doesn't want anything touched. Poor Maggie—she tried to get 'em for us; but, mercy! she never tried but once. But I've got some things. I've got pictures of a lot of them, and most of them I know quite a lot about."

As she spoke she picked up from the table a big red plush photograph album. Seating herself at his side she opened it, and began to tell him of the pictures, one by one.

She did, indeed, know "quite a lot" of most of them Tintypes, portraying stiffly held hands and staring eyes, ghostly reproductions of daguerreotypes of stern-lipped men and women, in old-time stock and kerchief; photographs of stilted family groups after the "he-is-mine-and-I-am-his" variety; snapshots of adorable babies with blurred thumbs and noses—never had Mr. John Smith seen their like before.

Politely he listened. Busily, from time to time, he jotted down a name or date. Then, suddenly, as she turned a page, he gave an involuntary start. He was looking at a pictured face, evidently cut from a magazine.

"Why, what—who—" he stammered.

"That? Oh, that's Mr. Fulton, the millionaire, you know." Miss Flora's hands fluttered over the page a little importantly, adjusting a corner of the print. "You must have seen his picture. It's been everywhere. He's our cousin, too."

"Oh, is he?"

"Yes, 'way back somewhere. I can't tell you just how, only I know he is. His mother was a Blaisdell. That's why I've always been so interested in him, and read everything I could—in the papers and magazines, you know."

"Oh, I see." Mr. John Smith's voice had become a little uncertain.

"Yes. He ain't very handsome, is he? Miss Flora's eyes were musingly fixed on the picture before her—which was well, perhaps: Mr. John Smith's face was a study just then.

"Er—n-no, he isn't."

"But he's turribly rich, I s'pose. I wonder how it feels to have so much money."

There being no reply to this, Miss Flora went on, after a moment.

"It must be awful nice—to buy what you want, I mean, without fretting about how much it costs. I never did. But I'd like to."

"What would you do—if you could—if you had the money, I mean?" puerled Mr. Smith, almost eagerly.

"Well, there's three things I know I'd do. They're silly, of course, but they're what I want. It's a phonygraph, and to see Niagara Falls, and to go into Noell's restaurant and order what I want without even looking at the prices after 'em. Now you're laughing at me!"

"Laughing? Not a bit of it!" There was a curious elation in Mr. Smith's voice. "What's more, I hope you'll get them—some time."

Miss Flora sighed. Her face looked suddenly pinched and old.

"I shant. I couldn't, you know. Why, if I had the money, I shouldn't spend it—not for them things. I'd be needing shoes or a new dress. And I couldn't be so rich I wouldn't notice what the prices was—of what I ate. But, then, I don't believe anybody's that, not even him." She pointed to the picture still open before them.

"No?" Mr. Smith, his eyes bent upon the picture, was looking thoughtful. He had the air of a man to whom has come a brand-new, somewhat disconcerting idea.

Miss Flora, glancing from the man to the picture, and back again, gave a sudden exclamation.

"There, now I know who it is that you remind me of, Mr. Smith. It's him—Mr. Fulton, there."

"Eh? What?" Mr. Smith looked not a little startled.

"Something about the eyes and nose." Miss Flora was still interestedly comparing the man and the picture. "But, then, that ain't so strange. You're a Blaisdell yourself. Didn't you say you was a Blaisdell?

"Er—y-yes, oh, yes. I'm a Blaisdell," nodded Mr. Smith hastily. "Very likely I've got the—er—Blaisdell nose. Eh?" Then he turned a leaf of the album abruptly, decidedly. "And who may this be?" he demanded, pointing to the tintype of a bright-faced young girl.

"That? Oh, That's my cousin Grace when she was sixteen. She died; but she was a wonderful girl. I'll tell you about her."

"Yes, do," urged Mr. Smith; and even the closest observer, watching his face, could not have said that he was not absorbedly interested in Miss Flora's story of "my cousin Grace."

It was not until the last leaf of the album was reached that they came upon the picture of a small girl, with big, hungry eyes looking out from beneath long lashes.

"That's Mellicent—where you're boarding, you know—when she was little." Miss Flora frowned disapprovingly. "But it's horrid, poor child!"

"But she looks so—so sad," murmured Mr. Smith.

"Yes, I know. She always did." Miss Flora sighed and frowned again. She hesitated, then burst out, as if irresistably impelled from within. "It's only just another case of never having what you want when you want it, Mr. Smith. And it ain't 'cause they're poor, either. They ain't poor—not like me, I mean. Frank's always done well, and he's been a good provider; but it's my sister-in-law—her way, I mean. Not that I'm saying anything against Jane. I ain't. She's a good woman, and she's very kind to me. She's always saying what she'd do for me if she only had the money. She's a good housekeeper, too, and her house is as neat as wax. But it's just that she never thinks she can use anything she's got till it's so out of date she don't want it. I dressmake for her, you see, so I know—about her sleeves and skirts, you know. And if she ever does wear a decent thing she's so afraid it will rain that she never takes any comfort in it!"

"Well, that is—unfortunate."

"Yes, ain't it? And she's brought up that poor child the same way. Why,

(Continued on page 22.)

Federal Reserve Makes Short Time Loans Possible

Expert on Rural Credit Explains How the Federal Reserve System Helps the Farmers

By JOHN H. KRAFFT

THIS is the second article of a series of four by Mr. Krafft on financing agriculture. In this article he discusses short time loans for operating capital, which are made by the local banker, and which the banker can re-discount with the Federal Reserve Bank. The third article of this series will follow in an early issue.

THE local banker is often looked upon as an individual who is collecting interest rather than a person who is a material factor in building up communities and who is a counselor in the business affairs of his customers. Undoubtedly, there are cases where the first opinion is well warranted, however, instances of this kind are rather the exception to the rule. There is no business institution in this country that has done more towards the building up of communities than have the small country banks, especially those whose management is far-sighted enough to see that the profits and the success of the bank are dependent upon a real service and that the more prosperous their customers are the more profitable the bank will be. There is no community which really is a good community unless it is properly financed, and, a wide awake banker realizing this fact, does everything possible to not only amply but properly finance his customers, and thereby finances the community.

The business of banking is a very old one. The first banks we have record of were the"money changers" in the Greek Temples who used to sit upon a bench to transact their business. From this we derive the word "bank". A bank is an institution which is serving a dual purpose. Its first obligation is towards its depositors and its second obligation is towards its borrowers. This fact has been taken into consideration by State and National Governments with the result that there have been laws passed regulating the banking business.

These laws require a bank to invest a certain amount of capital, depending upon the size of the community and the volume of business transacted, and then require the bank only to loan on certain conditions. In most banks there is a double liability on their stock investment. This liability acts as an added protection to the depositors by making the bank management doubly careful in seeing that there is no loss to the stockholders of the bank, due to its not strictly enforcing the laws under which the bank is operating. Every borrower from a bank feels that he is entitled to credit; however, in many instances these borrowers who do not care to loan their funds to another man under the same conditions they find themselves. A bank, having a very material obligation towards its depositors, naturally would not accept a loan of this type, even though the law under which they are operating allowed it.

There are three factors which usually determine the extension of credit—character, capacity and capital. Character is a very necessary business qualification. It is not formed in a short time but is established through years of practice of honesty and industry. A banker also must take into consideration the capacity of the application for work, and his ability to earn through his industry and honesty. Capital is an indication of a man's worth in dollars and cents, and may consist of lands, live stock, equipment of anything else of sound worth. Any man with character and capacity who has shown that he is able, through these requisites, to accumulate is entitled to credit, and, under ordinary conditions, will find no trouble in obtaining credit.

Credit implies confidence. It is only through this confidence that credit transactions are possible and confidence can exist only where good character exists. There is very little chance of success in any undertaking without good character. A strong character has fixed habits of honesty, industry and thrift. "He can look the whole world in the face" and has nothing to conceal. When he needs the help of a bank he gives the banker all the facts regarding his business, and because he gives this confidence he wins the confidence of the banker. A successful man considers his credit standing his most valuable asset and aims to maintain this standing. The old saying "honesty is the best policy" means that it pays to be honest, however, this is not the reason why honest men are honest.

In addition to honesty, there is another factor which materially enters into the extension of credit, and that is good management. A man may be very careful as to his promises and yet not deserve credit. A man may bear a good reputation and may have enjoyed a reasonably good income for a number of years but he has arrived at middle age and has not accumulated anything. He has shown that he lacks the ability to manage his affairs and has not the determination to save money, and has not the faculty of adjusting his expenses to his income. A bank is a public servant, but that does not necessarily mean that they must serve those who are unfair in business or lack the elements of business judgment. The reputation of being a thrifty and careful person is the best assurance of receiving financial help when needed.

Wrong ideas have too often prevailed about the owing of money, and those unfamiliar with business often shy against credit and debt. They are not able to distinguish between wise and unwise debts. Debts created for pleasure are an abuse of credit and have ruined many persons. Debts for a sound investment, almost without exception, prove profitable provided the borrower has the necessary requisites to obtain credit.

It is the aim of all progressive banks to extend the maximum available credit to the right type of borrowers. No institution which we have has been more instrumental in building up and improving communities than have the small country banks. These institutions are the corner stone of our financial structure. Half of the deposits in the United States, it has been estimated, come from banking institutions located in villages of two thousand population or less, or from strictly agricultural sections. The manager of this type of bank is usually an individual who has grown up in the community and knows the conditions of the community and all of the individuals living in it and is a man who has usually built his own success and the success of his institution upon a service to the community.

The fact that banks in certain communities have not been able to take care of all of the financial needs of the community does not always mean that the bank has been negligent in giving service. The demand for money in certain sections is, at times, larger than can be taken care of by bank deposits in the community. This is especially true of the newer sections. Another factor which enters into this is the fact that money has a tendency to flow towards the financial centers. This has always been true and always will be true. This fact was one of the reasons for the establishment of our Federal Reserve System. This System has proven its soundness in many ways, but if it had served no other purposes than that of creating twelve financial centers in the United States instead of one, it would have proven its worth. Banks in the country communities often find that an excess of money from a certain community has drifted into the financial centers; usually through the sale of stocks and bonds. For this reason the Federal Reserve Banks, the banks operating under the Federal Farm Loan Act, and the Intermediate Credit Banks have been chartered by the Government for the purpose of re-distributing the funds, which have been accumulated, into the place where they are most needed.

The banking business, the same as agricultural and many other businesses, has undergone a very decided change in the last few decades. There was a time in the earlier history of our country when the small local banker tried to take care of the financial needs of the community. In the older sections they were able to do this to a more or less satisfactory degree. In the newer sections, however, it was impossible to give any adequate service. Naturally, it took years of careful study and experience to build up by successive stages of financial system which would assure a fair distribution of funds to all sections, and this has been accomplished. It is impossible for the average country bank to finance all of its farmer customers' needs and the needs of the community in which it operates. In the future these banks, to some extent at least, will have to avail themselves of the facilities offered by the banks chartered under the Federal Reserve Act, Federal Farm Loan Act and the Intermediate Credits Act. Country banks are realizing this more every day and as they realize it are more and more using the facilities offered them by these institutions with very satisfying results to their customers, the community in which they are operating and the banks themselves.

These Federally chartered institutions were created primarily to provide sufficient capital, and also on a type of contract suited to the needs of the borrower. No class of men as a whole have hailed the coming of these banks more heartily than have the country bankers. The country banker in the last few years has gone through the farmers' difficulties with them. If anyone has an idea that this is not a fact that idea will be readily dispelled if you will take a glance over the history of farming for the last few years. Since 1914 the men engaged in banking have gone through a period of ups and downs which thoroughly tested character and ability.

First, we had the Great War, which upset trade conditions and shook the faith of investors in material values, then followed the equally unexpected demand and a high price for farm products. Our Country's entry into the War still further increased this demand. Then, followed the close of the War and a few years of wild extravagance and speculation, undoubtedly due to the sudden release of our population from the privations and strains of War and also to the warped sense of moral and material values invariably brought about by War. Then, we had a sudden relapse from which we are slowly recovering. The farmers found themselves staggering under a load of unmarketed products, and the market for farm lands reflected the same history—first the scramble for lands at any price and then the drop in values. When the drop came the local banker often held the bag and was just as much interested as the farmer in working out of a bad situation.

During periods of large profits such as we passed through after the last War it is rather surprising that a great volume of debts are created and very few debts paid off. Our easy money went to luxuries, high price land, and, we all know, a considerable part into high priced crops which did not return to the producers their expense of production. These few years of large income and lavish spending saw a large increase in the debts of the farmers. The one thing which has saved the farming industry from very serious trouble is the fact that farmers before the War were comparatively light borrowers. However, this debt was very rapidly increased during and after the War but in the last year or two gradually decreased, which clearly demonstrates the truth of the previous statement—that debts are created during prosperous times and paid off during the less prosperous times.

The credit for a sounder financial condition of the farmer at the present time than it was a few years ago is largely due to the country banks and to the service given to these country banks by the banks chartered under Federal Acts. The local bank has always been and must continue to be the mainstay of the farmer for credit needs. They have rendered a real service to the farmer but have had to face several difficul-

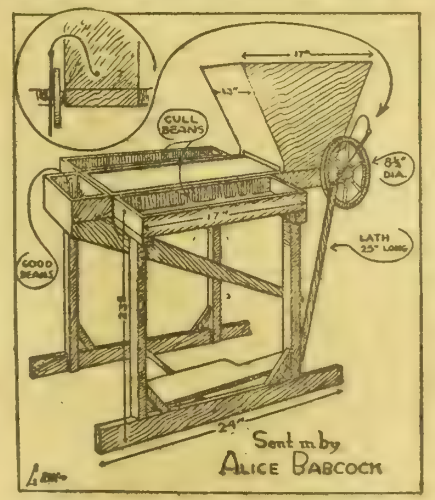
(Continued on Page 11)

Plan For a Home-Made Bean Picker

OUR readers are showing a decided interest in the idea of picking their beans at home and the ones who own home-made pickers are many and they answered our call for plans for a bean picker that any farmer can make. We are only publishing one this issue but we have several more on hand that we will print in the near future. We closed the contest November 1st and hope to be able to announce the winner in our next issue.

The plan for the picker shown here was sent in by Mrs. Alice Babcock, Sherman, Michigan. Her husband made it several years ago. She writes as follows:

"He used just such lumber as he happened to have, some smooth dressed and some sawed by him to fit his needs. The rollers were made from rollers in an old binder, one wheel was of metal, and another picker he made a wooden circle wrapped firmly with binder chain for weight. The belt is made of several thickness of a grainbag, machine stitched, on one and of binder canvas on the other. It runs over a smooth board between the rollers and the boxed frame around is beveled till it is easy to slide beans over. The throat of the hopper fits snugly enough at the back so that beans may not pass under if the belt is reversed. A wooden piece is inclined in the throat toward the front which meets the metal slide, the opening being adjusted to regulate the feed. The wire loop keeps turning the beans from packing and on the move. A tin on the end of the chute keeps the beans directed down into the container. After being oiled and run awhile they work smoothly and are made neat. The lower front is like a sewing machine with no obstructing cross pieces. Our pickers are firmly built also. Our son suggests that a wheel or crank could be placed on the left with two pedals used to overcome the tendency to stop on center, also chutes could be made for the cull beans.



"We picked one winter when the price was high and reckoned almost a day's wages each evening besides having the culls for hogs and chickens. We are sure it pays when the pick is heavy. The work is pleasant, even fascinating and can be done in stormy weather."

Washtenaw Club Members Take Annual Outing

One Hundred Twenty-Seven Boys, Girls and Leaders of Washtenaw County Attend Only Exclusive County Club Camp in Michigan. Third Year Pronounced Most Successful

THE third consecutive year of the Washtenaw County Boys' and Girls' Club Camp, held at Camp Birkett, the Y. M. C. A. Camp on Silver Lake, was by far the most successful, 127 boys, girls and leaders attending. This is the only exclusive County Club Camp in Michigan and is entirely self supporting, each boy or girl bringing bread, beans, potatoes, tomatoes, eggs, etc., for the week, and in addition a fee is charged to pay rent of camp, pay cook, and buy supplies such as meat and milk which must be fresh. The aim of those in charge is to give the campers useful instruction and at the same time a good outing.

The boys occupy the camp the first week and the girls the second. Thru the kindness of Mr. L. Reiman in charge of the U. of M. Fresh Air Camp, Mr. Lockwood, Naturalist and Indian Chief and wife spent a day at Camp and entertained at Camp Fire. A senior scout from Ann Arbor spent the week at Camp and assisted in instruction, first aid, rope splicing, knot tying, etc. Mr. V. O. Nelson, secretary Y. M. C. A. gave excellent instruction in swimming and resuscitation.

Dairy extension specialists took up milk testing, judging, fitting and showing calves. Professor Bartlett, head of the U. of M. botanical department, came out for a day each week and gave intensely interesting talks on his subject and travels.

During girls' week, Miss Elda Robb, assistant state club leader, took up basket weaving, making artificial flowers, sewing, canning, judging and games.

The evenings were spent in Camp Fire entertainment. Talks were given by Dr. G. G. Alway, Ann Arbor; Professor Bartlett, U. of M.; Professor Ford and Dr. Pittman, State Normal College; Mr. L. Reiman, University Y. M. C. A.; Mrs. Dora Stockman, East Lansing, and others.

Saturday of each week a picnic was held to which parents and friends were invited.

Boys' Week

Boys arrived at camp on Monday bringing supplies, bread, beans, potatoes, tomatoes, eggs, etc., for the week and in addition were required to pay a fee. The county club camp is entirely self supporting. The fee pays rent of camp, which is secured from Y. M. C. A., pays the cook and buys supplies such as meat and milk which must be fresh. Monday evening at Camp Fire, Mr. L. Reiman, graduate of U. of M. and in charge of U. of M. fresh air camp, gave an excellent talk, led in songs, yells, etc. At Monday Camp Fire Vaughn Christensen, Eagle Scout from Ann Arbor was introduced, arriving at Camp for the week having charge of singing, games and first aid.

Tuesday, three other advance scouts from Ann Arbor assisted Christensen and instructed in first aid, trail blazing, songs, games, etc. At Camp Fire that evening, Dr. G. G. Alway of Ann Arbor gave an excellent talk on "Cleanly Habits" and incidentally told of some of his war experiences.

On Wednesday, Professor H. H. Bartlett head of the botanical department U. of M., spent the day at Camp, took the campers for a hike explored an old lake bottom, found small deposits of peat and in addition did a little "snake charming." That evening he entertained at Camp Fire with intertaining items of his visit to the island of Sumatra.

Part of the morning the next day was spent in putting up tents and beds for the club girls who occupied camp the week following. Mr. V. O. Nelson, secretary of the Y. M. C. A., Ann Arbor, gave an interesting and valuable drill on life saving and resuscitation. Messers. E. H. Hent and C. F. Hoffman, dairy department, M. A. C., took up milk and cream testing and fitting, showing and judging dairy cattle. At Camp Fire, Professor Ford of the State Normal College, Ypsilanti, gave an interesting talk telling stories of early days and Indian life in Michigan. Mrs. L. Seamans of Ypsilanti entertained with readings.

A group of the boys who attended the Camp on Silver Lake. Fine looking bunch of young farmers, aren't they? Mr. Lockwood, the naturalist is the one standing at the back, wearing a white shirt.

Friday, through the kindness of Mr. L. Reiman, "Dad" Lockwood, naturalist and an Indian Chief and his squaw, from the U. of M. fresh air camp, spent the day with us. The former entertained with nature study work, entomology and excellent lecture on birds. The Indians entertained at Camp Fire with songs, yells and dances.

Saturday was picnic day. All parents and friends were invited for picnic dinner. The fathers defeated the boys in a baseball game in the afternoon and after a "goodbye swim" all left for home.

Second Week of Camp

On Monday of the following week the girls took possession of the Camp and what a time they had. At the end of the week we asked Mary Murray, county champion in Garden Club 1922, and member of the Garment and Poultry Clubs this year, how the girls enjoyed the Camp and if they wanted to go back next year. Her answer left no doubt as to the popularity of the annual event.

A group of industrious club members learning how to make baskets at Camp Birkett. Miss Robb, assistant state club leader in the foreground acted as instructor.

"This is the third consecutive year we have had the privilege of attending the Camp and we think it has been better each year," said Mary. "The first year the boys and girls were all there at the same time but the last two years the boys have gone one week and the girls the next. We think the last plan is better.

"This year the boys enjoyed their vacation from July 30th to August 4th. Then we girls went August 6th and before night came 9[illegible] girls and leaders had arrived. We were very glad to have Miss Robb with us. We enjoyed a splendid supper and a good night's rest that night. The most of us slept in tents. We thought that those who wanted to sleep in huts didn't know a good thing when they saw it. Our bunks were something the shape of a pig crate with wire stretched across top and bottom, then two could sleep on top and two on the bottom.

"Each morning two inspectors would go and look in our tents and then they would pin a flag on the front of the neatest. Most of the mornings we arose bright and early. We had setting up exercises and then could go in for a swim if we wanted to. After breakfast was over and the dishes washed we had classes and were taught to make paper flowers, sachet bags, night birds, reed baskets and organdie flowers.

"We ate in the club house. There were eight tables and most of them seated twelve people. After dinner we had an hour in which to rest or write letters. Then we had classes again.

"Each evening we had a ball game. Mr. H. S. Osler, county agricultural agent, came every night and showed moving pictures. We all enjoyed them very much, too. After movies we had Camp Fire. Each day we looked forward to this part of the day's program with great anticipation and we were never disappointed in it either for A. L. Watt, county club agent, always had something nice planned and Miss Robb had plenty of good songs.

"Tuesday night Dr. G. G. Alway from Ann Arbor came and gave us a talk on health. That night it rained very hard and it almost seemed as though our tent had been through a war. for some of us were obliged to take up our beds and walk. while Miss Robb sought shelter for us in one of the huts, and the Good Samaritan took us in.

"We were allowed to go out in a boat any time we wanted to if we were accompanied by a leader.

Parents and Friends Welcome

"All our parents and friends were welcome to visit us any time, but we did have some unwelcome visitors while we were there. Three wandering puppies seemed to like Camp Birkett, too.

"One night I was quite startled when I felt something kiss me right "plumb" on the lips. I turned our flash light on and discovered that one of the pups was in bed with us. I might have known the poor little fellow was in trouble, for in the meantime Miss Robb was hunting for him and I guess he came to us for protection. Miss Robb proceeded to take them up to a cottage and let them go, but they thought she wanted to run a race with them so they almost beat her back to Camp.

"The next night she and one other leader determined to conquor the villians, so they took them up to the club house and shut them under a crate. That night our sleep was not disturbed in the least but the next morning Mrs. Biedermann, our cook, said they kept her awake all night.

"On Thursday evening Mrs. Dora Stockman gave us an interesting talk which was thoroughly enjoyed by all. Great was the excitement that night, as it was stunt night. Each group was plotting and planning so they could take the rest by surprise. The stunts included an Indian dance, a play, mock wedding and an operation. We girls in our tent wrote a paper called "Dew Drop Inn News," for that was the name of our tent. We wrote items of interest about the leaders and the girls. We also had jokes about them but tried not to have anything which would hurt any ones feelings in any way. After stunts were over, we gave Miss Robb, Mrs. Biedermann and Mr. A. L. Watt each a small gift to show our appreciation for what they were doing for us. Then we children went to bed and I dare say that the leaders stayed up a little longer and talked over the events of the day.

Take Hike on Friday

"On Friday afternoon we took a long walk. Professor H. H. Bartlett of the botanical department, U. of M., went with us and told us about the different flowers and weeds and showed us an old lake bed. After the hike we had a short service in memory of our lake President, Mr. Warren Harding. We sang two hymns, prayer was offered, Mrs. A. A. Schoen read an item from the paper and Mr. Bartlett told us a little about Mr. Harding's life.

"That night Miss Robb had to go home. We were very sorry to have her go but were glad she could be with us for even that short time. Mr. Bartlett gave us a splendid Camp Fire telling of his experience on the island of Sumatra. Mr. Earl Martin, the manager of our county fair, came and talked to us one evening.

"Saturday morning we spent most of our time getting our things packed ready for home. All the parents were invited for a picnic dinner. After dinner we chose up sides and had a good ball game. Then we departed and went to our homes.

"We will never forget these happy times we've had together, neither will we forget how good the leaders were to us. Although we know that each leader did all they could," said Mary, "we realize that Mr. Watt and Miss Robb had a great deal of work to do and that most of the responsibilities rested upon them."

WASHTENAW CLUB MEMBERS BIG WINNERS AT FAIR

THIS year is the first time Washtenaw county boys and girls exhibited live stock, canning and sewing at the Michigan State Fair, and the winnings and honors they won were far in excess of those won by the club members of any other county on the size of exhibits. Of the 33 head of live stock exhibited all except two won individual prizes. In the Shorthorn class they won all prizes and they went down the balance of the list of live stock with winnings about as numerous. In the judging contests Washtenaw county team finished first competing with 17 counties in general stock judging, and won the honor to represent Michigan at the International Live stock Exposition, at Chicago in December, all expenses paid. In the dairy dairy judging contest Washtenaw won first, being 53 points ahead of the winners of second place. Fifteen teams competed in the dairy

(Continued on Page 23)

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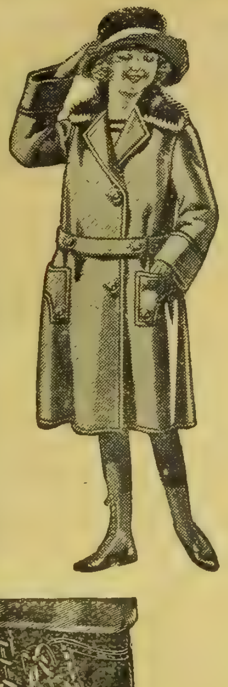
Fur Trimmed Coat for Girls and Children

$4.48



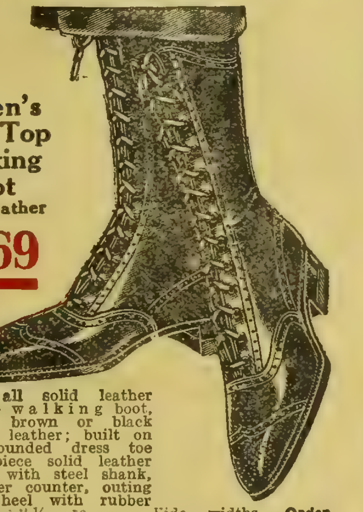
Girl's stylish coat of polo that insures real service. Has warm Coney Fur Collar. Two novelty pockets. All-around belt. Novelty buttons trim pockets and belt. A durable coat at an amazingly low price. Sizes 7 to 14 years. State size wanted. **Order Navy by No. 96E7308. Brown No. 96E7310. Send no money. Pay $4.48 and postage on arrival for either color.**

Same quality for children furnished in sizes 2 to 6 years. **Order Navy by No. 96E7458. Brown No. 96E7460. Send no money. Pay $3.48 and postage on arrival for either color. State size.**

Women's Wave Top Walking Boot

Solid Leather

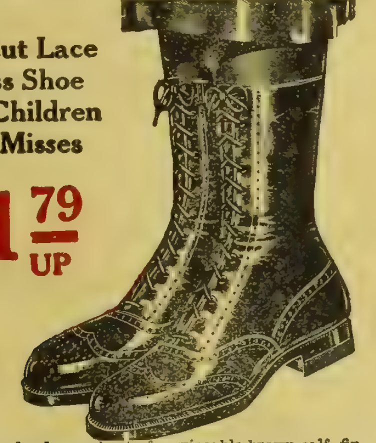
$2.69



Women's all solid leather wave top walking boot, comes in brown or black calf finish leather; built on sensible rounded dress toe last; one-piece solid leather inner sole with steel shank, solid leather counter, outing sole and heel with rubber tip. Sizes 2½ to [illegible] Wide widths. **Order Black Calf by No. 96S203. Order Brown Calf by No. 96S204. Send no money. Pay $2.69 and postage on arrival.**

Hi-Cut Lace Dress Shoe for Children and Misses

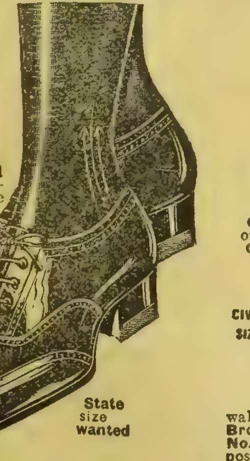
$1.79 UP



Extremely dressy boot of serviceable brown calf finished leather. Pretty wing tip with medallion on full rounded toe, perforated vamp, quarter and eyelet rows. One-piece extension oak sole and low heel with rubber top lift. Wide widths. **Child's sizes 8½ to 11, No. 96S439. Price, $1.79. Misses' sizes 11½ to 2, No. 96S440. Price, $1.98. Growing Girls' sizes 2½ to 8, No. 96S441. Price, $2.49. Send no money. Pay bargain price and postage on arrival. State size.**

Women's Patent Leather, Gun Metal or Brown Calf Finished Oxfords

$1.98



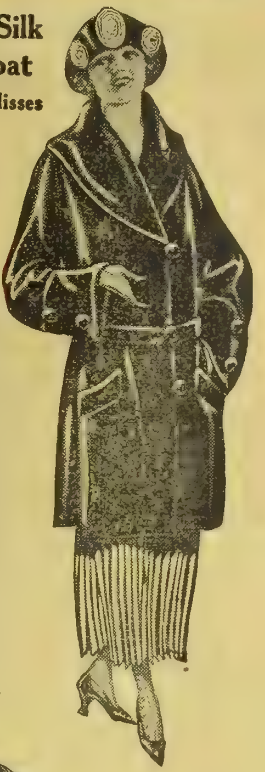
Made with imitation shield tip and medallion perforated vamp, perforated lace stay and circular foxing. Has medium rubber heel and medium pointed toe. Sizes 2½ to 8, wide widths. **Order patent by No. 96S121. Order gun metal by No. 96S122. Order brown by No. 96S123. Send no money. Pay $1.98 and postage on arrival.**

State size wanted

Sporty Style Silk Seal Plush Coat

For Women and Misses

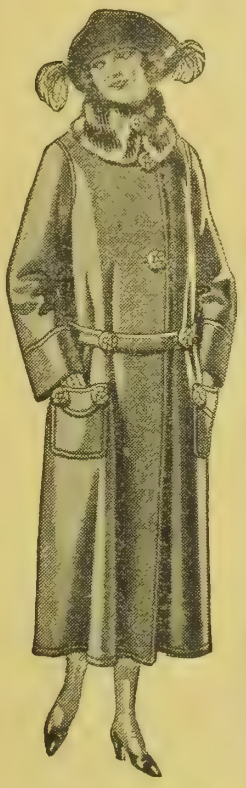
$9.98



Where else can you buy a genuine silk seal plush coat of this jaunty style and splendid quality for such a low price? Beautifully modeled of soft, warm, lustrous, deep pile silk plush with full lining of beautiful flowered sateen. Newest loose back flared style with belt. Wide 10-inch shawl collar, two pockets and roomy bell sleeves. Length, about 34 inches. Women's sizes, 34 to 44; Misses, 32 to 38 bust measure. State size. **Order No. 96E7000. Send no money. Pay $9.98 and postage on arrival. Money back if not satisfied.**

Fur Trimmed Thibet Coat

$5.98

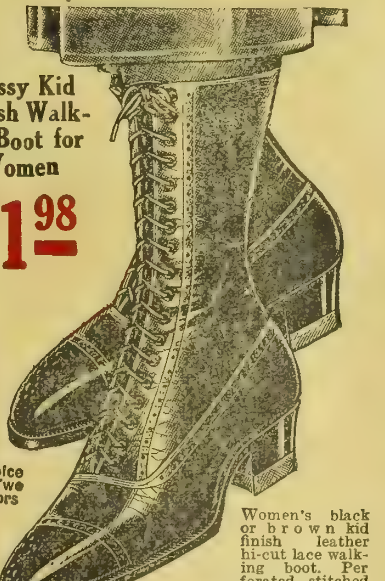


Another sensational value in a warm winter coat. This becoming model is of splendid Thibet cloth in choice of rich brown or navy blue. The ample collar is of genuine brown Coney fur. Coat is finished with all-around self material belt and two patch pockets trimmed with pretty buttons. Imitation cuff is also button trimmed. Coat measures about 48 inches long, and comes in sizes 34 to 44 bust.

Order Brown by No. 96E7094. Navy by No. 96E7096. Black by No. 96E7095. Send no money. Pay $5.98 and postage on arrival for either color. State size wanted. Order similar style Black plush collar by No. 96E7097, Price $3.98.

Dressy Kid Finish Walking Boot for Women

$1.98



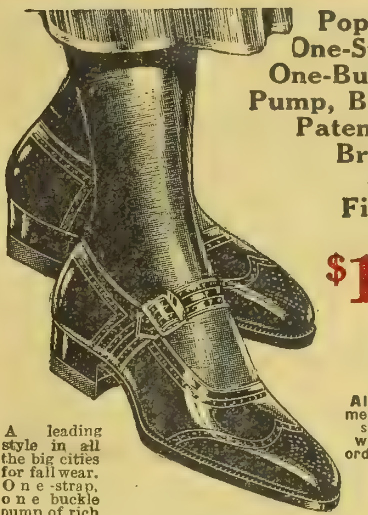
Choice of Two Colors

GIVE SIZE

Women's black or brown kid finish leather hi-cut lace walking boot. Perforated stitched tip with medallion toe; neat perforations at vamp and lace row. Medium extension oak sole with rubber topped walking heel. Sizes 2½ to 8. Wide widths. **Brown Kid finish No. 96S195. Black Kid finish No. 96S194. Send no money. Pay $1.98 and postage on arrival for either color. State size.**

Popular One-Strap One-Buckle Pump, Black Patent or Brown Calf Finish

$1.98



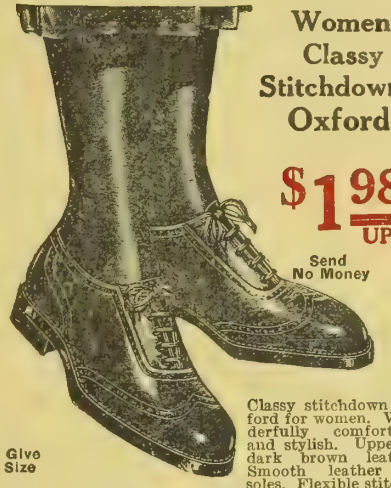
Always mention size when ordering.

A leading style in all the big cities for fall wear. One-strap, one buckle pump of rich black patent leather or Brown Calf finished leather. Is well made with perforated sewed tip and medallion toe. Fancy perforation on vamp, strap and quarter. One-piece medium extension oak sole; low flapper walking heel with rubber top lift. Sizes 2½ to 8; wide widths. **Black patent No. 96S20. Brown Calf finish, No. 96S21. Send no money. Pay $1.98 and postage on arrival for either leather. State size.**

Women's Classy Stitchdown Oxfords

$1.98 UP

Send No Money



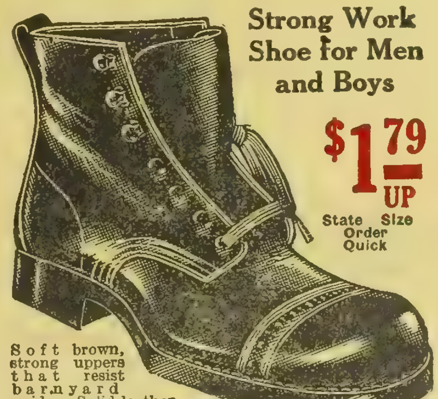
Give Size

Classy stitchdown Oxford for women. Wonderfully comfortable and stylish. Upper of dark brown leather. Smooth leather insoles. Flexible stitched down oak outsoles. Low rubber heels. Sizes 2½ to 8. Wide widths. **Order Brown by No. 96S273. Send no money. Pay only $1.98 and postage on arrival. Order Patent Leather by No. 96S274. Send no money. Pay $2.48 and postage on arrival.**

Strong Work Shoe for Men and Boys

$1.79 UP

State Size Order Quick



Soft brown, strong uppers that resist barnyard acids. Solid leather insoles. All seams stitched with waxed thread. Strong leather soles. Wide widths. Sizes 6 to 11. **Order by No. 96A758. Send no money. Pay $1.98 and postage on arrival. Order boy's sizes, 1 to 5½ by No. 96A554, Price $1.89. Order little gents' sizes 9 to 13½ by No. 96A555, Price $1.79 and postage on arrival. Mention size.**

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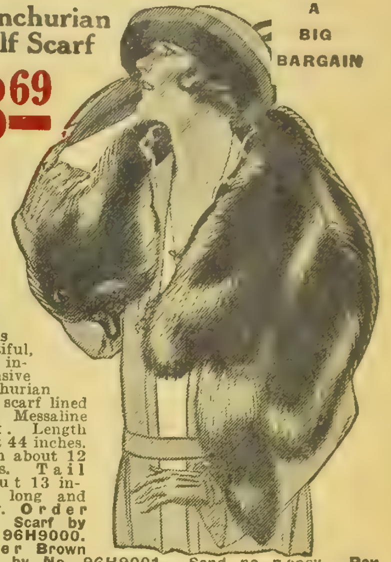
Manchurian Wolf Scarf

$3.69

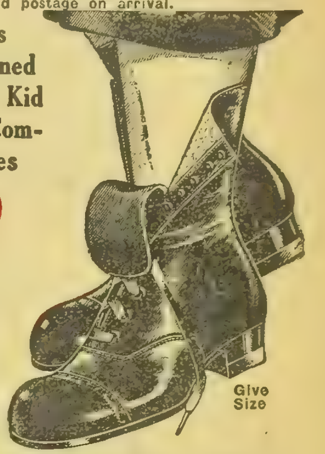
A BIG BARGAIN



Oh Just Look at this beautiful, soft, inexpensive Manchurian Wolf scarf lined with Messaline silk. Length about 44 inches. Width about 12 inches. Tail about 13 inches, long and bushy. **Order Black Scarf by No. 96H9000. Order Brown Scarf by No. 96H9001. Send no money. Pay only $3.69 and postage on arrival.**

Women's Fleece Lined Soft Black Kid Finished Comfort Shoes

$2.29



Give Size

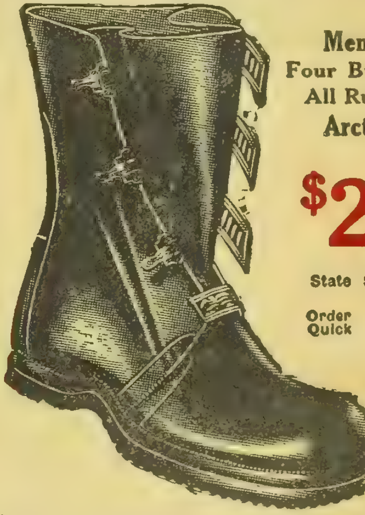
Positively America's greatest bargain in a woman's shoe of this kind. Soft kid finished pliable leather uppers have heavy fleeced lining that keeps feet warm as toast in the most severe winter weather. Excellent grade natural oak leather soles and low rubber heels. A roomy last that is also dressy in appearance. Simply unbeatable value at Sharood's low price. Women's sizes 3 to 9, wide widths. **Order No. 96A880. Send no money. Pay $2.29 and postage on arrival. State size.**

Men's Four Buckle All Rubber Arctics

$2.79

State Size

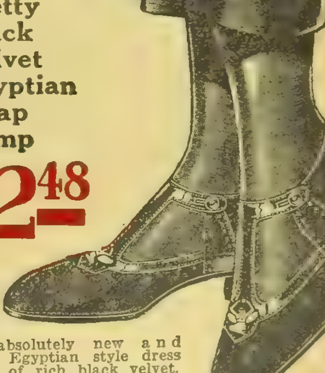
Order Quick



Guaranteed best quality all rubber 4-buckle hi-cut arctic. Made with double corrugated soles and reinforced seams. Snow-excluding tongue. Men's sizes 6 to 15. Wide widths. Can be washed and cleansed. Send quick. **Order by No. 96A990. Send no money. Pay $2.79 and postage on arrival.**

Pretty Black Velvet Egyptian Strap Pump

$2.48



State Size

An absolutely new and novel Egyptian style dress pump of rich black velvet. Medium pointed dress toe and patent leather trimming, as pictured. Patent leather vamp, collar, and instep straps fastened on each side by buttons. Neat perforations at sides. Fancy carved Egyptian slave ornament on vamp. Leather insole; genuine oak outsoles; medium height, rubber tipped leather heel. Sizes 2½ to 8; wide widths. **No. 96S257. No money now. Pay $2.48 and postage on arrival. State size.**

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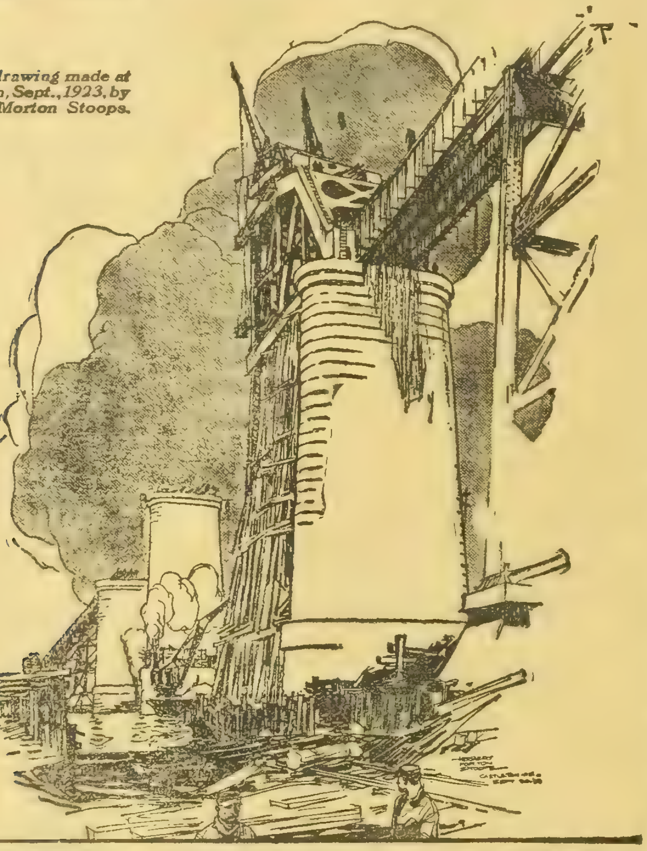
Beyond the dreams of the Pioneers

Of the mile-long, high-level bridge now being built across the Hudson near Albany on the New York Central, the New York *World* says:

"The great cut-off at Castleton on the Hudson * * * * will be a boon to all the people of New York State and to five times as many beyond its borders. * * * *

"The Castleton cut-off is a notable example of those modern railway problems which concern rather improving old lines than the opening of new ones, for the cheaper movement of traffic grown vast beyond the dreams of the pioneers."

From a drawing made at Castleton, Sept., 1923, by Herbert Morton Stoops.



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Farmers Service Bureau

(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full name and address. Name not used if so requested.)

DIVIDE SEED ON 50-50 BASIS

I am just letting my fields to be worked by B and B furnishes all of the seed and does all of the work and B gives me one-third, and B cuts the hay and he gives me one-half the hay as I furnish all of the clover seed. Now what share of the clover seed ought I to get if B should cut that?—A. J. C., Laingsburg, Mich.

—The clover seed should be divided on the same basis as the hay, that is 50-50. However, the landlord should share the expense of hulling the clover seed in the proportion as the crop is divided.—F. T. Riddill, Research Asst. in Farm Management, M. A. C.

WHO GETS PROPERTY?

Will you please give me some information in a case like this. If my mother died and left no will and had no joint deed would everything fall to my father? I am the only child. Can I hold a share and how much? My husband and I bought the property and my father charged me full value for the farm and besides charged 6 per cent interest. Please let me know what chance I have, if any.—Mrs. B., Traverse City, Michigan.

—If your mother died intestate, i. e. without having made a will, her real property would descend to you as the only child. However, if the title to the farm was in your fathers name, it would not be a part of your mother's estate and of course would not descend to you. One-half of her personal property would descend to you and one-half to her husband.—Asst. Legal Editor.

WAS FENCE IN PROPER PLACE?

Have I cause for action to collect damages in the following matter: Contractors grading highway No. 12, took down my fence damaging some of my crop and left it lying on the ground, my crops being unprotected. It will cost me quite a sum to put this fence up and I have hard work to meet my taxes. A. H. P., Gould City, Michigan.

—If your fence is in the proper place the contractors would have no right to take it down and leave it down, and you would have a right of action against them for damages.—Asst. Legal Editor.

EXEMPT FROM SCHOOL

At what age is a child exempt from school in the country?—S. A., Yale, Mich.

—A child might be exempt from attending school in a country district if such child is sixteen years of age or such child is exempt from attending country school if he has secured an eighth grade diploma and is not yet sixteen years of age if there is no high school maintained in the district in which he lives. If such child attended a city district where there was a continuation school maintained and he had not completed ten grades of work or its equivalent and was under seventeen years of age, he would be required to attend such continuation school during the eight hours per week required by law.— W. L. Coffey, Dept, of Public Instruction, Lansing.

BELIEVES LAND ASSESSED TOO HIGH

I have 160 acres that I am using for pasture. It is so hilly it cannot be farmed or used for anything but pasture land. I bought it for $1,000 on a contract. The same spring I bought it it was assessed for $1,400 then the state raised it to $1,600 but now it is back to $1,400. You told me last spring to write the State Tax Commission, and I did so, and they told me to meet the board of review in the township in which the land is located. I did that but could get nothing done. I understand that land cannot be assessed for more than its cash value but I did not know how its cash value might be determined, without it would be by the sale price. Has the supervisor of board of review a right to assess it for more? I wanted to pay my taxes this year under protest and do you think I could make a complaint that it was assessed too high, the valuation being $400 more than I paid for it on a contract?—J. J. M., Beulah, Mich.

—The assessed valuation of property is fixed in accordance with the judgment of the assessing officer. An appeal, however, may be taken to the State Tax Commission if the owner of property believes that the assessment of his property is excessive and greater than the value of the property.

Taxes may be paid to the Township Treasurer under protect. The owner of the property, if the taxes are paid under protest, must commence suit within thirty days from the time of payment of the taxes. The assessment will then be reviewed by the Court.

It is presumed that property is assessed at its cash value.—O. B. Fuller, Auditor General.

DEALER LIABLE FOR PRICE

I shipped a crate of 18 fat hens weighing 99 pounds to a Detroit poultry dealer on June 7th. Eleven days later he mailed me my check and paid me the market price of June 18th or at time of mailing the check which was five cents per pound lower than on date I shipped the hens. I would like to know if there is any way I can collect the difference which I consider due me? I also requested him to return my empty coop by express immediately and have failed to receive it. I have written him in regard to this matter and have failed to get a reply. Would I be allowed to advertise his dishonesty?—Mrs. Wm. C., Minden City, Michigan.

—The poultry dealer would be liable to you for the price of the poultry at the time he received it. You might send your claim to a lawyer for collection.—Asst. Legal Editor.

OWNERSHIP OF FRUIT

Will you please answer my question in your paper? Does the fruit on a tree belong to the man who owns the tree? We have a mulberry tree whose limbs hang over the fence of our neighbor. This neighbor does not want me to get my berries nor does she want them herself.—Mrs. L., Elsie, Michigan.

—Fruit on a tree belongs to the owner of the land on which the tree grows, even if some of the branches protrude over the land of another.—Asst. Legal Editor.

CONTROVERSEY OVER HIGHWAY

I would like to know through the Farmers Service Bureau about the following: A and B both own farms adjoining highway which never was traveled much. It is the main state road. Has C the right to chase his cattle on this road if A does not want them there and has C the right to shoot at A's dog when going after cattle to chase them back? What can be done?—W. W., Metz, Mich.

—The adjoining land owner owns the land to the center of the highway, subject only to the right of the public to use it for hiighway purposes. C would have no right to use the highway in front of A's farm for the purpose of grazing his cattle. C would have no right to shoot A's dog unless the dog was unnecessarily injuring his cattle, and if he does this he would be liable to A for damages.—Asst. Legal Editor.

POTATO PRODUCERS' ASS'N. MEET AT GAYLORD, NOV. 8

THE Michigan Potato Producers' Association is holding a meeting on Thursday of this week, at Gaylord during the Top-O-Michigan Potato Show. The meeting begins at 1:30 P. M. with Thomas B. Buell, President of the Michigan Potato Producers' Association, presiding as chairman. F. C. Gaylord, of Purdue University, will talk on seed, soil and spud success. F. E. Fogle, M. A. C., discusses the construction and ventilation of potato storage houses. Potato storage diseases and their control will act as a subject for J. E. Kotila of the College, and W. P. Hartman of the state department of agriculture will talk on standardization.

FEDERAL RESERVE MAKES SHORT LOANS POSSIBLE

(Continued from Page 7)

ties. Often the time required on a loan by a farmer was longer than the bank could safely give and the large demands of farmers at certain times of the year were too heavy for most banks to carry; also, the large demands coming from all over the country at about the same time placed the larger city bank with which the smaller banks were doing business into a position where they could not meet the demand.

One of the principal features of their Federal Reserve System is the fact that through it our financial resources are pooled. If there is a heavy demand for credit, this pool can be used for relief or if any particular section has large credit requirements the banks of this System can be used to distribute the burden over the whole country. This System has proven itself of great value; however, from an agricultural standpoint it has not been as satisfactory as it has to other lines of business in which there is a quicker turn over than there is on a farm. The Federal Reserve Act placed a limit on the banks operating under this Act to take as collateral notes which do not run over ninety days, with the exception of agricultural paper, which was limited to six months and last Spring this time was raised to nine months. This time limit of nine months now very satisfactorily takes care of the excess short time loans of farmers which the country bank can re-discount with the Federal Reserve Bank, but does not take care of longer time loans for the purposes of raising and maturing cattle, etc. However, the Intermediate Credit Banks have been established to take care of this type of paper.

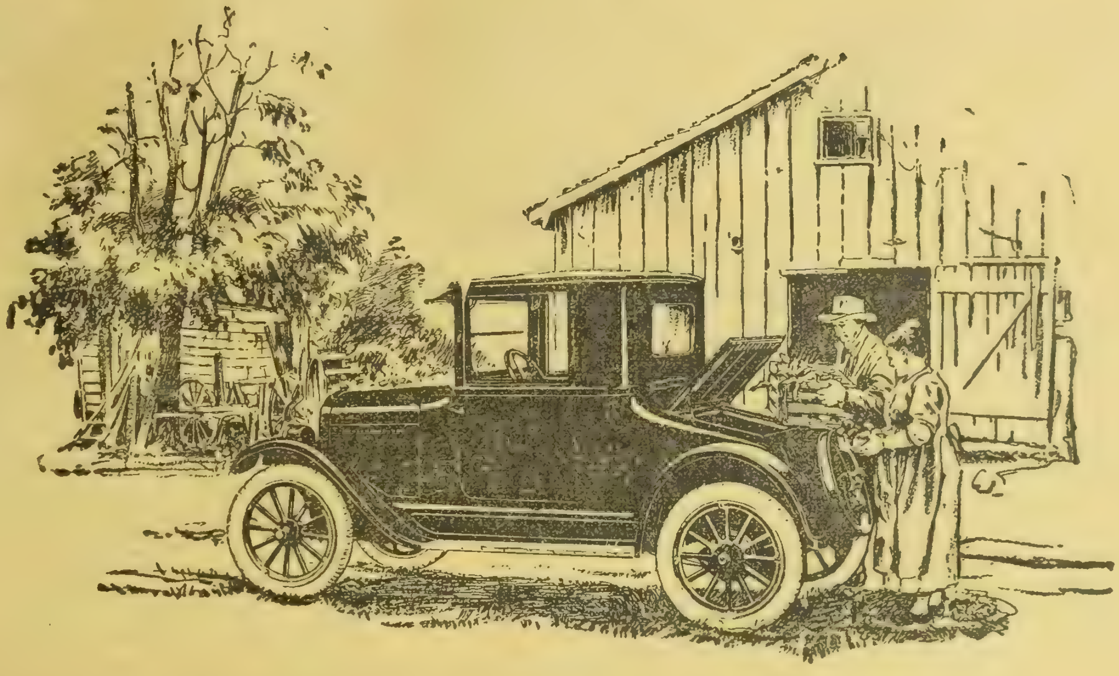
Not all of the country banks are members of the Federal Reserve System. These Banks, however, receive an indirect service from the Federal Reserve Banks through their city correspondents, who have been enabled to take as collateral many millions of paper which they could not have done had they not had access to the facilities offered by the Federal Reserve Banks. Whenever a country bank finds itself in a position where it cannot take care of all of the needs for short time loans from its customers and it is a member of the Federal Reserve System it can take this paper to the Federal Reserve Bank and use it as collateral on loans. These notes offered as collateral must be taken up in at least nine months and must come from borrowers who are entitled to credit—that is, from men who show a financial statement which warrants the extension of credit—and who use the funds for agricultural purposes. The local bank must guarantee the payment of these loans and naturally can only make such loans as will meet the collateral requirements of the Federal Reserve Bank.

The facilities offered country banks by the Federal Reserve Banks and the foresight and sincere interest of the average country banker in farming has been responsible for our being on a sounder financial footing. The job the banker had was a very difficult one and if he had not used foresight would still be very sick instead of on the way to recovery. The success of any institution is primarily dependent upon its customers. Poor customers mean failure—good customers success. The average business success of today is due to a better service rendered to its customers and this is as true of the banks as of any other type of organization. The farmer with a good reputation who has shown signs of thrift will find when he goes to his local banker for a loan that the banker will not only meet him half way but will often go farther. The success of the country banks is closely allied with the farmers success. The lack of cooperation between the banker and the farmer would not only be unsound but foolhardy. The cooperation of the country banker with the farmer has been very clearly demonstrated in the past and especially in the last few years. If you need financing and are entitled to it go to your banker and lay all of your cards cn the table and you can rest assured that you will get a square deal.

for Economical Transportation

CHEVROLET

Every Farm Needs Two



EVERY farm needs two automobiles, one of which should be a closed model Chevrolet.

The open touring car is best for general farm use, carrying passengers or perhaps miscellaneous bulky produce or merchandise, but for cold or rainy weather, and for church or social use the family needs a closed car, either a 2-passenger Utility Coupé, as illustrated, or the 5-passenger Sedan. The extra large rear compartment is a feature of the Coupé.

These closed cars are very finely made, furnished, upholstered and trimmed. The windows are of plate glass and can be lowered, providing as much air as an open car, yet affording full protection against wind, rain, snow or cold when raised.

With a second car on a farm, one is always available for those at home when the other car is out.

The low prices of Chevrolet make the ownership of two cars feasible for most farm families.

CHEVROLET MOTOR COMPANY

Division of General Motors Corporation

DETROIT, MICHIGAN

Prices Effective September 1, 1923 f. o. b. Flint, Michigan

Superior 2-Pass. Roadster	$490
Superior 5-Pass. Touring	495
Superior 2-Pass. Utility Coupe	640
Superior 5-Pass. Sedan	795
Superior Commercial Chassis	395
Superior Light Delivery	495
Utility Express Truck Chassis	550

Five United States manufacturing plants, seven assembly plants and two Canadian plants give us the largest production capacity in the world for high-grade cars and make possible our low prices.

Dealers and Service Stations Everywhere

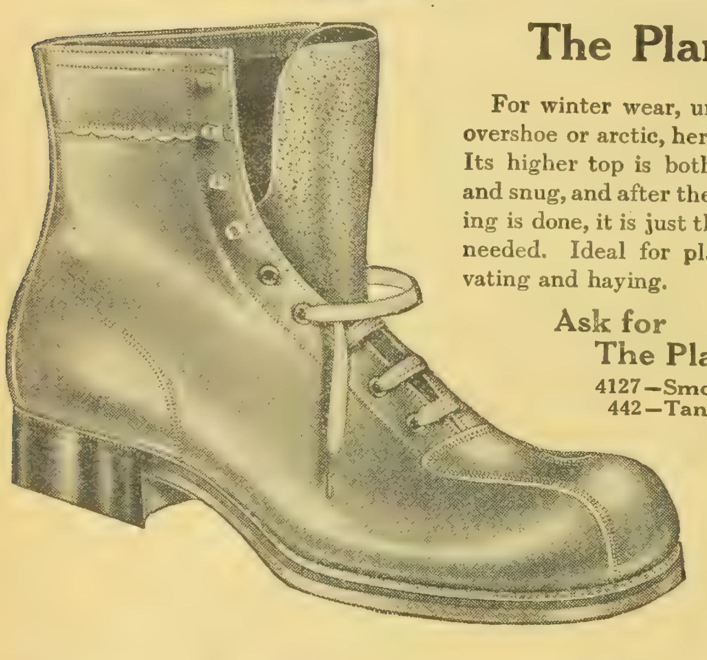
ROUGE REX
Cordovan Horsehide Shoes
Wear 1,000 Miles—Always Stay Soft

February 13, 1921

It will be three years this Fall since I bought your Rouge Rex shoes and after having put three pairs of new soles on them, they are good yet. I wore them most of the time. They are the best fitting and easiest walking shoes I have ever worn. They are certainly made to stand the wear, and are always soft and pliable, summer and winter.

There are six of us and we are all going to buy your shoes. My neighbor asked me when I was going to wear this pair out; and I told him that if I knew that I could get another pair, I would do so. He said he would, too.

Yours truly,
(Signed) WALTER HOFF,
R. No. 1 West Saginaw, Mich.



The Planter

For winter wear, underneath an overshoe or arctic, here is the shoe. Its higher top is both comfortable and snug, and after the spring plowing is done, it is just the shoe that's needed. Ideal for planting, cultivating and haying.

Ask for
The Planter
4127—Smoke
442—Tan

Stays Soft in Any Weather

A 1,000-Mile Shoe—
From Tanners to You

Every man knows what it is to dry out wet shoes. The leather drys out stiff as a board, hard and uncomfortable.

Now this discomfort is ended. For, thanks to our exclusive, secret, double-tanning process, the Rouge Rex shoe dries out after every soaking as soft as new buckskin. *This amazing shoe stays soft.* No other shoe made like it!

We tan the leather in our own tannery.

We take selected horsehide of the superfine quality, formerly used for expensive Cordovan shoes and Cossacksaddles—the toughest, longest-wearing leather known. Yet by our secret tanning process we give this wear-resisting leather the softness and pliability of buckskin. It never loses its softness—and it wears and wears and wears. For we even increase its natural durability.

Rouge Rex
Comfort Shoe

Tender feet welcome these shoes. They're soft and flexible as a moccasin, yet wear like iron. A typical factory or dry weather shoe, so light you don't realize they are on duty. Ask for 435 in chocolate. 434 in tan. Both are outing models. 495 chocolate Blucher.

Unusual Economy
Work Shoes for All Purposes

We operate our own tannery and our shoe factory as one organization. This effects very large economies. So every Rouge Rex shoe is very low priced when you consider the quality.

There is a Rouge Rex for every use. For field and shop, for lumbering and hunting, for the mines and the oil fields. The Planter model shown assures dry, warm feet in blizzard weather. The ever-soft leather in every model assures perfect comfort always. This new-day hoe is the one all men want.

If your dealer cannot supply you write us and we will see that you are supplied from our nearest dealer.

HIRTH-KRAUSE COMPANY
Shoe Manufacturers and Tanners
Dept. 304, Grand Rapids, Michigan

OUR UNQUENCHABLE HOPE: THE MAN

A SERMON BY REV. DAVID F. WARNER

TEXT: "A man shall be a hiding-place from the wind, and a covert from the tempest". Isaiah 32:2.

THE story goes, that one Diogenes, with his latern, cynically goes about in the day time in search of a man. But this was in ancient Athens when political life was weakening. Yet, is the prophet Isaiah also saying that there is great need of a man to put righteousness into the social and political life of Jerusalem? Is he defying universal experience when he says there is yet to come a man who shall become the world's hiding-place from the tempests of danger? And have we yet come into that day when we believe there is but one man who can give full value and meaning to this prophecy? Well, in the face of all human experience, it seems a puzzling prediction. And, yet, Faith continues to proclaim and so Hope, that that man is Jesus Christ.

Jesus Christ brought a religion. a way of living that is a matter for this world as well as the future. And from the day of accountability until death, not pleasure, not merchandising or farming, not making of a living; but religion, the making of a life after the pattern of The Man, is the chief concern of mortals here below.

Even yet, our undying hope for refuge is in men who live so close to human need on the one hand, and so close to the heart of the Eternal, on the other. We hope to have editors after the way of The Man. Yet, we have so many un-Manly editors; editors who are used by the large interests to exploit men rather than help them; who are catering to the favor-seeking men and corporations. Press reporters are asked to bring in a definite character of news, and if it is not that, it is doctored up in the office. "Woe unto you, scribes, Pharisees, hypocrites! cleanse first the inside of the cup and platter that the outside thereof may become clean also." Woe unto you, pharisaical editors, who put appearance above reality making life mere play and a farce. The press may be helpful or dangerous. What a spiritual fragrance would spread thruout our land if the editors of magazines, of country weeklies, and of great city dailies, would come out in unsparing denounciation of the evils and the extensive publication of the good.

We hope for Christian lawyers. Lawyers exist for the adjudication of legal wrongs. As officers of our court system they, are expected to assist in the administration of justice. But some of them, for gain tho small, will barter away their souls and induce others to do so. I was sitting in the office of a city lawyer. A poor boy came in for some advice. He went out. The lawyer complained to me because the boy offered him no fee. Verily, what pettifoggers and social leeches! (No, not all.) But our schools continue to turn out too many men whose great ambition is to get place as counsel for some blood-thirsty corporation. Shame! And yet, hope revives, for "in that day" we are to have lawyers who will be arbiters of differences after the principle of arbitration in the eighteenth chapter of Matthew as laid down by The Man. "Woe, unto you, scribes, Pharisees, hypocrites! for ye tithe mint and anise and cummin, and have left undone the weightier matters of the law; justice, mercy, and faith." And woe unto you lawyers who put all things on the same level in morality.

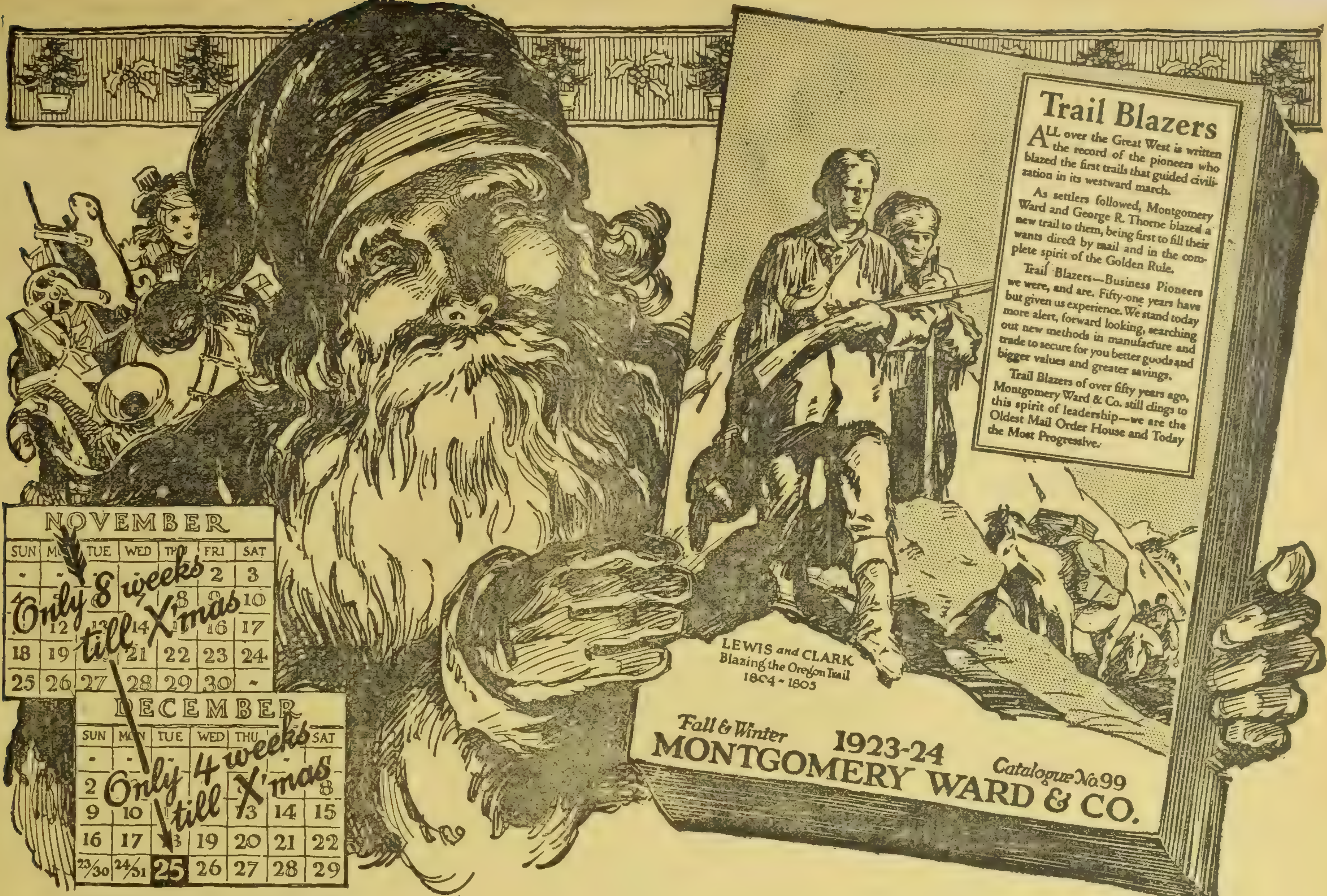
We hope for Christian businessmen, more of them. Such will promote business co-operation and bring producer and consumer closer together. Then we may say farewell to Mr. High-Cost-of-Living. We hope for business men, who, in interpreting their work, will not lose sight of The Man. But the spirit of competition, rather than co-operation; and of unearned gains and love of speculation, have led to dangerous combines and monopolies, and socially harmful alliances with politics. "In business, not slothful, fervent in spirit, serving the Lord" says the spirit of The Man.

We hope for Christian businessed after the manner of The Man. We ministers need Christ. In the days following the Reformation, when rationalism was running riot in Germany, it is said the typical sermon was on "the value of general charity, good agriculture, duty of the citizen, care of bees, and similar collateral themes." Is history repeating itself? Have you known of any pulpits where sermons on politics, war, the liberty loan, the status quo in government, and similar thems had the right-of-way? Well, should this condition continue, we may look for the adulteration of our hymns and our worship, the leaving of the Bible out of our schools, and the spiritual element out of our education. Anything else but preaching Christ cheapens and degrades the pulpit and encourages Christendom to swing over into rationalism and materalism. We read that in the days of English Deism at the beginning of the Wesley movement, the clergy were devoted to amusements, had little conception of the sanctity of their office and the spiritual care of the common people. Is this too common today? Then let us hope for more John Wesleys. Surely, we need preachers after the boldness of The Man. Preachers who will condemn sin in the church as well as out, in high places as well as low. Any hireling can denounce the street peddler and petty gambler, but it takes a pulpit hero to stigmatize corporation law-breakers and tax-dodgers, and any and all respectable sinners; and then out of love, insist on the social ideals of The Man Jesus.

We hope for farmers who care most about the idealism of The Man. Farmer friends, of course you know you control that which contributes most to the maintenance of life. You know that men cannot live without the industry of the soil. Ours is a basic occupation. Then, will we take selfish advantage of society? This is tempting. Yet, it is extremely fascinating to know and to feel what possibilities for serving mankind. have the plowman and the sower. But this calls for Christian vision. "The vision of a man is the correct measure of the man," says Carlyle. Behold the rural Galilean, who but for the Cross for mankind's sake, could have exploited all creation.

Everywhere we need, and we hope for, a revival of Gospel religion and of friendship with the Unseen Man. How we do need Christian motive and purpose in every walk and word and wish of life! The life of today must needs have morality at its center to save it. This is to say that it must have religion. I am increasingly convinced as the days go on that nothing but the religion of The Man can save men and nations. "Tongues" and "knowledge" are not enough, says the apostle Paul. Culture will not avail. To bring our blase children to know and to feel the white holiness of Jesus Christ; this is where we must build our future. I believe the religion of Jesus in practice, and that alone, will give necessary attention to the children, the poor, the sick, the imprisoned; and that only will rid our land of thievings, hold-ups, the traffic in drink, the terrible ravages of the social evil, and will give happy employment to all. Some American bankers were banqueting in China. The conservation passed to the alarming embezzlement of public funds in recent years. A Y. M. C. A. secretary asked if he might be allowed to ask two questions. How many of you men attended church and Sunday school when you were boys? All hands went up. How many of your boys are attending church and Sunday school today? No hands up.

Now, the fall elections are near. What shall we hope for? Whom shall we vote for? The self-seeker and the man or women drunken with political ambition? A man cannot be better than his ideal. Only worthy purposes makes a man worthy. My candidate must be a person who has a clear vision of the just laws, and fair ideals, and happy service that should prevail among us. Be he church member or no, I want him to see the light of that city or community where reigns the Golden Rule. **And, I want him to believe** that such a commonwealth can, and and will some day, be established.



Trail Blazers

ALL over the Great West is written the record of the pioneers who blazed the first trails that guided civilization in its westward march.

As settlers followed, Montgomery Ward and George R. Thorne blazed a new trail to them, being first to fill their wants direct by mail and in the complete spirit of the Golden Rule.

Trail Blazers—Business Pioneers we were, and are. Fifty-one years have but given us experience. We stand today more alert, forward looking, searching out new methods in manufacture and trade to secure for you better goods and bigger values and greater savings.

Trail Blazers of over fifty years ago, Montgomery Ward & Co. still clings to this spirit of leadership—we are the Oldest Mail Order House and Today the Most Progressive.

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Twenty complete Christmas stores, hundreds and hundreds of gifts, everything suitable for Christmas is pictured in your Montgomery Ward Catalogue.

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And in this great Christmas Catalogue everything is ready now. You do not need to wait until Christmas is at hand to make your selections. You have before you now in your Ward Catalogue everything you will want to buy for Christmas.

Start Today Selecting Your Gifts for Christmas

The weeks before Christmas pass by quickly. So start today looking through your Catalogue and select your gifts carefully. There is an increased pleasure both in giving and receiving a carefully selected and appropriate gift.

There are no "Christmas Profits" in Montgomery Ward prices

There are no Holiday prices, no "Christmas profits." You pay the lowest price of the year for every Christmas gift. You buy from Ward's Catalogue at the normal, everyday price.

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Order Your Christmas Gifts Early. Christmas is just around the corner

We are ready now to handle all Christmas orders. Our stocks of Christmas goods are now complete. Everything is ready. So order now.

Get out your Ward Catalogue today. Don't put it off till Christmas time. Don't wait till some things are gone.

Start today making up your Christmas list. Order early.

MONTGOMERY WARD & CO.
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Established 1872

Montgomery Ward & Co.

The Oldest Mail Order House is Today the Most Progressive

The Michigan
BUSINESS FARMER

SATURDAY, NOVEMBER 10, 1923

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THE RURAL PUBLISHING COMPANY, Inc.
GEORGE M. SLOCUM, President
Mt. Clemens, Michigan

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RELIABLE ADVERTISERS

We will not knowingly accept the advertising of any person or firm who we do not believe to be thoroughly honest and reliable. Should any reader have any cause for complaint against any advertiser in these columns, the publisher would appreciate an immediate letter bringing all facts to light. In every case when writing say: "I saw your advertisement in The Michigan Business Farmer!" It will guarantee honest dealing.

"The Farm Paper of Service"

AN OPEN LETTER TO MR. KELLEY

"Enclosed find check for one dollar for which please continue your paper. I want to tell you something. The farmers have got where they haven't got a darn bit of faith in the whole works, from the farm papers to the governor himself. The cards are stacked so we get cold-decked at every deal but I suppose we have got to support you all someway.

After a hard fight we succeeded in stopping the T. B. test in Jackson County. It had been carried on here for two years and 80 per cent of us considered it the hardest blow ever dealt the cattle industry of our county. Beside we do not believe it amounted to anything. I'll bet we will never see a word of it in a farm paper just the same. Yours,—J. D. Kelley, Cement City, Michigan."

MY Dear Mr. Kelley:—You say "the farmers have got where they haven't got a darn bit of faith in the whole works from the farm papers to the governor himself!"

We will not attempt to answer for the Governor. And we will not attempt to answer for any other so-called "farm-paper", but we will challenge your right to include THE MICHIGAN BUSINESS FARMER, (if that was your intention) in that aspersion.

From the day the first copy of this publication went into the mails, it has been published with one goal always before us—the greatest possible service to the farmers of our home state.

We have never hesitated to attack any individual or proposition no matter how formidable, if we believed it menaced the farming business in Michigan. We have championed every farmers organization plan which had behind it a sincere purpose. We have never been biased by politics, religion or organization affiliations.

NOR WILL THE BUSINESS FARMER EVER BE!

This is the only farm paper owned and edited in Michigan to-day and we would be traitors to our trust if we deviated one iota from this declaration of principles which has been our beacon from the start.

Now, Mr. Kelley, if there is any subject of interest to the farmers of Michigan which cannot or will not be discussed in these columns, whether we personally favor or disfavor it, I want to know what it is.

We maintain a department known as "What the Neighbors Say", under which appears in each issue letters from our readers on all manner of subjects. These letters appear just as they are received by us. We welcome them and print them, whether we agree with them or not. We believe this is part of the service expected of us and that we have no right to shut our columns to any reader who has a message for the farmers of Michigan.

Now, Mr. Kelley, if we have made it plain to you where we stand, we thus publicly invite you to state the farmers problems particularly in regard to the tuberculin testing of cattle, and your message will be printed in these columns. And I will not hold you, Mr. Kelley, to your bet that you would never see a word of it in any farm paper, either!—GEORGE M. SLOCUM, Publisher

BEAN CAMPAIGN A FLIVVER

IT ought to be apparent to the bean growers in Michigan that they will have to take over the marketing of beans into their hands.

When New York, California and Colorado, the other great bean producing states, agree to a campaign in which they will pay their share of the cost of a $50,000 advertising campaign to increase the sale of beans to the consumers in America, and when that plan goes on the rocks because of the shortsightedness of a few jobbers in Michigan it is high time that this state produced a leader who can initiate a strong organization of bean producers that will specialize only in handling this commodity and preparing it for market.

There is every reason why an organization of this kind can be as successful as those in the west, whereas a selling agency, organized to handle all manner of farm products, perishable and otherwise, quickly finds itself in very difficult waters.

Michigan beans will always hold an enviable place on the bean market in the United States. They are not a perishable crop; it is not difficult to prepare them for market, and THE BUSINESS FARMER was first, as you know, to encourage the farmers and their families to hand-pick their own beans and prepare them ready for market in their own homes, or with cooperatively owned machinery in their own neighborhoods.

A good organizer in a central office, with branches in the bean markets, could dispose of all the beans produced in Michigan and promote their sale at a cost so small to the individual bean grower that it would not be noticeable.

Then when another plan came forward, to promote the sale of beans and to which other states had agreed to pay their share, there would be no question but what the Michigan bean grower's association would raise this fund over night.

Where is the man who will step forward from the bean growers ranks or from the bean jobbers ranks and offer to take over the organization of a strong bean growers association in the state of Michigan?

There is a wide open opportunity here for some young man to show his mettle. He must be a man who knows how and where to sell beans and whose counsel can be taken by the men he is representing. The farmers of this state will be quick to recognize such a man and we will through the columns of THE BUSINESS FARMER, do all we can towards making his plans a success.

Perhaps we had best not close this comment without recognizing the many bean jobbers in Michigan who do realize the importance of cooperating with the growers and of increasing the consumption of Michigan grown beans. It is unfortunate that these men cannot work out a plan which would prove satisfactory to the bean growers and which would utilize their own equipment and facilities already built.

These men know the market and if they will lay their cards on the table and go fifty-fifty with the bean growers on the possible profits we would be just as anxious to see such a plan tried. Particularly because we believe in using the material we have at hand, if it is possible and practicable.

GOLDEN ANNIVERSARY OF THE GRANGE

THE Michigan State Grange celebrated its fiftieth annual convention at Muskegon the week of October 23rd to 26th.

We are proud to present in this issue a complete report by our staff correspondent of the proceedings of this meeting, which should be of interest to all farmers in Michigan whether members of this particular organization or not.

The Michigan State Grange has an enviable record over the fifty years since its organization in Michigan, when it was one of the pioneers in this great national organization that now has members in every state in the Union.

The Grange pioneered much of the organization and cooperative work which has been taken up by later organizations and carried forward with slight changes, but always with the principles behind it which the Grange leaders in its inception formulated.

The Grange has come to be recognized because of its age and experience as the counselor for the younger and often more impulsive organization and it has many times proved a good balance wheel when radical leaders would have led the farmers of this country into some will-o-the-wisp mirage.

We have never known a community where a local Grange was established that was not blessed by its environment. The Grange has meant not only the meeting place, the center of community interest, the place where men and women of the same calling could meet on equal grounds and discuss their mutual problems, but it has been the great educator which need recognize only as its superior the country school itself.

We are proud of the Michigan State Grange and we are proud of its leaders, who for fifty years have kept stainless the record of its work in this great state.

We know we bespeak the sentiments of every farmer in Michigan, no matter what his organization affiliation, when we wish the Michigan State Grange Godspeed and add our sincere congratulations and sincere hope that the second half of the century may see even greater accomplishments than have the fifty years just passed.

I COME TO SERVE!

THE cover design of this issue is a famous artists conception of the modern crusader who goes forth with the single purpose of relieving suffering, binding up the wounds and rehabilitating those who are unfortunate enough to be overtaken by calamity. He searches the world to find where he may be of assistance and his motto is "I come to serve!"

The American Red Cross has been first on every field of battle, first at every natural calamity, first at the bed-sides in every epidemic, no matter where in the world, since it was first organized.

We hope it will never again have to go upon the field of battle to ease the pain and scourge of War, but the natural calamities, fire, earthquake, flood and cyclone, will always be reaching out in some part of the world and exacting its penalty of helpless humans.

Within twenty-four hours after the earthquake, which so recently visited those congested islands in the Pacific, the American Red Cross had great ships loaded with provisions, medical supplies, nurses and doctors. That very gesture of good friendship to Japan in her hour of need will do more to cement a fellowship between the peoples of that far nation and our own than all the Jingoists on both sides can bolster up in another decade.

To give our share, no matter how small the contribution is, to the American Red Cross during the annual roll call which begins November 11th and closes November 29th is a privilege which every true Americans holds sacred. No wonder it is called the "greatest mother in the world!"

PAY-AS-YOU-GO ROADS

PAY for your highways as you build them, says Governor Groesbeck, in outlining plans for highway construction during the year 1924. There is not a farmer in Michigan who will not say "Amen" to this proposition, because, as we have continually pointed out, no sane man can defend continued issuing of bonds which mortgage the whole future prosperity of this state.

If Governor Groesbeck's administration is to be given credit for no other accomplishment, certainly his road building program and the changes he has made in the plans under operation when he took over the office have been commendable. He can well point with pride to the fact that under his administration only $2,000,000 have been issued for highway bonds; that he has placed several hundred prisoners on the roads and that a greater mileage has been built at a lower cost than at any time since the complete highway program was adopted.

Having given the Governor credit for what he has done for good roads we must necessarily take him to task for vetoing the gasoline tax which has now been adopted by most of the states having a large registration of automobiles and trucks. There is every good reason for a gasoline tax. Lieutenant-Governor Thomas E. Reed, speaking at the Farmer's Picnic at Bear Lake, Manistee County, said recently, "The gas tax is the only fair method of paying for Michigan's great highway program, considering the fact that people from all over the continent drive over the highways of the state, and I believe that we will have that law in the near future."

We harbor the idea that even the Governor himself regrets now the action he took and is trying to make amends for it in the hope that he can have a successful highway building program well under way before the next legislature meets, when it is a certainty the gasoline tax will be inaugurated in this state.

MICHIGAN NEVER SO PROSPEROUS

DEPOSITS in Michigan's 572 State banks, two industrial banks and 12 trust companies which declined $93,305,350.26 during the year ending September, 1921, are now, as shown by a statement issued by the Michigan Department of Banking as of Acts 10, this year, to be the largest in the history of the State.

The recovery from the decline in the year of the last quarter of 1920 and the first three quarters of 1921, has been continuous. From Sept. 15, 1922, to Oct. 10, 1923, just 13 months the increase has been $124,481,258.94, of which $40,818,0085.15 was in commercial deposits and $83,693,285.79 in savings deposits.

For the five-year period the increase in commercial and savings deposits combined has been nearly 100 per cent, or from $59,724,468.65 to $1,099,375,782.21.

And not all of this increase has been registered from the cities of Michigan either! Country banks report that a large proportion of their obligations from farmers have been liquidated and in the face of the agricultural calamity howlers, farmers have largely paid up the money borrowed during the periods of so-called "good-times".

PUBLISHER'S DESK

AN EXCEPTION TO PROVE THE RULE

THERE is an old adage that "There is an exception to every rule" and it mav be that we have found it in the case of the knitting machine manufactured by the Home Profit Hosiery Company, Rochester, New York.

Late in October, at the earnest solicitation of our New York representative, the publisher stopped off at Rochester and visited the five-story home of this company. We met Mr. H. B. Watson, the general manager, and through his courtesy were able to make a careful investigation into the manufacture of the machines, the plan of selling to the user, the method of collecting the home work, supplying the raw material and paying for the work done. We also saw the finished work, as sent in by women from all parts of the country, being sterilized, matched, pressed, wrapped and placed in standard attractive hosiery boxes for the retail trade.

There was every indication that a legitimate work-at-home business was being operated here and that this company has many hundreds of satisfied operators who are shipping their material regularly, was demonstrated.

We have always stated in these columns that it was not the desire of the Publisher to use this department to work an injustice on any industry because of the misconduct of any individual in that industry.

We have had a great deal to say about auto knitters and yet we must confess that we have never had a complaint registered against the Home Profit Hosiery Company, although we have had any number against other companies in this same line, many of which we have adjusted to the satisfaction of our readers, but not without some pressure being brought to bear from this office.

We have the assurance of Mr. Watson that the interests of our readers will always come first and that they must be satisfied before he will consider the transaction closed. Under these circumstances we feel that it is no more than right that we should state the facts as we found them on a personal visit to this company at Rochester, and we should be pleased to hear from any of our readers who are familiar with it or who are now employed by it.

A NEW ONE FROM ILLINOIS

I wish to know if you can tell me anything in regard to the reliability of the Bankers Investment Bureau, 320 E. Clay St., Roodhouse, Ill., which claims to furnish a list of over 200 land buyers' names and addresses for two dollars and claim they do not charge any commission for selling your land in this way. In the first place I answered an ad in the "Lansing State Journal" of Mrs. W. Roberts of 320 E. Tray, Roodhouse, Ill., and when my answer came it was from the Bankers Investment Bureau, 320 E. Clay St., Roodhouse, Ill., and made me a special offer of over 200 names of buyers if I would send in within a certain date and as I didn't pay any attention they sent me a second letter which I will enclose for you to see, and extended the special price offer to Oct. 16. Will you please let me know what you can about this as soon as possible.—F. Y., St. Johns, Mich.

IN the first place if the Bankers Investment Company had the right kind of a proposition and buyers waiting for your farm they would not need to advertise under a fictitious name and a fictitious address to secure business. Legitimate business houses do not stoop to such methods.

In the second place if they were certain of selling your farm to one of their two hundred buyers as their circular would indicate, they would be glad to offer to do all of the work for a three or five per cent commission, which you would probably be glad to pay, on the actual sale of your property. Like most concerns of this kind we figure that the chief revenue of the Bankers Investment Bureau is the two dollars for listing which they receive from those who fall for their scheme. We suggest that you spend this two dollars in advertising in your local county paper or your state farm paper. We have known of a great number of farms to be sold on this basis but we never have known one to be sold by the kind of scheme that the Bankers Investment Company have offered to to you.

SELLING STILLS BY MAIL

"Is it any wonder that the manufacture of home brew prospers when advertisements like the enclosed card, are promiscuously circluated thru the mails?"

AND the circular our good friend encloses is headed "New Model Boiler and Storage Can", but the picture is of a copper still already to hook on the coil and altho the type plainly states that it is for boiling and storage, anyone with a child's intelligence would know that it is for making whisky.

But if there were any doubt left in your mind as to the intent of the machine advertised, it would be quickly dispelled by the announcement of copper-tubing at 30c per foot and "Liquor Flavouring Extracts: Rye, Bourbon, Scotch, Irish, Gin, Brandy, etc., at 75c per bottle" which appears on the same circular.

Now mind you, this circular was delivered by a United States government employee in the mail-box of a farm home which had not asked for it and had no desire for it and yet, if purchased, it would be shipped again through the governments mails to their door-step. A complete rum-making outfit that would terrorize a neighborhood and give the sheriff a merry chase to discover it!

No, dear madam, it is no wonder that there is almost as much drinking of alcoholic liquors in many sections as there was before prohibition, when circulars of this kind flood the mails and every city and town has its "Malt and Hop Stores" which sell the identical material this circular offers.

SELF-HELP

"The Pelman Institute wants $39.00 cash out of me for a course in Pelmanism. I am interested in almost anything that leads to mental and financial advancement. Do you think this Pelmanism is real goods and worth the money, or is it a fake?"

I HAVE read over the circular you sent with your letter and altho I do not doubt but what the Pelman books are valuable if you will read them, I am sure that you can get just as much good value by asking for the right kind of books at your local public library, and you will be ahead just $39.00 cash that they ask you for the course.

If you have money to burn, maybe you can get full value out of this course, but our experience is that most people sign up for these correspondence courses and never finish them. There is no question but what they are valuable, but they are only worth as much as you put into them. Ask your local library for some of Orison Swett Mardens books on self-help, nothing better was ever written.

SAVED MANY TIMES

DEAR Editor: You will find enclosed one dollar to extend my subscription two years. We like THE BUSINESS FARMER it has saved us many times the cost. I wrote to one of the knitting machine concerns intending to purchase one but after reading about them in M. B. F., I wouldn't venture. I was also going to write Warren McRae, but think I will let such men alone. A word to the wise is sufficient, and your paper is always on time with the best of advice. We farmers have hard enough times as it is without being taken in on these gilt edge advertisements. Let the good work go on and may many more be benefited by your timely warnings.—G. M. H., Cadillac, R. No. 2, Mich.

Steel rail mills of the country, with one exception, are booked to capacity until next June. Railroads are expected to place between 20,000 and 25,000 cars and considerable tonnage of track fastening.

First Mortgage Real Estate Gold Bonds

You will find Federal first mortgage bonds convenient securities to own; they pay generous interest, they are absolutely safe; and the Federal organization of financial experts takes all details from your shoulders.

Write for Booklet AG1093

Tax Free in Michigan
Free from Federal Income Tax of 4%

6½%

FEDERAL BONDS
Are Better Bonds (1093)

FEDERAL BOND & MORTGAGE COMPANY
FEDERAL BOND & MORTGAGE BUILDING, DETROIT

Farm Financing.....

Every farmer should know the United States Government authorizes

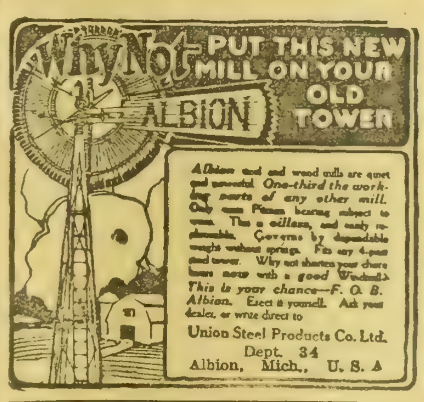
The First Joint Stock Land Bank
of Cleveland

To make long time farm loans, at lowest rates of interest, WITHOUT COMMISSIONS, repayments to be on easy plan of 1% per year in addition to interest. Loans authorized:

1. Up to 50% of the land.
2. Up to 20% of amount insurable buildings add to land.
3. To farmers who own good and well managed security.

Loan value determined by a Government appraiser. Thus the government protects the farmer by determining the value the land, limiting interest rates, prescribing the terms and conditions of the loan, and by prohibiting commissions. For complete information of this opportunity to save money write

The First Joint Stock Land Bank of Cleveland
Guardian Bank Bldg. - - Cleveland, Ohio


Why Not—PUT THIS NEW MILL ON YOUR OLD TOWER
ALBION

Albion [illegible] and wood mills are quiet and [illegible]. One-third the working parts of any other mill. [illegible] This is your chance—F. O. B. Albion. Erect it yourself. Ask your dealer, or write direct to

Union Steel Products Co. Ltd.
Dept. 34
Albion, Mich., U. S. A

5 BIG MAGAZINES FOR ONLY $1
All For One Year

Woman's World, (Monthly)
Good Stories, (Monthly)
American Needlewoman,
The Household, (Monthly)
The Farm Life, (Monthly)

Our Price $1.00 ALL FIVE FOR 1 YEAR

ORDER BY CLUB NUMBER 60
A Dollar Bill will do, We take the risk
Send all orders to
WHITLOCK and COMPANY
25 North Dearborn St., Chicago

CLASSIFIED

WANTED, EXPERIENCED DECAL GIRLS to do Border, Specials and Medallion Patterns. Day or piece work. Steady employment guaranteed. Shop conditions very best. Write or telephone THE ATLAS CHINA CO., Niles, Ohio.

EARN $110 TO $250 MONTHLY, EXpenses paid as Railway Traffic Inspector. Position guaranteed after completion of 3 months' home study courses or money refunded. Excellent opportunities. Write for Free Booklet G-165 STAND. BUSINESS TRAINING INST., Buffalo, N. Y.

Prices Can't Be Lower

Just a letter or card brings these bargains; then pay postman on arrival, plus **SEND NO MONEY** postage. Money will be refunded if you are not absolutely satisfied.

HUNDREDS of ARMY GOODS BARGAINS,

ARMY O. D. WOOL BLANKETS $2.77

Genuine Army Class B wool blanket, full bed size. This price is the lowest anywhere and as they are getting scarce we suggest you buy several at this remarkable low price of .... $2.77 Plus Postage

Army O. D. Wool Shirt $2.95

This is the most wonderful shirt value made. Regulation army, double elbows, lined chest, of finest O. D. wool serge. Costs today to manufacture more than $5.00. Sale price.................. $2.95 Plus Postage

HORSE BLANKETS $1.85

These blankets for small horses, of brand new heavy weight outside shell of burlap wool blanket lined. Heavy webb girths, leather straps $1.85 Plus Postage

Waterproof Horse Blanket $2.95

For larger horses shell of treated duck blanket, lined. This is a well made durable blanket, weight about 10 lbs. Worth $8. Our price $2.95 Plus Postage

ARMY WOOL SOCKS

3 Pair 77c

All wool heavy weight extra length, just the thing for winter. They are long wearing regulation wool socks and worth 75c pair.

Sale price

3 pairfor 77c

SHEEPSKIN COATS $9.75

36 inches long with heavy O. D. Moleskin shell, lined with best grade bark tanned sheepskin. Well tailored, built for service. Beaverized collar. Sale price.................. $9.75 Plus Postage

100% Wool Union Suits $3.95

The best of material and workmanship in these heavy winter weight, all wool ribbed suits, You will not be dissapointed with this great bargain. Sizes 36 to 46................ $3.95 Plus Postage

Army Russet Dress Shoe

WOOL SOCKS FREE WITH EVERY PAIR

$3.69

Sizes 6 to 11

Goodyear welt Munson last regulation army pattern, drill lined shoe. Extra comfortable with soft toe leather inner sole and double ply oak leather outer sole. Snap up this bargain with pair wool socks free, only....... $3.69 Plus Postage

ARMY OFFICERS SHOE $3.69 and Free Wool Sox

Sizes 6 to 11—Wool sox free with every pair, mahogany finish plain toe Goodyear welt smooth calf uppers, solid oak sole with extra water proof sole, a very neat and dressy shoe.

All Wool Slipover Sweater 98c

Sleeveless to be worn under coat. This is a splendid servicable all wool slipon. All sizes. Worth $2. Our price only........... 98c

ARMY WOOL DRAWERS 79c

Made for U. S. Army, worlh $1.50, our price 79c Plus Postage. Stock up on these as there are only a few left. Sizes 32 to 38.

New O. D. Wool Breeches $3 45

All Wool O. D. Regulation breeches brand new, made of extra quality wool serge and melton materials. Extra patch on knee. Our Special $3.45 Plus Postage

New Khaki Breeches $1.55

Good quality and weight well tailored strongly stitched, splendid bargain at... $1.55 Plus Postage

O. D. Wool Trousers $2.77

Where you can buy a splendid all wool trouser of O. D. serge or melton, heavy weight material for this low price. Has heavy drill pockets and double stitched thruout Sale Price............. $2.77 Plus Postage

In business in Minneapolis for 27 years.

THE DAVIS COMPANY

131 Washington Ave. N. MINNEAPOLIS, MINN.

No Money Now!

Send for this sensational bargain by first mail. We want you to see how Chase saves you big money. If you don't think these warm hi-cuts are better value than the regular $3.00 quality elsewhere send them back and receive all your money.

Knitted from Pre-shrunk Wool

Famous Shrunk Wool Knit 10-Inch Hi-cut

$1.95 and postage

Don't confuse this wonderful quality with the ordinary inferior "pressed felt" article. This hi-cut is knitted from pre-shrunk wool that will out wear several pairs of the cheaper grade.

Order by MBF- 8392

CHASE CO.

Dept. 207

(Formerly Chase Shoe Co.)

MINNEAPOLIS, MINN.

Get Manufacturer's Prices

SAVE $5.00 to $40.00 On Your New Range or Heater —direct from manufacturers—and get the finest quality and newest improvements made? See our beautiful new design blue and gray porcelain enamel ranges that you can buy for less money than others ask for just ordinary stoves.

MAIL A POSTAL TODAY—for the greatest money saving bargain book of our 22 years. Any stove, range, heater or furnace on 30 days' trial. Quick, safe delivery guaranteed. Easy payments. 500,000 pleased customers. Send us your name today.

KALAMAZOO STOVE CO., Mfrs.
678 Rochester Ave., Kalamazoo, Mich.

"A Kalamazoo Direct to You"

30 Days' Trial

Clutch Pencil Given For 8 Boys' Names

REGULAR size, 5 inches long, attractive and serviceable. Complete with pocket grip. Should last a life-time. Always sharp and ready for use. No broken points. Pencil sent post paid for names and addresses of 8 reliable boys ages 8 to 18 years living on R. F. D. routes in any of the following states: N. D., S. D., Minn., Ohio, Ind., Ill., Wis., Mich., Iowa, Nebr., Mo., Kan., or Okla. Give corrrect names and addresses. Write plainly. This offer is open only to one person in each family. Only one list of 8 names wanted from each person; no one person may receive more than one pencil. Offer not open to those who sent list of names previously unless different names are sent. SUCCESSFUL FARMING, 193 Success Building, Des Moines, Iowa

What the Neighbors Say

TWO MANY WILD THEORIES

EDITOR—A man who was supposed to be one of the leaders in trying to form a National Farmer-Labor party said in a recent speech that he didn't favor a Farmer-Labor party but favored farmers and laborers uniting against the predatory interests.

Now I protest there are no predatory interests that form any class of the people in this country. Such statements foment class hatreds and are used to exploit votes. One of our great blessings in this country is an abundance of capital and efficient business and I believe the capitalist and businessman are just as honest and patriotic as the farmer and laborer.

Of course, there are some bad men in all classes. If it were not so we wouldn't need punitive and regulatory laws. Many statements commonly made to influence voters have no foundation in fact. One such is the goverment guaranty of railroads. Now the government doesn't guarantee the railroads anything, not even immunity from strikes and hold-ups.

It is said the Esch-Cummins law should be repealed. Do they mean the railroads should be left without any regulation whatever? It seems to me it should be amended and strengthened so that differences could be composed, strikes averted, and the people provided with continuous and efficient transportation.

The Federal Reserve Board is denounced and blamed for deflation of prices of agricultural prices. The Federal Reserve law was passed for the express purpose of providing an elastic currency. Anyone can see that it took more money to carry on business during the war with its high prices and intense activity than now. That it takes more money to move the wheat crop when wheat is $2.00 per bushel than when it is only $1.00 per bushel. There is plenty of money with which to do business and the Federal Reserve Board is in no way to blame for the low price of farm products. Inflation of the currency is one of the greatest catastrophies that can happen to any country.

The commission to value railroad property, the Railroad Labor Board, the Interstate Commerce Commission, the Supreme Court, the Judiciary, Judges and Legislators, in fact every government agency in sight is denounced and yet they demand government ownership of everything.

We want neither commission nor facistism in this country but we will have both if any considerable amount of the wild theories advocated at the present time are enacted into laws. The recent experience of Italy along those lines should be a lesson to us. —K. S. Wood, Boyne City, Mich.

STATE PENSION FOR OLD

MR. EDITOR:—Why not pension the old rather than some of these young widows? I know one who has four children and is drawing $25.00 per month and also keeping house for a widower with three children. He is a strong man able to support them without her getting $25.00 per month. When they get pension why do they give it where two families agree to live in the same house as one family? She said she has been advised to live so and still draw a pension. If the state upholds such why not pension the helpless? There are some who think she is not entitled to it.—A Reader, Fenwick, Mich.

NO SMALL CHILDREN WORKING IN BEET FIELDS

DEAR EDITOR:—I have just read about your child labor in the Michigan beet fields. I think that fellow is trying to raise a big stink to help destroy our sugar industry. I think he is the one the state police should square up. I have spent the biggest part of my life on the farm and have failed to find one child of five or six years old that does much in the sugar beet fields. I have one that is nine years old and every time he has a chance he is in the field doing something and he is a lot better off there than if he was in the city doing mischief or getting crippled up by machines or sticking his nose where he has no business. We have too many people now who are trying to make a living now spreading all kinds of propaganda. They are the ones that ought to be attended to first. I will say again that a child of five or six years old cannot top beets. He might happen to pick up a knife to play with and hurt himself with it, that is how accidents happen. For weeding they are no good at that age, they might try but that is all.—Joseph Fargett, Bay County, Mich.

MADE SOME PROGRESS IN PAST 50 YEARS

EDITOR—The present situation for the farmer can not continue. California farmers are letting their fruit rot on the trees for the wholesaler is not placing orders with the canneries.

If the farmers could organize and do as factory owners do—put a price on their crops—and then the state could set a maximum price farming might be different. Say a bottom price of 60 cents per bushed and a top price of $1.00 per bushel fob the farm for the potatoes—a bottom price of $1 and a top price of $1.50 per bushel for apples fob the farm; a bottom price of $1 and a top price of $1.50 for wheat fob the farm; 60 and 80 cents for oats; so that the city dweller would know the spread between farmer and consumer and stop speculation and corners. Also stop robbing the city man with $4 or $5 per bushel crops when there is a food shortage.

The North Carolina Farmers Union shows that there was a refusal by the Secretary of Agriculture to permit Dr. Spillman's cost of Production figures for farmers to be printed. That farmers were supposed to produce and know nothing.

While the world has so far been ruled by fear, and kept in darkness by ignorance and false doctrines, yet we have made some progress in the last 50 years. We have abolished negro slavery, the saloon, stopped gambling on horse racing, closed the Louisana lottery, given the vote to women, adopted Initiative and Referendum in 16 states, and in spite of Mutt and Jeff, the movies, divorce scandles in the dailies, and the base ball and prize fight scores, Lincoln was right when he said you could not fool all the people all the time. There is considerable sober thinking going on today.—Ezra R. Averill, R. 5, Grand Rapids, Mich.

BUSINESS BACKING THE BIBLE

DEAR EDITOR:—I am quoting the following from the Literary Digest of March 13, 1923. The references to the Bible are my own:

" 'The only sure foundation for business and national safety is not great and plentiful markets, ships on the seas and trained forces to protect and maintain our interests at home and abroad, but religion,' and it is not a denominational journal which tells us this, but a business publication. Recently the attention of the Manufacturers' Record (Baltimore) was called to a revival which is reported to be sweeping over Mississippi, and, in the words of Howard S. Williams, Editor of the Hottersburg American, to be creating 'a better feeling in Mississippi today between men of all classes than ever before.' The Record feels therefore, a moral compulsion to note the phenomenon is of more than local or passing interest. 'The very foundation of individual, national and worldly prosperity,' says the Baltimore periodical, 'is religion.' 'Without the guiding influence of religion and the power it has over mankind this nation would soon sink back into barbarism, and no business in it would be safe. Eliminate from any community the churches and property of all kinds would become worthless.' This we are told is the lowest point of view from which to study the influence of religion on the individual or on the world. The Record emphasizes its views by asserting: 'This country needs a genuine revival (individual nationwide) of old time religion—the religion that accepts the teachings of the Bible as Divine; a religion that makes the employer honest with his employees and the employee honest with his employer; a religion that makes every adherent of it through and through honest and honorable, in every transaction and in every relation of life; a religion which uplifts, which makes men realize that in the literal fulfilling of the teachings of the Golden Rule there is safety, and nowhere else is there safety for business or for society. The lack or absence of this kind of religion takes from men the moral backbone to stand out in the open and fight wrong wherever intrenched, regardless of their personal or business safety. Every man who seeks to fight wrong under the guise of some secret organization hasn't the moral courage to fight in the open and lacks the inspiring power of true religion. The spirit of the Golden Rule must dominate every factory and every farm. The man who cheats, sells bad goods or who tries in any way to take advantage of another, is by that fact sapping his own moral fiber. Only through a nation-wide revival of the religion of the Cross brought about by an individual confession of sin and turning from our wicked ways can save the work from chaos. The world is in turmoil through failure of religion to function fully in our hearts and lives.' " 2 Tim. 3:1-5; 1 Tim. 6:6-10; 1 John 1:8-10; Luke 6:31—M. A. C., Grand Haven, Mich.

RADIO DEPARTMENT

FARM RADIO NEWS COVERS COUNTY

AGRICULTURAL reports are now being broadcast by radio telegraph as well as by radio telephone direct from the United States Department of Agriculture at Washington through the Arlington radio station. The new service is designed to speed up the dispatching of market news and is the result of co-operative arrangements with the Navy Department to establish remote control stations in the Department of Agriculture.

With the use of radio and wire telegraphy the Department of Agriculture has established the most complete and efficient market news service to farmers and other agricultural interests developed anywhere in the world. Farmers in practically any section of the country can now receive reports of agricultural prices and movements at the leading market centers the same day, and in many cases within a few hours after the news develops. Trained market reporters in the markets collect the information and file it for immediate dissemination by telegraph and radio.

"FARMING AIN'T WHAT IT USED TO BE

A RECENT issue of the New York Herald tells about George Elkins, Buncombe, Ill., who at 97 years of age is declared to be the oldest active farmer in the country. He has affidavits to prove that for 75 years he has been working the farm on which he lives. His first "forty" was acquired during the presidency of Millard Fillmore. His next 120 acres cost him only 12½ cents an acre.

Says Mr. Elkins:

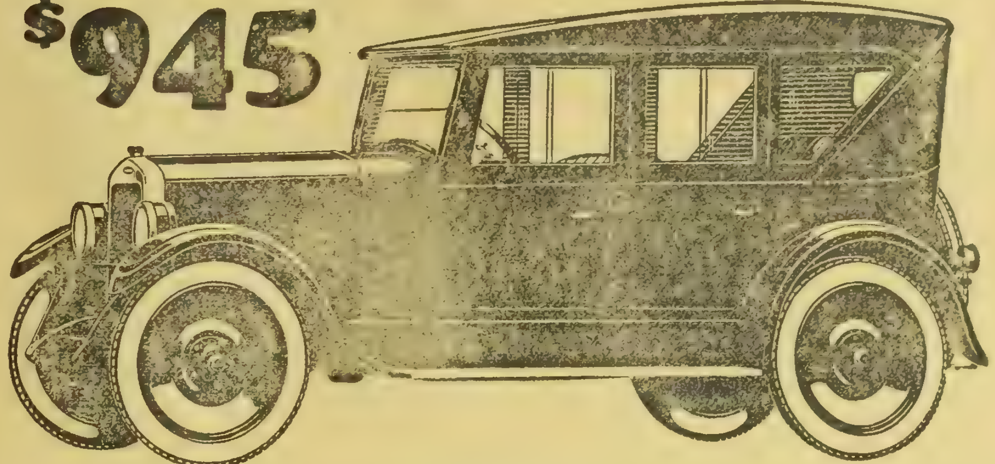
"If a person is always getting mad and worrying about little things that come up it's bound to cut down his years. Some folks spend all their time using themselves up trying to get even with the other fellow. There has been a heap of changes in the last eighty years. Farming ain't what it used to be. Even fifty years ago. When I first started we could raise ten bushels of corn on the same amount of land it takes for three bushels now, and we didn't have a whole lot of newfangled things to put it in with either."

Mr. Elkins' chief criticism of his business is that the same amount of land which produced 10 bushels of corn 50 years ago, gives him only three bushels today. That is, if 50 years ago Mr. Elkins raised 50 bushels of corn per acre, today he is getting only 16 or 17 bushels. No wonder he complains! And he is quite right: Farming ain't what it used to be!

In some way we did not receive the September 29th issue of your paper. We missed it. Please may we have a copy? Your paper is read by us all and we do enjoy it. So thankful it is a clean, wholesome paper, trying to help instead of hinder.—Bruce Barron, Kent County, Michigan.

Oakland Six Touring Car

$945



Glass Enclosed Comfort

for only $60 *more*

For only $60—you can equip any True Blue Oakland Touring Car with a new Glass Enclosure designed by the factory, and built to fit perfectly with Oakland's new-type permanent top and its weather-tight windshield.

This Glass Enclosure is quickly installed or removed, and is absolutely rattle-proof. Only your own eyes can fully tell you how perfectly it fits, how fine it looks, and how comfortable it is on cold and stormy days.

Farmers will particularly appreciate its sturdy construction—its ability to provide all of the comforts of a closed car, and yet to negotiate the roughest roads and steepest hills with the ease and agility of an open car.

See this Enclosure installed on a True Blue Oakland Touring Car—the car with the highly developed six-cylinder engine, the sound and simple four-wheel brakes and the centralized controls. See it at your dealers—its usefulness and comfort will truly amaze you!

OAKLAND MOTOR CAR COMPANY, PONTIAC, MICH.
Division of General Motors Corporation

Touring . .	**$ 945**
Roadster .	**945**
Sport Touring	**1095**
Sport Roadster	**1095**

Glass Enclosures

Touring Models	**$60**
Roadsters . .	**40**

Oakland

Business Coupe	**$1195**
Coupe for Four	1345
Sedan . . .	1395

Prices f. o. b. Pontiac

Government Tax Additional

A Product of General Motors

RHEUMATISM

A Remarkable Home Treatment Given by One Who Had It.

In the year of 1893 I was attacked by Muscular and Sub-acute Rheumatism. I suffered as only those who are thus afflicted know, for over three years. I tried remedy after remedy, but such relief as I obtained was only temporary. Finally, I found a treatment that cured me completely, and such a pitiful condition has never returned. I have given it to a number who were terribly afflicted, even bedridden, some of them seventy to eighty years old, and the results were the same as in my own case.

I want every sufferer from any form of muscular and sub-acute (swelling at the joints) rheumatsim, to try the great value of my improved "Home Treatment" for its remarkable healing power. Do not send a cent; simply mail your name and address and I will send it free to try. After you have used it and it has proven itself to be that long-looked-for means of getting rid of such forms of rheumatism, you may send the price of it, one dollar, but understand, I do not want your money unless you are perfectly satisfied to send it. Isn't that fair? Why suffer any longer when relief is thus offered you free? Don't delay. Write today.

MARK H. JACKSON
No. 265-K Durston Bldg.
SYRACUSE, N. Y.

Mr. Jackson is responsible. Above statement true.

The Children's Hour

INDOOR MAGIC

Magician's Maxim: Never tell your audience what you are going to do before you do it.

* * *

Can you "palm" a coin?

This is the first thing for a young magician to learn.

Place a quarter in the palm of your hand. Grip it by pressing the ball of the thumb upwards. Practice till you can hold a coin this way, even when your hand is upside down, without seeming to have anything there at all. Many tricks are based on this—for instance:

Magic Production of a Coin: Come forward with a coin palmed in your right hand. Show your left hand, back and front, as empty. Then, as if to emphasize what you say, give it a slap with your right, leaving the coin. Now show your right hand empty, at the same time pulling up your sleeve with your left to mask the presence of the coin.

Close your left hand and, after one or two passes over it, produce the coin.

OUR BOYS AND GIRLS

Dear Uncle Ned:—As I haven't written in quite a while I thought I would write a few lines. How is the weather down there in Mt. Clemens lately? It is kind of rainy here. It has rained here for two or three days now and I hope it will quit now pretty soon. Well I suppose most of the boys and girls are getting ready for Halloween now. Pretty soon they will have to be getting ready for Christmas, and probably it won't be long before the ground will be white instead of brown. I wish some of the boys and girls would write to me. The trees begin to look like fall now don't they, with different colored leaves on them?—Lawrence Chapman, 923½ Pine Ave., Alma, Michigan.

Dear Uncle Ned:—I have never seen a letter in your paper from our town, Marcellus, and I fear that some of you may not know there is such a place, it is for that reason that I am writing. I have read "The Children's Hour" for some time and enjoy it immensely. I live on a farm near Marcellus, and I am in high school. Uncle Ned, I have often wondered just what kind of a person you really are. I read of the romance brought about through your page in the M. B. F. and I think that you should feel quite encouraged. I am not going to sign my name but to anyone who will write me through the page of the M. B. F. as "The Marcellian" I should be very glad to carry on a correspondence with. I suppose I have taken space enough but I guess I forgot to tell you that I am a girl. I am hoping that this little missive won't find its way to your waste paper basket or I shall surely feel that Marcellus is not on the map. I hope I'll see in one of your near future issues a letter headed "The Marcellian" from someone, and I surely will answer it with joy. Bye-bye.—"The Marcellian."

Hello Uncle Ned:—I hope you have room on your page for a little northeastern girl to settle her letter in. Or maybe it'll settle in Mr. Waste Paper Basket. Well, Uncle Ned, I have been a silent reader of the M. B. F. and the Children's Hour for over four years. But the reason I did not write was that I did not know your address, until this week's issue and right at the top of the page I saw it. I live on the farm with my mother, father and three sisters. I suppose there is someone who would like to know what I look like. I am a girl of 13 on the 13th day of May. Have I a twin? I have blond hair (which is bobbed) a very light complexion, am 4 feet 11 inches tall, weigh 113 pounds. The autumn leaves are beginning to fall again. My but this summer has gone fast, hasn't it, Uncle Ned? School has started again. I go to school every day. I am in the 8th grade. Well Uncle Ned I will have to close for this time as it is my bedtime. With love to all. Your niece,—Leona Seder, Alger, Michigan. P. S.—Boys and girls, write to me.

Dear Uncle Ned:—I have been a silent reader of the boys' and girls' page for several years. I attend the North Branch high school and will be a senior next year. The 13th of July I was seventeen years old. I am a blonde and have light brown hair, brown eyes, and weigh one hundred and ten pounds. One of my four brothers and two of my three sisters are married. I live on a 160-acre farm, two and one-half miles from North Branch. I would like to hear from some of the boys and girls and promise to answer all letters received. This is getting rather long for my first attempt so I will say good-bye. Your niece,—Teresa Kreiner, North Branch, Michigan.

Dear Uncle Ned:—Please send Mr. Waste Basket on an errand so he will not see this. I read all of the letters from the boys and girls page and enjoyed them very much. As it is the custom, I will describe myself. I will be 16 on Thanksgiving Day, am 5 feet and 9 inches tall and weigh about 140 pounds. I live on a farm of 80 acres and help my father with the farm work. The answer to Doris Margaret Scott's riddle is a "well". I have one sister who is older than I. I will enter high school this fall. Well I will close with a few riddles: Round as an apple, busy as a bee, prettiest little thing you ever did see. If you throw a stone into the water what does it become? I would like to hear from some of the boys and girls. Well, good-bye to you. Your nephew,—Lloyd Laubaugh, R. 3, Delton, Mich.

Dear Uncle Ned:—May I enter your merry circle? I wrote you once before, two years ago, but I hope you won't care because I am writing again. I will describe myself: I have dark brown hair, dark brown eyes, am 4 feet and 6 inches tall, weigh 64 pounds, will be in the eighth grade next year, and will be 13 years old the 27th day of October. Have I a twin? If so write, and I will surely write you a big letter. We have lots of tame rabbits here. Do you like rabbits, Uncle Ned? I do, and can get ours to sit right in my lap. I also like poetry, flowers, and small children. My best friend has moved away to Muskegon, and I miss her so. I dread to start to school on that account. My father works at Bamfield, but my mother, my sisters, Gladys and Sherlie, and myself are on the farm. Hoping my letter escapes the waste basket, I remain, your loving niece.—Leah Corbin, Stanwood, R. 1, Michigan.

Making Chair Castors From Bottle Caps

BOTTLE caps may be fastened to the ends of chair or table legs in such a way that the furniture may be pushed over the floor or carpet easily, and the floor will not be scratched nor the carpet torn. These bottle cap castors will be found both strong and durable.

Get four bottle caps and four short flat-headed nails. The cork lining should be left in the caps.

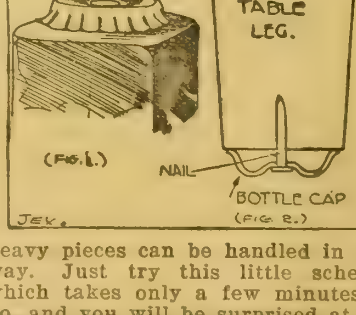
Turn the chair or table upside down, so that the ends of the legs are uppermost. Make a hole in the center of each leg, preferably with an awl or drill. Failing these tools, drive a nail part-way in and then pull it out, straight.

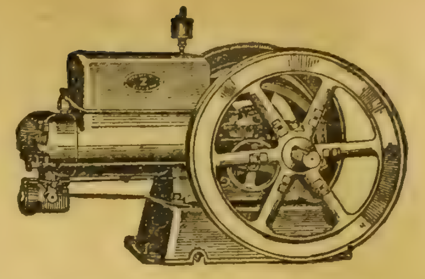
Place a bottle cap on the end of each leg and drive a nail carefully through the center, so that the nail enters the hole already made in the wood. Drive carefully until the head of the nail is level with the bottle cap.

Now hold the blunt end of a large nail on the head of the nail in the bottle cap, and then hammer on the point of the large nail until the head of the smaller nail is driven down below the level of the bottle cap, as shown in Fig. 2. Take care not to dent or wrinkle the tin bottle cap in any way.

You have thus made a polished surface on the bottom of each leg of the piece of furniture.

When you have fastened all four bottle cap castors in this way, turn the chair or table over and see how easily it slides over the floor. Even heavy pieces can be handled in this way. Just try this little scheme, which takes only a few minutes to do, and you will be surprised at the results.





"Starts every time Hot or Cold"

FAIRBANKS-MORSE

'Z' engine

C. E. Sumner, Nettleton, Miss., says: . . . "Three years ago I bought a 'Z'. I have not spent one penny for repairs. It starts every time you call on it; makes no difference, hot or cold. Uses less fuel for power developed than any other I ever ran." . . . . R. H. Kingsbury, Fort Worth, Texas, says: . . . "I have been using a 'Z' engine for about three years for irrigation. I have never suffered a loss due to insufficient water."

Over 350,000 users have approved the "Z" Engine. No matter what your power requirements, there is a "Z" Engine to exactly suit your needs. Over 5,000 dealers carry these engines in stock and will save you money on freight.

1½ H. P. "Z"	(Battery Equipt)	$ 54.00
1½ H. P. "Z"	(Magneto Equipt)	74.00
3 H. P. "Z"	(Battery Equipt)	90.00
3 H. P. "Z"	(Magneto Equipt)	110.00
6 H. P. "Z"	(Magneto Equipt)	170.00

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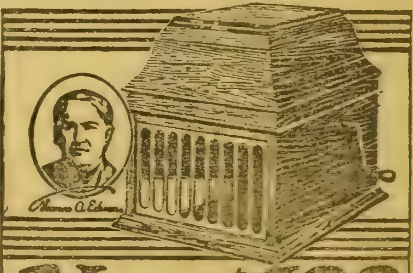

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WANT TO SELL POULTRY?
AN AD IN M. B. F. WILL DO IT

U. P. ADAPTED TO RAISE GREEN MOUNTAIN SEED POTATOES

THAT the soils and climatic features of the Upper Peninsula of Michigan are particularly adapted to the raising of Green Mountain certified seed potatoes; that there is an urgent and almost nation-wide demand for this variety of seed, and that the farmers of the Upper Peninsula of Michigan are overlooking an unusual commercial opportunity in failing to give more attention to this agricultural feature is the opinion Chris Bemis, Manager of the certified seed department of the Michigan Potato Growers Exchange of Cadillac, Michigan, who recently visited the peninsula in the interest of the seed potato production.

Mr. Bemis visited most of the agricultural communities throughout the peninsula, and in company with several of the county agricultural agents, visited some of the best potato fields.

"While it is true that there may be some over-production of common table stock, there is a decided lack of the certified seed potato variety, which is now in such urgent demand", Mr. Bemis declared. "We are receiving constant and urgent calls through our Exchange for carload lots of Green Mountain, Russett Rurals, Irish Cobblers, Early Ohio, and other varieties of certified seed potatoes from practically every section of the country.

"The great need right now is for the Green Mountain variety. We have had, for the most part, to meet the demands for the other certified seed variety from our lower Michigan fields. Green Mountain seed, however, is typically adapted to the soil and climatic conditions of the Upper Peninsula of Michigan. Thus far, we regret to say, only one potato grower in the Upper Peninsula of Michigan has met our inspection requirements, and that man is John Delongchamp of Champion, Mich., and we have purchased his entire crop for this year. We are making every possible effort to encourage the Upper Michigan farmers to adopt this feature of agriculture. We understand that a few have started in on the Russett Rural variety. We do not believe that this is advisable for the upper Michigan territory; largely for the reason that conditions in the lower peninsula are much more favorable for this variety, and we have been able to secure a more desirable product from that section of the state, and our demand for that particular type is not so urgent at this time.

"I could place ten carloads of certified Green Mountain seed today, if I could get them, at top market prices; and we could almost definitely assure raisers of Green Mountain seed a twenty to forty per cent increase on their income on each acre, as compared with the common table stock variety, which the upper Michigan farmers are now raising. We hope that next year will bring about some tangible results."

CLUB MEMBERS WHO FINALLY ATTEND COLLEGE

THE results of a survey to determine the number of former boys' and girls' club members enrolled or students at the Michigan Agricultural College has just been made public by R. A. Turner, the state club leader. At the opening of the school year in September there were 57 former club members in the freshman class, or 10.7 per cent of the entire enrollment for the class. In the sophomore class 27 were found that were former club members, or 6.8 per cent of the class. The junior class contained 2 less but the per cent of the class was 7.8. In the senior class the number dropped to 21 and the per cent to 7.7. The total number attending who were formerly members of boys' and girls' clubs was 130, or 8.4 per cent of the total enrollment.

THANK YOU!

Please accept my thanks for the good work you are doing and what you have done and are doing for me. If I can only afford one paper it shall be the good M. B. F. as I love it from cover to cover. It is such a good, honest, clean, large-typed paper. We are all in love with Curwood's stories. Please give us more of them. They are good, clean, manly stories. Yours truly,—Mrs. Jennie Quick.

Marketing Your Products

October in Michigan railroading is always the month of peak load. Coal is coming in; crops are rolling out. To so handle this additional traffic that it may be carried smoothly and without interruption to the normal year-round flow of raw materials and finished products is a task which finds every employee of Michigan's twenty-four railroads, keyed and ready.

Our personnel is at its highest point of efficiency.

Our rolling stock is in virtually 95% perfect repair condition.

Our road beds are in better shape than at any time since the disaster of Government operation. We have bought 620 miles of new rail this year.

Two seasons of prosperity of Michigan have permitted us to invest this year in new locomotives, cars and other betterments the record breaking sum of $75,980,881.26.

Despite restrictions such as handicap no other business, Michigan railroads are solving—not their problem—but the problem of transportation that naturally follows the industrial, social and economic expansion of a prosperous state.

Do you notice and experience this improvement in your transportation? Tell us frankly and fully.

Upon the attitude of you people of Michigan towards your railroad system rests much of the future prosperity of your state.

Michigan Railroad Association
Railway Exchange Bldg., Detroit, Mich. (3

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WHEN WRITING TO ADVERTISERS PLEASE MENTION MICHIGAN BUSINESS FARMER

The Farm Home
A Department for the Women

Edited by **MRS. ANNIE TAYLOR**

DEAR FOLKS:—I have been very anxious to have you know more about the Hot Lunches for the rural schools and although I am able to give you just a brief idea, because of space, I have some bulletins on this subject and would be pleased to send one of them to you. Be sure and read the Recipe column. It has our Thanksgiving Dinner and may have one or two new suggestions. Maybe you would like some special dish for Thanksgiving that you have thought of having but haven't the recipe. Write me and I will try and help you out. If you are using the hot lunches in your community I would appreciate any letters telling of how you manage so that we all may enjoy your advanced ideas.

Your Friend,
Mrs Annie Taylor

Address letters: Mrs. Annie Taylor, care The Business Farmer, Mt. Clemens, Michigan.

EARLY TRAINING

IN a basket, all day,
I must sleep the hours away;
And it does no good to cry,
For they simply let me lie.
No one rocks or coddles me;
I am being "trained" you see.

There are roses on the wall,
But the basket is so tall
I can only see the flowers
When, at the appointed hours,
I am lifted out with care,
To be taken down the stair.

After I am dressed and fed,
Back I go again to bed.
Sleeping, waking, there I lie,
And it does no good to cry.
I shan't have a bit of fun
Till this being "trained" is done.

EATING FOR HEALTH

AMONG the dietetically important vegetables—and one, moreover, that is always with us—is the cabbage. Cabbage is about nine-tenths water, and it requires three-fourths of a pound of cabbage, or about one serving, to furnish one hundred calories of heat to the body, while it requires less than one ounce of sugar to furnish the same amount. This sounds bad for cabbage, doesn't it? But let us look at it from another angle before coming to conclusions.

This serving of cabbage furnishes nearly one-third of the time needed in the day's rations. Sugar furnishes none, and the body needs lime to build bones, to make strong teeth and for other equally important purposes.

This serving of cabbage also supplies nearly one-fourth of the iron required by the body each day. The body requires only a small amount of iron, but the work accomplished by that minute quantity is of exceeding importance. Without iron, red blood corpuscles can not be formed; and without red corpuscles, the blood does not function properly.

Not only does this serving of cabbage furnish one-third of the day's lime and nearly one-fourth of the iron needed, but it also supplies over half of the phosphorus required by the body for the day's work, and phosphorus also is very essential to the proper functioning of the human mechanism.

But these are not the only advantages of cabbage. It is what is known as a bulky vegetable, and this bulkiness and certain laxative properties, together with its high iron and water content, help to prevent conditions that may cause putrefaction in the intestines.

In addition to this, nearly all of the cabbage is edible; only fifteen per cent has to be discarded as waste. As vegetables go, this is a comparatively low percentage of waste. There are only three in which the loss is lower—String-beans, onions and okra—while in several the loss is higher, green corn having a wastage of over sixty per cent and green peas nearly fifty.

In addtion to this, cabbage is a valuable source of the much-talked-of vitamins. But in this connection it is well to remember that cooking cabbage either in the pressure cooker or in boiling water destroys a percentage of the Vitamin C, the one that prevents scurvy. Therefore, cabbage that is served raw in the form of salad is a more valuable source of this vitamin than cabbage that has been cooked.

FOOD CALENDAR FOR NOVEMBER

DON'T forget that the proper seasoning for your Thanksgiving menu is a genuine spirit of thankfulness.

Be sure there's cranberry, grape currant or tart-apple jelly for the roast turkey dinner.

While the cranberry season is on, remember to can sauce and make jelly for other days. Cranberries are as good with summer meals as winter.

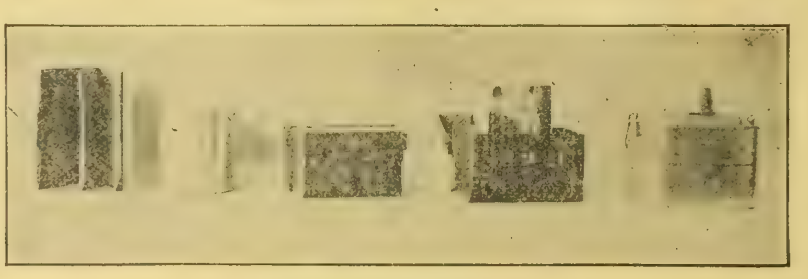
Start a jar of left-over slices of bread to have some ready for the turkey stuffing.

If you are so fortunate as to have partridge, pheasant or other game, you will need to use a stuffing rich in fat to relieve the dryness of these otherwise delicate meats.

For your Thanksgiving centerpiece tray a low Indian basket filled with fruits—oranges, pears, apples, bunches of grapes—and decorated with autumn leaves.

Another suitable centerpiece is a low bowl of oak leaves or short branches mixed with sprays of bittersweet.

Don't discard the fat from your Thanksgiving fowls. Clarified, it is an excellent shortening and may well be used in making white sauces to use with strong-flavored vegetables.



Good Bye, old Lunch Boxes!

Hot Lunch For Our Rural Schools

AS long as most of us remember the school lunch has been an incidental affair, I feel sure this article will have its appeal. There was an idea in cooking the meals that this and that would be left over and would be a good addition to the children's lunch. Often an unexpected guest or a hungry family would clean the platters and none of that wholesome appetizing food was left for our boys and girls and so again they had to take pot luck.

As one authority said recently:

"The installation of equipment for cooking something hot at noon in the rural schools is probably the greatest stride in maintaining public health that has ever been made.

"That sounds exaggerated, but it isn't. An examination of the children in several rural schools before the hot lunch was installed and again several months after it had been in operation revealed some startling facts.

"Before the hot lunch was put in, seven out of each ten children were in very poor physical condition, very susceptible to diseases and of low vitality, two out of ten were in fair condition and one was good. Then after several months of hot lunch, there were seven good, two fair and only one poor."

The hot lunch club has come to be recognized in many rural schools, as an essential part of the school program and a big step in this, the right direction, has been taken. In the city schools, where a great number come a long distance, they are serving regular hot meals at noon for a very small amount of money.

The hot lunch to be successful should have the co-operation and support of the entire community. The school board and the parents are most intimately concerned with this project, but such organizations as the Parent-Teachers' associations, the Grange, Farmers' Club, and the various Ladies' Aid Societies should be made to feel a vital interest in the undertaking.

If your school has no hot lunch system working for our boys' and girls' better health, why not invite the teacher and several of the mothers who are good at pushing things along and keep the telephone and the car busy until you get your school lined up and marching along by the side of the good ones for high standard of health.

I have some bulletins prepared by the Agricultural College that I will gladly send any of our readers who are interested enough to get this good work started. It tells just how to go about it and contains plans for inaugurating this important inovation and includes some receipes for meals.

The girls take turns at preparing the hot food.

MOTHER'S PROBLEMS

AS THE SCHOOL YEAR PROGRESSES

A GOOD start has been made on the school year. The novelty has all worn off; the children are settled down into the five days a week routine. It is not too early to ask yourself: "How are they standing up under school?"

Are colds becoming frequent occurrences? Is there a tired washed-out look to any of the little faces? Have you heard complaints of headaches? Viewing your children as an outsider, just how do they look to you, physically?

Perhaps you are fortunate enough to have a school-nurse or school-doctor who examines the children at intervals and reports their health condition to you; perhaps you must be the sole judge. Don't neglect any ill-health signs that may be appearing now. If there is a tendency to weariness, if weight has been noticeably dropped, endeavor to find out why.

Consider first of all the subject of sleep. Have the children been getting to bed early enough nights, considering that they can no longer sleep until they feel like getting up? Have there been too many parties and entertainments and evening trips to town for the little folks?

How about their food? Do they rush off without any breakfast, as I have known many children to do? Or do they eat for their morning meal such indigestible food as doughnuts and coffee and heavily greased potatoes or over-sweetened pancakes? Milk, toast, eggs and fruit, with a favorite cereal, should start their day for them. And if lunches are taken, they should contain nourishing bread and meat sandwiches, fruit and only a small proportion of sweets.

An abundance of sleep and of plain, simple, wholesome foods and of pure, fresh air, necessary for health at all times, is doubly essential when children are under the strain of school and of necessity must be "penned up" for hours with other children. Make sure that your children have all three!

WINTER GAMES

FOR mouths now there will be little time after school for outdoor playing. More and more the young folks will be in the house, and more and more will it become necessary to keep them occupied, and therefore, out of mischief. It is the season for indoor games. Are your children supplied with the most common ones?

Games are beneficial in many respects. Tiddledy-winks and jack-straws, those two old favorites, provide excellent training in judgment as well as muscle control. Dominoes and checkers are instructive as well as interesting. Old Maid and Authors sharpen the wits and quicken the memory. In even the most simple games there is real development made in the child's mind.

More important, however, than the mere educational value that games provide, is the moral training secured in friendly contests with other children. Sooner or later a child has to learn to accept defeat occasionly. Some children, to whom first place means very little, accept defeat too philosophically; others take their losses too hard. There is little to be done to help those in the first class, but a great deal can be done to help those who go down to defeat with tears in their eyes.

Usually that type of child derives the most benefit from the games he plays if he can play with a neighbor-child, rather than with his own brothers and sisters. If playing only with the children in his own family, he is too apt to give away to his emotions and create a scene because he didn't win—a performance detrimental, rather than beneficial, to him. But if playing with "outsiders" he will keep himself in control, will laugh at his defeat, and determine next time to win.

Watch should be kept over children at their indoor games. Cheating should be detected and severely reprimanded at once. Under proper supervision indoor games can teach generosity, fairness, determination, self-control and the ability to smile in the face of defeat.

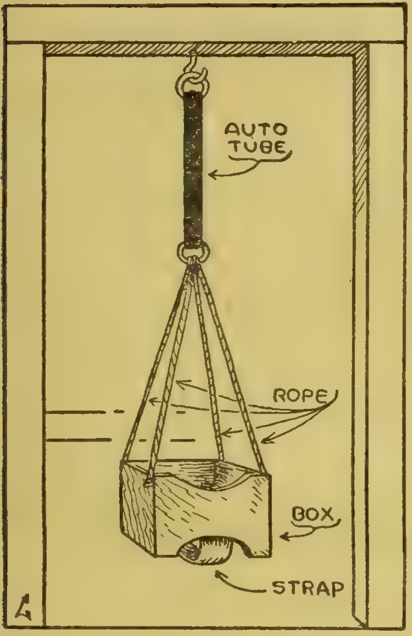
Personal Column

For the Lady who Knits Mittens.—Could you tell me if the lady (Celia Brennan) who knitted mittens last winter had her add in the M. B. F. is going to do so again? Would like some children's mittens knitted.

Helpful Handy Hints.—A long time ago I noticed a request for helpful suggestions so here are some things I have found helpful: A piece of wire clothes line with half a dozen spring clothes pins strung on and fastened behind the range, the small boy and big man will find it a good place to dry wet mittens and also to keep them where they can be found. The wife will not have to move them every time she sweeps. A short line with pins on is indespensible on the back porch, handy to hang dish towels and various small pieces on. A woodbox on casters with a piece of rope fastened to it is easily taken out on the porch to fill; saving several steps, it will take only a minute to wheel the box out. Of course a built-in box is better but we do not all have them.—A Subscriber.

Things Made at Home.—I put a screw hook in the top of door casing, for jumper.

I took a box the size I wanted, the box being twelve inches by fourteen inches wide and ten inches deep. The side I wanted for front I cut out and took off the bottom. I put a strap in the center so baby wouldn't slide out. I hollowed out front so it wouldn't be too high for baby to lean on. I took a rope and cut it in four pieces long enough to make jumper right height from floor; fastened these ropes to the corners of box and tied ropes in ring. On this ring I fastened an auto tube and on tube put another ring to hang in hook put in door casing. I also upholstered the box so it is comfortable for baby. She has a good time in her jumper.—Mrs. E. M. S.



RECIPES

THE THANKSGIVING DINNER

THANKSGIVING Day has long been called the first really American holiday. We all know it means giving thanks and is a day of feasting. All our crops are in and we have much to be thankful for.

I am giving you a Thanksgiving Day menu and some recipes of dishes that have always been great favorites with my family:

Celery Olives Relishes
Oyster or Fruit Cocktail
Roast Turkey, Giblet Gravy
Mashed Potatoes or
Candied Sweet Potatoes
Steamed Squash or Succotash
Cranberry Sauce
Jellied Vegetable Salad
Carrot Pudding or Pumpkin Pie
Coffee
Nuts and Raisins

OYSTER COCKTAIL

Eight small oysters, two drops Tabasco, one tabespoon tomato catsup, one teaspoon celery, finely chopped, one-half tablespoon vinegar or lemon juice, one-half teaspoon Worcestershire sauce.

Mix ingredients, chill thoroughly, and serve in cocktail glasses, or cases made from green peppers placed on a bed of lettuce.

ROAST TURKEY

DRESS, clean, stuff, and truss a ten-pound turkey. Place on its side or rack in a dripping pan or roaster. Rub entire surface with salt, and spread breast, legs, and

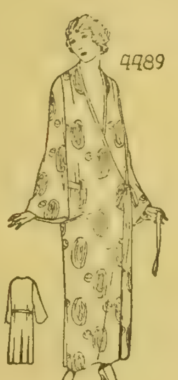
If every woman knew how good LILY WHITE FLOUR, *"The Flour the Best Cooks Use,"* really is, it would be impossible to sell any other flour *except* at a tremendous discount in price.

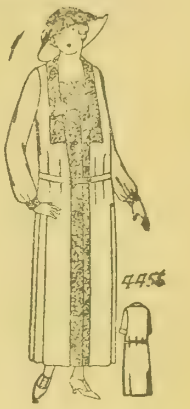
VALLEY CITY MILLING COMPANY - GRAND RAPIDS, MICHIGAN

AIDS TO GOOD DRESSING

SEND IN YOUR SIZE

Lately some of you ladies have been sending for patterns without giving size. This means expense and delay for both of us. I hope you all realize the importance of sending in your size when asking for patterns.





4507. A Practical Play Dress for Tiny Tots.—Comfort and freedom are expressed in the style here illustrated. The model is good for gingham, seersucker, repp, pongee and kindergarten cloth. The bib and pocket, also the cuff may be omitted. The Pattern is cut in 3 Sizes: 6 months, 1 year and 2 years. A 1 year size requires 1⅞ yard of 36 inch material.

4456. A Slenderizing style for Women of Mature Figure.—Satin was used for this model. The revers collar, cuffs and panel fronts are braided in fine soutache. This style would be attractive in white or colored linen, with braiding or embroidery in a matched or contrasting color. The Pattern is cut in 7 Sizes: 36, 38, 40, 42, 44, 46 and 48 inches bust measure. A 38 inch size requires 5 yards of 40 inch material. The width at the foot of the dress is 2½ yards. To trim with contrasting material as illustrated, requires 1½ yards 40 inches wide.

4488. A House Dress "Neat and Trim"—The house dress of today has a very important place in the model wardrobe of every woman. The model here illustrated is suitable for the stout and slender figures. Gingham, crepe, ratine or printed cotton, as well as linen may be used for its development. The width at the foot is 2⅛ yards. The closing is at the left side in front. The Pattern is cut in 6 Sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. A 38 inch size requires 4⅜ yards of 36 inch material.

4462. A Comfortable, Practical Style.—This is a good model for nainsook, crepe, crepe de chine or silk. The Pattern is cut in 4 Sizes: Small, 34-36; Medium, 38-40; Large, 42-44; Extra Large, 46-48 inches bust measure. A Medium size requires 2⅝ yards 36 inch material.

4489. A Model of Comfort and Grace.—Every woman appreciates the charm of a comfortable negligee such as here portrayed. The new figured, or embroidered silks are very smart for a garment of this kind, but silk or cotton crepe, corduroy, terry cloth, china silk or batiste, is also attractive. The Pattern is cut in 4 Sizes: Small 34-36; Medium, 38-40; Large, 42-44; Extra Large, 46-48 inches bust measure. A Medium size requires 6½ yards of 27 inch material.

4479. A Neat Apron for Many Occasions.—Lawn, batiste, dotted Swiss or silk could be used for this style. It is also attractive for cretonne, or chintz. The Pattern is cut in one Size: Medium, and requires 1½ yard of 36 inch material.

4505. A Youthful Stylish Design.—Here is a very pleasing model, with becoming lines and smart features. The style is suitable for the new figured silks, for moire satin, or jersey weaves. The Pattern is cut in 5 Sizes: 12, 14, 16, 18 and 20 years. A 16 year size requires 3⅝ yards of 40 inch material. To make belt and revers of contrasting material requires ⅝ yard of 40 inches wide.

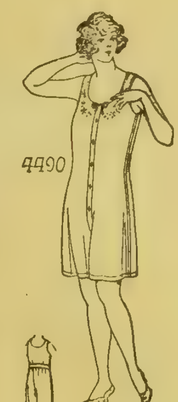
4529. A Comfortable Suit for the "Little Man."—Flannel, jersey cloth, twill or serge could be used for this model. It is also good for wash fabrics. The blouse may be finished with the sleeve long, or in elbow length as illustrated. The Pattern is cut in 3 Sizes: 2, 4 and 6 years. A 4 year size requires 2¾ yards of 36 inch material. For collar and cuffs on long sleeves of contrasting material ⅝ yard is required, 27 inches wide.

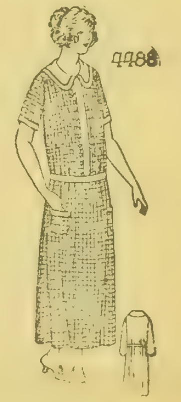
4490. A Popular Practical Model.—Crepe, cambric, crossbar muslin and silk are suitable for this style. It is cut with comfortable fulness, and is good for slender and stout figures. The Pattern is in 4 Sizes: Small, 34-36; Medium, 38-40; Large, 42-44; and Extra Large, 44-48 inches bust measure. A Medium size requires 2½ yards of 36 inch material. For belt of elastic or webbing ⅝ yard 2½ inches wide. elastic or webbing ⅝ yard 2½ inches wide is required.

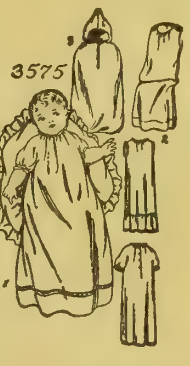
3575. Set of Garments for an Infant.—Pattern 3575 is here portrayed. It is cut in One Size and comprises a Dress, Barrie Coat, and Carriage Robe. The Dress will require 2½ yards of 36 inch material; the Barrie Coat 2¼ yards and the Robe 2¼ yards. Cambric, lawn and nainsook are appropriate for the Dress and Barrie Coat, and for the Robe eiderdown broad cloth, Bedford cord, silk, satin, or flannel may be used.

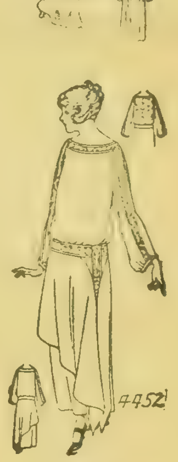
4472. A Pretty Apron for "Mother's Helper.—Figured percale in white and blue is here portrayed. The style is easy to develop and easy to adjust. The straps may be fastened to the belt with buttons or snap fasteners. The Pattern is cut in 5 Sizes: 6, 8, 10, 12, and 14 years. A 12 year size requires 2 yards of 27 inch material.

4452. A Unique and Stylish Model (for Slender Figures.)—Canton crepe in a pretty tan shade was used for this design, with bands of Persian embroidery for trimming. This is also a good model, for satin, taffeta, and moire. The Pattern is cut in 3 Sizes: 16, 18 and 20 years. An 18 year size requires 5¾ yards of 40 inch material. The width of the skirt at the foot is 2 yards.









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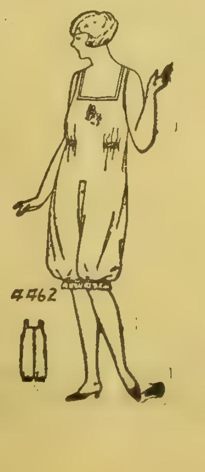

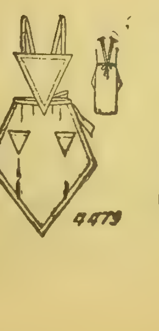

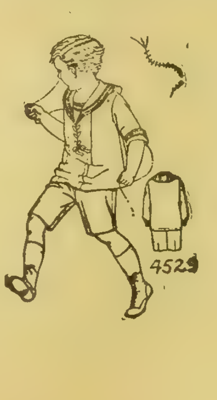

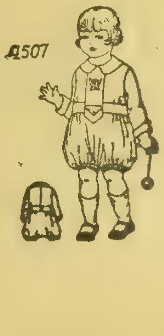

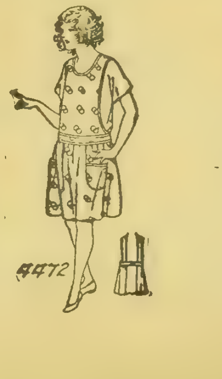

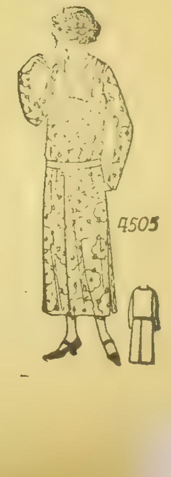

Crossroads of Conversation

Could the telephone directory in the hands of each subscriber be revised from hour to hour, there would be no need for the information operator. But even during its printing and binding, thousands of changes take place in the telephone community. New subscribers are added to the list. Old ones move their places of business or of residence.

Though their names are not listed on the directory, these subscribers must be connected by the highways of speech with all others in the community. To supplement the printed page, there must be guides at the crossroads of conversation.

Such are the information operators, selected for their task because of quickness and accuracy, courtesy and intelligence. At their desks, connected with the switchboards in central offices, they relieve the regular operators from answering thousands of questions about telephone numbers that would otherwise impede the rendering of service. If they are unnecessarily asked for numbers already in the directory, service is retarded.

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wings with one-third cup butter, rubbed until creamy and mixed with one-fourth cup of flour. Dredge bottom of pan with flour. Place in a hot oven with enough water to start and when flour on turkey begins to brown, reduce heat, and baste every fifteen minutes until the turkey is cooked, which will require about three hours.

For basting use one-half cup of butter melted in one-half cup boiling water and after this is used baste with fat in pan. Pour water in pan during the cooking as needed to prevent flour from burning. During cooking turn turkey frequently that it may brown evenly. If turkey is browning too fast, cover with buttered paper to prevent burning. Remove string and skewers before serving. Garnish with parsley or celery tips or curled celery rings and disks of carrots strung on fine wire. One year I strung cranberries and fastened around legs and wings and crossed the breast of the turkey and using parsley for my green color.

Turkey is often roasted with chestnut stuffing, oyster stuffing, or turkey stuffing (Swedish style).

CHESTNUT STUFFING

Three cups large chestnuts, one-half cup butter, one teaspoon salt, one-eighth teaspoon pepper, one-fourth cup cream, one cup cracker crumbs.

Shell and blanch chestnuts. Cook in boiling water until soft. Drain and mash. Add one-half the butter, salt, pepper, and cream. Melt remaining butter, mix with cracker crumbs, combine with mixture.

OYSTER STUFFING

Three cups stale bread crumbs, one-half cup melted butter, salt and pepper, few drops onion juice and one pint of oysters.

Mix ingredients in order given, add oysters, cleaned and drained from liquor.

TURKEY STUFFING
(Swedish Style)

Two cups stale bread crumbs, two-thirds cup melted butter, one-half cup of raisins, seeded and cut in pieces, one-half cup English walnut meats broken in pieces, salt, pepper and sage.

Mix ingredients in order given.

GRAVY

Pour off liquid in pan in which turkey has been roasted. From the liquid skim off six tablespoons fat; return fat to pan and brown with six tablespoons flour; pour on gradually three cups stock in which the giblets, neck, and tips of wings have been cooked, or use liquor left in pan. Cook five minutes, season with salt and pepper. For giblet gravy add to the above giblets, heart, liver, and gizzard finely chopped.

CHESTNUT GRAVY

To two cups thin gravy add three-fourths cup cooked and mashed chestnuts.

CRANBERRY JELLY WITH CELERY

Pick over and wash four cups of cranberries. Put in a stew pan and add two cups sugar and one cup boiling water. Bring to the boiling point and let boil twenty minutes; then force through a strainer. When mixture begins to thicken, fold in one and one-half cups celery cut crosswise of stalks in one-eighth-inch slices. Turn into a mould or moulds and chill. Remove from moulds and garnish with curled celery.

JELLIED VEGETABLE SALAD

Soak one tablespoon granulated gelatine in one-fourth cup cold water and dissolve in one cup boiling water; then add one-fourth cup, each, sugar and vinegar, two tablespoons lemon juice and one teaspoon salt. Strain, cool, and when beginning to stiffen, add one cup celery, cut in small strips, one-half cup shredded cabbage, one-third cup small cucumber cubes, one-fourth cup cold cooked green peas, and one-fourth cup cold cooked beets (cut in thin slices; then in fancy shapes). Turn into ring mould and chill. Serve on lettuce leaf or any green and use horseradish cream dressing. One-half cup heavy cream, 3 tablespoons vinegar, one-fourth teaspoon salt, few grains pepper, 2 tablespoons grated horseradish root. Beat cream until it begins to thicken, then add gradually vinegar, while continuing the beating. When mixture is stiff, add seasonings and fold in grated horseradish.

PUMPKIN PIE

One and one-half cup steamed and strained pumpkin, two-thirds cup brown sugar, one teaspoon cinnamon, one-half teaspoon ginger, one-half teaspoon salt, two eggs, one and one-half cups milk and one-half cup cream.

Mix ingredients in order given and bake in one crust.

CARROT PUDDING

One cup of raw carrots and one cup of raw potatoes, grated fine, one and one-half cup flour, one cup sugar, one cup raisins one cup currants or Sultana raisins, one tablespoon molasses, one teaspoon soda, one salt spoon each of cinnamon, nutmeg and allspice.

Steam three hours. Will serve ten or twelve persons.

Soup Recipe.—Two of our readers sent in the soup recipe for Mrs. Cronin and I hope you will all enjoy it: One-half bushel tomatoes, 14 stalks of celery, leaves and all; twelve stalks of parsley, leaves and all; eight bay leaves; twelve teaspoons salt; two tablespoons mixed spices; one-half teaspoon red pepper; one cup white sugar; boil until tender, then take seven onions fried in one cup of butter till tender and add to the mixture. Then take one and one-half cups flour stirred smooth in a little water, add to the whole. when thoroughly scalded and put through collander, heat and can.—Mrs. M. L. S.

—if you are well bred!

What to Avoid in Social Conversation.—Do not manifest impatience. Do not engage in argument. Do not interrupt another when speaking. Do not find fault, though you may gently criticise.

The Runner's Bible

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Offer unto God thanksgiving; and pay thy vows unto the most high. And call upon me in the day of trouble; I will deliver thee, and thou shalt glorify me. —Ps. 50:14-15.

And one of them when he saw that he was healed, turned back, with a loud voice glorifying God; and he fell upon his face at His feet, giving Him thanks, and He was a samaritan. And Jesus answering said, Were not the ten cleansed? But where are the nine? Were there none found that returned to give glory to God, save this stranger?—Luke 17:15-18.

The world, and that includes those who call themselves Christians,—seem sadly lacking in gratitude. Even when it is felt, some are unwilling to humble themselves enough to express it; or what is worse, they are reluctant to give pleasure by such expression. Thanks, sincerely and humbly given, may be just the encouragement the receipient needs,—true, spiritual food. At least it will let in a little of God's sunshine upon a very dark world.

OH MONEY! MONEY!

(Continued from page 6.)

from babyhood, Mellicent never had her rattles till she wanted blocks, nor her blocks till she wanted dolls, nor her dolls till she was big enough for beaus! And that's what made the poor child always look so wall-eyed and hungry. She was hungry—even if she did get enough to eat."

"Mrs. Blaisdell probably believed in—er—economy," hazarded Mr. Smith.

"Economy! My stars, I should think she did! But, there, I ought not to have said anything, of course. It's a good trait. I only wish some other folks I could mention had more of it. There's Jim's wife, for instance. Now, if she's got ten cents, she'll spend fifteen—and five more to show how she spent it. She and Jane ought to be shaken up in a bag together. Why, Mr. Smith, Jane doesn't let herself enjoy anything. She's always keeping it for a better time. Though sometimes I think she does enjoy just seeing how far she can make a dollar go. But Mellicent don't, nor Frank; and it's hard on them."

"I should say it might be." Mr. Smith was looking at the wistful eyes under the long lashes.

" 'Tis; and 't ain't right, I believe. There is such a thing as being too economical. I tell Jane she'll be like a story I read once about a man who pinched and saved all his life, not even buying peanuts, though he just doted on 'em And when he did get rich, so he could buy the peanuts, he bought a big bag the first thing. But he didn't eat 'em. He hadn't got any teeth left to chew 'em with."

"Well, that was a catastrophe!" laughed Mr. Smith, as he pocketed his notebook and rose to his feet. "And now I thank you very much, Miss Blaisdell, for the help you've been to me."

"Oh, you're quite welcome. indeed you are, Mr. Smith," beamed Miss Blaisdell. "It's done me good, just to talk to you about all these folks and pictures. I've enjoyed it. I do get lonesome sometimes, all alone, so! and I ain't so busy as I wish I was, always. But I'm afraid I haven't helped you much—just this."

"Oh, yes, you have—perhaps more than you think," smiled the man, with an odd look in his eyes.

"Have I? Well, I'm glad. I'm sure. And don't forget to go to Maggie's now. She'll have a lot to tell you. Poor Maggie! And she'll be so glad to show you!"

"All right, thank you; I'll surely interview—Miss Maggie," smiled the man in good-bye.

He had almost said "poor" Maggie himself, though why should she be poor

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PHILIPSBORN'S
DEPARTMENT 528 - CHICAGO

Maggie had come to be an all-absorbing question with him. He had been tempted once to ask Miss Fora, but something had held him back. That evening at the supper table, however, in talking with Mrs. Jane Blaisdell, the question came again to his lips; and this time it found utterance.

Mrs. Jane herself had introduced Miss Maggie's name, and had said an inconsequential something about her when Mr. Smith asked:—

"Mrs. Blaisdell, please,—may I ask? I must confess to a great curiosity as to why Miss Duff is always 'poor Maggie.'"

Mrs. Blaisdell laughed pleasantly.

"Why, really, I don't know," she answered, "only it just comes natural, that's all. Poor Maggie's been so unfortunate. There! I did it again, didn't I? That only goes to show how we all do it, unconsciously."

Frank Blaisdell, across the table, gave a sudden emphatic sniff.

"Humph! Well, I guess if you had to live with Father Duff, Jane, it would be 'poor Jane' with you, all right!"

"Yes, I know." His wife sighed complacently. "Father Duff's a trial, and no mistake. But Maggie doesn't seem to mind."

"Mind! Aunt Maggie's a saint—that's what she is!" It was Mellicent who spoke, her young voice vibrant with suppressed feeling. "She's the dearest thing ever! There couldn't be anybody better than Aunt Maggie!"

Nothing more was said just then, but in the evening, later, after Mellicent had gone to walk with young Pennock, and her father had gone back down to the store, Mrs. Blaisdell took up the matter of "Poor Maggie" again.

"I've been thinking what you said," she began, "about our calling her 'poor Maggie,' and I've made up my mind it's because we're all sorry for her. You see, she's been so unfortunate, as I said. Poor Maggie! I've often wished there was something I could do for her. Of course, if we only had money—but we haven't; so I can't. And even the money wouldn't take away her father, either. Oh, mercy! I didn't mean that, really—not the way it sounded," broke off Mrs. Blaisdell, in shocked apology. "I only meant that she'd have her father to care for, just the same."

"He's something of a trial, I take it, eh? smiled Mr. Smith.

"Trial! I should say he was. Poor Maggie! How ever she endures it, I can't imagine. Of course, we call him Father Duff, but he's really not any relation to us—I mean to Frank and the rest. But their mother married him when they were children, and they never knew their own father much, so he's the only father they know. When their mother died, Maggie had just entered college. She was eighteen, and such a pretty girl! I knew the family even then. Frank was just beginning to court me.

"Well, of course Maggie had to come home right away. None of the rest wanted to take care of him, and Maggie had to. There was another Duff sister then—a married sister (she's died since), but she wouldn't take him, so Maggie had to. Of course, none of the Blaisdells wanted the care of him—and he wasn't their father, anyway. Frank was wanting to marry me, and Jim and Flora were in school and wanted to stay there, of course. So Maggie came. Poor girl! It was real hard for her. She was so ambitious, and so fond of books. But she came and went right into the home and kept it so Frank and Jim and Flora could live there just the same as when their mother was alive. And she had to do all the work, too. They were too poor to keep a girl. Kind of hard, wasn't it? and Maggie only eighteen!"

(Continued in Nov. 24th issue.)

WASHTENAW CLUB MEMBERS BIG WINNERS AT FAIR

(Continued from Page 8)

judging. For the third time in as many consecutive years the team Washtenaw walked away with first prize in grain and corn judging at the State Fair this year. As a reward the winning members will have their expenses paid by the State Fair to the National Hay and Grain Show to be held in conjunction with the International Livestock Exposition. In garment making the girls from Washtenaw won third place. Also in the milking contest this county was represented and won second place. All seven trips offered at the State Fair to the International Livestock Exposition and National Hay and Grain Show at Chicago in December were won by boys and girls from this county. And their total cash winnings from state and county fairs this year amounts to $1,440.85.

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Red Squirrel Enemy of Useful Birds

IT is hard to believe that the handsome, agile, graceful red squirrel which adds such a picturesque note to our lawns and parks is an inveterate destroyer of the eggs and young of useful birds and spends much of his time in searching out nests among the trees. Such however are his habits and naturalists and sportsmen class him as one of the most vicious of all game destroying animals. In many places war has been declared on him by sportsmen who are particularly interested in ridding their neighborhood of "vermin," as the birds and animals are called which prey on useful species. A great mass of evidence has been collected against the red squirrel showing that his depredations are such as to make it necessary to keep down his number if insectivorous birds are to be allowed to flourish and help out in their useful work.

The late John Burroughs wrote of the red squirrel: "Nearly all the birds look upon it as their enemy and attack and annoy it when it appears near their breeding haunts. Thus I have seen the pewee, the cuckoo, the robin and the wood thrush pursuing it with angry voice and gestures. If you wish the birds to breed and thrive in your orchards and groves, kill every red squirrel that infests the place."

Dr. B. H. Warren of West Chester, Pennsylvania, formerly State Ornithologist of Pennsylvania and a naturalist of repute stated that some years ago when Thomas J. Edge was Secretary of Pennsylvania Department of Agriculture, he received complaints from a dozen or more farmers in different sections of Pennsylvania about red or pine squirrels destroying young chickens. Several also wrote Secretary Edge that this squirrel killed the young of domestic pigeons.

Prof. N. F. Davis, teacher of biology at Bucknell College, Lewisburg, Pa., had so much trouble with red squirrels killing nesting birds and eating their eggs about the lawn of the college campus where lots of trees flourish, that he shot some twenty of the nimble little red-coated murderers to end their depredations. One day six of the squirrels attacked and pursued a large gray squirrel and before Prof. Davis could save it, the vicious creatures cornered their victim and literally cut it to pieces.

The presence of the red squirrel is by common consent among many naturalists, dangerous to useful birds for the protection of which there is such an insistant demand at this time.

Dr. C. Hart Merriam, who for many years was chief of the Biological Survey, Washington, D. C., and who ranks as one of the foremost authorities in the United States on birds and animals writes: "The propensity to suck the eggs and destroy the young of our smaller birds is the worst trait of the red squirrel and is in itself sufficient reason for its extermination, at least about the habitations of man. I have myself known him to rob the nests of the red-eyed vireo, chipping sparrow, robin, Wilson's thrush and ruffed grouse, and doubt not that thousands of eggs are annually sacrificed in the Adirondack region alone, to gratify his appetite. Therefore, where abundant, as he always is during springs that follow nut years, his influence in checking the increase of our insectivorous birds can hardly be over estimated. Dr. A. K. Fisher informs me that on three occasions he has known these squirrels to destroy young robins. I have long been aware that this animal was on occasional depredator of the poultry yard, and find in a journal written twelve years ago, a note to the effect that a case had come to my knowledge where one was caught in the act of killing both chickens and ducks."

The late Arthur Chapman, former Game Commissioner of Pennsylvania wrote: "Reliable farmers and poulterers tell me red squirrels sometimes, but rarely, will attack and kill little chickens and they have been known to catch and devour small ruffed grouse."

Mr. August Koch a noted naturalist of Williamsport, Pa., who died several years ago wrote as follows: "Red squirrels, decidedly smaller in size than grey squirrels are much quicker. The red species is bold, impudent and aggressive. He is fearless and loquacious and does not hesitate to go out and battle to death with the gray.

"Red squirrels, two or more together often attack the gray and they generally kill or seriously main the grey opponent.

"The reds sometimes go to the homes of the grays, attack and drive off the old grays and then drag their helpless little ones out of the nest, tear them to bits and eat, with great gusto, the quivering and bloody remains."

Red squirrels destroy many green apples and pears by cutting the fruit to eat the seeds.

In some states the red squirrel has been protected by law but the mass of evidence proves him to be a destroyer of the worst kind, of game and useful birds and also injurious to the other interests of farmers.

Most sportsmen add him to the list of their enemies and he has been put on the black list of the New York Conservation Commission.

WHEN A MINK PLAYED 'POSSUM

A TRAPPER sent a shipment of seven skunk, two opossum and one mink skin to a fur house in a distant city. He failed, however, to enclose a note with his furs listing all the furs sent. The fur grader in going over the furs, sorted out and classified the skunk and because a glance at the two opossum skins told him that they both classed as fine, large prime skins, he tossed them into a big pile of other furs and went on with the next shipment awaiting his attention.

He had seen no mink skin along with the skunk and opossum skins. Of course, the trapper at that time refused to ship any more furs to that receiving house.

Some weeks later a large collection of opossum skins were being piled up for sale, when one of the men engaged in stacking up the skins noticed a handsome, dark, furry tail sticking out of a big prime opossum skin which had probably brought the trapper between one and two dollars, the missing mink skin which was worth at least four times that much.

This is not an isolated instance of this sort of error on the part of trappers in shipping furs; it happens time and time again. No furs should ever be placed inside of other furs. Place your furs flat, one on top of the other, with heads all pointing in one direction, on the heavy paper or burlay in which you are going to ship them; enclose an inside tag bearing your name and address and list the furs you are enclosing, then wrap your bundle securely. When packed in this way you may be sure that each and every fur will meet the fur graders attention and there can be no misunderstanding regarding the number of furs you ship.

"Jimmie," said the teacher, " why don't you wash your face? I can see what you had for breakfast this morning."

Little Boy—"What was it?"

Teacher—"Eggs."

Little Boy—"Wrong, teacher; that was yesterday."—Capper's News.

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WASHINGTON. Patents have been granted by the Government to a lighting engineer by the name of Johnson, on a new lamp for burning ordinary kerosene oil. This lamp produces a vapor from the oil which makes a blue flame that incandesces a mantel, and thus creates a very strong, soft, pure white light. As it consumes only 6% oil mixed with 94% air, it is exceedingly economical. Said to be very simple to operate, odorless, noisless, and dangerless.

F. H. Johnson, 60? W. Lake Street, Chicago, Ill. He also wants local distributors and has a very unique selling plan to offer agents. He is even offering to give one free to the first user in each locality who will help introduce this new light.—(Adv.)

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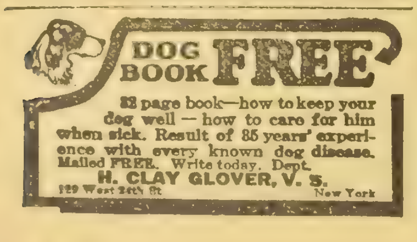
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GRANGE APPROVES OF PRISONERS BUILDING ROADS

(Continued from Page 4)

exemption of $4,000, and beginning with a 5 per cent tax on all income above the $4000. It is also provided that the revenue derived from this income tax shall be used to replace the general property tax.

The delegates heartily appraved the wish of Mr. Cook that conditions speedily improve so that every farmer in Michigan will make more than $4000 per year and thus be allowed to pay an income tax. "Nothing would suit us better," declared Mr. Cook.

The Farm Bureau and the Michigan Federation of Labor have both promised their support in securing this amendment so there is considerable confidence that the movement will soon be successfully completed.

Petitions were distributed to the delegates and the task of securing the 60,000 signatures necessary has already begun.

Report by Mrs. Dora Stockman

The State Grange listened with special interest to the report presented by their State Lecturer, Mrs. Dora H. Stockman. As a member of the State Board of Agriculture, Mrs. Stockman felt it her duty to place the facts of the present situation squarely before the Grange. Clearly and frankly she outlined the development of the controversy which began with the dismissal of Pres. Friday from the Mich. Agrl. College. "Mr. Friday frankly admitted that he did not know much about agricultural economics. When we hired him we hoped he could analyse the farm problems and do for the farmer what economists were doing for other lines of business. But after 14 months of administration, Dr. Friday himself felt that he was in the wrong place," said Mrs. Stockman.

Mrs. Stockman stated that the State Board of Agriculture will stand by its rights. She further stated that, "It is time that the people of the state know whether the constitution is still effective or whether it is a scrap of paper to be juggled or annulled. I do not believe that the legislature has the right to nullify our fundamental law. If the people decide that the State Board of Agriculture is unnecessary and desire the entire control of state affairs in the Administrative Board, with the veto powers in the hands of one man, the constitional boards should be abolished and the administrative board created by constitutional amendment."

Speaking of the charge of "politics," Mrs. Stockman declared, "The statement that the Administrative Board must lift M. A. C. out of politics makes one smile. The truth is that some members of the Board of Agriculture, and probably some of the County Agents, got in wrong by standing for the income tax and the gas tax, which were measures that the farmers wanted. County Agents are not a political machine, but if they were they would be working for the farmers." "The Grange and members of the Board of Agriculture, prior to the Administrative Board's action, decided it would be better to continue the County Agent work solely with public money just as soon as sufficient funds were available."

Mrs. Stockman refuted the charges of inefficiency in the matter of spending appropriation funds for the Agricultural College and stated that M. A. C. is the leading agricultural college in the country and is ready to serve the farmers of the state.

Private Peat Starts Something

One of the "high lights" of State Grange week was the address given by Private Peat on Wednesday afternoon. Private Peat is a young Canadian veteran of the World War. He come so closely in contact with the horrors of war that he decided to devote his life to advancing the cause of world peace.

In brief, Private Peat's argument is that war develops so easily because the youth of the nation is taught to glorify war. He described how statues, memorials, history books, lecturers, and the like, all glorify war, hold it up as a splendid thing, and talk only of victory, glorious victory.

The young soldier then gave some vivid descriptions of war as he experienced it in the trenches of France. He asked that youth be taught what war really is. "For every Victoria Cross, and the honor of receiving it, our youth should be taught that there are ten thousand wooden crosses and the tears of ten thousand heart broken mothers," declared Private Peat.

"There will be little war in the world for the next ten or more years," said Private Peat, "because the young men who are needed to make up the armies know what war really is," "You must wait until another generation of young men has grown up, before you can again recruit armies who are eager to get into war."

His "Plan of Peace" was well received by the Grange delegates who pledged themselves, by resolution, to work for glorifying the work of peace and for unmasking the realities of war.

Wide Range of Questions Discussed

Among the more important of the various resolutions adopted favorably by the State Grange were the following:

To prohibit hunting, trapping, or fishing on posted land without the written consent of the owner. A exemption of $4,000, and beginning fine of $10 to be imposed for each offense.

Against the further propogation of Chinese pheasants.

That only taxpayers shall vote on bond issues. This resolution was amended to read that all electors shall be allowed to vote on bond issues but that 60 per cent of the qualified electors of the bonding district must vote in favor of the band issue before it shall be authorized. This was still further amended to allow the issuance of school bonds on the approval of a majority vote providing that the affirmative vote includes not less than 40 per cent of the total number of electors.

That all voters must be able to read and write the English language.

No Tax Exempt Bonds

The State Grange went on record very emphatically as opposing the issuance of any tax exempt bonds. Efforts to amend this resolution so as to make exceptions in the case of various types of bonds, were consistantly voted down.

The Grange was also just as emphatic regarding reapportioning the state in legislative district. By resolution, they insisted that the moiety clause be retained to apply to the smaller counties and groups of counties. It was also decided that only citizens, rather than total population, should be made the basis of the count for apportionment.

Various Contract Firms Were Heard From

The State Grange has a contract system whereby the subordinate Granges can purchase various comodities at reduced prices. The list includes coal, automobile tires, paints, day-old chicks, and canned goods. A connection, made recently, allows the purchase of harvester machinery made by the state of Minnesota.

Other Resolutions were

Condemning the false reports made concerning child labor in the beet fields.

That the state ferry, plying across the Straits of Mackinac, should be self supporting.

Endorsing the proposition of a state-owned fertilizer plant.

Requesting the establishment of a state-owned cement plant.

Recommending the adoption of the short-form ritual where desired.

Recommending the establishment of a system of uniform text books.

Endorsing the Meggison system for the distribution of primary school funds.

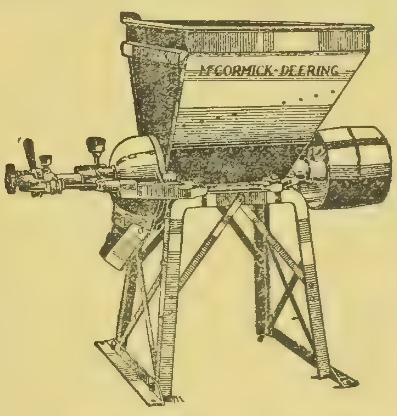
Grange Favors Consolidated Schools

A real controversy developed over the proposition of endorsing the establishment of consolidated schools. After numerous votes, amendments, tabling the motions, and recommendations, the convention finally voted to endorse school consolidation providing that the proposed district had an assessed valuation of not less than two and one-half millions.

Want Electricity on the Farms

The proposition to develop a super-power electrical system by combining various power units in the state was received with much interest by the Grange delegates. A representative of the Public Utilities

(Continued on Page 27)



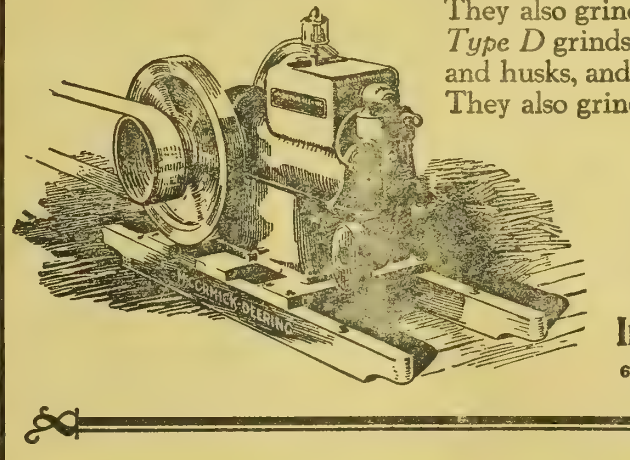
Feed Your *Low-Grade* Wheat

ON the advice of the best authorities, wheat is now being fed to make pork. Wheat at 75 cents a bushel [or less when it is low-grade, shrunken, and unsalable] has a hog-feeding value of $1.00 a bushel—and it is from 8 to 10% more valuable than corn as a pork builder. It is nutritious and palatable and has more mineral matter and protein. Two objects are gained by wheat feeding—the low-grade surplus is turned into good money on the farm, and the price of No. 1 wheat will be pushed higher.

McCORMICK-DEERING—*the grinder with double-faced, self-sharpening grinding plates. Ask for a demonstration at your dealer's store.*

All authorities agree that, because of its hardness, wheat must be ground for feeding. Coarse grinding releases 10 to 22% more feeding value. Here McCormick-Deering Feed Grinders are especially well fitted to come to the aid of the farmer. Famous for years for their fast, many-sided work in small grain grinding, they are ideal for handling surplus wheat just as desired.

There are three types and sizes of McCormick-Deering Feed Grinders. The *Type C* handles small grains and shelled corn or a mixture of both. The *Type B* mills are for ear corn. They crush the cobs and grind cobs and corn together. They also grind small grains and shelled corn. The *Type D* grinds corn in the husk, pulverizes the cobs and husks, and makes a fine meal of the whole mass. They also grind corn on the cob and small grains.



Ask for a demonstration of these general-purpose grinders at the store of the McCormick-Deering dealer. See what they will do for wheat or any other grain, or for corn in any shape. Let them show you how to get maximum food value out of grain when run by the most economical power—McCormick-Deering Kerosene Engines.

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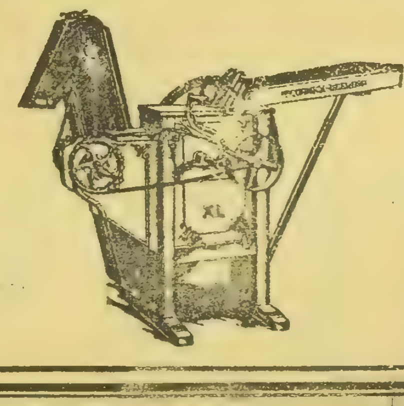

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I guarantee the Bowman Remedy will absolutely cure Contagious Abortion in cattle and hogs. It also stamps out such attendant trouble as retention of placenta, white scours, calf pneumonia. If your herd is attacked by Abortion, get in touch with me at once.

Write me today

I will be glad to send you full details immediately: Get all the facts. See what the Bowman Remedy has done: Judge for yourself: Just send me a postal now.

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I guarantee to bring every cow or sow that is a breeder back to normal, healthy delivery if treated with Bowman's Remedy according to directions. In exceptional cases, where additional treatments are needed, I will furnish these free, except for shipping cost. For every animal Bowman's Remedy does not cure of Contagious Abortion, I will refund the cost of treatment.
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Nov. 14—Polled Shorthorns, Clarence Wyant, Berrien Springs, Michigan.
Nov. 15—Herefords, Poland Chinas, Shropshires, C. A. Stimson, Eaton Rapids, Michigan.

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Before purchasing feeders investigate the Sotham Earliripe HEREFORD Beef Plan. A proven, profitable system of beef production of great benefit to the producer. Realize the utmost from your feeding operations. Write for information. HEREFORDS, Yearlings, Two-year-olds, Young cows with calves, all registered and T. B. tested at practical prices for producing Earliripe HEREFORD Baby Beeves. Terms granted upon proper credentials.
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5 extra nice Repeater heifers one year old for $500.00. Also 10 cows with ten nice lusty calves by side for sale.
If in want of bulls, write us.
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We Have Bred Herefords Since 1860
Spring calves for sale. Write us your wants. A few Chester White Boars and Sows for sale.
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FOR SALE—REGISTERED RED POLLED Cattle. Both Sex.
PIERCE BROS., R. 1, Eaton Rapids, Michigan.

My! Oh [illegible] An Opportunity
35.73 lb. [illegible] at Public Sale
SIRE COLONEL [illegible] SEG[illegible] [illegible] S JULIA PRINCESS. THE HIGHEST PRODUCING [illegible]
from dams [illegible], whose three sisters have each produced over 1,200 lb. [illegible] WORLD'S CHAMPIONS.
40 - HEAD WILL BE SOLD AT AUCTION - 40
[illegible] o'clock a. m.
Wednesday, Nov. 14th, at Fair Grounds, Allegan, Mich.
Most of them bred to our CARNATION BULL, whose sire is own brother to that wonderful cow SEGIS PIETERJE PROSPECT—WORLD'S CHAMPION MILK PRODUCER, 37,381 lbs. milk and 1,448 lbs. butter in a year and he already has 92 A. R. O. Daughters, and whose dam is a 32.38-lb. four year-old daughter of AVON PONTIAC ECHO, a son of MAY ECHO SYLVIA, 1,005 lbs. of milk and 41 lbs. of butter in a week.
A GREAT OPPORTUNITY to secure choice heifers and young bulls for your herd.
Remember the date—Wednesday, November 14th! Send for catalogs.
HILLCREST FARM, - - Kalamazoo, Michigan

DAIRY and LIVESTOCK

BREEDS OF DAIRY CATTLE
No. 2—Jersey

THE island of Jersey, the largest of the Channel Islands, is the native home of the Jersey breed of cattle. Except for immediate no cattle have been landed on the island since 1779, so that ever since that time the purity of the breed has been preserved. It seems probable that the foundation stock is the same as the Guernsey, namely, from Brittany and Normandy, in near-by northwestern France. Conditions in Jersey are similar to those in Guernsey. The breeders on the island have developed cattle that, in addition to productive ability, have uniformity of type and natural beauty, while in America the breeders have developed greater size and production, with less refinement of features.

Importations and Distribution

Jerseys were first imported into the United States about the middle of the last century, and since that time importations have been made practically every year. The breed probably has the largest numbers and widest distribution of all the dairy breeds in this country. Large numbers of Jerseys may be found throughout New England, the Middle West, the South, and the Southwest.

Characteristics

Jerseys very considerably in color. The solid-colored animals are preferred by many breeders. Various shades of fawn, squirrel gray, mouse color, and very dark brown are common colors, and in the broken-colored animals white is mixed with these colors.

The muzzles and tongues are usually black or lead colored, and it is very common for animals to have a light or mealy ring around the muzzle. A black switch is also a desirable feature. Next to the Guernsey the Jersey has the yellowest skin secretion of all the dairy breeds. The horns are small, waxy, and frequently tipped with black.

Jerseys have a distinctly nervous disposition and are usually somewhat excitable. Their highly organized nervous system causes them to respond quickly to good treatment and abundant feed. The udders are symmetrical and have sufficiently large teats.

Jerseys are the smallest of the dairy breeds. Mature cows range from 700 to 1,300 pounds in weight (average about 900 pounds); bulls vary from 1,400 to 2,000 pounds (average about 1,500 pounds). Compared with the Guernsey, the Jersey is smaller, and has finer features and more refinement throughout.

The birth weight of calves ranges from 45 to 75 pounds. Animals of the breed mature very early, in this respect excelling all other dairy breeds.

Production

In natural yellow color the milk of the Jersey cow ranks next to that of Guernsey cows and is usually slightly richer in butterfat. The large fat gobules cause the cream to rise readily upon standing. Jerseys, like Guernseys, are adapted to the production of butterfat.

Families

A considerable number of families have been developed, and it is difficult to determine which are the most prominent, but probably the following are among the best known. Combination, Eminent, Financial King, Gamboge Knight, Golden Glow's Chief, Golden Maid's Prince, Jap-Sayda, Majesty, Noble, Olga Lad, Owl-Interest, Oxford You'll Do, Raleigh, St. Lambert, St. Mawes, and Sophie Tormentor.

WASHTENAW COMPLETES TEST OF 43000 HEAD OF CATTLE

WASHTENAW County has just completed their tuberculosis campaign. 43936 head of cattle were tested and 1059 reactors found. The total percent of reactors for the county was 2.4 per cent. Ypsilanti township had the most reactors, 8 per cent. Several of the townships went under 1 per cent. Infection seemed to be worse around Ypsilanti and Ann Arbor which is the principle dairy section.

Work in the county started about fourteen months ago. Dr. F. W. High was detailed by the State Department of Agriculture to take care of the work in the county. The efficient way in which he has handled the work has met with the general approval of the livestock breeders of the county.

Six townships have had two complete tests. On the first test in these six townships the total number of cattle tested were 8980. 229 reactors were found or 2.5 per cent. On the second test in these same townships 7826 cattle were tested and 31 reactors found which is .4 per cent. These tests show that if the work is continued infection can be greatly reduced if not practically eliminated.

The Board of Supervisors at their October session appropriated funds for the second drive which will take place in September, 1924. Livestock breeders of the county expect to reduce infection below one-half of one percent so that Washtenaw County can become an accredited area.—H. S. Osler, County Agricultural Agent.

NOT GOOD FEED FOR CATTLE OR SHEEP

Is buckwheat hay a good feed for cattle and sheep?—V. D. S., Custer, Michigan.

—Buckwheat hay is not a satisfactory feed for either cattle or sheep, and its growth for this purpose is not to be advised.

Where one has the buckwheat on hand to utilize, it might be fed in small quantities to either cattle or sheep and thus disposed of, but to use it as the sole roughage for either cattle or sheep would not at any time be desirable.

I would not advise using over one-third buckwheat in connection with some good quality of roughage, such as clover or alfalfa hay.—Geo. A. Brown, Professor of Animal Husbandry, M. A. C.

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Keep Free from Filth and Lice
Save Feed and Build Flesh

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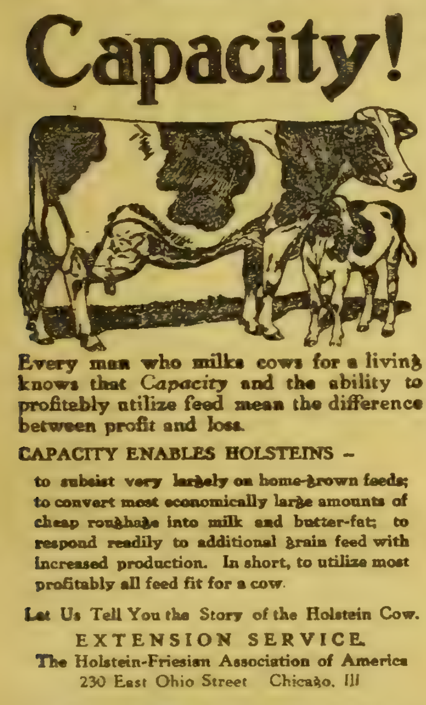

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GUERNSEY BULL CALVES $50. A. R. BREEDING. 50% to 75% breeding of Norman's Missaukee Red Rose. Bull soon ready for service $100.
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RAISE SHORTHORNS WITHOUT HORNS Like Kelley does. U. S. Accredited Herd No. 28945. For description and price write,
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O. I. C.

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CHESTER WHITES: FALL PIGS SIRED BY The Pilot—White King two great herd boars. My herd represents the best in Chester bloodlines. Special offer for orders taken during November. Write **CLARE V. DORMAN, Snover, Michigan.**

CHESTER WHITES FOR SALE—SPRING Boars of right type with quality. Shipped on approval. **WILBER JONES, Reese, Michigan.**

GRANGE APPROVES OF PRISONERS BUILDING ROADS

(Continued from Page 4)

Ownership League of America described the development of electrical systems in Ontario whereby the farmers get power and light for their farms at a cost which is less than the rates charged in the United States.

The water power of Michigan has already passed out of the reach of the public to a large extent and is owned by private corporations. The Grange went on record as favoring the development of all available sources of power for the public good and started a movement looking to the formation of a super-power system for the state.

Annual Banquet Largest Ever

The Annual Banquet was the largest ever held, a total of 658 taking part. It was necessary to divide the banqueters, some of them eating in the Elks temple while the remainder help their affair in the Masonic temple. Practically the same program was presented at each place.

Prominent among the banquet speakers were L. Whitney Watkins, State Commissioner of Agriculture and Clark L. Brody, Secy.-Manager of the Michigan State Farm Bureau.

Commissioner Watkins declared that the crying need in Michigan today is law enforcement and deplored the undue emphasis being placed on the so-called efficiency of centralized government.

Secretary Brody praised the work which the Grange has carried on in Michigan for the last fifty years and asserted that the Grange is "the father of the father of the Farm Bureau. Both Mr. Brody and Toastmaster Cook told of the cordial relations existing between the Grange and the Farm Bureau and of the results being secured by this close cooperation.

A class of 64 took the fifth degree, the degree of Pomono, while 116 were initiated into the degree of Flora, the sixth degree.

State Master Cook reported that Michigan leads all of the other states this year, with a total of twenty-two new or reorganized Granges. He outlined an extension organization which, it is hoped, will bring greatly increased results.

At present the state is divided into eight districts, each under the supervision of a Regional Deputy who acts as a Deputy State Master. The plan is to have a County Deputy, appointed in each county by the Regional Deputy and responsible to him for Grange activity in his respective county. It is proposed to finance this system principally through the dues of the county Pomono grange.

A very impressive memorial service was held on Thursday afternoon. The memory of the Grangers who had passed into the Great Beyond during the year, was thus honored. A special eulogy was given of the life and work of Mrs. Cora Ketcham, who was very active in Grange circles, especially during the time that her husband, Cong. John C. Ketcham, was Master of the State Grange.

The election of three members for the State Executive Committee resulted in N. P. Hull, A. W. Thompson, and J. W. Helme, being chosen to succeed themselves.

The vote to determine the place of meeting for 1924 resulted in the selection of Petoskey by a small margin over Grand Rapids. Big Rapids also bid for the 1924 meeting. It was decided to hold the 1924 meeting one week later in October, that is, on the last Tuesday of the month.

Was Hard Working Convention

This was probably one of the hardest working convention which Michigan has ever seen. The general sessions began early in the forenoon and lasted until late in the evening. And, somehow or other, the delegates managed to find time to crowd in committee meetings galore.

No one who attended the sessions could fail to be impressed with the earnestness of this body of men and women from the farms of Michigan who gathered to discuss their common problems and to find solutions if possible. There was enthusiasm in abundance. Enthusiasm over the achievements of the past year and especially over the program of work laid out for 1924.

Without doubt, if Grange spirit and Grange organization count for anything, this coming year will see splendid progress made in Grange affairs.

From GRASS to DRY FEED

Now, the pasture field and range must give way
—to the stall and manger, the feed lot and self-feeder, the barnyard and fodder rack.

Include

DR. HESS STOCK TONIC
in the ration

You have often noticed stocking of the legs, roughness in the hair, highly colored urine—all on account of the change from grass to dry feed.

Not so where Dr. Hess Stock Tonic is fed. The Tonics, the Laxatives, the Diuretics, take care of all that. No worms; the Vermifuges settle them.

Then you are all set for heavy feeding, a good yield of flesh and milk throughout the winter.

Tell your dealer what stock you have. He has a package to suit. GUARANTEED.

25 lb. Pail $2.25 100 lb. Drum $8.00
Except in the far West, South and Canada.

Honest goods—honest price—why pay more?

DR. HESS & CLARK Ashland, O.

I spent 30 years in perfecting this Tonic.
GILBERT HESS
M.D., D.V.S.

Dr. Hess Dip and Disinfectant Kills Hog Lice

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Hill Crest Farms, Perrinton, Mich. Duroc-Jerseys and Black Top Delaine Sheep. 35 stock rams to pick from. Farm 4 mi. straight south of Middleton. Gratiot Co.
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PEACH HILL FARM offers choice weanling Duroc pigs. Either sex. Priced very reasonable. Write us.
'NWOOD BROS., Romeo, Mich.

A FEW CHOICE DUROC SHOATS, THE BIG long kind. Either sex. Price $10 each registered.
F. A. LAMB & SON, Cassopolis, Michigan.

Duroc Inn Offers Choice Duroc Pigs Either Sex priced reasonable. Sired by "Walz Sensation."
John L. Walz, Reese, Michigan, R. 4.

HAMPSHIRES

Hampshire Boars and Fall Pigs Now Ready to ship. Bred gilts in season, 11th year.
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FOR SHROPSHIRE RAMS WRITE OR CALL ON
DAN BOOHER, R. 4, Evart, Michigan.

WEST MARION OXFORDS. 25 YEARS Breeding. The best stock for sale. Both sex.
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GOATS FOR SALE—FOUR REGISTERED Angora Does.
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FOR SALE: ONE MALE AND ONE FEMALE Pup five months old, one quarter Blood Hound and three quarters English Fox Hound trained on rabbits. My dogs are extra good on Racoon, Skunk, Fox or any fur bearing animals. Write for particulars.
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Fire Having Destroyed Our Kennels, We Are offering for quick sale Reg. Collie Puppies at reduced prices. **Silvercrest Kennels, Gladwin, Mich.**

German Shepherd, Airdales, Collies; Old English Shepherd dogs; Puppies; 10c illustrated instructive list. **W. B. Watson, Box 27, Macon, Mo.**

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37 Head Registered Polled Shorthorns 37
10 Miles North of Niles, Michigan
Wednesday, Nov. 14, 1 o'clock. Inspection of cattle, 11.30 a.m. Lunch 12 o'clock
22 Cows — 7 Bulls — 8 Heifers
Herd Sires: "Dale Fashion" x17407-675321; "Victor Sultan" x22538-877183
A good general purpose type. Exceptionally good opportunity for beginners. Cattle t. b tested
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Terms if desired. Foreign buyers please bring bank references. Write for catalog.
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There's only one way to prove anything—just *try* it. I know when you use my prescription with your flock, you'll get *results*. That's why I offer you a FREE sample package.

It's prepared from my 30 years' experience in poultry raising. It increases the appetite, builds up the hen's body and brings about an active, healthy condition of the egg-producing organs for winter laying.

Every morning, feed one tablespoonful in a warm mash to each 20 hens—if you want to get winter eggs, and guard your flock from cold-weather ailments such as catarrh, roup, sorehead, canker, etc. You keep chickens for profit. Make them *pay*—make them *lay*. My prescription will help you. Prove it now. Read my free offer coupon.

Dr. LeGear's Poultry Prescription: 25c, 50c and $1 packages (except Rocky Mountain States and West). Also pails and drums. Satisfaction guaranteed or money refunded.

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Ask at store about my free Poultry Course

Buy Dr. LeGear's Lice Powder

Dr. L. D. LeGear, V. S. [In Surgeon's Robe]

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While in France I obtained from a noted French physician a prescription for the treatment of Rheumatism and Neuritis. I have given it to thousands with wonderful results. The prescription costs me nothing. I ask nothing for it. I will mail it if you will send me your address. A postal will bring it. Write today.

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S. C. White Leghorns and S. C. and R. C. Black Minorcas. Must make room before cold weather. About ready to lay.
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LEGHORNS

LEGHORNS

S. C. Buff Leghorn Hens, Pullets and Cockerels. Hens and pullets $2.50 each; cockerels $3.00 to $5.00 each. Show birds a matter of correspondence. LAPHAM FARMS, Pinckney, Mich.

COCKERELS, S. C. W. LEGHORNS, TOM Barron strain, 250 egg utility line, April hatched, $1.35. Satisfaction guaranteed.
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RHODE ISLAND REDS TOMPKINS STRAIN to make room for young stock. I will sell after November 1, 1923, 50 2 year old hens at $2.00 each; 25 1 years old hens at $3.00 each; cockerels at $2.50 and up. All these cockerels are from my best 3 year old hens that layed 205 eggs or better in their pullet year. Quality breeder of Rhode Island Reds.
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WHITTAKER'S R. I. REDS. MICHIGAN'S greatest color and egg strain. Cockerel price list ready in September. Improve your flock with Whittaker's red cockerels.
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Fine Rose Comb R. I. Red Cockerels $2.00 Each. Giant Bronze Turkeys, toms $9.00; hens $7.00.
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BARRED PLYMOUTH ROCK COCKERELS $5 each. From first prize winning strain at Chicago and Detroit. J. A. Barnum, Union City, Mich.

PARK'S STRAIN BARRED ROCK COCKERELS from extra selected stock headed by M. A. C. cockerels. April hatched, $4.00 each. 3 or more $3.50 each. Shipped approval and prepaid on orders received before December 15.
REESE BROS., Williamston, Michigan.

TURKEYS

Pure Bred Mammoth Bronze Turkeys, Champion strain. Large and vigorous. Unrelated stock.
Mrs. B. Smatts, R. 1. East Jordan, Mich.

BOURBON RED TURKEYS: THE BEST SIDE line for a farm. We sold $400.00 worth last year. Write for prices, etc.
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PURE BRED BRONZE TURKEYS. TOMS $8.50; Hens $6.50.
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Bourbon Red Toms $9; Hens $7
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HIGHEST PRICES PAID FOR LIVE AND Dressed Poultry, Veal, Rabbits, etc. A square deal always. Write to
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Poultry for Profit

CARE OF YOUNG PULLETS IN EARLY WINTER

YOUNG pullets kept for laying purposes should all be laying early in December. Pullets hatched as late as May in the heavier breeds should be laying by February 1st and Leghorns hatched even the last of May will generally be laying by the first ten days of December. This is, of course, presuming that they have been handled carefully during the growing period and have been developed properly, or in accordance with the suggestions which we have published in these columns from time to time.

If they seem to be under-developed and it looks as if it will be midwinter before they will round into laying form, the most economical plan would be to cull the flock severely and get the laggards to market without delay. This is the last call and all found to be non-producers should be weeded out at once. The laggards and culs are likely to prove a source of loss in more directions than one. For one thing, they are generally where disease epidemics get their start. By removing them from the flock the chances of loss in this directions are materially reduced.

The pullets that are found to be well-developed and practically matured must now be given the best of attention and care in order to bring out the eggs so much desired. It is best to have them in a flock to themselves; either in a separate laying house of their own, or at least in a separate pen. Where layers of different ages are kept together, the tendency is for the yearlings or older fowls to dominate the situation and worry the young pullets. This does not make for the best performance on their part. It is always best to have your pens or flocks of practically the same age.

Have a house where the pullets can be confined with sufficient room until the weather is settled in the spring. Allow three or four square feet of floor space per bird and keep plenty of straw litter on the floor. This should average about one foot in depth. Feed all grain in this litter, so that they will have to exercise for it. Fowls with this amount of floor space and plenty of clean litter on the floor confined all the time will lay more eggs than fowls kept under any other plan, fed the same ration. If you doubt this, divide your flock and keep one one way and another the other way. It will prove the truth of the above assertion.

Select a good laying ration, and commence to feed it gradually so that in ten days or two weeks the pullets are on full ration. A number of rations may be used, either the Cornell laying ration, which we have published a number of times, or the New Jersey ration, the Ames ration, or commercial rations purchased on the open market. Probably the New Jersey ration will be the simplest for farm usage. It is made of the following ingredients: Grain, 100 pounds each of cracked corn, wheat and oats; mash, 100 pounds each of wheat bran, ground oats, corn meal and beef scraps. It is easy to keep these ingredients and amounts in mind, and all of them may be had on the farm with a feed grinder, with the exception of the beef scraps and, possibly, the bran.

As soon as the pullets are on full mash feed, keep it before them all the time in open hoppers. Do not worry because they seem to eat a lot of it. The more a pullet lays, the more she will have to eat in order to keep pace with her manufacturing process. Hens that "eat their heads off" are more likely the most profitable ones you have. The sluggards are satisfied early in the day and spend the rest of the time sunning themselves or on the roosts.

The grain is fed twice a day, morning and midafternoon, about one-third of the day's total in the morning, the balance at night. At noon, is the proper time to feed the green food, which is most economically produced in the form of sprouted oats. Feed one ounce to each pullet, and feed when the sprouts are one inch long. Don't neglect the green feed; it is one of the most important elements in the laying rations and brings more eggs than any other single ingredient.

Plenty of fresh water all day long is another secret of winter eggs, whether with the yearlings or the pullets. Over two-thirds of the egg is made up of water and unless they have this in abundance, you need not look for very many eggs. We have known flocks to stop laying following bitterly cold days for no other reason than that their water had frozen up so quickly the day before and they didn't get enough. Cold weather don't interfere with the laying, else they would not have laid on the cold days. It will pay to get non-freezing founts or heaters which will prevent the ones you have from freezing. See to it that the water doesn't freeze and explode this old notion right in your own henhouse. Your hens or pullets will keep right on laying, no matter how cold it is.

See to it that your houses are well ventilated, but free from drafts. This is important, especially where large numbers are kept in the same flock, or where the roosting room is somewhat crowded.

Gather the eggs several times a day to prevent freezing. This is important, especially if they are intended for market. Keep the nests clean by changing the nesting material frequently. The droppings must be removed at least once a week from the dropping boards for the same reason. Allowed to accumulate, the pullets or hens will be working in it on days when there are thaws, and with dirty feet they foul the eggs in the nest when they get on to lay. That means a lower price on the market. You can't beat the market by washing them, either. Washing eggs are spotted by the candlers and classed as "dirties."

Pullet eggs are invariably smaller than those laid by yearlings. This means that they should not be mixed with the latter, because that will lower the price the larger eggs will bring. Grade your own eggs, packing pullet eggs in a separate case.

Boys' and girls' club work is very popular in the Upper Peninsula and the leaders are expecting things from some of the members. The above shows some of the boys judging livestock.

The Agricultural and Business Situation

Revised Monthly by the Department of Research of the American Farm Bureau Federation.

WHEAT:

There promises to be a scarcity of wheat east of the Rocky Mountains and mainly to prohibitive freight rates from the Pacific Coast the thirty cent tariff on wheat stands a good chance of being effective. Without any further exports east of the Rockies, the supply would not be excessive. Table No. 2 below shows the details of this situation. The price of wheat at Chicago is six cents higher than a month ago and ten cents above three months ago, but five cents under the same date last year.

CORN:

The corn production forecast is a trifle over three billion bushels. About one-fifth of this will be sold as corn. The price at Chicago is now fourteen cents higher than last month and thirty-one cents above the corresponding date a year ago. The average price for this crop year promises to be enough above last year to yield at least one hundred million dollars additional income.

COTTON.

The October government forecast indicates an increase in cotton output of one and one quarter million bales. This is higher than private estimates. Cotton prices are running about four cents a pound above last year and may average this increase for the season. On the basis of this price and the government forecast farmers would receive around three hundred and fifty million dollars more for their cotton this year than last.

EXPORTS:

In July, cotton exports were only about half as much as in the same month last year. In August they were only slightly less than in August, 1922, while in September they were almost double the September exports of a year ago. This is one time when large exports are coinciding with high prices. A study by this Department of the relation of exports and prices indicated that cotton usually went abroad in large quantities when prices were low but not when they were high.

Wheat shipments abroad, since July 1, are 40 per cent less than the same period in 1922. Further exports during the balance of this crop year ending next July, as already shown, must come from west of the Rockies or cut deeply into consumption and reserves east of the Mountains. Forty-five million bushels of Durum wheat produced east of the Rockies and grown for export to be used in making macaroni has not yet gone abroad in quantities. Foreign demand yet to be exerted, coupled with low supply and the tariff previously mentioned, give hope for a rising wheat market.

INDUSTRIAL SITUATION:

Manufacturing output showed an almost continuous upward trend from May 1921, to May 1923. From that point there has been a slight decline and there is yet no indication of further upward movement. Manufacturers and merchants are acting with great caution. Purchases by consumers, however, show no let-up.

Transportation of all groups of commodities with the exception of grain and grain products is in excess of last year. The railroads have been handling freight without congestion.

Building expenditures in the second quarter this year were larger than in the first or third quarters and were smallest in the third. Prices of building materials were highest in the second quarter but do not account entirely for the decline. Compared with the corresponding periods a year ago, the third quarter also makes the poorest showing in gain in expenditures.

PRICES:

Central market prices of farm products show a gain of 3½ per cent over previous month and 8 per cent over previous year, according to the latest figures of the U. S. Department of Labor. Of the nine groups of products including some four hundred commodities, the farm, food, clothing, and chemical groups show increases over previous month. Metals, building materials, fuel and miscellaneous declined. The index numbers of prices for building materials, on the 1913 base as 100, were 193 for first quarter of this year, 200 second quarter and 186 the third quarter.

Under date of October 23, out of 24 farm commodities, 9 are above a year ago in price and 15 are below. Compared with last month, 13 are higher, 9 are lower, and 2 remain unchanged. Cattle, hogs and sheep are under last month and last year. Corn is the only grain above a year ago. Dairy and poultry products are running much the same in price compared with both the month and year previous.

I. Production and Trade.

1. Agriculture: U. S. Production—000,000 omitted.

	October, 1923 Forecast	1922	Average 1917-1921	1923* Per Cent
Winter wheat, bu.	568	586	590	96
Spring wheat, bu.	213	276	245	87
All wheat, bu.	782	862	835	94
Corn, bu.	3021	2891	2931	103
Oats, bu.	1302	1201	1378	94
Barley, bu.	199	186	192	104
Rye, bu.	65	95.5	70.3	93
Buckwheat, bu.	14	15	14.9	94
Potatoes, white, bu.	401	451	388	103
Sweet potatoes, bu.	96	110	94.3	102
Flaxseed, bu.	20	11.7	9.7	207
Rice, bu.	33	42	41	81
Tobacco, lbs.	1462	1325	1361	107
Cotton, bales	11	9.8	11.2	98
Peaches, total crop, bu.	46	56.7	42.7	108
Apples, total crop, bu.	191	201	160	119
Apples, commercial, bu.	33	31	25.7	128
Sugar beets, tons	7	5.2	6.9	101

* As per cent of average of 1917-1921.

2. Wheat Situation: (Nat C. Murray, Clement Curtis & Co.) (000,000 omitted)

	East of Rockies	West of Rockies
Supply:		
Carried over, July 1, 1923	91	10
Production, 1923 crop	645	137
Total supply	736	147
Distribution:		
Domestic requirements for food, seed and feed	583	51
Excess feeding	28	7
Total domestic requirements	611	58
Exported to date, Oct. 15, about	43	7
Total	654	65
Remainder for carryover and export	82	82

3. Mining (Federal Reserve Bank of New York):

Figures express production as a percent of normal. In estimating normal production, due allowance is made for seasonal variation and year to year growth.

	Aug., 1923	July, 1923	Aug., 1922
Anthracite coal	104	100	2
Bituminous coal	105	106	60

4. Manufacturing (Federal Reserve Bank of New York):

Wheat flour	116	122	119
Sugar	74	70	144
Cotton	89	83	97
Wool	97†	104	87
Pig iron	109	121	59
Steel ingot	107	105	79
Copper	109†	102	85
Gasoline	*	110	102
Cement	130	135	120
Lumber	*	114	108
Automobiles	141†	151	124

* Not available. † Preliminary.

5. Building Expenditures (Bradstreets): (000,000 omitted)

	1923	1922	Per cent Increase
First quarter	$794	$522	52.3
Secnd quarter	830	718	15.6
Third quarter	690	629	9.5
September, 164 cities	220	201	9.4

6. Transportation (000 omitted):

Freight car loadings:	Week Ending Oct. 6, 1923	Same Week Month Ago	Same Week Year Ago	Week Ending Oct. 6, 1923*
Total	1080	929	954	113
Grain and grain products	50	47	50	100
Livestock	42	36	39	108
Coal	192	153	186	103
Coke	12	14	10	120
Forest products	73	56	57	128
Ore	67	72	47	143
Merchandise	254	218	228	111
Miscellaneous	389	324	336	116

* As percentage of week year ago.

7. Employment:

	Sept., 1923	Aug., 1923	Sept., 1922
Out of 64 industrial centers employment:			
Increased over previous month in	28	29	47
Decreased over previous month in	36	35	17

8. Bank Debits:

Units of $1,000,000,000

	Sept., 1923	Aug., 1923	Sept., 1922
New York City	$16.80	$16.19	$19.22
Outside bank debits	17.26	17.31	16.55

9. Mail Order Sales:

	September, 1923	September, 1922	Nine Months Ending September, 1923	Nine Months Ending September, 1922
Montgomery Ward & Co.	$ 9,949,389	$ 7,088,684	$ 90,303,489	$ 59,562,224
Sears Roebuck	16,103,251	14,375,429	151,749,747	121,279,805

II. Foreign Trade.

1. Exports (000 omitted):

Commodity:	August, 1923	August, 1922	Eight months Ending August, 1923	Eight months Ending August, 1922
Grand total	$304,939	$296,250	$2,507,926	$2,377,543
Beef and veal, lb.	2,002	3,207	18,498	21,889
Pork, lb.	77,882	57,067	591,402	448,861
Lard, lb.	83,758	68,907	702,544	498,581
Butter, lb.	375	1,169	4,128	8,411
Cheese, lb.	296	378	7,093	3,724
Hides and skins $	435	231	2,307	2,673
Corn, bu.	781	12,170	37,525	131,573
Meal and flour, bbls.	40	39	475	453
Wheat, bu.	14,198	33,703	64,788	100,169
Flour, bbls.	1,273	1,169	9,083	9,158
Oats, bu.	148	1,763	2,554	19,645
Oatmeal and rolled oats, lb.	12,811	9,786	83,298	66,224
Fruits and nuts $	5,096	5,903	31,284	36,299
Vegetable oils $	618	727	7,138	8,758
Sugar, lb.	5,877	89,816	417,235	1,780,017
Tobacco, lb.	33,214	28,958	292,989	262,712
Cotton, bales	244	273	2,202	3,481

2. Imports:

(000 omitted)

Grand total	$275,382	$281,376	$1,952,556	$2,650,603
Beef and veal, lb.	1,932	2,362	9,896	16,465
Pork, lb.	37	29	723	507
Butter, lb.	1,053	76	13,957	2,646
Cheese, lb.	5,542	3,765	34,598	23,207
Hides and skins $	6,745	10,381	94,462	59,285
Corn, bu.	9	2	130	95
Wheat, bu.	596	1,152	7,119	13,537
Flour, lb.	3,670	7,973	38,361	99,961
Oats, bu.	6	56	97	1,235
Fruits and nuts $	3,622	4,095	43,787	45,357
Vegetable oils $	5,828	4,917	49,797	42,612
Sugar, lb.	453,153	953,907	5,714,087	8,043,862
Tobacco, lb.	2,895	5,459	43,311	58,775
Wool, lb.	10,288	34,472	355,190	250,742

3. Prices of Foreign Drafts:

	Nominal Gold Value Par of Exchange	Price of Demand Drafts Oct. 23, 1923	Sept. 18, 1923	Oct. 16, 1922
England	$4.87 to 1 £ sterling	$4.50	$4.53	$4.43
France	19.3c to 1 franc	5.83c	5.78c	7.52c
Sweden	26.8c to 1 crown	26.29c	26.55c	26.72c
Holland	40.2c to 1 florin	38.71c	39.28c	38.93c
Argentina	42.5c to 1 peso	32.10c	33.10c	35.95c
Japan	49.9c to 1 yen	48.75c	48.40c	48.10c

4. Discount Rate of the Bank of England:

October 17	Month Ago	Year Ago
4%	4%	3%

III. Money and Credit.

1. Gold Movement (000 omitted):

	Aug., 1923	Aug., 1922	Eight Months Ending 1923	Eight Months Ending 1922
Exports of gold	$ 2,200	$ 955	$ 25,015	$ 11,744
Imports of gold	32,837	19,092	192,699	185,091

2. Federal Reserve Ratio:

	Oct. 20, 1923	Sept. 15, 1923	Oct. 18, 1922
Ratio of total reserves to deposits and Federal Reserve note liabilities	75.3%	75.9%	75.2%

3. Interest Rates:

	Sept., 1923	Aug., 1923	Sept., 1922
4-6 mos. commercial paper	5.41%	5.25%	4.41%
60-90 days commercial paper	5.12%	5.02%	4.19%

4. Stock and Bond Prices:

	Oct. 11, 1923	Sept. 7, 1923	Oct. 12, 1922
20 Railroad stocks	$79.23	$79.93	$ 92.50
20 Industrial stocks	87.16	92.84	101.73
40 Bonds	86.31	87.11	[illegible]

5. Business Failures:

	Week Ending Oct. 11, 1923	Sept. 6, 1923	Oct. 12, 1922
Bradstreet's	326	281	[illegible]
Duns	292	247	[illegible]

IV. Prices.

1. Wholesale Prices of Farm Commodities:

Quotations at Chicago except as noted.

	Oct. 23, 1923	Month Ago	Year Ago
Fat hogs, cwt., average	$ 7.00	$ 8.25	$ 8.95
Beef steers, good native, cwt., ave.	10.25	10.30	10.90
Fat lambs, cwt., average	12.70	11.85	14.15
Fat sheep, cwt., average	6.00	6.90	6.80
Wool, Ohio Delaine unwashed, lb. (Boston)	.535	.535	.555
Butter, 92 score, lb.	.465	.475	.45
Cheese, No. 1 twins, lb.	.24	.239	.25
Eggs, fresh firsts, doz.	.37	.33	.355
Poultry, hens, lb.	.215	.21	.21
Wheat, No. 2 hard, bu.	1.1025	1.04	1.1525
Corn, No. 2 mixed, bu.	1.0125	.8675	.6975
Oats, No. 2 white, bu.	.4375	.4175	.44
Rye, No. 2, bu.	.7075	.6875	.795
Barley, bu.	.655	.625	.68
Kafir, No. 2 white, cwt. (K. C.)	1.80	1.805	1.85
Hay, No. 1 timothy, ton	26.50	26.50	22.00
Flax, No. 1, bu. (at Minneapolis)	2.38	2.32	2.47
Cotton, middling, lb. (New York)	.3085	.2975	.2410
Beans, white, cwt. (f. o. b. Michigan)	5.75	6.00	6.60
Potatoes, northern whites, cwt.	1.00	1.70	1.20
Onions, midwest yellows, cwt.	3.25	3.15	1.85
Apples, winter varieties, bbl.	5.00	5.50	5.10
Hides, No. 1 native, heavy (Chicago)	.15	.145	.23
Sugar, fine granulated, lb. (N. Y.)	.0935	.0835	.0698

2. U. S. Department of Labor Relative Wholesale Prices:

Prices in year 1913 equal 100.

	Sept., 1923	Aug., 1923	Sept., 1922
All commodities (weighed average or general price level)	154	150	153
Farm products	144	139	133
Food products	147	142	138
Cloths and clothing	202	193	183
Fuel and lighting	176	178	244
Metals and metal products	144	145	134
Building materials	182	186	180
Chemicals and drugs	128	127	124
House furnishing goods	183	183	173
Miscellaneous	121	130	116

3. Prices of Farm Products at the Farm Relative to 1913:

(U. S. Bureau of Agricultural Economics)
Prices in year 1913 equal 100.

Commodity:	Aug., 1923	July, 1923	Aug., 1922
Cotton	194	190	170
Corn	146	147	106
Wheat	113	107	112
Hay	110	108	96
Potatoes	185	191	137
Beef cattle	95	97	93
Hogs	92	89	114
Eggs	137	119	118
Butter	145	136	124
Wool	221	229	189

4. Relative Purchasing Power of Farm Products:

(U. S. Bureau of Agricultural Economics)

The quantity of various commodities which a given amount of each farm product would purchase at prices prevailing in 1913 is put equal to 100. The figures given represent the percentage of this quantity which the same amount of farm products would purchase in August, 1922. Prices at the farm are used for agricultural products, and wholesale prices at central markets for other commodities.

	All Commodities	Cloths, etc.	Fuel, etc.	Metals, etc.	Building Mtls.	House Furn'gs
Cotton	129	100	109	134	104	[illegible]
Corn	97	76	82	101	79	80
Whaet	75	59	63	78	61	62
Hay	73	57	62	76	59	60
Potatoes	123	96	104	128	100	101
Beef cattle	63	49	53	65	51	52
Hogs	61	48	52	63	49	50
Eggs	91	71	77	85	74	75
Butter	97	75	81	100	78	79
Wool	147	114	124	153	119	121

Average purchasing power of all farm products in terms of all other commodities. Same basis as above table.

1913	100	December, 1921	62
1914	112	July, 1922	69
1915	106	August	64
1916	89	September	64
1917	106	March, 1923	69
1918	112	April	70
1919	111	May	71
1920	[illegible]	June	71
1921	67	July	72
1922	[illegible]	August	73

MARKET FLASHES

MARKET SUMMARY

Demand for wheat and corn quiet. Oats and rye unchanged. Beans steady after recent price advance. Potatoes easy. Butter and eggs steady to firm. Cattle steady to low. Hogs active. Sheep dull and lower in price.

(Note: The above summarized information was received AFTER the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press —Editor.)

FOOTE'S MARKET LETTER

BY W. W. FOOTE

Business is Better

ALL reports agree that business has undergone marked improvement throughout the country, the Chicago mail-order houses having made a new high record for the year to date. In the same tenor is a statement by Walter Cravens, president of the Kansas City Joir Stock Land Bank, that farmers of Kansas, Missouri, and Oklahoma are paying interest regularly on borrowings of $40,000,000, and that there is no reason for reports that the agricultural industry of the central west has collapsed.

What Farmers Are Doing

A new record has been set for the number of silos on Wisconsin farms an official state report showing a total of 100,060 silos. The assessors report shows that 5,636 silos were added in 1922. Based upon the census figures for 1920, there are now 53 silos to every 100 farms in the state.

The Hinegardner orchard about six miles west of Toledo, Iowa, one of the best in Tama County, is bearing a remarkable crop of winter apples, consisting of Genetons, Johnathans, Northwestern Greenings, Grimes, Golden and others of fine quality. The yield is around 1,000 bushels, and it has been hard to get them picked and marketed. A great part is being sold at the orchard at $1 a bushel.

Wheat Prices Uncertain

Traders in wheat have been in a state of uncertainty, not knowing whether government aid would come to the rescue, and the result was fluctuations in prices within rather narrow limits. "Short" traders felt afraid to sell, while the bulls were timid about loading up. Virtually the surroundings of the market are unchanged, with excessive supplies in exporting countries and lack of large buying most of the time, although recently much increased exports from North America have taken place, including both wheat and flour. The Chicago Federal Reserve Bank reports activity in fall wheat sowing throughout the country. According to reports from 159 agents representing 181,155 farmers, the acreage devoted to wheat in that district is only 78.2 per cent of that of a year ago. In many districts corn and late potatoes grown on low lands failed to mature before frosts, and this reduced the supply of choice seed corn. The quality of the corn crop was affected by frosts in practically all north central and northeastern states. Wheat prices are affected noticeably by the late puchases of Canadian wheat by American mills, as well as by considerable marketing of wheat by American farmers. Exports of corn and oats are mostly insignificant, little old corn being left in the country. Corn still sells well above prices paid a year ago, but prices have had quite a fall during recent weeks, and farmers are anxious to market their surplus before further declines. Less rye is being exported than a year ago, although prices are far lower than at that period, making it a good purchase, it would seem. The visible wheat supply in the United States is growing rather fast, and a short time ago it aggregated 68,000,000 bushels, or twice as much as a year ago. The rye visible supply aggregates 16,600,000 bushels, or twice as much as last year; while that of oats aggregates 20,127,000 bushels, or comparing with 35,464,000 bushels a year ago. Much is published regarding feeding wheat to stock on the farms where grown, and it has been stated that this will approximate 7 per cent of the total crop, comparing with a normal of 2 per cent. Such feeding is estimated at 50,000,000 to 60,000,000 bushels.

December wheat sells on the Chicage market up to $1.08, comparing with $1.15½ a year ago; December corn at 74½ cents, comparing with 68 cents yast year; December oats at 42 cents, comparing with 42½ cents last year; and December rye at 69½ cents, comparing with 83½ cents a year ago.

World's Grain Crops

World's wheat crop in thirty-five countries this year is 3,283,000,000 bu. or 344,000,000 bu. more than last year. Rye in twenty-five countries, 928,390,000 bu. against 605,202, 000 bu. last year. Germany raised 273,301,000 bu. of rye this year, against 206,000,000 bu. last year. It also raised 411,681,000 bu. of oats, against 276,643,000 bu. last year, while 27 countries of the world raised 3,539,566,000 bu. compared with 3,069,757,000 bu. last year.

A Cattle Contrast

A live stock paper called attention a short time ago to the fact that two car loads of cattle were sold recently in the Chicago market at $12.35 per 100 pounds, having been purchased a year ago for $7.25 as feeders. The year's care and feed gave them the finish required. It also calls attention to the fact that on the same day two loads of cattle were sold at $7.50, having been brought two months previously for $9. They lacked high finish, of course, and were only meaty feeders. The reason why the range of prices for beef cattle is so wide is that too many half-fat cattle are offered and only a moderate supply of finished beeves.

Although the movement of cattle from ranges and farms this year to markets shows large gains, plenty are left in feeding districts, and considerable numbers of stockers and feeders are going out from Chicago. The annual marketing of ordinary cattle has been in progress for several weeks, and many of these have to compete with western rangers, but the range season is nearly over, and this will help the market for natives of middling quality. Recently the best demand has been for well fattened light steers and fat yearlings and these have been quicker to advance than heavy steers. This is a good time for buying stockers and feeders, prices ruling low for very good kinds. Beef steers are selling in the Chicago market largely at $8.25 to $11.60, the best heavy steers going at $11 to $12 and the best yearlings at $12 to $12.40, while inferior little steers go as low as $6.25 to 7.25, with pretty good steers taken at $9.50 to $9.75. Heavy steers have had a big decline in prices, and are bad sellers. Stockers and feeders sell mostly at $5.50 to $6.50, with common lots as low as $3.50 to $4.50 and choice feeders at $7 to $7.50 to a limited extent. Cows and heifers sell at $3.25 to $9.50.

Large Consumption of Provisions

Ordinarily, the enormous consumption of lard and fresh and cured hog meats would lift prices for hogs to a high level, but the huge marketing of hogs at packing points, large and small, has stood in the way of advancing values, save at times when the receipts are smaller than usual. A short time ago a curtailed buying of hogs in the Chicago Stock Yards for shipment to eastern packing points was an important factor in putting hogs on a cheaper basis, but later this demand arrived and helped to advance prices. However, the usual trend of the hog market is on the down grade, as it is no easy matter to dispose of such enormous receipts. Owing to the large proportion of light hogs and pigs, these had to sell at quite a discount, with choice heavy butchers market toppers.

Stocks of cut meats at western packing points, decreased 42,213,000 pounds in October, compared with 35,347,000 pounds last year. Lard stocks were reduced over 29,000,000 pounds and are nearly 1,000,000 pounds less than last year.

Enormous Hog Marketing

Combined receipts of hogs this year aggreate in twenty markets 34,938,000 head, comparing with 27,152,000 for the same time last year. The Chicago market is getting the largest supplies since February, and prices are lower, late sales being made at $6.40 to $7.50. The top is paid for heavy butchers, with the best bacon weights at $7.15. Inferior light lots predominate.

The Sheep Industry

Marked improvement is seen in various parts of the country in the breeding of sheep, as well as in the preparation of lambs for the market. The "bucky" lamb is being eliminated in many farming districts, and especial progress has been made in Kentucky. A short time ago it was estimated by the Department of Agriculture that more than 200,000 docked weather and ewe lambs were marketed from that state this year. This has been a great year for the sheepmen of the United States, far larger numbers of sheep and lambs being marketed than last year, and while prices varied greatly, as usual, the industry has on the whole been very profitable to those who understand just what methods to follow. The range shipping season is closing, and large numbers of these lambs have been slaughtered, as well as large supplies of lambs and sheep **from feeding districts of the middle west and south. Feeding sections will winter large number of lambs, most farmers having completed refilling their sheep sheds, and there is still a large demand for high-grade breeding ewes for shipment to Michigan and other near-by states, as high as $11 to $12 per 100 pounds being paid for the best yearling ewes, and nowhere near enough offered to go around. Of late the quality of the range thin feeding lambs offered in the Chicago market has greatly fallen off, and lower prices were paid. Lambs sell in Chicago at $9 to $13.25, feeders going at $11.75 to $12.85.**

BEANS

Prices in the bean market are quoted lower at some points, and the demand is said to be better than expected giving a steady tone to the market. Dealers are waiting for cold weather to put more life into the market. Consumption increases with the beginning of cold weather but whether the demand will be sufficient to cause prices to advance very much is a question.

POTATOES

Receipts have increased during the past fortnight and the market is easy. Market students declare the prices are low enough to encourage speculation, but the larger speculators are holding off, claiming that crop reports are so encouraging for large supplies this winter that they see no reason for paying current prices.

QUOTATIONS

Wheat

Detroit—Cash No. 1 red, $1.14½; No. 2 white, $1.14; No. 2 mixed, $1.13.

Chicago—Cash No. 3 red, $1.07

Prices one year ago—Detroit, Cash No. 2 red, $1.31; No. 2 white and No. 2 mixed, $1.29.

Corn

Detroit—Cash No. 2 yellow, $1.03; No. 3, $1.02.

Chicago—Cash No. 2 yellow, 97 @99c.

Prices one year ago—Detroit, Cash No. 2 yellow, 80c; No. 3, 79c; No. 4, 78c; No. 5, 77c.

Oats

Detroit—Cash No. 2 white, 46½c; No. 3, 43½c.

Chicago—Cash No. 2 white, 42½ @44c.

Prices one year ago—Detroit, Cash No. 2 white, 49c; No. 3, 47½c; No. 4, 46c.

Rye

Detroit—Cash No. 2, 77c.

Chicago—Cash No. 2, 70½@ 70¾c.

Prices one year ago—Detroit, Cash No. 2, 90c.

Beans

Detroit—C. H. P., $5.30@5.40 per cwt.

Chicago—C. H. P., $6.20@6.50 per cwt.

Prices one year ago—Detroit, C. H. P., $7.00 per cwt.

Potatoes

Detroit—$1.23@1.40 per cwt.

Chicago—95c@$1.00 per cwt.

Prices one year ago—Detroit, $1.20 per cwt.

Hay

Detroit—Standard timothy and light mixed, $21.50@22; No. 1 clover mixed, $19@20; No. 1 clover, $19 @20 per ton.

Chicago—No. 1 timothy, $26@27; No. 1 clover mixed, $22@24; No. 1 clover, $22@24 per ton.

Prices one year ago—Detroit, Standard timothy, $16.50; light mixed, $16.50@17.50; No. 1 clover, $15 @15.50 per ton.

FARM BUREAU RADIO PROGRAM

Station KYW, Chicago, Central Time
8:01 P. M. Wave Length, 536

November 13—"Exit the Scrub Bull," by E. G. Thiem, Secretary of Illinois Holstein-Friesian Association.

"Orderly Marketing of Live Stock," by John G. Brown, President, National Live Stock Producers' Association.

Cut Fence Bills in Half

Be sure to ask your dealer for "Galvannealed"—not the ordinary galvanized fence wire.

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Mt. Clemens, Mich.

PRITCHARD'S WEATHER FORECAST
INTERPRETED BY THE STARS

Week of November 11

FOR the week of N[illegible]ber 11th the temperature in Michigan is expected to average cold for the season. The latter days of the week are scheduled for the most sunshine.

A rain or snow and wind storm will probably effect this state at very beginning of week with a change to colder by Monday, at the latest.

A day or so of fair weather will then be followed by more severe weather when rain, snow, blizzards and strong winds will cover most of Michigan. Then will come a cold period that will drop temperatures to a minimum of 25 to 28 degrees.

During the last two days of the week the sky is expected to be generally clear.

Week of November 18

Temperatures during the first three days of this week will rise decidedly in Michigan but before the end of the week [illegible] have fallen below freezing again.

During early part of this period winds will be southerly, skies will cloud up and light rain will fall generally. This condition will continue for the greater part of the week with the exception that rain is likely to turn to snow in sections, especially about Friday.

As this week comes to an end the sky will be clear in most counties and the temperature low for the season.

November Normal Month

An average of all storms we believe will effect Michigan this month leads us to predict a normal month. Precipitation will probably be a little above normal and the temperature will be a little above the average. However, we expect a number of cold spells that will help to take down any high extremes for the month as a whole. We are also looking for a moderately warm but wet December.

OWOSSO FARMER MAKES $1,500 FROM ACRE MICHIGAN BEANS

(Continued from Page 3)

esting to note the delusion under which some of the protestors who claimed Robust beans to be wrinkled labored. When tested in identification with known samples called all wrinkled beans Roberts regardless of their true identity.

The Michigan plant breeder in 1922 brought out a new strain of Robust beans which showed even a marked improvement over the very desirable earlier selections released in 1915.

Farmers fully convinced of their productivity are demanding Robust beans for seed. They get their pure stock from growers of the Michigan Crop Improvement Association, who grow Robust beans under an inspection supervised by the Michigan Agricultural College and all seed meeting association requirements is certified as to purity, quality and vitality. The inspection, both in the field and after harvest is the safest assurance that the beans are genuine Robusts, pure, and true to varietal characteristics.

Statistics show that 26,000,000 Americans, nearly one-fourth of the nation's population, have savings accounts in the state and national banks.

Gas industry is now adding new customers to its gas mains at the rate of 350,000 a year.

GET YOUR COAL FREE

Special offer to Michigan Business Farmer readers. A large successful 16-year old coal company, The Peoples Coal Company, 1120 W. 35th St., Dept. 713, Chicago, Ill., shipping direct from mine to user, is offering this unusual opportunity to one coal user in every neighborhood who has a few hours spare time each month. This is its method of quickly introducing the finest grade, freshly mined, free burning coal, which is being sold from mine direct to user, thereby saving the profits of all middle men. Man of good standing and well known in his community can get his coal free. We suggest that you write this firm today.—Adv.

Why dont you buy "Scrubs"?

WHEN you set out to buy cows for your herd, why don't you buy scrubs? They don't cost as much as good ones.

Of course, the reason you don't is that there's more profit in the good ones.

It's the same with buying feed. LARRO is worth more than other rations for the same reason that good cows are worth more than scrubs.

The reason lies in highest quality ingredients—in the standardizing of these ingredients before mixing—the removal of all foreign material, such as tags, lumps, bits of wood, nails and every particle of iron and steel—in the perfect proportioning of each ingredient according to a formula adequate for every requirement of safety, condition, health and milk.

LARRO will make you more money over cost than any other ration. ***We guarantee that—absolutely.***

The Larrowe Milling Company, Detroit

FREE "Preparing Cows for Winter" is the title of an article that appears in the September issue of The Larro Dairyman. If you are not receiving this excellent, free magazine for cow-owners, fill out and mail this coupon now, or take it to your Larro dealer.

The Larrowe Milling Company
51 Larrowe Bldg., Detroit, Mich.
Gentlemen:
I am now feeding......cows and I want to receive, without cost, your magazine—"The Larro Dairyman."
Name..
St. or R. F. D................................
Town..............State.................

PICK YOUR OWN BEANS

Since the Michigan Business Farmer told its readers how some bean growers were getting good money out of poor beans, the farmers mentioned have been deluged with requests for information.

Jack Shay writes: "Send a private stenographer to take care of my correspondence."

To relieve our good customers of this embarrassment we are using this space to give the information desired.

$250 will buy a **Judson Jr. Bean Picker** which will pick your own and all your neighbors' beans for years without cost for repairs.

The only mechanical picker that will handle wet beans.

The feed value of the culls pays the cost.

Compare this with your experience.

Write today for illustrated description.

THE JUDSON MICHIGBEAN COMPANY
409 East Fort St. Detroit, Mich.

Detroit Beef Company

offers its services to the *Farmers of Michigan* as a high class, reliable commission house for the sale of *Dressed Calves* and live poultry. Write us for information how to dress and ship calves to market. $250,000 capital and surplus. 34 years in business in the same place and same management.

Address
DETROIT BEEF CO., Detroit, Mich.

Cured His Rupture

I was badly ruptured while lifting a trunk several years ago. Doctors said my only hope of cure was an operation. Trusses did me no good. Finally I got hold of something that quickly and completely cured me. Years have passed and the rupture has never returned, although I am doing hard work as a carpenter. There was no operation, no lost time, no trouble. I have nothing to sell, but will give full information about how you may find a complete cure without operation, if you write to me, Eugene M. Pullen, Carpenter, 59-K Marcellus Avenue, Manasquan, N. J. Better cut out this notice and show it to any others who are ruptured—you may save a life or at least stop the misery of rupture and the worry and danger of an operation.

(A statement by the publisher who personally inspected the plant, product and plan of the Home Profit Hosiery Co., at Rochester appears on page 15 this issue.)

Left With Two Babies And No Income

At first it was pretty hard to manage—now I keep my pocketbook comfortably filled

By Bessie English

WHEN my husband died, two years ago, it seemed the end of the world to me. There I was with two small children—one only six weeks old—and no income.

My husband's long sickness had taken every dollar of our savings. Baby's coming had brought another expense. The insurance was barely enough to meet all the bills. I was left almost destitute.

I was totally unprepared for the responsiblity of being the family breadwinner. The only thing I knew how to do was housework. The outlook was anything but cheerful.

I Wouldn't Hear of It

Everybody was very kind. There were many offers of help. But I had too much pride to be willing to accept charity, even from relatives. My folks urged me at least to let them take the children, so I would have only myself to provide for, instead of three. But I wouldn't hear of it. My babies were all I had in the world, and I was determined that nothing should take them from me.

But how was I to manage? I couldn't sleep thinking about it. Both children, and especially the baby were at an age where they needed a mother's constant care. I couldn't leave them alone to go out working. Yet I faced the necessity of somehow earning enough to provide food and clothing and a home.

I live in a small town. At best there aren't many ways here for a woman to earn a living. And I had to find something that wouldn't take me away from the children. That didn't leave much choice. I would have to take in washing or starve.

I was none too strong. It was a hard grind. At times both my back and my courage were ready to break. But always the thought of my two children kept me going.

It was terribly discouraging. The children, of course, required quite a bit of my time. No matter how long or how hard I slaved over the washtubs, what I earned was barely enough to keep body and soul together. Even with sewing added, the amount I earned was still pitifully small.

Worst of all, the hard work was gradually wearing me down. I lost twenty pounds. I began to fear I couldn't hold out much longer. The strain and worry of it had me almost in despair.

Mrs. Bessie English
97 Pitman St.,
Pennsgrove, N. J.

Just What I Had Been Hoping For

One Sunday I was so tired and discouraged that I was about ready to give up. Trying to get my mind off my struggle, I picked up a paper which a neighbor had brought over. As good luck would have it, the first thing that caught my eye was a way to earn money at home. Exactly what I had long been hoping for but never expecting to find—good pay for work I could do entirely at my own convenience, without stepping out of the house, without any tax on my strength, without set hours, without having to leave or neglect the children.

I read it from beginning to end. It told how a Mrs. Himburg in Brooklyn, New York, had averaged about $12 a week for nearly two years—in her spare time. How hundreds of other home workers each earned all the way from $5 to $25 or more every week—the amount depending on how much time is given to the work.

I made up my mind I could do as well as anyone else. The work looked easy and interesting—knitting socks for the Home Profit Hosiery Company. I didn't know a thing about knitting, but it said no experience was necessary. I immediately wrote for full information about the plan.

The mere thought that perhaps my drudgery at the washtubs would soon be over put me in better spirits than I had been for weeks. The more I found out about the plan and the money others were earning, the more convinced I became that here was my chance. So I sent in my application. In due time I received my Knitter, a supply of free yarn, and a book of simple and clear instructions that made everything plain and easy. Honestly, I fell in love with my Knitter as soon as I saw it—it looked so clever and capable. After a little practice, I could knit socks fine enough for any millionaire. It is no trick at all on this skillful little Home Profit Knitter. And I can sit down at my machine and earn a good day's pay while watching the children.

My First Check

My first check from the Home Profit Hosiery Company made me happier than any other money I had ever received—for it meant that at last I had found a way to be self-supporting without making a slave and drudge of myself. Since then practically every dollar I have had has been earned on my Home Profit Knitter—I call it the family breadwinner. And I have done this without tiring myself or neglecting the children or housework. Compared with washing or sewing, the work is actually restful. I have regained all the weight and strength I had lost—and have regained my old cheerfulness and self-respect. I am able to give my children all the necessaries and some of the comforts of life. I am gradually putting a little money aside. Above all I can face the future with full confidence that I will always know where the money for the things we need is coming from because the Home Profit Hosiery Company has signed a life contract with me to take all the socks I can knit. It was a lucky day for me when I read about the Home Profit Work Plan.

Mrs. Bessie English
97 Pitman St., Pennsgrove, N. J.

* * * * *

It Is Helping Fill Hundreds of Pocketbooks

The Home Profit plan is putting easily earned extra money into the pockets of people all over America—helping them pay for homes, helping them put money in the bank, helping them pay debts, helping them buy furniture and automobiles, helping them dress better and live better, helping them in all the ways that money can be used for.

Some earn $5, $10 or $15 extra every week; a few as high as $25 to $30 or more—in the privacy of their own homes, and without any interference with their other duties.

How much one can earn in this way all depends on how much spare time can be given to the work. You are always your own boss—can start and stop knitting whenever you like—any time of the day or evening. You can knit as many or as few socks each day or each week as you choose. Whether few or many, the Home Profit Hosiery Company guarantees to take every pair of socks you can knit for them, in accordance with their simple specifications, and to give you good pay for every pair you send them. They also supply free yarn for all the socks you send them. (But if you prefer, you can buy your yarn from the company at wholesale price and sell the finished hose at your own price to local stores, neighbors, etc.) You can also knit sweaters and many other articles on the Home Profit Knitter, either for your own use or to sell.

There is an enormous demand for the fine quality of wool hose so easily knitted on the skillful little Home Profit Knitter, and the Home Profit Hosiery Company is ready to make guaranteed arrangements with spare time home workers anywhere. It doesn't matter where you live. You don't need to know anything whatever about knitting at the start—the simple and clear instruction book quickly shows you how. All you need is a Home Profit Knitter, a little spare time, and the willingness to use it. No matter what you need money for, it will pay you to send for free information about the Home Profit guaranteed plan. Simply tear out and mail the coupon—now, while it is in your mind. That takes only a minute, but it can easily make a difference of hundreds of dollars a year to you.

Home Profit Hosiery Co.

Dept. 301, 872 Hudson Ave., Rochester, N. Y.

HOME PROFIT HOSIERY CO., INC.
Dept. 301, 872 Hudson Ave., Rochester, N. Y.

Send me full information about making money at home in my spare time with the Home Profit Knitter. I am enclosing 2 cents postage to cover the cost of mailing, and I understand that I am not obligated in any way.

Name ....

Street ....

City .... State..............................

(Write Name and Address Plainly)

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An Independent
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Edited in Michigan

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THANKSGIVING MORN

Read in this issue: How Dad and Mother Attend Night School at Hartland, Michigan—See Page 4

Even as a Grain of Mustard Seed—

Long ago it was written that faith, even tho small as a grain of mustard seed, could remove mountains.

Henry Ford, with unbounded confidence, has labored for more than twenty years to remove the mountain of difficulty standing in the way of modern transportation. He has sought always to give the world practical transportation at low cost.

Many have wondered why Ford products, whose remarkable value time and use have proved, can be produced, sold and serviced for so little.

It is because from forest and mine to finished product there exists a marvelous coordination of every phase of manufacture. From scores of widely scattered Ford-owned sources the raw materials are brought by Ford transportation units to Ford plants, moulded, machined and assembled into cars, trucks and tractors.

At no time is the high quality of manufacture or workmanship beyond the supervision of the builders. Unhindered by changing market conditions, Ford products are built uniformly sturdy and dependable year after vear.

This unusual development of industrial economy delivers your Ford car, truck or tractor at the lowest possible cost.

Ford Motor Company

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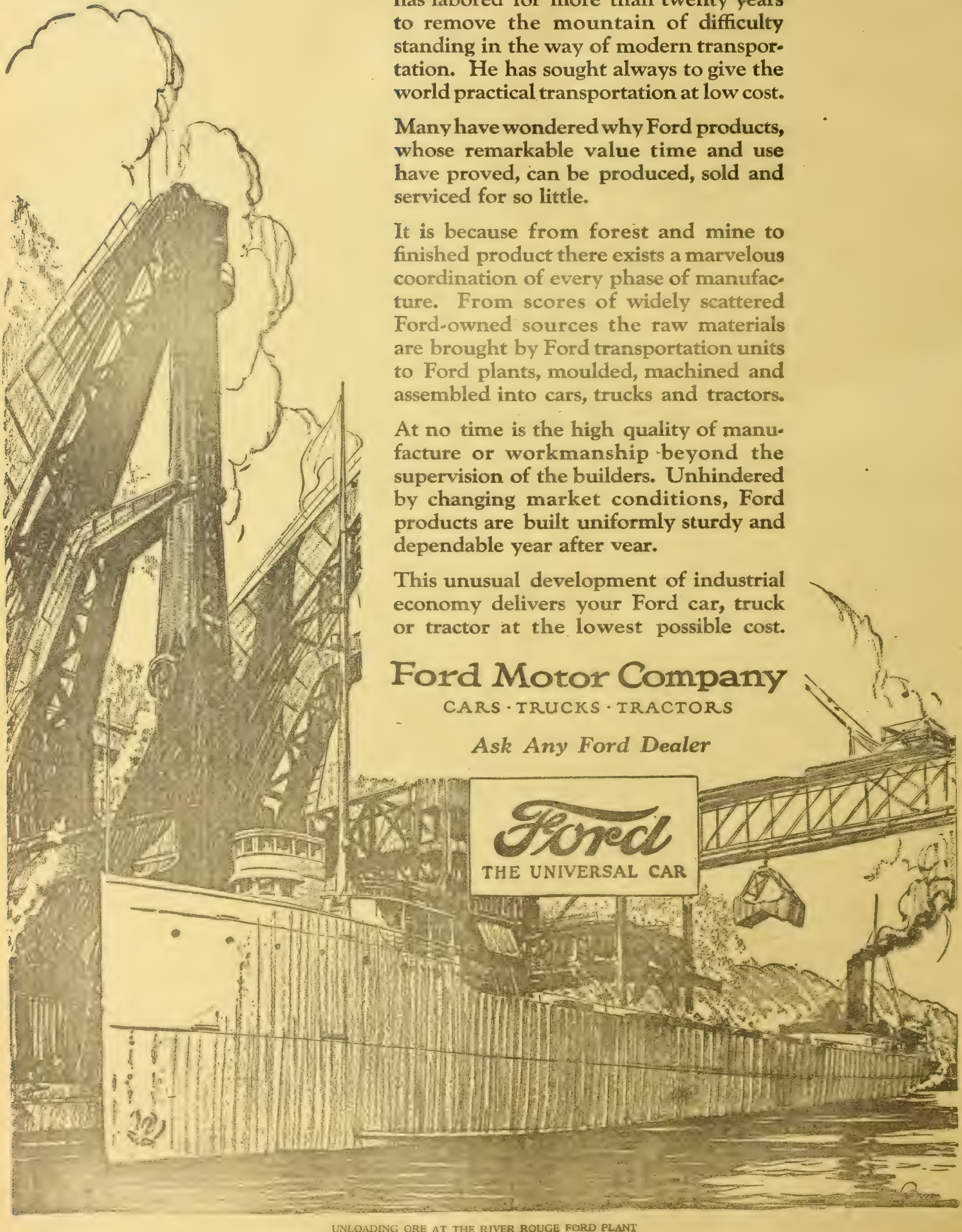

UNLOADING ORE AT THE RIVER ROUGE FORD PLANT

SATURDAY
November 24th,
1923

VOL. XI, NO. 7

Being absolutely independent our columns are open for the discussion of any subject pertaining to the farming business.

"Hew to the line, let the chips fall where they may!"

The Michigan
BUSINESS FARMER

"The Only Farm Magazine Owned and Edited in Michigan"

Published Bi-Weekly
Mt. Clemens, Mich.

TWO YEARS $1

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Boy Wins Grand Prize at Gaylord Potato Show

Highest Award Won by Seventeen Year Old Boy---Directors Plan to Make "Top O' Michigan Potato Show" Annual Event

By E. J. LEENHOUTS

"IT is the best display of potatoes that I have ever seen," said F. C. Gaylord, of Purdue University, judge of the exhibits at the Top O' Michigan Potato Show, held at Gaylord, November 7th, 8th, and 9th, relative to the tuber entries at the Gaylord show. In the opinion of the Indiana potato expert, Northeastern Michigan sees its most important proof as to the success of its first All-Northeastern Michigan potato show.

Undoubtedly, the headlight of the tuber exhibit was the winning of the grand sweepstake by a seventeen year old boy, Edward Domke, Jr., of Ocqueoc in Presque Isle County. The youthful aspirant to state potato honors won the championship of boys' club work at the Grand Rapids' apple and potato show in 1922 which included a scholarship to the Michigan Agricultural College. He is of a retiring nature and radiates the sincerity which characterises the progressive farmers in the northern counties. His heart and soul are in the better potato work; he knows potatoes intimately. His goal is the knowledge which will enable him to raise perfect tubers year after year—to gain a state and national reputation as a prize-winner in potato exhibitions.

The boy's 32 potato display which won first honors was an exhibit which comprised perfect, clean, typy, and uniform tubers. The potatoes were probably more nearly free from blemishes and minor imperfections than those in any other single display. The popularity which attended the decree of judge Gaylord in awarding the boy's exhibit first place attested to its favorable acceptance by the potato growers and visitors.

Professor Gaylord spoke of the superiority of northern grown certified seed at the opening program sponsored by the Michigan Potato producers' association Thursday afternoon. He claimed that through the use of Michigan seed it was possible to increase the yield per acre. His statement, that good hardy seed had made it possible to extend the growing of tubers over a larger area in the Hoosier state, was accepted by the northern potato growers as proof of the quality of their product.

Potato Warehouse Problems

At the same meeting, in an interesting discussion of potato warehouse problems, Floyd E. Fogle, of the farm mechanics department at the Michigan Agricultural College, stressed the importance of admitting plenty of air to the potatoes, the air to be cooled in warm weather and warmed in cold weather by proper ventilating processes, such as flues, intakes, and basement ventilating channels. Two successful systems of potato warehouse ventilation were demonstrated. The Ruthford system, according to Mr. Fogle, is a more complicated system than the King plan inasmuch as the former is constructed so as to allow for control of the incoming and outgoing air by dampers. He recommended either system as being adapted to northern potato storage conditions.

J. E. Kotila, potato specialist at the Michigan Agricultural College, whose work on potato cultural methods has excited national recognition, explained the physiological reactions which take place when a potato breaks down, or rots. He claimed that practically the entire number of incidents where potatoes have deteriorated in storage trace back to a lack of oxygen. His talk was a follow-up on the one given previously by F. E. Fogle, inasmuch as proper ventilation, according to Professor Kotila, eliminates most of the rotting caused by lack of air at the right temperature.

An inspiring talk of fifteen minutes duration given by William C. Hartman, Director of the Bureau of Foods and Standards of the Michigan State Department of Agriculture, laid particular emphasis on the necessity for the growers and potato buyers cooperating with the state agricultural department in enforcing the new potato grades as established and promulgated by the department. He claimed that it was absolutely essential for growers to market graded tubers if the Michigan product was to avoid its present day discrimination on the eastern and mid-western markets.

Advantages of the grading campaign, which has been started by the state agricultural department, were mentioned by Mr. Hartman as reasons which proved, conclusively, the value of potato grading. He declared that it was immaterial whether the consumers saw the benefit of the new plan or not, saying that the grower was the country's first charge; although he claimed that the results of the campaign would take care of the consumer by giving him a better grade product.

Sponsored Banquet Meeting

The Top O' Michigan Potato Show Association sponsored a banquet meeting on the second day of the show at the Knights of Pythias hall which started at 6:30 and lasted until close to ten o'clock. It was without a question, the binding feature of the three days' show. Here the discussion of marketing problems, growers' problems, and buyers' problems was entered into without formality. It was purely a sociable gathering where business difficulties were settled over a table spread with a bounteous supply of foods—chief among the vegetables being the all-important potato.

Professor F. C. Gaylord, of Purdue University, H. C. Moore, of the Michigan Agricultural College, Elmer Smith, of Gaylord, W. H. Hill, of the New York Central Lines, T. F. Marston, of the North Eastern Michigan Development Bureau, R. A. Turner, of the M. A. C., Robert Wylie, of the Michigan Potato Growers' Exchange, C. S. Bender, of Andrews Brothers, Detroit, and W. C. Hartman, of the State Department of Agriculture, were introduced by F. J. Shipp, president of the Top O' Michigan Potato Show Association, who acted as toast master at the banquet.

In the speech given by C. S. Bender, who buys potatoes for the large Detroit house of Andrews Bros., the speaker declared that any buyer in a large city was willing to pay preminum prices on fancy, graded tubers, and that he was sure the average consumer was willing to pay the extra price if he could be assured of good potatoes in return for his money.

Entries Total 155

There were 155 entries at the show, among which were a number entered in either the Detroit Special, the Consumers' Special, or the Detroit News' Special classes. These three special entry features created a great deal of interest in the selling of graded potatoes, since they were classes representing field competition rather than plot competition. The exhibitor who won the first, second, or third prize was given the privilege of selling a certain quantity of his potatoes, which must conform to those he exhibited, in Detroit markets, to the Detroit Board of Commerce, business institutions and the Detroit News cafeteria at a premium price per bushel. Crowley Milner & Company, Newcomb-Endicott Co., and the Detroit Board of Commerce offered $2.00 a bushel; the Union News offered $1.80; and, the Detroit News Cafeteria offered, as an inducement to sponser grading, a price of fifty per cent above the prevailing market price, which totals eighty cents.

The attendance at the show was estimated as being from 1,500 to 2,000. Over three hundred attended the lectures given on the second afternoon of the fair in the large auditorium. Visitors were passing through the building in a steady flow during the three days. Those who had exhibits of the Michigan Agricultural College, the state department of agriculture, Armour & Company, and the American Chemical Company in charge said that the attendance was much greater than had been expected. All booth exhibitor spoke of the interest which the spectators manisfested in the exhibits prepared by them and claimed that the first Northeastern Michigan potato show had proved itself as being worthy to be ranked among the top-notchers in the country.

Credit Due Agent Lytle

A. C. Lytle, county agent of Otsego county, to whom, possibly, more credit is due for the successful tuber show than any other single individual, expressed his sincerest thanks at the banquet meeting Thursday night to the sponsers and co-operators who had helped with the financing, publicity, and judging of the Top O' Michigan Potato Show.

He publicly thanked the supervisors of the potato growing counties who had voted an appropriation for the show, the Michigan Central Railroad, the State Department of Agriculture, the Northeastern Michigan Development Bureau, the Michigan Potato Growers' Exchange, and the various companies and the Michigan Agricultural College, who had booth exhibits, for helping the first Pinnacle City potato exhibit over the trials and tribulations which go with all new ventures. He expressed a desire that the show be made a permanent institution in Northeastern Michigan, saying that it was absolutely essential to the territory which ranked the lowly spud as one of its staple crops.

The concensus of opinion is that the Top O' Michigan Potato Show achieved its three-fold purpose, i. e., first, the education of the growers as to types, varieties, and quality demanded by the market; the proper method of grading and care; the results of proper cultivation and fertilization; secondly, that of developing a medium for securing publicity for Northeastern Michigan and thusly attracting the attention and interest of the buyer and consumer to this area and its product; thirdly, that of developing a medium for direct sales contract between the buyer an dgrower of table stock and certified seed potatoes.

Some excellent critics go further and say that the Northeastern Michigan Potato Show, in reality, went beyond its previously outlined scope and exceeded, as far as benefits are concerned, the hopes of its most enthusiastic backers. It was, undoubtedly, the greatest contribution which Northeastern Michigan has made towards the education of its potato growers, and the greatest single factor in the annals of northern Michigan agriculture making for more efficient production and the attendant rural prosperity.

"It is the sincerest statement," said F. J. Shipp, prominent northern Michigan business man and President of the Top O' Michigan Potato Show, "which I can make when I say that the Top O' Michigan Potato Show has proved that it is so invaluable to northern Michigan, both as to its business and potato interests, that it is essential to retain it as a permanent institution in Northeastern Michigan if our potato growers are to be made to feel that the consuming public and the potato buyers are directly behind them in their fight for better prices as a result of delivering better products."

Prize Winners

The winners in the several different classes as announced by the Top O' Michigan Potato Show Association is as follows:

Class A, Late Varieties

Russett Rural — first, Edward Domke, Ocqueoc; second, Walter Barlow, Spratt; third, Charles Herron, Alpena; fourth, Frank Rotter, Alanson; fifth, J. Fred Brudy, Wolverine; sixth, Frank Wyrick, Alanson; seventh C. G. Brudy, Wolverine; eighth, Willian Shann, Wolverine.

White Rural—First, Morrell Fox, Gaylord; second, Michael Smilowski, Gaylord; third, E. S. Brewer, Onaway.

Irish Cobbler—First, John Mosser, Weadock; second, R. C. Campbell, Hetherton; third, John Allen, Hubbard Lake; fourth, Steven Hartman, Alpena.

Any other Variety—First, C. G. Brudy, Wolverine with Bliss Triumph; second, Nellie Feldhauser, Frederic, Early Northern; third, Wilber Broadbent, Gaylord, White Wonder.

Class B

County Exhibits—First, Otsego; second, Cheboygan; third, Presque Isle; fourth, Alpena; fifth, Crawford.

Class C

Certified Seed—100 pound lots—First, Frank Wyrick, Alanson; second, Jacob Weiss, Alanson; third, Charles Herron, Alpena; fourth, W. Barlow, Alpena; awards of merit, H. L. Molineaux, Wolverine; Harold Bailey, Gaylord; John Spreeman, Vanderbilt; Harold Bonnett, Levering; Ernest Pettifor, Gaylord; Fred Brudy, Wolverine.

Class D

Club Exhibit — First, Sunnyside Potato Club, Cheboygan.

Rural Russett—First, F. J. Wester, Cheboygan; second, John A. Wester, Cheboygan; third, Rudolph Redman, Cheboygan; fourth, Jack McArthur, Cheboygan.

White Rural—First, J. A. Wester, Cheboygan.

Class E

Detroit Special—First, J. H. D. Myers, Levering; second, Charles Herron, Alpena; third, Ernest Pettifor, Gaylord; fourth, George Coultes, Gaylord.

Class F

Detroit News Special—First, C. Herron, Alpena; second, William Feldhauser, Frederic.

Class G

Consumers' Special—First, Chas. H. Shaub, Elmira; second, Charles Herron, Alpena; third, J. H. D. Myers, Levering; fourth, Valentine Mankowski, Gaylord.

Sweepstakes

Best Peck in Show—Edw. Domke, Ocqueoc.

Dad and Mother Can Go to School At Hartland

Livingston County Consolidated School Increases Its Value to Community by Maintcining Night Classes in Soils and Economics for the Farmer and His Wife

By **W. D. WHITE**

Superintendent of Hartland Consolidated School

DURING the year 1920 ten districts of Hartland township, Livingston County, that were maintaining one room schools, voted to organize the Hartland Consolidated Schools and locate the school plant at Hartland, Michigan, a village of about 100 inhabitants, situated about the center of the Consolidated district, where also was located a building which with a small outlay could be made to house the first six grades.

A new $65,000 building was erected to house the upper six grades which are divided into Junior and Senior High schools. The new building was completed in October, 1921, and Hartland Consolidated School was on its way, cheered by many, kicked by a goodly number, while many more said it just couldn't be done.

The first year saw 272 enrolled in school, with 15 tuitioners.

The school offers three courses, College Preparatory, Agriculture, and Home Economics or Household Arts, all full four year courses.

The school is on the University Accredited List, and also the Federal Smith-Hughes list.

School Tax Rate Tripled

The year that the districts were run under Consolidated before the new building was done the school tax rate for the year was $6.05. The first year, 1921, that we were in the new building our school tax was $20.00 per $1000; last year, 1922, the rate per $1000 was $22.00 and that same rate will prevail this year (1923).

With such a jump, from $6.05 to $20.00 and $22.00 per $1,000 tax payers to be shown—they were all from Missouri. This $22.00 rate takes care of all expenses, interest on bonds, retirement of bonds, etc., together with $4,600 state aid which we receive. This year we shall receive $500 federal aid and next year $1,000 making a total of $5,600 federal and state aid.

Naturally where so much school money was involved in place of so small amount of the past years, a program that would demonstrate to the tax payers that the sums paid for the new venture were real dividend paying investments instead of the burden which most prophesied that would have to be established. Consequently no one is allowed to fool away his or her time. Every boy and girl is made to do his or her work. They are not allowed to fall down if mentally capable and in this district we find mighty few of the mentally weak.

Many boys and girls receiving high school training now in our schools never would have entered a high school as students had they not been blessed with the establishment of one at home. We have a half dozen all the way from twenty to twenty-three years of age who have been in high school during the last two years and have entered again this year.

The Hartland Consolidated School at Hartland, Michigan.

Last year a man who has worked at the carpenter trade for a number of years came and asked to take arithmetic with the 8th grade class so as to enable him to figure bills of lumber and make measuration calculations which he had never been able to do. He also learned to fit his own saws, a problem which he had never been able to solve before.

The manual training shop under the very capable supervision of E. A. Rewalt, trains the boys in carpentry, architectural design, both barn and houses, mechanical drawing, woodwork and cabinet making. The 24-foot cabinet shown in the agricultural laboratory cut was made by the boys in the manual training courses. The boys are taught cement mixing and cement form construction. Wagon boxes, hay racks, self-feeders of all kinds, whiffletrees, neck yokes, and repair work of all kinds is done, the only charge being for the material if the school furnishes it. If the farmer brings his material, the work is done gratis. A charge of 35 cents is made for filing crosscut saws for farmers.

Boys do all carpenter and repair work about the school plant. They are taught the art of saw filing and tool fitting which is a part of the manual training course.

Night School for Farmers

Probably the one feature of the consolidated school that has done more to help the tax payer realize an investment instead of a burden, is the night school for the farmers and their wives. Not to overdo the matter for the first time last year three courses: arithmetic, economics and soil chemistry were offered for a twelve weeks' course. There were 43 farmers and wives enrolled. It was not an experiment, it seemed as if this work should be done, and so worked out our problems together. In the mathematics class we were fortunate in securing the services of Mr. Frank Dodds, a tax-payer farmer in the district also the father of two girls, one in high school and one in the grades. Not but a few years ago Mr. Dodds was considered one of the best teachers in Livingston This arithmetic class caught young men 20 to 27 years old who had left school when in the early grades. The mathematics of every day life is what the school tried to get across to these young men.

The significant thing in this arithmetic class is the fact that we find a farmer who is capable and willing to co-operate to make the school function 100 per cent both night and day. Many other farmers might be named.

Study Marketing

The Economic Class stressed the marketing, transportation, standardization of farm products. The middle man, cooperation, farm bureau, agricultural finance, federal aid and most interesting of all, the relation of these subjects to each other.

The members of the Soils Chemistry class brought samples of soil from the different parts of fields which they were to plant in the spring to corn, potatoes, oats, barley, alfalfa, clover, etc., to the laboratory, and under the supervision of A. F. Monroe, head of the agricultural department, analyzed the samples for lime and humus content, also texture and plasticity of soil. After chemical analysis of samples of soil each farmer put several crocks of soil onto the test racks and planted some kind of grain or potatoes in each of 5 crocks, all crocks being planted to the same kind of seed at the same time. One crock is kept as a check and another subjected to treatment with lime only, another with lime and manure, another with nitrate, perhaps another with manure and phosphate, and so on, until the soil from a field was treated with all combinations and barnyard manure and commercial fertilizers. The class watched the experiments and after contents of crocks had grown for a length of time contents of crops were weighed on balances and conclusions drawn. The farmers report that the time spent in night classes is the best investment they could have made last winter and are asking for more this winter.

The school maintains what is called an exchange department. A large bulletin board with "Wanted" and "For Sale" columns is placed at one end of the assembly room. Any farmer of the district or outside the district may advertise anything for sale which he has on this board. Or if a man or housewife wants to buy something word is sent to school. The "Wanted" and "For Sale" bulletin board and nine bus loads of boys and girls do the rest.

The exchange department handles eggs, chickens, calves, pigs, cows, sows and pigs, horses and young cattle, seed potatoes, oats, corn, etc.

Registered Seed at Wholesale

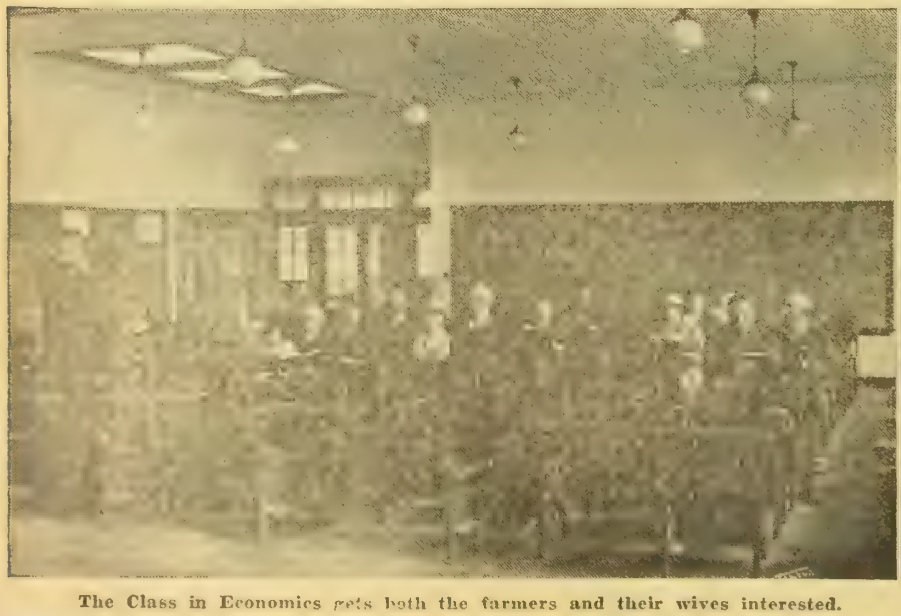
The school maintains a working agreement with the Michigan State Farm Bureau whereby any farmer in our district may obtain an order from the Schools Exchange Department and secure State Farm Bureau certified and registered seed at wholesale. Hundreds of dollars are saved to the farmers in money, but the value of certified and registered seed cannot be computed. The above narrative illustrates in a small way what a consolidated school should do for the community in which it is located.

The school holds an agricultural fair each year, and the fair just held October 25th and 26th showed a keen desire on the part of the exhibitors to want the best in seed and products.

With the two days fair is held a series of five lectures which with the exhibits make the fair an educational institution. Last week, B. J. Ford of the State Department gave an address on Rural Education, and E. E. Gallup an address on cooperation of all organizations, Alexander MacVittie, State Farm Bureau, an address, "Accomplishments of the Farm Bureau," E. C. Forman, Head of Poultry Department, M. A. C., poultry culling demonstration and lecture. The last evening, Friday, F. A. Butterworth of Chicago, Assistant General Freight Agent of P. M. system, gave an address on "Freight Rates as they affect the Farmer."

A lecture course of five numbers has been maintained each year. This year the senior class has sold more than enough tickets to pay for the course.

The school is high school, college, workshop, information bureau, commodity exchange, wholesaler, social center, agricultural exhibition, and milk testing station, all under one roof, and it is hoped that it will contribute its quota toward making consolidated schools an investment which shall pay the largest dividends in good American citizenship.



The Class in Economics gets both the farmers and their wives interested.

Farmers Class in Soils studying lime sulphur and Bordeaux mixture

PICTURES FROM FAR AND NEAR

LATEST IN HATS.—This hat is modeled after the huge dirigible, ZR-1, or Shenandoah. Cute, isn't it?

SCION OF WEALTHY FAMILY TURNS CABBY.—Having lost all of his money Francis O. French, former wealthy New York broker, is getting another start by driving a taxicab.

BIG NEWSPAPER OWNER.—Lord Beaverbrook is rapidly becoming one of England's leading newspaper owners.

CANINE MUSIC LOVER.—Ernest Ladovitch, well known violinist of Washington, D. C., is playing for his Russian wolf hound, Nicolai, once owned by the ex-Czar of Russia.

PATICYCLING.—Paticycling is the newest mode of transportation in France. These men are racing from Paris to Versailles for a prize of 1500 francs. Photo shows the racers passing through Paris.

PAYS DOCTOR TO KEEP HIM WELL.—Samuel M. Vauclain, pays a doctor a flat annual fee to keep him well. When he is sick the doctor gets no pay.

TRIPLETS SCORE AT BABY SHOW.—Here are the Creegan triplets from Alliston, Massachusetts, who were features of the baby show held recently in Boston, Mass. They are fine healthy looking specimens, and received honorable mention as well as looks of admiration.

FRANCE HONORS FOUR DEAD AVIATORS.—A unique monument showing four shrouded forms, has just been dedicated at Trevol, near Moulin, France. It is to honor four French aeronauts who were killed, September 25, 1909, when the huge dirigible, Republic, burned.

FIRST BOTTLE NOSE WHALE EVER CAUGHT.—It weighs about five tons and is twenty three feet in length. It was caught at Ten Pond Island and brought to Gloucester, Mass.

HERO OF OUR BOYHOOD DAYS.—Burt L. Standish, known in private life as Gilbert Patten, wrote the "Frank Merriwell" stories, enjoyed by all boys.

BOYS LEARN TELEGRAPHY.—A continuation school, run by the Board of Education, New York, for Western Union boys, is teaching them to be telegraphers. The boys are shown taking dictation from a "keyboard."

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Dairy Cows Help Farmers Stage "Come Back"

After Two Crop Failures Arenac County Farmers Turned to Dairying and Are Succeeding With Help of Business Men

By E. J. LEENHOUTS

IT was a sad-faced group of men which met in the rooms of the Standish Chamber of Commerce last November to discuss "ways and means" of improving the common weal of their fair city and citizens. During the past three years they had heard nothing but "deficits," "back-dues," "hard times," and other hard luck stories. Several attempt at interesting manufacturing concerns in locating in the city of Standish had failed, one of these failures taking with it a large sum of money donated by the business men. Being a town of only 1,000 people, its interests were entirely bound up with those of the farming community surrounding it (altho not all of the urban population appreciated that fact), and the farmers had suffered two crop failures and were in very bad straits.

It was at this meeting that Mr. H. A. Chamberlain, the banker arose and said, "Gentlemen, we are facing a crisis. Unless something is done very speedily, three-fourths of our farmers will lose their farms thru foreclosures and most of us will face bankruptcy. The farmers' interests and ours are mutual and it is only by co-operating with them that we can "save our own skins," as well as possibly helping them out. Let us forget these dreams about factories with large pay-rolls and develop some practical plans for helping ourselves. I believe the best way to do this is to assist the surrounding farmers toward a greater degree of prosperity because I have noticed that when they are making money, we are also getting along fairly well." In the discussion that followed, he pointed out that the one-crop farmers were losing money thruout the entire country but that the dairy-farmers were fairly prosperous; that Arenac County had been relying on beans and beets entirely too much and should be depending upon the dairy-cow more; that many organizations of business men in other communities had assisted materially in getting their farmers to change their system of farming to the mutual advantage of both; and that closer co-operation between rural and urban folks would work wonders for Standish and Arenac County. Among those members who gave enthusiastic support were the President of the Chamber of Commerce, a clothier, Mr. Bernthal, and the local newspaper editor, Mr. Perlberg. The latter offered his newspaper medium for use in this work and plans were formulated which called for three large projects: (1) a series of educational meetings at which authorities on agriculture should appear and explain the advantages of dairying and give general instructions on how to proceed to produce milk more efficiently; (2) financing all worthy farmers who wished to purchase purebred or good grade cows; (3) take full advantage of the assistance which is being offered free-of-charge by the state, the Agricultural College, the Development Bureaus, the Michigan Central R. R., etc.

Held Series of Meetings

The story of the development which has taken place in Arenac County during the past year shows how closely these men "have hewed to the line." All thru the winter months, a joint meeting of the Chamber of Commerce and farmers was held every two weeks and the attendance mounted from a mere handful to over 250 people. Leading authorities from the Agricultural College on dairying, farm crops, poultry, and farm organization appeared before these meetings in turn and the business men became about as enthusiastic about farming as did the farmers themselves. At each one of these meetings the President announcd that the banker was ready to advance money for the purchase of better stock to any farmer who wished to buy, payments to be made monthly out of the milk-check. The newspaper carried large head-lines announcing the meetings and, later, gave complete accounts of the speeches. The editor also prevailed upon the Agricultural Department of the N. Y. C. Lines to prepare a series of articles on the advantages of dairying, the selection of cattle, feeding and care of cows, etc. Every week for three months, one of these articles occupied a half-page of this newspaper, often illustrated with pictures. Long before spring arrived, everybody was talking and thinking about the dairy-cow and many purchases had been made. A carload of purebred and grade cows were brought into the County in March by the banker. The Chamber of Commerce had enlisted the active co-operation of the Extension forces from the college and the Agricultural Department of the N. Y. C. Lines and they were all working hand in hand.

"Better Dairy Day" at Standish, June 25, 1923. A carload of purebred Holstein cattle was sold to Arenac county farmers on that day.

Lease Purebred Sires

Appreciating the need for better breeding, the M. C. R. R. leased three purebred Holstein sires to three groups of dairy-farmers near Standish. Altho leased free of charge, the railroad has the option of taking them away in case they are not well cared for. One of these sires was made grand champion at the fair and all of them are well-bred animals of excellent type. The leasing of these three bulls started the movement which resulted in the introduction of over 30 pure-bred dairy sires into Arenac County in the short period of six months.

Hire County Agent

The business men realized, however, that there were so many things to be done to bring about more efficient farming that they began to consider the matter of employing an expert to take care of the educational and organization work. They found that the Federal and State Government would pay half of the salary of such an "expert," commonly called "County Agent," and so they proceeded to hire one. The banker and the editor took the lead in this matter and they employed a young college graduate. Before he arrived, however, the President of the Chamber of Commerce had succeeded in organizing a Cow-test Association of 26 members and had employed a young man to make tests and keep the records on the cows belonging to these 26 farmers. With these two young men on the job to look after the details and to carry on the educational work, the development has been proceeding at a good rate and the business men have been left free to look after other matters, particularly that of financing the worthy farmers.

"Better Dairy Day"

Dairying without proper feed is impossible. The best dairy-feed is alfalfa but it is almost impossible to raise alfalfa without limestone and a large share of Arenac's soil requires limestone, Reasoning along these lines, the Agricultural Agent of the M. C. R. R. offered the County Agent a carload of limestone for demonstration purposes. As a result, the County Agent has established 20 one-acre demonstrations thruout his county and the farmers will soon be convinced that the use of limestone is the best insurance against crop-failure in alfalfa, the best dairy feed.

During the summer, a "Better Dairy Day" celebration was arranged for the county thru the co-operation of the Chamber of Commerce, the County Agent, the Livingston County Breeders' Association, and the Agricultural Department of the M. C. R. R. A carload of purebred Holstein cattle were supplied by the Livingston Association at very reasonable prices and a big program was arranged for the day when the cattle arrived at Standish. The main speaker of the day was Mr. H. E. Dennison, Dairy Extension Leader from M. A. C., who used one of the cows to illustrate his points. Old Bossy shared the platform with all of the speakers. Over 500 farmers were present and the cows were disposed of to the farmers at bargain prices.

A year has gone by since that meeting of the C. of C. at Standish when it was decided to launch this agricultural campaign. Has it been worth the candle? The records show that over 200 grade and purebred cows have been shipped into the county; 30 purebred bulls have been placed in the same county and should make a wonderful change in the cows of the next generation; one Cow-test Association has been formed and is fast weeding out the unprofitable cows; a Boys' and Girls' Club of ten members has been formed and is making real efficient dairymen out of these youths, saying nothing about the effect it may have on the fathers; the milk receipts at the local creamery have increased from a daily average of 18,000 to over 40,000 pounds; production per farm has increased over 30 per cent in spite of the fact that many herds have been reduced this year on the books of the local creamery; instead of the milk-checks aggregating $300 as they did last year, they now average $800 per day; and, best of all, the farmer and the business man are no longer distrusting each other but are working together toward a common end.

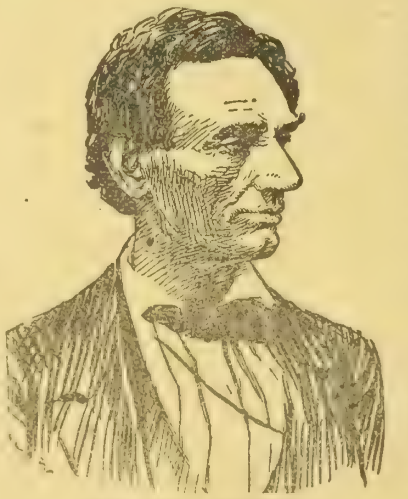
All Will Be Benefited

Someone may ask, "What does that development do for the business-men of Standish? I can see how it benefits the farmer but I do not see what the business man or the railroad gets out of it?" Six months after the first joint meeting was held, six prominent business men were asked what they thought of the dairy business and the reply was the same substance from each. It was, "We can feel the difference in our business right now. Our farmer-patrons have money to spend and they are spending it with us. It is the best thing that has ever struck our county, looking at it from the selfish standpoint." As for the M. C. R. R., its prosperity depends upon the prosperity of the folks along its right-of-way, and it already has had enough increase of business from this county to prove that dairying has made Arenac County more prosperous.

When farmer, business man, educational institution, railroad, breed association, etc., all co-operate with the dairy cow, it is extremely improbable that prosperity and the farmer will be very far separated.

The First Thanksgiving Proclamation

IT has pleased Almighty God to prolong our national life another year, defending us with his guardian care against unfriendly designs from abroad, and vouchsafing to us in His mercy many and signal victories over the enemy, who is of our own household. It has also pleased our Heavenly Father to favor as well our citizens in their homes, as our soldiers in their camps and our sailors on the rivers and seas, with unusual health. He has largely augmented our free population by emancipation and immigration, while He has opened to us new resources of wealth, and has crowned the labor of our working men in every department of industry with abundant rewards. Moreover, He has been pleased to animate and inspire our minds and hearts with fortitude, courage and resolution sufficient for the great trial of Civil War into which we have been brought by our adherence as a nation to the cause of freedom of humanity, and to afford to us reasonable hopes of an ultimate and happy deliverance from all our dangers and afflictions.



The Great President

Now, therefore, I, Abraham Lincoln, president of the United States, do hereby appoint and set apart the last Thursday of November, next, as a day which I desire to be observed by all my fellow-citizens, wherever they may be, as a day of thanksgiving and praise to Almighty God, the beneficent Creator and Ruler of the Universe. And I do further recommend to my fellow-citizens aforesaid, that, on that occasion they do reverently humble themselves in the dust and from thence offer up penitent and fervent prayers and supplications to the Great Dispenser of events for a return of the inestimable blessings of peace, union and harmony throughout the land which it has pleased Him to assign as a dwelling place for ourselves and our posterity throughout all generations.

In testimony whereof, I have hereunto set my hand and caused the seal of the United States to be affixed.

Done at the city of Washington this twentieth day of October, in the year of our Lord, one thousand eight hundred and sixty-four, and of the independence of the United States the eighty-ninth..

ABRAHAM LINCOLN.

By the President:

WILLIAM H. SEWARD, Secretary of State.

Previous to the issuance of the foregoing proclamation, several New England states governors had proclaimed state holidays known as Thanksgiving days. The proclamation by President Lincoln was the first directing the people of the entire nation to observe a common day of thanksgiving.

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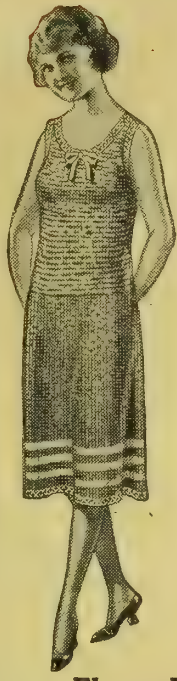
Don't send one cent. Just letter or postcard brings you any of these smashed price bargains. Merely give name and number of each article you want. Also state size and write your name and address plainly to avoid delay. Pay nothing 'till goods arrive—then only the amazing bargain price and postage. If you are not delighted with your bargain for any reason at all simply return the goods and your money will be cheerfully refunded. ORDER NOW. If you buy NOW YOU BUY RIGHT.

Combination Knit Princess Slip for Women and Misses

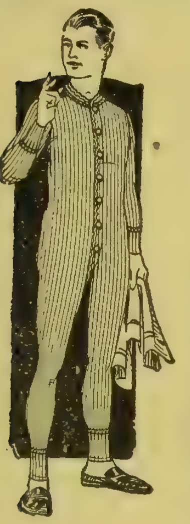
49c UP



A combination waist and petticoat, knitted in one piece from splendid wool-finished cotton yarn in oxford gray with border stripes. Drawstring at neck. Neatly finished around neck and armholes. Sizes small, medium or large. **Order No. 96C1488. Send no money. Pay 59 cents and postage on arrival. Money back if not satisfied. State size wanted. Order Misses' sizes 6 to 18 by No. 96C1494. Pay 49c and postage on arrival.**

Heavy Fleeced Union Suit

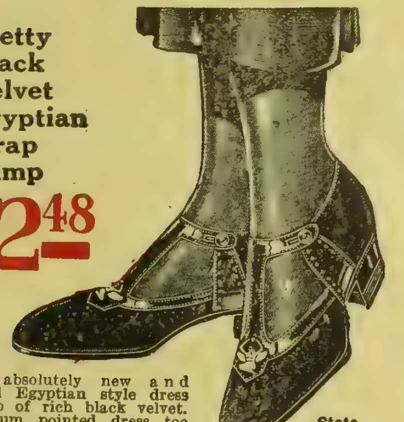
$1.29



Men's heavy flat knit union suit of good quality cotton yarn, with heavy fleece lining. A sure protection from cold. Closed crotch, flap seat, flat seams. Knit cuffs at wrist and ankle. Sizes 34 to 46. **Order Tan Jaeger Color by No. 96C1279. Pay $1.29 and postage on arrival. Order Gray Random Color by No. 96C-1280. Send no money. Pay $1.29 and postage on arrival. Order Boys' sizes 22 to 34, Natural Jaeger color, by No. 96C1358. Pay 89c and postage on arrival.**

Pretty Black Velvet Egyptian Strap Pump

$2.48

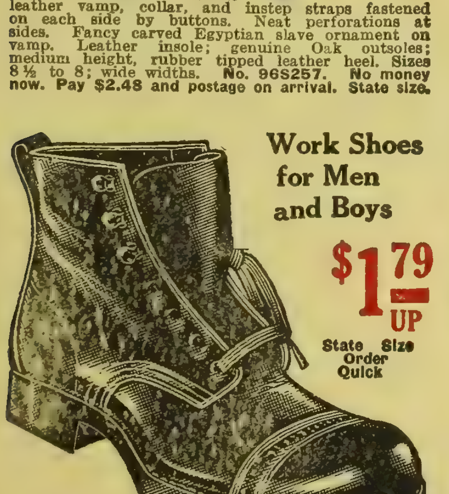


State Size

An absolutely new and novel Egyptian style dress pump of rich black velvet. Medium pointed dress toe and patent leather trimming, as pictured. Patent leather vamp, collar, and instep straps fastened on each side by buttons. Neat perforations at sides. Fancy carved Egyptian slave ornament on vamp. Leather insole; genuine Oak outsoles; medium height, rubber tipped leather heel. Sizes 8½ to 8; wide widths. **No. 96S257. No money now. Pay $2.48 and postage on arrival. State size.**

Work Shoes for Men and Boys

$1.79 UP



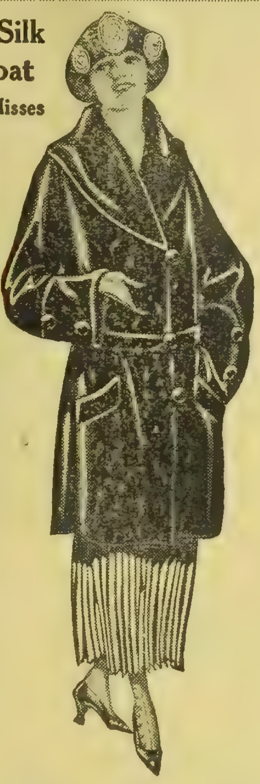
State Size
Order Quick

Order your pair quick—while this bargain offer lasts. Wonderful work shoe for men. Has soft, strong uppers that resist barnyard acids. Solid leather insoles. All seams stitched with waxed thread. Strong leather soles. Wide widths. Men's sizes 6 to 11. **Order Brown by No. 96A-758. Order Black by No. 96A760. Pay $1.98 and postage on arrival. Order Boys' Brown, sizes 1 to 5½, by No. 96A554. Pay $1.89 and postage on arrival. Order Little Boys' Brown, sizes 9 to 13½, by No. 96A555. Pay $1.79 and postage on arrival.**

Sporty Style Silk Seal Plush Coat

For Women and Misses

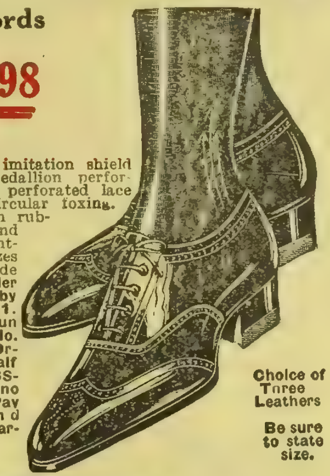
$9.98



Where else can you buy a genuine silk seal plush coat of this jaunty style and splendid quality for such a low price? Beautifully modeled of soft, warm, lustrous, deep pile silk plush with full lining of beautiful flowered sateen. Newest loose back flared style with belt. Wide 10-inch shawl collar, two pockets and roomy bell sleeves. Length, about 34 inches. Women's sizes, 34 to 44; Misses, 32 to 38 bust measure. State size. **Order No. 96E7000. Send no money. Pay $9.98 and postage on arrival. Money back if not satisfied.**

Women's Patent Leather, Gun Metal or Brown Calf Finished Oxfords

$1.98



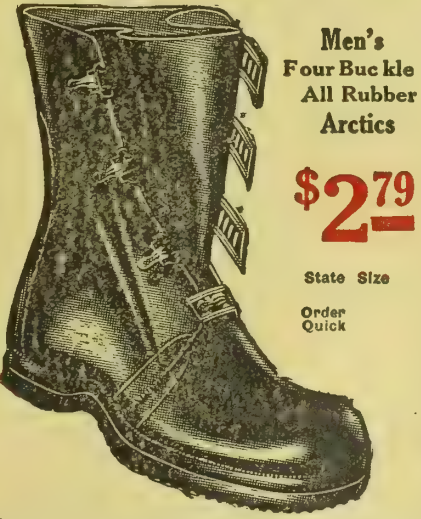
Made with imitation shield tip and medallion perforated vamp, perforated lace stay and circular foxing. Has medium rubber heel and medium pointed toe. Sizes 2½ to 8, wide widths. **Order patent by No. 96S121. Order gun metal by No. 96S122. Order brown calf by No. 96S-123. Send no money. Pay $1.98 and postage on arrival.**

Choice of Three Leathers

Be sure to state size.

Men's Four Buckle All Rubber Arctics

$2.79



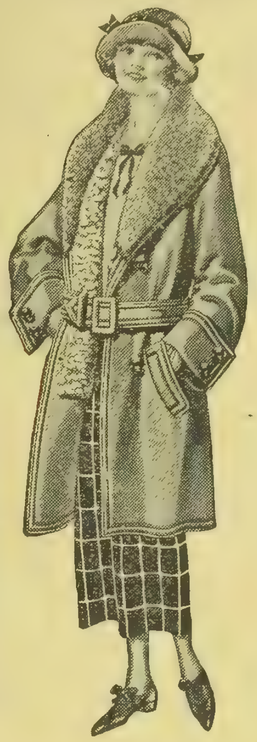
State Size

Order Quick

Guaranteed best quality all rubber 4-buckle hi-cut arctic. Made with double corrugated soles and reinforced seams. Snow-excluding tongue. Men's sizes 6 to 15. Wide widths. Can be washed and cleaned. Send quick. **Order by No. 96A990. Send no money. Pay $2.79 and postage on arrival.**

Sheep Lined Chappie Coat for Misses

$9.98

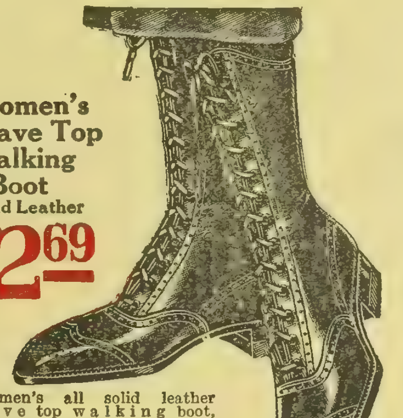


A surprising bargain is this warm chappie coat. It is a smart, jaunty model of moleskin cloth very popular with up-to-date misses. Mannish style with heavy lined beaverized sheep's wool collar and soft genuine sheep wool lining. Set-in sleeves, suede-cloth lining. Olive drab color. Length 36 inches. Misses and small women's sizes 32 to 38 bust. **Order by No. 96E-7202. Send no money. Pay $9.98 and postage on arrival.**

Women's Wave Top Walking Boot

Solid Leather

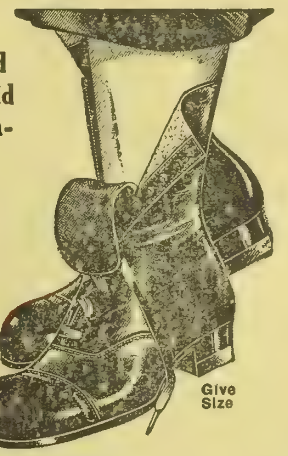
$2.69



Women's all solid leather wave top walking boot, comes in brown or black calf finish leather; built on sensible rounded dress toe last; one-piece solid leather inner sole with steel shank, solid leather counter, outing sole and heel with rubber tip. Sizes 2½ to 8. Wide widths. **Order Black Calf by No. 96S203. Order Brown Calf by No. 96S204. Send no money. Pay $2.69 and postage on arrival.**

Women's Fleece Lined Soft Black Kid Finished Comfort Shoe

$2.29

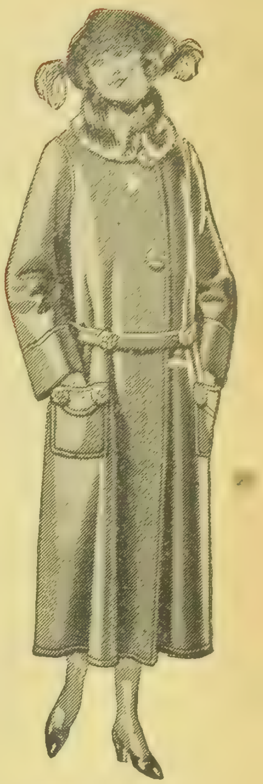


Give Size

Positively America's greatest bargain in a woman's shoe of this kind. Soft kid finished pliable leather uppers have heavy fleeced lining that keeps feet warm as toast in the severest winter weather. ..Excellent grade natural oak leather soles and low rubber heels. A roomy last that is also dressy in appearance. Simply unbeatable value at Sharood's low price. Women's sizes 3 to 9, wide widths. **Order No. 96S880. Send no money. Pay $2.29 and postage on arrival. State size.**

Fur Trimmed Thibet Coat for Women

$5.98



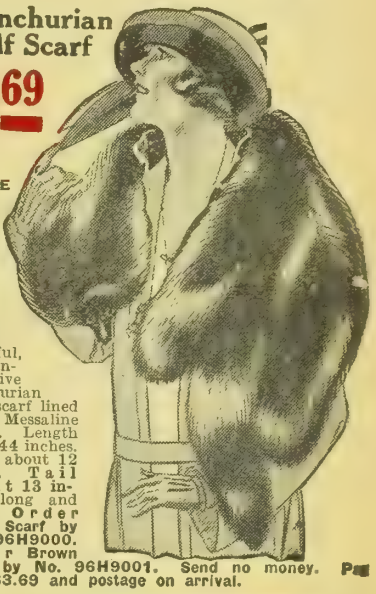
Sensational value in a warm winter coat. This model is of splendid Thibet cloth in choice of three colors. The ample collar is of genuine brown Coney fur. Coat is finished with all-around self material belt and two patch pockets. Imitation cuff is button trimmed. Coat measures about 48 inches long and comes in sizes 34 to 42 bust.

Order Brown by No. 96E7094. Navy by No. 96E7096. Black by No. 96E-7095. Send no money. Pay $5.98 and postage on arrival. Order similar style black with plush collar by No. 96E7097, Price $3.98. State the size wanted.

Manchurian Wolf Scarf

$3.69

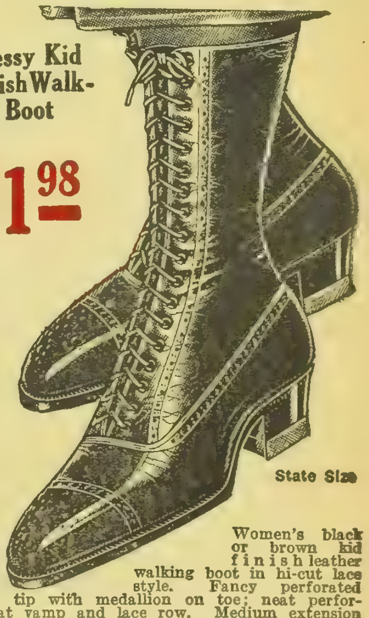
BIG VALUE



Oh Just Look at this beautiful, soft, inexpensive Manchurian Wolf scarf lined with Messaline silk. Length about 44 inches. Width about 12 inches. Tail about 13 inches, long and bushy. **Order Black Scarf by No. 96H9000. Order Brown Scarf by No. 96H9001. Send no money. Pay only $3.69 and postage on arrival.**

Dressy Kid Finish Walking Boot

$1.98



State Size

Women's black or brown kid finish leather walking boot in hi-cut lace style. Fancy perforated stitched tip with medallion on toe; neat perforations at vamp and lace row. Medium extension oak sole with proper height walking heel rubber tipped. A distinct Sharood bargain, suitable for dress or street wear. Soft kid finish leathers are dressy and comfortable. Sizes 2½ to 8; wide widths. **Order Brown Kid finish by No. 96S195. Order Black Kid finish by No. 96S194. Pay $1.98 and postage on arrival.**

FREE BARGAIN CATALOG

Your order from this ad brings you our beautiful illustrated 160-page catalog of more than 4,000 bargains in everything to wear. You get a new Bargain Catalog every six weeks. This is Sharood's way of keeping you supplied with fresh-up-to-date merchandise at the lowest prices in America—a method vastly superior to the old way of sending out a big catalog once or twice a year. Sharood's goods are always the newest—prices guaranteed the lowest.

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Genuine Army Goods At LOWEST PRICES IN America!

SEND NO MONEY Examine goods and if you are not more than satisfied with your bargain, we will gladly return your money. PAY ON ARRIVAL

HEAVY O.D. BLANKETS $2.89 each

Genuine army pure wool blankets worth at least $7.00 full bed size, about 66 x 84 inches. The ideal blanket for the home, or camping, motoring, etc. Gives more warmth than two ordinary blankets. They are getting very scarce.......... $2.89 each Plus Postage.

KHAKI COATS (BLOUSES) 39¢

Army regulation cotton khaki coats, reclaimed by the government. Just the thing for outdoor wear as for hunting, camping, farm work, etc. Four pockets, metal buttons. Sizes 32 to 37. A dollar value at our special price 39c Plus Postage

NEW O.D. WOOL COATS $2.69

$8.00 Would not duplicate this value.

U. S. Army O. D. wool coats made of fine wool serge and melton, have four pockets, and all are lined. Sizes 35 to 38.......... $2.69 Plus Postage

Extra sizes 48, 50 and 52.......... $2.98

TUXEDO TOBACCO AT ½ PRICE | 6 TINS for 49¢

6 sixteen cent tins. Ninety six cents worth for only 49c. Tuxedo has a wonderful richness, and a wealth of fragrance not found in other tobaccos. 6 cans for.......... 49c Plus Postage

ARMY HORSE BLANKETS $2.59 each 2 for $4.98

Brand new government horse blankets. Made of heavy treated waterproof duck; lined, weight about 9 pounds. This blanket is worth at least $4.50 each...... $2.59 Plus Postage

Hi-Top All Rubber LACE ARCTICS $2.75

Almost knee high (15 inches) pure gum rubber lace arctics for men. Reinforced front and back. Good warm lining. Full snow excluding tongue. Finely constructed throughout. Fits over the shoe. Many men wear this lace arctic as a knee boot...... $2.75 Plus Postage

Sizes 7 to 11.

ALL WOOL SOX 3 Pair for 89¢

Goats hair Wool. Genuine army regulation, a pure wool worsted sock with reinforced heel and toe. Medium heavy weight. Worth $1 a pair, at only 3 pr. for 89c Plus Postage

NEW ARMY O.D. WOOL BREECHES $3.59 PLUS POSTAGE

Brand new heavy army O. D. all wool breeches made of best wool serge and melton materials, with large extra patches on knees. Sizes 28 to 46 $3.59 Plus Postage

NEW O. D. ALL WOOL WRAP LEGGINS. A bargain at ...... 69c Plus Postage

All Wool O.D. Trousers $2.79

U. S. Army O.D. woolserge Yankee pants.

Well tailored, made of excellent quality 20 oz. wool serge and melton without cuffs. Have four pockets of extra quality drill and the trousers are double stitched throughout. Worth at least $6.00. Sizes waists 28 to 36 $2.79, Sizes 37 to 42 $2.98 Plus Postage

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Made of olive drab webbing with metal buckles and tips. Brand new— 10c Plus Postage

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Regulation army olive drab all wool heavy knitted gloves with extra long snug fitting wristlets. Is both warm and durable. Can also be used as a liner for a chopper mitt. Order several pairs at per pair.......... 29c Plus Postage

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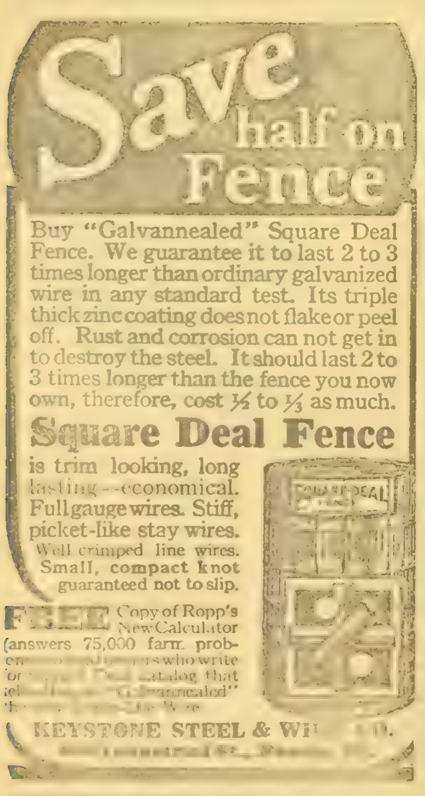

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Buy "Galvannealed" Square Deal Fence. We guarantee it to last 2 to 3 times longer than ordinary galvanized wire in any standard test. Its triple thick zinc coating does not flake or peel off. Rust and corrosion can not get in to destroy the steel. It should last 2 to 3 times longer than the fence you now own, therefore, cost ½ to ⅓ as much.

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is trim looking, long lasting—economical. Full gauge wires. Stiff, picket-like stay wires. Well crimped line wires. Small, compact knot guaranteed not to slip.

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"My Engine Will Do the Work of 6"

Try This Remarkable Engine FREE

The Edwards Farm Engine sells direct to you at low factory price. No other engine like it. 1½ to 6 H. P. in one engine. Change power while running. Efficient at all powers.

Fits Every Farm Job

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What the Neighbors Say

TOO MUCH "POLITICS" AT M. A. C.

DEAR Editor:—I am enclosing a one dollar bill for which please send me the M. B. F. for two years.

I was very much interested in your editorial on Michigan beans. this "idea" has been in my mind for a long time. I graduated from M. A. C. in '22 and since that time have been in the marketing game. For a while I was with J. P. Burroughs & Son, of Flint. I have been with the Wolverine Grain Co. since last March. I have decided to devote my life to help solve the farmer's marketing problems. There is a great chance for service here, I believe. However, the job you outline would take a lot of experience and knowledge of marketing. Anyone who didn't have these qualifications would make an awful fizzle of it. So I have decided to fit myself for just such a job. Then if the job doesn't show up, I'll either make it or put my effort into private enterprise.

One of the biggest hinderances in the way of the organization you outline is the fact that the farmer is not educated to it. The letter you reproduce in your editorial column is proof of that. However, the outlook is not entirely hopeless and I think that you are to be commended for the work you are doing in educating the farmer.

It is to be regretted that politics is so rampant and is cutting down the efficiency of my alma mater. I don't know your views—but I am heartily with the Governer in the present "squabble." I haven't had an opportunity to make a careful study of the facts, if indeed such a thing were possible, but my life at the college for three or four years leads me in that direction. I have noted the "plank" of the Grange in the issue you sent us and it is evident that they don't agree with my views.

If I ever get the time I hope to write for your paper. I think that the problems of the Michigan farmer are such as to be worthy of the effort of the best minds in the state.

It is my sincere hope that I haven't tired you with this lengthy letter and that I may have the pleasure of meeting you some time. Unbiased minds are so rare it is refreshing to come in contact with one.—W. H. Kaltenbach.

BETTER CONDITIONS FOR THE FARMER

TO the Editor:—A great deal has been said but not much done for the benefit or for improving the condition of the farmer.

During the war the administration declared that the manufacturer must have a reasonable profit and he received a very reasonable profit. Has the administration ever said to the farmer you must have a reasonable profit? Have they as a class ever received a reasonable profit on all crops? In times past when any one of the farmer's productions sold so there was ten or fifteen per cent profit what did the government do? Simply showed their deep concern by sending out circulars and in every way try to induce the farmer to raise that particular commodity and the farmer always patriotic turned in and raised that particular crop. What was the result? In the fall there being an over production the crop went back to starvation prices. Just a short time ago the President and his Cabinet met for a conference to see if something could be done to improve the condition of the farmer. After carefully going over every theory presented at the meeting they finally concluded to advise the farmer to go into raising sugar beets. (Sugar is high you know.) Such advice always leads to reduce the cost to the consumer and lessen and reduce the price of that article in the market and lessen the financial opportunities to the farmer. I am told several manufacturers make from 50 to 300 per cent profit. Has the government ever said anything against that or even given them advice that would give them a set back? I think not. The farmer loan system is a good thing for the farmers that are economical but a damage to those that are extravagant, but on the whole I think it a good thing. In conclusion I would like to present several ideas that I think would improve the farmers' condition more than anything that has been done.

First pay the governments debts with the farmers' produce. That is, let each government we owe order all the farmers' produce they wish, giving them credit for that much on their debt to us and pay the farmer thus, creating a demand for farmers' produce.

Second: Establish public bonded warehouses in every large city in the United States making a direct outlet for all the farmers' produce.

Third: Lessen the taxes by re-establishing the excess of profits tax at from one per cent for the lowest up to 25 per cent for the highest. This for the safety of the whole country as well as the farmer.

Farmers let's wake up and fight harder for bettering our condition. Elect men in congress and even a president who will work for the interest of the farmer.—M. S. Howes.

MINING MARL FOR MUSKEGON COUNTY FARMS

PRACTICALLY every farm in Muskegon county has two important soil needs—more lime and more humus. Through years of steady cropping the lime originally in the soil has been removed in the crops and by constant leaching while the humus has been nearly all worn out.

Fortunately for some sections of the county nature has stored up some of this leached-out lime in the form of marl. Now marl is simply lime which has been deposited from solution in water. In some cases the lime seems to settle to the bottom while in other cases small plants, or even animals with their shells take the lime from the water. Then they die and settle to the bottom, they help build up the marl beds.

And now comes Chapter two "Mining the Marl." Dr. Hornung of Muskegon is as much a farm enthusiast as an extractor of molars. His extensive holding in Cedar Creek township include a large portion of Duck and Mud lakes. And these lakes contain extensive marl deposits. Analysis of this marl shows it to contain over 90 per cent of calcium carbonate, which is the technical name for lime.

The next problem is to get this marl out onto higher ground where it can be reached and hauled away. Dr. Hornung seems to have solved the problem with the aid of an engineering company of Goshen, Ind. This company makes a specialty of excavating outfits and after looking over the Duck Lake proposition, recommeded a drag-line outfit. This equipment has been purchased by Dr. Hornung and will be set up soon, probably this month. It is hoped to get the excavator in action so that enough marl for the winter needs of that section can be secured.

In co-operation with the Agricultural Agents of Muskegon and Newago counties, Dr. Hornung plans to hold a special demonstration meeting as soon as the outfit is in working order. Soil testing outfits will be on hand for this meeting and it is planned to make it of unusual interest to every farmer in these two counties.

The high freight rates on ground limestone make that commodity a rather expensive article when delivered in Muskegon county. Farmers within hauling distance of Dr. Hornung marl pile will appreciate securing lime so near at hand and at such a reasonable cost. Dr. Hornung plans to charge only a moderate amount per yard of marl, sufficient to cover the cost of excavating.

NO DAMAGE DONE

After much excitement the Smiths had at last managed to catch the train.

Now, when they could sit quietly for a while, they began to wonder if they had left anything behind.

Mrs Smith gave a shriek.

"Oh, Harry," she gasped, "I forgot to turn off the electric-iron!"

"Don't worry, darling," he replied, nothing will burn. I forgot to turn off the shower-bath."—The Christian Advocate (New York).

Farmers Service Bureau

(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full n ame and address. Name not used if so requested.)

TAKING OVER OLD TURNPIKE

I would like some information on some legal questions. Has the government the right to take over the old turn pike road that has been closed for over thirty years without buying or paying for damages? As this road runs through my farm and has been farmed and buildings thereon. Would State have to buy this property? If not as I have a warranty deed would the man deeded the property to me have to make it good?—W. G., Portland, Michigan.

—In this state a highway or any portion of it can be lost by non-user. Gregory vs. Knight 50-64. Lyle vs. Leslia 64-16. Whether or not a particular highway would be lost to the public by reason of non-user must be determined from the particular facts of each case and believe that it would be more appropriate for you to consult some private attorney who will be able to ascertain all of the facts surrounding the case and the history of it and thereby give a more definite reply than we can.—H. Victor Spike, Assistant Attorney General of Michigan.

FULL CREW ON TRAIN

Is a railroad company allowed to run a train without a full crew of men?—J. W. M., Tawas City, Mich.

—For your information, there is no law in the State of Michigan stipulating the number of men that shall be maintained on a train. The law does not even specify that an engineer and fireman should be maintained on a locomotive, say nothing of the number of the train crew.—Michigan Public Utilities Commission.

WIFE HAS CLAIM ON PROPERTY

I am a reader of the Business Farmer and would like to know through your paper if a wife that has lived only one month after her marriage with the man of her choice, and then deserts him, and not returned for over a year, can she have any claim on the man's property if the man is not divorced, and wishes to sell his property?—W. J. A., Alpena, Mich.

—If you have not been divorced from your wife she has the same rights in your property as she would have had, had she lived with you continuously. Before you can dispose of your real property it would be necessary for her to sign the conveyance in order to release her right of dower in such property.—Asst. Legal Editor.

LICENSE TO PEDDLE GROCERIES

Does a person have the right, without a license, to sell groceries from their home in country, and can they deliver in the adjoining towns?—M. V. B., Grand Ledge, Michigan.

—A person can peddle groceries without a license if they have been conducting a grocery store for one year or more but if they have not then a license is required. This license is good anywhere in the State of Michigan.—Hoyt Woodman, Deputy State Treasurer.

LIEN ON FURNITURE

Can you give me some advice on the following matter: We have rented my farmhouse to A as a summer cottage ($5.00 per month). A brings some furniture such as one bed and spring, no mattress, one table, 4 chairs, some dishes, ice box and some bedding, but has never occupied the house. A has not paid rent, except the first $5.00, and left their furniture here. Then we told them to vacate as we were going to move in ourself. A said "we'll come sometime," but for more than two years A didn't come for the things. Now we fixed up the furniture, cleaned, varnished it, used the dishes which most are broken now, and bedding burned when we had a fire in the attic. Now A comes and wants their things. Can we make them pay for 8 months rent and 22 months storage? Then A and his wife had parted, and he told us to keep the things, two years ago last spring, now they are together again and want their things. Can they make us pay for bedding which burned and dishes that are broke? Can we keep the furniture if they refuse to pay storage or rent? Would like to have your legal advice on this subject.—Mrs. G. G., Hesperia.

—I am of the opinion you would have a lien on the furniture, and could hold it, for rent due you during the time you were deprived from the use of the house. You could also make a reasonable charge for storage which you could set off against the value of the furniture. —Asst. Legal Editor.

PRUNING

Can you give me some information regarding the pruning of different kinds of fruit trees and the proper season to prune and spray, and can some of it be done in the fall?—F. P. B., Mancelona, Michigan.

—A great many of our fruit growers make the mistake of pruning young fruit trees too severely. When these trees are heavily pruned, they are late in coming into bearing and are somewhat dwarfed in size. On the other hand, if they are not pruned at all, they are apt to form a number of weak crotches and to develop into trees that will be unable to support heavy loads of fruit in later years. Pruning, then, during the unbearing age of the tree, is mainly for the purpose of developing a strong frame-work, and should be only severe enough to gain this end.

Bearing apple trees should be thinned to admit some light, to permit a free circulation of air, and make thorough spraying possible and thus aid in the development of high quality fruit. To get this result in pruning it is necessary that the pruning be confined almost exclusively to the removal of small branches, and by this I mean branches that have a diameter at the point of removal of not more than an inch. The removal of a number of weak crotches and to bearing trees is not advisable unless they are diseased.

Peaches, in Michigan, are generally pruned too lightly. You should thin out last season's growth by removing as much as perhaps 50 to 60 per cent of it, and then head back the remaining branches severely enough to remove from 25 to 60 per cent of the growth, depending upon the vigor of the tree. Again, peach trees should be kept quite open in the center so as to expose the fruit as much as possible.

Cherries, plums and pears are handled in much the same manner as apples. The Experiment Station Special Bulletin 118 gives more detailed information with regard to pruning each of these fruits.

The pruning may be done any time from the time the leaves drop in the fall until the trees blossom the following spring, except in the very coldest days when the wood is frozen and is apt to split.—Roy E. Marshall, Department of Horticulture, M. A. C.

SCHOOL CHILDREN SWING ON FENCE

I would like a little information. I have land right across the road from schoolhouse, and there is a ditch on my side with a fence close to the bank of the ditch. Now, do the children have any right to play on the bank and slide and fill the ditch and swing on the fence?—A. D. A., Milan, Mich.

—In right to the question, I would say the children have no right to swing on the fence as this fence belongs to the owner of the land and he can forbid their climbing on the fence. He can hardly forbid the children playing on the bank outside his fence. If the children fill up the ditch he should file his complaint with the township highway commissioner. The children should of course not be allowed to fill up the ditch.—G. N. Otwell, Dept, of Public Instruction.

The Law and the Railroads

Railroad recovery in Michigan—the "Better Service" you hear about and enjoy—is being provided you despite the severe handicaps imposed by a multitude of special laws.

Such laws have established certain governmental bodies entirely separate and without co-ordination. These bodies fix our rates for carrying freight and passengers—pass judgment on all of our security issues and other financing—specify the working hours of our employes and the wages we must pay them—limit our profits, when there ARE profits, to a small and definite maximum—have full jurisdiction over our tax assessments—restrict rigidly our methods of competition—hedge about, with a multitude of restrictions, every department of our operations.

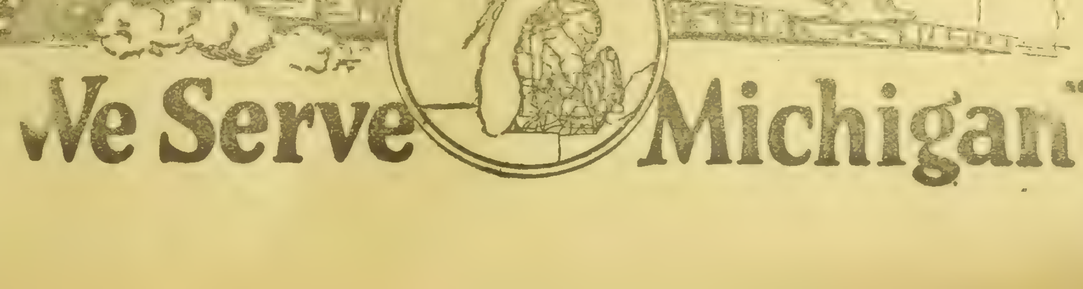
Michigan's 24 steam railroads honestly try to obey every one of these laws. We do not even ask for a lightening of this load. But we do maintain that this present burden should NOT be INCREASED.

We are furnishing you today the best transportation you have ever had. With conditions unchanged, we can see our way clear to still further improving our service.

Give us a square deal—an honest chance.

And let this Association know you consider this a reasonable request.

Michigan Railroad Association
508 Railway Exchange Bldg., Detroit, Mich.



$10,000.00 DAMAGE CASE

SUED WHILE TOURING IN OREGON

Boyne City, Michigan,
October 20, 1923.

**Citizens' Mutual Auto Insurance Co.,
Howell, Michigan.**

Gentlemen:

I have just been advised that the suit started against me for $10,000 as the result of an automobile accident which occurred the 4th day of August, near Salem, Oregon, in which Mrs. Alice Lenon was fatally injured, was adjusted and dismissed. I wish to say that my wife and I are greatly pleased that this matter has been disposed of.

We have lived in Michigan a long time and were taking a trip this summer, going to California. When this sad accident occurred in Oregon, it took the pleasure out of our trip. When they held the inquest and later started suit against us, we were very thankful that we had an automobile insurance policy. While we had been a member of your company for a number of years we had never needed this protection before. Your Secretary, Mr. Robb, came to Oregon to give his personal attention to this matter. From his large experience in handling personal injury claims and his knowledge as a lawyer, we found that he was able to cope with the attorneys who had been employed to try this case against us and now that the matter has been adjusted so that all parties are satisfied by the payment of a total expense of $1,961.00, we are greatly relieved. Any one who has ever been in an accident of this kind can appreciate the consolation of service.

We thank your company for the service rendered and for the able way in which this case was handled.

Sincerely yours,

(Signed) **S. B. Stackus.**

Oh Money! Money!

by ELEANOR H. PORTER

THE STORY TO DATE

MR. STANLEY G. FULTON, 50-year old bachelor and possessor of twenty million dollars, calls on his lawyer and they discuss the disposition of this large fortune after its owner's death. The lawyer is in favor of giving the money to colleges or charities while Fulton is opposed to these ideas. He remembers that he has some distant cousins and decides to leave the money to one of them, but first he determines to learn which one will use it to the best advantage. To find out who is the worthy one he, through his lawyer, gives, each cousin $100,000 to use as they will. Before giving them the money grows a beard and, using the name of Mr. John Smith, goes to the town where they live to find out what kind of people they are. Upon arriving in town he visits James Blaisdell, one of the cousins, where he tries to hire board and lodging. While there he meets Miss Flora Blaisdell, another cousin who is a dressmaker. They decide they cannot rent a room to him and supply him board and refer him to Frank Blaisdell's, the third cousin. He gets a room there and, passing as a writer gathering material for a book on the Blaisdell family in this country, he starts out.

(Continued from November 10th issue.)

"IT was, indeed!" Mr. Smith's lips came together a bit grimly.

"Well, after a time Frank and Jim married, and there was only Flora and Father Duff at home. Poor Maggie tried then to go to college again. She was over twenty-one, and supposed to be her own mistress, of course. She found a place where she could work and pay her way through college, and Flora said she'd keep the house and take care of Father Duff. But, dear me; it wasn't a month before that ended, and Maggie had to come home again. Flora wasn't strong, and the work fretted her. Besides, she never could get along with Father Duff, and she was trying to learn dressmaking, too. She stuck it out till she got sick, though, then of course Maggie had to come back."

"Well, by Jove!" ejaculated Mr. Smith.

"Yes, wasn't it too bad? Poor Maggie, she tried it twice again. She persuaded her father to get a girl. But that didn't work, either. The first girl and, her father fought like cats and dogs, and the last time she got one her father was taken sick, and she had to come home. Some way, it's always been that way with poor Maggie. No sooner does she reach out to take something than it's snatched away, just as she thinks she" got it. Why, there was her father's cousin George—he was going to help her once. But a streak of bad luck hit him at just that minute, and he gave out."

"And he never tried—again?"

"No. He went to Alaska then. Hasn't ever been back since. He's done well, too, they say, and I always thought he'd send back something; but he never has. There was trouble, I believe, between him and Father Duff at the time he went to Alaska, so that explains it, probably. Anyway, he's never done anything for them. Well, when he gave out, Maggie just gave up college then, and settled down to take care of her father, though I guess she's always studied some at home; and I know that for years she didn't give up hope but that she could go some time. But I guess she has now. Poor Maggie!"

"How old is she?"

"Why, let me see—forty-three, forty-four—yes, she's forty-five. She had her forty-third birthday here—I remember I gave her a handkerchief for a birthday present—when she was helping me take care of Mellicent through the pneumonia; and that was two years ago. She used to come here and to Jim's and Flora's days at a time; but she isn't quite so free as she was—Father Duff's worse now, and she don't like to leave him nights, much, so she can't come to us so often. See?"

"Yes, I—see." There was a queer something in Mr. Smith's voice. "And just what is the matter with Mr. Duff?"

"Matter!" Mrs. Jane Blaisdell gave a short laugh and shrugged her shoulders. "Everything's the matter—with Father Duff! Oh, it's nerves, mostly, the doctor says, and there are some other things—long names that I can't remember. But, as I said, everything's the matter with Father Duff. He's one of those men where there isn't anything quite right. Frank says he's got so he just objects to everything—on general principles. If it's blue, he says it ought to be black, you know. And, really, I don't know but Frank's right. How Maggie stands him I don't see; but she's devotion itself. Why, she even gave up her lovers years ago for him. She wouldn't leave her father, and, of course, nobody would think of taking him into the family, when he wasn't born into it, so the affair was broken off. I don't know, really, as Maggie cared much. Still, you can't tell. She never was one to carry her heart on her sleeve. Poor Maggie! I've always so wished I could do something for her!

"There, how I have run on! But then, you asked, and you're interested, I know, and that's what you're here for—to find out about the Blaisdells."

"To—to—f-find out—" stammered Mr. Smith, grown suddenly very red.

"Yes, for your book, I mean."

"Oh, yes—of course; for my book," agreed Mr. Smith, a bit hastily. He had the guilty air of a small boy who has almost been caught in a raid on the cooky jar.

"And although poor Maggie isn't really a Blaisdell herself, she's nearly one; and they've got lots of Blaisdell records down there—among Mother Blaisdell's things, you know. You'll want to see those."

"Yes; yes, indeed. I'll want to see those, of course," declared Mr. Smith, rising to his feet, preparatory to going to his own room.

CHAPTER VI

Poor Maggie

It was some days later that Mr. Smith asked Benny one afternoon to show him the way to Miss Maggie Duff's home.

"Sure I will," agreed Benny with alacrity. "You don't ever have ter do any teasin' ter get me ter go ter Aunt Maggie's."

"You're fond of Aunt Maggie, then, I take it."

Benny's eyes widened a little.

"Why of course! Everybody's fond of Aunt Maggie. Why, I don't know anybody that don't like Aunt Maggie."

"I'm sure that speaks well—for Aunt Maggie," smiled Mr. Smith.

"Yep! A feller can take some comfort at Aunt Maggie's" continued Benny, trudging along at Mr. Smith's side. "She don't have anythin' just for show, that you can't touch, like 't is at my house, and there ain't anythin' but what you can use without gettin' snarled up in a mess of covers an' tidies, like 't is at Aunt Jane's. But Aunt Maggie don't save anythin', Aunt Jane says, an' she'll die some day in the poorhouse, bein so extravagant. But I don't believe she will. Do you, Mr. Smith?"

"Well, really, Benny, I—er—" hesitated the man.

"Well, I don't believe she will," repeated Benny. "I hope she won't, anyhow. Poorhouses ain't very nice, are they?"

"I—I don't think I know very much about them, Benny."

"Well, I don't believe they are, from what Aunt Jane says. And if they ain't I don't want Aunt Maggie ter go. She hadn't ought ter have anythin'—but Heaven—after Grandpa Duff. Do you know Grandpa Duff?"

"No, my b-boy." Mr. Smith was choking over a cough.

"He's sick. He's got a chronic grouch, ma says. Do you know what that is?"

"I have heard of them."

"What are they? Anything like chronic rheumatism? I know what chronic means. It means it keeps goin' without stoppin' —the rheumatism, I mean, not the folks that's got it. They don't go at all, sometimes. Old Dr. Cole don't, and that's what he's got. But when I asked ma what a grouch was, she said little boys should be seen and not heard. Ma always says that when she don't want to answer my questions. Do you? Have you got any little boys, Mr. Smith?

"No Benny. I'm a poor old bachelor."

"Oh, are you poor, too? That's too bad."

"Well, that is, I—I—"

"Ma was wonderin' yesterday what you lived on. Haven't you got any money, Mr. Smith?"

"Oh, yes, Benny, I've got enough—to live on." Mr. Smith spoke promptly, and with confidence this time.

"Oh, that's nice. You're glad, then, ain't you? Ma says we haven't—got enough ter live on, I mean but pa says we have, if we didn't try ter live like everybody else lives what's got more."

Mr. Smith bit his lips, and looked down a little apprehensively at the small boy at his side.

"I—I'm not sure, Benny, but that I shall have to say little boys should be seen and not—" He stopped abruptly. Benny, with a stentorian shout, had run ahead to a gate before a small white cottage. On the cozy, vine-shaded porch sat a white-haired old man leaning forward on his cane.

"Hi, there, Grandpa Duff, I've brought somebody ter see ye!" The gate was open now, and Benny was halfway up the short walk. "It's Mr. Smith. Come in, Mr. Smith. Here's grandpa right here."

With a pleasant smile Mr. Smith doffed his hat and came forward.

"Thank you, Benny. How do you do, Mr. Duff?"

The man on the porch looked up sharply from beneath heavy brows.

"Humph! Your name's Smith, is it?"

"That's what they call me." The corners of Mr. Smith's mouth twitched a little.

"Humph! Yes, I've heard of you."

"You flatter me!" Mr. Smith, on the topmost step, hesitated. "Is your—er—daughter in, Mr. Duff?" He was still smiling cheerfully.

Mr. Duff was not smiling. His somewhat unfriendly gaze was still bent upon the newcomer.

"Just what do you want of my daughter?

"Why, I—I—" Plainly nonplused, the man paused uncertainly. Then, with a resumption of his jaunty cheerfulness, he smiled straight into the unfriendly eyes.' "I'm after some records, Mr. Duff, —records of the Blaisdell family. I'm compiling a book on—"

"Humph! I thought as much," interrupted Mr. Duff curtly, settling back in his chair. "As I said, I've heard of you. But you needn't come here asking your silly questions. I shan't tell you a thing, anyway if you do. It's none of your business who lived and died and what they did before you were born. If the Lord had wanted you to know he'd 'a' put you here then instead of now!"

Looking very much as if he had received a blow in the face, Mr. Smith fell back.

"Aw, grandpa"—began Benny, in grieved expostulation. But a cheery voice interrupted, and Mr. Smith turned to see Miss Maggie Duff emerging from the doorway.

"Oh, Mr. Smith, how do you do?" she greeted him, extending a cordial hand. "Come up and sit down."

For only the briefest of minutes he hesitated. Had she heard? Could she have heard, and yet speak so unconcernedly? It seemed impossible. And yet—He took the chair she offered—but with a furtive glance toward the old man. He had only a moment to wait.

Sharply Mr. Duff turned to his daughter.

"This Mr. Smith tells me he has come to see those records. Now, I'm—"

"Oh, father, dear, you couldn't!" interrupted his daughter with admonishing earnestness. "You mustn't go and get all of those down!" (Mr. Smith almost gasped aloud in his amazement, but Miss Maggie did not seem to notice him at all.) "Why, father, you couldn't—they're too heavy for you! There are the Bible, and all those papers. They're too heavy, father. I couldn't let you. Besides, I shouldn't think you'd want to get them!"

If Mr. Smith, hearing this, almost gasped aloud in his amazement, he quite did so at what happened. His mouth actually fell open as he saw the old man rise to his feet with stern dignity.

"That will do, Maggie. I'm not quite in my dotage yet. I guess I'm still able to fetch downstairs a book and a bundle of papers." With his thumping cane a resolute emphasis to every other step, the old man hobbled into the house.

"There, grandpa, that's the talk!" crowed Benny. "But you said—"

Er—Benny, dear," interposed Miss Maggie, in a haste so precipitate that it looked almost like alarm, "run into the pantry and see what you can find in the cooky jar." The last of her sentence was addressed to Benny's flying heels as they disappeared through the doorway.

Left together, Mr. Smith searched the woman's face for some hint, some sign that this extraordinary shift-about was recognized and understood; but Miss Maggie, with a countenance serenely expressing only cheerful interest, was over by the little stand, re-arranging the pile of books and newspapers on it.

"I think, after all," she began thoughtfully, pausing in her work, "that it will be better indoors. It blows so out here that you'll be bothered in your copying, I am afraid."

She was still standing at the table, chatting about the papers, however, when at the door, a few minutes later, appeared her father, in his arms a big Bible, and a sizable pasteboard box.

"Right here, father, please," she said then, to Mr. Smith's dumfounded amazement. "Just set them down right here."

The old man frowned and cast disapproving eyes on his daughter and the table.

"There isn't room. I don't want them there," he observed coldly. "I shall put them in here." With the words he turned back into the house.

Once again Mr. Smith's bewilderer eyes searched Miss Maggie's face, and once again they found nothing but serene unconcern. She was already at the door.

"This way, please," she directed cheerily. And still marveling, he followed her into the house.

Mr. Smith thought he had never seen so charming a living-room. A comfortable chair invited him, and he sat down. He felt suddenly rested and at home, and at peace with the world. Realizing that, in some way, the room had produced this effect, he looked curiously about him, trying to solve the secret of it.

Reluctantly to himself he confessed that it was a very ordinary room. The carpet was poor, and was badly worn. The chairs, while comfortable looking, were manifestly not expensive, and had seen long service. Simple curtains were at the windows, and a few fair prints were on the walls. Two or three vases, of good lines but cheap material, held flowers, and there was a plain but roomy set of shelves with books—not immaculate, leather-backed, gilt-lettered "sets," but rows of dingy, worn volumes, whose very shabbiness was at once an invitation and a promise. Nowhere, however, could Mr. Smith see protecting cover, mat, or tidy. He decided then that this must be

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WORLD EMANCIPATION

A SERMON BY REV. DAVID F. WARNER

TEXT: "That they may all be one * * * that the world may know that thou didst send me." John 17:21.

"CHRIST or Chaos," a recent book; Bok's world peace prize offer; World Court week among the churches; Lloyd George's warning voice among us; and the German mark at 150,000,000,000; all these signal a world on fire.

But, hasn't the Law and the Prophets sketched a saved world? And isn't this the design in the Gospel? We do not question. In truth, this is a deduction from creation. All men are God-imaged thru their creation. They are living witnesses of a Divine Fatherhood. This establishes their kinship and the ideal of human brotherhood. Malachi says: "Have we not all one Father? Hath not one God created us? Why do we deal treacherously every man with his brother?" Paul declares, "God made of one every nation of men to dwell on the earth." And said Burns, "poet of the plain man,"

"What tho on homely fare we dine,
  Wear hodden-gray and a' that;
Gie fools their silk and knaves their wine,
  A man's a man for a' that."

And because "a man's a man," God-imaged, Jesus came to redeem him.

Christ came not to condemn the world but to save it. And to this end we hear him praying passionately for unity (Jno. 17:20-23). Are the words "that they all may be one" more than a hope? Do they confirm the prophecy of that great Isaian regeneration when "the wolf shall dwell with the lamb," etc.? Is the great pulsing heart of this world beating in that direction now? Do the proposals for international arbitration of difficulties have any bearing on Christ's world aim? And do the words of Lloyd George, "If the churches of Christ thruout Europe and America allow another war to fructify, they had better close their doors," mean anything to the churches?

Recently, at the Foreign Missions Conference of North America, a prominent speaker uttered these words: "Our little systems have their day, but unfortunately they have not ceased to be." Another, at the annual meeting of the Federal Council of Churches said: "I hope to live to see the day when a whole denomination will seek first the kingdom of God, even at the loss of its own life." Are we to understand, therefore, that the restoration of social Christianity demands a united church? At least a worked-out cooperation in terms of denominational comity and friendship? And do you know that weeks before the Washington Disarmament Conference, President Harding called upon the "Federal Council of Churches in America" to develop the sentiment for the same? What bearing have these events on a world salvation? And should the churches now challenge the world thru a united front?

But we can not do this. Christendom is not united. And why? When Jesus came to earth, he found the viper of social injustice, inhumanity to man and unbrotherliness raising its cruel head everywhere. Palestine was torn by various political factions. And why these things? There was no common ground in religion. This always makes a difference in heart and destroys love, unity, church, and country. Some one has said, "Religion is the great state-guiding principle." Therefore Constantine espouses the Christian's God, and the Kaiser throws out the sop to his people: "Me and Gott." So it does seem that any great moral and political advance awaits religious unity. That "the meek shall inherit the earth" is not yet visible in any large way.

So, today, we ought evermore to be praying Christ's prayer for spiritual unity and purpose among the churches. But, in practice, we find ourselves shot thru with denominational ambitions and handicapping factions. Here the Pharisee comes in for Jesus' vehement reproof. And here the Pope is reaching out for control. But what about our Protestant sects? Is any one of these the sole channel thru which God would pour his healing grace upon the world? What arrogance and pride is camouflaged behind some professions of church loyalty and devotion! I wonder if this might be the root cause of disunion? But the ceaseless purpose of God rolls on thru the impact of his Spirit, released nineteen hundred years ago. "Unto him that sitteth upon the throne and unto the lamb" is rendered the universal chorus of the ages. And some day, by the fiat of God, every tongue shall confess, not my church first or infallible, but that "Jesus Christ is Lord (first) to the glory of the Father."

What will unite Christendom? Will polity, methods, or organization? Certainly, here is but one cementing impulse, that of loving the world into Christ, even Matt. 28:19, 20. It is love that caroled from the clouds on that great birthnight of the world: "On earth peace and good-will to men." It is the new commandment to love one another. It is the principle of love with a two-fold sweep: to God and to neighbor. God so loved that he gave, and he whom he gave rendered to the world an unwearied service in love. Service in love is the only guarantee of Christian unity and cooperation in behalf of a world salvation. And here, the church that would be greatest must become servant of all.

"The love of Christ constraineth me," says Paul. "One can hardly conceive that Paul had any time for human bickerings and divisions. He could not sit around home nor confine his service to his own country. He must claim the Roman world for Christ. This love transcends that of home and country, and thru Christian cooperation, pushes its emmisaries out to the four corners of the earth to claim humanity for a universal family in God. America and the church for the world! But until we have arisen above mere nationalism, above the spirit expressed in "Deutchland uber Alles," or "America first," and above a selfish denominationalism, we have not come into the New Testament

(Continued on Page 17)

Washtenaw County Boys' and Girls' Club State Champion Dairy Judging Team. Tallest—Roland Stein, Ann Arbor Township. Center, David Maier, Northfield Township. Shortest, Walter Maier, Northfield Township. Winning Team Dairy Judging Contest, Michigan State Fair, 1923, in competition with 15 teams representing 15 counties. As individuals they ranked 1st, 9th and 7th, respectively in 45 competitors and as a team were 53 points ahead of the team placing second.

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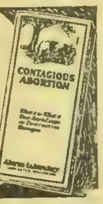

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The Michigan
BUSINESS FARMER

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We will not knowingly accept the advertising of any person or firm who we do not believe to be thoroughly honest and reliable. Should any reader have any cause for complaint against any advertiser in these columns, the publisher would appreciate an immediate letter bringing all facts to light. In every case when writing say: "I saw your advertisement in The Michigan Business Farmer!" It will guarantee honest dealing.

"The Farm Paper of Service"

THE GASOLINE TAX AGAIN

GOVERNOR GROESBECK has practically gone on record as being willing to compromise on the gasoline tax measure which he vetoed last spring. The Governor insists, however, that the gasoline tax be so prepared that it will include a weight tax which will reduce the license plate fee to a nominal figure, and also a provision for doing away with horsepower as a factor in computing taxes on cars and trucks, claiming that weight should be the main factor.

Representative Joseph E. Warner, Ypsilanti, who introduced the gasoline tax bill in the House, early this year, said recently: "I agree with the Governor that something should be done at the special session to work out a better way for financing road construction and maintenance and for guaranteeing highway bond interest and sinking fund requirements, and am giving study as to how it can best be done."

This means that one of the first measures to be taken up by the legislature will doubtless be the gasoline tax issue, and it will be a pretty fight, because the Detroit Automobile Club has gone on record that they will secure the necessary twenty-nine thousand signatures to a petition which will hold up the bill until a referendum is had on it a year hence, and under this plan there is no way in which the legislature could put a tax bill into effect until after the next general election.

Just why the Automobile Club should be opposed to the gasoline tax we have never been able to figure out. Perhaps we are dense, but a tax which has been so generally accepted by so many states since it was passed and vetoed this spring surely must have some of the merits which it proponents claim for it. It is obvious, that something must be done to keep the good roads we are building with bonds in good condition. with taxes which meet the repair costs as they accrue. A tax of two cents on every gallon of gasoline consumed in Michigan would go a long way toward this end.

HELP FOR GERMANY

THERE is a bill pigeon-holed in Congress known as the Newton Bill, providing for an appropriation of $70,000,000 for the purchase in this country of food supplies for the famine-stricken people in Germany and Austria, to be distributed by the American Red Cross, with the co-operation of the German and Austrian Red Cross.

It is stated on high authority that conditions in Germany are rapidly approaching the famine state which was so nobly relieved in southern Russia by generous America.

There are, of course, those so embittered toward our former enemies that they would give them no comfort, but we think even these would be softened by the unlifted arms of a mother or the plaintiff wail of a tiny child without nourishment.

One of the great problems before the American farmer is to find a market for a portion of his surplus food products. American granaries are bulging and there are ample supplies so that the entire amount of this $70,000,000 could and would be spent directly for American farm products.

We would like to offer the suggestion that these purchases of farm products might be made without profit from the various growers organizations throughout the country. For instance, the Michigan Bean Growers Association would doubtless be glad to load cars at all points in Michigan of a sufficient quantity to supply this particular staple in the food purchases for the American Red Cross and we believe that there is not a bean grower in Michigan who would not be glad to supply his quota at a price even lower than that offered on his local market. He would not be entirely charitable in this because every pound of beans that leaves United States for export removes its share of the competition on the American market which forces the price downward.

Seventy million dollars sounds like a lot of money until you start talking about battleships, and there you could drop it without hardly making a splash. It would be an object lesson for all the world if America would put the Newton Bill in effect immediately Congress has convened. We have often thought lately that we would hate to be a missionary in a heathen land trying to teach Christianity with the sorry spectacle of so-called Christian nations grinding their heels of hate into their conquered Christian brothers.

SCALPING BEANS

THERE seems to be ample proof that the bean market is the eternal football of interests who are determined only to force prices up and down with the idea of scalping an extra profit.

The bean growers of Michigan, as we pointed out on this page in our last issue, ought to be handling their own beans and delivering them to the markets of the United States at their own profit.

We repeat that we hope some man will step forward ready to take on the task of organizing the bean growers and of handling their products. There is a wideopen opportunity here for some man who knows enough about selling beans and is favorably enough known in the trade to command the respect of the wholesale grocer with whom he must deal and the confidence of the growers for whom he must act.

Michigan fell down on its share of an advertising campaign which was designed to tell the great consuming public of the United States to "eat-more-beans," and the reasons for doing so, just as the many growers' associations out in California have so successfully done in the past few years. Michigan fell down because of the shortsightedness of some of her jobbers, and although Michigan's share of this campaign was to have been only $16,000 out of a $50,000 campaign, the amount was not raised.

One bean broker has come forward with the suggestion that a popular subscription be made up by bean growers and others interested in the industry and has offered to start it off with a $50 contribution, this THE BUSINESS FARMER will be glad to match if there is any interest in such a proposition from the grower and broker. It is our frank opinion, however, that this is a difficult way in which to raise a perfectly obviously needed fund for promotion purposes.

Some of you larger growers of beans call a meeting to talk this thing over and see if something cannot be started. There is a man somewhere for the job. Now it's up to you to help find him!

ELECTRICITY THE MODERN GENII

ALADDIN, the famous hero of the lamp in the "Arabian Nights," who with a single rub of his thumb on the coveted lamp produced a genii to do his bidding, had nothing on the modern farmer who has electricity and the power it represents at the touch of his thumb on a button.

No place in industry does electricity fit in more completely to lift the labor of men and women than it does on the farm. Electricity turns the chores and hardships of the farm and the farm home into pleasure.

Michigan is fortunately situated. We have a great number of rivers ready to be harnessed and thus supply for all time this mysterious power direct to our farms.

A beginning in harnessing the power available in Michigan has been made, but until every farmer can have electricity for his use by running wires out to the roadside, it will not be meeting the full demands of our citizens.

Michigan has no greater resource to be conserved and made the most of, than the power which runs to waste in her rivers. Probably the next great development in electricity will be the abolition of transmitting wires.

The possibilities of wireless have only been touched and our best authorities tell us that there is ample proof already that the next great invention will be the transmission of electric energy without wires. That will bring power and light and with it, continuous water under pressure and heat for cooking, to every home and to every farm, no matter how isolated.

You say you are too late to make a great discovery or a great invention young man! Why, the age of invention has only begun. We have only lifted a corner of the great tapestry which hides the gifts of God from mankind.

MELLON URGES TAX CUT

SECRETARY of the Treasury Mellon made a hit with the people of the United States when he issued a formal statement last week advising a huge cut in the governmental taxes, but whether he made himself equally popular with the administration is yet to be decided.

Mr. Mellon's recommendations included a 25 per cent reduction in the taxes on earned income; reduction of the normal taxes on incomes from 4 per cent and 8 per cent to 3 per cent and 6 per cent respectively. Application of the surtax at $10,000 instead of $6,000, and scaling progressively upwards to 25 per cent on incomes of $100,000 and repeal of the taxes on admissions and on telegrams, telephone messages, and leased wires.

Mr. Mellon figures that these recommendations, including some increases in corporation tax, would reduce the total assessment by $323,000,000 next year, but he wisely concludes his communication with this observation: "A soldiers' bonus would postpone reduction, not for one, but many years to come."

Business has been good throughout the United States during the past twelve months and government receipts have been largely augumented by this prosperity. It is quite possible that to foist a soldiers' bonus on the already tax-ridden country at this time would force a depression in industry through a curtailment of buying power which would leave little profit to the individual soldier.

We have never talked to a hard-working farmer boy who saw service either on this side or in France who was as rabid for a soldiers' bonus as the American Legion officials would lead us to believe. The sentiment of the boys we have talked to seems to be: "Take care of those who were injured, even those who were slightly injured; give them the best care possible. See that they are provided for throughout life and that dependents are provided for. For us who fought for a cause and came back unscathed, we ask nothing save the honor which every man gets for serving his country and his flag!"

The voice of the Secretary of the Treasury calling for a reduction in taxes is indeed welcome news to the farmers of this country, but we shall indeed be lucky if, with the presidential campaign just in the offing, we are not burdened with a soldiers' bonus which will be rushed through in the opening days of the new Congress to build up political fences at home.

ONE KIND ACT EVERY DAY!

IT was just before supper time on a blustery evening when ones chief ambition is to get home and as near as possible to the stove. Mother was waiting on the corner for an interurban car which seemed as though it would never come. Suddenly a gentle tap on her shoulder and a cheery voice, "On your way home, Mrs.——? An affirmative answer and then "I saw you standing here waiting for the car, so I found a place there to park my automobile and came back to get you!" The man was a neighbor who lived a half-mile or more from our home.

It was a simple thing to do and yet how easily he could have gone selfishly past mother and on home without more than a passing thought. On the way he unfolded the reason and it seems to me that it is so well worth repeating that it ought to find a place in some form or other on this page at least once every year.

"I came from a family of five boys and two girls. My mother was a Scotch woman who believed in training her children from infancy the sterling principles which has made her own life a beautiful one. One of her mottoes was: At least one kind act every day! When we gathered about the supper table, each in our turn told mother what kind act we had done that day and received our approbation from her as it was merited. It became a fixed habit in my mind and to this day if noon comes and I have done no kind act, I begin to feel nervous and this increases until my kind act has been done, when I feel satisfied with myself and with the world. I have been very busy to-day and the first chance I had to practice my mothers precept was when I saw you standing there in the cold waiting for the car!"

Think, if you will, of the influence which this single family of five men and two women are having to-day, with each practicing this simple doctrine, on the world in which they live.

There is no need of pointing out the obvious moral. If all the world could have been brought up by the same sterling Scotch mother it would be so near like what we hope to see in Heaven that most of us would prefer to stay here!

PUBLISHER'S DESK

HOW TO CATCH FAKE STOCK SALESMEN

SOME STATE bankers' associations are distributing an investor's questionnaire with the idea of protecting purchasers of securities from fake stock salesmen.

The questionnaire pins the salesman down to answering the following questions:

Date.
Name of company.
Name of salesman.
Kind of stock offered.
Total issue of stock.
Stock given for property.
Stock given for good-will.
Stock given for patents.
Are you taking any Liberty Bonds?
If so, at what price?
Amount of cash needed.
Par value of stock.
Market price of stock.
Has the stock a ready market?
If so, where is it listed?
Is the stock accepted by banks as collateral for loans?
If so, what banks have accepted it to your knowledge?
What are the present net earnings?
Bank references.
Names of officers.
Former occupation.

This is worth cutting out and pinning up on the calander where it will come in handy some day when a stock-salesman calls at your front door. If he tells you he is "letting you in on the ground-floor" and so has no time to fill in the answers to these questions, my advice to you is to let him out on the same level.

CHEAP TIRES

WE have excluded from the columns of THE BUSINESS FARMER all advertising of any excepting brand new automobile tires. There are so many schemes afloat to sell tires at ridiculously low prices that it is not possible to separate the good from the bad.

One of the common schemes which we uncovered is a cheap tire with a guarantee which reads, "If not satisfied, send us 50 per cent of the original price of the tire and we will exchange for another rebuilt tire at any time." Then they guarantee some five or ten thousand miles use out of the so-called rebuilt tire.

Now it works out this way: A man orders a tire at a ridiculously low price and receives an old worn-out tire, puts it on the car, drives it a few miles, has a blow-out with all of its pleasures, takes it back home and looks up his guarantee from the company. He finds he can get another one just like it at 50 per cent of the amount he paid for the first tire. But it takes a mighty brave man to pay even half the original price for an article that has proven no good. So we presume their re-orders are a very small percentage of their first orders.

We have come to the conclusion that a good place to buy a tire is of a concern which will back the tire they are selling with their reputation.

A LOT ON DICKINSON ISLAND

"I am writing you asking a little advice. A little over a month ago my son was visiting in Detroit and in some way drew a ticket and they claimed he drew a lot on Dickinson Island, St. Clair Flats, and they got him to pay them $15 on it as a first payment. Then he heard it was a swindle as the lots were worthless and he asked them to give him back the money. They said they would but as the head man was not in and they could not until he was, but he never was in it seemed. Now is there any way to make them pay back the $15? The boy is only seventeen years old and I, his mother am trying to take this up for him. I am enclosing the ticket and receipts they gave him. Please let me know what you think of it and also if there is a chance of getting the money back."

IT is a dull issue indeed in which we cannot announce a new scheme being worked. We have never been on Dickinson Island but it is a safe bet that this land ought to have been sold by the quart instead of by the foot. This is a new scheme of selling real estate but it is an old one among a certain class of individuals who make easy money out of other people's hard earned money.

As this is the first complaint THE BUSINESS FARMER has had on this particular scheme it is probable that it is being worked among the suckers in the cities, of which there are, always were and always will be, a sufficient quantity.

We are looking up this scheme further to see if there is any possibility of getting the money back for our reader, who certainly has our sympathy. That is, our sympathy is for the mother and not the son who could afford to charge it up to experience; he will have plenty more to pay for before he gets along many years.

THE DETROIT FIDELITY AND SURETY COMPANY

I HAVE no idea how much of this company's stock was sold to the farmers of Michigan, but in answer to the inquiries which I have had I am pleased to print a report from a reliable source, which may be encouraging to some of our readers who hold stock. I am giving a full report which I believe is from a reliable source, as follows:

"The Detroit Fidelity and Surety Company was formed some two or three years ago with a capital of three million dollars, all of which is now outstanding, we are told.

"The company sold the stock at $100 per share, that is, $50 par and $50 surplus. We might add that all insurance stocks are sold on this basis in order to do away with double liability.

"The market on the stock at the present time is quoted $70 bid, $77 asked, at which prices we can either buy or sell.

"The company has been doing an exceptionally good business in surety bonds, but at best the proposition is a very speculative one and requires excellent management. Mr. Bunting, who was the former president of the company, died some few months ago and we have not been informed as to who his successor is. We believe, however, that the board of directors are capable and will probably find a fit successor.

"The company is not paying any dividends at the present time although there seems to be some dividend talk, but we believe it is simply good business form to build up a substantial surplus before any dividends are paid."

HOME WORK

"On account of sickness, high taxes, etc., I feel I must help along financially and am writing you for advice. I have tried fancywork but it is not steady and I am very much of a failure as a saleswoman.

"I am in receipt of circulars from the Auto Knitter, Gearhart Knitter, United Show Card Studios, 407 Gratiot Avenue, Detroit, Michigan; also Paris Art Works, West Haven, Connecticut, and would like to learn something about Fireside Industries.

"The prices of an outfit of knitters or show card writing course seem very high to me. Is there a chance to get steady employment with either?

"The Paris Art Works are offering beading purses, dress trimming, etc. It strikes me that would last only as long as the fad lasts. It would seem to me as if show cards would always be used. I am full of work but money is scarce or I would not be trying to get work."

YOUR request is thoroughly taken to heart and I wish I could recommend one of the companies you have mentioned. They are all based upon the proposition of getting something out of you and giving you very little in return.

Things are coming better on the farm now and if you will work hard in the regular farming endeavors I am sure you will be further ahead in the end. Eggs and butter have both brought high prices all this year, and there has been a steady market through the summer months. This would seem to be better than the kind of home work you mention.

First Mortgage Real Estate Gold Bonds

The safest and most profitable investment for savings is in Federal first mortgage real estate serial gold bonds—and every day more farmers are coming to that conviction.

Write for Booklet AG1084

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FEDERAL BONDS
Are Better Bonds (1084)

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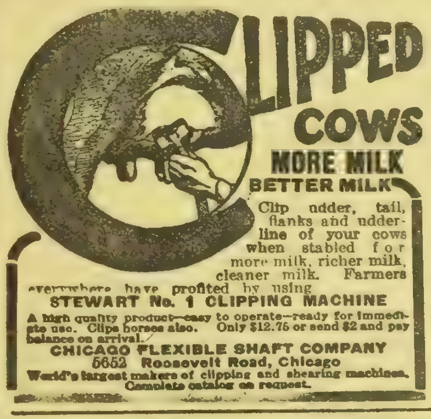

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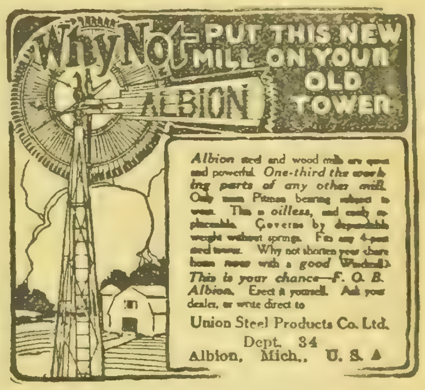
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The Farm Home
A Department for the Women

Edited by MRS. ANNIE TAYLOR

DEAR FOLKS:—Thanksgiving is with us again and I wish you all a happy one, with every member of your household present that it is possible to bring together. It is a lovely family day and I know you will all enjoy it. For those of us who have been more fortunate than others, say a prayer on that day to help give strength this coming year to guide them and put them right. I want you all to read my article about "Have you done your Share." In the Recipe Column are some good dishes that I make for my family and they might please you. I am anxious to know how some of you mothers handle "lunches" for the school children and would like to receive some letters telling of your ideas.

Your Friend,
Mrs Annie Taylor

Address letters: Mrs. Annie Taylor, care The Business Farmer, Mt. Clemens, Michigan.

THE WORKER'S THANKSGIVING

O GOD of those who labor on
From dawn till twilight hours are gone,
We thank Thee for the grace
That lets us know the rapture strong
Of working well and brave and long,
Each in his chosen place!

We thank Thee for the tasks that wait
For our glad coming, soon or late,
The splendor and the strain
That keep our working muscles true,
That glorify whate'er we do,
With hand or brain!

We thank Thee for the sun and shade
Of which this working world is made,
For water and the soil;
For joys that cling and griefs that fly,
For chance to live and chance to die—
O God of those who toil!

—Ethel Colson

ORIGIN OF THANKSGIVING DAY

THANKSGIVING Day has long been called the first really American holiday. President Lincoln established it as a national festival in 1864, and since that time it has been a legal holiday. But the day of Thanksgiving goes back to the Englishman, William Bradford, who led the Pilgrims to this new land. Back of him we find that Moses really instituted the first Thanksgiving Day by issuing this splendid proclamation: "After thou hast gathered in thy corn and thy wine thou shalt rejoice in thy feast, thou and thy son and thy daughter and the Levite and the stranger and the fatherless and the widow that are within thy gate."

Bradford, in 1633, called on the fifty-five surviving passengers of the "Mayflower" to hold a feast of gladness and thankfulness. He also followed the proclamation of Moses to the letter, for he asked ninety and one strangers, among them the good Indian, Massasoit, and others belonging to his famous tribe. So our hospitality, for which as a nation we have always been known, was established by good old William Bradford. History also tells us that he was a "good provider." The first Thanksgiving Day feast consisted of wild turkey, which comes down into history as the mainstay of our Thanksgiving meal. Then there was a fish and succotash. The book tells us, too, that the Indians brought in nine deer as their contribution to the white man's feast. The origin of our thankful day is strictly biblical, as Bradford, the leader of those seeking after religious liberty and truth, was simply following in the footsteps of Moses, who was leader and lawgiver to a people in a strange land.

Six years after Lincoln issued his Thanksgiving Day edict nine Southern states adopted the holiday. In 1877 a general Thanksgiving Day was proclaimed in Scotland. It comes in the middle of November. When our housewives are dressing turkeys they should think of Alice Bradford and the three or four young women whom she had to assist her in preparing those first Thanksgiving Day birds. How glad she must have been when her blanketed and befeathered guests departed! The red men were a trial to our foremothers.

"HAVE YOU DONE YOUR SHARE"

I WONDER what "Have you done your share" stands for. It means a great deal to the Red Cross that gave such splendid help during the war and is still keeping up the good work. It is just like the "Widow's Mite" and is up to the individual to know what is your share.

This work was brought right home to me this last week, when I was asked to help in getting a small town started and work with the local folks who realized the need of this organization.

It cost $1.00 to join the Red Cross each year, and that was what we went after, trying to renew the old members and bring in new ones. A great many people think this money is spent outside their local community. The Red Cross is trying to establish and help a Red Cross nurse in every county in the country, to help in sickness and in any of the many trials and unfortunate accidents that come to every household sometime or other during the year. One-half or fifty cents of every dollar is used for local work and during my experience this last week, I found a new idea used, at least it was to me, in raising funds to take care of this great and noble work.

I went to Wayne and Belleville, and in the little town of Belleville the folks who felt they could not give a dollar in cash (which is mightly hard for a lot of us to do) hit upon the idea of giving food stuffs. One family gave a bushel of potatoes, another a fat chicken, and some gave canned fruit. The local organization held a bazaar and sold these things and raised $309.00, more money than they could have collected by just asking for cash donations.

I am wondering if in some of our communities, where the ladies are active with clubs, they could not do something similar and help in this great and wonderful charitable work that helps us all when we really need it.

I think the Red Cross of the United States of America has done more to help Russia and their starving children to create a love for this nation and its people, than all the treaties ever written. They know America means "bread" and it is a great step in the right direction. The great Japanese earthquake with all its attending misery was relieved by these same dollars that our nation gathers once every year.

Maybe this work has not reached you, but when it comes be prepared and do not turn a deaf ear to the call for help. Be thankful this Thanksgiving that we are able to help in this work if it is only like the "Widow's Mite."

TURKEY CONUNDRUMS

After the dinner has been served and one wonders what to do to make fun for the family, it is a good plan to have some game to fall back on.

The conundrums I am giving you can be played by every member of your household.

They are simple and can easily be guessed by anyone at all familiar with the turkey.

You can use the fun-maker with a group of folks just like a spell-down and a great deal of mirth and laughter is the result.

1. What part of a turkey assists my lady in making her toilet?
2. What part of the turkey opens the front door?
3. What part of the turkey will appear on the day after Thanksgiving?
4. What part of a turkey is part of a sentence?
5. What part of a turkey is used for cleaning purposes?
6. What part of a turkey does the farmer watch with anxiety?
7. Why is the man who eats too fast like a turkey?
8. What part of the turkey is an Oriental?
9. Why ought the turkey to be ashamed when he is being served?
10. What color gets its name from the turkey ?
11. What feathers find place on my lady's dresser?
12. When the turkey is cooking, in what country is it?
13. What part of a turkey is a story?
14. What part of the turkey appears on the battlefield?
15. Why has the turkey five reasons for being sad?

1. Comb. 2. Last part of turkey, k-e-y. 3. Bill. 4. Claws (clause). 5. Wings for dusters. 6. The crop. 7. Both are gobblers. 8. The first part, T-u-r-k. 9. Because we see the turkey dressing. 10. Turkey red. 11. Pin feathers. 12. In Greece. 13. Tail (tale). 14. Drum Stick. 15. He got it in the neck. He was bled. He got a roasting. He was terribly cut up. Finally, he is in the soup.

MOTHER'S PROBLEMS

A RECORD OF BEHAVIOR

HAVE you ever been in a schoolroom and noticed on the blackboard a list of pupil's names, each name followed by stars in red or blue or yellow chalk? The teacher, if asked, would tell you that the stars indicated perfection in some particular line—perfect lessons, perfect attendance or, perhaps, perfect behavior. She would tell you, also, that the star record displayed where all might see, was the cause of a great deal of friendly rivalry among the children; that it did increase greatly their childish efforts.

The same idea brought home in a family where there are two or more children will bring equally as good results. Children easily drop into careless habits of personal appearance; they grow lax about their chores, they become too accustomed to mother and her orders to respect them at once. They need a bit of prodding up at times — and it is difficult to find the right prod. The star record provides an exceedingly inexpensive, but nevertheless, highly efficient prod.

If a small blackboard cannot be used with colored chalk, a large strip of wrapping paper tacked conspiciously on the kitchen wall, with the names written in large black letters, and the earned stars marked with bright crayons, will serve the same purpose. For a few cents there can be purchased at stationary stores small boxes of gummed stars in gilt or red. These may be used instead of crayon-made stars, to the delight of the children.

The record in plain sight on the wall of the kitchen awakens in each child a pride he would not otherwise feel. Though he might lose his feeling of rivalry with the other children in the family, the thought of the chart for everyone to see and ask about, will hold him long to his chores or his daily good behavior. It will be a prod but an extremely softly padded one!

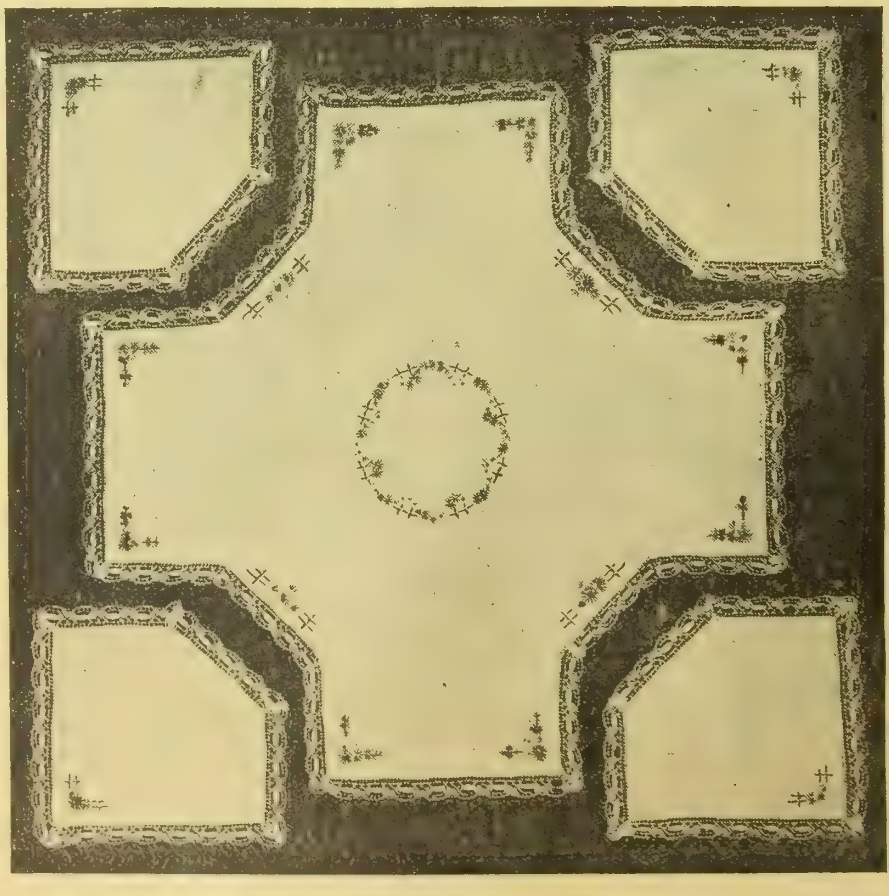
Personal Column

"Birth Control"—Will you please publish in the personal column where I can get a book on birth control. Please publish as soon as possible.—A subscriber.
—This article was published in October 13th issue of M. B. F. and is called "Women's Morality and Birth Control," is twenty cents and can be purchased thru the New York Women's Publishing Co., 104 5th Avenue, New York City.

Where to Find Mendets.—Am sending address of the company where the soft lead mendets can be bought. They are 10 cents a box and 25 or more in a box, all sizes; sent post paid to any address for ten cents in stamps or coin. They are just fine. The address is: E. E. Peck & Company, Batavia, New York.—Mrs. J. S., Holton, Michigan.

Superfluous Flesh.—I am an interested reader of the M. B. F. especially the Home Department. I want to send in a few suggestions to our friends. Also would like to have you ask, through the Home Department, for a remedy for overfatness, or superfluous flesh. There might be some reader that knows something for reducing. Some simple home remedy. It is disgusting to get stout and fat. Hope we fleshy ones will get some help. I have tried everything, but to no avail, so please dear Mrs. Taylor, come to our help and let the home friends send in their answers to the Home Department.—Mrs. F.
—My one word of advice is to watch your diet. This seems to be the only safe way

The Luncheon Set For Christmas



Can you imagine how pleased you would be if one of your Christmas packages contained the lovely luncheon set. One's table could be made very attractive with a set like this to eat from. Somehow the food tastes better when served from these individual doilies. It is not a great deal of work, and not expensive.

The set can be had stamped on Linen Finished Suiting, price $1.00, or on Oyster Linen, price $1.25. With sufficient lace to finish edges and floss to start the work we can furnish the set on Linen Finished Suiting for $1.50 or on Oyster Linen for $1.75. In ordering set send in for "Pattern No. 404", enclosing stamps, money order, or check to cover the purchase price, to the Pattern Dept. of Michigan Business Farmer, Mt. Clemens, Mich.

and still retain your health. I have a friend who tried taking salts every morning and right now she is under a physician's care with a run down condition and boils coming and an abcessed ear, that is most painful. The doctor said it was caused by her violent abuse of her system in trying to reduce. There are a great many books on "Eat and grow thin." I am trying this rule of eating only one good meal a day and trying to avoid fattening foods. I know it is hard, especially when you are the cook, and have to plan meals for the rest of the family. I really feel so much better when I eat less. Maybe some of our readers have had this same trouble and will be glad to help the rest of us. I would like very much to know if any of you women have had any success in reducing. It is a known fact that the folks who are slight in build have a better chance for health and old age than our fat people.

Nail Wounds.—When a rusty nail is run into the foot or is cut with a rusty instrument, mix flour and sweet milk together until like a biscuit dough and bind on wound.

Chapped Hands.—Equal parts of aqua ammonia and glycerine, rubbed on the hands after washing is an excellent remedy for sunburn, poison ivy, and chapped hands. If there are any open places it will find them, and sting for a second, but it does a lot of good.

Falling Hair.—A solution of salt and water is good for falling hair. Use twice a week.

Farmers' Liniment.—Two fresh eggs well beaten, poured into a bottle, with one cup each of vinegar and turpentine. It is the best liniment for all purposes, and it is just fine for taking out the lump or swelling which sometimes comes under the jaw of a cow.—Mrs. P. F.

Has Any Reader This Poem?—I wonder if some reader of the M. B. F. could send me the poem, "The Eagle's Rock"? The first verse reads: "It was the Golden Eagle's rock, Cragged and wild and lone; Where he sat in state with his royal mate, On his undisputed throne."—Mrs. H. M. Rickard, Deerfield, Michigan, R. 1.

Share Our Home With Us.—Do you think that possibly there would be an old couple of 55 or 60 years, who would like a home on the farm with a young couple? We have no children and we would like a kind old couple to live with us. If you think anyone would care to write I will leave my address with you. —A subscriber.

—if you are well bred!

General Suggestions About Introductions.—Ladies being introduced should never bow hastily, but with slow and measured dignity. The younger to the older, the gentleman to the lady. It is the lady's privilege to recognize the gentleman after an introduction, and his duty to return the bow. Introductions on the streets or in public should be made so quietly as not to attract public attention.

Perfect ease and self-possession are the essentials to the making and receiving of graceful and happy introductions.

Etiquette requires that a gentleman always raise his hat when introduced to either lady or gentleman, on the street.

Introduce to each other only those who may find acquaintance agreeable. If any doubt exists on the subject, inquire beforehand.

MY FAVORITE RECIPES

Thanksgiving Pudding.—One-third cup suet, one-half pound figs, finely chopped, two and one-half cups of stale bread crumbs, three-fourths cup milk, one cup brown sugar, one teaspoon salt, three-fourths teaspoon cinnamon, one-half teaspoon grated nutmeg, one-half cup English walnut meats, one-half cup raisins, seeded and cut in pieces, two tablespoons flour, four eggs, two teaspoons baking powder.

Chop suet and work with the hands until creamy, then add figs. Soak bread crumbs in milk, add eggs well beaten, sugar, salt, and spices. Combine mixtures, add nut meats and raisins dredged with flour. Sprinkle over baking powder and beat thoroughly. Turn into a buttered mould, steam three hours and serve with yellow sauce.

Yellow Sauce.—Two eggs, one cup of powdered sugar, three tablespoons wine or any flavoring. Beat yolks of eggs until thick, add one-half the sugar gradually; beat whites of eggs until stiff, add gradually remaining sugar; combine the mixtures and add wine.

RECIPES

Hollandaise Sauce.—One-half cup of butter, yolks of two eggs, one-half tablespoon vinegar, or one tablespoon lemon juice, one-fourth teaspoon salt, few grains of cayanne, one-third cup of boiling water.

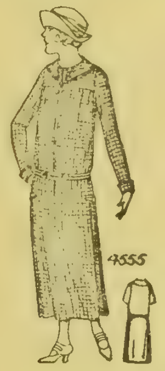
Put butter in a bowl, cover with cold water and wash, using spoon. Divide in three pieces; put one piece in a sauce pan, with yolks of eggs and vinegar or lemon juice, place sauce-pan in a larger

(Continued on page 17.)

"The Flour the Best Cooks Use," is what they all say about **LILY WHITE FLOUR,** which description is particularly apt.

VALLEY CITY MILLING COMPANY - GRAND RAPIDS, MICHIGAN

AIDS TO GOOD DRESSING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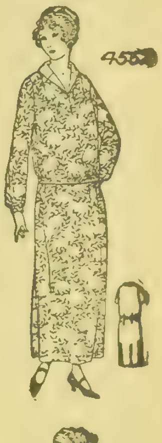
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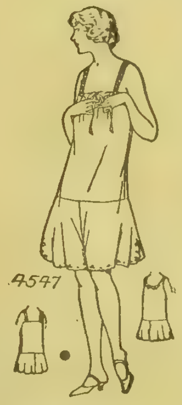
SEND IN YOUR SIZE

Lately some of you ladies have been sending for patterns without giving size. This means expense and delay for both of us. I hope you all realize the importance of sending in your size when asking for patterns.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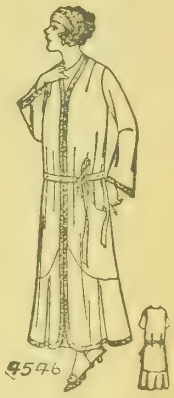
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4568. A Practical Garment for Young Children.—Here is a style that will appeal to the busy mother of little children, especially those of the "creeper" age. This design provides a convenient closing at the inner seam, which is very practical for children below 2 years of age. The garment may also be made with this seam closed, for the back is in drop style. The Pattern is cut in 3 Sizes: 6 months, 1 and 2 years. A 6 months size requires 1 ⅝ yard of 36 inch material.

4558. A New Coat Style for the Growing Girl.—Polo cloth, velours, caracul and other pile fabrics may be used for this model. The collar may be rolled in choker style or turned back together with the fronts. The Pattern is cut in 5 Sizes: 6, 8, 10, 12, and 14 years. A 10 year size requires 2 ¼ yards of 54 inch material.

4564. A New and Stylish Blouse.—Velveteen or satin with bands of embroidery would be attractive for this design. Crepe or crepe de chine would also be appropriate. One could omit the trimming bands and the collar. The neck edge may be in square outline, as illustrated in the small view. The Pattern is cut in 6 Sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. A 38 inch size requires 2 ⅝ yards of 40 inch material.

4546. A Comfortable Rest Garment.—Satin, velveteen, crepe or corduroy, as well as batiste, crepe de chine and dimity are suitable material for this style. The circular flounce is a new style feature. The Pattern is cut in 4 Sizes: Small, 34-36; Medium, 38-40; Large, 42-44; Extra Large, 46-48 inches bust measure. A medium size requires 5 ½ yards of 32 inch material. The width of the flounce at the foot is 2 ¾ yards.

4548. A Popular Apron Style.—Percale with bias binding in white or in a contrasting color would be good for this design. Gingham, linen, cambric and sateen are also desirable. The Pattern is cut in 4 Sizes: Small, Medium, Large and Extra Large. A Medium size requires 3 yards of 27 inch material.

4555. One of the Season's Youthful Models.—Jersey, wool crepe or kaska cloth could be used for this style. It has the new flare fulness in plait effect at the sides, and smart useful pockets topping the plaits. The Pattern is cut in 5 Sizes: 12, 14, 16, 18 and 20 years. A 16 year size requires 3 ½ yards of 40 inch material. For vest of contrasting material ⅛ yard 24 inches wide is required. The width of the skirt at lower edge is 2 ⅜ yards.

4552. A Neat and Simple House Frock in "Slip On" Style.—Printed cotton, figured percale, dimity, ratine, linen and other wash fabrics may be used for this model. It is also good for wool crepe or jersey cloth. The Pattern is cut in 7 Sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38 inch size requires 4 ¾ yards of 36 inch material. The width at the foot is 2 yards. For facing and collar of contrasting material as illustrated ½ yard of 36 inch material is required.

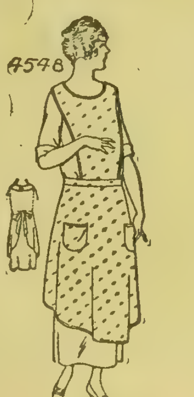
4556. A Practical Model for School Wear.—Wool crepe and plaid suiting are here combined. The long lines of the waist are pleasing and the plaited skirt, affords comfort and freedom in moving. The Pattern is cut in 4 Sizes: 8, 10, 12, and 14 years. A 12 year size requires 2 yards of plaid or check material, and 1 ⅞ yard of plain material. If one material is used 3 ⅞ yards 40 inches wide will be required.

4551. A Smart One Piece Dress for Mature Figures.—Figured and plain silk could be combined in this model, or, one could have moire and satin. Broad cloth or kasha with embroidery for vest and sleeve bands would also be attractive. The Pattern is cut in 7 Sizes: 36, 38, 40, 42, 44, 46 and 48 inches bust measure. A 38 inch size requires 5 ¾ yards of 40 inch material. The width at the foot is 2 yards. For panel of contrasting material 1 ⅝ yard 27 inches wide or wider is required.

4569. A Pretty Coat and Cap Set.—This coat model is comfortable and simple. The cape may be omitted, and the coat may be finished without a collar. As here shown, white flannel was used with bandings of white grosgrain silk, and embroidery for decoration. The cap is of white faille with scallops embroidered. The Pattern is cut in One Size: It requires 3 ½ yards of 40 inch material. The cap alone will require ⅝ yard.

4547. A Practical Undergarment.—This style of "combination" comprises circular drawers portions, joined to a long vest. The top may be finished with the shaped shoulder, or in camisole style. The Pattern is cut in 4 Sizes: Small, 34-36; Medium, 38-40; Large, 42-44; Extra Large, 46-48 inches bust measure. A Medium size requires 2 ⅝ yards of 36 inch material.

4566. A Popular Suit for Small Boys.—Wool jersey, serge velveteen or corduroy could be used for this model. It is also suitable for wash materials. The Pattern is cut in 3 Sizes: 2, 4, and 6 years. A 4 year size requires 2 ⅝ yards of 36 inch material.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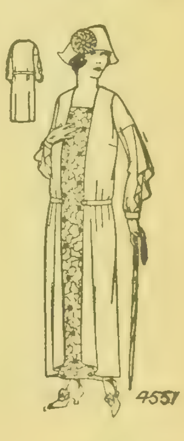
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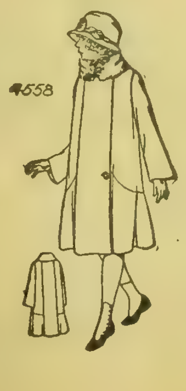
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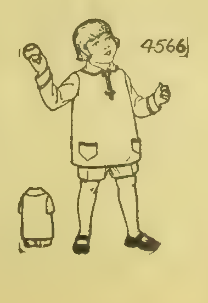
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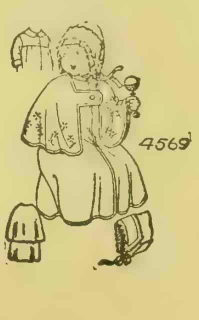
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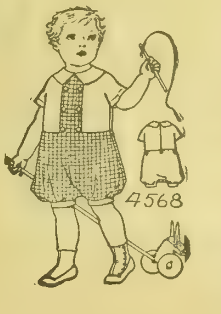
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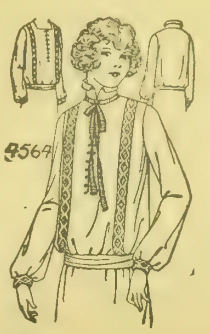
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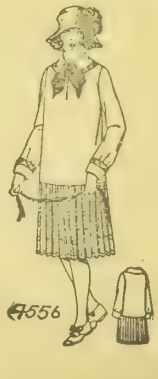
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RHEUMATISM

A Remarkable Home Treatment Given by One Who Had It.

In the year of 1893 I was attacked by Muscular and Sub-acute Rheumatism. I suffered as only those who are thus afflicted know, for over three years. I tried remedy after remedy, but such relief as I obtained was only temporary. Finally, I found a treatment that cured me completely, and such a pitiful condition has never returned. I have given it to a number who were terribly afflicted, even bedridden, some of them seventy to eighty years old, and the results were the same as in my own case.

I want every sufferer from any form of muscular and sub-acute (swelling at the joints) rheumatsim, to try the great value of my improved "Home Treatment" for its remarkable healing power. Do not send a cent; simply mail your name and address and I will send it free to try. After you have used it and it has proven itself to be that long-looked-for means of getting rid of such forms of rheumatism, you may send the price of it, one dollar, but understand, I do not want your money unless you are perfectly satisfied to send it. Isn't that fair? Why suffer any longer when relief is thus offered you free? Don't delay. Write today.

MARK H. JACKSON
No. 265-K Durston Bldg.
SYRACUSE, N. Y.

Mr. Jackson is responsible. Above statement true.

The Children's Hour

DEAR girls and boys:—So many are interested in riddles and puzzles that I have decided to make a puzzle a regular part of our page each issue. The first one appears on this page and I hope you find it interesting. The answer will appear in our December 8th along with a new puzzle. After two or three have appeared let me know what you think of them.

I have many other features I intend to use as soon as space permits so be on the lookout. One or more may appear in the very next issue.

And now I want to warn you not to eat too much Thanksgiving dinner next Thursday. If you do you will not be able to go to school the following Monday. Ha! Ha!—UNCLE NED.

THE FLY AND THE COACH

UPON a mountain road in the Alps a heavy coach was climbing. An importunate fly buzzed around and alighted first on the ear of one horse, then on the flanks of another, and finally settled on the coachman's nose.

"See," she said, "not only do I have to stir up the horses, but I have even to help the coachman drive his team!"

Arrived at the top, she spoke vaingloriously to the Coachman.

"See how we got up the hill!"

But the Coachman, with a smart slap killed the Fly.

"There are too many like you in this world," he said, "who only annoy others and then try to take the credit for the work!"

Be sure your services will be of assistance, before giving them unasked.

OUR BOYS AND GIRLS

Dear Uncle Ned:—May I join your merry circle? My father takes the M. B. F. and likes it very much. I enjoy reading the Children's Hour. This is the first time I have ever written. I hope it does not hit the waste paper basket like lots of boys and girls letters do. Tell it to run fast and jump over the top. Ha! Ha! Well I guess I had better describe myself. I am twelve years of age. My birthday is the twenty-seventh day of February. I have light curly hair and am light complexioned and have blue eyes. we live on a farm two miles from town and one mile from school. I have three sisters. We have seven cows, three horses, and two dogs. Well I guess I will close hoping some of the girls will write to me as it is very lonesome. I am your loving niece,—Loraine Spatezel, Tyre, Michigan, R. 2, Box 2.

Dear Uncle Ned:—Apple picking time again, isn't it Uncle Ned? My but the summer goes fast, especially when you don't want it to. But I have had a good time this summer. I went to the lake with some girls, besides going to Grand Rapids and I think I ought to work hard now, don't you Uncle Ned? Do you ever have a vacation Uncle Ned? I should think you would get awfully tired. I have been digging potatoes this week, had two hundred and thirty eight bushels off from about two acres. I also have been picking apples. My sister wrote to the M. B. F. a short time ago. We saw her letter in print and she has received several letters. I wish some of the children of this circle would write to me. I like to write letters, also to receive them. I am in the ninth grade this year and I go to the Lake City High School. I like to go to school. I am planning to be a teacher some day. It is raining this morning and it makes things look dull, doesn't it Uncle Ned? How many of the girls can crochet? I am just beginning and I wish some of the girls would send me some easy patterns. Hope to hear from some of the boys and girls. Your niece,—Thersa Lamb, Lake City, Michigan, R. 3, Box 79.

Dearest Uncle Ned:—Well, well, how long it has been since you last heard from me, dear Uncle? I sure did want to join your drawing contest but my, so much work to do without a dear mamma. Sure do miss her. It looks real sad around here without her. Well I have taken a lot of pictures as I have my own camera now. Say Uncle do you want a song called "Uncle Ned"? Well as I have written so many times and never described myself I will do so. I am a girl five feet two inches tall, have light brown bobbed hair, blue eyes and light complexion. And how I do wish I really could go to school. I am now 16 years of age and will be 17 on the eighteenth day of November. It is real lonesome at home all alone, so I hope I will receive letters from all of the cousins. Well I have been to Detroit and Saginaw recently. My Uncle Norman of Detroit came over and I went home with him in his auto. Sure enjoyed the nice long trip. I never got tired riding. I also had a nice time in Detroit and Belle Isle with my Uncle and two Aunties. Coming back with my aunt Rose from Detroit to Saginaw on the street car and from Saginaw to Elkton my Uncle Harry brought us in his auto. I sure wish I could take another trip soon. Say I have received two letters without names signed. Hope they write again and sign their names. As my letter is taking up too much space I will say good luck to all. From your affectionate niece,—Miss Betty Kliedo, R. 3, Box 9, Elkton, Michigan.

P. S.—Say how do you like my name of Betty instead of Elizabeth? And also I have a nice song which I will send the next time for those that have no dear mamma.

—I am very sorry for you Betty, because your mother has died and because you cannot attend school. I hope the girls and boys take time to write to you and I am sure many will. Yes, I would like a song called "Uncle Ned." Have you one or can you compose one? I think Betty sounds so friendly and sweet, a lot more than Elizabeth. Come again.

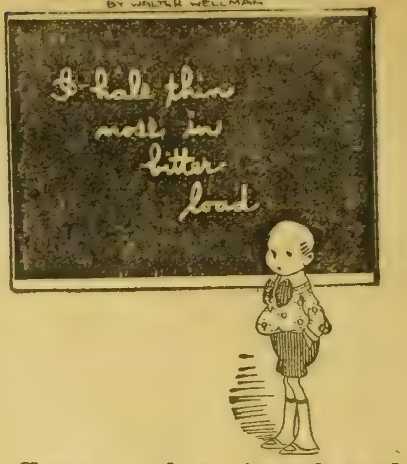
Dear Uncle Ned:—I think I have been on the outside looking in at the cousins long enough, so if you and Mr. (I'll be polite maybe it will help me) Waste basket will let me I'll join the merry circle. I suppose you want a description of me as this is my first letter. I am, or will be fifteen years old this week. I am five feet five inches tall, have black hair, which for a wonder isn't bobbed, and I have black eyes. I live a short distance from Walloon Lake which is a resort and considered one of the prettiest places in Michigan. And as Michigan is the prettiest state in the Union it is one of the prettiest places in the U. S. A. I think so anyway. As this is my first letter I will close. Will some of the cousins please write to me as I like to write letters and will answer all I get. Your niece,—Beatrice Ecker, R. 3, Boyne City, Michigan.

Dear Uncle Ned:—It is raining today so I am writing to you. I read Elsie L. Mahler's and Selden C. Fowler's letters and they both live somewhere near where my mother was born. That was in Boyne Falls, and she has been to Little Traverse Bay, Petoskey, Roaring Brook, Wequetonsing, and all the other places around there and she says that the shore road is the prettiest road she has ever seen. I live on a farm 200 miles from Detroit and would like to go there as I have a lot of relatives in Detroit and Grosse Isle and Wyandotte. My cousin from Wyandotte is here with us now. Do you like to go swimming in the lakes Uncle Ned? I live three and one-half miles from Eight Point Lake and it is the safest lake around here for bathing. It has many cottages on its shores. And the prettiest beach I have ever seen. I am 11 years old and in the 7th grade at school. I go to the Maple Grove school. It is 80 rods from our place. I would like to have some of the cousins write to me please. Well I see the waste basket eyeing this letter, so must close. Your niece,—Mildred M. Monthei, R. 2, Lake, Michigan.

Dear Uncle Ned:—As I have never written before, I made up my mind that I would write for the first time. And I would like to see my first letter in print. My father takes the M. B. F. and I like it real well. I am a farmer's daughter, and live on a farm. I live close to the school house. It is only 20 rods from the house. I would like to have some of the boys and girls guess my age. I am between 11 and 16 years of age. The one who guesses my age will receive a nice long letter. Now I will describe myself. I have light brown bobbed hair, blue eyes, light complexion, and I am 5 feet and 5 inches tall and I weigh 115 pounds. I would like to hear from some of the girls and will answer all who write. Well I guess I will give some room for the others to write. Good bye. Your niece,—Agnes Anna Yarabek, R. 2, Oakley, Michigan.

A PROVERB

BY WALTER WELLMAN



Change one letter in each word and then arrange the new words to form a well-known proverb. What is it?

Dear Uncle Ned:—I have been a reader of the Children's Hour for some time now and I always thought I would like to write. I am 5 feet 3 inches tall, have dark hair and blue eyes. I was 17 years old the 10th of August. Have I a twin? I live on a farm of 80 acres, 3 miles from a small village and 5 miles from town. We have 3 horses, 7 cows, 10 pigs and 5 calves. I have 2 sisters and 3 brothers. My sister and I went visiting this summer and we sure had a good time. The name of the place we went to was Pittsford. We went to see my married sister. We used to live in Idaho. Then we went to Wisconsin and didn't like it there so we moved to Michigan. We certainly saw some beautiful scenery out west. Were you ever out there, Uncle Ned? We intend to go west in May.—Florence Ray, Paris Mich., Route 1.

Dear Uncle Ned:—May I join your merry circle? I have written before but my letter did not escape the waste paper basket. But I decided to try again. "If at first you don't succeed, try, try again." My birthday is the 31st of May. My age is between 13 and 16. The one that guesses my age correctly will receive a letter from me. I am 5 feet 4 inches tall, have light brown hair and blue eyes. I have one brother and two sisters. We have quite nice weather at present altho it has been rather cold. As my letter is getting rather long I will close. I wish some of the cousins would write to me. Your want-to-be niece,—Helen Lemmer, R. 1, Sterling, Michigan.

A BIT OF THIS AND THAT

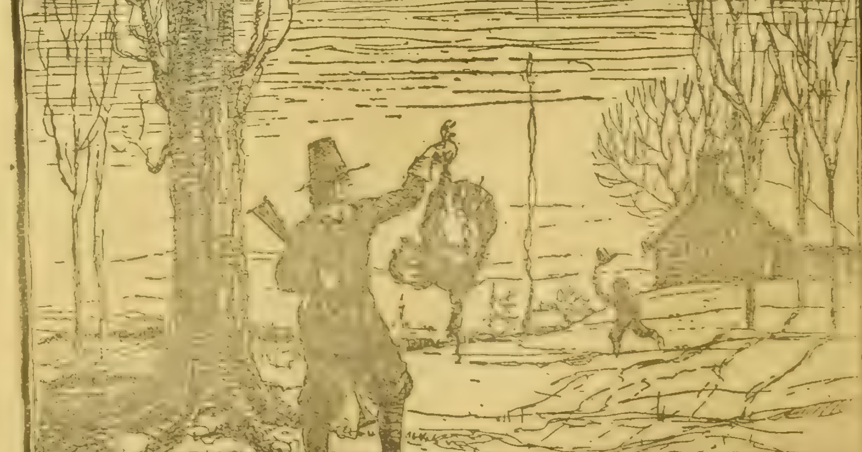
"Your money or your life!" cried the highway robber.

"Take my life," said Mike, "I'm saving my money for my old age."

If a room with eight corners had a cat in each corner, seven cats before each cat, and a cat on each cat's tail, how many cats would there be in the room? (Ans.) Eight.

Perhaps the most curious difinition of a net was that of an Irish lad who called it "a lot of holes tied together with strings."

Neatness is a good thing, but a Boston boy who copied all the autograph signatures in an autograph album and then threw away the originals, was going a little too far.



Thanksgiving morning in the days of our forefathers

RECIPES

(Continued from page 15.)

one containing boiling water, and stir constantly with a fork or wire whisk until butter is melted; then add second piece of butter, and as it thickens, add the third piece. Add water, cook one minute, and season with salt and cayanne. If mixture curdles, add two tablespoon of heavy cream.

Onions in Cream.—Put onions in cold water and remove skins while under water, drain, put in sauce-pan, and cover with boiling water; boil five minutes, drain, and cover again with boiling salted water. Cook one hour or until soft, but not broken. Drain and add a thin white sauce or cream seasoned with salt, pepper, and butter. This makes a nice vegetable to go with the Thanksgiving dinner.

Creamed Cauliflower.—Remove leaves, cut off stalks, and soak thirty minutes (head down) in cold water to cover. Cook (head up) twenty minutes or until soft in boiling salted water; drain and separate flowerets, and reheat in cream sauce.

Cauliflower a la Hollandaise.—Prepare as for creamed cauliflower, using Hollandaise Sauce instead of cream sauce.

Baked Onions.—Twelve good sized onions, one tablespoonful of margerine, one tablespoonful salt, one-eighth teaspoon paprika, two teaspoonfuls honey or brown sugar, toast strips, parsley.

Peel the onions, cut in halves crosswise, and place in a buttered casserole. Add the seasonings (no water) and bake one and one-half hours, in a moderate oven at 400 F. Serve with strips of hot, buttered toast to absorb any gravy and garnish with parsley dipped in vinegar. Enough to serve four.

The Runner's Bible

Let us come before His presence with thanksgiving.—Ps. 95:2.

Enter into His gates with thanksgiving, and into His courts with praise. Give thanks unto Him, and bless His name. For the Lord, is good; His mercy endureth forever; and His faithfulness unto all generations.—Ps. 100:4.

In all thy ways acknowledge Him and He will always make plain thy paths. —Prov. 3:6.

—The ever grateful heart is in harmony with the activity of good, and its needs are always supplied. The remark is often heard, concerning those in perpetual want, "You need not expect gratitude from that class", the truth is "that class" is composed of the habitually unthankful who ignoring God and his laws are adrift and ever in want.

WORLD EMANCIPATION

(Continued from Page 11)

conception of a world for Christ.

But the answer is in the making. Such statesmen as Wilson, Taft, Herrick, and others, are reading our constitution in the international spirit. And churchmen are reading the church's charter anew. Formerly, we were wont to read it: "The world for Methodists," or "Baptists," or for another of two-hundred different sects. But now it is, "The world for Christ." We have read out churchianity and read in Christianity. We have read out unfriendly sectarianism, and read in concerted action in a unity of purpose. Surely the time is here when "salvation will he appoint for walls and bulwarks" thruout the world if we will have it so.

Certainly, the day is here when we must see that discord, havoc, and tragedy are wrought because we are not answering Christ's prayer for unity and love. The day is here when a united Christendom should take on apostolic zeal for world prohibition, peace, purity, and brotherhood. This is "Thy Kingdom come on earth." This is Paul's "the liberty of the glory of the children of God." And would we dare to believe that this is possible of achievement in the next generation, if we will pay the price in money and men thru allied action of the churches? But all this awaits a renewal of the vision and leadership after Christ's own prayer and purpose.

OH MONEY! MONEY!

(Continued from page 10.)

why he felt su[illegible] rested and at peace with all mankin[illegible] ven as the conviction came to him. however he was suddenly aware that everything was not, after all, peaceful and harmonious.

At the table Mr Duff and his daughter were arranging the Bible and the papers. Miss Maggie suggested piles in a certain order: her father promptly objected, and arranged them otherwise. Miss Maggie placed the papers first for perusal: her father said "Absurd!" and substituted the Bible. Miss Maggie started to draw up a chair to the table: her father derisively asked her if she expected a man to sit in that—and drew up a different one. Yet Mr. Smith, when he was finally invited to take a seat at the table, found everything quite the most convenient and comfortable possible.

Once more into Miss Maggie's face he sent a sharply inquiring glance, and once more he encountered nothing but unruffled cheerfulness.

With a really genuine interest in the records before him, Mr. Smith fell to work then. The Bible had been in the Blaisdell family for generations, and it was full of valuable names and dates. He began at once to copy them.

Mr. Duff, on the other side of the table, was arranging into piles the papers before him. He complained of the draft, and Miss Maggie shut the window. He said then that he didn't mean he wanted to suffocate, and she opened the one on the other side. The clock had hardly struck three when he accused her of having forgotten his medicine. Yet when she brought it he refused to take it. She had not brought the right kind of spoon, he said, and she knew perfectly well he never took it out of that narrow-bowl kind. He complained of the light, and she lowered the curtain; but he told her that he didn't mean he didn't want to see at all, so she put it up halfway. He said his coat was too warm, and she brought another one. He put it on grudgingly, but he declared that it was as much too thin as the other was too thick.

(Continued in December 8th issue.)

RADIO DEPARTMENT

FARM BUREAU RADIO PROGRAM

Station KYW, Chicago, Central Time
8:01 P. M. Wave Length, 536

Nov. 27—"Co-operative Marketing of Wheat" by Walton Peteet, director of Co-operative Marketing, American Farm Bureau Federation, "Farm Films", by D. O. Thompson, president, Homestead Films, Inc.

Dec. 4—"The Farm Problem an International Problem" by C. T. Crofton, State Speaker Illinois Farmers' Institute.

"Farm Bureau Service to a Community" by J. W. Coverdale, secretary, American Farm Bureau Federation.

M. A. C. WILL TALK TO FARMERS BY RADIO

RADIO as an agent of the Michigan Agricultural College extension service will be tried out this winter, according to plans of a committee recently appointed by Acting-President R. J. Shaw. The arrangements contemplate the use of the college station, WKAR as an integral part of the institution's educational service.

To make certain that the radio gives good service , it has been especially equipped, and its sending radius extended to 2,000 miles.

The incomplete plans provided for the broadcasting on specified nights of extension talks, covering matters of particular interest to Michigan farmers. Talks on engineering and matters of general interest also will be given. No decision has been reached on the question of providing entertainment with the extension talks.

Station WKAR now is used at noon each week day for the sending of market and weather news.

WILL BROADCAST FROM WRC WASHINGTON, D. C.

ARRANGEMENTS have been completed for broadcasting farm bureau programs one night each week from Washington, D. C. The Washington station WRC will broadcast on Monday night at 8 o'clock, Washington time.

The Washington programs will begin on November 26 with a fifteen minute talk by Edwy. B. Reid, assistant Washington Representative of the farm bureau.

The opening of the Washington radio program is a second step in the plan of the farm bureau to have the farmer's voice on the air each night of the week. It is hoped that one more eastern and two western radio stations will soon be broadcasting one night each week a farmer's story.

FREE BOOK ABOUT CANCER

The Indianapolis Cancer Hospital, Indianapolis, Indiana, has published a booklet which gives interesting facts about the cause of Cancer, also tells what to do for pain, bleeding, odor, etc. A valuable guide in the management of any case. Write for it today, mentioning this paper. (Adv

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Stops Colds in 24 Hours

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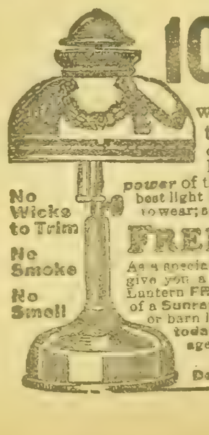

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FUR DEPARTMENT

MAKING "NOBODY'S FOOL" OF YOUR SON

GIVE a little attention to this business of trapping and you will see how it holds a liberal business education for that boy of yours—the apple of your eye! He will be getting his training in such a fascinating way that he will never realize that he's being taught; and do you know of any better way of teaching?

Watch the way he sails into this business venture of his. He is out on the big job before and after school with an enthusiasm that will warm your heart. Who ever saw a red-blooded youngster without a down-right itch for nature—the woods and its inhabitants?

Think it over, a little, and you will see it broaden him and at the same time make him a real fan for the country:

That boy is embarking on an honest-to-goodness business of his own; so his chest swells a bit—as is proper and healthful—when he realizes this. He studies the fur lists from the big St. Louis fur houses, figuring out in his own way where is the best market for his product—which firm looks like the squarest deal for him. Developing a little competitive alertness right there, you see.

The thing fascinates him. Imposing checks are made out in his name. He needs more traps and bait—he orders them by mail and he takes care of his income, appreciates it and makes it work for him.

He now has an interesting market to study, just as his Dad has. He's a producer. Progressive, to be reckoned with! His affairs are bringing him in touch with the outer business world in a way that will be invaluable to him when he takes over the farm and has to watch his step every day as you do now.

His fur houses keep in touch with him instructing him not only in every marketing advantage but in the conservation of his assets. He learns that he can't expect to have any business left if he doesn't look ahead—use sense in the matters of how and when he traps and how to guard and stimulate the increase of the fur bearers that his business relies on. He not only acquires foresight, but in this phase of the business is wrapped up a lot of sound, manly principle.

Give him his start this way: Lend him enough to buy the few essentials necessary for a start. Let him exercise his ingenuity to get more complete equipment as his needs become greater. See that he gets in touch with the reliable fur houses that advertise in your own farm paper. Watch the gleam in his eye when you tell him you expect him to take up that note promptly when due.

He'll never grow up a piker!

ONE WAY TO FOOL MR. SKUNK

NOBODY loves a skunk. He is an industrious advertiser, and sometimes when he has been advertising too energetically, no one cares to have anything to do with him.

Under certain favorable circumstances, however, it is easily possible to get around that. One requirement is that the trap must be set within reasonable distance of a stream or other body of water. Here is the way a forest ranger used to operate under those conditions:

In setting a trap for skunk he always attached to it a stout wire about twelve feet long. The length of the wire can be increased according to the timidity of the trapper, or his reluctance to associate too closely with his quarry.

In making his rounds, this ranger always carried a weight to which was fastened a wire loop two or three inches in diameter. When he came to a catch which—as sometimes happens—had failed to perform up to expectations, Bud would get the end of the long wire and carefully drag skunk, trap and all to the nearest water. Usually the skunk behaves himself under these circumstances. When he was all set with Mr. Skunk right alongside the bank of the water, Bud would slip the wire loop of the weight over the end of the long wire which he had in his hand, and let it run down the wire to the trap. Then by a bit of engineering he would trip his outfit off into the river. Of course the weight drowned the skunk, and under those circumstances he doesn't enter the usual protests.

On one occasion one of these drowned skunks froze so hard that it was impossible to skin him; and when he was brought into the house and put where he would thaw, there wasn't a suspicion of an odor in the room. It's not nearly the job skinning a skunk so treated.

UNCLE RUBE SPINACH SAYS

JUST GIRLS AN' US

SOMETIMES we wonder why nice girls git to be ol' maids. Again we wonder why girls not so nice git married an' divorced all inside of one little year—365 days—for lots of 'em fix the time.

Good friends, why is this thus? Now the question has been asked an' as I ans'er all questions, I'll ans'er this. Girls don't git married jest 'cause a feller don't know what he's goin' to meet up with next mornin'.

You know how 'tis—girls put so darned much paint, or what ever it is, onto their faces that nobody knows what they look like in the nat'ral, an' so the young fellers are kinda shy—they don't want to grab a pig in a sack—other wise speakin' they kinda wanta know what they're gittin'. The marriage game, in some cases is kinda serious—some folks take it that way at least an' so I say young fellers show purty good judgement when they turn down a painted female. Why don't you know you can paint an old house or barn or even a Ford an' make it look like new. It ain't new—its shattered in places, the feller 'at buyes it is stung. So with our painted women—they put the enamel on to make 'em look like new. But after years an' years we git to see through the paint—we know women for jest what they are an' let me say right here an' now, God made woman perfect. He didn't paint her, no not at all.

An' when our young woman puts the paint on they try to improve God's handiwork. It can't be did, young folks. He made us all perfect as He saw it and you can't improve it any more'n you can improve the beauties of Yellowstone Park or any other of God's own handiwork.

I read jest a few days ago of a nurse 'at got somethin' like ten thousand dollars from a doctor jest 'cuse he kissed her. Now kisses at that price are way out of my reach. Still an' all, without paint on 'em they might be worth the money.

But you see, our girls protect 'emselves. Fresh paint should be hung onto the lips of two-thirds of our girls an' jest open for business onto the rest of 'em.

Oh yes, sure they're fine girls—the Lord never made any finer but most of 'em paint an' powder jest the same. An' taken altogether, that's that. Cordially yours.—UNCLE RUBE

NEW LAMP BURNS 94% AIR

Beats Electric [illegible]

A new oil lamp that gives an amazingly brilliant, soft, [illegible] better than gas or [illegible] tested by the [illegible] leading universities and [illegible] superior to 10 ordinary oil [illegible] without odor, [illegible] or noise [illegible] pumping up is simple, clean, [illegible] burns 94% air and [illegible] common kerosene (coal oil).

The inventor, [illegible], 609 W. Lake St., Chicago, Ill., [illegible] to send a lamp on a 10 day's FREE trial, or even to give one FREE to the first user in each locality who will help him introduce it. Write him to-day for full particulars. Also ask him to explain how you can get the agency, and without experience or money make $250 to $500 per month. (Adv.)

Poultry for Profit

FEEDING FOR EGG FERTILITY

This year I have not had any luck at all with my geese. I have two layers and a gander. Geese laid about forty eggs and only three fertile. Can you tell me what is wrong, as eggs were all taken care of? I don't know how old the geese or gander are and would like to have you give me all the information available.—Mr. E. M., Munith, Mich.

—Our expert water fowl breeders claim that low fertility and hatchability of geese eggs can in most cases be attributed to methods of feeding. They consider heavy feeding of cracked corn detrimental from the standpoint of breeding, and usually recommend eliminating most of the cracked corn about two weeks prior to the breeding season. Wheat and oats should form the basis of the ration for geese if high fertility and hatchability is desired.

Usually infertility is charged back to the male whereas the hatching quality of fertile eggs is accredited to the female. This might indicate that the gander referred to is not particularly strong as a breeder and probably it would be advisable to introduce new blood. Access to water of course, usually improves the hatching quality of the eggs but heavy corn feeding is considered a distinct detriment, in the case of breeding stock.—E. C. Foreman, Professor of Poultry Husbandry, M. A. C.

CAUSED BY OVERCROWDED CONDITIONS

Can you give me any information in regard to the disease amongst my poultry? The springers seem to lose control of their legs, and wings droop, they fall on their backs and cannot get up for some time, yet they eat all they can reach. At least six have it, starting with one. They are fat in general. I feed corn, oats, rye and wheat, ground and have them on range.—A. D., Lupton, Michigan.

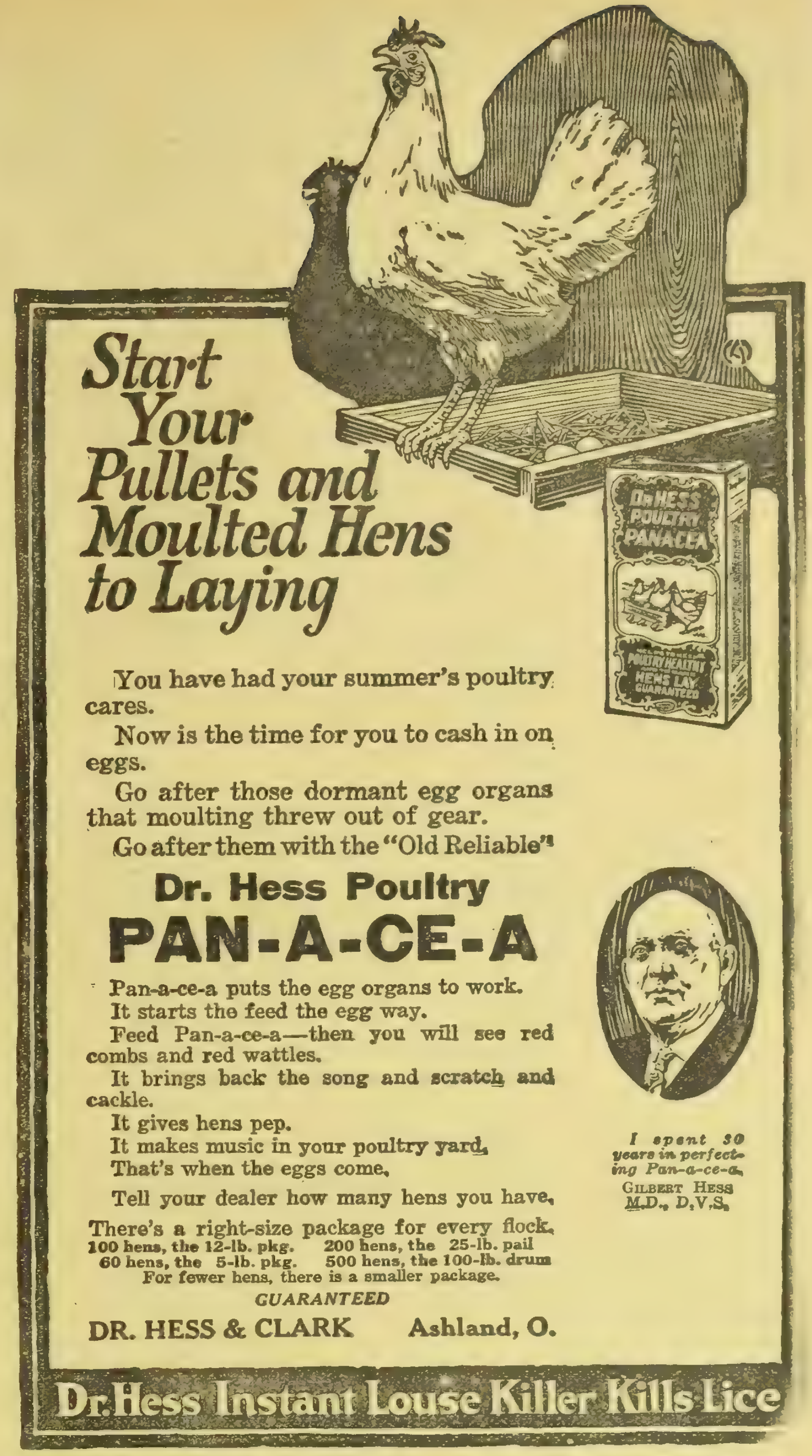
—The leg weakness which is now prevalent in the flock of springers is typical of an overcrowded condition, especially where the chicks have not been induced to roost, at an early age. In the artificial brooding of chicks it is highly important that the colony or brooder house be well ventilated and maintained in a clean sanitary condition. Where the chicks are permitted to huddle on the floor, a number of the members of the flock will develop a weakened condition which is reflected in leg weakness, drooping wings, and emaciation, and an apparently run down condition. These birds usually have good appetites and respond to better methods of management. They do not, however, make very economical gains.

In this particular flock I would suggest segregating all light weight specimens giving them a fattening mash consisting of 50 per cent corn meal, 20 per cent middlings, 20 per cent ground oats and 10 per cent bran. This should be moistened with skim milk and the chicks fed all they will consume in fifteen minutes, three times daily. These birds should be marketed when they have fleshed sufficiently for roasters, and should not be used for breeding purposes. The other members of the flock should be placed in permanent winter quarters with ample roosting room in addition to the other requirements of a satisfactory laying house which includes dryness, light and ventilation.—E. C. Foreman, Professor of Poultry Husbandry, M. A. C.

FINE BUTTER PRODUCTION RECORD

AN exceptional record for butter production was made recently by Wabeek Fancy 2d of J. B. Jones herd, of Romeo, according to the advanced registry office of The Holstein - Friesian Association of America. At the age of five years this cow produced 548.1 pounds milk containing 21.289 pounds butterfat equal to 26.61 pounds butter in seven days.

Breeders of dairy cattle who are in a position to put time and special attention on testing work have enhanced the value of their animals greatly by the official records they have made. Dairymen whose facilities for record making are somewhat limited are given an opportuntiy by the advanced registry department to determine the production of their cows through the farmers' and dairymen's classes.



Dr. Hess Poultry Panacea
Poultry Health Hens Lay Guaranteed

Start Your Pullets and Moulted Hens to Laying

You have had your summer's poultry cares.

Now is the time for you to cash in on eggs.

Go after those dormant egg organs that moulting threw out of gear.

Go after them with the "Old Reliable"

Dr. Hess Poultry
PAN-A-CE-A

Pan-a-ce-a puts the egg organs to work.
It starts the feed the egg way.
Feed Pan-a-ce-a—then you will see red combs and red wattles.
It brings back the song and scratch and cackle.
It gives hens pep.
It makes music in your poultry yard,
That's when the eggs come,
Tell your dealer how many hens you have,

There's a right-size package for every flock.
100 hens, the 12-lb. pkg. 200 hens, the 25-lb. pail
60 hens, the 5-lb. pkg. 500 hens, the 100-lb. drum
For fewer hens, there is a smaller package.

GUARANTEED

I spent 30 years in perfecting Pan-a-ce-a.
GILBERT HESS M.D., D.V.S.

DR. HESS & CLARK Ashland, O.

Dr. Hess Instant Louse Killer Kills Lice

MICHIGAN CROPS

TREATING BEANS TO KEEP BUGS OUT

Please give me the formula for treating beans to keep bugs out of them.—S. V. C., Litchfield, Mich.

—I would say that there is no preventative measure so far as I know that looks at all good to me. Beans kept at a very low temperature will, of course, not be attacked, at least the insect will become dormant as long as the beans are kept very cold, but if there happens to be any bugs present they will start working as soon as it warms up.

It has also been suggested that for seed beans they may be packed in air-slaked lime. I have never tried this and do not think much of it.

I would put the beans in a cold place and then watch them, examining them from time to time for insects and if the weevils do appear then I would fumigate in the orthodox manner with carbon disulphide, relying on the destruction of the bugs when they appear, rather than on the prevention of injury. The method of treatment is as follows:

The treatment for beans containing weevils or other insects is comparatively easy, providing the beans are in tight bins or barrels, capable of being tightly and quickly closed. Old carpets, blankets, etc., often will be found useful in helping to make the bins tight.

Measure the inside of the bin, counting in the air space above the beans if the bin is not entirely full, and place some old pans or plates on top of the beans. Then put in the pans two drams of liquid carbon disulphide for every cubic foot of space in the bin, and quickly close the bin. Thus a pound of the liquid will suffice for about fifty cubic feet, or a little more, of space, or for about fifty bushels of grain. This treatment is far more effective during warm weather than in cold. During severe cold weather, the insects are dormant and resist the action of the fumes quite successfully.

The bin should remain tightly closed from twenty-four to forty-eight hours, a longer exposure being likely to injure the germinative power of the beans.

The liquid carbon disulphide, on being liberated, will be quickly transformed into gas, which, being heavier than air, settles to the bottom and fills all the air spaces between the seeds. The liquid costs about sixty cents for a single pound, if purchased at retail. The work must be done in the day time, away from lamps, stoves or fire of any sort. No fire must be allowed to come near until everything has been thoroughly aired out, for the gas fumes are very explosive when mixed with the air. The beans should be shoveled over several times. Great care must be observed to breathe as little as possible of the fumes, as they are very poisonous and will produce death as easily among men as among insects.

Carbon disulphide may be obtained of the makers at about six cents a pound in fifty pound drums. It is also useful for killing woodchucks, gophers, and other vermin. The work should be done away from other farm buildings, since the insurance is likely to lapse during the operation.—R. H. Pettit, Professor of Entomology, M. A. C.

POULTRY BREEDER'S DIRECTORY

Advertisements inserted under this heading at 30c per agate line, per issue. Commercial Baby Chick advertisements 45c per agate line. Write out what you have to offer and send it in. We will put it in type, send proof and quote rates by return mail. Address The Michigan Business Farmer, Advertising Department, Mt. Clemens, Michigan.

PULLETS, HENS AND COCKERELS
S. C. White Leghorns and S. C. and R. C. Black Minorcas. Must make room before cold weather. About ready to lay.
LAPHAM FARMS, Pinckney, Mich.

High Grade, Utility Cockerels For Sale—April hatched—White Wyandottes, Barred Rocks and White Leghorns. C. W. Heimbach, Big Rapids, R. 5, Michigan.

LEGHORNS

LEGHORNS
S. C. Buff Leghorn Hens, Pullets and Cockerels. Hens and pullets $2.50 each; cockerels $3.00 to $5.00 each. Show birds a matter of correspondence. LAPHAM FARMS, Pinckney, Mich.

FOR SALE—LARGE IMPORTED SCOTCH White Leghorn Stock Cockerels and Cock Birds. Also exhibition and bred-to-lay S. C. Buff Leghorns. FAIRVIEW POULTRY FARM, C. J. Sweet, Prop., Ann Arbor, Michigan.

RHODE ISLAND REDS

RHODE ISLAND REDS TOMPKINS STRAIN to make room for young stock. I will sell after November 1, 1923, 50 2 year old hens at $2.00 each; 25 1 years old hens at $3.00 each; cockerels at $2.50 and up. All these cockerels are from my best 3 year old hens that layed 205 eggs or better in their pullet year. Quality breeder of Rhode Island Reds.
WM. H. FROHM, New Baltimore, Mich., R. 1.

WHITTAKER'S R. I. REDS. MICHIGAN'S greatest color and egg strain. Cockerel price list ready in September. Improve your flock with Whittaker's red cockerels.
INTERLAKES FARM, Box 4, Lawrence, Mich.

Fine Rose Comb R. I. Red Cockerels $2.00 Each. Giant Bronze Turkeys, toms $9.00; hens $7.00. Mrs. Albert Harwood, R. 4, Charlevoix, Mich.

WYANDOTTES

March Hatched Rose Comb White Wyandotte Cockerels, Fishel Strain. Beauties at $3 each. Mrs. Tracy Rush, 104 Grover Ave., Alma, Mich.

ORPINGTONS

BUFF ORPINGTON COCKERELS FOR SALE. Cooks Strain.
A. J. BREWBAKER, Elsie, Michigan.

PLYMOUTH ROCKS

BARRED PLYMOUTH ROCK COCKERELS $5 each. From first prize winning strain at Chicago and Detroit. J. A. Barnum, Union City, Mich.

PARK'S STRAIN BARRED ROCK COCKERELS from extra selected stock headed by M. A. C. cockerels. April hatched, $4.00 each. 3 or more $3.50 each. Shipped approval and prepaid on orders received before December 15.
REESE BROS., Williamston, Michigan.

TURKEYS

Pure Bred Mammoth Bronze Turkeys, Champion strain. Large and vigorous. Unrelated stock.
Mrs. B. Smatts, R. 1. East Jordan, Mich.

PURE BRED BRONZE TURKEYS. TOMS $8.50 Hens $6.50.
FRED. A. MERITHEW, Deckerville, Michigan.

BOURBON RED TURKEYS: THE BEST SIDE line for a farm. We sold $400.00 worth last year. Write for prices, etc.
R. W. ROBOLTHAM, Hesperia, Michigan.

FOR SALE UNRELATED STOCK. BOURBON Red turkeys. Brown and White Chinas and Canadian wild geese. Black Muscovy, White Pekin and wild Mallard Ducks. Pearl Guineas.
J. D. CALLAGHAN, Fenton, Michigan, R3.

LARGE VIGOROUS BOURBON RED STOCK Turkeys. Axtell Strain.
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BOURBON RED TURKEYS STATE FAIR WINNERS.
THOMAS G. CALLAGHAN, Fenton, Michigan.

FOR SALE PURE BRED **NARRAGANSETT TURKEYS**
MRS. C. W. BEEBE, Adrian, Mich., R7.

MAMMOTH BRONZE TURKEYS Hens $7 Toms $8
D. F. MARSHALL, Beulah, Michigan.

MAMMOTH BRONZE TURKEYS PURE BRED. For breeding only. Write me.
JOHNSON TURKEY FARM, Six Lakes, Michigan.

HIGHEST PRICES PAID FOR LIVE AND Dressed Poultry, Veal, Rabbits, etc. A square deal always. Write to,
C. E. McNEILL & CO.
325 W. South Water St., Chicago

BREEDERS DIRECTORY

Advertisements inserted under this heading for reputable breeders of Live Stock at special low rates to encourage the growing of pure-breds on the farms of our readers. Our advertising rate is Thirty Cents (30c) per agate line per insertion. Fourteen agate lines to the column inch or $4.20 per inch, less 2% for cash if sent with order or paid on or before the 10th of month following date of insertion. SEND IN YOUR AD AND WE WILL PUT IT IN TYPE FREE, so you can see how many lines it will fill. Address all letters,
BREEDERS DIRECTORY, MICHIGAN BUSINESS FARMER, MT. CLEMENS, MICH.

CLAIM YOUR SALE DATE

To avoid conflicting dates we will without cost, list the date of any live stock sale in Michigan. If you are considering a sale advise us at once and we will claim the date for you. Address, Live Stock Editor, M. B. F., Mt. Clemens

G. P. PHILLIPS
THE GOLDEN RULE AUCTIONEER
Bellevue, Michigan
Pedigreed Sales a Specialty.
Write, wire or call for terms and dates.

CATTLE

HOLSTEINS

HERD SIRE FOR SALE AT FARMERS PRICES. T. B. Tested guaranteed every way. Pontias Romeo Dutchland DeKol No. 270204 H. F. H. B. sire Pontiac Dutchland 2'd Dam Pontiac Osiris. **H. S. BOWERMAN, Two Miles South of Romeo, Michigan.**

27 LB. PURE BRED HOLSTEIN BULL whose sire's five nearest dams averaged 30 lbs. butter, Dam's record 27 lbs. butter, 652 lbs. milk in 7 days. Also 2 heifers 24 months old. One due in April, other in July. Their sire's dam made 28 lbs. butter, 652 lbs. milk in 7 days. HENRY MADDELEIN, Maxwell Station, R. 4, Detroit, Michigan.

AYRSHIRES

FOR SALE—REGISTERED AYRSHIRE bulls and bull calves, heifers and heifer calves. Also some choice cows.
FINDLAY BROS., R 5, Vassar, Mich.

HEREFORDS

Registered Purebred Herefords

Produce Baby Beeves in the shortest possible time and in the most economical manner. They realize extreme top prices at a year old. Under the Sotham System 69 head from nine producers in one week averaged $95.60 per head, weighing from 750 to 850 lbs. It is to your interest to investigate this system. Repeater, Fairfax, Beau Donald Breeding at practical prices for raising beef. Terms.
T. F. B. SOTHAM & SONS
(Herefords since 1839) Saint Clair, Mich.

We Have Bred Herefords Since 1860

Spring calves for sale. Write us your wants. A few Chester White Boars and Sows for sale.
CRAPO FARM, Swartz Creek, Michigan.

ANGUS

WE HAVE SOME FINE YOUNG ANGUS BULLS from International Grand Champion Stock at reasonable prices. **E. H. KERR & CO., Addison, Mich.**

RED POLLED

FOR SALE—REGISTERED RED POLLED Cattle. Both Sex.
PIERCE BROS., R. 1, Eaton Rapids, Michigan.

GUERNSEYS

GUERNSEY BULL CALVES $50. A. R. BREEDING. 50% to 75% breeding of Norman's Missaukee Red Rose. Bull soon ready for service $100.
A. M. SMITH Lake City, Michigan.

FOR SALE. A Few Choice Registered Guernsey heifers due in Dec. and Jan. at very reasonable prices. **Twin Brook Farm, Washington, Mich.**

JERSEYS

REG. JERSEYS, POGIS 99th OF H. F. AND Majesty breeding. Young stock for sale. Herd fully accredited by State and Federal Government. Write or visit for prices and description.
GUY C. WILBUR, BELDING, Mich.

FOR SALE: JERSEY BULLS, HOOD FARM BREEDING.
J. E. MORRIS, Farmington, Michigan

SHORTHORNS

FOR SALE: REGISTERED SHORTHORN Bull, 4 years old, of good size and dark red in color. Kind and gentle. Wonderful herd sire. Price right. If interested address
L. A. KING, R. 1, Harbor Springs, Michigan.

FOR SALE: FOUR REGISTERED BRED two year old Shorthorn heifers. Tubercular tested. Ten cents per pound. Inquire
PIPER & GOODALE, East Tawas, Michigan.

REGISTERED MILKING SHORTHORN CATTLE, Shropshire and Delaine sheep. Stock and prices right. Write wants. Also car load feeding cattle.
CLOVER CREST RANCH, Tawas City, R3, Mich.

RAISE SHORTHORNS WITHOUT HORNS Like Kelley does. U. S. Accredited Herd No. 28945. For description and price write,
L. C. KELLY & SON, Plymouth, Michigan.

SWINE

O. I. C.

O. I. C'S: 75 LAST SPRING PIGS, PAIRS not akin. From 3 good strong sires. Also fall pigs. Recorded free. ½ mile west of depot.
OTTO SCHULZE & SONS, Nashville, Mich.

CHESTER WHITES

CHESTER WHITES: FALL PIGS SIRED BY The Pilot—White King two great herd boars. My herd represents the best in Chester bloodlines. Special offer for orders taken during November. Write **CLARE V. DORMAN, Snover, Michigan.**

HAMPSHIRES

REG. HAMPSHIRE HOGS FOR SALE Write your wants to
JOHN W. SNYDER, St. Johns, Michigan.

DUROCS

AT THE STATE FAIR WE SHOWED ONE of the largest boars. He won 3rd in his working clothes (no fitting). He is back home and we want you to have a gilt or sow bred to this fine Colonial Boar. Write us.
SCHAFFER BROS., R. 4, Oxford, Michigan.

A Few Choice Duroc Boars and Gilts the Big kind. Ready for service. Price $15.00. Registered.
F. A. LAMB & SON, Cassopolis, Michigan.

POLAND CHINAS

BIG TYPE P. C. SEVERAL GOOD SPRING Boars. Sired by an extra good Son of Peter Jones. Also fall pigs either sex.
W. BREWBAKER & SONS, Elsie, Michigan.

SHEEP

FOR SHROPSHIRE RAMS WRITE OR CALL ON
DAN BOOHER, R. 4, Evart, Michigan.

WEST MARION OXFORDS. 25 YEARS Breeding. The best stock for sale. Both sex.
WM. VAN SICKLE, Deckerville, Michigan

FOR SALE—Reg. Oxford Rams and Ewes. Satisfaction guaranteed. Write your wants to Geo. T. Abbott, Palms, Mich. Phone Deckerville 73-3.

FOR SALE 200 FEEDER LAMBS FOR Delivery November 30th.
A. F. LONGPRE, Curran, Michigan.

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GOATS FOR SALE—FOUR REGISTERED Angora Does.
M. E. HESS, 111 N. Johnson Ave., Pontiac, Mich.

DOGS

Fire Having Destroyed Our Kennels, We Are offering for quick sale Reg. Collie Puppies at reduced prices. **Silvercrest Kennels, Gladwin, Mich.**

GUINEA PIGS

FOR SALE: GUINEA PIGS OF ALL AGES prices very reasonable. Write us.
HUGO CARLSON, Baraga, Michigan, Box 58.

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(If it is a Renewal, mark X here ☐ and if possible send the address label from this or any recent issue to avoid mistakes.

DAIRY and LIVESTOCK

MEETINGS AT THE INTERNATIONAL

NATIONL Association meetings to be held during the week, December 1st to 8th, are given herewith. Place of meeting and time follow the name of the association:

Friday and Saturday, Nov. 30 and Dec. 1st—American Society of Animal Production, Hotel Sherman.

Monday, December 3rd—International Crop Improvement Assn., Percheon Society of America, Assembly Hall, 8:00 P. M.; National Swine Growers' Assn., Sherman Hotel, 8:00 P. M.

Tuesday, December 4th—Hampshire Swine Record Assn., Sherman Hotel, 9:00 A. M.; State Leaders of Boys' and Girls' Club Work, Assembly Hall, 9:30 A. M.; American Assn. of Importers and Breeders of Belgian Draft Horses, Stock Yard Inn, 1:00 P. M.; International Crop Improvement Assn., Assembly Hall, 2:00 P. M.; American Clydesdale Assn., Clydesdale office, 4:30 P. M.; National Assn. of Stallion Registration Boards, Stock Yard Inn, 6:00 P. M.; American Rambouillet Assn., Stock Yard Inn, 6:00 P. M.; American Shire Horse Assn., Record Bldg., 7:30 P. M.; American Shropshire Assn., Assembly Hall, Rec. Bldg., 7:30 P. M.; American Polled Shorthorn Assn., Hotel Sherman, 8:00 P. M.; Chester White Swine Record, Ft. Dearborn Hotel, 8:00 P. M.; International Live Stock Exposition Assn., Record Bldg., 8:00 P. M.

Wednesday, December 5th — Horse Association of America, Blackstone Hotel, 10:00 A. M., 2:00 and 7:30 P. M.; Red Polled Cattle Club, Stock Yard Inn, 2:00 P. M.; Milking Shorthorn Society, Stock Yard Inn, 3:00 P.M.; American Suffolk Horse Assn., Clydesdale Office, 4:00 P. M.; American Southdown Breeders' Assn., Stock Yard Inn, 6:00 P. M.; American Shorthorn Breeders' Assn., Congress Hotel, 7:00 P. M.; American Duroc Jersey Assn., Sherman Hotel, 7:30 P. M.; American Oxford Down Record Assn., Record Bldg., 7:30 P. M.; Nat'l. Lincoln Sheep Assn., Amer. Sheep Br. Office, 7:30 P. M.; American Hampshire Sheep Assn., Record Bldg., 8:00 P. M.; Amer. Aberdeen Angus Assn., LaSalle Hotel (Red Room), 8:00 P. M.; American Galloway Assn., Clydesdale Office, 8:00 P. M.

Thursday, December 6th—Nat'l. Assn. of County Agricultural Agts., Hotel Morrison, 10:00 A. M., 2:00 and 7:00 P. M.; National Soybean Growers' Assn., Stock Yard Inn, 1:30 P. M.; Amer. Shetland Pony Club, Stock Yard Inn, 2:30 P. M.; Welsh Pony Club, Stock Yard Inn, 3:30 P. M.; Amer. Cotswold Association, Record Bldg., 5:00 P. M.; Nat'l. Society of Record Associations, La Salle Hotel, 6:00 P. M.; Continental Dorset Club, Amer. Sheep Br. Office, 7:30 P. M.

BREEDS OF DAIRY CATTLE

No. 3—Guernsey

THE GUERNSEY breed had its early development on the Channel Islands of Guernsey and Alderney, and at present cattle from either island are eligible to registry in the herd book of the American Guernsey Cattle Club. The origin of the breed is obscure, but it is probable that the parent stock came from Normandy, France, which is adjacent to the islands. Early livestock laws of the islands prevented the importation of livestock for any purpose except slaughter, and under these conditions, in the course of the last century, the cattle developed into a distinct breed.

The climate of the Channel Islands, being mild throughout the year, allows a long grazing season.

Although they come from the same parent stock, Guernseys are larger than their companion breed, the Jerseys, and are unlike them in some other respects, having been developed by men with different ideals.

Importations and Distribution

The first representatives of the breed were imported in the early part of the nineteenth century, but not until 1878 were efforts made to keep the breeding pure in this country by the establishment of a herd register. Since that time there have been importations almost every year, and the breed has maintained a steady growth in numbers and popularity. About 50 per cent of their numbers are found east of the Alleghanies, but they are spreading westward.

Characteristics

The characteristic colors of Guernseys are some shade of fawn and white. The farmer varies from a very light orange fawn to a deep reddish or brownish fawn. An orange fawn with white markings, the fawn predominating, is perhaps the most common. The under parts of the body, legs, and switch of tail are usually white. A buff nose and amber-colored horns of medium size are typical of the breed. A rich yellow secretion of the skin is most highly thought of by breeders and is considered as an indication of the quality of the milk, which is rich in fat and highly colored.

Guernseys possess a nervous temperment, but are quiet and gentle if properly handled and are not easily excited.

A lack of uniformity among Guernseys is perhaps the most serious criticism that can be made, but this defect is being remedied rapidly through the efforts of the breeders, and during the last few years a great improvement in this respect has been noted.

Guernseys are medium in size. The cows vary in weight from 900 to 1,400 pounds (average about 1,050 pounds); the bulls range from 1,400 to 2,200 pounds (average about 1,600 pounds). There is some resemblance between the Guernsey and the Jersey, but the former is larger and slightly coarser boned, with a deeper and more "rangy" body. The head also is somewhat longer and more narrow than that of the Jersey.

The birth weight of calves ranges from 60 to 85 pounds. Heifers reach maturity a little later than Jerseys and earlier than the other breeds.

Production

Milk from Guernsey cows is noted for its extremely yellow color and high percentage of butterfat. The fat globules are larger than those in milk from either Holstein or Ayrshire cows, and consequently the cream rises more rapidly upon setting. Guernseys are particularly adapted for the production of butterfat or cream or for rich milk at a special price.

Families

There are a number of well-developed families of Guernseys, of which the following are among the more widely known: May Rose, Glenwood, Masher's Sequel, Governor of the Chene, Yeksa, Tricksey, and Sheet Anchor.

VETERINARY DEPARTMENT

HAVE EXAMINATION BY VETERINARIAN

I have two Holstein heifers 18 months old that fail to come in heat. What can be done?—R. L. C., Hopkins, Mich.

—Occasionally one finds a heifer in which the external signs of heat are so obscure that they are overlooked by the herdsman. Rectal examination of the ovaries by a qualified veterinarian will reveal whether the animal is ovulating or not. If this is the condition in these two heifers, they might become pregnant by running with a bull. Occasionally failure to come in heat is due to lack of development of some one or more of the reproductive organs. This condition cannot be determined except by an examination by a qualified veterinarian.—E. T. Hollman, Associate Prof. of Animal Pathology, M. A. C.

LIKES M. B. F.

Enclosed you will find $1.00 to pay for the M. B. F. for two years. I thank you very much because you are working for the farmers' interest. There are not very many working for the good of the farmer now days. It seems as if almost everybody is working against them. Yours for success.--Wm. Jorgenson, Montcalm County, Michigan.

Poland China Ton Litter Makes High Weight

THE heaviest litter yet reported in the Michigan Ton Litter Contest was produced by V. J. Brown & Son, of Jonesville, Michigan, and weighed 2840½ pounds when they were 180 days old, October 18th. As most of the strong contenders for high honors in the contest have been weighed in, this litter is expected to win their producers the $50.00 cash first prize donated to the Michigan Ton Litter Club by Packing Companies of Detroit, and the $200.00 cash prizes offered by the Poland China Breed Promotion Committee. The pigs are pure-bred Poland Chinas and eligible to registration and have proven the efficiency of an improved pork machine, or well-bred pig, for converting feed into pork.

The litter represents practical pork production, as no unusual or uneconomic labor and methods were used on them. Their owners operate a large stock farm, feeding several carloads of hogs and lambs each year, and do most of the work themselves, leaving no time for labor that they did not think would pay for itself without any uncertain prizes. A carload of lambs were sheeping down corn in an adjoining field at the time the pigs were weighed.

The dam of the litter is "one of the largest sows in Michigan," says F. E. Haynes, a prominent Poland China breeder and owner of the litter's sire. She is of rugged medium type showing strong constitution and feeding capacity, an active disposition and easy movement. In fact, her owner admits she is a good fence jumper. She is four years old and had raised three previous litters, ranging from six to nine pigs raised.

She ran in the barn yard all winter, following dairy cows and picking most of her feed from their droppings. She received some ear corn and middlings and a little tankage with the other sows about six weeks before farrowing. Mr. Brown says he uses tankage to prevent the desire of sows to eat pigs and to make the pigs stronger at birth.

The litter of fourteen pigs was farrowed April 21st in a thoroughly cleaned farrowing pen where the straw was changed often. Four of the larger pigs were killed before they were a week old, leaving the two runts and eight larger pigs uniform in sizes. At the close of the contest the two weighed only 223½ lbs. a piece, while the eight averaged 229.2 lbs. each, The heaviest pig weighed 326 pounds.

During the suckling period the sow received corn, skimmed milk, tankage and middlings. The pigs began eating with their mother when about three weeks old. A creep was soon supplied where the pigs were fed a slop of skimmed milk, middlings and hominy separately from the sow. The sow and litter were kept separate from the other hogs in a small orchard on mixed pasture of alfalfa, sweet clover and blue grass. The pigs ran with their mother until ten or eleven weeks old.

A self-feeder was used from weaning time on, supplied at first with about equal parts of hominy and middlings, with 5 per cent of tankage added. Mr. Brown said the pigs seemed to especially care for the hominy. They received a limited amount of skimmed milk throughout except two weeks in early September when they had none. Some ear corn was fed after three months of age.

After harvest about the middle of July, no more hominy was fed. The feeder was filled with a ground mixture of rye, oats and a little wheat. the ear corn was increased and soaked shelled corn was used the last two weeks.

A mineral mixture of ground bone, lime and salt, as recommended by the Michigan Agricultural College, was kept before the pigs. They also had access to ashes and charcoal.

When the litter was four months old on August 21st, they weighed 1,493 pounds. During the remaining fifty-eight days, they nearly doubled their weight, gaining 1,347½ pounds, or an average of 2.32 lbs. per head per day. However, the pigs carried their weight well and though well finished were not over fat at the end of the contest.—V. A. Freeman, Extension Specialist in Animal Husbandry, M. A. C.

PRICE OF SILAGE PER TON

Could you give me the price per ton of silage in a silo?—C. D., Sandusky, Mich.

—Ordinarily we consider the price of good corn silage in the silo as worth approximately one-third the price of good mixed or clover hay. —O. E. Reed, Professor of Dairy Husbandry, M. A. C.

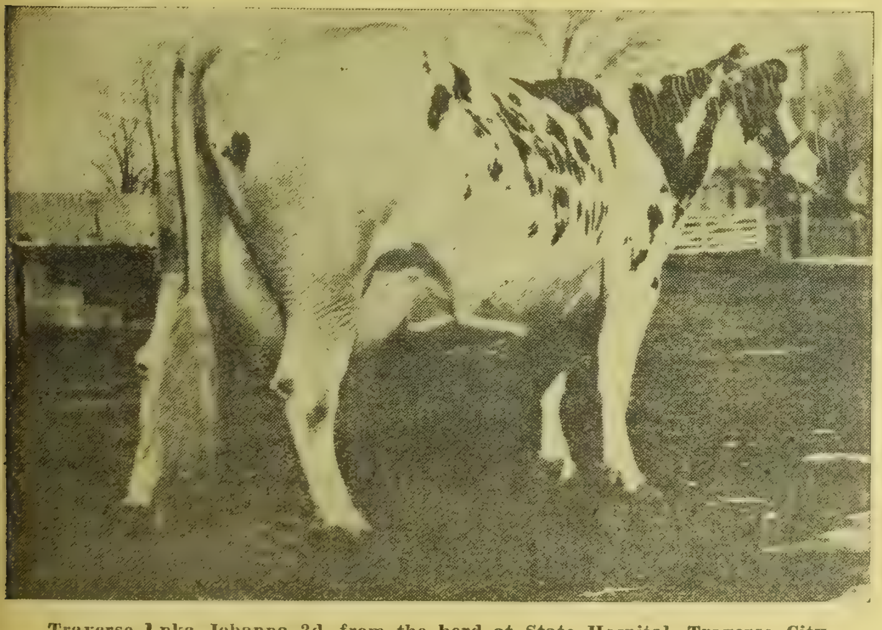
PAYS TO ADVERTISE

The "unprepared" speaker arose before the audience. He was to speak on the lives of Washington, Jefferson and Lincoln. Being somewhat forgetful, he had pinned their names on the inside of his coat on the right.

"Dear friends," he said, "I am about to speak of three great men whose names are indelibly printed on our minds; no true American can forget them."

Then, opening the left side of his coat instead of the right, and peeping in, he said: "I speak of Hart, Schaffner and Marx."

New Champion Holstein Butter Producer



Traverse Inka Johanna 2d, from the herd at State Hospital, Traverse City.

MICHIGAN has two new Holstein state butter producing champions, according to an announcement from the advanced registry department of The Holstein-Friesian Association of America. Both cows are in the herd of the State Hospital at Traverse City. Traverse Colantha Walker is the new state leader for ten months' production as a full age cow. Her record is 22,048.9 pounds milk containing 864.32 pounds butterfat, equivalent to 1,080.4 pounds butter. This record makes her the second highest producer of butter in her class in the United States. Her barn-mate, Traverse Inka Johanna 2d, is the new state champion in the junior four-year-old class for ten months' production. Her record is 22,400.2 pounds milk and 764.61 pounds butterfat—equal to 980.7 pounds butter.

Does Your Herd Suffer From *Contagious Abortion?*

Then you're the man I want to talk to. You've probably heard Contagious Abortion is incurable. Forget that, because it's no longer true.

Maybe you've tried to beat the disease in every way you knew of, but with no luck. Don't let that worry you. Just consider this fact:

Hundreds of breeders have stamped Contagious Abortion out of their herds with the aid of the Bowman Abortion Remedy. You may have heard about it, because it has saved thousands of dollars for dairymen and stockmen.

Bowman's Abortion Remedy will *Stop Your Losses*

The Bowman Abortion Remedy isn't one of those things that work wonders for the other fellow, but not for you. No, sir. I guarantee that the Bowman Remedy will rid YOUR herd of Abortion. It also eliminates retention of placenta, white scours and calf pneumonia. It is effective with either cattle or hogs.

Write me today

If Abortion is eating up your profits, investigate the Bowman Remedy now. Get all the facts about it--and detailed experience of men who have used it: Write me at once.

Guarantee

I guarantee to bring every cow or sow that is a breeder back to normal, healthy delivery if treated with Bowman's Remedy according to directions. In exceptional cases, where additional treatments are needed, I will furnish these free, except for shipping cost. For every animal Bowman's Remedy does not cure of Contagious Abortion, I will refund the cost of treatment.

ERICK BOWMAN, President.

ERICK BOWMAN
Discoverer Bowman's Remedy

Erick Bowman, President
Erick Bowman Remedy Company
240 N. Cedar St. Owatonna, Minn.

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Famous Black Gun Metal Shoe

A favorite of thousands. Extra wear, extra value. Roomy, good-looking sturdily made to the last stitch. Moderately priced. Your store has it.

Ask for No. 960.

Farmers Prefer Dependable H-B Shoes---

For 30 years our skilled shoemakers have been satisfying the middle states farmers with Dress and Service Shoes combining good looks with exceptional wearing qualities. A complete line for men and boys, including the H-B Hard Pan that wears like iron. Fairly priced, easy on your feet and pocketbook.

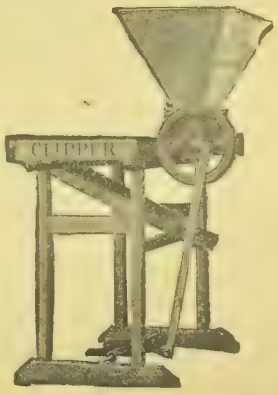
HEROLD-BERTSCH SHOE CO., Grand Rapids, Mich
Handsome booklet free.

Gertrude Vernon Ewalt
and her purebred Collie puppies

Pedigreed Scotch Collie PUPPIES
For CHRISTMAS

What better present for a real boy or girl than a beautiful Sable and White Collie Puppy? It's certainly an all year and a year after year present; It need not be shipped of course, until just befor CHRISTMAS. YES, Get started early. Write for Special prices.

WOLVERINE COLLIE FARM KENNELS
Dr. W. Austin W. Ewalt
Mount Clemens, Michigan



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— ON THE —
Clipper Foot Tread Bean Picker

Price $9.25 Each

Delivered freight prepaid. Save the culls and reduce dockage.

Catalogue and description on request.

A. S. FERRELL & CO , Saginaw, W. S., Mich.

MARKET FLASHES

MARKET SUMMARY

Bearish news fails to weaken grain market. Beans easy. Large supply of potatoes. Good demand for turkeys and supply moderate. Butter and eggs in demand and scarce. Cattle and hogs active and higher. Sheep lower although active.

(Note: The above summarized information was received AFTER the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press —Editor.)

FOOTE'S MARKET LETTER

BY W. W. FOOTE

Preparing for Winter

FARMERS have prepared for the long winter season, and corn husking is the last real hard work, this going forward where the weather permitted. Of course, some of the corn is wet, but this is belived to be of much smaller proportions than was at first reported. There is a fine large corn crop in the corn belt states, and undoubtedly it will be mainly used for stock feeding on the farms where grown. Farmers have cut their wood for the winter, and those living in parts of the country where wood lots abound are not worrying about the dearness of coal in the cities. The apples have been gathered and put away for family consumption all these cold months, and so have the potatoes and other vegetables, while all kinds of preserves and canned goods are stored in the cellar. Thank heaven, the farmers are not going to starve, even if the wheat crop turned out so large as to make the prices unsatisfactory. Hogs, too, are selling lower than they should, because too many were bred, but they are not a dead loss, and in many farming districts farmers are getting back to the old-time practice of killing a few hogs for fresh meats and cured hams and bacon. Some farmers, but not a great many, perhaps, are owners of hives of bees, and this is a side issue that helps out a lot at very small expense, except to the bees, furnishing some pocket money as well as furnishing the table with a delicious sweet for placing on hot biscuits. The farm implements are carefully stored away, the manure pile has been put where it will do the most good, and in the evenings after the chores are done the farmer and his family may plan for the new farm house or barns to be built next year, getting plenty of ideas from the architectural designs.

What About Wheat

That is the question which wheat growers everywhere are asking, and so far as can be seen now, about all that can be done is to see what cooperation can be accomplished in marketing the big crop harvested this year and to cut down the acreage for next year. A reduction in wheat lands from 62,000,000 to 50,000,000 acres is one of the changes urged by the production committee of the Wheat Council of the United States, during the recent meeting in Chicago. The lower acreage, it is claimed, would be sufficient to meet the requirements of the country and should be brought about as soon as the farmers can arrange about diversifying their crops. At the same time the committee decided that steps should be taken to broaden the domestic demand for wheat by increasing consumption of bread and other wheat products. "It would be to the advantage of every wheat farmer," the report said, "to produce sufficient milk, butter, poultry, and meats to feed his own family and to provide for other necessary living expenses, instead of relying on the wheat crop alone to provide for them." In a statement giving the cause of this action, Sidney Anderson, president of the council, said: "At present the potential profitable market for our wheat is limited by domestic requirements and it is probable that this condition has come to stay as long as we maintain a standard of living ligher than in any other country and expect our farmers to share that standard. Our chances for successful competition in the world wheat market with other countries with a vast expansion of new land, pioneer populations, and low standards of living are very slight. December wheat has fallen to $1.01½, comparing with $1.20¼ a year ago. December corn sells in Chicago at 74¼ cents, comparing with 71¾ cents a year ago; December oats at 41 cents, comparing with 44½ cents last year; and December rye at 67½ cents, comparing with 90¼ cents a year ago.

"There is a pretty good movement of corn as it is shucked on the farms," said H. I. Baldwin of Decatur, Ill. "It demonstrates that quite an amount of corn is for sale at present prices. One should watch the weather. If favorable, you can expect more corn loadings from this section shortly. Should guess that the moisture content of corn on the stalk today is from 20 to 25 per cent in different sections. After excess moisture now in 1923 corn crop is accounted for the dry matter yield will be considerably reduced."

Views of a Bear

Arthur W. Cutten, who has been bearish on grains and stocks for some time, in a statement issued referring to grains said: "The American wheat producer is practically losing his foreign market by the competition of other exporting countries. Foreign wheat and other products are entering the country in competition with American products, despite the tariff.

"Farmers are feeding 70 to 80 cent corn to 6 cent hogs and incurring steady losses thereby, and American manufacturers and producers are threatened with a tariff barrier by our most prosperious and largest customers, with retaliatory measures against us under consideration by other nations who have been good customers in the past.

"The political and financial condition of Europe continues in a state of chaos, with their monetary system becoming further hopelessly demoralized, their credits exhausted, their textile and shipbuilding industries dormant, and unemployment steadily increasing. These pertinent facts may prove of slight moment, but a careful survey of world's conditions fails to disclose any sudden or marked improvement in either its economic or political condition and it is questionable whether capital will accept seriously the superficial expressions of opinion so widely disseminated."

Outlook for Cattle

Were it not for the extremely large consumption of meats throughout the country due to the employment of labor at extremely high wages, prices for beef cattle would not be so high as they are, for extremely large supplies have been marketed this fall from feeding districts and the ranges. The range season is closing now, however, and there will be fewer cattle marketed from now on, enabling owners to get better prices, particularly for the native grassy cattle which have competed with range cattle for summer and autumn months. The Chicago market has shown activity so far as desirable offerings were concerned quite recently, with buyers showing a marked preference for well fattened light weight steers, yearlings continuing to sell much higher than heavy long-fed steers. Low grade little killing steers are especially poor sellers, and there is an extremely wide range of prices for butcher stock, choice cows and heifers greatly outselling poorly fed lots. Regarding the future, many stockmen are in doubt, some of them believing there is a risk with prices for corn so high; but enough farmers have taken what appears to be a rather small risk in restocking their feed lots to insure a normal future supply of beef. And what is highly important, most of these cattle have been bought at a low scale of prices, many having been obtained as low as $4 to $5 per 100 pounds. These cattle are now headed in an upward direction, but bargains are still obtainable. Present sales are largely at $5 to $6.50 for stockers and feeders, while the better ones sell at $6.75 to $7.25. Beef steers sell in the Chicago market largely at $8.25 to $11.75. The best heavy cattle sell at $10.50 to $11.75, common lots selling as low as $5.75 to $6.

Yearling Cattle Booming

While the great bulk of the cattle marketed in Chicago sell far below top figures, a few prime little yearlings sell at a big premium. The other day a buyer paid $12.65 for 21 yearlings which averaged 1173 pounds. On the same day the best heavy steers, which averaged 1510 pounds, sold at $10.90. The best heavy steers marketed during the week averaged 1518 pounds and brought $11.75. Farmers should make more of the course of events and aim to market cattle light in weight and good in quality. It is a very irregular market, and while prime young cattle have advanced sharply, other cattle have sold lower.

Too Many Hogs

It is simply a case of overproduction, and until the marketings become much smaller it is useless to look for any material improvement in prices. While it is obviously impossible to say just what the future will bring forth, the chances are for low markets for the remainder of the year. According to the recent report of the Department of Agriculture, the number of stock hogs in the United States on the first day of September this year was three tenths of one per cent larger than a year earlier, while in the corn belt states it was 4.3 per cent larger. Hogs coming on the Chicago market of late average 233 pounds in weight, and choice heavy lots sell at a liberal premium over the best light bacon lots. The enormous marketing may be inferred from the fact that on a recent Monday 74,237 hogs arrived in Chicago, followed by 52,000 on the following day. Severe declines in prices have been unavoidable, and pigs sold very badly. It seems to be advisable to breed at least one-fourth fewer sows for another year; but no one can tell just what will happen. At any rate it is best to breed fair numbers. Recent receipts of hogs were overwhelmingly large, and prices were the lowest since June, sales ranging at $5.60 to $6.95, the top being 70 cents lower than a week earlier and comparing with $8.25 a year ago. Combined receipts in twenty markets for the year to late date amount to 36,930,000 hogs, comparing with 28,701,000 a year ago.

Improved Outlook for Sheep

With the close of the range shipping season, the marketing of sheep and lambs begins to show a marked falling off in numbers, and the sheepmen who had the courage to wait for better times will be rewarded, as prices will naturally go higher. Michigan farmers are largely interested in the sheep industry, and they know from experience that when properly conducted, it pays. Not many sheep are reaching the Chicago market, lambs predominating. Experienced Michigan farmers do not need to be reminded to send none but well fattened lambs to market, but many poorly finished flocks are arriving and sold at a big discount. Lambs sell in Chicago at $9 to $13.10 and feeders at $10.50 to $12.75.

Forced Marketing of Horses

A few days ago four Russian farmers who settled several years ago in North Dakota were compelled to market 18 horses in Chicago to get money to buy seed, their wheat crop having failed. The horses sold at $27.50 to $100 per head.

WHEAT

Several declines have taken place in the Detroit wheat market during the last two weeks, the price of No. 2 red declining to $1.08 per bushel. There were several bearish factors at work in the market that caused it to weaken. The most important was the revised estimate of the wheat crop of Canada, making the total 500 million bushels considerable larger than previous estimates and a record production. News of both bearish and bullish nature came from Russia. The foreign demand is practically at a standstill and receipts are larger than the demand at most points. Millers are out of the market at Detroit and dealers find it difficult to dispose of the modest receipts from day to day. There are reports that have a tendency to bull the market, which holds the prices from declining rapidly.

CORN

Corn is coming to market a little more freely now but the quality is poor, as it contains considerable moisture. Buying is slow. Should prices go any lower farmers are not expected to sell as the feeling is that they should secure good prices for this year's crop.

OATS

Oats have declined slightly in sympathy with other grains although there is a steady tone to the market. Shipping demand is reported to be slow.

RYE

Rye is off three cents from what it was a week ago. This decline was due to lower prices in other grains as there is little, if any, change in the conditions governing this market.

BEANS

Continuation of weakness in the Detroit bean market caused prices to decline further during the past fortnight. Indications are that there has been no change in consequence in the Michigan market during the last couple of weeks. Elevators that are paying $5 per cwt. are doing a good business but those bidding less are not very busy. Demand is reported to be just heavy enough to keep up with the state's ability to handpick. It is believed that any increase in demand would strengthen the market to considerable extent.

POTATOES

According to November estimates, this year's potato crop will be the fourth largest ever produced in the United States. The report shows a total of 416,722,000 bushels, an increase of about 15,000,000 over the October forecast. Assuming that is this year's population in the United States is approximately 110,000,000 the per capita production of potatoes is nearly 3.8 bushels or about the same as in 1920 when many growers who held their crop until spring suffered severe losses. Last season's output averaged 4.16 bushels per capita, and prices to growers were low. Experience of recent seasons indicates that, when the per capita production exceeds 3.6 bushels, the spring price of main-crop potatoes often is lower than that of the previous autumn. This is the opinion of leading market experts.

QUOTATIONS

Wheat

Detroit—Cash No. 2 red, $1.08; No. 2 white, $1.09; No. 2 mixed, $1.08.

Chicago—Cash No. 3 red, $1.02; No. 1 hard, $1.05@1.06.

New York—Cash No. 2 red, $1.22½; No. 2 mixed, $1.07.

Prices one year ago—Detroit, Cash No. 2 red, $1.36; No. 2 white, and No. 2 mixed, $1.34.

Corn

Detroit—Cash No. 3 yellow, 93c; No. 4, 88c; No. 5, 83c.

Chicago—No. 2 yellow, 92c.

New York—No. 2 yellow and No. 2 white, $1.08.

Prices one year ago—Detroit, Cash No. 2 yellow, 79c; No. 3, 78c.

Aspirin

Say "Bayer" and Insist

BAYER

Genuine

Unless you see the name "Bayer" on package or on tablets you are not getting the genuine Bayer product prescribed by physicians over twenty-two years and proved safe by millions for

Colds	Headache
Toothache	Lumbago
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Neuralgia	Pain, Pain

Accept "Bayer Tablets of Aspirin" only. Each unbroken package contains proper directions. Handy boxes of twelve tablets cost few cents. Druggist also sell bottles of 24 and 100. Aspirin is the trade mark of Bayer Manufacture of Monoaceticacidester of Salicylicacid. (1)

FREE

Vita Gland-Tablets

Starts Hens Laying in 24 Hours

Hens have glands just like humans and also require vitamines. Because they directly stimulate the organs involved in egg production the mysterious newly discovered VITA GLAND tablets, crushed into hens' drinking water, turn winter loafers into busy layers almost over-night. Science has discovered how to control egg production with essential vitamines, and gland extract that works directly on the OVARIAN or EGG producing gland of the hen. The wonderful effect of gland stimulation is shown by a simple test. Gov't experiment stations report that hens properly fed vitamines etc. lay 300 eggs as against the sixty of the average hen. "Leg weakness of baby chicks due to insufficient Vitamine B" says The Official Bulletin. Also says: "Hens start laying at an average age of 139 days when fed vitamines."

TRY THIS FREE BOX

EGGS, EGGS, EGGS and fine healthy chicks, prosperous flocks without fuss or bother or drugs or expensive feeds can be had. Just drop these tablets into drinking water. So simple to double your profits. Chickens now full of pep and life. Nests full of eggs. Summer production at winter prices. So confident are the Alexander Laboratories, the manufacturer of the original and genuine VITA GLAND tablets, that you will be amazed at results that they offer to send a free box for your own use. This is how. Send no money, just name. They will mail two boxes, each regular, one dollar size, six months supply. When they arrive deposit only a few cents postage and one dollar with postman. When your neighbor sees the wonderful increase of eggs in your nests let him have one box for a dollar, and thus your box has cost nothing. $5000 in big Kansas City bank guarantees your satisfaction or money back without question, so write today and get dozens of extra eggs this simple easy way. Write ALEXANDER LABORATORIES, 9035 Gateway Station, Kansas City, Mo.—(Adv.)

Detroit Beef Company

offers its services to the *Farmers of Michigan* as a high class, reliable commission house for the sale of *Dressed Calves* and live poultry.—Write us for information how to dress and ship calves to market. $250,000 capital and surplus. 34 years in business in the same place and same management.

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TOO LATE TO CLASSIFY

FOR SALE—Fine Toulouse Geese, $5
MRS THOS. E. WILSON, Plymouth, Mich., R4.

If you have poultry for sale
put an ad in
The MICHIGAN
BUSINESS FARMER
You'll get Results!

Oats

Detroit—Cash No. 2 white, 46c; No. 3, 44c.

Chicago—Cash No. 2 white, 44c.

New York—No. 2 white, 53c.

Prices one year ago—Detroit, Cash No. 2 white, 49½c; No. 3, 48c; No. 4, 46½c.

Rye

Detroit—Cash No. 2, 72c.

Chicago—Cash No. 2, 70@70½c.

Prices one year ago—Detroit, Cash No. 2, 93c.

Beans

Detroit—C. H. P., $5.15@5.20 per cwt.

Prices one year ago—Detroit, C. H. P., $6.75 per cwt.

Potatoes

Detroit—$1.16@1.33 per cwt.

Chicago—90@95c per cwt.

Prices one year ago—Detroit, $1.05 per cwt.

Hay

Detroit—No. 1 timothy, $22.50@23; standard and light mixed, $21.50@22; No. 1 clover mixed, $19@20; No. 1 clover, $19@20 per ton.

Prices one year ago—Detroit, No. 1 timothy, $17@17.50; light standard, $16.50; light mixed, $16.50@17 per ton.

PRITCHARD'S
WEATHER
FORECAST
INTERPRETED BY THE STARS

Week of November 25

DURING first three days of this week the weather is expected to be very severe both on land and water. During Sunday temperatures will be rising in most parts of the state and the weather will be threatening if not actually raining. Winds will rapidly increase in force and rain become heavier. Monday and Tuesday will be critical days from a storm standpoint.

About middle of week temperatures will rapidly fall to much lower readings followed by several days of unseasonably cool weather.

Close to Friday the weather will again become unsettled, with brisk winds and scattered showers or snow flurries but by end of week the skies will be clearing and the temperature falling again.

Week of December 2

Brisk winds and generally high barometer may be expected in Michigan during first half of this week which generally means fair weather but local snow flurries or showers may also be expected.

Not later than Thursday winds will increase to near gales and there will be an increase in the amount of rain or snow to the state in general. By Friday the temperature will have dropped to much lower readings, a condition that will run into next week at which time it will probably intensify considerably.

Mild Winter in Michigan

The average weather conditions to expect for the first three months of 1924 point to a mild winter in Michigan. Temperatures for this period will average above the seasonal normal. Rain or snow fall, speaking in general terms, will not be as heavy as usual.

MEET AT M. A. C., DEC. 4-5

THE Annual Meeting of the Michigan State Association of Farmers Clubs will be held at the Michigan Agricultural College in Agricultural Building, Room 402, on Tuesday and Wednesday, December 4th and 5th, 1923. All clubs are invited and urged to send delegates to this meeting as matters of vital importance will be discussed. Plans are being made for the accommodation of all that attend. Let this be the greatest meeting that Michigan State Association of Farmers Clubs has ever held.—Mrs. I. R. Johnson, Secretary.

Dad Smith was fond of trying to catch little Johnny in spelling long words, but Johnny was usually able to hold his own, so Dad decided to try a few monosyllables for a change.

"Johnny," he said, "I'm going to give you some easy ones this evening. Spell dumb"

"D-u-m."

"Ha, I caught you that time. It's d-u-m-b"

"Well didn't I say that?"

"I didn't hear the b, Johnny."

"You're not supposed to hear it, Dad; teacher said the b was silent in that word."—Judge.

Get
Bumper Crops
with SOLVAY

Fields that give little cost you just as much labor as fields that give you *big*. Sour soil is often the cause—correct it, make the soil *sweet*, the field fertile, the crop big, the profit large, by using

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Don't wonder why you have no big crops—Use lime and get them, and remember to use only SOLVAY—it is finely ground, gives results right away and for years after. Safe, will not burn—easy to apply. Learn all about Lime.

Write for the Solvay Lime Book—It's free!

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Write for four grade list. No complaint from shipper in over 4 years. Good treatment given pays you more than high prices.

HOMESPUN TOBACCO, FIVE POUNDS Chewing, $1.75, ten, $3.00, twenty, $5.25; Smoking five pounds, $1.25, ten, $2.00, twenty, $3.50. Pipe and Recipe free. Send no money, Pay when received. KENTUCKY TOBACCO CO., Paducah, Ky.

DAIRY FEED SALESMAN—A MAN WHO knows the dairymen of Michigan can have a most profitable connection as our sales representative. This is a great opportunity for the right young man. State your qualifications fully when writing H. T. HEIDRICK, Sales Manager, 100 Corn Exchange Building, Minneapolis, Minn.

VISIT

INTERNATIONAL LIVE STOCK EXPOSITION

Dec. 1 to Dec. 8

Union Stock Yards Chicago

Supreme Court of the Pure-Bred Live Stock Industry.
Round-up of the Master Breeders and Feeders of the Continent.

SEE the Aristocracy of the Animal Kingdom.
LEARN Economy in Production.
ENJOY the Great Spectacular Features.
PROFIT by Investing in a Trip to
THE WORLD'S GREATEST LIVE STOCK SHOW.

DAILY PURE-BRED SALES:

ABERDEEN-ANGUS SALE
Wednesday, Dec. 5th, 1:00 P. M.
For particulars write Chas. Gray,
Union Stock Yards, Chicago.

HEREFORD SALE
Friday, Dec. 7th, 1:00 P. M.
For particulars write R. J. Kinzer,
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CLYDESDALE SALE
Thursday, Dec. 6th, 10:00 A. M.
For particulars write American Clydesdale Assn., Union Stock Yards, Chicago.

SHORTHORN SALES
Shorthorn Sale 1:00 P. M. Thursday, Dec. 6th.
Milking Shorthorn Sale, 10:00 A. M. Friday, Dec. 7th.
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The Michigan BUSINESS FARMER

An Independent
Farm Magazine Owned and
Edited in Michigan

VOL. XI, No. 8 SATURDAY, DECEMBER 8, 1923 TERMS: TWO YEARS $1 60c PER YEAR—5 YRS. $2

The Demand for Guineas On the Michigan Market Is Constantly Increasing.

In this issue: Michigan "Going Strong" At International—Selling Your Apples At a Profit

Current Agricultural News

MICHIGAN POULTRYMEN PLAN MARKETING EXCHANGE

ONE more step in the movement to form a state cooperative organization for selling of poultry and eggs was accomplished last week at the Michigan Poultry Exposition, Grand Rapids, when a committee was named to draft a plan which will be presented to local groups.

Those on the committee are O. L. Miner, of Dowagiac; Alex Klooster, of Byron Center; J. B. Devereaux, of Hastings; Charles Highbach, of Big Rapids; Mrs. Dale Jenkins, of Clinton; W. C. Eckard, of Paw Paw, and George Cabell, of Hudsonville, president of the Michigan Poultry Producers' Association.

This action followed addresses by Hale Tennant, director of markets for the Michigan Agricultural College; E. B. Heaton, dairy marketing specialist with the American Farm Bureau Federation, and Gifford, of the college's market department, and on open discussion in which the feasibility of various plans was considered.

The poultry men realize that their position is difficult. Any organization which is effective must include a fair proportion both of the farmers with poultry flocks and of the commercial growers. The plan presented by Mr. Patch calls for the signing by members of a contract to sell all poultry and eggs, except those needed for home consumption and for hatching and breeding purposes, through the exchange, for a period of four years.

WASHTENAW COUNTY HORTICULTURAL ASS'N. FORMING

ABOUT one hundred of the leading fruit growers of the county gathered Thursday noon, November 23rd, at the Chamber of Commerce, Ann Arbor, and partook of a substantial dinner which was followed by remarks on the formation of a horticultural association for Washtenaw county; also remarks were made regarding spraying, packing, cold storage, etc.

The following officers were elected: President, Thomas Applegate, Milan; Secretary, L. A. Seamans. Ypsilanti. A committe on constitution and by-laws was appointed by chairman as follows: B. W. Manwaring, Ann Arbor; George English, Chelsea; A. G. Stein, Ann Arbor.

The chairman appointed a committee consisting of Henry Bredernitz, Saline; A. C. Stein, Ann Arbor; F. J. Simons, Ypsilanti; George English, Chelsea; Arthur Intz, Saline, to report on a list of nine directors. The following were recommended and accepted:

Thomas Applegate, Milan; Howard Boyd, Chelsea; B. W. Manwaring, Ann Arbor; William Austin, Saline; F. J. Simons, Ypsilanti; D. A. Biker, Chelsea; Bruce Rorabacher, Saline; A. C. Stein, Ann Arbor, and Gustave Uphans, Manchester.

The time and place for holding the next meeting was left to chairman Applegate who indicated it would be in about three weeks when another banquet will be held and that he would try and have a state speaker present. Prof. Gardner was to have been present at this meeting but another engagement prevented.
—J. W. Sanders.

FARMERS ESTABLISH BEAN PICKING PLANT

THE Michigan Elevator exchange made public last week the fact that it has established a bean-picking elevator and warehouse at Port Huron capable of handling a carload of beans daily affording warehouse and picking facilities for the bean-handling cooperative elevator associations of its string of some 150 local organizations which have not had such service heretofore.

The plant, which has been leased by the elevator exchange and which will operate under the name of the Michelex Elevator and Warehouse Co., is equipped with the latest devices for economical and efficient handling of beans. The equipment consists of automatic loaders and unloaders, a polisher, three giant pickers, a dryer and about 100 hand pickers which will enable the exchange to add the "finishing touches" to its product.

Arrangements have been perfected for picking 130 cars of picking stock within the next 90 days, the exchange declared.

The plant has a storage capacity of 60,000 bushels with a warehouse capable of holding 10 or 15 cars of beans in storage.

HUSKS 149 BUSHELS OF CORN IN NINE HOURS

Thomas Monroe, of Pana, Illinois, broke all Central Illinois records for corn husking on the John Butcher farm near Blue Mound. recently when in nine hours he husked 149 bushels and 50 pounds.

RADIO DEPARTMENT

FARM BUREAU RADIO PROGRAM

Station KYW, Chicago, Central Time
8:01 P. M. Wave Length, 536

December 11—"News from the Fifth Annual Meeting," by Silas L. Strivings, Former member Executive Committee, American Farm Bureau Federation.

CHURCH SERVICE BY RADIO

SINCE the story about the parish in Shiawassee county receiving service by radio appeared in the columns of THE BUSINESS FARMER the editor has read several articles regarding various churches following their example. The latest one to come to my attention is a Presbyterian church at Woodhull, Illinois. There is a regular pastor at this church but he was called to Davenport, Iowa, to deliver a sermon. Not wanting to miss the sermon they placed a receiving set on the pulpit, the congregation assembled as usual, and a loud speaker amplified the voice so that every word could be understood in the furtherest corner of the church.

MILK FOR BABIES IN GERMANY

Dear Mr. Slocum:—Your editorial on page 12 of November 24, has appealed to me. I too, believe even the embittered would be softened by the uplifted arms of a mother and the plaintiff wail of a tiny child without nourishment.

I am glad to contribute my little mite of Ten Dollars on this happy Thanksgiving day to help feed the starving children of Germany, just as cheerfully as if the shoe was on the other foot, and the contribution was to starving children in Russia or France.

I think your editorial so ably covers the situation. I think contributions not only save suffering and starving of children, but also the bread cast upon the waters return to this country directly and indirectly. It helps find a market for our surplus food.

So much can be said I will not try to say it. I believe if The Business Farmer would start a fund for the Red Cross and accept contributions for the specific purpose as outlined in your editorial you would start something and it probably would attain national proportions.

I hope the Newton Bill (now pigeon-holed) will pass in the next Congress. —A subscriber of B. F.—Edwin P. Harms, Wayne County.

ALL right, brother Harms, I will match the ten dollar bill you enclosed with my own check for $10 and I am reprinting this with the thought that there are other readers of THE BUSINESS FARMER who will be glad to contribute some amount, any amount, big or little, on or before December 20th, so we can turn this amount over to the American Red Cross for the specific purpose of BUYING MILK FOR GERMAN BABIES and send it as a Christmas message of Good Will and Peace on Earth to Germany. If you care to lend a hand send your remittance of any amount to me, a list of contributors to this fund will be published in the December 22nd issue.
—GEORGE M. SLOCUM, Publisher, Mt. Clemens, Mich.

A Merry Christmas Every Month!

The Gift for Your Loved Ones—

THE GIFT which is for more than today—each month its Cash Dividends bring back a fortunate remembrance of your kindness—and as years pass, it provides an ever growing Nest-egg to protect your loved ones in the future.

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SATURDAY
December 8th,
1923

VOL. XI, NO. 8

Being absolutely independent our columns are open for the discussion of any subject pertaining to the farming business.

"Hew to the line, let the chips fall where they may!"

The Michigan
BUSINESS FARMER

"The Only Farm Magazine Owned and Edited in Michigan"

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TWO YEARS $1

Entered as second-class matter, August 22, 1917, at the post-office at Mt. Clemens, Mich., under act of March 3rd, 1879.

State Fruit Growers Hold 53rd Annual Meeting

Striking Results Secured Through Investigational Work During Past Year and Common Sense Analysis of Marketing Situation are Outstanding Things at Convention

By CARL H. KNOPF

(Special Correspondent of The Business Farmer.)

A PIONEER must be a trail blazer. He must ever be in advance, finding the best route to travel and marking it for the benefit of those who are to follow him. This has been the mission of Michigan's pioneer organization of fruit growers, the State Horticultural Society, which held its 53rd Annual Convention at Grand Rapids, November 20-22, 1923. During its more than half-century of activity this Society has shown the great advantages of Michigan as a fruit growing state, has championed everything which would develop the fruit industry, and has been the guiding force behind the Horticultural Department of the Michigan Agricultural College with its wealth of experimental and investigational work.

Two outstanding things characterized this 53rd annual meeting. One was the clear and common sense analysis of the marketing situation. The second was the striking results secured through the investigational work carried on this year, under the direction of the M. A. C. Horticultural Department.

Raspberry Results at South Haven

S. E. Johnston, Supt, of the South Haven Experiment Station, reported on the work done there with black and red raspberries this season. Ordinarily the results of experimental work are not made public until confirmed by several years' tests but the 1923 information was so conclusive that it seemed best to give it to the growers at once.

The work with black raspberries was to determine how many canes should be left per hill and also just how the lateral branches should be handled. In some plots the lateral branches were trimmed back to 4 buds each, in others the laterals were left full length but some were thinned out, and both of these were compared with plants where all of the laterals were left full length.

To show how carefully and painstakingly the work was done, each cane and each branch was divided into sections of five buds each and the divisions were marked with strings. A record was kept of the kind of buds which developed in each section and also the number and weight of berries produced on each section. Work done as carefully as this gives both accurate and dependable information.

Two plots outyielded all of the others, one where the laterals had been cut back to four buds each and the other where the laterals were left full length but had been thinned out. The comparative yield of these two plots to an acre basis was as follows;

Four-bud laterals—210 cases containing 1,819,727 berries.

Full-length, thinned laterals—220 cases containing 2,372,241 berries. While the full length laterals yielded the most cases and the most berries yet the berries were much smaller and it was found that a person would earn only three-fourths of a cent for picking each extra quart from these canes. The conclusion was that the most practical method of handling the lateral branches is to cut them back to four or more buds. This method results in better berries, earlier berries, and easier picking.

A great difference in yield was noticed between the canes with different sizes of stems. Careful measurements were taken, which, when compared with yield, showed plainly that with large canes more canes can be left per hill and more buds can be left per lateral branch.

Supt. Johnson also recommended that the main canes be allowed to reach 24 to 30 inches in length before being pinched back. This is recommended because it was found that the buds on the stalks of the canes and the lateral branch buds which were nearest the canes, produced the largest yields of berries.

Prune Reds Higher

As red raspberries have only about one-third as many buds per root length of cane as do the blacks, Supt. Johnson recommended leaving the red raspberry canes quite long. It was found that the yield per acre increased with the length per cane but that the limit was reached at about shoulder height. Canes which are too tall break over more easily and another difficulty was found in the fact that the berries on the top laterals have a tendency to run small.

Mr. Johnson stated that the first five buds nearest the cane on the red raspberry lateral branches are usually vegetative buds and for that reason any laterals on such canes should be left at least twelve buds in length.

Supplementary Cash Crops for the Grower of Small Fruits was the topic discussed by Prof. Geo. E. Starr of the M. A. C. Prof. Starr recommended, among others, sweet corn, asparagus, chicory, and melons.

Cherry Spraying for 1924

These recommendations were presented by Prof. H. M. Wells, also of the M. A. C. Horticultural Dept. who has been carrying on the work with the assistance of Prof. Dutton.

To date they have found lime sulfur to be about equal with Bordeaux mixture as a spray to control the cherry leaf spot. Their observation has been that more leaf injury is caused by the Bordeaux spray and also that it tends to reduce the size of the cherries. Special warning was given not to attempt alternating the lime sulfur and Bordeaux sprays during the season. Pyrox sprays during the 1923 season gave considerable foliage injury.

The results to date indicate that lime sulfur, used at the rate of 1¼ gallons to 50 gallons of water, is the most satisfactory spray for cherries Applications of this spray are recommended as follows;

First application, just as the petals fall. Second, 10 days later. Third, after another 10 days. Fourth, just after harvest.

For the poison, 1 pound of powdered arsenate of lead should be used for each 50 gallon of spray mixture.

Discussing the effects of the leaf spot infection which defoliated so many cherry orchards in 1922, Prof. Wells said that in the yields on the experimental blocks in Grand Traverse county had been reduced from 4½ crates on the protected trees to 2½ crates per tree in the check block which was defoliated by the disease.

Michigan fruit grading laws were discussed by Director Wm. P. Hartman, Bureau of Standards, State Department of Agriculture. Mr. Hartman stated that Michigan's standards for apples have received widespread recognition and cited, as proof, the fact that 17 states now use the Michigan apple grades.

Mr Hartman stressed the importance of standardizing as being fully as important as advertising. He stated that two billions of dollars spent in this country every year for advertising would be of little value unless the advertisers followed it up with a constant supply of standard products. He stated that the practice of dumping an ungraded product on the market is causing Michigan potato growers a loss of at least $1,000,000.00 annually.

Mr. Hartman exhibited four full-page ads taken from a single issue of the "Ladies Home Journal." These ads from cooperative organizations in California, advertised California fruits and canned goods, in colors, to the American public. The cost of a single month's insertion of each of these ads. in colors was given as $11,000. These four pages three in colors and one in black, therefore cost $39,000. By reason of having a large quantity of standard goods to follow up these advertisements, Mr. Hartman stated that the California growers were able to realize a profit, even from an advertising bill of nearly 40,000 per month per magazine.

It was stated that the raisin growers alone, spent over two million dollars in advertising in 1922. With the increased market for their product they are able to realize a profit on their advertising investment.

Everbearing Strawberries

This subject was discussed by A. L. Watson, of Grand Rapids, who has become widely known throughout the state as the proprieter of Strawberry Acres.

The everbearing variety, according to Mr. Watson, was a sport from the Bismark variety and was first known as the Pan American. It was discovered and propagated by a Mr. Cooper in New York state, in 1898.

There are two distinct types of everbearers, the Superb and the Progressive. The former has the larger size but the latter has the superior flavor and sweetness and so is becoming the most popular market variety.

Michigan marketing problems were discussed at length by F. L. Granger of Benton Harbor. Mr. Granger stated that he had become convinced that production, and not advertising, is Michigan's first marketing problem. For example, apples should be in cold storage within 72 hours after being picked from the tree. Under the present system several weeks may elapse before the fruit reaches cold storage.

Mr. Granger advocated selling

(Continued on Page 23)

Michigan "Going Strong" At International

CHICAGO, Dec. 3.—Michigan has always been a big winner of prizes at the International Hay and Grain Show held during the International Live Stock Exposition each year at Chicago and this year our farmers are going to try to/win more than ever. They started off by winning two prizes on their hard red winter wheat, and this is the first year they have ever exhibited in this class. Only two samples were entered from Michigan and they won twentieth and twenty-first places in a field of eighty entries from the wheat belt of the United States and Canada. Arnold Callan, Caro, won twentieth place and John Shoemaker, Hudsonville, was the other exhibitor. The samples shown were of Berkeley Rock, the new variety developed by Prof. Frank Spragg of the M. A. C., by mixing Red Rock and Berkeley Rock.

The Michigan growers who placed in the soft red winter wheat class are: First, A. W. Jewett, Jr., Mason; second, L. H. Laylin, Mason; third, John C. Wilk, Alma; fourth, D. C. Seaman, Jackson; fifth, A. F. Hilliard, Mason; sixth, C. D. Finkbeiner, Clinton; eighth, L. T. Lasenby, Mason; eleventh, T. J. Wilk, Alma; twelfth, J. A. Wilk, Alma; fourteenth, J. I. Hazelitt, Ionia; sixteenth, Ralph Jewett, Mason; twenty-third, F. L. Houghton, Alto.

For the first time Michigan made a strong showing in field peas when, in the class other than yellow, Martin Peterson, of Bruce Crossing, took first; Adolph Trousil, of Ewen, took second, and L. H. Laylin, of Mason, third. The first two are members of a group of Ontonagon county farmers whom W. N. Clark, county agricultural agent, has organized for intensive seed work.

In field beans, Arthur W. Jewett, Jr., of Mason, took first; Melvin J. Smith, of Springport, second, and L. T. Lasenby, of Mason, third.

Six out of ten places in yellow soy beans went to Michigan men. G. C. Wilk, of Alma, was fourth; Charles Laughlin, Danville, fifth; Charles N. Able, Danville, sixth; Charles Ashbaugh, Luther, seventh; L. H. Laylin, Mason, eighth, and H. C. Owen, Ovid, ninth.

In soy beans and other variety, Arthur W. Jewett, Jr., of Mason, was fifth, Lynn Jewett, of Leslie, ninth, and L. H. Layin, of Mason, tenth.

Harold Goetz, of Blissfield, was second in the junior class in yellow corn. In the collegiate live stock judging contest, held Saturday, the M. A. C. team placed eighteenth.

Judging in the other crop classes and live stock is going on as we go to press and a list of the winners will appear in our next issue.

Michigan Stock At Show

Exhibitors from Michigan in the live stock show are Carr Bros. & Co., of Bad Axe, with Shorthorn cattle; C. H. Prescott & Sons, of Tawas, also with Shorthorns; Woodcote Stock Farm, Ionia, with Aberdeen Angus cattle and carcass entries; Willian E. Scripps, of Orion, with Aberdeen Angus cattle and Belgian horses; Dwight Cutler, of Ionia, with Aberdeen Angus cattle; Harold J. Harwood, of Ionia, with grades and crossbreds; Cliff Middleton, of Clayton, with Shropshire sheep; Harry T. Crandall, of Cass City, with Oxford, Lincoln and Cotswold sheep and Chester White hogs; Detroit Creamery Farm, of Mt. Clemens, with Poland China, Duroc Jersey and Chester White hogs; Fred B. Hill, of Flat Rock, with Duroc Jersey hogs; Andrew Adams, of Litchfield, with Chester White hogs and swine carcasses; W. F. Adams, of Litchfield, with Tamworth hogs and swine carcasses, and J. L. Miller, of Caledonia, with Percheron horses.

The Michigan Agricultural College is exhibiting Herefords and Aberdeen Angus cattle, Hampshire, Shropshire, Oxford, Cotswold, Dorset, Southdown and Rambougiller sheep, Berkshire, Poland China, Duroc Jersey, Chester White, Hampshire, Tamworth and Yorkshire hogs, Clydesdale, Percheron and Belgian horses and swine, sheep and cattle carcasses.

Selling Your Apples At a Profit

Make Money On Large Apple Crop by Making Into Cider and Then Converting Into Vinegar

By F. W. FABIAN

Associate Professor Bacteriology and Hygiene, Michigan Agricultural College

(Written Exclusively for The Business Farmer.)

Aren't They Beauties?

WITH a large apple crop in many sections of the state farmers are wondering how they can market them to the best advantage. Considering the prevailing price of apples, the scarcity of labor and also the high price of labor when it is possible to get it and finally the high freight rates where they have to be shipped by freignt, makes the apple crop a mighty poor paying one this year.

However, there is a way of turning your apples into a real profit with a minimum returns. The way that is described in this article, doubtless, is familiar to most farmers only they have not realized its possibilities.

It takes about eight bushels of good juicy apples (ten or more bushels if they are dry) to make a barrel of cider. This cider then can be fermented by yeast and bacteria and changed into acetic acid. When it has reached this stage, we call it vinegar. Vinegar can be sold any time of the year for from thirty to fifty cents per gallon. To take a concrete example, say that apples are selling for one dollar a bushel and it takes eight bushels to make a thirty-two gallon barrel of cider. The cider when converted into vinegar will sell at say forty cents per gallon. The eight bushels of apples if sold on the market would bring eight dollars and the vinegar made from those apples would sell for one and one-half times as much or about thirteen dollars. The actual profit on the whole orchard would be a great deal more than this for apples picked for cider need not have near the care in picking and handling as those sold on the market. Furthermore all the cull apples can also be turned into a profit in this way while in many cases they are allowed to lay on the ground and rot.

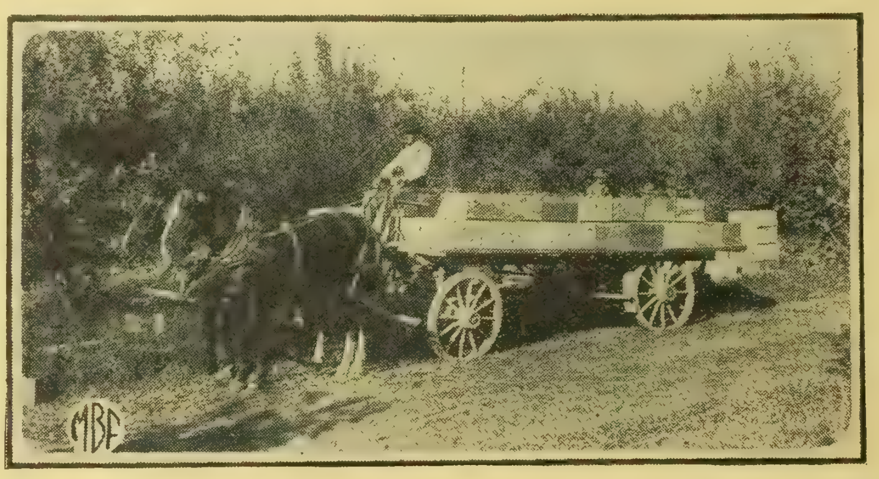
Vinegar a Long Time Investment

One of the chief objections that the farmer has to making vinegar is the length of time it takes to convert the cider into vinegar. He places the cider in the cellar at a low temperature and allows it to remain there until spring or the following summer before it turns into vinegar and is ready to sell. It takes so long when nature, unaided, is allowed to take her course that the farmer would rather sell the apples for a great deal less in the fall and realize on them quickly. Then too when spring or the next summer comes around he often finds that the cider has not turned into vinegar and in some cases has spoiled so that his apples are a total loss. This uncertainty together with the long wait for the money has reduced the amount of vinegar made on the farm to a minimum. In most cases the farmer only makes enough for home consumption and in many cases actually buys vinegar.

Making Vinegar Scientifically

However, by making vinegar scientifically all the trouble and objections usually encountered could be avoided. Furthermore the cider could be converted into vinegar, sold and the money in the bank inside of two to three months. All this is made possible by the use of pure cultures of yeast and bacteria isolated and grown in sterile cider. These cultures are added to the cider as soon as possible after making and does the work quickly and well. The Bacteriological Laboratory of the Michigan Agricultural College, East Lansing, Michigan, has been sending out these cultures for years to the farmers of not only Michigan but all over the United States and Canada and in fact to all parts of the world. It is one of the few places in this country where these cultures can be obtained and as a result the demand is yearly increasing. Not only farmers, but many people living in the cities liking the flavor of good cider vinegar buy cider when possible and send for the cultures and make their own vinegar. Many vinegar factories, also, send for pure cultures with which to start their initial fermentation. The cultures are furnished at cost, twenty-five cents, and is done not as a money-making scheme but as a real service to the people of the state.

In the scientific process of making vinegar, two cultures are necessary. The first culture used is a yeast, (Saccharomyces ellipsoideus) which converts the sugar present in apples into alcohol. The cider is then known as "hard cider." The second culture necessary is a bacterium, (Bacterium aceti) which converts the alcohol made by the yeast into acetic acid. The cider is then called "vinegar." The first process takes about two weeks and the second process about six weeks or more so that in about two months or four at the most, it is possible by using pure cultures to produce a good saleable vinegar. This is quite different from six months or a year. In addition to this you are always sure of getting vinegar.



When labor is plentiful and one has the time the most profitable way to market the apple crop is to grade the apples and sell according to grade, using the culls for cider vinegar. But when labor is scarce and wages high and there is an abundance of fruit by making your whole crop of apples into cider vinegar you can market the crop at a profit where you could not otherwise.

Specific Directions for Making

1. Use good clean juicy apples.
2. Wash and scald the cider barrel thoroughly.
3. Fill the barrel about three-fourths full of cider.
4. Inoculate with vinegar yeast as soon as possible.
5. Store the cider at a temperature of 65 to 75 degrees F.
6. Allow it to ferment until no more gas is given off.
7. Inoculate with vinegar bacteria.
8. Allow to ferment until 4 per cent or more of acetic acid is produced.
9. It is now ready for sale. If you keep it for home use, fill the barrel full, cork tightly, and store in cool place.

What Is Vinegar?

"Vinegar is a condiment produced by the successive alcoholic and acetic fermentation of a watery solution of sugary or starchy substances by certain yeasts and bacteria."

The Michigan Dairy and Food Laws (1917) define vinegar as follows: (Act No. 384, Session Laws 1913), paragraph 67, section 2: "The word 'vinegar' as used herein is limited to a water solution of acetic acid derived by the alcoholic and subsequent acetous fermentations of fruits, grain, vegetables, sugar or syrups, and if not distilled must carry in solution the extractive matter derived solely from the substances indicated on the label as its source."

Law on Sale of Cider Vinegar

Paragraph 68, Section 3 of Act No. 384: "No vinegar shall be sold or exposed for sale as apple or cider vinegar which is not the legitimate product of pure apple juice. The term 'cider vinegar' as used herein, shall be construed to mean vinegar derived by the alcoholic and subsequent acetous fermentation of the expressed juice of apples, and which contains not less than four per cent of absolute acetic acid. Cider vinegar which during the course of manufacture has developed in excess

(Continued on page 19.)

1923 Apple and Potato Show Finest Exhibition of Kind Ever Held in State

By CARL KNOPF

(Special Correspondent of The Business Farmer.)

KING Apple and his royal concort Potato held undisputed sway at Grand Rapids during the week of November 20 to 23, when the Second Annual Apple and Potato Show was held in the Klingman building. With the leading growers of apples and potatoes in keen competition for state honors the 1923 Show proved to be the largest and finest exhibition of its kind ever held in the state.

Some two hundred exhibitors entered displays, making the Show considerably larger than last year. There was also a marked increase in the quality of exhibits, thus proving that the Show is filling its mission of teaching quality and selection.

Apples were shown in all quantities from the five-apples-per-plate exhibit up to the big fifty-bushels exhibit. All sections of Michigan were represented by their choicest fruit and it is difficult to say just which classes afforded the most competition. One large room was nearly filled with tables bearing the plate exhibits while the tray exhibits were banked along the side of that same room. Apples packed in bushels and barrels occupied over half of the display space alloted to fruit, with the seven fifty-bushel exhibits predominating.

A feature of the Show was the fifty-bushel exhibit of apples which won first prize. This was grown by Wm. Weckler, of Ludington, Mason county. Composed of Northern Spies, Snows, Johnathans, Grimes Golden, Wagners, and Canada Reds, with fruit of wonderful size and coloring, and skillfully packed, this exhibit made a picture which alone was worth a trip to the Show.

Second prize in this same class was won by W. H. Roach & Co., of Hart, while third and fourth honors, respectively, went to Crystal Lake Orchards of Beulah and to the Benzie county exhibit.

The South Haven Fruit Exchange won first place in the fifty-bushel exhibit, commercial pack, with a display showing remarkable uniformity and excellent skill in packing.

Prizes for the best barrels of the different varieties were awarded as follows: Greenings, Jesse Pickett of Dutton; Johnathans, H. Schaefer & Sons of Sparta; Wealthys, L. F. Waid of Byron Center; Wagners, A. J. Dowd of Hartford; Snows, H. Schaefer & Sons of Sparta; Grimes Golden, Friday Bros. of Coloma; McIntosh, W. H. Roach & Co. of Hart; Northern Spies, Oscar Braman of Grand Rapids; Steele Reds, Farley Bros. of Albion.

Son Beats Out His Dad

The individual bushel classes brought out splendid displays of the various varieties. Very sharp competition marked every class and the placings were close.

Those following the judging were much amused when competition in the Northern Spy section narrowed down to a contest between Oscar Braman, well known representative from Kent county, and his son, Russell. The bushel selected by the son was finally awarded first place and the dad had to be content with the second prize. When all of the premiums were totalled it was very certain who had done the most careful work, as Russell won a total of 27 prizes while all Mr. Braman could muster was 7.

For purposes of competition in the plate displays the state is divided into four sections. The Upper Peninsula was not represented this year but the sweepstakes winners for the best plates of apples from the other sections were: Southwestern Michigan, Steele Reds exhibited by Farley Bros. of Albion; Northern Michigan, McIntosh exhibited by R. Roobothen of Beulah.

The plate of Delicious shown by Pickford Bros. was finally awarded the championship ribbon.

Other exhibits worthy of mention were as follows: Individual plate display, won by L. A. Spencer of Kibbie with 105 different varieties in the collection; Best collection of pears, shown by Taylor and Jager of Douglas; Ten bushel exhibit of apples, won by H. Schaefer & Sons of Sparta; Five bushel apple exhibit, by Russell Braman of Grand Rapids.

Some comment was heard through the show rooms that an exhibit from a single orchard which contained over 100 different varieties demonstrated very clearly the need in Michigan of standardizing on a few varieties.

"Wonder Show" of Potatoes

The potato exhibit vied with the apple display in extent, quality, and in interest. Probably thousands of people who thought they knew all about potatoes, learned for the first time, at the Show, what potatoes really are. Long lines of tables, each bearing piles of uniform and smooth tubers, was a revelation of what "quality" means in the potato game. From the long slender Bur-

(Continued on Page 20)

PICTURES FROM FAR AND NEAR

MADE FROM DRIED APPLES.—Types taken from the southern mountain district and immortalized in these dried apple dolls by Isabel Million of Knoxville, Tennessee. Every type of mountaineer is found in her collection which is the most unique in the world.

AMERICAN CROSSES ATLANTIC OCEAN ON YACHT.—Dr. Paul Morgan, an intrepid young American who was snapped upon his arrival in Budapest from New York. Dr. Morgan braved unheard of perils crossing the Atlantic in his small yacht "Beatrice" and his successful negotiation of the "drink of water" may lead other adventurous souls in following his trail. He plans to sail down the Danube into the Black Sea.

NO REASON FOR DYING OF DIABETES.—Prof. Ralph H. McKee of Columbia University, N. Y., says a remedy for sufferers of diabetes is within reach of all. Through the new discovery, Intravin, relief can be had at about $3 a week, and in some cases the cost is less.

EDUCATORS RECEIVED BY PRESIDENT AT WHITE HOUSE.—Left to right is Chief Justice Wm. H. Taft, President Coolidge and Wm. Mather Lewis, new president of the George Washington University, Washington, D. C. A large gathering of Educators assembled at the White House before the inauguration of Mr. Lewis.

GERMAN MARKS RISE.—In direct contradiction of the statements that the German mark is daily falling comes this one showing that the mark is rising. However, we hasten to explain that the German boys find it cheaper to make kites from the currency than to buy them—and in this way is sending the mark flying skyward.

"ADOLPHUS" SMOKES A PIPE.—Hundreds of pipes have been sold by the suggestiveness of this clever machine nicknamed "Adolphus", and used in the shop of a London tobacconist, who invented it some years ago. It is not merely a toy but a working member of his staff for it puts a pipe into condition.

WORLD'S LARGEST FLAG.—This flag, 90x150 feet, was unfurled on the front of the building of J. L. Hudson Co., Detroit, November 11th, Armistice Day. It weighs 600 pounds.

BEATS THE LADIES AT THEIR OWN WORK.—John Myers, aged 19, of Blackburn, England, who engaged in the "clock, click" clash which animated London. Ranged against him were seven of the cleverest women knitters, but they were vanished in the semifinals. The contest took place in Selfridge's, London's biggest department store.

CITIZENS OF
MICHIGAN
FOUL BROOD
ERADICATION
PROGRAM
Michigan
Department of
Agriculture
SNAPPED AT THE TOP 'O MICHIGAN POTATO SHOW, NOVEMBER 7th, 8th, 9th.—The view at the left shows a fine display of potatoes from Crawford county, while in the background you see the exhibit of the State Department of Agriculture. At the right is a close-up view of one corner of the State Department of Agriculture exhibit. The show was such a success that it is planned to make it an annual event.

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Loans For Farmers' Marketing Associations

Agricultural Credit Act is Connecting Link Between Short Time and Long Time Loans

By JOHN H. KRAFFT

THIS is the third of a series of four articles by John H. Krafft on financing the farmer. In the first article Mr. Krafft discusses rural credit conditions in general; in the second, short time loans; and in this article he takes up Intermediate Credit Loans. The fourth article will appear in the near future.

THE Agricultural Credit Act of 1923, passed by our last Congress, supplies a very necessary credit link between short time loans necessary to farmers and the long time loans made under the Federal Farm Loan Act. It has been stated by those not quite familiar with agriculture and agricultural financing that this Act would be instrumental in bringing the farmer further into debt. This is not the case; as a matter of fact, this Act provided instrumentalities to be used by the farmer in pulling himself out of debt. Through the banks established by this Act the country banks are furnished with the necessary capital for economical and successful crop production and can furnish to cooperative organizations the credits needed to orderly market the farm products of their membership.

The Senate in February passed two bills, known as the Leroot and the Capper bills. The House, about the same time, passed a bill known as the Stone Bill. Later, the principal feature of these bills were combined, some few additions made and passed as the Agricultural Credit Act of March 4th, 1923. This Act created the Federal Intermediate Banks and National Agricultural Credit Corporations.

The purpose of these two types of institutions is the same. The methods of organization and operation differ somewhat, however.

The National Agricultural Credit Corporations are privately owned and are limited in profits to a point where it is very doubtful as to whether any of these institutions will ever be chartered by the National Government.

The limitations placed by the Act are such that an investment in these institutions would not look at all attractive to an investor. The business transacted under this Act will undoubtedly be transacted thru the Federal Intermediate Credit Banks.

I will give a brief digest of the organization and powers of these Banks:

The Act provides for the establishing of twelve Intermediate Credit Banks. One to be located in each of the twelve Federal Land Bank Districts in the United States. The capital stock of these banks is all owned by the United States Government. Each bank has an authorized capital of Five Millions of Dollars on which there has been paid up to date One Million dollars. These banks are authorized to discount paper, or purchase paper, from any national bank, any bank or other financial institution or agricultural marketing association, organized under the state laws or any other Intermediate Credit Bank, provided the original loans were made for agricultural purposes including the raising, breeding, fattening or marketing of live stock. The credit banks may also loan directly to cooperative associations composed of persons engaged in producing or marketing agricultural products—such loans are to be secured by shipping documents, warehouse receipts or mortgages on live stock and may not exceed 75 per cent of the market value of the product, or of the live stock. There must be made provisions for maintaining this margin.

The law provides limitations on the amount of paper which can be purchased from or discounted for any individual organization. The loans made must have a maturity at the time of purchase or discount of not less than 6 months or more than three years. For the present the Federal Farm Loan Board has made a ruling not to accept loans with a maturity of over nine months. However, as these banks progress this time limit undoubtedly will be extended materially.

The Federal Farm Loan Board sets the interest rate to be charged on these loans. The interest rate, however, may not exceed by more than one per cent the interest rate on the last bonds issued by the bank. These banks are not allowed to purchase loans where the rate charged to the borrower is in excess of one and one-half of one per cent of the rate charged by the bank. At the present time the rate charged by the Intermediate Credit Banks is 5½ per cent, so the bank will not discount any paper where the borrower has been charged above 7 per cent.

The banks or cooperative marketing organizations rediscounting notes with the Intermediate Credit Banks must guarantee these notes. Intermediate Credit banks are authorized, subject to the approval of the Federal Farm Loan Board, to issue debentures or bonds which are to be secured by an equal amount of cash or obligations held by the bank. Each bank may issue bonds up to a total of ten times its capital and surplus.

This makes the combined credit facilities of all these Intermediate Credit Banks Six Hundred Sixty Million Dollars. The Bonds of these banks may run from six months to five years. The rate of interest is subject to the approval of the Federal Farm Loan Board, but may not exceed 6 per cent per annum. There is no Government obligations on these bonds. However, all of the banks in the system are liable for the bonds issued by other banks of the system.

The whole system is based upon the same general plan as are the Federal Land Banks. The Intermediate Credit Banks will go into the open market of the Country for their money and will obtain this money through the sale of bonds just as the Federal and the Joint Stock Land Banks do. The security against these debentures or bonds will be the notes given by farmers and which have been guaranteed by Banks, a cooperative marketing organization or a live stock corporation. This gives the farmers an organization through which they can go into the money market and obtain funds. The bonds or debentures issued by these banks are by the Act declared instrumentalities of the United States Government and are exempt from all Federal, State or Municipal taxation. The capital of these banks is not taxable, however, any real estate owned by these banks is taxable the same as any other real estate within the same jurisdiction.

In order to help these banks properly function, the comptroller of the currency of the United States is directed to furnish to such banks for their confidential use reports regarding the financial condition of national banks with which the Credit Banks contemplate dealing, and also to make examination of organizations through which the Credit Banks are contemplating making loans or expecting discount. These examinations may, however, only be made with the consent of the organization which is examined. The law provides that with the exception of banks, trust companies and savings associations organized under State laws, any organization, before securing rediscount privilages with the Credit Banks, must file written consent to an examination by Land Bank examiners. State bank and trust companies may also be required to pass this examination. This gives the Intermediate Credit Bank ample opportunity to ascertain from official sources the financial ability of the organization with which they contemplate doing business. Each one of these banks must be examined by the Federal Farm Loan Board at least once every year and the results of such examination shall be made public. In addition, each Credit Bank must furnish at least three times a year a detailed statement of its financial activities and condition. These reports are to be published in the local papers. Land Bank appraisers at the request of the Credit Bank and with approval of the Federal Farm Loan Board are authorized to inspect the condition of products or live stock which serve as a basis for loans or discount with a Credit Bank. There are heavy penalties provided for in the Act for embezzlements, for making false reports for the purpose of securing credit, or for accepting fees except as provided for in the law.

The Intermediate Credit Banks give a service similar to that of the Federal Reserve Bank on agricultural paper with a maturity of not over nine months and are in addition allowed to make loans on paper with a maturity up to three years. They are also allowed to make loans to cooperative, marketing and live stock companies and in a general

(Continued on Page 17)

Highest Honor In Michigan Ton Litter Contest Won By Poland Chinas

By V. A. FREEMAN

Extension Specialist in Animal Husbandry, Michigan Agricultural College

SIXTEEN litters weighed above the ton mark at 180 days age in the Michigan 1923 Ton Litter Contest. They were all fed for practical economical production without using any expensive methods to induce rapid growth so that the lessons brought out by their records are of practical value to every swine grower in the state.

A summary of the records of the winners show in nearly every case—

1. The dams received either some protein supplementary feed such as skimmed milk, tankage, middlings, oil meal or legume hay, along with a limited amount of corn during the gestation period or else the ration was made up of a very small proportion of corn, barley or rye for several weeks before farrowing. This supplementary protein feed was considered especially important the last 5 or 6 weeks.

2. The dams were managed so as to require them to take considerable exercise every day during the gestation period.

3. A careful record of the breeding date was kept so that special attention could be given at farrowing time to provide a warm, clean, dry pen and to be on hand to care for the new pigs.

4. The sows were fed lightly for two days to one week after farrowing, but as soon as the pigs could use more milk, the feed was gradually increased until the sows were receiving all they could consume after the first month.

5. The pigs were encouraged to take feed by themselves at ages of three to five weeks and were well started on feed by the time they were weaned at 8 to 10 weeks old.

6. Feeds rich in protin like skimmed milk, butter milk, middlings and tankage were used for the pigs before and at weaning time, along with tempting foods such as corn, hominy, or ground barley, wheat and oats.

7. Alfalfa or clover pasture was used for the sow and litter and for the pigs after weaning.

8. Several of the litters were fed on self-feeder from before weaning time throughout the period while others were required to use more pasture the first three or four months, but were full fed during the last two or three months. The litters making the highest average weight per pig were full fed throughout the period.

9. The dams of the litters were larger than the average sow, but of a medium type, showing plenty of constitution, feeding capacity and great length and depth of body, and showed an active temperament.

The position, weight and breed of the winning litters are given in the chart at the foot of the two center columns. The number of pigs in each littler and complete names and addresses of owners are also given.

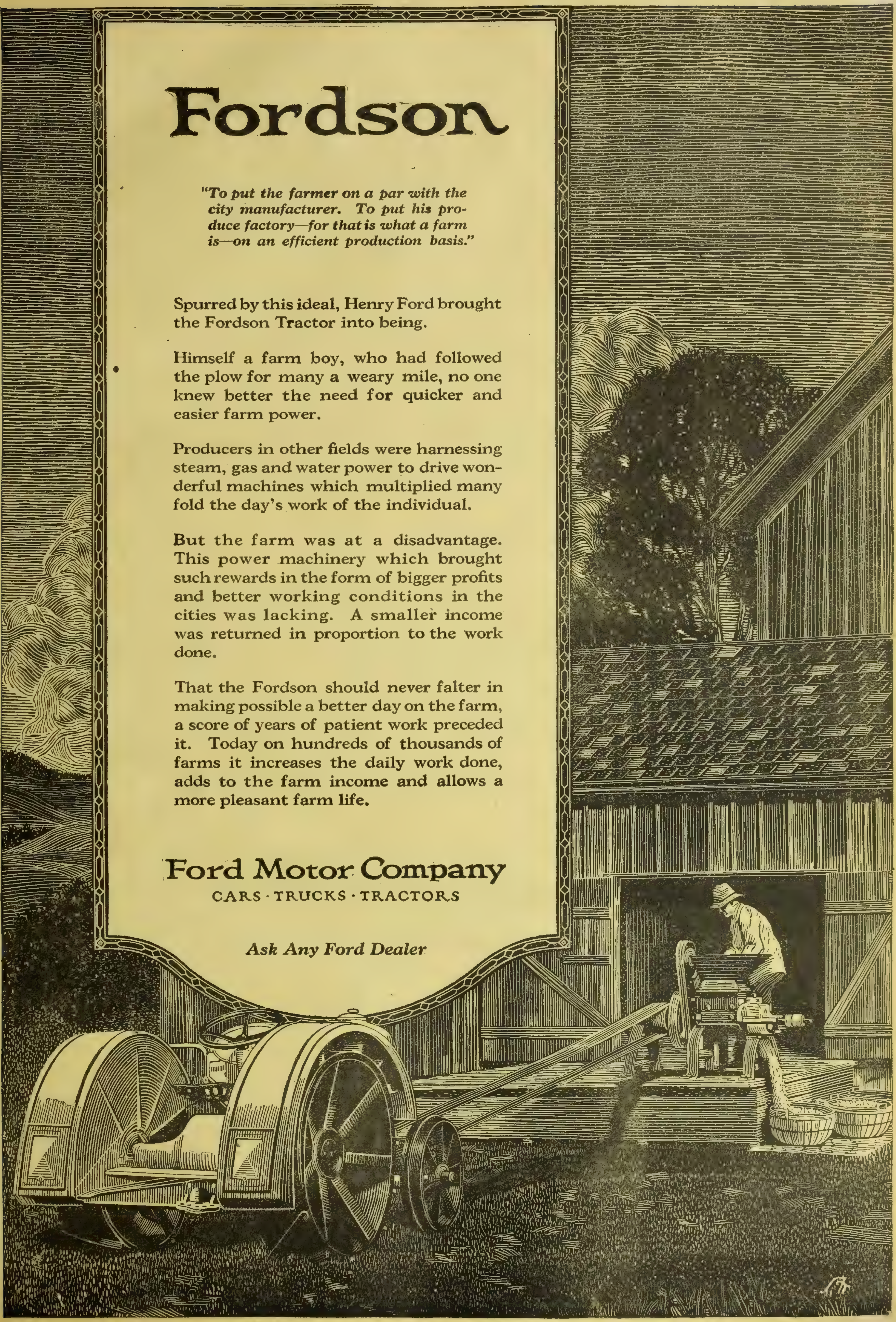
The first five will win in addition to the gold medal to be awarded each of the sixteen, the cash prizes made possible by the contributions of packing companies of Detroit, which are $50.00, $40.00, $30.00, $20.00 and $10.00 respectively.

The heaviest litter in the contest also wins their producers, V. J. Brown & Son of Jonesville, the $200.00 offered by The Poland China Breed Promotion Committee. The heaviest Duroc Jersey litter, produced by H. M. McIlwain of Bath, wins the $100.00 offered by the National Duroc Jersey Record Association. The heaviest Chester White litter, produced by Fritz Mantey of Fairgrove, wins the $100 offered by the Chester White Record Association. Ray Harold of Gladwin, wins the $50 offered by the American Duroc Jersey Ass'n.

It is interesting to note that while a Poland China litter won high honors both in litter weight and average weight per pig, a Duroc Jersey litter stood second, and a Chester White litter stood near the top. Every litter was sired by a pure bred and three-fourths of the dams were pure breds. Seven of the sixteen litters were sired by a Duroc Jersey, five by a Chester White, three by a Poland China, and one by a Berkshire. Of the dams, five were Durocs, three Chesters, three Polands, one Berkshire, and four grade Durocs, Polands and Chesters.

HOW WINNING LITTERS STAND

Weight	Breeding of Sire	Breeding of Dam	Number of pigs	Owner	Address
1st—2840½	Poland C.	Poland C.	10	V. J. Brown & Son,	Jonesville.
2nd—2756	Duroc J.	Duroc J.	12	H. M. McIlwain,	Bath.
3rd—2636	Poland C.	Grade D. J.	12	Monroe H. Smith,	Leonidas.
4th—2404	Chester W.	Grade P. C.	10	Fritz Mantey,	Fairgrove.
5th—2341	Duroc J.	Duroc J.	10	Ray Harold,	Gladwin.
6th—2278	Chester W.	Chester W.	11	Chas. McCalla,	Ann Arbor.
7th—2272	Chester W.	Grade C. W.	9	Harry Ward,	McBain.
8th—2202½	Duroc J.	Duroc J.	10	Perry A. Hewitt,	Highland.
9th—2158½	Chester W.	Chester W.	9	W. H. Collar,	Dansville.
10th—2124	Duroc J.	Grade D. J.	11	Royce Brazee,	Onsted.
11th—2122	Berkshire	Berkshire	12	Joseph L. Ruth,	Port Austin.
12th—2060	Poland C.	Poland C.	9	Jesse T. Fox,	Pratville.
13th—2055½	Duroc J.	Poland C.	10	Ivan Bursley,	Charlotte.
14th—2042	Duroc J.	Duroc J.	8	Alex. Brown,	Homer.
15th—2014	Duroc J.	Duroc J.	9	Helen Strange,	Grand Ledge.
16th—2000	Chester W.	Chester W.	10	Ralph A. Tew,	Hudson.



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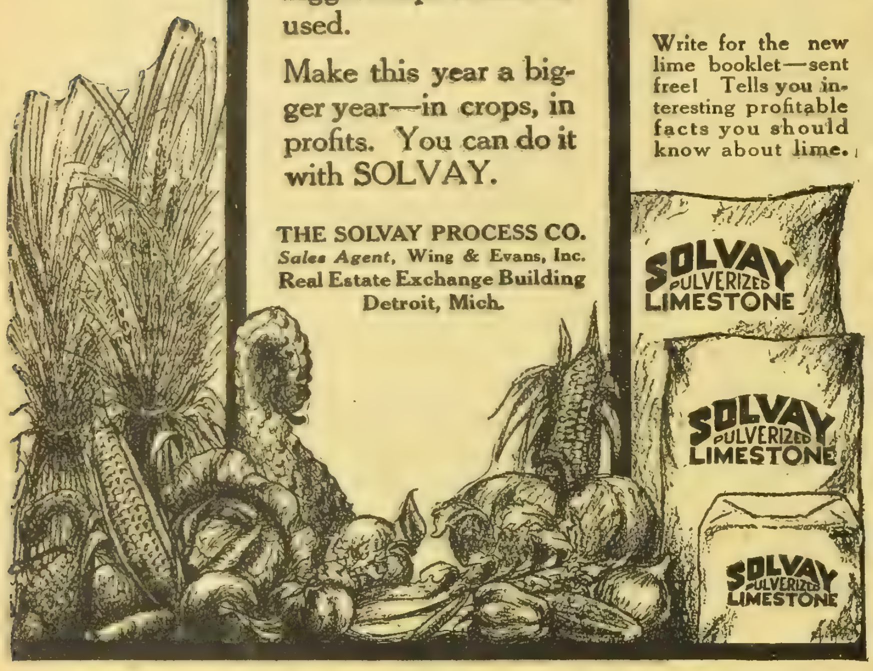
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What the Neighbors Say

FOREIGNERS USE CHILDREN IN BEET FIELDS

IN the editorial of your issue of Oct. 27, entitled, "Child Labor in the Beet Fields," is certainly food for thought.

It is an accepted fact that contract labor brings the whole family into the beet field from the time the blocking and thinning start until the last beet is topped in the field.

However, in our opinion this use of child labor is not in any way comparable to the employment of child labor in the cotton mills of the south because the season for blocking and thinning beets usually starts just about the time the district schools let out for summer vacation and in most cases the harvesting is completed not later than two months after school starts in the fall. This leaves about seven months of school for these children and in most cases that have come under observation they are eager to make the most of their opportunity, sometimes excelling their more fortunate class-mates whose parents never think of keeping their children home to work. Thus these children of contract laborers cannot be classed as illiterate. However, we have found from experience that their presence in the fields is objectionable from quite a different standpoint.

In about nine cases out of ten their work is unsatisfactory. Handling beets is too heavy work for many of them and as their parents are bound to keep them going the work is done in a very poor manner.

It seems to us that this contract labor is being paid enough that they can make a living wage without driving their children to the very limit of their endurance and I believe it is time that the beet growers of Michigan who employ contract labor should say emphatically enough to be heard by every labor family that no children shall be brought in the beet fields to work. —A. J. Davis, Shiawassee County, Mich.

APPLAUDS LABOR ORGANIZATION

EDITOR of M. B. F.:—That Big Business should try to set farmers and workingmen by the ears is "Very natural" as neighbor Pecksniff used to say. That certain so-called farm editors should fall for its propaganda is not surprising, but to find it on your editorial page is nauseating. If labor gets more than we do because it had the good sense to organize efficiently before we began to wake up, whose fault is it? Instead of being jealous, why not profit by their example?

To sneer at radicalism is easy and fashionable, but radicalism varies. There is not only the careless radicalism of the puppy who digs up the pansy bed for fun, and the selfish radicalism of the pig who roots up everything in hope of immediate personal gain. There is also the constructive radicalism of the gardener who goes to the roots of things in transplanting and cultivating. There are puppies and pigs among all classes, not excepting farmers. Every class, including organized labor, has some who try to follow the teachings of Jesus and many capable of following intelligent self-interest. On these depends the solution of our problem. Most of them are farmers or workingmen, not because these classes are morally superior, but because they are most numerous and feel most keenly the enlightening pinch of circumstances.

The interests of farmers and workingmen are not all identical. Even among farmers each commodity group has interests and problems of its own. So also has each industrial group of workingmen. No human being can fully and fairly represent all these interests. Yet our present representative system requires one person to represent not only all these, but also all the various groups of manufacturers, bankers, etc., in his district or state. Here, I believe, is one great source of trouble. Give every interest its own representative and let no congressman or legislator try to represent more than one interest, and our legislative bodies will for the first time in history really represent the whole people. But just now we must use the system we have, which requires political parties.

The strongest argument against a new party just now is not the diversity of interests among progressive citizens, but the fact that neither farmers nor workingmen see clearly enough yet to know exactly what they want. This may cease to be a fact sooner than we think. Anyhow the time is ripe for earnest mutual discussion and criticism, not aimless sneers. To promote such criticism and discussion every farmer should read some good labor organ and every workingman some good farm paper. My choice would be THE BUSINESS FARMER and "Labor," the up-to-date weekly published at Washington, D. C., by the railroad brotherhoods. "Labor" costs $2.00 a year because it carries no advertisements. If you can't afford to subscribe for both, take THE BUSINESS FARMER anyhow and exchange with some member of any railway union. But subscribe if you can and get some union man to subscribe for M. B. F.—Stacy Brown, Ionia County, Mich.

DOING BUSINESS WITH BANK CREDIT

DEAR Sir:—Some time ago business was done with personal notes sent thru the mails. Now banks say that 95% of our business is done with bank credit. That is, business men take their 30, 60, or 90 day notes to the bank and the bank, for a fee of 6 to 10 per cent, passes on these notes and pretends they are money on deposit. Of course the notes and the collateral are the personality and property of the borrower so it is his credit—not bank credit, at all. But it seems odd to me that the business man does not take his note to the Chamber of Commerce and for a fee of one per cent let them pass on his credit and draw checks on the Chamber of Commerce and clear or swap them thru the Chamber of Commerce clearing house. Then by making public improvements by spreading a tax levy and issuing public improvement scrip we will find our new methods get twice as much as interest bearing bonds. In addition to that we shall miss the periodic panics when bankers tell the people their borrowers notes are no good, and refuse to allow them to pretend to have money on deposit and mail out their checks to pay their debts. We are making progress, but of course slowly.

The farmer may well consider this idea, for his business is, not now, very profitable. — Ezra R. Averill, Grand Rapids, Mich.

SEARS, ROEBUCK PLAN TO GIVE FARMER AID

JULIUS Rosenwald, president of Sears, Roebuck & Co., has announced the establishment of the Sears, Roebuck Agricultural Research Foundation to determine essential facts relative to farming and to study every phase of agricultural economics.

Their findings will be presented to the public as well as the farmers in order to acquaint the laymen with the farmers' problems.

In announcing that the foundation will be headed by the most capable men available in the agricultural research field, who will have a large staff of economists and statisticians, Mr. Rosenwald says: 'As business men we feel a direct obligation to do everything we can to improve the farmers' condition. A careful survey has revealed to us that where the farmer needs help is in economies in marketing his product.

"We have, therefore, decided to establish an agricultural research foundation to deal exclusively with the economic problems of the farm. The task will be placed in the hands of fair-minded research men, and we expect to discover facts of vital interest to the farmers and the public."

Men in the trade consider this a far-sighted move inasmuch as it is designed to improve the purchasing power of the farmer, the mainstay of the mail order business.

Farmers Service Bureau

(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full name and address. Name not used if so requested.)

SELL FURNITURE FOR STORAGE CHARGES

Want to ask a question. A woman moved her household goods here twelve years ago and nothing was said in regard to paying storage. She lives in another state. How can I proceed to get these goods for storage? She is keeping house and has bought furniture to furnish five rooms.—D. E., Hartford, Michigan.

—I would advise you to write a letter to the woman, notifying her that unless she removed the furniture, it would be sold for storage. If she does not remove it within a reasonable length of time you may sell it and deduct your storage charge from the proceeds.

Before proceeding to sell you should consult a lawyer as to the proper steps to be taken in the sale to comply with the statute.—Asst. Legal Editor.

THRESHING SWEET CLOVER

I wish some information concerning threshing sweet clover seed. It is next to impossible to get a regular clover huller on account of no other jobs and hilly roads. Can it be threshed with a grain separator and afterward sent somewhere and have prepared for market? I will thank you for any advice or information you can give.—A. B., Tustin, Mich.

—A grain separator is very frequently used in threshing sweet clover. When operated carefully no trouble should be experienced in removing the seed from the plants. If the hull is to be removed from the seed it is essential that the plants be thoroughly dry, otherwise it is impossible to remove the hull. Also it is advisable to make a few adjustments if the hull is to be removed. Alfalfa or red clover riddles should be used. The speed of the fan should be reduced about half so that the seed will not be blown over. Some operators set the concave teeth so that they run closer to the cylinder teeth than is customary when threshing grain. After these changes, only a very small percent of the pods will be removed if they are damp. If the plants have made a very rank growth, the machine may clog unless the number of rows of concave teeth are reduced. All of the larger seed companies have scarifying machines that are quite efficient in removing sweet clover hulls.—C. R. Megee, Associate Professor of Farm Crops, M. A. C.

HURT WHILE BLOWING STUMPS

I was unable to pay my taxes in 1922, they were payable in March 1922. Until what date must those taxes be paid to avoid consequences? I have rented my farm for one year to a neighbor farmer without asking any return whatsoever. I made the arrangement with him that I furnish the powder to blow out the stumps, paying his time and labor. Should any accident happen in storing or using the dynamite could I be held liable for the damages to health and property? Thanking you for your kind information.—O. P., Emigsville, Pa.

—As I do not have a copy of the Pennsylvania statutes, I would suggest you consult your county treasurer on the first question, regarding payment of taxes.

If you are hiring your tenant to blow out stumps on your farm for your benefit, and paying him wages to do the work, you would be liable for damages done by his negligence while doing the work. Your liability would depend upon the exact nature of the arrangement or agreement you had with your tenant, and inasmuch as I do not have the details of the agreement would not be able to definitely advise whether or not you would be liable in your case.—Asst. Legal Editor.

WHO IS LIABLE FOR DAMAGE?

I am writing you for advice as to hay rake? A buys new machinery who must stand good for damage to to do haying with. A hires man to help rake, hired man runs into a stump, gets mad and hits horse and makes it jump and breaks wheel so A has to order another wheel, before he can finish haying. Would like to know who is to blame when horse goes fast enough at all times so she doesn't need whip used on her at any time, and as it was only carelessness that caused the machine to be broken. Would appreciate any advice you can give me.—A subscriber to M. B. F. Lewiston, Mich.

—Liability for damages in a case like this would depend upon the negligence of the person who caused the damage. If the hired man was negligent in performing his duty thus causing the damage, he would be liable.—Asst. Legal Editor.

RIGHT TO BUY BOOKS

Has any two of the school board the right to purchase books or supplies without the knowledge of the third member?—J. S., Bloomingdale, Michigan,

—I would say that it is the duty of the director to purchase the necessary appendages for the schoolhouse and keep the same in good condition and repair. The necessary appendages shall include set of wall maps, the grand divisions of the United States and Michigan, a globe, dictionary, a reading chart, case for library books, looking glass, comb, towel, water pail, cup, ash pail, poker, stove shovel, broom, dust pan, duster, wash basin, and soap, and upon the order of the district board shall furnish the schoolhouse with such other apparatus and material as may be necessary in doing efficient work. The director shall keep an account of all expenses incurred by him as director and such accounts shall be audited by the moderator and treasurer and on their written order shall be paid.

No act authorized to be done by the district board shall be valid unless voted at a meeting of the board. A majority of the members of the board at a meeting thereof shall be necessary for the transaction of all business.—G. N. Otwell, Department of Public Instruction.

MUST HAVE COWS TESTED

Is there a state law to compel one to let a cow tester test his cattle?—G. K., Pinckney, Mich.

—From the address given it is assumed that you live in Livingston county. Livingston county is one of those counties in which Area Tuberculosis Eradication work is underway and the fact has been duly advertised.

Section 15A, which was added to Act 181 of the Public Acts of 1919 by the 1923 legislature, states in part that "Whenever the Commission shall have determined to test for tuberculosis all the cattle in any certain county where bovine tuberculosis eradication has been adopted, he shall give public notice of his determination by publishing a notice to that effect in one or more newspapers of general circulation in said county at least ten days before such testing shall commence. Cattle found to be reactors to such tests shall be branded, slaughtered when ordered by the Commissioner and the owners thereof entitled to such indemnities as in this act provided. It shall be unlawful for any person who owns, or who is in possession of, or controls any cattle, to prevent, hinder, obstruct or refuse to allow the Commissioner or authorized veterinarian to conduct such tests for tuberculosis on such cattle, provided that this section shall not apply to steers properly isolated from other cattle.—B. J. Killham, State Veterinarian.

RAFFLES

Will you please inform me if it is unlawful to raffle a car via tickets. Thanking you, I am, H. L. R., Newberry, Michigan.

—It is unlawful in Michigan to dispose of personal property by means of raffles, or lottery.—Asst. Legal Editor.

About Farm Machines *and the* McCormick-Deering Line

THE U. S. Department of Agriculture has shown that farm equipment is one of the smallest items in the cost of farming, the yearly average being only 4 to 8% of the total.

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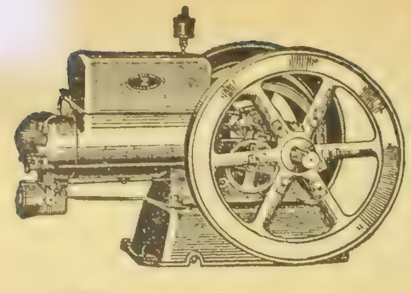

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Oh Money! Money!

by ELEANOR H. PORTER

THE STORY TO DATE

MR. STANLEY G. FULTON, 50-year old bachelor and possessor of twenty million dollars, calls on his lawyer and they discuss the disposition of this large fortune after its owner's death. The lawyer is in favor of giving the money to colleges or charities while Fulton is opposed to these ideas. He remembers that he has some distant cousins and decides to leave the money to one of them, but first he determines to learn which one will use it to the best advantage. To find out who is the worthy one he, through his lawyer, gives, each cousin $100,000 to use as they will. Before giving them the money grows a beard and, using the name of Mr. John Smith, goes to the town where they live to find out what kind of people they are. Upon arriving in town he visits James Blaisdell, one of the cousins, where he tries to hire board and lodging. While there he meets Miss Flora Blaisdell, another cousin who is a dressmaker. They decide they cannot rent a room to him and supply him board and refer him to Frank Blaisdell's, the third cousin. He gets a room there and, passing as a writer gathering material for a book on the Blaisdell family in this country, he starts out. He calls on all of the Blaisdells and as they all talk of a relative by the name of Miss Maggie Duff he decides to call on the lady. He finds her living with her father, an old man who seems to have soured on the world.

(Continued from Nov. 24th issue.)

MR. SMITH, in spite of his efforts to himself unable to confine his attention to birth, death and marriage notices. Once he almost uttered an explosive "Good Heavens, how do you stand it?" to his hostess. But he stopped himself just in time, and fiercely wrote with a very black mark that Submit Blaisdell was born in eighteen hundred and one. A little later he became aware that Mr. Duff's attention was frowningly turned across the table toward himself.

"If you will spend your time over such silly stuff, why don't you use a bigger book?" demanded the old man at last.

"Because it wouldn't fit my pocket," smiled Mr. Smith.

"Just what business of yours is it, anyhow, when these people lived and died?"

"None perhaps," still smiled good-humoredly.

"Why don't you let them alone, then? What do you expect to find?"

"Why, I—I" Mr. Smith was plainly non-plused.

"Well, I can tell you it's a silly business, whatever you find. If you find your grandfather's a bigger man than you are, you'll be proud of it, but you ought to be ashamed of it—'cause you aren't bigger yourself! On the other hand, if you find he isn't as big as you are, you'll be ashamed of that, when you ought to be proud of it—'cause you've gone him one better. But you won't. I know your kind. I've seen you before. But can't you do any real work?"

"He is doing work, real work, now, father," interrupted Miss Maggie quickly. "He's having a woeful time, too. If you'd only help him, now, and show him those papers."

A real terror came into Mr. Smith's eyes, but Mr. Duff was already on his feet.

"Well, I shan't," he observed tartly. "I'm not a fool if he is. I'm going out on the porch where I can get some air."

"There, work as long as you like, Mr. Smith. I knew you'd rather work by yourself," nodded Miss Maggie, moving the piles of papers nearer him.

"But, good Heavens, how do you stand—" exploded Mr. Smith before he realized that this time he had really said the words aloud. He blushed a painful red.

Miss Maggie, too, colored. Then, abruptly, she laughed.

"After all, it doesn't matter. Why shouldn't I be frank with you? You couldn't help seeing—how things were, of course, and I forgot, for a moment that you were a stranger. Everybody in Hillerton understands. You see, father is nervous, and not at all well. We have to humor him."

"But do you mean that you always have to tell him to do what you don't want, in order to—well—that is—" Mr. Smith, finding himself in very deep water, blushed again painfully.

Miss Maggie met his dismayed gaze with cheerful candor.

"Tell him to do what I don't want in order to get him to do what I do want him to? Yes, oh, yes. But I don't mind; really I don't. I'm used to it now. And when you know how, what does it matter? After all, where is the difference? To most of the world we say, 'Please do,' when we want a thing, while to him we have to say, 'Please don't.' That's all. You see, it's really very simple—when you know how."

"Simple! Great Scott!" muttered Mr. Smith. He wanted to say more; but Miss Maggie, with a smiling nod, turned away, so he went back to his work.

Benny, wandering in from the kitchen, with both hands full of cookies, plumped himself down on the cushioned window-seat, and drew a sigh of content.

"Say, Aunt Maggie."

"Yes, dear."

"Can I come ter live with you?"

"Certainly not!" The blithe voice and pleasant smile took all the sting from the prompt refusal. "What would father and mother do?"

"Oh, they wouldn't mind."

"Benny!"

"They wouldn't. Maybe pa would—a little; but Bess and ma wouldn't. And I'd like it."

"Nonsense, Benny!" Miss Maggie crossed to the little stand and picked up a small box. "Here's a new picture puzzle. See if you can do it."

Benny shifted his now depleted stock of cookies to one hand, dropped to his knees on the floor, and dumped the contents of the box upon the seat before him.

They won't let me eat cookies any more at home—in the house, I mean. Too many crumbs."

"But you know you have to pick up your crumbs here, dear."

"Yep. But I don't mind—after I've had the fun of eatin' first. But they won't let me drop 'em ter begin with, there, nor take any of the boys inter the house. Honest, Aunt Maggie, there ain't anything a feller can do, 'seems so, if ye live on the West Side," he persisted soberly.

Mr. Smith, copying dates at the table, was conscious of a slight apprehensive glance in his direction from Miss Maggie's eyes, as she murmured:—

"But you're forgetting your puzzle, Benny. You've put only five pieces together."

"I can't do puzzles there, either." Benny's voice was still mournful.

"All the more reason, then, why you should like to do them here. See, where does this dog's head go?"

Listlessly Benny took the bit of pictured wood in his fingers and began to fit it into the pattern before him.

"I used ter de 'em an' leave 'em 'round, but ma says I can't now. Callers might come and find 'em, an' what would they say—on the West Side! An' that's the way 'tis with everything. Ma an' Bess are always doin' things, or not doin' 'em, for those callers. An' I don't see why. They never come—not new ones."

"Yes, yes, dear, but they will, when they get acquainted. You haven't found where the dog's head goes yet."

"Pa says he don't want ter get acquainted. He'd rather have the old friends, what don't mind baked beans, an' shirt sleeves, an' doin' yer own work an' what thinks more of yer heart than they do of yer pocketbook. But Ma wants a hired girl. An' say, we have ter wash our hands every meal now—on the table, I mean—in those little glass wash-dishes. Ma went down an' bought some, an' she's usin' 'em every day, so's ter get used to 'em. She says everybody that is anybody has 'em nowadays. Bess thinks they're great, but I don't. I don't like 'em a mite."

"Oh, come, come, Benny! It doesn't matter—it doesn't really matter, does it, if you do have to use the little dishes? Come, you're not half doing the puzzle."

"I know it." Benny shifted his position, and picked up a three-cornored bit of wood carrying the picture of a dog's paw. "But I was just thinkin'. You see, things are so different—on the West Side. Why even pa—he's different. He isn't there hardly any now. He's got a new job."

"What?" Miss Maggie turned from the puzzle with a start.

"Oh, just evenin's. It's keepin' books for a man. It brings in quite a lot extry, ma says; but she wouldn't let me have some new roller skates when mine broke. She's savin' up for a chafin' dish. What's a chafin' dish? Do you know? You eat out of it, some way—I mean, it cooks things ter eat; an' Bess wants one. Gussie Pennock's got one. All our eatin' 's different, 'seems so, on the West Side. Ma has dinners nights now, instead of noons. She says the Pennocks do an' everybody does who is anybody. But I don't like it. Pa don't, either, an' half the time he can't get home in time for it, anyhow, on account of gettin' back to his new job, ye know, an'—"

"Oh, I've found where the dog's head goes," cried Miss Maggie. There was a hint of desperation in her voice. "I shall have your puzzle all done for you myself, if you don't look out, Benny. I don't believe you can do it, anyhow."

"I can too. You just see if I can't!" retorted Benny, with sudden spirit, falling to work in earnest. "I never saw a puzzle yet I couldn't do!"

Mr. Smith, bending assiduously over his work at the table, heard Miss Maggie's sigh of relief—and echoed it, from sympathy.

CHAPTER VII

Poor Maggie and Some Others

It was half an hour later, when Mr. Smith and Benny were walking across the common together, that Benny asked an abrupt question.

"Is Aunt Maggie goin' ter be put in your book, Mr. Smith?"

"Why—er—yes; her name will be entered as the daughter of the man who married the Widow Blaisdell, probably. Why?"

"Nothin'. I was only thinkin'. I hoped she was. Aunt Maggie don't have nothin' much, yer know, except her father an' housework—housework either for him or some of us. An' I guess she's had quite a lot of things ter bother her, an' make her feel bad, so I hoped she'd be in the book. Though if she wasn't she'd just laugh an' say it doesn't matter, of course. That's what she always says."

"Always says?" Mr. Smiths' voice was mildly puzzled.

"Yes, when things plague, an' somethin' don't go right. She says it helps a lot ter just remember that it doesn't matter. See?"

"Well, no,—I don't think I do see," frowned Mr. Smith.

"Oh, yes," plunged in Benny; " 'cause, you see, if yer stop ter think about it—this thing that's plaguin' ye—you'll see how really small an' no-account it is, an' how, when you put beside really big things, it doesn't matter at all—it doesn't really matter, ye know. Aunt Maggie says she's done it years an' years, ever since she was just a girl, an' somethin' bothered her; an' it's helped a lot."

"But there are lots of things that do matter," persisted Mr. Smith, still frowning.

"Oh, yes!" Benny swelled a bit importantly. "I know what you mean. Aunt Maggie says that, too; an' she says we must be very careful an' not get it wrong. It's only the little things that bother us, an' that we wish were different, that we must say 'It doesn't matter' about. It does matter whether we're good an' kind an' tell the truth an' shame the devil; but it doesn't matter whether we live on the West Side an' eat dinner nights instead of noons, an' not eat cookies any of the time in the house,—see?"

"Good for you, Benny,—and good for Aunt Maggie!" laughed Mr. Smith suddenly.

Aunt Maggie? Oh, you don't know Aunt Maggie, yet. She's always tryin' ter make people think things don't matter. You'll see!" crowed Benny.

A moment later he had turned down his own street, and Mr. Smith was left to go on alone.

Very often, in the days that followed, Mr. Smith thought of this speech of Benny's. He had opportunity to verify it, for he was seeing a good deal of Miss Maggie, and it seemed, indeed, to him that half the town was coming to her to learn that something "didn't matter"—though very seldom, except to Benny, did he hear her say the words themselves. It was merely that to her would come men, women and children, each with a sorry tale of discontent or disappointment. And it was always as if they left with her their burden, for when they turned away, head and shoulders were erect once more, eyes were bright, and the step was alert and eager.

He used to wonder how she did it. For that matter, he wondered how she did—a great many things.

Mr. Smith was, indeed seeing a good deal of Miss Maggie these days. He told himself that it was the records that attracted him. But he did not always copy records. Some times he just sat in one of the comfortable chairs and watched Miss Maggie, content if she gave him a word now and then.

He liked the way she carried her head, and the way her hair waved away from her shapely forehead. He liked the quiet strength of the way her capable hands lay motionless in her lap when their services were not required. He liked to watch for the twinkle in her eye, and for the dimple in her cheek that told a smile was coming. He liked to hear her talk to Benny. He even liked to hear her talk to her father—when he could control his temper sufficiently. Best of all he liked his own comfortable feeling of being quite at home, and at peace with all the world—the feeling that always came to him now whenever he entered the house, in spite of the fact that the welcome accorded him by Mr. Duff was hardly more friendly than at the first.

To Mr. Smith it was a matter of small moment whether Mr. Duff welcomed him cordially or not. He even indulged now and then in a bout of his own with the gentleman, chuckling inordinately when results showed that he had pitched his remark at just the right note of contrairiety to get what he wanted.

For the most part, however, Mr. Smith, at least nominally, spent his time at his legitimate task of studying and copying the Blaisdell family records, of which he was finding a great number. Rufus Blaisdell apparently had done no little "digging" himself in his own day, and Mr. Smith told Miss Maggie that it was all a great "find" for him.

Miss Maggie seemed pleased. She said that she was glad if she could be of any help to him, and she told him to come whenever he liked. She arranged the Bible and the big box of papers on a little table in the corner, and told him to make himself quite at home; and she showed so plainly that she regarded him as quite one of the family, that Mr. Smith might be pardoned for soon considering himself so.

(Continued in Dec. 22nd issue.)

THE PROPHET OF A NEW DAY

TEXT: "And he came into all the regions round about Jordan, preaching the baptism of repentance unto remission of sins; * * * * The voice of one crying in the wilderness, 'make ye ready the way of the Lord.' "—Luke 3:3f.

THIS prophet is John the Baptist. He makes his appearance as a new spokesman of God in wonderful days. A new King has been born. He receives the recognition of heaven and the attention of wise men. The angels are guarding his every movement. So he is taken to Egypt and returns to Nazareth, eluding the jealous and brutal Herod. John announces that a new, free day is at hand, and a new and gracious Ruler. This is the beginning of the great and continuing revolution of all time; even the democratising and spiritualizing of all peoples. This revolutionary movement is being hopefully felt today in its onward sweep. It is rolling up billows across the sea, submerging the tyrany of European Herods. But, how dangerous is all this spirit and movement unless guided by Christian impulses!

But let us look at this prophet. He says, "I am the voice of one crying in the wilderness." And, to think of it, we are yet in the wilderness of social, economic, and religious entanglement. But John is the last prophet of the old days of oppression. He is Elijah which was to come to announce the lifting of the ban upon religious freedom and social oppression. Jesus said so. In spirit, energy, looks, and manner, he is Elijah. He comes on to the stage so abruptly and right out of the desert like Elijah of old. In the wilderness we see him struggling and wrestling with God. From there, rough and ready, Heaven sends him as the courier of the new day. His proclamation is, "The Kingdom of Heaven is at hand." What a pity, yea tragedy, the world has been so long appreciating this! Let us hope that we are in the rebirth, of Kingdom sureties for this, our day.

But the key-note of John's message is repentance. It is the same olden call. But not having heard the prophetic voice for four centuries, his generation had grown indifferent and unbelieving. What would be our state were the churches closed and the Word unpreached for even a twelve-month? A literal hell. But into this day John comes with his rousing call to repentance for the day of the Lord is at hand. And to him this meant judgement. It meant cleansing the threshing-floor and burning the chaff with unquenchable fire. But to his Jewish listeners, it meant complete dominance of the Gentile world, and that they, the Jews, would come into partial inheritances. And many Jews covet this ideal yet. They are saying in this new epoch, "Now we shall soon return to our own Palestine and sit under our own vine and fig tree to enjoy an exclusive paradise on earth." Even John's conception, which is not completely Christian, would correct this notion. He says, "By the Kingdom, I mean that the King has come to establish his rule over your life; your thoughts and wills. Therefore repent. Your outward formal life has become nauseating, inviting judgement." The multitudes said, "What then must we do?" John said, Feed and clothe your needy neighbors." The publicans said, "What must we do?" The answer came "Lower the taxes and cease extorting from your neighbor." The soldiers asked him, "We, what must we do?" Said the prophet, "Cease violent and unjust oppression." (see Luke context). How pertinent for today! "One hundred and forty-five thousand men, women and children, expectant mothers and gray-haired patriarchs have been deported from the Ruhr." France, cease your oppression. Bring back evicted families to their homeland. Where do you get your right to starve and terrorize the working population of a whole nation, bringing on cicic strife and revolution? And, O, America, there are many working men yet in Leavenworth, and for no other reason than that they expressed an honest opinion against war. And who of us can say today that they were not more nearly right? "Sweet land of liberty," cease your opperssion. Hurry with your amnesty. And all Christendom, we need not so much religious garb and sacramental form, as a robe of purity, pentinence, and neighborly goodness.

Surely, this is the great need of our day. The church is called thru prayer and service to anchor the world safely to this heavenly ideal. Why has it not been done already? Because church formulas and dogmas are being idealized rather than the spirit of the Book. The spirit of the prophet would put social balance and self-denial into our lives. But we are self-complacent and refuse such a baptism. More Johns crying in the wilderness! Said Jesus, Jerusalem did not go out to hear a man who was clothed in "soft raiment." And no Christian today can move the hearts of one or many if he is given to hankering after the sensualities of life. There is no place in the world of social obligations for a kid gloved or soft-raiment religion. It is hypocricy and the ax lieth at the root of the tree.

But let us examine the scene more closely. Were there any church folks in the audience? Matthew says the Pharisees were there. Ah, the church leaders! But John hated them for their finely-woven and self-made religion. Worshipers of traditions and rules. Well, dare not the church have rules? Yes, but she dare not make rules. Her rules are already made and to a social outlook and end. This is the church that Jesus lived and died for; and this is the imperative of churchdom today. And the Sadducees, also were there. They treated religion lightly and were a fair sample of the morally clean and worldly-wise men of our day. When both of these classes asked for baptism, John says, "Ye offspring of vipers, who has warned you to flee from the wrath to come?" His words were rough and harsh. They had in them the hot sting of judgment. But the seared consciences of his audience needed just this. He was not "knocking," but in his vigorous way was just tearing off the mask of piety that they might see their sins and repent. John must have believed that honeyed words usually reveal no one's sin, and no fruit is brought meet for repentance.

Now, here is a teaching not to be put off. Judgment comes along with the new day of redemption. It is associated with the Kingdom age, even now. We are suffering under heavy judgment now because of a lack of social politics and righteous living. Does it seem that some of the chaff must be burned up to save the wheat? Well, this is the Baptist's principle in action. The Bible says this principle is eternal and history makes it world-wide in scope. So, if we, our homes, and our country would be saved, there must come into our living that day of sorrow for sin and an amendment of our ways.

So here is the prophet's call. It is the red lantern of warning against the spirit of ease, of sensual comforts, of dollar-chasing, and of social seclusion and parasitism. Here is his announcement: "All flesh shall see the salvation of God." Who will help made ready "the way of the Lord," the prophet's new day?

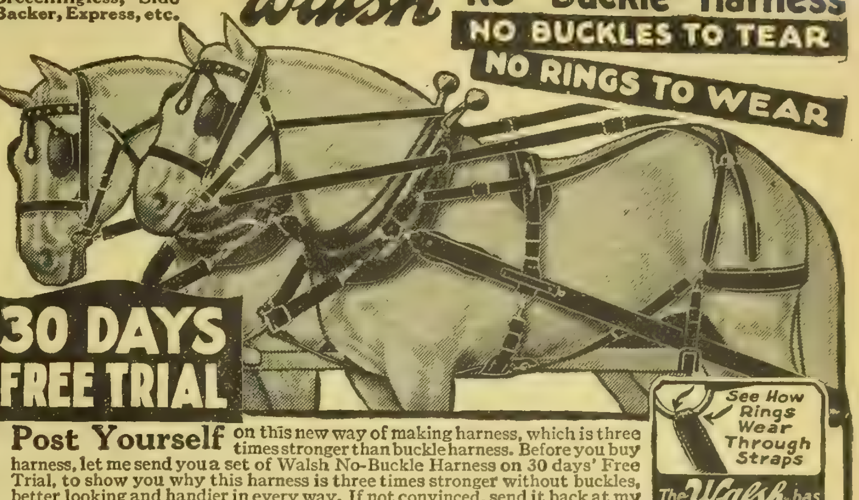
BIBLE THOUGHTS

BE KIND TO THE ERRING:—Brethen, if a man be overtaken in a fault, ye which are spiritual, restore such an one in the spirit of meekness: considering thyself, lest thou also be tempted.—Galatians 6:1.

THE WAY OF ESCAPE:—It shall come to pass in the day that the Lord shall give thee rest from thy sorrow, and from thy fear, and from thy hard bondage wherein thou wast made to serve.—Isaiah 14:3.

KEEP THE WORD:—Whoso keepeth the word, in him verily is the love of God perfected: hereby know we that we are in him.—1 John 2:5.

PRAYER FOR TODAY:—O Lord God, I pray thee, send me good speed this day.—Genesis 24:12.



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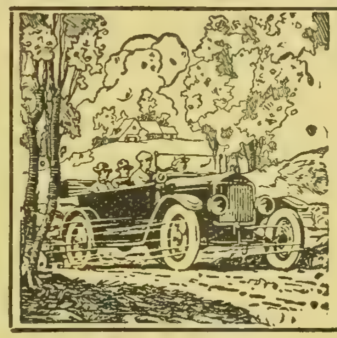

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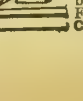

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The Michigan
BUSINESS FARMER

SATURDAY, DECEMBER 8, 1923

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RELIABLE ADVERTISERS

We will not knowingly accept the advertising of any person or firm who we do not believe to be thoroughly honest and reliable. Should any reader have any cause for complaint against any advertiser in these columns, the publisher would appreciate an immediate letter bringing all facts to light. In every case when writing say: "I saw your advertisement in The Michigan Business Farmer!" It will guarantee honest dealing.

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THE LONG LOOK AHEAD

"It seems to me that the long look ahead for agriculture was never so bright as it is at the present time. Increasing living standards are continually broadening the demand for the products of the farm. Our national population is increasing by more than two million mouths and backs annually. So it is true that urban population is growing more rapidly than rural. This is not necessarily a matter of alarm. Rather it is indicative of a healthful development. It means that our domestic markets are growing and that soon—probably within the next decade—home consumption will absorb out troublesome surpluses. Then should the business of farming be better than now and country life advance along lines of permanent well being.

"The present crisis has accomplished one result for agriculture which is well worth while. It has called the attention of the whole country to the farmer and his problems. It has brought a realization not only to the hard headed business man of the city but to the laborer and the housewives that their interest is closely identified with the welfare of the countryside."

THE man who delivered the above very sensible analysis of the present situation in which agriculture finds itself, is none other than Joseph R. Howard, former president of the American Farm Bureau, who made a good name for himself in a hard job.

His opinion has been confirmed by any number of clear thinkers who are not out for political position or some other juicy plum which they hope to reach by stepping on the backs of a depressed class.

"But farmers in my neck of the woods are still discouraged and many of them are selling out to go to work in the automobile factories!"

No one knows that betters than we do, neighbor! We don't argue for a moment that things are right—not by a long ways! But we do claim, and we can prove, that things are getting better for the farmer and to get discouraged now, throw up the sponge and sacrifice years of hard labor in building up a farm is the height of folly and most of the so-called "farmers" who are doing it, will be back looking for a job as "hired man" in the neighborhood which they left before many years have past. Clip this out, paste it in your scrap-book and look it up a year from now—then tell me how far we were wrong in this rather (we cheerfully admit) amazing prediction in the last month of the year of our Lord, 1923.

APPLE AND POTATO SHOW A SUCCESS

NO one who visited the Second Annual Apple and Potato Show in the Klingman Building at Grand Rapids last week could go away without being impressed with the progress which is being made in better preparation of our products for the market.

As we have so many times pointed out, Michigan is so located in proximity to the great consuming markets and to the center of population that it should be one of the most profitable farming states in the United States.

The way to profitable markets is through making products attractive for the market. This is today an unchallenged fact that has been proven by the more progressive farmers and orchardists from the great Northwest, where handicapped as they are by high freight rates, they have so prepared and graded their products that they command a fancy price from the consumer in the East which more than overcomes their handicap.

The directors of the Michigan exhibition may well be proud of what they are accomplishing, not only through the growing attendance at this annual show but also through its influence on the industry as a whole in our State. The leading growers in each division here meet in competition and place before the public the products of their handiwork and the accomplishment of their year's effort. So long as men compete with one another for supremacy there can be no stagnation and only an improvement in whatsoever line they may attempt.

WHY STOP IMMIGRATION?

IN our opinion the farming business in America would gain greatly by taking down the bars which limits immigration to the negligible number who are admitted today.

In our opinion an influx of labor from Europe of the right kind, would bring down the cost of manufactured goods which the farmer buys, and increase the local consumption of American grown farm products.

So far we have not seen any farm leaders or organizations stepping forward with such a program, which leads one to suspect that they are more under the domination of the labor unions than we would like to admit.

Obviously we believe in a selective system which selects the immigrants on the other side for his capabilities as a worker. We would let in the entire family of any man who could prove that he was a worker, in an industry beneficial to this country.

Europe is teeming with millions who would like to come to American. We need them here, at least, these who are of the type who immigrated in the early days, to this country, and pioneered its progress.

We believe that a wide open invitation to the right kind of immigration at the present time, would be helpful to American agriculture.

BR'ER RABBIT, HE AIN'T SAYIN' NOTHIN'

PROBABLY no president who has sat in the chair for many years, has been more in sympathy with or anxious to please the farmers of America, than Calvin Coolidge, and yet his record of achievement to date is, so far as we can see, nil.

It may be, however, that we are short-sighted, and as a matter of fact, the steady hand of a quiet man who makes his decisions slowly and will not be lead by radical demands made from isolated factions, is exactly what American agriculture needs to reestablish its equilibrium.

No one can accuse President Coolidge of not listening at least to their demands, whether or not he acquiesces to them. During October and November it is said that the President saw more than ten official delegations from the agricultural districts, covering the whole range of demands, from those presented officially by the American Farm Bureau to those laid down by Magnus Johnson.

Somehow or other Calvin Coolidge in the White House always reminds us of the old Uncle Remus story, we used to read in childhood days, and in which appeared the line we never forgot, "Br'er Rabbit, he just kept on sayin' nothin'!"

We cannot believe that our President is not capable of arriving at a decision. We do not believe that he is afraid, as some would have us believe because of the proximity to a presidential election. We know that he must make a record for himself of actual accomplishments if he hopes to win at next year's polls.

We do not happen to be numbered among those who believe that American agriculture is headed for the scrap heap. On the other hand we think it has been on the mend since June, 1923. The old pendulum is swinging the other way now, and the farmer is coming back into his own, but he is not going to do it with the help of the labor, or other political parties which have been riding on velvet while he took the hard knocks.

We look for the future adjustment to come from the reduction in the price being paid union labor for their manufacture of articles which the rural community of the United States must purchase, rather than a return of war-time prices for farm products.

The average union scale today is well over a dollar an hour, in many trades, and yet the price of farm products does not measure up to this level above the 1913 price of labor. It must be apparent where the readjustment in the future must come.

There is, as we have said, the possibility that the course pursued by our president is the best thing that could happen to agriculture, that natural conditions will adjust themselves and that any radical move, such as price fixing, or tariff raising, or financing exports, would only react as a boomerang to the farmer who accepted it as a solution of the present problem.

In the meantime, Br'er Rabbit he just keeps on sayin' nothin' and perhaps we would be better off if a lot of other would-be champions would adopt the same policy.

COOPERATION IS A SUCCESS

BECAUSE here or there a local or state cooperative marketing association makes a failure is no reason whatsoever for the individual farmer to lose confidence in the general principle of cooperative marketing as a solution to his present problems,

Recently a speaker before the Western New York Fruit Growers Cooperative Association at Rochester said: "Great strides have been made in cooperative marketing all over the country. Cotton growers last year sold cooperatively more than a quarter of a billion dollars worth of raw cotton. The tobacco growers are organized in the tobacco growing states from Connecticut to South Carolina, and a very active campaign is on to organize the wheat industry in the West. Plans are now being made to organize all of the fruit sections of the country. After these sections are organized locally, it is planned to federate them, so that each may know what the other is doing and plan its sales policies accordingly. It is hoped that with such an organization it will be possible for one to buy good apples in every section of the country just as readily as oranges can be purchased today."

Cooperation in America is a success, just as it is a success in every civilized country under the sun and our sons and daughters will scarcely remember the days when their dads and granddads, each made his own price and sold the products of his farm in competition with the whole world! Stand by your cooperative marketing association—even if it hurts sometimes. Stand by it or someday you'll be standing alone!

SELLING APPLES BY THE QUART

THE orchard is a department which ought to pay a profit on every farm in the State of Michigan because we are blessed with a climate and a geographical location which makes fruit growing one of the most profitable of our money crops.

Doubtless some of our readers will question this statement in view of the low prices paid for the run of Michigan apples this year, but we challenge them to prove that any apple-orchard owner who sprayed, cared for his orchard and properly graded his fruit for market this fall did not make a profit from his crop.

Most of the apples which are left to rot on the trees because the farmer does not think they are worth picking can be charged to the neglect of their owner rather than the condition of a market working against him.

That there is more than one way to sell even the ordinary run of the apple crop is proven by Prof. Fabian's article "Selling Your Apples at a Profit," which appears on page 4 of this issue. This should be read and preserved by every man who has an orchard on his place.

BABIES WERE NEVER OUR ENEMIES

BECAUSE God sees fit to have a human soul born on German soil does not make that morsel of humanity our enemy. We doubt if you could tell, if they were laid before you in a basket, with chubby hands and pink toes upturned, which of three was an American, English or German baby.

Hate is not born in babies. We teach hate, in the later years to children. So if today, when German babies are dying for want of proper nourishment, generous hearted America, comes once again to the rescue of stricken humanity, these same babies will be tought not hate, but love for this country by their grateful mothers.

A subscriber who read our editorial on this page in the last issue entitled "Help for Germany," sent a contribution with the suggestion that we start a fund for German babies. This we are doing, as you will note on page two of this issue.

THANK YOU, MR. GERKS!

I NOTICED in Wednesday's "Christian Science Monitor" part of your editorial of November 24th. More power to you. When you get a paper of the high standing of "The Monitor" to quote your articles in corroboration—you show that you are alert to the times when higher journalism is at the threshold and such has been my experience with you. May this policy continue to grow and prosper. Cordially, Benjamin Gerks, Rochester, N. Y.

PUBLISHER'S DESK

SHOW CARD SCHOOL

"Since we are not fortunate enough to live in the bean district of Michigan I am asking your advice on the West Angus Show Card Company of Toronto and their offer. Will you find out for me if this concern is trustworthy and their offer worthwhile for one who might have a few hours to spare each day? From a reader who greatly appreciates the 'farmers' friend.' "

I WOULD not send the show-card company any money because this is another scheme which I have never found to work out satisfactorily. If you are still interested after reading this, ask this company to tell you of a satisfied student in Michigan, then write or go and see this person and satisfy yourself before spending any money on such a scheme.

ADDRESSING MUSIC CIRCULAR

"I saw an advertisement in one of the magazines a few days ago telling how I could make money in my spare time by addressing music circulars at home. I answered the ad and they agreed to pay me 10 cents per copy for all music that I addressed and wanted me to send $2 for a working outfit. Well I sent the $2 and they sent me 80 copies of music to sell. Isn't this obtaining money under false pretenses? I wonder if you can do anything about it. At least you can probably keep some of our subscribers from getting stung. I am enclosing the two letters. Thanking you for anything that you can do."

YES, friend, this scheme has all the earmarks to us of getting money under false pretenses, but it has been worked so long we presume the post office department has passed upon it as being not fraudulent. Otherwise they would have been put out of business long ago.

All we can do is to reprint the warning which your letter gives in the hope that we can make a knowledge of this scheme so common that none of our readers at least will ever be taken in by it.

GERMAN MARKS FOR EASY MARKS!

I would like to get your opinion about the German money that is being peddled around this country. Of course we all know that it isn't worth anything now, absolutely nothing, but if the German republic stands won't that money be redeemed sometime at some price. They are also selling a bond on the City of Breman, a 4½ per cent bond to be redeemed in ten years. Which would you consider to be the best gamble, the bond or the marks? If the German republic falls would not the bond some day have a value at some price?

YOU can buy German paper money for the price of waste paper. Some New York brokers have had offices papered with it, and there are millions of loyal citizens in all parts of the world who have lost probably more than the entire amount of the German reparations! To buy either German money or German bonds at this time with the idea of ever profiting by their purchase, would be the heighth of speculation in our opinion.

SEWING GLOVES AT HOME

ARE any of my readers employing their spare time and using their own sewing machines to make gloves for any concern? I have been asked about a company with headquarters at Avon-by-the-Sea, New Jersey, which sounds like an attractive enough place to spend the summer, but does not impress me especially as a glove-manufacturing or distributing center. There are lots of idle hands and more idle sewing machines in Michigan and if it is practical to make canvass gloves at home, I would like to know more about it.

THE WAYS OF WOMEN!

"As you are trying to expose all the different frauds that are advertised in the different papers, I will send you the outline of one. A friend of mine saw advertised, "Busts Developed." I think it was in the "Hearth and Home." There was a picture of a woman with a large bust, and it said, "send $10 for a ten days' free treatment, and your bust will develope quite a lot in that time.' So my friend sent the $10 and received some tablets to take inwardly, also some salve to rub on her bust. She followed the directions for two days and was taken so sick she had to call a doctor. It had poisoned her kidneys and she could not pass urine for almost 24 hours. She was so weak she had to go to bed, and there she stayed for three weeks and a half, and then was hardly able to creep around the house. During the time she had to live on nothing but milk and water. That was two months ago, and she is still sick, and the doctor says he does not know as she will ever be well again. And he says it is nothing that caused it, but the medicine. The medicine was analyzed, and it contained two deadly poisons. One kind was to make your flesh swell up and by rubbing the salve on your bosom it was supposed to swell the most there.

"Please do not sign my name, as my friend does not want anyone but the two doctors that attended her to know what caused her sickness.

"We like your paper just fine and always intend to take it. We get so much good from it.

"Oh! yes, can my friend collect any damages from this firm for selling her medicine that poisoned her. She is a poor widow. with several children to support. And she is very hard up. Please do not describe her in your paper, as quite a few of our friends take your paper and my friend is ashamed to let them know what made her sick.

"Thanking you for all your past, and future kindness, as you have helped us so many times, by your advise, and also by making the college in Ohio settle for the typewriter they sent me that was no good."—L. H.

ONE might smile at the above recital of one woman's attempt to recast herself in the mold of Venus, were it not for the pitiful picture which her condition today presents. When, O, when, will some women learn that the qualities which the right kind of men admire are not to be found in drug-stores or contained in bottles or jars! There is nothing to be added to the moral which this letter reprinted here will, I hope, carry to my readers.

MICHIGAN DAIRY AND FARM PRODUCE COMPANY

SEVERAL recent inquiries regarding the above company led us to an investigation, which disclosed the following facts as submitted by Gideon T. Bryce, its president. Mr. Bryce, formerly a resident of Romeo, Macomb county, operated a large dairy farm and enjoyed, we believe an excellent reputation in his community, he says:

'This company was chartered under the laws of the state of Michigan, with an authorized capital of $500,000.00, and on June of the present year the Michigan Securitites Commission authorized us to sell stock to the extent of $200,000 for our first issue.

"The shares are in the sum of $10 each, fully paid, and it may interest you to learn that we already have subscriptions to the extent of approximately $80,000 represented by nearly 1,000 stockholders of which 90% are farmers, resident within an area of ninety miles of Detroit.

"Three months ago we purchased as a going concern, the business, good-will and plant of the Birmingham Creamery & Ice Mfg. Company, and this constitutes the first unit in our plans to establish ourselves in certain areas, so that we can take care of the milk of our farmer stockholders.

"In addition we purchased as a going concern the business of the Birmingham Dairy, Birmingham.

"During the summer of 1924 it is the intention of the directors to open a chain of "Cash and Carry" stores in Detroit through which we shall distribute not only milk, but all other farm produce. Our stockholders will be considered first in our purchases."—Gideon T. Bryce, President.

First Mortgage Real Estate Gold Bonds

Each month sees an increasing number of farmers choosing Federal first mortgage bonds for their surplus funds.

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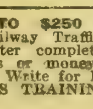

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DAIRY FEED SALESMAN—A MAN WHO knows the dairymen of Michigan can have a most profitable connection as our sales representative. This is a great opportunity for the right young man. State your qualifications fully when writing H. T. HEIDRICK, Sales Manager, 100 Corn Exchange Building, Minneapolis, Minn.

The Farm Home
A Department for the Women

Edited by MRS. ANNIE TAYLOR

DEAR FOLKS:—This last month has been a full one for most of us and I am sure you will all agree with me when I say that it has been for me. I want so badly to give you all the new ideas and holiday suggestions that it has crowed out our personal column and recipes that you readers have so kindly sent in. I am keeping every one and hope that you will soon see them on the pages of our Women's Department.

In the last two or three issues have been home-made ideas and designs for making the work easier and also more attractive. Remember that if you have thought up some clever idea, it is very lovely of you to share it with the rest of our readers. Draw up your object and give us the measurements and maybe someone among us will be waiting for just that very article. Can you imagine the happiness that you will have given.

I received so many letters asking for the "Hot Lunch Bulletin" that I soon finished my supply and am expecting more every day. I will send them just as soon as they arrive. I expect your cooperation on this very important subject. Do not hesitate to write. Our department is one of service.

Your Friend,
Mrs Annie Taylor

Address letters: Mrs. Annie Taylor, care The Business Farmer, Mt. Clemens, Michigan.

WHO IS SANTA CLAUS?

WHO is Santa Claus? The mystery
Seems to have no clue;
But I'll tell you how to solve it.
Santa might be you.

If you found some lonely children
With no Christmas tree,
And gave them one, or shared your own,
You Santa Claus would be.

Some poor children have no Christmas!
It is sad, but true;
So remember! Who is santa?
Well, he might be you!

CHRISTMAS FOR OUR CITY RELATIONS

IT must be a problem to think up something useful and attractive for our city relations. We feel as if it is impossible to buy the desired gift within our means.

I wonder if you have ever though of sending a lovely box of foodstuff done up in a pretty package. You know a nice fat chicken or goose is one of the finest gifts to a city family.

The old law of compensation is always with us whether we recognize it or not and we who live on a farm the twelve months out of our year can hardly realize the wonderful things and sights we see every day compared to the family of like circumstances in the city. It is next to impossible to purchase the lovely fresh foods that you folks enjoy every day and just take it for granted that all the people in town have the same by just buying. This is not true at all.

There are a great many boys and girls away at school who cannot get home because of distance and expense. Can you imagine the real joy of opening a box from Mother with a lovely fruit cake and some homemade jam or jelly? Maybe a cooked chicken and a box of their favorite homemade candy. I feel sure that such a gift would be most highly prized when opened so far away from home. What could be more intimate or better loved?

A good strong box and each article wrapped in bright Christmas paper and ribbon would be a very attractive and most appreciated gift. There isn't a boy or girl, or sister or brother, whose mind would not wander back to the farm home and its spacious kitchen, with Mother walking to and fro preparing the dainties for them.

It was only a few weeks ago I had a birthday and the package came just the day before, timed just right so I would receive it on the right day. A pair of pillowslips with lace crocheted on the edge by Mother's own hands. It meant so much to me to know of the many times her hands went in and out making the lace and the pillowslips more beautiful. I knew of the effort it must have been for her, and the care she took to have them just right. The box was just a plain one, but Mother must have found a large colored rose in some magazine and pasted it on the cover to make it look more attractive.

It is always the little extra effort and way you wrap your gifts that help them count for so much because of your efforts in making them more attractive. Let us all try this year and wrap our packages up with more thought and care as to their appearance.

The bright red tissue paper is very popular and is giving the white tissue a race for first place. The five-and-ten-cent stores all carry the bright ribbons and cord and seals to make the gifts attractive.

BOOKS FOR THE HOME

BOOKS for the home ought to be choosen with a view to preparation for a life of American citizenship and a clean wholesome mind. Christmas should bring its share of good reading for every member in the family. This would include religion, government and what is termed general literature. A supply should be at hand, not only as a source of study to furnish knowledge and information, but for amusement and entertainment in hours of relaxation.

Every member of the household should have some special reading that he or she is fond of. Nothing outside of study, can improve our minds or broaden our vocabulary more than good wholesome reading.

The first that I would suggest for the family would be to have some good farm magazine coming regular. Of course we think THE BUSINESS FARMER is the best, but after all this is a matter of personal opinion. They all are trying to give you the best they have, and so it is good reading for any live farmer.

Then there should be something just for mother—for she is the center of the home. Something for her individual use, for unless she is able to enter into the real spirit of reading books, it is unlikely that she will ever be able to impart that taste to her children, and guide them in that field with sympathy and discretion.

We should probably find that the mothers of most of our great men of recent times have been devoted readers of the Bible. If it is possble that we have a home without one, be sure that this year will be the last. When it comes to certain household problems, like nourishment, which is so important for the bodily welfare of all, and the management of children, it is apparent that instruction on these subjects ought always to be available: "The Care and Feeding of Children," by Doctor Holt, is one of the best books out on this subject, and should be in every home where children are living. "The Book of Good Manners" is another very fine book to have in every home. There are bound to be times when the most refined and thoughtful of us will have to use it for reference.

Then there is that splendid book "What a Young Girl Ought to Know" full of chapters telling you how to answer the most delicate questions any little inquisitive girl might ask. "Truth O'Women" with last words from long vanished ladies, is a book of short poems in which women of all sorts, of all ages, speak from their graves—much the same manner of "The Spoon River Authology."

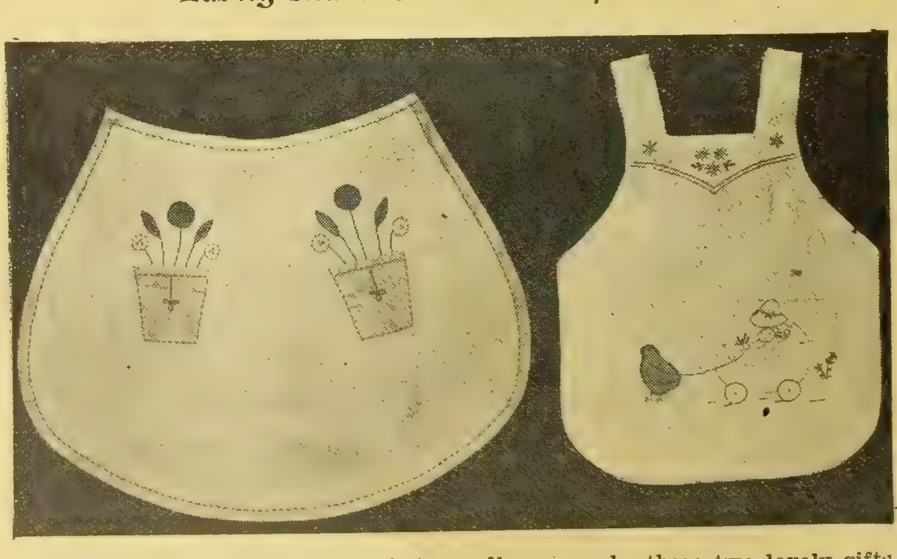
Books on travel are always fine reading for those of us who can travel no other way than thu the pages of books. It is a great school of learning and very fascinating past time for some of our winter evenings. Some good fiction for Dad would be "Dr. Nye." It is a splendid story of a man's life in a small town and most of the characters can be found among our own personal acquaintences. "The Mine with the Iron Door," is another dealing with romance and adventure, laid in the Catilina Mountains of Arizona. The description of this part of our country is beautiful in this book. "The Real Robert Burns" is a splendid book telling about this famous character in our literary world. His poems are known the world over. "Gardening Under" is a good practical book, inviting the pleasures of outdoors by taking your gardens inside under glass. "Rimrock Trail" is another regular "he-man" tale of adventure.

Don't deny the youngfolks the many tales that are written for them in book-form to stir their imagination for the bigger and better things in life. For our boys I have thought of "Lefty O' The Bush," "The Go-Ahead Boys on Smuggler's Island," "The Boy Scout Fire Fighters," "George Washington" and famous Americans for young readers. For our girls: "The Corner House Girls," "Polly's First Year at Boarding School," and for our wee folks: the kneetime Animal Stories, "Squinty, the Comical Pig." Maybe you have a daughter teaching and "School Plays for all occasions" is very fine for a reference book.

These are only a few of the many books to be had for Christmas. You will find there are always the old masters like Dickens, Shakespeare, Holmes, and Longfellow. In our Book Review, you will find the publisher's name, address, and prices.

Let this be a Christmas of Knowledge and good reading.

Easily Made Gifts For Chrisimas



ANYONE that is handy with their needle can make these two lovely gifts in very little time. They are beautiful and I am sure would be very much liked by any lady or child that could be the proud possessor of them. Can you imagine any little girl not liking this darling apron with its outlined design of the chick pulling the little girl! The ladies' apron with its cunning flower-pot design with pretty ribbon ties makes an adorable gift.

No. 407—Child's Combination Apron or Dress. This is a very attractive number and comes stamped with patches included for a child two to four years. Price 50c.

No. 408—Ladies' Apron. Stamped on Unbleached Muslin. Full size tea apron. Applique patches included. Price 50c.

MOTHER'S PROBLEMS

WHEN PLANNING CLOTHES

WHEN planning and making the children's clothes, who decides what the colors and styles and materials shall be? Is it you, you, Mother, entirely? Or do you and the children talk details over and come to a mutual decision?

There is no better training for a girl than the training she can receive from her mother in the planning of her clothes. "Decisions" are hard to make. Some people reach manhood and womanhood without ever having learned how to make them. In the matter of clothes, they never know just what they want, they buy hap hazardly, and they never are wholly satisfied with their purchases.

A child does not have to be very old to have opinions of his own. Don't thwart those opinions every time they conflict with yours. Perhaps he has as good a right to them as you have to yours. Perhaps his ideas are wrong; sometimes the easiest way to show him how wrong his ideas are is to let him suffer a bit by following his wishes instead of your own.

I have known many mothers who make clothes for their children without asking for their opinions at all, and then, when the children object to the style or color of the dresses or blouses, reply: "Well, that's what I made. Wear it, or go without!"

That attitude is not fair to the child. It likewise tends to make them careless of their clothes. Many a child has deliberately torn or soiled a dress she dislikes so as not to have to wear it again.

There is infiinite joy in planning daughter's dresses with the little daughter offering suggestions. With a little tact, Mother can usually sway her away from decisions. But if her heart is set on a color you know is unbecoming, let her have it. She will likely hear an unfavorable comment some time which will teach her that she has made a mistake.

Work together! That is the keynote of happy Mothers and children. Working with you, the children will learn things they are not conscious they are being taught!

—if you are well bred!

Never speak harshly to a child. Never use disrespectful names. Never use profane or vulgar words in the presence of a child. Do not be so cold and austere as to drive your child from you. Never misrepresent. If you falsify, the child will soon learn to decieve also. Never withhold praise when the child deserves it. Commendation is one of the sweetest pleasures of childhood.

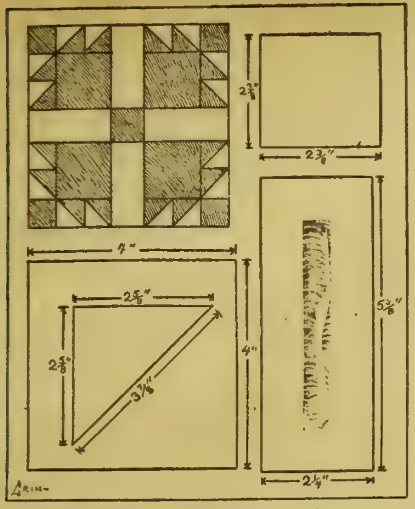
Personal Column

Play the Game.—I would like very much to know if the story "Play the Game," by Ruth Comforth Mitchell, in the August, September and October, 1920 numbers of "Woman's Home Companion", can be obtained in book form and where. If not, would like to exchange other magazines for those numbers.—V. E. Smith, Vanderbilt, Michigan.

—Maybe some kind reader has these magazines; if not, you can purchase it thru the Appleton Publishing Company, 29-35 W. 32nd St., New York City, at $1.75.

Some Hints to Relieve Work.—I have read so many suggestions in the Michigan Business Farmer that have been a help to me. I have one that I want to pass along. Purchase three yards of white table oil-cloth and use instead of table linen that has to be washed and ironed. Then it can simply be washed and put away, by rolling around a stick. Then when silo filling time comes and bean threshers, you will have it all ready for use again. This has been such a help to me for I am an invalid and not able to do but very little work. Hoping this may help someone else, I am—Mrs. L.

"DOVE AT WINDOW" QUILT BLOCK



Quilt Pattern—Take pieces of any two colors that you have or that harmonize and set together, following pattern showing you which pieces to join. It is a good idea to have one of the colors plain material and the other figured. This makes a very attractive design for block quilting.

CHRISTMAS DINNER 1923

I will try and give you a Christmas menu that will help make the holiday this year a better one by good things to eat and still not drain the family purse.

In the November 10th issue was the turkey roasted and stuffed three different ways. I think a Christmas goose is as fine a dish for our second holiday that can be had. Chicken is always good and sure to be liked, but those of us who can have goose will be in keeping with the day. The following is a full dinner and may be too much for some of us, and so I would suggest that you pick out of it the courses that you think right for your particular needs and family taste.

Tomato Soup
Roast Goose Apple or Potato Stuffing
Giblet Gravy
Mashed Potatoes Buttered Onions
Celery Apple Sauce
Lettuce and Pear Salad
Mince Pie or Plum Pudding
Nuts—Candy
Coffee

Potato Stuffing.—Two cups hot mashed potatoes, one and one-fourth cups soft stale bread crumbs; one-fourth cup finely chopped fat salt pork; one finely chopped onion; one-third cup butter; one egg; one and one-half teaspoons salt; one teaspoon sage. Add to potatoes, bread crumbs, butter, egg, salt and sage; then add pork and onion.

Apple Stuffing.—To plain bread stuffing add one cup chopped apple, not too fine and season well.

Salad Dressing.—One cup sugar; two eggs, two-thirds cup vinegar and one-third cup water; one teaspoon mustard; two heaping teaspoons flour; one teaspoon butter; one teaspoon salt. Mix ingredients in the order given. Mix mustard and flour and a little water, enough to make a smooth paste and add. Cook in double boiler until it thickens. Add whipped cream enough to make it nice and light. This is splendid for fruit or any salad that you like with a sweet dressing.

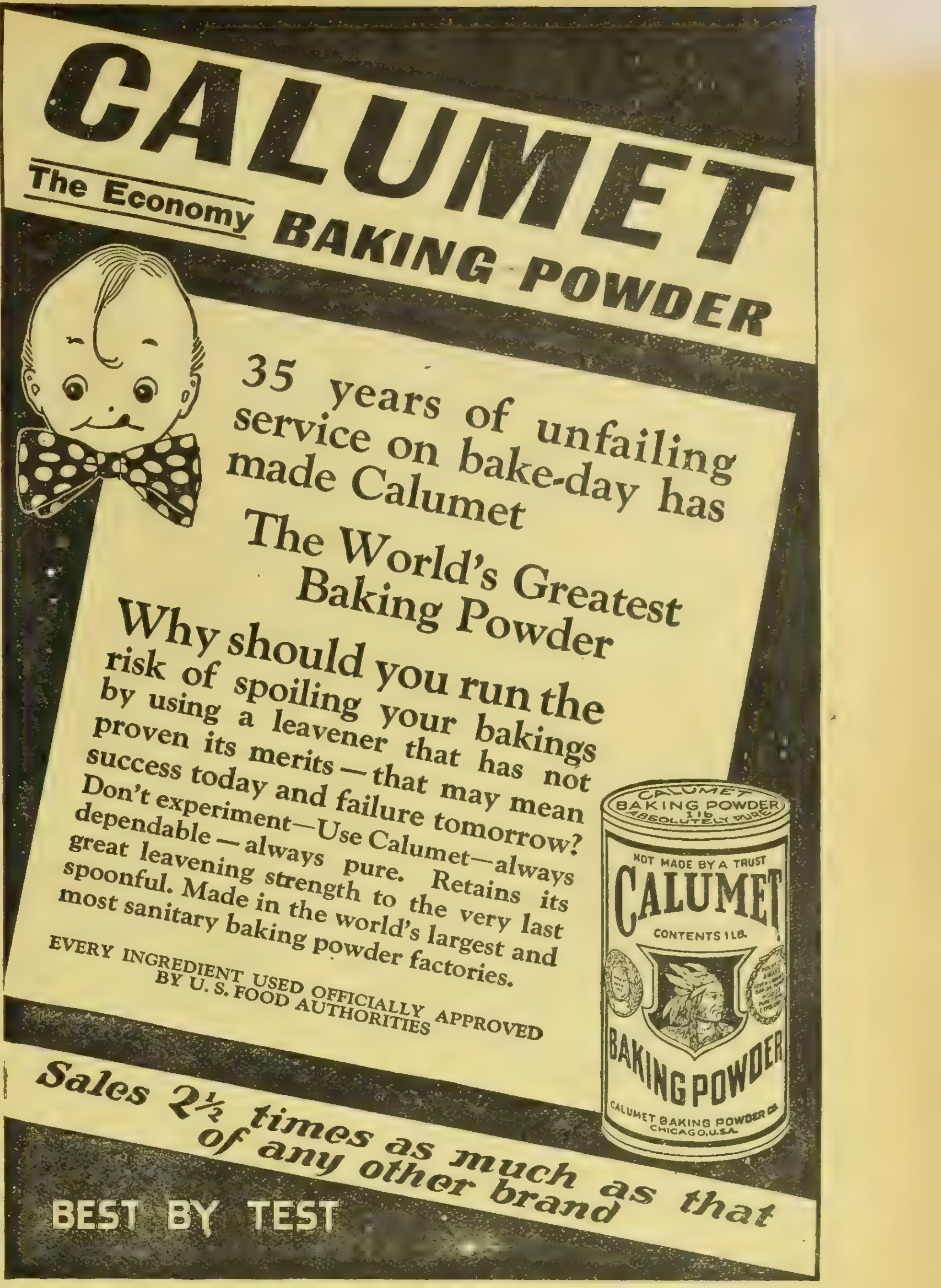
Chocolate Caramels.—Two and one-half tablespoons butter; two cups of molasses; one cup brown sugar; one-half cup milk; three squares of unsweetened chocolate, one teaspoon vanilla. Put butter into kettle; when melted add the molasses, sugar, and milk. Stir until sugar is dissolved, and when boiling point is reached, add chocolate, stirring constantly until chocolate is melted. Boil until, when tried in cold water a firm ball may be formed in the fingers. Add vanilla just after taking from fire. Turn into a buttered pan, cool, and mark in squares.

Peanut Nougat.—One pound sugar, one quart of peanuts. Shell, remove skins, and finely chop peanuts. Sprinkle with one-fourth teaspoon salt. Put sugar in a perfectly smooth granite sauce pan, place on range, and stir constantly until melted to a syrup, taking care to keep sugar from sides of pan. Add nut meats, pour at once into a warm buttered tin, and mark in squares. If sugar is not removed from range as soon as melted it will quickly caramelize.

English Fruit Cake.—One pound butter, one pound light brown sugar, 9 eggs, one pound flour, two teaspoons mace, two teaspoons cinnamon, one teaspoon soda, two tablespoons milk, three pounds currants, two pounds raisins, seeded and finely chopped, one-half pound almonds, blanched and shredded, one pound citron, thinly slice and cut in strips.

Cream the butter, add sugar gradually, and beat thoroughly. Separate yolks from whites of eggs; beat yolks until thick, and lemon color, whites until stiff and dry, and add to first mixture. Then add milk, fruit, nuts, and flour mixed and sifted with mace, cinnamon, and soda. Put in buttered deep pans, cover with buttered paper, steam three hours, and

(Continued on page 17.)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BAKING POWDER
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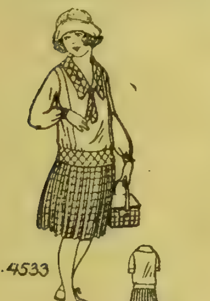
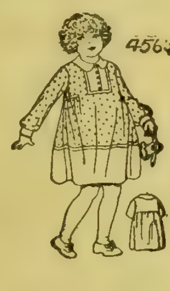
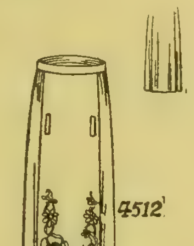
AIDS TO GOOD DRESSING

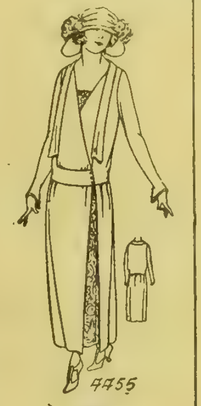
SEND IN YOUR SIZE

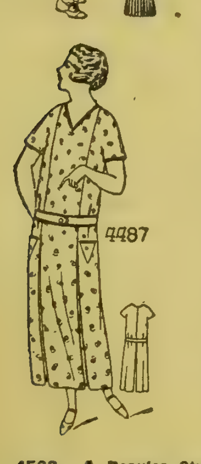
Lately some of you ladies have been sending for patterns without giving size. This means expense and delay for both of us. I hope you all realize the importance of sending in your size when asking for patterns.

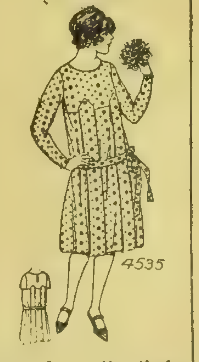












4455. A Unique and Stylish Gown.—This is a splendid model for taffeta for Canton crepe or satin. It is also good for combinations of figured and plain silk or jersey weaves, or twill with braid or braiding for decoration. The Pattern is cut in 7 Sizes: 34, 36, 38, 40 42, 44 and 46 inches bust measure. A 38 inch size requires 5⅝ yards of 40 inch material. For panel and insert of contrasting material ¼ yard of material (cut crosswise) is required. The width of the skirt at the foot is 2¼ yards.

4487. A Pretty "Cover All" Apron.—Here is a fine "protecting" apron with plait extensions at the side front seams. In unbleached muslin with a finish of bias binding in a contrasting color, this model will be inexpensive and very serviceable. Gingham, or sateen, chintz or chambrey are also suitable, and in damask in blue and white or silver gray, it will be attractive. The Pattern is cut in 4 Sizes: Small, 34-36; Medium, 38-40; Large, 42-44; Extra Large, 46-48 inches bust measure. A Medium size requires 5⅛ yards of 32 or 36 inch material.

4512. "A New Panel Skirt"—Here is a model good for twill, broad cloth or serge. It is also nice for linen and other wash fabrics. The pockets may be omitted. This Pattern is cut in 7 Sizes: 25, 27, 29, 31, 33, 35 and 37 inches waist measure. A 29 inch size requires 3⅛ yards of 40 inch material. The width at the foot with plaits extended is 2 yards.

4533. A Popular Style for the Growing Girl.—Wool rep and plaid suiting are here attractively combined. The blouse slips over the head. The skirt is separate and may be joined to an underbody or finished with a band. The Pattern is cut in 4 Sizes: 6, 8, 10, and 12 years. A 10 year size requires 4⅛ yards of 36 inch material. To make waist and sleeves of contrasting material, requires 1⅜ yards.

4565. A Simple Frock for a Small Girl.—Figured crepe and plain crepe are here combined. This style is also attractive in voile, batiste or silk, or, one may use wool crepe with braid trimming or embroidery. The Pattern is cut in 4 Sizes: 2, 4, 6, and 8 years. A 4 year size requires 2⅜ yards of 27 inch material. To make facing, collar, cuffs and vent of contrasting material requires 1 yard.

4535. A Smart Dress Style for the Growing Girl.—Darted foulard is here shown. The model is one that lends itself well to wash materials, to wool rep and jersey weaves. Woolen crepe would also be nice for this style. The Pattern is cut in 4 Sizes: 8, 10, 12, and 14 years. A 12 year size requires 4 yards of 32 inch material.

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Order from the above or former issues of The Business Farmer, giving number and sign your name and address plainly.

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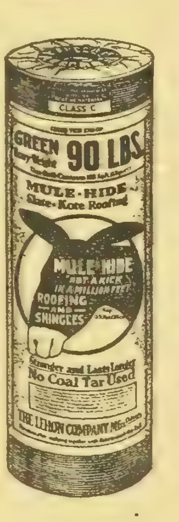
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Buy Christmas Seals! Buy as many as you can. The Great White Plague can be stamped out entirely. Christmas Seals are saving many lives. Buy Christmas Seals, and save a life for Christmas.

Merry Christmas 1923

Stamp out Tuberculosis with Christmas Seals

The Children's Hour

JUST BEFORE CHRISTMAS

JUST before Christmas,
  Is the meanest time of all!
You have to be so pesky good,
  There ain't no fun at all.

For if you're up to any tricks,
  There's someone sure to say:
"You best be careful, Johnny!
  Santa may be round today."

Now if Santa likes a feller,
  As his presents seem to show,
What makes him bother me so long?
  That's what I want to know.

This year I just wrote a letter,
  Just before Thanksgiving Day,
Directed it to "Santa, North Pole,"
  And sent it on its way.

And this is what my letter said:
  "Oh, Santa, be a dear,
And please don't come a-snooping round
  A-watching me this year."

THE JUST CALIPH

ONCE, in Bagdad, a Caliph built a magnificent palace, but, in order that its main entrance should be imposing it was necessary to pull down a small laborer's hovel. The vizer was ready to destroy it, but the Caliph ordered that the poor old man who dwelt there should be paid for his hovel.

"I will not sell," said the poor man. "My forefathers lived and died here, I wish to die here. Tell the Caliph I said so. He is just."

The Caliph considered long when this answer was brought him, and then he answered,

"Let the hovel stay. There is no gate so splendid, that I could raise to my palace. If people saw a gate blazing with gems they would say only 'The Caliph is rich,' but if they should see the hovel, they would cry, 'The Caliph is just'."

Justice is greater than riches.

OUR BOYS AND GIRLS

Address all letters to the Children's Hour as follows:

UNCLE NED,
The Business Farmer,
Mt. Clemens, Mich.

Dear Uncle Ned:—Here's wishing you the happiest birthdays, and hoping you will have many more as happy. Although I did not send you anything last year, I thought of you, and that does just as well, I think, don't you? But I am not going to let this one slip into the past without showing you that I remember it. That is why I'm writing to you now. You may call this your birthday letter. I am enclosing in this letter a poem I wrote. I want to know what you think of it. Now I will tell you what I received for my birthday. My sister gave me a book and so did my mother. Our school teacher gave me a book also. My father and mother together bought me a dozen blue Amberol records. A friend sent me a tablet and 4 Narcissus bulbs. So you see I was well remembered. Well I guess I'd better close or you won't want me to write again, so good-bye Uncle Ned. From your invalid Nephew,—Orville H. Trueblood, Pewamo, Michigan.

Dear Uncle Ned:—As this is my first letter will look for it to go in the waste paper basket. I have been studying at my friend's and reading the M. B. F. and ilke the children's stories very well. Well, I had better describe myself. I have light brown hair, blue eyes, baby doll bobbed hair, and am five feet one inch tall. I am twelve years of age and in the eighth grade at school. I weigh 89 pounds. My birthday is July 12th. I have two sisters and two brothers and I am the oldest. We all go to school but baby, who is four. My father trucks from home to Detroit and all along the line. We live in town. It is small, only has seven stores and one bank. Our home and lawn covers a quarter of an acre. Our home is all modern with electric plant and water and gas and all bathroom furnishings. Well, I will close my letter with a riddle. Upon a hill there is a mill and by the mill there is a walk and in the well there is a key, and if you don't answer this riddle you will have to kiss me. Round as an apple and deep as a cup, all the king's horses can't pull it up. Will some of my cousins please write to me. I will gladly answer. Write to—Kathleen Frost, Hale, Michigan.

Dear Uncle Ned:—I have been a silent reader of the Children's Hour ever since we have taken the M. B. F. but now I thought that I would be one no longer. I am a girl fifteen years, weight about eighty pounds, five feet in height and have dark brown hair (bobbed) and dark blue eyes. I am a junior at Ionia High School. My birthday is on August fourteenth. Have I a twin? I ride back and forth to school every day. It is about a fifteen minute drive. I am taking up a business course and find it very interesting. I have no brothers or sisters so I would be very glad if some of the boys and girls would write to me. I surely will answer all letters I receive. At school I belong to a Girls' Literary club and a parlimentary club. In both clubs we are going to have a play for Thanksgiving. In American history class we have a new teacher from Grand Rapids. She came last week, to stay until the beginning of the next semester. I like her very well as she gives us all E's. She is very sociable, and told us all about her family. She said that one of her five brothers was a doctor. One day a lady came into his office, who said that she felt bad all over. By what she told him he didn't know what ailed her so he mixed her up some salt, soda, and red coloring and gave it to her and told her to come back in a week. When the week was up she came back and said that the medicine had done her so much good that she wanted some more just like it. By that time he had forgotten what color he had put in the former medicine so he put brown in this. The lady told him of the mistake, so he mixed up some more with the red coloring. As that lady imagined the medicine was good. Please imagine this letter is good enough to print. Your niece,—Olive Groves, R. 1, Ionia, Michigan.

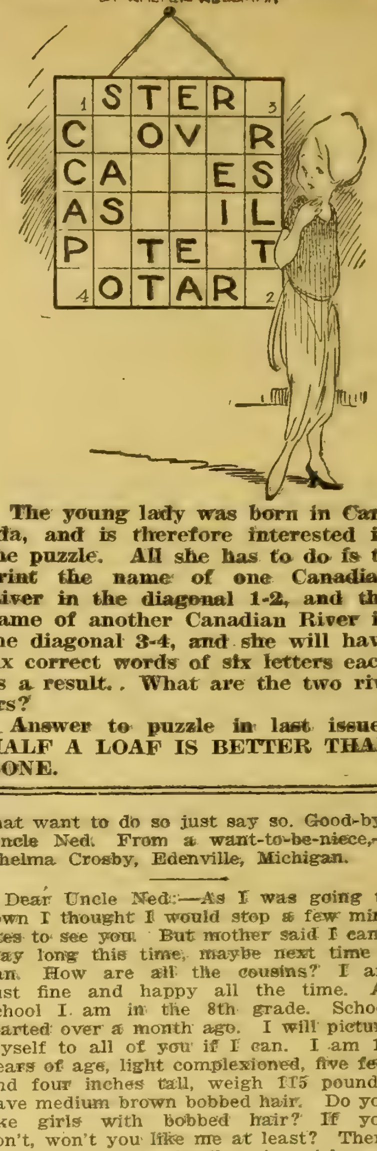
Dear Uncle Ned:—I have never written to you before. My father takes the M. B. F. and I like to read the Children's Hour. I am a farmer girl and live on quite a large farm. I go to high school and like it very much. I have a brother and two sisters going too. My brother graduates this year. Has any of the other cousins got "The Song of The Dying Cowboy?" If they have I wish they would please send me the words. Well, I will have to describe myself. I am five feet tall, have light brown hair, but don't wear it bobbed. I want it bobbed though. I am dark complexioned and am fifteen years of age. My birthday is the 1st of September. There is no use asking if I have a twin because I have. Well, I will have to close for this time. Your niece, Fay Houtz, R. 3, Montgomery, Michigan.

Dear Uncle Ned:—I have never written to you before, but have been very much interested in the boys' and girls' department so thought I would like to join too. My grandfather takes the M. B. F. and likes it very much. I am 16 years old and my birthday is January 12th. Have I a twin? And will she please write to me? I passed the 8th grade this spring. I will tell what Birch Run looks like. It has a population of about 600. There are four or five stores, oil station, bakery, etc. We live near the Dixie Highway. Many people go north of here, for fishing and camping. I have one brother, he is 10 years old. He is in the 4th grade. Will some of the cousins please write to me as I like to write letters. I remain your niece.—Kathering Spensberger, Birch Run, Mich.

Dear Uncle Ned:—My how lovely it must be, to have so many nice nieces and nephews. I think guessing games are very interesting, don't you? I have noticed previously that most every person has been writing riddles. So I am going to make my letter one of mystery. My age is between 7 and 16. The first letter of my surname is P. Don't you love to wander out in the woods in the fall of the year and just study the beautiful trees, and their many colors. I will close with three riddles (a) What most resembles a half cheese? (b) Which is the best way to raise strawberries? (c) What two letters are the desting of all earthly things? Now every one must remember that the person who can tell me the following answers (my surname, my exact age, and answer two of the three riddles correctly) will receive a letter from me composed of 25 pages. Best regards to all, I remain,—Miss P. Stroupe, R. 7, Pontiac, Michigan.

CANADIAN RIVERS

BY WALTER WELLMAN



The young lady was born in Canada, and is therefore interested in the puzzle. All she has to do is to print the name of one Canadian River in the diagonal 1-2, and the name of another Canadian River in the diagonal 3-4, and she will have six correct words of six letters each as a result. What are the two rivers?

Answer to puzzle in last issue: HALF A LOAF IS BETTER THAN NONE.

Dear Uncle Ned:—I wrote to you once before Uncle Ned but Mr. Waste Paper Basket knew that my letter wasn't worth while reading, so he gobbled him up. Isn't that so? Well, how do you like this weather Uncle Ned? We had a little snow today. I will be glad when it gets cold, so we can go skating. Do you like to skate? I love to skate. How many of the cousins like to skate? I described myself in my other letter, Uncle, but no one knows that but Mr. Waste Basket, and so I will have to do it all over again. I am a girl 5 feet 1 inch tall, weigh 102 pounds. I am 13 years old. I have brown eyes and hair, and for a great wonder my hair isn't bobbed. My birthday is in October. Will all of the cousins that have a birthday in October write to me? I will answer all letters I receive. Uncle Ned, I would like to have a contest and all of the cousins draw a picture of Mr. Waste Basket. All that want to do so just say so. Good-bye Uncle Ned. From a want-to-be-niece,—Thelma Crosby, Edenville, Michigan.

Dear Uncle Ned:—As I was going to town I thought I would stop a few minutes to see you. But mother said I can't stay long this time, maybe next time I can. How are all the cousins? I am just fine and happy all the time. At school I am in the 8th grade. School started over a month ago. I will picture myself to all of you if I can. I am 14 years of age, light complexioned, five feet and four inches tall, weigh 115 pounds, have medium brown bobbed hair. Do you like girls with bobbed hair? If you don't, won't you like me at least? There are twelve in our family, nine girls and three boys. I was in Saginaw Saturday, came home Sunday afternoon with sister. There are some boys and girls from our town who wrote and I thought I would write. Hope you will print my letter for this is the first time I have written. If it doesn't hit the waste paper basket I will be lucky—I'll try to keep away from it. I will close with a joke. If a man has seventy patches on his pants what time is it? Guess it. Will some of the cousins write to me. I will close with lots of joy, from your unknown friend, "Bobbie"—Helen S. Janetski, R. 5, Freeland, Michigan.

Dear Uncle Ned:—I received your most welcome letter today and was very glad to hear from you. Thank you so much for sending me the pencils and pencil box. I sure will make life miserable for the pencils, for I am going to school every day, and will make good use of them. The weather is getting terribly cold out here. I will be glad when winter begins, for then I can go to skating parties. I just love to skate on ice skates, don't you, Uncle Ned? The fact is, I love all outdoor and indoor sports. My friend and I went horse back riding Sunday and had absolutely a swell time. I am simply crazy about riding horseback, that is what I call enjoying life. Don't you, Uncle Ned? My age is between 15 and 17. Whoever guesses my age will receive a long letter from me. Won't the boys and girls please write to me? I will try and answer all letters received. At times I am so terribly lonesome that I would just love to receive some nice long letters from the girls and boys. As my letter is getting long I will close with love, your niece,—Miss Margaret Jackowiak, Sherwood, Mich.

NEW LAMP BURNS
94% AIR

Beats Electric or Gas

A new oil lamp that gives an amazingly brilliant, soft, white light, even better than gas or electricity, has been tested by the U. S. Government and 35 leading universities and found to be superior to 10 ordinary oil lamps. It burns without odor, smoke or noise—no pumping up, is simple, clean, safe. Burns 94% air and 6% common kerosene (coal oil).

The inventor, A. R. Johnson, 609 W. Lake St., Chicago, Ill., is offering to send a lamp on a 10 day's FREE trial, or even to give one FREE to the first user in each locality who will help him introduce it. Write him to-day for full particulars. Also ask him to explain how you can get the agency, and without experience or money make $250 to $500 per month. (Adv.)

LOANS FOR FARMERS' MARKETING ASSOCIATIONS

(Continued from Page 6)

way transact a business very similar to the business transacted by the War Finance Corporation. The purpose of these banks is to provide seasonable credit facilities for agriculture and to place the farming business on a parity with manufacturing, transportation and commerce.

The Federal Reserve Banks in times of necessity issue notes against the short time loans they hold and Intermediate Banks issue debentures or bonds. The term of agricultural paper is long and the probability of renewal too great to use such paper for a basis for notes such as are issued by the Federal Reserve Banks. Under ordinary conditions and in time of ordinary demand for money the local bank can take care of short time needs of farmers for money either by their own funds or through their city correspondents. In times of very heavy demand, however, or where the paper is for a longer period than the local bank can carry, these banks can use the facilities available through the Federal Reserve Banks and the Intermediate Credit Banks. This gives country banks a very valuable service as a bank of deposit cannot afford to tie up its deposits in loans of an indefinite maturity or paper which must be renewed over a period of years. This type of paper is ordinarily called frozen assets and may raise havoc and has raised havoc with agriculture in the last few years. Our present system of financing loans for agricultural purposes lays the foundation for the solution of one of the greatest problems facing agriculture—namely the marketing of farm products. Without the proper system of marketing farm products farming can never come into the place to which it is entitled.

The saleability of farm lands and the profits of the farm are dependent upon what the farmer can get for what he sells. This is not the problem of politics or sentiment but of a right system and the introduction into farming of the same business principles and methods of financing as applied to other businesses. The trouble with farming in the past has been that a large percentage of the production of any one crop has been dumped on the market within a very short period, every farmer jumping against the other and striking his own bargain. This is always the result of individual selling. The only solution is group production, group marketing and group financing. Unless we know what everybody is producing and also the buying power of our market we are groping in the dark and this principle must be applied to farming before we will have definite results. The supply and demand we know controls prices. It is necessary, however, to control the flow and the supply. It is necessary to have the supply where needed and also when needed.— This is a simple question of storage and financing.

The Federal Intermediate Credit Act gives us the credit facilities for properly financing products in storage. Properly managed and properly organized cooperative marketing organizations are having no trouble to finance themselves at the present time. They have had no trouble for some time, not any more than have other businesses. The fact, however, remains that the cooperative marketing of farm products is in its infancy and that the foundation for proper financing had to be laid before it could be expected to have the cooperative marketing of farm products successful in a large degree. Where we have the right type of a cooperative marketing association we do not hear of any movements amongst farmers for a farmers' cooperative bank. They are not needed.

The farmer must learn to run his own business and then he will forget about running the other fellow's business. The farmer will be satisfied to run his own business and will not listen to the fellows who cannot run themselves but are trying to run everything else including the Government. As soon as the farmers will sell their products at the point of consumption instead of the point of production, as is now the case, the price to the consumer will not increase but the price to the producer will increase. In the past when the farmers generally got a report that there was an over-production of any one crop they got scared and thought that somebody would get stuck and tried to sell their products first and thereby broke the market. Nobody but the farmer was to blame for this.

Properly organized and properly managed cooperative marketing organizations will accomplish a great deal of good. One small marketing organization thrusting its wares against many other small organizations will never get results. This has been tried for the last fifty years. It is necessary that each commodity be organized and then sold. The farmer has not always listened to sound advice; would-be leaders have often sold him on such things as guaranteed prices and other legislative remedies, which, if adopted, would make the farming conditions many times worse than they ever have been. As soon as farming is organized along business lines the farmer will be satisfied to run his own business and will run it successfully instead of having somebody run down to Washington every time something happens. Nearly everybody is with the farmer on this proposition. I believe the farmer is willing to be led along the right lines if he has the right leader, and the success of this movement is dependent upon leadership and management. The farmer cannot afford to fool with amateurs in this matter. Credit facilities have been made available to the farmer and now it is up to him to use these facilities. Financing and marketing are so closely allied that they cannot be separated. The principal value of the Intermediate Credit Act lies in the facilities which it offers for the marketing of farm products.

RECIPES

(Continued from page 15.)

bake one and one-half hours in a slow oven, or bake four hours, in a slow oven. Rich fruit cake is always more satisfactory when done if the cooking is accomplished by steaming. This is a splendid Christmas cake and you need not feel it is hard to make.

Sugared Popped Corn.—Two quarts of popped corn; two tablespoons butter; two cups brown sugar; one-half cup of water. Put butter in sauce pan, and when melted, add sugar and water. Bring to boiling-point, and let boil sixteen minutes. Pour over corn, and stir until every kernel is well coated with sugar.

The Runner's Bible

(Copyright by Houghton-Mifflin Co.)

I in them, and thou in me, that they may be perfected in one.—John 17:23. (E. R. V.)

Christ is in and about us always, but we make Him appear to the spiritually blind, only when we do a Christlike act. Whoso gives us a better understanding of life, brings us glad tidings, or even speaks an encouraging word, is for that moment the Christ to us—"the Word made flesh"—the most greatly to be desired accomplishment of mankind. We should look for Him in every one we meet, even in the most depraved. He is there, and encouragement will help to bring Him forth—the Divine Light—that is to guide us.

OUR BOOK REVIEW

(Books reviewed under this heading may be secured through The Michigan Business Farmer, and will be promptly shipped by parcel post on receipt of publisher's price stated.)

The books listed below are very suitable for Christmas gifts and can be purchased through The Book Review, Business Farmer, Mt. Clemens, Michigan.

Kneetime Animal Stories "Squinty, The Comical Pig." by Richard Barnum; Barse & Hopkins, 60 cents.

"School Plays for All Occasions" by Madelene D. Barnum; Barse & Hopkins. $1.25.

"The Book of Good Manners" by Frederick H. Martens; Social Culture Publications.

"Polly's First Year at Boarding School" by Dorothy Whitehill; Barse & Hopkins, 75 cents.

"The Corner House Girls" by Grace Brooks Hill; Barse & Hopkins, $1.00.

"Rimrock Trail" by J. Allan Dunn; Bobbs Merrill, $1.75.

"Lefty O' the Bush" by Burt L. Standish; Barse & Hopkins, 75 cents.

"The Go Ahead Boys on Smugglers' Island" by Ross Kay; Barse & Hopkins.

The Boy Scout Fire Fighters" by Irving Crump; Barse & Hopkins.

"George Washington" by Joseph Walker; Barse & Hopkins.

"Gardening Under Glass" by F. F. Rockwell; Doubleday Page & Co., $3.50.

"The Real Robert Burns" by J. L. Hughes, LLd; Stokes, $1.75.

"The Mine with The Iron Door" by Harold Bell Wright; D. Appleton & Co., $2.00.

"Doctor Nye" by Joseph C. Lincoln; D. Appleton & Co., $2.00.

"Truth O' Women" by Josephine Daskam Bacon; D. Appleton & Co., $1.50.

"What a Young Girl Ought to know" by Mrs. Mary Wood-Allen, M. D.; Vir Publishing Co., $1.50.

"The care and Feeding of Children" by L. Emmett Holt, M. D.; D Appleton & Co., $1.25.

DEWITT CLINTON

Crowds greeting the Service-Progress Special en route

Working with the farmer—

MORE THAN 775,000 people have visited the Service-Progress Special demonstration train sent out over the New York Central Lines by the Agricultural Relations Department.

The exhibits on this train, showing the wonderful advance in steam transportation in the United States, and particularly the interdependence of the railroad and the farmer, have served to bring closer together the New York Central and its agricultural patrons.

The New York Central Lines serve some of the richest farming sections of Illinois, Indiana, Ohio, Michigan, New York and Pennsylvania, and they haul more than a million carloads a year of farm products.

Working with the farmer, to promote better and more profitable farming, the Agricultural Relations Department has grown to be one of the most useful in the New York Central organization.

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You do not expect bumper crops from your fields without fertilizing and extensive cultivation. Why, then, expect a maximum milk yield from your cows unless you keep their milk-making organs in top-notch health? The hard-worked milk-producing functions of the cow need frequent aid to keep up a full flow and retain the stamina to resist disease.

Kow-Kare has such positive action on the digestive and genital organs that its benefit is soon shown in the milk yield. Thousands of successful dairymen are now using it regularly about one week in each month for every cow. Especially during the winter months it aids in keeping up a full yield from dry rough feeds.

Dairy authorities say that the average dairy can double the net profit if measures can be found to increase the milk 10%. Kow-Kare is a regular part of the feeding course in thousands of dairies where surprising increases in milk yield are being accomplished.

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Feed dealers, general stores and druggists sell Kow-Kare, $1.25 and 65c sizes. If dealer is not supplied, order direct. We pay postage.

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Registered Purebred Herefords

Produce Baby Beeves in the shortest possible time and in the most economical manner. They realize extreme top prices at a year old. Under the Sotham System 69 head from nine producers in one week averaged $95.60 per head, weighing from 750 to 850 lbs. It is to your interest to investigate this system. Repeater, Fairfax, Beau Donald Breeding at practical prices for raising beef. Terms.
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Spring calves for sale. Write us your wants. A few Chester White Boars and Sows for sale.
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WE HAVE SOME FINE YOUNG ANGUS BULLS from International Grand Champion Stock at reasonable prices. **E. H. KERR & CO., Addison, Mich.**

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CLOVER CREST RANCH, Tawas City, R3, Mich.

RAISE SHORTHORNS WITHOUT HORNS Like Kelley does. U. S. Accredited Herd No. 28945. For description and price write,
L. C. KELLY & SON, Plymouth. Michigan.

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O. I. C'S: 75 LAST SPRING PIGS, PAIRS not akin. From 3 good strong sires. Also fall pigs. Recorded free. ½ mile west of depot.
OTTO SCHULZE & SONS, Nashville, Mich.

HAMPSHIRES

REG. HAMPSHIRE HOGS FOR SALE Write your wants to
JOHN W. SNYDER, St. Johns, Michigan.

DUROCS

AT THE STATE FAIR WE SHOWED ONE of the largest boars. He won 3rd in his working clothes (no fitting). He is back home and we want you to have a gilt or sow bred to this fine Colonial Boar. Write us.
SCHAFFER BROS., R. 4, Oxford, Michigan.

DOGS

German Shepherd, Airdales, Collies; Old English Shepherd dogs; Puppies; 10c illustrated instructive list. **W. B. Watson, Box 27, Macon, Mo.**

Have You Live Stock For Sale?

An Ad in The Michigan Business Farmer will sell it.

DAIRY and LIVESTOCK

FARMERS DISTRIBUTE MILK AT IRONTON

HERE'S a tip to the milkman—and judging from the trouble in which he seems to be constantly involved as a result of his "sliding scale," he needs it.

The farmers of Ironwood and Erwin townships, Gogebic county, in the Upper Peninsula of Michigan—and of Hurley, Wisconsin, organized the Ironwood Milk Distributors' Association, early in October. The association will endeavor to place the industry on a higher business basis, and to insure to its members and patrons a square deal.

It will endeavor, also, to work towards the production and marketing of a first class article for which a reasonable, uniform, price will be charged, in accordance with the average cost of production and marketing. The association, moreover, will aim to protect its members against loss, resulting from removal of customers from the city, who fail to pay their bills; and to require of its members, that the milk ordinance of the city of Ironwood be observed in every particular, in regard to the t. b. testing of cattle, cleanliness of operation, cleanliness of production, and bottling of milk and cream, as well as methods of distribution.

The city health officer of Ironwood is instructed by the association to report all members or other parties suspected of non-compliance with the milk ordinance. They will be dealt with accordingly.

C. E. Gunderson, Gogebic county agricultural agent, commenting upon the plan says: "Milk, properly produced and handled, is the nation's best food, and will become even more liberally used when its high food value at low cost is commonly understood. But the consuming public wishes to know that it is the good, wholesome, clean pure food that nature meant it to be. That is the purpose of the new organization.

The officers of the Association are:

President, Julius E. Johnson; Vice President, C. E. Johnson; Secretary and Treasurer, Luther Olson.

ONTONAGON COUNTY COMPLETES T. B. TEST

ON November 21, the work of tuberculin testing all the cattle in Ontonagon county, Upper Peninsula, was completed. Approximately 9,700 head were tested. 120 animals reacted to the test. This would give an average of 1.25 per cent reacters. This is a very low ratio of reacters. Other portions of the state have sometimes shown as high as 10 per cent reactors, and the average for all cattle tested in the state is 2.2 per cent. Ontonagon county cows are healthy.

The taxpayers of the county have reason to be pleased with the financial report covering the cost of the tuberculin test. A year ago Ontonagon county appropoiated $3,000 to cover the county's share of making the test. The census figures of 1920 showed 5,800 head of cattle in the county. The estimate of expense was based on this number of cattle. Instead of this number the veterinarians found 9,700 head of cattle; and the total expense to the county, for the county's share of making the test, is less than $2,000.

The increase in the number of cattle in the county, from 5,800 in 1920 to 9,700 in 1923, shows that the farmers of Ontonagon county are rapidly developing the dairy business. This is a wise step for the farmers to take, for dairy farming is the safest, surest, and most profitable type of farming for Ontonagon county. Having all the cattle of the county free of tuberculosis will go a long way towards increasing the value of, and profits from, the cattle. This helps the farmer. The man in town is also benefited by having a healthy and safe milk supply, and even the butter and cheese manufactured in the county will be better for the fact the tuberculin test has been made. Likewise we can all have a more comfortable feeling about eating meat from cattle that have been slaughtered locally.

It is probable that some sort of retest will be made next year. At least all the herds where reactors were found will be tested again. The decision in this matter rests with the State Department of Agriculture.—W. N. Clark, County Agricultural Agent.

BREEDS OF DAIRY CATTLE

No. 4—Brown Swiss

THE Brown Swiss breed originated in the Canton of Schwyz, in eastern central Switzerland. The cattle are called variously Brown Switzer, Brown Schwyzer, and Brown Swiss, the last name being the one commonly used in the United States. Conditions in Switerland are such that a strong animal capable not only of milk production but of service as a draft animal is desired, and the large frame is evidence of fitness for these requirements.

The first importation into the United States was made in 1869, and although other importations have been made since, comparatively few animals have been brought to this country. Quarantine regulations in the United States against contagious animal diseases on the Continent of Europe probably have hindered the introduction of large numbers of these animals. The distribution in the United States is not widespread, the cattle being found principally in the States of New York and Wisconsin. The present popularity of the Brown Swiss has been gained entirely by the merits of the animals, as they have not been much advertised.

Characteristics

In color the cattle vary from a light-gray, mouse color, or brownish dun to dark brown. A medium shade of brown shading into a light gray or almost white strip along the backbone and on the belly is preferred. The udder is usually white, switch of tail and hoofs black. A black muzzle with a creamy or mealy ring around it is characteristic. The horns, of medium size, are white at the base and black at the tip. In disposition the cattle are mild and docile and for their size are very active; they are excellent grazers, especially on rough land.

The cows when mature weigh from 1,100 to 1,600 pounds (average about 1,250 pounds); bulls range from 1,500 to 2,500 pounds. The cattle are compact, smoothly fleshed over all parts, and when dry rapidly put on flesh, which is milked off well after freshening. Straightness of hind legs is a typical characteristic of the breed.

The breed has been criticized because certain animals have shown lack of regularity in type of udder and have had exceptionally large teats. As the breeders pay more attention to these points great improvement is observed.

Calves at birth are large and vigorous and weigh from 65 to 90 pounds. As a rule, animals of the breed are somewhat slower in maturing than those of other dairy breeds.

In milk production this breed ranks well, with a moderate percentage of fat. The average of the 228 cows that have completed yearly records of production to January 1, 1918, is 10,931.1 pounds of milk testing 3.998 per cent, amounting to 437.02 pounds of butter-fat.

Families of Brown Swiss have not been developed to any great extent in this country.

TATTOO MARKS

Would like to ask if any of your readers have ever used any of these tattoo ear markers for marking sheep. If so, is it a success, and permanent, or will it grow dim after while?—B. S., Ionia, Mich.

—The tattoo marks, using black or blue ink, may be used satisfactorily with those breeds of sheep having a white face and ear. I have never known of tattoo marks being used with the black eared sheep, although I can see no reason why it could not be so used if one could obtain a red ink.—Geo. A. Brown, Professor of Animal Husbandry, Michigan Agricultural College.

CATTLE BLOAT ON ALFALFA

I have a field of alfalfa one year old and would like to pasture cows in it but I am told they would bloat. Could you give me any information about pasturing cattle and horses with safety?—E. M. I., New Baltimore, Mich.

—There is considerable danger of bloat when pasturing cattle on alfalfa, especially when it has any moisture on it, such as comes from a rain or heavy dew, also when the alfalfa is real green and growing rapidly.

We have not made a practice of pasturing our alfalfa fields here until they are three or four years old and considerable of June grass has come in. Horses and hogs are not as subject to bloat as are cattle and sheep and there is very little danger of injury to horses or hogs providing they are started on the alfalfa when it is dry.

I would not advise the pasturing of an alfalfa field only one year old, as there would be considerable danger of its being pastured too close and injuring the stand. It would be much better to see it go into the winter with a good top to hold the snow and give it protection from the cold this winter.—Geo. A. Brown, Professor of Animal Husbandry, M. A. C.

PLANS FOR BUILDING BEEF-CATTLE BARNS

BREEDERS and feeders of beef cattle will find in a new Farmers' Bulletin, Beef-Cattle Barns, just published by the United States Department of Agriculture, suggestions of value regarding the right types of barns for various conditions, the location, arrangement, ventilation and construction. Several plans and alternate plans are given for general-purpose barns, feeding barns, sheds, and barns for housing breeding herds. Consideration is given to the requirements in severe climates and in regions where less protection is needed from the elements. The bulletin contains 16 drawing showing elevations, floor plans, and cross sections.

Copies of the bulletin, which is No. 1350, may be obtained by writing to the Department of Agriculture, Washington, D. C., as long as the supply lasts.

VETERINARY DEPARTMENT

COW POX

We have a cow that has scores on her bag and teats. They first make their appearance in a lump. This breaks open and then a large scab forms. We do not use the milk as we thought it might not be good. These scores have been coming on for about 4 weeks. Sometimes they all go away and other times they number 3 and 4 on the bag. Cow eats good and is in fair condition. Once there was a very large one came on and she did not give hardly any milk. She does not give as much now as she ought to. She gets mostly corn fodder with pumpkins, carrots, and bran.—P. A., Sherman, Mich.

—I think this cow is suffering from cow pox. Washing the teats and udder after each milking with a one per cent solution of hyposulphite of soda will bring about a cure in most cases. The occasional application of sulphur ointment will help to soften up and remove the scabs. The disease is easily spread from cow to cow in the act of milking. The affected cows should be milked last and the milk man should wash his hands thoroughly with soap and a good disinfectant before milking another cow.—John P. Hutton, Assoc. Prof. Surgery and Medicine, M. A. C.

SELLING YOUR APPLES AT A PROFIT

(Continued from page 4)

of four per cent acetic acid, may be reduced to a strength of not less than four per cent, and cider vinegar so reduced shall not be regarded as adulterated. Every manufacturer or producer of cider vinegar shall plainly brand on the head of the cask, barrel or keg or other container of such vinegar, his name, place of business and the words 'fermented cider vinegar,' and no person shall mark or brand as cider vinegar any package containing that which is not cider vinegar. Any vinegar sold or offered for sale shall be marked or branded plainly upon the package or container from which it is sold and also on the original package or container in which it is sold or delivered, in a manner to show its true character and source."

Paragraph 71, Section 6: "No vinegar shall be sold or exposed for sale in which foreign substances, drugs or acids shall have been introduced. No vinegar shall contain any artificial coloring matter, and all vinegar shall have an acidity of not less than four per cent by weight of absolute acetic acid. If vinegar contains any artificial matter, or less than the required amount of acidity, it shall be deemed to be adulterated."

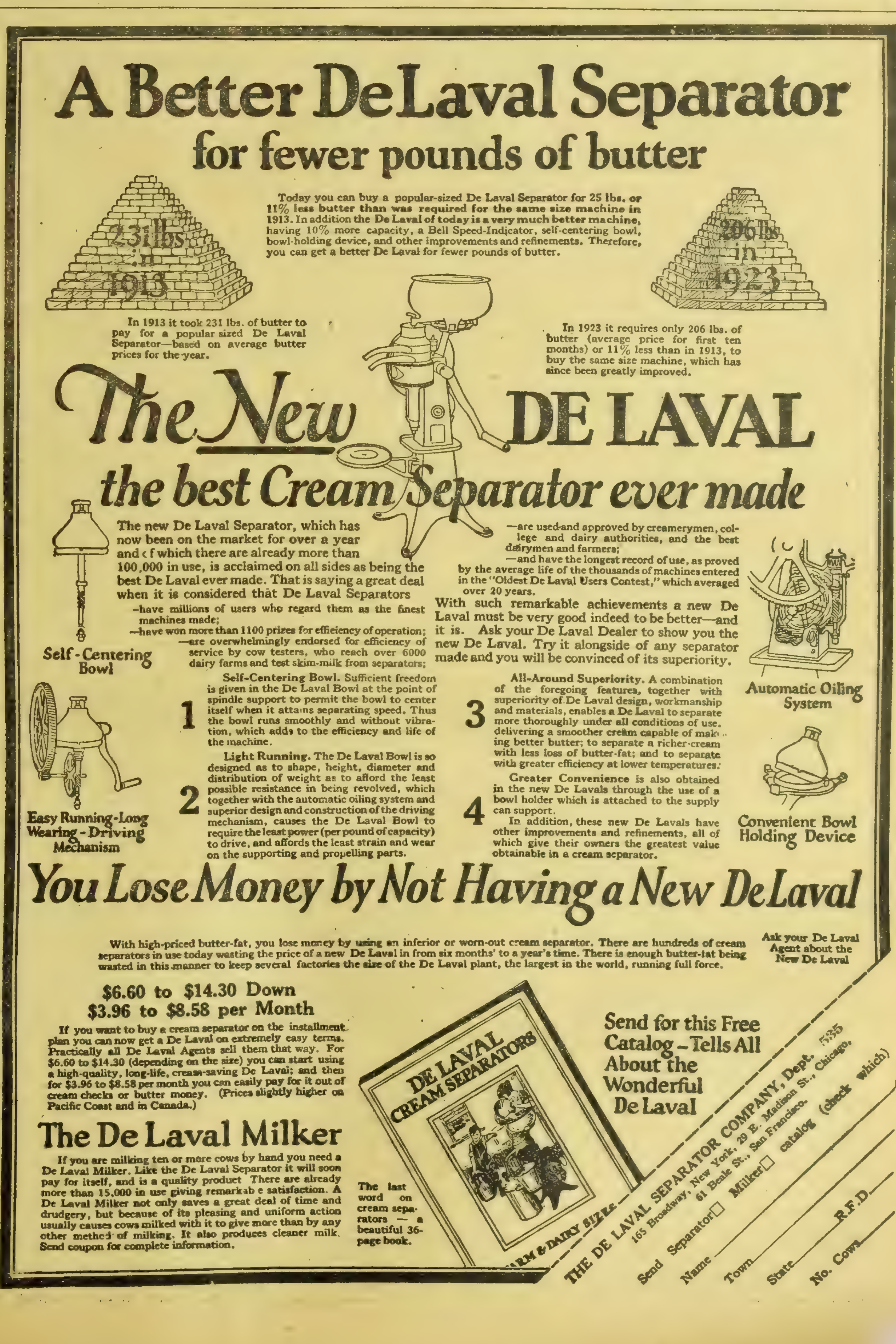
Paragraph 74, Section 9: "Whoever violates any of the provisions of this act shall, upon conviction, be punished by fine of not more than two hundred dollars or imprisonment in the county jail not to exceed six months or both such fine and imprisonment in the descrition of the court."

There are many reasons why vinegar making in the home is not a success. The first mistake is in not using good sound fruit. You can not make good vinegar from unsound or rotten fruit. The microorganisms spoiling the fruit will likewise spoil the vinegar if not properly controlled. The second mistake is in keeping the cider at too low a temperature. It will actually take any where from one to three years to make vinegar if the cider is kept at a low temperature. On the other hand if kept at too high a temperature the alcohol is evaporated and other undesirable organisms enter and destroy the food materials necessary for the yeasts and bacteria in the making of vinegar. Another mistake often made is in the choice of variety of apples. Many apples that make good cider to drink do not make good cider for vinegar due to the small amount of malic acid present. Malic acid is necessary in cider to keep out the putrefactive bacteria that otherwise would spoil the cider. Again many varieties are low in sugar content and sugar is necessary in cider for good vinegar. Contrary to popular opinion sweet apples do not as a rule contain more sugar than sour apples. They simply have less malic acid present which makes them taste sweeter. Taking everything into consideration most varieties of winter apples make the best cider for vinegar. Fall apples are the next most desirable for vinegar making and summer apples the least desirable.

In conclusion it might be said that any one observing a few simple rules of cleanliness, selecting the proper variety of apples, inoculating with pure cultures of yeast and bacteria can make good cider vinegar conforming to the laws of Michigan at a small cost; thus receiving twice as much for the apple crop and in many cases converting an unprofitable crop into a profitable one.

(Editor's Note:—Anyone interested in producing better vinegar send for Special bulletin No. 98, Bacteriological Laboratory, Michigan Agricultural College, East Lansing, Mich.)

FREE BOOK ABOUT CANCER
The Indianapolis Cancer Hospital, Indianapolis, Indiana, has published a booklet which gives interesting facts about the cause of Cancer, also tells what to do for pain, bleeding, odor, etc. A valuable guide in the management of any case. Write for it today, mentioning this paper. (Adv


231 lbs in 1913
206 lbs in 1923
Self-Centering Bowl
Easy Running-Long Wearing-Driving Mechanism
Automatic Oiling System
Convenient Bowl Holding Device
DE LAVAL CREAM SEPARATORS

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Today you can buy a popular-sized De Laval Separator for 25 lbs. or 11% less butter than was required for the same size machine in 1913. In addition the De Laval of today is a very much better machine, having 10% more capacity, a Bell Speed-Indicator, self-centering bowl, bowl-holding device, and other improvements and refinements. Therefore, you can get a better De Laval for fewer pounds of butter.

In 1913 it took 231 lbs. of butter to pay for a popular sized De Laval Separator—based on average butter prices for the year.

In 1923 it requires only 206 lbs. of butter (average price for first ten months) or 11% less than in 1913, to buy the same size machine, which has since been greatly improved.

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the best Cream Separator ever made

The new De Laval Separator, which has now been on the market for over a year and of which there are already more than 100,000 in use, is acclaimed on all sides as being the best De Laval ever made. That is saying a great deal when it is considered that De Laval Separators
—have millions of users who regard them as the finest machines made;
—have won more than 1100 prizes for efficiency of operation;
—are overwhelmingly endorsed for efficiency of service by cow testers, who reach over 6000 dairy farms and test skim-milk from separators;
—are used and approved by creamerymen, college and dairy authorities, and the best dairymen and farmers;
—and have the longest record of use, as proved by the average life of the thousands of machines entered in the "Oldest De Laval Users Contest," which averaged over 20 years.

With such remarkable achievements a new De Laval must be very good indeed to be better—and it is. Ask your De Laval Dealer to show you the new De Laval. Try it alongside of any separator made and you will be convinced of its superiority.

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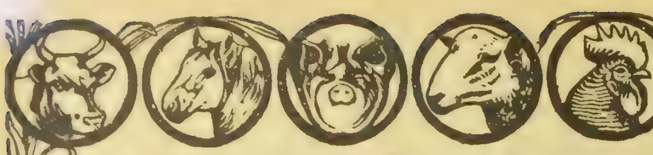

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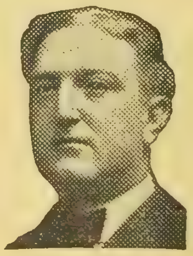
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1923 Apple and Potato Show Best Ever

(Continued from page 4)

banks to the round Irish Cobblers, the exhibits showed wonderful color, bloom, and finish, and made a picture which the average person could hardly believe possible of the prosiac potato.

The Russet Rural was easily the leading variety at the Show. In fact, this variety had more exhibits than all other varieties combined. Next came the White Rurals, with the other varieties trailing as to number of exhibits.

In the exhibit of 32 potatoes, Edward Sutton of Central Lake won first with his peck of Russet Rurals and the same peck was later awarded the championship of the whole show.

The peck class of Russet Rurals was really a "contest of the champions" as it included the exhibits of Lee Sneathen of Charlevoix who won sweepstakes at the International Potato Show at Duluth this year and Ernest Pettifor of Gaylord who won the championship of the 1922 International. Sneathen's exhibit placed a close second while Pettifor was awarded third.

When the visitor saw the dozens of other exhibits, all of splendid quality and uniformity, which did not come within the prize money, it was easy to appreciate that winning a place in this competition meant a real honor.

The Upper Peninsula came in for its share of the potato honors as first place in the White Rural peck competition was won by C. R. Millar of Manistique, while John DeLongchamps peck of Green Mountains won first in its class.

The best peck of Irish Cobblers was exhibited by George Harrison of Manton and Wm. Howe of East Jordan won first prize with a peck of Early Ohios. In the "any other variety" class, first place was awarded to Chas. Albert of Vulcan, who exhibited a splendid peck of Russet Burbanks.

Otsego Has Best County Exhibit

A county exhibit consisted of 12 samples of 32 potatoes each, to be selected from the exhibits made by individual growers. Otsego county placed first; Cheboygan county, second; Emmet county third; and Presque Isle county fourth.

To encourage the selection of better market potatoes, the Michigan Potato Growers' Exchange offered prizes for the best exhibits of market potatoes shown by cooperative marketing associations. First place in this division was won by the Central Lake Marketing Ass'n. with the Lake City Ass'n. second and the Marquette County Farm Bureau, third.

A novel feature of the potato exhibit was a contest whereby the housewives visiting the Show expressed their judgment as the kind of potatoes they prefer. Several exhibits, each composed of 150 lbs. of table stock, were displayed and were designated by numbers. Each lady was given a ballot on which she marked the number of the exhibit which she would prefer to buy. Interest in this feature was very marked among the visiting housewives.

A guessing contest, which concerned the number of apples and potatoes displayed in two piles, also received much attention.

Potato Producers Hold Meeting

The Michigan Potato Producers' Ass'n. held two meetings in connection with the Show. Warehouse construction and storage conditions were the two topics especially emphasized. Prof. Floyd Fogle of the M. A. C., Dept. of Farm Mechanics, described approved types of storage houses and showed the details of construction. Prof. Fogle stressed the importance of proper ventilation in these houses. He predicted that potatoes would soon be stored in bonded houses, similar to other commodities which now have that privilege, which would enable the grower to finance his business on the warehouse receipts. The importance of having the best storage houses, so as to comply with the requirements of bonding, was shown clearly.

J. Kotilla, who has been doing special research work for the M. A. C. in connection with potato diseases, showed that most of the troubles met in storing potatoes are caused by insufficient ventilation. He explained that the potato is a living plant and that the life processes go on within the tuber during the winter. This makes it necessary that the tuber have a sufficient supply of oxygen otherwise breakdown will occur in the tissues of the tuber.

Mr. Kotilla showed how this breakdown appears first as rings or spots under the surface of the tuber and later extends to the well known "black heart." These conditions may be caused by lack of proper ventilation of by too high temperatures in storage. In the later case the result is the same inasmuch as the high temperature stimulates the potato and it therefore requires more oxygen to supply its "breathing" process.

An honor club, which admits to membership only those potato growers who obtain an average yield of not less than 300 bushels of potatoes per acre, has been promoted this year by the Michigan Potato Producers' Ass'n. Those winning membership this year are as follows:

Name	Acres	Yield Per A. Bu.
A. L. Dunlap, Lupton	2	301
E. B. Loehne, Central Lake	2	322
A. Verschme, Manistique	2½	324
A. N. McDonald, Millersburg	2	395
Arthur Hockin, Kewadin	4½	333
Tony Shooks, Central Lake	2	318
Irvin Cole, Alanson	2	359
J. G. Woodman, Paw Paw	9	350
C. S. Dearborn, Belleaire	3	350
F. Schmalzreid, Levering	10	342
M. E. Parmelee, Hilliards	2	363
M. A. Rector, Rockford	2	322
J. DeLongchamp, Champion	3	420
Harry Reilly, Belleaire	2	310
R. C. Bennett, Alba	3	308
Lee Sneathen, Charlevoix	2	390
H. J. Bonnett, Beaverdam	2½	305
H. Vandersilk, Central Lake	4½	400
W. Bowers & Son, Central Lake	2	350

In addition to the honor of obtaining membership in the "300 Club," each of the above growers was presented with a very attractive medal watch fob. The 1923 championship goes to John DeLongchamp of Champion with his average yield of 420 bushels per acre.

FUR DEPARTMENT

TRAPPING THE WEASEL

NO animals are more blood-thirsty and carnivorous than the weasel tribe.

They are well equipped both in actual weapons and in activity of body and have powers quite out of preportion to their size. They are gifted with a magnificant fur which in the colder climates, turns a snow white during winter months. Skins should be cased fur side out. The fur of the White Weasel is most valuable; that of the brown weasel is only worth a few cents.

Locate runway or place weasel frequents and hang bait from limb of tree by piece of string, so that it is just within reach of the animal. Bait should hang about 12 inches from trunk of tree and trap should be directly under. Always keep traps used for small animals properly oiled so they will spring with very little pressure upon them. When trapping for weasel as well as all other animals, great care should be used to cover traps and remove all unnatural appearance. Use rabbit, bird or liver for bait.

MICHIGAN HOLSTEIN BREEDERS ADOPT PREFIX NAMES

FIVE Michigan Holstein breeders have adopted prefix names within the past three months for use in naming their cattle. These names have been reserved on the books of The Holstein-Friesian Association of America for the exclusive use of the breeders.

They are: Security, M. O. Posthuma & Sons, Coopersville; Postdale, John E. Post, Durand; Masfarmco, M. J. McPherson, Howell; Oshtemo, H. B. McMurray, Kalamazoo; Cool Lake, Earl Fairbanks Jr., Lansing.

The use of prefix names is of decided advantage to the breeder. It gives him the use of all names in new combinations, even those in previous use by other persons and makes selection of names less difficult. The prefix may become well known and thus become a trade mark for the owner.

Poultry for Profit

NOT GOOD PLAN TO FORCE HENS TO MOULT

Is it a good plan to force hens to moult? About what time and how should they be fed during that time?—Mrs. B. H., Snover, Mich.

—It is not practical to force hens into a premature moult. A number of experiments have been conducted in relation to egg production and moulting. Most of the heavier producers delay moulting until September fifteen or later; in fact most hens that moult subsequent to this date are worthy of being included in the breeding pen. Such hens usually moult quickly and resemble a pin cushion at certain stages of the moulting period. The early and slow moulters are undesirable and do not return to early production as many people seem to believe.

A good ration for the moulting would be as follows:

Scratch feed: two parts cracked corn, one part wheat, 20 per cent bran, 20 white middlings, 20 corn meal, 20 ground oats, 15 meat scrap, 5 old process oil meal.—E. C. Foreman, Professor of Poultry Husbandry, M. A. C.

MICHIGAN TO HAVE CERTIFIED BABY CHICKS

THE Michigan Baby Chick Association has completed its plan for the certification of flocks and state inspection of hatcheries. This announcement was made by C. J. DeKoster, secretary of this Association, This is welcome news to the chick-buying public and the Michigan Baby Chick Association is performing a distinct service to the poultry industry of the state. It will put the poultry business on a firmer basis.

For many years Michigan farmers and poultrymen, like those of other states, have been the victims of unscrupulous poultry producers and hatcheries who had the ability to write flowery advertisements but did not deliver chicks of good quality. There were also many good reliable poultry-men in the state, but buyers had no way of knowing the good from the bad. The Michigan Baby Chick Association saw the necessity of this move more than two years ago and immediately laid the foundation. Progress was slow but sure. The work was started in 1922 by the Michigan Agricultural College but a shortage of men and funds made it necessary to drop the work. This year the Association has formulated a plan whereby they can do the work themselves under the supervision of the M. A. C. Several plans were suggested and discussed and the following was finally put into use:

The certification plan provides that every flock furnishing eggs to the hatchery must be inspected by a member of the inspection committee of the association. The pullet flocks are carefully inspected for size, rate of maturity, freedom of disease, uniformity of type, uniformity of growth and productive ability. The hens are rated for lateness of moult, size and uniformity, general vigor, freedom of disease and productive ability. Male birds are inspected for size and physical development, character, constitutional vigor and breeding.

Then the inspector is to determine what the general conditions around the farm are, such as sanitation, ventilation, over-crowding, forcing for production and feeding. These are the points upon which the score cards will be judged by the board of directors to whom the inspector makes his report. Flocks that do not come up to the standard requirements will not be certified. When a flock fails to pass the inspection test, the flock owner benefits by the inspection and can generally improve his flock and within a few years may be able to have them certified. When a flock passes the inspection a certificate is issued the flock owner showing that his flock is up to the required standard. Most of the hatcheries in the state are coming in on this certified stock plan. It will mean better chicks, better satisfied customers and a big boost for the baby chick industry of Michigan.

Before the 1924 season opens all hatcheries of members of this Association will be inspected by a man from the poultry department of the Michigan Agricultural College. Hatcheries will be inspected for sanitation, ventilation and general conditions. This works hand in hand with the certification plan and unless a hatchery has the facilities to hatch good strong chicks under good conditions it will not be able to sell certified stock. The Association feels that a man can have the best stock in the world and if they are not hatched right the stock will do no one any good.

Plans of this kind have been used by the state of Wisconsin successfully; Illinois has adopted a similar plan for next year; and why should Michigan lag behind? Michigan is not lagging behind, thanks be to a few live men, who have put this big thing across. We say "Big" thing, because we believe that the certification of flocks and a state inspection of hatcheries is the biggest forward step that has been made in the poultry industry of the state.

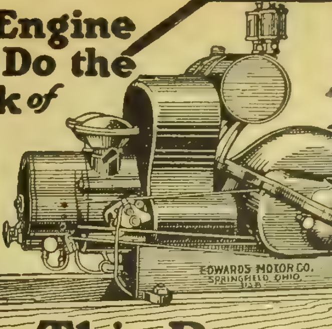
UNCLE RUBE SPINACH SAYS

MAN IS HEAD OF THE HOUSE

JEST a few days ago or there about, a feller where I work at —he'd been quite a bit chesty 'bout how he run things out to his place—sed he was boss at home an' run his own place. Well, you know how it is when a feller gits that way? Of course no human bein' has ever figgered out 'zactly how comes—but any way, some fellers do 'magine they run things up in their homes an' less they git too chesty 'bout it I most gen'rally let 'em dream their dreams and say nothin' 'bout it. But this young guy got onto my nerves a little. Oh he wasn't a kid,—35 or 36 prob'ly—an' I argued with him 'cause bein' long in years—not old you know, but well past my twenties—I kinda sort o' thought he wasn't much different from any other married man. So you see, just to prove I was right and that he didn't run his own home I angled 'round 'til he invited me out to his house for dinner—for Sunday dinner. Well now I have my Sunday dinners paid for—that is gen'raly speakin, if not, well then I wait 'til Monday and I can most allus git trusted on Monday. But to continue—or rather git back to where I wuz at. He invited me to go out to his place for my Sunday dinner. Well an' good! I accepted the invitation at once, I wanted to see a house where the husban' wuz boss an' so I sed I'd be glad to go out.

This wuz on Thursday night an' I wuz quite proud to think that I, out of all the youngsters comin' from the South, that I wuz the only one invited. An' he invited me 'cause I had advocated 'at a man should run his own place.

Oh, well, folks, I didn't go out there, I'm sorry as I can be. I know you're sorry to. Saturday night—jest the night when I thought it'll be a short night cause I was planin' on a free dinner—by the great horned spoon an' striped cats an' blind pigs—the young feller came to me an' sez—in a kinda sinful voice, "Uncle Rube its all off, the wife don't want company an' I can't take you out to the houso without her consent an' "—well folks, he took off his workin' cap an' showed me a bunch, a lump on his head jest 'bout the size of a brown leghorn egg and he sez "you see how it is, Uncle Rube—Course" he sez, "I run my own home but——my wife don't want you out there". Oh I'm so glad I'm free, no woman can tell me where to go and when to come back—yes, yes, I'll be there in jest a minute, what's the hurry? Cordially yours, UNCLE RUBE.



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—A. Y. EDWARDS

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There is no other farm engine like it. Simple in construction and easy to operate. It is only one engine, yet it takes the place of six engines. It will give from 1½ to 6 H. P., yet it is so light that two men can carry it easily. Set it anywhere and put it to work.

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Operates with kerosene or gasoline. Easy starting, no cranking. The greatest gas engine value on the market. And you can prove all of these statements to your own satisfaction.

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Ivan L. Blake, of Hannibal, New York, says: "Only engine economical for all jobs. I run a 28-inch cord wood saw, a 24-inch rip saw, a washer, a pump, and a grinder, and it sure runs them fine. It has perfect running balance, and it sets quiet anywhere."

Clarence Rutledge, of Manitoulan Island, Ontario, says: "Have given my Edwards four years' steady work and like it fine. It uses very little fuel. I run a 28-inch cord wood saw, also a rip saw, 8-inch grinder, ensilage cutter, line shaft for shop, churn, washer, separator and pump. Have had ten other engines and the Edwards beats them all."

Frank Foell, of Cologne, New Jersey, says: "It's a great pleasure to own an Edwards engine. I run a wood saw, cement mixer, threshing machine, etc. Do work for my neighbors. Easy to move around and easy to run. I would not have any other."

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Main Street, Springfield, Ohio

Without cost or obligation, send me complete description of your engine, also details of your free trial offer.

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And they told me she had "incurable paralysis," then I gave her

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46,000 PURE BRED BREEDERS. 15 varieties. Best laying strains. Incubate 25,000 eggs daily. Catalog Free. Prewar prices. Free live delivery.
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Advertisements inserted under this heading at 30c per agate line, per issue. Commercial Baby Chick advertisements 45c per line. Write out what you have to offer and send it in. We will put it in type, send proof and quote rates by return mail. Address The Michigan Business Farmer, Advertising Department, Mt. Clemens, Michigan.

PULLETS, HENS AND COCKERELS

S. C. White Leghorns and S. C. and R. C. Black Minorcas. Must make room before cold weather. About ready to lay.
LAPHAM FARMS, Pinckney, Mich.

High Grade, Utility Cockerels For Sale—April hatched—White Wyandottes, Barred Rocks and White Leghorns. C. W. Heimbach, Big Rapids, R. 5, Michigan.

LEGHORNS

LEGHORNS

S. C. Buff Leghorn Hens, Pullets and Cockerels. Hens and pullets $2.50 each; cockerels $3.00 to $5.00 each. Show birds a matter of correspondence. LAPHAM FARMS, Pinckney, Mich.

FOR SALE—LARGE IMPORTED SCOTCH White Leghorn Stock Cockerels and Cock Birds. Also exhibition and bred-to-lay S. C. Buff Leghorns. FAIRVIEW POULTRY FARM, C. J. Sweet, Prop., Ann Arbor, Michigan.

RHODE ISLAND REDS

RHODE ISLAND REDS TOMPKINS STRAIN to make room for young stock. I will sell after November 1, 1923, 50 2 year old hens at $2.00 each; 25 1 years old hens at $3.00 each; cockerels at $2.50 and up. All these cockerels are from my best 3 year old hens that layed 205 eggs or better in their pullet year. Quality breeder of Rhode Island Reds.
WM. H. FROHM, New Baltimore, Mich., R. 1.

WHITTAKER'S R. I. REDS. MICHIGAN'S greatest color and egg strain. Cockerel price list ready in September. Improve your flock with Whittaker's red cockerels.
INTERLAKES FARM, Box 4, Lawrence, Mich.

Fine Rose Comb R. I. Red Cockerels $2.00 Each. Giant Bronze Turkeys, toms $9.00; hens $7.00.
Mrs. Albert Harwood, R. 4, Charlevoix, Mich.

WYANDOTTES

March Hatched Rose Comb White Wyandotte Cockerels, Fishel Strain. Beauties at $3 each. Mrs. Tracy Rush, 104 Grover Ave., Alma, Mich.

PLYMOUTH ROCKS

BARRED PLYMOUTH ROCK COCKERELS $5 each. From first prize winning strain at Chicago and Detroit. J. A. Barnum, Union City, Mich.

PARK'S STRAIN BARRED ROCK COCKERELS from extra selected stock headed by M. A. C. cockerels. April hatched, $4.00 each. 3 or more $3.50 each. Shipped approval and prepaid on orders received before December 15.
REESE BROS. Williamston, Michigan.

FOR SALE—SUPERIOR RINGLET BARRED Rock cockerels, Cocks, Hens, and Pullets, Show Birds and Breeders. J. L. Wyndham, Tiffin, Ohio.

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BUFF ORPINGTON COCKERELS FOR SALE. Cooks Strain.
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Maplehurst Farm Buff Orpington Cockerels—Exhibition and Production strain—Flock culled by Prof. Foreman. $5.00 to $7.50.
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S. C. ANCONA COCKERELS HATCHED FROM Sheppards very best, order early, $5.00 each.
H. CECIL SMITH, Rapid City, Mich., R. 2.

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Pure Bred Mammoth Bronze Turkeys, Champion strain. Large and vigorous. Unrelated stock.
Mrs. B. Smatts, R. 1. East Jordan, Mich.

BOURBON RED TURKEYS: THE BEST SIDE line for a farm. We sold $400.00 worth last year. Write for prices, etc.
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FOR SALE UNRELATED STOCK. BOURBON Red turkeys. Brown and White Chinas and Canadian wild geese. Black Muscovy, White Pekin and wild Mallard Ducks. Pearl Guineas.
J. D. CALLAGHAN, Fenton, Michigan, R3.

LARGE VIGOROUS BOURBON RED STOCK Turkeys. Axtell Strain.
MARY BEACOM, R4, Marlette, Michigan.

BOURBON RED TURKEYS STATE FAIR WINNERS.
THOMAS G. CALLAGHAN, Fenton, Michigan.

MAMMOUTH BRONZE TURKEYS PURE BRED. For breeding only. Write me.
JOHNSON TURKEY FARM, Six Lakes, Michigan.

PURE BRED BRONZE TURKEYS. HEAVY, hardy, well marked. Hens $6.00, Toms $9.00.
CHAS. S. CLELAND, Deckerville, Mich.

MICHIGAN'S BEST GIANT BRONZE TURKEYS. Another excellent flock ready for sale. We place 100 breeders in Michigan each year. Furnish unrelated stock. Save by buying early.
N. EVALYN RAMSDELL, Ionia, Mich.

Pure Bred Mammoth Bronze Turkeys. Sicilian Buttercups, S. C. Buff Leghorn and Silver Wyandotte cockerels. Caroline Kunkel, R. 4, Boyne City, Michigan.

FOR SALE BIG BRONZE TURKEYS. Male and Females.
ELMER O. HACKENBERG, Marcellus, Mich.

FOR SALE—PURE BRED MAMMOTH BRONZE Turkeys from large and vigorous stock.
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THOROUGHBRED GIANT BRONZE TOMS FOR Sale. Large beautiful birds. Michigan's best strain. Write for prices. MARY A. JOYNT, Omena, Mich.

MARKET FLASHES

MARKET SUMMARY

Active buying gives wheat market strength. Corn unchanged. Oats and rye follow trend of wheat. Beans steady. Butter and eggs in demand. Large supply of potatoes weakens market. Apples easy. Cattle trade slow but steady. Sheep and hogs active and prices gain.

(Note: The above summarized information was received **AFTER** the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press —Editor.)

FOOTE'S MARKET LETTER

BY W. W. FOOTE

Farming Conditions

PERHAPS never before were farming more mixed than now, and while there are many complaints of hard times and forced economy, numerous reports come from more prosperous districts where farmers and stockmen have been able to meet their obligations without going heavily into debt. Naturally, the worst reports come from exclusively wheat growing districts, but many farmers who are in the habit of carrying on dairying as well as devoting part of their efforts to raising other grains and feeding live stock are nore than making both ends meet. In same farming districts it is reported that an accumulation of bad paper is being liquidated, numerous farmers having been carried by country banks in the hope of better crops and better prices, and this tends to postpone the dawn of a better day. On the other hand, it is cheering to learn that less money is needed for financing farmers than was anticipated. The Federal Farm Loan Board has completed its plan of financing this year's crops, having loaned a total of $32,000,000, and the wheat growers failed to take advantage of the fullest credit facilities. Only $2,403,896 of the total loaned to farmers was loaned on wheat. All of the loans for which wheat was furnished as security were made in the St. Paul, Wichita and Spokane districts. Corn husking has been going forward steadily in the states comprising the corn belt, and early sown wheat is showing up unusually well. Hogs have been marketed in overwhelming number, the last crop of pigs having been a huge one, but low prices have favored a large consumption of fresh pork, and cured meats and lard have also been eaten so largely that there are no uncomfortable accumulations anywhere. Fresh pork roasts are retailing in the Chicago meat markets at 17 cents per pound, and they are affecting the sales of beef and mutton to a marked degree, as these meats are not any cheaper. The return of Thanksgiving day brought unusually large supplies of poultry to market, and prices for turkeys were much lower than a year ago, receipts being larger than ever before. As farmers know, turkeys are apt to be difficult to raise, but where owners are successful and raise large numbers for the market, profits are liberal. To a remarkable extent farmers are doing their marketing of poultry and other farm products by using motor trucks, and profits are largely increased thereby. North Dakota farmers are great turkey men, shipping car loads of prime dressed turkeys to Chicago and other large markets.

Increased Michigan Bean Crop

The official crop report for Michigan says the average yield increased this year from 11 to 11.5 bushels an acre, aggregating a total production of 6,532,000 bushels, and probably the largest quantity of white beans ever grown in any state in one year. The average pick is placed at 8 per cent, with approximately 6,000,000 bushels of merchantable beans.

The Bean and Pea Journal says: "The demand for soybeans has exceeded the supply of the better varieties in Iowa, according to a member of the farm crops section of Iowa State college. This condition obtains in spite of the fact that the acreage of soybeans has been doubling annually, while in many counties the acreage is estimated at from 10,000 to 15,000 acres. While most of this acreage is planted with corn for hogging down a good many fields are planted for the production of seed."

Large Wheat Supply

While farmers of the far west are in numerous instances reported to be holding their wheat for higher prices and even going so far as to defer payment of interest on mortgages, other farmers are accepting prices offered, fearing values may go lower later under heavy offerings. Stocks in sight are growing in volume rapidly, and a short time ago it was started on the best of authority that available supplies of wheat east and west of the Rocky Mountains, in Canada and afloat aggregated 247,000,000 bushels, comparing with 197,200,000 bushels a year ago. It is as evident as ever that unless especial efforts are made, wheat is not likely to sell much, if any, higher, the worlds, surplus being so great as to make sharp competition between rival exporting companies. The wheat situation is a domestic one, and not dependent upon exports, and we are importing wheat from Canada. Harvesting wheat is going on in Argentina, and the surplus of that country for export is estimated at 170,000,000 bushels, while the Austrailian surplus is placed at 60,000,000 to 80,000,000 bushels. Germany, France and other European countries have grown large crops of wheat and potatoes, but the Germans are so impoverished that comparatively few are able to buy food in a normal way. Corn farmers as a class are in good shape financially, and undoubtedly they will ship a great deal of corn to market after corn husking is over. Stocks of corn now in sight are insignificant, and it is impossible to scrape up enough to bring exports to even a moderate amount, although cash corn has had a large fall in prices. Very good exports of oats, rye and barley are reported, and rye prices still rule unusually low, with the visable supply in this country nearly twice as heavy as at this time last year. Corn and other feeds are not generally regarded as too high for feeding to stock on the farm, although corn does look high when it is recalled that a little more than two years ago new cash corn sold in the Chicago market for 49 cents a bushel.

Late sales were made of December wheat at $1.02, comparing with $1.19¼ a year ago; December corn at 72 cents, comparing with 72 cents last year; December oats at 43 cents, comparing with 44 cents last year; and December rye at 67 cents, comparing with 83 cents a year ago.

Prime Dairy Cows

The honor list of cows in state testing associations for October, just released by the dairy extension department of the University of Illinois, shows that the highest producing cow in any of the 19 groups was owned by Rock River Farm in the Ogle county test group. This is the property of Senator Medill McCormick. The cow is a purebred Holstein, which produced 2,236 pounds of milk and 101.5 pounds of butter fat.

The next highest cow was owned by A. D. Machamer of the Jo Daviess group. This cow was a grade Holstein, which produced 2,164 pounds milk and 84 pounds butter fat in the month.

The highest producing herd also was owned by Mr. Machamer. Five grade holsteins in this herd averaged 1,458 pounds milk and 46.1 pounds fat. The lowest record was 522 pounds milk and 32.7 pounds fat for 22 purebred Jerseys in the Know-Warren group.

The Cattle Outlook

Now that the Thanksgiving extensive consumption of poultry is over, the demand for beef may be expected to be reasonably large until the Christmas and New Year holidays start up another lively demand for turkeys, geese, ducks and chickens. Only a moderate demand exists for heavy beef steers, as has been the rule for many weeks, and the local packers and city butchers as well as eastern shippers show a marked preference for yearlings, which have been selling at a liberal premium over prices paid for heavy cattle. Prospects appear promising for well-bred and well fattened cattle, but it appears to be the prevailing opinion among cattle feeders that in most instances it will not be advisable to go in for a long feed. It also is highly probable that fat cows and heifers will be good sellers. After a two years comparison of long and short feeding at Purdue University in Indiana it was demonstrated that light weight cattle which were roughed through the winter and fed out in the spring and summer months for marketing late in the summer have a better show for profits than heavy steers fed for four or five months in the winter. The Chicago cattle receipts for Thanksgiving week were so unusually small that prices advanced 25 to 75 cents, the bulk of the steers selling at $8.50 to $11.60 and the best yearlings going at $12 to $12.75, while the best heavy steers went at $11.50 to $12.25. Common steers sold at $6 to $7 and cows and heifers at $3.50 to $10.50. Stockers and feeders were higher at $5 to $7.50.

The Hog Industry

It was demonstrated months ago that the farmers had greatly overdone hog breeding, and the explanation of the tremendous declines in prices is found in the highly sensational increased shipments to the leading packing points. The recent spread in Chicago prices has narrowed materially, but prime heavy butcher hogs are still selling much above the best light bacon hogs. Recent receipts of hogs in Chicago have averaged 235 pounds, being four pounds heavier than a year ago and twenty-one pounds over the ten-year average. Lard is especially active at much higher prices than a year ago. Despite liberal Chicago hog receipts last week, prices were not much lower, late sales being at $6.45 to $7.15, comparing with $7.30 to $8.60 a year ago. Combined receipts in twenty markets for the year to late date amount to 38,793,000 hogs, comparing with 30,351,000 a year ago.

Lambs Promise Well

While many more flocks of lambs are being fed this winter in Michigan, Ohio, Indiana, Illinois, Wisconsin and other states than a year ago, lamb and mutton are far more popular meats than in former years, and it looks promising for sheepmen who bought feeders right and finish them right. Around Thanksgiving the consumption of lamb meats was very small, as usual, but sellers managed to put price up on very much reduced supplies. In regard to marketings in the near future, it should be noted that cheap pork causes many families to buy pork in place of mutton. Poorly fed lambs are too numerous and sell badly, as do heavier lambs, especially lambs weighing from 85 to 100 pounds and over. Lambs sell in Chicago at $9.50 to $13.25 and feeders at $11 to $12.35.

WHEAT

The Detroit market showed slight change during the week ending December 1 and the grain was steady owing to smallness of receipts. Demand from the eastern millers is on the increase and any grain is sold as soon as it appears on the market. There is little demand from other directions, dealers declare.

CORN

Offerings of the new crop are large but the quality of most of the grain coming forward is poor. Too much wet weather left the grain soft and it requires quick handling to avoid loss. Although driers are working overtime a lot of the corn is going hot and sour. This is keeping the market steady. As soon as the soft corn has been disposed of farmers are expected to hold the balance of their surplus and wait for higher prices. And if there is as much poor corn as is reported the farmer who has some first class corn stored away will make some money before several months have passed.

OATS

Oats are firm and unchanged at Detroit. Some of the other large markets in this country report prices slightly higher and demand fair. Country offerings to arrive are nil.

RYE

There is nothing doing in the Detroit rye market and the grain is easy with a quiet tone prevailing.

BEANS

There was a gain of 5 cents in the Detroit bean market last Saturday but this left the price 10 cents under what it was a week previous. Fair quantities of beans are being shipped to New York from Michigan. The eastern dealers are reported to be well pleased with the grade of beans they are receiving from our state this year.

POTATOES

Potatoes were fiirm at Chicago last week but lower on most other markets. At Detroit the supply was plentiful and the market had an easy tone to it.

HAY

Trade has been rather slow and eastern markets especially have a little easier tendency. Receipts have been ample and under a light demand these markets have been unable to realize top prices for anything under very choice stock.

QUOTATIONS

Wheat

Detroit—Cash No. 2 red and No. 2 mixed, $1.10½.

Chicago—Cash No. 1 hard, $1.10 @1.11.

Prices one year ago — Detroit, Cash No. 2 red, $1.33; No. 2 white and No. 2 mixed, $1.31.

Corn

Detroit—Cash No. 3 yellow, 81c; No. 4, 76c.

Chicago—Cash No. 2 mixed, 76¼c; No. 2 yellow, 77¾@86c.

Prices one year ago — Detroit, Cash No. 2 yellow, 76c; No. 3, 75c.

Oats

Detroit—Cash No. 2 white, 49½c; No. 3, 47½c.

Chicago—Cash No. 2 white, 44¾ @45¼c.

Prices one year ago — Detroit, Cash No. 2 white, 49½c; No. 3, 48c.

Rye

Detroit—Cash No. 2, 73c.

Chicago—Cash No. 2, 72c.

Prices one year ago — Detroit, Cash No. 2, 89c.

Beans

Detroit—C. H. P., $4.75@4.80 per cwt.

Prices one year ago — Detroit, C. H. P., $6.75 per cwt.

Potatoes

Detroit—$1.10@1.20 per cwt.

Chicago—$1.00@1.10 per cwt.

Prices one year ago — Detroit, 92c per cwt.

Hay

Detroit—No 1 timothy, $23.50@24; standard and light mixed, $22.50@23; No. 1 clover $21@22 per ton.

Chicago—No. 1 timothy, $25@26; No. 1 clover, $23@25; No. 1 light clover mixed, $24@26 per ton.

Prices one year ago — Detroit, No. 1 timothy, $17@17.50; light standard, $16.50; light mixed, $16.50@17 per ton.

STATE FRUIT GROWERS HOLD 23RD ANNUAL MEETING

(Continued on Page 3)

from 20 to 40 per cent of the fruit crop on futures before the crop is harvested. He argued that such a practice would tend to prevent glutted markets and would make a foundation for the market at harvesting time.

Government inspection of cars of fruit at loading points was praised as an excellent method of merchandising as it enabled cars to be sold in the cities by auction and f. o. b. loading point.

Merchandising the apple was the topic assigned to Prof. V. R. Gardner, head of the Horticultural Department of the Michigan Agricultural College. Using numerous charts as illustrations, Prof. Gardner outlined the present apple marketing situation with remarkable clearness. He showed that over 90 per cent of the apples are sold and out of the growers' hands by November first of each year. In contrast with this dumping, Prof. Gardner showed that the demand for apples is practically constant throughout the ten months from August to May, inclusive, whereas the bulk of the marketing is done within a comparatively few weeks following the harvesting. Using data obtained from chain stores, restaurants, and grocery stores in Detroit, Lansing and Grand Rapids, Prof. Gardner showed how remarkably uniform this demand is for apples throughout the year.

Without minimizing the importance of grades, standards, advertising, cooperative marketing machinery, and the like, Prof. Gardner showed how proper merchandising is the key to the apple situation. "If there is one principle more basic, more fundamental, than all others in merchandising it is that success lies in being able to sell people what they want, where they want it, and when they want it," stated Prof. Gardner in emphasizing his point that merchandising the apple must be made as stable a transaction as the daily sales, of coffee, shoes, and sugar.

Home storage of fruit is rapidly decreasing and now the greater part of the apple crop is marketed in small quantities from week to week. More storage capacity, especially cold storage, is a prime necessity in Michigan today, according to Prof. Gardner. "With a commercial production averaging more than 1½ million barrels of apples annually Michigan should have storage facilities for at least 1 million barrels," stated Prof. Gardner.

A Fight on Futures

The question of whether, or not, future sales of fruit are an advantage to the fruit grower was the most debated, and hotly contested question of the meeting.

James Nicol, of South Haven, President of the Michigan Fruit Growers Inc., the central cooperative fruit marketing exchange of the state, attacked the present system of selling fruit on future sales. He described a transaction of this past grape marketing season wherein a fruit broker in Michigan sold one hundred cars of grapes for future delivery. Having thus sold himself "short" the broker proceeded to flood the grape growing section with letters telling of a large grape crop in California and predicting a glut on the markets with consequent ruinous prices for grapes. In this way the broker proceeded to hammer down prices and break the grape market. This whole transaction enabled the broker to buy grapes at low prices to fill orders which had been sold previously at much higher figures.

Mr. Nicol advocated government regulation of these sales of futures and insisted that each future sale should be registered. With the sales thus recorded and available for inspection, Mr. Nicol believes that much of this market manipulation will be abolished. "No dealer should have the right to sell 100 cars of fruit at any price he pleases when he doesn't own a dollars worth of fruit himself," stated Mr. Nicol. "If he is allowed to do this, the sale should be recorded and should also be published in the newspapers for the benefit of the growers."

Mr. Nicol's views met with hearty endorsement from the fruit growers and the society went on record as favoring government registration of future sales of fruit.

Bulk Cars Injure Apple Market

Asserting that the sale of Michigan apples in car lots in bulk is working great injury to the reputation of Michigan fruit and is also a direct injury to Michigan fruit growers who carefully grade and pack their fruit, the State Hort. Society passed a resolution demanding that sales of bulk apples in carload lots be designated as a sale of a closed package and be subjected to the rules and regulations now applying to smaller packages.

The Society also passed a resolution asking for a Truth-In-Fruit-Juices law which will protect both the fruit grower and also the consumer of the fruit juices.

Aircooled Storages For Farms

Storage houses cooled by air are profitable investments for the fruit growers and more of them should be built, according to Prof. Roy E. Marshall of the M. A. C. Hortical Dept. Prof. Marshall stated that there are now about 14 of these aircooled apple storages in Michigan and they have a total capacity of 107,000 bushels. Twelve of these storages were built during the past year, showing that Michigan growers are waking up to the need for storage facilities.

The advantages of small air-cooled storages were explained by Prof. Marshall as follows: Require only a moderate investment, have low operating cost, allow the grower to spend all of his time harvesting because later in his storage he can sort, grade, and pack, and permit the grower to hold his fruit until the market conditions warrant his selling.

Where the quantity of fruit is 50,000 barrels, or more, a commercial cold storage is desirable. "There should be five or ten more cold storages, with a capacity of from 50,000 to 150,000 barrels each, located in our principal fruit producing sections," declared Prof. Marshall.

Increase in Cherry Crop

George Friday of Coloma, speaking on the subject of Cherry Marketing, stated that within 10 years the cherry crop of Michigan will have quadrupled. He recommended careful preparation in advance to handle the marketing of this prospective increase.

Fertilizing

Prof. F. C. Bradford spoke on "Profitable and Unprofitable Use of Fertilizer In the Apple Orchard."

Careful study of three experimental orchards showed that present production of orchards is not an accurate sign as to whether, or not, they need fertilizer. By studying wood growth, fruiting, and bud development some orchards are seen to be deteriorating and should receive fertilizers. Other orchards, also in profitable production, may be maintaining their growth and hence the application of fertilizers would be unprofitable in such cases. The point made by Prof. Bradford was that it is necessary to carefully study the orchard before applying fertilizers, also that fertilizer is most profitably applied during the season of a big crop in order to counteract the tendency of the trees to produce a light crop the following year.

Winners In Student Contests

In the apple judging contest, in which students from the M. A. C. take part, W. G. Lensen of Traverse City won first place; Gerald J. Stout of Cedar Springs, second; Lillian Lewton of Tacoma Park and H. J. Wilkinson of Detroit tied for third place.

The public speaking contest for M. A. C. horticultural students was won by E. R. Bristol of Almont. Lillian Lewton of Tacoma Park was second and H. J. Wilkinson of Detroit, third.

Re-elect Officers

By unanimous vote the present officers of the Society were re-elected for another year. The officers are as follows:

President, A. J. Rogers, Beulah.

Secretary, T. A. Farrand, Eaton Rapids.

Treasurer, J. P. Munson, Grand Rapids.

Members of Excutive Committee: Prof. V. R. Gardner, M. A. C.; R. J. Coryell, Birmingham.

Do you want 15$^{\underline{82}}$?

OR TEN or twenty times that much *additional profit*, depending simply on the number of cows you own. Listen—

Down in Fairfax County, Virginia, the dairymen belong to a Cow Testing Association. Various kinds of feed are given the 665 cows in these herds, but LARRO is the general favorite. A year's record, compiled by the official tester, makes the reason plain:

Herds which received more than 50% of LARRO earned an average net profit of *$15.82 more per cow* than the other herds.

Fully half of all these Fairfax County cows were in the LARRO extra-profit division!

Only a feed made of tested ingredients—feed that never varies in the kind, the quality or the percentage of ingredients—a feed absolutely free from dangerous iron and steel trash—can make that extra money for you. LARRO answers these specifications—absolutely. There's a LARRO dealer near you. Write us if you don't know where to find him.

The Larrowe Milling Company, Detroit, Mich.

FREE "Feeding the Fresh Cow" is the title of an article that appears in the December issue of the Larro Dairyman. If you are not receiving this excellent, free magazine for cow-owners, fill out and mail this coupon now, or take it to your LARRO dealer.

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Gentlemen:
I am now feeding......cows and I want to receive, without cost, your magazine—"The Larro Dairyman."

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St. or R. F. D..

Town.................. State................

Detroit Beef Company

offers its services to the *Farmers of Michigan* as a high class, reliable commission house for the sale of *Dressed Calves* and live poultry. Write us for information how to dress and ship calves to market. $250,000 capital and surplus. 34 years in business in the same place and same management.

Address

DETROIT BEEF CO., Detroit, Mich.

GARLOCK - WILLIAMS CO., Inc

2463 RIOPELLE ST., DETROIT, MICH.

WE SOLICIT YOUR SHIPMENTS of live poultry, veal and eggs.

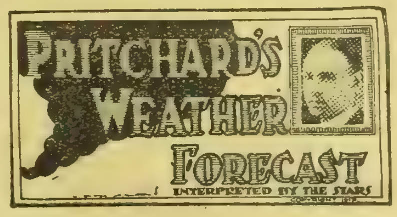
Our commission is 5%.

References: Wayne County and Home Savings Bank, Bradstreet.

TOO LATE TO CLASSIFY

Mammoth Copper Bronze Turkeys, Champion Strain, large bone, good color. Best is the cheapest. Prices reasonable. **Emma Godshalk, Marcellus, Michigan.**

Barred Rock Cockerels, Husky, Vigorous Birds bred from great layers. Sons of Detroit and Grand Rapids 1st prize males.
W. C. Coffman, Benton Harber, Mich., R. 3.



THE early part of this week will be generally fair in most parts of Michigan. Any showers or snow flurries that may appear at this time will be more the result of local conditions than a regular storm.

However, about Tuesday light rains will occur that may turn to snow flurries before the middle of the week.

These storm conditions will soon pass and the sky again become clear. Temperatures will average cold, especially the nights and mornings but by Saturday temperatures will again moderate.

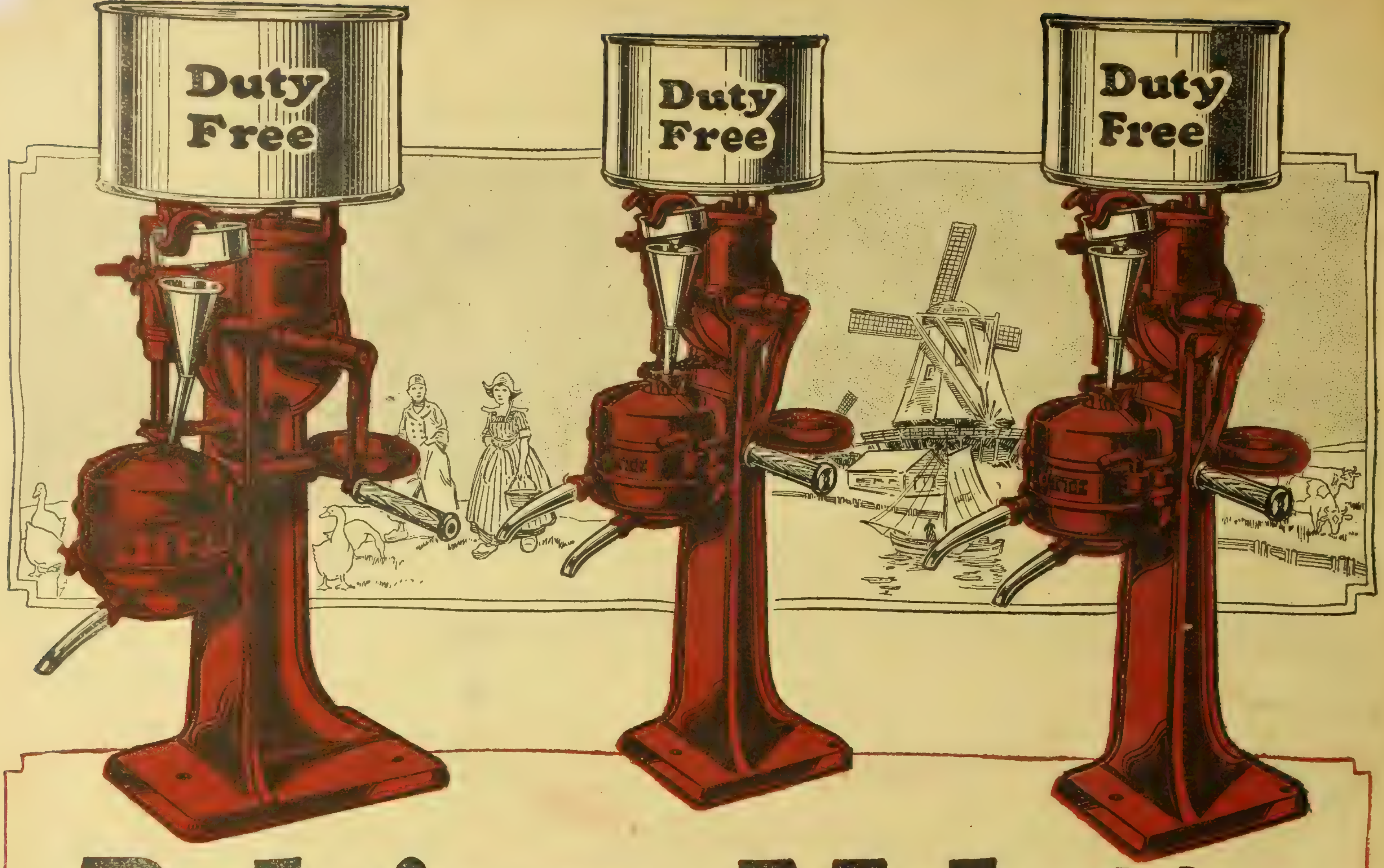
Week of December 16

Radical changes in temperature may be expected in Michigan this week. The high temperature points for this week will be reached about Sunday, Wednesday and early part of next week. Decided changes to colder will follow each of these high points, effecting this state about Tuesday and during closing days of this week.

During early part of this week and again about the middle rains, turning to snow, will be more or less prominent to most parts of the state.

White Christmas

Christmas, 1923, will be white. We are basing this prediction upon the fact that the month in general will yield more than the normal amount of precipitation and during the cold spells this will be in the form of snow. In those sections (if there are any in the state) where the covering up to Christmas has been very light, the warmer temperatures just before the holiday may cause it to disappear but the white mantle will again appear either on or within 48 hours following December 25th. Michigan will receive its share of sleet and snow before the arrival of the new year.



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Free Trial

Your choice of any model. NO MONEY DOWN—FREE TRIAL—SMALL MONTHLY PAYMENTS—DUTY FREE. This wonderful Belgium Melotte Separator has been picked by a jury of thousands of farmers—picked by dairy experts throughout the world to be the "king" of all separators ever manufactured. It has broken all records for Efficiency of Skimming, Ease of Turning, Convenience of Operation and Durability. Send the coupon for Big Free Book.

Write

Mail coupon for catalog giving full description of this wonderful cream separator. Don't buy any separator until you have found out all you can about the Melotte and details of our 15-year guarantee. Don't wait—be sure to mail coupon TODAY!

THE MELOTTE SEPARATOR, *H. B. BABSON, U. S. Manager*
2843 West 19th Street, Dept.33-09, Chicago, Ill. — 2445 Prince Street, Berkeley, Calif.

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Post Office ____________________________

*County*_____________________ *State*________

*How many cows do you milk?*____________________

The Michigan BUSINESS FARMER

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Edited in Michigan

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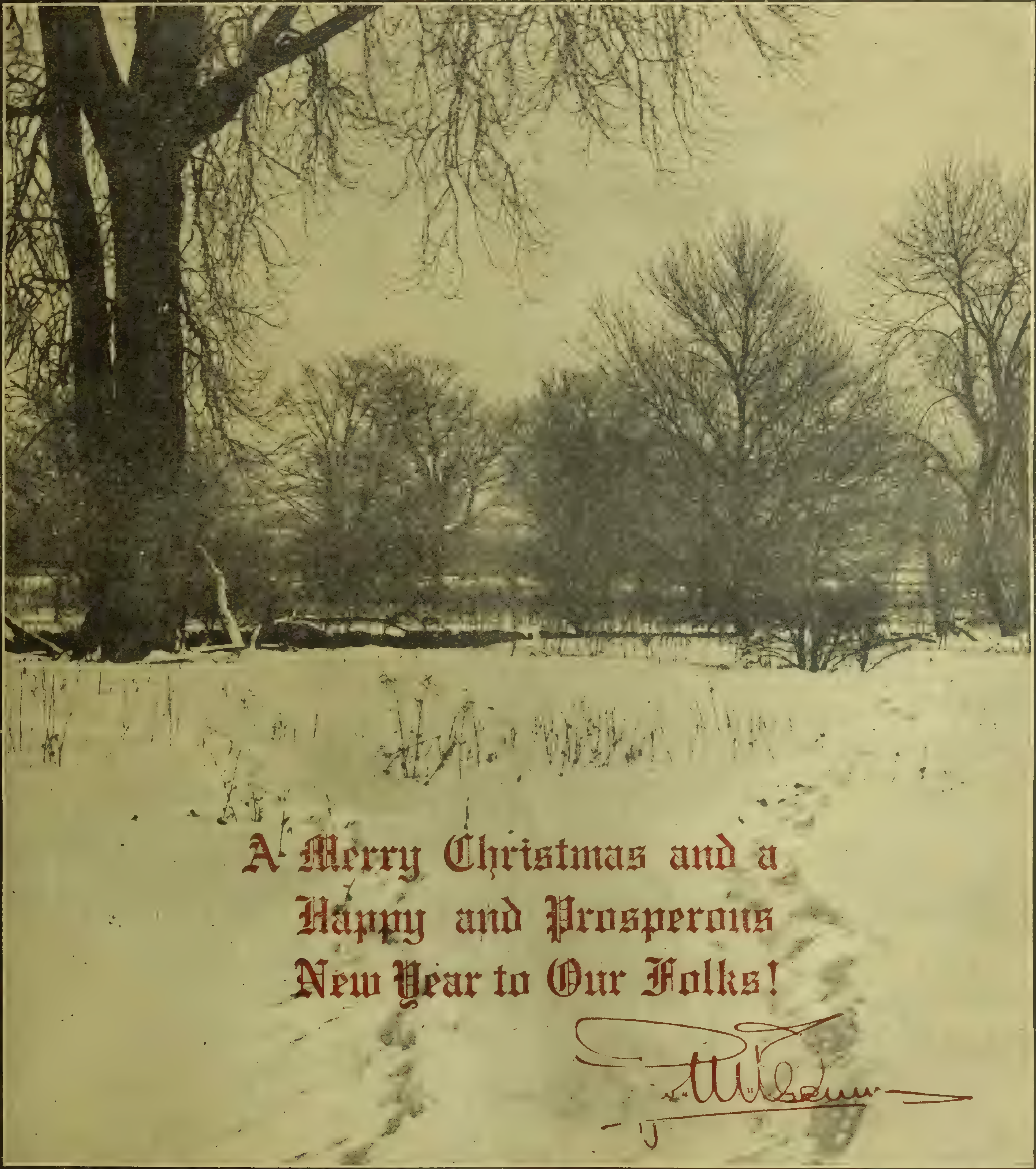

A Merry Christmas and a
Happy and Prosperous
New Year to Our Folks!

Read in this Issue: What the Re-Apportionment Fight Is All About—Farm-Labor Unity Urged at Gleaner Convention—Farmers' Clubs Favor Gas Tax and Salary Cut—Farm Bureau Provides Bean Marketing Agency—Michigan Carries Off Its Share of Prizes at International at Chicago

OVER
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Thrifty Michigan People are receiving a safe, permanent, tax free income
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HOWELL

Current Agricultural News

M. A. C. STUDENT FIRST IN POULTRY JUDGING

THE REV O. W. BEHRENS, representing the M. A. C., ranked first in a national intercollegiate students poultry judging contest at Chicago last week, according to word received here. The M. A. C. team was second, Missouri winning first place. Other members of the M. A. C. team were: C. H. Wright, of Williamston, who was fifth among individuals and George Allen, of Rockford, Ill., who was sixth. Mr. Behrens was a chaplain in the U. S. Navy during the World War and later was a student pastor at East Lansing.

FARM BUREAU AGAINST PRICE FIXING AT ANNUAL MEET

OSCAR E. BRADFUTE of Xenia, Ohio, was unanimously re-elected president of the American Farm Bureau Federation at the fifth annual meeting held at Chicago Dec. 10-13. J. E. Reed of St. Paul, Minn., was elected vice-president.

The convention was addresses by Secretary Wallace of the U. S. Dept. of Agriculture, Julius Barnes, president of the U. S. Chamber of Commerce, and many other national leaders, who discussed present day problems as they affect the American farmers. Strong resolutions were adopted by the convention.

Michigan State Farm Bureau Members were represented by their president, W. E. Phillips of Decatur, vice-president M. L. Noon of Jackson, Secretary-Manager C. L. Brody of Lansing, Mrs. Edith Wagar of Carleton, James Nicol of South Haven, E. C. McCarty of Bad Axe, and other delegates.

Secretary Wallace told the Farm Bureau that the packers should keep their books open to the public—that the public had a right to an understanding of their great business, notwithstanding the packers' objections to the contrary. He was assured of farmer support in his stand. He congratulated farm organizations for their harmonious relations with each other.

Following, and in brief, is a summary of the resolutions adopted by the Farm Bureau convention:

Government price fixing of farm commodities unsound.

Henry Ford's Muscle Shoals project advocated and Congress urged to vote on question without delay.

Class 1 railroads should be electrified.

Amendment urged to intermediate credit act changing minimum loan period from 6 to 4 months.

Amendment to eligibility clause of Federal Reserve Act advocated limiting all re-discounts, including commission and brokerage to 2 per cent above the base federal reserve rate.

Limitations of immigrants to the present total, with recommendation that basis upon which the percentage is determined be shifted from 1910 to 1890 or as early period; also that they be selected after physical, mental and other tests made over seas.

Taxes should be progressive—the greater the income the higher the rate; they should be laid as far as practicable, so as to tend to the equitable distribution of wealth.

General sales tax opposed; issuance of all tax-free securities should be stopped; all deductions allowed in figuring income taxes should first be set off against tax-free income.

They urged that steps be taken to stop leaks in 1921 tax law, and an amendment passed whereby profits derived from the sale of stock, received as stock dividends, shall be taxable at the regular surtax rates.

Reduction of income taxes opposed; provision approved whereby federal and national banks should be taxed the same as any other business or the farm.

Establishment of a co-ordinated policy of transportation recommended, involving farm-to-market roads, the railroads, the construction of Great Lakes-St. Lawrence and Lakes-to-Gulf waterways, and an American merchant marine.

Immediate action should be taken by Interstate Commerce Commission to slash freight rates on farm products sold at disproportionately low prices.

Grain futures and packers and stockyards control acts endorsed.

Co-operative marketing of farm products approved as offering the most practicable means of stabilizing agriculture on a profitable basis.

Adoption of plan recommended for licensing of all dealers and shippers engaged in interstate shipments by the Department of Agriculture under existing laws or such additional laws as may be necessary.

Development of super-power, hydro electric facilities and the storage and utilization of water for electrical purposes; development of water-power resources.

ZEELAND POULTRY ASSOCIATION WILL HOLD ANNUAL SHOW

THE annual exhibition of the Zeeland Poultry and Pet Stock Association will be held at Zeeland December 28, 29, 31, 1923, and January 1, 1924. A hearty welcome is extended to all breeders of poultry who care to exhibit their birds in competition. The special inducement of cash prizes, silver cups and special premiums should draw poultrymen from considerable distance. The officers of the Association who are in charge declare that it is to be a real show and the best birds will win regardless of who the owner might be, and to this end they have engaged two of the best judges in the country. They have arranged two classes, standard and utility, which takes in the farmer as well as the back-yard poultryman. All entries must be in by Wednesday, December 26th, at 12 o'clock, midnight. The show will be governed and conducted under the official poultry show rules of the American Poultry Association, and all prizes will be awarded strictly in accordance with the Standard of Perfection. Let's go!

CANADIAN IS WHEAT KING OF NORTH AMERICA

H. G. L. STRANGE of Fenn, Alberta, is the new wheat king of North America. When his exhibit was awarded the wheat championship at the International Grain and Hay show, Chicago, it marked Canada's twelfth win in thirteen years of international competition against the best wheat growers of the continent.

Canada began winning international wheat championships in 1911 when Seager Wheeler of Rosthern, Sask., famous wheat wizard, carried off first prize at the New York Land show. The following year the championship went to James Holmes of Raymond, Alta. In 1913 it was won by Paul Garlach of Allan, Sask. Seager Wheeler won it again in 1914, 1915 and 1916. Samuel Larcombe of Birtle, Man., won it in 1917. Seager Wheeler won it in 1918. J. C. Mitchell captured in in 1919 and 1920 and R. O. Wyler of Luseland, Sask., in 1922.

The only break in the Dominion's record came in 1921, when G. W. Kraft of Bozeman, Montana, kept the honor in the United States.

Mr. Strange's winning variety this year was Marquis. Marquis wheat is the staple spring wheat of Canada and a large part of the United States. It was evolved by Dr. Charles Saunders, then Dominion cerealist and developed to its present perfection by Seager Wheeler. It has meant millions of dollars to farmers of North America.

FINE POULTRY AT DETROIT SHOW

ONE hundred and forty poultry breeders from Michigan, Ohio, Illinois, Indiana, Wisconsin, Pennsylvania and Ontario were represented at the Detroit National Poultry Show, held week before last at the Light Guard Armory. About 1,500 birds were exhibited. The quality of the birds shown in Detroit was said to be second only to those exhibited at the Madison Square Garden, in New York City.

A Regular Statesman

A citizen of Nosepaint Gulch was sounding the praises of Congressman Wombat.

"What did Congressman Wombat ever do for you?" asked another citizen.

"Well, he once sent me a package of turnip seed."

SATURDAY
December 22
1923
VOL. XI, No. 9
Being absolutely independent our columns are open for the discussion of any subject pertaining to the farming business.

"Hew to the line, let the chips fall where they may!"

The Michigan
BUSINESS FARMER

"The Only Farm Magazine Owned and Edited in Michigan"

Published Bi-Weekly
Mt. Clemens, Mich.
TWO YEARS $1
Entered as second-class matter, August 22, 1917, at the post-office at Mt. Clemens, Mich., under act of March 3rd, 1879.

What the Re-Apportionment Fight Is All About

Wayne County Locks Horns With Rest of Senate and Unparalleled Battle Rages at Special Session of Michigan Legislature

By STANLEY M. POWELL

(Lansing Correspondent of The Business Farmer.)

DARK war clouds have hovered over the special legislative session called by Governor Groesbeck to discuss problems of legislative re-apportionment. The feeling was none too friendly when the lawmakers assembled and it seems to get worse with each passing day. It now looks as tho the special session would prove merely a useless expense with no satisfactory results being achieved.

The senate, with but one dissenting vote, passed a bill which would increase the number of Wayne county senators from five to seven. This bill has been reported favorably by the House Committee on Apportionment and is now up for final passage. However, the Attorney General has submitted an opinion in which he declares that this measure would probably be held unconstitutional, so there is little hope of its being passed. Some members are in favor of redrafting the bill to give Wayne county eight senators, but there appears to be little probability that such a measure would stand any chance of mustering the 51 votes necessary for its passage.

Kill "21 for Wayne"

The House Committee on Appointments surprised everybody by reporting favorably a bill which would increase the number of Wayne county representatives from 14 to 21, an increase of exactly 50 per cent. However, even this large increase was regarded by many of the members as being insufficient to make the bill constitutional, so when it came up for final passage it was hopelessly defeated by a vote of 32 to 64. The vote was later reconsidered and a recess taken until an opinion could be secured from the Attorney General as to its constitutionality.

When the opinion came, it stated that the bill was unconstitutional in two respects: first, it gave Livingston county, which does not have even a moiety of population a separate representative, and second, there was a gross inequality between the populations of the districts as outlined. For instance, in the proposed district to be comprised of Kalkaska, Crawford, Oscoda, and Ogemaw a population of 18,195 would be given a representative, while in Wayne county one member would be required to represent 56,078 inhabitants. There were other proposed districts that were only slightly in excess of the Kalkaska district in population. With this plain opinion staring them in the face, not even the Detroit members could vote for the bill, and it was defeated 90 to 3.

Since this measure has been defeated, re-considered, and defeated again, under the rules of the House the subject matter of representative re-apportionment cannot be brought up during the present session without a supension of the rules, which requires a two-thirds vote. To date every effort in this direction has been defeated, and it now looks as though there was small possibility of getting any re-apportionment legislation during the present session.

Situation a Deadlock

Since the constitution makes it mandatory upon the legislature to pass re-apportionment legislation this year, there has been a wide spread sentiment for some legislation of this character. Due to the intense bitterness which developed between the Wayne county members and those from the rural districts at the regular session over the gas tax issue, it was regarded from the first as practically impossible for any bill to be passed which would give Detroit all she was asking. It has been practically agreed all along that whatever was done would be more or less of a compromise, but since the Attorney General has declared all of these compromise bills unconstitutional, it now looks as though the situation were a deadlock.

It was apparent that none of the representatives wished to be held up in the light of openly defying a definite constitutional mandate. On practically every roll call several members "reserved the right to explain their vote and did so at some length in an effort to justify their positions. In some cases this was a little difficult because perhaps there were some selfish motives which prompted some of the members in taking the stand which they did. There are always some members who fear that they will be lost out in the cold and have their hopes for future political advancement blasted.

After the House had twice defeated the re-appointment bill, Speaker Welsh made a statement to the newspapers in which he said: "This is a fearful thing. The members who oppose re-appointment to-night openly, brazenly, and criminally violated their oaths to support the law of Michigan. If they were justified, the bootlegger, the highway robber are justified. What can we say to private citizens who break a law when the elected representatives of the people wilfully ignore the constitution upon which our laws are based?"

Welsh Speaks Plainly

The next day when his collegues saw this statement in one of the Detroit papers they were thrown into a tumult of resentment. Representative Fred Ming of Cheboygan demanded an explanation of the speaker. Speaker Welsh met the situation without flinching. Calling the speaker pro-tem to the chair, he left the rostrum and coming down before the clerk's desk, in one of the most dramatic scenes ever enacted in the House of Representatives delivered a forceful speech in which he not only admitted all that the papers had said but added to it and made it even stronger. He concluded his remarks by saying: "I did make that statement and I make it here again that the action of this House in openly defying, brazenly defying, the constitution of the state of Michigan is the most tragic action that has ever taken place within these four walls."

On the next day, however, he slightly modified his remarks by making a conciliatory speech in which he said, "While I did and still do criticize their judgement, I have never intended and do not now impugn their motives."

Shall Citizen or Alien Count?

Members of the House justify their positions by declaring that they never had a chance to vote on a constitutional measure and point out that the Appointment Committee has stated that it would not be possible for them to report out a bill giving Wayne any more representatives than was done in the measures which have already been held unconstitutional. They state that it would not be a desirable thing either for Detroit or for the state at large for Wayne county to have the greatly increased representation which it is demanding. They feel that if representatives were to be distributed according to population it should be done on the strictly citizenship basis, without considering the number of aliens. There are 183,503 aliens in Wayne county, which is more than 62 per cent of the total alien population of Michigan, although Wayne county has only about one-third of the adult inhabitants of the state. 25 percent of the population of Wayne county are aliens and do not have the right of self-government even in their own county, yet Wayne is asking for state representation in the state legislature for these non-citizens.

City Domination a Menace

Then, too, it is granted that one of the basic principles of our American form of governments is that areas as well as population totals should be considered in giving representation. This principle is carried out even in our U. S. Government. The state of Delaware with 223,000 people and New York with 10,385,000 have exactly equal representation in the U. S. Senate. This provision was no doubt adopted to prevent the country from being dominated politically by a few congested centers of population.

To prohibit such a condition arising in the state government nearly every state having a large city has adopted some restriction to keep the city from ruling the state, or as it is sometimes expressed "to keep the tail from wagging the dog."

Maryland, for instance, has 1,449,661 people of whom 733,826 live in Baltimore. Yet its 27 senators come one from each county with but three extra ones for Baltimore, while in the lower house Baltimore has but 24 out of 101 members. Thus Maryland's greatest metropolis, with over half of the state's total population, is represented but by one-fourth of one house and one-seventh of the other. Still more striking is the case of Rhode Island, where out of a total population of 604,397 there are 237,595 who live in Providence, while only 3 per cent of the state's population is rural. In the lower house, which has 100 members, each city or town no matter how small has one member and no city or town, no matter how large, can have more than one-fourth of the whole number. Providence, with 40 per cent of the state's population, can elect only one-fourth of the lower and only one-thirty-ninth of the upper. More illustrations might be given to show how these problems are being met in other states.

Moiety Clause Is Safe-Guard

It is pointed out by those who oppose re-apportionment at this time that whether or not the legislature does anything at its present session, the constitution provides that in 1926 the question of revising this document shall automatically be submitted to the voters. If they authorized its revision, a constitutional convention would be held in 1927. Because of this situation many law-makers argue for leaving the present districts undisturbed for the next two years. The constitutional convention is composed of three members from each senatorial district, so the more senators Detroit gets, the more voice it would have in drafting the new constitution. If given its own way, it would probably discard the moiety clause entirely and virtually take over the complete control of the state.

Present conditions make it quite

(Continued on Page 23)

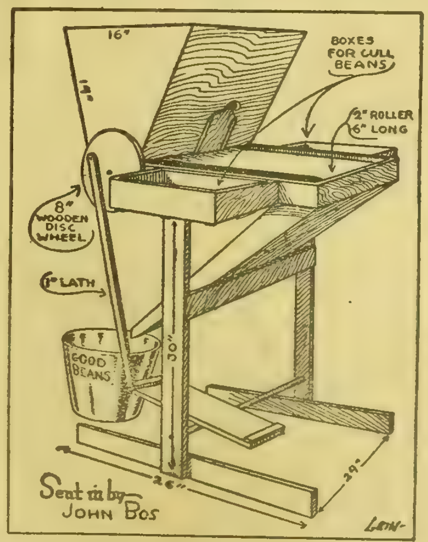
Prize Plan For Home-Made Bean Picker

(Awarded First Prize of $10 in Contest.)

AFTER a very careful examination and study of all the plans submitted in our home-made bean picker contest the judges have at last announced the winner of the money offered. It was a close contest several plans being so good that it was difficult to decide which was the best. They finally got the number down to two, then the battle started, some were in favor of one while the others were just as determined that the other was the best. One plan was sent in by Alice Babcock of Sherman, Michigan, and the other by John Bos, Marion, Michigan, and the one finally chosen was by John Bos. After studying them from every angle his was declared the easiest to operate. However, all of the plans were good and we are publishing the best of them. If none of them suit you, you can get the ideas as to the good points of each one and then build one just suited to your needs. We have several plans yet to publish so watch for them in near future issues.

John Bos' Plan

"I am sending you a sketch of my bean picker, that I made and used since seven years ago, which I wish you would consider in your picker contest. It isn't hard to make as the necessary dimensions are given in the sketch, the material required we all have on hand. The main frame is made from planed 1x4 in. The hopper is made from ¾ in. box lumber that we have laying around, it is provided with a tin slide above the running canvas to regulate the thickness of beans suitable. The running canvas we made from an old binder canvas which is 6 inches wide. I made my cull bean boxes from some old sewing machine drawers, the canvas running between. As shown in the sketch our frame is well braced as this is always important and you will notice the hopper is built so it will drain empty as it sets quite far over the canvas. The rollers over which the canvas runs are two inches in diameter which insures plenty surface contact with the canvas to prevent slipping. The machine works smooth and practically noiseless. Hoping this sketch will be of benefit to our readers, we are, Yours truly, John Bos, Marion, Michigan.



Farm-Labor Unity Urged at Gleaner Convention

Farm Organization Favors Enforcement of Prohibition Law, Government Ownership and Operation of Railroads, Lower Taxes, Discontinuance of Tax Exempt Bonds, Approves Aid for Disabled Soldiers but Rejects Bonus

THE Gleaners, organized in this State in 1894, met for the first time in Detroit, where the National Gleaner Temple is located, week before last. The convention was combined with a "home-coming" celebration and more than one thousand delegates and visitors were present on the opening day. All sessions were held in the big assembley rooms of the Hotel Statler, and officers report the most successful convention ever held by this organization.

The convention opened on Wednesday and continued through to Friday evening. On Wednesday afternoon special street cars too the delegation to the Ford motor plant, where special guides took them through the factory. Later a visit was made to the National Temple, located at Woodward and Palmer avenues. Wednesday evening, special memorial services and a special program by Gleaner talent was the attraction. Thursday was devoted to business rotine. Thursday evening the Gleaners gathered for a banquet at Hotel Statler. Four hundred and sixty seven broke bread together. Excellent music was provided and Hon. H. F. Baker, Nathan F. Simpson, of the State Tax Commission, Harry L. Hurlbert, who is in charge of Michigan Industries and Rev. Howard Field were the speakers. The election of officers took place Friday morning, all officers being reelected unanimously and without opposition.

Officers reports showed the society in a prosperous condition, with assets of two million dollars and a membership approximating seventy-six thousand.

The Gleaners have made a careful study of public affairs and that they positively knew what they wanted was indicated by the report of the legislative committee.

Legislative Committees Report

The question of transportation and distribution is of utmost importance to profitable farming and, likewise, affects every man, woman and child of this nation.

Since the war we have tried the plan of government guarantees thru the Esch-Cummins Law and this has been followed by increased freight and passenger rates until the charges imposed are inreality a subsidy, placing a burden upon the people which must, in some manner be shifted.

As a means of reaching this end we insist that the water should be squeezed out of the capitalization of the railroads and the rates arranged under the Esch-Cummins Law to meet its requirements upon the reduced capitalization. Unless the provisions of the present laws are modified the only alternative is Government ownership of the Nation's transportation lines which are the arteries of trade. We believe in the principles of government ownership and operation under a commission divorced from politics and fully authorized to so nationalize the transportation lines that the people may receive the benefit of economic and efficient transportation service. As organized Farmers we pledge our support to the St. Lawrence-Mississippi Deep Water way Project and recommend that the Gleaner Organization give its full support to the encouragement of this Project.

Mail Service

The citizens of the United States now enjoy the added benefits to the mail service of parcel post for which the Farmers worked for more than three decades. The method of rented cars for carrying the mail and parcel post of the railroad companies is both unsatisfactory and wasteful and we are certain that, nationalizing the transportation lines under Government ownership will place these cars under the full control of the Government and will have the added benefit of placing the employes under Civil Service. Under the present plan the periodic strikes and tie-ups have cost the shippers of this Nation millions of dollars and it is our opinion that, in no other way can this misunderstanding between capital and labor be adjusted.

Protecting Out National Resources

Private interests are securing the ownership and control of the water power and thus depriving the people of a benefit that is rightfully theirs. We suggest that Congress consider well the advanced step taken by the State of Illinois and also of the Province of Canada to preserve the water power for the people.

So Strong—Lamentably Weak

It seems passing strange that a Nation so strong and powerful that it may extend its strong right arm out to every farm and every village or city home and, knocking at the door, demand the sons of that household for military service across the seas, is strangely, lamentably weak when it comes to solving its own domestic troubles.. We refer especially to the fuel problem which is one of the Nation's richest inheritances. For more than thirty years we have had semi-annual strikes and tie-ups because of the troubles between the mine owners and the miners. Strange to say, these troubles occur just at a time when fuel is most needed and it is evident that there is never a supply on hand for immediate use at such times.

Your committee does not claim a conspiracy between the miners and mine owners but briefly calls your attention to the fact that these troubles occur at a time when the mine owner can get an extra dollar, the miners a few extra pennines and the consumer pays the bill. We, therefore, recommend Government supervision with power to control all natural resources and we recommend that it be brought strongly to the attention of our representatives at Washington that what this Country and its people most need is action not the eternal compromises without any definite results.

It has been many times said that the Farmer and industrial worker have nothing in common; that they cannot and will not get together. In view of existing conditions such a statement is absurd. To substantiate this it is only necessary to say that the Department of Agriculture has given out facts in connection with the operation of the farms of the Nation for 1922 which show that, where the Farmer received seven billion dollars for his products, the working-man and consumers generally, paid twenty-two billion dollars for the self same products. With a spread of fourteen billion dollars between the price the Farmer receives and what the working-man pays for the products of the farm, it would certainly seem that there is plenty of opportunity, when conditions are understood on both sides, for getting together on the part of these two great forces with the one thought of the elimination of those who render but a meager service to either producer or consumer and, yet, take as their profit more than sixty-five per cent of the producer's and consumer's dollar.

Care of the Soldier Boys

We condemn the policy of the Government in its treatment of the injured soldier boys who were willing to give their all for a principle. In every locality will be found brave lads who returned from the fields of battle with shattered nerves and ruined in body and health, who are eking out a miserable existance, many of them with families to support, on a pension scarcely large enough to keep the wolf from the door. The Farmers of the Nation are not in favor of a bonus to all soldiers at this time but we are in favor of giving liberal pensions for all injured war veterans and these pensions should be sufficient to keep the family together and give every possible assistance for their future care and comfort.

Taxes

The Farmers of this Nation are carrying a burden of taxation altogether out of proportion to the earning value of their farms. In nearly every state the assessed valuation is the same as it was during the war period while the productiveness of the farm has decreased one half. Taxable property owned by the Farmer is in such condition that it cannot be covered and, therefore, the tax collector has the property before him as an open book while the more favored classes can put their holdings in the safety deposit vault and escape their portion of this burden.

We demand that the policy of issuing tax-exempt bonds and stocks be discontinued at once thruout the entire Nation in order that the wealthy class may bear their just portion of the burden for the support of the Government. We must remember, as Farmers and tax-payers, that our responsibility extends further than simply complaining because big bond issues are floated and thus increasing the indebtedness of every farm and home in our states. It is our privilege and should be considered a duty to vote and work against the conditions of this orgy of extravagance and reckless bond issues that are becoming prevalent thruout the United States.

We deplore the condition which seemingly exists among the citizens of this Country that law enforcement is a question for each individual to decide. Laws are provided for the protection of the people; officers are chosen to administer the laws as written—the question as to the necessity for the law and the operation of the law having already been decided upon by the people either direct or thru their representatives. An officer sworn to administer the law either should to the best of his ability uphold and administer the law or resign from his position. One hundred per cent Americanism means obeying the laws of the Nation and, as the prohibition question has been fully and finally settled by a legally enacted amendment to the Constitution of the United States, the citizen who will not uphold the law is not true to the principles of this Country.

We recommend that the National Officers use the full power of this Organization and such resources as are available to wage a fight against one backward step in the campaign for the enforcement of the Eighteenth Amendment to the Constitution of the United States.

The Farm Bloc

This Committee can hardly understand why there is all this opposition to the Farm Bloc in Congress. Is it not merely putting into practice the same plan and force that have instrumental in shaping legislation for all the industries during the past half century? The organized Farmers of the Nation should get soundly back of the so-called Farm Bloc and put forth every effort to increase its strength in Congress; not for selfish interests but to speak with sufficient power and authority to be heard.

Daniel Webster, at a critical time in the Nation's history, said: "Nothing will ruin this Country while the people themselves undertake its safety and nothing can save it when the Nation's safety is placed in any hands but their own."

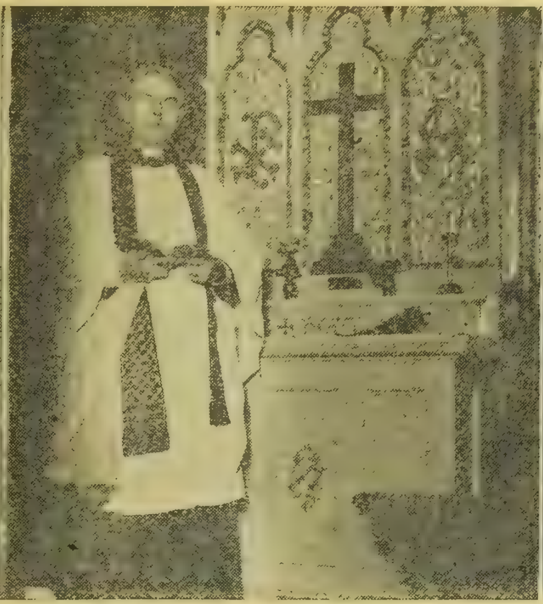
As a Nation, we have wandered far away from this good advice. A minority of the citizens of the Nation now rule both states and Nation. It is a deplorable fact and one which should cause concern on the part of every forward looking American citizen that, in this free Country where every man and woman are soverign rulers, sixty-three percent of our boasted citizens haven't sufficient interest in state and national affairs to even go to the polls and cast their ballot.

In every regular constituted Gleaner lodge-room the American flag finds its place beside the altar upon which we have made our pledge, therefore, let us, as individual Gleaners, solemnly promise that we will uphold all that that flag stands for, pledging to ourselves, our Country and our Order that we will exercise our franchise as American citizens on election day.

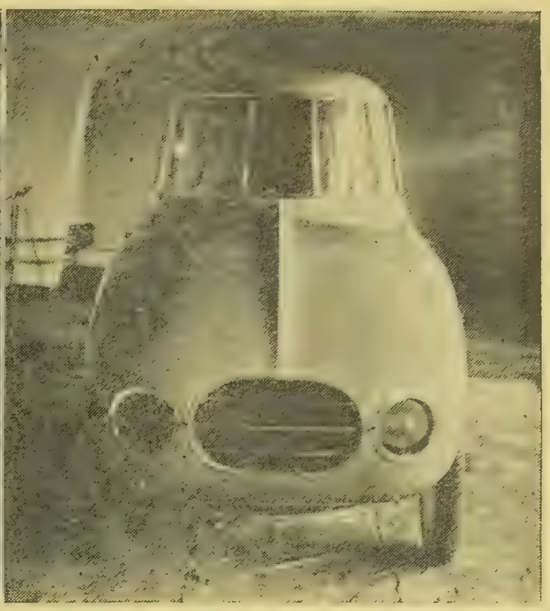
Delegates who attended the biennial convention of the Gleaners at Detroit, gathered in front of the Gleaner Temple, national headquarters, and had their picture taken.

PICTURES FROM FAR AND NEAR

NOT THAT SHE NEEDS IT.—Pretty Miss Agnes Reilly of New York, doesn't need this reducing machine personally, but she finds it great to keep in condition. She was snapped at the electrical and industrial show held in New York City recently.



WORLD'S SMALLEST CHAPEL.—Rev. Thomas J. Lacey, rector, standing near the altar of the tiniest church in the world which has just been consecrated on the porch of the church of the Redeemer, Brooklyn, N. Y. It cost $1,230.



A FUEL SAVER.—According to tests this car burns 25 per cent less fuel than a common built automobile of same horsepower. This is due to its lightness and the shape of the body, it offers little resistance to the air.

COOK GOES TO JAIL.—Dr. Frederick A. Cook, noted Artic explorer who was sentenced in Texas courts to 14 years and 9 months in jail, and assessed a $12,000 fine for fraudulent dealings in oil wells.

MORE THAN ONE KIND OF MULE WEARS PANTS.—Here is Miss Katherine Crowley, pretty southern Pacific girl, driving Gerry, the most obstinate of mules. It is said that he will not step until his front legs are encased in a pair of trousers. Rather modest for a mule.

CONTINENTAL BEAUTY TO INVADE AMERICA.—Mme. Fernade Diamante, an olive skinned beauty, is planning to visit America and see this country from the Broadway stage. She is considered a wonderful dramatic actress.

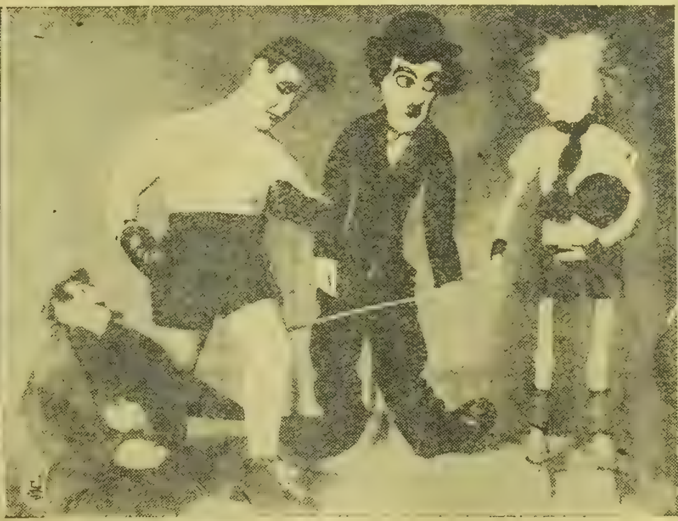
AKRON AERIAL
POLICE PATROL

FIRST AIR ARREST MADE.—Howard Calver and Frank O'Niel (left to right) have been arrested as Akron, Ohio's first sky traffic violators. They violated a city ordinance prohibiting stunt flying over certain districts. They have been sentenced to a day in a baloon prison.

MUSSOLINI IN NEW GARB.—The Italian Premier was recently made Honorary Commander of the Italian Air Forces, and he is wearing the regulation uniform.

A MOVING LETTER BOX. —All letter boxes in Amsterdam, Holland, are attached to the rear of street cars, and at the end of their runs, they are emptied and sent to the post office. This method saves many hours and considerable work.

HE'S CIVILIZED.—This is Mr. Lion, a cat owned by a lady in Youngstown, Ohio. As a kitten he refused to drink milk from a saucer so he was given a bottle, equipped with a nipple. Although he is over a year old he continues to take his meals in this way.



RUSSIA'S CONTRIBUTION TO TOYLAND.—From the land of the Soviets come these quaint toys, Russia's contribution to the bag of Santa Claus. They have made their first appearance in England, and the stores of London are stocking up as they expect these toys to prove very popular. Here is Charlie Chaplin, Jack Dempsey, a priest and an athlete.

SOMETHING NEW IN CADDIES.—We have seen boys, girls, old men, young men, and even dogs, acting as caddies but this is the first time we ever saw an elephant doing this work. He seems to enjoy his duties. We'll look for crocodiles next.

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Farmers' Clubs Favor Gas Tax and Salary Cut

Governor Is "Raked Over the Coals" On All But Two Points At Annual Meeting of Michigan State Association of Farmers' Clubs at M. A. C.

By R. C. GROESBECK

(Special Correspondent of The Business Farmer.)

RESOLUTIONS scoring Gov. Alex J. Groesbeck, the state administrative board, and the public utilities commission, and demanding the enactment of an adequate income tax law, a gasoline tax of two cents per gallon, the repeal of the present automobile license law, and the enactment of a weight tax of sixty cents per hundred weight on all motor vehicles, were the principal features of the thirty-first annual meeting of the Michigan State Association of Farmers' Clubs, held at the Michigan Agricultural College December 4 and 5.

Hitting the policies of the state's chief executive, the resolutions asked that "representative state government be restored by the elimination of the extraordinary power now possessed by the governor," and that the state administrative board be abolished or decidedly modified. The association further asked that the "useless" commissions appointed by the governor be discontinued.

The resolutions were drafted by a committee composed of Edgar Burk, of St. Johns; Senator Charles B. Scully, of Almont; Charles Cook, of Owosso; Alfred Allen, of Mason; and Herman Hass, of Ann Arbor. Senator Scully, who is closely connected politically with Herbert Baker, of Cheboygan, former state senator, and leader of the Farm and Labor movement in Michigan, was instrumental in getting most of the resolutions before the session of the association.

Resolutions Adopted

The complete resolutions as adopted by the association were:

Resolved, That we restore representative state government by the elimination of the extraordinary power now possessed by the governor to the end that the Administrative Board be abolished or decidedly modified.

And, further, that the various useless commissions appointed by the governor be discontinued, and such commissions as are necessary, be made elective by the people to whom said commissions are responsible.

Resolved, That we reduce the operating expenses of state government by removing twenty-five per cent of the state employees on the state payroll.

Resolved, That we reduce the operating expenses of state government by reducing twenty-five per cent of the major salaries.

Resolved, That we ask for a resumption of legislative responsibility for appropriations and disbursements without dictation and interference of the executive branch.

Resolved, That the exercises of the constitutional board of the University of Michigan and the Michigan Agricultural College, namely: the Board of Regents of the University and the State Board of Agriculture be left to the proper authorities without executive interference.

Resolved, That we ask for a return to the auditor general's department the sole responsibility for the state's bookkeeping and accounting.

Resolved, That we ask for the abolition of all useless and duplicating state agencies.

Resolved that we hold every peace officer strictly responsible for the enforcement of the law, and welcome and encourage any agency that stands for statuatory and constitutional rights.

Repeal Auto License Law

Resolved, That the present automobile license law be repealed, and the governor, at the special session of the Michigan legislature, ask for a weight tax of sixty cents per hundred pound weight for all passenger and freight motor vehicles operating on the highways, together with a gas tax of two cents per gallon.

Resolved, That it is the sense of the Farmers' Clubs that the state public utilities commission is not functioning in the interest of the people, but rather to the interest of the utilities themselves, and the cost of operating the same is around $500,000 annually, which is money uselessly expended.

Therefore, we would recommend the repeal of the said act and return to home rule regulation of public utilities as far as possible.

Whereas, the fundamental principle of republican farm of government is under three heads, viz.: executive, legislative, and judicial, and should be held distinctly separate; therefore we would suggest that as the governor is the executive branch, the legislature is the legislative branch, and the courts of the state the judicial branch, that the governor and the State Administrative Board confine their actions to the executive branch of the state government, without interference with the powers of the State Board of Agriculture or other like bodies.

Whereas, the problem of overproduction has been fraught with loss and discouragement to farm people, and

Whereas, the advent of the tractor and truck has largely increased production and decreased consumption,

Therefore, be it resolved, that we are opposed to any more development of public tracts of land for agriculture at public expense.

Whereas, the greatest force in America today is organization, and whereas, our American agriculture is having a desperate struggle to unify its farmers, and

Whereas, only in union can the farm group ever hope to stem the tide of special interest, and

Whereas, too much division still lurks in the organization of Michigan agriculture,

Therefore, be it resolved, that the Michigan State Association of Farmers' Clubs go on record condemning as disloyal and vicious any attempt of those who make bold to arouse in any way the spirit of antagonism among our leading farm organizations.

Resolved, That since the Board of Agriculture has been acting within its constitutional rights in dealing with the funds appropriated to our state agricultural college, and since the said board carried endorsement of our entire membership, that we endorse the stand taken by the State Board of Agriculture in its endeavor to give the extension department the support it needs in these days of financial depression.

Resolved, That the legislature enact a law making it a fine for a person to trespass upon farms for the purpose of hunting and fishing if notices are posted, without the consent of the owner.

Lower Taxes

Resolved, That we ask and demand as a substitute for the crushing taxes upon realty and home owners, an income tax, to meet all the operating expenses of state government.

Resolved, That it is the sense of the State Association of Farmers' Clubs that we defer the reappointment for state representation until the constitutional amendment in 1926, and then have it passed on actual citizenship.

Resolved, That we endorse the Farm Bureau in its efforts to standardize and establish an adequate farm organization in cooperation with local clubs and granges, and that we commend our farmers' clubs for the part they have played in helping to make its foundation permanent.

Several resolutions dealing with national affairs were also adopted by the association. They commended President Coolidge on his stand in granting amnesty to political prisoners; urged the fixing of prices by growers' exchanges, such as the fruit growers and milk producers operate, rather than by the government; recommended the sale of Muscle Shoals to Henry Ford or to any other person offering better terms, in order to provide power for the electrification of railways, nitrate for the farmers as fertilizer, and materials for explosives.

Many Prominent Speakers

A number of prominent speakers addressed the members of the association during the two days' meetings. Among these were Marion L. Burton, president of the University of Michigan; Clark L. Brody, manager of the State Farm Bureau and a member of the State Board of Agriculture; Dr. Eben Mumford, of the extension department of the Michigan Agricultural College; and Lee S. Noble, president of the association.

Herbert Baker, of Cheboygan, scheduled for an important address, telegraphed Senator Scully that he would be unable to attend because of the state convention of Gleaners, being held in Detroit at the same time. He expressed his best wishes for the success of the association, and stated that he "heartily approved the actions of the State Board of Agriculture, and was unalterably opposed to the actions of the State Administrative Board."

L. Whitney Watkins, head of the State Department of Agriculture, was also slated for an address, but was unable to be at the meetings because of illness.

Dr. Eben Mumford, of the M. A. C. extension department, gave the principal address at the first day's session. "The loss of youth is the greatest loss that agriculture, as an industry, has suffered in its history," he said. "More young people have left the farms in the past two years than every before. The greatest fault with agriculture is its failure to interest the youth of the nation."

Dr. Mumford termed the present

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Michigan Carries Off Its Share of Prizes At International At Chicago

By MILON GRINNELL

ON the opening day of the Hay and Grain Show at the International Livestock Exposition. Chicago, December 1st, farmers from Michigan won: 2 places in the hard winter wheat class; 12 places in soft red winter wheat class; 3 prizes on field peas; 3 prizes on field beans; 6 prizes on yellow soy beans, and 3 prizes on soy beans and other varieties, as stated in our last issue. The opening day was only an indicator of what the farmers of our fair state was going to do all through the show.

In the oat division Michigan captured 28 of the 35 awards for Region 2, which includes parts of Iowa, Minnesota, Wisconsin, Ohio, Ontario, Connecticut, New York and Rhode Island. The first position in this class by a Michigan man was fourth and it was won by L. H. Laylin of Mason, who was a big winner in other classes.

J. C. Wilk, of Alma, was next on the list of Michigan winners with 6th place. Ralph Jewett, of Mason, took 7th; R. E. Davis, of Fairgrove, was 8th, and R. Wooden, of Hanover, was 9th. Others were G. L. Dailey, of Kalamazoo, 10th; Douglas E. Bow, Saginaw, W. S., 11th; Jesse W. Pickett, Dutton, 12th; J. R. Scott, Fairgrove, 13th Ed Coler, Fairgrove, 14th; David E. Hanson, Berlin, 15th; D. A. Geddes, Saginaw, 16th; A. E. Hilliard, Mason, 17th; L. E. Wooden, Hanover, 18th; Roy L. Bow, Saginaw, W. S., 19th; T. J. Wilk, Alma, 20th; H. B. Armstrong, Highland, 21st; J. A. Wilk, Alma, 22nd; Pliny W. Jones, Black River Falls, 23rd; Lewis D. Hess, Ceresco, 24th; Lynn Jewell, Leslie, 26th; Francis Robinson, Watrousville, 27th; Fred Schwaderer, Cass City, 28th; Wood Bros., Rives Junction, 29th; C. D. Graham, Union City, 31st; Arthur W. Jewett, Jr., Mason, 32nd; Henry Lane, Fairgrove, 33rd; Rossman Bros., Lake View, 35th;

Then of the 25 awards in the six-rowed barley division went to Michigan. Henry Lane, of Fairgrove, headed the list of Wolverine winners. His sample won third place. A. W. Jewett, Jr., of Mason, took sixth place. Fritz Mathey, of Fairgrove, placed seventh. Others were J. A. Wilks, of Alma, tenth; A. E. Hilliard, of Mason, eleventh, and Lynn Jewell, of Leslie, twelfth. Michigan farmers won fourteenth, fifteenth, sixteenth and twenty-first places also.

Big Winners on Rye

There were nearly 100 entries in the rye division and as usual Michigan carried off most of the honors. First place was won by Geo. C. Hutzler, South Manitou; L. H. Laylin, Mason, took 3rd; Arthur W. Jewett, Jr., Mason, 4th; L. T. Lasenby, Mason, 5th; A. E. Hilliard, Mason, 6th; Lynn Jewell, Leslie, 8th; Ralph Jewett, Mason, 9th; Melvin J. Smith, Springport, 10th; H. E. Owen, Ovid, 11th; Mrs. B. Johnson, South Manitou Island, 13th; Allen Schroder, Caro, 14th; W. H. Warner, Concord, 15th; Douglas V. Bow, Saginaw, W. S., 16th.

In the alfalfa class of the hay division, Chas. Laughlin, Dansville, took 5th place; L. H. Laylin, Mason, 7th; Edward W. Laughlin, Dansville, 9th; A. E. Hilliard, Mason, 10th; Ralph Jewett, Mason, 14th; Lynn Jewell, Leslie, 15th. On red clover first place went to Wisconsin but after that Michigan farmers had things about their own way. C. Robert Laughlin, Dansville, placed 2nd; Arthur W. Jewett, Jr., Mason, 3rd; Chas. Laughlin, Dansville, 4th; E. W. Laughlin, Dansville, 5th; L. H. Laylin, Mason, 6th; Lynn Jewell, Leslie, 7th; Ralph Jewett, Mason, 8th; L. T. Lasenby, Mason, 9th; A. E. Hilliard, Mason 10th. In the timothy class Arthur W. Jewett, Mason, who was declared hay champion of the show, won 1st; A. E. Hilliard, Mason, 2nd; L. T. Lasenby, Mason, 3rd; L. H. Laylin, of Mason, 4th; Lynn Jewell, of Leslie, 5th; Ralph Jewell, of Mason, 6th. In the mixed class, timothy and clover, Michigan won the first four positions, A. E. Hilliard, of Mason, taking 1st; L. T. Lasenby, of Mason, 2nd; Lynn Jewell, Mason, 3rd; and L. H. Laylin, also of Mason, 4th.

The Michigan Agricultural College is to be commended on its fine display at the hay and grain show. It was the same as the one made at the state fair this year and it made a much better showing than any of the other state displays.

Live Stock Winnings

In the livestock show Michigan livestock held its own in all classes where entries were made.

In the Aberdeen Angus cattle division Queen's Guards, owned by William E. Scripps, of Orion, won fourth place as senior bull calf, Woodcote Stock Farm, Ionia, placed fifth. Woodcote Stock Farm also won second on junior bull calf. William E. Scripps won first prize for the best Aberdeen Angus cow with calf by side, second for aged Angus cow, and third in the junior calves class. Woodcote Stock Farm placed in the junior yearlings and senior calves classes. C. H. Prescott and Sons, of Tawas City, were the big Michigan winners in the Shorthorn division, placing second in the junior calves class and high in all other classes in which they had entries. The M. A. C. represented Michigan in the Hereford division and won 7th place on senior yearlings.

Michigan made a great showing

(Continued on Page 18)

Farm Bureau Provides Bean Marketing Agency

One Thousand Carloads of Beans Marketed Last Year Through Bean Department of Michigan Elevator Exchange, an Organization but One Year Old and Serving 25,000 Farmers

By STANLEY M. POWELL

(Lansing Correspondent of The Business Farmer.)

AS a reader of THE BUSINESS FARMER, it is with no little satisfaction that I noted in several recent issues of your progressive publication continued reference to the desirability of having a farmers' state-wide cooperative bean marketing organization. You have made the need for this very clear and it does not need further emphasis.

However, it seems fitting at this time to call the attention of your readers to the fact that there is already in Michigan an organization which it seems to me is filling most of the requirements which you have suggested. I refer to the Bean Department of the Michigan Elevator Exchange, an organization serving 25,000 farmers, which is already well established, which last year marketed 1,000 carloads of beans for its 107 member elevators, besides handling 2,600 cars of grain and 1,300 cars of hay, bringing the total business up to $5,000,000. The Exchange is thus a very important factor in marketing Michigan-grown beans, grain and hay. It maintains traffic, organization and auditing service for its locals.

On a Sound Basis

It is, of course, obvious with a going concern such as the Elevator Exchange, the costly period of experimentation has already been passed through. The truth of this is evidenced by the fact that last year the Exchange returned to its farmer members $8,000 in patronage dividends and at the end of its fiscal year had a surplus of some $17,868.12, and its business is growing and prospering rapidly.

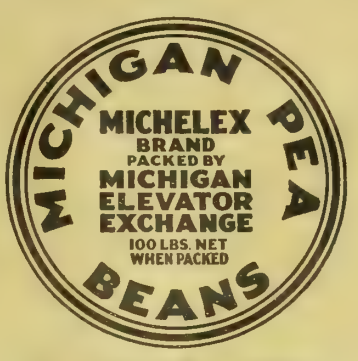
The history of this organization has been one of rapid growth and substantial development. It was founded in 1920 as a department of the Michigan State Farm Bureau and started out with a membership of twenty cooperative elevators. Headquarters have always been in Lansing.

By the spring of 1921 the Exchange business had developed to a point where it was necessary to employ separate sales managers for the grain, hay and bean departments, for the original membership of 20 had increased to 80 local associations. (Mr. C. S. Benton, a man who had had long experience as a bean salesman and traffic expert, ws selected to head the bean department.

In July, 1921, the Elevator Exchange was incorporated as a separate organization, although it is still affiliated with the Michigan State Farm Bureau as one of its commodity exchanges. It now serves 107 local associations that have contracted to sell all their beans, grain and hay through the Exchange.

Adopts Michelex Brand

The phenomenal growth in the quality of beans handled and the steady and substantial expansion of selling territory is due to a large extent to the quality of beans shipped by the member elevators. The trade realizes that the Exchange ships the grade of beans they sell. To capitalize on this asset, the Bean Dept. of the Michigan Elevator Exchange has established the Michelex trade mark which is used on all choice hand picked beans marketed through the Exchange. Michelex trade marked beans have met with distinct favor on the part of the bean buyers, as they are always uniform and up-to-grade. These branded beans teach the trade to come back for more of the beans put up by the Elevator Exchange farmers.



This trade mark is stamped on all bags of choice hand picked beans marketed through the Exchange.

While the Exchange has never experienced any difficulty in marketing all the choice beans which its members had for sale, there have been times when the question of moving off-grade beans has been a serious problem. The outlet for off-grade beans appears to be very limited, and each year finds this trade becoming smaller, especially on a declining market, when the trade is more interested in quality than in price.

Inasmuch as many of its member elevators were not equipped to pick their beans to choice, the Michigan Elevator Exchange rendered another very important and progressive service to its bean producing members when it was instrumental in the organization of the Michelex Elevator and Warehouse Company and the establishment at Port Huron of a bean picking plant with a picking capacity of more than a car of beans per day.

This means that growers and local elevators, who in the past have been entirely without picking facilities, can now have a satisfactory outlet for their picking stock. They can send it to the picking plant at Port Huron where there is the most modern machinery for making it into high grade choice hand picked stock.

This is the Michelex Elevator and Warehouse Company plant at Port Huron, the bean picking and storage plant recently leased by the Michigan Elevator Exchange. It is one of the most completely equipped terminal bean elevators in the state.

The entire output of the Port Huron establishment will be marketed under the Michelex brand which assures a strong demand and a premium over unbranded stock. There is every indication that the organization of the Michelex Elevator and Warehouse Company will fill a long felt want in the bean marketing situation in Michigan. All Michelex beans are inspected and certified by inspectors of the Michigan Bean Jobbers Association before they leave the state.

Has Best Sales Connections

The Exchange's Bean Department has splendid connection with some of the largest and most careful buyers. The bulk of the beans are sold to the large canners, as Heinz, Armour, Van Camp and to the wholesale grocers throughout the eastern and central states. Mr. C. S. Benton, the bean manager, has a close knowledege of the bean business and the consumer demand in all parts of the country. He is in constant touch with the managers of the member elevators so that he can fill all orders promptly.

One of the big savings which is effected by this organization of the country elevators is the traffic service which it renders possible. Of course, no local elevator could maintain an expert transportation and rate department but they need such service. The cost would be prohibitive with one elevator, but when the expense is divided among the business of 107 local elevators the cost is very small and the savings effected have proved to be very great.

Cars delayed in transit costs the shipper money. Rates are ever changing and so are rules. Someone must protect the elevators or they will experience big losses through overcharging. The traffic department of the Elevator Exchange helps the members to get cars and checks their freight rates and makes claims for them. This is a service which the Elexator Exchange gives to its members free.

The dividends which have been returned to the members have been made possible through the fact that the overhead operating cost of this state-wide sales agency has been kept down very low. The Exchange charges $20 per car for beans or 4 cents per bag, and out of this small charge has been made enough to make the patronage dividends and the surplus possible.

Believes In Contracts

Perhaps the success of this bean marketing venture is largely traceable to the fact that it has had definite iron-clad contracts which have insured a steady volume of beans and has made possible a low everhead. The 107 local associations have all contracted to sell all their beans, grain and hay through the Exchange.

However, if the locals find that they have better bids from other sources than the Exchange, it is in the Exchange rules that they may avail themselves of any such better offer, but they must pay the Michigan Elevator Exchange the regular

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The Marlette Farmers' Co-op. Elevator Company, at Marlette, Sanilac county, serves around 400 farm bureau members and has been in business for five years. It is a member of the Michigan Elevator Exchange.

The Snover Farm Bureau Association, at Snover, Sanilac county, is another member of the Elevator Exchange. The Association handles, on an average, over $13,000 a month for its members.

Farmers Service Bureau

(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full name and address. Name not used if so requested.)

PLANTING HICKORY NUTS

When should hickory nuts be planted or wont they grow from nuts, or would it require small trees and transplant them? If nuts will grow what kind of soil should they be planted in and when, also how deep? How and when should horse chestnuts be planted? How deep? —Mrs. A. O., Carsonville, Michigan.

—Hickory nuts may be planted either in the fall or spring. If they are to be kept until spring before planting they should be stratified, which may be done by placing them in a box alternating layers of nuts with layers of sand. The box should be placed out doors during the winter where it should be covered with wire netting to keep out the rodents. If the nuts are planted in the fall many of them may be dug out by the squirrels during the winter.

The nuts should be planted about one and a half inches deep. The hickory requires rather deep fertile soil.

Horse chestnuts may be handled in the same way as hickory nuts, either stratified or planted in the fall. Stratifying is usually considered the safest.—A. K. Chittenden, Professor of Forestry, M. A. C.

PASSING OF CHILD UP TO TEACHER

I've got a little sister 10 years old the 10th of this month. She's in the sixth grade and was also last year. She passed her examination, her lowest mark being 78 and the highest 100. They wouldn't pass her on account of her age. Now can they hold a child back for that? She's full of ambition, but the learning of some things twice has given her no courage. Would you please let me know if there is a law that can hold her back on account of her age? A. DeV., Dighton, Mich.

—The passing of a pupil is a matter which is in the hands of the teacher or if in a graded school, the superintendent. It would be impossible to pass on the matter at a distance. —T. E. Johnson, Department of Public Instruction.

INTOXICATING LIQUORS

Has a man the right to make fermented liquor for his own use? Has he the right to treat his friends or sell it out to friends? What can be done with a father that gives his 3 year old baby fermented liquor?—Mrs. A. M. W., St. Charles, Mich.

—It is unlawful for any person to make, sell, give away or have in his possession intoxicating liquor. Any person who violates this law may be prosecuted, and, if convicted, is subject to a fine or imprisonment, or both, in the discretion of the judge. —Asst. Legal Editor.

RED WOOLEN UNDERWEAR AND RHEUMATISM

Is it true that red woolen underwear will keep aches and pains away?—Mrs. A. O., Carsonville, Mich.

—Red woolens have no more merit than any other woolen underwear. People who are subject to a great deal of exposure should always wear woolen.—Dr. C. C. Young, Dept. of Health.

ASPARAGUS CULTURE

Will you please tell me about the care and culture of a new asparagus bed?—W. A. R., Petoskey, Mich.

—An asparagus bed is usually started by planting either one or two year old roots. One-year roots are preferable. The roots may be grown from seed or they may be obtained from a reliable seedman. When only a few are needed for starting a bed in the home garden, it is usually more convenient and satisfactory to purchase the necessary plants. The roots should be planted as early in the spring as the ground can be worked. If the roots are grown on the premises, they should be dug as needed for planting. If received from a distance and the soil is not prepared for planting, they should be carefully "heeled in" near the place where they are to be planted or packed in moist soil and placed in a cool cellar until they are needed.

The best soil for asparagus is a deep, rich, sandy loam, but it may be successfully grown in any well-drained soil. If the soil is heavy it should be made lighter by the use of large amounts of stable manure or in the home garden it is often advisable to trench the soil to a depth of about two feet and mix sand or sifted ashes with the soil which is removed to make it lighter and more porous. The soil should be well enriched with stable manure and all noxious weeds and grasses thoroughly subdued previous to planting. When preparing the soil it should be dug or plowed and the surface soil made fine and mellow as deeply as possible. The plantation is then laid out by making furrows or trenches about four feet apart and eight or ten inches deep to receive the plants. The roots are set about eighteen inches apart in the bottom of the furrow taking care to get the crown or bud uppermost and the roots evenly spread out like the spokes of a wheel. The object of setting the roots deep is to permit of digging or working over the surface of the bed without interfering with the crowns or roots. Only enough soil is placed in the furrow to cover the crowns about two inches, the balance being gradually worked in during the season after the plants start into growth.

The plants should be well cultivated the first season. In the fall, after growth has ceased, mow off the tops and burn them. In the spring of the second year, a dressing of well-rotted manure may be applied and thoroughly worked into the soil before the plants start to grow. If manure is not available, about one ton per acre (or 2 pounds for each hundred feet of row) of a high-grade complete fertilizer may be applied. Cultivation should begin as soon as the shoots appear and continue as long as it is convenient to get between the rows. Late in the fall remove the tops and burn as in the preceeding season.

In the spring of the third year some shoots may be cut but the cutting should not continue for more than two weeks. After the bed is well established, cutting may be continued for six or eight weeks. Cutting should never be continued too long as the plants must be given time after the last cutting to store food in the roots for the next season's crop. The general care of the bed during the third and each succeeding season should be about as follows: (1) Thorough digging or disking of the soil before growth starts in the spring. (2) As soon as the shoots start, cultivate between the rows to keep down the weeds and conserve moisture. (3) At the close of the cutting season apply a dressing of well-rotted manure or commercial fertilizer and thoroughly work into the soil. (4) Cultivate frequently during the summer as long as convenient to get between the rows. (5) After growth ceases in the fall, mow off the old tops and burn them to destroy insects and diseases.

If the asparagus beetle becomes troublesome during the cutting season leave a few shoots here and there uncut. These will serve as trap plants on which the beetles will collect. They may then be poisoned with arsenate of lead, 3 tablespoonfuls of powder in a gallon of water or 1½ pounds in 50 gallons. After the cutting season is over the plants may be protected from beetle injury by two or three sprayings with arsenate of lead as directed above.

The Palmetto is the leading variety grown and is usually recommended.—R. E. Loree, Department of Horticulture, M. A. C.

MARKET FOR PEPPERIDGE TREES

I have some pepperidge trees. They run small in timber. When can I sell same, or is there not much value on that kind of timber? Some tell me it is valuable. I have an offer of $1 a cord.—W. H. H., Mungee, Michigan.

—The pepperidge, more commonly known as the black gum (Nyssa sylvatica) is not found to much extent in Michigan and is therefore not listed on Michigan markets. In the south where it occurs with red gum (Liquidambar styraciflua) and the tupelo (Nyssa aquatica) it is considered as inferior in value to either the red gum or the tupelo.

The red gum, with which many people confuse the black gum, is in demand by many veneer factories because it makes a passable imitation of Circassian walnut or mahogany, depending upon the stain applied; but the black gum lacks the necessary grain for this market. Most of it is sold with tupelo but it lacks the broad clear widths of the latter.

The black gum or pepperidge has one characteristic which gives it a special value and that is that it is very difficult to split. This quality brings it into use considerably in berry boxes, hubs, table legs, crates, barrel veneers and exselsoir.

The problem of whether to sell timber as logs or as cordwood has to be settled according to the conditions existing in each particular stand. In general, it is best to sell the logs, if a suitable market can be found. The Forestry Department at the Michigan Agricultural College is endeavoring to help the farmer in getting a better financial return out of his woodlot by keeping a list of timber buyers in the State who use woodlot timber in logs or sawed to dimension. We will be glad to send to anyone interested a list of such buyers in their locality.

The price obtained for logs or standing timber varies with the distance from market and quality and size of the product, as well as the kind of timber. In this particular instance it would probably cost about $1.25 a rick for cutting the timber into fuelwood. Since there are three ricks of 16-inch wood to the cord, it would cost $3.75 per cord. With a sale price of $10 per cord, and a cutting cost of $3.75, the difference ($6.25) would represent the value of the standing timber, per cord. Figuring two full cords per 1,000 feet, board measure, of logs, the value per 1,000 feet of standing timber for cordwood would be twice $6.25 or $12.50. One would need to get at least $12.50 a thousand feet for the logs in order to equal the price received for fuelwood.

Knowing the cost of manufacturing the timber into fuelwood and figuring two full cords to the thousand feet B. M. of logs one can then determine whether any offered price for the logs is preferable to the price offered for fuelwood.—J. C. DeCamp, Assistant Professor of Forestry, M. A. C.

CAUSE OF WARTS

What is the cause of people having warts?—Mrs. A., O., Carsonville, Mich.

—Warts are benign tumor growths. Cause not known.—Dr. C. C. Young, Dept. of Health.

What the Neighbors Say

SUGAR TAX TO PAY BONUS

"A flat sales tax of 2 cents a pound on all sugar consumed in the United States, as a substitute for the present tariff, is advocated by the United States Sugar Association as a means of providing revenues sufficient to meet a possible soldiers' bonus. The association sent out letters to members of Congress and other public officials stating that the proposed tax would increase the Government's revenues $104,042,674 a year or enough 'to discharge the entire obligations to be incurred under the bonus bill, without further increasing the cost of sugar to consumers'."

DEAR Mr. Editor:—Yours of recent date, relative to child labor in the beet fields, received. I am still getting the article I promised you on this subject into shape, and will mail it to your paper as soon as possible. I am mailing under separate cover, a copy of our beet paper that we sent out to all members of the Michigan Sugar Beet Growers' Association, which I am sorry to say, we were forced to discontinue publishing on account of the lack of cooperation and funds.

I am enclosing a couple of newspaper clippings which should be carefully gone over, as here is a proposition which not only concerns the beet farmer, but the factory as well. This proposition of a sales tax on sugar, to pay a soldier's bonus is the usual plan to pass it on to the man least able to defend himself, the farmers, as if this proposed tax goes through all sugar beet contracts will be so made that the factory will not lose only in perhaps the loss of business.

The organization pushing this propaganda appears to be the United States Sugar Association, which in name at least, is the same organization that has been working extensively in the west and mailed by the Scotts Bluff Republican, as being a Cuban organization, and not an American organization, as the name implies. I am enclosing clipping which we reprinted in our paper on page 4. Every farm paper, every farm organization, and every factory, having the interest of Michigan, its industry, and its farmers, at heart, should get busy as this idea of a sales tax when once started, will in the end envolve every farmer in the United States. This article enclosed states that the consumer will pay no more than he does now, which no doubt may be admitted for the time being, but it should be made plain that this proposed tax of 2 cents per pound, will be paid by the United States beet grower. I will suggest that your paper takes the lead in this fight. Your paper, no doubt, is the most read by the beet growers of Michigan, of any paper in Michigan, and also has given the most space and cooperation in the grower's problems in the past. Give us a full page on this. I am sure every farmer will read every word, whether he is a beet grower or not. Also I feel every factory will have a like interest especially those that are offering 50-50 contracts. Also every bank doing business in a farming community.—C. E. Ackerman, Durand, Mich.

FORBID KILLING OF YOUNG CALVES

DEAR Editor—I am attaching to this copy of letter written to the Editor of the Detroit Times on October 22 to which I have not had any reply.

What do you think of this idea of forbidding the kiling of young animals?

Editor, The Detroit Times, Dear Sir: In your October 18 issue you say that the real way to save leather and improve the food supply would be to discourage or forbid the killing of young calves or of any beef animals not full grown.

All right, now who do you expect should pay for the feeding of the animals until grown? On our farm we have about 15 grade bull Holstein calves a year; I will make you a present of them if you will pay for the feed and care of them until they are of age. Don't you know that you or any one else in the City, State or Nation could get an almost unlimited amount of bull calves for $5 a head; and that the farmer makes more money to sell them when a week old at $5.00 than he can get any time afterwards.

I will sell you six yearling pure bred Holstein bulls right now for just what their feed costs and not ask one cent for labor or profit.

Believe me as far as I am concerned bull calves, especially not pure bred, are going to get the ax if they are not disposed of within two weeks after birth. It costs 25c a day and more to feed them milk, and they gain about one pound a day in weight, and then what are they worth? I will tell you—from 6c to 10c a pound in the market when they are salable. Can any one afford to pay 25c and get a return of 10c?

It is not up to the farmer to carry on such a losing game, you or any one else can do it if you want to. How many bull calves do you want right now at $5.00 a piece one week old?

You say—"If every calf grew to full size, can you imagine what the beef and leather supply would be?" I sure can, and can you imagine what the price would be to the farmer?—Charles Staff, Wayne Co.

A Giant Who Works For You

There is a giant who works tirelessly to lighten the labor on the American farm, to make the farm more productive, and farming more profitable.

He is personified by the vast resources of the Ford organization, whose herculean labors are directed primarily toward lowering the cost and increasing the efficiency of Ford cars, Ford Trucks, and the Fordson Tractor.

The larger this giant has grown the lower the prices of Ford products have fallen, and the more valuable they have become from the investment standpoint as farm equipment.

To the farmer this has meant lower and lower farm costs, better arrangement of farming activities, more money crops, all with less effort and therefore with greater net profit—proof enough that it is to his interest to standardize on Ford equipment.

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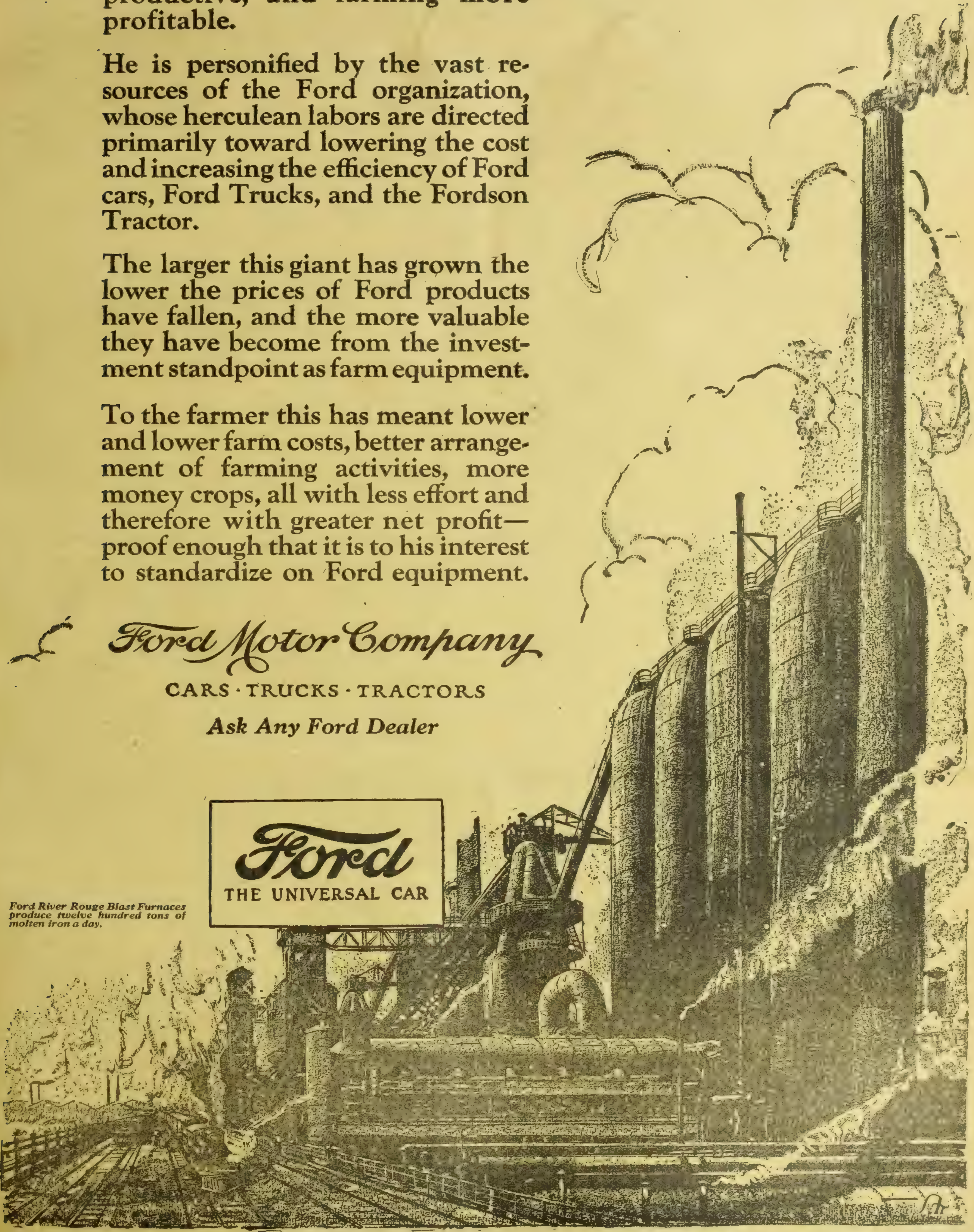

Ford

THE UNIVERSAL CAR

Ford River Rouge Blast Furnaces produce twelve hundred tons of molten iron a day.

Oh Money! Money!

by ELEANOR H. PORTER

THE STORY TO DATE

MR. STANLEY G. FULTON, 50-year old bachelor and possessor of twenty million dollars, calls on his lawyer and they discuss the disposition of this large fortune after its owner's death. The lawyer is in favor of giving the money to colleges or charities while Fulton is opposed to these ideas. He remembers that he has some distant cousins and decides to leave the money to one of them, but first he determines to learn which one will use it to the best advantage. To find out who is the worthy one he, through his lawyer, gives, each cousin $100,000 to use as they will. Before giving them the money grows a beard and, using the name of Mr. John Smith, goes to the town where they live to find out what kind of people they are. Upon arriving in town he visits James Blaisdell, one of the cousins, where he tries to hire board and lodging. While there he meets Miss Flora Blaisdell, another cousin who is a dressmaker. They decide they cannot rent a room to him and supply him board and refer him to Frank Blaisdell's, the third cousin. He gets a room there and, passing as a writer gathering material for a book on the Blaisdell family in this country, he starts out. He calls on all of the Blaisdells and as they all talk of a relative by the name of Miss Maggie Duff he decides to call on the lady. He finds her living with her father, an old man who seems to have soured on the world.

(Continued from December 8th issue.)

IT was while at work in the corner that he came to learn so much of Miss Maggie's daily life, and of her visitors.

Although many of these visitors were strangers to him, some of them he knew.

One day it was Mrs. Hattie Blaisdell, with a countenance even more florid than usual. She was breathless and excited, and her eyes were worried. She was going to give a luncheon, she said. She wanted Miss Maggie's silver spoons, and her forks, and her handpainted sugar-and creamer, and Mother Blaisdell's cut-glass dish.

Mr. Smith, supposing that Miss Maggie herself was to be at the luncheon, was just rejoincing within him that she was to have this pleasant little outing, when he heard Mrs. Blaisdell telling her to be sure to come at eleven to be in the kitchen, and asking where she could get a maid to serve in the dining-room, and what should she do with Benny. He'd have to be put somewhere, or else he'd be sure to upset everything.

Mr. Smith did not hear Miss Maggie's answer to all of this, for she hurried her visitor to the kitchen at once—to look up the spoons, she said. But indirectly he obtained a very conclusive reply; for he found Miss Maggie gone one day when he came; and Benny, who was in her place, told him all about it, even to the dandy frosted cake Aunt Maggie had made for the company to eat.

Another day it was Mrs. Jane Blaisdell who came. Mrs. Jane had a tired frown between her brows and a despairing droop to her lips. She carried a large bundle which she dropped unceremoniously into Maggie's lap.

"There, I'm dead beat out, and I've brought it to you. You've just got to help me," she finished, sinking into a chair.

"Why, of course, if I can. But what is it?" Miss Maggie's deft fingers were already untying the knot.

"It's my old black silk. I'm making it over."

"Again? But I thought the last time it couldn't ever be done again."

"Yes, I know; but there's lots of good in it yet," interposed Mrs. Jane decidedly; "and I've reached a point where I just have got to have help. So I came right over."

"Yes, of course, but"—Miss Maggie was lifting a half-finished sleeve doubtfully—"why didn't you go to Flora? She'd know exactly—"

Mrs. Jane stiffened.

"Because I can't afford to go to Flora," she interrupted coldly. "I have to pay Flora, and you know it. If I had the money I should be glad to do it, of course. But I haven't, and charity begins at home, I think. Besides, I do go to her for new dresses. But this old thing—! Of course, if you don't want to help me—"

"Oh, but I do," plunged in Miss Maggie hurriedly. "Come out into the kitchen where we'll have more room," she exclaimed, gathering the bundle into her arms and springing to her feet.

"I've got some other lace at home—yards and yards. I got a lot, it was so cheap," recounted Mrs. Jane, rising with alacrity. "But I'm afraid it won't do for this, and I don't know as it will do for anything, it's so—"

The kitchen door slammed sharply, and Mr. Smith heard no more. Half an hour later, however, he saw Mrs. Jane go down the walk. The frown was gone from her face and the droop from the corners of her mouth. Her step was alert and confident. She carried no bundle.

The next day it was Miss Flora. Miss Flora's thin little face looked more pinched than ever, and her eyes more anxious, Mr. Smith thought. Even her smile, as she acknowledged Mr. Smith's greeting, was so wan he wished she had not tried to give it.

She sat down then, by the window, and began to chat with Miss Maggie; and

"No, Maggie, I don't know, really, what I am going to do—truly I don't. Business is so turrible dull! Why, I don't earn enough to pay my rent, hardly, now, ter say nothin' of my feed."

"But I thought that Hattie—isn't Hattie having some new dresses—and Bessie, too?"

A sigh passed Miss Flora's lips.

"Yes, oh, yes; they are having three or four. But they don't come to me any more. They've gone to that French woman that makes the Pennock's things, you know, with the queer name. And of course it's all right, and you can't blame 'em, livin' on the West Side, as they do now. And, of course, I ain't so up ter date as she is. And just her name counts."

"Nonsense! Up to date indeed!" (Miss Maggie laughed merrily, but Mr. Smith, copying dates at the table, detected a note in the laugh that was not merriment.) "You're up to date enough for me. I've got just the job for you, too. Come out into the kitchen." She was already almost at the door.

"Why, Maggie, you haven't, either!" (In spite of the incredulity of voice and manner, Miss Flora sprang joyfully to her feet.) "You never had me make you a—" Again the kitchen door slammed shut, and Mr. Smith was left to finish the sentence for himself.

But Mr. Smith was not finishing sentences. Neither was his face expressing just then the sympathy which it might be supposed to be showing, after so sorry a tale as Miss Flora had been telling. On the contrary, Mr. Smith, with an actual elation of countenance, was scribbling on the edge of his notebook words that certainly he had never found in the Blaisdell records before him: "Two months more, then—a hundred thousand dollars. And may I be there to see it!"

Half an hour later, as on the previous day, Mr. Smith saw a metamorphosed woman hurrying down the little path to the street. But the woman to-day was carrying a bundle—and it was the same bundle that the woman the day before had brought.

But not always, as Mr. Smith soon learned, were Miss Maggie's visitors women. Besides Benny, with his greivances, young Fred Blaisdell came sometimes, and poured into Maggie's sympathetic ears the story of Gussie Pennock's really remarkable personality, or of what he was going to do when he went to college—and afterwards.

Mr. Jim Blaisdell drifted in quite frequently Sunday afternoons, though apparently all he came for was to smoke and read in one of the big comfortable chairs. Mr. Smith himself had fallen into the way of strolling down to Miss Maggies almost every Sunday after dinner.

One Saturday afternoon Mr. Frank Blaisdell rattled up to the door in his grocery wagon. His face was very red, and his mutton-chop whiskers were standing straight out at each side.

Jane had collapsed he said, utterly collapsed. All the week she had been house-cleaning and doing up curtains; and now this morning, expressly against his wishes, to save hiring a man, she had put down the parlor carpet herself. Now she was flat on her back, and supper to be got for the boarder, and the Saturday baking yet to be done. And would Maggie come and help them out?

Before Miss Maggie could answer, Mr. Smith hurried out from his corner and insisted that "the boarder" did not want any supper anyway—and they could live on crackers and milk for the coming few days?

But Miss Maggie laughed and said, "Nonsense!" And in an incredibly short time she was ready to drive back in the grocery wagon. Later, when he went home, Mr. Smith found her there, presiding over one of the best suppers he had eaten since his arrival in Hillerton. She came every day after that, for a week, for Mrs. Jane remained "flat on her back" seven days, with a doctor in daily attendance, supplemented by a trained nurse peremptorily ordered by that same doctor from the nearest city.

Miss Maggie, with the assistance of Mellicent, attended to the housework. But in spite of the excellence of the cuisine, meal time was a most unhappy period to everybody concerned, owing to the sarcastic comments of Mr. Frank Blaisdell as to how much his wife had "saved" by not having a man to put down that carpet.

Mellicent had little time now to go walking or auto-riding with Carl Pennock. Her daily life was, indeed, more pleasure-starved than ever—all of which was not lost on Mr. Smith. Mr. Smith and Mellicent were fast friends now. Given a man with sympathetic understanding on one side, and a girl hungry for that same sympathy and understanding, and it could hardly be otherwise. From Mellicent's own lips Mr. Smith knew now just how hungry a young girl can be for fun and furbelows.

"Of course I've got my board and clothes, and I ought to be thankful for them," she stormed hotly to him one day. "And I am thankful for them. But sometimes it seems if I'd actually be willing to go hungry for meat and potatoes, if for once—just once—I could buy a five-pound box of candy, and eat it all up at once, if I wanted to! But now, why I can't even treat a friend to an ice-cream soda without seeing mother's shocked reproachful eyes over the rim of the glass!"

It was not easy then (nor subsequently) for Mr. Smith to keep from asking Mellicent the utterly absurd question of how many five-pound boxes of candy she supposed one hundred thousand dollars would buy. But he did keep from it—by heroic self-sacrifice and the comforting recollection that she would know some day, if she cared to take the trouble to reckon it up.

In Mellicent's love affair with young Pennock Mr. Smith was enormously interested. Not that he regarded it as really serious, but because it appeared to bring into Mellicent's life something of the youth and gayety to which he thought she was entitled. He was almost as concerned as was Miss Maggie, therefore, when one afternoon, soon after Mrs. Jane Blaisdell's complete recovery from her "carpet tax" (as Frank Blaisdell termed his wife's recent illness), Mellicent rushed into the Duff living-room with rose-red cheeks and blazing eyes, and an explosive:—

"Aunt Maggie, Aunt Maggie, can't you get mother to let me go away somewhere—anywhere, right off?"

"Why, Mellicent! Away? And just to-morrow the Pennock's dance?"

"But that's it—that's why I want to go," flashed Mellicent. "I don't want to be at the dance—and I don't want to be in town, and not at the dance."

Mr. Smith, at his table in the corner glanced nervously toward the door, then bent assiduously over his work, as being less conspicuous than the flight he had been tempted for a moment to essay. But even this was not to be, for the next moment, to his surprise the girl appealed directly to him.

"Mr. Smith, please, won't you take me somewhere to-morrow?"

"Mellicent!" Even Miss Maggie was shocked now, and showed it.

"I can't help it, Aunt Maggie. I've just got to be away!" Mellicent's voice was tragic.

"But, my dear, to ask a gentleman—" reproved Miss Maggie. She came to an indeterminate pause. Mr. Smith had crossed the room and dropped into a chair near them.

"See here, little girl, suppose you tell us just what is behind—all this," he began gently.

Mellicent shook her head stubbornly. "I can't. It's too silly. Please let it go that I want to be away. That's all."

"Mellicent, we can't do that." Miss Maggie's voice was quietly firm. "We can't do—anything, until you tell us what it is."

There was a brief pause. Mellicent's eyes, still mutinous, sought first the kindly questioning face of the man, then the no less kindly but rather grave face of the woman. Then in a little breathless burst it came.

"It's just something they're all saying Mrs. Pennock said—about me."

"What was it?" Two little red spots had come into Miss Maggie's cheeks.

"Yes, what was it?" Mr. Smith was looking actually belligerent.

"It was just that—that they weren't going to let Carl Pennock go with me any more—anywhere, or come to see me, because I—I didn't belong to their set."

Miss Maggie said nothing, but the red spots deepened.

"Yes. It's just—that we aren't rich like them. I haven't got—money enough."

"That you haven't got—got— Oh, ye gods!" For no apparent reason whatever Mr. Smith threw back his head suddenly and laughed. Almost instantly, however, he sobered: he caught the expression of the two faces opposite.

"I beg your pardon," he apologized promptly. "It was only that to me—there was something very funny about that."

"But, Mellicent, are you sure? I don't believe she ever said it," doubted Miss Maggie.

"He hasn't been near me—for a week. Not that I care!" Mellicent turned with flashing eyes. "I don't care a bit—not a bit—about that!"

"Of course you don't! It's not worth even thinking of, either. What does it matter if she did say it, dear? Forget it!"

"But I can't bear to have them all talk—and notice," choked Mellicent. "And we were together such a lot before; and now—I tell you I can't go to that dance to-morrow night!"

"And you shan't, if you don't want to," Mr. Smith assured her. "Right here and now I invite you and your Aunt Maggie to drive with me to-morrow to Hubbardville. There are some records there that I want to look up. We'll get dinner at the hotel. It will take all day, and we shan't be home till late in the evening. You'll go?"

"Oh, Mr. Smith, you—dear! Of course we'll go! I'll go straight now and telephone to somebody—everybody—that I shan't be there; that I'm going to be out of town!" She sprang joyously to her feet—but Miss Maggie held out a restraining hand.

"Just a minute, dear. You don't care—you said you didn't care—that Carl Pennock doesn't come to see you any more?"

"Indeed I don't!"

"Then you wouldn't want others to think you did, would you?"

"Of course not!" The red dyed Mellicent's forehead.

"You have said that you'd go to this party, haven't you? That is, you accepted the invitation, didn't you, and the people know that you did, don't they?"

"Why, yes, of course! But that was before—Mrs. Pennock said what she did."

"Of course. But—just what do you thing these people are going to say to-morrow night, when you aren't there?"

"Why, that I—I—" The color drained from her face and left it white. "They wouldn't expect me to go after that—insult."

"Then they'll understand that you—care, won't they?"

"Why, I—I— They—I can't" She turned sharply and walked to the window. For a long minute she stood, her back toward the two watching her. Then, with equal abruptness, she turned and came back. Her cheeks were very pink now, her eyes very bright. She carried her head with a proud little lift.

"I think, Mr. Smith, that I won't go with you to-morrow, after all," she said steadily. "I've decided to go —to that dance."

The next moment the door shut crisply behind her.

CHAPTER VIII

A Santa Claus Held Up

It was about five months after the multi-millionaire, Mr. Stanley G. Fulton, had started for South America, that Edward D. Norton, Esq., received the following letter:—

Dear Ned:—I'm glad there's only one more month to wait. I feel like Santa Claus with a box of toys held up by a snowdrift, and I just can't wait to see the children dance—when they get them.

And let me say right here and now how glad I am that I did this thing. Oh, yes, I'll admit I still feel like the small boy at the keyhole, at times, perhaps; but I'll forget that—when the children begin to dance.

And, really, never have I seen a bunch of people whom I thought a little money would do more good to than the Blaisdells here in Hillerton. My only regret is that I didn't know about Miss Maggie Duff, so that she could have had some, too. (Oh, yes, I've found out all about "Poor Maggie" now, and she's a dear—the typical self-sacrificing, self effacing bearer of everybody's burdens, including a hugs share of her own!) However, she isn't a Blaisdell, of course, so I couldn't have worked her into my scheme very well, I suppose, even if I had known about her. They are all fond of her—though they impose on her time and her

(Continued on page 18.)

JUNK PLUS IDEA EQUALS LIGHTING PLANT

CARL HELBER, a dairy farmer living near Ann Arbor made a lighting plant for his barn for around $2. Mr. Helber, who has a large herd of cows, uses a gasoline engine to operate his milking machine and he decided that the engine could do double duty with a little extra cost. He went to a garage and in a pile of old parts of automobiles that had been discarded as junk he found part of an engine and six headlights minus the bulbs. He paid $2 for these.

In the barn he inverted the crank-case and generator that had been salvaged from the junk pile and installed them above the gasoline engine used to run the milking machine. The engine below was connected with the generator by a belt in such a way that the milking machine and generator could be operated simultaneously. The six headlights were equipped with bulbs and fastened in strategic positions about the barn. Two wires were arranged leading from the generator, one to carry the current to the lights and the other to connect with the ground. While the cows are being milked the barn is brilliantly lighted at no additional cost. At other times when light is desired the gas engine may be started in a moment, and the cost is not great.

SEEING THE IMMANUEL MAN

A SERMON BY REV. DAVID F. WARNER

TEXT: "Behold, the virgin shall be with child, and shall bring fourth a son, and they shall call his name Immanuel; which is, being interpreted, God with us."—Matthew 1:23.

HARRY Emerson Fosdick says, "Not often in the Bible are we invited merely to agree with an opinion; we are everywhere called to trust a Person." And that Person makes his advent in our text. "And they shall call his name Immanuel," or "God with us." But what a disappointment! The Jews had so disregarded the Messianic expectation as to externalize their salvation. They longed to be saved from the Roman yoke. And when the angel announces the deliverance to be internal; a salvation from sins, then, to them, this Person was not the Messiah.

Soon, we shall be memorializing that day when God made himself present among men in Jesus, the Immanuel man. But, do we discern better than the first century folks? Is our Christmas faith a Christian faith? A great psychologist has said, if we are truly Christian, we shall see the universe to be, not an IT, but a THOU. Certainly, God is with us, but how difficult to realize his presence, notwithstanding. This is such a real, a throbbing world; a world in which the things of sense and the achievements of men are so real, so everywhere present, that the masses seem to have been made insensible to the presence of God. Sensations of the marvelous things men about us are doing, are so ceaselessly crowding in upon our mental horizon, that the presence of God is well-night lost sight of or forgotten. How many Christmas shoppers take thought of the real meaning of the Christ-mass?

"White Christopher" appeared before a company of profane men one day while they were at work. With his arms outstretched, he looked so awe-inspiring, so Cross-like, that the men stopped swearing. Just this is the value of religion, to pledge to us the presence of Jehovah that we might have correction for our evil ways. The presence in the life of men of a supreme being is fundamental. So the most primitive peoples were animists; later heathenism localized their divine being in sacred places and idols; and in the Old Testament revelation, God is present in the pillar of cloud, the burning bush, and the ark. But gradually, a more moral view began to prevail, and God was at hand without these material associations. Early and late, the prophets are pleading for a recognition of God's presence thru a spiritual awakening and moral reforms. But the Jew was unimaginative and unspiritual, and so the prophet's message did not take. And the Greeks were expectant and longing; so it remained for the great Jehovah to give a pledge in reality, to both Jew and Gentile, of his redeeming presence. Therefore our text announces the coming of Jesus, the "God with us" man.

Said the sick little girl to the nurse who was manifestly selfish, "Didn't you know Jesus was born?" Friends of the yule-tide, are your hearts warm and tender toward the Babe of Bethlehem? Thru your Christmas spirit will your children recall that Jesus was born to save us from a hell of covetousness into which so many are falling? But the Founder of our religion came, lived, and lives that we might keep near God. Men heard him speak, and tho not college bred, no man ever spake as did he. They saw his eyes flame with indignation and weep with tears of grief. They felt his soul in action as a furious tempest, and then as a calm summer breeze. They saw his hand impart the tender, healing touch, and then with a scourge, the same hand cleanses the temple. They saw him go to the Cross because he would not save himself. No, their eyes could not be cheated, this was truly Immanuel.

And this reality is today to every Christian the great "I AM." He says, "I am the door, you can get to God thru me. I am the Bread of Life, feed daily upon me. I am the Light of men, walk in my ways. I am the Ressurrection and the Life, you may have a glorious future in me." And doesn't this Jesus bring God so close as to make heaven to be the atmosphere of Christ about us, rather than a place in the firmament above? I wonder. Think it over. An eccentric, Southern preacher said, in approaching a large forest tree, "O tree, I love thee because Jesus made thee." Certainly, this man was immersed and overwhelmed in the spiritual presence of Christ. And the amazing thing is, this is the heritage of every Christian. And this is that which enables us to put God into our farming. "Thanks be to God for his unspeakable gift." How friendly, warm, and vital should this make our every day living!

And, now, did we walk in the companionship of Christ, what would it do? To the church folks, I may say, it would spiritualize our prayer and worship. A vision of God is fundamental here. Moses saw him sitting on a paved work of sapphire stone. Jacob and Isaiah had marvelous visions of him. But to us he may be many times more real. And our vision of him is to conform to that ideal of life as seen in the personality of Christ. "The pure in heart shall see God." This correct attitude of heart is imperative. Together with another minister, I visited the institution of Jane Adams in Chicago. This minister inquired, "May we see Jane Adams?" The answer came, "Do you have a message for her?" And to my humiliation, this minister exclaimed, "No, we just want to see her." What puerile curiosity! For this woman is great in works of charity and philantropy. But how great and real is God! Yet how often we come into his presence with childish attitudes and hearts unthankful for his goodness and mercies! Due to overcrowded hotels in a Western city where a laymen's convention was on, a drummer, by invitation, shared a room with W. J. Bryan. On retiring for the night, Mr. Bryan said to the traveling man, "It is my custom at this time to read a portion of scripture and pray. Shall I do this audibly?" The drummer graciously yielded, for here was one who made it the practice of his life to pledge to others the presence of the Unseen.

Immanuel-Jesus to Santa Claus. This, we are reminded at this season of the year, has been our descent. And how many good folks have helped to make it so! We talk about the Christmas spirit as if it came from a red-faced, bewhiskered old hobgoblin that comes out of the frozen North and sweeps down our chimneys to give us a gay holiday for exchanging gifts. What unworthy imagery! How different from the reality of that Babe in whose character we are to learn the life of service and sacrifice. The myth of Santa Claus has led to an orgy of commercialism and a day of big dinners and gay feelings. Is it not time that "In chastened mood and with humble heart we gather once more around the Babe in the Manger;" and strive to know the presence of One who came to save us from our sins.

It is time. And only this indwelling of God in the heart is the basis of all right living. We look with disgust at how often religion is used for an handmaid; as in the lodge, in our businesses, our pleasures, and often in the churches. Whereas, religion should be our mistress, to be served in all the avocations and ways of life. Jesus says, "Without me ye can do nothing." And who of us wants to fail?

A father returned from work at twilight. Stealing unnoticed upon them, he was listening to his two small children at play. Said the little sister to her brother, "I can kiss God." "O, no you can't," said the little brother, "God is too far away." But sister steps across the room and kisses her brother. "There," said she, "I have kissed God." And come to think of it, isn't this the creative idea, and the reality that Christ has filled full? Therefore, at this recurring Christmas season, will we refind our Christian faith and have our chiefest cheer in a God who is with us and in us.

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The Michigan
BUSINESS FARMER

SATURDAY, DECEMBER 22, 1923

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DRAFTING CAPITAL

> "Section 1. In the event of a declaration of war, the property equally with the persons, lives, and liberties of all citizens shall be subject to conscription for the defense of the Nation."

IT has always appeared to us that in the time of war, a democracy such as ours, should be put entirely on a wartime basis. If the government has the right to conscript young men for military service, then it has an equal right to conscript property and materials used in the continuance of that war.

Representative John M. Evans, of the First District, Montana, recently introduced a bill of which the above is a section, for exactly this purpose. It is a bill calling for an amendment to the United States Constitution which would, after having been ratified by the legislatures of three-fourths of the several states, make the conscription of property mandatory, as is the conscription of individuals.

Surely the experience of the last war should be of some value to us to lay for the guidance of future generations and if the lessons learned cannot be used for that purpose we must admit that it was largely fought in vain.

Wartime becomes an emergency in which every man and every industry should be on an equal footing and serving only one end. The sight of profiteers, whether in labor or capital, making unheard-of profits, while young men were being put up before the merciless slaughter of the front-line trenches for a pittance is a picture not to be repeated.

Here is something for the American Legion, the many womens organizations and every sane and loyal citizen to get behind and make a reality. As a matter of fact, it would probably be the best possible insurance against another war!

RE-APPORTIONMENT

BEHIND a smoke screen carefully laid by Detroit politicians and largely fanned by the city newspapers, the population of Michigan is being divided and arrayed against itself.

If one were to believe all the metropolitan newspapers said it would be a one-sided issue with the rural delegation at Lansing making a scrap of paper of the state constitution and denying to a large proportion of our citizenship equal representation in making the laws which govern them. It is easy from this point to fan the flames, as they were back in the days of the famous "Boston tea-party" which ended in severing the ties between England and the thirteen struggling colonies.

The present state constitution, as we understand it, provides for representation in the legislature on the basis of population, taking into no consideration the number of citizens or the amount of territory thus represented. Probably those who made this constitution did not forecast the growth of a metropolitan city in which a very large percentage of its population are aliens who have not accepted the responsibilities or who apparently do not care for the privileges of United States citizenship. No man could advance a sound argument that it was the intention of the makers of our constitution to protect the rights of these visitors who come here only to take advantage of American conditions, accumulate enough American dollars and sail away to their homelands where their accumulation is enhanced to a point that they may retire in peace and comfort.

On page 3 of this issue our Lansing correspondent carefully and impartially outlines both sides of the re-apportionment fight, which we know will be read with great interest by the mass of thinking farmers in Michigan but which we hope might be read by the misguided citizens of our metropolitan cities.

Detroit newspapers would have their readers believe that the rural districts of Michigan do not appreciate what the growth of Detroit has meant to the prosperity of the state. This statement is a malicious slander because there is not a citizen of Michigan who does not hold in the utmost respect and the greatest pride the growth and prosperity of our great metropolis.

There is every reason why all sections of Michigan should be allied for their common good and we hope and pray that the present adjournment will result in clearing the muddy waters and allow. calm judgment and clear thinking to be applied to the present situation, which is by no means a one-sided proposition. The interests of the state as a whole, including Wayne county, are greater than, and must be given preference to, the selfish interests of any single city in the state.

THE GASOLINE TAX AGAIN

IT probably goes without saying that the proposed gasoline tax of two cents per gallon, which would meet favor with the rural element of Michigan, will have to wait until the matter of re-apportionment is settled and may even be used as a compromise in securing a settlement satisfactory to both sides.

The gasoline tax is not something to be traded in, neither is the matter of state apportionment. Both should stand or fall on their respective merits.

What we do know is that Michigan has an ever-increasing highway expense to meet and that the most direct way to secure enough money to build new roads and to keep those already built in repair is a gasoline tax, such as is now in force in most of the states in the Union.

A year ago when the Governor vetoed the gasoline tax it was a novelty, but during the past twelve months it has been voted on, and with success, in practically every state which ranks with Michigan in total annual registration of automobiles. This means that when a resident of our state goes into any other state he contributes to their good roads fund in every gasoline purchase he makes, but when the hordes of summer visitors from other states come to take advantage of our lakes and rivers they ride over roads which have been paid for and are maintained exclusively by citizens of Michigan. The moral is obvious.

FORGOTTEN!

AFTER you have studied the picture by Tom May which has become world famous, although first printed in the Detroit Journal several years ago, you will be interested to know that it was inspired by the tale of a German washerwoman who came the morning following Christmas to tell Mr. May that she had watched all day long a child who came to the window of a hovel facing her own home and kept peering out as if looking for someone. Late in the afternoon when this good woman went over to make inquiry she found that the child had been looking for Santa Claus and she added wistfully, "I must have been a very bad little girl, otherwise he would not have forgotten me!"

We hope there is no child in Michigan who is going to be forgotten by Santa Claus this Christmas. It may be that in the cities where there are more organizations caring for the needy, there is less possibility of overlooking someone than there is in the country, particularly after a trying period such as we have been experiencing the past two or three years.

If you know of a poor family near you where there is even a possibility that Santa Claus may not come with his pack of good cheer, by all means go to them at once. Do not run the risk of this catastrophe happening in your neighborhood. It takes so little to please the heart of a child and toys on the market are so cheap that under no condition must any child, anywhere in Michigan, this Christmas, be "forgotten!"

STATE OWNED CEMENT PLANT

IT is rumored that the state has taken an option of 453 acres of land two miles southwest of Charlevoix with the intention of erecting a state-owned cement plant to supply the highway requirements of Michigan.

We hope this statement is true. One need not be a radical to commend the ownership by the state of the manufacture of basic raw materials which it uses in such large quantities and in which the employment of penal labor could be so economical a feature.

There is no question but what cement is one of the best and most economical of road-building materials. It is equally true that in the repair and maintenance of the roads already constructed and the hundreds of miles to be constructed, many millions of dollars worth of cement will be required every year by this state. Fortunately, Michigan is well supplied with marl and there is no reason why we should not put ourselves in a position to take advantage of this gift which nature has apparently placed at our doors for this specific purpose.

GOOD BYE, 1923!

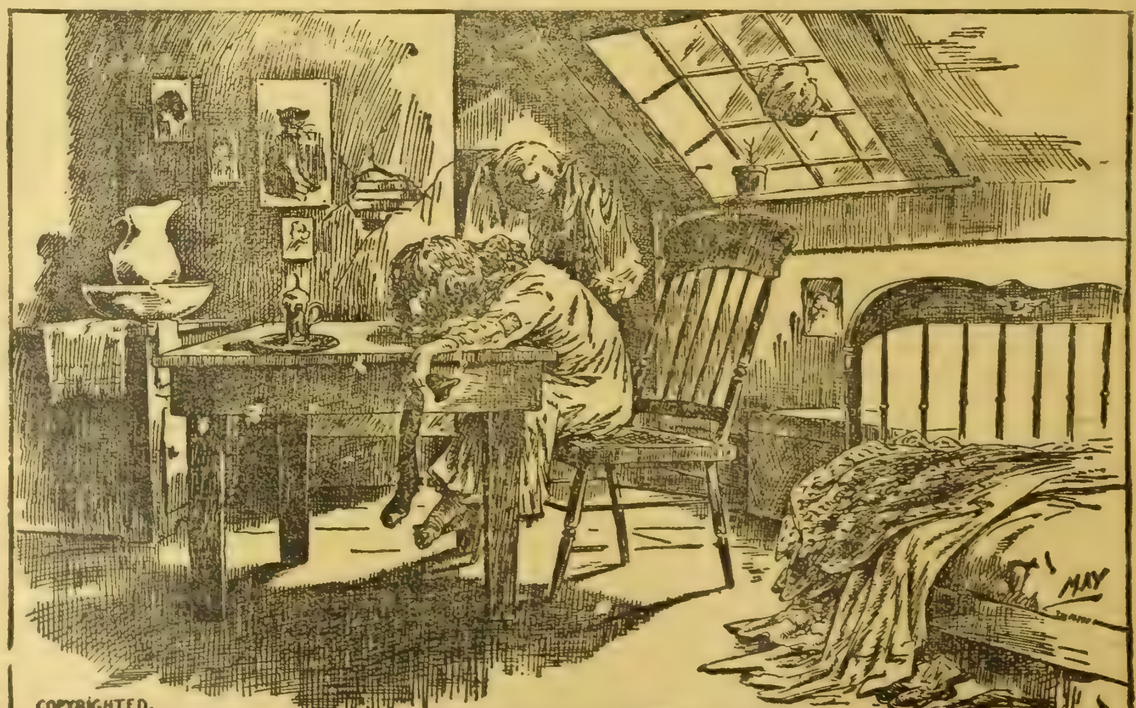
ERE another issue reaches your hands, 1923 will be but a memory and 1924 with all the promises and opportunities of a New Year will be in your possession.

It would be easy to preach a sermon on what you can make of your vast opportunities which unroll themselves before you, but farmers as a general rule have had about all of the preachin' and sympathy they need during the past two years—lets hope for less of it next!

The fact is that 1924 presents a rosy picture for the farmer who has stuck to his knittin' and kept puttin' the manure back on his land. Who has kept building up his herd and the rust off his machinery. This type of farmer needs no sympathy and the amazing (to some) fact is that he is the type who asks none. He has been fed-up on the wind-jammer type of politician who can weep nice, large tears for everyone who will vote him into a nice, fat job.

1923 was a shake-down for the farming business—thousands of farmers left the farms, but everyone that left crowded the farmer who remained nearer the top. Thank God, neighbor, you were one who stuck to the farm!

You are assured of a Happy and Prosperous New Year!



FORGOTTEN! —By Tom May.

PUBLISHER'S DESK

STANDARD FOOD ASSOCIATION

"Here I am again asking your valuable advice in this my trouble. You will remember me writing to you in regard to the Standard Food Association of New York, of which I was supposed to get thoroughbred Belgian hares, which I never got as their offspring were all the way from spotted white to blue and I would like to send back the four breeders which I purchased of them at $25, if I could get my money back to say nothing of express charges. I had no luck with the young which I gave the best of care. What would you advise me to do? I am a poor woman and need the money and can't stand such deals. They agreed to send purebred stock. Please give me your advice.—Always a reader of the M. B. F."

THE above is a sample of letters we get from folks who try to raise Belgian hares for resale to the company from whom they buy the original breeding stock. Perhaps somewhere in Michigan there is someone doing this successfully and making money from the scheme. If there is we would like to hear from them. But what letters we receive are exactly along the line of the above, which ought to be sufficient warning to our readers.

If, however, there are any still beguiled by the amazing profits to be made by the simple procedure as outlined in this or similar circular matter, we might repeat some of the stories as told to the vigilence committee which has been conducting an investigation:

A gentleman from Arkansas writes that he paid the company $22 for a pair of rabbits after he had seen their advertisement and after the company had written "continually even urging me to borrow money to get them with." He points out that the company was very prompt in writing to him before he paid his money. Read the balance of his story as he himself writes it.

"On December 23, I wrote to them that I had four pairs of rabbits to ship, all of the same litter and to please send shipping instructions. I waited almost two weeks and got no reply—so I wrote again and after waiting two weeks longer without result, I thought it strange—they had always been so prompt in answering me. I was determined to get an answer so I send a registered letter and got an immediate reply.

"They told me to ship my rabbits and pay expressage, as they had no funds at shipping point to pay for express, and as I had the contract, I supposed, of course, that they would refund the money.

"I shipped them in two lots. The first lot consisted of two (2) does and two (2) bucks. They said that they had received all O. K., and that I was to send my contract back and get a renewal before I could get my check. I had a true copy of the contract made, then I sent the original to them and kept the copy. In answer they told me that I had shipped Flemish Giants instead of Black Siberians and they were under weight. Now I have proof that I have never had or owned another kind of hares but the ones purchased from the company, and their young, so if I shipped them Flemish Giants, they misrepresented them to me as Black Siberians."

Another typical story comes from Pennsylvania, from a gentleman who paid $92 to prepay an order. He writes as follows:

"After waiting five months for delivery, on September 17, I submitted a letter to the Standard Food & Fur Association in which I cancelled my order. On September 25 I received a crate in which were three rabbits shipped via the American Express Company, express bill on end of crate was dated September 20—please note five days express live stock two hundred miles—and was marked 'Four (4) live rabbits.' On September 26 I received a letter written under date of September 24 from the Standard Food & Fur Association advising 'that we have this day forwarded you an exceptionally fine consignment of Imported Spotted Giants. etc.' On September 27 I received another letter dated September 24 from the Standard Food & Fur Association saying 'we have this day forwarded you 3 does and 1 buck of French Argent de Champagne via the American Railway Express Company.' Both letters were signed by the Secretary but his signature was undecipherable so that his name remains a mystery.

"We placed the rabbits in pens and, of course, have been feeding them. Today we made an investigation with the purpose of determining their sex and there was revealed the exceedingly pleasing (?) fact that each of the three rabbits were in complete possession of all the essentially masculine faculties."

OUR GERMAN BABIES FEEDING FUND

IT is too early to publish a full report on the generous contributions by readers of The Business Farmer to the German Babies Feeding Fund which we announced in the last issue.

We will remit the amount received up to December 20th., to the American Red Cross and specify to that splendid organization that every penny contributed by our readers is to be sent direct to Germany, if possible by cable to reach there before the Christmas season, to buy milk for the needy children.

We acknowledge to December 17th, the time of going to press, the following contributions:

Edwin P. Harms	$10.00
Employees of The Business Farmer	13.00
George M. Slocum	10.00
Mrs. Grant Slocum	10.00
Mrs. D. F. Wilcox	10.00
Sydney Floyd Bigger	4.00
Adam Falk	3.00
Henry J. Fuss	2.00
Mrs. Blanche Snider	1.00
S. A. Y.	1.00
Theo. Bengel	1.00
Total to December 17th	$65.00

One letter just received reads:

Dear Mr. Slocum:—I am a little boy seven years old, and I had this $4 saved up to buy Christmas presents with, but when mamma read in your paper about the babies in Germany starving, I thought I would send it to them instead.—Sydney Floyd Bigger, R3, Box 24B, Cheboygan, Mich.

WE WILL CONTINUE THE FUND

Since the original appeal was made, President Coolidge has gone on record as endorsing the appeal of the American Red Cross for Funds to Feed Starving German Babies, so we will continue to receive and acknowledge through these columns, any amount, large or small which our readers care to send in for this noble purpose. We will be glad to have you take up a fund in your local church, lodge or farmers' organization. It will certainly go a long ways towards proving that there is a God in Heaven and Peace on Earth, Good Will to ALL Men!

Contributions can be made in care of the publisher, George M. Slocum, The Michigan Business Farmer, Mt. Clemens, Mich., and should be made in check, money-order or registered letter, made payable to "GERMAN BABIES FEEDING FUND."

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HIGHEST GRADE SOFT AND HARD COAL. You get mine prices and sell at whatever profit you want. Our men now averaging over $1 0 ton. No yard or equipment necessary. We put you in business. Very small amount working capital needed. BOYLSTON COAL CO., 3657 So. Racine Ave., Chicago.

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The Farm Home
A Department for the Women

Edited by MRS. ANNIE TAYLOR

Christmas

DEAR FOLKS:—The one time in the year when our hearts should be light and our heads held high with happiness and gladness for all who come within our sphere. It is a wonderful day for our loved ones and those of you who have the family complete at this time of the year are indeed fortunate.

I want to thank you all for your splendid help and cooperation in bringing before our readers the many new and useful subgestions that you have so willingly sent in to me. I have tried hard to make our department a family affair where we could discuss all the problems that confront the average woman on the farm. The recipes bave been fine and I know a great many have enjoyed reading them.

Below you will find a few articles that are more or less personal with every mother, and I hope you will read every word in them. Use our page. Don't just read it I am always at your service. I want to wish you all a Merry Christmas and I really believe 1924 will be the best year our farm-folks have seen in a long time. So I wish you a Happy New Year.

Your Friend,
Mrs Annie Taylor

Address letters: Mrs. Annie Taylor, care The Business Farmer, Mt. Clemens, Michigan.

SANTA CLAUS

HE comes in the night! He comes in the night!
He softly, silently comes,
While the little brown heads on the pillows so white
Are dreaming of bugles and drums.
He cuts through the snow like a ship through the foam,
While the white flakes around him whirl.
Who tells him I know not, but he findeth the home
Of each good little boy and girl.

His sleigh it is long, and deep, and wide;
It will carry a host of things,
While dozens of drums hang over the side,
With the sticks sticking under the strings.
And yet not the sound of a drum is heard,
Not a bugle blast is blown,
As he mounts to the chimney-top like a bird,
And drops to the hearth like a stone.

The little red stockings he silently fills,
Till the stockings will hold no more;
The bright little sleds for the great snow hills
Are quickly set down on the floor.
Then Santa Claus mounts to the roof like a bird,
And glides to his seat in his sleigh;
Not the sound of a bugle or drum is heard
As he noiselessly gallops away.

He rides to the East, and he rides to the West,
Of his goodies he touches not one;
He eateth the crumbs of the Christmas feast
When the dear little folks are done.
Old Santa Claus doeth all that he can;
This beautiful misson is his;
Then, children, be good to the little old man
When you find who the little man is.
—ANON.

PREPARATION FOR MATERNITY

"WE didn't have children when we should and then when we wanted to everything seemed to go wrong." How many a bitter tragedy of modern life is summed up in these words. The story, which unfortunately is being enacted every day, brings into vivid relief the fact that preparation for maternity and the care of the infant are necessary if serious dangers are to be avoided and the greatest joy of life is to be consumated. We no longer lead a primitively natural life; our food and habits are modified by social conditions; our intelligence brings with it greater sensativeness and the ability to forsee and apprehend suffering and responsibility as well as the capacity for greater joy and pleasure. Maternity means some sacrifice of comfort and pleasure, but at the same time the fulfillment of the greatest happiness that life affords. Medical progress has kept pace with the needs for special care and precaution incident to the changed conditions of life, and the risks and dangers of maternity are today less than ever before. Some may resent or scoff at the need of such precautionary measures, but neglect of them ends with the recognition "We've found out that there's something to being prepared and that prevention saves a lot of trouble."

THE NEW HEALTH EDUCATION

THE first idea that is often found at work in the health movement that health is primarily a physical matter. This idea is predominent in the emphasis of brushing one's teeth, in masticating one's food and in exercising one's muscles. Contrariwise, health is not only physical but also mental and social. One's teeth are more dependent on what one's mother eats during pregnancy than on teeth-cleaning habits; one's digestion is related as much or more to mental attitudes than it is to mastication; and exercise that neglects the satisfactions and annoyances in the nervous system is making false claims for wholesomeness. The teacher of health education must recite as one of the first principles: Mind and body are one. Health and happiness are not built up; they come from activities that produce them as by-products. The important consideration in this connection is to teach boys and girls to live correctly, to establish wholesome habits, and to farm socially useful attitudes. The school by its sterile program of calisthenics may delude itself about "building up health," but boys and girls go to college seeking to be excused from the requirement of physical education. It is far more important that the schoolseek constantly to develop a skill in and a love for some form of physical activity that they will carry with them throughout life. In an article that is full of sound common sense, Dr. J. F. Williams of Teachers' College, Columbia University makes the above remarks and brings home forcefully the need for interest and satisfaction in work and play if a real hygiene is to be taught.

The hotter a man gets under the collar the higher the blood pressure. —Hygeia.

THE NERVOUS CHILD

"THE so-called nervous child is frequently an untrained child of untrained and weak parents. It has been estimated that 50 per cent of the nervous children belong in this group. The children may be over-stimulated by excessive attention, as by rocking and coddling. The young, inexperienced mother is frequently confused by her task. Her new responsibility may make her extremely nervous. She shows anxiety if he does not sleep, or she becomes frenzied if he does sleep. She over-clothes him lest he catch cold. She picks him up the moment he cries. She paces the floor with him or sings to him. She fails to feed him regularly. In short, she fails in the normal training process." Dr. Isaac A. Abt, in the December issue of Hygeia, stresses the importance of the influence that the attitude of the mother has on the temperament of the child. He readily imitates her anxiety and is unconsciously impressed by the air of confusion that reigns when she fusses and worries over him. As the child grows up he becomes more and more imitative and susceptible to the atmosphere around him. He learns that he is delicate or that he is naughty; he listens to the stories told of his pranks and nerves. The feelings of personal inferiority that may be thus engendered often have the most serious consequences in after life. A child's toys should be simple. Elaborate and complicated playthings teach him extravagence and selfishness and he becomes discontented and begins to demand more and more in the way of excitement and variety.

Fear is a normal part of childhood, but it should never be played for discipline; childhood fears are a potent course of nervousness in later years. In addition fear is a shock that jars the whole nervous system and its effects last a long time. To avoid and remedy nervousness, one of the greatest essentials is healthful occupation. Every normal child should have a certain amount of work assigned to him. It produces a feeling of satisfaction and self-appreciation, keeps the attention fixed and avoids fanciful dreaming. This of course must not go to the extent of fatigue, but regularity of well chosen and interesting work is one of the best safeguards against nervousness.

HOW TO REMOVE STAINS

To remove hot-water marks from polished furniture, dampen a cloth in denatured alcohol and rub lightly over the spots. Let stand for half a day to dry. If all the marks are not removed, apply again after the furniture is dry.

To take marking-ink out of linen, use a saturated solution of cynid of potassium, applied with a camel's hair brush. After the marking disappears the linen should be washed in cold water.

If ink is spilled on your hand, wet the end of a match and rub over the ink. Wash in cold water and the ink will come off.

To remove dirt or stains from a colored hat caused by the grease of the hair or by your collar rubbing against it, try rubbing the hat with a cloth soaked in benzin. The dirt will disappear instantly.

To remove grease spots from woolen cloth, use vinegar instead of gasoline, as it removes it much quicker, and does not leave a ring.

To clean silver purses, cover with butter-milk and let stand all night. Then rinse in tepid water.

Sometimes when you remove a spot with gasoline you leave a ring about the part cleaned. You can remove this by holding it over the steam of the teakettle.

Rub steel blades of knives with emery paper before puting away for any length of time, and they will not rust.

After squeezing the juice from a lemon, use the remains for cleaning brass, by first dipping in salt and powdered brick dust. This is excellent also for scouring copper cooking vessels.

MOTHER'S PROBLEMS

A Word of Praise

I HAVE known parents who never praised their children, no matter how deserving of praise they were. They were, they said, "afraid to praise them"—afraid lest they get "big-headed," and over-proud of their accomplishments. And I have known children who developed a deplorable "don't care" attitude, merely because no favorable mention was ever made of their efforts when they were best, so that it seemed to the child that it mattered little whether work or studies graded high or low.

A bit of praise honestly given may spur a child on to untold heights. Many a child's big ambition is to please Mother or Daddy, and it is nothing short of cruel to withhold the word of praise the childish ears are open for. Even if the work is not worthy of praise, criticism of it should be friendly, constructive and careful. To crush all the joy and expectancy out of an accomplished task, may crush something vital out of the child.

I know a successful woman who delights in telling to what she owes her success. "As a little girl," she has often said, "I was told by a neighbor woman that I had worked a bit of embroidery exceptionally well. 'But I might have known you would have,' she added, 'for everything you undertake to do, you do well!' After those words of praise, I just had to work hard, and do my best. I had to live up to that woman's bit of praise. I am still guided by it. Whatever I do, I try my best to do well!"

Let's all remember that. A bit of honest praise may give a child a mark to live up to that will affect the whole of his life. If you are raised on a throne, so to speak, you are not going to give up your place of power without putting up a good, stiff fight. Whenever the chance occurs place your child on a throne and watch the gratifying way with which he fights to maintain his lofty perch in your eyes.

Personal Column

I am enclosing a letter on my experience of picking beans. Hoping it will be of some use:—Noticing the request for more plans and letters on bean pickers I thought I would give some of my experience with picking beans. For nine winters we have had bean pickers in the house. My sister and myself always did the picking. My mother was unable to do the work all alone, so we would do the washing, ironing and scrubbing. Then we could sit down and pick beans. We never raised many beans ourself, but would pick for the neighbors, and some for the elevator. The winter of 1921 we hand picked 363 bushels. For the culls we got 9c per pound. When we would be busy with other work, my small sisters would pick awhile, and in that way they earned their own spending money. I think it pays better for farmers to hand pick their own beans, then they have their culls which are very good for feeding purposes, and the hand picked beans can be sold for first class beans. The name of the picker we used is "The Clipper", made by A. T. Farrell Company. I have tried others, but like this one the better. This is not an expensive machine. One could not be made much cheaper. Hoping this will be of some use to our readers.—Miss Schoof, Michigan.

My Letter of Thanks.—My Dear Mrs. Taylor: Here I am again after many weeks of silence. I had intended to write you a letter of greetings to be published in our paper for my dear friends over the state who have taken an interest in us. My family were all sick at Thanksgiving time, so had to let it go by. Now as I can only reach my thanks to you, I wish you to put before them all my greetings for a Merry Christmas and a Happy New Year. I have not forgotten any one of them, but am not in a position this year to remember them all personally, so take this method of wishing them the seasons greetings. Forever grateful,—Mrs. Jennie Hains, R. 4, Box 40, Harrison, Michigan.

Re-Silvering a Mirror.—As I am a subscriber of the Michigan Business Farmer would like to know if some of our readers could tell me what to use and how to re-silver looking glass or mirror, and if I could silver a glass that has never been silvered before and where could I get the material to re-silver it with. We like the M. B. F. and get many good ideas out of it.—Veronica C. Paul.

Knitting Done at Home.—Seeing the inquiry for a mitten knitter in your paper of November 10th, would be glad of any work that I could do at home, as I am not able to get out to earn anything. Would knit, crochet, piece quilts, or quilt them. Will be glad to correspond with anyone desiring work done.—Mrs. Minnie Driscoll, R. 2, Kingsley, Michigan.

Three Splendid Suggestions.—I am very interested in the Farm Home Department and would like the opportunity to help some of its readers, if possible.

Raspberries and Huckleberries—Make a good combination for jam. Yellow transparent apples and huckleberries are excellent for spreads.

Washing Windows.—Use a soft sponge or cloth and clear warm water to wash the glass, and then go over it after it is rinsed with a rubber window cleaner which can be purchased for the small sum of 19 cents. This method is much easier and more satisfactory than using cloths.

Varnish—Applied to the linoleum dries over night leaving a smooth, glossy, easy-to-clean surface, which protects and prolongs the life of the linoleum.—Harriet C. Reeves.

Hearty Dishes—Let us hear from some of our readers that know good wholesome dishes that may be served to the men folks.

Dear Mrs. Taylor: I received your

letter regarding the painting of my walls and thank you so much for all your trouble.

I am sending a few recipes of things that my family like especially well. I patented most of them myself. They can most likely be standardized and improved as I have had no domestic science lessons and only know what I have learned for myself. I hope you may find some of them useful for the cook-book. I am interested in hearty dishes for supper and hope the book will have some good ones. Thanking you for your help, I am sincerely.—Mrs. V. C., Cass, City.

Knitting Done at Home.—Anyone desiring knitting done, write Mrs. F. Fuller, Wolverine, Michigan. I love to knit these long evenings. I knit double mits for men, also single ones for children.

Buchrum Substitute—If you are in need of some and can't get to town, use bed ticking starched very stiff, let dry, then sprinkle and iron smooth.—Mrs. M.

Quilt Pattern—Sometime ago I received a splendid quilt pattern, drawn and the directions given. I sent this to one of my readers and I am wondering if I might have it back, so I can print it for all of us to use. If there are any readers who have patterns, I would like to have them and would appreciate it if you will send them to me real soon. —Anne Taylor.

—if you are well bred!

Duty to Your Chaperon.—At school receptions, sleigh-rides, class meetings at private homes, and so on, there is always a chaperon, who is giving her time for your enjoyment. Her kindness should be repaid by your courtesy.

1. As soon as possible after greeting your hostess, greet your chaperon.
2. Also, just before leaving, speak to her again cordially and gratefully.
3. See that your chaperon is not left alone. If the function is a dance, invite her to dance; or sit out a dance with her, sometimes. Make her enjoy being your chaperon.
4. Never tease to stay when the time comes to go.
5. Don't hinder your chaperon by loitering over your wraps; be ready when she is, and leave the building with her.

RECIPES

Tomato Soup—One peck ripe tomatoes, one dozen large onions, one bunch celery, one bunch parsley, six whole cloves, eight bay leaves. Cook and strain then add to the juice, one-half cup flour, one-half cup sugar, one-half cup butter, one-half teaspoon black pepper then bring to a boil and can or bottle and seal.—Mrs. Egbert Hall.

Quick Oatmeal Cookies—Four cups of rolled oats or oatmeal (raw), two cups white flour, two cups brown sugar. Mix together then add one cup shortening and one teaspoon salt. After this is thoroughly mixed add one-third cup of water in which is dissolved one scant teaspoon of soda. I usually add a little lemon extract. Roll quite thin and cut into squares with a knife. Bake in rather hot oven. Let them partially cool in the pan or they will break up badly.

I have received many helpful suggestions from our page and hope that some one will like these.—Mrs. Elmer Van Antwerp.

Crab Apple Butter.—Four quarts of crab apples, wash and quarter them but do not pare or remove cores. Put in a preserving kettle with four cups of water and cook until well done. Mash through a collander and add three cupfuls of granulated sugar, two tablespoonfuls of ground cinnamon and two teaspoonfuls of salt. Cook about three-quarters of an hour or until thick. This will keep in jars with pariffin.—Mrs. W. E. Fitzgerald.

Candied Citron.—One of our readers asked for this recipe and I am sure you will find this one sent in by a reader very fine. Use mature citron. Peel melon and remove center; then cut into squares; allow one pound of sugar for every pound of citron, using the least water possible to prevent burning. Cook sugar and water until the syrup is thick. Put citron and thinly sliced lemon into and cook thoroughly. When done remove citron from kettle and strain. Then place on an enamel or earthen pan and put into a hot oven. Turn frequently to prevent sticking and to make it dry evenly. When nearly dry sprinkle heavily with sugar and return to oven; when thoroughly dry wrap in oiled paper. This syrup makes nice jelly by adding sugar. We raise our citron in summer, gather before the frost and lay away until we have plenty of time to candy them which may be any month of the year.—Alma Becker.

Canned Sausage Meat.—Sausage or fresh pork may be fried only partly done, put into cans and the grease poured in. Seal and invert the cans until cold so the grease will form a seal over the top. This keeps fine.—Mrs. W. E. Fitzgerald.

Vegetable Soup.—One peck of ripe tomatoes, twelve ears of sweet corn (or three pints canned) six stalks celery, six onions, two quarts chopped carrots, two small or one large head of cabbage, six peppers, three red and three green, five quarts of soup stock. Mix all together, bring to boil, pack in hot sterilized cans and boil three hours. Makes about ten quarts and is fine.

Fish.—Be sure fish is fresh, scale, clean, and wash, and cut in pieces suitable for serving, being sure they are small enough to put in the cans. Pack in sterilized cans, putting in one teaspoonful of salt to a quart can. Put on rubber and cover. Screw tight as possible, then give one-half turn back, put cans on rack in canner and fill canner with cold water up to the shoulder of the cans, cover canner and bring to boil slowly. Boil three hours. After the water begins to boil lift cans out and tighten cover; turn upside down and if any of the cans leak, put on a new rubber quickly. Put can back in canner and boil fifteen minutes; tighten and set aside; before they are cold tighten again. The fish can be fried or baked after taking from cans and is like fresh fish.

Meat.—I have canned pork, beef, mutton, fish, liver, hearts, and tongues, and chickens like I do fish and have never had any spoil. In canning meats it is best to kill them yourself or otherwise be very careful they are fresh. Have everything ready to work quickly. Cans, covers and rubbers thoroughly sterilized. In canning chicken the rib pieces can be left for other purposes as they take lots of room and not much meat. The bones in the beef and mutton can be broken into small pieces; put in lots of water and boiled for soup stock, can and you may have soup any day. I put the soup stock in cans hot; put cans in hot water and boil three hours. It will keep indefinitely.—A subscriber.

Filled Cookies.—One cup melted lard, one cup of sugar, one teaspoon baking powder, one-half teaspoon soda, two-thirds cup of sweet milk, flour to make dough which will roll out thin, cut with any shaped cooky cutter, place in the center of each cooky a spoonful of the filling, place another cooky on top with edges even, press the edges together and bake.

Filling.—One cup chopped raisins, one-half cup of sugar, two level tablespoons of flour, one-half cup of boiling water mix the sugar and flour, stir it into the hot water (not boiling) when thoroughly blended, allow to boil, add the raisins, stir well and allow to get cool before using. Add a sliced banana to the white of one egg and beat until stiff. The banana will entirely dissolve, and a delicious substitute for whipped cream will result.—Mrs. P. F.

MY FAVORITE RECIPES

Mocked Bisque or Cream of Tomato Soup—One quart of stewed tomatoes; one quart milk; one teaspoon salt; one-eighth teaspoon pepper; one-fourth teaspoon soda; two and one-half tablespoons butter; two tablespoons corn starch. Heat the tomatoes till soft, strain and add soda. Heat the milk in a double boiler. Rub the butter and corn starch together, adding slowly, enough hot milk to make it pour easily. Stir slowly into the scalding milk and cook fifteen minutes. Add seasoning and strained tomatoes. Serve at once. The soda prevents the acid in the tomatoes from curdling the milk. This is my old recipe from my high school book and I use it all the time. It is very delicious.

Plum Pudding—One cup suet, chopped fine, one cup sweet milk, two cups seeded raisins, one cup molasses, two cups flour, one teaspoon soda, one cup currants, one-fourth cup each of citron, orange, lemon peel, one teaspoon cinnamon, one-half teaspoon each of cloves and nutmeg. Steam it two hours and serve it with hard sauce.

The Runner's Bible

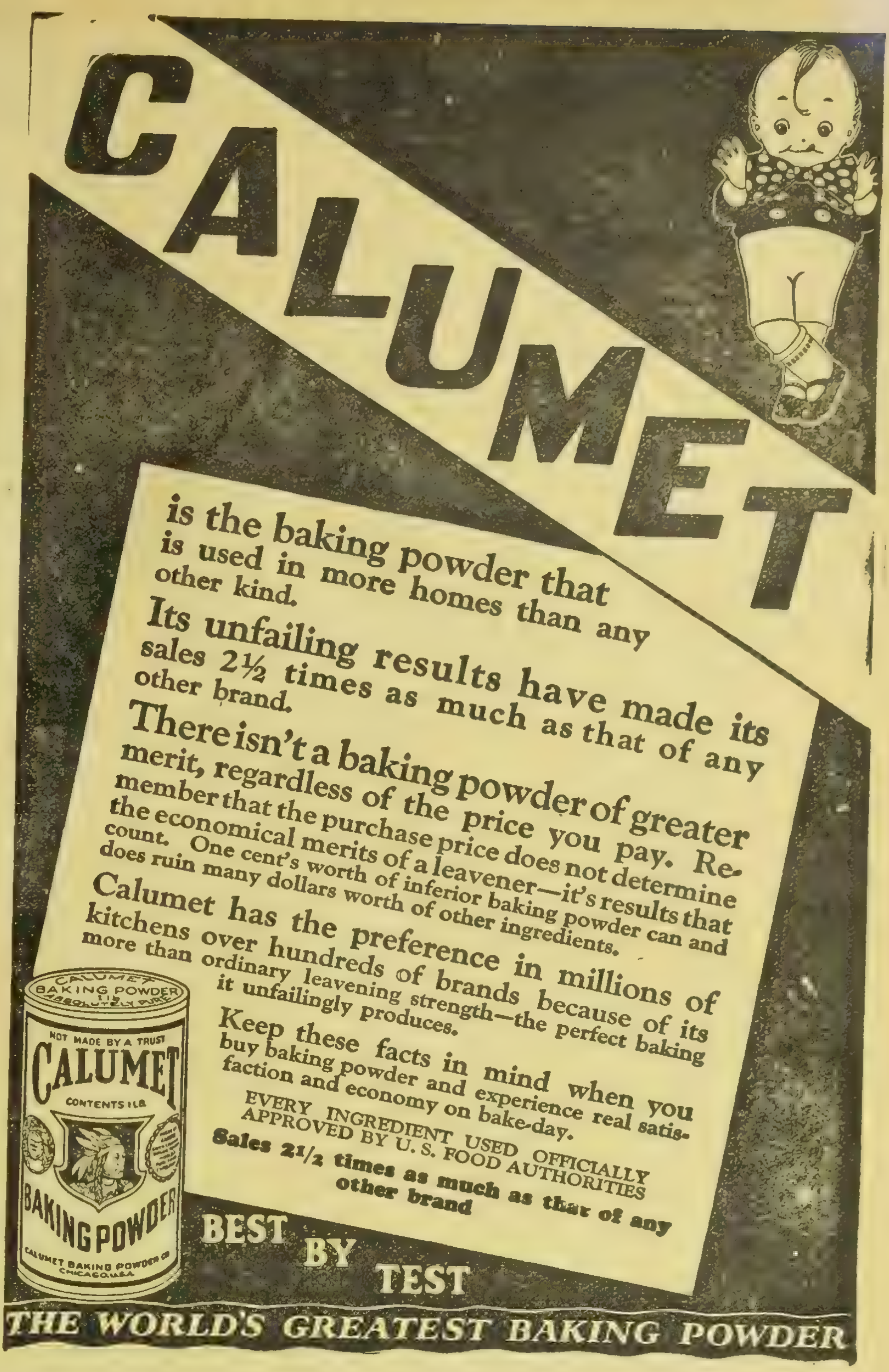
How beautiful upon the mountains are the feet of him that bringeth good tidings, that publisheth peace, that bringeth good tidings of good, that publisheth salvation, that saith unto Zion, Thy God reineth. Isa. 52:7.

Be sure you carry happiness and glad tidings about with you. If in a solemn and serious manner you say to a man, "Let me prepare you to die that you may live after death," you will hardly be able to get his attention. But if, with enthusiasm you will tell him that you have good news for him, that it is possible for him to have perfect health, to be prosperous, and happy here upon this earth, he will eagerly listen for every word. Man longs for help, he wants it now—to-day.

WOMEN'S EXCHANGE

IF you have something to exchange, we will print it FREE under this heading providing: First—It appeals to women and is a bonifide exchanges, no cash involved. Second—It will go in three lines. Third—You are a paid-up subscriber to The Business Farmer and attach your address label from a recent issue to prove it. Exchange offers will be numbered and inserted in the order received as we have room. —MRS. ANNIE TAYLOR. Editor.

108—Ladies shoes No. 3½, No. 6½, and 7, also rubbers. Men's cloth mittens and pattern.—Mrs. Geo. Morgan, R. 3, Vicksburg, Michigan.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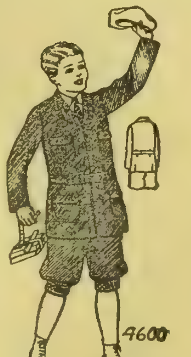
AIDS TO GOOD DRESSING

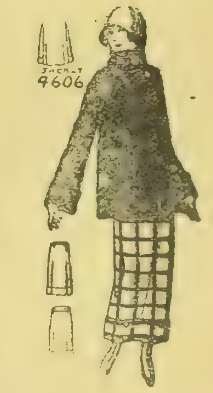
SEND IN YOUR SIZE

Lately some of you ladies have been sending for patterns without giving size. This means expense and delay for both of us. I hope you all realize the importance of sending in your size when asking for patterns.



4600. A Popular Suit Style for Growing Boys—Tweed, cheviot, serge, khaki and linen are good materials for this model. The ample pockets will please the boy who has such good use for them. The Pattern is cut in 4 Sizes: 8, 10, 12 and 14 years. A 10 year size requires 4¼ yards of 36 inch material.

4606-4594. A Smart Costume—This comprises a popular short Jacket (or coat) and the new cuff Skirt. One could use caracul, velvet or other pile fabrics for the Jacket and wool plaid suiting, twill or heather mixtures for the Skirt. The Jacket is cut in 6 Sizes: 34, 36, 38, 40, 42, and 44 inches bust measure. A 38 inch size requires 3⅛ yards of 40 inch material. The skirt which measures 1⅝ yard at the foot is cut in 7 Sizes: 25, 27, 29, 31, 33, 35 and 37 inches waist measure. A 29 inch size requires 2⅝ yards of 54 inch material.



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DEAR girls and boys:—But a few more days and then Christmas. Christmas, what a wonderful word that is to both young and old. The moment you hear it from the lips of some of your friends, or you read it some where, so many things spring up in your mind. Maybe you think how last year Santa Claus forgot to bring some of the things you wanted. Or possibly you are worried about what to ask for this year. And I hope you think of the little boy or girl living down the road a little way from you who was forgotten entirely last year. Resolve that this year she or he will not be forgotten and to be sure that she or he is not send a present yourself. Even though it may be a doll or toy that you received last Christmas, that you are tired of, it will be new to this girl or boy and both you and the receiver will be happy. Some times you may think that you have so few things and have none to spare but if you will stop and think for a moment you will realize that you have much to be thankful for and that there are many that are worse off than you. Make Christmas a real merry Christmas by bringing some happiness into at least one other home besides your own. Your Christmas will seem much pleasanter if you do.

A very merry Christmas and happy, prosperous New Year to all of you.—UNCLE NED.

OUR BOYS AND GIRLS

Dear Uncle Ned:—May I join your merry circle? I am a farmer girl 14 years of age, and am in the 8th grade at school. I am 5 feet 2 inches tall, and have dark eyes, dark bobbed hair, and a fair complexion. Have I a twin? We have two weeks vacation. Everyone expects to get their potatoes dug before school starts. I have both mother and dad and have five sisters. Our baby is two years old. The one which guesses my correct birthday will receive a nice long letter. Just the month, not the date. Uncle Ned, try also. As my letter is getting towards the basket I'll quit before it gets there. Here are 3 riddles: What was the first bet ever made? Ans. The alphabet. If you court a young woman, and you are won, and she is won, what will you become? Ans. One, of course. What trade would you recommend to a small man? Ans. Grocer (Grow-Sir). Your loving niece.—Miss M. I. S., Reed City, Michigan.

Dear Uncle Ned:—I have never written to you before so I made up my mind I would write to you. My father is a reader of the M. B. F. and likes it very well. I always read the Children's Hour. I will describe myself. I have brown hair, brown eyes. Am about 4½ feet tall and am ten years old. My birthday is November 27th. I live about 9 miles from Allegan, or 1½ miles west of Hopkins, Michigan. Do you like to pick up potatoes, Uncle Ned? I don't. I live on the main road between Allegan and Grand Rapids, Michigan. I think the answer to Ermalee Lockwood's riddle is a stove. I live on a farm of 105 acres. We have 8 cows, 4 horses, 5 cats, 6 pigs and 250 chickens. For pets I have a calf named Jack, and a cat named Cottontail. Well my letter is getting long so will close with a riddle: Why is a postage stamp like a little boy? The one who guesses this riddle will receive a nice long letter from me. Your loving nephew.—Edwin C. Nicolai, Allegan, Mich., R. 6.
—Well Edwin, your birthday comes on the same day in the same month as mine. I never thought picking up potatoes was such hard work. It isn't near as hard as picking up stones.

Dear Uncle Ned:—As I have been a silent reader for over a year, I thought I would like to join your merry circle. No one ever wrote from this part of the state that I know of, so I will start if my letter doesn't go in the waste paper basket. I am a girl with bobbed, blonde hair. I have it bobbed with bangs. Am 59 inches tall, 14 years of age, 8th grade, light complexion. I'm living in a city with about 3,000 population. It is quite a nice place. It is right in the thumb of Michigan. I live about 18 miles from Lake Huron, altho I go to the lake quite often. I love to read the Children's Hour very much. There is one girl that wrote to the Children's Hour, she lives in Argyle. That's about 20 miles from here. I've been there quite often. We went to Port Huron about 3 weeks ago, and next Sunday I think we will go again. I do quite a bit of traveling. I can't ever stay at home. Port Huron is about 80 miles from here by road. I think I will close for this time, so goodbye. From your want-to-be niece,—Elizabeth Eberte, 308 S. Silver St., Bad Axe, Michigan.

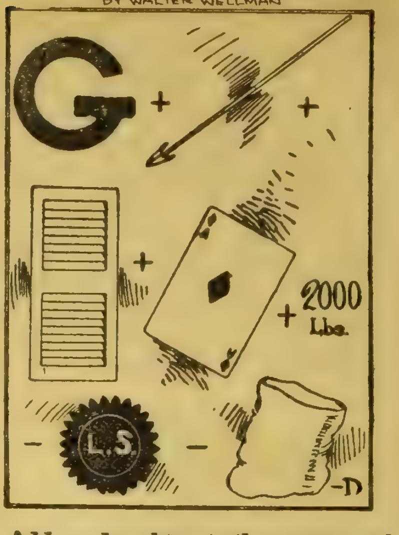
The Children's Hour

Dear Uncle Ned:—I have read the M. B. F .and enjoy it. I have written before, but I guess it reached the waste basket. I live near Clear Lake. It certainly is a pretty lake. On the north shore is the Meceola Golf Links, and by the side of that is the Lakewood Association. There is 28 cottages there. On the west side is a hotel. There is a high dive and some boats to rent. The east side an association owns to, by the name of "Seven Oaks". This summer I went swimming every day. I can swim, dive and float some. I am 5 feet and 3 inches tall. My birthday is the 7th of November. I have a light complexion and light brown hair. I will close with a riddle: Why is a green back more valuable than a silver dollar? Lovingly,—Faybelle Robinson, R. 2, Box 18, Big Rapids, Mich.

Dear Uncle Ned:—Tap! Tap! Tap! May I come in? I won't stay long but just long enough to take off my hat. I am altogether a new bird. I live on a farm four miles from Stambough. I go to school and am in the 8th grade. I guess I will describe myself. I am 14 years old. Have I a twin? I am 5 feet and 9 inches tall, have blue eyes, brown hair. (Oh, yes, I bobbed it the first of August.) The weather here has been nice and warm. I have been to Iron Mountain and had a very good time and the trip was just dandy. Have you been in Iron Mountain, Uncle Ned? Guess I will close and leave some room for the rest. Will the cousins write to—Agnes Manning, Stambough, Michigan, Box 211.

A LARGE COLLEGE

BY WALTER WELLMAN



Add and subtract the names of the objects, and have, as a result, the name of a large college popular with many young men.

Answer to puzzles in last issue: ALBANY and NELSON.

A Gift For Dad

"HOW many men there are today who have lost the respect of their associates and made failures of themselves merely because at one time or another they were afraid to say 'No'."

When Sam O'Hearn had heard these words from the lips of Professor Simmons, principal of Columbia High School, one morning in assembly, he wondered to himself if he wasn't one of those persons who can't say "No." He was afraid so.

* * *

"Now here's the proposition, O'Hearn. You're the star man of Columbia's basketball team. The whole team swings around your playing at center. It would be the simplest matter in the world for you to throw the game to Parker High next Thursday night if you just wanted to, and if you will we fellows'll make it worth your while. What d'you say?" It was Pinky Pinkerton of Parker High. Pinky had the reputation of being the leader of the betting students of his school, and inasmuch as betting on any games between the two institutions was forbidden by the faculties, Pinky took great delight in his reputation.

Sam O'Hearn listened to Pinky's words with a throbbing heart.

"What's it worth to you guys?" he eagerly questioned.

"Well, twenty-five dollars is a good price, I guess."

Twenty-five dollars! What wouldn't Sam O'Hearn do for that sum. Especially right at that moment for he was in dire financial straits. He had been working every evening after school and all day on Saturdays at Johnson's Corner Drug Store, where he and Pinky were now conversing during a spare moment, "helping out," in an attempt to earn sufficient money to purchase his mother and dad a Christmas present in the form of a talking machine that he had seen standing in the window of the Music Shop downtown.

But even though he toiled hard and long in Johnson's he was positive he could not get enough money together to purchase the machine. It was priced at 35 dollars and to date, just one week before Christmas he had but 25 of these. Ten dollars short.

"Twenty-five dollars," murmured Sam O'Hearn as the scheming, crafty Pinky Pinkerton from Parker High, stood by with a half sneer on his face.

Sam leaned farther over the counter in the rear of Johnson's Drug Store, where Pinky had come to make his offer, and thought. That twenty-five dollars added to the twenty-five he already had would not only give him enough to purchase the talking machine as a Christmas present for his folks but would leave him fifteen dollars more which would provide him with spending money for many weeks. What an opportunity!

Then suddenly it came to Sam that by selling the game to Parker he would not be playing square with his school, Columbia. What would his classmates think if they ever found out that for a measly old twenty-five dollars he had "thrown" a game to their hated basketball rival? What would Peggy Hartman think, especially?

But, shucks, why be so foolish, Sam thought. Columbia High had never done him any especial good that he could see—why should he deprive himself and his folks of something that would give them no end of pleasure just because he was a ninny and afraid to take a chance? It would be easy for him to "fix" it so that Parker would win—but, then, maybe somebody would find out.

As if he knew what Sam was thinking about, Pinky Pinkerton broke in on Sam's thought. "None of your friends'll ever get wise. All us guys at Parker will keep the whole business under our hats, and nobody will ever know."

That was the straw that broke the camel's back. Sam O'Hearn cast aside his honor and, "I'll take you up on that, Pinky," he said, deliberately. "How'll we work it, now?" And then Pinky, realizing that he had poor Sam—Sam whom all had though so highly of, of whom his parents were so proud—under his influence, leaned his crafty head forward, and laid the plans for the "throwing" of the Columbia-Parker game on the following Thursday night, the night before Christmas eve.

It was the night of the Columbia-Parker basketball game. Sam O'Hearn, in his basketball togs, stood leaning against a locker in the gymnasium of Columbia High where the game was to be played, deep in thought. He was thinking of the agreement he had made with Pinky Pinkerton of Parker several nights before. Had he done right in promising Pinky he would "throw" the game to Parker for twenty-five dollars just to favor some of those crafty betting Parker students? Somehow he felt guilty of having committed a great wrong. "Nonsense,' 'he tried to tell himself, "I haven't done anything I shouldn't," but this thought had no effect. He still felt guilty.

"Better hurry out on the floor and get in a little practice before we commence, Sam." It was the voice of Mr. Parks, the Columbia coach. Sam stirred himself from his deep meditation. He looked up. Mr. Parks stood in front staring hard at him. "Something wrong, Sam?"

Sam's eyes fell. He couldn't force himself to look the coach squarely in the eye. It was that infernal guilty feeling.

"Naw—no, sir," replied Sam, and with a couple of words of advice from the coach on how to get the jump on Parker's center, Sam strode slowly and thoughtfully through the swinging door and onto the floor of the big gymnasium where already the other men of Columbia were practicing.

Sam saw that the balcony of the gymnasium was crowded to overflowing with eager spectators..

Leaning far over the railing of the balcony Sam saw Peggy Hartman with a host of her girl friends. She waved. Sam waved back. Farther back in the crowd Sam saw his pal Jimsy Perkins—good old Jim. Jim yelled a terrific war cry to Sam. Sam waved and smiled.

Somehow the feeling of guilt surged through him with greater force. What—oh, what would they say if they ever found out? And they might—there was a chance of it.

Columbia High had finished her preliminary practice. Parker had taken hers. The referee was stepping out from the locker room, whistle in hand. The game was about to start.

Sam O'Hearn had returned to the locker room. He was in a quandary. He was positive now that he wasn't doing the right thing to take that filthy money from Parker's betting crowd.

"And I'm not going to do it." Sam's lips compressed in a straight line. His jaw tightened.

He hurried to his locker. Taking from it his big brown dressing gown, he threw it over his shoulders. Then with a quick stride he dashed up the circular stairway and onto the balcony of the gymnasium. Getting his bearings, his quick eye hunted out Pinky Pinkerton and his group of boisterous followers. He wormed his way quickly through the crowd to where they were.

"Pinkerton," he called.

Pinky turned, looking crossly and questioningly. "What d'you want now?"

"I'm here to tell you that I'm not going to take your money and I'm not going to throw the game to Parker." With these words, sharp and pointed, Sam quickly turned, leaving the startled Pinky staring open-mouthed after him, and made his way back to the locker room. How much better he felt! "I'm going to play harder than ever in this game," Sam told himself. He did.

Sam, feeling light of heart and happy, hurried home through the snow late that night. The spirit of Christmas was in the air. He felt cheerful.

San's dad, Mr. O'Hearn, was reading his evening newspaper when Sam stamped into the house. Mrs. O'Hearn had gone to bed.

"Dad, I want to tell you something," announced Sam as he pulled a chair up to the cheery grate fire. And then he went into detail about the offer from the betting students of Parker, how he had said he would accept it, and then later how he had declined. He told about the talking machine he had been intending to buy and how now, without the funds, he'd have to give it up.

"Son," said Mr. O'Hearn, "never mind about the talking machine—I'll go fifty-fifty with you, and we'll make it a joint present to mother. You have given me enough Christmas present tonight. I'm glad to see you're a man, my boy. Accept my thanks and congratulations. I'm proud of you. Now then, let's pile to bed, shall we?"

DAIRY and LIVESTOCK

THE "SCRUB BULL FUNERAL"

A SERIES of "scrub bull funerals", scheduled to occur in each of the fifteen counties comprising the Upper Peninsula of Michigan is an outstanding feature of the better livestock campaign to be conducted during the season of 1924; by the Upper Peninsula Development Bureau of Michigan, an organization devoted to the industrial growth and progress of that region.

The final details of the plan whereby the Development Bureau will distribute one thousand dollars in cash prizes to various live stock associations throughout the fifteen counties at the end of the year 1924, were discussed at length during the recent county agricultural agents' conference, held at Marquette, Michigan, and definite rules and regulations governing the contest were drawn up.

The campaign is the climax of an energetic effort conducted during the past few years throughout the Upper Peninsula of Michigan to encourage dairy farming as the branch of agriculture best adapted to the soils, economic and climatic conditions existing throughout that section and spurred on by the extension department of Michigan Agricultural College, the State Department of Agriculture, the Upper Peninsula Development Bureau, and other co-operating agencies, a definite plan is now in progress for the immediate upbuilding of upper Michigan's dairy livestock population.

Practically every community in the several counties throughout the peninsula is showing an active interest; and in fact, a keen rivalry apparently exists.

The particular plan to which this article refers involves primarily the substitution of pure bred bulls for "scrubs", rather than just the elimination of "scrub stock."

At the recent county agricultural agents' conference, a central committee was named, its members representing the Michigan Agricultural College, the railroads of the Upper Peninsula, and the Upper Peninsula Development Bureau. The committee follows:

D. L. McMillan, superintendent, U. P. Experiment Station, Chatham, chairman; E. G. Amos, assistant state leader of county agents, Marquette, secretary; G. E. Bishop, secretary manager Upper Peninsula Development Bureau, Marquette; J. A. Jeffery, land commissioner D. S. S. & A. Railway, Marquette; and O. E. Reed, department of dairy husbandry, Michigan Agricultural College, East Lansing.

In addition, central committees will be organized in each county to work directly with the county agricultural agents among the farmers of their respective districts.

Following are a few of the more important rules governing the contest:

"The awards won by the various counties must be spent under the direction of the committee that was in charge of the contest in the county, with the one stipulation that the money be spent in advancing the dairy industry in the county.

"The following ways of spending the money are suggested:

1. Promotion of calf club work;
2. Rebate on bulls bought;
3. Dairy tours;
4. Scholarships;
5. Revolving fund for purchase of improved dairy cattle.

"Awards will be made on the basis of the number of scrub bulls of breeding age replaced by registered bulls.

"Any county, which at any time during the year completes its work with one hundred per cent pure bred, registered bulls, will be entitled to first place. Should any more than one county show one hundred per cent registered bulls, they will be entitled to first, second, third and fourth places, respectively, in the order in which they have completed the work, regardless of the number of scrubs replaced.

"No less than eight counties must compete in this contest, before prize money is available, and no county is ligible to a prize unless at least twenty-five scrubs are replaced.

"All entries must be made to the chairman of the Central Committee before January 1, 1924. After this date, the entries may be accepted at the discretion of the committee. All replacements are counted from January 1, 1924, to December 31, 1924, inclusive, provided* that pure bred registered bulls calves purchased after July 1, 1923, that replace scrub bulls of breeding age after January 1, 1924, shall count as legitimate replacements.

"Any question which may arise in this contest will be referred to the Central Committee. This committee shall consist of a representative of the Upper Peninsula Development Bureau, of the Michigan Agricultural College, of the Upper Peninsula Experiment Station, of the railroads operating in the Upper Peninsula, and of the supervisory extension force, making a total of five members on the committee.

"A monthly report showing date of replacement, address of the owner of the scrub bull replaced, the age of the scrub bulls, age and breed and registration number of registered bull in which an interest has been purchased, and the name and address of the men who have agreed to use the service of the pure bred bull owned in the community, will be forwarded on the first day of each month to the chairman of the Central Committee."

The interest being emphasized in the better livestock and dairying campaign throughout the Upper Peninsula of Michigan is by no means limited entirely to the agencies named above, for it has extended also to the banks, manufacturers, and other business interests in the various districts. In fact, so keen has this interest become that practically every bank throughout the Upper Peninsula of Michigan now stands ready to loan money to worthy farmers for the purchase of pure bred livestock, and during the past year alone, the pure bred livestock population has been considerably increased through this means.

The past two years have indeed brought about a marked transition in the agricultural status of the Upper Peninsula of Michigan, and it is the prediction that with the successful achievement of the goal set for the year 1924, dairy farming will be definitely established as a thriving and profitable industry throughout the Upper Peninsula of Michigan. That, at least, is the aim of the various agencies which are cooperating in this effort.

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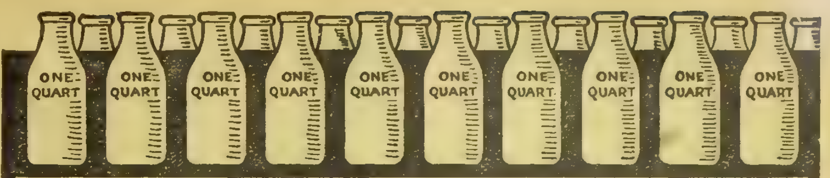

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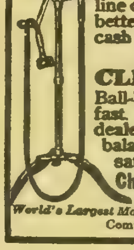

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seed oil to the affected parts of the body and brushing it in with a body brush. You can repeat this treatment once or twice at intervals of five or six days. If you have a veterinarian in your locality I would advise that you have him make an examination of your horse and prescribe treatment.—John P. Hutton, Asso. Prof. Surgery and Medicine, M. A. C.

STERILITY IN CATTLE

Wish to ask a question concerning cows that won't ketch when they are drove three or four times. We have some that are Holsteins. They look well, eat well, and hold up fairly well in their milk and cream tests, but won't get with calf. Have been drove three times each and let run with bull for one month, and still they don't ketch.—Mrs. J. B. L., Pentwater, Michigan.

—It is impossible to determine the cause of sterility in cattle without a personal examination. In most cases of sterility failure to breed is due to disease of the reproductive organs. Ocassionally it may be attributed to faulty nutrition or a constitutional disease. Furthermore, the cause of sterility may be found in the bull. If a qualified veterinarian is not available for making a personal examination, I would suggest that you flush the vagina of each cow about three times a week with a solution made by adding four ounces of borax to one gallon of clean warm water using about one-half gallon for each animal. If there is reason to suspect that the bull is the fault, I would suggest trying another bull.—E. T. Hollman, Asso. Prof. of Animal Pathology, M. A. C.

MICHIGAN CARRIES OFF ITS SHARE AT INTERNATIONAL

(Continued from Page 6)

on hogs, and much credit is due the Detroit Creamery Farm, Mt. Clemens, especially in the Duroc Jersey Chester White and Poland China divisions. On Poland Chinas the Detroit Creamery Farm won: 4th on junior boar pig; 1st, senior sow pigs; 1st, junior sow pigs; 1st, young herds; 1st, produce of sow; 1st get of boar, and junior champion sow. On Duroc Jerseys the Creamery Farm won: 2nd junior yearling sow; 3rd and 4th, senior sow pig; 2nd, young herd bred by exhibitor; 1st, produce of sow; 3rd, get of boar, and junior champion sow. In the Chester White classes the Creamery Farm won: 1st, junior boar pig; 1st, aged sow; 1st, senior yearling sow; 1st, junior yearling sow; 1st, 3rd, senior sow pig; 2nd, 4th, 5th, junior sow pig; 1st, young herd; junior champion boar; senior champion sow; junior champion sow; reserve champion boar, grand champion sow, and reserve champion sow. Andy Adams, Litchfield, was not far behind the Creamery Farm in nearly all classes of Chester Whites.

M. A. C. Wins On Hogs

The animal Husbandry Department of the M. A. C. won signal honors with its hogs. While the barrow show was the strongest in the history of the Show, there being an increase of 20 per cent in entries in these classes over last year, the college hogs succeeded in winning forty-six prizes. Among the premiums won were ten firsts, seven seconds, five thirds, four fourths, two fifths, three sixths, two sevenths and seven eights, and in addition to this two campionships, two reserve championships, one grand championship and one reserve grand championship.

Seven breeds of hogs were shown by the College, the premiums in the "on foot" classes being distributed among the different breeds as follows: Duroc Jerseys, 4; Poland Chinas, 6; Chester whites, 4; Berkshires, 6; Hampshires, 4; Tamworth, 5; and Large Yorkshires, 7.

It was in the Swine Carcass classes where the outstanding honors were won. In the 100-200 lb. class with sixty-two entries, second prize was obtained with "Michigan Laddie," a Berkshire barrow. In the 200-300 lb. class with fifty-eight entries, first premium was won with "Michigan-Repeater," a Berkshire barrow. A Berkshire, "Michigan O. K.," also won first premium in the 300-400 lb. class, against forty-six entries, while in the 400 lb. and over class with twenty-five entires, the College won first place with "Michigan Col.," a Chester White, and fourth prize with "Michigan State," a Duroc Jersey.

In addition to these honors, the carcass produced by "Michigan O. K." was made grand champion of the entire show, while the carcass produced by "Michigan Repeater" was given the reserve grand championship ribbon.

W. S. Adams, Litchfield, was the big Michigan winner in the Tamworth division and his animals placed well in nearly all classes. In the Tamworth division the M. A. C. took first, second and third in the class for fat barrows, 350-450 pounds, and first on a pen of three barrows of the same weight. Another Tamworth barrow won fourth in the 250-350 pound class. High awards went to the college in the fat Yorkshire division also. One barrow won the Yorkshire grand championship and first in the 150-250 pound class. Second place in this class likewise went to the college, as did first in the 250-350 pound barrow class, first and second in the class for pens of three barrows, 150-250 pounds, and first in the class for pens of three barrows 250-350 pounds.

The M. A. C. did all of Michigan's winning on sheep. In the Hampshire division the college won 5th on ewe lambs, association special; 5th, 3 ewe lambs; 4th, 3 ewe lambs, association special. The college also won prizes in the Shropshire and Oxford divisions.

Pervenche, owned by the Michigan Agricultural College, was named grand champion mare in the Belgian division of horses. She was also junior champion mare. In winning the grand championship, Pervenche exceeded her achievement of a year ago, when she was named reserve champion.

William E. Scripps, of Orion, took several places in the Belgian division, winning first in the class for two animals, produce of one dam, second in the class for stallion and three mares, and third in the three-mare class. The college took second place in the last-named class.

In the Percheron division the M. A. C. won several places. J. L. Miller, of Caledonia, was another from Michigan to win prizes on this breed of horse.

The International Livestock Exposition was a decided success from Michigan's point of view. As I heard one man from this state say, "The way the M. A. C. and individuals from old Michigan are taking prizes, it makes me want to tell the world where I'm from."

OH MONEY! MONEY!

(Continued from page 10.)

sympathies abominably. But I reckon she'll get some of the benefits of the others' thousands. Mrs. Jane, in particular, is always wishing she could do something for "Poor Maggie," so I dare say she'll be looked out for all right.

As to who will prove to be the wisest handler of the hundred thousand, and thus my eventual heir, I haven't the least idea. As I said before, they all need money, and need it badly—need it to be comfortable and happy, I mean. They aren't really poor, any of them, except, perhaps, Miss Flora. She is a little hard up, poor soul. Bless her heart! I wonder what she'll get first, Niagara, the phonograph, or something to eat without looking at the price. Did I ever write you about those "three wishes" of hers?

(Continued in January 5th issue.)

Second Sight

The young lady palmist of the church bazaar said to one of her girl clients: "I see by your hand you are going to be married."

"Wonderful," said the girl.

"You are engaged to a man named Wilkins," continued the amatuer seer.

"How amazing," gasped the girl, "surely the lines on my hand can not reveal the name——"

"Lines," sniffed the palmist. "Who said anything about lines? You are wearing the ring I returned to Mr. Wilkins three weeks ago."—Argonaut.

FORD RUNS 57 MILES ON GALLON OF GASOLINE

A new automatic and self-regulating device has been invented by John A. Stransky, 2109 Fourth St., Pukwana, South Dakota, with which automobiles have made from 40 to 57 miles on a gallon of gasoline. It removes all carbon and prevents spark plug trouble and overheating. It can be installed by anyone in five minutes. Mr. Stransky wants agents and is willing to send a sample at his own risk. Write him today.—Adv.

Uncle Rube Spinach Says:

HOW I GOT INTO THE MOVIES

THERE'S been times, quite a few, when I wanted to live the quiet life. I wuz on the farm then an' the quiet life sort of appealed to me. But you know I hankered for somethin' different. I wanted action—went to movin' pictur' shows an' such an' finally come to think I'd like to be a movie actor myself. Well folks I'm it—a movie actor, I mean. I'm a real actor now, I'm it every minute of my life 'ceptin' when I'm sleepin'. An' even then my landlady sez I'm movin' some. She sez, which's neither here nor there, 'at I sleep not only long, but loud. Well mebbe so—that don't bother me none. Anyway, I don't play the phonograph, the ukalele, nor the saxaphone, when I'm sleepin'. Well as I sed, I'm into the movies now an' course you'll want to know how it all happened. An' while I don't like to brag 'bout myself, yet as nobody else does it, I've got to do something for myself, so I'm jest goin' to bust out an' tell you all about the hull thing.

My first introduction wuz jest a few days ago. I went up town an' wuz kinda lookin' into windows an' at things on the street. Long skirts an' such, you know, an' a cop, a police, come up just behind me, tapped me on the shoulder with a little stick he had in his hand, an' told me to git movin'. I guess he wuz surprised to see me move so swiftly. You see lately, well since I went to bootleggin', I've been kinda s'picious of any man what wears a blue coat with buttons, brass buttons, onto it, so I moved with alacrity, if you know what that means, an' I wuz out of his sight in less time 'an I can tell it. That wuz my first appearance in the movie art.

Well, since I got hit jest a few days ago, by one of Hank Ford's offspring, I've been kinda movin' every time I hear an auto honk. I move in sever'l an' various directions. Sometimes I find myself into the top of a tree before I know 'at I've left the ground. The song of the siren mebbe is alright, but I'll be darned if I like to hear it come in from an auto behind me. So you see that put me right into another movie act, in fact, makes me purty nigh a star, 'cause I move so thick an' fast.

An' then you know, bein a widower, without a wife, an' there bein' sév'ral widows without husbands—well 'course this is another story—an' yit I'm jest as 'fraid of 'em as can be, an' that makes me a real movie actor. I move whenever I see one of 'em comin'. They mean alright—guess mebbe they do—mebbe solicitin' for the Japs or somethin', but anyways it means danger an' so I move—git into the movies an' am a reg'lar actor in self defense. Yes, an' there's the feller I owe money to—a cash customer, so to speak. Gosh, I move when I see him comin'.

An' then sometimes, with jest a little money in my suit case, or wherever I happen to have it, I go into a department store an' ask for some socks. The lady clerk shows me some for 80 cents or a dollar a pair, an' I sez: "Ain't you got some for 'bout 10 cents apiece." She looks at me with nose in the air—to git more wind, I s'pose—an' sez "Oh, you wear the cheap kind?" Well I move—she ain't my kind of girl any way, an' bein' 'at I hardly ever don't wear socks and how, I jest take my hat off'n my head for a minit, or maybe less, an' think of holy words or whatever it is an' I come away.

A movie actor in fact if not in name. Yes, since I'm in the movie class all right, you may never see me in pictures 'less I throw my hat in the ring, for pres'dent, then you wouldn't see me prob'ly, but you might see a pictur' of the hat.

Cordially yours.—UNCLE RUBE.

Poultry for Profit

TURKEYS AFFECTED WITH POISON IVY

I am now treating my turkeys for poison ivy. They are not getting any better but thought before I neglected any longer I would inquire if you have ever known of fowls getting poisoned. There are several patches of poison ivy around where the turkeys roam. If you know of any treatment better than the one I am using will you please send it to me. I am using two teaspoonfuls of Epson salts with one cup of boiling water, and when cooled enough to use I put in one teaspoonful of baking soda and wash their heads twice a day.—Mrs. L. A. H., Harbor Beach, Michigan.

—This is a new experience to all members of the department. The baking soda which you have used is probably the most effective method of combating this trouble, providing of course, you have made a correct diagnosis. There is a possibility that this particular flock of turkeys has become affected with Chicken Pox, in which case the skin erruptions would occur.—E. C. Foreman, Prof. of Poultry Husbandry, M. A. C.

SEND AFFECTED HEN TO M. A. C.

I know I am safe to tell you its Roup from what I have read of this disease although during past year is first I had it in my chickens. At first eyes and nose seemed to water, then later on the left side of the eye, appears a lump that looks like it contains matter, swells around the eye and sometimes over the eye till blind. Will eat until they die. It is hard for me to see a case of it among chickens until lump appears. I have always caught the ones affected and cooped them away from the rest. They live for a long time in this stage and I try to doctor them by putting a supposed medicine to be good for roup in drinking water and feed a chicken tonic, but anyway they finally die. Please tell me if there is anything that can be done for them in this stage? For the ones who seem well I clean everything best I can; hen house and drinking pans, spray with Creolin and put a drop in the drinking water. Give Epsom salts occasionally. Anyway this don't prevent well ones from getting the disease, and I don't know what to do next. I have several hens that look nice, but cannot tell how soon before they will have the disease. I now have four and have lost several. I always put the dead ones where no other chickens can ever get near them, and always coop the ones affected as soon as I see it. I sure would like to do something to save the ones that look well now.—O. McC., Mancelona, Michigan.

—Conditions like those described are very apt to be due to intestinal parasites such as tape worms or round worms. Coccidosis is also apt to be responsible for such symptoms. It will, therefore, be evident that nothing can be prescribed in the line of treatment until the real cause of the trouble is uncovered.

My advice is that you either have some of these chickens examined by a veterinarian or that you send a few of the affected ones to the Veterinary Department of the Michigan Agricultural College for diagnosis. H. J. Stafseth, Res. Assoc. in Bacteriology, M. A. C.

Last Shall Be First

The man who puts safety last usually goes to the hospital first.—Two Bells.

FREE BOOK ABOUT CANCER

The Indianapolis Cancer Hospital, Indianapolis, Indiana, has published a booklet which gives interesting facts about the cause of Cancer, also tells what to do for pain, bleeding, odor, etc. A valuable guide in the management of any case. Write for it today, mentioning this paper.(Adv

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(Continued on following page.)

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FRUIT AND ORCHARD

Edited by FRANK D. WELLS

MICHIGAN vs. WESTERN

AT a meeting of men interested in Michigan fruit, recently held in Detroit, the apple was the subject of discussion. The western product was matched against homegrown fruit and the result was—well, let the reader decide for himself.

Apples were there from Washington, such as can be obtained on the market. Apples were there from Michigan, the best that could be procured. They were compared in the package and out of it. They were eaten raw and cooked. They were baked and made into pie and sauce. Certainly the test was a fair way of trying the fruit. It was not color, but the really important qualities that counted. The results were of interest, not only to every apple growed, but to everybody who takes pride in the Great Lakes apple district.

First to be considered was the packing. The western stock was of a uniform grade and so closely packed that there was no shaking, even after coming on the railroad from the Pacific coast to Detroit, a journey long enough and rough enough to loosen the fruit if anything short of an earthquake could. The Michigan packages were all loose and shaky. The fruit varied from medium to large and very large in the same package. As might be expected the weight of such loosely packed cases was not uniform. Some were several pounds too light. The closely packed western fruit was up to standard in weight.

Some of the home-grown fruit was ripe, some half ripe, some decidedly green, so the flavor varied from good to indifferent and from indifferent to bad. The rivals from the Pacific coast were uniformly ripe, so similar in flavor. Score again for the latter.

In every way the West equalled Michigan and in some respect was so far ahead that it was hardly worth while to make a comparison.

It may be objected that these men were interested in western apples, so were not fair judges, but such was not the case. They were in reality prejudiced in favor of their home state, and came to the meeting expecting that Michigan would have the better of the contest. But the evidence was there and it was too strong for denial.

This is not saying that the western flavor is equal to that of the Michigan apple at its best. These judges did not say that fruit could not be grown here which would discount the best of western apples, but they did not and could not get it. So it should be expected that they and consumers generally will buy something that they know and can depend upon, rather than invest in uncertainties.

Michigan can produce as good apples as are grown and that is being done every year, but such fruit, when properly packed, does not need to depend upon the general market. There is a place for all of it and more like it.

But the fact remains that the packing and grading of Michigan fruit is deplorably poor. When will it be better? The subject has been discussed and agitated for years, yet little progress towards reform has been made. When will the time come that the name Michigan will stand for what it ought to on a package of apples?

(Rather severe on our homegrown fruit. Have any of our readers a word to say on the subject?—Editor.)

NOTES AND COMMENTS

If the orchard hasn't a cover crop it ought to have one. Weeds are better than nothing.

* * *

An orchard long in sod becomes rootbound. The sod can be flopped over until the ground freezes. A sod upside down is still a cover for the ground.

* * *

A few years ago I had to make cider of my russets, said an apple grower. Now I pick them for the auto trade in the spring. Wish I had more of them.

* * *

There is one mistake to which the novice is liable. The strawberry bed is covered too early. A mulch is important, but it should not be applied till the ground is well frozen. It is the thawing and freezing that plays hob with the plants. Put on the straw so as to keep the ground frozen until spring.

* * *

Plant a mulberry for the birds. They like the fruit and will spare the cherries, or some of them. The Russian variety grows quickly and bears abundantly. The fruit is not so good as that of some other kinds, but the birds don't care. Do they eat the fruit for what it is, or do they think they are getting a nice fat black worm?

FUR DEPARTMENT

THE MINK

THIS animal is of the weasel tribe. It is a flesh-eater—birds, fish, rabbits and other small animals form its principle food, it being particularly fond of muskrats, will also, if given the opportunity, raise havoc in the chicken house. Because of the value of his pelt the Mink is rapidly being exterminated in the more thickly settled districts and while some of his traits are not admirable, he is too valuable an animal and has paid too many hundred times the damage he has done in his occasional raids to deserve total extermination. His favorite haunts are along streams, around lakes and in settled districts, ditches and drains. His pelt becomes prime in early November and is too valuable to be destroyed earlier than that. He also loses quality early and by breeding season in February should be left to produce more good dollars for the next season. The mink furnishes about the hardest proposition the amateur trapper has to contend with as more skill and a better knowledge of its habits is necessary to be successful than of the other common fur bearers. There are many good mink sets but the amateur will find natural water sets the most profitable. I will try to describe a few for you. A log laying along the bank so part of it is in the water forms a base for one of the best. Place your trap, I prefer No. 1 or No. 1½ Newhouse, in about two inches of water and securely stake a bait of bird or fish just beyond—it will usually catch any but the wisest that pass that way. Any natural looking hole under a bank or a hollow log at the edge of the water or a drain tile coming into the creek or ditch will be thoroughly investigated by every Mink that passes and a trap carefully placed in the approaches to these points will be successful. The less you disturb the surroundings the more success you may expect. Don't set several traps in poor places but look for the spot the mink has got to step in, in his investigations and you will be surprised at the ease with which this clever animal is caught. They are great travelers and while they may not pass the same spot once in several days they can usually be counted on to return. I have followed mink signs long distances looking for just the right place to make a set and my patience has usually been rewarded. Always case handle your skins and take the bone from the tail and open the tail to the tip. Remove all fat and see that the fur is clean and dry before stretching. Time spent in making suitable boards is as productive of good returns as time spent in properly setting your trap. A long narrow board slightly narrower at the shoulders than at the base and tapering to a point at the nose with edges to 1-16 of an inch varying in width at the base from two to four inches and made from 3-8 inch box lumber make the finest kind of mink boards, and will turn out a skin that the buyer will call "trapper handled." In stretching have back in middle of board, pull on evenly and don't try to over stretch. Tack tail open and hang in a cool dry place. Never turn fur side out.

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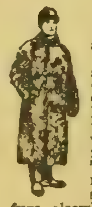

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THE MICHIGAN BUSINESS FARMER
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The Agricultural and Business Situation

Revised Monthly by the Department of Research of the American Farm Bureau Federation.

PRICES:

Features in the agricultural situation this past month have been the decline in wheat, corn and hog prices, and the rise in cotton prices.

Wheat at Chicago is off 6 cents from a month ago. Canadian wheat is coming in over the 30-cent tariff wall. This is due to the high milling qualities of Canadian wheat, which is demanded at a premium, and to the scarcity of high grade hard wheats in the United States. With the low supply of domestic wheat east of the Rocky Mountains, a higher tariff would without doubt be effective in raising the price in this territory.

The Wheat Council of the United States is recommending a reduction of wheat acreage from 62 million to about 50 million acres as fast as alternative crops can be profitably introduced. The purpose is to take American wheat producers off the world market and raise the domestic price to profitable levels. The ultimate effectiveness of the proposal is dependent upon a prohibitive tariff and the holding down of production in face of the price incentive to increase it.

Estimated cotton production was reduced three-fourths of a million bales by the November Government forecast. Prices have gone up another 5 cents, now standing at about 35 cents per pound.

Prices of fat hogs at Chicago are now around $6.85, compared with $7.00 a month ago and $7.70 a year ago. Since September 1 combined receipts of hogs at eleven leading markets have been about 30 per cent greater than in the same period last year. This has been caused partly by the unfavorable corn-hog ratio (7.9 bushels of corn now equal in value to 100 pounds of pork compared with the average of 11.2 bushels). Another influence is the growing prevalence of cholera, which the Department of Agriculture reports more serious than in any year since 1914, when the last extensive outbreak reached its height. Owing to low prices, the cost of immunizing and relative freedom from disease for a number of years, the percentage of susceptible animals is extremely high.

Corn has dropped over 15 cents a bushel at Chicago during the last thirty days. It is now 83 cents, compared with $1.01 a month ago. Of the corn quoted at $1.01 at Chicago, farmers had little or none to sell. The supply of corn this year, counting the crop and carry-over, is slightly larger than last, but its quality is low and feeding value per bushel is below normal.

INTEREST RATES:

In August, 1920, at the beginning of the depression of 1921, interest rates on four to six months' commercial paper were 8.25 per cent. They had declined to 4.25 per cent by July, 1922. From this low point they reached 5.25 per cent last spring and now stand around 5.12 per cent. This fall, when the seasonal demand for money would ordinarily cause an increase in the rate, there has been a slight easing off. The belief is fairly general that it will continue to decline moderately the balance of this fall and winter, and that a plentiful money supply at low rates will provide a sound basis next spring for expanding business activity.

GENERAL BUSINESS:

Industrial production has declined since last spring. This has led to the fear that another business depression is starting. The National City Bank of New York points out that we have never had a serious business depression in this country which began in an easy money market. "It is inconceivable," says the bank, "that the conditions which create a real crisis can develop without the pressure which results from an over-extended credit situation."

Moreover, there is no accumulation of goods which should cause factories to further reduce activity. Demand for the products of factories due to full employment at high wages continues unabated and farm purchasing power will probably be almost one-half billion dollars more this crop year than last.

Construction work has not caught up with the demand for buildings and promises to proceed at a high rate. Railroads are handling big traffic volume without congestion and are placing large orders for new equipment. The depressing influence of the European situation has probably spent its force. The memory of the 1921 collapse, still fresh in the minds of business men, will tend to hold overexpansion in check and should be an important factor in assuring a comparatively long period of even activity.

I. Production and Trade.

1. Agriculture: U. S. Production—000,000 omitted.

	November, 1923 Estimate	1922	Average 1917-1921	1923* Per Cent
Corn, bu.	3029	2891	2931	103
Wheat, bu.	782	862	835	94
Oats, bu.	1302	1201	1378	94
Barley, bu.	199	186	192	104
Rye, bu.	65	95	70	93
Buckwheat, bu.	14.5	15	15	97
Potatoes, white, bu.	417	451	388	107
Potatoes, sweet, bu.	97	110	94	103
Cotton, bales	10.2	9.8	11.2	91
Tobacco, pounds	1437	1325	1361	106
Flaxseed, bu.	19	12	10	190
Rice, bu.	33	42	41	81
Peaches, bu.	46	57	43	107
Apples, total, bu.	194	201	160	121
Apples, commercial, bu.	33	31	26	127
Sugar beets, tons	6.7	5	7	96

* As per cent of average of 1917 1921.

2. Wheat Situation: (Nat C. Murray, Clement Curtis & Co.)

(000,000 omitted)

	East of Rockies	West of Rockies	Total
Supply:			
Carried over, July 1, 1923	91	10	101
Production, 1923 crop	645	137	782
Total supply	736	147	883
Distribution:			
Dometisc requirements for food, feed and seed	583	51	634
Excess feeding	28	7	35
Total domestic requirements	611	58	669
Exported to date, Nov. 17, about	72	15	87
Total	683	73	756
Remainder for carryover and export	53	74	127

3. Mining (Federal Reserve Bank of New York):

Figures express production as a percent of normal. In estimating normal production, due allowance is made for seasonal variation and year to year growth.

	Sept., 1923	Aug., 1923	Sept., 1922
Anthracite coal	35	104	61
Bituminous coal	99†	105	86

3a. Manufacturing:

Wheat flour	109	116	114
Sugar	102	74	110
Cotton	88	89	92
Wool	98†	98	99
Pig iron	102	110	68
Steel ingot	99	107	87
Copper	103†	111	79
Gasoline	*	108	102
Cement	136	130	121
Lumber	*	125	107
Automobiles	140†	145	97

* Not available. † Preliminary.

4. Building Expenditures (Bradstreets):

(000,000 omitted)

	1923	1922	Per cent Increase
First quarter	$794	$522	52.3
Secnd quarter	830	718	15.6
Third quarter	690	629	9.5
October	270	205	31.7

5. Transportation (000 omitted):

Freight car loadings:	Week Ending Nov. 3, 1923	Same Week Month Ago	Same Week Year Ago	Week Ending Nov. 3, 1923*
Total	1035	1080	980	106
Grain and grain products	48	50	52	92
Livestock	44	42	39	113
Coal	180	192	191	94
Coke	11	12	11	100
Forest products	76	72	60	127
Ore	43	67	47	92
Merchandise	252	254	232	109
Miscellaneous	382	389	348	110

* As percentage of week year ago.

6. Employment:

	Oct., 1923	Sept., 1923	Oct., 1922
Out of 63 industrial centers employment:			
Increased over previous month in	31	27	54
Decreased over previous month in	32	36	9

7. Bank Debits:

(Units of $1,000,000,000)

	Oct., 1923	Sept., 1923	Oct., 1922
New York City	$19.15	$16.39	$22.21
Outside bank debits	19.75	17.38	18.42

8. Mail Order Sales:

	October, 1923	October, 1922	Ten Months Ending October, 1923	Ten Months Ending October, 1922
Montgomery Ward	$15,165,652	$10,288,916	$105,469,141	$ 69,851,140
Sears Roebuck	22,576,793	19,933,164	174,326,540	141,212,969

II. Foreign Trade.

1. Exports (000 omitted):

Commodity:	September, 1923	September, 1922	Nine Months Ending September, 1923	Nine Months Ending September, 1922
Grand total	$374,191	$307,563	$2,881,252	$2,685,106
Beef and veal, lb.	3,256	3,356	21,711	25,246
Pork, lb.	85,462	57,406	676,847	506,267
Lard, lb.	83,630	61,120	786,174	559,700
Butter, lb.	468	1,077	4,597	9,488
Cheese, lb.	278	334	7,365	4,059
Hides and skins $	393	226	2,699	2,898
Corn, bu.	1,136	9,608	38,660	141,881
Meal and flour, bbl.	39	40	514	493
Wheat, bu.	15,408	25,987	80,197	126,156
Flour, bbl.	1,568	1,300	10,651	10,458
Oats, bu.	272	4,379	2,826	24,024
Meal and rolled, lb.	18,590	9,425	101,888	75,650
Fruits and nuts $	6,327	7,311	37,611	43,610
Vegetable oils $	655	1,024	7,793	9,782
Sugar, lb.	9,616	28,824	426,851	1,808,841
Tobacco, lb.	37,646	33,102	330,635	295,814
Cotton, bales	689	368	1,892	3,849

2. Imports:

(000 omitted)

Grand total	$253,645	$229,493	$2,904,196	$2,182,049
Beef and veal, lb.	3,542	10,533	13,438	26,998
Pork, lb.	189	76	912	582
Butter, lb.	1,712	89	15,669	2,735
Cheese, lb.	5,033	3,037	39,631	26,244
Hides and skins $	5,918	9,143	100,380	68,428
Corn, bu.	8	2	139	97
Wheat, bu.	1,235	782	8,353	14,320
Flour, lb.	2,665	8,197	41,026	108,154
Oats, bu.	1	37	98	1,271
Fruits and nuts $	3,537	3,621	47,323	48,979
Vegetable oils $	3,386	3,209	53,183	45,821
Sugar, lb.	447,554	890,150	6,161,641	8,434,011
Tobacco lb.	3,097	2,780	46,409	51,556
Wool, lb.	7,883	27,892	863,073	278,634

3. Prices of Foreign Drafts:

	Nominal Gold Value Par of Exchange	Price of Demand Drafts Nov. 19, 1923	Oct. 23, 1923	Nov. 20, 1922
England	$4.87 to 1 £ sterling	$4.33	$4.50	$4.49
France	19.3c to 1 franc	5.35c	5.83c	7.41c
Sweden	26.8c to 1 crown	26.35c	26.29c	26.8c
Holland	40.2c to 1 florin	37.64c	38.71c	39.35c
Argentina	42.5c to 1 peso	30.63c	32.10c	36.6c
Japan	49.9c to 1 yen	48.13c	48.75c	48.35c

4. Discount Rate of the Bank of England:

November 14	Month Ago	Year Ago
4%	4%	3%

III. Money and Credit.

1. Gold Movement (000 omitted):

	Sept., 1923	Sept., 1922	Nine Months Ending September 1923	Nine Months Ending September 1922
Exports of gold	$ 1,023	$ 1,398	$ 26,039	$ 13,142
Imports of gold	27,803	24,464	220,521	209,555

2. Federal Reserve Ratio:

	Nov. 17, 1923	Oct. 20, 1923	Nov. 15, 1922
Ratio of total reserves to deposits and Federal Reserve note liabilities	75.6%	75.3%	75.2%

3. Interest Rates:

	Oct., 1923	Sept., 1923	Oct., 1922
4-6 mos. commercial paper	5.35%	5.41%	4.62%
60-90 days commecrial paper	5.12%	5.12%	4.40%

4. Stock and Bond Prices:

	Nov. 9, 1923	Oct. 11, 1923	Nov. 10, 1922
20 Railroad stocks	$80.28	$79.23	$83.50
20 Industrial stocks	91.14	87.16	97.50
40 Bonds	86.79	85.31	89.30

5. Business Failures:

	Week Ending Nov. 8, 1923	Oct. 11, 1923	Nov. 9, 1922
Bradstreets	383	326	374
Dun	428	292	337

IV. Prices.

1. Wholesale Prices of Farm Commodities:

Quotations at Chicago except as noted.

	Nov. 20, 1923	Month Ago	Year Ago
Fat hogs, cwt., average	$ 6.85	$ 7.00	$ 7.70
Beef steers, good native, cwt., av.	9.90	10.25	9.35
Fat lambs, cwt., average	12.25	12.70	14.45
Fat sheep, cwt., average	7.25	6.00	7.40
Wool, Ohio Delaine unwashed, lb. (Boston)	.54	.535	.565
Butter, 92 score, lb.	.525	.465	.505
Cheese, No. 1 twins, lb.	.24	.24	.2425
Eggs, fresh firsts, doz.	.50	.37	.525
Poultry, hens, lb.	.1725	.215	.18
Wheat, No. 2 hard, bu.	1.045	1.1025	1.20
Corn, No. 2 mixed, bu.	.835	1.0125	.725
Oats, No. 2 white, bu.	.44	.4375	.4475
Rye, No. 2, bu.	.71	.7075	.89
Barley, bu.	.605	.655	.67
Kafir, No. 2 white, cwt. (K. C.)	1.725	1.80	1.89
Hay, No. 1 timothy, ton	27.50	26.50	23.00
Flax, No. 1, bu. (at Minneapolis)	2.4125	2.38	2.45
Cotton, middling, lb. (New York)	.3535	.3085	.254
Beans, white, cwt. (f. o. b. Michigan)	5.35	5.75	6.90
Potatoes, northern whites, cwt.	1.00	1.00	.55
Onions, midwest yellows, cwt.	2.65	3.25	1.90
Apples, winter varieties, bbl.	5.25	5.00	5.50
Hides, No. 1 native, heavy (Chicago)	.14	.15	.23
Sugar, fine granulated, lb. (N. Y.)	.0885	.0935	.07

2. U. S. Department of Labor Relative Wholesale Prices:

Prices in year 1913 equal 100.

	Oct., 1923	Sept., 1923	Oct., 1922
All commodities (weighed average or general price level)	153	154	154
Farm products	144	144	133
Food products	148	147	140
Cloths and clothing	199	202	188
Fuel and lighting	172	176	226
Metals and metal products	142	144	135
Building materials	182	182	183
Chemicals and drugs	129	128	124
House furnishing goods	183	183	176
Miscellaneous	120	121	120

3. Prices of Farm Products at the Farm Relative to 1913:

(U. S. Bureau of Agricultural Economics)
Prices in year 1913 equal 100.

Commodity:	Sept., 1923	Aug., 1923	Sept., 1922
Cotton	219	194	161
Corn	144	146	104
Wheat	119	113	115
Hay	113	110	98
Potatoes	156	185	108
Beef cattle	97	95	92
Hogs	104	92	110
Eggs	167	137	158
Butter	153	145	134
Wool	222	221	189

4. Relative Purchasing Power of Farm Products:

(U. S. Bureau of Agricultural Economics)

The quantity of various commodities which a given amount of each farm product would purchase at prices prevailing in 1913 is put equal to 100. The figures given represent the percentage of this quantity which the same amount of farm products would purchase in September, 1923. Prices at the farm are used for agricultural products, and wholesale prices at central markets for other commodities.

	All Commodities	Cloths, etc.	Fuel, etc.	Metals, etc.	Building Mtls.	House Furn'g
Cotton	142	103	124	152	120	120
Corn	93	71	82	100	79	79
Wheat	77	59	68	83	65	65
Hay	73	56	64	79	62	62
Potatoes	101	77	89	108	86	85
Beef cattle	63	48	55	67	53	53
Hogs	68	52	59	72	57	57
Eggs	108	83	95	116	92	91
Butter	100	76	87	106	84	84
Wool	144	110	128	154	122	121

Average purchasing power of all farm products in terms of all other commodities. Same basis as above table.

1913	100	December, 1921	62
1914	112	July, 1922	69
1915	106	August	64
1916	89	September	64
1917	106	April, 1923	70
1918	112	May	71
1919	111	June	71
1920	86	July	72
1921	67	August	73
1922	69	September	75

MARKET FLASHES

MARKET SUMMARY

All grain quiet after small gains in wheat and rye. Beans firm after small advance. Eggs lower. Butter firm. Dealers expecting large supply of poultry for Christmas. Potatoes slightly firmer. Dressed calves and hogs easy. Cattle steady. Hogs higher. Sheep lower.

(Note: The above summarized information was received **AFTER** the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press —Editor.)

FOOTE'S MARKET LETTER

BY W. W. FOOTE

Improved Farmer's Outlook

NINETEEN hundred and twenty-four promises to be an improvement over the closing year, and in various farming districts the present year has not been so bad. Much depends upon the lines of farming followed, and the most unsatisfactory returns have followed wheat farming, this affecting many of our Michigan farmers. On the other hand, the many Michigan farmers who are fruit and berry specialists have come out well ahead, the marketing of these, as well as of grapes, reaching vast totals. The Chicago market for Michigan grapes, apples, peaches, cherries, plums, etc., is quickly reached, being across Lake Michigan, and it uses a large proportion of these famous products. Since prohibition became a law of the United States, for some reason, the consumption of grapes has reached hitherto undreamed of proportions, and this applies to the grapes of California, New York and other states as well as to the Michigan grapes. Michigan beans too have had a widening sale and brought liberal returns, as have the products of dairies, butter, eggs and poultry having larger consumption than ever before. Recently butter has undergone a further advance, and tub butter is selling in Chicago retail markets around 60 cents a pound. Eggs come high at this season when the hens can hardly be coaxed into attending to business, but the cold storage eggs help out a lot, October, November and December being the low production months. According to the Department of Agriculture, about one-half of the eggs are laid in the four months from March to June, and if it were not for the placing of eggs in storage there would be an enormous shortage in the winter period. There is a serious honey shortage this year, but the bees at any rate provided the farmers plenty of the delicious sweet. The turkeys did unusually well this year and brought in good profits, even if they sold lower than last year. A small flock of turkeys is a good thing, and so is a supply of geese and ducks, even if you fail to market many. Then there is the onion, which the truck farmers find extremely profitable, as was pointed out during the recent convention of the National Onion Association held in Chicago. About a million bushels of onions are brought from Spain to this country every year, while the annual consumption of home grown onions is about seventeen times this amount. Onions are good for the health, as well as pleasant to eat, and no farm should be without its garden, in which there should be a well kept onion patch.

Increased Trade in Corn

The greater part of the interest of the Chicago grain trade is centered in corn at the present time. The wheat and oat markets are in a rut, and speculators are not trading at all freely in the two cereals. Country offerings of corn are not large, and farmers continue to be dissatisfied with prevailing prices. The visible supply of corn in the United States is insignificant as are exports. Within a short time corn has sold lower than a year ago, but a little more than two years ago it sold down to 46½ cents.

Increased Movement in Rye

Millers are doing a good business in rye, two Chicago mills making around 2,000 barrels a day, while a number of outside millers are also busy. The rye flour is mostly shipped to Germany, one of the Chicago mills having sold around 5,000 barrels within a week. Rye is being shipped from Chicago, all rail, to eastern mills, one mill taking 5,000 bushels a few days ago. Exports of rye flour are being included in the reports of wheat flour which swells clearances and has created the impression that wheat flour clearances are on a large scale. Rye has been marketed freely, the liberal offerings having ran the visible supply in this country up to 18,266,000 bushels, comparing with 8,713,000 bushels a year ago. Recent sales were made of rye in the Chicago market at 68 cents, comparing with 90 cents a year ago.

The Wheat Outlook

Wheat farmers are waiting developments before selling freely, but prospects do not look very bright for government help in putting prices on a higher level, and declines follow after rallies in prices. Prices are much lower than a year ago, and the visible supply in the United States reached a total a while ago of 72,547,000 bushels, comparing with 33,516,000 bushels on the same day in 1922. It turns out that a great deal of wheat has been fed to live stock owing to the low market price, and a short time ago Secretary of Agriculture Wallace reported that around 90,000,000 bushels had been used in this way, a much larger quantity than was supposed. At the present time the leading wheat exporting countries of the world are the United States, Canada, Argentina and Australia, and fair exports are being made by this country, although not enough to put prices higher. December wheat sold recently in the Chicago market at $1.05, comparing with $1.23⅝ a year ago. Corn sold around 72 cents, comparing with 74⅝ cents a year ago. Oats sold around 43 cents, comparing with 45½ cents a year ago.

The Hog Outlook

Stockmen throughout the corn belt states are hoping for higher prices for hogs after the last crop of pigs matures and is out of the way; and it is estimated by men who are well informed that breeding of sows for next spring's pigs will show a falling off or from 20 to 25 per cent, but this is merely a guess. At any rate the wise course seems to be for farmers to do less breeding. Of course, corn and hogs will always be among the staple farm products in this country, for our domestic consumption of fresh and cured hog products reaches enormous proportions, while this country does a large part in feeding the world. There are many complaints regarding our foreign trade, but somehow European countries manage to buy liberal quantities of lard and cured hog meats in this country, and weekly exports are extremely large. Lard is selling at far higher prices than a year ago, because of the enormous demand, but prices for fresh pork are off and retail meat shops in Chicago are selling roasts and chops for 10 to 15 cents a pound. Overwhelming marketing of hogs explains the tremendous decline in their prices, and within a short time average prices for hogs were the lowest since 1915. Up to recent date the combined hog receipts in twenty markets for the year amount to 40,802,000 head, comparing with 32,001,000 for the same time last year and 30,829,000 two years ago. The spread in hog prices has greatly narrowed, bringing light and heavy kinds much closer together. Hogs sold in Chicago recently at $6.50 to $7.25, comparing with $7.25 to $8.30 a year ago.

Increased Cattle Feeding

An increase of 2 per cent in the number of cattle on feed in the eleven corn belt states is shown by a preliminary Department of Agriculture report. The states showing the largest gains are those having either a large amount of soft corn which must be utilized within a few months or a big increase in corn production. As compared with 1922, there is an increase of 10 per cent in the number on feed in South Dakota and Minnesota, and 5 per cent in Illinois, Nebraska, Indiana and Wisconsin. Ohio is off 10 per cent and Kansas 5 per cent. It is estimated that the average weight of fed cattle will be somewhat less than last year.

Yearling Cattle Wanted

Seldom, if ever, has the demand for well fattened yearling steers and heifers been so good as during recent weeks, and in the Chicago market killers have discriminated severely against fat heavy steers. For a short time after Thanksgiving the demand for beef was so lively that despite unusually large receipts of cattle in the Chicago market, prices advanced materially, but later on the demand fell of so much that a big drop in values took place on all except choice yearlings. Recently the bulk of the steers sold at $8 to $11.50, with prime cattle taken at $11.75 to $13.25, and sales all the way down to $6.40 to $7.50 for the commoner light weights, and inferior little steers salable at $4.25 to $6.35. Approaching cold and stormy weather made farmers disposed to hasten marketing their short fed cattle, and the offerings averaged poorly in grading. The best beeves were taken at fancy prices for the Christmas trade and comprised but a small share of the transactions. Cows and heifers sold at $3.25 to $10.50, while calves sold at $5.75 to $10.65 and stockers and feeders at $5.75 to $10.50. A year ago common to prime beef steers sold at $6.65 to $14. Combined receipts in twenty markets for 1923 to late date amounted to 14,058,000 cattle, comparing with 13,610,000 a year ago.

Sheep and Lambs on Feed

There were about 3 percent, or 170,000 head, more sheep and lambs on feed for market in the Corn Belt and Western states on December 1, this year than on the same date last year according to an estimate given out by the United States Department of Agriculture. The total estimated number on feed this year is 5,170,000 head of which 2,838,000 head are in the Corn Belt and 2,332,000 head are in the west as against 5,000,000 head on feed last year of which 2,624,000 head were in the Corn Belt and 2,376,000 head were in the west.

In the Corn Belt states there are about 210,000 head more on feed this year than last. Of this increase over 40,000 head are in the states east of the Mississippi and 170,000 head in those west. The states showing considerable increases are Indiana with 55,000 more and Iowa with 117,000 more while the two largest feeding states, Michigan and Nebraska, show little change. The farm feeding in Illinois shows an increase of around 60,000 head but this is more than offset by a decrease of 70,000 head at feeding stations adjacent to Chicago.

The western feeding areas show a decrease of some 40,000 head from last year. Colorado, however, shows an increase of 40,000 head from 1,400,000 last year to 1,440,000 head this year. This increase is due to 150,000 head more in Northern Colorado, the Arkansas valley showing a decrease of 110,000 head and the San Luis Valley practically the same number as last year. Idaho shows a decrease of 70,000 head while Utah shows the same number as last year. California and Nevada show decreases of 50,000 and 35,000 head respectively while Montana and Wyoming show increases of 20,000 and 15,000.

While the total market movement of sheep and lambs from Corn Belt pastures and western ranges this year shows an increase of around 300,000 head over last year. This increase has been due to the increased marketings of western lambs. The marketings from the Corn Belt states during the months when the native grass stock moves show a decrease of over 500,000 head from last year and every state shows a decrease; the marketings of western lambs from July 1, to November 1, show an increase of over 800,000 head. The shipments of stocker and feeder sheep and lambs into the Corn Belt through markets show an increase of around 300,000 head from August 1, to November 1. This decreased marketing of native stock may indicate either an expansion of the sheep industry in the Corn Belt by holding back ewes and ewe lambs or the possibility of an increased marketing of native stock this winter; in which latter event the Corn Belt marketings will be larger than above indicated.

The movement of feeding stock both into the Corn Belt and Western areas was earlier this year than last and the movement during November showed a sharp falling off. The weight of feeding lambs was probably about the same in all areas this year as last.

The indications are that the supply of fed sheep and lambs for slaughter coming from areas that usually ship to Corn Belt markets during the next five months will be somewhat larger than last year but that the supply in the areas shipping to the Pacific Coast markets will be smaller. But since there are always considerable numbers of lambs put on feed after December 1, if this number this year shows a marked falling off the total market supply of fed stock from now to June 1, may be no larger than it was last year.

The first Colorado lambs of the season have arrived in Chicago and sold at $13.

BEANS

Reports from the eastern markets show the demand for pea beans is very good and good quality stock is finding ready market. In the east most Michigan choice pea beans are put in cartons and sold at a nice profit. Why not put them up in cartons here in Michigan and keep the profit at home where it belongs? Prices at Detroit are up 5 cents but the market is unchanged.

POTATOES

The supply of potatoes is ample at Detroit to care for all demand and the market is steady. Prices are unchanged.

WHEAT

Detroit—Cash No. 2 red & No. 2 mixed, $1.10½.

Chicago—Cash No. 2 red, $1.09¼.

Prices one year ago—Detroit, Cash No. 2 red, $1.42.

CORN

Detroit—Cash No. 3 yellow, 78c; No. 4, 74c.

Chicago—Cash No. 2 yellow, 72¼@72½c.

Prices one year ago—Detroit, Cash No. 2 yellow, 80c; No. 4, 78c.

OATS

Detroit — Cash No. 2 white, 50½c; No. 3, 48c.

Chicago—Cash No. 2 white, 43½@45½c; No. 3, 41¾@43¾c.

Prices one year ago—Detroit, Cash No. 2 white, 52½c; No. 3, 51c.

RYE

Detroit—Cash No. 2, 73½c.

Chicago—Cash No. 2, 70c.

Prices one year ago—Detroit, Cash No. 2, 94c.

BEANS

Detroit—C. H. P., $4.85@4.90 per cwt.

Prices one year ago—Detroit, C. H. P., $7.50 per cwt.

POTATOES

Detroit—$1.16@1.33 per cwt.

Chicago—$1@1.15 per cwt.

Prices one year ago—Detroit, 94c@$1.00 per cwt.

HAY

Detroit—No. 1 timothy, $23.50@24; standard & light mixed, $21@22; No. 2 timothy, $21.50@22; No. 1 clover mixed, $21@22; No. 1 clover, $21@22 per ton.

Chicago—No. 1 timothy, $25@26; No. 2, $23@25; No. 1 light timothy & clover mixed, $24@26; No. 1 clover, $23@25 per ton.

Prices one year ago—Detroit, No. 1 timothy, $16.50@17; light light standard, $16@16.50; light mixed, $16@16.50; No. 2 timothy, $14@15 per ton.

PRITCHARD'S WEATHER FORECAST
INTERPRETED BY THE STARS

Week of December 23

LIGHT showers or snow flurries are probable during early part of this week in Michigan and in some sections it may be just enough to get by with a "White Christmas." The temperature about Sunday will be cold for the season but by Christmas day will be moderating.

About Thursday there will be an increase of storm indications with more rain or snow, if not some sleet and wind, in the state but the week goes out with a brief change to cooler and mostly pleasant weather, except for some local storms.

Week of December 30

Light rains over southern counties of Michigan with rain, sleet or snow in sections farther to the north are the conditions to be expected during first half of this week. The winds will be brisk to high with the probabilities that with any great amount of snow after Monday, drifts will be common. These conditions may last through Wednesday.

Following the middle of the week temperatures will drop decidedly and the sky clear off. Bright days and clear star-light nights will probably hold out during the balance of week. Temperature, however, will moderate during closing days of this week.

January Warm

The average temperature for January in Michigan is expected to be above the seasonal normal. The precipitation for this same period is expected to average about or possibly a little above the normal. We would interpret this that January will not see heavy snow fall in Michigan for the month as a whole.

Summer Forecast O. K.

Latest government figures show Michigan experienced temperatures three degrees below normal during the summer months and that no high temperature marks were made. These facts agree with our forecast of last June. We also stated at this time that "October and November moisture conditions will tighten up," a forecast that has been remarkably proven by the disasterous forest fires in October due to dry weather and the ideal weather for out-door work and sports in November.

WHAT THE RE-APPORTIONMENT FIGHT IS ALL ABOUT

(Continued from Page 3)

evident that the only safe-guard of the rural districts in this re-appointment struggle is the moiety clause in the state constitution which provides that any county having more than half of an exact mathmatical ratio of representation should be entitled to its own representative. The population of Michigan according to the 1920 census was 3,668,412. There are 100 representatives in the state legislature, so an exact ratio would be 36,684. A moiety would be one-half of this or 18,342.

While the constitution specifically provides that any county having a moiety of population is entitled to independent representation, it does not make clear whether or not this rule should apply to a group of smaller counties. In other words the legislators are at a loss to know whether they should cease grouping counties when the district thus formed has a moiety or whether they should continue until the total population has reached a full ratio. The Attorney General has ruled that the moiety clause does not apply to districts, but only to individual counties.

Regarding the senatorial reapportionment the condition is somewhat different. There is no moiety clause covering this situation, but the language of the constitution is regarded by some as being significant, for, while it says that the representatives shall be apportioned anew every ten years, it says that the senatorial districts shall be "rearranged." The Detroit members insist that the new senatorial districts should be formed strictly on the basis of population, which would give Wayne ten senators. However up-state senators insist with equal firmness that there is nothing in the constitution that provides that the senatorial districts shall be arranged solely on the population basis. They maintain that the legislature is perfectly at liberty to take into consideration any and all other factors.

Bitterness Still Lingers

It is apparent that some bitterness still lingers in the minds of the up-state members as a result of the gas tax fight in the regular session. These members are none too friendly to their Detroit colleagues or to the administration in general. They are not in favor of relinquishing any of the control which they now enjoy. As one senator expressed it, when testifying before the Senate Apportionment Committee, "Let Detroit learn to govern itself before it tries to govern the whole state."

Before the session convened it was definitely reported that the "Give Detroit nothing" sentiment of the up-state representatives would make it impossible to pass any sort of a constitutional re-apportionment bill. When the governor and Detroit members moved heaven and earth to defeat the gas tax at the regular session they "sowed a wind and they now reap a whirlwind."

Itch for Gas Tax

Probably nothing will restore a complete friendly feeling among the members of the state legislature until the Governor submits a message to them permitting them to enact the long desired state two cent gasoline tax. If he permits the legislature to consider the problem of highway finance there will probably be very little opposition to the gas tax. The only question will be regarding the best form of such a tax and whether or not the present license fees shall be reduced or displaced by a weight tax.

A wail is going up from certain cities in Michigan that if the gas tax is enacted, provision should be made for the return of a portion of the revenue to the cities from whence it came. However, some leading representatives have a scheme which they believe will quiet this opposition. They are going to urge the passage of a law to require the state to take over the entire burden of a trunk-line construction and maintenance. This would apply equally to trunk lines whether passing through a city or the open country. They believe that such a bill would be fair and would receive the support of the city people who are now objecting to all the revenue of the gas tax going directly into the state treasury.

It now looks as if the governor would not give the legislature a chance to even consider the question of a gas tax.

FARMERS' CLUBS FAVOR GAS TAX AND SALARY CUT

(Continued from Page 6)

day as the most critical in the history of agriculture. "Farm equipment throughout the country has been wearing out, and has not been replaced," he said, and estimated that from ten to fifteen billion dollars would be required to restore America's agricultural equipment to its former place.

He added that the equipment of the farmers is now in much the same shape that the railroad supplies were at the close of the World War, and urged the farmers to take definite and united action to remedy the situation at once.

In speaking of the work of the agricultural colleges of the country, Dr. Mumford said, "The agricultural colleges and their experimental stations are the great laboratories working for the farmers, and play a very important part in the success of the industry. The value of Rosen Rye, developed by specialists at the Michigan Agricultural College, to the farmers of this state has been more than the total cost of maintaining the institution since its foundation 66 years ago."

The early history of farm organization was traced by Dr. Mumford, and the advantages of its present day form pointed out. Each farmers' association, the grange, the farm bureau, and the farmers' clubs, has its own service to perform, according to Dr. Mumford, and these organizations should cooperate rather than compete.

"Through complete federation, all farmers' organizations of the country can work together on their problems, and can speak in a united voice that will bring results. Complete federation is the next step," he declared.

Clark L. Brody, head of the State Farm Bureau, gave a short address at the annual banquet, held in the evening of the first day's sessions. In urging greater organization among the farmers of the state, he said, "It is necessary for each group of producers of various farm products to organize separately if they are to market their products in the best way. Each organization can market their own products, and by cooperation among these organizations, the greatest good to the farmers of the state can be accomplished."

Mr. Brody pointed out that marketing organizations gave the farmers the best sales and distribution ability that can be obtained, and urged that the associations demand greater ability when selecting their managers, and that they stand ready to pay these men adequate salaries.

Dr. Marion LeRoy Burton, president of the University of Michigan, was the principal speaker at the final session Wednesday afternoon. "Brains plus character is the nation's need today," he said. "The thing that America needs is to stop guessing and base her decisions on genuine thought."

President Burton spoke on "The Mind," which he said he considered to be of far greater importance than any of the social, economic, or agricultural problems that he might discuss.

There are many kinds of minds, according to President Burton, but the ideal type is the thinking mind. "We must train our people to think if we are to have real progress," he said. "Three things are necessary for a thinking mind. First, you must get rid of all prejudices; second, forget all about popularity; and third, do not 'shy' at the problems which confront you."

He mentioned the taxation problem only in passing, but said, "I am profoundly in sympathy with the farmer when he says that land is taxed far too much."

Robert S. Shaw, acting president of the Michigan Agricultural College and director of the college experiment station, and L. Whitney Watkins, head of the State Department of Agriculture and a member of the State Board of Agriculture, were made honorary members of the association at the final meeting.

FARM BUREAU PROVIDES BEAN MARKETING AGENCY

(Continued from Page 7)

handling charge. It is remarkable that not more than one per cent of the total sales made by member associations are made to parties outside of the Exchange.

After joining the Michigan Elevator Exchange the local elevators have the privilege of using a crop contract between themselves and their farmer members. This contract permits the farmer to sell outside of his local association if he can get a better price, but he must pay his local co-op the regular handling charge to which it is entitled on his business.

The Michigan Elevator Exchange is a non-profit organization and any surplus accumulated after the actual overhead expenses are paid is returned to the members as a patronage dividend.

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BUSINESS FARMER

An Independent
Farm Magazine Owned and
Edited in Michigan

VOL. XI, No. 10 SATURDAY, JANUARY 5, 1924 TERMS: TWO YEARS $1
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1924—Looks Like a Happy New Year, Doesn't he?

A. B. Cook Calls Meeting of Michigan Bean Growers, To Be Held at Owosso, Friday, January 18th.

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Current Agricultural News

ANOTHER MICHIGAN WINNER AT INTERNATIONAL

WE have just learned that we omitted the name of one of Michigan's prize winners from the list of winners at the International Livestock Exposition, Chicago, published in the last two issues of the THE BUSINESS FARMER. This winner is Mr. George D. Stuck, of Overlook Farm, Otsego, breeder of thoroughbred Aberdeen-Angus cattle. Mr. Struck is the proud possessor of two prize ribbons and a cash award of $25. And this gentleman has been breeding purebred Angus cattle for only three years.

OCEANA COUNTY GROWERS RENEW ORCHARDS

THE orchards of Oceana county, one of the richest fruit-growing sections of the state, are being restocked. A larger fall setting of fruit trees is reported than ever before. This has been due partly to the mild weather which has made late planting possible, and also because of the increased profits from orchards.

One feature has been the large renewal of peach orchards. For years Oceana county was one of the big centers for peaches. During the last few years, however, there was a decline in the acreage of peaches in favor of cherries and apples. The old peach orchards now are being replanted.

M. A. C. PURCHASES CHAMPION BELGIAN STALLION

RANGE LINE PHOENIX, a two year old Belgian stallion, has been purchased to head the purebred Belgians owned by the Michigan Agricultural College, according to R. S. Hudson, who has charge of the college horses.

At the International Livestock exposition in Chicago this year, this colt was Junior and Reserve Grand champion, besides placing first in his class. He was also Junior champion and first ribbon winner in his class at the Ohio State Fair.

Jupiter, the well known Belgian stallion that has been exhibited by the college at the International, the Michigan and Ohio state fairs, and numerous other showings throughout the country, where he took many first honors, has been sold to Bell Brothers, of Wooster, Ohio, according to Mr. Hudson.

The Breeders Gazette, in a recent report of the Chicago show, makes the following comment on Range Line Phoenix: "The three year old and two year old stallion classes were the 'high spots' of the Belgian show. Each class furnished a champion. Louis de Maeter and Range Line Phoenix, winners of premier championship honors this year, were two of the most popular choices for such distinction in the history of the show. George Potts showed them in fine bloom.

"Range Line Pheonix, a growthy roan, won handily from the other two year olds. He has a great set of bottoms, long pasterns, clean ankles, and hard, lean hocks. He is a real stock horse prospect. The Michigan Agricultural College is to be congratulated on the purchase of such a horse to head its band of Belgian mares."—R. C. Groesbeck.

STATE HOLSTEIN MEN DINE FEBRUARY 4

THE Annual Banquet of the Michigan State Holstein Association will be held at Lansing on the night of Monday, February 4th. The Annual Meeting will be held the following day, Tuesday, February 5th, at the Michigan Agricultural College, East Lansing. William Moscrip, of Minnesota, probably the best known dairy cattle judge of the U. S. A., will be present to demonstrate Dairy Type and to hold a judging "school." It is planned to hold a High Class Sale of Selected Holsteins at the College the afternoon of February 4th.—J. G. Hays, Extension Specialist, Michigan Holstein Association.

PLAN CO-OPERATIVE FARM MARKETING

EFFORTS to formulate a policy for "orderly marketing and co-operative production" by the farmer as represented by the National Grange are to be made in Washington, Jan. 15-19 by a marketing committee of that organization, National Master L. L. Taber announced Friday, December 21.

Members of the committee who were appointed by Mr. Taber are A. W. Goss, Seattle, Robert McMullen, Hutchinson, Kan.; John McSparren, Furniss, Pa.; Robert P. Robinson, Wilmington, Del.; O. L. Martin, Montpelier, Vt.; Albert Manning, preside Pottsville, Pa.; and David Agans, Three Bridges, N. J. Taber

(Continued on Page 22)

DON'T SIGN THAT SUGAR BEET CONTRACT

I HAVE just received reliable information that The Owosso Sugar Company has rejoined the Manufacturers' Association and agreed to join with the other Michigan factories in doing away with the 50-50 contract for the next season, 1924. The contracts agreed upon were in the field, Monday, December 31st, and are a 45-55 proposition with the farmer on the short end as usual. This arrangement puts the farmer back to where he was years ago only he is taking more chances of losing on this new contract than ever, and gives the factories a monopoly of his beet workers, the wages of which the farmer pays. Will the Michigan sugar beet growers place their necks within this nooze and sell their 1924 beet crop 5 months before it is time to plant it, and 10 months before harvest time, or will they not sign one single one of these contracts and look around and get their bearings? Are we, here in Michigan where we formulated the 50-50 contract, going to take anything less when our brother growers throughout the west are now getting 50-50 contracts which we carried to them by our President John C. Ketchem who was elected by them president of the National Beet Growers Association. Haven't we any pride? Will we swallow the sop thrown to us by this Michigan Sugar Beet Manufacturers Association and this company that just has, by their last move, shown the Michigan growers their hand. Are we going to stand for and insist on a tariff policy which protects a bunch of giants who give the farmer what they want to and gouge the public with high sugar prices, and give them the right to go into foreign countries and get cheap labor under contract which they will control and bring them within our midst to deteriate our farm community life and bring upon ourselves such charges of working children and even 5 years old babies, as recently charged by the National Child Labor Committee, or will we say "No, absolutely no," when called upon and told to sign on the dotted line?

Every Michigan beet grower should withhold contracting until after the meeting at Lansing during the week beginning January 21 which will be attended by representatives of the United States government, they having spent most of last summer going into the matter of the costs of growing sugar beets.. Let's not sign a contract until after March 1st, 1924, which is then two and one half months before planting time.—C. E. Ackerman, Former Manager, Michigan Sugar Beet Growers Ass'n.

SATURDAY
January 5
1924

VOL. XI. No. 10

Being absolutely independent our columns are open for the discussion of any subject pertaining to the farming business.

"How to the line, let the chips fall where they may!"

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Electricity For All Farm Homes in Michigan

Special Committee Working Under the Direction of State Public Utilities Commission Is Trying to Solve Light and Power Problem

By R. C. GROESBECK

(Special Correspondent of The Michigan Business Farmer.)

CAN the network of high tension power lines that cover almost the entire state of Michigan be used to furnish electricity to the farms? This is a question which a special committee, working under the direction of the state Public Utilities Commission, is trying to solve.

The special committee which has been appointed to carry on an extensive investigation consists of George W. Bissell, dean of engineering at the Michigan Agricultural College; L. Whitney Watkins, head of the state department of agriculture; Roy T. Duncan, of the Detroit Edison Company; Alfred Fisher, of Ann Arbor, director of the committee on public utilities information; and A. B. Cook, of Owosso, master of the Michigan State Grange.

It is thought by the committee that the rural power lines of the state can be used for the double purpose of furnishing electricity to the farms and lighting the rural highways. Electrical power is not available for farms at the present time because the voltage is too high, but, according to Dean George W. Bissell, chairman of the special committee, the problem of stepping down the voltage is financial rather than mechanical. The cost of constructing the necessary transformers, and how to meet this expense is the big problem.

The cost of constructing these transformers would be a fixed charge, and would have to be met from funds received from the service. How this cost is to be distributed, particularly in communities where the number using the service would be continually changing, constitutes a problem all in itself, he said.

Peter Fagan, secretary of the Michigan Public Utilities Commission, declared that it is important that no false steps be taken in the movement to make power available for farms in this state.

In Illinois and Wisconsin, he said, the power companies extended their lines to the rural districts, and, for a time, supplied power to the rural communities at a loss. After the lines had been established, the companies suddenly demanded that their rates be increased to cover the cost of the service, with a result that the farmers became greatly dissatisfied with the system. The State Public Utilities Commission, according to Mr. Fagan, hopes to make sure that Michigan gets started on the right road in this work.

The men working on the project believe that farmers of the state would be glad to obtain power from these transmission lines because of the greater convenience in comparison with the home generating plants now in use on many farms. Electricity, they believe, can be used to advantage in many farm operations, such as cutting wood, running milking machine, and chopping feed. It would also make possible the use of many conveniences about the farm home that cannot now be used.

The committee will also make every effort to devise a means of using the rural power lines to furnish electricity for lighting the rural highways as well as furnishing power and light on the farms. It is becoming more and more necessary that some means be found to make the highways safe for night travel.

During the past two years an experiment in this work has been conducted on the road between Lansing and East Lansing through the cooperation of the Consumers Power Company, the Lansing Automobile Association, and the township authorities. Over a stretch of about two miles, lights are mounted on poles 30 feet high. The light from these makes the use of bright automobile headlights unnecessary. The lighting thus far has been very satisfactory, but of course, the project has been used only as an experiment.

In speaking of the work done by the special committee, which will report back to the Public Utilities Commission February 15, Dean Bissell said, "In our report we are to give a precise statement of the problem, and recommend principles to be followed in its solution. We shall obtain information about the prectices followed in other states, ascertain the attitude of the producing companies, discover how much interest is manifested by the rural population in obtaining electrical service, and find out to what extent the manufacturers of farm machinery are prepared to furnish power-driven appliances suitable for use on the farm.

"I believe that after the present agricultural depression has passed, all progressive farmers will be glad to make use of electrical current if it can be had at reasonable rates. Of course the rates will differ in different parts of the state. Farmers in Wayne county will be able to get the service cheaper than those in outlying sections. But we hope that the rates can be made low enough to make electricity practical for all parts of the state."

A MEETING OF MICHIGAN BEAN INTERESTS

A MEETING of bean growers and others in Michigan interested in orderly marketing, advertising, and in other ways making the bean crop a more profitable one, will be held at the Owosso Armory, Owosso, beginning 10:30 A. M. Friday, January 18th. The meeting is being called by A. B. Cook, president of the Michigan Bean Growers Association, and will be held under the auspices of the Association, R. L. Churchill, secretary and manager of the California Lima Bean Growers Association, will be present and Michigan men representing all phases of the industry will be on the program. It is to the interest of every bean grower in Michigan that he attend this meeting. Be there, without fail.

California Bean Man Urges Co-operative Marketing of Michigan's Crop

THE plan to put on a nation-wide advertising campaign to increase consumption of pea beans created much interest in all parts of the country and the news of Michigan's failure to raise her share of the money was received with much regret. We recently received a letter from R. L. Churchill, secretary and manager of the California Lima Bean Growers Association, Oxnard, Calif., commenting on it. He did not write the letter for publication but it contained so much of interest to all growers that we urged we be permitted to print it. He finally consented and we are publishing it herewith.

WE have noticed the editorial paragraph under the heading "Scalping Beans" in your issue of November 24th.

It has seemed strange to us for several years past, that a group of the largest bean growers in Michigan did not take active steps to organize for the cooperative marketing of the major portion of Michigan's production of pea beans. This has been more puzzling in recent years because of the very rapid development in the cooperative marketing on a large scale of such products as cotton and tobacco, which have been and are being supported by many thousands of growers, both large and small, scattered over a number of states. According to reliable governmental reports, the cooperative marketing of cotton, tobacco, rice and peanuts, has within the past two or three years, transformed the South from a condition of financial distress to one of the most prosperous sections of the United States.

We have written a number of letters during recent years to Mr. A. B. Cook, of Owosso, Mich., suggesting that some active steps be taken to organize the Michigan bean growers, not only for the benefit of your growers, but also because of the detriment to the bean business of the entire country caused by the erratic fluctuation of prices on Michigan beans, which tends to create a lack of confidence in the minds of the distributing trade with respect to all varieties of beans, and undoubtedly to a certain extent adversely affects the movement and price of all varieties.

With reference to advertising of beans, our Association has expended as much as $45,000 annually in advertising lima and baby lima beans, although marketing only about half the California production of these two varieties, and not being engaged in marketing any other varieties. It is accordingly almost humerous to us that Michigan fell down on raising $16,000 for National advertising of Michigan beans from all those interested.

However, it is undoubtedly true that growers much more than elevator men should be the ones to contribute towards the advertising of Michigan beans, particularly if growers will place themselves in position to really benefit by orderly and intelligent marketing, with resultant stabilization of the market.

As we understand the situation now existing in Michigan, there is so much manipulation and speculation existing, that the growers, most of the bean elevators, and the jobbing and distributing trade, are all suffering from the uncertain and chaotic conditions obtaining. Undoubtedly many of the elevator men would welcome a strong growers organization, and there is no particular need or reason why growers should build new elevators or purchase any of those new operating, as they could undoubtedly arrange to continue to use cleaning and storage facilities now provided, and confine the activities of the growers cooperative marketing association to the marketing of their beans under grades and regulations established by their own organization. The present National and State laws favorable to such associations, and the facilities offered by recent revisions of Federal Reserve Bank laws and the continued services of the War Finance Corporation, permit cooperative marketing associations to very easily finance liberal advance payments to grower members and to carry out a sane and reasonable marketing policy and price level in connection with distributing the sale and movement of the products over a period of eight or ten months, if desired.

In your editorial, you expressed the hope that someone will step forward ready to take on the task of organizing Michigan bean growers and handling their products, but you make a better suggestion when you urge some of the large growers to call a meeting to talk matters over and see if something cannot be started. Undoubtedly you realize that the interest taken by President Coolidge and Secretaries Hoover and Wallace in the problem of farmers, and recommending cooperative marketing, as one of the post practical means of securing assistance and relief, indicates more than a friendly attitude on the part of the Federal government, and we are confident that merely the asking would bring experts from the United States Bureau of Markets to assist in organizing your Michigan bean growers, as soon as sufficient interest was manifested.

Undoubtedly trained and experienced men connected with existing cooperative marketing associations of various farm products, including beans, could also be secured to assist your growers, to organize.

We have not written you this letter for publication, and are inclined to believe that it has not been properly written for publicity purposes; but we are much interested from the standpoint of the bean industry in the entire United States in seeing Michigan bean growers form a

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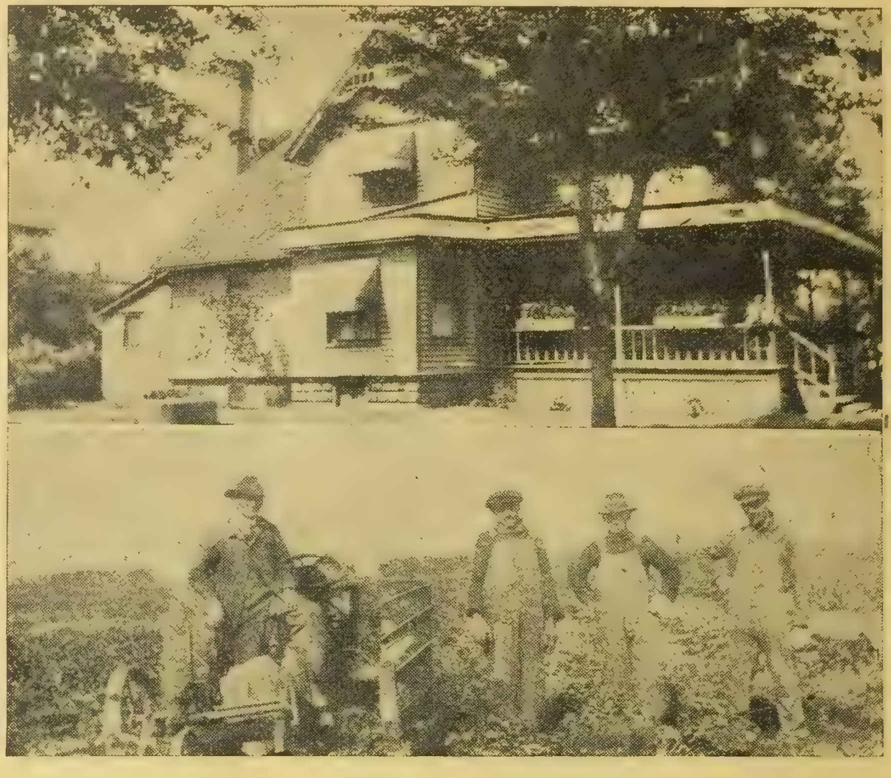
What Will Beet Growers Get For 1923 Crop?

Authority Believes That Farmers Who Grew Sugar Beets the Past Season Will Make a Good Profit on Their Crop. Discusses Contract for 1924

By C. E. ACKERMAN

(Written Exclusively for The Business Farmer.)



ABOVE: The home of C. E. Ackerman, Durand, Michigan, Mr. Ackerman's farm contains 350 acres and he had 40 acres of sugar beets in 1923.

BELOW: Mr. Ackerman is shown here using tractor and plow which has been remodeled into a beet plow. Three contract beet workers are shown with Mr. Ackerman.

WHEN the 15th of February, 1924, rolls around the beet growers of Michigan will have received full settlement with the 17 sugar factories of Michigan and then we will know how the beet deal came out. Since this year sees 3 different contracts, the 45-55 labor aid contract and the famous 50-50 contract, the final outcome of these contracts and the higher price of sugar with also an extraction thus far that is above the average, the proposition is more interesting than usual. On account of very little having been written about the Michigan sugar beet industry by the growers, I am induced to give a general review of the industry from the growers' standpoint for the past three seasons. During the latter part of the year 1920 the sugar industry came into its after the war readjustment. The three outstanding conditions of facts at that time were as follows: 1st, there were around one and a half million tons of unmarketable surplus sugar. 2nd, the refund market for sugar was $4.60 per 100 pounds New York, and 3rd, the Federal Reserve Banks had curtailed all sugar loans. This indeed did make a gloomy outlook for the industry. Starting the New year, January 1st, 1921, the sugar factories came out with contracts offering $5.50 per ton for beets and went through the year getting a little better than 50 per cent of an acreage in the United States and around 80,000 acres in Michigan. At the end of the year the factories came out with financial statements showing losses of over $11,000,000.00. One Michigan factory even went so far as to get their financial statement showing over $1,000,000 loss printed in the congressional record.

The grower not being able as usual to furnish figures showing his loss, in dollars and cents, simply went broke and finally continued in the business as usual (a characteristic which applies to the farming business only). Although the after effects of this and other calamities the farmer has gone through at the same time is now being heard of down in Washington from political men with something to offer to help the farmer.

The beginning of the year 1922 saw a little improvement. Farmers got $7.12 for their beets and the average price of sugar was around 6 cents per pound.

The factories could not make any money this year on account of the high coal, limestone and material costs and mainly on account of the fact that they could not run a full season of 100 days owing to the fact that the growers would not grow the beets on account of the high costs and the low price of beets and sugar and also on account of an unsettled dispute between the Michigan Sugar Beet Growers' Association and the factories. At the beginning of the year 1923, the industry seemed to be in a deplorable condition. Many large growers of beets had decided not to grow another beet. Sugar factories stock went down over two thirds on the market and it looked as if many factories would close up indefinitely, and to some, it looked like losing their capital stock, they having depleated their large surpluses built up during the war. In fact, the business never did look darker for the factory and the farmer than at this time. Most growers had long since given up hopes of ever coming to any understanding with the factories in regards to a better participating contract asked by the growers' organization, and the factory men were also a discouraged lot of fellows, although their training enabled them to not show it in their faces so plainly like the farmer does. In due time, the forepart of 1923, all the Michigan factories came out with their contracts which were along the old style and offering $6.00 per ton for beets. Little headway was being made getting contracts and many farmers had dismissed the idea of ever growing beets again. Finally the Owosso Sugar Company broke away from the sugar manufacturing Association and came out with the long sought 50-50 contract, which gave the grower one-half of the average extraction of sugar per ton of beets, for the seasons run at the average New York price for the months of October, Novermber, December and January, and also a 45-55 contract where the factory furnishes labor assistance. Shortly after this the association factories came out with a new contract offering $7.00 per ton for beets and a little better sliding scale on the lower priced sugars. Then the Owosso company also came out with the $7.00 contract making three contracts for them in the field at the same time. This seemed to stimulate the industry together with the fact that sugar began advancing in price. Farmers called meetings of their organizations advising growers to try out the new contracts with the result that the Owosso company secured a full acreage harvesting enough beets to run their two factories to capacity for a full run notwithstanding the fact that this summer was a very bad one on account of draught in many sections preventing the germination of the seed, many acres being lost thereby.

This year 109,400 acres were planted to sugar beets an increase of 28,000 acres over last year, and all factories sliced beets with the exception of one at Marine City. In the United States the acreage was increased over 120,000 acres and 89 of the 99 factories in the country sliced beets this year, and will turn out approximately 900,000 tons of sugar which is about one-fifth of what we consume. It might be stated here that in Michigan we produce less than one-sixth of one per cent of the sugar used in the world and less than enough to supply Michigan itself. Thus it can be seen that there is little danger of over production of sugar in the United States for some time to come.

It also will be of interest to the sugar beet grower to know that the present rise in prices is world wide and is not confined only to the United States as some would have us believe, and that the most casual examination of trade statistics will show the world supplies are less in 1923 than in 1922 by over 1,000,000 of tons and that the decrease is entirely in the western hemisphere or in those places from whence the United States and the United Kingdom get their sugar. I would like to pass a word to the Michigan farm housewife that it would not be a bad idea to lay in 4 or 5 hundred pounds of sugar for next summer and fall. It may go lower, but the writer doubts it, as to its going higher, time will tell. It however is evident that we are coming near and nearer to a sugar shortage which

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Baby Beef Plan Insures Good Cash Market For Michigan Herefords

SO much interest has been shown in the baby beef marketing plan devised by T. F. B. Sotham, of Michigan Hereford cattle fame, that we secured this article, based on an interview with Mr. Sotham. There is much of interest to you in this article whether you are a breeder of Herefords or not.

WHEN Hereford cattle men of the United States dig into the records to find the oldest Hereford breeding establishment they immediately turn up in Michigan, for here it is where they find one of Michigan's leading farms in the breeding of Herefords, the result of sixty-three years of consistent breeding. It is the herd established by Governor H. H. Crapo, of Swartz Creek, Michigan, and now under the able supervision of young W. W. Crapo, of Detroit. The first cows of this herd were purchased through Willian H. Sotham, father of T. F. B. Sotham, of St. Clair Michigan.

THOMAS FREDERICK BEAUBOIS SOTHAM

Looking back into Hereford history, we find that in various parts of Michigan were located some of the noted herds of the seventies and eighties. There was Tom Foster, of Fostoria; Fairfield, of Bay City; Phelps, of Pontiac; Sotham, of Bloomfield Hills; Crapo, of Flint; and many others. The elapse into the nineties saw the breed migrate into the West where they have ruled on the plains ever since.

The call of the cheap pasture lands of the West and the rapid increase in value of eastern lands made the West appeal to the cattle men of the eighties and the market for beef cattle was transferred to the West, with the result that the drain on eastern Herefords at very satisfactory prices ended with a thorough thinning out of Herefords in Michigan. Then the growth of the now great population centers adjacent to Michigan led to a great increase in the production of dairy products and helped cause a decline in beef-cattle demand in Michigan.

And now that the cheap pasture of the West has reached prices that make eastern lands compare favorably when beef cattle production is concerned, it is only fitting that Michigan lands should present the best opportunities for beef production. It is the contention of T. F. B. Sotham that two acres of $100 Michigan land will keep a cow; in the West in the great ranching sections it takes from five to twenty acres and sometimes more to keep a cow. Such land ranges from $5 to $20 an acre. Thus you have the same amount of interest to pay on land investment. Land in the West that takes less than this to keep a cow is equally higher in price, while in Michigan there is a good deal of land that two acres will keep a cow at a much lower figure than the above $100 per acre. Then again it is the contention of Mr. Sotham that Michigan, with her spacious barns thus comfortably housing her cattle in the winter eliminates the terrific mortality loss as a result of cattle being outdoors all winter.

As a result of Mr. Sotham's experience with Hereford cattle on the ranges in this country as well as in Argentina, South America, on the

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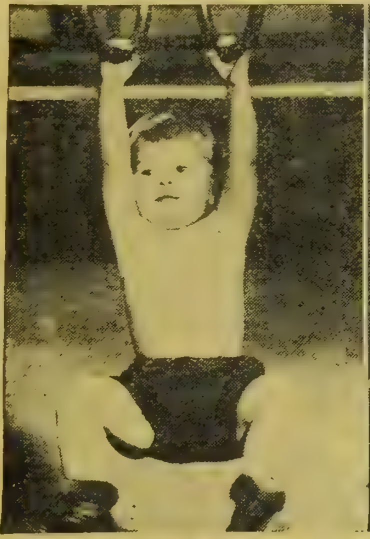
WILLIAM HENRY SOTHAM

PICTURES FROM FAR AND NEAR

RUTH ENJOYS FARM LIFE.—Here are "Babe" and Mrs. Ruth, with one of their Guernsey cows and her calf, on their farm at Sudbury, Mass. "Babe" says he is "as fit as a fiddle" and intends to continue to break home run records during the coming season.

ARTISTS SAY SHE IS MOST BEAUTIFUL ENGLISHWOMAN.—Mrs. F. A. Baldwin is the wife of Squadron Leader F. A. Baldwin, of London, England. This is the latest picture of the London beauty to reach this country.

UNITED IN BRILLIANT ROYAL CEREMONY. The Crown Prince of Sweden and Lady Louise Mountbatten, just after their marriage in London. They are the future rulers of Sweden. Their marriage unites that country with England.


THE WORLD'S STRONGEST "STRONG MAN".—John Salvatore, 22 months old, of St. Paul, Minnesota, can chin himself 15 times. He spends a half hour each day in gym work and is said to have never been sick one day.

STATE PRIZE WINNERS IN HOME ECONOMICS.—Each of the above girls proved herself to be the best in home economics in boys and girls club work during 1923 and represented her state at the International Congress of Boys and Girls Clubs, held at Chicago. The girls visited Montgomery Ward and Company where this picture was taken. Michigan's champion, Miss Ilda Meitzner, Utica, is shown in the insert in the lower, left-hand corner of the picture. She also appears in the group, second row from the rear.

A BULL'S EYE EVERY SHOT.—Mrs. Gus Knight of Upland, California, who has won the title of champion woman trap shooter of the Pacific coast. She hits the clay pigeons with alarming regularity and few men care to compete with her.

GRAND CHAMPION OF 1923 INTERNATIONAL.—Broadus White Socks, senior yearling Aberdeen-Angus, was declared the king of cattledom by Judge William Read, of London, England. The judge is standing in the background. This fine animal was purchased by the Sears-Roebuck Agricultural Foundation to whom we are indebted for this photo.

BRILLIANT STUDENTS AT U. S. COLLEGE.—Left to right: Margaret Hsieh and Grace Li, both students at Wellesley college. Miss Li is the daughter of a former president of China and Miss Hsieh is a famous chinese writer, who is well known despite her youth.

WHAT'S A COUPLE OF FORDS TO ANGELO.—Angelo Taramaschi, Italian wrestler, demonstrating before a large crowd in Boston, Mass., how he can hold two cars pulling in opposite directions. Many were afraid that there would be two Angelos where only one bloomed before, but he showed up the Lizzies at the demonstration.

DICTATOR FOR A DAY.—Here is Adolf Hitler, one-time leader of the Bavarian Royalist army, who became dictator of Germany for one day. Photo shows him conferring with one of his officers shortly before his downfall.

FAMOUS SCULPTOR MODELS LLOYD GEORGE.—P. Bryant Baker, well known English sculptor, with the bust of Lloyd George he modeled. The subject never sat for the bust, the sculptor studying him while he was in action.

STIRS PARIS WITH HIS GENIUS.—Little Pietro Mazzini, five and one-half years old, whose mastery of the piano has made him the sensation of Paris. He is declared one of the most brilliant child pianists of the age.

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Farmers Service Bureau

(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full name and address. Name not used if so requested.)

VOTING FOR OVERSEER OF HIGHWAYS

I have been a devout reader of the M. B. F. for a good many years. It's good. Every citizen of Michigan ought to read it. Your Service Bureau is especially valuable. Please answer through this department this simple question. Has an elector of a township in this state, who resides in one road district and has also taxable property in the other road district of the same township, a right to vote for an overseer of highways in each road district where he has taxable property, or can he only vote for the one overseer in the district where the elector resides, regardless of how much taxable property he may own in the other road districts of the same townships?—W. F. B., Hillman, Michigan.

—In defining the eligibility of electors to vote for highway overseer in any road district, the statute provides that he must be a resident of road district, or an elector of the township, having taxable property in such road district. It does not require that he be both, but that he be either one or the other. If you own taxable property in one road district you may vote there for overseer, altho you may live in another. You may also vote in the one in which you are a resident, provided, however, that in both cases, that you are a qualified elector in the township. The statute does not limit the number of road districts in which any one person may vote, so you would be eligible to vote in each district in which you have taxable property.

This statute justly gives to those, whose property helps bear the burden of maintaining the highways, a voice in choosing the person who shall have charge of their maintenance. —Asst. Legal Editor.

LIABLE FOR ALL DEBTS

If a man signs notes and bonds with a person and the man he signs with goes to the wall could the signer fix his property so his creditors could not get it. Could he give or deed it to his wife or mother, or could a person mortgage for all he is worth? Will a joint deed hold good? Can an unmarried man hold the same amount of property as a married man with family? Will a joint deed held between mother and son be the same as man and wife? Is there any law against a man trying to defraud his creditors.—Mr. M., Carson, Mich.

—An individual's interest in property held under a joint deed is subject to levy on execution for the payment of his debts. Any transfer of property by a debtor for the purpose of defrauding his creditors is unlawful, and such a transfer could be set aside. A homestead is exempt from the payment of debts in most cases. —Asst. Legal Editor.

DISTANCE TO THE SUN

Dear Editor:—Will you be so kind as to answer through the columns of your esteemed paper the distance in miles of our earth from our sun; also the distance between our earth and moon; also the relative distance between the sun and moon at new moon and full moon.—C. C., T., Sand Lake, Michigan.

—The revolution of the earth around the sun once a year is not in an exact circle but rather an ellipse and the sun is to one side of the center of this ellipse. The earth reached its farthest point from the sun on this irregular orbit last July 5th when it was about ninety-four and a half million miles distant; the earth's nearest approach to the sun will be next New Year's day—about ninety-one and a half million miles distant. From an astronomical standpoint this three million miles difference between the nearest and farthest point to the sun is very small and astronomers roughly call the distance ninety-three million miles, which is the average distance of the two extremes.

The average distance of the moon from the earth is given as 238,840 miles but as the orbit of our satelite is also in the form of an ellipse with the earth at one side of the exact center, the distance varies from 221,617 miles, as it will be on December 6th, to 252,973 miles, as it will be on December 19th.

The relative distance between the sun and moon at new and full moon varies with the season. By using average figures, however, we learn the difference in miles to be a little short of a half million. That is, the moon is a half million miles nearer the sun at new moon than at full moon; a mere trifle, so to speak, since this figure is only about the 180th part of the whole distance between the sun and earth. The least possible distance between the sun and moon is about ninety-one million six hundred thousand miles. —Pritchard's Weather Forecast.

RECOVER DAMAGES

Will you please advise me what would be the proper thing for me to do in this case. I bought a Jersey bull calf, age 18 months. The bull was sold to me as a sire to be all right in every way. He seems to be perfectly healthy but is not a sire as I have had to take my cows to a sire ever since I have owned this bull, which has been better than six months. I went to the man I bought him from, stated the facts to him as they are and asked for an adjustment, either a bull that is a sire or my money refunded as this calf is no good to me as he is now. He said he could not understand it and up to date has made no effort to make the matter right. Now as I feel that I am entitled to an adjustment I would like your advice before I go to him again. Since my deal I have learned that this calf is not the first one sold here in the neighborhood by this breeder that has proved out this same way.—W. H. L., Belding, Michigan.

—If the seller sold you the calf as a sire, when in fact it was not a sire, you could recover from him such damages as you have suffered in an action on an implied warranty.—Asst. Legal Editor.

ASSESSING FOR COUNTY DRAIN

Please advise me in regards to County Drain. About ten years ago the county drain was dug. Several farms surface water drained into this ditch at about the middle. Though this ditch does not come within a half a mile we were assessed several hundred dollars special drain tax. We understand they assessed us a certain per cent of the entire cost of the ditch. Can they assess us for the entire cost of the ditch or for just that portion where our surface water enters their drain to the outlet?—G. D. S., Fremont, Michigan.

—In reply you are advised that property benefitted by the construction of the drain should be assessed a certain percentage of the entire cost of construction.—H. Victor Spike, Assistant Attorney General.

FAILED TO NOTIFY INDORSER OF NOTE

Will you kindly advise me on this matter? A gives note to B, it being endorsed by C. A does not pay. Note was due three months ago, but B did not notify C. Now must C pay the note? Thanking you in advance.—F. G., Charlevoix, Mich.

—B's failure to notify C, the indorser, of A's non-payment would discharge C, unless notice of non-payment was waived.—Asst. Legal Editor.

HOW TO PLANT RAMBLER ROSE BUSH

How should a rambler rose bush be planted, with rich manure around it or none at all? Should it be kept dry or moist?—Mrs. A. O., Carsonville, Michigan.

—While the ground cannot be too rich, the roses should not be planted in manure alone. The best land for growing Crimson Rambler roses is good wheat land. The plants should be thoroughly watered after planting, especially if it is in a dry time. —Thos. Gunson, Professor of Horticulture, M. A. C.

PAY TAXES UNDER PROTEST

What proceeding will have to be taken after the board of review of the township have refused to comply with the law of the state governing exemption from taxes of 80 acres of stump land? Applicant has complied with the law, but the board refused to act on it, claiming it would make other peoples' taxes higher, etc. The law has been strictly complied with so far, as far as the applicant is concerned. I was elected Justice of the Peace at our last election, and have been consulted in this matter. I would like to have your opinion and advice.—C. K., Ashley, Michigan.

—The party aggrieved by the decision of the board of review may apply to the Michigan State Tax Commission at Lansing, asking that body to review the action of the board of review. The owner of land illegally assessed may pay the taxes under protest and bring action against the township for the recovery of taxes so protested.—Asst. Legal Editor.

ONE PHONE HAS STRONGER GENERATOR THAN OTHERS

We have a telephone line here at Brohman. Get service through the Michigan Telephone Company at White Cloud. I would like to know for the benefit of the community here if a telephone is put on the line that has a stronger generator than the rest of the phones, will that have any effect on the other phones to prevent them from getting central? C. R., Brohman, Michigan.

—Ordinarily the subscriber on a rural line installs a telephone with higher resistance fingers than those contained in the other sets on the line, penalizes himself more than the others on the line because the other telephones having lower resistance ringer coils will consume most of the ringing current sent out from headquarters, and he will have difficulty getting his signals. This is true whether the telephones are bridged on a metallic line or bridged on a ground line to earth.

There should be no difficulty experienced by the other parties on the line for getting Central, if some one party had installed a high resistance set, unless there should have been trouble on the set so that the generator remains bridged across the line at all times. Such a condition would be almost the equivalent of a short circuit. The condition you described in your question would more often happen on the case of a new set being installed that had extremely low resistance ringer coils, which likewise would have the effect of a short circuit on the line.—A. R. Sawyer, Prof. of Electrical Engineering, M. A. C.

MIX-UP IN ACCOUNT

May I call for your help, as I'm in trouble with out local lumberman? I let an account run with him when building, and have since settled with him by paying off as much as possible at different times. I received a receipt each time and kept them but he always refused to give me a statement, stating he was too busy to make one out, and he never puts the price of each article on the slips, only the total. I settled with him in full last year, and dealt with him again several months ago, and now when I asked to settle with him a month ago he asked for over $70.00 more than he had coming. I then showed him my receipts and found he was mistaken, in fact, no mistake but swindle. I had lost one receipt of $22.40 so he still thinks he has this coming, at least. Can you please tell me whether I owe him this when he refuses to state the price of each article on his slips, and also refuses to make out statements?—E. L., Pt. Hope, Mich.

—If you have settled the old account with the lumberman, he could not include in the new account, items of the old one. I would insist on having an itemized statement of the account before paying it.—Asst. Legal Editor.

MUST FIGHT FIRE

Can a state fire warden compel a man to fight fire? Last spring a fire warden ordered me and some of my neighbors out to fight fire. We put in a whole day, and never got our pay. I don't care so much for the days work, but it puts one out a lot that time of the year.—G. T., South Branch, Michigan.

—Deputy fire wardens are authorized to impress any able-bodied men into the service of fighting fires when it is necessary to do so. The law provides that the services of such men shall be paid for at the rate of $2.00 per day.—John Baird, Director, Dept. of Conservation.

RADIO DEPARTMENT

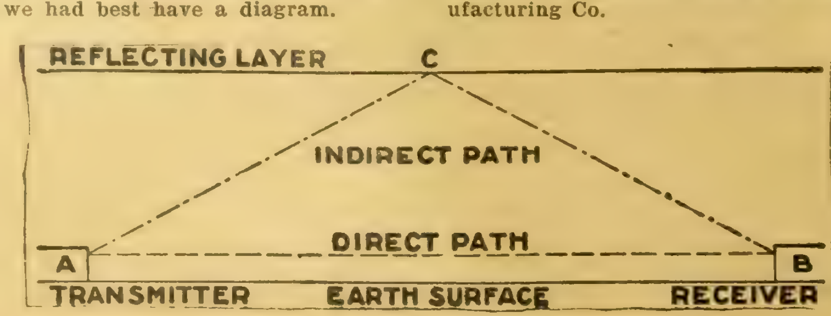
WHAT CAUSES FADING

MANY of us have experienced a feeling of great disgust when listening to a good concert from a broadcasting station to have the music gradually die out. This usually happens at the most interesting part, for instance, when a distant station is just about to sign off. Frequently the regularity with which the signals die out at the crucial point leads one to think that something has control of this phennomomen and is using this control with diabolical intent.

The periodical dying out of radio signals is known as fading. There have been many attempts to make measurements on radio transmissions to determine the exact cause of fading but few of these measurements have produced any worthwhile data. The best explanation of fading seems to be a theoretical one. It is believed that at a height of thirty or forty miles above the surface of the earth that the air becomes so rarefied that it becomes a conductor of electricity. As such it acts like a reflector of the electromagnetic waves by which radio communication is effected. The result is that the waves reach the receiving antenna not by one definite path but by a number of paths of different length. To make this clear I think we had best have a diagram.

"A" represents a radio transmitting station sending out electromagnetic waves which radiate in all directions. Some of them go directly to the receiving station "B" while others go by an indirect route up to the conducting layer and then down again. If the difference in length of these two paths is right, that is, a mutiple of the wave length, the waves will add and the effect produced will be greater than by direct transmission alone. But the difference in length may also be such that the waves do not add and thus the effect may be less than it would be by direct transmission. The reflecting layer is constantly shifting so that the reflection varies momentarily between the limits described resulting in varying intensity of the siginal received. This the fading.

This simple explanation of fading leads to several interesting things. The reflecting layer is very definite during the day. Hence there is less fading during the day and this seems to be the case. On account of the lack of reflection, the range of a station is much less during the day than at night and this we all know to be the case. It would also appear that it is impossible to send raido signals away from the earth. —By Roger H. Bryant, Radio Engineer, Westinghouse Electric & Manufacturing Co.



How Banks Operate Under the Farm Loan Act

Farmers Who Wish to Purchase Land Can Secure Long Time Loans From These Banks

By JOHN H. KRAFFT

THIS is the fourth and concluding article of the series prepared by Mr. Krafft, that has been appearing in THE BUSINESS FARMER. Mr. Krafft here discusses the Federal Farm Loan Act and how it makes it possible for a farmer to secure a long time loan.

THE Federal Farm Loan Act was not emergency legislation. Congress proceeded with great care, after a most careful and thorough study of the entire fields of rural credits. No legislation in the history of this country received more careful consideration. It was the first successful effort in the United States to organize farm credit and to provide financial machinery, and instruments of credit by which agriculture may go into the money markets of the world and obtain adequate funds at rates of interest it can afford to pay and upon terms adapted to the peculiar character of farming operations.

The Federal Farm Loan Act, establishing the Federal Farm Loan System under which both Federal Land Banks and Joint Stock Land Banks operate, is a system of finance borrowed from Europe. This system has been adapted to American conditions. It was developed in Europe through more than one hundred and fifty years of experience. There were several Commissions sent to Europe by the United States to study agricultural financing in the various European countries. These Commissions came back with a report to Congress and recommendations upon which the Federal Farm Loan Act was based.

The Act provided for a dual system of banking consisting of Federal Land Bands and Joint Stock and Land Banks. It created a Federal Farm Loan Bureau, part of the United States Treasury Department, and made provision for the appointment of a Federal Farm Loan Board which has supervision over the banks operating under this System. It divided the United States into twelve Federal Land Bank Districts and established in each one of these Districts a Federal Land Bank, and also provided for the chartering by the Federal Farm Loan Board of Joint Stock Land Banks. These banks can operate in not more than two states.

Under this Act the farmer is permitted to choose between two different types of banks authorized by the United States Government to make long term amortized loans. To borrow from a Federal Land Bank the borrower joins a local National Farm Loan Association. These National Farm Loan Associations are the agencies through which the Federal Land Bank Loans its funds. The borrower from a Federal Land Bank takes 5 per cent of his loan in capital stock in the local Association and has a double liability on this stock. The local Association in turn owns this amount of stock in the Federal Land Bank. The Federal Land Bank holds this stock as collateral against the loans of all of the borrowers in the association.

A borrower from a Joint Stock Land Bank makes his application directly to the Joint Stock Land Bank or through a local bank representing the Joint Stock Land Bank. He does not make and stock investment in the bank.

Both Joint Stock Lank Banks and Federal Land Banks are limited by law to an interest rate not to exceed 6 per cent. Both are limited to a profit of 1 per cent—the difference between the interest rate and the bond rate. Out of this margin of 1 per cent the bank must pay all operating expenses, salaries, rent, heat, light and other incidentals. Joint Stock Land Banks are limited to make loans not to exceed fifteen times their capital, which gives them a maximum gross profit of 15 per cent. Federal Land Banks are allowed to loan Twenty times their capital, which gives them a maximum gross of 20 per cent. Out of these profits, of course, comes the cost of management. These banks do not charge any commissions for making loans. The Federal Land Bank is permitted to make a charge for the cost of appraising the land by a Federal appraiser and the cost of examining the Abstract by the banks' attorney. In addition to this the local Association is permitted to make a charge sufficient to carry on the work of the Association and to pay the salary of the Secretary of the Association. A Joint Stock Land Bank is only allowed to make a charge for the actual cost of examining the land by the Federal appraiser and the cost of examining the Abstract by its Attorneys. They are not allowed to charge any commissions, neither are their correspondents allowed to charge any commissions.

Both Joint Stock Land Banks and Federal Land Banks are subject to semi-annual examinations by the Federal Farm Loan Board. Borrowers in both Joint Stock Land Banks and Federal Land Banks enjoy the same protection. Both types of banks are limited to loans not to exceed 50 per cent of the value of the land alone, pus 20 per cent of the amount insurable buildings add to the land to make the total value of the farm. The funds must be used for agricultural purposes or to take up an existing encumbrance originally created for such purposes. Federal Land Banks are limited to loans not to exceed $25,000 to one individual and to borrowers who actually live on and operate the farm. Joint Stock Land Banks are limited to loans not to exceed fifteen per cent of their capital and in no case to exceed $50,000, but are not restricted to borrowers who actually live on the land just so the funds are used for agricultural purposes.

The purpose of this dual system of banking was to give the farmer the choice of joining a cooperative institution and making a loan through the National Farm Loan Association from the Federal Land Bank and purchasing 5 per cent of his borrowings in stock in the Local Farm Loan Association, or of making his loan directly through a Joint Stock Land Bank without this stock investment. No loans are made either by Federal Land Banks or Joint Stock Land Banks to speculators or on questionable security or to borrowers of questionable personal standing. It is necessary in each case that the borrower has a reputation of meeting his obligations promptly and that he owns good and well managed security. The rates of interest in any type of a loan is based very much upon the type of security offered, therefore, Congress found it necessary to place restrictions in order to obtain adequate funds for the farmers through these banks.

After the loans have been made by these banks they are sent to Washington for final approval by the Federal Farm Loan Board. When approved by the Board, they are used as collateral with the Registerar of the District and bonds issued against these loans. These bonds are sold on the open market and the sale of the bonds is very much dependent upon sound judgment in selecting the security guaranteeing the bonds—in other words—by inspiring confidence into the bond buyer. The Government makes a guarantee to every bond buyer of either Federal Land Bank or Joint Stock Land Bank bonds that the security on these bonds consists of farm mortgages where the funds have been used for agricultural purposes and that no loan exceeds 50 per cent of the actual value of the land, plus 20 per cent of the amount insurable buildings added to the land to make the total value of the farm. In order to make good on this guarantee to bond buyer, the Federal Farm Loan Board appoints Government Land Appraisers. These appraisers are assigned to the various banks and must make an inspection of all loans and approve the loans before the bank can pay out the funds. It has been argued by some people that the amount these banks are allowed to loan under the Act should be increased. If these banks were allowed to make larger loans the result would be that the interest rate would be increased proportionately and while this would help a small percentage of the farmers, the fact remains that the limitations as they stand give most of the farmers the opportunity of making their loan through this System and of enjoying the benefits of the System. The restrictions, as they stand, operate to the decided advantage of the desirable borrower with good security.

In order to obtain a loan from the Federal Land Bank, the applicant makes application to the Secretary of National Farm Loan Association and to obtain a loan from a Joint Stock Land Bank, makes his application direct to a Joint Stock Land Bank or through a local bank representing the Joint Stock Land Bank. The applicant fills out an application form and swears to it before a Notary Public. Within a short time the land is appraised by the local committee in case the application is made to a Federal Land Bank and if approved by the local committee the application is sent to the Federal Land Bank and a Government appraiser re-inspects the security. In a loan from a Joint Stock Land Bank the appraisal is made only by the Federal appraiser, unless the Bank has an appraisal made by their local correspondent which Joint Stock Land Banks always do. If the loan is approved by the appraiser and also by the Bank the applicant is asked to deliver a completed Abstract brought down to date which must show a fee simple title in the name of the borrower. The procedure then necessary is the same as in any other farm loan, other than the fact that the loan must be made on the amortization plan and the farm must be inspected by a Government inspector and the title approved by an Attorney appointed by the Government.

By "amortization" is meant a contract under which a small payment per thousand of the loan in addition to the interest is paid off every year, and the loan matures in a given number of years. The banks operating under the Federal Farm Loan System are allowed to make loans running from five to forty years, however, most of these banks are making loans for a period of thirty-three years. The borrower, however, has the option of paying off after five years. This gives him a loan which runs at his option for from five to thirty-three years. Assuming that the interest rate on a loan is 6 per cent and a borrower obtains a loan from one of these banks for $10,000, a payment of $350.00 semi-annually will pay interest and entire principal in a little less than thirty-three years, as loan never falls due at any one time. You may ask how you can pay off this loan in thirty-three years by paying 1 per cent of the principal annually. If you should deposit $50.00 semi-annually at 6 per cent compound interest, it would amount to $10,000 in a little less than thirty-three years. The depositor would have paid in only $3,300, but the compound interest would, in that time, amount to $6,700. That is the plan on which these loans are made and paid, except that instead of making a deposit of $50.00 the borrower pays the same on the principal in his note. If the note is paid before maturity he only pays the unpaid balance. The borrower does not get something for nothing, he pays at the rate of $70.00 per annum on $1,000 borrowed from which is deducted interest at the rate of 6 per cent on the unpaid principal and the balance applied on the debt, but he never has any renewals with incidental expense. No one can disturb him in the possession of his land, nor demand further payments than that. The loan, in fact, never falls due in a lump sum but is gradually amortized or paid off by the regular semi-annual installments. The borrower has the privilege of paying $100 or any multiple thereof on the principal on any interest paying date after five years. The contract which the borrower signs runs for a period of from five to thirty-three years at his option. It has been the policy of Land Banks to allow payment of the loan before five years if there was some sound reason for this, however, when this privilege is granted there is a charge made for it.

Land Banks do not make loans on undivided interests or anything less than an absolute fee simple title.

(Continued on Page 29)

Piconning Farmers are on the Right Track

READERS of the agricultural press have read much during the past year about the wonderful dairy development which has taken place in Arenac county. If the folks in northern Bay county have their way, they will also be included in those accounts, because they are preparing to follow the lead of their neighbor county to the north, and go much further.

Learning by close association and observation what active co-operation between farmer and business man has done in Arenac county toward greater prosperity by developing the dairy business, the Board of Commerce and the Grange at Pinconning are planning a similar project in their community. This desire has been accentuated by the advent of a new up-to-date milk-plant at Pinconning, owned by Mr. Tom Halpin who has had a great deal of experience with the manufacture of dairy products. This assures the producer of an excellent market for his milk and cream.

Various agencies, including the Michigan Agricultural College, the N. E. Michigan Development Bureau, and the Agricultural Department of the M. C. R. R., are being enlisted in this work. A series of educational meetings will be held during the winter at which authorities on dairying will be invited to speak. One of the first steps taken was on arrangement with the Agricultural Department of the M. C. R. R. for the leasing without charge of three purebred Holstein sires to three groups of Farmers. These animals have been delivered to their caretakers. Not only does this impress the farmers with the worth of a purebred sire but it also provides high-class breeding for about 30 farmers. Since all three of these animals are out of dams that made over 24 pounds of butters in seven days, and two of them are out of sires whose dams produced over 31 pounds of butter in seven days, it is very reasonable to suppose that these sires will be of great benefit in raising the standard of the livestock in the neighborhood of Pinconning. The fact that several purebreds have been purchased since by the neighbors would indicate that the object-lesson is not being missed.

Northern Bay county is ideally adapted dairying according to Mr. Halpin, owner of the new creamery. He says that he looked around for four months for a suitable location and that he thinks he has found it in Pinconning. He feels that wonderful developments will take place in dairying in that community in the next few years, and that all will prosper because of it.—E. J. Leenhouts.

Does Your Son Want to Become a Veterinarian?

Promising Future For Young Farmer Boys Who Study Veterinary Science to Fit Themselves to Guard the Health of Our Farm Animals

By WARD GILTNER

Dean of Veterinary Medicine, Michigan Agricultural College

(Written Exclusively for The Business Farmer)

SYSTEMS of agriculture differ in different lands. In America it rests substantially upon animal industry, and American agriculture with all its defects and unsatisfying features, is, all things considered, the greatest, the most efficient and the most satisfying system of agriculture that the world has known. It is a fairly safe assumption that the relationship of animal industry to the success of American agriculture is one of cause and effect. A weakening of animal industry in America means a serious weakening of agriculture; a change in the system of agriculture involving the reduction of animal industry to a lesser role means a less satisfying system.

The maintenance of a successful animal industry does not depend on following a simple formula. I do not know that we are interested at the present time in a program of increased live stock production but it seems to me that the same method for achieving such an end might be used to bring about a more profitable animal industry. After reviewing all the possible ways whereby there might be an increase in our available meat food supply former Secretary of Agriculture Houston said: "But an easier and more definite program for a large increase in the meat supply involves the eradication of the cattle tick, of tuberculosis and of hog cholera, and the prompt suppression of such diseases as the foot and mouth disease."

Is it not a fact that the maintenance of the health of live stock is the most logical and the more certain way both to increase and economically to foster animal industry? Human experience has developed a method and means to accomplish this desirable end and that is through veterinary science. Science applied to thė sloution of the problems of animal industry has made possible the proud position of American agriculture. The veterinarian in American is called upon to protect the horses and mules of the Army through the medium of a well organized and competently manned veterinary corps. A veterinarian heads the Bureau of Animal Industry of the U. S. Department of Agriculture and is aided by the largest well trained body of veterinarians (about 1500) in the world. It is the service of these men that protects the country against entrance of foreign animal plagues, such as cattle plague and foot and mouth disease, or eradicates the disease before it makes headway if it gains entrance into the country. Accurate knowledge backed by good judgment is required in such work. Investigations into the nature of disease must be in progress constantly. The veterinarians of the Bureau are also required to assist the various state veterinary boards and commissions to eradicate or suppress such diseases as Texas fever of cattle, dourine of horses, tuberculosis of cattle and swine, hog chorera, scab of sheep, cattle and horses and many other diseases constantly menacing the health of domesticated animals. It is the function of these men also to inspect the meat that is slaughtered in establishments that engage in export or interstate trade, thus protecting the health of the people.

The various states must maintain an adequate corps of trained veterinarians whose honor and integrity are unquestioned and whose professional training is on a par with that required by the learned professions. Municipalities demand the services of veterinarians in the capacity of meat and milk inspectors and to protect the health of animals in the various city departments. Many large private establishments employ veterinarians to attend their valuable live stock possessions. The great English race horse, Papyrus, was attended by a veterinarian on his recent visit to this side of the Atlantic.

Big Field Is Private Practice

Of course the great field for the veterinarian is private practice. The farmer must expect more from well trained, high principled veterinary practitioners than from any other source in his efforts to ward off disease from his horses, cattle, swine, sheep and poultry. To this list of animals must be added pets, such as dogs, cats and others, in which the city dweller has an equal interest. and fur bearing animals, especially the fox, now demanding expert veterinary service because of the effects of domestication on their health.

WARD GILTNER

"AMERICAN agriculture depends on animal husbandry, the success of which depends upon the health of farm animals. The health of farm animals can bė maintained only by adequate veterinary service. The number of students in veterinary colleges has fallen from about 3,000 to about 500. About half the schools have closed; one school closed in November; another has no freshmen and will probably close soon. So far as the closing of these schools is concerned it seems a fortunate circumstance that they are all private enterprises. Veterinary education is a matter of public concern and must be supported by the public, and it is a serious matter that there are only about one-sixth as many students preparing themselves to become care-takers of America's animal husbandry as there were before the war. The disasterous effects of this situation will not be felt for four or five years, but it is certain that within a few years we will suffer from the lack of properly trained young men to look after veterinary practice, meat and milk inspection, animal disease eradication and other aspects of veterinary service."—Prof. Ward Giltner, Dean of Veterinary Medicine, M. A. C.

A lessening in the number and value of farm animals is neither permissible nor possible if we are to maintain our standards of living, except in case of the horse which may be partly, and only partly, replaced by the tractor, truck and automobile. Space and time will not permit of a discussion in this article of the relative merits of draft animals and the internal combustion engine as farm power, nor of the possibility of substitutes for the domesticated animals upon which we depend for food, clothing and other useful things. For those who are alarmed by false predictions of an animal-less age we submit some cold statistical facts. Comparing the figures of 1910 with those of 1920 for numbers and values of live stock we find no cause for alarm.

Now what about the statistics side so far as the veterinarian is concerned. In 1910 there were 199,000,000 animals on the American farms with a value of $5,274,000,000 or 17,000 valued at $413,000 for each veterinary practitioner. In 1920 there were 215,000,000 farm animals worth $8,556,000,000, that is 24,634 having a value of $912,000 for each practitioner. This is the way Dean Moore of Cornell figures it out. These figures do not include poultry or pets.

In 1916 there were about 3,000 students in veterinary colleges in America. There were 22 of these schools, 12 privates and 10 state. Today there are 12 state schools and one private school which has no freshmen class, an indication of early cessation of activities. These schools have less than 600 students enrolled. It is estimated that over 500 veterinarians leave the profession every year because of death, disability or from other causes. In other words nearly as many are lost each year as are now enrolled in all the schools, and the schools release by graduation less than one-fourth of their total number of registrants each year. In 1914 the average attendance in our veterinary colleges was 120, now it is 52 (ranging from 16 to 90).

There is far less interest in veterinary education in America than there is in European countries. France is training more men to combat animal disease than is the United States while our animal industry is valued at an incomparably higher figure than is the French. Compare the following figures for France and the United States for 1921:

France: 13,343,000 cattle; 5,166,000 swine; 9,600,000 sheep; 2,892,000 horses and mules. United States: 41,923,000 cattle; 63,000,000 swine; 37,209,000 sheep; 18,853,000 horses and mules.

We have three times as many cattle, twelve times as many swine, four times as many sheep and nearly seven times as many draft animals as has France. Our Federal government is not spending a dollar on veterinary education while some of the smallest European countries, no more important than some of our states, are spending about as much as all our states combined.

An explanation of the situation is not so easy. In the first place the veterinarian in America has not occupied the lofty position in the public eye filled by the European veterinarian. This is largely a matter of circumstance. Ours is a new country, hewn out of the wilderness only recently. Our agriculture has owed more to our natural resources and to the sturdy character and indomitable will of the pioneer than to a refinement of skill and traditional practice or specific education. The veterinarian was as rough and ready as the pioneer farmer. The designation "horse doctor" was more or less accurate in its descriptive quality. Veterinary education, like all technical and professional education in America was pitched on no higher plane than conditions demanded. With the development of agriculture and agricultural education and their consequent problems, veterinary practice and education have developed—it is no vain boast to say that they have kept apace and it is with pride that both the agriculturist and veterinarian can justly boast of the rapidity of the pace.

Students of Better Class

Today the veterinarian is educated largely at the expense of the state in well—not too well or well enough — equipped and properly manned colleges usually associated with agricultural colleges. The training of the veterinarian is thorough, intensive and extensive. The methods are scientific and effective. The personnel of the profession is becoming high class—consisting of men of character, personality, high ideals and marked ability. Modern veterinary practice demands that its votaries keep abreast of the times in respect of their ability to turn the most recent discoveries in medical science to the advantage of their varied patients. But they have so much to live down! And yet so much achievement to glory in! There is a great need for the general public, and especially parents of available young men, to become acquainted with the nature, the purpose and the vital importance of a profession that is charged with the responsibility of maintaining the integrity of a great essential industry. The profession is not over crowded, the work is fascinating and honorable, its members occupy the highest positions of honor, trust and responsibility in their respective communities.

But agriculture is in the dumps which fact reacts unfavorably upon veterinary science and practice. Perhaps it is fortunate that many poorly qualified men—men who were never well prepared for their training and consequently never well trained, men who have neglected their opportunities to keep themselves informed of the advances in their science and practice, men who may be naturally ill adapted to the peculiar requirements of the profession—it may be fortunate that some such men are leaving the profession to go into business. Agriculture will speedily, or in due time, recover, there will be renewed interest in the pleasure horse and in pet animals and then who will look after them in sickness and advise their owners in order that sickness be avoided? Our veterinary colleges are graduating less than three qualified men annually for each state in the Union. In some states more than that many new positions are being created each year. Young men entering college now are preparing themselves for service four years from now. What will be the situation then? Certainly not better in so far as the number of available men is concerned.

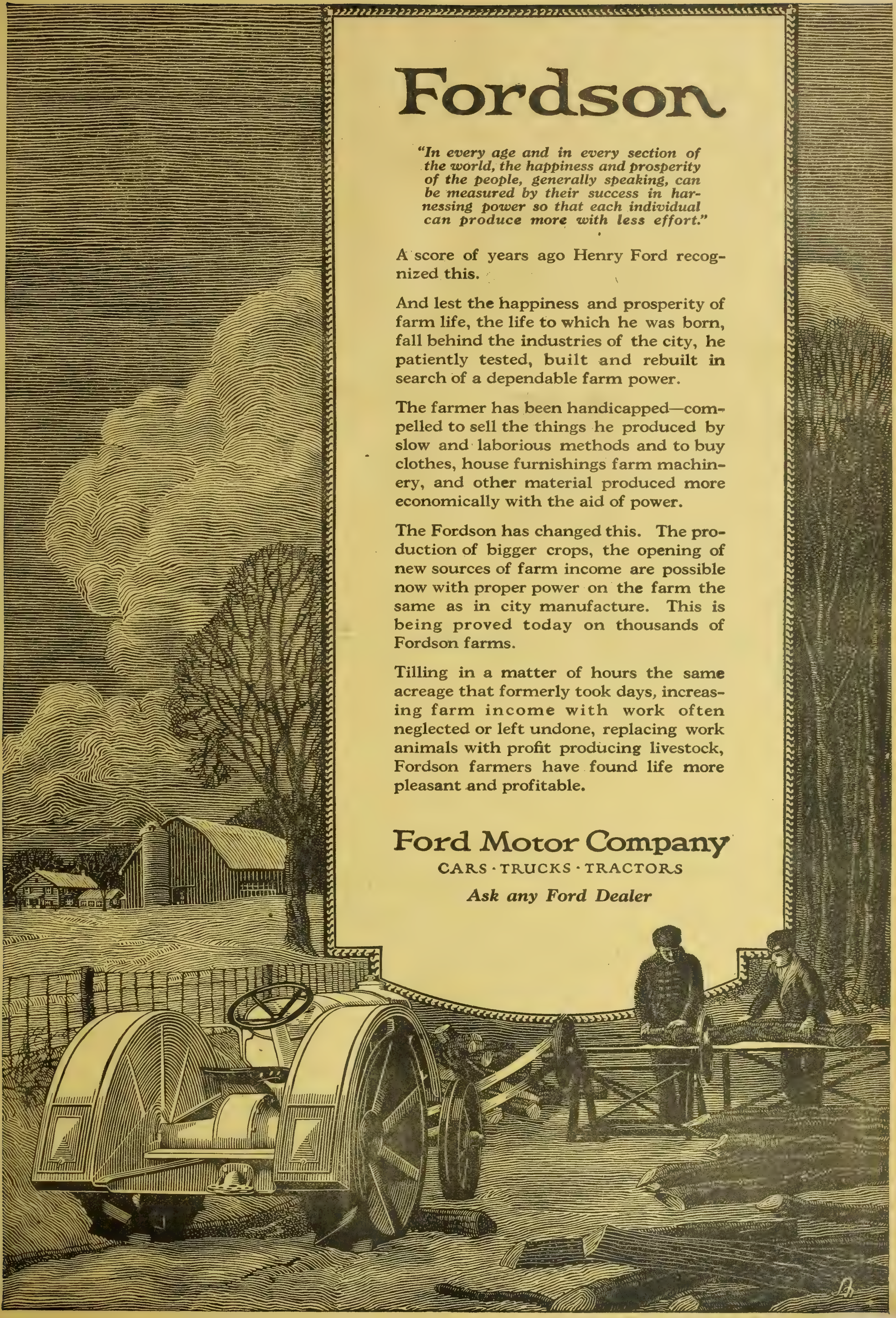
There may be some thoughtless persons or some disgruntled clients who rejoice or at most see no cause for alarm in the veterinary situation. They would admit our premises but not our suggested conclusions. Is there not some other way whereby the livestock industry may be protected? Yes, undoubtedly; but it would be nothing but veterinary science and practice under another name or guise. For after all

(Continued on Page 26)

COMPARISON OF FIGURES FOR 1910 WITH THOSE OF 1920 FOR NUMBER AND VALUE OF LIVE STOCK ON FARMS,

	Dairy Cows		Horses		Mules		Sheep		Swine	
Michigan	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value
1910	767,083	29,312,252	560,936	68,278,456	3,329	469,927	1,545,241	8,420,741	655,921	8,284,483
1920	977,000*	53,735,000*	605,509	56,433,765	5,884	661,115	1,209,191	13,688,379	1,106,066	19,621,714
Increase	209,917	24,422,748	44,573	-11,844,691	2,555	191,188	-336,050	5,267,638	450,145	11,337,231
	Dairy Cows		Horses		Mules		Sheep		Swine	
United States	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value
1910	20,625,432	706,236,307	17,430,418	1,985,554,817	3,787,316	497,982,330	39,644,046	203,516,144	35,134,097	352,157,958
1920	24,429,000*	1,241,726,000*	19,767,317	1,782,077,487	5,432,391	779,294,411	35,033,516	395,401,286	59,346,407	988,582,380
Increase	3,803,568	535,489,693	2,336,899	-176,477,330	1,645,075	281,312,111	-4,610,530	191,885,142	24,212,310	636,424,422

*Figures for 1923.



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What the Neighbors Say

THANKS FOR PRIZE MONEY!

I WISH to advise you that we received the $10.00 prize you sent us for the best home-made bean picker plan. We hereby wish to express our sincere thanks for the same, to Mr. Gerks we also wish to extend thanks. We feel we drew a good plan and we know if anybody makes one like it they will be satisfied with its work. We also wish to state that we couldn't get along without your valuable paper, it covers all branches of farming, so thoroughly that we find something interesting on practically every page of the issues. Our satisfaction is clearly indicated by our last subscription renewal, when we renewed for 5 years in advance. Only wishing we could be of some service to you, I am,—John Bos, Marion, R3, Mich.

SOLDIER FAVORS BONUS

DEAR Editor: Just a few lines in regard to your editorial "Mellon urges tax cut."

Sounds to me very much like the propaganda of a certain well know Chamber of Commerce. Maybe it is? However, this same Mr. Mellon piled up millions upon millions of dollars for himself and associates at the expense of the taxpayers of this country, and, as it often looks, at the expense of the men who fought. Yes it is every American's duty to fight for and uphold our country in time of need, but that is not saying advantage should be taken of their patriotism to beat them out of what they so justly earned, while those in snug jobs at home were making from eight to fifteen dollars a day and those who are fighting the bonus so hard now, were making millions and grafting right and left.

I am telling you right now when you say you have not talked to a soldier who was very strong for a bonus, that you have talked to a darn few soldiers. I am personally acquainted with about three hundred service men, and I have never heard one say he was anything but in favor of it, and at the 32nd Div, Reunion at Grand Rapids last summer, I heard about three thousand voice their approval.

I also notice that in almost the same breath that you denounce the bonus, you approve a bill to give Germany $70,000,000. WHY? Because it might bring up the price of beans a few cents. It is the wish of a large majority of the people that a bonus be passed and you know it, and if it were not, how do you figure our representatives would be building political fences by passing it. I will close, hoping you will be a man fair enough to show the soldier's side of this question as well as the interests that are wishing its downfall.—H. Calkins, Highwood, Mich.

ABSTRACT COMPANY REPLIES TO "E. K."

DEAR EDITOR:—In your issue of September 29, there appeared an article from one of your subscribers signed "E. K." from Cass City, regarding abstracting and particularly regarding a certain abstract which he claims to have purchased from us. He particularly claimed that the charges for work done on this abstract were exhorbitant, and complained of both charges and lack of guarantee as to accuracy. Will you kindly print for us in your valuable paper, the following reply:

His first suggestion is that abstracts should be made by county officials, and implies that such work would be more reliable and would cost less. The county official elected by the people for a period of two years, enters his office with no experience in the work, but must gain this experience by doing the work. During the busy season of the year when transfers of property are frequent, he is kept busy with this work of his office, and this is just the time when abstracts are most needed.

A competent abstractor could not go into the office of the Register of Deeds and make a complete abstract of any parcel of land from the records there found and certify to it as being correct. This may seem strange as the records are all in that office. But these records 'consists of approximately 120,000 deeds and 100,000 mortgages, assignments and discharges recorded verbatum in a chronological order, the first records in our county being made in 1851, and following one another as received for record with no distinction as to land therein described.

To compile an abstract from these records, one may look in the Tract Book and find the name of the person locating that parcel of land. Then we must follow the index of name until a conveyance of that parcel is made by the first owner, then take the grantee's name and foltake the guarantee's name and follow in the same manner, through sixteen books of indices of deeds and twelve books of indices of mortgages. But it often happens that the title does not run smoothly, an owner having perhaps abandoned the land, or perhaps a grantee does not place his deed on record, and then we are lost. But perhaps we know the name of the present owner and can tract back in the same way, beginning with the latest index book and going backwards to the beginning, or until we again become lost because of the dropping out of the party for whom we are looking. And we can go through each mortgage index following the name of those whom we have found to be the owner at one time of the parcel we are interested in, thus getting as nearly as possible, a good chain of title. But on lands in Tuscola County, particularly, there are numerous miscellaneous transfers not to be found in any way except by a careful perusal of each of the 200,000 transfers, and this is a task which it is supposed that a clerk could do in less than half a day and that a county official should be expected to do. An abstract compiled in such a manner, even approximately correct, would not be ready when required, and the cost would certainly be worth talking about if paid for by the time required to do such work.

"E. K." further states that his land abstracted consisted of about eight acres located partly in the Village of Cass City, that the charge of Fifty Dollars was outrageous, and that what he has as an abstract isn't worth much, and further states that he thinks it could have been made in much less than half a day. He also asks some interested person, even a practical abstractor, to answer. So let us see just how this particular abstract was made.

First, an abstract office is made up of vaults in which are kept copies of all the records from the office of Register of Deeds. These have been compiled from the beginning of the records, when time, labor and material were inexpensive, having been carefully guarded in vaults from loss by fire or other destructive agency. These records have been transferred to another complete set of books, one book for each township, each divided into 36 parts, into each of which are put all the transfers affecting that section of the particular township. There are also books for the villages and each village book is also divided into parts, so that each block of the village has a section of its own, and the various transfers affecting these separate blocks are placed therein, a transfer affecting several different parcels being placed under each division affected.

These books form a basis for the abstract work and represent much time and thought, and their value must form a part of the cost of an abstract. An abstract around any village represents many hours close study before any attempt at writing the document is made. The descriptions must be studied, so that all parcels which in any way cover the parcel concerned, are included and all others rejected. These must then be arranged so that a complete history of the parcel of land is shown. Sometimes two or three days are accupied in studying upon one description, before everything is arranged to form the most complete abstract possible from the recorded transfers. After this is done the abstract is written. Then it is compared with the record to be sure that nothing has been omitted. In cases where apparent breaks in title exist, records in offices of Judge of Probate and County Clerk have been searched in the hope of finding some paper which, if recorded in the office of Register of Deeds, might add to the clearness of title and the office of County Treasurer is also entered looking for the tax record.

This, then, is the finished product sent out, being always examined by one who has had years of experience before being mailed, and this work, and the experience, and the intrinsic value of the records all enter into the cost of the finished abstract.

"E. K." is right in thinking that an abstract made from the last twenty years records would be of little value. The only excuse for the existence of an abstract is that it shows a complete history of the title, and that must come from the time of location of the property of its value is lacking. Of course it must be understood, in this connection, that an abstract does not guarantee perfect title. An abstract is simply a history of the title made for the purpose of disclosing errors, if any exist, and cannot change documents to make corrections.

The statement that "E. K." would not object to paying well for a real service seems to have been answered. If an abstract showing a complete history of the title is of value, we consider our work described above, to be a real service. If not, we are wasting not only our time but much mental labor which should be used in a good cause. But we believe that it is only lack of understanding of the real service given by the complete compilation of an abstract that has led to this discussion.

As for some different system, there is no other way by which ones title to property may be determined. A state may not decree a good title in a person who is holding possession of a piece of land without satisfactory evidence that no one else has a good claim to such land. For this purpose, there must first be secured a complete abstract of title and a clear title must be shown, oftentimes expensive court proceedings being required to clear old clouds upon title, and then a Title Certificate may be issued by the state in which such a system has been adopted. As for the reduced cost, a recent visitor to our office, commenting on the reasonableness of our charges, spoke of the cost of abstracts secured in a state in which this system is used, and aid that his firm often had to pay $200 or $300 for one abstract. As for the value of this system, the fact that many decline to deal with titles so registered, does not give us full confidence in its use.—Ealy & Co., Abstractors, Tuscola County, Michigan.

TO INCREASE SALES OF PRISON TWINE

DEAR Editor:—I have seen by the papers that the Michigan farmers were not buying as much prison twine as they should. One reason is I think that the persons who order it cannot take the time to canvass their townships to see about what they can sell. I ordered one-half ton and if I could have had two ton I could have sold it by doing a little advertising, I believe. If one person in each township could order what they could sell and give good bonds or security for the amount, and settle with the prison every two weeks and not sell any of it, except for cash, the sale of twine could be increased double. I know it could more than double in my township. I believe the farmers ought to support this to the limit. I would like to hear from someone else who has a better plan.—Wm. R. Symons, Arenac County, Mich.

OUR 1924 COVER MODEL

JOHN ALTON LORD, of Lapeer county, is the young gentleman who so kindly consented to pose for the cover of this issue. He is the son of Mr. and Mrs. F. A. Lord and his father is the owner and editor of the Lapeer County Clarion and the Otsego County Herald. Evidently this young man is optimistic over the prospects of 1924—so are we and we hope you are!

Home, James!

Unlucky Motorist (having killed the lady's puppy): "Madame, I will replace the animal."

Lady: "Sir, you flatter yourself."—Bison.

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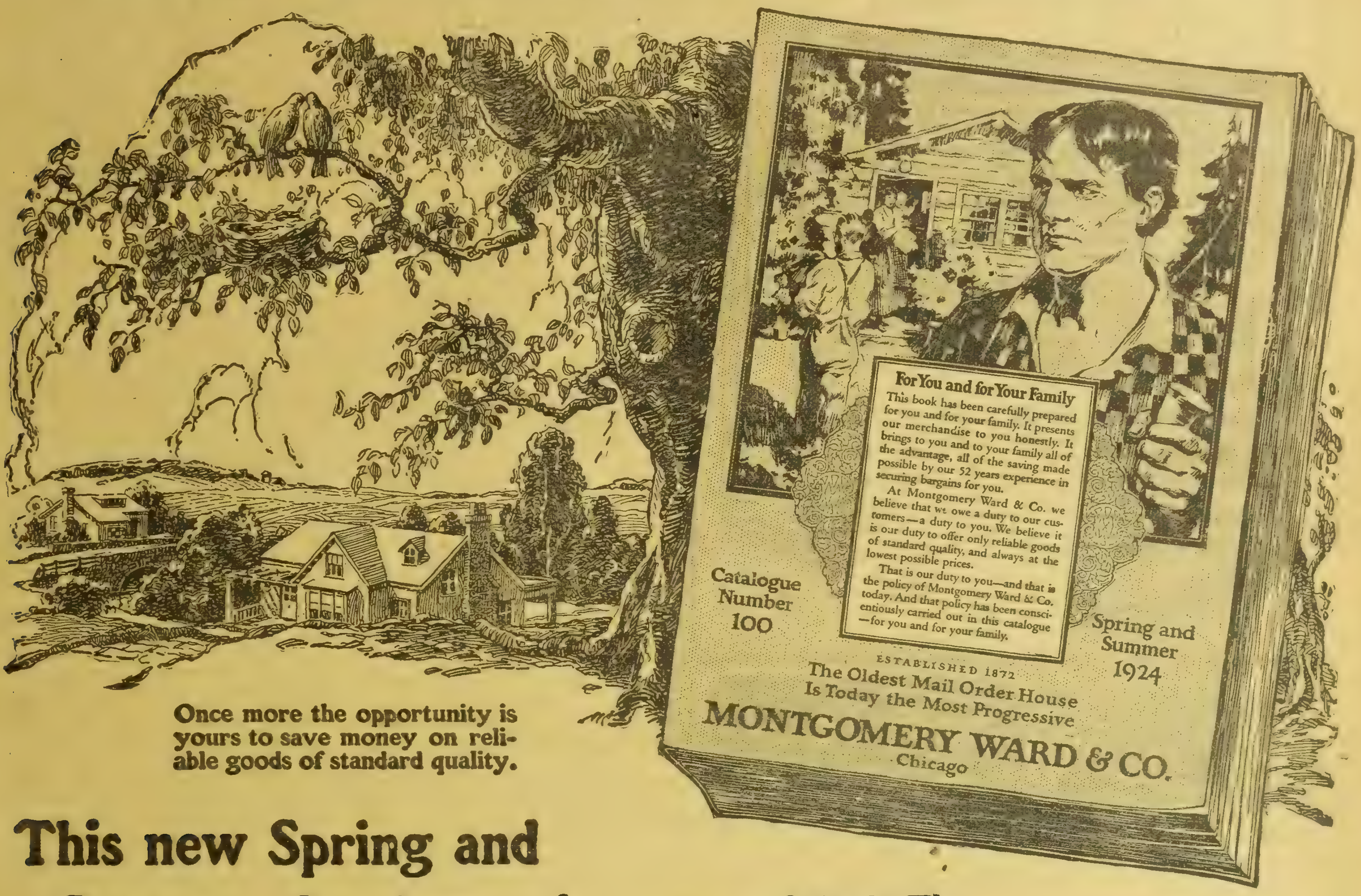

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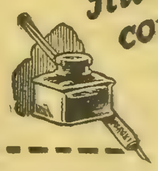

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WHEN WRITING TO ADVERTISERS PLEASE MENTION MICHIGAN BUSINESS FARMER

What Will Beet Growers Get For 1923 Crop?

(Continued from Page 4)

will be more manifest this next spring than last spring.

The big question in the growers' minds at the present time is what will we get for our beets? It cannot be answered for certain until after February the 1st, 1924. And anyone that has stated any price, is simply talking for effect, as the average extraction cannot be known until after the factories close which will not be known until February 1st, 1924. However, I am warranted in stating that my opinion is that it will be good in both extraction and price. One factory manager has told me that up to date the extraction has been above the average, which is about 250 pounds per ton of beets, and the average New York price of sugar since October 1st is around $8.80 for cane.

Another question which is aggitating the growers mind is what kind of contract will the 1924 contract be? This question is no doubt in the minds of the personnel of the factories. Some say there will still be the three contracts for next year, some say the factories will get together and come out with one emboding the good points of all three. I believe this can be done. Further I believe it should be done. Let me suggest a contract embodding a participating contract on a 50-50 basis, charging a certain sum per acre, where labor assistance is furnished and a safe minimum substantial first payment of say $6.00 per ton which would relieve the minds of our growers that are doing business entirely on borrowed capital. I may say frankly that I cannot find a year where the grower actually did gain anything financially by having a guaranteed minimum price in his contract, but if it makes us feel better, why let's have it.

In closing, there is one other question that is bothering the minds of the growers and that is the accusation that they are employing child labor in the beet fields. My opinion is that these that are bringing the charges are not familiar with the facts of the case. It was charged by Mr. Owen R. Lovejoy, Secretary of the National Child Labor Committee that the beet workers children lost 63 per cent of their school time. This if true is not on account of beet work, as schools are closed for the summer, and the harvest does not begin until about October 15th and is done about December 10th and very few children under 16 years can do much topping beets. The writer sends a picture of some of his beet workers that represent the kind that really pay to have in the beet field. Mr. Lovejoy charges that work in the beet fields is detrimental to the health of children, not being a doctor I cannot say. However the writer has labored at most all kinds of farm work since he was six years old, at such work that he could do and has acquired thereby a practical knowledge of his business that is worth a great deal of money. Besides has formed habits of industriousness that lots of children nowdays are not getting. As far as I have observed, the best workers children are not overworked, neither are they under-fed, as stated by Mr. Lovejoy and I have been in every beet growing section in Michigan.

According to Dr. Carl E. Buck, epidemiologist of the Department of Health, there are not so many under-nourished children in the poor sections of the cities as there are among the wealthier class of people, as the food the poorer class of children get is plain, but nourishing, whereas, the children of the rich become dainty in their eating habits and therefore form abnormal appetites not to their good. It this is a fact then moving these children out of the crowded city into the open country in the summer time certainly cannot be detrimental to their health. Especially when their work and play is in the open air. As far as housing conditions are concerned, it should be made clear that the sugar companies are renting houses that are occupied by farmers themselves a couple of years ago, having since moved into the cities. There are a few of the "beet shanties" being used, but they compare very favorably with the usual summer resorter's cottage that he lives in when he takes his vacation.

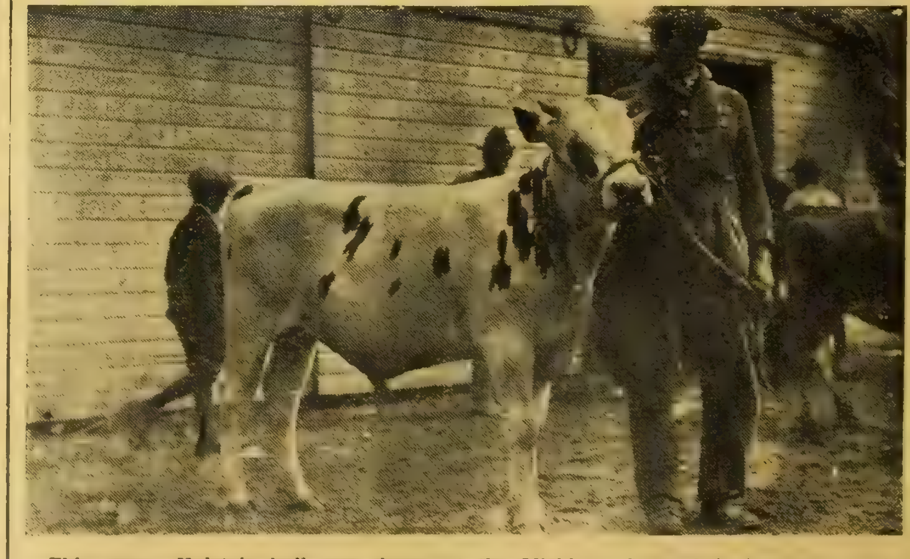
One point more, Mr. Lovejoy charges that his agents actually covered 10,500 acres of the beet fields and found 1358 children at work there if he had covered the whole beet acreage in Michigan then he would have found 14,938 children at work since he states that these children done around 7 acres of beets apiece, there would be only 4,034 acres left for the 10,900 adult laborers the 17 sugar factories hired to work. If Mr. Lovejoy's contentions are true then it is not a question of child labor, but a question of the childishness of labor. The facts are that beet workers do not shirk like so many city workers nowdays, because they are working not by the day but by the acre. Therefore the efficiency of the beet worker and his family for which the Michigan sugar beet growers paid $2,507,000.00 in cash and about $620,000.00 in extra bonuses, house rents, gardens, fuel, and transportation from and back to the cities from whence they came.

THE EXPERIENCE POOL

Bring your everyday problems in and get the experience of other farmers. Questions addressed to this department are published here and answered by you, our readers, who are graduates of the School of Hard Knocks and who have their diplomas from the College of Experience. If you don't want our editor's advice or an expert's advice, but just plain, everyday business farmers' advice, send in your question here. We will publish one each week. If you can answer the other fellow's question, please do so, he may answer one of yours some day! Address Experience Pool, care The Business Farmer, Mt. Clemens, Mich.

INFORMATION WANTED

Have read the experiences of the readers of your paper on The Oil Gas Burner and have decided not to get one. There are two things I would like to learn something about, through your Experience Pool. Namely: The knitting Machines, that are used at home and goods sold, and the union looms for making rugs and cushions.—Mrs. Lida Brooks, R3, Midland, Mich.



This young Holstein bull was shown at the Michigan State Fair in 1923 by his owner, Frances Maulbetsch, Ann Arbor. This young bull won first prize as senior calf, was champion Holstein bull in the club class and winner of fourth prize in the open class of twelve entries. At the Washtenaw County Fair he was first in his class and grand champion Holstein bull. His proud owner stands at his head in the picture.

NEW LEADERSHIP FOR THE NEW YEAR

A SERMON BY REV. DAVID F. WARNER

TEXT: "He that hath ears to hear, let him hear what the Spirit saith to the churches."—Rev. 3:6.

WE jubilantly salute the New Year. We hail it for its revolutionary newness. It brings to us glad tidings of universal unrest; of the giving of industrial tyranny and the forced abdication of political autocrats. But more significant still, ecclesiastical authority is yielding to a more sympathetic and representative leadership. The legalistic John gave way to the leadership of the Christ. Yet, how humbly and graciously! It is not given to too many men to retire, willingly, when a better man appears to assume the role of leadership. This Jesus, for a time, became the visible, personal leader of His church. But isn't He our personal leader, yet? The Revelator sees Him walking among the churches in the wisdom and power of God. Hugh Black saw him on the battle fields of France as the "Comrade in White." And even yet, when we meet in His Name, He promises to be in our midst; and when we go out to our tasks, he says, "Lo, I am with you always."

But one day, He and His disciples took a farewell walk up the gentle slopes of Olivet. "And it came to pass, while He blessed them there He was carried up into heaven." Yet not until he had given them the imperative order to "Tarry" until they were clothed. Clothed with what? With more accessions to their number? With more means? With symbol or sacrament? No. But clothed with power. The Greek word translated "power," is the word for dynamite. That is significant, isn't it? Well, the disciples tarried for this spiritual dynamite. Church folks speak of it as the blessing of Pentecost. And here is where the Holy Spirit assumes the leadership of God's people to convict of sin and impart life and power. "He that hath an ear, let him hear what the Spirit saith to the churches." And so, while a visible leader seems to be a psychological necessity, the invisible leadership of the Spirit is fundamental. The one gives vision, the other gives power. And the church in Sardis needed most of all to recognize the leadership of "the seven spirits of God," which is to say, the Holy Spirit. (Read the Revelation of St. John, 3:1-6).

Sardis was a popular church, widely known and advertised. And while "thou hast a name that thou livest," evidently it was due to a selfish directed publicity. You can see its publicity departments putting out in great, red letters, "The People's Church," or "The Glad Hand Church." "To-night the President's message will be radioed. Be on time and hear the great choir." "O Sardis, thou hast a name, but thou art dead." "Thou hast depended for thy life and power upon machinery and men, when, only the church that is in constant correspondence with Him who hath 'the seven spirits of God,' hath life; not a semblance of life."

In some animals, even after death has taken place, you will notice a spasmodic twitching and movement of the muscles. How many churches and individuals try so hard to hold the respect of the community and friends thru a show of Christian life when their spiritual heart has ceased to beat! And can't we see how possible it is (tho how fatal) to be connected with a church thru a formal adherence, but not thru a vital conviction! "Sartis, thou art dead." But is my church dead? Haven't we been much alive during the past year? Just see our fine training center and take note of all our equipment! And how we have prophesied in the name of Christ and have laid our gifts at our Lord's feet! Why, we don't feel any sting of death. But paralysis is not painful. And it is the business of the world to chloroform the church into an unconscious death. We need to be solemnly aroused to the fear that spiritual paralysis be creeping up to our heart and we be unconscious of it. Samson slept in the lap of a Delilah and went out to perform his usual feats, and wist not that his strength was gone. Sardis was sleeping in the lap of the world not knowing that her life blood was ebbing away. And your church may have plenty of organization activity, but a growing deadness at life's center. Yet, withal, there always stand out in bold spiritual relief, "a few names that have not defiled their garments." "They shall walk with me in white for they are worthy." May this new year find more churches coming out of the denominational blundering promoted by an ecclesiatical hierarchy; away from selfish connection with Christ, their Head. Does it not seem, sometimes, that Christ, the "chief corner stone" would yet be rejected by the builders? And does it not appear that in our zeal to have the biggest church, the best choir, and the most popular standin with the community, that we are in danger of betraying and repudiating the spirit and devotion of the "apostles and prophets" who constitute the first course in the building?

Now, God, thru His spirit, is the self-appointed leader of the church. In the Jewish wilderness assembly, the ark went before them and the cloud was over them; but Kadesh Barnes witnessed their defeat because they preferred man's counsel. In choosing their king, Israel turned from the counsel of God, and while a man-led kingdom was dying out, it became clearer and clearer to the wide-visioned prophets that God must send a leader to earth to vindicate His name and save His people. This Leader came; He served; He died; He ascended; yet, he still walks among us in the "seven spirits of God." And when the heavenly dove made its peaceful descent upon our Savior, God gave of his spirit in overwhelming measure. When Christ ascended He did so that He might fill our "earthen vessels" without measure, with the same spirit and so to impart quickening life and power. May the New Year bring this conscious conviction to all, that it is not in man or the things of man to impart spiritual life; but the holy ways of grace and power are learned from Him, who hath the spirit that was sent by direct course to heal our deadness.

But what is the practical meaning of all this? It is this: "Judgement must begin with the house of God." Your church and mine must get right with God. Sardis, "I have found no works of thine perfected before God." "Be thou watchful and establish the things that remain." Life had not entirely gone out. There was smoldering embers lying about, and the Seer is pleading that she yield to the leadership of Him who does not quench smoldering flax, but fans it into a new fire. This means that until churches yield precedence to Christ, above love of denomination, sacrament, or ritual, or prestige, they can not keep their garment from defilement.

Now, we would not minimize the need of an efficient church for this new era. Modern equipment and organization are important. But all this is but as cold, lifeless machinery without spiritual fitness. The coal is shoveled into the engine but no power is generated. Why? There is no fire. But it takes fire to create fire. Just this is the meaning of Pentecost. Moses came down from the mountain one day with the Ten Commandments, and read them impressively, expecting that his people would learn and obey them before reaching Canaan. But they have not done so to this day. Why? Jesus came down from the new Sanai in a later day and submitted the rules for Christian efficiency in a new age (the Sermon on the Mount), but we treat them as impractical and visionary, and something to be achieved in the long afterwhile. Why? Did you ever try to think it out and feel it out? In the days of river traffic, passengers were want to wait for days for their boat. In the interim they would idle away their time whittling and swaping stories. But when, up the river, the deep scream of the boat's whistle was heard, no matter whether day or night, the whole town awoke into a spasmodic activity until the

(Continued on Page 23)

When skating pond takes Tom from kindling pile, there's a chance for a story-telling picture. Such pictures are sure of a smile when you turn the page in your Kodak Album. *Illustration from a Kodak negative.*

A Kodak for the Farm

IN addition to the dollars-and-cents value that Kodak pictures of cattle, horses, hogs, crops, equipment, buildings, have in the business of farming, Kodak plays part the year 'round in the farm's fun—as the picture above shows.

Get a Kodak at your dealer's for your farm.

Autographic Kodaks $6.50 up

Eastman Kodak Company, Rochester, N.Y.

The NEW IMPROVED Walsh No-Buckle Harness

NO BUCKLES TO TEAR - NO RINGS TO WEAR

$5

Made in all styles: *Breechingless, Side Backer, Express, etc.*

After 30 Days Free Trial - Send No Money

I send you my Walsh No-Buckle Harness to use on your own team on your own farm thirty days free. See for yourself why this harness with no buckles to tear, no rings to wear, no buckle holes to weaken straps, is three times stronger, better looking, better fitting, handier in every way than any other. Amazing success—thousands used in every state for over 9 years. You can get complete interesting facts by sending for new, big, free book.

WALSH "SPECIAL TEST" LEATHER

Buckles weaken and tear straps. Ordinary harness has 68 buckles and 270 places where ring friction wears straps in two. Walsh has no buckles, no rings—besides it is made of Northern Steer Hide Leather, tanned by special six-month's bark-tan process. Actual test in steel testing machine shows Walsh Leather to be twice as strong as ordinary harness leather. Free book tells about this remarkable test.

Saves Repair Expense

The money spent repairing old harness will make first few monthly payments toward a Walsh—the world's strongest harness. No frequent breakdowns to consume valuable time. The Walsh is easier to put on and take off. No stubborn buckles to bother when winter cold bites the fingers and straps are stiff. Easily adjusted to fit any horse. All I ask is, test it thorougly at my risk and expense.

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Balance easy monthly payments, or cash after trial if you wish. Sold direct to you. Satisfaction guaranteed. Write today for my big, new, free book, prices, easy payments and 30 day trial offer, also how to make money showing Walsh Harness to your neighbors.

James M. Walsh, Pres., WALSH HARNESS CO.
421 Keefe Ave., Milwaukee, Wis.

Please send me two sets Walsh No Buckle Back Pad Harness, for which I am enclosing my check. This makes my third set. All of my horses now have Walsh No Buckle Harness. Yours, a satisfied customer—*August Maas, Gettysburg, So. Dakota.*

I am well pleased with my Walsh Harness. Please ship two more sets at once—*D. F. Connors, Auburn, New York.*

The Walsh Has No Buckles or Rings

See How Buckles Tear Straps
See How Rings Wear Straps

Used and endorsed by Agricultural Colleges, Government Experiment Stations, leading Horsemen and thousands of Farmers in every state.

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Your Copy Is Ready - Write NOW

FREE BOOK 100 Illustrations
The Walsh Harness Not a buckle on it

The Michigan
BUSINESS FARMER

SATURDAY, JANUARY 5, 1924

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THE RURAL PUBLISHING COMPANY, Inc.
GEORGE M. SLOCUM, President
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RELIABLE ADVERTISERS
We will not knowingly accept the advertising of any person or firm who we do not believe to be thoroughly honest and reliable. Should any reader have any cause for complaint against any advertiser in these columns, the publisher would appreciate an immediate letter bringing all facts to light. In every case when writing say: "I saw your advertisement in The Michigan Business Farmer!" It will guarantee honest dealing.

"The Farm Paper of Service"

1 9 2 4

OUR very able Secretary of Agriculture, Mr. Wallace, has in his usual clear and concise manner set forward a program, which is at the same time a prediction, of the better things which are in store for American agriculture during 1924.

There can be little question now, but what the farming business on the whole, is convalescing from a period of depression such as has not been experienced since the period immediately following the Civil War.

We who have been closely identified with the agricultural business have felt as though we were passing through a period the like of which had never been seen before, but history in its usual manner has only repeated itself and we are now emerging into the silver lining, the turn in which was felt in most divisions of the farming and stock growing business early in 1923.

The migration from the farms to the cities has only decreased the number of producers and increased the number of consumers. We have pointed out consistently through these columns that this could only work to the benefit of those who would remain on the farm.

It is the real farmers who have stuck by their farms, at least in that territory north of the Mississippi and Ohio Rivers, which is after all the real prosperous agricultural and dairy heart of America.

We look forward with real optimism for the farmers in Michigan particularly during 1924, and those who were smiled at as their neighbors drove toward the city with their household effects are going to have a chance to smile, if our prediction proves correct, before the end of this very year.

As old Bill Nye once said, "Things might have been wuss, but I don't see how!"

FARMERS IN SUGAR FACTORIES

FROM Owosso comes a report that most of the labor employed in the sugar beet plant operated there has been recruited this year from the farming district immediately adjacent to this plant.

It may be that this is a solution to the employment of the surplus of farm labor which is created with the locking up of Nature's storehouse, in the early winter, here in Michigan.

Perhaps the conditions which have forced the present situation at Owosso, which is doubtless reflected in other sections of the state, is a move in the right direction. Would it not be possible for the factories to begin slicing later in the season after the farmers and farm labor were released from their fields? This may offer a suggestion for a happy solution to one of the present day farming problems.

CHRISTMAS TREE WASTE

NO one who has in his heart a love for conservation could go about the streets of Detroit or any other large city in Michigan Christmas Day filled with the true Christmas spirit. He was too embittered by the sight of thousands of unused Christmas trees lying in every vacant lot because the supply had far exceeded the demand, great as that must have been.

Even the city newspapers are up in arms against this unwarranted destruction of the years of growth necessary to create this standing timber in the northern part of our state. To duplicate these young trees which are destroyed will take years of patient effort and the surprising part is that most of them were cut down by a lawless bunch of vandals who drove into northern Michigan via auto truck from the cities and actually stole them from property which was not their own.

It would be impossible for the state police if they were numbered in the thousands to protect these trees which are scattered over so large an area and in so many countries, but it should not be hard to check from the selling end, where the trees came from, and if they were legitimately purchased.

No one would want to deprive a single child of the sight of the Christmas tree but there must be a way to discourage this wholesale destruction and the needless waste which it involves, and no larger subject can attract the attention of the State Board of Conservation. They should have the support of the legislature in any law they want enacted to curb this practice.

THE SUGAR BEET SITUATION

THERE is no man in Michigan who enjoys a better reputation among the beet growers themselves than C. E. Ackerman of Durand, who on page 4 of this issue discusses the sugar beet situation in Michigan, the probable price to be paid and the outlook for the future.

Mr. Ackerman has been a leading figure in many of the bitter fights which have been staged in Michigan and he is one of the men who has been given considerable credit for the progress which has been made to benefit the growers during the past few years.

The fact that he is optimistic over the future of sugar beet growing in Michigan is a signal for congratulations on the part of beet growers in our state and for the sugar beet industry generally.

We hope every reader in the sugar beet country will not only read this article but pass it along to his friends and neighbors who grow beets and we want you to know that the columns of THE BUSINESS FARMER are always open to a discussion of any of the points which Mr. Ackerman or any other writer brings up so that you may feel perfectly free to state your facts and they will be published with your name or not as you so desire. The important thing is to get the opinion not only of one reader but of the many who are confronted with perhaps other problems or who have other ideas which are worthy of discussion.

SECRETARY OF AGRICULTURE OPTIMISTIC OVER FARMING IN 1923-1924

THE industry, courage and faith evidenced by the farmers of the Nation during the past three years are slowly bringing their reward. Improvement in agricultural conditions continues—not as rapidly as desired or needed, nor as rapidly as deserved, but nevertheless it continues. The promise of the year has been fulfilled.

So we come to the end of the third year of post-war depression with a feeling of greater confidence born of better times already realized and with justified hope of still further improvement in 1924.

In general, the crops of 1923 were good. Some sections in the cotton belt and in the wheat belt suffered from the ravages of weather and insect pests, but the aggregate crop production was equal to the average of the five preceding years.

Considering money return we find that the values of most crops are greater than in 1922. The total value of all crops is 12 per cent greater. The values of the wheat, rye, rice, clover seed, cranberry, peach and pear crops are below 1922; in the case of wheat 11 per cent below. The values of all other important crops are greater.

It is difficult to measure the productive value of livestock during the year, dependent as it is upon crops marketed in that form. In general, it has been a prosperous year for sheep growers, fairly good for dairymen, less satisfactory for producers of hogs, and discouraging for growers of range cattle. Cattle feeders, however, have done very well on the whole.

Experience gained during these years of depression, however, together with progress already made, warrant a hopeful attitude for the coming year. Gradually crop acreage is being better adjusted. The domestic market continues strong. The children keep coming, and that means a steadily increasing number of mouths to be fed. Those who stay by the farm and do good farming can look forward to better times as a reward for their years of toil and hardship. Those businesses depend directly upon farm purchases can find decided encouragement in the growing gross income of the farmer, for he will buy as his income expands.

The year 1924 comes with the promise of continued improvement in the material prosperity of the farmer, and the farmer continues to be the material and spiritual backbone of the Nation.—Henry C. Wallace, Secretary of Agriculture.

THE SPECIAL SESSION

IT cost the tax payers of Michigan considerably more than $20,000 to call an extra session of the legislature and to find out who actually is "boss" at Lansing.

After meeting for nearly two weeks the legislature was adjourned without passing one single bill or performing one single act of benefit to the state unless it be reasoned that their refusal to enact the reapportionment bill until a constitutional amendment is voted upon would be worth the astounding amount which this cost.

Of course the voters and taxpayers of Michigan know that the legislature's refusal to consider the reapportionment act was largely a thrust at Governor Groesbeck who, rightly or wrongly as you may think, is accused of being a supreme "boss" on his job and neither his pleading nor his threats could change the majority of the legislature in anything that he sponsored.

There is much to be said on the matter of reapportionment in this state. It is not a simple problem and is one that will require considerable discussion if the people of Michigan are to vote intelligently on an amendment to the constitution regarding it, which now seems necessary if any is made.

Anyway we hope the boys enjoyed the week or two they had at Lansing just before Christmas!

MORE VETERINARIANS NEEDED

IF you have thought that the auto repair man had the veterinarian by the throat and that with the apparent "passing of the horse" there was to be no more need for the old familiar "horse doctor", prepare to change your views.

Professor Ward Giltner, head of the Veterinary Department of M. A. C., leads a very timely discussion on this subject in a special article in this issue, in which he encourages farmer boys to take up this lucrative employment in their neighborhood as a veterinarian and points out that the number of horses, cows, mules and swine have largely increased not only in Michigan but in the entire United States during the past ten years in spite of its phenomonal development in automotive power.

There are any number of communities even in our own state where there is no good veterinarian within easy access, and yet the number of animals on the farms is constantly increasing and their needs for medical attention must be as carefully guarded as are those of their human owners.

There is many a boy going into some other profession from the farms today who could make a greater success as a veterinarian not only because of the opportunities it presents but because of his natural aptitude for handling animals and his real and perfectly natural joy in working with them.

Fortunately Michigan has an excellent veterinary department at its agricultural college and the man in charge of it is acknowledged as the foremost teacher of his profession in the United States today. If you are interested or if you have a boy who is interested we suggest you write Professor Giltner. You will find him only too anxious to help you make the right start.

THE GOVERNOR SMELLS "PORK"

PERHAPS Governor Groesbeck is right when he points out the possible danger of a "Pork-Barrel" in Michigan which will become as popular with a certain type of politicians as is that larger and more famous river and harbor bill in the national congress.

It now appears, according to the Governor, that certain members of the Legislature who make demands for state road improvements in their own districts, offer to trade votes on important measures with the simple assurance that their demands for road improvement be granted.

As it now stands, the construction and improvement of roads in Michigan, is entirely under the governor and his state board of administration, and it is likely that this one has given rise to the popular conception that the present governor is using czar-like methods in the administration of his office. It is obvious that the matter of road building must be considered in the light of the use to which all sections of the state will give these main highways. The matter of local connecting roads is one that is strictly within the confines of the county; and should be so considered. It is likewise obvious, that if the building of roads in Michigan, were to be entirely based on the activities of the various representatives at Lansing, there would be no complete plans ever carried out, and the state would appear simply as a crazy-quilt of roads, heading in all directions, but ending nowhere.

PUBLISHER'S DESK

The Collection Box

The purpose of this department is to protect our subscribers from fraudulent dealings or unfair treatment by persons or concerns at a distance.

In every case we will do our best to make a satisfactory settlement or force action, for which no charge for our services will ever be made, providing:

1.—The claim is made by a paid-up subscriber to The Business Farmer.

2.—The claim is not more than 6 mos. old.

3.—The claim is not local or between people within easy distance of one another. These should be settled at first hand and not attempted by mail.

Address all letters, giving full particulars, amounts, dates, etc., enclosing also your address label from the front cover of any issue to prove that you are a paid-up subscriber.

THE BUSINESS FARMER, Collection Box
Mt. Clemens, Mich.

Report ending December 29, 1923

Total number claims filed	2404
Amount involved	$23,248.28
Number claims settled	935
Amount secured	$22,283.85

THE SOLUTION FRAUD

THE National Vigilence Committee is issuing warnings of a fraudulent proposition which goes under several names, but is a fluid claimed to renew the life in a worn-out storage battery instantly.

We have not heard from this in Michigan yet, but we can very well issue this warning, thus locking the stable-door for once before the horse is stolen!

If anyone offers you any kind of "monkey-glands" which are guaranteed to make your old storage battery act like a new one in a jiffy, call the sheriff and send me the particulars.

A SONG WRITING SWINDLE

ALLURING statements regarding the easy money supposed to be made in song-writing are published from time to time and serve as a bait to the ignorant and unwary who then become easy victims for the "songsharks."

Without advertising these concerns could not secure fresh victims. Here are a few typical advertisements:

WHY DON'T YOU WRITE THE WORDS FOR A SONG. We'll help you along by composing the music Free and publishing same. Send poems today.

WRITE THE WORDS FOR A SONG. We will compose music, secure copyright, and print. Submit poems on any subject.

NO MONEY NEEDED FOR PUBLICATION—Poems set to music and published on commission.

WRITE THE WORDS FOR A SONG. We revise Poems, write music and guarantee to secure publication. Submit poems on any subject.

WRITE A SONG POEM—Love, Mother, Home, Comic or any subject. I compose music and guarantee publication. Send words today.

SONGS AND POEMS WANTED. We compose music, publish, sell and pay you five cents royalty on every copy sold.

The fake publisher and song-shark secures his victims through advertisments in the cheaper grade magazines of wide circulation. To those who respond he sends alluring circulars and booklets to show how easy it is to turn out song-poems that may bring "fame and fortune." With the false bait contracts are sent out for the victim to sign, together with "Certificates of Guarantee" and "Money Refund Certificates." In order to induce the signing of these contracts the advertisers, whether "Music Company," "Corporation," "Student," "Bureau" or by the name of an individual, flatter the prospective victim by praising his song-text, no matter how poor it may be. Of course they offer to revise it and have their "Chief Composer" set it to music. If the sucker is slow in answering a series of clever follow-ups pursue him until he takes the bait, signs the contracts, sends his money and is hooked.

Any hack musician of experience can grind out commonplace music by the yard. With song-texts set before him on the piano-rack and plenty of music paper he'll wearily work all day on one or two formulas till sick of them, then use another, always basing his scheme on the popular music of the hour.

While the government has closed many of these concerns for obtaining money under false pretense others still flourish and by carefully worded documents that seek to keep within the law they somehow escape the clutches of the authorities.

OUR GERMAN BABIES FEEDING FUND

Edwin P. Harms	$10.00
Employees of Business Farmer	13.00
George M. Slocum	10.00
Mrs. Grant Slocum	10.00
E. B. Travis and daughter, Mary	10.00
Sydney Floyd Bigger	4.00
Adam Falk	3.00
Henry J. Fuss	2.00
Mrs. F. W. Theberath	2.00
Mrs. Blanche Snider	1.00
S. A. Y.	1.00
Theo. Bengel	1.00
Martha Smith	1.00
Victor Avram	1.00
Total to January 1, 1924	$79.00

SONG SWINDLER GETS YEAR AND $2000 FINE

A YEAR and a day in prison was the sentence imposed in U. S. Court by Federal Judge Lindley on W. L. Needham, manager of the Musician Self-Maker Company, in whose trial the government submitted 2220 exhibits of verses which ambitious novice poets and writers sent him in the belief they would be set to music. Needham was convicted of using the mails to defraud. He also was fined $2000.

Many of the writers of lyrics came from their homes in distant states to testify of how they had sent Needham fees from $2 or $3 to $35.

"You were a petty parasite on the community, getting money from trusting people—a high school boy, a woman with a baby in her arms, and a woman 63 years old," said the judge in passing sentence.

Chicago Sharks Wiped Out

The Needham case represents the type of fraud known as the song swindle or fake publishing for the exposure of which the Music Industries Chamber of Commerce has undertaken a campaign on behalf of the Music Publishers' Association of the U. S. and other legitimate music trade interests. An active, systematic drive to warn amateur song writers and get them to report their complaints to the post office authorities, has resulted in saving many victims and checkmating the song sharks.

MADE THEM COME TO TIME

THANKS to you! The —— —— Seed Co. has sent us a check for the amount that I sent them. I know that we have you to thank for ever getting it back even if they did write a soft letter saying how very sorry they were that the order had not received better attention. They had plenty of time to reply to the letters I sent them before it was placed in your hands. It has centainly been a boost for your paper as a good many of my neighbors (some who already take your paper) were interested in the case and many doubted if I would ever get my money back. So thanking you again and wishing you a most successful New Year, I am, Fred R. Smith, Wexford County, Mich.

LIKES M. B. F.

YOU folks certainly publish the best farm paper in Michigan, and I came to you with my trouble. Now please accept my thanks for so promptly taking up my claim with the ———— Company. This letter is to tell you that on the 22nd, part of the goods came and on the 24th the rest came so you see that lets you out without any further trouble. Please again accept my thanks, and here is to you and the best farm paper in Michigan, with best regards.—A. F. Schmidtke, Mason County, Mich.

GOVERNMENT BULLETINS OF INTEREST IN JANUARY

A SMALL list of Farmers' Bulletins of general interest during January is believed to be of value to our readers. Copies may be obtained free by addressing the Office of Publications, United States Department of Agriculture, Washington, D. C. Specify number and name in requesting bulletins.

Farmers' Bulletin 181, Pruning; 828, Farm Reservoirs; 847, Potato Storage and Storage Houses; 947, care and Repair of Mowers, Reapers, Binders; 1036, Care and Repair of Grain Separators; 1040, An Illustrated Poultry Primer from Cold; 1117, Forestry and Farm Income; 1131, Tile Trenching Machinery; 1160, Diseases of Apples in Storage; 1194, Operating a Home Heating Plant; 1387, Laws Relating to Fur Animals for the Season 1923-24.

First Mortgage Real Estate Gold Bonds

Funds you find available for January investment can be most profitably and safely disposed of in Federal first mortgage bonds—known among farmers as Better Bonds.

Write for Booklet AG1087

Tax Free in Michigan
Free from Federal Income Tax of 4%

6½%

FEDERAL BONDS
Are Better Bonds (1087)

FEDERAL BOND & MORTGAGE COMPANY
FEDERAL BOND & MORTGAGE BUILDING, *DETROIT*

NOTICE!

The First Joint Stock Land Bank of Cleveland, O.
Through Amendment to the Charter has changed its name to
The Columbus Joint Stock Land Bank
and the location of its principal office to
66 E. Broad St., Columbus, Ohio

This change adds further to the strength of the Bank and enables us to render a still more effective service than in the past.

To the experienced and successful farmer, who owns a good and well managed farm this bank offers an excellent service and on most favorable contract, and which eliminates commissions, costs and uncertainty of renewals, and gives financial protection to your family. We will gladly give you complete information if you will write us.

Columbus Joint Stock Land Bank
Chartered by the U. S. Government
66 East Broad Street Columbus, Ohio

NEW SUBSCRIPTION RATES TO M. B. F.
New or Renewal Subscriptions

ONE YEAR	.60
TWO YEARS	$1
FIVE YEARS	$2

The Michigan Business Farmer,
Mt. Clemens, Mich.

I enclose $.............. for a .... years subscription, this entitles me to every department of Business Farmer Service, without further cost for the full period of my subscription.

M.. RFD No.........

P. O.. STATE..................

(If it is a Renewal, mark X here ☐ and if possible send the address label from this or any recent issue to avoid mistakes.

Nature left that air space

Did you ever stop to think why there is a hollow space at one end of an egg? Nature has provided that air space so that the baby chick may have air to breathe from the time it comes to life within the egg until it is strong enough to break through the shell.

Eggs hatched in an incubator absorb the air from the incubator. If fumes from poor oil are present they will penetrate the egg shell, which is porous, and the little chick dies in the process of incubation.

The Scientific Refining process by which National Light Kerosene is refined eliminates all possibility of these poisonous fumes. It provides clean, uniform heat, producing a healthy chick from every fertile egg.

In lamps it gives a steady white light and leaves a clean wick and a clear chimney. In stoves it burns to the last drop—giving its full share of steady heat. There are no unhealthy fumes or odors.

In tractors it will develop more power than ordinary coal oil. A smooth running engine is assured when this economical fuel is used. The best oil for Lighting Plants.

If your dealer cannot supply you, write us and we will ship at once from one of our 103 conveniently located branches.

THE NATIONAL REFINING CO.
Scientific Refining
704-E10 National Bldg. Cleveland, Ohio

Surprising "Come-Back"

"Veterinarians said, 'better kill, than try to cure so bad a case'. I had not used him for three months before I wrote for your free book. It is six months since I stopped treatment and there is not a mark of the trouble left. After I started treatment, I worked the horse and he was cured in about two months." L. J. Cornwell, Watertown, N.Y.

More than 380,000 satisfied users have had similar experiences with Save-The-Horse. It has unrivalled record of success for 30 years.

SAVE-The-HORSE

is Guaranteed by signed MONEY BACK contract to cure SPAVIN, Ringbone, Thoropin,—or Shoulder, Knee, Ankle, Hoof and Tendon Disease. Write today for FREE 96-page Save-The-Horse BOOK—on how to locate, understand and treat 58 kinds of lameness; also sample Guarantee and expert veterinary advice—ALL FREE; no obligation; write today.

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At Druggists and Dealers with Signed Contract or sent prepaid.

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SAVES MONEY
garage, barns, warehouses, corn cribs, hog, milk and poultry houses, MAT FACE, homes, churches, etc. Glazed tile, wood or cement stave silos. Early buyers discount. Write for agency proposition.
National Clay Products & Silo Co.
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DOG BOOK FREE

32 page book—how to keep your dog well—how to care for him when sick. Result of 36 years' experience with every known dog disease. Mailed FREE. Write today. Dept 10901.

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CLOVER $2.00 PER BU.

lower in price today than we will ask later. Act quick—supply limited—market advancing. Buy now—your grass seed—our prices subject to change. Have wonderful values in guaranteed high grade tested Iowa grown Clover. Also Sweet Clover, Timothy, Alfalfa, Hubam and all farm and garden seeds. Our prices lowest yet. Save money. Write today for FREE SAMPLES, special prices and 116-page catalog.

A. A. Berry Seed Co., Box 127, Clarinda, Iowa

Oh Money! Money!

by ELEANOR H. PORTER

THE STORY TO DATE

MR. STANLEY G. FULTON, 50-year old bachelor and possessor of twenty million dollars, calls on his lawyer and they discuss the disposition of this large fortune after its owner's death. The lawyer is in favor of giving the money to colleges or charities while Fulton is opposed to these ideas. He remembers that he has some distant cousins and decides to leave the money to one of them, but first he determines to learn which one will use it to the best advantage. To find out who is the worthy one he, through his lawyer, gives, each cousin $100 000 to use as they will. Before giving them the money grows a beard and, using the name of Mr. John Smith, goes to the town where they live to find out what kind of people they are. Upon arriving in town he visits James Blaisdell, one of the cousins, where he tries to hire board and lodging. While there he meets Miss Flora Blaisdell, another cousin who is a dressmaker. They decide they cannot rent a room to him and supply him board and refer him to Frank Blaisdell's, the third cousin. He gets a room there and, passing as a writer gathering material for a book on the Blaisdell family in this country, he starts out. He cal's on all of the Blaisde'ls and as they all talk of a relative by the name of Miss Maggie Duff he decides to call on the lady. He finds her living with her father, an old man who seems to have soured on the world. He secures what information he can from her and her father. He then writes a letter to his lawyer discussing the various relatives he has met.

(Continued from Dec. 22nd issue.)

I CAN'T see that any of the family are really extravagant, unless, perhaps, it's Mrs. James—"Hattie." She is ambitious and is inclined to live on a scale a little beyond her means, I judge. But that will be alright, of course, when she has the money to gratify her tastes. Jim—poor fellow, I shall be glad to see him take it easy, for once. He reminds me of the old horse I saw the other day running one of those infernal treadmill threshing machines—always going, but never getting there. He works, and works hard, and then he gets a job nights and works harder; but he never catches up with his bills, I fancy. What a world of solid comfort he'll take with that hundred thousand! I can hear him draw the long breath now—for once every bill paid!

Of course, the Frank Blaisdells are the most thrifty of the bunch—at least, Mrs. Frank, "Jane," is—and I dare say they would be the most conservative handlers of my millions. But time will tell. Anyhow, I shall be glad to see them enjoy themselves meanwhile with the hundred thousand. Maybe Mrs. Jane will be constrained to clear my room of a few of the mats and covers and tidies! I have hopes. At least, I shall surely have a vacation from her everlasting "We can't afford it," and her equally everlasting "Of course, if I had the money I'd do it." Praise be for that!—and it'll be worth a hundred thousand to me, believe me, Ned.

As for the husband—I'm not sure how he will take it. It isn't corn or peas or flour or sugar, you see,—and I'm not posted as to his opinion of much of anything else. He'll spend some of it, though,—I'm sure of that. I don't think he always thoroughly appreciates his wife's thrifty ideas of economy. I have not forgotten the night I came home once, to find Mrs. Jane out calling, and Mr. Frank rampaging around the house with every gas jet at full blast. It seems he was packing his bag to go on a hurried business trip. He laughed a little sheepishly—I suppose he saw my glinking amazement at the illumination—and said nothing about being tired of always feeling his way through pitch-dark rooms. So, as I say, I'm not quite sure of Mr. Frank when he comes into possession of the hundred thousand. He's been cooped up in the dark so long he may want to blow in the whole hundred thousand in one grand blare of light. However, I reckon I needn't worry—he'll still have Mrs. Jane—to turn some of the gas jets down!

As for the younger generation—they're fine, every one of them; and just think what this money will mean to them in education and advantages! Jim's son, Fred, eighteen, is a fine, manly boy. He's got his mother's ambitions, and he's keen for college—even talks of working his way (much to his mother's horror) if his father can't find the money to send him. Of course, that part will be all right now—in a month.

The daughter, Bessie (almost seventeen), is an exceedingly pretty girl. She, too, is ambitious—almost too much so, perhaps, for her happiness, in the present state of their pocketbook. But of course that, too, will be alright, after next month. Benny, the nine-year-old, will be concerned as little as any one over that hundred thousand dollars, I imagine. The real value of the gift he will not appreciate, of course; in fact, I doubt if he even approves of it—lest his priviliges as to meals and manners be still further curtailed. Poor Benny! Now, Mellicent—

Perhaps in no one do I expect to so thoroughly rejoice as I do in poor little pleasure-starved Mellicent. I realize, of course, music-culture, and travel; but I must confess that in my dearest vision, this child is reveling in one grand whirl of pink dresses and chocolate bonbons. Bless her dear heart! I gave her one five-pound box of candy, but I never repeated the mistake. Besides enduring the manifestly suspicious approval of her mother because I had made the gift, I have had the added torment of seeing the box of chocolates doled out to that poor child at the rate of two pieces a day. They aren't gone yet, but I'll warrant they're as hard as bullets—those wretched bonbons. I picked the box up yesterday. You should have heard it rattle!

But there is yet another phase of the money business in connection with Mellicent that pleases me mightily. A certain youth by the name of Carl Pennock has been beauing her around a good deal, since I came. The Pennocks have some money—fifty thousand, or so, I believe—and is reported that Mrs. Pennock has put her foot down on the building romance—because the Blaisdells have not got money enough! (Begin to see where my chuckles come in?) However true this report may be, the fact remains that the youth has not been near the house for a month past, nor taken Mellicent anywhere. Of course, it shows him and his family up—for just what they are; but it has been mortifying for poor Mellicent. She's showing her pluck like a little trump, however, and goes serenely on her way with her head just enough in the air—but not too much.

I don't think Mellicent's real heart is affected in the least—she's only eighteen, remember—but her pride is. And her mother—! Mrs. Jane is thoroughly angry as well as mortified. She says Mellicent is every whit as good as those Pennocks, and that the woman who would let a paltry thing like money stand in the way of her son's affections is a pretty small specimen. For her part, she never did have any use for rich folks, anyway, and she is proud and glad that she's poor! I'm afraid Mrs. Jane was very angry when she said that. However, so much for her—and she may change her opinion one of these days.

My private suspicion is that young Pennock is already repentant, and is pulling hard at his mother's leading-strings; I was with Mellicent the other day when we met the lad face to face on the street. Mellicent smiled and nodded casually, but Pennock—he turned all colors of the rainbow, with terror, pleading, apology, and assumed indifference all chasing each other across his face. Dear, dear, but he was a sight!

There is, too, another feature in the case. It seems that a new family by the name of Gaylord have come to town and opened up the Gaylord mansion. Gaylord is a son of old Peter Gaylord, and is a millionaire. They are making quite a splurge in the way of balls and liveried servants, and motor cars, and the town is agog with it all. There are young people in the family, and especially there is a girl, Miss Pearl, whom, reports says, the Pennock's have selected as being a suitable mate for Carl. At all events the Pennock's and the Gaylords have struck up a furious friendship, and the young people of both families are in the forefront of innumerable social affairs—in most of which Mellicent is left out.

So now you have it—the whole story. And next month comes to Mellicent's father one hundred thousand dollars. Do you wonder I say the plot thickens?

As for myself—you should see me! I eat whatever I like. (The man who says health biscuit to me now gets knocked down—and I've got the strength to do it, too!) I can walk miles and not know it. I've gained twenty pounds, and I'm having the time of my life. I'm even enjoying being a genealogist—a little. I've about exhausted the resources of Hillerton, and have begun to make trips in the afternoon to an old cemetery copying dates from moss-grown gravestones, and not entirely lose my appetite for dinner—I mean supper. I was even congratulating myself that I was really quite a genealogist when, the other day, I met the real thing. Heavens, Ned, that man had fourteen thousand four hundred and seventy-two dates at his tongue's end and he said them all over to me. He knows the name of every Blake (he was a Blake) back to the year one, how many children they had (and they had some families then, let me tell you!' and when they all died, and why. I met him this morning in the cemetery. I was hunting for a certain stone and I asked him a question. Heavens! It was like setting a match at one of those Fourth-of-July flower-pot sky-rocket affairs. The question was the match that set him going, and thereafter he was a gushing geyser of names and dates. I never heard anything like it.

He began at the Blaisdells, but skipped almost at once to the Blakes—there were a lot of them near us. In ten minutes he had me dumb from sheer stupefication. In ten minutes he had made a century run, and by noon he had got to the Crusades. We went through the Dark Ages very appropriately, waiting in an open tomb for a thunderstorm to pass. We had got to the year one when I had to leave to drive back to Hillerton. I've invited him to come to see father Duff. I thought I'd like to have them meet. He knows a lot about the Duffs—a Blake married one, 'way back somewhere. I'd like to hear him and father Duff talk—or, rather, I'd like to hear him try to talk to Father Duff. Did I ever write you Father Duff's opinion of genealogists? I believe I did.

I'm not seeing so much of Father Duff these days. Now that it's grown a little cooler he spends most of his time in his favorite chair before the cookstove in the kitchen.

Jove, what a letter this is! It should be shipped by freight and read in sections. But I wanted you to know how things are here. You can appreciate it the more—when you come.

You're not forgetting, of course, that it's on the first day of November that Mr. Stanley G. Fulton's envelope of instructions is to be opened.

As ever yours,
John Smith.

CHAPTER IX

"Dear Cousin Stanley"

It was very early in November that Mr. Smith, coming home one afternoon, became aware that something very extraordinary had happened.

In the living-room were gathered Mr. Frank Blaisdell, his wife, Jane, and their daughter, Mellicent. Mellicent's cheeks were pink, and her eyes more starlike than ever. Mrs. Jane's cheeks, too, were pink. Her eyes were excited, but incredulous. Mr. Frank was still in his white work-coat, which he wore behind the counter, but which he never wore upstairs in his home. He held an open letter in his hand.

It was an ecstatic cry from Mellicent that came first to Mr. Smith's ears.

"Oh, Mr. Smith, you can't guess what's happened! You couldn't guess in a million years!"

"No? Something nice, I hope." Mr. Smith was looking almost as happily excited as Mellicent herself.

"Nice—nice!" Mellicent clasped her hands before her. "Why, Mr. Smith, we are going to have a hundred thousand dollars—"

"Mellicent, I wouldn't talk of it—yet," interfered her mother sharply.

"But mother, it's no secret. It can't be kept secret!"

"Of course not—if it's true. But it isn't true," retorted the woman, with excited emphasis. "No man in his senses would do such a thing."

"Er—ah—w-what?" stammered Mr. Smith, looking suddenly a little less happy.

"Leave a hundred thousand dollars apiece to three distant relatives he never saw."

"But he was our cousin—you said he was our cousin," interposed Mellicent, "and when he died—"

"The letter did not say he had died," corrected her mother. "He just hasn't been heard from. But he will be heard from—and then where will our hundred thousand dollars be?"

"But the lawyer's coming to give it to us," maintained Mr. Frank stoutly. Then abruptly he turned to Mr. Smith. "Here, read this, please, and tell us if we have lost our senses—or if somebody else has."

Mr. Smith took the letter. A close observer might have noticed that his hand shook a little. The letterhead carried the name of a Chicago law firm, but Mr. Smith did not glance at that. He plunged at once into the text of the letter.

"Aloud, please, Mr. Smith. I want to hear it again," pleaded Mellicent.

Dear Sir (read Mr. Smith then, after clearing his throat),—I understand that you are a distant kinsman of Mr. Stanley G. Fulton, the Chicago millionaire.

Some six months ago Mr. Fulton left this city on what was reported to be a somewhat extended exploring tour of South America. Before his departure he transferred to me as trustee, certain securities worth about $300,000. He left with me a sealed envelope, entitled "Terms of Trust," and instructed me to open such envelope in six months from the date written thereon—if he had not returned—and thereupon to dispose of the securities according to the terms of the trust. I will add that he also left with me a second sealed envelope entitled "Last Will and Testament," but instructed me not to open such envelope until two years from the date written thereon.

The period of six months has now expired. I have opened the envelope entitled "Terms of Trust," and find that I am directed to convert the securities into cash with all convenient speed, and forthwith to pay over one third of the net proceeds to his kinsman, Frank G. Blaisdell; one third to his kinsman, James A. Blaisdell; and one third to his kinswoman, Flora B. Blaisdell, all of Hillerton.

I shall, of course, discharge my duty as trustee under this instrument with all possible promptness. Some of the securities have already been converted into cash, and wihtin a few days I shall come to Hillerton to pay over the cash in the form of a certified check; and I shall ask you at that time to be so good as to sign a receipt for your share. Meanwhile this letter is to apprise you of your good fortune and to offer you my congratulations.

Very truly yours,
Edward D. Norton.

"Oh-h!" breathed Mellicent.

"Well, what do you think of it?" demanded Mr. Frank Blaisdell, his arms akimbo.

"Why, it's fine, of course. I congratulate you," cried Mr. Smith, handing back the letter.

"Then it's all straight, you think?"

"Most assuredly!"

"Je-hos-a-phat!" exploded the man.

"But he'll come back—you see if he doesn't!" Mrs. Jane's voice was still positive.

"What if he does? You'll still have your hundred thousand," smiled Mr. Smith.

"He won't take it back?"

"Of course not! I doubt if he could, if he wanted to."

"And we're really going to have a whole hundred thousand dollars?" breathed Mellicent.

"I reckon you are—less the inheritance tax perhaps."

"What's that? What do you mean?" demanded Mrs. Jane. "Do you mean we've got to pay because we've got that money?"

"Why,y-yes, I suppose so. Isn't there an inheritance tax in this State?"

"How much does it cost?" Mrs. Jane's lips were at their most economical pucker. "Do we have to pay a great deal? Isn't there any way to save doing that?"

"No, there isn't," cut in her husband crisply. "And I guess we can pay the inheritance tax—with a hundred thousand to pay it out of. We're going to spend some of this money, Jane."

The telephone bell in the hall jangled its peremptory summons, and Mr. Frank answered it. In a minute he returned, a new excitement on his face.

"It's Hattie. She's crazy, of course. They're coming right over."

"Oh, yes! And they've got it, too, haven't they?" remembered Mellicent. "And Aunt Flora, and—" She stopped suddenly, a growing dismay in her eyes. "Why, he didn't—he didn't leave a cent to Aunt Maggie!" she cried.

"Gosh! that's so. Say, now, that's too bad!" There was genuine concern in Frank Blaisdell's voice.

"But why?" almost wept Mellicent.

Her mother sighed sympathetically.

"Poor Maggie! How she is left out—always!"

"But we can give her some of ours, mother,—we can give her some of ours," urged the girl.

"It isn't ours to give—yet," remarked her mother, a bit coldly.

"But, mother, you will do it." importuned Mellicent. "You've always said you would, if you had it to give."

"And I say it again, Mellicent. I shall never see her suffer, you may be sure,—If I have the money to relieve her. But —" She stopped abruptly at the sound of an excited voice down the hall. Miss Flora, evidently coming through the kitchen, was hurrying toward them.

Jane—Mellicent—where are you? Isn't anybody here? Mercy me!" she panted, as she reached the room and sank into a chair. Did you ever hear anything like it in all your life? You had one, too, didn't you?" she cried, her eyes falling on the letter in her brother's hand. "But 'taint true, of course!"

Miss Flora wore no head-covering. She wore one glove (wrong side out), and was carrying the other one. Her dress, evidently donned hastily for the street, was unevenly fastened, showing the topmost button without a buttonhole.

"Mr. Smith says it's true," triumphed Mellicent.

"How does he know? Who told him 'twas true?" demanded Miss Flora.

So almost accusing was the look in her eyes that Mr. Smith actually blinked a little. He grew visibly confused.

"Why—er—ah—the letter speaks for itself, Miss Flora," he stammered.

"But it can't be true," reiterated Miss Flora. "The idea of a man I never saw giving me a hundred thousand dollars like that!—and Frank and Jim, too!"

"But he's your consin—you said he was your cousin," Mr. Smith reminded her. "And you have his picture in your album. You showed it to me."

"I know it. But, my sakes! I didn't know he knew I was his cousin. I don't s'pose he's got my picture in his album! But how did he know about us? It's some other Flora Blaisdell, I tell you."

"There, I never thought of that," cried Jane. "It probably is some other Blaisdells. Well, anyhow, if it is, we won't have to pay the inheritance tax. We can save that much."

"Save! Well, what do we lose?" demanded her husband apoplectically.

At this moment the rattling of the front-door knob and in imperative knocking brought Mrs. Jane to her feet.

"There's Hattie, now, and that door's locked," she cried, hurrying into the hall.

When she returned a moment later Harriet Blaisdell and Bessie were with her.

There was about Mrs. Harriet Blaisdell a new, indescribable air of commanding importance. To Mr. Smith she appeared to have grown inches taller.

Well, I do hope, Jane, now you'll live in a decent place," she was saying, as they entered the room, "and not oblige your friends to climb up over a grocery store."

"Well, I guess you can stand the grocery store a few more days, Hattie," observed Frank Blaisdell dryly. "How long do you s'pose we'd live—any of us —if 'twa'n't for the grocery store to feed us? Where's Jim?"

"Isn't he here? I told him I was coming here, and to come right over himself at once; that the very first thing we must have was a family conclave, just ourselves, you know, so as to plan what to give out to the public."

"Er—ah—" Mr. Smith was on his feet, looking somewhat embarrased; "perhaps, then' you would rather I were not present at the—er—family conclave."

"Nonsense!" scouted Frank Blaisdell.

"Why, you are one of the family, 'seems so," cried Mellicent.

"No, indeed, Mr. Smith, don't go," smiled Mrs. Hattie pleasantly. "Besides, you are interested in what concerns us, I know—for the book; so, of course, you'll be interested in this legacy of dear Cousin Stanley's."

Mr. Smith collapsed suddenly behind his handkerchief, with one of the choking coughs to which he appeared to be somewhat addicted.

"Ain't you getting a little familiar 'dear Cousin Stanley,' Hattie-" drawled Frank Blaisdell.

Miss Flora leaned forward earnestly.

"But, Hattie, we were just sayin', 'fore you came it couldn't be true; that it must mean some other Blaisdells somewhere."

"Absurd!" scoffed Harriet. "There couldn't be any other Frank and Jim and Flora Blaisdell, in a Hillerton, too. Besides, Jim said over the telephone that that was one of the best law firms in Chicago. Don't you suppose they know what they're talking about? I'm sure, I think it's quite the expected thing that he should leave his money to his own people. Come, don't let's waste any more time over that. What we've got to decide is what to do. First, of course, we must order expensive mourning all around."

"Mourning!" ejaculated an amazed chorus.

"Oh, great Scott!" spluttered Mr. Smith, growing suddenly very red. "I never thought—" He stopped abruptly, his face almost purple.

But nobody noticing Mr. Smith. Bessie Blaisdell had the floor.

"Why, mother, I look perfectly horrid in black, you know I do," she was wailing. "And there's the Gaylord's dance just next week;and if I'm in mourning I can't go there, nor anywhere. What's the use in having all that money if we've got to shut ourselves up like that, and wear horrid stuffy black, and everything?"

(Continued in January 19th issue.)

M. A. C. DISTRIBUTES SPECIAL SOIL TESTING OUTFIT

A SPECIAL soil testing outfit, which makes it possible for farmer to know just where lime is acidity, and thus determine the line requirements of their lands, is being assembled and distributed on a "cost" basis by the Michigan Agricultural College department of soils, according to the announcement of Dr. M. M. McCool, head of the department.

The outfit, going under the name of Soiltex, is being furnished to farmers of the state on request. Directions for applying the test and enough material for two hundred individual tests are included in the outfit.

The Soiltex method presents a very simple way to determine the acidity of the soil. A few drops of liquid from a small can are poured over a small quantity of soil which has been placed on a piece of special paper, and the color of the liquid as it runs off determines the degree of acidity in the soil tested.

This method was perfected by a member of the soils staff at the Michigan Agricultural College some months ago, and has proven to be so effective that the college has determined to distribute the outfits at cost to the farmers of the state.

The use of this testing method will make possible the efficient application of lime on a large scale in Michigan. Many soils need lime or marl applications to overcome acidity, while others need no lime or only a relatively small amount. Only by careful and accurate test can the afrmer know just where lime is needed. The Soiltex method of testing is expected to take the guess out of the work and to result in greater efficiency and economy in the application of lime.—R. C. Groesbeck, M. A. C. Correspondent.

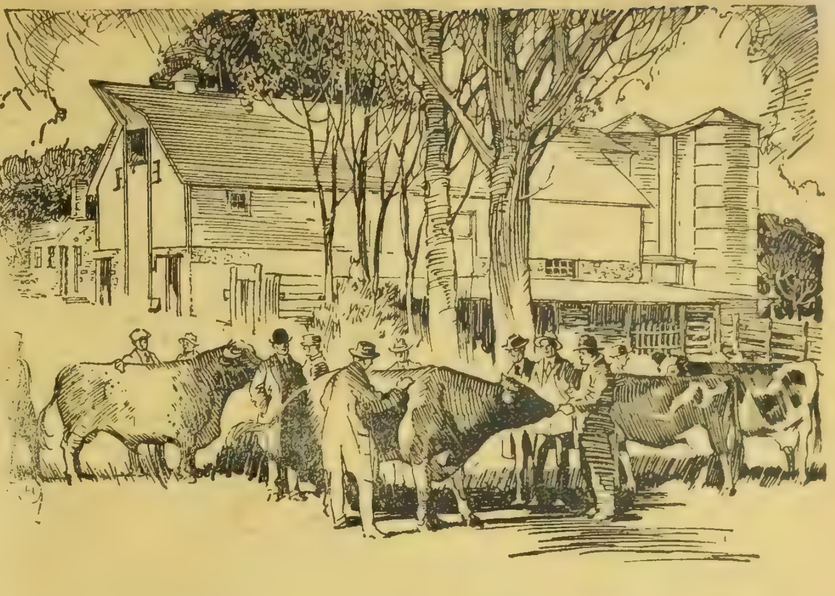
The Scotch of It

Sandy had just met his girl at the end of the street, where she was waiting for him. She was looking into a confectioner's window when Sandy made his presence known by remarking:

"Weel, Jennie, what are y' gaun to have the nicht?"

She, not inclined to ask much, replied: "Oh, I'll just tak what you'll tak, Sandy."

"Oh then, we'll tak a walk," said Sandy, as he led her away.—Pearsons Weekly.



Cattle *and the* Soil

MEN who were brought up on farms in the very districts served by the New York Central Lines now compose the Agricultural Relations Department of this railroad system.

A thorough knowledge of the farmers' problems as well as those of the railroad enables these men to work for the common good of these two interdependent interests.

To improve soil conditions the Agricultural Relations Department has established 525 limestone demonstrations in cooperation with county farm bureaus and experts from various colleges of agriculture.

The department has materially assisted in establishing a Better Sire Campaign for the introduction and breeding up of dairy cattle.

It is the task of the department to foster cooperation between agriculture and transportation and to bring an ever-better service to the farmers of the country.

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WHEN WRITING TO ADVERTISERS MENTION THE M. B. F.

The Children's Hour

O, THAT I WERE A BIRD

O, THAT I were a bird,
I'd sing the sweetest songs ever heard,
Thus cheer the world as I go by,
And all trouble defy.

Were I a pretty flower,
I'd not waste e'en one hour,
I'd try some heavy heart to cheer instead
And so make sure the joy ahead.

But only a mortal am I,
I cannot scent the wood nor fly,
So I content must be
To do what is required of me.

—Written by Orville H. Trueblood, Pewamo, Michigan, for the Children's Hour.

DEAR Girls and Boys: How do you like the poem printed above? It was composed by Orville Trueblood, a member of the Children's Hour for some time past, and I think it beautiful. There seems to be many poets among the readers of this page, as I have received several requests to have a poetry contest to see who could write the best poem. I am planning on holding such a contest in the near future so sharpen your pencil, get some paper ready, put your thinking-cap on, and see what kind of a poem you can compose.

Have you read our story, "Martha Curlylocks' Party" appearing on our page, this issue? I want to print one in each issue, when space permits, this winter. If you do not like the kind of stories printed just write and tell me and I will try some different ones. This is your department and I want to print only things that are of interest to you. —UNCLE NED.

THE SUN AND THE BAT-WOMAN

ONCE Sun, wanting to go to bed behind the mountains, got lost in the cliffs. It was getting late. Bat-woman was already out, and Sun begged her to show him the way.

"Very well," said the Bat-woman, "but I want a reward. I have no feathers on my wings and the birds laugh at me. Give me some of the bright-colored feathers from your sunset sky."

"I will do that," said Sun, "but do not go too near my Earth-brother, Sunflower, while he is open. He is jealous."

So Bat-woman took the colored feathers from the sky and made herself beautiful. But she got vain and flew over the Earth while Sunflower grew angry.

"Feathers are not for you," he said, and he made a Magic.

At once all the feathers dropped off Bat-woman's wings and flew away as little birds. We call them Orioles, and that is why they are colored like the sunset.

Those who are vain will lose what has made them vain.

OUR BOYS AND GIRLS

Dear Uncle Ned:—Wonder if you would mind if I asked for permission to join your merry circle? I thought maybe if I wrote on Christmas day, my letter might have a better chance of escaping the wastepaper basket. What do you think about it? I certainly hope everyone has had one of the merriest Christmasses. This day always makes me think of the Christ child in the manger, and the angels words, "Glory to God in the Highest, On earth peace, and good will to man." There has been speeches of patriotism, wonderful, and eloquent sermons, but I do not think, in all the world, there has ever been any words more beautiful than those spoken by the Herald Angel Gabriel, at the birth of Christ, except maybe, the words He Himself spoke just before his death. I expect I'd better be describing myself, or you won't know what to think about me. I'm four feet eight inches tall, rather dark blue eyes, and hair that is about the color of a ripe chestnut, (rather curly), fourteen years of age, and sticky just now with Christmas candy. Uncle Ned, why could we not have a poetry contest? I have composed some verses, but I cannot draw worth anything. I'd much rather sit down and compose a piece of poetry, or read a good book, than get Algebra! (I happen to be in the ninth grade). Is there any that disagree with me? Uncle Ned, please tell me what you think of the Campfire Girl movement, won't you? I should be very much pleased if some of the cousins would write and give me their opinion upon it. Will answer all letters received. Will close, wishing to everyone the very happiest of New Years.—Iola Hardy, Mayville, Mich.
—I think we can have a contest on poetry composed by the cousins, if there are many interested. We'll try one in the near future. As to the Campfire Girls, I think it is a very nice organization and any girl, city or farm, will benefit by belonging. There are many readers of our page who belong and will write you all about them. Come again, Iola.

Dear Uncle Ned:—Oh, no, I am not a new one. I have written before, but it has been two or three years since. I love to read the Children's Hour and say, Uncle Ned, you have a lot of interesting Cousins, haven't you? I like to read about those trips some of the cousins take and am sorry I haven't one to describe. I would like to know what the cousins are planning to do when they grow up. I would like to be the Governess of small children or else play in some orchestra in a theatre. Uncle Ned, I'd like your job too. I am just sweet sixteen, (?) going on seventeen. Oh, yes, the answer to Lloyd Laubaugh's riddles are: 1. A watch. 2. Wet. Am I right Lloyd? Well Uncle, my letter is going to take up too much room if I don't stop soon so will say "So-long" 'till next time.—A Girl from Greenville, Michigan.

Dear Uncle Ned:—My father has taken the M. B. F. for about three years now, and this is the first time I have attempted to write, so please don't discourage me the first time. I guess I had better describe myself, but don't anyone get scared! I am—well I guess I won't tell my age. I'll let you guess that, but I am between the age of 12 and 20 years. I am about five feet three inches tall, and I am a blonde, but I haven't bobbed hair, although I have nothing against it. Anyone guessing my correct age will receive a letter from me. I am attending high school and I am in the tenth grade. I like typewriting and shorthand the best of all subjects. I went through Mt. Clemens this summer when I was going to Canada. We drove through to Canada with an automobile and we also drove up in the northern part of Michigan, but I don't want to take the space to tell you about it. I have a brother in Honolulu. He is in the U. S. Army. He sent us some pictures from there and they sure are some lovely scenes. Well if I don't stop there won't be any room for anyone to write, that is, if this letter is printed, which I hope it is. Will some of the boys and girls write to me? I will try and answer all letters received. From your niece,—Sadie London, 66 Hanover St., Battle Creek, Michigan.
—Come again Sadie, and do tell us about your trip. The cousins will be interested I am sure.

Dear Uncle Ned:—I have been thinking about joining your merry circle for a long time, but have never found time to write, for I love books, as I see lots of the cousins do, and most of my spare time is spent in reading. My favorite authors are Zane Gray and Mary J. Holmes, and lots of others of which I could not tell which I like best. I would like to hear from Josephine Dannon very much, and would answer her letters if she would care to write, and the others too. Perhaps I had better tell you how I look. Well, I am about 5 ft. 11 in. tall, weigh about 82 pounds, have brown bobbed hair, brown eyes, and fair complexion. I am very small for my age, for I have a sister who is exactly as tall as I am and she is only 11 while I was 14 the 13th day of May. Have I a twin? If I have tell me, and I will write to him or her. I know the answer to Ermalee Lockwell's riddle, it is a threshing machine. I am glad you said we might put in poetry Uncle Ned, for I like it. I will put in some riddles, and the one who guesses the most will receive a letter. Why is a schoolmistress like the letter "C"? Why is a policeman like a rainbow? What is the difference between stabbing a man and killing a pig? I am in the 8th grade, and live a half a mile from school in the country on a 205-acre farm. I have three brothers and two sisters alive and one dead. Her name was Cora May. I think it was quite pretty, don't you, Uncle Ned? Hoping to hear from some of the cousins soon, I will close. Your loving niece,—Bernice Brockway, R. 3, Jackson, Michigan.

Dear Uncle Ned:—I have just finished reading the Children's Hour and decided to write a few lines. I read Helen Limmer's letter and she said her birthday was the 31st of May, just two days later than mine. I think it is very nice in putting a puzzle in our part of the paper every issue. As I have written before I will not have to describe myself. I'm a freshman this year, but I do not like school. It is raining here tonight, and as I was lonesome, thought I would write. Hope this escapes the waste paper basket. I must close, hoping to hear from the boys and girls. I will answer all the letters I can. Your niece,—Lena M. Ables, R. 3, Box 33, Montgomery, Michigan.

Dear Uncle Ned:—May I join your merry circle? I live on a ninety-eight acre farm. As other children describe themselves, I will also. I weigh sixty four pounds and am four feet nine inches tall. I have brown bobbed hair, blue eyes. I will be eleven the 1st day of February. Have I a twin? I wish you all would write to me as I am glad to receive letters. I have not read the Children's Hour very long, but found all the old papers I could. I hope this will miss the waste paper basket. I will give a riddle. If a cord of wood comes to $10, how much will a ton of coal come to? This is getting pretty long for the first time. Your loving niece.—Reva Covert, R. 5, Ionia, Michigan.

Dear Uncle Ned:—I have been reading the M. B. F. for quite a while. I am 13 years of age and weigh 135 pounds, and my height is five feet ten inches, and have dark brown bobbed hair, and my eyes are gray. I am in the seventh grade. My birthday is October 18th. I hope my letter escapes the waste paper basket. I have written once before but it wasn't in print. For pets we have six pigeons, six cats, and one dog. We are getting ready to have a Christmas program. I will close.—Mae E. Jury, St. Johns, Michigan.

Martha Curlylocks' Party

By Helen Gregg Green

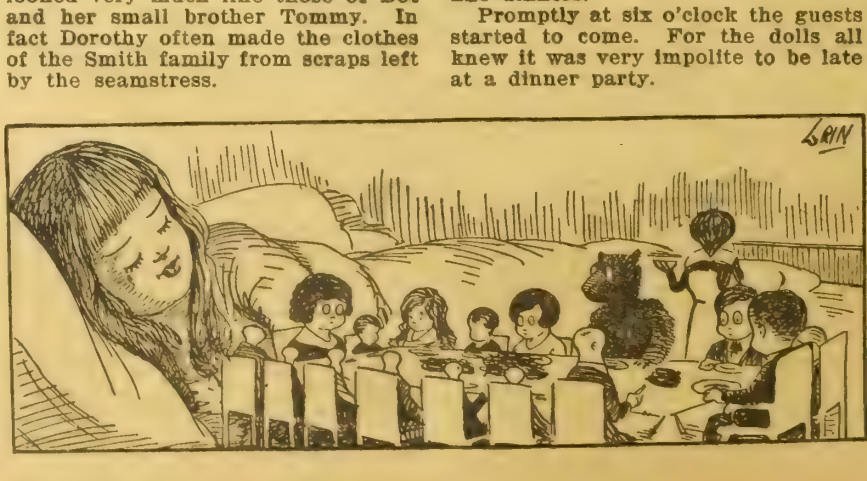
LITTLE Dorothy Thomas owned the lovliest families of dolls. They were the Kewpie family, the Curlylocks family, the Pody-Wodies and a family who looked so much like real people, Dot called them the Smith family.

In the Kewpie family were Mr. and Mrs. Kewpie and four small Kewpies. The Curlylocks family consisted of Mother and Father Curlylocks and one beautiful daughter, Martha, who had long golden curls and big blue eyes; the Pody-Wodies were funny little dolls made out of clothes pins. There were Mr. and Mrs. Pody-Wodie and five Pody-Wodie children. Mrs. Smith, who was a widow, had two sons and a daughter, who wore clothes that looked very much like those of Dot and her small brother Tommy. In fact Dorothy often made the clothes of the Smith family from scraps left by the seamstress.

Dorothy enjoyed playing with her families of dolls; but on the day I am going to tell you about, my dears, she was a very tired and sleepy little girl. So she had not played long till she fell fast asleep.

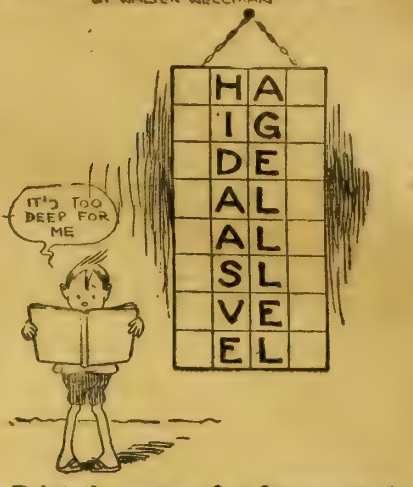
And while she slept, all the dolls decided to have a birthday party for Martha Curlylocks who was that day two years old. So invitations were sent out by Father and Mother Curlylocks to all the other dolls. The party was to be a dinner party, so the dolls were very eager to go. Because Mrs. Curlylocks was noted for having a good cook, whose name was Mamie Stocking Face, because she was made out of an old black stocking. Mamie had a daughter, Sally, who served Mrs. Curlylocks' fine dinners.

Promptly at six o'clock the guests started to come. For the dolls all knew it was very impolite to be late at a dinner party.



FAMOUS AUTHORS

BY WALTER WELLMAN



Print the name of a famous poet in the first upright column, and the name of a famous writer of prose in the last column and have eight correct words of four letters as a result. Who are they?

Answer to puzzle in last issue: G plus SPEAR plus BLIND plus ACE plus TON minus SEAL minus BAG minus D=PRINCETON.

Mr. and Mrs. Curlylocks and Martha greeted the guests after Sally Stocking Face had met them at hte door and sent them to Martha's pretty blue and white room to lay aside their wraps and hats.

Mr. and Mrs. Podie-Wodie brought a friend of theirs, Mr. Teddy Bear from Bearville. Mr. Teddy Bear was introduced to Martha Curlylocks. He had met the other guests at a party given by Mrs. Podie-Wodie in his honor. Martha had been ill and could not go.

"Mr. Teddy Bear", said Mrs. Curlylocks, "I want you to meet my daughter, Martha". Mr. Teddy Bear and Martha cordially shook hands, and Mr. Teddy Bear told Martha how glad he was to know her. To which Martha replied, "And I am happy to meet you, Mr. Teddy Bear." And began asking him about Bearville, for she knew to make a stranger feel at home, you should talk to him of the things and places he knows about.

Soon the dinner bell rang and all arose to go to the table. The gentlemen dolls stood back and the lady dolls went first. At the table the gentlemen dolls seated the lady dolls.

First Sally Stocking Face brought in a cup of bouillon for each guest. The guests all waited for the host and hostess to start eating. When they began, the guests took up their bouillon spoons and put the side of the spoon farther away into the cup and sipped the good bouillon Mamie Stocking Face had made, always from the side of their spoon. For, my dear children, they were very polite dolls, I assure you.

The next course was very good and the dolls ate heartily. They all kept their knives on the edge of their plates, except Timmy Podie-Wodie, who was a very impolite doll. He even put his knife in his mouth, which made his poor mother nearly ill with shame.

The dolls held their knives and forks correctly when cutting the good meat, by placing the first fingers on the knife and fork and keeping the prongs of the fork down. The thumbs and the three other fingers remained at the side of the knife and fork. And the elbows were kept close to the dolls' sides. Mr. Teddy Bear's paws could not hold as well as the fingers of the dolls.

Only one piece of meat was cut at a time by the dolls and Mr. Teddy Bear, and only one bite of bread was spread with butter at one time. But Timmy Podie-Wodie cut all his meat at once, and children, would you believe it, he spread a whole slice of bread and even made a terrible noise when he ate. But you could not hear the other dolls eat their dinner, they ate so quietly.

When they wanted anything at the table, they said, "Please pass the celery", or whatever they wanted. And when it was passed, they said "Thank you", very politely.

Mr. Teddy Bear told them of Bearville and was very pleasant and entertaining. He said he had two fine children and a pretty wife. Mr. Teddy Bear noticed the nice table manners of the dolls. He saw that they unfolded half of their large napkins and that the young dolls asked the older dolls if they could have food before they served themselves. He also saw that the young dolls sat erect and did not handle their knives and spoons or drum on the table, or fidget, until served.

So Mr. Teddy complimented the dolls, and when told by the mothers of the dolls, they ate just as nicely at home, he said, "That is right. I read once, 'Eat at your own table as you would eat at the table of a king', and that is the way I have taught my little bear children to do."

After the meat course was served, a pretty big salad was passed. All the dolls knew to use the salad fork for this but Timmy Podie Wodie who used his spoon. And who did not know to eat with his mouth shut as much as possible.

Next the most wonderful pink and white ice cream and cake was brought in by Sally Stocking Face. All the dolls liked this course thein best. As perhaps you would, too, children dear!

When the dinner was over, Sallie Stocking Face passed the finger bowls. The dolls dipped their fingers into the bowl and dried them on their napkins. Poor Mr. Teddy Bear got his paws quite damp and had a hard time getting them dry.

After dinner the dolls played games and Martha Curlylocks sang a beautiful song, "I Love to be a Doll". Mibbsie Smith played the piano and the small children were quiet and good, for they knew to talk while any of the dolls was playing or singing would be very impolite.

At ten o'clock the guests left, after thanking Mr. and Mrs. Curlylocks for the pleasant evening. As the dolls were going out the door, Dot awoke, and rubbed her eyes and looked about her. She expected to see the dolls walking out, talking and laughing. Instead, they were just as she had left them and not dressed party clothes at all!

FRUIT AND ORCHARD

Edited by FRANK D. WELLS

FALL BEARING STRAWBERRIES FOR THE HOME GARDEN

WHILE the ordinary summer varieties of strawberries must be cared for over a year before a crop has been harvested, the so-called everbearing or fall-bearing varieties can be fruited within four months after the plants are set, and will remain in bearing for two or three months and sometimes afford a strawberry shortcake for Thanksgiving even in Michigan. The same plants will produce a crop of fruit the following June, and with a little care will bear the second fall.

Although the variety known as "Progressive" seems to be best adapted for general cultivation, the "Superb," "Francis," and other sorts do well under favorable conditions.

A fairly heavy and moderately rich sandy loam seems best adapted for everbearing varieties. If too rich, the plants will run to vines, instead of fruit; while if too light and poor, a weak growth will be made. A soil that is naturally moist should be chosen, or arrangements made for watering the plants in dry weather.

The plants may be set two by four feet, if to be worked with a horse; or as close as one by two or three feet in a small garden. In very close culture, they may be set so that there will be three rows with the plants one foot each way, with a wak two feet wide between the plants.

The plants should be given frequent cultivating and hoeing, taking pains to stir the soil after every rain. As the blossoms appear, they should be pinched off, and this should be kept up until the plants have made a strong growth. This may be as soon as the middle of July with early set plants; or as late as August 15th when they are planted late. In three to four weeks after the picking of the blossoms has stopped, the berries will begin to ripen, and can be picked two or three times each week until November 1st, or even later in some seasons.

The following spring they will need cultivation and hoeing, cutting out some of the plants, if too thick, and they will produce a very satisfactory crop in June. They will again fruit during the fall months, but it is more satisfactory to start a new plantation each spring for the fall crop.

While it is desirable to set out the plants as early in the spring as the ground can be worked, the plants will do well if put out any time before June first.—L. R. Taft, State Inspector of Orchards.

FLYPAPER AS A SUBSTITUTE FOR GRAFTING WAX

I have been advised that tanglefoot flypaper is a satisfactory substitute for grafting wax.—V. C. S., Paw Paw, Mich.

—Anything which will keep the cut surfaces from drying out and oxidyzing tends to increase the chance of a graft to this extent, then tanglefoot flypaper would be valuable, in as much as it is more or less waterproof. In the same way a bottle of clay such as was used by the old timers is also helpful.

In the case of tanglefoot, however, I have seen serious injury to bark from the use of this material. It is my recollection that the manufacturers advise that the trees be wrapped with paper before the tanglefoot is applied. Consequently, I should expect unfortunate results were any of the tanglefoot material to come in contact with cut surfaces and any graft to which it were to be applied should have a preliminary wrapping of some other material. Consequently I can see no reason for using tree tanglefoot either with or without the paper as a wax for grafting. Undoubtedly, there have been cases where it has been used and the grafts have lived. I have also seen grafts live without any wax or any protection. However, that is not a sign that they should be treated that way.—F. C. Bradford, Department of Horticulture, M. A. C.

NOTES AND COMMENTS

A cranberry bog is profitable, but expensive to make. The turf must be removed and the ground covered deep with sand. Besides, there must be some means of flooding. Now is the time for some wizard to envolve a plant that will grow without these conditions. Then this fruit may be brought within the reach of all.

Interest in the huckleberry seems to be on the increase. Suitable localities are limited, so at present there is no liability of an over supply of cultivated product. At the same time the marshes are disappearing. The future for this luscious fruit looks bright.

A nursery man some years ago ran short of blackberry stock, so dug up a quantity of wild plants and filled his orders. In due time he began to receive letters from his customers, all pleased with the size, quantity and quality of the fruit, best they had ever seen. It is a matter of common opinion that the blackberry has not been benefitted by improvement, so called.

In days of old, not so very ancient neither, the owner of a Duchiss apple orchard was reaping a harvest. Now he is lucky to give the fruit away. There are two reasons for this. One is overproduction. Too many trees have been planted. The other reason is discrimination. The fruit is not of high quality and better varieties are taking its place. The public is learning.

The Wildgoose is the name of a family of plums native to America, comprising many varieties. It is also the name of one variety in this group, which is unfortunate, since it has resulted in much confusion. The Wildgoose is hardy in Southern Michigan. The fruit is early and highly colored, but these are insufficient reasons for growing it in place of the later, but really good varieties.

A late spray for the apple and pear should not be overlooked. During the last of August the Bodling moth is busy laying her eggs for the late brood. These eggs are deposited on leaves as well as fruit, but the worm crawls from the foliage to the apple, feeding on the way. An application of lead arsenate will settle its stomach for all time and will keep the fruit free from scab, unless there is already some present. These late sprays are of more importance than many seem to suppose. There is no economy in neglecting them.

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The Farm Home
A Department for the Women

Edited by MRS. ANNIE TAYLOR

DEAR FOLKS:—Here we are at the beginning of a New Year. What are you going to do as the woman of the household? Are you going to make the home life more cheerful and full of love and help solve the financial problem with John and for all concerned? It has always been said that woman's intuition is uncanny. If you feel you possess any of this virtue, assert it this coming year. Help in every way by schemeing and planning the future for you and yours somehow. This is a woman's job after all. I hardly feel it is necessary to remind you of the wonderful value companionship and partnership means to every married couple and their home. The women on the farm are close to their husbands in work, more so than in any other work in life, and I can hardly say more, but if there is any chance for improvement, let us resolve this year to make it a better world to live in. Any problem that you feel I could help you with or answer, do not hesitate to write me. I am willing and ready to help you. What I do not know I can find out. Hoping to hear from you often and wishing you all the happiest and most prosperous year, I am,

Your Friend,
Mrs Annie Taylor

Address letters: Mrs. Annie Taylor, care The Business Farmer, Mt. Clemens, Michigan.

MY MOTHER-IN-LAW

MY Mother-in-law came to live with us
Upon one cold winter day.
We told her she need not work
To wear herself away.

But Mother with a willing hand
Would work to "beat the band,"
And soon we both forgot ourselves,
As young folks oft-times do,
And we just kept mother busy
Working from morning until two.

She carried in the water,
And she carried in the wood,
So we just kept Mother busy
Doing everything she could.

Until Mother grew old and feeble
And her hair has turned to gray,
And upon her death bed,
We saw her pass away.

So upon the following years,
As they passed day by day,
We never knew what Mother did—
Until she had passed away.
—Written for The Business Farmer by Chas. Hewlett.

THE NEW YEAR

EACH of us is sentenced to death. The time and the place is the only mystery.

Recently there were two men prominent in public life who received their doom and a definite time limit.

One of these was a distinguished surgeon who served in the war and then gave his best to scientific laboratory experimentation. The day came when he knew that he had probably three months longer to live. Through the X-ray he was relieved of suffering, and this is what he did with all that was left to him of life:

He sent a note to his friends saying: "My wife and I are retiring. Do not come to us unless we send for you."

They measured the value of every hour. They lived not as one dying, but in the resolution to make each day count for all that it could hold. Favorite operas and concerts were attended—good plays they both would enjoy. They read together the verse and essays which both of them had loved. Occasionally they entertained the friends who really counted, and they visited the homes of those who were dear to them.

A lifetime was enjoyed in those weeks. It was a little less than three months, but every day had been used to its utmost.

It takes a high soul and a strong character to face the end of the road this way. It is a lesson for each of us who is tempted to waste priceless time.

The other man who knew that his days were numbered accepted his fate as a good soldier, but without the philosophy which triumphed over death. He couldn't tell his wife; he was afraid to hurt her. He kept it a secret from his associates. Only his physicians and two friends who met him in the weak hour of his first shock knew the limit of his life.

This man plunged into his work with renewed effort, resenting any suggestion of illness. He projected plans for his corporation and worked intensely on programs which would not come to light until long after he had passed out of life.

In his work he lived as one whom death could not touch. His one desire was that no one should treat him as a dying man, but that he should live with the living on an equal footing. When death came his business affairs were in order. Life had been a day's work well done.

With the surgeon life had been a day's work—and then a happy evening before night came on.

What would you do if you knew how long you had to live?

The New Year is at hand. January first is almost any other Winter day—except that it is a beginning. It is a reminder that we too may begin.

What will we do with this New Year: live it every day and every hour, or work it, or loaf it along?

Have you though what a wonderful place the world might be if we all lived each day as if it were our last chance to make memories for those we meet and those we love?

EATING FOR HEALTH—WINTER VEGETABLES

ENTHUSIASM for vegetables, although well cultivated and highly developed during the Summer months, may wane with the coming of Winter and the passing of the garden and market supply of fresh lettuce, chard, tomatoes and other vegetable favorites. Lest this happen, one may well adopt the truck-growers' highly educational slogan, "Eat vegetables for vitamins," as a motto for the Winter's diet.

A safe rule to follow is to serve two vegetables other than potatoes daily. In laying the foundation menus for a month, canned tomatoes may be slipped in at least as often as twice a week without fear of wearying the family appetite.

Fortunately the supply of leafy vegetables does not stop with the passing of Summer. Such leafy vegetables as cabbage and celery and onions keep well in storage and afford valuable minerals as well as vitamins.

In order to preserve as much as possible of their valuable food elements, these vegetables should be cooked only enough to make them tender. Cabbage, for instance, requires only twelve to twenty minutes of cooking in uncovered salted water. Vegetables of any kind possess most value when eaten raw. Cabbage shredded or shaved is an excellent salad vegetable and may be eaten as cole-slaw or combined with other foods in salad mixtures. It adds bulk and crispness as well as minerals and vitimines tó the diet, and a cabbage salad of some kind might well occupy a place on the menu as often as twice a week.

Carrots, beets, turnips and squash are other Winter vegetables, with carrots probably in the lead as far as food value goes. These vegetables may be used to fill in the odd days in the menu. Carrots are particularly healthful if eaten raw. They are easily digested if grated or finely ground and may be used in salad in combination with other vegetables or with pineapple or grated cheddar or American cheese or cottage-cheese.

One excellent way of serving Winter vegetables without great loss of value in cooking is to grind or chop finely the raw vegetables such as carrot, onion, cabbage or turnips and add them to a clear soup made of chicken or beef stock. When finely ground, the vegetables need only a few minutes' cooking, ten or fifteen being sufficient.

The knowledge of successful methods of food preservation has made a variety of commercial or home canned vegetables available for food throughout the year. It is especially important that the use of canned vegetables as "greens" be included in the diet.

All vegetables contain many of the tonic and laxative properties included in that dosage that in former years was a harbinger of spring. As a sign of the times and a better knowledge of nutrition and right eating for health, it is interesting to note that "You need a spring tonic for that tired feeling" has changed to "Eat vegetables for vitamins."

FOOD CALENDAR FOR JANUARY

This is a good month to—

Use citrus fruits and cranberries plentifully.

Begin making or using whole-wheat bread.

Use canned vegetables to alternate with those from winter storage.

Serve canned tomatoes twice a week.

Have stewed dried fruits often.

Use fireless cooker for hot breakfast cereals.

Add a few chopped dates to the porridge just before serving.

Think of all the hot desserts you know—rice pudding, bread pudding, apple betty, warm gingerbread, fresh pies—and get some fruit into them if possible.

Make puddings or muffins of left-over breakfast cereal, adding a few nuts, raisins or currants.

Keep up the salad habit. There are dozens of cabbage, carrot, celery, apple and other winter salads.

Remember a hot dish for the children's school lunch.

Take time to measure ingredients accurately, follow directions carefully and improve the standard of the home-made products.

FOR THE HOME-SEWER

WHEN making buttonholes in very soft or thin material, rub a little library paste on the wrong side of the goods and let it dry before cutting the buttonholes. This gives a firm surface to work on, and the paste will not discolor the most delicate fabrics.

In working an eyelet leave the end of the thread long enough to go around the eyelet hole and work over it. It thus pads and makes a firm, even eyelet.

When you wish to put wide lace on a luncheon-cloth or a large centerpiece, try rolling your lace, beginning at one end and rolling very tight. Now tie with a clean cord in three or four places, wet thoroughly one inch at bottom. When this dries, you will find your lace will fall in a graceful circle ready to be sewed on your centerpiece.

Long narrow belts are easily turned by a small safety-pin stuck in one end and run through to the other end.

If the inside belting of your skirt has lost its stiffness, try dipping it in cold starch and press with a hot iron. It will renew it.

To iron a round centerpiece so that it will not pucker in the center, always iron from the center to the outside edge.

At the extreme right end of the ironing-board fasten a tiny writing-pad, a pencil and a paper of pins. As an article is ironed, record missing buttons and tears on a slip and pin to the upper side of the garment when it is finally folded. No need to unfold any article to see if it needs mending.

OUR PRAYER FOR 1924

Keep us, of God, from pettiness; let us be large in thought, in word, in deed.
Let us be done with fault-finding and leave off self-seeking.
May we put away all pretense and meet each other face to face—without self-pity and without prejudice.
May we never be hasty in judgement and always generous.
Let us take time for all things; make us to grow calm, serene, gentle.
Teach us to put into action out better impulses, straightforward, and unafraid.
Grant that we may realize it is the little things that create differences; that in the big things of life we are at one.
And may we strive to touch and to know the great, common woman's heart of us all, and, oh, Lord God, let us forget not to be kind!
—Mary Stewart.

The above "Collect" has been adopted by the National Federation of Women's Clubs.

THE RURAL LIBRARY IN WINTER

NOW is the time for the teacher to make the very best use of the rural school library. It is useless to expect much reading in rural communities during the active farming months but in the long evenings of winter there are two or three hours after supper that country folks have for leisure. Parents and children will welcome good books and magazines. The many fine books of animal stories are especially interesting and appropriate now. The hunting seasons are on and through the natural interest roused in wild life, there is an opportunity to teach the boys and girls about the animals of their own and other countries, kindness to all folk of forest and filed, and a better way of treating our wild friends than killing them.

The holiday seasons bring with them special and charming editions of old books that will tempt children to read when they otherwise would not, as well as large numbers of new and worthwhile books and stories. In the winter, too, the Congress is usually in session and people's minds are more easily turned toward questions of national and State-wide interest. There is better opportunity to teach good citizenship, patriotism, and loyalty through well-selected timely articles on current thought and movements. Moreover, in rural sections such local governmental activties as grand jury and town meetings, sessions of county courts, and meetings of tax-levying bodies are usually held in the winter months when the farmers are not so busy, and the rural library may be well used to give help and information along these lines of civic duty.

Personal Column

Playing Checkers.—Will you please publish or send me directions for playing checkers, as some people say when you put a checker in the king row, you have the privilege of jumping right out again before the other person moves, and I would like to know if that is right or not. Thanking you in advance.—A subscriber.

—I have played checkers a great deal and never knew that any player could move more than once at any play of the game.

The Duty of Casting an Intelligent Ballot.—Every country citizen should aid in the arousing of men and women to a full sense of their duty as good citizens, in casting the ballot, and in such manner and unity as shall result in securing good and efficient government, such that statemen will rightly interpret and politicians will not regard.

One of the leading questions, at this present time, is that of temperance and prompt and efficient expressing of public sentiment, regarding this important matter is essential if temperance is to be made to continue effective.

Woman has been given the franchise and with it is coupled the duty for its proper use but it is much to be regretted that so large a portion of American womanhood fails to recognize their duty in the matter of casting the helpful ballot whenever the opportunity is presented.

History tells us that the neglect or wrongful use of the ballot-box has resulted in recourse to the terrible cartridge-box but no such sad condition will be ours if you and I, with all of our fellow citizens do our full and fearless duty in support of right and righteousness. Will you do this? What say, you fellow citizens? The fact is, patient as a people, we are too much "wrapped up" in securing financial possessions and well for us, will be, if we give more thought and heed to our duty, as good citizens of our state and nation.

The present troubled condition in Europe should cause every American, who has true love of country, to most carefully consider the obligations which accompany citizenship and then loyally decide to perform those obligations.—J. T. Daniells, Ex.-Pres. of Michigan State Association of Farmers' Clubs and 83 years old on this pleasant "Christmas Day."

Superfluous Flesh.—In the women's department of the Business Farmer I saw where Mrs. F. is asking for some information regarding the reduction of superflous flesh. I have been dreadfully afflicted too and could find no relief until a couple of months ago and now I am losing steadily, and feel fine. Please either send me Mrs. F's. address or publish this in the woman's department.

Everyone knows that milk is a perfect food so will not be afraid to try this remedy. One day eat anything you wish and as much as the appetite desires. It is best, however, to avoid sweets and starches though not positively necessary. Do not lunch between meals. The next day take three meals (positively without lunching between meals) but make those three meals entirely of skimmed milk. Take all one wishes but be sure that all cream is removed. In doing this every alternate day, eating one day and the next day using skimmed milk, a gradual reduction will take place. The milk furnishes all the body needs except fat and what is needed of that must be used from the surplus of the body. I am losing from one-half to one pound a week. This is better than a rapid reduction as the waste is more easily removed and one will feel better during the period of reduction than with a more rapid loss. —An Interested Reader.

Burned Out.—I have several old quilts that are worn quite badly, and as I have not pieces enough to make tops to cover them, I thought perhaps you could help me out, by putting a notice in our Business Farmer. I am a reader of it. I have not been able to get what quilts I need since I burned out, so wish the readers of the paper could send me anything that will make a patch for a top. I can use old worn out wool dress skirts or waists by cutting out the best of it. I wish to send my many thanks in advance for what anyone may send me.—Mrs. Pearl Cook, Roscommon, Mich, R. 2.

—if you are well bred!

Children and Table-Talk.—"Out of the abundance of the heart the mouth speaketh" is a saying which has no application to the child at the table. Self expression on the part of the child is one of the cardinal education principles in the child-training of our day but, as a rule, the table is not the place for it. The child cannot expect to share with table-talk of its elders as an equal. Hence it should, as a rule, speak only when spoken to. A careful mother, of course, who keeps an eye on her little ones during the meal, can easily see if the child is very eager to contribute some little conversational item. A kindly, questioning glance will suffice to grant the permission desired and—away from the table, for the children should not be corrected at the table, either before members of the family or guests—the child may easily be taught that what it has to say must be brief and to the point.

The Runner's Bible

(Copyright by Houghton-Mifflin Co.)

Thou shalt have no other gods before me. Ex. 20:3.

For all the gods of the peoples are things of nought. Ps. 96; 1, e. R. V.

We never fear a person, or thing until after we have ascribed power to it, which is to make of it "a god". Where you find yourself in fear turn with deep gratitude to the truth that all power comes from the one true God. (Rom. 13:1). Firmly deny that this thing which frightens you has any power whatsoever, and you will be free from fear and from danger—freed by Truth.

RECIPES

Celery and Cheese Bake.—Six stalks celery, one-fourth cup grated cheese, butter or substitute, salt and white pepper, one-half cup white sauce, buttered bread crums.

Clean the celery, cut into inch lengths, and cook in enough slightly salted water to cover. When tender remove and drain, add the white sauce and the grated cheese and season with salt and pepper to taste. Place buttered crumbs in bottom of bake-dish, add some of the celery mixture, more crumbs, the remainder of celery, and top with the crumbs. Bake about fifteen minutes in oven and serve at once.

Apple-Whip Cake.—One-fourth cup butter or substitute, two eggs, two cups sifted pastry flour, one large tart apple, one orange, two cups sugar, one-half cup sweet milk, three teaspoons baking-powder, Red raspberry or currant jelly, one teaspoon vanilla.

Cream together the butter and one cup of the sugar, add the egg-yolks, and beat up until light, add the milk, and the flour to which the baking powder has been added; add the juice and grated rind of orange. Beat up and bake in two layers.

Just before ready to serve spread with the jelly, and heap up on top the apple-whip. To make this grate the large, tart apple. Whip until stiff the whites of the eggs, fold gradually the sugar and the apple. Beat up until very white and light, flavor with the vanilla or a little orange extract.

WOMEN'S EXCHANGE

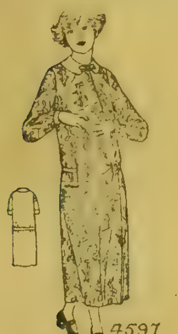
IF you have something to exchange, we will print it FREE under this heading providing: First—It appeals to women and is a bonifide exchanges, no cash involved. Second—It will go in three lines. Third—You are a paid-up subscriber to The Business Farmer and attach your address label from a recent issue to prove it. Exchange offers will be numbered and inserted in the order received as we have room. —MRS. ANNIE TAYLOR. Editor

109.—Housekeeper wanted for family of two. Send extra postage to Annie Taylor, Michigan Business Farmer.

AIDS TO GOOD DRESSING

SEND IN YOUR SIZE

Lately some of you ladies have been sending for patterns without giving size. This means expense and delay for both of us. I hope you all realize the importance of sending in your size when asking for patterns.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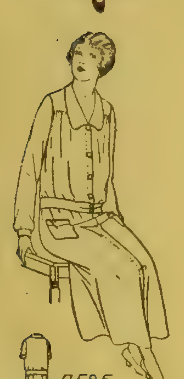
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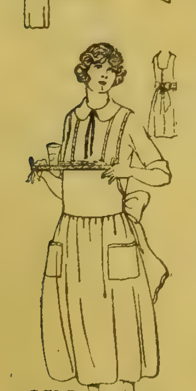
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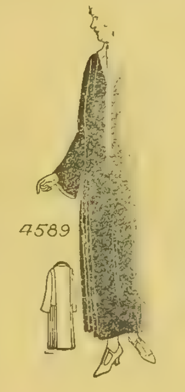
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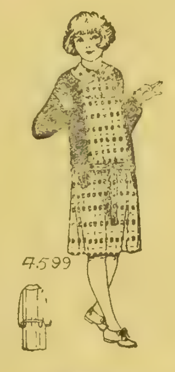
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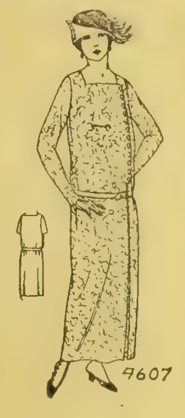
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4585. A Good House or Morning Dress.—This model is comfortable and practical. It is suitable for a nurse's uniform, or for a house dress. Linen, repp, drill, percale, gingham and flannelette may be used to develop the dress. The Pattern is cut in 7 Sizes. 36, 38, 40, 42, 44, 46 and 48 inches bust measure. A 38 inch size requires 4 ⅝ yards of 36 inch material. The width at the foot is 2 yards.

4583. A Popular Style with New Features.—This is a very pretty model. It is suitable for silk, alpaca, flannel and jersey cloth, as well as for wash materials. The shoulder and sleeve portions are combined. This Pattern is cut in 6 Sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. A 38 inch size requires 2 ½ yards of 40 inch material.

4589. A Splendid Style for Mature Figures.—Velvet or satin, would be very attractive for this model. It is finished in slip on style. The plait portions afford becoming fulness at the sides. The facing and collar are new features. This Pattern is cut in 7 Sizes: 36, 38, 40, 42, 44, 46 and 48 inches bust measure. A 38 inch size requires 5 ¾ yards of 40 inch material. For collar and facings of contrasting material ¾ yard is required. The width at the foot is 3 ⅜ yards.

4598. A Pretty Frock for "Party" or "Best Wear."—Figured silk with facings of crepe in a contrasting color, made this attractive model. One could use taffeta or printed voile. The sleeve may be finished with or without puff. This Pattern is cut in 4 Sizes: 8, 10, 12, and 14 years. A 12 year size requires 4 yards of one material 40 inches wide. To trim as illustrated requires ¾ yard of contrasting material.

4599. A Pleasing Model for School or "Afternoon" Wear.—This dress is in slip on style. It has lines that are becoming and girlish. A combination of cloth and velvet, or plaid suiting and serge would be very desirable for this stlye. The Pattern is cut in 4 Sizes: 8, 10, 12 and 14 years. A 12 year size requires 3 yards of 40 inch material of one kind. To make as illustrated requires 1 ¼ yard of plain material and 1 ¾ yard of checked material.

4597. A Smart Frock for the Growing Girl.—New features and becoming lines are expressed in this pretty one-piece model. The right front is slightly draped at the side closing. The sleeve may be in wrist or elbow length. Figured crepe, or twill or serge could be used for this design. The Pattern is cut in 3 Sizes: 12, 14 and 16 years. A 14 year size requires 2 ¼ yards of 54 inch material. To make collar, band cuffs and a narrow belt of contrasting material will require ⅝ yard of 40 inch material.

4581. A Jaunty Coat for a Tiny Tot.—Brown velours was used for this model. The collar and cuffs are of chiffon velvet trimmed with soutache braid. This style is good also for velvet, velours, kasha and twill. The Pattern is cut in 3 Sizes: 2, 4, and 6 years. A 4 year size requires 2 ¼ yards of 40 inch material. To make collar and cuffs of contrasting material will require ½ yard.

4584. A Pretty Apron.—Comfort and daintiness are expressed in this model. One could use unbleached muslin and trim it with bias banding of cretonne or gingham, or, one could use satin or percale with a contrasting color for binding. The Pattern is cut in 4 Sizes: Small, 34-36; Medium, 38-40; Large, 42-44; Extra Large, 46-48 inches bust measure. A Medium size requires 4 ½ yards of 27 inch material.

4604. A Popular and Seasonable Style.—Bolivia cloth, duvetyn or broad cloth could be used for this model. The fronts lap in double breasted style. The collar is convertible, and may be turned up high, or rolled low with the fronts of the coat open. This Pattern is cut in 4 Sizes: 4, 6, 8 and 10 years. A 6 year size requires 2 ½ yards of 40 inch material. To trim with fur cloth or pile fabrics requires ¼ yard 54 inches wide.

4607. A Simple,. Stylish Frock.—French serge, kasha or jersey weaves are good for this model. It has graceful lines, and becoming plait fulness at the left side of the front. The sleeve features the new fitted model. This Pattern is cut in 7 Sizes: 34, 36, 38, 40, 42. 44 and 46 inches bust measure. The width at the foot with plaits extended is 2 yards. For a medium size 2 ⅝ yards of 54 inch material will be required.

4602. A Good Style for a School Dress.—This model is finished in "wrap style" and has the new flare effect in the skirt portions. As illustrated plain and contrasting material may be effectively combined or, one could use wool crepe with wool or yarn embroidery for decoration. It is also a good style for velvet. The Pattern is cut in 4 Sizes: 6, 8, 10 and 12 years. A 10 year size requires 3 ¼ yards of 27 inch material of one kind. If made as illustrated it will require 1 yard of figured material and 1 ½ yard of plain material 36 inches wide.

4595. A Stylish Skirt Model.—Here is a splendid version of the popular "side drape." One may use any of the soft materials now in vogue for this model. The width of the skirt at the foot is about 1 ⅞ yard. The Pattern is cut in 7 Sizes: 25, 27, 29, 31, 33, 35 and 37 inches waist measure. A 29 inch size requires 3 ½ yards of 40 inch material.

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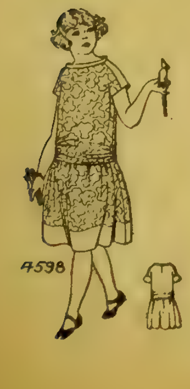
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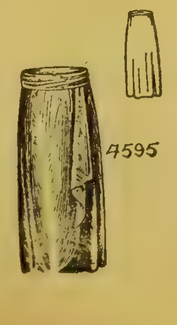
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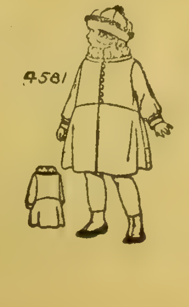
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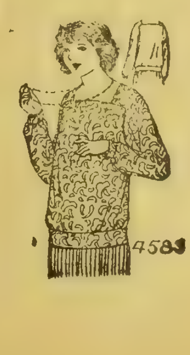
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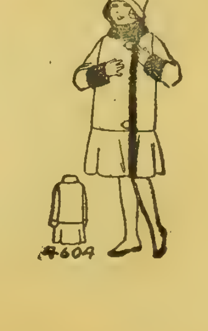
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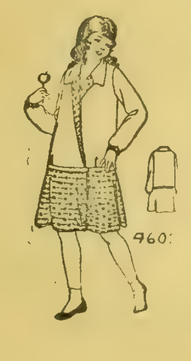
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Mr. Jackson is responsible. Above statement true.

RADIO DEPARTMENT

FARM BUREAU RADIO PROGRAM

Station KYW, Chicago — Central Time 8:01. Wave Length 536 meters.

January 4—"What of 1924?" by O. E. Bradfute, President American Farm Bureau Federation.

"County Farm Bureau Tax Work," by John C. Watson, General Statistician, Illinois Agricultural Association.

January 8—"A Day on South Water Street," by W. H. Hall, Department of Agriculture, Bureau of Markets.

"Financing the Farmer," by Burton M. Smith, Chairman, Agricultural Commission of the American Bankers Association.

Station W. R. C., the voice of the capital, Washington, D. C., 8:00 P. M., Eastern Standard Time. Wave length 469 meters.

January 7—"The Northern Migration of Negroes," by E. V. Wilcox.

PLAN CO-OPERATIVE FARM MARKETING

(Continued on Page 2)

will be chairman ex-officio of the committee.

The program and policy sought to be established for the Grange, Mr. Taber said probably will include both legislative and administrative activities. "Some legislation may be necessary," he said, "but what the farmer needs is more team work, not more legislation."

Mr. Tabor said indications are that plans may be worked out along lines of the federal farm loan system and that the out-standing purpose of any program will be to "improve the economic condition of the farmer."

TWO COUNTIES JOIN FOR CO-OP CHERRY CANNERY

THE cherry growers of Oceana and Mason counties plan a co-operative cannery and already $20,000 of the necessary $60,000 has been subscribed. The movement was launched at a meeting of growers of the two countries held at Hart last week and resulted in the naming of a committee to proceed with the organization. The subscriptions already obtained were volunteered.

The proposed plant probably will co-operate with the Grand Traverse Packing Co., another co-operative concern, which has been successful during the three years of its operation.

The movement for a co-operative plant is the result of the strike of cherry growers here this year when they refused to sell to local canneries because of the price offered.

In the Grand Traverse plant 250 barrels of 50 gallons capacity are frozen daily during the canning season. In the storage plant, 5,000 barrels can be stored at zero temperature.

The Grand Improvement Association has donated a site for the plant.

OVER 5,000 FARMERS EXPECTED DURING FARMERS' WEEK

FARMERS' Week at the Michigan Agricultural College, which has grown to be the biggest conference of farmers of the state held during the year, will be staged February 4-8 this winter, according to the announcement of A. M. Berridge, chairman of the Farmers' Week committee at the college.

More than a dozen of the leading agricultural organizations of the state will hold their annual meetings at M. A. C. during this week. A program including some of the leading men and women in the agricultural and business life of the nation is being prepared. Special agricultural exhibits on various phases of farming and rural life will feature the week.

Last year more than 5,000 farmers and their families attended the gatherings, and the committee is making plans to care for an even greater number this year.—R. C. Groesbeck, M. A. C. Correspondent.

CALIFORNIA MAN ADVOCATES CO-OPERATIVE MARKETING

(Continued from Page 3)

strong and truly cooperative bean marketing association. We believe such an organization would be of material benefit, not only to the Michigan bean farmers, but to many of the Michigan bean elevators, to the bean growers and dealers in other states; to the bean jobbers and the whole grocery trade handling various varieties of beans, and to the consumers who eat these beans.—R. L. Churchill, Secretary and Manager, California Lima Bean Growers Association, Oxnard, Calif.

Base Ingrate

Zeke: "Wall, how ye feelin', Jed?"
Jed: "Oh! purty good."
Zeke: "What? Purty good, after me walkin' four mile to see ye?"—Brown Bull.

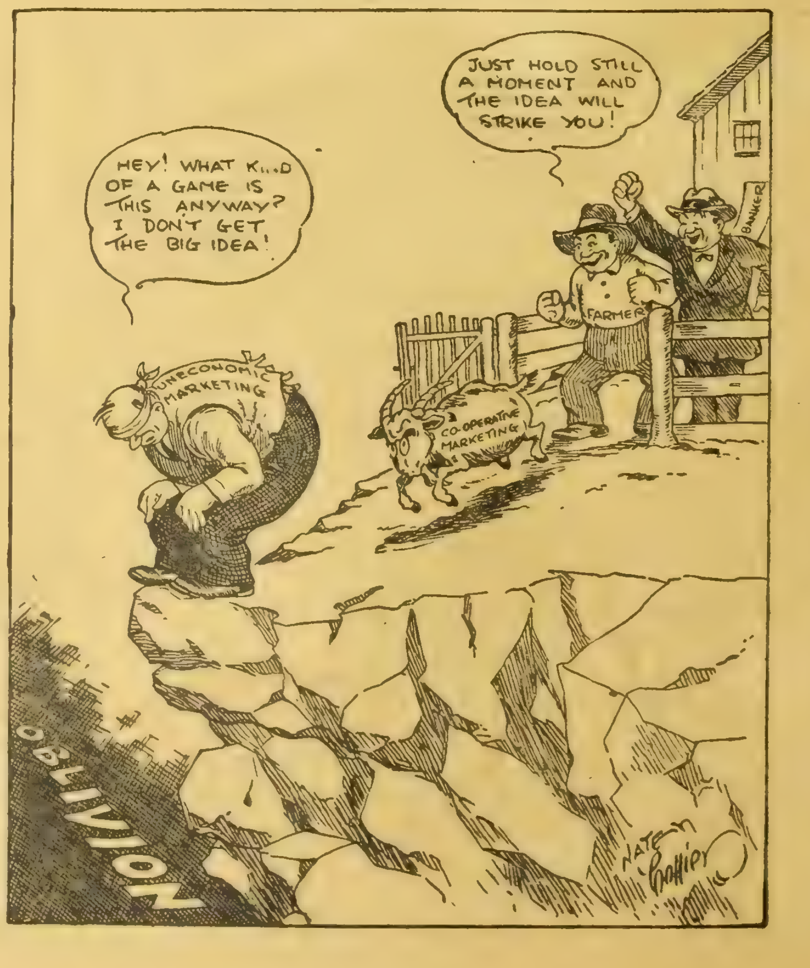
Simplification

The following is an example of the simplicities of "pidgin" English, as set forth in a bill rendered by a Jap taxi driver in Hilo, Hawaii:

"10 comes and 10 goes at 50c a went, $5.—Washington Star.

It was a mathematician's son who, in class, when asked what a fortification was, answered: "Two tentifications."

GETTING THE IDEA


HEY! WHAT KIND OF A GAME IS THIS ANYWAY? I DON'T GET THE BIG IDEA!
JUST HOLD STILL A MOMENT AND THE IDEA WILL STRIKE YOU!
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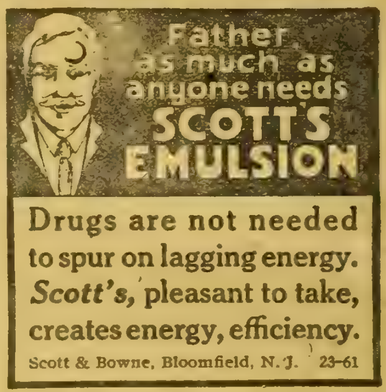
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Cured His Rupture

I was badly ruptured while lifting a trunk several years ago. Doctors said my only hope of cure was an operation. Trusses did me no good. Finally I got hold of something that quickly and completely cured me. Years have passed and the rupture has never returned, although I am doing hard work as a carpenter. There was no operation, no lost time, no trouble. I have nothing to sell, but will give full information about how you may find a complete cure without operation, if you write to me, Eugene M. Pullen, Carpenter, 59-K Marcellus Avenue, Manasquan, N. J. Better cut out this notice and show it to any others who are ruptured—you may save a life or at least stop the misery of rupture and the worry and danger of an operation.

CLOVER $4.90 Per Bu. AND TIMOTHY

BIG BARGAIN—Sample Free—SAVE MONEY. Red Clover and Timothy mixed—Standard Grasses, unsurpassed for hay or pasture. Contains nice amount clover—ready to sow. Thoroughly recleaned, guaranteed and sold subject to your test and approval. A real Bargain. Have Pure Clover, Alfalfa, Clover, Timothy and all Field Seeds at amazingly low prices. Write for free samples and 52 page catalog. American Field Seed Co., Dept. 347 Chicago, Ill.

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WE PAY $200 MONTHLY SALARY, FURNish car and expenses to introduce our guaranteed poultry and stock powders. BIGLER COMPANY, X682, Springfield, Illinois.

AGENTS SELL WOLVERINE LAUNDRY Soap. Wonderful repeater and good profit maker. Free auto to hustlers. WOLVERINE SOAP CO., Dept. B32, Grand Rapids, Mich.

FREE TO INTRODUCE OUR PEDIGREED Strawberries we will send 25 fine plants free. PIEDMONT NURSERY CO., Piedmont, Mo.

TIMBER FOR SALE—R. W. ANDERSON, Clarkston, Michigan.

FOR SALE: B. L. K. DOUBLE UNIT Milker, complete, never unpacked. H. S. BOWERMAN, 2 Miles South of Romeo, Michigan.

HOMESPUN TOBACCO, FIVE POUNDS Chewing, $1.75, ten, $3.00, twenty, $5.25; Smoking five pounds, $1.25, ten, $2.00, twenty, $3.50. Pipe and Recipe free. Send no money. Pay when received. KENTUCKY TOBACCO CO., Paducah, Ky

FUR DEPARTMENT

HOME TANNING OF SKINS

WHEN it is desired to preserve the skins of wild animals which have been shot or trapped, these may be tanned either with the hair on or off, as desired. Hair can be removed from hides by soaking them in tepid water made alkaline by lye or lime. The following recipe for a tanning liquor is furnished by the Biological Survey of the United States Department of Agriculture: To each gallon of water add one quart of salt and one-half ounce of sulphuric acid. This mixture should not be kept in a metal container. Thin skins are tanned by this liquor in one day; heavy skins must remain in it longer. They may remain in it indefinitely without harm.

When removed from this liquor, the skins are washed several times in soapy water, wrung as dry as possible, and rubbed on the flesh side with a cake of hard soap. They are then folded in the middle, hung lengthwise over a line, hair side out, and left to dry. When both surfaces are barely dry, and the interior is still moist, they are laid over a smooth, rounded board and scraped on the flesh side with the edge of a worn flat file, or a similar blunt-edged tool. In this way an inner layer is removed and the skins become nearly white in color. They are them stretched, rubbed, and twisted until quite dry. If parts of a skin are still hard and stiff, the soaping, drying, and stretching process is repeated until the entire skin is soft. Fresh butter, or other animal fat, worked into skins while they are warm, and then worked out again in dry hardwood sawdust, or extracted by a hasty bath in gasoline, increases their softness.

RACCOON RAISING

I wish to know in what way it is possible to raise raccoon and what I should feed them?—A Reader, Suttons Bay, Mich.

—They should be kept in an enclosure say 10 by 20 feet for each raccoon. Thus if you had a dozen animals the enclosure should be about 50 by 50 feet. There is a wire manufactured for fur farming purposes and for coon about 14 gauge is right size with a 2 inch mesh. Such wire can be had of B. F. Tarman, Quincy, Pa., I think. Coon are very fond of sweet milk and bread: they also eat table scraps, meat, etc. The raising of raccoon will soon become much more of a business than now altho there are numerous ones now raising.—A. R. Harding.

WIDEN ROAD BETWEEN DETROIT AND PONTIAC

THE 'most dangerous" improved road in the country will soon be the safest. Work was started early this winter which, when completed, will form a 200 foot right of way between Detroit and Pontiac, Mich. This stretch of highway is reputed to be the most traveled strip of road in the world.

The history of this highway graphically illustrates the growth of automobile travel and the rapidity with which road conditions change. Only six years ago the last strip of concrete connecting these two cities was laid. At that time it was looked upon as an achievement, and it was predicted that here was a good road for a generation at least. Today it is less adequate for the demands put upon it than was the dirt road it succeeded.

About 10 years ago a short strip of concrete was laid on the road in what is now Detroit. The next improvement started in 1915 when another section of the Pontiac end was concreted. Additional strips were laid in the two following years, the final piece of concrete being completed late in 1917.

The completed road averaged 16 feet in width. There was one section 18 feet wide and another 15 feet. The new road was not more than a year old when it became apparent that it was too narrow to care for the ever increasing traffic. During the past two years the urgent requests of motorists to have the road widened were emphasized by a large number of fatal accidents, many of them due to automobiles being crowded off the road and onto tracks of an greater portion of the right of way. This year the state legislature passed necessary laws to permit the improvement.

When the new highway is finished it will consist of two shoulders of gravel road, each 38 feet wide, at the extreme right and left. These will be for the use of slow-moving vehicles and for parking purposes. Next will come two concrete roadways, each 40 feet in width, automobiles. These will be separated in the center by a 44-foot space for the interurban tracks from the automobile highway.

SPECIAL WINTER COURSES AT M. A. C. OPEN JANUARY 7

A NUMBER of special winter courses in various phases of agriculture, including dairy, poultry, horticulture, and farm mechanics, as well as "general agriculture," will open at the Michigan Agricultural College on January 7, according to the announcement of A. M. Berridge, director of winter courses.

The work in all the courses is designed to be of the greatest value to the practical farmer who has not the time for the regular four year courses. It is limited to practical material of value to the man actually engaged in agricultural pursuits.

Every citizen of the state over sixteen years of age is eligible for admission, there being no educational requirements placed on the courses, although a good grade school education is advised for those who would gain the greatest advantage from the special classes.

The list of courses which open January 7 include: general agriculture, eight weeks for each of two years; dairy production, twelve weeks; dairy manufactures, eight weeks; horticulture, eight weeks; poultry, four weeks; farm engineering, eight weeks.

The first of three special four week courses in trucks and tractors opened December 31.—R. C. Groesbeck, M. A. C. Correspondent.

NEW LEADERSHIP FOR THE NEW YEAR

(Continued from Page 13)

boat had gone, and then it went to sleep again. Many churches are metamorphosed into mausoleums and have written over their doors, "Death sleeps here." Why? Not thru lack of men, money, or machinery; but thru a need of a warm and vital connection with the great Antecedent Life, Christ. Sadis, "Thou has a name that thou livist but—." "He that hath ears to hear, let him hear what the Spirit saith to he churches" in his year that is just now new.

BIBLE THOUGHTS

TASTE AND SEE:—O taste and see that the Lord is good.—Psalms 34:8.

SECRET OF PROSPERITY:—As long as he sought the Lord, God made him to prosper.—2 Chronicles 26:5.

CURSING or BLESSING?—Cursed be the man that trusteth in man, and maketh flesh his arm, and whose heart departeth from the Lord.

Blesseth is the man that trusteth in the Lord, and whose hope the Lord is.—Jeremiah 17:5, 7.

OBEDIENCE:—If ye love me, keep my commandments.—John 14:15.

FULLNESS OF JOY:—Thou wilt shew me the path of life: in thy presence is fulness of joy; at they right hand there are pleasures for everymore.—Psalm 1:11.

GOD'S DAILY BENEFITS:—Blessed be the Lord, who daily loadeth us with benefits, even the God of our salvation.—Psalm 68:19.

BETTER THAN SILVER AND GOLD.—Godliness with contentment is great gain. For we brought nothing into this world, and it is certain we can carry nothing out. And having food and mainment, let us herewith be content.—1 Timothy 6:6, 7, 8.

SOW BOUNTIFULLY:—He which soweth sparingly shall reap also sparingly; and he which soweth bountifully shall reap also bountifully.—2 Corothians 9:6.

VICTORY SURE:—Greater is he that is in you, than he that is in the world.—1 John 4:4.

Priceless Service

Despite fire or storm or flood, a telephone operator sticks to her switchboard. A lineman risks life and limb that his wires may continue to vibrate with messages of business or social life. Other telephone employees forego comfort and even sacrifice health that the job may not be slighted.

True, the opportunity for these extremes of service has come to comparatively few; but they indicate the devotion to duty that prevails among the quarter-million telephone workers.

The mass of people called the public has come to take this type of service for granted and to use the telephone in its daily business and in emergencies, seldom realizing what it receives in human devotion to duty and what vast resources are drawn upon to restore service.

It is right that the public should receive this type of telephone service, that it should expect the employment of every practical improvement in the art, and should insist upon progress that keeps ahead of demand. Telephone users realize that dollars can never measure the value of many of their telephone calls. The public wants the service and, if it stops to think, cheerfully pays the moderate cost.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY
AND ASSOCIATED COMPANIES
BELL SYSTEM
One Policy, One System, Universal Service

DELUXE PERSONALIZED STATIONERY

Smart stationery, correct in size. DeLuxe ripple-finish, deckle edged lawn correspondence paper, tinged with silver along the deckled edge. 100 double sheets (10½ by 7½) and 100 envelopes, the new smart size printed with your name and address (or any three lines desired) in rich, royal blue. Choice of white, buff, gray, pink, blue or lavender. Do not confuse with cheap bond paper offers. This stylish stationery sent in neat box to any address for only $2.50—less than you can buy the paper unprinted in any retail store. Order today. You'll be delighted. Money refunded if you are not.

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really given away free to you, for selling only 40 packs vegetable and flower seeds at 10c large pack. Or this handsomely decorated Colonial Style 31 pc. Blue Bird Dinner Set given according to startling offer in our catalog. Similar to sets retailing at $10. Send today. Easily sold. **Earn big money or premiums.** Send no money. We trust you with seeds until sold.
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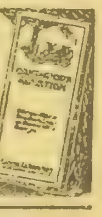

FREE This Practical Book on CONTAGIOUS ABORTION

Tells you about cause, effects and treatment of this dangerous disease; explains how, without risk, you can, like thousands of other farmers and stockmen, rid your herd of it by using ABORNO the pioneer, guaranteed remedy for Contagious Abortion. Write for FREE Copy.
ABORNO LABORATORY
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Write for four grade list. No complaint from shipper in over 2 years. Good treatment given pays more than high prices.

If you have poultry for sale
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The MICHIGAN
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You'll get Results!

Double *the* Net Dairy Profit!

— and stop dreading cow diseases, at one stroke —

One cent a day

per cow is the average cost of using Kow-Kare as a preventive of disease and aid to increased milk yield.

Most dairymen feed a tablespoonful twice a day one week out of each month Fed two weeks before and two weeks after calving, Kow-Kare strengthens the cow over this critical period.

The best dairy authorities say that, on the average, an increase in milk yield of only 10% will double the net profit. This is a goal so moderate that it can be attained in almost every dairy.

Cows are pretty hardy creatures, but their genital and digestive organs—always hard worked in the function of milk making—are prone to break down. The milk-yield at once suffers.

These milk-making functions of nearly every cow, need frequent aid to keep them toned up to top-notch production, and to ward off disease. Kow-Kare accomplishes just this purpose. Acts directly on the organs of production. Thus strengthened, you need have little fear of such cow diseases as Barrenness, Abortion, Retained Afterbirth, Scours, Bunches, Milk Fever, Lost Appetite.

The milk-flow, too, is surprisingly increased by the general conditioning action of Kow-Kare. A cow may have no sign of disease, yet show a substantial increase in yield when Kow-Kare is fed moderately.

Start now to get 10% more milk from your cows. Our free book, "The Home Cow Doctor" tells how to use Kow-Kare successfully. Write for your copy.

Feed dealers, general stores and druggists sell Kow-Kare; $1.25 and 65c sizes. If your dealer is not supplied, we will mail postpaid upon receipt of remittance.

DAIRY ASSOCIATION CO., Inc., Lyndonville, Vt.

Makers also of Bag Balm, Grange Garget Remedy, Horse Comfort and American Horse Tonic.

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KOW-KARE
The Great Cow Medicine
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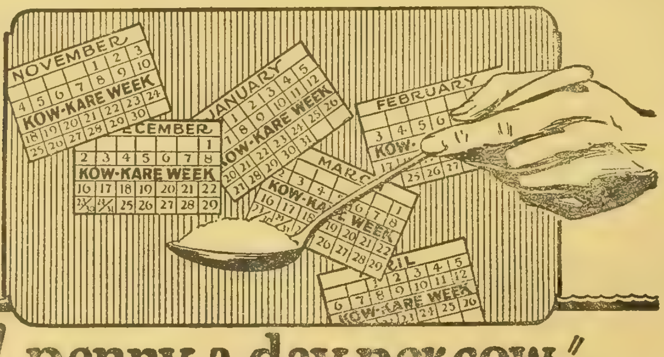

Have a **KOW-KARE** *week each month*

"A penny a day per cow"

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Advertisements inserted under this heading for reputable breeders of Live Stock at special low rates to encourage the growing of pure-breds on the farms of our readers. Our advertising rate is Thirty Cents (30c) per agate line per insertion. Fourteen agate lines to the column inch or $4.20 per inch, less 2% for cash if sent with order or paid on or before the 10th of month following date of insertion. **SEND IN YOUR AD AND WE WILL PUT IT IN TYPE FREE**, so you can see how many lines it will fill. Address all letters,
BREEDERS DIRECTORY, MICHIGAN BUSINESS FARMER, MT. CLEMENS, MICH.

CLAIM YOUR SALE DATE

To avoid conflicting dates we will without cost, list the date of any live stock sale in Michigan. If you are considering a sale advise us at once and we will claim the date for you. Address, Live Stock Editor. M. B. F., Mt. Clemens

Feb. 5—Poland Chinas, Detroit Creamery Farm, Mt, Clemens, Michigan.
Feb. 20—Durocs, Detroit Creamery Farm, Mt. Clemens, Michigan.

CATTLE

HOLSTEINS

HERD SIRE FOR SALE AT FARMERS PRICES. T. B. Tested guaranteed every way. Pontias Romeo Dutchland DeKol No. 270204 H. F. H. B. sire Pontiac Dutchland 2'd Dam Pontiac Osiris. **H. S. BOWERMAN, Two Miles South of Romeo, Michigan.**

FOR SALE: REGISTERED HOLSTEIN BULL of King Segis Pontiac and Pontiac Korndyke breeding. Ready for service. (Federal Accredited). Price $100. **GEORGE C. SPANGENBERG, Royal Oak, Michigan, R. 6, Box 108.**

FOR SALE—Two Registered Holstein Heifers. One born Dec. 20, 1922 and the other May 28, 1923 from good producing stock and well developed. Price $164.00 for both. **Geo. Church, 1 mile south and 1 mile west of Imlay City, Mich.**

FOR SALE—HOLSTEIN FRIESIAN REG. BULL Calf, two-thirds white. Every Dam a R. O. cow. His 15 nearest Dams are 27 lb. A real show calf. Priced to sell.
H. W. MOHR, Elkton, Michigan.

AYRSHIRES

AYRSHIRES

To make room for winter we are offering bred cows and heifers also some well bred young bulls. Look up our winnings at leading state fairs. **W. T. SHUTTLEWORTH, Ypsilanti, Michigan.**

FOR SALE—REGISTERED AYRSHIRE bulls and bull calves, heifers and heifer calves. Also some choice cows.
FINDLAY BROS. R 5, Vassar, Mich.

DAIRY and LIVESTOCK

DETAILS COUNT IN DAIRYING

IN our eagerness to make every dollar possible we often overlook some of the smaller and seemingly lesser important things in the dairy, and by doing so are often unknowingly the losers. There are innumerable little things which cost practically nothing but which make a decided increase in the butterfat yield and consequently in the financial yield.

They are such simple things as regularity in time of milking, having the same person milk the same cows, quietness and gentleness while working around the cows, seeing to it that the cows are thoroughly milked clean and making it a practice to brush or clean the cows at intervals. These are some of the things that every cow keeper knows. Some may admit that they are all right for the man who has an extra large dairy or who gets a large price for his milk, but they think that they have no time to pay attention to all of those details.

Now the very fact that one is not getting the highest price for his produce or does not have a large dairy, should make him all the more anxious to get all the profit out of his cows possible under the existing conditions without the expenditure of too much extra capital. It is important to milk the cows regularly, or, in other words, as nearly at the same time as possible. And in order to obtain the best results they should not be milked hurriedly one time and then quite slowly at another. Neither should milking be stopped every few minutes. After the cow is started the milking should be steady until finished.

It is also essential that the same person milk the same cows, as a cow will never yield as much nor will she be as consistent if milked by different persons. Being noisy and rough around the cows is expensive. These things will probably not affect the yield as much as the test. I know this by actual observation in a herd that had been chased by a dog during the day. After testing the cows in the evening the average test was found to be just a trifle over 2.30 per cent, while ordinarily the average test of these cows was about 4.10 per cent. But the number of pounds of milk given was about the same. It is a well-known fact that cows when nervous or frightened will not yield the fat even though the quantity may not change materially.

There is a loss in two ways in not milking clean. Not only does the owned lose the milk, but the cow will soon have a swollen udder, which may result in the loss of a quarter or ruin the whole cow as far as milking is concerned. And besides, if a cow testing 4 per cent butterfat be milked and the first fourth of the milk be tested it will probably only test about 2 per cent and it even may be a little lower. The second fourth will test between 3 and 4 per cent and keep on increasing, and the very last milk or strippings sometimes tests as high as 12 and even 15 per cent. Hence the importance of getting the strippings.

On the majority of farms now the cows are kept in a fairly sanitary condition, but unfortunately there are some who are careless about the sanitary condition of the animals. In some cow stables the brush and curry comb are unknown articles. This is certainly not because the expense is too great. Keeping the cows clean is important and stables can be built in which the cows will keep quite clean with practically no expense.

Where a gutter is kept in back of the cows the error is so often made in giving the cows too much room between the feeding trough and the litter gutter. The littler will not drop in the gutter and consequently the cows are dirty. Where stanchions are used from 4½ to 5 feet is ample room between the stanchion and the gutter, varying of course with the size of cows. An ordinary sized Jersey or Guernsey will easily stand on 4½ feet. If, however, the cows are tied to a high trough they must have a little more room than I have mentioned in order to lie comfortably.

Every dairyman should have a Babcock tester of his own, or at least himself and a neighbor or two own one between them. There are, however, some who haven't got a tester nor have their cows been tested by someone else. By the following simple method they may test their cows so as to get a comparative idea of their value.

Get as many small-necked bottles as there are cows in the herd and after milking each cow perfectly dry weigh her milk to get the number of pounds. Then stir or pour it from one vessel to another until it is thoroughly mixed, and from the milk of each cow fill one of the bottles full and set away in a cool place until the cream has risen. The amount showing in the neck of the bottles will show at once which cows give the richest milk. The bottles should all be of the same size and make. Bottles in which catsup has been packed for sale in stores will make good test bottles for this purpose. A label should be pasted on each bottle on which is written the name or color of the cow from which the milk came. You know how many pounds each cow gives and which one gives the richest milk. Keep the milk from the best cow and that from the poorest one and take it to a creamery and have it tested, being sure to mix the milk well from each cow before taking samples for testing.

If a dairyman closer than the creamery has a tester the samples can be taken to him. The Babcock tester will show exactly what each cow is doing and from observing the difference in the various test bottles a very close estimate can be made of what any cow in the herd is doing. The man who takes the trouble to make a careful test of his cows often meets with a surprise in finding that some of his cows are getting their board without having to pay anything for it. When this is found to be true no time should be lost in getting rid of them and putting better ones in their place.—H. C. Warren.

CLINTON CO-OPERATIVE CREAMERY GREAT SUCCESS

EIGHT years ago a group of one hundred sixty-five men in and about Westphalia, a small town in Clinton county, elected to form a small co-operative creamery by each purchasing a ten dollar share-thereby raising $1,650.00. With this money a small plant and equipment was secured.

Had anyone prophesied the returns which this small investment would mean to those men over a period of eight years, it is doubtful if the phrophecy would have received very much consideration.

However, during the eight years just passed $14,673.64 in patronage dividends has been declared besides purchasing a house and lot valued at $2,000.00 an paying for cream on the same basis with other creameries and cream buying stations.

The fact that during the last year their total business of $34,035.00 shows an increase of approximately $7,000.00 demonstrates that there is a considerable element of satisfaction in its management which during the past year decreased expenses $600.00.

Mr. Theodore Bengel, who has been secretary for a number of years prepares each year a detailed statement assembled on a sheet of paper, which this year was nearly fourteen feet long and two feet wide, showing each patrons name, each check sent out, a total at the bottom of this column and also his patronage dividend figured out. This gives neighbor an opportunity to see just how they stand and also an opportunity to review their years work with the creamery.

Mr. Bengel also states that it also gives a very graphic record of the stability of patrons; that is, it is easy to note the blank column and weeks in which no check were sent to certain patrons showing that some were shopping around, which of course, tended to decrease the patronage dividend and this in some cases amounted to as much as $40.00 which makes a splendid Christmas present for the loyal members.

The success of the creamery is reflected in the agricultural prosperity of the community and one has but to drive through to know that some force is behind the well kept farms and farm buildings.—H. V. Kittle.

BREEDS OF DAIRY CATTLE

No. 5—AYRSHIRE

THE Ayrshire breed originated in the county of Ayr, in southwestern Scotland. In that region, which borders on the Irish Sea, the surface is rolling and has much rough woodland. Pastures therefore, are somewhat sparse and it is necessary for animals to graze large areas in order to obtain sufficient feed.

It is only within the last hundred years that Ayrshires have had a type well enough established to be entitled to the designation of breed. No exact account of the different infusions of blood of other breeds into the native Scotch cattle to form the Ayrshire breed is at hand. It is probable, however, that the Channel Islands, Dutch, and English cattle were all represented.

Importations and Distribution

The first importantion of Ayrshires to this country was made in 1822, since which time there have been frequent importations into both the United States and Canada. New England, New York, and Pennsylvania probably contain the largest number of representatives of the breed. There is a small distribution in the other Atlantic States and the Pacific Northwest. In Canada Ayrshires have had great popularity and the breed seems well able to withstand the rigors of the Canadian climate. The merits of the breed have not been advertised widely; consequently it is not well known in many sections of the United States.

Characteristics

The colors of Ayrshires may vary from medium red to a very dark mahogany brown and white, with either color predominating. Of late years among breeders there has been a decided tendency toward white with red markings. A black muzzle and a white switch are desired, but are not necessary for registration. Perhaps the most picturesque feature of animals of the breed is their long horns, which turn outward, then forward and upward. Another point of which breeders of the Ayrshire are very proud is the uniform, square, level udder with long body attachment which is common among the cows.

Quick, brisk actions are characteristic of the animals, which seem always to have an abundant store of energy and to be exceptionally alert. Ayrshires have a highly nervous disposition, which is useful for both production and self-support. Probably none of the other dairy breeds can compare with the Ayrshires in ability to obtain a livelihood on scant pastures. Their ability as "rustlers" has made them very useful in sections where there is much rough land in pasture.

In weight the cows may vary from 900 to 1,300 pounds (average about 1,000 pounds); bulls weigh between 1,400 and 2,000 pounds (average about 1,600 pounds). The animals are noticeably compact in body, with a tendency to smoothness over all parts. Formerly they were criticized for their short teats, but that fault has been removed largely by careful breeding. As a breed Ayrshires are generally very hardy and show great constitutional vigor.

At birth the calves weigh from 55 to 80 pounds, are very vigorous, easy to raise, and make rapid gains. Heifers reach maturity of frame at an age between the Holstein and the Jersey.

Production

Milk from Ayrshire cows contains comparatively little color and has the fat in uniformly small globules which average smaller in size than in any other breed. For these reasons the milk sometimes fails to show a distinct cream line, by which the consumer often judges the quality of the milk. Ayrshire milk, because of the small fat globules, stands shipping well without churning, and in other respects it is well adapted to the market-milk trade. The percentage of the butterfat in the milk is medium, and consequently there is no difficulty in conforming to local or state butterfat standards.

Families

On account of the comparatively recent origin of the breed few families have been developed. The more prominent in the United States are the Brownie, Auchenbrain, Finlayston, White Cloud, Jean Armour, and Robin Hood.

MICHIGAN JERSEY QUALIFIES FOR SILVER MEDAL

VARIELLA'S Creampot 538801, by producing 8,214 lbs. of milk and 507.05 lbs. of fat in 365 days, at 2 years, 2 months, becomes a Silver Medal cow in the herd of Mr. H. F. Probert of Jackson, Michigan. This fine cow is out of Champion's Creampot 377815 and by Variella's Flying Fox 168-679 having two Register of Merit daughters to his credit.

BREAKING AND TRAINING COLTS

IF a horse is to reach the stage of full value and usefulness possible for an animal of his type and class, he must be carefully broken and well trained when young, results which frequently are not accomplished by many horsemen. The best methods and practices for making a good work horse out of a good colt prospect are described in Farmers' Bulletin 1368, Breaking and Training Colts, a revision of a former bulletin, which has just been prepared by the United States Department of Agriculture.

Since horses do things largely through habit, it is essential, says the bulletin, to establish good habits and to prevent colts from doing things which might develop into bad habits. It is of primary importance here that the colt should never be permitted to have his own way. If he can not do the one thing asked of him, the trainer immediately should make him do something else which he can do. In this way the colt is soon impressed with the fact that man is his master. Once this impression is firmly fixed in the colt's mind he is well on his way toward becoming a good, safe work horse.

The bulletin takes up in separate chapters such subjects as the age to break, gentling the colt, breaking to lead, handling and trimming the colt's feet, breaking to drive, stopping, backing, driving double, driving single, sights and sounds, breaking to ride, correcting bad habits, throwing a horse, harness, and the importance of a good mouth.

Copies of the bulletin may be had free as long as the supply lasts by addressing the Department of Agriculture, Washington, D. C.

USING CULL BEANS IN BALANCE RATION

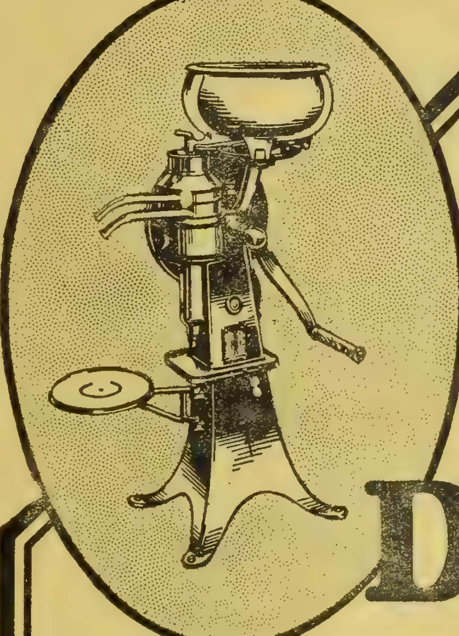
I have corn silage with a very little corn in it though. I figure to feed it twice a day with hay, corn stalks, or bean pods for roughage. Then for grain I buy cull beans and boil them, feed each cow about two quarts twice a day with a tin cupful of cotton seed meal. Is this anywhere near a balanced ration or not? If not, what would you advise me to add?—L. R. Whittemore, Mich.

—It is very difficult to say whether you are feeding a balanced ration or not from the measures that you use for feeding your cattle, that is, a tin cup might hold anywhere from a quart to two pounds of cottonseed meal.

Since you wish to feed cull beans, I would suggest this ration: 40 lbs. ground corn, 40 lbs. ground oats, 20 lbs. ground cull beans, 10 lbs. oil meal, 10 lbs. cottonseed meal.

If you feed alfalfa hay at the rate of 12 to 15 pounds per day instead of corn stalks, the ration would be satisfactory if the cottonseed meal were left out. However, you undoubtedly wish to utilize the feeds at hand and I would suggest for roughage that you feed 30 to 40 pounds of silage and 12 to 15 pounds of hay, which I assume contains a

(Continued on page 26)



-Closer Skimming
-Easier Running
-Longer Life

With the NEW

DE LAVAL

Cream Separator

A Better De Laval

For Fewer Pounds of Butter

In 1913 it took 231 lbs. of butter (average price for the year) to pay for a popular size De Laval Cream Separator. In 1923 (average price for the first ten months) a De Laval of the same size can be purchased for 206 lbs. of butter, 25 lbs. or 11% less than in 1913. In addition, the De Laval of today is a very much better machine, having 10% more capacity, a Bell Speed-Indicator, self-centering bowl, a bowl holding device, and other improvements and refinements.

You Lose Money by Not Having a *New* De Laval

With high-priced butter-fat, you lose money by using an inferior or worn-out cream separator. There are hundreds of thousands of cream separators in use today wasting the price of a new De Laval in from six months' to a year's time. There is enough butter-fat being wasted in this manner to keep several factories the size of the De Laval Plant, the largest in the world, running full force.

$6.60 to $14.30 Down
$3.96 to $8.58 per Month

If you want to buy a cream separator on the installment plan you can now get a De Laval on extremely easy terms. Practically all De Laval Agents sell them that way. For $6.60 to $14.30 (depending on the size) you can start using a high-quality, long-life, cream-saving De Laval; and then for $3.96 to $8.58 per month you can easily pay for it out of cream checks or butter money. (Prices slightly higher on Pacific Coast and in Canada.)

The De Laval Milker

If you are milking ten or more cows by hand you need a De Laval Milker. Like the De Laval Separator it will soon pay for itself, and is a quality product. There are already more than 15,000 in use giving remarkable satisfaction. A De Laval Milker not only saves a great deal of time and drudgery, but because of its pleasing and uniform action usually causes cows milked with it to give more than by any other method of milking. It also produces cleaner milk. Send coupon for complete information.

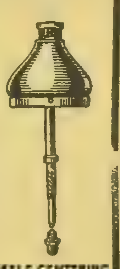
The new De Laval Separator, which has now been on the market for over a year and of which there are already more than 100,000 in use, is acclaimed on all sides as being the best De Laval ever made. That is saying a great deal when it is considered that De Laval Separators

—have millions of users who regard them as the finest machines made;
—have won more than 1100 prizes for superiority of operation and construction;
—are overwhelmingly endorsed for efficiency of service by cow testers, who reach over 6000 farms;
—are used and approved by creamerymen, college and dairy authorities;
—and have the longest record of use, as proved by the life of the thousands of machines in the "Oldest De Laval Users Contest," which averaged over 20 years.

With such remarkable achievements a new De Laval must be very good indeed to be better—and it is. Convince yourself. Ask your De Laval Dealer to show you the new De Laval. Try it alongside of any separator made and you will be convinced of its superiority.

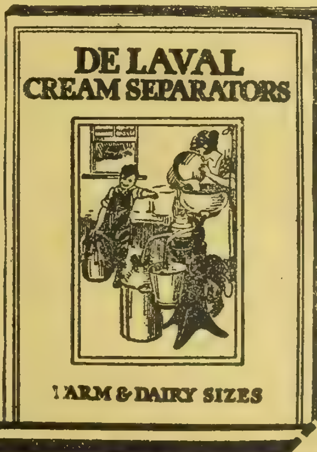
The new De Lavals have all the good features of the old, plus:

1. Self-Centering Bowl. The De Laval Bowl is so designed as to center itself when it attains separating speed, eliminating vibration, which adds to its efficiency and life.
2. Light Running. The De Laval Bowl is so designed as to shape, height, diameter and distribution of weight as to afford the least possible resistance in being revolved, which together with the automatic oiling system, and superior design and construction of the driving mechanism, requires the least power (per pound of capacity) to drive.
3. All-Around Superiority. A combination of the foregoing features, together with superiority of De Laval design, workmanship and materials, enables a De Laval to separate more thoroughly under all conditions of use, delivering a smoother and richer cream.
4. Greater Convenience is also obtained in the new De Lavals through the use of a bowl holder which is attached to the machine.



SELF CENTERING BOWL

Ask your De Laval Agent about it



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The last word on Cream Separators.

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State R.F.D.
No Cows

Make Your MILKERS PAY

Every cow in your herd can be made to produce up to her full capacity

—if you look well to her ration, her health, her appetite and her digestion.

Balance the ration. Feed bran, oats and corn, or their equivalent, cottonseed or linseed meal, clover hay, alfalfa, silage—pasture in season.

Remember, the better the appetite the greater the food consumption, the greater the milk production.

DR HESS
STOCK TONIC

DR. HESS STOCK TONIC

Keeps Cows Healthy *Makes Cows Hungry*

It conditions cows to turn their ration of grain, hay and fodder into pails of milk.

It contains *Nux Vomica,* greatest of all nerve tonics. *Quassia* produces appetite, aids digestion. *Salts of Iron* keeps the blood rich. There are *Laxatives* for the bowels, *Diuretics* for the kidneys, to help throw off the waste materials which so often clog the cow's system.

Excellent for cows at calving. Feed it before freshing. Good alike for all cattle.

Tell your dealer how many cows you have. He has a package to suit. GUARANTEED.

25-lb. Pail $2.25 **100-lb. Drum $8.00**

Except in the far West, South and Canada.

Honest goods—honest price—why pay more?

DR. HESS & CLARK **Ashland, O.**

I spent 30 years in perfecting this Tonic.
GILBERT HESS,
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Dr. Hess Dip and Disinfectant
Keeps the Dairy and Stables Healthful and Clean Smelling

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Registered Breeding Cattle, T. B. Tested at practical prices for production of Hereford Baby Beeves profitably all ages.
T. F. B. SOTHAM & SONS.
(Herefords since 1839.)
St. Clair, Mich.

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70 Herefords 786 lbs. 70 Herefords 700 lbs.
86 Herefords 575 lbs. 51 Herefords 500 lbs.
All dehorned, deep reds and in good grass flesh. Can also show you other bunches. If in the market for real quality one car load or more your choice. Write stating number and weight preferred.
VAN V. BALDWIN
ELDON, WAPELLO CO., IOWA

We Have Bred Herefords Since 1860
Spring calves for sale. Write us your wants. A few Chester White Boars and Sows for sale.
CRAPO FARM, Swartz Creek, Michigan.

4 HEREFORD BULLS, PRICED TO SELL, Dropped in March. 3 Polled, all good individuals, T. B. Tested. **Wm. C. Dicken, Smyrna, Mich.**

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WE HAVE SOME FINE YOUNG ANGUS BULLS from International Grand Champion Stock at reasonable prices. **E. H. KERR & CO., Addison, Mich.**

RED POLLED

FOR SALE—REGISTERED RED POLLED Cattle. Both Sex.
PIERCE BROS., R. 1, Eaton Rapids, Michigan.

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REG. JERSEYS, POGIS 99th OF H. F. AND Majesty breeding. Young stock for sale. Herd fully accredited by State and Federal Government. Write or visit for prices and description.
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FOR SALE: REGISTERED SHORTHORN Bull, 4 years old, of good size and dark red in color. Kind and gentle. Wonderful herd sire. Price right. If interested address
L. A. KING, R. 1, Harbor Springs, Michigan.

REGISTERED MILKING SHORTHORN CATTLE, Shropshire and Delaine sheep. Stock and prices right. Write wants. Also car load feeding cattle.
CLOVER CREST RANCH, Tawas City, R3, Mich.

RAISE SHORTHORNS WITHOUT HORNS Like Kelley does. U. S. Accredited Herd No. 28945. For description and price write,
L. C. KELLY & SON, Plymouth, Michigan.

GUERNSEYS

GUERNSEY BULL CALVES $50. A. R. BREEDING. 50% to 75% breeding of Norman's Missaukee Red Rose. Bull soon ready for service $100.
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O. I. C'S: 75 LAST SPRING PIGS, PAIRS not akin. From 3 good strong sires. Also fall pigs. Recorded free. ½ mile west of depot.
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100 SPOTTED POLAND CHINA PIGS, EITHER Sex for sale cheap. Also several bred sows for March and April farrow. Also 3 Registered Holstein bulls ready for service, at your own price.
MERLE H. GREEN, Ashley, Michigan.

DUROCS

AT THE STATE FAIR WE SHOWED ONE of the largest boars. He won 3rd in his working clothes (no fitting). He is back home and we want you to have a gilt or sow bred to this fine Colonial Boar. Write us.
SCHAFFER BROS., R. 4, Oxford, Michigan.

SHEEP

FOR SHROPSHIRE RAMS WRITE OR CALL ON
DAN BOOHER, R. 4, Evart, Michigan.

HORSES

FOR SALE FULL BLOODED BELGIAN Stud Colt coming two.
J. M. MISHLER, Route 4, Middlebury, Indiana.

(Continued on page 29.)

considerable amount of timothy, and allow the cows to have such corn stalks and bean pods as they wish to pick over. The grain mixture should be fed at the rate of one pound of grain for each three and one-half pounds of milk produced.—J. E. Burnett, Assoc. Prof. of Dairy Husbandry, M. A. C.

Veterinary Department

MARE NEEDS GOOD FEED AND CARE

My brood sows will root one another in the side and then suck till they take the hair off. My young pigs are doing the same thing. I have put rings in their nose, but it isn't long until the rings are out. They don't root as long as the rings hold. I have them in clover pasture and feed corn and separator milk, fresh from the separator.

I have a young mare 6 years old that has been worked hard and half fed this last year or two. When I first got her about 6 weeks ago she was poor, had no life, and sure was hard looking. She is fattening up now though and looks lots better, but when I was plowing with her lately she would go along with her head down and if you spoke to her to go any faster, she seemed to pay no more attention than if she had not heard me. If you stop her when she is working, she drops her head and seems to go to sleep. If I hit her with the line she seems to have all kinds of life, but soon forgets.—L. R., Whittemore, Mich.

—I do not know what is the matter with the brood sows. I would not like to make any suggestions without first having an opportunity to make a physical examination of the sows.

The six-year-old mare in all probability needs plenty of good feed and care more than anything else. Put her on a full feed of oats, corn and bran making the ration about one-half oats and the other half equal parts of corn and bran. A small handful of oil meal added to the ration night and morning would also be very good. Clover hay would be better than timothy. The addition of one teaspoonful of artificial carlsbad salts to the feed night and morning and continued for about one month would do very well. It may take all winter for your mare to get in good condition.—John P. Hutton, Division of Veterinary Medicine, M. A. C.

MILK THICK AND STRINGY

Would like to know what to do for my cow. Her milk is thick and stringy. She calved August 7th. Was not so bad when she came fresh as she is now. Her udder swells and she only gives half the milk. Last winter she tried to jump the fence and was hung on the fence. We think she might have gotten hurt.—A. P., Onaway, Mich.

—This cow is suffering from one of the forms of mastitis and I would suggest that you consult your local veterinarian relative to treatment and put the case in his charge. I would be glad to prescribe treatment but is very unsatisfactory to prescribe treatment for a case of this kind without first having an opportunity to make a physical examination of the patient. If you do not have a veterinarian in your community and will write me a letter giving as best as you can all the symptoms of the case I will be very glad to prescribe as best I can.—John P. Hutton, Assoc. Prof. Surgery and Medicine, M. A. C.

REMOVE BOTH HORNS WITH DEHORNING CLIPPERS

I have a cow that lost part of one horn last fall, just the inside is left. She did not seem to mind it at the time, but I don't think she looks as well as she did last year. Do you think losing the horn would have any effect on her health? She has had the same care this year as last year. It is one of my best cows, and I would like to keep her well. She just freshened in October. Would it be necessary to cover the horn with something? And what? I should also like to know why some cows like so well to lick a persons clothes, and if there is anything to do for it. The same cows do not drink water so well as the others. They sip it very slowly, stop drinking and start in again until they at last get to the bottom of the pail, even when the water is not very cold. They seem to be in good health otherwise.—C. J., Leelanau County, Mich.

—I think it would be best for the cow to have both horns removed using the dehorning clippers. It is a habit that many healthy cows have to want to lick a persons clothes.—Prof. John P. Hutton, Division of Veterinary Medicine, M. A. C.

COW SWEATS

I have a three year old cow that sweats. Will be standing in the barn and be all wet with sweat. Seems to be well, eats hearty, and in fair condition, and is to freshen in March. She still seems to have her old hair, doesn't look as tho she had shed as she should. I have only owned her about six weeks.—A. S., Fremont, Michigan.

—I think that the sweating is due to the heavy coat of hair that the cow has. Groom the cow good twice daily, put her on a good balanced ration. The addition of a heaping tablespoonful of Glauber salts to her feed night and morning would be very beneficial.—John P. Hutton, Asso. Prof. Surgery and Medicine, M. A. C.

DOES YOUR SON WANT TO BECOME A VETERINARIAN?

(Continued from Page 8)

veterinary science is nothing more nor less than science applied to the solution of the problems of disease prevention and cure in the lower animals, and veterinary practice is only the legally sanctioned and protected method of effecting this application in every-day life. There may be some better way—we doubt it—of applying the science of the veterinarian but there is certainly no substitute for the science itself. It is not a problem that is vital alone to the veterinarian—he can find other work to do. A well educated veterinarian is a well educated man and as such he can look after himself. But without veterinary service our animal industry would be ruined. The effect on agriculture and consequently upon the general welfare is obvious. We beseech a thoughtful consideration of the veterinary problem on the part of your readers.

Appreciate Company

Two farmers met after church and had this conversation:

"I hear you've sold your pig?"

"Yes, sold him last Thursday."

"What d'ye get?"

"Eight dollars."

"What did it cost ye to raise it?"

"Paid three dollars for the shote, and five more for the feed."

"Didn't make much, did ye?"

"No, but I had the use of the pig all summer."—Exchange.

Why Not a Butcher Shop

Party on the phone—Have you any nice round steak?

Dispr Zachry—No, madam.

Party on phone—Have you any nice loin steak?

Dispr Zachry—No, madam.

Party on phone (much exasperated)—Well, for goodness sake, why haven't you?

Dispr Zachry—This is the dispatcher's office and our trains have not killed any cows lately.—A. C. L. News.

The Only Way

"The women of today are able to meet any situation," said a clerk in the general manager's office at Detroit.

"If I were to kiss you, how would you meet the situation?" asked her friend.

"Face to face," she replied.—Exchange.

NEW LAMP BURNS 94% AIR

Beats Electric or Gas

A new oil lamp that gives an amazingly brilliant, soft, white light, even better than gas or electricity, has been tested by the U. S. Government and 35 leading universities and found to be superior to 10 ordinary oil lamps. It burns without odor, smoke or noise—no pumping up, is simple, clean, safe. Burns 94% air and 6% common kerosene (coal oil).

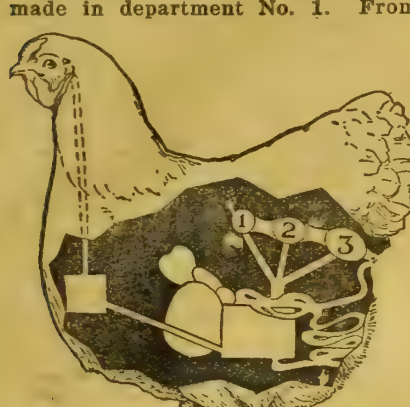
The inventor, A. R. Johnson, 609 W. Lake St., Chicago, Ill., is offering to send a lamp on a 10 day's FREE trial, or even to give one FREE to the first user in each locality who will help him introduce it. Write him to-day for full particulars. Also ask him to explain how you can get the agency, and without experience or money make $250 to $500 per month. (Adv.)

Poultry Department

HOW TO MAKE A HEN MAKE EGGS

A HEN'S egg factory is departmentized. The egg she lays is made by piece work in three departments—just like Henry Ford makes an automobile, according to L. J. Brosemer of the Sears-Roebuck Agricultural Foundation, who shows that inside a hen is a plant that works with the system and regulation of an up-to-date automobile factory.

"There are three departments in the egg making plant," said the Foundation's expert. "The yolk is made in department No. 1. From this department it moves through a passageway into the next department where the yolk is coated with white. When the coating job is completed in department No. 2, it is moved into department No. 3, where the egg is encased with a layer of the purest form of carbonate of lime, forming the egg shell. Then the egg is passed on to a hungry world—fresh, sanitary and sealed. These three departments of the egg making plant might be compared with an automobile factory. First, the engine is made, like the hen makes its yolk, then the chassis, as the chicken encases its yolk in white, finally, the auto body covering the whole, just as the hen puts a covering of lime over its product in the form of a shell.



Sometimes the egg plant fails to work. That is not due to laziness or labor unrest or strikes, but because the egg making material furnished the hen is not of the proper sort. The average American hen lays 72 eggs a year. She should manufacture twice that number. The reason she makes so few is because, as an honest manufacturer she refuses to manufacture anything but a whole and complete egg. Farmers and other poultry keepers are to blame, because they unknowingly do not provide the food material the hen requires to keep all three egg making departments working full time. When a hen is fed the right foods in the proper amounts so as to secure the greatest efficiency in her plant she has to make eggs or she'll burst.

"Hens must be given a balanced ration. If they are fed a mixture that produces 100 yolks for every 50 whites, then the egg making plant can only turn out 50 normal eggs. The same situation in an automobile factory would cut down the output, for what could be done with 100 engines if the auto maker had only enough material to manufacture 50 chassis? He is up against it the same as the hen's egg plant."

After working over gizzards and test tubes for years expert poultrymen are agreed that each particular kind of poultry feed contains a definite amount of yolk and white making material. A balanced ration that contains exactly the right proportions that will enable the egg making plant to turn out an equal number of yolks and whites and keep the hen's factory working full time is given below:

Kind of Food	Yolks	Whites	Shells
12 lbs. beef scrap	12	133	0
50 lbs. cracked corn	128	67	0
50 lbs. wheat	122	91	0
25 lbs. bran	39	51	0
25 lbs. shorts	51	53	0
30 lbs. corn meal	78	40	0
10 lbs. ground oats	20	15	0
Free access to oyster shells	0	0	450
	450	450	450

"The above ration fed to the average flock of fowls practically will double the egg yield of the hen's factory," concluded Mr. Brosemer.

CHICKEN FRIENDS

ANY chicken that varies enough from its mates to be remembered as an individual may well be called a chicken friend.

The first chicken we remember was an exceptional layer. Her egg had pinkish spots entirely different from any other hen's egg. Also she was a pepper and salt type of plumage a hen grown by one of the children from a chick, and distinctive in appearance so she was never mistaken for another hen. We put a leg band on her to give her a number. One day in September we saw she was beginning to molt; then we lost sight of her until one night while looking over the chickens preparatory to choosing some for exhibition, we found a snowy white hen with the legband of "Speckles." It didn't seem possible that she had molted pure white, but she had; it was Speckles all right as she proved by her eggs with the pinkish spots.

There was a Silver Laced Wyandotte pullet which showed from the time she was hatched a disposition to be friendly. She would follow us to the house and up on the porch if allowed. The coal chute was under the dining room window. One day Silver hopped up and looked thru the window. Not long after on a lovely October day, the screens were taken down, and Silver flew thru the window. No one noticed her coming in; when discovered she was making a nest of the corner of the couch, which she didn't leave until she had laid her first egg; then how she did cackle! The doings of the live stock the coming of the calves and pigs and chickens make up much of the excitement of the farm; the family were all curious as to where Silver would lay her next egg. When we saw her picking her way daintily towards the house, we opened the window. In she flew and laid another egg. In time the novelty wore off and we shut her up, but Silver was persistent so long as she was on range. She would fly up against the window until she was let lay in her first nest. As everyone knows, hens have favorite nests. Sometimes there is a regular line-up waiting to lay in one nest.

Beauty was another chicken friend. She was the prettiest White Wyandotte we ever saw. In her second year she took sweepstakes as the best bird in the show of 1,500. She was good tempered and prepotent as well as beautiful; her grand daughter took sweepstakes pullet in the American class at the state fair.

Beauty liked to pose; she would stay put in any position she was placed, but she would not go into a coop head first. Put her in backwards, and she was still: but let her see the coop before her body was in, and there was trouble.

We had two splendid cockerels one year, full brothers. We wished to use them alternately in the pen, and to separate them from the pullets gave them a yard to themselves. Sometimes they were peaceable; and again they would fight. Finally we took to tying them together at the first sign of trouble. With a wide strip of flannel we tied one leg of each about two feet apart. After an hour of being tied, they wouldn't look at one another. This is a good remedy for fighting males of all ages.

Strangers to chickens may say that they have no intelligence, that they are not temperamental, but anyone who has worked with chickens will tell a different story. Some chickens are sweet tempered, some are cross, some are jealous, some are cranky. One good breeder finds it well to humor his hens.

HATCHING DUCK EGGS

I wish to hatch my duck eggs in an incubator, and do not know how to go about it. Is it the same way as chicken eggs? Would you advise hatching duck eggs in an incubator?—J. O., New Haven, Michigan.

—The large commercial duck farms in the East hatch practically all of their eggs in the hot water type of incubator and secure very satisfactory results; in fact these hatches

(Continued on Page 28)

My Engine Will Do the Work of 6

"I set out to build a farm engine that would have every feature the farmer wanted and none he didn't want. It has now been on the market six years. Thousands of satisfied users tell me I've succeeded. I'm proud to have this engine bear my name."
—A. Y. EDWARDS

EDWARDS FARM ENGINE

Try This Remarkable Engine FREE

There is no other farm engine like it. Simple in construction and easy to operate. It is only one engine, yet it takes the place of six engines. It will give from 1½ to 6 H. P., yet it is so light that two men can carry it easily. Set it anywhere and put it to work.

Change Power as Needed

It is a 6 H. P. when you need 6, or 1½ H. P. when you need only 1½, or any power in between. Fuel consumption in proportion to power used and remarkably low at all times. Adjustment from one power to another is instantaneous.

Burns Kerosene

Operates with kerosene or gasoline. Easy starting, no cranking. The greatest gas engine value on the market. And you can prove all of these statements to your own satisfaction.

What Users Say

Ivan L. Blake, of Hannibal, New York, says: "Only engine economical for all jobs. I run a 28-inch cord wood saw, a 24-inch rip saw, a washer, a pump, and a grinder, and it sure runs them fine. It has perfect running balance, and it sets quiet anywhere."

Clarence Rutledge, of Manitoulan Island, Ontario, says: "Have given my Edwards four years' steady work and like it fine. It uses very little fuel. I run a 28-inch cord wood saw, also a rip saw, 8-inch grinder, ensilage cutter, line shaft for shop, churn, washer, separator and pump. Have had ten other engines and the Edwards beats them all."

Frank Foell, of Cologne, New Jersey, says: "It's a great pleasure to own an Edwards engine. I run a wood saw, cement mixer, threshing machine, etc. Do work for my neighbors. Easy to move around and easy to run. I would not have any other."

Free Trial Offer

Now—I want to prove my claims to you. I want to send you an Edwards Engine for absolutely free trial. Just write your name and address on coupon and mail. I will send at once complete details about my farm engine and about my free trial offer. No cost or obligation. Mail coupon now.

MAIL THIS COUPON

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934 Main Street, Springfield, Ohio
Without cost or obligation, send me complete description of your engine, also details of your free trial offer.
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FROM
Michigan's Old Reliable Hatchery, the best equipped and most modern Hatchery in the State.
Pure Bred Tom Barron English and American White Leghorns, Anconas, Barred Plymouth Rocks and Rhode Island Reds. Strong, Well-hatched Chicks from tested Hoganized Free range stock that make wonderful winter layers.
Chicks sent by Insured Parcel Post prepaid to your door. 100% live delivery guaranteed. Sixteen years of experience in producing and shipping Chicks giving absolute satisfaction to thousands. Write for valuable illustrated free catalog and price list. Get lowest price on best quality Chicks before placing your order.
VAN APPLEDORN BROS. MICHIGAN'S OLD RELIABLE HATCHERY HOLLAND, MICHIGAN
HOLLAND HATCHERY & POULTRY FARM, R. 7, Holland, Mich.

S. C. White Leghorns
Bred for egg production since 1910. Our 13 years of experience in hatching and shipping chicks gives you the big, strong, healthy chicks that grow to maturity in the shortest possible time. 100% live delivery guaranteed. Let us mail you our 32 page catalog with price list.
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Pure Bred Chicks February and March Prices.
Broiler Chix 12c
W. or B. Leghorns 14c
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W. Wyandottes 18c
White Rocks 18c
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Extra selected standard bred chicks $4.00 per 100 more. Add 35c if less than 100 ordered. Good bank reference. Circular free.
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EGG-BRED BABY CHICKS

CHICKS, BARRED AND WHITE PLYMOUTH Rocks. Bred-to-lay M. A. C. strain. Pedigreed sires used from 258-302 egg hens. Have good size and early maturity. Get my circular.
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Advertisements inserted under this heading at 30c per agate line, per issue. Commercial Baby Chick advertisements 15c per line. Write out what you have to offer and send it in. We will put it in type, send proof and quote rates by return mail. Address The Michigan Business Farmer, Advertising Department, Mt. Clemens, Michigan.

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S. C. White Leghorns and S. C. and R. C. Black Minorcas. Must make room before cold weather. About ready to lay.
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High Grade, Utility Cockerels For Sale—April hatched White Wyandottes, Barred Rocks and White Leghorns. C. W. Heimbach, Big Rapids, R. 5, Michigan.

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LEGHORNS

LEGHORNS
S. C. Buff Leghorn Hens, Pullets and Cockerels. Hens and pullets $2.50 each; cockerels $3.00 to $5.00 each. Show birds a matter of correspondence. LAPHAM FARMS, Pinckney, Mich.

RHODE ISLAND REDS

WHITTAKER'S R. I. REDS. MICHIGAN'S greatest color and egg strain. Cockerel price list ready in September. Improve your flock with Whittaker's red cockerels.
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RHODE ISLAND REDS TOMPKINS STRAIN to make room for young stock. I will sell after November 1, 1923, 50 2 year old hens at $2.00 each; 25 1 years old hens at $3.00 each; cockerels at $2.50 and up. All these cockerels are from my best 3 year old hens that layed 205 eggs or better in their pullet year. Quality breeder of Rhode Island Reds.
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Have size, type color and breeding. G. W. VAN FOSSEN, 321 Hillsdale St., Hillsdale, Michigan.

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FINE, LARGE, THOROUGHBRED WHITE Wyandotte cockerels [illegible] for sale.
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ANCONAS

[illegible] ANCONA COCKERELS SHEPPARDS Best. $5.00 others at $4.00, $3.00 and $2.50.
H. CECIL SMITH, Rapid City, Mich., R. 2.

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COCKERELS, THOMPSON STRAIN BARRED Rocks, dark matings, April Hatched, weight 8 lbs. from good layers. $3.50, 2 or more $3.00 each.
MRS. FRED KLOMP, St. Charles, Michigan.

Barred Rock Cockerels, Husky, Vigorous Birds bred from great layers. Sons of Detroit and Grand Rapids 1st prize males.
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PARK'S STRAIN BARRED ROCK COCKERELS from extra selected stock headed by M. A. C. cockerels. April hatched. $4.00 each. 3 or more $3.50 each. Shipped approval and prepaid on orders received before December 15.
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BARRED ROCK COCKERELS BRED FROM Holtermans Pedigreed Aristocrats direct. Both Light and Dark. Price $4.00, two for $7.00.
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WHITE HOLLAND TURKEYS. GET STARTED right and have success. We have been shipping from this one farm for 38 years and have developed a large hardy strain that stands the test. Address stamped envelope for quick reply.
ALDEN WHITCOMB, Byron Center, Michigan.

(Continued on page 31)

ARE YOUR COWS Losing Their Calves From Abortion?
You Can Stop Them Yourself AT SMALL COST
Ask for FREE copy of "The Cattle Specialist," our cattle paper. Answers all questions asked during the past thirty years about abortion in cows. Also let us tell you how to get the "Practical Home Veterinarian", a Live Stock Doctor Book, without cost. Veterinary advice FREE. Write tonight. A postal will do.
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Burns any fuel--costs less
This brooder raises more and better chicks at lowest cost. Stove is sturdy, safe, air-tight, self-regulating—best in world to hold fire. Burns soft coal—cheapest brooder fuel—perfectly. Also hard coal, wood, etc. Automatic regulator maintains uniform heat night and day. Canopy spreads heat evenly over chicks; gives pure air, ample room. 500 and 1,000 chick sizes. Guaranteed. Lowest prices. Express prepaid E. of Rockies. FREE—$3.00 stove pipe outfit sent free with brooder if you order NOW.
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BE COMFORTABLE—
Wear the Brooks Appliance, the modern scientific invention which gives rupture sufferers immediate relief. It has no obnoxious springs or pads. Automatic Air Cushions bind and draw together the broken parts. No salves or plasters. Durable. Cheap. Sent on trial to prove its worth. Beware of imitations. Look for trade-mark bearing portrait and signature of C. E. Brooks which appears on every Appliance. None other genuine. Full information and booklet free in plain sealed envelope.
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Has all the features that insure big hatches—double walls, copper tank, complete nursery, perfect heat control through automatic trip burner, "Tycos" thermometer held so chicks can't break it when hatching. Detroit Brooders, too. Write for low combination price today!
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WEBER'S BEST laying; BEST paying chickens, ducks, geese & turkeys. Fine pure-bred quality. Fowls, Eggs, Incubators at new low prices. 42 years poultry experience, and my 100 page Catalog and Breeders' Guide Free.
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45,000 PURE BRED BREEDERS. 15 varieties. Best laying strains. Incubate 25,000 eggs daily. Catalog Free. Prewar prices. Free live delivery.
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R.F.NEUBERT Co., Bx 801, Mankato, Minn

BABY CHICKS FROM BRED TO LAY S. C. Buff Leghorns. First hatch March 3rd.
J. W. WEBSTER, Bath, Michigan.

Certified Pure Bred Baby Chicks
Trapnested direct from world champion layers; the famous Tom Barron and Hollywood strains of White Leghorns. Order these chicks from pedigreed stock now at bargain prices! Hatched in the largest and finest hatchery in Michigan at the rate of 150,000 eggs to a setting. Also get our prices on Barred Rocks and other popular breeds. Satisfaction guaranteed or money back. Write for FREE illustrated catalog and special DISCOUNT PRICES—today.
SUPERIOR POULTRY FARMS
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140 Egg Incubator $13.25 30 Days Trial
Both Machines Made of California Redwood
Freight Paid east of the Rockies, Hot water, copper tanks—double walls—dead air space—double glass doors—a real bargain at $13.25. Shipped complete, set up ready to use.
140 Egg Incubator and Brooder - $17.75
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Made of California Redwood. Positively the best value on the market. Order direct from this ad. 30 days trial—money back if not pleased. If not ready to order now, don't buy until you get our 1924 catalog which shows larger sizes up to 1000 eggs. (3)
WISCONSIN INCUBATOR CO. Dept. 140 Racine, Wis.

DOWN FLAT
And they told me she had "incurable paralysis," then I gave her
HAPPY HEN WORM REMEDY
and now she is just as fine as ever. When your birds develop leg-weakness, go light, or have pale faces and combs send at once for this wonderful life saver, recommended by leading poultrymen everywhere; $1.10 postpaid; large flock sizes $2.50 and $5.00 postpaid. We guarantee it to give satisfaction or money back. Interested dealers write for prices.
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Room 129 36 S. Market St. Boston, Mass.

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How to Make Money Raising Foxes
If you get the right start, fox raising will pay you enormous profits. We show you how—we start you right. On a small investment you can start on the road to fortune.
The Big Secret of Success
in the fox raising business is getting the right foundation stock from reliable breeders. We have the finest stock in the country—animals with show records—Don't take chances—get your foundation stock from us and be on the safe side. Let us start you right. Write today for full particulars.
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All I want is your name and address so I can send you a free trial treatment. I want you just to **try** this treatment—that's all—**just try it.** That's my only argument.
I've been in the Retail Drug Business for 20 years. I served four years as a member of the Indiana State Board of Pharmacy and five years as President of the Retail Druggists' Association. Nearly everyone in Fort Wayne knows me and knows about my successful treatment. Over **twenty thousand** Men, Women and Children outside of Fort Wayne, have, according to their own statements, been cured by this treatment since I first made this offer public.
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Please send without cost or obligation to me your Free Proof Treatment.
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compare very favorably with those secured from the domestic hen. As a rule the hot water type of machine is preferred. Most varieties of ducks require about twenty eight days of incubation, but the Muscovy variety requires a period of about five weeks. It is a good practice to sprinkle the eggs with warm water by means of a whisk broom several times during the hatching period. About the 26th day it is also advisable to moisten a flannel cloth and lay it over the top of the eggs for a few hours. This of course is practiced primarily to provide additional moisture at the time of hatching. If you have a limited number of eggs to hatch it would probably be advisable to hen hatch them entirely.—E. C. Foreman, Professor of Poultry Husbandry, M. A. C.

NO CURE FOR WHITE DIARRHEA

I would like to know a cure for white diarrhea in poultry, especially baby chicks. Also a stimulant to feed hens for winter eggs. I would like a formula I could make.—E. O. D., Prescott, Mich.

—There is no cure for bacillary white diarrhea in adults or baby chicks. If the party concerned will correspond with the Veterinary Department of the Michigan Agricultural College, they can give them detailed information as to the handling of this disease.

As to stimulants to feed hens for winter eggs, I would say that this is a vicious habit and anyone who is at all interested in the continued well-being of their flock should abstain from such agents. Proper feeding and proper housing is the best means by which to obtain high production for any length of time. —H. J. Stafseth, Res. Assoc. in Bacteriology, M. A. C.

BABY BEEF PLAN INSURES GOOD CASH MARKET

(Continued from Page 4)

small farm or the large one, he is positive in his assertion that Michigan can produce Herefords more economically and more profitably than any other location in the world, while Michigan beef raising eliminates western mortality losses, compares favorably in land investment; the proximity to the population centers and the great markets eliminate loss from shrinkage in transportation and cut freight costs. Nor does Michigan fear terrible drouths when the profits of a season are wiped out, or losses from animal pests. Many are the advantages of Michigan over the so-called cattle country.

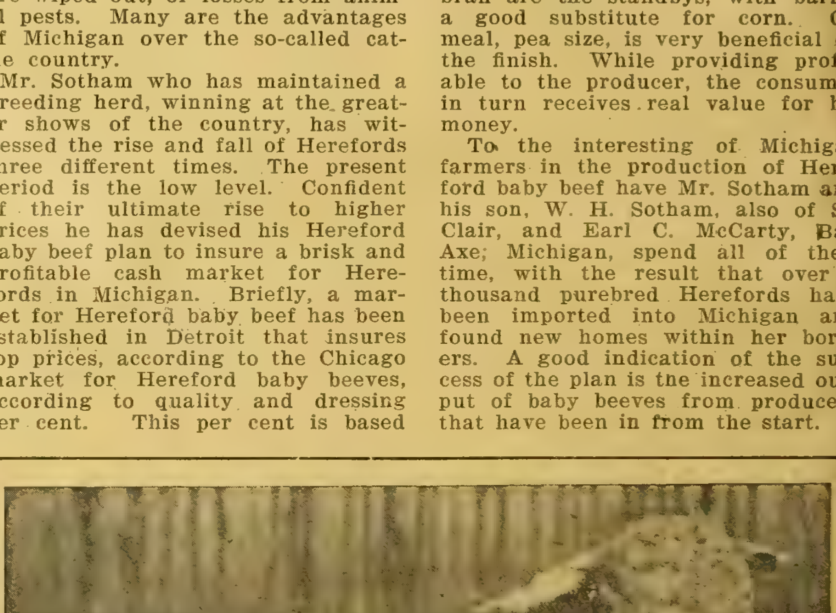
Mr. Sotham who has maintained a breeding herd, winning at the greater shows of the country, has witnessed the rise and fall of Herefords three different times. The present period is the low level. Confident of their ultimate rise to higher prices he has devised his Hereford baby beef plan to insure a brisk and profitable cash market for Herefords in Michigan. Briefly, a market for Hereford baby beef has been established in Detroit that insures top prices, according to the Chicago market for Hereford baby beeves, according to quality and dressing per cent. This per cent is based reasonably and Michigan producers have had little difficulty in making it. Some have even dressed more, demanding a premium, while others that do not make the base per cent receive a lesser sum for each one per cent less dress.

Purebred Hereford cattle are used because at present they can be purchased very reasonably, because they are more thrifty and make bigger gains, thus arriving at the desired weight more quickly, so much so that it more than offsets the difference in interest on investment. And then purebreds have two markets—breeding and beef; while the grade has one—beef. Not all the produce of these purebred Hereford breeding cattle are used for beef. The outstanding individuals are raised the same way but are kept for breeding purposes. They are disposed of privately or by auction sale. As the breeder is sure of his baby beef price he knows that a purchaser in the sale must pay more than he is worth for beef. As a result eight successful purebred Hereford sales have been held in Michigan during the last eighteen months, the breeders realizing a substantial profit over and above baby beef prices.

The production of these beeves requires the least possible amount of labor necessary to any method of stock feeding. Cows are preferably run loose with their calves in the winter, a creep being built in one end of the barn that enables the calf to get in but keeps the cow out. In this creep is built a self-feeder, allowing the calf to have what grain he wants when he desires it. Good silage with either clover or alfalfa hay will keep the cow in a good condition throughout the winter. Oat straw in addition is an economical change. In the summer a creep built in the field where the calf comes for water or salt lets the calf have what grain he wants while on grass. In other words, the calf is pushed from date of birth until ready for market. Full benefit of his growth is taken. He is castrated while from two to three months of age, lessening the grief caused when older. Thus at from ten to fourteen months of age a mature baby beef is produced and realizes extreme top prices.

Whole oats and whole cornmeal are used in feeder for calves that are just beginning to eat grain. This is kept up until incomplete digestion requires grinding, unless hogs run with cattle. Corn, oats, and bran are the standbys, with barley a good substitute for corn. Oil meal, pea size, is very beneficial on the finish. While providing profitable to the producer, the consumer in turn receives real value for his money.

To the interesting of Michigan farmers in the production of Hereford baby beef have Mr. Sotham and his son, W. H. Sotham, also of St. Clair, and Earl C. McCarty, Bad Axe; Michigan, spend all of their time, with the result that over a thousand purebred Herefords have been imported into Michigan and found new homes within her borders. A good indication of the success of the plan is the increased output of baby beeves from producers that have been in from the start.



Straight Edge, No. 1169786, herd sire owned by T. F. B. Sotham, of St. Clair, is the only living bull sired by Perfection Fairfax and out of a Disturber cow.

How Banks Act Under Federal Farm Loan

(Continued from Page 7)

They are not hypercritical as to title, but Abstracts must show at east a good title in the name of the borrower. There is nothing in these loans which hinders the borrower from selling his farm. As a matter of fact, a farm which has a mortgage of this type on it will sell for a better price than if the purchaser had to pay the entire sales price in cash or to obtain a loan for himself. The fact that the land is permanently financed is always an inducement to the purchaser. In case of a sale, of course, the bank must be notified that the sale has taken place and must give its sanction as to the loan being assumed by the new owner.

The cost of making a loan from one of these banks is small but varies somewhat on account of the different manner in which the Federal Land Banks and the Joint Stock Land Banks transact their business. These banks are limited to loans not to exceed $100 an acre and only take into consideration the agricultural value of the security. They do, of course, take into consideration the location value insofar as it adds to the agricultural value in the way of marketing farm products, school facilities, etc. However, loans are not made on the basis of suburban valuation.

This System of financing has made available money at low rates of interest and on convenient time, and any system which has done this can help the farmer who wishes to finance himself, and this is what the Federal Farm Loan System was intended for and is doing. The men, who undertook to develop this System of financing the farmer properly and in a manner adapted to the needs of agriculture, began by accepting the first principles in order to eradicate the abuses and difficulties surrounding the business of supplying capital for agriculture.

The first step in properly financing agriculture was to arrange for securing capital investments in land on convenient terms—terms which would give the farmer an opportunity to make the farm help pay for itself over a period of years out of the money earned in actual operation. Land Banks give the man who heretofore has been renewing his mortgage every five years, dabbling along and paying the highest rate of interest, or at least a good stiff one, and paying a commission every time he renewed a loan, a chance to get on his feet by giving him thirty-three years in which to pay the loan and at a rate of interest not to exceed 6 per cent. While there is no such thing as an easy way of paying a debt, the fact remains that the type of loan made by these banks is a very easy loan for the farmer compared with the one he used to have to carry.

There are no more than enough funds in the average country community to take care of the seasonable demands for loans from farmers who wish to use the funds for operating capital. Naturally, the country banker is interested in an outlet or a connection which will furnish him adequate funds to properly finance land purchases or to refinance existing mortgages, and in doing this, with the farmer, is interested in several matters. One is the type of contract, another one is the rate of interest.

The farmer who is permanently financed on a loan such as these banks make is head and shoulders above the man who is temporarily financed, and who has signed a large obligation for a short term knowing that he cannot meet it at its maturity. This, in itself, is unsound business and when this man goes to a local bank to borrow money for a short time for buying cattle, equipment, fertilizer or any improvements on the farm the banker must take into consideration the fact that he has a large obligation maturing within a short time which he knows that he cannot meet at its maturity, and about which there may be uncertainty of cost of renewal. The banker, as a good credit man, must take this into consideration in extending credit. On the other hand, the man who is permanently financed on a contract such as these banks offer can go into the local bank to borrow funds for operating purposes or for improvements and be taken care of, if his general reputation entitles him to credit.

The interest rate of these banks is about the same as charged by loan companies on desirable loans, but the borrower saves the commissions charged by the agents of these companies and also gets permanent financing. The real cost of a Land Bank Loan is much less than in other loans on good security.

The agencies have been provided by the United States Government to properly take care of the farmers needs for capital for the purchase of land for refinancing existing farm loans and for other long time farm investments and every farmer who needs and entited to this service should for his own interests familiarize himself with this service.

JAPAN INDEPENDENT OF OTHER NATIONS FOR SUGAR SUPPLY

THE last country to build up a home sugar industry of sufficient size to render it independent of the world for its sugar supply is far away Japan, the dream of whose statesmen long has been to make the Empire as nearly self-supporting as possible.

For two centuries small quantities of crude sugar have been produced in primitive bull-power mills in Japan, but until recently the bulk of her sugar requirements was imported from other countries.

After acquiring the island of Formosa, the Japanese government set to work vigorously to develop sugar production wherever sugar could be produced in the Empire. It levied a protective duty on sugar; established a sugar bureau; sent students to Germany, Hawaii, Lousiana, Java and other countries to study and report on their sugar industry; imported beet seed and new varieties of cane; established experiment stations; set aside large tracts of land for new sugar companies; granted an annual subsidy of 6 per cent for 5 years on the capital invested; purchased and loaned sugar machinery to new companies; furnished manure gratuitously for 5 years and in various other ways stimulated the development of the industry. The early modern mills were entirely equipped with American, German or British machinery, all of which was copied and reproduced until now, only the rolls are imported.

As a result, a hundred of the primitive mills in old Japan have been modernized, 52 new cane mills have been built in old Japan and Formosa 4 beet sugar factories have been erected in old Japan, Manchuria and Korea and 13 refineries have been constructed in old Japan. Several of her mills grind a thousand or more tons of cane per day, while the largest has a capacity of 3,000 tons, one of the largest mills in the world.

The sugar industry of Japan now profitably employs $250,000,000 of private capital and produces four to five hundred thousand tons of sugar annually, about as much sugar as the Japanese people consume. In the event of war Japan will not be made to submit to the rapacity of foreign sugar producers, as were the United States and Great Britain during and after the world war.—Truman G. Palmer, Sugar Statistician, Washington, D. C.

THE CORN'S IN THE SILO

THE corn is in the silo
  And the wheat is in the bin
And the frogs way down the meadow
  Are losing of their vim.

The air is keen and snappy
  And the eaves are falling down
And where the wood once was green
  Now 'tis a russet brown.

Now every one's preparin'
  For the winter's coming on
The frost has glazed the pumpkin
  But it cannot touch the corn.

FOR

The corn's packed in the silo
  And the wheat is in the bin
It took a year in making
  Thank God we've got it in.

Mr. T. O. Kraenel,
Park Avenue Hotel,
New York City.

Father's Blow to Mother

"Poor Broome! He's gone over to the silent majority."

"Why—I—when did he—is he dead?"

"Well, no; but he's married."—Tit-Bits.

CHANGE
OF
NAME

EFFECTIVE January 1, 1924, the name of this Company was changed to The Michigan Bell Telephone Company.

The Michigan Bell Telephone Company is a Michigan corporation, organized in Michigan for the purpose of furnishing Michigan people with Universal Telephone Service.

Change in name was made in order to identify this Company in name with the Bell System, of which it is a part. Through the Company's association in the Bell System, telephone users in Michigan are assured the highest standard of service—Bell Service.

MICHIGAN BELL
TELEPHONE COMPANY

(Continued from Page 26)

PET STOCK

DOGS

German Shepherd, Airdales, Collies; Old English Shepherd dogs; Puppies; 10c illustrated instructive list. W. B. Watson, Box 27, Macon, Mo.

HUNDRED HUNTING HOUNDS CHEAP. C. O. D. Trial. KASKENNELS, BUFA, Herrick, Ills.

Have You Live Stock For Sale?

An Ad in The Michigan Business Farmer will sell it.

WHEN WRITING TO ADVERTISERS, PLEASE MENTION THE BUSINESS FARMER

MARKET FLASHES

MARKET FLASHES

MARKET SUMMARY

Wheat steady. Corn and oats show some activity. Receipts of beans small and demand slack. Hay easy with large supply. Butter firm. Large supply of eggs. Potatoes steady. Demand for poultry greater than supply. Cattle active and higher. Hogs average higher. Sheep trade strong.

(Note: The above summarized information was received **AFTER** the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press —Editor.)

FOOTE'S MARKET LETTER

BY W. W. FOOTE

Increase in Business

THAT American farmers are regaining in part at least their old time purchasing power is an undeniable fact, and perhaps the most striking index of improvement in the agricultural situation is the renewed business reported by the mail-order houses. The year's combined sales of the two large Chicago mail order firms for the year just closed aggregated around $350,000,000, an increase of about $83,000,000 over 1922. Farmers because of over production have been forced to sell their wheat and hogs at such reduced prices as to make big inroads in their profits, but lambs have been highly profitable, as have well fattened cattle. Dairy interests have been extremely prosperous, and farmers have made good money on their eggs, poultry, milk, etc. Wages paid to farm hands are far higher than before the war, and so are railroad freight rates, and the entire scale of living has had the biggest kind of a boom, workmen's wages having soared to figures never deemed possible ten years ago. In the production of wheat the enormous farms of the Canadian western provinces stand a good show of coming out ahead over the little farms of the United States, with their enormously powerful sowing and harvesting implements, and this is bound to become even greater in the future. Legislation to solve the problem of our vanishing forests is expected to be enacted in the near future, and "keep the fires out and the taxes down" is one of the popular ways of expressing the sentiments of owners of forests. For nearly a year a committee appointed by the United States Senate has been traveling all over the country studying the forestry and lumber question. The foreign commerce of this country has been large in volume, and enormous exports of lard and cured hog meats have been brought about through much reduced prices.

Advice to Farmers

Strange to say, after all the painful experience of wheat farmers during the past year in finding an unsatisfactory market for their crop on account of enormous overproduction in exporting countries, there looms up what looks very much like danger of a repetition of the same thing, the decrease in the winter wheat acreage as reported by the Department of Agriculture being much less than it should be. It remains for the spring wheat farmer to take a hand in the game and devote less acreage to that grain than they did last year. Wheat is an easy crop to raise, and farmers are apt to let the other fellow do the reduced area line and fail to do so themselves. As has been pointed out many times, farmers have made a serious mistake by keeping up the wheat acreage to the huge requirements of war times, and now it looks like a continuance of low prices indefinitely or until much less land is sown to wheat. The world's wheat crop for 1923 amounted to 3,461,000,000 bushels, or 500,000,000 bushels in excess of the pre-war era, exclusive of Russia, and that country furnished in the past only 164,000,000 bushels to importing countries. As estimated by the Department of Agriculture, the reduction in the winter wheat acreage amounts to less than 13 per cent, which is much less than it should be to bring about a sufficient rise in prices to allow fair profits to farmers. Talk of outside help in advancing prices had died down, the crops is much needed, and it has future appears to lie in the hands of wheat growers. Diversification of been suggested that in some districts raising flax seed might be a good substitute for part of the wheat acreage.

The Grain Markets

Within a short time cash wheat has declined on the Chicago Board of Trade to $1 a bushel, comparing with $1.26 a year ago, with a poor domestic demand for consumption, although recent exports attained very good proportions. Speculators in wheat evidently lack faith in its higher value, and the visible supply is much larger than a year ago. Corn in sight, on the contrary is far less than is usual at the beginning of a year, the crop of 1922 having been pretty closely used up when the 1923 crop began to move to market, and very little is being exported. Corn prices have fallen below those of a year ago, with late sales on the Chicago market around 70 cents a bushel, but it looks high when it is recalled that a little more than two years ago it sold down to 47 cents. Much corn was saved for marketing by the unusually mild weather extending into the winter period, giving live stock a chance to remain in pastures. Rough feed is abundant, and farmers have plenty of corn. Oats have sold around 41½ cents, being slightly lower than a year ago; while May rye sold as low as 73½ cents, comparing with 90½ cents a year ago. With rye so cheap, it seems strange that exporters do not buy more liberally.

The Chicago Live Stock Exchange announces that, effective Jan. 1, the Union Stock Yard and Transit Company will reduce the price of corn fed live stock on this market from $1.35 per bushel to $1.25 per bushel.

This saving to the shippers to this market of 10c per bushel on corn is the result of the agreement between the stock yard company and the committee of the exchange.

An Object Lesson

To improve the standard of the live stock in Colorado the Burlington Railroad has traded evenly fifty-eight purebred bulls and boars for the same number of scrubs. All of the scrubs were killed immediately. The total value of the pedigreed animals was $10,000, while the scrubs were valued at about $500, or an average of $250 for the good stock and $17 for the poor ones.

The Cattle Industry

Most of the time there is an excellent demand for well fattened beef cattle, the times being good and labor well employed throughout the country at extremely high wages. The demand was curtailed temporarily during the holidays, however, when poultry was largely substituted for beef, pork and mutton, and despite much smaller receipts of cattle in the Chicago market than usual, prices suffered sharp reductions. Even the better class of cattle shared in the declines, and killers discriminated to a marked degree against heavy long-fed steers. Occasionally there are upward spurts in prices for weighty steers, but most of the time the local packers and eastern shippers buy them much less freely than the choice light weight yearling steers and heifers. Fancy fat cattle were pretty closely marketed several weeks ago, and few or none are arriving on the market now. Many of the offerings grade rather poorly, and only a small percentage sell near the top figures. There is a moderate demand for stockers and feeders, with low prices for the poorer lots and not many of the choicer kinds on the market. Plenty of cattle are being fed in the corn belt states, and there is no danger of a beef scarcity. The supply of cattle offered in Chicago for Christmas week was so unusually small that desirable light cattle, especially yearlings, sold higher, but heavy steers were neglected and lower. The bulk of the beef steers offered brought $8 to $10.75, the choicer yearlings going at $10.75 to $11.75 and the best heavy steers at $10 to $11, with no heavy lots going later above $10.75. Common steers sold down to $6.25 to $7.25, and inferior little steers brought $4 to $6. Butchering cows and heifers sold at $3.25 to $7.50 mostly, and limited numbers of stockers and feeders sold at $4 to $7.50, not many going above $6.50. Calves were scarce and higher at $5 to $13.50.

The Hog Problem

In answer to farmers who ask what course to follow in breeding sows and maturing pigs until suitable for marketing, it may be said that this is a big country, and it is not easy to predict the future. Even the Bureau of Agriculture sometimes makes blunders in its estimates. However, late reliable advices indicate a considerable lowering of the number of sows that were bred for spring farrowing, and this would naturally have a marked effect on future markets. A well informed authority estimates a reduction of 25 per cent in the number of sows bred, but this seems an over estimate. At the same time, whether correct or otherwise, it is never wise for farmers to stay out altogether of hog breeding, while at times it is advisable to lower or increase operations. The rush to get hogs marketed is likely to be kept up for several weeks more, and then there will be, probably, a let up and advance in prices. Low prices greatly stimulate the consumption of hog products, and the exports of lard and cured hog meats for the past year mounted up to nearly two billion pounds, being much larger than for the previous year and about twice as much as before the war. Chicago received unusually small supplies of hogs during Christmas week, and the best lots advanced 20 cents. Late sales were at $6.30 to $7.25, with heavy butchers at the top and bringing 20 cents more than the best bacon hogs. A year ago hogs sold at $7.40 to $8.45 and eight years ago at $6.70 to $7.25. Combined receipts in twenty markets for 1923 to late date amount to 31,124,000 hogs comparing with 33,053,000 a year ago.

Good Prices For Lambs

Recent receipts of lambs in the Chicago market were unusually small, and prices had a sharp upward movement, especially for the choicer offerings of fat handy weights, those weighting 90 pounds and over being descriminated against by the packers. Colorado is marketing lambs more freely than is usual so early in the year, and the other day a sale was made of 1,000 lambs which tipped the scales at 77 pounds and brought $13.50 per 100 pounds. Lambs comprise nearly all the receipts, as is usual at this season. Michigan farmers have marketed large numbers of corn-fed lambs.

WHEAT

Wheat had a holiday week last week and made little change in any direction. They are figuring that American wheat must decline part of the way to meet Canadian wheat, it being admitted that the two must come closer together before the end of the crop year. The belief now is that a great deal of Canadian wheat will be needed on this side of the line in order to fill the needs of bakers who use spring wheat flour. It is said that the spring wheat production here has been too small to meet the needs of consumers and the Canadian grain will be used as a blend to bring up both the quality of the flour and the quantity. The market shows not hurry about slumping although everything in the line of statistics points in a declining direction. When the market appears easy and ready to slump some buying power comes into the market and the offerings are absorbed. This has happened so often that bears are afraid to follow a decline with more selling and it becomes an easy matter to stop the decline and give the market an upturn. The buying is always credited to eastern dealers who are the chief owners of the American visible supply and willing to continue accumulating supplies in order that wheat may not decline. The holiday week developed nothing of importance in the deal. Stocks continue heavy and there is still no sign of activity in foreign buying. Domestic demand is slow, which is usually the case at this time of year.

OATS

Oats were active last week and prices advanced slightly although buyers were scarce.

Rye

Rye advanced slightly last week in sympathy with other grains.

BEANS

Demand for beans was slow at Detroit and the market was called steady at the close of last week. There was a dull tone to the market in general as there always is during the holiday period. At this time of the year, a great many dealers cut down orders on account of their practice to take inventories and naturally want as little stock possible. It is observed, however, that dealers are not anxious to sell when concessions are demanded.

POTATOES

Potatoes are strong to quiet. At western points they are strong while in the east there are some markets that report trading dull. Eastern dealers stocked up rather heavy previous to Christmas expecting a heavy demand during the holiday period and they find they purchased more than they needed so they are not going to buy any more until they get rid of their present stocks.

HAY

Holiday dullness continued in all markets last week. Reciepts are not heavy at present but the demand is limited. There is a good demand for the best grades of all sorts, but low grades are very slow. Bad weather in the west is restricting the movement of hay and this is keeping those markets from becoming overstocked under the light demand.

CORN

Trade in the corn market was a little more active at Chicago last week. Commission houses were buying on a larger scale, and report demand showed some improvement. An active feeding demand in the west is reported. Receipts are not large and bulls feel very confident about future prices. The Detroit market closed firm last week.

MARKET QUOTATIONS

Wheat

Detroit—Cash No. 1 red, $1.12; No. 2 red, $1.11; No. 2 white, $1.12; No. 2 mixed, $1.11.

Chicago—No. 2 hard, $1.14½.

Prices one year ago—Detroit, Cash No. 2, 1.36½; No. 2 white and No. 2 mixed, $1.34½.

Corn

Detroit—Cash No. 3 yellow, 77½c; No. 4, 73½c.

Chicago—Cash No. 2 yellow, 72@72½c; No. 3, 69½@71c.

Prices one year ago—Detroit, Cash No. 2 yellow, 79c; No. 3, 78c.

Oats

Detroit—Cash No. 2 white, 47½c; No. 3, 45½c.

Chicago—Cash No. 3 white, 43½@44c.

Prices one year ago—Detroit, Cash No. 2 white, 51½c; No. 3, 50c.

Rye

Detroit—Cash No. 2, 74c.

Chicago—Cash No. 2, 69¾c.

10 Cents

worth of ordinary fuel will keep this *Sanray* lamp or lantern in operation for *30 hours.* Produces *300 candle power* of the purest, whitest and best light known to science. Nothing to wear; simple; safe; 10 days' trial.

No Wicks to Trim
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WE SOLICIT YOUR SHIPMENTS of live poultry, veal and eggs.

Our commission is 5%.

References: Wayne County and Home Savings Bank, Bradstreet.

POULTRY

(Continued from page 27)

TURKEYS

BOURBON RED TURKEYS: THE BEST SIDE line for a farm. We sold $400.00 worth last year. Write for prices, etc.
R. W. ROBOLTHAM, Hesperia, Michigan.

Pure Bred Mammoth Bronze Turkeys. Sicilian Buttercups, S. C. Buff Leghorn and Silver Wyandotte cockerels. **Caroline Kunkel, R. 4, Boyne City, Michigan.**

Highest Quality White Holland Turkeys. Large, hardy, home-loving birds. Real producers. Toms $11.00-$14.00, Hens, $10.00-$12.00.
Alvah Stegenga, Portland, Michigan.

PURE BRED BIG TYPE BRONZE TURKEYS, Hugo Strain. Pullets six dollars. Toms nine.
HOWARD E. LEVITT, Croswell, Michigan.

S. C. R. I. RED COCKERELS. PURE BRED Dark and even color. $3 and $5 each.
LOUIS MORRIS, Mt. Morris, Mich., R. 1.

LARGE VIGOROUS PUREBRED WHITE Holland Turkeys For Sale.
MRS. EDNA DRIVER, Fowlerville, Mich., R. 3.

PURE BRED GIANT STRAIN BOURBON Red Turkeys.
MRS. RENA MEEK, Belmont, Michigan.

ONE PUREBRED WHITE HOLLAND TOM, $9.00. A fine bird.
ERNEST MARCH, R. 1, Box 128, Twining, Mich.

Pure Bred Mammoth Bronze Toms One 2 Year old hardy beautiful well marked birds. Write for prices. **Mrs. F. Griffin, Riverdale, Michigan.**

WHITE HOLLAND TURKEYS FOR SALE. Prices reasonable. Write for particulars.
E. H. HAWLEY, North Star, Michigan.

GIANT BRONZE TURKEYS FROM PRIZE Winning birds. Large, healthy, unrelated stock furnished. **Mrs. La Verne Brownell, Belmont, Mich.**

MAMMOTH BRONZE TURKEYS, LARGE beautiful birds. Write for prices.
MRS. BEN JOHNSTON, Onaway, Mich., R. 1,

Mammoth Bronze Turkeys. Goldbank Strain. Unrelated stock. Vigorous healthy birds. Write for prices. **Mrs. Perry Stebbins, Saranac, Mich.**

THOROUGHBRED GIANT BRONZE TOMS FOR Sale. Large beautiful birds. Michigan's best strain. Write for prices. **MARY A. JOYNT, Omena, Mich.**

UNRELATED STOCK, VIGOROUS HEALTHY Birds Write for prices. Bronze Turkeys, a nice flock of both Toms and Hens.
ALONZO PRATT, LeRoy, Michigan, R. 3.

PURE BRED LIGHT BRAHMA COCKERELS $4.00 each.
MRS. E. B. WILLITS, Reading, Michigan.

SEND $3.00, $5.00 OR $7.50 AND I WILL ship by express the best S. C. R. I. Red cockerel you can get for the money.
F. W. KENDRICK, Dryden, Michigan.

$ We can use a few earnest men and women part or full time in soliciting subscriptions and acting as our agents. Write

Circulation Manager
THE BUSINESS FARMER
Mt. Clemens, Mich.

Prices one year ago—Detroit, Cash No. 2, 93c.

Beans

Detroit—C. H. P., $4.75 per cwt.
Chicago—C. H. P., $5@$5.50 per cwt.
Prices one year ago—Detroit, C. H. P., $7.40 per cwt.

Potatoes

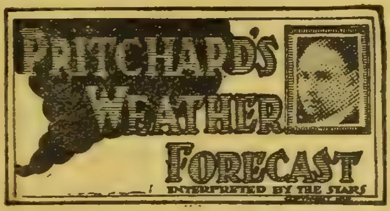
Detroit—$1.26@1.33 per cwt.
Chicago—$1.25@145 per cwt.
Prices one year ago—Detroit, $1@1.10 per cwt.

Hay

Detroit—No. 1 timothy, $22@23; No. 2, $20@21; No. 1 clover, $20@21; light clover mixed, $21.50@22.

Chicago—No. 1 timothy, $26@-27; No. 2, $24@26; No. 1 clover, $23@25; light timothy and clover mixed, $24@26.

Prices one year ago—Detroit, No. 1 timothy, $16.50@17; standard, $16@16.50; light mixed, $16@16.50; No. 1 clover, $14.50@15 per ton.



Week of January 6

LIGHT rain or snow flurries are probable in Michigan during first part of the week of January 6 but before the middle of the week there will be sunshiny days and clear skies. Following the middle part of the week we look for renewed storminess with an addition of gales and some sleet. At the close of the week temperatures will be somewhat colder.

Week of January 13

Clear, cold weather is expected for the early part of the week of January 13 but by the middle of the week there will be a decided moderation in the temperature. There will be thawing conditions in some parts of this state and winter rains but the change to lower temperatures during end of this week will change the rain to snow flurries.

1924 to Average Warm

The year 1924 as a whole will average warmer than normal with the summer and early fall months producing rainfall above the average. These statements, while correct from a statistical standpoint, should be taken advisedly by the average farmer whose use of such a forecast is naturally limited to his own fence line. We mean by this there will be many extremes and that each locality will have its own modifying effect. These changes will be considered from week to week in this column.

We forsee a mild winter but with numerous temperature extremes during January and a cold spell from about two weeks before to two weeks after the solar eclipse in March. We look for quite a little snow and cold close to the eclipse date.

Fall Forecast Verified

Our forecast of a mild, dry fall as written last June has been verified. This weather not only hindered the holiday trade and probably made hundreds of dollars of difference in the northern states but also upset the wool garment trade and many other commercial enterprises depending upon cold and snow. On the other hand, the weather added hundreds of dollars to the farmer's next year's profits because he was able to get a lot of next springs work done this last fall.

Our prediction of a "White Christmas" was also verified in most counties of the state.

Some Trip

Motorist: "Say, buddy, how far is it to Bingville?"

Schoolboy: "Well, mister, the way you are headed now it is just 24,996 miles; but if you turn around it is only four miles.—Exchange.

FREE BOOK ABOUT CANCER

The Indianapolis Cancer Hospital, Indianapolis, Indiana, has published a booklet which gives interesting facts about the cause of Cancer, also tells what to do for pain, bleeding, odor, etc. A valuable guide in the management of any case. Write for it today, mentioning this paper. (Adv

Genuine Army Goods At LOWEST PRICES IN America!

SEND NO MONEY Examine goods and if you are not more than satisfied with your bargain, we will gladly return your money. **PAY ON ARRIVAL**

4 Buckle Cloth Top Arctic $1.69

Arctic tops of heavy snowproof cashmere, full lined with heavy warm fleece, double corrugated soles, reinforced seams. They have been used very little and are in perfect condition. If you want a good over shoe for less than pair of rubbers order today as stock is limited. Sizes 7 to 12.

New 4-Buckle Cloth Top Arctic same as described above except brand new sizes 7 to 12. only $2.95 Plus Postage.

New 4-Buckle All Rubber Arctic 1st quality friction cloth lined arctics, pure gum uppers, double soles, reinforced seams, sizes 7 to 12 $2.89 Plus Postage.

ARMY HORSE BLANKETS $2.29 each 2 For $4.49

Brand new Government Horse Blankets. Made of heavy treated waterproof duck, burlap lined, weight about 7 pounds. This blanket is worth at least $4.50, each $2.29 Plus Postage.

NEW ARMY O.D. WOOL BREECHES $3.47 PLUS POSTAGE

28 oz. Melton

Brand new heavy army O. D. all wool breeches made of best wool serge and melton materials, with large extra patches on knees. Sizes 28 to 46 $3.47 Plus Postage

NEW O. D. ALL WOOL WRAP LEGGINS. A bargain at............ 69c Plus Postage

WEB BELTS Made of olive drab webbing with metal buckles and tips. Brand new— 10c Plus Postage

ARMY PURE WOOL UNDERWEAR 89¢ per garment

Men stock up on these fine suits of wool underwear made for the U. S. Army. Our price is only 89c per garment. You would rightly expect it to be $1.50. Shirt sizes 34 to 42 Drawers 30 to 40................89c Plus Postage

O.D. Wool Coats $1.45

Army regulation O. D. wool blouses slightly used, but in perfect condition, in fact like new. Made of fine wool serge and melton with four pockets. Sizes 34 to 40. $1.45 Plus Postage

NEW O.D. WOOL COATS $2.69

$8.00 Would not duplicate this value.

U. S. Army O. D. wool coats made of fine wool serge and melton, have four pockets, and all are lined. Sizes 35 to 44.................. $2.69 Plus Postage
Extra sizes 46, 48, 50 and 52..............$2.98

Khaki Coats (Blouses) 39c

Army regulation cotton Khaki coats, reclaimed by the government. Just the thing for outdoor wear as for hunting, camping, farm work, etc. Four pockets, metal buttons. Sizes 32 to 37. A dollar value at our special price 39c Plus Postage.

New Khaki Blouses Sizes 34 to 38. 89c Plus Postage.

ALL WOOL Sox 3 Pair for 89¢

Genuine army regulation, pure wool sock with reinforced heel and toe. Medium heavy weight., Worth 70c a pair at only 3 pair for 89c Plus Postage.

All Wool O-D Trousers $2.98

U. S. Army O.D. woolserge Yankee pants. Well tailored, made of excellent quality 20 oz. wool serge and melton without cuffs. Have four pockets of extra quality drill and the trousers are double stitched throughout. Worth at least $6.00. Sizes waists 28 to 42 $2.98 Plus Postage.

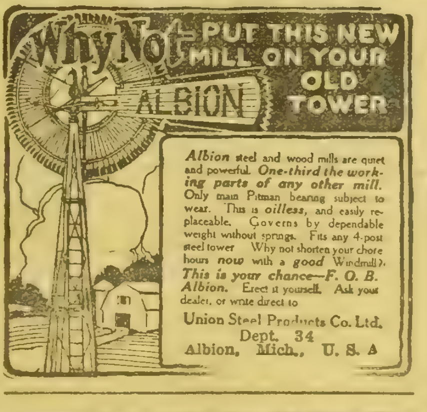
Extra Heavy O. D. Wool Trousers made of 28 oz. melton. Wonderful for cold weather. Sizes 34 to 42. $3.59 Sizes 44 and 46 $3.89 Plus Postage.

O.D. WOOL ARMY GLOVES 29 PAIR

Worth 75c a pair at only **29c**

Regulation army olive drab all wool heavy knitted gloves with extra long snug fitting wristlets. Is both warm and durable. Can also be used as a liner for a chopper mitt. Order several pairs at per pair............................29c Plus Postage

U.S. SALVAGE CO. DEPT. M
SAINT PAUL, MINN.


Why Not PUT THIS NEW MILL ON YOUR OLD TOWER
ALBION

Albion steel and wood mills are quiet and powerful. *One-third the working parts of any other mill.* Only main Pitman bearing subject to wear. This is *oilless*, and easily replaceable. Governs by dependable weight without springs. Fits any 4-post steel tower. Why not shorten your chore hours *now* with a *good* Windmill? *This is your chance—F. O. B. Albion.* Erect it yourself. Ask your dealer, or write direct to

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Albion, Mich., U. S. A.

Only $2 DOWN ONE YEAR TO PAY

$44 Buys the New Butterfly Jr. No. 2½ Light running, easy cleaning, close skimming, durable. NEW BUTTERFLY Separators are guaranteed a lifetime against defects in material and workmanship. Made also in four larger sizes up to No. 8 1-2 shown here; sold on **30 DAYS' FREE TRIAL** and on a plan whereby they earn their own cost and more by what they save. Postal brings Free Catalog Folder. Buy from the manufacturer and save money. (1)

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200 sheets good quality ruled letterheads, 5½ by 8½, with 100 envelopes printed with farm name, owner's name and address, or any three lines desired. Paper put up in tablets. Sent to any address on receipt of $1.00. Write plainly name and address.

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offers its services to the *Farmers of Michigan* as a high class, reliable commission house for the sale of *Dressed Calves* and live poultry. Write us for information how to dress and ship calves to market. $250,000 capital and surplus. 34 years in business in the same place and same management.

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DETROIT BEEF CO., Detroit, Mich.

Straw Wanted

100 cars or any part. Wheat, oat, rye, barley or mixed. Must be sound and clean. January shipment. Car lots good hay and potatoes at all times. Quote at once.

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80-ACRE MICHIGAN FARM WITH STOCK, Tools, Crops; $1000 Cash. Owner a business man with distant interests, sacrifices all for amount insurance buildings; fertile district, fine co-operative creamery, splendid high school; close 2 depot towns; 3 noted lakes; 38 acres loamy fields, 10-cow pasture, woodlot, 55 fruit trees, grapes, berries; excellent 2-story 9-room brick house, porches, 2 barns, granary, windmill, etc. $3600 gets it, horses, 3 cows, poultry, tools, implements, vehicles, crops etc. included if taken now. Part cash. See picture and details page 38 New Illus. Bargain Catalog covers many states. Copy free. STROUT FARM AGENCY, 427KJ Marquette Bldg., Chicago, Ill.

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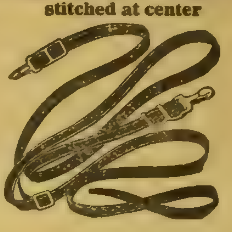
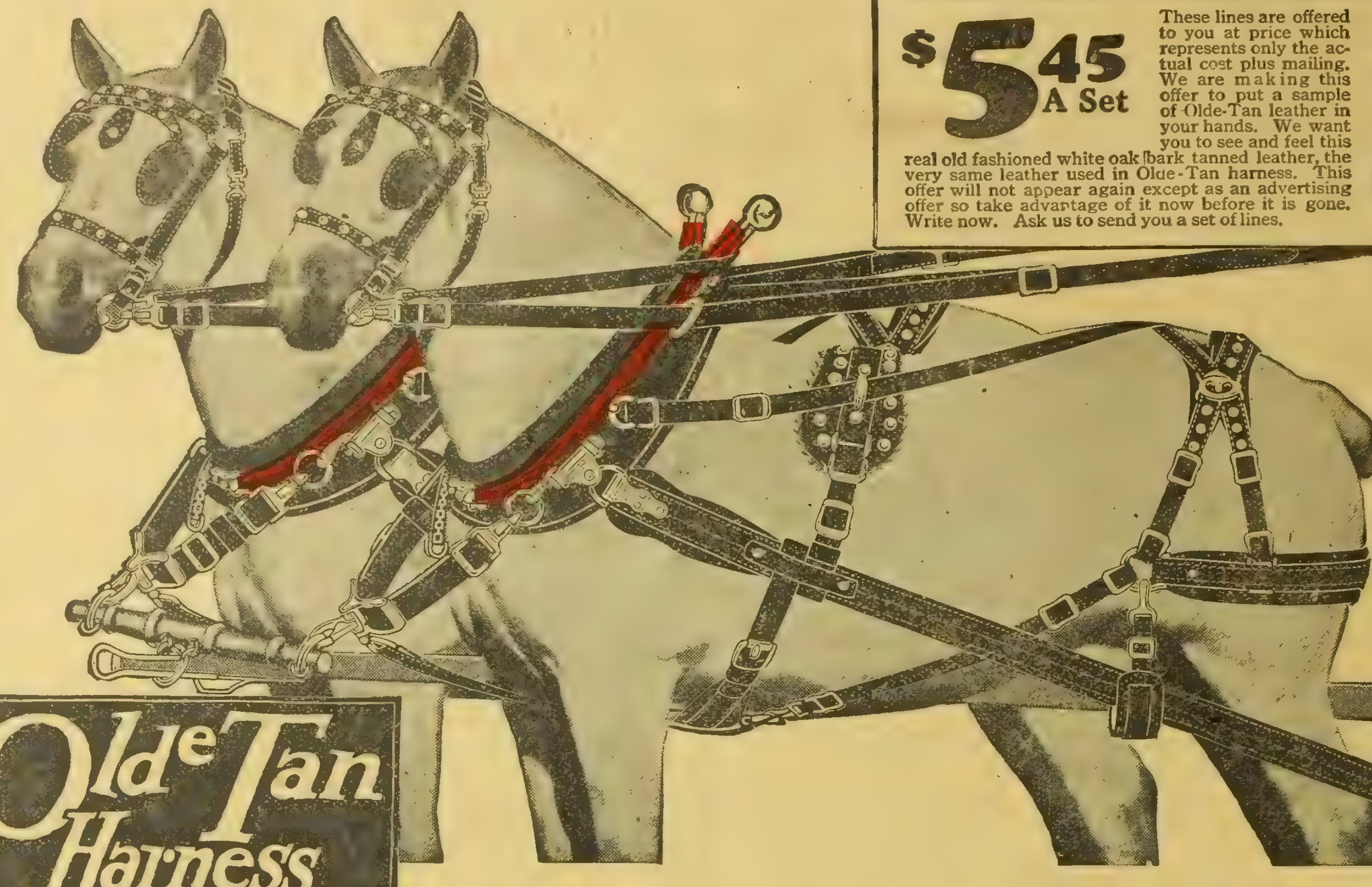
$5.45 A Set

These lines are offered to you at price which represents only the actual cost plus mailing. We are making this offer to put a sample of Olde-Tan leather in your hands. We want you to see and feel this real old fashioned white oak bark tanned leather, the very same leather used in Olde-Tan harness. This offer will not appear again except as an advertising offer so take advantage of it now before it is gone. Write now. Ask us to send you a set of lines.

20 Feet Long
1 Inch Wide
Main Line double and stitched at center





Olde Tan Harness

Metal-to-Metal Construction

$7.50 DOWN Puts it on Your Horses!

WRITE TODAY for the Free Olde-Tan Metal-to-Metal Harness Book which tells you how, for only $7.50 down, you put this Olde-Tan metal-to-metal harness on your horses. You don't need to send any money. We send the harness before you pay a cent. After the harness reaches you, make the first payment. The balance may be paid at the rate of a few dollars each month.

Metal-to-metal construction is not a new thing. We just put in practice the time-old knowledge that nothing can wear like metal. Everywhere there is wear or strain we have placed metal against metal. The harness is as light as any other harness, yet every point of contact is protected with tough, high quality metal shaped and fitted so that rounded steel parts take away all corner strains and pulls. First there is the finest leather that can be tanned then metal to protect the leather.

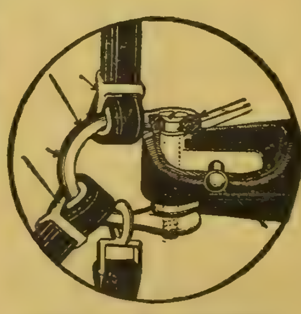
The superior quality of the leather in Olde-Tan Harness is recognized throughout America. 70-year-old tanning skill is behind it. It is tanned by a tanner-manufacturer and then made into Olde-Tan Harness. The tanner-manufacturer carefully supervises every step through the tannery and the factory until the harness is ready for your horses.

When you buy Olde-Tan Harness you don't have to worry about the quality of the leather. You are sure of the best. The high grade leather and metal-to-metal construction insures at the very least double harness wear.

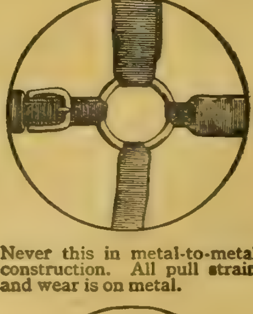
Did your last harness last 30 years? There are hundreds of Olde-Tan Harness in use today that old and older. What is more, they have required almost no patching — no mending during all those years. There are positively no places for Olde-Tan Harness to wear out. We give a guarantee which protects you during the entire life of the harness.

Besides the unequalled wearing qualities, Olde-Tan Harness has every adjustabte feature. While Olde-Tan is practically a buckleless harness we have placed buckles in a very few places to give greater convenience in putting on and taking off the harness.

But no place on Olde-Tan where there is excessive strain will you find a buckle because buckles cut down the strength of a strap 30%. So it is from beginning to end—every item having received such practical and common-sense consideration that you instantly appreciate its all around superiority. Our free book tells you all about these many special features of Olde-Tan Harness. Be sure that you don't make a mistake on your next harness. Write for and read this harness book before you buy.



Metal-to-metal construction. Metal brushing. Leather held tight without play or friction. Note special riveted metal extension in breeching.



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The Michigan
BUSINESS FARMER

An Independent
Farm Magazine Owned and
Edited in Michigan

VOL. XI, No. 11 SATURDAY, JANUARY 19, 1924

TERMS: TWO YEARS $1
60c PER YEAR—5 YRS. $2

JAN [illegible] 1924
UNIVERSITY OF ILLINOIS

Getting Ready for the Hot Summer Days

Big Program for Farmers' Week at Michigan Agricultural College, February 2-8—See page 3.

Servant of the Millions

FOUNDED on the principle that a business earns the right to exist only as it serves, the Ford organization has grown to be more than a business.

It is an institution that serves its millions.

Through 29,000 service stations in America its stewardship reaches out to every one of the Ford Cars, Ford Trucks and Fordson Tractors on every street, highway and farm the length and breadth of the land.

The nearest service to every farm is Ford service—a very potent reason for standardizing on Ford equipment.

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Ask Any Ford Dealer

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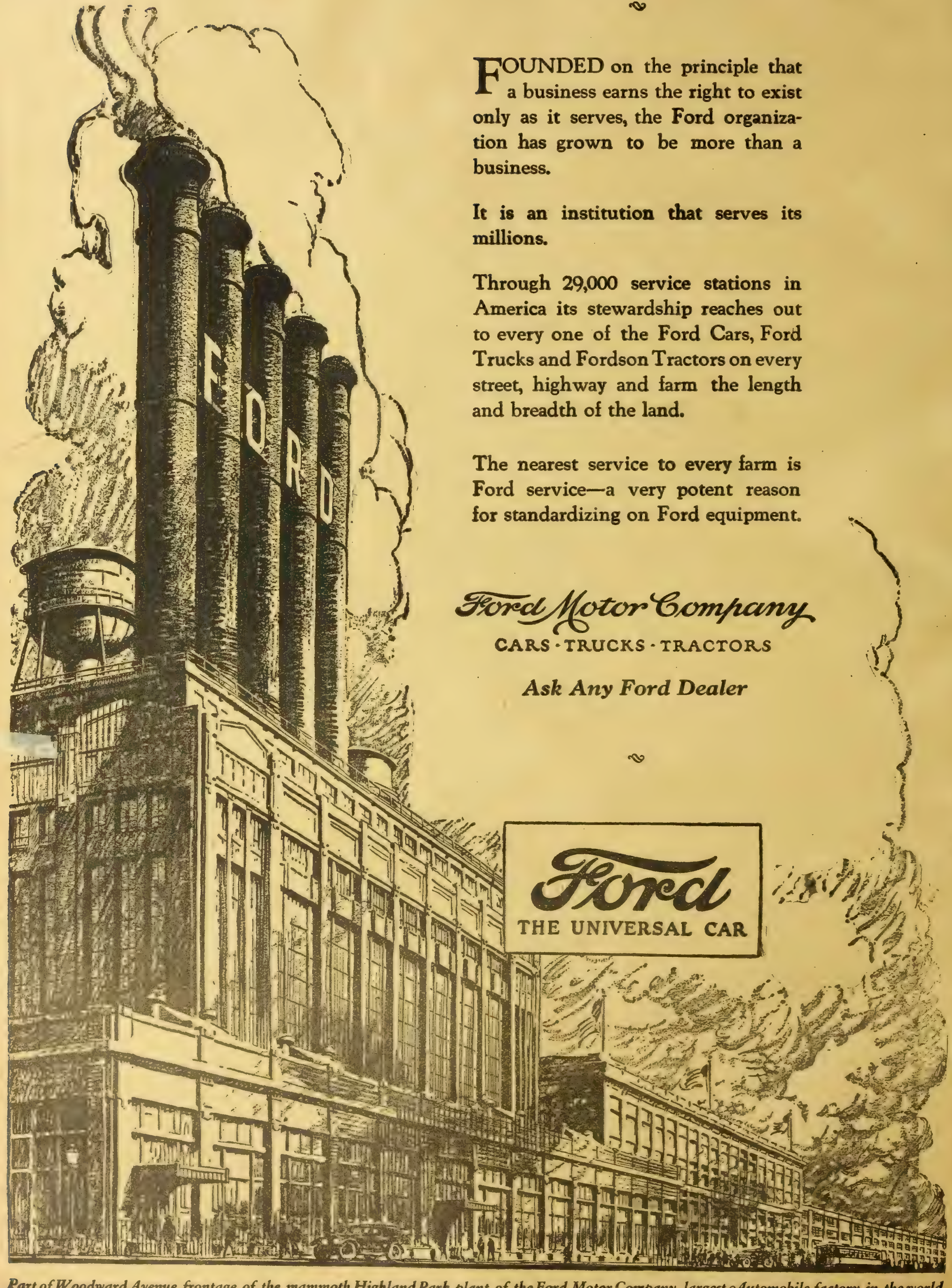
THE UNIVERSAL CAR



Part of Woodward Avenue frontage of the mammoth Highland Park plant of the Ford Motor Company, largest Automobile factory in the world

SATURDAY
January 19,
1924

VOL. VI. No. 11

Being absolutely independent our columns are open for the discussion of any subject pertaining to the farming business.

"Hew to the line, let the chips fall where they may!"

The Michigan
BUSINESS FARMER

"The Only Farm Magazine Owned and Edited in Michigan"

Published Bi-Weekly
Mt. Clemens, Mich.

TWO YEARS $1

Entered as second-class matter, August 22, 1917, at the post-office at Mt. Clemens, Mich., under act of March 3rd, 1879.

College Making Big Plans for Farmers' Week

Meeting, Speeches, Parades, Exhibits, Concerts, Shows and Sales Will Make It a Busy Week for Farmer Visitors

By R. C. GROESBECK

(Special Correspondent of The Business Farmer.)

THE annual Farmers' Week program, to be staged at the Michigan Agricultural College from February 4 to 8 this year, is to be filled with the largest list of special features and attractions of particular interest to the farmers of the state that has ever been offered.

Men and women of prominence in the agricultural, business, and professional life of the state and nation have been engaged for addresses on subjects of vital interest to the "practical" farmer. These speakers will make up the greatest array of platform talent ever offered Michigan farmers.

The list of speakers includes: Walton Petite, secretary of the National Council of Cooperative Associations, Chicago, Illinois; L. J. Tabor, Master of the National Grange, Columbus, Ohio; H. R. Smith, National Livestock Commissioner, Chicago, Illinois; Dr. Hugh Cabot, dean of the School of Medicine, University of Michigan; F. G. Ketner, Ohio State Farm Bureau, Columbus, Ohio; L. Whitney Watkins, State Commissioner of Agriculture, Lansing; Robert S. Shaw, Acting-President of M. A. C.; W. T. Hartman, Director of the Bureau of Markets, Foods, and Standards, State Department of Agriculture, Lansing; Verne Branch, Director of Municipal Markets, Detroit; J. W. Nicolson, Michigan State Farm Bureau, Lansing; O. E. Reed, head of the M. A. C. Dairy Division; J. T. Horner, Associate Professor of Economics, M. A. C., and many other specialists from the Michigan Agricultural College.

Thirty different state agricultural organizations and associations will hold their annual meetings at the college in connection with Farmers' Week. These will include practically all of the larger agricultural societies in Michigan.

Among the associations to hold their annual meetings will be: the Michigan State Farm Bureau, Michigan Crop Improvement association, Michigan Breeders and Feeders association, Michigan Potato Producers association, Michigan Beekeepers association, Michigan Soils association, Michigan Poultry Producers association, and various other special groups.

The annual livestock parade, more than a mile in length, will be one of the features of the week. At this time the registered blue bloods owned by the college, which won state, national, and international prizes, will be displayed to the farmers of the state. The visitors will also have the opportunity of inspecting these animals in the college barns and stables throughout the week.

Special agricultural exhibits on various phases of rural life will be shown in the agricultural show iin the new library building. The entire first floor of the new structure will be devoted to this display.

The annual fruit and flower show, promoted by the M. A. C. student horticultural club, will be another feature of the week. Prize Michigan apples and fruits as well as flowers are being brought together for the annual display, which is always one of the most attractive displays shown during the week. All Michigan farmers are eligible to compete, and entries may be made until noon on February 4, the opening day of Farmers' Week.

Something new in livestock judging will be staged this year. A special livestock judging contest for the practical "practicing" farmer is to be held, open to everyone, and of the informal type.

College students, high school students, boys and girls club members, and practically all other classes of novices at the farming game have been engaged in livestock judging contests for years. Teams have met at county, state, national, and international events to decide the best pickers of blue ribbon stock, but the events have always been listed for students.

This year, working on the idea that the farmer himself knows something about livestock, this special feature will be staged. The event will cover many classes, and any farmer particularly well acquainted with one class of livestock may try his hand at picking the blue ribbon winners in that class. Winners at last year's International Livestock Show will be included in the list of stock to be judged.

Other livestock judging contests for high school students will be held during the week. More than 500 Smith-Hughes high school agricultural students from the state, representing more than seventy schools, will be at the college for these contests.

An auction sale of registered cattle owned by the college will be held during the week. At this time Michigan farmers will have an opportunity to purchase purebred cattle at their own prices. These annual sales of registered cattle have been very popular with the state farmers, and it is expected that many thoroughbred cattle will be taken out in the state from these sales.

Individual conferences between farmers who have special problems and college specialists will be held throughout the week. Various college staff men, including specialists in every branch of agriculture, will be in their offices during the week to meet the farmers and confer with them on their individual problems. These conferences will give the farmer an opportunity for expert advice without cost to him.

A number of entertainment features have been provided for the crowds. Motion pictures, debates, plays, and band concerts will be provided. The annual Michigan Aggie-University of Michigan basketball game will be staged in the college gymnasium on Wednesday evening, February 6. A special block of re-

(Continued on Page 31)

PROGRAM OF FARMERS' WEEK

GENERAL SESSIONS

(College Gymnasium)

Monday, February 4
1:00 P. M. Sale of Holstein cattle (Pavilion, Agr'l. Bldg.).
6:30 P. M. Motion Pictures.
7:30 P. M. Musical Program.
8:00 P. M. Debate: College teams.

Tuesday, February 5
1:30 P. M. Band Concert.
2:00 P. M. Address—F. G. Ketner, Ohio State Farm Bureau.
2:45 P. M. Address—H. R. Smith, National Livestock Com'r.
3:30 P. M. Music.
3:45 P. M. Address—O. E. Reed, Prof. Dairy Husbandry, M.A.C.
5:30 P. M. Formal opening of new Home Economics Building and reception.

Wednesday, February 6
1:30 P. M. Band Concert.
2:00 P. M. Address—J. W. Nicolson, State Farm Bureau.
2:45 P. M. Address—Walton Petite, Sec. National Council of Coop. Assn's.
3:00 P. M. Music.
3:15 P. M. Address—L. J. Tabor, Master, National Grange.
7:30 P. M. M.A.C.-U.of M. basketball game. Motion Pictures in Home Economics building.

Thursday, February 7
1:00 P. M. Parade of college Livestock.
1:30 P. M. Band Concert.
2:00 P. M. Address—W. P. Hartman, director, Bureau of Markets, Foods and Standards.
2:45 P. M. Address—J. T. Horner, Assoc. Prof. of Economics, M. A. C.
3:00 P. M. Address — Verne Branch, Director, Municipal Markets, Detroit.
6:30 P. M. Motion Pictures.
7:30 P. M. Music.
7:45 P. M. Address—Robert S. Shaw, Acting-President of M. A. C.
8:30 P. M. Music.
8:45 P. M. Address—Dr. Hugh Cabot, Dean, School of Medicine, U. of M.

Friday, February 8
10:00 A. M. Sale of registered Shorthorn cattle (Pavilion, Agr'l. Bldg.).

HOUSEWIVES' CONGRESS

(Auditorium of New Home Economics Building)

Tuesday, February 5, 9:00 A. M.
Recital—Music Department, M. A. C. "Value of Salads in the Diet," with demonstration, Miss Adele Koch, Ass't. State Leader of Extension. "What Hats Make of Us," Miss Emma P. Garrison, Assoc. Prof. of Home Economics. "Financial Arrangements," A Play by the Columbine Players.

Wednesday, February 6, 9:00 A. M.
Recital—Music Department, M. A. C. "How to be Wise when One Buys," Miss Julia Tear, Assistant Prof. of Home Economics. "Step-Saving Suggestions," Miss Marion Rogers, Extension Specialist in Home Economics. "Arrangement of Furniture and Furnishings," Miss Winifred Gettemy, Assoc. Prof. of Home Economics.

Thursday, February 7, 9:00 A. M.
Recital—Music Department, M. A. C. "Rickets, the Most Universal Disease of Infancy," Dr. Marie Dye, Assoc. Prof. of Home Economics. Play—"From Danger Valley to Healthy Hill."

Friday, February 8, 9:00 A. M.
Recital—Music Department, M. A. C. "Fancy Work vs. Art Needle Work," Miss Eunice Ryan, Extension Specialist in Clothing and Textiles. "Home Economics Here and There," Mrs. Louise Campbell, State Leader of Extension. "Round Table Discussion."

Valuation of State is Increased Over One Billion and a Half Dollars

ONE of the outstanding features of the state tax situation in 1923 was the increase in the equalized valuation of the state for the purpose of levying the direct state property tax from $5,000,000,000 to $6,540,000,000. This increase was authorized by the state board of equalization, composed of the three state tax commissioners, the auditor general and the director of the department of agriculture.

By thus making this big increase in the valuation, the board practically accepted the recommended valuation of the state tax commission, which was $5,545,065. In former years the equalization board has greatly reduced the actual assessed values fixed by the tax commission. The year's work relating to taxation has been summarized by the board of state tax commissioners in the following statement:

"The primary purpose for which the board of state tax commissioners was created is to see that the provisions of the tax laws of the state are enforced and that all property subject to taxation under that law shall bear its just proportion of the tax burden. To that end the board is given supervision over all local assessing officers throughout the state, and each year greater efforts are made to secure the full and hearty co-operation of these officers in bringing all property to the assessment rolls at its true cash value as required by the constitution and laws of the state. During the assessment period the entire force of appraisers is at the disposal of local assessing officers, and great assistance is rendered by appraising for them property with which they are unfamiliar and whose actual value they are therefore unable to determine. Assistance of this character has been of special value in the assessment of public utilities, manufacturing establishments, and stocks of merchandise. This service is greatly appreciated by local assessing officers and the board each year receives an increasing number of appeals for help of this character.

Review Local Assessments

"The board, in order that it may act in more than an advisory capacity, is given power by the law to review any assessment made by a local assessing officer. In the exercise of this power, many reviews are held each year and the scope of these reviews extends from that of a single assessment to reviews of all the property within a county. During the past year complete reassessments were made of the counties of Macomb and St. Clair. The review of the assessments of an entire county requires the examination and appraisal of every piece of property within the county subject to assessment under the provisions of the tax laws of the state and in the two counties named the examinations and appraisals covered many thou-

(Continued on page 19.)

Clearing Away the Snow on the Ice.

Cutting the Ice.

Floating Large Cakes to Shore for Recutting.

Harvesting Crop Farmers Do Not Have to Plant

Farmers will Find It to Their Advantage to Work Together in Harvesting and Storing Their Ice

By EARLE W. GAGE

THE ice crop is the only one the farmer harvests that does not rob his soil of fertility and, considering the advantages of a good home supply of ice, no improvement is more satisfactory than a good ice supply.

"Keep cool" is good advice to the farm family on hot summer days when the thermometer registers around ninety in the shade, when fruits and vegetables must be preserved, when cool drinks are so delicious, and when there is the milk and cream to be cooled and kept cold until ready for market.

Eighty per cent of the dairy products of the farm require artificial cooling before they are ready for market or home use, while 30 per cent of the value of dairy products is lost through failure or inability to cool to a low temperature quickly. Abundant testimony can be given by the manager of a milk plant, cheese factory, or creamery, as well as buyers of cream and eggs.

Ice on the farm is not a luxury; it is a money saver and, at the same time, adds to the comfort of living during at least three months of the year. Six months is a long time to look ahead and these winter days do not suggest the added heat of June, July, and August, but now is the time to "can next summer's cold."

When Jack Frost snaps away in January or February, it is a sign for the farmers to prepare for next summer's heat and the ice season is at hand. There is no crop that is produced as cheaply and brings as high returns as the ice crop. Instead of depleting the pocketbook it enriches the farmer and makes life more attractive to his family, because it supplies a wider variety of high-grade foods in summer.

Cooperation in ice harvesting is more important perhaps than the common community get-together at threshing time. It is best that the ice be cut and hauled to the storage house as soon as possible to permit the ice to form while it is yet cold and prevent waste if freezing weather is passing. Then, too, the work can be done much more efficiently when there are enough men and teams to do all the operations at the same time.

To harvest ice efficiently a few ice tools will be needed. A steel scraper is desirable; some types of road scrapers can be used for this work or a very good home-made scraper may be fashioned of wood and faced with an old crosscut saw. An iceplow is almost essential if any great quantity of ice is to be harvested. This facilitates the removal of the porous surface ice and simplifies greatly cutting into blocks. Half a dozen pike poles, bearing vertical points and horizontal hooks, are needed in floating the ice to the loading platform. An ice saw may be useful, or an ordinary crosscut saw may be used by removing one handle.

Ice cutting is best conducted by three squads of men, each with a team. The first squad removes the snow or spongy ice from the surface of the field and plows, saws, and cuts the ice into blocks of a size most convenient to handle. If the ice is more than twelve inches thick blocks two feet square on the surface would be most convenient; if it is thinner than this, blocks three feet square can be packed conveniently into the house. But thick ice should be cut in proper size blocks so as not to call for undue lifting.

The second squad of men cut loose the blocks and float them to the side of the open water where they are ready to be loaded on the sleigh or wagon. Here a tramway with a pair of hooks attached to a rope will make loading a relatively easy task. Let the ropes extend across the load from the tramway; hitch a horse to it and drag the blocks from the water onto the load.

The third gang of men should be at the ice house to place each load in position and pack sawdust around it as rapidly as possible. Eight men with three teams can work rapidly fields, especially if the snow is deep, in harvesting a crop of ice by this cooperative method.

Where the ice is not quite thick enough to meet the need the snow should be scrapped off the surface the day before cutting is started if indications are that the night will be severely cold. The snow acts as an insulation and retards freezing, and when it is removed not only is the entire mass of ice better frozen but a few inches in thickness is added.

On small ponds the snow may be removed to the shore but on large it is impracticable to scrape the snow entirely off the field. It becomes necessary, therefore, to pile it in windrows.

After the snow is off the field is ready to be marked for cutting. The marking must be done carefully so that all cakes will be rectangular, which aids in economical handling and packing in the ice house. It the proper start is made in marking off the field no trouble will be experienced; otherwise subsequent cuttings will be difficult.

Success in marking depends largely on getting the first line straight, which may be done by placing a stake to serve as a guide at each end of the proposed line. A straightedge, consisting of an ordinary board about 14 feet long, is then aligned with the two stakes and the cutting tool or hand plow run along its edge, after which the board is pushed forward and again aligned with the stakes. This is continued until the entire distance between the stakes has been covered. Another way is to stretch a line between the stakes and do the marking with a handplow although this is not so satisfactory as the handplow can not be operated in so straight a line with the board. After the first line has been cut it can be used as a guide for the horse marker if this is used.

After the ice field has been lined off in one direction, the crosslines should be made. Care should be taken to have these at right angles to those first drawn, which is accomplished by the use of a square. A suitable square may be made easily by first nailing the ends of two boards together with a single nail. Measure a distance of eight feet on the outer edge of one board and six feet on the outer edge of the other board, then nail a third board diagonally across the two, adjusting it until the two marks are exactly ten feet apart on a straight line. Nail the boards securely, forming the desired square.

To estimate the amount of ice needed on a dairy farm, use as the basis the number of cows kept. If the average cow produces 3,500 pounds of 3.7 per cent milk per year (which is equal to 431 pounds of 30 per cent cream) it will require 431 times 1.16 pounds or about 500 pounds of ice, to cool the cream produced by each cow and keep it in good, sweet condition until delivered to market. In addition, it is best to store 500 pounds of additional ice, or a total of 1,000 pounds per cow. This is sufficient to cool the cream needed for household uses and allow for reasonable waste. Therefore, the 20-cow dairy should have 100 tons of ice stored. These figures are for cream; if the milk is to be cooled it will take between two and three times as much ice, or about 30 tons for the 15-cow dairy.

It is necessary to store more ice than is seemingly needed, as there is sure to be a waste, even in the best houses. Sometimes this averages 25 per cent of the whole amount of ice put up.

The number of square feet of ice required per ton of ice in blocks 22 inches square, and of various thickness, is shown in the following table:

Thickness of ice inches	No. Cakes required for one ton	Cutting space required per ton—sq. ft
4	31.3	105.4
6	20.3	70.2
8	15.6	52.6
10	12.5	42.1
12	10.4	35.1
14	8.9	30.1
16	7.8	26.3
18	6.9	23.4
20	6.3	21.1

Not only will you save much space, but ice as well, by properly packing the ice in the house. You can get only 35 to 40 pounds of ice in a cubic foot of space when the ice is thrown in at random, while about 50 pounds can be packed in the same space with a little care. This means also that the air cannot circulate through the ice and melt it, therefore pack it carefully.

About a foot of sawdust should be placed on the floor of the ice house, with less in the center to permit the cakes to lean inward. The sides of the ice should be smooth. Any projecting pieces should be trimmed off before insulation is put on. If sawdust or mill shavings are used a space of at least twelve inches should be left between the outer walls and the ice stack.

It is easy to calculate how much ice the house will hold. Allowing 45 cubic feet per ton, an uninsulated house 18 by 12 by 10 feet, with one foot around for insulation, will hold about 38 tons, while the same sized house if insulated, will hold about 43 tons.

Jackson Livestock Man Honored by France

THERE are many tillers of Michigan soil that won medals of honor from the French government for bravery on the battlefield during the World War but there is perhaps only one from our fair state that has been honored for helping that country get back on its feet. This man, known from one end of the state to the other, Corey J. Spencer, Jackson, owner of Grand River Stock Farm and breeder of some of the finest pure bred Holsteins in Michigan.

It was a little over two years ago that Mr. Spencer learned that agriculture in France was suffering from the lack of high quality dairy sires. During the war the livestock in the war zone was driven away, an, while the Germans had to make restitution with respect to cows, the farmers of France were without good herd sires. Mr. Spencer, wanting to help in the post-war reconstruction, shipped overseas two choice pure-bred herd sires, authorizing the French government to dispose of them as it saw fit.

Time passed and his time and mind being taken up with other matters about forgotten his gift when he received a letter from Paris. The letter was written in French and Mr. Spencer not being able to read it, placed it in his pocket planning to call on a friend within a few days who could translate it for him. Three or four days later the letter was still in his pocket unread. And then he received another letter written in French, but it came from Antoine Barthelemy, the consul at Chicago. This was the straw that broke the camel's back. He could not restrain his curiosity no longer and he immediately called upon his friend Lewis Atherton, a former major in the U. S. Army who had fought during the recent war in France, and could speak and read the French language. The letters contained the information that Mr. Spencer had been awarded the Croix de Chevalier du Merite Agricole, in gratitude for his generous act.

"I was amazed," he said in relating the incident. "I could not believe it at first. When I sent the two sires overseas, I was simply trying to help a little. I never dreamed the gift would be esteemed so highly."

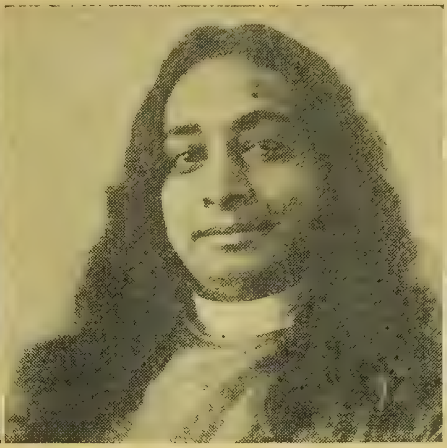
Formal presentation ceremonies will be held in honor of Mr. Spencer after the badge arrives, it is announced by C. E. Linabury, secretary of the Jackson Chamber of Commerce. A. Barthelemy, French consul at Chicago, and Joseph Belanger, consular agent at Detroit, as well as Gov. Groesbeck and state agricultural leaders will be invited.

Mr. Spencer was recently elected a member of the board of directors and vice-president of the newly organized Farmers' and Workingmen's Savings Bank in Jackson. He is also president of the Jackson County Holstein-Friesian Association.

Mr. Spencer was born on a farm in Ontario. He was the eldest of six children. He came to Jackson at the age of 18 to enter business college. Afterwards he entered high school at 21, paying his expenses by odd jobs. He spent several years in California and returned to Jackson in 1915. He bought the farm at Eaton Rapids in 1918. In the summer he lives at the farm and drives to his office in Jackson each morning.

PICTURES FROM FAR AND NEAR

GRAND DUKE STARTS NEW CULT.—Grand Duke Alexander Michaelvitch of Russia has startled London by founding a new religion called the Union of Souls. The cult is devoted to beauty, is without priests or churches and is open to all creeds.



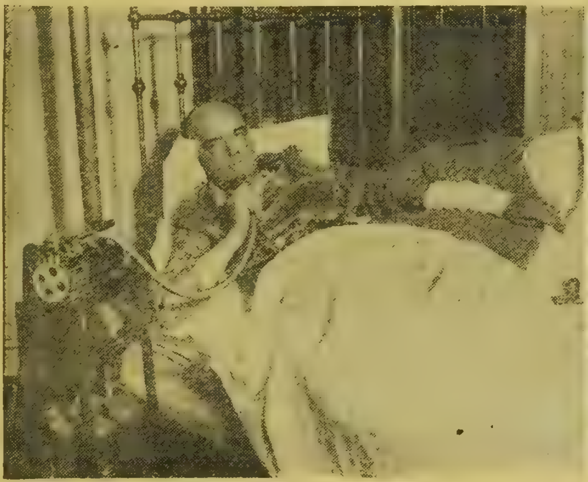
NEW SORT OF "DR. COUE."—Swami Yoganada, A. B. of India, is in New York lecturing on physical perfection through the power of will over matter.

BRITISH ADMIRAL TOURS WORLD IN MOTOR CAR.—Admiral John Weston of South Africa, well known member of the British Admiralty, is making a tour around the world with his family in a specially made motor car. The photo was snapped in Budapest, Hungary.

PREDICTS TIDES FOR 1926.—F. J. Haight of the U. S. Coast and Geodetic Survey operates a machine that predicts tides in any part of the world at any future date.

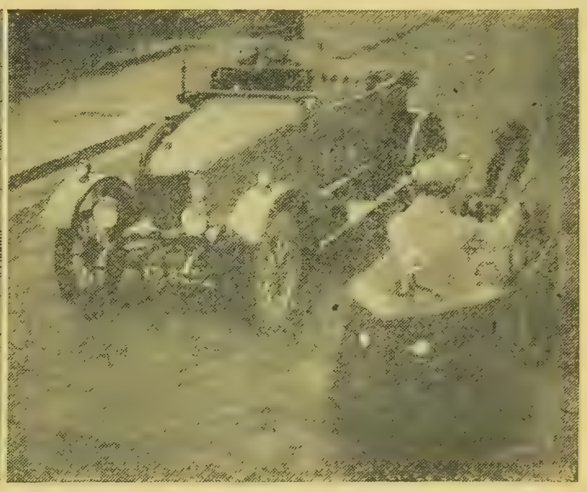
KLAN MOVEMENT SPREADING IN WEST.—Even the women have formed an auxiliary to the Ku Klux Klan. Recently thousands of them gathered at the Konclave held in Youngstown, Ohio, to celebrate the election of a Klan endorsed mayor. Representatives from three states were there.

AMERICA TO SEE FUTURE NORWEGIAN KING.—Prince Olaf, heir to the throne of Norway, who upon coming of age next spring will visit America, taking in New York, Washington, and other large cities.



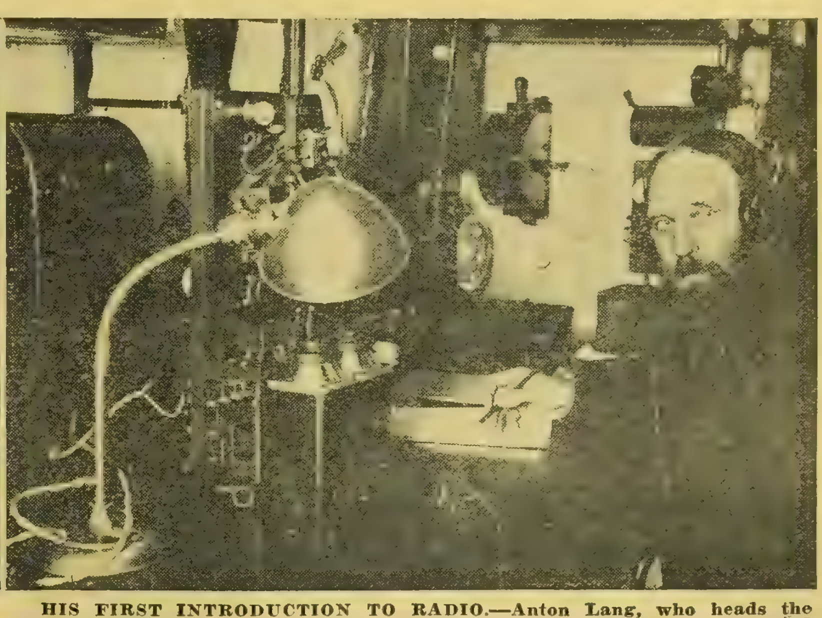
....AUTHOR, DESPITE INFECTED ARM, "CARRIES ON".—Louis Joseph Vance, noted writer, who on being forced by an infected arm to suspend work, "craried on" with the assistance of a dictaphone. No chance to get writer's cramps here.

BRYAN'S FORMER SECRETARY IN CONGRESS.—Left to right: Edgar Howard, Nebraska, and William Jennings Bryan. Howard, who is a representative from Nebraska, once was private secretary to Bryan.



WHEN AUTO MEETS "AUTO"—This "boat" on the left has been invented by a naval commander, and is "rowed" on the road. Two levers propel it on the same principles as they would a boat. Quite an idea, isn't it?

MEXICANS READY FOR BATTLE.—What has now become an every day scene, is this one showing Mexican troops marching through towns and villages, fully equipped and ready for battle at a moments notice. It was thought that Mexico was at last getting where there would be fewer revolutions but the latest news does not indicate that.



HIS FIRST INTRODUCTION TO RADIO.—Anton Lang, who heads the Passion Players, from Oberammergau in Bavaria, now in this country, listened in for the first time in his life and enjoyed it very much. Lang has for years played the part of Christus in the Passion Play, and with fellow players, is disposing of their bits of pottery, sculpture, etc., in this country.

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Holding A Community Fair in a Small Town

Ladies' Aid Society Puts On Community Fair in Brethren, Manistee County, On Rainy Day With Great Success

By GRACIA POTTER

UP in Manistee county, in the little town of Brethren, the people wanted to build a church, one where all might go, and they had about exhausted their supply of ideas for making money to start the building, when one of them thought of the community fair. Only a few believed it could be done. The others said, "It's a good idea all right, but Brethren isn't large enough to make it a success." However it was finally decided to make a try at it anyway. Did they succeed? Over 250 people attended the fair and the Ladies' Aid Society served dinner to 110 of them. The ladies back of the fair reported a profit of $100.00 for the church building fund. And they would have done better if it had not rained all day.

BRETHREN is a "2x4 town" up in the Cutover with three or four stores, a big consolidated school that half her people think she can't afford, with no more "spirit of co-operation" than the average, with no factions on opposite sides of Main Street, and the usual allottment of knockers.

With all this to contend with, she has held a Community Fair, on a rainy day, with howling success. The moral, for the benefit of villagers moved to do likewise, is—"Nothing is impossible"!

Two years ago Brethren had a fair, sponsored by a committee of farmers and business men. No prizes except ribbons were given, but the farmers came in out of the choppings with their big pumpkins and cabbages, their wives and children, and that fair was so much of a success that there was talk at the time of making it an annual event. But a year passed, and another, and no plans were laid.

In the meantime 25 women of the community had organized a Ladies' Aid Society, and were stopping at nothing legitimate to earn the where-with-al to build Brethren a church where all good people can freely commune together. Farm sale dinners, chicken suppers, oyster stews, and outdoor pageants had followed each other in rapid succession.

"If Brethren would have a fair," some member suggested, "we could serve dinner to the crowd."

"If we have our own fair," was the final decision, "we can keep out the concessions discountenanced by church folks, and we can keep all the profit."

Four committees of women were appointed, a dinner committee, a prize and premium committee, a program and a White Elephant committee.

Using the premium list of the county fair as a pattern, the premium committee drew up our premium list, and then solicited and collected premiums for over 100 awards. These prizes ranged all the way from a pearl handled carving set donated by a merchant for the best rooster, a sack of flour donated by another merchant for the best loaf of bread, to a pint of pickles for the homliest man, and a carton of rolled oats for the best fried cakes, and a pair of socks for the largest pumpkin.

THE BUSINESS FARMER and several other publishers gave us from 10 yearly subscriptions to several six month's subscriptions to be used as premiums. These we put on the grains and poultry exhibits.

The local merchants all gave merchandise for premiums, the farmers gave half bushels of winter apples, strawberry and raspberry plants. Aid members gave dahlia bulbs, needlework, and dishes, and a sugar shell for the best plate of candy.

The county paper printed the prize list, and the calls for entry tickets, there was no charge, began to come in.

The committee women requisioned the men-folks and an implement shed behind the town hall, built to house the road graders and other road tools, was cleared out and used for fruit, vegetables and poultry. The parsonage a few rods from the town hall, was filled with needlework, and cookery.

The White Elephant committee had spread broadcast a small card bearing the outline of an elephant. This asked the people to give us their White Elephants for our White Elephant booth at the Community Fair, and explained that a White Elephant is anything which is too good to throw away, but which the owner does not want or need.

As a result of this publicity White Elephants began to accumulate; Suits of men's clothing, shoes, dishes, bed-quilts, apples, aprons, Indian baskets. A local auctioneer gave his services, and when the sale began many of the people who had brought in produce gave that to be sold. There were feather clad carnival dolls from the last city carnival, cooking utensils, books, things new and second hand.

In the meantime the dinner committee had planned a dinner of chicken and noodles, mashed potatoes, baked beans, pickles, coffee and pie, and set the price at 25 cents per plate.

So the day was set, and a week of fine fall weather preceeded it. "What if it rains?" inquired the pessimists.

"But it won't rain," said the boosters, "At least it never has rained when we have had suppers, or sale dinners, ever."

But it did rain. Beginning the night before with lowering clouds, it rained all night and was coming down steadily at 7:00 a. m.

"They can't have it!" said the knockers. "Will they try?" enquired the doubtful ones.

The chairman on premiums, perched in a farm wagon, under an umbrella, with her private collection of needle-work in a suit case, and her house plants in behind, with her pies and noodles and potatoes for the dinner carefully protected from the weather, arrived in the village at 7:30 to answer the question.

"Certainly!" she said decidly and led the way to the parsonage needlework show room.

"We've got to," said the dinner chairman, and went after another batch of noodles with her rolling pin.

"Surest thing you know," said the Chairman on Poultry and Farm products, he was an Aider's husband, and he fell to tacking building paper on the rainy side of the Implement shed.

"But nobody'll come!" said the head shakers.

Two farmers from four miles out were already unloading their exhibit out of their Fords. Two cars from the County seat, a newspaper reporter, two Fair judges, and a wagon load of sightseers were already there.

One hundred and ten people sat down to dinner. Some of them had not the heart to eat it all and pay only 25 cents, so we received fifty cents and a dollar for many plates. There were more than 250 people on the grounds. The exhibits were of excellent quality and fair quantity. The dinner and White Elephant Sale netted better than $100.

The county agricultural agent was present and acted as a judge, and the day was so full that there was no time for a musical show scheduled for the afternoon.

Everything was carried out as planned except the baby show, and that was cancelled because the schools were closed the day before when a dyphtheria scare had developed.

Disease, knockers, and inclement weather, and the Fair was a success. "I'm so glad it rained," said a tired dinner committee lady at the end of the day, "Because if it hadn't we never could have fed the crowd. The dinner was eaten up clean."

Next year the Ladies' Aid hopes to plan for a two-day Fair, with prizes for field athletics as well as farm crops and will plan to feed twice as many people.

Everybody was most kind. None whom we asked for prizes refused to help. But the real success of the

(Continued on page 19.)

Some Helpful Information on Making Out Your Income Tax Return

THIS is a story of informative value to Business Farmer readers in the preparation of their income tax returns for the year of 1923. Taxpayers, any part of whose net income regardless of the amount was derived from farming, are required to use the larger form 1040, which heretofore was used only for reporting net income in excess of $5,000. The article explains how to figure your income and exemptions so that you can file a correct report.

TO the farmer the problem of correctly making out an income tax return for the year 1923 should present no unusual difficulties, notwithstanding he is required to use the larged form, 1040. Careful study of the instructions on this and the accompanying form 1040F—schedule of farm income and expenses—will be of material aid in this connection.

Heretofore Form 1040 was used only for reporting net income in excess of $5,000. Its use for reporting net income for the year 1923 is required when the net income, regardless of the amount, was derived from "a business or profession, including farming," and in all cases where the net income was more than $5,000. The smaller form, 1040A, heretofore used for reporting net income of $5,000 and less from whatever source derived, is to be used for reporting net income for the year 1923 of $5,000 and less derived chiefly from salaries and wages. Taxpayers will receive both forms, it being impossible for the Bureau of Internal Revenue to determine at this time the class of form desired.

The farmer who keeps his accounts on the cash receipts and disbursement basis—which means a record of the amount actually received and the amount actually paid for expenses—must file his income tax return for the year 1923 on that basis. He must include in his gross income for the year the amount of cash or the value of merchandise or other property received from the sale of live stock and produce, which were raised on the farm, profits from the sale of live stock or any other items were purchased, profits from the sale or rental of farm lands, and profits from all other taxable sources. The farm expenses will be the amount actually paid out during the year.

For farmers keeping their accounts on the accrual basis, inventories at the beginning and end of each taxable year are necessary.

For those reporting on the accrual basis, the gross profits are obtained by adding to the inventory value of live stock and products on hand at the end of the year the amount received for the sale of stock and products and other miscellaneous receipts, for hire of teams, machinery, etc., during the year, and deducting from this sum the inventory value of stock and products on hand at the beginning of the year plus the cost of stock and produce purchased during the year. The farm expenses will be the actual expenses incurred during the year, whether paid or not.

Farmers who keep their accounts on the cash receipts and disbursement basis are required to file a schedule of farm income and expenses on Form 1040F, which must be attached to the individual return on Form 1040. With farmers who keep their account on the accrual basis, the filing of Form 1040F is optional.

All necessary expenses paid or incurred during the year 1923 in the operation of a farm as a business enterprise may be deducted from gross income in ascertaining net income, upon which the tax is assessed. These include the expense of harvesting and marketing of crops and the cost of seed and fertilizer used. Amount expended for the purchase of feed for live stock may be deducted, but the value of a farmer's own products used for such purpose is not a deductible item. The farmer may deduct the cost of small tools used up in the course of a year or two, wages paid to farm hands (other than domestic servants) and rent paid for farm land and buildings (other than the dwelling) cost of repairs to fences, wagons and machinery, also bills paid for horseshoeing, stock powders, rock salt, veterinary service, insurance (except on the dwelling), gasoline for operating power, and sundry minor expenses.

The value of produce raised on the farm and used in the board of farm laborers may not be deducted as an expense. The farmer may, however, deduct the cost of food purchased for his laborers. The value of the services of the farmer, himself, his wife or dependent minor children cannot be deducted unless the amount is reported by the recipients as income on Form 1040.

The purchase price of an automobile even when used wholly in farm operation may not be deducted, as it is regarded as an investment of capital. The cost of gasoline, repairs, and upkeep of an automobile, if used wholly in the business of farming is deductible as an expense; if used partly for business and partly for the pleasure and convenience of the taxpayer or his family, such cost may be apportioned accordingly, and that proportion of cost attributable to business deducted.

General deductions such as for taxes, losses, interest on indebtedness, bad debts, contributions, etc., are explained in instructions on the forms.

Every single person whose net income for 1923 was $1,000 or more or whose gross income was 5,000 or more, and every married couple whose net income was $2,000 or more, or whose gross income was $5,000 or more must file a return.

The exemptions for the year 1923 are $1,000 for single persons, $2,500 for married couples whose net income was $5,000 or less, and $2,000 for married couples whose net income was in excess of $5,000. In addition the taxpayer is allowed a credit of $400 for each person dependent upon him for chief support, if such person is under 18 years of age or incapable of self-support because mentally or physically defective.

The return, accompanied by at least one-fourth of the amount of tax due, must be filed with the collector of internal revenue for the district in which the taxpayer lives, or has his principal place of business. The filing period is from January 1 to March 15, 1924.

DO YOU KNOW THIS MAN?

DEAR EDITOR:—Find enclosed post office money order for one dollar to renew my subscription for two years. Now, dear M. B. F., I am going to ask a favor of you. Will you try and find Garva Jones and his wife, Jessie, whose address on May 14th was 229 E. Wall Street, Lansing, Michigan? If any person knowing their address would write to me I would thank them very much as I wish to correspond with them on important business.—Chas. M. Pierce, Charlevoix, Mich., R. 2.

OPERATING MOTOR TRUCK FREIGHT LINES

Will you please give me the facts as to how a person can obtain a franchise on a certain road, for trucking for service or for hire? A man has obtained such a franchise here, but his rates seem to be extra high. He tells us we cannot hire any other truck. Is this legal? If so, where are our rights?—A. R., Acme, Mich.

Anyone desiring to operate motor truck freight lines for hire over fixed routes or between fixed termini, may be permitted to do so upon proper application to the Michigan Public Utilities Commission and complying with the provisions of Act 209 of the Public Acts of the State of Michigan for the year 1923. —Clare Retan, Deputy Attorney General.

EIGHTEEN PATRONS ON ONE TELEPHONE LINE

Is there anything that can be done about the way the telephone company does with its patrons? Several years ago when they first raised the rates they promised to give us party lines with only 8 on a line, four on each side, but they now have as high as 18 and 20 on these lines. Our line has nine rings on the W-side and the same on the J-side. Only instead of ringing nine rings on the J-side, they ring 1 long and 1 short, and call it one-one. Some of the other lines have what they call one-two (rings one long and two short). It is almost impossible to get the line if you want it in a hurry.—M. B., Flint, Mich.

This Commission has made an order and it has been the general practice not to place more than ten telephones upon one country line. However, there are places in which the parties insist that they ought to be on a general line and they are willing to be put to the inconvenience of having a large number of persons on the lines in order to visit with their neighbors without going through the central office. Usually where there are eighteen or twenty people upon a line it has been customary for the company to install a separate wire for taking care of them, because it is not regarded as good telephone practice to have eighteen or twenty telephones on a line, and on complaint the Commission has usually so ordered.—Mich. Public Utilities Commission.

CANNOT MAKE ADDITIONAL CHARGE

Can any officer collect for car hire for serving civil case summons besides his ten cents a mile travel to serve same?—H. F., Moran, Mich.

—The Michigan statutes provide that a sheriff shall be allowed 10c per mile for traveling expenses in the service of sommons. An additional charge for car hire would not be authorized.—Asst. Legal Editor.

INTEREST RATE TOO HIGH

What can I do if a banker charges me over 7 per cent on a note? Is there any law to protect a farmer? Can the bankers charge ten to sixteen per cent on notes?—A. T., Flint, Mich.

—We assume that you refer to the interest rates which may be charged by state banks. Under the provisions of Section 1970 of the Compiled Laws of 1915, a state bank may charge seven per cent interest, with a minimum charge for interest or discount of fifty cents. If a bank charges more than the interest hereinbefore stated, it cannot collect any interest on its loan, if the borrower raises that question.

Farmers Service Bureau

(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full name and address. Name not used if so requested.)

Section 5998 of the Compiled Laws of 1915 provides that where usury is charged on notes, commercial paper, etc., the party making the loan shall lose all his interest and can only collect the principal. Of course persons or associations loaning money under the provisions of Act 317 of the Public Acts of 1921 in sums of not more than $300 may collect interest up to three per cent a month. We take it, however, that you are not referring to associations of this character.—Clare Retan, Deputy Attorney General.

HUNTING AND POSTING

1. Can hunting be prohibited on your own farm? 2. How should signs read? 3. How close should they be posted? Is more than one notice or sign necessary? 4. What course of action if offenders are found? 5. What if offenders refuse to leave if ordered off farm? 6. Are offenders liable for trespassing or only if damage has been done?—R. D., Ada, Michigan.

—1. Hunting may be prohibited on your own farm.

2. "No hunting," or whatever words will best inform the public that you do not want anybody to hunt on your farm. 3. They should be posted close enough to be easily read, and as many used as required.

4. An action for damages could be brought against the trespasser, or he could be prosecuted in a criminal action. 5. Report the matter to the prosecuting attorney. 6. Nominal damages might be awarded where there were no actual damages, in the descretion of the court.—Asst. Legal Editor.

ENTITLED TO HALF OF STRAW

I am working on shares a farm which adjoins my own. My contract reads, "each to get one-half the proceeds derived from the sale of all grain, produce, etc., taken off said farm." Have I a right to bring half the straw down on my farm when I thrash? First party did not reserve straw. The only thing first party reserves is the house. Please let me know as soon as possible. I always supposed that straw was personal property the same as the grain. I enjoy reading your paper very much.—J. C. P., Concord, Mich.

—Straw would be considered personal property as well as the other crops, such as grain, etc. If the leasor did not reserve the straw, I am of the opinion you would be entitled to one-half the straw along with the other produce.—Asst. Legal Editor.

CAN THEY INSTALL FURNACE IN SCHOOL?

We have always had stoves in our school house and one has broken, so the school board bought another, and the county commissioner has forbidden us to put it up. Is there any law compelling us to buy a furnace for the school?—G. F., Tawas City, Mich.

—According to the law, all school buildings and repairs over $300 in value, must be approved by the superintendent of public instruction. I do not know of any law that would compel you to buy a furnace, although that would probably be the best way of heating your building, especially if it is of any size.—Dept. of Vocational Teacher Training, Michigan Agricultural College.

LEGAL WIDTH OF SLEIGHS

Would you please tell me if there is any new law concerning the widths of sleighs? Have they got to be 4-feet wide or more?—E. M. S., Dryburg, Mich.

—The last legislature enactment for standard gauge for vehicles is Act number 73 of the Public Acts of 1919. This Act fixes the standard gauge, except such vehicles as are inches from center to center of tread and makes it unlawful to use on any of the public highways of this state any vehicle other than standard gauge, except such vehicles as are used for extraordinary purposes. For the purpose of construing the act, motor trucks, moving vans, logging sleighs with a wider draft than fifty-six inches, cutters, and light delivery sleighs are conclusively presumed to be vehicles used for extraordinary purposes.

Therefore, in direct reply to your inquiry, you are advised that sleighs that may be classed as "light delivery sleighs" need not be of standard gauge.—H. Victor Spike, Assistant Attorney General.

IS DOG TAX LAWFUL?

I would like to know if dog tax is lawful and if you don't pay your tax could they kill your dog and imprison anyone for any length of time? What is the value on a dog? —D. G. M., Harrison, Mich.

—Yes, a tax on dogs is lawful, the same as a tax on automobiles, farms, or other property, and if you did not pay the tax, they could come and take your dog and imprison him for life, or kill him, by giving him gas. But they could not imprison you. tho perhaps if they took your dog you would want to go too.

You ask what is the value on a dog, and that is a very difficult question. Dogs are like men; their value is not easily determined. I know of a dog whose life is insured for $10,000. Obviously a very high priced dog. Many a small boy would not take that much for the little yellow mongrel that pals with him, and is found with him wherever he goes. Some women are very devoted to little wooley dogs, and value them more highly than children. On the other hand, the farmer's faithful shepherd or watchdog that guards his property could probably be bought and sold for the small sum of five to ten dollars.

A United States Senator once made a famous speech in the Senate on the virtues of the dog. Much has been written about the value of dogs, and much more will likely be written, and after you have read it all you won't know any more about how much your dog is worth than you did before. But if you have a good faithful dog and he doesn't chase chickens or kill sheep, you would better pay the tax and keep him. Every boy ought to own a good dog. There are many things he can learn from a faithful dog, which will make him a better man when he grows older.—Asst. Legal Editor.

ASSESSING BANK STOCK

I have a few share of bank stock of a bank in a nearby village, but I live in a township located in an adjoining county. Is this stock assessable in the village where bank is located or in the township where I live?—R. A., Lakeview, Mich.

—Sub-division 3 of Section 4008 of the Compiled Laws of 1915 is as follows: "All shares in banks shall be assessed to their owners in the township, village or city where the bank is located: Provided, That the shares owned by a person residing in the county where the bank is located shall be assessed in the township or city where he resides." If you reside in another county from that in which the bank is located, it is clear that your stock should be assessed in the village in which the bank is located.—Clare Retan, Deputy Attorney General.

ARE BUYERS GIVING A FAIR TEST?

Will you please inform, if in your opinion, a price of 64c can be paid for butter fat, together with 1½c hauling, a total of 65½c, when New York extras quoted at 54c and given an honest test? In other words, would not a 65½c price on a 54c market indicate a condition quite out of the ordinary? Frankly we believe this situation means that something is being taken out of the test to admit this price.—F. A., Sears, Mich.

—The question as to whether a creamery can pay 65½ cents for butterfat depends entirely upon what price he is selling his butter. I don't know as the price he pays for butterfat necessarily has to be based upon what New York extras are worth. This is generally true but we happen to know of several creameries that are getting a much better price than New York extras for their butter. I know of one creamery that has sold butter at 50c a pound and has paid the patrons better than 60c a pound for butterfat, but they had a big volume of business and their overhead was very low.

In the instance that you mentioned here, if a creamery is making 40,000 pounds of butter a month and paying 65c for their butterfat and selling their butter at 54c, they will get approximately $800 more for their butter than they will pay for their butterfat. In a small creamery this will take care of the overhead, but if they didn't have this volume this margin would be very close.

But answering your question to the point, will say that we would have to know what the creamery in question is obtaining for their butter before we could tell what their spread was between their buying and selling price. But even on the figures that you have given here we would hesitate very much and think any one should hesitate to say that the buyers are not giving an honest test.—Prof. O. E. Reed, M. A. C.

MICHIGAN CROPS

GOING TO SOW SOY BEANS

I would like to sow some soybeans, some with corn and some broadcast. How many should I sow and when? What is their average yield? Also price? When sowing alfalfa on light sand should I sow with or without nurse crops?—M. A., Minden City, Mich.

—When planting soybeans with corn it is usual to plant six quarts per acre with six or eight quarts of corn. Soys should be planted through a special soybean planting attachment on drill, if corn is drilled. When planting soys broadcast, from two to three bushels per acre should be used.

In southern or central Michigan the Manchu soys are advisable, and in northern Michigan, the Early Blacks. Planting should be made from the middle of May to mid-June. May plantings give best results.

Present prices on soybean seed are as follows: Certified—1 to 10 bushels—$3.50; Certified—10 bushels and over—$3.25.

When planted with corn, soybeans usually increase the yield by one-half ton to one ton of green material. The average yield of hay from soys broadcasted ranges from two and one-half to three tons of air dry hay.

When sowing alfalfa on sandy land, it is usually advisable to use a companion crop in order to prevent injury as a result of blowing. Buckwheat, planted at the rate of one or two pecks per acre, or barley at the rate of three pecks, furnishes excellent nurse crops for spring planted alfalfa on light soils.—J. F. Cox, Professor of Farm Crops, Mich. Agricultural College.

SHREDDED CORN FODDER SWEATS

I would like to know what to do wih my shredded corn fodder. Was shredded a week ago. This A. M. I discovered it was getting hot. It is about 15 feet deep in the center. Have not much chance or room to turn it over. Would like to save it with as least work or trouble as possible, as I am alone with three small children.—Mrs. McC., Breedsville, Mich.

—Corn fodder when first shredded usually goes through a sweat and heats. If the fodder was reasonably dry when shredded, it is not likely that it will heat sufficiently to cause decomposition. On the other hand, if it was quite wet, it will become hot and decompose.—C. R. Megee, Assoc. Prof. of Farm Crops, M. A. C.

Oh Money! Money!

by ELEANOR H PORTER

THE STORY TO DATE

MR. STANLEY G. FULTON, 50-year old bachelor and possessor of twenty million dollars, calls on his lawyer and they discuss the disposition of this large fortune after its owner's death. The lawyer is in favor of giving the money to colleges or charities while Fulton is opposed to these ideas. He remembers that he has some distant cousins and decides to leave the money to one of them, but first he determines to learn which one will use it to the best advantage. To find out who is the worthy one he, through his lawyer, gives, each cousin $100 000 to use as they will. Before giving them the money grows a beard and, using the name of Mr. John Smith, goes to the town where they live to find out what kind of people they are. Upon arriving in town he visits James Blaisdell, one of the cousins, where he tries to hire board and lodging. While there he meets Miss Flora Blaisdell, another cousin who is a dressmaker. They decide they cannot rent a room to him and supply him board and refer him to Frank Blaisdell's, the third cousin. He gets a room there and, passing as a writer gathering material for a book on the Blaisdell family in this country, he starts out. He calls on all of the Blaisdells and as they all talk of a relative by the name of Miss Maggie Duff he decides to call on the lady. He finds her living with her father, an old man who seems to have soured on the world. He secures what information he can from her and her father. He then writes a letter to his lawyer discussing the various relatives he has met. The members of the Blaisdell family that each cousin of Stanley G. Fulton has fallen heir to $100,000 and there is much excitement.

(Continued from January 5th issue)

"FOR shame, Bessie!" spoke up Miss Flora, with unusual sharpness for her. "I think your mother is just right. I'm sure the least we can do in return for this wonderful gift is to show our respect and appreciation by going into the very deepest black we can I'm sure I'd be glad to."

"Wait!" Mrs. Harriet had drawn her brows together in deep thought. "I'm not sure, after all, that it would be best. The letter did not say that dear Cousin Stanley had died—he just hadn't been heard from. In that case, I don't think we ought to do it. And it would be too bad—that Gaylord dance is going to be the biggest thing of the season, and of course if we were in black—No; no the whole, I think we won't, Bessie. Of course, in two years from now, when we get the rest, it will be different."

"When you—what?" It was a rather startled question from Mr. Smith.

"Oh, didn't you know? There's another letter to be opened in two years from now, disposing of the rest of the property. And he was worth millions, you know, millions!"

"But maybe he—er—Did it say you were to—to get those millions then?"

"Oh, no, it didn't say it, Mr. Smith." Mrs. Harriet Blaisdell's smile was a bit condescending. "But of course we will. We are his kinsmen. He said we were. He just didn't give it all now because he wanted to give himself two more years to come back in, I suppose. You know he's gone exploring. And, of course, if he hadn't come back by then, he would be dead. Then we'd get it all. Oh, yes, we shall get it, I'm sure."

"Oh-h!" Mr. Smith settled back in his chair. He looked somewhat nonplused.

"Humph! Well, I wouldn't spend them millions—till I'd got 'em, Hattie," advised her brother-in-law dryly.

"I wasn't intending to, Frank," she retorted with some dignity. "But that's neither here or there. What we're concerned with now is what to do with what we have got. Even this will make a tremendous sensation in Hillerton. It ought to be written up, of course, for the papers, and by some one who knows. We want it done just right. Why, Frank, do you realize? We shall be rich—rich—and all in a flash like this! I wonder what the Pennocks will say now about Mellicent's not having money enough for that precious son of theirs! Oh, I can hardly believe it yet. And it'll mean—everything to us. Think what we can do for the children. Think—"

"Aunt Jane, Aunt Jane, is ma here?" Wide open banged the front door as Benny bounded down the hall. "Oh, here you are! Say, is it true? Tommy Hooker says our great-grandfather in Africa has died an' left us a million dollars, an' that we're richer 'n Mr. Pennock or even the Gaylords, or anybody! Is it true? Is it?"

His mother laughed indulgently.

"Not quite, Benny, though we have been left a nice little fortune by your cousin, Stanley G. Fulton. And it wasn't Africa, it was South America."

"And did you all get some, too?" panted Benny, looking eagerly about him.

"We sure did," nodded his Uncle Frank, "all but poor Mr. Smith here. I guess Mr. Stanley G. Fulton didn't know he was a cousin, too," he joked, with a wink in Mr. Smith's direction.

"But where's Aunt Maggie? Why ain't she here? She got some, too, didn't she?" Benny began to look anxious.

His mother lifted her eyebrows.

"No. You forget, my dear. Your Aunt Maggie is not a Blaisdell at all. She's a Duff—a very different family."

"I don't care, she's just as good as a Blaisdell," cut in Mellicent; "and she seems like one of us, anyway."

"And she didn't get anything?" bemoaned Benny. "Say," he turned valiantly to Mr. Smith, "shouldn't you think he might have given Aunt Maggiie a little of that money?"

"I should, indeed!" Mr. Smith spoke with peculiar emphasis.

"I guess he would if he'd known her!"

"I'm sure he would!" Once more the peculiar earnestness vibrated through Mr. Smith's voice.

"But now he's dead, an' he can't. I guess if he could see Aunt Maggie he'd wish he hadn't died 'fore he could fix her up just as good as the rest."

"I'm very sure he would!" Mr Smith was laughing now, but his voice was just as emphatic, and there was a sudden flame of color in his face.

"Your Cousin Stanley isn t dead, my dear,—that is, we are not sure he is dead, spoke up Benny's mother quickly. "He just has not been heard from for six months."

"But he must be dead, or he'd have come back," reasoned Miss Flora, with worried eyes; "and I, for my part, think we ought to go into mourning, too."

"Of course he'd have come back," declared Mrs. Jane, "and kept the money himself. Don't you suppose he knew what he'd written in that letter, and don't you suppose he'd have saved those three hundred thousand dollars if he could? Well, I guess he would! The man is dead. That's certain enough."

Well, anyhow, we're not going into morning till we have to." Mrs. Harriett's lips snapped together with firm decision.

"Of course not, I'm sure I don't see any use in having the money if we've got to wear black and not go anywhere," pouted Bessie.

"Are we rich, then, really, ma?" demanded Benny.

"We certainly are, Benny."

"Richer than the Pennocks?"

"Very much."

"An' the Gaylords?"

"Well—hardly that"—her face clouded perceptibly— "that is, not until we get the rest—in two years." She brightened again.

"Then, if we're rich we can have everything we want can't we?" Benny's eyes were beginning to sparkle.

"Well—" hesitated his mother.

"I guess there'll be enough to satisfy your wants, Benny," laughed his Uncle Frank.

Benny gave a whoop of delight.

"Then we can go back to the East Side and live just as we've a mind to, without carin' what other folks do, can't we?" he crowed. "'Cause if we are rich we won't have ter keep tryin' ter make folks think we are. They'll know it without our tryin' "

"Benny!" The rest were laughing; but Benny's mother had raised shocked hands of protest. "You are incorrigible, child. The East Side, indeed! We shall live in a house of our own, now, of course—but it won't be on the East Side."

"And Fred'll go to college," put in Miss Flora eagerly.

"Yes; and I shall send Bessie to a fashionable finishing school," bowed Mrs. Harriett, with a shade of importance.

"Hey, Bess, you've got to be finished," chuckled Benny.

"What's Mell going to do?" pouted Bessie, looking not altogether pleased. "Hasn't she got to be finished, too?"

"Oh, I don't know what I'm going to do," breathed Mellicent, drawing an ecstatic sigh. "But I hope I'm going to do just what I want for once!"

"And I'll make you some pretty dresses that you can wear right off, while they're in style," beamed Miss Flora.

"But what are you going to do, Flo? Here you've been telling what everybody else is going to do with the money."

A blissful sigh, very like Mellicent's own, passed Miss Flora's lips.

"Oh, I don't know," she breathed in an awe-struck voice. "It don't seem yet—that it's really mine."

"Well, 't isn't," declared Mrs. Jane tartly, getting to her feet. "And I, for one, am going back to work—in the kitchen, where I belong. And—Well, if here ain't Jim at last," she broke off, as her younger brother-in-law appeared in the doorway.

"You're too late, pa, you're too late! It's all done," clamored Benny. "They've got everything all settled."

The man in the doorwoy smiled.

"I knew they would have, Benny; and I haven't been needed, I'm sure—your mother's here."

Mrs. Harriet bridled, but did not look unpleased.

"But, say, Jim," breathed Miss Flora, "ain't it wonderful—ain't it perfectly wonderful?"

"It is indeed,—very wonderful," replied Mr. Jim.

A Babel of eager voices arose then, but Mr. Smith was not listening now. He was watching Mr. Jim's face, and trying to fathom its expression.

A little later, when the women had gone into the kitchen and Mr. Frank had clattered back to his work downstairs, Mr. Smith thought he had the explanation of that look on Jim's face. Mr. Jim and Benny were standing over by the fireplace together.

"Pa, ain't you glad—about the money?" asked Benny.

"I should be, shouldn't I, my son?"

"But you look—so funny, and you didn't say anything, hardly."

There was a moment's pause. The man, with his eyes fixed on the glowing coals in the grate, appeared not to have heard. But in a moment he said:—

"Benny, if a poor old horse had been climbing a long, long hill all day with the hot sun on his back, and a load that dragged and dragged at his heels, and if he couldn't see a thing but the dust of the road that blinded and choked him, and if he felt as if he couldn't go another step, in spite of the whip that snapped 'Get there—get there!' all day in his ears—how do you suppose that poor old horse would feel if suddenly the load, and the whip, and the hill, and the dust disappeared, and he found himself in a green pasture with the cool gurgle of water under green trees in his ears—how do you suppose that poor horse would feel?"

"Say, he'd like it great, wouldn't he? But pa, you didn't tell me if you liked the money."

The man stirred, as if waking from a trance. He threw his arm around Benny's shoulders.

"Like it? Why, of course, I like it, Benny, my boy! Why, I'm going to have time now—to get acquainted with my children!"

Across the room Mr. Smith, with a sudden tightening of his throat, slipped softly into the hall and thence to his own room. Mr. Smith just then, did not wish to be seen.

CHAPTER X

What Does It Matter?

The days immediately following the receipt of those three remarkable letters by the Blaisdell family were nerve-racking for all concerned. Held by Mrs. Jane's insistence that they weren't sure yet that the thing was true, the family steadfastly refused to give out any definite information. Even the eager Harriet yielded to Jane on this point, acknowledging that it would be mortifying, of course, if they should talk, and nothing came of it.

Their enigmatic answers to questions, and their expressive shrugs and smiles, however, were almost as exciting as the rumors themselves; and the Blaisdells became at once a veritable storm center of surmises and gossip—a state of affairs not at all unpleasing to some of them, Harriet in particular.

Miss Maggie Duff, however, was not so well pleased. To Mr. Smith, one day, she freed her mind—and Miss Maggie so seldom freed her mind that Mr. Smith was not a little surprised.

"I wish," she began, "I do wish that if that Chicago lawyer is coming, he'd come and get done with it! Certainly the present state of affairs is almost unbearable."

"It does make it all the harder for you, to have it drag along like this, doesn't it?" murmured Mr. Smith uneasily.

"For—me?"

"That you are not included in the bequest, I mean."

She gave an impatient gesture.

"I didn't mean that. I wasn't thinking of myself. Besides, as I've told you before, there is no earthly reason why I should have been included. It's the delay, I mean, for the Blaisdell's—for the whole town, for that matter. This eternal 'Did you know?' and 'They say' is getting on my nerves!"

"Why, Miss Maggie, I didn't suppose you had any nerves," bantered the man.

She threw him an expressive glance.

"Haven't I!" she retorted. Then again she gave the impatient gesture. "But even the gossip and the questioning aren't the worst. It's the family themselves. Between Hattie's pulling one way and Jane the other, I feel like a bone between two quarrelsome puppies. Hattie is already house-hunting, on the sly, and she's bought Bessie an expensive watch and a string of gold beads. Jane, on the other hand, insists that Mr. Fulton will come back and claim the money, so she's running her house now on the principle that she's lost a hundred thousand dollars, and so must economize in every possible way. You can imagine it!"

"I don't have to—imagine it," murmured the man. Miss Maggie laughed.

"I forgot. Of course you don't. You do live there don't you? But that isn't all. Flora, poor soul, went into a restaurant the other day and ordered roast turkey, and now she's worrying for fear the money won't come and justify her extravagance. Mellicent, with implicit faith that the hundred thousand is coming, wants to wear her best frocks every day. And, as if she were not already quite excited enough, young Pennock has very obviously begun to sit up and take notice."

"You don't mean he is trying to come back—so soon!" disbelieved Mr. Smith.

"Well, he's evidently caught the glitter of the gold from afar," smiled Miss Maggie. "At all events, he's taking notice."

And—Miss Mellicent?" There was a note of anxiety in Mr. Smith's voice.

"Doesn't see him, apparently. But she comes and tells me his every last move! (and he's making quite a number of them just now!), so I think she does see—a little."

"The young rascal! But she doesn't—care?"

"I think not—really. She's just excited now, as any young girl would be; and I'm afraid she's taking a little wicked pleasure in—not seeing him."

"Humph! I can imagine it," chuckled Mr. Smith.

"But it's all bad—this delay," chafed Miss Maggie again. "Don't you see? It's neither one thing nor another. That's why I do wish that lawyer would come, if he's coming."

"I reckon he'll be here before long," murmured Mr. Smith, with an elaborately casual air. "But—I wish you were coming in on the deal." His kindly eyes were gazing straight into her face now.

She shook her head.

"I'm a Duff, not a Blaisdell—except when they want—" She bit her lip. A confused red suffused her face. "I mean, I'm not a Blaisdell at all," she finished hastily.

"Humph! That's exactly it!" Mr. Smith was sitting energetically erect. "You're not a Blaisdell—except when they want something of you!"

"Oh, please, I didn't mean to say—I didn't say—that," cried Miss Maggie, in very genuine distress.

"No, I know you didn't, but I did," flared the man. "Miss Maggie, it's a downright shame—the way they impose on you sometimes."

"Nonsense! I like to have them—I mean. I like to do what I can for them," she corrected hastily, laughing in spite of herself.

"You like to get all tired out, I suppose."

"I get rested—afterwards."

"And it doesn't matter, anyway, of course," he gibed.

"Not a bit," she smiled.

"Yes, I suspected that." Mr. Smith was still sitting erect, still speaking with grim terseness. "But let me tell you right here and now that I don't approve of the doctrine of yours."

" 'Doctrine.'?"

"That 'It-does-n't-matter' doctrine of yours." I tell you it's very pernicious—very! I don't approve of it at all."

There was a moment's silence.

"No?" Miss Maggie said then, demurely. "Oh, well—it doesn't matter—if you don't."

He caught the twinkle in her eyes and threw up his hands desparingly.

"You are incorrigibie!"

With a sudden businesslike air of determination Miss Maggie faced him.

"Just what is the matter with that doctrine, please, and what do you mean?" she smiled.

"I mean that things do matter, and that we merely shut our eyes to the real facts in the case when we say that they don't. War, death, sin, evil—the world is full of them, and they do matter."

(Continued in February 2 issue.)

MAPLE-SUGAR MAKERS, DO YOUR TAPPING EARLY

MAKERS of maple sugar have lost half and even more of their crops many seasons by not being prepared for the first runs, says the United States Department of Agriculture. It is a good policy to tap early in the season, not only in order to obtain the earlier runs of sap but also because these early runs are generally the sweetest and therefore the best sugar producers.

All sugar makers are familiar with "sugar weather." In general, the season is ready to open during the middle or last part of February in the southern sections and later in the northern ones, when the days are becoming warm, the temperature going above 32 degrees F., and the nights are still frosty. If the days are very bright, warm, and sunny, the sap starts with a rush, but soon slackens. A high wind, warm spell, or a heavy freeze checks the flow, but the return of seasonable weather causes it to start again.

Records of opening and closing dates kept in an Ohio sugar camp show the opening season as early as February 13 in 1891 and 1906. The latest opening date recorded was March 27 in 1885. The number of days of flow varied from 9 to 50, the average being about 30 days.

All Bargain Prices Smashed in this Greatest January Clearance Sale

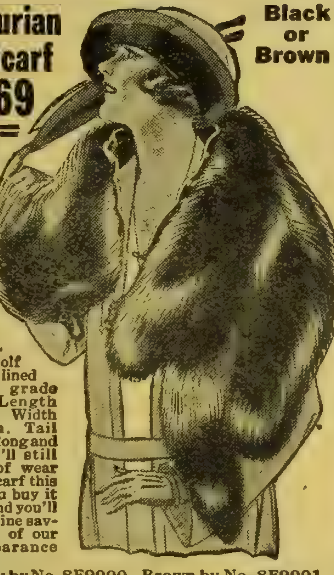
Save Big Money Now by ordering everything you need during this January Clearance—the Most Daring Sale ever attempted by any concern, anywhere! Sharood has knocked the very bottom out of prices—everything sacrificed to make room for the incoming spring stocks. Here is the very cream of bargains in things to wear right now—guaranteed the biggest values in America today! Order on approval and judge for yourself.

Satisfaction Guaranteed or Money Back

Merely give name and number of each article you want. Also state size, and write your name and address plainly to avoid delay. Send only the amazing bargain price and few cents postage mentioned in each description. When goods arrive, examine them carefully. If not delighted with your bargains, return goods and we refund your money instantly. Order Now—Today! Shipment positively goes forward within 24 hours of time we receive your order.

Manchurian Wolf Scarf $3.69

Black or Brown



Rare Value

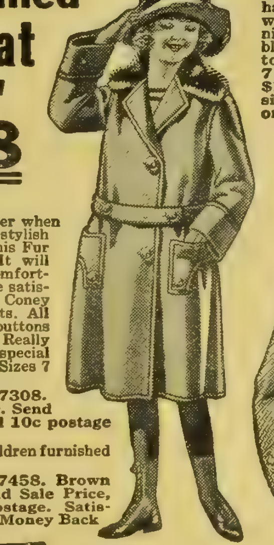
Luxurious in appearance, yet very economical in price is this soft, warm Manchurian Wolf Scarf. It's lined with high grade messaline. Length about 44 in. Width about 12 in. Tail about 13 in., long and bushy. You'll still get plenty of wear out of this scarf this season if you buy it right now, and you'll make a genuine saving because of our special Clearance Sale Price.

Order Black by No. 8F9000. Brown by No. 8F9001. Send Sale Price, $3.69, and 6c for postage. Satisfaction Guaranteed or Money Back Instantly.

Fur Trimmed Polo Coat

For Girls and Children

$3.98



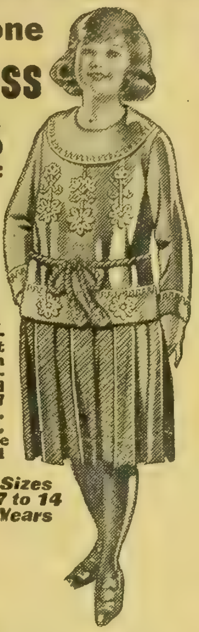
You'll be a happy mother when you see how smart and stylish your little girl looks in this Fur Trimmed Polo Coat. It will keep her warm and comfortable, and positively give satisfaction. Collar of warm Coney Fur. Two novelty pockets. All around belt. Novelty buttons trim pockets and belt. Really an amazing value at our special Clearance Sale Price. Sizes 7 to 14 years. State size.

Order Navy by No. 5F7308. Brown by No. 5F7310. Send Sale Price, $3.98,,and 10c postage for either color.

Same quality coat for children furnished in sizes 2 to 6 years.

Order Navy by No. 5F7458. Brown by No. 5F7460. Send Sale Price, $2.98, and 10c for postage. Satisfaction Guaranteed or Money Back Instantly.

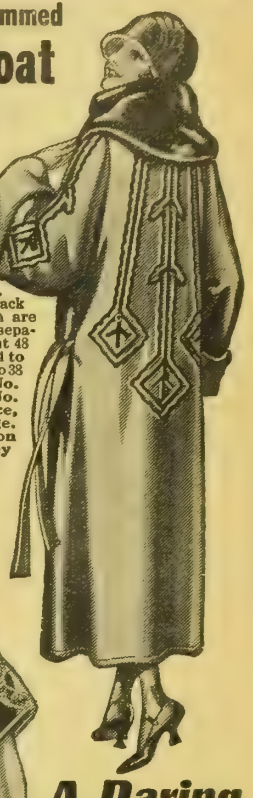
Child's Two-Tone Middy Dress $1.98



One of the biggest bargains in children's dresses ever offered. Warm, serviceable, and pretty 2-piece Middy style with smart Balkan blouse, of all red Flannel cotton warp, and blue Serge skirt. Blouse has round collar and cuffs. Front, collar, cuffs, and Balkan bottom embroidered in contrasting colors. Rope girdle with tassels at waist. Skirt hangs in clustered plaits from white muslin underwaist. Furnished only with red blouse and blue skirt combination. Sizes 7 to 14 years. Order by No. 7F8326. Send Sale Price, $1.98, and 5c for postage. State size. Satisfaction Guaranteed or Money Back Instantly.

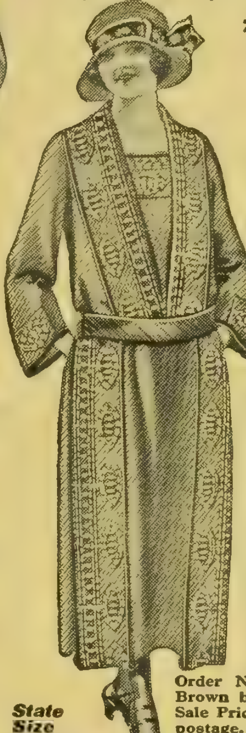
Sizes 7 to 14 Years

Side-Tie Fur Trimmed Velour Coat $9.98



Designed along the season's newest lines. Excellently made of serviceable Wool Mixed Velour with Genuine Brown Coney Fur Snawl collar. Excellent twill lining. Embroidery adorns the back and also sleeves, which are stylishly fashioned, with separate cuffs. Length about 48 inches. Women's sizes 34 to 44 bust. Misses' sizes 32 to 38 bust. Order Brown by No. 5F7130. Navy by No. 5F7132. Send Sale Price, $9.98, and 16c postage. State size. Satisfaction Guaranteed or Money Back.

Embroidered Gabardine for Stout Women $3.98

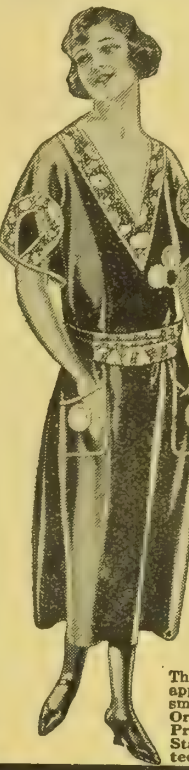


You'll hardly believe your mirror when you try on this excellent quality Embroidered Gabardine dress, and see the trim, slender, smart appearance you've attained. A dress guaranteed to give long, satisfactory wear. Skirt is finished with two wide, loose panels attached at waist and bottom. Edges bound in black, and embroidered in contrasting color. New long roll shawl effect collar, vestee, and latest bell shaped sleeves all embroidered to harmonize with skirt panels. Slightly shirred at waistline in back. Sizes 44 to 54 bust measure. State size and length.

Order Navy by No. 5F7610. Brown by No. 5F7612. Send Sale Price, $3.98, and 13c for postage. Satisfaction Guaranteed or Money Back Instantly.

State Size Wanted

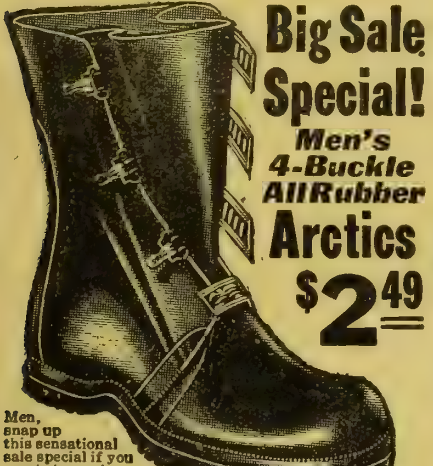
A Daring Bargain! Rich Sateen Dress Apron $1.49



You can't buy this attractive dress apron anywhere else in the U. S. for anywhere near this low price—quality considered. Made of splendid quality Black Twill Sateen. The graceful V-neck, sleeves, and belt are prettily trimmed with gay colored cretonne. The pockets are finished with crepe applique edged with piping. Sizes, small, medium and large.

Order No. 7F6001. Send Sale Price, $1.49, and 5c for postage. State size. Satisfaction Guaranteed or Your Money Back.

Big Sale Special! Men's 4-Buckle All Rubber Arctics $2.49

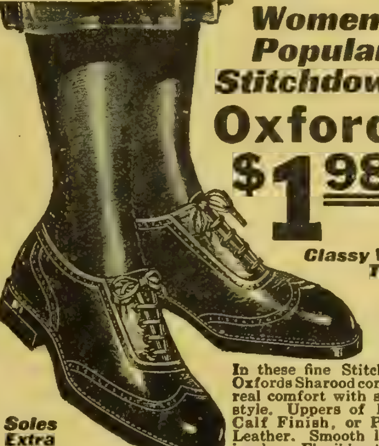


Men, snap up this sensational sale special if you want to make a real saving! Guaranteed best quality All Rubber hi-cut 4-buckle arctic, built for real wear. Double thick soles and reinforced seams. Snow excluding tongue. Sizes 6 to 15. Wide widths. Buy now, while the big Sale is on!

Order by No. 1F990. Send Sale Price, $2.49, and 12c for postage. Satisfaction Guaranteed or Money Back Instantly.

Women's Popular Stitchdown Oxfords $1.98

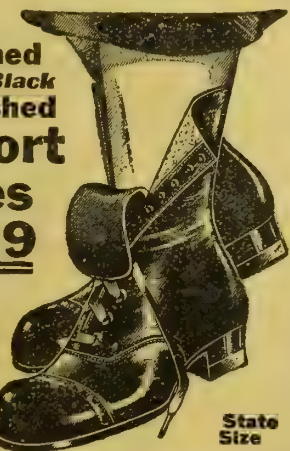
Classy Wing Tip



Soles Extra Flexible

In these fine Stitchdown Oxfords Sharood combines real comfort with snappy style. Uppers of Brown Calf Finish, or Patent Leather. Smooth leather insoles. Flexible stitched down oak outsoles. Low springy rubber heels. A rare opportunity to save real money. Sizes 2½ to 8. Wide widths. Order Brown by No. 9F273. Send Sale Price, $1.98, and 8c for postage. Order Patent Leather by No. 9F274. Send Sale Price, $2.48, and 8c for postage. State size. Satisfaction Guaranteed or Money Back Instantly.

Women's Fleece Lined Extra Soft Black Kid Finished Comfort Shoes $2.29



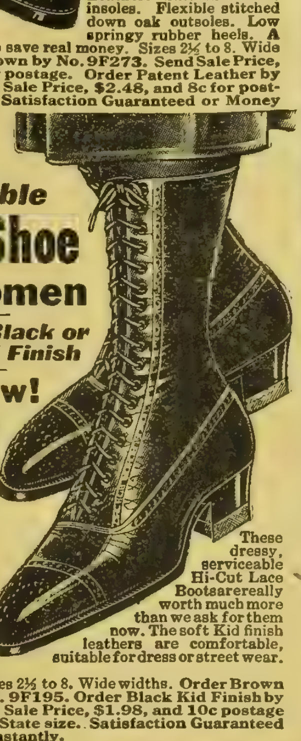
There's real comfort for your feet in these splendid shoes, and real comfort for your purse in our special January Clearance Sale price. Uppers of soft, pliable Kid finished leather; heavy fleece lining that keeps feet warm in coldest weather. Excellent natural oak leather soles; low rubber heels. Comfortable roomy last that is also very dressy. Women's sizes 3 to 9. Wide widths. Order No. 9F880. Send Sale Price, $2.29, and 10c for postage. State size. Satisfaction guaranteed or money back instantly.

State Size

Good Looking, Serviceable Dress Shoe for Women

Choice of Black or Brown Kid Finish

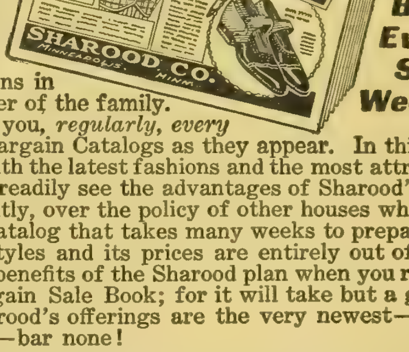
Buy Now! $1.98



Made of Black or Brown Kid Finish Leather. Fancy perforated stitched tip with medallion on toe; neat perforations at vamp and lace row. Medium extension oak sole with walking height heel, rubber tipped. Sizes 2½ to 8. Wide widths. Order Brown Kid Finish by No. 9F195. Order Black Kid Finish by No. 9F194. Send Sale Price, $1.98, and 10c postage for either color. State size. Satisfaction Guaranteed or Money Back Instantly.

These dressy, serviceable Hi-Cut Lace Boots are really worth much more than we ask for them now. The soft Kid finish leathers are comfortable, suitable for dress or street wear.

FREE Mid-winter Bargain Sale Book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Federal Land Bank Bonds yield a regular income, payable twice a year. Price and interest rate on request.

Federal Land Bank Bonds may be had in denominations to fit your bank account: $40, $100, $500, $1,000, $5,000 and $10,000. Your choice of coupon or registered form, delivered by registered mail. Correspondence confidential. Remember, the words "The Federal Land Bank" appear at the top of every bond issued by a Federal Land Bank.

Should you desire a Federal Farm Loan, apply to the Secretary-Treasurer of the nearest National Farm Loan Association. Your County Agent can give his name and address.

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Write today for free pamphlet, "Getting Together To Get Ahead." Address the nearest Federal Land Bank or the Fiscal Agent at Washington, D. C. Support your only national cooperative lending and investing system, by putting your surplus funds into Federal Land Bank Bonds.

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What the Neighbors Say

REGULATING SPEED OF AUTOS

EDITOR of the Business Farmer: Why is it that so often the simplest questions considered by the public or our representatives are made the hardest? It is most always caused by the interests of some privileged class. The question of how to regulate the speed of automobiles has been chewed and chawed for years by the public and lawmakers and laws have been passed for that purpose but all attempts have been a total failure. Now, let us lay aside all desire to favor any particular class and by so doing we find the remedy very simple and that is by imposing a reasonable fine for the first offense of violating the speed limit, for the second offense take away their driving license for six months; for the third offense disqualify them for driving any kind of a motor vehicle for the balance of their life and for violating the latter ten or fifteen years imprisonment. This would be fair to all and special privileges to none. Each one would decide his own fate and the public would be much safer and would soon see a great reduction in lives lost and the hospital bills. Excepting the speeder I would like to know who would object to such a system. Years ago we tried to prohibit saloons by high license which favored the man that had the price. We have had the same experience with the automobile.

With the experience we are having trying to regulate the speed of automobiles I think it is time that we applied something more effective. Therefore, I have submitted the above remedy and believe it might be a benefit to the public.—E. R., Greenville, Mich.

MORE ON RECORDING LAND TRANSFERS

IN a recent issue the Caro party says he does not like the present system of recording land transfers. I have never talked to a practical farmer that did! When J. W. Helme was a legislator he tried hard to have a state-wide system of land registry adopted by general law, along the line of "state guaranteed land titles" much in use in other states and Ontario—optional with interested owners whether or not used. What happened? Every abstract clerk and most of the registrars with their whole office force, half the real estate men, all the tax title beneficiaries in the state, took issue with the claimed advantages in the bill, caused its defeat and have ever since taken a fling at Mr. Helme.

Since, a Mr. King of Escanaba proposed a change by the indexed register route, so simple that a grader from High School could drop in the Register of Deeds' office and tell the parents what was to be found on such a page, of such a date, of the property they had need of knowing, just a matter of public history,—a text-book, if you please. What was the result? He fared the same as Mr. Helme before him, and the same afterward! He has had no friends among abstractors.

In another issue of THE BUSINESS FARMER, a Michigan man complains of our line fence law, the issue being "The obligation of a non-stock-grower, a non-poultry-raiser is under to maintain half a division fence," when said owner cannot possibly benefit. This is a very natural feeling just now when fence material is so costly and so perishable, (light wire and thick sap posts lasting but 12 years here) every person in the state with like experience can so testify with sympathy. Our general laws are the cause of this injustice—a state wide law used to govern owners of real estate where a local act should be used. The reason for this backward condition of government of Michigan is largely owing to our extreme conservatism. We regularly elect politicians holding fast to tradition of the past even as far back as the Constitution of 1854 (see Supreme Court decision regarding counties legal right to establish land title registry — the case was Wayne County). Don't attempt anything new is the slogan of the would-be legislator! And he is the party elected nine times out of ten.

Case after case in all courts decided every term convinces us that the Constitution of 1909 and the Judicature Act of 1915 are out of date with modern system of earning—"Wresting a living from the miserly grasp of the soil."

If there are any practical, wisely progressive men and women still owning and earning a good living from farm and orchard land in Michigan (the other class of farmers are always radical or progressive) to such do I appeal for a remedy, offering a few suggestions:

Amend the Constitution, where it conflicts with progress, to-wit: We write our franchise act in Constitution, why not write our primary and registration act as well in basic law! Require prospective electors from other states to register with precinct clerk, giving full particulars and taking a transcript of same to be produced wherever they desire to vote one year afterward, instead of six months; this measure would greatly aid police. Provide for a public service draft law instead of a nominating petition. The party of first choice to qualify under his party choice within a specified time, or automatically leave the name in column first at left of ticket,—all to be done at spring election. No separate primary! Leave the necessary elimination to the party or parties listed. Provide for a larger township unit for governing locally by consolidating two or more townships of like topography and habit of farming with more power to enact by-laws than now. Provide for a vote of interest on petition for public work having for its object special or frontage taxes for benefit. Provide official ballot at all school meetings with voters registered by director at taking census thirty days prior to annual school meeting with but two classes of voters eligible: those with children and those with property assessed. Also official ballot at Township primary for nomination; after the annual report of the Township is read instead of before, as now. Give local boards of review more consideration in determining what is land value for taxing purposes, and eliminate state tax from agricultural and forest lands.

You now have specific tax on canines,—an honest tax! Why not on all animals including fur-bearers? This would be a boon to assessors and Boards of Review. If you would save the roads, tax the tires instead of the gas! If you would save the woods don't tax them—tax the second growth logs at the licensed sawmill.

A good dispensary law would beat our present beverage control,—it might put the bootlegger out of business with legal competition and take the money into the public till. We have not stopped effectually the consumption of alcohol—just changed the vendors, taken them from behind the screen and placed them behind the bush near the road.—E. R., Port Hope., Mich.

True Chivalry

The genius of a certain Arkansas editor showed itself recently when he printed the following news item in the local column of his paper:

"Miss Beulah Blank, a Batesville belle of twenty summers, is visiting her twin brother, age thirty-two."—Arkansas Taxpayer.

Lawless Proceeding

The teacher was giving the class a lecture on "gravity."

"Now, children," she said, "it is the law of gravity that keeps us on earth."

"But please, teacher," inquired one small child, "how did we stick on before the law was passed?"—The Tattler (London).

Also Like a Fish

Bella—"Dick's awfully poetical. When I accepted him he said he felt like an immigrant entering a strange country."

Donna—"Well, so he was!"

Bella—"An immigrant, why?"

Donna—"Wasn't he just 'landed?' "—London Mail.

The Easy Sex

"I wonder why it is a girl can't catch a ball like a man."

"Oh, a man is so much bigger and easier to catch."—Baseball Magazine.

MICHIGAN RANKS HIGH AMONG STATES IN PRODUCTION

THE various crops, not including live stock or live stock products, produced in Michigan during 1923 have a total estimated value of $242,472,000, as compared with $214,899,000 in 1922, and $183,685,000 in 1921. This represents a gain of nearly 13 per cent over 1922 and 30 per cent over 1921. The valuations were computed on the basis of the December 1 price except for such fruits as were out of season. In those cases the price was that received in the marketing season. Wheat, barley, rye and beans commander lower prices on December 1 than on the same date in 1922, all other crops showing a higher price. Corn, oats, hay, beans and apples brought a larger total monetary return than in 1922, and winter wheat, corn, buckwheat, potatoes and hay returned a larger value per acre than in 1922. These larger returns were mainly due to better prices rather than larger yields as only winter wheat, barley, beans and apples showed a greater production, as shown by the annual report prepared by L. Whitney Watkins, State Commissioner of Agriculture and Verne H. Church, U. S. Agricultural Statistician.

Notwithstanding this apparent improvement in the general agricultural situation, Michigan farmers were compelled to pay approximately 20 per cent higher wages for their hired labor than in 1922. On October 15, the average farm price for crops and live stock was 21 per cent higher than in 1913, but the wholesale cost of all commodities was 53 per cent higher than in 1913. Therefore, the purchasing power of farm products on that date was only 75 per cent of that in 1913. This is seven per cent higher than it was at the beginning of 1923 and 11 per cent higher than the lowest point, which was touched in August and September, 1922. The trend being upward, conditions may be said to be improving but the increase has been discouragingly slow especially to those farmers having heavy financial obligations. The farmers that secured better than average yields generally realized a little profit this year, but practically all whose yields fell below the average received no adequate return for their labor and investment, and many suffered a direct cash loss.

The spring was backward and the planting of early crops thereby delayed. A heavy snow covering over the northern half of the State delayed the arrival of warm weather. Freezing temperatures occurred on several dates during May. However, extremely warm weather in June hastened growth and nearly all crops attained a normal development by the middle of July. The low temperatures in May did some injury to fruit in the southwestern counties where a portion of it was in bloom at the time, but practically no harm was done elsewhere in the State and there was a good crop of nearly all kinds of fruit. The season was unfavorable for the development of fungous diseases, and all fruit and roots crops were unusually free from them. Drought was particularly severe in Mason and adjacent counties during July and August, causing considerable damage to crops in that region and lesser injury in other localities. Good rains in September helped late crops, and the absence of a general frost until October permitted practically all crops to mature well. The fall was mild and pleasant which enabled farmers to complete the harvesting of crops and to do more than the usual amount of plowing for next year's planting.

For 1923, the State ranked 17th among the states in the production of all crops. Last year it held 22nd place although it usually holds 18th place.

Vanishing Ancestor

"How far do they trace their ancestry?"

"The grandfather, a City Bank Director, was traced as far as China; there all traces were lost."—London Opinion.

Ins and Outs

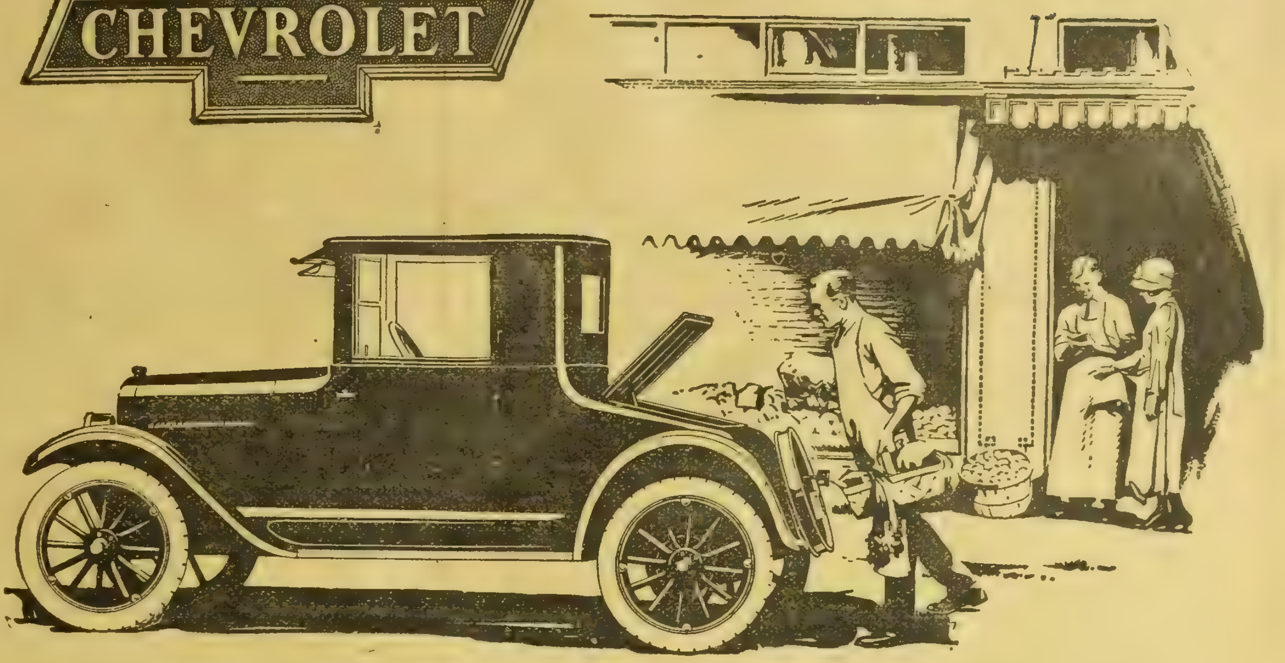
A taxi-driver recently got the worst of a wordy bout.

An old man with a wheelbarrow would not get out of the way, and the taximan shouted: "You ought to be wheeling a pram!"

"And you ought to be in it," replied the old man."—Brisbane Mail.

for Economical Transportation

CHEVROLET



The Economical Quality Car

When low priced cars came on the market, PRICE was the magnet that drew buyers because low price made automobiles possible for millions hitherto debarred from the advantages of motor transportation.

Time and experience have developed the fact that purchase price—although an important factor—must always be considered in connection with operating and maintenance costs.

Chevrolet prices are not the lowest on the market, yet Chevrolet economical transportation averages lowest in cost. This average cost considers the purchase price, interest on investment, depreciation and all operating and maintenance costs.

A detailed comparison with any other car in the low priced field will convince you that Chevrolet is the best buy because of its superior quality and because the purchase price includes full equipment.

More than a million Chevrolets are now in use. Twelve huge plants are now building them at the rate of twenty-five hundred per working day. Nearly one-half million Chevrolets were bought in 1923—far exceeding in number the sales of any other quality car.

Thus, our statements have the strongest possible backing, namely, the faith and patronage of the American people who know automobiles and know practical values better than any other people on earth.

Let any one of our seven thousand dealers show you our seven types of cars and explain how easy it is to get one and enjoy its use.

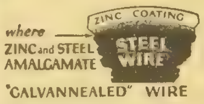
Prices f. o. b. Flint, Mich.

SUPERIOR Roadster	$490	SUPERIOR Commercial Chassis	$395
SUPERIOR Touring	495	SUPERIOR Light Delivery	495
SUPERIOR Utility Coupe	640	Utility Express Truck Chassis	550
SUPERIOR Sedan	795		

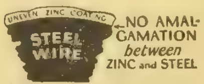
Chevrolet Motor Company, Detroit, Michigan
Division of General Motors Corporation

Save 1/2 on your Fence Bill

Use Rust-Proof Fence



"GALVANNEALED" WIRE
Extra thick zinc coating penetrates INTO the steel wire, preventing it from flaking and peeling off.



Ordinary GALVANIZED WIRE
Thin coating of zinc, unevenly applied. Ordinary process of galvanizing merely lays zinc ON, not INTO the wire.

WE GUARANTEE "Galvannealed"—(newly discovered *rust-proof* fence wire)—to last 2 to 3 times longer by any standard test, and to carry 2 to 3 times more zinc coating than any ordinary galvanized fence wire made.

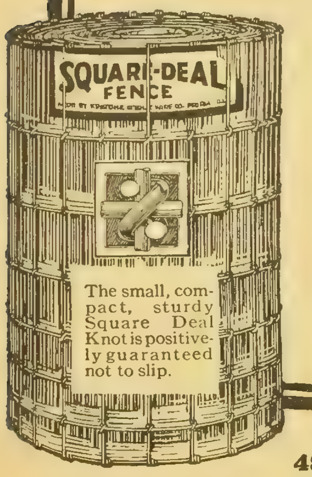
This means "Galvannealed" should last *2 to 3 times longer* in actual use and, therefore, costs *½ to ⅓* as much as you now pay.

In "Galvannealed" wire the extra heavy zinc coating is amalgamated *INTO* the steel body of the wire. In ordinary galvanized wire the thin zinc coating is merely laid ONTO the wire—"Galvannealing" goes IN, galvanizing only goes ON.

Square Deal Fence

is now made up from both "'Galvannealed', the Triple-Life Wire" and from the regular quality of galvanized wire.

Farmers who know how to save money buy Square Deal fence. Stiff, picket-like stay wires make fewer posts necessary; wavy or crimped strand wires provide springiness and keep the fence tight and trim; the famous Square Deal Knot holds stay and strand wires in a vise-like grip, positively guaranteed not to slip.



The small, compact, sturdy Square Deal Knot is positively guaranteed not to slip.

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FREIGHT PREPAID

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Dept. 3908 Cleveland, O.

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Wear the Brooks Appliance, the modern scientific invention which gives rupture sufferers immediate relief. It has no obnoxious springs or pads. Automatic Air Cushions bind and draw together the broken parts. No salves or plasters. Durable. Cheap. Sent on trial to prove its worth. Beware of imitations. Look for trade-mark bearing portrait and signature of C. E. Brooks which appears on every Appliance. None other genuine. Full information and booklet free in plain sealed envelope.

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and on a plan whereby they earn their own cost and more by what they save. Postal brings Free Catalog Folder. Buy from the manufacturer and save money. (1)
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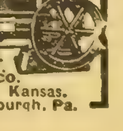
$33 UP FARM ENGINES



Saved $21 ordering direct from your factory says W. Price, Ind. You will save on our reliable engines. Built to do hard, heavy work. Kerosene, Gasoline. Easy to start—no cranking. Sizes 1 1-4 to 22 H-P. 3 Months Trial. Cash, Easy Terms; 10-Year Guarantee. Free Book—"How to Know Better Engines". Write today. THE OTTAWA MFG. CO.
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Wears like Iron
stands hardest outdoor service. The farmers' favorite.

Most wear per dollar.

The Famous H-B Hard Pan Ask for it by name.

Soles made from best part of hide. Uppers specially retanned to resist water and barnyard acids. Roomy, comfortable. Your store sells it, or can get it for you.

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The guarantee of 30 years of honest workmanship are behind H-B dependable service and dress shoes for men and boys. Good looking, long-wearing, fairly priced. They satisfy your feet and pocketbook.

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DeLuxe Silver Fox Ranch, Manistee, Mich

WHEN WRITING TO ADVERTISERS PLEASE MENTION MICHIGAN BUSINESS FARMER

COMING OUT OF THE CRUCIBLE

A SERMON BY REV. DAVID F. WARNER

TEXT: "What is old is gone, the new has come."—2 Cor. 5:17 b. (Moffatt).

THIS new day of 1924 is one of change. It is a day of exit. The old is going and the new is coming. This is a day of scrutiny; of comparison, selection, and elimination. It is a day when the principles of cooperation and coordination are coming under critical observation. This day is seeing the leaven of Christ doing some intense work. We feel that world-wide, universal ideas, plans, and goals are having their birth, tho in great travail. So, we may yet hope that the twentieth century is yet to be blessed thru a religion of international good-will. "Go ye * * * and make disciples of all nations," says the Christ.

When the apostle uttered the words of our text, he was interpreting the realism of Christ. But religion, that is, Christianity, is still in the crucible, because the world has not understood. Faith yet holds, that when we teach and live all things whatsoever Christ has commanded, then tomorrow will have exchanged its provincialism, nationalism, and radicalism, for internationalism and interracialism; for human brotherhood. It will have come up, or got back, to a Gospel that is universal in its reach and adaptation; back to Christ and the apostles, where there is neither bond nor free, Jew nor Greek, Chinese nor African, working-man nor capitalist, klan nor anti-klan, high caste nor low caste, but all are one in Christ. The apostle Paul says, further, that all creation is in travail waiting the revealing of the sons of faith. We all shall be glad to hail the rising star of orthodoxy thru a simple trust in Jesus Christ. This is to be the sole seal of legitimacy in true religion.

What are some of the signs? In the home land there is hope that the give christ of denominationalism is to give way to the Christ of the Gospels. Church federation is growing, and union and community churches are becoming more numerous day by day. In foreign lands, denominational and comity federation are recognized as a fundamental need. National churches are now in the process of formation. S. D. Gordon universalizes and well-nigh unsects the Christian religion by saying that the day is coming when you will not be saked to what church you belong, but what are you doing. (Cf. Matt. 25:31-46). And so it seems that a sacramental religion is to find its only justification in a positive, ethical Christianity.

Now, is the conventional church meeting modern demands? As an instance of failure, the Russian church has all but gone to pieces, spiritually and corporately. A native minister writes that the people looked to her in this day of new demands, "earnestly to direct the life of the nation in new and right channels." But in her conventions the main topic of discussion was: "what form of clothing should the clergy wear?" This formal and ritualistic church once dominated the land. It satisfied the spiritual conception and desires of the masses.

How we have hugged to our bosoms the historical signifance of the Greek church still practicing apostolic ordinances! This is the church, that, not because of these ordinances, but in spite of them, has, in the crucial test, gone spiritually bankrupt. It was a blind leader of the blind. When it ought to have been the spiritual solace and power of Russia's confused masses; when it ought to have been ready to make itself felt and heard, it was helpless and impotent. It was tied down to customs and traditions of the dead past.

And we shall have to continue to wonder for some time yet, how it is that the Christ of Luke 4:18 is not giving us economic comfort and political peace. But the new Christianity is to demonstrate that there is a rational, a spiritual, way to solve human problems. Former President Wilson dared attempt to lead us into this high road in international politics. A magazine writer wrote at the time, "The human family will have to set right about the work of reforming and mastering themselves, getting rid of their prejudices and fixed ideas, and enter upon the task of judging everything by the standards that Jesus laid down, if it is going to fulfill the President's demands." But let old men wail, women be raped, and Smyrna burn; partisian politics and industrial imperialism must have their inglorious reign. Why? Ask denominational church leaders who are content in official smugness. Ask the capitalist who sits in the front pew. What christian is not ashamed of the pacts of Versailles and Lusanne?

It is but reasonable that the church should urge unity, harmony, and justice in all the domains of human living. The Kingdom of God can come on earth only by writing the King's teaching on the hearts of nations, as well as individuals. Today we are living under a nervous peace and civilized humanity is falling back into social disorder and unhappiness. Thus, we may know we are indifferent to a democratic and ethical Gospel. We are to believe in Christian ordinances, worship, and prayer; but the churches have yet to prove that these things are creative of spiritual power and life. Will it take another period of war and red gore of battle to bring the church to her knees?

I wonder if the church has ever had such an opportunity as today,—in China, India, Russia, Japan, and elsewhere? In the great convulsive condition of the world, all peoples are groping for an articulate faith in God. Chas. E. Scott found a Chinese village where they had thrown away their idols, forsaken heathen priests, and had formed a society to seek after the true God. Is Christianity ready enough, united enough, powerful enough, to bring to the heathen world, the only true Mediator of faith, Jesus Christ? Life is being aroused everywhere. Is the church able to direct it so that it will not get lost?

Surely, this is a day of Kingdom opportunity! To save it we must have a church outwardly federated and inwardly generated. The times are demanding vital religion, spiritual religion, spiritual reality. A convention of the South India United Church adopts the following: "We face together the gigantic task of the winning of India for Christ—one-fifth of the human race. Yet confronted by such overwhelming responsibility, we find ourselves rendered weak and relatively impotent by our unhappy divisions—divisions for which we were not responsible and which have been, as it were, imposed upon us from without; divisions which we did not create and which we do not desire to perpetuate." When will we understand that, as another has said, "The mission of Christianity is to transform civilizations, not to transfer them."

Now, the world needs to know that it is on the wrong road, that it is staggering to ruin in its own self-righteousness. This declaration must be the unceasing cry and prayer of the church. And it is, but the world has not minded. Why? Well, on the church's side as an institution, she has not met fundamental human needs and instincts. So, the present crucible of affliction, methinks, is pressing the church to purge religion of unholy divisions and dogmatical bickerings, and to give the world a simple, practical Gospel that meets the needs and longings of a travailing humanity. I wonder if the church could not heal more souls if it would serve more bodies.

BIBLE THOUGHTS

DO WE?—Jesus said unto him, thou shalt love the Lord thy God with all thy heart, and with all thy soul, and with all thy mind.—Matthew 22:37.

IS NOT THIS THE FAST that I have chosen? to loose the bands of wickedness, to undo the heavy burdens, and to let the oppressed go free, and that ye break every yoke?—Isaiah 58:6.

A LAMP AND A LIGHT:—Thy word is a lamp unto my feet and a light unto my path.—Ps. 119:105.

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Puts this Olde-Tan Metal-to-Metal Harness on Your Horses

We trust you wherever you live. Only $7.50 down. Pay the rest monthly. Write for free harness book. Learn all about this improved metal-to-metal harness construction. Metal wherever there is wear or strain. No old-fashioned buckles.

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NATIONAL SILO

Glazed tile, wood and cement stave silos. Glazed and unglazed hollow building tile and MAT FACE RESIDENCE BLOCKS. Early buyers discount. Write for special agency proposition. National Clay Products & Silo Co., Dep't. 16, Neely Block, Muncie, Indiana.

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MAKE YOUR OWN ROPE
All sizes including hay fork ropes. Wonderful saving. Send for free booklet, "Rope Making On The Farm." New Era Rope Machine Company, Minneapolis, Minn.

OVER 500.000 WAYSIDE FARM MARKETS IN 1924

THE summer of 1924 will see more than 500,000 wayside markets in successful operation throughout the United States.

While such a vast number seems almost incredible it is said to be borne out by an investigation made by the National Farm Market Bureau, of Toledo, O., an organization devoted to statistical research and in aiding the farmer in finding a profitable market for his produce of whatever nature.

For the past year the Bureau has has been conducting a campaign of research into the extent and importance of rural roadside markets, and is authority for the statement that 1924 will find half a million front-yard markets doing business thruout Uncle Sam's domain, and—making money.

It bases its enlightening declaration on a thorough investigation made in a dozen scattered states, one of the surprising features of which was that in 90 per cent of the replies received from "wayside farm marketers" the writers credited a large share of their success to the intelligent use of bulletin boards.

"Not only is the bulletin board unfailingly an economical method of advertising for the farmer, but it invariably hits the nail on the head," says the statement. "It is the farmer's 'silent salesman', summer and winter, always on the job, conserving time and money, and indirectly causing a stream of shekels to pour into the coffers of the roadside market merchant, be he farmer or gardner.

"To obtain a bulletin board is the easiest thing imaginable. One way is to take several smooth boards and nail them together. Paint the surface a dull black, and there you have your blackboard bulletin board; or cover the surface with blackboard cloth, which takes chalk rapidly and is inexpensive. Maybe the children have a playroom blackboard, and if so it can be used during the vacation season at least.

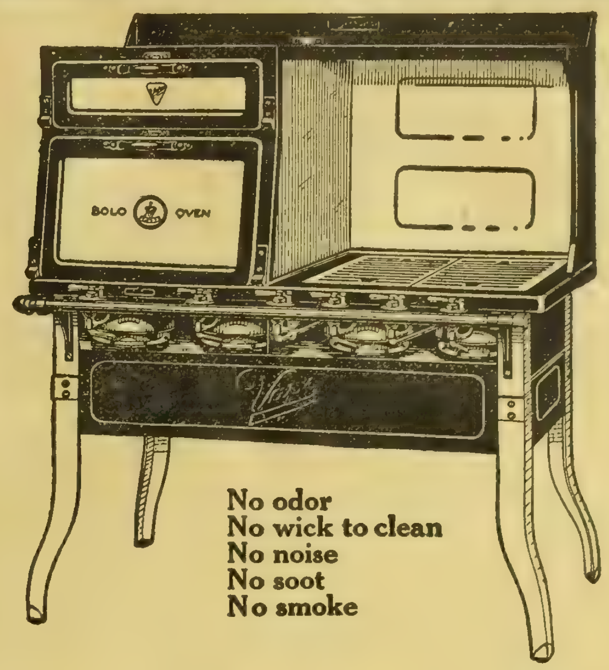
"Yet another way is to purchase a board ready-made 'in town', or have some carpenter make you one. Better yet, in some communities enterprising merchants or banks, or manufacturing concerns, give away neat bulletin boards to their rural friends or patrons conducting wayside markets. These are always excellently made and are preferable to any other sort. So if you want to succeed in the wayside market business use a bulletin board."

Here are some interesting facts in connection with the investigation:

Number of questionnaires sent out, 21,592; replies received from persons conducting bona fide wayside markets, 5,481; percentage reporting financial success, 94; percentage reporting net annual profit of $1,000. 58; $,2000, 41; $3,00, 36; $4,00, 28; $5,000, 19; $5,000 and over, 14; percentage of markets conducted exclusively by women, 21; percentage of markets selling some commodity in winter, 34; percentage farm mortgages raised by profits from markets, 18.

Average number of customers per market daily (estimated), 38; greatest number of customers, reported in a day by any one market, 1,436; earliest crop marketed, strawberries; latest, apples; number buying autos with market profits, 2,214; number installing radio sets, 708; number buying musical instruments, 2,612; number spending winter in Florida or California on market profits, 312; number selling all farm products through the market, 3,168; average selling season, June 15 to Oct. 1.

"It is impossible," states the report, "to make any definite declaration as to the number of markets in operation throughout the country, but we feel confident, from data at hand, that the summer of 1924 will see less than half a million, perhaps more, serving the public."



No odor
No wick to clean
No noise
No soot
No smoke

Marvelous Oil Stove Converts Kerosene into Gas—Gives Clean Blue Flame

A speedy cooker—bakes, roasts, boils same as a gas range.

This is the range people everywhere are talking about. It created a sensation at the State Fair. Thousands saw it subjected to tests that would cripple any other oil stove. Thousands of hardware and furniture dealers all over the country are now selling it. People everywhere are enthusiastic about it. Go and see it before buying any range. It is an all-year range.

Has Gas Range Advantages because it burns gas

You will like its beauty, its convenience, its cleanliness. It gives you a new and wider range of service. It will enable you to do better cooking, baking, roasting with less effort and no disappointments because you can regulate the heat—you turn the flame up or down with a lever valve same as a gas range.

Each Vapo Burner is a Miniature Gas Plant

It makes hydro-carbon gas from kerosene. It is smokeless, sootless, odorless and wickless. It does not burn a thin film of oil; it burns gas. You get a clear BLUE flame of powerful heating intensity. You get a cooking, baking and roasting ability that is entirely new and unprecedented in an oil range.

32 to 36 hours of heat from 1 gallon of kerosene

—And that by using burner turned on fully. You get 50 to 60 hours' service with burner regulated to simmering heat.

Lever valves of automatic locking type give perfect control of flame. You can tell whether "ON" or "OFF" at a glance. Safety lock prevents accidental altering of flame. Sight feed in our patented valve enables you to see oil feeding drop by drop. Oil tank is conveniently placed for easy filling. And Range sets flush against the wall.

Built-in Bolo Oven Insures Quick Baking

Each Vapo Range with oven has BOLO type oven—Big or Little—made big or little by Bolo plate for slow and fast baking at the same time. Oven is ventilated insuring light pastry, cakes and bread. The Bolo feature cuts down fuel bills as well as insuring quick results. Everything that hampers you in the use of ordinary oil ranges is banished from the Vapo.

Other Important Features

Big Cooking top enables you to speed up meals.

High Shelf does not interfere with use of wash boiler on top.

White Enameled Splasher, oven doors and legs are easily kept clean.

Lever valve easily and surely regulated.

Burners easily cleaned.

Durable construction equal to finest gas ranges.

Very compact: Vapo six-burner type goes in space of ordinary four-burner stove.

Furnished with or without oven in three-burner, four-burner, and six-burner styles. Right or left-hand oven.

Take this advertisement to your dealer and ask him to show you a Vapo range. If he has none is stock, write us and we will see that you are supplied.

THE VAPO STOVE COMPANY, Lima, Ohio

Vapo LIMA, OHIO
Oil Ranges
Heaters
Hot Water Heaters

The Michigan
BUSINESS FARMER

SATURDAY, JANUARY 19, 1924

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We will not knowingly accept the advertising of any person or firm who we do not believe to be thoroughly honest and reliable. Should any reader have any cause for complaint against any advertiser in these columns, the publisher would appreciate an immediate letter bringing all facts to light. In every case when writing say: "I saw your advertisement in The Michigan Business Farmer!" It will guarantee honest dealing.

"The Farm Paper of Service"

FRIDAY PREDICTS PROSPERITY

DR. DAVID FRIDAY, economist, and former president of Michigan Agricultural College spoke on three occasions in Detroit last week, and in each, predicted that 1924 would see a continuation of the prosperity which commercial centers of the country are enjoying and a distinct improvement in the position of the farmers.

Regarding Michigan and the agricultural situation, he said: "Notwithstanding reports to the contrary, agriculture, outside of the northernmost districts of the wheat belt, has experienced a not unfavorable year. Michigan farmers should have been pretty well satisfied with their returns from sugar beets and beans. The most discouraging outlook is that of the wheat farmers of Montana, the Dakotas and perhaps Nebraska. The process of finding relief in these regions through diversified farming, must be slow, and, unless Canada's wheat crop fails, our wheat growers must suffer from keen competition."

These words are doubly effective coming from Dr. Friday because his reputation as a prophet have been pretty well borne out, since he made his statements at Farmers' Week at Lansing, a year ago, that the year 1923 would see a considerable improvement in farm conditions, especially here in Michigan, and that the exodus of farmers to the cities, could only result in an improved condition for those farmers who remain on the farm. Further that lessened production always resulted in higher prices, whether it be in raw materials, manufactured articles, or in farm produce.

At least most of us will hope Dr. Friday is right about 1924. We believe he is!

HOWARD SAYS SO, TOO!

JAMES R. HOWARD, former president of the American Farm Bureau, is the first agriculturist in the public eye to support our contention that the restriction of immigration is a disadvantage to the farming business in America.

Mr. Howard, however, takes it up from the viewpoint that our restriction of immigration is causing the colonization of many new agricultural territories in other lands which will be competitors of America, if not immediately, in future generations.

It is our contention that if the right kind of emigrants, real workers and their families, are allowed to come into the United States freely and be absorbed by industry and agriculture, they would of themselves offer a sufficient consuming market to more than merit their admittance, and that in the name of humanity there is no reason why we should close the gates to this land of prosperity!

We do not wish to be construed as commending unrestricted immigration, but we do believe that it is possible for the American consuls abroad to separate and segregate undesirable applicants and not to allow any prospective immigrant to set out from his native land without credentials in his pockets which would, when he had proved himself worthy, admit him to citizenship here.

The present situation only means that the demand for labor in the cities has curtailed entirely the supply of labor to the farms and the farmer must look to immigration if he is to be supplied. There are millions of peasants who want to come to America, work on the farms, and accumulate enough to buy farming land for themselves. Certainly this is a worthy object which we, as a nation, have no right to challenge.

THE 1924 ROAD PROGRAM

EVERYONE interested in good roads in Michigan will praise the present plans of the state highway department to complete 500 miles of concrete roads and such additional gravel roads as the state can pay for from the funds derived from license tax receipts and the sale of road bonds, during 1924.

The Governor figures that not less than 100 miles can be built entirely by the prison labor already organized for road work, and in addition, every available prison "trusty" will be applied to the construction of the paved highways if the Governor has his way.

Already the State Highway Department engineers have disclosed that on 10.4 miles of pavement laid on Grand River Avenue by both free and prison labor, the state saved over $36,000, or nearly $4,000 per mile, less than the estimates of the lowest bidders.

THE BUSINESS FARMER has commended from the first the use of prison labor on the roads in Michigan, both for building new roads and the maintenance of the hundreds of miles of good roads we already have in condition. We have also commended the Governor on the establishment of the state-owned cement plant, because the requirements this year are estimated at 1,000,000 barrels of cement for road construction in Michigan alone. This does not mean that the state can make all of the cement they use, but that with this factory in operation it will set at rest any of the many rumors that the state is being gouged by the organized cement manufacturers.

Michigan has a right to be proud of the progress made in road building during the year 1923, but from all indications 1924 will out-distance that record. Good roads are expensive, but in the long run good roads will show a profit to every citizen who helps to pay for them.

THE BOK PEACE PLAN

SOME months ago that public-spirited individual, Edward Bok, former editor, offered under certain conditions a cash prize of $100,000.00 for the best plan submitted for world peace, and the winning plan has just been awarded the prize. The name of the winner has been withheld, however, because it is desired to take a national referendum as to whether the people of this country want a permanent peace plan and whether the suggested plan is satisfactory. It is felt that if the winner's name were announced before the referendum was made it might be construed as a political move from one side or the other and thus the whole value would be lost.

The plan briefly proposes as follows:

I. That the United States shall immediately enter the Permanent Court of International Justice, under the conditions stated by Secretary Hughes and President Harding in February, 1923.

II. That without becoming a member of the League of Nations as at present constituted, the United States shall offer to extend its present cooperation with the League and participate in the work of the League as body of mutual counsel under conditions which

1. Substitute moral force and public opinion for the military and economic force originally implied in Article X and XVI.
2. Safeguard the Monroe Doctrine.
3. Accept the fact that the United States will assume no obligations under the Treaty of Versailles except by Act of Congress.
4. Propose that membership in the League should be opened to all nations.
5. Provide for the continuing development of international law.

This plan would seem to place the United States in the position which we have always felt it should occupy as the leader in the progress of world peace and democracy. It should be obvious to every thinking American that we cannot stand isolated from the rest of the world and serve the useful purpose to humanity for which we are dutybound. If any of our readers have not read the Bok Peace Plan we will be glad to secure for them copies which can be passed on to your local farm organizations or churches, as it to voluminous for reprinting completely in these columns, although we would like to.

A GOOD JOB WELL DONE

SOMETIMES we think the flowers given the living are much more cherished than those placed on the caskets of the dead and a dainty nosegay on our way to work some morning may be more valued than the floral horseshoe you are planning to send us!

All of this is apropos to our saying a good word or two regarding the work during the past year of the Board of State Tax Commissioners, composed of William S. Linton, Saginaw, Nathan F. Simpson, Hartford, and George Lord, Detroit, of which Mr. Linton is chairman and Mr. B. F. Burtless, Lansing, is secretary.

These men have naturally been put in a most hazardous and generally thankless position, and one that we certainly do not envy them. Everyone wants his taxes reduced and yet it is obvious that some taxes are too low and must be raised. You can well imagine the grief that such a job brings with it.

This Commission has worked night and day during the past year trying to relieve the tax situation which exists in Michigan and we have heard few words of commendation.

We hope the Commission will accept this as a slight token of our appreciation of work well done by faithful public servants, in which we hope we will be joined by the many thousands of farmer-readers of THE BUSINESS FARMER.

COREY SPENCER, A CHEVALIER

IF you happen to meet Corey Spencer, of Jackson, owner of the Grand River Stock Farm, at an auction sale in the near future, hesitate before you step up and slap him on the back and call him by his first name.

As told on page 4 of this issue, Mr. Spencer has been awarded the Croix de Chevalier du Merite Agricole and that he should speak to common folks in the future will be only because of his generous good nature and his desire not to show a swollen cranium simply because of the deep honor which the French government has conferred upon him.

Mr. Spencer is famous in Michigan not only for this signal honor but for a good many years of conscientious work in building up the livestock industry in Michigan, particularly in the Holstein breed and for which, we doubt, if he will ever receive any especial badge of merit from our state or government. We are rather lax in this country in acknowledging obligations of this kind and we could well follow the example set by the French government in this regard. There are any number of men who have contributed unlimited advantages to agriculture who have never received a pittance for their toil or any recognition from their government.

We are glad that this signal honor has come to Michigan and particularly to Corey J. Spencer because he deserves it.

HAVE YOU A RADIO?

"THEY don't know what they're missing," said a good farmer friend of mine from whom I inquired as to the reason why so few farm homes are equipped with a radio receiving set.

The second reason which we found for the apparently cold reception which farmers are giving radio was the fear of lightning traveling down the aerial and causing damage to the home. This, however, can be easily prevented either by a knife switch or a special lightning arrester which costs only a dollar or so and offers automatic protection, besides being approved by the insurance underwriters so that it does not affect fire insurance any more than telephone or lighting wires coming into the same house.

It is a fact, friends, that you who are isolated from towns and cities do not know what you are missing by not equipping your home with a radio receiving outfit. You can build a set yourself that will give excellent results or you can buy one at a comparatively low cost when the daily pleasure and profit to be derived from a radio is considered.

Next to the automobile I consider the radio the greatest advantage which the farmer has achieved in our lifetime. Think it over and we believe you will want one!

A DANGEROUS PRECEDENT

SECRETARY of State Hughes set up a very dangerous precedent when he decided to sell arms to the present constitutional government in Mexico and refused to sell them to Huerta and the rebels who are opposing President Obregon.

No matter which side is right we must keep in mind that our own George Washington was a rebel in the eyes of the British monarchy, and while Secretary Hughes and the administration may be perfectly justified in the present situation, there is a precedent being set up here of discrimination on the part of our government which might in time lead to most serious consequences.

If we are sincere in our prayers for world-peace, how can we go into the markets of the world with war-material for sale?

James Couzens, Michigan's fighting senator, says Mellons plan to cut the surtax on profits would have saved him $4,000,000 in taxes he has paid during the past ten years. Some slice of melon, Jim!

PUBLISHER'S DESK

"WE WANT YOUR GOODS"

THIS is a title of a circular which Landon & Werling, 1307 Perry Street, Detroit, Michigan, sent out to a large list of farmers in Michigan, and they were certainly honest about that statement at least, because they not only wanted the goods but after they got them they forgot to pay for them!

Their circular offered fancy prices for dressed veal and hogs and chicken, turkeys and ducks. One of our readers sent them 20 hens, weighing 110 pounds, and another reader shipped two creates of Barred Rock hens, 34 in all, weighing 175 pounds, and they are still "waiting at the church" for their money.

We not only made an investigation, but on finding that we could not locate the parties, turned the matter over to the local post office inspector, who under date of January 10th returned our file stating as follows: "In reference to enclosed correspondence, I have to advise that the concern complained of are out of business, left no change of address, and all effort to locate either of the persons has been without result. It appears to have been a case of a couple of fly-by-night operators who gathered in what they could get and then disappeared.

"It would appear to me that your paper could accomplish great good by advising all of your patrons to not ship products to any strange concern without first making some inquiry regarding their rating. If they would do that there would be fewer losses and complaints."—E. E. Fraser, Post Office Inspector.

The Inspector is quite right and we have for several years pointed out to our readers of this page, that we would be glad to investigate any commission house which offers them an outlet for farm products, at no expense to our subscribers, and advised our readers not to ship to any concern which they have not had previous experience or which was not recommended by this publication or some other reliable source.

Apparently some peole never will learn and all we can do is to keep the facts before those who will.

SHE MAKES IT GO!

I have a heavy simplex auto knitter and I certainly make good with it and when these people complain they don't make good, the fault surely lies mostly with themselves. Just the other day I sold $6.00 worth to one family alone. I wish you would give me the address of the lady having the Auto Knitter for sale. Maybe I could buy the medium or fine cylinders for making medium and fine socks. Also her bobbins and hose boards. The Auto knitter instruction book is just full of various things one can make. The directions are plain yet some I can't pick out. I know its my own fault, not the little machines fault. I tried to make mittens and all at once it seemed clear to me. I stick to one thing, making gentlemen's socks. I bought a 6 cylinder Saxon 1918 car and have a bank account. My car, while not new, runs splendidly and we surely enjoy it. That and little expenses incurred with a car, I have kept up with my knitter. Also numerous other things around the house and dainties for the table. I sell at home, 75c per pair and I take care of a large home, besides cooking for four. I can give you neighbor's names, customers of mine, who are delighted with my socks. Yet I sold another lady a machine who sits down with her hands folded and says she simply cannot learn to knit with it. I tell her she don't apply herself. You, who read this, could not have the responsible position with the magazine if you had sat back and said I simply can't. Now that's the trouble with these unsuccessful Auto Knitters. I quit playing at our little country dances, because I made more and shorter hours, and not out in all kinds of weather. One can average from $2.00 to $3.00 a day. I sold $6.00 worth one day. So you see I made and sold 10 dozen pairs. Paid off our potato diggers, part money; $50:00, sold 3 pair socks to them besides all that the people had me make for their sons living in the cities, for Christmas. Also there was my own dad and brother, one a railroad engineer in Chicago. All say nothing could have been nicer than my socks, even jellies or chickens sent them for Christmas.

From now on I think I shall charge 85c per pair. Even then, at the stores they are $1 per pair.

I was so angry at all the slams directed at this concern. I just had to tell you a few facts in their favor. Respectfully, Mrs. Chas. Cudway, Benzie County, Mich.

P. S. My folks take your paper and I live with them, as they are getting old and need me, so you see usually half days is all the time I have to devote to my machine, and as we all read your paper I feel I am one of the Michigan Business Farmer family, too.

I AM printing the above letter because it seems to prove that the successful operations of these hand knitting machines is largely a matter of the perseverance and dexterity of the operator.

Here is a woman who writes us in apparent good faith that she has a machine and would like to buy another, because she finds that she can make a comfortable living knitting socks at home, a large market for which she finds among her friends and relatives.

Within the past two week I have had an inquiry from a woman with two children and an invalid husband, who would have to borrow part of the $60 or $75 necessary to purchase a knitting machine. She wanted to know if I would advise the purchase, and of course I had to tell her that it would be too great a risk until she had tried the work and that my advice was that she should put her situation up to a knitting machine manufacturer and ask him if he would not ship her a machine on trial, with the understanding that she would purchase it if she found she could operate it satisfactorily, and make a living by so-doing.

There is such a demand in the farm homes for work for the women to do in spare time that it is indeed too bad that there is not some kind of home employment which we can recommend, and it has been our desire to find such employment for our readers which has prompted us to make a state-wide investigation of the knitting machine proposition. We are glad to publish any information on either side of the case which may be of benefit to our readers.

CO-OPERTIVE LAND COMPANY

Do you know anything of the standing of the "Co-operative Land Company, 1328 Chemical Bldg., St. Louis, Mo.?" We received a circular wishing us to list our farm with them and requested a deposit of one-half of the usual fee of $35.00, ($17.50), and they guarantee a sale, or rather guarantee to furnish names and addresses until we make our own sale.—W. V.

WE have had some correspondence regarding the Land Company at St. Louis, you mention. Our advice is to send them no money, as they work on the same scheme that we have written up many times in our columns. Ask them to give you a name and address of any farm owner for whom they have sold a farm, in Michigan, then write or see him, and find out his experience.

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FRUIT AND ORCHARD

Edited by FRANK D. WELLS

HEALTH FACTS ON FRUIT

FRUIT is not concentrated nutriment. Most fruits contain from 75 to 95 per cent of water. The balance is largely woody fiber or cellulose, fruit sugar and minerals. The cellulose supplies the waste which is so frequently lacking in modern diets.

Cellulose furnished no nutriment; it affords simply bulk and a mechanical stimulation to the movements of the digestive organs. They are built to receive this bulk and their proper functioning requires it.

Thus the free daily use of fresh fruit incidentally insures a regular supply of water and a certain bulk to the food which prevents constipation, allays thirst, and, according to some, diminishes the desire for stimulating drinks.

Pure water should of course be taken in addition to that supplied by fruit in the diet.

These reasons alone render fruit a valuable addition to the diet, but there are other equally important reasons for using it.

There are found in fruit, fresh vegetables, fresh milk, fresh meat and whole cereals, certain chemical compounds termed "vitamins." These protective food constituents are not organisms but chemical substances present in minute quantities, but extremely important in maintaining the bodily health. Their absence has been held responsible for such diseases as scurvy, beri, beri, possibly pellagra, as well as lesser degrees of ill health and faulty growth.

Acid fruits, such as oranges, lemons, limes and probably most berries, seem to contain these vitamins in a very stable form. Heating to the boiling point apparently does not destroy the vitamins of such fruits to the extent it does the vitamines of most other foods.

Vitamin deficiency arises from the use of pasteurized or sterilized milk, white flour, milled rice or cereals, sterilized or highly cooked non-acid foods, and cured meats. Fresh meat, even when roasted, appears not wholly to lose its vitamins.

Vitamin deficiency in one of its most pronounced forms, scurvy, is often present in infancy, due to the use of pasteurized or sterilized milk or too little milk. The child at birth apparently has enough vitamins stored in its body to keep it going, but after the first month or two it requires either fresh milk, orange juice, or tomato juice, or other anti-scorbutic food, to supply the deficiency.

Even though adults rarely suffer from scurvy except on Artic voyages, or under conditions of privation, when fresh vegetables, fruit and and fresh milk or meat are not available, it is not impossible that a partial lack of vitamins is responsible for much ill health in those who live largely on sterilized or cured foods, or on a restricted diet.

The daily use of fruit is a safeguard against vitamin deficiency.

There are still other important reasons why fruit is a dietetic safeguard.

It has been found that our foods may be classified into those that on burning or assimilation leave an acid ash, and those that produce bases, or alkalies. All foods are burned or oxidized in the body, and whether their ashes furnishes acid or base is an important matter to know.

The foods most favorable for base-forming purposes are potatoes, apples, bananas, raisins, oranges, cantaloupes and tomatoes.

The strongly acid-forming foods are meats, fish, eggs and cereals.

It is easily possible unduly to decrease the reserve alkalinity of blood by dietetic errors, but not possible unduly to increase it.

The general tendency is to over-acidity, and against this tendency fruit is a safeguard.

Strained fruit juice is often acceptable, both to bowels and stomach when the fruit itself is not.

Fruit should be eaten fully ripe but decayed or moldy fruit should, of course, be avoided. Bananas are usually eaten underripe. They are not fit to eat until the skin is brown and the pulp is mellow like a ripe peach. Their starch is then changed to sugar.

Bananas are more acceptable to delicate stomachs as a puree made by passing through a fine strainer, also when baked.

Cooked fruits, especially peaches and pears, are often more acceptable than raw fruits, and as the acid seem not to lose their vitamins in cooking, one of the most valuable properties is thus retained.

The acid flavor of fruits is rendered much more pronounced by cooking, and thus sugar is required to make them palatable, and increases their fuel value. It is a good plan to cook with sour apples, sweet apples, raisins or other sweet fruits.

The Burden of Tax Exempt Securities

MANY inquiries received from various sources and some articles written for farm papers show that the effect of the proposed constitutional amendment restricting the issuance of tax exempt securities is often misunderstood and the evils of tax exempt securities is not apprehended. I also find that some inquire why it is necessary, and others as to what benefit will result. Some also do not understand what the term "tax exempt securities" covers. To make these matters clear to persons who do not have time or opportunity for independent investigation I have summarized the questions most commonly asked and will answer each separately.

Question. What securities are exempt from taxation?

Answer. The bonds of the National government are exempt both as to principal and income from taxation by the several states or any subdivision of them. Part of them are entirely exempt from any tax by the Federal law which created them, but most of the mare not entirely. Certain issues authorized by the Federal government, such as the farm loan bonds, are also entirely exempt. The bonds of the states or any divisions of them are exempt from Federal taxes, and are generally made exempt from taxation by or within the state that issues them. Other states, however, may tax both principal and interest.

Question. What is proposed by the amendment?

Answer. To permit the National government to tax the income only of the state securities and the states to tax the income from the National securities, in each case only to the same extent as the government or state taxes its own bonds.

Question. Does the amendment apply to securities already issued?

Answer. No, only to those issued after its adoption.

Question. Why ought such an amendment be adopted?

Answer. To equalize the burdens of taxation. As some escape taxation by investing in tax exempt securities this must be made up by increasing the taxes of others. The amount of state and municipal securities in existence is now over ten billion dollars, the income from which is entirely exempt from Federal tax, and about twenty billions of government bonds partially exempt. The loss to the government thereby has been variously estimated at from three hundred millions to four hundred millions a year. The effect is to nullify the provisions of the graduated tax and increase the taxation of the ordinary individual.

Question. Who are most favored by the present system?

Answer. The extremely wealthy who have invested in tax exempt securities. Under our graduated income tax a person having a net income of one million from property like railroads bonds, corporation stocks, farms, or business of any kind, is required to pay a Federal income tax of $550,800 per year, while if he has this amount of income from tax exempt bonds he does not pay a cent thereon. The gain is not large to those having small incomes, hence they seldom buy tax exempt securities. The extent to which the extremely wealthy hold tax exempt securities may be judged from the fact that when William Rockefeller died, it was found that his estate included $43,000,000 in tax exempt securities.

Question. It is sometimes claimed that those who buy tax exempt securities pay enough more for them to buy securities upon which the interest is so low that the government substantially makes up its loss in taxes and the purchaser derives little gain therefrom. Is this true?

Answer. Only to a very limited extent. There is always such a large amount of tax exempt securities being offered that there is little competition for those having heavy incomes. For those having an income of a million dollars the purchase of a tax exempt bond paying 4.50 per cent would net as much as a taxable bond paying 10.00 per cent, but the same bond could be sold at the same price by making the rate of interest slightly higher. The government loses what the buyer of tax exempt securities makes according to his income. Tax experts and political economists all agree that under a graduated system of income taxes the exemption benefit to the wealthy investor is not passed on to the borrowing municipality or state.

Question. Is it necessary to amend the Constitution when we already have what is known as the Income Tax Amendment?

Answer. Yes. Although it was generally believed when that amendment was passed that Congress would have the power to tax incomes from any source, the Supreme Court has since held that it does not extend the objects of the tax, and only made it necessary to apportion the tax among the states.

Question. Will conditions change so as to make such an amendment unnecessary?

Answer. On the contrary, conditions are getting worse as the state and municipal indebtedness is increasing at the rate of about a billion dollars a year. This enlarges the amount of property exempt from taxes and places a heavier burden on the salaried man and the man who has only a small income as well as on all incomes derived from industry, agriculture and commerce.

Question. Does the issuance of tax exempt securities make any difference to the man whose income is not large enough to require him to pay an income tax, such as a small farmer or a laborer?

Answer. Yes, because it increases the cost of living.

Question. How does the exemption of bonds increase the cost of living?

Answer. By withdrawing money from active business, thus decreasing competition, and by increasing the cost of capital to manufacturing corporations, railroads and merchants, thereby raising the cost of manufacturing goods, making freight rates higher, and generally increasing the cost of doing business. Capital for building has been scarce and high, making rents higher, and causing workmen to demand higher wages. When dead capital is tied up in tax exempt bonds live capital must pay for both, and all taxes on property have enormously increased.

Question. Does the amendment permit the Federal government to tax the principal as well as the income of bonds now exempt?

Answer. No. The amendment in express terms applies only to income, and provides that neither the government or the states shall discriminate against the bonds of the other.

Question. Would farmers have to pay a higher rate for land loans if tax exempt securities were not permitted to be issued?

Answer. No. Investments in tax exempt securities have withdrawn immense sums which would have been used for farm loans, and thereby reduced the rates of interest. Many farmers were required to pay their loans when money was hard to get because the holders of the loans wanted to put their money into tax exempt securities. Farm loans were formerly a favorite investment for large estates. These estates are now getting rid of them as fast as possible. If no more tax exempt securities were issued the rate on farm loans would fall for there would be more competition for them. So, also, if no more tax free issues were premitted the Federal farm loan bonds would sell at substantially the same rate. They would enjoy a preference on account of the security, and security has more to do with the market price of bonds than the tax free provision. There are now great amounts of tax free bonds in existence that can not be sold on as favorable terms as some of those which are taxable. Moreover, as before stated, the quantity of tax exempt bonds is so immense that there is more than there is demand for among the large income tax payers. A considerable portion must be taken by those whose income tax is assessed at only a small percent. The price these parties will pay fixes the price of the whole issue and they will pay only a very little more than for a taxable security of the same grade.

Question. Is this a political or local question?

Answer. It is not. Neither is it a question of occupation. Members of both political parties voted for the amendment when the resolution passed the House of Representatives in January, 1923. Two democratic Secretaries of the Treasury and one republican Secretary have recommended the adoption of the amendment. It was approved by President Harding, who earnestly urged its passage, and passed the House in the last session of Congress. So many organizations have approved it that there is no space to mention them all, but among the more prominent are: the National Grange, American Farm Bureau Federation, the American Bankers Association, National Association of Real Estate Boards, the United States Chamber of Commerce, the American Economic Association, and the National Tax Association. Economists and tax experts, with practically no exceptions, favor it, and the legislature of several states have already endorsed it.

How to Make Cooperation a Success

IT is always easy enough to tell the other fellow how to do it, no matter what it is, but the number of failures in co-operative effort would seem to justify the following advice. It is given by Lloyd S. Tenny, who has made a study of the farmer organizations for the U. S. Department of Agriculture. He outlines there seven factors of success:

1. The association must have a definite object in view. Interviews with farmers disclose that they frequently do not know the purpose for which the organization is being formed.

2. The organization must be formed on a commodity basis. Both at home and abroad and the outstanding successes in co-operative marketing have almost invariably confirmed their operation to a single agricultural product or to a group of products very closely allied.

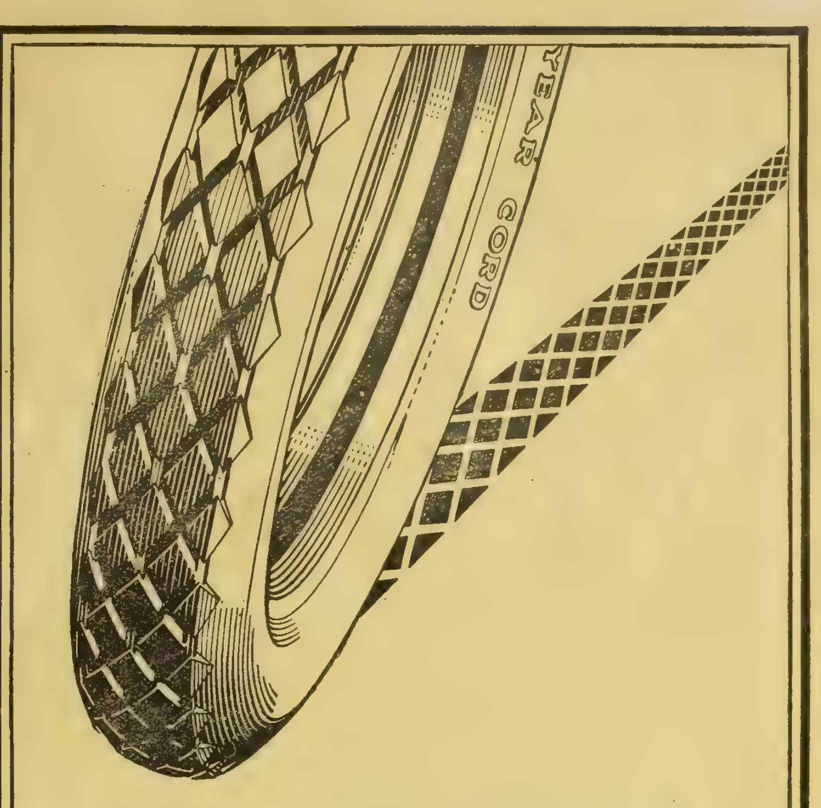
3. There must be a sufficient volume of business to cover operating costs and the business should be controlled or under contract by the association. Many efforts in co-operation have failed because the farmers were willing enough to promise to sell their products through the association but, when the time came to deliver these products, there appeared to be equally good reasons why the promises should not be fulfilled. It is not good business for a commercial organization to attempt to proceed without contracts.

4. No business can succeed without good management. The management is not only concerned with selling the products profitably, but must also recognize the individual member in the association and must function in such a manner as to satisfy this human element.

5. Proper accounting.

6. Educated membership. The members must have complete knowledge of the aims and conduct of the organization.

7. Self-perpetuation. The organization must be established and operated on lines that include and make use of the best thought and experience available; once organized it should be unnecessary to call on outside aid to re-establish policies, to provide a board of directors or management to conduct affairs.



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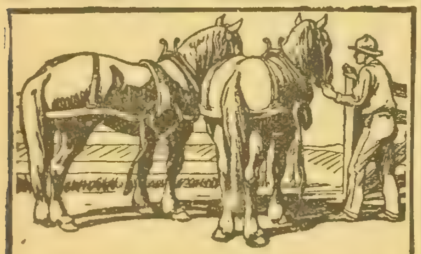

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The Children's Hour

A BABY IN A POCKET

THE kangaroo baby is a very tiny creature when he is born. Indeed he is only as big as your thumb, and would get lost if his mother didn't keep him in her pocket until he grew larger. He is born blind, naked, and so helpless that his mother holds him between her lips while she uses her paws to open the pouch so that she can put him inside. She then sticks her mouth into the pocket, being very careful not to let the baby slip, and places his mouth against a nipple. The queer baby clings to it tightly and does not let go for several weeks. Even then he would die of hunger if Mother Kangaroo did not force the milk down his throat.

By working certain muscles in her body, the mother pumps the milk into her baby. Then she closes up the pocket and the queer little mite takes care of himself by clinging to the nipple, his mother pumping milk into him as he needs it. This is all the care he gets for several weeks.

The tiny baby inside the nice fur-lined cradle is slowly growing to look like his father and mother. He can see, hear, and move. He has a soft fur coat on his body. Mother Kangaroo now opens her pocket and finds that the ugly mite has grown to be a very nice baby. He is, perhaps, the size of a big kitten. He looks at her with his beautiful soft eyes full of wonder. It is the first time he has seen his mother, but he isn't afraid of her. She is very proud of her baby and coaxes him to put his head outside the cradle. The little fellow is too shy at first, but at last he grows bolder and peeps at the queer world where his mother lives. He looks very funny with his small head and big ears poked through the pocket.

For weeks he is content to remain in the cradle, poking his head out from time to time. If he attempt to push his way out, however, his mother's paw quickly pushes him back again. He is too small to be allowed outside. Mother Kangaroo, leaping and hopping from place to place, carries him with her, his little head sticking out of her big pocket.

Thus he lives and sees life from his cradle until he is the size of a big hare. Then he is allowed to come out, but if there is the slightest danger, he climbs into the pocket and hides himself.

When Little Kangaroo is seven or eight months old, he is too large to get in his old cradle, but he sticks his head inside to get his milk. He is now learning to care for himself. He hops and leaps and kicks his feet, which are growing big and strong. He uses his claws, and feeds with his mother and others on grass, leaves and herbs. He is no longer a baby.

HUNTING DOG AND SHEPHERD DOG

A SHEPHERD'S dog, one day, at the corner of a wood, met a Hunting Dog.

"Come, Cousin," said the Hunting Dog, "and I will show you some sport. Not far from here, a Wolf has his lair. We will hunt him out, you and I, and chase him over the mountains. Maybe he will show battle. That will be fun, because a Wolf can put up a good fight, even against two Dogs. What! You hang back? You are not afraid, surely?"

"My post is with the flock," answered the Shepherd's dog. "As for being afraid, I have killed several wolves when they came to attack my sheep, and I killed them alone, my Hunting Cousin. Go, hunt for a fight if you wish, I will wait until the fight comes to me."

It is no sign of cowardice to defend instead of attacking

OUR BOYS AND GIRLS

Dear Uncle Ned:—My father takes the M. B. F. and we all like it very much. I am a girl of twelve years of age, and am in the seventh grade at school. I like my studies real well this year. I will describe myself. I am four feet ten inches tall, weigh about seventy pounds. I have light hair, light blue eyes, and am light complexioned. My birthday is the 16th of March. Have I a twin? I live on a 160-acre farm. We have twelve cows, five calves, twenty-nine pigs, six horses, eighty chickens, and two ducks. For pets I have a dog and a cat. The dog's name is Ted and the cat's name is Tony. My sister went hunting with Ted the other day and he chased a rabbit. The rabbit went into a hole and he dug right in after it, and she had to wait about a half an hour before they could get him out. I have two sisters and one brother. My oldest sister is sixteen, and I have a little sister nine years old. My brother is only two years old. I hope my letter isn't too long to be published. Bye-bye, your niece.—Miss Eva Calhoun, R. 4, Lakeview, Michigan.

Dear Uncle Ned:—I haven't noticed any letters from Harbor Springs, which is my town. I am about four feet, five inches tall. I have medium brown hair and blue eyes. I am rather fat. I am between ten and fifteen years of age, and the one who guesses my correct age will receive a letter. I am in the seventh grade. It is storming here today. I like to slide down hill. Well goodbye.—Veda Wheaton, R. 1, Harbor Springs, Mich.

Dear Uncle Ned:—I have written you before and saw my letter in print and I thought I would write again. I thought Christmas day would be without any snow, but I was very much mistaken, wasn't I? Did you have a lot of fun on Christmas? I did and hope you and all the cousins had a lot of fun. There was a program at the school I go to, on Friday night the 21st. I was in a few songs and a dialogue, and had a fine time. Well, Uncle Ned, do you like to go to parties? I do, and go to quite a few of them. I am in the seventh grade at school and was twelve years old the 18th day of December. I was born in the cold and stormy month of December. Well I guess I will close for now. I hope "Old Mr. Wastebasket" does not get this letter. Your nephew,—L. D. Biddle, R. 2, Lake View, Michigan.

Dear Uncle Ned:—I am going to write a letter again. I haven't written a letter to the children's Hour page since last spring. Well, did you have a good time Christmas? I did. We had a tree at home and a tree and program at the church. My little sister Ethel spoke for the first time and she did fine. She is five years old. We all got a bag of candy and nuts at church. My sister, brother and cousin, went to Traverse City today for a couple of days visit, with my aunt and uncle. I guess they will have a good time. I wish I could have gone with them, but I have just been up there recently, so I could not go this time. I will send in a few riddles. Who guesses them will receive a letter from me. If I place a dime on the table in a room full of people, what is the first thing it does? How many peas in a pint? What grows in winter, dies in summer, and grows with its roots upward? I think the answer to Faybella Robinson's riddle is, when you put it in your pocket you double it, and when you take it out, you find it increases. Am I right, Faybella? I will close for this time, wishing Uncle Ned and all the cousins a happy New Year.—Gladys Carlson, Box 49, Omena, Michigan.

Dear Uncle Ned:—I have been a silent reader of the M. B. F. and find the Children's Hour very interesting myself. I have light eyes, black hair (which is bobbed) and weigh 148 pounds. Can anyone guess my age? Try it. There is hardly any snow on the ground in Gladwin county, but we can say we had a white Christmas. I love snow and I think perhaps every boy and girl should. I am very sorry we have no snow and ice for I remember last December we had many skating and coasting parties. We sure enjoyed them. They made our cheeks rosy and our lips red. I noticed my letter is getting somewhat long and the waste basket is wondering, but nevertheless I am thankful and appreciate the privilege of writing. I will close, wishing some of the nieces and nephews would write to me. From your want-to-be niece.—Miss Dorothy Foote, Star Route, Gladwin, Michigan.

Dear Uncle Ned:—I thought I would write a letter to the Children's Hour but I don't want Mr. Wastebasket to get my letter which I think he will. I must describe myself. My age is twelve years. My birthday is February eighteenth. I have bobbed hair and my height is four feet ten and one-half inches. I have six brothers and two sisters. Two of my brothers are married. I am in the seventh grade at school. I go to my brother's school. Both of my sisters teach and two of my brothers. One isn't teaching this year. Did you have a Merry Christmas? I did. I play the piano although I haven't taken any lessons. My sister plays the piano also. Well, I guess I will say goodbye for this time.—Ursula Byrne, R. 5, Lowell, Mich.

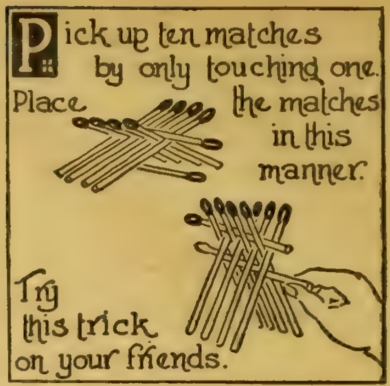
Dear Uncle Ned:—I have been a silent reader of the Children's Hour for some time. Well, I must describe myself. I have light brown bobbed hair, dark brown eyes, and am four feet and eight inches tall. I am eleven years of age, and in the seventh grade at school. I have three sisters and one brother. I will close with a few riddles. The person that guesses these riddles right will receive a letter from me. Black upon black and black upon brown, three legs up and six legs down. Upon the hill there is a green house, in front of the green house there is a white house, in that white house there is a red house, in that red house there is a lot of little negroes. Well I must close and leave room for someone else. With love to Uncle Ned and cousins, your want-to-be niece,—Imogene Hibberd, R. 2, Box 22, Remus, Michigan.

Dear Uncle Ned:—I thought I would join your merry circle. My father takes the M. B. F. and we enjoy it very much. I am a girl and am 10 years old, and am in the fourth grade. I live in the country. I go to the country school. Now I will describe myself. I am 4 feet 3 inches tall and weigh 63 pounds. I have black eyes, and brown curly hair. I wish some girls and boys would write to me. I like to get letters.—Miss Jessie Maginity, Millersburg, Michigan.

Dear Uncle Ned:—May I join your merry circle? I have never written to you before. I will try to describe myself and our home. I have brown eyes and light brown bobbed hair. I am four feet six inches tall. Our home is one and three fourths miles east of the village of Westphalia. Our farm contains about one hundred and twenty acres. We have a number of cattle. As a pet I have two cats and one dog. My father takes the M. B. F. and likes it very much. I like to read the Children's Hour. As my letter is getting long I will stop and let the boys and girls guess my age. Good-bye to all.—Margaret Bingel, Westphalia, Michigan.

Dear Uncle Ned:—I have read the page of the Children's Hour many times and was greatly interested in the letters. I guess I will describe myself before I write any more. I am 4 feet 5 inches in height, and weigh 116 pounds. I am 13 years old. I have brown eyes, light hair and I am light complexioned. I am in the 7th grade at school. I greatly love music and I play the piano lots, but only by ear. I have three sisters and they are all married. I am the only one left now. I live on a 120 acre farm and we have 2 horses, 1 cow, 90 chickens, and 4 cats. I was in Muskegan this summer. I have two sisters that live there. I certainly had a glorious time. Well, Uncle Ned, I hope to see my letter in print and would very much like to have some of the cousins write me. I had better leave space for some of the cousins to write, so will close.—Helen Carey, R. 4, Box 149, Traverse City, Michigan.

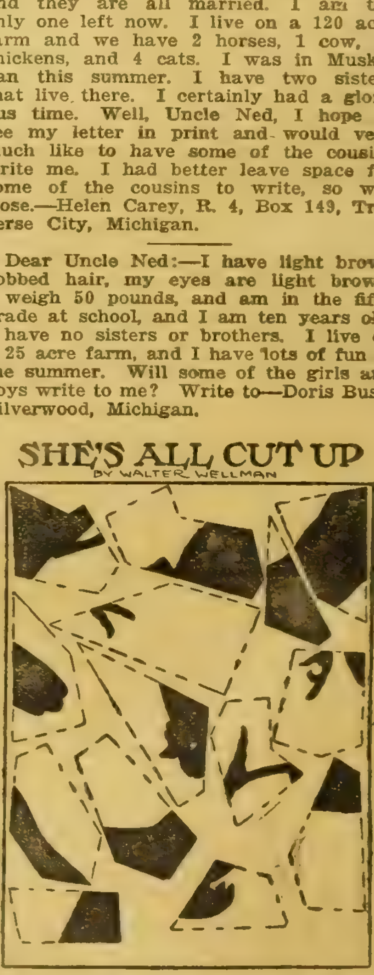
Dear Uncle Ned:—I have light brown bobbed hair, my eyes are light brown, I weigh 50 pounds, and am in the fifth grade at school, and I am ten years old. I have no sisters or brothers. I live on a 25 acre farm, and I have lots of fun in the summer. Will some of the girls and boys write to me? Write to—Doris Bush, Silverwood, Michigan.



Pick up ten matches by only touching one.
Place the matches in this manner.
Try this trick on your friends.

SHE'S ALL CUT UP

BY WALTER WELLMAN



Cut out the pieces along the dotted lines, and then paste them together on a stiff piece of cardboard, and have her as she was. What was she?

Answer to puzzle in last issue: WHITTIER and THACKERY.

Valuation of State Increased

(Continued from Page 3)

sands of descriptions of property. This work was made necessary because the local assessors had not given sufficient attention to the rapidly changing conditions in the counties with the result that the tax burden was not equitably distributed.

"For several years the board, cooperating with the state geologist, has made an appraisal of the iron mines of the state and has communicated the result of such appraisal to the assessing officers of the townships and cities in which such property is located, with the result that no class of property in the state is more equitably or evenly assessed than are the iron mines. A similar appraisal is now being made of the copper mines and it is expected that the result of the appraisal will be reflected in the assessment of this class of property.

Survey Exemptions

"Believing that it will be of great interest to the people of the state the board is now securing information as to the value of all property in the state which is exempt by law from taxation. This information will be made public and it is believed will prove enlightening to those interested in the subject of taxation.

"To the end that the state tax may be distributed to the several counties in proportion to their taxable value, the board is required by law to prepare for each meeting of the state board of equalization an estimate of the true cash value of all taxable property in each country in the state. The preparation of this report demands the utmost care and consumes as much time as any other activity in which the board is engaged. In order to prepare an estimate of the value of taxable property, it is necessary that examinations be made in each county to ascertain whether or not assessments are made in compliance with law, and whether or not all property subject to assessment is actually upon the assessment rolls. In the earlier history of the tax commission the members were not represented on the state board of equalization and its recommendations did not always receive the attention to which they were entitled. Under the present law, however, all members of the commission are members of that board and the result is that the recommendations made are given most careful consideration, and it is confidently believed that the tax burden is now distributed to the several counties of the state more equitably than ever before.

"To insure further the proper distribution of the burden of state taxation, the board was given power in 1913 to review the equalization made by a board of supervisors. When any supervisor believes that his assessing district has been discriminated against by the board of supervisors in equalizing the assessment rolls of the county, he is privileged to appeal to the board of state tax commissioners to review the equalization. In such cases careful investigations are made in every assessing district in the county; and after holding a hearing, at which every supervisor is permitted to give information relative to the assessment of property in his district, a new equalization is made by the board and state and country taxes must be apportioned upon the equalization so made. In this manner, each assessing district in the state is insured against being called upon to pay more than its proper proportion of the burden of state and county taxation. Such reviews of equalization were held during the past year in the counties of Genesee, Lake, Macomb, Oakland, Oscoda, St. Clair and Shiawassee.

"The members of the board of state tax commissioners, together with the governor of the state, constitute the state board of assessors. It is the duty of this board to assess for purposes of taxation the property of railroad, express, sleeping car, private car line, telephone and telegraph companies operating within the state. To make this assessment detailed reports from approximately 1,500 companies must be compiled and carefully studied. Assessments are made on 87 railroads, one express company, one sleeping car company, 240 car companies and 300 telephone companies. Telephone companies whose gross receipts are less than $500 per annum are not subject to assessment. There are 741 companies whose receipts are too small to warrant an assessment. The aggregate value of this property assessed for the year 1922, taxes upon which were payable in 1923, was $213,097,750. The amount of taxes assessed against this property was $8,921,604.02.

Tax Mortgages

"Under the provisions of the mortgage tax law, the board of state tax commissioners is required to determine the amount of tax to be paid in the state of Michigan upon all mortgages covering property in Michigan and other states. Ten such mortgages were submitted to the board during the year and taxes amounting to $47,948.50 were collected thereon.

"In investigating the operation of the mortgage tax law, it was discovered that owners of land contracts, by their failure to place such contracts upon record, were evading the taxes thereon. Inasmuch as all mortgages and land contracts upon which the specific tax is not paid are subject to assessment under the general tax law, the board was obliged to take steps toward forcing the payment of either the specific tax or the general property tax upon this class of property. Owners of mortgages, because of the fact that it is important to record the mortgage to protect the mortgage interest, have almost universally complied with the law and have paid the specific tax; the owner of a land contract, however, still retains title to the property until the payments on the contract have been completed and has therefore, not been interested in placing the contract upon record, thus evading the tax.

"Through activities of the board, thousands of land contracts upon which no tax has been paid have been uncovered and during each of the past two years it is conservatively estimated that $1,000,000 has been paid on these securities which would not otherwise have been paid. One-half of the amount so paid goes to the general fund of the state, and the other half goes to the general funds of the counties in which the taxes are paid, thus relieving the owners of general property from taxation to that extent.

"The members of the board of state tax commissioners are William S. Linton, of Saginaw; Nathan F. Simpson, of Hartford; and George Lord of Detroit. Mr. Linton, being the senior member of the board, is the chairman. The secretary is B. F. Burtless, of Lansing."

HOLDING A COMMUNITY FAIR IN SMALL TOWN

(Continued from Page 6)

venture is due to the women of the Aid. All busy women, several mothers of large families, none rich, all Workers, not one caring a whit for criticism or knocks, or petty jealousies. Everyone with a prayer in her heart and determination on in her mind.

They see already their aim materializing in a large hole on a lot on Main Street. The excavation for the basement of the new Church, the Ladies' Aid kitchen of the new Church if you please.

Can it be done? Certainly. Surest thing you know.

Given a Ladies Aid Society, or a Committee or anything you want to call it, like ours, and any Community can have a Fair, or a new Church or anything.

Going Down

"Oh, yes," said Mrs. Gadgett, proudly, "we can trace our ancestors back to—to—well, I don't know exactly who, but we've been descending for centuries.'—Boston Transcript

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Too Human

Bobby (Christmas morning)—"Mummie, Santa Claus isn't a very good man, is he?"

Mother—"Certainly he is, dear! Why not?"

Bobbie—"Well, he came into my room last night in the dark, and I'm almost sure I heard him say 'Damn!' "—London Humorist.

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A Department for the Women

Edited by MRS. ANNIE TAYLOR

DEAR FOLKS:—These coming months are the ones that will tell us this spring if our winter has been well spent. Are you trying your best to get the right start? There is a great deal of community work to be done and I know personally that the women of Michigan are trying and are doing a great work. Co-operate with your neighbor. The sewing club should be formed right now. There are so many ideas to be exchanged in this department. Share your knowledge. How about having some lessons in first-aid by the community nurse. I feel sure that every mother would appreciate and enjoy an afternoon spent in this manner. We have a great many shut-in days ahead, and you know how hard it is to plan such a day to make it a happy one for both you and the kiddies. I am sure there are some new ideas for such a day. Let's pass them on. For every letter published I will send $1 to you. Letters should be in not later than February 1st.

Your Friend,
Mrs Annie Taylor

Address letters: Mrs. Annie Taylor, care The Business Farmer, Mt. Clemens, Michigan.

EIGHT YEARS OLD

By Anne Campbell

AT church entertainments
  I mean to be good.
I try to sit quiet
  As little boys should.

I stay by my mother
  And try not to squirm,
An' wish I was baitin'
  A hook with a worm!

I think while I'm sittin'
  Of all kinds o' things.
How funny a snake looks
  With butterfly's wings!

Of shootin' an' skatin'
  An' runnin' all day!
It's awful hard keepin'
  So quiet this way!

I plan that I'll holler
  When they've done their stunt.
My ma wouldn't like it,
  So mebbe I wunt!

They'll put me to bed now,
  But I'll never peep!
That church entertainment
  Was lots worse than sleep!
(Copyright, 1923.)

HOME-MADE SOAPS

SOME time ago one of our readers asked for a good recipe for soap-making. I sent her a book with the information in it. In the meantime I wrote to Washington and they sent me these splendid directions and also a list of reference books that may be obtained at your local or some library near.

When necessary, soaps can be made at home by treating melted animal fats or vegetable oils with a strong solution of caustic soda dye. Originally caustic lye with fresh slaked lime, allowing it to settle, pouring off the clean solution, and concentrating it by boiling. Common lye, which can now be obtained from practically all drug stores, grocery stores, and dealers in household goods, is caustic soda or soda lye and has chemical properties very similar to those of potash lye. Soaps made with potash lye are always soft, while those made with soda lye, under proper conditions and treatment, are hard. Directions for using soda lye in home-made soaps are usually given on the labels or wrappers of the cans in which the lye is sold.

The home preparation of soap is rarely practicable except when inedible, or an excess of edible, fat, grease, oil, or tallow is available and can be disposed of advantageously in no other way. It is largely a hit-or-miss business. As some free alkali or uncombined grease, or both, is usually present in home-made soaps, they are seldom suitable for toilet use. Careful chemical control and special manufacturing equipment are necessary to make soaps having the desirable properties commonly associated with a toilet soap.

Laundry Soaps

A small quantity of laundry soap may be prepared by the so-called "cold process," as follows:

Empty the contents of a small can containing approximately 5½ ounces of household lye (which should be at least 94 per cent caustic soda) into an iron kettle, add 1½ pints of water, stir with an iron or wooden rod until all of it is disolved, and allow the solution to cool.

In another iron kettle melt 2½ pounds of clear grease consisting largely of tallow. After this has cooled, pour the solution of lye slowly into the melted grease; stir for about 10 minutes to mix thoroughly; and then pour into a black-iron pan. Cover and leave it in a warm place for a day or two, after which the soap can be cut into cakes.

The grease used must be clean and free from salt. After being melted over the fire it must be allowed to cool until it is just warm to the hand. The solution of lye must also be just lukewarm. Care must be taken to stir the lye into the grease, not the grease into the lye. If the soap is streaky, with grease layers, showing that it is not thoroughly combined with the lye, put it back into the kettle, with one pint of water, and heat until the soap is melted and clear. Pour into a black-iron pan, cover, and set aside for two or three days.

Because of the glycerine liberated from the grease and the large quantity of water present, the soap made in this way will not be very hard. As it dries out, however, it will harden to some extent.

List of Reference Books

Soapmakers' Handbook, by Wm. T. Brannt, published by H. C. Baird & Co., Philadelphia, Penna.

Modern Soaps, Candles and Glycerin, by L. L. Lamborn, pub. by D. Van Nostrand Co., N. Y.

Textile Soaps and Oils, by C. H. Hurst and Wm. H. Simmons, 2nd Rev. Ed. Pub. by Scott, Greenwood & Son, London.

Simmons and Appleton's Handbook of Soap Manufacture.

Deite's Manual of Toilet Soap Making.

The last two books listed can be purchased from D. Van Nostrand Co., 25 Park Place, New York, N. Y.

GETTING THE BABY TO SLEEP

PROPER habits of sleep are almost as essential to the good health of an infant as is the right diet or sufficient exercise in the open air. Unless a baby gets plenty of sleep, he is certain to be nervous, irritable, and to grow more or less debilitated. During the first year, as a general rule, the more babies sleep the better. During the second year fourteen hours is the ideal amount and, in order to get this in, a twelve-hour night must be supplemented by a nap of two hours during the daytime.

To encourage sleep the infant should be placed alone regularly at the same hour each afternoon and evening in a quiet, partially darkened room or in a protected situation in the open air. Regularity is of the utmost importance. A baby put to bed late one evening cannot be expected to go to sleep promptly the next. Nor should a baby be rocked, fussed over, or otherwise pampered at his bedtime hour. Such a practice, if indulged in, is certain to become habitual and to react to the detriment of the infant.

Not only is it important for a baby to sleep a sufficient number of hours out of the twenty-four, but he should sleep soundly while he is at it. To insure this he should be protested, so far as possible, from loud sounds, strong light and tactile sensation of every sort. Young mothers are liable to make the mistake of disturbing their babies by unnecessary attentions. The less done to a baby while he is asleep the better. Very often babies are kept awake by the mistaken ministrations of solicitious mothers, who fail to appreciate the fact that their babies' whimpering is in reality an appeal for sleep. A point, too, well worth emphasizing in this respect is that water given just before bedtime results in bed-wetting and consequently an unnecessary disturbance.

Altogether, a maxim well worth bearing in mind at bed time is: "Let well enough alone."

EMBROIDERY MUCH USED ON HATS THIS SEASON

EMBROIDERY is used a great deal this season on hats. The hat may be made of embroidered material or it may be constructed first of plain material and then literally embroidered all over. The material used for embroidery depends, of course, upon the ground material, in other words, the goods of which the hat is made. Chenille is a very popular material for embroidery, although nearly everyone knows that chenille has to be couched on. Couching is a sort of occasional going over and over stitch, used to hold heavy braid or cord in position. Couching is employed when the thread cannot be sewed through or into the material. The chenille of the present season is a great improvement over the crawly, perishable material we have been acustomed to heretofore.

Another material used in embroidering hats is a narrow flat braid of artificial silk, which may be easily threaded into a longeyed needle. This is sold under a number of different names, the most common of which are ribbizene, or filo braid. This material may be used in any number of simple decorative stitches in carrying out all-over designs.

Narrow ribbon either plain or shaded in color is also used. The ribbon is first laid over the stamped design and held in place by pins stuck straight in, folding the ribbon neatly at corners, or gathering one edge of the ribbon and drawing up to fit around curves. In some of the narrow ribbons, it is possible to draw up the cord at the edge as in many of the lace edges. In sewing this ribbon onto the hat or onto the hat materials, take occasional tiny stitches over extreme edge of ribbon. The term "occasional stitches" in this case would mean stitches at intervale, near enough together to hold the ribbon to the line of the design, yet far enough apart so that the ribbon will not look as though it were glued to the hat, but instead will have the appearance of being embroidered. Yarn or worsted, and fiber silk are also used for hat embroidery.

Personal Column

Can Anyone Help by Sending In These Songs?—I am a poor girl. My mother died a year ago. My father is alive and I have two brothers and no sisters. I should like some songs that my father and mother used to sing. The songs are as follows: "There'll Come a Time"; "After the Ball Was Over"; "The Little Girl that Played Upon My Knee"; "Break the News to Mother" and "When Maggie and I Were Young."—A subscribers daughter.

Has Anyone this Information?—Will you please publish the following request in your valuable paper? Would like to know where I can purchase the book entitled, "My Opion and Betsy Bobbits" by Josiah Allen's wife or Marietta Holly. Thanking you in advance.—Mrs. Wm. Krause, Jr., R. 1, Box 53, Washington, Michigan.

Home for the Right Boy.—Will you please locate for me through your paper some homeless unfortunate boy who wishes a home. Excellent schooling, opportunity as we live in a district school and also access to a high school free of charge.—A subscriber.

Words Wanted.—I wonder if some reader of the M. B. F. would please send me the words of the song, "I Want to Go to Morrow." The first few lines of it is: "I started on a journey just about a week ago, For the little town of Morrow, in the state of O-hi-o.—Miss Fleeta Burch, R. 2, Dryden, Michigan.

"In School Days", by Whittier.—This poem was asked for by one of our readers and sent to me. It is quite long and felt we could not give it the space at that time. I have tried to find the subscriber and send the poem to her but my letter has been returned. I will thank two of our readers, Mrs. Carl Moeckel and Mrs. Geo. F. Baggett for sending me the poem.

Still sits the school-house by the road,
  A ragged beggar sunning;
Around it still the sumachs grow,
  And blackberry-vines are running.

Within, the master's desk is seen,
  Deep-scarred by raps official;
The warping floor, the battered seats,
  The jackknife-carved initial;

The charcoal frescos on its wall;
  Its door's worn sill, betraying
The feet that, creeping slow to school,
  Went storming out to playing.

Long years ago a winter sun
  Shone over it at setting,
Lit up its western window-panes
  And low eave's icy fretting.

It touched the tangled golden curls,
  And eyes with grief o'erflowing,
Of one who in her steps delayed
  When all the school were going.

For near her stood the little boy
  Her childish favor singled;
His cap pulled low upon his face
  Where pride and shame were minigled.

Pushing with restless feet the snow
  To right and left, he lingered
As restlessly her tiny hands
  The blue-checked apron fingered.

He saw her lift her eyes; he felt
  The soft hand's light caressing,
And heard the tremble of her voice,
  As if a fault confessing.

"I'm sorry that I spelt the word;
  I hate to go above you,
Because"—the brown eyes lower fell—
  "Because, you see, I love you."

Still memory to a gray-haired man
  That sweet child-face is showing.
Dear Girl; the grasses on her grave
  Have forty years been growing.

He lives to learn in life's hard school
  How few who pass above him
Lament their trimph and his loss,
  Like her, because they love him.

—if you are well bred!

Personal Habits.—The power of winning love and friends, which is such a precious possession to all young people, especially girls, will, in connection with good behavior and good manners, depend very largely upon certain personal habits, chief among which are order, neatness promptness, and cheerfulness.

The girl or woman who is personally disorderly and untidy in her room and dress put a great strain upon the patience and affection of all those associated with her who are possessed of refined and cultivated tastes. In fact, I believe there is nothing so disenchanting, so contrary to ideal young womanhood, as a lack of neatness and tidiness in person and dress.

Menu for January

Tomato Bisque
Pickled Peaches Celery
Roast Rabbit Currant Jelly Sauce
Hominy Squares
Riced Potatoes Boiled Onions
Cranberry Salad
Apple Tapioca
Coffee

Roast Rabbit.—6 tablespoons breadcrumbs, 3 tablespoons chopped cooked ham, 3 tablespoons lard, 1 tablespoon chopped parsley, 1 teaspoon grated lemon rind, ½ teaspoon powdered herbs, 3 chopped mushrooms, 3 beaten eggs, 1 rabbit, salt, pepper, and red pepper to taste. Beat up eggs, add mushrooms, lard, ham, breadcrumbs, parsley, and seasonings, and mix well. Wipe rabbit, and season inside with pepper, salt, and powdered cloves. Lay force-meat inside rabbit and sew top; skewer head back and legs on each side; roast 1 hour, basting well with melted lard. Serve hot with currant jelly sauce.

RECIPES

Gingerbread.—1 cup sour milk, 2¾ cups bread flour, ¼ cup shortening, 1 egg, 1 teaspoon soda, ½ teaspoon salt, 1½ teaspoon baking powder, ¾ cup sugar, 1 cup molasses, 1 teaspoon ginger, ½ teaspoon cinnamon.

Mix and sift the dry ingredients. Mix the molasses with the milk and slightly beaten egg. Add the liquid to the dry ingredients, then add the melted shortening. Bake in a large shallow pan 35 to 40 minutes in a moderate oven (375 deg.).

If sweet milk is used, leave out the soda and use 5½ teaspoons baking powder.

Chocolate Fudge.—Two cupfuls sugar, one cupful milk, two squares baking chocolate, one tablespoonfud butter and one teaspoonful vanilla. Boil the first three ingredients together slowly until a soft ball is formed when tried in cool water. Do not stir the fudge after taking it from the stove, but add the butter and let cool. Be sure the fudge is cool in the center as well as on the outside of the pan. When cool add vanilla and beat until the fudge forms a ball and can be rolled out in long strips on bread board or marble slab. Cut in pieces. If when beating, the fudge becomes heavy and quite sticky, add one-half teaspoon of warm water, being careful not to add too much. Good fudge requires a lot of beating.—Margaret L. Millin, Lake Shore Road, Mt. Clemens.

Meat Pie.—1 large bunch of celery, 1 large onion, 1 pint water or meat broth, ¾ pound cooked meat cut up, 1 cup strained tomatoes, 1 teaspoon salt and pepper, 6 tablespoons flour mixed, with ½ cup water for thickening.

Cook the celery and onion in the water or broth, add the meat, tomato juice, salt and pepper, then the thickening slowly and boil five minutes. Pour this mixture hot into a casserole cover with a crust made from the following directions: ¾ cup milk, 2¼ cups bread flour or 2½ cups pastry flour, 6 tablespoons shortening, 4½ teaspoons baking powder, ¾ teaspoon salt.

Mix and sift the dry ingredients, cut in the fat thoroughly with a biscuit cutter, then add the milk slowly. Pat the dough out on a floured board. Make the crust about one inch deep. Place this on top of the mixture in the baking dish. The dish should be deep enough so that the liquid will not boil over the sides. Bake in a hot oven 20 minutes.

Cocoa Bread.—1 cake compressed yeast, 2 cups milk, scalded and cooled, 1 tablespoon sugar, 5½ cups sifted flour, ½ cup sugar, ½ cup cocoa, ¼ cup butter, ½ tablespoon salt.

Dissolve yeast and one tablespoon sugar in lukewarm milk; add 3 cups of flour and beat until smooth. Cover and set aside to rise in a warm place until light —about ½ hour. Add sugar and butter creamed, eggs well beaten, cocoa, remainder of flour, or enough to make a soft dough, and salt. Knead lightly; place in a greased bowl. Cover and let rise in a warm place until double in bulk—about two hours. Mould into loaves; place in well greased bread pans, filling them half full. Cover and let rise again until light —about one hour. Bake 40 to 45 minutes. The oven should be hot first, and then moderate.

Honey Dew Cake—Four yolks of eggs. One white of an egg. Butter size of two eggs. One and one-half cups sugar. Three cups flour. Two and one-fourth teaspoons baking powder. One-half teaspoon salt. Milk. Five teaspoons of extracted honey. Cream eggs, butter and sugar. Add flour, baking powder and salt, sifted together. Add enough milk to make soft batter. Beat in honey and flavor with vanilla, (one teaspoon). Bake in moderate oven. This will make loaf cake 12½x9½ inches. Also six cup cakes. J. B. Pewamo, Michigan.

The Runner's Bible

(Copyright by Houghton Mifflin Co.)

Let each man prove his own work, Gal. 6:4.

In our efforts to be kind we must be careful not to perform another's duty for him, thereby to deprive him of needful experience. Neither must we allow ourselves to dictate by over-advice or undue influence.

Let none of you suffer * * * a meddler in other men's matters, 1 Peters 4:15.

Remember you can shine upon your brother, but not for him.

WOMEN'S EXCHANGE

IF you have something to exchange, we will print it FREE under this heading providing: First—It appeals to women and is a bonifide exchanges, no cash involved. Second—It will go in three lines. Third—You are a paid-up subscriber to The Business Farmer and attach your address label from a recent issue to prove it. Exchange offers will be numbered and inserted in the order received as we have room. —MRS. ANNIE TAYLOR. Editor.

110.—Plush, Percale and gingham, Quilt pieces, for anything useful. Mrs. Geo. Morgan, R. No. 3, Vicksburg, Mich.

AIDS TO GOOD DRESSING

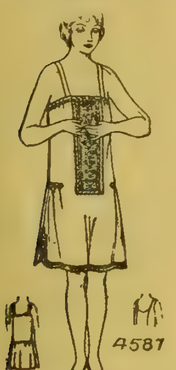
BE SURE AND SEND IN YOUR SIZE

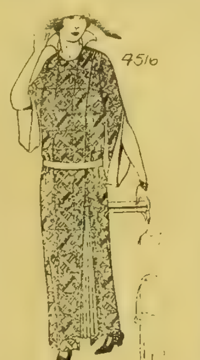
4593. A Popular House Dress for Slender or Mature Figures.—Striped percale is here combined with white pique. This is a good style for ratine, for wool rep, or serge, and also for linen, gingham and voile. The sleeve may be finished in wrist or elbow length. The Pattern is cut in 7 Sizes: 36, 38, 40, 42, 44, 46 and 48 inches bust measure. The width at the foot is 2 yards. A 38 iinch size will require 4¾ yards of 36 inch material. Collar, vest and pocket flaps of contrasting material, require ½ yard.

4587. A Practical Undergarment.—This pretty model comprises a vest and "step-in" drawers. The vest portion may be finished with "camisole" top or with shaped shoulders. If desired a closing may be effected at the side of the panel. Crepe, crepe de chine or nainsook is suitable for this design. The Pattern is cut in 4 Sizes: Small, 34-36; Medium, 38-40; Large, 42-44 and Extra Large 46-48 inches bust measure. A Medium size requires 2⅜ yards of 36 inch material. Panel of Embroidery requires ½ yard 9 inches wide.

4516. A Stylish Gown.—Figured silk was used for this model with crepe trimming. This is a good style for moire or satin or broad cloth. The neck edge may be finished without the collar. Beige and blue would be a good combination for this design. The Pattern is cut in 6 Sizes: 34, 36, 38, 40, 42, and 44 inches bust measure. A 38 inch size requires 5⅛ yards of 40 inch material. To trim as illustrated requires 1⅛ yard of material 40 inches wide. The width of the dress at the foot with plaits extended is 2⅜ yards.

4586. A Pretty Night Dress.—Nainsook, crepe or crepe de chine are attractive materials for this design. Lace or insertion or, a simple finish of hem-stitching will be suitable for trimming. The Pattern is cut in 4 Sizes: Small, 34-36; Medium, 38-40; Large, 42-44; Extra Large, 46-48 inches bust measure. A Medium size requires 4⅝ yards of 36 inch material. To trim with contrasting material requires ⅜ yard 36 inches wide or 2⅝ yards of lace 3 inches wide if trimmed as illustrated.



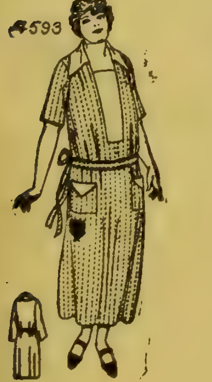


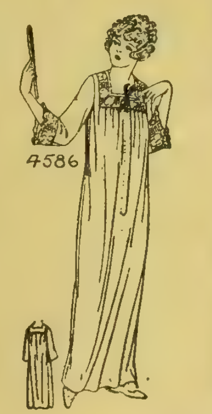
4603. A Dainty Frock for a Little Girl.—Figured and plain silk are combined in this instance. The model is also attractive for wool rep, or wool crepe, and for all wash materials. Voile and embroidery would be a good combination. The Pattern is cut in 4 Sizes: 4, 6, 8 and 10 years. An 8 year size requires 2½ yards of 36 inch material. For godet of contrasting material ⅝ yard 27 inches wide is required, cut crosswise.

4534. A Good Style for A School Frock.—Checked gingham in brown tones was used for this model. It is good for wool jersey, twill and serge also for taffeta and velveteen. The Pattern is cut in 4 Sizes: 6, 8, 10 and 12 years. A 10 year size requires 2⅛ yards of 54 inch material. Collar and cuffs of contrasting material will require ⅜ yard 36 inches wide.

4601. A Simple Frock for the Growing Girl.—Wool crepe was selected for this model, decorated with cross stitching in contrasting colors. The lines are simple; the sleeve and neck line are very pleasing. The Pattern is cut in 4 Sizes: 6, 8, 10 and 12 years. A 10 year size requires 2⅝ yards of 32 inch material.

4582. A Smart New "Separate" Blouse.—Long lines and a stylish collar make this blouse as desirable and attractive. It is finished with the popular hip bands, and is becoming to youthful and mature figures. The Pattern iis cut in 6 Sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. A 38 inch size requires 2½ yards of 40 inch material.





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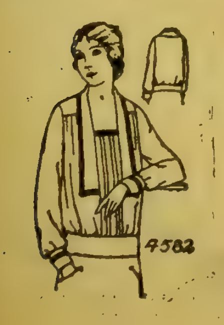

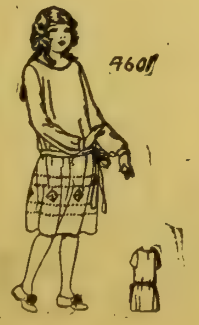

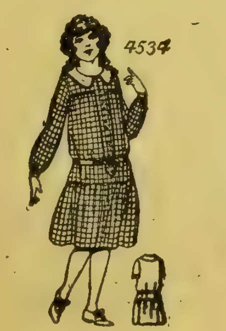

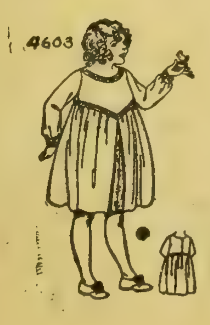

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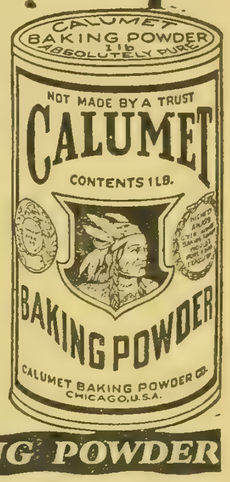

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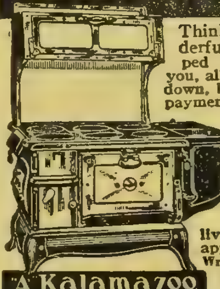

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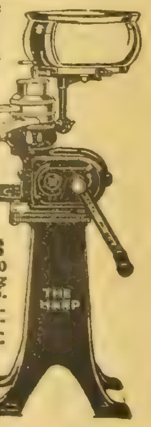

DAIRY and LIVESTOCK

GOOD WOOL DEMAND APPARENT

THOUGH the United States is the third country in wool production and has produced an average of 300,000,000 pounds a year for the last 35 years, it has never met the home demand. Imports for some years prior to the war averaged 200,000,000 pounds. They reached a peak at 453,727,000 pounds in 1918. Probably a normal annual amount which must be imported is around 300,000,000 pounds. American sheepmen have therefore no need to be afraid of overshooting the home demand for wool. Since 1921 wool prices have more than doubled. The problem of selling wool is not to create a market but to take the best advantage of the one that exists.

This has been attempted in the last few years by considerable extension of cooperative marketing. Great quantities of wool are now assembled annually by wool pools and held at central points for inspection by wool buyers. Cooperation, however, has seen its greatest development in the farm flock regions. On the range, cooperative marketing is comparatively new, and effects only a small portion of the wool sold by large ranching outfits. It has, however, achieved some success. Results indicate that cooperative selling stimulates competition among buyers, facilitates business-like transactions, and tends to check overloading of markets.

The ratio of the number of sheep to population in the United States has declined since 1884. From 1899 to 1903 there were about 5 sheep for every 8 people. Ten years later there were only 4. From 1919 to 1923 there were only 2.8 sheep for every 8 people, or about 1-3 of a sheep per person. Nevertheless the total production of wool has remained practically constant owing to increase in the weight of the fleeces. Per capita consumption of wool has been maintained by great increases in imports.

REPORT OF NEWAYGO COW TESTING ASSOCIATION

THE Newaygo county cow testing association, oldest association of its kind in the United States, has just completed a very successful year, with 223 cows completing their records for the entire year, 25 cows having been sold as undesirable, 16 purchased and four pure bred sires purchased during the year.

The results of the work show a great improvement over that of 1922 according to figures below:

The average production of all cows in the association for 1923 is 6,755 lbs. milk, 321.0 lbs. butterfat, while that for 1922 is 7,112 lbs. milk, 302.3 lbs. butterfat. Also the average profit per cow in the association was $104.61 over cost of feed for 1923, while the average profit for 1922 was $53.87 over cost of feed. The average cost for feed in producing 100 lbs. of milk was $00.99, and $00.24 per lb. for butterfat.

Forty-eight cows in the association made over 365 lbs. of butterfat during the year, while seventeen out of the twenty-seven herds averaged over 300 lbs. and four over 400 lbs. of butterfat.

The high cow in each herd averaged 8,482 lbs. of milk and 404.3 lbs. of fat, returned $140.18 above feed cost, and produced milk for $00.80 per 100 lbs., butterfat for 18c per lb. for cost of feed, and the average return for every dollar expended for feed was $3.14.

The low cow in each herd averaged 5,159 lbs. milk and 238.6 lbs. butterfat, returned $67.55 above cost of feed, produced milk for $1.116 per 100 lbs., fat for 26c per lb. for feed, and the average return for every dollar expended for feed was $2.11.

Pure bred cows have appeared in the "high ten" each month 2.1 times as often as did the grades, and "Grandfather's Pride" (the scrub with no pure bred breeding) has not appeared once.

Six members have completed records for two years and their average production is 547 lbs. of milk and 32.7 lbs. of butterfat above that of one year ago. This demonstrates the fact that the cow testing association is a benefit and a business proposition for the dairyman even if he thinks he knows what his cows are doing after one year's membership in the association.

The high cow in the association for 1923 is a registered Jersey owned by A. C. Nelson, of Holton, and is one of the most efficient cows in the association, her average production for the year being 8,787 lbs. milk and 587.7 lbs. butterfat which is 932 lbs. milk and 131.7 lbs. of fat above her production for 1922. During the past year this cow consumed $41.28 worth of roughage and $59.72 worth of concentrates, or grain, and produced at a profit of $234.95 above cost of feed. Mr. Nelson's neighbors have predicted disaster for the practice he has been following, stating that he would burn out his cows by overfeeding, and that he could not make money by feeding so heavy, while as a matter of fact he has at no time fed over one lb. of grain to three lbs. of milk, and his cows have not been "off their feed" once during the year. His herd average on five cows is 8257 lbs. milk and 464.5 lbs. fat, with an average profit of $173.65 above cost of feed, which is the highest in the association.—Clair Taylor, County Agr'l. Agent.

HOLSTEIN MEET DURING FARMERS' WEEK

IN our last issue we published a short item regarding the meeting of the members of the Michigan Holstein-Friesian Ass'n. during Farmers' Week at the Michigan Agricultural College, February 4th to 8th. For the benefit of those who might have overlooked it we are publishing something about it again in this issue.

The annual banquet will be held at Lansing on the night of Monday February 4th. The annual meeting will be held the following day, Tuesday, February 5th, at the M. A. C., East Lansing. William Moscrip, of Minnesota, probably the best known dairy cattle judge of the U. S. A., will be present to demonstrate Dairy Type and to hold a judging "school." The fourth annual sale of selected Holsteins will be held Monday afternoon, February 4th.

MICHIGAN'S SECOND 40-POUND HOLSTEIN COW

ONLY three other junior four-year-old Holstein cows in the United States have exceeded the seven-day production record of Eco-Sylv Belle Pietje of the Carl E. Schmidt herd at Oscoda. Under the constant supervision of the Michigan Agricultural College this cow recently produced in one week 682.2 pounds milk and 33.014 pounds butterfat—equal to 41.267 pounds butter, according to the advanced registry department of The Holstein-Friesian Association of America. Among the three other cows with higher records is Michigan's champion producer in this class, Wandamere Belle Hengerveld, whose record is 42.65 pounds butter. This cow is owned by E. L. R. Pelletier of Pontiac.

Eco-Sylv Belle Pietje dropped her second calf at the time of her last freshening. She is a large cow, weighing around 1900 pounds shortly before freshening a few weeks ago. Her sire is Avon Pontiac Echo and her dam, Belle Model Pietje 3d. Albert E. Jenkins, manager of the Schmidt herd, states that she is being continued on strictly official test under the supervision of the state college representatives and is producing over 100 pounds milk and around 4.2 pounds butterfat daily.

CASTRATING AND DOCKING INCREASE PRICE OF LAMBS

PRODUCING desirable lambs for the market is dependable to a large extent on the three following principles of management, namely, good breeding, proper feeding, and castration and docking of the lambs. Of these three factors the latter is probably more abused than any of the others, especially when it is considered that docking and castrating are easily done and add much to the desirability and value of the lamb carcass. The most desirable, and thus the most profitable, lamb carcass can not be produced from lambs which have not been docked and castrated, says the United States Department of Agriculture.

The farmer does not market his bull calves as bulls, nor his boar pigs as boars, says the department. Why, therefore, should he market his male lambs as ram lambs rather than as wethers? The correction of this neglect by castrating and docking the lambs is vital, and upon a more general observance of the practice in the farm flocks hinge the real profits and more general success. It is conservatively estimated that 80 per cent of the native lambs—those marketed from farm flocks—which reach the markets come undocked and uncasterated, and that the percentage of ram lambs among the offering during the last year has been as large as ever before.

On the other hand, the custom of docking all lambs and castrating the males is almost universal in the range flocks, and to this practice in a large measure may be attributed the fact that lambs produced on our western ranges outsell native or farm-raised lambs at the market on the average of from $1 to $1.50 per 1000 pounds. These operations have been found profitable, and that is the big reason that they have become so commonly practiced on the western range. They are likewise applicable to the farm flock and just as necessary for the production of the best lambs and consequently the most profit.

IT PAYS TO CONTINUE TESTING OF DAIRY COWS

As a result of the study of records of cow-testing associations in all parts of the country, the United States Department of Agriculture has shown that in well-managed associations there is a gain in the average yearly production of cows from year to year. In other words, even though the poor cows are culled out at first, it pays to keep everlastingly at it, as there is always an opportunity for profitable improvement.

To illustrate this, figures of butterfat production for three associations one each in Michigan, Ohio, and Pennsylvania, show that for the first year the average per cow was 237 pounds, for the second year it was 255 pounds, for the third year 278, for the fourth 292, and for the fifth year 305 pounds. The last year in the series showed an average production of 68 more pounds of fat than the first year. At 40 cents a pound this amounts to $27.-20 a head, and for a herd of 20 cows the increased value would be $544 a year.

Production records of 17,405 purebred, grade, and scrub cows showed that in milk production the purebreds and grades excelled the schubs by 12.42 per cent, and in butterfat production by 17.86 per cent.

NEW STATE HOLSTEIN BUTTER CHAMPION

Michigan's new Junior two-year-old champion Holstein cow for 30 days production of butter is Charlevoix Ormsby Zwelle, owned by Loeb Farms at Charlevoix. Her official record as announced by the advanced registry department of The Holstein-Friesian Association of America, is 1,842.2 pounds milk and 82.395 pounds butterfat equal to 102.9 pounds butter.

This cow displaces the former champion in this class, Traverse Edio Sylvia Walker, of the State Hospital herd at Traverse City, whose record is 100.5 pounds butter.

KEEPING MILK GOATS

Recently I read an article from a lady in Colorado on raising goats for milking, and the ready sale, and profits from this industry. Will you kindly give me your opinion on the advisibility of my going into it in this section? What breed should I get? What is the prospect of selling milk in cities like Bay City, Saginaw and Detroit? I could ship to any of these places. What is the usual price per quart? How could I work up a market? I have an ideal place to keep them. What is the usual price for them?—C. F., Grayling, Mich.

—In many sections of the country

Cream Separator Facts Worth Thinking About!

It is not enough to buy a cream separator that skims *fairly* clean and that runs *fairly* easy—you want one that gets *all* the butterfat down to the last drop and that runs so easily that a child can turn it. In addition, you must get construction that makes many years of good service possible.

In recent tests, the Illinois Cow Testing Association found it a common occurrence, on average farms, for *out-worn, poorly constructed, poorly cared-for separators to waste $25 worth of butterfat every month.* Think of it, *$300 wasted in a single year!* If the machine you are using is failing you in such a manner, you cannot afford to operate it a single week longer, regardless of the so-called "bargain price" you may have paid for it.

It is unnecessary for you to suffer such butterfat losses. You can escape them by throwing out the wasteful machine now and replacing it with a new, efficient McCormick-Deering Ball-Bearing Cream Separator. These modern, easy-running separators represent genuine economy. From the viewpoint of long life, easy-turning, and close-skimming, they outrank all others. You need one on your farm!

If ready cash is not plentiful, ask our dealer for his liberal terms. Let a McCormick-Deering Primrose earn bigger cream profits for you and apply the extra dollars on the easy payments the McCormick-Deering dealer will offer you.

There are five popular sizes—all of standard McCormick-Deering ball-bearing design. Ask the McCormick-Deering dealer about the size best suited to your herd.

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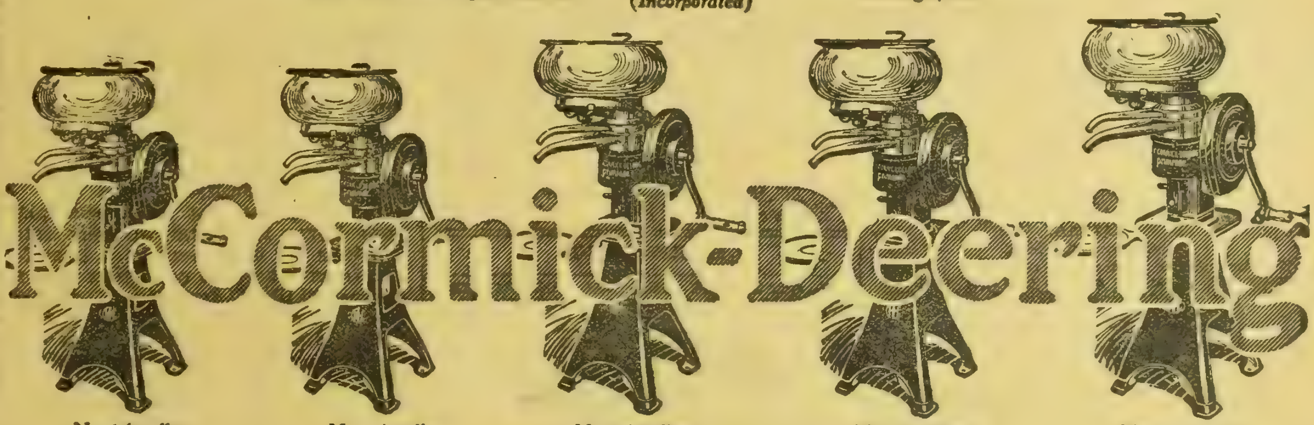

No. 1 (350 lbs. capacity) No. 2 (450 lbs. capacity) No. 3 (650 lbs. capacity) No. 4 (850 lbs. capacity) No. 5 (1100 lbs. capacity)

BREEDERS DIRECTORY

Advertisements inserted under this heading for reputable breeders of Live Stock at special low rates to encourage the growing of pure-breds on the farms of our readers. Our advertising rate is Thirty Cents (30c) per agate line, per insertion. Fourteen agate lines to the column inch or $4.20 per inch, less 2% for cash if sent with order or paid on or before the 10th of month following date of insertion. SEND IN YOUR AD AND WE WILL PUT IT IN TYPE FREE, so you can see how many lines it will fill. Address all letters,
BREEDERS DIRECTORY, MICHIGAN BUSINESS FARMER, MT. CLEMENS, MICH.

CLAIM YOUR SALE DATE

To avoid conflicting dates we will without cost, list the date of any live stock sale in Michigan. If you are considering a sale advise us at once and we will claim the date for you. Address, Live Stock Editor, M. B. F., Mt. Clemens

Feb. 4—Holsteins, Michigan Holstein-Friesian Association, East Lansing, Michigan.
Feb. 5—Poland Chinas, Detroit Creamery Farm, Mt. Clemens, Michigan.
Feb. 20—Durocs, Detroit Creamery Farm, Mt. Clemens, Michigan.

CATTLE

HOLSTEINS

FOR SALE: REGISTERED HOLSTEIN BULL of King Segis Pontiac and Pontiac Korndyke breeding. Ready for service. (Federal Accredited). Price $100. GEORGE C. SPANGENBERG, Royal Oak, Michigan, R. 6, Box 108.

FOR SALE—Two Registered Holstein Heifers. One born Dec. 20, 1922 and the other May 28, 1923 from good producing stock and well developed. Price $164.00 for both. Geo. Church, 1 mile south and 1 mile west of Imlay City, Mich.

AYRSHIRES

FOR SALE—REGISTERED AYRSHIRE bulls and bull calves, heifers and heifer calves. Also some choice cows.
FINDLAY BROS., R 5, Vassar, Mich.

AYRSHIRES

To make room for winter we are offering bred cows and heifers also some well bred young bulls. Look up our winnings at leading state fairs.
W. T. SHUTTLEWORTH, Ypsilanti, Michigan.

HEREFORDS

HEREFORDS

Registered Breeding Cattle, T. B. Tested at practical prices for production of Hereford Baby Beeves profitably all ages.
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72 Herefords	750 lbs.	76 Herefords	660 lbs.
86 Herefords	550 lbs.	48 Herefords	500 lbs.

Can also show you other choice quality bunches. All are dehorned, deep reds, good stocker order. Well marked and show their breeding. If in the market for real quality, one car load or more your choice. Write stating number and weight preferred.
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We Have Bred Herefords Since 1860

Spring calves for sale. Write us your wants. A few Chester White Boars and Sows for sale.
CRAPO FARM, Swartz Creek, Michigan.

4 HEREFORD BULLS, PRICED TO SELL, Dropped in March. 3 Polled, all good individuals. T. B. Tested. Wm. C. Dicken, Smyrna, Mich.

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FOR SALE—REGISTERED RED POLLED Cattle. Both Sex.
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RAISE SHORTHORNS WITHOUT HORNS Like Kelley does. U. S. Accredited Herd No. 28945. For description and price write,
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GUERNSEYS: REGISTERED BULL CALVES. Month old $40. Best of breedings. Mahon''s American Farm R. 1, B. 43, Mt.Clemens, Mich.

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OTTO SCHULZE & SONS, Nashville, Mich.

(Continued on Page 24)

FOR COWS ONLY
KOW-KARE
DAIRY ASSOCIATION CO., INC.

A penny a day is the average cost per cow for the use of Kow-Kare as a preventive of disease and aid to big milk yield.

Nearly Every Cow Can be made a Big Milker

Cow owners have learned that no effort on the farm pays so handsomely as the drive for ***more milk.*** Over 90% of the so-called poor milkers are capable of much better results than is obtained from them. An improved health standard is a sure booster of milk profits.

No wonder. Dairy experts say that under average conditions a yield-increase of only 10% will double the net profit of dairying. The fixed cost per cow of feed and care is about the same regardless of yield. After this cost is met, every pint of milk is added profit.

Perfect health has more to do with big milk yields than breeding or feeding. "Forcing" the milk-making organs to greater efforts ends disastrously unless extra demands are met with extra support of the cow's vitality.

Kow-Kare is invaluable to cow owners. It increases the activity of the milk-making function by promoting vigorous health in the genital and digestive organs. It prevents or relieves cow diseases and disorders by helping these organs to function as nature intended. Its benefits are widely recognized for the treatment of Barrenness, Abortion, Retained Afterbirth, Scours, Bunches, Milk Fever, Lost Appetite.

Let Kow-Kare help you to greater milk profits. Your feed dealer, general store or druggist can supply you—large size can $1.25; medium size 65c. Order direct from us if your dealer does not have Kow-Kare. We pay postage.

Write for copy of our free 32 page book, "The Home Cow Doctor." It will show you the way to greater profit from your cows.

DAIRY ASSOCIATION CO., Inc., Lyndonville, Vt.

On thousands of farms KOW-KARE is "Standard equipment"

Here are just a few extracts from letters such as we receive in every mail from cow owners:

Wm. E. Starkey, Austin, Ind: "I have found KOW-KARE is the best medicine for milch cows that there is. I found that it always paid to feed it whenever my cows went down on the quantity of milk they were giving. I have cured several cows that were down and could not get up.

James H. McClintick, Solon, Me.: "I had a cow that retained the afterbirth for five days, when I decided to try your Kow-Kare. Three doses removed the afterbirth completely and she is now all right. After that I decided to feed KOW-KARE to two other cows for experiment. It increased the flow of milk of one of them nearly one-half; the other gave more milk than formerly and gained in flesh. KOW-KARE is all that is claimed for it.

Joseph Stott, Norwich, Conn.: "I find that by giving a few doses of KOW-KARE it will keep cows in a healthy state, and the result will be more milk—just what we want.

(Continued from Page 23)

DUROCS

RAISE A TOPMAST SENSATION
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We are offering bred sows and gilts. Let us quote you prices on a real boar pig sired by TOPMAST SENSATION. Write us your wants.

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WE GUARANTEE OUR REG. HAMPSHIRES satisfactory. Ask for literature and price.
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REG. HAMPSHIRE HOGS FOR SALE Write your wants to
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We will sell the greatest lot of yearling sows and gilts ever offered in this state, bred to

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DETROIT CREAMERY FARMS
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milk goats have become quite popular, either as a fad or because of their real value in furnishing milk where cows' milk will not answer the purpose. In some experiments carried on in western experiment stations it was shown that goats are very economical milk producers. In some cities goats' milk finds a ready demand for infant feeding and use in invalid diet. This is because of the composition of the milk of the goat. It is claimed by some to be nearer that of human milk than any other animals.

Before one establishes a business of raising goats it is necessary to find out something of the requirements and demand for the milk. It is not safe to count on making a success of milk goats in your section of the state simply because success was made by a lady in Colorado. Some people make a success of anything if they apply themselves and have enough enthusiasm and energy to carry out well defined plans. I believe that this is quite true in raising goats.

There are several breeds of milk goats. Perhaps the most important one and at least the oldest and best known is the milk goat that originated in Switzerland. Other breeds are the Nubian and Maltese.

We do not know of any great demand for milk in the cities that you mention, but it would seem that the demand for special milk of this kind would came naturally from the larger cities and in this event it would be much better to engage in this business closer to the place where you expect to find a market than to engage in it at such a great distance. We have records showing that goat milk has sold at from 25c to $1.00 a quart. The price of milk goats would depend to a great extent on how well bred, if pure breds, and if grades, how much milk they will give. We cannot tell you the average price of milk goats at the present time.—O. E. Reed, Professor of Dairy Husbandry, M. A. C.

Veterinary Department

HORSE EATS SAND

I have a horse six years old that I have trouble with. He has been eating sand. I have given him linseed oil and turpentine. There has been considerable of sand passed from him. He eats and drinks good, but every two or three days has a running of the bowels. I would like to know what causes this and what would be good to give him.—A. A. H., Emmet County.

—I would suggest that you place your horse in charge of your veterinarians for treatment as it is suffering from a serious condition that requires skillful treatment and can best be administered by the veterinarian who has the privilege of making frequent examinations of his patient.—John P. Hutton, Division of Veterinary Medicine, M. A. C.

DISABLED SOLDIER BECOMES WATCH REPAIRER

TO make a watch repairer out of a laborer is not only a super accomplishment for the instructors effecting this transformation but if proves that a man with initiative and confidence is a big factor in making such a change possible.

That such an accomplishment can be made a fact has been brought to light by the case of Joseph Kinnick Jr., a disabled ex-soldier living at 1080 Concord Ave., Detroit.

Before entering the service Kinnick was a laborer. But while serving on the Chanpagne sector in France he was wounded in the chest by a machine gun bullet. The nature of this wound incapacitated him from returning to the heavy work of a laborer. So, after spending six months in the hospital, he was discharged. Knowing that it would be foolish for him to attempt to "carry on" at his pre-war occupation, Kennick applied to the U. S. Veterans' Bureau for a course in vocational training, which was given him.

For thirty-one and a half months he received "replacement training," training on the job, in one of Detroit's large jewelry shops. At the end of this period he had become proficient, whereupon he was given suitable employment and declared rehabilitated.

Kinnick is doing well at his new vocation. Furthermore, he is now earning a wage which is 35 per cent in excess of his pre-war income.

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The Biggest Value in Ensilage Cutters
Throws And Blows — Saves One Man

THOUSANDS of farmers agree that the Papec is the biggest value in ensilage cutters—simple, rugged, long-lived. Fills the highest silo without plugging the pipe. Light of draft; costs less to operate. Every part is easy to get at.

The Papec is made in four sizes: R-10; N-13; L-16 and K-19. A gasoline engine, developing 3 h.p. or more, will operate the R-10 size. Any tractor can be used with the medium sizes. For heavy tractors use a K-19 Papec—capacity practically unlimited.

Write for free catalog and U. S. Gov't Bulletin "Making and Feeding of Silage." Every silo owner should read them. Mention size of your silo.

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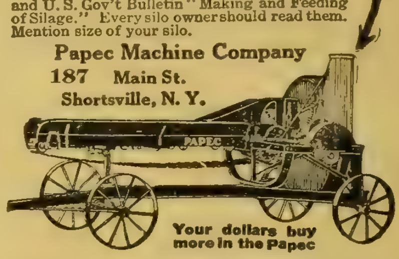
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HEAVES Use 2 large cans. Cost $2.50. Money back if not satisfactory. One can at $1.25 often sufficient. NEWTON'S Compound for Worm Expelling, Conditioning, Heaves, Indigestion, Distemper, Coughs. 65c and $1.25 cans. At dealers or post-paid. The NEWTON REMEDY CO., Toledo, Ohio

SHEEP

FOR SHROPSHIRE RAMS WRITE OR CALL ON
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DOGS

German Shepherd, Airdales, Collies; Old English Shepherd dogs; Puppies; 10c illustrated instructive list. W. B. Watson, Box 27, Macon, Mo.

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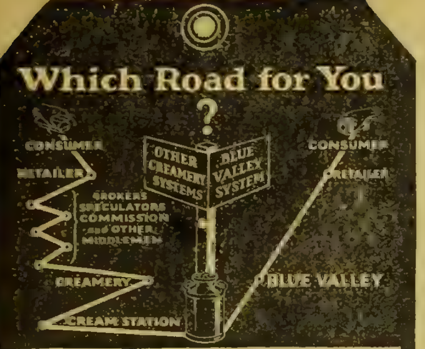
FOR SALE MOLINE TRACTOR AND PLOWS nearly new. Also imported Percheron Stallion weight one ton. Write for particulars to S. A. LETSON, Lake, Michigan.

HOMESPUN TOBACCO, FIVE POUNDS Chewing, $1.75, ten, $3.00, twenty, $5.25; Smoking five pounds, $1.25, ten, $2.00, twenty, $3.50. Pipe and Recipe free. Send no money. Pay when received. KENTUCKY TOBACCO CO., Paducah, Ky.



For 23 years Blue Valley has given farmers a high direct cream market. No useless profit takers between them and Blue Valley—between Blue Valley and retailers. Blue Valley butter, the National brand, brings farmers bigger cream checks direct.

Another Blue Valley Booster

"We are well pleased with every one of the checks, and have found Blue Valley the best creamery. I will ship again next week."-Frank Rupar, Holton, Mich.

Thousands of B.V. B's (Blue Valley Boosters) will tell you it pays to ship your cream yourself direct to Blue Valley.

For Bigger Cream Checks

Ship to

BLUE VALLEY CREAMERY CO.

Ship to Blue Valley Creamery in City nearest you:

Detroit, Mich.
Grand Rapids, Mich.
Milwaukee, Wis.
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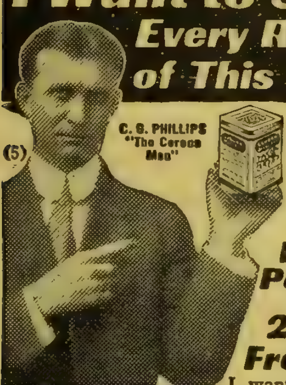
BLUE VALLEY BUTTER is good butter

Also creameries in 16 other cities
General Office: CHICAGO

that's why millions use it

I Want to Send Every Reader of This Paper



C. C. PHILLIPS "The Corona Man"

(5)

a Big Can of CORONA

By Mail—Postpaid—on 20 Days' Free Trial

I want to prove to you at my risk that CORONA is the greatest healing ointment that you have ever used for all kinds of cuts, wounds, sores, etc. on man or beast.

Just Send Your Name and Address

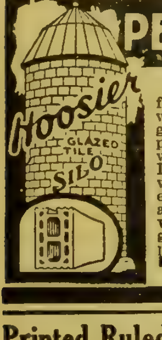
and I'll send you this big can, postpaid. Use it for Chapped Hands, Ulcers, Cuts, Wounds, Bruises, Piles, Boils, Eczema, etc.—nothing like it for keeping the hands from chafing during winter season. Use it on your animals for Barb Wire Cuts, Collar Boils, Cracked Hoofs, Grease Heel, Sore Teats, Caked Udders, etc., then if after 20 days' free trial you are convinced it is the best healing preparation you ever used—then send me 65c in full payment. If you are not satisfied after giving it a trial—don't pay me a cent. I let you be the judge. Send name and address today for this big 20-DAY FREE TRIAL CAN.

C. C. PHILLIPS, "The Corona Man"

THE CORONA MFG. CO.

42 Corona Block, KENTON, O.

NOTE—If you have used Corona and druggist cannot supply you and you prefer larger can, order direct from ad. 20 oz. can postpaid $1.25.



PERMANENCE

"HOOSIER SILOS" are proof against wind, fire, frost and decay, reinforced with every course of tile with galvanized steel cable, equipped with continuous doors with double sealing clamp. Doors set flush with inside wall allows even setting of ensilage. HOOSIER silos also in wood, same splendid value. Territory open for good salesmen. Get our prices before buying. **Hoosier Bldg. Tile & Silo Company, Dept. MB-17 Albany, Ind.**

Printed Ruled Stationery

For Business Farmers $1.00

200 sheets good quality ruled letterheads, 5½ by 8½, with 100 envelopes printed with farm name, owner's name and address, or any three lines desired. Paper put up in tablets. Sent to any address on receipt of $1.00. Write plainly name and address.

ALLEGAN STATIONERY COMPANY
Department M Allegan, Michigan.

HAVE YOUR POULTRY
FOR SALE?
AN AD IN M. B. F.
WILL SELL IT.

UNCLE RUBE SPINACH SAYS

A SUNDAY FROLIC

MY good friends, this seems to be Sunday night an' yet I have jest come from a dance. Went down into "hunkey town" this evenin' an' things wuz goin' wild down there. An' say, good folks, while I'm kinder glad I'm American, like Andy Gump, 100 per cent for myself an' the rest for the folks, yet—well, the hunkies ain't so bad—everybody wuz havin' a good time. Elderly ladies weighin' 'round 200 pounds, younger wimmin not so heavy but good an' plump, little kiddies from 3 to 5 years of age—all an' everybody danced. Folks, it wasn't just a regular two, one or three-step, it wuz a dance. The music wuz stringed instruments, all 'ceptin' one, bein' played by pickin' with the fingers. One feller sawed a bow 'cross a fiddle. Mebbe you like the name of violin better. No matter, that's what the feller fiddled onto, an' taken here an' there, the music wuz purty durn good.

They wuz a policeman there to keep us—well, to keep the crowd quiet, so must of us kept still. It sure wuz a great dance. I ain't a "hunkey" yet, but, well, seein' how happy they wuz—little kiddies not mor'n 4 or 5 years old, hoppin' in an' havin' just as good a time as anybody? Folks, friends, why don't we, you an' us, have just such times? We used to heve 'em. We liked 'em, didn't we? But now you know if we heve a dance or party we've got to fix up for it. Men has to overdress, you know what I mean, put on a lot of things he don't like, high collars, cuffs an' whatnots, what ever they may be, an' wimmin heve to take off a lot of things they should ort to wear. I don't hardly know jest how to name the things—but corset strings an' sich, an' other things—you know how it is an' when you go to a dance it ain't a dance but it's a ball—"bawl" maybe would hit it nearer. An' so that's why I'm writin' this little letter. I went to a dance—jest a reg'lar dance—yes, Sunday night, too. Folks, there wuz jest as much religion there as you or I can find in any church anywhere.

Everybody wuz sober an' everybody seemed glad. There were no long faces, you do see long faces in church sometimes, don't you? Well I didn't see any of 'em there tonight an' so if you hear that I've come to be a "hunk" it's 'cause I've joined the dance—I've shed the sour face, heve learned to live the life! Cordially yours,—UNCLE RUBE.

MUTTON CONSUMPTION INCREASES

IMPROVED methods of slaughter and the development of artificial refrigeration and refrigerated transportation have greatly increased the consumption of mutton in the United States in the last 30 years. It is, however, considerably lower than in many other countries. Average annual per capita consumption of lamb and mutton for the ten-year period 1912-1921 in the United States was 6.2 pounds. This compares with a per capita consumption of 9 pounds in Canada in 1910; 26.7 pounds in the United Kingdom from 1895 to 1908; 9 pounds in France in 1904; and in Germany of only 2.2 pounds a year for 1904-1913.

In these periods the consumption of lamb and mutton in these countries constituted the following percentages of the total meat consumption: 4.35 per cent in the United States; 5.57 per cent for Canada; 22.25 per cent for the United Kingdom; 11.25 per cent for France; 1.91 per cent for Germany.

A Low Down Dog

The garage keeper's little daughter never had happened to see a dachshund before.

"Look, papa," she exclaimed, "See what a long wheel-base that dog's got."—Selected.

Your Stock
needs help now!

Use

Dr. LeGear's Stock Powders

The beneficial effects of these powders at this time of year are especially remarkable.

Mid-winter is the meanest time for stock. Indoors! Inactive! On dry feed; no pasture.

The whole system gets out of condition—bad digestion, poor assimilation, impure blood. All stock are affected, but some show it more—spiritless, hide-bound, run-down, wormy. No wonder feed is *wasted*, flesh gains are slow and milk yields *low*.

This condition is costing you money. Don't lose another day in getting DR. LEGEAR'S Stock Powders in their feed daily.

The laxatives will correct bowel troubles. The diuretics will regulate the kidneys. The tonics will sharpen appetite, aid digestion and purify the blood. The vermifuges will drive out worms. The minerals build bone and blood tissues.

Results are *more* milk, *faster* growth and sleek, strong, well-conditioned animals.

For 30 years this personal prescription of DR. LEGEAR has been "first aid to farm stock."

Get it now. Satisfaction guaranteed or money refunded.

Small, medium and large packages. 25 lb. pails. 100 lb. drums.

FREE Sample Coupon

Hand this coupon to my dealer in your town and get FREE Sample of Dr. LeGear's Stock Powders. [Also my 128 page Stock and Poultry book free.] Use sample, then buy the size package you need.

If dealer is out of samples, send us 10¢ to mail sample and book to you. Dr. L. D. LeGear Medicine Co., St. Louis, Mo.

Keep your hens busy laying—use
Dr. LeGear's Poultry Prescription
Ask at store about my Free Poultry Course

Dr. L. D. LeGear, V. S.
[In Surgeon's Robe]
Trade-Mark Reg. U. S. Pat. Off.

Convince Yourself
See it Work
Try it

The New DE LAVAL

SKIMS CLOSER-RUNS EASIER-LASTS LONGER

Examine the new De Laval Cream Separator thoroughly. Compare it with any cream separator made. Then try it in actual use, and convince yourself that it is superior in every respect—that it will skim cleaner under all conditions of use and is easier to handle and operate. Your De Laval Agent will be glad to arrange such demonstrations—if you do not know who your De Laval Agent is, write us.

This new De Laval has been on the market more than a year, and already there are over 100,000 in use; and from the enthusiastic reports received concerning it there is no question but that it is the best De Laval Separator ever made. And that is saying a great deal when it is considered that De Laval Separators

—have millions of users who regard them as the finest machines made and the best money-makers on the farm;
—have won more than 1100 prizes for superiority of operation and construction;
—are overwhelmingly endorsed for efficiency of service by cow testers, who reach over 6000 farms;
—are used and approved by creamerymen, college and dairy authorities;
—and have the longest record of use, as proved by the life of the thousands of machines in the "Oldest De Laval Users Contest," which averaged over 20 years.

In spite of the fact that the new De Laval is much improved, yet in terms of butter it costs much less. In 1913 it took 231 pounds of butter to pay for a popular-sized De Laval. Now it requires only about 188 pounds (average prices for years 1913 and 1923) to pay for the same machine—43 pounds or 18% less butter. In addition, the present-day De Laval is at least 20% better, having 10% more capacity, a bell speed-indicator, a self-centering bowl, and many other improvements and refinements.

There are many worn-out and inferior cream separators in use today, wasting enough cream to pay for a new De Laval in less than a year. If you are losing money in this way, stop it by getting a new De Laval. You can get one on such easy terms that it will pay for itself while you are using it.

See your De Laval Agent or write us.

$6.60
To $14.30 Down
the balance in Easy Monthly payments

No. 7 -200 lbs. Capacity
No. 8 -225 " "
No. 10-350 " "
No. 12-500 " "
No. 15-750 " "
No. 17-1000 " "

Hand, Belt or Electric Drive

The De Laval Milker

If you milk ten or more cows, a De Laval Milker will soon pay for itself. Besides saving a great deal of time and drudgery, it produces cleaner milk and by its pleasing, uniform action usually causes cows to give more milk. More than 15,000 users will tell you so. Send coupon for complete information.

Send this coupon for Free Catalog
THE DE LAVAL SEPARATOR CO., DEPT. 537
N. Y., 165 B'way; Chicago, 29 E. Mad. St.
Send Separator ☐ Milker ☐ catalog
(check which)
Name.........................
Town.........................
State.........R.F.D..
No. Cows....

FREE VITA GLAND TABLETS STARTS HENS LAYING IN TWENTY-FOUR HOURS

Hens have glands just like humans and also require vitamines. Because they directly stimulate organs involved in egg production the mysterious newly discovered VITA GLAND tablets, crushed into hen's drinking water, turn winter loafers into busy layers almost over night. Science has discovered how to control egg production with essential vitamines, and gland extract that works directly on the OVARIAN or EGG producing gland of the hen. The wonderful effect of gland stimulation is shown by a simple test. Gov't experiment stations report that hens properly fed vitamines, etc., lay 300 eggs as against the sixty of the average hen. "Leg weakness of baby chicks due to insufficient Vitamine B" says The Official Bulletin. Also says: "Hens start laying at an average age of 139 days when fed vitamines."

Try This FREE BOX

EGGS, EGGS, EGGS and fine healthy chicks, prosperous flocks without fuss or bother or drugs or expensive feeds can be had. Just drop these tablets into drinking water. So simple to double your profits. Chickens now full of pep and life. Nests full of eggs. Summer production at winter prices. So confident are the Alexander Laboratories the manufacturer of the original and genuine VITA GLAND tablets that you will be amazed at results that they offer to send a free box for your own use. This is how. Send no money, just name. They will mail two boxes, each regular, one dollar size, a generous supply. When they arrive deposit only a few cents postage and one dollar with postman. When your neighbor sees the wonderful increase of eggs in your nests let him have one box for a dollar, and thus your box has cost nothing. $5000 in big Kansas City bank guarantees your satisfaction or money back without question, so write today and get dozens of extra eggs this simple easy way. Write ALEXANDER LABORATORIES, 9035 Gateway Station, Kansas City, Mo.—(ADV.)

BOWERS Colony Brooder

Burns any fuel—costs less

This brooder raises more and better chicks at lowest cost. Stove is sturdy, safe, air-tight, self-regulating—best in world to hold fire. Burns soft coal—cheapest brooder fuel—perfectly. Also hard coal, wood, etc. Automatic regulator maintains uniform heat night and day. Canopy spreads heat evenly over chicks; gives pure air, ample room. 500 and 1,000 chick sizes. Guaranteed. Lowest prices. Express prepaid E. of Rockies. FREE—$3.00 stove pipe outfit sent free with brooder if you order NOW.

F. M. BOWERS & CO.
1416 W. Wash. St.
Indianapolis, Ind.

140 Egg Incubator $13.25 30 Days Trial

Both Machines Made of California Redwood

Freight Paid east of the Rockies, Hot water, copper tanks—double walls—dead air space—double glass doors—a real bargain at $13.25. Shipped complete, set up ready to use.

140 Egg Incubator and Brooder	$17.75
180 Egg Incubator Alone	15.75
180 Egg Incubator and Brooder	22.00
250 Egg Incubator Alone	22.75
250 Egg Incubator and Brooder	31.00

Made of California Redwood. Positively the best value on the market. Order direct from this ad. 30 days trial—money back if not pleased. If not ready to order now, don't buy until you get our 1924 catalog which shows larger sizes up to 1000 eggs. (3)

WISCONSIN INCUBATOR CO. Dept. 140 Racine, Wis.

Detroit-Alliance INCUBATOR 140-EGG CAPACITY

Has all the features that insure big hatches—double walls, copper tank, complete nursery, perfect heat control through automatic trip burner, "Tycos" thermometer held so chicks can't break it when hatching. Detroit Brooders, too. Write for low combination price today!

FREIGHT PREPAID

Detroit-Alliance Incubator Co. Dept. 10 Alliance, Ohio

BABY CHICKS

Send now for descriptive matter and price list of our PURE BRED PRACTICAL POULTRY 10 LEADING VARIETIES

Some fine breeding this year in improved egg quality stock; customers' egg records from stock last year.

COCKEELS—A few unsold in Barred Rocks, White Wyandottes, and R. C. Reds. $3.00 and $4.00.

STATE FARMS ASSOCIATION,
Masonic Temple, Kalamazoo, Michigan.

CHILSON BARRED ROCK—HATCHING Eggs and Baby Chicks. Winning pens all heavy breeds Mich. international egg contest 1923. Nucgugan's greatest eggs and color strain. Write for price list today.
Mr. and Mrs. W. H. Chilson, R1, Grandville, Mich.

Whittaker's Red Chicks and Eggs for Hatching. Rose and Single Combs. Bred from Fourteen Generations of Winter Layers. Write for Free Catalog of Michigan's Greatest Color and Egg Strain. Interlakes Farm, Box 4, Lawrence, Mich.

PUREBRED CHICKS: BARRED ROCKS, BUFF Orpingtons, White Wyandottes and Rhode Island Reds. Satisfaction guaranteed. Write for special reduced prices. Joseph Amster, Paw Paw, Mich.

BABY CHICKS FROM BRED TO LAY S. C. Buff Leghorns. First hatch March 3rd.
J. W. WEBSTER, Bath, Michigan.

Have You Live Stock For Sale?

An Ad in The Michigan Business Farmer will sell it.

Poultry Department

WHY BABY CHICKS DIE IN THE SHELL

LITTLE chicks dying in the shell, I believe, is one of the most discouraging troubles the amateur chick raiser has to face, and apparently the one which mystifies him most. Yet there are several causes for even the strongest chicks dying in the shell.

First, take the case of eggs set under hens. It often happens that hens will sit well until the last twenty-four hours, then get nervous and fidgety. Often Biddy gets hungry or thirsty and leaves the nest. This is often the case when the hens are allowed to set in the chicken house or steal their nest around the farm buildings. But if no one happens to notice them when they come off to feed, they may go back to their nests with only a half-filled crop on the nineteenth or twentieth day, which will force them to leave the nest again before the hatch is completed. Then as the warm weather advances in the spring, vermin may worry a hen into leaving her nest. Rats very often scare a hen into leaving her nest when she is sitting outside, or another hen may frighten her while trying to claim the nest to lay in. In fact, there are numerous accidental causes for the hens getting off the nest in the last forty-eight hours, when she should sit undisturbed.

Perhaps the most frequent cause for chicks dying in the shell when eggs are set under a hen, is the owner's anxiety to help things along. During the last thirty-six hours, it is most imperative that all the warmth and moisture generated by the developing chicks and the body of the hen should be retained in the nest, and if someone is perpetually lifting the hen partly from the eggs to take away the hatched chicks or to see what is going on, much of the moisture is allowed to escape, therefore, the last two or three eggs fail to hatch, though they often contain fully developed chicks. An extremely dry season generally causes lots of chicks to die in the shell. The best way to combat adverse conditions is to remove broody hens from the chicken house or shed and set them in clean nests which can be closed so that a quantity of whole corn and clean water can be left in readiness for Mrs. Biddy, to feed herself with when she comes off the nest. I keep a shallow box of fine coal ashes in the house where the hens are sitting, so that they can dust themselves every time they leave the nest. If it is a dry season, it is a good plan to sprinkle water on the floor of the house every two or three days.

Watch the dropping of all chickens, both brooder and those under the hens, and at the slightest indication of looseness of the bowels, remove drinking water and replace with cold tea, or rice water. I find it a good precaution to feed boiled rice two or three times a week while the chicks are little, and if they develop any serious trouble, keep them under cover; or if with a hen, keep the hen shut into the brooder coop, for then she is much more likely to brood than if allowed to run at large.

How to Avoid Leg Weakness

Leg weakness rarely develops if the chickens are properly fed. Green food and animal food must form part of their ration. It is usually better for the ordinary farm to depend on curd cheese and an occasional hard-boiled egg, chopped up fine without removing the shell. And for green stuff I don't think there is anything as good as young sprouts of onions, of course, fine enough for the little chicks. Beef liver is mighty good. It is the best of all animal food when about half boiled and chopped fine and fed in small quantities. An old rusty nail or two, or a few drops of tincture of iron in the drinking water, is a good tonic, especially if the chicks commence to look pale around the bill, or droopy in any way.

Stale wheat bread crumbled fine and mixed with hard-boiled egg, shell and all, is hard to beat; about two tablespoonfuls of the latter in a cup of crumbs; the combination just moistened with scalded milk and fed for breakfast and supper. When about a week old have a mash made of hulled oats, ground coarse; corn meal and wheat equal parts of each, steamed for three to four hours. To each cupful of this add just before feeding a teaspoonful of bone meal and mix well. I feed three times a day all they will clean up in five minutes. If you haven't a steamer, a very good substitute may be made by getting a two-quart tin pail with a close-fitting lid—a lard pail will do; put the meal in it, pour in sufficient boiling water to just moisten it; close down lid and stand in four or five-quart pail with a tight-fitting lid; put in enough boiling water to reach half way up the sides of the smaller one. After the little chicks are about two weeks old the hen may be allowed to wander with them, after the dew is off the grass in the morning, until about 4 in the afternoon. The pan of mixed seed can be removed, and bone and meal omitted (except at supper time, when it is best to continue the bone for another two or three weeks); vary this at noon by feeding pot cheese and boiled liver chopped with green onions. It you have very few chicks and they are allowed free range with a mother hen they will be able to pick up all the animal food they want in the way of grubs and other insects.—Farm and Ranch.

WANTS TO GO INTO POULTRY BUSINESS

We have ten acres of land a quarter of a mile east of OxBow Lake, about four of hard ground, the rest marsh. The Huron River is the north line. There is an old house and a chicken coop, and old shed or two. What I want to know is do you think it would pay to remodel the house, buildings and fence. We think we can do it all for $2,000, and plant berries. There is a very small huckleberry marsh. Could we make a living—by a living I mean, comfortable clothes, plenty to eat and the expenses one incurs. We have no children to educate and we are not extravagant, our society is our church. We are nine miles from Pontiac on improved road, nearly everything could be sold at the door. We would also keep chickens and geese.—Mrs. H. C., Pontiac, Mich.

—It is rather difficult to make a definite answer with only the information at hand. However, if you are experienced in the care of poultry you, no doubt, could keep a flock sufficiently large enough to make a living with what garden stuff you will be able to grow.

As to spending $2,000 on improvements it will depend on the future possibilities in the way of expansion and increasing the income. If you have not had any experience in poultry raising, I would suggest that you rent some small place well located that has adequate buildings and start in gradual. In this way you can find out whether you like the work and can make it a profitable business or not. Then if you feel satisfied you could go ahead and improve your own place or buy one perhaps better situated.—F. T. Riddell, Research Asst. in Farm Management, M. A. C.

FEEDING COOKED POTATOES TO POULTRY

Are potatoes good for chickens? If so, which would be the best cooked or raw one for laying hens?—Mrs. W. T., Romeo, Mich.

—Experienced poultrymen find that excellent results can be obtained by feeding cooked potatoes to their laying stock. The cooked potato is more palatable than the raw, and the most practical method of feedin them is in the form of a moistened mash. The potatoes should constitute 40 per cent of the mash mixture. Ordinarily the standard dry mash which consist of equal parts by weight of bran, middlings, corn meal, ground oats, and meat scrap can be mixed with the boiled potatoes and excellent results secured. The cooked potato usually contains sufficient moisture to give the proper consistency to the entire mash.—E. C. Foreman, Professor of Poultry Husbandry, M. A. C.

—Inspected and Approved

Baby Chicks

From Best Egg Laying Strains in the World

Tancred, pedigree-sired and Tom Barron, S. C. White Leghorns, S. C. & R. C. R. I. Reds, Parks' Barred Plymouth Rocks.

LAKEVIEW

Our flocks are all on free range, closely culled, inspected and approved by Michigan Baby Chick Association. Every bird is healthy, has size, type and color.

Hatched in World's Best Incubator

Our chicks are strong, sturdy and healthy. They live and grow because they are hatched in the best incubator made. 100% live delivery to your door. Illustrated catalog sent FREE.

LAKEVIEW POULTRY FARM, R 8, Box 6, Holland, Mich.

DAY OLD CHICKS

S. C. Barred Rocks
S. C. White Rocks
S. C. Rh. I. Reds
White Wyandottes
Orpingtons
S. C. Br. & Buff Leghorns
S. C. Eng. White Leghorns
S. C. Anconas
S. C. Minorcas

Strong, sturdy, heavy laying strains from large, vigorous yearling hens raised on our farms, and culled by expert poultrymen, to our high quality Certified Utility Flocks, Extra Selected Flocks and Blue Ribbon Pens.

Babion's Fruit & Poultry Farms
R. F. D. 7, Flint, Mich.

S. C. White Leghorns

WOLVERINE BABY CHICKS

Bred for egg production since 1910. Our 13 years of experience in hatching and shipping chicks gives you the big, strong, healthy chicks that grow to maturity in the shortest possible time. 100% live delivery guaranteed. Let us mail you our 32 page catalog with price list.

Wolverine Hatchery
R. 2, Box 30, Zeeland, Mich.

Pure Bred Baby Chicks

We have been carefully developing our flocks for eight years. Every chick pure bred and from stock carefully culled, for type and production. Our chicks give satisfaction. Order today and get chicks when you want them.

Prices on	50	100	500
W. Leghorns	$7.00	$13.00	$62.00
B. Rocks, R. I. Reds	8.00	15.00	72.00
W. Wyandottes, W. Rocks	8.50	16.00	77.00

Postpaid. 100% live delivery. You take no chances. Ref. Farmers & Mechanics Bank, this city. No Catalog. Order from this ad.

WASHTENAW HATCHERY
Geddes Rd, Ann Arbor, Mich.

PURE BRED BABY CHICKS

Guaranteed, Certified Tom Barron and Hollywood White Leghorn and Barred Rock chicks now offered at prices that mean unusual savings. Fast growers that will soon earn big profits for you. Book orders now and receive liberal discount. Write for free catalog and price list today.

SUPERIOR POULTRY FARMS, Box 201, Zeeland, Mich.

WYNGARDEN'S "EGG-BRED" BABY CHICKS

Best laying strains on earth. Genuine Barron English White Leghorns, Brown Leghorns and Anconas. Backed by 19 years' actual breeding on our own farms. Will sell 30,000 strong, healthy, well hatched baby chicks weekly. Hundreds of our customers making big profits. It will pay you to buy our "EGG-BRED" varieties. Write at once for our handsome 1924 catalog—it's free

WYNGARDEN FARMS & HATCHERIES Box B Zeeland Mich U.S.A.

Pure Bred Chicks February and March Prices.

Broiler Chix	12c	W. Wyandottes	18c
W. or B. Leghorns	14c	White Rocks	18c
B. Rocks or Reds	17c	Buff Orpingtons	18c
Sheppards Anconas	16c	Black Minorcas	16c

Extra selected standard bred chicks $4.00 per 100 more. Add 35c if less than 100 ordered. Good bank reference. Circular free.

Lawrence Hatchery, BF R. 7, Grand Rapids, Mich.

TESTED BABY CHICKS

February, March prices. Heavy broiler chicks 12c. Barred Rocks or Reds 17c, Anconas Black Minorcas 16½c, White or Brown Leghorns 15c, White Rocks, White Wyandottes, Buff Orpingtons 17½c. Extra selected chicks, built directly from contest winners. 4c per chick more. Add 30c if less than 100 wanted. Hatching eggs. Catalog. Good reference. Beckmann Hatchery, TMBF. 26 Lyon St., Grand Rapids, Mich.

QUALITY Chicks & Eggs

45,000 PURE BRED BREEDERS. 15 varieties. Best laying strains. Incubate 25,000 eggs daily. Catalog Free. Prewar prices. Free live delivery.
Missouri Poultry Farms, Columbia, Mo.

64 BREEDS Most Profitable pure-bred Northern raised chickens, ducks, geese, turkeys. Fowls, eggs, incubators at reduced prices. 31st year. Largest plant. Large valuable poulty book and catalog free.
R. F. NEUBERT Co., Bx 881, Mankato, Minn

WEBER'S BEST laying, BEST paying chickens, ducks, geese & turkeys. Fine pure-bred quality. Fowls, Eggs, Incubators at new low prices. 42 years poultry experience, and my 100 page Catalog and Breeders' Guide Free.
W. A. Weber, Box 68 Mankato, Minn.

CHICKS, BARRED AND WHITE PLYMOUTH Rocks. Bred-to-lay M. A. C. strain. Pedigreed sires used from 258-302 egg hens. Have good size and early maturity. Get my circular.
J. V. SHEAP, 1115 N. Adams St., Owosso, Mich.

Marketing Poultry Requires Care in Handling

CARE in marketing poultry will greatly increase the profits of the poultry producer, says the United States Department of Agriculture. Losses occur from crowding, rough handling, improper packing, failure to time shipments advantageously, and other causes. Attention to a few simple rules, says the department, will eliminate many of these troubles.

Live poultry should be graded by age and kind, and the different classes shipped in separate coops, it is pointed out. Dressed birds should never be scald picked for a market which prefers them dry picked. They should be chilled to remove body heat before shipping, and should be packed in barrels or boxes lined with clean paper, and farm dressed birds in warm weather must be packed with alternate layers of cracked ice.

The best time of day to forward a shipment depends on the length of the journey and the time the shipment will arrive on the market. Live poultry should never arrive late Saturday afternoon, for they may be held over until Monday, and in that case will suffer heavy shrinkage. It is always desirable to have shipments arrive on the market early enough to be weighed the same day. Actual shrinkage on poultry shipments varies according to the condition of the birds, the weather, and the length of the journey. Several lots of broilers which were on the road 6 to 8 hours showed a shrinkage of 5 to 15 per cent, and a general average of 11 per cent.

Producers are advised not to feed poultry before shipping unless the birds will not arrive until the following day. It is desirable to have poultry arrive with empty crops. When it arrives with full crops, it is said to be "croppy" and the receiver may hold it overnight before weighing or may make a deduction in the weight to allow for the croppy condition. In marketing dressed poultry, says the department, it usually pays to fatten the birds before marketing.

In cooping poultry for shipment, the birds should be graded so that each lot is as uniform in color, size, grade and class as possible. Uniform lots, says department specialists, are more attractive, and sell more readily and for a better price. Culls, weaklings, and cripples should not be mixed with better quality stock, because they may die en route, and in any case will lower the appearance of the entire lot. Crowding should be avoided not only to prevent killing of the birds, but to prevent bruising, which causes poultry to dress out poorly.

Raising market poultry is not yet much specialized in this country. There is some specialization in producing chickens near Philadelphia and Boston and on Long Island, but the great bulk of market poultry is a by-product incidental to the production of eggs. On general farms, poultry is kept to supply eggs and poultry for the table, and to produce eggs for sale. Poultry is likewise a secondary consideration on specialized egg farms.

Chickens are reared and marketed in considerable numbers in various areas in the East and on the Pacific coast, but the greater supply is produced on general farms in the East North Central and West North Central States. According to the census of 1919, Iowa led in the number of chickens raised, with 31,076,91, followed in order by Illinois, Missouri, Texas, Indiana, Kansas, Ohio, Oklahoma, Nebraska and Pennsylvania. Total value of the poultry raised in this country in 1922 was $381,178,000, of which amount chickens accounted for $354,199,000.

Since the States of the Middle West not only raise more poultry but have a greater surplus above their own needs than any other section, the poultry marketing problem is one of moving birds from the sources of production to the consuming centers in the best possible condition and at the lowest cost. In the shipment of poultry to New York there is an average haul of 1,000 miles. For efficiency and economy in handling, the poultry sold in small lots from individual farms must be assembled at central points and shipped, either alive or dressed, in large lots, often car lots. This end of the business is chiefly in the hands of dealers.

EASY TO PREVENT DIRTY EGGS AND SUCH EGGS CUT PROFITS

DIRTY eggs on the market sell for a low price. Usually they do not bring more than half the price of fresh clean eggs. Dirty eggs, which have been washed, are considered by the trade poorer in quality than dirty eggs, due to the fact that in washing the protective albuminous covering on the egg is destroyed causing the egg to dry out more rapidly.

A few soiled eggs in a case of fresh eggs detract greatly from its appearance, and appearance is one of the most important qualities in the sale of any food product.

Very frequently eggs, which are only slightly soiled, can be cleaned with a stiff brush. Others can be cleaned by wiping the soiled part of the egg with a damp cloth, and allowing it to dry naturally. Eggs which are very dirty, or badly stained, should not be shipped. Such eggs should be used at home, or sold locally.

The most important thing, however, is to produce only clean eggs. Eggs become dirty generally because the hens' feet are dirty. The hens' feet become dirty because they are not provided with sufficient clean litter, when they are allowed out in muddy yards on wet and stormy days, and when the dropping boards are not cleaned off and the hens are allowed to track over them on their way to the nests. The lack of nesting material and too few nests cause eggs to become broken and other eggs smeared.

How to overcome most of these conditions is obvious. To keep the hens off the dropping boards, poultry wire may be tacked on the under side of the roosts, and out to the edge of the drooping board, a scheme frequently used by commercial poultrymen.

Since eggs are the principal product that poultry keepers are trying to produce, it is essential, as a business proposition that they be produced under conditions which will insure their full value.

DO HENS GET TOO FAT?

IF first-class layers, no! Not infrequently owners get worried about their hens, particularly Leghorns, getting too fat. We have yet to see any considerable number in a given pen that could be considered overfat for egg production. As a matter of fact, the moderately fat hen is most always the laying hen. And more often than not the prime cause of a low egg yield is the excess number of underfat hens in the flock. There is no use expecting or trying to get a satisfactory lay from thin hens or those not well supplied with surplus body tissue. The egg is an overproduction and not formed where the body requires for maintenance all of the nourishment supplied through the daily food stream.

Unhappily we are too apt to deal in excesses. We get the idea that if a little is good a whole lot must be better, and vice versa. Some one started preaching that fat hens don't lay and then the idea spread like wildfire even to the feeding and management of the young stock and pullets. True, one might feed a lop-sided ration and lay on a soft, flabby fat, but it is not commonly done. We have found the lop-sided ration at times, but usually thin stock rather than fat on account of it. There is a great difference in flesh that is worked on the frame by exercise and liberal feeding and the flabby fat accumulated by heavy pen feeding. The former is very much to be desired—fine, solid, plump bodies, with a good blanket of fat just under the skin does much to make comfort and egg records during winter months. Haphazard pen feeding is not the way to profitable poultry keeping.

A hen is much like a machine geared up to a certain production. It takes enough feed in the hopper to enable it to turn out quantity. We are pretty well sold to the proposition that there are far more good

(Continued on Page 28)

Dr. HESS POULTRY PANACEA

Get Winter Eggs!

See to it that there is song and cackle, scratch and action, going on in your poultry yard.

That's when the eggs come.

Feed

Dr. Hess Poultry

PAN-A-CE-A

See them get busy. It gives hens pep.

Nux Vomica is what does it—that greatest of all nerve tonics. A Pan-a-ce-a hen can't hold still. It's her good feeling that makes her hop around.

Pan-a-ce-a has Quassia in it to make hens hungry. Great combination! One makes them eat—the other helps them digest what they eat.

No dormant egg organs when that combination gets to work on a hen's system. You just get eggs—eggs.

A Pan-a-ce-a hen is always a hungry hen—an industrious hen. She gets off the roost winter mornings, ready to scratch for her breakfast.

Tell your dealer how many hens you have. There's a right-size package for every flock.
100 hens, the 12-lb. pkg. 200 hens, the 25-lb. pail
60 hens, the 5-lb. pkg. 500 hens, the 100-lb. drum
For fewer hens, there is a smaller package.

I spent 30 years in perfecting Pan-a-ce-a.
GILBERT HESS
M.D., D.V.S.

GUARANTEED

DR. HESS & CLARK Ashland, O.

Dr. Hess Instant Louse Killer Kills Lice

HIGHEST QUALITY CERTIFIED BABY CHICKS

FROM

Michigan's Old Reliable Hatchery, the best equipped and most modern Hatchery in the State.

Pure Bred Tom Barron English and American White Leghorns, Anconas, Barred Plymouth Rocks and Rhode Island Reds. Strong, Well hatched Chicks from tested Hoganized Free-range stock that make wonderful winter layers.

Chicks sent by Insured Parcel Post prepaid to your door. 100% live delivery guaranteed. Sixteen years of experience in producing and shipping Chicks giving absolute satisfaction to thousands. Write for valuable illustrated free catalog and price list. Get lowest price on best quality Chicks before placing your order.

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POULTRY BREEDERS' DIRECTORY

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PULLETS, HENS AND COCKERELS
S. C. White Leghorns and S. C. and R. C. Black Minorcas. Must make room before cold weather. About ready to lay.
LAPHAM FARMS, Pinckney, Mich.

High Grade, Utility Cockerels For Sale—April hatched—White Wyandottes, Barred Rocks and White Leghorns. **C. W. Heimbach, Big Rapids, R. 5, Michigan.**

FOR SALE—3 JERSEY BLACK GIANT Roosters $5.00 each.
MRS. BESSIE JACOBS, Linden, Mich., R. 2.

LEGHORNS

LEGHORNS
S. C. Buff Leghorn Hens, Pullets and Cockerels. Hens and pullets $2.50 each; cockerels $3.00 to $5.00 each. Show birds a matter of correspondence. **LAPHAM FARMS, Pinckney, Mich.**

RHODE ISLAND REDS

RHODE ISLAND REDS TOMPKINS STRAIN to make room for young stock. I will sell after November 1, 1923, 50 2 year old hens at $2.00 each; 25 1 years old hens at $3.00 each; cockerels at $2.50 and up. All these cockerels are from my best 3 year old hens that layed 205 eggs or better in their pullet year. Quality breeder of Rhode Island Reds.
WM. H. FROHM, New Baltimore, Mich., R. 1.

S. C. R. I. RED COCKERELS. PURE BRED Dark and even color. $3 and $5 each.
LOUIS MORRIS, Mt. Morris, Mich., R. 1.

S. C. R. I. RED COCKERELS. PURE BRED. Dark even red, big Boned Birds, $3, $5 each.
DAN LEATHERS, Mt. Morris, Michigan

ORPINGTONS

BUFF ORPINGTON COCKERELS FOR SALE. Cooks Strain.
A. J. BREWBAKER, Elsie, Michigan.

WYANDOTTES

Silver Wyandottes. Prize Winning Strain, Detroit and Chicago. Some fine stock now $4, $5, and $6 each. **Alvah Stegenga, Portland, Mich.**

White Wyandotte Cockerels, $3 each
Wayne Chipman, R. R. 2, Washington, Mich.

BARRED ROCKS

BARRED ROCK COCKERELS AND PULLETS from America's best prize-winning laying strains. Winners of 18 first prizes at Detroit and M. A. C. the last two seasons. Low prices.
TOLLES BROS., R. 10, St. Johns, Mich.

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S. C. ANCONA COCKERELS SHEPPARDS Best. $5.00 others at $4.00, $3.00 and $2.50.
H. CECIL SMITH, Rapid City, Mich., R. 2.

PLYMOUTH ROCKS

COCKERELS, THOMPSON STRAIN BARRED Rocks, dark matings, April Hatched, weight 8 lbs. from good layers, $3.50, 2 or more $3.00 each.
MRS. FRED KLOMP, St. Charles, Michigan.

(Continued on Page 28)

PATENTS

Send sketch or model today for examination and report. *Record of Invention* blank onwhich to disclose your invention and NEW guide book, *"How to Obtain a Patent"* sent free. Promptness assured. Highest references. WRITE TODAY. CLARENCE A. O'BRIEN, *Registered Patent Lawyer*, 155-C Security Savings & Com'l Bank Bldg., directly across street from Patent Office, Washington, D. C.

For Sick Chickens

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GOES TO THE SPOT

Don't let **ROUP, COLDS, CANKER, SOREHEAD, BOWEL TROUBLE**, etc., take your profits. Easy to cure or prevent. "The Lee Way" Book, 64 pages, by GEO. H. LEE, tells about poultry ailments, how to detect, what to do, etc. Germozone (75c and $1.50 sizes) and this **FREE** book at drug or seed stores, or postpaid from GEO. H. LEE CO. Omaha, Nebr.

POULTRY

(Continued from Page 27)

PLYMOUTH ROCKS

Barred Rock Cockerels, Husky, Vigorous Birds bred from great layers. Sons of Detroit and Grand Rapids 1st prize males.
W. C. Coffman, Benton Harber, Mich., R. 3.

BARRED ROCK COCKERELS BRED FROM Holtermans Pedigreed Aristocrats direct. Both Light and Dark. Price $4.00, two for $7.00.
N. AYERS & SON. Silverwood, Michigan.

TURKEYS

WHITE HOLLAND TURKEYS. GET STARTED right and have success. We have been shipping from this one farm for 38 years and have developed a large hardy strain that stands the test. Address stamped envelope for quick reply.
ALDEN WHITCOMB, Byron Center, Michigan.

GIANT MAMMOTH BRONZE TURKEYS. Very large birds. Their sire weighs 40 lbs. Toms, $10.00-$12.00-$15.00; Hens, $7.00-$9.00.
MRS. WILL DILLMAN, Cassopolis, Mich., R. 5.

PURE BRED WHITE HOLLAND TURKEYS For Sale. Young Toms, $10; Hens, $8. Two year old Toms, $15 each. Early hatched birds.
MRS. ED. COLLING, Mayville, Mich., R. D.

Highest Quality White Holland Turkeys. Large, hardy, home-loving birds. Real producers. Toms $11.00-$14.00, Hens, $10.00-$12.00.
Alvah Stegenga, Portland, Michigan.

Michigan's Best Gilant Bronze Turkeys. America's best strains vigorous breeders, both utility and fancy. Extra good values in young toms.
N. Evalyn Ramsdell, Ionia, Michigan.

PURE BRED GIANT STRAIN BOURBON Red Turkeys.
MRS. RENA MEEK, Belmont, Michigan.

Pure Bred Mammoth Bronze Toms One 2 Year old hardy beautiful well marked birds. Write for prices. **Mrs. F. Griffin, Riverdale, Michigan.**

GIANT BRONZE TURKEYS FROM PRIZE Winning birds. Large, healthy, unrelated stock furnished. **Mrs. La Verne Brownell, Belmont, Mich.**

MAMMOTH BRONZE TURKEYS, LARGE beautiful birds. Write for prices.
MRS. BEN JOHNSTON, Onaway, Mich., R. 1,

Mammoth Bronze Turkeys. Goldbank Strain. Unrelated stock. Vigorous healthy birds. Write for prices. **Mrs. Perry Stebbins, Saranac, Mich.**

HIGHEST PRICES PAID FOR LIVE AND Dressed Poultry, Veal, Rabbits, etc. A square deal always. Write to,
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Apply it to Any Rupture, Old or Recent, Large or Small and You are on the Road That Has Convinced Thousands

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Anyone ruptured, man, woman or child, should write at once to W. S. Rice, 529C Main St., Adams, N. Y., for a free trial of his wonderful stimulating application. Just put it on the rupture and the muscles begin to tighten; they begin to bind together so that the opening closes naturally and the need of a support or truss or appliance is then done away with. Don't neglect to send for this free trial. Even if your rupture doesn't bother you what is the use of wearing supports all your life? Why suffer this nuisance? Why run the risk of gangrene and such dangers for a small and innocent little rupture, the kind that has thrown thousands on the operating table? A host of men and women are daily running such risk just because their ruptures do not hurt nor prevent them from getting around. Write at once for this free trial, as it is certainly a wonderful thing and has aided in the cure of ruptures that were as big as a man's two fists. Try and write at once, using the coupon below.

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529C Main St., Adams, N. Y.

You may send me entirely free a Sample Treatment of your stimulating application for rupture

Name ....
Address ....
State ....

DO HENS GET TOO FAT?

(Continued from Page 27)

hens than there are good feeders. And the conviction applies even more strongly to pullets. Too many pullets start into production with the severe handicap of being under weight, with not enough surplus fatty tissue to maintain bodily requirements, energy and heat, and make eggs at the same time. As they come into maturity a certain reserve is stored up and this enables egg production to begin, but unless the feeding program is such as to maintain this reserve the task of completing growth, feathers and laying eggs is so great that they cannot carry the entire load. Self-preservation is the first law of nature, therefore egg production stops, and usually a molt begins, the extent of which depends on how severe the strain on the system has been—or, in other words, how deficient the feeding schedule.

One might as well attempt to build a house on a foundation of sand and expect it to stand as to try to maintain production with undeveloped or under nourished pullets. It can't be done.

While we accept a good mash as the maturing feed, it can be and frequently is used with lack of judgment. A narrow ration will tend to force the flock and may develop some that will lay in four, to four and one-half months, but it does not supply the frame and foundation to stand the strain of heavy production. Feed a dry mash one that has plenty of ground grain so that they learn to eat large quantities of it, but also remember the whole grain. The old-fashioned homily still works wonders. "Take one pail of feed and two pails of hard common sense into the poultry yard and feed both at the same time."—Joseph E. Davis in the Utah Farmer.

ADVANCE IN FARM WAGES DURING YEAR

FARMERS were required to pay higher wages to male farm labor during 1923 than in the two preceding years, the United States Department of Agriculture reports. The average rate per month with board in 1923 was $33.18, in 1922 it was $29.17, and in 1914 the rate was $21.05. The average monthly rate without board in 1923 was $46.91, in 1922 it was $41.79, and in 1914 the rate was $29.38.

Day wages for harvest labor, with board averaged $2.45 in 1923, as compared with $2.20 in 1922 and with $1.55 in 1914. For farm labor other than at harvest time the rate per day with board was $1.93 in 1923, as compared with $1.65 in 1922, and with $1.13 in 1914.

The peak year in wages of farm labor in recent years was 1920, the department points out. The deflation of general prices then began and farm wages continued to decline until the fall of 1922, when an upward trend developed.

RADIO DEPARTMENT

INFORMATION ON AERIAL

I am planning on purchasing a radio receiving set soon and am writing to you for information on the aerial. I have read that one should have 100 feet of wire in their aerial and I have noticed that some fellows have four wires, others three, still other two and many only one. Which do you consider the best? Can one use insulated wire? Can more than one set be operated on one aerial?—R. B., Saginaw County, Mich.

—There is some misunderstanding about aerials. Some believe that an aerial composed of four wires 25 feet long is just as good as one wire 100 feet long. This is not true, the latter being by far the best, and for the average set the one wire 100 feet long is better than an aerial of two, three or four wires of that length. The single wire permits of more selective tuning. Yes, you can use insulated wire and get as good results as you can from a bare wire. Two receiving set cannot be used on one aerial with any degree of satisfaction as tuning one set puts the other out of tune; also the signal strength is reduced when two sets are used on one aerial. We have heard of cases where two sets have given good results on one antenna when near a powerful sending station. However such results are to be classed as freakish.

RADIO AN IMPORTANT FARM IMPLEMENT, SURVEY SHOWS

THE importance of radio in the production and marketing of agricultural products is brought out in a special survey of about 1200 representative farmers, just completed by the United States Department of Agriculture. More than 50 per cent of the 1200 farmers replying reported that they owned tube sets employing three or more tubes, while approximately 50 per cent of the farmers reporting have homemade sets ranging from simple crystal detectors to tube sets.

More that 75 different makes of seas were found among the manufactured sets purchased, although the bulk of the sets were confined to about 15 of the leading makes that are more or less widely advertised in radio and general magazines. The average cost of the manufactured sets was $172.

Comparatively few of the owners of home-made sets operate crystal receivers, the survey revealed. The average cost of the crystal sets was $11. The average cost of the homemade tube sets was $83.

Eighty per cent of these farmers said they were interested in receiving both weather and market reports. The survey was made in practically every State in the Union, the most numerous replies coming from Illinois, Iowa, Texas, Kansas, Ohio, New York, Missouri, and Indiana.

KEEP AERIAL AWAY FROM ELECTRIC LIGHT WIRES

CHRISTMAS radio sets, given with wishes for health and happiness, may become messengers of death unless care is used in erecting aerials.

Aerials should not be strung across electric light wires, either indoors or out. The ends of the antenna should be securely fastened against wind and also against the added weight of ice-covered wires. One end broken loose, may be carried against a heavily charged electric line and lead a dangerously high current into the house.

A warning similar to this one, sent out last year by the Michigan Committee of Public Utility Information met with instant response but during the past few days the Christmas radio sets have been called upon to provide a means of forgetting real winter weather. Outdoor antennas have been carelessly erected, and in some instances the "Best Wishes" will be enjoyed only by the "heirs and assigns."

DID YOU KNOW THIS?

It is a good idea to mount your tube sockets so that if anyone walks across the room the vibration will not cause your set to ring or get it out of tune. This can be done by mounting each one on a piece of inner tube. Take one of the old tubes you have thrown away and cut out pieces to the same size as the base of the tube socket. You can use two pieces under each tube if you wish but one will do the trick very satisfactorily. If you have no automobile maybe your neighbor will give you a good size piece from one of his old tubes.

* * *

To get the best results from WD-12 tubes it is desirable to use two dry cell batteries connected in multiple for each tube. Thus, in connection with a 3 tube set best results will be obtained when 6 cells are used, all connected in multiple. And it is also cheaper than one cell for each tube.

FREE BOOK ABOUT CANCER

The Indianapolis Cancer Hospital, Indianapolis, Indiana, has published a booklet which gives interesting facts about the cause of Cancer, also tells what to do for pain, bleeding, odor, etc. A valuable guide in the management of any case. Write for it today, mentioning this paper. (Adv

RHEUMATISM

A Remarkable Home Treatment Given by One Who Had It.

In the year of 1893 I was attacked by Muscular and Sub-acute Rheumatism. I suffered as only those who are thus afflicted know, for over three years. I tried remedy after remedy, but such relief as I obtained was only temporary. Finally, I found a treatment that cured me completely, and such a pitiful condition has never returned. I have given it to a number who were terribly afflicted, even bedridden, some of them seventy to eighty years old, and the results were the same as in my own case.

I want every sufferer from any form of muscular and sub-acute (swelling at the joints) rheumatsim, to try the great value of my improved "Home Treatment" for its remarkable healing power. Do not send a cent; simply mail your name and address and I will send it free to try. After you have used it and it has proven itself to be that long-looked-for means of getting rid of such forms of rheumatism, you may send the price of it, one dollar, but understand, I do not want your money unless you are perfectly satisfied to send it. Isn't that fair? Why suffer any longer when relief is thus offered you free? Don't delay. Write today.

MARK H. JACKSON
No. 265-K Durston Bldg.
SYRACUSE, N. Y.

Mr. Jackson is responsible. Above statement true.

The Agricultural and Business Situation

Revised Monthly by the Department of Research of the American Farm Bureau Federation.

FARM INCOME:

Cash receipts of farmers in the United States from sales of all products were fourteen billion dollars in the crop year ending June 30, 1920. Two years later the income had fallen almost to one-half this amount. The following year it showed a gain of one and one-half billion dollars and this crop year another gain of one-half billion dollars.

Farm cash returns come from crops, 50 per cent; livestock, 26 per cent; and animal products, 24 per cent. This year cotton is yielding the most money, followed in order by dairy products, cattle, hogs, wheat and poultry.

In the decline from the peak of prosperity crops showed the greatest loss and animal products the least, the decline in crop sales being 53 per cent; livestock, 50 per cent, and animal products, 20 per cent.

WHEAT:

Wheat is the only important product returning less money each year since the break in general prices in 1920. It promises to yield this season only one-third of the income of the peak year. Acreage sown to winter wheat this fall is estimated to be 12 per cent less than last fall. After allowing for probable domestic requirements for the full crop year, and exports to December 1, wheat east of the Rockies remaining for carryover and export is estimated at 65 million bushels. With seven months remaining for exporting, this represents a small amount for this territory which must be supplemented by wheat brought from the west coast or imported from Canada, or domestic consumption must be further reduced. Consumption is already at low ebb, the average per capita for the last three years being 4.22 bushels, compared with 5.06 bushels for the five-year pre-war period.

COTTON:

Cotton shows a small production gain and large price gain, with additional income of something like 30 per cent over last year. Certain states, including Alabama, Mississippi, Georgia and Arkansas, have decidedly smaller crops than last season and the higher price will not make up for the reduced output. Texas and the Carolinas have had big yields.

HOGS:

Marketings of hogs have been 25 per cent larger this calendar year than last. These enormous sales brought in 1 per cent more cash.

Low prices of corn two years ago gave impetus to pork production. Contrary influences now working to check production may be expected to have a marked effect on pork prices by the latter part of 1924.

CATTLE:

The range cattle industry is still confronted with an unprofitable and declining market. Sales of feeders coming mainly from the range make up around 12 per cent of total sales of cattle. Three per cent more pounds of fat cattle have been sold this year than last at slightly higher prices.

GENERAL BUSINESS:

Last spring business was headed toward a boom, which was checked and followed by a small decline. This in turn has been checked. The belief is general that 1924 will be a moderately good business year.

PRICES:

The general price level, as computed by the U. S. Bureau of Labor Statistics, has declined 3 per cent since a year ago. Farm products have gained 2 per cent. Farm purchasing power, on the basis figured by the U. S. Bureau of Agricultural Economics, is 10 per cent above this date last year.

I. Production and Trade.

1. Agriculture: U. S. Production—000,000 omitted.

	December, 1923 Estimate	1922	Average 1917-1921	1923* Per Cent
Corn, bu.	3054	2906	2931	104
Wheat, bu.	786	868	835	94
Oats, bu.	1300	1216	1378	94
Barley, bu.	198	182	192	103
Rye, bu.	63	103	70	90
Buckwheat, bu.	14	15	15	93
Potatoes, white, bu.	412	453	388	106
Potatoes, sweet, bu.	97	109	94	103
Cotton, bales	10.081	9.8	11.2	89
Tobacco, lb.	1475	1247	1361	108
Flaxseed, bu.	17	10	10	170
Rice, bu.	33	41	41	81
Peaches, bu.	46	56	43	107
Apples, total, bu.	197	203	160	123
Apples, commercial, bu.	34	32	26	131
Sugar beets, tons	6.9	5.2	7	96

* As per cent of average of 1917-1921.

2. Wheat Situation: (Nat C. Murray, Clement Curtis & Co.)

(000,000 omitted)

	East of Rockies	West of Rockies	Total
Supply:			
Carried over, July 1, 1923	91	10	101
Production, 1923 crop	645	137	782
Total supply	736	147	883
Distribution:			
Dometisc requirements for food, feed and seed	583	51	634
Excess feeding	28	7	35
Total domestic requirements	611	58	669
Exported to December 1	60	30	90
Total	671	88	759
Remainder for carryover and export	65	59	124

3. Mining (Federal Reserve Bank of New York):

Figures express production as a percent of normal. In estimating normal production, due allowance is made for seasonal variation and year to year growth.

	Oct., 1923	Sept., 1923	Oct., 1922
Anthracite coal	95	35	95
Bituminous coal	99	99	91

3a. Manufacturing:

Wheat flour	104	109	112
Sugar	137	102	108
Cotton	94	88	95
Wool	101†	100	106
Pig iron	98	102	184
Steel ingot	101	99	100
Copper	107†	102	84
Gasoline	*	107	102
Automobiles	159†	140	114

* Not available. † Preliminary.

4. Building Expenditures (Bradstreets):

(000,000 omitted)

	1923	1922	Per cent Increase
First quarter	$794	$522	52.3
Secnd quarter	830	718	15.6
Third quarter	690	630	9.5
October	276	211	30.8
November	254	207	22.8

5. Transportation (000 omitted):

Freight car loadings:	Week Ending Dec. 1, 1923	Same Week Month Ago	Same Week Year Ago	Week Ending Dec. 1, 1923*
Total	835	1035	840	99
Grain and grain products	46	48	49	94
Livestock	32	44	35	91
Coal	157	180	184	85
Coke	11	11	13	85
Forest products	64	76	60	107
Ore	12	43	11	109
Merchandise	215	252	200	108
Miscellaneous	298	382	289	103

* As percentage of week year ago.

6. Employment:

	Nov., 1923	Oct., 1923	Nov., 1922
Out of 63 industrial centers employment:			
Increased over previous month in	26	31	52
Decreased over previous month in	37	32	11

7. Bank Debits:

(Units of $1,000,000,000)

	Nov., 1923	Oct., 1923	Nov., 1922
New York City	$19.98	$1915	$19.03
Outside bank debits	18.52	19.75	17.13

8. Mail Order Sales:

	November, 1923	November, 1922	Eleven Months Ending November, 1923	Eleven Months Ending November, 1922
Montgomery Ward	$14,112,312	$11,003,750	$119,581,453	$ 80,854,890
Sears Roebuck	20,416,166	20,196,559	194,742,706	161,419,528

II. Foreign Trade.

1. Exports (000 omitted):

Commodity:	October, 1923	October, 1922	Ten Months Ending October, 1923	Ten Months Ending October, 1922
Grand total	$393,814	$366,186	$3,275,804	$3,051,292
Beef and veal, lb.	2,535	2,978	24,246	28,224
Pork, lb.	80,551	57,621	757,354	563,887
Lard, lb.	76,378	66,332	862,552	626,033
Butter, lb.	344	524	4,941	10,012
Cheese, lb.	331	308	7,696	4,367
Hides, skins $	650	380	3,349	3,278
Corn, bu.	528	10,149	39,188	151,330
Meal and flour, bbl.	40	41	554	534
Wheat, bu.	9,239	18,282	89,435	144,438
Flour, bbl.	2,092	1,510	12,743	11,968
Oats, bu.	258	3,042	3,084	27,066
Meal and rolled, lb.	17,275	13,036	119,164	88,686
Fruits and nuts $	12,130	10,162	49,741	53,772
Vegetable oils $	751	1,011	8,544	10,793
Sugar, lb.	6,209	13,200	433,910	1,822,041
Tobacco, lb.	44,958	58,353	375,594	354,167
Cotton, lb.	405,940	418,367	1,911,058	2,392,148

2. Imports:

(000 omitted)

Grand total	$308,366	$345,104	$3,212,520	$2,527,153
Beef and veal, lb.	3,174	4,504	16,613	31,502
Pork, lb.	183	54	1,095	639
Butter, lb.	1,202	232	16,872	2,967
Cheese, lb.	9,609	6,776	49,240	33,019
Hides and skins $	6,507	13,487	106,884	81,915
Corn, bu.	14	3	152	100
Wheat, bu.	2,834	2,566	11,187	16,886
Flour, bbl.	19	51	229	603
Oats, bu.	4	8	103	1,279
Fruits and nuts $	7,375	8,724	54,699	57,703
Vegetable oils $	3,860	5,166	57,043	50,987
Sugar, lb.	623,976	432,456	7,096,618	8,866,467
Tobacco, lb.	4,197	6,295	50,605	57,823
Wool, lb.	9,566	25,260	372,639	303,894

3. Prices of Foreign Drafts:

	Nominal Gold Value Par of Exchange	Price of Demand Drafts Dec. 18, 1923	Nov. 19, 1923	Dec. 19, 1922
England	$4.87 to 1 £ sterling	$4.37	$4.33	$4.61
France	19.3c to 1 franc	5.20½c	5.35c	6.83c
Sweden	26.8c to 1 crown	26.32c	26.35c	26.89c
Holland	40.2c to 1 florin	38.11c	37.64c	39.82c
Argentina	42.5c to 1 peso	32.25c	30.63c	37.90c
Japan	49.9c to 1 yen	46.80c	48.13c	48.95c

III. Money and Credit.

1. Gold Movement (000 omitted):

	Oct., 1923	Oct., 1922	Ten Months Ending October 1923	Ten Months Ending October 1922
Exports of gold	$ 1,307	$17,591	$ 27,185	$ 30,734
Imports of gold	29,858	20,866	250,379	230,422

2. Federal Reserve Ratio:

	Dec. 15, 1923	Nov. 17, 1923	Dec. 13, 1922
Ratio of total reserves to deposits and Federal Reserve note liabilities	75.3%	75.6%	75.1%

3. Interest Rate:

	Nov., 1923	Oct., 1923	Nov., 1922
4-6 mos. commercial paper	5.19%	5.35%	4.88%
60-90 days commercial paper	5.09%	5.12%	4.62%

4. Stock and Bond Prices:

	Dec. 7, 1923	Nov. 9, 1923	Dec. 8, 1922
20 Railroad stocks	$82.43	$80.28	$84.39
20 Industrial stocks	93.80	91.14	96.91
40 Bonds	86.80	86.79	89.08

5. Business Failures:

	Week Ending Dec. 6, 1923	Week Ending Nov. 8, 1923	Week Ending Dec. 8, 1922
Bradstreets	461	383	462
Duns	422	428	484

IV. Prices.

1. Wholesale Prices of Farm Commodities:

Quotations at Chicago except as noted.

	Dec. 18, 1923	Month Ago	Year Ago
Fat hogs, cwt., average	$ 6.95	$ 6.85	$ 8.05
Beef steers, good native, cwt., av.	9.50	9.90	9.60
Fat lambs, cwt., average	12.50	12.25	13.85
Fat sheep, cwt., average	6.75	7.25	7.20
Wool, Ohio Delaine unwashed, lb. (Boston)	.545	.54	.565
Butter, 92 score, lb.	.53	.525	.53
Cheese, No. 1 twins, lb.	.22	.24	.2675
Eggs, fresh firsts, doz.	.40	.50	.51
Poultry, hens, lb.	.18	.1725	.175
Wheat, No. 2 hard, bu.	1.08	1.045	1.28
Corn, No. 2 mixed, bu.	.7225	.835	.7675
Oats, No. 2 white, bu.	.45	.44	.475
Rye, No. 2, bu.	.70	.71	.915
Barley, bu.	.67	.605	.6725
Kafir, No. 2 white, cwt. (K. C.)	1.295	1.725	1.68
Hay, No. 1 timothy, ton	26.00	27.50	21.00
Flax, No. 1 bu. (at Minneapolis)	2.445	2.4125	2.72
Cotton, middling, lb. (New York)	.355	.3535	.262
Beans, white, cwt., f. o. b. Michigan.	5.05	5.35	7.75
Potatoes, northern whites, cwt.	1.10	1.00	1.00
Onions, midwest yellows, cwt.	2.15	2.65	2.50
Apples, winter varieties, bbl.	5.10	5.25	5.25
Hides, No. 1 native, heavy, lb.	.135	.14	.2025
Sugar, fine granulated, lb. (N. Y.)	.089	.0885	.0705

2. U. S. Department of Labor Relative Wholesale Prices:

Prices in year 1913 equal 100.

	Nov., 1923	Oct., 1923	Nov., 1922
All commodities (weighed average or general price level)	152	153	156
Farm products	146	144	143
Food products	148	148	143
Cloths and clothing	201	199	192
Fuel and lighting	167	172	218
Metals and metal products	141	142	133
Building materials	181	182	185
Chemicals and drugs	130	129	127
House furnishings	176	183	179
Miscellaneous	118	120	122

3. Prices of Farm Products at the Farm Relative to 1913:

(U. S. Bureau of Agricultural Economics)

Prices in year 1913 equal 100.

Commodity:	Oct., 1923	Sept., 1923	Oct., 1922
Cotton	232	219	181
Corn	141	144	106
Wheat	121	119	125
Hay	113	113	100
Potatoes	129	156	98
Beef cattle	93	97	93
Hogs	97	104	111
Eggs	198	167	195
Butter	159	153	143
Wool	221	222	193

4. Relative Purchasing Power of Farm Products:

(U. S. Bureau of Agricultural Economics)

The quantity of various commodities which a given amount of each farm product would purchase at prices prevailing in 1913 is put equal to 100. The figures given represent the percentage of this quantity which the same amount of farm products would purchase in October, 1923. Prices at the farm are used for agricultural products, and wholesale prices at central markets for other commodities.

	All Commodities	Cloths, etc.	Fuel, etc.	Metals, etc.	Building Mtls.	House Furn'gs
Cotton	152	117	135	163	127	127
Corn	92	71	82	100	78	77
Wheat	79	61	70	85	67	66
Hay	74	57	66	80	62	62
Potatoes	84	65	75	91	71	71
Beef cattle	61	47	54	65	51	51
Hogs	63	49	56	68	53	53
Eggs	129	100	115	139	109	108
Butter	104	80	92	112	87	87
Wool	144	111	129	156	121	121

Average purchasing power of all farm products in terms of all other commodities. Same basis as above table.

1913	100	December, 1921	62
1914	112	July, 1922	69
1915	106	August	64
1916	89	September	64
1917	106	April, 1923	70
1918	112	June	71
1919	111	July	72
1920	86	August	73
1921	67	September	75
1922	69	October	75

MARKET FLASHES

MARKET SUMMARY

Wheat steady. Corn strong. Oats firm. Rye in demand. Beans unchanged. Eggs wanted. Demand for butter greater than supply. Poultry slow and easy. Potatoes unchanged. Dressed calves easy and hogs inactive. Cattle lower. Hog market active. Sheep steady.

(Note: The above summarized information was received AFTER the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press —Editor.)

FOOTE'S MARKET LETTER

BY W. W. FOOTE

The Year's Business

THE year just closed was a good one for business in most respects, with farmers sharing in the prosperity, but one crop farmers failed to make good, this applying especially to those who devoted most of their efforts to growing wheat and raising hogs. Obviously, what is needed in the wheat states is a diversified system of farming, and it is gratifying to hear that wheat farmers in Iowa and other states are reducing their wheat acreage. The domestic trade of the United States has expended rather surprisingly, largely as a result of employment of labor at high wages and a fair increase in our population through births and immigration, despite the restrictions placed by the government on bringing in foreigners. We exported large quantities of farm products to foreign countries, but the Department of Agriculture announces that for the first time in the history of the country the value of agricultural products imported exceeded the value of exports for the fiscal year ending June 30, 1923. The imports consisted chiefly of silk, sugar, rubber, wools and coffee. It would appear that we should produce more wool and sugar; yet in the year mentioned we imported $396,000 000 worth of sugar and $167,000,000 worth of wool. These are crops which our farmers could raise profitably. While it is not likely that Congress will adopt a course letting in foreigners indiscriminately, it is probable that a law will be enacted by which desirable workers will be allowed to enter the country and allowed in due time to become American citizens. It is extremely unfortunate that affairs in European countries are slow to improve, yet we are exporting large amounts of grains and flour, while, strange to say, our exports of provisions have exceeded all former records. Agricultural production in Europe has improved materially, and the betterment in industry is manifest in the increased volume of foreign goods sold to this country, tending to restore the balance of the world trade. Looking to the future, we are confronted by the credit inflation because of the abnormal gold holdings and by presidential election year. This country holds about half of the monetary gold supply of the world. Farmers who are out of debt and own fertile lands face a promising future, and they hardly need advice, the important things being well maintained, soil, a variety of crops and avoiding unduly spreading of their acres.

Better Feeling in Wheat

While much higher prices than those now prevailing for wheat seems hardly probable in the near future, it must be admitted that the market has got into better shape, with sales at well above prices prevailing several weeks ago, although they appear low when placed in comparison with those paid two years ago. It is evident that advances of a permanent nature must be brought about by enlarged consumption, and this is as yet not sufficiently liberal to cause traders to become bullish in sentiment, although choice wheat is selling at a good premium, with no excessive amounts in store. The export demand is fair, with Manitoba wheat much wanted. Reactions follow decided advances, but they leave prices higher than early in the season, although a short time ago there were 145,377,000 bushels of wheat in the United States and Canada in the visible supply and in bonded stocks in this country. Many farmers are sending in inquiries asking what course to follow regarding disposing of their wheat, and it may be replied that it appears to be good judgment to sell in moderate quantities from time to time, taking advantage of any bulges in values. Later on there will be general interest felt in the spring wheat acreage, and all of us hope that farmers will realize the great importance of curtailing their acreage and thereby help in restoring prices to a profitable basis. Fair interest is shown in the oats and rye markets, oats selling around the prices of a year ago, with a visible supply of 20,591,000 bushels of oats in the Unites States, comparing with 32,122,000 bushels a year ago. Rye is in far larger supply than a year earlier, and with prices far lower than a year back, it is strange that the export trade is not much greater. With 54,613,000 bushels of wheat in the United States and Canada in excess of a year ago, farmers with wheat for sale will see the need of going slow in marketing. Late sales were made of May wheat in Chicago at $1.09, comparing with $1.19 a year ago.

Bull Market in Corn

In former years wheat was usually the big item in speculation, and except occasionally, less interest was shown in corn and oats; but for the last few months corn has come into much greater prominence on the Board of Trade and is now far ahead of wheat in active trading. The advent of winter weather has resulted in much increased consumption of corn on farms, whereas heretofore it was so unusually mild that much less corn and other feeds were required for fattening live stock than in normal winters. Farmers a while ago were apt to take a rather bearish view of the outlook for corn prices, and they were beginning to market their surplus, anticipating much increased sales throughout the corn belt states and a consequent drop in prices. Now, however, they are much more optimistic in their views as a general rule, and this is natural in view of the fact that recent prices reached the highest level of the season. A corn specialist says the grain trade seems to be at last awakening to the fact that the stocks of old corn were exhausted when the new crop started to move, and that it has been filling holes and has disappeared. This is why stocks have not accumulated, the visible corn supply in this country being only about 10,000,000 bushels. Iowa and Illinois farmers have sold little corn so far, but on recent advances they have shown a disposition to sell some, and around 80 cents a bushel for May corn they may be expected to sell more freely. Prices are well above those of a year ago, and far higher than at this time in 1922, May corn having sold at that time as low as 52 cents. Of late the west and southwest have received considerable corn from the Missouri River markets. Late sales of May delivery were made on the Chicago Board of Trade of corn at 77½ cents, comparing with 72 cents a year ago; oats at 46 cents, comparing with 44⅞ cents last year; and rye at 75 cents, comparing with 88⅝ cents a year ago.

Embargo on Grain

A special from Winnipeg to the Chicago Tribune says:—An embargo on grain shipments to Fort William and Port Arthur by the middle of next week is a certainty, according to grain exchange students of market conditions. They argue that the 50,000,000 bushels of Canadian wheat at lower lake ports, 40,000,000 bushels at Fort William and Port Arthur, and 45,000,000 in the country elevators, with, it is estimated, 100,000,000 bushels still in the hands of farmers, will mean virtually paralyzing grain trade. They say Canada will have to export 2,000,000 bushels of grain a day from the opening of navigation to get free of this crop before the opening of the new grain year on Sept. 1 next. Lower lake terminal elevators are crowded to capacity. All rail shipments will have to be stopped, it is said. Upper lake ports have a capacity of 63,000,000 bushels and they cannot take more than 80 per cent of that.

Canadian Wheat Flour

The department of commerce at Washington writes Uhlmann Grain company as follows: "We regret that your suggestion that this department report figures of exports of wheat flour made from Canadian wheat separately from flour made from United States wheat cannot be put into effect. This Canadian flour is entered into a bonded mill for grinding into flour, all of the product of the bonded mill to be exported. Under section 311 of the tariff law, wheat is admitted free of duty. The flour produced is a blended product made partly from United States and partly from Canadian wheat. The flour when exported is regarded as a domestic product because it is made in the United States. Whether the material is of domestic or foreign origin is immaterial. The export declaration filed with the collector of customs at the port where the flour is exported shows only the number of barrels of the flour exported and does not give the proportion or amount of Canadian wheat used in grinding the flour. Separate statistics are kept of the amounts of Canadian wheat entered in bonded mills for grinding into flour for export. During the nine months ending with September 30, 1923, 5,548,193 bushels have been entered. No information is available as to when the flour ground from this wheat or partly from Canadian and partly from United States wheat will be exported. Beginning with January 8, this office will issue weekly statements showing the imports into eight principal northern border districts of Canadian wheat entered for consumption (duty paid) and entered into bonded mills for grinding into flour for export. Those statements will be issued to the press and to interested parties on Tuesday of each week."

Choice Cattle Wanted

The restricted demand for beef cattle at Thanksgiving, Christmas and New Year's has given place to improved conditions, with marked increase in the consumption of beef, pork and mutton. Even rather ordinary cattle have shown advances in prices in the Chicago market at times, and on days when common cattle were not plentiful killers paid higher prices for steers with a little flesh on them than feeders were prepared to pay. While the cattle receipts have increased in numbers, relatively few choice finished lots have been offered, and the bulk of the steers marketed sold at $8.25 to $10.75 per 100 pounds, the better class of the yearlings selling at $11 to $12 and the best heavy long fed steers at $10 to $11.25. Killers have continued to descriminate against heavy cattle, and it does not require a great many to satisfy the trade requirements. Steers grading as good find buyers at $10 and over, and steers selling below $9 do not grade very high. Steers of ordinary grade sell for $6.75 to $7.75, with inferior little steers selling at $4.50 to $6.65 in a small way. Butcher stock has a fair outlet, cows and heifers selling usually at $3.75 to $8.25, while bulls bring $4.25 to $7 and calves $5 to $12.50. The stocker and feeder trade is only fair at $4.50 to $7.85, sales being mainly at $5.25 to $7.50. Milch cows sell at $35 to $90 each. Farmers should market their cattle as soon as ready, but it is not well to let well bred cattle go until properly finished. Ruling prices for fat stock are extremely good.

Surfeit of Hogs

There has been no end to the hog supply, and prices have had many breaks because far more were marketed than needed, despite the unprecedentedly large consumption of fresh and cured hog products, including good exports to European countries. The best strengthened influence all along has been the unusually liberal demand for the better class of hogs offered on the Chicago market to ship to eastern packing points. The hogs offered average well in quality, and the bulk of the sales are within a range of 30 cents, with prime heavy butchers going highest and 25 cents above best bacon hogs. Recent Chicago receipts of hogs have averaged 231 pounds in weight, being four pounds less than a year ago and eleven pounds above the ten year average. Recent markets have changed greatly for the better, due to a marked improvement in the local and eastern shipping demand. Late Chicago hog sales were at a range of $6.50 to $7.50, or substantially the prices of a week earlier.

Active Lamb Market

There has been of late an extremely liberal demand for lambs in the Chicago market at a high scale of prices, although the materially increased receipts have brought about some reductions in quotations. Feeding lambs are particularly active at fancy prices, with sales at $11.75 to $13. The highest priced lambs are taken for a short feed. Numerous sheepmen are marketing lambs only half fed, causing sales at unremunerative prices. Receipts

A. B. COOK APPROVES OF NEW BEET CONTRACT

I BELIEVE the principle of the new sugar beet contract is right. Both parties are, under its terms, interested in the ultimate outcome of the joint enterprise. From the time of the securing of the contracts until the last sack of sugar is sold it should be a joint enterprise. I can see no future for the industry on any other basis. I can see a brilliant future for it on the basis of cooperation and a mutual interest in the final results of the year's operations.

My personal opinion of the contract after a kind of a "once over" was that it was a fair proposition. I submitted it to the gentleman who originated the "50-50" idea and who is a careful student of beet sugar affairs and who while a farmer has the respect of all classes and he said "it is a fair proposition under present conditions."

I think the manufacturers missed an opportunity when they failed to invite in representative growers to discuss with them the terms of the proposed contracts before it was printed. However fair it may be to the grower, had he by his representatives accepted it without ammendment it would have placed the proposition before the growers in a better light. The signing on the dotted line is a much simpler and pleasanter transaction and confidence much more easily secured if the signee has had a part in the preparation of the literature which proceeds that dotted line. If all the growers were of a type mentioned in connection with the 50-50 contract above and all of the manufacturers of the type of the manager of the Owosso Sugar Company the establishment of satisfactory relationship in this industry would be possible of immediate accomplishment.—A. B. Cook.

in the Chicago market recently showed big gains in numbers, but the demand was correspondingly large, and lambs advanced, selling at the best prices since the first of last September. Lambs sold at $11 to $14 and feeder lambs at $11.75 to $13. Twelve years ago the best lambs brought $7.

WHEAT

There is steady tone to the Detroit wheat market. Millers are buying again and receipts show no increase so there is little pressure on the market. Reports come that Canada, our northern neighbor, has a huge supply of wheat on hand. Elevators are said to be full and the farmers are shipping so fast that there will soon be a tieup of transportation if an embargo is not declared on the farm deliveries. This does not seem to have any bearish effect on the Detroit market.

CORN

Demand for corn has improved some during the past two weeks and prices have advanced. Manufacturers are in the market for good corn and some export business reported. Receipts remain about the same; plenty of poor grade but little first class.

OATS

The oat market showed a steady improvement during the week ending January 12th and high price levels for the season were made at some places. Farmers are not active sellers.

RYE

The price of rye at Detroit shows a slight decline over two weeks ago although the market remains steady in tone.

BEANS

The Michigan bean market is steady to strong. Demand is not heavy but enough to keep the crop moving steadily from the state. There is a fair supply coming to market but farmers as a whole are not overly anxious to sell. Foreign beans continue to come into the country but they do not seem to be hurting to market for the Michigan bean. Regarding to future trend of the market The Bean and Pea Journal states: "There are reasons on either side of the market—bullish and bearish factors. The crop was huge, but is going into consumption. Unbaised observers believe present prices will rule for some time to come, with little need to tip the scales either direction, up or down."

POTATOES

Potatoes are fairly steady and the finest grades are moving at firm prices. Receipts are fairly large although extremely cold weather in some parts has caused a slowing up of hauling.

HAY

Receipts at most markets have been light and more strength has been shown both in the east and west under increased activity. The demand for good hay is urgent with offerings of the better grades very small. Accumulations have been cleaned up and there is very little hay unsold at any market. The average of prices has increased, the west showing a dollar increase and the east not quite as much but tending toward more strength. Country loadings are small and weather conditions uncertain.

MARKET QUOTATIONS

Wheat

Detroit—Cash No. 1 red, $1.14; No. 2, $1.13; No. 2 white, $1.14; No. 2 mixed, $1.13.

Chicago—Cash No. 2 red, $1.13; No. 2 hard, $1.09½@1.12½.

New York—Cash No. 2 red, $1.26; No. 2 hard, $1.25½; No. 2 mixed, $1.15½.

Corn

Detroit—Cash No. 3 yellow, 83c; No. 4, 79c.

Chicago—Cash No. 2 yellow, 77½@78½c; No. 2 mixed, 76¾c.

New York—Cash No. 2 yellow, 95c; No. 2 white, 96½c; No. 2 mixed, 94½c.

Oats

Detroit—Cash No. 2 white, 52c; No. 3, 50c.

Chicago—Cash No. 2 white, 46½@50c; No. 3, 46@46¾c.

New York—Cash No. 2 white, 57c.

Rye

Detroit—Cash No. 2, 73½c.

Chicago—Cash No. 2, 73½c.

Beans

Detroit—C. H. P., $4.70 per cwt.

Potatoes

Detroit—$1.83@2.00 per cwt.

Chicago—$1.35@1.50 per cwt.

Hay

Detroit—No. 1 timothy, $23.50@24, No. 2, $21@22; No. 1 clover, $21@22; No. 1 clover mixed, $21@22 per ton.

Chicago—No. 1 timothy, $27@28; No. 2, $25@27; No. 1 clover, $25@27; light timothy & clover mixed, $26@28 per ton.

New York—No. 1 timothy, $30@32; No. 2, $28@30; light clover mixed, $30@32 per ton.

SUGAR BEET MEN TO MEET AT M. A. C.

SUGAR beet men of the state will gather in conference at the Michigan Agricultural College from January 23 to 25, in the third annual Sugar Beet Institute held under the auspices of the college.

Both manufacturers and growers have been invited to the meeting, and it is predicted that last year's attendance of 250 will be equalled or bettered.

Problems of production, with emphasis on the cultural end, will be discussed at the conference, according to acting-dean E. B. Hill, of the M. A. C. agricultural division, who is arranging details of the institute. Fertilization, disease problems, insect control, and general cultural methods will be taken up.

The list of men who are to lead discussion at the various meetings includes five men from the U. S. Department of Agriculture at Washington, D. C. Prominent state manufacturers and growers, and specialists from the agricultural college, will also take part in the program.

MICHIGAN A LEADER IN PRODUCING WOOL

MICHIGAN, one of the big lamb-feeding states of the nation, produces about 8,000,000 pounds of wool annually.

Official Government estimates placed the Michigan sheep population in 1923 at 1,171,000, a marked increase over the total for the previous year.

In addition there is a decided increase in the number of lambs being fed this winter in Michigan. Many of these will be shorn before leaving the farms, thus helping to boost the Michigan wool clip.

Among the reasons for the present increase in the number and popularity in sheep in Michigan are the following:

The educational activities of the Michigan Division State Grange and of the Extension of the Michigan Agricultural College, the natural economic and labor conditions and the influence of the wool pool conducted by the Michigan State Farm Bureau.

COLLEGE MAKING PLANS FOR FARMERS' WEEK

(Continued from Page 3)

served seats has been held for the Farmers' Week guests, and these will be offered at general admission prices at the registration booth.

The annual Housewives Congress will be held in the new home economics building during the week as a special feature for the women attending Farmers' Week. Talks on various phases of home economics as applied to farm homes will be given by college specialists, and specialists, and special exhibits will be shown.

The new home economics building, the finest of its kind in the country, has just been completed at at cost of $400,000, and will be opened to the public for the first time on Tuesday evening, February 5, as one of the features of the week.

Reduced fares have been granted on all transportation lines in the state for the Farmers' Week crowds. These reduced rates are offered on round trip fares from all points in the state, and have liberal stop-over privileges. Full information can be obtained from local ticket agents in each town.

Last year more than 5,000 farmers and their families attended the Farmers' Week programs, and plans have been made to care for an even larger attendance this year.

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as compared to using wheat feed or ground grains. We guarantee this increase has been secured in hundreds of actual tests. Both protein and molasses produce milk. International Special Dairy contains both. This great feed is digestible and palatable and is skillfully processed and mixed, thus insuring a big extra gain in milk. Accept no substitute. Inferior brands offered by other mills cannot produce the same profitable results as International Special Dairy. Order some today.

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offers its services to the *Farmers of Michigan* as a high class, reliable commission house for the sale of *Dressed Calves* and live poultry. Write us for information how to dress and ship calves to market. $250,000 capital and surplus. 34 years in business in the same place and same management.

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WE SOLICIT YOUR SHIPMENTS of live poultry, veal and eggs.

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HAVE YOU POULTRY FOR SALE?
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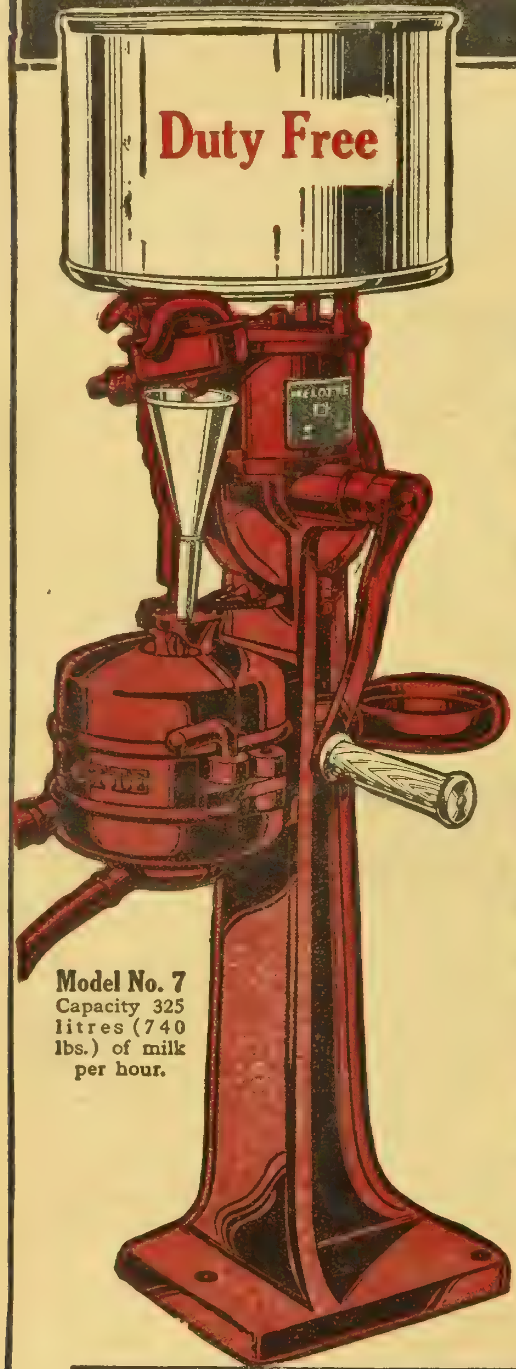
WILL SELL IT.

In 30 Years
Not a Single Melotte Bowl Has Ever Been Out of Balance



Model No. 7
Capacity 325 litres (740 lbs.) of milk per hour.

AND not one will be out of balance in another 30 years. That's because the very design and construction of the Melotte Bowl makes it impossible for it to get out of balance. At a conservative estimate, out-of-balance bowls are costing the American farmer, in wasted cream, millions of dollars a year — probably double the cost of all the thousands of Melotte Separators in use in America.

Imported Belgium
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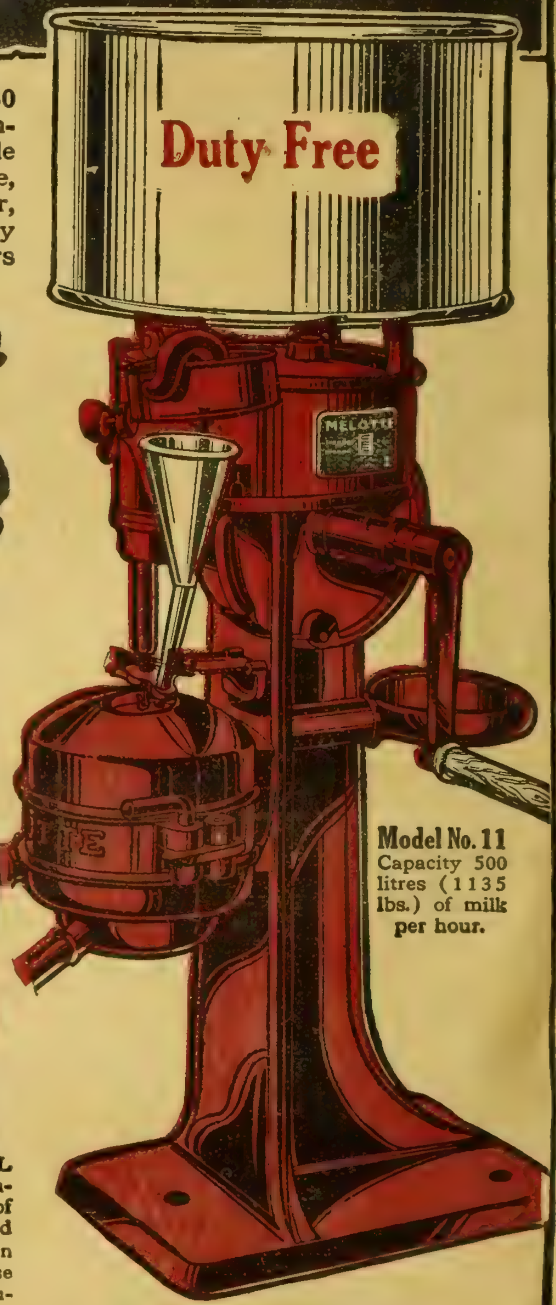
$7.50 After Trial

Your choice of any model. NO MONEY DOWN —FREE TRIAL —SMALL MONTHLY PAYMENTS—DUTY FREE. This wonderful Belgium Melotte Separator has been picked by a jury of thousands of farmers—picked by dairy experts throughout the world to be the "king" of all separators ever manufactured. It has won every important European contest for Efficiency of Skimming, Ease of Turning, Convenience of Operation and Durability. Send coupon below for Big Free Book.

(Other Models Fully Described in Catalog)



Model No. 11
Capacity 500 litres (1135 lbs.) of milk per hour.

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PINE TREE MILKER
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AT LAST! Here is a milker with seven years' successful record back of it. A milker that is as supreme among milkers as the Melotte is among separators. Every owner of 8 or more cows can now afford to buy. Send today for our special Pine Tree small-herd offer.

The Melotte Separator, *H. B. Babson, U. S. Manager*
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Without cost to me or obligation in any way, please send me the Melotte catalog which tells the full story of this wonderful separator and M. Jules Melotte, its inventor and hundreds of letters from American Farmers.

*Name*________________________________

*Post Office*________________________________

*County*________________ *State*________________
Print name and address plainly

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Free Trial!

We will send an Imported Belgium Melotte Cream Separator direct to your farm on a 30 day's absolutely Free Trial. Use it just as if it were your own machine. Put it to every possible test. Compare it with any or all others. The Melotte is easy to keep clean and sanitary because it has only one-half of the tinware of other separators. Turns so easily that bowl spins 25 minutes after you stop cranking unless brake is applied. No other separator has or needs a brake. After you have tried it for 30 days and you know it is the separator you want to buy, pay $7.50 down and the balance in small monthly payments.

Write! Mail coupon for catalog giving full description of this wonderful cream separator. Don't buy any separator until you have found out all you can about the Melotte and details of our 15-year guarantee! Don't wait — be sure to mail coupon TODAY!

Melotte Separator — *H. B. BABSON, U. S. Manager*
2843 West 19th Street, Dept. 33-01 Chicago, Ill.
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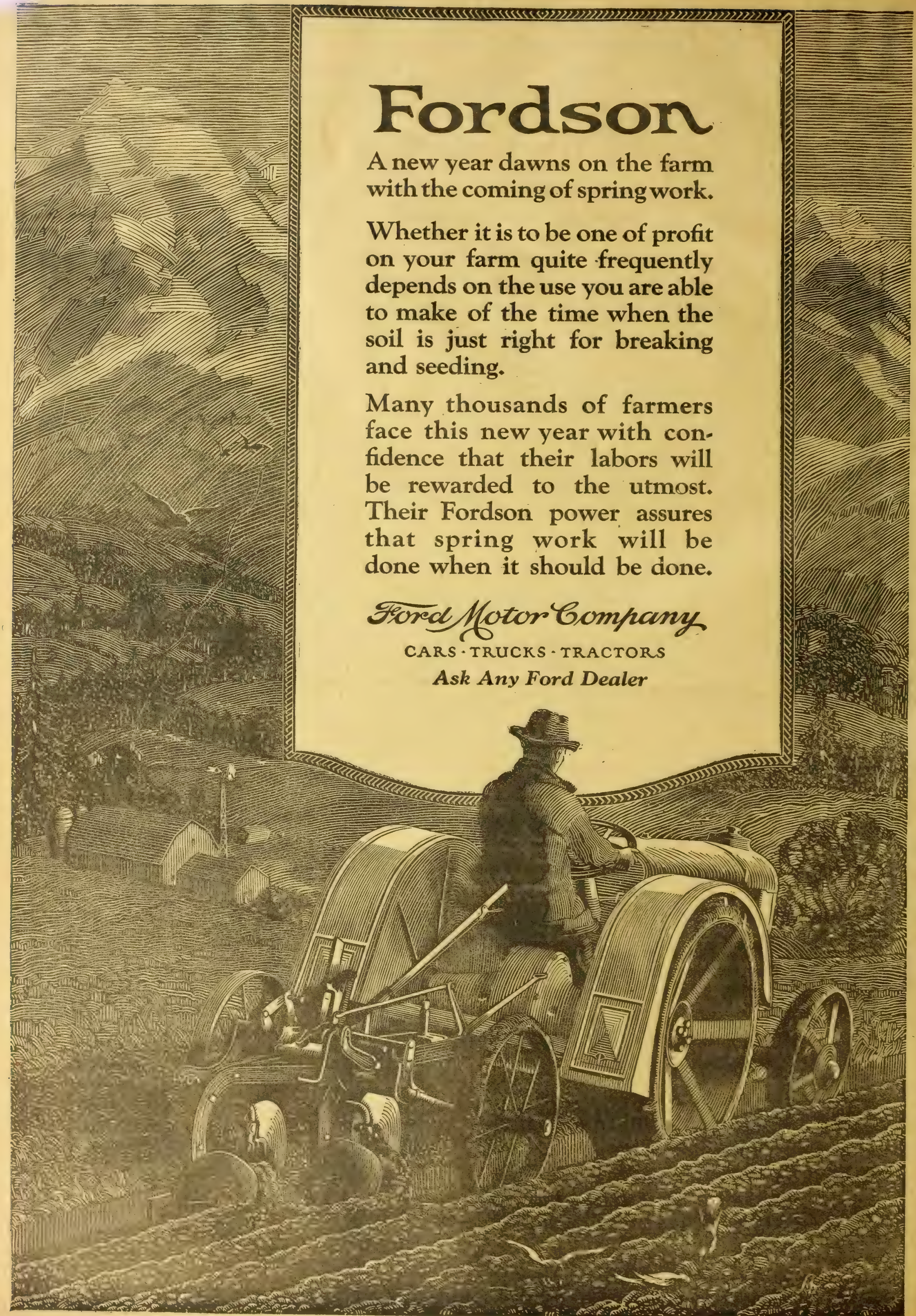
The Michigan BUSINESS FARMER

An Independent
Farm Magazine Owned and
Edited in Michigan

VOL. XI, No. 12 SATURDAY, FEBRUARY 2, 1924 TERMS: TWO YEARS $1
60c PER YEAR—5 YRS. $2

THEIR SATURDAY JOB



Fordson

A new year dawns on the farm with the coming of spring work.

Whether it is to be one of profit on your farm quite frequently depends on the use you are able to make of the time when the soil is just right for breaking and seeding.

Many thousands of farmers face this new year with confidence that their labors will be rewarded to the utmost. Their Fordson power assures that spring work will be done when it should be done.

Ford Motor Company

CARS · TRUCKS · TRACTORS

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SATURDAY
February 2,
1924

VOL. VI, No. 12

Being absolutely independent our columns are open for the discussion of any subject pertaining to the farming business.

"Hew to the line, let the chips fall where they may!"

The Michigan
BUSINESS FARMER

"The Only Farm Magazine Owned and Edited in Michigan"

Published Bi-Weekly
Mt. Clemens, Mich.

TWO YEARS $1

Entered as second-class matter, August 22, 1917, at the post-office at Mt. Clemens, Mich., under act of March 3rd, 1879.

Michigan Bean Growers Plan to Market Crop

Association of Bean Growers Authorize A. B. Cook to Name Committee of Ten to Form Marketing Organization

By R. C. GROESBECK

(M. A. C. Correspondent of The Business Farmer)

AT a meeting of more than three hundred Michigan bean growers, held in the armory at Owosso on January 18, it was voted to appoint a committee of ten men to formulate a plan for the cooperative marketing of beans in this state.

A. B. Cook, of Owosso, who called the meeting, acted as chairman of the meetings, and will work with the committee which he appoints to formulate a definite plan of action.

R. L. Churchill, manager of the California Lima Bean Growers Association, gave the principal address of the afternoon session. He asserted that cooperative marketing was the only remedy to prevent the dumping of the bean crop on the market, pointing out that eighty per cent of the state crop was put on the market immediately after the crop was harvested.

Mr. Churchill said that the object of the cooperative marketing associations was not to increase the price of the commodity, but to produce an orderly system of marketing the product. When successful the cooperative system does not increase the price to the consumer, but obtains a larger share of the consumer's dollar for the farmer, he declared. He said that at the present time the Michigan bean grower is getting forty-two per cent of the consumer's dollar, while in California the members of the growers associations are receiving sixty per cent.

Churchill declared that the cooperative marketing plan had been endorsed by bankers, economists, and business men of the nation as fundamentally sound, and asserted that the methods of the farmers in marketing their products in the past had been in direct violation of the fundamental principles of business. He also pointed out that when the farmer buys anything he must pay the price set by the man who sells the product, while in selling he must accept the price set by the buyer.

The speaker declared that the California Lima Bean Growers Association, over a period of seven years, has returned to the growers and average price of $8.10 per hundredweight for their beans, while the independent bean growers have received considerably less.

In financing Churchill said that the California association advances to the growers within a month after they had delivered the beans, between fifty and sixty per cent of their value, paying the balance later. The beans are stored in public warehouses and are supplied to the market in an even and orderly manner. The association itself is able to obtain large loans with the warehouse receipts as collateral, as the title to the produce passes to the association upon delivery of the beans.

Churchill declared that his analysis of the bean situation in Michigan showed him that:

The market now lacks a stabilizing influence; there are too many small elevators, both privately and farmer owned, each bidding against the other; there are too many farmers selling their bean crops individually, and as a result selling on a buyers' market at the buyers' prices.'

He also declared that there is too wide a margin between what the producer gets and what the consumer pays, citing as an example a case where several cars of beans were sold and resold seventeen times, each buyer making a profit.

Churchill said that the wholesale purchasers of beans would welcome the organization because it would stabilize the market and protect them. The wholesalers would then know when they bought beans in the fall that the price was not going to fluctuate greatly later resulting in heavy losses to them.

In closing his address, Churchill urged that the Michigan bean growers follow the example of the California growers and market their beans through a cooperative association, and stated that the California association would be glad to aid them in any ways possible.

Christian Breise, of Lansing, former president of the Michigan Bean Jobbers Association, told the growers of the efforts made by himself and others to stabilize the bean market, but said that all the attempts had met with failure.

James N. McBride, of Burton, former state market director, declared that the time had come when the farmers must adopt the same tactics that large business concerns used and set the prices for which their products would sell.

He said that he was opposed to government price fixing, but declared that he believed the farmers could fix the price of beans by cooperative marketing. He said that there were all the favorable elements in the state to make bean raising profitable, and that the problem of the Michigan growers was to coordinate these elements into the best plan for orderly marketing.

J. A. Rose, a representative of the Federal Reserve Intermediate Bank of St. Paul, told the farmers of the purposes of the bank and how cooperative associations such as the California Lima Bean Growers Association were able to obtain large loans on crops to finance their marketing of the products.

Mr. Cook's Address

In opening the meeting Mr. Cook gave the following address:

"It affords me pleasure to call this very important representative body of men to order. We are here today representing one industry unique in the agricultural annals of the state.

"Beans are the only staple agricultural crop in the production of which Michigan holds a commanding position and her right to the position is no longer challenged.

"This condition arises from the fact of the peculiar adaptation, both of soil and climate, of about a score of counties here in the central and eastern part of the lower peninsula of Michigan.

"There has been no propaganda by those interested in merchandising this crop or by the manufacurers of machinery used in the production or distribution or consumption or by any other outside agency to encourage the production of beans. Comparatively speaking beans have looked good to the farmer or possibly it would be a more correct statement to say that other crops had looked worse. Beans have been fortunate in being exempted from any form of artificial stimulation. The best and only stimulation needed in agriculture or anywhere is a profitable price. Boosting the production of commodities already underpriced is an economic fallacy. Practically every agricultural product is underpriced today. The vital burning question in agriculture in America is remunerative prices. My next door neighbor and his boy drive 28 miles to Flint and back every day; they help manufacture Buicks. They are farmers born and bred. On every hand the bright and progressive are being driven in the same direction. What are we going to do about it? As patriotic Americans who believe that high standards as to personal and general conditions of our agricultural classes are one of the safeguards of our free institutions, what is it our duty to do?

Credit Is Adequate

"While we do not want to dictate the work of this conference, we do feel that the millions of bushels of beans we are growing indicate that we do not need to discuss the practical side of the growing of beans. Further, we believe the government has done all it can in justice to all by extending credit facilities to producers secured by their product during the 'from farm to consumer' period and in removing the legal barriers to collective bargaining by the producers. We do not believe any of our time need be consumed by appeals to the government for further aid. The use the cotton and tobacco growers and other producers have made of the credit facilities afforded by the government is conclusive proof that ways are at hand so that the grower who needs a substantial payment on his beans can be taken care of, dumping avoided, orderly marketing established. It is little short of a crime the way our bean market year after year is over loaded the first three or four months of the marketing season. It is doubtful if complete recovery ever takes place.

"We do not believe it is necessary to establish new agencies for marketing. We should have a super-organization controlled by the growers, to regulate supply in accordance with demand. By a proper co-ordination of this with the agencies which we now have we believe the desired results can be accomplished. We are here today to investigate and see if some very valuable agencies and opportunities are not being overlooked by us.

Need Orderly Plan

"Would it be unreasonable for us to ask that splendid able body of men in our extension and county agricultural agent forces to assist in organizing us in a way that we may utilize the governmental agencies intended to assist in orderly and remunerative marketing as well as to assist us in increasing production? Increased production should be accompanied by more effective and orderly distribution, or disaster is probable. Any agency assisting in one should in both.

Competition Blamed

"Co-operative marketing has not functioned as a market stabilizer or strengthener. This was needed and expected. It has given us another competitor, in many cases a salutary one, for the business of carrying our products from the producer to the consumer. In the absence of any systematic and comprehensive machinery for orderly marketing, the farmer who feels he must have cash dumps his beans on the co-operative elevator regardless of market conditions. The co-operative elevator does not feel justified in speculating on the future price under the chaotic conditions that exist, its funds and facilities are limited and it in turn pushes the beans onto the elevator exchange or the private jobbing house, when they in turn are placed in a difficult position as the market becomes confused and uncertainty prevails. Day by day the market is put lower in an effort to do business in the face of such unsatisfactory market conditions. Co-operative is underbidding co-operative, private jobber, underbidding private jobber, each against the other, a little lower day by day and week by week, and everyone stands by and wonders where it will all end. Usually it ends when about 80 per cent of the beans are out of first hands.

"So well is the condition recognized year by year that a lot of beans are contracted when they are in blossom at a much lower price than the one prevailing at the time the contract is made. A sold short interest is a burden on the market. This condition is unnecessary and the responsibility for it is on the grower.

Two Dollars Average

"Some injustice has resulted in the public mind, we believe, from the change from the bushel standard of measure to the hundred weight. The hundred weight is the right way and should be adopted for all products. The public hears $4.50 as the price of beans and

(Continued on Page 27)

INVITATION TO ATTEND FARMERS' WEEK

IN behalf of State Board of Agriculture the Faculty and the Student Body of the Michigan Agricultural College I extend to every Michigan Farmer and Housewife and to all others interested in agriculture, a cordial invitation to attend our Annual Farmers' Week and Housewives' Congress from February Fourth to Eighth. Our new Home Economics Building just completed will be open to the public at this time. The daily meetings of the Housewives' Congress and the Extensive Home Economics Exhibit are to be staged in his building. Speakers of state and national reputation have been secured to appear on the group and general program. All visitors will have excellent opportunities to gain inspiration and information from the comprehensive exhibit and carefully planned speaking program. We invite you to visit us during this week in order also that we may all become better acquainted, that you may visit and see this fine state institution, its herds and flocks and its splendid equipment for educational service to the state.

R. S. SHAW, Acting President, M. A. C.

Muskegon Farmers Put Operation in Cooperation

Farmer-Owned Creamery at Ravenna Made About 400,000 Pounds of Butter Last Year and Over Half of Output Was Marketed by Parcel Post

By CARL H. KNOPF

(Special Correspondent of The Business Farmer.)

Secretary-Manager Harvey Averill, who, stockholders say, deserves much credit for the success of the Ravenna Incorporated Butter Company.

NINE years is a comparatively old age, as cooperative organizations go in Michigan, but such is the length of time that the Ravenna Incorporated Butter Co., has been working on a cooperative basis. This creamery, located at Ravenna, Muskegon county, is a striking example of the way in which quality and cooperation can be combined to form a decidedly successful enterprise.

But there are many other remarkable things about the Ravenna creamery besides its age. For instance, it markets over 60 per cent of its total output by parcel post which means that, each year, tons of the Ravenna butter go to the consumers via Uncle Sam's mail bags—but that is another part of our story.

The Ravenna creamery first started operation away back about 1911. Some 200 farmers formed a co-partnership to finance the venture and for three years everything moved along quite well. Then the creamery burned and, for some reason or other there was no insurance. This, as you may suppose, was a body blow, right to the heart, but the farmers were not disheartened. Instead, they immediately started plans for a bigger and better concern to be organized as a stock company. Each of the 200 members advanced $36 to meet the obligations of the old company and, in return, each received 2 shares of stock in the new organization.

In September, 1914, the Ravenna Butter Company was incorporated as a stock company with a total capitalization of $6,000. This was issued in the form $10 shares, makeing a total of 600 shares. One share was set as the limit which any one stockholder could own. The original members disposed of their extra shares of stock and so, at the present time there are about 587 stockholders, the few additional shares being held by the company itself to be sold as new patrons make application.

These 587 owners of the creamery meet once per year and elect the officers and directors who are made responsible for the business during the following twelve months. The present officers and directors are as follows:

President, S. D. McNitt, Ravenna; Sec'y.-Manager, H. S. Averill, Revanna; Directors: J. Roy Davidson, Nunica; Roy Haas, Coopersville; Carl Kober, Conklin.

Acorn From Which Grew Oak

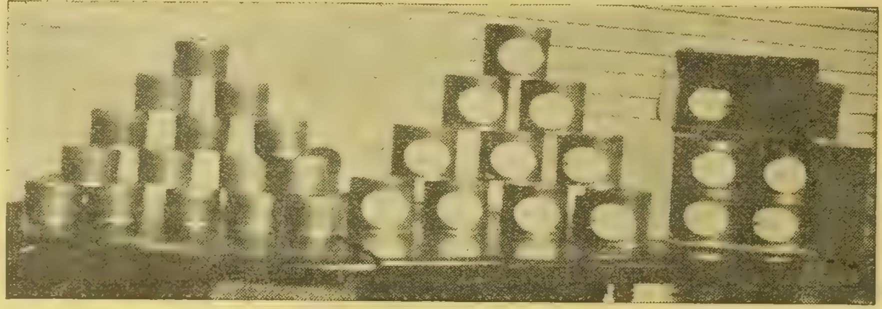
Back in 1914 an employe from the Detroit post office came to Ravenna for a visit. There was nothing unusual about such an occurence but there was something unusual about Ravenna butter. We may conclude that the flavor "lasted" because on his return to Detroit he decided that he must have more of that Ravenna butter. Accordingly he wrote to Manager Averill asking that a couple of pounds be sent him by parcel post. He even sent an empty fiber container for the shipment, the same kind of package which the creamery now uses at the rate of four carloads per year.

From this one shipment has been built up a parcel post business which, this past year, has handled about 400,000 lbs. of butter. And 400,000 pounds is 200 tons so the reader can appreciate that this is "some" butter to be sold direct from creamery to customer. The total sales of butter from the Ravenna creamery in 1922 were 648,018 pounds so the parcel post shipments represent approximately 62 per cent of the total business.

To ship this butter requires over 100,000 of the fiber containers, or four full carloads as mentioned above.

As the reader can well imagine, the parcel post business from this creamery alone amounts to more than the total business done in a year by many postoffices. Something over 17,000 shipments are made each year and the bill for postage amounts to $5,000.00 annually. In fact the business from the creamery promises to boost the local postoffice into the second class group.

The origional list of one customer has grown now to 2,000 customers scattered all over the United States. Butter has been shipped as far west as San Francisco, as far east as New Jersey, and as far south as Florida. Averill relates with pride how, a few years ago, a shipment of butter was made, via parcel post, to Germany. It was reported as being in excellent condition on its arrival.



Containers in which butter is shipped. Left to right: containers holding 2 pounds, containers holding 5 pounds and packages made up for shipment, one containing two 5-pound containers and one holding four 5-pound containers.

While the customers are thus scattered yet the bulk of the butter is used in Michigan. Detroit gets 95 per cent of the parcel post shipments and it is safe to say that the post office force of that city, following the example set by the postal clerk mentioned above, now eat nothing but Ravenna butter.

Butter for parcel post shipment is packed in waxed fiber containers. There are two sizes, one holding 2 lbs. and the other holding 5 lbs. The smallest amount which the creamery will ship is 4 lbs., made up of two 2 lb. containers. Mr. Averill states that the 5 lb. container is the more popular size and the most common shipment is a 20-lb. box containing four of the 5 lb. packages.

Each week many orders are received ranging from 150 lbs. to 400 lbs. each. These orders are mainly Club orders, ie., orders for a number of persons which are grouped together by some individual who charges a small amount to pay for his time. A Club order must be for at least 80 pounds.

Club orders as large as 1,000 lbs. and 2,000 lbs. each are not uncommon. J. P. Bacon, employed in the wholesale stamp department of the Detroit post office, sends in more large Club orders than any other person. His orders range from 2,500 lbs. to 3,100 lbs. each, and practically all of this is used by the employes in the post office.

When asked as to the practicability of making long distance shipments Mr. Averill answered that he does not consider it advisable to ship further than the second zone of the parcel post. He has two reasons for this, one is that the butter is not certain to arrive in the best condition, and the second, that it is not possible to insure shipments of butter sent farther than the second zone.

About one-fifth of the parcel post shipments are made on standing orders, a standing order being one for a fixed amount to be shipped at regular intervals.

A Business Built On Quality

And now you are wondering, as did the writer, just what kind of a costly and extensive system of advertising was used to build up such an excellent business by mail. When the question was put up to Mr. Averill he answered, "We have had practically no advertising except the word-of-mouth kind. When a family uses our butter, they like it and tell their neighbors about it. Then the neighbors order. That's the way our business has been built up. Oh, we send out calendar pads each year, but these go just to our present customers! And occasionally we send a shipment of butter to be used at a church supper or a lodge banquet with our compliments. This is good advertising because when the diner has had a taste of our butter he wants it for use on his own table." There you have in a nut shell the reason for the remarkable increase in the business of selling Ravenna butter by mail—Quality! Quality which the consumer recognizes with the first taste and quality which continues through the weeks, months, and years—that is the secret of Ravenna's success.

Many farmers will argue against attempting to sell quality in farm products, saying that "people won't pay extra for it." This argument seems disproven by the experience of the Ravenna creamery. The price of parcel post butter ranges from 8 cents to 11 cents per pound above the average price for creamery butter and the consumer pays, in addition, the postage and insurance charges.

On the day the writer visited the creamery the price of Standards (90 score) butter in Chicago was 48½ cents. The parcel post price on that same day was 60 cents per pound which enabled the creamery to pay its patrons 63 cents per pound for the butterfat delivered on that day.

Fresh Butter that is "Fresh"

The customers of the Ravenna creamery can well afford to pay a premium for their butter. The churning is done in the morning and the butter churned in the forenoon is packed into containers that afternoon. It leaves Ravenna on the late afternoon train and, in the case of Detroit customers, is delivered to their doors sometime the next day. Butter delivered to your door in from 24 to 48 hours after churning! Contrast this with the usual route followed in the distribution of butter from creamery to wholesaler to jobber to retailer to customer. The Ravenna method not only cuts out the many middlemen and their profits, all to the advantage of the farmer, but it also delivers fresh and wholesome butter direct to the consumer at a reasonable price and without the weeks of delay which are usually interspersed between creamery and consumer.

With each shipment of butter is included an invoice giving the cost of butter and also the amount of postage and insurance charges. The customer is to remit on receipt of the invoice. One might suppose that such a method would cause the losses from non-payment to run quite high. However, according to Manager Averill, the percentage of loss is surprisingly low. On a parcel post business in 1922 amounting to over $160,000 only $613 was charged off for bad accounts and not all of this came from butter sales. The largest losses, according to Manager Averill, were caused by the bankruptcy of grocery stores which were distributing the butter.

"Before shipping to a new customer we require some reference," said Mr. Averill. "Sometimes writing in on the stationery of the firm is sufficient but, as a usual thing, our new customers come to us with the recommendation of some one of our old customers."

On a Strictly Cooperative Basis

The business of the Ravenna creamery is conducted on a strictly cooperative basis. All patrons in the territory within reasonable distance of the creamery are required to be stockholders. However, the cream routes extend out for long distances and cream is purchased from producers outside of the area. No discrimination is made between stockholders and nonstockholders in the matter of price or returns.

No interest is paid on the shares of stock and no dividends are declared. Any benefit which a stockholder derives must come from the cream which he supplies to the creamery. In other words, patronage is the basis of benefits.

Where then, you ask, is the advantage in being a stockholder? Simply as being one of the group of cooperators who are putting across a successful business, and of having a voice in the affairs of the organization. And these advantages are sufficient to cause a demand for all the shares of stock available.

The creamery buildings alone are inventoried at approximately $6,000 which represents the amount which the stockholders have invested in the business. This, together with the land, machinery, trucks, and equipment, makes a total investment upwards of $20,000.

Checks in payment for the cream are issued every two weeks. Payment for cream delivered during one month is paid for on the following month. This gives the creamery about 30 days to manufacture the cream into butter, sell the butter, collect the amounts due, and divide the proceeds among the dairymen.

The cream receipts are pooled for

(Continued on Page 22)

The Ravenna Incorporated Butter Company

PICTURES FROM FAR AND NEAR

SWEETENING THINGS UP.—Dr. H. C. Gore of the Bureau of Chemistry, United States Department of Agriculture, has discovered that by the simple process of imitating the functioning of the human stomach he can convert corn into sugar. He has been able to get thirty-five pounds of sugar from one bushel of corn. Now, will the price of sugar drop?

CAN ENGLAND TOP AMERICA'S STANDARD OF GOOD LOOKS?—Andre Charlot, well known theatrical man of England, declares that the best looking girls are to be found in England and submits the above as proof. The idea! No country has us beat for pretty girls.

GIVES EMPLOYEES APARTMENT HOUSE APIECE.—When J. Louis Guyon, of Chicago, went broke ten of his employees pooled their earnings together and turned the money over to him. The tide turned, today he owns 50 apartment houses, and in gratitude he is presenting each one of his benefactors with a thirty apartment building.

COMMANDER OF DIXMUDE.—In the center is Commander Plessis, with his officers just before they sailed away in the ill-fated Dixmude, a huge airship belonging to France.

KING OF MILKERS.—Secretary of Agriculture Henry C. Wallace is today a titled man. He is the champion cow milker of the Capitol and he defeated Senator Magnus Johnson of Minnesota for the honor.

KNIGHTED.—Corey J. Spencer, of Jackson, Michigan, gave the French government 2 pure bred herd sires. Recently he was informed that he was to be knighted.

BETSY ROSS HOME TO BE MOVED.—The old Betsy Ross house at 239 Arch Street, Philadelphia, Pa., which because of fire hazards, may be moved to one of Philadelphia's many parks.

GREECE'S NEW PREMIER.—General Danglis, chairman of the Venizelist Party, who has been appointed the new Premier of Greece.

TAXI DRIVER IS FAMOUS MUSICIAN.—Samuel Becker, once well known musician in Russia, is now driving taxi in Minneapolis, Minn. In between trips he writes music for a radio broadcasting station.

MAY BRING RECOGNITION OF RUSSIA.—Dr. Eduard Renes, Foreign Minister of Czecho-Slovakia, has done more than any other man to bring about recognition of his country by other countries.

PRESIDENT BREAKS PRECEDENT.—President Coolidge, as far as is known, is the first Republican president to pay tribute to Andrew Jackson, founder of the present Democratic party. Accompanied by Secretaries Weeks and Denby he walked across to Lafayette Park and laid a wreath at the base to the monument to Andrew Jackson. The photo shows the trio walking through the Park.

HARSH CRITIC OF AMERICA.—Giovanni Papini, famous Italian author, is said to have recently declared America the "land of the millionaire, of the nauseating Longfellow and the intolerable Washington."

(Copyright, Keystone View Co.)

Thousand Birds in "Gold Medal" Poultry Show

Cash Prizes Totaling Over $200, 800 Ribbons and More Than 100 Special Prizes Distributed at Big Show at Muskegon

By SPECIAL CORRESPONDENT

WITH its well-lighted Armory filled nearly to capacity, Muskegon entertained the aristocrats and the workers of Michigan's world during the third week in January. It was a thousand-bird Show, and then some. There were 662 birds entered in the standard classes and 284 birds in the utility division. This makes a total of 946 birds. Add to this a number of turkeys, ducks, geese, pigeons, and nearly 100 rabbits, and you have one of the largest Shows in the state. For quality, as well as number of exhibits, Muskegon ranks with Grand Rapids and Detroit as one of the three leading Poultry Shows in Michigan for the 1923-24 season.

There were 112 exhibitors at the Muskegon Show. The support given by those outside of Muskegon county is indicated by the fact that 63 of the exhibitors were from other counties. Ottawa, Kent, Newaygo, Oceana, Mason, Wexford, Kalamazoo, Calhoun, St. Joseph, Allegan, Shiawassee and Ionia were among the counties represented by exhibits.

It was essentially a Show made up of small exhibits, the average being less than nine birds per exhibitor. As 18 was the highest number of birds shown by any one exhibitor in the same variety class this indicates that the exhibitors were concerned with quality rather than quantity.

Gold and Silver Medals Awarded

A total of more than $200 was actually distributed in cash prizes to the winners at Muskegon. This in addition to 800 ribbons and more than 100 special prizes, most of the latter being donations from the merchants of the city. The total prizes actually won and distributed amounted to over $500.

The most coveted awards, however, were the medals offered by the American Poultry Association under the direction of its president. Thos. F. Riggs, who designated the Muskegon exhibit as the official "Gold Medal" A. P. A. Show of Michigan for the year. In addition to the splendid championship gold medal which gives the name to the Show, there were 23 silver medals distributed by the American Poultry Association as championship awards in other classes.

A goodly share of the highest honors of the Muskegon Show were won by E. C. Zoeller of Albion who exhibited a wonderful string of White Rocks. The much-coveted Grand Championship Gold Medal, offered by the A. P. A. for the best cockerel in the show, was won by Zoeller on a White Rock cockerel. This same cockerel also won the Association trophy awarded for the best bird in the Show. This Association trophy is a massive silver cup, which has been battled for ever since 1912. During the 12 years of competition this cup has been won by 9 different exhibitors. By repeating his wins of 1918 and 1922, Mr. Zoeller becomes the first three-time winner and now is the permanent, and proud, possessor of the Association cup.

A second silver cup, awarded for the best cock, hen, cockerel, pullet, and pen of any one variety was also won by Mr. Zoeller, making his second winning of this particular trophy.

The special prizes for the best cock, best hen, best cockerel, best pullet, the best young pen, in the Show were won by Mr. Zoeller who, as the reader may imagine, had a good week of it.

There were, however, other winners at the Muskegon Show. Wm. Bassett of Muskegon won a total of 499 points in the White Wyandotte division and was awarded the silver cup trophy given to the exhibitor winning the highest number of points at the Show on any variety. This is the second win for Mr. Bassett on this particular cup.

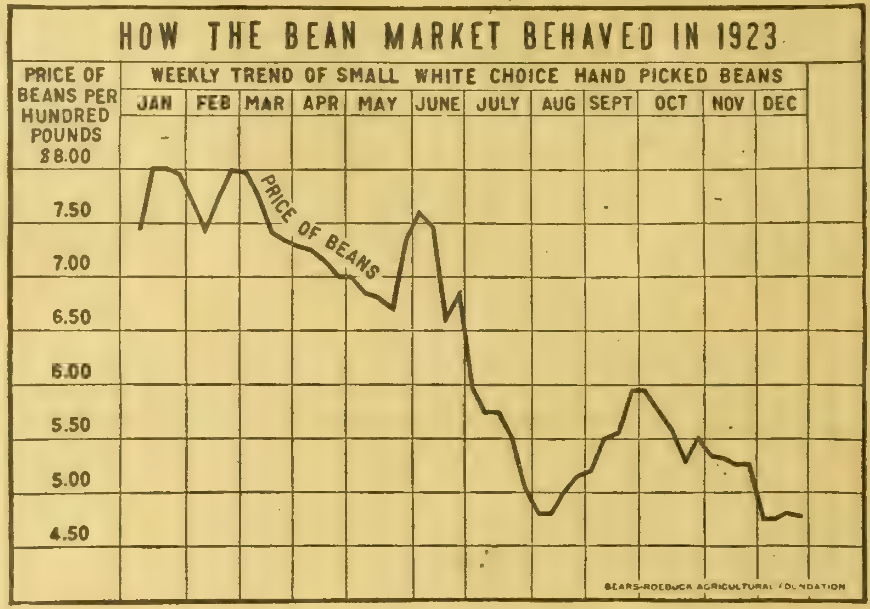
The cup awarded for the best pen in the Show was also won by Mr. Bassett with his White Wyandottes.

Roy Strevel of Muskegon with a pen of Buff Wyandottes, won the cup awarded for the best solid-color pen in the show.

The best pen of parti-colored birds were S. C. Rhode Island Reds, owned by A. M. Wood of Grand Rapids. This trophy is also a silver cup and during its seven years of competition has been won by six different exhibitors.

The Buff Orpingtons owned by H. O. Rieger of Grand Rapids won, for the third time, the cup awarded for the best pen of Orpingtons so Mr. Rieger becomes the permanent owner of that trophy.

L. D. Hyde of Muskegon won, for the second time, with his Himalayan rabbits, the trophy awarded to the exhibitor winning the largest number of points in the rabbit competition on any one variety. According to the rules governing this particular trophy, the second winning gives permanent possession.



The best rabbit in the show was a Chinchilla, owned by Wilkinson and McGee of Grand Rapids, who thereby won a special silver trophy. A second cup was won by this same firm with a Chinchilla buck which was designated the best junior buck in the show.

Awards In Utility Classes

Best Pen, Francis Kent, of Muskegon, on S. C. White Leghorns. Best Old Pen, Francis Kent, on S. C. White Leghorns. Best Young Pen, James DeGroot, of No. Muskegon, on S. C. Mottled Anconas. Best Cock, K. T. Murphy of Muskegon, with a White Wyandotte. Best Cockerel, Peter M. Hansen, of Muskegon, with an S. C. White Leghorn. Best Pullet, Maurice Vanderwater, of Muskegon, with an S. C. R. I. R. Best Hen, Francis Kent, with an S. C. White Leghorn.

The pen of S. C. White Leghorns which won both best pen and best old pen in the utility division, were raised and exhibited by Francis Kent of Muskegon. The judges gave Mr. Kent much commendation on this pen, both for type and uniformity. As expressed by one judge, "The four hens are as like as four peas."

Two additional awards won in the standard classes were as follows:

A. M. Wood of Grand Rapids, best old pen in Show, with S. C. R. I. Reds.

Jas. DeKoster of Holland, second best pen in show, with Buff Rocks.

The competition was keen throughout the show. In the utility class of Single Comb White Leghorn pullets, 23 were entered for competition. This class held the attention of the judge for a long time with awards finally made as follows: First, Royal Bratton of Montague; Second, Bert Denman of Muskegon; Third, Francis Kent, of Muskegon; Fourth, Peter M. Hansen of Muskegon; Fifth, Francis Kent.

In addition to the silver medals awarded by the A. P. A. for the best cockerel in each of 17 different breeds, the following sweepstakes silver medals were also A. P. A. awards:

Best Turkey, L. O. Dawson of Muskegon;

(Continued on Page 19)

Good Care of Brood Sow this Winter Means Strong Litters Next Spring

By W. E. J. EDWARDS

Associate Professor of Animal Husbandry, Michigan Agricultural College

IN order that brood sows farrow strong, thrifty litters next spring, several factors must be given careful consideration this winter. Occasionally sows wintered in a haphazzard manner produce good litters of thrifty pigs, but this is the rare exception.

Several points are of vital importance. The brood sow should be forced to take sufficient exercise; clean, dry, well ventilated quarters should be provided; and the proper food constituents should be given.

Sufficient exercise is very essential in the production of a strong litter of pigs. By no means should the sow be cramped in a small pen where she does not have the run of a lot. If she is so confined, she is very liable to become soft and flabby and usually has considerable difficulty in delivering her young. Under such conditions the pigs usually lack vitality, a larger number of them are liable to die at birth, and those remaining will not get the strong start they need. Sows getting insufficient exercise usually become indolent and often kill several of their pigs by lying on them, whereas sows that have had the run of a reasonable sized lot have much more vitality and heed the cries of their young, getting up when they happen to pinch a little fellow in lying down.

Some brood sows have to be forced to take the exercise they need. This can be accomplished by having the sleeping quarters and the feeding trough some distance apart. this brings up the question of winter quarters.

No doubt the use of the portable cot is the most satisfactory method of housing brood sows during the winter and in fact during the entire year except at farrowing time, when a community house is usually preferred. There are many styles of portable cots, the size to be recommended being six by eight feet. The cot does not need to be warmly built, one thickness of lumber being quite sufficient. In fact, it is not necessary to put on a door. It should be floored, however, and placed in a dry place and by all means should be kept dry and well bedded.

In planning the hog lots it is advisable that they be made long and narrow, rather than square. They can then be plowed without difficulty and by placing the cot at one end and the feeding trough at the other, the sows are forced to take a fair amount of exercise.

A large number of different food constituents are necessary in the production of a healthy litter. Not only must the demands of the sow be met, but the ultimate development of the litter depends to a large extent upon their being properly nourished before parturition. A strong frame with good muscular development should be produced. This can be done only by supplying these growth producing constituents in the ration. Bone cannot be built without mineral matter and muscle cannot be developed without protein. It is, therefore, of paramount importance that there be no lack of these constituents in the feed given.

Most of our home grown grains are deficient in growth producing qualities although oats and rye are fairly well balanced in this respect. Oats as a sole ration are not recommened, as they do not contain the variety of proteins necessary, while rye should be fed in limited amounts as it often contains ergot which may cause abortion. Good, second growth alfalfa hay is rich in substances which produce growth and if sows can be induced to consume considerable quantities, home grown grains such as oats and barley with a small amount of corn makes a satisfactory ration. Sufficient alfalfa is seldom eaten, however, unless it is ground and mixed with these grains to the extent of about twenty-five percent of the ration.

A few well balanced rations which meet the needs of the pregnant sow are:

1. Corn, 12 parts by weight; Tankage, 1 part by weight.
2. Barley, 18 parts; Tankage, 1 part.
3. Ground Oats, 100 parts; Corn, 100 parts; Tankage, 8 parts.
4. Ground Oats, 600 parts; Middlings, 100 parts; Tankage, 5 parts.

Good second growth alfalfa hay should be available with each of the above rations.

Even when alfalfa is fed, additional minerals should be fed to insure proper bone development. Many mineral mixtures are now on the market. Home made mixtures may be used to good advantage. Hard wood ashes and soft coal are very good. Considering cost and results obtained equal parts of acid phosphate, finely ground limestone, and common salt is recommended. This mixture should be placed in a self-feeder and the sows allowed to take all they wish, or it may be mixed with the feed, using about two pounds of the mixture to every one-hundred pounds of the ration.

Goiter or hairlessness has been the cause of very heavy losses among new born pigs in some sections of the country for some time. Michigan has been comparatively free from this trouble but an increasing number of hairless litters has been reported by our breeders the past two or three years.

Pigs affected with this trouble are usually farrowed weak or dead. Many of them are hairless and usually show a swollen neck due to an enlargement of the thyroid gland similar to goiter in humans. This is caused by a deficiency of iodine in the ration.

Highly concentrated foods, such as our common grains, are quite de-

(Continued on Page 19)

Farmers Service Bureau

(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accomopanied by full name and address. Name not used if so requested.)

MAKING CEMENT FROM MARL

Will you please state how to make cement from marl?—P. C., Ithaca, Mich.

—The marl is first excavated, usually by means of steam shovels and pumped or conveyed by barges to the plant where it is stored in large tanks. It is then mixed with clay and the other ingredients necessary to produce the proper chemical compound and thoroughly mixed, after which it is passed through enormous drums which revolve and are heated to a very high temperature so that the marl is calcined or roasted into clinkers.

These clinkers are then ground in large revolving drums. It then goes through the process of soaking for storage and shipment. This covers these processes in a general way.—H. H. Musselman, Prof. Agricultural Engineering Dep't., M. A. C.

IS GIRL 18 YEARS OLD OWN BOSS

Has a girl at the age of 18 her right to leave home and work for herself or can her parents take her back home? Is she at that age her own boss? Can they draw her pay? Thanking you, I remain.—B. R., Bay City, Mich.

—Until a child has reached the age of 21 years, the parents have the custody and control over it, so long as they properly discharge their duty as parents, unless such child has been emancipated by the parents.

The parents are under legal duty to support and care for the child, and in return they have the right to collect her wages.—Legal Editor.

TAX EXEMPTION LAW

Please inform us if in Michigan there exists a so-called exemption law. If so, to what amount, man having family to support can claim exemption? Also please name the law or article, if such exists.—A. K., Dundee, Mich.

—A house-holder is entitled to a homestead exemption of the value of $1500.00. See Section 12888—12896 of the Compiled Laws of 1915.

Exemption from levy and sale under any execution, or upon any other final process of a Court, of the following property, viz:

1. All sewing machines, not exceeding one such machine for each family, all spinning wheels, weaving looms with the apparatus, and stoves put up and kept for use in any dwelling house;
2. A seat, pew or slip, occupied by such person or family, in any house or place of public worship;
3. All cemeteries, tombs and rights of burial, while in use as repositories of the dead.
4. All arms and accoutrements required by law to be kept by any person; all wearing apparel of every person or family.
5. The library and school books of every individual and family, not exceeding one hundred and fifty dollars, and all family pictures;
6. To each householder, ten sheep, with their fleeces, and the yarn or cloth manufactured from the same; two cows, five swine, and provisions and fuel for comfortable subsistance of such householder or family for six months;
7. To each housholder, all household goods, furniture and utensils, not exceeding in value two hundred and fifty dollars;
8. The tools, implements, materials, stock, apparatus, team, vehicle, horses, harness, or other things to enable any person to carry on the profession, trade, occupation or business in which he is wholly or principally engaged, not exceeding in value two hundred and fifty dollars. The word team in this subdivision shall be construed to mean, either one yoke of oxen, a horse, or a pair of horses, as the case may be;
9. A sufficient quantity of hay, grain, feed and roots, whether growing or otherwise, for propertly keeping for six months the animals in the several subdivisions of this section exempted from execution, and any chattel mortgage, bill of sale, or other lien created on any part of property above described, except such as is mentioned in the eighth subdivision of this section, shall be void, unless such mortgage, bill of sale or lien be signed by the wife (if he have any) of the party making such mortgage or lien.

See Section 12858-12872, Compiled Laws of 1915.

Exemption of wages for the personal labor of a householder having a family is 60 per cent of the amount of said wages, but in no case shall more than $30.00 be exempt and in all cases shall less than $8.00 be exempt. See Section 14,365 of the Compiled Laws of 1915.—Clare Retan, Deputy Attorney General of Michigan.

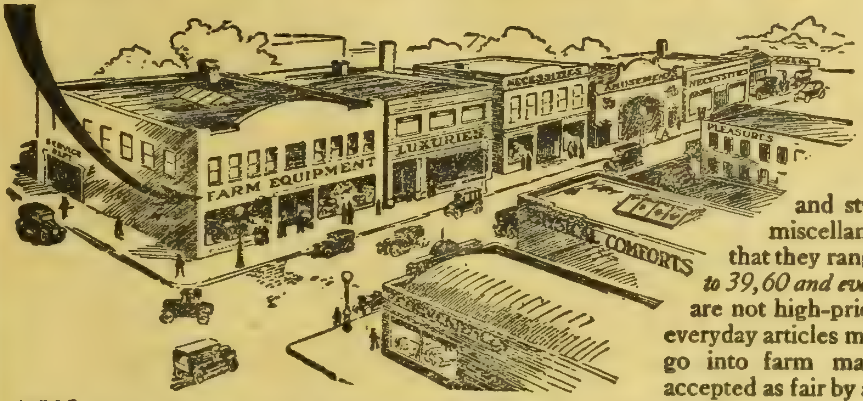
MUST HEIRS SIGN OFF?

If a man dies and leaves a will have all the heirs got to sign off before they can give a clear deed to a farm?—Mrs. J. G., Wheeler, Mich.

—The answer to your question would depend upon what interest the heirs have in the property, which in turn would depend upon the terms of the will.

When a person dies leaving a will, each legatee or devisee receives whatever property or share of property is bequeather or devised to him. Title to the farm would vest in the persons to whom it was devised, and before it could be conveyed all the devisees would have to sign the conveyance. Any person has the right to name what disposition shall be made of his own property at his death, and if he desires to do so and the heirs would receive no interest, and consequently would not have to "sign off." Moreover, he may provide in his will that one heir shall receive all his property and the other heirs nothing, and these disinherited would have no remedy, except to attack the validity of the will in court. If one heir has performed services for the testator, he could not establish a claim for such services unless there was an agreement whereby he was to receive compensation for such services.—Asst. Legal Editor.

Where the Farmer's Dollar Buys the Greatest Value



IN some of the stores of any town the farmer's dollar buys the necessities of life; in others it buys physical comforts; in still others it buys pleasures. *In the farm equipment store the farmer's dollar buys the means to make many more dollars.* It buys the equipment which, like the land itself, is responsible for his progress and prosperity. When the farmer invests in modern farm machines, he is really buying clothing and education, electric lights, automobiles, radio outfits, etc., because these things are purchased with the money made by farm machines.

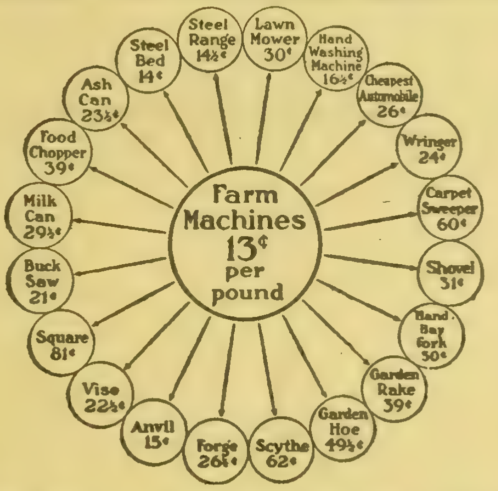
Of all the stores in town, *the farm equipment store is the one where the farmer gets the greatest return for his money.* This is true not only on the basis of the foregoing but it is found true also by comparing the prices paid by the farmer for different articles made of similar materials.

An interesting comparison has been made by the Research Department of the National Association of Farm Equipment Manufacturers. They took, First, a group of eleven basic farm machines: Sulky plow, peg tooth harrow, disk harrow, grain drill, corn cultivator, corn planter, corn sheller, grain binder, mower, hay rake, and grain wagon—and, Second, a list of common articles used on the farm but not classed as farm equipment. Then they obtained the pound prices of these articles by dividing the retail prices by the weights. The pound-price basis is the only practical way to compare these articles and it is entirely fair since the materials go through the same machine shop and factory processes and are handled by the same class of labor. Freight to the dealer's store was not included, since it applies to all articles the farmer buys and varies with the distance from point of manufacture.

The chart below shows the prices per pound of the basic farm machines and other articles the farmer buys.

Ignore for a minute the *low figure* in the big circle and study the pound prices of the miscellaneous articles. You will see that they range *all the way from 14 cents up to 39, 60 and even 81 cents per pound.* Yet these are not high-priced goods; they are ordinary, everyday articles made of the same materials that go into farm machines, and the prices are accepted as fair by all buyers. The articles are of a standard line sold practically everywhere.

Now note the low average retail price per pound of farm machines. The *average* pound price of these basic machines and implements, needed by every grain-growing farmer, is less than the *lowest* in the other group. Some of these farm machines have complicated parts in their makeup and all of them are built to stand years of hard use, yet *the average price the farmer pays for these necessary farm machines is only 13 cents per pound.*



The above comparisons, which can be duplicated in any community in this country, prove the statement that *the farmer pays less money, pound for pound, for the machines that do his work than he pays for any other similar manufactured article he buys.*

This shows what farm machines would cost if they were priced like other articles the farmer buys:

A sulky plow, priced like a wringer, would cost about $45 MORE
A peg-tooth harrow, priced like a forge, would cost about $30 MORE
A disk harrow, priced like a buck saw, would cost about $50 MORE
A grain drill, priced like a food chopper, would cost about $390 MORE
A corn planter, priced like a forge, would cost about $60 MORE
A corn cultivator, priced like a vise, would cost about $40 MORE
A corn sheller, priced like a milk can, would cost about $20 MORE
A 7-ft. grain binder, priced like the cheapest automobile, would cost about $200 MORE
A 7-ft. grain binder, priced like an ash can, would cost about $150 MORE
A 5-ft. mower, priced like a lawn mower, would cost about $80 MORE
A hay rake, priced like a garden rake, would cost about $110 MORE
A wagon, priced like a hand washing machine, would cost about $50 MORE

The National Association of Farm Equipment Manufacturers has issued several bulletins on subjects similar to the above. We will be glad to see that the full set is sent to those interested. Drop us a line.

INTERNATIONAL HARVESTER COMPANY
of America
(Incorporated)
606 So. Michigan Ave. Chicago, Ill.

Oh Money! Money!

by ELEANOR H. PORTER

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THE STORY TO DATE

MR. STANLEY G. FULTON, 50-year old bachelor and possessor of twenty million dollars, calls on his lawyer and they discuss the disposition of this large fortune after its owner's death. The lawyer is in favor of giving the money to colleges or charities while Fulton is opposed to these ideas. He remembers that he has some distant cousins and decides to leave the money to one of them, but first he determines to learn which one will use it to the best advantage. To find out who is the worthy one he, through his lawyer, gives, each cousin $100.000 to use as they will. Before giving them the money grows a beard and, using the name of Mr. John Smith, goes to the town where they live to find out what kind of people they are. Upon arriving in town he visits James Blaisdell, one of the cousins, where he tries to hire board and lodging. While there he meets Miss Flora Blaisdell, another cousin who is a dressmaker. They decide they cannot rent a room to him and supply him board and refer him to Frank Blaisdell's, the third cousin. He gets a room there and, passing as a writer gathering material for a book on the Blaisdell family in this country, he starts out. He calls on all of the Blaisdells and as they all talk of a relative by the name of Miss Maggie Duff he decides to call on the lady. He finds her living with her father, an old man who seems to have soured on the world. He secures what information he can from her and her father. He then writes a letter to his lawyer discussing the various relatives he has met. The members of the Blaisdell family that each cousin of Stanley G. Fulton has fallen heir to $100,000 and there is much excitement.

(Continued from January 19th Issue.)

"THEY do matter, indeed." Miss Maggie was speaking very gravely now. "They matter—woefully. I never say 'It don't matter' to war, or death, or sin, or evil. But there are other things—"

"But the other things matter, too," interrupted the man irritably. "Right here and now it matters that you don't share in the money; it matters that you slave half your time for a father who anywhere near appreciate you; it matters that you slave the rest of the time for every Tom and Dick and Harry and Jane and Mehitable in Hillerton that has run a sliver under a thumb, either literally or metaphorically. It matters that—"

But Miss Maggie was laughing merrily, "Oh, Mr. Smith, Mr. Smith, you don't know what you are saying!"

"I do, too. It's you who don't know what you are saying!"

"But, pray, what would you have me say?" she smiled.

"I'd have you say it does matter, and I'd have you insist on having your rights, every time."

"And what if I had?" she retaliated sharply. "My rights, indeed!"

The man fell back, so sudden and so astounding was the change that had come to the woman opposite him. She was leaning forward in her chair, her lips trembling, her eyes a smouldering flame.

"What if I had insisted on my rights, all the way up?" she quivered. "Would I have come home that first time from college? Would I have stepped into Mother Blaisdell's shoes and kept the house? Would I have swept and baked and washed and ironed, day in and day out, to make a home for father and for Jim and Frank and Flora? Would I have come back again and again, when my beloved books were calling, calling, always calling? Would I have seen other girls love and marry and go to homes of their own, while I—Oh, what am I saying?" she choked, covering her eyes with the back of her hand, and turning her face away. "Please, if you can, forget what I said. Indeed, I never—broke out like that--before. I am so--ashamed!"

"Ashamed! Well, you needn't be." Mr. Smith, on his feet, was trying to work off his agitation by tramping up and down the small room.

"But I am ashamed," moaned Miss Maggie, her face still averted. "And I can't think why I should have been so —so wild. It was just something that you said—about my rights, I think. You see—all my life I've just had to learn to say 'It doesn't matter,' when there were so many things I wanted to do, and couldn't. And—don't you see?—I found out, after a while, that it didn't really matter, half so much—college and my own little wants and wishes— as that I should do—what I had to do, willingly and pleasantly at home."

"But, good Heavens, how could you keep from tearing 'round and throwing things?"

"I couldn't—all the time. I—I smashed a bowl once, and two cups." She laughed shamefacedly, and met his eyes now. "But I soon found—that it didn't make me or anybody else—any happier, and that it didn't help things at all. So I tried—to do the other way. And now, please, please say you'll forget all this—what I've been saying. Indeed, Mr. Smith, I am very much ashamed."

"Forget it!" Mr. Smith turned on his heel and marched up and down the room again. "Confound that man!"

"What man?"

"Mr. Stanley G. Fulton, if you must know, for not giving you any of that money."

"Money, money, money!" Miss Maggie threw out both her hands with a gesture of repulsion. "If I've heard that word once, I've heard it a hundred times in the last week. Sometimes I wish I might never hear it again."

"You don't want to be deaf, do you? Well, you'd have to be, to escape hearing that word."

"I suppose so. But—" again she threw out her hands.

"You don't mean—" Mr. Smith was regarding her with curious interest. "Don't you want—money, really?"

She hesitated; then she sighed.

"Oh, yes, of course. We all want money. We have to have money, too; but I don't think it's—everything in the world, by any means."

"You don't think it brings happiness, then?"

"Sometimes. Sometimes not."

"Most of—er—us would be willing to take the risk."

"Most of us would."

"Now, in the case of the Blaisdell's here—don't you think this money is going to bring happiness to them?"

There was no answer. Miss Maggie seemed to be thinking..

"Miss Maggie," exclaimed Mr. Smith, with a concern all out of proportion to his supposed interest in the matter, "you don't mean to say you don't think this money is going to bring them happiness!"

Miss Maggie laughed a little.

"Oh, no! This money'll bring them happiness all right, of course,—particularly to some of them. But I was just wondering; if you don't know how to spend five dollars so as to get the most out of it, how will you spend five hundred, or five hundred thousand—and get the most out of that?"

But Miss Maggie shook her head.

"Nothing. I was just thinking," she said.

CHAPTER XI

Santa Claus Arrives

It was not long after this that Mr. Smith found a tall, gray-haired man, with keen gray eyes, talking with Mrs. Jane Blaisdell and Mellicent in the front room over the grocery store.

"Well—" began Mr. Smith, a joyful light of recognition in his eyes. Then suddenly he stopped and picked up something from the floor. When he came upright his face was very red. He did not look at the tall gray-haired man again as he advanced into the room.

Mellicent turned to him eagerly.

"Oh, Mr. Smith, it's the lawyer—he's come. And it's true. It is true!"

"This is Mr. Smith, Mr. Norton," murmured Mrs. Jane Blaisdell to the keen-eyed man, also, for no apparent reason, had grown very red. "Mr. Smith's a Blaisdell, too,—distant, you know. He's doing a Blaisdell book."

"Indeed! How interesting! How are you, Mr.—Smith?' The lawyer smiled and held out his hand, but there was an odd constraint in his manner. "So you're a Blaisdell, too, are you?"

"Er—yes," Mr. Smith, smiling straight into the lawyer's eyes.

"But not near enough to come in on the money, of course," explained Mrs. Jane. "He isn't a Hillerton Blaisdell. He's just boarding here, while he writes his book."

"Oh, I see. So he isn't near enough to come in—on the money." This time it was the lawyer who was smiling straight into Mr. Smith's eyes.

But he did not smile for long. A sudden question from Mellicent seemed to freeze the smile on his lips.

"Mr. Norton, please, what was Mr. Stanley G. Fulton like?" she begged.

"Why—er—you must have seen his pictures in the papers," stammered the lawyer.

"Yes, what was he like? Do tell us," urged Mr. Smith with a bland smile, as he seated himself.

"Why—er—" The lawyer came to a still more unhappy pause.

"Of course, we've seen his pictures," broke in Mellicent, "but those don't tell us anything. And you knew him. So won't you tell us what he was like, please, while we're waiting for father to come up? Was he nice and jolly, or was he stiff and haughty? What was he like?"

"Yes, what was he like?" coaxed Mr. Smith again. Mr. Smith for some reason, seemed to be highly amused.

The lawyer lifted his head suddenly. An odd flash came to his eyes.

"Like? Oh, just an ordinary man, you know,—somewhat conceited, of course." (A queer little half gasp came from Mr. Smith, but the lawyer was not looking at Mr. Smith.) "Eccentric—you've heard that, probably. And he has done crazy things, and no mistake. Of course, with his money and position, we won't exactly say he had bats in his belfry—is'nt that what they call it?—but—"

Mr. Smith gave a real gasp this time, and Mrs. Jane Blaisdell ejaculated:—

"There, I told you so! I knew something was wrong. And now he'll come back and claim the money. You see if he don't! And if we've gone and spent any of it—" A gesture of despair finished her sentence.

"Give yourself no uneasiness on that score, madam," the lawyer assured her gravely. "I think I can safely guarantee he will not do that."

"Then you think he's dead?"

"I did not say that, madam. I said I was very sure he would not come back and claim this money that is to be paid over to your husband and his brother and sister. Dead or alive, he has no further power over that money now."

"Oh-h!" breathed Mellicent. "Then it is—ours!"

"It is yours," bowed the lawyer.

"But Mr. Smith says we've probably got to pay a tax on it," thrust in Mrs. Jane, in a worried voice. "Do you know how much we'll have to pay? And isn't there any way we can save doing that?"

Before Mr. Norton could answer, a heavy step down the hall heralded Mr. Frank Blaisdell's advance, and in the ensuing confusion of his arrival, Mr. Smith slipped away. As he passed the lawyer, however, Mellicent thought she heard him mutter, "You rascal!" But afterwards she concluded she must have been mistaken, for the two men appeared to become the best of friends. Mr. Norton remained in town several days, and frequently she saw him and Mr. Smith chatting pleasantly together, or starting off apparently for a walk. Mellicent was very sure, therefore, that she must have been mistaken in thinking she had heard Mr. Smith utter so remarkable an examination as he left the room that first day.

During the stay of Mr. Norton in Hillerton, and for some days afterwards, the Blaisdells were too absorbed in the mere details of acquiring and temporarily investing their wealth to pay attention to anything else. Under the guidance of Mr. Norton, Mr. Robert Chalmers, and the heads of two other Hillerton banks, the three legatees set themselves to the task of "finding a place to put it,' as Miss Flora breathlessly termed it.

Mrs. Hattie said that, for her part, she should like to leave their share all in the bank: then she'd have it to spend whenever she wanted it. She yielded to the shocked protestations of the others, however, and finally consented that her husband should invest a large part of it in the bonds he so wanted, leaving a generous sum in the bank in her own name. She was assured that the bonds were just as good as money, anyway, as they were the kind that were readily convertible into cash.

Mrs. Jane, when she understood the matter, was for investing every cent of theirs where it would draw the largest interest possible. Mrs. Jane had never before known very much about interest, and she was fascinated with its delightful possibilities. She spent whole days joyfully figuring percentages, and was awakened from her happy absorption only by the unpleasant realization that her husband was not in sympathy with her ideas at all. He said that the money was his, not hers, and that, for once in his life, he was going to have his way. "His way" in this case proved to be the prompt buying out of the competing grocery on the other corner, and the establishment of a good-sized bank account. The rest of the money he said she might invest for a hundred per cent, if she wanted to.

Jane was pleased to this extent, and asked if it were possible that she could get such a splendid rate as one hundred per cent. She had not figured on that! She was not pleased later, when Mr. Norton and the bankers told her what she could get—with safety; and she was very angry because they finally appealed to her husband and she was obliged to content herself with a paltry five or six per cent, when there were such lovely mining stocks and oil wells everywhere that would pay much more.

She told Flora that she thought she ought to thank her stars that she had the money in her own name, to do just as she pleased with, without any old-fogy men bossing her.

But Flora only shivered and said "Mercy me!" and that, for her part, she wished she didn't have to say what to do with it. She was scared of her life of it, anyway, and she was just sure she would lose it, whatever she did with it; and she most wished she didn't have it, only it would be nice, of course, to buy things with it—and she supposed she would buy things with it, after a while, when she got used to it, and was not afraid to spend it.

Miss Flora was, indeed quite breathless most of the time, these days. She tried very hard to give the kind gentlemen who were helping her no trouble, and she showed herself eager always to take their advice. But she wished they would not ask her opinion; she was always afraid to give it, and she didn't have one, anyway; only she did worry, of course, and she had to ask them sometimes if they were real sure the places they had put her money were perfectly safe, and just couldn't blow up. It was so comforting always to see them smile, and hear them say: "Perfectly, my dear Miss Flora, perfectly! Give yourself no uneasiness." To be sure, one day, the big fat man, not Mr. Chalmers, did snap out: "No, madam; only the Lord Almighty can guarantee a government bond—the whole country may be blown to atoms by a volcano to-morrow morning!"

She was startled, terribly startled; but she saw at once, of course, that it must be just his way of joking, for of course there wasn't any volcano big enough to blow up the whole United States; and, anyway, she did not think it was nice of him, and it was almost like swearing, to say "the Lord Almighty" in that tone of voice. She never liked that fat man again. After that she always talked to Mr. Chalmers, or to the other man with a wart on his nose.

Miss Flora had never had a check-book before, but she tried very hard to learn how to use it, and to show herself not too stupid. She was glad there were such a lot of checks in the book, but she didn't believe she'd ever spend them all—such a lot of money! She had had a savings-bank book, to be sure, but she had not been able to put anything in the bank for a long time, and she had been worrying a good deal lately for fear she would have to draw some out, business had been so dull. But she would not have to do that now, of course, with all this money that had come to her.

They told her that she could have all the money she wanted by just filling out one of the little slips in her check-book the way they had told her to do it, and taking it to Mr. Chalmer's bank—that there were a good many thousand dollars there waiting for her to spend, just as she liked; and that, when they were gone, Mr. Chalmers would tell her how to sell some of her bonds and get more. It seemed very wonderful.

There were other things, too, that they had told her—too many for her to remember—something about interest, and things called coupons that must be cut off the bonds at certain times. She tried to remember it all; but Mr. Chalmers had been very kind and had told her not to fret. He would help her when the time came. Meanwhile, he had rented her a nice tin box (that pulled out like a drawer) in the safety-deposit vault under the bank, where she could keep her bonds and all the other papers—such a lot of them!—that Mr. Chalmers told her that she must keep very carefully.

But it was all so new and complicated, and everybody was always talking at once, so!

No wonder, indeed, that Miss Flora was quite breathless with it all.

By the time the Blaisdells found themselves able to pay attention to Hillerton, or to anything outside their own astounding personal affairs, they became suddenly aware of the attention Hillerton was paying to them.

The whole town was agog. The grocery store, the residence of Frank Blaisdell, and Miss Flora's humble cottage might be found at nearly any daylight hour with from one to a dozen curious-eyed gazers on the sidewalk before them. The town paper had contained an elaborate account of the bequest and the remarkable circumstances attending it; and Hillerton became the Mecca of wandering automobiles for miles around. Big metropolitan dailies got wind of the affair, recognized the magic name of Stanley G. Fulton, and sent reporters post-haste to Hillerton.

Speculation as to whether the multi-millionaire was really dead was prevalent everywhere, and a search for some clue to his reported South American exploring expedition was undertaken in several quarters. Various rumors concerning the expedition appeared immediately, but

(Continued on page 29.)

DO ANY BUILDING IN 1923?

REPORTS have been circulated that the farmers of Michigan did little building during 1923. We want to determine whether this report is true or not and we are coming to you to find out. We will pay $1 apiece for all photos of Michigan farm houses or barns built during last year, that we print in The Business Farmer. Take a picture of that new house or barn—a snapshot will be satisfactory if clear enough—have a good print made and then send it to us stating when the building was put up, and the cost. Also be sure to give your complete name and address. If we can use your photo we will pay you $1 for it but if we cannot you may have it returned if you wish. Try and send your picture in within the next two weeks.

"Buy Early!" says Sharood

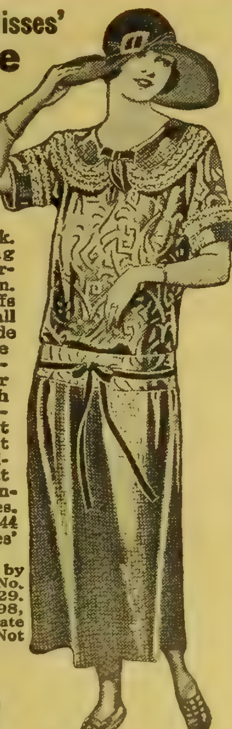
Advance Spring Styles at the World's Lowest Prices

Here is the very first showing of assured spring styles—fashions that are bound to be popular this season—and everything offered at amazingly low introductory prices. Sharood says: "Buy Now!" Buy at Lowest Prices in America—GUARANTEED. Remember, you can order on approval—you can actually see and try on everything you select. If not delighted with the styles and astounded at your saving, return the goods and you will not lose one cent

Satisfaction Guaranteed or Money Back

Merely give name and number of each article you want. Also state size, and write your name and address plainly to avoid delay. Send only the amazing bargain price and few cents postage mentioned in each description. When goods arrive, examine them carefully. If not delighted with your bargains, return goods and we refund your money instantly. Order Now—Today! Shipment positively goes forward within 24 hours of time we receive your order.

Women's and Misses' Silk Crepe Frock



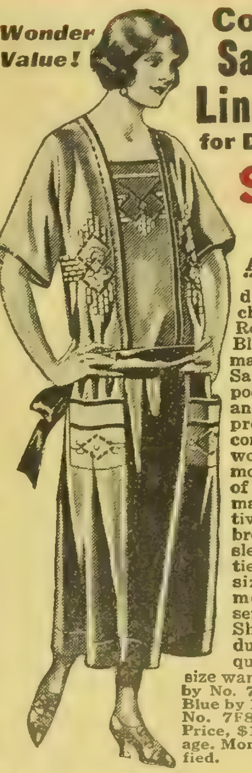
$4.98

You'll be delighted with this lovely frock. It's a new charming style creation and a marvelous Sharood bargain. Skirt, collar, and cuffs are made of heavy all Silk Crepe. Bodice made of silk and cotton crepe in fancy pattern of contrasting colors. Collar and cuffs edged with rows of ecru lace. Slipover style. Finished at neck with black velvet ribbon bow. Black velvet sash with bow at waist-line. Comes in unusually pretty shades. Women's sizes, 34 to 44 bust measure. Misses' sizes, 32 to 38 bust.

Order Copenhagen Blue by No. 5F7525. Brown by No. 5F7527. Grey No. 5F7529. Send Bargain Price, $4.98, and 13c for postage. State size. Money Back if Not Satisfied.

Combination Sateen and Linene Dress for Day-Time Wear

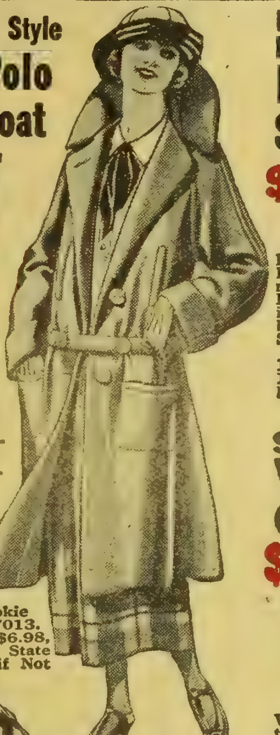
Wonder Value!



$1.98

A very charming and "different" dress for day-time wear, in choice of Tangerine, Rose or Copenhagen Blue top. The skirt is made of lustrous Black Sateen, with large patch pockets of same color and material as waist, prettily decorated with contrasting tops and wool embroidery to harmonize. The blouse is of solid color Linene made especially attractive with wool hand embroidery. Novel Vestee sleeves. All-around belt ties in back. Women's sizes, 34 to 46 bust measure. A simply sensational bargain at Sharood's low introductory price. Order quick! Be sure to state size wanted. Order Tangerine by No. 7F8041. Copenhagen Blue by No. 7F8042. Rose by No. 7F8043. Send Bargain Price, $1.98, and 6c for postage. Money Back if Not Satisfied.

An Ultra-Smart Style All Wool Polo Chappie Coat For Women and Misses



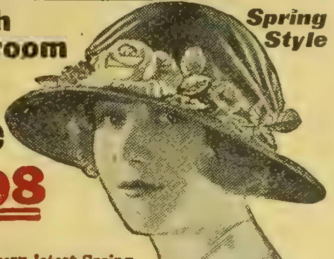
$6.98

Made of fine quality All Wool Polo with mannish collar and reveres, and raglan sleeves. Has 4 pockets, 2 muff and 2 side pockets. Belt all around. Inverted pleat in center of back. Length 38 inches. A very stylish coat and a very practical one for spring wear. Buy it now at our special money-saving price. Women's sizes, 34 to 44 bust. Misses' sizes, 32 to 38.

Order Tan by No. 5F7011. Order Rookie Brown by No. 5F7013. Send Bargain Price, $6.98, and 14c for postage. State size. Money Back if Not Satisfied.

French Mushroom Poke Shape

Spring Style

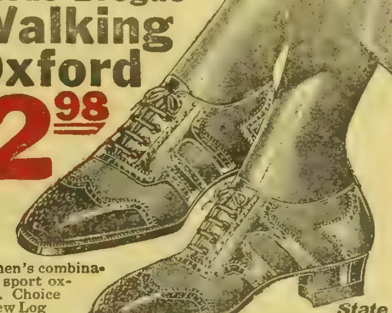


$1.98

Here's the very latest Spring Hat Style. Fetching French mushroom poke with shirred back. High lustre Baronette satin crown, hand draped. Brim is of the very newest French Visca cloth trimmed with beautiful floral wreath and foliage in many contrasting Spring colors. Made in 3 very popular shades for Spring.

Order Sand Color by No. 8F9800. Copenhagen Blue by No. 8F9803. Black by No. 8F9804. Send Bargain Price, $1.98, and 15c for postage. Money Back if Not Satisfied.

Calf Trimmed Suede Brogue Walking Oxford



$2.98

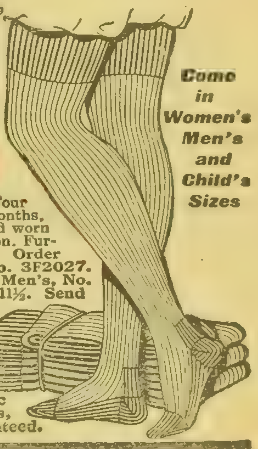
State Size

Women's combination sport oxford. Choice of new Log Cabin brown suede vamp and quarter with contrasting brown calf trimming at tip, lace row and quarter, or black suede with black calf trimming. One-piece genuine oak sole; low walking heel with rubber top lift. Sizes, 2½ to 8. Wide widths.

Order Brown by No. 9F119. Black by No. 9F130. Send Bargain Price, $2.98, and 8 cents for postage. Satisfaction Guaranteed or Money Back Instantly.

4 Months' WEAR Guaranteed

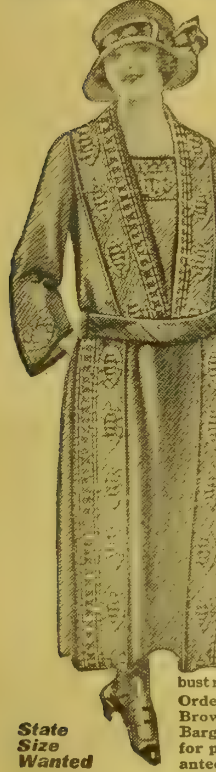
4 PAIRS 98c



Come in Women's Men's and Child's Sizes

Knit of combed cotton. Four pairs guaranteed four months, if bought of one size and worn alternately by one person. Furnished in black only. Order Women's hose by No. 3F2027. Sizes, 8½ to 10. Order Men's, No. 3F1657. Sizes, 9½ to 11½. Send 98c and 2c postage for 4 pairs. Order Children's hose of same guaranteed quality by No. 3F1710. Sizes, 6 to 10. Send 98 cents and 2c for postage for 3 pairs, with 4 months guaranteed.

Embroidered Gabardine for Stout Women



$3.98

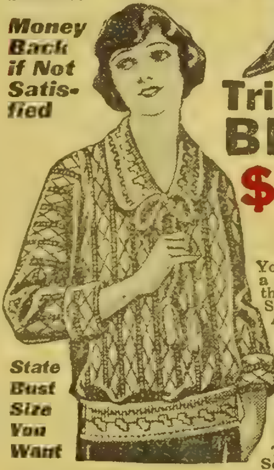
You'll hardly believe your mirror when you try on this excellent quality Embroidered Gabardine dress, and see the trim, slender, smart appearance you've attained. A dress guaranteed to give long, satisfactory wear. Skirt is finished with two wide, loose panels attached at waist and bottom. Edges bound in black, and embroidered in contrasting color. New long roll shawl effect collar, vestee, and latest bell shaped sleeves all embroidered to harmonize with skirt panels. Slightly shirred at waistline in back. Sizes 44 to 54 bust measure. State size and length.

Order Navy by No. 5F7610. Brown by No. 5F7612. Send Bargain Price, $3.98, and 13c for postage. Satisfaction Guaranteed or Money Back Instantly.

State Size Wanted

Tricolette Blouse

Money Back if Not Satisfied

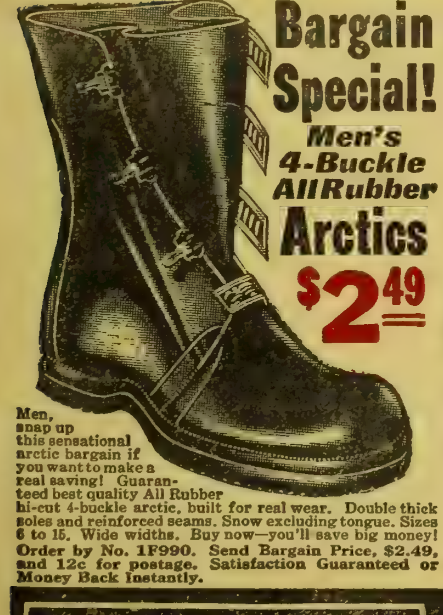


State Bust Size You Want

$1.98

You could not wish for a prettier blouse than this. Fine quality Fibre Silk Tricolette model. Attractive band of wool yarn in combination colors on belt and collar. Tasseled tinsel neck cord. ¾-length sleeves. Sizes, 34 to 44 bust. Copenhagen, No. 7F7945. Taffee Brown, No. 7F7947. Tangerine, 7F7949. Send Bargain Price, $1.98, and 6c postage.

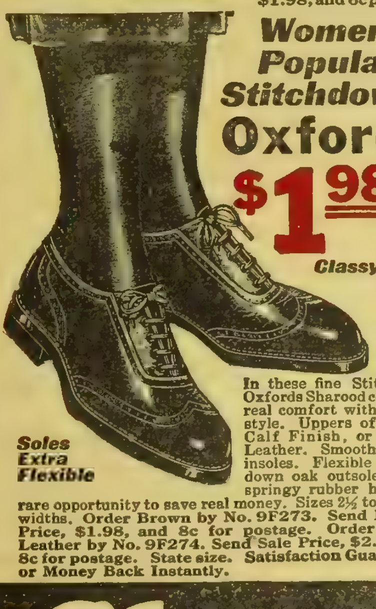
Bargain Special! Men's 4-Buckle All Rubber Arctics



$2.49

Men, snap up this sensational arctic bargain if you want to make a real saving! Guaranteed best quality All Rubber hi-cut 4-buckle arctic, built for real wear. Double thick soles and reinforced seams. Snow excluding tongue. Sizes 6 to 15. Wide widths. Buy now—you'll save big money! Order by No. 1F990. Send Bargain Price, $2.49, and 12c for postage. Satisfaction Guaranteed or Money Back Instantly.

Women's Popular Stitchdown Oxfords



$1.98

Classy Wing Tip

Soles Extra Flexible

In these fine Stitchdown Oxfords Sharood combines real comfort with snappy style. Uppers of Brown Calf Finish, or Patent Leather. Smooth leather insoles. Flexible stitched down oak outsoles. Low springy rubber heels. A rare opportunity to save real money. Sizes 2½ to 8. Wide widths. Order Brown by No. 9F273. Send Bargain Price, $1.98, and 8c for postage. Order Patent Leather by No. 9F274. Send Sale Price, $2.48, and 8c for postage. State size. Satisfaction Guaranteed or Money Back Instantly.

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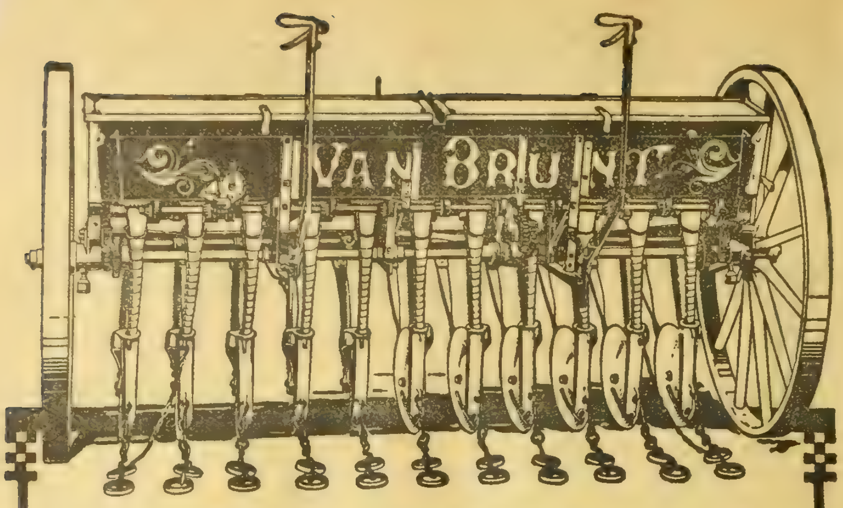

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Every seed is planted to best advantage and fertilizer placed where the growing crop easily gets the additional plant food which makes a bigger yield of better grain from the same field when you use a

John Deere-Van Brunt Grain and Fertilizer Drill

Plants seed properly—the famous Van Brunt adjustable gate force-feed compels seed to flow from grain box in even, continuous streams—no clogging or bridging—no seed or ground wasted. Finger-type feeder wheels handle fertilizer just as positively. Metal seed tubes and closed disc boot delivery protect seed until it reaches bottom of seed furrows of equal depth—an even stand of grain, all maturing at one time is the result.

Covers the seed—tilting lever enables you to set disc boots to plant and cover seed at the desired depth under all field conditions.

The discs pulverize the soil and make a good seed bed because set at the proper angle. They run easily and properly because equipped with dust-proof, oil-tight bearings that are guaranteed to last. Scrapers keep the discs clean.

Standard sizes and styles. Tractor hitch and grass-seeder attachment extra.

Get your share of increased yields per acre this season by using a Van Brunt Drill. Sold by John Deere dealers. Write today, address John Deere, Moline, Ill., and ask for free Booklet VD-633

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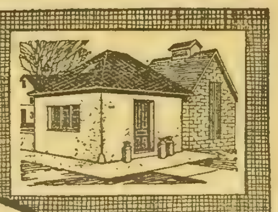

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CEMENT

What the Neighbors Say

SALE OF CHRISTMAS TREES

TO stop the waste of Christmas trees let the State Board of Conservation prepare a bill that can be made a state law, and this law would be that no person could sell or place on the market any trees without possessing and showing a certificate to show his ownership of the trees, whether they were produced on his own land or he purchased them from some other party. Such blank certificates would be obtainable at the country treasurer's office and filled out by the owner of such land where trees were cut naming township and county and giving a description of the land. This would stop the timber thieves. They could not sell or show how they obtained possession of the trees.

This lawless type of men broke all records last December. I own a tract of 200 acres, enclosed with a barb wire fence. Where the fence was in their way they tore it down and took what trees they wanted. They even took some of the trees I had cut ready to load and ship. I caught six in one day and there were some I did not get. I supposed they wished me a merry Christmas in not getting caught.—C. H. Anschulz, Iosco County, Mich.

MAKE CLEAN COW BARNS MATTER OF LAW

DEAR EDITOR:—Might I have the use of a little space in these columns in behalf of the dairy industry?

First let us deal briefly with the tubercular testing that is going on in our state. We hear among farmers that there are threats of what they will do when the tester drives in their yard, others tell you that if any of their cattle are tested out they wont get rid of them and will use the milk of condemed cows and so on.

Having been a loser of some of my best cows in the T. B. test all I have to say for these men is that if they have any reacters they will do just like all the rest of us do.

Second, Mr. Editor, and M. B. F. readers let us turn our attention to the sanitary conditions of the barns and surroundings of the milk producing herds of our state of Michigan.

Where are our laws on sanitary inspection of our dairy business? Have we any laws protecting any herds outside of a few special herds close to the city and town that consume milk from wagons?

What on earth is the matter with our law makers they enact a law that costs the state and farmers a mint of money to clean up the T. B. and in so doing clean up the milk so far as T. B. is concerned which in my mind is all right for if I have a T. B. cow in my herd I am glad to know it so I will be able to get rid of her as soon as possible.

But will it ever dawn upon the minds of our law makers and upon the minds of the consuming public that there is a necessity of cleaning up the milk after it is drawn from the cow? Let me cite one case I know a man that takes his can and pail out to the cow barn in the evening—a barn that to be safe in you must wear rubber boots, filth in a deplorable condition—he sets the can behind the cows, milks and pours, not strains, the milk in the can, lets it set all night, milks the same way in the morning and takes the can to the road for the milk truck. This herd passed the T. B. inspection. Another case close by: here when the cows step around on the plank floor the liquid manure will shoot up between the plank. This man sells milk and his herd passed the T. B. inspection.

Now in my own barn I have always taken pride in its cleanliness. In winter I clean my barn two and three times a day. The manure goes in the spreader and direct to the field; in fact I would rather eat and sleep in my cow barn than in certain houses. The result is that

(Continued on Page 31)

Few Farmers Attend Sugar Beet Meeting

THE third annual meeting of the men interested in the sugar-beet industry in Michigan called and handled by the Michigan Agricultural College during the week of January 21 to and including January 25 was well attended by representatives of factories including men from Canada, Ohio and Indiana. Most factories brought their entire staff of field men and the total number present ran around 400. The total number present last year was 250.

It is a lementable fact that the men that pay much of the taxes in the support of the M. A. C.; those that need the information furnished, the dirt farmer, was not in attendance and on this account the M. A. C. lost a great chance to give to Michigan the real worth of its efforts, which were given throughout the past year. If the farmers and their organizations had participated in this meeting great benefits besides actual knowledge of beet culture could have been gained. One in particular that I have in mind is that the farmers could have met with the factory men and I am sure that had they done so both would come to the conclusion that the other was not after all such a freak of nature.

The first two days, the 21st and 22nd, were given over to meetings of the experts of the U. S. Government and the several states attending.

Wednesday, January 23, saw in attendence a big representation of factory men and their field men, nearly filled room 402 of the agricultural Building. Prof. J. F. Cox, chairman, called the meeting to order presenting Mr. E. B. Hill, M. A. C., who gave the address of welcome. The program was carried out on time and ably handled by the various men having the carious topics in charge.

On account of the actual growers of beets not being represented at this meeting I wish to present a few out standing facts as they appeared to me. First, it appears that Michigan beets are not infested with curly top a plant disease caused by the leaf hopper which causes great damage to beets in the west, the disease not having been seen east of the Mississippi River. About the only serious disease that Michigan beets are infected with is blight or leaf spot which is a fungi or mold growth which is favored in its growth by damp weather condition. This is also true of the disease known as "Black root" which is spread largely thru the seed from year to year. Good culture, good drainage, and early planting securing an early vigorous growing plant is about the only practical solution of these diseases.

It was shown by Dr. Carsen that in the west vast sections had become so infested with curly top and Vematode, a parasite or worm that works in the small beet roots, that the culture of sugar beets had to be given up, The Vematode condition being the worst where beets have followed beets for a period of 10 years or more and the control of which consisted in crop rotation. Very interesting pictures were shown showing the effect of these diseases.

From all experiences in using fertilizers in various quantities, sown in various ways and at various times not much benefit could be seen on the average of the sugar content nor of the purity, Experiments were carried on as to the effect of fertilizers on various soils sown various ways in various amounts from 150 pounds to 1000 pounds per acre, and taken as a whole these tests show that the best results were secured by sowing from 150 to 200 pounds of good fertilizer with the seed, as good or better increases intonage was secured with these amounts as where larger amounts were sown. It was shown that a fertilizer high in vitrogen and Phos. Acid was better than one exceptionally high in potash, and deficient in Nitrogen and Phos. acid.
—C. E. Ackerman.

UNCLE RUBE SPINACH SAYS

HIT AN' MISS ETC.

WELL, now 'at our New Year res'lutions, like the baby's toys is mostly broken, let's git right down to carpet tacks an' talk 'bout other an' less serious things. O' course I know the good res'lutions wuz made in good faith, 'aint no doubt about it, an' so's the promises of our congressmen—both made to be broken. A baby toy, if it last forever would soon put every toymaker in the world out o' buz'ness. They break, more has to be made, an' more is bought. An' so the world goes on. If every good res-'lution made on New Year's wuz kept we wouldn't have to die to get to heaven, an' if there wuz no breakin' of the laws there'rd be no use for prisons or jails.

Its fine an' nice to think of all these things after we've made our res'lutions, promises an' everything. 'Course, we've seen 'em busted up—broken an' smashed all to flinders an' yit we kind'a cherish 'em 'cause we made 'em. An' folks'es we made 'em all in good faith, didn't we now?

Here's some of 'em: no smoke, no drink, no gittin' mad, no steppin' aside from the marriage vows, no gossip (this applies to one sect only—maybe to the insect—no matter). We know there wuz a quite a few things we could of swore off of an' made us no worse. Well, now for instance, we could of cut out congress an' the special session of our own legislatur'—neither has ever cut much figger. An' then a mother-in-law, she could be elim'nated if we didn't git married. Personally now—its jest me you know—some times I think the mother-in-law is the real thing. Mebbe better'n the offspring—'member I sed mebbe.

Oh well, folks, here's a hard thing to write 'bout an' I'm sweatin' awful as I tackle it 'cause its an awful smart man I'm goin' against—Mr. Martin, (If you know who I mean) President of the Common Scoundels—mebbe they call 'emselves Council—no matter, 'sall the same to me.

Any ways an' always Mr. Martin, of Detroit, president of the what every they are, sez, the dry law is plungin' the country into a wave of crime. I agree with him absolutely. If there weren't any laws there wouldn't be any crime. Crime is the breakin' of the laws—always.

Mr. Martin sez, "Either amend or repeal the law." I agree with Mr. Martin, who ever he is. Repeal it sez I—repeal 'em all! There's a law agin murder, broken a dozen times a day. There's a law agin bigamy, agin adultry, agin gamblin'. Oh, there's lots of laws! A law agin robbery, a white slave law, a hold-up law—more laws 'an we know what to do with—all broken a hundred times a day. Let's amend 'em or let's repeal 'em. All of these laws are broken—yes day after day. But the prohibition law, poor little thing—broken, yes, sure its broken. But why jump onto this little law an' call for a repeal or an amendment an' let all the bigger laws go on jest as they are?

I wuz out to Amos Spriggins' a few days ago an' we got talkin'—Uncle Amos likes a little swig you know—an' I sez, sez I, "Uncle Amos, what is your candid opinion 'bout the Volstead law an' how do you like it?" "Well," he sez, "I tell you, Rube, I think ol' Volstead wuz jest gittin' over a drunk when he got that law through but he's made a dry man of me alright."

And then I asked him how he would fix things up, an' he said, "Waal, I'll tell you, I'd repeal all the laws, make whiskey free, set it out in barrels with tin cups onto 'em an' cards invitin' everybody to drink all they wanted." With a little wink in his eye, an' pullin' a few grasshoppers out of his whiskers he sez "Don't you see, Rube, 'at 'uld make dry men of 'em in jest no time at tall.

An' folks ain't it so? More drunkness they tell us then when whiskey flowed everywhere. An' yet it must be in cellars or some place. We don't see it on the street. Let the heart control sez the preachers—some of 'em—set a barrel of liquor out an' let your appetite take you home—Oh—what a task—what a gall a man must have to preach such stuff—By making it plentiful stop consumption. It's to laugh an' laugh hard. Isn't it now? Cordially yours.— UNCLE RUBE.

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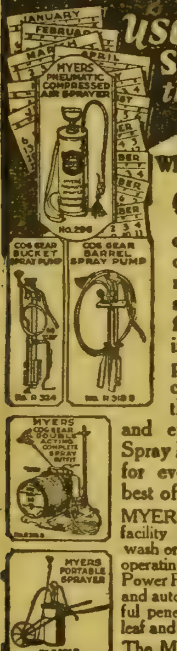
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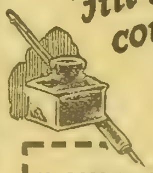

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THE INWORKED LIFE

A SERMON BY REV. DAVID F. WARNER

TEXT: "Have this mind in you, which was also in Christ Jesus." Philippians 2:5.

"THIS mind in you" is our clue. In the context (Phil. 2:1-11), is stressed, MIND; a loving, compassionate, unselfish mind. This teaching has to do with the inward man. This is primary and creative. Jesus insists on the inworked life. "The Kindgom of heaven is within you, " says he. "Be ye transformed by the renewing of your mind," says Paul to the Romans. This is the only rational way to the unselfish life. But the church would be loath to admit what a large field she is tilling in selfish interests. So would individual christians. Our civilization has made rid of the open saloon and other of the large evils; but not yet this corporation getting of gain out of the blood and oppression of our fellow men. All this is cruel and colossal selfishness. But this unrenewed mind breaks out in our local business competition, and in the home and community life, where it is most offensive of all. Bad odors in close and intimate quarters become nauseating. And how possible even, to find a selfish love of one's acts in the kindnesses performed along the dusty ways of life!

Having to do with this innate evil, the apostle sets as the corrective, the person and life of Christ. Unlike the proud Herods and Capernaums of his day, Jesus Christ chose to humble himself as a servant, tho it meant death. So did Ghandi of our own day, and now he languishes in an English prison. Verily, what a price we sometimes must pay, when there is a bold, reasoned purpose of mind to keep to the royal way, "taking the form of a servant!" Yet, the world has forged so far ahead in Christian democracy, that to be loved by the people, is to make oneself their servant: to empty oneself for their sake.

"Have this mind in you, which was also in Christ Jesus." "Christ shall be manifest in my body." This was the apostle's ideal of faith and service. Now, the Philippian church had faith. It believed in Christ; but it was a factional belief. Cf Phil. 1:15-17. Paul would expel this spirit of discord by emphasizing "one accord," and lowliness of mind," which is the mind of Christ. Yes, and the American church believes in Christ. But, shame, what factions! And note all this unholy squabble by the so-called Fundamentalists and Modernists over matters upon which Jesus was silent. How unloving and humiliating! And how foreboding, seeing we need the defense of a united church to hold back the chariots of war which we hear rumbling in the distance! The faith of our churches needs yet to be made perfect thru a united service, and this service made perfect thru a "lowliness of mind."

But, you say, we are doctrinally strong. We have an orthodox belief. Yes, but there is no more dangerous unbelief than that which accepts without question, the Christian doctrines, and yet, the life is slack and idle. A foreign missionary recently reported these words from a "well-educated, Hindu gentleman:" "You (Christians) not only do not practise the principles of Jesus Christ, but have actually forgotten them, while we India people are proud that we are the real Christians of today." And, says the missionary, "Are we too hide-bound on the one hand, and too cowardly on the other, to win these leaders to Christ?" But, I am sure we are too slothful and selfish. We want a system of belief and discipline that requires little thot and no change, and that carries us along easily to the Paradise of God. This is the tragedy of the church today. Her leaders would have God drive off the Canaanites and all the other "ites," while they battle over cemeteries of dead traditions. And, "Like priest, like people."

Take note, that Paul's point of appeal is, to have the mind of Christ, which according to verse three, is "doing nothing thru faction or vainglory." The animating principle of faction is to set ourselves against a brother or neighbor, to delight in contest or combativeness in order to gratify pride. But would you humiliate an opponent? Then don't antogonize. Work into your life the mind of Christ. This mind would pour on "coals of fire." Why, don't you know that heat softens native ores so that the good runs together into one and the slag into its own place? Visit the foundry at once and then fire up the furnace of love, and behold, a miracle has been worked in your "earthen vessels."

"Or vainglory." Don't put too great an emphasis upon yourself. This does well enough for worldlings but not for Christians. Christianity depends for its progress and harmony, upon the carrying out of this principle. Even your opponent has some unseen and unmeasured good. At least it is a precarious thing to get into the habit of judging other folks. Why not wait for a higher judgment? It was the arrogance and high-mindedness in the fair garments of religion that was making trouble at Philippi. And at times today, these things run riot among God's people. It is a terrible thing to thus dissipate the sacred privileges of our holy religion.

Now, the mind of Christ emphasizes unity, "one accord," "one mind." Work these in. But, may we have no honest differences of opinions? Certainly, we have such. Because of differences in temperament and training, differences in opinion are inevitable. And yet, how nearly we might agree were we sincere and loving enough. And this unity is to be brough about by the inworked mind of the Master. The author of our text preserved this ideal for himself even to the last resort of separation. And what were they to do about it? They parted peaceably and understandingly, each to carry out his own plans. They did not break the "right hand of fellowship." See Gal. 2:9. Now, this arrangement was, emphatically, a less offense against Christian charity, than to persist in keeping up bitterness and strife. These men had the mind of Christ inworked.

Whenever and wherever, Christian leaders quarrel over matters of externals, and even to the point of acrimony; then and there, truth is sacrificed, love cools, life dies out, and the world gleefully remarks, "How these Christians hate one another." Instead of spending our energies on useless disputes, let us spend them in behalf of the unsaved masses, who have not yet come into the glories of the Christian day. While sick people are dying all around us, let not the physicians by the bedside, quarrel over the merits of different medical schools.

When the spirit of unity comes into a soul or church, it is inworked. It comes from above. Discord comes from below. The more carnal a Christian is, the more contentious and divisive he is. But the more spiritual he is, the more loving, forbearing, and self-renouncing. Of course, the same is true of a church. When religion is lowest, what happens? Go down to the Atlantic coast when the tide is out. There you will see many little fishes, all snug and content in their little, separate puddles. And so it is when the religious tide is out. There are many sects and divisions—now about two hundred—each counting their communion for themselves as the nearest to the mind of Christ. But the ocean of God's redeeming love is coming in. The tide is flowing. Spiritual unrest is general, and every ripple of influence, and every wave of social progress, is telling us that the great, boundless sea of Christianity is coming in to engulf all the little religious pools, and then all the saints will be at home in the glad waters of eternity. "Where Jesus it, 'tis heaven," says the hymnist. Happy the Christians that are being baptized in the tide of a new love and a new inworking of the mind of Christ.

BE VERY CORAGEOUS:—Only be thou strong and very corageous, that thou mayest observe to do according to all the law. * * * that thou mayest prosper withersoever thou goest.—Johua 1:7.
14:6.

MICHIGAN CROPS

SOYBEANS FOR HAY

We have a clay and gravel soil, and what soys would be best for this kind of soil, and which is the proper way of handling them for hay? At what stage should they be cut for hay? In cutting them for hay should they be raked up before they are cured and put in weather piles to cure or not? Is it best to rake them on windrows to cure? Is it a good feed for horses or for cattle mostly? What is the proper way to sow them for to raise seed flour, drilled or planted in rows? Can they be threshed with a common grain separator? What benefit are they to the soil? Are they as valuable to the soil as red clover? Is there most always an active market on soys raised for seed?—J. A. Y., Burr Oak, Mich.

—Under conditions such as you describe, I am certain that you will find the Manchu soybeans very satisfactory either for hay or seed purposes. In growing for hay, they may be planted at the rate of from two to three bushels per acre with an ordinary grain drill, provided your land is free of weeds, Pigeon grass, or Quack grass. Usually soybeans can be planted in this manner with the greatest success after a carefully cultivated field of corn, potatoes, or beans. On ground which is inclined to be weedy, it is advisable to plant in rows twenty-eight inches apart, cultivating at least twice. A grain drill can be used for planting. Every fourth drill hole only should be allowed to run seed.

The planting time for soybeans ranges from May 15th to June 15th in your locality. The early plantings in that range usually give best results.

Soys should be cut for hay when the pods have formed and are beginning to fill. Soybean hay is cured in much the same way as alfalfa hay is cured. The crop should be allowed to wilt in the swath for from four to eight hours, according to the weather, and thrown into windows before the leaves have had a chance to be come dry and powdery. In good weather curing can be accomplished in windrows with one or two turnings. During threatening weather, it is advisable to throw into small cocks, which can be opened for drying, if wet by rain, and rebuilt.

Soybean hay makes an excellent feed for cattle and sheep and can be fed with success to horses. It is not as good as alfalfa or clover hay for horses, owing to its more stemmy nature. In feeding horses, from one-fourth to one-half of the ordinary hay ration may be made up of soybean hay with good results.

In handling the crop for seed purposes, it should be planted in rows twenty-eight inches apart, giving clean cultivation in much the same manner as corn is cultivated. The crop is cut for seed, when ripe, with mower equipped with buncher attachment. Care should be taken to handle in the early morning when wet with dew and before the pods have become over-ripe and reach the shattering stage. The common grain separator can be used for threshing with proper adjustments. Usually every other concave is removed when threshing beans.

If a soybean crop is pastured off or turned under, the soil is markedly benefited. The value of turning under a crop of soybeans, which would produce a ton and one-half or two tons of dry hay, is practically equivalent to the value of turning under a good crop of red clover.

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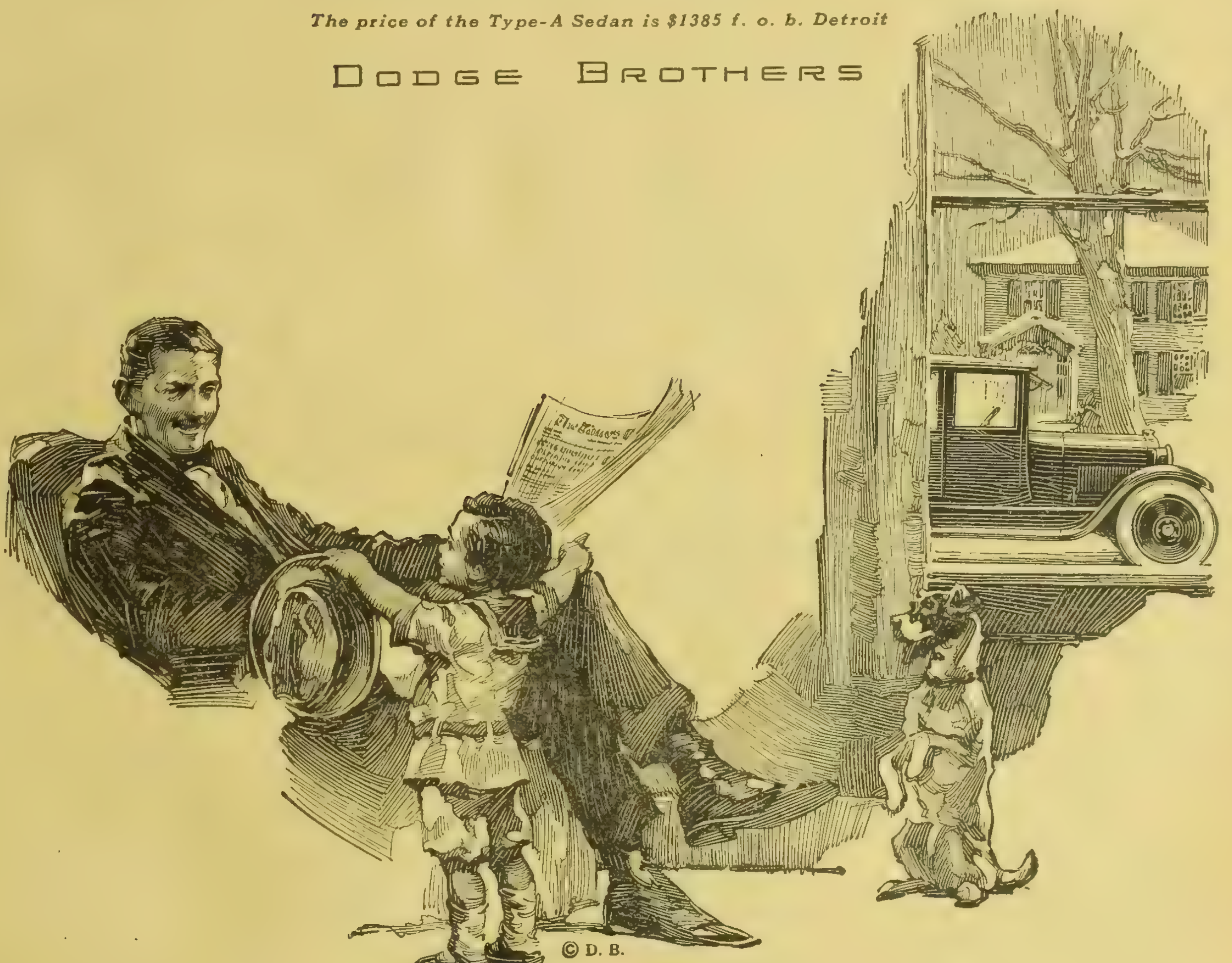

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"The Farm Paper of Service"

THE TEMPEST IN A TEA-POT

JUST now the newspapers are blazing forth in giant headlines the flagrant abuse of high office, even perhaps the betrayal of our government in the leasing of Tea-Pot Dome and other oil reserves to private corporations. From the facts already disclosed it is apparent that the interests of the government which had lent Secretary Fall high responsibility and trust, were made subservient to his personal interests.

Coming as this does at a time when President Coolidge was building by conservative and modest efforts a respect for Washington which it has not occupied in the public mind for many, many years is most unfortunate. That the disclosures will have a marked effect on the forthcoming election must be apparent.

In time of war, if a soldier on sentry duty guarding only a few hundred dollars worth of government property, were to be found asleep, he would be subject to court-martial and perhaps death. Tired and exhausted tho he might be from the day's march, young and unmindful of his responsibility as he might be, none of these things would protect him from the penalty of his neglect of duty. There are soldiers who fought in the trenches in Flanders who have spent long years in our own government prisons for such petty crimes where the effect was no more actually than the possibility of what might have happened to the property they were responsible for.

How then can we bespeak leniency for the man in high-office who betrays his trust to the government in matters that concern millions of dollars?

And are not those who tempt the public official into such a position making themselves equally liable to punishment?

Giving aid or comfort to the enemy is high treason, in time of war. Those who would profit at the expense of the government in times of peace, are they any less guilty of high treason?

GIVING THE FARMER REAL HELP

IF some of the would-be spokesmen in congress would turn their attention to the actual needs of the farmer today and analyze them they would find, we think, that in the real agricultural heart of the United States, which includes the great central section largely east of the Mississippi river, the real need is in labor for the farm, rather than extended credits.

For some weeks back, on this page, we have been pointing out that the present system of restricted immigration has worked a hardship on the farmers of this country which can hardly be measured, it has been so far-reaching.

With industry issuing the siren-call of high wages, and the available supply of farm labor in states like Michigan, is so negligible that the average farmer has almost given up in despair trying to get efficient help at a fair wage to help him in the arduous work of his farm.

It ought to be apparent that the farmer cannot compete with the factory which offers more money and shorter hours, nor can he attract to the farm men or boys who have been educated in city ways.

There ought to be some means of attracting to this country large families of worthy peasants from the agricultural sections of Europe, who pressed by present economic conditions there, are begging for admittance to our shores. The type we refer to would not, contrary to what some would have us believe, settle only in the cities and thus compete only with the laborer in industry. The Department of Agriculture could, it seems to us, work out a plan of distribution of these immigrants which would move them directly from Ellis Island to the farms where they are needed.

Quite recently Philip W. Henry, in an address in New York, pointed out the fact that the United States has actually lost more laborers, who have returned to their native lands, than have entered. "In view of the loss," said Mr. Henry, "that our country has sustained during the last 10 years in the emigration of laborers and of the disinclination of our native population, including children of immigrants, to enter this field, it is evident that the present law should be liberalized.

"It is not generally known how much our immigration has fallen off from pre-war days, when it averaged over a million gross and under a million net per year. For the fiscal year 1922 the net immigration was only 110,844, of whom 76,106 were people of no occupation, including women and children. For the fiscal year 1923 the figures were 441,469 and 166,345, respectively.

These figures ought to prove what has been happening to farm labor, in addition to the other attractions which industry has offered to steal the help needed by the farmer.

The fact is also, that the type of peasant who goes to work on the farm has one ambition and that is to own land in America. He adopts quickly the living conditions which his environment, in daily contact with the American farm family, give him in contrast to the segregation among those of his own kind who form their communities in industrial centers.

His children, growing up in the healthy American environment of the rural school, become the citizens of whom we are proud and never know the call back to the country from whence they came. The peasant who comes to us from the agricultural centers of Europe is the best class of immigrant we can attract to our shores and that some recognition of this fact is not made by our representatives at Washington is the worst crime against the farmer of which they are to-day guilty.

COUNTRY FAIRS PROMISE TO CLEAN-UP

FOLLOWING in the-footsteps of their illustrious leader, the Michigan State Fair, the county fair managers in their recent meeting at Lansing went on record as promising a clean-up of the mid-way which will mean the complete elimination of the "snake-eater," the "Egyptian dance" and the gambling devices which have long attracted the undesirable attendants and been an eye-sore and a contamination to the better element of every community.

THE BUSINESS FARMER led last year in a concerted effort along this line sponsored by George W. Dickinson, manager of the state fair at Detroit and with the full approval of the board of fair managers. The gratifying results were shown at the 1923 fair and the predicted loss of revenue to the fair was far surpassed by the receipts from more worthy sources.

There were fairs conducted in Michigan last year which were hardly more than traveling carnivals of vice and that they should have been supported in any way by the funds set aside by the state for the promotion of agriculture was a shame and a disgrace.

The fair managers themselves are the ones to insist on a clean-up this year and they alone can make it possible. Their complaint of a digression from the self-adopted rules which they have laid down for the conduct of all fairs in Michigan during 1924 should result in the immediate cutting-off of the offending fair association from the funds provided by the state.

The manner of handling and awarding premiums was also discussed and some of the more flagrant abuses will be abolished this year. The fairs are an institution of which the community should be as proud as of its schools and when they cease to be such, they are not worthy of the name they bear.

A MORE NATURAL ALLIANCE

WE have continually predicted that because of their divergence of interests the so-called Farmer-Labor alliance could never be made a success. Union labor has only one object, which selfishly worthy as it may be, has nothing in common with what the farmer must accomplish if he would protect his own industry.

The farmer, altho a worker, is not a laborer or an employee. The farmer is a manufacturer and an employer. He is a capitalist, in that he owns his farm-factory and employs labor to make his business profitable. He must invest in raw material and sell it at a profit above his cost of manufacture for the market.

These facts were given significance by the Farmer-Manufacturer meeting held a week or so ago in Chicago and which, though it may not have accomplished all that its promoters would have had it, still laid the foundation for some constructive work which has never before been possible.

In European countries, where the farmer is a peasant, who tills the soil for the benefit of the land-owning aristocracy, there may be some reason for a union between the men who thus are laborers and the laborers who are employed in factories in which they own no interest.

In America, thank God, we have today, no such conditions and with a continuation of American ideal and the proper cooperation of American institutions we shall never have.

That the farmer and the manufacturer found many points of kindred interest is proven by the resolutions adopted at this meeting, for example:

"We approve of cooperative marketing of farm products as offering the most practicable means of stabilizing agriculture on a profitable basis. We urge American universities and colleges, public schools, and especially our state agricultural colleges and agricultural high schools, to establish regular and special courses in marketing and that courses in farm cost accounting be stressed."

With respect to immigration the convention went on record in favor of a "admission of applicants, limited not by numbers, but by quality and in accordance with our economic needs. If a system of national quotas be retained by the present Congress, we favor such flexibility of administration that in time of agricultural and industrial expansion enough may come in, and in time of depression not too many. Selection should be made at the point of origin."

Other resolutions opposed government fixing of prices of agricultural or other commodities; commended the United States Departments of Agriculture and Commerce for the work they are doing in the foreign marketing field; advocated that in the development of power at Muscle Shoals the production of fertilizer be the primary, but not the sole object; favored reforestation; urged general reduction of taxes by all government units; advocated modification of our laws affecting navigation to enable the American merchant marine to operate successfully in competition with the vessels of other nations; favored the development of the St. Lawrence and Lakes-to-Gulf waterways; opposed government ownership or operation of railroads, mines, public utilities, farms or factories; denounced legislative projects designed to impair property rights; opposed curtailment of the power of the Supreme Court and condemned "the proposal to require more than a majority vote of the court to void any act of Congress, which would give the minority a controlling voice."

GOWDY NEW MEMBER OF BOARD

PARTICULARLY will Berrien county farmers be pleased with the recent appointment of Herbert W. Gowdy, of Union Pier, to the state board of agriculture to succeed Jason Woodman of Paw Paw, who was not a candidate to succeed himself.

Representative Gowdy made a good record in the farmers' interests for himself when he filled that office in the state legislature and there is every reason to expect a continuation of this same fidelity to purpose which guided him in then, in this new opportunity which has been awarded him.

The board today faces grave responsibilities and the infusion of new blood will not be amiss, although we do not wish by this statement to cast the slightest reflection on the unblemished record of Jason Woodman, whose life-long service to the farming business in his home state will not be forgotten by this or coming generations. The fact is, impersonally, that boards, like individuals may become ensnared in a mesh of their own making and where the way out may appear simple to the one from the outside, they who are in cannot see it.

We believe the appointment of Representative Gowdy marks a step in the fulfillment of the full service which the board can render to agriculture during the coming year of rapidly changing conditions and THE BUSINESS FARMER on behalf of its readers, wishes him all success and promises him their loyal support.

The personnel of this board is now as follows: **Dora H. Stockman, Lansing; L. Whitney Watkins, Manchester; J. R. McColl, Detroit; Melville B. McPherson, Lowell; Clark L. Brody of Three Rivers and Mr. Gowdy.**

PUBLISHER'S DESK

FAKE TIRE COMPANY LOSES MAIL PRIVILEGE

THE Rose Tire Company, The United Financing Syndicate, The Dealers Tire Company, The Low Price Tire Company and The Mail Order Tire Company, all of 1526 South Wabash Avenue, Chicago, Illinois, were the subject of a Fraud Order issued by the Post Office Department on January 5, 1924. This action is the outcome of the National Vigilance Committee's campaign against tire companies whose activities tend to destroy the public's confidence in the entire industry.

The representatives of these companies have been advertising extensively in farm papers offering used tires at fabulously low prices which, when delivered, were found to be in such a state of decay as to be absolutely unfit for further use. When complaint was made the purchaser was advised that he could avail himself of the privilege accruing from the companies' guarantee to sell a second tire at half the price if the first tire was unsatisfactory.

Many publications have already been warned regarding the activities of these people but the advertising was continued by a number of rural paper with the result that many persons in rural districts have been mulcted of small sums.

CORRESPONDENCE COURSES IN SCENARIO WRITING

EVERY few days we receive a letter from some reader who is taking a correspondence course in writing scenarios. They have found that "all is not gold that glitters," that they are not making money like they were told they would. They come to us for help. They want to get their money back, as a rule, and some times we can help while other times it is beyond our power to do anything. Others who are contemplating taking up one of these courses come to us for advice. Many of the letters are published in these columns and you readers know how we advise them.

The Authors League of America, an organization composed of the well known authors of this country, has started a fight against "movie schools" and selling agencies, charging that they are worthless, and that they cannot furnish proof that they or any of their "pupils" have ever had a scenario accepted by a motion picture producer. In an article in a recent issue of their official organ of the League it was pointed out that of 42,020 plots or scenarios sent to producers last year, all but four were returned to the senders as unusuable. Of these four no records are available that they have ever been produced.

As a large percentage of the 42,016 useless scenarios had been submitted by "pupils" of movie correspondence schools or by selling agencies they contend that the schools and agencies therefore were merely money-making schemes of the worst type.

According to the article, the art of writing scenarios is not the work of an idle moment, nor does it come of attending a so-called "movie school," where it is charged that none of the information dispensed at fancy prices is in the least helpful to aspiring film writers. Professional scenarists like Peter B. Kyne, Rex Beach, Rupert Hughes and others dominate the writing end of the film field so competely that it is almost impossible for an amateur to have his efforts accepted, or even considered. The fact only one scenario in 10,000 was accepted by screen companies proved this, the article held.

"The maiden lady in straitened circumstances and a small town environment," the article read, "who attempts to compete successfully with such experienced writers as Peter B. Kyne, Rex Beach, Rupert Hughes and many other well-known authors, stands as much chance as the village blacksmith has of defeating Jack Dempsey after a correspondence course in boxing."

While all writing requires talent, the article continued, scenario writing requires "an intimate knowledge of all literary forms" by reason of the fact it is a highly technical branch of expression. Movie schools, despite the fact that they promise to give in a few weeks the training of several years, are deficient even in providing their "pupils" with the most elementary rules of the business, and in no way whatevery fit them to write scenarios which will be found acceptable by film companies. Most companies now do not even read the scenarios sent in to them by amateurs or selling agencies, unless they reflect immediately the specially trained pen.

Thus in a $25,000 prize contest recently conducted by the Goldwyn Pictures Corp. in conjunction with a Chicago newspaper, not a single one of 27,000 scenarios submitted by unknown writers was taken at a $500 premium, as offered by the firm for all scenarios worth production although not winners. Of 15,000 submitted in the course of the year to the Goldwyn company, only one story by an unknown writer was accepted. Famous Players-Lasky accepted none out of 4,000, and the Fox Film Co., was equally restrained in considering the 13,000 scenarios submitted to it. Of 1,100 stories sent to the Al Christie Co., 4,800 to the Universal Film Co., 4,120 to smaller producers, one story was accepted by each of the groups.

The published article is in the form of a report and signed by Grant Carpenter, staff writer with Warner Brothers; Bernard McConville, free lance scenario writer; Eve Unsell, scenario editor of Preferred Pictures; Walter Woods, supervisor of production with Famous Players-Lasky, and Arthur Statter, formerly with Universal and now a free-lance writer. Besides condemning "movie schools," the writers strongly recommended that unless amateurs wish to lay themselves open to unending disappointment, they had better keep out of the scenario field, or else get the essential training with a movie concern.

ONE TRAPPER'S EXPERIENCE

"On the 17th of November I shipped 7 coons, 97 rats, and 1 mink to J. R. Hough Fur Corp., Meriden, Conn. According to their price list they sent me, this fur should have brought $215. They sent me $19.66 for it and called it all summer caught, which I can prove different. They advertised to pay 5 per cent more for anything over 50 skins. This they did not do. Two days after date of their invoice I received their check and returned it to them, requesting the fur be returned. Five days later it came back stating I had not ordered this fur held separate, that it was mixed with other fur and sold, and they could do nothing. Our postmaster saw me tie a letter with the tag on this bag of furs and I saw him put these furs in a mail pouch and bill it to Meriden, Conn. Also insured it. On their price list was a printed contract, if these furs were to be held separate fill it out, and mail to them with the shipment. That is what was in the letter tied to the bag of furs. I sorted out of this bunch of furs eleven rat hides, culls, kits and otherwise damaged, so as to make them all good hides. I sent these to Perceys Fur House and received $8.98 for them. I should have received $144.70 the actual value of this fur here on our local market."

The Collection Box

The purpose of this department is to protect our subscribers from fraudulent dealings or unfair treatment by persons or concerns at a distance.

In every case we will do our best to make a satisfactory settlement or force action, for which no charge for our services will ever be made, providing:

1.—The claim is made by a paid-up subscriber to The Business Farmer.

2.—The claim is not more than 6 mos. old.

3.—The claim is not local or between people within easy distance of one another. These should be settled at first hand and not attempted by mail.

Address all letters, giving full particulars, amounts, dates, etc., enclosing also your address label from the front cover of any issue to prove that you are a paid-up subscriber.

THE BUSINESS FARMER, Collection Box
Mt. Clemens, Mich.

Report Ending January 28, 1924

Total number claims filed	2417
Amount involved	$23,383.19
Number claims settled	943
Amount secured	$22,336.37

First Mortgage Real Estate Gold Bonds

Every investigation we have made shows that among farmers Federal Bond and Mortgage Company first mortgage bonds enjoy a pronounced preference.

Write for Booklet AG1089

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Free from Federal Income Tax of 4%

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Regular Price $6.00

WE believe this to be the greatest offer ever made to residents of rural routes in Michigan. It gives you a great metropolitan daily, keeping you abreast of state and international news of the day and Michigan's only home-owned and edited farm magazine, to keep you posted on farm news, the trend of the markets and what farmers and farmers' organizations are doing. This is an offer that should appeal to all real business farmers and we are proud to be able to make it at this time.

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This phenominal low price is made to R. F. D. addresses only. Use this order blank and send check, money order or registered letter to

The Michigan Business Farmer, Mt. Clemens, Michigan

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Dear Sir:—

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NEW YORK CENTRAL LINES

An engine terminal on the New York Central Lines in midwinter. Railroad men must keep the heavy traffic moving through all kinds of weather.

Achievement

THE American railroads in 1923 hauled the largest tonnage in their history—and with an efficiency of operation never before paralleled. To this achievement the New York Central Lines contributed a notable measure of public service.

The very heavy program in rehabilitation inaugurated by the New York Central Lines immediately following the termination of Federal control—involving the expenditure of many millions of dollars for new equipment and larger facilities—placed this railroad system in a position to meet the growing traffic demands of the great territory it serves.

While car loadings throughout the country for 1923 showed an increase of 26.7% over 1921, and 15.3% over 1922, the New York Central Lines gained 42.7% over 1921, and 16.8% over 1922.

The New York Central program of expansion—in anticipation of the greater traffic demands of the coming years—is going steadily on.

NEW YORK CENTRAL LINES

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AND THE NEW YORK CENTRAL AND SUBSIDIARY LINES
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RADIO DEPARTMENT

EDITED BY J. HERBERT FERRIS

WE WILL HELP YOU

THERE are many of you who would like to build your own sets, yet will hesitate because you are afraid that you will not buy the correct parts to assemble into a complete set. In fact that is a possibility if you should go to a certain class of dealers who think because you are a farmer they can sell you anything. Also some of you who assemble sets may have a little difficulty in making the set work.

To avoid all this, The Radio Department will purchase for you any or all of the parts necessary to build a set. Just write us telling us what you want, enclosing the amount necessary and a few cents postage to cover the mailing charge and we will buy the article for you and send it to you. In this way you will know that the part you buy will work in your receiving set.

We will test out any set that you may build or have bought and make what adjustment is necessary to make it work and return it to you without any expense to you except the postage or expressage for transportation.

USE THIS DEPARTMENT. IT IS FOR YOU.

HOW TO BUILD EFFICIENT AND CHEAP RECEIVING SET

NOW that winter is here at last, and we are confined to the house a little more than we are in good weather, our thoughts have time to turn to the more entertaining and instructive subjects of world happenings.

Radio will bring the voice of the President of the United States to you, music from the best musicians, dance music for those who like it, and many interesting talks from well known people. You can get the market reports and weather forecasts as well.

The chief difficulty in the average farm home is to find the member who has enough spare money to buy one of the expensive receiving sets. Sometimes such sets have been bought and because the one who was operating it did not understand it the results have not been satisfactory or the set did not work at all.

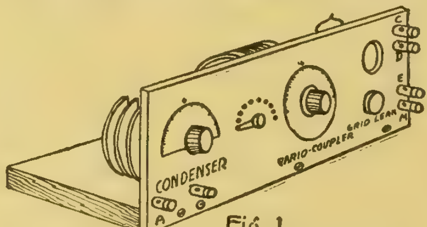

Fig. 1

The following described part if bought and assembled will enable any one with a screwdriver, soldering iron and a piece or two of wood to build a receiving set that will bring in clearly and loud many of the broadcasting stations within 500 miles night after night, and under favorable weather conditions bring in stations from greater distances.

The apparatus listed can be bought from any radio dealer or from the large mailorder houses, and the price given after each article is the price of a cheap but serviceable article that will give years of satisfactory service. More expensive parts can be bought if desired and the set can be mounted in a fancy or plain cabinet or on a plain board as desired. Remember that looks are not what make a receiving set operate. The simpler the assembly the better the results.

In assembling this receiving set follow the diagram given herewith carefully, and be sure that connections are made to the parts just as marked.

If you have not already put up an aerial, a single wire aerial about 100 to 150 feet long, and about 30 feet high will do.

List of Parts and Prices:

150	feet No. 12 or 14 bare copper wire	$1.00
2	strain insulators	.20
1	8-inch by ½-inch porcelean tube	.05
1	lightning arrestor (inside)	1.25
1	Vario-coupler	3.00
1	23 plate variable condenser	2.50
1	switch lever and 10 contact points	.50
1	grid condenser and leak	.25
1	socket for WD-11 or WD-12 bulb	.75
1	WD-11 or WD-12 bulb	6.50
1	set 2000 ohm telephone receivers	4.00
6	binding posts	.50
1	22½ volt B battery	1.50
1	No. 6 dry battery	.50
		$22.50

I Piece of smooth board ¾-in.x10-in.x6-in.

I Piece of board ¼-in.x10-in.x6-in.

Soak both pieces of wood in hot parraffn till they will absorb no more, let cool then smooth down with fine sand paper. These are for the base and panel. If the wood is thoroughly dry two or three coats of shellac well sanded will do as well.

The condenser, the vario-coupler, the switch and 10 contact points and the grid leak and 6 binding posts are mounted on the thin piece of wood as shown in Fig. 1. After mounting these parts screw this panel to the thick piece so that it is vertical, Fig. 1.

Now study Fig. 2 carefully, and connect the wires as shown by the heavy lines, be sure that the wires from the outside of the vario-coupler are connected in turn to the contact points. From the switch lever connect a wire to one side of the small grid condenser, and from the other side of the grid condenser to the binding post on the socket marked "grid" or "G." Now from one side of the grid condenser run a short wire to one side of the grid leak, (which is mounted on the panel) also a wire from the other side of the grid condenser to the other side of the grid leak.

Now connect one side of the variable condenser to contact No. 1, the other side of the condenser to binding post on the panel marked "A" (for aerial) Now connect on the back of the panel, binding post "G" (for ground) to binding post "C"

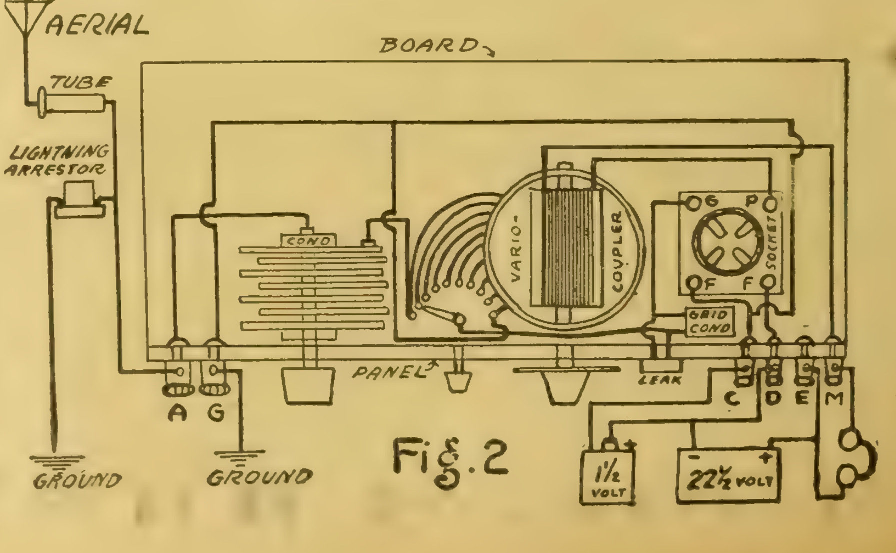

Fig. 2

RADIO PROGRAMS

Station WRC, Voice of the Capital, Washington, D. C.,—8.00 P. M. Wave length, 469 meters.

February 4—"Road Building a Federal and State Obligation," by W. C. Markham, Secretary, American Association of State Highway Officials.

February 11—"Balancing Uncle Sam With His Cities," by Elmer O. Fippin, Chief of the Fippin Agricultural Consulting Service.

February 18—"Financing Agriculture With Special Reference to Long-Term Farm Mortgages," by Robert A. Cooper, Chairman, Federal Farm Loan Board.

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which in turn is connected to the binding post on the socket marked "F." Also connect binding post "C" to contact No. 10 or the last wire from the outside winding of the vario-coupler. Connect the other binding post on the socket marked "F" to binding post "D." You will find 2 wires that come from the rotor (moving part) of the vario-coupler, these wires are connected, one to the binding post on the socket marked "P," the other to the binding post marked "M."

Having put up your aerial, bring in one end into the house thru the porcelean tube and connect to binding post "A," also connect the aerial to one of the binding posts on the lightning arrestor, the other post of the lightning arrestor is connected to a wire which in turn is connected to a water pipe or well, now connect a wire to your water pipe or well casing and connect that to post marked "G."

Connect the single dry battery (No. 6) to posts marked "C" and "D," be sure that you connect the positive or carbon to the post marked "D." Then connect your negative (-) side of the "B" battery (22½ volt) to post "D" and the positive side to post "E," connect your telephones to posts "E" and "M," You are now ready to tune in, but try it at night after 7 p. m. the first time.

To tune, set switch lever on contact 3 and with one hand turn the condenser back and fourth slowly, with the other hand turn the rotor of the vario-coupler slowly back and fourth. Listen for a slight whistling, when you hear the whistling sound make your turning movements of the condenser very slowly, and you will hear the music or talking. When you have once found it adjust very carefully till you get the clearest and loudest music. Do not be discouraged if it does not come in at first, but first trace out your connections and then keep on trying till you hear the music.

Just as soon as you finish listening-in, be sure and disconnect your "A" battery which is the single No. 6 battery.

We will tell how to add amplifiers to your set in a future issue of this paper so that if you wish the additional loudness and are willing to spend the money a whole room full of people can hear the music.

BLIGHT PROOF "SPUDS" LATEST

TWO years ago, when his potato crop was almost a complete failure, W. R. Smith, soldier settler of Byron, Ontario, Canada, discovered a hill of potatoes which had not died down from blight. The balance of the crop was as brown as a berry, and the one hill, which stood green among the desolate looking field of "spuds," showed no trace of late blight.

Believing that he could raise seed from this potato which would be immune from blight, Smith saved the potatoes from this hill, and next spring cut them up into small sets and planted them apart from his other potatoes. Last fall he had over two bags of the seed, and by cutting these into small sets was able to plant a considerable plot.

The potatoes in this field have reproduced exactly the same "blight-resistant" qualities that he found in the lone hill two years ago. Smith now feels he is on his way to the realization of a dream he has entertained for two years, that of being able to produce blight-proof potatoes.

Government field crop experts have visited the field of potatoes at Rayburn farm and declare them to be bypical Dooleys, and furthermore, say that it is the healthiest crop of potatoes which they have every seen. In the whole field not one leaf shows any signs of blight, or any other disfigurement. Some of the vines, when held at full length, measure over 38 inches, and are of a dark green color.

In the feeding of pigs an acre of clover or alfalfa pasture will save 1,149 pounds corn and 468 pounds of tankage as compared with dry-lot feeding, research in the Animal Husmandry Division of the United States Department of Agriculture shows.

New York Girl Wins Grange Essay Contest

THE winner of the Grange Highway Safety Essay Contest, Miss Mildred Soper, the 14-year old daughter of E. G. Soper, Lecturer of Seneca Castle Grange, near Seneca Falls, N. Y., was presented to President Coolidge at the White House on January 16, accompanied by National Master Louis J. Tabor of Columbus, Ohio, and a number of the Masters of State Granges who were in Washington at the same time on other business. President Coolidge presented a certificate of this award to Miss Soper in the presence of several Senators and Congressmen, officials of the National Automobile Chamber of Commerce, the Highway Education Board and the National Grange.

The essay contest was conducted by the Grange in co-operation with the National Automobile Chamber of Commerce and the Highway Education Board on the subject of increasing the safety of highway traffic and preventing the loss of lives.

This is one of three contests conducted annually, one for children of the Granges, one for all children of elementary school age, and one for teachers. Children of the Granges are also eligible for the elementary school contest. There are local and state prizes and a national prize which includes a trip to Washington for the first prize winners.

Anybody interested in this contest can get further details by writing the Master of the National Grange, L. J. Tabor, 970 College Ave., Columbus, Ohio, or the National Automobile Chamber of Commerce, New York City.

This picture was taken in front of the White House after Miss Soper had been presented to the President. Front row, left to right, E. A. Eckert of Illinois, National Master Louis J. Taber, Miss Mildred Soper, Mr. E. C. Soper, Dr. T. C. Atkeson, and Mrs. T. C. Atkeson; Back row, J. F. McMullen of Kansas, J. A. McSparran of Pennsylvania; W. J. Thompson of Maine; Arlando Martin of Vermont, A. S. Goes of Washington State, David Agans of New Jersey and A. M. Loomis of Washington, D. C.

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The Children's Hour

DEAR girls and boys:—A whole month of the new year has passed and we have just crossed the threshold of the second month, February. And the birthday of Abraham Lincoln is on the 12th. Whenever I think of Abraham Lincoln I am reminded of the story of the little girl. She had been told that Mr. Lincoln was a very homely man, and one day her father took her to see him. Mr. Lincoln took her upon his knee and chatted with her for a moment in his merry way, when she turned to her father and exclaimed: "O, pa! He isn't ugly at all; he's beautiful!"

Yes, he was beautiful. It is true that his features were irregular but after the first glance they passed unnoticed. It was his eyes that immediately told you that he understood human nature, that he was sympathetic and kind, and then you forgot his irregular features. I hope you all study about Abraham Lincoln and his life. Mr. Lincoln was an example of what a poor boy, with many handicaps, can do if he wills.—UNCLE NED.

OUR BOYS AND GIRLS

Dear Uncle Ned:—May I join your merry circle? We take the M. B. F. enjoy it very much. I am in the 8th grade at school. Now I will describe myself. I am 5½ feet tall and have blue eyes, and brown bobbed hair, and am 13 years old. I live only 25 miles from Mt. Clemens. I live on the main road from Detroit to Port Huron. I have been in Mt. Clemens and think it is a pretty place. I saw Helen Darr's letter and I think she is 15 years old. I hope she will see my letter in print, that is, if it does not reach the waste paper basket. I also hope she will write to me and describe her place, for I never was in that part of Michigan. I have no sisters or brothers and my mother died when I was 10 years old. Uncle Ned, please excuse me for using so much of your space for this letter. I remain, your niece,—Marie Wagner, Memphis, Michigan.

Dear Uncle Ned:—May I join your merry circle? My father takes the M. B. F and likes it very much. I read the Children's Hour and enjoy it. This is the first time I have written and I hope to see this in print. We live on a farm of fourteen acres, one mile from Caro, and we have 2 horses, 3 cows, and a dog named Trixie. The river runs past our place and in the summer we go boat riding and bathing. I am going to describe myself. I have blue eyes, blonde hair, and a light complexion, and am four feet three inches tall. I am ten years old. My birthday is the sixteenth day of August. My name is Edna but my father calls me Pete. I guess I will close, hoping some of the boys and girls will write to me. From your loving niece.—Edna Rickwalt, R. 4, Caro, Mich.

Dear Uncle Ned:—I decided to start the New Year by catching up on my correspondence, but when I went through my address book, I nearly gave up in dispair. They are nearly all answered now, though I haven't thanked you for your lovely pencil case yet. I'm sure you knew when you picked it out that I'd be wonderfully pleased with it. A gentleman in northern Michigan wrote to me and asked if I had ever heard of a man by a certain name, because he was his uncle who had disappeared some 20 years ago and his name was Adolph and he saw my name with my drawing, he wondered if I might be of kin to the lost uncle. I never heard of such a man and so let the matter drop, until a short time ago, a lady in West Virginia wrote to me stating that she had seen my drawing and wondered if I had ever heard of a man by the name given, as the gentleman in Michigan had inquired for. She said that this was her father and that he had never mentioned of having any relatives or parents, and she wondered if I had ever heard of him. I sent both people each other's addresses and hope that I shall soon hear from them saying that they are lost cousins. I think that it is very strange and amusing that I should hear from both, don't you? Daddy just came in and sat down on the puppy. I think that's very amusing too, don't you? Our puppy is a French Bull dog, and its name is Vanity Fair. (Please don't blame me, my sister named it). Among my many lovely Christmas gifts I received a basket ball and a "Mah Jong" set. Has the "Mah Jong" craze struck you yet? I love to play both. I have a sister who teaches geography in Detroit and a brother who teaches agriculture in St. Clair. I am the baby of the family. I've been corresponding with several girls and boys thru the M. B. F. and I'll certainly enjoy corresponding with many more, if they can stand the strain of reading my letters. Now don't heave a sigh of relief for finishing reading this letter, for if you don't publish it I'll write another. (I probably will write anyway.) Your loving niece,—LaVendee Adolph, Union City, Michigan.

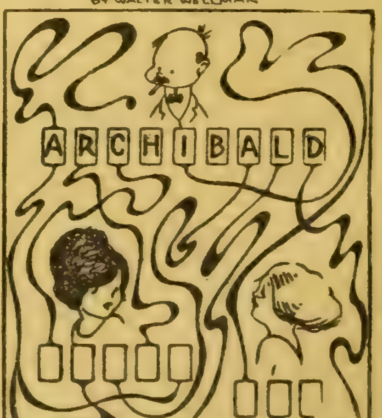
Dear Uncle Ned:—Well, now don't faint, because I've made another attempt. I wrote to you a few months ago, but guess Mr. Waste Basket was somewhat of a pig and ate it up, but here's hoping he won't be as hungry when this arrives. I am a girl 15 years old, have brown eyes, brown bobbed hair and am 5 feet 4 inches tall, and weigh 119½ pounds. Am taking the 8th grade again this year. There are about 28 pupils in our school. My birthday is August 22nd. Have I a twin or triplet? Ha! Ha! I live up in northern Emmet county, near Petoskey, Mackinaw City, Harbor Springs, and many other very pretty places. I saw Elsie L. Mahler's letter and she sure gave a perfect description of the scenery around here. I got my hair bobbed about a week ago and like it fine. For a long while I couldn't decide if I wanted it bobbed or not, but finally I did, and am not sorry. I once wrote to a girl whose name was Wilma Olmstead, of Sherwood, but for some unknown reason we drifted apart and never wrote again. I also correspond with a boy right along. Well I will close now with a few tongue twisters: Doris does daddy's daily dinner dishes daintily. Fred fried fresh fancy fat fish for Fan. Bob bought Brother Bill's bicycle by Benson's. Selma stopped sewing silk stockings Saturday. Must stop now and leave room for the rest. I hope Mr. Waste Basket won't get this letter. Will try to answer all letters I receive if the cousins will write to me. With love and best wishes to all.—Miss Ruby E. Fletcher, R. 1, Pellston, Michigan.

Dear Uncle Ned:—Here is another farmerette who wants to join your merry circle. May I come in? How are all the cousins? Well, I hope. I better describe myself before I go any further. I am about five feet two inches, weigh 98 pounds. Have light brown hair (which of course is bobbed) light blue eyes and in the eighth grade at school. I am not going to tell my age but the one that guesses it will receive a long letter from me. My age is between 11 and 16. I think the answer to Helen S. Janetski's riddle is: It's time to get a new pair. Have you ever been up north to Roscommon? If you haven't you certainly ought to go. It is a nice drive. Will all the boys and girls write and I will answer all letters received [illegible] Miss Louise Fergusen, R. 1, Birch Run, Michigan.

Dear Uncle Ned:—I am very much interested in the M. B. F. and would like to join your merry circle. I am a farmer's girl and am thirteen years old, and am a blond. I like the country life very much. I have always lived on a farm. We have a large woods, in the spring I love to go flowering. I love to write stories. I would enjoy it very much if we could have a story contest sometime, Uncle Ned, and I am sure that some of the other merry circlers would too. Well my letter is getting long so I will close for this time, with a riddle: What is round at both ends an [illegible] middle? Will some of the other boys and girls writ [illegible] all letters I receive. Goodbye, from a friend.—Leone Cadwallad [illegible] [illegible]leman, Michigan.

RIVALS

BY WALTER WELLMAN



The handsome man at the top is ARCHIBALD. No wonder there are two pretty young ladies after him. What are their names? Simply trace each letter to a vacant square, and print the letter there, and you will have the names of the blonde and the brunette. What are they?

Answer to last puzzle: A HEN.

OVER THOUSAND BIRDS IN GOLD MEDAL POULTRY SHOW

(Continued from Page 6)

Best Duck, Russell Kampenga of Muskegon;

Best Goose, Bert Denman of Muskegon.

Club Boys Win Many Prizes

Five boys, all members of a Boys Poultry Club, exhibited in the various classes and were consistent winners throughout. Older exhibitors, who had been accustomed to seeing the juniors exhibit in special classes, learned to have a wholesome respect for the boys when they came in direct competition with the boys and saw them win a large share of the awards.

Judges of the Muskegon Show were: Henry C. Dipple, of Indianapolis; Prof. E. C. Foreman, of East Lansing; D. Mieras, of Grand Rapids.

A very interesting thing occured toward the close of the show. Prof. Foreman of the M. A. C. Poultry Dept., who had been placing the awards in the utility classes, was called back to East Lansing for a special meeting. He was unable to return on the following day and so the management of the show was obliged to secure Prof. O. L. Sanford of the Ferris White Leghorn Farms, Grand Rapids, to place the sweepstakes awards on the utility birds. After Prof. Sanford had completed his awards and the winners had been announced, a letter was received from Prof. Foreman directing the placing of the sweepstakes awards. To the surprise and delight of the show officials, these awards, made entirely separately by the two judges, corresponded throughout. As one official remarked, "It shows that they are both darned good men and know their business." It is indeed seldom that such a check has been given on poultry show awards and with such satisfactory results.

The Annual Banquet

Always one of the features of the Muskegon Show, the Annual Banquet this year was attended by more than 200 people making it one of the largest gatherings of its kind ever held in the state. Poultry people representing many sections of western Michigan were present to meet with the Muskegon folks and enjoy their hospitality.

In addition to local speakers the presidents of the Holland and Grand Haven Associations, on behalf of their organizations, responded to toasts.

The guest of honor was Thos. F. Riggs, president of the American Poultry Association. Pres. Riggs complimented the Muskegon people on their excellent exhibit saying that it was one of the best he had ever visited and much better than he had expected to find. Mr. Riggs described the aims and purposes of the American Poultry Association and defended vigorously the standard types of fowls as described in the official Standard of Perfection.

"We need fanciers in the poultry game to develop the poultry breeds to the highest degree possible," asserted Pres. Riggs. "The Jersey cow and the Holstein cow were developed by the fancier and not by the milkman. The Shorthorns and the Herefords are products of the cattle fanciers and not of the butchers. So the poultry varieties need fanciers also."

Mr. Riggs deplored the tendency toward the so-called "utility" fowls with no regard to their appearance He asserted that the standard requirements called for such body conformation that the fowls were certain to be profitable producers as well as beautiful in appearance.

Utility of fancy, Which? To this question Muskegon's answer is. "BOTH." In other words the sentiment is towards a combination of both the present standards, fancy and utility. in the same bird.

Additional Show Features

Special poultry meetings were held afternoons and evenings in connection with the show. Prof. Foreman spoke on "Culling" and on "Type 'In Relation to Production." Dr. H. J. Stafseth, also of M. A. C., discussed "Poultry Diseases."

At these meetings, and also at the evening show, some special poultry motion picture films from the U. S. Dept. of Agriculture were shown by the County Agricultural Agent, Carl Knopf.

A poulty show can be successful only as it has the support of a live organization. The Muskegon and East Shore Poultry and Rabbit Fanciers Ass'n, with as much poultry pep and enthusiasm as its name is long, is the reason for the success of the Muskegon shows.

This Association has 94 members all of them interested in poultry and all of them willing to boost both standard and utility poultry although most of them are fanciers and "back lotters."

The officers of the Association are:

Pres., Thos. Erickson;
1st. Vice Pres., J. E. Marvin;
2nd. Vice Pres., Daniel Wurtz;
Sec'y., H. S. Nobel;
Treas., Lambert Hoeker.

The Secretary, H. S. Nobel, has had much experience with poultry exhibitions and it is through his efforts that the Muskegon Show runs very satisfactorily and smoothly. A special system of records, entry tags, and shipping tags, has been developed by Mr. Nobel. A new feature this year, which received the endorsement of all, was the use of white tags to designate the "standard" entries and of pink tags for the "utility" birds.

So, while Muskegon's 14th. Annual Poultry Show was the largest and best which the Association has every held, plans are already being made to insure an even better show for next year.

GOOD CARE OF BROOD SOW MEANS STRONG LITTER

(Continued from Page 6)

ficient in iodine, but experiments have shown that the addition of a small amount of this substance to the ration enables the sow to produce a healthy, normal litter.

Either potassium iodide or sodium iodide may be used. For a sow of medium weight a daily dose of two grains given in the ration throughout the gestation period is sufficient to prevent the trouble, or a larger dose of three or four grains daily given for eight or ten weeks before farrowing has been found to be satisfactory.

Dry potassium or sodium iodide is not easily mixed with the ration so that each sow will get the required amount. It should be dissolved in water and a small portion of this solution mixed in the water that is used to make the slop. While daily doses are given by some breeders, the dose may be doubled and given three or four times a week. Considerable labor is thereby saved and practically the same results obtained.

A simple method of administering potassium iodide or sodium iodide is as follows: Dissolve two ounces of the solution, each ounce of which contains 30 grains of iodine. This amount of solution is sufficient for five sows for a period of two months. A herd of this size should be given one fluid ounce four times a week. Each sow will then get 24 grains of iodine per week.

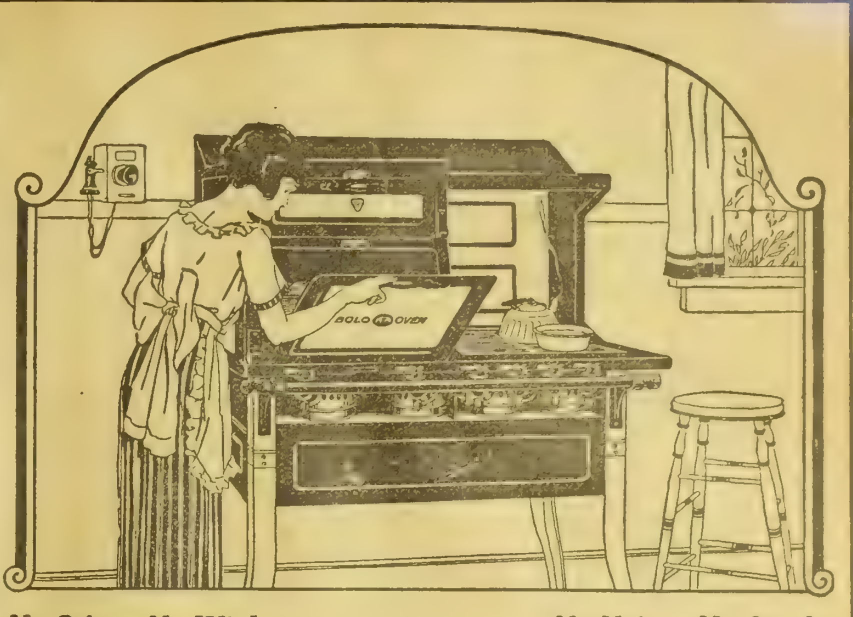
As roughage contains somewhat larger quantities of iodine than do our common concentrates, when the sows are on pasture or when good alfalfa hay is fed, however, and especially if this trouble has been suspected previously, the feeding of the amount of iodine suggested is a cheap insurance against what might result in heavy loss.

NEW LAMP BURNS 94% AIR

Beats Electric or Gas

A new oil lamp that gives an amazingly brilliant, soft, white light, even better than gas or electricity, has been tested by the U. S. Government and 35 leading universities and found to be superior to 10 ordinary oil lamps. It burns without odor, smoke or noise—no pumping up, is simple, clean, safe. Burns 94% air and 6% common kerosene (coal oil).

The inventor, A. R. Johnson, 609 W. Lake St., Chicago, Ill., is offering to send a lamp on a 10 day's FREE trial, or even to give one FREE to the first user in each locality who will help him introduce it. Write him to-day for full particulars. Also ask him to explain how you can get the agency, and without experience or money make $250 to $500 per month. (Adv.)



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Each burner a miniature gas plant

Every Vapo burner is a complete gas plant. It generates hydrocarbon *gas* from kerosene. This gas burns with a hot, blue flame that is *sootless, smokeless and odorless.* No wicks to trim. No chimneys to bother with. Cooks faster and better because its flame is hotter and can be adjusted to several heats including simmering heat.

32 to 36 hours on one gallon of kerosene

A single burner will operate 32 to 36 hours on a gallon of kerosene when turned on full. At simmering heat, it will give from 50 to 60 hours' service. Users tell us that 7 quarts of kerosene last the average family for a week.

The automatic lock valve prevents accidental shifting of the flame and is a safeguard against playing with valve. When you find a cooking heat that suits you, you can keep it and turn to it at once next time.

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This oven is equipped with an adjustable *Bolo plate* which makes the oven big or little as you desire. This intensifies the oven heat and enables you to do both slow and fast cooking in the same oven. It gives you two ovens in one. The odor from one oven does not affect what is in the other oven. Perfect ventilation insures light pastry, bread and cake.

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Department M Allegan, Michigan.

The Farm Home
A Department for the Women

Edited by MRS. ANNIE TAYLOR

DEAR FOLKS:—It does not seem possible that a whole year has gone by and Farmers' Week is here with us again. I almost feel like saying "All who are going, please raise up your hand." I cannot tell how many of M. B. F. readers are raising their hands, but I do want to feel that the women of Michigan's rural homes will be in Lansing strong this coming week.

There has been a great deal of preparation and hard work done just to serve you and me and every day will be a profitable one for those of us who make this effort.

Our January 19th issue printed the program for the week. See if you cannot see your way clear to go. This issue is really our Valentine number and I hope my efforts will help you plan "a good time for all."

Your Friend,
Mrs Annie Taylor

Address letters: Mrs. Annie Taylor, care The Business Farmer, Mt. Clemens, Michigan.

A VALENTINE.

By Margaret E. Sangster.

THE valentines we used to get—they'd silver hearts upon them,
And golden arrows, ruby-tipped, and yards of paper lace;
And softly tinted envelopes with little verses on them,
And, in the center of it all, a cupid's chubby face.

You sent me one, my first one,
When I was only nine—
The postman left a letter;
They told me it was mine—
And I, with cheeks a-tingle,
And rounded eyes a-glow
Said—"Why' who could've sent it?"
And some one said—"You know!"

It seemed all scrolls and flowers,
And little birds with wings,
And slender, smiling angels
And other pretty things.
And, 'way inside was printing
And blue forget-me-nots,
And written in, with pencil,
"I love you lots—and lots!"

They laughed at me, the grown-ups,
They did not understand—
I stood before them, silent,
The letter in my hand—
But oh, my heart was pounding
For "Be My Valentine—"
Was written straight across it.
And I was only nine!

The Valentines we used to get—they'd silver hearts upon them,
And golden arrows, ruby-tipped, and yards of paper lace;
And softly tinted envelopes with little verses on them,
And, in the center of it all a cupid's chubby face!

—Christian Herald.

A VALENTINE SHOWER

IF any member in your community is being married during the month of February or if your social center, church or meeting place needs some kitchen furnishings, a good idea is to have a combination valentine party and kitchen shower.

The invitations made on heart-shaped cards could be worded as follows:

"Instead of your heart bring a frying pan,
A dish or a plate or some kind of a can,
A towel or tablecloth, either will do,
To furnish our kitchen so empty and new."

To provide entertainment you could number each parcel as it came in and pile all the packages on or around a large table before unwrapping. Guessing what each parcel contains proves great fun. Music and recitations would be lovely for the church or music, cards or sewing something special for the bride-to-be, will pass a very pleasant afternoon. Heart-shape, Sandwiches and cakes with coffee for refreshments.

A CHILDREN'S VALENTINE PARTY

THE Invitation—For a children's party use a candy kiss. Write the invitation on a long narrow strip of white paper, with a red border. Wrap it around the kiss, which already has a waxed paper wrapping and cover with a wrapper of red tissue. Wrap and twist in appropriate kiss style. As it probably will not stay twisted without being tied, tie with colored baby ribbon at each end. To one of these ribbons tie a wee card, with the child's name.

The Invitations

"Come to my Valentine Party do!
All sorts of sweet things will be waiting for you,
To admit you, the price is a kiss;
But that must be given to Cupid, my dear,
This isn't the ticket—the one you see here,
And so you, of course, may eat this."

This may be delivered by the child who gives the party.

All invitations for young people can be written out on a piece of paper cut the shape of a spoon with the following words written on it.

"Soon, oh soon,
By the light of the moon,
Come to my balcony
And spoon."

For an old folks' party, use the old fashioned lace valentine, if you can get them. Insert an extra leaf, on which write the invitation.

"For times sake this comes to you.
Do come and play real hearty.
Your youth will come again I'm sure,
If you come to my Valentine Party."

Or a heart would make a pretty invitation.

"We're getting old,
Or so I'm told,
But I'm not down in the dumps.
There's a party due
For me and you,
And the watchword is 'Heart's are trumps.' "

The Decorations

Every ten cent store carry the colored paper suitable for Valentine parties. The color scheme thruout should be in deep pink and white and red. Hearts cut out and either pasted or pinned is the chief decorations. Hang little cupids around on the curtains and stuck in the pictures.

A plate of red hearts numbered should be given the boys and a plate of white hearts numbered should be given the girls. There should be two alike a red and a white heart to match couples up for the first game. This idea is pretty and appropriate for any of the parties suggested.

For the table, do not use too many kinds of decorations. If it is a heart party, have festoons of varying sized hearts, in pink, around edge of table. The place cards if used should be of hearts. Candies should be of hearts.

Sandwitches, cookies, and tarts should all be heart shaped. You can buy the heart-shaped cookie cutters in any hardware store. Arrows may be used in connection with some of the hearts. These should be white, gold or silver.

For the Spoon Party, use pretty souvenir spoons, in connection with any one of the motifs suggested. Every thing on the table must be "spoon vituals," to be eaten with a spoon. This will cause much merriment.

Games

As each is given his souvenir or red heart, he must kiss the giver's hand, and bow allegiance. After taking off wraps, they find partners by the numbers written on the hearts. Each pair is given a candy kiss on a long string, one end of which is to be taken between the teeth. Each then draws in the string and the pair disposing of their kiss first wins. The hands must not touch it.

Another game is to have quotations written on hearts that have been broken or cut and then mixed up. Pass these out and each finds his partner by matching halves.

Then in couples, they pin darts on a large red heart, after the style of "Failing the Donkey." These should be a prize, for everything, especially for a child's party, all of little value.

"Who Kissed Me?" is an amusing stunt. Several, in the secret, go into another room. A girl is brought in, blindfolded, turned around, then led to a chair. When seated, some one kisses her. She is asked, "What boy kissed you?" And on guessing wrong, she is told she is a captive and is kept, the blind being removed. Then a boy is called in, to go thru the same proceedings, and fail to guess correctly, when asked "What girl kissed you?" They always fail to guess correctly, since it is always a girl who kisses a girl, and a boy who kisses a boy.

CORRECT CLOTHING FOR WINTER

NEXT to overheating our houses, our principal Winter sin of commission is wearing clothes that are too heavy or too tight, or both. Most buildings are maintained at a Summer temperature throughout the year, and it is obviously absurd for any one who is going to occupy such buildings to pile on clothing heavy enough for a polar expedition. The safe way to do is to wear clothing of light—or, at most, moderate—weight which in the winter and then to put on a heavy coat or wrap when going outdoors. The skin must breathe as well as the lungs, and for this reason clothing should be such as will permit free circulation of air. Underclothing and suits or dresses should be made of material sufficiently porous to admit the air freely to the body. Thick, heavy woolens, suits lined with an impervious material and outer clothing made with a very tight weave should be avoided. It is perfectly possible to keep warm without packing the body in wrappings such as a mummy might wear. In fact, because of the healthier skin condition that will result from lighter and more porous clothing, you will find that you do not suffer with the cold nearly so much as when you bundle up. Garments that are too heavy not only induce perspiration but hold it and force you to go about all day in a clammy state that is both uncomfortable and unhealthy.

Personal Column

Grandma's Idea of Modern Clothes.—We elderly ladies like pretty fussy dresses, but oh, those narrow skirts. Buy one that has the flying panels and set in skirt to make them wider. It can be done if skirt and waist are joined at the waistline, with three-fourth length sleeves or longer, and a V-neckline, filled in with lace. We can have a comfortable dress. One has to use their own judgment in buying, or get on accommodating clerk interested to please we elderly heavy weight matrons. Even small, elderly women like wider skirts. Why don't the manufacturers of ladies hats and dresses cater to us? We grandma's like to feel dressed up and comfortable.—Grandma.

Little Helps.—When you have broken isinglass in your auto curtains, save pieces for your stove and cut to fit, cut rubber bands out of your inner tubes and use in place of strings on packages and boxes. Use the velvet from old hats to polish your shoes, also to line your man's mittens.—Subscriber

Oat Sprouter.—I made one out of 3 old colanders, the flat ones like a milk pan, or one can-use old pans and punch holes with a nail all over bottom. The main object is to let the water drain out after sprinkling. I wet about a peck of oats with luke-warm water and let stand 24 hours in a pail. Then put in colanders. Set one pan on pail then put sticks across and then another, and so on, and set in a warm place a few days, also sprinkle each day. Keep oats moist. Then when sprouts have formed an inch or so, feed the chickens and see how they will enjoy the oats and sprouts in the cold snowy weather. One could use the flat flour sieves or old window screens. —Mrs. M.

Who Has One of These Attachments?—I am a Business Farmer reader and like it real well. I would like to hear from some of the women who are also readers, if they know any sewing machine company, who makes and sells hemstitchers that fit any machine. I saw the advertisement in our home paper, but mislaid it, and now I am out of luck. The price was $2, if not satisfied return and they would refund the money. I would like to hear from them in the next paper.—A Reader.

Knitting Socks.—Could any of the business Farmer readers send directions for knitting socks. Am sending a cookie recipe. It is as good as Christmas candy.

Four cups brown sugar, four eggs, well beaten, one cup shortening, one tablespoon (scant) soda, one tablespoon cream tartar, one teaspoon salt, eight cups flour, Seasoning of any kind. Mix and form into a loaf. Leave over night, and then slice of medium thickness, and bake.—Mrs. A. D. M., Olivet, Mich.

What I Think of Birth Control.—Dear Mrs. Taylor: Would you please tell me through your personal column, where I could get literature on Birth Control. What is your opinion on the subject? Your paper is wonderful, I can hardly wait for the next issue. Thank you,—Mrs. J. S.

—This is a very hard question to answer because of its personal character, but I will brave the wrath or good will of my readers.

I feel that it is every woman's duty to produce at least two children to help propagate the race if she is mentally and physically strong enough to produce healthy children, and if not, try all means possible to bring this about.

If a woman is sickly and weak and it makes her home a hospital most of the time, I feel it is only right that she should use her head and try and see that her husband sees it in the same light.

I do not feel it is right for one woman to bear all the sickness and struggle and poverty that go with having large families. Sometimes it is better to have fewer children and bring that few up in a clean wholesome atmosphere with good, wholesome food and clothing. These conditions only make for unhappiness and ill health and should be avoided.

If a family with moderate means and good strong bodies want a large family, I would praise them for their love and courage in the glorious of all states, MOTHERHOOD.

We are trying right now to get a Mother's pension through so every woman who will ask for it can have an allowance for every child born to her. I heartily advocate this.

Our communities should have a special trained nurse to help show us how to properly take care of our children.

After all, Birth Control is a personal problem that should be given a great deal of thought and good clear thinking. It rests with each individual and should be considered a matter for both husband and wife to decide.

—if you are well bred!

Children are men and women in the making, and a child's acceptance as a member of human society at large begins with its christening, when it is received in the religious community as an individual. Hense, tho the child does not, in practise, begin to learn the rudiments of manners from association with the adult members of the family until, perhaps, the age of four or five, its christening does not mark the beginning of its social life.

The Birth Announcement.—Cards engraved are the proper form, but for those of us who cannot afford this luxury a simple note announcing the birth with the word "Son" or "Daughter" and the name. Many stationers have stock cards that are very pretty and very good.

Menu for February 1st

Prune Cocktail
Brown Fricassee of Chicken
Boiled Rice Baking Powder Biscuits
Apple and Celery Salad
Mince Pie
Coffee

Brown Fricassee of Chicken.—Draw, singe and joint chicken. Put four tablespoons of fat in saucepan; when brown, put in chicken. Stir until every piece is nicely browned, then add two tablespoons flour, stir again, add one pint of boiling water or stock, stir until it boils; add one teaspoon salt. Cover and let simmer gently until tender then add one teaspoon onion juice, and little black pepper. Put neck piece, heart liver, gizzard, and back pieces in center of dish; put two pieces of breast on top, second joints, on one side of plate, legs crossed on other, and wing at each end of plate. Pour sauce over, sprinkle with chopped sparsley, and serve.

RECIPES

Valentine Lollepop.—One cup of sugar, one cup white corn sirup or gluclose, and one-third cup of water stirred over the fire until completely dissolved and mingled, and then gently boiled to the soft ball stage. If you want your sugar lumps to be red, throw into the partly cooked sirup two tablespoons of the little red cinnamon candies, the smaller the size the better. Such colors fade with cooking so should not be put in at the start. Take a large flat pan and lay sticks upon it in regular line. Pull the candy just enough so that it can be dropped upon these sticks and it is surprising how well you can shape it into hearts.

Eggless Milkless Fruit cake.—Two cups white sugar, one cup butter and lard, two cups hot water, one teaspoon cinnamon, one teaspoon cloves, one pound raisins. Cook all together three minutes and cool half cup chopped citron, one teaspoon soda, sifted with flour, five or six cups flour. Bake in a square pan one hour in a slow oven.

Spanish Macaroni.—1 cup cooked macaroni, 1 cup grated cheese, 2 onions, ½ cup butter, 1 qt. tomatoes, 2 red peppers.

Make a sauce by frying onions chopped fine in one-half cup of butter. Add a quart of tomatoes and the pulp of 2 red peppers. Simmer until reduced to half. Butter a baking dish, put in a layer of the sauce, then a layer of macaroni and grated cheese, and so on until the dish is filled. Bake over one-half hour.

Scalloped Chicken.—Two cups finely minced chicken, one onion, one-half cup rice, one quart chicken stock, three sweet peppers, one tablespoon butter, salt and pepper, one cup white or cream sauce.

Wash the rice well, and cook until tender in the boiling stock. Season to taste with salt and pepper; a little celery-salt may be used, or some minced parsley if desired. While the rice is cooking, boil the eggs hard, chop up fine and stir with chopped peppers or pimentoes into the rice. Fry the minced onion in the butter until a light brown and add. Arrange rice and chicken in alternate layers in a bake dish, covering the top with a few buttered bread-crumbs. Bake for twenty minutes in moderate oven. Chicken is very nice scalloped with bread or cracker crumbs. In this case use more sauce, making it with part of the chicken stock and cream. Mushrooms are minced, celery may be used to season, or a few oysters may be added to the sauce.

One-Egg Chocolate Cake—Sift together one and one-half cups flour, one cup of sugar, one teaspoon of baking powder and three tablespoons of cocoa, beat one egg very light, add three tablespoons of melted butter and one-half cup of milk and add to the dry mixture and beat well. Flavor with one teaspoon vanilla extract. This is quickly made and good. —Alma B., Augusta, Michigan.

The Runner's Bible

(Copyright by Houghton Mifflin Co.)

Forgive and ye shall be forgiven. Take heed unto yourself; if thy brother sin, rebuke him; and if he repent, forgive him. And if he sin against thee seven times in the day, and seven times turn again to thee, saying, I repent, thou shalt forgive him. (Luke17-3-4.)

All evil must be forgotten, whether it be in you or your brother. To hold perpetually in remembrance your brother's faults and sins, is to create an imperfect, a distorted pattern from which you will be fashioned.

AIDS TO GOOD DRESSING

BE SURE AND SEND IN YOUR SIZE

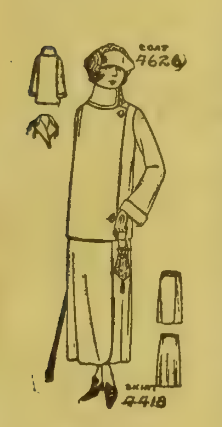
4626-4418. A Stylish Suit.—Broadcloth or velvet would be attractive and seasonable for this model. It is also suitable for the new mohair suitings. The coat has the fronts in double breasted style, and with a collar that may be rolled low to form revers, or turned high in chocker style. The skirt is in "wrap" model. The Coat Pattern, 4626, is cut in 3 Sizes: 16, 18 and 20 years for Misses and Small Women. The Skirt Pattern, 4418, is cut in 7 Sizes: 16, 18 and 20 years, and 31, 33, 35 and 37 inches waist measure for Ladies. The width at the foot is 2⅛ yards. To make this Suit for a medium size will require 5½ yards of 40 inch material.

4611. A Good "Cover All" Apron.—This attractive model may be finished to close at the centre back, or on the shoulders. The belt is slipped under the tab extensions on the pockets. Percale in a neat pattern, or unbleached muslin may be used for this design. It is also good for gingham, lawn or sateen. The Pattern is cut in 4 Sizes: Small, 34-36; Medium, 38-40; Large, 42-44; Extra Large, 46-48 inches bust measure. A Medium size requires 3¾ yards of 36 inch material

4608. A Quaint and Youthful Model.—For a youthful figure there is no style more charming than that of the fitted waist and full skirt. This is a splendid model for taffeta and other silks also for wool or silk crepe. The Pattern is cut in 3 Sizes: 16, 18, and 20 years. An 18 year size requires 4¾ yards of 36 inch material. The width of the skirt at the foot is 2¾ yards.

4632. A Dainty 'Party" or Dance Frock.—Voile in a pretty shade of apple green with a pattern of embroidery to match, is here shown. Georgette crepe or crepe de chine in orchid or white with the tucks hemstitched would also be pleasing for this style. The dress may be finished to slip over the head or to close to centre back. The puff on the sleeves may be omitted. The Pattern is cut in 4 Sizes: 6, 8, 10 and 12 years. A 10 year size requires 3¼ yards of 32 inch material.

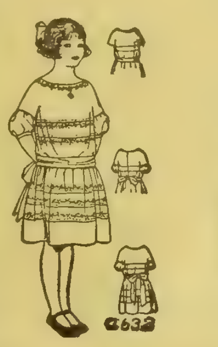
4622. A Dainty Frock for Mother's Girl.—Voile or batiste, China silk, or taffeta could be used for this design. The sleeve may be a short puff, or the popular bishop style. This Pattern is cut in 5 Sizes: 2, 4, 6, 8 and 10 years. A 4 year size requires 2⅞ yards of 32 inch material.

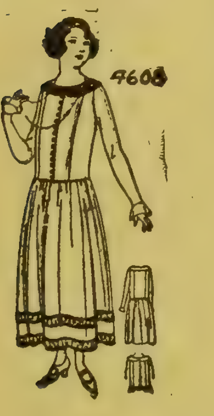


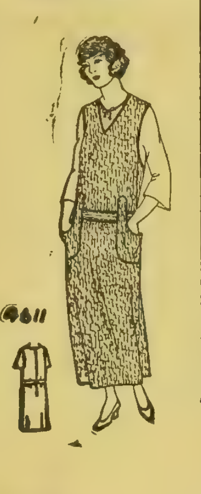
4621. A Simple Frock.—Collar and cuffs of this neat model are checked white and yellow gingham, the frock and sleeves are of yellow poplin. This is a good style for challie, poplin, or linen. It could also be of batiste with collar and cuffs of embroidery. The Pattern is cut in 4 Sizes: 2, 4, 6 and 8 years. A 4 year size requires 2½ yards of 27 inch material. For collar and cuffs of contrasting material ⅝ yard is required.

4630. A Set of Pretty Caps.—Scraps of lace, silk, satin or similar material may be used for these pretty boudoir accessories. No. 1 is pretty with the crown of satin or soft silk shirred to net or lace and trimmed with tiny ruffles or plaited frills. Ribbon or elastic run through a casing holds the cap to the head. No. 2 is made with a wide band which forms a facing, that is to be edged with lace or may be bound with ribbon or bias material. Embroidered net is pretty for this style. The Pattern is cut in 4 Sizes: Small, Medium, Large, Extra Large. A Medium size in either style requires ⅝ yard of 27 inch material. For the crown of No. 1 in contrasting material ¼ yard 9 inches wide will be required.

4623. A New and Stylish Blouse.—Reseda green satin would be pleasing for this design. The buttons could be of crystal or covered with the material of the blouse. This is a good model for crepe, crepe de chine and the new printed silks. The vest, collar and cuffs could be of contrasting material. The Pattern is cut in 6 Sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. A 38 inch size requires 2⅜ yards of 32 inch material. For collar, vest and cuffs of contrasting material ¾ yard of 40 inches wide is required.







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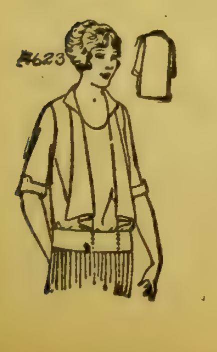

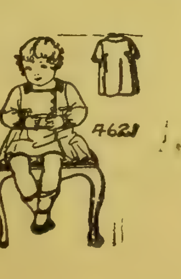

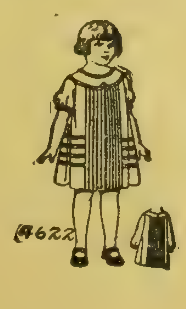

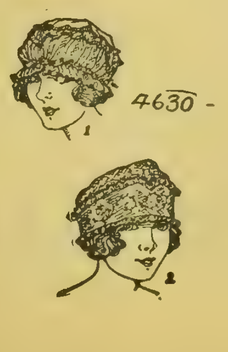

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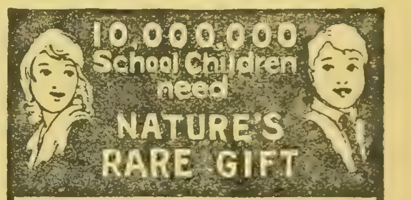

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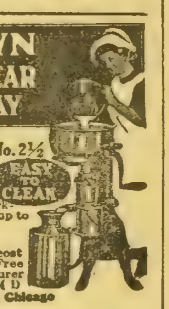

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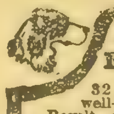

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MENTION THE MICHIGAN BUSINESS FARMER WHEN WRITING ADVERTISERS

MUSKEGON FARMERS PUT OPERATION IN CO-OPERATION

(Continued from Page 4)

each two weeks period. The operating expenses are deducted, the sinking fund is maintained at about $1,000 and the remainder is paid back to the patrons in their cream checks. This gives the dividends earned by the business each two weeks, directly to the man who milks the cows.

The success of this method is shown in the butterfat prices which the Ravenna concern is able to maintain. Below are the comparative figures for the past five years showing the margin received by the farmer per pound of butter fat over the average price received by the creamery for the butter:

Year	Ave. price butterfat	Ave. price for butter	Margin b. f. over butter
1918	53.3c	49.2c	4.1c
1919	66.0c	60.5c	5.5c
1920	67.2c	60.5c	6.7c
1921	47.7c	43.2c	4.5c
1922	45.3c	40.5c	4.8c

A total of 648,018 lbs. of butter were sold in 1922 for a total of $262,914. The sales of buttermilk brought an additional $2,200. It is interesting to note that the quality of the buttermilk is such that the greater part of it is sold for table use.

The operating expenses during the past year of this $265,000 business were only about $20,000 representing a manufacturing cost of less than 8 per cent. Considering the amount of labor involved in buttermaking, and with the additional packing and wrapping of parcel post shipments, this represents a remarkably low cost.

The Ravenna creamery is not making a mistake which is made by so many cooperative concerns, namely that of paying out all of the proceeds leaving no reserve for financial backing and strength. The trial balance of September 27, 1923, shows a surplus of over $21,000.

Twice per week the cream is gathered on 17 cream routes which extend out into all parts of Muskegon county and even into the adjoining counties of Ottawa, Kent, Newaygo, and Oceana. Four trucks are required for these routes, two of the trucks being owned by the creamery and the other two are hired.

400 Per Cent Increase In Number of Patrons

A splendid growth has been enjoyed by the creamery ever since its reorganization. From a total of 150 patrons in 1918 the number increased to approximately 600 patrons in 1922. This means an increase of 400 per cent in 8 years, all of which goes to show that the Ravenna creamery is a growing concern as well as a going concern.

The sales of Butter in that period likewise increased from 237,000 lbs. to 648,000 lbs. and the amount paid to the farmers jumped from $97,000 to $219,000.

Harvey Averill has been manager ever since the reorganization. He is, to use his own expression, "just an ordinary sod-buster farmer" and he expects to go back to the farm when his period of usefulness for the creamery is at an end.

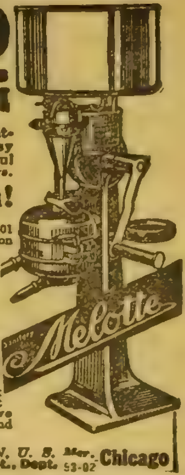
While Harvery Averill may be an "ordinary" farmer he is certainly an extraordinary creamery manager and much of the success of the Ravenna institution is due to his business ability. A leader in community enterprises, a good "mixer," liked and respected by all, and possessed of an abundance of common sense and good business judgment, Harvey Averill just about fills the bill.

Mr. Averill is ably assisted by two clerks in the office and by a buttermaker and three assistants who handle the manufacturing end.

"Quality"—Always "Quality"

During his whole nine years of service Manager Averill has worked unceasingly to improve the quality of the Ravenna product. At every opportunity he has urged the patrons of his creamery to "produce better cream so we can make better butter and thereby pay you more for your butterfat." All of which is the "better quality—better product—larger profits" lesson which farmers are learning so slowly.

"Seventy-five per cent of the poor butter comes from cream which was



Imported Melotte

$7.50 After 30 Days FREE TRIAL

30 days' free trial—then, if satisfied, only $7.50 and a few easy payments—*and*—the wonderful Belgium Melotte Separator is yours.

No Money Down!
Catalog tells all—WRITE!

Caution! U. S. Bulletin 201 shows that vibration of the bowl causes *cream waste!* The Melotte bowl is *self-balancing*. Positively cannot get out of balance therefore cannot vibrate. Can't remix cream with milk. Runs so easily, bowl spins *25 minutes* after you stop cranking unless you apply brake. No other separator needs a brake. Bowl chamber is *porcelain lined*.

Catalog FREE
Send today for free separator book containing full description. Don't buy any separator until you have found out all about the Melotte and details of our 15 year guarantee.

MELOTTE H. B. BABSON, U. S. Mgr. 2843 W. 19th St., Dept. 53-02 Chicago

BREEDERS' DIRECTORY

Ads under this heading 30c per agate line for 4 lines or more. $1.00 per insertion for 3 lines or less.

CLAIM YOUR SALE DATE

To avoid conflicting dates we will without cost, list the date of any live stock sale in Michigan. If you are considering a sale advise us at once and we will claim the date for you. Address, Live Stock Editor, M. B. F., Mt. Clemens

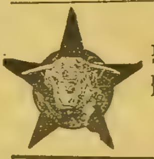
- Feb. 5—Poland Chinas, Detroit Creamery Farm, Mt. Clemens, Michigan.
- February 8—Shorthorns, Michigan Shorthorn Breeders' Ass'n., East Lansing, Mich.
- February 20—Angus and Poland Chinas, E. A. Clark, St. Louis, Michigan.
- February 20—Holsteins, Forest Deatsman Lake Odessa, Michigan.
- Feb. 20—Durocs, Detroit Creamery Farm, Mt. Clemens, Michigan.

CATTLE

HOLSTEINS

FOR SALE—Two Registered Holstein Heifers. One born Dec. 20, 1922 and the other May 28, 1923 from good producing stock and well developed. Price $164.00 for both. Geo. Church, 1 mile south and 1 mile west of Imlay City, Mich.

HEREFORDS



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Registered Breeding Cattle, T. B. Tested at practical prices for production of Hereford Baby Beeves profitably all ages.
T. F. B. SOTHAM & SONS.
(Herefords since 1839.)
St. Clair, Mich.

Steers For Sale

72 Herefords 750 lbs. 76 Herefords 660 lbs.
86 Herefords 550 lbs. 48 Herefords 500 lbs.

Can also show you other choice quality bunches. All are dehorned, deep reds, good stocker order. Well marked and show their breeding. If in the market for real quality, one car load or more your choice. Write stating number and weight preferred.
V. V. BALDWIN, Eldon, Wapello Co., Iowa.

BREED HEREFORDS THAT FATTEN quickly. Eleven choice two-year-old heifers and several yearling bulls sired by International Prize Winners for spring sale. Write us for information. Breeders of Herefords since 1860.
CRAPO FARM, Swartz Creek, Michigan.

4 HEREFORD BULLS, PRICED TO SELL. Dropped in March. 3 Polled, all good individuals. T. B. Tested. Wm. C. Dicken, Smyrna, Mich.

AYRSHIRES

AYRSHIRES

To make room for winter we are offering bred cows and heifers also some well bred young bulls. Look up our winnings at leading state fairs.
W. T. SHUTTLEWORTH, Ypsilanti, Michigan.

FOR SALE—REGISTERED AYRSHIRE bulls and bull calves, heifers and heifer calves. Also some choice cows.
FINDLAY BROS., R 5, Vassar, Mich.

ANGUS

WE HAVE SOME FINE YOUNG ANGUS BULLS from International Grand Champion Stock at reasonable prices. E. H. KERR & CO., Addison, Mich.

RED POLLED

FOR SALE—REGISTERED RED POLLED Cattle. Both Sex.
PIERCE BROS., R. 1, Eaton Rapids, Michigan.

JERSEYS

REG. JERSEYS, POGIS 99th OF H. F. AND Majesty breeding. Young stock for sale. Herd fully accredited by [illegible] and Federal Government. Write or visit [illegible] and description.
GUY C. WILBUR, BELDING, Mich.

SHORTHORNS

RAISE SHORTHORNS WITHOUT HORNS Like Kelley does. U. S. Accredited Herd No. 28945. For description and price write,
L. C. KELLY & SON, Plymouth, Michigan.

FOR SALE: REGISTERED YEARLING SHORThorn Bull, Roan Welfare Breeding.
CLAIR I. BROWN, R. 10, Kalamazoo, Michigan.

GUERNSEYS

GUERNSEY BULL CALVES $50. A. R. BREEDing. 50% to 75% breeding of Norman's Missaukee Red Rose. Bull soon ready for service $100.
A. M. SMITH Lake City, Michigan.

(Continued on Page 25)

There are many imitations of quality but there has not yet been found a substitute for satisfaction.

ROOFING MATERIAL
CLASS C
STAND THIS END UP
GREEN
Heavy Weight
90 LBS
This Roll Contains 108 Sq Ft (1 Square)
MULE-HIDE
Slate-Kote Roofing
MULE-HIDE
NOT A KICK IN A MILLION FEET
ROOFING
AND
SHINGLES
Reg. U.S. Pat. Office
Stronger and Lasts Longer
No Coal Tar Used
THE LEHON COMPANY Mfrs. Chicago

MULE-HIDE
Asphalt Shingles and Roll Roofing

Insist on the genuine. It is your protection.

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Save half on Fence

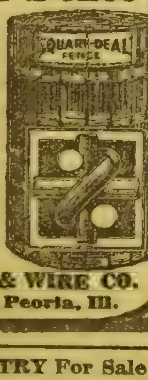
Buy "Galvannealed" Square Deal Fence. We guarantee it to last 2 to 3 times longer than ordinary galvanized wire in any standard test. Its triple thick zinc coating does not flake or peel off. Rust and corrosion can not get in to destroy the steel. It should last 2 to 3 times longer than the fence you now own, therefore, cost ½ to ⅓ as much.

Square Deal Fence

is trim looking, long lasting—economical. Full gauge wires. Stiff, picket-like stay wires. Well crimped line wires. Small, compact knot guaranteed not to slip.

FREE Copy of Ropp's New Calculator (answers 75,000 farm problems) to land owners who write for Square Deal catalog that tells all about "Galvannealed" the new Triple-Life Wire.

KEYSTONE STEEL & WIRE CO.
4830 Industrial St., Peoria, Ill.



Have You LIVE POULTRY For Sale? An Ad in THE MICHIGAN BUSINESS FARMER Will Sell It!

spoiled before it left the farm," declares Mr. Averill. He has an idea that the trend of the future will be toward skimming stations to handle the farmers' milk. And the reason Mr. A. has this hunch is the tendency of farmers to avoid separating the milk and the dislike of the farmers' wives to wash the separators. They want to sell whole milk and the creamery must meet the situation.

If skimming stations do again come into style they will not only reduce the labor on the farm but they will effect a great improvement in the quality of the cream and of the resulting butter.

Every day in every way it is getting better and better, is Manager Averill's opinion of the dairy business. As proof he displays the average price paid for butterfat during the first six months of 1923 by the Ravenna creamery. 55.7c per pound is the figure for the six months and the average for the entire year will undoubtedly be higher.

Notice the average butterfat prices for the preceeding five years which plainly show the rise during the war and the subsequent depression: 1918, 55.3c; '19, 66c; '20, 67.2c; '21, 47.7c; '22, 45.3c—and now up again—55.7c.

These figures support Mr. Averill's argument that dairying has been one of the most profitable lines for the farmer. Dairy prices never dropped as low as did other farm products and they are among the first to recover. It will be pleasing news to Michigan's dairymen to learn that dairy product prices have reached the bottom of the depression and are again on the upgrade.

Demand Exceeds the Supply

And so, as we have attempted to outline, quality is the basis for the success of Ravenna butter and selling direct by mail is the reason for the success of Ravenna creamery. During the last few months the demand for Ravenna butter, both locally and from mail orders, has greatly exceeded the supply.

On several evenings Mr. Averill has reported as follows, "There isn't enough butter left in the creamery tonight to spread a single slice of bread." All of which goes to prove that people know good butter when they taste it and that they will buy it if they can get it.

That there are real cash rewards in cooperation is shown by the Ravenna creamery. The manager estimates that the average price paid for butterfat during the year is from 5c to 11c per pound above ordinary butterfat prices.

Take, for example, the day which was mentioned before in this article when Standards were quoted in Chicago at 48½c. The usual practice is to pay for butterfat 1c per pound under Standard quotations, or 47½c per pound on that particular day. Compare this with the Ravenna returns of 60c for butter and approximately 63c per pound for butterfat.

Can It Be Possible?

No story is at its best which does not carry a moral. In addition to emphasizing quality and cooperation, this account closes with a warning against treason. It is treasonable to "aid or abet the enemy." What then shall we say of the dairy farmer who gives assistance to oleo, that arch enemy of the dairy business?

It is stated on good authority that 75 per cent of the patrons of the Ravenna creamery use oleomargarine on their tables. We can well hope that this figure is placed much too high, but it shows a danger which exists in all parts of Michigan as well as at Ravenna.

The farmer who uses oleo in preference to butter may save a few cents per week on expenses but in other ways he loses fearfully. He loses in the strength and vigor of his growing children who have been deprived of the vitamines so necessary to their development. He loses in the health of the adults of his family who have been given an inferior food product. And, furthermore, he is a trator to his own business.

No one will dispute the fact that anything which aids the sale and use of oleomargarine injures the dairy business to the same extent. Furthermore, that anything which injures the dairy business has an effect on all other lines of farming because they all are interdependent.

Prepare* YOUR HORSES *for Spring Work

Time will mean money to you, Mr. Farmer, one of these days

—when spring comes on, when the sun begins to shine.

The acres you plow, or harrow, or sow, each day will depend entirely upon the good condition of your team.

Condition them now with a course of

DR. HESS STOCK TONIC

You can feel it on the lines

It helps them shed their winter's coat, whets their appetite, tones up their digestion, cleans out the bowels and kidneys, drives out the worms.

Feed your workers Dr. Hess Stock Tonic and you will soon discover that you have a team before you that can do an honest day's work, without a pant or a tremble of the muscle. They will be there for business—and willing.

Excellent for mares in foal—and colts of any age. GUARANTEED.

Tell your dealer how many horses or mules you have; he has a package to suit.

25 lb. Pail, $2.25 **100 lb. Drum, $8.00**

Except in the far West, South and Canada.

Honest goods—honest price—why pay more?

DR. HESS & CLARK Ashland, O.

DR. HESS
STOCK TONIC

I spent 30 years in perfecting this Tonic
GILBERT HESS
M.D., D.V.S.

Dr. Hess Dip and Disinfectant
Keeps the Dairy and Stables Healthful and Clean Smelling

12—CONCORD GRAPE VINES—$1.00 Strong Plants. Sent Postpaid. Free Catalogue of Fruit Trees, Plants, Etc. **PEACH BELT NURSERIES, Bangor, Michigan.**

SPECIAL OFFER—200 DUNLAP 200 GIBSON Strawberry Plants and 25 Black Raspberry Plants Post Paid $3.00. **Fred Stanley, Bangor, Mich.**

WHEN WRITING TO ADVERTISERS, PLEASE MENTION THE BUSINESS FARMER

Grand Champion Duroc Sale!

Friday, February 15, 1924

We will Sell Great Big, Prolific Daughters of J. D's Sensation King of Pathmasters and Pilot Col bred to

TOP KING 6th - **ELVETRAND COL. JACK**
The Michigan Grand Champion — Junior Champion of Ohio and Michigan

This Offering will Consist of

23 Fall and Spring Yearling & 17 Gilts

Write for Catalog.

SALE WILL BE HELD IN A HEATED PAVILION, At Farm No. 3, corner Gratiot and Nunneley Roads.

Come early, inspect the offering and enjoy a good hot lunch at noon.

Detroit Creamery Farms
R. F. D. No. 7, MT. CLEMENS, MICH.
A. A. SCHULTZ, Supt.

DAIRY and LIVESTOCK

DECLINE IN HOG PRODUCTION

THE pig survey taken by rural mail carriers throughout the United States on December 1 shows some very interesting comparisons between different sections of the country, says V. H. Church, Agricultural Statistician for Michigan. The report indicates that there was an increase of 4.7 per cent in the number of sows farrowing in the fall of 1923 as compared with the previous fall, and a decrease of 10.6 per cent as compared with last spring. Wisconsin and North Dakota were the only other corn belt states reporting an increase compared with one year ago. For the corn belt as a whole the number is 6.1 per cent less than one year ago and 43.6 per cent less than last spring. The number of pigs saved in the fall of 1923 in Michigan is 5.8 greater than in the previous fall and 9.8 per cent less than last spring. For the corn belt, the number saved is 3.8 per cent less than one year ago and 43.1 per cent less than last spring.

A decrease of 2.0 per cent in numbers of sows bred or intended to be bred for spring farrowing in 1924 in the State, and 5.4 per cent in the corn belt is also shown. The average number of pigs saved per litter last fall in the state was 6.0 as compared with 5.8 last spring and 5.9 the previous fall. The corresponding figures for the entire corn belt were 5.02, 4.93, and 4.90 per cent. Experience with previous surveys has shown that actual farrowings have fallen considerably short of expressed intentions.

The decline in production and tendency for a further decrease is due to the lower prices that have prevailed for some time, and the relatively better price of corn. Receipts of hogs at stock yards during the last few months have been the heaviest in many years.

DON'T MIX THEM UP

A SHORT time ago I heard a story about a friend of mine who had a little experience in introducing animals of another breed into a herd of purebred cattle. I want you to enjoy the story so will tell it as I heard it.

This particular man had a herd of purebred Holsteins which he had been breeding for about twenty-five years. They were very good producers and probably averaged between 8000 and 10,000 pounds of milk for the year. However, everyone was talking percentage of fat on the milk check from the milk station and it did seem to him that he might be getting a little more money if he could increase the fat percentage. Therefore, he purchased a grade Guernsey cow to put in with his herd of about twenty Holsteins. He turned her out in the pasture with the other cattle and his neighbors noticed her as they passed by on their way to the milk station. There was considerable comment at the milk station and the proprietor remarked that this man had purchased a Guernsey cow to raise his fat content.

A month went by and one morning a neighbor asked how he was coming with the Guernsey cow. He replied, "Very well indeed so far. My fat test went up 1 per cent this month and she hasn't even freshened yet. I do not know what it will do when she does."

This story set me thinking. The first question I asked was,—just how much can one Guernsey cow in a herd of twenty Holsteins affect the milk? I sat down and figured a little.

If the Holsteins average 40 lbs to the cow and the Guernsey 30 lbs., there would be produced 800 lbs of Holstein milk and 30 lbs., of Guernsey milk per day. If the Holstein milk tested 3.3 there would be 26.40 lbs. of fat produced by the Holstein and if the Guernsey milk tested 4.4 there would be 1.32 pounds of fat produced by the Guernsey, a total of 27.72 lbs of fat. Now dividing the total pounds of fat by the total pounds of milk, we find the average percent of fat 3.34 and this would be called 3.3 percent on the milk sheet unless the dealer was generous.

This gives a pretty good indication of the affect that one cow can have in a herd of twenty cows. You see quite readily that the affect is almost negligible. This, however, is not the gravest error and I believe that many of our farmers are short-sighted in mixing breeds for this reason:—that they are sure not to keep a purebred bull of the breed from which they introduce one or two cows to increase the fat content. This means that they will be using a purebred Holstein bull on a Guernsey or Jersey cow and that in the first generation they will have a half-blood or hybrid. This carries us back to the time we started with native cows with no particular description fifteen to twenty years ago or longer and which we have eliminated by persistent effort through use of purebred bulls. One attempting to use this system argues that he does not raise the calves and consequently there is no disasterous affect. However some are pretty sure to sell a heifer calf from this mating if the dam is a good producer, to a neighbor and this neighbor will carry on the work of crossing and breeding to his own dissappointment and loss.

Disasterous results have been obtained through many years by this system of breeding, and breeding policies and methods are just as important as the careful selection of producers and therefore we should keep either one breed or another, building up gradually from good grades to purebreds, for the greatest producers come with the purest blood. We should analyze our business very carefully before making a change. We have sensational and fashionable things in farming as well as in ladies' clothes and many farmers must look carefully into these things before spending much money.

Choose your breed. Work toward your ideal through careful grading up. Eliminate the blood of all other breeds so far as possible and work steadily into a purebred herd being sure to practice as careful selection with purebreds as you should with grades. At any rate, "Don't mix them up."—M. C. Bond.

A LITTLE FEED, A LITTLE LABOR, RETURN GOOD PROFITS

"THERE is a horse that I would give $200.00 for," said a well known dealer who is shipping to the eastern markets, "if he were in good flesh and short haired. As it is, I dare not pay more than $140.00 for him, and even at that I take a chance of losing money. Long

BREAKING NO SPEED LIMITS

Reading from left to right, this jolly group is composed of: Alvin Lind, Edwin Mund, Allen McDonald, and last but not least, Topsy, all of Chase, Michigan.

I Want to Send Every Reader of This Paper
C. G. PHILLIPS "The Corona Man"
(5)
a Big Can of CORONA By Mail—Postpaid—on 20 Days' Free Trial

I want to prove to you at my risk that CORONA is the greatest healing ointment that you have ever used for all kinds of cuts, wounds, sores, etc. on man or beast.

Just Send Your Name and Address

and I'll send you this big can, postpaid. Use it for Chapped Hands, Ulcers, Cuts, Wounds, Bruises, Piles, Boils, Eczema, etc.—nothing like it for keeping the hands from chafing during winter season. Use it on your animals for Barb Wire Cuts, Collar Boils, Cracked Hoofs, Grease Heel, Sore Teats, Caked Udders, etc., then if after 20 days' free trial you are convinced it is the best healing preparation you ever used—then send me 65c in full payment. If you are not satisfied after giving it a trial—don't pay me a cent. I let you be the judge. Send name and address today for this big 20-DAY FREE TRIAL CAN.

C. C. PHILLIPS, "The Corona Man"
THE CORONA MFG. CO.
42 Corona Block, KENTON, O.

NOTE—If you have used Corona and druggist cannot supply you and you prefer larger can, order direct from ad. 20 oz. can postpaid $1.25.

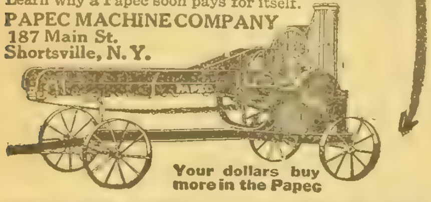
CLIP WORK HORSES For More Work

Clipped horses feel better, work better, look better. Dry off quickly. Cleaned in less than half the time. Clip your horses this Spring. It's real economy, and it's easy with a

Stewart No. 1 Clipping Machine

Ball bearing. Smooth running. Clips fast and easy. Lasts years and years. Clips cows and mules also. Only $12.75 at dealers, or send $2.00 and pay balance on arrival. Guaranteed satisfactory or money back. Get one now. Complete Catalog on request.

CHICAGO FLEXIBLE SHAFT COMPANY
5652 Roosevelt Road CHICAGO, ILL.
World's Largest Makers of Clipping & Shearing Machines



Filled 40 Silos—Never Plugged

"Filled 40 silos this fall (1922) with an L-16 Papec Cutter, second season, and never had a plugged pipe." Ernest Kahler, Clifton Springs, N. Y.

The Papec is made in four sizes to fit any power. N-13 and L-16 sizes are ideal for Fordsons.

Send today for our new catalog and U. S. Gov't Bulletin "Making and Feeding of Silage"—both free. Learn why a Papec soon pays for itself.

PAPEC MACHINE COMPANY
187 Main St.
Shortsville, N. Y.

Your dollars buy more in the Papec

Use HOOSIER TILE for permanent buildings for farm or city, dwellings, store rooms, garages, foundation and basement walls, hog barns, barns, poultry houses, etc. Combines beauty, durability, economy. Smooth Glaze or Mat Face finish. Estimates free. Buy now for spring building. Save time and money. Hoosier Bldg. Tile & Silo Co., Dept. MB-17, Albany, Ind.

PERMANENT

COATS AND ROBES

Let us tan and manufacture your season's catch into a coat, robe, neck piece, cap, mittens of finest quality and latest design.

Custom Furriers Since 1878
Send for Illustrated Price List

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FREE This Practical Book on CONTAGIOUS ABORTION

Tells you about cause, effects and treatment of this dangerous disease; explains how, without risk, you can, like thousands of other farmers and stockmen, rid your herd of it by using ABORNO the pioneer, guaranteed remedy for Contagious Abortion. Write for FREE Copy.

ABORNO LABORATORY
42 Jeff St. Lancaster, Wis.

Which Road for You ?

For 23 years Blue Valley has given farmers a high direct cream market. No useless profit takers between them and Blue Valley—between Blue Valley and retailers. Blue Valley butter, the National brand, brings farmers bigger cream checks direct.

Another Blue Valley Booster

"I want to thank you sincerely for the way I have been treated ever since I have shipped cream to you."—Andrew Skeba, Cedar, Michigan.

Thousands of B. V. B's (Blue Valley Boosters) will tell you it pays to ship your cream yourself direct to Blue Valley.

For Bigger Cream Checks
Ship to
BLUE VALLEY CREAMERY CO.

Ship to Blue Valley Creamery in City nearest you:

Detroit, Mich.
Grand Rapids, Mich.
Milwaukee, Wis.
Duluth, Minn.

Also creameries in 16 other cities
General Office: CHICAGO

BLUE VALLEY BUTTER is good butter
that's why millions use it

LAXOTONIC

Will prevent and overcome bloat, stoppage and paralysis of the bowels in cattle. Salts or Oil are Dangerous.

Never Drench Cattle

Give Dr. David Roberts Laxotonic dry on the tongue. For sale by dealers or postpaid 50c. Ask for FREE copy of The Cattle Specialist and how to get The Practical Home Veterinarian without cost.

Veterinary Advice Free

Dr. David Roberts Veterinary Co.
152 Grand Av., Waukesha, Wis.

DON'T WEAR A TRUSS

BE COMFORTABLE—

Wear the Brooks Appliance, the modern scientific invention which gives rupture sufferers immediate relief. It has no obnoxious springs or pads. Automatic Air Cushions bind and draw together the broken parts. No salves or plasters. Durable. Cheap. Sent on trial to prove its worth. Beware of imitations. Look for trade-mark bearing portrait and signature of C. E. Brooks which appears on every Appliance. None other genuine. Full information and booklet free in plain sealed envelope.

MR. C. E. BROOKS

BROOKS APPLIANCE CO., 297 STATE ST., MARSHALL, MICH.

WE TAN

and make to your order from your Cattle, Horse and all kinds of Hides and Furs, Men's Fur Coats, Robes, Caps, Gloves and Mittens, Ladies' Fur Coats and Fur Sets. Remodeling and Repairing latest styles. Ship us your work and save one-half. New Galloway Coats, Robes, Gloves and Mittens for sale. We are the oldest Galloway Tanners: 36 years continuous business. Free style Catalogue, prices and samples. Don't ship your hides and furs elsewhere until you get our proposition.

HILLSDALE ROBE & TANNING CO.
Hillsdale, Michigan.

White Blossom SWEET CLOVER $3.00 Per Bu.

Unhulled. Grow Sweet Clover. Cheaper and better than Red. Grows anywhere. Best fertilizer, wonderful pasture and hay. Big money maker. Crop often worth $50 per acre. Sow our superior scarified seed

Don't delay writing for our 116-page catalog giving full particulars and FREE SAMPLES. Our prices save you money. Also low prices on Clover, Alsike Alfalfa, Timothy, etc. Write today.

A. A. Berry Seed Co., Box 927, Clarinda, Iowa

NATIONAL Hollow Building Tile

SAVES MONEY
garage, barns, warehouses, corn cribs, hog, milk and poultry houses, MAT FACE, homes, churches, etc. Glazed tile, wood or cement stave silos. Early buyers discount. Write for agency proposition.

National Clay Products, & Silo Co.
DEPT. 16 MUNCIE, IND

FREE SAMPLES CLOVER

for your test and approval. We want you to see our high-testing seed and our low prices before you buy.

Buy Now at Wholesale. Crop short. We expect higher prices later. We bought early big stocks on lower markets. Our prices amazingly low. We can save you money on Clover, Alfalfa, Timothy, Sweet Clover, Hubam and other Field seeds. Write today for free samples and big Seed Guide.

American Field Seed Co., Dept. 827, Chicago, Ill.

haired, thin horses are much more susceptible to disease, must be held in our stables for some time until they get in better condition, and the risk and expense, and the fact that they are not saleable until they are in better flesh, makes a horse of that kind less desirable to me at $140.00 than the same horse would be at $200.00, if he were in fit condition."

Other dealers corroborated his statement and added that while it was unprofitable to put feed into a $50.00 horse, it would certainly pay to put 30 days' feed and some grooming on horses weighing 1500 pounds or over. Twelve quarts of oats per day, plus plenty of good forage and a little oil meal, (say one half teacupful at each feeding time with the oats), will put horses in a much improved condition for sale in 30 days' time, if they are kept in clean stalls, well bedded, and given a thorough grooming every day.

Fifteen dollars worth of feed per horse, plus some work, will make $50.00 to $60.00 difference in the selling price in any good horses that are to be sold this spring; and while horses are a by-product of the farm, it is worth while having such by-products in fit condition to bring a top price.

THE COW

THERE is virtue in the cow; she is full of goodness; a wholesome odor exhales from her; the whole landscape looks out of her soft eyes; the quality and the aroma of miles of meadow and pasture lands are in her presence and products. I had rather have the care of cattle than be the keeper of the great seal of the nation. Where the cow is there is Arcadia; so far as her influence prevails there are contentment, humility and sweet, homely life.—John Burroughs.

SHEEP RAISING PREFERABLE TO GOAT RAISING

I have about 340 acres, about 50 acres cleared. At present 15 acres is in hay. River flows along one side. Would you think it advisable to try raising Angora goats, so they would help clear the brush and at the same time bring in some profit, or would you advise raising sheep? Would the wool be heavier per sheep in this northern country? I have a good barn where I could store hay and house sheep or goats. Expect to rotate crops from hay to small grain, then back to hay for feed, small grain like oats, rye, wheat and barley. Is there a very good market for Angora wool? How do prices compare with that received for sheep wool?—C. F., Cathro, Mich.

—I would advise you to engage in the sheep business rather than in that of raising Angora goats. In the first place, the young lamb is a great deal hardier and easier to raise than is the Angora kid. The lamb grows much faster and will weigh a great deal more than the kid at marketing time in the fall and will bring about double what the kids will.

The sheep will also shear a heavier fleece of wool than the goat will of mohair. Where one specializes in the production of mohair, gives his goats especially good care and produces a high quality of mohair, it will bring more per pound than will wool, but under ordinary farm conditions the clip of wool from a sheep will bring more than the clip of mohair from a goat.

If you desired only to clear this land and then engage in some other form of livestock production, it would be alright to purchase a sufficient number of goats on some of the markets and take them out to the farm and keep them until the brush was destroyed, but as a business on the farm, to be continued year after year, the raising of sheep is undoubtedly preferable to the raising of goats.—Geo. A. Brown, Prof. of Animal Husbandry, M. A. C.

Practices on de Seat

"Aunty, what do you do when your children practice deceit on you?"

"What you all call dis here dey practices?"

"Deceit; tell you lies, you know."

"In dat case, Ah practices on de seat?"

A Self Centering Bowl in the new De Laval

A Better De Laval For Fewer Pounds of Butter

$6.60 to $14.30 Down the Rest in Easy Monthly Payments

Greater Value. Present-day purchasers of De Laval Cream Separators are getting more value than was ever before possible. In 1913 it took 231 pounds of butter to pay for a popular-sized De Laval. Now it requires only about 188 pounds (average prices for years 1913 and 1923) to pay for the same machine—43 pounds or 18% less butter. In addition, the present-day De Laval is at least 20% better, having 10% more capacity, a bell speed-indicator, self-centering bowl, and many other improvements and refinements.

Self-Centering Bowl. The De Laval Bowl is so designed as to center and balance itself when it attains separating speed, which causes it to run smoothly, without vibration, and adds to the efficiency and life of the machine. It also gives the least possible resistance in being revolved, which together with the automatic oiling system and superior design and construction of the driving mechanism, causes the De Laval Bowl to require the least power (per pound of capacity) to drive.

All-Around Superiority. A combination of the foregoing features, together with superiority of De Laval design, workmanship and materials, enables a De Laval to separate more thoroughly under all conditions of use, deliver a smoother cream capable of making better butter, to separate a richer cream with less loss of butter-fat, and to separate with greater efficiency at lower temperatures.

Remarkable Record. Not only was the De Laval the first continuous centrifugal cream separator ever made, but ever since it has been first in popularity, in numbers in use, in efficiency and length of service. All of the thousands of De Laval Separators entered in the "Oldest Users Contest" held last year, averaged over 20 years of use. Any De Laval is capable of giving equal service.

Pays for Itself. There are many worn-out and inferior cream separators in use today, wasting enough cream to pay for a new De Laval in less than a year. You can buy a De Laval on such easy terms that you can use it while it is paying for itself.

The De Laval Milker.

If you milk ten or more cows, a De Laval Milker will soon pay for itself. Besides saving a great deal of time and drudgery, it produces cleaner milk and by its pleasing, uniform action usually causes cows to give more milk. More than 15,000 users will tell you so.

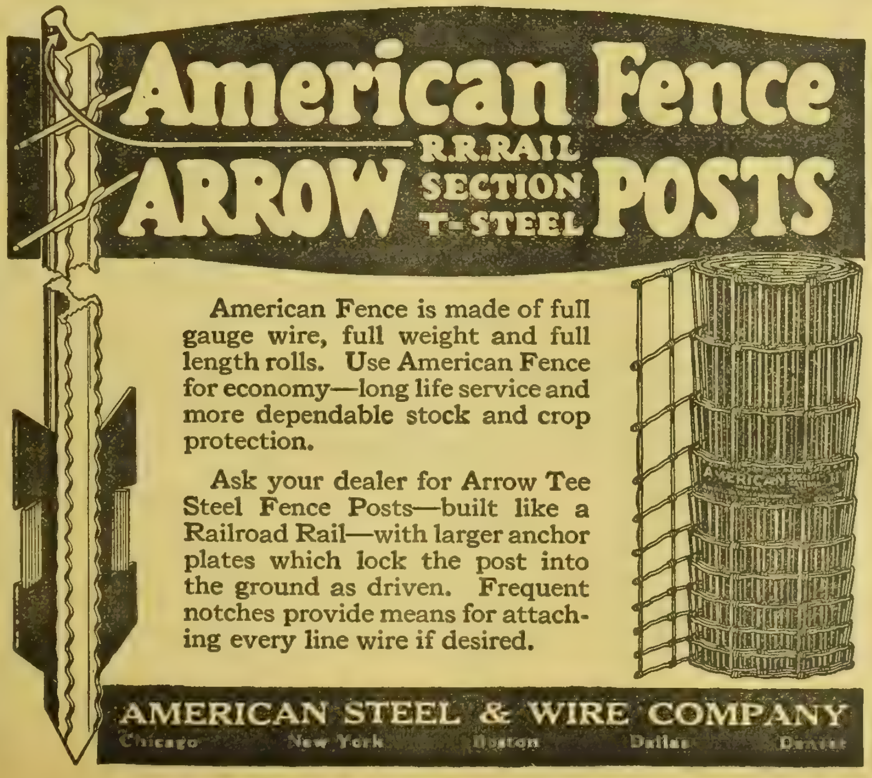
Send coupon for complete information.

Ask Your De Laval Dealer For A Demonstration

Mail this Coupon to For Free Catalog

The De Laval Separator Company
New York, 165 B'way
Chicago, 29 E. Madison St.
Send Separator ☐ Milker ☐ catalog (check which).
Dept. 538

Name ....
Town ....
State ....R. F. D...... No. Cows......


American Fence
ARROW R.R. RAIL SECTION T-STEEL POSTS

American Fence is made of full gauge wire, full weight and full length rolls. Use American Fence for economy—long life service and more dependable stock and crop protection.

Ask your dealer for Arrow Tee Steel Fence Posts—built like a Railroad Rail—with larger anchor plates which lock the post into the ground as driven. Frequent notches provide means for attaching every line wire if desired.

AMERICAN STEEL & WIRE COMPANY
Chicago New York Boston Dallas Denver

(Continued from Page 23)

SWINE

O. I. C.

O. I. C'S: 75 LAST SPRING PIGS, PAIRS not akin. From 3 good strong sires. Also fall pigs. Recorded free. ½ mile west of depot.
OTTO SCHULZE & SONS, Nashville, Mich.

DUROCS

RAISE A TOPMAST SENSATION
LITTER
and raise the best.
We are offering bred sows and gilts. Let us quote you prices on a real boar pig sired by TOPMAST SENSATION. Write us your wants.
LOEB FARMS
Virgil Davis, Superintendent Swine,
Charlevoix, Michigan.

AT THE STATE FAIR WE SHOWED ONE of the largest boars. He won 3rd in his working clothes (no fitting). He is back home and we want you to have a gilt or sow bred to this fine Colonial Boar. Write us.
SCHAFFER BROS., R. 4, Oxford, Michigan.

DISPERSION SALE! MICHIGANA FARM MUST sell all Durocs. We are offering bred sows and gilts, also fall pigs, either sex at bargain prices. Write your wants.
MICHIGANA FARM, Pavilion, Michigan.

HAMPSHIRES

WE GUARANTEE OUR REG. HAMPSHIRES satisfactory. Ask for literature and price.
LUCKHARD'S MODEL FARM, Bach, Michigan.

REG. HAMPSHIRE HOGS FOR SALE Write your wants to
JOHN W. SNYDER, St. Johns, Michigan.

you can double dairy profits

The net profit from your cows can be *doubled* by increasing your total milk production only 10% ! Eminent dairy experts are authority for the correctness of this surprising fact.

10% More Milk—
Doesn't it seem possible?

Let us suppose your profit last month from your cows was $100. If by a little more intensive methods you can get even 10% more milk this month, your net profit would be at least $200 !

Surely such a result is worth trying for. It is the poor milkers in the herd that eat up the profit made by the good producers. Usually they are poor milkers because of some impaired condition of the genital functions—the milk producing organs.

The medicinal properties of Kow-Kare affect just these organs. Its toning, stimulating action is quickly apparent. Sluggish cows have improved appetites and assimilation and better milk flow is sure to follow.

In the treatment or prevention of Barrenness, Abortion, Retained Afterbirth, Scours, Bunches, Milk Fever, Lost Appetite, Kow-Kare has a reputation founded on successful use for over twenty-five years. You, too, can realize greater profits from dairying through the judicious use of Kow-Kare. Try it.

Kow-Kare, large package, $1.25; medium size, 65c—at feed dealers, general stores and druggists. If your dealer is not supplied, we will send postpaid on receipt of remittance.

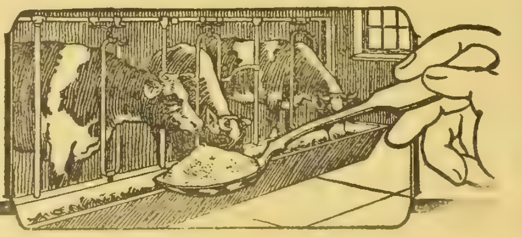
DAIRY ASSOCIATION CO., Inc., Lyndonville, Vt.
Makers of Bag Balm, Grange Garget Remedy, Horse Comfort, American Horse Tonic.

FOR COWS ONLY
KOW-KARE
The Great Cow Medicine
DAIRY ASSOCIATION CO. INC.

How to use KOW-KARE

Our free book, "The Home Cow Doctor," tells how to use Kow-Kare in treating various cow diseases. It also tells of its use as a disease-preventive and stimulant to greater milk-flow.

The usual method is to feed one tablespoonful twice a day one week out of each month. Costs only a cent a day per cow.



A supreme offering of Big Type
Poland Chinas and Aberdeen Angus
WEDNESDAY, FEB. 20, 1924
This is superior to any sale we have held in the past.
40 - HEAD - 40

The sows are bred to a son of Liberator out of a Peter the Great sow. Smooth checkers, and Domino a grandson of Peter Jones. He will sell as an attraction one of the greatest daughters of Ambition ever sold in the state. This state will be full of attractions. Write for catalogue.

E. A. CLARK, Proprietor J. D. HELMAN, Auctioneer

SHEEP

FOR SHROPSHIRE RAMS WRITE OR CALL ON DAN BOOHER, R. 4, Evart, Michigan.

PET STOCK

DOGS

German Shepherd, Airdales, Collies; Old English Shepherd dogs, Puppies, 10c illustrated instructive list. W. R. Watson, Box 27, Macon, Mo.

GOATS

GOATS FOR SALE

Swiss Saanen and Toggenburg milk goats all bred to Elain's Boy 1748, his dam Elain 1031 an 8 qt. milker. Sire Andres Hofer 177 (imported). Due to freshen soon. Prices reasonable. Write for particulars. F. J. HELM, SWISS MILK GOAT DAIRY, Grass Lake, Michigan.

If you have poultry for sale put an ad in the MICHIGAN BUSINESS FARMER You'll get Results!

Dispersal Sale of the Forest Deatsman Herd — of —
Registered Holstein Cattle
Lake Odessa, Mich., Wednesday, Feb. 20, 1924

30 head of exceptionally well bred registered Holstein cattle. 15 head of good cows and two-year-old heifers, nearly all fresh or near springers. 10 well bred yearling heifers and good heifer calves. 5 high class bulls and bull calves. A buyers opportunity to secure very desirable cattle at a dispersal A buyers opportunity to secure very desirable cattle at a dispersal sale where sale where the best ones are sold.

Good A. R. O. cows with A. R. O. butter records up to 28.14 lbs. 20 lb. junior two-year-olds, 23 lb. junior three-year-olds, a two-year-old daughter of a 29 lb. junior three-year-old daughter of a 34 lb. bull. Young bulls and bull calves out of 34 lb. sires and from A. R. O. dams up to 29.75 lbs. A sale where you can buy the good ones. If interested, write for a sale catalog.

FOREST DEATSMAN, Owner, Lake Odessa, Michigan.
W. R. HARPER, Sale Manager, Middleville, Michigan.

WHEN WRITING TO ADVERTISERS PLEASE MENTION THE BUSINESS FARMER

SPOTTED POLAND BREEDERS TO FORM STATE ASSOCIATION

On Monday, February 4th, of Farmers' Week, the Spotted Poland breeders of Michigan are planning to hold a meeting for the purpose of organizing a State Association of Spotted Poland Breeders. This meeting will be held in Room 110 of the Agricultural Building, Michigan Agricultural College, East Lansing, and will begin at 10 o'clock in the forenoon.

All of the swine breeding associations are meeting on Monday and all join together at 3 o'clock in a meeting of the Swine Breeders' Association in Room 402, Agricultural Building.

Spotted Poland breeders throughout Michigan should make it their duty to attend this meeting, and also, to help in getting all the breeders in their county or immediate community interested in attending, and help boost the State Association.

CULL BEANS GOOD FEED FOR DAIRY COWS

I wish to know if there is any danger in feeding cooked cull beans to cows giving milk or those soon to freshen.—W. C., Morley, Mich.

—Cull beans, apparently, are good feed for dairy cows, if not fed in too large amounts. At the present time we have very little information relative to the amount of beans which can be fed successfully. Cull beans are a good protein feed and should be fed as such in the dairy cow's ration. I would recommend about three pounds per day of raw beans or their cooked equivalent, to milk cows. I would not advise feeding beans to cows about to freshen. Cull beans can be fed either ground or cooked. In feeding raw cull beans I would recommend that they be fed with a mixture of other grains so that the beans do not make over 25 per cent of the ration and that the other grains be palatable to the cow, as one of the difficulties in feeding beans is that the cows do not care very much for them. Cooked beans differ from raw beans in that the protein is not quite as available in the cooked form.—J. E. Burnett, Associate Professor of Dairy Husbandry, Mich. Agricultural College.

Veterinary Department

RING BONE

Can a ring bone on the hind foot of a five-year-old mare be killed? What is the process of treatment? The growth may be plainly seen but the horse is lame only after a long drive.—Reader, North Branch, Mich.

—A great many ring bones can be cured if properly treated. The swelling can never be removed but the lameness can be gotten rid of in some cases. Where there is no lameness it is best to let them alone. Where lameness is present point firing no doubt is about the best treatment that can be applied. This should not be attempted, however, by no one except a qualified veterinarian. If the lameness does not disappear in four to six months time the animal can be fired again. Some cases take from one to three years before the lameness entirely disappears then there are cases that are incurable. Those cases where the bony swelling comes in such a way that it mechanically interfers in the working of the joints of the foot. Let an experienced veterinarian make an examination of your mare and he will be able to give you the desired information relative to a prognosis.—John P. Hutton, Assoc. Prof. of Surg. and Med., M. A. C.

"A man who believes in the old saying, "See a pin and pick it up, and all that day you'll have good luck," saw a pin in front of the post office the other day. Bending down to get it, his hat tumbled off and rolled into the gutter, his eyeglasses fell and broke on the pavement, his suspenders gave way behind, he burst the buttonhole on the back of his shirt collar, and he all but lost his new front teeth. He got the pin.

FREE BOOK ABOUT CANCER

The Indianapolis Cancer Hospital, Indianapolis, Indiana, has published a booklet which gives interesting facts about the cause of Cancer, also tells what to do for pain, bleeding, odor, etc. A valuable guide in the management of any case. Write for it today, mentioning this paper, (Adv.

RHEUMATISM

A Remarkable Home Treatment Given by One Who Had It.

In the year of 1893 I was attacked by Muscular and Sub-acute Rheumatism. I suffered as only those who are thus afflicted know, for over three years. I tried remedy after remedy, but such relief as I obtained was only temporary. Finally, I found a treatment that cured me completely, and such a pitiful condition has never returned. I have given it to a number who were terribly afflicted, even bedridden, some of them seventy to eighty years old, and the results were the same as in my own case.

I want every sufferer from any form of muscular and sub-acute (swelling at the joints) rheumatsim, to try the great value of my improved "Home Treatment" for its remarkable healing power. Do not send a cent; simply mail your name and ad- and I will send it free to try. After you have used it and it has proven itself to be that long-looked-for means of getting rid of such forms of rheumatism, you may send the price of it, one dollar, but understand, I do not want your money unless you are perfectly satisfied to send it. Isn't that fair? Why suffer any longer when relief is thus offered you free? Don't delay. Write today.

MARK H. JACKSON
No. 265-K Durston Bldg.
SYRACUSE, N. Y.

Mr. Jackson is responsible. Above statement true.

POULTRY BREEDER'S DIRECTORY

Advertisements inserted under this heading at 30c per agate line, per issue. Commercial Baby Chick advertisements 45c per agate line. Write out what you have to offer and send it in. We will put it in type, send proof and quote rates by return mail. Address The Michigan Business Farmer, Advertising Department, Mt. Clemens, Michigan.

PULLETS, HENS AND COCKERELS
S. C. White Leghorns and S. C. and R. C. Black Minorcas. Must make room before cold weather. About ready to lay.
LAPHAM FARMS, Pinckney, Mich.

High Grade, Utility Cockerels For Sale—April hatched—White Wyandottes, Barred Rocks and White Leghorns. C. W. Heimbach, Big Rapids, R. 5, Michigan.

FOR SALE—3 JERSEY BLACK GIANT Roosters $5.00 each.
MRS. BESSIE JACOBS, Linden, Mich., R. 2.

LEGHORNS

LEGHORNS
S. C. Buff Leghorn Hens, Pullets and Cockerels. Hens and pullets $2.50 each; cockerels $3.00 to $5.00 each. Show birds a matter of correspondence. LAPHAM FARMS, Pinckney, Mich.

TANCRED, HOLLYWOOD AND WYCKOFF Males head my carefully selected breeding pens. Choice eggs $3.00 and $2.00 per 15. My stock is of the very best. Write me.
F. ARTHUR MARTIN, Indian River, Michigan.

RHODE ISLAND REDS

RHODE ISLAND REDS TOMPKINS STRAIN to make room for young stock. I will sell after November 1, 1923, 50 2 year old hens at $2.00 each; 25 1 years old hens at $3.00 each; cockerels at $2.50 and up. All these cockerels are from my best 3 year old hens that layed 205 eggs or better in their pullet year. Quality breeder of Rhode Island Reds.
WM. H. FROHM, New Baltimore, Mich., R. 1.

S. C. R. I. REDS, MANHOOD STRAIN. Fine dark birds. Price $3 apiece or two for $5.
ALFRED DEICKMANN, Pigeon, Mich., R. 3.

S. C. R. I. RED COCKERELS, PURE BRED Dark and even color. $3 and $5 each.
LOUIS MORRIS, Mt. Morris, Mich., R. 1.

ORPINGTONS

BUFF ORPINGTON COCKERELS FOR SALE. Cooks Strain.
A. J. BREWBAKER, Elsie, Michigan.

WYANDOTTES

White Wyandotte Cockerels, $3 each
Wayne Chipman, R. R. 2, Washington, Mich.

BARRED ROCKS

BARRED ROCK COCKERELS AND PULLETS from America's best prize-winning laying strains. Winners of 18 first prizes at Detroit and M. A. C. the last two seasons. Low prices.
TOLLES BROS., R. 10, St. Johns, Mich.

PLYMOUTH ROCKS

COCKERELS, THOMPSON STRAIN BARRED Rocks, dark matings, April Hatched, weight 7 lbs. from good layers. $3.50, 2 or more $3.00 each.
MRS. FRED KLOMP, St. Charles, Michigan.

BARRED ROCK COCKERELS BRED FROM Holtermans Pedigreed Aristocrats direct. Both Light and Dark. Price $4.00, two for $7.00.
N. AYERS & SON, Silverwood, Michigan.

BRAHMAS

A FEW FINE LIGHT BRAHMA COCKERELS for sale $5.00 each, while they last.
DR. E. R. FENN, V. S., Pottersville, Mich.

TURKEYS

WHITE HOLLAND TURKEYS. GET STARTED right and have success. We have been shipping from this one farm for 38 years and have developed a large hardy strain that stands the test. Address stamped envelope for quick reply.
ALDEN WHITCOMB, Byron Center, Michigan.

GIANT MAMMOTH BRONZE TURKEYS. Very large birds. Their sire weighs 40 lbs. Toms, $10.00-$12.00 $15.00; Hens, $7.00-$9.00.
MRS. WILL DILLMAN, Cassopolis, Mich., R. 5.

Michigan's Best Giant Bronze Turkeys. America's best strains vigorous breeders, both utility and fancy. Extra good values in young toms.
N. Evalyn Ramsdell, Ionia, Michigan.

PURE BRED GIANT STRAIN BOURBON Red Turkeys.
MRS. RENA MEEK, Belmont, Michigan.

BOURBON RED TOMS. SPLENDID PUREbreds $10. Order direct from this ad.
MAURICE A. RECTOR, Rockford, Mich., R. 3.

LARGE VIGOROUS BOURBON RED STOCK Turkeys. Axtell Strain.
MARY BEACOM, R4, Marlette, Michigan.

Pure Bred Mammoth Bronze Toms One 2 Year old hardy beautiful well marked birds. Write for prices. Mrs. F. Griffin, Riverdale, Michigan.

GIANT BRONZE TURKEYS FROM PRIZE Winning birds. Large, healthy, unrelated stock furnished. Mrs. La Verne Brownell, Belmont, Mich.

MAMMOTH BRONZE TURKEYS, LARGE beautiful birds. Write for prices.
MRS. BEN JOHNSTON, Onaway, Mich., R. 1.

Mammoth Bronze Turkeys. Goldbank Strain. Unrelated stock. Vigorous healthy birds. Write for prices. Mrs. Perry Stebbins, Saranac, Mich.

HIGHEST PRICES PAID FOR LIVE AND Dressed Poultry, Veal, Rabbits, etc. A square deal always. Write to,
C. E. McNEILL & CO.
325 W. South Water St., Chicago

HAVE YOU POULTRY FOR SALE?
AN AD IN M. B. F. WILL SELL IT.

SOYBEANS FOR HOG FEED

Are soybeans of any value for hog feed? If so, explain in which way they should be fed for best results. —J. A. Y., Burr Oak, Mich.

—Soy beans are an excellent protein supplement for feeding hogs. In other words, they play the same part in the ration that would digester tankage, skimmed milk, or oil meal. Experiments have shown, however, that soybeans do not contain the mineral matter such as is found in the skimmed milk or tankage and for satisfactory results, hogs fed soy beans as a protein supplement should have access to mineral matter continually. The following mineral mixture is satisfactory: Pulverized limestone, 10-lbs.; 16 per cent acid phosphate, 10-lbs.; Salt, 1-lb.

The soy beans may be ground and fed in a self-feeder, or they may be ground and mixed up with the ration where the same is being fed in a slop.

Where the soy beans are ground and mixed with a grain ration consisting largely of corn, in the neighborhood of one-sixth to one-fifth of the ration should consist of the ground soybeans.—Geo. A. Brown, Prof. of Animal Husbandry, M. A. C

MICHIGAN BEAN GROWERS PLAN TO MARKET CROP

(Continued from Page 3)

thinks this means a bushel and being unfamiliar with the average shrinkage resulting from the picking process believes the price is a high one. The fact that the average bean grower of this state has received less than $2 per bushel for his beans, machine measure, this year, indicates the measure of misunderstanding liable to occur in the minds of the uninformed public.

Advertising Advisable

"A wonderful field almost entirely unworked is the advertising of the pea bean as a food. We believe that the consumption of beans could be increased 25 per cent at a cost entirely insignificant by efficient advertising. Foreign inferior beans should not be permitted to compete on even terms. There is a tremendous amount of work in the interests of this crop, the promotion of which would be the best investment the Michigan bean grower makes.

"There is no reason why a high quality of white pea beans should at any time be a glut on the market. The means are all at our hands to prevent it. Beans of this character should never sell at a price which will not repay us for our investment in them and a profit. Our present tariff is high enough to make this possible without encouraging importation. We believe beans are the only agricultural product of which this could be said of Michigan, working independently. Vast fields open when we consider co-operation along this line among the states. A certain farmer organization has a committee of seven at work now in Washington on a proposition of this kind.

"We will make no suggestions, but hope and expect that much light will be thrown on these subjects of orderly marketing, adequate price, advertising and protecting the reputation of our incomparable or at least unexcelled, Michigan pea bean.

"In common with many others, we have felt that a meeting of this kind should be held. Mr. Churchill, offering to come on this date, brought things to a focus. It is late to be effective to any degree for this year's crop, is certainly somewhat belated, but a start must be made some time, somewhere. Is this the time, is this the place? We expect this conference to be friendly and effective and constructive.

"We believe every one here is honest in his desire to serve and is measurable unselfish. We ask your co-operation in making this meeting a pleasing and profitable one from start to finish. Many angles are to be presented and we ask courtesy and consideration for all. If, after a careful consideration, the conclusion is reached that it is possible in fairness to all and in the interests of economic efficiency to take steps which promise to put the Michigan pea bean on a more satisfactory and uniformly profitable basis to the grower, we hope to see the preliminary steps taken before the final adjournment of this session."

F.S.R

Fertilizer must be "cured"

Great bins of Royster Fertilizer "cure" or "age" for months so that your results from its use will swell the earnings from your land.

PERHAPS you didn't know that fertilizer should be "cured." Such "details" as this represent the difference between Royster's Fertilizer and less carefully prepared foods—and the difference between profitable crops and crops that are not so profitable.

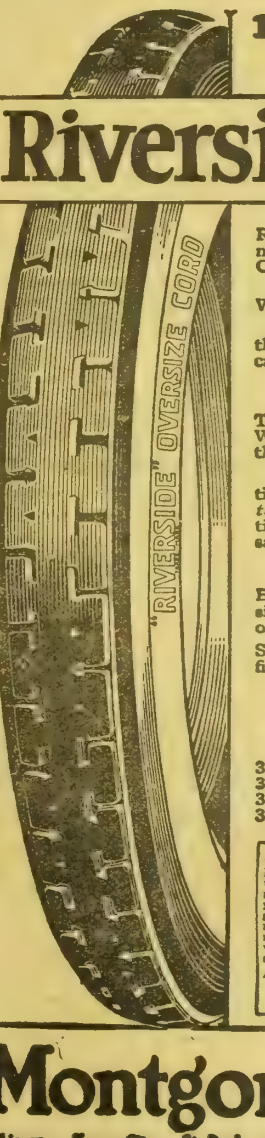
To keep vast quantities of fertilizer for months represents an enormous supply and a tremendous capital. Therefore, only a large company like Royster's can offer this more effective "cured" fertilizer.

Rid yourself of the idea that all fertilizer is alike. This is no more true than that all land is alike. The truth of this can be proven—not alone by the enthusiastic praise of successful farmers who have used Royster's, but by your own experience.

Grow better and larger crops by using fertilizer that has been "cured"—that is free from lumps—that has been proven chemically correct—and that has established a record for good works over a long period of years. Look for the name "ROYSTER" on the bags.

F. S. ROYSTER GUANO CO.
Toledo, Ohio

ROYSTER
Field Tested Fertilizers



10,000 miles guaranteed and yet you save 1/3

Riverside OVERSIZE CORD Tires

Riverside Oversize Cord Tires are guaranteed for 10,000 miles and in actual performance give up to 18,000 miles. Can any other tire do more?

So why not save one-third and use Riverside Cords? What more will any other tire do? Then why pay more?

And this 10,000 miles service is backed by a guarantee that has stood for fifty-one years. Does any other tire carry a better guarantee?

Quality is built into Riverside Cords

This guaranteed mileage is built into Ward's Riverside Cords. High treads, thicker and stronger, of tough, live rubber.

This exceptional quality of Ward's tires alone has made us the *largest retailers of tires in the country.* The tires themselves have convinced thousands that Riverside Cords are best.

"I have used Riverside Tires for the past four years. I have never had to send a tire back for adjustment.
I have tried several different highly advertised makes alongside of Riversides and have not found a superior."
Walter M. Schworm, Nessen City, Mich.

You Don't Risk One Cent

Before you buy any tires send for Riversides. Inspect them. Compare them with tires selling for $5.00 or $15.00 more.

Send them back if you do not find them the equal of any first-quality oversize cord made. We will refund your money.

These prices buy 10,000 miles of service—and more.

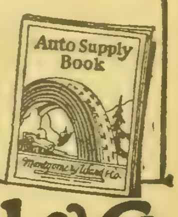
CATALOGUE No. 464M00—Be sure to give size.

SIZE	PRICE	POSTAGE	SIZE	PRICE	POSTAGE
30 x 3½	$ 9.75	28c	32 x 4½	$20.95	45c
32 x 4	16.95	42c	34 x 4½	21.95	48c
33 x 4	17.45	43c	33 x 5	28.75	58c
34 x 4	18.25	43c	35 x 5	29.95	61c

"I have used two Riverside Cords on the rear wheels of my car for two years. They have gone over 12,000 miles now and have never been off the wheels — and they still look fine."
August Wm. Schultz
B—56—R 2
Van Horn, Iowa

Wire your order. Orders received by telegraph will be shipped the same day C. O. D.

Free Write today to our house nearest you for free Auto Supply Book. Address Dept— 11-T



Established 1872
Montgomery Ward & Co.
Chicago Kansas City St. Paul Portland, Ore. Oakland, Cal. Ft. Worth New York Atlanta, Ga.

Buy Both With the Savings Get More Eggs

The DETROIT-ALLIANCE is a Proven BIG HATCHER

THE Detroit is not an untried incubator. For years it has been turning out bigger hatches of fine husky chicks for poultry raisers all over the country. That's why I can so unconditionally guarantee it to out-hatch and outlast any other incubator made, regardless of price.

Shipped complete ready to use except putting on legs.

All the features of machines costing twice as much you will find in the Detroit-Alliance. Double walls with dead air spaces between for keeping out the cold and holding in the heat, big nursery, special thermometer holder that keeps thermometer in plain view from outside yet up where chicks can't break it while hatching, automatic heat regulator, copper leak-proof hot water tank with rounded elbows for even distribution of heat in hatching chamber—in short everything that insures large hatches of strong, vigorous, fast growing chicks, is built into the wonder Detroit-Alliance Hatcher.

Freight prepaid east of the Rockies and allowed to points beyond.

Special Combination Offer

Carries 140 chicks through the critical five weeks following hatching. Double walls, hot water heat, durably constructed yet light and easy to clean. A triumph of mechanical ingenuity.

By buying both machines at one time you get not only the best, most complete profit hatching outfit on the market but you get it at tremendous savings—so big, in fact that if you tried to get the same value anywhere else just the incubator alone without a brooder you'd have to pay more than what I am asking for both machines. *Write now—get my catalogue and sensational combination offer.* Study Detroit-Alliance features and compare, both in quality and price, with any other incubator or brooder ever built. *Write today!*

WILLIAM CAMPBELL, President

Detroit-Alliance Incubator Company, Dept. 10 Alliance, Ohio

HIGHEST QUALITY CERTIFIED BABY CHICKS

FROM

VAN APPLEDORN BROS. BABY CHICKS SINCE 1906 MICHIGAN'S OLD RELIABLE HATCHERY HOLLAND, MICHIGAN

Michigan's Old Reliable Hatchery, the best equipped and most modern Hatchery in the State.

Pure Bred Tom Barron English and American White Leghorns, Anconas, Barred Plymouth Rocks and Rhode Island Reds. Strong, Well-hatched Chicks from tested Hoganized Free-range stock that make wonderful winter layers.

Chicks sent by Insured Parcel Post prepaid to your door. 100% live delivery guaranteed. Sixteen years of experience in producing and shipping Chicks giving absolute satisfaction to thousands. Write for valuable illustrated free catalog and price list. Get lowest price on best quality Chicks before placing your order.

HOLLAND HATCHERY & POULTRY FARM, R. 7, Holland, Mich.

Great Northern Hatchery

Pure Bred Selected Flocks

100 Per Cent Live Delivery

Strong sturdy northern grown Chicks. Selected, pure bred stock. Healthy flocks on free range insure strength in every Chick. Order from this Ad.

Varieties	Prices on 50	100	300	500	1000
Leghorns (S. C. White and Brown)	$7.00	$13.00	$38.00	$62.00	$120.00
Barred Rocks	8.00	15.00	43.00	72.00	140.00
White Rocks	9.50	18.00	53.00	85.00	165.00
Mixed Broiler Chicks	$10 per 100 straight				

Hatched under best conditions in Newton incubators. Every Chick carefully inspected. 100% live delivery guaranteed. Reference State Commercial Savings Bank, this city. Write for prices on special matings. **GREAT NORTHERN HATCHERY, Box 50, Zeeland, Michigan.**

HUSKY CHICKS

PURE BRED CHICKS PAY BEST. My **heavy laying,** personally inspected, Hogan tested flocks, **most profitable** leading varieties, produce chicks that **pay you big profit.** Only one grade **the best. Low prices.** 97% live delivery guaranteed, Postpaid. **Catalog Free.** Write today.
SIEBS HATCHERY Box 519 Lincoln, Ill. (Member I.B.C.A.)

QUALITY Chicks & Eggs

45,000 PURE BRED BREEDERS. 15 varieties. **Best laying strains.** Incubate 25,000 eggs daily. Catalog Free. **Prewar prices.** Free live delivery.
Missouri Poultry Farms, Columbia, Mo.

64 BREEDS Most Profitable pure-bred Northern raised chickens, ducks, geese, turkeys. Fowls, eggs, incubators at reduced prices. 31st year. Largest plant. Large valuable poulty book and catalog free.
R.F.NEUBERT Co., Bx 801, Mankato, Minn

WEBER'S BEST laying; **BEST** paying chickens, ducks, geese & turkeys. Fine pure-bred quality. Fowls, Eggs, Incubators at new **low** prices. 42 years poultry experience, and my 100 page Catalog and Breeders' Guide **Free.**
W.A.Weber, Box 68 Mankato, Minn.

S. C. White Leghorns

BRED FOR EGG PRODUCTION SINCE 1910

WOLVERINE BABY CHICKS

You can have chicks from these high grade egg producing Leghorns, and they have had 13 years of careful selecting and breeding direct back of them and they will be producing at 5 to 5 and one half months of age.

You benefit by our many years experience in hatching and shipping chicks for they mature in the shortest possible time. 100% safe arrival guaranteed. Let us mail you our 32 page catalogue with price list.

WOLVERINE HATCHERY, Zeeland, Mich., R2.

RELIABLE CHICKS

S. C. English White Leghorns and Barred Rocks. Every chick from carefully mated, culled, pure-bred flocks owned and developed by us for 15 years. Leghorn males from trapnested 280 egg hens. Free catalog. Write for prices.

Reliable Hatchery and Farms,
Route 3 Holland, Mich

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Free Proof To You

J. C. HUTZELL
DRUGGIST

All I want is your name and address so I can send you a free trial treatment. I want you just to **try** this treatment—that's all—**just try it.** That's my only argument.

I've been in the Retail Drug Business for 20 years. I served four years as a member of the Indiana State Board of Pharmacy and five years as President of the Retail Druggists' Association. Nearly everyone in Fort Wayne knows me and knows about my successful treatment. Over **twenty thousand** Men, Women and Children outside of Fort Wayne, have, according to their own statements, been cured by this treatment since I first made this offer public.

If you have **Eczema, Itch, Salt Rheum, Tetter**—never mind how bad—my treatment has cured the worst cases I ever saw—**give me a chance to prove my claim.**

Send me your name and address on the coupon below and get the trial treatment I want to send you FREE. The wonders accomplished in your own case will be **proof.**

CUT AND MAIL TODAY

J. C. HUTZELL, Druggist, No. 4831 West Main St., Fort Wayne, Ind.

Please send without cost or obligation to me your Free Proof Treatment.

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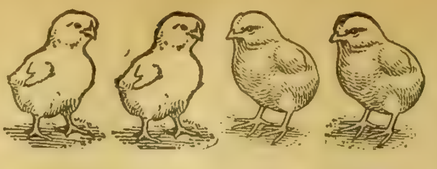


BROODING PRACTICES

THOROUGH preparations for the reception of the chicks should be made several days in advance of their arrival.

1. The colony house or building used should be tightly constructed and easily ventilated. Adjustable openings in both the front and rear of the colony house, directly below the roof, should be provided especially for summer ventilation. This permits good air circulation and releases the warm air which tends to accumulate near the roof. The growing chicks have all the open air benefits obtained while roosting in trees with the additional advantage of shelter, during inclement weather.

2. The floor of the colony house should be dry, warm and free from draughts. A covering to a depth of two inches of white sand provides ideal conditions and in addition supplies grit material.

3. The brooder stove should be operated two or three days previous to the arrival of the chicks. The automatic heat regulator should commence to check the rampers when the thermometers register 90 degrees F. directly below the outer edge of the canopy or deflector. This will provide sufficient heat and allow the chicks to select the temperature required for their comfort.

4. A wire cloth screen should be placed around the Brooder at a distance of 15 inches from the outer margin of the heat deflector. This confines the chicks, preventing them from straying too far from the source of heat before they are educated to return when uncomfortable. The screen may be removed after the third day or gradually widened out giving more floor space.

5. Avoid overcrowding—this applies both to brooder and house capacity. Many chicks are killed or ruined when the capacity of either is over-rated. A colony house 10x 10 will accomodate 300 to 500 chicks quite satisfactorily. Larger units may produce excellent results but require more experience in this special phase of work.

6. Chicks have a tendency to withdraw from the brooder as they get older and frequently crowd towards certain corners. Huddling may result due to a sudden drop of temperature, should the fire get low. If this occurs a high mortality usually results and a weakened condition is apparent in those that do survive. Keep the corners of the house screened off.

7. The chicks should be coaxed outside during the first and second week. Leg weakness can usually be avoided if the chicks cultivate the habit of running outside almost continuously. They appear thriftier and do not develop the hot-house appearance of closely confined chicks.

8. Low flat roosts should be placed in the colony house after the second week thereby educating the chicks to roost early. Once the chicks have taken to roosting the danger point is past.

9. Reduce the temperature as the chicks get older but don't be too hasty in taking away the heat, because sudden showers may occur in which case a little heat will provide greater comfort and may save the lives of many chicks should they get chilled.

10. Segregate the broilers and cull pullets and draw the colony house to a well shaded range, where plenty of green food is available. Economic gains can then be made by hopper feeding and labor is reduced to a minimum.

KEEP SHELL BEFORE BREEDERS

MANY people assume that if they have supplied the hens with grit that they can get along without oyster-shell. They fall into the error of thinking that all the shell is for is to act as a form of grit and that it is not necessary where grit itself is provided. As a matter of fact, oyster-shell is not intended at all for the primary purpose of aiding in the grinding of the grain or other elements taken into

BOWERS Colony Brooder

Burns any fuel—costs less

This brooder raises more and better chicks at lowest cost. Stove is sturdy, safe, air-tight, self-regulating—best in world to hold fire. Burns soft coal—cheapest brooder fuel—perfectly. Also hard coal, wood, etc. Automatic regulator maintains uniform heat night and day. Canopy spreads heat evenly over chicks; gives pure air, ample room. 500 and 1,000 chick sizes. Guaranteed. Lowest prices. Express prepaid E. of Rockies. **FREE—$3.00** stove pipe outfit sent free with brooder if you order NOW.

F. M. BOWERS & CO.
1416 W. Wash. St.
Indianapolis, Ind.

140 Egg Incubator $13.25
30 Days Trial

Both Machines Made of California Redwood

Freight Paid east of the Rockies, Hot water, copper tanks—double walls—dead air space—double glass doors—a real bargain at $13.25. Shipped complete, set up ready to use.

140 Egg Incubator and Brooder	**$17.75**
180 Egg Incubator Alone	**15.75**
180 Egg Incubator and Brooder	**22.00**
250 Egg Incubator Alone	**22.75**
250 Egg Incubator and Brooder	**31.00**

Made of California Redwood. Positively the best value on the market. Order direct from this ad. 30 days trial—money back if not pleased. If not ready to order now, don't buy until you get our 1924 catalog which shows larger sizes up to 1000 eggs. (3)

WISCONSIN INCUBATOR CO. Dept. 140 Racine, Wis.

DAY OLD CHICKS

- S. C. Barred Rocks
- S. C. White Rocks
- S. C. Rh. I. Reds
- White Wyandottes
- Orpingtons
- S. C. Br. & Buff Leghorns
- S. C. Eng. White Leghorns
- S. C. Anconas
- S. C. Minorcas

Strong, sturdy, heavy laying strains from large, vigorous yearling hens raised on our farms, and culled by expert poultrymen, to our high quality Certified Utility Flocks, Extra Selected Flocks and Blue Ribbon Pens.

Babion's Fruit & Poultry Farms
R. F. D. 7, Flint, Mich.

—Inspected and Approved

Baby Chicks

From Best Egg Laying Strains in the World

Tancred, pedigree-sired and Tom Barron, S. C. White Leghorns, S. C. & R. C. R. I. Reds, Parks' Barred Plymouth Rocks.

LAKEVIEW

Our flocks are all on free range, closely culled, inspected and approved by Michigan Baby Chick Association. Every bird is healthy, has size, type and color.

Hatched in World's Best Incubator

Our chicks are strong, sturdy and healthy. They live and grow because they are hatched in the best incubator made. 100% live delivery to your door. Illustrated catalog sent FREE.

LAKEVIEW POULTRY FARM, R 8, Box 6, Holland, Mich.

For Sick Chickens

GERMOZONE

Don't let **ROUP, COLDS, CANKER, SOREHEAD, BOWEL TROUBLE,** etc., take your profits. Easy to cure or prevent. "The Lee Way" Book, 64 pages, by GEO. H LEE, tells about poultry ailments, how to detect, what to do, etc. Germozone (75c and $1.50 sizes) and this **FREE** book at drug or seed stores, or postpaid from

GOES TO THE SPOT GEO. H. LEE CO. Omaha, Nebr.

Early Maturing Baby Chicks

These chicks are from flocks headed by cockerels of high producing blood lines. Culled by experts. Each flock personally supervised. Pure bred. $13.00 per 100 and up. Special: We have a limited number of superior grade chicks from special matings. Write for description and prices. 100% live delivery. Ref. Milan State Savings Bank.

MILAN HATCHERY, Box 5, Milan, Michigan.

CHICKS: HOGAN TESTED GUARANTEED

Our Chicks are from flocks on free range. They will live and grow and make a profit. ENGLISH WHITE LEGHORNS and BROWN LEGHORNS. Heavy laying Extra Good BARRED ROCKS. Postpaid to your door and full live delivery guaranteed. Our flocks are carefully supervised and Hogan tested. Bank Reference furnished. Write for prices and descriptive matter.

HILLVIEW HATCHERY, C. Boven, Prop.
Box H. R. R. 12, Holland, Mich.

Chicks With Pep

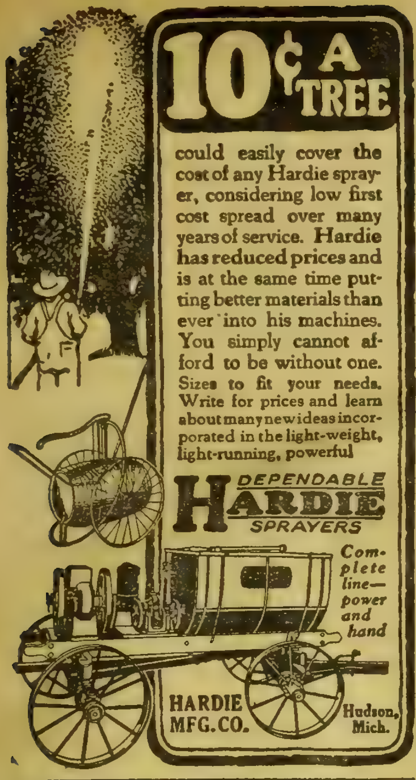
Try our lively and vigorous chicks from bred-to-lay and exhibition hens. They will make you money for they have the quality and egg laying habit bred into them. A trial will convince you. All leading varieties. Safe delivery. Prepaid. Prices right. Bank reference. Big illustrated catalog free.

Holgate Chick Hatchery, Dept. B, Holgate, Ohio.

ELGIN CHICKS

Barron Strain, Selected English White Leghorn Chicks, Produced under my personal care. They are full of Pep as customers report and have re-ordered. They are carefully packed for shipping. 100% Live Delivery Guaranteed. Write at once for catalog and Price list.

ELGIN HATCHERY, Box 317-A, Zeeland, Mich.



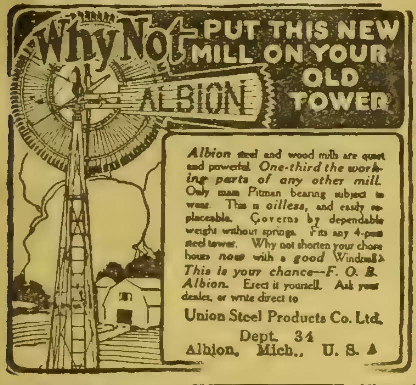
10¢ A TREE

could easily cover the cost of any Hardie sprayer, considering low first cost spread over many years of service. Hardie has reduced prices and is at the same time putting better materials than ever into his machines. You simply cannot afford to be without one. Sizes to fit your needs. Write for prices and learn about many new ideas incorporated in the light-weight, light-running, powerful

DEPENDABLE HARDIE SPRAYERS

Complete line—power and hand

HARDIE MFG. CO. Hudson, Mich.



Why Not PUT THIS NEW MILL ON YOUR OLD TOWER

ALBION

Albion steel and wood mills are quiet and powerful. *One-third the working parts of any other mill.* Only main Pitman bearing subject to wear. This is *oilless*, and easily replaceable. Governs by dependable weight without springs. Fits any 4-post steel tower. Why not shorten your chore hours *now* with a *good* Windmill? *This is your chance—F. O. B. Albion.* Erect it yourself. Ask your dealer, or write direct to

Union Steel Products Co. Ltd.
Dept. 34
Albion, Mich., U. S. A.

PURE BRED CHICKS

Tom Barron Imported and Hollywood strains S. C. White Leghorns, Sheppard's Famous S. C. Mottled Anconas and Park's Bred to Lay Barred Rocks. All Free range flocks, **carefully culled and certified by experts** and bred many years **for high egg production.** Pedigreed males from **260 to 280** egg strains and from hens that produced **leading** pen in Michigan's International Laying contest, head our flocks. Eggs from these **famous strains** hatched with scrupulous care in our Modern Mammoth Incubators produce **strong, husky, peppy chicks** that are easy to raise and become **marvelous layers.** Chicks are shipped postpaid. 100% live delivery guaranteed. Write for **our big free illustrated catalog.**

Silver Ward Hatchery, Box 30 Zeeland, Mich

Pure Bred Chicks February and March Prices.

Broiler Chix	12c	W. Wyandottes	18c
W. or B. Leghorns	14c	White Rocks	18c
B. Rocks or Reds	17c	Buff Orpingtons	18c
Sheppards Anconas	16c	Black Minorcas	16c

Extra selected standard bred chicks $4.00 per 100 more. Add 35c if less than 100 ordered. Good bank reference. Circular free.
Lawrence Hatchery, BF R. 7, Grand Rapids, Mich.

TESTED BABY CHICKS
February, March prices. Heavy broiler chicks 12c. Barred Rocks or Reds 17c, Anconas Black Minorcas 16½c, White or Brown Leghorns 15c, White Rocks, White Wyandottes, Buff Orpingtons 17½c. Extra selected chicks, built directly from contest winners. 4c per chick more. Add 30c if less than 100 wanted. Hatching eggs. Catalog. Good reference. Beckmann Hatchery, TMBF. 26 Lyon St., Grand Rapids, Mich.

BABY CHICKS—REMARKABLE FOR SIZE and strength. Reasonable prices. Leghorns, Anconas, Rocks. Reds, Wyandottes, Orpingtons, Minorcas, Spanish, Brahmas. **TYRONE POULTRY FARM, Fenton, Michigan.**

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Ads Under this Head 10c per Word, per Issue

MISCELLANEOUS

EARN $110 TO $250 MONTHLY, EXPENSES paid on Railway Traffic Inspector. Position guaranteed after completion of 3 months' home study course or money refunded. Excellent opportunities. Write for Free Booklet G-165 STAND. BUSINESS TRAINING INST., Buffalo, N. Y.

WE PAY $200 MONTHLY SALARY, FURNISH car and expenses to introduce our guaranteed poultry and stock powders. BIGLER COMPANY, X682, Springfield, Illinois.

AGENTS SELL WOLVERINE LAUNDRY Soap. Wonderful repeater and good profit maker. Free auto to hustlers. WOLVERINE SOAP CO., Dept. B32, Grand Rapids, Mich.

FREE TO INTRODUCE OUR PEDIGREED Strawberries we will send 25 fine plants free. PIEDMONT NURSERY CO., Piedmont, Mo.

FOR SALE MOLINE TRACTOR AND PLOWS nearly new. Also imported Percheron Stallion weight one ton. Write for particulars to S. A. LETSON, Lake, Michigan.

PRICES WANTED AT ONCE ON A FEW cars strictly first class alfalfa hay. R. D. BAILEY, County Agricultural Agent, Grayling, Mich.

WE ARE IN POSITION TO SUPPLY YOU at all times with good second-hand egg crates, including fillers and covers, complete for shipping at the following rates: Carload lots F. O. B. Detroit, 14c each; less than carload lots, 16c each. WM. SPITZ & SONS, 2645 Chene St., Detroit, Michigan.

the crop, although it does perform some service along that line.

It's chief function is to furnish lime, which is necessary in the formation of shell for the eggs which the hens are expected to lay. Lime is in more available form for this purpose in oyster-shell than in any other form in which it can be fed. Some people attempt to supply it through lime added to the drinking water, but this has not proved satisfactory. Water dissolves but a very small amount of lime.

Where a fine egg is desired either for market or hatching purposes, oyster-shell in sufficient quantities must be before the hens all the time. Hens that have plenty of oyster-shell are going to lay better eggs, and more uniform eggs than those that are denied it. Rough shells on eggs are sometimes a hereditary characteristic in certain hens, but more often are due to a deficiency of lime in the ration than to anything else.

We have demonstrated in our own experience that oyster-shell plays a very important part in the ration for both layers and breeders. The hens eat greedily of it, if deprived of it for a time, and one must be alert to keep the shell hopper full at all times. If the shell runs out for a while, the egg yield is certain to reflect this fact, unless the hens have access to lime in some other form.

OH, MONEY! MONEY!

(Continued from page 8.)

none of them seemed to have any really solid foundation. Interviews with the great law firm having the handling of Mr. Fulton's affairs were printed but even here little could be learned save the mere fact of the letter of instructions, upon which they had acted according to directions, and the other fact that there still remained one more packet—understood to be the last will and testament—to be opened in two years' time if Mr. Fulton remained unheard from. The lawyers were bland and courteous, but they really had nothing to say, they declared, beyond the already published facts.

In Hillerton the Blaisdells accepted this noteriety with characteristic variation. Miss Flora, after cordially welcoming one "nice young man," and telling him all about how strange and wonderful it was, and how frightened she felt, was so shocked and distressed to find all that she had said (and a great deal that she did not say!) staring at her from the first page of a big newspaper, that she forthwith barred her doors, and refused to open them until she satisfied herself, by surreptitious peeps through the blinds, that it was only a neighbor who was knocking for admittance. An offer of marriage from a Western ranchman and another from a Vermont farmer (both entire strangers) did not tend to lessen her preturbation of mind.

Frank, at the grocery store, rather welcomed questioners—so long as there was a hope of turning them into customers; but his wife and Mellicent showed almost as much terror of them as did Miss Flora herself.

James Blaisdell and Fred stoically endured such as refused to be silenced by their brusque non-committalism. Benny, at first welcoming everything with the enthusiasm he would accord to a circus, soon sniffed his disdain as at a show that had gone stale.

Of them all, perhaps Mrs. Hattie was the only one that found in it any real joy and comfort. Even Bessie, excited and interested as she was, failed to respond with quite the enthusiasm that her mother showed. Mrs Hattie saw every reporter, talked freely of "dear Cousin Stanley" and his wonderful generosity, and explained that she would go into mourning, of course, if she knew he was really dead. She sat for two new portraits for newspaper use, besides graciously posing for staff photographers whenever requested to do so; and she treasured carefully every scrap of the printed interviews or references to the affair that she could find. She talked with the townspeople, also and told Mr. Smith how fine it was that he could have something really worth while for his book.

(Continued in February 16th Issue.)

Mr. Gassam—"Yes, I suppose I can claim to be a financial success, and just think, I started business with a shoestring."

Miss Green—"Mercy! It's genius! A man who could get anybody to buy one shoestring couldn't help but succeed."—Boston Transcript.

A ROPP'S CALCULATOR FREE

We cannot help but call the attention of BUSINESS FARMER readers to the offer made by the Keystone Steel & Wire Company, to send a Ropp's New Calculator, that book that figures instantly interest rates, capacity of bins, cribs, silos and hundreds of other farm questions, absolutely free. Thousands of copies have been sold at 50c each and yet in order to introduce their Galvanealed fencing they will send Ropp's Calculator with their catalog, to any reader of our magazine who will ask for it on a postal card addressed to the company at 4826 Industrial street, Peoria, Ill., (Adv.)

KARSTEN'S QUALITY

BABY CHICKS

From Stock—That is Bred With the Laying Habit

Hollywood & Barron English Strain Matings Single Comb White Leghorns

250-300 Egg-Bred Line

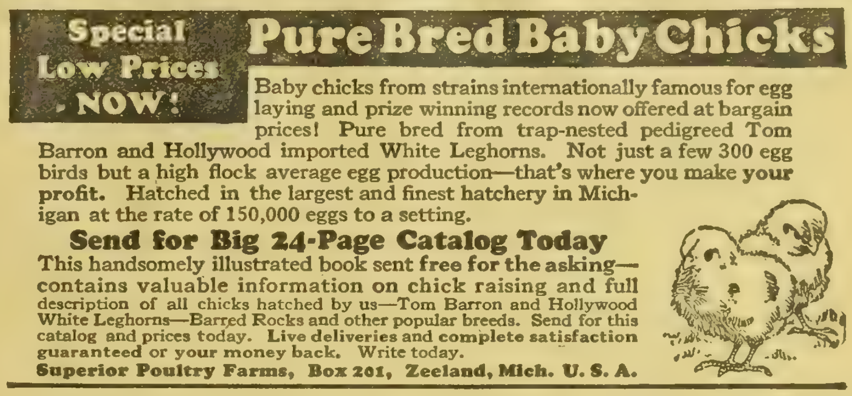
Careful breeding, typetesting and trapnesting has produced our world-famous Karsten's Quality Laying Hen---A Utility Bird With Standard Requirements

Our Leghorns are long, deep-bodied, wedge-shaped birds, with wide backs and low spread tails, big lopped combs and alert eyes. Birds that lay those large white eggs that bring the high prices on the New York Market. Our Baby Chicks cost no more than you would pay for common stock.

WE WANT TO PROVE THIS TO YOU. SEND FOR FREE CATALOG it describes our wonderful breeding establishment, it tells what and how to feed your chickens for profit, it will show you how you, too, can double your poultry profits. WRITE TODAY AND GET YOUR COPY.

Quality Stock Without The Fancy Prices

KARSTEN'S FARM—Box —ZEELAND, MICHIGAN



Special Low Prices NOW!

Pure Bred Baby Chicks

Baby chicks from strains internationally famous for egg laying and prize winning records now offered at bargain prices! Pure bred from trap-nested pedigreed Tom Barron and Hollywood imported White Leghorns. Not just a few 300 egg birds but a high flock average egg production—that's where you make **your profit.** Hatched in the largest and finest hatchery in Michigan at the rate of 150,000 eggs to a setting.

Send for Big 24-Page Catalog Today

This handsomely illustrated book sent free for the asking—contains valuable information on chick raising and full description of all chicks hatched by us—Tom Barron and Hollywood White Leghorns—Barred Rocks and other popular breeds. Send for this catalog and prices today. **Live deliveries and complete satisfaction guaranteed or your money back.** Write today.

Superior Poultry Farms, Box 201, Zeeland, Mich. U. S. A.

HUNDERMAN'S FIRST-CLASS CHICKS $10 and UP

We are heavy producers of first-class Chicks. Flocks on free range. Culled by expert. 100% Live Delivery Guaranteed. Order today from this Ad and get Chicks when you want them.

Prices on	50	100	300	500
English S. C. White Leghorns	$6.50	$12.00	$36.00	$57.50
Barred Rocks	8.50	16.00	48.00	77.50
Single Comb R. I. Reds	9.00	17.00	50.00	82.50

Mixed Chicks........$10.00 per 100 straight

Blue Hen Incubators. Reference: Zeeland State Bank. Order today. You take no chances. Catalog Free.
HUNDERMAN BROS., POULTRY FARM, Box 30, Zeeland, Michigan.

Our Modern Chicks — PURE BRED FOR EGGS

400,000 CHICKS

BIG, STRONG, FLUFFY CHICKS hatched from well-bred and well kept, heavy laying hens insuring good growth and PROFITS.

Prices on	50	100	500	1000
White, Brown and Buff Leghorns	$7.00	$13.00	$6[illegible].00	$120.00
Barred and White Rocks, S. C. and R. C. Reds, Anconas	8.00	15.00	72.50	140.00
White Wyandottes, Buff Orpingtons	8.50	16.00	77.50	....
Silver Wyandottes	9.50	18.00	87.50	170.00

Mixed, $12.00 per hundred, straight. Postpaid. 100% Live Arrival Guaranteed. Order right from this ad. Best Bank Reference. You take no chance. Free Catalog. Member I. B. C. A. and Ohio Assn.
MODERN HATCHERY, Box 62, Mt. Blanchard, Ohio.

SUNBEAM HATCHERY

Chicks are produced under my personal supervision. Hatched from select, pure bred, heavy laying hens, well kept to insure vigorous Chicks.

Varieties Prices on	50	100	500
White, Brown and Buff Leghorns	$7.00	$13.00	$62.50
Barred Rocks, R. and S. C. Reds, Anconas	8.00	15.00	72.50
White and Buff Rocks, White Wyandottes, Black Minorcas	8.50	16.00	77.50
White and Buff Orpingtons, Silver Wyandottes	9.00	18.00	87.50

Mixed, all varieties, $12 per 100 straight. 100% Live Delivery Guaranteed. Postpaid. Order from this Ad. Bank References. There is no risk. Free Catalog. Member I. B. C. A.
H. B. TIPPIN, Box E, Findlay, Ohio.

Are Money Makers.

MEADOW BROOK

One of the Founders of the Chick Industry
21 Years in Business

An old reliable hatchery which has been putting out guaranteed chicks for years. Our flocks are the result of careful breeding and culling over a long period. When seen, our chicks recommend themselves. **WHITE LEGHORNS.** Headed by males of 275-303 egg record breeding. **BARRED ROCKS, R. I. REDS and WHITE WYANDOTTES.** Each breed carefully developed. B[illegible]N LEGHORNS, Netherland Strain. [illegible]F LEGHORNS, extra sp[illegible] breeding Heasley's egg-basket strain. Write for illustrated catalog.

MEADOWBROOK FARM HOLLAND MICH. R.R. 1-H

Pure Bred Baby Chicks

We have been carefully developing our flocks for eight years. Every chick pure bred and from stock carefully culled, for type and production. Our chicks give satisfaction. Order today and get chicks when you want them.

Prices on	50	100	500
W. Leghorns	$7.00	$13.00	$62.00
B. Rocks, R. I. Reds	8.00	15.00	72.00
W. Wyandottes, W. Rocks	8.50	16.00	77.00

Postpaid. 100% live delivery. You take no chances. Ref. Farmers & Mechanics Bank, this city. No Catalog. Order from this ad.
WASHTENAW HATCHERY
Geddes Rd, Ann Arbor, Mich.

BEST CHICKS at Low Prices

Send for free catalog describing **best bred** chicks in the country. Tom Barron and Tancred White Leghorns, Michigan's Champion Winter Laying Barred Plymouth Rocks and S.C.R.I. Reds. No better chicks anywhere at any price. Satisfaction and 100 per cent live delivery guaranteed.

YOU CAN DO IT WITH B-F BABY CHIX

Brummer-Frederickson Poultry Farm, Box 26 Holland, Mich.

CHICKS, BARRED AND WHITE PLYMOUTH Rocks. Bred-to-lay M. A. C. strain. Pedigreed sires used from 258-302 egg hens. Have good size and early maturity. Get my circular. **J. V. SHEAP, 1115 N. Adams St., Owosso, Mich.**

68 VARIETIES of Fine pure-bred chickens, ducks, geese, turkeys, fowls, eggs, baby-chicks. Large catalog 5c. **A. A. ZIEMER, Austin, Minn.**

DUNDEE CHICKS

PURE BRED CULLED FLOCKS

Our chicks are from pure bred flocks carefully culled by experts. Anconas are direct from Sheppard. Leghorn flocks headed by males from Michigan Ag. College. Rocks are from a 230-302 egg strain. Reds are Liddicoat's best. Write for catalogue and price list. It will save you money. Reference, Dundee State Savings Bank, this city.
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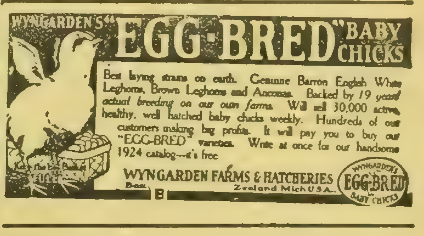

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Best laying strains on earth. Genuine Barron English White Leghorns, Brown Leghorns and Anconas. Backed by *19 years actual breeding on our own farms.* Will sell 30,000 active, healthy, well hatched baby chicks weekly. Hundreds of our customers making big profits. It will pay you to buy our "EGG-BRED" varieties. Write at once for our handsome 1924 catalog—it's free

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BABY CHICKS

Send now for descriptive matter and price list of our **PURE BRED PRACTICAL POULTRY 10 LEADING VARIETIES**
Some fine breeding this year in improved egg quality stock; customers' egg records from stock last year.
COCKEELS—A few unsold in Barred Rocks, White Wyandottes, and R. C. Reds. $3.00 and $4.00.
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CHILSON BARRED ROCK—HATCHING Eggs and Baby Chicks. Winning pens all heavy breeds Mich. international egg contest 1923. Nucgugan's greatest eggs and color strain. Write for price list today.
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BEFORE BUYING ELSEWHERE GET OUR prices on White and Brown Leghorns and White Rocks. Prepaid Parcelpost. Satisfaction Guaranteed. **De Koster's Hatchery, Box B, Zeeland, Mich.**

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PUREBRED CHICKS: BARRED ROCKS, BUFF Orpingtons, White Wyandottes and Rhode Island Reds. Satisfaction guaranteed. Write for special reduced prices. **Joseph Amster, Paw Paw, Mich.**

MARKET FLASHES

MARKET SUMMARY

Wheat, corn and oats steady after advance in price on opening day of week. Rye and beans firm. There is a good demand for butter and eggs. Apples firm. Potatoes steady. Cattle steady but dull. Hogs steady. Sheep active to higher.

(Note: The above summarized information was received **AFTER** the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press —Editor.)

FOOTE'S MARKET LETTER

BY W. W. FOOTE

Aid for Northwest

PRESIDENT COOLIDGE has sent a special message to Congress on the acute situation in the northwest wheat growing sections, and reference is made to the numerous bank failures, the many foreclosures of farm mortgages, and the inability of the farmers of the wheat growing districts to finance the necessary purchases of live and other stock which will enable them to diversify their products. "Bills have been introduced," to quote the presidential message, "providing for the lending by the federal government of moneys directly to the farmers for purposes of assisting them in conversion of their farms on the basis of diversified farming." One such, introduced by Senator Norbeck and known as the Coulter bill, would allow a farmer to borrow not to exceed $1,000 at reasonable rates of interest, for the purpose of live stock, poultry and similar necessities on the well-balanced farm. In certain sections where the financial situation is worst, the President suggests that it may be necessary to strengthen the capital resources of the country banks, and to create "new financing institutions such as have been organized with great success in the live stock territory." It is evident, however, that the insecure collateral of the wheat districts stands in the way of new financial institutions such as the live stock pools.

Mixed Farming Conditions

Despite the many gloomy reports coming from agricultural districts, numerous reliable reports are received every day of fair profits derived by small farmers who have made the best of their opportunities, and have not purchased tracts of land at war-time inflated prices. These lands as a rule are mortgaged at high rates of interest, and in most instances they could not be sold for anywhere near the cost price. The average farmer who owns his own farm and owes no man money is the fortunate one, and he can face the future courageously, the essentials being well diversified crops, plenty of manure for his acres, first-class seeds and raising so far as possible such things as his family consume. Michigan farmers have learned the importance of abandoning the dangerous one crop system, and many are taking up dairying and sheep raising, both of which are highly profitable. Michigan farmers are also greatly skilled in growing fruits, grapes, berries, etc., and these find a market in Chicago and other nearby cities. Our domestic trade is on a large scale for January, and the railroads are doing an enormous freight carrying business, their increased operations calling for vast sums to be expended for new equipment. They are paying much higher wages than a decade ago and claim that at existing cost of operation considerable reductions in carrying charges are impossible. The foreign trade of the country is slow to improve because of abnormal business and financial conditions, and it seems hardly probable that any marked change will take place this year, although our exports of provisions are extremely heavy, due to low prices. For the same reason the consumption of fresh and cured hog products in the United States is the largest ever known.

Light Trading in Wheat

Trading in wheat on the Chicago Board of Trade recently was the smallest in a year, while there was good speculative trading in corn. It is encouraging to note that prices for wheat seem to have touched bottom, but it does not look as though any marked improvement will take place in the near future, with rival exporting countries still underselling us. Only a short time ago when Liverpool was selling wheat about 20 cents lower than a year ago, Chicago wheat was selling only ten cents lower than at that time. The visible wheat supply in the United States is decreasing at the rate of more than 2,000,000 bushels a week, but it aggregated 70,495,000 bushels, comparing with 48,829,000 bushels a year ago. Bradstreet's reports 209,000,000 bushels of wheat in the United States and Canada, in addition to large supplies owned by the mills. Much wheat has been sold in the northwest by farmers who could not obtain credit, but much remains. May delivery wheat sells in Chicago close to $1.10, comparing with $1.17½ a year ago.

Corn and oats have advanced to the highest prices of the season, and corn sentiment is still quite bullish despite sales above 80 cents a bushel. Cold weather has greatly increased the consumption of corn on farms, and this is naturally a bullish factor, with the supply in markets unusually low. Rye prices are very low, yet the export demand lags. A great deal of trade is transacted in corn, and it is recalled that a little more than two years ago it sold at 52 cents. May corn sells on the Chicago Board of Trade around 81 cents, comparing with 72¾ cents a year ago; May oats at 48⅞ cents, comparing with 44½ cents last year; and May rye at 74 cents, comparing with 87¾ cents a year ago.

The Bean Market

The news service of the Bean & Pea Journal says: "Michigan beans can be laid down in a territory extending from New York to Kansas City at a lower figure than perhaps any other bean other than the California pinks. Foreign beans are not causing any great concern among domestic shippers as yet, though they are coming in right along. New York state, as usual, controls her own conditions. Idaho reports a growing popularity for Great Northerns."

Hogs Plentiful and Active

The hog market of late was quite a remarkable one, with receipts in Chicago close to the largest on record, while the wonderfully large local and shipping demand kept prices steady day after day. Eastern shippers were usually liberal buyers, taking the choicest hogs, and this outside buying proved of great help to sellers. Because of the enormous marketing of hogs, prices are far lower than in recent years, with prime butcher hogs selling the highest and 15 cents over the best light bacon hogs. Receipts are gaining in weight, late Chicago receipts averaging 233 pounds. Late sales were made of hogs at a range of $6.50 to $7.35, the top being 15 cents higher than a week earlier.

Most farmers appear to be favorably disposed to feeding the usual number of cattle, despite the advance in the price of corn, and this seems to be sensible. A successful Indiana cattle feeder remarked recently that he never made any money feeding cattle when corn was cheap, and doubtless many other stock feeders have had similar experience. When corn is selling at low prices there is apt to be a scramble to buy cattle to fatten, and the business is likely to be overdone. If corn sells high, farmers are apt to stay out of cattle feeding, and in the end cattle go higher. At the present time cattle feeding is normal, and fat cattle are expected to make fair profits for owners. The recent severely cold snaps resulted in large marketing of half fat cattle, lots which had been fed from 60 to 120 days, and selling in the Chicago market for $8 to $9.75 per 100 pounds. Fat light weight yearlings are the best sellers, with heavy long fed steers selling at a discount. Recent sales of beef steers were largely at $8 to $10.25, the very best steers going at $10.25 to $11.25 and the best yearlings at $10.75 to $11.75. The common steers sold at $6.50 to $7.75, aside from inferior little canner and other cheap lots at $4.50 to $6.40. Most butcher stock had a good sale at $3.50 to $8.50 for cows and heifers, and stockers and feeders have a fair sale at $5.25 to $7.25, while calves bring $4 to $13. It is interesting to know that before the war, in 1912, beef steers sold at $4.75 to $9. The late decline in beef cattle was from 25 to 75 cents.

Premium For Lambs

John Clay, the new president of the International Live Stock Exposition, announces that to encourage competition in the car loads of lambs to be exhibited this year in the big show he will donate $250 to be presented to the owner of the champion load. He suggests that farmers prepare a car load of prime lambs and help themselves and also the International. Many sheepmen are in the habit of marketing prime fattened lambs, but it is surprising how many half fat flocks are shipped to market and sold far below the finished lots. Heavy lambs are still discriminated against by the packers, and the demand is mainly for fat handyweights, objections being raised against flocks averaging over 80 pounds. Not many feeding lambs are being offered on the Chicago market, recent sales having been made at $12 to $13.25 per 100 pounds, while killers paid from $12 to $14. Not many breeders are offered, and a short time ago a single-deck of choice yearling ewes, bred to lamb in April, found a buyer at $11.

WHEAT

A steady demand for Michigan soft winter wheat caused a firm tone to prevail in the Detroit market during last week. Receipts were not large and buyers were on hand for everything that was offered. Millers reported an increased demand for flour. Reports come in that a fairly large quantity of wheat is being fed on the farms.

CORN

In spite of fact that corn weakened on many of the large markets of the country it held firm at Detroit. An increase in receipts caused other markets to decline but demand at Detroit took care of all that came to hand. Many of the leading market observers declare that there is a bullish outlook to the future of this grain.

OATS

On nearly all of the larger markets oats followed the trend of corn; where corn was higher oats were higher, and when corn declined oats followed suit.

RYE

There was no change in the rye market, the market remaining steady in tone. There has been an

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154 Michigan Cities and Towns served.
37 Waterpower and Steampower Plants, totaling over Quarter-Million Horsepower.
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252,000 Electric and Gas Customers.
2,000 Industries served.
38,000 Customers added in 1923 alone.

Actual Working Assets in the Service of Michigan day and night—back your investment and assure your income.

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CONSUMERS POWER COMPANY
Securities Department JACKSON, MICH.

increase in price of one-half cent during the last fortnight.

BEANS

The bean market at Detroit is experiencing an improved demand and the price is some higher than it was two weeks ago. Eastern markets are quiet and receipts light. An increase in demand is anticipated by eastern dealers.

POTATOES

The potato market is easy at most points and trading slow. Prices show some decline.

HAY

Continued large receipts in practically all markets weakened hay prices somewhat last week. The demand has been quite good but was not equal to the supply and values in consequence show an easier tendency. Western markets show a good demand for best alfalfa, which is strong.

MARKET QUOTATIONS

Wheat

Detroit—Cash No. 1 red, \$1.14½; No. 2, \$1.13½; No. 2 white, \$1.14½; No. 2 mixed, \$1.13½.

Chicago—Cash No. 2 red, \$1.12½; No. 2 hard, \$1.08@1.13.

Prices one year ago—Detroit, Cash No. 2 red, \$1.35; No. 2 white, \$1.33.

Corn

Detroit—Cash No. 3 yellow, 84c; No. 4, 82c.

Chicago—Cash No. 2 yellow, 80c; No. 2 mixed, 78½c.

Prices one year ago—Detroit, Cash No. 2 yellow, 76½c; No. 3, 75c.

Oats

Detroit—Cash No. 2 white, 52c; No. 3, 51c.

Chicago—Cash No. 2 white, 48@49c; No. 3, 47¼@48¼c.

Prices one year ago—Detroit, Cash No. 2 white, 49c; No. 3, 47½c.

Rye

Detroit—Cash No. 2, 74c.

Chicago—Cash No. 2, 72½c.

Prices one year ago—Detroit, Cash No. 2, 90c.

Beans

Detroit—C. H. P., \$5.00 per cwt.

Prices one year ago—Detroit, C. H. P., \$7.70 per cwt.

Potatoes

Chicago—\$1.25@1.40 per cwt.

Prices one year ago—Detroit, \$1@1.10 per cwt.

Hay

Detroit—No. 1 timothy, \$24.50@25; No. 2, \$22@23; No. 1 clover, \$21.50@23; No. 1 clover mixed, \$21.50@22.50 per ton.

Chicago—No. 1 timothy, \$26@28; No. 2, \$24@25; No. 1 clover, \$25@26; light timothy & clover mixed, \$25@26 per ton.

Prices one year ago—Detroit, No. 1 timothy, \$16.50@17; No. 2, \$17@18; No. 1 clover, \$14@15; No. 1 clover mixed, \$14@14.50 per ton.

MAKE CLEAN COW BARNS MATTER OF LAW

(Continued from Page 10)

I had two reacters, therefore I can not believe that T. B. comes from filth.

Some will say T. B. is bred from one generation to another. I can not believe that. I had a fine, well-bred heifer react and her sire, grand sire, dam and grand dam, all registered stock, were T. B. tested with never a reacter.

If Mr. B. J. Killham, chief veterinarian, or some other authority would through the M. B. F. give the cause of T. B. in cattle I am sure the readers would be grateful for it.

Mr. Editor,. I don't want to take any more space but let me ask one question. Is milk from T. B. cows any more injurious to the human race than milk drawn from filthy cows with filthy surroundings? Now M. B. F. reader, lets get our heads together and clean house in our cow barns and pull for a law that will force every cow barn in Michigan to be cleaned up. Other states do it, why not us?—O. R. Richard, Clinton County, Mich.

New Rule for Our Employees

All requests for leave of absence on account of toothache, severe colds and minor physical ailments, and on account of church picnics, weddings and funerals and the like, must be handed to the foreman in charge of your department before 10 a. m. on the morning of the game. —Houston.

Railroading in Winter

Especially in Michigan, Railroad transportation is subject to sudden periods of extreme cold and heavy snow. Such weather lowers the efficiency of steam-driven machinery, imposes severe hardships on men, and makes necessary abnormal expenditures for fuel, wages and special equipment.

To vanquish these obstacles—to accept and deliver freight and passengers in the teeth of a midwinter blizzard, when necessary—is an annual battle for each of Michigan's 24 steam Railroads.

Even in a comparatively open winter, the Railroads must always be equipped and ready. On certain northern runs, a snow plow precedes every train throughout the winter, regardless of weather.

Winter railroading in Michigan is seldom possible at a profit. Often it can be accomplished only by large financial loss. Yet, despite the handicaps of climate, the cars move, and Michigan continues warm, well fed and prosperous.

Do you appreciate the foresight, determination and fortitude which, year in and year out, make Railroad transportation so sound a reliance. The Railroads will be pleased and helped to know that you do.

Michigan Railroad Association
508 Railway Exchange Bldg., Detroit, Mich.

"We Serve Michigan"

Detroit Beef Company

offers its services to the *Farmers of Michigan* as a high class, reliable commission house for the sale of *Dressed Calves* and live poultry. Write us for information how to dress and ship calves to market. \$250,000 capital and surplus. 34 years in business in the same place and same management.

Address

DETROIT BEEF CO., Detroit, Mich.

HENRY T. FRASER

Western Market, Detroit, Mich.

Ship us your poultry, veal or farm produce of all kinds.

References: Detroit Board of Commerce, Wayne County and Home Bank.

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84-ACRE INDIANA FARM WITH STOCK, tools, crops; only \$5500. Money maker in section \$100 acre values; city markets; on improved road near live RR town; 70 acres level tillage, creek watered pasture, 44 apple trees, pears, plums, cherries, grapes, 2 acres berries; comfortable house, barns, poultry house, garage. \$5500 gets it, horses, cows, heifer, poultry, full implements, tools, corn, hay, rye, potatoes, apples, etc. included to settle immediately. Part cash. Details page 23 Illus. Catalog Bargains—many states. Copy free. STROUT FARM AGENCY, 427KJ Marquette Bldg., Chicago, Ill.

CHICKEN BROODER STOVES

COAL BURNING—REAL ONES, BIGGER, better and cheaper than you can buy elsewhere. 1000 chicks size \$16.68. All cast iron stove, 52 in. galvanized hover. Shipped promptly from warehouse in Ill. Satisfaction guaranteed. Order from this adv. or write for folder. GEORGE J. WETTSCHURACK, Lafayette, Ind.

Shorthorn Show and Sale!

By Michigan Shorthorn Breeders' Association, at

Michigan Agr'l College, East Lansing, Mich.

Friday, February 8, 1924

48 Females, 14 Bulls—Show 9 a. m., Sale 11 a. m.

Every animal guaranteed, tuberculin tested and sold subject to 60 days retest. The BEST BREEDERS IN MICHIGAN are offering many from their SHOW HERDS. A few were shown at the 1923 INTERNATIONAL.

This is an exceptional opportunity to get show animals of best blood lines.

Auctioneers:
CAREY M. JONES,
DR. J. P. HUTTON

Write for Catalogue
W. E. JUDSON EDWARDS,
East Lansing, Michigan.

SAWMILL FOR SALE

Sawmill in good shape, just as dismantled. Includes one solid saw—about 32"; and one Atkins 60" inserted tooth saw. Left Hand Mill. Have no more use for same. First check for \$500.00 takes it. The 60" saw alone costs \$200.00 today wholesale.

A. M. TODD COMPANY, Mentha, Mich.

TOBACCO

HOMESPUN TOBACCO, FIVE POUNDS Chewing, \$1.75, ten, \$3.00, twenty, \$5.25; Smoking five pounds, \$1.25, ten, \$2.00, twenty, \$3.50. Pipe and Recipe free. Send no money. Pay when received. KENTUCKY TOBACCO CO., Paducah, Ky.

TO LATE TO BE CLASSIFIED

WHITE ROCK COCKERELS FOR SALE. Fishel Strain. G. F. PETERS, Big Rapids, Michigan.

S. C. WHITE LEGHORN CHICKS FROM Demonstration Farm flock, under the supervision of Extension Department M. A. C. Price \$15.00 per 100. Ralph S. Totten, Pittsford, Michigan.

RESULTS COUNT!

I am getting lots of letters regarding my turkeys and I do not think there will be any need of putting the ad in any more.—Alonzo Pratt, LeRoy, Michigan.

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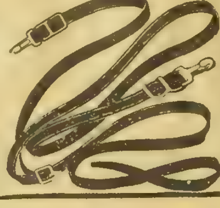
Olde-Tan Team Lines

20 Feet Long
1 Inch Wide

$5.45 A Set

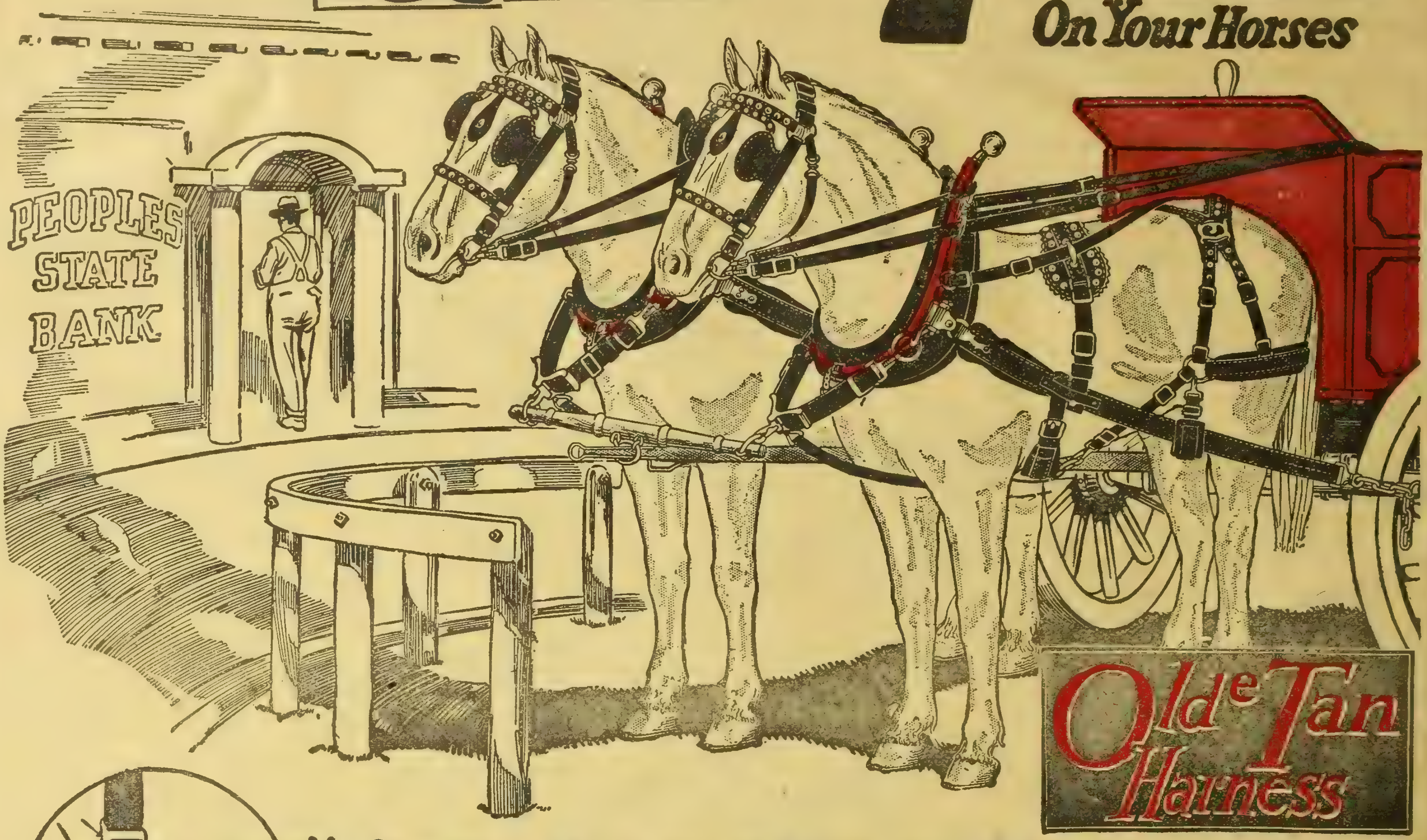
These lines are offered to you at price which represents only the actual cost plus mailing. We are making this offer to put a sample of Olde-Tan leather in your hands. We want you to see and feel this real old fashioned white oak bark tanned leather, the very same leather used in Old-Tan harness. This offer will not appear again except as an advertising offer so take advantage of it now before it is gone. Write now. Ask us to send you a set of lines.

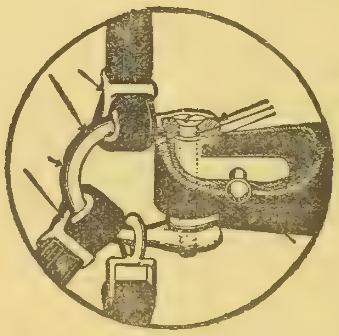
Main Line Double and Stitched at Center



Thorp, Wis.
Babson Bros., Chicago, Ill.
Gentlemen: We received the harness Thursday. We took it home and the next day went to the Peoples State Bank where we had the money deposited and told the banker to send you your money in full. Your harness is O. K. Yours very truly,
HERMAN DERVENSKI
Thorp, Wis., R. 1

$7.50 Puts This Harness On Your Horses





Metal-to-metal construction. Metal bushing. Leather held tight without play or friction. Note special riveted metal extension in breeching.

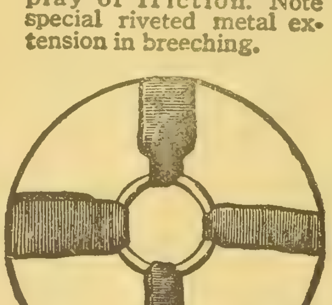
"Am Sending Payment Your Harness Is O. K."

Says Olde-Tan User

"Never saw its equal—it could not be better—beats anything I have seen in 30 years—people here just crazy about it—there's no wear on leather at all—one of the best harnesses ever put on a team in Oregon—it makes the harness here look slim—will outlast two ordinary sets—if it's as good as it looks, it will last as long as I live—saved $15 or $20."

Olde Tan Metal-to-Metal harness has aroused real enthusiasm from coast to coast. The foregoing extracts are a few taken from hundreds of letters. Practical harness buyers see its superiority at once. Metal-to-Metal is so simple and so superior everyone wonders why it was not used before.

With real, old-fashioned tanned leather, backed by 70 years of tanning skill, and then with the leather protected by metal, so that metal rubs against metal and not against leather, it is no wonder that buyers believe it will last as long as they live. You, too, will be amazed at this practical, sensible harness with no round rings wearing against the straps. All square strap surfaces



Never this in metal-to-metal construction. All pull strain and wear is on metal.

Metal-to-Metal

See the Metal-to-metal illustration we show you here. Figure it out for yourself. You know straps wear when they see-saw against metal. Well, they can't see-saw in this harnesss because wherever there is wear, it is metal upon metal. You can put a set of Olde Tan Metal-to Metal harness on your horses for only $7.50 down. If you don't like it, you can send it back. We want to be sure that you see Olde Tan Metal-to-Metal harness. This is why we have made it so easy for you to get it. Be sure to know all about Olde Tan Metal-to-Metal harness before you buy your next set.

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The Michigan
BUSINESS FARMER

An Independent
Farm Magazine Owned and
Edited in Michigan

VOL. XI, No. 13 SATURDAY, FEBRUARY 16, 1924 TERMS: TWO YEARS $1
60c PER YEAR—5 YRS. $2

"AN EGG A DAY KEEPS THE AXE AWAY"

A Giant Who Works For You

There is a giant who works tirelessly to lighten the labor on the American farm, to make the farm more productive, and farming more profitable.

He is personified by the vast resources of the Ford organization, whose herculean labors are directed primarily toward lowering the cost and increasing the efficiency of Ford cars, Ford Trucks, and the Fordson Tractor.

The larger this giant has grown the lower the prices of Ford products have fallen, and the more valuable they have become from the investment standpoint as farm equipment.

To the farmer this has meant lower and lower farm costs, better arrangement of farming activities, more money crops, all with less effort and therefore with greater net profit—proof enough that it is to his interest to standardize on Ford equipment.

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Ask Any Ford Dealer

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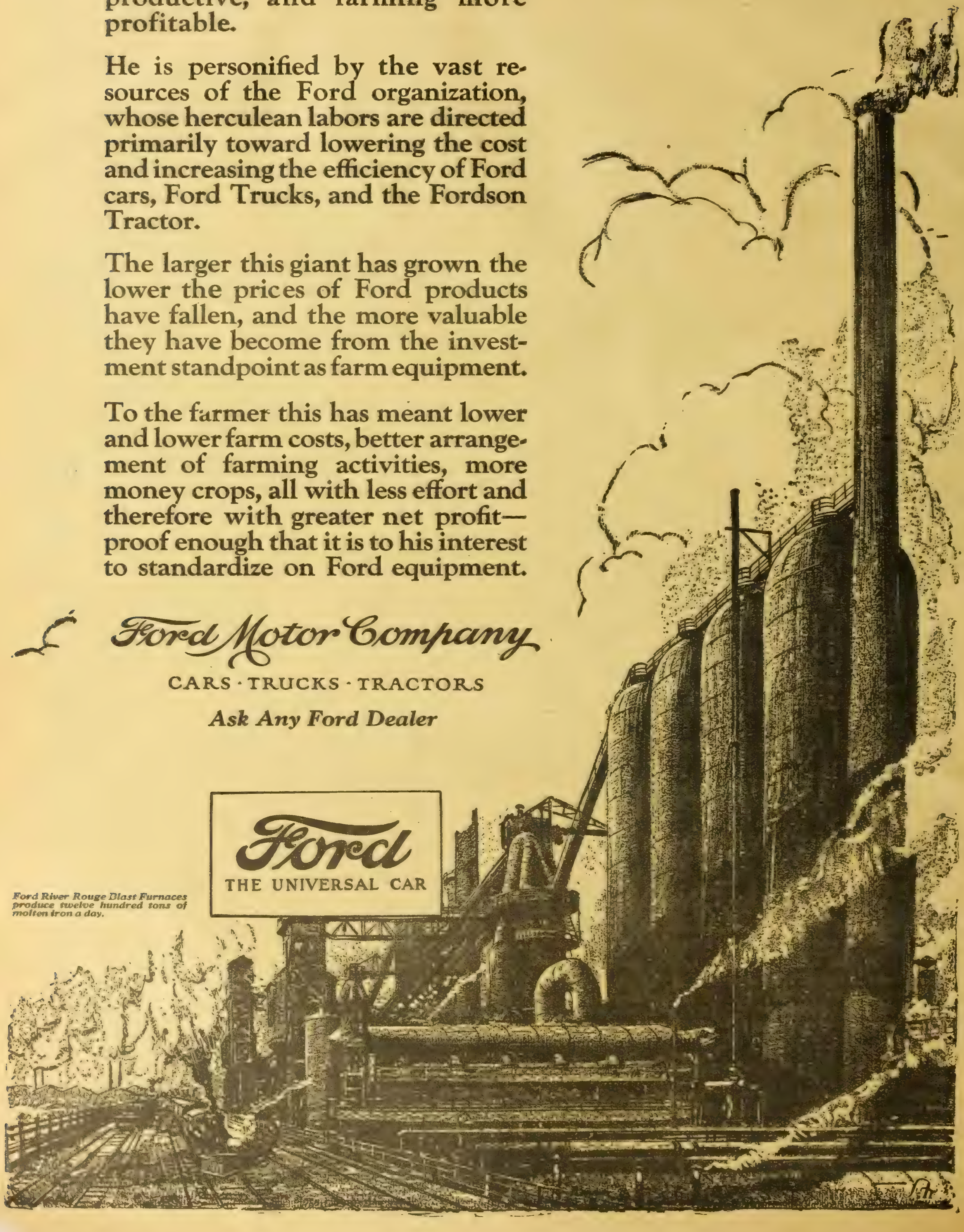
THE UNIVERSAL CAR



Ford River Rouge Blast Furnaces produce twelve hundred tons of molten iron a day.

SATURDAY
February 16,
1924

VOL. VI, No. 13

Being absolutely independent our columns are open for the discussion of any subject pertaining to the farming business.

"Hew to the line, let the chips fall where they may!"

The Michigan
BUSINESS FARMER

"The Only Farm Magazine Owned and Edited in Michigan"

Published Bi-Weekly
Mt. Clemens, Mich.

TWO YEARS $1

Entered as second-class matter, August 22, 1917, at the post-office at Mt. Clemens, Mich., under act of March 3rd, 1879.

Farm Bureau Pleased With Record of Past Year

M. L. Noon Elected President and Clark Brody Retained as Secretary—General Manager at Sixth Annual Meeting of Michigan State Farm Bureau.

By STANLEY M. POWELL

(Lansing Correspondent of The Business Farmer.)

SATISFACTION, harmony and enthusiasm marked the sixth annual meeting of the Michigan State Farm Bureau Board of Delegates held at East Lansing, February 7-8. One hundred and fifty accredited delegates and about 300 other Farm Bureau members reviewed the splendid progress of the past year and aggressively formulated a program of policy and action for the coming year.

In a masterly way in the President's annual address, W. E. Phillips, retiring president of the Michigan State Farm Bureau, sketched the history of the organization, rejoiced in its admittedly splendid achievements and briefly outlined his recommendations regarding the future activities. He declared that the Michigan Farm Bureau was today stronger and more substantial than ever before, even though the present membership was less than that which was signed on the first wave of after-war enthusiasm.

Brody Pictures Progress

Perhaps the most impressive feature of the meeting was the annual report submitted by Secretary General Manager, Clark L Brody, summarizing for the delegates the progress and achievements of organized agriculture in Michigan and giving the delegates a panoramic view of activities of the various Farm Bureau departments and services.

Other high spots of the two day meeting were the brief oral reports of the heads of the Bureau's departments, an exceptionally forceful and appropriate speech by N. P. Hull, the election of the new Farm Bureau Board of Directors and the consideration and adoption of the annual resolutions. As illustrating the close cooperation and harmony existing between Michigan farm organizations, it is worthy of note that Mr. Hull is chairman of the executive committee of the Michigan State Grange and is also President of the Michigan Milk Producers Association, one of the powerful commodity exchanges affiliated with the Michigan State Farm Bureau. He urged the delegates to be loyal to their own best interests by standing by their Farm Bureau and taking a personal responsibility for its advancement.

Pick New Bureau Heads

The new Farm Bureau Board of Directors, which is composed of one representative of each of the five affiliated commodity exchanges and six directors chosen at large was elected as follows: M. L. Noon, Jackson, Michigan Milk Producers Ass'n; Herbert Gowdy, Union Pier, Michigan Fruit Growers, Inc.; Fred Smith, Elk Rapids, Michigan Potato Growers Exchange; John O'Mealey, Pittsford, Michigan Live Stock Exchange; W. E. Phillips, Decatur, Michigan Elevator Exchange; L. Whitney Watkins, Manchester; E. C. McCarty, Bad Axe; Mrs. Edith M. Wagar, Carleton; George Wheeler, Mt. Pleasant; M. B. McPherson, Lowell; and Verold F. Gormely, Newberry. The new Board organized by electing M. L. Noon, President and M. B. McPherson, Vice-President. Clark L. Brody was re-engaged as Secretary and General Manager.

Resolutions Fix Programs

The resolutions adopted by the Farm Bureau Board of Delegates constitute probably the most comprehensive program of cooperative marketing and agricultural and general legislation which was ever laid down by any Michigan farm organization. Outstanding in popular interest were resolutions advocating a 2 cent gasoline tax, a State income tax and supporting the State Board of Agriculture in the discharge of its full constitutional duties in the management of the Michigan Agricultural College and its extension activities.

The delegates expressed satisfaction with the present management of the State Farm Bureau and its affiliated commodity exchanges, urged the production of better quality products, favored the teaching of cooperative marketing and farm cost accounting in the public schools and colleges, endorsed County Agent and Boys' and Girls' Club work, favored greater participation by women in Farm Bureau affairs, opposed Pittsburgh Plus and commended the management of Michigan fairs for efforts now being made to present cleaner and more educational exhibitions.

Legislative Program

With reference to national legislation, the Farm Bureau delegates adopted resolutions opposing tax-exempt securities, consumption or sales taxes, government price fixing and governmental guarantees, any form of federal ship subsidy and a lowering of the Great Lakes-St. Lawrence Waterway, strict enforcement of the 18th amendment and Volsted Act, national truth-in-fabric and truth-in-fruit-juice legislation, a law requiring treating all imported seed with Eosin dye, continued support for T. B. work, a national standard container bill, a quarantine on the oriental moth, and a resolution which has as its aim securing a more desirable class of immigrants. The resolution adopted on Muscle Shoals, while not mentioning the Ford tender specifically, still corresponds with it in nearly every requirement which it prescribes and contains a provision in opposition to Government operation.

The State legislative program as laid down for the Farm Bureau by its Board of Delegates includes in addition to the State gasoline tax and the state income tax, a resolution favoring pay-as-you-go policy, another urging that the counties' share of the automobile license money should be collected by the counties wherein the autos are owned and that each county's portion be retained by the county treasurer and the balance turned over to the State. The Farm Bureau program favors legislative reapportionment based on citizenship with a restriction on the maximum delegation from any one county and insists upon full observance of the moiety clause, advocates educational qualifications for citizenship, urges prison manufacture of binder twine and other farm supplies, favors the payment of state bounties on wolves and opposes the present system of paid state trappers.

Unexcelled in Progress

"The farmers of Michigan are not excelled by those of any other state in the development of their cooperative marketing, transportation, pure seeds and other services," Clark L. Brody told the delegates in presenting his annual report.

Speaking of the great commodity marketing organizations affiliated with the State Farm Bureau, Mr. Brody said that the Michigan Milk Producers Ass'n surpasses any organization of its kind in the country; the Michigan Elevator Exchange, serving 150 farmers' elevator associations, is a national leader in that field. The Michigan Live Stock Exchange with its two terminal marketing offices at the Detroit and Buffalo yards gives some 233 Michigan associations of farmers live stock marketing service.

The Michigan Potato Growers Exchange with about 112 associations and the Michigan Fruit Growers, Inc., with 30 associations enrolled complete the groups of Michigan farmers' cooperative marketing organizations that probably handle $40,000,000 worth of business annually for their members.

"The commodity marketing exchanges are pillars of strength for the State Farm Bureau," declared Mr. Brody, and, on the other hand, the commodity exchanges to fortify themselves along grading, legislative, publicity, transportation and general service lines, need a powerful central service organization, combining all the farmers' organized economic power, such as the State Farm Bureau. Neither will reach its highest success without the other.

"In formulating the policies of the State Farm Bureau it is of highest importance that we keep close to the man actually tilling the land, and in this connection our membership solicitors report that while the farmers are much concerned about cooperative marketing they regard with equal importance relief from unjust taxation, excessive freight rates, car supply, and information on public questions concerning agriculture. It should be recognized that cooperative marketing, while a big factor, will not alone bring the complete relief so sorely needed by the farmer."

The Bureau vs. Politics

Reviewing the history of the State Farm Bureau's legislative activities and discussing its failure to secure final passage of the gas tax and the income tax, Mr. Brody said, "There were many disappointments in attempting to carry out the legislative program outlined by the delegates one year ago. Nevertheless, the battles fought by our organization during the past year, especially that of the gas tax measure and resulting conflicts that followed along other lines, have demonstrated that the Michigan State Farm Bureau is a power to be reckoned with and that it is not subservient to the will of any politician or political faction.

"No farmers' organization has ever suffered more violent and unfair attacks than has your State Farm Bureau the past year, and those who would control your organization and make it serve their own ambitions have spared no effort to discredit your Farm Bureau officials and destroy the power and influence of the Farm Bureau. Had the farmers' interests been surrendered, these assaults would not have been made, as it is not the custom of those making such attacks to seek to destroy individuals or organizations that are serving their selfish purposes or that are not in their way.

"Our enemies who would destroy or cripple what they cannot control have attempted to brand the State Farm Bureau as a faction seeking to promote the ambitions of individuals for political office. While the Michigan State Farm Bureau has always taken a firm stand on legislative issues, and must continue to do so, it has never at any time been involved with the political fortunes of any person in any way whatsoever. It is and always has been kept free from such unsavory and emaciating entanglements and must be kept so at any cost. The Michigan State Farm Bureau has avoided those pitfalls that have too many times in the past destroyed or weakened farmers' organizations and has been strengthened rather than injured by the struggle. The Farm Bureau is still and always must be owned and controlled by its members only."

Conclusion

In concluding his masterly report, Mr. Brody uttered the following remarkable paragraph:

"The things really worth while in the world do not come easily but are the product of years and years of hard work, struggle and sacrifice, so it is not surprising and should not be discouraging that the development of the Farm Bureau has been a battle testing the mettle and demanding high courage and perseverance in the membership as well as in your officers and leaders. This is the stuff out of which the great movement essential to the welfare of thousands must be built. The mistakes and failures of yesterday are but the forerunners of the successes of tomorrow. We as farmers of Michigan have put our hands to the plow and are not turning back. The future is full of hope. We are going forward to a better day for organized agriculture."

Eaton County Farmer is "Corn King"

ONE section of the recent M. A. C. Farmers Week program rather mysteriously announced that Michigan's 1923 Corn King would discuss the subject, "How I Did it." The mystery was finally cleared up when G. W. Putnam, Director of the M. A. C. farm crops extension work, announced that his department had been carrying on a semi-contest during this recent season. Twenty-five of Michigan's leading corn growers were chosen for this work and definite records were kept to determine the yield, the cost of production, and the profit per acre. Profit per acre was made the basis of the awards.

Charles Laughlin of Dimondale, Eaton county, produced 83 bushels of shelled corn per acre. Allowing a moisture content of 14 per cent, this is equivalent to a yield of 175 baskets of ears.

Totaling the cost of production up to, and including, the harvesting and then deducting this amount from the value of the corn left a balance of $63.51 profit per acre for Mr. Laughlin. As this was the largest per acre profit, a bronze medal, with the accompanying title of "Corn King of Michigan" was awarded to Mr. Laughlin.

Other leading contestants and the yields they secured per acre are as follows: "Paul Clement, Britton, Monroe county—72.5 bu.; Milo Robinson, Union City, Branch county—70.77 bu.; D. V. Bow, Saginaw—70.72 bu.; P. A. Smith, Mulliken, Eaton county—69 bu.; D. A. Geddes, Swan Creek, Saginaw county—67 bu.; Alfred Vincent, Durand, Shiawassee county—64 bu.; Rossman Bros., Lakeview, Montcalm county—53 bu.

This contest will be carried on during this coming season under the direction of the Michigan Crop Improvement Ass'n. Profit per acre will still remain as the basis of designating the winners. Additional awards will be made.

Improving the Oat Crop

M. A. C. Experts Very Successful in Developing Excellent Varieties of Seed for Michigan

By FRANK A. SPRAGG
Assistant Professor of Farm Crops, M. A. C.

This is a view of the oat varietal series of the year 1909. You will note in fact that there are two such series of plats placed end to end. The one in the foreground is a small series planted from new strains that have not been sufficiently increased to plant plats in the longer series of varieties seen in the background. A varietal series is a collection of varieties planted side by side in a systematic manner. The standard variety is planted on the edge and each fifth plat throughout the series.

THE problem in the production of a crop is to produce the greatest increase of value with the least expense. We must be careful to distinguish between increase of value and transfer of value already produced. The successful farmer must keep two bank accounts. One of these is in the form of soil fertility, and the other in the form of cash or credit. If he simply transfers his account from the farm soil bank to the one in town, he is not really producing any increase in his total valuation but merely changing the form of his wealth. He may do it in such a way as to easily deceive himself.

Farmers often are deceived also by appearances. A certain farmer's yield attracted attention for miles around, and other farmers traveled long distances to buy seed from him. This farmer did not have a superior variety, that could be depended upon to produce more than other varieties under the same conditions, but this high yield was largely due to the fact that the farmer knew how to farm. He was a good farmer living on a rich piece of land, improved by proper rotation and fertilization. He believed in plowing and fitting his land so as to give the seed the best chance to grow. He used acid phosphate that his crop might stand up, mature earlier and produce more under the same conditions. He believed in farming out all weed seeds that his soil might be put to the best use—the production of a desirable crop. He believed in saving his crop from the ravages of smut by the simple formaldehyde treatment. This alone probably saved him ten bushels per acre that would have otherwise gone to smut the threshers' faces, and make the passer-by think his barn on fire because of the dust.

Those who planted the seed that came from this splendid field, but planted it under different conditions, suffered a great disappointment because they did not get the results that they had expected. They had assumed that this fine yield was due to a superior variety and could be depended upon to give better yields than other varieties under poorer conditions, while the yield was actually due to good management of the soil. The yield of any crop is dependent upon two complex forces. One of them is the variety; the other, the conditions under which the crop grows.

The extra good farmer mentioned above had a neighbor who on a similar soil planted a high yielding pedigreed variety. He neglected to fit his land properly; he had run down his farm by failure to return to it the fertility taken out by the crops, and he did not treat his seed for smut.

Through this improper management, he lost heavily on a variety that had high-yielding characteristics and tried to do its best in spite of the farmer. Thus we had on the neighboring farms, conditions that more than counter-balanced the benefit obtained from the improved pedigreed high yielding variety.

What, then do we mean by an improved variety? We mean a variety that will under the same conditions produce better quality or yield or both. The best variety will fail if burnt up by drought, drowned by poor drainage, consumed by smut, or if starved to death by lack of plant food, but even then the pedigreed strain will produce more than its poor competitor, if grown under the same conditions.

Plant Feeding

The problem of producing the greatest increase of value in oats with the least expense, was attacked by the Michigan Experiment Station in 1900, when Prof. J. A. Jeffery began his selection work. Six years later, he turned over to the writer nineteen individual oat plants, whose pedigrees had already passed through six individually selected mother plants. The seed produced on each of these nineteen plants was planted in separate plats in 1907 and again in 1908. By this time the seed from each of Prof. Jeffery's selections had been increased enough to plant a one-twentieth acre plat side by side with each other and in direct comparison with a standard variety in 1909. The grain produced on each plat was carefully threshed by means of a small machine that was entirely cleaned out after every plat. Thus the seed was kept pure. One of these lines was distributed in 1911 as the Alexander and the other in 1916 as the College Wonder.

Beginning with 1906, individual plant selections were obtained from wider sources. Seed was obtained from farmers, seed men, other experiment stations, and from around the world through the U. S. Office of Seed and Plant Introduction and Distribution. About one hundred new sources of seed were received in the next five years. The seeds that went into the nursery were each individually planted five inches from its neighbor in order to be sure that what grew in a spot was only one plant. From these nursery beds thousands of plants have been selected and tested. Those that showed themselves superior were increased and later, tested for yield in direct comparison with one another so that the yielding powers of the varieties could be compared under like conditions. Each variety is usually planted twice in the same year and along side of a standard variety, for each of three years before making a selection for distribution. Those lots that stand at the top of an average of six such results are considered superior, and worthy of further tests in the hands of farmers over Michigan. This work is being done by the members of the Michigan Crop Improvement Association. If a variety wins in the hands of this group of farmers, it is increased by them and distributed to those sections where it is best adapted.

MEET MR. SPRAGG, FOLKS

Mr. Frank A. Spragg

IN a series of articles, of which this is the first, Mr. Frank A. Spragg is going to tell the readers of THE BUSINESS FARMER about the different varieties of seeds for Michigan farms developed at the Michigan Agricultural College. Mr. Spragg is well qualified to write these articles as he has been plant breeder at the M. A. C. since 1906, coming to the College from Montana, and he has seen from the beginning the introduction of the new varieties of seeds introduced by the College. His first article is on oats, and following ones will take up wheat, rye, barley, beans, alfalfa and clover.

The first group of varieties that were collected were tested for comparative yield only during the years of 1909 and 1910. Each of them were planted twice in each of those years however. Thus four results were obtained for each variety. On the basis of these results two new varieties were introduced in 1911. These were the Alexander oat and the Worthy oat, each of them coming from an individual plant selected in 1906. These two varieties were about equal in yield according to the test at M. A. C. and both of the varieties were about equal in yield of extra stiff straw. But some one started the story that the Alexander was suited to sandy soil and that the Worthy was suited to heavy soil. As a result, these varieties were so planted by many. But the Alexander could not produce as much on sand as the Worthy did on good soil, and soon very few people grew Alexander. In spite of these facts at least one man, Mr. George Hurteau of Allegan, grew both Alexander and Worthy on his heavy lowlying soil. As the result of his test, he gave up the Worthy in favor of the Alexander, which he said yielded more bushels of grain for him.

By 1915, about six thousand bushels of Worthy oats were used for seed. It is estimated that at least 100,000 acres of Worthy oats were grown in Michigan in 1917. Exact figures are not obtainable because the spread was largely from farm to farm by natural processes. By 1918 the Worthy oats seemed to be known by nearly every progressive farmer of Michigan. Later introductions have replaced them in a few places, but the Worthy oat has become standard in the district around Fairgrove in Tuscola County were they can be obtained commercially in large quantities.

The oat-improvement work continued at M. A. C. and a large number of new sources of seed were drawn upon. The varieties that won in the earliest yields tests were later compared with the seed from new sources. The policy has been and still is, to send out an improved variety as soon as we are convinced that it is superior to know varieties, and then to keep looking for something better. Thus it happened that the College Wonder and College Success were distributed in 1916, and the Wolverine in 1917.

The College Success was a late variety that had to be planted extra early, but under those conditions produced exceptionally well. It was favored for a time by the farmers of Ottawa and the neighboring counties, where the Worthy had failed but the Worthy was generally reported superior to the College Success in eastern Michigan. However, twenty acres in Huron county showed 95 bushels of College Success oats per acre in 1918.

The Wolverine according to the College tests during the four years 1914 to 1917 averaged 20 per cent more bushels per acre than the Worthy. It is an earlier variety than any of the others mentioned in this paper. The Wolverine has taken well over Michigan and is now the leading pedigreed variety being grown by the Michigan Crop Improvement Association. One might wonder why the farmers of the Fairgrove district stick to and swear by the Worthy when the tests at the College show Wolverine superior. This brings up the problem of local adaptions, as well as personal preferences among farmers.

According to reports, the Strube oats have given extra good yields, on certain low, flat, recently drained parts of Saginaw and Bay counties. Also, it may be the ordinary varieties do not ripen properly under conditions that prevent early planting. Those conditions may need an extra early variety. The Worthy and Wolverine varieties were developed for good oat land. The Worthy and College Wonder were similar in many ways. They were equal in time of maturity belonging to the mid-season class that most farmers plant. However, College Wonder yielded 14 per cent more bushels per acre than the Worthy according to the college tests of 1911 to 1917. And yet among farmers the Worthy is still popular, and no pedigreed seed of the College Wonder is now available. This is an example of what is referred to above as personal preference among farmers.

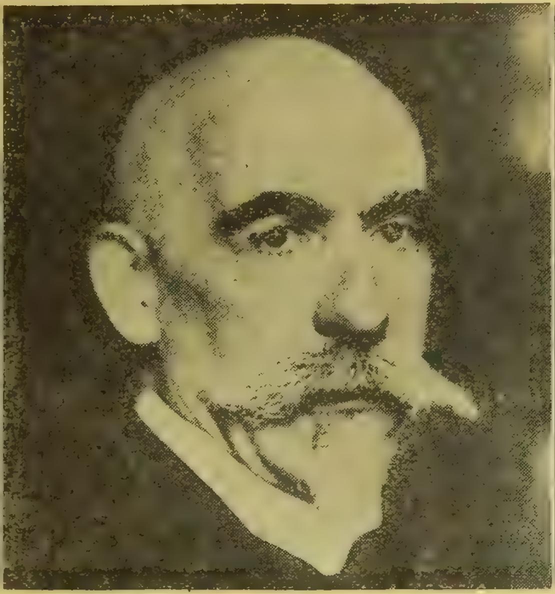
In general, however, it might be said that wide awake farmers over

(Continued on Page 29)

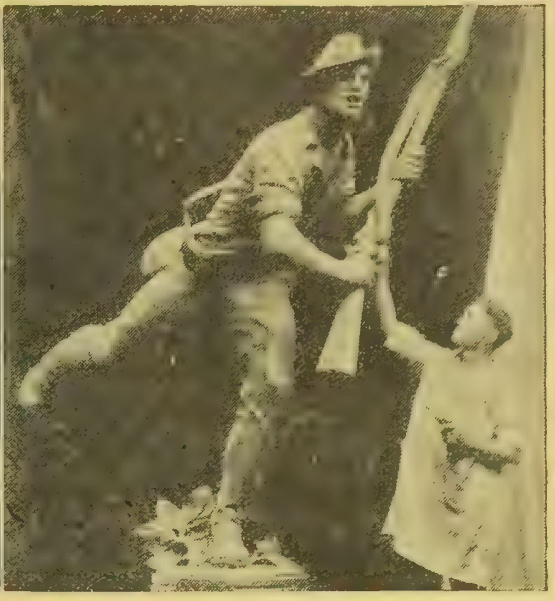
This is a view of a later varietal series when a large number of new series of seed had been drawn upon. This series, like all such varietal tests, is planted with the standard variety, sandwiched in frequently. This will give the farmer an idea of how he can compare varieties on his farm. They must not be planted on the edge of the field, and must be planted side by side in the same field. A drill width of each running the full length of the field will answer.

PICTURES FROM FAR AND NEAR

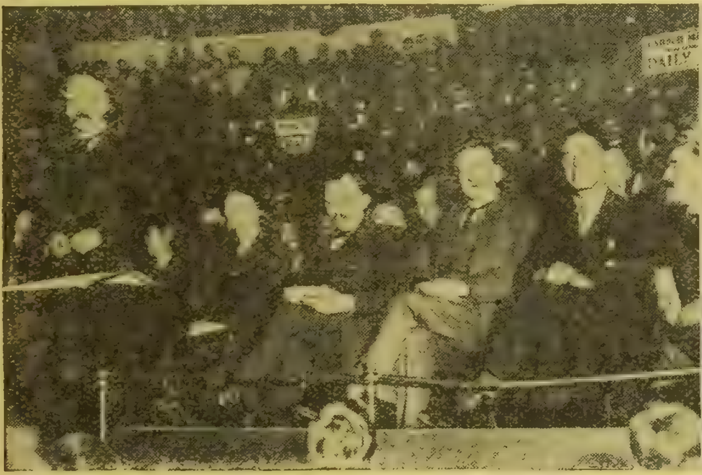
TWO BIG CHIEFS MEET.—Chief Bacon Rind of the Osage tribe and some of his followers paid a visit to President Coolidge a short time ago, and the two big chiefs had their pictures taken together. The Osage tribe is the richest in the country and controls the vast oil fields in Oklahoma.



INVENTS HUGE SUBMARINE CRUISER.—Oswald Flamm, a German submersion specialist, who has invented a submarine cruiser of more than 7000 tons. A big successful model exists. It has been learned that the British, French and Italian governments are interested in the invention.

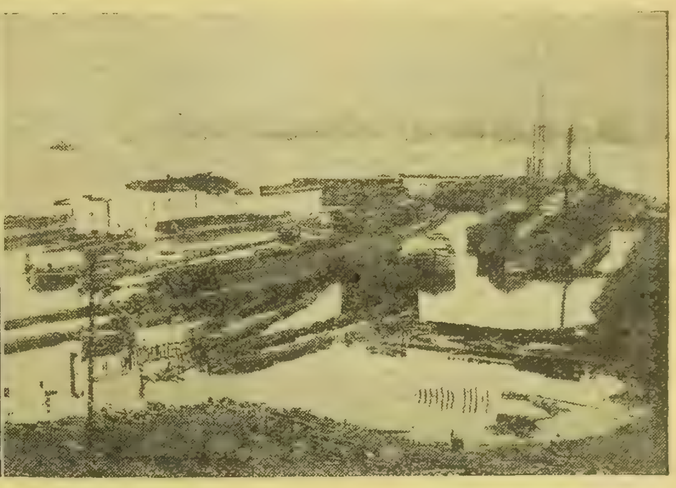


STATUE TO THE SPANISH AMERICAN WAR FIGHTERS.—Photo shows Mr. Robert Aitken, N. A., with his statue of "The Skirmisher" which is to be erected at Binghamton, N. Y. and unveiled on July 4, in honor of the boys, from Broome county, N. Y., who fought in the conflict of '90.



LABOR VICTORY DEMONSTRATION IN ENGLAND.—The Labor party held a demonstration recently in Albert Hall, London, to celebrate their victory. The new premier, Ramsey MacDonald, is shown standing at the left while seated behind him are several members of the Labor party

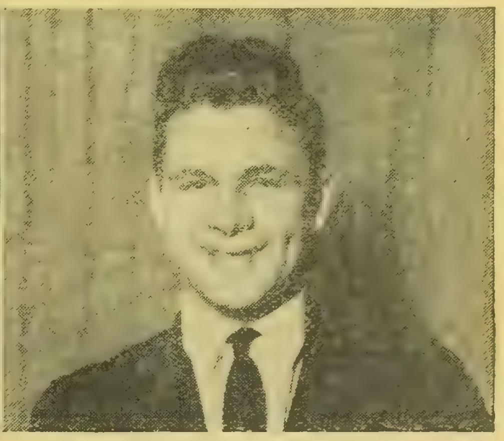
LEADS FEMININE BLACK SHIRTS.—Mme. Amalia Besso leads the woman black shirts of Italy.



A SHIP GRAVEYARD.—Along a goodly stretch of the west bank of the Hudson River, just north of Weehawken, N. J., is to be found a typical graveyard—the last resting place for dead or forgotten ships. The photo shows group of abandoned ships in all states of decay.

PRIEST IS ON LONE PATROL.—The Rev. Phillip Magrath of St. Bridget's Church, N. Y., is making it his nightly duty to patrol the North River front from 23rd to Canal streets, New York City, and defend any peaceful citizen who may be the victim of a thug.

BRAVEST AMERICAN HERO SITS FOR PORTRAIT.—Sargeant Samuel Woodfill, selected by General Pershing as the outstanding American hero of the World War, and retired a few weeks ago from the army, is having his portrait painted in New York. He will be one of the collection of heroes of the war which will be painted by Joseph Cummings Chase, famous artist. Mr. Chase has been commissioned to do this work by the A. E. F.



NOTHING HURTS HIM.—Here is Ralph Colston, freshman at the University of Pennsylvania, who is absolutely immune to pain. Doctors declare that no pain hurts him, also he is double jointed throughout his body. He will take part in the coming Olympic games in the hop-skip-and-jump.

McADOO PRESENTS COWBOY TROPHY.—William Gibbs McAdoo has just proclaimed Yakima Canutt the World's champion cowboy at bull-dogging, roping and riding, and has presented him with a trophy. The trophy is presented annually by the Roosevelt Hotel, of New York, in honor of Theodore Roosevelt. This ceremony took place at Los Angeles, California.

YOUNGEST BANK PRESIDENT IN EAST.—Bernard C. Diekman, although only 28 years old, is president of Ridgefield Park, N. J. Trust Company.

AGED HUNTER KILLS 500 MOUNTAIN LIONS.—Ben V. Lily, of New Mexico, 70 years old, has been a big game hunter from childhood on. He is now employed by the United States Biological Survey, to kill wild animals in the stock raising district. So far he has killed over 500 mountain lions. Each year he saves the stockmen thousands of dollars.

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Farmers' Week at M. A. C. is a Splendid Success

Discussion of "The Future of Agriculture" Attracts Thousands of Michigan's Farmers and Housewives. Optimism is Keynote of 1924 Sessions

By CARL H. KNOPF

(Special Correspondent of The Business Farmer.)

IF one were to ask, "What is the greatest annual event in Michigan agriculture?" the answer would undoubtedly be, "The Farmers' Week and Housewives' Congress at the Michigan Agricultural College." This combined event brings together the farm folks from all parts of Michigan for a solid week of enjoyment and profit. The lectures, discussions, demonstrations, and exhibits are a rare blending of scientific discoveries and practical experience and give the maximum of information and inspiration.

The attendance at Farmers' Week for 1924, held February 4 to 8, nearly reached the 4000 mark. This is truly remarkable considering the weather which prevailed during the week. Snow and sleet blockaded railroads and highways in many sections of the state but still the people managed to reach East Lansing. And at M. A. C. they found a Farmers' Week program which justified every effort they made to attend.

Today the question uppermost in the minds of the farmer is, "What is to become of agriculture?" To a great extent the general public is puzzling over that same question. Each year the Farmers' Week program features the principal and timely topics of agriculture, and so the 1924 program was built around the subject, "The Future of Agriculture."

Optimism Prevails Throughout

Probably the most striking thing about the Farmers' Week just past was the optimism which was manifest in the various addresses and discussions. The whole week was saturated with optimism. It was clearly recognized and frankly stated that agriculture is in an unsatisfactory condition. No effort was made to conceal the fact that the road to recovery and normal conditions is a long one. But the general feeling was that the bottom has been reached and that improvement is bound to come. No one predicts, or expects, a rapid rise but all are looking for a steady gain in agricultural affairs.

The Farmers' Week audiences and the sessions of the Housewives' Congress were addressed by men and women who have achieved prominence in state and national affairs. Members of the M. A. C. faculty and other Michigan talent were used on the program more extensively than out-of-state speakers. The wisdom of this was apparent in that our Michigan folks were able to outline definitely our problems in Michigan and to present specific plans for improvement.

Pres. Shaw Predicts Recovery

Speaking at the close of the week's program, Dr. Shaw, Acting President of the M. A. C., made a summing up of the entire week when he discussed the general topic, "The Future of Agriculture." Describing the depression which existed about 1893, Dr. Shaw called to mind the fact that in those days dressed hogs sold for 4c per pound, feeder steers for $4.50 per cwt. and wheat for 60c per bushel. Showing that the prices of the 90's were at much lower levels than during the present depression, Dr. Shaw stated the situation then was made even worse by the corresponding depressions in industry and commerce. The fact that industry is comparatively prosperous at the present time, gives the farmer a better market and greatly helps the present situation.

Dr. Shaw stated that the whole agricultural system was thrown out of balance during the war. Cereals and grains were produced in much greater proportion than livestock products. Poor lands and pastures were brought into the production of cash crops with the result that overproduction following the war wrecked the markets.

"Agriculture is certain to recover," stated Dr. Shaw. He warned his hearers that the process will be a gradual one. Comparing again with the "hard times" of the 90's he showed that the opening of great areas of new Western lands further hindered recovery at that time and yet, 1897 the agricultural situation was quite satisfactory.

Comparing Michigan agriculture with that of the Northwestern states, Dr. Shaw showed how the diversity of this state's crops had helped her escape the crisis which the other sections now face. Michigan's dairy products, beans, poultry sugar beets, and similar crops, were cited as giving great advantages over the one-crop states.

Emphasizing organization as a great factor in improving present conditions, Dr. Shaw called attention to the wonderful aid which Michigan is receiving through the Farm Bureau, Grange, Gleaners, and Farmers' Clubs. He stated that Michigan's 75 cow testing associations, the bull associations, the Dairy-Alfalfa campaigns in 52 counties, the 38-million-dollar income from poultry, and the 1,373 Boys and Girls Clubs are all helping to again put Michigan on the high road to profitable farming.

"Get Above Average"

In one of the most interesting addresses of the entire week, Eugene Davenport, formerly Dean of Agriculture in the University of Illinois, discussed "The Problems of Agriculture." With his keen analysis and pithy advice, Dean Davenport's saying might well be compiled into a sort of "Poor Richard's Almanac" for agriculture.

"You will never get anywhere by being simply an average farmer", stated Mr. Davenport, who added, "Prices of farm products are based on what the average farmer can produce them for—and with no profit added." He advised, as the remedy, that each find out the line of work which he can carry on to advantage and then get above the average.

In briefly discussing the various problems, Mr. Davenport advised that each farmer analyze his farming system. He stated that Michigan is one of the best sections for the production of wheat but that the Michigan farmer connot compete with the peasants of Russia or the Hindus of India in the production of that cereal, hence the farmer must change his system.

A crop system in which the crops dovetail as to time, was advised. Plenty of equipment was recommended with a warning that this may be easily overdone.

Speaking of the time element, Dean Davenport stated that the farmers, as a class, waste more time than any other class of business men. He recommended livestock farming, and dairying especially, as a means of utilizing time to best advantage throughout the year. Speaking of the objection to dairying as "confining" he said that the groceryman, the merchant, and the professional man seemed fully as confined, with the possible exception that they do not have to work on Sundays.

Proper use of capital and consulting with the banker, were strongly advised. "The banker is not a mere money lender, he is the business manager of the funds of the community."

The secret of success in marketing according to Mr. Davenport , has been found by those who realize that two good apples are worth more on the market than two good apples with one poor one thrown in. He told of the grower who made three grades of his apples. The No. 1's he packed in boxes, the No. 2's he fed to the pigs, and the No. 3's were buried.

Other advice given by Mr. Davenport was to improve the home conditions even during the hard times, to get plenty of the best reading matter, to systematize entertainment, and to take a vacation each year, for the farmer, preferrably in the city.

The three requisites for successful farmers are, according to Dean Davenport, that they be progressive, be judicious, and that they have contented minds.

L. J. Taber Says, "Organize"

The address given by Louis J. Taber, Master of the Ohio State Grange and also of the National Grange, was one of the high lights of the week. Speaking on "The Influence of Social Life on the Future of Agriculture," Mr. Taber emphasised social life as being the deciding factor in the agriculture of tomorrow. He strongly advised organization stating that, "The farmer in Michigan who does not belong either to the Grange or to the Farm Bureau is an agricultural slacker." Vigorous applause showed that the audience fully concurred in this opinion.

Mr. Taber stated that the cost of government must be decreased and at the same time the efficiency of government must be increased. Prosperity now hidden must be made to pay its share of the tax burden. The effort of the Grange in Michigan to initiate an income tax was lauded as being splendid work.

Law enforcement is a vital issue stated Mr. Taber. He would deport every alien who violates the liquor law and he would also send to the penitentiary every millionaire who employs men to violate that law for him. "We need a re-baptism in Americanism," stated Mr. Taber who urged that the immigrants be taught to "leave Europe behind."

"Production is more important than marketing," was a rather startling statement from the National Master. He also stated that cooperative production will be a vital factor in the future. Cooperative production was defined as being, not limited production, but rather, "production guided by information and wisdom."

"Farmers have the right to strike the same as have workers in other lines of industry but God forbid that the farmers of America should ever bring want and suffering to innocent people, simply for the sake of advancing their own interests", was a sentiment from Mr. Taber which met with unanimous approval.

Mr. Taber advised the farmers to train leaders for conducting the business of agriculture. He stated that the farmers must not denounce other lines of business but rather that they must learn from, and work with, other business men.

He closed with an appeal to the farmers' organizations to improve the social advantages of the country and raise the standard of living because "the hope of agriculture is the type and standard of its social life."

Housewives Congress

Much interest was shown in the sessions of the Housewives' Congress. Topics of interest to homemakers were presented by various members of the home economics teaching and extension staff. Miss Jean Kreuger, who recently came from the University of Wisconsin to become Dean of the M. A. C. Home Economics Department, presided at these meetings.

The list of topics considered ranged from clothing and furniture to diets and diseases of malnutrition. "How to be Wise When One Buys," was another topic which indicated that the business side of home management must be studied. 'Step Saving Suggestions' were also well received.

Dr. Marie Dye, Assoc. Professor of Home Economics, created something of a sensation in discussing, "Rickets, the Most Universal Disease of Childhood." Rickets was described as a disease of the bones caused by improper feeding. Dr. Nye asserted that almost every infant, between the ages of 6 to 18 months, has rickets to a greater or less degree. As proof of this she cited the experience of a Lansing baby specialist who has found that fully 90% of the children which he examines have rickets to some extent. Sunlight, small quantities of cod liver oil, and egg yolks were recommended for the prevention or cure of rickets.

Following the formal opening of the new Home Economics building on Tuesday evening the remaining sessions of the Housewives' Congress were held in that building.

Erected at a cost of $400,000 this new structure is easily the finest building on the M. A. C. campus and is also claimed to be one of the finest buildings of its kind in the United States. Built of brick and trimmed with sandstone this building has a beautiful and imposing style of architecture which makes it dominate the northern end of the college campus.

The interior of the building is finished in keeping with the whole structure. Nothing has been left undone in the way of arrangement, furnishings, and equipment to provide for the comfort, convenience, and efficient training of the young women fortunate to be enrolled in the M. A. C.

Simultaneous with the opening of the new building comes the announcement that a new course in nursing will be established at M. A. C. in cooperation with Sparrow hospital at Lansing.

The Big M. A. C. Parade

A Farmers' Week feature of recent years has been the annual parade. This year a mile-long procession gave to the thousands of visitors some idea of the activities and resources of the college. Headed by the M. A. C. military band, one of the finest college bands in the U. S. there came

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Sidney Smith Wins Livestock Judging Contest

ONE of the most interesting events of the recent Farmers' Week at M. A. C. was the livestock judging contest. This contest differed from most of its kind in that the visiting farmers were the contestants. While club boys and college students have had their judging contests for years, "dad" has usually been on the sidelines with nothing to do but look on. This recent contest at M. A. C. was arranged for the farmers and they got into the game most heartily. Each of the two forenoons of the contest the Judging Pavillion was well filled with contestants and spectators and the discussions frequently waxed warm over the merits of the various animals.

Percheron horses, Holstein and Angus cattle, Shropshire sheep, and Duroc Jersey hogs were the breeds used for the contest. Four animals were displayed in each of the five classes.

Each contestant was given a card for each class and on the card he wrote the order in which he placed the animals and also the reasons for so placing them. The contestant was allowed to judge as many of the different classes as he chose. At the close of the contest on Wednesday forenoon, the official placings were announced and discussed.

Beautiful silver trophy cups were provided by the State Board of Agriculture and these were presented to the winners at the close of the general program on Wednesday afternoon. The following are the winners in each of the classes; Percherons, Andy White of Orion; Shropshires, Fred Weikenbach of Beulah; Duroc Jerseys, Russell Jordan of Eaton Rapids; Holsteins, James Avery of Lansing.

Although not making the highest score in any one class, Sidney Smith of Orion had the highest average score for the entire five classes and so he was awarded the championship trophy cup.

As a means of arousing interest in better livestock and also to teach the practical points of livestock selection, the Farmers Livestock Judging Contest seems to fill a very great need and there is no doubt but that the event will be staged at Farmers' Week meetings in succeeding years.

Thirty-Three State Organizations Meet at M. A. C.

Livestock and Poultry Ass'ns, Rural Press and Y. M. C. A. Groups, Muck Farmers, Vinegar Manufacturers and Nurserymen Assemble During Farmers' Week

By CARL H. KNOPF

(Special Correspondent of The Business Farmer.)

EACH year sees a large increase in the number of organizations holding meetings in connection with Farmers Week at the Michigan Agricultural College. There are several reasons for this. Convenient places for meetings are available at M. A. C. while the Farmers Week events attract thousands of farmers from all parts of Michigan and tend to increase the attendance at the group meetings.

Monday afternoon of Farmers' Week was given over to the meetings of the several swine associations in the state. Most of these organizations had a good attendance of interested breeders. Despite the present low prices of pork there was a feeling of optimism in evidence among the swine breeders. The very fact that hog prices have dropped to very low levels is encouraging the swine breeders to believe that there will soon be a steady and gradual improvement in the business.

The various associations elected officers as follows:

Michigan Poland China Ass'n.

President, W. E. Livingston of Parma; Secretary and Treasurer, W. I. Wood, Birmingham.

Hampshire Breeders Ass'n.

President, Floyd Aseltine, Okemos; Vice President, John Landon, Addison; Secretary-Treasurer, C. F. Luckhard, Bach.

Duroc Jersey Breeders Ass'n.

President, O. F. Foster, Pavillion; Secretary-Treasurer, J. F. Schaeffer, Detroit; Directors; V. A. Freeman, East Lansing; Harold Shafley, St. Johns; Newton Barnhart, St. Johns.

Spotted Poland China Ass'n.

This is a new state organization of swine breeders which was formed during Farmers' Week. The following officers were chosen:

President, G. S. Coffman, Coldwater; Vice President, C. F. Luckhard, Bach; Secretary-Treasurer, C. L. Nash, Cassopolis; Executive Committee; Dr. F. Watson, Breckenridge; P. Clark, Adrian; Alfred Grueber, Frankenmuth; C. L. Emery, Albion.

Chester White Breeders Ass'n.

President, A. J. Hawkins, Coldwater; Secretary-Treasurer, F. W. Alexander, Coldwater.

Swine Breeders Ass'n.

This organization looks after the general swine interests of the State. Its officers are; President, John Miller, Swartz Creek; Vice President, W. E. Livingston, Parma; Secrtary-Treasurer, W. E. Haynes, Hillsdale. In addition to the officers this Association also has a board of directors, one director to r epresent each breed. The directors are; F. J. Schaeffer, Detroit, Duroc Jerseys; Albert Feldcamp, Manchester, Poland Chinas; E. R. Morrish, Flint, O. I. C's; F. W. Alexander, Vassar, Chester Whites; George Starr, Grass Lake, Hampshires; C. L. Nash, Cassopolis, Spotted Poland Chinas.

State O. I. C. Ass'n.

President, Edward Smith, Saline; Secretary-Treasurer, Earle R. Morrish, Flint.

The greater part of the cattle associations held their meetings on Tuesday forenoon. The newly elected officers of the various associations are:

Hereford Breeders Ass'n.

President, W. W. Crapo, Swartz Creek; First Vice President, L. Whitney Watkins, Manchester; Second Vice President, E. C. McCarty, Bad Axe; Third Vice President, J. R. Campbell, St. Johns; Secretary-Treasurer, Verne A. Freeman, East Lansing.

Aberdeen Angus Breeders Ass'n.

President, Sidney Smith, Orion; Vice President, Jas. Curry, Marlette; Secretary-Treasurer, Jas. McNab, Cassopolis.

Red Polled Cattle Club

President, N. C. Herbison, Birmingham; Vice President, R. L. Finch, Saline; Secretary-Treasurer, Mark Westbrook, Ionia.

DAIRY BREEDS

The dairy breed organizations also had large attendances at their respective meetings. The Michigan Holstein-Friesian Ass'n. held a sale of 43 purebred Holstein cattle on Monday afternoon of Farmers Week. This was followed in the evening by the annual banquet. At the business meeting on Tuesday the following officers were elected; President, M. W. Wentworth, Battle Creek; Vice President, W. R. Harper, Middleville; Secretary-Treasurer, H. W. Norton, Jr., Lansing. Executive Committee, E. L. Smith, Adrian; H. W. Norton, Jr., Lansing; Dudley E. Waters, Grand Rapids; J. E. McWilliams, Mt. Clemens; Silas Munsell, Howell; John B. Strange, Grand Ledge; John H. Wynn, Rochester.

Other dairy cattle associations and their officers are:

Guernsey Cattle Club

President, John Endicott, Detroit; Vice President, George Hoffman, Monroe; Secretary-Treasurer, C. F. Meyers, Grand Blanc; Directors, F. C. Holbeck, Long Lake; H. W. Wigman, Lansing; J. M. Williams, North Adams; J. B. Deutsch, Big Bay.

Ayrshire Breeders Ass'n.

President, W. T. Shuttleworth, Ypsilanti; Secretary-Treasurer, E. C. Roberts, Fennville.

Brown Swiss Breeders Ass'n.

President, L. S. Marshall, Leslie; Vice President, H. C. Teel, Lansing; Secretary-Treasurer, E. H. Creuss, Sebewaing.

A Pioneer of Thirty-Four Years

One of the veteran livestock organizations of the state is the Michigan Improved Livestock Breeders and Feeders Association which had charge of the general program on Tuesday afternoon of Farmers' Week. Following the regular program a business session was held and the following officers were elected; President, Jacob De Geus, Alicia; Secretary, George A. Brown, East Lansing; Treasurer, H. F. Probert, Jackson.

The livestock organizations in Michigan are not confined entirely to the cattle breeders as [illegible] by the interest and attendance at the meetings of the Michigan Horse Breeders Ass'n. Officers of this association for the coming year are:

President, L. C. Hunt, Eaton Rapids; Vice President, Jacob De-Gues, Alicia; Secretary-Treasurer, R. S. Hudson, East Lansing; Executive Board, O. E. Bell, Mason; Ray Whitney, Onondaga; William Bird, St. Johns; Sidney Smith, Orion.

Large and enthusiastic meetings were held by the Michigan Muck Farmers Association during parts of two days during Farmers' Week. This association elected as its officers; President, Robert Zimmerman, Centerville; Vice President, George Kaper, Hamilton; Secretary-Treasurer, P. H. Harmer, East Lansing.

The Michigan Crop Improvement Association has become a vital factor in the farm industry of the state. During the past year its work has been considerably extended as well as increased in scope. The association takes the new and improved varieties developed at the M. A. C. and distributes them over the state. It also maintains an inspection service which handles the certification and registration of worthy seed. After this improved seed is produced in sufficient quantity it is placed on the market, usually through the agency of the Seed Department of the Michigan State Farm Bureau. By thus acting as the intermediary agency between the College's development work and the Farm Bureau's marketing system the M. C. I. A. is rendering a very valuable service to the farmers of Michigan. Its officers as chosen for the ensuing year are; President, Garfield Farley, Albion; Vice President, Ralph Arbogast, Union City; Secretary, H. C. Rather, East Lansing; Directors, A. B. Cook, Owosso; E. C. McCarty, Bad Axe; George Wheeler, Mt. Pleasant; W. R. Kirk, Fair Grove; C. R. Oviatt, Bay City; Charles Laughlin, Dimondale.

Other organizations relating to, or allied to agriculture which held meetings during Farmers' Week are; Michigan Press Association; Michigan Crop Reporters Association; Vinegar Manufacturers Association; Michigan Nurserymens Association; County Y. M. C. A. Secretaries; and Short Course Students Association.

Holstein and Shorthorn Breeders Hold Sales

HUNDREDS of Farmers' Week visitors mingled with Holstein and Shorthorn breed enthusiasts in the crowds which attended the two sales of purebred cattle during Farmers' Week. The sales were held in the judging pavilion of the Agricultural building and, each time, the crowd of spectators and buyers taxed the capacity of the pavilion

The Holstein sale was held on Monday afternoon, February 4th. Under the direction of J. G. Hays, field man for the Michigan Holstein Breeders Association 43 head of purebred Holsteins had been consigned by various Holstein breeders throughout the state. These were all animals of excellent type and breeding some of them being backed by creditable production records made in Cow Testing Associations or under official supervision.

The 43 head of Holsteins sold for a total of $10.800.00 or an average of more than $250 per head. This sets a high mark for state sales of Holstein cattle during recent years. It shows that good animals were consigned and also proves that people will pay good prices for good stuff

The two cows brought $420 each. One was consigned by John C. Buth, of Grand Rapids and sold to L. C. Carlyle of Yale, Michigan. The other $420 cow was purchased by M D. Buth of Grand Rapids from the consignment of J. N. Lamoreaux of Grand Rapids.

An aged bull, also consigned by Mr. Lamoreaux, was sold to a group of Holstein breeders in Newaygo County for $415. Two other animals sold for $400 while 4 other animals reached, or exceeded, the $300 mark, each.

The range of prices and the spirited bidding at the sale indicates

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"A Stitch in Time Saves Nine" Applies Very Well to Work on the Farm

By F. T. RIDDELL

(Department of Farm Management, Michigan Agricultural College.)

DID you ever stop to think of the thousands of dollars that are spent every year for farm machinery? Did you ever stop to consider that this machinery had to be replaced about every ten years? Not only this but there are the repair costs that must be taken care of which helps to add to the bill.

An investigation conducted by the Farm Management Department of the Michigan Agricultural College showed that the investment in farm machinery in twenty-five of the better farms in Lenawee County amounted to $1,800 per farm and the average investment on the same number of high grade farms in Montcalm, Antrim and Emmet Counties amounted to $1,000 per farm. At once it is apparent that the farmer has no small amount of money invested in this sort of farm equipment. The depreciation charge alone amounts to approximately one-tenth of the investment. While this is an unavoidable charge, there are many other things entering in which indirectly tend to lower the farm income.

Fam machinery is a very important and dependable factor in our production and the efficiency of utilization of this factor depends on the farmer himself, as to the condition of the machine when he desires to use it. In many cases too much valuable time is wasted making repairs [illegible] adjusting machinery at the [illegible] year when a few hours delay [illegible] mean the cutting down of crop yield or the entire loss of the crop

The farmer's time is divided into seasons; seeding time, cultivating, and harvesting cover three of these periods and the operations performed in any one of these cannot be postponed to any other period. Thus the farmer must be in readiness at the proper time if he expects to get the best results out of the business. For a few hours delay at seeding and harvesting time may mean a bank balance in red ink at the end of the year. (A poor or damaged crop.)

Oats is a crop that must be sown at a time of year when the weather conditions are catchy, and if not seeded when conditions are right it may mean several days delay and a lot of extra work to refit the ground. Much of this delay coming through poor preparation for the task at hand. The horses are in poor condition, the tools are rusty, the drill needs repairing or the seed has not been cleaned, perhaps it was the farmer's intention to treat his seed for smut but due to delay in securing the disinfectant he postpones this operation for this year trusting to luck. Thousands of tons of hay are ruined each year because the hay loader failed to work; because the hay fork, the track, or ropes were in poor repair. The hay loader may have been left in the field where it was last used all winter or long enough so that it is rusty, the ropes are rotten or the slats are cracked or warped out of shape, so when farmer Brown finds himself confronting a twenty-acre field of hay ready to harvest and the weather man predicting a storm within a few hours he frets and stews, and everything is in an uproar because the hay loader won't work.

Often-times spraying is delayed and put off until it is too late because the materials were not secured at the proper time or the spraying outfit does not work, the pumps need rewashering, the hose or pipes leak, or have corroded.

The tractor is another piece of farm machinery that is not only expensive but complicated and fails to function unless in perfect condition. It is a powerful machine and if in condition is a big factor in production when things are favorable for its work. Investigations show that the tractor only operates about 38 days a year on the average farm, thus if the machine is not in preparation for utilization at the proper time its overhead expense per working day or per acre will be greatly increased.

On the majority of farms the winter season is the farmer's slack period. Outside of caring for livestock there are very few operations to perform and these do not have to be done at any definite period, thus leaving time on the farmer's hands which could be utilized very profitably in the overhauling and repairing of farm machinery, cleaning

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Oh Money! Money!

by ELEANOR H. PORTER

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THE STORY TO DATE

MR. STANLEY G. FULTON, 50-year old bachelor and possessor of twenty million dollars, calls on his lawyer and they discuss the disposition of this large fortune after its owner's death. The lawyer is in favor of giving the money to colleges or charities while Fulton is opposed to these ideas. He remembers that he has some distant cousins and decides to leave the money to one of them, but first he determines to learn which one will use it to the best advantage. To find out who is the worthy one he, through his lawyer, gives, each cousin $100,000 to use as they will. Before giving them the money grows a beard and, using the name of Mr. John Smith, goes to the town where they live to find out what kind of people they are. Upon arriving in town he visits James Blaisdell, one of the cousins, where he tries to hire board and lodging. While there he meets Miss Flora Blaisdell, another cousin who is a dressmaker. They decide they cannot rent a room to him and supply him board and refer him to Frank Blaisdell's, the third cousin. He gets a room there and, passing as a writer gathering material for a book on the Blaisdell family in this country, he starts out. He calls on all of the Blaisdells and as they all talk of a relative by the name of Miss Maggie Duff he decides to call on the lady. He finds her living with her father, an old man who seems to have soured on the world. He secures what information he can from her and her father. He then writes a letter to his lawyer discussing the various relatives he has met. The members of the Blaisdell family learn that each cousin of Stanley G. Fulton has fallen heir to $100,000 and there is much excitement.

(Continued from February 2nd issue.)

MR. SMITH, these days was keeping rather closely to his work, especially when reporters were in evidence. He had been heard to remark, indeed, that he had no use for reporters. Certainly he fought shy of those investigating the Fulton-Blaisdell legacy. He read the newspaper accounts, though, most attentively, particularly the ones from Chicago that Mr. Norton kindly sent him sometimes. It seems in one of these papers that he found this paragraph:—

There seems to be really nothing more that can be learned about the extraordinary Stanley G. Fulton-Blaisdell affair. The bequests have been paid, the Blaisdells are reveling in their new wealth, and Mr. Fulton is still unheard from. There is nothing now to do but await the opening of the second mysterious packet two years hence. This, it is understood, is the final disposition of his estate; and if he is really dead, such will doubtless prove to be the case. There are those, however, who, remembering the multi-millionaire's well-known eccentricities, are suspecting him of living in quiet retirement, laughing in his sleeve at the tempest in the teapot that he has created; and that long before the two years are up, he will be back on Chicago's streets, debonair and smiling as ever. The fact that so little can be found in regard to the South American exploring expedition might give color to this suspicion; but where, oh, where, on this terrestrial ball could Mr. Stanley G. Fulton find place to live in unreported retirement?

Mr. Smith did not show this paragraph to the Blaisdells. He destroyed the paper containing it, indeed, promptly and effectually—with a furative glance over his shoulder as he did so. It was about this time, too, that Mr. Smith began to complain of his eyes and to wear smoked glasses. He said he found the new snow glaring.

"But you look so funny, Mr. Smith," said Benny, the first time he saw him. "Why, I didn't hardly know you!"

"Didn't you, Benny," asked Mr. Smith, with suddenly a beaming countenance. "Oh, well, that doesn't matter, does it?" And Mr. Smith gave an odd little chuckle as he turned away.

CHAPTER XII

The Toys Rattle Out

Early in December Mrs. Hattie, after an extended search, found a satisfactory home. It was a somewhat pretentious house, not far from the Gaylord place. Mrs. Hattie had it repapered and repainted throughout, and two new bathrooms put in. (She said that everybody who was anybody always had lots of bathrooms.) Then she set herself to furnishing it. She said that, of course, very little of their old furniture would do at all. She was talking to Maggie Duff about it one day when Mr. Smith chanced to come in. She was radiant that afternoon in a handsome silk dress and a new fur coat.

"You're looking very well—and happy, Mrs. Blaisdell," smiled Mr. Smith as he greeted her.

"I am well, and I'm perfectly happy, Mr. Smith," she beamed. "How could I help it? You know about the new home, of course. Well, it's all ready, and I'm ordering the furnishings. Oh, you don't know what it means to me to be able at last to surround myself with all the beautiful things I've so longed for all my life!"

"I'm very glad, I'm sure." Mr. Smith said the words as if he meant them.

"Yes, of course; and poor Maggie here, she says she's glad, too,—though I don't see how she can be, when she never got a cent, do you, Mr. Smith. But, poor Maggie, she's got so used to being left out—"

"Hush, hush!" begged Miss Maggie.

"You'll find money isn't everything in this world, Hattie Blaisdell," growled Mr. Duff, who, to-day, for some unknown reason, had deserted the kitchen cookstove for the living-room base burner. "And when I see what a little money does for some folks I'm glad I'm poor. I wouldn't be rich if I could. Furthermore, I'll thank you to keep your sympathy at home. It ain't needed nor wanted—here."

"Why, Father Duff," bridled Mrs. Hattie indignantly, "you know how poor Maggie has to—"

"Er—but tell us about the new home," interrupted Mr. Smith quickly, "and the fine new furnishings."

"Why, there isn't much to tell yet—about the furnishings, I mean. I haven't got them yet. But I can tell you what I'm going to have." Mrs. Hattie settled herself more comfortably, and began to look happy again. "As I was saying to Maggie, when you came in, I shall get almost everything new—for the rooms that show, I mean—for, of course, my old things won't do at all. And I'm thinking of the pictures. I want oil paintings, of course, in gilt frames." She glanced a little disdainfully at the oak-framed prints on Miss Maggie's walls.

"Going in for old masters, maybe," suggested Mr. Duff, with a sarcasm that fell pointless at Mrs. Hattie's feet.

"Old masters?"

"Yes—oil paintings."

"Certainly not." Her chin came up a little. "I'm not going to have anything old in my house—where it can be seen. For once I'm going to have new things—all new things. You have to make a show or you won't be recognized by the best people."

"But Hattie, my dear," began Miss Maggie, flushing a little, and carefully avoiding Mr. Smith's eyes, "old masters are—very valuable, and—"

"I don't care if they are," retorted Mrs. Hattie, with decision. "If they're old, I don't want them, and that settles it. I'm going to have velvet carpets and the handsomest lace curtains that I can find; and I'm going to have some of those gold chairs, like the Pennock's have, only nicer. Theirs are awfully dull, some of them. And I'm going to buy—"

"Humph! Pity you can't buy a little common sense—somewhere!" snarled old man Duff, getting stiffly to his feet. "You'll need it, to swing all that style."

"Oh, father!" murmured Miss Maggie.

"Oh, I don't mind what Father Duff says," laughed Mrs. Hattie. But there was a haughty tilt to her chin and an angry sparkle in her eyes as she, too, arose. "I'm just going, anyway, so you don't need to disturb yourself, Father Duff."

But Father Duff, with another "Humph!" and a muttered something about having all he wanted already of "silly chatter," stamped out into the kitchen, with the usual emphasis of his cane at every other step.

It was just as well, perhaps, that he went, for Mrs. Hattie Blaisdell had been gone barely five minutes when her sister-in-law, Mrs. Jane, came in.

"I've come to see you about a very important matter, Maggie," she announced, as she threw off her furs—not new ones—and unbuttoned her coat—which also was not new.

"Then certainly I will take myself out of the way," said Mr. Smith, with a smile, making a move to go.

"No, please don't." Mrs. Jane held up a detaining hand. "Part of it concerns you, and I'm glad you're here, anyway. I should like your advice."

"Concerns me?" puzzled the man.

"Yes. I'm afraid I shall have to give up boarding you, and one thing I came up today for was to ask Maggie if she'd take you. I wanted to give poor Maggie the first chance at you, of course."

"Chance at me!" Mr. Smith laughed, but unmistakably he blushed. "The first —But, my dear woman, it is just possible that Miss Maggie may wish to—er—decline this great honor which is being conferred upon her, and she may hesitate, for the sake of my feelings, to do it before me. Now I'm very sure I ought to have left at once."

"Nonsense!" (Was Miss Maggie blushing the least bit, too?) "I shall be very glad to take Mr. Smith as a boarder if he wants to come—but he's got something to say about it, remember. But tell me, why are you letting him go, Jane?"

"Now this surely will be embarrassing," laughed Mr. Smith again nervously. "Do I eat too much, or am I merely noisy, and a nuisance generally?"

But Mrs. Jane did not appear to have heard him. She was looking at Miss Maggie, her eyes somber, intent.

"Well, I'll tell you. It's Hattie."

"Hattie!" exclaimed two amazed voices.

"Yes. She says it's perfectly absurd for me to take boarders, with all our money; and she's making a terrible fuss about where we live. She says she's ashamed—positively ashamed of us—that we haven't moved into a decent place yet."

Miss Maggie's lips puckered a little.

"Do you want to go?"

"Y-yes, only it will cost so much. I've always wanted a house—with a yard, I mean; and 'twould be nice for Mellicent, of course."

"Well, why don't you go? You have the money."

"Yes, I know I have; but it'll costs so much, Maggie. Don't you see? It costs not only the money itself, but all the interest that the money could be earning. Why, Maggie, I never saw anything like it." Her face grew suddenly alert and happy. "I never knew before how much money, just money, could earn, while you didn't have to do a thing but sit back and watch it do it. It's the most fascinating thing I ever saw. I counted up the other day how much we'd have if we didn't spend a cent of it for ten years—the legacy, I mean."

"But, great Scott, madam!" expostulated Mr. Smith. "Aren't you going to spend any of that money before ten years' time?"

Mrs. Jane fell back in her chair. The anxious frown came to her face.

"Oh, yes, of course. We have spent a lot of it, already. Frank has bought out that horrid grocery across the street, and he's put a lot in the bank, and he spends from that every day, I know. And I'm willing to spend some, of course. But we had to pay such an inheritance tax and all that it would be my way not to spend much till the interest had sort of made that up, you know; but Frank and Mellicent—they won't hear to it a minute. They want to move, too, and they're teasing me all the time to get new clothes, both for me and for her. But Hattie's the worst. I can't do a thing with Hattie. Now what shall I do?"

"I should move. You say yourself you'd like to," answered Miss Maggie promptly.

"What do you say, Mr. Smith?"

Mr. Smith leaped to his feet and thrust his hands into his pockets as he took a nervous turn about the room, before he spoke.

"Good Heavens, woman, that money was given to you to use. Now, why don't you use it?"

"But I am using it," argued Mrs. Jane earnestly. 'I think I'm making the very best possible use of it when I put it where it will earn more. Don't you see? Besides, what does the Bible say about that man with one talent that didn't make it earn more?"

With a jerk Mr. Smith turned on his heel and renewed his march.

"I think the only thing money is good for is to exchange it for something you want," observed Miss Maggie sententiously.

"There, that's it! triumphed Mr. Smith, wheeling about. "That's exactly it!"

Mrs. Jane sighed and shook her head. She gazed at Miss Maggie with fondly reproving eyes.

"Yes, we all know your ideas of money, Maggie. You're very sweet and dear, and we love you, but you are extravagant."

"Yes. You use everything you have every day; and you never protect a thing. Actually, I don't believe there's a tidy or a linen slip in this house." (Did Mr. Smith breathe a fervent "Thank the Lord!" Miss Maggie wondered.) "And that brings me right up to something else I was going to say. I want you to know that I'm going to help you."

Miss Maggie looked distressed and raised a protesting hand; but Jane smilingly shook her head and went on.

"Yes, I am. I always said I should, if I had money, and I shall—though I must confess that I'd have a good deal more heart to do it if you weren't quite so extravagant. I've already given you Mr. Smith to board."

"Oh, I say!" spluttered Mr. Smith.

But again she only smilingly shook her head and continued speaking.

"And if we move, I'm going to give you the parlor carpet, and some rugs to protect it."

"Thank you; but, really, I don't want the parlor carpet," refused Miss Maggie, a tiny smouldering fire in her eyes.

"And I shall give you some money, too," smiled Mrs. Jane, very graciously,—when the interest begins to come in, you know. I shall give you some of that. It's too bad you should have nothing while I have so much."

"Jane, please!" The smouldering fire in Miss Maggie's eyes had become a a flame now.

"Nonsense, Maggie, you mustn't be so proud. It's no shame to be poor. Wasn't I poor just the other day? However, since it distresses you so, we won't say any more about it now. I'll go back to my own problems. Then, you advise me—you both advise me—to move, do you?"

"I do, most certainly," bowed Miss Maggie, still with a trace of constraint.

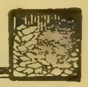
Any you, Mr. Smith?"

Mr. Smith turned and threw up both his hands.

"For Heaven's sake, lady, go home, and spend—some of that money!"

(Continued in March 1st issue.)

Farmers Service Bureau



(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full name and address. Name not used if so requested.)

LUMPS IN ALUMINUM PAIL

I have an aluminum pail and there are small lumps around on the inside. Is it alright to use it for drinking water? What is the cause of the pail getting that way?—Mrs. A. O., Carsonville, Mich.

—The lumps on the aluminum pail are due to an impurity in the alloy which has been used recently to made cheaper grades of aluminum utensils. A little electric battery is set up in the structure of the metal. It is in no way harmful.—Dr. C. C. Young, Dept. of Health.

CAN REMOVE FENCE

I have a farm I bought on contract. I missed payment but my contract has not been foreclosed. I bought fence and temporarily fastened it up. Can I take it away?—J. B., Whittemore, Mich.

—If the fence is of temporary construction and you removed it before the contract was foreclosed, I am of the opinion you would have the right to take it off the farm.—Asst. Legal Editor.

STATE FUND FOR PURCHASING ATHLETIC EQUIPMENT

Could you please tell me if there is a place in Lansing or elsewhere in Michigan that schools get playthings free, such as footballs, basketballs, etc.? I have been told there is such a place, but do not know where to send.—D. B., Bad Axe, Mich.

—Just after the war when the Michigan Boxing Commission was organized, a certain part of its receipts was turned over to this Department for the purchase of athletic equipment. With the dying out of boxing in Michigan this fund was not kept up and, consequently, the supplies purchased at that time have been practically used up. There was, however, at that time a good deal of equipment sent to schools, especially in the smaller communities and in rural districts. This practice has been discontinued.— A. F. Westphal, State Director of Physical Education.

FELL TREES INTO DITCH

I sold a piece of timber to a lumber company and they let the job of cutting the timber to some parties. There is quite a large ditch running through this piece of timber and when they cut the trees they fell several of them into the ditch. Now these tops are stopping up the ditch to a certain extent and causing sand bars. Would the parties that cut the timber be obliged to remove these tops from the ditch or will I have to do it?—L. Y., St. Johns, Mich.

—I am of the opinion you could recover damages from the parties who cut the timber, if they refuse to remove the tops from the ditch.—Asst. Legal Editor.

CANNOT MAINTAIN GASOLINE PUMP ALONG TRUNK LINE

I am writing to you for a little information about a gasoline pump on Michigan trunk line between Flint and Owosso. There is a party trying to make us move it but I say they cannot because they do not show any papers from the State Highway Department. Have they got the right to make us remove it? I have had trouble with the oil company and believe they are trying to bluff us so we will move it. The pump is located on five points and the pump is thirty feet from state trunk line. Is that far enough or not? And will they have to serve

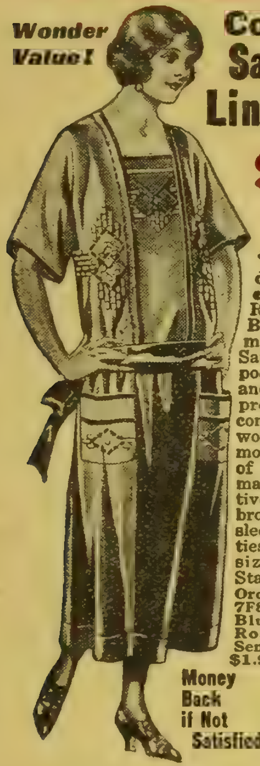
(Continued on Page 26)

Fashions for Springtime
Appealing in Style and Price

There's a freshness of Spring itself in Sharood's new styles for the coming season. And what amazing values—absolutely the Biggest Bargains in America! Here are some of the newest Spring fashions. Look them over—and note the extraordinarily low prices for such fine styles. Then send your order—early—before the big rush, the tremendous demand for these choice styles, commences. Our unqualified "Money-Back" Guarantee insures full value for every penny you spend.

Satisfaction Guaranteed or Money Back

Merely give name and number of each article you want. Also state size, and write your name and address plainly to avoid delay. Send only the amazing bargain price and few cents postage mentioned in each description. When goods arrive, examine them carefully. If not delighted with your bargains, return goods and we refund your money instantly. Order Now—Today! Shipment positively goes forward within 24 hours of time we receive your order.



Wonder Value!

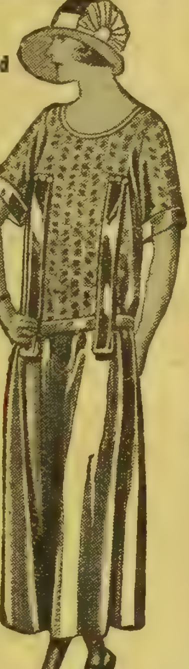
Combination Sateen and Linene Dress

$1.98

A very charming and "different" dress for day-time wear, in choice of Tangerine, Rose or Copenhagen Blue top. The skirt is made of lustrous Black Sateen, with large patch pockets of same color and material as waist, prettily decorated with contrasting tops and wool embroidery to harmonize. The blouse is of solid color Linene made especially attractive with wool hand embroidery. Novel Vestee sleeves. All-around belt ties in back. Women's sizes, 34 to 46 bust. State size.

Order Tangerine by No. 7F8041. Copenhagen Blue by No. 7F8042. Rose by No. 7F8043. Send Bargain Price, $1.98, and 6c for postage.

Money Back if Not Satisfied



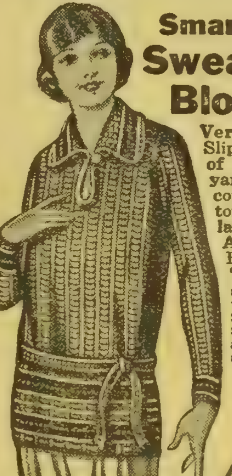
Beautiful Silk and Crepe Dress

For Women and Misses

$4.98

Silk and Crepe are beautifully combined in this lovely dress. The bodice is of printed figured pattern silk and cotton crepe. Pretty bands of crepe silk on front and back, finished with small metal buttons. The neck and sleeves are outlined with crepe silk. The skirt and the trimming are made of heavy Silk Crepe. Belt all around. Truly, an amazing value! State skirt length desired. Color, light Blue. Misses' sizes, 32 to 38. Women's sizes; 34 to 44 inches, bust measure.

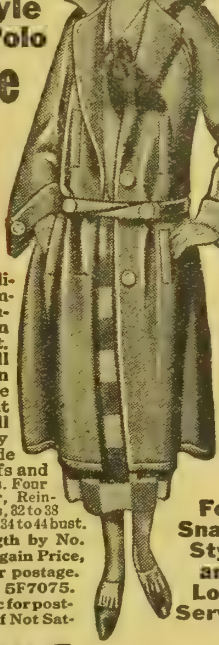
Order by No. 5F7605. Send Bargain Price, $4.98, and 6c for postage. Satisfaction Guaranteed or Money Back Instantly.



Smart Slip-Over Sweater Blouse

$1.98

Very smart and stylish Slip-Over Sweater Blouse of pure worsted knitted yarn with wide border of contrasting colors at bottom and on cuffs and collar. Full rack stitched. All-around sash. Color, Buff with Brown and Tangerine. Women's sizes 36 to 44 bust measure. Order No. 3F1976. Send bargain price, $1.98, and 6c for postage. Money back if not satisfied. State Size.



Sport Style All Wool Polo Chappie Coat

$7.98 UP

Good style and reliable quality are combined with an unusually low price in this Chappie coat. Of serviceable All Wool Polo cloth in popular sport style with inverted pleat in back. Belt all around. Roomy Raglan sleeves made with separate cuffs and trimmed with buttons. Four slash pockets. Color, Reindeer Tan. Misses sizes, 32 to 38 bust. Women's sizes, 34 to 44 bust. Order 38-inch length by No. 5F7071. Send Bargain Price, $7.98, and 16c for postage. 42-inch length, No. 5F7075. Send $8.98 and 18c for postage. Money Back If Not Satisfied. State Size.

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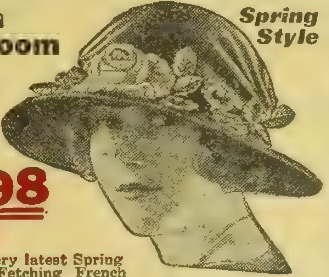

Spring Style

French Mushroom Poke Shape

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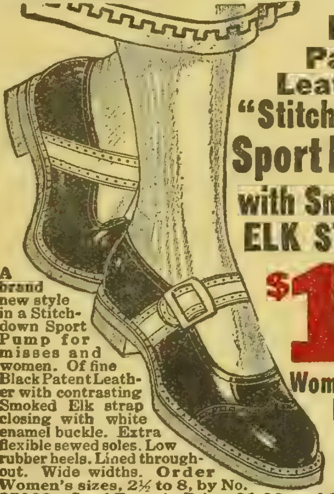
Here's the very latest Spring Hat Style. Fetching French mushroom poke with shirred back. High lustre Baronette satin crown, hand draped. Brim is of the very newest French Visca cloth trimmed with beautiful floral wreath and foliage in many contrasting Spring colors. Made in 3 very popular shades for Spring.

Order Sand Color by No. 8F9800. Copenhagen Blue by No. 8F9803. Black by No. 8F9804. Send Bargain Price, $1.98, and 15c for postage. Money Back if Not Satisfied.



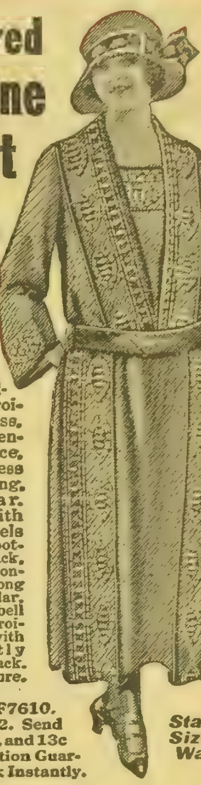
New Patent Leather "Stitchdown" Sport Pump with Smoked ELK STRAP

$1.98

Women's and Misses' Sizes

Flexible Soles

A brand new style in a Stitchdown Sport Pump for misses and women. Of fine Black Patent Leather with contrasting Smoked Elk strap closing with white enamel buckle. Extra flexible sewed soles. Low rubber heels. Lined throughout. Wide widths. Order Women's sizes, 2½ to 8, by No. 9F283. Send Bargain Price, $1.98, and 8c for postage. Order Misses' sizes, 11½ to 1, by No. 9F495. Send $1.49, and 4c for postage. Money Back if Not Satisfied.



Embroidered Gabardine for Stout Women

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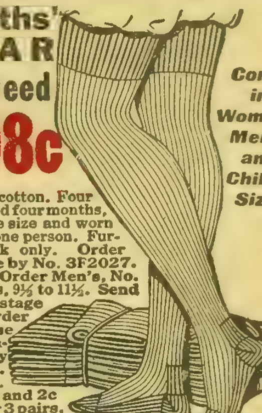
You'll hardly believe your mirror when you try on this excellent quality Embroidered Gabardine dress, and see the trim, slender, smart appearance, you've attained. A dress guaranteed to give long, satisfactory wear. Skirt is finished with two wide, loose panels attached at waist and bottom. Edges bound in black, and embroidered in contrasting color. New long roll shawl effect collar, vestee, and latest bell shaped sleeves all embroidered to harmonize with skirt panels. Slightly shirred at waistline in back. Sizes 44 to 64 bust measure. State size and length.

Order Navy by No. 5F7610. Brown by No. 5F7612. Send Bargain Price, $3.98, and 13c for postage. Satisfaction Guaranteed or Money Back Instantly.

State Size Wanted

Amazing Hosiery Bargains



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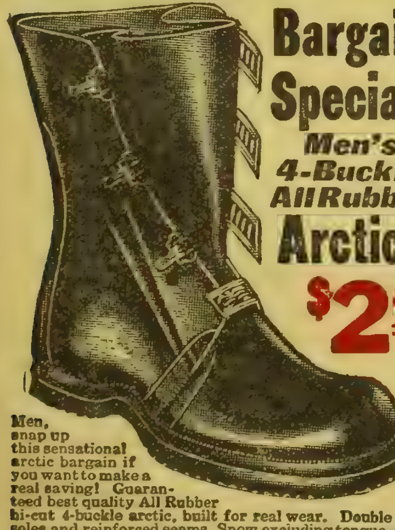
Come in Women's Men's and Child's Sizes

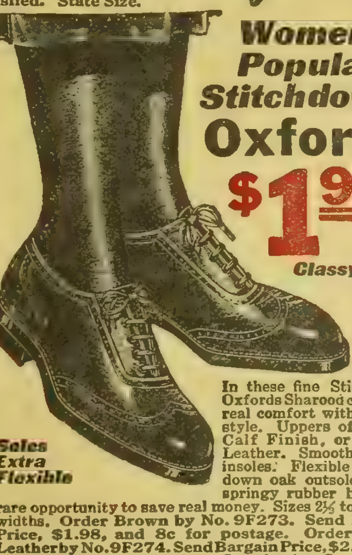
Knit of combed cotton. Four pairs guaranteed four months, if bought of one size and worn alternately by one person. Furnished in black only. Order Women's hose by No. 3F2027. Sizes 8½ to 10. Order Men's, No. 3F1657. Sizes, 9½ to 11½. Send 98c and 2c postage for 4 pairs. Order Children's hose of same guaranteed quality by No. 3F1710. Sizes, 6 to 10. Send 98 cents and 2c for postage for 3 pairs, with 4 months guarantee.



Bargain Special! Men's 4-Buckle All Rubber Arctics

$2.49

Men, snap up this sensational arctic bargain if you want to make a real saving! Guaranteed best quality All Rubber hi-cut 4-buckle arctic, built for real wear. Double thick soles and reinforced seams. Snow excluding tongue. Sizes 6 to 15. Wide widths. Buy now—you'll save big money! Order by No. 1F990. Send Bargain Price, $2.49, and 12c for postage. Satisfaction Guaranteed or Money Back Instantly.



Women's Popular Stitchdown Oxfords

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Classy Wing Tip

Soles Extra Flexible

In these fine Stitchdown Oxfords Sharood combines real comfort with snappy style. Uppers of Brown Calf Finish, or Patent Leather. Smooth leather insoles. Flexible stitched down oak outsoles. Low springy rubber heels. A rare opportunity to save real money. Sizes 2½ to 8. Wide widths. Order Brown by No. 9F273. Send Bargain Price, $1.98, and 8c for postage. Order Patent Leather by No. 9F274. Send Bargain Price, $2.48, and 8c for postage. State size. Satisfaction Guaranteed or Money Back Instantly.

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What the Neighbors Say

WHEAT GROWERS SHOULD RAISE SUGAR BEETS NOW

DEAR EDITOR: A remedy is sought for distressed American wheat farmers who are selling their surplus abroad at less than its cost of production.

This condition arises not so much from the low price of wheat as from the fact that while cost of production has increased, the yield per acre remains at 13 to 15 bushels, compared with an average of 24.7 bushels in northwestern Europe, their high yield having been brought about by the introduction of sugar-beet culture.

One of the suggestions made for their relief is for our farmers, where the growing of sugar beets is possible, to devote sufficient of their present wheat area to sugar-beets to produce at home the sugar we now import.

Among the numerous important advantages of this plan are:

FIRST: It would create for American wheat farmers a home market for a profitable cash crop, on which they would realize nearly two hundred million dollars annually.

SECOND: It would save our sending several hundred million dollars abroad for the purchase of a crop we are eminently fitted to produce at home.

THIRD: It would save consumers on the purchase price of sugar, as domestic sugar always sells at a lower price than imported sugar. For several months consumers in the west have been purchasing domestic beet sugar for a full cent a pound less than consumers in the east have been compelled to pay for imported sugar made from Cuban raws.

FOURTH: It would free the American people from subjection to foreign combinations which in 1920 boosted the price of Cuban raw sugar to 24c per pound, at a time when refined domestic beet sugar was selling at one-half that price.

FIFTH: But more important than all other considerations combined, it would double the yield and reduce the price of every crop grown in rotation with sugar beets, thus aiding the farmer and lowering the price of all foodstuffs to the consumer.

Sugar beets improve the soil. Europe doubled her yield of cereals per acre by growing them in rotation with sugar beets and other hoed root crops. In a thirty year period (1879-1909), Germany increased the cereal yield on 34,000,000 acres by 530,000,000 bushels, the value of which since has been as much every year as all it cost her to establish the greatest beet-sugar industry in the world.

A similar increase in this country would give our farmers an extra four billion bushels of cereals without extra cost, thus enabling them to produce in competition with the world, however low the price might go.—Truman G. Palmer, Sugar Statistician, Washington, D. C.

SIMPLER SYSTEM OF GETTING TITLE TO LAND

DEAR EDITOR:—I have just been reading in your issue of January 5th, the letter from Ealy & Co., abstractors, Tuscola county, Mich. Now I wish every property owner in Michigan could read and ponder this letter.

If it is such trouble and expense to get an abstract now, what will it be a hundred years from now? It would seem as if our legislators might put in some of their time in giving us a better and simpler system of title to real estate than we have at present.

Just a suggestion: I understand that original title to a large part of the real estate in this country was acquired by warrant or grant directly from the state or United States. Certainly a good enough title for any one. Now why not have our probate or our curcuit courts examine and correct the title to every piece of property in the country. Then let the state give a warranty deed to every owner. When a man sells let him surrender his deed and let all the old records be destroyed.

Of course some lawyers and perhaps abstractors might be out of a job, if they really want to do some really useful work, I could give one of them a job on my farm. Aside from said lawyers and abstractors, does any one know of any good reason why, some such plan should not be put in operation.—A. Bauhahn, Ottawa County, Mich.

FRUIT AND ORCHARD

Edited by FRANK D. WELLS

PRUNING OF SMALL FRUITS

THE pruning of small fruits although necessary is an operation which is in general badly neglected. Raspberries, blackberries, gooseberries and currants are often able to survive neglect and still produce small crops of fruit annually. For this reason they are often left uncared for, with the result that the plants become very thick, and thus spraying, cultivation and harvesting operations are made difficult. The yield of the plantations is likewise reduced. When the plants are regularly and well pruned, they will produce larger and better fruit, cultural operations are made easier, and the plantations will remain in a profitable condition over a much longer period than will those which are neglected. Pruning the small fruits is often tedious, but the actual work is very simple and easily performed if a few principles are kept in mind.

Raspberries, Blackberries and Dewberries

The methods of growth and fruit bearings of the raspberry and the blackberry are essentially the same. The canes bear fruit but once. Each season new shoots are developed from the crown of the plant or from buds on the roots. The following year they produce flower clusters, bear fruit, and die. The object to be kept in mind when pruning these fruits is to remove all the old canes which are of no further use, and to secure, by proper thinning and heading-in, a proper number of vigorous, well-developed shoots for the production of a crop the following season.

The practice of removing the old canes varies with different growers. Some remove them soon after the fruit is harvested; others leave them until spring. Both practices undoubtedly have some advantages, but better results are secured when the old canes are cut out and burned as soon as the fruit is harvested. Insects and diseases which they harbor are in this way destroyed and the growth is given more room to develop.

At the time the old canes are cut out, the young shoots should be thinned. When the plants are kept in hills or the growth confined to original crowns, all weak and badly diseased shoots should be removed and those remaining thinned out, leaving only a sufficient number to produce the next season's crop. In the case of the red raspberries, when the canes are not much branched eight or ten may be left in each hill; but if they are large and much branched, five is enough. Four or five canes is the usual number left with the blackberries and with the black and purple raspberries.

When red raspberry plants are allowed to form a solid or continuous row, all suckers should be kept cut out so that only a narrow hedge about twelve inches wide is allowed to form. Those in the row should then be thinned, leaving the remainder spaced so that they will stand about six inches apart.

Spring pruning is usually practiced, especially if the canes are tall and vigorous or have been severely winter-injured. They are cut back to live wood or to a desirable fruiting height, usually four or five feet.

so that they will support a crop of fruit.

Black raspberries are usually pruned more severely than the reds. They are pruned during the summer by pinching off or heading-in the young shoots to stop the terminal growth and to induce the development of low and well-branched plants. The work should be done during June and July when the shoots are 18 to 24 inches high. In order to check growth at the desired height it is necessary to go over the plantation several times, as all the new shoots do not attain the proper height at the same time. Weak plants are likely to result if the shoots are allowed to grow much beyond the desired height and are cut back later. In the spring, all the lateral or side shoots should be cut back to 12 to 18 inches in length, depending upon the vigor of the variety. The pruning of the blackberries and the purple varieties of raspberries is similar to that just described for the black raspberries, except that the new growth is allowed to grow to a height of about 30 to 36 inches before being pinched back.

The new growth of the dewberry is not pinched back in the summer, but is allowed to run on the ground. It is cut back to the desired length the following spring and tied to the trellis.

When pruning currants and gooseberries, it should be borne in mind that the best of fruit is usually produced at the base of one-year-old shoots and on the spurs which have developed from the two and the three-year-old wood. The pruning of these fruits, therefore, consists of cutting out all of the oldest wood each year and thinning out the new shoots so as to leave only a few of the strongest ones to replace [illegible] older bearing wood. A good bush should have from five to [illegible] ing stems, the number depending upon the fertility of the soil and the vigor of the variety. It should be the aim at each annual pruning to provide this number of stems two or three years of age and a continuous supply of young ones coming in to take the place of those removed. Very vigorous young shoots are sometimes headed-in to induce the development of spurs. All branches tending to lie on the ground should be removed and the center of the bushes kept open by cutting out crowding and interfering branches. Do not leave the bushes too thick. This is a common mistake when pruning these fruits. Larger berries and better filled bunches are secured and the fruit is more easily harvested if the bushes are not allowed to become too dense.

Black currants bear the most fruit on the one-year-old canes, and for this reason it is necessary to keep up a good supply of young shoots. The wood must practically be removed each year.

The pruning of the gooseberries and currants may be done any time during the dormant season, but it is usually deferred until late winter or very early spring just before growth starts. When pruning, watch for indications of the cane borer. A cane with a black center and somewhat hollow indicates the presence of the borer, and such a cane should be cut back until sound, healthy pith is reached.—R. E. Loree, Horticultural Department, M. A. C.

DO NOT GROW GRAPES

Would you advise growing grapes on a large scale here in Arenac county? What would be a reasonable return off an acre of grapes and what kind would you advise growing here? The ground is sand and clay loam. I have a piece of ground that is quite sandy. Would you advise planting cherry trees on it?—G. La G., Twining, Mich.

—We do not recommend the commercial culture of grapes in Arenac county. Occasionally there might be a season when the fruit would ripen properly if the soil and the location happen to be particularly favorable. However, growing season temperatures in that part of the state are not sufficiently high in the average season to mature grapes satisfactorily.

The cherry which is mentioned in your letter would be much more satisfactory for that part of the state. —V. R. Gardner, Professor of Horticulture, M. A. C.

Why, Without Realizing It, You May Need

for Economical Transportation

CHEVROLET

There are three main groups of prospective buyers of Chevrolet automobiles and commercial cars.

First, are all who know from comparisons or through the experiences of friends that Chevrolet provides the utmost dollar value in modern, economical transportation of people or merchandise. This group constitutes our spontaneous market; its members walk right into our dealers' places of business and buy Chevrolet car.

Second, the large group of people with modest incomes who have the false impression that so good a car as Chevrolet is beyond their means.

They do not realize that due to engineering excellence and full modern equipment, Chevrolet operating and maintenance costs average so low that during the life of the car, it delivers modern, comfortable, fast transportation at the lowest cost per mile, *including the purchase price.*

The tremendous growth of our business during the last two years has been due to the shifting of thousands from this group to the first group.

Third, the smaller but very important group of people of ample means, able to buy the highest priced cars, only a small percentage of whom as yet realize that Chevrolet combines quality features of much higher priced cars with such operating economy that as an extra car it virtually costs them nothing, due to the reduction in their transportation expenses effected by it.

This message, then, is addressed to all in the second and third groups. We respectfully suggest consideration, investigation and comparison of Chevrolet with any other car at any price. The result will be to our mutual benefit.

Chevrolet Motor Company, Detroit, Michigan

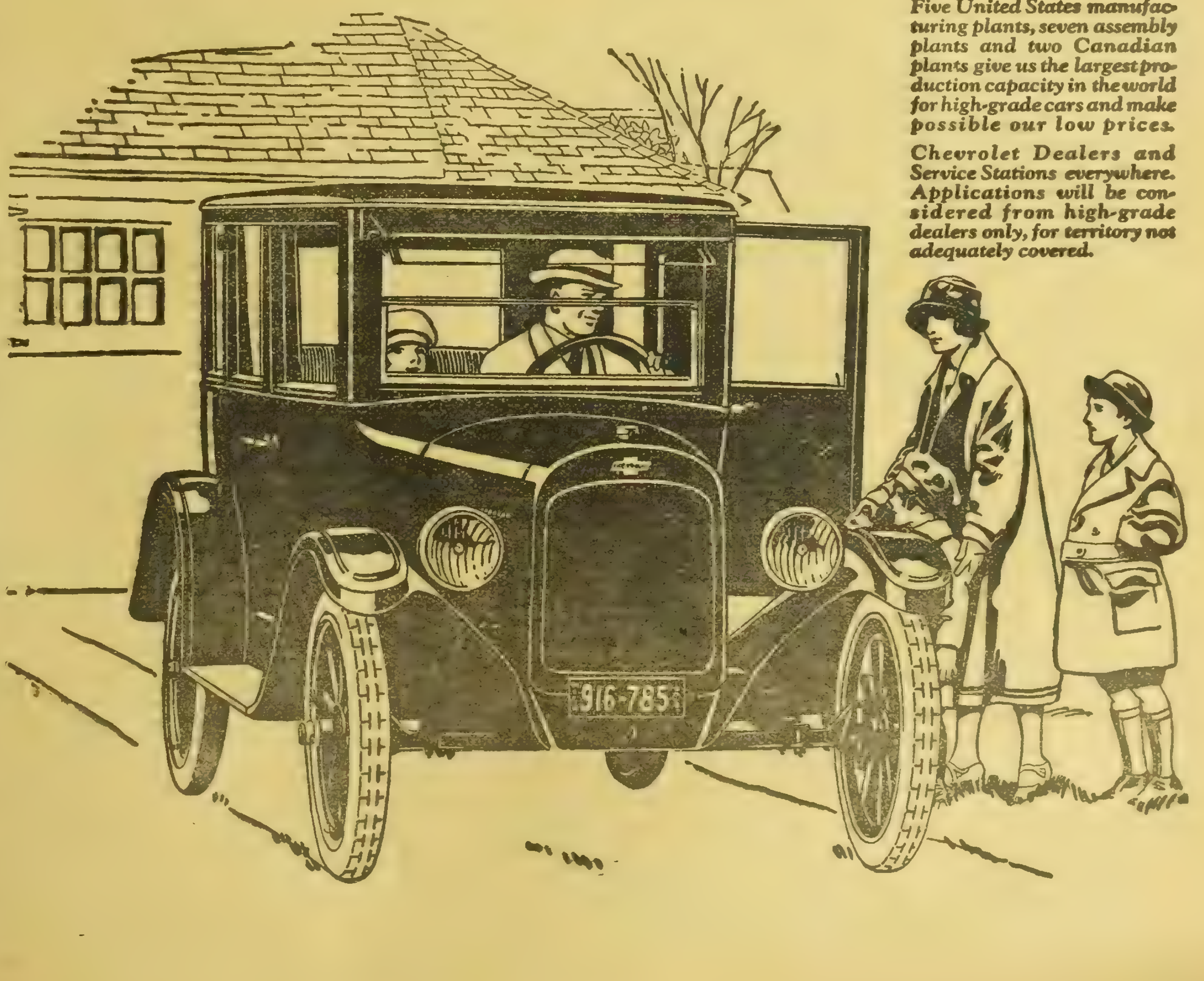
Division of General Motors Corporation

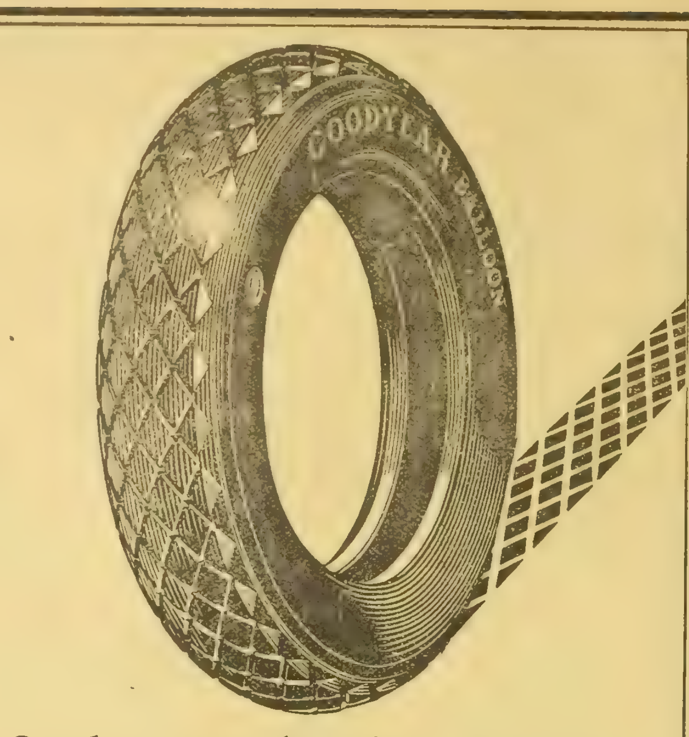
Prices f. o. b. Flint, Michigan

Superior Roadster	$490	Superior Sedan	$795
Superior Touring	495	Superior Commercial Chassis	395
Superior Utility Coupe	640	Superior Light Delivery	495
Superior 4-Passenger Coupe	725	Utility Express Truck Chassis	550

Five United States manufacturing plants, seven assembly plants and two Canadian plants give us the largest production capacity in the world for high-grade cars and make possible our low prices.

Chevrolet Dealers and Service Stations everywhere. Applications will be considered from high-grade dealers only, for territory not adequately covered.





Goodyear is making balloon tires in the smaller diameter 20- and 21-inch rim sizes, of course. But what interests motorists today is, *Goodyear is also making balloon tires to fit present rims on most cars in use.* That means a big saving. And the name Goodyear, on balloon tires or on any other type, means supreme quality and dependability.

GOODYEAR

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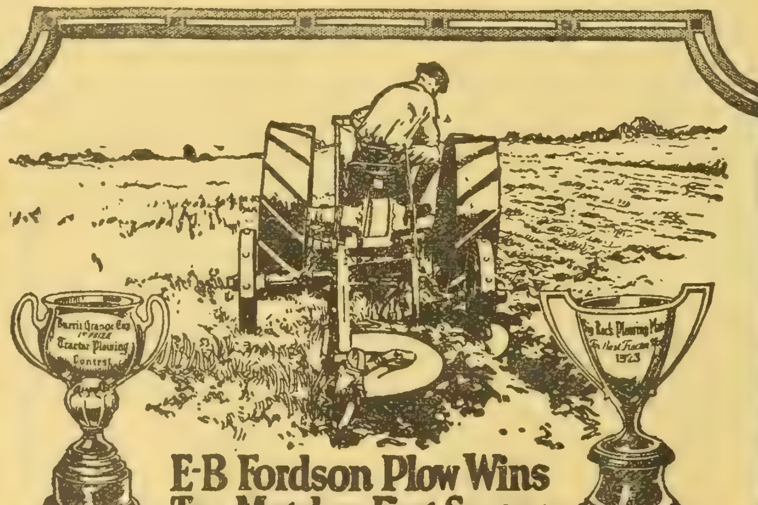
Burrit Grange Cup 1st Prize Tractor Plowing Contest
Big Rock Plowing Match For Best Tractor 1923

E-B Fordson Plow Wins Two Matches First Season

Both the Burrit Grange and Big Rock plowing matches were won by the E-B Fordson Plow with perfect jobs of plowing. Farmers prefer this plow because of its flexibility, its even furrows and the ease with which it is handled from the tractor seat.

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E-B

THE OUT-WORKED LIFE

A SERMON BY REV. DAVID F. WARNER

TEXT: "Work out your own salvation with fear and trembling."—Phil. 2:12b.

THIS is the emptied life. We pray for a filled life. Why? That we might empty it. For an inworked life that we might outwork it. It is the only way to keep life from decaying. The Dead Sea stinks. Why? It has no outlet. It is not outworked. When the word was made flesh, Jesus was under the same demand for outworking his life as we are. This he called obedience. "He learned obedience by the things which he suffered. And having been made perfect, he became unto all them that obey him the author of eternal salvation."

In this vision of the incarnate Christ we get our true setting of the meaning of life and how to save it to serve this meaning. And isn't this the great concern of living? There is nothing quite so pitiful as to see men satisfied with the trival, and who daily hinder the sublime possibilities of the soul. We want the things of earth and we get them. And when life closes to familiar scenes we have but a handful of fading glory. We return to our Maker the ashes of a burnt-out life. What shame!

The Bible teaches that every man away from God is fit only for disgrace and eternal death. But it teaches that a deliverance from this is the "blessed hope." When we are led out to the gallows of judgment, and the trip is ready to pull, and then comes the voice of pardon; that will be the unspeakable blessing. But it is now, for the judgment day is on now, yet, there awaits that final transaction with God, when we pass thru, all alone, the last turnstile of earth's journey. Ominous dread? No. "Death is swallowed up in victory," says Paul.

But this is not all of salvation. If so, my personal escape from hell would be my only purpose in life. But isn't that the traditional belief? Yes, but it is untenable in the light of a social Gospel. And just this has produced many negative and selfish lives. Salvation has another dimension and a larger spiritual content. It is deliverance from, into—, from a slavery to sin into a bondservice to righteousness; from a negative into a positive outworked life; from a religion of "nots" into a religion of "dos," and into a wider existence where we expand and grow into mighty trees of God's planting; "unto the measure of the stature of the fullness of Christ;" which fullness was emptied, outworked for our example. What insufficient definitions and understanding of religion we have had! To be like Jesus, who loved his neighbor as he loved himself, is to be saved.

But this salvation is to be reached after. "I press toward the goal," says the apostle. You have seen athletes running in a race. How hot and eager! How hard they worked! Well, they could not run that race by sitting in the grandstand with the crowd. Neither can you. But how may we win the race of salvation? Work it out. You'll not win by accident, and not get it from your ancestry. "My father worketh hitherto and I work." "We must all appear before the judgment seat of Christ"—Well, read it for yourself in 2Corinthions 5:10. Work is the primal law of redemption. You will remember God's charge to Adam. This is man's noblest birthright. And to think of your own vainglory and high-mindedness is to know that developing a Christian personality is hard work, but a noble achiement. It means the form of work that serves out amidst the lust and power, and the greed and gain of this world. Out where the cloud of sin is darkening the pathway of men. Out of the pews of the church into the world fields of action. Love working out is the only way to resist the appetite for sin and keep oneself from the meannesses of earth. Work is the open way to health and success. Call up Abe Lincoln and hear his testimony. Ask the rest of the rail-splitters and frontiersmen. What say you, friend? Open the portals of the past and hear what great men of God have said. Well, whenever I see a holy, Christian character, I know that he has come up thru the Gethsemane of struggle and tears. "Work out your own salvation," and yet it comes as by magic.

And in what spirit shall we work? Well, just read Phil. 2:12-18. "Do all things without murmurings and questionings." Some of us have fallen out with work and others complain that it does not suit their case, opinion, or party. This darkens our light amidst a crooked generation. We are looked upon as no different than the world. When we give way to these surface vices, our life loses its attraction. We are asked to speak to some erring friend, or to go on some mission of mercy, but we put it off, and off, until at last, the clock of conscience says it is time to act; and then we go, but with murmuring and disputing. And so with our giving and self-denying, we murmur and complain. Yet, at last we may do it, thinking that in the mere doing conscience may be satisfied. No, no, there is no radiation of Christ in this. And this wise generation knows it. Tho imperfect in accomplishment, we are urged to be perfect in motive. This gives spiritual sanction to the most humble service. Religion must have something rare and uncommon to be attractive.

No one was more glad and free in his new-found religious liberty than was the apostle, Paul. He was always happy and optimistic, yet sublimely serious. "This one thing I do." And he did it in fear and tremblings; in shipwreckings, scourgings, and death. Friends, most of us take life so lightly. We seem not to have counted the glory of spiritual achievement, or the tragedy of spiritual defeat. We seem not to feel that God has invested his son in us and we are bought with a tremendous price. Why barter away our lives and blest immortal prospects? Why are we not serious and earnest? My penmanship teacher practiced two hours before writing a letter to a particular friend. We are writing our own life's epistle and sending it on to our Dearest Friend where we are to meet it as our book of life. Ought we not to work out our salvation with fear and trembling?

And God is out enabling power. It is he who worketh in us both to will and to work his good pleasure. To attempt to work out our salvation on the field of human effort alone, is to meet defeat and failure. This is Paul's argument, in the seventh chapter of Romans. But when God works in us we are willing his good pleasure, and are no longer debtors to fleshly appetites and disobedience. Why does the little bud on the tree develop into fruitage? Why does the acorn grow to be a massive oak? God, is the answer. This is what the apostle means by strength in weakness.

Pull the switch and feel the pull and energy of that mystical force, electricity. Paul was constantly pulling the switch, or rather, he left it open. How easy and free his life! Said he, "It is no longer I that work but Christ that worketh in me." God takes up his abode in the heart's holy of holies that he might work out in the ideals of life. He lays hold of the intellect that we might understand his will; upon the emotions that we might feel his pleadings; upon the will that we might be helped into right choices; and upon the imagination that we might enjoy the city of gold. All this, that we might not run in vain. Work out your own salvation with fear and trembling.

SUFFICIENCY:—Our Sufficiency is of God.—2 Corinthians 3:5.

GET UNDERSTANDING:—A scorner seeketh wisdom, and findeth it not: but knowledge is easy unto him that understandeth.—Proverbs

EVERY DAY:—This is the day which the Lord hath made; we will rejoice and be glad in it.—Psalm 118:24.

UNCLE RUBE SPINACH SAYS

WHY WORRY?

HOW much worrin' we do when there aint a thing to worry about, don't we now? You know, right here, this very night, an' its night now, as purty nigh it any ways. It's past 'leven o'clock P. M., but I've been settin' here wonderin' what I could worry 'bout an' then all to once, I happened to think of my shoe strings. You know I most always gen'rly wear two shoes an' I have an awful time with the strings 'at I tie 'em up with. Mostly I tie 'em in a double bow knot, not that I have to tie 'em that way, but I do.

Well its easy enough to tie 'em but the untyin' aint always so easy. You see my strings, the end of 'em I mean, has a habit of droppin' through the loops 'an when I jerk 'em to git my shoes off, I'm all tangled up, so as I said, tryin' to think of somethin' to worry 'bout, I thought of the shoe strings, an' I reached down an' give one a jerk,—she came off jest fine. I wuz surprised an' used some rather harsh words—give the other string a jerk an' would you b'lieve it—it came also. Well there, an' here I am jest provin' to me that this worry biziness is all foolish. We worry 'bout things that can't possibly happen to us.

Mebbe we think the Lord put us here to worry 'bout somethin', but good friends, he never did any such thing. He put us into this world, made the world beautiful, put flowers, trees, an' everythin' here for us to enjoy. If we don't enjoy all the beauty that is around us, well then, dear friends, there's somethin' wrong with us ourselves, an' we'd ought to see a doctor right away. An' I don't mean a reg'lar doctor that charges a dollar for a little box of pills 'at costs him 'bout 3 cents. I mean a doctor that will tell you your real trouble. An' gen'rlly speakin' you'll find you aint so sick as you think. Your mind gits kinda warped or somethin' an' you think the world is upside down. No matter folks, I know 'cause I've been into an' thorugh it—yes, lots of times, an' its a dear ol' world, beauty all 'round us, even the snow flakes, if you've ever examined 'em, have a beauty all their own. Every one of 'em have a form perfect, each one is perfect. Were we half so perfect there would be no jails, no prisons, no lunatics, no feeble minded, there would be nothin' in this world but peace an' happiness.

But we worry, we feel that we must worry 'bout somthin'. That's why I worried 'bout my shoe strings. Friends, mebbe you're lookin' for bigger things to worry 'bout. You'll find the things you're lookin' for, don't ever fear. If you want to worry jest keep a finger in the air, an' worry will come to you. It's a bountiful crop this year—every year for that matter. Always plenty of material to start things, but what does it get you in the end?

Oh shucks! When my shoe string came untied I quit the worryin' folks. Friends, jest think the matter over, resolve right now that two things shall not worry or fret you. An' here are the two things that no one should ever worry 'bout; the things you can't help, an' the things you can help. If you can't help a thing why worry 'bout it? If you can help it, go ahead an' change it an' don't worry 'bout it any more. An' last an' finally, don't worry anyway Cordially yours,—UNCLE RUBE.

Clean Through

A superintendent of public instruction in Georgia explained the powers of the X-ray machine to a gathering of negroes at the school commencement. After the meeting was over a negro called him aside and wanted to know if he was in earnest about his machine. The superintendent assured him that he was. "Boss, I wants to ax you ef er nigger et chicken, kin you look in him and see chicken?"

"Why, yes, Ephraim."

"Well, boss, I wants to ax you jes' one mo' question. Kin you look in dat nigger an' tell whar dat chicken come from?"—Royal Gaboon.

He Was Loyal Anyhow

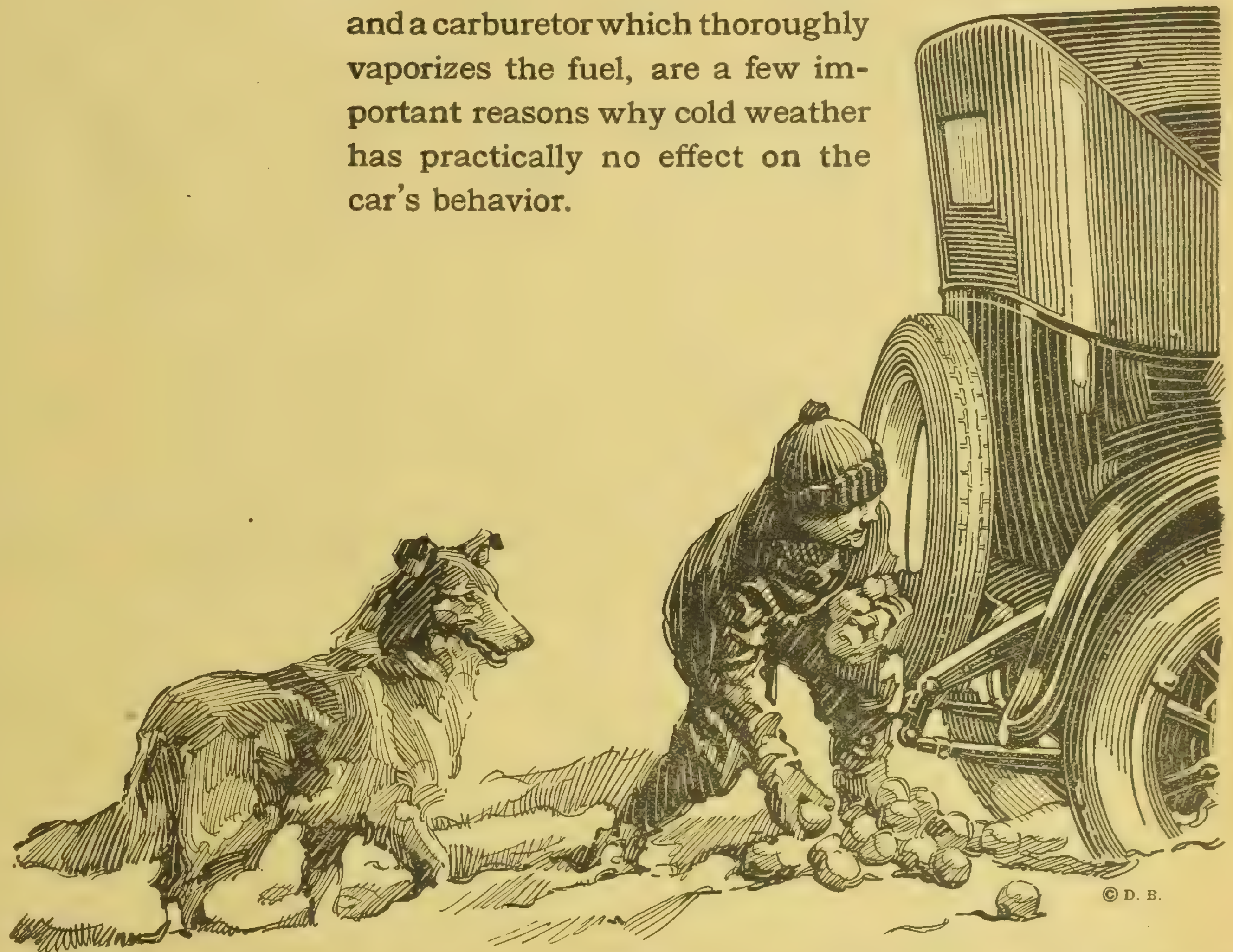
"Can't yer go any faster?" roared the angry traffic cop to the fellow who had delayed a string of autos several blocks long.

"Yes," calmly replied the driver of the antiquated flivver, "I can, but I don't want to leave the car."—Wallace Farmer.

DODGE BROTHERS
TOURING CAR

It is good to know that you can park the car on cold days, assured that it will start promptly upon your return.

Precise engine construction, a powerful starter, battery capacity far beyond actual requirements, and a carburetor which thoroughly vaporizes the fuel, are a few important reasons why cold weather has practically no effect on the car's behavior.



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The Michigan
BUSINESS FARMER

SATURDAY, FEBRUARY 16, 1924

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"The Farm Paper of Service"

WOODROW WILSON

AMERICA has paid its final respects to one of its great presidents, Woodrow Wilson. His earthly remains have been deposited in the cathedral which overlooks the capitol of the great democracy whose destiny this man helped to mold.

The name of Woodrow Wilson will oft be mentioned in history and in school-rooms many generations after the names of those who harrassed his plans have been forgotten.

The principles which Woodrow Wilson laid down at a time when all of the world was a seething cauldron of war and hatred attracted all men of every nation, creed, and color to the standards of humanity which he unfurled. The principles of world peace and world democracy which he preached during those trying years and which he failed to accomplish in practical form at Versailles will be echoed from one generation to the other until their accomplishment is assured on this earth.

Woodrow Wilson will be remembered always as the pioneer apostle of world peace. Nothing that his enemies have said will deter in the slightest the measure which history takes of this man.

As one writer has so aptly expressed it "Woodrow Wilson was the greatest single casualty which the United States suffered in the World War."

He died a martyr to a principle as lofty as that for which Lincoln died and which, like Lincoln, he could not live to see completed.

We bow our heads in humble reverence to the memory of a man who gave his life for his country—Woodrow Wilson.

MICHIGAN LEADS IN BEANS

ACCORDING to Frank B. Drees, secretary of the Michigan Bean Jobbers Association, the 1923 crop of navy beans in Michigan exceeded two million bushels, and if so this will place California in second position.

In navy beans the farmers of Michigan have a crop which can be made, if it already is not, the most profitable single crop grown on the farm in our state and a crop which will make the particular sections of Michigan especially suited to it among the most profitable farming lands in America.

If it is true that Michigan grows practically three-fourths of all the navy beans sold in the United States, then it is equally true that the men who grow them should control its price and destiny on the market.

In the face of some discouragement from co-operatives which have been organized during the past few years and which has not made a success in controling the markets, we predict that for the growers of any single commodity who can band themselves together as can the bean growers of Michigan, there is excellent reason to believe that they can control the price of their product on the market and thus realize from it the profit to which they are entitled as manufacturers.

A recent meeting of the bean growers at Detroit showed that these gentlemen have at last awakened to the possibilities of cooperating with the grower and their action is not to be discouraged, but that they must get ready to share the profit and responsibilities of marketing Michigan's beans with the authorized representatives of the growers themselves is only a case of "eventually, why not now?"

HORSE VS. TRACTOR

AT one of the Farmers Week meetings at Lansing, Mr. R. L. Hudson, superintendent of the horse department, made the following statement: "It has been generally agreed by horsemen and tractor men alike that the horse as well as the tractor are here to stay and that we have been going through a period of adjustment i nwhich the place of each has come to be recognized."

This would seem to indicate that both sides of a controversy which has waxed warm during the past decade have come to acknowledge the rightful place of each, on the farms of this country.

It is safe to assume that the tractor will never entirely supplant the horse and it is equally true that the horse cannot meet the competition of the tractor in certain lines of farm work which must be done quickly and efficiently.

It is equally true that the tractor will replace two or three teams and that the ordinary farm in Michigan, for instance, of comparatively small acreage can be well handled by a small tractor and one team, whereas three or four teams might be required without the aid of the tractor.

It is interesting also to note that the cost of a tractor is today less than a portable engine of the same horsepower would have cost ten years ago. There is no reason for the farmer waiting for silo filling, wood cutting, or even threshing if he and his neighbor will purchase cooperatively these important machines and handle them with their own tractors.

We predict a large sale of tractors in Michigan this year, principally because farmers are becoming convinced that these machines have been brought to a practical and efficient point which guarantees them long life and proves that they are out of the experimental class.

To those farmers who are planning to buy tractors this year we want to add just one word of advice, and that is: get your tractors early enough so that it can be well worn-in before you put it to the heavy duties of plowing. You would not think of running an automobile at high speed with a load of six or seven people the minute you bought it, and yet your tractor in plowing works even harder. Our suggestion is that you get delivery of your tractor at once and begin using it on light work around your farm so that it will be well worn-in by the time plowing starts. You have not a minute to lose and your dealers will be glad to accommodate you in the matter of time because he is as anxious as you to see you make a success of a tractor on your farm.

PROHIBITION ON TRIAL

NO sane man would attempt to argue but what absolute prohibition of alcohol for beverage purposes would be an excellent condition. But prohibition which prohibits is one thing and prohibition which maintains a great army of bootleggers and produces a crop of corrupt officials is quite another.

It seems a pity that men cannot be found who can enforce laws, but after six years of prohibition in Michigan one feels at times that too long a step was made without the backing of proper public enlightenment, that too drastic a law was put on the books before the people were ready to receive it.

One thing is certain, that man or woman is a traitor to better government, who ostrich-like, with head in the sands, refuses to face the conditions as they exist, not only in the urban centers, but in the rural sections of Michigan.

There are those who believe temperance and moderation can be taught, whereas prohibition can never be enforced. One thing is certain, the present intolerable disregard of a constitutional law cannot continue without proving a menace to the very foundation of our government.

WHY TAX THE AUTOMOBILE BUYER?

THE automobile manufacturer is putting up a just fight for discontinuance of the five per cent excise tax which the buyer of a new automobile must pay in addition to the manufacturers price.

This excise tax on automobiles was imposed, as we understand it, during the time of a national emergency, when the purchase of a new car was by some considered a luxury and a source of taxation revenue which was entirely justified. The times which made this excise tax practical under such conditions have passed long ago and that Secretary of the Treasury Mellon should not have recommended the abolition of this unjust tax on the citizens of this country in his recent proposal is to be regretted.

The farmers of the United States will buy more than half of the automobiles purchased in this country in 1924. It is mighty important to them that this tax be removed, and if some of their would-be sponsors in Congress will take enough time from their wailings over "our pitiful plight" to remove this tax, they will receive the undying gratitude of their farmer constituents.

The average farmer has driven his old Lizzie just as long as he proposes to, and this year with conditions looking better he is going to trade it in for a new model and perhaps a truck too, so it is mighty important to him that this direct tax on his progressiveness be removed.

WELL, NOW, MR. PESSIMIST!

WE recognize that there are still any number of farmers, and friends of the farmer, who do not believe that cooperative marketing can ever be made a success in these United States. They remind us of the man who saw the giraffe in the circus menagerie and said "I don't care, there ain't any such animal!"

The facts are, that the cooperative farmers organizations in American did a business of over two billion dollars last year. Reports to the Department of Agriculture from 2600 grain organizations show business totaling $490,000.000; 1841 dairy products organizations, $300,000,000; 1182 livestock shipping associations, $220,000,000; 856 fruit and vegetable associations, $280,000,00; 78 cotton cooperatives, $100.000,000; and 14 tobacco organizations $132.000,000.

Only 8313 of the 10,000 organizations have reported, of which 90 per cent were engaged primarily in selling farm products, and 10 per cent in collective purchasing of farm supplies.

THE RETURN OF THE PRODIGAL!

WE saw a cartoon the other day that was a clear exposition of the happy return to the farmer of his wayward daughter, Prosperity, who has been absent from the old farm these past few years.

Prosperity has come back to the farm. In some sections she is more worn from her trials and tribulations during the sojourn away from home than in others, but in those sections which are not dependent on any one crop, where diversified agriculture has been practiced as it has in Michigan, for instance, her return is spirited and easily apparent.

Many of the farm homes to which this wayward daughter would now return and settle down in the peace and comfort of former years have been boarded up and their once proud possessors have flown with other moths who have been drawn by the flame of the city lights. Fain now would she help in the planning of this year's crops, in the upbuilding of the herds and flocks, but no, like rats from the ship in distress, these weak ones of the farm, are now standing in lines to catch the street-car to their work, punching the time-clock and returning to their homes after dusk with scarce enough from their high-sounding wages to pay the land-lord, the gas-bill, the butcher, the baker and the hoard of city vultures who prey on their daily stipend.

Back on the farms of Michigan, the sterling men and women who have stuck to the ship, while the winds of adversity howled through the rigging and when it seemed as though the harbor of safety would never be reached before dire calamity would send them to the bottom of despair; these sturdy souls are looking forward to a year which promises a further return to the days of normalcy.

Natural conditions have brought about a cleaning-out of the laggards, the mis-fits, the ne'er-do-wells on the farms of the United States. To-day we have left as our legacy the cream of the farming population and with them, we face the tomorrow with upturned faces and high hopes.

Welcome home, Miss Prosperity, we've kept the chair at the right-hand of dad, always waiting for you and altho the fatted calf may have already been shipped to a market that paid a fair price this year for him, have another helping of chicken and biscuits, we want you to know we're glad to have you home, and we'll never again mention how long you stayed away, if you'll just take your old room upstairs and make this your home for ever-more!

PUBLISHER'S DESK

BE A FINGER PRINT SPECIALIST

THE old saying goes "Do one good act every day," and if I do nothing else today I will save one reader sixty dollars because I have just advised him that I do not believe there is a very good opening for a finger-print expert at Moscow, Michigan.

There seems to be no end to these correspondence school games, and you will always find them tied up with a five-dollars down and a five-dollars-a-month proposition, as this one was. Their circular matter is sometimes so plausible that unless you had stones in your pocket you might be wafted away in the exuberance of the man who wrote it.

I see by the papers that a Harvard professor is making a rocket which he hopes to shoot to the moon and I fully expect to find the circular matter for a moon-shooting correspondence school guaranteeing to teach you how to make a rocket to hit the moon for five dollars down and five dollars per before many more issues go to press. If you see one tell me about it.

DETROIT AIR COOLED CAR COMPANY

A READER writes to find out if the hundred dollars which he paid for one share of preferred and one-quarter share of common stock in the Detroit Air Cooled Car Company has been lost. I am given to understand that this company is still in operation but that manufacture on a profitable basis has not begun yet. While there is life there is hope!

THE ART WORK SCHEME

"Dear Mr. Slocum: I would like to ask you a few questions on which I would like to get your idea as to what can be done. Now, in regard to the Underwood Art Goods Company, Portsmouth, Ohio, the manager is Ruth E. Underwood. I saw her ad. in a paper of where she wanted ladies to do fancy work at home, so I wrote her and she said that she would send me a finished article, for which she charged a price of $1.00 and she sent me a free try-out for me to make and send back for inspection.

"The finished article was a handmade handkerchief and she was to pay me 25 cents apiece for making them. And when I had done work enough to amount to $12.00 she was to refund my dollar.

"So she accepted my work and sent me a quarter of a dozen to make. I made them and sent them back, for which she agreed to send my pay as soon as she received the goods. I sent the work back to her but have never heard from her since, and that was the latter part of May 1923. I wrote her in regard to the work and have heard nothing. I also had a return on the outside of the package.

"Now I would like to know if there is any way of getting my dollar back or the pay for the work or stopping her from swindling others out of their dollars?"

I HAVE advised our reader who wrote the above that she should send a registered letter to this company, stating her claims, and keep a copy of that letter. If she does not receive a satisfactory reply I will take it up with the proper authorities to see that justice is secured, and I would be glad to hear from any others of our readers who have had experience with the above company.

I. R. HOUGH FUR COMPANY

THROUGH this department we have continuously advised fur trappers in Michigan to insist upon the company to whom they ship furs holding their shipments separate until the price has been quoted and made satisfactory. If there is any business in which there are more crooks than in the buying of raw furs we do not know what it is. This morning on my desk I find a letter from a reader at Charlevoix, as follows:

"I have just read in The Business Farmer of another person who shipped furs to the I. R. Hough Fur Company, Meriden, Connecticut, and got skinned as I did but worse. I sent three good mink all prime and should have been classed as large and four rats, large, for which I should have gotten $25.00. I had them insured for $20.00 and got a check for $2.30 for summer caught furs, none gotten before November 1. I sent check back and wanted furs returned but they said they were nearly rotten, green, mildewed, and burnt—some classification for summer caught furs. I can give exact dates of sending and receiving checks as I had them registered. This letter can be published and I would like the address of the other party who sent the other letter on page 15, issue of February 2, 1923."

These letters hardly bear out the high-sounding circular matter which this company sends out, from which we quote as follows: "Why you should ship to the Hough Fur Company, Inc. We are recognized as the most liberal and expert graders. We quote the very highest prices. And we do absolutely guarantee to pay you every cent your furs are worth. Fictitious high prices mean nothing to you—it's the liberal grading that counts every time. Remember our quotations are net to you. I pay all express charges and refund parcel post charges on all shipments. Goods are held separate upon request and we charge no commission."

Compare these printed claims with what our readers have been reporting of their dealings with this Company. Can you beat i ?

Fur trapping is a profitable side line for men and boys in most sections of Michigan. It is a stable employment and there is always a good market for all kinds of furs, but the most important thing is to know they are being sold through a responsible house that will give you a fair grading, and it is well to pay no attention whatsoever to fly-by-night concerns that make especially high prices in the circular matter which they send by mail. This type of house cannot advertise in high-grade publications, which attempt to protect their readers.

PAID UP RIGHT WAY

ABOUT two weeks ago I sent an account to you for collection. It was for milk sold to the —— Creamery Company. Would say I have had a local attorney trying to collect this account since the last of August but was unable to collect it. I received my check yesterday. This shows they were glad to s[illegible] when they found you were after them.

I am very thankful to you for this service and wish you would write me as to the amount I am in your debt for same.

I will ever be a booster for the Michigan Busines Farmer for the amount saved me on this one instance would pay many years subscription to M. B. F. Again thanking you I remain W. M., Beryille, Mich.

OUR BOOK REVIEW

(Books reviewed under this heading may be secured through The Michigan Business Farmer and will be promptly shipped by parcel post on receipt of publisher's price stated.)

Good Health.—How to get it—how to keep it—by Alvah H. Doty, former health officer of the port of New York and author of "Prompt Aid to the Injured." It is published by D. Appleton and Co., New York, and the price is $2.00.

The Eighth Wonder,—and other stories, by A. S. M. Hutchinson, author of "If Winter Comes."—"The Eighth Wonder" which gives the book its name, is a story of love glorified; "Some Talk of Alexander" the tale of a spiritual awakening; "The Rough Little Girl and the Smooth Little Girl" as fine a picture of the temper of a real aristocrat by birth and breeding as has been drawn; "The Swordsman" a dramatic account of an ancient British revenge; "The Grim Test" a charming and humorous modern love story, "A Magdalen of the Soil" a tragedy of present-day France. In "There Still are Fairies" a workmen's strike is handled with a light humorous touch, and "In Evening Bells" is an allegory which closes the book on a high spiritual level. The stories are altogether different but promise excellent entertainment and need no other introduction to a public already acquainted with this author's work. Little, Brown and Co., Boston, Mass. ($2.00.)

First Mortgage Real Estate Gold Bonds

Farmers accustomed to appraising real estate appreciate most highly the conservative procedure of the Federal Bond & Mortgage Company in restricting each issue to a moderate portion of the rock-bottom value of the security.

Write for Booklet AG1090

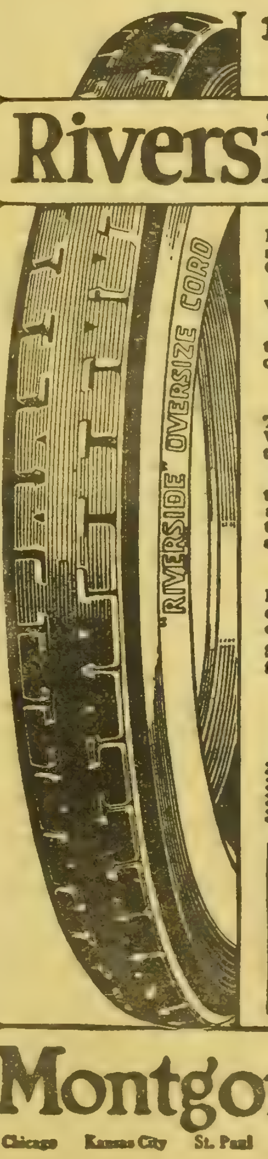
Tax Free in Michigan
Free from Federal Income Tax of 4%

7%

Federal Bond & Mortgage Company

(1177)

FEDERAL BOND & MORTGAGE BUILDING, *DETROIT*



10,000 miles guaranteed and yet you save ⅓

Riverside Oversize Cord Tires

Riverside Oversize Cord Tires are guaranteed for 10,000 miles and in actual performance give up to 18,000 miles. Can any other tire do more?

So why not save one-third and use Riverside Cords? What more will any other tire do? Then why pay more?

And this 10,000 miles service is backed by a guarantee that has stood for fifty-one years. Does any other tire carry a better guarantee?

Quality is built into Riverside Cords

This guaranteed mileage is built into Ward's Riverside Cords. High treads, thicker and stronger, of tough, live rubber.

This exceptional quality of Ward's tires alone has made us the *largest retailers of tires in the country*. The tires themselves have convinced thousands that Riverside Cords are best.

"I have used Riverside Tires for the past four years, I have never had to send a tire back for adjustment.
I have tried several different highly advertised makes alongside of Riversides and have not found a superior."
Walter M. Schwoem, Nessen City, Mich.

You Don't Risk One Cent

Before you buy any tires send for Riversides. Inspect them. Compare them with tires selling for $5.00 or $15.00 more.

Send them back if you do not find them the equal of any first-quality oversize cord made. We will refund your money.

These prices buy 10,000 miles of service—and more.

CATALOGUE No. 464M00—Be sure to give size.

SIZE	PRICE	POSTAGE	SIZE	PRICE	POSTAGE
30 x 3½	$ 9.75	28c	32 x 4½	$20.95	45c
32 x 4	16.95	42c	34 x 4½	21.95	48c
33 x 4	17.45	43c	33 x 5	28.75	[illegible]
34 x 4	18.25	43c	35 x 5	29.95	[illegible]

"I have used two Riverside Cords on the rear wheels of my car for two years. They have gone over 12,000 miles now and have never been off the wheels – and they still look fine."
August Wm. Schultz
R – 56 – R 1
Van Horn, Iowa

Wire your order. Orders received by telegraph will be shipped the same day C. O. D.

Free Write today to our house nearest you for free Auto Supply Book. Address Dept— 11-T

Auto Supply Book
Montgomery Ward & Co.

Established 1872

Montgomery Ward & Co.

Chicago Kansas City St. Paul Portland, Ore. Oakland, Cal. Ft. Worth New York Atlanta, Ga.

Cletrac

A Better Tractor
A Lower Price
$1270
F. O. B. FACTORY

12-20 H~P

CLETRAC'S *crawler* construction, its suitable size, great pulling power, simplicity and economy of operation all appeal to the farmer. The broad tracks with which Cletracs are equipped furnish plenty of traction in any kind of soil—no miring down, no "digging in."

Cletracs, because of the broad tracks on which they travel, are noted for their splendid work in seed-bed fitting. Cletracs *do not pack the soil.*

The purchase of a Cletrac is an investment in a crawler tractor of a size best suited to the all-round power requirements on the farm.

Five millions of dollars in equipment and a big factory constituting upwards of five acres of floor space under roof signify the element of permanency back of Cletracs.

Cletracs, with these and many other advantages of crawler construction, are now offered at the above new low price.

Write for catalog and let us tell you more about the use of Cletracs.

THE CLEVELAND TRACTOR COMPANY
Cleveland, Ohio

BRANCH OFFICES:

New York Chicago San Francisco Minneapolis Oklahoma City
Detroit Atlanta Los Angeles Windsor Portland

The New IMPROVED Walsh NO-BUCKLE HARNESS
No Buckles To Tear No Rings To Wear

$5 After 30 Days Trial

Send for my big new free harness book. Tells how I send Walsh No-Buckle Harness on 30 days free trial. Use it—prove for yourself that it is stronger, easier to handle. Outwears buckle harness because it has no buckles to tear straps, no rings to wear them, no buckle holes to weaken them. Amazing success—thousands in use in every state.

Costs Less—Wears Longer

Saves repairs. Walsh special 900 steel test leather, which is explained in big free book. Easily adjusted to fit any size horse. Made in all styles: back pad, side backer, breechingless, etc. $5 after 30 days trial—balance is paid monthly. Return to me if not satisfactory. Write today for my big free book, prices, easy terms. Sold direct to you by mail only.

J. M. WALSH, *Pres.*
WALSH HARNESS CO.
424 Keefe Ave., Milwaukee, Wis.

Walsh Harness Book Tells the Why and How WRITE FOR IT TODAY

Send For Your Copy

Implements Cost Less under the MOLINE Plan

because all wastes are cut out. See your Moline dealer or write to us

NEW MOLINE PLOW CO.
Moline, Ill.

TOBACCO

HOMESPUN TOBACCO, FIVE POUNDS Chewing, $1.75, ten, $3.00, twenty, $5.25; Smoking five pounds, $1.25, ten, $2.00, twenty, $3.50. Pipe and Recipe free. Send no money. Pay when received. KENTUCKY TOBACCO CO., Paducah, Ky.

Aspirin

Beware of Imitations!

BAYER

Demand

Unless you see the "Bayer Cross" on the package or on tablets you are not getting the genuine Bayer Aspirin proved safe by millions and prescribed by physicians over twenty-three years for

Colds Headache
Toothache Lumbago
Neuritis Rheumatism
Neuralgia Pain, Pain

Accept "Bayer Tablets of Aspirin" only. Each unbroken package contains proven directions. Handy boxes of twelve tablets cost few cents. Druggists also sell bottles of 24 and 100. Aspirin is the trade mark of Bayer Manufacture of Monoaceticacidester of Salicylicacid. (2

PATENTS

Send sketch or model today for examination and report. *Record of Invention* blank on which to disclose your invention and NEW guide book, *"How to Obtain a Patent"* sent free. Promptness assured. Highest references. WRITE TODAY. CLARENCE A. O'BRIEN, *Registered Patent Lawyer*, 1551 Security Savings & Com'l Bank Bldg., directly across street from Patent Office, Washington, D. C.

WHEN WRITING TO ADVERTISERS PLEASE MENTION THE MICHIGAN BUSINESS FARMER

RADIO DEPARTMENT

EDITED BY J. HERBERT FERRIS

HOW TO BUILD A SIMPLE RECEIVING SET

SINCE writing the first part of this series of "How to Build" articles I have constructed a simple receiving set exactly as described in the preceeding article, with the exception that a rheostat was added to control the "A" battery should I desire to use some other kind of tube than the one mentioned. This set cost less than the figures given previously and in every way is satisfactory. With it I have heard broadcasting stations during the daytime that with my larger set and amplifiers I could not hear.

It is possible that the beginner may have some trouble in "tuning-in" at first. Just have patience and keep trying, making all adjustments very slowly and carefully. When you once hear a broadcast and realize just what you have done the "tuning-in" will come easier each time you try it. After having used your set for several nights you will be able to listen-in without much preliminary adjusting.

Be sure that when you once have got a station in clear to write down on a memorandum at just what points you had the dials set. This will make it easier for you the next time that you want to hear the same station.

Be sure to disconnect your "A" battery as soon as you are through listening for that time. The longer your battery is used the shorter the life. The most satisfactory results with a WD-11 (or WD-12) tube will be had if you will use two or three No. 6 batteries connected in parallel; that is with all the carbons connected together and all the zincs connected together; this will add many times the life of one battery alone, as dry batteries will give a longer service for the less current that you use. The additional cost of one or two extra dry cells at first is small and will mean that you will more than get your money back in increased life.

Sometimes when your set is connected up it will not work, and this may be due to the fact that if the wires from the rotor (moving part) of the vario-coupler are connected in one way that the set will not regenerate or oscillate, but by simply reversing the connections of these two wires you will find that the set works fine. Therefore it is advisable not to solder the connections on these two wires until you have tried out your set and found that it works.

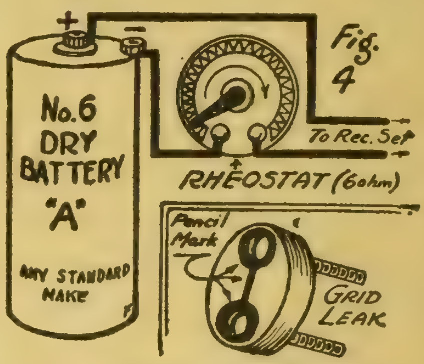
A rheostat in the "A" battery circuit will give you slightly better control on clearing up the voice in what you hear. It should be connected as shown in Fig. 4, and can either be connected on your panel or be connected just to your wires between the A battery and your set. In either place the results will be the same. It will save your battery also as you will then only have to use just the exact current necessary to receive well. This will cost you from 60c up.

Should you have a car with a starter and so can have a 6 volt storage battery to use will find that with a UV-201A or a C-301A tube, which costs the same as a WD-12, you can use your storage battery for receiving instead of buying dry batteries, but you must then use a 30-ohm rheostat to control the current for the tube which then will give you practically a whole month of receiving for three hours a night, on one charge.

In handling these vacuum tubes, no matter what make, be sure that you place them down carefully and gently, remembering that they cost you $6.50 each and if the filament is broken that the tube is no longer of any use as a detector. They should also be carefully watched to see that by mistake you do not short-circuit your "B" battery across the filament which will burn it out.

The list of parts given did not mention dials for either the vario-coupler or the variable condenser. These were figured in on the price given and unless you wish to spend more you will not have to. Always remember that the prices given are for low priced parts, and you can always buy better parts for higher prices. Yet at double the prices given you will not get enough more satisfaction or service out of your set to warrant your spending the money.

The grid condenser has a important function to perform and should be short circuited (or shunted) with the grid leak. This grid leak, unless you buy a complete mounting and leak, will only be a piece of hard rubber, thru which two screws project. It will be necessary for you to remove these screws and place a piece of strong letter paper on the rubber and then replace the screws which will have to pass through the paper. Before screwing them down all the way, take a soft lead pencil and blacken the paper around each hole and under the screw head, only blacking out a little farther than the heads will cover. Now when your screw heads are down tight and the set is ready to test take your pencil and make a mark connecting the screw heads. This is to let excessive charges that collect on the grid of the bulb leak away. Sometimes you have to use a heavier or lighter mark. Take an eraser and after trying a heavy mark erase a part of it and try till you get the best results. These final adjustments should not be made untill you are listening-in to a broadcast at which time you will be better able to tell if the heavy or light line is giving you the best results.



Rheostat to control "A" battery.

Whenever you have finished listening -in, cover your set with a piece of paper or cloth to keep out the dust. It will make a lot of difference in the reception if you get dust particles between the plates of your condenser.

Do not place your set where the baby, or young children can play with it, nor do not permit strangers or even friends to turn the knobs just to see what it will do. Only the maker and the older members of the family should handle the set at all; the builder should be the one who first trys to make it work as he knows just how it was connected up.

After a time of using your set you will possibly want to get the music and talking a little louder so that several people in a room can hear all the good things; then you will want what is called an "amplifier." This will bring in the signals so that a "loud talker" can be used and heard by either a roomful or a large crowd depending upon the number of "steps" or "stages" of amplification that you use. We will now tell you how to build a "one step" or a "two step" amplifier.

PICKED OUT OF THE AIR

Radio is rapidly becoming more interesting and of more importance to the farmer. Hardly a week passes that one does not read of another station devoting certain nights to broadcasting programs of particular interest to farmers. It is getting so that a farmer can "tune-in" nearly any night of the week and find at least one station broadcasting a special farm program.

Have any of you heard station WKAR? It is the station of our Michigan Agricultural College, and they are in the air each Wednesday evening during the winter months. The station has a sending range of 3,000 miles and they are planning some good programs. They broadcast on a 280-meter wave length, and they start at 8 o'clock, Central

Standard time. Be ready for them next Wednesday evening.

A broadcasting station has just been constructed for Sears-Roebuck Agricultural Foundation, of Chicago. It is to be an exclusive agricultural broadcasting station and will operate on a wave length of 448 meters.

If you want to hear an old fashioned dance concert listen to WOS, Missouri State Marketing Bureau, Jefferson City.

One Farm Bureau program a month will be broadcasted from WGY. This program is broadcasted the last Monday of each month at 7:15 P. M. E. Victor Underwood, Secretary of the New York Farm Bureau Federation will speak the last Monday in February.

POTATO MARKET IN HEALTHY CONDITION

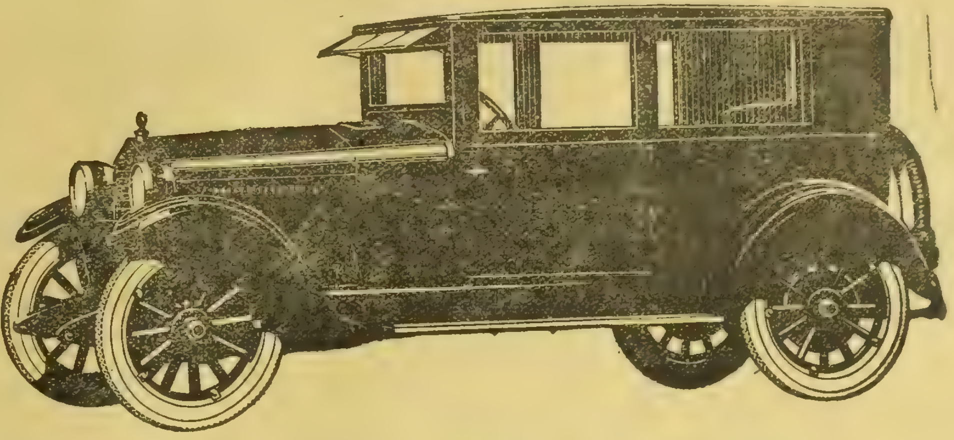
POTATO prices are improving. Returns on the 1923 crops are averaging a little better than a year ago, according to late figures. The average planted in 1923 was about 10 per cent smaller than the previous year due to disastrous returns on the 1922 crop. The estimated yield is around 412,392,000 bushels or 14 per cent less than a year ago. With a smaller crop and a brisk demand due to the buying power of the consuming public potato distributors are optimistic. This year's crop will equal practically the same as the 1917-1921 average of 288,000,000 bushels. On a per capita basis the crop will be about 15 per cent smaller than in 1923 or 3.75 bushels. The average in the last 20 years has been 3.6 bushels while last year it was 4.1 bushels. Usually a yield of less than 3.6 bushels per capita results in higher price, or if the yield is more than the average, the price usually drops in proportion. This was true last year when the 1922 crop yielded 60,000,000 bushels above the average consumption. Prices went so low through the fall and winter that many of the growers left their fields undug. This year the crop is almost a normal yield on a per capita basis, the result is stronger prices.

Compared with last year, the crop is larger in the intermediate states of Ohio, Indiana, Illinois, Missouri, Kansas and Kentucky. In New Jersey and Virginia there is a big reduction. Of the 18 late potato states the most important ones are New York, Michigan, Wisconsin, Minnesota, North Dakota, Nebraska, Colorado and Idaho and in these states the crops are from 10 to 35 per cent less than a year ago. Maine is an exception, with an increase of more than 50 per cent. The crop in the late potato states is altogether about 40,000,000 bushels less than in 1922. The carlot shipments for the season up to December 22, 1923, comprised 90,477 cars as compared with 90,387 cars during the same period of the previous year. The car lot movement for the two years is approximately the same. From the minor late crop states 13,924 cars were moved against 25,010 cars in 1922. Most of this decline is in shipments from New Jersey, which shipped only 6,245 cars this year as compared with 18,030 cars in 1922. Shipments from the early producing states totalled 33,147 cars in 1923 as compared with 40,870 cars in 1922. Since the 1923 crop is considerably smaller than the crop of the previous year and shipments to date have totalled practically the same, the conclusion may be drawn that the marketable supply still to be shipped is smaller than it was a year ago.

Within the last few weeks the potato market has slightly strengthened. Carlot shipments have declined. They are now but little above normal for this season. Demand should remain strong for the rest of this year as industrial prospects are favorable. With indications pointing to a smaller commercial movement the prevailing level should remain considerably higher than for the ten months ending October 31, 1923. Exports during the past year have been about normal, while the imports have been less than the average, due to unattractive prices here and to tariff restrictions.

(Editor's Note: The above information was secured through courtesy of the Sears-Roebuck Agricultural Foundation.

The New ESSEX
A SIX
Built by Hudson under Hudson Patents



A 30 Minute Ride Will Win You

Essex closed car comforts now cost $170 less than ever before. Also with this lower price you get an even more attractive Coach body and a six cylinder motor built on the principle of the famous Hudson Super-Six.

It continues Essex qualities of economy and reliability, known to 135,000 owners. It adds a smoothness of performance which heretofore was exclusively Hudson's. Both cars are alike in all details that count for long satisfactory service at small operating cost.

Gives Ideal Transportation

You will like the new Essex and its nimble ease of operation. Gears shift quietly. Steering is like guiding a bicycle, and care of the car calls for little more than keeping it lubricated. That, for the most part, is done with an oil can.

The chassis design lowers the center of gravity, giving greater comfort and safety at all speeds, on all roads. You will be interested in seeing how this is accomplished.

Greater fuel economy is obtained. The car is lighter, longer and roomier. You will agree that from the standpoint of appearance, delightful performance, cost and reliability, the new Essex provides ideal transportation.

The Coach $975
Touring Model - $850
Freight and Tax Extra

ESSEX MOTORS
DETROIT, MICHIGAN

DIRECT TO YOU AT MAIL ORDER RATES
For healthy orchards plant handsome, thrifty, Michigan-grown trees, grape vines, berry bushes, roses and shrubs. Raised in Kalamazoo County—famous for hardy, well rooted stock. Guaranteed healthy and true to name. Buy in your own State and insure prompt arrival in vigorous condition. Special prices on orders sent now. Ask for our handsome catalog of dependable trees—it's free.
Celery City Nurseries, Box 210, Kalamazoo, Michigan
Purchase Celery City Trees Direct from Grower to Planter
Plan to Plant Another Tree

STRAWBERRY PLANTS
$2.50 Per 1000, and up. Our strong, healthy, tremendous bearing plants guarantee big crops of luscious berries. Best varieties for all kinds of soils. Many new varieties such as Eaton, Bun Special, Premier, Marvel and Cooper. The world's greatest new Everbearing Strawberry CHAMPION. Full line of Raspberries, Blackberries and Asparagus.
GLADIOLI—ROSES—ORNAMENTALS
Greatly Reduced Prices. Large Stock of good Grape Plants at $30.00 per thousand. Beautiful new color catalog free. Write Today.
BRIDGMAN NURSERY CO., Box 64 Bridgman, Mich.

STRAWBERRIES $3.00 per 1000 and up, Raspberries, Grapes, Gooseberries, Currants, Dewberries. Stock guaranteed. Prices right. Catalogue free. HELLENGA'S NURSERY, Three Oaks, Michigan.

SPECIAL OFFER—200 DUNLAP 200 GIBSON Strawberry Plants and 25 Black Raspberry Plants Post Paid $3.00. Fred Stanley, Bangor, Mich.

$1 Advertising Bargains
12 Dewberry Plants for $1.00; 12 Concord Grape Vines for $1.00; 20 Apple or Pear grafts ready to plant, make 6 ft. trees in one season for $1.00; 4 peach trees for $1.00; 20 flower bulbs for $1.00; 8 Iris clumps for $1.00. All postage paid. Get my list of other bargains.
MARSHALL VINEYARD
Ben L. Marshall, Paw Paw, Michigan.

Strawberries 25% Off
Prices slashed on Raspberry, Blackberry, and Grape plants. Stock guaranteed. 30th year. Catalog free. J. N. ROKELY & SON, R. 20, Bridgman, Mich.

STRAWBERRY PLANTS FOR SALE—PREMIER 60c per hundred, $4.50 per thousand. Senator Dunlap, Gibson and Dr. Burrill 50c per hundred, $3.50 per thousand, postpaid. ROB'T. DE GURSE, Ovid, Michigan.

ALL WOOL YARN FOR SALE—FROM MANUfacturer, 75c up per lb. Also socks. Free sample. H. A. BARTLETT, Harmony, Maine.

GOOD SEEDS
Grown From Select Stock—None Better—54 years selling good seeds to satisfied customers. Prices below all others. Extra lot free in all orders I fill. Big free catalogue has over 700 pictures of vegetables and flowers. Send your and neighbors' addresses.
R. H. SHUMWAY, Rockford, Ill.

KNIGHT'S PLANTS
Strawberry—Raspberry—Blackberry
Currant—Gooseberry—Grape—Asparagus
25% reduction in price on some varieties
No reduction in quality. Our catalog describes Champion, The Best Everbearer and other best standard varieties. It tells you how to grow berries successfully; contains information to be had from no other source. Worth much to you, but is free.
DAVID KNIGHT & SON, Box 27, Sawyer, Mich.

PROFITS FROM YOUR CORN CROP
Glazed tile, wood and cement stave silos. Glazed and unglazed hollow building tile and MAT FACE RESIDENCE BLOCKS. Early buyers discount. Write for special agency proposition. National Clay Products & Silo Co., Dep't. 14, Neely Block, Muncie, Indiana.

Financial Statement as of December 31, 1923

Cash in banks and office	$309.271.06
Municipal Bonds	28,947.45
Building and real estate	27,727.44
Furniture and equipment	12,000.00
Salvage	9,350.00
Accounts Receivable	6,662.25
Accrued Interest	3,725.35
Total Assets	**$407,683.55**

Total Assets, December 31, 1921	$137,392.51
Total Assets, December 31, 1922	226,499.45
Total Assets, December 31, 1923	**407,683.55**

During the year 1923 the assets of the company increased $181,184.10.

The total claims paid for the year 1923 amounted to $402,422.11. The total claims paid since organization amount to $1,664,120.10.

The company made a state-wide record for the year 1923, writing and renewing 46,050 policies. With a state-wide organization to write insurance and adjust claims the company is prepared to continue to give efficient service for 1924. No automobile owner should drive a day without insurance. Select a well established company that is prepared to stand the test of the serious claims and that has had experience in handling the complicated automobile claims.

Ask any sales agency and they will name you the agent for this company. The rate is very reasonable and you can obtain any kind of policy that you may desire to meet your needs. Insure today; tomorrow may be too late.

Citizen's Mutual Automobile Insurance Company

HOWELL, MICHIGAN

The Children's Hour

DEAR girls and boys: Washington's birthday is but a few days off and many of you will observe at school by speaking pieces, holding a party, or in some other way quite as suitable. Thoughts of George Washington bring to my mind many of his sayings. Some of them you have heard while others you have not, but I am going to give you some of them and hope you will remember and think of them during your daily work or play. They are:

Think before you speak.

Speak no evil of the absent, for it is unjust.

Let your conversation be without malice or envy.

Show not yourself glad at the misfortune of another, though he were your enemy.

Associate yourself with men of good quality if you esteem your reputation.

If a man does all he can, though he succeeds not well, blame not him that did it.

Be not hasty to believe flying reports to the disparagement of any one.

Aren't these fine sayings? We should remember them in our daily life.—UNCLE NED.

THE HEIGHT OF RIDICULOUS.

By Oliver Wendell Holmes.

I WROTE some lines once on a time,
In wondrous merry mood,
And thought, as usual, men would say,
They were exceedingly good.

They were so queer, so very queer,
I laughed as I would die,
Albeit, in the general way,
A sober man am I.

I called my servant, and he came,
How very kind of him,
To mind a slender man like me,
He of a mighty limb!

"These to the printer," I exclaimed,
And in my humorous way,
I added (as a trifling jest),
"There'll be the devil to pay."

He took the paper, and I watched,
And saw him peep within;
At the first line he read, his face
Was all upon the grin.

He read the next, the grin grew broad,
And shot from ear to ear;
He read the third; a chuckling noise
I now began to hear.

The fourth, he broke into a roar;
The fifth, his waistband split;
The sixth, he burst five buttons off;
And tumbled in a fit.

Ten days and nights, with sleepless eyes,
I watched that wretched man,
And since I never dare to write,
As funny as I can.

Sent in by Berenice Brockway, R. 3, son Michigan.

OUR GIRLS AND BOYS

Dear Uncle Ned:—This is the first time in my life that I have written to M. B. F. We live on my grandfathers sheep ranch, 96 acres of wild land. My mother has lots of pretty flowers, which makes the place look homelike. I am deaf and go to the Michigan School for deaf at Flint. I want to get an education so I can help my parents because my father is not well. I have one sister and one brother. I am the oldest. Last August on Sunday afternoon I went over to my friends house, and they took me to Mud Lake to swim, but I can't swim as I am not able to use my arms good, but my girl friends all swim. I had a good time though. I can't do things like girls and boys who are strong, but don't take any back seat when it comes to dancing any fancy steps. I can enjoy a dance or movie. There is none nearer than 14 miles so I cannot go much. I read all the letters the boys and girls write in the M. B. F. and one time last summer I read one written by Bernice Kimball. She goes to Flint school too. She is also deaf. I receive a great many letters from the deaf boys and girls who were the pupils at Flint school, and I sure am interested in them. From your niece.—Alvina Lucille Hains, R. 4, Box 40, Harrison, Michigan.

Dear Uncle Ned:—I have been a silent reader for about three years. I would never miss the girls and boys page. I wrote two letters before to Uncle Ned but I never saw them in print. I would like to see this one in the M. B. F. I saw only one letter on the children's page that was from Provemont, so that put this notion in my head. My age is between 14 and 20 years old. All that guess my age correctly will get a long letter from me. I passed my eighth grade this last spring and now I would like to go to the Ferris Institute next winter. I will close with a riddle. What is the difference between the North and South pole? Answer: the World. Now don't forget to guess my age.—Mary Ziets, R. 1, Box 31, Provemont, Mich.

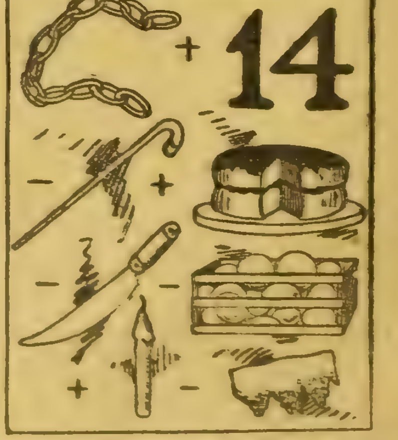
Dear Uncle Ned:—I have been a silent reader of the Children's Hour for some time. Well, I must describe myself. I am twelve years of age, and in the 7th grade at school. I will close with some riddles. What is over the water, under the water, and always with its head down? Why is a goose like a cows tail? Why is the home of an old man easy to enter? What kind of business never progresses? What relation is the door to the door mat? I will close now. I hope that Mr. Wastebasket does not get this letter. I wish some of the girls and boys would write to me. With love to Uncle Ned and cousins.—Gladys Trace, R. 1, Palms, Michigan.

Dear Uncle Ned:—I was just reading the M. B. F. and found so many nice letters that I thought I would write a few lines for the children's page. I am 15 years old and have 1 sister married. My father owns 80 acres of land. We have 2 horses, 7 cows, 3 yearlings and 3 calves. We live about 30 rods from the school. The school teachers stay at our place. Well I will close hoping to see my letter in print in the next issue, and wishing to receive many letters from the children that read the M. B. F. I will answer every one of them. From your nephew,—D. O. Ball, Maple City Mich., R. 2. P. S.—I will take a guess at Veda Wheaton's age. I will say that 12 years is the age.

Dear Uncle Ned:—We have been taking your paper, and I always like to read it. I have never written you before, so will take the pleasure of dropping a few lines too. I am ten years old. My birthday is May 9th. Have I a twin? I am in the 4th grade at school, and we live on an 80 acre farm. We have 3 horses and 12 head of cattle. We have pigs, and 100 chickens. We have 6 cats, and we live 4 miles from Traverse City. When I was reading your last paper, I found some riddles of Miss Imogene Hibberd about the green, white and red house. The answer is a watermelon, isn't it? Another riddle I saw by Miss Gladys Carlson: What grows in the summer and dies in the summer? The answer is an icicle, isn't it? Well, as I like to hear riddles, I think I will put in some too: Where was old Uncle Moses when his lamp went out? There are two brothers, Joe and Tommy. Each of them had a flocks of sheep. If Joe would give Tommy one of his sheep, they would have the same amount of sheep, but if brother Tommy had to give his brother Joe one of his sheep, brother Joe would have three times as many as brother Tommy. How many sheep did each brother have at first? My next riddle is. I went through an orchard and picked some apples. On the way home I met my friend No. 1. I gave him half of the apples and a half of an apple more than half. The balance I kept. On the second road I met my friend No. 2. I gave him half of the balance, and a half apple more than half, and the balance I kept. On the third road I met my friend No. 3. I gave him half of the balance and a half apple more than half, and I only had one apple left. How many apples did I pick up, and I never cut or broke one apple, and gave each friend a half apple more than half? Well as my letter is getting long I will close hoping to get an answer from some cousins. Good-bye Uncle Ned, until the next time.—Miss Martha Hermann, R. 2, Box 21, Traverse City, Michigan.

A BREED OF PUPS

BY WALTER WELLMAN



Add and subtract the names of the objects, and have, as a result, the name of a breed of dogs. What is it?
—Answer to last puzzle: CLARA and IDA.

FARMERS' WEEK AT M. A. C. IS A SPLENDID SUCCESS

(Continued from Page 6)

the infantry, coast artillery, and cavalry units of the college regiment. Next came floats representing departments of the college and following these were prize winning livestock from the splendid flocks and herds of the college. The whole parade gives to the visitor a moving picture of M. A. C. and demonstrates something of the size of the college institution.

Seven Big Exhibits

The exhibits held in connection with the Farmers' Week programs form one of the big attractions of the week. The Poultry Show, held at the poultry plant brought together the winning birds from the various poultry shows of the state for a final competition. The entries in the rabbit classes were also extensive and this section of the show was held in the Veterinary building.

The Animal Husbandry Department exhibit was held in a building joining the Judging Pavillion. This exhibit illustrated the results of various feeding experiments and also featured the M. A. C. winnings at the International Livestock Exposition.

At the new Home Economics building interesting exhibits of clothing and textiles claimed the attention of the women visitors. Proper combinations of foods for the various meals formed a large part of the nutrition exhibit. Proper home furnishings were also displayed. The work of the co-eds with nutritional experiments was illustrated by many cages of white rats upon which the several diets are being tried.

The Engineering building contained the exhibit of the Engineering Department. A minature power station and transmission line was shown, together with extensive exhibits of metals. The big broadcasting station of the college was also a center of attraction. This station is WKAR and broadcasts at 280 meters. Several of the talks given during Farmers' Week were broadcasted for the benefit of those not able to attend.

The Farm Crops exhibit, consisting of splendid displays of grain and potatoes, was located on the second floor of the new Library which is just being completed. A display of landscaping and design was also made in this building.

The 15th Annual Horticultural Show was held in the college Armory. This show brought out excellent exhibits of apples from different counties of Michigan. Always artistically arranged, this display of flowers and fruit attracts many visitors.

Entertainment

The musical organizations of M. A. C., such as the orchestra, glee clubs, and quartette of the college, added much to the programs. Motion pictures, and comedy plays lightened up the programs while the U. of M.-M. A .C. basketball game added the sport feature.

Special sales of Holstein cattle and Shorthorn cattle attracted many followers of those breeds. Livestock judging contests proved a big source of interest.

The main part of the programs, given at the general sesions in the afternoons, was made up of short talks given by the heads of different college departments. These talks, while interesting, were especially valuable in that each professor outlined the work which his department proposes to do, out through the state, in helping the industry which he represents.

Professors Brown of the Animal Husbandry Department, Foreman of the Poultry Department, Reed of the Dairy Department, Cox of the Crops Department, McCool of the Soils Department, Chittenden of the Forestry Department, and Gardner of the Horticultural Department, were those who presented plans for extending the work of their respective departments out to the people of the state.

Other speakers who featured the programs were H. R. Smith, Commissioner of the National Livestock Exchange at Chicago; E. L. Ewing, Traffic Counsel for the Michigan State Farm Bureau; J. W. Nicholson, Manager of the State Farm Bureau's Seed Department; Verne Branch, Director of the Detroit Municipal Markets; J. T. Horner, Associate Professor of Economics at M. A. C., and Dr. Hugh Cabot, Dean of the University of Michigan's school of Medicine.

The conclusion of the whole matter is that nowhere else in Michigan can the farmer and his family find such a source of entertainment, enjoyment, information, and inspiration as that afforded by the Annual Farmers' Week at the Michigan Agricultural College.

"A STITCH IN TIME SAVES NINE"

(Continued from Page 7)

seed, making repairs on gates, as well as many other operations could be gotten out of the way before the rush season, for the work performed now on such operations will pay big in the increase of crops produced or sowed.

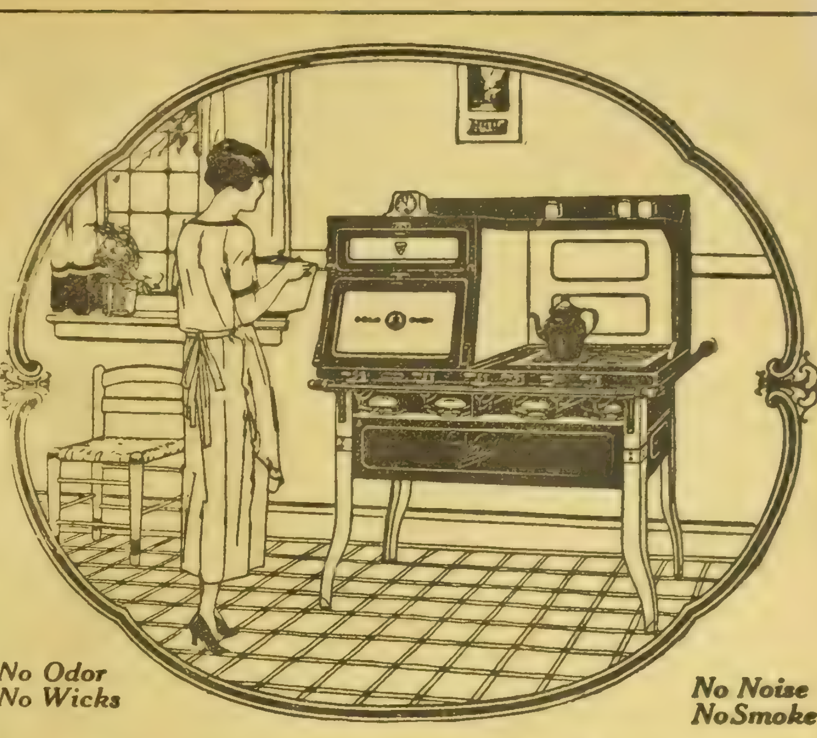
Not only can time be used profitably and crop production increased by having everything in readiness at the proper time but the life of farm machinery can be greatly prolonged by keeping it properly housed and repaired at the right time. The average life of a grain binder according to Minnesota Bulletin No. 117 is 7.41 years. If properly cared for and kept in good state of repair when used under normal conditions it should last much longer than this. The manure spreader no doubt receives as hard abuse as any machine on the farm due to the exposure and type of work it has to perform. The apron fails to work satisfactorily but instead of properly repairing it, at once, the farmer hastens to devise some means of getting by, by wiring up the broken part with hay wire; something else calls the farmer's attention and the next time the machine is used more difficulties arise and finally a breakdown about the time the load is one-fourth off, thus meaning a waste of time and costly repairs that could have been avoided if the machine had been cared for in the proper manner at the right time instead of decorating it with hay wire. Don't delay repairing your machinery until the last moment when you are rushed and then attempt to get by with the use of hay wire. For a machine that only half performs the job is not only expensive but takes the joy out of life and leads one to use profane words when with a little forethought in replacing broken parts and making the necessary adjustments at the right time would avoid all unpleasant moments and have saved time and money as well. Sometimes it takes days and even weeks to get repairs which if delayed too long might mean the purchase of a new machine or the hiring of the neighbor's machine or poorly performing the operation which in any case is expensive in the end.

It may mean only tightening or applying a little oil paint to the proper places or perhaps the adjustment of the equipment which is inexpensive but if delayed will result in the weakening of more expensive parts. So remove the hay wire, tighten up the bolts, repair the slats, and be ready for operations when the zero hour comes.

A good plan is to make a note of the condition of the machine at the end of the season or at the time it is last used. A convenient way is to use a tag system writing on the tags the parts that need repairing and then attach the tag to the machine. In this way when the farmer finds time to make repairs he knows at once what is wrong and does not have to waste time in finding out what to do.

If the machinery that needs repairs is placed in a convenient place in the shed, so as to be reached easily, it will facilitate matters very much, for lots of times the hay loader or binder is stored in the rear of the shed or an inconvenient place to get at, and repairs are neglected and postponed until it is time to use the machine or not at all.

Not only can the farmer utilize his time to a profit in getting his machinery in readiness but he can also utilize his time to a very great advantage in having his seed selected, tested, and cleaned, gates made, and posts sharpened. These and many other operations can be taken care of during the winter months thus in the end helping to make farming more profitable and enjoyable.



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Vapo Bolo oven bakes and roasts like a gas stove

The cabinet types of Vapo Ranges have a built-in Bolo Oven—a feature found only on the Vapo. The adjustable Bolo plate will make the oven big or little. Bolo means "Big or Little Oven." This makes a more intense heat because it is confined in a smaller space. You can do slow and fast baking at the same time.

Vapo is the only oil stove oven thatoffers you this advantage.

Vapo insures cooking comfort

Vapo construction includes many details which make for cooking comfort. The cooking top is roomy enough to prepare a large meal without crowding. The high shelf does not interfere with use of a wash boiler on the top and yet is not out of reach. The range is the right height to prevent back strain. Bolo oven doors drop to form shelves when needed. The oil tank is placed right for easy filling and the range sets flush against the wall. A range to treasure and be proud of. Have your dealer show you a Vapo.

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GEORGE WASHINGTON

ONLY a baby, fair and small,
Like many another baby son,
Whose smiles and tears came swift at call;
Who ate, and slept, and grew, that's all—
The infant Washington.

Only a boy, like other boys,
With tasks and studies, sports and fun;
Fond of his books and games and toys;
Living his childish griefs and joys—
The little Washington.

Only a lad, awkward and shy,
Skilled in handling a horse or gun;
Mastering knowledge that, by and by,
Should aid him in duties great and high—
The youthful Washington.

Only a man of finest bent,
Hero of battles fought and won;
Surveyor, General, President,
Who served his country, and died content—
The patriot Washington.

Only—ah! what was the secret, then,
Of his being America's honored son?
Why was he famed above other men?
His name upon every tongue and pen—
The illustrious Washington.

A mighty brain, a will to endure,
Passions subdued, a slave to none,
A heart that was brave and strong and sure,
A soul that was noble and great and pure,
A faith in God that was held secure—
This was George Washington.

VALUE OF SALADS IN THE DIET

SOME of us went and heard all about it and some of us staid at home.

Well it was a very fine lecture and demonstration, and important.

Salads do have a place in our diet; and altho some of us feel that it is one of those extra fussy dishes that the men folks do not care for, it should be eaten in some form at least once a day.

Miss Hughes, Asso. Prof. Home Economics, brought out the thot that the dressing for salads should be appropriate for the combination you are serving and made to be good tasting. A great many of us just throw a few ingredients together and think that it is going to taste alright. It is not true with any cooking. Thot and care has to be exercised in making any dish.

It took me a long time to convince my husband of the fact that he should eat salads and how much they meant to his health.

At first he would say, it was just like eating a lot of grass. I had become careless and thot that plain lettuce with dresing was all that he needed. I soon discovered that the lettuce was alright but the dressing was all wrong. I made my French dressing too sour and the vinegar taste was too strong. I soon learned by experience the right amount to use and also that he tired of the same dressing. I found he liked a very inexpensive boiled dressing and I alternated with it.

Salads don't necessarily have to be expensive and extravagant. Some very simple combinations will give you the right amount of iron that comes with this class of food.

At this time of the year, when our blood is thick and heavy with the winter cold and lack of exercise that comes with the summer in being out-doors, it is very important that we watch our diet and not let it be too heavy and rich. Lots of vegetables and salads will help keep us in good condition.

I remember last year receiving so many letters telling about eczema. I sort of felt that these folks had all let their blood get sluggish with lack of green food stuffs in their diet.

Let us not allow this condition to exist this spring, but start right now and eat the right foods and drink lots of water. Remember the lovely vegetables you put up last summer? Eat them up. Leave out some of the meat and use more vegetables and eat moderately.

Below is a list of salad combinations that were given all those who heard the lecture and are very fine. Use some of the more simple combinations that you no doubt have on your own shelves. I agree with Mrs. Campbell State Home Demonstration Leader when she says the nuts found right here in Michigan make an excellent substitute for the walnuts and pecans that are imported from California. Can you imagine a nicer nut meat than our own native hickory?

Salad Combinations

1. 1 c apples, 1 c celery, ½ c walnuts (Waldorf Salad).

The Farm Home
A Department for the Women

Edited by MRS. ANNIE TAYLOR

DEAR FOLKS:—All I lack is the room to print the many splendid letters that you sent to me. They speak for themselves in our columns below. We all seem to feel the same about reading and I too feel that sometimes we try to make our children read what is not interesting to them and then think it is the child's lack of wanting to read.

Send for the "Bok Peace Plan" and read it thru. This subject is too big and fine a thing to let go by and say it is something we do not understand.

Maybe some of you mothers have some special sandwich filling that appeals to your kiddies. Let the rest of us have it and share with you. One of our readers asked for new fillings other than egg and in this issue I have put a few. These may not be new but they are wholesome.

Your Friend,
Mrs Annie Taylor

Address letters: Mrs. Annie Taylor, care The Business Farmer, Mt. Clemens, Michigan.

2. 1 c pineapple, 1 c bananas, ½ c cherries.
3. Banana rolled in chopped nuts.
4. Prunes stuffed with pecans, whipped cream.
5. 1 c celery, 1 c apples, green peppers.
6. 1 c grapefruit, 1 c marshmallows, 1 c white grapes, ¼ c nuts.
7. 1 c pineapple, 1 c marshmallows, 1 c white grapes, ½ c nuts.
8. 1 c oranges, 1 c Bermuda onions.
9. 1 c oranges, 1 c dates.
10. 1 c chicken, an equal amount of celery (1 or ½ c), ¼ c olives, ½ c nuts.
11. 1 c peas, 1 c cheese cut in small cubes.
12. 1 cooked chicken, 1 cucumber, 1 c walnuts, 1 c peas.
13. Sweet breads, 1 pint, equal amount of cucumbers.
14. 1 c olives cut lengthwise, 1 c almonds, cut lengthwise.
15. Canned pears cut in halves, shredded almonds in center of pear. Serve with cheese straws.
16. 2 c salmon, 1 c celery cut fine, ½ doz. sour pickles.
17. Head lettuce and requefort cheese.
18. Cooked asparagus, rings of green peppers, slices of pimentoes.
19. Sliced hard-boiled eggs, cucumbers, celery and lettuce.
20. 2 c cold string beans, 1 t onions cut fine, ½ doz. radishes, sliced thin.
21. 1 can strained tomatoes, 2-3 box gelatine soaked in ½ c cold water, 1 t salt, 1 t powdered sugar. Make a jelly, put into molds, serve on lettuce.
22. Dressing for head lettuce: t parsley—chopped very fine, 1 egg hard boiled, cut fine, 1 t cooked beets, chopped fine, 1 t vinegar, paprika, 1 T chili sauce, add to ¼ c mayonnaise dressing.
23. Unsweetened prunes stuffed with cream cheese. Garnish with pimento or green pepper. French Dressing or Mayonnaise.
24. Tomato—moulded in gelatine.
25. 1 slice pineapple on lettuce. Garnish with 1 T pimento and 1 T grated cheese.

THE CHILDREN AND SHUT-IN DAYS

TO my mind the subject you have chosen for discussion in your Woman's Department in the January 19th issue is one of most vital importance, and interesting to all of us mothers everywhere, for not only are the childhood years of our little ones affected, but their characters throughout life may be made or marred by the tenor of their home life.

I have two children, a boy and girl, aged seven and nine, respectively, and I know by experience that it takes a great deal of one's time to keep them contented and out of mischief, especially as you say on shut-in days. But I find these days can be the happiest periods of our lives if we seek to interest our children in worthwhile things, and keep their little minds and hands occupied. I believe the whole keynote of the situation can be found in the word "busy," not necessarily busy in work, though each have their little chores to do, but busy also in their play. They love to read, and I try to supply them with good books suited to their age and they pass many a pleasant hour reading aloud to each other or to me. On Sundays we have a Sunday school class, and I teach them bible stories, prayers and graces, each taking turns in asking the blessing at table. Frequently we sing songs, and it is surprising how quickly they will learn a tune. Here is where their choice of good music as well as good books rests with the Mothers, and how truly applicable is the old bible verse: "Teach thou thy child in the way he should go, and when he is old he will not depart from it."

Again they spend many a pleasant hour sorting their flower and garden seeds which they collected, or making picture books. Just now their evenings are taken up making valentines. I try to teach them to play quietly in the house. They have the whole out-of-doors to play in when their pent-up energy must escape, and, of course, Baby Brother comes in for a share of their time.

Surely the aim of a mother can be none higher than to be such a companion to her children that they would rather be home with her than anywhere else in the world.—M. G. F., Cheboyban County, Mich.

NOT A DULL DAY SO FAR THIS WINTER

WINTRY days do not seem to be lonely ones for us so perhaps I have some ideas to pass along. My three little girls of 5, 4 and 2 years have been taught to depend upon themselves considerably and very seldom do they say "Mamma, what shall I do?" They play with picture puzzles, their spelling board and other toys, play house with their dolls, the rockers are their cars at times and they go traveling and amuse themselves while mother gets a lot of work done. They also help by running small errands about the house. The eldest often helps with the dishes and just this morning proudly announced that she had made up her bed before coming down stairs.

Once in a while for variety they have a party with "eats" that have been made in their aluminum play dishes, a tiny loaf of bread, a dainty little cake, cocoa made in a tiny kettle, etc. Of course I bake these things when I am doing my baking. Once this winter when they wondered what to do we had a taffy pull, each child of course pulled taffy and it was such fun that we are going to do it again soon.

One thing the two older girls love to do is make kindergarten things. We save the pretty colored paper that comes into the house and I help them make paper lanterns, and other things. They are never so happy as when making something The only materials I have purchased is a box of crayolas and they amuse themselves for a long while coloring pictures.

I tell them stories and was very much surprised one day to see them act out one of the stories. (I had never mentioned to them that it was possible to "play" the stories.) The baby soon left them and went to play by herself, but that didn't matter to the other two, they doubled up on their parts and their play went along uninterrupted. Since then they have dramatized a number of stories by themselves and seem to enjoy it immensely.

One must be careful to choose the right kind of stories for children. The girls are now beginning to make up stories suggested to them by pictures on the magazine covers or in advertisements. These little stories they tell aloud to the others.

There are very few days when the children don't get out of doors for a while at least and we haven't had a lonely day this winter, and do not expect to have.

Do not misunderstand me—my children are healthy, normal youngsters and disagree and quarrel at times as all normal children do, but we do not have time hanging heavy on our hands. By keeping the children happy and contented I have more time to work and read, and sew, and study, and these wintry days seem all too short for all we'd like to do, and this in spite of the fact that a few weeks ago we moved to a new neighborhood where we are among total strangers—Mrs. W. E. Fitzgerald, Kent County, Mich.

THE AMERICAN PEACE AWARD

A GREAT many brilliant minds have been working for a solution for world peace and I know you all have heard it discussed. Whether it is the right step or whether it is the wrong step has been one of the perplexing questions that even our great men have been unable to solve.

The "Bok Peace Plan" is now opened for discussion and if there are any of the women readers of this page that are interested as voters and want to know more about what these men and women are doing, send for the printed "Winning Peace Plan." Address your letter to the "American Peace Award," 342 Madison Ave., New York City ,N. Y.

Personal Column

Making Textile Leather and Wood Art Products at Home.—As you know we farm women are interested in making money at home; some thing as a side issue. I have a chance of getting textile leather and wood art products stamped for painting, but have to pay $7.75 first as a membership fee to insure them for their stock material as they are to furnish everything. Now could you kindly write me as to their reliability and whether it would be wise to send the money. I know nothing about this company but want to earn the money yet I do not want to be a loser. The company I refer to is "The Nile Art Co., Fort Wayne, Indiana."

—Perhaps some of our readers have had some experience along this line and can help or suggest a way for our reader.

—if you are well bred!

The Reply.—The reply to a birth announcement must be prompt. A short, warm note of congratulation, not too conventional, best answers the purpose. Gifts of flowers, jellies or any little article for the child are a graceful courtesy; but not imperative, since the note of congratulation answers the needs of the occasion.

Menu for February 16th

Onion Cocktail
Roast Mutton; Currant Mint Sauce
Okra and Tomatoes
Jellied Salad
Butterscotch Pie
Coffee

Onion Cocktail.—Two cups diced apples, one cup diced onions, one cup seeded raisins. Fill glass with onions, apples, raisins. Pour over a sour dressing made as follows: One-fourth cup each of vinegar and water, one tablespoon lard, salt and red pepper to taste, and two teaspoons sugar. Place in small sauce pan over fire until lard melts, then stir in well beaten yolks of two eggs, stirring constantly until thick. Place in ice box to cool before using.

Butterscotch Pie.—One egg, one cupful dark brown sugar, one cupful milk, three tablespoons flour, two tablespoons lard, three tablespoons water, one-fourth teaspoon salt, one tablespoonful powdered sugar, one teaspoon vanilla, one baked crust.

Put yolk of eggs into saucepan, add brown sugar, milk, water, lard, salt, and vanilla. Stir over fire until it thickens and comes to boiling point. Pour into baked pie shell. Beat up white of egg, then beat powdered sugar into it. Spread on top of pie and brown lightly in oven.

RECIPES

Sandwich Fillings.—To keep sandwiches, place them in a bowl and cover with a cloth wrung out of hot water. Sandwiches thus treated may be made in the morning and used in the evening.

The possible filling for sandwiches are unlimited. The ingenious housewife can always find some tasty combination from her pantry for the emergency afternoon or lunch box sandwich. Sandwiches also supply a wonderful source for using up "odds" and "ends" or "left-overs" such as bits of meats, vegetables, etc. They can so readily be mixed with salad dressing or other seasonings and so form tasty fillings. Always remember that sandwiches to be pleasing should be dainty and attractive.

1. Minced ham with shredded lettuce, onion and mayonnaise.
2. Dutch cheese mixed with chopped stuffed olives or pickle, green pepper and chili sauce.
3. Dutch cheese mixed with walnut or hickory nut meats, olives, paprika and cream.
4. Peanut butter mixed with chopped dates and a bit of orange juice.
5. Figs chopped with crystallized ginger and a bit of rind and juice of lemon.
6. Chicken or veal minced with mayonnaise.
7. Pimentoes, green peppers and celery shredded and mixed with mayonnaise.
8. Tongue, minced with India relish or chopped pickle.
9. Apple butter mixed with chopped nuts.
10. Tuna fish or salmon mixed with celery, nut meats and salad dressing.
12. Minced hard boiled eggs, melted butter, seasonings, onion and mayonnaise.

Candied Citron.—Cut the citron, which should be fully ripe, into very large pieces and peel, using only the hard part outside. To each four pounds of citron allow two pounds of sugar, one lemon and one-half pound ground ginger, one-half teaspoon ground cloves and allspice, mixed. Put the citron in a kettle and pour the sugar over it and let it stand all night. In the morning add the lemon cut fine and the spices in a bag. Work until the citron is clear and tender and the syrup is quite thick. Take it out and drain well and spread in a single layer on a large agate tray in a place where the wind will blow over it, but not in the sun or oven. Turn occasionally and keep the tray tilted so that any syrup that drains off may be readily dipped out with a spoon. When partly dry roll in granulated sugar and spread again. Repeat until well crystalized. Then pack away for winter. The syrup is fine for pancakes.

Nut and Rice Loaf—Three cups chopped peanuts, three cups cooked rice, one teaspoon celery salt, one teaspoon onion juice, three teaspoons salt, two beaten eggs, one cup sweet milk. Mix thoroly. Bake half hour in a slow oven.—Alma B., Augusta, Michigan.

The Runner's Bible

(Copyright by Houghton Mifflin Co.)

He that goeth about as a tablebearer revealeth secrets, but he that is of a faithful spirit concealeth the matter.—Prov. 11:13.

The malicious tablebearer is an anomaly in nature. All other animals which thrive upon corruption, because they devour it, are benefactors. But through the scandalmonger, corruption is nourished and increased a thousand fold. The one who has the love of God in his heart never discusses the errors and sins of another; on the contrary, he does his best to conceal and to destroy them.—(Luke 6:13; Ps. 32:1.)

AIDS TO GOOD DRESSING

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FASHION BOOK NOTICE

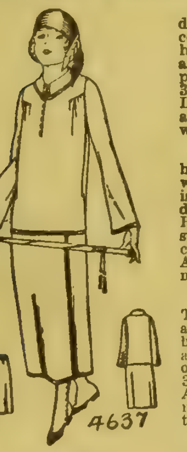
Send 10c in silver or stamps for our UP-TO-DATE SPRING AND SUMMER 1924 BOOK OF FASHIONS, showing color plates, and containing 500 designs of Ladies', Misses' and Children's Patterns, a CONCISE and COMPREHENSIVE ARTICLE ON DRESSMAKING, ALSO SOME POINTS FOR THE NEEDLE (Illustrating 30 of the various, simple stitches) all valuable hints to the home dressmaker.

4629. A Set of Attractive Sleeves.—No. 1 is a new two-piece model suitable for cloth, velvet or silk. No. 2 will be pretty in crepe, silk or chiffon. No. 3 is very stylish and pleasing. It is a good model for combinations of plain and figured materials. The Pattern which includes the three styles illustrated, is cut in 4 Sizes: Small, Medium, Large and Extra Large. To make No. 1 will require ⅞ yard of 40 inch material. No. 2 will require 1½ yard and No. 3, 1⅛ yard. For band cuff and cap on No. 3 of contrasting material ⅝ yard is required.

4619. A Neat and Comfortable Play Suit.—This model provides a separate blouse. The Overalls are sleeveless, and the body portion of the back is buttoned to the waist portion. Seersucker, denim, or gingham could be used for the overalls, and cambric for the blouse, or the entire suit may be of one material. The Pattern is cut in 4 Sizes: 2, 3, 4 and 5 years. A 4 year size requires 1½ yard for the Overalls, and 1⅛ yard for the Blouse.

4631. A Popular "Play" Costume.—Dotted percale and white linine are here combined. This style is also for gingham, wool jersey, wool rep, and pongee. The Pattern is cut in 4 Sizes: 4, 6, 8 and 10 years. A 6 year size requires 2¾ yards of 36 inch material. For collar and cuffs of contrasting material ⅝ yard is required.

4638. A Serviceable Set of Bloomers and Brassiere.—For the growing girl comfort and freedom in movement and breathing is very desirable. The brassiere may be of satin, jean, drill or strong muslin. The bloomers are nice for cambric, sateen, serge or flannel. This Pattern is cut in 4 Sizes: 12, 14, 16 and 18 years. A 14 year size requires 2⅛ yards of 36 inch material.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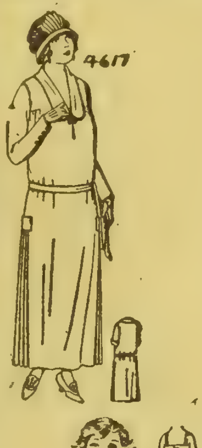
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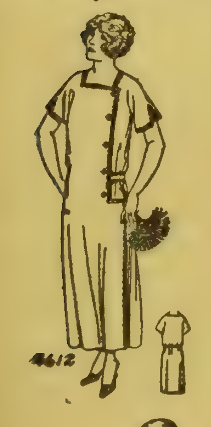
4612. A Pretty "House" Frock.—Household duties will be lightened when one is attired in so comfortable and pretty an "apron frock" as is here portrayed. The closing is at the left side, and the right side, boasts of a very convenient pocket. The Pattern is cut in 4 Sizes: Small, 34-36; Medium, 38-40; Large, 42-44; Extra Large, 46-48 inches bust measure. The width at the lower edge is 2 yards. A Medium size will require 5½ yards of 27 inch material.

4637. A Jaunty Up-To-Date Model.—Here we have the latest expression in blouses, coupled with a smart skirt in wrap effect. This style is especially suited to growing girls. It may be developed in wool rap, jersey, serge or broadcloth. Braid or binding, or a simple finish of machine stitching is nice for decoration. The Pattern is cut in 5 Sizes: 12, 14, 16, 18 and 20 years. A 16 year size requires 2¾ yards of 54 inch material.

4617. A Popular Style for Stout Figures.—The plait fullness and "V" neck line are new and attractive style features. In black satin or blue serge this design will make a good serviceable day dress. It is also good for crepe weaves or wool rep. The Pattern is cut in 7 Sizes: 36, 38, 40, 42, 44, 46 and 48 inches bust measure. A 40 inch size requires 4¾ yards of 40 inch material. The width at the foot with plaits extended is about 2⅝ yards.

6420. A Popular Blouse or Smock Suit for Small Boys.—This is a good model for twill, serge, corduroy, velveteen and for all wash materials. The Pattern is cut in 4 Sizes: 3, 4, 5 and 6 years. A 4 year size requires 3¼ yards of 27 inch material.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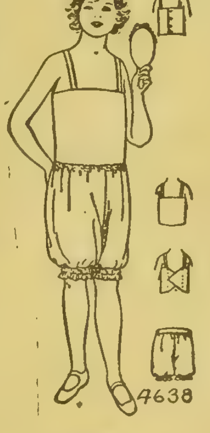
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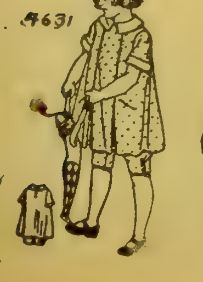
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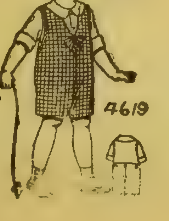
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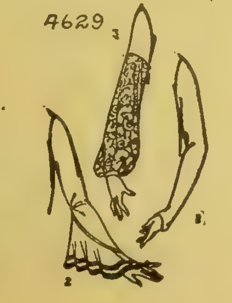
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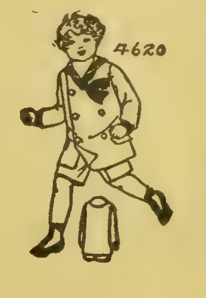
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GAS AND INCOME TAXES URGED BY LINTON

THE proposed gas tax and the income tax amendment were named by William S. Linton, chairman of the state tax commission, as the two most immediately available remedies for the oppressive real estate taxes that are being carried by the taxpayers of the state especially the farmers, in an address recently at Saginaw.

"There is no question about it," said Mr. Linton, "Taxes are oppressive. Workers everywhere today give one day out of their week to pay the expenses of government. The burden is great, and others besides the farmers are loaded down. This situation has been brought about largely on account of the world war.

"Tax exempt bonds have taken from the state tax rolls a great amount of wealth. An interesting point in this connection is that almost the first municipal tax exempt bond ever issued in Michigan was a Saginaw City bond, issued under a special legislative act years ago.

"Farmers should in some practical way be relieved from their excessive realty tax burden. The state portion of the taxes is small, however, as compared with the local share, the state receiving only about 10 cents out of every dollar of the taxpayer's money. Most of the money paid by many counties to the state is returned again in the primary school and road funds.

"Real estate is too heavily burdened. This includes the farm, the home and business places. The laws of the state require that a great amount of the taxes come from real estate. We will have to look to other lines also to help out this condition.

"A gas tax is now in force in 36 states. Under such a law the persons who actually use the highways would pay for them in a fair proportion. Tourists, it is estimated, would bring in more than $1,000,000 to the state under such a tax.

"The income tax amendment if passed would require each person whose income was more than $4,000 per year to contribute his full share toward the up-keep of the state. This tax would undoubtedly take care of all the state's expenses, and real estate would then have to care for local taxes only.

"The farmer today is up against it. In many of the counties of the state farmers are abandoning their farms because of insufficient revenue, and with present expension maintenance, they cannot even keep up their taxes. As this condition grows a serious question arises. Where is our food supply going to come from unless the soil is worked to the limit, and the farmer is made contented and prosperous by fair and liberal treatment?

"I am in favor of eliminating the state taxes collected from real estate entirely by getting this support from some proper source."

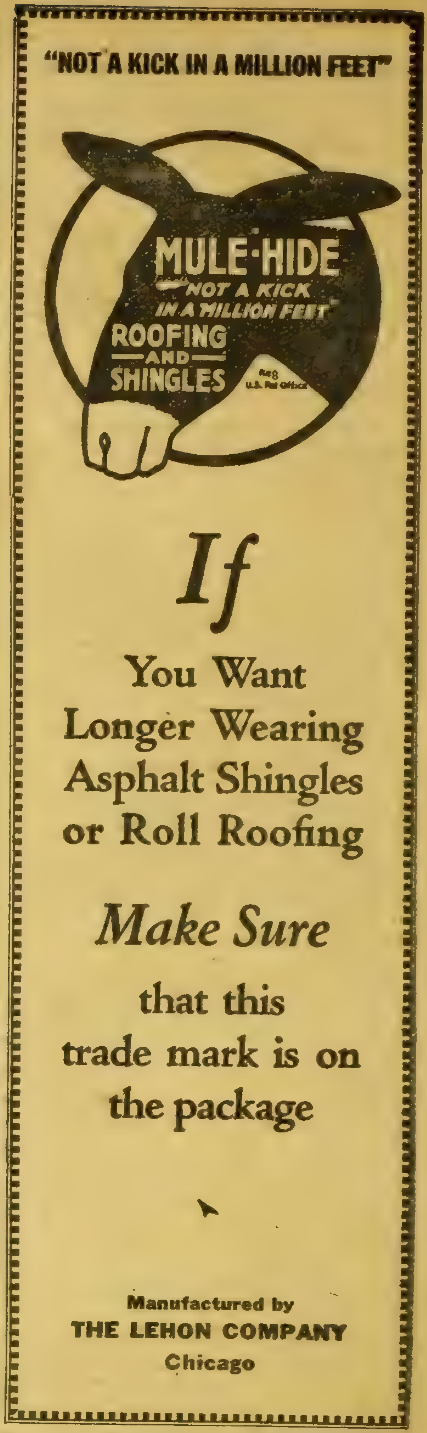
GETTING OUT FIREWOOD

FIREWOOD has never been in such great demand as during the past two or three years. Shortage and high price of coal, of course, has been the reason. And as usual when something is urgently needed, labor to produce it is hard to find.

Necessity, the mother of invention, taught me a quick and easy way of splitting logs. I will describe it briefly:

Taking as an example, a log four feet in diameter and fourteen feet long. An auger hole was bored two thirds of the way through near either end. It is desirable to have both holes as nearly as possible in the same grain of the wood. One and one-quarter pounds of forty per cent straight nitroglycerin dynamite was loaded in each hole and well tamped in with damp clay. The charges were fired with cap and fuse. Electric blasting caps would have been better to insure the charges going exactly together.

Cost was 75 cents for explosives and I figure 75 cents more for one hour's time. The labor charge can be considered or not as the operator prefers. Usually such work is done by farm help in slack time and no real extra labor cost is incurred.
—C. G. S.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February 20—Angus and Poland Chinas, E. A. Clark, St. Louis, Michigan.
February 20—Holsteins, Forest Deatsman, Lake Odessa, Michigan.
Feb. 20—Durocs, Detroit Creamery Farm, Mt. Clemens, Michigan.
Feb. 25—Chester Whites, Detroit Creamery Farm, Mt. Clemens, Michigan.
March 11—Poland Chinas, Detroit Creamery Farm, Mt. Clemens, Michigan.
March 25—Holsteins, Fred H. Lee, Plymouth, Michigan.

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To make room for winter we are offering bred cows and heifers also some well bred young bulls. Look up our winnings at leading state fairs.
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10 Head Registered Shropshire Ewes, Exceptional quality, bred for last of March and April.
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DISPERSION SALE! MICHIGANA FARM MUST sell all Durocs. We are offering bred sows and gilts, also fall pigs, either sex at bargain prices. Write your wants.
MICHIGANA FARM, Pavilion, Michigan.

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HAMPSHIRES—BRED GILTS AND BOARS at bargain prices. Write your wants. 12th year.
JOHN W. SNYDER, St. Johns, Mich., R. 4.

MICHIGAN BREEDERS FAIL TO BID AT POLAND CHINA SALE

ON February 5th the Detroit Creamery Farms held the first of a series of late winter sales of high grade hogs. Some of the finest Poland Chinas ever bred in this state were sold at this sale and the cream of the stock offered was purchased by breeders from out of the state. It was enough to make one wonder as to what is to become of the Poland China hog in this state when Michigan breeders failed to bid very high on the quality stock. Michigan breeders must keep this fine stock in the state if they want to retain their position as a livestock state. They will have another opportunity March 11th when the Detroit Creamery Farms will sell another fine lot of Poland Chinas. The attendance was fair considering the weather. Following is a list of the numbers of animals sold, name and address of purchasers and prices paid:

No. 1, J. H. Ganahl, St. Louis, Mo., 225.00; 3, Arlington Place Farms, Indianapolis, Ind., 120.00; 4, Arlington Place Farms, 120.00; 5, Arlington Place Farms, 255.00; 6 Arlington Place Farms, 140.00; 7, Fred Smith, Roseville, Mich., 80.00; 8, Oscar Blythe, Grove Hill, O., 50.00; 9, Arlington Place Farms, 130.00; 10, Dewey Nash, Fairfax, Oklahoma, 80.00; 11, Emil Rosell, Mt. Clemens, Mich., 32.50; 12, Arlington Place Farms, 50.00; 13, Arlington Place Farms, 210.00; 14, G. A. Shepard, Modock, Ind., 45.00; 15, G. R. Doemling, Mt. Clemens, Mich., 60.00; 16, E. W. Goddard, Laurence, Ind., 50.00; 17, Louis Priehs, Mt. Clemens, Mich, 50.00; 18, Emil Rosell, Mt. Clemens, Mich., 32.50; 19 Emil Rosell, 27.50; 20, Albert Gaskel, New Haven, Mich., 35.00; 21, Fred Smith, 35.00; 22, W. H. Powell, Ada, Ohio, 60.00; 23 Maurice Lonergan, Omaha, Neb., 125.00; 24, E. W. Hamman, Manzanola, Colo., 95.00; 25, Arlington Place Farms, 115.00; 26, Emil Rosell, 32.50; 27, Emil Rosell, 37.50; 28, Fred Smith, 35.00; 29, Fred Smith, 35.00; 30, Arlington Place Farms, 140.00; 31, Cass Patterson, Mt. Clemens, Mich., 35.00; 33, E. W. Hamman, 150.00; 34, R. L. Goddard, Lawrence, Ind., 47.50; 37, J. Wm. Fox, Newport, Mich., 37.50; 38, Bert Coulin, Mt. Clemens, Mich., 37.50; 39, Bert Coulin, 37.50; 40, Ed Krushell, Birmingham, Mich., 40.00; 41, Ed Krushell, 40.00; 42, R. L. Goddard, 50.00; 43, V. E. Howell, Otter Lake, Mich., 50.00; 44, Bert Coulin, 32.50; 45, Fred Smith, 65.00.

FARMERS SOLVING FARM MANAGEMENT PROBLEMS

THOUSANDS of farmers in all parts of the country are reorganizing their business to bring about a better balance between their crop and livestock enterprises, the United States Department of Agriculture declares. Through the farm management extension work of the department, livestock growers particularly are appreciating the importance of producing on the farm a properly balanced livestock ration instead of purchasing feeds in the open market. Farmers are also becoming more self-sufficient in the matter of food for the family whereas formerly much of the food consumed has been purchased, it is said.

The basis for the reorganization program is the keeping of simple farm accounts that reveal at once the weak spots in the business such as poor crop and livestock combinations, waste motion and inefficient use of labor, the department says. Mass meetings at which farmers are being impressed with the need for more efficient farm management to combat the high costs of production and marketing are being held wherever farmers can be assembled by the extension workers connected with State agricultural colleges and Federal Department of Agriculture. The teaching of farm booking in rural grade schools so that the growing generation of farm boys and girls may have a better understanding of efficient farm management has been one of the striking developments of the movement.

A recent directory of the cow-testing associations in the United States compiled by the Department of Agriculture shows the sections that have made the greatest progress in this work. Wisconsin leads with 151 cow-testing associations, Minnesota is second with 55, Michigan is third with 53, Iowa is fourth with 47, and Pennsylvania and Ohio tie for fifth place with 36. The total number of associations in the United States is 627. There are 277,010 dairy cows in these organizations.

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The Safe Ration for Dairy Cows

Just as the railway semaphore prevents disaster, so does LARRO insure safety for your herd.

Safe—because Larro has just the right amount of protein from the right sources. More is often dangerous. Less is not enough.

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Safe—because it is free from adulteration and fillers. It contains nothing but clean, wholesome, milk-making, profit-making ingredients.

Read "Feeding the Fresh Cow" in The Larro Dairyman, our free, quarterly magazine for cow owners. Send us your name and address today if you are not receiving it.

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TELL YOUR FRIENDS ABOUT IT

Sale of Worlds Grand Champion

Chester White Sows

A WONDERFUL LINE OF SOWS WILL BE SOLD AT YOUR OWN PRICE

Monday, Feb. 25, 1924

This is without a doubt the greatest bunch of sows and gilts that probably was ever sold in any one Chester White Sale.

PATHMASTER is conceded by many of the world's greatest breeders, to be the most sensational Chester White boar ever produced. The entire offering will be bred to him. All showing heavy with pigs, some with pigs at side. Write for catalog.

Sale will commence at 1 o'clock

in a heated pavilion at Farm No. 3, Corner Gratiot and Nunneley Roads, 1½ mile south of Mt. Clemens. Come early inspect the offering and enjoy a good lunch at noon.

Detroit Creamery Farms,

Mt. Clemens, Mich. A. A. Schultz, Sup't.

10% More MILK
Doubles Dairy Profits
"A penny a day per cow invested in KOW-KARE works wonders"

A poor milker costs just as much to house, feed and care for as a good producer. For this reason just a slight increase in the milk yield makes a big difference in the *net* profit. Dairy experts say an increase of 10% in the milk yield will *double* the profit.

How important it is, then to get from your cows every pint of milk of which they are capable.

The chief cause—almost the only cause—of poor milkers is the condition of their health. Particularly the health of the milk-making organs.

Kow-Kare, the famous cow medicine and conditioner, acts directly on the milk-producing organs. It tones up the genital and digestive functions, makes them sturdy and active. More milk and better health *must* result. Feed Kow-Kare one week out of each month (a tablespoonful twice a day) and the result will surprise you.

For the treatment of Barrenness, Abortion, Retained Afterbirth, Scours, Bunches, Milk Fever, Lost Appetite, etc., Kow-Kare has a well-earned reputation. No dairy barn should be without it. For twenty-five years it has been the chief reliance of thousands of dairymen, when cows are sick.

Feed dealers, general stores and druggists sell Kow-Kare; $1.25 and 65c sizes. Write for our free book, "The Home Cow Doctor." It is full of information valuable to cow owners.

DAIRY ASSOCIATION CO., Inc. Lyndonville, Vt.

Makers of Grange Garget Remedy, Bag Balm, American Horse Tonic and Horse Comfort.

Unprofitable Cows are often sick without appearing so!

Watch the milk pail closely. The rise and fall of the yield indicates the health condition of the cow. A cow may look well, yet be suffering from sluggish digestive or genital organs. Kow-Kare acts directly on these organs. Its use restores normal milk yield and enables the cow to throw off disease.

FOR COWS ONLY
KOW-KARE
The Great Cow Medicine
DAIRY ASSOCIATION CO., INC.

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CORONA WOOL FAT
FOR CUTS, WOUNDS, SORES, BURNS, BOILS, CHAPS, ETC. ON MAN OR BEAST

TRY This Big Can on 20 Days FREE TRIAL

I make this liberal offer to prove *before you pay* that CORONA WOOL FAT is the greatest healing preparation you ever used for Cuts, Galled Shoulders, Collar Boils, Inflamed Udders or other injuries of man or beast.

SEND NO MONEY

Simply mail me a postal or letter saying "Send me your big can of CORONA WOOL FAT on 20 Days Free Trial." I'll send it postpaid. Use all or part of it, and if you don't find it to be the best healing ointment you ever used you won't owe me a cent. If it does all I claim for it, send me 65c in payment at end of 20 days. (6)

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The Corona Mfg. Co. 42 Corona Block Kenton, Ohio

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To get the most profit out of your silo, fill it with the simplest, strongest and most economical Cutter made.

Throws And Blows Saves One Man

The Papec's few parts and correct design reduce draft and lengthen life. Equipped with positive self-feed that is saving a man for hundreds of farmers. The Papec never clogs on any silo! Its performance is continuous. That one fact has made thousands of Papec sales and Papec boosters. The Papec is built by people who have long specialized in ensilage cutter construction. And the output is increasing every year.

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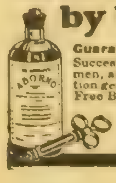

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GREATEST NEED OF PURE BRED SIRES

THE greatest need for more profitable dairying in Michigan is better herd sires. This does not apply particularly to the farmer or breeder who has a large herd of cows, but more particularly to the farmers who are milking a half dozen cows or less. These small herds are producing the great bulk of the dairy products that are sold on the market today. In many herds the cows are of no particular breeding and show all colors from common red to black and white, brindle, yellow, blue, roan and black. Some of the individual cows in these small herds are exceptionally good producers but they are accidents in most cases. These occasional good cows rarely produce a good daughter because they are bred to a scrub or grade sire. It is a well known fact that the individual farmer cannot afford to own a well bred pure bred sire when he has a herd of only six to a dozen grade cows—simply because the cash outlay would bring the service fee to high for the calves he obtains.

Every farmer knows this, and that is the reason he uses a scrub or grade bull—usually one out of his own cows. The only remedy for this condition is for several or many farmers in a community, township, or county to decide on one breed and then buy the best bull or bulls of that breed they can afford, and use this bull as a community sire. Such a plan will do more than anything else to place the cow business on a more profitable basis.

In Alpena County, Michigan, thirty farmers adopted a plan similar to this some twelve years ago and they have used three herd sires in as many communities for several years. They have figured it out from their records that the service fee per heifer calf obtained in this association has cost them less than one dollar and while this co-operative plan was established only a few years ago, today they can boast of 800 offsprings of these bulls. They have more than doubled the value of the cattle they are milking and the community has built up such a reputation for the breed of cattle they are handling that they have no trouble in selling their surplus stock at good prices. Any one wishing detailed plans for organizing a bull association should apply to the Agricultural College.—O. E. Reed, Professor of Dairy Husbandry, M. A. C.

WORK OF COW TESTING ASSOCIATION

AN indication that cow testing association work is helpful to promote better sires is shown in that 189 purebred sires were purchased among the association members. Twenty-eight associations are listed with all members either owning or using purebred sires, while 92.7 per cent of all the C. T. A. members are either using or own purebred sires. It is interesting to note that there are 876 purebred Holstein, 284 purebred Guernsey, 235 purebred Jersey bulls and a small number of other breed sires in use by the members of sixty-two associations we have reporting out of seventy operating. There the 42 grade Holstein, 30 grade Shorthorns, 24 grade Jersey and 11 grade Guernsey bulls in use among these sixty-two associations reporting.

Occasionally the argument is presented by the farmer when the cow testing association work is mentioned to him, that it is only for purebred cows. This argument is untrue. Two-thirds of all the cows listed in the Michigan C. T. A. are grade cows. On a basis of sixty-two associations that have reported there are 12,318 grade cows and 5,373 purebred cows among the association membership. Of this number 6,849 are grade Holsteins, 2,134 grade Guernseys, 2,104 grade Jerseys and 988 grade Shorthorns, while 3,824 are purebred Holsteins, 83 are purebred Jerseys and 532 are purebred Guernseys, plus a small number of representatives of minor breeds.

In a report for the year 1923 the number of cows under test in the cow testing association work in Michigan is shown to have increased from 4,973 to 20,314. The average production per day for all cows in the Michigan cow testing associations was found to be 20.9 pounds of milk and .83 pounds of fat. Allow-

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HAND AND POWER PUMPS
FOR EVERY PURPOSE
1823
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WHEN you buy a hand or power pump, buy one that you *know* will operate right and give you many years of trouble-free service. Myers Pumps are that kind. They keep on working without any tinkering, without repairs, long after other pumps have served their usefulness. We have built pumps for 50 years and have developed a line that meets every requirement on the farm. All are simple, reliable—and built for a long life. If you want pumps you can depend on, get the Myers—***absolutely the best pumps made.*** See your Myers dealer or write for catalog. (37)

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Pumps, Water Systems, Hay Tools, Door Hangers

Complete Milker $123!

Comes complete and ready to use; nothing to install, no bother, no expense. No electricity—no gas engine. **Run by hand.** So easy to pump a child can do it, thanks to patent spring and vacuum. Tremendous improvement in machine milking. Simple, ultra simple! That's why this complete milker costs so little and is **better** for you and your cows. Only $123—think of it. Special Offer—rock-bottom price direct. **30 Days Free Trial.** No C. O. D.—no deposit. **Easy Monthly Payments.** We'll make that milker pay for itself every day while you are using it. **Also:** Portable gas engine and electric milkers.

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Light running, easy cleaning, close skimming, durable.
NEW BUTTERFLY Separators are guaranteed a lifetime against defects in material and workmanship. Made also in four larger sizes up to No. 5 1-2 shown here; sold on
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While in France I obtained from a noted French physician a prescription for the treatment of Rheumatism and Neuritis. I have given it to thousands with wonderful results. The prescription costs me nothing. I ask nothing for it. I will mail it if you will send me your address. A postal will bring it. Write today.

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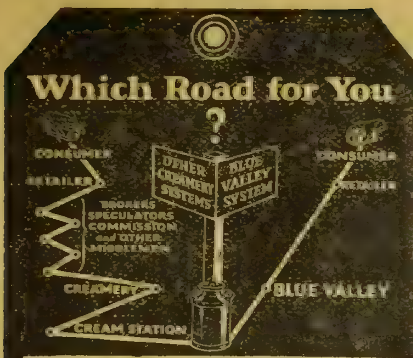
Have You LIVE POULTRY For Sale?
An Ad in THE MICHIGAN BUSINESS FARMER Will Sell It!



For 23 years Blue Valley has given farmers a high direct cream market. No useless profit takers between them and Blue Valley—between Blue Valley and retailers. Blue Valley butter, the National brand, brings farmers bigger cream checks direct.

Another Blue Valley Booster

"We received the largest checks from Blue Valley."—John Stirret, Kinde, Mich.

Thousands of B.V. B's (Blue Valley Boosters) will tell you it pays to ship your cream yourself direct to Blue Valley.

For Bigger Cream Checks

Ship to

BLUE VALLEY CREAMERY CO.

Ship to Blue Valley Creamery in City nearest you:

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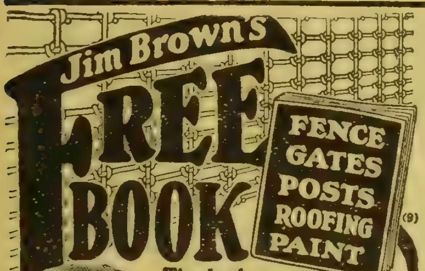

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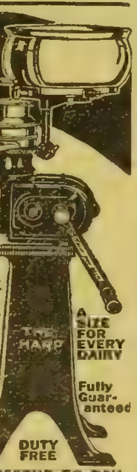

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The Standard in Europe For More Than 22 Years

You get the *closest skimming, easiest-turning, quickest to clean separator ever built.* Has replaced hundreds of thousands of machines in England, France, Germany, Belgium and Denmark. Quality at Bargain Prices! Why? Because European labor and materials are cheaper, we build in tremendous quantities, and sell *direct to you.* From $83.80 up *Also on easy monthly payments.* Write today for prices and descriptive folder.

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BE COMFORTABLE—Wear the Brooks Appliance, the modern scientific invention which gives rupture sufferers immediate relief. It has no obnoxious springs or pads. Automatic Air Cushions bind and draw together the broken parts. No salves or plasters. Durable. Cheap. Sent on trial to prove its worth. Beware of imitations. Look for trade-mark bearing portrait and signature of C. E. Brooks which appears on every Appliance. None other genuine. Full information and booklet free in plain sealed envelope.

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ing a ten months' milking period this would make the average production of the Michigan C. T. A. cow 6,357 pounds of milk and 252.5 pounds of butter fat. The 1920 United States census credits the average of the Michigan cow with 3,750 pounds of milk and 150 pounds of butter fat.

To prove that the cow testing association work sends "visitor" cows to the butcher—it was found that a total of 714 cows were sold as undesirable, unprofitable individuals during the year.—A. C. Baltzer, Extension Specialist in Dairying, Michigan Agrilcultural College.

FEEDING VALUE OF WHITE AND YELLOW CORN

Would you please let me know if there is any difference in the feeding qualities of the white and yellow corn?—L. M., Sterling, Mich.

—From the standpoint of the chemical composition, there is no difference in the feeding value of white and yellow corn and under average farm conditions where good rations are being fed and some leguminous hay forms part of the ration, there would be absolutely no difference in feeding value between white and yellow corn.

The white corn, however, is lacking one of the vitamines which is absolutely necessary to the proper functioning of the digestive tract in the digestion and absorption of minerals. This vitamine, which is lacking in white corn, is found abundantly in either clover or alfalfa hay. Where livestock is on pasture there is, therefore, no difference in white and yellow corn. Neither is there any difference in their value during the winter if the stock have a small amount of either clover or alfalfa.

Even hogs will eat a sufficient quantity of alfalfa or clover to give them all of the required vitamine.—Geo. A. Brown, Professor of Animal Husbandry, M. A. C.

COW HAD MILK FEVER

We have a cow that freshened October, 1923, and got down with milk fever for about 3 hours. Since then she gave only about one-quarter as much milk as other years. Also garget part of the time. What can I give her? Would this come alright at next calving?—B. V., Remus, Michigan.

—It is not an uncommon occurence for a cow to become affected with garget after having an attack of milk fever. I am afraid that there is very little that you can do to bring this cow back to her full milk at this laction period. She will very likely be all right again at her next laction period. Two tablespoonfuls of artificial carlsbad salts given on the cows feed night and morning for three or four weeks may bring favorable results.—John P. Hutton, Veterinary Division, M. A. C.

KITTEN EATS LITTLE

I have a half blood Angora kitten weaned about five months ago which never has eaten as a kitten should. It seems hungry and cries for food and then eats very little. It does not grow and is so poor and lately will not play. It has so little life, but its mate eats and grows and is so playful and lively. I've been told it may have worms. Could you judge? If you could and would suggest a remedy I would greatly appreciate it.—Miss P., Ingham Co., Michigan.

—Give the cat one grain of calomel and one grain of sodium bicarbonate at one dose. Then give night and morning one drop of tinctura of nux vomica and five drops of water, and continue for several weeks.—John P. Hutton, Veterniary Division, Michigan Agricultural College.

Corn prices made appreciable advances during the past year, says the United States Department of Agriculture. Low receipts at primary markets and the low visible supply of corn have resulted in rising prices despite large farm stocks and heavy production during the three years 1919-1922. It is pointed out, however, that the price of hogs must always be considered in connection with that of corn, inasmuch as approximately 80 per cent of the corn crop is sold "on the hoof."

Get more milk!

Use

Dr. LeGear's Stock Powders

You ought to see the hundreds of letters that people write in, like this:- "One of my cows in her last milking period produced less than 40 lbs. of milk daily. This year she was started on Dr. LeGear's Stock Powders and is making over 60 lbs. daily." Frank J. Swantner, Valley Park, Mo.

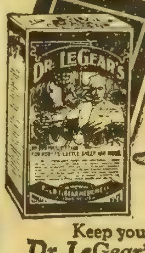
The reasons for such results now are easy to understand. In spring and summer, green pasture gives cows, in natural form, the laxatives, tonics and purifiers needed to *turn the most feed into milk.*

In winter, dry feed lacks these elements and much feed goes into *waste,* instead of milk.

Dr. LeGear's Stock Powders give cows just what their winter feed lacks. Tonics to sharpen appetite, aid digestion and purify the blood. Laxatives to correct bowel troubles. Vermifuges to expel worms. Minerals for milk, bone and blood tissues.

Every hog, horse and sheep, too, as well as your cows, need this helpful conditioner now. Get it! Satisfaction guaranteed or money refunded.

Small, medium and large packages. 25 lb. pails. 100 lb. drums.



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Dr. LeGear's Poultry Prescription
Ask at store about my Free Poultry Course

Dr. L. D. LeGear, V. S.
[In Surgeon's Robe]
Trade-Mark Reg. U. S. Pat. Off.

20% Less Butter Will Buy a 20% Better De Laval

Present-day purchasers of De Laval Cream Separators are getting more value than was ever before possible. You can now get a new De Laval for approximately 20 per cent less butter than the same size machine could be purchased for ten years ago.

In addition, the present-day De Laval is at least 20 per cent better, having 10 per cent more capacity, a bell speed-indicator, self-centering bowl, and many other improvements and refinements.

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All-Around Superiority. A combination of the foregoing features, together with superiority of De Laval design, workmanship and materials, enables a De Laval to separate more thoroughly under all conditions of use, deliver a smoother cream capable of making better butter, to separate a richer cream with less loss of butter-fat, and to separate with greater efficiency at lower temperature, all of which means more money and profit for the user.

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The De Laval Milker. If you milk ten or more cows a De Laval Milker will soon pay for itself. More than 15,000 in use, giving wonderful satisfaction.

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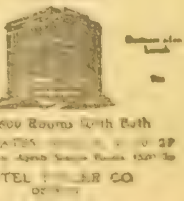

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[illegible] take your order from your Cattle Horse and all kinds of Hides etc. Furs. Men's Fur Coats, Robes Caps, Gloves and Mittens Ladies Fur Coats and Fur Sets Remodeling and Repairing latest styles. Ship us your work [illegible] save one half. New Galloway Coats, Robes, Gloves and Mittens for sale. We are the oldest Galloway Tanners 38 years continuous business. Free style Catalogue, prices and [illegible]. Don't ship your hides anywhere until you get our proposition

HILLSDALE ROBE & TANNING CO.
Hillsdale, Michigan.

DETROIT CREAMERY HOLSTEIN MAKES GREAT RECORD

AN excellent record for the production of butter was made recently by Elmland Jewel De Kol Cornucopia of the Detroit Creamery Co. Holstein herd at Mt. Clemens, according to the advanced registry department of the Holstein Friesian Association of America. At the age of five years and nine months this cow produced in one year under the supervision of the State Agricultural College 21,700.4 pounds milk and 720.30 pounds butterfat—equal to 900.3 pounds butter.

Nearly 97,000 Holstein cows and around 6,750 bulls have been admitted to entry in the Advanced Register up to the present time. The increased value of a cow tested for advanced registration depends upon the production shown. It is usually considered that the increased value is not less than $100 a cow.

CANNOT MAINTAIN GASOLINE PUMP ALONG TRUNK LINE

(Continued from Page 8)

papers on me before they can make me move it? And if they do serve papers how long are they supposed to give?—G W. H., Corunna, Mich.

—The state Administrative Board recently passed a resolution prohibiting the maintenance of any gasoline filling station on any state trunk line in the state.

The maintenance of any part of the gasoline filling station within any part of the right-of-way of a highway is an obstruction and the authorities having control over the highway in question may compel the removal thereof

If the pump mentioned in your communication is within the limit of this trunk line highway either the State Highway Commissioner or the Board of County Road Commissioners of the county in which the road is situated, if it be a county road, may compel the removal thereof. The statute does not prescribe the proper notice to be given, but thirty days notice would undoubtedly be sufficient.—H. Victor Spike, Assistant Attorney General.

NEXT OF KIN IS HEIR

If a person who has no children and no brothers or sisters, dies leaving no will, would the first cousins inherit the property. If so, suppose one cousin is dead, could the children of this cousin share in the property?—P Q Jackson County.

—If the deceased had neither wife nor mother or father at the time of his death the next of kin would inherit the property in the following order of priority: uncle or aunt, then first cousins. The heirs of a deceased cousin would be entitled to their parent's share.—Asst. Legal Editor.

ALLOWANCE FOR DRAIN

A county drain is being surveyed across my farm. The drain will be 400 rods long I put in 120 rods of 10-inch tile five years ago, which is sufficient for that drain in my farm, located near the lower end of the drain and which they plan to leave in. There are eight farmers interested besides myself. Would like some idea of what I have a right to expect from the 120 rods of tiles toward my share of the expense.—E. Pettsford, Mich.

You should have an allowance for the drain put in by you, to apply on your share of the expenses. The allowance should be based on the actual value of the drain. The value could be estimated upon the actual cost of putting in the same drain now, including labor and material, less depreciation.—Asst. Legal Editor.

LAW PROHIBITS MARRIAGE OF COUSINS

Give the law in full of Michigan and nearby states on cousins marrying. Does it make a difference if the people are past middle age and not liable to raise a family?—Mrs. W. V., Ortonville, Mich.

—Compiled Laws, 1915, Sections 11364 and 11365 prohibit the marriage of first cousins in Michigan. Most states have similar provisions against this kind of marriage. Such laws are by no means economic regulations, but follow the general policy of the law of the various states in which they have been en-

RHEUMATISM

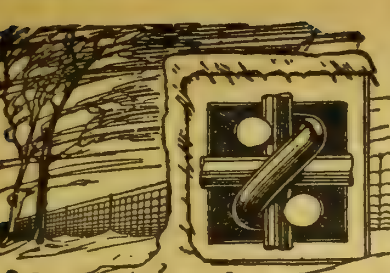
A Remarkable Home Treatment Given by One Who Had It.

In the year of 1893 I was attacked by Muscular and Sub-acute Rheumatism. I suffered as only those who are thus afflicted know, for over three years. I tried remedy after remedy, but such relief as I obtained was only temporary. Finally, I found a treatment that cured me completely, and such a pitiful condition has never returned. I have given it to a number who were terribly afflicted, even bedridden, some of them seventy to eighty years old, and the results were the same as in my own case.

I want every sufferer from any form of muscular and sub-acute (swelling at the joints) rheumatsim, to try the great value of my improved "Home Treatment" for its remarkable healing power. Do not send a cent; simply mail your name and address and I will send it free to try. After you have used it and it has proven itself to be that long-looked-for means of getting rid of such forms of rheumatism, you may send the price of it, one dollar, but understand, I do not want your money unless you are perfectly satisfied to send it. Isn't that fair? Why suffer any longer when relief is thus offered you free? Don't delay. Write today.

MARK H. JACKSON
No. 265-K Durston Bldg.
SYRACUSE, N. Y.

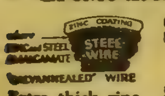
Mr. Jackson is responsible. Above statement true.



New Rust Resisting Fence Wire

"Galvannealed"—newly discovered rust-proof fence wire, insures many years longer service than you have ever had before from any kind of fence.

In "Galvannealed" wire an extra heavy coating of rust-proof zinc is amalgamated INTO the body of the steel wire. In ordinary galvanized wire a thin coating of zinc is merely laid ONTO the steel body of the wire.



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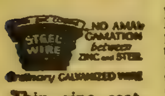
Extra thick zinc coating goes IN.



Ordinary GALVANIZED WIRE

Thin zinc coating only goes ON.

Square Deal Fence

is now made from rust-proof, high test "Galvannealed" wire or from standard quality galvanized wire. Square Deal leads with its stiff, picket-like stay wires that make fewer posts necessary. Its well crimped line wires spring back into place after every shock and strain. Famous Square Deal Knot can never slip. Square Deal stands tight and trim, looks better, wears longer, therefore costs less.

2 Books FREE

Ropp's New Calculator (worth 50c) figures grain and livestock profits; measures capacities of cribs, wagons, silos; figures interest, wages; contains commercial law, parcel post rates, etc. Sent free with Square Deal catalog that tells all about "'Galvannealed'—the Triple-Life Wire." Both books free to land owners.

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SQUARE-DEAL FENCE

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Advertisements inserted under this heading at 30c per agate line, per issue. Commercial Baby Chick advertisements 45c per agate line. Write out what you have to offer and send it in. We will put it in type, send proof and quote rates by return mail. Address The Michigan Business Farmer, Advertising Department, Mt. Clemens, Michigan.

High Grade, Utility Cockerels For Sale—April hatched—White Wyandottes, Barred Rocks and White Leghorns. C. W. Helmbach, Big Rapids, R. 5, Michigan.

S. C. ANCONA COCKERELS FROM SHEPPARD'S best, $3 to $7 each.
H. CECIL SMITH, Rapid City, Mich., R. 2.

Single Comb Rhode Island Whites. Winners At Holland Show hundred birds competing of first old pen and three other firsts. Eggs $2 per 15. Write John A. Hartgerink, Zeeland, Michgian.

WHITE ROCK COCKERELS FOR SALE. Fishel Strain.
G. F. PETERS, Big Rapids, Michigan.

FOR SALE—THOROUGHBRED TOULOUSE Geese and Buff Rock Cockerels. Blue ribbon prize winners. Baldwin & Nowlin, Laingsburg, Mich, R4.

LEGHORNS

TANCRED, HOLLYWOOD AND WYCKOFF Males head my carefully selected breeding pens. Choice eggs $3.00 and $2.00 per 15. My stock is of the very best. Write me.
F. ARTHUR MARTIN, Indian River, Michigan.

HIGH GRADE ROSE COMB BROWN LEGHORN Cockerels, for sale. Price $2.00 to $3.00.
JOHN NEWMARCH, Kingsley, Mich., R. 2.

RHODE ISLAND REDS

RHODE ISLAND REDS TOMPKINS STRAIN to make room for young stock. I will sell after November 1, 1923, 50 2 year old hens at $2.00 each; 25 1 years old hens at $3.00 each; cockerels at $2.50 and up. All these cockerels are from my best 3 year old hens that layed 205 eggs or better in their pullet year. Quality breeder of Rhode Island Reds.
WM. H. FROHM, New Baltimore, Mich., R. 1.

CRYDER'S S. C. REDS, ONE OF LEADING Red pens in Michigan egg contest. Bred for color, shape, and heavy production. Write for prices on hatching eggs.
EDW. H. CRYDER, Alamo, Michigan.

S. C. R. I. REDS, MANHOOD STRAIN. Fine dark birds. Price $3 apiece or two for $5.
ALFRED DEICKMANN, Pigeon, Mich., R. 3.

S. C. R. I. RED PURE BRED EGGS FOR setting. 15-$1.25 or 100-$8.00.
LOUIS MORRIS, Mt. Morris, Michigan, R. 1.

ORPINGTONS

WHITE ORPINGTON COCKERELS FOR Sale. $3 each.
James McCoy, 115 Prospect St., Mt. Clemens, Mich.

BRAHMAS

A FEW FINE LIGHT BRAHMA COCKERELS for sale $5.00 each, while they last.
DR. E. R. FENN, V. S., Pottersville, Mich.

acted, and have for their purpose the protection of the health and general welfare of society. So when two people go into another state for the express purpose of contracting a marriage which is forbidden by the laws of their own state they not only commit an offence against the dignity and honor of their own state, but against society in general.—Asst. Legal Editor.

NO RIGHT TO PAY LOSS

A man whose cyclone insurance dues were to be paid in November neglected to pay, and in August a cyclone passed through that section blowing down his barn and after this happened he sent in his back dues to the company and the company paid the loss. Had the board of directors a right to pay this loss?—J. E., Washtenaw County, Mich.

—The Board of Directors would have no right to pay a loss on a policy, after the policy had lapsed.—Asst. Legal Editor.

HUSBAND WOULD GET HALF OF PROPERTY

Will you please tell me, where a man and wife own a farm and there are no children and no joint or no will made, in case the wife should die, would the husband get all property or would he have to share it?—F. P., Coral, Mich.

—Upon the death of the wife without surviving children and without having made a will, the property would descend as follows: One half to the husband and the other half to the father and mother of the wife, or to her brothers and sisters or nephews and nieces.—Asst. Legal Editor.

MUST PAY DOG TAX

Is it a state law that compels you to pay a dog tax. If a person's dog kills another man's sheep and he finds it out, can he kill the dog or make the owner pay for the sheep that he has killed?—H. L., Mt. Morris, Mich.

—A state law requires the owner of dogs to pay a tax on them, except in cities having ordinances providing for such tax.

Any person may kill any dog which he sees pursuing, worrying or wounding any live stock. If any of your live stock have been injured by the acts of any dog, you may report the matter to the local justice of the peace, whose duty it is to investigate the matter and summon the owner to show cause why the dog should not be killed. You may also sue the owner for damages, and make him pay for the sheep killed or injured.—Asst. Legal Editor.

SUE MAN WHO SOLD COW TO YOU

On November 5th, 1923, I bought a cow, not milking at time and supposed to freshen in December. I paid cash for the cow. Now this cow was bred December 31 instead of freshening and is standing dry all this time. What can I do? Can I hold the seller for discount or return of cow? If he says the bank held a mortgage on the cow and took the money, can I collect from the bank?—E. R., Gladwin, Mich.

—You would have to sue the man who sold the cow to you, for damages for misrepresentation. You would have this right of action against him if he falsely misrepresented that the cow would be fresh when he knew she would not. If you obtained judgment, you would levy on any of his property, and the bank would have nothing to do with it.—Asst. Legal Editor.

The purebred Holstein cattle which farm boys and girls of Delaware have fed and cared for as a part of their dairy calf club work constitute 19 per cent of the purebred Holsteins in that State, according to a recent report received by the United States Department of Agriculture.

FREE BOOK ABOUT CANCER

The Indianapolis Cancer Hospital, Indianapolis, Indiana, has published a booklet which gives interesting facts about the cause of Cancer, also tells what to do for pain, bleeding, odor, etc. A valuable guide in the management of any case. Write for it today, mentioning this paper.(Adv.

Buy Federal Land Bank Bonds

Farmers! Here Is Your Own Borrowing and Investing System

THROUGH the twelve Federal Land Banks, farmers own and operate a huge national co-operative borrowing and investing business. Already, these Banks have resources of over $880,000,000! They are supported by more than 4,500 local National Farm Loan Associations with a membership of nearly 300,000 farmers.

After paying the costs of operation and setting aside necessary reserves, all profits are returned to the borrowing farmers through their local associations. To date, over $7,000,000 has been paid as dividends.

A Federal Land Bank mortgage need never fall due. It is gradually retired by the semi-annual payment of a uniform sum, equal to the interest on the amount borrowed plus ½ of 1% of the loan. For example, the farmer with a mortgage of $1,000 at 6% pays $35 every six months. This includes the interest and a payment on the principal sufficient to cancel the loan in about 33 years.

When You Have Money To Invest

Every farm family should support their co-operative Farm Loan System by investing in Federal Land Bank Bonds. This can be started with a single Bond—$40, $100, $500, $1,000, $5,000 or $10,000—and increased as the money can be spared. These bonds are safe. No investor in them has ever lost a dollar. They are free from all taxes, except inheritance taxes. This applies to both principal and interest.

Should you need money quickly, these Bonds command a ready market, or your banker will accept them as security for a loan.

You can buy these Bonds from any Federal Land Bank or from the Fiscal Agent at Washington, D. C. The Bonds will be sent by registered mail. All correspondence confidential. Remember that the words "The Federal Land Bank" appear at the top of every Bond issued by a Federal Land Bank.

Write today for "Federal Farm Loan Board Circular No. 16." It's free.

If you desire a Federal Farm Loan, apply to the Secretary-Treasurer of the nearest National Farm Loan Association. Ask your County Agent for his address.

The Federal Land Banks are located at

Springfield, Mass.
New Orleans, La.
Wichita, Kansas
St. Louis, Mo.
Berkeley, Cal.
Omaha, Nebr.
Louisville, Ky.
St. Paul, Minn.
Baltimore, Md.
Columbia, S. C.
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FEDERAL LAND BANKS
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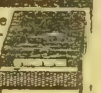
Both Machines Made of California Redwood

140 Egg Incubator 30 Days Trial $13.25



Freight Paid east of the Rockies, Hot water, copper tanks—double walls—dead air space—double glass doors—a real bargain at $13.25.
Shipped complete, set up ready to use.

140 Egg Incubator and Brooder	$17.75
180 Egg Incubator Alone	15.75
180 Egg Incubator and Brooder	22.00
250 Egg Incubator Alone	22.75
250 Egg Incubator and Brooder	31.00

Made of California Redwood—last a lifetime. Positively the best value on the market today. Order the size you want direct from this ad. 30 days trial—money back if not pleased. If not ready to order now, don't buy until you get our new 1923 catalog. (3)
WISCONSIN INCUBATOR CO. Dept. 138 Racine, Wis.

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GERMOZONE
GOES TO THE SPOT

Don't let ROUP, COLDS, CANKER, SOREHEAD, BOWEL TROUBLE, etc., take your profits. Easy to cure or prevent. "The Lee Way" Book, 64 pages, by GEO. H LEE, tells about poultry ailments, how to detect, what to do, etc. Germozone (75c and $1.50 sizes) and this FREE book at drug or seed stores, or postpaid from GEO. H. LEE CO. Omaha, Nebr.

WYANDOTTES

White Wyandotte Cockerels, $3 each
Wayne Chipman, R. R. 2, Washington, Mich.

For Sale--Several Beautiful Barred Rock Cockerels. Also a few Mammoth Pekin Ducks and Drakes.
Mrs. O. Terpening, Ithaca, R. 1. Phone.

WHITE WYANDOTTES. REGAL STRIAN. Eggs for hatching, $1.50 per 15; $7.00 per 100.
F. W. ROBERTS, Salem, Michigan.

PLYMOUTH ROCKS

COCKERELS, THOMPSON STRAIN BARRED Rocks, dark matings, April Hatched, weight 7 lbs. from good layers, $3.50, 2 or more $3.00 each.
MRS. FRED KLOMP, St. Charles, Michigan.

BARRED ROCK COCKERELS BRED FROM Holtermans Pedigreed Aristocrats direct. Both Light and Dark. Price $4.00, two for $7.00.
N. AYERS & SON. Silverwood, Michigan.

BARRED ROCKS

BARRED ROCK COCKERELS AND PULLETS from America's best prize-winning laying strains. Winners of 18 first prizes at Detroit and M. A. C. the last two seasons. Low prices.
TOLLES BROS., R. 10, St. Johns, Mich.

BARRED ROCK COCKERELS FROM BRUMMER'S trap nested stock, all nice, well marked birds, $3.50 each, $3.00 each for three or more.
REESE BROS., Williamston, Michigan.

TURKEYS

BOURBON RED TURKEYS, LARGE VIGOROUS birds, sell breeding stock of 1 yr. old Tom and 9 Hens at reasonable prices or separately. Tom $15, Hens $6 and $8. Making room for other poultry. REESE BROS., Williamston, Mich.

Michigan's Best Giiant Bronze Turkeys. America's best strains vigorous breeders, both utility and fancy. Extra good values in young toms.
N. Evalyn Ramsdell, Ionia, Michigan.

FOR SALE—PURE BRONZE TOMS $10.00 and $12.00, Hen Turkeys $6.00 and $7.00, also some fine pure old stock. Some nice Toulouse Geese. Mrs. Thomas E. Wilson, Plymouth, Mich. R4.

MICHIANG'S BEST GIANT BRONZE TOMS for sale. Large beautifully marked birds. Price reasonable. Write MARY A JOYNT, Omena, Mich.

Pure Bred Mammoth Bronze Turkeys, Champion Strain. Large and vigorous. Unrelated stock.
Mrs. B. Smatts, R. 1, East Jordan, Michigan.

LARGE VIGOROUS BOURBON RED STOCK Turkeys. Axtell Strain.
MARY BEACOM, R4, Marlette, Michigan.

Pure Bred Mammoth Bronze Toms One 2 Year old hardy beautiful well marked birds. Write for prices. Mrs. F. Griffin, Riverdale, Michigan.

MAMMOTH BRONZE TURKEYS, LARGE beautiful birds. Write for prices.
MRS. BEN JOHNSTON, Onaway, Mich., R. 1.

Mammoth Bronze Turkeys. Goldbank Strain. Unrelated stock. Vigorous healthy birds. Write for prices. Mrs. Perry Stebbins, Saranac, Mich.

WHITE HOLLAND TURKEYS BARGAIN PRICE.
MRS. ELLA CLEVELAND, Millersburg, Mich.

White Holland Turkeys
ALDEN WHITCOMB, Byron Center, Michigan.

HIGHEST PRICES PAID FOR LIVE AND Dressed Poultry, Veal, Rabbits, etc. A square deal always. Write to,
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AN AD IN M. B. F.
WILL SELL IT.

HUNDERMAN'S FIRST-CLASS CHICKS $10 and UP

We are heavy producers of first-class Chicks. Flocks on free range. Culled by expert. 100% Live Delivery Guaranteed. Order today from this Ad and get Chicks when you want them.

	Prices on 50	100	300	500
English S. C. White Leghorns	$6.50	$12.00	$36.00	$57.50
Barred Rocks	8.50	16.00	48.00	77.50
Single Comb R. I. Reds	9.00	17.00	50.00	82.50

Mixed Chicks..........$10.00 per 100 straight

Blue Hen Incubators. Reference: Zeeland State Bank. Order today. You take no chances. Catalog Free.

HUNDERMAN BROS., POULTRY FARM, Box 30, Zeeland, Michigan.

400,000 CHICKS

Our Modern Chicks ... BRED-FOR-EGGS

BIG, STRONG, FLUFFY CHICKS hatched from well-bred and well kept, heavy laying hens insuring good growth and PROFITS.

	Prices on 50	100	500	1000
White, Brown and Buff Leghorns	$7.00	$13.00	$62.00	$120.00
Barred and White Rocks, S. C. and R. C. Reds, Anconas	8.00	15.00	72.50	140.00
White Wyandottes, Buff Orpingtons	8.50	16.00	77.50	....
Silver Wyandottes	9.50	18.00	87.50	170.00

Mixed, $12.00 per hundred, straight. Postpaid. 100% Live Arrival Guaranteed. Order right from this ad. Best Bank Reference. You take no chance. Free Catalog. Member I. B. C. A. and Ohio Assn.

MODERN HATCHERY, Box 62, Mt. Blanchard, Ohio.

BABION'S QUALITY CHICKS

Prices quoted are for Chicks Hatched from OUR GOOD UTILITY FLOCKS.

Varieties	Prices on 25	50	100	500	1000
White, Brown or Buff Leghorns	$4.00	$7.00	$18.00	$60.00	$120.00
Barred and Buff Rox, Reds and Anconas	4.00	8.00	15.00	70.00	140.00
White Rox, Wyandottes, Minorcas	5.00	9.00	17.00	80.00	160.00
Silver Wyandottes and Orpingtons	5.50	10.00	19.00	92.50	180.00

Chicks from our EXTRA SELECTED FLOCKS will be $3.00 per 100 higher, and Chicks from OUR FANCY BLUE RIBBON PENS WILL BE $5.00 per 100 higher, Postpaid 100%. First hatch off February first. You cannot go wrong. Order from this adv. Thousands satisfied. Ten years experience. Our Slogan: The Best Chicks are Cheapest, Not the Cheapest Chicks Best. Bank references.

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LARGE, HUSKY CHICKS

WINSTROM POULTRY FARMS and HATCHERY

Purebred, high quality chicks from certified, tested flocks on free range.

Varieties	Prices on 25	50	100	500	1000
S. C. White and Brown Leghorns	$3.50	$6.75	$13.00	$62.50	$120.00
Anconas	3.75	7.25	14.00	67.50	130.00
Barred Rocks, R. I. Reds	4.50	8.50	16.00	77.50	150.00
Assorted Chicks	2.75	5.50	10.00	50.00	--------

Extra Select Stock $2.00 per 100 higher. Well hatched in modern machines. Each order carefully packed under our personal attention. Postpaid. 100% live delivery. Bank reference. 1924 catalog ready.

Winstrom Poultry Farm and Hatchery, Box A-5, Zeeland, Mich.

SUNBEAM HATCHERY

Sunbeam Chicks Are Money Makers

Chicks are produced under my personal supervision. Hatched from select, pure bred, heavy laying hens, well kept to insure vigorous Chicks.

Varieties	Prices on 50	100	500
White, Brown and Buff Leghorns	$7.00	$13.00	$62.50
Barred Rocks, R. and S. C. Reds, Anconas	8.00	15.00	72.50
White and Buff Rocks, White Wyandottes, Black Minorcas	8.50	16.00	77.50
White and Buff Orpingtons, Silver Wyandottes	9.00	18.00	87.50

Mixed, all varieties, $12 per 100 straight. 100% Live Delivery Guaranteed. Postpaid. Order from this Ad. Bank references. There is no risk. Free Catalog. Member I. B. C. A. H. B. TIPPIN, Box E. Findlay, Ohio.

We can save you money on

Ancona and White Leghorn Chicks

Send at once for catalog and prices. We insure your chicks for one week.

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CHICKS—Investigate

STAR HATCHERY

Our chicks are the kind that make good. Every flock is carefully culled and mated. We have been in business seven years and have been building carefully and consistently to a place where we can offer chicks more than worth the money we ask. SINGLE COMB, ENGLISH STRAIN, WHITE LEGHORNS, BARRED ROCKS, ANCONAS. 100% live delivery guaranteed. Investigate our proposition before buying. A postal will bring full information.

STAR HATCHERY, Box 23, Holland, Mich.

Pure Bred Chicks February and March Prices.

Broiler Chix	12c	W. Wyandottes	18c
W. or B. Leghorns	14c	White Rocks	18c
B. Rocks or Reds	17c	Buff Orpingtons	18c
Sheppards Anconas	16c	Black Minorcas	16c

Extra selected standard bred chicks $4.00 per 100 more. Add 35c if less than 100 ordered. Good bank reference. Circular free.

Lawrence Hatchery, Box I, R. 7, Grand Rapids, Mich.

TESTED BABY CHICKS

February, March prices. Heavy broiler chicks 12c. Barred Rocks or Reds 17c, Anconas Black Minorcas 16½c, White or Brown Leghorns 15c, White Rocks, White Wyandottes, Buff Orpingtons 17½c. Extra selected chicks, built directly from contest winners. 4c per chick more. Add 50c if less than 100 wanted. Hatching eggs. Catalog. Good reference. Beckmann Hatchery, TMBF. 26 Lyon St., Grand Rapids, Mich.

Select Quality Chicks

From America's best winter-laying purebreds. Closely culled, properly mated, thrifty flocks of White and Barred Rocks, White and Brown Leghorns, Rose Comb Reds, Wyandottes. 14 years experience. Prices right. Free catalog. References.

HAIGHT HATCHERIES, Cedar Springs, Michigan.

CHILSON BARRED ROCK—HATCHING Eggs and Baby Chicks. Winning pens all heavy breeds Mich. international egg contest 1923. Nucgugan's greatest eggs and color strain. Write for price list today.

Mr. and Mrs. W. H. Chilson, R1, Grandville, Mich.

BEFORE BUYING ELSEWHERE GET OUR prices on White and Brown Leghorns and White Rocks. Prepaid Parcelpost. Satisfaction Guaranteed.

De Koster's Hatchery, Box B, Zeeland, Mich.

Whittaker's Red Chicks and Eggs for Hatching. Rose and Single Combs. Bred from Fourteen Generations of Winter Layers. Write for Free Catalog of Michigan's Greatest Color and Egg Strain. Interlakes Farm, Box 4, Lawrence, Mich.

BABY CHICKS--REMARKABLE FOR SIZE and strength. Reasonable prices. Leghorns, Anconas, Rocks, Reds, Wyandottes, Orpingtons, Minorcas, Spanish, Brahmas.

TYRONE POULTRY FARM, Fenton, Michigan.

S. C. WHITE LEGHORN CHICKS FROM Demonstration Farm flock, under the supervision of Extension Department M. A. C. Price $15.00 per 100. Ralph S. Totten, Pittsford. Michigan.

PUREBRED CHICKS: BARRED ROCKS, BUFF Orpingtons, White Wyandottes and Rhode Island Reds. Satisfaction guaranteed. Write for special reduced prices. Joseph Amster, Paw Paw, Mich.

BABY CHICKS FROM BRED TO LAY S. C. Buff Leghorns. First hatch March 3rd.

J. W. WEBSTER, Bath, Michigan.

[illegible] VARIETIES of Fine pure-bred chickens, ducks, geese, turkeys, fowls, eggs, baby-chicks. Large catalog 5c. A. A. ZIEMER, Austin, Minn.

—*Inspected and Approved*

Baby Chicks

From Best Egg Laying Strains in the World

LAKEVIEW

Tancred, pedigree-sired and Tom Barron, S. C. White Leghorns, S. C. & R. C. R. I. Reds, Parks' Barred Plymouth Rocks.

Our flocks are all on free range, closely culled, inspected and approved by Michigan Baby Chick Association. Every bird is healthy, has size, type and color.

Hatched in World's Best Incubator

Our chicks are strong, sturdy and healthy. They live and grow because they are hatched in the best incubator made. 100% live delivery to your door. Illustrated catalog sent FREE.

LAKEVIEW POULTRY FARM, R 8, Box 6, Holland, Mich.

Early Maturing Baby Chicks

These chicks are from flocks headed by cockerels of high producing blood lines. Culled by experts. Each flock personally supervised. Pure bred. $13.00 per 100 and up. Special: We have a limited number of superior grade chicks from special matings. Write for description and prices. 100% live delivery. Ref. Milan State Savings Bank.

MILAN HATCHERY, Box 5, Milan, Michigan.

CHICKS: HOGAN TESTED GUARANTEED Our Chicks are from flocks on free range. They will live and grow and make a profit. ENGLISH WHITE LEGHORNS and BROWN LEGHORNS. Heavy laying Extra Good BARRED ROCKS. Postpaid to your door and full live delivery guaranteed. Our flocks are carefully supervised and Hogan tested. Bank Reference furnished. Write for prices and descriptive matter.

HILLVIEW HATCHERY, C. Boven, Prop. Box H. R. R. 12, Holland, Mich.

Chicks With Pep

Try our lively and vigorous chicks from bred-to-lay and exhibition hens. They will make you money for they have the quality and egg laying habit bred into them. A trial will convince you. All leading varieties. Safe delivery. Prepaid. Prices right. Bank reference. Big illustrated catalog free.

Holgate Chick Hatchery, Dept. B, Holgate, Ohio.

BABY CHICKS Our Own Breeding flock of large type American White Leghorns.

Laying and standard qualities combined. 13 years experience in breeding, hatching and marketing. Also, Barred Rocks and R. I. Reds High Quality. All flocks culled and inspected. Modern hatching plant, 2 hatches weekly. Quality chicks at commercial prices. Order early and get chicks when wanted. Write for prices and circular.

DEAN EGG FARM & HATCHERY at Big Beaver. Mail address Birmingham, Mich, R.F.D. 4.

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64 BREEDS Most Profitable pure-bred Northern raised chickens, ducks, geese, turkeys. Fowls, eggs, incubators at reduced prices. 31st year. Largest plant. Large valuable poultry book and catalog free. R. F. NEUBERT Co., Bx [illegible], Mankato, Minn

FEEDING THE CHICKS

IDLE chicks will soon form the habit of toe-picking and cannibalism. It is a natural habit for the chicks to pick at something, and if there is nothing else in sight for them to pick at, they will pick each others' toes. Of course, they cannot be fed until they are at least forty-eight hours old, but do not put them under the hover or into the brooder until there is something ready for them to pick at. This may be grit or oyster shell, and should be placed in several shallow pans and a little may be scattered in the litter to provide somthing for the chicks to scratch for.

It is well to remember that grit is a chicken's teeth, and they should always have access to plenty of it. The commercial grit may be used, or the grit may be ground or crushed at home, from broken crockery and glassware. Sods dug up with an axe and brought into the brooder house while the biddies are confined contain grit, and help to bring out-of-doors conditions inside, on cold days. If this is practiced faithfully you will have no trouble with leg weakness, as it is not only confinement, but lack of access to Mother Earth that causes leg weakness in young chicks.

Finely chopped vegetables, such as mangels, beets, potatoes, etc., provide the much needed succulent material in the chicks' diet, and much healthful exercise is obtained by chasing one another about with the vegetable scraps. Busy chicks are contented chicks, and their running about develops sturdy legs.

Milk will provide the necessary animal protein and help with the rapid development of the chicks. If you have not the time properely mix a dry mash, buy some good commercial brand. Balanced rations are just as necessary for chicks as for mature fowls. Fed in self-feeding hoppers, near the brooder, it provides every thrifty chick with an equal opportunity to grow and develop.

ANIMAL PRODUCTS AND EGG YIELD

A GREAT increase in our annual egg production may be expected when poultrymen and farmers in general recognize the importance of animal feeds in the fall and winter rations for the laying flock. The demonstration of the superiority of feed combinations containing meat scrap, milk and its products, tankage, or fish scrap is one of the most valuable additions to our knowledge of poultry management contributed by the United States Department of Agriculture and various experiment stations.

Practically all experimental tests have shown that these feeds will greatly stimulate egg production, especially during the fall and winter months. The fact that many farmers get no eggs at all during this period may usually be attributed to a lack of essential animal feed. The addition of from 10 to 25 per cent of one of those named would in most cases make a remarkable difference. Which one of these feeds should be used depends upon local conditions and prices. They are of about equal value when the protein content is taken into consideration. The fish meal and tankage have given just as good results as meat scrap. Milk is just as good when available at a low cost, and fresh buttermilk and skim milk produce good results. In some sections condensed buttermilk and semi-solid buttermilk have been fed with success.

In a test extending from November 1st to July 10th on the government farm at Beltsville, Md., 30 hens on a ration without meat scrap or any animal feed averaged 74 eggs each. Another flock of 30 hens of the same breed during the same period laid an average of 113 eggs each, the difference of 39 eggs being attributed to the ration which contained meat scrap. Both flocks were out on range whenever the weather was favorable, which made the difference less than it would have been had the birds been kept in pens. In a test made by Purdue University Agricultural Experiment Station animal feeds were shown to have a decided value in the ration of laying hens and pullets. The pullets fed skim milk averaged 140.2 eggs in a year; those fed meat scrap, 135.9 eggs; and those in the check pen that received no animal

BOWERS Colony Brooder

Burns any fuel—costs less

This brooder raises more and better chicks at lowest cost. Stove is sturdy, safe, air-tight, self-regulating—best in world to hold fire. Burns soft coal—cheapest brooder fuel—perfectly. Also hard coal, wood, etc. Automatic regulator maintains uniform heat night and day. Canopy spreads heat evenly over chicks; gives pure air, ample room. 500 and 1,000 chick sizes. Guaranteed. Lowest prices. Express prepaid E. of Rockies. FREE—$3.00 stove pipe outfit sent free with brooder if you order NOW.

F. M. BOWERS & CO.
1416 W. Wash. St.
Indianapolis, Ind.

PURE BRED CHICKS

Tom Barron Imported and Hollywood strains S. C. White Leghorns, Sheppard's Famous S. C. Mottled Anconas and Park's Bred to Lay Barred Rocks. All Free range flocks, carefully culled and certified by experts and bred many years for high egg production. Pedigreed males from 260 to 280 egg strains and from hens that produced leading pen in Michigan's International Laying contest, head our flocks. Eggs from these famous strains hatched with scrupulous care in our Modern Mammoth Incubators produce strong, husky, peppy chicks that are easy to raise and become marvelous layers. Chicks are shipped postpaid. 100% live delivery guaranteed. Write for our big free illustrated catalog.

Silver Ward Hatchery, Box 30 Zeeland, Mich

Improved S. C. White Leghorns

BRED FOR EGG PRODUCTION SINCE 1910

WOLVERINE BABY CHICKS

CHICKS from this high grade egg laying strain will give you a bigger profit, and absolute satisfaction. They have 13 years of careful selecting and breeding direct behind them, and mature in the shortest possible time. You benefit by our 13 years in hatching and shipping chicks. These chicks possess great vitality and grow up uniform in size. 100% safe arrival guaranteed. Let us mail you our catalogue with prices.

WOLVERINE HATCHERY, Zeeland, Mich., R. 2

Pure Bred Baby Chicks

We have been carefully developing our flocks for eight years. Every chick pure bred and from stock carefully culled, for type and production. Our chicks give satisfaction. Order today and get chicks when you want them.

	Prices on 50	100	500
W. Leghorns	$7.00	$13.00	$62.00
B. Rocks, R. I. Reds	8.00	15.00	72.00
W. Wyandottes, W. Rocks	8.50	16.00	77.00

Postpaid. 100% live delivery. You take no chances. Ref. Farmers & Mechanics Bank, this city. No Catalog. Order from this ad.

WASHTENAW HATCHERY
Geddes Rd, Ann Arbor, Mich.

R CHICKS

S. C. English White Leghorns and Barred Rocks. Every chick from carefully mated, culled, pure-bred flocks owned and developed by us for 15 years. Leghorn males from trapnested 280 egg hens. Free catalog. Write for prices.

Reliable Hatchery and Farms,

Route 3 Holland, Mich

BABY CHICKS

Send now for descriptive matter and price list of our PURE BRED PRACTICAL POULTRY 10 LEADING VARIETIES

Some fine breeding this year in improved egg quality stock; customers' egg records from stock last year.

COCKERELS—A few unsold in Barred Rocks White Wyandottes, and R. C. Reds. $3.00 and $4.00.

STATE FARMS ASSOCIATION,
Masonic Temple, Kalamazoo, Michigan.

BEST CHICKS at Low Prices

YOU CAN DO IT WITH B AND F BABY CHICKS

Send for free catalog describing best bred chicks in the country. Tom Barron and Tancred White Leghorns, Michigan's Champion Winter Laying Barred Plymouth Rocks and S.C.R.I. Reds. No better chicks anywhere at any price. Satisfaction and 100 per cent live delivery guaranteed.

Brammer-Frederickson Poultry Farm, Box 26 Holland, Mich.

HUSKY CHICKS

PURE BRED CHICKS PAY BEST. My heavy laying, personally inspected, Hogan tested flocks, most profitable leading varieties, produce chicks that pay you big profit. Only one grade the best. Low prices. 97% live delivery guaranteed. Postpaid. Catalog Free. Write today.

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ELGIN CHICKS

Barron Strain, Selected English White Leghorn Chicks, Produced under my personal care. They are full of Pep as customers report and have re-ordered. They are carefully packed for shipping. 100% Live Delivery Guaranteed. Write at once for catalog and Price list.

ELGIN HATCHERY, Box 317-A, Zeeland, Mich.

QUALITY Chicks & Eggs

45,000 PURE BRED BREEDERS. 15 varieties. Best laying strains. Incubate 25,000 eggs daily. Catalog Free. Prewar prices. Free live delivery.

Missouri Poultry Farms, Columbia, Mo.

WEBER'S BEST laying; BEST paying chickens, ducks, geese & turkeys. Fine pure-bred quality. Fowls, Eggs, Incubators at new low prices. 42 years poultry experience, and my 100 page Catalog and Breeders' Guide Free. W. A. Weber, Box 63 Mankato, Minn.

Get My Special Low Price — On This Wonderful Incubator

Hatches a Chick From Every Fertile Egg

Freight prepaid east of Rockies and allowed to points beyond

The DETROIT is scientifically constructed to give big hatches of lusty, fast growing chicks.

Temperature is automatically regulated by a Miller type trip burner that acts directly on the flame. Heat is held in and cold kept out by double walls having dead air spaces between them. Every part of the hatching chamber is evenly heated—the hollow square hot water tank has rounded elbows that prevent cold corners.

These are only a few of the features that make the Detroit such a big hatching incubator. Write for catalog giving full and detailed description and get the almost unbelievable bargain price.

Big Combination Offer

Detroit - Alliance Incubators and Brooders

Keeps 140 Chicks comfortable and warm. Insures maturity of your flock. Same efficient durable construction as in the Detroit incubator. The most practical brooder built.

My record smashing combination offer is the talk of the country. Write for it today and learn what tremendous savings you can secure by ordering both machines at one time. Read my unconditional guarantee. Complete satisfaction or your money back is the only basis upon which I make a sale. Drop me a card tonight. I'll answer by return mail

Wm. Campbell, President
Detroit-Alliance Incubator Co.
Dept. 10 Alliance, Ohio

MEADOW BROOK

HENRY DePREE & SONS.

One of the Founders of the Chick Industry

21 Years in Business

Pure-bred stock carefully developed for years. Order from this ad and get chicks just when you want them.

Prepaid prices on	50	100	500
White and Brown Leghorns	$7.00	$13.00	$62.50
Rocks, Reds, Buff Leghorns	8.00	15.00	72.00
White Wyandottes	11.00	20.00	95.00
Mixed Chicks (all varieties)	$10.00 per 100		

You take no chances. Ref: First State Bank, Holland. 97% live delivery guaranteed. White Leghorns headed by male birds of 285-303 egg record strains. Other breeds highly bred. Circular free.

MEADOWBROOK FARM HOLLAND MICH. R.R. 1-H

B & R CHICKS

ARE THE GOOD KIND

We hatch chicks from flocks which have had our own personal attention. Every bird is carefully selected by us for best production. A pure-bred chick from us has the breeding to grow into a fine money making fowl. Send for full information. 100% live delivery guaranteed. All popular breeds. We hope you wil give us a trial order for that will mean a permanent customer, we are sure. Write today.

Borst & Roek, Box 10, Zeeland, Mich.

WYNGARDEN'S "EGG-BRED" BABY CHICKS

Best laying strains on earth. Genuine Barron English White Leghorns and Anconas. Backed by 19 years' actual breeding on our farms. 30,000 active, healthy, well hatched chicks weekly. Hundreds of our customers making big profits. You ought to buy our "Egg-Bred" varieties. Write at once for handsome 1924 catalog—it's free.

WYNGARDEN HATCHERIES & FARMS
Box "B", Zeeland, Mich., U. S. A.

BUSINESS FARMERS EXCHANGE

Ads Under this Head 10c per Word, per Issue

MISCELLANEOUS

ROUP—QUICKLY CURED BY USING Shuey's Roup Remedy, and will keep it out of your flock. Send 50c for regular size bottle. Money back if not satisfactory. THE SHUEY REMEDY CO., 68 W. Main St., Springfield, Ohio.

WE PAY $200 MONTHLY SALARY, FURNish car and expenses to introduce our guaranteed poultry and stock powders. BIGLER COMPANY, X682, Springfield, Illinois.

AGENTS SELL WOLVERINE LAUNDRY Soap. Wonderful repeater and good profit maker. Free auto to hustlers. WOLVERINE SOAP CO., Dept. B32, Grand Rapids, Mich.

FOR SALE MOLINE TRACTOR AND PLOWS nearly new. Also imported Percheron Stallion weight one ton. Write for particulars to S. A. LETSON, Lake, Michigan.

MAN AND WIFE WITHOUT CHILDREN for farm near Detroit, man to help on farm, wife for housework. Modern improvements—steady work. Box No. 236, care of Michigan Business Farmer.

PRICES WANTED AT ONCE ON A FEW cars strictly first class alfalfa hay. R. D. BAILEY, County Agricultural Agent, Grayling, Mich.

FARM LANDS

110-ACRE MICHIGAN FARM WITH 11 horses, cattle, automobile, furniture, hogs, poultry, full implements, tools, beans, potatoes, hay, oats, straw, winter's wood, etc.; on improved road; near R R town; 90 acres loamy tillage, 15-cow pasture, woodland, 300-tree bearing apple orchard, 40 cherries, acre grapes and berries; excellent 8-room house, furnace; overlooking beautiful river; 76-ft. barn, silo. Owner left alone cannot operate, all only $6300 if taken now. Part cash. Details page 35 Illus. Catalog Bargains—many states. Copy free. STROUT FARM AGENCY, 427KJ Marquette Bldg., Chicago, Ill.

160-ACRE FARM FOR SALE WITH GOOD improvements. FRANK GLAWE, Ocqueoc, Mich.

feed of any kind laid an average of only 61.2 eggs.

It has been shown that it is impossible to judge the value of a hen as a layer unless she has been fed a ration that would give her an opportunity to demonstrate her capacity. Pullets that have not yielded profitably because of a ration lacking in animal matter have become profitable layers when the defect in the ration was corrected.

LAZY HENS TRAPPED; CAN'T LOAF ON JOB

EVEN barnyard hens will have to punch time clocks if an invention now being exhibited at a London, England, poultry show finds favor with the farmers. An ingenious Dutchman is suspecting some of his hens of loafing on the job. He has accordingly evolved a system by which, fitted on the back of each of his chickens, a leather strap is attached with a piece of colored chalk at the end.

Above the door of each trap nest he places a paper and a memorandum. The door is so constructed that the hen can not enter the nest without making a mark on the paper. As he uses different colored chalk for each chicken, he is now jubilant at having been able to rout the unproductive hens from his flock.

The inventor alleges he has not yet discovered a way to register the fradulent entering of nests—that is the hen chalking up a mark without laying any eggs.

IMPROVING THE OAT CROP

(Continued from Page 6)

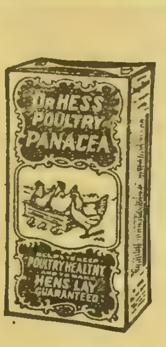
Michigan have a number of old stand-by varieties that should be replaced with caution if at all. Many a farmer has seen some big advertisement and at once got enough of that seed to plant his entire acreage, only to discover in the fall that he had been a sucker. But that was not the worst part of it. He had fed out his old variety, and he did not know where he could get any more seed. He would not grow his purchase another year, and had to look again.

A far better method is to test the new variety of oats side by side with the old variety in the same field. Be sure that they are not planted in separate fields, but side by side in the same field. Leave an alley wide enough to walk in back and forth between the two varieties. Get yields on them in the fall. Examine the seed that you thus obtain. If you are then convinced that the new variety is superior to your old variety, grow some more of it. If not, grow your old variety. Keep looking for a variety that, under your soil and conditions, will produce more bushels of grain per acre when planted side by side with your old variety in the same field. This is safe in the case of oats as they do not cross. Be careful that you don't mix them mechanically.

The desire of M. A. C. is that each farmer may have the best variety for his soil and conditions. Then if he will also be a good farmer and give the seed a chance, the problem is solved. Unfortunately only a few farmers will do that, and the problem remains.

The Michigan Agricultural College has now spent over twenty years improving varieties of oats. Several new improved varieties have been distributed, and from the list two varieties have stood the test of time. These are the Worthy and Wolverine. They are both stiff straw varieties. The hope now is, that Michigan farmers will generally take advantage of the work of their agricultural college, and will try the Worthy, or Wolverine, either one or both of them along-side of their old variety in the same field. There the farmer must be the judge. If the work at M. A. C means anything, it means that many of these farmers, will vote in favor of one of the improved varieties, for these strains mean greater yields and better quality at no greater expense. The work of growing the crop is the same regardless of the variety, but a good variety gives greater returns for this effort.

All correspondence on this matter should be sent directly to the Secretary of the Michigan Crop Improvement Association, East Lansing, Michigan.



VIGOROUS BREEDERS

STRONG CHICKS

Mating time is the time that your breeders should be in the pink of condition

—so that they can impart health and vigor to their offspring—the chicks.

Begin now to condition your breeders.

Feed

Dr. Hess Poultry
PAN-A-CE-A

Then you get chicks that are strong and livable.

Chicks that can resist the attacks of disease—the little-chick ailments.

Pan-a-ce-a is not a stimulant, mark you—it's a tonic that does its good work nature's way. It insures fertile eggs for hatching.

Tell your dealer how many hens you have. There's a right-size package for every flock.

100 hens, the 12-lb. pkg. 200 hens, the 25-lb. pail
60 hens, the 5-lb. pkg. 500 hens, the 100-lb. drum

For fewer hens, there is a smaller package.

GUARANTEED

I spent 30 years in perfecting Pan-a-ce-a.
GILBERT HESS
M.D., D.V.S.

DR. HESS & CLARK Ashland, O.

Dr. Hess Instant Louse Killer Kills Lice

HIGHEST QUALITY CERTIFIED BABY CHICKS

FROM

Michigan's Old Reliable Hatchery, the best equipped and most modern Hatchery in the State.

Pure Bred Tom Barron English and American White Leghorns, Anconas, Barred Plymouth Rocks and Rhode Island Reds. Strong, Well-hatched Chicks from tested Hoganized Free-range stock that make wonderful winter layers.

Chicks sent by Insured Parcel Post prepaid to your door. 100% live delivery guaranteed. Sixteen years of experience in producing and shipping Chicks giving absolute satisfaction to thousands. Write for valuable illustrated free catalog and price list. Get lowest price on best quality Chicks before placing your order.

VAN APPLEDORN BROS. BABY CHICKS SINCE 1908 MICHIGAN'S OLD RELIABLE HATCHERY HOLLAND, MICHIGAN

HOLLAND HATCHERY & POULTRY FARM, R. 7, Holland, Mich.

Great Northern Hatchery

Pure Bred Selected Flocks

100 Per Cent Live Delivery

Strong sturdy northern grown Chicks. Selected, pure bred stock. Healthy flocks on free range insure strength in every Chick. Order from this Ad.

Varieties Prices on	50	100	300	500	1000
Leghorns (S. C. White and Brown)	$7.00	$13.00	$38.00	$62.00	$120.
Barred Rocks	8.00	15.00	43.00	72.00	140.
White Rocks	9.50	18.00	53.00	85.00	165.
Mixed Broiler Chicks	$10 per 100 straight				

Hatched under best conditions in Newton incubators. Every Chick carefully inspected. 100% live delivery guaranteed. Reference State Commercial Savings Bank, this city. Write for prices on special matings.

GREAT NORTHERN HATCHERY, Box 50, Zeeland, Michigan.

GET YOUR CHICKS

FROM AN OLD RELIABLE HATCHERY

STRONG AS A BUCK

We have been in the chick business for 12 years and raised chickens for years and know how to produce Chicks of the very best quality. Our chicks are hatched in Blue Hen Incubators. We carefully inspect all chicks. No cripples. Flocks are carefully culled and developed on free range, insuring strength and health. World's Greatest Layers. Tom Barron Strain WHITE LEGHORNS. Heavy Dutch Type BROWN LEGHORNS. Rose and Single Comb R. I. REDS. Park's BARRED ROCKS. Order now at new low prices. Catalog free. We Guarantee 100% Live Delivery.

KNOLL'S HATCHERY, R. 12, Box 25, Holland, Michigan.

Certified Pure Bred **Baby Chicks**

Trapnested direct from world champion layers; the famous Tom Barron and Hollywood strains of White Leghorns. Order these chicks from pedigreed stock now at bargain prices! Hatched in the largest and finest hatchery in Michigan at the rate of 150,000 eggs to a setting. Also get our prices on Barred Rocks and other popular breeds. Satisfaction guaranteed or money back. Write for FREE illustrated catalog and special DISCOUNT PRICES—today.

SUPERIOR POULTRY FARMS
Box 201 Zeeland, Mich.

DUNDEE CHICKS

PURE BRED CULLED FLOCKS

Our chicks are from pure bred flocks carefully culled by experts. Anconas are direct from Sheppard. Leghorn flocks headed by males from Michigan Ag. College. Rocks are from a 230-302 egg strain. Reds are Liddicoat's best. Write for catalogue and price list. It will save you money. Reference, Dundee State Savings Bank, this city.

Dundee Hatchery, Box B, Dundee, Mich.

Quality Chicks at Reasonable Prices

Pine Bay Farm

English White Leghorns, Parks Strain Barred Rocks, S. C. Black Minorcas, Reds and Anconas. My pen (16) at the 1923 Mich. Contest finished third among all heavy breeds, four hens making records over 200 eggs each, and one with a record of 254 eggs was seventh highest individual for the entire contest, 290 birds competing. Catalog free.

PINE BAY POULTRY FARM,
Holland, Michigan.

MARKET FLASHES

MARKET SUMMARY

Wheat unchanged. Coarse grains quiet and steady. Beans steady. Butter in demand. Receipts of eggs exceed demand. Potatoes quiet. Poultry firm and supply small. Cattle trade slow and prices lower. Sheep active. Although the hog market is active prices are lower.

(Note: The above summarized information was received AFTER the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press —Editor.)

FOOTE'S MARKET LETTER

BY W. W. FOOTE

The Farmer's Outlook

THIS depends very greatly on where the farmer lives and how his farming is conducted. The newspapers are devoting much space to the bad farming conditions, but these reports come largely from the northwest and parts of the middle west where farm lands were boomed beyond all reason during the war; and small farmers who have not branched out and contracted for more acres than could be paid for are getting along very well as a rule. Just now the bad conditions existing in South Dakota are causing the federal government much concern, and hopes are entertained that legislation will be enacted which will bring relief to the large wheat growers and arrest the great fall in prices for that important farm product. In addition to needed financial relief for these farmers, who have been depending wholly on raising wheat, it is planned for them to diversify their productions so as not to depend upon a single crop. It is hoped to reach definite conclusion on these matters in time to lower the wheat acreage the coming spring. Already a hopeful feeling prevails throughout the country, and wheat prices have had a fair advance, despite the lack of anything like a normal export demand. Foreign business conditions are still far from normal, and European countries are unable to buy our products in anything like pre-war volume. Meanwhile, we are getting along quite comfortably, business moving smoothly in most channels, wheat and hogs being the important exceptions because of overproduction. There is no overproduction of cattle, however, and there is a serious underproduction of sheep, although this important industry is steadily growing in Michigan and several other middle western states. Mutton is far more popular than it used to be, and stockmen owning flocks of sheep and lambs are getting along extremely well on the whole. The cattle industry never looked more promising than now, high prices prevailing in the markets of the country, while dairy men have every reason to be satisfied. Deflation has about run its course, the banks are in fine shape, and the Chicago banks are making loans at 5 to 5½ per cent.

Important Change in Wheat

Only a few weeks ago it looked next to hopeless for wheat prices, with nearly everyone talking bearish and farmers hardly daring to expect much of a change for the better. It is still a little early to talk intelligently about the future, but public sentiment has changed to such an extent that leading speculators in wheat hesitate about going much "short" of the Chicago market. Prices have advanced to the highest point of the season, and although the visible wheat supply in this country is still much larger than a year ago, it is steadily decreasing, notwithstanding unusually small exports of wheat and flour from our shores. A short time ago it was said that wheat held in the interior by farmers for $1 a bushel was well cleaned up. This has reduced the offerings until a new high level is reached, those who have taken profits looking for a temporary break. Leading conservative traders predict that the deferred futures of wheat will receive excellent support on breaks. Of course, it is obvious that the higher wheat sells, the worse will the export demand become, and from now on we must depend mainly on domestic consumption. There is a prospect of radical measures by Congress, with a probability of a higher wheat tarriff, and much reliance is placed on the promise of a reduced spring wheat acreage. It is an important fact that the winter wheat acreage is much lowered, and it is startling to learn that the two Dakotas had around 11,000,000 acres of spring wheat last year out of a total for the United States of 18,800,000 bushels. Our foreign outlet for breadstuffs is so much lowered that during a recent week exports of wheat from North America were only 2,422,000 bushels, comparing with 6,151,000 bushels for the corresponding week last year. The visibe supply of wheat in this country is decreasing every week, but it is still large, being about 67,000,000 bushels, comparing with 46,776,000 bushels a year ago. The late rise saw May wheat sell in the Chicago market as $1.13, a new high price for the season, with a subsequent reaction. A year ago May wheat sold at $1.21½.

Corn at New High Level

Corn has advanced within a short time to the highest prices of the season with large speculative and legitimate buying and no excessive offerings, although larger shipments from farming districts are being made. Large amounts of corn and oats are being fed on farms, and the visible corn supply increases slowly, while light exports are going forward. Some farmers are marketing part of their corn surplus, believing that later marketings will be large enough to weaken prices materially. Corn for May delivery is up to 82 cents, compared with 76 cents a year ago; oats selling at 49¼ cents, comparing with 88¾ cents a year ago.

Shortage of Seed Corn

There is a shortage of good seed corn throughout a large portion of the corn belt states, the result of unfavorable weather conditions last year. Much of the corn harvested in 1923 in Illinois, Indiana, Iowa and Missouri was soft, and farmers who failed to have early maturing corn may expect to get thin stands. Seed crop experts suggest that farmers owning cribs of old as well as early maturing corn make germination tests as early as possible. Only corn that shows a germination test of 90 or more should be saved for seed.

Co-Op Increases Price

In a report published in the Chicago Tribune, it is shown that farmers in Carroll county, Ill., received from 4 to 5 cents per pound more for their butter fat last year by selling it through their own organization than they were offered by local creamery stations. They sold approximately $116,000 worth of poultry, butter and eggs in 1923 through the Mount Carroll Cooperative Creamery Company, Inc., which was established two years ago. This is a $30,000 increase over the first year. The company paid a 7 per cent dividend to its stockholders at the end of the year and voted a patronage dividend of ½ cent on each pound of butter fat delivered to the creamery. The dairymen brought in 160,000 pounds of butter fat during the twelve months and received an average of 46.8 cents a pound for it, or 4 to 5 cents more than the local creameries offered them. The patronage dividend amounted to about $800.

Illinois Orchards Cooperate

Six hundred carloads of fruit and vegetables were shipped to ninety-eight towns in twenty states from Illinois orchards and gardens last year through the Illinois Fruit exchange, a cooperative organization of farmers with headquarters at Centralia, Ill. The products of this organization are distributed through the Federated Fruit and Vegetable Growers, Inc. Both organizations are fostered by the farm bureaus.

There is such a marked scarcity of well finished beef cattle, both long-fed heavy steers and yearlings, that sellers can depend upon obtaining fancy prices. The bulk of the steers offered on the Chicago market recently found buyers at $8 to $10.35, but a late sale was made of two car loads of 1493-pound steers to a New York shipper at $11.50, being 15 cents above any previous sale of heavy steers for 1924. The best yearlings have been taken at $10.50 to $11.50, while only a few heavy steers sold as high as $10.50 to $11. No steers that were good went below $9, and low grade steers sold at $4.50 to $7. Butcher cows and heifers were good sellers at $3.50 to $8.25 mostly, canner and cutter cows selling at $2 to $3.40, bulls at $3.50 to $7.50 and calves at $5 to $14. A limited business is seen in stockers and feeders at $5 to $7.50, a few fleshy steers suitable for a short finish bringing $7.75 to $8.25. A year ago the best beef steers sold at $11, two years ago at $8.90. Cattle not good in quality have sold 25 to 75 cents lower, the consumption of beef having fallen off. Compared with normal years, fat cattle are selling at high prices.

The Hog Traffic

So long as supplies of hogs sent to market foot up such remarkably large numbers there will be great difficulty in placing prices on a much higher level; but it is surprising how well values have ruled under such big receipts in Chicago and other western markets. Hogs on the Chicago market average up well in quality, the bulk selling within a range of 30 cents and heavy butchers going at the top, being 10 cents above the best bacon hogs. Late Chicago receipts averaged in weight 232 pounds, being five pounds less than a year ago. The consumption of fresh and cured hog products is the largest ever known, and exports of provisions are enormous. Fresh pork sells extremely low, and it is largely substituted for other meats. Hogs have sold recently at $6 to $7.20.

High Prices for Lambs

At times prices for lambs suffered declines, but whether the market happens to be up or down, values are very high, and the sheep industry is on a good paying basis. Late sales of lambs were made in the Chicago market at $13.50 to $15.00, with feeders bringing $13.00 to $13.75. Eight years ago the best lamb brought $11.50.

WHEAT

The general outlook for the wheat market shows little change and a firm tone is favored. Milling demand is good as millers are buying our wheat to mix with Canadian wheat. Millers say that Canadian wheat is not grinding well and requires a mixture of American to make good flour. Bulls are making much over expected help from the government and bears are not inclined to consider fighting an advance that has the government back of it.

CORN

Corn is not coming to market very fast at the present time as farmers are holding their surplus to feed to farm animals or to sell next summer when they expect much higher prices. Those who are forced to sell are about the only ones sending to market at present. There are many believers in higher prices in the corn market during the next few months and all receipts of good corn are promptly taken. Chicago dealers state they expect the amount of receipts to decline soon.

OATS

There has been little doing in the oat market and an easy tone prevails.

RYE

Rye is inactive failing to follow the leading grains.

BEANS

The bean market at Detroit is in about the same condition as it was two weeks ago and prices are unchanged. Eastern dealers report large receipts of foreign beans. At New York and other large markets in the east consumption is said to be fair and the market inactive. Heavy advertising done by the canners recently is helping to keep up the demand.

POTATOES

A steady to firm tone is noted in the potato markets of the country. Although the trade has not been especially active there has been a steady demand for good grade stock and dealers are expecting this to continue.

HAY

Unfavorable weather conditions have caused a somewhat firmer tendency. Country loadings have been interfered with and the movement has been light. Demand has been slow at some eastern markets but at the close the demand has increased somewhat and a better feeling is shown. As a whole markets are steady to firm.

MARKET QUOTATIONS

Wheat

Detroit—Cash No. 1 red, $1.16½; No. 2 white, $1.16½; No. 2 mixed, $1.15½.

Chicago—Cash No. 2 red, $1.14½; No. 2 hard, $1.12½.

Prices one year ago—Detroit, Cash No. 2 red, $1.39; No. 2 white, $1.39.

Corn

Detroit—Cash No. 3 yellow, 86c; No. 4, 84c.

Chicago—Cash No. 2 yellow, 79c.

Prices one year ago—Detroit, Cash No. 2 yellow, 80½c; No. 3, 79c.

Oats

Detroit—Cash No. 2 white, 54c; No. 3, 52½c.

Chicago—Cash No. 2 white, 49¾c.

Prices one year ago—Detroit, Cash No. 2 white, 50c; No. 3, 48½c.

Rye

Detroit—Cash No. 2, 74c.

Chicago—Cash No. 2, 73c.

Prices one year ago—Detroit, Cash No. 2, 90c.

Beans

Detroit—C. H. P., $5 per cwt.

Prices one year ago—Detroit, C. H. P., $7.60 per cwt.

Potatoes

Chicago—$1.20@1.40 per cwt.

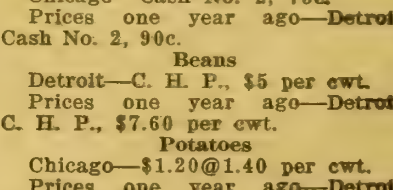
Prices one year ago—Detroit, $1@1.10 per cwt.

Hay

Detroit—No. 1 timothy, $23@25; No. 1 clover and No. 1 clover mixed, $20.50@21 per ton.

Chicago—No. 1 timothy, $25@27; No. 1 clover, $22@23; light timothy & clover mixed, $24@25 per ton.

Prices one year ago—Detroit, No. 1 timothy, $16@16.50; No. 1 clover mixed, $14@14.50 per ton.

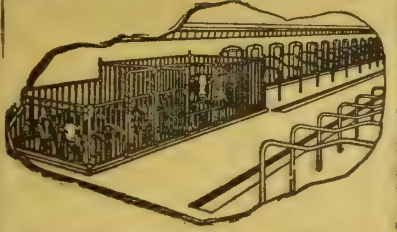


Week of February 17

The first half of this week in Michigan will be generally mild and unsettled to stormy. Showers or snow flurries will occur during the period from Sunday to Wednesday together with moderately strong winds in various parts of the state.

About Wednesday or Thursday temperatures will fall somewhat

Your Barn
Equipped Complete



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Whatever you want — a complete outfit — a few stalls — a pen — a carrier — everything formerly sold only for cash, now offered on this easy payment plan. You'll be surprised at the many big improvements we have made and the low prices quoted on barn equipment which measures up to the quality standard of the famous imported Melotte Cream Separator, sold by us on payments to thousands of American farmers for years.

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Let our expert submit ground plans for your new barn—or for re-arranging your old barn, with utmost economy and convenience. You assume no obligation. Let us figure with you. Our prices, superior quality, and monthly terms will be mighty attractive.

Write Today!

Just a card will do. Tell us what equipment you are interested in. How many cows you have. Get our complete proposition. See how easy it is to buy the Babson way. Write us at once. Do not miss this chance of fixing up your barn now and paying during the coming year.

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We pay the postage

Two fine parlor brooms, one kitchen broom and one heavy garage or barn broom. These brooms ordinarily sell through stores at $4.00. Our price, delivered at your door, $2.85—the best household value ever offered straight from our big factory.

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Reference—Commercial Trust & Savings Bank, Lomax, Ill.

Only one set to a family—Send check or money order today. $2.85 brings these four brooms to your home—we pay the postrge.

Consumers Broom Mfg. Co.
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Detroit Beef Company

offers its services to the *Farmers of Michigan* as a high class, reliable commission house for the sale of *Dressed Calves* and live poultry. Write us for information how to drses and ship calves to market. $250,000 capital and surplus. 34 years in business in the same place and same management.

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GARLOCK - WILLIAMS CO., Inc.
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WE SOLICIT YOUR SHIPMENTS of live poultry, veal and eggs.
Our commission is 5%.
References: Wayne County and Home Savings Bank, Bradstreet.

HENRY T. FRASER
Western Market, Detroit, Mich.
Ship us your poultry, veal or farm produce of all kinds.
References: Detroit Board of Commerce, Wayne County and Home Bank.

IMPROVED ROBUST BEANS—HEAVIEST yielding existing variety and latest improved Agricultural College strain. Ninety-four per cent germination. Not polished or hand picked. Ninety pound bag, six dollars. Owosso. Will pick out three pounds to Bag. A. B. COOK, Owosso, Mich.

lower but about Friday will again rise under the influence of falling barometer. As a result of this condition snow flurries will occur in many parts of Michigan during last days of week. This activity will be followed by change to much colder.

Week of February 24

Following the storminess that may reach into this week, the weather in Michigan will be generally fair and colder up to about Wednesday. Shifting winds from east to south with falling barometer by the middle of the week will introduce rain, sleet or snow into many parts of the state.

Following after this storm area the weather will be clear and the closing days of the week will experience mild temperatures for this time of year.

March Warm and Dry

March in Michigan will average warmer than the seasonal normal and will give indications of an early breaking up of winter but the farmer has yet to reckon with fickle April. During March precipitation will be far below the seasonal average.

April Cool and Stormy

For April in Michigan there will be much storminess and temperatures will average below the seasonal normals.

HOLSTEIN AND SHORTHORN BREEDERS HOLD SALES

(Continued from Page 6)

to supporters of the breed that Holstein cattle have started their long-delayed "comeback." Several out-of-state breeders were present and animals were purchased to go to Pennsylvania and to Indiana.

A Holstein heifer donated by Corey J. Spencer of Jackson, to the Peoples Church of East Lansing, was sold twice. The first sale was under the direction of Prof. O. E. Reed, head of the M. A. C. Dairy Department, as auctioneer. The bids were donations, each bidder paying into the building fund of the Peoples Church the amount which his bid raised the preceding bid. Some $165 dollars was raised for the new church building in this way. Then the animal was auctioned off in the regular manner and was purchased by the Detroit Creamery Company for $200. This amount also goes toward the building of the new church.

A fund which is bound to be of untold benefit to worthy students at the M. A. C. was created by Mr. Spencer through the donation of ten purebred Holstein heifers. These were sold for $1100. This money has been put in a loan fund and will be used to assist needy students who are working their way through college.

The Shorthorn Sale

At the close of Farmers' Week, on Friday afternoon, the Shorthorn breed was featured. The animals consigned to the sale were first brought in and judged. This gave the buyers an opportunity to inspect the offerings as well as to discuss Shorthorn type. Following the judging came the sale at which some 45 Shorthorns changed hands.

Due to a large number of young animals the average of the sale was somewhat low, being in the neighborhood of $100 per head. The top animals of the sale brought $300 each. These were yearling heifers, bred and consigned by H. B. Peters and Sons, Carland, Michigan, and were sold to Houston and Ikeler of Grandville, Ohio.

Officials in charge of the sale expressed themselves as satisfied with the results secured. As a result of the interest displayed they are looking forward to a certain, though gradual, improvement in the Shorthorn business. —Carl H. Knopf, special correspondent.

RADIO PROGRAMS

Station KYW, Chicago. Central Time 8:20. Wave length 536 meters.

February 19—"Some Business Aspects of Farmer Organizations," by R. A. Cowles, Treasurer, Illinois Agricultural Association.

"Dairy Industry and Its Relation to National Health," by Louise Fitzgerald, National Dairy Council.

February 26—"Agricultural Editing on the Metropolitan Paper," by Frank Ridgway, Agricultural Editor, Chicago Tribune.

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Are your savings earning you all they should—with safety?
Are they earning you good interest—tax free?

LET YOUR MONEY EARN

6.6%

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Invest in this Security where your money works for you 24 hours a day in serving 800,000 Michigan people.

Enjoy all the benefits a good investment brings you. You can have 6.6% with safety—and tax-free in Michigan.

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Large Crystals — Small Crystals — Pulverized

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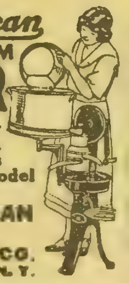

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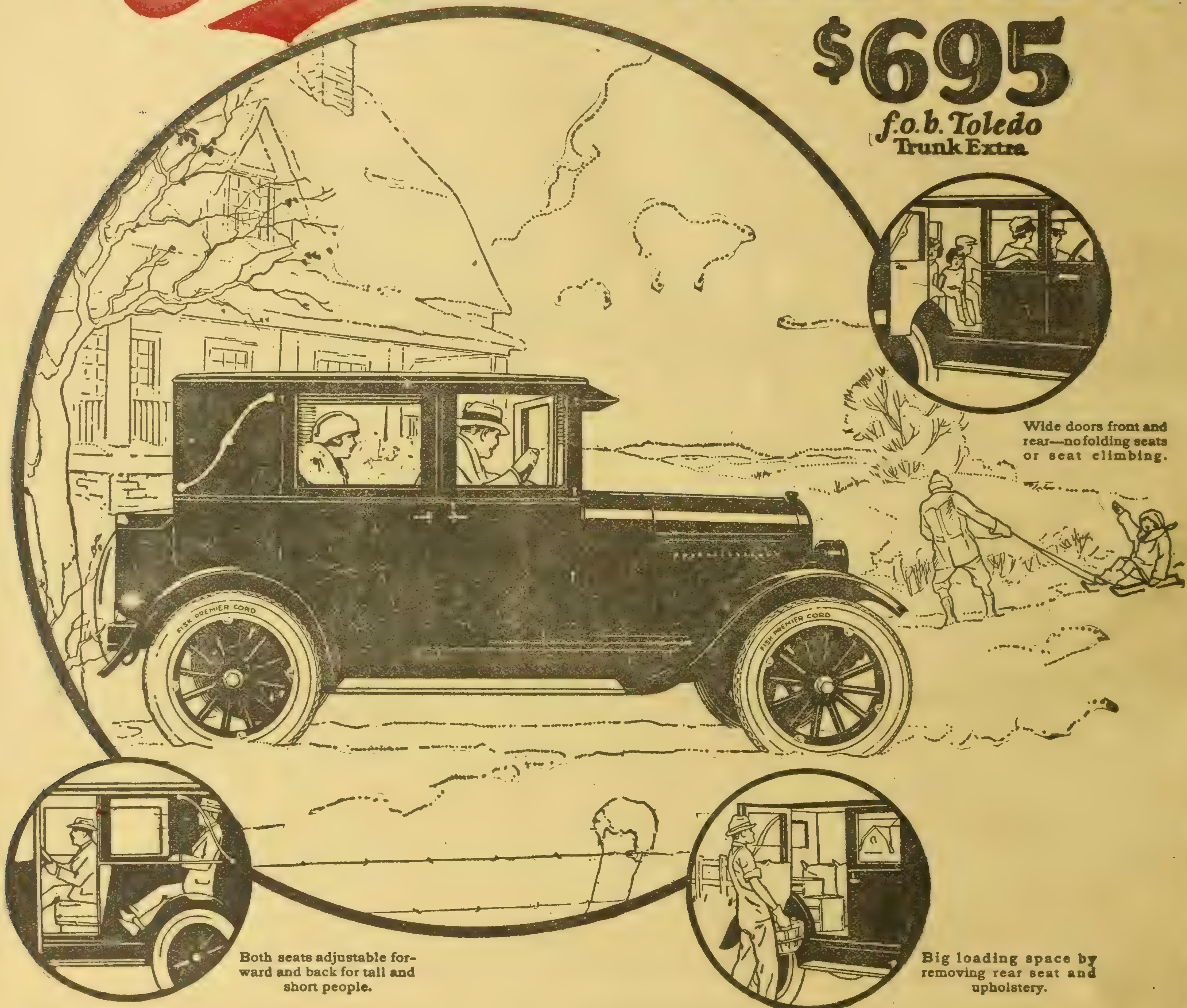

Wide doors front and rear—no folding seats or seat climbing.

Both seats adjustable forward and back for tall and short people.

Big loading space by removing rear seat and upholstery.

The Car that Electrified America!

The new Overland Champion was announced last October. Farmers everywhere immediately pronounced it by far the most useful car they had ever seen!

For here is a work car and a family car all in one! Take out the rear seat and upholstery, and you have 50 cubic feet of loading space, easily available through the wide rear door, for groceries, supplies, tools, feed, seed, anything and everything! Both seats adjust forward and backward to accommodate tall people and short people. Both seats and upholstery make into a comfortable, full-sized bed in car—a great camping car!

Bigger engine. Bigger power. Extraordinary gasoline, oil and upkeep economy. Triplex springs. And the famous Overland reliability and staunchness. See the Overland Champion!

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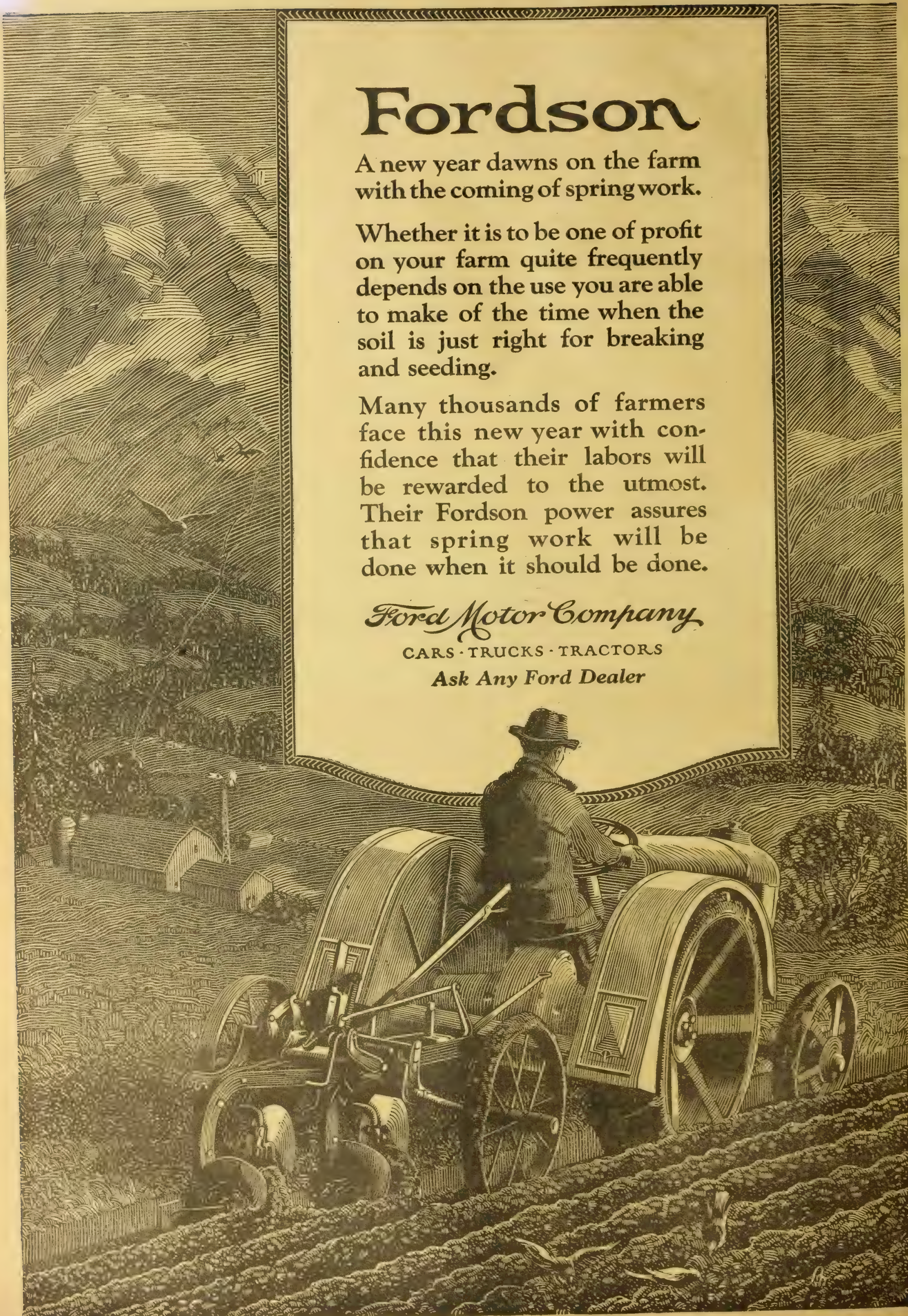
The Michigan
BUSINESS FARMER

An Independent
Farm Magazine Owned and
Edited in Michigan

VOL. XI, No. 14 SATURDAY, MARCH 1, 1924 TERMS: TWO YEARS $1 60c PER YEAR—5 YRS. $2

PROSPERITY FOLLOWS THE COW

In this issue: "The Time is Ripe for Tax Reform in Michigan," the first of a series of articles on taxation in Michigan and how to solve present problems—"Wexford Farmers Organize Community Meet"—"Are Fruit Growers Willing to Pay 5 or 10 Cents More for Certified Trees?"—Other interesting features



Fordson

A new year dawns on the farm with the coming of spring work.

Whether it is to be one of profit on your farm quite frequently depends on the use you are able to make of the time when the soil is just right for breaking and seeding.

Many thousands of farmers face this new year with confidence that their labors will be rewarded to the utmost. Their Fordson power assures that spring work will be done when it should be done.

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SATURDAY
March 1,
1924

VOL. VI, No. 14

Being absolutely independent our columns are open for the discussion of any subject pertaining to the farming business.

"Hew to the line, let the chips fall where they may!"

The Michigan
BUSINESS FARMER

"The Only Farm Magazine Owned and Edited in Michigan"

Published Bi-Weekly
Mt. Clemens, Mich.

TWO YEARS $1

Entered as second-class matter, August 22, 1917, at the post-office at Mt. Clemens, Mich., under act of March 3rd, 1879.

The Time is Ripe for Tax Reform in Michigan

Reports Show Not Only Tax Totals Are Too High but Tax Burden is Not Equally Distributed Over Entire Wealth of the State

By **STANLEY M. POWELL**

(Lansing Correspondent of The Business Farmer.)

YEAR after year you have found your taxes a little higher than they were the previous year until all taxpayers are now anxiously asking where all this money is going to, what is it being used for. Mr. Powell answers the questions in this article which is the first of a series on taxation in Michigan and how to solve the present dilemma. Taxation is one of Mr. Powell's favorite subjects and he has made a very careful study of it so he knows thoroughly what he writes about. Let us have your comments, on any one, or all, of the articles.

"REAL ESTATE, which constitutes but 35 per cent of the wealth of Michigan, is today paying 80 per cent of the total taxes, while the other 65 per cent of Michigan's wealth escapes with but 20 per cent of the tax burden," said Representative Fred B. Wells, of Cassopolis, discussing Michigan's taxation conditions recently. Mr. Wells ought to know what he is talking about, for he was one of five senators and representatives chosen from the 1921 Legislature to make a two-year study of taxation conditions in Michigan and other states.

We hear a lot of talk about taxes, especially along about this time of the year. Many hair-brained ideas are advanced as to what should be done about the situation, but it seems evident that the solution of our present difficulties is suggested by the startling figures presented by Mr. Wells. If those figures are true, the difficulty is not mearly that the tax totals are too high, but that the tax burden is not equally distributed over the entire wealth of the state. To talk blindly of tax reduction may be to oppose good schools and other desirable projects but to advocate the placing of a larger proportion of Michigan's wealth on the tax rolls as a method of reducing the tax rate is a proposal to which no fair minded citizen should take exception.

Taxes Sky-Rocket

Taxation seems to be a chronic disease afflicting the body politic. We are annually reminded that it seems to be a necessary evil that is always with us. But during recent years it has seemed to go from bad to worse and the unfortunate individual who owns farm or town real estate in Michigan today is suffering from intermittent chills and fever and a very unsteady pulse as he faces a tax burden which in many cases is already becoming confiscatory.

The alarming increase of tax totals in Michigan is revealed by the following figures: In 1901 the total tax levied on the general property of the state for state, county, city, village, township, road, school and drain purposes was $23,350,000. By 1921 this figure had increased to the staggering total of $158,389,000, an increase of 700 per cent in 20 years. It is interesting to note that during this 20-year period the assessed valuation of the property bearing these taxes increased only about 410 per cent. The result was inevitable. The rate of taxation had to go up, which it did, mounting from $17.49 per thousand in 1901 to $28.88 per thousand in 1921.

Tax Payers Can't Pay

This tax burden on real estate is proving too great. Present conditions show that such a high general property tax is neither safe nor advisable. As this rate of taxation on the general property of the state has increased so rapidly, it is very significant indeed that the delinquent taxes returned to the Auditor General have increased likewise. In 1919 the assessed valuation of the property returned delinquent for taxes was $187,349,683. In 1920 this total was nearly doubled to $363,350,009. 1921 revealed another husky jump, bringing the total up to $449,474,231. This was practically one-tenth of the total assessed valuation of Michigan real estate for that year. The taxes returned delinquent amounted to over $10,000,000.

By 1922, the last year for which figures are available, the total value of property returned delinquent had risen still further, being $455,746,257. The total unpaid taxes for this year are not yet available, as the staff of clerks in the Auditor General's Department have not yet finished the tremendous task of totaling them. Not only have many tax payers allowed their property to return to the state rather than pay these high taxes, but unquestionably there have been three or four times as many more who have had to borrow money at 6 or 7 per cent rather than pay the heavy penalty of delinquent taxes.

Still Bonded Indebtedness Increases

This tax increase would have been bad enough if we had been observing a "pay-as-you-go" policy, but that was not the case. On top of this increase in the taxation on general property, the public bonded debt has been increasing by leaps and bounds. During the ten years from 1911 to 1921 the bonded indebtedness of the cities of Michigan increased 550 per cent, while that of the counties increased 800 per cent. The State, which in 1911 had no debt at all, by 1921 had $65,000,000 of bonds outstanding. In other words, the bonded indebtedness of Michigan and its various subdivisions had increased in ten years 830 per cent. Bear in mind that even these figures do not include Covert road, drainage and other district bonds, which would make this increase much larger.

To make the situation real plain, let's restate in a little different way. Each man, woman and child paid in general property taxes in Michigan $10 in 1901 and $43.02 in 1921, and over and above this for each man, woman and child there was an increase in the bonded indebtedness outstanding from $13.46 in 1911, to $82.95 in 1921.

Can't Economize Greatly On State

In this increase in the tax burden in Michigan, which is seriously discouraging the ownership of real estate and homes, as is known by all who have given taxation any serious study, it is interesting to note that only about 11 per cent of the taxes are levied for state purposes, while the remaining 89 per cent are for local purposes, which the taxpayer has the power to vote upon himself. However, this fact does not make his burden any lighter.

The two big questions in taxation are economy in government and equitable distribution of the burden. As far as economy is concerned, we can never expect 100 per cent efficiency when our public officials are elected by popular vote, and surely no citizen of Michigan wishes to give up the privilege of franchise, even through the average citizen neglects the privilege.

Regarding state expenditures, when one considers that about 20 per cent of the expenditures must go for interest and sinking fund for bonds issued; about 30 per cent to support our state educational institutions, (containing about 18,000 students, the necessity for which is readily seen for a people who must be enlightened and educated to better govern themselves); about 15 per cent for hospitals, housing 8,100 insane people; about 11 per for correctional and charitable institutions and prisons housing about 6,000 people; and the courts, legislature, all state departments, boards and commissions involving not over 20 per cent of our state expenditures, it is plain to be seen that if any material cuts are to be made in state expenditures, they cannot be made on boards, commissions, etc.

The strictest of economy should be exercised in making appropriations for these boards, commissions and departments, but if they were all abolished and the whole state capitol and Lansing government blown up, it would only have reduced the taxes of the people of Michigan between 4 and 5 cents on the dollar during the past year or two.

How Then Reduce Taxes

State expenditures can not be greatly reduced, if we are to maintain the standards the people of Michigan demand for their colleges and state institutions. It is very plain that there is a greater opportunity to economize on the expenditures of $138,000,000, for local purposes than upon the expenditure of less than $20,000,000 for state purposes.

Some system of taxation must be devised which will not only relieve real estate somewhat, but that will have a tendency to bring about more economy in local expenditures, and that will be so devised that there will be sufficient people contributing to the support of all branches of the government, including the State, so that the officials elected will feel responsible to the people electing them.

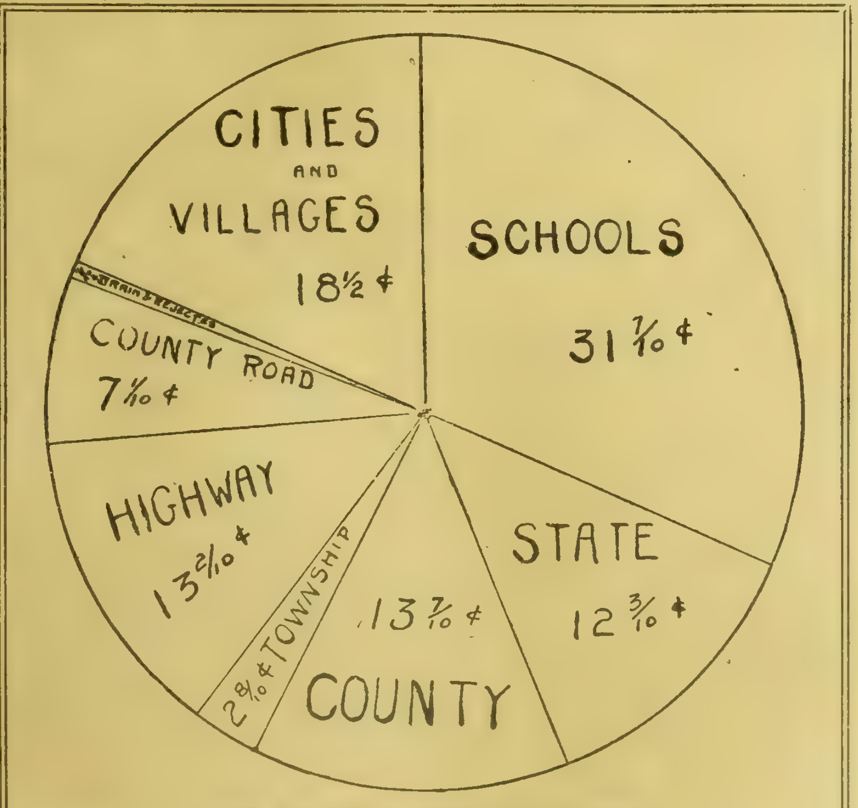
If it would be possible to remove all state tax from the general property of the State, every taxpayer would soon realize that if he desires lower taxes on his home, his business or his farm, then he must interest himself in the management of his schools, his city or township and the building of the roads in his community.

To bring about more economy, the people of Michigan must get rid of the tendency at "voting time" to vote large expenditures for schools, roads, cities, etc., and at "tax paying time" to point with disgust and bitterness toward the state as the cause for the large figures on their tax receipt. If the entire state tax were removed from general property (which in 1921 was 78 per cent real estate) every general property taxpayer's mind would be forced toward the extravagance in local expenditures.

Proposed Solutions

To meet these requirements it is being strongly urged that we adopt a state income tax in Michigan which would raise sufficient revenue to entirely remove the necessity for the general property tax for state

(Continued on Page 19)



HOW THE STATE USES ITS DOLLAR

This chart shows how the state spends its revenue for the various state boards, commissions, institutions, etc. Note how much is absorbed by interest on the state bonded indebtedness.

Wexford Farmers Organize Community Meet

Education and Entertainment Both Have Place on Friday Night Programs of Community Meeting in Carpenter Schoolhouse

By EVA HENDERSON DAVEY

COMMUNITY SONG

(Composed by one of the men while he milked)

ON Friday night it's my delight,
And a pleasure, don't you see?
To mingle with the boys and girls
Of the Carpenter Community.
There's an organ in the corner,
There's music when you come,
And you're welcome every Friday night
To the Carpenter Community Meet.

On Friday night, be it dark or light,
You'll find me right on hand,
My part to fill with hearty good-will,
And by the Community stand.
There'll be many neighbors present,
And real old friends to greet;
So, you're welcome every Friday night
To the Carpenter Community Meet.

TWO miles west of the recently incorporated city of Manton, in Wexford county, Michigan, is located the Carpenter school house where in November, 1921, was organized The Carpenter Community Meet.

The Carpenter district is one of the oldest settled parts of this section of Michigan, the Carpenter school being district number one in Cedar Creek Township. Many of the people in the neighborhood are sons and daughters or grandchildren of the early settlers. Some of them are living with their families on the same farms where they were born and in the same houses. The oldest residents still remember the days when each house stood in its own little clearing, made by cutting down, rolling into a heap, and burning the big maple, beech, etc.; and the provisions were carried down from the new town of Traverse City on horse-back or often on the back of the early settler himself. A short time after the towns of Manton and Clam Lake (Cadillac) were started.

It is a quiet country place, too near Manton to be a backwoods settlement and too old to be considered such by its inhabitants, and too far from town to take a very active part in the social life of the village.

It is comparatively easy to hold almost any sort of a meeting or to organize a society in a settlement far from town. People in such communities feel the need of getting together and depend upon each other for their social life. But in a place like Carpenter district they are not so united, and any such undertaking to be a success must have behind it a united effort.

Beginning in the fall when the crops were mostly harvested and farm work not so strenuous a few of the neighbors began to discuss plans for some kind of a country club. An opening meeting was announced for November and a notice published in the Manton Tribune-Record.

About thirty people came to this first meeting, old, young and those who were neither; and every one was given an opportunity to tell what kind of meetings he wanted. Entertainment seemed to be the leading idea though some were for organization with a view to community betterment, and some wished to enlist outside aid in solving the problems common to all, such as restoring soil fertility, breeding up live stock, lowering taxes, etc. But all were agreed that they wanted meetings of some kind and all declared themselves willing to help.

A chairman, a sec'y-treas. and an organist were elected and the name Carpenter Community Meet chosen. A vote to meet once each week on Monday nights carried. The chairman appointed two committees, one to provide a program for the following week and one to choose a topic for debate and appoint debaters to argue it at the third meeting.

That was the beginning and each week throughout the winter a community meeting was held. Sometimes the roll-call numbered fifty or sixty and even on several occasions as high as seventy-five or eighty, and sometimes on a stormy night only eight or ten would be present. The chairman and his wife and the secretary never missed a meeting.

The meetings were opened by community singing and prayer, followed by recitations, readings, talks, discussions. Special features were: debates, talks on given topics, speaking by someone from outside, special music, mock trials, suppers.

The notice regarding the opening meeting brought a letter from the county agricultural agent, Mr. Wm. F. Johnson of Cadillac, to the chairman, Mr. Walter E. Davey, congratulating the community on its effort and offering his help. During the winter he spoke one evening answering questions and making suggestions for community welfare, and gave a short demonstration of poultry culling on some hens brought in from the nearest poultry house. In the spring he made another visit and spoke on soil fertility, crop rotation, etc. In the summer Mr. Johnson held a poultry culling demonstration at one of the farms with Mr. C. M. Ferguson, poultry expert of Lansing, as demonstrator. Since then poultry raising for profit has been on the increase and more farmers are raising pure-bred stock and buying setting eggs and cockerels with a view to increasing egg production.

Wexford county has in former years been a great potato raising center and much of the soil will no longer produce potatoes enough per acre to yield a profit but instead give the grower a money loss while decreasing the fertility of his soil. The answer to the question as to what he shall do to bring back the fertility of the soil and at the same time turn the loss into gain lies in the raising of alfalfa, sweet clover, soybeans, etc. and letting some one else raise the potatoes until he has rebuilt his soil so that he can produce them at a profit.

Quite a number of debates were held during the winter after the Community Meet was organized. Men and women consulted histories, geographies, maps, not to mention dictionaries, in looking up forgotten facts. Some who had never before heard a debate took part and learned to enjoy the battle of argument followed by the matching of wits and knowledge in rebuttal.

In the spring a debate was arranged with a near-by debating society and the Carpenter Community debators were the victors.

At Christmas time the community united with the school in a tree and program. The community filled one hundred sacks of candy, nuts, and pop corn and one was given to every person present at the tree and one sent to absent ones who had attended former meetings and to people unable to come. This has been done each of the three Christmases since the Community Meet was organized.

With the coming of spring the question of keeping up the meetings was discussed. One man who had been a regular attendant always ready to do his part declared that if an attempt were made to hold meetings during the busy season the Community Meet would be so dead by fall that it could not be resurrected. Quite a number shared this opinion. Others felt they needed recreation in summer as well as in winter.

It was finally decided to hold a meeting once a month, the programs to be voluntary. No committees were appointed except when suppers were served. The chairman was at liberty to call upon any one present to contribute something to the program. Very few failed to respond. Sometimes the response was hesitant. More than one person rose slowly and made his way still more slowly to the front deciding on the way he would do but ready to do something when he faced the audience. And the meetings were as enjoyable as those of the winter and fully as well attended, one of the usual attendants being the man who thought summer meetings would kill the Meet. His little daughter liked to speak pieces and she brought her father and mother along to keep her company.

When work slacked down in the fall requests for more frequent meetings ended in a decision to hold one every other week. At the beginning of summer the night had been changed from Monday to Friday so the children could come with less interruption to their school and their sleep.

The second winter the Superintendent of the Manton Consolidated

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Are Fruit Growers Willing to Pay 5 or 10 Cents More for Certified Trees?

By E. A. KIRKPATRICK

IN the past year and three months, I have asked 97 people whether, if they were about to plant an apple orchard, they would be willing to pay five or ten cents a tree for certified trees—that is, certified as to variety.

In 83 of the 97 cases, the answer was "Yes." In the other 14 cases, the answer was not always "No," but it amounted to that; there was a lukewarmness that indicated little or no interest.

My list included a dozen professors of horticulture, fifteen professional and business men, and the rest were farmers with orchards. And would you believe it, the most enthusiastic about this matter were the farmers.

"Yes, siree," said one man at the meeting of New Jersey Horticultural Society. And here's the reason: "Fifteen years ago I planted an orchard of 500 trees, supposed to be Grimes Golden and Jonathan. They came into bearing a few years ago and turned out to be Ben Davis, every last one of 'em. See what I would have gained by buying certified trees? But they didn't have them then."

The most striking thing brought out by my nosing around was this: "How can the inspector who certifies the trees tell the different varieties, and how does he mark them so that the mark will stick to the trees?" The folks I tackled got even with me and, after answering my question, asked me the ones just stated. More than half of the folks wanted to know those facts. I take it that the others already knew.

The answer to those questions is really a short history of tree certification. It is a new thing—only a few years old, to be exact. It is the brain child of Dr. J. K. Shaw, Massachusetts Experiment Station, who has been working on the problem since 1915. Dr. Shaw, in tests, showed that he could register a 99.99 per cent "guess" on varieties, by the system of identification he has worked out. Up to the present time, the identification is based on the leaves, but Dr. Shaw is now working ahead on tree form and appearance of the bark as additional "finger print" material.

The Massachusetts Fruit Growers Association took up with the idea and now offers certification of twelve leading varieties of apple trees to any nursery in the state, or of any trees to be purchased by growers or dealers in the state. A representative of the Experiment Station examines the trees, and if they are found true to name, a hole is drilled in the branch of each tree and a small lead seal is attached with a press. The seal bears the letters "M. F. G. A.," and the date of year in which inspection is made. On the other side are the words "Certified to be Baldwin," or whatever variety it happens to be. The cost of this work has been between 2 and 3 cents a tree. In 1921, about 3,000 trees were examined and 10 per cent were untrue to name. In 1922, 10,000 trees were examined and the percentage was much lower.

A view of the 15th Annual Horticultural Show held during the 1924 Farmers' Week at the Michigan Agricultural College.

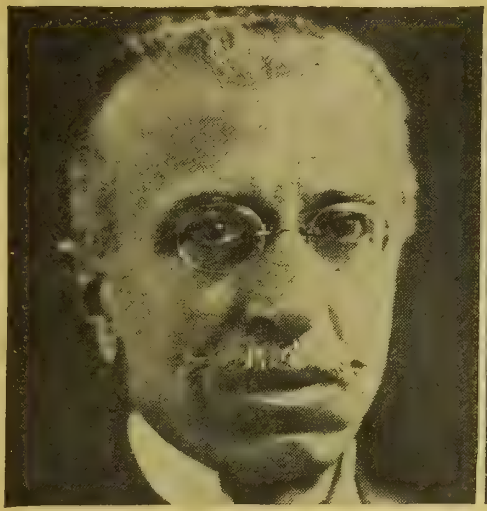
Massachusetts is the only state that is putting this idea to work, and since the nursery business is an interstate business, the work in Massachusetts doesn't begin to solve the problem, for fruit growers in the other states.

Are the nurseries in favor of this plan? Well, some of them are, and some are not. I suspect they would be in favor of certification if it were required, or in use in all states, just as they are in favor (publicly) of the present quarantine laws. I have put this matter up to a half dozen or more nurserymen, and find there are a few reasonable objections, as follows:

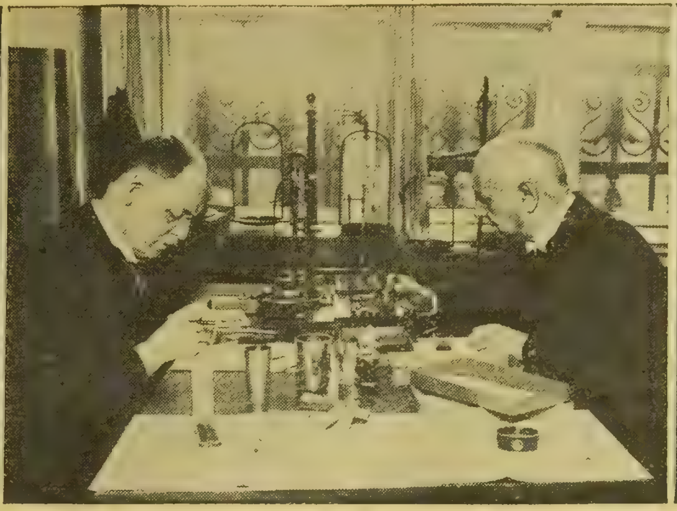
1. The expense of certification, which would, as a matter of course, be paid by the buyer of the trees. If 10 per cent of the trees were rejected, that would increase the cost of the ones certified, and there would also be the actual cost of the work of certification.
2. Small-order buyers (and about 85 per cent of the nurserymen's business comes from this class) do not care so much about getting a particular variety; many of them don't know one variety from another. They would have to pay for certification whether they wanted it or not.
3. An experienced nurseryman can tell one variety from another

(Continued on Page 11)

PICTURES FROM FAR AND NEAR

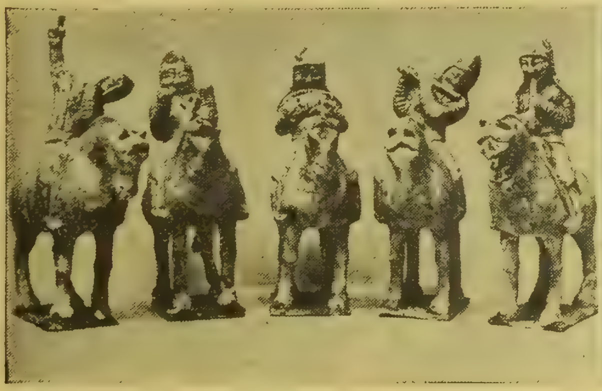


CLAIMS CURE FOR CANCER.—Dr. Naame, a Syrian, who has been reported as having perfected a sure cure for cancer. He has worked for years, watching causes of the disease, experimenting with results, and at last his efforts have been rewarded.

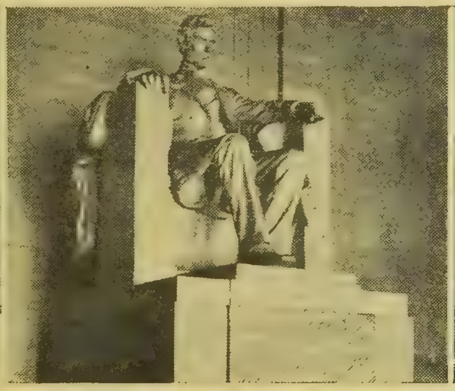


FIRST MUNICIPAL GOLD SALE BUREAU IN GERMANY.—Scarcity of money in Germany is causing the middle class to sell its gold, silver and precious jewels. To prevent unscrupulous dealers from cheating the people an Appraisal Bureau has been started by the government where experts give free appraisals. The experts work without salary.

LEADS CRUSADE AGAINST DIVORCE.—Jean N. Penfield, noted feminist, is leading a crusade against too easily obtaining divorces. She shows that divorces should be brought to a minimum to avoid future chaos, but if necessary, grant, and make valid in every state.



CHINESE JAZZ BAND OF 600 A. D.—This group of stone figures, dug up from a tomb in the interior of China, are now on exhibition in the Pennsylvania Museum. They were placed in the tomb and were supposed to provide music for the departed soul as he went on his way to the next world.

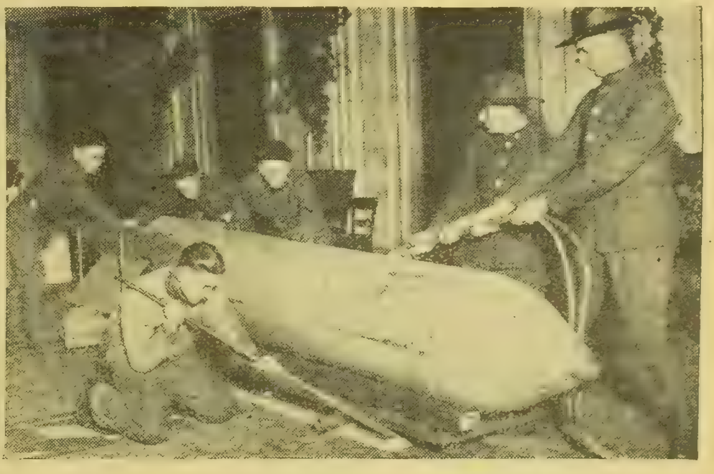


MEMORIAL STATUE OF LINCOLN.—This statue of "The Great Emancipator" is the work of Daniel Chester French, well known sculptor, and has won the admiration of thousands. It is considered a wonderful likeness.

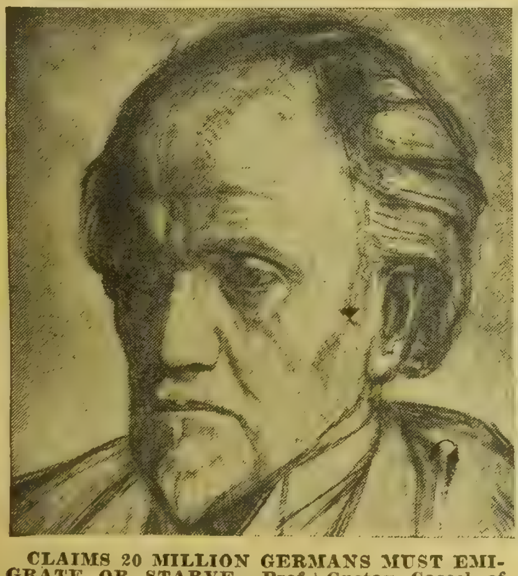
"GIVE ME A SHAVE, HAIRCUT AND SOME MUSIC".—No doubt that is what most men demand when they go to this Washington, D. C., tonsorial parlor, where the new Nickel-in-the-slot Radio receiving set has been installed. It is the invention of D. J. Richardson, of that city.

EDISON'S SON TO TAKE OVER CONTROL OF DAD'S PLANTS.—Charles Edison, son of Thomas Alva Edison, has taken over the managership of all of his father's 33 different industries. He took the place of Stephen B. Mambers, who has been at the job for the past eleven years.

WINNER OF BOK PEACE AWARD.—Dr. Charles Herbert Levermore, winner of the Bok Peace Award.



WORLD'S LARGEST BOMB.—This is the largest bomb in the world and has been on exhibit at the Hotel Commodore, New York City, recently. The bomb weighs 2 tons, is almost 14 feet long and was developed by army experts to be carried by Barling bombing planes.



CLAIMS 20 MILLION GERMANS MUST EMIGRATE OR STARVE.—Prof. Gustav Cassel of Stockholm University, claims twenty million Germans must emigrate at once or starve in the next few months. This picture of Prof. Cassell is a sketch made of him by his son, who is a well known artist.

LONDON BRIDGE.—Every time the Tower Bridge of London is raised for river boats to pass it costs the city $15. It isn't often that the Thames rises so high that the bridge must be raised, yet every part of the machinery must be kept in perfect condition at all times. The bridge is almost 30 years old. The London children consider it a great treat to see the "bridge go up."

SEEKS ARMY DISCHARGE.—James W. Westcott, 90 years old, of Brooklyn, N. Y., is seeking an honorable discharge from the U. S. Army. He fought in the Civil War, was wounded, officials were unable to find room for him in the hospital so he was sent to his sister. When the war ended the government forgot about him.

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What the Neighbors Say

FUTURE OF BEAN MARKET

MY opinion is that the future bean market depends entirely on the grocer. If they will insist on a fair return for their labors, which they are justly entitled to, they can get 6c or 7c a pound just as readily as they can 5c and the trade will take them just as readily as they do now.

The idea that a 7c price in Michigan attracts imported beans in competition is disproven this year by the large imports that have come in and are still coming from both Japan and Europe. With a Pea bean market of $5.00 in Michigan. we have brought in as many beans to date and contracted for their importation as we ever have.

My personal opinion of the market is that it will be a steady, firm market, and that while fluctuation might run over a range of a dollar a bag, nevertheless, Pea bean accounts will show a good profit if they trade from day to day and leave the future alone.

If Michigan had entered the advertising campaign, I am sure that the demands for beans would have been so stimulated that never again would the thought of manipulation as a means to create demand, enter into the minds of the Michigan people and that bean prices would range today from $6.50 to $7.50 instead of $4.75 to $5.25.

I have had proven to me by actual experience that the consumer will pay 20c a pound for beans and be glad to get them, if they are given a reason for buying them. The material which the advertising committee gathed during the summer contained every reason why people should eat beans, and it is unfortunate that through Michigan's failure to come in this campaign that we were unable to broadcast to the American people the advantages of beans over any other food product that they might use. Think of Henry Ford trying to stimulate the demand for Ford automobiles by going around to his agents and placing dummy orders. This is the policy the bean men have followed in the past.

It might interest you to know that I run an add every Friday in the Christian Science Monitor on the household page, offering 5 pounds of beans for $1.00, and I am doing a very satisfactory business. I would suggest that you get one of these Monitors. This proves to me that the consumer will pay a fair price for a good product.—Benjamin Gerks, New York.

BEST FARMERS CONTINUE TO MOVE TO CITY

DEAR EDITOR:—As one of your readers I again wish to express my opinion on one of your articles appearing in the Feb. 16th issue, entitled "The Return of the Prodigal."

Prosperity has not returned to the U. S. or Canadian farmer. Nor will it soon. Auctions are being held daily in all parts of the country even now. Many more will follow in the spring. Yes, the doors and windows will be boarded up for those leaving do not intend to return soon, if ever. It is not the flame of city lights that is calling the farmer. Not so, but it is the light of desire for better conditions, less hours of toil and the night to enjoy some of the good things that the average farmer is denied. Then again you are mistaken when you say its the weak ones who leave the poor conditions and absolute slavery of the farms.

Only the strong, determined and better class of farmers are leaving the poor conditions behind. It is the rats or farmers who are mislead by articles in their daily papers or farm journals who stay and live and hope for the prosperity that you tell them year after year is just around the corner, and never comes.

Yes, the farmer who becomes a worker in one of the large modern shops does punch a clock. At the end of a day his card shows a total of from eight to ten hours work. If the poor devil had remained on the farm and had punched a clock his hours would have registered nearer 16.

Yes, he does ride to work in an electric vehicle called street car. This is just one of the modern means of conveyance at his command. And he gets home from his work several hours before dusk except in a few winter months, while the everage farmer is doing up his evening chores by lantern light. While the city worker has his Sunday for pleasure, rest or education the farmer has hours of necessary labor to perform.

Yes, back on the farms of Michigan are men and women who have stuck. Why? Well, for various reasons. Some are too young to leave for the better conditions offered them in the city yet, others dare not leave the old parents worn out by years of slavery and misery, and others are only waiting for some poor boob to come along and buy or rent their place so they can leave. Then you have the class of easily satisfied farmers who are satisfied with a living and nothing more. This class is largely responsible for the rut and slave-like conditions that the average farmer is forced to live in.

But again I say the farmers are waking up and the articles such as you like to hand out are turning many into deep thinking men and women. I might suggest to you that it would be wise to tell your readers of the paper published in Chicago called Farmer-Labor Voice. Will you do it?—Ralph Jordan, Petoskey, Mich.

VOTE DOWN BEET CONTRACT OFFERED

DEAR EDITOR:—At a meeting of the Durand Local of the Michigan Sugar Beet Growers Assn. it was unaminously voted that the present sugar beet contract for 1923 offered by the Mich. Sugar Factories, consisting of a 45-55 proposition with a $7 guarantee be turned down and not taken up for the reason that the 45-55 basis is unfair to the grower besides it gives the factories absolute monopoly of the contract labor or beet workers the wages of which the grower pays.

It was resolved by a unanimous vote that the growers will consider a contract based on a 50-50 proposition and average sugar price or sales, with "field" or labor supervision based on the acreage basis instead of the per cent of sugar basis.

It was also unanimously voted to cause a copy of these proceedings to be mailed to the sugar companies doing business in this section and also that copies be mailed the farm organizations and the newspapers of the state. Signed: C. E. Ackerman, C. S. Reid, F. Mikan, officers of The Durand Beet Growers' Ass'n.

P. S. The financial statement of the above organization shows a substantial balance on hand and the organization stands ready to cooperate in any way to benefit the industry represented.

FARM OR FACTORY

IT is a great mystry to me why the majority of the farm boys would rather leave the farm and work in the factory, than go to high school and hense college.

The eighth grade seems to be the limit of the farm boys education. At this period they are not fitted for a special vocation, and they are too young to own or manage farms. They become discouraged. To the boy just finishing the eighth grade the farm looks like a poor paying proposition. The boy measures wealth, at this time, by actual cash. So our boy goes to the city, procures a job in the factory and becomes a slave to command.

I cannot understand why a boy would rather be a factory worker, than the monarch of his own farm. Have they no pride in being a landowner, and managing their own affairs, instead of being a machine in a factory. You will say, of course, that the boys make more money in the factory. But the factories close down or our boy is fired. Then the money he has saved must go to tide him over until the factory opens, or he succeeds in getting a new job, and of course there is always the possibility of a failure. The crops on the farm may fail—but one has a home and enough to eat, and there are always the cows and hens to fall back upon.

In the country one has a play of ideas to work out. Ones imagination has full play, and an inventive nature can find an outlet on the farm. But if one has decided that he prefers the city life to that of the country, at college he will be able to fit himself for a business life or take up a profession.

In a factory the young man's mind is cramped. He has no outlet for his imagination or inventive ability. Who could have ideas about the common routine of factory work? He might be able to write an ode "On Dipping a Wire Frame in Gasoline," but I doubt it.

Now, if the country boy goes to high school that would occupy the time, at which he would be discouraged with the farm. His mind being inquiring, he will form many new ideas, and by the time he has finished high school, he will have decided whether he wishes to remain a farmer or take up a profession. He will then go to college—take a course in extensive farming, or a business or professional course and become his own boss and much respected citizen. — Dorothy Dill, Traverse City, Michigan.

LOW VALUES REDUCE CATTLE PRICES

EDITOR, Business Farmer—Cattle prices, with their up and downs, depend on many different factors other than the price of beef. Some livestock producers watch the beef market closely, but pay little attention to the price of hides and other by-products. Yet these same hide and by-product prices largely affect the price received by the producer of the live animal.

As an example, the decline in hide prices alone, since the peak in 1919, has reduced the value of an average native steer about $22.00. When hide prices fall, the packers cannot make up the loss by charging more for meat, because if this were done the demand for beef would be restricted, and the whole supply could not be sold.

Therefore, the immediate effect of the drop in hide prices is to lower cattle prices. Over long periods of time, however, low hide prices make for higher beef prices by discouraging cattle production. At the present time, hide prices are considerably below the pre-war level and consequently are a depressing influence in cattle prices.

Conditions in the leather market have been such as to cause very wide fluctuations in hide prices during recent years. From a peak of about 53 cents per pound in 1919, heavy native steer hides fell to about 10 cents early in 1921. From this low point, hides moved gradually upward until they reached a price of 23 cents in November 1922, which was fairly comparable with the pre-war level of prices. But they did not remain there very long. In December there was a sharp decline followed by a continued drop which reached a level of a little below 15 cents in July 1923, a price which has been maintained since then with only slight fluctuations either way. The following table shows the effect of these fluctuations on the value of a 60-pound hide:

August	1919	$31.80
April	1921	6.00
November	1922	13.00
January	1924	9.00

The above table shows that the decline in price from the **1919** peak to the 1921 low point amounted to over $25.00 per head. The decline since November 1922 amounts to about $4.00 per head.

The drop in prices of the cheaper grades of hides has been even more pronounced than in the case of good mative steer hides. For this reason prices of poorer grades of cattle from which such hides are obtained, have been affected even more in proportion, than good native beef steers.

The extremely low prices of practically all grades of heavy hides are merely a reflection of a condition existing in the leather industry. Any improvement in the leather business will be accompanied by an advance in hide prices.

Producers and packers have mutual interest in this situation and it is to be hoped for the good of the entire industry that the extreme depression in the hide market will not continue.—Swift & Company, Chicago, Ill.

MICHIGAN CROPS

KNOW THE SOURCE OF YOUR SEED

IN nearly every community in the State there is an unsuccessful field of alfalfa and frequently of June clover that stands out as a warning against the disasterous effect of sowing unadapted seed. It would be very difficult to find a farmer who would consider planting Southern Illinois corn in Northern Michigan for grain purposes and yet there are quite a number of farmers who do not hesitate to sow Arizona common alfalfa seed in Michigan. The results are usually more disasterous than planting Southern Illinois corn in Northern Michigan because alfalfa usually does not produce a crop the first year and Arizona common alfalfa frequently winter kills so badly that the crop the second year is unprofitable. It may be mentioned here that the Arizona section produced more than 2,500,000 pounds of alfalfa seed this season and this seed is being distributed quite rapidly.

A careful study of the adaptability of alfalfa and clover seed has been made by the Farm Crops Department of the Michigan Agricultural College. More than 400 plats of alfalfa and clover sown from seed of many sources are available for study. The following table shows very briefly some of the results secured.

Experiments carried on at the Michigan Agricultural Experiment Station show the following yields for the various strains of seed:

Strain of Alfalfa	State	Tons per A. Air dry hay
Hardigan	Michigan	7.21
Grimm	Idaho	7.09
Common	Montana	6.39
Common	Utah	6.06
H. Perivian	Arizona	1.11
Common	Arizona	0.92

The above plats were seeded the same day and given the same care in every way so that the difference in yield is a difference in adaptability to Michigan conditions.

What of the value of Hairy Perivian seed in Arizona? It is excellent for the southwestern part of the United States. This is just the point we wish to bring out. Seed adapted to one section may not be adapted to another section. Then keep the seed in the section where it is adapted and this can best be done by the farmers demanding adapted seed.

Data very similar to that secured with the adaptability of alfalfa has been secured with the adaptability of June clover seed. Seed from Italy and Southern France produces stands that are much less productive than our own Michigan grown seed. On the plats at the college those seeded with Michigan seed produced 1.7 tons more air dry hay per acre than plats seeded the same day with Italian seed. This is very important at the present time due to the fact that the clover seed crop in the United States is about 45 per cent normal and large importations of seed from Italy and Southern France are being made into this country.—C. R. Megee, Dept. of Farm Crops, M. A. C.

SERRADELLA

We wish to learn if you know of a grass seed by the name of Serradella. We understand this is a foreign grass and is used for building up soil, also for feeding cattle, sheep, etc. The seed is a yellowish seed, very nearly the same size as clover seed.—D. M. & Co., Remus.

—Serradella is an annual legume with a much branched, slended stem. It is cultivated for forage and green manure in France, Germany, Portugal and Spain. It has been carefully tested here at the college, and due to the sparse growth produced, cannot be recommended for Michigan conditions. Sever-

(Continued on Page 22)

Farmers Service Bureau

(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full name and address. Name not used if so requested.)

DUTIES OF JUSTICE OF PEACE.

What are the duties of a justice of the peace of a township?—N. G., Petoskey, Mich.

—The duties of a justice of the peace of a township are so many and varied, that it is not possible to give them in detail. In a general way, a justice of the peace is a member of the township board during the last two years of his term of office. He may also sit on the board during any period of the first two years of his term of office when by reason of a vacancy in any other office on the board, there are not three other members to act thereon. He may also try civil cases in tort where the amount involved is not more than $100 or actions on contracts, where the amount does not exceed $300. He also has original jurisdiction in cases of misdemeanor. That is, where the punishment is by fine of not exceeding $100 or imprisonment in the county jail not to exceed ninety days. He may also hold examination in criminal cases involving crimes to be tried by a court of record.—Clare Retan, Deputy Attorney General.

MUST GET LICENSE FROM STATE

I have a recipe for jam which everybody seems to call delicious. I have thought of trying to put it up in cans for sale. I did not make up the recipe myself. Could I can it in ordinary mason jars and sell it, or would I have to get permission from the state to do so?—F. D., Nessen City, Michigan.

—You would be required to obtain a license from the Food and Drug Commissioner of the State, at Lansing, Mich., in order to make and sell your jam. License fee is $25.00. —Asst. Legal Editor.

FUR RAISING

Do you know where I can purchase a pair of muskrat? How large a space should muskrat have? Which is the easiest to raise coon, skunk or muskrat?—A Reader, Lenox, Mich.

—Perhaps by paying trappers about double the fur value. There are also dealers who have them for sale. Might write B. F. Tarman, Quincy, Pa. A pond of an acre if well supplied with vegetable growth such as cattails is sufficient for six or eight females and a couple of males if put in before breeding season. Muskrat have two or three litters a year and six females if they do well would mean well up towards one hundred muskrat by fall. If you have a place of only a few square rods they can be raised but would require food perhaps towards fall when with the young the numbers increased. Muskrat are the easiest raised for they will practically raise themselves if conditions are right, that is, water and food. Not only muskrat raising but coon, skunk and mink raising is only begun. The fur catch for the season of 1923-24 is only about half of an average crop and points to the raising if the supply is going to equal the demand from this on.—Fur Editor.

LAWFUL LINE FENCE

What should a lawful line fence between two pieces of property be constructed of? How high. Are sheep, goats and hogs classed as stock?—M. J. S., Turner, Michigan.

—Sec. 2206, C. L. 1915 provides that "All fences four and one-half feet high and in good repair, consisting of rails, timber, boards, wire, or stone walls or any combination thereof, and all brooks, rivers, ponds, creeks, ditches and hedges, or other things which shall be considered equivalent thereto, in the judgment of the fence viewers, within whose jurisdiction the same may be, shall be deemed legal and sufficient fences." Sheep, goats, hogs, etc., are livestock, but a fence may be legal and still not be sufficient to restrain such animals.—Asst. Legal Editor.

CAN CUT TREES

I have some valuable timber such as black walnut, white ash, elm and hickory, along the highway, adjoining my farm. This highway is called the trunk line M-63. This road has been surveyed, but not graded. By the stake this timber stands about 80 feet from the center of said highway. Now have I got the right to cut and market this timber? Also have I the right to trim shade trees along my farm without the consent of the road boss?—H. W., Cloverdale, Mich.

—The timber growing in the highway adjacent to your farm belongs to you, and you may cut it or do whatever you wish with it so long as you do not interfere with travel on the highway. You may trim the trees along your premises without consulting the road boss.—Asst. Legal Editor.

GIVING TOBACCO TO OWN CHILDREN

Is there any law to prohibit a man from giving his own children tobacco?—Reader, Saginaw County.

—There seems to be no statute which prohibits a father giving tobacco to his own children. Section 15277 of the Compiled Laws of 1915, makes it unlawful for a person or his clerk or agent to sell, give or furnish tobacco in any form to a child under seventeen years of age without the consent of the parent or guardian. It implies, therefore, that tobacco may be furnshed to a child with the consent of the parent or of course, by the parent. —Clare Retan, Deputy Attorney General.

WHO PAYS TAXES?

I have sold 40 acres of land this fall, and had an argument regarding taxes. Sold it in October. By law who should pay the taxes?—J. A., Grant, Michigan.

—If you sold your land at any time prior to December 1st, the purchaser is bound to pay the taxes for the current year. Where the land is sold after December 1st, the seller pays the taxes for the current year. —Asst. Legal Editor.

CULTURE OF MUSHROOM

Would you please give me full information concerning the cultivation of white mushrooms? What is the usual market price, also how long does their season last by raising them in a hot bed and where could I obtain the spawn or seed?—W. H., Flint, Mich.

—The common cultivated mushroom is known botanically as Agaricus campestris and grows wild during the months of August and September. Any cellar of outbuilding which will maintain a uniform temperature of 45 to 65 degrees is a satisfactory place for growing mushrooms. Fresh horse manure is fermented for three or four weeks, turning it every three days so that the pile will not burn in the center, and placed in the beds eight or ten inches deep. The manure should be moist but not wet. Level and tramp well and leave until the temperature recedes to 70 degrees, at which time it is ready to spawn.

Good spawn may be secured in brick form from any reliable seedsman. Each brick is broken into ten or twelve pieces and each piece spaced ten inches each way and covered one or two inches deep in the manure. About ten days after spawning the bed is cased to prevent evaporation: that is, covered with an inch of fine loam soil.

Success depends largely on the condition of temperature and mosture existing in the cellar or building. Excessive moisture causes growth of foreign fungi and on the other hand the atmosphere should be moist enough to prevent evaporation from the bed. A temperature of 55 degrees gives best results. Growth is more rapid at higher temperatures but the period of production is shorter and the crop lighter.

The beds begins to produce in eight to ten weeks after spawning and will continue to produce for two to four months.

The price of mushrooms varies considerable. Very often a dollar a pound is realized and sometimes they sell as low as twenty-five cents per pound. Probably forty to sixty cents a pound is an average price. A square foot of bed space should yield a pound of mushrooms.—E. P. Lewis, Instr. in Vegetable Gardening, M. A. C.

CHARGE FOR FOOD AND KEEP

I would like to know how long I would have to keep and feed a stray dog which has no tag to claim ownership. Can I claim ownership? I have watched for an advertisement claiming her. Would I have to advertise her? If so, how long? If I find the owner can I get a reward? —H. R., Holton, Mich.

—If the owner of the dog calls for it, you may charge him for keeping and feeding it, and hold the dog until he pays you. However, I would advertise in the local paper for three or four issues and, if nobody calls for it, keep it.—Asst. Legal Editor.

GO INTO BANKRUPTCY

Two persons agree to go into partnership in farming and draw up an agreement to that affect. The partnership borrow money and the two partners sign as securities. The partnership does not prosper and they decide to cease operations. One of the parties is willing to, as the other has lost his all in the partnership, but desires to save a little out of the wreckage, at least not to be held responsible for anything, should the assets of the partnership not be equal to the liabilities. Will it be necessary for him to take the bankruptcy law to protect his earnings in the future? And what can he save by taking the law?—O. F. F., Pavilion, Mich.

—Each partner would be liable personally for the debts of the partnership in the event the assets did not equal the liabilities. In order to protect your future earnings from liability for the payment of the debts of the firm, it would be necessary to file a petition to be adjudged a bankrupt. Bankruptcy would not save your present assets from liability, however.—Ast. Legal Editor.

INOCULATING SHOOL CHILDREN

They inoculated my sister some time ago for diphtheria, injecting the virus into the abdomen without painting the abdomen with iodine. She was very ill afterwards as were all the children in the school. Now they are going to inoculate the children again, in the arm. Have we a right to forbid this being done? This second inoculation is also for diphtheria.—D. M., Ossineke, Mich.

—It is not always necessary to apply iodine before administering toxin antitoxin. In fact our physicians often use other cleansing agents such as alcohol.

There is no law to compel school children to be inoculated against diphtheria. Any parent who does not wish his child to have the treatment has the right to request of the school authorities that it be not given.

Of course, it is much more advisable that this case who has been inoculated once should receive full immunization, which would require three inoculations.—R. M. Olin, Commissioner of Health.

LIABLE FOR BREACH OF CONTRACT

A sells B forty acres of land. B signs a contract to pay interest annually for five years and then pay for it. B has one hundred and twenty acres valued at twelve thousand dollars free of incumbrance. Now after B has had possession of the forty awhile can he back out and not pay for the forty or does his property stand good for the debt?—M. H., Snover, Mich.

—If B breaks his contract and refuses to pay for the land, he would be liable to you for damages for breach of contract. B's unencumbered land could be levied upon to collect the damages after a judgment had been obtained.—Asst. Legal Editor.

CAN COLLECT RENT FOR HALL

I rented a hall to an organization and received no rent. Can I collect same and who would one serve papers on? Or how would you go about collecting it?—W. J., Gilford, Mich.

—You could collect rent for the use of your hall. The proper person to serve would be the secretary, president, or other officer of the organization.—Asst. Legal Editor.

LICENSE TO PEDDLE GLASSWARE

Do you have to pay a license to sell glass ware on the road? If you do how much is the license for a team of horses or a car?—D. N. B.

—I am of the opinion that one would have to secure a state license to peddle glassware and if on foot the fee is $5.00; of with one horse, $10.00; two horses, $40.00; a small car $20.00 and a large car $40.00. Application should be made to the State Treasurer.—C. J. DeLand, Secretary of State.

BEST TIME TO PRUNE TREES

When is the best time to trim black walnut and fruit trees?—C. H., Boon, Mich.

—Fruit or other trees may be pruned at almost any time during the dormant season when the tissues are not frozen. This means any time when the temperatures do not go below twenty degrees above zero, as a few degrees of frost usually does not serve to freeze up the tissues. This, of course, means that the bulk of the pruning is done during March and April, as it is at that time of the year that weather conditions are most favorable for the work.—V. R. Gardner, Professor of Horticulture, M. A. C.

MORE CONTRIBUTIONS TO FEEDING FUND

Two contributions to the German Babies Feeding Fund have been received since we published our statement of total received. These were for $1 each and came from William Baum and Andrew Baum, both of AuGres.

Farmer Putnam's Philosphy

I GOT home from Grange meetin' the other night mad and ready fur a fight. Josephine noticed I had a bad look in my eye and it made her bristle up and she sez: "What's the matter Tom; didn't they elect you to office?"

"Woman," sez I, "let me be. We didn't have no election; we had a debate on agricultural conditions. I tell you things is in a turrible state and I believe this country is goin' to have a revolution before long, if the farmer don't git more prosperous soon."

"Tom," she sez, "you go on to bed and stop talkin' nonsense, or there'll be a revolution right here at home."

I was so mad I couldn't talk back and I didn't know a thing till next morning when it all come back to me that I had been over in Europe where I took up a five acre patch of rocky land. I had one cow instead of a work horse and I used her to plow with. After I got my plowin' done I planted potatoes by hand and when they come up I hand hoed 'em five or six times, because I didn't have no cultivator or any other tool to work with exceptin' the hoe. Well the next trouble was dry weather. The neighbors told me to go and pay the priest to pray fur rain. I done so and then it rained so hard that half my crop washed away. Then the neighbors blamed me fur payin' the priest too much; they said us Americans was too liberal with our money.

Well, I finally got to harvest my potatoes and they made a big cartload. I hauled 'em to town with my cow hitched to the cart and sold 'em, gettin' two cartloads of paper marks fur the load.

When I got back to my patch the neighbors had the laugh on me, because they said the money wasn't worth the paper it was printed on and that the two loads of marks wouldn't buy a suit of clothes. After I woke up and thought this here dream over it took all the fight out of me and now I'm goin' ahead plannin' my spring work and thankful that conditions is as good as they is, and that I don't have to farm in Europe.—Thos. Jefferson Putnam, Specialist in Rural Devilment.

Oh Money! Money!

by ELEANOR H. PORTER

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tinued from February 16th issue.)

MRS. JANE laughed a bit ruefully.

"Well, I don't see but what I shall have to, with everybody against me like this," she sighed, getting slowly to her feet. "But if you knew—if either of you knew—how really valuable money is, and how much it would earn for you, if you'd only let it, I don't believe you'd be quite so fast to tell me to go and spend it."

"Perhaps not; but then, you see, we don't know," smiled Miss Maggie, once again her cheery self.

Mr. Smith said nothing. Mr. Smith had turned his back just then.

When Mrs. Jane was gone, Mr. Smith faced Miss Maggie with a quizzical smile.

"Well?" he hazarded.

"You mean—"

"I'm waiting orders—as your new boarder."

"Oh! They'll not be alarming, I assure you. Do you really want to come?"

"Indeed I do! And I think it's mighty good of you to take me. But—should you, do you think? Haven't you got enough, with your father to care for? Won't it be too hard for you?"

She shook her head.

"I think not. Besides, I'm going to have help. Annabelle and Florence Martin, a farmer's daughters, are very anxious to be in town to attend school this winter, and I have said that I would take them. They will work for their board."

The man gave a disdainful sniff.

"I can imagine how much work you'll let them do! It strikes me the 'help' is on the other foot. However, we'll let that pass. I shall be glad enough to come, and I'll stay—unless I find you're doing too much—about your father?"

"Oh, he won't mind. I'll arrange that he proposes the idea himself. Besides,"—she twinkled merrily—"you really get along wonderfully with father, you know. And, as for the work—I shall have more time now: Hattie will have some one else to care for her headaches, and Jane won't put down any more carpets, I fancy, for a while."

"Well, I should hope!" he shrugged. "Honestly, Miss Maggie, one of the best things about this Blaisdell money, in my eyes, is that it may give you a little rest from being chief cook and bottle washer and head nurse combined, on tap for any minute. But, say, that woman will spend some of that money, won't she?"

Miss Maggie smiled significantly.

"I think she will. I saw Frank last evening—though I didn't think it necessary to say so to her. He came to see me. I think that you'll find that they move very soon, and that the ladies of the family have some new clothes."

"Well, I hope so."

"You seem concerened."

"Concerened? Er—ah—well, I am," he asserted stoutly. "Such a windfall of wealth ought to bring happiness, I think; and it seemed to, to Mrs. Hattie, though, of course, she'll learn better, as time goes on, how to spend her money. But Mrs. Jane— And, by the way, how is Miss Flora bearing up—under the burden?"

Miss Maggie laughed.

"Poor Flora!"

"'Poor Flora'! And do I hear 'Poor Maggie' say 'Poor Flora'?"

"Oh, she won't be 'poor' long," smiled Miss Maggie. "She'll get used to it—this stupendous sum of money—one of these days. But just now she's nearly frightened to death."

"Frightened!"

"Yes—both because she's got it, and because she's afraid she'll lose it. That doesn't sound logical, I know, but Flora isn't being logical just now. To begin with, she hasn't the least idea how to spend money. Under my careful guidance, however, she has bought her a few new dresses — though they're dead black—"

"Black!" interrupter the man.

"Yes, she's put on mourning," smiled Miss Maggie, as he came to a dismayed stop. "She would do it. She declared she wouldn't feel half decent unless she did, with that poor man dead, and giving her all that money."

"But he isn't dead—that is, they aren't sure he's dead," amended Mr. Smith hastily.

"But Flora thinks he is. She says he must be, or he would have appeared in time to save all that money. She's very much shocked, especially at Hattie, that there is so little respect being shown his memory. So she is all the more determined to do the best she can on her part."

"But she—she didn't know him, so she can't—er—really mourn for him," stammered the man. There was a most curious helplessness on Mr. Smith's face.

"No, she says she can't really mourn," smiled Miss Maggie again, "and that's what worries her the most of anything—because and he with neither wife nor chick nor child to mourn for him, she says. But she's determined to go through the outward form of it, at least. So she's bought a veil. She's taken Mr. Fulton's picture (she had one cut from a magazine, I believe), and has had it framed and hung on her wall. On the mantel beneath it she keeps fresh flowers always. She says it's the nearest she can come to putting flowers on his grave, poor man!"

"Good Heavens!" breathed Mr. Smith, falling limply into a chair.

"And she doesn't go anywhere, except to church, and for necessary errands."

"That explains why I haven't seen her I had wondered where she was."

"Yes. She's very conscientious. But she is going later to Niagara. I've persuaded her to do that. She'll go with a party, of course,—one of those 'personally conducted' affairs, you know. Poor dear! she's so excited! All her life she's wanted to see Niagara. Now she's going, and she can hardly believe it's true. She wants a phonograph, too, but she's decided not to get that until after six months' mourning is up—it's too frivolous and jolly for a house of mourning."

"Oh, good Heavens!" breathed Mr. Smith again.

"It is funny, isn't it, that she takes it quite so seriously? Bessie suggested (I'm afraid Bessie was a little naughty!) that she get the phonograph, but not allow it to play anything but dirges and hymn tunes."

"But isn't the woman going to take any comfort with that money?" demanded Mr. Smith.

"Indeed, she is! She's taking comfort now. You have no idea, Mr. Smith, what it means to her, to feel that she need never want again, and that she can buy whatever she pleases, without thinking of the cost. That's why she's frightened—because she is so happy. She thinks it can't be right to be so happy. It's too pleasant—to be right. When she isn't being frightened about that, she's being frightened for fear she'll lose it, and thus not have it any more. I don't think she quite realizes yet what a big sum of money it is, and she'd have to lose a great deal before she lost it all."

"Oh, well she'll get used to that, in time. They'll all get used to it—in time," declared Mr. Smith, his face clearing a little. "Then they'll begin to live sanely and sensibly, and spend the money as it should be spent. Of course, you couldn't expect them to know what to do, at the very first, with a sum like that dropped into their laps. What would you do yourself? Yes, what would you do?" repeated Mr. Smith, his face suddenly alert and interested again"What would you do if you should fall heir to a hundred thousand dollars—to-morrow?"

"What would I do? What wouldn't I do?' laughed Miss Maggie. Then abruptly her face changed. Her eyes became luminous, unfathomable. "There is so much that a hundred thousand dollars could do—so much! Why, I would—" Her face changed again abruptly. She sniffed as at an odor from somewhere. Then lightly she sprang to her feet and crossed to the stove. "What would I do with a hundred thousand dollars?" she demanded, whisking open a damper in the pipe. "I'd buy a new base-burner that didn't leak gas! That's what I'd do with a hundred thousand dollars. Are you going to give it to me?"

"Eh? Ah—what?" Mr. Smith was visibly startled.

Miss Maggie laughed merrily.

"Don't worry. I wasn't thinking of charging quite that for your board. But you seemed so interested, I didn't know but what you were going to hand over the hundred thousand, just to see what I would do with it," she challenged mischievously. "However, I'll stop talking nonsense, and come down to business. If you'll walk this way, Mr. New Boarder, I'll let you choose which of two rooms you'd like."

And Mr. Smith went. But, as had occurred once or twice before, Mr. Smith's face, as he followed her, was a study.

CHAPTER XIII
The Dancing Begins

Christmas saw many changes in the Blaisdell families.

The James Blaisdells had moved into the big house near the Gaylord place. Mrs. Hattie had installed two maids in the kitchen, bought a handsome touring car, and engaged an imposing-looking chauffeur. Fred had entered college, and Bessie had been sent to a fashionable school on the Hudson. Benny, to his disgust, had also been sent away to an expensive school. Christmas, however, found them all at home for the holidays, and for the big housewarming that their parents were planning to give on Christmas night.

rank Blaisdells had also moved. They were occupying a new house not too far from the grocery store. They had not bought it yet. Mrs. Jane said that she wished to live in it awhile, so as to be sure she would really like it. Besides, it would save the interest on the money for that much time, anyway. True, she had been a little disturbed when her husband reminded her that they would be paying rent meanwhile. But she said that didn't matter; she was not going to put all that money into a house just yet, anyway,—not till she was sure it was the best they could do for the price.

They, too, were planning a housewarming. Theirs was to come the night after Christmas. Mrs. Jane told her husband that they should not want theirs the same night, as Hattie's, and that if she had hers right away the next night, she could eat up any of the cakes or ice cream that was left from Hattie's party, and thus save buying so much for herself. But her husband was so indignant over the idea of eating "Hattie's leavings" that she had to give up this part of the plan, though she still arranged to have her housewarming on the day following her sister-in-laws.

Mellicent, like Bessie, was home from school, though not from the same school. Mrs. Jane had found another one that was just as good as Bessie's, she said, and which did not cost near so much money. Mr. Smith was not living with them now, of course. He was boarding at Miss Maggie Duff's.

Miss Flora was living in the same little rented cottage she had occupied for many years. She said that she should move, of course, when she got through her mourning, but until then she thought it more suitable for her to stay where she was. She had what she wanted to eat, now, however, and she did not do dressmaking any longer. She still did her own housework, in spite of Harriet Blaisdell's insistence that she get a maid. She said that there was plenty of time for all those things when she had finished her mourning. She went out very little, though she did go to the housewarming at her brother Jame's—"being a relative, so," she decided that no criticism could be made.

It seemed as if all Hillerton went to that house-warming. Those who were not especially invited to attend went as far as the street gate, and looked on enviously. Mrs. Hattie had been very generous with her invitations, however. She said that she had asked everybody who ever pretended to go anywhere. She told Maggie Duff that, of course, after this, she should be more exclusive—very exclusive, in fact; but that this time Jim wanted to ask everybody, and she didn't mind so much—she was really rather glad to have all these people see the house, and all—they certainly never would have the chance again.

Mr. Smith attended with Miss Maggie. Mrs. Hattie had very kindly included him in the invitation. She had asked Father Duff, too, especially though she said she knew, of course, that he would not go—he never went anywhere. Father Duff bristled up at this and declared that he guessed he would go, after all, just to show them he could, if he wanted to. Mrs. Hattie grew actually pale, but Miss Maggie exclaimed joyfully that, of course, he would go—he ought to go, to show the proper respect! Father Duff said no then, very decidedly; that nothing could hire him to go, and that he had no respect to show. He declared that he had no use for gossip and gabble and unwholesome eating; and he said that he should not think Maggie would care to go, either,—unless she could be in the kitchen, where it would seem natural to her!

Mrs. Hattie, however, smiled kindly, and said, of course, now she could afford to hire better help than Maggie (caterers from the city and all that), so Maggie would not be in the kitchen, and that with practice she would soon learn not to mind at all being 'round among folks in the parlor.

Father Duff had become so apoplectically angry at this that Mr. Smith, who chanced to be present, and who also was very angry, was forced to forget his own wrath in his desire to make the situation easier for Miss Maggie.

He had not supposed that Miss Maggie would go at all, after that. He had even determined not to go himself. But Miss Maggie, after a day's thought, had laughed and had said, with her eyes twinkling: "Oh, well, it doesn't matter, you know,—it doesn't really matter, does it?" And they had gone.

It was a wonderful party. Mr. Smith enjoyed it hugely. He saw almost everybody he knew in Hillerton, and many that he did not know. He heard the Blaisdells and their new wealth discussed from all viewpoints, and he heard some things about the missing milliorare benefactor that, were particularly interesting—to him. The general opinion seemed to be that the man was dead; though a few admitted that there was a possibility, of course, that he was merely lost somewhere in darkest South America and would eventually get back to civilization, certainly long before the time came to open the second letter of instructions. Many professed to know the man well, through magazine and newspaper accounts (there were times when Mr. Smith adjusted more carefully the smoked glasses which he was still wearing); and some had much to say of the millionaire's characteristics, habits, and eccentricities; all of which Mr. Smith enjoyed greatly.

Then, too, there were the Blaisdells themselves. They were all there, even to Miss Flora, who was in dead black; and Mr. Smith talked with them all.

Miss Flora told him that she was so happy she could not sleep nights, but that she was rather glad she couldn't sleep, after all, for she spent the time mourning for poor Mr. Fulton, and thinking how good he had been to her. And that made it seem as if she was doing something for him. She said, Yes, oh, yes, she was going to stop black mourning in six months, and go into grays and lavenders; and she was glad Mr. Smith thought that was long enough, quite long enough for the black, but she could not think for a moment of putting on colors now, as he suggested. She said, too, that she had decided not to go to Niagara for the present. And when he demurred at this, she told him that really she would rather not. It would be warmer in the spring, and she would much rather wait till she could enjoy every minute without feeling that—well, that she was almost dancing over the poor man's grave, as it were.

Mr. Smith did not urge her after that. He turned away, indeed, rather percipitately that Miss Flora wondered if she could have said anything to offend him.

Mr. Smith talked next with Mrs. Jane Blaisdell. Mrs. Jane was looking particularly well that evening. Her dress was new, and in good style, yet she in some way looked odd to Mr. Smith. In a moment he knew the reason: she wore no apron. Mr. Smith had never seen her without an apron before. Even on the street she wore a black silk one. He complimented her gallantly on her fine appearance. But Mrs. Jane did not smile. She frowned.

"Yes, I know. Thank you, of course," she answered worriedly. "But it cost an awful lot—this dress did; but Frank and Mellicent would have it. That child!—have you seen her to-night?"

"Miss Mellicent? Yes, in the distance. She, too, is looking most charming, Mrs. Blaisdell."

The woman tapped her foot impatiently.

"Yes, I know she is—and some other folks thing so, too, I notice. Was she with that Pennock boy?"

"Not when I saw her."

"Well, she will be, if she isn't now. He follows her everywhere."

"But I thought—that was broken up." Mr. Smith now was frowning.

"It was. You know what that woman said—the insult! But now, since this money came—" She let an expressive gesture complete the sentence.

Mr. Smith laughed.

"I wouldn't worry, Mrs. Blaisdell. I don't think he'll make much headway—now."

"Indeed, he won't—if I can help myself!" flashed the woman indignantly.

"I reckon he won't stand much show with Mellicent—after what's happened."

"I guess he won't," snapped the woman. "He isn't worth half what she is now. As if I'd let her look at him!"

"But I meant—" Mr. Smith stopped abruptly. There was an odd expression on his face.

Mrs. Blaisdell filled the pause.

"But, really Mr. Smith, I don't know what I am going to do—with Mellicent," she sighed.

"Do with her?"

"Yes. She's as wild as a hawk and as—as flighty as a humming-bird, since this money came. She's so crazy with joy and excited."

"What if she is?" challenged Mr. Smith, looking suddenly very happy himself. "Youth is the time for joy and laughter; I'm sure I'm glad she is taking a little pleasure in life."

Mrs. Blaisdell frowned again.

"But Mr. Smith, you know as well as I do that life isn't all pink dresses and sugar-plums. It is a serious business, and I have tried to bring her up to understand it. I have taught her to be thrifty and economical, and to realize the value of a dollar. But now—she doesn't see a dollar but what she wants to spend it. What can I do?"

(Continued in March 15th issue.)

THE STORY TO DATE

MR. STANLEY G. FULTON, 50-year old bachelor and possessor of twenty million dollars, calls on h' lawyer and they discuss the disposition of this large fortune after its owner's death. The lawyer is in favor of giving the money to colleges or charities while Fulton is opposed to these ideas. He remembers that he has some distant cousins and decides to leave the money to one of them, but first he determines to learn which one will use it to the best advantage. To find out who is the worthy one he, through his lawyer, gives, each cousin $100,000 to use as they will. Before giving them the money grows a beard and, using the name of Mr. John Smith, goes to the town where they live to find out what kind of people they are. Upon arriving in town he visits James Blaisdell, one of the cousins, where he tries to hire board and lodging. While there he meets Miss Flora Blaisdell, another cousin who is a dressmaker. They decide they cannot rent a room to him and supply him board and refer him to Frank Blaisdell's, the third cousin. He gets a room there and, passing as a writer gathering material for a book on the Blaisdell family in this country, he starts out. He calls on all of the Blaisdells and as they all talk of a relative by the name of Miss Maggie Duff he decides to call on the lady. He finds her living with her father, an old man who seems to have soured on the world. He secures what information he can from her and her father. He then writes a letter to his lawyer discussing the various relatives he has met. The members of the Blaisdell family learn that each cousin of Stanley G. Fulton has fallen heir to $100,000 and there is much excitement.

FARM MECHANICS

BREAKING IN THE NEW TRACTOR

NO doubt many of our readers are contemplating the purchase of a new tractor for spring work. To those who are I want to pass on to you a word of caution about breaking it in.

It is not advisable for you to wait to get the tractor until you want to use it and then put it to work right away pulling a plow. It wants to be worked in gradually at not too heavy a load.

You are familiar with the notice pasted on the windshield of practically every new car, cautioning purchasers not to drive the car over twenty-five miles an hour for the first five hundred miles. You would not think of loading seven or eight heavy persons into a five-passenger car and try to see how many miles you could cover in a given length of time or how steep a grade it would pull on high with that kind of a load.

That probably would not do as much damage to the car as putting a new tractor to work plowing ten or twelve hours a day the first thing would do to a tractor. There is just as much reason for "easing in" the tractor as there is for driving a car carefully for the first five-hundred miles, or starting in a team of horses that is soft after three or four months of idleness.

The reason why it is necessary to work in a new tractor gradually is because it takes time to wear down the wearing surfaces of bearings, pistons, and cylinders. All tractors are run for several hours at the factory, but not long enough so that the wearing surfaces of the pistons and cylinders are worn down smooth enough so there will be no danger from scoring when the machine is put to heavy work.

If the tractor is started off at light work the wearing parts of pistons, cylinders, and bearings attain a working surface gradually and do not become overheated or scored. As they become worn in it is easier to lubricate the various working surfaces properly so that when the machine is called upon to do heavy work it will handle it without serious injury.

A tractor, or any machine in fact, will well repay the owner for the care taken in seeing that it is worked in gradually. It will avoid a lot of trouble and expense. Many a tractor has been practically ruined by failure to observe this caution, thus bringing the wrath of the owner on the tractor and its manufacturer when the fault is really his own, in not observing a few simple precautions that were, or should have been at least, explained to him by the manufacturer's representative.

I would, therefore, advise that those readers who have definitely decided to buy a tractor this spring get delivery as early as possible so that they will have an opportunity to give it as much use as possible before they are ready for the heavy work of plowing. If you cannot do any better, let it run idle for several hours each day, and see that it gets plenty of lubrication. There may be light belt work that you can do with it such as sawing wood, grinding feed, etc., or it can be used for hauling manure, or harrowing.

If you haven't any work for it to do until you get ready to plow, spend a few hours as often as you can playing with it—just drive it up and down the lane or out in the fields to get familiar with handling and operating it. It will not only be good experience, but it will also be a mighty good thing for the tractor.

A CHEAP AND RELIABLE HOUSEHOLD CEMENT

CURDLE skim milk with vinegar or rennet, press out the whey and dry the curd at a gentle heat, but as rapidly as possible. When perfectly dry, grind it to powder in a mortar, and mix it with one-tenth its weight of dry quicklime in fine powder. To every ounce of the mixture add five or six grains of powdered camphor. Reduce the whole to a fine powder by rubbing with back of heavy spoon or pestle, and keep in a wide-mouthed bottle well corked. When required for use, mix it into a paste with a little water, and apply immediately.

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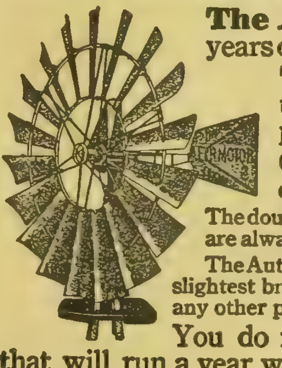

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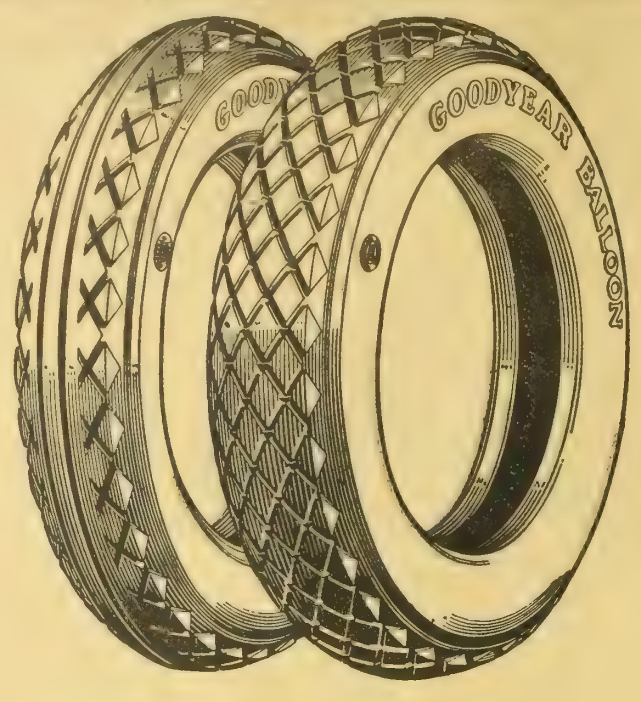

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Development Congress Discusses Taxes

THE problems of taxation vied with those of reforestation at the Tri-State Development Congress which met in Duluth recently, and received the major portion of attention. 200 delegates representing Wisconsin, Minnesota, and Michigan listened to Dr. R. L. Ely, noted authority on agricultural economics, Mr. J. C. Watson of the Illinois Agricultural Association, and E. G. Quamme, President of Federal Land Bank, discuss this all important matter of taxes. Dr. Ely said, "Unless the present tendency toward governmental agencies and commissions, toward greater bond issues, and toward continued issuing of tax-exempt securities, ceases, land taxes will soon reach the point of confiscation—the government will own all the land and farmers will be tennants. 66 per cent of the annual value of land is now going toward taxes. The farmers and the railroads enjoyed the highest rate of taxation in Wisconsin during the past two years. Every attempt to "swat the rich" by dircet taxes result in a greater ax for the landowner and consumer. Disaster awaits us unless we begin to practice real economy in government, unless we stop asking the government to do more things for us—creating this paternalistic attitude—unless we return more to the indirect tax. In 1910 only 3 per cent of our revenue was derived from direct taxes, but in 1920 it was 20 per cent. Demagogs and politicians have been promising us from time immemorable that they will reduce taxes if elected but not a one of them has ever done so. We, ourselves, are at fault because we are continually urging some new commission or agency. The income tax is a fair tax and should be retained."

A resolution was drawn up and heartily endorsed, pointing out the impending danger as taxes on land approach the point of confiscation, urging the research to discover ways and means for more equitable distribution of taxes, and questioning the wisdom of further issuance of tax-free securities.

In the discussion on the utilization of the idle lands in northern Michigan, Minnesota, and Wisconsin, Mr. Herman Lundin of Michigan sounded the keynote when he said, "The hope of these states and the hope of the nation lies in the reforestation of idle land, preferably by private capital but by governmental agencies if necessary. Without more adequate fire protection or without a better system of taxation, however, we will never realize this hope." In this sentiment he was echoed by all prominent men present such as the deans of the three Agricultural Colleges, Dr. R. T. Ely, an authority on agricultural economics, and Rapheal Zon, Director of Lake States Forest Service Station. Mr. Zon said, "With only three states east of the Mississippi River showing an increase of acres of land put into farms over those abandoned, it is useless to talk of putting these acres of marginal land to better use than forestry. Rather than permit them to be idle let them produce a crop of lumber which will be valuable enough in a generation from now." Another speaker pointed out that even in Wisconsin, the foremost in colonization methods, last year 90,000 acres of farm land was abandoned while 100,000 acres were being incorporated into farms. In most cases this better farming land was found in so-called cut-over country. He pointed out that all lands could be classified as good agricultural land, as marginal, or submarginal. During emergencies, such as the World War, the marginal lands are brought under cultivation and are made to pay because of the high prices, but it is an economic waste to work them during periods like those we are in now. The submarginal will probably never be used for agricultural purposes and should be utilized for permanent forest while the marginal should produce a crop of early maturing timber and may be returned for agricultural purposes if conditions are favorable.

Dr. Ely said, "We deplore the present paternalistic tendency of our government—a government that is more and more doing the things for us that we should be doing ourselves. It is a dangerous thing but it is the only way that we will have the proper reforestation unless our states furnish adequate fire protection and cease to penalize, by severe taxes, the growing of timber." In a carefully prepared speech Mr. Lundin described the plan of taxation of forest lands as incorporated in the bill which he introduced in the Michigan Legislature of 1923. He propose that the land be taxed at 5c an acre but that no tax be levied against the growing timber until it was harvested when the tax would be as many per centums as the years the forest had been exempt. In other words, if the timber was harvested 25 years later, the tax would be 25 per cent of the value. To recompense the townships for the loss in taxes the local townships could borrow, the money to be returned when the taxes from the lumber harvest came in. "Such a system of taxation," said Mr. Lundin, "is being used in the Scandinavian countries with great success. It brings about reforestation by private individuals as a regular crop, it provides wealth for the townships in later years, it preserves our game and fish, it provides places for recreation and rest, and it benefits agriculture by bringing about a better distribution of the rain-falls." "But", he concluded," We must have fire protection." His plan met with the approval of those present and will probably be advocated in all three states as the uniform law for taxing lands devoted to forestry.

Dean R. S. Shaw of Michigan Agricultural College took a prominent part in the discussions. In a splendid discourse at the banquet he said, "There never was a more critical period ahead of the American people as far as agriculture is concerned. The success of this great industry in the past gained through exploitation of the soil. The three things that will contribute to the success of the nation or any nation in the future are the fertility of the soil, adequate transportation, and busy workshops. We must see to it from now on that real farming keeps away from the undesirable system of exploitation."

Dean Coffey of Minnesota sees a great industrial development in Lake States provided the raw materials, particularly forest products, remain available. He said, "Agriculture and forestry are basic to future prosperity and greater development of the three states. They should supplement each other; the settler should grow, utilize and market timber the same as he does other crops. We foresee a great industrial development for the region, but in order to achieve this development the intelligent utilization of land is necessary, for industrial development is contingent upon a supply of raw products, and at least half of our raw products for manufacturing in the United States comes directly from farms and forests.

"We are the great playground of the Middle West. To be permanently successful in attracting tourists we shall have to make intelligent utilization of land."

Dean Russell of Wisconsin pointed out the relations between industry and agriculture. He said, "Fat cities cannot build on a lean countryside."

It seemed to be the consensus of opinion that a great future awaits the Lake States if (1) taxes on land can be reduced, (2) our idle lands utilized by growing timber crops, (3) continued adequate rail transportation coupled with increased water route facilities.—E. J. Leenhouts.

OUR BOOK REVIEW

(Books reviewed under this heading may be secured through The Michigan Business Farmer, and will be promptly shipped by parcel post on receipt of publisher's price stated.)

The Potato.—By William Stuart. This book explains the culture, cultivation, harvesting, shipping, storage and marketing angles—enumerating conditions peculiar to the North, South, East and West. Various planting methods, influence of the soil, temperature, moisture, varieties to grow, crop rotation, kind and amount of seed to use are made intelligible with plain, everyday text. New and up-to-date potato machinery pictured in action. This complete course in potato culture is a good investment for the young farmer planning to grow his first crop: for the student, shipper, buyer, seedsman, gardener, and practical farmer who wishes to keep abreast of the latest developments. Published by J. B. Lippincott Co. Price $3.00. Postage or express charges extra.

Uncle Rube Spinach Says:

WOMENS RIGHTS, ETC.

SOMETIMES I git letters from sev'ral an' var'ous women askin' 'bout women's rights an' vice versa, or what ever they call 'em—have they got all their rights, what are they, how'd they git 'em an' what are they for; in fact, lots of women don't seem to know what they want nor what rights they've got.

You know there's mightly few women, if they'd stop an' consider the matter, that'd want to have jest the rights that mere men have got. Fact is, if we'd pin women down to men's rights they'd raise—well the dickens, blazes an' everything. Why folks, if women was pinned down to jest the rights men has you an' I, an' mebby Bill Bryan an' Coolidge 'ud be 'bout the only ones that could live with 'em or nigh 'em now 'an forevermore.

Jest cut 'em right down to our rights—well, jest make 'em pay alimony for 20 or 30 years, let 'em pay a few breach of promise things, give 'em a fine of ten thousand or more dollars for kissin' one of us unprotected male men, send 'em to jail if they speak to us on the street 'thout a pleeceman's introduction. put 'em in a padded cell 'thout pads if they cast vampy eyes onto us—well they do them things to men, yes even for less'n anything like what I've mentioned. Why a man can't even slap a woman's face 'thout bein' haled 'fore a Justice an' fined or sent to prison for life or longer. Now you know a woman can slap a man ragged 'thout no provocation a tall hardly—jest in defense of her honor or whatever it is she slaps him for an' he ain't got a word to say 'bout it—he has no honor to be mussed up or whatever they do with what a man ain't got. A woman can git excused from jury duty on 'count of sex—a man can't do that. Women can run away from their husbands an' the law can't touch 'em for it. Let a man try runnin' away from his wife and he lands in jail. Wife can hold one-third interest in her husband's property—a man can hold nothin' but his temper an' hardly that.

Women can sue for divorce an' man has to pay all expenses—even in the marriage game itself. Who pays for the license? Who pays the preacher? Who buys the weddin' ring? Who keeps it if the thing its for busts up? Equal rights! Equal'ty of the sexes! Dear folks, there ain't no such animal known—there couldn't be—not in ten thousand years. An' if women 'ould only study the matter jest a little while they'd see it wouldn't be good for 'em to have any such thing. Fact is, they wouldn't want it at all.

Sad indeed 'ould be the day for this ol' world if men and women could be on an equal footin'—women would have to come down off'n the high pedestal; (what ever that is) they'd have to lower themselves by a good many degrees from where men themselves have placed 'em.

Woman with all her lovliness, with the great mother love, the motherhood that belongs to her alone, can never become man's equal. She must always remain his superior. In all the finer things of life woman is at the top. She makes the home bright, she is the joy of life, she has more nerve, more hope, more love than any man can ever have.

Yes by gravy, she has more privileges than men an' she should o'rt to have 'em for she is the maker an' the finisher of all that is good an' noble in man's life! An yet I'm kinda sorry to say, lots of our fine, nice women ain't satisfied with what they've got—they seem to want to come down to men's level, to be on an equality with them. Oh my dear women friends, jest thank our good God that you are not man's equal—that you are so much above him in all that is good an' lovely that he can never hope to reach your level.

I am not writin' this in any sentimental mood—I don't like women 'specially well myself, but I know somethin' of the lovliness of 'em—of the mother heart that's in 'em, an' I am sayin' to you an' every lady 'at I never want to see women on an equality with men unless men get on a higher plane than they've ever been an' I guess mebbe higher 'an' they ever will be.

Womans rights mebbe is a nice thing. I'll say its all right an' they've got a lot more'n we poor cusses'll ever have. I'm glad they got 'em—but equality! No my dear women of the she sex, I don't never want to see no such thing as that, least-wise not into this world as she is today. Cordially yours.—UNCLE RUBE.

FOR THE BABIES!

Detroit, January 18, 1924.
Michigan Business Farmer,
Mt. Clemens, Michigan.
Attention Mr. Geo. M. Slocum.
Gentlemen:—

A few days ago I had the pleasure of receiving your check for $189.00 through Mr. Richard Koehler, which, by your noble efforts, you collected for the German babies feeding fund. The same was immediately forwarded to Germany for the purpose indicated.

On behalf of the committee I wish to offer sincere thanks for your action which we notice was entirely voluntary, and coming from a non-German publication, it is doubly appreciated. Your sincerely.—Chas. L. Beck, Sec'y., German Child Feeding Campaign, Detroit.

ARE FRUIT GROWERS WILLING TO PAY MORE FOR TREES?

(Continued from Page 4)

and, if he is making an honest pack, he would have to pay for service not needed. Mixing of varieties needn't occur where experienced men do the packing.

4. What about replacement of varieties, if under certification some should slip through that were not true to name?

5. If the inspector were the least bit in doubt, he would err on the side of safety and throw out some trees of known variety.

Last winter at a meeting of the Ontario fruit growers, it was stated that some nurseries in that province as well as some in the states, used to practice substitution of varieties; if they had not the variety asked for, they would give what they considered the next best thing.

That there was truth in this statement is evident from the experience related by one of the Ontario men present. He said that in 1912 he bought 1,000 Morello cherries, and when they came into bearing, there were only 800 Morellos; there were 100 Early Richmond trees and 100 of other worthless varieties. In 1913, 200 Monarch plum trees were bought, and 120 turned out to be Green Gage. In 1916, he bought 500 Bartlett pears, and 75 turned out to be Bosc.

Professor Macoun, horticulturist at the Ontario agricultural college, says they have been studying identification of apples for several seasons and have made application for a man to go into growers' orchards and pick out trees not true to name.

Can this work be extended to other fruits than apples? Yes—and it is just as essential with other fruits, if not more so. It apples turn out to be worthless they can be topworked, but this is not true of peaches, pears, plums, cherries.

In view of all these facts, if I were a fruit grower (and I used to have a large orchard) I would want certified trees. I believe other growers would pay the extra cost for them, too. And if I were a nurseryman, I would try to give the growers what they want. A satisfied customer you know, is the best kind.

Wrong Name

A local doctor recently was paid a visit by a young negro who complained of pains in the chest, from which he could get no relief. The doctor made ready for an examination, and applying his stethoscope, said:

"I don't like your heart action. You've had some trouble with anigina pectoris, haven't you?"

"You is kinda right, doc," said the young exaggerated brunette, grinning sheepishly, "only that ain't her name."

Zinc Insulated TRADE MARK **Fences**

No Extra Cost

INSULATED AGAINST RUST

40% TO 100% MORE ZINC

AMERICAN, ANTHONY, ROYAL,
NATIONAL, ELLWOOD, U. S.

Our New Wire Has Double the Heat Treatment in the Zinc Bath—the Proper and Only Way to Give a Heavier Coating with Lasting Quality

This new galvanizing *insulates* the wire with zinc, or spelter. The wire passes through a long molten bath where it accumulates this greater protective coating, *impregnating the steel.*

You know, of course, that all fence wire is galvanized—to protect it from rust—to make it last longer, in all kinds of weather.

Perhaps you *don't* know that there's as much difference in galvanized coatings as there is in the thickness of bark on trees.

It is not only the amount of zinc applied that gives the wire long life, but the coating must be uniform and even to be durable *and made inseparably a part of the steel.*

The temperature of the bath, the great length of time the wire takes to pass through it, the great amount of zinc that can be applied by this process without cracking or peeling—all these are important factors.

Our Zinc Insulated Wire Fences Have 40% to 100% More Zinc Than Other Fences

Our Zinc-Insulating process perfectly protects the wire. It repels rust. It protects the wire from the oxygen in the air and the storm elements. It safeguards the steel.

By this process the zinc is practically a part of the steel, giving it a super-protection that adds many years to the life of the wire. As a result, OUR WIRE FENCE WILL OUTLAST ANY OTHER WIRE FENCE MADE, and its use greatly reduces your fence cost per year—to say nothing of the better protection its staunchness and sturdiness insures.

All our Farm Fences — of every brand — American, Royal, Anthony, National, Ellwood and U. S. — are Zinc-insulated—*at no extra charge.*

Some wire fence makers market several qualities—a very small percentage of their to al production bearing even good galvanizing, and that usually sold at a marked price advance. It all looks alike. You can't tell the grades apart. We make one grade only.

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Your local dealer sells Zinc Insulated Fence and we stand back of him for your protection. We prepay the freight to the dealer.

American Steel & Wire Company

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EDITED BY J. HERBERT FERRIS, R. E.

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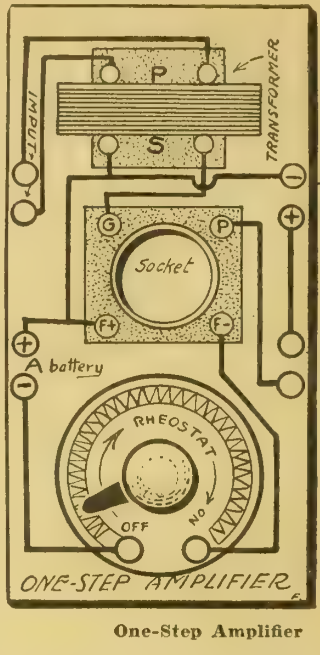
WE will now tell you how to build an amplifier which can be connected to the receiving set previously described. This will enable several people in a room to hear what your radio brings in.

The type of amplifier that we are going to describe is one that's called an audio-frequency amplifier; this is because it amplifies or increases the audible sounds that your detector and receiving set pick up. There is another type of amplifier that is for radio - frequency amplification, this we will not take up at present as we are more interested in getting louder results from the set that we have already built.



One-Step Amplifier

One step of amplification will add quite a bit more volume to your results but the addition of a second step adds so much greater a volume that it will pay to build a two step amplifier in preference to a one step. Directions will be given for both, (and as we realize that the pocket book is a governing factor) that if you cannot build a two step by all means build a one step.

List of Parts for One-Step Amplifier and Approximate prices

1 Socket for WD-12 tube	$ .75
1 WD-12 Vacuum tube	6.50
1 6-ohm rheostat	.75
1 Audio frequency amplifier	4.00
6 Binding posts	.50
1 22½ volt "B" battery	1.50
1 No. 6 dry battery (three of these are better)	.50
	$14.50

For a two step amplifier you will need 2 or each of the above items except the binding posts, "B" battery and the No. 6 dry cells.

Remember that on your detector you are only using a "B" battery of 22½ volts, whereas the amplifier will need at least 45 volts. The battery you use for your receiving set is also used in the amplifier, both the "A" and "B" batteries.

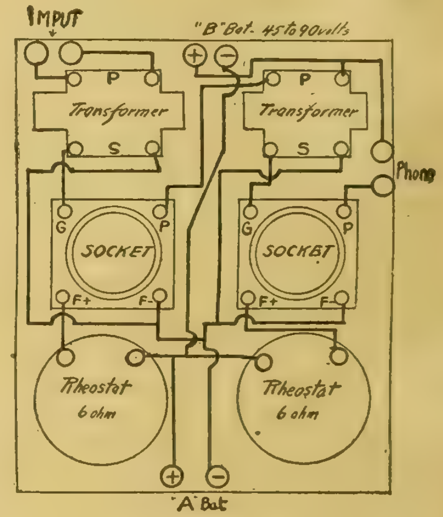
You will also need some short pieces of "bell wire" for making connections and a piece of wood for the base and another for the front panel.

We are showing two diagrams with this article, so that if you have ordered the parts for your amplifier you can build either one-step or two-step amplifier to add to your receiving set.

As stated before, we wish to emphasize it, a one-step amplifier adds very little more volume to the received signals, whereas the second step adds a very great deal more in proportion. The one-step will make music and voices that ordinarily are barely hearable loud enough to understand perfectly in the telephone receivers. The addition of a second step will make everything too loud for the telephone receivers, but will enable you to use a horn attachment to your receivers so that a roomfull can hear what is going on. It also will enable you to attach your receivers to your phonograph so that you will get the benefit of the specially designed horn that all talking machines have. You can buy (if you wish to spend the money) a regular loud talker (or speaker) and get volume enough to fill a hall or church or school.

In the list of materials given for the amplifier, we have only given one "B" battery, stating that with the one you have for your detector that you will then have 45 volts in your B battery. An amplifier will give good results with only 45 volts, but 67 to 90 volts will give much greater amplification in volume of sound received. So for loud results you will need three or four B batteries.

Do not buy 45 volt batteries or 90 volt batteries, for the reason that if any part of it proves defective the whole battery is ruined. If you buy separate units of 22½ each and connect them in series, you can see that if one set goes bad you have only lost one battery of 22½ volts instead of 45 or 90 volts. This is much easier on the pocket book.

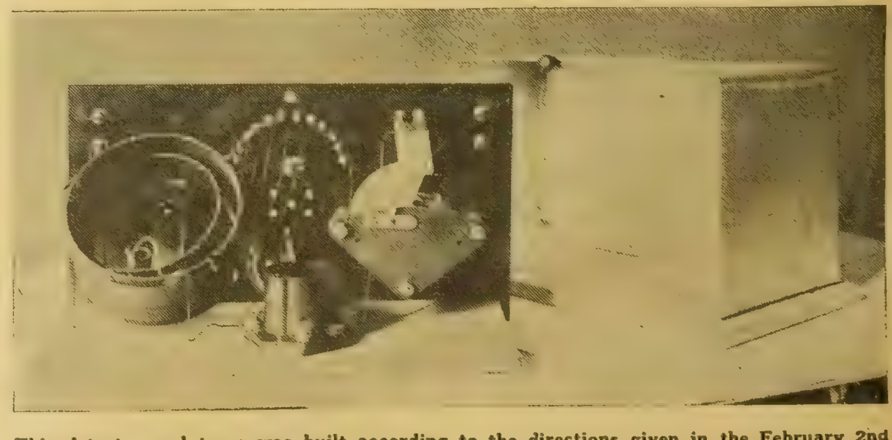


Two-Step Amplifier

Now to work!

Look over the diagram carefully, arrange all the parts approximately as shown, then make each connection from the binding posts to the instruments in turn. Solder all joints or if placed under nuts or screw heads be sure that the wire is clean and the screw head is clean and then tighten down good and tight. Good contacts depend upon the thoroughness with which you keep the parts clean, the care taken and soldering wherever possible.

It is not necessary to tell you how to make each connection, but it is necessary that you follow the diagram carefully. We have used graphic representations of the

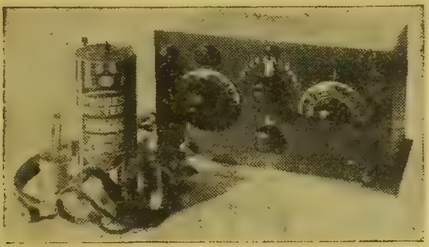


This detector and tuner was built according to the directions given in the February 2nd issue, except that as I use different tubes I have added the rheostat recommended in the February 16th issue. This shows how the instruments are placed.

different parts instead of the conventional symbols.

The binding posts and the rheostat are mounted to the panel which is fixed to the base with screws. The panel and base should be treated with parrafin or shellac as previously used on your detector set. Hard rubber or bakelite is much better. The exact position of the binding posts and other parts is not fixed but should be followed fairly closely. The shorter the wire leads are the better the results.

To connect this amplifier to your receiving set do as follows: Connect your A battery to the posts marked A, the positive to the positive post and the negative to the negative post. The B battery is connected next to it's posts. Your telephone receivers are removed from your receiving detector set and attached to the amplifier post marked "Phone" and two wires are run from your detector from the posts that you just took the telephones from and connected to the 2 posts marked "imput."



With this receiving set, which was described in our issue of February 2nd, I have heard stations 1,000 miles away.

To tune in, turn on the current with the rheostat of your amplifier about one half way and then tune your detector set as you previously did before adding the amplifier. You should now hear any broadcast much louder than before, it may be a little "mushy" but by adjusting the rheostat of the amplifier up or down a little you will clear up the voices so that they will sound natural.

Always burn your bulbs as low as possible, just so that you get the results, it does not pay to force them too high as the life is shortened and the batteries are used up sooner and above all the results in tone or sound are not satisfactory.

GOOD NEWS FOR YOU

The price on vacuum tubes for detectors and amplifiers have come down and instead of paying $6.50 each they can be bought for $5.00 to $5.50 each.

A VOICE FROM OUT OF THE SNOWBOUND NORTH

We are buried under about four feet of snow up here and if it wasn't for the Radio we would just about give up living on the farm as a bad job, but since we got it we do not care whether the snow gets to the eaves or not so long as it does not cover our wires.—Mrs. C. A. B., Hiawatha, Mich.

Questions and Answers

SEND IN YOUR QUESTIONS

I recently read a report that farmers were not taking much interest in radio but from the number of letters that pour into my office each day I am sure that the report did not refer to the farmers of Michigan. So far we have been able to publish only a few questions and answers due to shortage of space, but every question that comes in receives my best attention and a personal reply without charge to the reader. We hope to have room for more of these in our department in the future as many ask questions that are in the minds of many who are interested and the answers will prove of general interest. Send along those questions as I will answer them by an early mail. Let's get a radio receiving set while it is good "radio weather." Or if your set is not working right maybe I can help you.

SENDS FOR PARTS

I am enclosing my check for $25. Will you please purchase for me, and send by parcel post (or express if it would be better) the complete equipment listed in M. B. F. of Feb. 2nd, for building a radio receiving

(Continued on Page 19)

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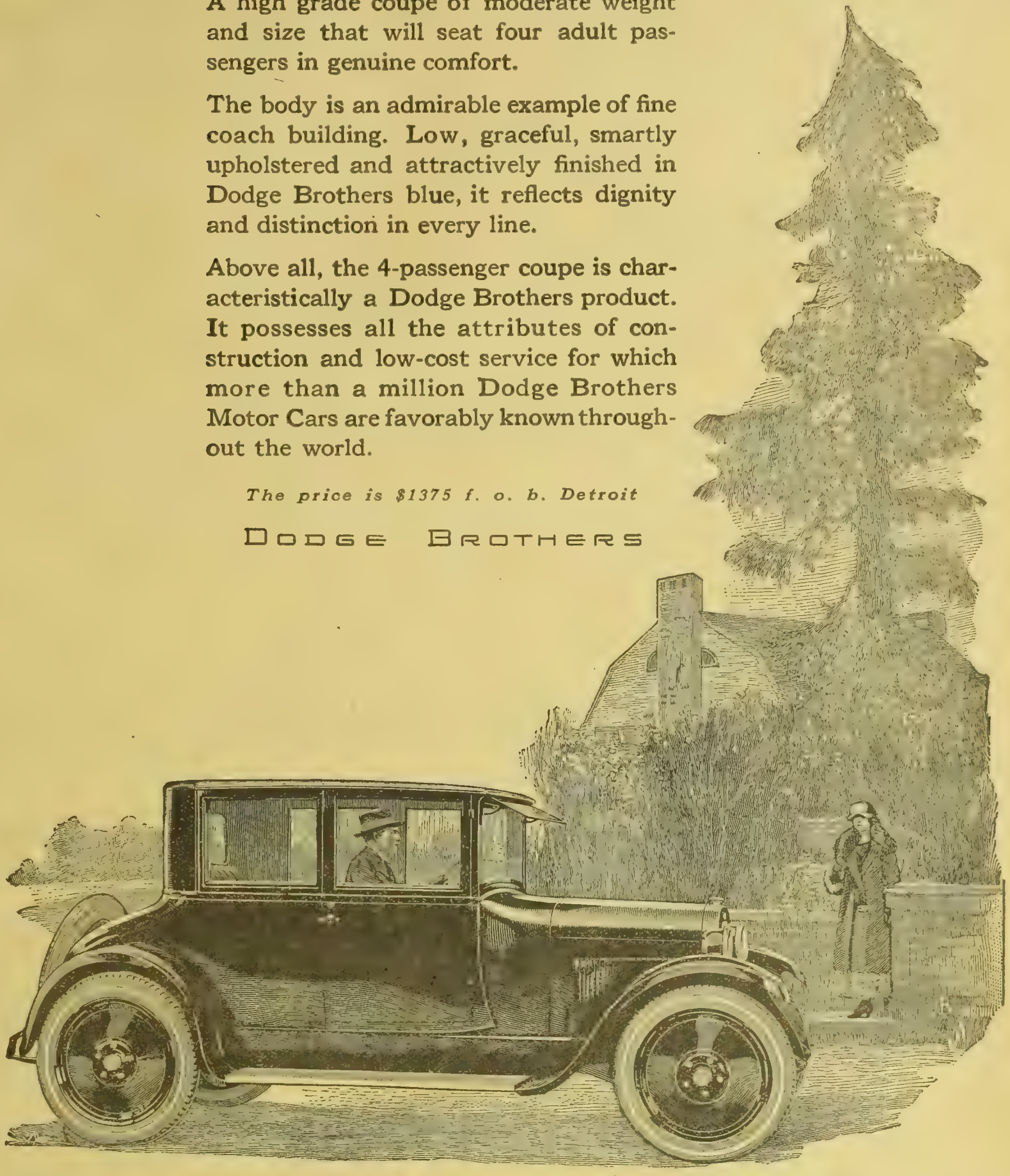

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The Michigan
BUSINESS FARMER

SATURDAY, MARCH 1, 1924

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"The Farm Paper of Service"

KEEP COOL-IDGE!

THERE is little doubt but what the Republican rallying cry for this year's campaign will be "Keep Cool-idge!" Calvin Coolidge is famed for his especial characteristic of immunity to the popular hysteria of the moment and although small in stature he has a David-like capacity for aiming straight with a single word at the vulnerable point of his opponent.

Into a calm political sea in which the bark which bore his colors was riding peacefully to a harbor of certainty for re-election which seemed ahead only as far as November, came a veritable typhoon in the shape of the Teapot Dome oil graft exposure. The Democrats looked on while the fleet of Republican cabinet officers were being tossed high on the waves of public opinion and finally dashed one by one on the rocks of sacrifice, but their contentment was shortlived when the cyclone switched its tail, as cyclones will, hitting the Democratic pride of the fleet so hard a blow that it is doubtful if the most able politicians of that party will be able to resurrect the good ship "McAdoo" from the dephths where it now lies.

Michigan had something at stake in all of this because Edwin Denby, Secretary of the Navy, is one of the national figures whom we are proud to point to as a son of this state. That he has been the "goat" in the present controversy is easily apparent to any man who knows the political game and how it is played, and that Calvin Coolidge should have defended his cabinet officer against the unwarranted attacks without the opportunity of a fair trial has only added to his standing with the sane thinking element in this state.

Calvin Coolidge, himself a Vermont farmer boy, with a keen knowledge of the hardships of his people on the rocky hillsides of that state, has shown an appreciation of the agricultural situation and a desire to remedy it which have been noted with growing approval by the farmers of this country. That he has not been led astray by radical senators who claim to represent the farming interests of this country is a proof that he can keep cool and a reason why the voters next fall are quite apt to rally to the banner "Keep Cool-idge!"

RADIO MAKES WINTER FLY

A LETTER just received from a lady reader at Hart, Michigan, closes with these lines: "The snow is piled high here but it doesn't matter so long as it does not cover the wires to our radio. With it the whole world is brought through storm, sleet, and snow into our living room, last night we listened to our President as plainly as if he had been on our own telephone."

One by one the terrors of farm isolation are being eliminated by science and invention. We have continually stated in these columns that radio was destined to be one of the greatest developments for improving farm life and keeping the boys and girls on the farm that has ever been divised. We considered that the radio ranks only second to the automobile and truck in its importance to agriculture.

It is easy to see from the correspondence addressed to the radio editor of THE BUSINESS FARMER that the interest in radio has jumped foreward by leaps and bounds this winter. We receive ten letters to every one we received a year ago, and wherever a radio is introduced on the farm it becomes the opening wedge which brings any number of outfits into each community.

A radio set may be purchased at low cost and assembled by the men and boys on the farm. J. Herbert Ferris, our radio editor has promised to help any reader of THE BUSINESS FARMER who assembles such a set to make it work satisfactorily; in other words, if you build a set according to his suggestions and it does not work satisfactorily, you may send it for him to test it out and tell you where the trouble is or correct it for you. This is a very generous offer and is made simply because there is no man in our state more keenly interested in or who will have had more to do with the development of radio on the farm than our own radio editor.

Do not hesitate to write him on any subject regarding radio. No matter how simple your questions or how intricate, we want to continue this publication as the leader in the development of this wonderful boon to the farm home which we from the first have pioneered.

THE WILLIAMS BILL

REPRESENTATIVE ARTHUR B. WILLIAMS of the Third District, Michigan, has undertaken a task which is to be commended and the plans under which he proposes to secure the results will well bear the scrutiny of every man interested in the greatest problem in American agriculture today, namely, that of safe marketing.

That Representative Williams has a keen conception of what is most needed is proven in his recent statement that:

"The critical phases of the farm situation are dealt with by a number of bills now pending in congress designed to give temporary and immediate relief. The bill that I have introduced is one intended to correct an underlying difficulty and to assist in affording permanent relief to the farmer.

"If the farmers of the country in 1920 and during the period since then had been thoroughly organized they would have been in a position very largely to have protected themselves. Instead of continuing on a war basis of production they would have curtailed to the probable needs for domestic consumption and export. Instead of doing that with reference to certain products at least, they have kept right on producing regardless of the market available to them.

"The first step in the matter of governing production is to have a well organized sales agency that is constantly in touch with the nature and volume of demand. A good sales organization in any business directs and has everything to say with reference to the kind and quantity of production. In this the farmers have been lacking. Their business, by and large, should be viewed from the same standpoint as that of the manufacturer. In times of lessened demand the manufacturer usually cuts down his production, when a lesser volume will bring more net profits than a larger volume will at ruinous prices.

"The bill that I have introduced has two general aspects. It provides a well balanced federal board to supervise and encourage the development of cooperative marketing organizations and in addition it is authorized to study the whole subject of marketing of farm products. To make recommendations from time to time to strengthen the plan undertaken and report as to conditions both in this country and abroad intimately affecting the marketing of these products with estimates as to the volume and character of products that should be produced by the farmers in any given year.

"This bill covers new ground, and I am quite aware that no doubt many valuable suggestions can be made with reference to it. I invite these and later may find it necessary to amend the bill to embody some of these ideas."

Cooperative marketing by the various branches of agricultural production is today a success. The apparent need now is a closer co-relation between the producers in the various states; in other words, there is no need for the bean growers in Michigan to proceed along individual lines if they can secure the cooperation of the other bean-growing states, although it would probably be advantageous for them to maintain their own individual selling relations and the matters of production discussed and mutually agreed upon between the various state units.

The Williams Bill coming from a Michigan representative deserves especial attention from us, and we feel that th farmers of the state and the farm organizations who represent them should go on record regarding this bill immediately and either give Representative Williams their hearty support or point out to him wherein this bill does not meet the needs as he has expressed them.

WOODROW WILSON

THE eagle has passed on! . . into the blue . .
And all the chattering of the sparrows dies.
They could not bear to see the eagle rise
Beyond the reaches that their small wings knew,
Above the housetops they could compass too—
But though they strove to blind the eagle's eyes
With fluttering wings . . to stay him with their cries,
He rose and passed—above, beyond their view.

An eagle always is a lonely one—
The far heights call to him and he must go;
But little birds cannot look on the sun.
And what an eagle knows they cannot know . .
When he is gone the small ones know, at last,
That there, above their heads, an eagle passed!

—By Roselle Mercier Montgomery.

WEXFORD FARMERS POINT THE WAY

IF you have been wondering how to get the folks in your neighborhood into a spirit of neighborliness which would make your life happier and more contented turn to page 4 of this issue and read the story of what they have done over at Manton.

There is not a community in Michigan where there is not a school house, and there is not a school house which is not available for the very purpose to which this one has been put. A community proposition such as this breaks down all the barriers of creed, secret fraternity or clanish organizations and leads all to a common footing through which to enjoy and profit by their social intercourse.

We heartily commend these Wexford County farmers for having helped to blaze a way.

THE TAX TUG O' WAR

ONE does not need to be a political diagnostic- [illegible] determine that the real reason why the Democrats and Republicans are enjoying [illegible] a merry tug o' war over the tax situation is because 1924 is an election year.

The one thing which all classes, including the farmer, capital, labor, and all other divisions of society, are solidly behind is a program which will reduce taxation in this country.

It should also be easily apparent that the one sure way to reduce taxes is to lower the cost of government operations. It is encouraging to know that this has been carried on more or less successfully, not only in the state, but in the national government during the past two years and we should not pass in this discussion without giving some credit to the men who have been active in making the present tax reduction plans even possible. The budget plan is largely responsible for these economies and that the national government should find itself with a surplus of funds with which to carry on the work of 1924 and, therefore, the possibility of eliminating the so-called "nuisance" taxes and to reduce the income tax is indeed commendable.

We doubt if the present war over the exact percentage of reduction in income and surtaxes will seriously affect the average farmer in Michigan. It is our opinion that there are many taxes which the farmer pays directly or indirectly which affect him much more seriously than that of the so-called income tax, which is applicable to so small a percentage of the men who till the farms of this country. The farmer would be quite willing to pay an income tax if his income were large enough to make such a feat possible, but during the last two or three years this particular tax has been the least of his troubles.

From our standpoint our chief interest in is a direct taxation of some sort which will spread the load evenly. We feel that agriculture was unduly burdened under the present system of taxation, and whether it be single tax, sales tax, or income tax, the fact remains that some new plan must be devised which will eliminate part of the load which the farmer is now asked to carry.

PUBLISHER'S DESK

M. B. F. READERS NOT SUCKERS!

Dear Mr. Slocum:—I am not considered a very stingy person and I am going to live up to my reputation. I have just received something that promises something good and I want to pass it along. I know you are after the frauds and I should think they would find out that the readers of old M. B. F. are not suckers. Enclosed you will find some good bait from Mr. Moriarity, of Chicago. I enjoy reading the M. B. F. very much. It is certainly clean in advertising and everything else. Very Cordially yours, W. G. Winslow, Selkirk, Michigan.

THE circular enclosed by Mr. Winslow, offered him a wonderful proposition if he would simply return a printed card to the address in Chicago. We are glad to know that he, with other readers of our page, is turning the tables and laughing at the city "rubes" who think they can sell gold-bricks to readers THE BUSINESS FARMER. Sooner or later we'll have them black-listing Michigan as a poor state in which to sell patent medicines, gilt picture frames, oil stocks and canvas automobile tires—then what will we have to smile over?

OFFER SHUT—IN $100 A WEEK

Dear Sir:—Am certainly interested in your articles of the Publisher's Desk and in fact the whole of THE BUSINESS FARMER which my father takes. Have been on the sick list for the past two years with operations and other trouble, but am gaining fairly well now. So I am writing you if you would advise me to write show cards for the Sho-Rite Sign System, which is located in Detroit. I have circulars from them and they want me to take their course, which is $35 cash or $45 on easy payments, and they guarantee steady work at home or get one a job as show card writer, and they say I can earn from $15 to $50 a week spare time, and also that a person can in time earn as much as $100 a week. It sounds fishy, so I am asking you about it. They have sent me a design to work out which I did, which they sent free. You will find the letter enclosed what they say about it. If anyone inquires about the Nile Art Company, Fort Wayne, Ind., don't recommend this company to them for they only got $7.75 out of me for their painting outfit with which to paint pillow tops and lamp shades. I painted two pillow tops and three lamp shades for which I was supposed to get $6.25, but instead they returned the pillow tops and shades. The way they first explained to me was that I was to buy the paint from them and they would furnish the goods to paint, but when they returned the pillow top and shades they wanted me to buy the designs from them at 60c a piece, and all the profit that I would get out of it would be the work. Well I guess a person has to be a fool first in order to get wise. Put this in your paper so others can read it. What kind of work would you recommend for me, as I am unable to do farm work and am only 20 years old, but would like something with a future. A subscriber and always will be.—

IF the Publishers Desk can just once in a while save a few dollars for some unfortunate who without its help might have been victimized, we shall be mighty well pleased with our work.

This sign-writing scheme was at one time worked entirely from Canada, now it has been taken up in Detroit and other cities. There is no question but what someone with latent artistic ability might learn to write signs, but the trouble with those schools, like most of their kind, is that they will take anyones money and promise them jobs at unheard-of wages just to get their tuition fees.

Sometime we want to find a correspondence school which offers the entire course and agrees to take their pay out of the first weeks salary which they so glibly promise the would-be student! If you find one, no matter whether they promise to make you play a violin like Fritz Kreisler or write songs like Irving Berlin, we advise you to take the course, because you have nothing to lose and much to gain.

Our advice to this ambitious young unfortunate is that he take up book-keeping or typewriting at some nearby business college.

MAKING APRONS AT HOME

Dear Sir:—I would like to have you tell me if you consider the "Rosemary Apron Company" whose address is "Asbury Park, N. J." a reliable firm. I am in need of work which I can do at home, and am a good needlewoman of ordinary kinds of sewing. This is their offer: They agree to furnish materials, patterns, thread, pay postage and all essentials for bungalow aprons which I am to make at home. For this service they agree to pay $6.50 to $8 per dozen when the aprons are sent to them finished. But first I am required to send them $1.50 for which they will send me material for one apron to make up, and send back to them, so they will have a sample of my work. Do you know anything about them, and does it sound "On the square" to you? If their offer were genuine I would be able to do a great deal to help myself the remainder of the winter.

I DO not have very much faith in any of these "work at home schemes" and I wrote of this particular one in this column some time ago, but had no comments on it. My suggestion is that you write this company and ask them to give you the name of a satisfied worker here in Michigan. If they were really anxious to secure your services, they would not ask you to make a remittance in advance. I would not send them any money.

WRITING "MOVIES"

Dear Sir:—I have been a subscriber to your paper for two years now and am coming to you for some advice. We moved down here from our farm at Chief, Michigan, last spring, and just before coming here I wrote to the Palmer Photoplay Corporation for their questionnaire and test to see if I was qualified to write scenarios. They sent me the questionnaire which I filled out and sent back to them, and I am enclosing the letter and rating they sent me, inviting me to enroll for their course of training which would enable me to successfully write photoplays, and they were selling agents for any plays I might write, good enough to sell to some producing company. They want $160 for their course of training and I could pay it on the basis of $10 down, and $10 per month. What I wish to know, is the Palmer Photoplay Corporation a reliable concern and would I be the loser if I enrolled for their course? I would like to take up this kind of work and I know of no other way to obtain the desired information concerning photoplay writing. Could you please inform me

(Continued on Page 31)

"FORTY YEARS OF GRAFTING"

BEGINNING in our March 15th issue we will publish "Forty Years of Grafting" It is the astonishing confessions of a past master in the art of bunco. A man who lived by his wits for forty years of up and downs—flush one month, dead broke the next—relates the history of his wasted life. In a half dozen articles he exposes the methods of professional fakers, swindlers and crooks, whose clever tricks give color to the statement that "a sucker is born every minute." And these articles make SOME story, as you might guess.

Millions of dollars is the annual harvest of these gentry—and a good share of it comes from those who ought to know better, but learned their lesson too late. The young folks, especially, should read these articles. Make sure your own boys and girls are posted so they will be on their guard against the tricks of the slick grafter.

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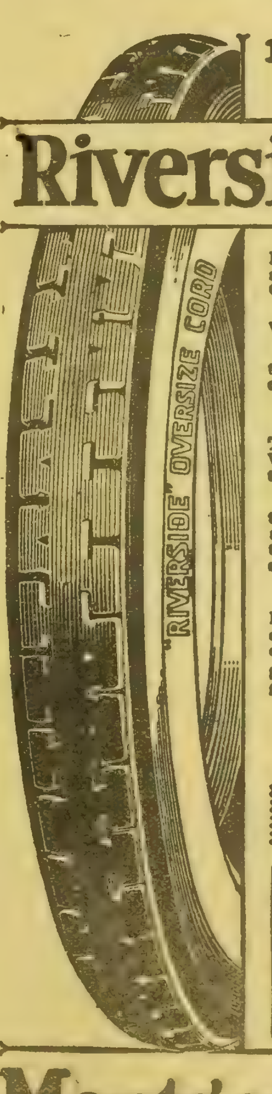

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This guaranteed mileage is built into Ward's Riverside Cords. High treads, thicker and stronger, of tough, live rubber.

This exceptional quality of Ward's tires alone has made us the *largest retailers of tires in the country*. The tires themselves have convinced thousands that Riverside Cords are best.

"I have used Riverside Tires for the past four years. I have never had to send a tire back for adjustment.
I have tried several different highly advertised makes alongside of Riversides and have not found a superior."
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You Don't Risk One Cent

Before you buy any tires send for Riversides. Inspect them. Compare them with tires selling for $5.00 or $15.00 more.

Send them back if you do not find them the equal of any first-quality oversize cord made. We will refund your money.

These prices buy 10,000 miles of service—and more.

CATALOGUE No. 464M00—Be sure to give size.

SIZE	PRICE	POSTAGE	SIZE	PRICE	POSTAGE
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32 x 4	16.95	42c	34 x 4½	21.95	48c
33 x 4	17.45	43c	33 x 5	28.75	58c
34 x 4	18.25	43c	35 x 5	29.95	61c

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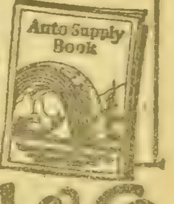

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Montgomery Ward & Co.
Chicago Kansas City St. Paul Portland, Ore. Oakland, Cal. Ft. Worth New York Atlanta, Ga.

Read This . . .
The Experience of a Cletrac Owner

Post, Texas,
January 17, 1924.

Panhandle Sales Company,
Amarillo, Texas.,

Mr. G. L. Kirven.

Dear Sir:

After thoroughly trying out the Cletrac Model W 12-20 Tractor for one year, will state for the benefit of farmers who may be concerned that cost of operation for ten hours is $3.00 at present prices.

I average eight acres per day flat-breaking at a cost of 37½ cents per acre. Planting with three row Lister, 20 acres per ten hour day at cost of 15 cents per acre.

I will prove these figures correct to any farmer who will visit my farm and will say also that my 14-year-old boy cranks and operates my tractor with perfect success, and will further state after using the tractor one year, that I have n't had one minute's trouble, and no additional cost, not even cleaned one plug, and will further state that I had a mechanic to drop the pan and he found bearings in A-1 condition, all tight.

Send any reference to,

Z. P. Lusk,
Post, Texas, Route A.

THE CLEVELAND TRACTOR COMPANY
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Ward's RADIO ROOFING

WARDS 85 lb. Slate Surfaced ROOFING $1.85 PER ROLL Guaranteed 15 Years

Regular 85-pound standard weight

Don't confuse this full-weight 85-pound roofing with cheaper, lighter roofing sold at the same price.

Lay it over old roofs. There is enough in one roll to cover 100 square feet—yet a roll costs only $1.85, with nails and cement.

Fire Underwriters Approve It

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We guarantee it for 15 years—it should last many more.

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Examine it! Cut it open! Test it. Judge its remarkable quality. Write for free Building Material Catalogue.

Order the roofing you need, Catalogue No. 174-M00. State color—red or green.

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York, Penna.	1.85	Chicago
Southern Illinois	1.85	Chicago
New Orleans	1.85	Chicago
Kansas City	2.00	Kansas City
St. Paul	2.00	St. Paul
Portland, Ore.	2.65	Portland
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Add 10c for extra long nails
Shipping weight 85 pounds per roll

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$3.45 SQ. 100 Ft.

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WHEN WRITING TO ADVERTISERS PLEASE MENTION THE MICHIGAN BUSINESS FARMER

THE PERISHING WORLD

A SERMON BY REV. DAVID F. WARNER

TEXT: "And the world passeth away and the lust thereof; but he that doeth the will of God abideth forever." 1 John 2:17.

WORLDLY things pass away to make room for the things that abide. Our childhood days are no more. Father and mother are gone, or are seen to go. We have lost the friends of other times. All our yesterdays are over. Many of these things have been sweet and fragrant, but they have decayed and died.

The whole world is being heaved and changed today, perhaps, as never before. Between the ocean shores and the limits of the poles, everything is in constant flux. Tomorrow, in all the civilized world, nothing will be as it is today. In the last decade, the world has known desolation on sea and land, in the air, and under the earth. Millions of men, large fortunes, cities, homes, and churches, have passed away never to be again in a material world. How emphatically, these events and judgements speak of a transitory existance here! And it seems the apostle means this lesson for all ages: fathers, children, and young men. Cf context. All are in danger of being drawn away with a perishing world.

This transiency has a twofold aspect. "The fashion of the world passeth away." 1 Cor. 7:21. Why? Because, "The whole world lieth in the evil one." 1 John 5:19. Everything visible and material, of course, passeth away. But also, things immaterial: tendencies, notions, and aspirations which are divorced from God. And here is a nice, fine sense, in which your possessions, when connected with the purpose of God, will retain their value for you over there. Because you have used what Jesus called the "mammon of unrighteousness" (wealth) to promote Christian fellowship and good-will on earth, you are accepted into holy habitations which are to abide.

In a tragic sense, the Eternal God has been proclaiming to all peoples and nations thru recent years, that the world is passing away. But this was divinely ordained from the beginning, and the only mournful thing about it is, that men and women choose to perish with it. "Demas has forsaken me, having loved this present world," says Paul. Well, there is a man near you that sacrificed home and loved ones for a moment's gratification in sensual pleasure, and you said, "What a fool!" But the man, who, not momentarily or grossly, but continually and in a more respectable sense, sets his affections on this world and its fleeting gains and pleasures, is the bigger fool. The Bible says so, and I wish it might burn into our hearts.

"And the lust thereof." Here we are reminded that evil desires and propensities, even, are fleeting and ever changing. Human experience proves this. To take it in a worldly sense, those things we once loved are no more pleasing. We are content to let them lie in the past while we go to greater indulgences. The first transgression or sensual indulgence does not satisfy. It is ever so with sharp business deals and all the questionable practices of life.

This is the nature of "the lust of the flesh and the lust of the eyes and the vainglory of life." There is a heart longing to strike up intimacies with the world. Our text condemns not the material world, but the love of it and the lust for it, since it (the world) is to pass away. Worldliness is a lustful state of mind. It does not have reference, primarily, to what you do or where you are, but to your mind attitudes. You may be in the most worldly places and yet be spiritual. The place is revolting to you and you long to get away. You may be in a spiritual atmosphere, listening to Gospel music and message, and yet, inwardly, you do not react to your invironment. You are hostile. As the arrows of truth find their mark, you rebel angrily. This is worldly lust. It is the Phariseeism that gnashed its teeth at Jesus Christ and finally killed him. How noble the sacrifice! And because of it, the lust of the world is condemned.

It ought to be repeated. This lust is a state of the heart. It is setting your affections on things that perish. It is the sensual and temporal attitude of life. The New Testament tells us of a rich young man who left Jesus sorrowfully, because he wanted to keep his riches. His affections were set upon them. Again it tells us of a big farmer who had barns and possessions. The Lord blessed him with big harvests. He tore down barns and built larger to take care of the increase. Now, as far as we know, this man was not vicious, had a good home life, and made his money honorably. But just as soon as he said, "Soul thou hast much goods laid up for many years; take thine ease, eat, drink, and be merry;" that soon the voice of the Eternal said, "Thou foolish one, this night thy soul shall be required of thee." What a big fool and worldling, this farmer was, to believe that he could feed soul and mind on perishing things! His attitude was temporal and selfish. And not a few today, spend the increase of the Lord in taking their ease at winter resorts, the while their neighbor at home or across the seas is in dire need. And I hear the inspired writer saying, "Whoso hath the world's goods, and beholdeth his brother in need, and shutteth up his compassion from him, how doth the love of God adbide in him?" This is 1 John 3:17. Now, compare it with John 3:17. Verily, "the servant is not above his Lord." How persistent and fatal is worldly lust!

You may have position and power today, but not tomorrow. Yesterday Nicholas Romanoff was Czar of Russia, all powerful. Then came dethronement, hatred, and death. And the Kaiser! You may have wealth today, but poverty tomorrow. Tho money can fill the belly, how foolish to live as tho it could fill the heart! How we ought to pack every day with noble aspirations and right decisions!

"He that doeth the will of God abideth forever." We have discovered the folly of the worldly life because it is attached to perishable foundations. But the life that is centered on DOING the will of God is to abide forever. Thruout the epistle the author plays upon the DOER of sin and the DOER of righteousness. Here are two men. One has used his time and though, wholly, on the getting of worldly things. He has a splendid home and no material needs that he cannot supply. Life goes on like a song as he lays up for himself and his children. You would like to be like him. But listen! Quickly one day he sends for a minister, who hurries to his side. He finds him lying in a richly furnished room, with costliest bedding and pillows. Doctors, nurses, wife, and children are bending over him. He is going—and gone. He is dead. And now, what is he? A dead fool. What does it profit to gain the things of a perishing world, while losing your own soul? That is what the minister told him again and again, but he would not listen. But the other man? He lives in a plain humble home. He works hard thru long days. He foregoes sensual pleasures; is busy practicing the gospel of othering; and is faithful to the will of God. One day the pastor is hurriedly called. He finds this man lying on a plain bed in a plain room. He is attended by plain folks. He thanks the pastor for his encouragement to live the non-worldly life, and his soul slips away from earthly ken. He is dead. But is he? No, he went away in visions of a mansion not made with hands, and he has just begun to live in that newer, better, land that stretches out before in ever satisfying vistas.

What are you going to do when you die? But what are you doing now? Are you squeezing this world as you would a great sponge to get out of it all the freshness possible? Are you taking the road that yield's up sensual delights? Or, will you be wise and abide in the will of God? The world is perishing, but he that loves God, and his neighbor as himself, shall abide forever.

DEPARTMENT ISSUES HANDBOOK ON BETTER FEEDING

PRACTICALLY all farmers in every section of the country should be interested in the new publication, A Handbook for Better Feeding of Livestock, just issued by the United States Department of Agriculture, as a part of a recently organized service for better feeding methods. This booklet contains in condensed form practical and up-to-date information on the feeding of cattle, hogs, sheep, horses, and poultry, compiled as a result of a country-wide study of farm feeding problems.

In this handbook all the different classes of animals are considered separately. For instance, there is special information on feeding young animals, dry cows, sires in service, weaning pigs and calves. Consideration is given to the feeding of farm wastes and by-products, the use of mineral feeds, the use of self-feeders, tonics, hogging down crops, commercial feeds, dehorning and castrating, with relation to feeding and management, mixing feeds and making up balanced rations, shelter for animals as it affects their production, water and salt. Sample rations are given for the various kinds of animals under different conditions. The importance of good breeding in obtaining maximum gains is emphasized.

Copies of the handbook, which is known as Miscellaneous Circular 12, may be obtained free, as long as the supply lasts, by addressing the Department of Agriculture, Washington, D. C.

PREPARING WALLS FOR PAINTING

CARE in the preparation of walls for their coatings of paint is highly necessary if the best final results are to be obtained. Every one who has tried to do a good painting job knows this. The preparation of the walls by proper application of elastic wall primer becomes an important operation. The following instruction of why, when and how to use it will be found helpful!

Elastic wall primer is used to seal very porous surfaces—in the language of the painter, to "stop suction;" to facilitate brushing properties of first coat over surfaces which are quite porous; to prevent lime burns.

The ordinary wall will not require any sealing other than that afforded by the undercoat, but walls where the porosity is greater than usual require a product which will seal the wall and reduce the suction. This can be done by applying a coat of the primer straight, or mixing it with the paint to be used on the next coat. The latter is the more desirable method, in that the addition of material used on a subsequent coat tends to offer better conditions of amalgamation between the coats. However, there are instances where a straight priming coat has its advantages, especially on an extremely porous wall, or where the wall is new and additional precautions are taken to prevent lime burns.

For porous walls, it is advisable to add a primer to the first coat so that the liquid portion in the paint is increased, and it is possible to brush the paint more easily and sufficiently without having to penetrate the wall too rapidly. If the paint penetrates too quickly, it cannot be applied evenly and so that it will not show brush marks.

The following suggestions apply to the use of elastic wall primer:

1. For the sealing of fresh walls where protection against lime burning is desirable, use a coat of elastic wall primer straight.

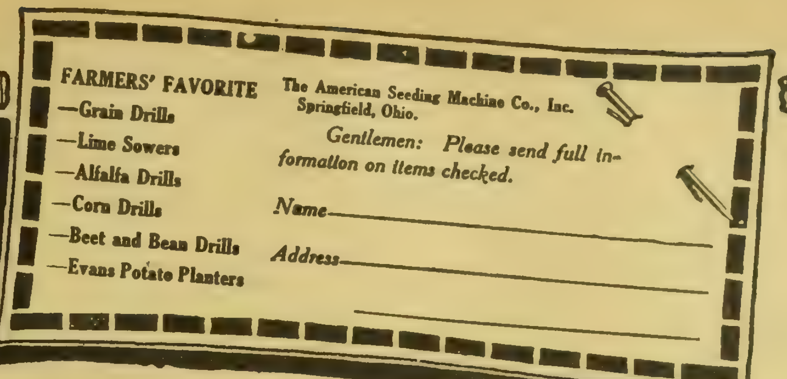
2. For the sealing of walls which are porous, the addition of one or two quarts of elastic wall primer per gallon of undercoater or flat primer per gallon of undercoater or flat wall paint.

3. On wall which are very porous, it may be necessary to use elastic wall primer straight as a sealer coat.

Mistaken Identity

"As I was crossing the bridge the other day," said an Irishman, "I met Pat O'Brien. 'O'Brien,' says I, 'how are you?' 'Pretty well, thank you, Brady,' says he. 'Brady!' says I, 'that's not my name.' 'Faith,' says he, and mine's not O'Brien.'

"With that we again looked at each other, an' sure enough, it was nayther of us."—Shelvin Equalizer.



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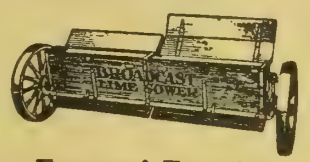

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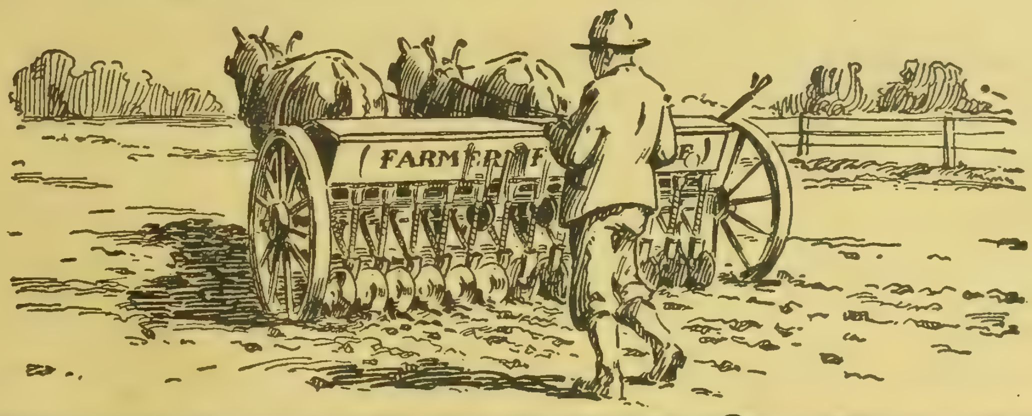

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The Children's Hour

DEAR boys and girls: — How many of you know there are two uses for spider webs—besides the purpose for which the spider spins it? I am sure that there are many of you who do not so I am going to tell you what they are used for. The manufacturers of surveyor's telescopes use it to mark the exact center of the object lens in the telescopes. Spider web is the only suitable material yet discovered for this purpose. I recently read an article that stated that in one large English factory where surveying instruments are made, spiders are among the most indispensible workers. They produce during a two-months' spinning season thousands of yards of web which is wound upon metal frames and put away until needed. When these spiders are not spinning they are kept in a large wooden cage under the care of several girls. They are fed and given very good care, but they die in the winter, making it necessary to secure more spiders each year.

Recently a new use for spider web was discovered. It has long been known that the web of the spider was many times finer than the finest filament spun by the silk worm, but the difficulty of obtaining silk from it was very great. Some years ago a Frenchman attempted the making of silk and was successful to a certain extent. He collected 10,000 spiders, kept them in separate cells, and produced wonderful silk. However, it is said that the spiders got together one night and the next morning there were only a few left, and the man was discouraged and quit. As you know it is the nature of one spider to try and destroy another and it was not until recently that a certain species from Brazil was discovered that is not so ferocious. And now this Brazilian spider is helping to make some of the finest silk in the world. How many of you knew that?—UNCLE NED.

BUDDHA AND THE WHALE

THE Buddha of Kamakura, in Japan is very big, so big that a man may sit on his thumb. In the Sea there is a Whale who is also big.

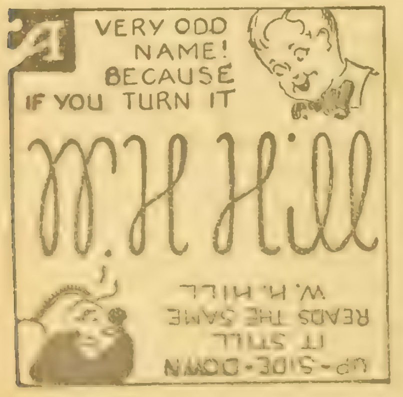
The Crab told the whale of the Buddha, and the Whale ordered the Crab to measure the idol. The messenger found the idol was seventy thousand paces of a Crab. Then the Whale went to visit Buddha and Buddha bade the priest measure both him and the whale with a rosary. The whale was found to be two measures greater than Buddha.

"Then," said Buddha, "hereafter in Japan there shall be two measures, one for hard things like my image, one for soft things like the Whale. And the soft things shall be two measures larger, yet equal."

Greatness can recognize greatness.

OUR BOYS AND GIRLS

Dear Uncle Ned:—My father takes the M. B. F. and we find it very interesting. I am nine years old and am in the fourth grade. Last Sunday we had a swell time sliding down hill. We took the sides out of large card-board boxes. Then we would sit on these at the top of the hill and then let ourselves go. We were lucky if we got to the bottom of the hill without running into snow banks a couple of times on the way down. Have any of you ever tried it? Have you, Uncle Ned? It's loads of fun. Maybe you would be interested in an experience I had once. When I was coming from school I had to pass a hotel where a man was staying with a police dog. The dog saw me and came bounding up. Before I knew it he had knocked me down on the sidewalk, and was on my back with his claws dug into my clothing. But I can't tell why he picked me out of the many people who pass every day. See if you can answer these riddles: When are potatoes like gate-posts? Ans. When they are put in the ground to (propogate). What chasm is there that separate friends? Ans. Sarcasm. Why is an average sermon like asparagus? Ans. Because the end of it is the best part. What three letters are expressive of excessive joy? Ans. X, T, C. Now, won't you boys and girls please write to me and I will answer all your letters; and send some pictures of yourselves when you write if you can. Your friend. —Ruth Weifenbach, Box M, Beulah, Mich.


A VERY ODD NAME! BECAUSE IF YOU TURN IT
W.H. Hill
UP-SIDE-DOWN IT STILL READS THE SAME W.H. HILL

Dear Uncle Ned:—Ever since Daddy has subscribed for the M. B. F. I have been an interested reader of the Children's Hour. During all this time I have not noticed any letters from Caledonia, so decided to let you know we were on the map also. I don't know whether or not it is the rule for each writer to send a description of themselves, but I notice the rest all do it, so I will follow. I am eleven years old, and weigh eighty pounds. I have brown bobbed hair and brown eyes. I am in the sixth grade and like to attend school. I missed about a year and a half because of a double mastoid operation and complications. I am going to try to answer Gladys Carlson's riddles which were in the January 19th issue. The dime looks round. There is one P in pint. And the answer to her third riddle is an icicle. I think the answer to Imogene Hibberd's second riddle in January 19th issue is a watermelon, but I can't guess the first one. We have a Girl Scout organization here and we certainly enjoy the work. It is instructive as well as pleasant. I am first patrol leader now, and I was president last year. With best wishes to you Uncle Ned, and to all the cousins, I am, most cordially yours,—Muriel Frey, Caledonia, Michigan.

Dear Uncle Ned:—As I haven't written for a long time, I thought I would try again and see if my letter would escape the waste basket. My father takes the M. B. F. and we all like it real well. I can hardly wait until it comes, and my father is always anxious to read what Uncle Rube Spinach has to say. I suppose you have forgotten what I said I looked like, so I will tell you again. I am about four feet eleven inches tall, weigh ninety-eight pounds, and have light hair, dark blue eyes, and fair complexion. My birthday is the nineteenth of December, and I am 13 years old. Have I a twin? We have twelve cows, and eleven calves, and four pigs. For pets we have two cats and a rabbit. The rabbit will eat out of our hands (all but when he's mad). Well Uncle Ned, how do you like the weather? It's pretty cold here. How many of the cousins like to slide down hill? I certainly like to. We have a good hill to slide on here, and we have quite a few sliding parties. I live about one-half mile from school. How many like school? I like it when I like my teacher, and I like her this year. Her name is Beulah Preston. I am in the seventh grade at school. I like all of my studies but history. Did you like that Uncle? Helen Cary you are about like me. I like music, but can only play by ear, and not that very good. How many of the cousins like to sing? I do, but I can't very well. I sing alto. Now because I sing alto don't think that I can sing good, because if you heard me you would think it was a rooster crowing. The answer to one of Imogene Hibberd's riddles is a (watermelon), but I don't know the other one. Now couldn't you write to me for answering that one? I will close with a riddle. As I was walking over London bridge I met a London scholar, he took off his hat and drew off his gloves, what was the name of the London scholar? I wish some of the boys and girls would write to me. Your want-to-be-niece,—Beatrice Campbell

Dear Uncle Ned:—I thought I would write you a letter tonight. I wrote once before but I guess the waste basket got it. I hope he doesn't get this one. Well I will describe myself. I am about five feet three and one-half inches tall, and am thirteen years of age. I was thirteen on the 11th day of February. Have I a twin? I have dark brown bobbed hair and blue eyes. I am in the seventh grade at school, and like going to school very much. I think the answers to Gladys Carlson's riddles are: (1) Looks round. (2) One. (3) Icicle. Am I right Gladys? If I am I am waiting for your letter. I will close or Mr. W. B. will sure get this. Your niece,—Mabel Warren, R. 3, Box 81, Sault Ste. Marie, Mich.

Dear Uncle Ned:—I wrote to you before but my letter did not escape the waste basket, but I hope it does this time. I read the Children's Hour every time the paper comes, and I think it is the most interesting part of the paper. I stay with my grandmother and grandfather. My mother and father are both alive, but I always did stay with my grandparents so I live with them now. I have four brothers and three sisters. I just live a mile from them and I go over and see them quite often. I will describe myself. I am fourteen years old, the seventh of April. Have I a twin? I am five feet tall. Have dark eyes and dark hair, bobbed of course. And weigh 90 pounds. I go to the country school and am in the 8th grade. Well I think I had better stop for this time. Some of the girls and boys please write to me. Your loving niece,—Lesa Wilcox, R. 5, Brown City, Michigan.

Dear Uncle Ned:—May I join your merry crowd too? I have joined one and think it is more fun than anything else. Well, I will tell you of my favorite sports. I like horseback riding, do you, too? I bet if you don't know anything about it and get on a horse once you'd think there was nothing like it. Well now I will describe myself. I am 12 years old, and in the 7th and 8th grade. I am 5 feet and 1 inch tall, have blue eyes and light hair. We have been taking the Michigan Business Farmer for a year and I like the Children's Hour very much. Well, I think my letter is getting rather long so I'll ring off.—Miss Dorothy Radloff, Owendale, Michigan, Box 54.

Dear Uncle Ned:—I would like to join your merry crowd. It seems rather strange that of all the names that have been signed to the letters that have been written in this section of the paper during the last year, there hasn't been any from the big city (?) of Parma, or even from any near-by towns. Possibly because some of them are too bashful to write, and maybe it is because they just simply can't find the time to write. I have noticed that personal description has been a part of most of the letters, so, according to custom, I will try to give you a faint idea of myself. I have dark brown hair and dark brown eyes. I am 18 years of age and a senior in high school. I think I have written enough, so I will ring off for this time, promising to write all those who write to me, providing that they write soon. From your nephew,—Lynford Pulling, Parma, Mich.

Dear Uncle Ned:—Here is a new cousin. I have never written before so I hope my letter doesn't reach Mr. Waste Basket. Well I better describe myself. I am a little girl of ten years, have light brown hair (which of course is bobbed), light brown eyes, and pretty pink cheeks. We have on our farm five horses, two cows, two calves, eighteen chickens, five ducks, three cats and two dogs. I have two brothers, and one sister. The sister is fourteen years of age. My oldest brother is twenty-one years of age, my youngest is sixteen. Who ever guesses my first name will receive a letter. Goodnight.—B. Durfee, Alger, Michigan, R1.

Dear Uncle:—As I have a little time I will write you a few lines. We take the M. B. F and we all like it fine. I wrote once before and saw my letter in print so thought I would write again. I hope old Mr. Waste Basket doesn't get this letter. I am a farmer's girl and like the farm very well. I am 13 years old and in the 7th grade at school. I have about a half mile to go to school. My birthday is March 31. Have I a twin? We built a new house this summer and it is sure nice. We have an 80 acre farm We have 8 calves, 5 cows, 2 mules, one horse and 4 pigs. We have one cat and one dog. I am glad when winter comes and there is snow on the ground. We have a lot of fun at school on the hills, and there is two or three hills. Well as my letter is getting a little long I will have to close. Will some of the boys and girls write to me? —Miss Ernestine Frick, R4, Box 46, Coleman, Michigan.

When Spring Comes Dancing Down the Hill

IT was Springtime, the sweetest time in all the year. The time when growing things stirred under the ground, as if to say, "Let me out! Let me out! I love the Spring, too."

The baby buds were coaxing to be freed, and the bluebirds built their tiny nests and sang little wistful notes. The wind was scented with blowing wildflowers.

One of the wildflowers, which gloried in the happy Springtime, was Li'l' Miss Arbutus, who, with her bronze leaves and white and pinkish blossoms all a-glow, called to every bird and flower-friend she saw, "Aren't you happy that Spring is here?"

A month after Li'l' Miss Arbutus had carroled, "Aren't you happy that Spring is here?" a little gipsy camp moved its wagons and tents a mile away from the grassy spot where Li'l' Miss Arbutus played. They were a happy little family who loved the flowers, and the birds, and the trees, and all the wild things under the great sea of skies.

The youngest member of the little gypsy family was a brown-eyed girl whom all the gypsies called little "Princess Gyp."

One day Li'l' Miss Arbutus heard voices, and, lifting one eye above her bronze leaf, she spied a small boy and girl. Strangers they were to her. Fair little strangers; one with bright yellow curls.

"H'm-m! They're not playmates of little Princess Gyp. Wonder where they came from, anyway!" crooned Li'l' Miss Arbutus. "I s'pect they—." But suddenly she stopped speaking. Why, what was that curly-haired little girl saying?

"Come on, Bobby! Let's pull up a whole armful of these woodsy flowers." And she waved one chubby white arm toward poor frightened Li'l' Miss Arbutus, the nodding white and yellow dog-tooth violets, dainty Miss Blue Flag, Jack-in-the-Pulpit, and all the rest of the little flower colony.

Poor Li'l' Miss Arbutus! Her wee, fluttery, flower-heart almost stopped beating. Surely, surely that curly-haired girl wouldn't do that! But yes! She and the boy called Bobbsy were bending low, grabbing Miss Hepatica and pulling poor Jack-in-the-Pulpit up by the roots.

"Oh, dear me! I'll come next! Oh, dear, all my poor flower-friends, and—." But by this time Li'l' Miss Arbutus was crying so hard she could not speak.

And suddenly she heard a voice,

"Oh, you horrid children! Go 'way! Go 'way!" And Li'l' Miss Arbutus' wee, fluttery flower-heart gave a merry flip-flop. It was little Princess Gyp scolding,

"Tearing up those brave little flowers!"

The little boy called Bobbsy and the owner of the yellow curls turned and ran. They were afraid of that firey-eyed little Princess Gyp who stood glaring at the little culprits.

"Oh, to think that next they would have ruined you, Li'l' Miss Arbutus—the sweetest flower that grows." And little Princess Gyp stooped over Li'l' Miss Arbutus as if to gather her in her protecting arms.

Now, my dears, at the time of this little story, Li'l' Miss Arbutus was not called the Trailing Arbutus. She was only Li'l' Miss Arbutus. Just plain Li'l' Miss Arbutus.

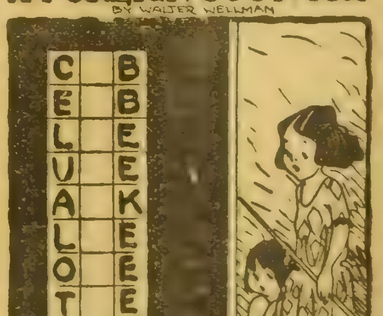
But when she looked up to thank the little Princess Gyp, and found that she had gone as quickly as she had come, she started as fast as she could go, to find dear little Princess Gyp.

She crawled this way and that, searching, searching, searching. But she never found the brown-eyed little gypsy who so understood the heart of little flower-persons.

But every year when growing things are stirring under the ground, and baby buds are coaxing to be freed, bluebirds build their nests and sing little wistful notes, and the wind is scented with blowing wildflowers, and spring comes dancing down the hills, Li'l' Miss Arbutus is always spoken of as the Trailing Arbutus.

A FOREIGN COUNTRY

BY WALTER WELLMAN



We have given you the first and last letters of nine words of three letters each. You are to see if you con print in the middle column, completing the nine words. What is the foreign country?

Answer to last puzzle: CHAIN plus CAKE minus KNIFE minus CRATE plus CANDLE minus LACE =HOUND.

SENDS FOR PARTS

(Continued from Page 13)

set, aerial, etc. It would seem to me that I should have about 50 feet of lead-in wire and also some wire for ground and wire for set. Wouldn't it be necessary to have another porcelean tube to run the ground wires out through? Could the lightning arrester ground and the ground from binding post "G" be the same? Please send complete equipment including lead-in wire, ground wire, wire for wiring set, spaghetti, porcelean tube, etc., if I will need them. If I haven't sent enough money and you'll let me know how much I am short I will send it right away. Thanking you, I am, E. J. Delamarter, Cheboygan County, Mich.

—Yesterday I shipped you by insured parcel post a package containing all the parts for your radio set, with the exception of an A battery which you can buy in Cheboygan for 50c (better use 2 in multiple) and so saved a few cents postage.

I am glad to be able to say that in this assortment of parts I have secured for you more parts than given in the article in The Business Farmer which will help out and make your set more efficient and add to appearance as well.

Additional parts included as extra, ground-clamp, knobs for running ground wire, wire for wiring up set, (you do not need spaghetti), ground wire and a hard rubber panel for the front of your set, and grounding switch.

I am retunring you herewith my personal check for $1.00 which is the balance due you, and from out of which you will need to buy your A battery.

You can use the same wire for ground of your set as you do for the ground of the lightning arrester.

I would suggest that you make a plan of your set on paper and mark each hole carefully, then prick thru to your panel and then drill the panel. In working the panel start all holes thru the side that is to be the front and then the chipped part will be in the rear.

I am enclosing a photo of a set built from parts like yours which will give you an idea.

WANTS BEST RADIO EQUIPMENT ON MARKET

Please advise me where I can buy the best radio equipment on the market. I am going to buy a radio receiving set and I want the best to be got and one that will give good service and a plain and loud speaker.—Clarence Chadwick, Tuscola County, Michigan.

—You ask us as to where you can buy the best radio equipment on the market. This, of course, will depend upon whether you are near a large city and wish to make the trip to town or whether you wish to buy by mail.

There are many dealers in Lansing, Detroit, Jackson, Flint, Bay City and Grand Rapids that handle standard and reliable makes of receiving sets.

Both Montgomery Ward and Sears Roebuck handle sets under their own name and guarantee them to give satisfaction or your money back.

The names of makers, who make sets that you can depend upon, are Westinghouse, Radio Corporation, Clapp-Eastham, C. D. Tuska, Collins-Kennedy, Grebe, Crosley, Atwater-Kent, and Adams-Morgan.

Telephone receivers are Brandies. Federal, Baldwin, Stromberg-Carlson and several others. In buying receivers to go with your set ask for a standard make and do not buy the cheapest as they are seldom as good as those mentioned above.

As you intend to buy the best, I would make a trip to Detroit if possible and go to different stores and have them show you the different makes and see them work and then let your pocket book be the limiting factor on what you buy.

Beware of sets for which remarkable performances are promised, buy any of the sets made by the above mentioned makers and you will not be disappointed.

Let us hear from you when you get your set and the results you have from it. We are interested in having you succeed.

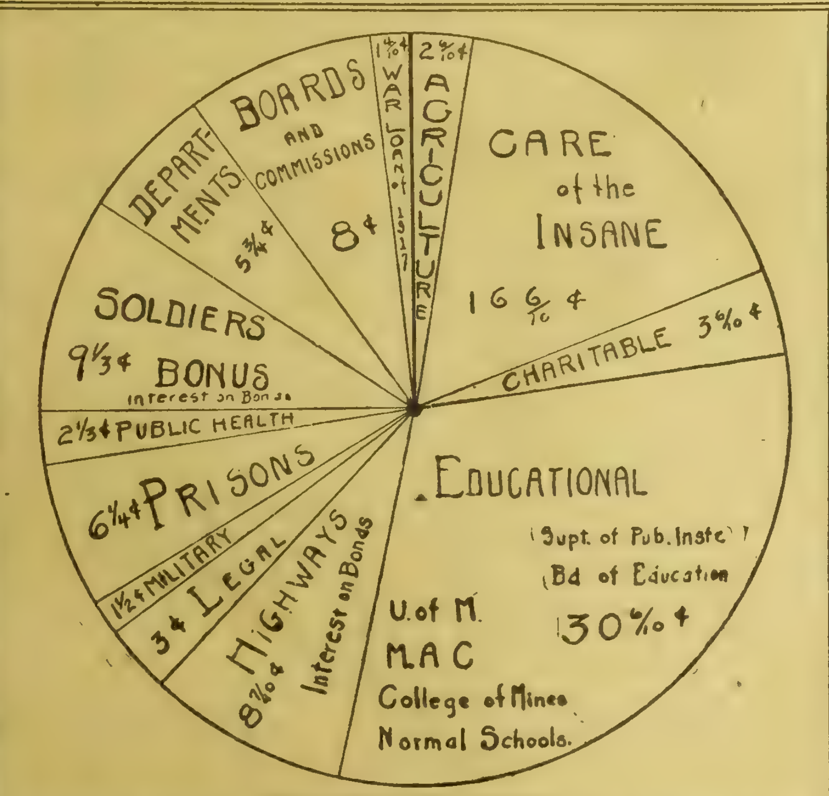
THE TIME IS RIPE FOR TAX REFORM IN MICHIGAN

(Continued from Page 3)

purposes. If this might be done, general property taxation would automatically become entirely a local proposition. Thus the benefits of such a tax reform would be both direct and indirect in that the tax payer would no longer have to pay a general property tax for state purposes and local governmental economy would be promoted.

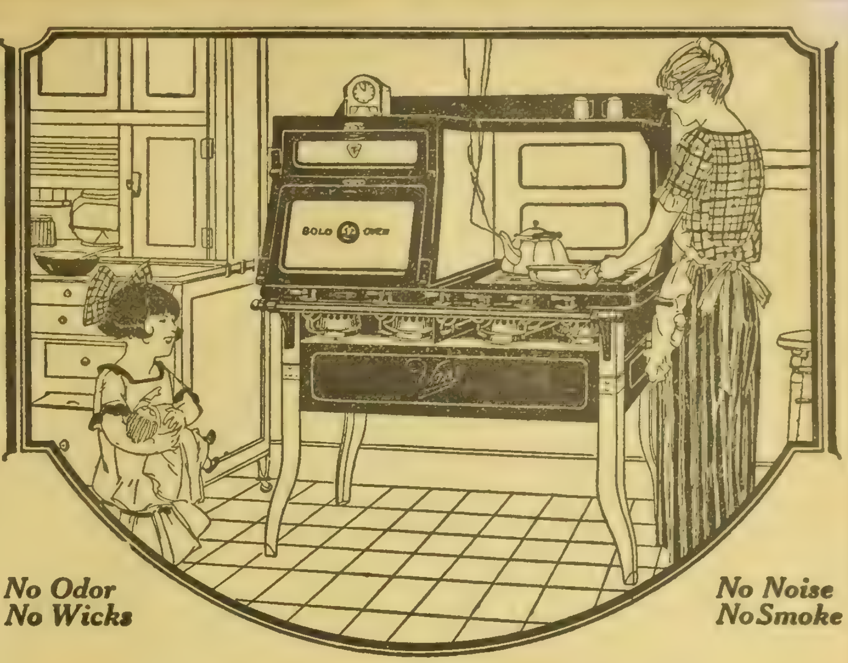
Perhaps, after all, the most logical way to reduce the oppressive tax burden in Michigan today is by placing more of our wealth on the tax rolls. This might be done not only through an income tax, but also through the adoption of a "compulsory listing" law, such as has already been adopted in several other states and has proved effective in uncovering hitherto hidden wealth. The abolition of tax-exempt securieties is also recommended as another step in the right direction.

These and other solutions of our present Michigan taxation dilemma will be discussed in future articles in this series to appear from time to time in The Business Farmer. Perhaps we may have a word to say about one of the most interesting aspects of the whole subject—the two cent gasoline tax.



THE TAXPAYER'S DOLLAR

This chart shows how a taxpayer's dollar is divided between state, county and local governments. Average of 75 agricultural counties is indicated by chart.


No Odor
No Wicks

No Noise
No Smoke

Beautiful Vapo Oil Range looks and acts like a gas range

32-36 hours of smokeless, odorless heat from a gallon of kerosene

Vapo is to the ordinary oil stove what the electric light is to the candle. It solves every cooking problem. You can bake, roast, boil, fry or stew with a Vapo. Everywhere, people proclaim it the cleanest, most convenient, most beautiful oil range ever seen. At state fairs thousands saw it pass tests out of the question for ordinary oil stoves. Any Vapo will duplicate these tests.

Burns gas made from kerosene

Each Vapo burner is a miniature gas plant. It generates hydro-carbon gas from kerosene and burns it with a hot, clean, blue flame ideal for cooking. Good baking and roasting are easy with the Vapo because the flame can be regulated from a low simmering heat to a heat intense enough for quickest cooking needs. Vapo has lever valves like a gas stove and these are provided with automatic safety locks preventing accidental shifting or moving by children.

Wickless, chimneyless and troubleless

Nothing on a Vapo to fuss with. No wicks to trim or adjust. No chimneys to burn out and fall into the burner. If kettle boils over, the liquid can't get into the burner and choke the flame. The Vapo burner is guaranteed for the life of the stove. Vapo heat does not smart the eyes nor soot up utensils.

Bake slow and fast at same time in Bolo oven

Adjustable Bolo plate makes oven big or little as you wish. It concentrates the heat and gives you two ovens in one. Odors from one oven do not permeate the other oven. Perfect ventilation insures light baking and pastry. Vapo is the *only* oil range with the built-in Bolo oven. You can have right or left hand oven. Ask dealer to show you Vapo. Write for booklet.

THE VAPO STOVE COMPANY
MBF LIMA, OHIO.
Please send me complete information about Vapo Ranges.
Name............................
Address..........................
Dealer's Name...................

The Vapo Stove Company, Lima, Ohio

Vapo LIMA, OHIO
Oil
Ranges
Heaters
Hot Water
Heaters

BOLENS POWER HOE
AND LAWN
MOWER TRACTOR

It seeds, it cultivates, it mows the lawn. It supplies power for operating light machinery.

The BOLENS has a patented arched axle for clearance and a tool control for accurate guidance in close weeding and cultivatting. A differential drive makes turning easy. All attachments have snap hitches and are instantly interchangeble. A boy will run it with delight. Send for full particulars.

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Use HOOSIER TILE for permanent buildings for farm or city, dwellings, store rooms, garages, foundation and basement walls, hog barns, barns, poultry houses, etc. Combines beauty, durability, economy. Smooth Glaze or Mat Face finish. Estimates free. Buy now for spring building. Save time and money. Hoosier Bldg. Tile & Silo Co., Dept. MB-17, Albany, Ind.
PERMANENT

CERTIFIED CHICKS at popular prices. We won 1st and 4th prize this year on English strain White Leghorn hen at the National Poultry Show, Chicago. Also 1st at Zeeland Poultry Show. Other breeds have had same careful supervision in developing and breeding. Purebred stock carefully culled. 100% live arrival guaranteed. Our chicks are money makers and will improve your flock. Write for catalog and prices. A trial will convince you. All flocks certified

American Chick Farm, Box 115-B, Zeeland, Mich.

PUREBRED BABY CHICKS. LEADING VARieties. 100% arrival. Priced right.
THOS. G. CALLAGHAN, Fenton, Michigan.

STURDY CHICKS—BRED-TO-LAY AND exhibition flocks, culled by experts. Reasonable prices. Catalog free. Single Comb White Leghorns, Rocks, Reds, White Wyandottes. Sunnybrook Poultry Farm, Hillsdale, Mich.

ELDORADO BLACKBERRY PLANTS—THE most profitable market blackberry grown. Good shipper, fine quality, productive and hardy. Disease free, State inspected, northern grown stock at $25.00 per M.; 500 same rate; $3.50 per hundred, postpaid.
H. L. KEELER, Elberta, Michigan.

FREE CATALOG HIGH QUALITY STRAWberry, Raspberry, Asparagus plants. Senator Dunlaps $2.75-1000. Write today.
C. D. THAYER, Three Rivers, Michigan.

HAVE YOU POULTRY FOR SALE? AN AD IN THE M. B. F. WILL SELL IT.

The Farm Home
A Department for the Women

Edited by MRS. ANNIE TAYLOR

DEAR FOLKS:—March! A month that means a great deal of thinking and planning for the coming spring.

The house has been getting shabby and on our nerves. Why not plan with the spring cleaning to change the looks of those rooms that need freshening up a bit.

Now is the time to make a few of the articles that put the personal touch in every home.

St. Patrick's Day is coming and it gives us a splendid opportunity to have a fun-day or evening. I am making up a list of things to do and have to eat on this day and will be glad to send a copy to any of our readers who are thinking of a St. Patrick's Party.

I want to thank you all for the many splendid letters you sent in these last few weeks. I remember last year receiving so many letters asking about exzema. Do not let this happen this year. Eat lots of vegetables. Some of those wonderful carrots, peas and spinach that you canned last year. Feed the family less meat and rich foods and I feel that a great deal of this evil can be eliminated.

Your Friend,
Mrs Annie Taylor

Address letters: Mrs. Annie Taylor, care The Business Farmer, Mt. Clemens, Michigan.

MY HIRED MAN AND JANE

SHE called him "Bud," he called her "Sis"
And though I never saw 'em kiss
Er hug, I kinda felt he thought
Right well o'her the way he bought
Her sweets and tuk her to the shows—
But she'd a dozen country beaux
And he was backward like and years
Too old fer her and so my fears
Jes drapped away and I opined
The thing was just as he outlined,—
The only child he was, bedad,
My little gal was all I had,
And so they kinder fixed it out
In fun, the while they worked about,
That he would be her brother Kris
And she would be his little "Sis."

So years rolled by, but yesterday
I caught 'em in a serious way.
Says she, "I don't know who to love,
Which one of them to give the glove.
Taz Cook is fine and Jim's got land—
To which one, Kris; shall I give my hand?"
But Kris he'd sorto lost his voice
Er didn't want to say his choice
Too quick, fer there he set a while
A-lookin' down the road a mile
Er two, and then he kinder turned his head,
And took her in his arms and said:
"Why,—neither one—fer I'm the boy
That wants to fill your life with joy,"
"Dear Jane," he sez, and she, "Dear Kris,"
And then I saw 'em hug and kiss.

FOR SUCCESS AND HAPPINESS!
The Ten-Point Success Creed

1. Work and Earn.
2. Make a Budget.
3. Record Expenditures.
4. Have a Bank Account.
5. Carry Life Insurance.
6. Own Your Home.
7. Make a Will.
8. Invest in Safe Securities.
9. Pay Bills Promptly.
10. Share with Others.

A MOTHER TO HER SON

THE message below came to me and I think it one of the finest and sweetest stories I have read in some time. I am giving it to you to use as you see fit. I wish that every Mother reader will find time to read it to her boy:

We have been asking a few men and women who have made good in life to tell us the biggest influence that contributed to the shaping of their characters.

We believe that in such bits of obscure history there lies the consoling proof that every honest effort bears fruit in life, every sincere thought becomes an influence. Prayer is answered.

There is a young man in New York who is making good. He has a keen mind and a strong character. He is becoming an influence for good in his community.

Recently his mother was cleaning out his pockets to help him change his clothes quickly.

"That letter will interest you, Mother," he said, referring to a letter about his work. But it was another paper she opened—a yellow, rumpled sheet—a note she had written him when he was eight years old, the first time he had been separated from her. It breathed the same thoughts and prayers that lie in the hearts of all mothers. She had forgotten she had written it.

The young man was embarrassed for a moment when he saw what she held. Then he said: "That is the most priceless possession I have. I am going to carry it in my pocket as long as I live. I have been tempted to do some rotten things in my life, and just the consciousness that I had that message in my pocket, and that it came out of your heart, has steered me straight most of the time."

Here is that Mother's message which a boy carried in his pocket until he became a man:

Get up when called in the morning.

Wash before dressing.

Wash your teeth. A clean mouth belongs to a clean heart.

Be obedient. Remember the world would be crushed into pieces if it did not obey the law of God. And you must suffer if you do not obey.

Be truthful. Only cowards lie. You are not a coward.

Be kind. It is the greatest gift in the world.

Don't forget that you have promised to do some kind act every day.

Wash your face and hands before going to the table.

Remember that your father is a gentleman. In his absence it is up to you to prove it. A gentleman is kind and truthful and clean and quiet.

Be interested in everything. Have a good time.

Remember that I love you with all my heart.

Say your prayers. Ask God to keep your heart clean and brave and true and your body well for
YOUR MOTHER.

MY IDEAS FOR WINTER EVENINGS

I KNOW of no better way of passing these long winter evenings than in good reading, and as there is so much such material nowadays practically in reach of everyone's pocket-book, that it is not doing justice to ourselves or family to be deprived of it. For it is now conceded by everyone that good reading is not a luxury, but a necessity, both from an educational and entertaining point of view, and we cannot have too much of it in our homes especially where there are children.

We often hear people say. "My children do not like to read" which no doubt is true if they have never gotten in that habit or formed a taste for it, which I think is usually the fault of the parents who themselves do not care for reading, or else have never taken the trouble to read to them or tried in any way to get them interested along that line.

If parents will take the time each day or evening to read a story that will arouse the child's interest and occasionally letting him read a part of it himself he will soon be looking about for something more to read and then is the time for the parents to sacrifice in other ways, if need be, to provide that child with good reading and plenty of it. There are many good books and magazines now for both boys and girls which they should have.

I have heard people say they could not afford to take magazines for their children when at the same time more money was being spent for fancy work material and tobacco in that home than the very best magazines would cost.

Now I do not like to think these people are selfish but rather do not realize the value of good reading to the growing generation.

I have been in homes where my heart really ached for the children there, as they had nothing to do all the long evenings and if they became a little too noisy were sent at once to bed or compelled to sit "quietly" in the corner, which we all know is torture to a healthy, active child. For we know most children want something doing every minute and if no entertainment is furnished in the home like reading or games they will be going outside to get it and then your worries begin.

I think it's nice for some member of the family to read aloud evenings some good story and funny ones the children always enjoy. And there is nothing makes them quite so happy as having their parents enter into their games and it makes the parents feel that much younger as well. There are many educational games that all ages can take part in and enjoy.

Now parents, your children are going from the home in a few short years to take up their various callings and what sort of memory will they carry with them of the winter evenings spent in the old home. Will they be happy memories? We trust through your efforts they will be.—Mrs. Manley Brown, Hillsdale Co.

COLLEGE VISITORS SEE FARM HOT WATER SYSTEM

HOT water in the country home bath room at an installation cost of approximately $75 is made available through a unique system devised by the agricultural engineering department of the Michigan Agricultural College and which was put on display for the first time in the new college library building for inspection by Farmers' Week visitors.

The outfit consists of a pressure pump, pressure tank, a kerosene bath water heater, lavatory, bath tub and all piping and appliances necessary within a modern bathroom, with the exception of a shower spray nozzle.

To display the outfit a model bathroom has been set up in the reading room of the library building by college students with an attendant on duty to demonstrate everything but actual taking of the bath and to answer all questions and explain the proper methods of "setting up" the system.

A great many of us did not see this system and I feel sure that the college will be glad to help you if you will write them in care of the Engineering Department.

Personal Column

Can Any Reader Supply or Suggest a Way for this Talking Machine.—I am a reader of the Business Farmer, and I have an Edison Talking Machine of the old make, in good condition, all but the four minute reproducer. I was wondering if you would put an article in the M. B. F. and see if any of the readers had an old reproducer for this make of machine that they would care to sell. Model C, No. 429017 Edison Standard, as the company has stopped making them, and we tried to repair it and couldn't.—Mrs. Sarah Wright, R1, Middleton, Mich.

From One in Need.—As there are so many helped by using the department for women, I thought I would use it again. I have quite a few handkerchiefs with crocheted lace on, and embroidered guest towels, bath towels, with crocheted lace on, and I can make most any kind of fancy work, and I was wondering if I put an ad in your paper if I couldn't get some help, as I live on a farm and can use lots of clothing or things others can't use. Have three children, 4, 6 and 9 years old. I have now some handkerchiefs with crocheted lace on, some fancy doilies, embroidered guest towels, and bath towels, with crocheted lace on. Will exchange for quilt pieces or anything I can use. Would like to get pattern for refooting stockings for children and myself. Will be very thankful if you will do this, as it will help me out a lot.—A Subscriber, Turner, Michigan.

Directions for Knitting Socks.—I have been a silent reader of M. B. F. for a number of years and enjoy it all, especially the Farm Home Department. In the last paper, I noticed some reader asked for directions for knitting socks, and as I have directions for making them as we did for the Red Cross during the war, I will copy and send them. They are very good shape too.—Mrs. R. E. J.

One hank of yarn (¼ lb). Loosely cast on 56 stitches; knit 2 plain, purl 2 for 4 inches, knit plain 7 inches (11 inches in all.)

Heel—knit plain 28 stitches on to one needle, turn, purl back these 28 stitches, turn, knit plain, repeating these two rows (always slipping the first stitch) for 28 rows, making heel about 3 inches. With the inside of the heel toward you, purl 16 stitches, purl 2 together, purl 1. Turn, knit 6 stitches, slip 1, knit 1, pull slipped stitch over, knit 1, turn, purl 7 stitches, purl 2 together, purl 1. Turn, knit 8 stitches, slip 1, knit 1, pull slipped stitch over, knit one, turn, purl 9 stitches, purl 2 together, purl 1. Turn, knit 10 stitches, slip 1, knit 1, pull slipped stitch over, knit 1, turn, purl 11 stitches, purl 2 together, purl 1. Turn, knit 12 stitches, slip 1, knit 1, pull slipped stitch over, knit 1, turn, purl 13 stitches, purl 2 together, purl 1. Turn, knit 14 stitches, slip 1, knit 1, pull slipped stitch over, knit 1, turn, purl 15 stitches, purl 2 together. Turn, knit 15 stitches, slip 1, knit 1, pull slipped stitch over. Now pick up and knit the 14 stitches down the side of the heel piece. Knit the 28 stitches of the front needle. Pick up and knit 14 stitches at the other side of the heel piece. Divide the heel stitches on the 2 side needles, and knit right around again to the center heel. First needle, knit to within 3 stitches of the front end of the side needle, knit 2 together, knit 1. Knit front needle plain. Third needle, knit 1, slip 1, knit 1, pull slipped stitch over, knit plain to end of needle. This reducing to be done every other row until there are 56 stitches on the needles (front needle 28, side needles 14 each). Knit plain until the foot from the back of the heel measures 8½ inches, or 9 inches, if a longer sock is desired. To narrow for toe.—Begin at the front needle; knit 1, slip 1, knit 1, pull slipped stitch over, knit plain to within 3 stitches of the end of the needle, knit 2 together, knit 1. Second needle.—Knit 1, slip 1, knit 1, pull slipped stitch over, knit plain to end of needle. Third needle.—Knit plain to within 3 stitches of the end, knit 2 together, knit 1. Knit two plain rounds, then narrow as before every other round until you have 20 stitches on three needles, 10 on front needle and 5 on each side needle. Then knit two plain rounds. Slip stitches on side needles all onto one needle, giving you 10 stitches on each of the two remaining needles. Intake of toe.—Having 10 stitches each on front and back needles, break off wool leaving 12 inches with which to finish off sock and thread it into a darning needle. Put darning needle into first stitch of the front knitting needle as if to knit, pull wool through and take off stitch. Put darning needle in next stitch of front needle as if to purl, pull wool through but leave the stitch on. Go to back needle, being particularly careful that the wool is taken under the knitting needle each time and not over. Put the darning needle in first stitch of the back needle as if to purl, pull wool through and take off stitch; put darning needle in next stitch of the back needle as if to knit, pull wool through but leave stitch on. Return to front needle, put wool in first stitch (the one previously purled) and repeat. In finishing off end of yarn, run yarn once down side of toe.

Will Send Poems.—I'm only 11 years old but I read your paper and saw where a girl wanted some songs. Among them were "When You and I Were Young Maggie" and "Just Break the News to Mother." Will you please publish this in the paper and tell her if she'd care to have those two mentioned above. I'll gladly send them. If she would just write me a letter (I like letters very much. My address is Miss Helen Smith, Box 51, R. F. D. No. 1, East Lansing, Michigan.

—if you are well bred!

Where there is a guest of honor, like a wedding, coming out, and so on, every guest should make it a point to meet the guest of honor. It is extremely rude to have been invited to such an affair and then leave without having been introduced to the main attraction.

Menu for March 1

Toad in the Hole
Creamed Potatoes
Jelly
Beet and Lettuce Salad, French Dressing
Baked Apple Whipped Cream
Coffee or Tea

Toad in the Hole.—Two cups flour, one-half teaspoon salt, one pound link sausage, or use fresh sausage meat and make a circle of it. Two eggs, two tablespoons melted fat, and three cups milk. Sift the flour and salt into a basin; beat up eggs well, and after mixing them with the milk and melted fat pour gradually on flour, beating it well with a wooden spoon. When quite smooth pour it into a well greasel fire-proof dish; skin the sausages and lay them in the batter and bake in a moderate oven for three-fourths of an hour. Serve in small squares arranged neatly overlapping each other on a hot dish.

RECIPES

TASTE your food while you eat it and you won't have to taste it afterward," says Horace Fletcher, the philosopher and dietician. Palatability has much to do with digestibility. The food we like usually agrees with us. Moderation is the safest rule. It is probably true that many shrewd farmers know how to feed steers, hogs, sheep, and horses, but do not know how to feed humans.

Pumpkin Cake.—One cup light-brown sugar, one-half cup granulated sugar, one-half cup fat, yolks of two eggs, three-fourths cup sifted pumpkin, one-half cup sour milk, two tablespoons caramel, one-fourth teaspoon soda, four teaspoons baking-powder one-fourth teaspoon salt, two cups flour, two-thirds cup chopped, flouder walnuts.

Cream the sugar and fat and add the other ingredients in the order given. Bake in loaf or layer tins. Frost with a boiled or a marshmallow icing.

Peanut Butter Fudge.—Two cupfuls of sugar, one-half cupful of milk, two heaping teaspoonfuls of peanut butter. Mix all ingredients and let boil hard for five minutes. Test in cool water until it forms a soft ball. Beat, pour in buttered pan, and cut in squares.—Margaret L. Millin, Lake Shore Road, Mt. Clemens.

Eggless Rye Muffins—Two cups of rye flour, four teaspoons baking powder, one-half teaspoon salt, four teaspoons sugar, one cup of milk, one tablespoon melted fat. Mix and sift ingredients, add milk and fat. Mix quickly, do not beat. Bake in greased muffin pans twenty minutes. This makes twelve muffins.—Alma B., Augusta, Michigan,

Filled Cookies—1 cup raisins, one-half cup sugar, one teaspoon flour. Chop the raisins and mix into the other ingredients. cook these together until thick, stirring to prevent scorching. Place plain cooky dough, roll and cut out in buttered pans, and spread one teaspoon of the raisin filling on top of every cooky, cover with another cooky and bake in slow oven.—Miss Alma Becker.

Grandma's Gingersnaps.—One cup of molasses, one teaspoon ginger flour, one-half cup shortening to make a stiff batter, one teaspoon soda. Boil molasses five minutes and add the shortening, soda and ginger. Cool lightly and add flour enough that the dough may be rolled very thin, cut and bake in a hot oven. Don't let it burn.

WOMEN'S EXCHANGE

IF you have something to exchange, we will print it FREE under this heading providing: First—It appeals to women and is a bonifide exchanges, no cash involved. Second—It will go in three lines. Third—You are a paid-up subscriber to The Business Farmer and attach your address label from a recent issue to prove it. Exchange offers will be numbered and inserted in the order received as we have room. —MRS. ANNIE TAYLOR. Editor.

111.—Assorted bulbs of dahlias and gladiolus in exchange for wool and cotton pieces for patchwork.—Mrs. Arthur Palmer, Paris, Michigan.

The Runner's Bible

(Copyright by Houghton Mifflin Co.)

By this shall all me know that ye are my diciples, if ye have love one to another. John 13:35.

Knowledge puffeth up, but love buildeth up. 1 Cor. 8:1.

Hatred stirreth up strifes; but love coveretl all sins. Prov. 10:12.

—If a brother has in penitence cast aside sin you will speed him into happiness by veiling his past from the world, with your own loving silence.

No one deserving the name of Christian ever resurrects another's sinful past to his shame.

Let all bitterness, and wrath, and anger and clamor, and evil speaking, be put away from you, with all malice. Eph. 4:31.

AIDS TO GOOD DRESSING

BE SURE AND SEND IN YOUR SIZE

FASHION BOOK NOTICE

Send 10c in silver or stamps for our UP-TO-DATE SPRING AND SUMMER 1924 BOOK OF FASHIONS, showing color plates, and containing 500 designs of Ladies', Misses' and Children's Patterns, a CONCISE and COMPREHENSIVE ARTICLE ON DRESSMAKING, ALSO SOME POINTS FOR THE NEEDLE (Illustrating 30 of the various, simple stitches) all valuable hints to the home dressmaker.

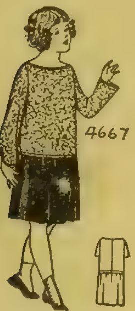
4653. A Stylish Blouse.—Here is Fashion's latest expressian in blouses. It may be finished with square neck outline, or with the little band collar at high neck line. The sleeve is smart in wrist length, and popular and very comfortable in the short length of the small view. This Pattern is cut in 6 Sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. A medium size requires 2 ⅞ yards of 40 inch material.

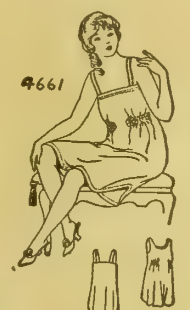
4667. A Good Dress for School.—Figured woolen and serge are here combined. Velvet and crepe or taffeta and velvet are also a good combination for this model. Gingham and linen would combine well, as would also pongee and crepe. The Pattern is cut in 4 Sizes: 6, 8, 10 and 12 years. An 8 year size requires 2 ⅛ yards of one material 40 inches wide. To make as illustrated requires ⅞ yard of plain material and 1 ¼ yard of figured material.

4647. A Stylish Coat Dress.—Here is a very attractive model, than may be finished with or without the flounces. It is a good style for broadcloth, mohair, serge, twill or kasha. The Pattern is cut in 6 Sizes: 34, 36, 38, 40, 42, and 44 inches bust measure. A 38 inch size requires 6 ¼ yards of 40 inch material, if made with flounces. If made without flounces 4 ⅞ yards will be required. The width at the foot is 1 ⅛ yard.

4661. A Comfortble Under-Garment for Girls' and Juniors.—Nainsook, crepe, crepe de chine, or washable satin could be used for this style. The fulness of the front may be disposed of in gathers, pin tucks or tiny plaits. Hemstitching, ribbon binding or embroidery may be used for decoration. The Pattern is cut in 6 Sizes: 6, 8, 10, 12, 14 and 16 years. A 12 year size requires 2 yards 36 inch material.

4656. A Popular Play Suit.—Pongee, linen, wool rep, jersey and gingham would be good for this model. The sleeve may be finished short, or in wrist length. The closing is comfortable and convenient. This Pattern is cut in 4 Sizes: 3, 4, 5 and 6 years. A 4 year size requires 3 ⅛ yards of 27 inch material.

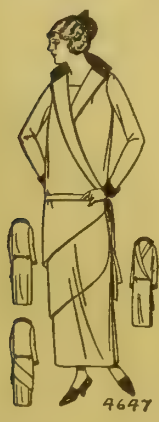




4660. A Practical "Traveling Accessory."—This handy receptacle for comb, brushes, and other toilet articles, will be found very useful on boat or train. It may be worn like an apron or folded up like a pocket or bag. Rubberized cloth, cretonne, ticking, or denim could be used for this model. The pattern is cut in One Size: It requires 1 ½ yard of 27 inch material.

4654. A Smart Suit for the Small Boy.—This is a practical play or school suit. It may be developed in linen, pongee, seersucker or kindergarten cloth as well as in serge, or flannel—Or, one may have the trousers of cloth, and the blouse of wash material. The Pattern is cut in 4 Sizes: 2, 3, 4, and 5 years. A 3 year size requires 2 ⅛ yards of 36 inch material.

4659. A Set of Two Practical Garments for Infants.—A dainty yoke dress and a comfortable "barrie" or petticoat is here depicted. The dress could be of lawn, batiste or fine nainsook. The barrie coat of flannel or cambric. The Pattern includes both designs. It is cut in One Size—and requires 2 yards for the Dress and 1 ⅝ for the barrie coat. To make the waist portions of the "barrie" of cambric will require ¼ yard.



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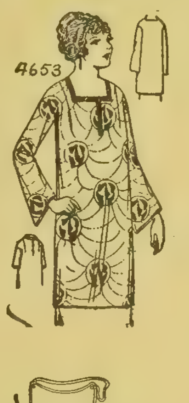

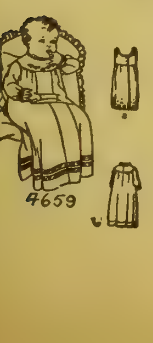

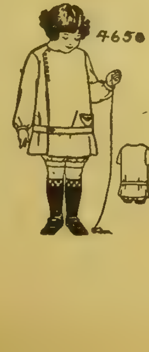

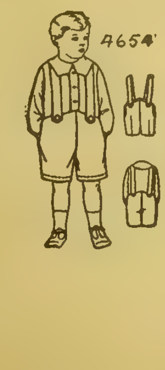

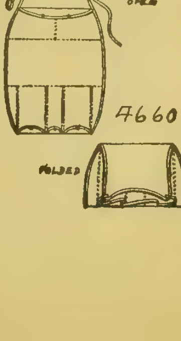

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RECIPES

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Drain juice from half a can of pineapple, add one tablespoonful of vinegar and enough water to make a pint. Heat to boiling point and add one package of Lemon Jell-O. Just as Jell-O begins to set, add three slices of canned pineapple, cubed, one-half can Spanish pimentos, shredded, and one medium size cucumber, salted and cut fine. Mould in individual moulds or in one large mould and slice. Serve with cream salad dressing.

New Manhattan Salad

Dissolve a package of Lemon Jell-O in a pint of boiling water and one teaspoonful vinegar. While it is cooling, chop one cup tart apples, one cup English walnuts, one cup of celery. Mix these ingredients, season with salt, and pour over them the Jell-O. Cool in individual moulds. Serve with mayonnaise or French dressing.

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Wexford Farmers Organize Community Meet

(Continued from Page 4)

Agricultural School attended the Community Meet quite often and he and others gave talks on balanced rations for dairy cows, making a good ration by using the crops you raised and adding the lacking ones, thereby keeping expense down; adaptability of soils, fertilizers, etc. The pastor of the Manton Methodist Episcopal church made an address emphasizing the importance of get together meetings in the creating and fostering of cooperation among farmers.

The second summer started like the first with monthly meetings but people seemed unusually busy even for farmers, and farmers are the busiest people there are. In the months since the opening meeting a number of the most useful helpers had left the community. The teacher who helped start the meetings was gone and another teacher whose home was in the neighborhood had moved to the district where she taught and opened similar meetings there. Several of the young men had gone to the cities, in the general exodus from the farms a number of families had gone away. Some of the evenings were too hot for comfort. The chairman tried to interest the farmers in a milk testing association and borrowed an outfit with which he tested the samples brought, but in August it was decided to discontinue the meetings for the summer.

In the fall the Community Meet was reorganized. A new chairman, Mr. G. W. Brown, was elected as well as a new sec'y-treas. It was again voted to hold weekly meetings.

Some of the new things we have had this year are: a penny march to take care of the expense of christmas next winter, an auction sale of articles no longer wanted by their owner but of value to others which resulted in putting a tidy little sum into the treasury, and a resolution on the part of the men to make a quilt.

At one of the earliest meetings it was decided that the Community Meet needed a good lamp and some song books. These were paid for by collections. But when it was decided to buy an organ collections would have been too slow so a Community Ladies' Aid was organized. Meetings were held on alternate Wednesdays with a pot luck dinner for which five cents was charged. Any man who took a sleigh load of women to the aid got a free (?) dinner. There was some argument among the men as to whether the dinner was worth the trip but there was usually one man at least who though it was or was willing to sacrifice himself for the good of the cause.

Quilts were made and sold and carpet rags sewed. If the hostess desired the ladies' worked for her as well as for the community. The organ was bought also a huge coffee pot. Now that the men are planning a quilt perhaps they'll start an aid. Who can tell? They have already promised a dinner of their own cooking to the woman who will take a load of men to their quilting.

SERRADELLA

(Continued on Page 6)

al other Agricultural Experiment Stations have also tried it out, but so far it has found no place in America. Sweet clover, hairy vetch, and soybeans may be successfully used for building up the soil. Sweet clover is quite sensitive to soil acidity, but has the ability to produce better than most other crops on soils that are low in organic matter and available fertility. Soybeans are not so sensative to soil acidity as sweet clover and are adapted to sandy soils.—C. R. Megree, Associate Prof. of Farm Crops, M. A. C.

DAIRY and LIVESTOCK

BREEDS OF BEEF CATTLE

IN OUR January 5th issue we concluded a series of articles on the leading breeds of dairy cattle in the United States and starting with this issue we will publish a series of articles on the leading breeds of beef cattle.

The breeds of beef cattle in the United States are the Shorthorn (both horned and polled), Hereford (both horned and polled), Aberdeen Angus, and Galloway. Each of these breeds has been carefully selected and bred for a long period of years, with the result that individuals transmit their breed characters very readily; hence their value and importance for use in improving or grading up native or scrub cattle.

With frequent exceptions, especially the Shorthorn, the cows of the beef breeds are not heavy milkers, and in this point lies their success as desirable and economical producers of beef. The heavy milking tendency, as with the dairy breeds, is associated with a conformation of body which prevents the animal from yielding the greatest quantity and the best quality of beef.

1.—Shorthorn

Of the breeds of beef cattle in the United States, the Shorthorn is the most extensively grown. The first importations where made in 1783 by Miller and Gough, of Virginia and Maryland, respectively. These cattle were brought from the Tees River Valley, in northeastern England, where they were sometimes spoken of as Teeswater, or Durham, cattle. These names are practically obsolete, and now only the name Shorthorn is used. Such men as Colonel Lewis Sanders, of Kentucky, who imported Shorthorns in 1817, Samuel Thorne, of New York, who in 1853 imported Duchesses and the famous Cherry, Abram Renick, who produced the famous bull Airdrie, and R. A. Alexander, of Kentucky, may be considered the founders of the Shorthorn breed in America. Later, the Ohio Importing Company was organized by some of these men and others to promote the industry.

The Shorthorn is the largest of the beef breeds. As a rule, when raised under favorable conditions the mature bulls weigh between 1,800 and 2,400 pounds, and the cows usually weigh between 1,300 and 1,600 pounds. These cattle have great adaptability and do well almost everywhere. They may vary in color from all red or all white to any combination of red and white, and a blending of the red and white hairs (roan) is a popular color. The Shorthorn crosses well with scrub and grade cows, the calves of such a matings developing into desirable beef cattle. The bulls are very prepotent and have been used freely in grading up the scrub cattle of the plains, in both this country and South America.

Some of the other breeds excel the Shorthorn in grazing ability where feed and pasture conditions are favorable. The Shorthorn thrives best where grasses are abundant and feed plentiful. Under these conditions it is not equaled by any other breed. The Shorthorn is early maturing, "growthy," and fattens readily.

Of all the beef breeds the Shorthorn excels in milk production, the large milk flow insuring a good calf. For this reason the Shorthorn cow is favored on many small farms to supply milk for the family in addition to raising a calf for beef. The steers sell readily as feeders and produce a very high-class beef with a thick loin and full hind quarter which furnish profitable cuts.

In conformation the Shorthorn is wide, deep, lengthy, and thickly fleshed—a good beef type. The great width of back and the straight lines of the Shorthorn, together with its depth, give a more rectangular form than that of any of the other breeds, although the wide distribution of the breed has caused a slightly greater difference in this respect to be recognized than in other beef breeds.

In the cow the following points should be noted: The horn is usually small and curved forward, with the tips pointing inward, upward, or sometimes downward, and should be of a waxy, yellowish color. The head should be shapely, with

KOW-KARE
DAIRY ASSOCIATION CO
THE HOME COW DOCTOR

Kow-Kare Helps World's Champion Ayrshire Cow

The use of Kow-Kare in the treatment of diseases, and in increasing the milk yield, is general in dairies of all classes. On the smallest hillside farm, or in the homes of the fancy herds Kow-Kare is equally valued.

M. G. Welch & Son, Burke, N. Y., owners of a world's champion cow, write us: "Enclosed find picture of our four-year Ayrshire cow, Agnes Wallace of Maple Grove (No. 25171), champion four-year-old Ayrshire cow of the world, with a record of 17,657 pounds milk and 966 pounds butter in one year. We have used Kow-Kare in our herd for years and would not think of getting along without it. We consider it the best cow tonic known."

The medicinal properties of Kow-Kare act directly on the digestive and genital organs of the cow—the milk-making function. By toning them up to active vigor the milk flow is increased and disease is guarded against.

Barrenness, Abortion, Retained Afterbirth, Scours, Bunches, Milk Fever, Lost Appetite and similar cow troubles always result from lowered vitality of these important organs. In treating such diseases Kow-Kare strikes at the heart of the trouble and assists nature in the rebuilding process.

Few successful dairymen now try to go through the winter months without the occasional use of Kow-Kare. Fed one week out of each month or for a month at calving time, Kow Kare pays big returns in better milk yield and freedom from disease.

Feed dealers, general stores and druggists sell Kow-Kare. Large size $1.25; medium size 65c. Send for free cow book, "The Home Cow Doctor."

DAIRY ASSOCIATION CO., INC.
Lyndonville, Vt.

FREE BOOK

BREEDERS' DIRECTORY

Ads under this heading 30c per agate line for 4 lines or more. $1.00 per insertion for 3 lines or less.

CLAIM YOUR SALE DATE

To avoid conflicting dates we will without cost, list the date of any live stock sale in Michigan. If you are considering a sale advise us at once and we will claim the date for you. Address, Live Stock Editor, M. B. F., Mt. Clemens

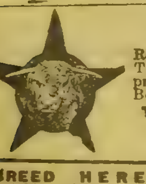
March 7—Poland Chinas and Angus, E. A Clark, St. Louis, Michigan.
March 11—Poland Chinas, Detroit Creamery Farm, Mt. Clemens, Michigan.
March 12—Holsteins, W. J. Bailey, Washington, Michigan.
March 20—Holsteins, John Rolfe Farm, Battle Creek, Mich., W. R. Harper, Sale Manager, Middleville, Mich.
March 25—Holsteins, Fred H. Lee, Plymouth, Michigan.

CATTLE

HOLSTEINS

FOR SALE
My Entire Herd of Holstein Cattle
One 31 lb. herd sire, 10 females. Among them are two A. R. cows, a 20 lb. 2 yr. old and a show cow, and a 19 lb. 3 yr. old. 4 cows are just springing. The herd is free from T. B. and sold under a retest. If interested write or call for pedigrees. Time will be given for one year.
H. W. MOHR, Pigeon, Michigan.

HEREFORDS



HEREFORDS
Registered Breeding Cattle, T. B. Tested at practical prices for production of Hereford Baby Beeves profitably all ages.
T. F. B. SOTHAM & SONS.
(Herefords since 1839.)
St. Clair, Mich.

BREED HEREFORDS THAT FATTEN quickly. Eleven choice two-year-old heifers and several yearling bulls sired by International Prize Winners for spring sale. Write us for information. Breeders of Herefords since 1860.
CRAPO FARM, Swartz Creek, Michigan.

AYRSHIRES

AYRSHIRES
To make room for winter we are offering bred cows and heifers also some well bred young bulls. Look up our winnings at leading state fairs.
W. T. SHUTTLEWORTH, Ypsilanti, Michigan.

FOR SALE—REGISTERED AYRSHIRE bulls and bull calves, heifers and heifer calves. Also some choice cows.
FINDLAY BROS., R 5, Vassar, Mich.

ANGUS

WE HAVE SOME FINE YOUNG ANGUS BULLS from International Grand Champion Stock at reasonable prices. **E. H. KERR & CO., Addison, Mich.**

RED POLLED

FOR SALE—REGISTERED RED POLLED Cattle. Both Sex.
PIERCE BROS., R. 1, Eaton Rapids, Michigan.

great width between the eyes, short from the eyes to the muzzle, which should be large and flesh-colored, with large, open nostrils. A black muzzle is objectionable to most breeders. The neck should be short and full, blending well into head and shoulder. The shoulders should be smooth and well covered with flesh. The crops should be full, the heart girth large, and the foreflank low. The chest should be wide and deep, with the brisket thick and well to the front. The ribs are usually well sprung and the barrel well developed. In good individuals the back is broad and the loin is wide, deep, and thickly fleshed. The hips are wide and should be well covered with flesh; the rump is long, wide, and level, carrying an abundance of flesh. The hind quarter is well developed in the Shorthorn, and it is characteristic in that it is almost straight from the root of the tail to the hocks; it is wide and thick, carrying flesh well down, thus giving a maximum quantity of flesh. The flank is low; the udder is usually well developed, extending well forward, with prominent milk veins. Teats of medium size are perferred.

The bull should possess the same desirable features as the female, without her feninine qualities. He should show masculinity by developing a heavier horn, a larger and thicker neck, a heavier bone throughout, and greater depth, thickness, and scale. His horns are heavier and less curved than the cow's, but they should not show undue coarseness.

VETERINARY DEPARTMENT

PARALYSIS

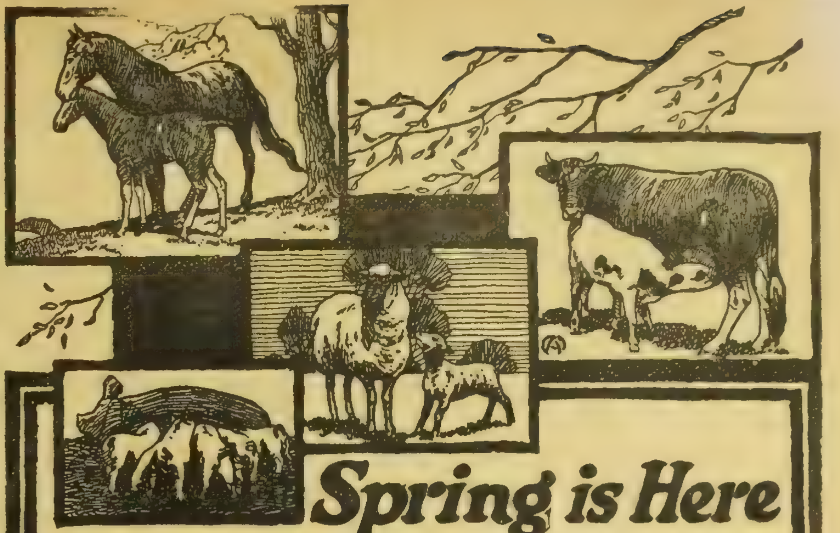
I have a pig weighing around 75 pounds which is unable to walk on its feet. It rolls or bounds around in the straw to get to the feding trough to drink milk. It has good appetite and is O. K. except it can not stand on its feet and walk. The hog house floor is partly cement and part hard wood floor, is kept clean and as dry as possible with good dry straw. I have feed this pig sulphur and condition powders but it seems to stay in the same condition. What can be done?—G. H., Sand Lake, Mich.

—Paralysis of the hind quarters of swine is quite common and is attracting considerable attention. In the majority of cases the cause is obscure and the treatment is very unsatisfactory. Various theories of the origin of the disease are given. A lack of mineral matter in the food of growing pigs may affect the joints and bones and cause paralysis. Paralysis sometimes follows parturation in sows that are in a run down condition and are being nursed heavily. In all probility some cases are due to lesions in the spinal cord, such as tuberculosis, tumors, abscess and diseased vertebrae. Confining pigs in small inclosures without exercise for a long time may cause paralysis. If there is constipation the pig should be given a dose of Epsom salts about two ounces as a drench in water. Give a light diet such as slop made of bran and milk. Make the animal as comfortable as possible, keep them in a clean place with clean bedding and plenty of fresh water. The daily administration of about four drams of cod liver oil in the feed sometimes gives good results.—John P. Hutton, Michigan Agricultural College.

Testing of seed corn can be done by any farmer. Why take a chance with untested seed when a little time will tell the story before the crop is planted?

CHANGE IN DATE OF CLARK'S SALE

IN our February 2nd issue we published an advertisement regarding the sale of pure bred Poland China hogs and Aberdeen Angus cattle to be held on February 20th. Thru an error the place where the sale was to be held was not mentioned. Mr. Clark postponed the sale until Friday, March 7th, 1924, and it will be held at his farm at St. Louis, Mich. Let's all attend.



DR HESS STOCK TONIC

Spring is Here

All out-of-doors is filled with the bleat of the lamb, the bawl of the calf, the grunt of the pig, and the whinny of the colt.

Youth asserting itself everywhere!

Keep their bodies healthy, and stomachs full.

You can then count on good growth—quick development—and begin to cash in on them before the summer-end.

Let
DR. HESS STOCK TONIC
be your insurance policy

against disease, insurance of good appetite, good digestion. It keeps the worms away.

Then, there are the mothers:

Your COWS need it for its system-toning, bowel-cleansing, appetizing effects. Puts them in fine condition for calving.

Your BROOD SOWS will be relieved of constipation and put in fine fettle for farrowing.

Excellent for MARES in foal—and EWES at lambing time.

It makes for good appetite, and more milk to nourish the offspring.

Tell your dealer what stock you have. He has a package to suit. GUARANTEED.

I spent 30 years in perfecting this Tonic.
GILBERT HESS
M.D., D.V.S.

25 lb. Pail, $2.25 **100 lb. Drum, $8.00**

Except in the far West, South and Canada.

Honest goods—honest price—why pay more?

DR. HESS & CLARK **Ashland, O.**

Dr Hess Dip and Disinfectant
For Sheep Ticks - for Hog Lice - for Health

DISPERSAL SALE

25 HEAD REGISTERED HOLSTEINS 25
Strongly bred in Pontiac Appollo, Pontiac Burke and King of the Pontiacs

Wednesday, March 12, 1924, Sale starts at 1 o'clock

21 head by 30 to 34 lb. bulls. One 24 lb. 4-year-old daughter of a 33 lb. cow with a 1082 lb. butter record. 16 bred to 30 lb. bull. Catalog ready March 1st.

W. J. BAILEY, - - Washington, Mich.

JERSEYS

REG. JERSEYS, POGIS 99th OF H. F. AND Majesty breeding. Young stock for sale. Herd fully accredited by State and Federal Government. Write or visit for prices and description.
GUY C. WILBUR, BELDING, Mich.

SHORTHORNS

RAISE SHORTHORNS WITHOUT HORNS Like Kelley does. U. S. Accredited Herd No. 28945. For description and price write,
L. C. KELLY & SON, Plymouth, Michigan.

GUERNSEYS

GUERNSEY BULL CALVES $50. A. R. BREEDING. 50% to 75% breeding of Norman's Missaukee Red Rose. Bull soon ready for service $100.
A. M. SMITH Lake City, Michigan.

GUERNSEY—PURE BRED BULL CALVES from 4 to 6 months old for sale. Priced for quick sale. Herd T. B. tested.
H. F. NELSON, R. 1, McBrides, Michigan.

(Continued on Page 31)

Dispersion Sale Registered Holstein Cattle at Battle Creek, Mich., on Thursday, March 20, 1924

The entire herds of T. W. Sprague and John Rolfe comprising about 75 head of well-bred registered Holstein cattle will be dispersed at the John Rolfe farm near Battle Creek, Michigan, on
THURSDAY, MARCH 20, 1924.

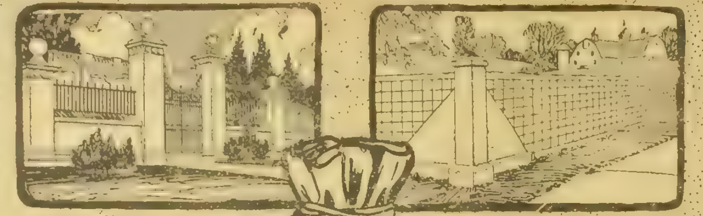
In this sale will be:
The 31-lb. cow, Princess Vale Piertertje
The 31-lb. yearling bull, Wolverine Prince Echo,
The 30-lb. 8-year old herd bull, Traverse Echo Sylvia King Segis,
A daughter of the 30-lb. bull, King Korndyke Hengerveld Ormsby,
Two daughters of the only Living Centuary Sire, Maple Crest Korndyke Hengerveld,
Eleven grand daughters of King of The Pontiacs,
Six daughters of the 30-lb. bull, Judge Walker Pietertje,
Six yearling daughters and six heifer calves, out of the 30-lb. herd sire, Traverse Echo Sylvia King Segis,

Also numerous well-bred animals that space does not permit us to mention.
If interested, write for a sale catalog to

JOHN W. ROLFE, R. F. D. No. 9 BATTLE CREEK, MICHIGAN,
WILBUR SPRAGUE, R. F. D. No. 9, BATTLE CREEK, MICHIGAN, or to
W. R. HARPER, MIDDLEVILLE, MICHIGAN.

COLONEL D. L. PERRY, Auctioneer,
Columbus, Ohio.

W. R. HARPER, Sale Manager
Middleville, Michigan.



ALPHA

The dealer who supplies ALPHA is a cement-service man, working in close cooperation with us.

See him and get a helpful Service Sheet or Special Bulletin on the building operation that most interests you.

Alpha Portland Cement Company

CHICAGO, ILL. EASTON, PA.
Battle Creek, Mich. Ironton, Ohio St. Louis Pittsburgh
Philadelphia Boston New York Baltimore

CEMENT

Let US Show YOU

How to Make Money Raising Foxes

If you get the right start, fox raising will pay you enormous profits. We show you how—we start you right. On a small investment you can start on the road to fortune.

The Big Secret of Success
in the fox raising business is getting the right foundation stock from reliable breeders. We have the finest stock in the country—animals with show records—Don't take chances—get your foundation stock from us and be on the safe side. Let us start you right. Write today for full particulars.

DeLuxe Silver Fox Ranch, Manistee, Mich

Galloway Challenges The World To Beat This Separator

Made in 4 sizes

90 DAY FREE TRIAL ON YOUR OWN FARM

$4.75

Skims closer, runs easier, operates more economically and sells at lowest price. So you can't beat it anywhere. That's what a Hundred Thousands users say.

Down, Balance On Easiest Terms
and you get 90 days to try it. If it meet all claims, it's yours. If it fails, it's mine. Besides lowest prices aud easiest terms, I give customers aluminum milk pail filled with aluminum as shown in picture. That's special advertising offer. Write to day for Special Bargain Circulars.

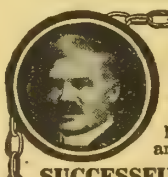
WILLIAM GALLOWAY COMPANY
363 Galloway Station, Waterloo, Iowa

DON'T WEAR A TRUSS

BE COMFORTABLE—
Wear the Brooks Appliance, the modern scientific invention which gives rupture sufferers immediate relief. It has no obnoxious springs or pads. Automatic Air Cushions bind and draw together the broken parts. No salves or plasters. Durable. Cheap. Sent on trial to prove its worth. Beware of imitations. Look for trade-mark bearing portrait and signature of C. E. Brooks which appears on every Appliance. None other genuine. Full information and booklet free in plain sealed envelope.

M . C. E. BROOKS

BROOKS APPLIANCE CO., 297 STATE ST., MARSHALL, MICH.



ANTI-ABORTION

For treating your cows for loss of calves. Inexpensive and easily applied by yourself.

SUCCESSFULLY USED FOR THIRTY YEARS

Write for FREE copy of The Cattle Specialist. Answers every question pertaining to Abortion in cows. *Ask our dealer or write Dr. David Roberts direct.*

Dr. David Roberts Veterinary Co.
152 Grand Ave., Waukesha, Wis.

ANTI-ABORTION

ECZEMA

CAN BE CURED

Free Proof To You

J. C. HUTZELL
DRUGGIST

All I want is your name and address so I can send you a free trial treatment. I want you just to **try** this treatment—that's all—**just try it.** That's my only argument.

I've been in the Retail Drug Business for 20 years. I served four years as a member of the Indiana State Board of Pharmacy and five years as President of the Retail Druggists' Association. Nearly everyone in Fort Wayne knows me and knows about my successful treatment. Over **twenty thousand** Men, Women and Children outside of Fort Wayne, have, according to their own statements, been cured by this treatment since I first made this offer public.

If you have **Eczema, Itch, Salt Rheum, Tetter**—never mind how bad—my treatment has cured the worst case I ever saw—**give me a chance to prove my claim.**

Send me your name and address on the coupon below and get the trial treatment I want to send you FREE. The wonders accomplished in your own case will be **proof.**

CUT AND MAIL TODAY

J. C. HUTZELL, Druggist, No. 4831 West Main St., Fort Wayne, Ind.

Please send without cost or obligation to me your Free Proof Treatment.

Name__________ Age__________

Post Office__________ State__________

Street and No.__________

DAIRYING—THE HOPE OF THE UPPER PENINSULA

NOTHING heretofore in an industrial way—unless it be the almost rocket-like ascent of the tourist industry—has caused the wave of enthusiasm and concerted effort which is attending the pure-bred dairy sire campaign now in progress throughout the Upper Peninsula of Michigan. It is a movement which, born almost over-night, and wholly as the result of a happy inspiration, has swept the peninsula from stem to stern, and left it rocking with the impact and reeking with the spirit of pure-bred bulls, pure-bred cows, better farms, and more creameries and bigger profits.

Probably the most important phase of the better-dairying campaign throughout upper Michigan is the pure-bred dairy sire campaign which officially opened January 1, 1924, and will formally close on the same date, 1925. It is the plan launched under the joint direction of the extension department of the Michigan Agricultural College; the railroads operating throughout the peninsula and the Upper Peninsula Development Bureau. It is a plan whereby the sum of $1,000 donated by the development bureau will be paid out in cash prizes, January 1, 1925, to the organizations in the various districts which have been most successful in the work of substituting pure-bred bulls for scrubs.

The plan involves, briefly, the organization of separate committees in each county, averaging about fifteen members for each district. These committees direct the work in their respective districts and are, in turn, responsible to a central committee composed of representatives of the three directing agencies. Among the co-operating organizations and institutions are the State Farm Bureau, the State Grange, banks, lumber companies, mining companies, individuals, corporations and the press, in each of the twelve counties which are entered to date.

Thus, some 180 or more live-wire citizens of Cloverland are today united in the one big effort to chase out the "scrub" and to establish, in his place, the pure-bred animal which is to build and improve every dairy herd throughout the region. That is, these 180 men represent only those who have pledged their time and effort as committeemen, toward the campaign in their respective districts. If we were to count every individual in upper Michigan who will have had a hand in it before the year is out, the total would be considerably in excess of that figure.

That, briefly, is what we mean when we say" the $1,000 bull campaign". But that isn't all.

In addition, to this carefully planned drive, there is apparent, all throughout the upper peninsula, a determined effort to improve and develop the diary industry with all possible speed, and yet, with every thought and consideration for the consistency and practicality of the plan.

Live-stock associations, cow-testing organizations, better dairying committees and other similar bodies are seeking, conscientiously, to make dairying an established and flourishing branch of agriculture throughout the peninsula. Already some communities have formulated definite plans, aside from the $1,000 bull campaign, for the immediate improvement of their dairy industry. This is true of Escanaba, at Ontonagan, and in the Gogebic range districts, particularly, where associations have been formed for the immediate purchase of pure-bred stock for distribution among the farmers. Such action has been made possible largely through the action co-operation of the banks in each district, which, after all, is the most gratifying feature of the whole situation. When the banker is "sold" the plan—wherever it may be—savors of practical merit. And that is surely true of this new movement in Cloverland.

But—when all is said and done; when every phase of the 'variphased' campaign is considered, there looms out of it all the one big issue—Better Dairying. And upper Michigan, with its climate, soils, transportation facilities and favorable geographical location, is adequately equipped as the background for the movement.—L. D. Tucker.

Which Road for You
?
CONSUMER
RETAILER
BROKERS
SPECULATORS
COMMISSION
and OTHER
MIDDLEMEN
CREAMERY
CREAM STATION
OTHER CREAMERY SYSTEMS
BLUE VALLEY SYSTEM
CONSUMER
BLUE VALLEY

For 23 years Blue Valley has given farmers a high direct cream market. No useless profit takers between them and Blue Valley—between Blue Valley and retailers. Blue Valley butter, the National brand, brings farmers bigger cream checks direct.

Another Blue Valley Booster
"Will ship the cream when we have it, as we can't do as well anywhere as we can by selling it to you."—Jacob D. Long, Scottsville, Michigan.

Thousands of B. V. B's (Blue Valley Boosters) will tell you it pays to ship your cream yourself direct to Blue Valley.

For Bigger Cream Checks
Ship to
BLUE VALLEY CREAMERY CO.

Ship to Blue Valley Creamery in City nearest you:

Detroit, Mich.
Grand Rapids, Mich.
Milwaukee, Wis.
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BLUE VALLEY BUTTER is good butter

Also creameries in 16 other cities
General Office: CHICAGO

That's why millions use it

I Want to Send Every Reader of This Paper

C. G. PHILLIPS
"The Corona Man"
(5)

a Big Can of CORONA

By Mail—Postpaid—on 20 Days' Free Trial

I want to prove to you at my risk that CORONA is the greatest healing ointment that you have ever used for all kinds of cuts, wounds, sores, etc. on man or beast.

Just Send Your Name and Address

and I'll send you this big can, postpaid. Use it for Chapped Hands, Ulcers, Cuts, Wounds, Bruises, Piles, Boils, Eczema, etc.—nothing like it for keeping the hands from chafing during winter season. Use it on your animals for Barb Wire Cuts, Collar Boils, Cracked Hoofs Grease Heel, Sore Teats, Caked Udders, etc., then if after 20 days' free trial you are convinced it is the best healing preparation you ever used—then send me **65c** in full payment. If you are not satisfied after giving it a trial—don't pay me a cent. I let you be the judge. Send name and address today for this big 20-DAY FREE TRIAL CAN.

C. C. PHILLIPS, "The Corona Man"

THE CORONA MFG. CO.
42 Corona Block, KENTON, O.

NOTE—If you have used Corona and druggist cannot supply you and you prefer larger can, order direct from ad. 20 oz. can postpaid $1.25.

Filled 40 Silos—Never Plugged

Throws And Blows
Saves One Man

"Filled 40 silos this fall (1922) with an L-16 Papec Cutter, second season, and never had a plugged pipe." Ernest Kahler, Clifton Springs, N. Y.

The Papec is made in four sizes to fit any power. N-13 and L-16 sizes are ideal for Fordsons.

Send today for our new catalog and U. S. Gov't Bulletin "Making and Feeding of Silage"—both free. Learn why a Papec soon pays for itself.

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PAPEC
Your dollars buy more in the Papec

FREE This Practical Book on CONTAGIOUS ABORTION

Tells you about cause, effects and treatment of this dangerous disease; explains how, without risk, you can, like thousands of other farmers and stockmen, rid your herd of it by using ABORNO the pioneer, guaranteed remedy for Contagious Abortion. Write for FREE Copy.

ABORNO LABORATORY
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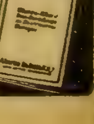

Should be Used in Every Vineyard

A wonderful labor-saver in the culture of grapes and berries. Using it, you hoe with horse power. You do quickly and thoroughly work that otherwise would be slow and tedious.

JOHN DEERE-SYRACUSE
Grape and Berry Hoe

Kills grass and weeds; stirs the soil; prevents mildew; its use means better quality and bigger quantity grapes and berries. Blade can be adjusted to cut deep or shallow and to throw soil towards or away from vines. Easily guided in and out around posts and vines. Horse hitches to one side of the pole, giving plenty of room for hoe to work under vines and bushes without injury to them from horse or whiffletree, even when foliage is at full growth. Cultivator attachment extra.

Get increased profits from your vineyard from now on by using this hoe. Sold by John Deere dealers. Write today for folder describing it, address John Deere, Moline, Ill., and ask for free Booklet GD- 733

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THE TRADE MARK OF QUALITY MADE FAMOUS BY GOOD IMPLEMENTS

Pay Less
for your implements
by buying them
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See your Moline dealer
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NEW MOLINE PLOW CO.
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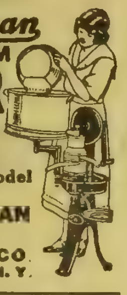

$24.95 Upward *American* CREAM SEPARATOR

On trial. Easy running, easily cleaned. Skims warm or cold milk. Different from picture which shows large size easy running New L.S. Model
Get our easy
MONTHLY PAYMENT PLAN
Write today for free catalog.
AMERICAN SEPARATOR CO.
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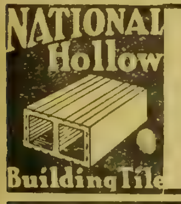

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garage, barns, warehouses, corn cribs, hog, milk and poultry houses, MA'I FACE, homes, churches, etc. Glazed tile, wood or cement stave silos. Early buyers discount, Write for agency proposition.
National Clay Products & Silo Co.
DETP. 16 MUNCIE, IND

30 DAYS FREE TRIAL
BLUST CHURN
Has been on market 62 yrs. Absolutely guaranteed. Easy to clean—no wear out to it. We give FREE with each churn a practical Dairy Thermometer and strong 3 legged milking stool. Get Free trial offer today.
THE BLUST CHURN CO.,
Mansfield, Ohio

HEAVES Use 2 large cans. Cost $2.50. Money back if not satisfactory. One can at $1.25 often sufficient. NEWTON'S Compound for Worm Expelling, Conditioning, Heaves, Indigestion, Distemper, Coughs. 65c and $1.25 cans. At dealers or post-paid. The NEWTON REMEDY CO., Toledo, Ohio

WHEN WRITING TO ADVERTISERS PLEASE MENTION THE MICHIGAN BUSINESS FARMER

START CAMPAIGN AGAINST BOVINE TUBERCULOSIS IN UPPER MICHIGAN

HAND in hand with the better-dairying campaign in Cloverland, comes the announcement by Dr. F. K. Hansen, assistant state veterinarian, that already six counties in upper Michigan are signed up for the bovine tuberculosis eradication work, and that this work has already been practically completed in two of the counties.

The counties on the list are: Gogebic, Ontonagon, Schoolcraft, Marquette, Chippewa and Delta. The first test of all herds in Gogebic and Ontonagon counties has been completed.

Work in the other counties will begin early in the spring, with the opening up of the highways, and, according to present plans, the first test will be completed in all six counties before next winter. A group of state and federal department workers will be retained in the upper peninsula during the winter to make re-tests of suspected cases and to wind up the season's activity.

It is the plan of the federal bureau of animal industry to accommodate, during 1925, all other counties which make application for this work. Thus—if the nine remaining counties of upper Michigan enroll for the T-B campaign during this year and next, Cloverland will represent the largest single area thruout the United States in which the work will be in progress, according to Dr. Hansen.—L. D. Tucker.

ALLEGAN COW TESTER ISSUES ANNUAL REPORT

KARL S. KING, cow tester for the East Allegan Association, reports in his annual summary that 302 cows were tested for the year, averaging 5623 pounds of milk and 242.1 pounds butter fat. Mr. Wm. Knobloch, one of the members of this association, of Otsego, Mich., had the high herd in butter fat production on 17 cows averaging 8997 pounds of milk and 479.9 pounds fat. His herd is made up of pure bred and grade jerseys. The high cow in butter fat production was an eight-year old grade jersey in Mr. Knobloch's herd. This cow made 13718 pounds milk and 715.3 pounds fat for the year. It is believed this is the highest cow testing association record made to date in Allegan county.

It is further interesting to study the records of production in the offspring from this cow. A three-year old grade jersey and a two-year old grade Jersey, both daughters out of this eight year-old cow, made 479.3 pounds fat and 476.4 pounds fat, respectively. The fat test on these three individuals for the entire year was 5.21, 5.23 and 5.27 per cent. This is a remarkably uniform test and uniform production for these high grade Jersey cows, all of them sired by purebred bulls.

The high herd in milk production belonged to Oliver Brothers, Plainwell, Michigan. In this herd of 10 purebred and grade Holstein cows averaged 9963.4 pounds milk and 350.9 pounds fat. Among the ten high herds in this association two Jersey herds averaged higher than 400 pounds fat annually. Mr. Knobloch's and Mr. David Anderson's. Mr. Martin Reed and Mr. John Smith also with purebred and grade Jersey herds, made an average above 350 pounds of fat. There were four Holstein herds that made better than 340 pounds fat average for the association year. Among the high cows listed 9 cows made over 500 pounds of fat and 24 cows made between 400 and 500 pounds of fat.

This is the second year that the East Allegan Association has operated. The interest aroused and the good work accomplished by the three associations that have been operating in this county during the past year have attracted considerable attention to the quality of dairy cows to be found in Allegan county. Both breeds—Holsteins and Jerseys—are well represented in the associations that are operating.—A. C. Baltzer, Dairy Extension Specialist, East Lansing, Michigan.

The Only Way

"Johnny," said the teacher sternly, "I want you to tell me where you learned to swear!"

Aw, I just picked it up, teacher," said Johnny. "But if you wanta learn I can't teach you none. You gotta go out where it's bein' done an' listen until you get it!"—Richmond Times-Dispatch.

F.S.R

Royster's "*cured*" fertilizer is *certified* fertilizer

YOU can't look at the ordinary bag of fertilizer and tell how good it is. You have to risk the time and money of a season's work before you KNOW. It isn't *known* to be good until you get your money!

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But Royster's "cured" fertilizer is like a certified check.

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It is certified by the "curing"—a feature of Royster's fertilizer which increases its value because of a more complete chemical action, making the plant food readily available to the plant. (Royster's goods age in great bins for four to six months. They are then re-milled and bagged).

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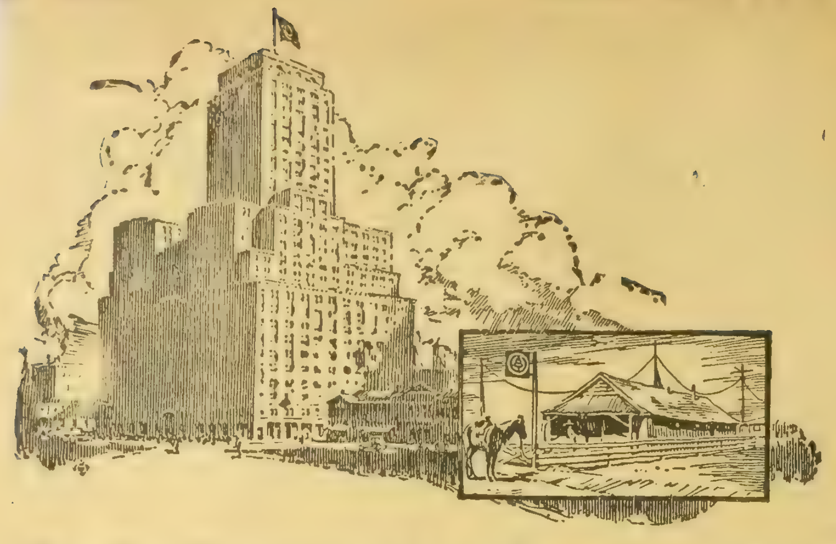

Each Serves Its Community

In Fraser, Colorado, a log cabin of three rooms shelters a telephone exchange that connects with the mountain homes of cowmen, miners, homesteaders and tie-cutters. In the heart of New York City a new building of twenty-nine stories is to become the home of several metropolitan central offices serving some 120,000 telephones. This building will contain, as well, offices for executives and for engineering, commercial, plant and accounting forces, providing space for over 7000 telephone workers.

Each of these buildings helps to render adequate and economical telephone service in its own community. They stand at the extremes in size, equipment and personnel. Yet they both indicate the nation-wide need for adequate housing of the activities of the Bell System; and they illustrate the varied ways in which that need is being met. One of the largest single items of plant investment of the Bell System is real estate, comprising nearly 1700 buildings acquired, with their sites, at a cost of $180,000,000.

It is continuously the aim of the Bell System to construct and so to situate each new building—whether executive office, central office, storehouse or garage—so that it shall serve its community with the utmost efficiency and economy, and remain a sound investment throughout its period of life.

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WE PAY $200 MONTHLY SALARY, FURNish car and expenses to introduce our guaranteed poultry and stock powders. BIGLER COMPANY, X682, Springfield, Illinois.

AGENTS SELL WOLVERINE LAUNDRY Soap. Wonderful repeater and good profit maker. Free auto to hustlers. WOLVERINE SOAP CO., Dept. B32, Grand Rapids, Mich.

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The Experience Pool

Bring your everyday problems in and get the experience of other farmers. Questions addressed to this department are published here and answered by you, our readers, who are graduates of the School of Hard Knocks and who have their diplomas from the College of Experience. If you don't want our editor's advice or an expert's advice, but just plain, everyday business farmers' advice, send in your question here. We will publish one each week. If you can answer the other fellow's question, please do so, he may answer one of yours some day! Address Experience Pool, care The Business Farmer, Mt. Clemens, Mich.

HAVE YOU EVER RAISED KUDZU GRASS?

DEAR Editor—Will you please ask your readers to tell me through your paper, if they have had any experience in raising Kudzu grass, in Michigan? If so, what kind of luck did they have? We have two seed catalogues in which it is advertised very highly. They say if you set out the roots 5 ft. by 10 ft. apart, that the second year, the vines will cover the ground. And you can cut two crops of hay from it each year in the north. The land will grow richer every year. And that it is as good or better than clover for stock and chickens. I bought some Dasheens, and they did not turn out good at all. In fact, they were a complete failure for me. Have any of your readers tried them? What do you think of the chestnut bean, that is being advertised. Do you think they are nothing but a colored bean, with a bean flavor or are they something extra nice?

I think it would be nice if the readers would write to your paper and tell of the different experiences that they have, in buying some new varieties of seed, and their luck in growing them. The seed catalogues are full of so many different things, that it is hard for a farmer to know which to buy and which not to buy. And I believe we could help each other a lot in that way, if we only would. We think your paper is fine, and do not want to miss a number. Wishing you the best of success, I remain—L. H., Cedar Springs, Mich.

CURING RING BONE

IF Mrs. Reader, North Branch, Mich., will get a one pound bar of Soder Led and bend it around his horse's leg just so it will rest on the ring bone cut off to right size and let his horse wear it in the stable only, take off when out it will kill it in 4 months. It killed one for me and he was so lame that he could hardly step on his foot and did not have any bunch. A veterinary in Hart, Mich., told me to do this and it would kill it.—A Reader, Muskegon Hgts., Mich.

Poultry Department

HOW I RAISE TURKEYS

PERHAPS almost everybody knows by this time how to raise turkeys successfully, but for fear there might be a few who are still having trouble, I want to tell them how easy I have found it to be.

When I first began to raise turkeys so many people told me to feed them curd or cooked clabber, but I tried that faithfully with very poor success.

I tried many ways and still kept losing little turkeys, so I finally tried feeding them just nice firm clabber, like I would eat myself, and lettuce and a few onion tops chopped fine.

When the little turkeys are two and a half days old I put them out with the mother turkey in a pen, (wagon frames are good) and give them sand to pick around in. Then I put fresh clabber out in baking powder can lids, or drinking fountains, on clean boards. They must not get themselves wet or the clabber dirty. I give them lettuce and onion tops chopped fine three times a day, but I keep the clabber before them all the time.

The clabber prevents all bowel trouble. Buttermilk is just as good for them, but they can pick the clabber up better. They are crazy about the clabber and will eat it till they look like they had the big crop, but it will not hurt them and will soon be gone and they will be calling for more and in no time they will be as fat as little butter balls.

Confined During First Week

I keep the little turkeys up till they are a week old, or can jump over a foot plank; then try to keep

RHEUMATISM

A Remarkable Home Treatment Given by One Who Had It.

In the year of 1893 I was attacked by Muscular and Sub-acute Rheumatism. I suffered as only those who are thus afflicted know, for over three years. I tried remedy after remedy, but such relief as I obtained was only temporary. Finally, I found a treatment that cured me completely, and such a pitiful condition has never returned. I have given it to a number who were terribly afflicted, even bedridden, some of them seventy to eighty years old, and the results were the same as in my own case.

I want every sufferer from any form of muscular and sub-acute (swelling at the joints) rheumatsim, to try the great value of my improved "Home Treatment" for its remarkable healing power. Do not send a cent; simply mail your name and address and I will send it free to try. After you have used it and it has proven itself to be that long-looked-for means of getting rid of such forms of rheumatism, you may send the price of it, one dollar, but understand, I do not want your money unless you are perfectly satisfied to send it. Isn't that fair? Why suffer any longer when relief is thus offered you free? Don't delay. Write today.

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High Grade, Utility Cockerels For Sale—April hatched—White Wyandottes, Barred Rocks and White Leghorns. **C. W. Heimbach, Big Rapids, R. 5, Michigan.**

S. C. ANCONA COCKERELS FROM SHEPPARD'S best, $3 to $7 each.
H. CECIL SMITH, Rapid City, Mich., R. 2.

Single Comb Rhode Island Whites. Winners At Holland Show hundred birds competing of first old pen and three other firsts. Eggs $2 per 15. Write **John A. Hartgerink, Zeeland, Michgian.**

EXTRA NICE OLD TOULOUSE GEESE. PEKIN and Rouen ducks. Narragansetts turkeys. S. C. R. I. Red cockerels at bargain prices.
MADIE RAY, R5, Leslie, Michigan.

FOR SALE—THOROUGHBRED TOULOUSE Geese and Buff Rock Cockerels. Blue ribbon prize winners. **Baldwin & Nowlin, Laingsburg, Mich, R4.**

Full Blood White China Geese Two Years Old. Large size, $5.00 each or $13.00 a trio.
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LEGHORNS

TANCRED, HOLLYWOOD AND WYCKOFF Males head my carefully selected breeding pens. Choice eggs $3.00 and $2.00 per 15. My stock is of the very best. Write me.
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RHODE ISLAND REDS TOMPKINS STRAIN to make room for young stock. I will sell after November 1, 1923, 50 2 year old hens at $2.00 each; 25 1 years old hens at $3.00 each; cockerels at $2.50 and up. All these cockerels are from my best 3 year old hens that layed 205 eggs or better in their pullet year. Quality breeder of Rhode Island Reds.
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CRYDER'S S. C. REDS, ONE OF LEADING Red pens in Michigan egg contest. Bred for color, shape, and heavy production. Write for prices on hatching eggs.
EDW. H. CRYDER, Alamo, Michigan.

S. C. R. I. REDS, MANHOOD STRAIN. Fine dark birds. Price $3 apiece or two for $5.
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R. C. R. I. Red Hatching Eggs $1.25 per 15. Postpaid. America's perfect breed for eggs, meat and beauty. **M. J. Spencer, R1, Melvin, Mich.**

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COCKERELS, THOMPSON STRAIN BARRED Rocks, dark matings, April Hatched, weight 7 lbs. from good layers, $3.50, 2 or more $3.00 each.
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BARRED ROCK COCKERELS AND PULLETS from America's best prize-winning laying strains. Winners of 18 first prizes at Detroit and M. A. C. the last two seasons. Low prices.
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FOR SALE—BEAUTIFUL BARRED ROCK Cockerels, also a few M. P. Ducks.
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TURKEYS

FOR SALE—PURE BRONZE TOMS $10.00 and $12.00, Hen Turkeys $6.00 and $7.00, also some fine pure old stock. Some nice Toulouse Geese. **Mrs. Thomas E. Wilson, Plymouth, Mich. R4.**

MICHIANG'S BEST GIANT BRONZE TOMS for sale. Large beautifully marked birds. Price reasonable. Write **MARY A JOYNT, Omena, Mich.**

Pure Bred Mammoth Bronze Toms One 2 Year old hardy beautiful well marked birds. Write for prices. **Mrs. F. Griffin, Riverdale, Michigan.**

MAMMOTH BRONZE TURKEYS, LARGE beautiful birds. Write for prices.
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Mammoth Bronze Turkeys. Goldbank Strain. Unrelated stock. Vigorous healthy birds. Write for prices. **Mrs. Perry Stebbins, Saranac, Mich.**

GIANT BRONZE TURKEYS FOR SALE. Toms $10 and $12 each.
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A FEW CHOICE PURE BRED GIANT BRONZE Turkeys for sale.
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Giant Bronze Turkeys from Prize Winning Birds. Large, Healthy, unrelated stock furnished.
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PUREBRED BOURBON RED TOMS $10.00 and $12.00 each.
THOS. G. CALLAGHAN, Fenton, Michigan.

MENTION THE MICHIGAN BUSINESS FARMER WHEN WRITING ADVERTISERS

them out of the dew in the early morning.

I feed them corn bread with black pepper at about a week old and when they are about two or three weeks old I gradually change to wheat and feed them wheat till they are grown. Of course, almost any kind of grain will do, but I think they grow off better when fed wheat. Wheat makes bone and muscle, and corn makes fat.

I feed my laying hens a laying mash in the morning and boiled oats at night and plenty of oyster shell and charcoal. Also try to have plenty of green stuff. Turkeys any size need shell or grit and plenty of charcoal, and clabber or sour milk is good for them at all times.

Lice cause a great many deaths among little turkeys. Sometimes they are so small that they cannot be seen with the naked eye. I powder the turks and the mother with a good powder when I take them off and once a week for six weeks afterward, and when they are a little older I put sodium fluoride on them, using the pinch method. I mention these powders, as I have had such good success with them. There may be others just as good.

I have the very finest, big-boned, healthy breeding stock that I can get. It is just as easy to raise a thoroughbred turkey as a scrub turkey and there is so much more pleasure and profit in raising the thoroughbred. At three months old my pullets are as tall as their mother and the toms are much taller.

How to Combat Roup

So many people have roup among their turkeys. It is a disease to be dreaded if not taken in time. The first sign of roup is a little foam in the eye and a wet nose. Just get the turpentine and a feather and put a drop up each nostril; wet the feather good and put it through that slit in the roof of the turkey's mouth and then down his throat; rub a little between his eye and nostril.

If he is puffed under the eye, slit that with a knife or small scissors, gently press the phlegm out and put a few drops of turpentine in the wound. A few applications will cure the worst cases. Some salts or copperas in the drinking water will be good, and if they have had roup long, some good tonic in their food for a few days is needed. Don't keep them up; doctor them and let them go.

If any turkey has the big-crop, don't operate, but use a funnel and tube and wash the crop out with creolin, a teaspoonful to a cupful of water. Wash it out twice with this solution and then twice with clear water. Of course it must be emptied first and this should be done early in the morning when there is least solid food in the crop. Keep the turkey up a few days, feeding it soft food and not much water.

For sorehead or chickenpox I scrape off the top of the bumps and paint them with iodine, then skip one day and paint again and then grease with axle grease or any good ointment and put salts in drinking water.

For cholera or black-head in turkeys, some have found that a child's dose of liver regulator and some copperas given every other day is very good. Give them water mixed with prepared chalk and scorched flour.

I have my turkeys all vaccinated against diseases, which is the easiest and best way of all, but you can't do that till they are about eight weeks old.

Turkeys are a great help on any farm in keeping down insects of all kinds, especially in the cotton. They can almost find their entire living in the fields and pastures without bothering the grain crops. We have raised turkeys for many years and they have never bothered anything but the melons. They have never hurt our fruit and we have most all kinds.—Mrs. J.

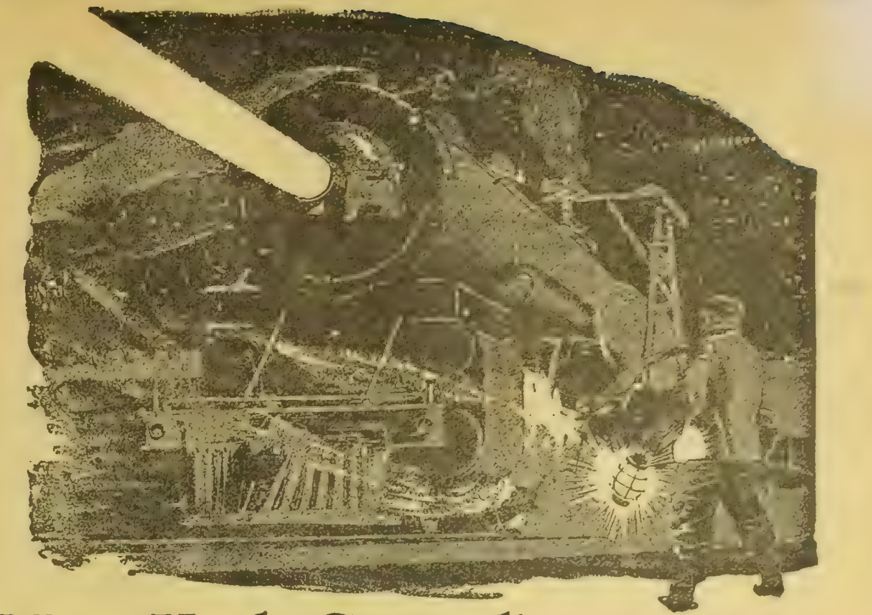
A schoolboy at lunch time entered a grocery store and said to the clerk: "Take this order: 10 pounds of sugar at 6 cents; 11 pounds of coffee at 25 cents; 8 pounds of tea at 30 cents. Add that up. How much is it?"

The clerk replied, "$5.75."

"Are you sure?" asked the boy.

"Of course I am sure."

The boy thanked him and said: "That's my arithmetic lesson for tomorrow."—Judge.



New York Central's 11,000,000 *horse-power*

THE locomotives in service on the New York Central Lines have an aggregate capacity of 11,000,000 horse-power. This equals a third of all power used in the manufacturing industries of the country.

Operating and maintaining this great power plant cost last year $169,000,000, or 33% of operating expenses. The men on the engines earned $34,000,000. In the fireboxes was burned $54,000,000 worth of coal. Repairs, another large item, took $54,000,000.

Adequate power is the first necessity of efficient transportation service. The capacity of New York Central Lines to meet the test of heavy traffic — as was so strikingly shown in the war emergency—is in no small measure due to the New York Central policy of maintaining a power reserve to meet abnormal traffic demands.

New York Central locomotives—whether designed to haul 100-car coal trains or the *Twentieth Century Limited*—are all built to special New York Central specifications, and year after year represent the highest achievement in American locomotive construction.

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We are heavy producers of first-class Chicks. Flocks on free range. Culled by expert. 100% Live Delivery Guaranteed. Order today from this Ad and get Chicks when you want them.

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English S. C. White Leghorns	$6.50	$12.00	$36.00	$57.50
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Blue Hen Incubators. Reference: Zeeland State Bank. Order today. You take no chances. Catalog Free.
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Our Modern Chicks ARE PURE BRED-FOR EGGS

400,000 CHICKS

BIG, STRONG, FLUFFY CHICKS hatched from well-bred and well kept, heavy laying hens insuring good growth and PROFITS.

	Prices on 50	100	500	1000
White, Brown and Buff Leghorns	$7.00	$13.00	$62.00	$120.00
Barred and White Rocks, S. C. and R. C. Reds, Anconas	8.00	15.00	72.50	140.00
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HEALTHY-VIGOROUS-PURE-BRED "GENEVA" CHICKS

CHICKS $10.00 UP
100% SAFE ARRIVAL GUARANTEED

Varieties	Prices on 50	100	500
White, S. C. & R. C. Brown & Buff Leghorns	$7.00	$13.00	$62.00
Barred Rocks, Reds, Black Minorcas	8.00	15.00	72.00
White Rocks, White Wyandottes, Anconas	8.50	16.00	77.00
Buff Orpingtons, Silver Laced Wyandottes, Blue Andalusians	9.50	18.00	......
Assorted, from Pure Bred Stock	6.00	11.00	50.00

Hatched from healthy, heavy laying flocks, well kept, insuring strong chicks that will grow into Profits. Postpaid. Order from this Ad. Save time. Reference, The Geneva Bank. Member International Baby Chick Ass'n. Free Catalog.
THE GENEVA HATCHERY, Box 23, Geneva, Indiana.

RURAL POULTRY FARM

PRODUCERS OF HIGH GRADE CERTIFIED CHICKS

From CERTIFIED 260-290 Egg Pedigreed Hollywood and Barron English White Leghorns. RURAL S. C. Brown Leghorns, Anconas and Barred Rocks. Pullets reported laying at 4 months. Fine, instructive catalog FREE, showing pictures of our birds, breeding establishment, etc. If you want the most for your money, investigate.

RURAL POULTRY FARM, Dept. 101, R. No. 1 ZEELAND, MICH.

SUNBEAM HATCHERY

SUNBEAM CHICKS Are Money Makers

Chicks are produced under my personal supervision. Hatched from select, pure bred, heavy laying hens, well kept to insure vigorous Chicks.

Varieties	Prices on 50	100	500
White, Brown and Buff Leghorns	$7.00	$13.00	$62.50
Barred Rocks, R. and S. C. Reds, Anconas	8.00	15.00	72.50
White and Buff Rocks, White Wyandottes, Black Minorcas	8.50	16.00	77.50
White and Buff Orpingtons, Silver Wyandottes	9.00	18.00	87.50

Mixed, all varieties, $12 per 100 straight. 100% Live Delivery Guaranteed. Postpaid. Order from this Ad. Bank references. There is no risk. Free Catalog. Member I. B. C. A. H. B. TIPPIN, Box E. Findlay, Ohio.

EGG-BRED CHICKS
200 Egg Strain S. C. English White Leghorns and Brown Leghorns. Our pen of White Leghorns to 1st prize (best W. Leghorn pen in the show) production class, in the largest utility show in the country held at Zeeland, Michigan. Dec. 28. Prof. E. Foreman of M. A. C. judging. 12 years of careful breeding for high egg-production, combined with 8 years of highly successful hatchery methods gives you chicks that grow into money makers. 100% live delivery guaranteed. Write for free catalog and prices.
ROYAL HATCHERY & FARMS
S. P. Wiersma, Zeeland, Michigan, R. R 2

Chicks With Pep

Try our lively and vigorous chicks from bred-to-lay and exhibition hens. They will make you money for they have the quality and egg laying habit bred into them. A trial will convince you. All leading varieties. Safe delivery. Prepaid. Prices right. Bank reference. Big illustrated catalog free.
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Pure Bred Chicks Can ship immediately.

Broiler Chix	11½c	White Rocks	16c
W or B. Leghorns	13c	W. Wyandottes	16½c
B Rox or Reds	15½c	Buff Orpingtons	16½c
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Extra selected standard bred chicks $4.00 per 100 more. Add 35c if less than 100 ordered. Good bank reference. Circular free.
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TESTED BABY CHICKS
February, March prices. Heavy broiler chicks 12c. Barred Rocks or Reds 17c, Anconas Black Minorcas 16½c, White or Brown Leghorns 15c, White Rocks, White Wyandottes, Buff Orpingtons 17½c. Extra selected chicks, built directly from contest winners. 4c per chick more. Add 80c if less than 100 wanted. Hatching eggs. Catalog. Good reference. Beckmann Hatchery, TMBF. 26 Lyon St., Grand Rapids, Mich.

Select Quality Chicks

from America's best winter-laying purebreds. Closely culled, properly mated, thrifty flocks of White and Barred Rocks, White and Brown Leghorns, Rose Comb Reds, Wyandottes. 14 years experience. Prices right. Free catalog. References.
HAIGHT HATCHERIES, Cedar Springs, Michigan.

CHILSON BARRED ROCK—HATCHING Eggs and Baby Chicks. Winning pens all heavy breeds Mich. international egg contest 1923. Nucgugan's greatest eggs and color strain. Write for price list today.
Mr. and Mrs. W. H. Chilson, R1, Grandville, Mich.

Whittaker's Red Chicks and Eggs for Hatching. Rose and Single Combs. Bred from Fourteen Generations of Winter Layers. Write for Free Catalog of Michigan's Greatest Color and Egg Strain. Interlakes Farm, Box 4, Lawrence, Mich.

BABY CHICKS—REMARKABLE FOR SIZE and strength. Reasonable prices. Leghorns, Anconas, Rocks, Reds, Wyandottes, Orpingtons, Minorcas, Spanish, Brahmas.
TYRONE POULTRY FARM, Fenton, Michigan.

BEFORE BUYING ELSEWHERE GET OUR prices on White and Brown Leghorns and White Rocks. Prepaid Parcelpost. Satisfaction Guaranteed.
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68 VARIETIES of Fine pure-bred chickens, ducks, geese, turkeys, fowls, eggs, baby-chicks. Large catalog 5c. A. A. ZIEMER, Austin, Minn.

SELL YOUR PURE-BRED POULTRY THROUGH THE BUSINESS FARMER

Pure Bred Baby Chicks

We have been carefully developing our flocks for eight years. Every chick pure bred and from stock carefully culled, for type and production. Our chicks give satisfaction. Order today and get chicks when you want them.

	Prices on 50	100	500
W. Leghorns	$7.00	$13.00	$62.00
B. Rocks, R. I. Reds	8.00	15.00	72.00
W. Wyandottes, W. Rocks	8.50	16.00	77.00

Postpaid. 100% live delivery. You take no chances. Ref. Farmers & Mechanics Bank, this city. No Catalog. - Order from this ad.
WASHTENAW HATCHERY
Geddes Rd. Ann Arbor, Mich.

RELIABLE CHICKS

[illegible] Barred Rocks. Every chick [illegible] from carefully mated, culled, pure-bred flocks owned and developed by us for 15 years. Leghorn males from trapnested 280 egg hens. Free catalog. Write for prices.

Reliable Hatchery and Farms,
Route 3 Holland, Mich

FREE CHICKS
In Contest
Many Breeds
Every One a Winner
Pure Breed Practical Poultry
D. W. Young American type Leghorns, also English type. You will be interested in the egg records our customers report.
Send for our descriptive matter and price list.
COCKERELS—A few Barred Rocks.
STATE FARMS ASSOCIATION
Masonic Temple, Kalamazoo, Mich.
(Member International Baby Chick Association)

BEST CHICKS at Low Prices

Send for free catalog describing best bred chicks in the country. Tom Barron and Tancred White Leghorns, Michigan's Champion Winter Laying Barred Plymouth Rocks and S.C.R.I Reds. No better chicks anywhere at any price. Satisfaction and 100 per cent live delivery guaranteed.

YOU CAN DO IT WITH B-F BABY CHIX

Brummer-Frederickson Poultry Farm, Box 28 Holland, Mich.

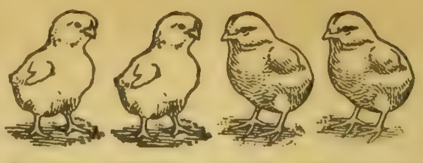
HUSKY CHICKS

PURE BRED CHICKS PAY BEST. My heavy laying, personally inspected, Hogan tested flocks, most profitable leading varieties, produce chicks that pay you big profit. Only one grade the best. Low prices. 97% live delivery guaranteed. Postpaid. Catalog Free. Write today.
SIEBS HATCHERY Box 519 Lincoln, Ill. (Member I.B.C.A.)

ELGIN CHICKS

Barron Strain, Selected English White Leghorn Chicks, Produced under my personal care. They are full of Pep as customers report and have re-ordered. They are carefully packed for shipping. 100% Live Delivery Guaranteed. Write at once for catalog and Price list.
ELGIN HATCHERY, Box 317-A, Zeeland, Mich.

BABY CHICKS FROM BRED TO LAY S. C. Buff Leghorns. First hatch March 3rd.
J. W. WEBSTER, Bath, Michigan.



BABY CHICKS NEED VITAMINS

WHEN a few years ago it was learned that the baby chick could live for the first three days of its life without food, the commercial hatchery had its beginning, and one has only to look through the pages of the farm press of today to get an idea of the magnitude to which this industry has already grown. In nearly all parts of the United States the hatcheries flourish and plants of immense size are not uncommon—some of them boasting a capacity of upwards of million eggs. Shipments of baby chicks over a radius of 1,000 miles are frequently found.

Two distinct movements are apparent in the American poultry industry: A very marked trend toward the use of centralized hatcheries, and a quite general tendency toward more winter egg production.

With the development of the baby chick business a number of widespread adjustments are coming. It makes possible a higher degree of specialization and an increase in efficiency. It is no longer necessary for the rank and file of poultrymen to suffer losses that have always been incident to unsatisfactory hatching—the baby chick men are assuming that risk and overcoming it largely by more expert methods, thus leaving the average poultryman free to turn his efforts to greater production.

But the success of the commercial hatchery, as well as that of the small poultryman is dependent largely upon the quality of eggs available for incubation. Where only eggs from vigorous, well-bred birds are used a rapid improvement in the type and production of the flocks is possible. In some states plans are already in operation whereby a system of accredited forms is established to supply high-class eggs to the hatcheries.

The vitality of the eggs incubated spells success or failure to the commercial hatchery. The percentage of hatchability of the eggs used determine whether the hatchery can succeed on a large scale, and to obtain highly hatchable eggs has been one of the biggest problems in the business.

Recent experiments have shown that the ration of the hen often determines whether or not an egg will hatch. It has been well established that animals ordinarily store up a supply of vitamins in their bodies. The good laying hen like the high producing dairy cow draws upon the body supply of vitamins with the result that unless it is constantly replendished it may become depleted.

Work at the Wisconsin Experiment Station with White Leghorn pullets shows that when a ration low in the fat soluble vitamin, and consisting largely of white corn, was fed to hens the eggs produced were very low in hatchability—15.3 per cent. When yellow corn was substituted for the white, the hatching quality at once rose to 23.6 per cent. When vitamin-rich feeds, such as pork liver, cod liver oil, or broken eggs were added to the ration, eggs hatching from 53 to 62 per cent were laid by the same birds that on rations low in fat soluble vitamin had produced largely non-hatchable eggs. The difference in the hatchability of the eggs produced from various rations is more pronounced toward the end of the laying season, because at that time the body reserves of vitamins are less of a factor.

Many successful poultrymen have held the belief that their hens should rest in the winter if they were to produce eggs high in vitality. Figures based on careful records and extending over several years have shown that with the proper ration hens can produce high priced market eggs all winter and then lay good hatching eggs in the spring.

November and December eggs bring the highest prices. Less storage eggs are now sold as fresh than formerly. People want quality and are willing to pay for it. The result is that fresh eggs have a good price in the season of low produc-

BOWERS Colony Brooder

Burns any fuel—costs less

This brooder raises more and better chicks at lowest cost. Stove is sturdy, safe, air-tight, self-regulating—best in world to hold fire. Burns soft coal—cheapest brooder fuel—perfectly. Also hard coal, wood, etc. Automatic regulator maintains uniform heat night and day. Canopy spreads heat evenly over chicks; gives pure air, ample room. 500 and 1,000 chick sizes. Guaranteed. Lowest prices. Express prepaid E. of Rockies. FREE—$3.00 stove pipe outfit sent free with brooder if you order NOW.
F. M. BOWERS & CO.
1416 W. Wash. St.
Indianapolis, Ind.

140 Egg Incubator 30 Days Trial $13.25

Both Machines Made of California Redwood

Freight Paid east of the Rockies, Hot water, copper tanks—double walls—dead air space—double glass doors—a real bargain at $13.25. Shipped complete, set up ready to use.

140 Egg Incubator and Brooder	$17.75
180 Egg Incubator Alone	15.75
180 Egg Incubator and Brooder	22.00
250 Egg Incubator Alone	22.75
250 Egg Incubator and Brooder	31.00

Made of California Redwood—last a lifetime. Positively the best value on the market today. Order the size you want direct from this ad. 30 days trial—money back if not pleased. If not ready to order now, don't buy until you get our new 1923 catalog. (3)
WISCONSIN INCUBATOR CO. Dept. 138 Racine

Detroit-Alliance INCUBATOR 140-EGG CAPACITY

Has all the features that insure big hatches—double walls, copper tank, complete nursery, perfect heat control through automatic trip burner, "Tycos" thermometer held so chicks can't break it when hatching. Detroit Brooders, too. Write for low combination price today!
Detroit-Alliance Incubator Co.
Dept. 10 Alliance, Ohio
FREIGHT PREPAID

—Inspected and Approved

Baby Chicks
From Best Egg Laying Strains in the World

Tancred, pedigree-sired and Tom Barron, S. C., White Leghorns, S. C. & R. C. R. I. Reds, Parks' Barred Plymouth Rocks.

LAKEVIEW

Our flocks are all on free range, closely culled, inspected and approved by Michigan Baby Chick Association. Every bird is healthy, has size, type and color.

Hatched in World's Best Incubator
Our chicks are strong, sturdy and healthy. They live and grow because they are hatched in the best incubator made. 100% live delivery to your door. Illustrated catalog sent FREE.
LAKEVIEW POULTRY FARM, R 8, Box 8, Holland, Mich.

Early Maturing Baby Chicks

These chicks are from flocks headed by cockerels of high producing blood lines. Culled by experts. Each flock personally supervised. Pure bred. $13.00 per 100 and up. Special: We have a limited number of superior grade chicks from special matings. Write for description and prices. 100% live delivery. Ref. Milan State Savings Bank.
MILAN HATCHERY, Box 5, Milan, Michigan.

CHICKS: HOGAN TESTED GUARANTEED Our Chicks are from flocks on free range. They will live and grow and make a profit. ENGLISH WHITE LEGHORNS and BROWN LEGHORNS. Heavy laying Extra Good BARRED ROCKS. Postpaid to your door and full live delivery guaranteed. Our flocks are carefully supervised and Hogan tested. Bank Reference furnished. Write for prices and descriptive matter.
HILLVIEW HATCHERY, C. Boven, Prop.
Box H. R. R. 12, Holland, Mich.

S. C. White Leghorn

Chicks, Wishbone Hatched, from Demonstration Farm Flock, culled under the supervision of the Poultry Dept. of Michigan Agricultural College, mated with males from the same stock that produced the winners of second place at the Michigan Egg Laying Contest, 1923. Price $15 per 100, $8 for 50, $4 for 25. Safe delivery guaranteed. A 25% deposit books your order for April or May delivery. Ref. Hudson State Savings Bank, Hudson, Mich.
[illegible] TOTTEN, Pittsford, Michigan.

BABY CHICKS Our Own Breeding flock of large type American White Leghorns. Laying and standard qualities combined. 13 years experience in breeding, hatching and marketing. Also high quality Barred Rocks and R. I. Reds. All flocks culled and inspected. Modern hatching plant, 2 hatches weekly. Quality chicks at commercial prices. Write for prices and circular.

DEAN Egg Farm & Hatchery, Big Beaver
Mail address Birmingham Mich., R-4

BABY CHICKS BARRON S. C. W. LEGhorns. Special low prices. 100% alive delivery guaranteed. Write for price list. HENRY WATERWAY, R4, Holland, Mich.

LEE'S LICE KILLER
The Old Reliable Has proven itself year after year the one sure way to rid poultry of lice, mites, bedbugs, body lice and such vermin. Paint or spray on roosts, etc. No dusting, dipping, greasing, handling. Get it at your drug or seed store, or write us for particulars and valuable free [illegible] Omaha, Nebr.

DONT LOSE BABY CHICKS
GERMOZONE, for 25 years the reliable remedy, will rid them of Roup, Colds, Bowel Trouble, etc., and keep them healthy. "A wonder worker." Used by hundreds of thousands. Get it at drug or seed store, or order of us by card—75c and $1.50 sizes, delivered. Postman will collect. No extra charge. Order today.
GEO. H. LEE CO. Omaha, Nebr

Wyngarden Strain
WHITE LEGHORN BABY CHICKS
EGG BRED for 18 YEARS

Here's what you get when you buy Guaranteed Wyngarden Baby Chicks.

(1) Pedigreed stock, sired by males whose dams had records of 260 to 289 eggs per year, and grand dams 298 to 304 eggs. (2) 100% live delivery. (3) Chicks guaranteed to be healthy. (4) Absolutely pure bred. (5) Absolutely no culls. (6) Stock that withstands winter cold as well as summer heat. (7) Free entry in our animal flock performance contest, whereby you may obtain 200 of our best Barron English White Leghorns free. We know the quality of our stock because we maintain 42 hatchery farms of our own, instead of buying eggs wherever available.

Sired by Hollywood and Funk Farm Males

White and Brown Leghorns. Anconas.

Send for our catalog and read full particulars of the Wyngarden Strain.

Wyngarden HATCHERY & FARMS ZEELAND, MICH. Box 3

Pure Bred Baby Chicks

Certified stock from famous strains Tom Barron and Hollywood White Leghorns—strong, healthy, vigorous baby chicks, hatched in the finest hatchery in Michigan—deliveries guaranteed—absolute satisfaction or your money back. Book orders now for early deliveries and get our attractive low prices.

Low Prices

Capacity of 150,00 eggs to a setting per mits us to quote bes prices for guaranteed pur bred baby chicks. Also let u quote you prices on Barrec Rock Baby Chicks and othe popular breeds. Send for Free catalog and prices. Write today.

SUPERIOR POULTRY FARMS
Dept. 801 Zeeland, Mich.

MEADOW BROOK
HENRY DePREE & SONS.
One of the Founders of the Chick Industry
21 Years in Business

Pure-bred stock carefully developed for years. Order from this ad and get chicks just when you want them.

Prepaid prices on	50	100	500
White and Brown Leghorns	$7.00	$13.00	$62.50
Rocks, Reds, Buff Leghorns	8.00	15.00	72.00
White Wyandottes	11.00	20.00	95.00
Mixed Chicks (all varieties)	$10.00 per 100		

You take no chances. Ref: First State Bank, Holland. 97% live delivery guaranteed. White Leghorns headed by male birds of 285-303 egg record strains. Other breeds highly bred. Circular free.

MEADOWBROOK FARM HOLLAND MICH RR 1-H

Strong, Healthy Chicks

Hatched in the latest improved Mammoth Incubator. English S. C. W. Leghorns, S. C. Anconas, Barred Rocks, R. I. Reds from heavy laying free range organized flocks. 100% alive. Parcel Post paid. Send for catalog. Reference.

Timmers Hatchery, R3, Box M, Holland, Mich.

Breckenridge Chicks Are Winners

Day old chicks from strong, vigorous flocks which have been carefully culled and extra selected standard male birds—Barred Rocks, R. I. Reds and White Leghorns. We guarantee 100% safe arrival. Write us for price list and circular.

BRECKENRIDGE HATCHERY,
J. C. Barnse, Prop.
Box 351, Breckenridge, Michigan.

Our Baby Chicks will insure your next years profit because we hatch only in tested Mammoth machines from healthy, husky flocks that know no disease. And our flocks are genuine egg machines. Order from this ad or write for catalogue.

	100	500		100	500
Rocks	$16	$77.50	En. W. Leg.	13	60.00
S. C. Reds	16	77.50	Anconas	14	65.00
Sel. W. Leg.	15	70.00	Broilers	9	45.00

100% Delivery Guaranteed
PROGRESSIVE POULTRY FARM,
Box 2, Holland, Mich.

CHICKS FROM LARGE SINGLE COMB WHITE Leghorns bred for winter egg production. Blue Ribbon winners. Winning eleven out of a possible fourteen prizes at Muskegon's Gold Medal show. Flock culled by Michigan Agricultural College expert. Farm under state supervision. Chicks from our own flocks only. 50 chicks $8.00; 100 $15.00; 500 $70.00.
C. EM. LAY EGG FARM
Francis M. Kent, R. 4, Muskegon, Michigan.

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64 BREEDS Most Profitable pure-bred Northern raised chickens, ducks, geese, turkeys. Fowls, eggs, incubators at reduced prices. 31st year. Largest plant. Large valuable poulty book and catalog free. R.F.NEUBERT Co., Bx 801, Mankato, Minn

tion and progressive poultrymen try to hatch their chicks early enough so as to have them well grown and ready to start laying in these months of premium prices.

As the dairy industry has gradually become one in which a very large part of the production occurs in the winter months so the poultry business is turning more and more to the production of winter eggs. Many of us can recall the days back on the farms of our boyhood when there was scarcely a cow in the entire neighborhood that gave milk in the winter time, and, of course, chickens did not ordinarily lay eggs in winter—we really did not expect them to. Yet large numbers of just such communities are now producing as much milk in January as in July and the egg production is often corresponding.

As in the dairy industry, poultry methods have changed greatly. The buff or speckled hens that used to hatch their summer broods under the woodpile or behind the democrat wagon in the implement shed required little attention. They roamed about in the open and nature supplied them with enough variety of food to provide for their maintenance.

But the question of raising large number of chicks in late winter or early spring so as to have them well grown and ready for winter laying is a complex one. Growing the birds in confinement without green or scratch feed has always been difficult on a large scale, because leg weakness, a term which may cover a variety of troubles, often developed and there seemed to be no way of overcoming it.

Recently, however, investigators at the Wisconsin station found that chicks can readily be grown under confinement without scratch feeds or green feeds. Again the problem seems to be one of supplying the proper vitamins in generaus quantities. When the vitamin element of cod liver oil is abundant in the ration, no leg weakness develops, and the indoor birds grow to be healthy, normal speciment, often above the average of those grown under the best of outdoor conditions.

In fertile eggs from the incubator which have often been discarded as worthless can be used as an inexpensive solution of the baby chick vitamin problem. It has been shown that a small quantity of egg when added to an ordinary ration of 60 parts cornmeal and 40 middlings will give excellent results. When skimmilk is available the eggs can be beaten in it until thoroughly mixed, and the whole used to moisten the mash of the chickens.

Eggs alone with the ration can be used if no skimmilk is available. About one egg to each 30 chicks is recommended for the first two weeks, and after that a gradual increase in the amount of egg used seems desirable in order to accommodate the needs of mire rapid growth. Whole milk can, of course, be substituted for eggs, as the butter fat supplies the necessary vitamins.

That the poultrymen who concentrate their efforts upon production will in the future be in a position to harvest increased profits seems probable. The industry tends more and more to become specialized and the specialization in winter egg production promises the most handsome returns.—Wisconsin Farmer.

After Thought

A lady who kept a little curly poodle dog lost her pet and called on the police to find it. The next day one of the force came with the dog very wet and dirty.

The lady was overjoyed and asked a lot of questions, one being:

"Where did you find my darling?"

"Why, ma'am," said the officer "a fellow had him on a pole and was washing windows with him."—Selected.

FARM PAPER SAVES WOMAN'S LIFE

THE Value of farm papers from many angles has been featured. But it may be news to know that a farm paper actually saved the life of Mrs. Frank Rosebough, Brockport, New York. Mrs. Rosebough was reading her paper when a disgruntled hired man fired a shotgun through the window at her husband. The charge missed the latter and would have killed Mrs. Rosebough except that the farm paper which was spread before her face broke the force of the shot.

BABION'S QUALITY CHICKS

Varieties	Prepaid prices on 25	50	100	500	1000
Pure English White, Brown and Buff Leghorns	$4.00	$7.00	$13.00	$62.00	$120.00
Barred Rocks, Reds, Anconas	4.25	8.00	15.00	72.00	140.00
Wh. and Buff Rocks, Wh. Wyandottes, Minorcas	4.75	9.00	17.00	82.00	160.00
Sil. Wyandottes, Orpingtons	5.50	10.00	19.00	92.00	180.00

Prices quoted are for chicks hatched from OUR GOOD UTILITY FLOCKS. Chicks from OUR EXTRA SELECTED FLOCKS will be $3.00 per 100 higher and Chicks from our Fancy Stock of BLUE RIBBON PENS will be $5.00 per 100 higher. Postpaid. 100% live delivery guaranteed. Bank references. You cannot go wrong. Order from this ad. Thousands satisfied. Ten years' experience. Our Slogan, the best chicks are cheapest, not the cheapest chicks best.
BABION'S FRUIT AND POULTRY FARMS, Flint, Michigan.

LARGE, HUSKY CHICKS

WINSTROM POULTRY FARMS and HATCHERY

Purebred, high quality chicks from certified, tested flocks on free range.

Varieties	Prices on 25	50	100	500	1000
S. C. White and Brown Leghorns	$3.50	$6.75	$13.00	$62.50	$120.00
Anconas	3.75	7.25	14.00	67.50	130.00
Barred Rocks, R. I. Reds	4.50	8.50	16.00	77.50	150.00
Assorted Chicks	2.75	5.50	10.00	50.00	....

Extra Select Stock $2.00 per 100 higher. Well hatched in modern machines. Each order carefully packed under our personal attention. Postpaid. 100% live delivery. Bank reference. 1924 catalog ready.

Winstrom Poultry Farm and Hatchery, Box A-5, Zeeland, Mich.

We can save you money on
Ancona and White Leghorn Chicks
Send at once for catalog and prices. We insure your chicks for one week.
M. D. WYNGARDEN
Route 4, Box 81 Zeeland, Mich

HIGHEST QUALITY CERTIFIED BABY CHICKS
FROM

VAN APPLEDORN BROS. BABY CHICKS Since 1906 MICHIGAN'S OLD RELIABLE HATCHERY HOLLAND, MICHIGAN

Michigan's Old Reliable Hatchery, the best equipped and most modern Hatchery in the State.

Pure Bred Tom Barron English and American White Leghorns, Anconas, Barred Plymouth Rocks and Rhode Island Reds. Strong, Well-hatched Chicks from tested Hoganized Free-range stock that make wonderful winter layers.

Chicks sent by Insured Parcel Post prepaid to your door. 100% live delivery guaranteed. Sixteen years of experience in producing and shipping Chicks giving absolute satisfaction to thousands. Write for valuable illustrated free catalog and price list. Get lowest price on best quality Chicks before placing your order.

HOLLAND HATCHERY & POULTRY FARM, R. 7, Holland, Mich.

Pure Bred Selected Flocks
100 Per Cent Live Delivery

Strong sturdy northern grown Chicks. Selected, pure bred stock. Healthy flocks on free range insure strength in every Chick. Order from this Ad.

Varieties	Prices on 50	100	300	500	1000
Leghorns (S. C. White and Brown)	$7.00	$13.00	$38.00	$62.00	$120.00
Barred Rocks	8.00	15.00	43.00	72.00	140.00
White Rocks	9.50	18.00	53.00	85.00	165.00
Mixed Broiler Chicks	$10 per 100 straight				

Hatched under best conditions in Newton incubators. Every Chick carefully inspected. 100% live delivery guaranteed. Reference State Commercial Savings Bank, this city. Write for prices on special matings.
GREAT NORTHERN HATCHERY, Box 50, Zeeland, Michigan.

PURE BRED CHICKS

Tom Barron Imported and Hollywood strains S. C. White Leghorns, Sheppard's Famous S. C. Mottled Anconas and Park's Bred to Lay Barred Rocks. All Free range flocks, carefully culled and certified by experts and bred many years for high egg production. Pedigreed males from 250 to 280 egg strains and from hens that produced leading pen in Michigan's International Laying contest, head our flocks. Eggs from these famous strains hatched with scrupulous care in our Modern Mammoth Incubators produce strong, husky, peppy chicks that are easy to raise and become marvelous layers. Chicks are shipped postpaid. 100% live delivery guaranteed. Write for our big free illustrated catalog

Silver Ward Hatchery, Box 30 Zeeland, Mich

Improved S. C. White Leghorns
BRED FOR EGG PRODUCTION SINCE 1910

CHICKS from this high grade egg laying strain will give you a bigger profit, and absolute satisfaction. They have 13 years of careful selecting and breeding direct behind them, and mature in the shortest possible time. You benefit by our 13 years in hatching and shipping chicks. These chicks possess great vitality and grow up uniform in size. 100% safe arrival guaranteed. Let us mail you our catalogue with prices.

WOLVERINE BABY CHICKS

WOLVERINE HATCHERY, Zeeland, Mich., R. 2

CHICKS—Investigate

STAR HATCHERY

Our chicks are the kind that make good. Every flock is carefully culled and mated. We have been in business seven years and have been building carefully and consistently to a place where we can offer chicks more than worth the money we ask. SINGLE COMB, ENGLISH STRAIN, WHITE LEGHORNS, BARRED ROCKS, ANCONAS. 100% live delivery guaranteed. Investigate our proposition before buying. A postal will bring full information.
STAR HATCHERY, Box 23, Holland, Mich.

DUNDEE CHICKS
PURE BRED CULLED FLOCKS

Our chicks are from pure bred flocks carefully culled by experts. Anconas are direct from Sheppard. Leghorn flocks headed by males from Michigan Ag. College. Rocks are from a 230-302 egg strain. Reds are Liddicoat's best. Write for catalogue and price list. It will save you money. Reference, Dundee State Savings Bank, this city.
Dundee Hatchery, Box B, Dundee, Mich.

CHICKS WHITE LEGHORNS $12 PER 100, $6.25 for 50, and $3.25 for 25. Barred Rocks and Reds $16 per 100, $8.50 for 50, and $4.25 for 25. White Wyandottes and Rocks $17 per 100, $8.75 for 50, and $4.50 for 25. Buff Orpingtons $18 per 100, $9.25 for 50, and $4.75 for 25. $5 on each 100 chicks with order will book your order. Balance two weeks before delivery. 100% live delivery guaranteed. Reference: Bank of Mt. Morris.
Meadow Brook Hatchery, R1, Mt. Morris, Mich.

BABY CHICKS From Best Producing Free Range flocks. Highest utility quality, best for general purposes. Sent post paid 100% live delivery guaranteed. Write for catalog.
HOMER HATCHERY, Homer, Michigan.

PUREBRED BABY CHICKS, BARRED ROCKS and Rhode Island Reds $14.50 per 100, White Wyandottes and Buff orpingtons $16.00.
JOSEPH AMSTER, Paw Paw, Michigan.

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We hatch chicks from flocks which have had our own personal attention. Every bird is carefully selected by us for best production. A pure-bred chick from us has the breeding to grow into a fine money making fowl. Send for full information. 100% live delivery guaranteed. All popular breeds. We hope you will give us a trial order for that will mean a permanent customer, we are sure. Write today.

Borst & Roek, Box 10, Zeeland, Mich.

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English White Leghorns, Parks' Strain Barred Rocks, S. C. Black Minorcas, Reds and Anconas. My pen (16) at the 1923 Mich. Contest finished third among all heavy breeds, four hens making records over 200 eggs each, and one with a record of 254 eggs was seventh highest individual for the entire contest, 990 birds competing. Catalog free.
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Holland, Michigan.

QUALITY Chicks & Eggs
45,000 PURE BRED BREEDERS. 15 varieties. Best laying strains. Incubate 25,000 eggs daily. Catalog Free. Prewar prices. Free live delivery.
Missouri Poultry Farms, Columbia, Mo

(Other Chick Ads on Page 19)

For Asthma During Winter

A Remarkable Method That Has Come to the Rescue of Asthmatics and Checks the Worst Attacks—Send Today for Free Trial

If you suffer with those terrible attacks of Asthma when it is cold and damp; if you choke as if each gasp of breath was the very last, don't fail to send at once to the Frontier Asthma Co. for a free trial of their remarkable method. No matter where you live or whether you have any faith in any remedy under the Sun, send for the free trial. If you have suffered for a lifetime and tried what you thought was the best skill known to cope with the most terrible attacks of Asthma, if you are discouraged beyond hope, send for this free trial.

It is the only way you can ever know what progress is doing for you in spite of all your past disappointments in your search for freedom from Asthma. So send for this free trial. Do it now. This notice is published that every sufferer may participate in this progressive method and first try the treatment free that is now known to thousands as the greatest boon that ever came into their lives. Send coupon today. Don't wait.

FREE TRIAL COUPON
FRONTIER ASTHMA CO., Room 590 B
Niagara and Hudson Sts.,
Buffalo, N. Y.

Send free trial of your method to:

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MARKET FLASHES

MARKET SUMMARY

Slack demand for wheat turns prices slightly lower. Corn, oats and rye unchanged. Beans steady after small decline, trading inactive. Butter in demand. Eggs easy. Poultry scarce and firm. Good demand for dressed Calves. Cattle trade active. Sheep and hogs higher.

(Note: The above summarized information was received AFTER the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press —Editor.)

FOOTE'S MARKET LETTER

BY W. W. FOOTE

Plans of Farmers

FARMERS are looking into the future and laying their plans for next spring, trying to learn from the past how best to avoid such mistakes as they have made. Michigan farmers are as a rule less inclined to devote too many acres to one crop than farmers of several other states, and agricultural and live stock are carried on in a conservative way generally, but it is a fact that in growing wheat many farmers have overdone it and have suffered financially in common with farmers in other important wheat states. It is almost a foregone conclusion that they will diversify their farming from now on, and some of them are preparing to utilize tracts not well adapted for raising crops to setting out forest trees, while others are making arrangements for setting out young fruit trees, as well as grape vines and berries. Just now there is quite a spread in the cultivation of orchards of apples and peaches, and the cherry tree is becoming highly popular in parts of the state. Cherries are much utilized in making pies and beverages, and every year the demand for them increases. Farmers are apt to be a little impatient about waiting too long for the trees to bear fruit, and nurserymen are called upon to produce a quick maturing, low growing cherry tree that will bear fruit within two or three years. Dairy interests are coming to the front in Michigan, as well as in other states of the middle west, and Holstein dairy cows are in increasing demand, with sales in the Chicago stock yards at $50 to $90 per head, and some cheaper cows around $35. It is always interesting to learn of big achievements in dairying, and the 150 high producing herd of purebred Holsteins owned by the Iowa State Hospital for the Insane boasts of a cow that made 150 pounds of butter in thirty days. High-bred dairy cows sell high, but if a farmer can pay the price, the returns justify what seems perhaps rank extravagence. Michigan is a famous state for the sheep industry, and lots of money is gathered these times on flocks of sheep and lambs, the wool item being a highly lucrative one. And yet the sheep industry of this country is falling seriously below the actual requirements, while the relatively small number of sheepmen are making all kinds of money, with recent advances of as much as $1 per 100 pounds in a week in the Chicago market. The Chicago Board of Trade is to assist the bankers in getting the ten million dollars needed for the farm credit corporation recently organized. The money market is steady, Chicago banks loaning at 5 to 5½ per cent.

What Will Wheat Do?

There are differences of opinion, of course, on this extremely important question, but there is a pretty general belief that startling changes in prices are not likely to occur in the immediate future and the ultimate valuation will be largely governed by the course of action adopted by the federal government in legislating on the tariff and other matters affecting wheat. Of late any fair advances in wheat prices have been followed by moderate reactions, and from one week to another quotable alterations are usually comparatively unimportant. Naturally, increasing the duty on imported wheat would put a check on our exports, and for weeks past the exports of wheat and flour have been quite moderate in volume. The way it looks now is that we are approaching the time when we must consume at home such wheat as our farmers raise. The high cost of wheat production may be expected to result in considerably curtailing the wheat acreage, and it is hoped that ultimately there will be readjustment in prices between farm products and commodities purchased by farmers. Statistically, there is no marked change, and the visible wheat supply in this country, while showing weekly reductions, is still much larger than a year ago. It is practically certain that marketing of wheat for the near future will show gains, as farmers will want to avoid paying taxes on their holdings. State taxes in North Dakota are so high that farmers are allowed two periods for payment. Many bills have been introduced in Congress for helping farmers in marketing their wheat, the most important one being the McNary-Haugen bill for appropriating $75,000,000 to aid in diversifying farming. May delivery wheat sells around $1.10.

A Minneapolis grain man figures that there is enough spring wheat to supply northwestern mills with 280,000 bushels a day until the new crop is harvested. He says mills are actually grinding 400,000 bushels per day, adding that "an increased tariff would insure the northwest taking wheat from the west and southwest, and perhaps our supposed surplus will look like a deficiency later in the season."

Corn, Oats and Rye

Corn and oats have continued to sell in the Chicago market at considerably higher prices than a year ago, while rye has sold much below prices paid at that time. As for corn, many farmers are quite bullish in sentiment, realizing that very little old corn was carried over from the 1922 crop. At the same time many farmers will sell part of their surplus corn early to avoid paying taxes on their grain. The visible corn supply is now increasing considerably, and prices in the future will be governed very largely by the volume of farm marketing. At the same time farmers are now asleep, and they have held a meeting in Des Moines, Iowa, where more than one hundred farmers of several states perfected an organization to be known as The Corn Growers' Association. The farmers were largely from Iowa, but also came from Illinois, Kansas and South Dakota, and those present were determined to obtain at least production cost for their corn, figuring this at over $1 a bushel. Although the corn in sight is growing in volume, it is still not much over half as large as a year ago, and very little is being exported to foreign countries, whereas a year ago it was exported with fair freedom. A great deal of corn has gone from the northwest to Duluth. The visible oats supply in this country is down to 17,526,000 bushels, comparing with 30,296,000 bushels a year ago, and exports are not large. The rye visible supply is up to 20,538,000 bushels, comparing with 12,946,000 bushels a year ago, while prices are unusually low, and yet exports are meager, comparing with fair exports a year ago. May delivery corn sells around 81 cents, May oats at 49 cents and May rye at 72 cents.

Bullish Factor in Corn

"The most brilliant factor in the corn situation is the failure of country elevators to accumulate a stock of winter shelled grain," says Burton Hungerford, the Logan & Bryan crop observer. "Central Illinois elevators probably have an average of 4,000 bushel on hand or about 20 per cent of normal at this season. Movement is likely to fall off sharply, as farmers have already delivered 75 to 80 per cent of the grain that had been sold to country dealers."

Successful Farmers' Creamery

C. B. Moody, secretary of the Iona Farmers' Creamery association, of Iowa has just issued his annual report for 1923. The report was satisfactory to the patrons who realized a large sum of money for their dairy products.

The creamery received 259,392.9 pounds of butter fat and paid $115,304.82 for it; hauling cost, $8,347.99; labor and salaries, $3,411.86; coal, salt and other items, $6,073.37, making the amount paid out $133,138.04.

The creamery made 320,473 pounds of butter and shipped to eastern markets 293,195 pounds, for which it received $120,519.66. Butter sold to patrons amounted to $6,580.59 and that sold at retail brought $4,139.04. The average overrun for the year was 23 per cent; average price received for all butter, 42 cents.

Choice Cattle Sell Higher

There has been a marked improvement in the consumption of beef in the United States recently, and despite the largely increased cattle receipts in the Chicago market, the choicer beeves, long-fed heavy steers especially, have sold higher. Only a few weeks back the local packers and eastern shippers greatly favored the better class of yearlings and readily paid a handsome premium over prices for the choicest heavy steers; but of late this rule was reversed, and yearlings sold much lower than weighty cattle of the best class. The bulk of the beef steers sold recently at $8 to $11, with the best weighty steers purchased at $10.70 to $11.70 and the best yearlings at $10.50 to $11.50. Steers of good grade sold at $9.50 and upward, with sales down to $6.25 to $7.50 for the cheaper class of light steers, and inferior little steers selling at $4.50 to $6.20. A few light weight cattle have sold especially well, and the other day a sale was made of 29 steers and heifers averaging 724 pounds at $10-50, while a little later the best steers and heifers mixed averaging 873 lbs. sold at $11. Fair to prime cows and heifers found buyers at $3.50 to $8 mostly and canner and cutter cows at $2 to $3.40, with bulls selling at $3.50 to $6 and calves at $5 to $13.50. A small winter trade is witnessed in stockers and feeders, sales being mainly at $5 to $7.50 and a few sales of fleshy feeders for a short finish at $7.75 to $8.25. Farmers wanting cattle for feeding are able to pick up good bargains. A year ago common to prime beef steers sold in Chicago at $6.25 to $10.25 and two years ago at $6.25 to $9.20. Well finished beef cattle are bringing good profits. Last week's large receipts resulted in a moderate decline except in the best.

Hogs Plentiful and Wanted

The huge production of hogs has stood in the way of placing the market on a higher price basis, although the trade requirements beat all past records. The really surprising thing is that the shrinkage in prices has not been even greater. The large decline which has taken place in hogs is reflected in corresponding declines in prices for hog products, especially fresh meats, and reduced values account for the enormous exports of provisions. In addition to heavy purchases of hogs by Chicago packers, there has been about the largest demand in that market for hogs to ship east ever known, and this makes lively competition at times. At the present time the high price of corn is causing increased marketing of young hogs, and receipts averaging 229 pounds, being five pounds less than a year ago. The bulk of the hogs sell within a range of 20 cents, with the best heavy butchers selling 15 cents above prime light bacon weights. Late sales were made in the Chicago market at $6 to $7.15, the top being 25 cents lower than a week earlier. Combined receipts in twenty markets for the year to late date aggregate 7,942,000 hogs, comparing with 7,003,000 a year ago.

Great Boom in Lambs

Months ago predictions were made that much higher prices were in store for prime lambs because of the short supply, and toda ythe prophets are surprised by the great boom which has taken place, the best flocks having sold in the Chicago market within a short time as high as $15.75 per 100 pounds, with sales down to $15 for the next best class, and feeder lambs bringing $13.50 to $14.25. Looking backward, it is recalled that at this time in 1915 lambs sold at $9.25 to $9.75. The best yearlings sell for $13.75, the best ewes at $10 and the best wethers at $11.75. Many farmers regret that they did not engage in the sheep industry months ago when urged to do so, but there is yet time and wise ones will try their luck. Wethers sell at $9.25 to $11 and yearlings at $12 to $13.75.

WHEAT

Trading was quiet in the wheat market at Detroit last week and the general tone was easy until the closing day when a slight firmness developed. Prices declined and then advanced leaving them at the same level as quoted in last issue. Demand and receipts remain about as they were two weeks ago, with southern millers the best buyers and farmers not ready sellers. Some export demand is reported but not enough to effect prices.

CORN

Contrary to expectations receipts of corn from farms increased during the fortnight closing Saturday of last week and the market showed some signs of weakening. Many dealers continue to believe in higher prices and if receipts again decline there is no doubt in the minds of many but that there will be an advance. Buyers complain about the quality of receipts declaring that very little good corn is being sent to market.

OATS

The oat market at Detroit continued unchanged in tone while prices declined a cent under two weeks ago. Demand is not active.

RYE

Rye followed the trend of oats during the two weeks ending February 23rd and is quoted a cent under two weeks ago. A dull tone prevails.

BEANS

Beans are inactive and steady with prices slightly lower at most of the larger markets. Detroit quotations show a decline of from 20 to 25 cents per hundred pounds. Demand is slow and mostly of a local nature at present. Anyone interested in Michigan beans should read the letter, "The Future of the Bean Market" by Mr. Benjamin Gerks on page 6 of this issue.

POTATOES

The potato market is steady at most points with trading from steady to dull. Detroit market has a fair demand and trading moderate. At Chicago the market is slow with demand light and eastern markets are in about the same condition as the Chicago market.

HAY

Eastern markets are lower due principally to the large amount of poor hay arriving. Some markets are overstocked with this description and it drags at irregular and uncertain figures. The demand for the best grades continues steady but offerings of this sort are small. The approach of spring is weakening the alfalfa and prairie markets in the southwest.

MARKET QUOTATIONS

Wheat

Detroit—Cash No. 1 red, $1.15½; No. 2, $1.14½; No. 2 white, $1.15½; No. 2 mixed, $1.14½.

Chicago—Cash No. 3 red, $1.10; No. 2 hard, $1.10@1.14.

Prices one year ago—Detroit, Cash No. 2 red, $1.35; No. 2 white, $1.35; No. 2 mixed, $1.33.

Corn

Detroit—Cash No. 3 yellow, 82c; No. 4, 80c.

Chicago—Cash No. 2 yellow, 82½c; No. 2 mixed, 80c.

Prices one year ago—Detroit, Cash No. 2 yellow, 79c; No. 3, 77c; No. 4, 75c.

Oats

Detroit—Cash No. 2 white, 53c; No. 3, 51½c.

Chicago—Cash No. 2 white, 49@50c; No. 3, 47¾@49c.

Prices one year ago—Detroit, Cash No. 2 white, 49½c; No. 3, 48c.

Rye

Detroit—Cash No. 2, 73c.

Chicago—Cash No. 2, 71c.

Prices one year ago—Detroit, Cash No. 2, 87c.

Beans

Detroit—C. H. P., $4.75 per cwt.

Prices one year ago—Detroit, C. H. P., $7.80 per cwt.

Potatoes

Detroit—$1.60@1.66 per cwt.

Chicago—$1.20@1.40 per cwt.

Prices one year ago—Detroit, $1.07@1.13 per cwt.

Hay

Detroit—No. 1 timothy, $23.50@24; No. 2, $21@22; No. 1 clover, $20.50@21; standard and light mixed, $22.50@23 per ton.

Chicago—No. 1 timothy, $26@27; No. 2, $25@26; No. 1 clover, $22@23; light timothy & clover mixed, $24@25 per ton.

Prices one year ago—Detroit, No. 1 timothy, $16@16.50; No. 2, $14@15; No. 1 clover, $13@14; standard and light mixed, $15.50@16 per ton.

PRITCHARD'S WEATHER FORECAST
INTERPRETED BY THE STARS

Week of March 2

FOLLOWING the generally fair weather which we are expecting at beginning of this week the weather will become unsettled and mild; maximum temperatures ranging between 50 and 55 degrees.

During Tuesday, Wednesday and probably Thursday there will be storms of rain or snow and gales in Michigan. We are not expecting precipitation to be as heavy as last week but the high winds may do more or as much damage as the snow or rain itself in many parts of the state.

About Friday and not later than Saturday temperatures will drop rapidly to a minimum between 18 and 23 degrees. The weather at end of this week will average clear although there may be some local snow flurries.

Week of March 9

This week opens in Michigan with a very severe storm of rain or snow and wind. Because of the high temperatures expected during early part of week, most of precipitation will be in form of rain during first part of storm period.

Following this storm period temperatures will fall and continue on the downward trend until Friday. There may be a reaction to warmer and some storminess within a day or so of the storm period of early part of week but this will not last long. Eventually temperatures will drop to readings close to the 20 degree mark and the skies about Thursday and Friday will be clear.

Balance of March Wet, Windy

The last half of March is expected to show precipitation above the normal in Michigan and the wind movement will also be above the average for this time of year. Nevertheless, we are expecting that the month will go out like a lamb in most parts of the state.

M. A. C. COW SETS WORLD'S PRODUCTION RECORD

"BRAVURA IV," a two-year-old brown Swiss cow bred and raised by the Michigan Agricultural College, is the proud possessor of a new world's record for milk and butter fat production for her breed and age.

The newest addition to the M. A. C. family of record breakers is a daughter of Bravura III, which previously held the world's record for a two-year-old brown Swiss. Further right to the title of queen is adduced from the fact that Bravura III is a double great granddaughter of College Bravura II, a cow that for many years held the brown Swiss production record for all ages. The present record holder, Bravura IV, is a descendent from maternal ancestors, which for five generations have been bred and raised by the college.

The new record was made by persistency of production. Her largest milk flow for a month was 1,694.7 pounds, with a milk production for the last full calendar month of 1,238.2 pounds and for the last day on test of 41 pounds of milk. The average butter fat test for the year was 4.19 per cent fat.

WRITING "MOVIES"

(Continued from Page 15)

where I might obtain reliable information on the subject, if it is not to be had from this company, and whether you would advise me to put $160 into their course. I will be very thankful for any information you can give me. I like your paper very much and am enclosing $1 for a two year renewal subscription.

WE understand the Palmer school is the best of its kind, but to us that statement does not mean a thing. If, as we have said before they will send out their course and let the student pay for it out of his earnings, we are for them. We have seen letters from these schools which would make the recipient believe that he or she had all the earmarks of a star and yet the letter was printed and probably went out to every one who replied, old or young, white, black or yellow.

Now, dear madam, you can secure from the Detroit Public Library good books on scenario writing without charge. After you have read these you can put your thoughts on paper and submit them to any of the legitimate producers of motion pictures, who are only too anxious to get the right kind of material, but I understand that they read five thousand scenarios to secure one which they keep, so unless you have unusual talent I certainly could not advise you to go into this work.

The best scheme is to write these people asking them if they have a satisfied student in Michigan and then go and talk with that party before you invest so large an amount of money. I have given you a frank answer because I believe you desire it.

Good Correspondence Schools

There are several correspondence schools of real merit in the United States and we do not wish any reader to get the idea from this page that we do not believe that a mail-course can be valuable. Several universities and colleges maintain correspondence schools in most subjects taught by them, but schools of this type do not make extravagant claims of earning power or promise Tom, Dick and Harry that they can, by a few evenings work at home master a profession which men and women only learn after a life-times work.

Milk is the best source of protein for little children and should be the chief item in their diet.

RADIO PROGRAMS

Station KYW, Chicago. Central Time 8:20. Wave length 536 meters.

March 4—"The Farm Bureau in the West," by E. P. Taylor, Organization-Finance Department, American Farm Bureau Federation.

"How Farm Accounts Help," by W. B. Remley, Publicity Department, International Harvester Company.

March 11—"The Work of the Committee on the Relation of Electricity to Agriculture," by E. A. White, Director, National Committee on the Relation of Electricity to Agriculture.

"New Ideas in Farm Home Architecture," by J. A. Scanlan, Consulting Structural Engineer.

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References: Wayne County and Home Savings Bank, Bradstreet.

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Swiss Saanen and Toggenburg milk goats all bred to Elain's Boy 1748, his dam Elain 1031 an 8 qt. milker. Sire Andres Hofer 177 (imported). Due to freshen soon. Prices reasonable. Write for particulars. F. J. HELM, SWISS MILK GOAT DAIRY, Grass Lake, Michigan.

MENTION THE MICHIGAN BUSINESS FARMER WHEN WRITING ADVERTISERS

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MICHIGANA FARM, Pavilion, Michigan.

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JOHN W. SNYDER, St. Johns, Mich., R. 4.

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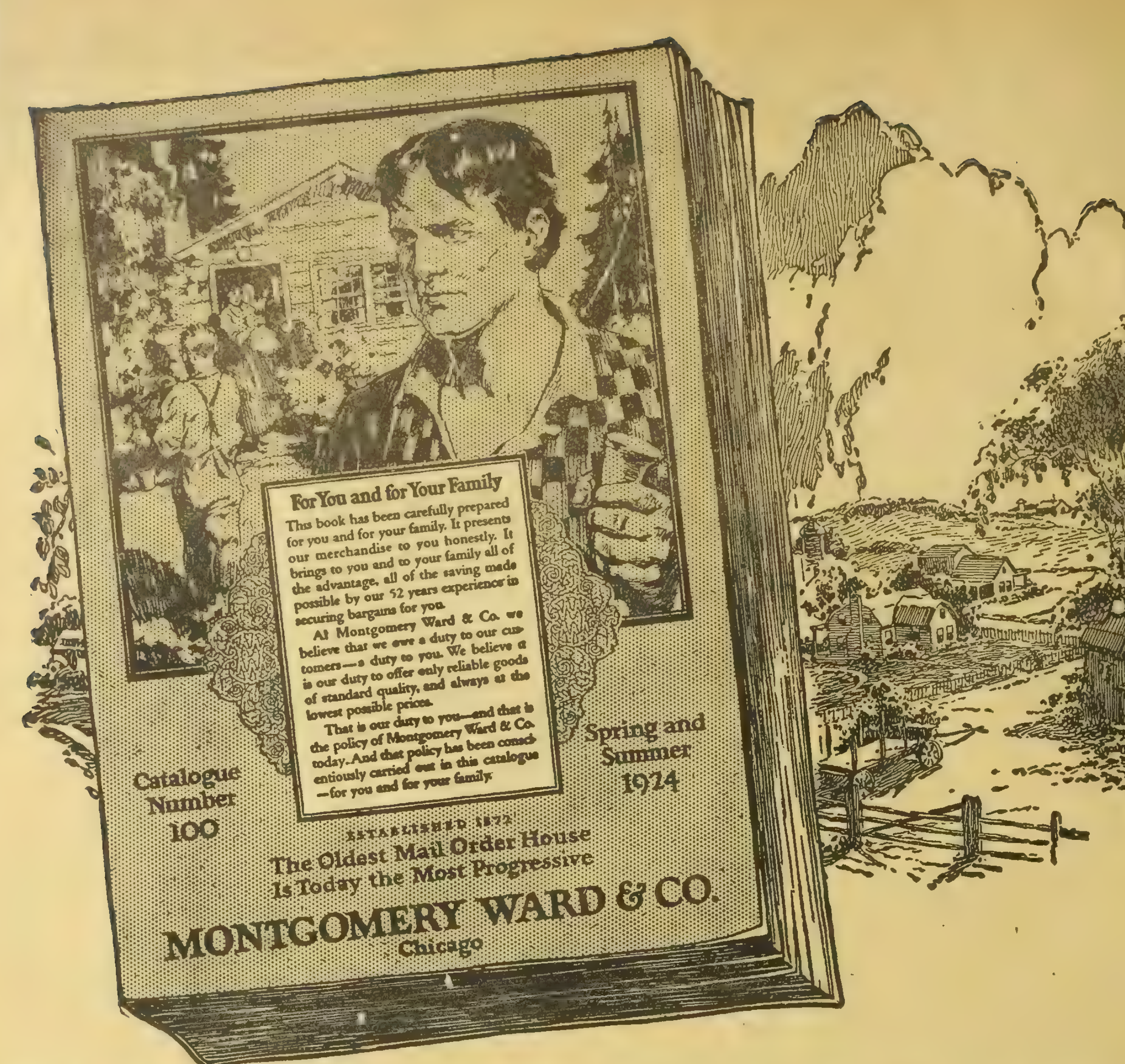

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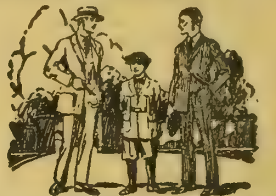

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BUSINESS FARMER

An Independent
Farm Magazine Owned and
Edited in Michigan

VOL. XI, No. 15 SATURDAY, MARCH 15, 1924 TERMS: TWO YEARS $1
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In this issue: "What About the Proposed State Income Tax?"—"Take Care of That Female Calf Today and She Will Repay You Tomorrow"—Don't miss reading "Forty Years of Faking."

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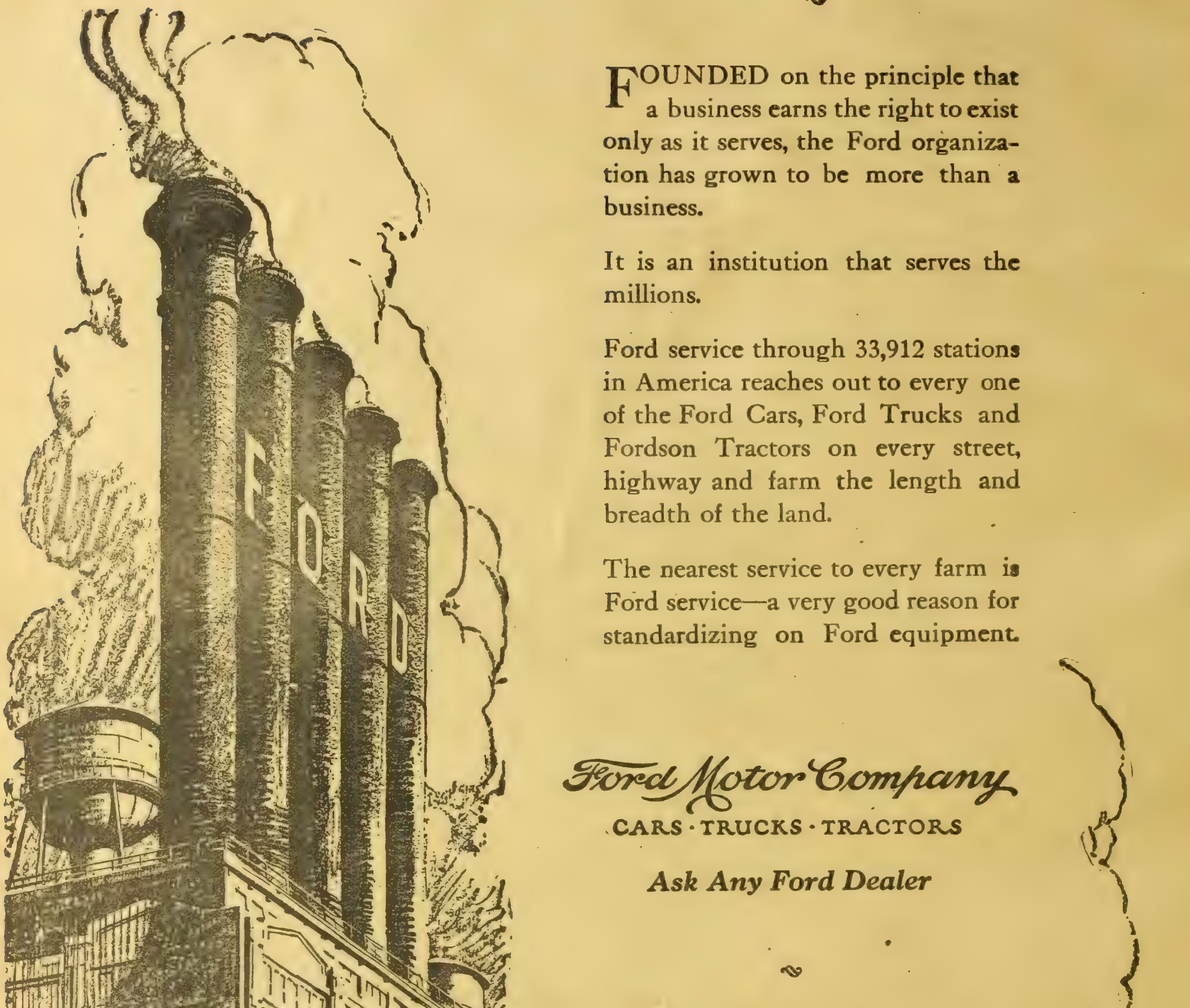

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SATURDAY
March 15th,
1924

VOL. VI, No. 15

Being absolutely independent our columns are open for the discussion of any subject pertaining to the farming business.

"Hew to the line, let the chips fall where they may!"

The Michigan
BUSINESS FARMER

"The Only Farm Magazine Owned and Edited in Michigan"

Published Bi-Weekly
Mt. Clemens, Mich.

TWO YEARS $1

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What About the Proposed State Income Tax?

Farm Organizations Endorse Proposed Income Tax for Michigan Believing It will Help Remove Burden From Shoulders of Overtaxed Farmer

By STANLEY M. POWELL

(Lansing Correspondent of The Business Farmer.)

IN this and the previous article of this series by Mr. Powell some definite facts and figures have been presented which challenge the attention of every thinking citizen of Michigan.

The rapid increase in the tax burden and the fact that this increase in taxation has greatly exceeded the increase in the valuation of property owned for taxes in Michigan have been pointed out. A rapidly advancing rate of taxation has been the inevitable result.

It has been shown that the burden on the general property of the state has become too great to be borne and that consequently there is a constantly increasing proportion of the total tax being returned each year.

It is also regarded as very significant that despite this rapid and unbearable increase in general property tax, the bonded indebtedness of the State and its local units has been continually mounting, increasing 830 per cent in the ten years from 1911 to 1921.

A personal income tax to largely or entirely replace the general property tax for state purposes has been advanced as a logical step in the solution of these perplexing problems. It has been shown that the revenue to be raised by the proposed amendment outlined in this article, if properly administered, should be entirely adequate, supplemented by existing and contemplated specific taxes, to take care of the financial needs of the state.

It has also been pointed out how the enactment of the proposed measure might logically be expected to result in economy in local appropriations and expenditures without encouraging extravagence in state expenditures and appropriations. But best of all it would be a big step toward equalizing the tax burden in Michigan. Watch for the article on the gas tax. It will be the next or third article of the series.

ADAM Smith, the great economist, in his classic work, "The Wealth of Nations" lays down the following as one of the fundamental principles of equitable and sound taxation:

"The subjects of every state ought to contribute toward the support of the government as nearly as possible in proportion to their respective abilities."

Mr. Smith evidently realizes that even though we practice the utmost governmental economy, we shall still be confronted with the necessity of raising large amounts to provide funds for all the various activities which people are today demanding of government. But the significant feature of this principle which he lays down is that the issue of first importance is to secure a fair distribution of the tax burden.

As pointed out in the first article in this series, our present system of taxation in Michigan is not securing any such desirable condition. The general property tax as applied today in our state is so hopelessly outgrown that real estate, which constitutes but 35 per cent of the total wealth of Michigan, is paying 80 per cent of the total taxes, while the other 65 per cent of our wealth escapes with but 20 per cent of the tax load. This situation is obviously unfair.

Taxes and Citizenship

Citizens of a republic should expect to pay directly toward the support of their government. It is a duty which is an important part of their obligation as citizens. As Professor Seligman of Columbia University has so well said, "Taxation should be regarded as a contribution cheerfully rendered by those who are alive to the sense of collective responsibility implicit in the very conception of democracy." And this leads us to remark in passing that this is certainly a noble sentiment, but unless taxation is fairly and equitably levied in such a way as to secure a just distribution of the tax burden how can we regard our present oppressive general property tax as a contribution cheerfully rendered by us as loyal citizens?

It seems quite evident that the purpose of taxation should not be either to punish or benefit any particular class or individual, but to provide revenue for the conduct of our various governmental units and activities. When a situation develops such that any one class of our citizenship is paying a disproportionate share of the load it is high time that a reform should be substituted to bring our method of taxation up to date and make it meet present conditions with a reasonable degree of justice.

Antiquated Tax System

Year by year the cost of government increases but we have failed to put into effect new systems of raising the necessary revenue. The result is, as we all know, that today Michigan real estate is laboring under an excessive burden of general property tax. This condition is not confined to Michigan alone for statistics reveal that the taxes which the farmers in United States paid in 1922 amounted to a larger sum of money than the total net income of the farms of the United States for that year. Both theory and history reveal that this is indeed a very undesirable and unfortunate condition.

The power to tax carries with it the power to destroy. When taxes become confiscatory and the citizen loses his property through inability to pay his taxes he can hardly be blamed for becoming radical. The experience in Russia illustrates that. Our farmers are the most conservative class of our citizens, but there is a limit to even their patience and there are those who fear that Michigan farmers may develop Red tendencies unless some immediate and substantial relief is secured.

One of the most aggravating features of the situation is that it is as unnecessary as it is undesirable. Under a fair distribution of the burden in Michigan, there would be no necessity for so much misery and distress as results under the present system. Because of its recent industrial development, Michigan is today one of the richest and most prosperous states in the union. Figures just released by the federal Department of Commerce show that Michigan's wealth more than doubled in the ten year period from Dec. 31, 1912 to Dec. 31, 1922, increasing from $5,233,760,000 to $11,340,150,000. This was a growth of 116.7 per cent. During this period the per capita wealth increased from $1,806 in 1912 to $2,883 in 1922, or 59.6 per cent. The big trouble today is that much of this new wealth is not on the tax rolls or helping in any way to bear its fair proportionate share of the burden.

What Is the Remedy?

Various remedies have been advocated to meet the undesirable tax situation which has developed in Michigan during the past decade. The remedy which appears to be the most logical and to meet with the greatest amount of popular favor is the suggestion for a state income tax, which should be so devised that it will raise enough revenue so that taken with the present specific taxes it will be ample for all of the needs of the state and thus entirely replace the general property tax for state purposes.

Michigan farm organizations have been outspoken in their endorsement of this idea. Just now they are all cooperating to secure the necessary signature to an initatory petition so that a constitutional amendment providing for a state income tax will be placed upon the ballot at the regular fall election in 1924.

Under the terms of the proposed tax, the first $4,000 from every income will be exempt from this form of taxation. This is not because of any desire to secure class legislation, but is prompted by the feeling that the little fellows are already paying far more than their share.

To Give Real Relief

The petition definitely provides that all funds raised by the proposed tax would be deducted from the amount which would otherwise be raised by the general property tax for state purposes. The balance, if any, would constitute the state tax. This gives definite assurance that this will not be merely a new means of providing added revenue for state officials to spend, but that it will afford real, genuine taxation relief to overburdened real estate.

If sufficient signatures are secured, the proposed amendment will be placed on the ballot at the regular fall election in 1924. In brief, its provision will be as follows:

1. $4,000 of all incomes shall be exempt.
2. Incomes from $4,000 to $20,000 shall be taxed 5 per cent.
3. Incomes from $20,000 to $40,000 shall be taxed 6 per cent.
4. Incomes from $40,000 to $60,000 shall be taxed 7 per cent.
5. Incomes from $60,000 to $80,000 shall be taxed 8 per cent.
6. Incomes from $80,000 to $100,000 shall be taxed 9 per cent.
7. Incomes above $100,000 shall be taxed 10 per cent.

All funds derived from this proposed tax shall be turned into the general fund of the state and shall be used in defraying general expense and bonded indebtedness and interest.

Who Would Benefit?

It might be interesting to note how the relief from general property taxation proposed by this constitutional amendment would be divided among Michigan tax payers. In 1921 the general property tax for state purposes was borne by the various classes of our citizenship as follows:

Corporations of State paid	$5,625,000
Other City Property paid	7,275,000
Villages of State paid	1,550,000
Townships Outside Villages paid	6,000,000
TOTAL	$20,450,000

These amounts, therefore, represent the division of the relief which would be afforded by a state income tax law to replace a general property tax for state purposes.

Thus it is plain to see that the proposed constitutional amendment would shift the big burden of state support from the property owners who are already overtaxed to thousands of individuals who, while probably owning little or no taxable property, still have healthy incomes and might well help support the state whose protection they enjoy. This is not a measure to benefit any one class of people, but to shift the burden of supporting the state government from the field of tangible property to another basis, that of net personal incomes.

There are thousands of professional men, physicians, dentists, lawyers, teachers, and salesmen whose personal income, and bondholders, mortgage holders, etc., whose net intangible property income (and their ability to pay taxes) has no relation whatever to the amount of land, real estate or assessed personal property which they possess. Inasmuch as there are many millions and probably billions of dollars of property in Michigan which yields a very good income paying no tax today, or at least none of any consequence, shouldn't such property bear a reasonable portion of this burden?

The proposed tax seems well adapted to distributing the state tax burden automatically in proportion to the individual's ability to pay.

Collection Easy and Cheap

The idea of a state income tax is neither new nor radical and visionary. Fourteen other states already have similar laws in successful operation. Experience in these states shows that the percentage of collection is high and the cost of collection is low. New York not only has a personal income tax and a corporation income tax, but has a corporation license fee as well. Through these three taxes they raised $86,711,000 in 1922 and collected it at a cost of but 1.2 percent. Massachusetts has a state income tax which applies only to interest earnings, yet under this system they collected $17,000,000 at a cost of 2½ per cent. These illustrations might be multiplied by quoting from the experience of the dozen other states which have state income tax laws.

Perhaps the ease of collecting an income tax is due to fact that it never hits a person who is not able to pay. It is automatic. If misfortune of any nature afflicts an individual, his tax is under the income tax system immediately drops off. If sudden prosperity comes along, the income tax automatically takes advantage of this increased tax-paying ability. This quality of flexibility is wholly lacking in the present general property tax. It is relentless in its action and annually takes its toll from the defenseless holder of real estate, regardless of whether or not that property has produced a profit or a loss during the year.

Can It Be Passed On?

No matter how cunningly devised any system of taxation may be, it is always human nature to attempt to pass it on and make the ultimate consumer pay. This is quite possible with most forms of taxation, but extremely difficult under the personal income tax, such as is being proposed for Michigan. It is paid out of net incomes after the year's business has been finished and the books closed. There is no way to get around it. Nor do we fear that the proposed moderate

(Continued on Page 31)

Barley for Michigan

Experiments Prove Beardless Variety Does Not Yield Well in this State

By FRANK A. SPRAGG

Assistant Professor of Farm Crops, M. A. C.

This is a view of the spring barley varietal series at the Michigan Experiment Station. It will illustrate how a farmer can plant varieties side by side in order to compare his old variety with others in his soil and under the same conditions.

WE have in these pages quite recently considered the improvement of the oat crop and the influence of the farm and the farmer in this great problem. The problem in the case of barley is just the same as in the case of oats. Success or failure depends upon the farm, the location, and the farmer as much as it does upon the variety. All that an improved variety can do is to produce more grain or better quality than other varieties under the same conditions and at the same expense. There are two ways of reducing cost of production, and one of them certainly is to produce more at the same expense. This can be done by means of an improved variety.

You farmers are interested in feed. That is usually the reason why you grow either oats or barley. The choice between these two crops depends, partly if not largely, upon the needs of the live stock on the farm. The farmer's experience must be relied upon to decide this point. Some prefer oats for their class of stock.

But, a great many farmers would grow the crop that yields them the most feed per acre. This is not necessarily the greatest number of bushels of grain per acre. A bushel of oats is 32 pounds, while a bushel of barley is 48 pounds of feed. The chances are that a pound of one has as much feed value as a pound of the other. If there is any difference, we may agree that a pound of barley is more nutritious than a pound of oats, at least to feed hogs. For horses, no doubt we would prefer oats. Suppose we say that a pound of oats is equal in food value to a pound of barley, that we may have a basis for comparison. Then a bushel of barley is worth one and a half times as much as a bushel of oats, or fifty bushels of barley is as good as seventy-five bushels of oats. Some of you are not able to raise as much barley as that, but could raise more oats. In that case, unless you must have the barley, you had better raise the oats, but be sure that it is a good producing variety. Others find by experience that their farm will produce more pounds of feed from barley. Well then, grow barley but a good variety of barley.

Some people object to barley because it has beards, and the hired man will not handle it. Some object to the barley because it is hard on the sheep's mouths and sticks in the wool. In these cases, it is not the beards but the barbs that make trouble. Those of you who have had barley beards down your neck, know what I am talking about. The beard that gets started, big end first, keeps on going. This is because the sides of the beard have little teeth, known as barbs.

Be careful to make this distinction between barbs and beards. There is no use trying to grow a beardless variety of barley under Michigan conditions. It will produce only about half as many bushels of barley to the acre. This has been tried out again and again at M. A. C. There is no use for you to try an experiment of this kind. Barley must have beards. All barleys will be barbless as soon as the breeding work can produce white high yielding barbless varieties, and they can be distributed long enough to become known. This process is on the way, but remains for the future.

The Michigan Crop Improvement Association has a variety of barley known as the Michigan Black Barbless. This came from an individual plant of this kind that I selected in 1913. The progeny of the plant after being increased was tested out in comparison with several progenies of the same kind and it was selected as the best one for distribution in 1918. This is not quite as good a yielder as certain old fashioned barbed sorts, but many farmers have preferred it because it is smooth. These beards are no more disagreeable to handle than the straw. They are perfectly smooth, so that you can rub one of them back and forth on your cheek without harm or discomfort.

This picture was taken in the spring of 1912. These two winter barleys grew in a wheat varietal series. Just note how the wheats were killed out on either side. The winter of 1911-12 was exceptionally hard. The plat to the left showing a full stand is the variety that has since been known as the Michigan Winter. It came from a single seed planted in the fall of 1909.

Mr. Maystead, a farmer in Hillsdale County who got some of this barley, the first year that it was distributed, tells his experience at harvest time. The barley had been cut and rained upon before it was shocked. His hired man had left him and a neighbor who was passing, caught him carrying two bundles of barley under each arm as he gathered it to be shocked. So the neighbor said: "Say, Maystead, I always thought you were crazy. Now I know you are." Maystead stopped work and told his neighbor to hop over the fence and see that no harm could come from so handling that barley. The neighbor did so and was convinced. And at threshing time the whole neighborhood knew that a new barley had come to town.

The Wisconsin Experiment Station has produced a good barley that is known in Michigan as the Wisconsin Pedigree. The Michigan Crop Improvement Association also has a supply of this barley that has been kept pure, and is available to people who wish to take advantage of the greater production that can be obtained from improved varieties.

Now, some one will be interested in a joke. We take it as such. It illustrates personal preferences among farmers. In 1918 when the Michigan Black Barbless was distributed, a white two-rowed barley known as the Michigan-2-Row was also distributed. This Michigan-2-Row had averaged from 20% to 25% more bushels per acre than the Wisconsin Pedigree on the plats at M. A. C. They are both barbed barleys and therefor alike on that point.

(Continued on Page 22)

Take Care of That Female Calf Today and She Will Repay You Tomorrow

By O. E. REED

Professor of Dairy Husbandry, Michigan Agricultural College

THE future milking herd on any farm will be just as good or just as poor as the female offspring happens to be Every farmer or dairyman hopes that the future generation of his herd or flock will be an improvement over his present holdings If one is to realize on his expectations he must first of all see to it that all chances for failure are eliminated as far as is possible. This means that the present herd must be inventoried and all poor producers "weeded out by keeping records on each individual. The next step is to see to it that the sire of the future calves is a pure bred sire and comes from a high producing family. Without taking these precautions there is chance of failure.

Next to good breeding comes good feeding. Many well bred animals fall short of their owners' expectations simply because they are not properly fed and fail to make the maximum growth and development. The time to begin feeding for development of good calves is before they are born. We are told that 95 per cent of the power of growth is expended at the time the calf is born. It is apparent that everything should be done to insure the normal development of the calf during this period. To begin with, the mother should be well fed at all times and the ration should be a complete one, furnishing every element needed for growth. The cow should be given a rest before she calves in order to build up her own body and properly nourish the calf in embryo. Many cows either "go dry" or are turned dry before freshening but are not fed sufficiently during this period. The average man figures that she doesn't require much and consequently turns her on a poor pasture and in many cases turns her to a stalk field in the winter to shift for herself. This method of treatment is the cause of many calves being born prematurely, or if carried full time they are in an extremely weakened condition when born. The ration at this time for the cow should consist first of all of an abundance of good pasture in summer, pasture with plenty of legumes, and alfalfa, clover or other legume hay in the winter. In the growth and development of the foetus a considerable amount of mineral matter is required to build the frame work. The legume hays contain an abundance of this material, but some of the common feeds, such as timothy hay, straw, etc., are very deficient. While these latter feeds are deficient in minerals it does not mean that the foetus will not develop to maturity, because the mother will draw the nutrients from her own body to make up the required amount absolutely necessary. However, if her own system is run down a weak offspring will be the result.

When the calf is born it should by all means receive the first milk of its mother. Some follow the practice of allowing the calf to remain with the mother for several days. There are some advantages in this system, the principal one being that the calf is sure to get the first milk and if the cow's udder is much swollen the massaging it gets from the nursing calf will be quite beneficial. However, there are some dangers. The calf may get too much milk and on the other hand, if the calf is a strong lusty calf and the milk secretion has not fully begun the calf will milk the udder dry and it is a common opinion that milk fever is likely to result if all the milk is taken from the udder at any time during the first two or three days.

A better system is to take the calf away from the mother immediately after it is born, at least before it has had time to nurse its mother. It will be much easier to teach the calf to drink from a pail when this system is followed. The conventional system of teaching the calf to drink is to get its head between your legs and then dip the fore finger into the pail of milk and let the calf suck the finger and gradually lower your hand into the pail of milk. Under ordinary circumstances, provided the calf is fully developed in a mental capacity, he will begin to drink at once or at least after a few such lessons. However, there is danger of the attendant being upset and both calf and pail of milk heaped upon him.

The milk of the mother is often too rich in butterfat and this may cause the calf to scour. If this condition prevails, the milk should be diluted with skimmilk or after the first few days the milk from a low testing cow can be fed with good results.

The quantity of milk to feed the calf at this time is very important. Under natural conditions the calf gets its milk often and in small quantities, and the more closely Nature is imitated in this case, as well as practically all others, the greater the success in calf raising. The average sized calf should receive about eight pounds of milk at first, large calves, such as Holstein calves, should have ten pounds or more. If calves are fed three times or more per day these amounts can be increased with good results.

The best guide as to the amount of milk to feed is the calf's appetite. It should be fed sufficiently, but never overfed, and it is a good practice to always keep the calf a little hungry. The last milk from the pail should be taken with as much relish as the first taste.

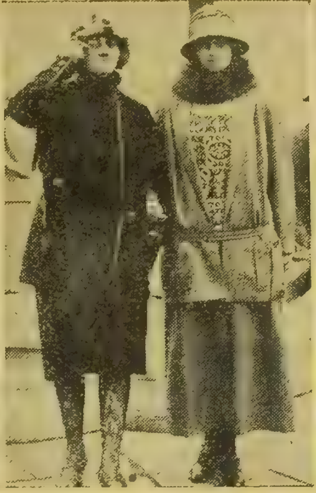
Changing to Skim Milk

It has been demonstrated many times that calves can be raised just as successfully on skim milk after they are well started as they can on whole milk. The time to change the calf from whole milk to skim milk will depend largely upon the development of the calf. If the calf is strong, and well developed, it may be changed to skim milk at

(Continued on Page 24)

PICTURES FROM FAR AND NEAR

MARY PICKFORD AND DOUGLASS FAIRBANKS.—This famous couple of "movieland" recently arrived in New York City from California and as usual the newspaper men and the camera men were there to greet them. Both Mary and "Doug" were willing to pose for the camera men.



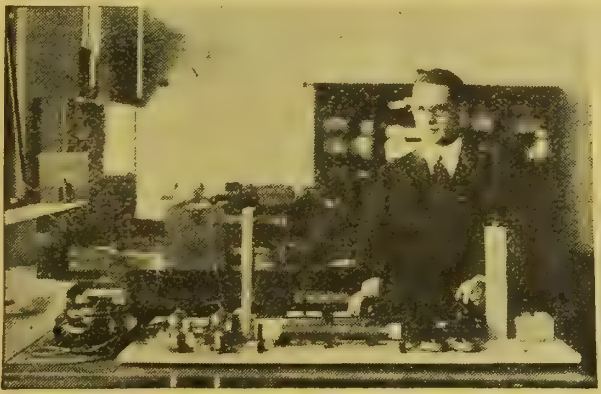
WELCOME, MISS 1924.—The latest style from London is the short skirt. Miss 1923 is on the right and Miss 1924 on the left.

U. S. MINISTER FOR POLAND LEAVES FOR POST.—Mr. and Mrs. Hugh S. Gibson, who left New York City on the SS President Roosevelt, for the Continent. Mr. Gibson is the newly appointed American Ambassador to Poland, and is going over to take up his new duties.

NOVELIST AT SIXTEEN.—Miss Mollie Panter-Downes, of Brighton, England, although only 16 years old, wrote "The Shoreless Sea" a novel that has won the approval of all English critics. The book is very popular.

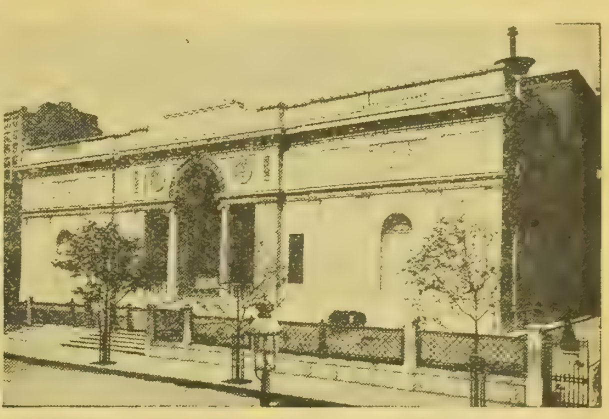
NEW CALENDAR TO RUN TILL YEAR 17600.—Prof. Chas. F. Marvin, chief of the U. S. Weather Bureau, Washington, D. C. has made up a calendar of his own. It has 13 months to the year and four weeks to each month, the first day each month coming on Sunday. An extra day each year would be a national holiday. Prof. Marvin says the calendar would run till 17,600.

TEN-YEAR-OLD POETESS.—Little Miss Nathalie Crane of Brooklyn, N. Y. has astounded the hardened verse writers with her technique and rythmic form of writing poems, Her poems are featured daily by large publications and she is winning a large audience.



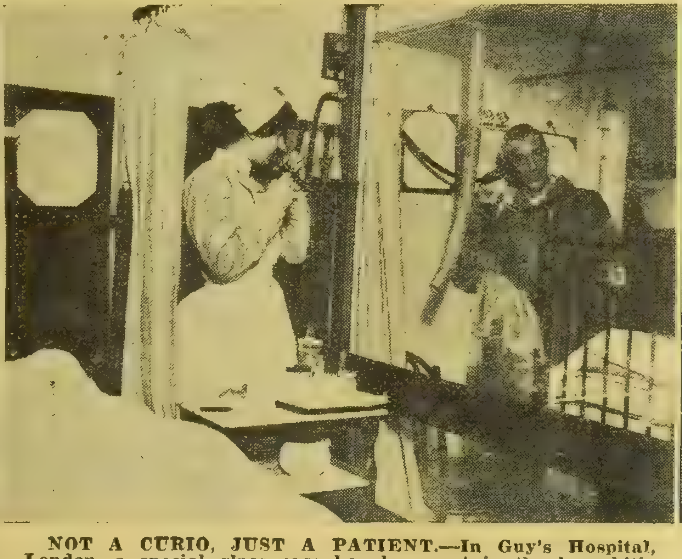
VISION BY USE OF RADIO.—Prof. Arthur C. Hardy, of the Massachusetts Institute of Technology, Boston, Mass. predicts that movies will soon be sent by radio. He is seen with a small working example of what the future machine will be based on. What next, we ask.

SUNKIST GIRL TO ENTER MUSICAL COMEDY.—Violet Oliver, California "Sunkist" girl, who made a tour of the world as a beauty contest winner, is going into musical comedy.

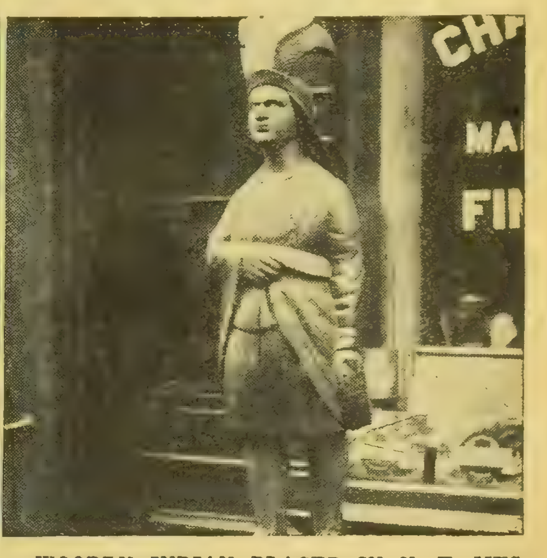


MORGAN GIVES LIBRARY TO PUBLIC.—J. P. Morgan, internationally known American financier, has given a library to the public as a memorial to his father, the late John Pierpont Morgan. The library is valued at $8,500,000 and contains over 25,000 books.

THE NEW JAPANESE CABINET.—This photo of the new Japanese cabinet was taken at the Premier's office on the day the appointments were made. The Premier, Viscount Kiiyoura, is standing in the front row, second from the left.



NOT A CURIO, JUST A PATIENT.—In Guy's Hospital, London, a special glass case has been put in the bronchitis ward for the treatment of that type patient. The glass case is air tight, and the patient lives inside, where he breathes double the amount of oxygen found in the normal atmosphere. The oxygen is forced into the case.



WOODEN INDIAN PLACED IN N. Y. MUSEUM.—This wooden Indian stood in front of a New York cigar store for 25 years, but recently the Museum of New York City asked for it saying it was an example of real primitive American art, so it now reposes in the Museum.

(Copyright, Keystone View Co.)

Farmers Service Bureau

(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full name and address. Name not used if so requested.)

COUNTY UP TO ROAD COMMISSIONERS

I am writing you to find out what right the county road commissioners have to accept a Covert Act road petition for a strip of unimproved road. Sent engineering department out upon it for two or three days, then said that they would not go any farther with the work. Now this is practically a level piece of road. It has not a creek or hill in the seven and ¾ miles. Last summer the road commissioners let or took bids for a Covert Act road in the county with a later number than this one. Every owner who lived upon or in the vicinity of the land adjoining the road signed the petition. Also better than one-half of the road is a R. F. D. route.—M. E. B., Flushing, Mich.

—I beg to refer you to Section 7 of said Act which provides that,

"Upon the filing of the petition the Board of County Road Commissioners shall proceed to examine the highway proposed to be improved and if they deem the proposed improvement necessary shall cause a survey thereof, and specifications to be made."

Section 3 of said Act provides that, "After the survey, plans and specifications and estimates of cost have been filed, the Board of County Road Commissioners shall, if they are of the opinion that the proposed improvement is not necessary for the benefit of the public welfare and convenience, make an order of determination." If the Board of County Road Commissioners do not deem the proposed highway necessary they need not cause any survey thereof to be made and if, after the survey has been made they determine that the proposed improvement is not necessary they need not continue the improvement.—H. Victor Spike, Asst. Attorney General.

MUST SUPPORT CHILDREN

Could you advise me as to what support a man would have to give his six small children, the oldest twelve, if he and his wife separated? Thanking you in advance, I am—A Subscriber, Old Mission, Mich.

—The amount the husband would be required to contribute toward the suport of his children would depend upon the condition and situation of the parties; the conduct and ability of the husband and the amount of property owned by the wife. In the event of divorce, these conditions would be taken into consideration by the judge. A reasonably accurate estimate would be the amount which would likely be required, under the circumstances, to provide a sufficient and proper support of the children.—Asst. Legal Editor.

NO LAW FORBIDDING SALE OF REMEDY

I am writing to ask if their is a law forbidding a person from selling mite and lice destroyer of all kinds vermin for hens and chickens in their drinking water or feed. I make this remedy myself. Have given it to my large flock with extra results, and would like to know if there is a law forbidding a person selling it. Just what I should have to do to be able to put this remedy out on the market?—Mrs. E. S. L., Clio, Mich.

—There is no state law forbidding the sale of such a remedy. If it contains anything poisonous, that must be indicated on the container.—Asst. Legal Editor.

COMPULSORY EDUCATION

What age does a child have to be or what grade does he need to have completed before he can be kept out of school?—Reader, Saginaw, Mich.

—The law provides that every child between seven and sixteen years of age shall attend school continuously and consecutively. A pupil who has completed the eighth grade and who is under sixteen years of age may be excused by the superintendent of schools in city districts, and by the county commissioner of schools in all other districts of the county if services of such child are essential to his support or the support of his parents. The superintendent or the commissioner as the case may be, is the judge as to whether this support is essential.

In a school district where there are not more than eight grades taught, a child may stay out of school after completing the eighth grade because there is no law to provide for the education of the child outside of his own district by compelling him to attend high school.—W. L. Coffey, Deputy Superintendent of Public Instruction.

MUST PAY FOR CAR

I bought a Ford car for $250.00 on contract. I paid $75.00 down, and I owe for the balance. Now as I cannot pay the balance I told them to come and get the car, which they refuse to do. Now have they got to take the car back? Or is there any way they can come on to me and make me pay for it? They hold my note for $175.00. I would like to know if they have to come and get the car, as I cannot pay for it, or can they make me pay for it.—F. H., LeRoy, Mich.

—When you purchased the car you entered into a contract with the company which both the company and you are bound to perform. In order to fulfill your part of the contract, you would have to pay the full amount of the purchase price and could not compel the company to accept the return of the car.—Asst. Legal Editor.

STANDARD RULE FOR SCALING LOGS

Please give me a standard scale for scaling logs. Thank you.—R. W. C., Ithaca, Mich.

—The Doyle rule gives too low a content for small logs and too high a content for big logs. The Scribner rule on the other hand is fairly close on small logs but gives too low a volume for large logs. The two rules coincide for logs 28 inches in diameter. Some buyers of logs take advantage of this and use a combined Doyle-Scribner in which the Doyle is used up to 28 inches and the Scribner is used for logs 28 inches and over.

The Doyle rule is the legal rule for Arkansas, Florida, Mississippi and Louisiana and is a standard for hardwoods in many parts of the Ohio Valley and for the yellow pine in the South. It's inaccuracy has resulted in the loss of millions of dollars to the growers of timber (and a corresponding gain to those who are buying timber) but the rule continues to be nevertheless widely used. The Scribner rule together with its modifications, the Scribner decimal C. is the legal rule for Minnesota, Wisconsin, West Virginia, Oregon, Idaho and Nevada and for the United States Forest Service and the Canadian Forest Service.

A check on forty-six firms in Michigan buying timber, which was made by the Forestry Department of the Michigan Agricultural College, shows that fifty-nine per cent of them are using the Doyle rule, thirteen per cent the Scribner and 28 per cent the Doyle-Scribner.—John C. DeCamp, Assistant Professor, Dept. of Forestry, M. A. C.

HER MARRIAGE WOULD NOT CHANGE CHILDREN'S NAME

I would like to have you answer a question or two for me. If a widow marries a second time and she has children by her first marriage can the children change their name along with their mother without any legal proceedings. What would the boy have to do to change his name if after two years he still has his father's name and he finds a name he wants more than his step-father's?—W. P., Fennville, Mich.

—The widow's children by her first husband would retain the name of their father until they had it changed by marriage or legal proceedings in the probate court. To have name changed, file petition with the local probate judge.—Asst. Legal Editor.

MAY SELECT MAIL CARRIER HE PREFERS

A farmer lives on a federal highway and for a short distance two rural mail routes cross on this road. We will designate the farmer's regular address route as "A" and the other route "B." On "B's" route there are several very convenient stores such as a grocery, hardware and garage to which the farmer can telephone order for commodities sent to him parcel post. Now, one carrier claims that the farmer has absolutely no right whatever to avail himself of the convenience of route "B." The farmer claims the rural routes are at the disposal of anyone who can use them for mail service. Who is right?—E. K., Brooklyn, Mich.

—Section 790 of the Postal Laws and Regulations provides that a patron residing on a road traveled by two or more rural carriers may select the carrier by whom he prefers to have his mail delivered and collected, in which case only the designated carrier shall handle his mail.

Unless such selection is made by the patron each carrier passing the box shall deliver mail into it and collect therefrom any mail which can be expedited in dispatch or delivery.—H. H. Billany, Fourth Assistant Postmaster General, Washington, D. C.

SNOW BLOCKS ROAD

Do parents have to break roads for two miles to school, or does the township have to, or do children have to walk two miles in snow two feet deep?—J. B., Eaton County, Mich.

—The compulsory education law provides that children under nine years of age and who live two and one-half miles from school, cannot be compelled to attend school. Aside from this one provision in the law, a child can be compelled to attend school. It is the duty of the parent to get his child to school. The compulsory education law says nothing relative to condition of roads.—W. L. Coffey, Deputy Superintendent of Public Instruction.

DANCING IN SCHOOL

We have a mothers' and teachers' club here, and at the last meeting one of the public schools here sent a letter to our school here asking them to have a dancing committee club. The letter was read before the club and the president asked that all mothers that rather have their girl dance come to school one evening in a week with their friends in the evening and have them well chaperoned by one of the club and their son, no movement. Then she said "I wish that some mother would speak up and say what she thought of it," and one mother got up and said that she for one was against dancing in the public schools. And then it was put to a vote, those mothers who wished to have the dance and have it well chaperoned to stand. Then she made the statement: "Don't be afraid to keep your seats because one was against it." Then she put it to a vote for those to stand that was against it. But, did not use her influence to urge them to stand. The majority was for the dance and I would like to know if any organization or school board has any right to organize a dancing class in the public school?—Mrs. C. A., Pontiac, Mich.

—There is nothing in the law that prohibits dancing if the school authorities deem it the proper thing to do. It appears from the letter, that in the particular place where this dancing is to be carried out in the schools, the proper provision is made for the supervision of the young people who are given the privilege of dancing in the school building.

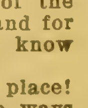
Many school authorities take the position that the school building exists for more than simply school instruction; that it should be used for social control and social betterment, and that it is much better that young people have the opportunity to dance at the school building when provision has been made for such and where there can be proper discipline than to dance in public auditoriums without this discipline.—W. L. Coffey, Deputy Superintendent of Public Instruction.

WHO IS LIABLE?

A gives B a note with signer in 1915. The interest was kept up until the year of 1918, since which time no interest has been paid. The signer not being notified note was not paid. Is note collectable and is signer holding?—C. M., Shepherd, Mich.

—The indorser on a note would not be liable unless given notice of its non-payment, except where notice is waved. The maker would not be liable after 6 years from the due date, this being the time limited by the statute of limitations.—Asst. Legal Editor.

Uncle Rube Spinach Says:



TRAVELED SOME-WHAT

GOOD folks I've been on quite a jaunt since I wrote you last. Seems like I've been purty nigh to the bottom of the world. You wouldn't scars'ly believe it but I've been clear way down in Florida. Don't seem hardly pos'ible does it? An' goin' down there, mostly in the night as I might say, I see some of the strangest sights. I took a sleepin' car from Chicago, if you know where it is—its on the Grand Trunk & Michigan Central railroads. An' so of course I got into Chicago. Its quite a big town by looks of things from the depot. See nothin' but Chicago. Guess it costs a lot of money to live there when a shoe shiner charges 10 cents fer a shine an' 25 cents for a tip. You know a tip is what most of our congressmen is lookin' fer when they git to Washington. But don't ever think one of 'em is lookin' fer 25 cents. Why you know lots of our servants down there would stick their nose up at. well at any thing less'n ten or twenty thousand dollars. An' some of 'em would think that small pay for their great ability.

Well down here in Florida I meet all kinds of folks. White, from the north, black or colored, real denizens—I guess they're that, anyway they seem to live thou a little colored I might say but not painted as lots of our Northern folks seen to be. No matter, we're white or black as painted—God never put no painted onto nothin' he ever made—but we see 'em painted down there jest as we see 'em up here.

As I wuz sayin' its a great place down there—you can wash off you feet an' any thing an' it don't cost a single cent 'cause you know you can wash your feet, if you're careful 'thout a bathing suit on to you otherwise not.

An' then its so kinda nice an' warm down there—Why even when its cold, its nice an' warm 'cause of what you see an' you can wade out into the water kinda salty it is, an pick up shells of most every kind guess mebbe they git tired of the sea, and ocean, an' come to land for rest an 'reclermation, if you know what I mean.

Oh, Florida is a great place! Back in the cenetery a little ways lives the nicest an' biggest snakes I've ever seen an' alligaters—Allegators 'at you leve at first sight. They have such an open countenance an' look so friendly. An' seminole indians—you don't hardly ever see anw of 'em but you know they're there. They don't look so friendly as the alligators quite, an' yet they ain't to bad if you dont rite 'em up.

There's lots of things I could say 'bout Florida but as the feller sed—the less the better, meanin' not to talk to much. 'Course you'll want to know 'bout the women down there an' I'll tell you. The Women are mostly females—dress in their rooms an' undress on the bathing beaches. They live on ice cream, lipsticks and powder puffs. They seem happy an' contented jest lazy as some poor fish can keep 'em goin'—when one's gone they bait their hook fer 'nother an' the supply seems to meet the demand—lots of fish and lots of beit an' that's 'bout all I know 'bout Florida. Cordially yours UNCLE RUBE.

FORTY YEARS OF FAKING

The Memoirs of a Grafter—By Himself

GRAFTING money from unwary folks is one of the easiest ways to make a living—while it lasts. This is the testimony of Pete Dexter, who, in "Forty Years of Faking," tells the story of his life. The grafter may get caught in the end, but in the meantime he is taking hard-earned money away from people who need it.

Dexter, in his story, gives a pretty complete record of devices for corralling easy money. What he didn't learn from more experienced fakers, he invented on his own hook. His story, according to our Service Bureau Editor, isn't overdrawn. There are records in the Service Bureau files of grafting schemes just as raw as anything Pete ever pulled.

"Forty Years of Faking" will run in the next six issues of THE BUSINESS FARMER. You will want to read every installment. Learn the grafter's tricks, and be ready to give the horse laugh to anyone who tries to put over the same stuff on you.

"GATHER up closer, boys. That's right; step right up here in front. These snakes are not going to hurt you. We have them under perfect control. Now, folks, before we begin our little show today, I want to tell you in just a few words some of the marvelous qualities of this famous Wizard Oil."

I decided this was worth listening to. Anyway, I wanted to see the ferocious reptiles which the man in buckskin suit had mentioned, and which kept wriggling around in the canvass bag he held on the top of the table before him.

"Folks," continued the speaker, "I hold here in my hand one bottle of my famous oil. This oil will penetrate—completely pass thru—the thickest of leather, instantly. Watch me closely. Here, son, hold this bag a moment.

"Wizard Oil," continued the speaker, "is a marvelous preparation. It is extracted at a great expense from the fat stored in the tails of these enormous reptiles of the desert, the diamond backed rattler. Indians long ago discovered the magic power of this oil and it was while I was scouting with General Phil Custer, just before the famous battle, that an old chief who had been captured, told me how to use it."

Meanwhile the speaker was preparing the famous demonstration which showed how the oil penetrated a piece of sole leather.

"Now, folks, just a drop of Wizard Oil on this thickest piece of leather. See it pass thru immediately. This oil will get thru any skin or leather just as quick. Makes it a wonder cure for rheumatism, sprains, aches or any ailment of man or beast. Folks, it's the best remedy that was ever put out. Absolutely cures many ailments. Not only is it a wonder cure, but a few drops rubbed on leather boots prevents water from soaking thru. A great preservative for leather and a fine oil for harness. Keeps that razor strop in shape, and there are thousands of other uses it may be put to.

"Now, folks, this marvelous oil is going to be sold today at a bargain. This oil, which generally brings much larger prices is offered to you today for the small price of one dollar a bottle. Money back if it does not do everything we claim it will. Now while our agents pass among the crowd" (which was pretty big by this time) "I am going to reach my hand into that bag the boy is holding and pull out Old Sitting Bull, the largest rattler in captivity. Boy hand the bag to me."

Well, I did that all right and stood by ready to leave in case the snakes jumped out of the bag. The speaker started to reach in for one of the snakes, meanwhile carefully watching the crowd. As he noticed that some of the onlookers were moving on, he began a story about the habits and life of a rattler. But he never did pull Old Siting Bull out of that bag.

A couple of times a snake's head came out, but the rattling part never showed up. It was not until later on in the day that I learned why. Sitting Bull was kept there because he was safe, being an absolutely harmless old bull snake.

But I stayed in hopes of seeing the mighty rattler. The agents, who had collected many dollars for the sale of Wizard Oil, returned and one of them began to do a few gymnastic stunts in front of the speaker. He was a dub as far as I could see, and my scorn of his ability soon made me utter a remark of, "That's nothing!"

Old Turner, that was the name of the boss, heard me, and said, "Well, son, are you able to beat that stuff?"

"Beat it!" says I, "Well, if I can't beat it, I will eat Old Sittin' Bull!"

"Folks," suddenly announced Old Turner to the crowd. "Here's a local boy who says he can beat our star acrobat. Beat a man who has been with a circus until he joined up with me this spring. Son, here's a five spot if you can show us some stuff. What do you say?"

Well, I was fussed, flabbergasted and the like, but that five spot represented a whole week's work on the farm of old man Dupray, so I throws off my hat and showed the gang some real tricks I started out by turning a few hand-springs to get limbered up. Did a few back somersaults and then walked on my hands and a lot of simple ones. I was a pretty good acrobat, and of course I got the money. The crowd was for me, and the old man handed over the cash.

That was the first time I ever helped with a fake deal, and was the real beginning of my long career in the game of chance.

Just after the old man handed me the cash, he stepped over and says to me, "Boy, we need you. What do you say to taking a job with us."

The deal that finally resulted amounted to nothing more or less than that I was to get $25 a month and keep, with a chance to travel, to go with Old Turner and his show. I was only 16 years old at the time, and had been farmed out by the folks in town who had raised me after Pa and Ma had died. Farmer Dupray, where I worked, was a tough old cuss and got me out too early mornings to suit me. Only the day before he had me carry a hive of bees into a shed, and when I fell down with them he was mad because I busted a good hive, and didn't care if I was stung a lot before I could retreat to safety. So I agreed to start that night. Didn't have any clothes worth while at the farm, and, besides, I thought it was safer if the folks didn't know which way I went.

That's how I got my start. Have worked at most every kind of a fake since then and have been in a lot of states. Have made a lot of money and lost most of it. Have had pretty good luck until a few years ago, when things started to break against me and I got taken up in an oil deal. Got a pardon, but luck was against me, and after a few more whirls I had to quit. So I finally reformed, and even tho the old desire to get started comes on frequently, I am managing to hold back. Long as I am settled down I decided to write this story, and if my rheumatism gives me a chance I will tell you how I made out in business life.

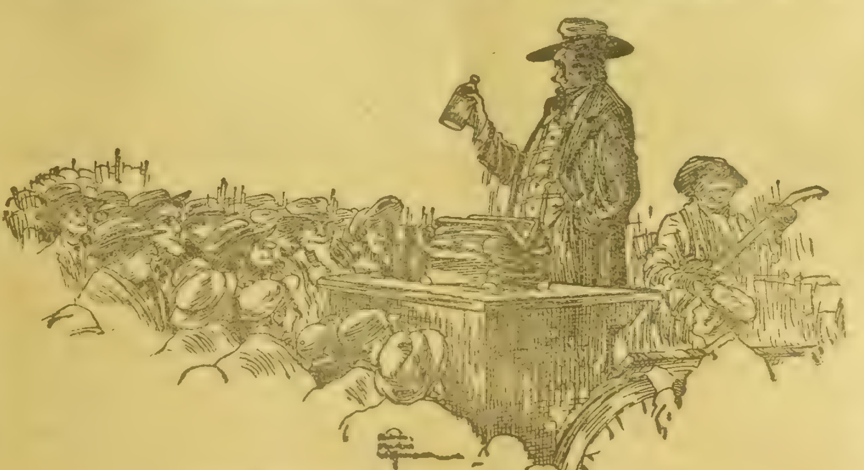
My name doesn't amount to much. Never had the same one two years running, so it ain't particular. But the first time I gave it was just after I joined up with Turner's medicine show. "Pete Dexter" was what I had answered to when he asked what he would call me, and so Pete I was for about a year and a half.

As I said before, I started out with the medicine show. That was a great game. The Wizard Oil which the old man was selling at a dollar a bottle, and which was guaranteed to cure everything he could think of, we made early in the morning at about 10 cents a gallon. As far as its coming from snakes—well, if it did come from the snakes, it was because they got out of their cage and crawled out over into the big barrel. That oil was the cheapest kind he could get hold of, and all he had to do was to put it in the bottles. The bottles cost about a nickel apiece and the profit on the deal amounted to about 90 cents a bottle.

The old man had a great stunt which he used to pull when he got around a crowd to show the wonderful qualities of the oil. Down behind the box he used to talk from, he had a piece of leather about a foot square. In another bottle, he had some fusal oil, which is highly penetrative. Of course he could get a crowd around by promising to exhibit the snakes and after he had delivered a talk on the wonderful oil he would give a demonstration as to how this oil would go thru the thickest of hides. All he had to do was to apply a little of the fusel oil to the square of leather before he brought it into sight. This fusel oil would immediately go thru the thick leather as if it was cloth. Having done this, Turner would bring the leather out in full view of the crowd, but being careful to keep his hand over the spot where the oil was. A few passes and he was applying the Wizard Oil. Without waiting for anyone to look, he immediately showed the piece, and apparently the Wizard Oil had penatrated the leather. As a matter of fact the Wizard Oil was never put on the leather during this demonstration. But if the crowd had been skeptical of its qualities up to this time, this little piece of slight-of-hand work sure brought them, and the dollars came rolling in.

We worked that game all that summer, and I soon began to see how easy the people will give up their money. I decided right there that there ought to be a chance for me to get some of that money. So soon after, I broke with the show and started on my own hook.

You see, the reason I broke with Turner was this. He had been taking a lot of money in that fall but he had held up paying us fellows saying that he was investing all his funds. I got suspicious and one night Turner didn't come back to the lot, like he was in the habit of doing. I got excited and trailed him down town. At the hotel the clerk said he had gone to the depot. Immediately I decided to follow him. I had an old revolver I had found a couple of weeks before so I took that along. Well, before Turner left town I collected the $150 coming to me but the other boys didn't get anything but the snakes and the oil. The oil business busted up after than. We didn't have a good ballyhoo and the other boys decided there was nothing in it. So I left on my own hook.



"Folk's it's the best remedy ever put out."

During my travels around the fairs I had met a lot of fellows who were doing a big business running lemonade stands. That looked to me like a pretty good graft. All a fellow had to do was get a few cents' worth of lemon salts at the corner drug store, a little coloring matter for another dime, one half dozen thick glasses and everything was all set. We kept track of all the county fairs and I soon had a circuit of my own. I managed to hit town about a day before the fair opened up, getting a permit, if necessary, from the head man of the fair to sell lemonade. Of course I did not get the permit unless I had to, as they cost money, but I always did manage to get hold of an old barrel which would hold water and a few boards to make a stand of.

During my career with the snake show, I had got the ballyhoo idea down pretty good and after I had mixed up my lemonade out of the lemon salts, a little color with the water and a few lemon rinds on the top, it was easy to sell. Of course we never had to worry about what was in the lemonade. The big idea was to sell it and we did not care how the stuff tasted after we got the money.

I made a lot of money that summer, but I had ambitions for a big game, and I decided that as long as I was as clever as that, I ought to be working at something in the winter, too. I had managed to drift into Florida where everything was balmy and liked it so well that I decided that it was a great place to winter, but it took a lot of money and my lemonade profits were dwindling pretty fast.

I chanced upon a circular one day that gave me a good idea. It seems as tho this company was offering silverware such as teaspoons, knives and forks and the like to people who saved enough coupons. Of course I soon got wise to the fact that the extra 50 cents or $1 which they asked to be sent along with the coupon, more than paid for the cheap grade of silver which was furnished. My idea, however, was somewhat different. I figured out a scheme to the effect that if I could get hold of a lot of names of some of my northern friends and send them a postcard to the effect that they had been awarded a prize of a half dozen teaspoons in a contest, that they would bite. So I went to a small print shop and got some cards printed which read as follows:

"You have been one of the lucky winners in our contest which has recently closed. If you will send 98 cents to cover shipping charges to the following address, we will be pleased to forward your premium of one-half dozen genuine silver teaspoons."

As long as I never had a title, I decided that now was a good time to get one, so I signed the card the National Awards Committee and put my street address on the bottom. Of course I left my name off for various reasons because I did not want my friends to know who was pulling this scheme.

When I was having these cards printed. I noticed in the print shop an address of a company who would furnish mailing lists of good prospects thruout the middle west. That was just what I wanted, so when the proprietor was looking the other way, I appropriated the letter for my own use. This mailing list cost me about three dollars, if I remember correctly, and I received a list of about five hundred names. When I had added on the list of all the names of my friends and relatives thruout the corn belt, I found I had a list of about seven hundred fifty prospects. In about a week I had cards addressed and mailed them and sat down to await results.

The first letter came from a wo-

(Continued on Page 19)

Oh Money! Money!

by ELEANOR H. PORTER

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THE STORY TO DATE

MR. STANLEY G. FULTON, 50-year old bachelor and possessor of twenty million dollars, calls on his lawyer and they discuss the disposition of this large fortune after its owner's death. The lawyer is in favor of giving the money to colleges or charities while Fulton is opposed to these ideas. He remembers that he has some distant cousins and decides to leave the money to one of them, but first he determines to learn which one will use it to the best advantage. To find out who is the worthy one he, through his lawyer, gives, each cousin $100 000 to use as they will. Before giving them the money grows a beard and, using the name of Mr. John Smith, goes to the town where they live to find out what kind of people they are. Upon arriving in town he visits James Blaisdell, one of the cousins, where he tries to hire board and lodging. While there he meets Miss Flora Blaisdell, another cousin who is a dressmaker. They decide they cannot rent a room to him and supply him board and refer him to Frank Blaisdell's, the third cousin. He gets a room there and, passing as a writer gathering material for a book on the Blaisdell family in this country, he starts out. He calls on all of the Blaisdells and as they all talk of a relative by the name of Miss Maggie Duff he decides to call on the lady. He finds her living with her father, an old man who seems to have soured on the world. He secures what information he can from her and her father. He then writes a letter to his lawyer discussing the various relatives he has met. The members of the Blaisdell family learn that each cousin of Stanley G. Fulton has fallen heir to $100,000 and there is much excitement.

(Continued from March 1 issue.)

"YOU aren't sorry—the money came?" Mr. Smith was eyeing her with a quizzical smile.

"Oh, no, no, indeed!" Mrs. Blaisdell's answer was promptly emphatic. "And I hope I shall be found worthy of the gift, and able to handle it wisely."

"Er—ah—you mean—" Mr. Smith was looking slightly taken aback.

"I mean that I regard wealth as one of the greatest of trusts, to be wisely administered, Mr. Smith," she amplified a bit importantly.

"Oh-h!" subsided the man.

"That is why it distresses me to see my daughter so carried away with the mere idea of spending. I thought I'd taught her differently," sighed the woman.

"Perhaps you taught her—too well. But I wouldn't worry," smiled Mr. Smith, as he turned away.

Deliberately then Mr. Smith went in search of Mellicent. He found her in the music-room, which had been cleared for dancing. She was surrounded by four young men. One held her fan, ane carried her white scarf on his arm, a third was handing her a glass of water. The fourth was apparently writing his name on her dance card. The one with the scarf Mr. Smith recognized as Carl Pennock. The one writing on the dance programme he knew was young Hibbard Gaylord.

Mr. Smith did not approach at once. Leaning against a window-casing near by, he watched the kaleidoscopic throng, bestowing a not too conspicuous attention upon the group about Miss Mellicent Blaisdell.

Mellicent was a picture of radiant loveliness. The rose in her cheeks matched the rose of her gown, and her eyes sparkled with happiness. So far as Mr. Smith could see, she dispensed her favors with rare impartiality; though, as she came toward them finally, he realized at once that there was a merry wrangle of some sort afoot. He had not quite reached them when, to his surprise, Mellicent turned to him in very evident relief.

"There here's Mr. Smith," she cried gayly. "I'm going to sit it out with him. I shan't dance it with either of you."

"Oh, Miss Blaisdell!" protested young Gaylord and Carl Pennock abjectly.

But Mellicent shook her head.

"No. If you will both write your names down for the same dance, it is nothing more than you ought to expect."

"But divide it, then. Please divide it," they begged. "We'll be satisfied."

"I shan't be!" Mellicent shook her head again merrily.

"I shan't be satisfied with anything—but to sit it out with Mr. Smith. Thank you, Mr. Smith," she bowed, as she took his promptly offered arm.

And Mr. Smith bore her away followed by the despairing groans of the two disappointed youths and the taunting gibes of their two companions.

"There! Oh, I'm so glad you came," sighed Mellicent. "You didn't mind?"

"Mind? I'm in the seventh heaven!" avowed Mr. Smith with exaggerated gallantry. "And it looked like a real rescue, too."

Mellicent laughed. Her color deepened.

"Those boys—they're so silly!" she pouted.

"Wasn't one of them young Pennock?"

"Yes, the tall dark one."

"He's come back, I see."

She flashed an understanding look into his eyes.

"Oh, yes, he's come back. I wonder if he thinks I don't know why!"

"And—you?" Mr. Smith was smiling quizzically.

She shrugged her shoulders with a demure dropping of her eyes.

"Oh, I let him come back—to a certain extent. I shouldn't want him to think I cared or noticed enough to keep him from coming back—some."

"But there's a line beyond which he may not pass, eh?"

"There certainly is!—but let's not talk of him. Oh, Mr. Smith, I'm so happy!" she breathed ecstatically.

"I'm very glad."

In a secluded corner they sat down on a gilt settee.

"And it's all so wonderful, this—all this! Why, Mr. Smith, I'm so happy I—I want to cry all the time. And that's so silly—to want to cry! But I do. So long—all my life—I've had to wait for things so. It was always by and by, in the future, that I was going to have—anything that I wanted. And now to have them like this, all at once, everything I want—why, Mr. Smith, it doesn't seem as it could be true. It just can't be true!"

"But it is true, dear child; and I'm so glad—you've got your five-pound box of candy all at once at last. And I hope you can treat your friends to unlimited soda waters."

"Oh, I can! But that isn't all. Listen!" A new eagerness came to her eyes. "I'm going to give mother a present—a frivolous, foolish present, such as I've always wanted to. I'm going to give her a gold breast-pin with an amethyst in it. She's always wanted one. And I'm going to take my own money for it, too, —not the new money that father gives me, but some money I've been saving up for years—dimes and quarters and half-dollars in my baby bank. Mother always made me save 'most every cent I got, you see. And I'm going to take it now for this pin. She won't mind if I do spend it foolishly now—with all the rest we have. And she'll be so pleased with the pin!"

"And she's always wanted one?"

"Yes, always; but she never thought she could afford it. But now—! I'm going to open the bank to-morrow and count it; and I'm so excited over it!" She laughed shamefacedly. "I don't believe Mr. Fulton himself ever took more joy counting his millions than I shall take in counting those quarters and half-dollars to-morrow."

"I don't believe he ever did," Mr. Smith spoke with confident emphasis, yet in a voice that was not quite steady. "I'm sure he never did."

"What a comfort you are, Mr. Smith," smiled Mellicent, a bit mistily. "You always understand so! And we miss you terribly—honestly we do!—since you went away. But I'm glad Aunt Maggie's got you. Poor Aunt Maggie! That's the only thing that makes me feel bad, about the money, I mean,—and that is that she didn't have some, too. But mother's going to give her some. She says she is, and—"

But Mellicent did not finish her sentence. A short, sandy-haired youth came up and pointed an accusing finger at her dance card; and Mellicent said yes, the next dance was his. But she smiled brightly at Mr. Smith as she floated away, and Mr. Smith, well content, turned and walked into the adjoining room.

He came face to face then with Mrs. Hattie and her daughter. These two ladies, also, were pictures of radiant loveliness—especially were the radiant, for every beam of light found an answering flash in the shimmering iridescence of their beads and jewels and opalescent sequins.

"Well, Mr. Smith, what do you think of my party?"

"I think a great deal—of your party," smiled the man. "And you?" He turned to Miss Bessie.

"Oh, it'll do for Hillerton." Miss Bessie smiled mischievously into her mother's eyes, shrugged her shoulders, and passed on into the music-room.

"As if it wasn't quite the finest thing Hillerton ever had—except the Gaylord parties, of course," bridled Mrs. Hattie, turning to Mr. Smith. "That's just daughter's way of teasing me—and, of course, now she is where she sees the real thing in entertaining—she goes home with those rich girls in her school, you know. But this is a nice party, isn't it Mr. Smith?"

"It certainly is."

"Daughter says we should have wine; that everybody who is anybody has wine now—champagne, and cigarettes for the ladies. Think of it—in Hillerton! Still, I've heard the Gaylords do. I've never been there yet, though, of course, we shall be invited now. I'm crazy to see inside of their house; but I don't believe it's much handsomer than this. Do you? But there! You don't know, of course. You've never been there, any more than I have, and you're a man of simple tastes, I judge, Mr. Smith." she smiled graciously. "Benny says that Aunt Maggie's got the nicest house he ever saw, and that Mr. Smith says so, too. So, you see, I have grounds for my opinion."

Mr. Smith laughed.

"Well, I'm not sure I ever said just that to Benny, but I'll not dispute it. Miss Maggie's house is indeed wonderfully delightful—to live in."

"I've no doubt of it," conceded Mrs. Hattie complacently. "Poor Maggie! She always did contrive to make the most of everything she had. But she's never been ambitious for really nice things, I imagine. At least, she always seems contented enough with her shabby chairs and carpets. While I—" She paused, looked about her, then drew a blissful sigh. "Oh, Mr. Smith, you don't know—you can't know what it is to me just to look around and realize that they are all mine—these beautiful things!"

"Then you're happy, Mrs. Blaisdell?"

"Oh, yes. Why, Mr. Smith, there isn't a piece of furniture in this room that didn't cost more than the Pennock's—I know, be cause I've been there. And my curtains are nicer, too, and my pictures, they're much brighter—some of her oil paintings are terribly dull-looking. And my Bessie—did you notice her dress to-night? But, there! You didn't, of course. And if you had, you wouldn't have realized how expensive it was. What do you know about the cost of women's dresses?" she laughed archly. "But I don't mind telling you. It was one hundred and fifty dollars, a hundred and fifty dollars, and it came from New York. I don't believe that white muslin thing of Gussie Pennock's cost fifty! You know Gussie?"

"I've seen her."

"Yes, of course you have—with Fred. He used to go with her a lot. He goes with Pearl Gaylord more now, There, you can see them this minute, dancing together—the one in the low-cut blue dress. Pretty, too, isn't she? Her father's worth a million, I suppose. I wonder how t'would feel to be worth—a million." She spoke musingly, her eyes following the low-cut blue dress. "But, then, maybe I shall know, some time,—from Cousin Stanley, I mean," she explained smilingly, in answer to the question she thought she saw behind Mr. Smith's smoked glasses. "Oh, of course, there's nothing sure about it. But he gave us some, and if he's dead, of course, that other letter'll be opened in two years; and I don't see why he wouldn't give us the rest, as long as he's shown he remembered he'd got us. Do you?"

"Well—er—as to that—" Mr. Smith hesitated. He had grown strangely red.

"Well, there aren't any other relations so near, anyway, so I can't help thinking about it, and wondering," she interposed. "And 'twould be millions, not just one million. He's worth ten or twenty, they say. But, then, we shall know in time."

"Oh, yes, you'll know—in time," agreed Mr. Smith with a smile, turning away as another guest came up to his hostess.

Mr. Smith's smile had been rather forced, and his face was still somewhat red as he picked his way through the crowded rooms to the place where he could see Frank Blaisdell standing alone, surveying the scene, his hands in his pockets.

"Well, Mr. Smith, this is some show, ain't it?" greeted the grocer, as Mr. Smith approached.

"It certainly is."

"Gee! I should say so—though I can't say I'm stuck on the brand myself. But, as for this money business, do you know? I'm as bad as Flo. I can't sense it yet—that it's true. Gosh! Look at Hattie, now. Ain't she swingin' the style to-night?"

"She certainly is looking handsome and very happy."

"Well, she ought to. I believe in lookin' happy. And I believe in takin' some comfort as you go along—not that I've taken much, in times past. But I'm goin' to now."

"Good! I'm glad to hear it."

"Well, I am. Why, man, I'm just like a potato-top grown in a cellar, and I'm comin' out and get some sunshine. And Mellicent is too. Poor child! She's been a potato-top in a cellar all right. But now—Have you seen her to-night?"

"I have—and a very charming sight she was," smiled Mr. Smith.

"Ain't she, now?" The father beamed proudly. "Well, she's goin' to be that right along now. She's goin' where she wants to go, and do what she wants to do; and she's goin' to have all the fancy flumadiddles to wear she wants."

"Good! I'm glad to hear that, too," laughed Mr. Smith.

"Well, she is. This savin' is all very well, of course, when you have to. But I've saved all my life, and, by jingo, I'm goin' to spend now! You see if I don't."

"I hope you will."

"Thank you. I'm glad to have one on my side, anyhow. I only wish— You couldn't talk my wife 'round to your way of thinkin', could you?" he shrugged, with a whimsical smile. "My wife's eaten sour cream to save the sweet all her life, an' she hain't learned yet that if she'd eat the sweet to begin with, she wouldn't have no sour cream—'twouldn't have time to get sour. An' there's apples too. She eats the specked ones always; so she don't never eat anything but the worst there is. An' she says they're the meanest apples she ever saw. Now I tell her if she'll only pick out the best there is every time, as I do, she'll not only enjoy every apple she eats, but she'll think they're the nicest apples that ever grew. Funny, ain't it? Here I am havin' to urge my wife to spend money, while my sister-in-law here— Talk about ducks takin' to the water! That ain't no name for the way she sails into Jim's little pile."

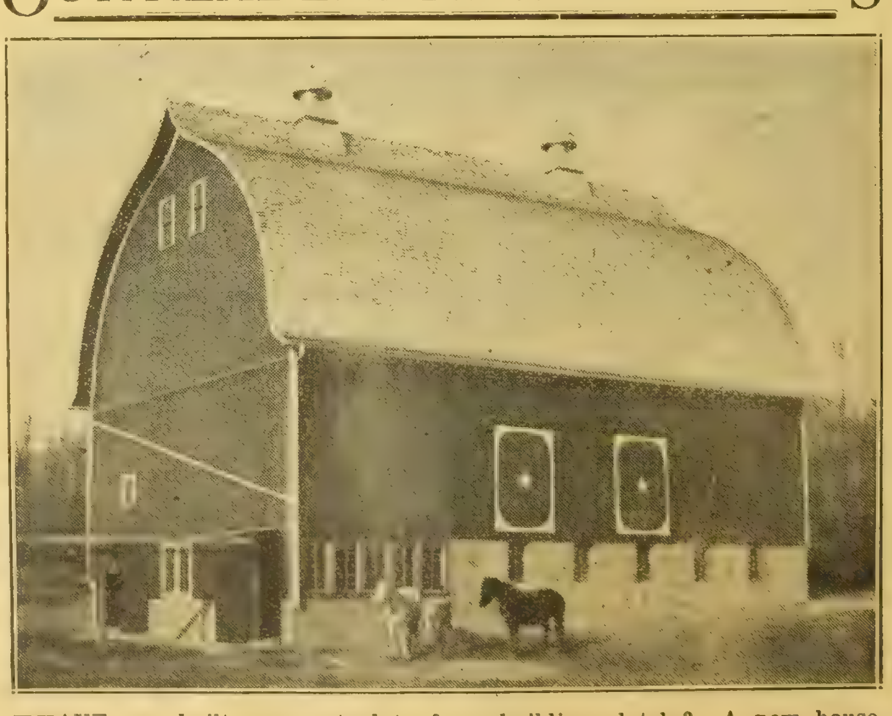
Mr. Smith laughed.

"By the way, where is Mr. Jim?" he asked.

The other shook his head.

"Hain't seen him—but I can guess where he is, pretty well. You go down that hall and turn to your left. In a little room at the end you'll find him. That's his den. He told Hattie 'twas the only room in the house he'd ask for, but he wanted to fix it up himself. Hattie, she wanted to buy all sorts of truck and fix it up with cushions and curtains and Japanese gim-cracks like she see in a book, and make a show-place of it. But

OUR READERS' NEW BUILDINGS



HAVE you built any up-to-date farm buildings lately? A new house, barn, hen house, hog house, or granary? If you have send us a picture of the new building and we will print it in this new department. It will show the M. B. F. readers what their distant neighbors are doing to change the scenery. And, incidently, you may be able to help some farmer decide just the type of house, or barn, or other buildings he desires to put up. He may like the appearance of your building and will want the plan of it. Send in your pictures. Kodak pictures are all right if the details show up well. Do not send the negative, just a good print.

This picture was sent in by one of our readers, Mr. Pearl Bear, who resides on route 2 at Tustin, Michigan. Mr. Bear says his barn was built last year and it cost him $4,000. It certainly is a fine looking barn, one any farmer would be proud to have on his farm.

Jim held out and had his way. There ain't nothin' in it but books and chairs and a couch and a big table; and they're all old—except the books—so Hattie don't show it much, when she's showin' off the house. You'll find him there all right. You see if you don't. Jim always would rather read than eat, and he hates shindigs of this sort a little worse'n I do."

"All right. I'll look him up," nodded Mr. Smith, as he turned away.

Deliberately, but with apparent carelessness, strolled Mr. Smith through the big drawing-rooms, and down the hall. Then to the left—the directions were not hard to follow, and the door of the room at the end was half-way open, giving a glimpse of James Blaisdell and Benny before the big fireplace.

With a gentle tap and a cheerful "Do you allow intruders?" Mr. Smith pushed open the door.

James Blaisdell sprang to his feet.

"Er—I—oh, Mr. Smith, come in, come right in!" The frown on his face gave way to a smile. "I thought— Well, never mind what I thought. Sit down, won't you?"

"Thank you, if you don't mind."

Mr. Smith dropped into a chair and looked about him.

"Ain't it great?" beamed Benny. It's 'most as nice as Aunt Maggie's, ain't it? And I can eat all the cookies here I want to, and come in even if my shoes are muddy, and bring the boys in, too."

"It certainly is—great," agreed Mr. Smith, his admiring eyes sweeping the room again.

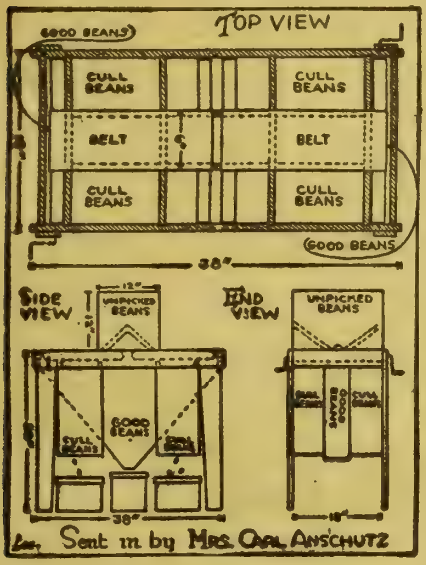
To Mr. Smith it was like coming into another world. The deep, comfortable chairs, the shaded lights, the leaping fire on the hearth, the book-lined walls—even the rhythmic voices of the distant violins seemed to sing of peace and quietness and rest.

(Continued in March 29th issue.)

FARM MECHANICS

HOME-MADE BEAN PICKER

AM sending you a picture of our bean picker which we have found very convenient as two can pick at the same time, and thus encourage competition. Every winter we hand pick our beans and find it a great saving. Where two can pick it seems the time flys faster than if you work alone, and then on stormy days friend husband can give his better half a helping hand if she is picking alone.—Mrs. Carl Anschutz, Bay County, Mich.



Sent in by Mrs. Carl Anschutz

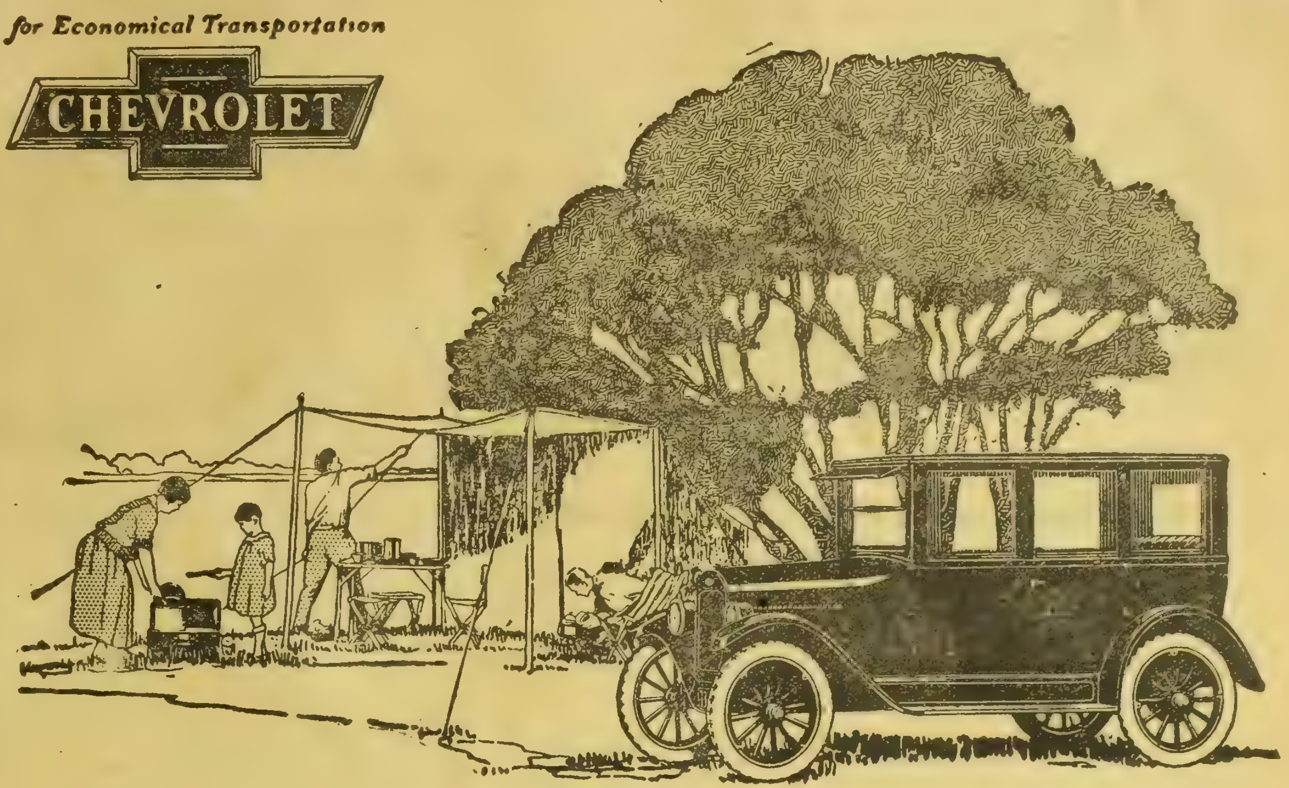
CAUSE OF BULGING OF CONCRETE FLOOR

The concrete floor of my cellar bulges in the center. Could you tell me what would cause it to do that? The floor was put in several years ago.—A K., Brown City, Mich.

—Either the floor has been lifted from the center by the weight of the outside walls so that it is hollow underneath or the surface layer of the floor may be lifted from the same cause.

If this cellar has been built tight enough to withstand water pressure, it might be possible that the water has surrounded the cellar and created enough pressure on the bottom to lift the floor. In case the cellar has been surrounded by water, and the pressure on the bottom upward would be quite effective in breaking the cement.

However, it is not likely that the cellar has been built absolutely water tight and any pressure by water on the outside would be likely to leak through some place until the pressure on the inside is approximately the same as on the outside.—H. H. Musselman, Professor, Agricultural Engineering Dept., M .A. C.



Will Your Family Be Happy Next Spring?

A low-priced, modern automobile like the Chevrolet has become indispensable to the American family of ordinary income. Without it they are prisoners on limited range—like hobbled horses in a pasture.

The inspiring beauties of Nature, the interesting and educational features of other places and other types of people and ways of living remain things to be read about, or seen dimly in cold photographs, until you are free to GO TO THEM at your convenience and pleasure.

Suppose you have definitely decided to buy a Chevrolet next Spring.

That does not necessarily mean you are going to get it.

Anyone posted on conditions in the automobile business will tell you that thousands of families are going to be unable to get cars next Spring. That has been true almost every Spring for the last ten years, but the shortage in April, May and June, this year, is going to be more serious than ever before.

There are just two ways of making sure of getting your Chevrolet for use when the flowers and balmy breezes of Spring lure you to the country roads:

Buy it NOW, or order it NOW.

If you do not want to pay for it in full at this time, any Chevrolet dealer will arrange terms to suit your convenience, so you can *pay as you ride.*

You will be surprised to learn how easy it is to pay for a Chevrolet and to get possession and use of it.

The only way to be sure of a Chevrolet next Spring is to order it NOW.

Chevrolet Motor Company, Detroit, Michigan

Division of General Motors Corporation

Prices f. o. b. Flint, Michigan

Superior Roadster	**$490**	Superior Commercial Chassis	$395
Superior Touring	495	Superior Light Delivery	495
Superior Utility Coupe	640	Utility Express Truck Chassis	550
Superior 4-Pass. Coupe	725		
Superior Sedan	795		

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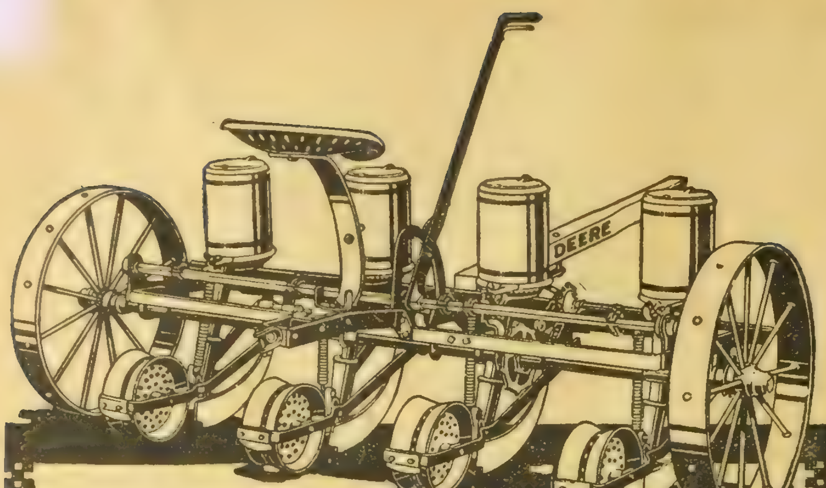
Five United States manufacturing plants, seven assembly plants and two Canadian plants give Chevrolet the largest production capacity in the world for high-grade cars and make possible our low prices. Dealers and Service Stations everywhere. Applications will be considered from high grade men only, for territory not adequately covered.



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Start your beet crop right by using the most accurate and uniform planter. Correct planting pays big dividends at harvest time. Use a

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Saves seed — none wasted — this planter is equipped with the most accurate John Deere seed-dropping mechanism. Special-shaped seed cells and sloping hopper bottom cause seeds to be dropped just as accurately as you could do it by hand. The seed is spaced properly—less thinning out is required after the beets come up.

Distance between rows is easily varied; machine can be converted into a three-row bean planter; depth of planting easily regulated; pressure wheels can be changed to either open or closed wheels quickly to cover seed effectively. Spring-pressure runners insure seed furrows of equal depth. Irrigating shovels extra. Sold by John Deere dealers.

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What the Neighbors Say

REDUCED TAXES

EDITOR—I am a firm believer in and am member of the Farm Bureau. I believe that the farmer's stand squarely back of the Farm Bureau slogans: "Pay as you go" and "tax reduction." I believe the farmers look to the Farm Bureau to live up to these slogans. I do not believe that one farmer in ten would vote for the proposed plan to increase our national indebtedness $39,000,000 for college extention throughout the various states. Junior college extention is all right. The state appropriates $150,000 for this purpose. But they are not teaching all dogs new tricks. I have never seen much better than a corporal's guard attend a college extension meeting called for that purpose. And even if their methods are good, the farmer's great need just now is ability to roof his buildings to properly store his present overproduction and not a program of increased taxation which will help delay his needed roof.

The farmer is looking to the Farm Bureau to guard the pork barrel and not be a partaker of it. Their $39,000,000 appropriation would start a program of congressional log rolling which would prove very expensive to all except promoters and bond holders.—Howard Smith, Saginaw County, Mich.

SETTING MR. JORDAN RIGHT

DEAR Editor:—As I am a reader of your paper, THE BUSINESS FARMER, I wish to answer parts of your editorial page.

Through the farm papers the average farmer is fed on propaganda and being tired and wore-out physically he is an easy victim to your mental poison. But things are different and a great many farmers see through your misleading editorials now. The large and yes small industries have not begun to take care of the vast amount of unemployment in towns and cities. Nor will they for some months yet. The immigration of the farm people to towns and cities keep up daily. Why? For high wages? No. But for just a chance to live better than cattle. You speak of high wages. Yes where the workers have well organized unions the wages can be called the saving wage. And where the workers are not organized they receive starvation wages.

You speak of attracting peasants to this country. Why a peasant with a large family to even last a year here on a farm had ought to land here with $5,000. Could he?

And referring to the large amount of laborers who have returned to their native land. Why of course they will. This country did not give them their heart's desire. They left slavery over there for wage slavery of the worst sort here. Farms they could not buy and the speed up system here they would not stand for. Being ignorant and unorganized they work for common wages which the merchants and manufacturers have agreed upon. This high wage runs from 30c to 50c per hour. Get out of your editors chair for a few days travel around in the various towns and cities and see the high wages offered to common laborers. See how they live. No Mr. Editor, you and others are not fooling all the farmers now. And as to a Farmer-Manufactor Party. Say a farmer isn't the stick that he was 30 years ago.—Ralph Jordan, Petoskey, Mich.

—Good for you, friend Gordan! The only wa ywe can get these facts out from under cover is to discuss them. Inasmuch as you have taken several direct slams at my editorial, you will I am sure, allow me to point out a few descrepencies in your letter of criticism.

he is through with the political spell-

In the first place there is little or no unemployment in either cities or towns in this country. My authority for this is the report to the President made by the Secretary of Labor, within the past ten days. Personally I know that any man able and willing to work can get employment in Detroit and for that matter in this city of ten thousand where THE BUSINESS FARMER is printed.

Men and women in the United States do not "live like cattle", in fact it is probably true that never before in the history of the world have so many people lived in such comfort as they do in this country today. Why, man alive, there are more telephones in New York than there are in the whole British Isles and probably more bath-tubs, too!

A farmer with an automobile in England or on the continent would be a "lorded-landholder, or a profligate spendthrift looked upon with suspicion by his rural neighbors. Are there no farmers near Petoskey who own automobiles, have telephones in their homes or enough fuel to keep them warm the long winter evenings? You know there are and we know too, that a good many readers whom you say we are trying to "mentally poison" have pianos, phonographs, radios and bath-rooms and they have won all of these so-called luxuries from the fields, orchards or dairy that surrounds their homes.

Perhaps, friend Jordan, they have a mystic key to all of these treasures, but the one we most often find them using is labeled Hard Work, and the strange part of that key is that it will fit the door of success on the farm, in store or factory.

When I finished high-school in Tuscola county the sugar companies were just bringing in their families of "hunkies" (as we unthinking young nit-wits were wont to call them.) They landed on our shores with a big family as their sole asset. Today thousands of acres of the best land in Michigan is cultivated by these sturdy farmers and their red-barns and tall silos are tangible evidence of their prosperity.

Thank you for the suggestion that we do some traveling, Mr .Jordan, we did some twenty thousand miles, mostly in Michigan last year, but we will try and do more this year, if you think that by doing so, we will learn what you have come to believe.

In your last statement, Mr. Jordan, we agree perfectly. "The farmer isn't the stick he was thirty years ago," nor will he ever be again, for he is through with the political spellbinder who wept alligator tears over the "pitiable plight" of the farmer that he might feather his own nest in a soft political job, from the farmers votes.

The man whom we are proud to call a "business farmer", is not crying himself, nor asking others to cry for him. He is working to get other farmers to join with him, control the output of their farm factories, and have a selling agency through which they may determine the price for which their produce is to be sold. That is the farmers' problem, as we see it, Mr. Jordan, and it is the farmers problem, not the politicians. We admire union labor, as much as you do, but what union labor has won they have won by organizing to sell their product, which is time, at a price which they determine. They have won, but not by crying or letting politicians cry for them. They have won by organizing and then standing by their organization, even if their feet were unshod, their bellies empty and their children kept home from school. So far we have not found a farmer organization which has been put to so strenuous a test, but we know that the farmers of America are built of as sturdy-stuff and we believe, that by the right kind of leadership they will never have to resort to the test.—Editor.

ENFORCE THE LAW

DEAR EDITOR:—It is a regretable fact that our Republic is endangered because of disrespect for law and that a portion of those in official position are laxin their efforts to enforce the law, especially is this true in the matter of enforcing temperance legislation in some of our cities and it is hoped that farmer organizations and others, will give expression to their views upon this matter through the state press as the Essex Farmers Club, Clinton county, has done in the following resolution:

Whereas, the question of securing compliance wih the provisions of law is of paramount importance, especially that portion dealing with the sale and use of intoxicating liquors as a beverages, and

Whereas, our public officials are

responsible in a large degree for the execution of the law, therefore be it

Resolved, by the Essex Farmers Club that each and every aspirant for public office is hereby requested to state in the public press, his attitude in the matter of the faithful enforcement of the law, especially that portion dealing with the question of temperance.—J. F. Daniells, Clinton County, Michigan.

IS PROHIBITION AND OTHER LAWS ON TRIAL?

DEAR EDITOR:—I notice in M. B. F., Feb. 16 issue, on page 14, an article "Prohibition On Trial." Now ALL laws are being violated and it seems more so than usual since the World War. In speaking of law violation people are apt to conclude that the prohibition law is what is meant mainly. But we also have a lot of trouble with various other crimes, bandits, speeding of autos, overloading of trucks and a general disregard of the rights and safety of other people. The violations are many and varied and affect people in all walks of life. There has been in the past a disposition and a practice on the part of certain lawless elements to "get around" the laws someway. We had law violaters in saloon days also and their number was legion. We had blind pigs, tigers, joints, slums, and so forth where lawless people congregated and held law in defiance. But our best citizens have ever stood for and labored for higher and purer ideals of American citizenship. If our race is to progress and flourish each generation must be better and nobler than the one before.

And so, I for one would never lower the Stars and Stripes, and all it stands for, to an inferior type or ideal of civilization. The grand old flag looks nobler to me as it floats over righteousness and justice. True, we have too many of the vicious criminal sort, and weak kneed officials too who are too careless, and disloyal. We have to strive and toil and sacrifice for the nation and the people, and the best things of life one must work for hardest to attain. So that we may be true to those who, in times past gave their best and their all that America might become the glorious nation that it is today. Let us stand firmly for the laws (all laws) of our land. Shall we become frightened because of untrue officials, or afraid of personal loss because we dare to stand for the right? Shall we fall in line with a lower element who value too lightly the principles our nation stands for?

To those who oppose the 18th amendment we have a word of warning. Do they really want the conditions that would come if violation of all law should become popular? Of what value would their property be in a community where law afforded them no protection? If might makes right what will the future of America be? Did the saloon or the blind pig, or the dens of iniquity ever contribute any thing to the well being of humanity? Answer these questions fairly down deep in your own heart and you will then know what to do about it when evil is striving for a permanent foothold upon American soil.

Let our course be "upward and onward." Let our best efforts be given to the building of a nation, and the uplifting of a race of people whose ideals are grounded in justice, mercy, progress, peace and all that the best in humanity means. — Mrs. Florence Howard, Vice-Pres. Monroe Co. W. T. C. U.

P.S.—Use this letter as you think best.

More than 85 per cent of the United States corn crop is fed to livestock and somewhat less than 10 per cent is used for human food, according to recent data compiled by the United States Department of Agriculture. The hog is the largest consumer, 40 per cent being fed to swine on farms.

Please find enclosed my check for $1 to renew my subscription for 2 years as I would not be without your paper for two times the price of it.—B. Britts, Arenac County, Michigan.

We appreciate your paper very much. It is the best farm paper for the farmer. —Walter Walson, Mason County, Mich.

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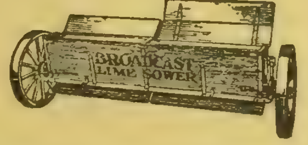

Farmers' Favorite Lime Sower

Positively the best lime spreader money can buy. Unequalled for uniform sowing of agricultural lime and commercial fertilizers. Simple in construction. Exceptional strength. Built for long years of hard service. Write for folder today.

Mail the Coupon Today

You can't raise grain profitably if you have to depend upon an old worn-out drill for your seeding. Write today for the fact-story of the Farmers' Favorite. And if you need a Lime Sower, Alfalfa Drill, Corn Drill, Beet-and-Bean Drill or Potato Planter, check the coupon.

The American Seeding-Machine Co., Inc.
Springfield, Ohio

FARMERS' FAVORITE
—Grain Drills
—Lime Sowers
—Alfalfa Drills
—Corn Drills
—Beet and Bean Drills
—Evans Potato Planter

The American Seeding-Machine Co., Inc.
Springfield, Ohio.

Gentlemen: Please send full information on items checked.

Name____________________

Address____________________

____

WE PAY $200 MONTHLY SALARY, FURNish car and expenses to introduce our guaranteed poultry and stock powders. BIGLER COMPANY, X682, Springfield, Illinois.

AGENTS SELL WOLVERINE LAUNDRY Soap. Wonderful repeater and good profit maker. Free auto to hustlers. WOLVERINE SOAP CO., Dept. B32, Grand Rapids, Mich.

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No Coal Tar Used
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Roofing & Shingles

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The Jumbo Roll—and any other Mule-Hide sign—is the mark of a lumber dealer who can give you the best in materials; in values; in service.

Trade with the dealers who display these signs and insure satisfaction for yourself.

THE LEHON COMPANY, Manufacturers
CHICAGO, ILLINOIS

MULE-HIDE
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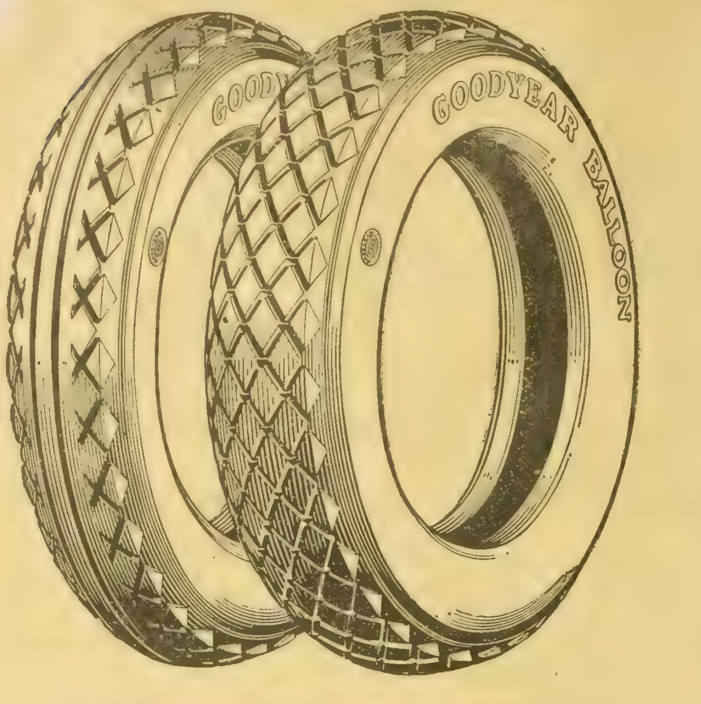
"Not A Kick In A Million Feet"


What do balloon tires cost? Not so much, if they're Goodyears. We make them to fit present rims. Also in the smaller diameter 20-, 21- and 22-inch rim sizes. That saves the average motorist real money. Your Goodyear Dealer will tell you how much it saves you.

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For healthy orchards plant handsome, thrifty, Michigan-grown **trees, grape vines, berry bushes, roses and shrubs.** Raised in Kalamazoo County---famous for hardy, well rooted stock. **Guaranteed healthy and true to name.** Buy **in your own State** and insure prompt arrival in vigorous condition. Special prices on orders sent **now.** Ask for our handsome catalog of dependable trees---it's free.

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R. H. SHUMWAY, Rockford, Ill.

STRAWBERRY PLANTS

$2.50 **Per 1000, and up.** Our strong, healthy, tremendous bearing plants guarantee big crops of luscious berries. Best varieties for all kinds of soils. Many new varieties such as **Eaton, Bun Special, Premier, Marvel** and **Cooper.** The world's greatest new Everbearing Strawberry CHAMPION. Full line of Raspberries, Blackberries and Asparagus. GLADIOLI—ROSES—ORNAMENTALS

Greatly Reduced Prices. Large Stock of good at $30.00 per thousand **Grape Plants** Beautiful new color catalog free. *Write Today.*

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ELDORADO BLACKBERRY PLANTS—THE most profitable market blackberry grown. Good shipper, fine quality, productive and hardy. Disease free. State inspected, northern grown stock at $25.00 per M., 500 same rate; $3.50 per hundred, postpaid.

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STRAWBERRY PLANTS FOR SALE--PREMIER 60c per hundred, $4.50 per thousand. Senator Dunlap, Gibson and Dr. Burrill 50c per hundred, $3.50 per thousand, postpaid.

ROB'T. DE GURSE, Ovid, Michigan.

FRUIT PLANTS—PRICES RIGHT—SEND for our free catalogue. Strawberries, Raspberries, Grapes, Dewberries, Gooseberries, Currants. State inspected. **Hollenga's Nursery, Three Oaks, Mich.**

FREE CATALOG HIGH QUALITY STRAWberry, Raspberry, Asparagus plants. Senator Dunlaps $2.75-1000. Write today.

O. D. THAYER, Three Rivers, Michigan.

Plant these 4 Best Grapes

Concord
Agawam
Niagara
Worden

Hardiest kinds. Once planted and growing you won't part with them for ten times their cost.

Agawam	Large amber-red berries on big bunches. Very sweet. Each 20c; 12, $1.75; 100, $12.
Concord	Best known grape. Sure to succeed Fine for grape juice. 15c; 12, $1.50; 100, $10.
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Worden	Large black berries. Bunches big. Extra early, hardy, sweet 20c; 12, $1.75; 100, $12.

Strong, well-rooted vines Set of four best varieties ONLY 65c

Postpaid and Satisfaction Guaranteed

Illustrated Seed and Nursery Catalog Free with Every Order

The Templin-Crockett-Bradley Co.
5747 Detroit Ave., Cleveland, Ohio

Get Low Prices on Berry Boxes and Baskets

Write for our **Free Catalog!** Shows you how you can save money by buying direct from *the largest Berry Box and Basket Factory in the Country.*

New Albany Box & Basket Co., Box 137 New Albany, Ind.

$1 Advertising Bargains

12 Dewberry Plants for $1.00; 12 Concord Grape Vines for $1.00; 20 Apple or Pear grafts ready to plant, make 6 ft. trees in one season for $1.00; 4 peach trees for $1.00; 20 flower bulbs for $1.00; 3 Iris clumps for $1.00. All postage paid. Get my list of other bargains.

MARSHALL VINEYARD
Ben L. Marshall, Paw Paw, Michigan.

RADIO DEPARTMENT

EDITED BY J. HERBERT FERRIS, R. E.

NOTES ON OPERATING YOUR RECEIVING SET

SOME of our readers who have built sets such as we have described in the February 2nd issue of THE BUSINESS FARMER have had success to start with and others have not. It is for the benefit of those who are having trouble that these notes are written, yet the successful ones may find a hint or two of value.

The batteries must be connected properly to the indicated binding posts. The B battery especially, as it will not work unless the positive side of the battery is connected to the "plate" of vacuum tube. The A battery will sometimes work better with the positive connected to one post and with other tubes the negative is so connected. Try changing your A battery connections.

Trace out all connections, a loose connection will make your set howl at times, or be very noisy and it will prevent it's working.

Be sure that all four contacts on the socket are making contact with the 4 prongs on the bottom of the tube.

Do not use to heavy a pencil line on the grid leak. If you buy a grid leak complete get one of 3 megohms for the WD-11 or WD-12 tube. Too much of a leak makes tuning difficult and looses much of the received value. Too little is just as bad. Try pencil lines of varying strengths. Be sure that your screws are making contact with the pencil lines.

If after trying the above your set does not work, reverse the connections on the rotor of your variocoupler. This alone causes more trouble than any other thing in sets like this, but is not a fault but is due to the fact that each make of instrument has its windings connected differently.

USE A RHEOSTAT—This will save your battery, and in many cases will help. If your set howls when first connected or when you go to tune, it may be because your filament is too hot. Use the rheostat (6-ohm) and keep the filament just heated enough to work.

Make your turnings on the condenser and coupler very slowly, you may miss a station without realizing it.

If in doubt write this department or send your set to have it tested. It costs you nothing but the postage. Do not send batteries—we have them.

PANELS AND THEIR MATERIALS

IN the articles on "How to Build" we have told you to use wood for the base and panels, emphasizing the need to parrafin or shellac them. This using of wood gives good results in spite of all that may be said against wood for panel use.

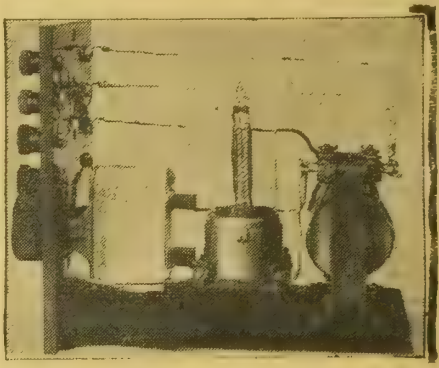
Wood is not considered a good dielectric, whereas hard rubber, bakelite, condensite and other materials are of good dielectric properties. The last named compositions are excellent insulators also, and in radio work good insulation is absolutely necessary as we are dealing with high frequency currents that have a way of finding all the weak spots. Wood is apt to hold a small amount of moisture at all times and hard rubber and the others are without moisture. Moisture will always cause leaks of electric current. Wood properly treated in hot parrafin has all the moisture driven from it and becomes an excellent insulator and has good dielectric properties.

For sets as we have been describing, to meet the needs of the small pocket-book, wood treated as described will give you as good results under ordinary usuage as the prepared composition panels. Laboratory tests alone will tell or show any difference.

For appearance and neatness and satisfaction of knowing that you are using the best we do suggest that you use one of the regular panels such as bakelite, hard rubber or condensite. A panel 6 by 10 inches will cost approximately $1.00 and will do for the receiving set, tho not large enough for a combined set including amplifier. If you wish to mount both sets in one, then get a panel 6 by 15 inches.

Before making any holes in the panel for mounting the different parts be sure that you first lay your plan out on a piece of paper, then using this paper as a template (pattern) mark the holes on the panel with a center punch or prick awl. After marking, remark deeper so that the drill point will not slip and mar the appearance of the panel.

To bore the holes you will need twist drills (not necessary wood) of one-eighth inch and one-quarter inch diameter. Use a breast drill if you have one, or an ordinary brace with bit shank drills. Bore carefully as the panel material is somewhat brittle and may chip a little. Start your boring from the face side of the panel and then the chipped edges where the drill breaks thru will be on the back and not show. A larger drill lightly run over the top of a small hole will smooth off any roughness on the edges. In this manner holes can also be counter sunk to make screw heads flush.



A side view of one stage amplifier, described in our last issue.

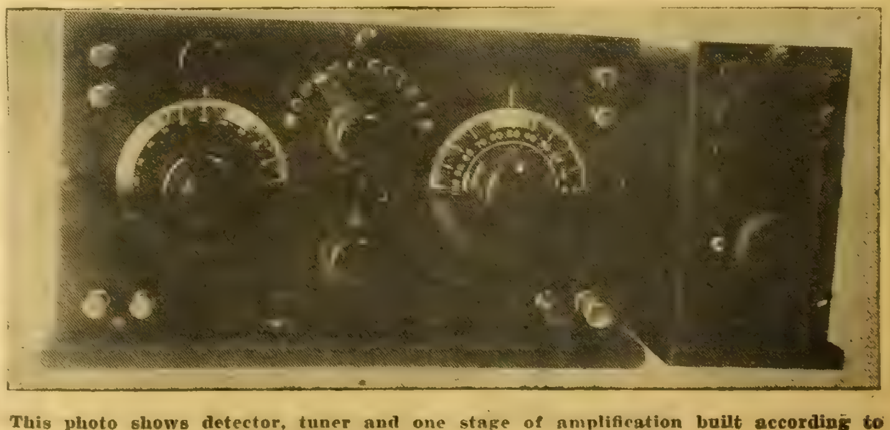
One great advantage of the regular panel materials mentioned over wood is that they not have a grain, do not split and crack nor warp like wood. A panel of bakelite one-eighth inch thick is rigid and stronger than a half inch piece of wood for a panel.

Questions and Answers

NOT REGENERATIVE CIRCUIT

I noticed in a recent issue of your paper an invitation to submit raido problems to you for advise, so I am doing so.

I am using a Duck type CV crystal set. The hook up I think is called a single circuit regenerative circuit, but I am not sure. It consists of a variometer, 45 plate variable condenser, small fixed condenser, and crystal detector. It gives mighty good results for a crystal set I think. Have received as far as 700 miles. But my main trouble is that often



This photo shows detector, tuner and one stage of amplification built according to the instructions given in our last two issues.

KDKA interferes so much that it is impossible to listen to anything else. Sometimes that station will come in as loud in any possible position on my dials as on any other. Sometimes when I am trying to listen to that station it will go out entirely, like a loose wire on a telephone, then if I shift my dials over to where 400 to 600 meters should come in it will come in again, though often badly distorted. Is there anything that I can do to shut KDKA out entirely, when I want to listen to Detroit? Would a loading coil placed in the aerial do it? If so how should it be made? Would the substitution of a variocoupler in place of the variometer be much better? Any advice you can give me I would appreciate.—Alfred Clark, St. Clair County, Mich.

—The circuit you use is not regenerative but is a single circuit and if changed to a two circuit would clear up your difficulty of tuning out undesirable stations. A variocoupler used, with your condenser across the primary and the present variometer in series with the rotor of the coupler would give you much better results and would be a two circuit tuner which would be sharp but not as loud as you now get your stations. Sometimes a poor connection or a grain of dirt will make your station go away, or it just naturally fades which no one can help.

SET WORKS FINE

THE parts for the radio receiving set came last Wednesday and we got it hooked up and tuned in last night for the first time. I want to thank you for getting the parts for us and for the help in telling us how to build it. I never had any experience of this kind before but we had no trouble in following your directions and making it work. We had WCBD, Zion City, Illinois, for over an hour last night and it came in nice and clear so that we could understand every word and hear the music real plain, except at times it sounded as though someone had stepped on the cat's tail, but we expect to get away from that as we get a little experience. We also had another station for a while but am not sure where it was. Again thanking you, I am, E. J. Delamarter, Cheboygan Co., Mich.

WANTS SET WITH 1,500 MILES RANGE

I read the Radio Department in the Busines Farmer with interest. I do not know much about sets and would like to know which set you think is best for receiving a distance of 1,500 miles. Also what are the prices?—M. M. Patrick, Eaton County, Mich.

—We are glad that you are interested in radio. It will be a great benefit and pleasure to farmers when they all have them in their homes for both business and pleasure.

There are a number of excellent and good sets that will cost you from $75 to $150. Yet many of these sets will not bring in the broadcasts any better than the set we describe in our February 2nd issue, especially when you add the amplifiers and loud speaker to it.

On such a set, here in northern Michigan I hear KYW, Chicago, give out the hourly news and market quotations every day. And it has brought in broadcasts from Dallas, Txeas, as well as Springfield, Mass., and many others.

The De Forest, Westinghouse (or Radio Corporation), Tuska, Clapp-Eastham, Atwater Kent, are all good and reliable sets.

Some dealer in Grand Rapids could show you these sets, but beware of extravagant promises. The dealers have not yet realized that the farmer is the next and largest market for good radio parts and sets, and so sometimes tries to "stick" you. Why not build yourself a set?

USES UP BATTERIES TOO FAST

I have a radio, 4 tubes, that I am operating on dry cells and the batteries are a big expense It will cost me around twelve or thirteen dollars a month. Is that unreasonable?

(Continued on Page 19)

DODGE BROTHERS
TYPE-B SEDAN

The Type-B Sedan could well stand as a concrete symbol of everything the name Dodge Brothers itself has come to represent.

It is honestly and wisely built. It stands up under the sternest kind of service. It will serve long beyond the span of life usually allotted to a motor car.

The price is $1250 f. o. b. Detroit

I'll Save You Big Money On This Beautiful Range

Our new low prices on Kalamazoo Ranges are the talk of the country. Greatest values ever offered. Ranges finished in beautiful gray or blue porcelain enamel. Our direct-from-factory prices save 25 to 40 per cent.

Mail a Postal Today

Get our prices now. Steel and iron prices are going up. Better write today when we can save you the most money. 30 days' trial. Cash or easy payments. Money-back guarantee.
W. S. Dewing,
"The Stove Man."

Kalamazoo Stove Co.
676 Rochester Ave.
Kalamazoo, Mich.

A Kalamazoo Direct to You

STRAWBERRY PLANTS—DUNLAP $3.00 PER 1000. Gibson $3.25 per 1000. Seven other varieties. Raspberry plants—Cumberland and Plow farmer $12.00 per 1000. King Red $15.00.
FRED STANLEY, Bangor, Michigan.

STRAWBERRY PLANTS FOR SALE
Senator Dunlap and Dr. Burrill, 60c per 100, $4.50 per 1000; Progressive Everbearing $1.00 per 100, $7.50 per 1000; St. Regis Everbearing Red Raspberries $1.50 per 100. Postage paid.
L. T. MORRIS, Athens, Michigan

Strawberries 25% Off
Prices slashed on Raspberry, Blackberry, and Grape plants. Stock guaranteed. 30th year. Catalog free.
J. N. ROKELY & SON, R. 20, Bridgman, Mich.

Galloway's WORLD BEATER BARGAINS

Are biggest values ever offered—and I challenge the world to match them--beating them is impossible--because big factory capacity--big demand, has brought manufacturing costs and overhead clear down. Selling direct from the factory to farm at small profit cuts out all waste--all unnecessary expense--puts high quality merchandise into users' hands by shortest route--and saves farmers millions of dollars.

FREE

To advetise Galloway Bargains, to make friends and boosters, I will give a customer who takes advantage of my special bargains an aluminum milk pail filled with aluminumware as shown in picture without extra cost. Get yours--time is limited.

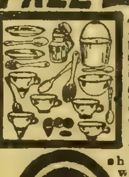
Cream Separators, Engines Spreaders known as "Galloway's Big Three," are masterpieces of construction, famous everywhere for satisfactory service--long life--ecnomical operation--low upkeep--proven by actual test on thousands of farms. You can have

90 Days' Trial on Your Farm

Test them any way and every way. Compare them with any other similar products--if Galloway products fail to meet all claims, fail to perform better than all others--if you are not convinced by actual experience that they are BIGGEST VALUE YOUR MONEY CAN BUY--ship them back if you do not like them--get any or all on easy terms--small payments down. WRITE TODAY FOR SPECIAL BARGAIN BULLETIN prices, terms, etc. and facts to prove that you can get your share of the saving on what you buy the Galloway Way.

WILLIAM GALLOWAY, President
William Galloway Co., 367 Galloway Sta., Waterloo, Iowa

$4.75 DOWN
Balance easy terms on Galloway Cream Check Payment Plan



Galloway Six

The Michigan
BUSINESS FARMER

SATURDAY, MARCH 15, 1924

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We will not knowingly accept the advertising of any person or firm who we do not believe to be thoroughly honest and reliable. Should any reader have any cause for complaint against any advertiser in these columns, the publisher would appreciate an immediate letter bringing all facts to light. In every case when writing say: "I saw your advertisement in The Michigan Business Farmer!" It will guarantee honest dealing.

"The Farm Paper of Service"

GET THIS STRAIGHT!

SOME people have a habit of reading more between the lines than they do in the printed words themselves. Two letters addressed to the Editor bring this fact to mind and are worth commenting on.

One accuses us of having sold-out to big business. Another that we don't understand how bad things are on the farm.

We will try, in plain language to make ourselves clear.

THE BUSINESS FARMER has only one interest to to serve and that is the best interests of the farmers of Michigan. We have no political, organization or religious entanglements of any name or nature!

THE BUSINESS FARMER is the only farm paper in Michigan which is not owned by a politician drawing a salary from the state or national government.

No man residing outside of the state of Michigan owns one dollars worth of the voting stock in this company.

We have not sold-out to big business or little business and, confidentially with the continued support of the better class of business farmers in Michigan we will never have too.

* * * *

Now, answering the second good reader, who thinks because we try to talk optimism we do not know how bad things are on the farm.

It is our opinion that the farming business needs sound leadership more than anything else. Sound leadership knows that no one can help the farmer out of the present situation but the farmer himself.

The present situation had to come. The farming business is the last to be organized for its own protection. It is the lamb in the lions den. The laborer is organized so strongly that he demands and receives a profit on his labor. The manufacturer, by cost accounting and keen salesmanship, makes a product and sells it in the face of competition at a profit. The transportation company knows it costs and demands a profit. The farmer alone is unorganized, unprotected and each individual farmer is every other farmers' worst enemy. That is, under the old order of things!

We are optimistic, because there is a proven way out of this dilemma. Cooperative marketing and the control of production is the key.

California led the way. The east was first to apply it in dairy products. We see plainly that it can be extended to all of the minor crops immediately and to the major crops eventually.

The weak-kneed, the jelly-spined and yellow-backed farmers have mostly left the farms. Good ridance! It is their farms which are "abandoned." It is they who listened to the calamity-howling politicians who rode to their soft-cushioned offices on their promises of "farmers relief!"

Now we have left, a sturdy lot of business men, who are sticking to their plows and their harrows, because they have millions of dollars invested in a business which they will not see fail, because it cannot fail.

* * * *

If thirteen grocery stores are starving to death because the town is not large enough to support them. And if five of the thirteen get cold-feet and go into the real-estate business, it is obvious that the remaining eight will divide the business which previously thirteen handled. And it is probable that each of the eight will then make a fair profit.

Apply that to the farming business and the answer must be the same.

* * * *

No, neighbor, THE BUSINESS FARMER has preached optimism, not because we have not known conditions on the farm, but because we hoped that our feeble words might lend a little ray of sunlight to that discouraged farmer or his wife. That we might hold a few of the stirling boys and girls who were scurrieing from the farm as they would from a plague—

Why?—

Because a certain type of individual has from platform and editorial page tried to make farmers believe he was their friend by telling them how badly they were off and promising relief which was never forthcoming.

If you want to hold a single boy or girl on the farms of Michigan—

If you want to hold a single man or woman in your employ from the magnet of the city factory—

If you want your farm to maintain its present value—

YOU will chase out of your neighborhood and bar from your homes, not only the politician, but the publication which he dominates with his poisoned pen.

* * * *

That the real, thinking, working business farmers of Michigan know these things without our stating them, is proven by their subscription renewals and their letters of encouragement which accompany them.

And they are the only kind we care to call business farmers anyway!

THE INCOME TAX

NO series of articles which we have been able to present to our readers for some time has stirred up the interest already manifested in the taxation series by Mr. Stanley M. Powell, begun in the March first issue.

In this issue Mr. Powell takes up the question of the income tax, a measure which has been voted on favorably by every farmers organization of standing in Michigan and one which we believe has the almost unanimous approval of the farmers in this state. Obviously it is not as popular in the metropolitan sections, and we can expect opposition that will make this a very difficult measure to get on the statute books-

It should be remembered that the income tax as proposed is not an additional tax but is to take the place of the general property tax as collected by the state. Inasmuch as incomes of less than $4000.00 are exempt, it is apparent that the larger proportion of farmers in Michigan will be entirely relieved of this burden, and when it is considered that they are the fundamental source of revenue and must pay the taxes indirectly through on all purchases of manufactured articles which they buy, it is quite apparent that it is not a matter of class legislation but rather a more equitable distribution of state taxation.

Other states, notably New York, where the bulk of the population are engaged in industrial pursuits, have an income tax, and with so illustrious an example it should not be hard to convince the voters of Michigan that such a tax is highly equitable and practical.

Mr. Powell points out that the first step is to procure 60,000 signatures to a petition for a constitutional amendment, so that it would be placed upon the ballot at the regular fall election of 1924 and voted on by all votors in the state. It will be largely up to the rural citizens of Michigan as to whether or not they get a chance to vote on this important measure at the coming election. By all means read Mr. Powell's series of articles: there is no use kicking about high taxes unless you are fully informed on them and that is the purpose of this series.

THE WILLIAMS BILL

REPRESENTATIVE ARTHUR B. WILLIAMS, of the third district of Michigan, introduced a bill "to establish a federal cooperative marketing system," which we mentioned on this page in the last issue, calling the attention of our readers and farmers organizations generally to the fact that they must get behind this bill if Mr. Williams is to be enabled to put it over.

Briefly it provides for the following features:

> **ORGANIZATION—Board of five members, of which secretary of agriculture shall be the head. Other members—a market expert, transportation expert, accounting expert, a practical farmer.**
>
> **APPLICATION—Country will be divided into five districts. All information and all business of the local co-ops of the district will pass through the district office. The general plan is much the same as followed in the federal bank system.**
>
> OPERATION—All co-ops will be required to keep standard accounts. Director, as he sees fit, may call for reports of condition of individual co-ops as is required now of national banks. Provision is made for publication of these reports so individual farmer member will know just how business is progresing.

A letter just received from Representative Williams reads as follows:

> "My attention is just now called to your very fine editorial of March first with reference to the cooperative marketing bill that I have introduced. You have hit the nail squarely on the head when you urge farmers of Michigan and farm organizations to go on record regarding this measure immediately. We are likely to have a hearing on the bill within the next two or three weeks, and if I could have support from farm organizations available at that time it would be very helpful. Anything that you can do to assist along this line will be very much appreciated. I have enlisted in this matter very seriously, and as time goes on am gathering strength and believe that the bill I have introduced can at least form the basis for very beneficial and needed legislation. Please accept my thanks for your editorial as it is very sympathetic and is along the right line."

Here is apparently a worthy bill prompted by a Michigan man. If you are interested write a postal card or letter today to Representative Arthur B. Williams, care of House of Representatives, Washington, D. C. Ask him for extra copies of this bill and tell him you are willing to help. This is a chance to do something that is worthy and do it quickly.

EDISON A "DUMBELL" AT SCHOOL

THIS is a special message to fathers and mothers who have become discouraged because of the seeming lack of interest or the slow progress of their offspring in school.

Thomas A. Edison, who has contributed more to the present generation of human kind than any living man, gave out recently an interview which sheds a ray of hope. "I was a youngster going to school in Port Huron, Michigan, and I was about eight years old," said Mr. Edison, "A teacher said my brain was 'addled.' Probably this was true but it hurt my vanity. So I ran to mother and sobbed out the story and she smoothed my hair and comforted me and told me I was the finest boy alive. From that time my mother, who had been a high school teacher, took charge of my education and I did not go back to the public schools. There remains with me yet, however, two great impressions—that of the hurt the teachers caused me and the comfort my mother was quick to give.

"It is not always a child's fault if he fails to catch on as quickly as his teacher thinks he should. It is sometimes the honest child who doesn't try to hide his deficiencies."

All human beings are not of the same temperament and that a boy or girl is backward in mathematics or in grammar may not mean that they do not have special capabilities for working with their hands or with their minds which may far outdistance those who must procure from books their learning.

How often we see the boy or girl who had the best record in school, who was able to reel off the chapters which they read in their school books as easily as a phonograph repeats its record and yet, who in later life were unable to apply the veneer of education which they received, while the so-called "backward" students in the same class stepped out in the world and made a great success.

Some day a school system will be devised which brings out the latent talents of each individual and until that time we beseech patience and encouragement, rather than harsh words or mortification

Every human being comes into the world with some especial talents and it is the crime of our civilization that there is not some means of finding these in the child and polishing them by the means of education.

As we go to press, the Ford bid for Muscle Schoals nitrate plant has been accepted by the house of representatives. Dispatches tell us the cities down south on receiving the news held great celebrations, comparable only to those of the original armistice day. Henry Ford is looked upon as a savior of the south.

* * * *

If you miss "Forty Years of Grafting" which starts in this issue you are going to miss one of the best series we have ever offored for your approval.

PUBLISHER'S DESK

THE DETROIT PACKING COMPANY

Please tell me something of the Detroit Packing Company. Is the company any good? Several have had money in the company for two or three years and have never received any interest. A year ago last October their man was here again selling stock and claiming we would ge our dividend and interest the following January but we never got any. Please tell me what this stock is worth per share? It was sold for $60.00 per share.—J. M. I., Charlevoix, Mich.

ALL I can tell you, without making an investigation of their recent financial statement which you as a stockholder, already have, is that this company has a splendid packing plant in Detroit, and that it is operated by men whom I believe to be honest, efficient, and trustworthy.

It is not to be expected that any new company can start off, within two or three years and make a profit, unless conditions are exceptional. This is one reason why farmers should not rush into businesses with their money, unless they are prepared to leave it in over a period of time, until the business is adjusted, and on a money making basis.

You paid $60 a share for this stock, and it may be worth more or less today, so unless you are pressed for money, I would not advise you to sell it, unless you find you can do so at a satisfactory profit to yourself. Personally, I have not lost faith in this company, nor the men behind it, and I believe with the great consuming market of Detroit at their very doors, that with efficient management they can make a success of this business, and certainly their institution has offered a market for a great mass of livestock on which the grower formerly had to stand the excess freight to the Chicago or Buffalo livestock markets.

WRITING SHOW SIGNS

Having been a reader of your paper for years and noted your advice to others. I would like to have you advise on the reliability of the West-Angus Show Card Service. I am sending you some of their literature which they have sent me. It sounds great but can it really be done?—A. B., Milford, Mich.

IF the company you mention can give you the name of a student who is satisfactorily making money from the scheme here in Michigan, and you can find out that what they say is true, I would be very glad to have you write me. So far I have not been able to find anyone who is making money at this card writing scheme, which is now being worked by a half dozen companies, evidently to their profit. It may not pay others, but it certainly pays them!

GREAT WESTERN INSTITUTE

I believe this is the best part of the M. B. F. Is the Great Western Institute an honest Institute? They say they will get you a government job or give you your money back. Their course costs $9.00. I wrote to them and asked for the names of ten persons that got their money back. They did not give me even one name. I also asked how long a person would have to wait after they enrolled? This they did not answer at all. They said if I wanted the names they would look them up but it would take quite a long time. Could you tell me where I could get a good map of the U. S. about 3x4 feet?—W. R., Elkton, Mich.

THE fact that the Great Western Institute will not send you a list of ten people who got their money back, proves that there is apparently something wrong with this scheme, and I would not advise you to send them any money.

THE HANDKERCHIEF SWINDLE!

Having seen the report of the swindle of the Underwood Art Goods Company of Portsmouth, Ohio, I thought it my chance to report too. I sent a dollar early last summer for my try-out, and they sent me a ready-made handkerchief to crochet an edge on, which I did, and sent it in for inspection. They sent it back and said the edge wasn't up to the standard, and sent me another try-out to be hemstitched. This I did also, and sent it in. Then they made me an offer of one dollar per dozen to hemstitch, and I took up the offer, and they sent me three to draw threads out, and draw silkthreads in to make a double border. This I did, and sent them in, and it was a month or six weeks before I received the next three, and so on it went through the rest of the year. It was January, 1924, when I received the last three, and I made them right up and sent in, and I haven't heard from them since. Now, if there is any chance of getting my money through your efforts, I surely will appreciate it, and I give you the liberty to use my name in this matter if you see fit to do so, and perhaps it will save someone else from investing their money in it.—Mrs. S., Marion, Mich.

* * *

I am a reader of your paper and just see where a lady writes and asked what could be done to get even with the Art Goods Company, Portsmouth, Ohio. I want to say that my daughter answered this woman's ad and sent $1.00 to her for work, which she was to send to her. Well, she sent as a trial a cheap cotton handkerchief, which she was to work and send back to her. She did so, but never heard from her. She promised to send the dollar back if the work was not satisfactory.

Hoping you will do something to stop this woman from swindling the public, even if you cannot get the dollar back for my daughter, I shall be very grateful.—Mrs. R., Gratiot County.

* * *

I for one have had some dealings with the Underwood Art Goods Company of which Ruth Underwood is manager, but did not go as far as the lady which complained in the issue of February 16th. I answered their advertisement and she wrote me she would send a finished article for which she charged a price of $1.00. I sent the money by check, and she sent the article which was a hand-made handkerchief, which I was to keep and a try-out, but she didn't send the try-out, and said I should send one of my own in for inspection, and if the work was satisfactory I would receive $3.00 per dozen, and should send stamps for its return if wanted. She sent the handkerchief back, and offered to pay me $1.00 per dozen for what work I would do for her, and we stopped right there, for no one could make a dozen handkerchiefs for a dollar. It is a scheme to get peoples money, and also their work. I also hope this will keep other readers from sending their money with such advertisements.—Mrs. L., from Indiana.

A POSTMASTER SPEAKS

DEAR SIR:—I note in your issue of Feb. 16th, that others are having trouble with I. R. Hough Fur Co. As postmaster here at Fairview, Mich., I am trying to get a fraud order against this concern which would deprive them of the use of the mails. One of the patrons of this office sent them about $20 worth of furs and received check for $3.25. After having given orders "to hold separate and aside" he could not get his furs back after returning the check for the third time. They have a form letter they use telling the shipper their fur was green, mildewed, etc. You are certainly doing your subscribers a favor in exposing this concern.—R. H. Kolb, Fairview, Mich.

"The first work to be accomplished in bringing about a better enforcement of law must be the awakening of the public to a clear sense of responsibility for it. Improvement in our laws can accomplish little unless accompanied by a determination on the part of our citizens to have these laws enforced."—Committee on Law Enforcement, American Bar Association.

First Mortgage Real Estate Gold Bonds

You will find Federal Bond & Mortgage Company first mortgage bonds convenient securities to own; they pay generous interest, they are absolutely safe; and our organization of financial experts takes all details from your shoulders.

Write for Booklet AG1190

Tax Free in Michigan
Free from Federal Income Tax of 4%

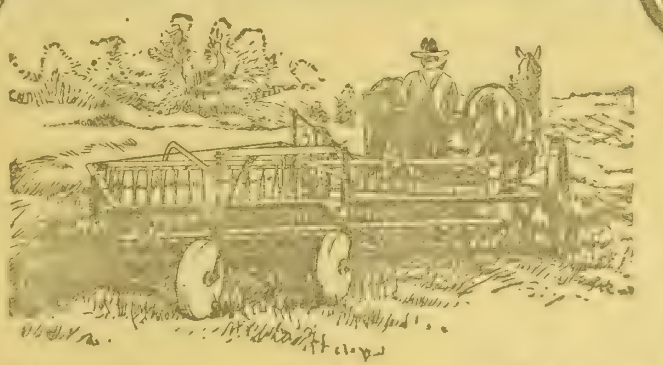
7%

Federal Bond & Mortgage Company

(1190)

FEDERAL BOND & MORTGAGE BUILDING, *DETROIT*

WHEN WRITING TO ADVERTISERS, PLEASE MENTION THE BUSINESS FARMER



Hay Time is Hurry Time

You are always crowded with work at hay time. A little delay often means spoiling part of the crop. You can't control the weather, but you can equip yourself to make hay quickly.

E-B Hay Tools enable you to make hay in the shortest possible time with the least work. Thousands of farmers are making money with the E-B Standard and Osborne Mowers and Side Delivery Rakes, Tedders, Dump Rakes, Hay Loaders and Presses. They are all dependable time savers.

Look over your hay machinery now and decide what you'll need. Order early so as to be ready.

Emerson-Brantingham Implement Co.
INCORPORATED
Business Founded 1852 Rockford, Illinois

[Mail coupon and get free books on E-B Hay Tools]

Name....................

Address....................

BOOKLET

E-B

Cletrac—More Than a Plow Tractor

Having a tractor enables a farmer to plow deeper, better and far quicker than with teams. Turning over the land is one of the biggest jobs of the whole year. The 12-20 Cletrac turns over the evenly cut furrows at the rate of eight to ten acres a day. But the farmer's tractor, to be a real investment, must do more than plow well. It must be able to go right onto the freshly plowed ground and quickly work it down to a perfect seed-bed. Here is where the Cletrac owner's foresight is rewarded. His tractor is admirably suited for ground fitting.

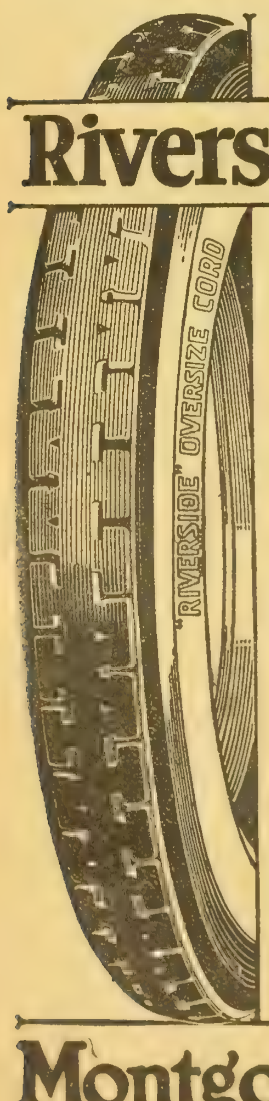
A Better Seed Bed Insures a Bigger Crop

Where the soil is loose—perhaps even wet in spots—the broad tracks carry Cletrac smoothly along without slip; full speed and load is maintained, the ground is mellowed and made fine and ready for planting without any packing down, and in the quickest possible time. When work is pressing and weather uncertain, to be able to fit and plant quickly and perfectly is the farmer's best assurance of a bigger yield and a better product. It often means the difference between profit and loss on the crop. No tractor is so well suited for *seed-bed preparation* and planting as the Cletrac.

Write for catalog and let us tell you more about the use of Cletracs.

THE CLEVELAND TRACTOR COMPANY
Cleveland, Ohio
BRANCH OFFICES:
New York Chicago San Francisco Minneapolis Oklahoma City
Detroit Atlanta Los Angeles Windsor Portland

MICHIGAN BUSINESS FARMER
"The Farm Paper of Service"
TELL YOUR FRIENDS ABOUT IT



10,000 miles guaranteed and yet you save 1/3

Riverside Oversize Cord Tires

Riverside Oversize Cord Tires are guaranteed for 10,000 miles and in actual performance give up to 18,000 miles. Can any other tire do more?

So why not save one-third and use Riverside Cords? What more will any other tire do? Then why pay more?

And this 10,000 miles service is backed by a guarantee that has stood for fifty-one years. Does any other tire carry a better guarantee?

Quality is built into Riverside Cords

This guaranteed mileage is built into Ward's Riverside Cords. High treads, thicker and stronger, of tough, live rubber.

This exceptional quality of Ward's tires alone has made us the *largest retailers of tires in the country*. The tires themselves have convinced thousands that Riverside Cords are best.

"I have used Riverside Tires for the past four years. I have never had to send a tire back for adjustment.
I have tried several different highly advertised makes alongside of Riversides and have not found a superior."
Walter M. Schworm, Nessen City, Mich.

You Don't Risk One Cent

Before you buy any tires send for Riversides. Inspect them. Compare them with tires selling for $5.00 or $15.00 more.

Send them back if you do not find them the equal of any first-quality oversize cord made. We will refund your money.

These prices buy 10,000 miles of service—and more.

CATALOGUE No. 464M00—Be sure to give size.

SIZE	PRICE	POSTAGE	SIZE	PRICE	POSTAGE
30 x 3½	$ 9.75	28c	32 x 4½	$20.95	45c
32 x 4	16.95	42c	34 x 4½	21.95	48c
33 x 4	17.45	43c	33 x 5	28.75	58c
34 x 4	18.25	43c	35 x 5	29.95	61c

"I have used two Riverside Cords on the rear wheels of my car for two years. They have gone over 12,000 miles now and have never been off the wheels — and they still look fine."
August Wm. Schultz
B – 56 – R 2
Van Horn, Iowa

Wire your order. Orders received by telegraph will be shipped the same day C. O. D.

Free Write today to our house nearest you for free Auto Supply Book. Address Dept— 11-T

Auto Supply Book

Established 1872
Montgomery Ward & Co.
Chicago Kansas City St. Paul Portland, Ore. Oakland, Cal. Ft. Worth New York Atlanta, Ga.

CONQUERING THE WORLD THRU MEEKNESS

A SERMON BY REV. DAVID F. WARNER

TEXTS: "Learn of me for I am meek and lowly of heart." Mt. 11:29. "Blessed are the meek for they shall inherit the earth." Mt. 5:5.

BUT, said the Kaiser this Jesus stuff is the silly talk of children. It is weak and ignoble. It does not belong to super-men And this is ever the notion of such cultus. Blessed are the strong for they shall conquer the earth. This is yet the world's ideal. And this is the law of the jungle; of the survival of the fittest. "To the victor belong the spoils." That is, to the conspicuous, daring, and heroic. And so, this virtue of meekness has been seriously misunderstood. According to profane conception, it forfeits its right to be a virtue. It is void of vigor and strength. But this, we know, is the direct opposite to the Jesus way. According to our texts, meekness is replete with comfort, energy, and strength.

"Jehovah upholdeth the meek." Ps. 147:6. He did the patient Job, tho that patriarch yelled and tore his hair. Not so meek you say. Well, a blind young man, led by his sister, got on my train. I beckoned to have him sit by my side. I was too quick to express my sorrow for his seeming misfortune. "O", said he, "you needn't be sorry for me." "No?" said I. "Tell me about it." And he did. About a year before he lost his sight thru heavy lifting in his father's store. He immediately called a physician who told him he would never see again. Then, rather than brood or wail over his affliction, he began at once a course in a blind school. And when I met him that day on the train, he said to me, "I am one of the happiest men in the world. I am now preparing to teach the blind the Jesus way of living." Verily, what recreating power in new objectives! Even so, in accepting willingly the hard experiences and providences of life, being disposed not to chafe under them, we are perfecting ourselves in Christian character. When sorrow and disaster come, we need something more than natural strength to carry us thru gracefully and joyfully.

But the will is the citadel of one's life. And that must be conquered thru meekness. With this submission accomplished, and an obedience that does not question, the soul is far on its road heavenward. All of God's providences, whether sunshine or shadow; all the commands of his will; and all the holy impulses of his Spirit, are to the end that we may yield a meek compliance to him. Do you have such an inconspicuous spirit? While the world idealizes the gorgeous sunflower, you be as the little violet, hidden away, but shedding fragrance everywhere.

In all this, Jesus is our human pattern. "I am meek and lowly." How wedded are meekness and humility! Both grow out of a right notion of and faith in God. We are humble because of a creaturely dependence upon God; and meek because of a non-retaliating disposition in consequence. When faithfulness to his mission required suffering and death, Jesus accepted in meek willingness. "Not my will, but thine be done." Meekness enabled Christ to conquer natural tastes and desires when opposed to the will of God. And it will do as much for you and me.

"Showing all meekness toward all men." Titus 3:2. This is the relationship that christians are to sustain toward men. Not a natural timidity and fear; not a craven weakness; but we must be to all men the strength of nobility and virility that is to produce the most happy results in fellowship and good-will. We are to conquer the "eye for an eye and tooth for a tooth" spirit. We are on unfriendly territory and are bound to be barked at, and sometimes bitten, by the dogs of the world; then meekness steps in to keep us unprovoked What a masterful spirit!

Friend, pour the divine chemical of meekness on the fires of antagonism. The icebergs of the North disappear only when they hit the warmer waters of the Atlantic. So pour on coals of fire. Overcome evil with good. Go the second mile.

The divine patience and meekness that grows out of love is not easily provoked. It has its way over self-assertiveness and restrains anger so that friendly relations might be kept up. It expects no bouquets pinned upon its coat. It does not look for the appreciation of men, and therefore, does not whine when not getting it. It is satisfied unfamed and unnoticed. May God be praised for the great company of immortals who are quietly and unassumingly making this world better in the Master's name!

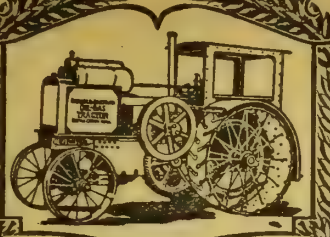
But what is meekness after all? In its totality, it is a world-conquering principle. "The meek shall inherit the earth." Not so, says the world. We shall build battle-ships and airplanes, equip armies, fill the air and sea with death dealing destructives, and by these we shall conquer the earth. Ah, the world would fain crucify the dearest hopes of the Christian. And here the writer must declare himself against the Coolidge policy of a strengthened army and navy. And why this policy? Well, investments are flowing into foreign quarters; and big money must be protected. The flag must follow trade. It is ever the way with any form of political imperialism. And who pays the taxes in men and money to promote this scheme of capital? How do you like it, farmer friend? But generations ago, that Rural Peasant in Galilee of the nations, proclaimed the freedom of men thru bread instead of bullets. Said he, "Disarm yourself of selfishness and retaliation. Arm yourself with meekness. Do not exploit men. Feed them. By this I conquered. So can you.

"The meek shall inherit the earth." Not thru outward possession, which was the Jewish conception, and is yet (ask the Jewish financiers), but thru the dominion of character. The meek, in accepting God's will and providences as the discipline of the soul, have overcome the world and mastered earthly things. Do you hear Paul and Silas singing praises in the prison stocks? Said the mystic, Madame Guyon, imprisoned in the French Bastile, "A little bird I am, shut in from the fields of air; and in my cage I sit and sing to Him who placed me there; Right pleased a prisoner to be, because, my Lord, it pleases thee." These and a thousand others have truly established sovereignty over the earth. Those who are calm under fire of opposition and wrong, show themselves able to counsel and guide men. This is what history will say of the late Woodrow Wilson.

"My heart was heavy, for its trust had been
Abused, its kindness answered with foul wrong;
So, turning gloomily from my fellow men
One summer sabbath day, I strolled among
The green mounds of the village burying place;
Where, pondering how all human love and hate
Find one sad level; and how, soon or late,
Wronged and wronged-doer, each with MEEKENED face,
And cold hands folded over a still heart,
Pass the green threshold of a common grave,
Whither all footsteps tend, whence none depart,
Awed for myself, and pitying my race,
Our common sorrow, like a mighty wave,
Swept all my pride away,
And, trembling, I forgave."
—Whittier.

One who is touched with the spirit of the meekened Christ, finds too much to pity in a world of sorrow to cherish the feeling of revenge. When we persist in an injurious spirit toward others, we become a social menace to a well-ordered society. We need the sweet, chastened spirit of Jesus. This is God's higher gift to men.

THUS SAITH THE LORD that created thee, O Jacob, and he that formed thee, O Israel. Fear not; for I have redeemed thee, I have called thee by thy name; thou art mine.—Isaiah 43:1.



Furnishes Power Like Steam

The Nichols-Shepard 20-42 Oil-Gas Tractor

delivers as steady power to a thresher as a steam engine.

When coupled with the 30x52 Red River Special it makes the most economical and profitable threshing outfit possible.

You have been waiting for this kind of an outfit.

It is just the right thing for either a group of farmers or a thresherman.

It will do all the work you want in a day's run, because it will thresh all the average crew can get to it.

The 20-42 Tractor is also adapted to plowing, grading, silo filling, wood cutting and other power applications on the farm.

Easily handled, starts quickly in cold weather and burns kerosene economically.

Write for catalog and learn of the great advantages which this tractor and this outfit possess.

Nichols & Shepard Co.
(In Continuous Business Since 1848)
Builders Exclusively of Red River Special Threshers, Wind Stackers, Feeders, Steam and Oil-Gas Traction Engines.
Battle Creek, Michigan

Where Is He Lame? Can He Be Cured?

OUR FREE 96 page Save-The-Horse BOOK, will tell you 99 times out of 100. It is the "last word" in helping you to locate, understand and treat every kind of lameness. This unique BOOK cost hundreds of dollars but is absolutely FREE to you.

SAVE-The-HORSE

is sold with a signed Money-Back Guarantee to cure SPAVIN, Ringbone, Thoropin, &c.,—Shoulder, Knee, Ankle, Hoof and Tendon Disease. After everything else has failed it has cured the most serious chronic cases. Over 380,000 satisfied users. 30 years success.

It costs you nothing for the most serviceable FREE BOOK on lameness ever printed, expert veterinary advice and sample of Guarantee. No obligation, all FREE. Don't fail to write today.

TROY CHEMICAL CO., 339 State St., Binghamton, N. Y.
At Druggists and Dealers with Signed Contract or sent prepaid.

You Can Save Money by buying your implements under the MOLINE Plan

See a Moline Dealer or write for details

NEW MOLINE PLOW CO.
Moline, Ill

FREE CLOVER

SAMPLES for your test and approval. We want you to see our high-testing seed and our low prices before you buy.

Buy Now at Wholesale.

Crop short. We expect higher prices later. We bought early big stocks on lower markets. Our prices amazingly low. We can save you money on Clover, Alfalfa, Timothy, Sweet Clover, Hubam and other Field seeds. Write today for free samples and big Seed Guide.

American Field Seed Co., Dept. 327, Chicago, Ill.

FARMER PUTNAM'S PHILOSOPHY

BARGAIN huntin' is all right fur the wimmin folks, but my advice to the men is, keep away from it, especially them bargains in seeds, which there ain't none. I tried that onct, sendin' back east fur some alfalfy seed which I seen advertised by a feller that said he had a few carloads to share with other dirt farmers, that it wasn't tested, but he could guarantee it true to variety and strong in germination, and at half price it was a big bargain. Well I hadn't never heard of the feller, but I sent fur some seed because it was cheap, and I planted it. When it come up the field looked fine and green, but it worried me, because it was the first time I ever got something fur nothing, and more than I bargained fur. It hurt my conscience so I wrote the feller a letter, sayin':

"Thanks for filling my order so prompt. You sure made good on guarantee. You said your seed would be true to variety and I don't doubt what it is. You didn't say what variety, or how many and I never saw so much variety, so I can't kick. I found dodder, peppergrass, mustard, sweet clover, dandelion, milkweed, morning glory, wild buckwheat, dog fennel, ragweed, sheep sorrel, sandbur, foxtail and sow thistle—everything except alfalfa. I suppose that will be up later, if there is room for it. I feel like I ought to apologize to you for sending you such a small sum for so many kinds of seed. Maybe you made a mistake. I don't want to be arrested for obtaining goods under false pretenses, so if you will let me know how much I owe you, I am willing to make a settlement on a variety basis, instead of in bulk. I feel this whole thing is my fault for not buyin' from a reputable seed house that sells its product at a fair price under the label of purity and germination of our State Laboratory."—Thomas Jefferson Putnam, Specialist in Rural Devilment.

DOESN'T PAY TO PRUNE PLUMS

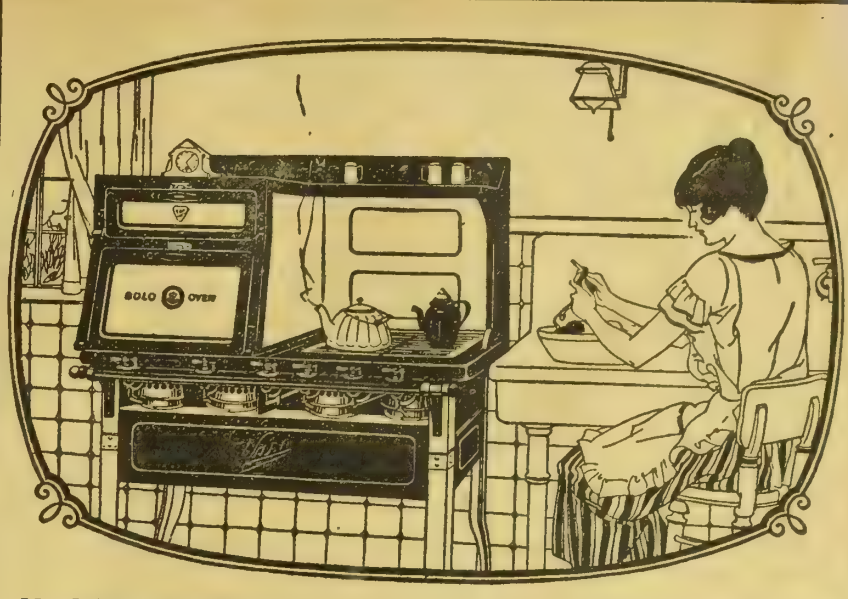
VERY little difference was noted in the behavior of heavily pruned plum trees and trees receiving much less pruning in tests conducted over a number of years with several standard varieties of plums on the grounds of the New York Agricultural Experiment Station at Geneva. In the opinion of the station horticulturists most varieties of plums require but little pruning subsequent to the proper shaping of the trees after they are planted. Since little pruning gives just as good if not better trees, it is regarded as a waste of time and effort to pay much attention to the pruning of trees. The chief recommendation is to thin out thick growths where necessary and to remove broken or injured branches.

Ten varieties of plums were used in the tests, including Abunda Bradshaw, Burbank, DeSoto, Grand Duke, Wayland, Pottawattamie Reine Claude, Shropshire, and Italian Prune. Referring to these tests the station specialists say, "Practically the only difference between the trees subjected to these two styles of pruning was that the little-pruned trees had larger and broader heads The heads on the little-pruned trees too, were more symmetrical than those which had been given heavier pruning. The increased size, however, in no way retarded the maturity of the fruit or impeded harvesting. The size of the trunks and and branches of the two lots of trees were practically the same and there was very little difference in the height of the trees.

OUR BOOK REVIEW

(Books reviewed under this heading may be secured through The Michigan Business Farmer, and will be promptly shipped by parcel post on receipt of publisher's price stated.)

Henley's 222 Radio Circuit Designs.—A complete and up-to-date collection of Modern Receiving and Transmitting Hook Ups. Written and edited by a staff of Radio Engineers of wide practical experience and thorough theoretical training. Editor John E. Anderson, A. B., M. A., formerly with the Western Electric Co. Arthur C. C. Mills, Radio Expert. Elmer H. Lewis, Assoc. I. R. E., Radio Instructor East Side Y. M. C. A., New York, Author of "A B C of Vacuum Tubes." 271 pages. 284 diagrams and illustrations specially made for this book. Published by the Norman W. Henley Publishing Co. Price $1.00.



No Odor—No Wicks *No Noise—No Smoke*

Gain new cooking ability with a smokeless, odorless Vapo Oil Range

Operates same as a gas stove because it burns gas

The Vapo is the highest grade oil range built and the most economical. Wickless, smokeless and odorless, it gives you more service per gallon of fuel, more service per square foot of space and more service per dollar than any other oil stove because of the remarkable, patented Vapo burner. Users everywhere are delighted. Thousands of dealers now sell this year-around oil range.

Cuts down work in the kitchen

No more long hours in the kitchen over a slow cooking stove. No more soot on cooking utensils. No more smarting eyes. No more trouble and annoyance with wicks and chimneys. You turn the Vapo flame up or down with a lever valve, same as a gas range. It has no wick. It has no wick substitute.

Cook a week on 7 qts. of fuel

That is what users say they are doing with the Vapo. A single burner operates 32-36 hours on a gallon of kerosene with flame turned high. At simmering heat it gives 50-60 hours service.

Vapo burner generates gas

It converts kerosene into hydro-carbon gas which burns with a hot, clean, blue flame which does not smell nor smoke nor smart the eyes. Flame can be turned from low to high and back again easily. This wonderful burner can't be clogged. Food or liquids can't boil over into burner and put out flame.

Bolo oven bakes and roasts same time

Movable Bolo plate makes oven big or little. Heat can be crowded into small space and intensified for quick baking and roasting. Makes two ovens in one. Slow and fast baking and roasting can be done at the same time. No other oil stove offers this advantage. Have your dealer show you this and other Vapo conveniences.

Write for folder describing the complete Vapo line. Sent free on request. Postal will bring it.

THE VAPO STOVE COMPANY
M. B. F. LIMA, OHIO.
Please send me complete information about Vapo Ranges.
Name.........................
Address.........................
Dealer's Name.........................

The Vapo Stove Company, Lima, Ohio

Vapo LIMA OHIO Oil Ranges Heaters Hot Water Heaters

WHEN WRITING TO ADVERTISERS, PLEASE MENTION THE BUSINESS FARMER

The WINDMILL with a RECORD

The Auto-oiled Aermotor has behind it 9 years of wonderful success. It is not an experiment.

The Auto-oiled Aermotor is the Genuine Self-Oiling Windmill, with every moving part fully and constantly oiled.

Oil an Aermotor once a year and it is always oiled. It never makes a squeak.

The double gears run in oil in a tightly enclosed gear case. They are always flooded with oil and are protected from dust and sleet.

The Auto-oiled Aermotor is so thoroughly oiled that it runs in the slightest breeze. It gives more service for the money invested than any other piece of machinery on the farm.

You do not have to experiment to get a windmill that will run a year with one oiling. The Auto-oiled Aermotor is a tried and perfected machine.

Our large factory and our superior equipment enable us to produce economically and accurately. Every purchaser of an Aermotor gets the benefit from quantity production.

The Aermotor is made by a responsible company which has specialized in steel windmills for 36 years.

AERMOTOR CO. Chicago Kansas City Dallas Minneapolis Des Moines Oakland

SQUARE-DEAL FENCE

Square Deal Fence Leads

New "Galvannealing" invention stops destructive rust.

Square Deal's stiff, picket-like stay wires that make fewer posts necessary; its well crimped line wires that spring back into place after every shock and strain and its famous Square Deal knot guaranteed never to slip—all these facts make Square Deal the fence that stands tight and trim, looks better and raises the value of your farm.

2 Books FREE

Ropp's New Calculator tells you your grain and livestock profits; measures capacities of cribs, wagons, silos; figures interest, wages; contains commercial law, parcel post rates, etc. Sent with Square Deal catalog. Both books FREE to Land Owners. Write today—find out how to cut fence costs with "Galvannealed."

Stops Rust

"Galvannealed" newly discovered rust-resisting fence wire, is guaranteed to last 2 to 3 times longer in any standard test than ordinary galvanized wire, therefore, should give you many years more service at a much lower cost. Fence this time with "Galvannealed."

Specify "Galvannealed" Square Deal Fence or the regular type will be furnished.

36

Kevstone Steel & Wire Co.
4836 Industrial St., Peoria, Ill.

STOP that cough before it begins—take SCOTTS EMULSION

right now to nourish the system and to build up strength and resistance.

Scott & Bowne, Bloomfield, N. J. 23-55

Sell TIRES
DIRECT FROM FACTORY

We want one auto owner in each locality to use and advertise Armour Cords. You can make big money and get your own tires Free by simply sending us orders from friends and [illegible]. No Capital or experience needed. We deliver and collect direct. Pay you daily. [illegible] Accidental [illegible] Tread Separation, Blistering, Blow-Outs and Rim-Cutting for [illegible]. We are actual manufacturers. Write today for Great Special Offer to [illegible] and new Factory Prices. [illegible]

FARM LANDS

$900 GETS MONEY-MAKING FARM, 7 CATTLE, 3 horses, tools, flock poultry, bees, rabbits, cider press, incubator, cream separator, vehicles, implements, etc.; 145 acres near village, city markets 80 acres tillage, creek-watered pasture, valuable timber and wood, apple orchard; fine 2-story 9 room house, beautiful maple shaded lawn, 54-ft barn, basement stables, running water, poultry houses. To settle immediately $4500 gets all, only $900 needed. Details and how farmers sold 7 head of cattle for $20,000 Page 49 Big Illus. Bargain Catalog money making farms, best sections United States. Copy free. STROUT FARM AGENCY, 427KJ Marquette Bldg., Chicago, Ill.

FOR SALE—80 ACRES, 35 CLEARED, running water, repairable buildings, 50 fruit trees, well fenced 20 acres sweet clover, consolidated school system. On rural route. $1,200.00 cash, terms if desired. EARL A. BUTTON, 855 Washington St., Traverse City, Michigan.

FOR SALE, 100 ACRES CLAY LOAM FARM, 80 acres under cultivation, balance pasture and wood lot. Nearly new 12 room brick veneer house, electricity, water system, bath and furnace. New barn, silo and other necessary buildings, also stock, tools and feed if desired. Must sell at [illegible] SEETS, [illegible]

FOR SALE—SMALL HOUSE AND LOTS in [illegible], Mich. Good location. Cheap. [illegible]

TOBACCO

HOMESPUN TOBACCO, FIVE POUNDS chewing, $1.75, ten, $3.00, twenty, $5.25; [illegible] $1.25, ten, $2.00, twenty, $3.50. Pipe and Recipe free. Send no money, [illegible] KENTUCKY TOBACCO CO., [illegible], Ky.

STRAWBERRY PLANTS

FREE TO INTRODUCE OUR PEDIGREED [illegible] 25 [illegible] plants free. PIEDMONT NURSERY CO., Piedmont, Mo.

The Children's Hour

DEAR girls and boys: What do you think of the suggestion of Muriel Frey in her letter below? Shall we have a "Correspondence Scramble"? It is up to you, girls and boys, as I am anxious to do only what you want me to. You send in your letters and I will do my part—and you can start right the moment you read this if you wish. Who will be the first?

"Kitty" of Chesaning is a real poet—or poetess, rather—isn't she? Let us hear from some of the other poet readers of our Children's Hour. Also you story writers get busy and write a real interesting story for our page. No doubt you can write one about some happening in your life that will be very interesting to us all. And you young artists can also have space on this page so send me some of your drawings. I will publish some of them, or as many as I can. Make the drawings with pen and ink and not with water colors. Let's see how much literary and artistic talent there is among the farm girls and boys.—UNCLE NED.

OUR GIRLS AND BOYS

Dear Uncle Ned:—While reading the letters in The Children's Hour I notice so many express a wish to correspond with others who write to the M. B. F. I have been wondering why you do not conduct a "Correspondence Scramble". When I have read letters asking for the boys and girls to write I have some times thought that I would; but some way I found it a hard thing to do; in fact, so hard that I never did do it. This would be an easy way to obtain correspondents and no one would really be writing first. I'll tell you a good way to conduct a "Correspondence Scramble" so that each one who writes will receive two letters. I know of course, Uncle Ned, that you know far more about this sort of thing than I do and, if you would rather follow out your own ideas on the subject; it will be alright with me. The only thing about it is that I am sure the readers of The Children's Hour would enjoy a scramble. My way is for each one who wishes to receive letters from other boys and girls, to write a letter (of course no one knows who will receive their letter) and enclose it (the letter) and a stamped self-addresses envelope to you, Uncle Ned, and then you open the letters and put some one else's into the other's envelope and mail them out. This way each child will receive some unknown friend's letter and some other child will receive the letter that they wrote. Each child then answers the letter they receive. This way each child gains two correspondents (the one who receives their letter and the one from whom they receive a letter). Its just heaps of fun. I know—for I entered such a scramble and am still keeping up an interesting correspondence with two new friends that I have made. I wish to thank you for printing my first letter in The Children's Hour. I know its asking a lot to ask you to print two letters in so short a time, but I really do wish this one could be printed to see if the other readers would like this idea. I think it would be fun for the readers of The Chidren's Hour if they would write to the M. B. F. telling whether they would like to try my idea.

I enjoy the puzzles on the children's page very much and I almost always try to solve them. My solution to the one in the March 1st issue is:—"Abyssinia". Wouldn't it be fun to have the children send in their answers and compete for prizes? Your new niece,—Muriel Frey, Caledonia, Michigan.

JUST A WISH

I WISH I were the month of June;
With all its pretty flowers in bloom.
I'd bow my fragrant head to all.
And be a little friend to all.

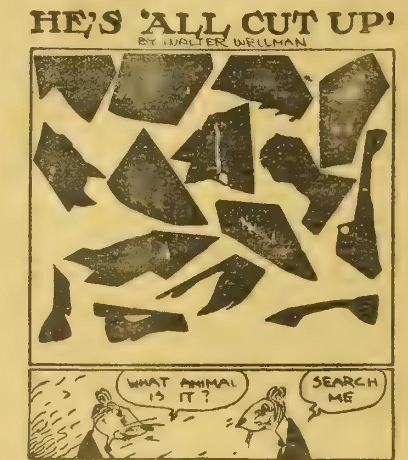
I'd also love to be the trees,
And watch the leaves play in the breeze,
And see the birdies build their nest,
In the trees they love the best.

And how I'd love to be the song
The birdies sing the whole day long.
I'd find my way in all sad hearts,
And make them once again glad hearts.

But just listen! All my dears,
And let me whisper in your ears,
God has given us all these gifts,
So for what more could we wish.
Composed by "Kitty" of
Chesaning, Mich.

Dear Uncle Ned:—My grandmother has taken the M. B. F. for quite a while, and I have been reading the letters in the Children's Hour. They are very interesting. Also I am quite a hand to read. I live in Benzie county about two miles from the town of Beulah. The community in which I live is called Eden. We call it the Garden of Eden just for fun. It is a nice place and I would hate to leave it. Everyone else has described themselves so I will also. I am five feet and two inches tall. I weigh 120 pounds, and am fourteen years old. I have light brown hair and it is bobbed. My grandparents are always making fun of it. My eyes are gray. I call them green mostly because they are such a funny color. I love music but only have an organ to play on. I have taken a few lessons and am as far advanced as the third grade. I must close or my letter will be put in the waste basket, because it is so long. Will write again sometime. Your want-to-be niece,—Margaret Link, Beulah, Michigan.

Dear Uncle Ned:—Well! We got here, and as we can see the waste paper basket peeping around the corner, we won't stay very long for fear of it getting us. We are two farm girls, our descriptions are: Dorothy has black bobbed hair, dark brown eyes, is 5 feet in height, and is 16 years of age. Mary has dark blue eyes, blonde hair, (which isn't bobbed) is 5 feet 5 inches in height, and is 17 years of age. Have we a twin? We love to dance, and all out-of-door sports. Will some of the boys and girls please write to us? We will answer all letters received. We have composed a poem. How do you like it, Uncle Ned? We will close with a few riddles. Those who guess them will receive a card from us:—Why is St. Paul like a horse? What is the difference between a mule and a postage stamp? What do lawyers do when they die? Well good-bye Uncle Ned, also hoping to hear from some of the cousins.—Mary Kulbanck and Dorothy Welling, both from Chesaning, Mich.



Cut out the pieces and paste them together to form a well-known animal What is it?

Answer to last puzzle: ABYSSINIA.

Dear Uncle Ned:—I have often thought of writing but, I don't like to, so kept putting it off. I have read the letters in the M. B. F. and enjoyed them very much. I was fourteen years old December second, and am in the eighth grade. I have dark brown hair, which is not bobbed, blue eyes and am about five feet two inches tall. Last week Wednesday I and another girl from my school went to a school nearby and wrote in a Spelling Contest and I won and so I represent Lyons township in Ionia county as the best speller. The words were not very hard but they were such as the two kinds of (write, right). And a week from today I go to Ionia court house to spell against girls or boys representing their townships in Ionia county. The one that wins receives a gold medal for their self and a gold cup for their school. I live three-quarters of a mile west of Pewamo on a farm of ninety-eight acres, opposite the Grand Trunk railroad. I don't have very far to go to school as it is on our farm. I have two sisters, Phyllis and Catherine Constance, and two brothers, Stanley and Billy. I think that Louise Fergusen is about thirteen years old. I wish some of the boys or girls would write and hope that my letter does not reach the waste basket. Your friend,—Hyacinth Blackmer, Box 73, Pewamo, Michigan.

Dear Uncle Ned:—May I come in and join your merry circle? I have been a reader of the Children's Hour for some time. I suppose my letter will fall a victim to the waste basket. I am 12 years old and weigh 125 lbs., have light brown hair, blue eyes and light complexion and am in the 7th grade at school. I have 2 brothers. My younger brother and I go a mile and three-quarters to school on skiis. We live on a garden farm of 10 acres. I help sell vegetables and fruit. We have a cow, a horse and 30 hens. Well as my letter is getting long so I will close. Your want-to-be-niece,—Pearl L. Schloppi, R. F. D. No. 2, Box 39, Petoskey, Michigan.

Dear Uncle Ned:—May I come back for a while? It has been so long since I have written to you that you can't remember who it is that is writing. I am not at Hubbard Lake now. You see I stay with my brother in Alpena, while I am attending high school. I read the Children's Hour tho, for mother saves the M. B. F. until I go home. My! but aren't we having wonderful weather for this time of the year? It sure is grand out. We are having exams this week in school. So far they haven't been very hard. Tomorrow we will have Algebra. I don't think it is hard. Now its getting pretty late, and I want to get up early in the morning and start with my Algebra, so will say good-night. Lovingly, your niece,—Eleanor Stovel.

Wanted---A Wife!

LONG, long ago their lived a dear little, downy little woodpecker. "Friend Downy," the Little Comrades of the Woods, called him.

We was a most handsome, dressy little fellow. He wore a black coat speckled with white, and the most enticing grey vest and trousers. and grey spats. And he carried a gold-headed cane. And, at the back of his dear little, downy little head there was a bright red spot. Which was meant for a tie. But he always wore it backwards.

But Friend Downy was Lonesome. Yes, sir-ee! 'Way down inside Friend Downy was lonesome!

So one day he spoke to one of his little Comrades of the Woods about that lonesome feeling, 'way down inside.

"Do you know," and Friend Downy looked thoughtful and wistful, "I want a mate, Mr. Chickadee!"

"A mate!" chirped Mr. Chickadee, "Well, why don't you advertise?"

"Advertise?" Friend Downy frowned. "How in the world would I advertise!"

"Oh, I don't know," and Mr. Chickadee gave a mysterious little chuckle. and away he hopped.

Well, for days and days Friend Downy thought over what Mr. Chickadee had said.

And one day, a month later, all the little Comrades of the Woods heard a strange drum, drum, drumming. It sounded as if someone were striking something against an old, partly decayed tree.

Mr. Chickadee, who was most curious, was the first to investigate.

Sure enough! It was Friend Downy drum, drum, drumming, with all his might on an old, old tree.

But, "I'm advertising!" was all Friend Downy would say.

"Hm-m-m!" observed Mr. Chickadee. "That's a strange way to advertise!"

But it wasn't long till a gay little woodpecker appeared, frisking her saucy, little self about the very tree on which Friend Downy was drumming.

"Oh! Oh! Oh!" cooed Friend Downy, his dear little heart dancing. "She's answered my advertisement!"

And Friend Downy drummed harder than ever, blinking his dear little, bright little eyes at the gay miss, dressed in a sweet black and white costume.

In short the drumming stopped, and the courting began.

And in a few days there was a wedding. Oh, dear me, such a grand one! All the little Comrades of the Woods were invited.

And so, from that day to this, when any one of the descendants of Friend Downy wants a bride, he simply drums, drums, drums, sending out his message "Wanted-A-Wife."—Helen Gregg Green.

.."FORTY YEARS OF FAKING"..

(Continued from Page 7)

man in Iowa who said she was glad that she had won a prize and enclosed the 98 cents asked for. Some sent the money without any comment and others gave minute descriptions of the kind of silverware they desired. It was surprising how easy the people bit on this deal. One fellow wrote that there must be some mistake as he had never entered any contest and therefore could not see why he should send the money. It was surprising to me to know that after fifteen days had passed, I had taken in over expenses nearly $200. The game was looking so good that I was just about ready to get a second collection of cards printed, when one day I stopped in front of the hotel and overheard a big fellow say: "Did you ever hear of the National Awards Committee in this town?"

Another fellow whom I had seen around town quite a bit said that was a new one on him. However, I decided it was time to beat it and in less time than ten minutes I had my grip packed and had started north. I picked up a paper on the train and discovered quite an article which told how some person had defrauded a lot of people on a silverware deal, and how they were looking for the fellow who was playing the game, so I decided it was time to put a lot of distance between myself and that town in Florida.

(Continued in March 29th Issue)

USES UP BATTERIES TOO FAST

(Continued from Page 13)

Can you give me any advice on a liquid "B" battery, 90 volts? Can I reduce the expense and get satisfaction? My set brings in the distance stations in good shape but, oh the pocketbook! I have a built-in horn but get better results with the headset.—Bert Lyon, Eaton County, Michigan.

—In reference to your difficulty with your radio set we do not know just what tubes and batteries you are using now as you do not mention them. However, we will do the best we can for you and think that if you follow directions that you will not have to buy new batteries more than once a year.

When ever you finish listening-in on your set always disconnect the "A" battery. This will prevent accidental drain on this battery. If your set has a switch for this purpose be sure that it is at "off" when not using the set.

If you are using 4 tubes of either WD-11 or WD-12 type you will need for your "A" battery 4 No. 6 dry batteries connected in multiple. These connected in multiple will give you from 100 to 300 hours of intermittant service. If you are using either UV-199 or C299 tubes you should uses 3 No. 6 batteries connected in series, better to use 6 batteries three in series and two in multiple. Your life then would be from 200 to 500 hours.

The "B" battery of 90 volts would be too expensive if you used wet batteries. Burgess or Eveready "B" batteries of 22½ volts each will give you 1,000 to 1,500 hours service (which will mean at least a year). Four of these 22½ volt batteries will cost you from $6 to $10 and that will be the limit for a whole year. Your total should not exceed $15 a year.

If we knew just what your set was and what tubes we could help you more, also tell you how to make your horn work. It should be better than head phones with so many tubes. Tell us what aerial and ground you use also the tubes and we can help you more.

We think that your trouble is mostly in leaving your filaments burning all the time which will use up your batteries quickly.

NOT CHEAPER TO BUILD THIS SET

Would it be very much cheaper to buy the parts to construct a receiving set like the Federal, type DX58, than to buy one already assembled?
—It would not be much cheaper for you to build a set like the Federal set that you mention than to buy one complete. You would have all the work and then not be sure of the results as their set is made from parts that they manufacture and fit their requirements and are assembled in their own shop.

If you desire to build your own set and have not done so previously in any way, the type of set that you suggest is too hard as a beginning. There are too many things that can go wrong with it and you would not be able to understand what is causing the difficulty. We advise building simpler sets to start. The set that we have described will give you a range of a few hundred miles to over a thousand at times. I listen to many stations on one like it every night and during the day I listen to KYW of Chicago regularly.

SCARLET FEVER

IF, at ten years, the child has not had scarlet fever, the chances are that he never will have it.

So say Drs. Hektoen and Perry of the McCormick Institute for Infectious Diseases, Chicago, in the first of a series of articles on "Neighborly Diseases," which appears in the March issue of Hygeia, the popular health magazine published by the American Medical Association.

Nine out of every ten cases of scarlet fever are among children under ten years, and the greatest number of cases are among children from three to six.

Scarlet fever can be prevented, say the doctors. Ways to prevent its spread are these:

1. Every person sick with the disease should be so confined that all discharges, such as from nose and throat, may be kept from direct or indirect contact with other persons.

This means, first of all, that all nasal and similar discharges must be caught on papers or cloths that can be burned at once.

2. No article should be taken from the sick room until it has been disinfected.

3. No person should leave the sick room without removing a protective garment and washing his hands.

4. No person who takes care of a scarlet fever patient, who has been in the room near one, or who has recently had the disease himself, should mingle with children or should handle food, especially milk.

Once the child gets scarlet fever there is no "cure." The disease must run its course, so the best care should be given him and the rules of isolation strictly followed.

Hundreds may be saved from suffering if a person takes conscious care of his own child and sees that if "exposed," he is kept at home and, if he develops the disease, he is properly isolated.

INDIA STILL PLOWS WITH FORKED STICK

THE Indian farmer has made only one or two improvements on the forked stick with which his forbears plowed in the days of King Tut-Ankh-Amen, 3,000 years ago.

The main improvement, says Don Griffin, an Ohio boy who went to India in 1915 and now is agricultural engineer for the Rajah of Gwalior, a central native state, is in the addition of an iron point to the sharp end of the stick. A plow like this goes 2 inches deep, and will not cover more than a third of an acre in a 12-hour day. Oxen pull it.

The plow is also used for a grain drill, this by the addition of a sort of funnel with a lang spout. The farmer drives the oxen, and his wife walks beside the implement dropping grains down the funnel at what she judges to be the proper rate. Then when the crop comes up the plow comes in for its third use; it is used as a cultivator.

In harvesting and threshing, methods are equally antique. The first modern thresher, demonstrated in the province only last year, aroused so much interest that it took ten armed men of the local constabulary, with bayonets fixed, to handle the crowds. Most threshing is done by the hoofs of oxen, and it takes two months to accomplish what a modern thresher can do in a day, or less. Gwalior, where Mr. Griffin is located, is four-fifths the size of Ohio. Its greatest farm problem is to save crops and people from wild beasts that come out of the jungle at night.

Zinc Insulated
TRADE MARK
Fences
No Extra Cost
INSULATED AGAINST RUST
40% TO 100% MORE ZINC

AMERICAN, ANTHONY, ROYAL,
NATIONAL, ELLWOOD, U. S.

Our New Wire Has Double the Heat Treatment in the Zinc Bath—the Proper and Only Way to Give a Heavier Coating with Lasting Quality

This new galvanizing *insulates* the wire with zinc, or spelter. The wire passes through a long molten bath where it accumulates this greater protective coating, *thus inseperably uniting the zinc with the steel.*

You know, of course, that all fence wire is galvanized—to protect it from rust—to make it last longer, in all kinds of weather.

Perhaps you *don't* know that there's as much difference in galvanized coatings as there is in the thickness of bark on trees.

It is not only the amount of zinc applied that gives the wire long life, but the coating must be uniform and even to be durable *and made inseparably a part of the steel.*

The temperature of the bath, the great length of time the wire takes to pass through it, the great amount of zinc that can be applied by this process without cracking or peeling—all these are important factors.

Our Zinc Insulated Wire Fences Have 40% to 100% More Zinc Than Other Fences

Our Zinc-Insulating process perfectly protects the wire. It repels rust. It protects the wire from the oxygen in the air and the storm elements. It safeguards the steel.

By this process the zinc is practically a part of the steel, giving it a super-protection that adds many years to the life of the wire. As a result, OUR WIRE FENCE WILL OUTLAST ANY OTHER WIRE FENCE MADE, and its use greatly reduces your fence cost per year—to say nothing of the better protection its staunchness and sturdiness insures.

All our Farm Fences — of every brand — American, Royal, Anthony, National, Ellwood and U. S. — are Zinc-insulated—*at no extra charge.*

Some wire fence makers market several qualities—a very small percentage of their total production bearing even good galvanizing, and that usually sold at a marked price advance. It all looks alike. You can't tell the grades apart. We make one grade only.

When you buy this ZINC INSULATED FENCE you are purchasing added years of fence service, without extra charge.

Your local dealer sells Zinc Insulated Fence and we stand back of him for your protection. We prepay the freight to the dealer.

American Steel & Wire Company
Chicago New Nork Boston Dallas Denver
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Slate Surfaced
ROOFING
$1.85 PER ROLL
Guaranteed 15 Years

SAVE 50¢ A ROLL
Ward's RADIO ROOFING

Regular 85-pound standard weight

Don't confuse this full-weight 85-pound roofing with cheaper, lighter roofing sold at the same price.

Lay it over old roofs. There is enough in one roll to cover 100 square feet—yet a roll costs only $1.85, with nails and cement.

Fire Underwriters Approve It

Radio Roofing is surfaced with red or green slate that beautifies as well as protects it. Resists fire. Not affected by heat and cold.

We guarantee it for 15 years—it should last many more.

Send for Free Sample

Examine it! Cut it open! Test it. Judge its remarkable quality. Write for free Building Material Catalogue.

Order the roofing you need. Catalogue No. 174-M00. State color—red or green.

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York, Penna.	1.85	Chicago
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New Orleans	1.85	Chicago
Kansas City	2.00	Kansas City
St. Paul	2.00	St. Paul
Portland, Ore.	2.65	Portland
Houston, Texas	2.45	Ft. Worth
Oakland, Calif.	2.65	Oakland

Add 10c for extra long nails
Shipping weight 85 pounds per roll

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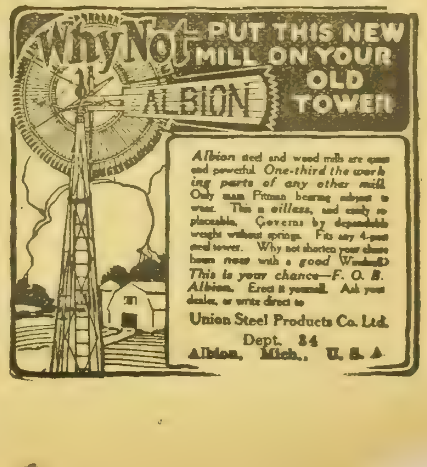
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Albion steel and wood mills are quiet and powerful. *One-third the working parts of any other mill.* Only main Pitman bearing subject to wear. This is *oilless*, and easily replaceable. Governs by dependable weight without springs. Fits any 4-post steel tower. Why not shorten your chore hours now with a *good Windmill? This is your chance—F. O. B. Albion.* Erect it yourself. Ask your dealer, or write direct to

Union Steel Products Co. Ltd.
Dept. 34
Albion, Mich., U. S. A.

The Farm Home
A Department for the Women

Edited by MRS. ANNIE TAYLOR

DEAR FOLKS:—Some of us dread the cleaning period and some of us cannot wait until we are off and at it. Strange how differently work effects us.

Let us try this spring to have some special convenience that we have wanted so long installed in the home. Maybe just a shelf in the kitchen or a new drop-leaf table or a place to hang our broom and dusters. Maybe John can fix it for you. So many times a simple device in the kitchen will make a woman's whole disposition change. We Sometimes do not realize the trivial things are the ones that get on our nerves. How about some short cuts in spring cleaning. $1 for the best letter received before April 1.

Your Friend,
Mrs Annie Taylor

Address letters: Mrs. Annie Taylor, care The Business Farmer, Mt. Clemens, Michigan.

WHEN MOTHER SLEEPS

When Mother sleeps a slamming door
  Disturbs her not at all;
A man might walk across the floor
  Or wander thru the hall;
A pistol shot outside would not
  Drive slumber from her eyes—
But she is always on the spot
  The moment the baby cries.

The thunder crash she would not hear,
  Nor shouting in the street;
A barking dog however near,
  Of sleep can never cheat.
Dear Mother, but I've noticed this
  To my profound surprise
That always wide-awake she is
  The moment baby cries.

However weary she may be,
  Though wrapped in slumper deep,
Somehow it always seems to me
  Her virgil she will keep.
Sound sleeper that she is, I take
  It in her heart there lies
A love that causes her to wake,
  The moment baby cries.

—Edgar A. Guest.

A PLACE TO WASH UP

MOST people hate to go all the way up stairs to the bathroom or bedroom washtsand just to wash their hands or freshen up before a meal The boy who naturally ignores his dirty hands until he is sent from the table groans and stamps all the way up and down; it is such a lot of trouble! And the men, coming in from the field or shop or garden work are apt to "track up" the house if they can not have a place to wash somewhere near the back door. Children can not take time from their play for washing faces unless a basin is provided very close to the yard. And mother herself, climbing stairs a dozen times a day, finds a trip up for hand-washing just the last straw that breaks a tired back.

And yet the kitchen sink is not the right place for all these necessary ablutions. The chief excuse for performing them there is that the water is handy. The idea of cleansing the skin where fruit and vegetables must be washed and dishes set down is not pleasant. Usually the people trying to clean up are in the way just before meal-time; and there is a great temptation among the masculine members of the family to dry the hands either all on the same roller towel or to take the tea towels!

Some sort of special washing-up place either on the back porch or in a corner or alcove of the kitchen is clearly necessary in every house where this problem occurs. In houses where there is running water the question is often easily solved by putting a lavatory somewhere on the ground floor—in a closet or at the end of the hall, or in some room where space can be spared A very good location is just inside a side entry which often occurs halfway down the steps leading to the cellar.

Farm housewives in Virginia who took part last year in home improvement contests directed by extension workers of the United States Department of Agriculture and the Virginia Polytechnic Institute, solved this washing up problem in a number of ways. One woman put the usual basin, bucket and soap on a bench on the screened-in back porch, and above it hung a medicine cabinet with a mirror in which were kept brushes, combs and other necessary toilet articles. A towel bar below provided a place for the individual towels.

Another woman placed a washstand in a storeroom opening off the kitchen, so that it was easily accessible and yet not conspicious. In a third home an old unsightly box for storing away shoes, rubbers, and other small articles was fitted with a shelf, painted white, and screened with a curtain of oilcloth bound with blue cretonne. This stand provided a place for keeping the basin and pitcher out of sight when not in use. When wanted they were easily set on top of it.

A fourth kitchen had a small extension, practically an anteroom which was useless except as a passageway. This was fitted with a child's shelf, built to suit the child's height, and provided with a bucket of water, basin and soap dish. There was a hook for a towel nearby. A lower shelf was put up to keep his overshoes on, and hooks at the right level were put on the opposite wall for the boy's cap and coat. The most untidy child can be helped to form orderly habits if a place like this is arranged especially for him.

Maybe some of you have schemed a way out of this problem, which means so much to every housewife when it is meal-time. If you have found a new and efficient way let us all share with you the knowledge.

BE FAIR TO THE BOYS

THE usual spring argument about taking the boys out of school and putting them to work in the fields will soon begin in the farm home. The father is very busy. Plowing and planting must be done on time. It is hard to hire men that can be trusted with the machinery and horses. Hired men mean more work in the kitchen for mother and daughters. The school may not be interesting. The boys are dependable, like to be out of doors, and are proud to take a man's place and help with the work. That is the easy, lazy way of looking at it and the boy gives up his spring school term and becomes a rural child laborer. It that occurs two or three years in succession he has lost his chance for an education.

The stronger, better way is to sacrifice something of the present comfort and expediency for the child's future welfare. By his work this spring or next spring the boy may save to the family two or three dollars a day for a few weeks but he does it at a very great loss to himself and probably to his people. He is giving up the time that should be used to deepen, broaden, and refine his life. Besides that, if he does not get proper schooling and enough of it now, he will not be able to earn as much as he ought when he becomes a man. Then he, too, will feel that his children must give up their chances for an education and spend their childhood days at some kind of labor. So the circle goes on from father to son. Keep the boy in school. That may be the way to bring the entire family to a finer plane of life.

FOODS FOR A MARCH APPETITE

THIS month sees the end of some of our morning fruit. Here are a few suggestions that may help you keep your health if watched carefully these days.

Apples soon will be done; and another breakfast delicacy, the baked apples, will pass for a time. To prevent this misfortune, baked apples may be canned in the home. Plenty of empty jars will be available at this season. The process is easy; simply bake the apples as usual, pack them in clean hot sterile jars, fill the jars with a thin hot syrup and seal. Take some care that the apples are kept as whole as possible. Rhode Island Greenings and Baldwins are good varieties for baking.

Perhaps you've had some turnips or onions in the cellar? If they have felt the coming of Spring and have put forth tender, green young sprouts, cut them off and use them in salads.

In cooking stewed prunes you probably improve them by adding a dash of lemon juice or a slice of lemon. Just for a change, try a bit of tart apple instead of the lemon. It's merely that a sharp flavor is needed to offset the mild and natural sweetness of the prune. However, with lemon or without, with apples or rhubarb or alone, don't, with the passing of Winter and the coming of the fresh fruits, don't neglect prunes. They still have a mission to perform in your food life.

Are you already looking forward to the maple season, and have you planned your favorite maple desserts to serve the family? Sometimes when you are just "too tired" to fuss with an elaborate dessert, try giving them apiece of fresh bread cut about an inch thick and two or three inches square, covered generously with fresh stirred or shaved maple sugar and served with thin cream. It will satisfy the family as well as yourself.

Spring lamb is one of the delicacies of this season. Why so few people really care for mint sauce with lamb is often the talk of the table. It may be because dried mint is often used instead of fresh mint, which should be available at every good butchershop. Two tablespoons of fresh chopped mint, a tablespoon of sugar, two of vinegar and six of water heated (never boiled) until sugar is dissolved make a good mint sauce.

This is a good month to put the canning equipment in shape, order new supplies and plan the Summer's canning.

As soon as the first daffodils appear, have some for breakfast—a few in a low bowl as a table decoration, of course. But even though not edible, they will have a tonic effect on the well-known jaded appetite of Spring.

THE PINT JAR METHOD HOT LUNCH

THE public health nurse of Ramsey County, Minnesota, has a novel plan for serving hot lunches in the rural schools of her county which she calls "The Pint Jar Method Hot Lunch." Each child brings from home some particular kind of food in a tightly closed Mason pint jar. Upon reaching school the jar is set on a rack in a clothes boiler. This boiler is partly filled with water and placed on a two-burner oil stove. At the morning recess the stove is lighted and by noon the contents of the jars are hot. Then monitors distribute the jars and the children supplement the warm dish with the cold food in their lunch baskets Each child has his initials scratched on the cover of his jar in order to insure identification. The nurse recommends the following kinds of foods for the jars: Cocoa, milk, soups, certain kinds of fruits and vegetables, macaroni, rice creamed eggs, baked beans, and stewed meat. The equipment required consists of a two-burner oil stove, a clothes bailer, rack, and hot can lifter.

SAVE TIME ON BUTTONHOLES

BUTTONHOLES on a baby's dress may be cut off in a strip when the dress is worn out and sewed under a tuck in little girls' blouses. The buttonholes in little boys' trousers are made in bands of durable material and can be ripped out and sewed into other garments when the trousers are discarded. Also the buttonholes in men's shirts may be ripped off and sewed under a tuck in children's aprons.

Personal Column

Ammonia for Cookies, Who Can Help?—I wish to know if any one can tell me how much 5c worth of Bakers Amonia used to be twenty years ago? A neighbor of mine moved into the home of her deceased aunt, with whom she used to make her home when she was a very young girl. She remembered that her aunt and also her own mother, who were sisters, used to make lovely cookies; so she was delighted when she found a recipe written in her aunt's hand for Lemon Cookies, but when we tried it we found there was not enough levening or enough oil of lemon. The recipe read 5c worth Bakers Ammonia, 5c worth Oil of Lemon, 2½ cups sugar, 2 eggs, 1 cup shortening, 2 cups sweet milk, salt. Can you correct this recipe, as we do not know how to tell how much Ammonia or Oil of Lemon to use with the other things as given. —A Subscriber.

—I am sorry that we are unable to answer query regarding Bakers Ammonia. It has been out of use for household baking for so many years and prices have changed so radically that I doubt if you will be able to find anyone who can give you the information that you seek.—Jean Krueger, Dean of Home Economics, Michigan Agricultural College.

—As you will notice, the college cannot answer this question. Maybe some of our kind readers will be able to help you.

"There'll Come a Time"—is a poem asked for by one of our readers who so kindly sent in poems "After the Ball was Over" and "Just Break the News to Mother". Maybe one of our readers will send in this one so she will realize the old saying "Give and ye shall receive."

Maybe This Has Happened to You.—We smoked some bacon and got it smoked too much, so it isn't very good. Do you know of any way we can take some of the smoke out of it? Please let me know through your column as soon as you can.—Mrs. J. A. T., Allegan, Mich.

—I know of no way of removing the excess smoke from meat that has been smoked too much. A small amount of excess smoke from the woods ordinarily used in smoking should cause no harm.

Green hickory is the best obtainable wood for smoking. Next comes maple wood, apple wood, or in fact most any hardwood. Corn cobs also may be used. Any of the pine woods or those having a resinous flavor should by all means be avoided.

The meat should be hung a considerable distance above the fire and it is usually best to suspend a piece of sheet-iron above the fire, in order that the smoke does not reach the meat directly. —Geo. A. Brown, Professor of Animal Husbandry, M. A. C.

Cannot Be Done.—Will you inform me through the columns of the M. B. F. of a matrimonial paper.—A Subscriber.

—This is something our department cannot do. Too much unhappiness may be caused by doing just this thing and I do not feel we should use our valuable space for it.

It pays, always, to do right and it never pays to do wrong.

I want to thank the reader who sent me the above motto. It is splendid and I am pleased to know that it is in some of our schools.—Annie Taylor.

A FORD

The first car I bought was a little tin
    Ford,
And every time I shifted gears it made
    the engine roar.

I started down the road one day,
  At driving I was green
I darned nye ran over everything I seen.

I ran down the neighbors chickens,
  Also their cats and dogs,
I ran through ditches and over
  Stumps and logs.

The only thing that I could do,
  Was just to let it spin,
And the way the darned thing rattled,
  You would know 'twas made of tin.

The way the people talk, about the Ford,
  It fairly makes you sore,
They claim that you can buy repairs,
  Down at the ten-cent store.

But let them say what e're they please,
  There's no other in their class,
That will go a greater distance,
  On the same amount of gas—than a
    Ford.

—Mrs. R. C., Fenwick, Mich.

Menu for March 15th

Veal and Ham Pie
Baked Potatoes Fried Parsnips
Salad of Canned Asparagus Tips
Cheese Fritters
Caramel Pudding with Meringue
Coffee

Veal and Ham Pie.—One and one-half pounds of veal, two hard-cooked eggs, few grains of red pepper, dust of powdered mace, one-half teaspoon grated lemon rind, one-half pound ham, one tablespoon flour, one teaspoon salt, six whole peppers, powdered sweet herbs, and pastry.

Cut veal and ham into very thin pieces; mix on a plate, flour, salt, pepper, sweet herbs, lemon rind, red pepper, and mace; roll in this seasoning each piece of veal and lay in a pie dish alternating layers of veal, ham, and egg, cut in slices; pile this in center of dish cover and decorate with light pastry; when baked add a little very good seasoned stock, which should become a jelly when the pie is cold, or a little gelatine may be added; garnish with parsley.

—if you are well bred!

The Christening Date.—Modern usage in general favors delaying the baby's christening until the young mother is conveniently able to attend in person. There is also the religion factor to be taken into account which in some denominations makes christening optional during a period of several years. The first or second Sunday after birth, formerly set as the proper day for baptism in the observance of the Roman Catholic and Episcopal Churches, now is not so strictly adhered to in practice. Though christenings are most common when the baby is from two to six months old, if the child is baptized when but a few weeks old, the event takes on a very intimate home character.

RECIPES

Overnight Cookies.—One and one-half cup brown supar, one and one-half teaspoon soda, one-half cup granulated sugar, two eggs, one-half teaspoon salt, one and one-half teaspoon cream of tartar, one-half cup butter, and lard mixed, three cups flour, one and one-half teaspoon vanilla.

Mix the ingredients in the order given, sifting the flour, soda and cream of tartar together before adding them. Shape in a loaf and cover with oiled paper. Let stand over night in the refrigerator. In the morning slice and bake in a moderate oven.

Apple Sauce Cake.—One and one-half cups sugar, one cup butter, one and one-half cups sour apple sauce hot. (Takes about three medium apples), three scant teaspoons soda, one cup chopped raisins, one and one-half cup chopped walnuts, one-half teaspoon cinnamon, one-half teaspoon nutmeg, one teaspoon vanilla.

Flour enough to make stiff batter, add a little salt. The nuts may be omitted if in a hurry, but it is not quite as good, of course.

Plain Cake.—One cup of sugar, one-half cup of cream, two eggs, one cup of cold water or milk, sweet, two and one-half cups of sifted flour and two teaspoons of baking powder, pinch of salt, and flavor.—Mrs. Ethel Short.

The Runner's Bible

(Copyright by Houghton Mifflin Co.)

He that keepeth understanding shall find good. Prov. 19:8.

Make no friendship with an angry man; and with a furious man thou shalt not go; lest thou learn his ways, and get a snare to thy soul. Prov. 22:24-25.

Self-pity must be strangled the moment it is recognized. It is the worm that dieth not. To indulge in self-pity is to tear down your strong holds. If you have spiritual understanding even in a small degree, you will know that continued misfortune indicates that something is clouding your consciousness of Ever-Present Help, you are engaged in wrong doing, are holding to the belief that some act of the past has power to harm you, are indulging in some form of hate, or you are not protecting yourself as you should "from the firy darts of evil." Self-pity has no place in the divine economy and should be reckoned with, worry and regrets as agents of death. No cure can come, nor harmony be banished while any one of these three has control of the thoughts.

AIDS TO GOOD DRESSING

BE SURE AND SEND IN YOUR SIZE

FASHION BOOK NOTICE

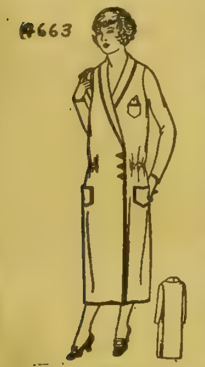
Send 10c in silver or stamps for our UP-TO-DATE SPRING AND SUMMER 1924 BOOK OF FASHIONS, showing color plates, and containing 500 designs of Ladies', Misses' and Children's Patterns, a CONCISE and COMPREHENSIVE ARTICLE ON DRESSMAKING, ALSO SOME POINTS FOR THE NEEDLE (Illustrating 30 of the various, simple stitches) all valuable hints to the home dressmaker.

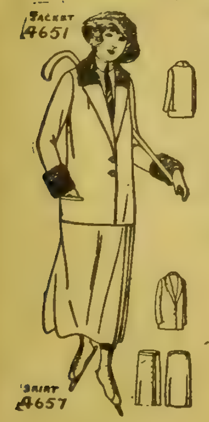
4641. A Popular One Piece Dress.—The straight line dress is here shown with pleasing and attractive features. One may have the fronts rolled low and open, or buttoned to the neck. The sleeve is pretty in wrist length with the narrow tab cuff, and very smart and comfortable in elbow length. The Pattern is cut in 7 Sizes: 36, 38, 40, 42, 44, 46 and 48 inches bust measure. A 38 inch size requires 4 ¼ yards of 40 inch material. The width at the foot is 2 ⅛ yards.

4639. A Pretty Garment for "Breakfast Time."—This would be lovely in silk crepe or embroidered crepe de chine. It is also attractive in corduroy, cotton crepe, batiste or China Silk. The Pattern is cut in 4 Sizes: Small, 34-36; Medium, 38-40; Large, 42-44; Extra Large, 46-48 inches bust measure. A Medium size requires 5 ⅝ yards of 32 inch material.

4651-4657. A Smart Street or Sport's Suit.—Twill, serge or broad cloth could be used for this model. The skirt is in "wrap" style. The Jacket has new lines and a very smart closing. The suit comprises Jacket 4651 cut in 6 Sizes: 34, 36, 38, 40, 42, [illegible] 44 inches bust measure, and Skirt 4657, cut in 7 Sizes: 25, 27, 29, 31, 33, 35, and 37 inches waist measure, with corresponding hip measures 35, 37, 39, 41, 43, 45 and 47 inches. The width of the skirt at the foot with plaits extended is 1 ⅞ yard. To make the suit for a medium size requires 5 ¾ yards of 40 inch material.

4658. A New Skirt Model.—This is a good "sports" model. It is attractive in plaid suiting, serge, wool rep, mixtures and in the new mohair weaves. The Pattern is cut in 7 Sizes: 25, 27, 29, 31, 33, 35 and 37 inches waist measure, with the corresponding hip measure, 35, 37, 39, 41, 43, 45, and 47 inches. To make the skirt for a medium size requires 2 ⅝ yards of 54 inch material. The width at the foot with plaits extended is 2 ⅛ yards.



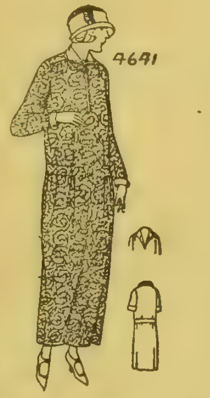


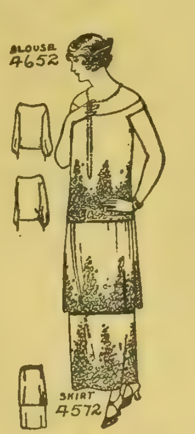
4663. A Simple Stylish Coat Dress.—Twill, serge or alpaca, as well as linen or rep could be used for this model. If preferred the fulness of the fronts may be held with belt or string girdle portions attached at the side seams. This Pattern is cut in 4 Sizes: 14, 16, 18 and 20 years. A 16 year size requires 3 ⅝ yards of 40 inch material.

4663. A Good School Frock.—This is a splendid style for remodeling, or for combining two materials as illustrated. Plaid or checked suiting and serge or wool rep would combine well. Gingham and chambrey or linen are also attractive together. The Pattern is cut in 4 Sizes: 8, 10, 12, and 14 years. A 12 year size requires 1 ¼ yard plain material, and 2 ⅝ of figured or checked material 40 inches wide.

4666. A Jaunty Style for a School Dress.—The new and pretty plaids are nice for this model, or, one could use serge, or wool rep. Wash materials are also attractive for this style. It is cut in 4 Sizes: 6, 8, 10, and 12 years. A 10 year size requires 3 ⅜ yards of 32 inch material. To make revers, collar and cuffs of contrasting material will require 1 yard.

4652-4572. A Unique Dinner or Evening Gown.—Here is a very attractive version of the "long waist" and tiered skirt, combined to make a very smart gown. The Blouse 4652 is cut in 6 Sizes: 34, 36, 39, 40, 42, and 44 inches bust measure. It may be finished with the neck line higher, and with a peasant sleeve in wrist length. Embroidered flouncing or bordered goods, as well as taffeta, linen, crepe and crepe weaves are attractive for this style. The skirt 4572 is cut in 7 Sizes: 25, 27, 29, 31, 33, 35, and 37 inches waist measure. The width at the foot is 1 ⅞ yard. To make the dress as shown in the large view will require 4 ⅝ yards of 40 inch material. To make the dress with long sleeves on the blouse requires 6 ⅛ yards.





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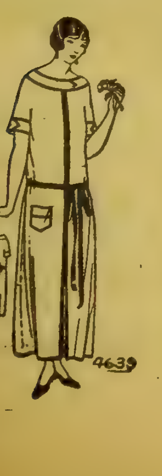

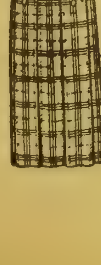

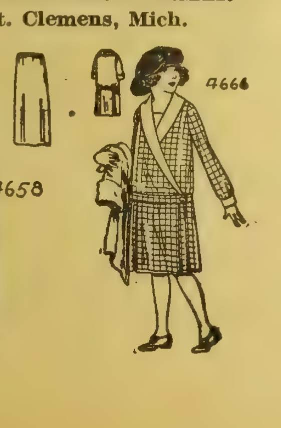

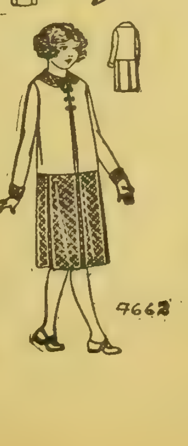

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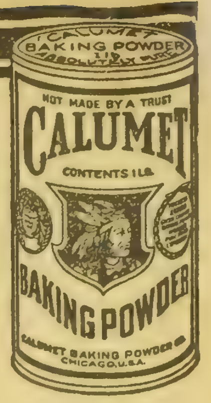

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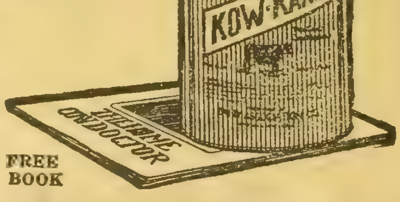

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BARLEY FROM MICHIGAN

(Continued from Page 4)

The Wisconsin has big heads with long spreading beards that overlap in the field and give a good impression to anyone who passes that way. The Wisconsin is a good yielding barley. Don't mistake me. It is the best yielder that can be obtained in quantity in the state today. The point is that the Mich-2-Row was better. This was a two-rowed barley, it is true, and some have said: "It stands to reason that a six-rowed barley will yield more bushels per acre than a two-rowed variety." However, that may be the Mich-2-Row had enough more heads to the acre, to more than make up for the difference. But the Mich-2-Row held its beards in a close cluster out from the end of the head, and the heads instead of nodding, stood straight. Thus, in looking down on the field you saw little more than the ends of the heads. This fact seemed to have deceived farmers, who did not stop to look further. Those who went far enough to get the barley threshed have many times been surprised, because they did not think that piece of barley could yield so much. The fact remains that farmers did not select this variety, and therefore there is no seed available at the present time.

The plant breeding work at M. A. C. has also produced a winter barley, known as the Michigan Winter. This barley was distributed in 1914. It came from an individual plant selected in 1910. Up to that time, winter barley had not been a commercial success north of the Ohio River. Mr. H. B. Derr, who was then head of the Barley Investigation of the U. S. Department of Agriculture believed in winter barley and believed that it could be made a success for that purpose and turned them over to the Michigan Experiment Station in the fall of 1909. Thus our work with winter barleys started with these lots of seed. The seed was planted that fall in what we call beds. That is, each seed was individually planted five inches from any other seed. There were eight of these beds planted in the fall of 1909. Two of the eight lots winter-killed as a whole the first season. A third lot was injured enough to be proven distinctly inferior, and was discarded as a whole. Individual plant selections were saved representing the remaining five sources of seed. These became mothers of plant rows sown in the fall of 1910. As a result of that year's test, a fourth source of seed was eliminated, and six strains now represented the remaining four original sources of seed, to be replanted in the fall of 1911. The fall rains soaked the ground before freezing and the temperature reached 20 degrees below zero. A very large portion of the wheats in Southern Michigan were killed or badly injured that winter, and most of the wheats on the Michigan Experiment Station were badly injured. The winter barleys were tested that winter along side of wheats that winter-killed. Three of the selections coming from the Wisconsin Winter, had winter killed. This left a selection from each of three sources, but one of them was discarded as not as good as the other two, which were again tested in 1913 and increased in 1914 for distribution that fall. One of these barleys was distributed as the Derr Winter and the other as the Michigan Winter. Farmers have generally preferred the Michigan Winter, and that is the only one for which the Michigan Crop Improvement Association could furnish seed this fall. During the seasons 1913-1915, the Michigan Winter averaged 58.9 bushels per acre on the experimental plats at M. A. C. and in 1915 seven acres of Michigan Winter averaged 59.3 bushels per acre. When compared on the basis of pounds of grain per acre, 59 bushels of barley equals 88.5 bushels of oats.

I could cite many good things that farmers have said about this barley in the first few years after distribution but the fact remains, that most of these people have neglected to grow it. The principal reason in my mind is that if planted late it is injured by the winter. Even as late as we plant wheat is not safe. It needs to be planted in the last days of August or about September 1. The 59.3 bushel yield on seven acres at M. A. C. was planted September 4, 1914. Experience shows

RHEUMATISM

A Remarkable Home Treatment Given by One Who Had It.

In the year of 1893 I was attacked by Muscular and Sub-acute Rheumatism. I suffered as only those who are thus afflicted know, for over three years. I tried remedy after remedy, but such relief as I obtained was only temporary. Finally, I found a treatment that cured me completely, and such a pitiful condition has never returned. I have given it to a number who were terribly afflicted, even bedridden, some of them seventy to eighty years old, and the results were the same as in my own case.

I want every sufferer from any form of muscular and sub-acute (swelling at the joints) rheumatsim, to try the great value of my improved "Home Treatment" for its remarkable healing power. Do not send a cent; simply mail your name and address and I will send it free to try. After you have used it and it has proven itself to be that long-looked-for means of getting rid of such forms of rheumatism, you may send the price of it, one dollar, but understand, I do not want your money unless you are perfectly satisfied to send it. Isn't that fair? Why suffer any longer when relief is thus offered you free? Don't delay. Write today.

MARK H. JACKSON
No. 265-K Durston Bldg.
SYRACUSE, N. Y.

Mr. Jackson is responsible. Above statement true.

that winter barley must cover the ground with a good vigorous growth by the time that winter sets in, if it is to winter well. This seven acre piece became loaded with Hessian Fly in the fall of 1914, so much so that the entomologist advised to have piece be plowed up. But the farm superintendent did not do so. In the spring a search for Hessian fly found only four insect in this barley field. It seems that the tops froze down so completely as to include the winter lodging-place of the Hessian fly, thus killing the fly, and these frozen tops protected the crowns of the plants from injury. The appearance of such a field in the early spring, (to anyone who is not familiar with winter barley), would be that the crop is dead. Several have plowed up pieces of winter barley on appearance alone. If it has winter killed, one can not be sure until the crowns decay. If the yield has been well covered with tops in the fall and with snow during the winter, it usually takes but a short time for the barley to grow up through the frozen tops and turn the yellow to green.

We have let this crop weather Michigan winters now for ten years. At one time it appeared that farmers would discard it as they have Alexander, College Success, and College Wonder Oats, and the Mich-2-Row barley, but it is still with us and it seems increasing in favor. If the Michigan Winter barley can be properly planted during the latter days of August, it warrants more serious consideration among farmers, at least in a small way.

There are three improved varieties of barley that can be gotten through the Michigan Crop Improvement Association. Address the Secretary at East Lansing in season. The Michigan Black Barbless and Wisconsin Pedigree can be obtained now for spring planting, and the Michigan Winter can be obtained when a new crop is available next July.

(Editor's Note: The third article of this series by Mr. Spragg will appear in an early issue.)

BREEDS OF BEEF CATTLE

1. (a)—Polled Shorthorn

THE Polled-Shorthorn breed was formerly known as Polled Durham. The name was changed in 1919 because not more than 5 per cent of the animals now being recorded in the Polled Shorthorn Record are other than "double standards." The "single standards" were produced by breeding polled cows to Shorthorn bulls, selecting the polled offspring and breeding them to other Shorthorn bulls. This grading up was continued until the polled offspring was brought to the fifth cross which contained 96⅞ per cent or more of Shorthorn blood when they were qualified for entry in the "Polled" record only. The double standards were the polled offspring from parents both of whom were registered in the American Shorthorn Herd Book. Double standards may be recorded in both the Polled Shorthorn Herd Book and the American Shorthorn Herd Book.

The breed is similar to the Shorthorn in every way except that it is hornless. The Polled Shorthorn is a comparatively new breed of cattle and of late years has been increasing very rapidly in popularity, especially since breeding Polled Shorthorns affords an added incentive to constructive breeding. The American Polled Shorthorn Association was organized in 1899 and its rules are such that one parent may be a horned Shorthorn, provided the other is a recorded Polled Shorthorn. There is no limit to the breeder's introducing into his Polled-Shorthorn herd the blood of any horned animal whose breeding and contour appeal to him, and since some breeders have developed the dual-purpose qualities in the animals, the result is a considerable variation in type.

We Know How He Felt

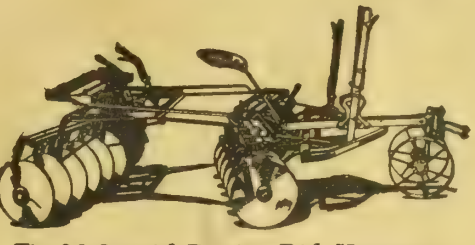
A rickety flivver chugged down the street faster than the cop thought the owner ought to be driving. The cop signalled him to stop, but the flivver kept right on going.

After a pursuit, the cop demanded angrily: "What's the idea? Why didn't you stop when I told you to?"

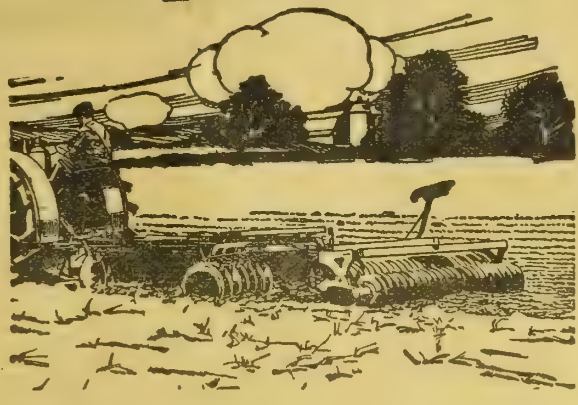
"Well," answered the man, "it seemed a shame to stop after I spent two hours gettin' the ol' bus started."

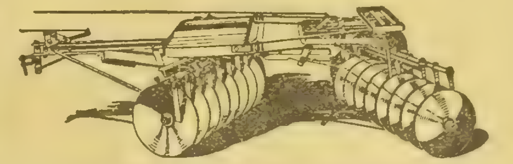
It is reported the cop let him go.

McCormick-Deering Tillage Implements



The *McCormick-Deering Disk Harrow* is a simple and efficient implement, built and trussed like a steel bridge, to serve many years. You will like the details and conveniences—the dust-proof bearings and the bearing oil cups set above the frame, the built-in angle-steel weight boxes, the oscillating disk scrapers, the forecarriage, etc. Made in sizes for everybody—4 to 10 feet. All sizes can be equipped with the tandem attachment which is shown above. Double disking is popular—farmers know that it more than pays for itself.





The *McCormick-Deering Leverless Disk Harrow* is a genuine tractor disk, not a made-over horse harrow. It is built for heaviest duty. It is controlled entirely from the driver's seat, without levers, yet it is very simple. Merely backing the tractor automatically sets the angle of both front and rear gangs. When the tractor starts forward the gangs hold that angle until released by a pull on the rope. In 5 to 10-foot sizes to fit your power.

SEED-bed making will call for fast and thorough work this year as always. The planting season will roll around in a twinkling, but no matter how few the days between plowing and planting you can have a profit-building soil by using efficient equipment.

McCormick-Deering Tillage Implements combine the three essentials—good work, long life and convenience. They are of practical design, their construction being based on ninety years of farm and factory experience. They are priced on the basis of economical quantity production, and as an investment they offer you attractive returns.

To Fill All Your Tillage Tool Needs See the McCormick-Deering Dealer. It Pays!

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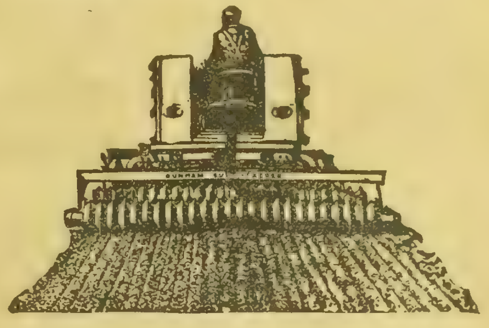
(INCORPORATED)
606 So. Michigan Ave. Chicago, Ill.



The *Dunham Culti-Packer* has no equal as a seed-bed finisher. It pulverizes the soil, fills out air spaces, and saves moisture content. Following the drill, it helps the little plants to get a quick start, firmly set in finely mulched soil. Use it to prevent winter-killing of wheat; to rejuvenate meadows, etc. It is far ahead of a roller for small grains. Made in eight sizes, for horse and tractor use.

BREEDERS DIRECTORY

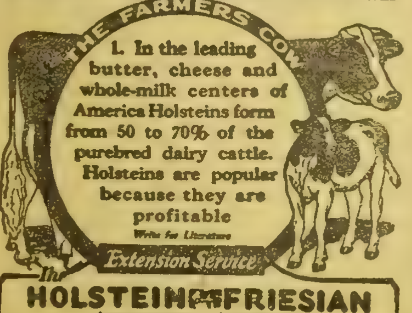
Advertisements inserted under this heading for reputable breeders of Live Stock at special low rates to encourage the growing of pure-breds on the farms of our readers. Our advertising rate is Thirty Cents (30c) per agate line per insertion. Fourteen agate lines to the column inch or $4.20 per inch, less 2% for cash if sent with order or paid on or before the 10th of month following date of insertion. SEND IN YOUR AD AND WE WILL PUT IT IN TYPE FREE, so you can see how many lines it will fill. Address all letters,
BREEDERS DIRECTORY, MICHIGAN BUSINESS FARMER, MT. CLEMENS, MICH.

CLAIM YOUR SALE DATE

To avoid conflicting dates we will without cost, list the date of any live stock sale in Michigan. If you are considering a sale advise us at once and we will claim the date for you. Address, Live Stock Editor, M. B. F., Mt. Clemens

March 20—Holsteins, John Rolfe Farm, Battle Creek, Mich., W. R. Harper, Sale Manager, Middleville, Mich.
March 25—Holsteins, Fred H. Lee, Plymouth, Michigan.

HOLSTEIN



1. In the leading butter, cheese and whole-milk centers of America Holsteins form from 50 to 70% of the purebred dairy cattle. Holsteins are popular because they are profitable

Write for Literature

The HOLSTEIN-FRIESIAN
Association of America
230 EAST OHIO STREET, CHICAGO, ILL.

FOR SALE—

7 Pure Bred Holstein Heifers
Very well bred. Herd Federal accredited.
$50 and upward depending upon age
O'Hara Farm, Utica, Mich.
W. C. STARK, Manager.

SALE OF HOLSTEIN CATTLE. HAVING SOLD my farm I am forced to sell my entire herd of pure bred Holstein cattle. Sale to be held at the farm, 7 miles east of Plymouth on 5 mile cement road or 5 miles S. of Farmington on Wayne-Farmington road to 5 mile road and ½ mile east. Tuesday, March 25, 1924. The herd consists of 44 head of cattle—28 daughters from a 33 lb. bull over 100 lbs. milk a day—4 daughters from a 35 lb. bull over 100 lbs. milk a day. Daughters and cows in calf from a 35 lb. bull. 1344.10 lbs. butter in 1 year. Everything on farm to be sold. Sale begins at 10 A. M. Cattle sale at 2 P. M.
FRED H. LEE, Plymouth, Michigan.

FOR SALE

My Entire Herd of Holstein Cattle
One 31 lb. herd sire, 10 females. Among them are two A. R. cows, a 20 lb. 2 yr. old and a show cow, and a 19 lb. 3 yr. old. 4 cows are just springing. The herd is free from T. B. and sold under a retest. If interested write or call for pedigrees. Time will be given for one year.
H. W. MOHR, Pigeon, Michigan.

RED POLLED

FOR POLLED SHORTHORNS Milk Strain Either Sex.
PAUL QUACK, Sault Ste Marie, Michigan.

HEREFORDS

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Registered Breeding Cattle, T. B. Tested at practical prices for production of Hereford Baby Beeves profitably all ages.
T. F. B. SOTHAM & SONS.
(Herefords since 1839.)
St. Clair, Mich.

BREED HEREFORDS THAT FATTEN quickly. Eleven choice two-year-old heifers and several yearling bulls sired by International Prize Winners for spring sale. Write us for information. Breeders of Herefords since 1860.
CRAPO FARM, Swartz Creek, Michigan.

GUERNSEYS

GUERNSEY BULL CALVES $50. A. R. BREEDing. 50% to 75% breeding of Norman's Missaukee Red Rose. Bull soon ready for service $100.
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GUERNSEY—PURE BRED BULL CALVES from 4 to 6 months old for sale. Priced for quick sale. Herd T. B. tested.
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WE HAVE SOME FINE YOUNG ANGUS BULLS from International Grand Champion Stock at reasonable prices. **E. H. KERR & CO., Addison, Mich.**

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REG. JERSEYS, POGIS 99th OF H. F. AND Majesty breeding. Young stock for sale. Herd fully accredited by State and Federal Government. Write or visit for prices and description.
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FOR SALE—ONE RED SHORTHORN REGIStered bull, age ten months. One roan shorthorn registered bull, age eight months. Also four red heifres, coming two years old.
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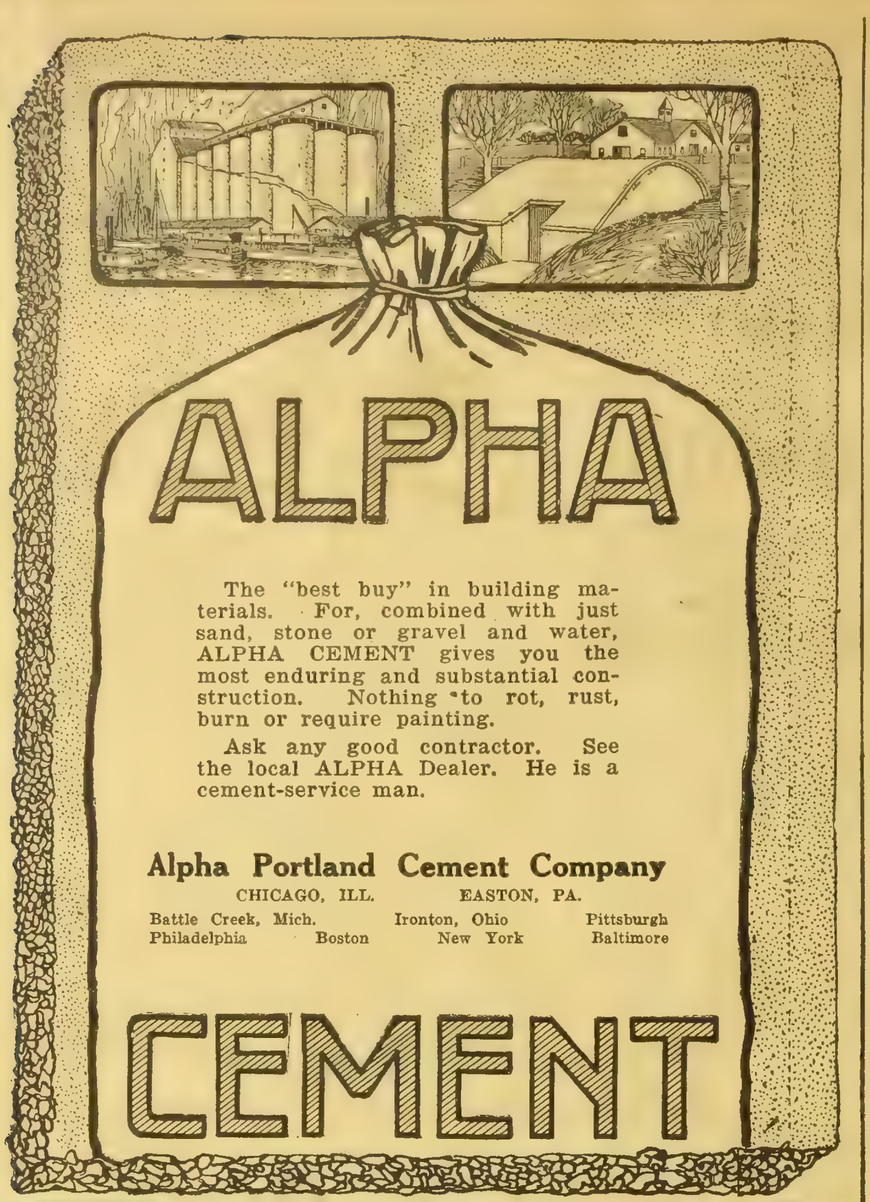
RAISE SHORTHORNS WITHOUT HORNS Like Kelley does. U. S. Accredited Herd No. 28945. For description and price write,
L. C. KELLY & SON, Plymouth, Michigan.

(Live Stock Ads Continued on Page 31.)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The "best buy" in building materials. For, combined with just sand, stone or gravel and water, ALPHA CEMENT gives you the most enduring and substantial construction. Nothing to rot, rust, burn or require painting.

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TRY This Big Can on 20 Days FREE TRIAL

I make this liberal offer to prove *before you pay* that CORONA WOOL FAT is the greatest healing preparation you ever used for Cuts, Galled Shoulders, Collar Boils, Inflamed Udders or other injuries of man or beast.

SEND NO MONEY

Simply mail me a postal or letter saying "Send me your big can of CORONA WOOL FAT on 20 Days Free Trial." I'll send it postpaid. Use all or part of it, and if you don't find it to be the best healing ointment you ever used you won't owe me a cent. If it does all I claim for it, send me 65c in payment at end of 20 days. (6)

Note: If you have used Corona and your dealer cannot supply you, and you prefer a larger can, order direct from this ad. 20 oz. can postpaid $1.25.

C. G. PHILLIPS, President
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FOR HOUSEHOLD USE
CORONA WOOL FAT
FOR CUTS, WOUNDS, SORES BURNS, BOILS, CHAPS, ETC. ON MAN OR BEAST

MORE WOOL

One man can shear in half the time, do better work and get 15% more wool with the marvelous **Stewart One-Man Power Shearing Machine.** Belts to any Engine. Gets longer staple wool. Shears easy. Sheep like it. Machine complete with 3 extra sets of cutting plates. At dealers only $21 or send us $2 and pay balance on arrival. Guaranteed satisfactory or money back. If you have no engine get Stewart No. 9 (hand power) Ball-bearing Shearing Machine. There's a Stewart Shearing Machine, hand or power, to meet every need. Complete catalog on request.

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BE COMFORTABLE—
Wear the Brooks Appliance, the modern scientific invention which gives rupture sufferers immediate relief. It has no obnoxious springs or pads. Automatic Air Cushions bind and draw together the broken parts. No salves or plasters. Durable. Cheap. Sent on trial to prove its worth. Beware of imitations. Look for trade-mark bearing portrait and signature of C. E. Brooks which appears on every Appliance. None other genuine. Full information and booklet free in plain sealed envelope.

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Sent FREE
30 Days' Free Trial
No deposits—No notes to sign—No obligation to buy! You try the famous imported Harp Separator entirely at my risk. You *alone* are the judge and if not thoroughly satisfactory return it at my expense.
The Standard in Europe For More Than 22 Years
You get the *closest-skimming, easiest-turning, quickest to clean separator ever built.* Has replaced hundreds of thousands of machines in England, France, Germany, Belgium and Denmark.
Quality at Bargain Prices! Why? Because European labor and materials are cheaper, we build in tremendous quantities, and sell *direct to you.* From $38.80 up. *Also on easy monthly payments.* **Write today for prices** and descriptive folder.
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THE HARP SEPARATOR CO.
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A SIZE FOR EVERY DAIRY
Fully Guaranteed
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10 MONTHS TO PAY

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PROFITS FROM YOUR CORN CROP

Glazed tile, wood and cement stave silos. Glazed and unglazed hollow building tile and **MAT FACE RESIDENCE BLOCKS.** Early buyers discount. Write for special agency proposition. **National Clay Products & Silo Co., Dep't. 16, Neely Block, Muncie, Indiana.**

NATIONAL SILO

TAKE CARE OF THAT FEMALE CALF TODAY

(Continued from Page 4)

the end of the second or third week. This change should be made gradually by substituting a small quantity of skim milk for whole milk in the daily ration. About a week or ten days should be taken for this change. In this way the calf will go off the whole milk gradually and will not have a distaste for the skim milk.

Temperature of Milk

Care should always be taken to have the milk warm and sweet; especially is this necessary when feeding the young calf. As the calf grows older it will do just as well on cooler milk if it is fed at the same temperature every day. The right temperature for the milk fed the young calf is blood heat, 100°F. The milk should be as nearly this temperature as it is possible to get it. There is no way by which the digestive system of the young calf can be upset more easily than by feeding cold milk at one meal and warm milk at another. If there is any doubt about the temperature, or if the milk has to be warmed at all, the thermometer should be used. Judging the temperature of milk by putting the finger into it is not satisfactory. Milk at 90° F. will feel warmer on a cold morning than it will on a warm morning, and the calf's digestive system is very sensitive to any change. It is also important to feed sweet milk. One feed of sour milk may upset the digestive system of the young calf for months, and one feed of such milk often causes the death of the calf. It is better to let the calf miss one or even two feeds than to feed it on sour milk, however, they may be raised on sour milk entirely after the first few weeks, but if sour milk is fed it should contain about the same acidity at all times.

Clean Pails Necessary

The pails from which the milk is fed should be kept as clean as possible. They should be kept as clean as the milk utensils. It any milk is left in them it will sour, and the calf will soon show the effects. The pails should be thoroughly cleansed and sterilized often.

Length of Time to Feed Skim Milk

The length of time that the calf should be fed on skim milk will depend upon the amount of skim milk available for this purpose. Some feeders wean their calves at four months of age, but it is a better practice to feed skim milk until the calves are six months old. If one has an abundance of skim milk it is a profitable practice to feed heifers until they are eight months or a year old. This will insure a better growth and better development. Many feeders give their calves as much as twenty-five to thirty pounds of skim milk per day when four to six months of age. This, however, is a wasteful practice. Eighteen or twenty pounds per day is all that can usually be fed profitably.

Feeding Grain and Hay

At the time the calf is changed from whole milk to skim milk it will begin to eat grain. The best way to get the calf started eating grain is by placing a little grain in its mouth after it has consumed its milk. It will like the taste of grain, and will soon eat without assistance if the grain is placed within its reach. Some feeders practice the feeding of grain with the milk. This is a serious mistake, especially if the grain consists of corn or other starchy feed. Such feed as corn must be acted upon by the saliva of the mouth in order to insure its proper digestion. When the grain is fed with the milk the calf simply gulps it down and does not masticate it in the least. In such cases indigestion often follows. When the calf once begins to eat grain readily, only such an amount should be given it as will be cleaned up at each meal. Here again the appetite of the calf is the best guide as to the amount of grain to feed. Usually the calf will not eat over a half pound of grain per day for the first two months. From this time until it is six months old a pound of grain per day will be sufficient.

Skim milk is deficient in fat, and in supplementing it one must make good this deficiency. Grains which contain a high percentage of carbohydrates may be substituted for the

Galloway CHALLENGES THE WORLD ON CREAM SEPARATORS

I want t see a bet ter separato --a closer skimmer, a more modern, easier and cheaper operating --a cheaper one in price—tha my famous Gallowa Sanitary. IT CAN'T B FOUND--and this is backed by several HUNDRED THOUSAND satisfied owners of Masterpiece Separators

Get These Facts

Galloway Separators are MADE RIGHT, WORK RIGHT, SOLD RIGHT. My big factories working to the limit with big outpu means lowest manufacturing cost. SOL DIRECT FROM FACTORY TO YOU mean low selling cost. Both combined mean lowest prices to you, easiest terms if you want them.

90 Days Trial

On your own farm, so you can test close skimming, easy operation; test the many improvements and exclusive features on thi Masterpiece Separator. After this test th separator is yours if it comes up to all claim and mine if it doesn't.

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terms, etc., today. It will mean a bi saving, Separator Satisfaction, at price you can't duplicate.

$4.25 down. Balance on easy terms.

I WILL GIVE TO YOU

An aluminum milk pail filled with aluminum (as shown in picture) as extra value if you buy my separator. It's a special advertising, friend-making offer, to introduce Galloway Separators, in every community. Write today for special offer.

Engines Manure Spreaders and Other Farm & Home Merchandise at Bargain Prices During My 90 Day Sale

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Better Pumps for 50 years

THAT'S why MYERS builds nearly three pumps a minute during working hours. People know that if it's a MYERS pump **it's right**—sure to give complete satisfaction.

MYERS pumps embody exclusive features, developed through long experience in building pumps for all conditions of service. Wherever you live, there's a MYERS dealer near you. He's a pump specialist and can help you choose exactly the pump you need.

The MYERS Line also includes Hay Tools and Door Hangers.

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(25)

MYERS HONOR-BILT PUMPS

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PUMPS FOR EVERY PURPOSE HAY TOOLS & DOOR HANGERS
FIG. 1980

BOLENS POWER HO

AND LAWN MOWER TRACTOR

It seeds, it cultivates, it mows the lawn. It supplies power for operating light machinery.

The BOLENS has a patented arched axle for clearance and a tool control for accurate guidance in close weeding and cultivatting. A differential drive makes turning ea All attachments have snap hitches and are in stantly interchangeble. A boy will run it wi delight. **Send for full particulars.**

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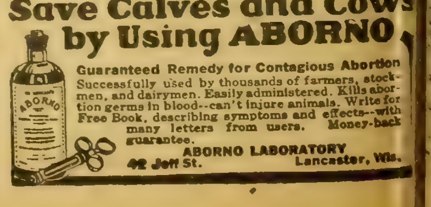
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Successfully used by thousands of farmers, stockmen, and dairymen. Easily administered. Kills abortion germs in blood--can't injure animals. Write for Free Book, describing symptoms and effects--with many letters from users. Money-back guarantee.

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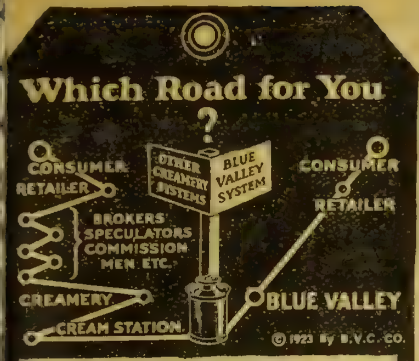

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"We have been absolutely satisfied in every way."—Mrs. A. Larson, So. Boardman, Michigan.

Thousands of B.V. B's (Blue Valley Boosters) will tell you it pays to ship your cream yourself direct to Blue Valley.

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Write for shipping tags and prices, or

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BLUE VALLEY CREAMERY CO.

Ship to Blue Valley Creamery in City nearest you:

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BLUE VALLEY BUTTER is good butter

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HEAVES Use 2 large cans. Cost $2.50. Money back if not satisfactory. One can at $1.25 often sufficient. NEWTON'S Compound for Worm Expelling, Conditioning, Heaves, Indigestion, Distemper, Coughs. 65c and $1.25 cans. At dealers or post-paid. The NEWTON REMEDY CO., Toledo, Ohio

Whose Team is This?

This picture was submitted in the Walsh No-Buckle Harness Photo Contest but no name was attached. Prize money awaits the owner of the team. Who is he?

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I send my Walsh No-Buckle Harness to use on your own team 30 days free. See for yourself why this harness with no buckles to tear, no rings to wear, and no buckle holes to weaken straps, is three times stronger, better looking, handier than any other. Amazing success. Thousands in use in every state over nine years.

Costs Less — Wears Longer

Saves repairs. Walsh "Special Test" Leather, tanned by special six-months' bark-tan process, explained in big, free book. Easily adjusted to fit any size horse. Made in all styles; Back Pad, Side Backer, Breechingless, etc.

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betterfat. Corn contains a high per cent of this material, and on account of its low cost in the corn belt it is the logical grain to feed with skim milk. Many farmers and dairymen make the mistake of feeding linseed oil meal with skim milk, as the only grain or concentrate fed. This mistake is made on account of the idea that some have regarding the composition of oil meal. Many assume that oil meal contains a high per cent of oil, which will replace the fat that has been taken out of the milk. Linseed oil meal is valuable for feeding on account of the high content of protein. It does not contain a very high per cent of oil. Oil meal may be fed in connection with corn, but this is not necessary, and it is very expensive. The corn has invariably given the best results as a supplement to skim milk. When teaching the calf to eat grain it is better to use ground corn, as the calf get a little older shelled corn may be fed.

Hay should be kept before the calf after it is two weeks old. At this age the calf will begin to nibble at the hay, and will soon consume quite a little of it. The eating of hay should be encouraged by keeping nice clean, bright hay within the reach of the calf at all times. For calves under two months of age, mixed or timothy hay is better than alfalfa or clover. The latter are usually too laxative and have a tendency to produce scours. After the calf is two or three months old it will do much better on alfalfa and will eat a great deal more of it than of the mixed hays. If alfalfa can not be had at this time, good clover or cowpea hay should be fed. If the calf is on pasture it will not be necessary to feed any hay.

The Calf Needs Water

Clean, fresh water should be provided at all times. Many feeders assume that the calf does not need water on account of drinking milk. It will consume a large amount of water even after drinking fifteen or twenty pounds of skim milk per day.

Calf Scours

The most common disease of the young calf is indigestion, or scours. Naturally the digestive system of the young calf is weak and is very easily upset. The old adage, "An ounce of prevention is worth a pound of cure," is very applicable here.

There are two kinds of scours that commonly affect the young calf—white scours, sometimes called calf cholera, and common scours, caused from indigestion. The white scours is a contagious form, and if the calf becomes affected at all it is within a few days after birth. The remedy for this disease is a preventative one, and the best way to insure against it is to keep the stalls and pens clean. Stalls used for calving purposes should be cleaned and disinfected after each calf is born. Additional precaution should be taken by tying a string around the navel cord of the young calf immediately after it is born, and applying some good disinfectant to the exposed parts.

The common scours, or indigestion, may usually be traced to faulty methods in feeding the young calf. The principal causes are as follows: overfeeding, feeding cold milk, irregular feeding, feeding alfalfa or other highly nitrogenous hay to the young calf, using dirty pails, and dirty stables.

Many cases of ordinary scours or indigestion are caused by the calf lying on the cold cement or damp cold bedding in the stall. The same effect is noticed when calves are turned out in the lot or pasture early in the spring before the ground is warm. They lie on the cold ground, their stomachs get cold, and scours inevitably result.

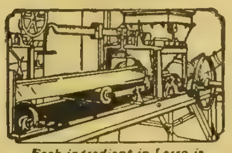
The first sign of indigestion or scours among calves is usually the characteristic foul-smelling dung. When a calf shows the first signs of scours the milk should be reduced one-half or more, and then gradually increased again as the calf improves. This method of treatment is usually sufficient to check a mild case. There have been many remedies suggested for treatment of the scours, and all are used with more or less success. The feeding of dried blood to calves has proved very effective. This may be fed by edding about a teaspoonful of soluble dried

(Continued on Page 26)

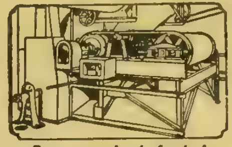
No Chance for Human Carelessness in Making—

Larro

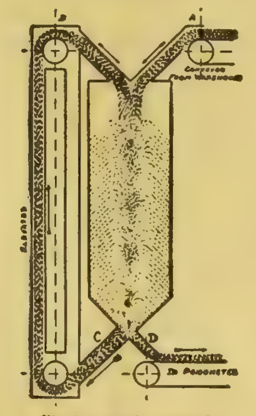
The Safe Ration for Dairy Cows



Each ingredient in Larro is continuously and accurately weighed as it flows through these poidometers to the mixer. All poidometers are driven by a single shaft. If one stops, they all stop.



Every pound of finished Larro passes over this big electro-magnet. It keeps Larro free from nails, wire and "tramp iron."



Warehouse and tank standardizing of each separate ingredient are exclusive features. This diagram of one of 14 blending tanks shows how it combines many different carloads of the same ingredient into one uniform blend of unvarying quality.

Human mistakes in making dairy feed are paid for, dearly, by the man who feeds cows.

Right there is where Larro offers you a tremendous saving. For Larro is made where they take no chance on human carelessness.

After being inspected, analyzed and approved by the chemists, each ingredient is standardized by blending to insure an absolute uniformity. These standardized ingredients flow continuously to the mixer through super-human machines called "poidometers" which weigh (not measure) the proportions with a most uncanny accuracy.

From the mixer the feed goes to the Jumbo Electric Magnet which removes all nails, tacks and wire from the finished Larro.

The Larro Mill is a great machine that never tires or forgets. If something goes wrong the mill automatically stops until that thing is made right. It can't work at all unless it works the right way.

The Larro Mill at Toledo, Ohio, is open to visitors all day every working day—no permits or letters of introduction necessary.

Feed Larro for the biggest profit, for safety, for healthy cows—and keep for yourself the money you may now be paying for some one else's carelessness.

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THE READY RATION
FOR DAIRY COWS
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Throws And Blows Saves One Man.

THOUSANDS of farmers agree that the Papec is the biggest value in ensilage cutters—simple, rugged, long-lived. Fills the highest silo without plugging the pipe. Light of draft; costs less to operate. Every part is easy to get at.

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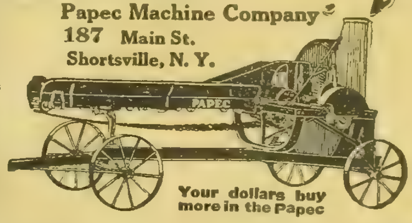

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45,000 PURE BRED BREEDERS. 15 varieties. Best laying strains. Incubate 25,000 eggs daily. Catalog Free. Prewar prices. Free live delivery.
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Learn How to Heal It FREE

Ruptured people all over the country are amazed at the almost miraculous results of a simple Home System for rupture that is being sent free to all who write for it. This remarkable invention is one of the greatest blessings ever offered to ruptured persons, and is being pronounced the most successful Method ever discovered. It brings instant and permanent relief and does away with the wearing of trusses forever.

Thousands of persons who formerly suffered the tortures of old-fashioned steel and spring trusses are now rejoicing in their freedom from the danger and discomfort of rupture after a brief use of this remarkable System. There is nothing like it anywhere and hosts of ruptured persons are astounded at the ease with which their ruptures are controlled.

For a limited time only, free trial treatments of this Muscle Strengthening Preparation are being mailed to all who apply. It is an original painless Method. No operation, no danger, no risk, no absence from daily duties or pleasures. Send no money; simply write your name and address plainly and the free treatment with full information will be mailed you in sealed package.

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This brooder raises more and better chicks at lowest cost. Stove is sturdy, safe, air-tight, self-regulating—best in world to hold fire. Burns soft coal—cheapest brooder fuel—perfectly. Also hard coal, wood, etc. Automatic regulator maintains uniform heat night and day. Canopy spreads heat evenly over chicks; gives pure air, ample room. 500 and 1,000 chick sizes. Guaranteed. Lowest prices. Express prepaid E. of Rockies. FREE—$3.00 stove pipe outfit sent free with brooder if you order NOW.

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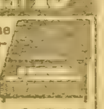
Both Machines Made of California Redwood

Freight Paid east of the Rockies, Hot water, copper tanks—double walls—dead air space—double glass doors—a real bargain at $13.25. Shipped complete, set up ready to use.



140 Egg Incubator and Brooder	$17.75
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Made of California Redwood—last a lifetime. Positively the best value on the market today. Order the size you want direct from this ad. 30 days trial—money back if not pleased. If not ready to order now, don't buy until you get our new 1923 catalog. (3)

WISCONSIN INCUBATOR CO. Dept. 138 Racine Wis.

CHICKS Strong. Healthy. From Heavy Layers. S. C. Tom Barron Eng. White Leghorns, $12.00 per 100. Barred Rocks and S. C. R. I. Reds $13.00. White Wyandottes $16.00. Assorted chicks $10.00. Order direct from this ad. Reference First National Bank.
BLISSFIELD HATCHERY, Blissfield, Michigan.

BABY CHICKS AND HATCHING EGGS, S. C. White Leghorns, Barron Strain, America's greatest layers, from our own breeding pens, chicks $15, eggs $5.50 per hundred. Barred Rocks and R. I. Reds, Chicks $16, eggs $6.50 per hundred. 100% live arrival guaranteed, prepaid. 10% down balance 10 days before shipment.
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Whittaker's Red Chicks and Eggs for Hatching. Rose and Single Combs. Bred from Fourteen Generations of Winter Layers. Write for Free Catalog of Michigan's Greatest Color and Egg Strain. Interlakes Farm, Box 4, Lawrence, Mich.

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BEFORE BUYING ELSEWHERE GET OUR prices on White and Brown Leghorns and White Rocks. Prepaid Parcelpost. Satisfaction Guaranteed.
De Koster's Hatchery, Box B, Zeeland, Mich.

BABY CHICKS BARRON S. C. W. LEGhorns. Special low prices. 100% alive delivery guaranteed. Write for price list. HENRY WATERWAY, R4, Holland, Mich.

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The Old Reliable Has proven itself year after year the one sure way to rid poultry [illegible] body lice and such vermin. Paint or spray [illegible] Get it of [illegible] for particulars and valuable [illegible] Omaha, Nebr.

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GERMOZONE, for [illegible] years the reliable remedy, will rid them of Roup, Colds, Bowel Trouble, etc., and keep them healthy. "A wonder worker." Used by hundreds of thousands. Get it at drug or seed store, or order of us by card—[illegible] and $1.50 sizes, delivered. Postman will collect. No extra charge. Order today.

GEO. H. LEE CO. Omaha, Nebr

blood to the milk and stirring it in well. Dried blood not only acts as a tonic, but often is fed along with milk at each feed on account of its feeding value as well as its value as preventative treatment against the scours. A fresh egg given to the calf when the scours is first noticed often checks the attack. Castor oil is also used with good results. Two tablespoonfuls is sufficient for a dose. This may be given as a drench with milk.

Feeding After Weaning

After the calf is weaned from milk the grain ration should be somewhat changed. The object in forming a grain ration for any growing animal is to feed it bone and muscle-forming feeds. The grain ration at this time will depend upon the kind of roughage fed. If alfalfa is used the calves will do well on a ration of corn alone, or corn and oats mixed, or corn and bran. If mixed or timothy hay, cane or corn fodder is fed, the grain ration should be changed some what. More nitrogenous foods, such as bran, linseed oil meal and cottonseed oil meal should make up the grain ration. If the calves are stunted by lack of proper food at this time they will usually develop in undersized cows. During the pasture season calves under a year old will make a more satisfactory growth if fed a grain ration while on grass. Yearlings and two year olds will make satisfactory development on a good pasture where a liberal amount of clovers abound

Young heifers should not be allowed to become too fat, they should be kept growing at all times, but a heifer that gets too fat before she is bred usually does not develop properly. After the heifer is bred she may be allowed to put some flesh on, particularly during the two or three months just before calving.

Exercise is a very important factor in the development of the young heifer. They should spend the greater part of their time in the open after they become a year old. Many dairymen follow the practice of keeping their milk cows either in the barn or in small lots all the time, but this practice does not give best results with the growing heifers.

Age of Breeding

The age to breed the heifer will depend first upon the breed and second upon her development. Jersey, Guernsey, or other early maturing breeds should be bred to calve about twenty-four months of age if fully developed. Heifers belonging to the Holstein, Ayrshire, or other late maturing breeds should have their first calves at about twenty-six to twenty-eight months of age. It is a better practice to have heifers calve early rather than late. The heifers calving early usually develop into more typy individuals, late calving tends to produce coarser animals that are particularly full or coarse over the shoulders and they usually retain this heaviness through out their life.

TEMPORARY SUMMER PASTURE FOR COWS

I will not have much pasture for my five milch cows during the coming summer except ten acres of marsh and would like your advice as to what to sow for green feed. I also have several geese and there seems to be very little grass in the yard and no clover field. I am wondering what I would plant in a poultry yard containing about one-half acre so that the goslings would have green feed. Would oats and rye be all right?—O. W. N., Milford, Mich.

—Sudan grass makes one of the best temporary summer pastures for cows as well as for horses. Would recommend seeding twenty-five pounds of Sudan grass on a well prepared corn soil about the middle of May. This should provide pasture by the 20th of June, and if pastured judiciously will pasture untill killed by frost in the fall.

Oats may be used as a pasture for geese. However, the oats will become woody and unpalatable. If the Sudan is not allowed to become tall and coarse, it will provide excellent pasture for the geese.—C. R. Megree, Associate Prof. of Farm Crops, M. A. C.

POULTRY BREEDERS' DIRECTORY

Advertisements inserted under this heading at 30c per agate line, per issue. Commercial Baby Chick advertisements 45c per agate line. Write out what you have to offer and send it in. We will put it in type, send proof and quote rates by return mail. Address The Michigan Business Farmer, Advertising Department, Mt. Clemens, Michigan.

High Grade, Utility Cockerels For Sale—April hatched—White Wyandottes, Barred Rocks and White Leghorns. C. W. Heimbach, Big Rapids, R. 5, Michigan.

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Single Comb Rhode Island Whites. Winners At Holland Show hundred birds competing of first old pen and three other firsts. Eggs $2 per 15. Write John A. Hartgerink, Zeeland, Michgian.

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Full Blood White China Geese Two Years Old. Large size. $5.00 each or $13.00 a trio. Mrs. Claude Mills, Stockbridge, Mich.

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RHODE ISLAND REDS TOMPKINS STRAIN to make room for young stock. I will sell after November 1, 1923, 50 2 year old hens at $2.00 each; 25 1 years old hens at $3.00 each; cockerels at $2.50 and up. All these cockerels are from my best 3 year old hens that layed 205 eggs or better in their pullet year. Quality breeder of Rhode Island Reds. WM. H. FROHM, New Baltimore, Mich., R. 1.

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WHITE WYANDOTTES. REGAL STRIAN. Eggs for hatching, $1.50 per 15; $7.00 per 100. F. W. ROBERTS, Salem, Michigan.

PURE BRED W. WANDOTTE HATCHING Eggs, Fishel's heavy laying strain. $7.00 per 100; $4.00 for 50 or $2.00 for 15. Mrs. Tracy Rush, 104 Grover Ave., Alma, Mich.

BARRED ROCKS

Hatching Eggs. Barred Rock, Aristocrats and Fishel White Wyandottes. 100-$5.50; 50-$3.00; 15-$1.25. Joseph Amster, Paw Paw, Michigan.

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A FEW CHOICE PURE BRED GIANT BRONZE Turkeys for sale. G. H. HOLSTED, Weidman, Michigan, R1.

MICHIANG'S BEST GIANT BRONZE TOMS for sale. Large beautifully marked birds. Price reasonable. Write MARY A JOYNT, Omena, Mich.

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MAMMOTH BRONZE TURKEYS, LARGE beautiful birds. Write for prices. MRS. BEN JOHNSTON, Onaway, Mich., R. 1.

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White Holland Turkeys ALDEN WHITCOMB, Byron Center, Michigan.

MAMMOTH WHITE HOLLAND TURKEYS. Tom 2 years old $8.00; young tom $7.00; 8 hens 2 years old $6.00 apiece. FRANK VONDROSEK, Sherman, Michigan.

BOURBON RED TURKEY EGGS, 50c EACH Postpaid, from winners at Michigan State Fair and Grand Rapids Exposition. THOS. G. CALLAGHAN, Fenton, Michigan.

BOURBON RED TURKEYS? YES; WE HAVE some good ones. Write for prices. R. W. ROBOTHAM, Hesperia, Michigan.

PURE BRED GIANT STRAIN BOURBON Red Turkeys. MRS RENA MEEK, Belmont, Michigan.

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QUALITY CHICKS

Our chicks are special quality. Our heavy home trade which takes most of our chicks indicates the worth of our stock. Those who know us best are our best customers. Pure bred stock carefully developed. 100% live delivery guaranteed. Order today. Catalog on request. Get acquainted

Prices Parcel Post Prepaid on	50	100	500
White, Brown and Buff Leghorns, Anconas	$7.00	$13.00	$62.50
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Day old chicks from strong, vigorous flocks which have been carefully culled and extra selected standard male birds—Barred Rocks, R. I. Reds and White Leghorns. We guarantee 100% safe arrival. Write us for price list and circular.

BRECKENRIDGE HATCHERY,
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SELECTED BARRED ROCK AND WHITE Wyandotte cockerels from high producing stock. White Wyandotte chicks for April $18 per 100. Barred Rock chicks for April $16 per 100. White Leghorn chicks for April $15 per 100. Order now. C. W. HEIMBACH, R. 5, Big Rapids, Mich.

White Diarrhea

Remarkable Experience of Mrs. C. M. Bradshaw in Preventing White Diarrhea

The following letter will no doubt be of utmost interest to poultry raisers who have had serious losses from White Diarrhea. We will let Mrs. Bradshaw tell of her experience in her own words:

"Gentlemen: I see reports of so many losing their little chicks with White Diarrhea, so thought I would tell my experience. I used to lose a great many from this cause, tried many remedies and was about discouraged. As a last resort I sent to the Walker Remedy Co., Dept. 680, Waterloo, Iowa, for their Walko White Diarrhea Remedy. I used two 50c packages, raised 300 White Wyandottes and never lost one or had one sick after giving the medicine and my chickens are larger and healthier than ever before. I have found this company thoroughly reliable and always get the remedy by return mail.—Mrs. C. M. Bradshaw, Beaconsfield, Iowa."

Cause of White Diarrhea

White Diarrhea is caused by the Bacillus Bacterium Pullorum. This germ is transmitted to the baby chick through the yolk of the newly hatched egg. Readers are warned to beware of White Diarrhea. Don't wait until it kills half your chicks. Take the "stitch in time that saves nine." Remember, there is scarcely a hatch without some infected chicks. Don't let these few infect your entire flock. Prevent it. Give Walko in all drinking water for the first two weeks and you won't lose one chick where you lost hundreds before. These letters prove it:

Never Lost a Single Chick

Mrs. L. L. Tam, Burnetts Creek, Ind., writes: "I have lost my share of chicks from White Diarrhea. Finally I sent for two packages of Walko. I raised over 500 chicks and I never lost a single chick from White Diarrhea. Walko not only prevents White Diarrhea, but it gives the chicks strength and vigor; they develop quicker and feather earlier."

Never Lost One After First Dose

Mrs. Ethel Rhoades, Shennandoah, Iowa, writes: "My first incubator chicks, when but a few days old, began to die by the dozens with White Diarrhea. I tried different remedies and was about discouraged with the chicken business. Finally, I sent to the Walker Remedy Co., Waterloo, Iowa, for a box of their Walko White Diarrhea Remedy. It's just the only thing for this terrible disease. We raised 700 thrifty, healthy chicks and never lost a single chick after the first dose."

You Run No Risk

We will send Walko White Diarrhea Remedy entirely at our risk—postage prepaid—so you can see for yourself what a wonder-working remedy it is for White Diarrhea in baby chicks. So you can prove—as thousands have proven—that it will stop your losses and double, treble, even quadruple your profits. Send 50c for a box of Walko, or $1.00 for extra large box—give it in all drinking water for the first two weeks and watch results. You'll find you won't lose one chick where you lost hundreds before. It's a positive fact. We guarantee it. The Leavitt & Johnson National Bank, the oldest and strongest bank in Waterloo, Iowa, stands back of this guarantee. You run no risk. If you don't find it the greatest little chick saver you ever used, your money will be instantly refunded.

WALKER REMEDY CO.,
Dept. 680 Waterloo, Iowa

CHICKS WHITE LEGHORNS $12 PER 100, $6.25 for 50, and $3.25 for 25. Barred Rocks and Reds $16 per 100, $8.50 for 50, and $4.25 for 25. White Wyandottes and Rocks $17 per 100, $8.75 for 50, and $4.50 for 25. Buff Orpingtons $18 per 100, $9.25 for 50, and $4.75 for 25. $5 on each 100 chicks with order will book your order. Balance two weeks before delivery. 100% live delivery guaranteed. Reference: Bank of Mt. Morris.
Meadow Brook Hatchery, R1, Mt. Morris, Mich.

ELGIN CHICKS
Barron Strain Selected English White Leghorn Chicks. We ship all over the states. Get the good winter layers. Prices are right. Grade AA, best stock. Grade A, good layers. Prices: Grade AA chicks, 25, $4.00; 50, $7.50; 100, $14.00; 500, $67.50; 1000, $130.00. Grade A chicks, 25, $3.50; 50, $6.50; 100, $12.00; 500, $57.50; 1000, $110.00.
ELGIN HATCHERY, Box 317-A, Zeeland, Mich.

BABY CHICKS From Best Producing Free Range flocks. Highest utility quality, best for general purposes. Sent post paid 100% live delivery guaranteed. Write for catalog.
HOMER HATCHERY, Homer, Michigan.

PUREBRED BABY CHICKS, BARRED ROCKS and Rhode Island Reds $14.50 per 100. White Wyandottes and Buff orpingtons $16.00.
JOSEPH AMSTER, Paw Paw, Michigan.

BABY CHICKS FROM BRED TO LAY S. C. Buff Leghorns. First hatch March 3rd.
J. W. WEBSTER, Bath, Michigan.

BUY BABY CHICKS WITH CARE

THE buying of baby chicks is a far more important problem than most purchasers realize. Baby chicks constitute the foundation stock of the future layers and breeders and, therefore, too much care can not be exercised in deciding upon the hatchery from which to buy.

Officials of the United States Department of Agriculture have observed that practical poultry raisers and farmers are relying upon the hatcheries more and more each succeeding year as a source of supply for their new crop of chicks. In other words, each year sees fewer and fewer chicks hatched under hens and the mammoth hatcheries are taking the place, to a certain extent, of the smaller incubators which are commonly operated on the farms. It is because of the fact that farmers are buying baby chicks from the commercial hatcheries in such large numbers that the officials of the department fell the necessity for urging them to exercise great care in deciding upon where to buy this year's supply of chicks.

At the same time it should be pointed out that many farmers, perhaps the majority, will still find it more economical to do their own hatching. This is especially the case where the farm flock is of good standard quality and has been bred for egg production. A farmer hatching his own chicks knows the quality of chicks he can expect.

The commerical hatchery business has developed to a very remarkable extent in the United States in the last two years. Some of the hatchery men have estimated that practically double the number of baby chicks will be hatched in mammoth hatcheries this year compared with last. There is a great increase in the number of hatcheries, each varying in capacity from a few thousand to several hundred thousand chicks.

The question of importance to a purchaser of baby chicks is the source of supply of eggs for the hatcheries. Many of the hatcheries have their business well organized and are able to guarantee the quality of the chicks. Some of the hatcheries, however, are not so particular where they purchase the eggs they use and are not able to guarantee high-quality chicks.

Purchasers of baby chicks would be well advised, officials of the department say, to make sure of purchasing from a reliable hatchery. Only purebred chicks should be bought and in addition to this, the purchaser should insist upon a satisfactory statement from the hatchery man as to the quality of eggs used. Were the eggs from a standard-bred flock with trap-nest records and was the flock in good breeding condition? Purchase baby chicks with great care. It is better to pay a few cents more for good quality chicks than can be guaranteed.

FIRST CARE OF BABY CHICKS

THIS is the season of the year when arrangements must be made to raise chicks to replenish the poultry flocks. Pullets are the most profitable part of the laying flock and a well-balanced laying flock should consist of at least half pullets; which allows careful culling of the hens during the summer and fall before the pullets are matured, according to the United States Department of Agriculture.

Baby chicks need especially careful attention in breeding and feeding during the first weeks of their lives, which should be followed by careful and regular attention throughout their growing period. Early hatched chicks are by far the most profitable whether grown to maturity for laying or sold as poultry flesh.

The brooder house and stove heater which are used for caring for the chicks during the first few weeks of their lives, must be in working order before the chicks arrive. The most common style of brooding is the use of a stove brooder in a colony house, keeping from 350 to 500 chicks in a flock in each house, and placing the houses about 150 feet apart on a good grass range. A house 10x14 feet makes a suitable colony house which can be readily moved if built on runners. Chicks brooded in the winter will do better in a larger house, about 10x20, partitioned so that one side is used for a brooder stove and the other for

(Continued on Page 28)

Raise all the Chicks You Hatch

Raise them the PAN-A-CE-A way.

Start them right—keep them growing right along without any backset.

PAN-A-CE-A gives chicks good appetite and good digestion—helps them develop rapidly—gives them vigor to resist disease.

PAN-A-CE-A prevents fermentation of the food; fermentation is where most of the bowel troubles start.

PAN-A-CE-A is a gentle tonic to all the little-chick organs—keeps the system in order.

PAN-A-CE-A contains the Salts of Iron, so essential to early chick life, and during the rapid growth of feathers.

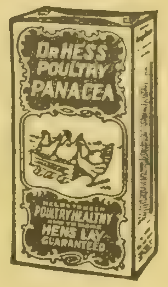
PAN-A-CE-A prevents and cures gapes, indigestion, diarrhea and leg weakness.

PAN-A-CE-A your chicks and then watch them feather! A Pan-a-ce-a chick will outfeather a non-Pan-a-ce-a chick every time.

Tell your dealer how many hens you have. There's a right-size package for every flock.
100 hens, the 12-lb. pkg. 200 hens, the 25-lb. pail
60 hens, the 5-lb. pkg. 500 hens, the 100-lb. drum
For fewer hens, there is a smaller package.

GUARANTEED

DR. HESS & CLARK Ashland, O.



I spent 30 years in perfecting Pan-a-ce-a
GILBERT HESS
M.D., D.V.S.

Dr Hess Instant Louse Killer Kills Lice

We can save you money on
Ancona and White Leghorn Chicks
Send at once for catalog and prices. We insure your chicks for one week.
M. D. WYNGARDEN
Route 4, Box 81 Zeeland, Mich

BABION'S QUALITY CHICKS

Varieties Prepaid prices on	25	50	100	500	1000
Pure English White, Brown and Buff Leghorns	$4.00	$7.00	$13.00	$62.00	$120.00
Barred Rocks, Reds, Anconas	4.25	8.00	15.00	72.00	140.00
Wh. and Buff Rocks, Wh. Wyandottes, Minorcas	4.75	9.00	17.00	82.00	160.00
Sil. Wyandottes, Orpingtons	5.50	10.00	19.00	92.00	180.00

Prices quoted are for chicks hatched from OUR GOOD UTILITY FLOCKS. Chicks from OUR EXTRA SELECTED FLOCKS will be $3.00 per 100 higher and Chicks from our Fancy Stock of BLUE RIBBON PENS will be $5.00 per 100 higher. Postpaid. 100% live delivery guaranteed. Bank references. You cannot go wrong. Order from this ad. Thousands satisfied. Ten years' experience. Our Slogan, the best chicks are cheapest, not the cheapest chicks best.
BABION'S FRUIT AND POULTRY FARMS, Flint, Michigan.

LARGE, HUSKY CHICKS

WINSTROM POULTRY FARMS and HATCHERY

Purebred, high quality chicks from certified, tested flocks on free range.

Varieties Prices on	25	50	100	500	1000
S. C. White and Brown Leghorns	$3.50	$6.75	$13.00	$62.50	$120.00
Anconas	3.75	7.25	14.00	67.50	130.00
Barred Rocks, R. I. Reds	4.50	8.50	16.00	77.50	150.00
Assorted Chicks	2.75	5.50	10.00	50.00	------

Extra Select Stock $2.00 per 100 higher. Well hatched in modern machines. Each order carefully packed under our personal attention. Postpaid. 100% live delivery. Bank reference. 1924 catalog ready.
Winstrom Poultry Farm and Hatchery, Box A-5, Zeeland, Mich.

Certified White Leghorn CHICKS

HOLLYWOOD MATED
$15 per 100
Sired by Hollywood males whose dams had egg records of 260 to 290. Stock certified by Michigan Baby Chick Ass'n.
Rural Strain, Barron Bred—$13
Anconas. Barred Rocks. Send for catalog.
RURAL POULTRY FARM
Box 110. Zeeland, Michigan.

BABY CHICKS Our Own Breeding flock of large type American White Leghorns. Laying and standard qualities combined. 13 years experience in breeding, hatching and marketing. Also high quality Barred Rocks and R. I. Reds. All flocks culled and inspected. Modern hatching plant, 2 hatches weekly. Quality chicks at commercial prices. Write for prices and circular.
DEAN Egg Farm & Hatchery, Big Beaver
Mail address Birminghan Mich., R-4

CERTIFIED CHICKS at popular prices.
We won 1st and 4th prize this year on English strain White Leghorn hen at the National Poultry Show, Chicago. Also 1st at Zeeland Poultry Show. Other breeds have had same careful supervision in developing and breeding. Purebred stock carefully culled. 100% live arrival guaranteed. Our chicks are money makers and will improve your flock. Write for catalog and prices. A trial will convince you. All flocks certified.
American Chick Farm, Box 115-B, Zeeland, Mich.

HIGHEST QUALITY CERTIFIED BABY CHICKS
FROM

VAN APPLEDORN BROS. BABY CHICKS SINCE 1904 MICHIGAN'S OLD RELIABLE HATCHERY HOLLAND, MICHIGAN

Michigan's Old Reliable Hatchery the best equipped and most modern Hatchery in the State.

Pure Bred Tom Barron English and American White Leghorns, Anconas, Barred Plymouth Rocks and Rhode Island Reds. Strong, Well-hatched Chicks from tested Hoganized Free-range stock that make wonderful winter layers.

Chicks sent by Insured Parcel Post prepaid to your door. 100% live delivery guaranteed. Sixteen years of experience in producing and shipping Chicks giving absolute satisfaction to thousands. Write for valuable illustrated free catalog and price list. Get lowest price on best quality Chicks before placing your order.

HOLLAND HATCHERY & POULTRY FARM, R. 7, Holland, Mich.

Great Northern Hatchery. Pure Bred Selected Flocks
100 Per Cent Live Delivery

Strong sturdy northern grown Chicks. Selected, pure bred stock. Healthy flocks on free range insure strength in every Chick. Order from this Ad.

Varieties Prices on	50	100	300	500	1000
Leghorns (S. C. White and Brown)	$7.00	$13.00	$38.00	$62.00	$120.00
Barred Rocks	8.00	15.00	43.00	72.00	140.00
White Rocks	9.50	18.00	53.00	85.00	165.00
Mixed Broiler Chicks	$10 per 100 straight				

Hatched under best conditions in Newton incubators. Every Chick carefully inspected. 100% live delivery guaranteed. Reference State Commercial Savings Bank, this city. Write for prices on special matings. **GREAT NORTHERN HATCHERY, Box 50, Zeeland, Michigan.**

HUNDERMAN'S FIRST-CLASS CHICKS $10 and UP

We are heavy producers of first-class Chicks. Flocks on free range. Culled by expert. 100% Live Delivery Guaranteed. Order today from this Ad and get Chicks when you want them.

Prices postpaid on	25	50	100	500	1000
English S. C. White Leghorns	$3.50	$6.50	$12.00	$57.50	$115.00
Barred Rocks, S. C. R. I. Reds	4.00	8.00	15.00	70.00	140.00
Odds and Ends	......	5.50	10.00	50.00	....

Blue Hen Incubators. Reference: Zeeland State Bank. Order today. You take no chances. Catalog Free.
HUNDERMAN BROS.' POULTRY FARM, Box 30, Zeeland, Michigan.

FREE CHICK OFFER

CHIX

Our Tom Barron Strain White Leghorns pay big dividends. We breed and hatch only one kind—the best. Our pure-bred chicks are strong, husky and easy to raise. Get our circular and FREE CHICK OFFER before buying eggs, chicks or breeding stock. It will surely pay you.

Progressive Poultry Farm,
P. VER HAGE, Mgr. Zeeland, Mich

SELECT STOCK

at commercial prices so why take others. We have bred the Barron strain S. C. W. Leghorns for 8 years and kept improving all the time. Our foundation stock from M. A. C. from pedigreed stock with egg records up to 279. We have customers from the northern part of the state that are getting from 60 to 70% egg production for the winter months. We also hatch the famous Sheppard Anconas and Barred Rocks. Write for our catalogue and order early so you can get them when you want them.

Byron Center Poultry Farm and Hatchery
G. C. KEISER, Byron Center, Michigan.

ROYAL EGG-BRED CHICKS

200 Egg Strain S. C. English White Leghorns and Brown Leghorns. Our pen of White Leghorns to 1st prize (best W. Leghorn pen in the show) production class, in the largest utility show in the [illegible] held at Zeeland, Michigan, Dec. 28. Prof. Foreman of M. A. C. judging. 12 years of careful breeding for high egg-production, combined with 8 years of highly successful hatchery methods gives you chicks that grow into money makers. 100% live delivery guaranteed. Write for free catalog and prices.

ROYAL HATCHERY & FARMS
S. P. Wiersma, Zeeland, Michigan, R. R. 2.

Chicks With Pep

Try our lively and vigorous chicks from bred-to-lay and exhibition hens. They will make you money for they have the quality and egg laying habit bred into them. A trial will convince you. All leading varieties. Safe delivery. Prepaid. Prices right. Bank reference. Big illustrated catalog free.
Holgate Chick Hatchery, Dept. B, Holgate, Ohio.

LOOK! 100,000 CHIX. BEST PUREBRED. M. A. C. method tested stock. Can ship at once. Barred Rocks or Reds, Black Minorcas 15c; White, Brown or Buff Leghorns 13c; Sheppards best Anconas 14c; Orpingtons 16½c; Black Langhans 18c; Large Brahmas 20c. Heavy broilers Chix 12c. Mixed spotted Chix 10c. Hatching eggs. Add 30c extra if less than 100 ordered. Catalog tells about our extra selected stock. Good bank reference. **Beckmann Hatchery, 26 Lyon, Grand Rapids, Michigan.**

For Asthma During Winter

A Remarkable Method That Has Come to the Rescue of Asthmatics and Checks the Worst Attacks— Send Today for Free Trial

If you suffer with those terrible attacks of Asthma when it is cold and damp; if you choke as if each gasp of breath was the very last, don't fail to send at once to the Frontier Asthma Co. for a free trial of their remarkable method. No matter where you live or whether you have any faith in any remedy under the Sun, send for the free trial. If you have suffered for a lifetime and tried what you thought was the best skill known to cope with the most terrible attacks of Asthma, if you are discouraged beyond hope, send for this free trial.

It is the only way you can ever know what progress is doing for you in spite of all your past disappointments in your search for freedom from Asthma. So send for this free trial. Do it now. This notice is published that every sufferer may participate in this progressive method and first try the treatment free that is now known to thousands as the greatest boon that ever came into their lives. Send coupon today. Don't wait.

FREE TRIAL COUPON
FRONTIER ASTHMA CO., Room 590 B
Niagara and Hudson Sts.,
Buffalo, N. Y.

Send free trial of your method to:

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Pure Bred Baby Chicks

We have been carefully developing our flocks for eight years. Every chick pure bred and from stock carefully culled, for type and production. Our chicks give satisfaction. Order today and get chicks when you want them.

Prices on	50	100	500
W. Leghorns	$7.00	$13.00	$62.00
B. Rocks, R. I. Reds	8.00	15.00	72.00
W. Wyandottes, W. Rocks	8.50	16.00	77.00

Postpaid. 100% live delivery. You take no chances. Ref. Farmers & Mechanics Bank, this city. No Catalog. Order from this ad.
WASHTENAW HATCHERY
Geddes Rd. Ann Arbor, Mich.

Quality Chicks at Reasonable Prices

Pine Bay Farm

English White Leghorns, Parks' Strain Barred Rocks, S. C. Black Minorcas, Reds and Anconas. My pen (16) at the 1923 Mich. Contest finished third among all heavy breeds, four hens making records over 200 eggs each, and one with a record of 254 eggs was seventh highest individual for the entire contest, 990 birds competing. Catalog free.
PINE BAY POULTRY FARM,
Holland, Michigan.

FREE CHICKS
In Contest
Many Breeds
Every One a Winner
Pure Breed Practical Poultry

D. W. Young American type Leghorns, also English type. You will be interested in the egg records our customers report.
Send for our descriptive matter and price list.
COCKERELS—A few Barred Rocks.
STATE FARMS ASSOCIATION
Masonic Temple, Kalamazoo, Mich.
(Member International Baby Chick Association)

Strong, Healthy Chicks

Hatched in the latest improved Mammoth Incubator. English S. C. W. Leghorns, S. C. Anconas, Barred Rocks, R. I. Reds from heavy laying free range organized flocks. 100% alive. Parcel Post paid. Send for catalog. Reference.
Timmers Hatchery, R3, Box M, Holland, Mich.

CHICKS: HOGAN TESTED GUARANTEED
Our Chicks are from flocks on free range. They will live and grow and make a profit. ENGLISH WHITE LEGHORNS and BROWN LEGHORNS. Heavy laying Extra Good BARRED ROCKS. Postpaid to your door and full live delivery guaranteed. Our flocks are carefully supervised and Hogan tested. Bank Reference furnished. Write for prices and descriptive matter.
HILLVIEW HATCHERY, C. Boven, Prop.
Box H. R. R. 12, Holland, Mich.

S. C. White Leghorn

Chicks, Wishbone Hatched, from Demonstration Farm Flock, culled under the supervision of the Poultry Dept. of Michigan Agricultural College, mated with males from the same stock that produced the winners of second place at the Michigan Egg Laying Contest, 1923. Price $15 per 100, $8 for 50, $4 for 25. Safe delivery guaranteed. A 25% deposit books your order for April or May delivery. Ref. Hudson State Savings Bank, Hudson, Mich.
RALPH S. TOTTEN, Pittsford, Michigan.

CHICKS FROM LARGE SINGLE COMB WHITE Leghorns bred for winter egg production. Blue Ribbon winners. Winning eleven out of a possible fourteen prizes at Muskegon's Gold Medal show. Flock culled by Michigan Agricultural College expert. Farm under state supervision. Chicks from our own flocks only. 50 chicks $8.00; 100 $15.00; 500 $70.00.
C. EM. LAY EGG FARM
Francis M. Kent, R. 4, Muskegon, Michigan.

a cool exercising room. Wire netting should be placed in the corners of the brooder house to prevent the chicks huddling and crowding in the corners.

Chicks should not be fed for the first 36 to 48 hours, after which they should be supplied regularly 4 or 5 times daily with easily digested feed which contains little waste material. They should be fed sparingly until about the 5th day; then they can be put on a full ration. An excellent feed can be made of infertile eggs taken from the incubator boiled for 15 minutes, chopped and mixed with a dry mash of equal parts of cracker meal, bran and corn meal, using a sufficient amount of the grain to make a dry, crumbly mixture. Middlings can be used in place of the cracker meal. Dry rolled oats are excellent for chicks and can be used as one feed, the other two or three feeds being the commercial chick grains.

At two weeks of age the chicks can be given a dry mash, in a hopper, consisting of 4 parts, by weight, of rolled oats, 2 parts bran, 2 parts corn meal, 1 part high-grade meat scrap, 1 part middlings, and ½ part dried buttermilk. Commercial chick feed should be fed three times daily in addition to the dry mash.

Milk is an excellent feed for chicks and should be provided either as a liquid or in the dry form to secure best growth. If liquid milk is available the dried milk can be ommitted. When the chicks are one month old they should be fed a coarser or intermediate chick grain, and at about two months of age the scratch feed can be changed to equal parts of wheat and cracked corn. This should be fed two or three times a day.

PROF. FOREMAN COUNTS EGGS BEFORE THEY ARE LAID

HENS are no mystry at all to Prof. E. C. Foreman, head of the poultry husbandry department of the Michigan Agricultural College.

Prof. Foreman not only can tell how many eggs a hen has laid during the last year, but how many she probably will lay during the coming 12 months.

At poultry shows Prof. Foreman frequently astonishes experienced breeders with his accuracy in estimating the number of eggs laid in the preceeding 12 months by a given hen. Usually his estimate is within five or six of the actual number, recorded by means of a trap-nest.

"It all comes from practice," he said. "One must make observations from trap-nesting and judge accordingly. And it isn't enough to say a hen is long-headed or short-headed. One must see deep into her nature."

Prof. Foreman judges a hen's egg-laying ability from three standpoints—intensity, or the number of eggs per month; endurance, or the number of months during the year she can maintain her performance; and interruptions, due to broodiness and other causes.

Intensity of production he gauges mostly by the head. There are several distinct types of heads. Birds that are crow-headed are usually slow to mature. Some have heads overly refined and these produce weight rather than eggs. The heads of some are sluggish and coarse in appearance, indicating beef type. Such birds are similar to the beef breeds of cattle. Hens with a masculine type of head are apt to be diseased and usually do not produce any eggs. Birds with heads lacking in distinctive characteristics are not good egg producers. But those with refined, well-proportioned heads, wide-open, protruding eyes and alert expression, may be depended upon to produce the maximum number of eggs in a month.

Endurance is indicated by body conformation, which in the best hens resembles that of a dairy cow, muscular rather than fat, with a broad, flat back; long, deep, flat ribs, giving a wedge-shaped body; and a layer of flesh along the back and breast.

Broodiness usually accompanies a round skull, following the outline of the eye, and the presence of a prominent bone structure over the eye. It is natural for hens to become broody and a greater perecentage of the eggs of such hens hatch. However, they are not the hens that make world's eggs-laying records.

Wyngarden Strain WHITE LEGHORN BABY CHICKS
EGG BRED for 18 YEARS

Here's what you get when you buy Guaranteed Wyngarden Baby Chicks

(1) Pedigreed stock, sired by males whose dams had records of 260 to 289 eggs per year, and grand dams 298 to 304 eggs. (2) 100% live delivery. (3) Chicks guaranteed to be healthy. (4) Absolutely pure bred. (5) Absolutely no culls. (6) Stock that withstands winter cold as well as summer heat. (7) Free entry in our animal flock performance contest, whereby you may obtain 200 of our best Barron English White Leghorns free. We know the quality of our stock because we maintain 42 hatchery farms of our own, instead of buying eggs wherever available.

Sired by Hollywood and Funk Farm Males

White and Brown Leghorns. Anconas.

Send for our catalog and read full particulars of the Wyngarden Strain.

Wyngarden HATCHERY & FARMS ZEELAND, MICH. Box B

—Inspected and Approved
Baby Chicks
From Best Egg Laying Strains in the World

Tancred, pedigree-sired and Tom Barron, S. C. White Leghorns, S. C. & R. C. R. I. Reds, Parks' Barred Plymouth Rocks.

LAKEVIEW

Our flocks are all on free range, closely culled, inspected and approved by Michigan Baby Chick Association. Every bird is healthy, has size, type and color.

Hatched in World's Best Incubator

Our chicks are strong, sturdy and healthy. They live and grow because they are hatched in the best incubator made. 100% live delivery to your door. Illustrated catalog sent FREE.

LAKEVIEW POULTRY FARM, R 8, Box 6, Holland, Mich.

MEADOW BROOK
HENRY DePREE & SONS.
One of the Founders of the Chick Indusrty
21 Years in Business

Pure-bred stock carefully developed for years. Order from this ad and get chicks just when you want them.

Prepaid prices on	50	100	500
White and Brown Leghorns	$7.00	$13.00	$62.50
Rocks, Reds, Buff Leghorns	8.00	15.00	72.00
White Wyandottes	11.00	20.00	95.00
Mixed Chicks (all varieties)	$10.00 per 100		

You take no chances. Ref: First State Bank, Holland. 97% live delivery guaranteed. White Leghorns headed by male birds of 285-303 egg record strains. Other breeds highly bred. Circular free.

MEADOWBROOK FARM HOLLAND MICH RR 1-H

B & R CHICKS
ARE THE GOOD KIND

We hatch chicks from flocks which have had our own personal attention. Every bird is carefully selected by us for best production. A pure-bred chick from us has the breeding to grow into a fine money making fowl. Send for full information. 100% live delivery guaranteed. All popular breeds. We hope you will give us a trial order for that will mean a permanent customer, we are sure. Write today.

Borst & Roek, Box 10, Zeeland, Mich

Our Baby Chicks will insure your next years profit because we hatch only in tested Mammoth machines from healthy, husky flocks that know no disease. And our flocks are genuine egg machines. Order from this ad or write for catalogue.

	100	500		100	500
Rocks	$16	$77.50	En. W. Leg.	13	60.00
S. C. Reds	16	77.50	Anconas	14	65.00
Sel. W. Leg.	15	70.00	Broilers	9	45.00

100% Delivery Guaranteed
PROGRESSIVE POULTRY FARM,
Box 2, Holland, Mich.

Pure Bred Chicks Can ship immediately.

Broiler Chix	11½c	White Rocks	16c
W. or B. Leghorns	13c	W. Wyandottes	16½c
B Rox or Reds	15½c	Buff Orpingtons	16½c
Sheppard's Anconas	15c	Black Minorcas	16c

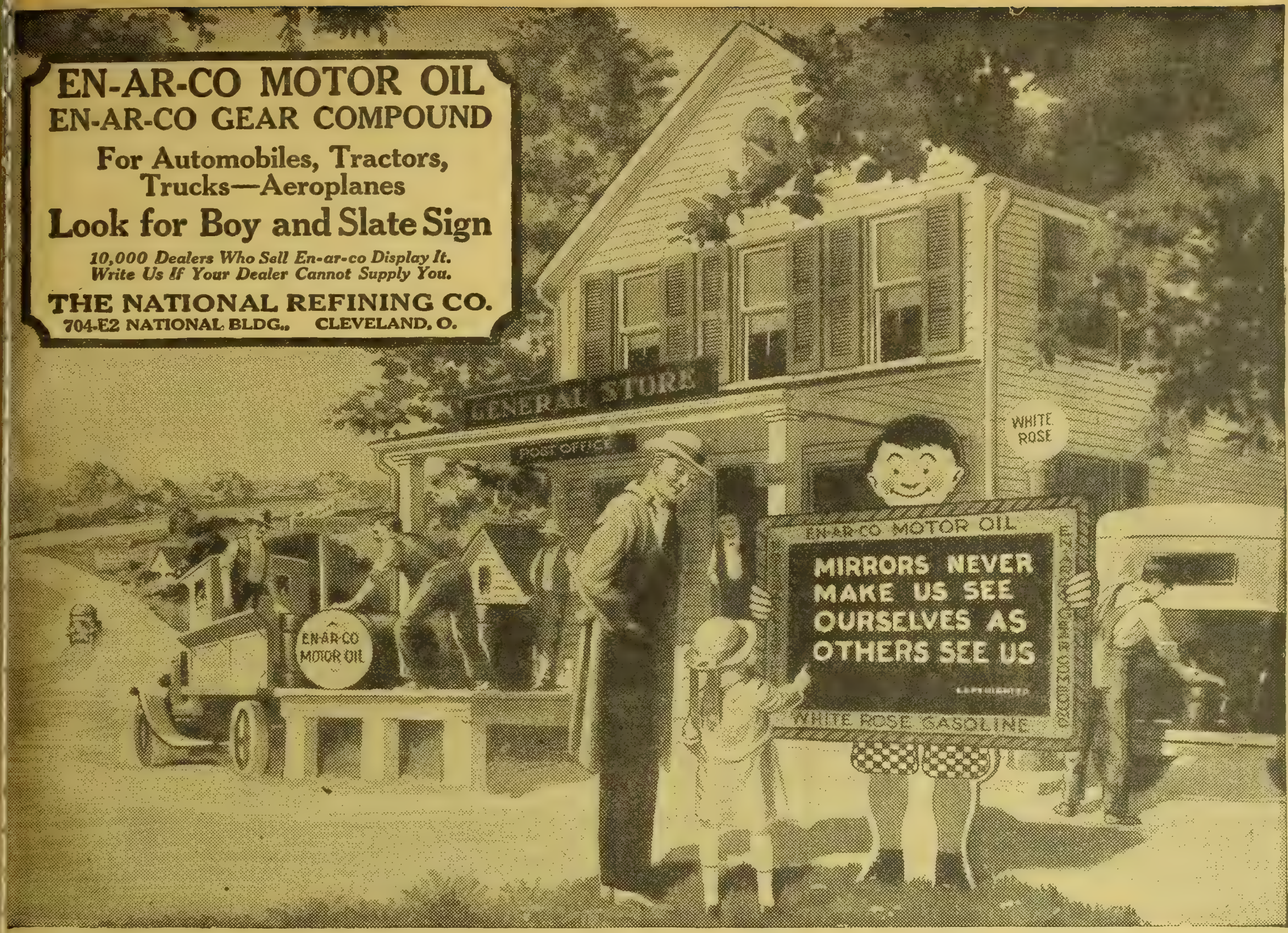
Extra selected standard bred chicks $4.00 per 100 more. Add 35c if less than 100 ordered. Good bank reference. Circular free.
Lawrence Hatchery, BF, R. 7, Grand Rapids, Mich.

Select Quality Chicks

from America's best winter-laying purebreds. Closely culled, properly mated, thrifty flocks of White and Barred Rocks, White and Brown Leghorns, Rose Comb Reds, Wyandottes. 14 years experience. Prices right. Free catalog. References.
HAIGHT HATCHERIES, Cedar Springs, Michigan.

PUREBRED BABY CHICKS. LEADING VARIETIES. 100% arrival. Priced right.
THOS. G. CALLAGHAN, Fenton, Michigan.

WHEN WRITING TO ADVERTISERS PLEASE MENTION THE MICHIGAN BUSINESS FARMER



EN-AR-CO MOTOR OIL
EN-AR-CO GEAR COMPOUND

For Automobiles, Tractors, Trucks—Aeroplanes

Look for Boy and Slate Sign

10,000 Dealers Who Sell En-ar-co Display It. Write Us If Your Dealer Cannot Supply You.

THE NATIONAL REFINING CO.
704-E2 NATIONAL BLDG., CLEVELAND, O.

400,000 CHICKS

BIG, STRONG, FLUFFY CHICKS hatched from well-bred and well kept, heavy laying hens insuring good growth and PROFITS.

	Prices on 50	100	500	1000
White, Brown and Buff Leghorns	$7.00	$13.00	$62.00	$120.00
Barred and White Rocks, S. C. and R. C. Reds, Anconas	8.00	15.00	72.50	140.00
White Wyandottes, Buff Orpingtons	8.50	16.00	77.50	....
Silver Wyandottes	9.50	18.00	87.50	170.00

Mixed, $12.00 per hundred, straight. Postpaid. 100% Live Arrival Guaranteed. Order right from this ad. Best Bank Reference. You take no chance. Free Catalog. Member I. B. C. A. and Ohio Assn.

MODERN HATCHERY, Box 62, Mt. Blanchard, Ohio.

CHICKS $10.00 UP
100% SAFE ARRIVAL GUARANTEED

Varieties	Prices on 50	100	500
White, S. C. & R. C. Brown & Buff Leghorns	$7.00	$13.00	$62.00
Barred Rocks, Reds, Black Minorcas	8.00	15.00	72.00
White Rocks, White Wyandottes, Anconas	8.50	16.00	77.00
Buff Orpingtons, Silver Laced Wyandottes, Blue Andalusians	9.50	18.00	....
Assorted, from Pure Bred Stock	6.00	11.00	50.00

Hatched from healthy, heavy laying flocks, well kept, insuring strong chicks that will grow into **Profits. Postpaid. Order from this Ad. Save time.** Reference, The Geneva Bank. Member International Baby Chick Ass'n. Free Catalog.

THE GENEVA HATCHERY, Box 23, Geneva, Indiana.

Certified Pure Bred
Baby Chicks

Trapnested direct from **world champion layers;** the famous Tom Barron and Hollywood strains of White Leghorns. Order these chicks from pedigreed stock now at **bargain prices!** Hatched in the largest and finest hatchery in Michigan at the rate of 150,000 eggs to a setting. Also get our prices on Barred Rocks and other popular breeds. Satisfaction guaranteed or money back. Write for FREE illustrated catalog and special DISCOUNT PRICES—today.

SUPERIOR POULTRY FARMS
Box 201 Zeeland, Mich.

---

proved S. C. White Leghorns
ED FOR EGG PRODUCTION SINCE 1910

CHICKS from this high grade egg laying strain will give you a bigger profit, and absolute satisfaction. They have 13 years of careful selecting and breeding direct behind them, and mature in the shortest possible time. You benefit by our 13 years in hatching and shipping chicks. These chicks possess great vitality and grow up uniform in size. 100% safe
ival guaranteed. Let us mail you our cata-
ue with prices.

WOLVERINE BABY CHICKS

LVERINE HATCHERY, Zeeland, Mich., R. 2

EST CHICKS
t Low Prices

nd for free catalog describ-
best bred chicks in the
ntry. Tom Barron and Tan-
d White Leghorns, Michigan's
ampion Winter Laying Barred
mouth Rocks and S.C.R.I. Reds.
better chicks anywhere at any
ce. **Satisfaction and 100 per**
nt live delivery guaranteed.

YOU CAN DO IT WITH B. of F. BABY CHIX

mmer-Frederickson Poultry Farm, Box 26 Holland, Mich.

RELIABLE CHICKS

S. C. English White Leghorns and Barred Rocks Every chick from carefully mated, culled,
e-bred flocks owned and developed by us for
years. Leghorn males from trapnested 280 egg
s. Free catalog. Write for prices.

Reliable Hatchery and Farms,
ute 3 Holland, Mich

CHICKS From World's Greatest Layers

If you want **pure bred chicks** that are **bred right, hatched right,** and shipped right, that grow and will make you a profit, **get our new low prices** and free catalog before you buy.

Tom Barron White Leghorns Heavy Type Brown Leghorns
R. C. & S. C. Rhode Island Reds Park's Barred Rocks

Flocks are carefully culled and developed on free range. All chicks are hand picked and inspected, no cripples or weaklings. Every one **strong** and **healthy. Satisfaction** and 100% live delivery guaranteed. **Postage** paid. Write now for our **low prices** and **free catalog.** White Leghorn and Barred Rock pullets after May 1, at low prices.

KNOLL'S HATCHERY, R. R. 12, Box B HOLLAND, MICH.

SUNBEAM HATCHERY

Chicks are produced under my personal supervision. Hatched from select, pure bred, heavy laying hens, well kept to insure vigorous Chicks.

Varieties	Prices on 50	100	500
White, Brown and Buff Leghorns	$7.00	$13.00	$62.50
Barred Rocks, R. and S. C. Reds, Anconas	8.00	15.00	72.50
White and Buff Rocks, White Wyandottes, Black Minorcas	8.50	16.00	77.50
White and Buff Orpingtons, Silver Wyandottes	9.00	18.00	87.50

Mixed, all varieties, $12 per 100 straight. 100% Live Delivery Guaranteed. Postpaid. Order from this Ad. Bank references. There is no risk. Free Catalog. Member I. B. C. A.

H. B. TIPPIN, Box E. Findlay, Ohio.

SUNBEAM CHICKS *Are Money Makers*

Cloverleaf Chicks Leads Them All

Get chicks from real quality stock; the long deep-bodied type that are just built for laying. Our stock has been bred for years for high egg production. Closely trap-nested so as to weed out everything but those that come up to the high Cloverleaf standard. "Cloverleaf" brings you extra value without the extra cost. 100% live delivery by prepaid parcel post. Send for catalog.

CLOVERLEAF POULTRY YARDS
R. R. No. 2-B ZEELAND, MICHIGAN

KARSTEN'S QUALITY

BABY CHICKS

FROM STOCK—THAT IS BRED WITH THE LAYING HABIT

Hollywood and Barron English Single Comb White Leghorns STRAIN MATINGS
250-300 EGG-BRED LINE

Careful breeding, typetesting and trapnesting has produced our world-famous Karsten's Quality Laying Hen—A Utility Bird With Standard Requirements

Our Leghorns are long, deep-bodied, wedge-shaped birds, with wide backs and low spread tails, big lopped combs and alert eyes. Birds that lay those large white eggs that bring the high prices on the New York Market.

SEND FOR FREE CATALOG
it describes our wonderful breeding establishment, it tells what and how to feed your chickens for profit, it will show you how you, too, can double your poultry profits

KARSTEN'S FARM BOX X ZEELAND, MICHIGAN

PURE BRED CHICKS

Tom Barron Imported and Hollywood strains S. C. White Leghorns, **Sheppard's Famous** S. C. Mottled Anconas and **Park's Bred to Lay** Barred Rocks. All **Free range flocks, carefully culled and certified by experts** and bred many years **for high egg production.** Pedigreed males from **250 to 280** egg strains and from hens that produced **leading pen** in Michigan's International Laying contest, head our flocks. Eggs from these **famous strains** hatched with scrupulous care in our Modern Mammoth Incubators produce **strong, husky, peppy chicks that are easy to raise** and become **marvelous layers.** Chicks are shipped postpaid. 100% live delivery guaranteed. Write for our **big free illustrated catalog.**

Silver Ward Hatchery, Box 30 Zeeland, Mich

CHICKS—Investigate

Our chicks are the kind that make good. Every flock is carefully culled and mated. We have been in business seven years and have been building carefully and consistently to a place where we can offer chicks more than worth the money we ask. **SINGLE COMB, ENGLISH STRAIN, WHITE LEGHORNS, BARRED ROCKS, ANCONAS.** 100% live delivery guaranteed. Investigate our proposition before buying. A postal will bring full information.

STAR HATCHERY

STAR HATCHERY, Box 23, Holland, Mich.

Early Maturing Baby Chicks

These chicks are from flocks headed by cockerels of high producing blood lines. Culled by experts. Each flock personally supervised. Pure bred. $13.00 per 100 and up. Special: We have a limited number of superior grade chicks from special matings. Write for description and prices. 100% live delivery. Ref. Milan State Savings Bank.

MILAN HATCHERY, Box 5, Milan, Michigan.

"It Fills the Bill"
"SELF-SERVE" Chick Feeder

Holds 12 quarts, Can't clog. Chicks can't roost on special cover nor touch feed with feet. Grown fowls cannot steal feed. Price $1.50 plus postage. Send for free booklet.

IRA P. HAYES,
Dept. B 12,
Eckford, Michigan

MARKET FLASHES

MARKET SUMMARY

Wheat is easy. Corn unchanged. Oats weak. Rye dull and steady. Beans firm. Potatoes easy. Butter and eggs in demand. Cattle active and higher. Hogs and sheep active but prices show no change.

(Note: The above summarized information was received AFTER the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press —Editor.)

FOOTE'S MARKET LETTER

BY W. W. FOOTE

Michigan Wealth Doubled

THE wealth of Michigan and Maine more than doubled in the decade from 1912 to 1922, as shown by the census bureau, but Maine's per capita wealth shows a larger increase than that of Michigan Statistics for the two states have just been made public. Michigan's wealth at the close of 1922 was $11,340,150,000, an increase of 116.7 per cent over 1912. The per capita wealth was $2,883, and increase of 59.5 per cent. Maine's wealth was $2,006,531,000, a gain of 100.1 per cent. The per capita wealth was $2,586, an increase of 94.1 per cent. To this it may be added that the Michigan farmers are as a class progressive and determined to make their farms yield more than in the past. They will stick to raising beans as one of the leading crops, and while realizing the importance of growing fewer acres of wheat than in recent years, will not abandon that grain because the country has overdone that industry since the war. Diversified farming is planned as the most promising scheme, and fruits and berries will unquestionably continue a big source of revenue. At the present time the sheep industry is especially attractive to farmers in Michigan, and those who own flocks of well bred sheep are extremely fortunate, prices having undergone enormous advances recently because of greatly inadequate marketings, with wool an important factor, as well as mutton. It should be added to what has been said that the existing farming conditions in Michigan are extremely varied, and many farmers have undergone hard experience, causing many farmers to leave farms untenanted. It is believed, however, that better times are coming, and a hopeful feeling is expressed in all parts of the state. Financial conditions have improved, and farmers entitled to credit are accommodated at ruling interest rates. High wages check the hiring of farm helpers, and the average farmer is managing to get along with little outside help except at harvest time. Not many farms are changing ownership, and war time prices for land cannot be obtained by sellers.

Important Government Statistics

The aggregate value of crops and live stock products, including animals raised, produced in the United States last year is estimated at $12,204,000,000 by the United States department of agriculture. This was $960,000,000 more than the estimate for 1922. The total includes $9,953,000,000 for crops, and $6,111,000,000 for animal products, less an allowance of $3,860,000,000 which is the estimated value of crops fed to live stock. The crop value last year was larger than for any year prior to 1917, the year the United States entered the world war, and was larger than for 1921 and 1922. The value of live stock products exceeded that for every year before 1918, and also for 1921 and 1922. The distress of wheat growers is shown by the estimate of the value of the 1923 wheat crop which is $726,000,000, compared with $874,000,000 in 1922 and with $2,080,000,000 in 1919. Corn was the largest single item of value, being $2,222,000,000 compared with $1,912,000,000 in 1922. Other important items in the cereal group were oats, of an estimated value of $539,000,000 compared with $479,000,000 in 1922, and barley $107,000,000 compared with $96,000,000 in 1922.

Swine was the outstanding item of value among animals raised, being estimated at $1,145,000,000 compared with $1,273,000,000 in 1922. Cattle had an estimated value of $924,000,000 compared with $975,000,000 the preceding year.

Firmer Wheat Market

It cannot be said that general trade conditions governing wheat have changed materially of late, but the bears find it more difficult to put prices on a lower basis, and they are slower to sell wheat "short" than was the case earlier in the year. Crop conditions begin to be more talked about, and samples of winter wheat from Champaign County, Illinois, show the plant was winter killed, the crown being soft and rotten. Thus far most of the bad crop news has come from Illinois, Indiana, Ohio and Kentucky, while favorable reports have come from Kansas and Oklahoma. Reductions in the visible wheat supply in the United States are slow, the stocks in sight being close to 64,000,000 bushels, comparing with 47,507,000 bushels a year ago. Canada has a large exportable wheat surplus, and this country is above an export basis, although fair north American exports of wheat and flour were made a short time ago. Hopes have been entertained by owners that placing a decidedly higher duty on wheat and flour imports would help to place values on a higher basis, the market being on a domestic basis, whereas in former years our exports really made ruling values. Recent sales of wheat were at decidedly lower prices than a year ago, and it is recalled that two years ago wheat for May delivery sold on the Chicago market as high as $1.50 per bushel. Obviously, the proper course for our farmers to follow at this time is to curtail their wheat acreage and thereby help to bring about pre-war smaller crops and correspondingly better prices. The general belief is that the spring wheat acreage will show a fairly large reduction from that of 1923. The tariff question on wheat has been settled by the announcement of the President, the duty on wheat being advanced to 12 cents, making it 42 cents. The import duty on flour is fixed at $1.04 per 100 pounds, a raise of 26 cents. The new duties take effect in thirty days. To help stock feeders, the import duty on mill feeds is reduced 50 per cent ad valorm.

Wheat Statistics

Farm reserves of wheat of 123,000,000 bushels as shown by the Snow-Bartlett-Frazier report, are the smallest since 1918, and compare with 153,000,000 bushels last year. States west of the Rockies have 6,000,000 bushels more than a year ago and those east have 37,000,000 bushels less. There is a marked shortage in reserves in the Dakotas and Minnesota, where farm holdings are 158,593,000 bushels, or only about sufficient for seed requirements, compared with 44,036,000 bushels last year. After allowing for the balance of the season, B. W. Snow estimates that there are 94,000,000 bushels for export to July 1 and for carryover, compared with 101,000,000 bushels actually on hand July 1, 1923. Reserves of corn are 1,165,000,000 bushels against 1,092,000,000 bushels last year, and of oats 447,000,000 bushels against 421,000,000 bushels in 1923.

Good prices for Corn

High prices for corn have caused rather extensive selling by farmers who had more than they required for feeding to their stock, and the visible supply has increased materially, exports from our shores continuing small, whereas a year ago they were of good proportions. Corn is fetching decidedly better prices than last year, while a little more than two years ago May corn sold on the Chicago Board of Trade for 62½ cents. Much corn has been fed on farms, but much is left, although little corn grown in 1922 was carried over to the following crop year. For weeks there has been activity in organizing corn farmers in Illinios, and a short time ago Iowa farmers started along the same lines, with a few of getting better terms. Oats are plentiful, with farm reserves larger than a year ago and far smaller exports than at that period, although prices are not especially high. The visible rye supply in the United States is reported at 21,205,000 bushels, comparing with only 14,954,000 bushels a year ago. Ruling prices are much below those of a year ago, but very little is exported, whereas last year it was exported freely. May corn sells around 81 cents, comparing with 74½ cents a year ago. May oats sell at 48 cents, compared with 44¾ cents a year ago. May rye sells at 71½ cents, comparing with 83¾ cents last year. May wheat sells at $1.11½, comparing with $1.19½ a year ago.

Hogs Highest in Four Months

A wonderful change has taken place in the hog industry, and former huge marketings and fast declining prices have been followed by a great falling off in marketings and a real boom in values, with sales at the highest figures recorded in four months. All this seems surprising and comes as an unexpected boon to great numbers of stockmen in the corn belt states. Eastern packers bought freely, taking an unusually large percentage of the daily offerings in the Chicago market, and this outside competition was a great help in advancing the better class of swine. Bad country roads account for much of the falling off in marketings, while in most hog growing districts remaining holdings are much reduced. Offerings averge up well in quality and the bulk of the Chicago sales cover a price range of 25 cents, the best light bacon hogs selling 15 cents under the best butchers. Recent receipts have averaged 229 pounds, or within a pound of the lightest since January, 1922. In Sympathy with the great fall in hog prices, provisions are far below prices of a year ago and have an enormous sale at home and abroad. Hogs on the Chicago market have been bringing $6.50 to $7.70, comparing with $7.10 to $8.50 a year ago. Combined receipts in twenty markets for the year amount to 10,763,000 hogs, comparing with 8,755,000 a year ago and 6,981,000 for the same time two years ago.

Fat Cattle Sell High

Prices for beef cattle have ruled very high in recent weeks, with plenty of the other kinds offered on the Chicago market, but not many of the best heavy long fed steers or prime yearling steers and heifers. The bulk of the beef steers sold quite recently at $8.25 to $11, with the best weighty steers selling at $11 to $12 and no good steers taken below $9.50. The best yearling steers sold for $10.25 to $11.25, and sales were made down to $6.75 to $7.75 for the commoner lots of light steers, with inferior little steers selling at $4.75 to $6.65. Butchering cows and heifers had a good demand at $3.85 to $9.35, canner and cutter cows selling at $2 to $3.75, bulls at $3.50 to $7.25 and calves at $5 to $12. Stockers and feeders are in improving demand, and good lots are much higher than a few weeks ago. Common stockers sell as low as $4.50 to $5.50 and fair to good feeders at $7.50 to $9, not many going above $8. A large share of the stockers and feeders sell at $6.50 to $7.50. A year ago beef steers sold at $9 to $10 for the best and nine years ago at $8 to $8.75. Fewer cattle have been marketed this year than a year ago.

Conditions are all favorable for men engaged in the sheep breeding industry, there being a serious shortage in the country, and prices have had a wonderful boom in recent weeks, prime lambs selling unexpectedly high, as well as yearlings and sheep. Recent sales of lambs have been made in Chicago at $16 to $16.50, feeders fetching $14.25 to $15.50.

WHEAT

A decline of 1 cent in price is the only change in the Detroit wheat market during the two weeks ending Saturday, March 8th. Demand is only sufficient to keep prices from declining. Farmers were liberal sellers during February as they needed the money to pay their taxes and reports are that they are continuing to bring their surplus to market at about the same rate. Export sales are reported moderate and some markets are experiencing an increase in milling demand.

CORN

The Detroit corn market is just about holding its own and the market is steady. Indications are that there will be a decrease in receipts soon and dealers are expecting higher prices. How long before this change in prices will take place is hard to predict. In the meantime demand is fair.

OATS

Oats followed the trend of other grains and the price declined 1 cent during the fortnight ending last Saturday. The market at Detroit is lifeless at this writing.

RYE

Prices for rye have declined 2 cents in Detroit and there is a steady tone to the market. Chicago reports increasing demand. Export demand has been quiet but the grain has been going to Europe steadily.

BEANS

Bean prices declined the fore part of the fortnight ending Saturday of last week but before the closing day prices were back to the level quoted in our last issue. The Detroit market is firm after an advance of 5 cents last Saturday. Eastern dealers say that recent receipts of good foreign beans have stopped any advance that might have taken place in the near future. Trade is not active. The present situation can be partly blamed to the fact that the advertising campaign fell through. It is a case where the housewife needs to be educated to use beans as part of the family meal more often. No doubt something will be done before another year's crop appears on the market.

POTATOES

At Detroit potatoes are active and in good supply. New York dealers declare old potatoes are doing fully as well as holders expect at this time of year. Demand is fair. New southern potatoes are selling well on eastern markets as prices are reasonable. Potatoes are steady at Chicago with no material change in price.

HAY

The markets are practically unchanged from a week ago. Receipts have fallen off some and have consisted of a goodly quantity of poor grade stuff. The demand has been fair for the better grades and prices as a consequence have hardened slightly in some markets.

MARKET QUOTATIONS

Wheat

Detroit—Cash No. 1 red, $1.13½; No. 2, $1.12½; No. 2 white, $1.13½; No. 2 mixed, $1.12½.

Chicago—Cash No. 3 red, $1.12½; No. 2 hard, $1.11½@$1.14.

Prices one year ago—Detroit, Cash No. 2 red, $1.35½; No. 2 white, $1.35½; No. 2 mixed, $1.35½.

Corn

Detroit—Cash No. 3 yellow, 83c; No. 4, 80c.

Chicago—Cash No. 3 yellow, 78½@80¼c.

Prices one year ago—Detroit, Cash No. 3, 77c; No. 4, 75c.

Oats

Detroit—Cash No. 2 white, 51c; No. 3, 83c.

Chicago—Cash No 2 white, 47½@48½c; No. 3, 46½@47¾c.

Prices one year ago—Detroit, Cash No. 2 white, 49½c; No. 3, 48c.

Rye

Detroit—Cash No. 2, 71c.

Chicago—Cash No. 2, 70½@70¾c.

Prices one year ago—Detroit, Cash No. 2, 84½c.

Beans

Detroit—C. H. P., $4.75 per cwt.

Chicago—C. H. P., $5.50 per cwt.

Prices one year ago—Detroit, C. H. P., $6.65 per cwt.

Potatoes

Detroit—$1.43@1.50 per cwt.

Chicago—$1.20@1.55 per cwt.

Prices one year ago—Detroit, $2.06 per cwt.

Hay

Detroit—No. 1 timothy, $23.50@24; No. 2, $21@22; No. 1 clover, $20.50@21; standard and light mixed, $22.50@23 per ton.

Chicago—No. 1 timothy, $24@26; No. 2, $20@23; No. 1 clover, $18@20; light timothy & clover, $22@24 per ton.

Prices one year ago—Detroit, No. 1 timothy, $16@16.50; No. 2, $14@15; No 1 clover, $13@14; standard and light mixed, $15.50@16 per ton.

PRITCHARD'S
WEATHER
FORECAST
INTERPRETED BY THE STARS

Week of March 16

PRECIPITATION—either rain or snow—will average above the normal for this week in Michigan and temperatures for the greater part of the seven days will average mild for the season. As a result of the melting snow many rivers in the state are expected to reach flood stage. The fact that we believe there will be numerous freezes during this period is all that keeps us from predicting serious floods. The two high temperature points during the week will occur, one at very beginning and the other during middle part; the two low-temperature points will be reached about Monday, Thursday and Saturday.

Storminess at very beginning of week with wind and moderate rain or snow flurries will give way to clearing about Tuesday. A more severe storm is expected in this state following Wednesday when winds will be of gale force and precipitation moderately heavy. The week will end with fair, cold weather.

Week of March 23

Spring showers, summer thunder storms and strong winds during early part of this week will show severe characteristics in many counties of the state. Despite the high temperatures, however, snow flurries may be expected in various parts of Michigan on or before Wednesday.

The coldest part of the week will be around Wednesday and Thursday after which time temperatures will gradually moderate.

The weather during last half of the week will be generally fair, although by Saturday the sky will become overcast and the weather appear threatening to stormy.

February Forecast Verified

Our forecast of precipitation above normal for the month of February has been fully verified in Michigan which also includes the severe sleet and snow storm during early part of month. Marketing has been greatly hindered because roads have not been opened in many parts of the state and with all the snow plows highways have been blocked to auto traffic.

FOOT AND MOUTH DISEASE APPEARS AGAIN

AFTER several years freedom from foot and mouth disease the infection has appeared in the United States, this time in California. It is now the prime duty and privilege of livestock owners to fully cooperate with state and federal officers in the quarantine and slaughter of affected and exposed animals, in the disinfection of infected premises and in all other measures essential for checking the spread of the disease and accomplishing its eradication.

If a condition suspicious of the disease, such as vesicles (blisters) in the mouth or on the feet develops among any cattle, sheep or swine, the owner should immediately notify his state veterinarian or the nearest inspector of the Bureau. Pending arrival of an official veterinarian the owner of suspicious animals will as a matter of course close his place to all visitors and with his family and help refrain from visiting other farms.

If the animals are found by the inspector to be infected with foot-and-mouth disease all stock on the premises, including horses, will be carefully confined and all dogs be prohibited from running at large. No animals are to be received on or shipped from the place or moved across any highway, and no milk, hay, feed, or manure is to be removed from the farm. It should be borne in mind that the curiosity of neighbors to see affected animals or their well meant desire to be helpful may result in infection of their own farms and further dissemination of the disease. There must be close alherence to all the necessary quarantine requirements until all susceptible animals have been slaughtered and cleaning and disinfection of the premises have been accomplished.

WHAT ABOUT THE PROPOSED STATE INCOME TAX?

(Continued on Page 3)

graduated income tax would drive capital out of Michigan. It hasn't worked that way in other states, even in New York where they have the triple system of levies mentioned above.

Why prolong this discussion? It is apparent that the proposed tax is a step in the right direction in that it will help relieve over-burdened real estate and tend to distribute the tax burden a little more nearly in proportion to the individual's ability to pay. If you agree with the sentiments expressed in this article, the first step is to see that the necessary 60,000 signatures (and preferably several thousand more) are secured to the initiatory petitions. The next job is to put the thing over big at the November election next fall.

(Editor's Note: We want to call your attention to a mistake in connection with the first article of this series which appeared in the last issue. The lines that appeared under the chart on page 3 belonged under the chart printed on page 19, while the lines under the chart on page 19 referred to the chart on page 3. No doubt you have already noticed this.)

RADIO PROGRAMS

Station KYW, Chicago.—Central time 8:20 P. M. Wave length 536 meters.

March 18—"Permanent Farm Buildings Pay", by K. J. T. Ekblaw, Agricultural Engineer, Portland Cement Ass'n. "Alarm Clocks, Pigs and Boys", by Guy L. Noble, Secretary, National Committee on Boys' and Girls' Club Work.

"Three years ago England had 2,000,000 men out of employment. America had 3,000,000 unemployed. We are still 'wet' there but in your three 'dry' years' three years of prohibition, what has happened? England still has 2,000,000 unemployed and America has a shortage of 500,000 workmen. Now let me ask you if prohibition has succeeded."—Gypsy Smith.

For removing ink stains from cotton, linen and silk use Javelle and oxalic and soap and water; grease stains use gasoline; cleaning pongee and crepe, use energine.

A Cash Crop For You Every Month!

The Seed-Dollars you invest in this great Electric and Gas Public Service are working for you day and night, every day in the year, earning you a safe, tax-free cash income.

Over 16,000 thrifty Michigan people are profiting through share owning partnership,

Invest In

Consumers Power Company Preferred Shares

Tax-Free in Michigan
(The Company pays the taxes)

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and Safety

Complete information and facts gladly given.
Write Securities Department—Jackson, Mich.
Or ask our Employees.

Every Day You Need
KRESO DIP No. 1
(STANDARDIZED)
TO AID IN KEEPING
All Livestock and Poultry Healthy
Kills Lice, Mites and Fleas.
For Scratches, Wounds and common skin troubles.

THE FOLLOWING BOOKLETS ARE FREE:
No. 151—FARM SANITATION. Describes and tells how to prevent diseases common to livestock.
No. 157—DOG BOOKLET. Tells how to rid the dog of fleas and to help prevent disease.
No. 160—HOG BOOKLET. Covers the prevention of common hog diseases.
No. 185—HOG WALLOWS. Gives complete directions for the construction of a concrete hog wallow.
No. 163—POULTRY. How to get rid of lice and mites, and to prevent disease.

Kreso Dip No. 1 in Original Packages for Sale at All Drug Stores.
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Parke, Davis & Co.
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offers its services to the *Farmers of Michigan* as a high class, reliable commission house for the sale of *Dressed Calves* and live poultry. Write us for information how to drses and ship calves to market. $250,000 capital and surplus. 34 years in business in the same place and same management.

Address
DETROIT BEEF CO., Detroit, Mich.

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WE SOLICIT YOUR SHIPMENTS of live poultry, veal and eggs.
Our commission is 5%.
References: Wayne County and Home Savings Bank, Bradstreet.

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To make room for winter we are offering bred cows and heifers also some well bred young bulls. Look up our winnings at leading state fairs.
W. T. SHUTTLEWORTH, Ypsilanti, Michigan.

FOR SALE—REGISTERED AYRSHIRE bulls and bull calves, heifers and heifer calves. Also some choice cows.
FINDLAY BROS., R 5, Vassar, Mich.

SWINE

POLAND CHINAS

Bargains in Poland Chinas
Bred sows and gilts $25 up. Choice fall gilts $12 up. Some herd boar prospects; real ones, $40 and $60 each.
These prices good for a short time only. Write for price list and breeding.
Also white male Collies $8 and $10 each.
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O. I. C'S: 75 LAST SPRING PIGS, PAIRS not akin. From 3 good strong sires. Also fall pigs. Recorded free. ½ mile west of depot.
OTTO SCHULZE & SONS, Nashville, Mich.

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DISPERSION SALE! MICHIGANA FARM MUST sell all Durocs. We are offering bred sows and gilts, also fall pigs, either sex at bargain prices. Write your wants.
MICHIGANA FARM, Pavilion, Michigan.

HAMPSHIRES

HAMPSHIRES—BRED GILTS AND BOARS at bargain prices. Write your wants. 12th year.
JOHN W. SNYDER, St. Johns, Mich., R. 4.

SHEEP

10 Head Registered Shropshire Ewes, Exceptional quality, bred for last of March and April.
C. LEMEN & SONS, Dexter, Michigan.

5 SHROPSHIRE EWES OF THE WOOLY TYPE, registered and priced right.
DAN BOOHER, Evart, Michigan.

DOGS

COLLIE PUPS FROM THOROUGHBRED trained stock, natural heelers, males $5, females $3.
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$ We can use a few earnest men and women part or full time in soliciting subscriptions and acting as our agents. Write
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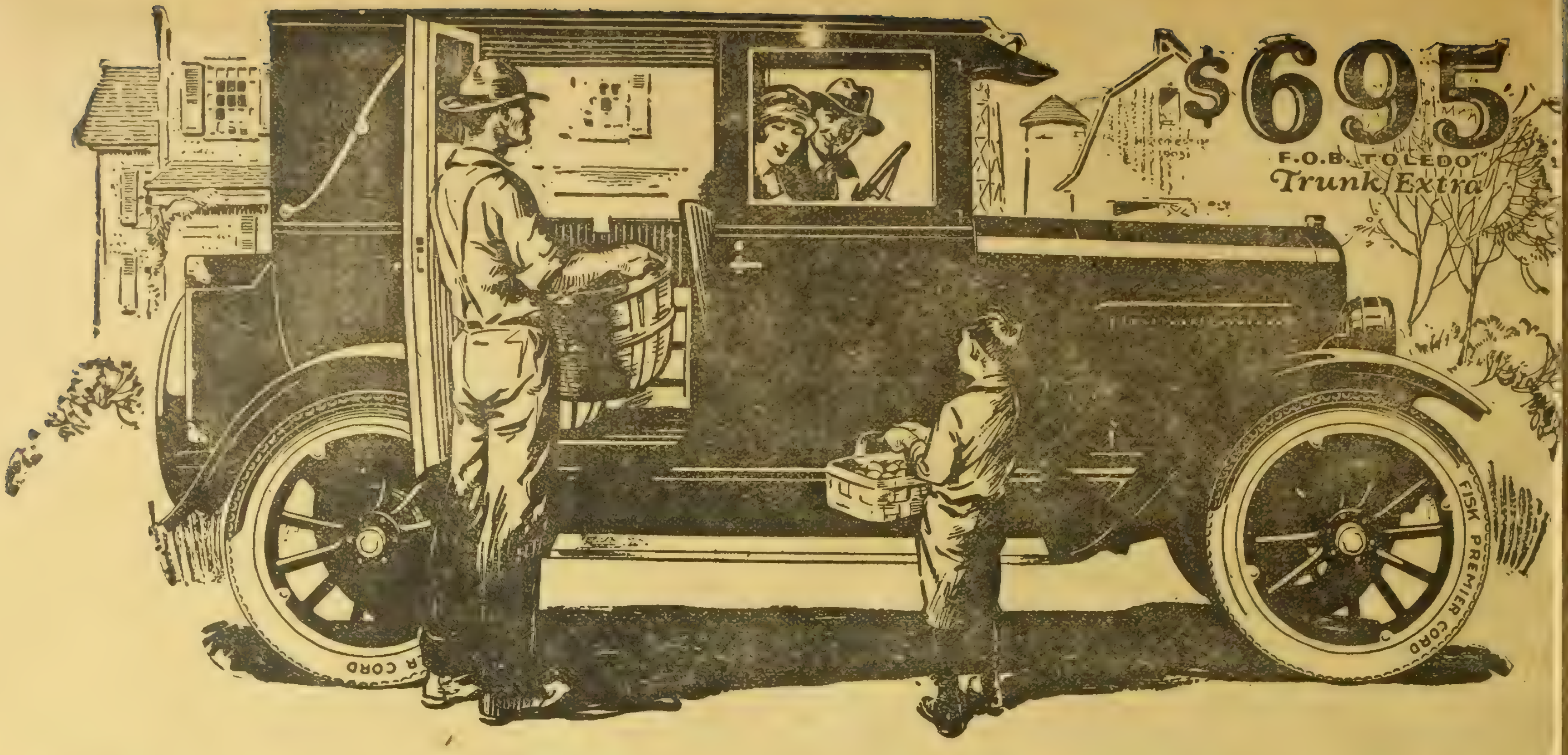

Biggest Money's Worth!

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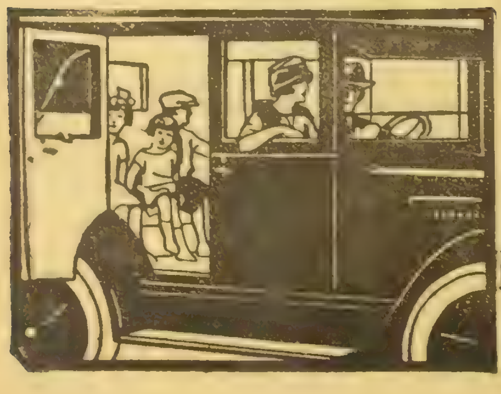
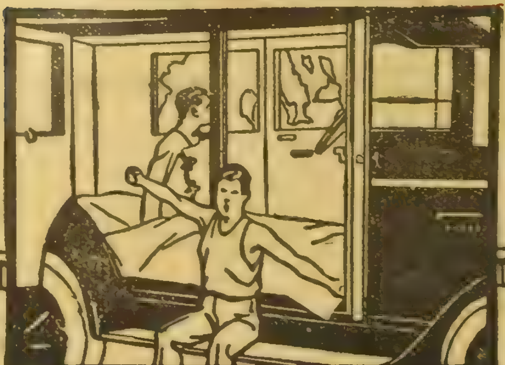
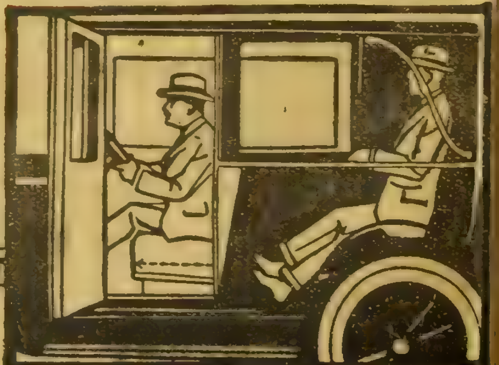


No hotel bills on long trips. Seats make into a full-size bed in the car for camping.



Both seats adjust backward and forward to accommodate tall and short people.



The Michigan
BUSINESS FARMER

An Independent
Farm Magazine Owned and
Edited in Michigan

VOL. XI, No. 16 SATURDAY, MARCH 29, 1924 TERMS: TWO YEARS $1
60c PER YEAR—5 YRS. $2

PLOW DEEP, BUT NOT TOO DEEP

Read Powell's Article on a State Gasoline Tax for Michigan—Don't Miss "Forty Years of Faking"

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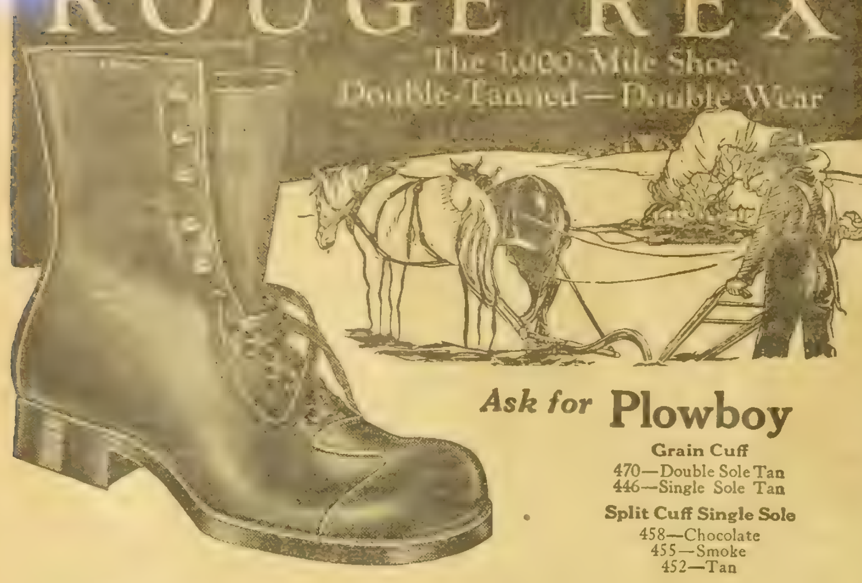

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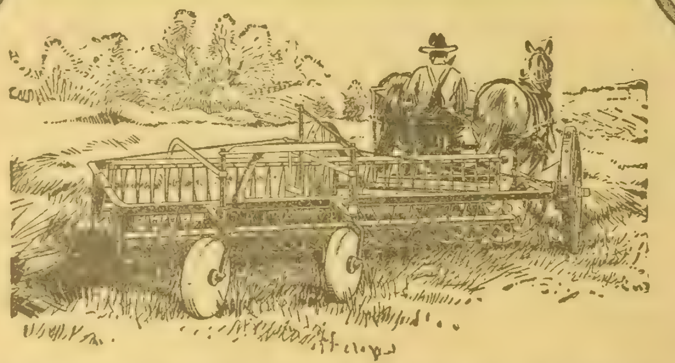

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BAY COUNTY FARMERS AND BUSINESS MEN COOPERATE

"THESE two meetings today are about the best that I have attended in a long time," said Prof. E. C. Foreman, head of Poultry Department, M. A. C., last Friday, March 14th, after he had made an address before a point meeting of farmers and business men at Pinconning in the afternoon, and a similar meeting at Standish. "It is seldom that I am flattered such a large and attentive audience."

A great deal has been said about the remarkable results which have been obtained in Arenac County in one year thru the co-operation of business men and farmers, but it is only when one who attended the first meeting last year attends one this year that the vastness of the change really sinks in. Now farmers and business men sit side by side, drinking the coffee, which is served after every meeting, swapping stories and talking business and farming. Last year, a group of business men congregated in one corner and farmers in another. About the only exchange made was by means of glances of suspicion and distrust. Then the lunch hour was mostly a quiet and gloomy affair—now it is noisy and jovial. A genuine community spirit has taken the place of suspicion and depression. All this in addition to the material benefits. Mr. Tom Weaver, the hardware merchant said, "Had it not been for this movement I do not know where we would have been now. Our farmers had $900 a day more to spend in August 1923 than they had in 1922 and I believe that stood between us and bankruptcy." Mr. W. H. Gillett, Manager of the Standish Creamery, reports that the average daily yield of his patron's cows increased from 6¾ to 10 lbs. in one year—over 50 per cent increase. His total volume doubled in one year and it was that factor alone which prevented the abandonment of his plant this year.

Pinconning folks are following closely upon the heels of their neighbors. Every two weeks they hold a rally at which some prominent man gives an address on better dairying and farming. Among the speakers have been Prof. O. E. Reed, J. F. Cox and E. C. Foreman, all of M. A. C. At no meeting in spite of the impossible roads, has the attendance dropped below 150 folks. Every business place, including garages and pool-rooms, were closed when Prof. E. C. Foreman spoke Friday afternoon. The Pinconning Boosters' Club claims 100% membership and is back of the movement heart and soul. "Agriculture is the leading industry of this town," said Mr. J. R. Fotheringham, the local banker, "and we want to treat it as such, especially because our material benefit depends upon it. A plan of financing the purchase of grade and purebred cattle has been developed by the Club and farmers are taking advantage of it. A cow-test association is being planned and a carload of sodatol is being handled. A series of chicken culling demonstrations are being planned for the summer. All these things are being accomplished thru the enthusiasm and co-operation of business man and farmer. But, most important of all, a community spirit is being developed which will make life just a little more worth while in Pinconning and vicinity.—E. J. Leanhouts.

WGY WILL BROADCAST FARM TALKS MARCH 31

RADIO broadcasting station WGY, General Electric Co., Schenectady, N. Y., will broadcast two talks the evening of March 31st that will be of great interest to our readers. Beginning at 7:15 P. M., eastern standard time, Mr. H. E. Babcock, of the N. Y. State Farm Bureau Federation, will give a 10 minute talk on, "The Essentials in the Cooperative Marketing Movement." He will be followed by Dean A. R. Mann, N. Y. State College of Agriculture, who will address the invisible audience on "The Extension Service of the College of Agriculture." This station opearates on a 380 meter wave length.

The Business Farmer is sure a great paper and I hate to miss one single copy of it.—Mrs. F W., Kingston, Michigan.

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SATURDAY
March 29th
1924

VOL. VI, No. 16

Being absolutely independent our columns are open for the discussion of any subject pertaining to the farming business.

"Hew to the line, let the chips fall where they may!"

The Michigan
BUSINESS FARMER

"The Only Farm Magazine Owned and Edited in Michigan"

Published Bi-Weekly
Mt. Clemens, Mich.

TWO YEARS $1

Entered as second-class matter, August 22, 1917, at the post office at Mt. Clemens, Mich., under act of March 3rd, 1879.

State Gasoline Tax Is An Invisible Toll Gate

All Who Own and Drive Automobiles or Trucks in Michigan Would Pay Their Share for Building and Maintaining Our Highways

By STANLEY M. POWELL

(Lansing Correspondent of The Business Farmer.)

IN trying to analyze the popular sentiment in favor of a gasoline tax for Michigan, Mr. Powell says, "The gas tax is the only practical method of getting highway revenue from visiting tourists, it automatically takes into account both the weight of the car and the distance driven, it puts the burden onto the people who get the benefit from the improved highways, it would lower the tax on real estate, lessening the burden of the general property tax."

Evidence is presented to show that gas taxes now being employed in 36 states are working satisfactorily and they are easily and cheaply collected.

Neighboring states either have gasoline taxes or are in the process of getting them. Michigan autoists touring in those states help pay for their roads, and fairly so. Should not the tourists who are yearly coming to Michigan resorts in increasing numbers, causing great highway depreciation, make some contribution to our highway expense account? A gasoline tax is the only solution to this growing problem, according to Mr. Powell. Do you agree with him?

WHEN a great vital issue which involves a fundamental principle of taxation justice becomes a political football, there is danger that it may not be settled entirely on its merits and according to the desires of a majority of our citizenship.

Such has been Michigan's history with the state two cent gasoline tax. Demanded by an overwhelming majority of the voters of nearly every county in the state, it was passed by the Michigan House of Representatives last spring by a vote of 80 to 18 and later, despite persistent and unprincipled lobbying and political wire pulling it also passed the Senate 19 to 11.

The Governor's veto which killed the bill aroused such a wave of popular resentment that Michigan's chief executive has relented somewhat and has come out with a conditional statement in favor of gas tax, but he has as yet failed to make his actions correspond with his words, for he has steadfastly refused to allow the State Legislature any opportunity to enact legislation of this type.

Sentiment Solid for Gas Tax

There is no question but what, if given a chance, the Michigan Legislature would pass a gas tax without delay. After the first week of the recent extra session of the Legislature the sentiment among Michigan's law-makers was so apparent on this issue that the Detroit Free Press on December 11th said, "Enactment of a gasoline tax is a foregone conclusion. Since Governor Groesbeck withdrew his opposition his entire following became superconscious of its conspicious position out on the end of a limb and marched into camp." But apparently the Free Press spoke too soon. Perhaps the opposition of the Governor had not been entirely withdrawn!

It is a unique situation to find people uniting in favor of any new form of taxation. When they virtually demand it and threaten to initiate it by petition, we may be sure that it has considerable of merit to recommend it.

Every Michigan farm organization has passed resolutions favoring a gas tax, for Michigan farmers are convinced that the gas tax is right and sound in principle, that it is a measure for justice and that it is a step in the direction of a policy of specific taxation which will give much-needed relief to sadly overburdened real estate.

Nor do the farmers stand alone in this position. Everywhere one goes in Michigan today he discovers people enthusiastically in favor of a two cent gasoline tax and finds that they are ready with plenty of arguments to tell why we should have one similar to those already in effect in 36 other states in the union.

Why the Gas Tax Is Favored

Briefly summarized, the arguments most commonly advanced are these: The gas tax is the only practical method of getting highway revenue from visiting tourists, it automatically takes into account both the weight of the car and the distance driven, it puts the burden onto the people who get the benefit from the improved highways, it would lower the tax on real estate, lessening the burden of the general property tax.

These popular arguments appear sound. They cannot be dismissed lightly. We are coming to realize more and more that we must continue to expend large sums for highway construction and maintenance in Michigan and for the payment of interest and principal on the State's bonded highway indebtedness which now amounts to about $38,000,000 and the refund of the $5,000,000 due from the State to the several counties.

People everywhere are interested in good roads. Speedy and comfortable transportation by auto from place to place appeals to our independent and liberty-loving natures. Then, too, the motor truck is fast becoming an indispensible part of our modern life and is used largely by farmers and commercial enterprizes of every description.

We must have roads, and better roads, and roads cost money. In commenting on this situation, the Governor himself admitted in the veto message, "Pavements ill adapted to withstand modern traffic conditions have been laid—poor engineering methods have prevailed and adequate safeguards have not been provided for the protection of the traveling public."

Every state needs good roads, but we in Michigan have a peculiar reason for being interested in the extent and condition of our highway system, for in recent years we have been developing a tremendous asset in the form of the tourist business.

The Michigan Farm Bureau News, the spokesman and official mouth of a large group of organized Michigan farmers who have been leading in the fight for a state gas tax, in discussing the tourist problem, declares:

"The summer tourist business has grown so rapidly that it is impossible to fully appreciate or accurately determine its present magnitude. However, reliable and competent men estimate that there are fully 200,000 visitors here in Michigan each day throughout the summer for a period of ten weeks.

"A questionnaire conducted among scores of visiting tourists by the Grand Rapids Herald has revealed that one of the most common complaints of these visitors is with reference to the condition, or lack of condition, of our highways. Many stated that they would not have objected to a gasoline tax, because they were accustomed to paying one at home. It is interesting to remember that motorists in 36 states pay gas taxes at home, but can tear up Michigan highways without making even a slight return.

"If Michigan is to retain, develop and promote its precious asset of tourist patronage it must maintain and improve its highways. It would be a short-sighted policy for us to 'kill the goose that laid the golden egg' by falling behind in our road buiding program. The burning question is, 'How shall this be financed?' Shall it be done as at present through confiscatory taxes on adjoining property, through general township and county levies and through the pyramiding up of a staggering burden of public debt by continuing to mortgage the future through the issuance of millions of dollars worth of highway bonds? Seemingly no satisfactory provision has been made for retirement of such outstanding highway bonds in Michigan.

"Shall highway financing be achieved through a system which is grossly unfair to the present generation and flagrantly unjust to generations yet unborn? Or shall we follow the beaten path, already taken with satisfaction by 36 states of the Union and adopt the gasoline tax idea?

"We don't expect the owners of adjoining property or the public in general to pay for the construction and maintenance of our railways or interurban lines. That is taken care of by those who use these facilities, in proportion to the amount of use.

"Since 95% of our modern traffic is furnished by gasoline driven vehicles, it is apparent that a gas tax would automatically distribute a large portion of the burden of highway expense among the users of the roads in proportion to the benefits derived."

Popular opinion and editorial comment therefore agree in favor of a gas tax as the most logical solution of our present problems.

The gas tax might not have been a fair means of raising highway revenue a few years ago when autos were scarce and most of the traffic was by horse-drawn vehicles. But today this situation is entirely different. In 1912 Michigan had but 39,579 registered motor vehicles. By 1922, ten years later, this number had increased nearly 15 times, reaching the total of 584,291. 1923 showed an added increase of 27%, bringing the total of registered Michigan cars up to 737,388. Today there are enough cars in Michigan so that our entire population might take a ride at the same time.

It is a fact beyond dispute that the great volume of gasoline consumed in Michigan is used for automobile and truck transportation on the public highways. The automobile has caused the insistent demand for a greatly enlarged program of highway development. To meet this demand the Legislature has authorized the issuance of $50,000,000 of state highway bonds, $38,000,000 of which has already been issued. No adequate provision has been made for the retirement of these outstanding bonds. We'll have to pay them. Our real estate will foot the bill unless we get help from those who use the roads. The automobile has also brought us a tremendous increased road repair and maintenance cost. Therefore, it is just that the automobile should contribute accordingly to defray highway expenses.

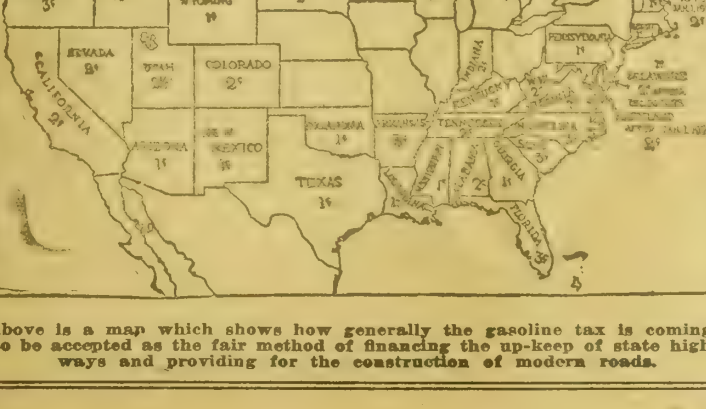
An Automatic Toll Gate

It is reasonable that the amount of such contribution should be in proportion to the use of the highway by each automobile. This situation might be met by the establishment of a network of old-fashioned toll gates on our public highways. This would prove highly inefficient and bunglesome. It is unnecessary. There is a simpler way to accomplish the same process. The gas tax is an automatic toll gate. It automatically takes care of both the mileage driven and the weight of the car, the two factors contributing to wear and tear of highway by automobiles. The gas tax would exact a substantial increase in revenue from trucks and busses that enjoy the profits accruing from their operation over the improved highways.

It is logical, too, that the man who drives his car 15,000 miles per year should pay three times as much into the highway fund as his neighbor who drives his car only 5,000 miles. The present license fee system or any plan of weight tax would charge each alike for the same car.

Certain opponents of a gas tax advocate an increased auto license fee to provide additional revenue for highway purposes. It is hard to understand how such a proposal would operate with any great degree of fairness to those who drive their cars but a little.

(Continued on Page 23)



Above is a map which shows how generally the gasoline tax is coming to be accepted as the fair method of financing the up-keep of state highways and providing for the construction of modern roads.

Farmers Can Safely Increase Clover Acreage

More Clover Can Be Grown in Michigan Without Danger of Over-Production and With Assurance of Profitable Returns

By J. F. COX

Professor of Farm Crops, Michigan Agricultural College

THE clovers have always been and are today the chief leguminous crops in Michigan. Red clover, Mammoth clover and Alsike clover are unusually well adapted to Michigan soils and climatic conditions, and to the common short rotations in use in the state. Red clover is the fundamental crop in Michigan rotations, and successful stands are almost invariably followed by more profitable crops of corn, potatoes, beets and beans. Alfalfa, sweet clover, and soybeans have recently gained an important place on Michigan farms; nevertheless, the clovers still occupy the greatest acreage, and dairying and live stock industries of the state are dependent upon the production of an abundance of clover hay for profitable production. As Dean R. S. Shaw of M. A. C. says, "the development and maintenance of a permanent agriculture in the state is dependent on leguminous plants. The clovers are more widely distributed, and far-reaching in their influence, than any of the others."

Michigan has long been known as a region particularly adapted to clovers, and to clover seed production. The fact that the clover acreage has decreased rapidly in the past few years and that many are failing to get dependable catches, particularly of red clover, is a matter of great concern.

When Clover Fails

When clover fails in communities where it once succeeded, agriculture is on the down-grade, "run-down" farms are frequent, less live stock is fed, crop yields are lower, and farms change hands rapidly. In regions where clover and alfalfa thrive, farmers are generally prosperous, crop yields are high, dairying and live stock raising are successful, and farm ownership is more stable, and land values are higher.

Without doubt, the two leading causes of red clover failures are the planting of unadapted seed and the decrease in the content of organic matter and lime in the soils of many farms, which have long been under cultivation.

Michigan Grown Seed Best

During the past four years, Professor C. R. Megee of the Michigan Agricultural College, has given his attention to the testing out of red clover seed from practically all commercial sources. These tests show conclusively that Michigan grown seed is best for Michigan. Seed from other northern states and Canada is also well adapted. Of the imported seed, the Italian is practically worthless and French seed gives only fair results. Seed from Northern European regions is good, but under present conditions, much Italian seed is being sent to northern ports and reshipped to the United States. There is a good supply of Michigan grown clover seed in the state. Michigan's leading seed companies and the Farm Bureau Seed Department are carrying good stocks of Michigan grown red, mammoth, and alsike clover seed. There is not enough seed, however, to supply the entire state demand with Michigan grown clover seed, because a considerable amount has been moved to out-of-state seed companies. Michigan farmers should buy their seed from dependable sources. Native grown red clover seed is selling at a considerably higher price than imported seed, hence cheap seed is especially dangerous this season.

Alsike seed is comparatively cheap and is available for those who cannot get Michigan grown red clover. Without doubt, alsike will be more largely used in mixing with red clover than previously. Much less alsike seed is needed per acre and it often gives good stands on soils were red clover fails to catch well, and during adverse seasons.

Michigan is particularly adapted to clovers, and clover seed production. And clover hay is in strong demand.

Rather than grow imported clover seed of doubtful origin, Michigan farmers will find alfalfa much more valuable. There is a large supply of northern grown alfalfa seed at prices about the same or somewhat less than native grown red clover. While Grimm costs more, it is harder under Michigan conditions and is available at cheaper prices than formerly.

Early Plantings Usually Best

As a general rule, plantings made in early spring, from the time the ground is in a honey-comb condition to early May, give best results in Michigan. Of red clover and mammoth, ten to twelve pounds per acre is the usual seeding; of alsike, alone, six or eight pounds; of red and alsike mixed, six pounds of red and three pounds of alsike. When seeded with timothy, from four to six pounds per acre of timothy is usually added to these plantings. Clover starts best when planted on a firmly rolled seed bed with oats or barley, or with wheat or rye, in which case the ground is in a firm condition.

The use of commercial fertilizers and manure with the grain crops, with which clover is usually planted, greatly benefits clover seedings. Lime and manure are frequently essential in getting good results with the clovers, red and mammoth clover particularly. Soils which are acid should be limed, using from one to two tons of finely ground limestone or three or four cubic yards of marl per acre or more on very acid soils. Manure greatly aids in increasing the moisture holding capacity of soils, and hence tides new seedings over dry spells of the first summer.

Michigan Seed In Great Demand

In tests at many other stations, Michigan grown seed ranks very high, hence seed producers can expect a strong demand. Under present conditions, the seed crop ranks as a very profitable one. It would pay farmers to use fertilizers with grain crops, particularly phosphate, in order to benefit the clover hay and seed crop seeded with the small grain.

In removing the first crop of red clover for hay, it should be cut when in full bloom before the heads begin to turn brown, in order to reduce the almost certain loss from the clover seed midge. Professor R. H. Pettit of the Department of Entomology, M. A. C., states that cutting when in bloom rather than after a number of heads have turned brown will reduce clover seed midge injury to a minimum. Attention to this one thing will greatly increase clover seed production on the majority of Michigan seed producing farms. It will also pay to clean up weedy fields by cutting weedy patches for hay and by pulling out or hoeing out such weeds as stick-cockle and dock in alsike and docks, thistles, and other weeds in red clover.

The average yield of Clover in the state is a bushel and a quarter per acre but good growers, giving proper attention to the seed crop, can expect, under favorable seasonal conditions, to receive from two and one-half to four bushels of red clover, and from three to six bushels of mammoth or of alsike per acre. The straw after threshing is a useful roughage, particularly for sheep.

A Safe Crop to Increase

The average yield of clover in the grown for hay and seed, and the use of clovers in hay and pasture mixtures, can be safely increased without danger of over-production and with assurance of profitable returns. Clover hay is in strong demand in Michigan. Michigan pastures are markedly improved by using red, alsike, and white clover with the original grass seedings, or reseeding with these legumes. Soils are greatly benefited by the successful growing of leguminous crops.

If You Have Not Tested Your Seed Corn Yet This Year Do So Now

By J. R. DUNCAN

Department of Farm Crops, Michigan Agricultural College

GOOD seed corn, according to Mr. Duncan, is a mighty scarce article in Michigan right now, and if farmers do not test their seed by Rag Doll or some other method they are going to be greatly disappointed with the stand this year. In this article he discusses the seed corn situation, what to look for in making a test, and describes the Rag Doll tester for the benefit of those who do not understand it. It will mean a little extra work to test your seed but it is better to be safe than sorry.

THE reports coming in to the Farm Crops Department from various sections of the state indicate that a large number of farmers are going to be surprised and disappointed in their seed corn for planting the corn crop this spring, and unless a germination test is run by the Rag Doll or some similar method, the seed corn to be planted will result in a very poor stand this year.

There are several factors which are responsible for the present condition of seed corn generally

1st.—Failure to mature corn at harvest time.

2nd.—Failure to mature corn with a high moisture content.

3rd.—Lack of proper storage after harvesting.

4th.—Failure to look for or recognize the apparent evidence of frozen or moldy kernels in the ears since harvesting.

The results from my variety plat at the Michigan Agricultural Experiment Station show a moisture content ranging from 39.5 for an early variety corn to 53 per cent for a late variety in the group of varieties, which we normally call adapted to this territory for grain. It is quite difficult to estimate the approximate moisture in grain but a great many farmers know that corn to keep in the crib without spoiling must be dry enough to shell some at least when shoveling into the crib. Corn in that condition would carry approximately 22 per cent moisture, so this year corn was evidently carrying an average excess of 23 per cent moisture, which of course is a dangerous condition to start with and perhaps was not fully appreciated.

Silage corn, harvested at the same time, contained from 55 to 71 per cent moisture.

With such conditions existing there is only one safe course to pursue and that is: Hang seed corn up so one ear cannot touch another, in a well ventilated room or building.

One good sized lot (40 bu.) of seed corn was inspected March 7. It was in a pile about two feet deep on the floor. The corn could have been spread out to less than half the depth. The windows were closed allowing no ventilation. A stove could easily have been operated. This was not done. The result of this improper handling is total loss of seed corn. The sample of this corn, brought into the Farm Crops Laboratory March 10th, showed a moisture content of 25.4 per cent and the germination test indicates zero.

With the facilities at hand and very little additional expense, this entire lot of corn (40 bushels) could have been saved for seed and would have been sold at a good figure, since Crop Improvement Association Registered Seed is selling at $6.50 per bushel, and certified seed is $4.50.

Another large lot of well sorted seed corn, if properly handled in the early part of the winter, could have practically all been sold for seed, but on account of improper handling will have to be resorted to get 45 per cent of the pile to germinate, 91.4 per cent. The balance, 55 per cent, germinated 69.4 per cent with a great many weak sprouts, which means less than 50 per cent germination if planted in the field.

A great many samples of seed corn have been tested for moisture and germination for farmers of Michigan this winter in the Farm Crops Laboratory, and only the corn that was placed on racks or hangers is showing satisfactory results. A great many samples run from 0 to 80 per cent germination, when no one ought to be satisfied with seed which does not test 90 per cent or better.

Our High School Agricultural Teacher reports that the seed corn brought in by boys from farms, shows about 50 per cent germination.

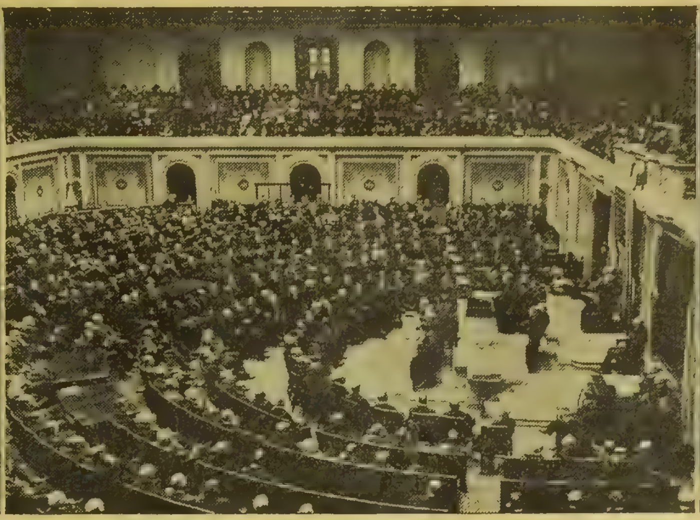
Methods of Testing Seed

The Rag Doll makes the simplest, inexpensive, efficient method imaginable and any boy taking Agriculture in High School knows how to operate one.

(Continued on Page 18)

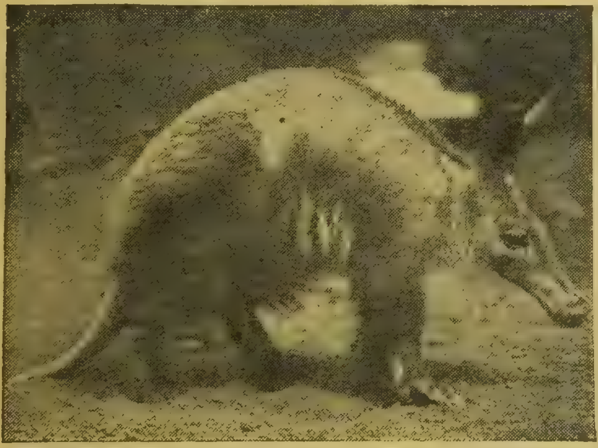
PICTURES FROM FAR AND NEAR

18 YEAR OLD PSYCHIC MARVEL.—Miss Eugene Dennis, of Atchinson, Kansas, has amazed the most critical with her psychic demonstrations. She performs wonders without going into a trance. She thinks a moment and then tells your past or where to find articles.



CONGRESS' TRIBUTE TO HARDING.—This is a fine view of Congress taken during the Harding Memorial Services held at the House, on February 27th. All of the nation's highest officials attended. Mrs. Harding, widow of the late President, sat in the balcony. The favorite hymns of Mr. Harding were rendered by the Marine Band in the House Lobby.

A REAL RADIO FAN.—Little Mary Nelson of Philadelphia, Penn., and her radio fan. The coils of the set are wound in the leaves of the fan and "tuning in" is done by opening or closing the fan to get the desired clearness.

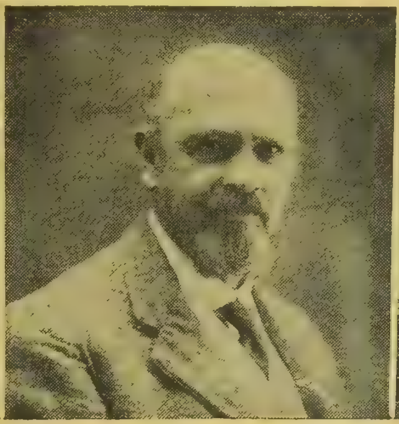


THEY SAY IT'S A BEAR! WHAT DO YOU SAY?—This odd creature, seen in the London Zoo, is called an Aard Vark, by the Boers of South Africa from where it came. At the Zoo it goes under the name of Ant-Bear. It lives entirely on ants. We suppose some society woman will have one for a pet soon.

REPRESENTATIVE AND BROTHER ARE LAW STUDENTS.—Besides attending to official duties Congressman Wm. Connery, of Lynn, Mass., (seated) and his brother Lawrence, his secretary, are studying law at a Washington university.

PRETTY NEAT WORK, ISN'T IT?—So says Frank E. Daily as he puts the finishing touches on his 4 masted Barque. Daily is 74 years old, and has seen 47 years sea service, and is now one of the residents of Sailors Snug Harbor, Staten Island, New York City, a well known home for old "salts of the sea."

PAINTS PICTURES TO ILLUSTRATE SERMONS.—Rev. Branford Clarke, of Brooklyn, N. Y., uses his own oil paintings to emphasize the main points in his sermons. The photo shows him in his study, with some completed pictures, and one he is working on.

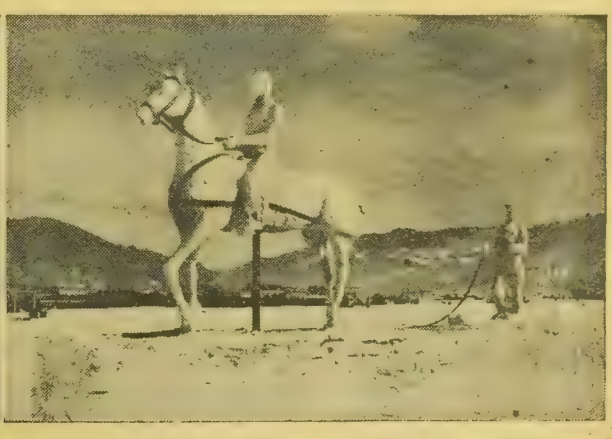


MOON MAY NOT BE DEAD.—Prof. W. H. Pickering, of the Harvard University Observatory at Jamaica, declares there is still life on the moon.

STILL ON THE GO.—Capt. Wanderwell, well known American globe trotter, and his party are touring around the world. This picture was taken in Constantinople, Turkey, in front of the Mosque of Saint Sophia. Both machines are Fords with special built bodies.

HAS HANDLED 31,000 TONS OF TYPE.—John S. Burnside, veteran "makeup" man of the Government printing office at Washington, has been on the job for 56 years, and the weight of the type he has set is the displacement of one of Uncle Sam's largest battleships, or over 31,000 tons,

A RATHER STRANGE HOBBY.—Miss Jeanne Gordon, young American contralto, now singing leading roles at the Metropolitan Opera House, New York City, has a fine collection of porcelain china banks, some of them priceless.



SNOW SCULPTURE.—A magnificent specimen of sculpture representing a man on horseback towing a man on skiis. This fine piece of snow sculpture is the work of Professor Brugner, well known Munich sculptor, and required many hours to model. Both horse and man are very life-like.

(Copyright, Keystone View Co.)

FORTY YEARS OF FAKING

The Memoirs of a Grafter—By Himself

PETE DEXTER, grafter de luxe, began his career as a faker when he was hired out to a traveling medicine show to care for some snakes and do a few acrobatic tricks. He tells us that one season with the dispenser of the famous "Wizard Oil" was enough, especially when he had to resort to force to get the pay coming to him.

Following a season at selling red lemonade at county fairs, he drifted south, and, after he had made a pretty fair clean-up by selling cheap silverware by mail, he hopped a train for the north. His move was speeded up particularly when he heard that officers were looking for him, but he made a safe get-away.

Pete, who has written his life history for THE BUSINESS FARMER, was an amateur in those days, but he admitted he was fast becoming an expert, and the story of his adventures in extracting easy money from the public follows.

(Continued from March 15th issue)

AFTER the little flyer I had in Florida, I decided that it wasn't safe to travel with a show or make the fair circuits, because I had already learned that a fellow was in danger if he was seen in public too much.

Money was getting scarce, and it looked as if I was going to have to get a job and do real labor if I intended to eat. I landed in South Dakota before my money ran out, and it was there that the next best scheme I figured out came to me. A fellow came around the job one day canvassing us boys so that we would all order tailor-made suits. He would take our measure, take a five-dollar deposit, and promise the suit in a couple of weeks. That gave me an idea. The job I had was kind of tough, and summer was coming on, so I wanted to get out in the air.

A couple of weeks later found me in a little town about forty miles away, with a bunch of cloth samples that I had taken out of a tailor shop when the boss wasn't looking. I also had on my new suit which the fellow had sold me, and I was armed with a pad of order blanks, a receipt book and a tape-line.

The suit I was wearing cost me twenty-five dollars, which in those days was a lot of money. For my purpose, I announced that a suit like mine could be had for fifteen dollars. Pick over the samples and choose the style. A five buck deposit was all I asked. I claimed to represent the New England Woolen Mills, and I had prepared some letters telling who I was.

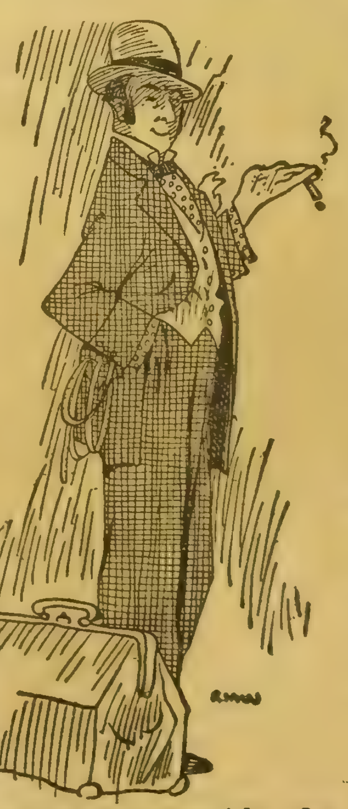
The first day I took orders for three suits. On the strength of that, I got five more next day, and the third day I had nine customers that handed over the five spot and took my receipt. That allowed me enough profit after I had paid my bills to get a pretty good start. I jumped two hundred miles into another state, worked the small towns till I had about a hundred dollars, and then moved again. That summer was the beginning of my big money time, and altho I was a couple years short of twenty-one, I cleaned up nearly two thousand dollars in about four months. I never did hit any of these towns again, but I'll bet the fellows who are waiting for me to deliver those clothes are getting pretty mad. They sure were easy. The way they fell for that cheap suit idea and handed me five spots was just like taking candy from a kid.

I had an aunt in New York, so I visited her that winter. She was glad to see me, and when she found I was a money-maker she kept me around until spring. She tried to get me to go to school, but that was out of the question for me. Cash was coming too easy for me in my line.

While I was stopping with her at Rome, New York, I figured out my next summer's business. Aunt bought her tea and coffee from a fellow who peddled it in a wagon. Every time she brought a dime's worth of tea, he gave her a lot of pretty coupons, and if she saved enough she eventually got a phoney silver tea set. The way women will buy stuff to get premiums is a joke. Why last year I met a fellow who was selling a paper that gave a great big dishpan with a year's subscription. That dishpan, he told me, cost the company 14 cents, but it sure pulled the three bucks away from them women. That agent got one dollar every time he unloaded the tin pan, and the company had another subscriber tied up for life.

Well, I began to hunt around for a cheap silver set. I read all the catalogs and finally found a firm that offered a knock-out for $11.80. It consisted of a sugar bowl, cream pitcher and a coffee pot and a tray all "genuine silver," and it was a swell lay-out. Next thing I did was to go over to a small town about five miles away, and had a lot of tags, receipts, cards and stuff printed, announcing that with every ten pounds of "Colonial Coffee" purchased from out traveling salesman, the Colonial Tea and Coffee Company would deliver one of the beautiful silver sets as a premium. This offer, the tickets stated, was to introduce a new coffee and better tea to the public. I sure was proud of the job that fellow did with those cards, and the swell way he fixed up them order blanks.

I fixed up my outfit, and as a sure business getter I bought a few pounds of the coffee that my aunt was using—and it was good stuff, too—and a week later I bid the folks good-bye, telling them I was going to Chicago to look up a business connection. I had never worked Illinois and Iowa very much, so I took my outfit and started about forty miles from Chicago. I had a Chicago address on my cards, and that helped, and it wasn't very long till I had enough money to buy a horse and buggy. The game I was working was that the coffee would be delivered at once and the silver set was to come from the factory. All I had to do was to exhibit the silver and the order sure came quick. At the close of each day, I would get some cheap coffee in a town, take it to my room and resack it for the next day's business. I always took full pay for the coffee and delivered as much as possible. The coffee I bought never cost me over fifteen cents a pound, and I sold it for thirty cents, and the silver set brought an extra dollar for shipping expenses. Say, I used to clean up twenty-five to thirty dollars a day, and folks in towns would come to my headquarters to get in on the silver set offer. Well, I worked Illinois for several weeks. I had told my customers that it would be a few weeks before the silver would be shipped, as the sets came from the east, so I was safe.



He would take our measure, take a five-dollar deposit, and promise the suit in a couple of weeks.

My next territory was Wisconsin, were every one drinks coffee, at least part of the time. Say, the way those women gobbled up my offer was something fierce. I ran out of order blanks twice and had new ones printed. I was wise enough to change the name of the town, and as long as I was going to Iowa late in the summer I had a set made for DesMoines, so that Iowa people would feel better about the company. Well, I cleaned up a wad of money that season. When I sold my horse and wagon and checked up, I sure felt rich.

Every one was going to California about that time, so I just packed up my things and went, too. I gave my silver set to a nice old lady in the last town I had stayed in, as her boarding house was the best on the road, and she was the tickeldest woman you ever saw—and the only one who ever got a silver set from the Colonial Tea and Coffee Company.

I had peddled along on that small line of stuff for several years, and didn't get caught, either. I was always careful to work different territory all the time, but I was beginning to find that the good sections were in the middle-west, and I wanted to try out some of my new schemes a second time. But I wanted bigger deals.

I had taken up with a bunch of fellows while I was in California, who were selling gold-mining stocks. They owned the Silver Star Company, located at Cripple Creek, Colorado, and shares had been going fast. I sure learned a lot of things from those boys, and even tho they gave me a job which paid pretty good, they eventually got all of my cash back, as I fell for their line and took shares whenever I could spare the price of a meal ticket. One day when I went to work, the police was standing in the door, so I figured that something was wrong. I kind of stepped up easy like and inquired of the cop what was the matter, a murder?

"Naw," said the cop; "the chief just got wise to the game that these birds is working and they are raiding the place and taking the books."

Right then and there I quit working for that gang, and about all I had when I left town was a considerable bunch of experience and a lot of stock.

But the experience sure came in handy a few years later when I went into business myself. Maybe those fellows is in the pen, but their spirit went marchin' on, for I sure went them a heap better, as I never got caught.

Well, the only time I ever had to bum a ride on a freight train was when I left California after the mine went bad. I had a couple of dollars, but I had to eat, too, and I hated to think about those cops lookin' for me, so I climbed on a train and after a week's travel, in which I got kicked off often enough so that I didn't miss any meals, I found myself down in Texas.

(Continued in April 12th issue)

A school board was visiting a school, and the principal was putting his pupils through their paces.

"Who signed Magna Charta, Robert?" he asked, turning to one boy.

"Please, sir, 'twasn't me," whimpered the youngster.

The teacher in disgust told him to take his seat, but an old tobacco-chewing member of the board was not satisfied; so, after a well-directed aim at the cuspidor, he said: "Call that boy back. I don't like his manner. I believe he did do it."

"This law is a queer business."
"How so?"
"They swear a man to tell the truth."
"What then?"
"And every time he shows signs of doing so, the lawyer objects."

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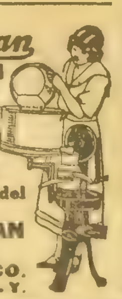

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Farmers Service Bureau

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RESILVERING MIRROR

Some time ago you published directions on how to resilver a mirror and I intended to save that copy of the paper but I mislaid it and now cannot locate it. Will you be kind enough to publish the directions again?—B. C., Washington, Mich.

—First, clean the glass very clean. Lay it on a flat surface with the back up. Pour some quicksilver on it at the center, lay a sheet of smooth tinfoil on it, and work the quicksilver out from under the foil with a rubber squeege roller such as photographers use for mounting pictures. Care must be taken to keep out wrinkles and air bubbles. After it is worked down flat, the foil should be painted or shellaced to prevent injury.—Managing Editor.

ONE HEIR CANNOT HOLD UP SALE

A man dies leaving widow, and three children, all of age, and an estate consisting of a farm and personal property but no will. Property has been in probate and all claims paid and administrator is trying to sell property. One heir says he will not sign off but wants farm divided. What proceeding is necessary in this case? Can the farm be sold without all the heirs signing off? Can one heir call for a division of farm? How long is administrator allowed to settle estate? How long can widow hold possession of farm home? Does she have to pay rent after a length of time?—Reader, Flint, Mich.

—Upon the authority of a majority of the heirs the probate court may order the farm sold and the proceeds divided among the heirs. One of the heirs cannot compel the administrator to divide the farm against the will of the majority. As soon as the debts have been paid and the share of each heir determined, the probate judge may order the estate settled immediately by the administrator. A widow may hold possession of the homestead without paying rent until her share of the estate has been assigned to her.—Asst. Legal Editor.

MUST BUILD FENCE

Will you please answer the following question through your paper? A and B each buy 5 acres of land joining; it was a ten acre farm. A gets house and rents his half, after three years B builds and goes to live on his half. There is no dividing fence. A's tenant has chickens and B wishes to raise garden. Now does A's tenant have to shut chickens up or does A and B have to build dividing fence?—F. E. W., Plymouth, Mich.

—A and B would be required to build a dividing fence, each party building and maintaining his share of the fence.—Asst. Legal Editor.

SHOULD NOT HOLD BOTH OFFICES

Please let me know if a man can be township clerk and school director in the township or is there a law that says he can not?—W. J., Gaylord, Mich.

—As a general rule a person may hold two offices at the same time unless it is prohibited by statute or unless the offices are incompatible.

It is our opinion that the offices mentioned by you are incompatible. The township clerk has numerous duties to perform relating to school matters. We would call your attention to Section 5758 of the Compiled Laws of 1915 which provides that:

"Any township clerk who shall neglect or refuse to certify to the supervisor any school district taxes that have been reported to him as required by this act * * * shall be liable to any district for any damage occasioned thereby, to be recovered by the treasurer in the name of the district in an action of debt or on the case."

Under this provision of the statute, the clerk might become liable to the district in damages for neglecting to perform his duty as clerk. It would be inconsistent for him to be a member of the school board which authorized or directed the treasurer to bring an action against him for damages.

He would be in a position where he could use his influence to prohibit the district from bringing a legal action against him for damages.—Clare Retan, Deputy Attorney General.

START SUIT AGAINST GARAGE

I had a good tire, 35x5, slightly damaged. I sent it to the garage by a neighbor to have it repaired. It was sometime before I sent for it. I sent by another neighbor, they said it was brought there but the man took it away with him. Then the man who took the tire there goes for it and they say they took it to the vulcanizing shop and they go there for it but can't find it. Then I go for it and they say it was so damaged by a nail functure that they threw it in the junk but say they will find it. They don't find it. Can I get damages and how? It's value is $20. It has been over a year.—V. G. Mattawan, Mich.

—You have a right of action against the garage for the value of your tire. The proper procedure would be to start suit before the local justice of the peace.—Asst. Legal Editor.

ASSESSING FOR DRAIN

Can the officers of a district on one side of the township, having put in a drain for the benefit of their farms, not the road, spread a tax for the same over the whole township? People in this vicinity will derive no possible benefit whatever from the drain because the river runs between and said drain goes to the river. It seems to me the people benefitted by this drain should pay for it. Any advice you can give me will be appreciated.—B. B., Harrisville, Mich.

—I presume that the drain in question is a drain being constructed under the provisions of Act 316 of the Public Acts of 1923. You do not state whether a drainage district has been established or whether the proposed drain is a county or an intercounty drain. We think that you should consult some local attorney who will be able to ascertain the facts necessary to give you proper advice.—Clare Retan, Deputy Attorney General.

SHE IS NOT 'AN HEIR

If my father, a widower with two adult children, should die without making a will, what share of his estate would my deceased brother's widow receive? A lawyer has told me that she is still an heir.—O. Y., Belding, Mich.

—She would not inherit anything. —Asst. Legal Editor.

We all like The Business Farmer. The Home Department and the Pattern Department are fine and the stories are much enjoyed, while the rest of the reading is very intertsting and good sound sensible reading. Yours for success.—Mrs. H. M. Shreeves, Oakland County, Michigan.

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WHEN WRITING TO ADVERTISERS PLEASE MENTION THE BUSINESS FARMER

What the Neighbors Say

FARM VS. CITY

DEAR EDITOR:—I am a reader of your paper and have been reading Mr. Jordan's articles. I must say, I am more than pleased to read your answer to his criticising of your paper also farming in general. I think you hit the nail on the head when you spoke of that key they call hard work. I know Henery Ford believes in it too, and he also wants every man that works for him to believe in it (I know, I been there nearly 8 years).

If the city looks so good to Mr. Jordan why doesn't he go there and live. He talks of unemployment in the cities. I lived there 15 years and always saw men idle. But they are the kind, as a rule, that are looking for the soft jobs.

There is no need for me to take up any more space as I think you fully answer all of his criticism. Hope he comes again as I enjoy reading his letters.—H. C., Caro, Mich.

PAY MORE ATTENTION TO SIDE ROADS

DEAR Editor: I was just reading the 1924 road program in your issue of January 19th. It says everyone interested in good roads in Michigan will praise the present plans. Very true, but did you ever stop to think that there are hundreds of groups of farmers that do not live on those trunk lines and cannot get to their market in the fall of the year with one ton of potatoes or sugar beets, or anything else, without over-drawing their team, and their taxes are so high that they dare not raise township road funds to gravel those roads.

Do you think the State Highway Department is giving the farmers a square deal to put so many millions in concrete roads for joy riding and to let the farmer get his produce to market the best way he can? I have often wondered if it was more necessary for the sports and travelers to have a fine concrete road to drive on than it was for the farmers to have a gravel road to get the real necessaries of life to market, so the consumer could have them at a reasonable price, and the farmer could live and use his teams as dumb animals should be used. I do not believe there could be anything done to cut down the high cost of living more than that every farmer in the state of Michigan have a gravel road from his market as near to his farm as possible.

Do you not think the State Highway Department would be doing a little more fair to the majority of taxpayers to make a fairly good gravel road of their great tourist routes and see that they stopped such speeding as they are doing on those roads, and put in a little more money on roads leading from the farm to their market?

I love to read the M. B. F. and I read nearly everything in it when I can spare the time, but I would like it much better if I could read a piece in each issue explaining the great mistake of our state and county highway departments are making in spending so much money for sport roads instead of making roads that would benefit the tax payers.—Ben Richards, Wexford County.

CHICKEN THIEVES

EDITOR THE BUSINESS FARMER—I would like your assistance and that of your paper in a matter that is causing a great deal of trouble to the farmers (and farmer's wives) in this neighborhood. As I am afraid if something is not done soon it will be the ruination of the poultry business, and so shorten by at least half, the supply of ready cash available for the farmer's wife, for herself, the children and the house, I am writing to you for aid. It is in short the existence of a ring, consisting principally of foreigners brought in for beet help, who systematically clean out the neighborhood they live in by gathering the chickens nights in the places they are most familiar with and disposing of them to some fellow worker who runs a truck or car, and crates for carrying the chickens.

Two years ago I had unusually good luck, hatching over three hundred early chickens besides half as many more, later ones. Of these I intended to sell the cockerels in the early fall and keep the pullets for myself. But in August they were all taken that were big enough to be called broilers which meant all of my early chickens and only the late ones were left. We managed to keep them by locking one door and nailing the other doors and windows fast and keeping wire on the inside of the windows although an attempt was made to steal my later ones, At the same time several of my nearest neighbors lost their chickens. Last year I raised only about fifty, most of them late, but five or six of my neighbors who were fortunate enough to raise a larger number, had them all stolen.

One friend who had spent a large part of the summer caring for eight hundred chickens, had three hundred carried off in one night, while she was visiting a daughter at some distance from home. A near neighbor, who purchased from two other neighbors, two batches of chickens, numbering twenty or twenty-five each, to add to his small flock of Anconas, had both batches of heavy chickens stolen inside of two weeks, and in place of his small chickens, they crossed the road and took fifty of his nearest neighbors.

I could go on with like illustrations for some time, but would only waste time and ink. Still something must be done to save a few hens for the farmer's hen-roosts or there will be no further use of raising chickens. Many of the sufferers here declare they will not raise chickens again for others to sell.

The horse thieves out west were hung, but a man who would steal a horse from a man, and ride it away, is still a man compared with a sneak who comes at night and steals some farm woman's chickens, the sale of which would bring money for her children's shoes, stockings and winter wear. If you can help in any way or by the help of other subscribers suggest some way of curbing this evil, I would greatly appreciate.—L. C. S., Breckenridge, Mich.

DOES NOT APPROVE OF DOG TAX LAW

DEAR Editor—In a recent issue of your paper there was an article "Must pay dog tax." Not wanting to criticise, but your assistant Legal Editor says that there is a state law except in cities where there is an ordinance providing for such tax. The law reads: "A state law, excepting cities of over 250,000 inhabitants"—that means Detroit, which includes all Wayne county. They have the right to make their own dog law. A state laws with exceptions that does not look reasonable or constitutional, and fine or lock a person up if he does not pay $3.00 or $6.00 as the case may be, is outrageous. Is it not? The Auditor General's report on the affair is $54,000 paid out for damages done by dogs in the state, and $310,000 collected to pay the fifty-four thousand dollars. Where does the rest of that money go according to the constitution? Other cities and counties should have the same rights, as Detroit, and Wayne county, and any county or township official that tries and does enforce that dirty outrage is doing an injustice to the people they represent. I contend that it is no more of a criminal offense to keep a dog than a cow or horse. Wayne county exempt. Wayne county has officials that stand for their rights and I admire them for that. Let other county officials do the same and there would be less taxes to pay, and less of the taxpayers' money spent for autos for some of our state officials, gasoline and repair bills.—W. B. Ellerthorpe, St. Clair County.

RADIO DEPARTMENT

By J. Herbert Ferris, B. E.

GROUND AND EARTH CONNEC-

TO properly receive radio messages a good earth connection is absolutely necessary. This connection may be made in several different manners, the easiest and simpliest ones for the average person to use will be described in a way that will enable you to have as good a "ground" as necessary for receiving.

The need of a ground is twofold: first, to act as an earth return for the wireless wave that your aerial picks up and passes thru your set, second as a protection for your set against lightning damage during the summer when thunderstorms are quite frequent.

If you have a house that has running water in it, piped from a spring or well you are fortunate as this will make a very good ground. Under these circumstance we would suggest that you plan to have your receiving set in a room near to one of the water pipes. The pipe may be in the cellar or in the next room or even outside.

The shorter the wire from your set to the ground connection, the pipe, the better your results. If you have to go much over 15 feet to reach a water pipe you may find that it will be necessary to shorten your aerial a little. Every foot of wire used in the aerial, the leadin, the ground connection all act as part of your receiving system, and should the wire be too long the natural wave length of your antenna system including ground leads will be higher than the low wave length of some of the broadcasting stations that you may wish to hear. Hence the necessity of having short leads to the actual ground connection.

Those of you who do not have a water system in the house, but have a windmill tower and driven well very near the house, can run a wire on short posts or under ground to your pump and make a connection there. In this case you may have to go as far as fifty to seventy-five feet and yet you will get good results. If you have to go as far as fifty feet shorten your aerial to not exceed 75 feet (if 30 feet high) in fact 50 feet long would in some instances be better.

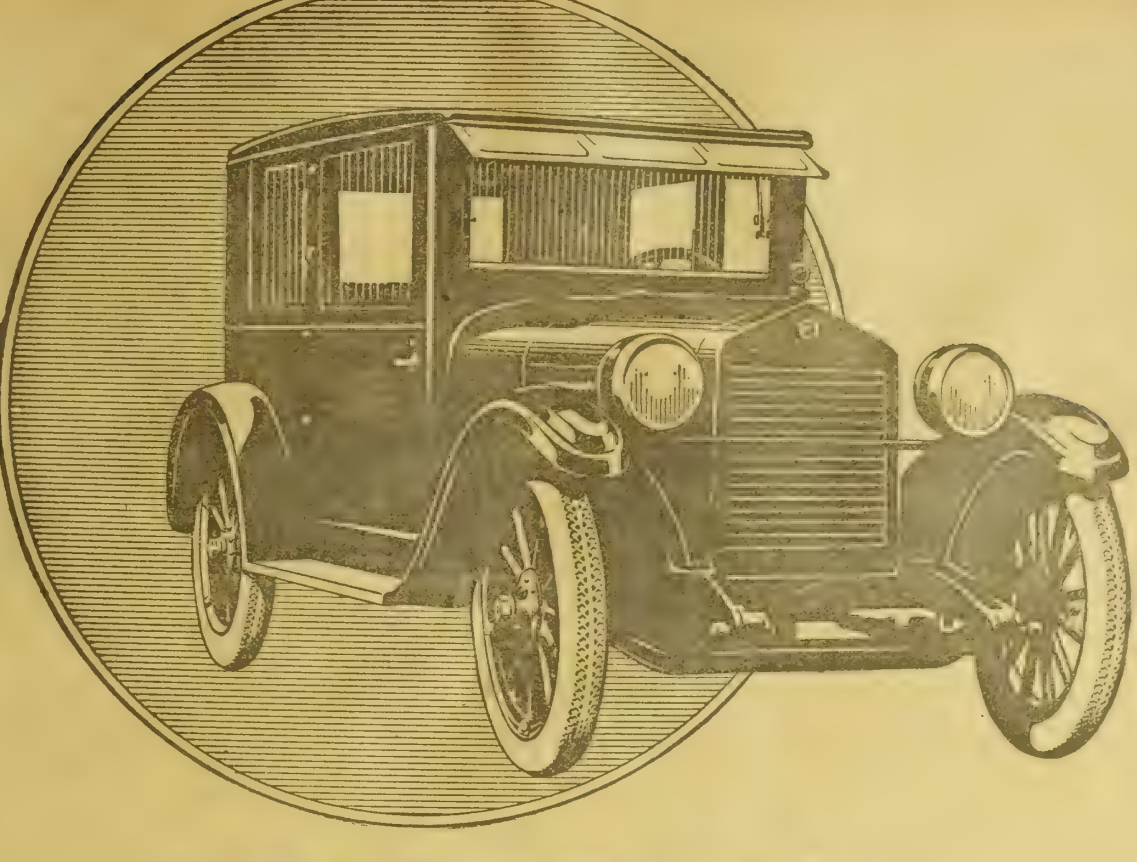
And for those that do not have a pump near at hand or water pipes in the house a connection to the cistern pump as long as it is partly immersed in water will give a satisfactory ground. Sometimes this gives a better ground than the piping in the house, but cannot be relied upon to do so. It will give good results.

Lastly we have to consider those who have no pump near or any piping. To them we will say it will be necessary to get an iron pipe or rod and drive it into the earth 6 to 10 feet, or until it is in permanently moist ground, and make their connection to that rod. A piece of half inch pipe is large enough, and in very dry weather one can pour a bucket or two of water in the pipe to keep the earth damp so that a better ground will result. Using a rod or pipe as just described placed near the house will be better than running a wire 50 feet to a pump that is away from the house.

Now to connect to the pipe, pump or rod. First, with a file or sand paper clean off a spot on the pipe or rod, all the way around it, and about 2 inches long so that all the rust is completely off. Around this cleaned spot wrap six or eight turns of your ground wire, close together and as tight as possible, twisting it tight with pliers. This will make a good connection, but must be wrapped with adhesive or electricians tape to keep out the dirt and mosture so that the connection will remain clean and free from rust.

The better connection is to buy what is called a "ground clamp" (about 10c) and fasten your wire to this and then clamp the ground clamp to the cleaned place on the pipe. If you can solder your connection to the pipe or rod it will be the best way and will always give you good contact with the pipe or rod.

You can use the same earth connection for your lightning arrester ground, as it should be as good as that used for your radio. If you use a lightning arrester, and you should, do not use smaller than No. 14 copper wire for the lead wire.



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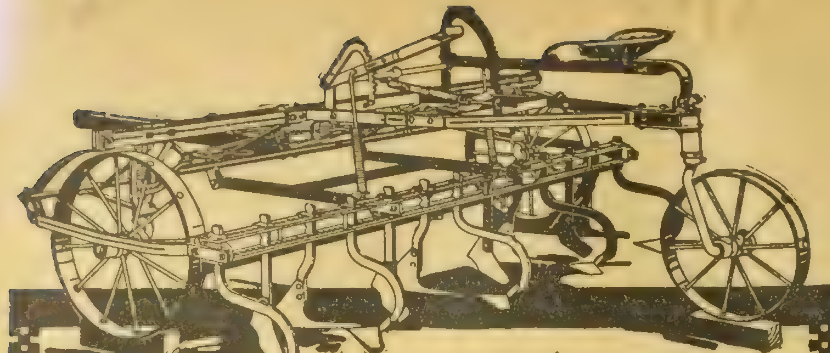

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Oh Money! Money!

by ELEANOR H. PORTER

THE STORY TO DATE

MR. STANLEY G. FULTON, 50-year old bachelor and possessor of twenty million dollars, calls on his lawyer and they discuss the disposition of this large fortune after its owner's death. The lawyer is in favor of giving the money to colleges or charities while Fulton is opposed to these ideas. He remembers that he has some distant cousins and decides to leave the money to one of them, but first he determines to learn which one will use it to the best advantage. To find out who is the worthy one he, through his lawyer, gives, each cousin $100,000 to use as they will. Before giving them the money grows a beard and, using the name of Mr. John Smith, goes to the town where they live to find out what kind of people they are. Upon arriving in town he visits James Blaisdell, one of the cousins, where he tries to hire board and lodging. While there he meets Miss Flora Blaisdell, another cousin who is a dressmaker. They decide they cannot rent a room to him and supply him board and refer him to Frank Blaisdell's, the third cousin. He gets a room there and, passing as a writer gathering material for a book on the Blaisdell family in this country, he starts out. He calls on all of the Blaisdells and as they all talk of a relative by the name of Miss Maggie Duff he decides to call on the lady. He finds her living with her father, an old man who seems to have soured on the world. He secures what information he can from her and her father. He then writes a letter to his lawyer discussing the various relatives he has met. The members of the Blaisdell family learn that each cousin of Stanley G. Fulton has fallen heir to $100,000 and there is much excitement. Mr. Fulton decides to change his rooming place and secures room and meals at Miss Maggie Duff's house.

(Continued from March 15th issue.)

"DAD'S been showin' me the books he used ter like when he was a little boy like me," announced Benny. "Hain't he got a lot of 'em?—books I mean."

"He certainly has."

Mr. James Blaisdell stirred a little in his chair.

"I suppose you have crowded them a little," he admitted. "But, you see, there were so many I'd always wanted, and when the chance came—well, I just just bought them; that's all."

"And you have the time now to read them."

"I have, thank— Well, I suppose I should say, thanks to Mr. Stanley G. Fulton," he laughed, with some embarrassment. "I wish Mr. Fulton could know how much I do thank him," he finished soberly, his eyes caressing the rows of volumes on the shelves. "You see, when you've wanted something all your life—" He stopped with an expressive gesture.

"You don't care much for that, then, I take it," inferred Mr. Smith, with a wave of his hand toward the distant violins.

"Dad says there's only one thing worse than a party, and that's two parties," peped up Benny from his seat on the rug.

Mr. Smith laughed heartily, but the other looked still more discomfitted.

"I'm afraid Benny is—is telling tales out of school," he murmured.

"Well, 'tis out of school, ain't it?" maintained Benny. "Say, Mr. Smith, did you have ter go ter a private school when you were a little boy? Ma says everybody does who is anybody. But if it's Cousin Stanley's money that's made us somebody, I wished he'd kept it at home— 'fore I had ter go ter that old school."

"Oh, come, come, my boy," remonstrated the father, drawing his son into the circle of his arm. "That's neither kind nor grateful; besides, you don't know what are you talking about. Come, suppose we show Mr. Smith some of the new books."

From case to case, then, they went, the host eagerly displaying and explaining, the guest almost as eagerly watching and listening. And in the kindling eye and reverent fingers of the man handling the volumes, Mr. Smith caught some inkling of what those books meant to Jim Blaisdell.

"You must be fond of books, Mr. Blaisdell," he said somewhat awkwardly, after a time.

"Ma says dad'd rather read than eat," giggled Benny; "but pa says readin' is eatin'. But I'd rather have a cookie, wouldn't you Mr. Smith?"

"You wait till you find what there is in these books, my son," smiled his father. "You'll love them as well as I do, some day. And your brother—" He paused, a swift shadow on his face. He turned to Mr. Smith. "My boy, Fred, loves books, too. He helped me a lot in my buying. He was in here—a little while ago. But he couldn't stay, of course. He said he had to go and dance with the girls—his mother expected it."

"Ho! Mother! Just as if he didn't want ter go himself!" grinned Benny derisively. "You couldn't hire him ter stay away—'specially if Pearl Gaylord's 'round."

Oh, well, he's young, and young feet always dance when Pan pipes," explained the father, with a smile that was a bit forced. "But Pan doesn't always pipe, and he's ambitious—Fred is." The man turned eagerly to Mr. Smith again. "He's going to be a lawyer—you see, he's got a chance now. He's a fine student. He led his class in high school, and he'll make good in college, I'm sure. He can have the best there is now, too, without killing himself with work to get it. He's got a fine mind, and—" The man stopped abruptly, with a shamed laugh. "But—enough of this. You'll forgive 'the fond father,' I know. I always forget myself when I'm talking of that boy—or, rather, perhaps it's that I'm remembering myself. You see, I want him to do all that I wanted to do—and couldn't. And—"

"Jim, Jim!" It was Mrs. Hattie in the doorway. "There, I might have known where I'd find you. Come, the guests are going, and are looking for you to say good-night. Jim, you'll have to come! Why, what'll people say? They'll think we don't know anything—how to behave, and all that. Mr. Smith, you'll excuse him, I know."

"Most certainly," declared Mr. Smith. "I must be going myself, for that matter," he finished, as he followed his hostess through the doorway.

Five minutes later he had found Miss Maggie, and was making his adieus.

Miss Maggie, on her way home, was strangely silent.

"Well, that was some party," began Mr. Smith, after waiting for her to speak.

"It was indeed."

"Quite a house!"

"Yes."

"How pretty Miss Mellicent looked!"

"Very pretty."

"I'm glad at last to see that poor child enjoying herself."

"Yes."

Mr. Smith frowned and stole a sidewise glance at his companion. Was it possible? Could Miss Maggie be showing at least a tinge of envy and jealousy? It was so unlike her! And yet—

"Even Miss Flora seemed to be having a good time, in spite of that funeral black," he hazarded again.

"Yes."

"And I'm sure Mrs. James Blaisdell and Miss Bessie were very radiant and shining."

"Oh, yes, they—shone."

Mr. Smith bit his lip, and stole another sidewise glance.

"Er—how did you enjoy it? Did you have a good time?"

"Oh, yes, very."

There was a brief silence. Mr. Smith drew a long breath and began again.

"I had no idea Mr. James Blaisdell was so fond of—er—books. I had quite a chat with him in his den."

No answer.

"He says Fred—"

"Did you see that Gaylord girl?" Miss Maggie was galvanized into sudden life. "He's perfectly bewitched with her. And she—that ridiculous dress—and for a young girl! Oh, I wish Hattie would let those people alone!"

"Oh, well, he'll be off to college next week," soothed Mr. Smith.

"Yes, but whom with? Her brother!—and he's worse than she is, if anything. Why, he was drunk to-night, actually drunk, when he came! I don't want Fred with any of them."

"No, I don't like their looks very well, but—I fancy young Blaisdell has a pretty level head on him. His father says—"

"His father worships him," interrupted Miss Maggie. "He worships all those children. But into Fred—into Fred he's pouring his whole lost youth. You don't know. You don't understand, of course, Mr. Smith. You haven't known him all the way, as I have." Miss Maggie's voice shook with suppressed feeling. "Jim was always the dreamer. He fairly lived in his books. They were food and drink to him. He planned for college, of course. From boyhood he was going to write—great plays, great poems, great novels. He was always scribbling—something. I think he even tried to sell his things, in his 'teens; but of course nothing came of that—but rejection slips.

"At nineteen he entered college. He was going to work his way. Of course, we couldn't send him. But he was too frail. He couldn't stand the double task, and he broke down completely. We sent him into the country to recuperate, and there he met Hattie Snow, fell head over heels in love with her blue eyes and golden hair, and married her on the spot. Of course, there was nothing to do then but to go to work, and Mr. Hammond took him into his real estate and insurance office. He's been there ever since, plodding, plodding, plodding."

"By George!" murmured Mr. Smith sympathetically.

(Continued in April 12th issue.)

LENT AND SELF-DENIAL

A SERMON BY REV. DAVID F. WARNER

TEXT: "Then said Jesus unto his disciples, If any man would come after me, let him deny himself, take up his cross, and follow me."—Mt. 16:24.

"A FAST of forty days beginning with Ash Wednesday and continuing until Easter." This is what the dictionary says about Lent. And just now many Christians are observing this period as one of self-denial in commemoration of the life of our Savior. And yet, I take it, that our Savior meant that we should practice self-denial three hundred sixty five days in every year. Do you think so? Is that what our text means?

Self-denial is, essentially, a part of religious character. There is no greater rogue in the field of Christian endeavor than Self. He must be denied his coveted place in our lives. To heed him may win us a reputation, but to deny him will win us a character. Always, there are many men and women in the limelight of the world. But it would be a surprising revelation to others and a burning condemnation of themselves to know the degree of self in the motives.

Self-denial includes a conquest over the demands of the body and a bringing under of the selfish ambitions of one's intellect and spirit. Perhaps just a simple study in the self-denial attitudes and teaching of Jesus might be helpful for the Lenton season.

In early times, the denying of the lower or carnal self was engaged in in a spirit and thru methods void of reason. We hear it called asceticism. It grew out of the exclusiveness and formalism of Judaism, as well as a misconception of Christianity by the heathen convert. It was a deliberate attempt to uproot the desires of the flesh and the instincts of nature. It was wholly a religion of negation and a self-excile from the world. Did Jesus teach and practice this? No. Jno. 17:15. But he taught and practiced reasonable self-denial and self-discipline.

Let us begin with fasting. This was practised by our Lord. Mt. 4:1f. It was made a logical and consequent part of religious life. Mt. 6:16f and 9:15f. But it was not the formal setting apart of a particular season or the parade of piety before the world. It was the outward evidence of a soul in its personal and sacrificial relation to God. And for its expression, it did not await a Lenton season of forty days, since it depended wholly upon a peculiar state of mind. And it seems, according to some such understanding as this, it was practiced by the early church. Acts 10:9, 13:3, 14:23.

And what about the marriage relation? Well, celibacy or the non-married state was countenanced and practiced by Jesus, but he did not generally recommend it for others. Mt. 19:12, Luke 14:26. But he did demand a pure and wholesome family life. So, the marriage relation is not debasing during Lent or any other time unless it be placed above the interests of the Kingdom of God. We read of some horrible crimes in church history because some religious leaders have denied themselves marital rights. And many communities and homes are suffering under low-toned morals because married people are not denying carnal lust.

Now, to what extent ought almsgiving to be featured in our life? Our Lord, tho poor, practiced this grace. Jno. 13:29. Indeed, it was a highpoint in his teaching. Mt. 6:1f and Luke 12.33. "Sell that which thou hast and give alms." We are urged to a determination not to be selfish in our abundance. Jesus' warnings on this are vigorous. Hence, to the man who is in danger of falling under the tyrany of money, he says, "Go and sell what thou hast and give to the poor." The love of money is a root of all kinds of evil. Why? Because it is not held subordinate to social demands. You have spent it in self-pleasure, and now, in your declining years you are losing your life. You have not been faithful in the unrighteous mammon, and therefore, you can not be trusted with the true riches. What fools we mortals are!

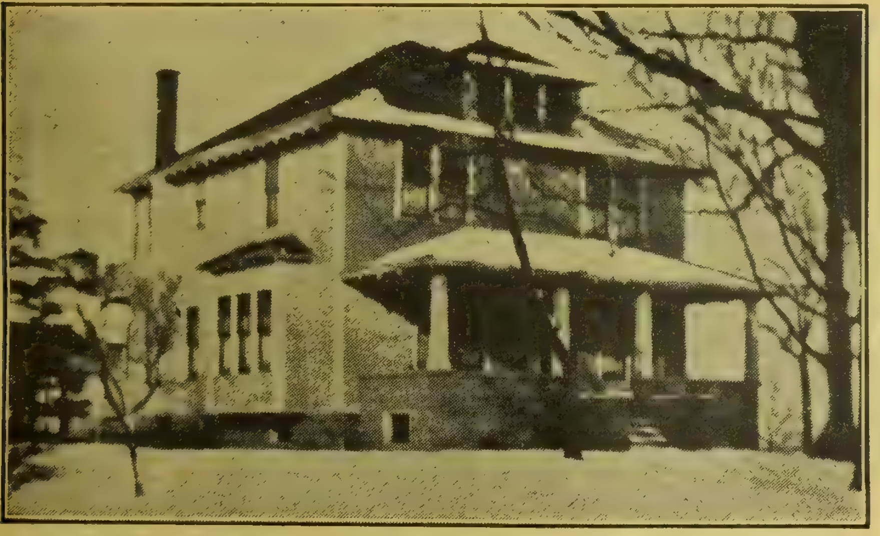
I think it was John Wesley who said, make all you can, save all you can, but give all you can. And when he preached that sermon you know where he placed the emphasis. To give wisely and unselfishly is to have discovered one of the fine arts. Few folks have learned the art of putting their dollars into the business of circulating good will. And in this economic world there are some spiritual things only money can do. When you give your dollars to Kingdom advancement you give so much of concentrated time and energy that God has given you. Consecrated money in the hands of a consecrated person is resistless in its power for good. "Whosoever that forsaketh not all that he hath can not be my disciple."

But again, we are urged to the refusal of luxury. Well, say in personal desires, in the household arrangements, and in the general surroundings of life. "Foxes have holes and the birds of the air have nests, but the son of man hath not where to lay his head," says the self-denying Jesus. And note the helpful hints in, "Behold, they that wear soft raiment are in king's houses;" and in the parable of a cer-

(Continued on Page 18)

OUR READERS' NEW BUILDINGS

Have you built any up-to-date farm buildings lately? If you have send us a picture of the new building and we will print it in this new department. It will show the M. B. F. readers what their distant neighbors are doing to change the scenery. And, incidently, you may be able to help some farmer decide the type of house, or barn, or other buildings he desires to put up. He may like the appearance of your building and will want the plan of it. Kodak pictures are all right if the details show up well. Do not send the negative, just a good print.



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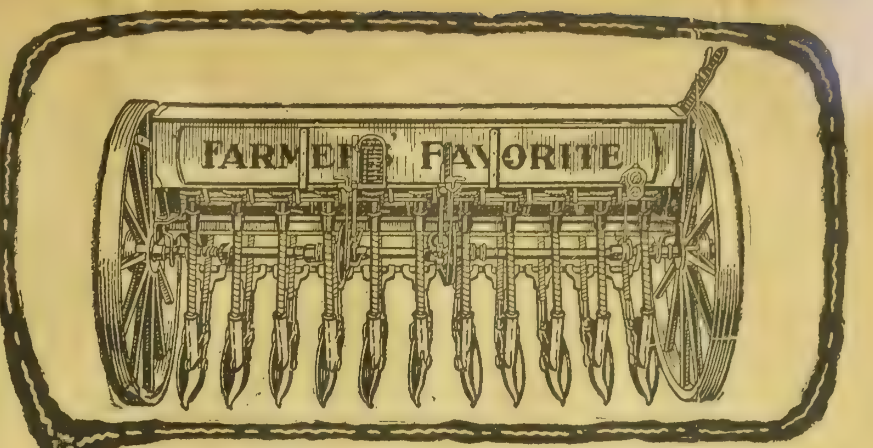

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The Michigan
BUSINESS FARMER

SATURDAY, MARCH 29, 1924

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"The Farm Paper of Service"

THE GASOLINE TAX AGAIN

YOU who have been following Mr. Stanley Powell's articles on taxation will not fail to read the one in the current issue on the popular gasoline tax, which has been a political foot ball in Michigan now for two or three years.

You will hardly fail to get the idea that Mr. Powell is an exponent of this method of collecting the necessary revenue to care for road building and improvements and we are inclined to believe that there are a great many of our readers who will agree with him.

One thing is certain, this gasoline tax proposition is going to come up again at the next general election and we want our readers to have all the facts. If there are any questions which Mr. Powell has not answered to your satisfaction in this or any of his previous articles on taxation I hope you will write to us, because there is no subject of more importance to the farmer today than that of increasing taxation and we shall be glad to open our columns to a full discussion of the proposition as it has been outlined in this series.

WALLACE ON COOPERATION

SECRETARY WALLACE made some pertinent remarks regarding farmers cooperation that that are well worth repeating, principally in view of our experience with cooperation in Michigan during the past few years.

It would not be fair to say that the farmers of Michigan are discouraged with cooperative marketing schemes. There is not a thinking business farmer who does not realize that this is the only way out, and it is interesting to note that Secretary Wallace agrees with us fully in that "cooperative associations will succeed or fail as they are efficient!"

"During the past three years," he continues, "farmers have turned to cooperation for the solution of their marketing difficulties in ever-increasing numbers. In a period of rapid expansion it is only natural that the essential principles and limits of cooperation at times should be overlooked. The department believes that its most helpful activity in this field consists in collecting and compiling the essential facts with regard to the cooperative movement and employing these data as the basis of careful studies of the older and more successful cooperative organizations. In this way an understanding of the general movement may be gained, and the principles which have guided well established organizations made available to newcommers in the field.

"It is important to remember that there have been previous periods of expansion and decline in cooperative activity in the United States. Cooperative sentiment is always stimulated by agricultural depression. The first great cooperative movement in agriculture reached it apex about 1874, but lasted for only a few years thereafter. Local work went forward in the later years of the nineteenth century, but it was not until after 1900 that the present period of expansion began. It increased gradually for a number of years, gaining momentum about 1914, and is not today at its maximum.

"There have been many failures of cooperative associations, although there is no reason to believe that the number of failures of such organizations during a given period varies materially from the number of failures in other enterprises under similar conditions. It was only natural that the number of failures of cooperative associations should be especially large following the world war, during the period of falling agricultural prices, just as the number of business failures in cities should be and was very large. the causes of the failures appear to be similar to the causes of failures in other lines. The main cause was falling prices. Other causes were poor management, inadequate financing, and too small a volume of business in proportion to the overhead expenses. Some associations purchased, largely on credit, buildings and equipment at war prices, and the subsequent decline in the value of such property, coupled with the decline in the price of agricultural products, was largely responsible for their failure.

"Business failures in cities are as natural economic phenomenon which we record statistically from day to day. It is a barometer of business activity. It is taken as a matter of course, but when a cooperative enterprise composed of farmers fails it flashes across the metropolitan press in glaring headlines!"

THE WORM HAS TURNED

WE have it on the authority of Verne H. Church, federal crop statistician located at Lansing, Michigan, in charge of this district, that the movement of young people from farm to city factory districts has largely lost its pulling power during the past few months.

Mr. Church says, in a recent report, "there is some movement from country to cities, but many are remaining on the farm because of more encouraging aspects. There will be an adjustment of crops to obtain a more profitable acre return. With the expected improvement in other factors, the farming situation is expected to show a step upward toward a more normal condition this year."

We are willing to give space on this page any time to an encouraging report, and we would point out to many a young man or woman who is discouraged with farm conditions of the past few years that pastures on the other side of the fence are always the greenest and that there are many objections to the congested and harrassed life in our modern cities which is not apparent to one who views it from the perspective of the country.

These may be trying times but it must be apparent to all that the conditions which toss them about are changing, that the decrease in farm acreage and population can only increase the returns of those who stick and surely even the hardships that have been undergone cannot compare with those of the pioneer forefathers who wrestled from the forest the fertile acres which we are now asked only to plant, cultivate and harvest.

We predict that the first slacking up of city employment will send labor back to the farm a-scurrying. Many a man has given up a good farm and moved to the city who is going to wish he had it back within the next year or two. Paste this in your hat and see how near we come to hitting the mark!

LESS WHEAT—MORE CORN IN PROSPECT

A STATEMENT just issued by the Bureau of Agricultural Economics of the U. S. Department of Agriculture, based on reports received from 43,000 farmers, shows that the farmers in every section of the country are beginning to apply business methods to their farming operations.

This report shows that on March first, farmers were planning to increase the corn acreage about 3 per cent over the country generally, but in Minnesota, South Dakota, and Kansas they are planning an increase of 10 per cent due to their disastrous season with wheat.

In almost the same territory wheat shows a prospective decrease of 14 per cent in acreage, while oats and barley show an increase of 7 to 9 per cent respectively.

The rye crop, according to this report, will only be 79 per cent of last year's production, and this too is influenced largely by the price change during the current marketing season.

Flax shows the greatest increase as farmers report they are planning to grow 54 per cent more than last year. Hay will receive 4 per cent larger acreage and potatoes a 2 per cent decrease.

These figures, if they are based on facts, prove that farmers are working as much with their heads as with their hands these days, and we predict that their profits will be readjusted accordingly. The day may come when farmers will decide in advance, the total amount of a product to be grown to supply the market on a profitable basis. The whole future of agricultural prosperity as we see it, not only in the United States, but in the other producing countries of the world will be determined by the control of production as well as of the markets.

Sometimes we thing it takes farmers as a class a long time to learn a lesson, but once it is learned you can depend upon them never, to forget it.

SAFE INVESTMENT

SURPRISING as it may be to some folks, there are a considerable number of farmers in Michigan who have funds in excess of their farming needs and must find a place for investment.

It is not usually this type of farmer who is attracted by the glowing terms of the stock salesman who finds those who must give notes in payment the easiest to approach and sell.

It would seem that after the experiences with which each rural community in Michigan is familiar there would be little opportunity for the glib stock salesman and yet every once in a while we run into a condition where, by painting a rosy picture and getting one or two influential farmers into the scheme, a veritable clean-up is made. The old adage that "One is born every minute" is evidently proven by actual experience in the constant supply of fresh money which these parasites find for their schemes.

There are so many good bonds on the market at this time and they are issued in such small denominations that there is no excuse for the farmer who has additional funds to be speculating unless he is an out-and-out gambler and is willing and can afford to take the loss as well as the gain. Federal Land Bank Bonds offer a tax-exempt security which are attracting a growing number of farmer investors. First real estate mortgage bonds pay a considerably higher rate of interest and are tax exempt, and when purchased from a trustworthy company with years of reputation behind them are probably as safe an investment as one can hope to secure. There are also forms of railroad and industrial bonds, all of which pay a higher rate of interest than the government bonds, and if wisely chosen may be as secure.

The point is that there is no excuse whatever for a farmer with funds to invest to experiment with unknown quantities and for the one satisfied purchaser of industrial oil or mining stock it is easy to find a hundred who have never received a penny from the amount they invested in such schemes.

The moral should be apparent.

PLANTING TIME

THERE are two articles in this issue which ought to be read by every farmer who is completing his plans on crops for the present season.

The first is by Prof. J. F. Cox, of Farm Crops Department of the College, in which he points out the desirability of increasing the clover acreage in Michigan. Prof. Cox is too well known to our readers to need any sort of introduction and when he has a message he usually delivers it because he believes it is needed. We hope every busines farmer will read this and profit by the suggestions given.

Another article by J. R. Duncan, of Prof. Cox's department, takes up the matter of testing seed corn and gives his reason why it is especially necessary this year. We have appended to this article a method of making "rag dolls" or corn testers, which ought to be in use on every farm in Michigan this season.

"A stitch in time saves nine" and a bushel of seed tested now may save nine bushels wasted to say nothing of the countless hours of worthless cultivation and planting.

"FORTY YEARS OF FAKING"

PETE DEXTER, we find, is likely to get himself into a new batch of trouble. Pete, as our readers will recall, is the villian or the hero, according to how you look at it, of the story, "Forty Years of Faking," that is now running in THE BUSINESS FARMER. In that story every name of a commodity, a person or a corporation, is entirely fictitious. Unfortunately, however, there are just so many names available in the world, and it is hard to put a label on a rogue that some honest may does not believe he has pre-empted.

We have been asked if Dexter was trying to expose some particular individual or some particular company or corporation. He is not. If names in real life happen to match the names in Dexter's story, it is purely an accident.

All that the story purports to do is to show the methods of grafters in different lines. Every incident in the story has for its basis in fact, but every incident is likewise completely altered so far as the names of the participants are concerned.

PUBLISHER'S DESK

HOW TO BE A FINGER-PRINT EXPERT

Having been a reader of your paper for years and noted your advice to others, I would like to have your advice on the finger-print work. I would like this work and want to know about the schools that are best.—E. B.

HERE is another young man who has been attracted by the glamour of the "Be a Finger Print Expert" circulars. It the number who have inquired through this department is any indication of the number who probably "bite" on this scheme, there will be more finger-print experts someday, than there are fingers!

It seems as though it is easiest to attract people to a profession of which they know absolutely nothing. Even becoming an "expert electrical engineer" or a "chiropractor" by mail, carries with it the suggestion that there may be some work connected with the job, but when you suggest so elusive an occupation as making finger-prints, the fish bite like hungry wolves.

For the benefit of those who read this column we will give a simple lesson in making finger-prints: Rub your thumb with lamp-black, press it firmly on sheet of white paper, lift it up, and Lo! you have left the imprint of your finger which is different, (so we are told) from that of any other finger in the world. To prove it compare the imprints of other members of your family. This system is used by every police department in the world, the army and navy and others for a positive mark of identification.

There you have it—the first lesson—ten dollars please!

FITTING SPECTACLES BY MAIL

"Dear Friend:—Let me send you Free On Trial a pair of my very finest Shell Rim Spectacles! No matter where you live I promise to send you a pair that will enable you to see perfectly and satisfy you in every respect or you will owe me nothing. I positively guarantee a perfect fit or there will be no charge whatever. They will protect your eyes, preventing eye strain and headaches; and enable you to read the smallest print, thread the finest needle, See Far or Near!"

IF any of our readers have not received a letter of which the above is the opening paragraph they can feel slighted. Here is a company so liberal and possessed of such occult powers, that without seeing the patient, without examining the eyes or testing in any way, can fit you with "a pair of glasses that will enable you to see perfectly."

If this statement were not a plain lie on the face of it, why would it still be necessary for universities and colleges to insist on a man giving from two to four years of study before giving him a diploma to practice as an optician?

Any sane man or woman ought to know that their priceless possession is sight, beside it the wealth of a Henry Ford or Rockefeller are as nothing. They know too, that the improper glasses might in a few months entirely ruin their sight and yet enough of them succomb to the magic words of such fakirs, so that they remain in business and probably prosper on their deception.

The day will come when Uncle Sam will scrutinize the advertising matter which he delivers into the home as carefully as does the responsible publisher, and laws will be enacted preventing such schemes being perpetrated on the public, but until that day arrives all we can do is to try to bring them to light in our humble way, through the medium of this column.

TOO MUCH BUNK

"I got an idea," says Farmer Brown,
"There's too much buncombe floating around,
You can't go here and you can't go there,
And you can't go travelin' anywhere,
But what some feller is on your trail,
With a sure investment that cannot fail,
He tells you how you can get rich quick,
And his method, it sounds pretty doggon slick,
He tells you how to make dollars grow
Until you will jes' be rollin' in dough.
He'll sell you mine stock for a song
That's going to be double fore very long,
And he puts up such a winning speil
You feel yourself ownin' an automobile,
A place in the county and one in town,
And a private yacht—for a dollar down.
But hang unto your dough for a rainy day,
And make your money in the good old way,
Save up your dollars as wise folks do,
And the poorhouse never will yawn for you."
—Creede, Colorada Candle.

RAISING AIREDALES

A READER writes to ask if we know if the scheme of raising Airedales for the Oorang Kennels, LaRue, Ohio, is a profitable and successful side-line in which a farmers wife can engage.

The company which operates under the name of the "Oorang Sportsman's Association" states that one "can make from $1000 to $10,000 net profit yearly, with but little expence." No wonder our reader is interested!

We are wondering if any of the friends of this column are successfully raising puppies for this concern or if you have had any experience with them, if so, without mentioning your name we would be glad to pass the information along.

WROTE POSTAL AUTHORITIES ABOUT "ART WORK" COMPANY

"Dear Sir:—One of the subscribers to your paper sent me the enclosed article cut from your paper (Feb. 16, 1924 edition) asking me to write to you as I have had experience with the Underwood Art Goods Co. I was worse off than she for I completed one dozen handkerchiefs for which labor I received no pay. Just one year from the time I sent in my last installment of 3 handkerchiefs to them, this company had the nerve to advertise in my home paper (I had answered their advertisement in the Detroit Free Press). I went out and go council on the case and the postmaster said it was a clear case of using the mails to defraud. I wrote to the chief inspector of the postal laws in Washington, D. C., and he took up the case. Three months after my complaint to him, I received part pay from the company and they tried to cheat me out of the rest by saying they did not receive all of the dozen completed. I wrote back to them that their contract read "paid by the dozen" and that I had sent the whole dozen back, also that I wanted my money and an answer immediately or I would take further steps to collect it. In 2 weeks I received the rest of my money but the $1 I never received. I am going to write the inspector of this $1 proposition soon. It would be a good plan for all complaints to go to the chief inspector and by so doing it may dissolve this company's business entirely. I feel sure they are a fraudulent company, and is a case for the U. S. authorities at present seeing one complaint has already gone in."
—Mrs. W., Oakland County.

RECEIVED CHECK

I wish to thank you for helping me regain my money. I could hardly believe my eyes when I received the check for Ihad lost all hopes of ever getting it. Thank you and I won't forget it and shall speak a good word for THE BUSINESS FARMER at every chance.—Mrs. M. S., Custer, Mich.

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Interest due you as an owner of a Federal Bond & Mortgage Company first mortgage bond is always and invariably paid promptly and precisely the minute it is due.

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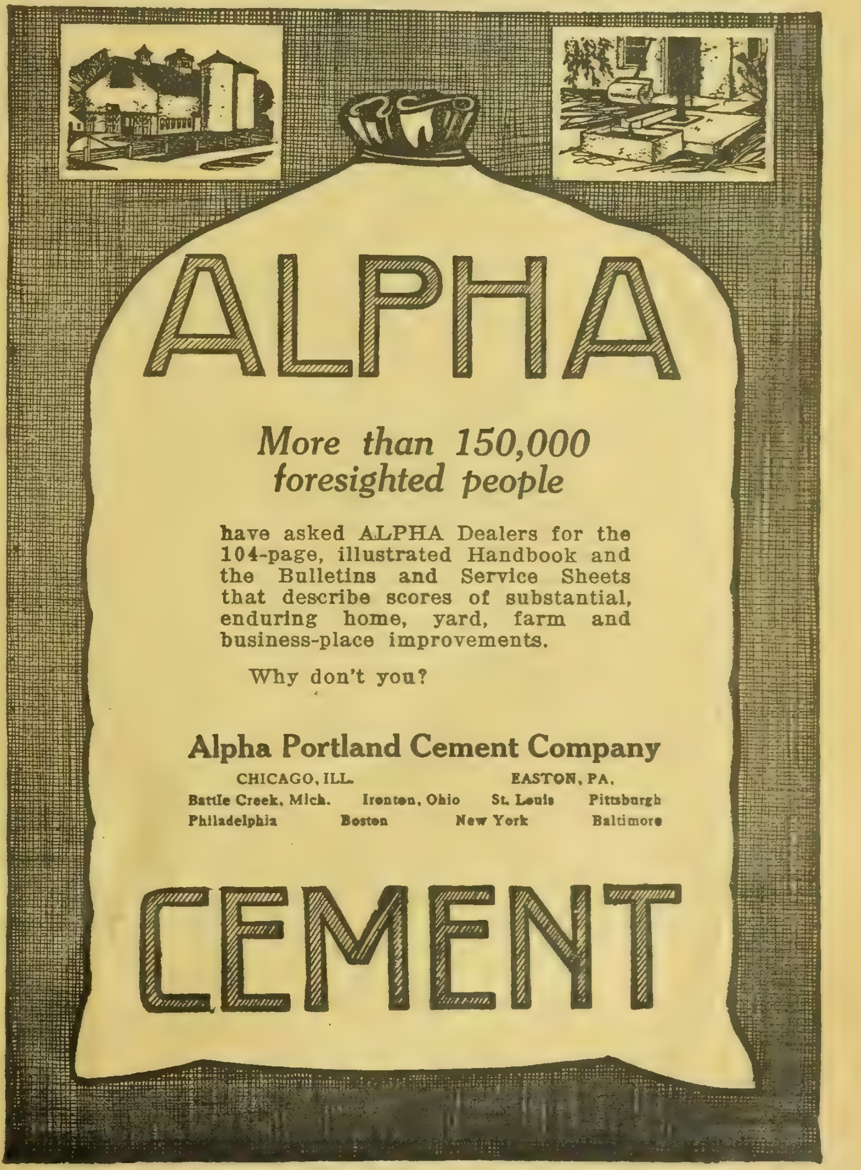
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have asked ALPHA Dealers for the 104-page, illustrated Handbook and the Bulletins and Service Sheets that describe scores of substantial, enduring home, yard, farm and business-place improvements.

Why don't you?

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Battle Creek, Mich. Ironton, Ohio St. Louis Pittsburgh
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CEMENT

"SETTIN' BREAD!"

By Anne Campbell

THE old-fashioned lamp shown warmly
On the tablecloth of red,
And the silvered hair of Grandma
Who was busy "settin' bread!"

As I drowsed there in the kitchen,
Though I should have been in bed,
I enjoyed the home-like picture
Of my Grandma "settin' bread."

Bright the kitchen fire was burning,
She revived the embers dead,
And the kitten drowsed beside it,
Warmed by Grandma's "settin' bread."

As I watched her dear hands hover
O'er the mixing bowl, she said,
"You must run to bed, my darling,
While your Grandma's "settin' bread."

Oh, I wish I could revive them
Happy evenings that have fled—
All the simple ways of living,
Like the rite of "settin' bread!"
(Copyright, 1923.)

The Farm Home
A Department for the Women

Edited by MRS. ANNIE TAYLOR

DEAR FOLKS:—Bread is one of the most important foods that we have, and in this issue I have tried to give you a small idea of how to make good bread for the family. It is so easy to go wrong and just as easy to have it turn out alright.

Thanks for the many letters received to help on a "subscriber in need."

I want you to know that if the name and town is not given me when you write, I cannot answer you. Sometimes our page is too full of the more general news and interest and personal letters can always be answered direct. I always use my own discretion about publishing the names of our readers and I never abuse the fact that those names are with me.

Your Friend,
Mrs Annie Taylor

Address letters: Mrs. Annie Taylor, care The Business Farmer, Mt. Clemens, Michigan.

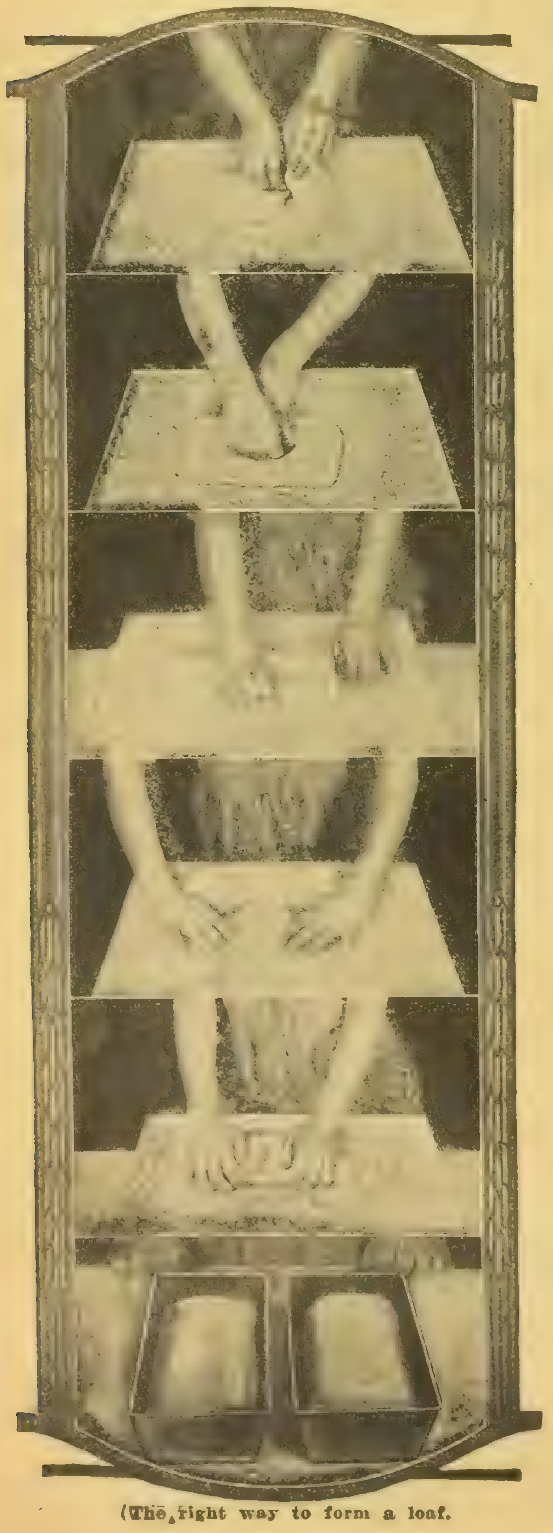
METHODS FOR MAKING BREAD

THERE are two general methods for making bread, one known as the "straight-dough" process and the other as the "sponge" process.

Straight-dough process.—In the "straight-dough" process all the ingredients are mixed at one time and the dough is made of the proper consistency before rising. Either compressed or liquid yeast may be used for this, but not dry yeast.

Sponge process.—In the "sponge" process only half the total amount of flour is used at first, with all or nearly all of the liquid, the yeast, and frequently the salt and the sugar. Compressed, dry, or liquid yeast may be used for this. This mixture is simliar to a soft batter, and after the first rising the remainder of the flour, the shortening, and any other desired ingredients are added. It is then kneeded until of the proper consistency and smoothness.

The sqonge process usually requires less yeast than the straight-dough method, because of the softer consistency of the mixture which facilitates the growth of the yeast. However, by using larger or smaller amounts of yeast one may shorten or lengthen the time required for rising. In a similar way the straight-dough process may be shortened or lengthened by increasing or decreasing the amount of yeast used. Hence recipes for the different variations of time are given and the housewife may select that which suits her convenience as to time and the kind of yeast she has on hand, or which seems to her most economical. Great care should be taken when using a sponge or dough which stands a long time—as, for example, the "overnight straight dough" or the "overnight sponge"—to keep it much cooler than when the quicker methods are used, since the former have a greater chance of becoming sour.


(The right way to form a loaf.

Flours In Quick Breads

The hard winter wheat flour is the best flour for the making of yeast breads while the soft flours are considered the best for the quick breads. The former contains more of the elastic material known as gluten and the latter more starch.

The gluten must be present in the yeast breads to allow for the expansion of the dough necessary to make a good bread. The gluten can be easily separated out by making a stiff smooth dough ball, placing it in a cloth and washing out the starch under the faucet or in a pail of water. If the sticky mass is then placed in a hot oven it will be found to stretch to at least twice its size. When baked it is hollow, hard and greyish tan in color. This action takes place when the bread is baked but then the gluten particles are distributed in the starch and consequently small holes are made throughout the whole mass.

The soft wheat flours, that is, the pastry flours, will yield very little gluten. While the two kinds of flour are on the market as bread and pastry flour, the tendency is to use one flour for most of the baking. The millers know this and as a result there are brands which are the result of the blending of two kinds of flour in the mill. These flours are not so high in gluten or starch content but that they will make both excellent quick breads and yeast breads.

When barley, rye or corn meal flours are used in quick breads it is often necessary to modify a plain recipe because these flours contain cellulose material and the quality of the gluten is not as good for bread purposes. The moisture content may also necessitate a slight change in the amount of liquid used in a recipe. Always sift white flour for quick breads.

Recipes

Four loaves straight dough:—Four cups (1 qt.) lukewarm liquid; 4 teaspoons salt; 2 teaspoons sugar; 1 or 2 cakes compressed yeast, or ½ to 1 cup liquid yeast; 3 to 4 quarts sifted flour.

Parkerhouse Rolls (Quick Method)

1 cupful milk; 2 tablespoonfuls sugar; 2 tablespoonfuls butter; 1 teaspoonful salt; ¼ to ½ cake compressed yeast or 2 to 4 tablespoonfuls potato yeast; 3 to 4 cupfuls sifted flour. Add the sugar, salt and butter to the scalded milk. When lukewarm, add the compressed yeast, which has been soaked in ¼ cupful of lukewarm water or the potato yeast. Add flour until no more can be worked in with a spoon. Cover tightly and let rise until three times its bulk. Turn on a floured board, kneed lightly and roll ¾-inch thick. Cut with an oval or round floured cutter. Crease in the middle with a floured knife handle, rub one half inch melted butter and fold over. Place the rolls one inch apart in an oiled tin and let rise until light. Bake in a hot oven 20 minutes.

THE MONTH OF EASTER BRIDES

TO complete the loveliness of spring, some time ago, somewhere far distant there was the first Easter bride. So this year, in the beauty of mid-April, there will be many formal weddings and many charming brides. From a purely feminine standpoint, at least, the most interesting feature of a wedding is the bride's gown. "What did the bride wear?" as the age-old question after every marriage ceremony and as time passes by the bride of today will always grow a bit reminiscent about her wedding attire, eager to describe how lovely it was.

This year's bride may choose her gown from an unusually attractive array of beautiful fashions.

The fabric, too, is a very important consideration in a bridal gown, and this season offers a wonderful silken selection in rich brocades and plain weaves of heavy quality. Satin, silk crepe, moire, crepe satin, charmeuse, satin brocade, crepe de Chine, Georgette, lace over satin and chiffon are some of the most desirable silks for this special occasion, and an ivory tint which is more becoming to most complexions than white is much in vogue for wedding-dresses.

The veil is a matter near and dear to the heart of the bride. The cap style caught with orange-blossoms appeals to many; others prefer the veil held in place at the back of the head by a bandeau of some more novel arrangement. Thus is every bride just a bit different.

Anniversaries

First, cotton. Second, paper. Third, leather. Fifth, wooden. Tenth, tin. Fifteenth, glass. Twentieth, china. Twenty-fifth, silver. Thirtieth, pearl. Fortieth, ruby. Fiftieth, gold. Seventy-fifth, diamond.

Personal Column

Helpful Hints.—If you have tough liver, run it through your food chopper with some salt pork, beat up an egg, add a little flour, and stir in. Then dip out by spoonfuls and fry.

A long steel fork, such as you can buy for 5 or 10 cents is dandy to turn fried cakes and to take them out of kettle, as grease will all drip out between the tines.—M. H.

How One Reader Made Attractive Curtains.—Japanese table cloth and 12 napkins were given to me. As my table was round I could not use the cloth. The square Japanese table cloths and napkins can be used for window curtains. The table cloth could be cut in half and hemmed on raw edge, and one hung on each side of large window or double window, in a dining room. Use a strip of scrimm one-half yard wide or more, to go across top of window frame, hemming it so it will hang full. Have a casing at top to run on pole; hem lower edge, then sew one side of napkins to the scrim, leaving the rest of edges loose. This will form a balance clear across top. One must sew napkins on so that they will all hang right. Mine were white and printed in blue birds and baskets to match tablecloth. They are very cute made up in this way.—M.

Some Useful Hints by a Reader.—To run curtain rods through curtains when starched or otherwise, is hard on the curtains, but will be easier to accomplish and easier on the curtains if there is a sewing thimble or waxed paper wound on the end of the curtain rods. Then the edges will slide without catching on the delicate mesh. I use wax paper or silk over the ends of the square rods, and my thimble on the round rods.

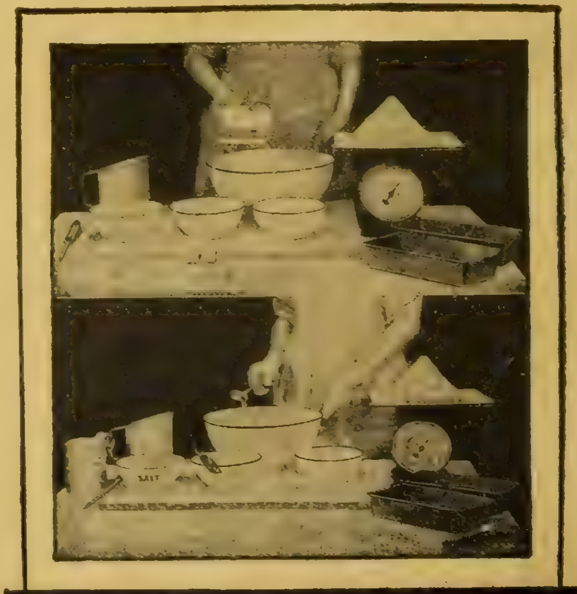
If making flour into gravy it tiresome to get smooth and takes too great a time, try my methods. Sift well a quart of flour with a heaping teaspoon of good baking powder, and store away in a dry glass jar, and use this prepared flour for gravy. It will be a smooth gravy, and all trace of powder will be gone.—Louise Lindley.

Menu for March 29th

Cream of Barley Soup
English Chicken Pie Stewed Tomatoes
Vegetable Gelatine Salad
Biscuits Cheese
Coffee

English Chicken Pie.—One chicken, one-half pound of veal fillet, four ounces bacon, three hard boiled eggs, one-fourth pound mushrooms, two tablespoons fat, pepper and salt to taste, chopped parsley, puff-pastry, stock, and one egg.

Cut fowl into small joints, season these with salt and pepper. Slice veal thinly, line bottom of fireproof dish with this, place on top a layer of chicken. Chop mushrooms finely, saute them in fat in small stew pan; sprinkle half of this over pieces of chicken, then layer of hard-boiled eggs, over that thin slices of bacon, and chopped parsley. Continue in this way until all ingredients are used up and the fireproof dish is full. Fill dish three parts full with stock. Put a strip of pastry round the edge of dish, wet this slightly with water, cover the pie with puff-pastry rolled out to the proper size and thickness, press down the paste on to the wet edge of paste trim round. Brush over pie with beaten egg, make a slit in center of the lid, put pie in moderate oven and bake one and one-half hours. Pour in a little stock before serving.


Careful measurement is a requirement of good bread making.

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$50 Style

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Latest Style from Paris Suiting Cloth Check "Boyish Mode" **Dress** ONLY $3.98 C.O.D.

Here it is. The beautiful, new style craze, "Boyish Mode" check suiting dresses, are the style hit of Paris, New York, Chicago, etc., and has swept America from Coast to Coast. JUST THINK! WE are offering this real, genuine suiting cloth check dress at the almost unbelievable bargain sale price of only $3.98.

Misses Sizes 14 16 18 20

Ladies 34 36 38 40 42 44 46 Inch Bust

Sent on Approval

We guarantee to refund every cent if you're not entirely satisfied, so you're taking no risk whatever. The checked suiting cloth material alone is worth our special sale price.

Send No Money

Made of finest quality suiting cloth material in tan color with oblong pencil check so popular with every woman and becoming to all figures. Tight fitting, tailored sleeves, pocket and smart, latest style side plait trimmed with novelty buttons. "BOYISH MODE" lace collar, dainty neck opening and bow tie of Satine ribbon. Neat leather belt defines waistline. Send name, address and size. Pay mailman the bargain price of $3.98 and postage on arrival. After try-on if not satisfied in every way—we will return every cent of your money.

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Hotel Tuller

STANDARD OF SERVICE

Headquarters in Detroit For

DETROIT AUTOMOBILE CLUB
OLD COLONY CLUB
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Table D'Hote Dinner [illegible]

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Over 800 Rooms With Bath
DAILY RATES: SINGLE, $2 50 UP
[illegible] Floors of Agents Sample Rooms, $3.00 Up

HOTEL TULLER CO.
DETROIT
O. C. FROMAN Mgr.

CAFETERIA GRILLE

4 GOOD BROOMS $2.85 POST PAID

Regular $4.00 Value

Two fine parlor brooms, one kitchen broom and one heavy garage or barn broom. Made from finest broom straw carefully sorted and selected. All four for only $2.85 postpaid to your door.

A Year's Supply of Brooms Direct from Our Factory

Satisfaction guaranteed. These four brooms regularly sell through stores for $4.00. Send your check or money order today, $2.85 for these four extra fine brooms. We pay the postage. Reference: Commercial Trust & Savings Bank, Lomax, Ill.

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507 First Street Lomax, Illinois

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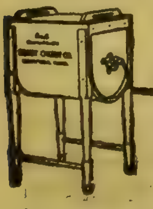

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THE BLUST CHURN CO., Mansfield, Ohio

HAVE YOU POULTRY FOR SALE?
AN AD IN THE M. B. F.
WILL SELL IT.

—if you are well bred!

The Decorative Factor.—Decorations at a home christening should be simple. Any white or pink blossoms or buds, in spring or summer, there is a wide range of choice—and in Autumn the white or pink flowers of the season—Asters, Chrysanthemums, Cosmos, etc., are in keeping a bit of tapestry or an Altar-cloth should be used under the font, and flowers can be used to decorate the table on which the font stands. An improvised font should always be a bowl of some kind.

Sometimes it is impossible for the mother to go to church, and home christenings are very informal and can be made lovely home affairs.

WOMEN'S EXCHANGE

IF you have something to exchange, we will print it FREE under this heading providing: First—It appeals to women and is a bonifide exchanges, no cash involved. Second—It will go in three lines. Third—You are a paid-up subscriber to The Business Farmer and attach your address label from a recent issue to prove it. Exchange offers will be numbered and inserted in the order received as we have room. —MRS. ANNIE TAYLOR, Editor.

112.—Lovely plush, percale and gingham quilt pieces for anything useful.—Mrs. Geo. Morgan, Vicksburg, R3, Michigan.

RECIPES

Inexpensive Cake.—One cup of sugar, one-half cup cocoa. Then add one-fourth cup of butter in one-half cup hot water, and stir, add three fourths teaspoon of soda in one-fourth cup sour milk, one cup flour, add last one egg, the white to be beaten very stiff. Flavor with vanilla, and a pinch of salt. Bake in moderate oven.

I always make white frosting, most always White Mountain.

One cup sugar, five tablespoons of water or milk, and boil until it forms a ball in cold water, and have the white of one egg beaten very stiff. Set dish of syrup in basin of cold water and beat until it starts to sugar around edge of dish. Then beat white of egg in and flavor with vanilla.

Molasses Cookies.—One cup of brown sugar, one cup of molasses, one cup of shortening, two or three eggs, four tablespoons of vinegar, one teaspoon Ginger, three teaspoons of soda, flour to roll out. I only use three eggs when I double the recipe.—Mrs. O. M. R., Sparta, Mich.

The Runner's Bible

(Copyright by Houghton Mifflin Co.)

Awake thou that sleepest and arise from the dead, and Christ shall shine upon thee.—Eph. 5:14.

Imagine what this awakening means; to learn that all has been but a dream; all of one's mistakes, sins, illnesses, misfortunes, all the woe of the whole world a hideous nightmare, unreal and to be forgotten! Picture the reality: oneself at rest in a kingdom of love, wholly under the care of the Creator; perfect health, Peace and Happiness one's own; the light of truth (Christ) always shining, always a glorious now. This is the Gospel of Good Tidings which Jesus Christ brought to earth, and which he commanded to be preached throughout the world, and is the message which you and I must deliver to those about us in one peculiar way—the Truth which must be expressed and proved in our daily lives, that the children of men (Rom. 9:8) shall know themselves as the children of God, without blot or blemish.

The cuts on bread making appearing on the opposite page are used through the courtesy of Dairymen's League News.

HOUSEHOLD HELPS

To prevent plaster from cracking when puting a tack or nail into the wall, first stick the point of the tack in soap.

When cut-glass jugs and vases become cloudy and ordinary washing does not remove the film, fill the glass piece with wet potato peelings, and let stand twenty-four hours or longer. When washed it will sparkle like new.

If you wash your phonograph records with soap and water and rinse well with clear water, then dry well they will sound clearer.

Thrust rusty knives through onions and let stand for a day. Remove, polish with sand-soap, and wash.

When cups have lost their handles or china is broken, try mending with collodian. You will find that the more it comes in contact with water the firmer it will become.

Instead of wearing gloves when sweeping, glue a six-inch strip of velvet, felt or any other soft material around the grip of your broom handle, and you will not have blistered hands again.

Do You Carry
Citizens' Mutual
Protective Insurance?

If you are the driver or owner of a motor car or truck can you really feel SAFE and SECURE without automobile insurance?

Suppose TOMORROW you should be held liable for damage to another vehicle, a pedestrian, or the occupant of your own or another car? The steady increase in production of automobiles means a greater risk every day you drive. Even though you were innocent, circumstances might point to YOU as the GUILTY one. What WOULD you DO? What COULD you DO except "Face the Music."

It is times like this that you really feel the need of ASSISTANCE. With our STATE-WIDE ORGANIZATION of Adjusters, Agents and Attorneys, located in EVERY COUNTY SEAT in Michigan, we ASSUME YOUR RISK and RESPONSIBILITY at once. We take the matter out of your hands entirely. That's how you are PROTECTED when you cover your car with a

Citizens' Mutual Non-Assessable Policy by Experience Covering Fire, Theft, Collision, Property Damage, Personal Liability in a Thoroughly Reliable and ......Substantial Company......

Starting Tenth Season

With Total Assets on Dec. 31, 1923, of

$407,683.55

46,050 Policies Written and Renewed in 1923

Our Business is to Assume Your Risk

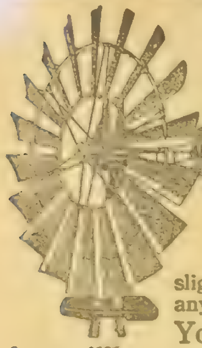
See Our Nearest Local Agent Today or Write to
WILLIAM E. ROBB, Secretary

Citizens' Mutual Automobile Insurance Company

HOWELL - - MICHIGAN

"Don't Wait Until After Your Accident—See Us Before It Is Too Late—"

The WINDMILL with a RECORD



The Auto-oiled Aermotor has behind it 9 years of wonderful success. It is not an experiment.

The Auto-oiled Aermotor is the Genuine Self-Oiling Windmill, with every moving part fully and constantly oiled.

Oil an Aermotor once a year and it is always oiled. It never makes a squeak.

The double gears run in oil in a tightly enclosed gear case. They are always flooded with oil and are protected from dust and sleet.

The Auto-oiled Aermotor is so thoroughly oiled that it runs in the slightest breeze. It gives more service for the money invested than any other piece of machinery on the farm.

You do not have to experiment to get a windmill that will run a year with one oiling. The Auto-oiled Aermotor is a tried and perfected machine.

Our large factory and our superior equipment enable us to produce economically and accurately. Every purchaser of an Aermotor gets the benefit from quantity production.

The Aermotor is made by a responsible company which has specialized in steel windmills for 36 years.

AERMOTOR CO. Chicago Kansas City Dallas Minneapolis Des Moines Oakland

SAVE 50¢ A ROLL

Ward's RADIO ROOFING

WARDS 85 lb. Slate Surfaced ROOFING $1.85 PER ROLL Guaranteed 15 Years

Regular 85-pound standard weight

Don't confuse this full-weight 85-pound roofing with cheaper, lighter roofing sold at the same price.

Lay it over old roofs. There is enough in one roll to cover 100 square feet—yet a roll costs only $1.85, with nails and cement.

Fire Underwriters Approve It

Radio Roofing is surfaced with red or green slate that beautifies as well as protects it. Resists fire. Not affected by heat and cold.

We guarantee it for 15 years—it should last many more.

Send for Free Sample

Examine it! Cut it open! Test it. Judge its remarkable quality. Write for free Building Material Catalogue.

Order the roofing you need. Catalogue No. 174-M00. State color—red or green.

Shipped From	Price Per Roll	Order From
Chicago	$1.85	Chicago
York, Penna.	1.85	Chicago
Southern Illinois	1.85	Chicago
New Orleans	1.85	Chicago
Kansas City	2.00	Kansas City
St. Paul	2.00	St. Paul
Portland, Ore.	2.65	Portland
Houston, Texas	2.45	Ft. Worth
Oakland, Calif.	2.65	Oakland

Add 10c for extra long nails

Shipping weight 85 pounds per roll

Established 1872

Montgomery Ward & Co.

Chicago Kansas City St. Paul Portland, Ore Ft. Worth Oakland Cal.

HEARING RESTORED OFTEN IN 24 HOURS

Amazing Results Secured In One Day By Use of Virex Formerly Known As Rattle Snake Oil.

Deafness and Head Noises need not be dreaded any longer since the discovery of a widely known physician. Now it is possible for some of the most obstinate cases of deafness to be relieved in a day's time by the application of a prescription formerly known as Rattle Snake Oil. This treatment is meeting with wide success all over the country.

Mr. D. Dey, a Nebraska resident, 67 years old, says, "I have used the treatment for only two weeks and my hearing is restored perfectly. The relief was almost instantaneous and now the head noises have disappeared. My catarrh, a case of many years standing, is improving wonderfully."

Mr. Ben Jackson, who lives in Indiana says, "Before I used Virex I could hear nothing. After ten days I could hear my watch tick."

Angeline Johnson, a Mississippi resident had been stone deaf for eighteen years. She says, "Virex has stopped my head noises and I can hear a train whistle 3½ miles away."

Roy Fisher, Iowa man, says "I hadn't heard a watch tick for eleven years—now I can lay my watch on the table and hear it plainly."

Mr. W. A. Lumpkin, of Oklahoma, says, "After being deaf 38 years, I used your treatment only a few days and hear fairly well."

Mr. Anthony Chapman, of Michigan, says, "The terrible head noises have stopped entirely and my hearing is practically back to normal.

Deaf Baby Now Hears

Mrs. Ola Valentine, of Arkansas, says, "My little boy, now 5 years old, had been deaf since about four months of age. Now he hears very well and is learning to talk."

Mr. Mather Pelleys says, "My young son, deaf for years, has used Virex for only three days and he hears almost as well as ever before."

Such amazing reports come from all over this country and Canada. The prescription which is known as Virex, is easily used at home and seems to work like magic in its rapidity on people of all ages.

So confident are we that Virex will re- [illegible] duce this remarkable treatment to a mil- [illegible] $2.00 treatment for only $1.00 on ten days' free trial. If the results are not [illegible] address to the Dale Laboratories, 1017 Gateway Station, Kansas City, Mo., and the treatment will be mailed at once. Use it according to the simple directions. If at the end of 10 days your hearing is not relieved, your head noises gone entirely, just send it back and your money will be refunded without question. This offer is fully guaranteed, so write today and give this wonderful compound a trial. (ADV.)

Every Day You Need

KRESO DIP No. 1

(STANDARDIZED)

TO AID IN KEEPING

All Livestock and Poultry Healthy

Kills Lice, Mites and Fleas. For Scratches, Wounds and common skin troubles.

THE FOLLOWING BOOKLETS ARE FREE:

No. 151—FARM SANITATION. Describes and tells how to prevent diseases common to livestock.

No. 157—DOG BOOKLET. Tells how to rid the dog of fleas and to help prevent disease.

No. 160—HOG BOOKLET. Covers the prevention of common hog diseases.

No. 185—HOG WALLOWS. Gives complete directions for the construction of a concrete hog wallow.

No. 163—POULTRY. How to get rid of lice and mites, and to prevent disease.

Kreso Dip No. 1 in Original Packages for Sale at All Drug Stores.

ANIMAL INDUSTRY DEPARTMENT OF

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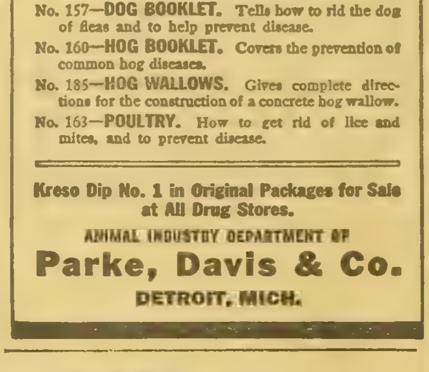

SAVE-The-HORSE Will Cure

WHEN you can't work because of his lameness the horse costs you for feed and your loss of time—perhaps a lost crop or a skimpy crop through delays. With Save-The-Horse you can cure SPAVIN, Ringbone, Thoropin, or,—Shoulder, Knee, Ankle, Hoof and Tendon Disease while working. You take no risk. We give signed MONEY-BACK GUARANTEE. Write today for FREE 96-page Save-The-Horse BOOK, [illegible]

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SAVES MONEY

[illegible] barns, [illegible] hog, [illegible] and poultry houses, [illegible] homes, churches, etc. Glazed tile, wood or cement stave silos. Early buyers discount. Write for agency proposition.

National Clay Products & Silo Co.

DEPT. 18 MUNCIE, IND.

The Children's Hour

DEAR girls and boys: You all read my letter in the last issue, didn't you?

Well, I know several did because I am receiving some of the nicest stories, poems and drawings. I am having a great time going through my mail; every letter, it seems, contains something of special interest. I always did love to go through my mail every day, because the letters were all so interesting but with all the stories, poems and drawings coming in it is particularly interesting now.

Some of the cousins are very much in favor of the "correspondence Scramble" idea, and many of them have already sent in letters to be forwarded to unknown friends. I have sent many of them out, and as soon as a few of them come in I mix them up and send them out. There seems to be some misunderstanding about the "Correspondence Scramble." Some believe that I intended they were to send in their letters at some definite time, to be named later, while others thought they were to send in their letters whenever they wished and I would send them out. The latter idea is correct. Send in your letters any time and I will see that some unknown friend receives it.—UNCLE NED.

OUR GIRLS AND BOYS

Hello Uncle Ned:—I suppose this letter will reach Mr. Waste Basket. I do not see very many letters from Brown City. Well I just got through reading the Children's Hour. Do you like to go sleigh riding? I do and I hate to see the snow go away, but it must some time. A snowy winter is my favorite season. I am thirteen years old the 30th of May. Have I a twin? I have brown hair. (Bobbed of course), weigh about 120 pounds. I am in the 8th grade at school and like all my subjects except two and they are civics and history. Did you like them when you went to school, Uncle Ned? Well I must ring off and hope Mr. Waste Basket will write me a letter. Ha! Ha! You will get lots more letters besides me. Your want-to-be-niece,—Laura Klaus, R. 6, Brown City, Mich.

—When I went to school the subject I did not like very well was arithmetic.

Dear Uncle Ned:—My last letter was not in the paper and so I thought I would try once again. I am thirteen years of age and in the seventh grade. I am five feet one inch tall and have dark brown hair, which will be bobbed before another year rolls around. Do you like bobbed hair, Uncle Ned? I mean have you anything against it? I have nice heavy, curly hair and would like some advice on whether to bob it or not. I am only thirteen and am not old enough to do my hair up and it spoils it to let it fly. Would you bob it if you were me? Well I think the answer to Beatrice Campbell's riddle is: The boys name was Andrew. Wasn't it, Bee? Well as my letter is getting long and I don't want to have Mr. Waste Basket get my letter I better hang up. From your would-be niece,—Thelma Crosby, Box 77, Edenville, Michigan.

—If your mother and father do not object I suggest you have your hair bobbed. I think girls of your age or a little older look very nice with bobbed hair. And it is much easier to comb.

Dear Uncle Ned:—This is the first time I have ever written to the M. F. B. though I read it every week and I think it is the most interesting paper we take. We live on a forty-acre farm and have one cow and about thirty chickens and I also have a pet rooster and he is just as tame as he can be though he is three years old. I had a pet rabbit but he died last fall. I have two sisters and one brother. I have lots of fun sliding down hill and I just love to. We have some nice hills to slide down. Did you ever skii or slide down hill? I went to a coasting party two weeks ago. One of our sleighs we call Pete. It is the best sleigh we have. I am eleven years old and have dark hair and eyes, am in the fifth grade and am four feet one inch tall. As my letter is getting long I must ring off. Please will some of the boys and girls write to me. Your niece, —Grace K. Gibes, Pellston, Michigan.

—You just bet I used to slide down hill, and what fun it was!

Dear Uncle Ned:—I suppose that you and my cousins might thing it funny to get a letter from a boy that lives in a city. About four years ago I used to take the M. B. F. and enjoyed it very much. So recently I visited my aunt who lives near Sandusky and I read this paper and the same old thrill came to me again as I read the Children's Hour. So I subscribed. I wrote a letter to one of my cousins and she answered it. She certainly writes good letters. Interesting at that. I don't know many riddles but if any of my cousins will write me a letter I promise an interesting one in return. I certainly enjoy your paper and I think it is worth the subscription price to read the Children's Hour. The school I go to is seven stories high and cost $7,000,000. I am in the tenth grade and am 15 years old. Be sure and write and I hope that this letter does not have a flight towards the waste basket.—Leo Buck, 2436 5th St., Detroit, Michigan.

—So you enjoy reading what the country cousins have to say: Well, I am glad to hear that and I know they will be interested in your letter.

Dear Uncle Ned:—May I join your merry circle too? We take the M. B. F. and we all like it fine. I am a reader of the Children's Hour and like it very well. I will describe myself. I am four feet and ten inches tall, weigh 90 pounds and have blonde hair, blue eyes and fair complexion. My birthday is December twenty-seventh and am thirteen years old. I think that B. Durfee's name is Beatrice. Am I right? As my letter is getting long I will close. Hoping some of the boys and girls will write to me. Your want-to-be-niece,—Miss Eva Baleom, Route 5, Hesperia, Mich.

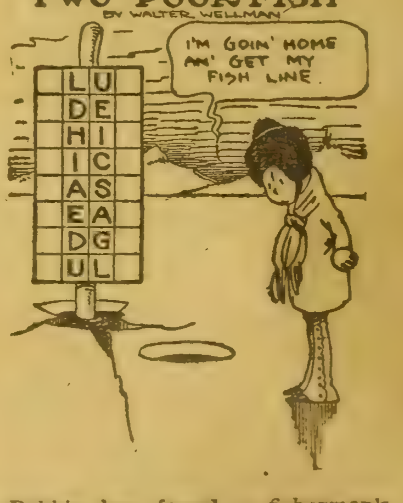
Dear Uncle Ned:—I have been a busy reader of the M. B. F. for many months since my brother gets the paper and now I decided to join your merry curcle. I enjoy reading the letters from all the boys and girls from many different places and as I haven't seen any from Bruce Crossing I would like to see this letter in print. I have been attending a country school until this term. I am sixteen years old. I am five feet and five inches tall. My hair is dark brown, and I haven't had a notion to bob it as yet. My greatest delight is living on a farm. We have thirteen cows, eleven calves, forty-six chickens, ten hogs, and a horse. My pets are a cat and two dogs. I have two sisters older than I am, and six brothers, and only two of my brothers continue going to school. I would like to have some of the girls and boys write to me and I will surely answer all letters. Your niece.—Miss Minnie Syrria, Box 23, Bruce's Crossing, Michigan.

—Haven't bobbed your hair yet, eh? I suppose you will take a notion to get it cut one of these fine days and off to the barber you will run.

Dear Uncle Ned:—I have read the lovely letters that you receive from many children. May I enter in your happy circle? I live in Dearborn, Michigan, and walk three miles each day to go to school, I am in the first year high, and love it very much. Perhaps you would like very much to know what I look like. Well, I am five feet three inches tall, weigh one hundred and three pounds, have light brown hair and light complexion, with a pug nose, (but not too puggy), am 16 years old, was born the nineteenth of July, 1907, have a twin sister. I wonder if I have a twin brother. If I have I would like very much to hear from him. Sincerely yours,—Fletcher R. Cox, R4, Box 139, Dearborn, Michigan.

TWO POOR FISH

BY WALTER WELLMAN


I'M GOIN' HOME AN' GET MY FISH LINE.
LU
DE
HI
IC
AS
EA
DG
UL

Bobbie has found a fisherman's hole in the ice, and has decided to go home for his fishing tackle. He is wondering also if he can catch his two favorite kinds of fish in the lake. We have given you the second and third letters of eight words of four letters each, and all you have to do is to print the name of one fish in the first upright column, and the name of another kind of fish in the last column, and you will have eight words of four letters each as a result. What are the fish?

Answer to last puzzle: A HORSE.

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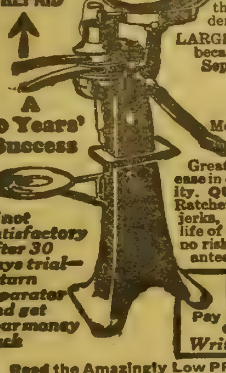
CREAM SEPARATOR Direct to You

30 DAYS FREE Trial



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LARGER PROFITS assured because it is the Cream Separator with "Million Dollar Bowl" Most efficient bowl ever invented. Only real self-balancing bowl. Greater satisfaction due to ease in operation and simplicity. QUICKLY CLEANED. Ratchet coupling eliminates jerks, noise and adds to life of separator. You take no risk. Money back guarantee protects you.

Order Now
Pay for it With Bigger Cream Checks
Write for Free Book

Read the Amazingly Low PREPAID Prices:

No.	Capacity	Price	1st Pay't	Monthly Payments
M.O.	150 lbs.	$25.00	$5.00	$5.00 for 4 Months
No. 1	250 lbs.	$35.00	$5.00	$5.00 for 6 Months
No. 2	[illegible] lbs.	$45.00	$5.00	$5.00 for 8 Months
No. 4	400 lbs.	$55.00	$5.00	$5.00 for 10 Months

Write for prices on larger sizes up to 1350 lbs. capacity. Also get our low prices on Electric or Power Driven Separators—telegraph at our expense.

Free Service and Parts for one year. Each Separator complete with tools, oil, brushes, etc. Send no money with inquiry. Write

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To avoid conflicting dates we will without cost, list the date of any live stock sale in Michigan. If you are considering a sale advise us at once and we will claim the date for you. Address, Live Stock Editor, M. B. F., Mt. Clemens

April 22—Holsteins, Short and Miller, Flushing, Michigan.

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SALE Our Entire Herd Holstein Cattle

25 head cows and heifers, 2 bulls. T. B. tested. Sale at farm ½ mile from Flushing. Sale on

TUESDAY, APRIL 22nd

Starting at 12 o'clock.
If interested write for catalog.
SHORT AND MILLER, Flushing, Michigan.

FOR SALE

7 Pure Bred Holstein Heifers
Very well bred. Herd Federal accredited.
$50 and upward depending upon age
O'Hara Farm, Utica, Mich.
W. C. STARK, Manager.

FOR SALE
My Entire Herd of Holstein Cattle

One 31 lb. herd sire, 10 females. Among them are two A. R. cows, a 20 lb. 2 yr. old and a show cow, and a 19 lb. 3 yr. old. 4 cows are just springing. The herd is free from T. B. and sold under a retest. If interested write or call for pedigrees. Time will be given for one year.
H. W. MOHR, Pigeon, Michigan.

HEREFORDS

HEREFORDS

Registered Breeding Cattle, T. B. Tested at practical prices for production of Hereford Baby Beeves profitably all ages.
T. F. B. SOTHAM & SONS.
(Herefords since 1839.)
St. Clair, Mich.

BREED HEREFORDS THAT FATTEN quickly. Eleven choice two-year-old heifers and several yearling bulls sired by International Prize Winners for spring sale. Write us for information. Breeders of Herefords since 1860.
CRAPO FARM, Swartz Creek, Michigan.

GUERNSEYS

GUERNSEY BULL, 15 MONTHS OLD. DAM'S A. R. Record 522 lbs. fat, class FF. Sire's dam's record 507 lbs. Light fawn color. Price $125.
SAGAMORE FARM, Gallen, Mich.

AYRSHIRES

AYRSHIRES

To make room for winter we are offering bred cows and heifers also some well bred young bulls. Look up our winnings at leading state fairs.
W. T. SHUTTLEWORTH, Ypsilanti, Michigan.

FOR SALE—REGISTERED AYRSHIRE bulls and bull calves, heifers and heifer calves. Also some choice cows.
FINDLAY BROS., R 5, Vassar, Mich.

IT PAYS TO TEST

"DO you belong to a Cow Testing Association?", a banker in Ingham county asked a farmer recently who wanted a loan. Bankers are interested in methods employed by their customers. They want to know that money borrowed is used in a productive enterprise, that the interest will be paid promptly, and that the principal will be paid without too much delay. And, they want to know that the cows milked by their customers are paying a profit on the operation. The cow testing association is a means by which a man can check up on his cows and find out the ones that are paying out and the ones that are not. Almost as important is the point of feeding. It is almost impossible to feed properly without milk weights and feed weights on each individual cow. These weights are obtained by the tester. Another point is the increased interest a man will take with his cows if he is in an association with a group of his neighbors.

There are three cow testing associations operating in Ingham county at present. One is located around Lansing and extends up into Clinton county. It has just finished a successful year and has started another. The second association is around Leslie. It will finish the year in April. The third association is around Mason and it will finish the year in May.—J. G. Wells, Jr., Dairy Extension Specialist, M. A. C.

INBREEDING

If a man has a pure bred bull and he breeds a cow and she raises a heifer would it be all right to breed her back to her father and if so how many generations can one breed back in that way and be all right?—F. M., Coleman, Michigan.

—Only in very especial cases would it be desirable to inbreed as closely as you suggest. Inbreeding has often been liked to a two-edged sword, or one that would cut both ways, meaning that inbreeding would possibly effect very rapid deterioration in the animals were all of such superior excellence and strong breeding powers that their superior qualities were transmitted and intensified, and the animals had no weak qualities to be intensified.

If one had an especial sire, with no weaknesses, and one that did not transmit any weaknesses or deficiencies of conformation, it would be alright to mate him to one of his daughters, but I would not care to go further than this.

Inbreeding in the hands of a very few keen, intelligent, stock men has proven rather disasterous. Close inbreeding is not, therefore, to be advised generally.—Geo. M. Brown, Professor of Animal Husbandry, M. A. C.

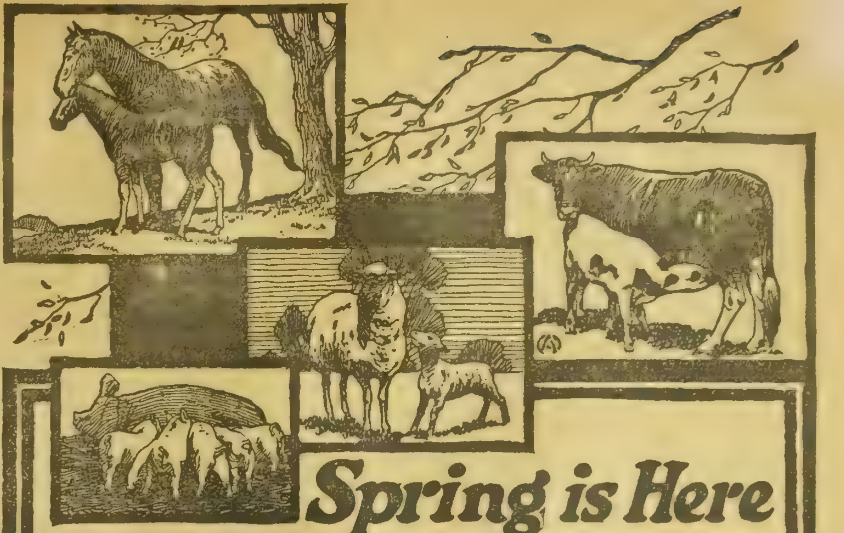
NEW BULLETIN DESCRIBES OPERATIONS ON HOGS

CASTRATION of hogs under various conditions is described in detail in a new Farmers' Bulletin, No. 1357, by S. S. Buckley, just issued by the United States Department of Agriculture. Besides giving directions for the ordinary operation, the bulletin gives the procedure for ridgelings, for spaying sows, and for operating on ruptured pigs. A number of illustrations help to make the methods easily understood.

In the case of males the operation of castration improves the quality of the meat and prevents the development of undesirable odors as well as doing away with the danger of indiscriminate breeding in the herd. Spaying is no longer practiced to any great extent as it has little influence on the quality of the meat. It is recommended that whenever possible the operation be done at an early age, preferably early enough so that the wounds will be healed before the pigs are weaned. It may be done at any season of the year, but on clear, cool days if the best results are to be obtained.

Copies of the bulletin may be obtained without cost, as long as the supply lasts, by addressing the Department of Agriculture, Washington, D. C.

I am a subscriber to The Business Farmer, which I consider a very good magazine, read every word of it.—L. J. A., Benzonia, Michigan.



Spring is Here

All out-of-doors is filled with the bleat of the lamb, the bawl of the calf, the grunt of the pig, and the whinny of the colt.

Youth asserting itself everywhere!

Keep their bodies healthy, and stomachs full.

You can then count on good growth—quick development—and begin to cash in on them before the summer-end.

Let

DR. HESS STOCK TONIC

be your insurance policy

against disease, insurance of good appetite, good digestion. It keeps the worms away.

I spent 30 years in perfecting this Tonic.
GILBERT HESS M.D., D.V.S.

Then, there are the mothers:

Your COWS need it for its system-toning, bowel-cleansing, appetizing effects. Puts them in fine condition for calving.

Your BROOD SOWS will be relieved of constipation and put in fine fettle for farrowing.

Excellent for MARES in foal—and EWES at lambing time.

It makes for good appetite, and more milk to nourish the offspring.

Tell your dealer what stock you have. He has a package to suit. GUARANTEED.

25 lb. Pail, $2.25 100 lb. Drum, $8.00

Except in the far West, South and Canada.

Honest goods—honest price—why pay more?

DR. HESS & CLARK Ashland, O.

Dr. Hess Dip and Disinfectant
For Sheep Ticks - for Hog Lice - for Health

How to Check Cow Ailments at their Source

KOW-KARE
THE HOME COW DOCTOR

FREE BOOK

The dairy cow is an exceptionally hardy animal and subject to very few ailments except those which attack the digestive and genital organs. These particular organs, being the milk-making function, are often overworked and unable to throw off such diseases as Barrenness, Abortion, Retained Afterbirth, Scours, Bunches, Milk Fever, Lost Appetite.

These ailments can be successfully treated —and just as surely prevented—by the use of Kow-Kare, because it is especially designed to tone up and strengthen the digestive and genital organs. A proper functioning of these important organs eliminates the cause of disease.

But the real profit of dairying today is made by keeping disease out while the milk-making organs are working at top-notch. Kow-Kare, in moderate quantity in the ration one week out of each month, induces a maximum milk flow and keeps the cow's disease-resistance up to par. In thousands of dairies Kow-Kare is now as much a part of the feeding routine as grains or silage. Its use costs, on the average, not more than a cent a day per cow.

Kow-Kare is sold by general stores, feed dealers and druggists—large size $1.25; medium size 65c. If dealer is not supplied, order direct. We pay postage. Ask for copy of free book, "The Home Cow Doctor."

DAIRY ASSOCIATION CO. INC.
Lyndonville, Vt.

SHORTHORNS

FOR SALE—ONE RED SHORTHORN REGIStered bull, age ten months. One roan shorthorn registered bull, age eight months. Also four red heifres, coming two years old.
Henry J. Lynch, Mayville, Tuscola Co., Mich.

RAISE SHORTHORNS WITHOUT HORNS Like Kelley does. U. S. Accredited Herd No. 28945. For description and price write,
L. C. KELLY & SON, Plymouth, Michigan.

ANGUS

WE HAVE SOME FINE YOUNG ANGUS BULLS from International Grand Champion Stock at reasonable prices. **E. H. KERR & CO., Addison, Mich.**

JERSEYS

REG. JERSEYS, POGIS 99th OF H. F. AND Majesty breeding. Young stock for sale. Herd fully accredited by State and Federal Government. Write or visit for prices and description.
GUY C. WILBUR, BELDING, Mich.

RED POLLED

FOR POLLED SHORTHORNS Milk Strain Either Sex.
PAUL QUACK, Sault Ste Marie, Michigan.

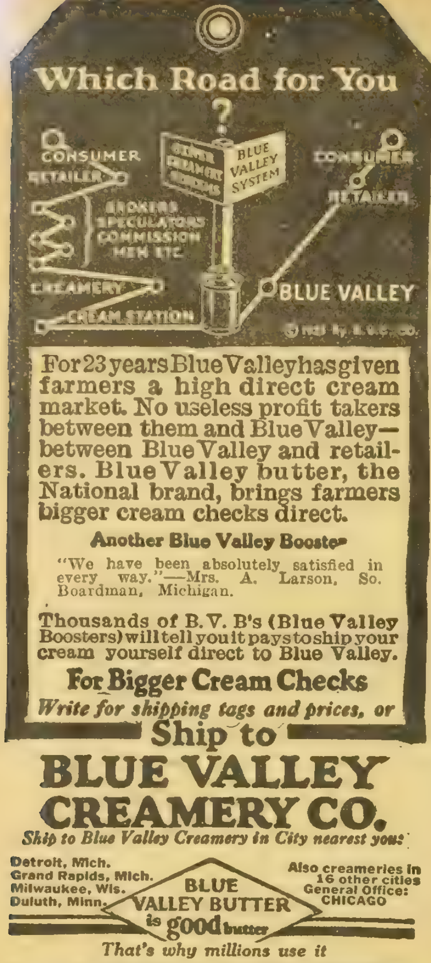
SWINE

POLAND CHINAS

Bargains in Poland Chinas

Bred sows and gilts $25 up. Choice fall gilts $12 up. Some herd boar prospects; real ones, $40 and $60 each. These prices good for a short time only. Write for price list and breeding. Also white male Collies $8 and $10 each.
E. A. CLARK, St. Louis, Michigan.

(Live Stock Ads Continued on Page 23.)



For 23 years Blue Valley has given farmers a high direct cream market. No useless profit takers between them and Blue Valley—between Blue Valley and retailers. Blue Valley butter, the National brand, brings farmers bigger cream checks direct.

Another Blue Valley Booster

"We have been absolutely satisfied in every way."—Mrs. A. Larson, So. Boardman, Michigan.

Thousands of B. V. B's (Blue Valley Boosters) will tell you it pays to ship your cream yourself direct to Blue Valley.

For Bigger Cream Checks

Write for shipping tags and prices, or

Ship to

BLUE VALLEY CREAMERY CO.

Ship to Blue Valley Creamery in City nearest you:

Detroit, Mich.
Grand Rapids, Mich.
Milwaukee, Wis.
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BLUE VALLEY BUTTER is good butter

Also creameries in 16 other cities
General Office: CHICAGO

That's why millions use it

No Money Down!
A size for every Dairy
Duty Free
Factory Prices

Try the HARP 30 Days FREE

Try the imported ball bearing Harp Separator *free* for 30 days. The easiest turning, closest skimming separator made. Unsurpassed for easy cleaning and durability. Compare it with any other machine. If it doesn't live up to all statements ship it back to me, and I will pay the freight both ways.

10 MONTHS TO PAY!

Selling in Europe 70,000 separators a year. Save *$25.00 to $50.00* on each machine. Duty free. Write for prices and descriptive folder today.

THE HARP SEPARATOR CO.
Dept. 39A 115 S. Dearborn St.
CHICAGO, ILL.

DON'T WEAR A TRUSS

BE COMFORTABLE—

Wear the Brooks Appliance, the modern scientific invention which gives rupture sufferers immediate relief. It has no obnoxious springs or pads. Automatic Air Cushions bind and draw together the broken parts. No salves or plasters. Durable. Cheap. Sent on trial to prove its worth. Beware of imitations. Look for trade-mark bearing portrait and signature of C. E. Brooks which appears on every Appliance. None other genuine. Full information and booklet free in plain sealed envelope.

MR. C. E. BROOKS

BROOKS APPLIANCE CO., 297 STATE ST., MARSHALL, MICH.

Galloway Challenges The World To Beat This Separator
Made in 4 sizes
90 DAY FREE TRIAL ON YOUR OWN FARM

Skims closer, runs easier, operates more economically and sells at lowest price. So you can't beat it anywhere. That's what a Hundred Thousands users say.

$4.75 Down, Balance On Easiest Terms

and you get 90 days to try it. If it meet all claims, it's yours. If it fails, it's mine. Besides lowest prices and easiest terms, I give customers aluminum milk pail filled with aluminum as shown in picture. That's special advertising offer. Write to day for Special Bargain Circulars.

WILLIAM GALLOWAY COMPANY
363 Galloway Station, Waterloo, Iowa

RHEUMATISM

I have returned home after 2 years' service in France with the A. E. F.

While in France I obtained from a noted French physician a prescription for the treatment of Rheumatism and Neuritis. I have given it to thousands with wonderful results. The prescription costs me nothing. I ask nothing for it. I will mail it if you will send me your address. A postal will bring it. Write today.

PAUL CHASE, Box 452, D-153, Brockton, Mass.

TOBACCO

HOMESPUN TOBACCO, FIVE POUNDS Chewing, $1.75, ten, $3.00, twenty, $5.25; Smoking five pounds, $1.25, ten, $2.00, twenty, $3.50. Pipe and Recipe free. Send no money. Pay when received. KENTUCKY TOBACCO CO., Paducah, Ky.

Test Your Seed Corn Now

(Continued from Page 4)

Here are some of the things to look out for when deciding whether corn is fit for seed or not:

1st.—Good mature seed corn kernels have a bright glistening appearance when held up to the light.

2nd.—The hull or seed coat is drawn tight around the kernel and over the germ. It is not wrinkled.

3rd.—If you cut a kernel crosswise one-third the way from the tip, the hard starch should be of an amber color, hard and brittle in texture.

4th.—The germ should be creamy in color and the embrayo in the center yellowish green. The germ should be firm and cheesey in texture.

Poor seed corn will have kernels showing one or more of the following symptoms:

1st.—Dullness of color.

2nd.—Starchiness or lack of transparency.

3rd.—The tip portion of the kernel may have a dark brown appearance. Do not confuse the brown membrane, which surrounds the germ, with the germ itself.

4th.—The hull or seed coat may be blistered over the germ, on the edges or sides of the kernel. This indicates a frozen kernel and is not worth anything for seed, particularly if the germ has turned dark brown. Fine lines or cracks, running through the hard starch, also indicates freezing.

5th.—Do not use kernels showing cracked seed coats. Discard the whole ear if you find any such grains.

6th.—Mold around the kernels is indicated by a white cobweby mass of filaments sometimes showing black specks or spores. It very severe, tips of kernels next to cob will be very dark brown or black.

7th.—If some kernels have turned brown or pink and the hard starch has become chalky and mealy, discard the whole ear. It may be badly diseased. If the ear has some kernels which show a gray canker, which is surrounded with pink ring, discard the whole ear. It indicates fusarium. If the cob has a shredded appearance, where it broke from the shank, or if it has a pink appearance around the outside of the pith, discard the whole ear. It indicates fusarium.

8th.—When the kernel is cut crosswise, if the hard starch is chalky and mealy and the germ has turned a dark brown and is either watery or dry and brittle, discard the ear. It won't pay to test it.

9th.—Discard all rough, starchy ears on general principles. They are immature and will give a weakened, lower per cent germination to say the least.

10th.—Run an individual ear test on all your seed corn this year if you expect to get a good stand.

A full stand on ten acres is a lot more profitable than 60 per cent of a stand on twenty acres and it is impossible to have a uniform stand of corn, unless one plants seed of high germination. Planting too much seed of uncertain germination results in too many stalks in one hill and one or none in the next and this lowers the yield and quality of the crop produced.

If you have not the materials handy for a rag doll tester, then use a sawdust box or sand-box germinator, using clean sand.

The Rag Doll Tester

The majority of the farmers of Michigan have tested seed corn some time or other by the rag doll method, or have heard of it, and know how to go about it, but for the benefit of those who know nothing about the test we are giving directions:

Cut cloth (cambric, muslin, or flannel) into strips five feet long and ten inches in width. Bisect lengthwise with heavy pencil line. Beginning about fifteen inches from end draw eleven cross lines at right angles to center line, three inches apart. Number spaces from one to ten on upper side of line and eleven to twenty on lower side.

Select and number ears to be tested. Dampen cloth and lay out smoothly on table. Remove six kernels from different parts of ear number one and place germ side up in space number one, tips pointing in same direction. Proceed with each ear in like manner. When spaces are filled roll carefully so as not to displace kernels and tie roll around center with string, place each roll as finished in bucket, cover with lukewarm water for several hours. Drain, and cover top with damp cloth or newspaper. Place in warm room. After several days moisten with warm water. On seventh day test is usually ready to read.

To read test unroll cloth carefully on table and study kernels in each square. Discard all ears corresponding to squares showing dead kernels which produced weak or mouldy sprouts. Save for planting ears with kernals showing strong, clean, stem and root sprouts.

(Editor's Note: Further information can be found by reading Bulletin No. 289, "Corn Growing in Michigan." Write the Bulletin Office, Michigan Agricultural College, East Lansing, Michigan, for this bulletin.)

LENT AND SELF-DENIAL

(Continued from Page 11)

tain rich man who fared sumptously day by day but forgot his poor neighbor. Yes, we do find our Lord vigorously condemning every satisfaction of our lower natures which disengages us from Christian love and service. The Kingdom of God is our highest good and it, therefore, claims our exclusive devotion. All selfish hindrances must be renounced.

But we are called upon also, to recognize the vanity in much of our intellectual or higher self. Freedom of thought and a broad culture are much to be desired; yet here we see a selfish and anti-spiritual trend. We have a great itching to be great, and to many this is to detach oneself from manual work, cultivate intellectual attainments, and keep oneself before a constantly admiring world. To win a name we will pay any price. But what is in a name when daily the unholy demands of self are robbing life of strength and sapping it of character?

The ideal of Jesus Christ was quite different. He was narrow. That is, he set boundaries for himself. He shut himself up within safe limitations. He chose a narrow field of service. He lived, worked, and died in a little corner of the earth that was as insignificant to the cultured and great of the world as it was small. He could have been a world-wide figure, but he chose to spend his strength with saw and hammer in the home carpenter shop and in helping those of his own land.

He chose to do but one thing. He could have done many others. The spirit of the times wanted him to move out into the world-wide circles of usefulness; wanted him to broaden out; but he said he would rather be narrow. There were other roads to take but he would take the narrow and self-denying one to Jerusalem and the Cross, and, "If any man would come after me, let him deny himself, take up his cross, and follow me." Even so, every community has a thorofare called, "The Way of the Cross," upon which, those who walk in His steps, must tread.

He denied himself in intellectual belief. The world said to keep broad. Don't be so positive. This is narrowness and bigotry. Jesus Christ tolerated none of this. To him certain standards of duty and destiny were true. Others were false. He made the right his standard and put it into action. And, unyieldingly, he denied himself of the false.

Finally, Jesus' self-denial and the narrow way must be concreted in our lives. Until we undertake an unusual and year-round program of self-denial, the world will travail in thirst, hunger, lust, and war. And until this takes place the church will drag impotently along.

The narrow, confined stream is one of force and power. When unconfined, it broadens its sweep and becomes a putrid swamp. So with men. Ask Edison, Ford, Steinmetz, Conwell, or Woodrow Wilson. But hear the call of the Christ, "Follow me." Yes, it is the way of self-denial, but it will keep you out of the shadows and bring you home to God.

FAMOUS
Imported **Lacta** No Duty
Cream Separator
Never Beaten In Open Competition

$5.00 Down | ONE YEAR To Pay | 30 Days FREE TRIAL

Finland's wonderful Cream Separator at prices that defy all competition. The Prize-Winning LACTA now SOLD DIRECT to you—and a year to pay.

A Positive Self Balancing Bowl

that will not get out of balance. No vibration. Runs light and free. No trouble to clean. Simple construction. Finest material and workmanship. Perfect oiling system. Skims perfectly. A special

Spare Parts Service

Maintained for every LACTA user.

If not satisfied after 30 days' FREE Trial send it back at our expense.

Every Shipment PREPAID

Immediate delivery. No long waiting—and a written GUARANTEE with each separator. You take no chances. Every penny of your investment fully protected. Try the LACTA. You must be satisfied in every way or your money will be refunded.

Prices

No.	Capacity	No. of Cows	Price	How to Pay
3	350 lbs.	5 to 6	$53.00	$5 with Order—Balance 12 Monthly Payments.
4	500 lbs.	6 to 10	65.00	
5	675 lbs.	10 to 15	77.00	

Get FREE Catalog!

Investigate TODAY. Get the best separator at the lowest price. Write. Don't wait. Postal will do. Address

BALTIC SALES CO., Inc.
U. S. Representatives
Dept. 118, 105 S. La Salle St., Chicago, Ill.

TAKE OFF YOUR HAT TO THE MYERS
PUMPS FOR EVERY PURPOSE HAY TOOLS & DOOR HANGERS
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MYERS HONOR-BILT DOOR HANGERS

"MYERS MEANS MERIT"

CAN'T get off the track. *They stay on—always.* This, with patent adjustable feature make Myers Door Hangers absolutely superior. Roller bearings permit easy "push and pull." Twelve styles to fit every need. Myers dealers everywhere handle Myers Door Hangers and the world-famous line of Myers Pumps and Hay Tools. *Be sure its a Myers.* See your dealer. Let him point out the Myers improvements. Or write us for catalog.

THE F. E. MYERS & BRO. CO.
494 Church St., Ashland, Ohio

Only $2 DOWN ONE YEAR TO PAY

You can now get any size of the New Butterfly Cream Separator direct from our factory for only $2 down, and on a plan whereby it will earn its own cost and more before you pay.

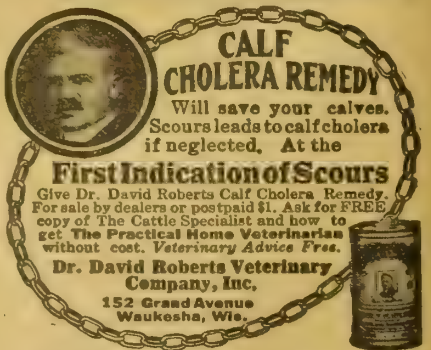
We quote Surprisingly Low Prices and allow payments as low as

ONLY $3.50 PER MONTH

No interest to pay — no extras. Every machine guaranteed a lifetime against defects in material and workmanship.

30 Days' FREE Trial on your own farm at our risk. Nearly 200,000 already in use on American farms. Easiest of all separators to clean and turn. *Write for Free Catalog Folder today.*

ALBAUGH-DOVER CO. 2260 Marshall Blvd
Chicago, Ill.


CALF CHOLERA REMEDY

Will save your calves. Scours leads to calf cholera if neglected. At the

First Indication of Scours

Give Dr. David Roberts Calf Cholera Remedy. For sale by dealers or postpaid $1. Ask for FREE copy of The Cattle Specialist and how to get The Practical Home Veterinarian without cost. *Veterinary Advice Free.*

Dr. David Roberts Veterinary Company, Inc.
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HEAVES Use 2 large cans. Cost $2.50. Money back if not satisfactory. One can at $1.25 often sufficient. NEWTON'S Compound for Worm Expelling, Conditioning, Heaves, Indigestion, Distemper, Coughs. 65c and $1.25 cans. At dealers or post-paid. The NEWTON REMEDY CO., Toledo, Ohio

WHEN WRITING TO ADVERTISERS MENTION THE M. B. F.

White Diarrhea

Remarkable Experience of Mrs. C. M. Bradshaw in Preventing White Diarrhea

The following letter will no doubt be of utmost interest to poultry raisers who have had serious losses from White Diarrhea. We will let Mrs. Bradshaw tell of her experience in her own words:

"Gentlemen: I see reports of so many losing their little chicks with White Diarrhea, so thought I would tell my experience. I used to lose a great many from this cause, tried many remedies and was about discouraged. As a last resort I sent to the Walker Remedy Co., Dept. 687, Waterloo, Iowa, for their Walko White Diarrhea Remedy. I used two 50c packages, raised 300 White Wyandottes and never lost one or had one sick after giving the medicine and my chickens are larger and healthier than ever before. I have found this company thoroughly reliable and always get the remedy by return mail.—Mrs. C. M. Bradshaw, Beaconsfield, Iowa."

Cause of White Diarrhea

White Diarrhea is caused by the Bacillus Bacterium Pullorum. This germ is transmitted to the baby chick through the yolk of the newly hatched egg. Readers are warned to beware of White Diarrhea. Don't wait until it kills half your chicks. Take the "stitch in time that saves nine." Remember, there is scarcely a hatch without some infected chicks. Don't let these few infect your entire flock. Prevent it. Give Walko in all drinking water for the first two weeks and you won't lose one chick where you lost hundreds before. These letters prove it:

Never Lost a Single Chick

Mrs. L. L. Tam, Burnetts Creek, Ind., writes: "I have lost my share of chicks from White Diarrhea. Finally I sent for two packages of Walko. I raised over 500 chicks and I never lost a single chick from White Diarrhea. Walko not only prevents White Diarrhea, but it gives the chicks strength and vigor; they develop quicker and feather earlier."

Never Lost One After First Dose

Mrs. Ethel Rhoades, Shennandoah, Iowa, writes: "My first incubator chicks, when but a few days old, began to die by the dozens with White Diarrhea. I tried different remedies and was about discouraged with the chicken business. Finally, I sent to the Walker Remedy Co., Waterloo, Iowa, for a box of their Walko White Diarrhea Remedy. It's just the only thing for this terrible disease. We raised 700 thrifty, healthy chicks and never lost a single chick after the first dose."

You Run No Risk

We will send Walko White Diarrhea Remedy entirely at our risk—postage prepaid—so you can see for yourself what a wonder-working remedy it is for White Diarrhea in baby chicks. So you can prove—as thousands have proven—that it will stop your losses and double, treble, even quadruple your profits. Send 50c for package of Walko—give it in all drinking water for the first two weeks and watch results. You'll find you won't lose one chick where you lost hundreds before. It's a positive fact. We guarantee it. The Leavitt & Johnson National Bank, the oldest and strongest bank in Waterloo, Iowa, stands back of this guarantee. You run no risk. If you don't find it the greatest little chick saver you ever used your money will be instantly refunded.

WALKER REMEDY CO., Dept. 687,
Waterloo, Iowa.

Send me the [ ] 50c regular size (or [ ] $1 economical large size) package of Walko White Diarrhea Remedy to try at your risk. Send it on your positive guarantee to instantly refund my money if not satisfied in every way. I am enclosing 50c (or $1.00). (P. O. money order, check or currency acceptable.)

Name ....

Town ....

State .... R. F. D. ....

Mark (X) in square indicating size package wanted. Large package contains nearly three times as much as small. No war tax.

FARMER PUTNAM'S PHILOSOPHY

THIS here eat more food propaganda is a good thing and I believe in pushin' it along, fur the benefit of humanity. Them experts sez we got to have more vittymines in the blood. They're all agreed on that, even the doctors is, at present. But when it comes to collecting them vittymines they is differences of opinion, some sayin' milk has got the most, some sayin' that meat is alive with 'em, some askin' us to take their word fut it that oranges is fifty per cent vittymines, others that cheese is rich with 'em, others sez tomatoes is made outen vittymines, others that green vegetables, like spinach, is the natural habitat of the true vittymine, others recommendin' cabbage, others carrots, because of their peculiar golden yellow color which is also good fut the complexion and kin be used inwardly to color the hair instead of henny, and so on and so forth, etc.

I been workin' on a bulletin of my own; that's how I come to have so much information on the life history and habits of the vittymine and my honest conclusions, after long and painful study of the subject is, that the people that recommends all them various kinds of vittymine infested foods is correct; that they do inhabit asparagus, tomato, spinach, carrot, cabbage, orange, apple (I bit into one onct in a apple, so I know) also, they are found in beef, pork, and mutton; also in milk which is fairly lousy with 'em accordin' to our food experts. My scientific conclusion which I'm givin' out herewith fur the benefit of humanity, is that the true vittymine is related to the California flea; that it hops about from plant to plant, from fruit to vegetable, from cow to goat, from pig to pullet, leavin' life givin' energy with all it comes in contact with.—Thos. Jefferson Putnam, Specialist in Rural Devilment.

SHORT COURSE IN FARM EXPLOSIVES AT M. A. C.

A ONE week's course in blasting and handling explosives will be an unusual type of school to be offered at Michigan Agricultural College, April 14 to 19 inclusive. The instruction will be under the supervision of L. F. Livingston, Extension Specialist in Agricultural Engineering and is a part of the program for the safe distribution and use of Sodatol, the new war salvage explosive, 1,500,000 of which will be placed in the state this year.

The instruction will consist of lectures and moving picture demonstrations of safe and economical methods of handling explosives to be given each forenoon. The afternoons will be confined to field stumps, rock blasting and ditching. Sufficient acreage of each of representative classes of work are available in the immediate neighborhood of the College to give the student a good working force, the number enrolling in these courses will be limited to forty men. For further information write to Short Course Department, Michigan Agricultural College, East Lansing, Michigan.

U. P. PRODUCES WORLD'S CHAMPION GUERNSEY

AGRICULTURAL development workers throughout the Upper Peninsula of Michigan are smiling complacently over the world's production record recently established by Rilma of Bay Cliffs 93480, a pure-bred Guernsey from the herd of the Bay Cliffs Stock Farm, at Big Bay, Marquette County. J. B. Deutsch is proprietor of the farm and owner of the herd.

Rilma of Bay Cliffs has hung up a record of 15,684.7 pounds of milk and 821.70 pounds of butter fat and her average test was 5.24 per cent. The record entitles her not only to first place in class D. D. but also places her fourth in class D. Rilma topped the former world's record in class DD by thirty-five pounds of butter fat.

Rilma's ancestry points to her grandsire Frank Rilma 21901 as the outstanding animal among her forefathers. Frank Rilma has over fifty registered daughters and over forty registered sons while the records of a number of his daughters appear in the Advanced Register.—L. D. Tucker.

CHICKS From World's Greatest Layers

If you want pure bred chicks that are bred right, hatched right, and shipped right, that grow and will make you a profit, get our new low prices and free catalog before you buy.

Tom Barron White Leghorns Heavy Type Brown Leghorns
R. C. & S. C. Rhode Island Reds Park's Barred Rocks

Flocks are carefully culled and developed on free range. All chicks are hand picked and inspected, no cripples or weaklings. Every one strong and healthy. Satisfaction and 100% live delivery guaranteed. Postage paid. Write now for our low prices and free catalog. White Leghorn and Barred Rock pullets after May 1. at low prices.

KNOLL'S HATCHERY, R. R. 12, Box B HOLLAND, MICH.

Wyngarden Strain WHITE LEGHORN BABY CHICKS

EGG BRED for 18 YEARS

Here's what you get when you buy Guaranteed Wyngarden Baby Chicks

(1) Pedigreed stock, sired by males whose dams had records of 260 to 289 eggs per year, and grand dams 298 to 304 eggs. (2) 100% live delivery. (3) Chicks guaranteed to be healthy. (4) Absolutely pure bred. (5) Absolutely no culls. (6) Stock that withstands winter cold as well as summer heat. (7) Free entry in our animal flock performance contest, whereby you may obtain 200 of our best Barron English White Leghorns free. We know the quality of our stock because we maintain 42 hatchery farms of our own, instead of buying eggs wherever available.

Sired by Hollywood and Funk Farm Males

White and Brown Leghorns. Anconas.

Send for our catalog and read full particulars of the Wyngarden Strain.

Wyngarden HATCHERY & FARMS ZEELAND, MICH. Box B

BOWERS Colony Brooder

Burns any fuel—costs less

This brooder raises more and better chicks at lowest cost. Stove is sturdy, safe, air-tight, self-regulating—best in world to hold fire. Burns soft coal—cheapest brooder fuel—perfectly. Also hard coal, wood, etc. Automatic regulator maintains uniform heat night and day. Canopy spreads heat evenly over chicks; gives pure air, ample room. 500 and 1,000 chick sizes. Guaranteed. Lowest prices. Express prepaid E. of Rockies. FREE—$3.00 stove pipe outfit sent free with brooder if you order NOW. F. M. BOWERS & CO. 1416 W. Wash. St. Indianapolis, Ind.

Whittaker's Red Chicks and Eggs for Hatching. Rose and Single Combs. Bred from Fourteen Generations of Winter Layers. Write for Free Catalog of Michigan's Greatest Color and Egg Strain. Interlakes Farm, Box 4, Lawrence, Mich.

BABY CHICKS—REMARKABLE FOR SIZE and strength. Reasonable prices. Leghorns, Anconas, Rocks, Reds, Wyandottes, Orpingtons, Minorcas, Spanish, Brahmas. TYRONE POULTRY FARM, Fenton, Michigan.

PUREBRED BABY CHICKS. LEADING VARieties. 100% arrival. Priced right. THOS. G. CALLAGHAN, Fenton, Michigan.

Detroit-Alliance INCUBATOR 140-EGG CAPACITY

Has all the features that insure big hatches—double walls, copper tank, complete nursery, perfect heat control through automatic trip burner, "Tycos" thermometer held so chicks can't break it when hatching. Detroit Brooders, too. Write for low combination price today! Detroit-Alliance Incubator Co. Dept. 10 Alliance, Ohio FREIGHT PREPAID

WHITE LEGHORN **BABY CHICKS**

TANCRED—BARRON, 200 to 300-egg bred lines. Wonderful layers of large, white eggs that bring premium prices. Over 2,000 selected breeders on free range. Get quality chicks from these tested layers mated to high record pedigreed males. 11½ cents and up. 100% live delivery guaranteed by prepaid parcel post. Write at once for valuable illustrated catalog and latest price list. J. PATER & SON, R. 4, Hudsonville, Michigan.

LOOK! 100,000 CHIX. BEST PUREBRED. M. A. C. method tested stock. Can ship at once. Barred Rocks or Reds, Black Minorcas 15c; White, Brown or Buff Leghorns 13c; Sheppards best Anconas 14c; Orpingtons 16½c; Black Langhans 18c; Large Brahmas 20c. Heavy broilers Chix 12c. Mixed spotted Chix 10c. Hatching eggs. Add 30c extra if less than 100 ordered. Catalog tells about our extra selected stock. Good bank reference. Beckmann Hatchery, 26 Lyon, Grand Rapids, Michigan.

S. C. WHITE LEGHORN CHICKS—FROM culled, healthy flocks of heavy layers on free range, headed by Kerlin males. April $12.00, May $11.00, June $10.00 per hundred, prepaid. 100% delivery. Hatched right, in a Wishbone Mammoth. 10% with order, balance one week before shipment. Some fine Silver Wyandottes, 20c each, no less than 25. WISHBONE HATCHERY, Sebewaing, Michigan.

QUALITY Chicks & Eggs

45,000 PURE BRED BREEDERS. 15 varieties. Best laying strains. Incubate 25,000 eggs daily. Catalog Free. Prewar prices. Free live delivery. Missouri Poultry Farms, Columbia, Mo.

SELECTED BARRED ROCK AND WHITE Wyandotte cockerels from high producing stock. White Wyandotte chicks for April $18 per 100. Barred Rock chicks for April $16 per 100. White Leghorn chicks for April $15 per 100. Order now. C. W. HEIMBACH, R. 5, Big Rapids, Mich.

STURDY CHICKS—BRED-TO-LAY AND exhibition flocks, culled by experts. Reasonable prices. Catalog free. Single Comb White Leghorns, Rocks, Reds, White Wyandottes. Sunnybrook Poultry Farm, Hillsdale, Mich.

BEFORE BUYING ELSEWHERE GET OUR prices on White and Brown Leghorns and White Rocks. Prepaid Parcelpost. Satisfaction Guaranteed. De Koster's Hatchery, Box B, Zeeland, Mich.

BABY CHICKS BARRON S. C. W. LEGhorns. Special low prices. 100% alive delivery guaranteed. Write for price list. HENRY WATERWAY, R4, Holland, Mich.

LEE'S LICE KILLER

The Old Reliable Has proven itself year after year the one sure way to rid poultry of lice, mites, bedbugs, body lice and such vermin. Paint or spray on roosts, etc. No dusting, dipping, greasing, handling. Get it at your drug or seed store, or write us for particulars and valuable free book. GEO. H. LEE CO. Omaha, Nebr.

DON'T LOSE BABY CHICKS

GERMOZONE, for 25 years the reliable remedy, will rid them of Roup, Colds, Bowel Trouble, etc., and keep them healthy. "A wonder worker." Used by hundreds of thousands. Get it at drug or seed store, or order of us by card—75c and $1.50 sizes, delivered. Postman will collect. No extra charge. Order today. GEO. H. LEE CO. Omaha, Nebr

POULTRY BREEDERS' DIRECTORY

Advertisements inserted under this heading at 30c per agate line, per issue. Commercial Baby Chick advertisements 45c per line. Write out what you have to offer and send it in. We will put it in type, send proof and quote rates by return mail. Address The Michigan Business Farmer, Advertising Department, Mt. Clemens, Michigan.

FOR SALE—THOROUGHBRED TOULOUSE Geese and Buff Rock Cockerels. Blue Ribbon prize winners. Buff Rock eggs $1.50 per 15. BALDWIN & NOWLIN, Laingsburg, Mich., R4.

LEGHORNS

PULLETS BARRON ENGLISH AND FERRIS Americans Leghorns. Eight weeks, eighty-five cents. Barred Rocks, White Rocks, Rhode Island Reds, one dollar. Ready April twenty-first. Early hatches make bigger, stronger birds. Early fall and winter eggs. RUFUS MORSE, Belding, Michigan.

TANCRED, HOLLYWOOD AND WYCKOFF Males head my carefully selected breeding pens. Choice eggs $3.00 and $2.00 per 15. My stock is of the very best. Write me. F. ARTHUR MARTIN, Indian River, Michigan.

RHODE ISLAND REDS

RHODE ISLAND REDS TOMPKINS STRAIN to make room for young stock. I will sell after November 1, 1923, 50 2 year old hens at $2.00 each; 25 1 years old hens at $3.00 each; cockerels at $2.50 and up. All these cockerels are from my best 3 year old hens that layed 205 eggs or better in their pullet year. Quality breeder of Rhode Island Reds. WM. H. FROHM, New Baltimore, Mich., R. 1.

CRYDER'S S. C. REDS, ONE OF LEADING Red pens in Michigan egg contest. Bred for color, shape, and heavy production. Write for prices on hatching eggs. EDW. H. CRYDER, Alamo, Michigan.

S. C. R. I. RED PURE BRED EGGS FOR setting. 15-$1.25 or 100-$8.00. LOUIS MORRIS, Mt. Morris, Michigan, R. 1.

WYANDOTTES

WHITE WYANDOTTES. REGAL STRIAN. Eggs for hatching, $1.50 per 15; $7.00 per 100. F. W. ROBERTS, Salem, Michigan.

PURE BRED W. WANDOTTE HATCHING Eggs, Fishel's heavy laying strain. $7.00 per 100; $4.00 for 50 or $2.00 for 15. Mrs. Tracy Rush, 104 Grover Ave., Alma, Mich.

WHITE WYANDOTTES. MARTIN STRAIN. Eggs for hatching $1.25 per 15; $6.00 per 100. MRS. R. GRAY, Millington, Michigan.

BARRED ROCKS

Hatching Eggs. Barred Rock, Aristocrats and Fishel White Wyandottes, 100-$5.50; 50-$3.00; 15-$1.25. Joseph Amster, Paw Paw, Michigan.

DARK RINGLET BARRED ROCK EGGS $1.75 per 15; $3.00 per 30. Large type White Pekin Duck eggs $1.25 per 12. MRS. FRED KLOMP, St. Charles, Michigan.

TURKEYS

TURKEYS: Pure Bred Bronze Toms. One or two years old. May hatch. Heavy, vigorous, healthy. Price $10.00. Chas. S. Cleland, Deckerville, Mich.

Pure Bred Mammoth Bronze Toms One 2 Year old hardy beautiful well marked birds. Write for prices. Mrs. F. Griffin, Riverdale, Michigan.

MAMMOTH BRONZE TURKEYS, LARGE beautiful birds. Write for prices. MRS. BEN JOHNSTON, Onaway, Mich., R. 1.

(Poultry ads. continued on page 23)

KARSTEN'S QUALITY

BABY CHICKS

FROM STOCK—THAT IS BRED WITH THE LAYING HABIT

Hollywood and Barron English Single Comb White Leghorns STRAIN MATINGS

250-300 EGG-BRED LINE

Careful breeding, typetesting and trapnesting has produced our world-famous Karsten's Quality Laying Hen—A Utility Bird With Standard Requirements

Our Leghorns are long, deep-bodied, wedge-shaped birds, with wide backs and low spread tails, big lopped combs and alert eyes. Birds that lay those large white eggs that bring the high prices on the New York Market.

SEND FOR FREE CATALOG

it describes our wonderful breeding establishment, it tells what and how to feed your chickens for profit, it will show you how you, too, can double your poultry profits

KARSTEN'S FARM BOX X ZEELAND, MICHIGAN

Our Baby Chicks

Can't be beat because they are hatched from Michigan's leading pedigreed flocks, culled by genuine poultry experts, for higher egg production and because we hatch only in tested mammoth machines. Rocks, Reds, White Leghorns, Anconas, Buff Orpingtons. Large instructive catalog tell all about them. Prices 9c up.

MICHIGAN HATCHERY and POULTRY FARM
Box 2, Holland, Michigan.

CHICKS WHITE LEGHORNS $12 PER 100, $6.25 for 50, and $3.25 for 25. Barred Rocks and Reds $16 per 100, $8.50 for 50, and $4.25 for 25. White Wyandottes and Rocks $17 per 100, $8.75 for 50, and $4.50 for 25. Buff Orpingtons $18 per 100, $9.25 for 50, and $4.75 for 25. $5 on each 100 chicks with order will book your order. Balance two weeks before delivery. 100% live delivery guaranteed. Reference: Bank of Mt. Morris.
Meadow Brook Hatchery, R1, Mt. Morris, Mich.

ELGIN CHICKS

Barron Strain Selected English White Leghorn Chicks. We ship all over the states. Get the good winter layers. Prices are right. Grade AA, best stock. Grade A, good layers. Prices: Grade AA chicks, 25, $4.00; 50, $7.50; 100, $14.00; 500, $67.50; 1000, $130.00. Grade A chicks, 25, $3.50; 50, $6.50; 100, $12.00; 500, $57.50; 1000, $110.00.
ELGIN HATCHERY, Box 317-A, Zeeland, Mich.

CHICKS Strong. Healthy. From Heavy Layers. S. C. Tom Barron Eng. White Leghorns, $12.00 per 100. Barred Rocks and S. C. R. I. Reds $15.00. White Wyandottes $16.00. Assorted chicks $10.00. Order direct from this ad. Reference First National Bank.
BLISSFIELD HATCHERY, Blissfield, Michigan.

BABY CHICKS AND HATCHING EGGS, S. C. White Leghorns, Barron Strain, America's greatest layers, from our own breeding pens, chicks $15, eggs $5.50 per hundred. Barred Rocks and R. I. Reds, Chicks $16, eggs $6.50 per hundred. 100% live arrival guaranteed, prepaid. 10% down balance 10 days before shipment.
C. W. BOVEE, North Star, Michigan.

BABY CHICKS From Best Producing Free Range flocks.. Highest utility quality, best for general purposes. Sent post paid 100% live delivery guaranteed. Write for catalog.
HOMER HATCHERY, Homer, Michigan.

PUREBRED BABY CHICKS, BARRED ROCKS and Rhode Island Reds $14.50 per 100, White Wyandottes and Buff orpingtons $16.00.
JOSEPH AMSTER, Paw Paw, Michigan.

BABY CHICKS FROM BRED TO LAY S. C. Buff Leghorns. First hatch March 3rd.
J. W. WEBSTER, Bath, Michigan.

Are You Ruptured?

Learn How to Heal It FREE

Ruptured people all over the country are amazed at the almost miraculous results of a simple Home System for rupture that is being sent free to all who write for it. This remarkable invention is one of the greatest blessings ever offered to ruptured persons, and is being pronounced the most successful Method ever discovered. It brings instant and permanent relief and does away with the wearing of trusses forever.

Thousands of persons who formerly suffered the tortures of old-fashioned steel and spring trusses are now rejoicing in their freedom from the danger and discomfort of rupture after a brief use of this remarkable System. There is nothing like it anywhere and hosts of ruptured persons are astounded at the ease with which their ruptures are controlled.

For a limited time only, free trial treatments of this Muscle Strengthening Preparation are being mailed to all who apply. It is an original painless Method. No operation, no danger, no risk, no absence from daily duties or pleasures. Send no money; simply write your name and address plainly and the free treatment with full information will be mailed you in sealed package.

Send now—today. It may save the wearing of a torturing truss for life.

FREE TREATMENT COUPON

Capt. W. A. Collings, Inc.
Box 226A Watertown, N. Y.

Send Free Test of your System for Rupture.

Name ....

Address ....

—Inspected and Approved

Baby Chicks

From Best Egg Laying Strains in the World

LAKEVIEW

Tancred, pedigree-sired and Tom Barron, S. C. White Leghorns, S. C. & R. C. R. I. Reds, Parks' Barred Plymouth Rocks.

Our flocks are all on free range, closely culled, inspected and approved by Michigan Baby Chick Association. Every bird is healthy, has size, type and color.

Hatched in World's Best Incubator

Our chicks are strong, sturdy and healthy. They live and grow because they are hatched in the best incubator made. 100% live delivery to your door. Illustrated catalog sent FREE.

LAKEVIEW POULTRY FARM, R 8, Box 6 ,Holland, Mich.

EGG BRED CERTIFIED CHICKS

from our Free range flocks of Hollywood and Barron improved English White Leghorns, 250-300 Egg-Bred line. Sheppard's Strain of Anconas direct. Parks strain of Br. Leghorns and Barred Rocks. Quality and high egg yield due to 11 years careful breeding on our modern 65 acre farm. Culled, mated, rated by experts. Strong vigorous Chicks. 100% live delivery. Extra selected chicks 100, $14,00; 500, $65.00. Barred Rocks 100, $18.00; 500, $85.00. Write for catalog and prices on selected Special Star matings. Postage prepaid.

Town Line POULTRY FARM ZEELAND MICH.

ROYAL EGG-BRED CHICKS

200 Egg Strain S. C. English White Leghorns and Brown Leghorns. Our pen of White Leghorns to 1st prize (best W. Leghorn pen in the show) production class, in the largest utility show in the country held at Zeeland, Michigan, Dec. 28. Prof. E. Foreman of M. A. C. judging. 12 years of careful breeding for high egg-production, combined with 8 years of highly successful hatchery methods gives you chicks that grow into money makers. 100% live delivery guaranteed. Write for free catalog and prices.

ROYAL HATCHERY & FARMS
S. P. Wiersma, Zeeland, Michigan, R. R. 2.

Chicks With Pep

Try our lively and vigorous chicks from bred-to-lay and exhibition hens. They will make you money for they have the quality and egg laying habit bred into them. A trial will convince you. All leading varieties. Safe delivery. Prepaid. Prices right. Bank reference. Big illustrated catalog free.
Holgate Chick Hatchery, Dept. B, Holgate, Ohio.

FREE CHICKS

In Contest
Many Breeds
Every One a Winner
Pure Breed Practical Poultry

D. W. Young American type Leghorns, also English type. You will be interested in the egg records our customers report.
Send for our descriptive matter and price list.

STATE FARMS ASSOCIATION
Masonic Temple, Kalamazoo, Mich.
(Member International Baby Chick Association)

Strong, Healthy Chicks

Hatched in the latest improved Mammoth Incubator. English S. C. W. Leghorns, S. C. Anconas, Barred Rocks, R. I. Reds from heavy laying free range organized flocks. 100% alive. Parcel Post paid. Send for catalog. Reference.
Timmers Hatchery, R3, Box M, Holland, Mich.

Baby chicks dying

How to stop it in 48 hours

White diarrhea kills half of all the chicks hatched, yet this loss is easily prevented, easily stopped. For years, thousands of poultry raisers have stamped out the trouble almost entirely, by putting Avicol in the drinking water. Within 48 hours, the sick ones are lively as crickets. Mrs. Wm. May, Rego, Ind., says: "I was losing 15 chicks a day before I received the Avicol. I haven't lost one since."

Avicol costs nothing to try. Readers are urged to write to Burrell-Dugger Co., 311 Allen Ave., Indianapolis, Ind., sending 50c as a deposit for a package by mail prepaid (or $1 for large size holding nearly 3 times as much). If you prefer, send no money but deposit the money with the postman on delivery. If Avicol doesn't stop your chick losses immediately, if you're not fully satisfied, the money deposited will be promptly refunded by the manufacturers.

M. A. C. TO CONDUCT POULTRY CULLING SCHOOL

A ONE-WEEK poultry culling school is to be conducted at the Michigan Agricultural College from June 30 to July 5 by the poultry husbandry department, according to Prof. Ernest C. Foreman, head of the department.

It is planned, according to college officials, to develop several men qualified to cull flocks on a commercial basis. Certificates will be issued to students who satisfactorily complete the course as an assurance of their reliability. If the men are fast cullers they will be able to earn adequate pay at 2 or 3 cents a head.

A rapidly increasing demand for instruction in this specialized field is said to have developed, and with the launching in July of the certification service in which the M. A. C. poultry department and the Michigan Baby Chick Association will cooperate, the services of competent and reliable cullers are expected to be in considerable demand.

Plans of the M. A. C. poultry extension division also include 10-day culling campaigns, between July 1 and Oct. 1, in four counties and two days each in all other counties desiring help.

HENS MAY HAVE TUBERCULOSIS

I have Rhode Island Red hens which seem to be in healthiest kind of condition and occasionally there will be one that will start to droop around and refuse to leave their perch to eat and then later seem to be lame in one leg and keep that way for a long time before they die. Please inform me what it is ails them and what to do for them.—J. H. D., Dighton, Mich.

—The clinical symptoms described would indicate that Tuberculosis may be present in this particular flock. Associated with the leg weakness which you intimated is present, one usually finds that the hens become greatly emaciated and moreover they become dull and anaemic, and are inclined to mope around. Their appetite, however, remains good, and in addition the hens will be found to drink considerable quantities of water.

It may be advisable to forward one or more specimens to Doctor Stafseth of the Bacteriology Department, East Lansing, for post mortem examination in order to definitely determine the ailment or disease now prevalent in your flock.

Intestinal worms would also induce a form of leg weakness and may cause such a condition known as "going light." A post mortem examination in the case of Tuberculosis, would reveal nodules on the liver and in most cases, bunches on the long intestinal tract. These are creamy white in color. In the case of intestinal worms, the entire intestional tract, including the ceca would reveal various species of parasites including cecum worms, round worms, and possibly tape worms. In treating for intestinal worms, we would recommend using one teaspoonful of oil of American Worm Seed and one of turpentine to each twelve fowls. This can be given in a moistened mash after the birds have been starved for twelve hours, and should be followed with Epsom salts at the rate of one pound per hundred birds, in the drinking water. Lime should be liberally used on the roosts and dropping boards following this treatment.

If Tuberculosis is present, the poultry house should be well lighted and ventilated, dropping boards incorporated, and all factors eliminated that tend to create unsanitary conditions. The young stock should be raised on new ground away from the parent flock. The old stock should be tested by a veterinarian, and the reactives eliminated, or if the flock is but an ordinary one, it may be advisable to dispose of them after the heavy spring laying season, and thoroughly disinfect the house and yards.—E. C. Foreman, Professor of Poultry Husbandry, M. A. C.

Teacher—Johnny, give me a sentence using the word "diadem."

Johnny—People who drink moonshine diadem sight quicker than those who don't.—Walworth Kewanee Craftsman.

RHEUMATISM

A Remarkable Home Treatment Given by One Who Had It.

In the year of 1893 I was attacked by Muscular and Sub-acute Rheumatism. I suffered as only those who are thus afflicted know, for over three years. I tried remedy after remedy, but such relief as I obtained was only temporary. Finally, I found a treatment that cured me completely, and such a pitiful condition has never returned. I have given it to a number who were terribly afflicted, even bedridden, some of them seventy to eighty years old, and the results were the same as in my own case.

I want every sufferer from any form of muscular and sub-acute (swelling at the joints) rheumatsim, to try the great value of my improved "Home Treatment" for its remarkable healing power. Do not send a cent; simply mail your name and address and I will send it free to try. After you have used it and it has proven itself to be that long-looked-for means of getting rid of such forms of rheumatism, you may send the price of it, one dollar, but understand, I do not want your money unless you are perfectly satisfied to send it. Isn't that fair? Why suffer any longer when relief is thus offered you free? Don't delay. Write today.

MARK H. JACKSON
No. 265-K Durston Bldg.
SYRACUSE, N. Y.

Mr. Jackson is responsible. Above statement true.

HIGHEST QUALITY CERTIFIED BABY CHICKS

FROM

Michigan's Old Reliable Hatchery, the best equipped and most modern Hatchery in the State.

Pure Bred Tom Barron English and American White Leghorns, Anconas, Barred Plymouth Rocks and Rhode Island Reds. Strong, Well-hatched Chicks from tested Hoganized Free-range stock that make wonderful winter layers.

Chicks sent by Insured Parcel Post prepaid to your door. 100% live delivery guaranteed. Sixteen years of experience in producing and shipping Chicks giving absolute satisfaction to thousands. Write for valuable illustrated free catalog and price list. Get lowest price on best quality Chicks before placing your order.

HOLLAND HATCHERY & POULTRY FARM, R. 7, Holland, Mich.

400,000 CHICKS

BIG, STRONG, FLUFFY CHICKS hatched from well-bred and well kept, heavy laying hens insuring good growth and PROFITS.

	Prices on 50	100	500	1000
White, Brown and Buff Leghorns	$7.00	$13.00	$62.00	$120.00
Barred and White Rocks, S. C. and R. C. Reds, Anconas	8.00	15.00	72.50	140.00
White Wyandottes, Buff Orpingtons	8.50	16.00	77.50	....
Silver Wyandottes	9.50	18.00	87.50	170.00

Mixed, $12.00 per hundred, straight. Postpaid. 100% Live Arrival Guaranteed. Order right from this ad. Best Bank Reference. You take no chance. Free Catalog. Member I. B. C. A. and Ohio Assn.

MODERN HATCHERY, Box 62, Mt. Blanchard, Ohio.

CHICKS $10.00 UP

100% SAFE ARRIVAL GUARANTEED

Varieties	Prices on 50	100	500
White, S. C. & R. C. Brown & Buff Leghorns	$7.00	$13.00	$62.00
Barred Rocks, Reds, Black Minorcas	8.00	15.00	72.00
White Rocks, White Wyandottes, Anconas	8.50	16.00	77.00
Buff Orpingtons, Silver Laced Wyandottes, Blue Andalusians	9.50	18.00	....
Assorted, from Pure Bred Stock	6.00	11.00	50.00

Hatched from healthy, heavy laying flocks, well kept, insuring strong chicks that will grow into **Profits. Postpaid. Order from this Ad. Save time.** Reference, The Geneva Bank. Member International Baby Chick Ass'n. Free Catalog.

THE GENEVA HATCHERY, Box 23, Geneva, Indiana.

LARGE, HUSKY CHICKS

Purebred, high quality chicks from certified, tested flocks on free range.

Varieties	Prices on 25	50	100	500	1000
S. C. White and Brown Leghorns	$3.50	$6.75	$13.00	$62.50	$120.00
Anconas	3.75	7.25	14.00	67.50	130.00
Barred Rocks, R. I. Reds	4.50	8.50	16.00	77.50	150.00
Assorted Chicks	2.75	5.50	10.00	50.00	....

Extra Select Stock $2.00 per 100 higher. Well hatched in modern machines. Each order carefully packed under our personal attention. Postpaid. 100% live delivery. Bank reference. 1924 catalog ready.

Winstrom Poultry Farm and Hatchery, Box A-5, Zeeland, Mich.

Cloverleaf Chicks Leads Them All

Get chicks from real quality stock; the long deep-bodied type that are just built for laying. Our stock has been bred for years for high egg production. Closely trap-nested so as to weed out everything but those that come up to the high Cloverleaf standard. "Cloverleaf" brings you extra value without the extra cost. 100% live delivery by prepaid parcel post. Send for catalog.

CLOVERLEAF POULTRY YARDS

R. R. No. 2-B ZEELAND, MICHIGAN

SUNBEAM HATCHERY

Chicks are produced under my personal supervision. Hatched from select, pure bred, heavy laying hens, well kept to insure vigorous Chicks.

Varieties	Prices on 50	100	500
White, Brown and Buff Leghorns	$7.00	$13.00	$62.50
Barred Rocks, R. and S. C. Reds, Anconas	8.00	15.00	72.50
White and Buff Rocks, White Wyandottes, Black Minorcas	8.50	16.00	77.50
White and Buff Orpingtons, Silver Wyandottes	9.00	18.00	87.50

Mixed, all varieties, $12 per 100 straight. 100% Live Delivery Guaranteed. Postpaid. Order from this Ad. Bank references. There is no risk. Free Catalog. Member I. B. C. A.

H. B. TIPPIN, Box E. Findlay, Ohio.

We can save you money on

Ancona and White Leghorn Chicks

Send at once for catalog and prices. We insure your chicks for one week.

M. D. WYNGARDEN

Route 4, Box 81 Zeeland, Mich

BABION'S QUALITY CHICKS

Varieties	Postpaid Prices On: 25	50	100	500	1000
English Wh., Br., Bl. and Buff Leghorns	$3.75	$7.00	$13.00	$62.00	$120.00
Barred Rocks, S. C. and R. C. Reds, Anconas	4.25	8.00	15.00	72.00	140.00
Wh. and Buff Rocks, Wh. Wyandots, Minorcas,	4.50	8.75	17.00	82.00	160.00
Sil. Wyandots, Buff and Wh. Orpingtons,	5.00	9.50	19.00	92.00	180.00
Black Lanshangs, Light Brahmas,	5.00	9.50	19.00	92.00	180.00

Prices quoted are for Chicks hatched from OUR GOOD UTILITY FLOCKS. Chicks from OUR EXTRA SELECTED FLOCKS will be $3.00 per 100 higher and Chicks from our Fancy Stock of BLUE RIBBON PENS will be $5.00 per 100 higher. Also eight week pullets $1.25 up. Postpaid 100% live delivery guaranteed. Bank references. You cannot go wrong. Order from this Ad. Thousands satisfied. Thirty-four varieties. Ten years' experience. Our slogan: The best chicks are cheapest, not the cheapest chicks best. **Babion's Fruit and Poultry Farms, Lock Box 354-A, Flint, Mich.**

Certified White Leghorn CHICKS

HOLLYWOOD MATED

$15 per 100

Sired by Hollywood males whose dams had egg records of 260 to 290. Stock certified by Michigan Baby Chick Ass'n.

Rural Strain $13

Brown Leghorns $14-$13

Anconas. Barred Rocks. Large, illustrated catalog FREE.

RURAL POULTRY FARM

Box 110 Zeeland, Mich.

PURE BRED CHICKS

Tom Barron Imported and Hollywood strains S. C. White Leghorns, Sheppard's Famous S. C. Mottled Anconas and Park's Bred to Lay Barred Rocks. All Free range flocks, **carefully culled and certified by experts and bred many years for high egg production.** Pedigreed males from **250 to 280** egg strains and from hens that produced **leading** pen in Michigan's International Laying contest, head our flocks. Eggs from these **famous strains** hatched with scrupulous care in our Modern Mammoth Incubators produce **strong, husky, peppy chicks** that are easy to raise and become **marvelous layers.** Chicks are shipped postpaid. 100% live delivery guaranteed. Write for **our big free illustrated catalog.**

Silver Ward Hatchery, Box 30 Zeeland, Mich

CHICKS—Investigate

Our chicks are the kind that make good. Every flock is carefully culled and mated. We have been in business seven years and have been building carefully and consistently to a place where we can offer chicks more than worth the money we ask. SINGLE COMB, ENGLISH STRAIN, WHITE LEGHORNS, BARRED ROCKS, ANCONAS. 100% live delivery guaranteed. Investigate our proposition before buying. A postal will bring full information.

STAR HATCHERY, Box 23, Holland, Mich.

Early Maturing Baby Chicks

These chicks are from flocks headed by cockerels of high producing blood lines. Culled by experts. Each flock personally supervised. Pure bred. $13.00 per 100 and up. Special: We have a limited number of superior grade chicks from special matings. Write for description and prices. 100% live delivery. Ref. Milan State Savings Bank.

MILAN HATCHERY, Box 5, Milan, Michigan.

RELIABLE CHICKS

S. C. English White Leghorns and Barred Rocks. Every chick from carefully mated, culled, pure-bred flocks owned and developed by us for 15 years. Leghorn males from trapnested 280 egg hens. Free catalog. Write for prices.

Reliable Hatchery and Farms

Route 3 Holland, Mich.

"It Fills the Bill"

"SELF-SERVE" Chick Feeder

Holds 12 quarts, Can't clog. Chicks can't roost on special cover nor touch feed with feet. Grown fowls cannot steal feed. Price $1.50 plus postage. Send for free booklet.

IRA P. HAYES,

Dept. B 12,

Eckford, Michigan

Great Northern Hatchery. Pure Bred Selected Flocks

100 Per Cent Live Delivery

Strong sturdy northern grown Chicks. Selected, pure bred stock. Healthy flocks on free range insure strength in every Chick. Order from this Ad.

Varieties	Prices on 50	100	300	500	1000
Leghorns (S. C. White and Brown)	$7.00	$13.00	$38.00	$62.00	$120.00
Barred Rocks	8.00	15.00	43.00	72.00	140.00
White Rocks	9.50	18.00	53.00	85.00	165.00
Mixed Broiler Chicks	$10 per 100 straight				

Hatched under best conditions in Newton incubators. Every Chick carefully inspected. 100% live delivery guaranteed. Reference State Commercial Savings Bank, this city. Write for prices on special matings.

GREAT NORTHERN HATCHERY, Box 50, Zeeland, Michigan.

QUEEN QUALITY CHICKS

from Best Blood Line Free Range Flocks.

Developed and Culled by Experts---**Barron Strain English White Leghorns, Brown Leghorns and Sheppard's Anconas.** Sturdy, Healthy Chicks. Just a little more for your money. Safe delivery guaranteed. Write for Catalog.

QUEEN HATCHERY & POULTRY FARM :: ZEELAND, MICH.

SELECT STOCK

at commercial prices so why take others. We have bred the Barron strain S. C. W. Leghorns for 8 years and kept improving all the time. Our foundation stock from M. A. C. from pedigreed stock with egg records up to 279. We have customers from the northern part of the state that are getting from 60 to 70% egg production for the winter months. We also hatch the famous Sheppard Anconas and Barred Rocks. Write for our catalogue and order early so you can get them when you want them.

Byron Center Poultry Farm and Hatchery

G. C. KEISER, Byron Center, Michigan.

HUNDERMAN'S

FIRST-CLASS CHICKS

$10 and UP

We are heavy producers of pure-bred chicks. Flocks on free range. Culled by an expert. 100% live delivery guaranteed. Order today from this Ad. and get chicks when you want them.

Varieties	Prices on 25	50	100	500	1000
English S. C. White Leghorns	$3.50	$6.50	$12.00	$57.50	$115.00
Barred Rocks, S. C. Reds	4.25	8.00	15.00	72.50	140.00
Odds and Ends	3.00	5.50	10.00		

Blue Hen Incubators. Reference: Zeeland State Bank. Order today; you take no chances. Orders booked for 10% down; balance ten days before chicks are to be shipped. Catalog free.

HUNDERMAN BROS. POULTRY FARM, Box 30, Zeeland, Michigan.

FREE CHICK OFFER

CHIX

Our Tom Barron Strain White Leghorns pay big dividends. We breed and hatch only one kind—the best. Our pure-bred chicks are strong, husky and easy to raise. Get our circular and FREE CHICK OFFER before buying eggs, chicks or breeding stock. It will surely pay you.

Progressive Poultry Farm,

P. VER HAGE, Mgr. Zeeland, Mich

Pure Bred Baby Chicks

We have been carefully developing our flocks for eight years. Every chick pure bred and from stock carefully culled, for type and production. Our chicks give satisfaction. Order today and get chicks when you want them.

	Prices on 50	100	500
W. Leghorns	$7.00	$13.00	$62.00
B. Rocks, R. I. Reds	8.00	15.00	72.00
W. Wyandottes, W. Rocks	8.50	16.00	77.00

Postpaid. 100% live delivery. You take no chances. Ref. Farmers & Mechanics Bank, this city. No Catalog. Order from this ad.

WASHTENAW HATCHERY

Geddes Rd, Ann Arbor, Mich.

Quality Chicks at Reasonable Prices

English White Leghorns, Parks' Strain Barred Rocks, S. C. Black Minorcas, Reds and Anconas. My pen (16) at the 1923 Mich. Contest finished third among all heavy breeds, four hens making records over 200 eggs each, and one with a record of 254 eggs was seventh highest individual for the entire contest, 990 birds competing. Catalog free.

PINE BAY POULTRY FARM,

Holland, Michigan.

CHICKS FROM LARGE SINGLE COMB WHITE Leghorns bred for winter egg production. Blue Ribbon winners. Winning eleven out of a possible fourteen prizes at Muskegon's Gold Medal show. Flock culled by Michigan Agricultural College expert. Farm under state supervision. Chicks from our own flocks only. 50 chicks $8.00; 100 $15.00; 500 $70.00.

C. EM. LAY EGG FARM

Francis M. Kent, R. 4, Muskegon, Michigan.

SPECIAL QUALITY CHICKS

Our chicks are special quality. Our heavy home trade which takes most of our chicks indicates the worth of our stock. Those who know us best are our best customers. Pure bred stock carefully developed. 100% live delivery guaranteed. Order today. Catalog on request. Get acquainted

	Prices Parcel Post Prepaid on 50	100	500
White, Brown and Buff Leghorns, Anconas	$7.00	$13.00	$62.50
R. I. Reds, Barred Rocks, White Wyandottes	8.00	15.00	72.50

CARVIEW POULTRY FARM, Morenci, Mich.

CHICKS: HOGAN TESTED GUARANTEED

Our Chicks are from flocks on free range. They will live and grow and make a profit. ENGLISH WHITE LEGHORNS and BROWN LEGHORNS. Heavy laying Extra Good BARRED ROCKS. Postpaid to your door and full live delivery guaranteed. Our flocks are carefully supervised and Hogan tested. Bank Reference furnished. Write for prices and descriptive matter.

HILLVIEW HATCHERY, C. Boven, Prop.

Box H. R. R. 12, Holland, Mich.

Pure Bred Chicks

Can ship immediately.

Broiler Chix	11½c	White Rocks	16c
W. or B. Leghorns	13c	W. Wyandottes	16½c
B. Rox or Reds	15½c	Buff Orpingtons	16½c
Sheppard's Anconas	15c	Black Minorcas	16c

Extra selected standard bred chicks $4.00 per 100 more. Add 35c if less than 100 ordered. Good bank reference. Circular free.

Lawrence Hatchery, BF, R. 7, Grand Rapids, Mich.

Certified Pure Bred

Baby Chicks

Trapnested direct from **world champion** layers; the famous Tom Barron and Hollywood strains of White Leghorns. Order these chicks from pedigreed stock now at **bargain prices!** Hatched in the largest and finest hatchery in Michigan at the rate of 150,000 eggs to a setting. Also get our prices on Barred Rocks and other popular breeds. Satisfaction guaranteed or money back. Write for FREE illustrated catalog and special DISCOUNT PRICES—today.

SUPERIOR POULTRY FARMS

Box 201 Zeeland, Mich.

MEADOW BROOK

HENRY DePREE & SONS.

One of the Founders of the Chick Indusrty

21 Years in Business

Pure-bred stock carefully developed for years. Order from this ad and get chicks just when you want them.

	Prepaid prices on 50	100	500
White and Brown Leghorns	$7.00	$13.00	$62.50
Rocks, Reds, Buff Leghorns	8.00	15.00	72.00
White Wyandottes	11.00	20.00	95.00
Mixed Chicks (all varieties)	$10.00 per 100		

You take no chances. Ref: First State Bank, Holland. 97% live delivery guaranteed. White Leghorns headed by male birds of 285-303 egg record strains. Other breeds highly bred. Circular free.

MEADOWBROOK FARM HOLLAND MICH RR 1-H

Improved S. C. White Leghorns

BRED FOR EGG PRODUCTION SINCE 1910

CHICKS from this high grade egg laying strain will give you a bigger profit, and absolute satisfaction. They have 13 years of careful selecting and breeding direct behind them, and mature in the shortest possible time. You benefit by our 13 years in hatching and shipping chicks. These chicks possess great vitality and grow up uniform in size. 100% safe arrival guaranteed. Let us mail you our catalogue with prices.

WOLVERINE HATCHERY, Zeeland, Mich., R. 2

BEST CHICKS *at Low Prices*

Send for free catalog describing **best bred** chicks in the country. Tom Barron and Tancred White Leghorns, Michigan's **Champion Winter Laying Barred Plymouth Rocks and S.C.R.I. Reds.** No better chicks anywhere at any price. **Satisfaction and 100 per cent live delivery guaranteed.**

Brummer-Frederickson Poultry Farm, Box 26 Holland, Mich.

BABY CHICKS

Our Own Breeding flock of large type American White Leghorns.

Laying and standard qualities combined. 13 years experience in breeding, hatching and marketing. Also high quality Barred Rocks and R. I. Reds. All flocks culled and inspected. Modern hatching plant, 2 hatches weekly. Quality chicks at commercial prices. Write for prices and circular.

DEAN Egg Farm & Hatchery, Big Beaver

Mail address Birminghan Mich., R-4

Breckenridge Chicks Are Winners

Day old chicks from strong, vigorous flocks which have been carefully culled and extra selected standard male birds —Barred Rocks, R. I. Reds and White Leghorns. We guarantee 100% safe arrival. Write us for price list and circular.

BRECKENRIDGE HATCHERY,

J. C. Barnse, Prop.

Box 351, Breckenridge, Michigan.

MARKET FLASHES

MARKET SUMMARY

Wheat easy after small decline. Corn unchanged. Oats and rye dull. Steady demand for beans and prices firm. Butter and eggs in demand. Potatoes firm. Good supply of poultry. Dressed calves in demand. Trade in cattle, hogs and sheep fairly active.

(Note: The above summarized information was received AFTER the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press —Editor.)

FOOTE'S MARKET LETTER

BY W. W. FOOTE

Promising Farm Outlook

THE general agricultural outlook for this year is promising for farmers who are out of debt and cultivate not too large tracts of land, while diversifying their products and exercising care in intensifying the yield of every acre. Where farm machinery is needed, it should be bought, even if time is required to make payment, and all manure piles should be spread carefully over the soil. It is pointed out by the Department of Agriculture in a bulletin just out that farmers are undertaking a normal production of products, while they are still confronted by difficulty of securing helpers, even at high wages and the general disparity between prices of farm and city products. Business interests are extremely prosperous, and the consumption of food is the largest ever known, yet the situation is not such as to warrant any expansion in production. Farmers are feeding plenty of cattle, while the hog industry is described by the agricultural department as going through a period of liquidation and discouragement; but this may be expected to right itself ultimately by curtailment of the number of sows bred. In this matter conservation is advised, and it should not be forgotten that in former such times heavy production and low prices brought about such reduction of breeding as to result in a hog shortage. The sheep industry is neglected by so many farmers that there is a shortage and unusually high prices, although Michigan makes a good record of flocks. Poultry production is expanding all the time, but no faster than the demand, and good prices are paid for poultry and eggs. As regards the dairy industry, the Department of Agriculture says: "The dairy industry has expanded to the point where gross domestic production, in terms of milk, slightly exceeds gross domestic consumption. Although 18,000,000 pounds net of butter and 64,000,000 pounds of cheese were imported during 1923, stocks of condensed milk and other products, more than equivalent to these imports, were piled up within the country. Judging from the number of cows on farms, there will be a further increase in domestic production in 1924. Foreign surplus production is likewise steadily increasing. This competition, coupled with the already heavy production in this country, and the possibility that consumer demand may not be definitely maintained at levels predicted upon great industrial prosperity, suggest the necessity for conservatism as to further expansion in dairy production."

Decrease in Wheat Area

Michigan wheat farmers are naturally deeply interested in the wheat acreage of the United States, as they have suffered extremely financially from the greatly excessive crop of wheat harvested last year, and judging from all that can be learned, the future of prices is going to be fixed mainly by the size of the crops of winter and spring wheat to be grown this year. With European conditions so abnormal and no prospect of any substantial early betterment, the American farmers must learn to depend mainly on the domestic consumption, and this, of course, means much smaller crops than those recently grown, for war time crops obviously imply sales at losses. The recent report issued by the Department of Agriculture is an extremely important one to every farmer interested in wheat, and unless the spring wheat farmers change their minds, there is a promise of a marked reduction in the acreage. Reports were received from 43,000 farmers as to what crops they plan to put in, and while the answers show that the spring wheat area promises to be 14 per cent less than in 1923, there is an indicated increase of 3.2 per cent in corn, 7 per cent in oats, 9 per cent in barley and 54 per cent in flax seed, the latter being due mainly to the unsatisfactory price for wheat in the northwest. In the corn belt states there is an indicated gain of 3.5 per cent in corn acreage. The total corn acreage promises to be the greatest on record, with the single exception of 1917, when 116,730,000 acres were harvested. The spring wheat acreage as indicated brings the total under that grain to the lowest in over twenty years, and, taken in connection with the 40,190,000 acres seeded to winter wheat, suggests of 56,347,000 acres, the smallest since 1917, when the harvested area was 45,089,000 acres. Still, the total is about 10,000,000 acres above the pre-war average. The spring wheat acreage is placed at 16,156,000 acres, comparing with 18,786,000 last year.

The Grain Markets

It has been found impossible to boost prices of wheat permanently under existing conditions abroad, and there has been a marked decline since the time, a number of weeks ago when wheat was selling in the Chicago market for future delivery around $1.13 a bushel. Our market is all the time above normal export standpoint, with exporting countries underselling us, and prices are on a domestic consumption basis. Not withstanding the large decline in prices, wheat is selling away higher than Canadian wheat, when exchange is figured, prices being much lower than in March last year, and it is startling to look back and recall that a little more than two years ago May wheat sold on the Chicago Board of Trade close to $1.40. European countries have been getting plenty of wheat from Argentina, and other exporting countries, and the wheat exports from the United States from the first of last July to the first of March were reduced to 120,000,000 bushels, or 48,000,000 bushels less than a year earlier, leaving a superabundance for home consumption. The visible wheat supply in this country was reported a short time ago as 61,656,000 bushels, comparing with 46,470,000 bushels a year ago. The most important recent event was the increase in the duty on imported wheat to 42 cents a bushel. In answer to inquiries as what to do with wheat on farms, it may be answered that numerous farmers are waiting for further information regarding spring wheat acreage. Of course, it is impossible to know what future prices will be. A short time ago May wheat sold at $1.04¼, comparing with $1.22 a year ago.

Corn prices have weakened recently on unincreased marketings, the visible supply in this country having risen to above 25,000,000 bushels, while exports from our shores continued much less than a year ago. Rye is still sold at far lower prices than last year, and exports have been surprisingly small. The rye visible in this country is up to 21,641,000 bushels, which compares with 17,518,000 bushels a year ago. Oats exports are not very large, although prices are low, but they look high if compared with two years ago when they sold down to 37 cents. About the same time May corn sold below 59 cents. It is reported that farmers of McLean county, Illinois, are planning to hold their surplus corn for $1 a bushel. Sales for May delivery were made in Chicago of corn at 77 cents, comparing with 74½ cents a year ago; oats at 47¾ cents, comparing with 45 cents last year; and rye at 67 cents, comparing with 84¼ cents a year ago.

Red Clover and Seed Corn

From many parts of the country reports are that there is going to be shortly a large demand for not only seed corn, but also for red clover seed. Farmers have been testing their seed corn, and in a great many instances the germinating power is found to be much too low for planting.

Larger Cattle Movement

Increased receipts of cattle in Chicago have lowered prices at times; following previous reduced supplies and higher values. Recent sales of the greater part of the beef steers were at $8 to $10.75, the choicer class of heavy steers bringing $11 to $12 and yearlings going at $10.50 to $11.50 No very desirable steers went below $9.25, and common lots sold for $6.85 to $8 and inferior lots at $4.50 and over. Fat cows and heifers sold at $6.50 to $9.90, but only a few sold as high as $8.50. A year ago the best steers were selling at $10.35. Canner and cutter cows go at $2.50 to $3.75, while calves bring $5 to $12.25. A fair demand exists for stockers and feeders at $4.50 to $8.75, the bulk selling at $6.25 to $7.50. The cattle industry is profitable so far as well finished kinds are concerned, but common lots are poor sellers. Thus far this year fewer cattle have gone to market than a year ago.

Good Demand for Hogs

Considering the huge marketings most of the time, hogs are selling better than might be expected, the local and eastern shipping demand being on a large scale, as low prices stimulate the consumption of fresh and cured pork products and lard. Hogs in the Chicago market sell largely with a range of 50 cents, with prime heavy butchers going the highest and the best light bacon hogs nearly as high. Recent receipts of hogs have averaged 230 pounds, being nine pounds less than a year ago. Combined receipts in twenty markets for the year to late date aggregate 11,400,000 hogs, comparing with 10,326,000 a year ago and 7,983,000 two years ago. Hogs are higher in Chicago, with sales recently at $6.50 to $7.65, comparing with $7.10 to $8.40 a year ago and $6.30 to $6.90 nine years ago.

High Prices for Lambs

Despite reactions now and then, prices are extremely high in the Chicago market, where wooled lambs have brought from $15.75 to $16.75, with culls selling at $13 and over and shearing and feeding lambs at $14.25 to $16. A year ago prime lambs sold at $15.50 and eight years ago at $11.90. Yearlings have been selling at $12.75 to $15, wethers at $10.25 to $13.25, ewes at $5 to $11 and bucks at $6.75 to $8.25. Shorn lots sell $1.50 to $2 lower than unshorn lambs and are preferred to wooled. These are great times for the sheep industry.

BEANS

Bean prices at Detroit declined during the fortnight ending Saturday, March 22nd, but advances took place bringing prices back to about what they were two weeks ago. The market is firm at Detroit. The eastern markets report an unsettled market with supplies good. Many close students of the bean market are of the opinion that we will not see higher prices the remainder of the season. Many eastern dealers are putting pea beans up in cartons and disposing of them readily with a good profit for their trouble. With the price per pound two or three cents higher the stock in packages finds a better market than bulk beans of the same quality.

POTATOES

A firm tone prevails in the market for old potatoes at Detroit. Eastern points are not proving a very good market for old potatoes, and trade is dull with irrigular prices. Government estimates on the intended acreage for this year show a decrease of 2 per cent under a year ago for the entire U. S. Michigan's acreage is expected to be from 8 to 10 per cent under that of last year.

MARKET QUOTATIONS

Wheat

Detroit—Cash No. 2 red, $1.06; No. 2 white, $1.07; No. 2 mixed, $1.06.

Chicago—Cash No. 2 hard, $1.11½.

Prices one year ago—Detroit, Cash No. 2 red, No. 2 white and No. 2 mixed, $1.32½.

IF---You are discouraged with bean growing or ---the market does not suit you the

JUDSON JR. BEAN SORTER

will make you an enthusiastic bean grower, because you get the profits.

Mail us samples of your beans, we will tell you the possible gain awaiting you.

Many Michigan farmers have made from $300 to $1000 in the last three months picking their own beans.

Ask address of your nearest Judson Jr. dealer.

Demonstration Branch and Sales Warehouse, Durand, Michigan.

JUDSON MICHIGBEAN CO.
Factory and Main Office, 407-9 Fort St. E., Detroit, Mich.

Kalamazoo Ensilage Cutters

"The World's Standard"

Center-shear cut means better ensilage, smoother running, less power, no clogging of blower. One lever starts, stops and reverses. *Big capacity.* Perfectly balanced. Malleable, unbreakable knife wheel insures absolute safety and makes *fast cutting* practical. Three sizes to meet every farmer's need Special Terms to Early buyers.

KALAMAZOO TANK & SILO CO.
Dept. 144 Kalamazoo, Michigan

Write for Catalog

Own your own cutter this year—don't depend upon somebody else to cut your ensilage. Every cutter will work overtime this year. Play safe—order yours now. Write today for catalog.

PRITCHARD'S WEATHER FORECAST
INTERPRETED BY THE STARS

Week of March 30

TEMPERATURES at beginning of this week in Michigan will be above the seasonal normal due to the storm center that is expected to be over the state at this time. More or less general rains may be expected at this time. Snow is probable in some counties as the temperature falls 10 degrees or more below freezing about Monday or Tuesday. Winds will be stronger than the average during early part of this week.

The balance of the week from about Tuesday will be generally fair with the probable exception of about Friday when some threatening weather is expected. The days will be warm and sunshiny while the night will be cool to cold.

Week of April 6

Little or no storminess of any severe character is expected in Michigan this week. Most of the period will be sunshiny days and star light nights except for the period around Thursday and Friday. On these last named days moderate showers and wind storms are to be expected.

April Wet and Cold

The month of April will prove backward to most farmers of the state with temperatures below the usual standard and rainfall more than the seasonal amount.

BREEDERS' DIRECTORY

O. I. C.

O. I. C'S: 75 LAST SPRING PIGS, PAIRS not akin. From 3 good strong sires. Also fall pigs. Recorded free. ½ mile west of depot.
OTTO SCHULZE & SONS, Nashville, Mich.

20 BRED GILTS
O I. C's. and Chester Whites. Bred from champion stock at farmer's prices. Booking orders for Spring pigs. JOHN GIBSON, Fosters, Mich.

HAMPSHIRES

HAMPSHIRES—BRED GILTS AND BOARS at bargain prices. Write your wants. 12th year.
JOHN W. SNYDER, St. Johns, Mich., R. 4.

SHEEP

5 SHROPSHIRE EWES OF THE WOOLY TYPE, registered and priced right.
DAN BOOHER, Evart, Michigan.

DOGS

FOR SALE—MALE FOX HOUND 17 MO. OLD. A good one will sell cheap.
RALPH ELMER, Harrisville, Michigan.

POULTRY BREEDERS

Mammoth Bronze Turkeys. Goldbank Strain. Unrelated stock. Vigorous healthy birds. Write for prices. Mrs. Perry Stebbins, Saranac, Mich.

White Holland Turkeys
ALDEN WHITCOMB, Byron Center, Michigan.

MAMMOTH WHITE HOLLAND TURKEYS. Tom 2 years old $8.00; young tom $7.00; 3 hens 2 years old $6.00 apiece.
FRANK VONDROSEK, Sherman, Michigan.

WHITE HOLLAND TURKEYS—REDUCED prices. Hens $7.00; Toms $9.00.
MRS DON ROSS, Mariette, Michigan.

BOURBON RED TURKEY EGGS 50c EACH Postpaid, from winners at Michigan State Fair and Grand Rapids Exposition.
THOS. G. CALLAGHAN, Fenton, Michigan.

BOURBON RED TURKEYS? YES; WE HAVE some, good ones. Write for prices.
R. W. ROBOTHAM, Hesperia, Michigan.

FARM LANDS

REAL ESTATE FOR SALE. 1. APPROXIMATELY 10 acres in Bangor Twp. Bay Co. 2. Approximately 20 acres in Hampton Twp. Bay Co. 3. Approximately 45 acres in Bangor Twp. Bay Co. All adapted for general or truck farming, dairying, located near the City. For further particulars inquire UNION MOTOR TRUCK COMPANY, Bay City, Michigan.

FARM FOR SALE—80 ACRES 5 MILES east of county seat on main road. Large frame house, orchard, no barn. 50 acres cleared, plenty of firewood, pastures. $1600. One mile to school. J. U. HENNING, White Cloud, R2, Mich.

Cured Her Rheumatism

Knowing from terrible experience the suffering caused by rheumatism, Mrs. J. E. Hurst, who lives at 204 Davis Avenue, B67, Bloomington, Ill., is so thankful at having cured herself that out of pure gratitude she is anxious to tell all other sufferers just how to get rid of their torture by a simple way at home.

Mrs. Hurst has nothing to sell. Merely cut out this notice, mail it to her with your own name and address, and she will gladly send you this valuable information entirely free. Write her at once before you forget. (Adv.)

Corn

Detroit—Cash No. 3 yellow, 81c; No. 4, 77c.

Chicago—Cash No. 3 yellow, 77@79c.

Prices one year ago—Detroit, Cash No. 2 yellow, 79c; No. 3, 77c; No. 4, 75c.

Oats

Detroit—Cash No. 2 white, 49½c; No. 3, 47½.

Chicago—Cash No. 2 white, 48½@49¼c; No. 3, 47½@48½c.

Prices one year ago—Detroit, Cash No. 2 white, 49c; No. 3, 47¼c.

Rye

Detroit—Cash No. 2, 66c.

Chicago—Cash No. 2, 66¾c.

Prices one year ago—Detroit, Cash No. 2, 81½c.

Beans

Detroit—C. H. P., $4.70@4.75 per cwt.

Prices one year ago—Detroit, C. H .P., $7.40 per cwt.

Potatoes

Detroit—$1.50@1.66 per cwt.

Chicago—$1.25@1.40 per cwt.

Prices one year ago—Detroit, $2.00@1.50 per cwt.

Hay

Detroit—No. 2 timothy, $21@22; No. 1 clover, $20.50@21; standard &light mixed, $22.50@23, per ton.

Chicago—No. 2 timothy, $21@24; No. 1 clover, $20@22; light timothy & clover, $24@26, per ton.

Prices one year ago—Detroit, No. 2 timothy, $14@15; No. 1 clover, $13@14; standard & light mixed, $15.50@16, per ton.

STATE GASOLINE TAX IS AN INVISIBLE TOLL GATE

(Continued from Page 3)

But no matter how attractive a proposition, such as the gas tax, may appear in theory and principle, it is only the part of common sense to see if that system has ever proved successful in practice. We naturally wonder about the matter of collections, are they complete and cheap or incomplete and expensive? Senator William M. Connelly of Spring Lake, champion of the gas tax in the recent session of the Legislature has made a particular study of this phase of the subject. As a result of this research he writes:

"A tax on gasoline is easily and cheaply collected. It has been stated by the opposition that the collection of a gasoline tax would create an army of soft job holders in the employ of the state and could only be collected at an enormous cost. This is the old game of the obstructionist, to base a poisonous argument on a dishonest hypothesis. The tax on gasoline would be remitted under sworn statements by the distributors, who would collect the tax from the retailers. The Secretary of State will handle the collections with probably two additional employees. The State of Indiana is collecting its gas tax at a cost of $7,000 per year. Is Michigan less competent or efficient than her neighbor? No." Senator Connelly goes on to give the figures for a long list of states, showing what each raises and the cost of collection in each case.

By doubling the length of this article it would be possible to give in full a list of 21 reasons for a gas tax which Senator Connelly has compiled, but lack of space prevents that. Let us merely hint at a few of them:—a workable rebate provision has been written into the proposed bill to exempt gasoline used other than in motor vehicles. The revenue would take care of the interest and sinking fund of our $50,000,000 highway bonds and leave a balance sufficient for trunk line maintenance and amortization of the large sum of reward money due the counties. The tax on gasoline is a comparatively painless method of procuring highway finances. It is spread over the year on an easy installment plan, it does not hit like a tax payable the first of the year when the coal bill, Christmas presents, general property taxes, etc., have reduced the payer to the brink of bankruptcy.

Thirty-six different states have a gas tax and declare it is a success, so why not give it a try here in Michigan?

Hank says to his wife the other night, "I sure miss that cuspidor."

"You always did miss it," says Mrs. Beasley, "that's why I threw it on the trash pile."

A Cash Crop For You Every Month!

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VOL. XI, No. 17 SATURDAY, APRIL 12, 1924 TERMS: TWO YEARS $1
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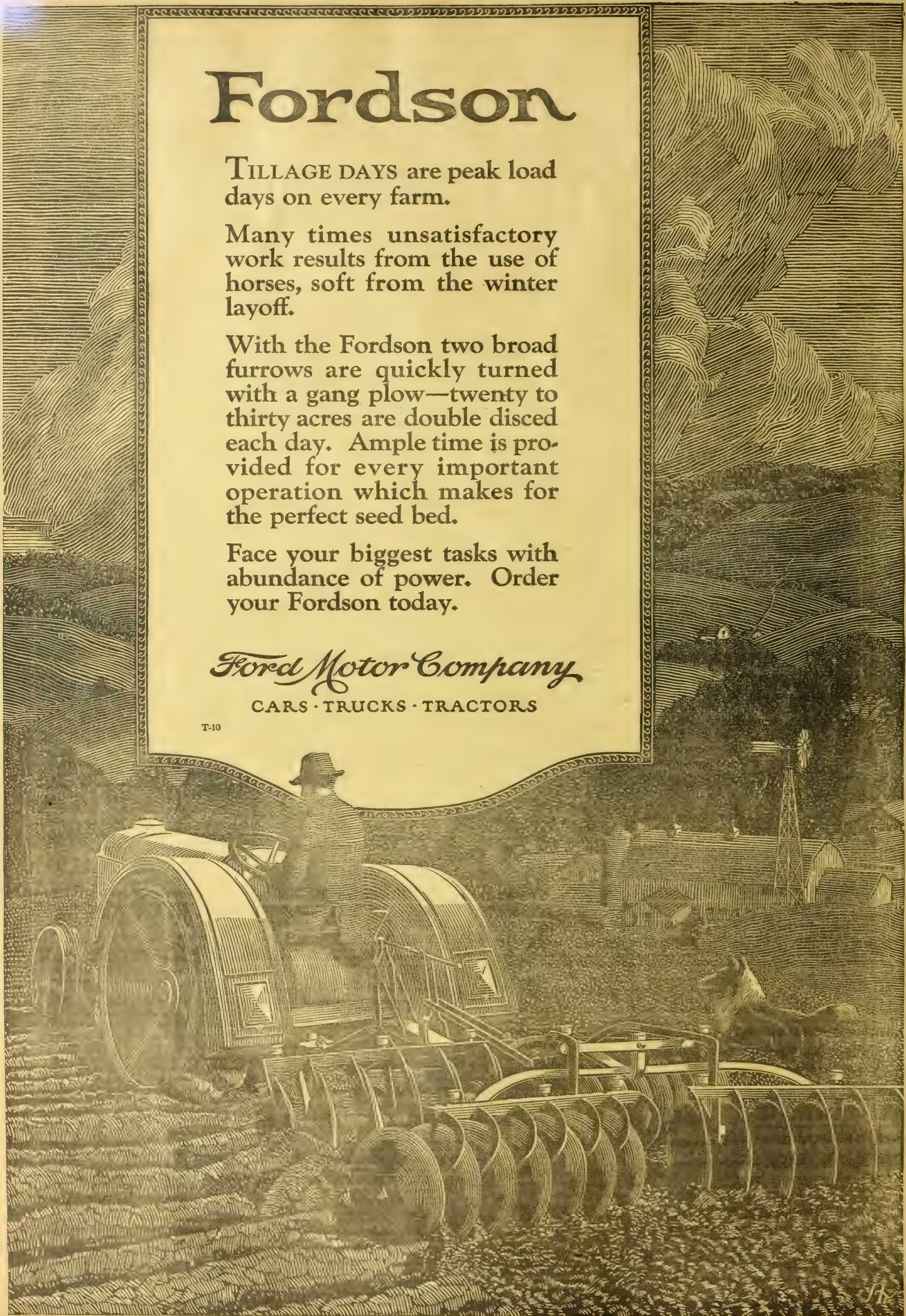

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VOL. VI. No. 17

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"Hew to the line, let the chips fall where they may!"

The Michigan
BUSINESS FARMER
The Only Farm Magazine Owned and Edited in Michigan

Published Bi-Weekly
Mt. Clemens, Mich.

TWO YEARS $1

Entered as second-class matter, August 22, 1917, at the post-office at Mt. Clemens, Mich., under act of March 3rd, 1879.

What Funds Are Spent Must First Be Raised

General Property Tax for State Purposes Is Not Only or Even Principal Source of State Revenue

By STANLEY M. POWELL

(Lansing Correspondent of The Business Farmer.)

> IN your article, "The Time is Ripe for Tax Reform in Michigan," on page 3 of the March 1st issue, you say; only about 11 per cent of the taxes are levied for state purposes. I am asking for information. Does that 11 per cent pay the cost of state government? We are told that the cost of state government has more than doubled since 1909. Do we not pay an indirect tax? Don't we pay a corporation tax, which goes into the general fund of the state, when we buy the manufactured product of these corporations? And in other ways don't we pay an indirect state tax?—David Brake, Newaygo County.

I SAT in a farmers' organization meeting a few days ago and heard a certain program of action carefully explained and its many merits lauded by various people. Then one rural sage arose and said, "I am glad to hear that you are all favorable to the plan, but let us have a little criticism. Let us not merely be 'yes men.' When everybody agrees things look weak and sick. An organization can only grow strong by overcoming opposition and by receiving vigorous criticism."

And so it is with no little pleasure that we receive the accompanying letter from Mr. David H. Brake of Fremont asking some searching questions about the amount of revenue raised to run the state government of Michigan and who bears the burden directly and indirectly. It is flattering to receive this notice from Mr. Brake, for although he does not say so in his letter, he is none other than the Honorable David H. Brake, representative in the State Legislature from Newaygo county. We are convinced that Rep. Brake asks these questions in the spirit of fairness and friendliness for he is himself a staunch friend of tax reform in Michigan. He voted for the Byrum Income tax bill in the 1923 Legislature and even went so far as to vote to pass the Warner gas tax bill over the Governor's veto.

Taxation is Live Issue

The comments and compliments which we are receiving on this series of taxation articles is most encouraging and prompts us to go still deeper into the subject. It shows that Michigan farmers are awake as never before to the importance of this great subject of taxation and to the absolute necessity of prompt measures to bring relief. Such interest is not surprising. Just as in Detroit traffic there are just two classes of people, the quick and the dead, so in rural Michigan today we must be alert on these great public questions or we shall soon find ourselves sold off from our farms and homesteads through the operation of the general property tax which is fast becoming confiscatory.

Pardon this degression. From here on I shall stick to my subject and attempt to answer briefly, fully and convincingly the very pertinent and timely questions asked by Mr. Brake. I shall seek to avoid endering any tirade or wordy discussion as to the evils of high taxation, great as they certainly are, nor on the sad waste of public money, frequent as that is; nor on the growth of the bureaucratic class which will finally, it seems, equal the taxpayers in number.

Seen and Unseen Taxes

Yes, Mr. Brake, I did say and it is true that out of every dollar of general property tax which an individual pays, only about eleven cents goes to the state government and the remainder is spent by the various local units up to and including the counties. But you are also quite right, Mr. Brake, in your surmise that the general property tax for state purposes is not the only or even the principal source of state revenue. It is true beyond a doubt that we do pay an indirect tax and that the corporation tax, for instance, is no doubt passed on to the ultimate consumer.

The facts are that in Michigan the general property tax is only one of the many "taxes" which have been devised to raise an ever increasing amount of revenue. However, it should be noted in passing that in the local government units, where the big proportion of tax money is spent, the general property tax is still the principal source of revenue.

Money Spent Must Be Raised

In figuring the total tax load of maintaining our state government we must therefore add together all of the revenue raised from all the various sources, or perhaps a better way would be to take the total of all our state expenditures, for it is apparent that whatever is spent must first be raised or else it must be borrowed to be repaid latter. And so we may well approach this problem with the understanding that if Michigan spends a dollar she must have a dollar in revenue to meet that expenditure and also if Michigan has that dollar in revenue, we the people of Michigan must contribute our share toward the raising of that revenue.

We must also recognize that there is always a tendency that the tax will be "passed on" to the ultimate consumer. Of course the unorganized farmer can hardly hope to pass on his general property tax, for as a rule he sells on a buyers' market and has no voice or control in determining the price to be paid for his products.

Likewise it is extremely difficult to pass on a personal income tax such as is now being proposed in Michigan. This levy is made after the year's business is over and the profits determined and it is hard to see how the burden can be dodged or shifted.

Of course the gas tax would be passed on to the ultimate consumer but in that case that is the way it should be, for then the person who derives the benefits from improved highways will pay in proportion to the benefit derived, which is certainly no more than right.

Four Sources of Revenue

For the purpose of this discussion we may note that exclusive of bond issues, there are in Michigan today four principal sources of revenue, as follows:

The general property tax.

The specific taxes levied against the railroads and other utilities.

The corporation tax.

The various automobile taxes.

The first of these, the general property tax, has been kept down surprising and this fact has been used by the administration in an effort to bolster up claims of economy and efficiency in state government. For the year ending June 30, 1924, this item amounted to an even $16,000,000, which was less than that for any of the preceding three years. This fact is widely advertised. Little is said about the growth of other forms of taxation.

For instance, let us examine a few figures relative to increase of the specific taxes upon railroads, express companies, telegraph and telephone companies, etc. We may be sure that the utilities which pay this tax will demand it back from us, the people, in increased tolls and freight and passenger rates. For the year ending June 30, 1920, this tax amounted to $9,457,349.50. Three years later it had increased to $11,870,079.16.

Corporations Pass It On

The corporation tax, the third source of revenue, is one of the newer forms of raising state revenue. This was determined upon by Governor Groesbeck when he first came into office in 1921. It was supposed to be an emergency tax and it was stated that if the corporations would submit to this tax for two years the law would be repealed. But such was not the case. The 1923 Legislature amended the law so that it will probably raise more revenue than in the past. While during the year ending June 30, 1921, there was no corporation tax, during the next two years a total of more than $11,000,000 was raised by this means. During the first four months of the present fiscal year $5,385,838.57 was received from this source.

There appears to be little doubt but what in the long run this corporation can be quite successfully passed on. Previous to the 1923 legislature, George Lord, then a member of the house of representatives and by reason his acknowledged experience and ability along taxation lines chairman of the special legislative committee on taxation inquiry, asked Rep. Franklin Moore at one of the hearings of this committee what he thought about the rates for the state corporations tax, and Mr. Moore said: "I am not concerned about that. Every corporation, including the one I am interested in, always passes on to the consumer every class and kind of taxation heaped upon it. The terms of your corporation tax do not interest me at all."

Autos Are Revenue Getters

The fourth general class of state property receipts is an interesting one to study. In it we find a growing multiplicity of taxes upon the automobile. Almost every year has found some new tax of this nature and the rapidly increasing number of automobiles has made this one of the principal sources of state revenue. There is the automobile license fee, the driver's license, the certificate of title, the chauffeur's license, the transfer fee, etc. From these sources the revenue in the past two years has been as follows: Year ending June 30, 1922, $7,817,205.97; year ending June 30, 1923, $10,389,440.09.

We note that the automobile is paying a considerable sum toward state expense, but we cannot help but wonder whether or not the burden is as fairly distributed as it would be under a gas tax system. We fear not.

Michigan during recent years has found another important source of revenue and that is from the sale of bonds. During 1922 we sold $30,000,000 worth of soldier bonus bonds. A total of $50,000,000 of these road bonds have been authorized by the votors and about $38,000,000 of them have been issued to date.

Space, time nor patience does not permit a detailed statement of all the various minor sources of revenue. Suffice it to say that practically everything from hunters and barbers on down is licensed for fees that are more than nominal.

Total Receipts and Expenditures

To get a clear conception of this whole rather complicated situation, let us examine the total revenues of the state for the past few years in order to ascertain a view of the actual development of taxation conditions. Excluding from our calculations the revenue derived from the sale of soldier bonus bonds we find that recepits have been as follows: Year ending June 30, 1920, $48,926,554.30; year ending June 30, 1922, $73,072,192.49; year ending June 30, 1923, $88,499,301.15.

Let us also examine the matter of disbursements. Shorn of all the vagaries of bookkeeping and disreguarding as before the item of soldier bonus, we find the following to be the corrected totals for disbursements: Year ending June 30, 1920, $39,981,589.59; year ending June 30, 1922, $64,999,814.30; year ending June 30, 1923, $71,449,831.16.

Centralization and Efficiency

Such then is the situation in Michigan today. The people have demanded more and more things of the state government. A big bureaucratic system has developed. Under our present administration it has been centralized and supposedly made wonderfully efficient. We do not dispute the fact that it is indeed centralized. We are a little more in doubt as to the claim for efficiency.

Let us see how this centralized and so-called efficient state government works. Alleged "reform" comes high sometimes if we can believe the figures published in the "Michigan Tradesman" relative to the cost of running our prisons. The following comparative tables of the cost of the prisons in 1916 and 1923 are startling:

Ionia	$52,225	$ 807,700
Marquette	39,175	531,572
Jackson	Nothing	1,168,581
	$91,400	$2,507,853

Woodbridge N. Ferris was governor in 1916, followed by Albert E. Sleeper on January 1, 1917, and the good record of the prisons was continued during his administration. Otis Fuller was warden of the Michigan Reformatory at Ionia then and until the present state administration took hold.

The Tradesman continues: "There are two stock explanations of these figures by the governor and his defenders. In the first place they claim big building programs cost a lot of money and secondly that the population of the State prisons have all increased enormously. Now as a matter of fact, building programs are not the larger part of any of these increases in expenses. That can be verified by the records of the auditor general. In the second place it is a fair proposition to maintain that if 100 prisoners back in

(Continued on Page 19)

Robust Beans Yield 25 to 30 Bushels Per Acre

In Experiments at M. A. C. Over Period of Four Years Robust Beans Produced One-third More Per Acre Than Other Michigan Variety

By FRANK A. SPRAGG
Associate Professor of Farm Crops, Michigan Agricultural College

This is a view of the bean varietal series of 1914 at the M. A. C. Two rows were planted to one variety and two rows to another variety, throughout the series. This is a view at harvest time and the puller has shoved the two rows of one variety into one, thus each puller-row represents a separate variety. The Robust was planted in each fifth plat throughout the series. The Robust plats have lost their leaves and are ready for harvest. The other varieties have their leaves. This is partly because they never drop all their leaves, largely because blight had been taking off their leaves all summer. Thus they are not ripe.

THE bean crop is very sensitive to its surroundings and yet resoonsive to proper conditions. A crop of beans can be made or destroyed quicker than almost any crop that I know. Because of these facts care must be taken to put them in the proper place in the rotation. They are not gross feeders. Alfalfa for example can be depended upon under most conditions to leave the soil richer than it found it. The same is true of clover in a less degree. Beans, however, although a legume, need to have not only a good supply of fixed nitrogen at hand but to have it in an immediately available form. To insure a good crop, beans should follow alfalfa or clover plowed not later than May 1, if possible. The month of May should be devoted to frequent dragging not only to precultivate the crop and kill weeds before the beans are planted, but to get the soil bacteria at work manufacturing available food, and getting the soil warm and in good tilth to give the bean crop a "send off." If this is done, the beans which should be planted about June 1 will get a good start and be able to outrun their troubles. Plant diseases like blight, for example, take time to develop. The growing of the common varieties of beans is a race for time between the bean crop and its diseases. If the diseases win the race and get the upper hand the crop is a failure, but if the conditions are such that the bean crop wins the race the crop is a success. Thus, more depends upon the farm and the farmer in the case of growing beans than in the production of oats or barley. Let us now turn our attention to varieties of beans.

Varieties of Beans

All that an improved bean can do is to produce more or better quality than the common sorts under the same expense. There are special problems in growing certain varieties that need to be known to get the best results. The Early Wonder and other navy beans of its class are very susceptible to bacterial blight and therefore need exceptionally good conditions for growth. The Early Wonder is an early variety and farmers have found that by planting it about the last week of June they still can have a long enough growing season to mature a crop before frost. Farmers have also found that these beans get a quicker start in late June than in early June, and by that means are able to make a fair growth before the blight develops. The blight will catch up with the Early but may only hinder it from giving a fair yield. Its quality may still be good. Blight usually takes more or less leaves from the Early Wonder all summer, compelling it to develop new leaves. The leaves are the factory that the plant has to produce starch. If the leaves are killed by disease, the plant must use up much starch in the production of new leaves. The plant may be working hard all summer and yet have a very poor crop, because it has been forced to devite so much energy in repair work. The Early Wonder may be likened to a weak harvester or other machine that is not able to withstand the conditions and must be continually repaired to continue its work. We make statements like this only by comparison. If we use the best machines that is available, that is all that can be done; but let us be sure.

Robust Good Yielder

On an average of four years at the Michigan Experiment Station the Improved Robust has yielded (1917-1920) an average a half more beans per acre than did the Early Wonder, under the same conditions. In other words the Early Wonder produced less than 16 bushels per acre while side by side with it for an average of four years the Improved Robust yielded 24 bushels per acre. It cost no more to plow or fit the land, nor to plant and tend the Robust than it did in the case of the Early Wonder. These low yields were due to the fact that the crop was poor in 1918 although the old line Robusts yielded 31.5 bushels to the acre at M. A. C. in 1920. In that year Improved Robust yielded 34.6 bushels per acre at M. A. C. Farmers get similar results.

We quote from the Bean and Pea Journal, "Wm. Myers, a farmer living near Carsonville, Michigan, grew 52 acres of beans during the season just passed. Forty acres were of the Robust variety from seed certified by the Michigan Crop Improvement Association, while the other twelve were of the common type. Early conditions seemed unfavorable to the later maturing Robust beans, but they made a rapid growth in late summer and threshed out seven bushels per acre more than did the commons. The quality and pick were equal, so the extra yield of 280 bushels at $4.50 per cwt. gives Mr. Meyers an added income of over $700.00 because of using Robust seed."

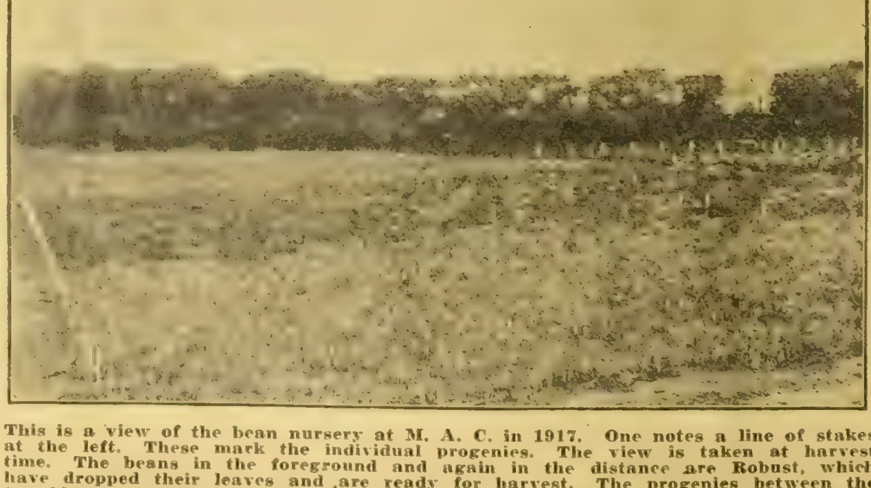
A farmer "near Bay Port who grew both Robusts and common beans reports much more uniform ripening of his Robust beans with an increased yield of five bushels per acre."

"An Ithaca grower got 25 bushels per acre on nine acres; one from McGregor 30.7 on 10 acres; one from Mildand 31.5 on seven acres, and one from Charlotte 33 bushels per acre on four acres." And Mr. Howard C. Rather, Secretary of the Michigan Crop Improvement Association states that on the average the 41 producers of pedigreed Robust obtained 21.6 bushels per acre. This is really a good showing when he observes that "Michigan's average bean yield the past two years has been 10.5 and 11.5 bushels per acre respectively."

Must Plant Earlier

These results cannot be obtained, however, unless the farmer knows and gives the Robusts a chance. They must be planted in good season. The first week of June is recommended and should be lived up to as a planting time for Robust beans. Some say that they can't, but they have been able to put in their oats and their corn before this, and we believe that they can plant the beans on time too. The principal trouble with these farmers is that they have been growing Early Wonder or some other bean of that type and experience has shown them that the Early Wonder becomes badly diseased when planted early. Then they try planting the Robust beans in the last week of June. The result is that the Robusts are caught by frost and they condemn the variety. The habit of the farmers in the bean districts is the principal obstacle in the way of the spread of Robust beans in those sections.

The Robust is a variety that the market has not been able to distinguish from other varieties of white navy beans. When beans get wet and swell in the field they are apt to dry with wrinkled coats, the coats now being too large for the beans. This is not a characteristic of any variety. They all do it, and careful observation of bean experts both at M. A. C. and over the state shows that the Robust do not wrinkle any worse than other varieties do. Some few elevator men evidently call all wrinkled beans "Robusts" and some have no doubt sold them as such. I quote from the Michigan Bean and Pea Journal: "A representative of an eastern concern picked what he called Robust beans out of a car of Michigan beans, the quality of which was objectionable to him. These beans were planted and they matured eight days earlier than known Robusts planted by their side the same day, and showed none of the plant characteristics of the Robust bean, the only place where the two varieties can be positively distinguished.



This is a view of the bean nursery at M. A. C. in 1917. One notes a line of stakes at the left. These mark the individual progenies. The view is taken at harvest time. The beans in the foreground and again in the distance are Robust, which have dropped their leaves and are ready for harvest. The progenies between the two blocks of Robust are also common navy beans. They are of the Early Wonder type, but because of the hot sun at blooming time they lost their flowers, had to set a second crop, and are not ripe as yet.

"Another elevator man who said positively that there was not a Robust bean in his community, claimed as much trouble from wrinkled beans as any dealer in the state."

A large elevator man, in central Michigan, says that he intends to discount "Robusts" a dollar next year. On being shown a lot of Robust beans grown at Eaton Rapids, that were not good enough to pass the inspection requirements of the Michigan Crop Improvement Association, he stated that that was one of the best lots of beans he had seen this year, not knowing that they were Robust beans. He can't tell Robust beans. We will be glad if elevator men would discount wrinkled and other injured beans in favor of those that have been taken care of, but we must object when they call them "Robusts."

The Robust variety comes from a healthy individual plant that was selected from among a lot of commercial beans containing mosiac in 1908 Investigation at the New York Experiment Station showed the Robust bean to be immunie to mosiac, and as a result I am told that almost all of the white pea beans now grown in the state of New York are of the Robust Variety.

Later Than Other Varieties

The Robust is a later bean than other varieties. It takes more time in developing a root system, but in the end develops a larger root system than ordinary varieties. The earlier varieties are first to bloom, while later the Robusts blooms profusely and has a very much larger setting of pods. The Robust cannot be said to resist drought any more than other varieties. In a test planted on sandy soil, the drought killed the beans in late summer. In such cases as this, other varieties have yielded more because they set their pods earlier and had more mature beans when the hot spell struck. However, under such condition the Robust beans could just about as well be planted two or three weeks earlier than is safe for other varieties, and produce a larger crop of beans because they too had had time to mature their crop of beans.

When the drought does not actually kill the crop, the Robust is able to set pods in hotter sun than can the common varieties. In 1916 the Robust was the only variety that had a good setting of pods at M. A. C. as other varieties dropped their flowers during a hot spell at blooming time. Most of them lost the second set of flowers and failed completely.

The leaves of the Robust are usually more wrinkled and drawn in at the edges than are those of other varieties which may be quite flat. The leaves of most varieties turn yellow and drop more or less all summer probably due to bacterial blight. The Robust being resistant to blight, holds its foliage and maintains it in a profuse development until a few days before harvest time, when the foliage turns yellow and drops off as a whole. The Robust actually matures the crop, and drops the leaves at maturity. Because of this characteristic, it will normally withstand frost that will kill the leaves without injuring the pods. The foliage then opens up, and the pods mature rapidly. A month before harvest the Robust is usually picked out as the greenest variety in a series. And yet if blight has so hindered the development of other varieties by dropping leaves, that they are not able to complete the work, the Robust may be ripe first. Also the Robust is the only variety that will drop all of its leaves at maturity. All other varieties will have some green leaves even when the pods are shattering the seed.

In growing a crop of beans, make sure that it is going to have an abundance of food and good healthy conditions. Otherwise you are apt to have a "stunted calf" on your hands that will never be worth raising. But, if you are going to grow beans why not have a strong robust variety? Among the navy beans there are two classes. One of these

(Continued on Page 26)

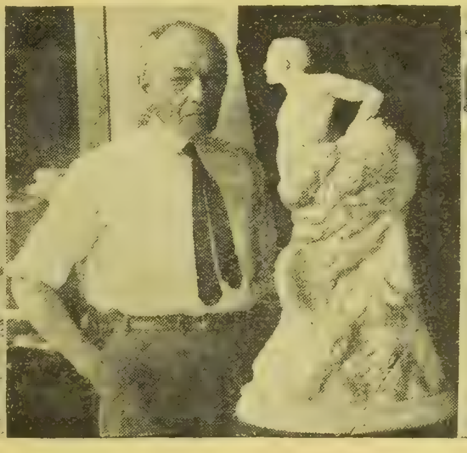
PICTURES FROM FAR AND NEAR

KING'S FAITHFUL INDIAN SERVANT.—Sir Prabasham Kar Pattani, one of the few millionaires of India, is Knight Commander of the British Indian Empire.

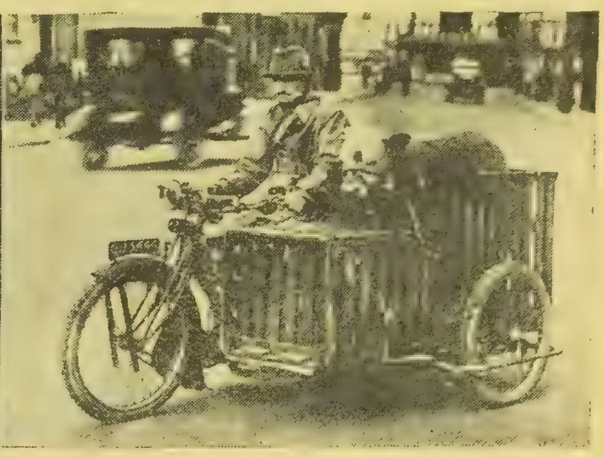
NOT A WAR CONSULTATION.—Left to right: Sir Esme Howand, British Ambassador to the United States, Secretary of State Charles E. Hughes, and Ambassador Jusserand of France having an informal chat at Washington.

"GRANDMOTHER OF RUSSIAN REVOLUTION" PASSES 80.—Catherine Breshkovsky, who on her 80th birthday, just passed, is still in the best of health.

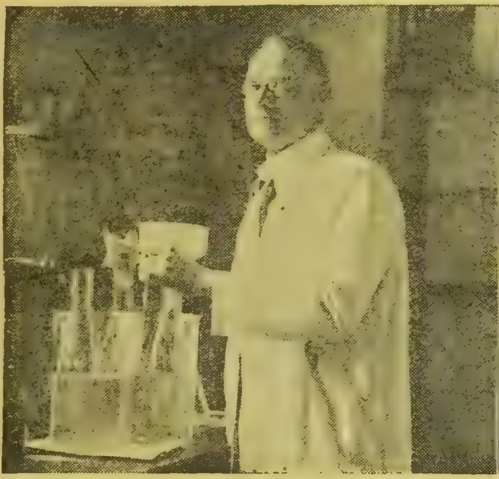
ROYAL MAIL STEAM PACKET STEAMER SEIZED AS LIQUOR AND DRUG CARRIER.—The SS Orduna was seized recently and on board was found $10,000 worth of liquor. Officers and crew were arrested on charges of smuggling. The seizure was made on 3 counts: Violation of the U. S. Customs law, Federal Narcotic law and National Prohibition law.



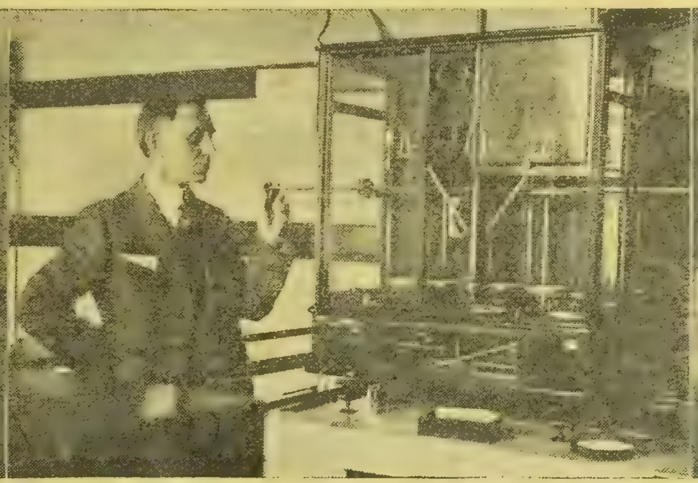
MISSING LINK IS REJECTED.—Carl W. Akeley's statuette "The Chrysalis," representing the ascent of man from the form of a gorilla, was rejected by the National Academy of Design for its annual exhibit. Judges declared it lacked merit.



OFF TO MARKET WITH THE FATTED CALF.—Over across the ocean, in England, the farmers have a new way of hauling their calves to market. They use a motorcycle with a side car, the side car being made out of a crate. This one here seems to know his fate beforehand, according to the sour expression on his face. How would this outfit work on rough roads, we wonder?

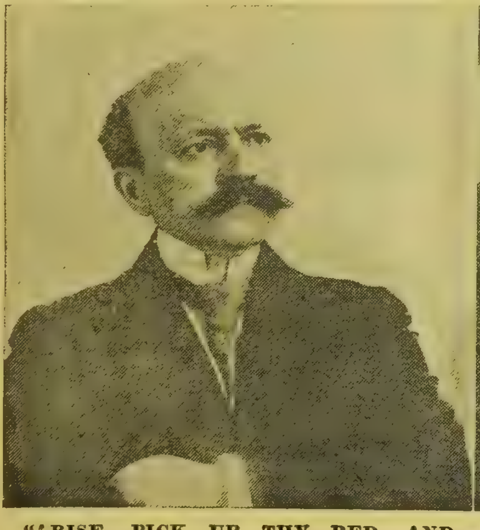


BY AND BY WE'LL NEVER GET TIRED.—Dr. Fred S. Flinn, of the Public Health Service, who is studying the power of certain chemicals to offset the toxic poisons produced by daily labor. The Germans experimented some along this line during the World War with success.



MOST SENSITIVE SCALE IN THE WORLD.—Mr. A. T. Peinkowsky, of the Bureau of Standards, at Washington, is here shown with the most sensitive set of scales in the world, so delicate that the moisture of one's finger will throw them off balance. It has been kept enclosed in glass as any passing person can throw it out of balance from body moisture.

TEDDY ROOSEVELT, III.—Theodore Roosevelt 3rd (right) is a chip of the old block of the Roosevelt family, as is shown by his menacing attitude while boxing with Hector Elizalde, son of the Minister of Ecuador to Washington, D. C.



"ARISE, PICK UP THY BED, AND WALK".—Dr Gabriel Bidou, eminent paralysis expert of France, who has treated many a paralytic with wonderful results. He is rapidly becoming famous.

TWO AMERICAN ARCHBISHOPS ARE MADE CARDINALS.—This shows (left to right): Archbishop George W. Mundelein, of Chicago, and Archbishop Patrick J. Hayes, of New York on board ship just before they sailed for Rome to attend Lentern Consistory where they were recently made Cardinals.

ONE OF IRELAND'S BEAUTIES.—Lady June Butler, of Ireland, has been acclaimed by beauty judges as the Emerald Ile's most beautiful woman. She is well known in the social circles and is a prominent hostess.

(Copyright, Keystone View Co.)

FORTY YEARS OF FAKING

The Memoirs of a Grafter—By Himself

A TRAVELING medicine show, selling "snake oil," was the cause of Pete Dexter's beginning of a life of graft. Pete has told how he happened to take up the career of living on easy money obtained at other people's expense, and how he went from the medicine show to working for himself.

A mail order deal in which he sold spoons in Florida, and then a job of canvassing in South Dakota gave him an idea of how easy some folks were to take in.

The canvassing graft got him into the tea and coffee business, and the premiums he offered sold the goods, but Pete never delivered the premiums, altho he left each section a little richer than when he started.

A winter in California gave him his first taste of the stock selling game. Dexter also found that the life of a de luxe faker also has its ups and downs and just when he thought he was getting away big, he came to work one morning to find the police there first. Dexter escaped, and about all he took along was experience. He hopped a freight train for Texas. He was getting to be a high-class faker, he admits, and this installment shows us some real inside stuff on a big land deal Dexter had a hand in.

(Continued from Mar. 29th Issue)

THE government had just given a lot of land away in Oklahoma and what was called Indian Territory. At that time everything was booming in the south. All the gang thought of at every town was to get land. Some of the boys were going over to the territory and marrying squaws so they could get some of the land they had, and I was almost on the verge of doing the same thing when a fellow one day told me I was a bright fellow and gave me a job. I was glad of it, as I hated to to think of hooking up with a savage.

The fellow I hired out to was about as clever a fellow as I had ever met. Tommy Conner they called him, and he had the head to put the stuff over. It seems that he had come to Texas for his health. He didn't have anything on me, as I had, too, but the climate had done him so much good that he had a wonderful plan worked out.

Tommy got a lot of the sage brush land lined up and the crew I was with worked hard to get a small stream of water headed onto it. After a couple of years we had about as pretty a spot as there was in the United States. It was only about 40 acres big, but it was sure some garden spot. Conner then goes to Kansas City and interests a lot of fellows with money in his game. They come down to the place and looks it over, and I was the fellow who showed them our place. Conner held a meeting, and they decided that here was a big chance to make a killing. Land about our place was selling pretty cheap and now and then a fellow was so glad to get rid of a section that he threw it in so that he wouldn't have to pay taxes on the sage bushes.

So I was commissioned to feel around and buy up the land. In order to keep up appearances, I opened a real estate office in town. Conner and his gang furnished me with the money I had and in a few months we owned land on each side of us. Meanwhile the beauty spot in our desert had been improved so that it had a hotel on it and a fence around it. The road from the station had been fixed up and it was lined with good looking plots which had gardens that were watered and kept up at considerable expense. That winter several meetings were held by our company and the boys from Kansas City and Chicago had some great times at the hotel. I was part of the company now as a reward for my work in the real estate office and we decided to keep my office going for future sales work.

In the latter part of the winter Conner announced that an advertising campaign was to start that spring to sell our land. Things were looking fine in our park and the land along the highway from the railroad sure looked as good as any place I have ever been. The irrigation system was working fine and the pipes were cleverly concealed. No one would have guessed that we hadn't had a rain for months.

The gang planned to invite all the editors of the farm papers to come down to look over our new section of the country. We named it the "Future Heart of the Agriculture of America" and we were going to run special trains down from the north, and every fellow who bought from us was to get his fare back. Things started fine. The first trainload of people who arrived were met by Conner at the station and welcomed like they were Columbus finding America. That boy had the line. I helped show the gang about and generally was handy with the fountain pen when checks for land were made out. Conner took the crowd out to our hotel and entertained them while they staid in Texas. He saw to it that they talked to no others than people connected with our company, and after a few days of talking those fellows decided that Texas as the place for them. Money was what we wanted, but Conner did take a few Iowa, Illinois, Indiana and Ohio farms as part payment.

The boys working for us in Kansas City and Chicago and other points sure kept a good crop of prospects coming to us, and the prices we got for that land were good. Lots of the bunch that came down thought Conner was charging too much for the land, and they would come to my office before they boarded the train for home. I would figure their case at once and confidentially show them maps of farms that could be had right in the same section as Conner's land and at a little cheaper price. Generally I got the stragglers, and Conner sure was generous with me in commissions. At the end of the year I had over $30,000 in the bank and that was a small part to what the rest of the gang cleaned up.

When the prospects moved in and began to find out what suckers they had been, we all beat it, and I sure had to keep under cover for a long time. If I hadn't changed my name and taken my money in my grip, I never would have staid clear for there was some row. But I sure learned how easy people like to give away their cash.

By this time I decided I was a promoter, so I frowned on the old lines and felt ashamed that I had mixed up in such little deals. So I began to look for big game.

Electric railways were than the popular craze. In St. Louis I met a fellow who had a plan where by an electric line was to be built to operate on an elevated track. Storms had been bothering lines built on the ground, and his scheme appealed to me as one that ought to sell, so after talking with the inventor, Mr. Henry Trainer, we formed a company. I furnished the money and he turned over the patent rights to me.

The first thing we did was to open an office in St. Louis, and as I had met a few fellows from St. Louis while working with Conner in Texas, I called on them and offered to let them in on my new company. Several of them were rather prominent in town and agreed to become directors in the new company, which we called the National Electric Service and Transport Company. I had a lot of certificates engraved and a young newspaper man whom I had met wrote up a description of the new type of railroad for our catalog. He had a friend who was an artist and for a few dollars he drew some sketches of the proposed railroad.

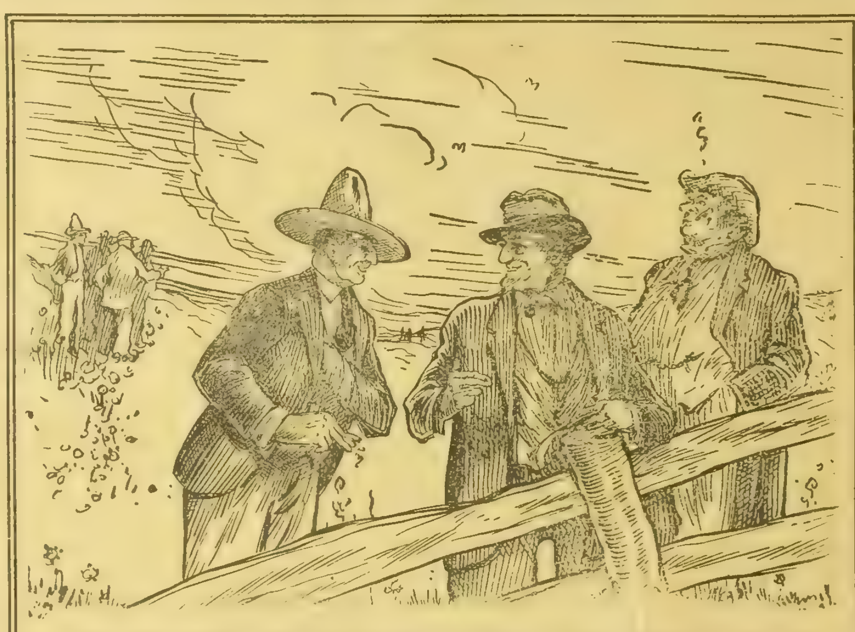
We had a small model of the new system built for our window and it sure worked pretty. Several of the newspapers sent men to interview us and that helped us a lot. We also ran a lot of advertisements and announced that our first line was going to be built in St. Louis. We also had a bunch of fellows lined up to sell the stock. Operations began in a short time and that stock went like hot cakes. We had a hard time filling the orders, and many a night we had to sit up till two and three o'clock, making out stock certificates and keeping things in good order. I was president and drew a big salary. Several directors who saw the money rolling in decided they had better start out, so I opened branch offices in various cities for them and put up more minature railroads. The stock sold fine for some time and all the boys were getting on in great shape, as I allowed them liberal commissions. Then things slacked up. Seems that the city fellows wanted action. So we gave them a dose of that.

Just outside the city was an old building with a pretty fair layout. It had been built for a watch factory but had gone broke. I found it could be purchased for about $8,000, so the board of directors announced one day that the first power plant was to be started. The old watch factory had been secured and was to be remodeled. We spent a few thousand for some architects' plans and more advertising, and that sure speeded the stock sales. Business was better than ever. We announced that the original capital stock of $2,000,000 was almost subscribed and as soon as we secured the full amount the first line would be built.

About this time, some fellow got peeved at a salesman and started a lawsuit, which lasted several months. With no sales in the meantime we announced that as long as there was a legal tangle we couldn't do anything, closed the branch offices and many of the directors left, leaving me and Trainer, the inventor, alone.

One day we heard that a bunch of stockholders were holding a meeting to see what could be done to save their money. Trainer told me about the deal, but not until it was too late. Then a fellow came with a warrant for my arrest and I had to put up a bond to account for the money paid to the company. It took about a year to get out of that mess, and when I did I was sadder, wiser and poorer. I saved a few thousand, but the railroad that was to have been built still remains a dream.

(Continued in April 26th issue)



I was quite handy with the fountain pen when a man wanted to make out a check for land.

Farmers Service Bureau

(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full name and address. Name not used if so requested.)

YEAR TO REDEEM FARM

I have a farm in Kalkaska county and being a subscriber to your paper I am asking for advice. The banker at Kalkaska is threatening to foreclose at once, the mortgage is $725. He requests me to sign and send him a quit claim deed stating that if he sells it for more than the mortgage what is over the mortgage will be mine. If I do not sign the deed and he forcloses, has he the right to sell farm at once, or do I have a year in which to redeem it? Would I have the privilege of renting the place after he forecloses or not? Do you think it possible for me to secure a loan from the Federal Farm Loan Bank? Would I have to live on the farm to get the loan or not. What would be the expense to secure a loan. The assessed valuation of the farm is $2500.—J. H. D., Durand, Mich.

—The mortgagor weuld have to give you three months notice before foreclosure sale. After the sale, you would have a year in which to redeem the farm. I would not advise you to sign a quit claim deed under these circumstances. You would be entitled to all the rents from the farm until the year had expired after the mortgage sale.

Write to the Federal Land Bank at St. Paul, Minn., and tell them just what security you have. They will inform you as to how much, and on what terms, you borrow it.—Asst. Legal Editor.

CANNOT VOTE WITH FIRST PAPERS

Please tell me if I can vote in my township with a first paper or not? —J. S., Turner, Mich.

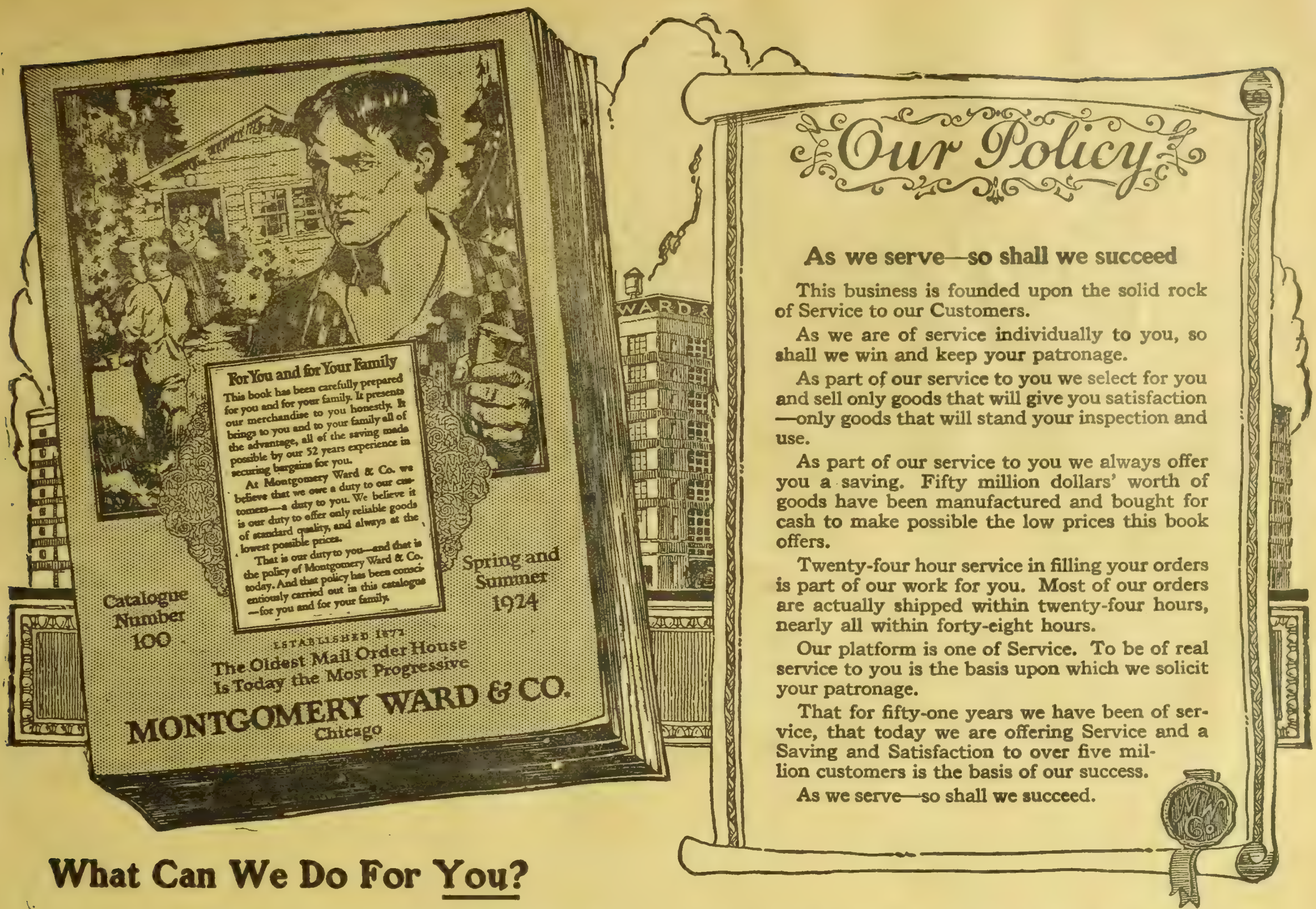
—We assume you mean that you have taken out your first naturalization papers and desire to know if you can vote. In reply will advise you that you cannot under the present law.—Clare Retan, Deputy Attorney General.

RIGHT OF PEDESTRIAN ON HIGHWAY

What right has a person on foot on the trunk line? Has he a right to part of the gravel, for a path, or should he get off of it entirely, for convenience of cars?—O. R., Hersey, Michigan.

—A pedestrian has equal rights on a highway with other persons traveling by automobile or otherwise, but the rights of persons using the public highway for traveling, whether on foot or otherwise, depends upon facts and circumstances surrounding each particular instance,

(Continued on Page 22)



For You and for Your Family

This book has been carefully prepared for you and for your family. It presents our merchandise to you honestly. It brings to you and to your family all of the advantage, all of the saving made possible by our 52 years experience in securing bargains for you.

At Montgomery Ward & Co. we believe that we owe a duty to our customers—a duty to you. We believe it is our duty to offer only reliable goods of standard quality, and always at the lowest possible prices.

That is our duty to you—and that is the policy of Montgomery Ward & Co. today. And that policy has been conscientiously carried out in this catalogue—for you and for your family.

Our Policy

As we serve—so shall we succeed

This business is founded upon the solid rock of Service to our Customers.

As we are of service individually to you, so shall we win and keep your patronage.

As part of our service to you we select for you and sell only goods that will give you satisfaction —only goods that will stand your inspection and use.

As part of our service to you we always offer you a saving. Fifty million dollars' worth of goods have been manufactured and bought for cash to make possible the low prices this book offers.

Twenty-four hour service in filling your orders is part of our work for you. Most of our orders are actually shipped within twenty-four hours, nearly all within forty-eight hours.

Our platform is one of Service. To be of real service to you is the basis upon which we solicit your patronage.

That for fifty-one years we have been of service, that today we are offering Service and a Saving and Satisfaction to over five million customers is the basis of our success.

As we serve—so shall we succeed.

What Can We Do For You?

A Personal Message from the President of MONTGOMERY WARD & CO.

As you turn the pages of this new Spring and Summer Catalogue there is just one thought uppermost in your mind:

"What is there of interest in this book for me?

How much saving is there for me?

What can Montgomery Ward & Co. do for me?"

In imagination I look into the homes of over five million customers into which this book goes, and in each I seem to hear these same questions asked.

And as I sit here in my office and look around at over one hundred acres of floor space, filled with new merchandise, I see the answer so plainly, the many advantages, the great saving, that I wish there might be some way of bringing you more closely together—you and Montgomery Ward & Co. —so that you might learn for yourself the answers to your questions.

If I could draw up a chair with you there at your own living room table and turn with you the pages of this Catalogue, I would tell you the most interesting business story you have ever heard.

It would be a story of how thousands of our bargains are secured, how our low prices are made. It would be a romance of ready cash and the tremendous buying power your patronage gives us. And of travel—travel through every part of this land and in Europe, searching for good merchandise at the lowest possible prices.

Do you know how our goods are bought —how our bargains are found? Let me give you an example: Here is a manufacturer who has a reputation for making the best goods, who lacks capital, who lacks business, so that his plant operates on half-time part of the year.

But he knows how to make good goods. We furnish the needed extra capital, we give him orders that make the wheels turn all day and keep his employees busy all the year. His own earnings are increased and his cost of manufacture cut far below anything he has ever known. And this saving goes to those who buy goods at Ward's—to our customers. What can we do for you?

You want to buy goods at a saving. You want to buy goods that will give you complete satisfaction. You want prompt service. You want your orders filled promptly, and your letters answered promptly—and you want your patronage appreciated.

At Montgomery Ward & Co. you get all these things. These are the advantages that are waiting here for you.

A saving—yes, we try always to offer you a saving; but always a saving on goods of Ward Quality. *I cannot lay too much stress on "Quality." We do not sell "cheap" goods.* It is our policy to offer you only goods that will stand up, that will give service, that will do exactly what you want them to do.

It is easy to sell at seemingly low prices. All you need do is to buy *low-priced goods.* Cut something out of the quality, out of the service, and you can always make a low price. *At Ward's we never sacrifice quality to make a low price.*

And, for fifty-one years this has been the policy of Montgomery Ward & Co. For fifty-one years in every dealing with every customer we have tried to follow a "deal as you would be dealt by" policy.

Millions of people will buy from this Catalogue— at a saving. The same saving, the same guarantee of satisfaction exists for you. We solicit your patronage. We will deal with you as you would be dealt by. And your orders and letters will always be appreciated at Montgomery Ward & Co.

Theodore F. Merseles
President

24-Hour Service

We have perfected our service for you. After much study and testing new systems and employing experts we have perfected a system that makes certain your orders will be shipped promptly.

Our records prove that during the past year most of our orders were shipped in 24 hours—nearly all of our orders within 48 hours.

Established 1872

Montgomery Ward & Co.

The Oldest Mail Order House is Today the Most Progressive

Chicago Kansas City St. Paul Portland, Ore. Ft. Worth Oakland, Cal.

Oh Money! Money!

by ELEANOR H. PORTER

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ntinued from March 29th issue.)

“YOU can imagine there wasn't much time left for books. I think when he first went there, he thought he was still going to write the great poem, the great play, the great novel that was to bring him fame and money. But she soon learned better. Hattie had little patience with his scribbling, and had less with the constant necessity of scrimping and economizing. She was always ambitious to get ahead and be somebody, and, of course, as the babies came and the expenses increased, the demand for more money became more and more insistent. But Jim, poor Jim! He never was a money-maker. He worked, and worked hard, and then he got a job for evenings and worked harder. But I don't believe he ever quite caught up. That's why I was so glad when this money came—for Jim. And now, don't you see? he's thrown his whole lost youth into Fred. And Fred—”

“Fred is going to make good. You see if he doesn't!”

“I hope he will. But—I wish those Gaylords had been at the bottom of the Red Sea before they ever came to Hillerton,” she fumed with sudden vehemence as she entered her own gate.

CHAPTER XIV

From Me to You With Love

It was certainly a gay one—that holiday week. Beginning with the James Blaisdells' housewarming, it was one continuous round of dances, dinners, sleigh-rides and skating parties for Hillerton's young people, particularly for the Blaisdells, the Pennocks, and the Gaylords.

Mr. Smith, at Miss Maggie's, saw comparatively little of it all, although he had almost daily reports from Benny, Mellicent, or Miss Flora, who came often to Miss Maggie's for a little chat. It was from Miss Flora that he learned the outcome of Mellicent's present to her mother. The week was past, and Miss Flora had come down to Miss Maggie's for a little visit.

Mr. Smith still worked at the table in the corner of the living-room, though the Duff-Blaisdell records were all long ago copied. He was at work now sorting and tabulating other Blaisdell records. Mr. Smith seemed to find no end to the work that had to be done on his Blaisdell book.

As Miss Flora entered the room she greeted Mr. Smith cordially, and dropped into a chair.

“Well, they've gone at last,” she panted, handing her furs to Miss Maggie; “so I thought I'd come down and talk things over. No, don't go, Mr. Smith,” she begged, as he made a move toward departure. “I haint come to say nothin' private; besides, you're just like one of the family, anyhow. Keep right on with your work, please.”

Thus entreated, Mr. Smith went back to his table, and Miss Flora settled herself more comfortably in Miss Maggie's easiest chair.

“Sure they're all gone,” said Miss Maggie cheerily.

“Yes; ain't it time they did, to my way of thinkin'. Mercy me, what a week it has been! They hain't been still a minute, not one of 'em, except for a few hours' sleep—toward mornin'.”

“But what a good time they've had!” exulted Miss Maggie.

“Yes. And didn't it do your soul good to see Mellicent? But Jane—Jane nearly had a fit. She told Mellicent that all this gayety was nothing but froth and flimsiness and vexation of spirit. That she knew it because she'd been all through it when she was young, and she knew the vanity of it. And Mellicent—what do you suppose that child said?”

“I can't imagine,” smiled Miss Maggie.

“She said she wanted to see the vanity of it, too. Pretty cute of her, too, wasn't it? Still it's just as well she's gone back to school, I think myself. She's been repressed and held back so long, that when she did let loose, it was just like cutting a puckering string of a bunched-up ruffle—she flew in all directions, and there was no holding her back anywhere; and I suppose she has been a bit foolish and extravagant in the things she's asked for. Poor dear, though, she did get one setback.”

“What do you mean?”

“Did she tell you about the present for her mother?”

“That she was going to get it—yes.”

Across the room Mr. Smith looked up suddenly.

“Well, she got it.” Miss Flora's thin lips snapped grimly over the terse words. “But she had to take it back.”

“Take it back!” cried Miss Maggie.

“Yes. And 'twas a beauty—one of them light purple stones with two pearls. Mellicent showed it to me—on the way home from the store, you know. And she was so pleased over it! ‘Oh, I don't mind the saving all those years now,’ she cried ‘when I see what a beautiful thing they've let me get for mother.’ And she went off so happy she just couldn't keep her feet from dancing.”

“I can imagine it,” nodded Miss Maggie.

“Well, in an hour she was back. But what a difference! All the light and happiness and springiness were gone. She was almost crying. She still carried the little box in her hand. ‘I'm takin' it back,’ she choked. ‘Mother doesn't like it.’ ‘Don't like that beautiful pin!’ says I. ‘What does she want?’

“ ‘Oh, yes, she liked the pin,’ said Mellicent, all teary; ‘she says she never heard of such foolish goings-on—paying all that money for a silly, useless pin. I—I told her 'twas a present from me, but she made me take it back. I'm on my way now back to the store. I'm to get the money, if I can. If I can't, I'm to get a credit slip. Mother says we can take it up in forks and spoons and things we need. I—I told her 'twas a present, but—’ She couldn't say another word, poor child. She just turned and almost ran from the room. That was last night. She went away this morning, I suppose. I didn't see her again, so I don't know how she did come out with the storeman.”

“Too bad—too bad!” sympathized Miss Maggie. (Over at the table Mr. Smith had fallen to writing furiously, with vicious little jabs of his pencil.) “But Jane never did believe in present-giving. They never gave presents to each other even at Christmas. She always called it a foolish, wasteful practice, and Mellicent was always so unhappy Christmas morning!”

“I know it. And that's just what the trouble is. Don't you see? Jane never let 'em take even comfort and now that they can take some comfort, Jane's so out of the habit, she don't know how to begin.”

“Careful, careful, Flora!” laughed Miss Maggie. “I don't think you can say much on that score.”

“Why Maggie Duff, I'm taking comfort,” bridled Miss Flora. “Didn't I have chicken last week and turkey three weeks ago? And do I ever skimp the butter or hunt for cake-rules with one egg now? And ain't I going to Niagara and have a phonograph and move into a fine place just as soon as my mourning is up? You wait and see!”

“All right. I'll wait,” laughed Miss Maggie. Then, a bit anxiously, she asked: Did Fred go to-day?”

“Yes, looking as fine as a fiddle, too. I was sweeping off the steps when he went by the house. He stopped and spoke. Said he was going in now for real work—that he'd played long enough. He said he wouldn't be good for a row of pins if he had many such weeks as this had been.”

“I'm glad he realized it,” observed Miss Maggie grimly. “I suppose the Gaylord young people went, too.”

“Hibbard did, but Pearl doesn't go till next week. She isn't in the same school with Bess, you know. It's even grander than Bess's they say. Hattie wants to get Bess into it next year. Oh, I forgot; we've got to call her ‘Elizabeth’ now. Did you know that?”

Miss Maggie shook her head.

“Well, we have. Hattie says nicknames are all out now, and that ‘Elizabeth’ is very stylish and good form, and the only thing to call her. She says we must call her ‘Harriet,’ too. I forgot that.”

“And Benny ‘Benjamin’?” smiled Miss Maggie.

“Yes. And Jim ‘James.’ But I'm afraid I shall forget—sometimes.”

“I'm afraid—a good many of us will,” laughed Miss Maggie.

“It all came from them Gaylords, I believe,” sniffed Flora. “I don't think much of 'em; but Hattie seems to. I notice she don't put nothin' discouragin' in the way of young Gaylord and Bess. But he pays 'most as much attention to Mellicent, so far as I can see, whenever Carl Pennock will give him a chance. Did you ever see the beat of that boy? It's the money, of course. I hope Mellicent 'll give him a good lesson, before she gets through with it. He deserves it,” she ejuculated, as she picked up her neck-piece, and fastened it with a jerk.

In the doorway she paused and glanced cautiously toward Mr. Smith. Mr. Smith, percieved the glance, tried very hard to absorb himself in the rows of names and dates before him; but he could not help hearing Miss Flora's next words.

“Maggie, hain't you changed your mind a mite yet? Won't you let me give you some of my money? I'd so love to, dear!”

But Miss Maggie, with a violent shake of her head, almost pushed Miss Flora into the hall, and shut the door firmly.

Mr. Smith, left alone at his table, wrote again furiously, and with vicious little jabs of his pencil.

. . . .

One by one the winter days passed.

At the Duffs' Mr. Smith was finding a most convenient home. He liked Miss Maggie better than ever, on closer acquaintance. The Martin girls fitted pleasantly into the household, and plainly did much to help the mistress of the house. Father Duff was still as irritable as ever, but he was not so much in evidence, for his increasing lameness was confining almost entirely to his own room. This meant added care for Miss Maggie, but, with the help of the Martins' she still had some rest and leisure, some time to devote to the walks and talks with Mr. Smith. Mr. Smith said it was absolutely imperative, for the sake of her health, that she should have some recreation, and that it was an act of charity, anyway, that she should lighten his lonliness by letting him walk and talk with her.

Mr. Smith could not help wondering a good deal these days about Miss Maggie's financial resources. He knew from various indications that they must be slender. Yet he never heard her plead poverty or preach economy. In spite of the absence of protecting rugs and tidies, however, and in spite of the fact that she plainly conducted her life and household along the lines of the greatest possible comfort, he saw many evidences that she counted the pennies—and that she made every penny count.

He knew, for a fact, that she had refused to accept any of the Blaisdell's legacy. Jane, to be sure, had not offered any money yet (though she had offered the parlor carpet, which had been promptly refused), but Frank and James and Flora had offered money, and had urged her to take it. Miss Maggie, however, would have none of it.

Mr. Smith suspected that Miss Maggie was proud, and that she regarded such a gift as savoring too much of charity. Mr. Smith wished he could say something to Miss Maggie. Mr. Smith was, indeed, not a little disturbed over the matter. He did try once to say something; but Miss Maggie tossed it off with a merry: “Take their money? Never! I should feel as I were eating up some of Jane's interest, or one of Hattie's gold chairs!” After that she would not let him get near the subject. There seemed then really nothing that he could do.

It was about this time, however, that Mr. Smith began to demand certain extra luxuries—honey, olives, sardines, candied fruits, and imported jellies. They were always luxuries that must be bought, not prepared in the home; and he promptly increased the price of his board—but to a sum far beyond the extra cost of the delicacies he ordered. When Miss Maggie remonstrated at the size of the increase, he pooh-poohed her objections, and declared that even that did not pay for having such a nuisance of a boarder around, with all his fussy notions. He insisted, moreover, that the family should all partake freely of the various delicacies, declaring that it seemed to take away the sting of his fussiness if they ate as he ate, and so did not make him appear singular in his tastes.

Of the Blaisdells Mr. Smith saw a good deal that winter. They often came to Miss Maggie's, and occasionally he called at their homes. Mr. Smith was on excellent terms with them all. They seemed to regard him, indeed, as quite one of the family, and they asked his advice, and discussed their affairs before him with as much freedom as if he were, in truth, a member of the family.

He knew that Mrs. Hattie Blaisdell was having a very gay winter, and that she had been invited twice to the Gaylords'. He knew that James Blaisdell was happy in long evenings with his books before the fire. From Fred's mother he learned that Fred had made the most exclusive club in college, and from Fred's father he learned that the boy was already leading his class in his studies. He heard of Bessie's visits to the homes of wealthy New Yorkers, and of the trials Benny's teachers were having with Benny.

He knew something of Miss Flora's placid life in her “house of mourning” (as Bessie had dubbed the little cottage), and he heard of the “perfectly lovely times” Mellicent was having at her finishing school. He dropped in occasionally to talk over the price of beans and potatoes with Mr. Frank Blaisdell in his bustling grocery store, and he often saw Mrs. Jane at Miss Maggie's. It was at Miss Maggie's, indeed, one day, that he heard Mrs. Jane say, as she sank wearily into a chair:—

“Well, I declare! Sometimes I think I'll never give anybody anything again!”

Mr. Smith, at his table, was conscious of a sudden lively interest. So often, in his earlier acquaintance with Mrs. Jane, while he boarded there, had he heard her say to mission-workers, church-solicitors, and door-way beggars, alike, something similar to this: “No, I can give you nothing. I have nothing to give. I'd love to, if I could—really I would. It makes me quite unhappy to hear of all this need and suffering. I'd so love to do something! And if I were rich I would; but as it is, I can only give you my sympathy and my prayers.”

Mr. Smith was thinking of this now. He had wondered several times, since the money came, as to Mrs. Jane's giving. Hence his interest now in what she was about to say.

“Why, Jane, what's the matter?” Miss Maggie was quering.

(Continued in April 19th issue.)

What Calf Club Work Did For Me

By ARTHUR NYLAND, Gobetic Co. Calf Club Champion

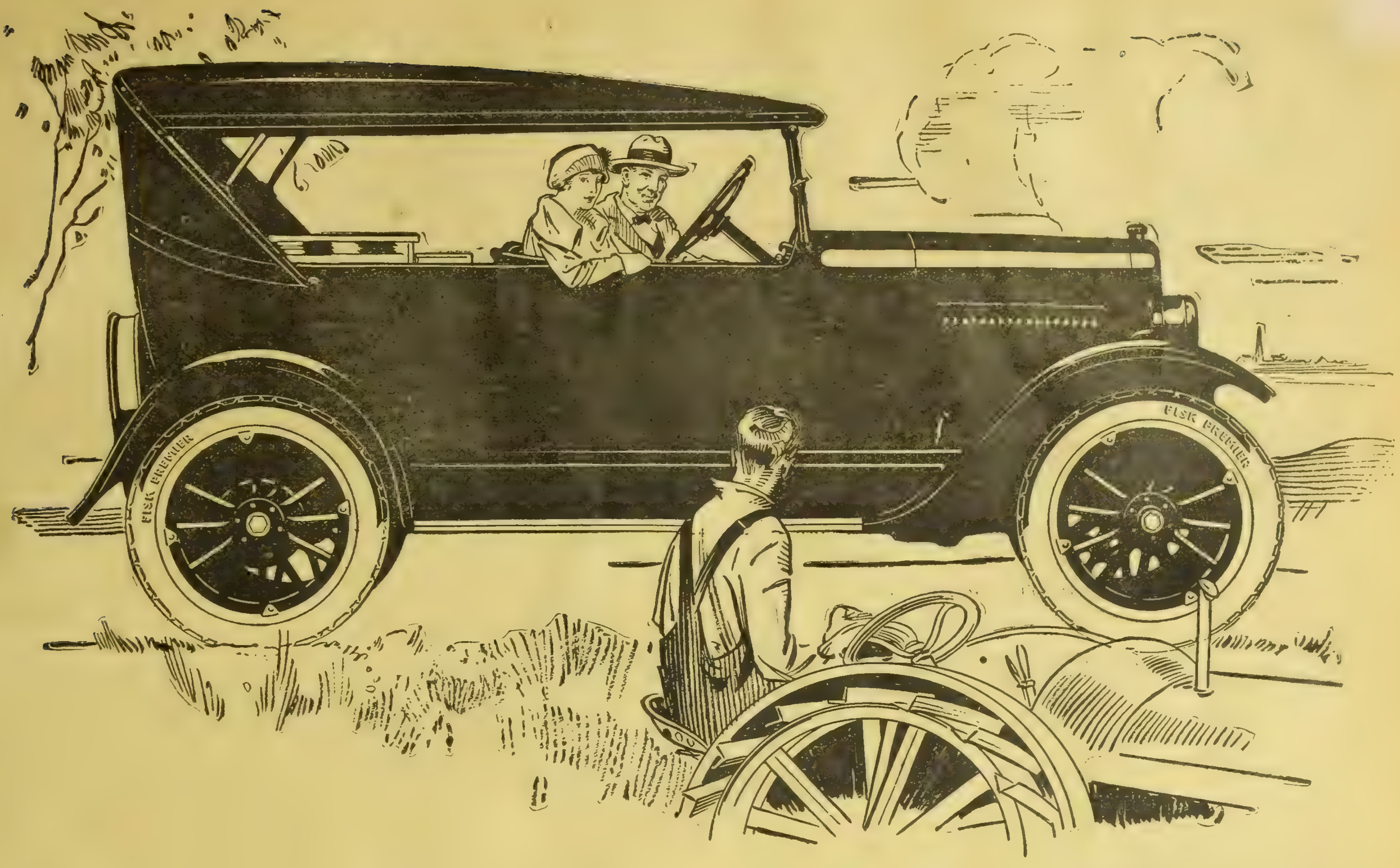
I HAVE been asked to tell of my experience as a calf club member. I first became interested in calf club work during the summer of 1921. My brother Walfred and I became members of the calf club in Erwin township at the same time. As the requirements to become a calf club member are that one must own a highgrade or pure-bred calf of one of the dairy breeds, my brother and I each became an owner of a pure-bred and registered Holstein Heifer. Mine was given me by my father, and Walfred bought his. My calf was 6 months old and Walfred's was about 5 months old. We were both eager to become members of the livestock judging team that our county agricultural agent, Mr. Gunderson was organizing about this time, so we took part in the livestock judging classes that were being held on the farms of the county at that time. The boys from Erwin township who were members of my calf club were Nicholas Puumala, Tom Hendrickson, John Koivisto, my brother Walfred, and myself. Several Ironwood township boys, Axel Kilponen, Carl Johnson, Onnie Kangas, Luther Olson, Leonard Nyland, Wm. Erickson and Conrad Walquist also were members of our judging class. We judged classes of dairy cattle, hogs, and sheep at the farms of C. E. Johnson, Raymond Dick, and K. Gunderson. We had good times riding around together and learned many valuable things in judging livestock.

We were all anxious to be members of the livestock judging team that went to the U. P. Farmers' Round-up at Chatham, August 12 and 13th. J. K. Jackson took all the Erwin township club boys to Chatham in his big 7 passenger studebaker car. It was the first and longest automobile trip we had ever taken, and believe me we had a good time. The weather was beautiful and the roads were fine and we had a big, comfortable car. We made short stops at Iron River, Ishpeming, Negaunee and Marquette and saw many beautiful lakes along the way. We started from Ironwood at 10 o'clock in the morning and had lunch at a little spring just outside of Watersmeet, and had supper on the beautiful Presque Isle at Marquette, where we saw deer running at large and other wild animals in cages.

We got into Chatham about 10 o'clock. We slept in tents while at Chatham, and took part in the setting-up exercises, games and the livestock judging events. There were about 5,000 people there. We saw and learned many new things. I had such a fine time on this trip that I decided that if there was ever a chance to go again, I wanted to go so last summer I again took part in the calf club work and judging classes and was again lucky enough to made the trip.

Here we have some of the members of the Gogebic County Calf Club work. Directly above the cross marked on the picture, is Arthur Nyland, author of this story about club work. On his right stands his calf, while his cow is shown at the extreme right end of the picture (to his left).

My family and me are all very much interested in The Business Farmer and do not want to be without it as we find a great deal of valuable information in it. Wishing you all success.--Chas. A. Hardy, Washtenaw County.



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Big-car performance with light-car economy! Big-car satisfaction at a light-car price! Low upkeep—slow depreciation! You are both money-wise and automobile-wise when you buy an Overland.

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Overland

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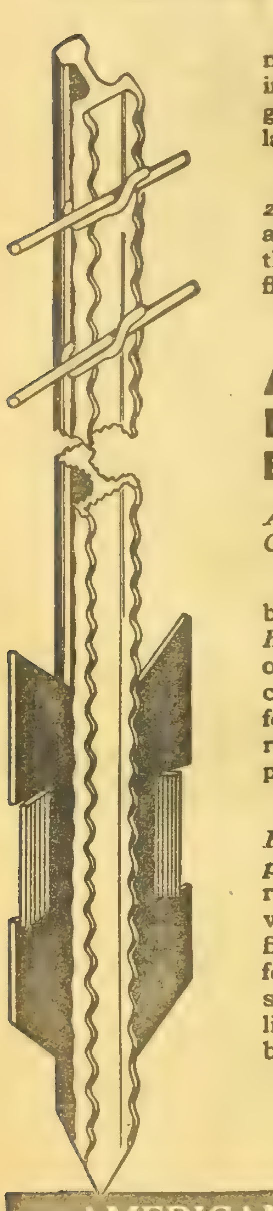

Wires used in Zinc Insulated Fences receive more than DOUBLE the usual heat treatment in the *zinc bath*—the proper and only way to give a heavier coating of galvanizing with lasting quality.

This better process not only applies *more zinc* to the wire, but makes the coating uniform and inseparably a part of the steel. It insulates the wire with more zinc and with no cracking, flaking or peeling off.

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AND 4 OTHER HARDY ORNAMENTAL SHRUBS

Planting a few shrubs this season will soon make your home a beauty spot and a greater joy to live in. Also, if you should later decide to sell it, you will find it more salable and worth a few hundred dollars more. Our collection consists of the following five most desirable varieties. They are not little, green-house-rooted cuttings, such as are often given in offers of this kind. These shrubs are all field grown, healthy and thrifty, and are sure to give satisfaction. We would recommend that you accept our special offer without delay, as this offer may be withdrawn at any time.

SPIREA VAN HOUTTEI (Bridal Wreath)—A leader among shrubs, and a beautiful ornament at all seasons. A round and graceful bush with arching branches, covered with white flowers in early summer. No doubt the most useful of all shrubs.

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What the Neighbors Say

EVERY CITIZEN PAY ACCORDING TO ABILITY

DEAR EDITOR: Your editorials don't suit me as well as they used to, but the one on taxation (March 1) is good, and the more I study the problem, the clearer I see a progressive income and inheritance tax as the ultimate solution.

To tax real estate for public improvements that increase its value seems fair enough. So does a sales tax on gasoline for highway repairs. Import duties to protect the home market, and small taxes or license fees to cover expenses of administering certain laws may be expedient. But for general revenue purposes let local, state and national governments cooperate in building a simple, efficient tax collecting machine and let every citizen pay according to ability.

Make no exemptions and no unfair discriminations against the rich. Let every citizen declare his or her net income annually, under pledge of secrecy as now. Let each, whether poor or rich, pay on the first one thousand dollars a light tax, say one-half of one per cent. Make it one per cent on the second thousand. add one-half of one per cent for each succeeding thousand, until the rate reaches fifty per cent, and let all above that point pay that rate. Apply the same taxes except such as noted above. Allow corporations to keep a reasonable undivided surplus, but treat stock dividends as part of the incomes of those to whom they are issued, which they certainly are.

To object that the high rate on big incomes "withdraws capital needed for business expansion" is nonsense. Does the government destroy the money it collects? No, it does just as any private citizen or corporation would—pays its running expenses and debts When it pays running expenses its employees put the money back into circulation just as quickly as if they were working for the steel trust or Standard Oil. When it pays its debts its creditors, mostly American citizens, have so much capital free for re-investment. If the general effect of the system is to somewhat reduce the fortunes of the very rich, the light tax on small incomes will tend to increase the number and the resources of small capitalists, whose capital is just as available for business expansion as if they were rich. And as the rich pay high rates only on their superfluous thousands, they are safe from absolute ruin.

I have not tried to figure out just what the minimum rate should be; one-half of one per cent may be too low for present needs. I do know that the average small farmer could pay ten times that rate and still save money on that deal, and believe that to attempt to exempt small incomes entirely, would be a serious mistake.—Stacy Brown, Lake Odessa, Michigan.

NO MORE TAX EXEMPT BONDS

DEAR Editor:—Your editorial on taxes and write up by Mr. Powell should draw forth considerable comment. The old saying "Two things are sure, death and taxes" is right, only it ought to be worded like this: "Taxes will be sure death to the Farmer if they are not reduced."

It is impossible for the farmer to keep the wolf of taxes from camping on his doorstep and at times he gets right into the house. We have been told repeatedly that this law and that scheme would reduce our taxes but instead they have been going up and up until we are obliged to sell crops at a disadvantage to meet them.

I have been paying taxes in our county (Isabella) for twenty-five years and they have almost been as high as rent for my farm the last four years. It has been impossible for me to make the repairs that are needed let alone build new buildings.

I have seen and read more printed matter about how to reduce taxes in the last year or two than I could carry and none of it has lowered my taxes one cent. Every office holder has promised to lower taxes. Before he was elected he always had some sure fire schemes that would do the trick. "Just elect me and you will soon see how your taxes will go down!" he would tell us. I think that high taxes has been the best campaign material for a lot of office seekers that ever was invented.

Now to my mind we as property owners and farmers should demand that instead of wasting so much good printer's ink, we get some action. Let's dig up the hidden treasure in the state, the tax exempt bonds, and put a tax upon them will help to bear the burden of taxes along with the farmers and property owners.

These bonds and stocks should be classed as personal property and taxed as such just as the farmers stock and tools are taxed. If the tax exempt bonds were made to go on record in the county or state where they were issued and a tax put upon them at that time, they would be paying in preportion to the farmer's mortgage or contract.

The farmer's business is too large for him to hide it. He is too broad minded to do it if he could, so let us get down to business and do something that will take the mill-stone of taxes from his neck and give him a square deal.—W. H., Mt. Pleasant, Mich.

WHY HAVE COUNTY AGENT?

DEAR EDITOR: I have read your valuable paper from the first issue, and think it is the best farm paper. I read so much about reducing taxes, that I cannot keep quite any longer. Why not commence at home to cut taxes? Now what good is a county agent, when 75 per cent of the farmers are opposed to him? I claim we can get along just as well without him. I have attended the county agents' meeting at the Farmers' Institute meeting and Farm Bureau meeting, and have heard their talk for the past four or five years, and all they could talk about was potatoes, potatoes, potatoes, and that was all they could talk about, until now you can hardly give potatoes away. Now all you can hear is dairying, dairying, dairying, and in four or five years they will run that in the ground.

Why don't they let the people vote on whether we want a county agent or not? I will wager that it will be voted down by 75 per cent. The board of supervisors say the state pays a certain per cent for the county agent's salary, but who is the state? It all has to come out of our taxes just the same. We are paying too many white collar fellows, running around at our expense.

Now let us vote on the question, and if they get one vote in favor of the county agent, then I will be in favor of him also. As for me I can't see where he has done us one cent worth of good. In the last 3 months I have received about a half dozen circulars asking if I wanted any dynamite. I don't know of any farmers around that want to buy a half car of dynamite.—H. E. Coblentz, Charlevoix County.

TRADE WHEAT AT $2

DEAR EDITOR:—Foreign made farm machinery, builders' hardware, cloth and clothing, shoes and thousands of farm necessities can be laid at our shores so cheap that in trade the farmer would get twice what he does now.

The high tariff party, G. O. P. (or Gasoline, Oil and Petroleum) says by their actions, "Mr. Farmer, we're behind a great big tariff wall and you'll pay war prices for our stuff, regardless of what your stuff brings, or go without tools, building material, clothes and shoes till you learn who's boss," and because the majority of north center and eastern states great grand fathers were Lincoln Republicans, then these great-grandsons think they must give 2 bushels of wheat for goods worth only 1 bushel and say nothing because the tariff men want cheap food for their factory help and double prices for factory goods.

That leaves plenty of profit to pay ten times as much for a new car as the average farmer can pay to have a car for each one of the rich man's family and one for a hired man to air the dog with.—C. H. Merrifield, Van Buren Co.

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THE PERFECT MOTOR OIL

Made in Five Grades

Makes Record in Protecting Bearings

"Burned bearings on a crankshaft or elsewhere", says a leading automotive authority, "means that the bearing is cut, caused by friction from lack of oil."

Polarine protects bearings, by maintaining at all times, an unbroken cushion of oil. That it can do this, is due solely to its correct scientific structure.

One Polarine user writes: "In checking back records of the last five years (during which we have used only Polarine Oils and Greases) on the upkeep cost of our tractors and trucks we had only one case of burned out bearings, and this one case was the fault of neglect on the driver's part to supply the necessary amount of oil.

"This, with eleven tractors and trucks running continually, we believe is *some* record."

Numerous other letters tell a similar story.

Polarine minimizes friction because it maintains its body. It maintains its body because (First) it is made from selected crude. (Second) because it is refined and treated by a special process to remove those elements which tend to form gum, carbon and other impurities. (Third) because it undergoes elaborate laboratory and field tests which check up the refiner in his efforts to produce a lubricant which will stand up under all temperature and mechanical conditions.

The chart at the left tells the *right* grade for your tractor to give you perfect protection against friction.

The essence of economy is to drain your crankcase frequently and fill up with the correct grade of Polarine. Your tractor will give you better service and it will last longer.

Tractor Chart of Recommendations

TRACTORS

Trade Name	Motor Oil
Adaptable	H.
Allis-Chalmers, 6-12	H.
Allis-Chalmers, Other Models	S. H.
All Work	S. H.
Andrews-Kincade	E. H.
Appleton	S. H.
Aultman-Taylor, 15-30	S. H.
Aultman-Taylor, Other Models	S. H.
Automotive	H.
Avery, C. & Road Raser	H.
Avery, Track Runner	S. H.
Avery, Other Models	E. H.
Bates Steel Mule, Midwest Motor	S. H.
Bates, Other Models	H.
Bear	S. H.
Best Tracklayer	E. H.
Big Farmer	E. H.
Case, 10-18, 12-20 and 15-27	H.
Case, 22-40	S. H.
Case, Other Models	E. H.
Cletrac, F.	H.
Cletrac, W.	S. H.
Coleman	E. H.
Dart	S. H.
Eagle	S. H.
E-B	S. H.
Ellwood	H.
Farm Horse	E. H.
Fitch	E. H.
Flour City, Junior and 20-35	S. H.
Flour City, Other Models	E. H.
Fordson	S. H.
Fox	E. H.
Frick	S. H.
Gray	S. H.
Hart-Parr	E. H.
Heider	S. H.
Holt, 2-Ton	H.
Holt, Other Models	E. H.
Huber	S. H.
Indiana	H.
International	H.
J. T.	E. H.
Klumb	E. H.
La Crosse	E. H.
Lauson	S. H.
Leader	S. H.
Leonard	S. H.
Liberty	E. H.
Lincoln	S. H.
Little Giant	S. H.
McCormick-Deering	H.
Minneapolis, 12-25 and 17-30	S. H.
Minneapolis, Other Models	E. H.
Mogul	S. H.
Moline	S. H.
Monarch	H.
Nilson	S. H
Oil-Gas	E. H.
Peoria	E. H.
Pioneer	E. H.
Reed	S. H.
Rix	S. H.
Rumley, Oil Pull, 12-20, 16-30 and 20-40	E. H
Rumley, Other Models	E. H.
Russell	S. H.
Samson	S. H.
Shawnee	H.
Square Turn	E. H.
Stinson	S. H.
Titan	S. H.
Topp-Stewart	S. H.
Toro	H.
Townsend	E. H.
Traylor	H.
Trundaar	S. H.
Twin City, 12-20 and 20-35	S. H.
Twin City, Other Models	E. H.
Uncle Sam	S. H.
Wallis	S. H.
Waterloo Boy	S. H.
Wetmore	S. H.
Wisconsin	S. H.

CULTIVATORS

Trade Name	Motor Oil
Acme	H.
Aro	H.
Avery	H.
Bailor	H.
Beeman	H.
Bolens	H.
Boring	H.
Centaur	H.
Do-It-All	S. H.
International	H.
Kincade	H.
Merry Garden	M.
Motor Macultivator	S. H.
New Britain	H.
Red E	H.
Spry Wheel	E. H.
Utilator	H.

KEY

L.—Polarine Light
M.—Polarine Medium
H.—Polarine Heavy
S.H.—Polarine Special Heavy
E.H.—Polarine Extra Heavy

N. B.—For recommendations of grades of Polarine to use in automobiles and trucks consult chart at any Standard Oil Company (Indiana) station.

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RADIO DEPARTMENT

EDITED BY J. HERBERT FERRIS, R. E.

BATTERIES—THEIR USES AND CARE IN RADIO

IN radio work there are two types of batteries used and these two types are again divided into three classes according to the use to which they are put.

The two types are—1st. Dry batteries, and 2nd. Storage batteries. The three classes are "A" batteries, "B" batteries and "C" batteries. Be sure and remember these classes as we will constantly refer to A-B-C batteries all thru our work with radio. As far as we now know there will only be these three classes but as radio invention and experimentation progresses we are likely to find use for batteries in another place in our set and then we will have "D" and "E" batteries.

We will first describe the two different types of batteries, as some of you will be using one type and others will use the other type. Remember that both are good and that each type is used for a particular purpose for it's convenience as well as economy.

A dry battery has a voltage of 1.5 when new and this gradually drops as the battery ages or is used. The effective amperage is around 30 on a No. 6 battery and very much lower on the small light type of batteries. All dry batteries are figured as delivering 1.5 volts per cell.

All dry batteries are made for intermittant service, and if used steadily will loose their life very quickly; therefore remember that whenever you are not using your batteries on your radio set they should be disconnected.

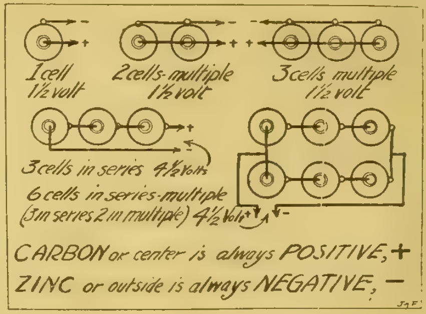
A storage battery, one cell, has an effective voltage of 2 and even when discharged will show a voltage of almost 1.5 tho it cannot deliver any amperage when discharged.

The common example of a storage battery is the lighting or starting battery in an automobile, which for the Ford is composed of 3 cells placed in one case and delivering 6 volts. The Dodge using 6 cells and giving 12 volts. House lighting plants have a group of 16 cells giving 32 volts.

The advantage of each type for radio as we see it from the stand point of the farmer or rural community is all in favor of the dry battery except in a few favored instances. These advantages are as follows:

The dry battery is,—Cheap, considering it's convenience. It is convenient. Easy to secure at most hardware stores, no matter how small the town. Light in weight and easy to carry about. No dangerous acids to spoil rugs, floors or clothes. No expensive charging equipment required. Long life, if given care. In this connection with long life remember that the life of the battery depends upon three things.—1st, the manufacturer, if he is reliable he will make a good battery. 2nd, Using the correct battery for it's particular purpose. 3rd, Care in not abusing the battery, that is only asking the battery to do only as much as it is able to do and not overloading it. Giving it a rest period frequently.

The advantages of the storage battery are —Long life, with care they will last 5 to 7 years and even longer. Noiseless operation over long periods of operation. Rechargability, they can be charged as frequently as necessary to keep them up to working strength. They can handle large volumes of current under a steady load for longer periods than a dry battery. They do not need rests to recouperate. For radio sets using several tubes and where large volume is desired storage batteries seem to give the best results at present. (Manufacturers are now working more and more to improve radio equipment especially for dry battery use.)


1cell 1½ volt
2cells-multiple 1½ volt
3cells multiple 1½ volt
3cells in series 4½ Volts
6 cells in series-multiple (3 in series 2 in multiple) 4½ Volts
CARBON or center is always POSITIVE, +
ZINC or outside is always NEGATIVE, −
J.H.F.

Dry cells for "A" battery.

Classes of Batteries

The three classes, A-B-C, of batteries are made both in the dry battery form or the storage battery.

The A battery is the battery that is used for the purpose of heating the filament of a vacuum tube. Remember that the purpose is not to produce light but heat of a certain temperature. Some tubes do not show any light when the filament is heated and others are very bright, just like an ordinary electric light such as the UV-201 or C-301 tube.

The B battery is the battery that supplies the energy for making the sounds in your telephone receivers. It also supplies the energy for amplifiers that give great volume.

The C battery is only used with certain types of sets, and quite generally in amplifier circuits to give what is called "bais" to the grid element of a vacuum tube a negative value greater than it would have if a C battery were not used. This more effectively controlls the action

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USE INGERSOLL PAINT
PROVED BEST by 80 years' use. It will please you. The ONLY PAINT endorsed by the "GRANGE" for 50 years.
Made in all colors—for all purposes.
Get my FREE DELIVERY offer
From Factory Direct to You at Wholesale Prices.
INGERSOLL PAINT BOOK—FREE
Tells all about Paint and Painting for Durability. Valuable information FREE TO YOU with Sample Cards. Write me. DO IT NOW. I WILL SAVE YOU MONEY. Oldest Ready Mixed Paint House in America. Estab. 1842.
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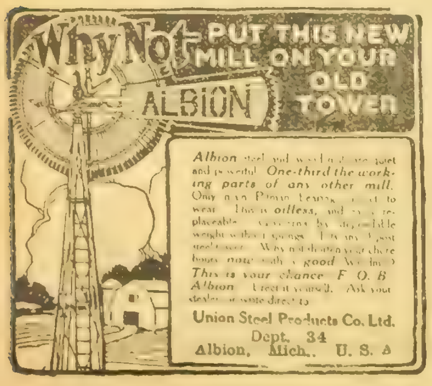

Why Not PUT THIS NEW MILL ON YOUR OLD TOWER
ALBION
Albion steel and wood mills are quiet and powerful. *One-third the working parts of any other mill.* Only one Pitman bearing [illegible] to wear. This is *oilless*, and [illegible] replaceable. [illegible] weight without springs. [illegible] steel tower. Why not shorten your chore hours now with a *good* Windmill? *This is your chance. F. O. B. Albion.* Erect it yourself. Ask your dealer or write direct to
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Protect Seed Potatoes
TREAT WITH J-J CORROSIVE SUBLIMATE
Obtainable through your Bureau or Agent. Trial oz. making over 30 gals. solution, mailed for 25c. Write today.
J. SCHANZENBACH, 74 Cortlandt St., New York.

OUR READERS' NEW BUILDINGS

Have you built any up-to-date farm buildings lately? If you have send us a picture of the new building and we will print it in this new department. It will show the M. B. F. readers what their distant neighbors are doing to change the scenery. And, incidently, you may be able to help some farmer decide the type of house, or barn, or other buildings he desires to put up. He may like the appearance of your building and will want the plan of it. Kodak pictures are all right if the details show up well. Do not send the negative, just a good print.

MRS. CECELIA WIRTH, EAGLE, MICHIGAN, OWNS THIS NEW BARN

"Here is a picture of my 'Honor Bilt' barn that was put up during June and July last year," writes Mrs. Cecelia Wirth, of Eagle, Michigan. "It is 28 feet wide by 42 feet long, and cost $1,015. The photo was taken while it was being painted shortly after it was built, as you will observe."

of the tube and adds life to B batteries that are used in amplifier circuits. It also helps to clear up the quality of the sounds received so that they are more life-like. (Prevents what is called distortion).

A batteries may be of the single cell type such as one No. 6 dry battery or a group of cells so arranged that they will give the desired voltage for the tube being used and also give longer life. If batteries are connected in "series" the voltage increases with the addition of each additional cell. If batteries are connected in "mutiple" or "parallel" the effective life is increased, the amperage or volume of current that can be delivered is greater and the voltage remains the same as in a single cell. Batteries may be also connected in "series-parallel" to both increase amperage and voltage. See the diagram showing different methods of connecting batteries for use as A batteries.

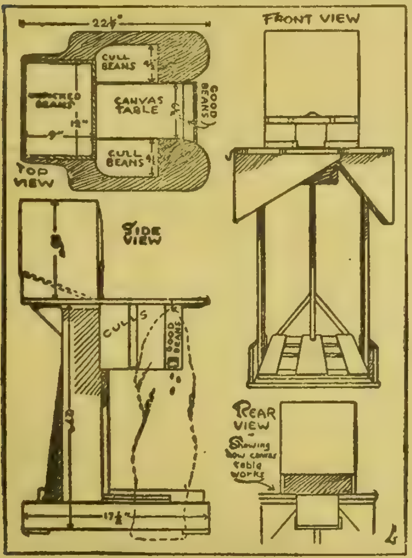
Remember that if you are using a WD-12 tube that requires 1½ volts to heat the filament that if you use 2 cells connected in mutiple that you will get nearly three times the life from 2 cells that 1 cell would give you and in many instances a much longer life than above stated. It is economy to use 2 cells instead of 1 cell every time. If you are also using amplifiers never use less than 3 cells in mutiple.

B batteries are a group of small cells connected in series and mounted all within on case and sealed over with sealing wax. Sometimes called a "block' battery, meaning that the small cells are assembled into a block or one large battery. Quite generally people believe that the B battery is one battery that gives a high voltage, that is correct, as we call a group of cells a battery, also we call a single cell a battery. The 22½ volt B battery is a group of 15 cells each with a voltage of 1½ making a total of 22½ volts. B batteries are also made with voltages of 45 or 90.

FARM MECHANICS

MAKE THIS AND PICK YOUR OWN BEANS AT HOME

HERE is our home-made bean picker. I will describe it and how it operates as best I can. There is a hook on the left arm above the chute to hang a bag on for the clean beans. It hangs over the end of the chute. It does away with a pail or any container that might spill or be a tempetation for little hands. The canvas table revolves. The end of the arm on paddle does not fasten to anything. There is no wheel on end of roller of canvas table to fasten it to. The peddle rests on a rod (groved to fit) in bottom frame. The piece on end of arm acts as a clutch on the canvas. It has a little rod through it so that the piece can turn. When the peddle is up it releases the canvas and when pressed down takes a hold and carries it along. The chute for the clean beans is right in front and under the left arm. The chute is 14¾" by 6" by 16" and is 2" wide. The opening is only 2" square. I will answer any questions.—Mrs. R. O. Reese, Williamston, Mich.



"I hearthey have established a home for telephone operators."
"And what did they name it?"
"Listen Inn."

EXCEPTIONAL RIDING COMFORT

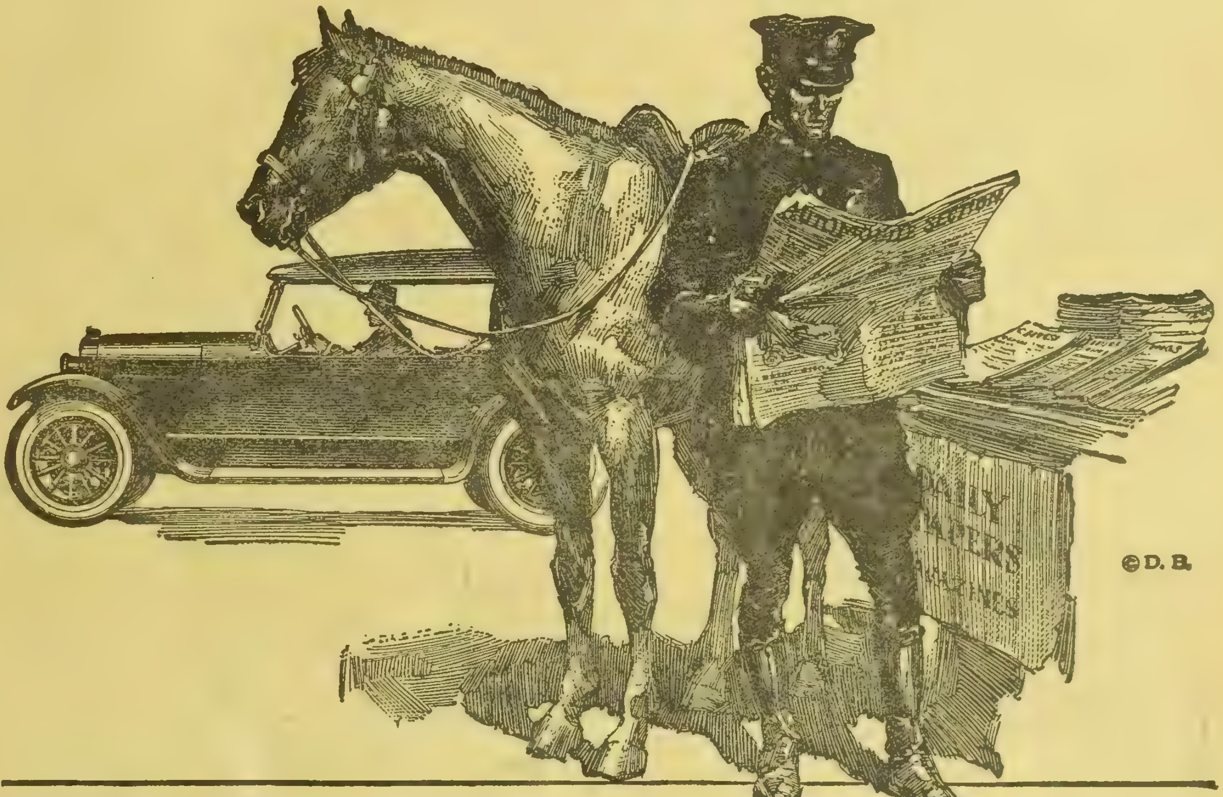
Owners continue to comment on the marked riding comfort of Dodge Brothers Motor Car.

Increased chassis length, low-swung body and generous seat depth have much to do with this

Primarily, however, it must be accredited to the greater buoyancy of the new spring equipment. The rear springs are ten inches longer, and underslung.

The price of the Touring Car is $895 f. o. b. Detroit

DODGE BROTHERS



SAVE MONEY

The **Manvel** Direct Stroke Windmill still leads after more than sixty years' dependable service. Thousands of them have run thirty years without upkeep expense.

The Manvel Fits Any Tower

60 YEAR RECORD

Working parts encased; adjustable direct stroke; broad ball-bearing turntable. All made in our own factory—hence low price, high quality. The Manvel saves you money. Write for free book describing our wood and steel mills, towers, tanks, etc.

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Pioneer Reserve Mutual Fire Insurance Co.,
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FOR SALE?
AN AD IN M. B. F.
WILL SELL IT.

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(Blue Vitriol)

The basis of Bordeaux Mixture
(Copper Sulphate and slaked lime)

Nichols Triangle Brand Copper Sulphate
Large and small crystals, pulverized—99% Pure.

The only known control for fungous diseases of fruits and vegetables.

Make Your Own Bordeaux

Bordeaux Mixture loses its efficiency on standing and should be freshly made. Use Triangle Brand Copper Sulphate and prepare your mixture when you need it. Triangle Brand is clean and pure. Packed in strong new barrels and kegs.

Nichols Copper Co.
25 Broad Street New York

The Michigan
BUSINESS FARMER

SATURDAY, APRIL 12, 1924

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Live Stock and Auction Sale Advertising: We offer special low rates to reputable breeders of live stock and poultry; write us.

RELIABLE ADVERTISERS

We will not knowingly accept the advertising of any person or firm who we do not believe to be thoroughly honest and reliable. Should any reader have any cause for complaint against any advertiser in these columns, the publisher would appreciate an immediate letter bringing all facts to light. In every case when writing say: "I saw your advertisement in The Michigan Business Farmer!" It will guarantee honest dealing.

"The Farm Paper of Service"

TAXATION IS THE LIVE ISSUE

WE questioned a little whether we would insert the figures given in Mr. Powell's article in this issue taken by him from "The Michigan Tradesman," which show that the cost of operation of three state prisons has increased from $91,000 in 1916 to over $2,500,000 in 1923.

Rather, however, than to dull the point of this particular article in the important series which Mr. Powell has been contributing to our columns, we are inserting them with the promise that in the next issue we will have a statement from the governor or someone close to the administration which will clear up this point.

We want our readers to know that we believe in giving both sides of every question as accurately as it is humanly possible. This is in keeping with a fixed policy of THE BUSINESS FARMER that we do not try to do the thinking for our readers, largely because we have no political or other affiliations which force us to draw conclusions which may not be our own. We believe the real mission of a farm paper, or other publication which stands for anything, is to bring to the searchlight of public opinion, the facts which otherwise might be hidden and therefore discovered only after it was too late.

Whether you agree with everything Mr. Powell says or not, you will be as interested in this present article as any which has appeared in the series.

THE MEAT IN THE NUT

> "The real trouble with the farmer, beyond all others combined, is his inability to reduce his output with the fall in demand. No matter in what terms it is put, the sum and substance of the farmers' lack of prosperity during the past three or four years is overproduction."

THE above recent statement by Mr. B. H. Hibbard, a noted economist, puts into the fewest possible words the exact status of agriculture in America, but, of course, it does not answer anything, excepting to point the direction in which the farming business must be kept moving.

If there were as many individual producers in any other line of business as there are in farming they would have identically the same problem which the farmer today faces.

If there were, instead of a half dozen shoe manufacturers in Michigan, ten thousand manufacturers of shoes, it is obvious that the price of shoes would be very hard to control, and that if an overproduction were reached those manufacturers who found their warehouses overloaded and their banks pressing, would sell at prices which would eventually ruin them.

And it is just as obvious that when enough of the ten thousand were forced into other lines of business a slump in the production of shoes would cause a shortage: prices would rise, and those in the shoe manufacturing business would again make a profit.

The only way out of the dilemma to keep the shoe manufacturing business on a normal basis would be for the ten thousand to get together and decide how many shoes they were going to manufacture to take care of the demand.

So as Mr. Hibbard says "the real trouble is the farmers inability to reduce his output with the fall in demand," and certain it is that until the farming business is organized, this condition must continue to exist.

There is a way out. California and its successful growers exchanges have pointed the way. It means: Michigan bean men, potato men, fruitgrowers, beet growers—get togather, stick togather and just as sure as the coming of a bountiful harvest to this state in the season just ahead, will success crown your endeavors.

A man who criticizes the organization of farmers to which he belongs without offering to help right any wrong that may be going on is a traitor to his calling and to his neighbors, and unfortunately the things you can do to him in Michigan without being guilty of "attempt to do great bodily harm" are all too good for him!

SPRING IS HERE

SPRING is here and if you have not felt the tingle of it in your blood you had better start in on a course of sulphur and molasses! But speaking of that well known old despot of childhood, we noticed recently that a very able physician declared such spring remedies were entirely unnecessary and that if people would follow simply the dictates of their appetites and the products of the field and garden as they come with the changing seasons there would be no need for dopes or medicines of any kind.

What can be finer these nice mornings than a dish of rhubarb at breakfast, and even as a dessert for supper, too? The way I like to eat it is with ginger cake made rich with molasses. My, what a combination they make! I presume, however, the cake does away with most of the good effects that otherwise would come from the rhubarb.

Make up your mind you will not take any medicine this spring. If you have the hangover of a cold, eat plenty of onions prepared in any manner but fried, and see if it does not give you relief.

There is a drug store in the backyard of every farm house and a doctor sits with you at every meal—none other than Ole Doc Moderation!

ROBUST BEANS WIN FAVOR

IN Prof. Frank A. Spragg's article in this issue continuing his series on seed development in Michigan, this authority points out that Robust beans which have been largely developed by the Michigan Agricultural College are yielding an average of one-third more than any other Michigan variety.

That the bean growers of Michigan have not been more eager to take up the Robust bean as a staple is largely due to lack of information on the subject and we are pleased to present this article for the benefit of our readers and in continuation of our policy to secure the best known authority on agricultural subjects which we attempt to treat in these columns.

We sincerely believe that it would pay every reader of THE BUSINESS FARMER to carefully read this series by Prof. Spragg and file them away for future reference as this really represents the result of many years of study and application to a subject to which most of us give too little attention in the ordinary conduct of our farming business.

It will behoove you to watch for the continuation of these articles each complete in the issue in which it appears, but all contributing to a general summary of the development of seed in this state.

CENTRAL ELECTRIC POWER

ACCORDING to figures supplied by the Michigan Public Utilities Commission, there are now 9,022 farms receiving central station electric light and power in this state.

The rapid spread of power wires over the rural districts of Michigan means an important step in their development and their improvement.

When you consider that electricity means not only light instantly available, heat for cooking and power for running water in the home but ample power for the heavier farm duties, its importance becomes apparent.

It may not be long before the threshing machine which comes to your farm will have mounted on it an electric motor, the wires from which they will connect to your own circuit and there free from danger of sparks the work of threshing or silo filling will be done in short order.

The Public Utilities Commission has interested itself in the development of rural power lines and is doing everything possible to encourage the companies already in operation in the state to extend these wires and thus make electricity available to the largest possible number of farms. This is indeed an encouraging sign for rural life development.

CONVICT ROAD WORK SUCCESSFUL

THE report of Fred E. Janette, state pardon commissioner for the year 1923 is interesting to farmers in Michigan particularly because it gives an insight into the success of using prison labor to build good roads and maintain them. Those who originally promised nothing but dire results from such an inovation are being won over to the plan as its practicability becomes more and more apparent. After pointing out that during 1923, only 125 prisoners were added to the burden of the state because while 1,971 entered prison gates, 1,846 were paroled. The report has this to say about prison road work:

> "Between July 12 and December 31 of last year, 660 prisoners from two of the three penal and reformatory institutions of Michigan, Jackson and Ionia, working upon construction of highways in this state built 25 miles of concrete surfaced roadway and earned an aggregate pay of $58,000.
>
> "The figures 660 enumerating the prisoners from Jackson and Ionia who were sent out to the road camps constitutes the total number of prison inmates who were given temporary paroles and made 'highway trusties.' They were coming and going all during the period of the work, large numbers of them, more than half of the total being returned to their prison for release on regular parole, to go to their homes, their minimum sentences having expired while they labored. As these were released others were sent to take their places. At no time did the aggregate prison population in all the camps—seven—attain a number in excess of 450. Governor Groesbeck has stated that it is the plan of the administrative board and highway department to employ as a fixed number 800 or more such prisoners in 1924, and to start early and build 100 miles of concrete highway.
>
> "Teach prisoners to work and teach them to like it, and you've started the reformation which all good people hope to see accomplished by prison discipline."

FIGHTING FARM FIRES

"IF farmers only knew it" the secretary of a leading Michigan mutual fire insurance company told us the other day, "they could save themselves millions of dollars in decreased assessments to say nothing of the individual loss and discomfort through fire on the farm. Every farm building ought to be equipped with some sort of a fire extinguishing apparatus so that the fire can be caught at the outset when it is not hard to control, and yet there are hundreds of kitchens and barns in Michigan that have no possible means of fire protection, so if a fire started it would be necessary to run and hunt up a pail of water and then try to extinguish it."

This matter of fire protection is a mighty important one, and if the fire losses in Michigan could be cut down several millions of dollars it would be immediately reflected in the assessments by the mutual companies which largely cover the risks on our farms.

Over at Owosso we understand a fire-truck was purchased recently, the funds for which were provided by the farmers in the vicinity who each contributed a small amount. Enthusiasm for buying this truck was largely aroused by the action of Roy L. Colby, supervisor of Shiawassee township, whose $12,000 farm home was damaged only to the extent of $2,000 because of the prompt and effective work of a chemical fire truck from Owosso which responded to his call and made the seven-mile trip to his farm in fourteen minutes.

This fire truck is kept in the central station in Owosso, and is manned by regular city firemen because it contributes to the city's equipment and yet is for the primary use of the farms in the vicinity.

The modern motor-driven fire wagon makes it possible for the isolated farm to have protection and in a radius of five to ten miles from the farm we would say that no better scheme could be worked out than to ask each farmer to contribute the small sum necessary to purchase such a truck. The amount invested would probably be returned many times over in decreased insurance cost.

But you do not need to wait until a motor driven truck is purchased in your vicinity. There are any number of small fire extinguishers on the market, some costing only a dollar or so each. There should be one conspicuously located in every farm kitchen and in every farm building, where it could be reached quickly in an emergency.

Look around your farm right now and see what protection you have given yourself against the fire which may come at any moment. It will be time well spent!

PUBLISHER'S DESK

HOW THEY WILL LIE!

IT has come to my attention that certain agents of a farm paper have made the statement that the service rendered by every department of THE BUSINESS FARMER, including the Publisher's Desk, was entirely through the columns of the publication.

How they will lie when cornered.

Our readers know, but I want them to tell their friends, that every single request for help or advise addressed to any department of THE BUSINESS FARMER is answered personally by mail, as promptly as possible.

Only those questions which are of general interest are given space in the paper and they do not represent one out of twenty of those answered direct by mail to the subscriber.

So large has the mail become addressed to Farmers' Service, Collection Box, Legal, Woman's and this department, that we have to insist now that the address label from any recent issue, be attached to every request for free service.

Your address label shows the date when your subscription expires and we can only render service without cost to paid-up subscribers. When you do attach this label to your request, no charge of any name or nature will ever be made unless specifically understood by you.—The Publisher.

CHASING BUTTERFLIES

> "WHY NOT spend spring, summer and fall gathering butterflies, insects? I buy hundreds of kinds for collections. Some worth $1 to $7 each. Simple outdoor work with my instructions, pictures, price-list. Send 10 cents (not stamps) for my illustrated prospectus before sending butterflies."

Can you tell me of any firm that buys butterfly cocoons. We have two large ones, and some say you can sell them and they are worth from two to five dollars, but I have never saw anything about butterflies only this ad. I am enclosing. Can you tell me if they are reliable or only a fraud. You notice they want 10 cents and it seems to be butterflies not cocoons they wish.—F. S.

WE are sorry to advise you that we do not know of any firm that buys butterflies, or cocoons. Perhaps there are such firms, but we have been unable to secure the addresses of them.

Along with the butterfly business, one might add the side line of catching will-o-the-wisps, fairies and goblins, which should surely lead once in awhile to the pot-at-the-end-of-the-rainbow!

THE HOUGH FUR CORP. AGAIN

I understand thru your paper—Publisher's Desk—you will intercede in cases of outside swindling. Such is my case. I will state the facts as condensed as possible and then if you are able to help me I will be very grateful to you.

I received a fur list from two fur houses, Abraham Fur Co. and the J. R. Hough Fur Corp., of Miredan, Conn. I had several dollars worth of furs that I trapped in November, and as the J. R. Hough Fur Corp. quoted prices a little higher than the Abraham, I decided to ship to them. I shipped by express the first of December to the J. R. Hough Corp.; shipment consisted of 33 muskrats—eleven of these were extra large, 22 medium—4 skunks, 1 cat, 1 white weasel. Express cost me $1 and I insured same for $70. On their lists they said they would pay all express charges and checks were sent our the day furs were received—also agreed to hold all furs separate if so specified (which I did) until customer received check and accepted same; if not satisfied they would return furs. I waited two weeks and got no word of my furs. Asked agent to look them up.

I wrote them and immediately received a check for $10.75, saying my furs were damaged. I returned the check by return mail and asked for my furs. They sent the check back again with a letter saying the furs were all spoiled and they had to dispose of them immediately to avoid complete loss. I sent the check back again, as I knew they were lieing and demanded my furs. Again received the check back and a duplicate (the exact words) of the letter before. I know my furs were in A-No.-1 shape, thoroughly cured and could not spoil in six months.

I was offered $38.75 by a buyer at the door here just a few days before I shipped. The Grand Rapids market would have brought me about $55.00. Hough's list would bring me close to $70. They sent me $10.45, did not even allow me my express or will not write a word regarding same. I am sure they have my furs. Can you help me to recover my furs or get full value for them. I did not have a damaged fur, have all my furs marked so I can tell if I get my own furs. My neighbor shipped to the Abraham Fur Co., and he got prices as listed, $1.90 a piece for medium rats and Hough's allowed me 25c for my mediums and 35c for my large. There were no prices quoted on their lists. This was too low even for even damaged unprime furs. They gave 5c for weasel and 25c apiece for my skunks.

Think I have given you all the facts but if there is anything more you wish to know will be glad to write.

I have taken the M. B. F. for just one year. We all enjoy it, could not get along without it now.—W. O., Kent City, Mich.

THIS is not the first complaint by any means that we have had against this company and we can do nothing as they are very careful not to get themselves caught in any way. Be sure that you are dealing with an honest company before shipping such a valuable quantity of furs again. There are many reliable ones.

SORRY, BUT TOO LATE!

"I read in THE BUSINESS FARMER not long a go about a lady who wrote you for advice about the Underwood Art Goods Company, Portsmouth, Ohio. You stated you would be pleased to hear from any of your readers who had had experience with the above company. Your paper came just a few days too late for my daughter had just sent in a dollar to this company and when she came home she read the article in THE BUSINESS FARMER. But she has not done any work for them yet as she read the article just in time. They wanted her to do $2 worth of work and send it in, and of course she would never have heard from them again."—Mrs. R. K.

THE MARY JANE APRON

ALTHO early in March we asked the Mary Jane Apron Company of Manitowoc, Wisconsin, to send us the names of several satisfied workers who were making the big money by sewing aprons at home, they evaded our request and sent instead only the printed matter with which they bait the hook. Our readers can draw their own conclusions, as we have already drawn ours.

"NESTLE HOME OUTFIT"

Dear Publisher: Altho I am not a farmer's wife, I am a farmer's daughter, and so enjoy your paper very much.

I wonder if any of your readers have had experience with the "Nestle Home Outfit" for permant waving by "Lanoil Method" so much advertised.

ANOTHER SETTLED

Just a line to let you know that we received the amount, $12.98. I received the money right away when you got after them. Thank you very much.—Mrs. T. M., Midland, Mich.

HE THAT LOVETH SILVER shall not be satisfied with silver; nor he that loveth abundance with increase; this is also vanity. When goods increase, they are increased that eat them; and what good is there to the owners thereof, saving the beholding of them with their eyes?—Ecclesiastes 5:10, 11.

First Mortgage Real Estate Gold Bonds

Many farmers find they have securities they can dispose of and invest the proceeds in Federal Bond & Mortgage Company first mortgage bonds at considerable profit to themselves. Let us analyze your investments for you.

Write for Booklet AG1192

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Free from Federal Income Tax of 4%

7%

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(1192)

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free-
Send for your copy of this catalogue
Auto Supply Book
Montgomery Ward & Co.

Riverside Oversize Cord Tires

10,000 Mile Guarantee and You Save ⅓

What more can any other tire do for you? Riverside Oversize Cords will run 10,000 miles—guaranteed—often up to 18,000 miles. What is the use of paying one-third more?

One-third on tires is a big saving. And this saving is sure—because Riverside Oversize Cords are guaranteed for 10,000 miles *service* on your car.

And this guarantee is fifty-one years old. It has back of it fifty-one years of straightforward dealing.

Quality Gives the Mileage

The big mileage of Riverside Oversize Cords over rough roads is put into them in the factory. It is the mileage built in by quality. High, thick, strong treads—*firsts* in every particular—built with the largest amount of good live rubber.

This extra Quality of Riverside Cords has made us the largest retailers of tires in this country. One user tells another. Just try Riverside Oversize Cords. You, too, may as well save one-third.

You Don't Risk One Cent

Before you buy any tires send for Riversides. Inspect them. Compare them with tires selling for $5.00 or $15.00 more.

Then, if you don't find them the equal of any first-quality oversize cord made, send them back. We will refund your money.

These prices buy 10,000 miles of service—and more.

CATALOGUE No. 464M00—Be sure to give size

SIZE	PRICE	POSTAGE	SIZE	PRICE	POSTAGE
30 x 3½	$ 9.75	28c	32 x 4½	$20.95	45c
32 x 4	16.95	42c	34 x 4½	21.95	48c
33 x 4	17.45	43c	33 x 5	28.75	58c
34 x 4	18.25	43c	35 x 5	29.95	61c

Wire your order. Orders received by telegraph will be shipped the same day C. O. D. Write today to our house nearest you for free Auto Supply Book. Address Dept.— 11-T

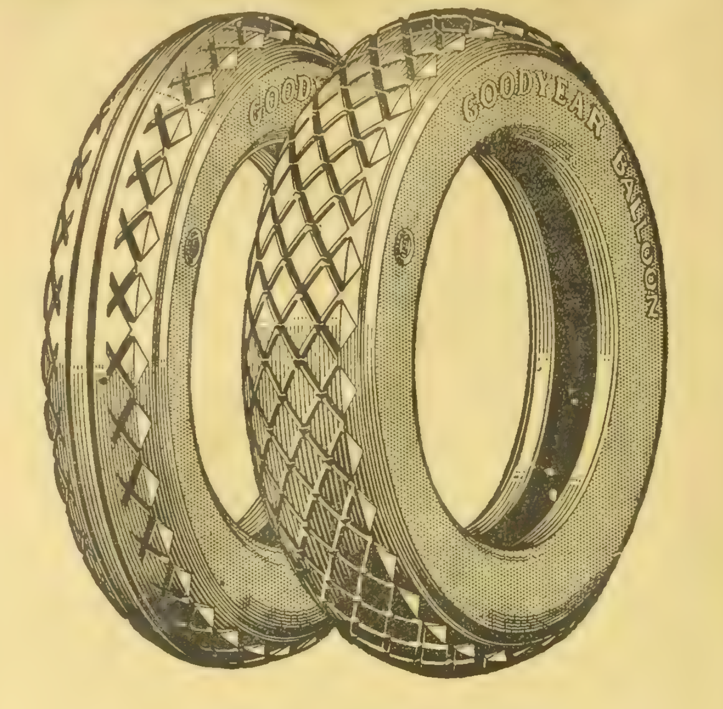
"I find your Riverside Cord tires give wonderful service. They have proved to be better than any tire I ever used and I have used some of the most expensive tires on the market. You will find me a strong booster for Riverside tires."
H. J. Armbruster, Urbana, Ohio.

"I have been using Riverside Cord tires for some time and think they are great. I have got more service out of them than any other tires I have ever used. When I need tires again I will buy the Riverside."
Alfred L. McNay, Williamstown, Ky.

"Would say that the Riverside tires are all right. I have been in the Delivery Business for ten years and find that the Riverside Cord tires last longer than other tires, even those costing a great deal more money."
Chas. Cassen, Petersburg, Ill.

Established 1872
Montgomery Ward & Co.

Chicago Kansas City St. Paul Portland, Ore. Oakland, Cal. Ft. Worth New York Atlanta, Ga.



The good word everywhere on balloon tires is "Goodyear." Because Goodyear makes them to fit rims on most cars now in use, as well as in the smaller diameter 20-, 21- and 22-inch rim sizes. Motorists appreciate this opportunity for saving. Get the facts from your Goodyear Dealer and you will, too.

GOODYEAR

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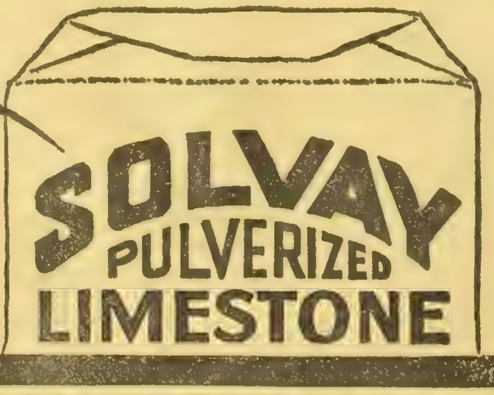

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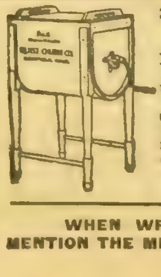

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WHEN WRITING ADVERTISERS MENTION THE MICHIGAN BUSINESS FARMER

THE POWER OF THE RESURRECTION

A SERMON BY REV. DAVID F. WARNER

TEXT: "His power to us-ward *** which he wrought in Christ, when he raised him from the dead, and made him to sit at his right hand in the heavenly places." — Ephesians 1:19, 20.

"WHAT hath God wrought!" This, we are told, is the first message to be send by wire. And the whole world listened. Why? The discovery of a new and wonderful power was being announced. And then other men aside from Franklin and Morse caught widened visions, and the power of electricity has been entering, day by day into the realm of human life and experience in ever increasing measure.

But God is the great broadcaster. And eighteen centuries before men had any organized knowledge of electricity, he announced to the world that a strange and mystical power had been wrought. But few men heard. Yet heaven's radio station is still working. Have you heard the message? How is your adjustment? Have you tried to tune in? But you must have the right wave length to get communicative results.

Well, the message of our text says, this power was wrought in Christ when God raised him from the dead. The resurrected Christ had made men to know that a new life had come into their midst, the power of which they did not understand. But do we yet understand? Ah, that does not matter. Do men understand electricity? But what does it matter? We know it, and feel it, and are using it to give us power and blessing. And tho a strange mystery and one that passes human understanding, we hail the resurrection of Jesus as a triumph for God and the demonstration of a new hope for man.

What strange mystery! O, yes, his disciples had seen their Master still the tempest with a word, had seen him feed the multitude with a handful of bread, and speak life into mortal flesh again; but then, this new resurrection power, this they had not dreamed of. Yes, he said he would rise again; but then, the scene of Calvary, such cruel sufferings, such ignominy, such a decided triumph for his enemies. Now, said Peter, "I go a-fishing." But soon we find this same disciple eclipsing all others in an awestricken zeal for his Christ. Forsooth, "He is risen." And Calvary only makes his reappearance more profound, deepens the disciples' impressions of Christ, and stimulates them to hither-to unknown boldness.

"Who art thou, Lord?" "I am Jesus whom thou persecutest." That was enuf. Paul has his face on the ground. We hear him lamenting, Why did I do it? Why have I gone on in this mad persecution of the Christians? Have I not seen their boundless hope and their undaunted courage? Surely, this Jesus of Nazereth is the risen Messiah. Why did I do it? Lo, he cries out of a disturbed conscience and is given a glorious vision of his Risen Lord, whom he accepts, and whom he, in turn, dies for.

Our text has St. Paul testifying of this power God wrought in raising Christ, and has him praying that we may know of the hope that it brings to us. The apostle taught the supremacy of love and the out workings of this grace so that social justice might prevail. But every Christian knows, too, his other words, "Delivered up for our transgressions and raised for our justification." The materialist has an unhallowed disregard for this teaching but St. Paul makes it the cornerstone of Christianity. Belief in the resurrection power makes that power inhere in us and expresses itself in a new life of love and works. We are spiritual idealists and believe and know that this power is Christ's spirit and influence passing over into the life of man. But faith says, too, that it is the pledge of a ceaseless heaven in the world to come.

But, are we to be but spiritual emanations or disembodied spirits sitting on ethereal clouds and singing celestial halleluiahs? "Dust thou are and to dust thou shalt return." What stark reality! And what apparent hopelessness! And so the disciples were unprepared for the bodily reappearances of Jesus and "were slow of heart to believe." But did he not walk with them by the way, eat with them by the Galilean sea, and say, "Handle me and see?" Ah, "My Lord and my God," says Thomas. We see the disciples associating with Christ's real body, but raised in incorruption and glorified.

We ascended the Transfiguration Mount to behold our Savior in full and glorified blaze. But why was he not then translated even as Moses and Elijah? Why must we follow him from that far celestial height down to the Cross and to the grave? Listen! "They (Moses and Elijah) spake of his decease which he should accomplish at Jerusalem." Not that he must die for his sins, but that he will die for our sins. Here is the mystery of the Cross. But having finished the work that mortal flesh could do, death and the tomb could not hold the body in which was the power of an endless life. Our Lord came forth with his identity unchanged, his voice and his movements the same, but in the body of his ascension; the body that is today and forevermore. So here is where the apostle gets his conception of a spiritual body, "a house not made with hands," with which all believers will be clothed. We are laid away as wasted and corrupt bodies, but Christ shall fashion anew the body of our humiliation that it may be conformed to the body of his glory.

"And made him to sit at his right hand in the heavenly places." This is the ultimate of the resurrection power. The forty days was but a halt in the way that our Lord might show himself alive by many infallible proofs. And how this re-showing did knit the disciples together in faith and heart and thus prepared them to bear his life and Gospel to the world! After this, said he, "I ascend unto my Father and your Father." And now, after sixty generations, we stand looking into the tomb of Christ and say, "He is risen." We look wistfully to the beyond and say, "He is there." There is infinite satisfaction when we shall have come into the majesty and power, the sweetness and comfort of an endless life with our Risen Savior.

Here, we remember, that friends and kinsfolk of both our Lord and the heralds of the Cross, reckoned them to be beside themselves because of the peculiarity of their life and teaching. What are they saying about you? Well, said St. Paul, "We are fools for Christ's sake." And, friends, when we believe that the spirit of the world to come is our very life blood, why need we care about being called fools. "Foolishness with men," says the converted Saul, "is the wisdom of God." Let us have more of this kind of folly.

A minister went home for the night with a rich farmer, husband of one of his members. This man had a good name and was counted one of the best members in the church. As they entered the house thru a rear shed, the minister noticed several bushels of corn hanging to the rafters. He remarked to the farmer about this corn. "Yes," said the farmer, "that is the finest seed corn I ever raised."

"If I were you I would just keep it there. You will never raise such corn again."

"You must think I am a fool," said the old farmer. "I must plant that corn in the ground or I will have no crop."

"The corn is like yourself," said the minister. "I never knew a man who had so many virtues hanging in his head as you. If only something would rattle down that seed corn out of your head into your heart, you would be a wonderful man."

A few weeks later the minister was sent for hurriedly. As he entered the house, the old farmer shouted, "Glory to God, the seed corn has rattled down."

"How did it happen?" said the minister.

"Well," said the farmer, "I was

currying my old mule, Jack, a little while ago, and he crowded me over against the stall. I struck him with the curry comb and yelled, 'get over.' Then he let drive, and do you see that scratch on my face? That is where his sharp-shod foot grazed me. Then I was horrified at being so near death, and I fell to my knees to thank God for my deliverance, and in all the fracas, the seed corn was rattled down, and now I want my life planted for God."

It pays to be a fool for Christ's sake when death is sure to come and the power of an endless life is at stake.

FERTILIZING POTATOES IN A DRY SEASON

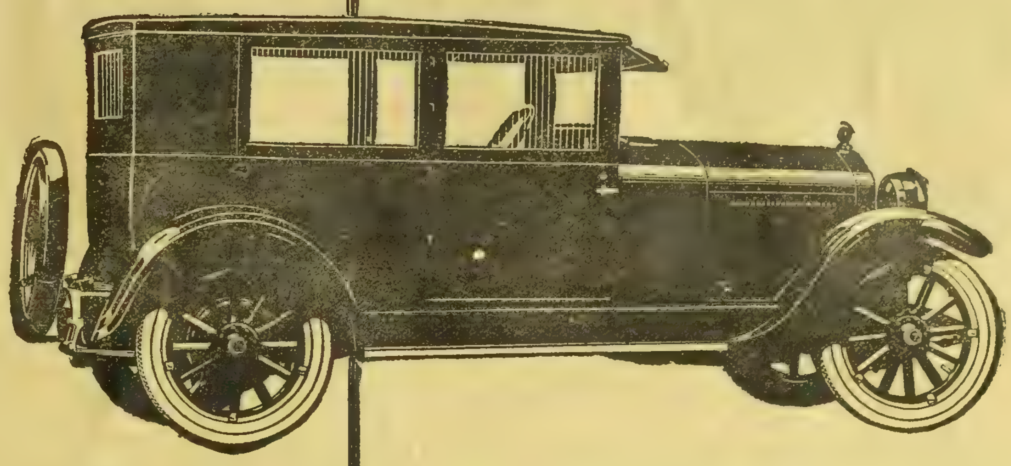
IT is comparatively easy to produce big yields of potatoes in a favorable season, but in such a season everybody gets good yields, and the big crop means low prices. The trick, of course, is to produce a large crop in unfavorable seasons when small crops are the rule. Heavy applications of fertilizer give profitable increases in most seasons, but occasionally an extended drought in July and August nullifies whatever beneficial effect the fertilizer might have had, and the farmer feels he has wasted his money, although the chances are that he will cash in on the added fertility in succeeding crops. The problem of the fertilizer user is how to get a profitable return in an unfavorable season.

Mr. Daniel Dean, a progressive potato grower of Nichols, New York, has a method of fertilizer application that apparently successfully combats the summer droughts that are rather frequent in his section. An evidence of his success is that there has been only one year since 1911 when his yield has been less than 230 bushels per acre. Mr. Dean's soil and climatic conditions are similar to those in many potato producing sections in Michigan. His methods, therefore, are at least worthy of consideration and perhaps a tryout under Michigan conditions.

Mr. Dean's theory is that the deeper you can induce the potato roots to go, the more moisture they will be able to obtain, and the better they will stand hot, dry weather in July and August. His method therefore, is first of all to have plenty of organic matter in the soil to hold moisture, and secondly, to apply the fertilizer in such a way as to encourage deep root development in the soil. He ploughs under a clover sod in the fall. Often in addition to the clover sod he ploughs under a top dressing of straw. In the spring he broadcasts 2,000 pounds of fertilizer to the acre, (eastern growers use larger amounts of fertilizers than do Michigan growers), and discs it into the soil. The fertilizer is usually mainly phosphate and potash. Then he immediately plows deeply and prepares the seedbed. The fertilizer is now well below the surface, inducing a greater root development in this lower layer than in the top layer which drys out in dry weather. The result is that the roots have a more widely developed feeding area from which they can obtain water and plant food even in times of drought.

Fertilizer, of course, is not to be wholly credited with Mr. Dean's success. You can't make U. S. No. 1 potatoes with only a grading machine or the use of fertilizer alone. As I have already pointed out, Mr. Dean takes care to maintain the organic matter supply in the soil. His rotation is potatoes, oats, and clover hay. With the plowing under of a clover sod once in three years, and top dressing with straw, he believes he can take care of the nitrogen problem without purchasing this expensive element. Farmers who are unable to grow clover would not be so fortunate.

Mr. Dean plants in drills 12 to 18 inches apart, which he believes is a factor in eliminating hollow heart. He uses certified seed, disinfects seed with corrosive sublimate, and sprays with a high pressure sprayer for fungous diseases as well as for insects. He believes in shallow cultivation and stirring of the soil after each rain to conserve moisture. He knows that high yields mean low costs per bushel and shapes his cultural methods to this end.—Ove F. Jensen.



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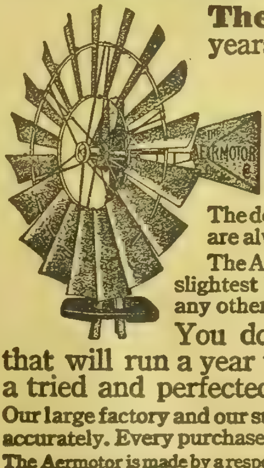

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Bakes, roasts and cooks with a clear, blue flame that doesn't smoke, smell nor smart the eyes

The Vapo Oil Range is the stove sensation of the year. Everywhere people are talking about the marvelous oil range that generates its own gas and burns it with a clean, hot flame that is sootless, smokeless and odorless. Thousands saw it undergo almost unbelievable tests at state and county fairs.

We urge *you* to see Vapo before you buy any oil range.

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32 to 36 hours heat from 1 gal. kerosene

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The Children's Hour

DEAR girls and boys: Are you going to be just like your mothers and fathers when you grow up; are you boys going to farm just like your fathers do, and are you going to try to do better? I do not mean that your father is not a good farmer or that your mother is not a good housekeeper—not by any means—but I hope that you will learn how to do the work in a still better way. For example, maybe your father could not attend the agricultural college when he was young and, as a result, he learned what he could from his father and from the neighbors. Now you can go to the M. A. C. and learn many things about the business of farming that your father never knew, and thus you will have the information to help you become a better farmer than your father. The same may be true in the house. Mother may have never attended college or had the good books about the work she has to do. No doubt mother is a better housekeeper, does things in a more modern way, than grandmother did but you have wonderful opportunities to do still better. And you all owe it to the world to do your best, no matter what your job may be. Whether at work or at play, in school or at home, be honest and upright and put your best efforts into whatever you may be doing.—UNCLE NED.

SPRING

Willow banks a shining,
  Gladening the year.
Pussy willow catkin,
  Tells us spring is here.

Blue bird songs a chiming,
  Happiness and cheer,
Hear the rippling music,
  Telling spring is here.

Marshland frogs a croaking,
  Everywhere, you hear.
We should all be happy,
  In the spring time of the year.
—By Norman O. Sibley, (Age 13),
Hale, R. 2, Michigan.

OUR BOYS AND GIRLS

Dear Uncle Ned:—Well here I am again, this is the second time I have written to the M. F. B. As I was looking over the March 15th issue, I noticed in The Children's Hour section that your readers could write a story, so I am enclosing a story which I have just finished writing. If you think it fit to publish, you may do so, that is if Mr. Waste Basket don't get it. I read many books and find them very interesting, so I am trying to begin story writing. Do you think I will make a very good story writer, Uncle Ned? This is a short story that I am enclosing. It is called "Mother's Day on a New England Farm." I guess this is all for this time. Wishing you good luck, I am, your niece,—Marie Wagner, Memphis, Michigan.

"Mother's Day on a New England Farm"

Once there lived a little girl whose name was Mary, her mother was very poor. At the beginning of this story Mary was nine years of age. Mary's father died when she was two years old. The farm on which Mary and her mother lived was only a small farm, and her mother spun flax and wove cloth for the neighbors, in order to make a living for herself and daughter. They lived in a house built of logs. It contained two rooms which were used as kitchen, living room, and bedroom. The kitchen and living room was a large room, at the end of the room was a fireplace. It was used to cook things in, as we use a stove now, and for heating purposes also. The room also contained a table and three chairs, in front of the fireplace was placed a rag rug made by Mary's mother. The bedroom contained a bed, chairs, and a small stand. This furniture was all made by Mary's father after they moved to New England.

Mary and her mother got up early one morning in May. The sun was shining and the sky was clear. When Mary had eaten her breakfast she asked her mother if she could go to the woods and pick flowers. Her mother said she could go if she was very careful not to lose her way, so Mary went down to the woods.

The next day would be Mother's Day, so Mary thought she would go to town and sell the flowers. When Mary had picked her basket of flowers she started for home. When she got there, she asked her mother if she could go to town, and her mother said she could. That afternoon Mary got ready and put her flowers in a basket and started for town. When she got there she went to a florist and asked the florist if he would buy her flowers. She did not think they would buy them, because the flowers were wild, and there were so many more prettier ones than hers, but to Mary's surprise the florist bought all of her flowers, and gave her money also for picking them.

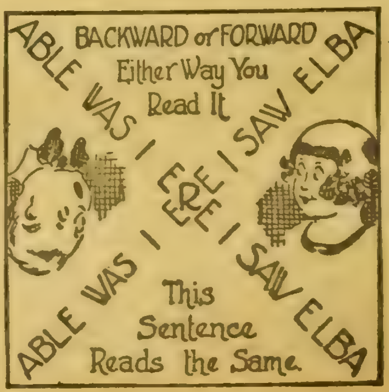
When Mary arrived home, her mother was looking for her, so she gave her mother the pay which was ten dollars, which seemed very much to her mother. This made Mary's mother have a happy Mother's Day all from little Mary.

Dear Uncle Ned:—Here I am six months in bed, and not able to get up yet. I hope I am the first one to enter that "scramble", and I wish you would mail my letter to some girl that I would be able to correspond with. I have written several letters to girls, but I have received no answers yet, but I wish all the cousins who see this letter would write to me, and I surely will answer every letter, regardless whether it is one or one hundred, so come on cousins, let me hear from you. I am a farmer's girl, 13 years old. Have brown bobbed hair, hazel eyes, am 5 ft. short, and weigh 90 pounds. I have two brothers, and one sister. My sister and one brother go to high school. As you will see by this letter, I live in the wonderful big (?) town of Emmett, and all of its inhabitants think it the best town on the map. I have so much of the Irish that I feel like an Irishman myself. Well, Uncle, I hope to see this letter in print, and that some of the cousins will write to me. Your niece,—Beryl McKenzie, Emmett, R. 2, Michigan.

Dear Uncle Ned:—Well, here I am again! I suppose you think I have the nerve of a "Government Mule", as my last letter was only printed a few weeks ago. Well about two days after the M. B. F. came, the letters began to pour in, and are still coming. I have received eighteen so far. I am answering them as fast as possible, but Oh! what a job. But then I sort enjoy it. Our mailman is a jolly, middle-aged man, and when the letters were coming in such a shower, he said "What's up, someone proposing to you?" But Uncle Ned knows it isn't proposals, don't you Uncle? Well I wonder how the weather suits the cousins? Pretty cold here tonight, but we have been having nice weather considering it is February. Oh Uncle, since I wrote last, I have a little new nephew. Born on January 3rd. His name is Robert Lee. but they call him Bobby. I also have 2 nice little nieces; Betty and Marie. I have lots of fun sliding down hill, although I am getting rather large for that kind of sport, don't you think so Uncle? But I sure enjoy it, and you know "We're young only once." I noticed a letter in the last issue from Mary Zietz. I got a letter from her, and she is a twin of mine. I also got a letter from a girl 16 years old, who has made a complete radio. Now boys, what have you to say to that? You see there are some girls who are as clever as boys. Well Uncle, I guess its time for me to stop my chatter, and go to bed. With love to all.—Ruby E. Fletcher, Pellston, R. 1, Michigan.

Dear Uncle Ned:—I was just reading the Children's Hour, and thought I would try my luck at it, as I have been in bed for three days with the measles. Do you like maple sugar? My father has a woods, and it is just back of our farm. He has rented it for three years now, and he has got it for another year. He says he would not miss making his syrup for anything. Last year my mother canned over one hundred quarts. The woods belong to Mr. Allen, of Alma, Mich. Wish you could be here to enjoy it with us. I am not describing myself, as I do not think it necessary if you do not see me. What is your chief record that you like? I think "Swinging Down the Lane" is very pretty. My sister has a Sonora, and lots of records. Most every night she brings home a new one. I will close with some riddles: What binds two together yet touches only one? What is the bigger? Mr. Bigger, or Mr. Bigger's baby? The baby is a little Bigger. I wish the nephews and nieces would write to me. Your want-to-be niece,—Ada Stone, Ithaca, R. 4, Michigan.

ANSWER TO LAST PUZZLE
PICKEREL and MACKEREL.


BACKWARD or FORWARD
Either Way You Read It
ABLE WAS I ERE I SAW ELBA
ABLE WAS I ERE I SAW ELBA
This Sentence Reads the Same.

UNCLE RUBE SPINACH SAYS

SOBBIN', ETC.

FOLKS'ES do you like sobbers? By that I mean, fellers 'at sob, whine, complain 'bout their work, 'bout their job, friends, an' almost everythin' else. Oh I've seen 'em, lots of 'em. Fellers 'll run a month to git a job, beg for it, pray for it, demand it, an' everythin' else, to git it, an' then, after they land it, they begin to sob 'cause it ain't a sleepin' job, or a job that has no work 'tached to it. As a feller sed, "more work and less of it" an' to most of our young fellers, the less, the better. Of course I know I was young once, ah, so many years ago it wuz—young as anybody then an' I guess I knew more'n most any young feller in our community—Well I didn't know how little I knew, little as I wuz, 'bout 35 years old—after that I knew less an' learned more'n I ever 'spected to know. But good friends, no matter how much or how little I know, I've never been a sobber—the sun always shines for me. I don't always see it,—a cloud may come between the sun and me—but I know it's there, shining bright, an' the cloud is just like a woman's veil hiding the beauty that lies behind.

Why sob 'bout our job? We don't have to work! You an' I can starve as well as anybody. My dear young fellers, the boys, like the boys that come to work with me, or boys 'at work on the farm—in fact, boys 'at work anywhere, in any place, under any conditions,—don't ever sob 'bout your job. If you don't like it, quit it, let someone come in that might like it. Don't slight your work. Even on the farm its possible to slight your job; you know what I mean, don't you boys? Weeding onions, parsnips, anything 'at requires skill, yes'n eatin' of the things you raise! It sure requires a strong will to keep from eatin' too much, an' yet boys sob 'bout farm life—its too hard, too many hours, too many cows to milk, hogs to feed—Gee Whitaker! Sob? I'll say they sob. If they realized that age would sometime git 'em, I jest kinda think mebbe they'd be less sobbin'.

Dear young fellers, I am thinkin' there's quite a lot of you takin' it here an' there—jest take the advice of a old feller 'ats yet to pass his next birthday, an' don't ever sob, don't be a whiner, don't be anything 'ceptin' what the Lord intended you to be, an' with these few remarks guess I'll close for now. Now you've got it same as I, an' its enough, an' most too much. Cordially yours.—UNCLE RUBE.

WHAT FUNDS ARE SPENT MUST FIRST BE RAISED

(Continued from Page 3.)

1916, 1917 and 1918 could maintain themselves and their institution under efficient management through the prison industries, 300 prisoners in their places now could also do the same thing. It would simply mean an enlargement of the industries, and facilities and labor for larger industrial activities means better advantages in such business, according to the logic of the industry."

What Can We Do?

With taxes unbearably high and public debt increasing at an alarming rate it is high time that we studied these facts. The light of relentless publicity and the purifying effects of informed public opinion upon them cannot help but have a beneficial effect. Let us stand for economy and also for a just and carefully devised system of distributing the burden of the necessary taxes which will remain even after the utmost economy has been applied.

Mr. Brake, we thank you for the excuse given by your inquiry for us to discuss in this detail some of the present financial problems of the state. But problems of local taxation are even greater, and we plan to take them up in our next article.

FOREST PROTECTION WEEK PROCLAIMED BY PRESIDENT

FOREST Protection Week for 1924 has been designated by President Coolidge for April 21-27, inclusive, announces the Forest Service, United States Department of Agriculture.

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CEMENT

The Farm Home
A Department for the Women

Edited by MRS. ANNIE TAYLOR

DEAR FOLKS—Easter! Spring! And all things beautiful seems to be the message that the word Easter usually brings to us. A wonderful old world, after all. Our good Lord has so arranged this earth that we may enjoy four beautiful seasons—each one holding a certain charm. Easter and Spring spells new life and new visions for a wonderful prosperous summer and fall. Let us all try and make this a happy and glorious season for our families by doing intelligently those things that will help make our home a place where life will be worth living.

Your Friend,
Mrs Annie Taylor

Address letters: Mrs. Annie Taylor, care The Business Farmer, Mt. Clemens, Michigan.

EASTER WEEK

SEE the land, her Easter keeping,
Rises as her Maker rose.
Seeds, so long in darkness sleeping,
Burst at last from winter snows.
Earth with heaven above rejoices,
Fields and gardens hail the spring.
Sloughs and woodlands ring with voices,
While the wild birds build and sing.

You to whom your Maker granted
Powers to those sweet birds unknown,
Use the craft by God implanted;
Use the reason not your own.
Here, while heaven and earth rejoices,
Each his Easter tribute bring—
Work of fingers, chant of voices,
Like the birds, who build and sing.
—Chas. Kingsley.

DAY DAWN—A QUIET TALK ON EASTER

OUT of the east comes, new light after the darknes of night—and we call it morning. Out of the Easter morning comes a wonderous new light—the light of life—after the darkness of sin's night—and it has been the first gleam of a morning, the morning of a new day, for all men.

Contrasts make things stand out. Black touching white seems blacker, and the white looks whiter. Sorrow makes joy seem gladder. Joy makes sorrow seem sadder. The deeper the sorry, the greater is the uplift of joy following after the first doze is over.

WORTH-WHILE THINGS

ALL adults who lived the year around on farms, in their youth, but who are at the present time incarcerated in cities, find that much of the conversation of their present contemporaries relating to the stage, popular plays, actors and actresses of a decade or two age, has few associations for them. Sometimes they feel keenly the fact that they were deprived of the glamour and fascination of the theatre.

There were, however, two substitutes for the magical amusement they missed. One of the most worth while things of life is the family reading circle. On many a winter evening the writer remembers listening to the father of the family read aloud to the mother who was busily sewing or knitting, and to the children who sat enthralled in the simple farm living room, while Howard Pyle's stories of Robin Hood or Mary Mapes Dodge's Donald and Dorothy kindled imaginations and made the coming of bed time a dreaded event.

The library was a meagre one, but Christmas and birthdays added to its size and the books were so persistently and devotedly read that they were "reduced and worn to the very threads and glues of their binding"; the best of it was that the whole family read and loved the same book.

Then there was the ride in the straw-filled sleigh, generously supplied with old blankets, to the school entertainment in which the older children took part, and the babies who were just learning to walk, ambled around at their own sweet will. The pantomine of Maud Muller read aloud, thrilled the audience. How lustily the children applauded the silent performers!

But it was a family reading cirlcle! A family sleigh ride! And the memory of these events is so vivid that the writer believes this little noted or greatly valued service rendered by farm homes in making it possible for the family to enjoy recreation in common, should be mangnified until its practice become more nearly universal.

MAKING DISHWASHING EASY

IS dishwashing really such a disagreeable task? Or do we think it is so because we work with poor equipment and according to methods that are not really satisfactory?

Before we discuss equipment, let us say a few words about some of the general factors that enter into the dishwashing problem.

Putting pots and pans to soak as soon as they are emptied makes it easier to wash them later on. Also, the scraping and correct stacking of dishes means a much neater job all the way through, as well as a real saving of time and labor. Too often does a woman pick up a random cup from a helterskelter conglomeration of dishes, wash that, then reach for a saucer, then perhaps a plate, and so through the list, until eventually all are washed. Meanwhile she has had to reach for and pick up so many dishes that she has changed her motion a number of times, with the consequent loss of energy and time. Had she stacked her dishes neatly and conveniently near to her dish-pan, she would have greatly expedited her work.

The right-handed worker will find it easier, as a rule, to have her piles of scraped dishes at the right of the dish-pan and her drainer at the left.

While water may not truly be called a part of the equipment, its importance in this connection is easily recognized. No one can exepect to have clean dishes if she attempts dishwashing in the proverbial teaspoon of water. Hot water, and plenty of it, is needed.

If the water is hard, some kind of water-softener is necessary. Borax is one of the milder softeners and is less injurious to the worker's hands than are some others. In the case of very hard water, resort is usually made to some such softener as washing-soda. No more should be used than is needed to "break" the water so that the soap lathers freely.

CAREFUL THOUGHT NEEDED IN CURTAINING WINDOWS

NOTHING impresses a visitor, be it man or women, more on approaching a house than the appearance presented by its windows.

There is nothing else in the furnishing of a house which is so apparent on the exterior as the treatment the windows have received, therefore is behooves us to give them careful thought.

Great expense is not necessary in curtaining windows. Charming effects may be obtained with cheese cloth, with flour sack material joined in decorative ways, or with the lower cost drapery materials. Scrim, marquisette, net and muslin are some of the drapery materials which may be had in inexpensive qualities.

To some people certain grades of scrim look not unlike a good quality of cheese cloth. The test of a really good scrim, however, is the slightly hard or scratchy feel of the material as it is rubbed between the fingers, due to the thread or "yarn" of which the material is woven being tightly twisted. The cheaper grades of scrim do not respond to this test.

Many of these inexpensive curtain materials some with a wide selvedge to be used as a finish instead of a hem. There is no objection to this if great care is taken in laundering, but if ironed carelessly the body of the curtain is apt to stretch, leaving the selvedge tight, thus preventing the curtain from hanging well. It is therefore a good plan to purchase the material with a selvedge or ordinary width, trimming off one selvedge on each curtain and making even hems along these edges. The hems should be placed towards the center of the window. There is no objection to the selvedge being left on the sides of the curtain next to the window frame.—Blanche E. Hyde, Clothing Specialist, Colorado Agricultural College.

FOR THOSE UNEXPECTED GUESTS

A CLEVER woman with a large rambling farmhouse in the country, discovered a convenient way of caring for her guests. It was not unusual to have five or six extra, many of them arriving unexpectedly and being persuaded to stay. There were always plenty of beds, couches and swings which could be pressed into service, but there was only one bath.

So a large shelf was fitted into the bathroom, and on this were six-small baskets—little round market or fruit baskets were used—and around the rim of each was painted a band of a different color. In each basket was placed a tiny cake of soap, a small tooth-brush with a little glass, a tiny tube of tooth-paste, and a wash-cloth with a border corresponding to the color of the basket. On a hook under the shelf—one for each basket—hung a towl, similarly colored, sewed to one side of which was a tape by which to hang it.

These were always ready, and there was never any confusing of toilet articles, for each guest was given a basket in which to keep his things, and kept it as long as he remained.

Since the house was built before days of electricity and had still the old-fashioned coal-oil lamps, some emergency method of lighting the guests to bed also seemed necessary, as the living-room lamps were too large to carry about conveniently. So six old-fashioned sconces, each holding a hand-dipped candle to match the color of the basket, were arrayed conveniently on the shelf so that each guest could find his light at hand. Several small lamps were of course provided for those who chose an hour of reading before retiring for the night.

DID IT EVER OCCUR TO YOU—

THAT an umbrella-stand with a pannel door opening outward may replace the newal-post at the front of the staircase?

That the wood-box for an open fire-place may be replenished by using a premitive elevator or hoisting tackle secured beneath the floor, through which has been cut a trap so that the wood-box may be pulled into place from below?

That a settee can be made from a bedstead by using the headboard as the back and cutting down the side-pieces to sixteen inches in length and attaching the foot posts to them? The space between the frame may be laced with closeline in lieu of a spring upon which a cushion is placed.

To utilize a small cider-keg as a base for a lamp? The frame of the shade may be made of split bamboo or wire and covered with oiled silk or a printed fabric shellacked and varnished.

Personal Column

Easter Suggestions.—Will you please accept this little Easter idea and pass it along as fast and as far as ever you feel it worthy. I have just as late as last Easter used for my children the idea of an eatable nest for the table on Easter noon day meal. Take the long fine strands of macaroni and while dry, have water in a large kettle or boiler, boiling hard, in which has been dissolved a good plenty of butter coloring, or yellow color, known as vegetable non poisonous coloring. Let macaroni boil real hard for 5 minutes, then add salt, and any good seasoning, and when this is put in do not stir any but let all continue to boil for 15 minutes more, then form into a nest on oval or meat platter. Then have salad made from ground hard boiled eggs, and salad dressing, and stuff colored egg shells, and fill in nest with same. This resembles real straw and is a delight to every one viewing the table. It may be found best to build a portion of nests at a time. I mean go all the way around, but build upwards a little by little, as each cools, then a rough outside may be added to all to finish and make like a real straw nest. This is my own idea and I have tried it out with my own ability, and find it a best new way.

Also there was a demand for a name for an Easter program or performance of school children, and I gave the name "Come to Our Easter Glow," and we had everything bright, and glowing, even to tinsel and gilt in the costumes. Let me say the title was just what they wanted. Please thank the legal department of M. B. F. for what they are doing for me.—Louis Lindley.

Too Much Smoke.—If Mrs. J. A. T. of Allegan, Michigan will place slices of the bacon in cold water for a while before frying, I think she will find that some of the smoke has been removed. If the bacon is freshened too much, it can be resalted when put to cook. When we buy bacon at the store it is usually too salty for us, and I treat it as above, to remove excess salt, and find that the smoke is also removed. Hoping this reaches Mrs. T. in time to be of help to her, I am,—Mrs. R. F., Elsie, Michigan.

Making Horse Radish.—Having found so many good things in The Farm Home Department of our paper, I wondered if I might ask if anyone of our department know how to fix horse radish so that it could be kept for winter use. I have tried and failed. Mine turns dark colored.—Subscriber's Wife.

Has Any Reader This Song?—I would like to know if any reader of M. B. F. has the words of the song "There's Always Room at the Top." I don't know if that is the right title of the song or not. We sang it in our school years ago, and it comes to my memory quite often, but I don't remember all the words, and I would like the music with it, if it were possible. I would pay for it.—A Reader.

"The Face Upon the Bar Room Floor"—Will someone send in this poem for one of our readers. I have looked in our local library and cannot find it.—Annie Taylor.

"Borax and Flour Cleaner"—In a shallow two quart vessel put one pint of water and one-half ounce powdered borax. Bring the water to a boil quickly, then while boiling, stir in one pound of flour, the vessel still on the stove. When the paste is done, pour onto a clean board and knead the mass for some minutes, as you would bread. When it is ready for use, try it and if it crumbles too much, it is either lacking in water, or has too much borax. If it is sticky there is too much water in it or not enough flour. Take a piece the size of your two fists and rub on the shade with sufficient pressure to cause the cleanser to crumble away a little rubbing with even strokes downward. Work it in your hands so there will be a fresh part always scraping off the dirt. Be sure and dust gently the worst of the dust off the shades before beginning. Cleaning with old stale bread is another very old method.—R. G.

Rupture Cure—2 ounces Iodine, and 1 ounce of Camphor, mixed. Rub twice a day on rupture. If it blisters, omit one day. Use 3 weeks, then once a day until cured A truss may be worn during this time. When cured, leave truss off occasionally. In case of a bad cough or cold should it return, apply the remedy. This remedy has cured some very bad cases.—A Subscriber.

—if you are well bred!

Street Courtesies.—The place next to the curb for the man walking with a lady on the street is the traditional rule still generally observed. In cities nowadays, it is usually not insisted upon. The inner was the "protected side", and modern urban conditions have done away, more or less, with the need for special protection. The rule of precedence when a man and woman are together in public is simple. The man precedes the woman wherever inconvenience, difficulty or danger may be supposed to exist: in passing along a thorny or marshy path or a broken stretch of road in the country, in forcing a way thru a crowd. A man allows a woman to precede him when entering a doorway, an elevator or a conveyance. He precedes her to aid her when they leave any vehicle.

Menu for April 12

Pea Soup Rice
Mock Goose, Apple Sauce
Stewed Celery
Pineapple Salad
Rhubarb Pie
Coffee

Mock Goose.—Two cup bread crumbs, two cups dropped black walnuts, two cups boiled rice, six hard boiled eggs, three raw eggs, one tablespoon grated onion, salt, pepper and grated nutmeg to taste. Put bread crumbs in saucepan with two cups water; cook for a few minutes; add hard cooked eggs, chopped; take saucepan from fire and add black walnut meats and rice. When this is well mixed, add raw eggs slightly beaten, and seasonings. Mold as near like a goose, making the legs and wings of material pressed over a piece of dry macaroni and stuck in sides where they belong. Brush over with melted fat and bake in oven one hour. Serve with apple sauce.

RECIPES

Bread Pudding.—Two cups of bread crumbs, one quart scalded milk, one-fourth cup sugar, three tablespoons butter, two eggs, one-half teaspoon salt, one teaspoon vanilla, one cup raisins. Soak bread in the milk, cool. Add sugar, butter, beaten egg yolks, salt, vanilla, and raisins. Bake 40 minutes, cover with a meringue made of two stifly beaten egg whites, and two tablespoons sugar. Brown.—Mrs. F. S.

Lemon Cookies.—One ounce carbonate of ammonia, one and one-half drams of lemon oil, one pint of sweet milk, one cup of lard, three cups of granulated sugar, three eggs beaten separately. Soak ammonia over night in the sweet milk, and mix the flour and lard like pie dough, then add other ingredients. Buy the ammonia and lemon oil the day before you plan to bake cookies, as it should be fresh.

Graham Gems.—One egg, one-half cup of sugar, one heaping teaspoon melted butter, one cup sour milk, one teaspoon soda, add enough graham flour to thicken, and drop into gem tins.—G. R.

Eggless Cake.—One cup of brown sugar, one-half cup lard, one cup of sour milk, one teaspoon soda, two tablespoons of molasses, one teaspoon salt, one teaspoon cinnamon, two cups of flour.—G. R.

Banana Pie.—One-half cup milk, one-third cup sugar, two heaping (not too large) tablespoons flour, two yolks of eggs, bring milk to boil, thicken with flour and egg yolks, add sugar, remove from fire and cut two bananas fine, stir in the hot filling, pour in a pie shell, make a meringue of whites of the two eggs, add two tablespoons sugar, and put in oven until nice and brown. Heating in oven makes flavor of bananas go through the whole pie. More sugar may be used if desired.—A Subscribers Wife.

Date Pie.—Line a pie plate with crust, put enough stoned dates to cover bottom, add one cup brown sugar, and one cup water. Bake with upper crust in a moderate oven. Whipped cream to cover when cool enough.—Mrs. H., Bayshore, Michigan.

The Runner's Bible

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Thou shalt increase my greatness, and comfort me on every side.—Ps. 71:21.
Behold, now is the accepted time; behold, now is the day of salvation.—2 Cor. 6:2.

Never speak of an opportunity as being lost. There is no such thing. All possibility awaits you now. The law of good, like the law of gravity, operates constantly for everyone, and nothing one can do can change its activity in our behalf with such obstacles as self righteousness, false ride, hatred, and other evils.

WOMEN'S EXCHANGE

IF you have something to exchange, we will print it FREE under this heading providing: First—It appeals to women and is a bonifide exchanges, no cash involved. Second—It will go in three lines. Third—You are a paid-up subscriber to The Business Farmer and attach your address label from a recent issue to prove it. Exchange offers will be numbered and inserted in the order received as we have room. —MRS. ANNIE TAYLOR. Editor

114.—Exchange Red Amarylls for Peony, Phlox, Iris, or any hardy flower.—Mrs. Chas. Sass, Clayton, R1, Michigan.

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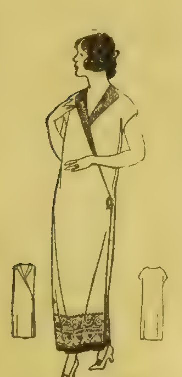
4688-4418. The Season's Popular Style—For sports wear, for business or street costume here portrayed will be ideal. White flannel with binding of black suede would be very striking and "sporty." Serge with a simple finish of machine stitching and with collar and cuffs of linen or organdy make a neat business suit in this style. The Blouse Pattern is cut in 6 Sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. The Skirt is cut in 7 Sizes: 16, 18 and 20 years for Misses, (25, 27 and 29 inches waist measure) and 31, 33, 35 and 37 inches waist measure for Ladies. 2¼ yards at the foot. To make this costume for a medium size requires 4¾ yards of 40 inch material.

4670. A Popular Style for Slender Figures.—Bordered goods, embroidered crepe, kasha and linen would all be attractive for this model. The dress is in wrap style. The fronts are turned back to form revers. The closing may be from left to right or the reverse. One may have this style with the short sleeve cap, or entirely sleeveless. The Pattern is cut in 3 Sizes: 16, 18 and 20 years. An 18 year size requires 4¾ yards of 36 inch material. The width of the skirt at the foot is 1½ yard.

4679. A Charming Frock for Juniors and Misses.—Silk and crepe could be pleasingly combined in this model which is also nice for linen, figured crepe or printed voile. One may have the sleeves in elbow length, or in wrist length. The Pattern is cut in 4 Sizes: 14, 16, 18 and 20 years. A 16 year size requires 4 yards of 40 inch material. To make as illustrated will require 3¼ yards of plain and ¾ yard of figured material 40 inches wide.

4681. A Comfortable Coat Style.—This is a good model for covert cloth, for heather mixtures as well as for pongee, kasha, twill and velours. The Sleeve is new and very comfortable. This Pattern is cut in 5 sizes: 6, 8, 10, 12 and 14 years. A 12 year size requires 3¼ yards of 40 inch material.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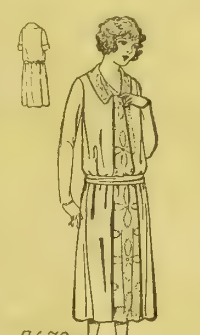
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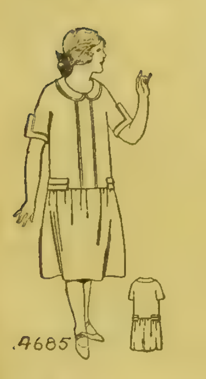
4692. "Peter Rabbit' and His Spring Suit.—Here is a well known nursery friend, ready for the Easter Parade, with a new Jacket and Overalls. One could make the Jacket of satin or velvet, and the Overalls of flannel, jersey or linen. The Pattern includes the "doll" and the garments. It is cut in 3 Sizes: Small 12, Medium 16, Large 20 inches in length. A 12 inch size requires ½ yard for the "doll" and ⅞ yard for the jacket and overalls. To make as illustrated will require ½ yard of 27 inch material for the Jacket, and ⅜ yard for the Overalls.

4691. A Smart "Early Season" Jacket.—Short "coats" are very popular, and lend themselves to attractive developments in silk, satin, kasha, twill, and other wool fabrics. Linen and silk alpaca would be fine for the style here portrayed. The Pattern is cut in 6 Sizes: 34, 36, 38, 40, 42, and 44 inches bust measure. A 38 inch size requires 2⅜ yards of 40 inch material.

4689. A Comfortable Corset Substitute.—Satin, sateen or drill are good materials for this model. It is a style that is suitable for slender and stout figures. The Pattern is cut in 4 Sizes: Small, 34-36; Medium, 38-40; Large, 42-44; Extra Large, 46-48 inches bust measure. A Medium size requires 1 yard of 36 inch material.

4685. A Very Attractive Frock for the Growing Girl.—Wool crepe, pongee, linen or gingham, could be used for this model. The closing is under the plaits in front. The trimming folds may be omitted on sleeves and waist. This Pattern is cut in 4 Sizes: 8, 10, 12 and 14 years. A 10 year size requires 2½ yards of 40 inch material.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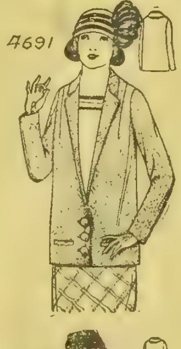
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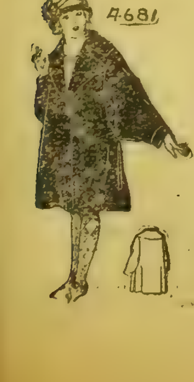
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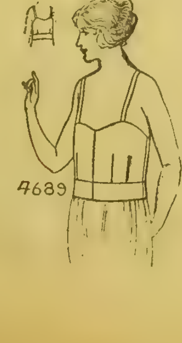
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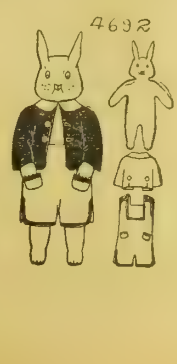
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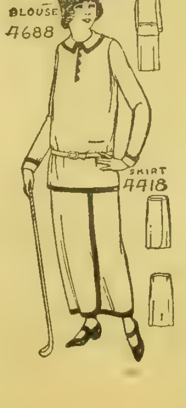

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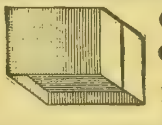

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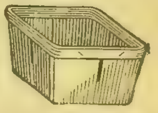

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U.S. RECORD $2,059.20 1 acre set same year. Champion Everbearing Strawberries. Bears 5 Mos. first year. Trial Order 250 plants $2.75 Postpaid, direct from the ORIGINATOR. Catalog Free. **Edw. Lubke, R9, New Buffalo, Mich.**

STRAWBERRY PLANTS FOR SALE Senator Dunlap and Dr. Burill, 60c per 100, $4.50 per 1000; Progressive Everbearing $1.00 per 100, $7.50 per 1000; St. Regis Everbearing Red Raspberries $1.50 per 100. Postage paid. **L. T. MORRIS, Athens, Michigan**

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STRAWBERRY PLANTS $3.00 PER 1000. Black Raspberry $12; Red $13. 20 Iris $1. 8 apple trees $1. 15 grapes $1; 1000 grapes $25. We grow the best plants in Michigan. Free catalog. **The Allegan Nursery, Allegan, Michigan.**

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FRUIT PLANTS—PRICES RIGHT—SEND for our free catalogue. Strawberries, Raspberries, Grapes, Dewberries, Gooseberries, Currants. State inspected. **Hellenga's Nursery, Three Oaks, Mich.**

20 DELICIOUS APPLE TREES $1.00 Start them with my hand made root grafts. 100 Hollyhocks seed and list of other bargains for 10c. **MARSHALL'S VINEYARD, Paw Paw, Michigan.**

Have You LIVE POULTRY For Sale? An Ad in THE MICHIGAN BUSINESS FARMER Will Sell It!

Reliable Transport

During almost every winter there comes to Michigan at least one period in which all inter-city transportation fails, except that furnished by the State's 24 steam Railroads. Such a period followed the snowfall of February 19, 1924.

During that period, traffic was suspended on even the most extensively traveled trunk highways. Automobiles, trucks and buses either remained indoors or were deserted and left in the drifts, awaiting aid from the highway authorities.

Yet, throughout this entire period, no community in Michigan suffered for food or fuel. For the railroad trains moved, carrying the freight and passengers entrusted to their care. Railroad men fought day and night against the storms, that this service might be provided.

The railroads consider it a compliment that Michigan always expects good railroad service, even complaining occasionally, it mid-winter trains vary from fair-weather schedules.

The expenses of this service under storm conditions are always excessive—and the state pays no part of the bill as it does for highway snow clearing. Railroad men incur the hardships and railroad capital pays the bill.

Will you recall, next July, that the Railroads hauled in your winter food and fuel despite 6 foot snowdrifts which shut off other means of transportation? Courage and railroad earnings did this—not your tax money.

Michigan Railroad Association

Railway Exchange Bldg., Detroit, Mich. (6)

"We Serve Michigan"

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Advertisements inserted under this heading for reputable breeders of Live Stock at special low rates to encourage the growing of pure-breds on the farms of our readers. Our advertising rate is Thirty Cents (30c) per agate line, per insertion. Fourteen agate lines to the column inch or $4.20 per inch, less 2% for cash if sent with order or paid on or before the 10th of month following date of insertion. SEND IN YOUR AD AND WE WILL PUT IT IN TYPE FREE, so you can see how many lines it will fill. Address all letters,
BREEDERS DIRECTORY, MICHIGAN BUSINESS FARMER, MT. CLEMENS, MICH.

CLAIM YOUR SALE DATE

To avoid conflicting dates we will without cost, list the date of any live stock sale in Michigan. If you are considering a sale advise us at once and we will claim the date for you. Address, Live Stock Editor, M. B. F., Mt. Clemens

April 22—Holsteins, Short and Miller, Flushing, Michigan.

HOLSTEINS

HOLSTEIN
THE FARMERS COW
Write for Literature
Extension Service

2. Of 94 cows producing 1000 lbs. butterfat or more in one year, 77 are Holsteins. As a breed they average highest in official tests for total butterfat. Holstein production insures profits

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SALE Our Entire Herd Holstein Cattle

25 head cows and heifers, 2 bulls. T. B. tested. Sale at farm ½ mile from Flushing. Sale on

TUESDAY, APRIL 22nd
Starting at 12 o'clock.
If interested write for catalog.
SHORT AND MILLER, Flushing, Michigan.

FOR SALE: CARLOAD REGISTERED HOLSTEIN cows; young, tuberculin tested. Bargain prices. J. E. GAMBLE Hart, Michigan.

HEREFORDS

HEREFORDS

Registered Breeding Cattle, T. B. Tested at practical prices for production of Hereford Baby Beeves profitably all ages.
T. F. B. SOTHAM & SONS.
(Herefords since 1839.)
St. Clair, Mich.

BREED HEREFORDS THAT FATTEN quickly. Eleven choice two-year old heifers and several yearling bulls sired by International Prize Winners for spring sale. Write us for information. Breeders of Herefords since 1860.
CRAPO FARM, Swartz Creek, Michigan.

ANGUS

WE HAVE SOME FINE YOUNG ANGUS BULLS from International Grand Champion Stock at reasonable prices. E. H. KERR & CO., Addison, Mich.

AYRSHIRES

AYRSHIRES

To make room for winter we are offering bred cows and heifers also some well bred young bulls. Look up our winnings at leading state fairs.
W. T. SHUTTLEWORTH, Ypsilanti, Michigan.

FOR SALE—REGISTERED AYRSHIRE bulls and bull calves, heifers and heifer calves. Also some choice cows.
FINDLAY BROS., R 5, Vassar, Mich.

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FOR SALE—ONE RED SHORTHORN REGISTERED bull, age ten months. One roan shorthorn registered bull, age eight months. Also four red heifres, coming two years old.
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RAISE SHORTHORNS WITHOUT HORNS Like Kelley does. U. S. Accredited Herd No. 28945. For description and price write.
L. C. KELLY & SON, Plymouth, Michigan.

GUERNSEYS

MAY – GUERNSEYS – ROSE

STATE AND FEDERAL ACCREDITED
Bull calves out of Dams up to 877 pounds fat. Sired by Bulls whose Dams have up to 1011 pounds fat. The homes of bulls; Shuttlewick May Rose Sequel, Jumbo of Briarbank and Holbecks' Golden Knight of Nordland. From Dams producing 1011.18 fat, 772 fat and 610 fat.
GEORGE L. BURROWS or GEORGE J. HICKS, Saginaw, W. S., Michigan.

RED POLLED

FOR SALE OR RENT—40 ACRES OR MORE. Dwelling, 2 acres, village Dryden, Mich. Polled Shorthorn Young Bull calf. 22 thresher. Collie pup. Write, Frank Bartlett, Dryden, Michigan.

FOR POLLED SHORTHORNS Milk Strain Either Sex.
PAUL QUACK, Sault Ste Marie, Michigan.

RED POLLED BULLS READY FOR SERVICE. From good milking strains. Prices right.
JACOB BERNER & SONS, Grand Ledge, Mich.

RED POLLED CATTLE Males and Females Large Yorkshire swine. E. S. CARR, Homer, Michigan.

RIGHT OF PEDESTRIAN ON HIGHWAY

(Continued from Page 6)

and it is impossible to give and definite advise without being presented a definite statement of facts.

I suggest that you consult some local counsel, or if your interest is merely academic, you should secure some text book on highways.—H. Victor Spike, Assistant Attorney General.

INDEPENDENT SUGAR COMPANY

I am writing you in regard to the Independent Sugar Co. of Marine City. Have they reorgnainzed and who is the head of it? Are they reliable? Do you think I would be safe in putting in beets for them? I lost nearly $500.00 in the old company when Handy Bros. were managing it and I feel a little suspicious.—C. L., Marlette, Mich.

—We do not know of any stock of this company being offered for sale, and we are in no way interested in selling any stock. It may be possible that someone is endeavoring to organize a company for the purpose of purchasing the plant. If that is true, we know nothing about it.

The plant of the company is for sale. The Bond Holders would be very glad to sell the property at a price which will reimburse them for their investment and the expense they have been put to in the way of taxes, etc.

The Marine City Sugar Co. under the auspices of the Bond Holders Protective Committee is now writing contracts for acreage in the vicinity of the plant, which will be sold with the plant so that the purchaser may have beets to run the factory during the coming campaign. These are bona fida contracts, and the farmers can be assured that they will be carried out in every particular, and that they will receive cash for their beets in the usual course of business.—Geo. E. Wedthoff, Sec'y-Treas., Bond Holders Protective Committee, present owners.

AVOID EXPENSE OF FORECLOSURE

In case of foreclosure under the Federal Farm Loan Act, who should start action, the Federal Land Bank or the local association? We have a case in our association of a farm, on which there was a loan made, being sold to a party who has allowed it to be returned for taxes. Should the local association take up the tax title by paying the delinquent tax out of its own funds, thus buying the farm in time, or let the federal bank attend to the matter? It would seem that in case of foreclosure the federal Bank is the proper party to start action since they have all necessary papers to do this.—H. C. B., Bellaire, Mich.

—If the owner's equity in the farm is worth enough to justify it, I would suggest that you purchase the farm and pay the taxes and pay off the mortgage, and thereby aviod the expense of foreclosure proceedings, which expense would eventually come out of the owner's equity, in case the bank took this action.—Asst. Legal Editor.

WOULD COMPENSATION GO TO CHILD?

A widow receives compensation for the accidental death of her husband. She has a little girl. If the widow dies without a will, would the compensation go to the child without going through court? Your answer will be greatly appreciated. We could not get along without the M. B. F. any more. Thanking you.—Mrs. L. J. L., Wolverine, Mich.

—Compensation would be payable to the child as a dependent, and without the necessity of any court action, if it were under 16 years of age at the death of the mother. If over 16 years and not physically or mentally incompetent, it would not be entitled to compensation.—Asst. Legal Editor.

Now You Tell One

An Irishman, an Englishman and a Scotsman were all out of work. They traveled together in search of employment, and came to a farmer's house and applied. The farmer said whoever could tell the biggest lie could have a job. The Englishman said he went to the North Pole in a tub. The Scotsman said he swam to the South Pole. The farmer then asked Pat, "Well, Pat what is your lie?"

"Begorra, sir" said Pat, "I believe these lads." Pat got the job.—Winnipeg Tribune.

MICHIGAN CROPS

"SPELTZ" OR WHITE EMMER

I am writing to you in regard to Speltz. Does Speltz do well in this locality and is it good for all kinds of stock? If so, where can I get good seed? Will sweet clover do well on ground that has never had sweet clover or alfalfa on it? Would you recommend sowing sweet clover in corn after the last cultivation? Does spring wheat do well in this locality?—O. McC., Mancelona, Mich.

—Several thousand acres of "Speltz" or white Emmer are grown annually in Michigan. The true Speltz is grown to a very little extent. The White Emmer, commonly called "Speltz" gives comparatively good results on light lands or on soils too poorly drained for good oats, barley or wheat growing. On well drained soil of average fertility, Speltz is outyielded by wheat, rye, oats, or barley.

White Emmer is planted in the spring as early as possible. Two bushels of seed per acre is needed. When threshed the chaff adheres to the kernels. It is fed in a similar manner to the feeding of oats or barley. It furnishes good stock feed and is highly appreciated by poultry men. Dependable seed can be secured from the Farm Bureau Seed Department, 221 N. Cedar St., Lansing, Michigan, or the S. M. Isbell Company of Jackson, Michigan.

In planting sweet clover on ground where it has not been grown previously, the seed should be inoculated with the proper culture, which can be secured from the Department of Bacteriology of the Michigan Agricultural College, East Lansing. The price is 25c per bottle and one bottle contains sufficient material to inoculate a bushel of seed. Directions for application accompany the material.

Best results come from sweet clover seedings made in early spring, using fifteen pounds of scarified seed and not more than a bushel of oats or barley as a companion crop. Occasionally good results come from seedings made in corn after the last cultivation. Such seedings are much more likely, than spring plantings, to be seriously injured by drought.

Spring wheat will give good results on the heavier soils in your locality. On the ordinary loams and lighter soils, spring wheat suffers greatly from summer droughts and will not yield as well as oats or barley. The Marquis variety is the highest yielder.—J. F. Cox, Professor of Farm Crops, M. A. C.

COLORADO'S CHAMPION JERSEY IS FROM MICHIGAN HERD

A. H. DONALDSON of Tyrone township, Livingston county, has been a member in cow testing association work for the past two years. Mr. Donaldson's life work has been to breed and keep high class Jersey cows. He is a firm believer in desiring to know that each animal pays for its feed and returns a profit over the year's time. His good purebred Jersey herd is known beyond the confines of his township and county and even beyond the boundaries of Michigan. Colorado has a champion butterfat producer that originated in Mr. Donaldson's herd. The living grand champion cow of Colorado, a purebred Jersey six years old, Cristine of Elm Place, 395208, has just completed a 365 day record on twice a day milking, making 14722 pounds milk and 778.6 pounds butterfat.

Mr. Donaldson is not leaving all of the good ones go out of his hands. He has a full sister to this cow in his herd that is making a very good record in the cow testing association work. To know the true value of cattle and to be a true breeder of good livestock is a strong asset for any farmer. Mr. Donaldson with his Jersey herd is making a strong record in practicing the best methods to improve his herd in every manner. He uses the best of purebred sires and grows abundant alfalfa hay to feed his well bred cows.—A. C. Baltzer, Ext. Spec., M. A. C., Lansing, Mich.

Chinaman—Tellee me where ra'lroad depot?

Citizen—What's the matter, Kan Lee? Lost?

Chinaman—No. Me here. Depot lost.

McCORMICK-DEERING

EVERY Spring, more farmers are turning to the tractor as the real key to farm profit. The need for more yield, the need for saving precious time, the need for cutting out all surplus expensive labor—for these the logical remedy is *tractor power.*

Tractor owners have increased over 7500 per cent in the United States in the past ten years. The trend of farm power goes onward, never backward. The man who returns to old methods, after tasting the flexibility, the freedom, and the profit in tractor farming, is so rare that he may be looked upon with curiosity.

McCormick-Deering 10-20 and 15-30 Tractors are built for all-around practical farm use. They are designed and equipped to work with many machines—to handle both field and belt work to best advantage. They are simple, easy to handle, and they will serve their owners many years.

Remember that *the crankshaft and the main ball bearings in McCormick-Deering 10-20 and 15-30 are guaranteed for the life of the tractor.*

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POLAND CHINAS

SHOW WINNING POLAND CHINAS

Two good herd boar good enough to head any purebred herd any where. Get my price on one of these. Booking orders for pigs at weaning time, $10 up. The very best of breeding. Over 60 head to pick from up to date and several sows to farrow. Write for prices and description to

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O. I. C'S: 75 LAST SPRING PIGS, PAIRS not akin. From 3 good strong sires. Also fall pigs. Recorded free. ½ mile west of depot.
OTTO SCHULZE & SONS, Nashville, Mich.

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HAMPSHIRES—BRED GILTS AND BOARS at bargain prices. Write your wants. 12th year.
JOHN W. SNYDER, St. Johns, Mich., R. 4.

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Shropshire Ewes for Sale: Fifteen Head of registered Shropshire ewes. Will begin to lamb middle of April. Price $25.00 per head. Union phone. C. V. Tracy, Ithaca, Michigan.

5 SHROPSHIRE EWES OF THE WOOLY TYPE, registered and priced right.
DAN BOOHER, Evart, Michigan.

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To say, for instance, that Larro bran is standardized means that scores of carloads of highest grade bran, with all their variations, have been combined into one unchanging blend of bran that is just right in every way—in color, texture, analysis and feeding value.

The standardizing process does what Nature and the people who produce feeding stuffs cannot do —it keeps each Larro ingredient exactly the same—it takes out the variations of color, texture, analysis and feeding value that they allow to creep in.

That's why Larro not only looks the same, but *is* the same, year in and year out.

Larro makes cows do their best all the time—they don't go off feed—they make you a bigger profit whether milk is up or down. Let Larro end your feeding problems now. It's the same milk-making, profit-making ration all the year round. Safe, uniform, healthful, profitable.

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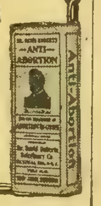

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I've been in the Retail Drug Business for 20 years. I served four years as a member of the Indiana State Board of Pharmacy and five years as President of the Retail Druggists' Association. Nearly everyone in Fort Wayne knows me and knows about my successful treatment. Over **twenty thousand** Men, Women and Children outside of Fort Wayne, have, according to their own statements, been cured by this treatment since I first made this offer public.

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BREEDS OF BEEF CATTLE

2—Hereford

THE Hereford ranks next to the Shorthorn in numbers in the United States. The first known importations were made in 1817 by Henry Clay and Lewis Sanders. The early development of the Herefords in America was brought about largely through the efforts of William T. Sotham and T. L. Miller. In 1881 the American Hereford Cattle Breeders' Association was formed by Hereford breeders, among whom were T. F. Sotham, T. L. Miller, W. S. Van Natta, J. M. Studebaker, and R. W. Sample. What is now Volume 1 of the American Hereford Record appeared in 1880 as the American Hereford Herd Book, being published by the Breeders' Livestock Association.

From the first Hereford cattle, because of their "rustling" ability, found favor with the western range men. On scant pastures and on the range where waterholes are far apart, the Hereford has shown its merit. Not only do the individuals of this breed thrive under adverse conditions, but they also respond readily to a favorable environment. The bulls are active, vigorous, prepotent, and very sure breeders.

The criticism formerly made of the breed because of a light hind quarter can scarcely be considered just today. The animals are somewhat less rangy, more compact, and more heavily fleshed than formerly. The tendency to patchiness about the root of the tail and "rolls" on the sides is also a criticism frequently heard. While the Hereford cows have been criticised because of scanty milk flow, there are few if any that do not produce enough to raise a good calf. As a breed they have a better heart girth and seem to withstand adverse conditions better than the Shorthorns. They mature early and fatten readily in the feed lot.

The weight of the Hereford cattle is only slightly less than that of the Shorthorn, but the conformation is such that a Hereford looks smaller than a Shorthorn of equal weight. Mature bulls weigh from 1,900 to 2,200 pounds, while the cows weigh from 1,200 to 1,600 pounds. It is not unusual for mature animals of either sex to weigh more.

The Hereford color is distinctive. It may be described as a medium to deep rich red, with white head, breast, belly, crest, switch, and legs below the knee and hock. White occuring back of the crops, high on the flank, or too high on the legs, is objectionable. A pure-white face is preferred, although many purebred animals show spots about the face and especially some red around the eyes. The hair is usually medium to long, soft and silky, with a curly tendency, but short-haired animals may be found. A characteristic of Hereford color is the dominance of the white face over the color markings of other breeds. Calves sired by a purebred Hereford bull, as a rule, show the characteristic white face.

The Hereford possesses a conformation which represents good beef type. The body is low, compact, and blocky, with well-sprung ribs, broad loin, and wide hips without prominent hip bones. The quarter is more rounded and bulging than that of the Shorthorn, although developed to a lesser degree in this respect than the Aberdeen Angus. The forehead is broad and prominent and the face is short, tapering slightly toward the nose. The muzzle is full, with large, open nostrils. The horns are of medium size, even color, and extend from the head at right rangles, level with the crops, curving forward and downward.

The horns of the bull are somewhat coarser, straighter, and heavier. The neck is short, thick, and blends well with the shoulders. Great width, depth, length of chest, and a fullness of the crops give the Herefords the constitution and endurance which breeders have been careful to preserve. The loin is broad and deep and the rump and hind quarters are usually well developed, carrying a large quantity of flesh. This portion of the body has been greatly improved within recent years and the tendency to roughness and patchiness has been reduced until the breed now stands out as one showing extreme beef type, with smoothness of form and

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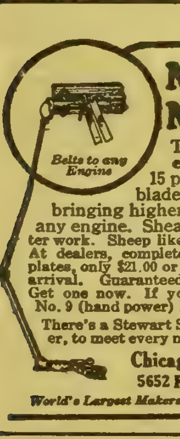

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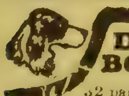

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much quality. For these reasons, combined with their "rustling" ability, the Hereford has become a poplar breed for improving range stock. The results obtained by the use of Hereford bulls for this purpose have been very satisfactory to the cattlemen in the West and Southwest.

The marked increase in the number of Hereford breeders in the Northwest would indicate that the breed is well adapted to a very cold climate as well as to that of the South. Neither the heat in the Corn Belt nor that in the South seems to bother them. They appear to be especially well adapted for use on the larger plantations, where animals are not given extremely good care and where the production of beef alone is desired. Two or three crosses on the native stock of the South produce a good beef animal that matures early and fattens well. On unimproved plantations or on farms with only fairly good pastures the Hereford gives better results than the Shorthorn. The rapid increase in the popularity of Herefords in this country is shown by the number of registrations and transfers in the last two years as reported by the American Hereford Cattle Breeders' Association.

The association mentions the following as some of the bulls which have been most influential in improving the Hereford breed during recent years: Perfection Fairfax 179767, Beau Donald 58996, Beau Brummel 51817, Bonnie Brae 8th 239653, Perfection 92891, Bonnie Lad 20th 555369, Beau Blanchard 362904, Woodford 500000, Beau Mischief 268371, Repeater 289598, Gay Lad 6th 316936, Cuba's Panama 372431, Bocaldo 362186, Gay Lad 9th 386873, Gay Lad 16th 412192, and Point Comfort 14th 337488.

HOW TO PREVENT COW FROM SUCKING SELF

I have a fine Holstein and Jersey three-year-old cow, had her first calf last May and soon after she took to sucking herself. She gives a good mess of milk when kept tied but as soon as lose she sucks herself dry. What would you suggest to break her of the habit?—O. F. H., Bay City, Mich.

—There are several remedies that have been tried, some with more success than others, to prevent a cow from sucking herself. One is to pierce her nose and put a bull ring in the nose and have two or three links of common chain hang from this chain gets in the way and she gets discouraged. A good many people have never failed to stop their cows in this way. Once in a while there are cows that have this habit so fixed that they in some way or other persist in the habit even with the chain in their nose.

Another method that has been used by some is to split the cows' tongue for about two inches. This plan has also stopped this habit in many instances, but we know defintiely of instances where the cow continued the habit.

Others have tried putting heavy bands around the cow's body and then fastening straps from each side of the halter to this girth and thus preventing the cow's reaching back to the udder.

Another scheme is to equip a halter with nails or tacks so that these nails or tacks will pierce the cow's flesh when she attempts to get to the udder.

The one that I particularly recommend is the bull ring method and if this fails I think I would try to substitute another cow for this one. —O. E. Reed, Professor of Dairy Husbandry, M. A. C.

M. A. C. HORSE SHOW SUCCESS ASSURED

WITH entries already made or assured by riding and hunting clubs of Detroit, Grand Rapids, Bay City, Flint and Lansing, the annual R. O. T. C. Horse Show at the Michigan Agricultural College grounds bids fair this year to take rank as the leading event of its type in Central Michigan. The annual show is scheduled for May 30 and 31.

Entertainment features during the Horse Show will include the M. A. C.-University of Wisconsin base ball game on Memorial Day, and concerts both days by the M. A. C.

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Cows and a New De Laval will give it

With a De Laval Cream Separator you harvest your crop twice a day instead of once a year, giving you a steady cash income. You also make more money from good cows and a De Laval than in any other way. Butter and butter-fat bring good prices. Skim-milk is splendid feed for calves, pigs and chickens, all of which bring in additional money. And a ton of butter-fat removes only 50 cents' worth of soil fertility, while the feed required to produce it, if sold, would remove $400 worth.

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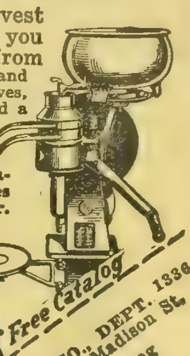

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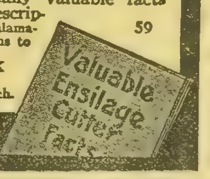

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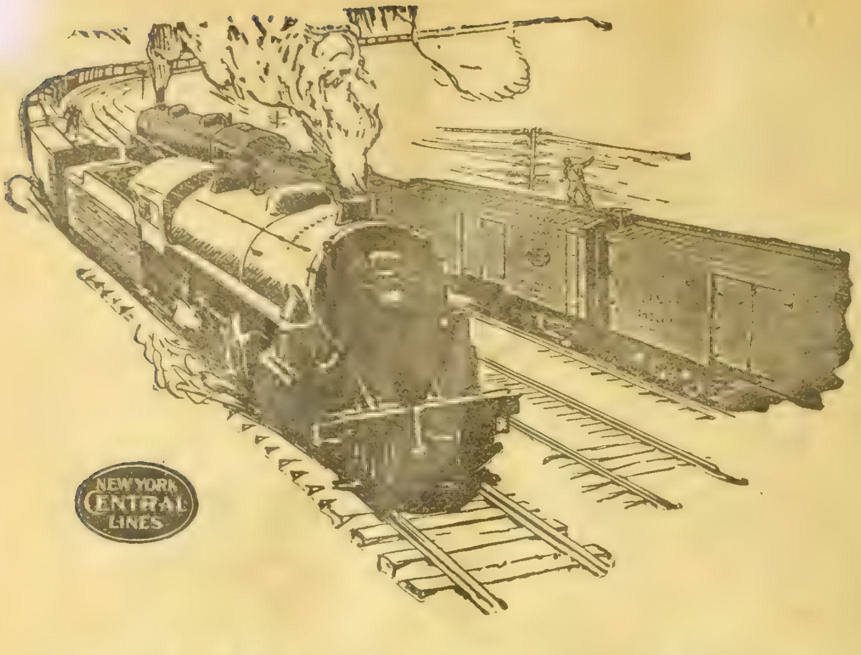
10 ACRES, GOOD, LEVEL, WELL DRAINED, sandy loam land, with good 7 room house with basement and small barn, located within the limits of the village of Evart, less than ½ mile to good approved High School, also good position for purchaser. Price $1,000.00 Cash. Write or Wire —W. F. UMPHREY, Evart, Michigan.

140 ACRES, EDGE TOWN, 3 HORSES, poultry, 17 cows and heifers, implements, tools, crops; prosperous farming district, convenient markets; on improved road edge depot town: 100 acres loamy tillage, 20-cow brook-watered pasture, woodlot; variety choice fruit; comfortable 10-room house, slate roof, big barn, stable, etc. Owner unable operate all for $4900, only $1500 needed. Details page 57 New Illus. Bargain Catalog money-making farms, best sections United States. Copy free. STROUT FARM AGENCY, 427KJ Marquette Bldg., Chicago, Ill.



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Taxes are a part of the cost of everything we eat, wear or use. Nothing escapes and no consumer can escape paying.

In the freight and passenger rates paid by the public last year were Federal, State and local taxes reaching the record figure of $336,000,000.

New York Central Lines taxes amounted to $37,605,560, or more than $100,000 a day; nearly three times what they were ten years ago.

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Advertisements inserted under this heading at 30c per agate line, per issue. Commercial Baby Chick advertisements 45c per line. Write out what you have to offer and send it in. We will put it in type, send proof and quote rates by return mail. Address The Michigan Business Farmer, Advertising Department, Mt. Clemens, Michigan.

JERSEY BLACK GIANTS MARTIN'S FAMOUS Washtenaw Strain Cocks, Cockerels and Eggs for sale. **P. MARTIN, Ann Arbor, Mich., R5, Box B.**

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PULLETS BARRON ENGLISH AND FERRIS Americans Leghorns. Eight weeks, eighty-five cents. Barred Rocks, White Rocks, Rhode Island Reds, one dollar. Ready April twenty-first. Early hatches make bigger, stronger birds. Early fall and winter eggs.
RUFUS MORSE, Belding, Michigan.

TANCRED, HOLLYWOOD AND WYCKOFF Males head my carefully selected breeding pens. Choice eggs $3.00 and $2.00 per 15. My stock is of the very best. Write me.
F. ARTHUR MARTIN, Indian River, Michigan.

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CRYDER'S S. C. REDS, ONE OF LEADING Red pens in Michigan egg contest. Bred for color, shape, and heavy production. Write for prices on hatching eggs.
EDW. H. CRYDER, Alamo, Michigan.

Cured Her Rheumatism

Knowing from terrible experience the suffering caused by rheumatism, Mrs. J. E. Hurst, who lives at 204 Davis Avenue, E67, Bloomington, Ill., is so thankful at having cured herself that out of pure gratitude she is anxious to tell all other sufferers just how to get rid of their torture by a simple way at home.

Mrs. Hurst has nothing to sell. Merely cut out this notice, mail it to her with your own name and address, and she will gladly send you this valuable information entirely free. Write her at once before you forget. (Adv.)

RHODE ISLAND REDS TOMPKINS STRAIN to make room for young stock. I will sell after November 1, 1923, 50 2 year old hens at $2.00 each; 25 1 years old hens at $3.00 each; cockerels at $2.50 and up. All these cockerels are from my best 3 year old hens that layed 205 eggs or better in their pullet year. Quality breeder of Rhode Island Reds.
WM. H. FROHM, New Baltimore, Mich., R. 1.

S. C. R. I. RED PURE BRED EGGS FOR setting. 15-$1.25 or 100-$8.00.
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BARRED ROCKS

Hatching Eggs. Barred Rock, Aristocrats and Fishel White Wyandottes, 100-$5.50; 50-$3.00; 15-$1.25. **Joseph Amster, Paw Paw, Michigan.**

DARK RINGLET BARRED ROCK EGGS $1.75 per 15; $3.00 per 30. Large type White Pekin Duck eggs $1.25 per 12.
MRS. FRED KLOMP, St. Charles, Michigan.

HATCHING EGGS—PURE BRED BARRED Rocks from prize winning stock—15, $2.00; 50, $3.75; 100, $6.50. Postage prepaid.
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PURE BRED W. WANDOTTE HATCHING Eggs. Fishel's heavy laying strain. $7.00 per 100; $4.00 for 50 or $2.00 for 15.
Mrs. Tracy Rush, 104 Grover Ave., Alma, Mich.

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FOR SALE—2 GEESE, 1 GANDER $10.00. Wanted to buy Soy Beans.
ANTHONY SIKORSKI, Bronson, Michigan.

FOR SALE—THOROUGHBRED TOULOUSE Geese and Buff Rock Cockerels. Blue Ribbon prize winners. Buff Rock eggs $1.50 per 15.
BALDWIN & NOWLIN, Laingsburg, Mich., R4.

VETERINARY DEPARTMENT

HORSE LOSES FLESH AND IS RESTLESS

I have a horse 11 years of age, he used to weigh around 1500, right along and a pretty animal, never sick but now he has began to lose flesh. Now he is mighty thin in spite of good feed. Restless, looks around, at times he gets down and up again and so on. He eats good but does not seem to get any benefit from it. His teeth are good. The local veterinary gave him something but with no help.—E. R. S., Big Rapids, Mich.

—The history of this case would indicate that the horse in all probability is suffering from some chronic organic intestinal trouble. There is no way of telling just what this trouble might be. I am very much afraid that the treatment will be unsatisfactory. If you have a veterinarian in your locality, I would suggest that you have him make a very careful examination of your mare, he may be able to make a diagnosis.

You might try the following prescription as an experiment: Fowler's solution of arsenite, 26 ounces; fluid extract of nux vomica, 2 ounces; fluid extract of quassia, 2 ounces; fluid extract of gentian, 2 ounces; mix and give two tablespoonfuls on the feed night and morning. This prescription can be refilled and repeated a second time if necessary.—John P. Hutton, Assoc. Prof. of Surgery and Medicine, M. A. C.

HEIFER DRINKS ONLY SMALL QUANTITY OF WATER

Would you be so kind as to give me a little advice on my cow? She is a Jersey, young and fat and gives little or no milk at all, drink one-half pail water in about two or three days. I give her salt but it does not seem to cause her to drink more. But worst of all she milks so hard. When I was a boy I remember of hearing of an operation on the teats. Is there any such remedy? If so what would be the result?—J. O. C., Jackson, Mich.

—As long as the heifer is fat and seems to be healthy, you need not be alarmed about her drinking a small amount of water. If she were allowed access to fresh water continually, the probabilities are that she might drink more.

The hard milking you speak of can be remedied if it is due to a contraction of the sphincter muscles at the end of the teats. The operation consists in cutting these muscles with a teat slitter. The operation should be performed by a veterinarian.—John P. Hutton, Assoc. Prof. of Surgery & Medicine, Michigan Agricultural College.

CANKER IN FOOT INCURABLE

Please let me know what to do for a horse that had the thrush and now has the canker in his feet?—J. V., Bay City, Mich.

—True canker affecting the frog, sole, wall, and foot skin is incurable. Better have your veterinarian make an examination of the horse's foot and determine whether it is canker or thrush. If thrush, it can be cured.—John P. Hutton, Assoc. Prof. of Surgery and Medicine, Mich. Agricultural College.

ROBUST BEANS YIELD 25 TO 30 BUSHELS PER ACRE

(Continued from Page 4)

is very well represented by Early Wonder and the other by Robust. The former are earlier but are susceptible to both mosiac and blight which often destroy the leaf system and causes a failure of the crop. Robust on the other hand is immune to mosiac and resistant to blight, holding its leaf system in workable condition until maturity when the leaves drop off as a whole. On point of yield the Robust has averaged a half more beans at M. A. C.

All correspondence regarding seed should be sent directly to the Secretary of the Michigan Crop Improvement Association, East Lansing, Michigan.

(Editor's Note: Do not miss the next article by Mr. Spragg. It will appear in an early issue so be on the look-out.)

Baby Chicks Sick and Dying

If they're weak, wobbly, "pasted up", with no appetite, don't waste a minute!

WHITE DIARRHEA

Easily stopped in 48 hours

White diarrhea kills half of nearly every hatch of chicks. It's strange how many people do nothing either to prevent the trouble or end it, thinking this loss can't be stopped. But it can be stopped, without extra work, without troublesome dosing, and at almost no cost. For years, thousands have saved their sick chicks and raised nearly every chick in every hatch, by merely dropping an Avicol tablet in the drinking water. Successful poultry raisers say there is nothing else like Avicol for this purpose.

Trouble gone in 2 days

Chas. N. Kittinger, Willows, Calif., writes: "Twelve of my chicks had diarrhea by the time I received my Avicol. I immediately gave them some, and by the second day, the trouble disappeared and now they are all as lively as crickets. If I had only known of Avicol sooner, I would have saved lots of chicks."

It is wonderful how sick, droopy chicks, within 48 hours after they get Avicol, become just as lively as Mr. Kittinger says. No matter how rapidly the trouble is spreading, they stop dying almost the very day Avicol is put in their drinking water.

"Stopped dying at once"

"Last spring I bought 25 baby chicks," writes Mrs. John Shaffer, Owen, Wis. "When about a week old, they began dying, would get droopy and in a few hours would die. When I had 15 left, I began giving Avicol and they stopped dying at once. I did not lose another one."

Costs nothing to try

Why should anyone sit back and let baby chicks die? It costs nothing to try Avicol. Readers are urged to write to the Burrell-Dugger Co., 83 Allen Ave., Indianapolis, Ind., sending 50 cents, as a deposit, for a package by mail prepaid (or pin a dollar bill to your letter for the extra large size holding nearly 3 times as much). If you prefer, send no money, but deposit the money with the postman on delivery. Either way, you won't risk a cent. If Avicol doesn't stop your chick losses immediately, if it isn't superior to anything else you ever heard of, if it doesn't satisfy you in every way, every cent of the money you have deposited will be promptly refunded by the manufacturers.

DUCKS

WHITE PEKIN DUCK'S EGGS FROM PRIZE winning stock, $1.50 per setting of (12) twelve. Prize winning Drakes, $5.00.
MRS HAROLD SIMS, Holly, Michigan.

TURKEYS

Pure Bred Mammoth Bronze Toms One 2 Year old hardy beautiful well marked birds. Write for prices. **Mrs. F. Griffin, Riverdale, Michigan.**

MAMMOTH BRONZE TURKEYS, LARGE beautiful birds. Write for prices.
MRS. BEN JOHNSTON, Onaway, Mich., R. 1,

White Holland Turkeys
ALDEN WHITCOMB, Byron Center, Michigan.

WHITE HOLLAND TURKEYS—REDUCED prices. Hens $7.00; Toms $9.00.
MRS DON ROSS, Marlette, Michigan.

BOURBON RED TURKEY EGGS 50c EACH Postpaid, from winners at Michigan State Fair and Grand Rapids Exposition.
THOS. G. CALLAGHAN, Fenton, Michigan.

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Gentlemen: For the enclosed

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White Diarrhea

Remarkable Experience of Mrs. C. M. Bradshaw in Preventing White Diarrhea

The following letter will no doubt be of utmost interest to poultry raisers who have had serious losses from White Diarrhea. We will let Mrs. Bradshaw tell of her experience in her own words:

"Gentlemen: I see reports of so many losing their little chicks with White Diarrhea, so thought I would tell my experience. I used to lose a great many from this cause, tried many remedies and was about discouraged. As a last resort I sent to the Walker Remedy Co., Dept. 680, Waterloo, Iowa, for their Walko White Diarrhea Remedy. I used two 50c packages, raised 300 White Wyandottes and never lost one or had one sick after giving the medicine and my chickens are larger and healthier than ever before. I have found this company thoroughly reliable and always get the remedy by return mail.—Mrs. C. M. Bradshaw, Beaconsfield, Iowa."

Cause of White Diarrhea

White Diarrhea is caused by the Bacillus Bacterium Pullorum. This germ is transmitted to the baby chick through the yolk of the newly hatched egg. Readers are warned to beware of White Diarrhea. Don't wait until it kills half your chicks. Take the "stitch in time that saves nine." Remember, there is scarcely a hatch without some infected chicks. Don't let these few infect your entire flock. Prevent it. Give Walko in all drinking water for the first two weeks and you won't lose one chick where you lost hundreds before. These letters prove it:

Never Lost a Single Chick

Mrs. L. L. Tam, Burnetts Creek, Ind., writes: "I have lost my share of chicks from White Diarrhea. Finally I sent for two packages of Walko. I raised over 500 chicks and I never lost a single chick from White Diarrhea. Walko not only prevents White Diarrhea, but it gives the chicks strength and vigor; they develop quicker and feather earlier."

Never Lost One After First Dose

Mrs. Ethel Rhoades, Shennandoah, Iowa, writes: "My first incubator chicks, when but a few days old, began to die by the dozens with White Diarrhea. I tried different remedies and was about discouraged with the chicken business. Finally, I sent to the Walker Remedy Co., Waterloo, Iowa, for a box of their Walko White Diarrhea Remedy. It's just the only thing for this terrible disease. We raised 700 thrifty, healthy chicks and never lost a single chick after the first dose."

You Run No Risk

We will send Walko White Diarrhea Remedy entirely at our risk—postage prepaid—so you can see for yourself what a wonder-working remedy it is for White Diarrhea in baby chicks. So you can prove—as thousands have proven—that it will stop your losses and double, treble, even quadruple your profits. Send 50c for a box of Walko, or $1.00 for extra large box—give it in all drinking water for the first two weeks and watch results. You'll find you won't lose one chick where you lost hundreds before. It's a positive fact. We guarantee it. The Leavitt & Johnson National Bank, the oldest and strongest bank in Waterloo, Iowa, stands back of this guarantee. You run no risk. If you don't find it the greatest little chick saver you ever used, your money will be instantly refunded.

WALKER REMEDY CO.,
Dept. 680 Waterloo, Iowa

READ AND ORDER; CHICKS FROM HIGH producing flocks, culled by M. A. C. expert. April and May, White Wyandottes, $18.00 per 100; Barred Rocks, $16.00; White Leghorns, $14.00. C. W. Heimbach, R5, Big Rapids, Mich.

STURDY CHICKS—BRED-TO-LAY AND exhibition flocks, culled by experts. Reasonable prices. Catalog free. Single Comb White Leghorns, Rocks, Reds, White Wyandottes. Sunnybrook Poultry Farm, Hillsdale, Mich.

* * * * BACK AGAIN ! * * * *

You can run our ad same as last year, starting now and run until we give you a stop order. I have not copy at hand but you have it in any last season issue. We have credit of $4.50 with you. We had splendid results from M. B. F. since the first season we used it. Thanks. Tyrone Poultry Farm, Fenton, Mich.

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Poultry Department

FEATHER PULLING

I wish to ask what makes hens pick feathers from about other hens necks.—Mrs. L. B. G., Clifford, Mich.

—I would say that this is a form of canabalism which frequently occurs in closely confined flocks that are fed an insufficient supply of animal protein. It is especially among the lighter and more nervous type of breeds.

Feather pulling from the neck may be caused by irregular feeding of buttermilk or skim milk. Hens frequently splash the feathers especially around the neck, and breast, in the drinking process. When the feathers become pasted with this milk, it is very palatable, and the habit may start.

Dry mash should be available at all times, containing from ten to twenty per cent meat scrap or animal protein substitute. The birds should be fed a scratch feed in deep litter to permit exercise. The daying houses should not be over crowded during the winter months.

Once the practice has been cultivated, the hens' attention should be diverted by suspending a piece of beef liver at a convenient height in the poultry house. This will also supply the necesary protein, and the hens will also forget the habit of feather pulling. At the earliest possible date the hens should be permitted free range as the habit of feather pulling is checked once the birds are out on free range.—E. C. Foreman, Prof. of Poultry Husbandry, M. A. C.

THE poultry raising season is nicely under way now and we suppose you are all having your troubles. We are always at the service of our subscribers and will be pleased to answer your questions. Be sure to sign your complete name and address so that we can send you a personal reply.

RAISE POULTRY

I wish you would kindly tell me which is the easiest to raise; chickens, geese, ducks, turkeys, guinea pigs, rabbits or fur bearing animals. I have had no experience and I do not know how to raise any of these and I have only a little time.—E. L. P., Owosso, Michigan.

—In studying the economic conditions we are under the impression that chickens are possibly a little more profitable than water fowl or pet stock, because the latter are being raised primarily for meat production.

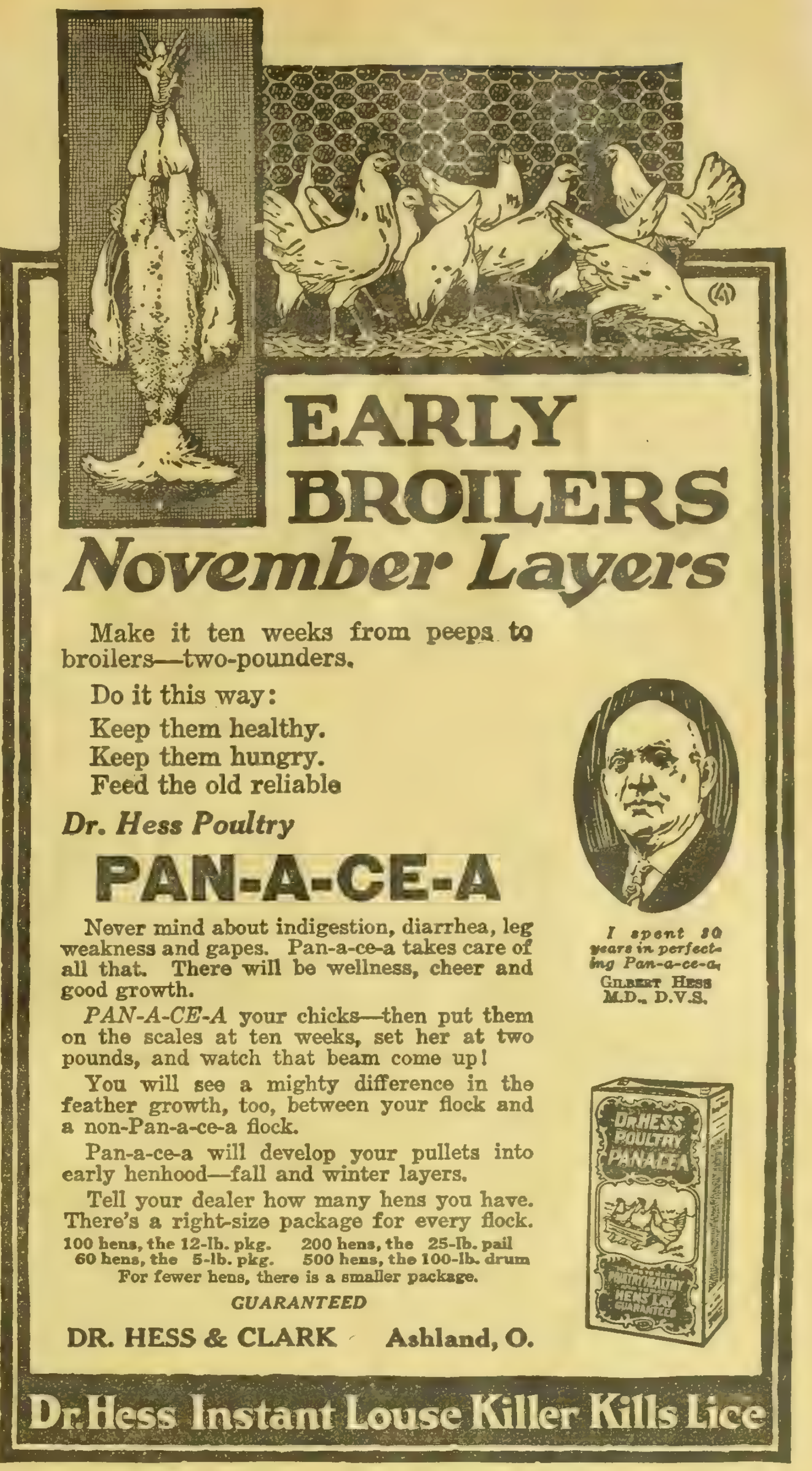
In poultry raising, the broiler, roaster, and market fowl are usually considered as incidental to production and the main source of revenue comes from market eggs. From the standpoint of raising stock with the least difficulty, possibly geese, guinea pigs, ducks, and guinea hens require less attention. From an economical standpoint, however, the rearing of chickens and turkeys is possibly more profitable, even tho they do require closer attention, and a greater amount of care. A careful study should be made on all these subjects before undertaking the raising of stock on a commercial scale.—E. C. Foreman, Professor of Poultry Husbandry, M. A. C.

THE PROBLEM OF DIRTY EGGS

IN seeking to improve the market quality of eggs, next to the problem of the underweight egg is that of the dirty egg. No matter how fresh and attractive it may be in other respects the dirty egg can never get on a plane with the clean egg. It is in bad repute with the local buyer and the stigma holds fast all along the line. In other words the soiled egg is more or less of an outcast with no hope of ever improving its status. The producer often resorts to washing to save the day and this helps some but the washed egg is easily detected and straightway discounted. It is difficult to estimate the economic waste from this cause but there is no doubt that dirty eggs cut the income of producers several hundred thousand dollar every year.

This considerable loss is regret-

(Continued on page 28)


Dr. HESS POULTRY PANACEA
POULTRY HEALTHY HENS LAY GUARANTEED

EARLY BROILERS
November Layers

Make it ten weeks from peeps to broilers—two-pounders.

Do it this way:
Keep them healthy.
Keep them hungry.
Feed the old reliable

Dr. Hess Poultry
PAN-A-CE-A

Never mind about indigestion, diarrhea, leg weakness and gapes. Pan-a-ce-a takes care of all that. There will be wellness, cheer and good growth.

PAN-A-CE-A your chicks—then put them on the scales at ten weeks, set her at two pounds, and watch that beam come up!

You will see a mighty difference in the feather growth, too, between your flock and a non-Pan-a-ce-a flock.

Pan-a-ce-a will develop your pullets into early henhood—fall and winter layers.

Tell your dealer how many hens you have. There's a right-size package for every flock.

100 hens, the 12-lb. pkg. 200 hens, the 25-lb. pail
60 hens, the 5-lb. pkg. 500 hens, the 100-lb. drum
For fewer hens, there is a smaller package.

GUARANTEED

DR. HESS & CLARK Ashland, O.

I spent 30 years in perfecting Pan-a-ce-a,
GILBERT HESS
M.D., D.V.S.

Dr. Hess Instant Louse Killer Kills Lice

LARGE, HUSKY CHICKS

Purebred, high quality chicks from certified, tested flocks on free range.

Varieties	Prices on 25	50	100	500	1000
S. C. White and Brown Leghorns	$3.50	$6.75	$13.00	$62.50	$120.00
Anconas	3.75	7.25	14.00	67.50	130.00
Barred Rocks, R. I. Reds	4.50	8.50	16.00	77.50	150.00
Assorted Chicks	2.75	5.50	10.00	50.00	——

Extra Select Stock $2.00 per 100 higher. Well hatched in modern machines. Each order carefully packed under our personal attention. Postpaid. 100% live delivery. Bank reference. 1924 catalog ready.

Winstrom Poultry Farm and Hatchery, Box A-5, Zeeland, Mich.

CHIX
Buy the "Best" for "Less"

BARRON STRAIN WHITE LEGHORNS EXCLUSIVELY

The large heavy egg producers. If you want big, strong, husky CHICKS that are easy to raise, mature quickly, and have the vitality to produce the maximum quantity of eggs in the coldest weather, we have the stock that you want. Why buy "CHEAP CHICKS" when you can get "THE BEST" at cheap prices? PULLETS, HENS, and COCKERELS after May 1st. Get our free Circular and Prices before you buy. We positively guarantee satisfaction.

Progressive Poultry Farms, P. Ver Hage, Mgr., Zeeland, Mich.

EGG BRED CERTIFIED CHICKS

from our Free range flocks of Hollywood and Barron improved English White Leghorns, 250-300 Egg-Bred line. Sheppard's Strain of Anconas direct. Parks strain Barred Rocks and Brown Leghorns. Quality and high egg yield due to 11 years careful breeding on our modern 65 acre farm. Culled, mated, rated by experts. Strong vigorous Chicks. 100% live delivery. Extra selected chicks 100, $14; 500, $65. Barred Rocks 100, $18; 500, $85. Write for catalog and prices on selected Special Star matings. Postage prepaid.

Town Line POULTRY FARMS ZEELAND MICH.

S. C. White Leghorn

Baby Chicks from Demonstration Farm flock, $13 per 100. Barred Rock chicks, $15 per 100.
RALPH S. TOTTEN, Pittsford, Michigan.

BEFORE BUYING ELSEWHERE GET OUR prices on White and Brown Leghorns and White Rocks. Prepaid Parcelpost. Satisfaction Guaranteed.
De Kostor's Hatchery, Box B, Zeeland, Mich.

Whittaker's Red Chicks and Eggs for Hatching. Rose and Single Combs. Bred from Fourteen Generations of Winter Layers. Write for Free Catalog of Michigan's Greatest Color and Egg Strain. Interlakes Farm, Box 4, Lawrence, Mich.

BABY CHICKS—REMARKABLE FOR SIZE and strength. Reasonable prices. Leghorns, Anconas, Rocks, Reds, Wyandottes, Orpingtons, Minorcas, Spanish, Brahmas.
TYRONE POULTRY FARM, Fenton, Michigan.

PUREBRED BABY CHICKS. LEADING VARIETIES. 100% arrival. Priced right.
THOS. G. CALLAGHAN, Fenton, Michigan.

Results Satisfactory!

NURSERY STOCK

Kindly discontinue the 5 line ad you are carrying for us after this month, as we do not find April ads profitable. Results, so far, are satisfactory. Thanking you, we remain,—J. N. Rokely & Son, Bridgman, Michigan.

LIVE STOCK

Please discontinue our ad in your paper, as we are sold out. Forward us bill. Thanking you for good results, we are most cordially, —C. Lemen & Sons, Dexter, Mich.

What have you for sale?

CERTIFIED CHICKS at popular prices.

We won 1st and 4th prize this year on English strain White Leghorn hen at the National Poultry Show, Chicago. Also 1st at Zeeland Poultry Show. Other breeds have had same careful supervision in developing and breeding. Pure-bred stock carefully culled. 100% live arrival guaranteed. Our chicks are money makers and will improve your flock. Write for catalog and prices. A trial will convince you. All flocks certified

American Chick Farm, Box 115-B, Zeeland, Mich

WHITE LEGHORN

BABY CHICKS

TANCRED—BARRON, 200 to 300-egg bred lines. Wonderful layers of large, white eggs that bring premium prices. Over 2,000 selected breeders on free range. Get quality chicks from these tested layers mated to high record pedigreed males. 11½ cents and up. 100% live delivery guaranteed by prepaid parcel post. Write at once for valuable illustrated catalog and latest price list.

J. PATER & SON, R. 4, Hudsonville, Michigan.

LOOK! **100,000 CHIX. BEST PUREBRED.** M. A. C. method tested stock. Can ship at once. Barred Rocks or Reds, Black Minorcas 15c; White, Brown or Buff Leghorns 13c; Sheppards best Anconas 14c; Orpingtons 16½c; Black Langhans 18c; Large Brahmas 20c. Heavy broilers Chix 12c. Mixed spotted Chix 10c. Hatching eggs. Add 30c extra if less than 100 ordered. Catalog tells about our extra selected stock. Good bank reference. **Beckmann Hatchery, 26 Lyon, Grand Rapids, Michigan.**

CHICKS **WHITE LEGHORNS $12 PER 100,** $6.25 for 50, and $3.25 for 25. Barred Rocks and Reds $16 per 100, $8.50 for 50, and $4.25 for 25. White Wyandottes and Rocks $17 per 100, $8.75 for 50, and $4.50 for 25. Buff Orpingtons $18 per 100, $9.25 for 50, and $4.75 for 25. $5 on each 100 chicks with order will book your order. Balance two weeks before delivery. 100% live delivery guaranteed. Reference: Bank of Mt. Morris.

Meadow Brook Hatchery, R1, Mt. Morris, Mich.

ELGIN CHICKS

Barron Strain Selected English White Leghorn Chicks. We ship all over the states. Get the good winter layers. Prices are right. Grade AA, best stock. Grade A, good layers. Prices: Grade AA chicks, 25, $4.00; 50, $7.50; 100, $14.00; 500, $67.50; 1000, $130.00. Grade A chicks, 25, $3.50; 50, $6.50; 100, $12.00; 500, $57.50; 1000, $110.00.

ELGIN HATCHERY, Box 317-A, Zeeland, Mich.

Pure Bred Chicks Can ship immediately.

Broiler Chix	**11½c**	**White Rocks**	**16c**
W. or B. Leghorns	**13c**	**W. Wyandottes**	**16½c**
B Rox or Reds	**15½c**	**Buff Orpingtons**	**16½c**
Sheppard's Anconas	**15c**	**Black Minorcas**	**16c**

Extra selected standard bred chicks $4.00 per 100 more. Add 35c if less than 100 ordered. Good bank reference. Circular free.

Lawrence Hatchery, BF, R. 7, Grand Rapids, Mich.

S. C. WHITE LEGHORN CHICKS—FROM culled, healthy flocks of heavy layers on free range, headed by Kerlin males. April $12.00, May $11.00, June $10.00 per hundred, prepaid. 100% delivery. Hatched right, in a Wishbone Mammoth. 10% with order, balance one week before shipment. Some fine Silver Wyandottes, 20c each, no less than 25.

WISHBONE HATCHERY, Sebewaing, Michigan.

BABY CHICKS From Best Producing Free Range flocks. Highest utility quality, best for general purposes. Sent post paid 100% live delivery guaranteed. Write for catalog.

HOMER HATCHERY, Homer, Michigan.

PUREBRED BABY CHICKS, BARRED ROCKS and Rhode Island Reds $14.50 per 100, White Wyandottes and Buff orpingtons $16.00.

JOSEPH AMSTER, Paw Paw, Michigan.

BABY CHICKS FROM BRED TO LAY S. C. Buff Leghorns. First hatch March 3rd.

J. W. WEBSTER, Bath, Michigan.

Are You Ruptured?

Learn How to Heal It FREE

Ruptured people all over the country are amazed at the almost miraculous results of a simple Home System for rupture that is being sent free to all who write for it. This remarkable invention is one of the greatest blessings ever offered to ruptured persons, and is being pronounced the most successful Method ever discovered. It brings instant and permanent relief and does away with the wearing of trusses forever.

Thousands of persons who formerly suffered the tortures of old-fashioned steel and spring trusses are now rejoicing in their freedom from the danger and discomfort of rupture after a brief use of this remarkable System. There is nothing like it anywhere and hosts of ruptured persons are astounded at the ease with which their ruptures are controlled.

For a limited time only, free trial treatments of this Muscle Strengthening Preparation are being mailed to all who apply. It is an original painless Method. No operation, no danger, no risk, no absence from daily duties or pleasures. Send no money; simply write your name and address plainly and the free treatment with full information will be mailed you in sealed package.

Send now—today. It may save the wearing of a torturing truss for life.

FREE TREATMENT COUPON

Capt. W. A. Collings, Inc.
Box 226A Watertown, N. Y.

Send Free Test of your System for Rupture.

Name ....

Address ....

Wyngarden Strain WHITE LEGHORN BABY CHICKS

EGG BRED for 18 YEARS

Here's what you get when you buy Guaranteed Wyngarden Baby Chicks

(1) Pedigreed stock, sired by males whose dams had records of 260 to 289 eggs per year, and grand dams 298 to 304 eggs. (2) 100% live delivery. (3) Chicks guaranteed to be healthy. (4) Absolutely pure bred. (5) Absolutely no culls. (6) Stock that withstands winter cold as well as summer heat. (7) Free entry in our animal flock performance contest, whereby you may obtain 200 of our best Barron English White Leghorns free. We know the quality of our stock because we maintain 42 hatchery farms of our own, instead of buying eggs wherever available.

Sired by Hollywood and Funk Farm Males

White and Brown Leghorns. Anconas.

Send for our catalog and read full particulars of the Wyngarden Strain.

Wyngarden HATCHERY & FARMS ZEELAND, MICH. Box B

Write Quick for REDUCED PRICES

CERTIFIED CHICKS

From World's Best Laying Strains

Tancred pedigree-sired, and Tom Barron S. C. White Leghorns, R. C. Rhode Island Reds; Park's Barred Plymouth Rocks.

Your Satisfaction Guaranteed

Our flocks are all inspected and **certified** by the Michigan Agricultural College. Watch our pens at M. A. C. East Lansing, Mich. Every bird is well matured and vigorous. No culls in our flocks. Our chicks are **bred right, hatched right, and shipped right.** Every one is strong and healthy. **100%** live delivery **postpaid. Satisfaction absolutely guaranteed.** Illustrated catalog **sent free.** Buy Lakeview chicks if you want to **make money.** Write for low prices today sure.

Lakeview Poultry Farm, R. 8, Box 6 Holland, Mich.

ROYAL EGG-BRED CHICKS

200 Egg Strain S. C. English White Leghorns and Brown Leghorns. Our pen of White Leghorns to 1st prize (best W. Leghorn pen in the show) production class, in the largest utility show in the country held at Zeeland, Michigan, Dec. 28. **Prof. E. Foreman of M. A. C. judging.** 12 years of careful breeding for high egg-production, combined with 8 years of highly successful hatchery methods gives you chicks that grow into money makers. **100% live delivery guaranteed.** Write for free catalog and prices.

ROYAL HATCHERY & FARMS
S. P. Wiersma, Zeeland, Michigan, R. R. 2.

Chicks With Pep

Try our lively and vigorous chicks from bred-to-lay and exhibition hens. They will make you money for they have the quality and egg laying habit bred into them. A trial will convince you. All leading varieties. Safe delivery. Prepaid. Prices right. Bank reference. Big illustrated catalog free.

Holgate Chick Hatchery, Dept. B, Holgate, Ohio.

FREE CHICKS

In Contest
Many Breeds
Every One a Winner
Pure Breed Practical Poultry

D. W. Young American type Leghorns, also English type. You will be interested in the egg records our customers report. Send for our descriptive matter and price list.

STATE FARMS ASSOCIATION
Masonic Temple, Kalamazoo, Mich.
(Member International Baby Chick Association)

Strong, Healthy Chicks

Hatched in the latest improved Mammoth Incubator. English S. C. W. Leghorns, S. C. Anconas, Barred Rocks, R. I. Reds from heavy laying free range organized flocks. 100% alive. Parcel Post paid. Send for catalog. Reference.

Timmers **Hatchery, R3, Box M, Holland, Mich.**

BABY CHICKS **BARRON S. C. W. LEG**horns. Special low prices. 100% alive delivery guaranteed. Write for price list. **HENRY WATERWAY, R4, Holland, Mich.**

LEE'S LICE KILLER

The Old Reliable Has proven itself year after year the one **sure** way to rid poultry of lice, mites, bedbugs, body lice and such vermin. Paint or spray on roosts, etc. No dusting, dipping, greasing, handling. Get it at your drug or seed store, or write us for particulars and valuable free book. **GEO. H. LEE CO. Omaha, Nebr.**

DONT LOSE BABY CHICKS

GERMOZONE, for 25 years the **reliable** remedy, will rid them of Roup, Colds, Bowel Trouble, etc., and **keep** them healthy. "A wonder worker." Used by hundreds of thousands. Get it at drug or seed store, or order of us by card—75c and $1.50 sizes, delivered. Postman will collect. No extra charge. Order today.

GEO. H. LEE CO. Omaha, Nebr.

able in that a large part of it can be prevented. Much of the soiling comes from dirty nests and laying quarters. A little fresh clean straw in the nests now and then will do much toward keeping eggs clean and mites and lice down. The roosts and dropping platforms and floors should be cleaned regularly and new litter added frequently.

Often eggs are soiled because too few nests are provided and there is keen compitition for the same nests. In some cases eggs are left in nests all day or several days and each hen in laying does her bit to muss up all eggs previously laid. This suggests the need for regular and frequent gathering.

During the spring months if drainage or soil conditions are poor one often notices mudholes and dirty puddles about the houses and runways of the hens. Such places harbor disease organisms and bemire the feet and feathers of the hens and they in turn smear the nests and eggs. Such wet places should be filled or drained in some way.

Occasionally hens develop bowel trouble and the resulting scours mean dirty eggs. A little medical treatment will correct this condition as a rule. Other heavily feathered birds have feathers about the vent soiled and balled up with droppings and offer another opportunity for soiling of eggs and nests. If these feathers about the vent are clipped away the trouble ceases.

Lastly eggs are often stained by dirty hands of the person gathering them or by dirty receptacles in which they are gathered or stored. Grease and oils are very often responsible for smears which can never be removed. If eggs are held in places where soot or dust collects many of them will lose their fresh attractive appearance. Too much handling, too, will rub off the delicate layers of bloom and cause the egg to take on the shiny appearance of the stale egg.

If all poultry raisers would observe these simple precautions 90 per cent of the cases of soiling of eggs could be prevented and a very substantial saving made for the poultrymen everywhere.

EGG INDUSTRY WIDELY SCATTERED

MORE than 5,000,000 farms in the United States produce eggs annually valued at more than half a billion dollars, says the United States Department of Agriculture. There are many specialized egg farms along the Atlantic and Pacific coasts and scattered to a less extent throughout the country, but the great bulk of market eggs used on the large eastern markets comes from the middle-western states where eggs are produced mainly as a side line on general farms.

In the ordinary course of marketing the eggs pass through a number of hands and must undergo a journey of a thousand miles or so before they pass across the counter from the retailer to the consumer, the department says. More than 47,000 cars of eggs alone are annually transported by rail. New York City is the largest consuming market, followed by Chicago, Boston, Philadelphia, and San Francisco.

Egg production is uneven throughout the year, being heavy in the spring and summer and light in the fall and winter. To fit the supply of eggs to the demand which is much more evenly spread over the year, it is necessary to hold about 12 per cent of the eggs in storage against the months of low production in the fall and winter, the department says.

To serve as a practical guide to producers, shippers and the egg industry generally the Department of Agriculture has recently published a printed bulletin dealing with every phase of the marketing of eggs. The bulletin deals with problems of transportation, the function of cold storage, marketing methods and channels, egg structure and composition, candling, grading, and containers. Copies of Farmers' Bulletin 1378, Marketing Eggs, may be obtained, as long as the supply lasts, upon request to the Department of Agriculture, Washington, D. C.

RHEUMATISM

A Remarkable Home Treatment Given by One Who Had It.

In the year of 1893 I was attacked by Muscular and Sub-acute Rheumatism. I suffered as only those who are thus afflicted know, for over three years. I tried remedy after remedy, but such relief as I obtained was only temporary. Finally, I found a treatment that cured me completely, and such a pitiful condition has never returned. I have given it to a number who were terribly afflicted, even bedridden, some of them seventy to eighty years old, and the results were the same as in my own case.

I want every sufferer from any form of muscular and sub-acute (swelling at the joints) rheumatsim, to try the great value of my improved "Home Treatment" for its remarkable healing power. Do not send a cent; simply mail your name and address and I will send it free to try. After you have used it and it has proven itself to be that long-looked-for means of getting rid of such forms of rheumatism, you may send the price of it, one dollar, but understand, I do not want your money unless you are perfectly satisfied to send it. Isn't that fair? Why suffer any longer when relief is thus offered you free? Don't delay. Write today.

MARK H. JACKSON
No. 265-K Durston Bldg.
SYRACUSE, N. Y.

Mr. Jackson is responsible. Above statement true.

SELECT STOCK

at commercial prices so why take others. We have bred the Barron strain S. C. W. Leghorns for 8 years and kept improving all the time. Our foundation stock from M. A. C. from pedigreed stock with egg records up to 279. We have customers from the northern part of the state that are getting from 60 to 70% egg production for the winter months. We also hatch the famous Sheppard Anconas and Barred Rocks. Write for our catalogue and order early so you can get them when you want them.

Byron Center Poultry Farm and Hatchery

G. C. KEISER, Byron Center, Michigan.

UNDERMAN'S

FIRST-CLASS CHICKS $10 and UP

We are heavy producers of pure-bred chicks. Flocks on free range. Culled by an expert. 100% live delivery guaranteed. Order today from this Ad. and get chicks when you want them.

Varieties	Prices on 25	50	100	500	1000
English S. C. White Leghorns	$3.50	$6.50	$12.00	$57.50	$115.00
Barred Rocks, S. C. Reds	4.25	8.00	15.00	72.50	140.00
Odds and Ends	3.00	5.50	10.00		

Blue Hen Incubators. Reference: Zeeland State Bank. Order today; you take no chances. Orders booked for 10% down; balance ten days before chicks are to be shipped. Catalog free.

HUNDERMAN BROS. POULTRY FARM, Box 30, Zeeland, Michigan.

We can save you money on

Ancona and White Leghorn Chicks

Send at once for catalog and prices. We insure your chicks for one week.

M. D. WYNGARDEN

Route 4, Box 81 Zeeland, Mich

Pure Bred Selected Flocks

Great Northern Hatchery

100 Per Cent Live Delivery

'Strong sturdy northern grown Chicks. Selected, pure bred stock. Healthy flocks on free range insure strength in every Chick. Order from this Ad.

Varieties	Prices on 50	100	300	500	1000
Leghorns (S. C. White and Brown)	$7.00	$13.00	$38.00	$62.00	$120.00
Barred Rocks	8.00	15.00	43.00	72.00	140.00
nite Rocks	9.50	18.00	53.00	85.00	165.00
xed Broiler Chicks	$10 per 100 straight				

tched under best conditions in Newton incubators. Every Chick carefully inspected. 100% live ivery guaranteed. Reference State Commercial Savings Bank, this city. Write for prices on cial matings. **GREAT NORTHERN HATCHERY, Box 50, Zeeland, Michigan.**

FREE CHICK OFFER

CHIX

Our Tom Barron Strain White Leghorns pay big dividends. We breed and hatch only one kind—the best. Our pure-bred chicks are strong, husky and easy to raise. Get our circular and FREE CHICK OFFER before buying eggs, chicks or breeding stock. It will surely pay you.

Progressive Poultry Farm,

P. VER HAGE, Mgr. Zeeland, Mich

HIGHEST QUALITY CERTIFIED BABY CHICKS

FROM

VAN APPLEDORN BROS. BABY CHICKS Since 1906 MICHIGAN'S OLD RELIABLE HATCHERY HOLLAND, MICHIGAN

Michigan's Old Reliable Hatchery, the best equipped and most modern Hatchery in the State.

Pure Bred Tom Barron English and American White Leghorns, Anconas, Barred Plymouth Rocks and Rhode Island Reds. Strong, Well-hatched Chicks from tested Hoganized Free-range stock that make wonderful winter layers.

Chicks sent by Insured Parcel Post prepaid to your door. 100% live delivery guaranteed. Sixteen years of experience in producing and shipping Chicks giving absolute satisfaction to thousands. Write for valuable illustrated free catalog and price list. Get lowest price on best quality Chicks before placing your order.

HOLLAND HATCHERY & POULTRY FARM, R. 7, Holland, Mich.

CHICKS $10.00 UP

HEALTHY·VIGOROUS·PURE-BRED GENEVA CHICKS

100% SAFE ARRIVAL GUARANTEED

Varieties	Prices on 50	100	500
White, S. C. & R. C. Brown & Buff Leghorns	$7.00	$13.00	$62.00
Barred Rocks, Reds, Black Minorcas	8.00	15.00	72.00
White Rocks, White Wyandottes, Anconas	8.50	16.00	77.00
Buff Orpingtons, Silver Laced Wyandottes, Blue Andalusians	9.50	18.00	....
Assorted, from Pure Bred Stock	6.00	11.00	50.00

Hatched from healthy, heavy laying flocks, well kept, insuring strong chicks that will grow into **Profits. Postpaid. Order from this Ad.** Save time. Reference, The Geneva Bank. Member International Baby Chick Ass'n. Free Catalog.

THE GENEVA HATCHERY, Box 23, Geneva, Indiana.

400,000 CHICKS

Our Modern Chicks ARE PURE BRED-FOR EGGS-MEAT

BIG, STRONG, FLUFFY CHICKS hatched from well-bred and well kept, heavy laying hens insuring good growth and PROFITS.

	Prices on 50	100	500	1000
White, Brown and Buff Leghorns	$7.00	$13.00	$62.00	$120.00
Barred and White Rocks, S. C. and R. C. Reds, Anconas	8.00	15.00	72.50	140.00
White Wyandottes, Buff Orpingtons	8.50	16.00	77.50	....
Silver Wyandottes	9.50	18.00	87.50	170.00

Mixed, $12.00 per hundred, straight. Postpaid. 100% Live Arrival Guaranteed. Order right from this ad. Best Bank Reference. You take no chance. Free Catalog. Member I. B. C. A. and Ohio Assn.

MODERN HATCHERY, Box 62, Mt. Blanchard, Ohio.

PURE BRED CHICKS

What our Customers say—

Elmer Arnold—801 eggs in 14 days in December from 85 June hatched White Leghorns; Herman Broegeler—Bought 100 **Ancona chicks**, raised 69 pullets, 30 cockerals. F. R. Wallis—Ordered 100 chicks, received 103, **raised every one.** This wonderful vitality and laying ability **shows why, as this is written, our S.C.W. Leghorns lead in Michigans International laying contest.** Our strains are Tom Barron Imported and Hollywood S. C. White Leghorns, Sheppards Famous S. C. Mottled Anconas and Parks Bred to Lay Barred Rocks. Chicks shipped postpaid, 100¢ live delivery guaranteed. Big illustrated catalog sent Free.

SilverWard Hatchery, Box 30 Zeeland, Mich.

MEADOW BROOK

HENRY DePREE & SONS.

ne of the Founders of the Chick Indusrty

21 Years in Business

re-bred stock carefully developed for years. der from this ad and get chicks just when you nt them.

	Prepaid prices on 50	100	500
hite and Brown Leghorns	$7.00	$13.00	$62.50
ocks, Reds, Buff Leghorns	8.00	15.00	72.00
hite Wyandottes	11.00	20.00	95.00
ixed Chicks (all varieties)	$10.00 per 100		

You take no chances. Ref: First State ank, Holland. 97% live delivery guarateed. White Leghorns headed male birds of 285-303 egg cord strains. Other breeds ghly bred. Circular free.

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Our Own Breeding flock of large type American White Leghorns.

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'It Fills the Bill'

"SELF-SERVE" Chick Feeder

Holds 12 quarts, Can't clog. Chicks can't roost on special cover nor touch feed with feet. Grown fowls cannot steal feed. Price $1.50 plus postage. Send for free booklet.

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Dept. B 12,
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250-300 EGG-BRED LINE

Careful breeding, typetesting and trapnesting has produced our world-famous Karsten's Quality Laying Hen—A Utility Bird With Standard Requirements

Our Leghorns are long, deep-bodied, wedge-shaped birds, with wide backs and low spread tails, big lopped combs and alert eyes. Birds that lay those large white eggs that bring the high prices on the New York Market.

SEND FOR FREE CATALOG it describes our wonderful breeding establishment, it tells what and how to feed your chickens for profit, it will show you how you, too, can double your poultry profits

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CHICKS From World's Greatest Layers

If you want **pure bred chicks** that are **bred right, hatched right,** and shipped right, that grow and will make you a profit, **get our new low prices** and free catalog before you buy.

Tom Barron White Leghorns Heavy Type Brown Leghorns
R. C. & S. C. Rhode Island Reds Park's Barred Rocks

Flocks are carefully culled and developed on free range. All chicks are hand picked and inspected, no cripples or weaklings. Every one **strong** and **healthy. Satisfaction** and 100% live delivery guaranteed. **Postage** paid. Write now for our **low prices** and **free catalog.** White Leghorn and Barred Rock pullets after May 1, at low prices.

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Developed and Culled by Experts---Barron Strain English White Leghorns, Brown Leghorns and Sheppard's Anconas. Sturdy, Healthy Chicks. Just a little more for your money. Safe delivery guaranteed. Write for Catalog.

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Varieties	Prices on 50	100	500
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Barred Rocks, R. and S. C. Reds, Anconas	8.00	15.00	72.50
White and Buff Rocks, White Wyandottes, Black Minorcas	8.50	16.00	77.50
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Mixed, all varieties, $12 per 100 straight. 100% Live Delivery Guaranteed. Postpaid. Order from this Ad. Bank references. There is no risk. Free Catalog. Member I. B. C. A. **H. B. TIPPIN, Box E. Findlay, Ohio.**

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Prices Parcel Post Prepaid	on 50	100	500
White, Brown and Buff Leghorns, Anconas	$7.00	$13.00	$62.50
R. I. Reds, Barred Rocks, White Wyandottes	8.00	15.00	72.50

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CHICKS: HOGAN TESTED GUARANTEED

Our Chicks are from flocks on free range. They will live and grow and make a profit. ENGLISH WHITE LEGHORNS and BROWN LEGHORNS. Heavy laying Extra Good BARRED ROCKS. Postpaid to your door and full live delivery guaranteed. Our flocks are carefully supervised and Hogan tested. Bank Reference furnished. Write for prices and descriptive matter.

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S. C. English White Leghorns and Barred Rocks. Every chick from carefully mated, culled, pure-bred flocks owned and developed by us for 15 years. Leghorn males from trapnested 280 egg hens. Free catalog. Write for prices.

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46,000 PURE BRED BREEDERS. 15 varieties. Best laying strains. Incubate 25,000 eggs daily. Catalog Free. Prewar prices. Free live delivery.

Missouri Poultry Farms, Columbia, Mo.

MARKET FLASHES

MARKET SUMMARY

Wheat unchanged to weaker. Corn quiet. Oats firm and unchanged. Rye quiet. Beans easy after decline. Butter and eggs steady after recent decline. Prices on potatoes higher. Poultry in fair supply and quiet. Good demand for dressed calves of good quality. Cattle active and higher. Hogs steady to lower. Sheep higher.

(Note: The above summarized information was received AFTER the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press —Editor.)

FOOTE'S MARKET LETTER

BY W. W. FOOTE

Farm Wages Higher

FARM wages in the United States last year, according to the recent report sent out by the Department of Agriculture, averaged $33.18 per month with board, comparing with $29.17 in 1922. Present indications point to still higher wages this year in the more prosperous farming districts, and it is a certainty that a great many farmers will stop employment of outside help, as they cannot see their way clear to obtain fair profits after paying the wages demanded. As farmers who have been employers of workers know from actual experience, hired workers are apt to be far more exacting than in past years, not only insisting on much higher pay, but working fewer hours and demanding many privileges not thought of ten years or more ago. This is one of reasons why so many farmers are reducing the acreage of various grains and other things, many of them planning on making their acres produce more than in the past by securing only the very best of seeds and manuring and working the ground more. In many parts of the middle west farmer boys have been doing this for several years and winning prizes; and now their dads are going to demonstrate, if possible, that they are not to be outdone. Farmers are already preparing for their usual spring activities, which are belated this year, oats sowing being very late in the southwest. It is hoped that the spring wheat acreage will be substantially lowered, but the prevailing belief in that the area of other farm products will not show very marked changes; and it may be set down at the start that farmers will have no cause for regret for getting prime seed corn and certified potato seed. Live stock feeders are prosperous so far as cattle are concerned, and sheep are unusually profitable, but hog prices have been depressed by the huge supply fattened in the corn belt states. Obviously, less breeding of sows is necessary to bring about higher prices.

What About Wheat?

Prices for wheat have undergone marked changes this year, and at times very fair upturns have encouraged holders, but it was found impossible to maintain values long, with the lack of former speculative support, and within a short time sales have been of May wheat at $1 per bushel. The fact is that traders in wheat have lacked confidence in prices, looking at the matter from supply and demand standpoint, and when the hoped for federal support faded away, the advanced values were lost. Large owners have not given up, however, and in some districts they have signed agreements to act unitedly in marketing their wheat. There is no marked improvement in the demand for breadstuffs to export, as other exporting countries continue to undersell us, and supplies of wheat in sight in the United States are considerably larger than a year ago, the Chicago elevators alone containing a short time ago 15,600,000 bushels, while the visible supply totaled over 59,000,000 bushels, comparing with 45,785,000 bushels a year ago. Spring wheat seeding reports will be read with usual interest, and the one hope for the future lies in much smaller wheat crops. At present prices it does not pay to raise wheat, and it is startling to look back and remember that a little more than two years ago wheat for May delivery sold up to $1.36 while cash wheat sold at this time in 1917 for $3.04. Late sales were made of May wheat on the Chicago Board of Trade at $1.02, comparing with $1.21⅝ a year ago. A sudden revival in the milling demand for wheat helped to strengthen the market, and cash lots sold a little higher a short time ago. Corn for May delivery sells in the Chicago market for 79 cents, comparing with 75½ cents a year ago; oats for May delivery at 46⅛ cents, comparing with 45 cents last year; and May rye at 66½ cents, comparing with 83¼ cents a year ago.

Important Wheat Move.

A special to the Drovers Journal from Evansville, Indiana, says:

"More than 50 per cent of the wheat acreage of the "Pocket," which includes southwestern Indiana, one of the largest wheat growing areas of the state, has been signed for the Indiana Wheat Growers' association, according to announcement made here at district campaign headquarters, nearly 80 per cent of the acreage has been signed up in Gibson county, the officers said, and in Posey, Vanderburg and Knox counties the drive has been successful. The other counties are showing similar interest, as 10,000 acres are reported from Dubois county.

Other counties have a large percentage of the acreage signed up of those men solicited, but the impassable roads in most localities outside the counties named have delayed the work considerably."

High Prices for Cattle

Beef consumption throughout the country is on a considerably larger scale than usual, and choice to fancy offerings of heavy long-fed steers as well as prime yearling steers and heifers have sold on the Chicago market recently at substantial advances in prices, with not enough offered to go around and an especially small supply of yearling steers. Most of the time plenty of common to fairly good cattle are offered on the market, but the prevailing practice is to ship cattle to market after a short feed. Prime heavy steers have sold up to $12.35 per 100 pounds the highest price of the year, while on a recent day there were sales of 40 heifers averaging 667 pounds at $10 and 13 heifers averaging 899 pounds at $10.15. Other sales have been made of choice heifers at $8.50 to $9.25. An important late sale was that of 58 head of 1548-pound choice Hereford steers at $12.35 for shipment to Boston. These cattle were fat when they went into the feed lots and received a five months feed thereafter. The bulk of the beef steers sold recently at $8.25 to $11.50, with sales down to $7 to $8 for common kinds and inferior little steers purchased at $5 to $6.90, and no good steers taken below $10. The best yearlings were wanted at $11 to $12, but very few were offered good enough to bring $11.50. Most heifers sold at $5.40 and over, and stockers and feeders had a moderate sale at $5 to $8.75, selling largely at $6 to $7.75, and plenty of bargains were picked up. Calves sold at $5 to $12 and bulls at $3.50 to $7.50, with canner and cutter cows at $2 to $3.75 and better cows at $4 to $8.50. A year ago common to prime beef steers were selling at $7.60 to $10.40, four years ago at $10 to $14.50 and eight years ago at $7.60 to $10. Combined cattle receipts in twenty markets for the year to late date amount to 3,128,000 head, comparing with 3,182,000 a year ago.

Rigid Cattle Quarantine

Announcement of rigid quarantine regulations against live stock and farm product shipments from California by the state of Nevada was the outstanding development in the foot-and-mouth disease epidemic in California.

Nevada has taken steps to make available a quarter of a million dollars to enforce the quarantine regulations.

The San Francisco stock yards remained under quarantine while work of destroying 5,000 head of cattle in the Los Angeles stock yards was progressing. A large dairy herd of 600 head was found infected in Los Angeles county. The epidenic in that section was still not under control.

Hogs and Provisions

Prevailing prices of hogs, which are the lowest in many years, work against the consumption of pork chops, and this has weakened prices for fresh and cured hog products and affected prices for hogs as well although decidedly fewer swine reached the Chicago market than a short time ago. Large marketing of hogs has resulted in acccumulations of provisions, and stocks of lard in western packing points on April 1 aggregated 48,446,000 pounds, comparing with 34,029,000 pounds a month earlier and 27,201,000 pounds a year ago. Stocks of pork amounted to 46,649 barrels, comparing with 46,227 barrels a month earlier and 44,081 barrels a year ago. Stocks of cured meats aggregated 355,665,000 pounds, comparing with 336,221,000 pounds a month earlier and 324,619,000 pounds a year ago. While hog receipts have fallen off materially, there has been a corresponding reduction in the purchases of eastern shippers in the Chicago market. Combined receipts in twenty markets for the year to date amount to 13,038,000 hogs, comparing with 12,056,000 for the same period last year and 9,0811,000 two years ago. Hogs average well in quality and there is a narrow range of prices. Chicago's receipts of hogs last week fell off to 164,500 head, comparing with 204,490 a week earlier and 176,133 a year ago, and only a small decline took place in prices, sales being made at $6.70 to $7.60. A year ago hogs sold at $7.15 to $8.65 and nine years ago, at $6.85 to $7.60. If the receipts do not increase, better prices may be looked for.

High Prices for Lambs

Not enough lambs are offered to satisfy the demand, and extremely high prices are paid for all fattened flocks, even heavy weights selling high and much wanted, although handy weights sell highest. Lambs with the wool on have been selling in the Chicago market for $13.50 to $16.85, mostly at $16.35 and over for Colorado fed lots, while shearing and feeding lambs are taken at $14.50 to $15.90. A year ago prime lambs brought $14.90, four years ago $21.50 and eight years ago $12. Ewes sell at $9 to $12, wethers at $10.25 to $13.25, yearlings at $13 to $15 and bucks at $7 to $8.75. These are great times for the farmers owning sheep. Lamps are at the highest prices of the year.

WHEAT

The wheat market at Detroit showed a little more strength last week, although there was a tone of easiness most of the time. Demand from the millers, while not pressing, was enough to take care of all receipts, and prices advanced 3 cents during the week.

CORN

Small receipts caused corn prices to advance at Detroit last week. Demand was only fair. Receipts are showing a steady decline while demand remains about the same.

OATS

The Detroit oat market is firm with receipts small. Prices are somewhat higher than they were two weeks ago.

RYE

Millers have been in the Detroit market trying to purchase rye but with very little success. Here too, higher prices are noted.

BEANS

Trade in general was dull in the bean market during the fortnight ending April 5th. Some dealers claim that the price at Detroit will decline to $4.50 and then remain around that figure, while others are fighting to keep the price up to around $5. A few farmers in Michigan are holding their beans for higher prices but the greater portion of them have sold. Reports show about the same condition in nearly every bean growing state in the Union.

POTATOES

A steady tone prevails in the potato market at Detroit, with the supply sufficient to take care of the demand. A fair demand for new potatoes and old potatoes quiet, is the condition of the New York market at present. Chicago has a liberal supply with demand and trading slow. Receipts would no doubt be greater if it were not for the bad condition of the country roads as farmers are reported anxious to sell. Michigan shippers state they have good wire inquiry.

HAY

Markets have shown more strength this week particularly in the west, due to light receipts and a good demand. Bad roads are restricting country loadings and the movement is light. Best grades alfalfa and prairie are in good demand. In the east the receipts are moderate and markets are steady for the top grades.

MARKET QUOTATIONS

Wheat

Detroit—Cash No. 2 white, $1.09½; No. 2 mixed, $1.09.

Chicago—Cash No. 2 hard, $1.03½@1.12.

Prices one year ago—Detroit, Cash No. 2 red, $1.36½; No. 2 white, $1.36½; No. 2 mixed, $1.36½.

Corn

Detroit—Cash No. 3 yellow, 84c; No. 4, 81c.

Chicago—Cash No. 3 yellow, 79¾c.

Prices one year ago—Detroit, Cash No. 3 yellow, 83½c; No. 4, 81½c.

Oats

Detroit—Cash No. 2 white, 54c; No. 3, 52c.

Chicago—Cash No. 2 white, 48¾@50c; No. 3, 47¼@48½c.

Prices one year ago—Detroit, Cash No. 2 white, 51½c; No. 3, 50c.

Rye

Detroit—Cash No. 2, 71c.

Chicago—Cash No. 2, 65½c.

Prices one year ago—Detroit, Cash No. 2, 81½c.

Beans

Detroit—C. H. P., $4.60@4.65 per cwt.

Prices one year ago—Detroit, C. H. P., $7.15 per cwt.

Potatoes

Detroit—$1.60@1.70 per cwt.

Chicago—$1.20@1.40 per cwt.

Prices one year ago—Detroit, $1.41@1.50 per cwt.

Hay

Detroit—No. 2 timothy, $21@22; No. 1 clover, $21@22; standard & light mixed, $22.50@23 per ton.

Chicago—No. 2 timothy, $23.50@25; No. 1 clover, $21@23; standard & light mixed, $24@26 per ton.

Prices one year ago—Detroit, No. 1 timothy, $20@21; No. 2 timothy, $17@19; No. 1 clover, $19@20; standard & light mixed, $19@20 per ton.

POTATOES STILL ON FARMS

The recent inquiry relative to merchantable stocks of potatoes held on March 1st resulted in showing that there were 35 per cent less potatoes in the country on that date available for shipment out of the countries where grown than one year ago.. While there is a larger quantity than last year in Maine, New York and Pennsylvania, the western states have only one-third to one-half as many.

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Mt. Clemens, Mich.

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PRITCHARD'S WEATHER FORECAST
INTERPRETED BY THE STARS
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Week of April 13

TEMPERATURES during most of this week will average close to or slightly below normal in Michigan. Temperatures in this state will not show any radical changes for the next week or ten days but from that time until middle of May weather and temperature changes will be more decided.

During early part of this week east winds and cold rains are to be expected. Generally fair weather is to be expected over the middle part of the week but conditions will again become unsettled and threatening about Saturday.

At the end of this week temperatures will rise considerably above normal for the season, wind forces will increase decidedly and general precipitation with some local heavy falls will be making themselves conspicious. These conditions will run over into next week.

Week of April 20

The stormy periods of this week in Michigan will occur at very beginning, again about Wednesday and Thursday and then about Saturday. Of these three periods, the last is expected to be the most pronounced. There will be more than the average amount of windy weather during most all the week but these conditions will come to more of a head at the close.

Gales on the Great Lakes, high winds inland, heavy rains and electrical storms are characteristics to expect at end of this or beginning of next week. These conditions may be followed by dashes of late spring snow in parts of the state.

Summer Warmer Than Usual

During summer months of July, August and September we are expecting the weather in Michigan to be warmer than usual. Rainfall, however will be more plentiful over the northern half than southern half of lower peninsula.

RADIO PROGRAMS

Station KYW, Chicago.—Central time 8:20 P. M., Wave length 536 meters.

April 8—"What Crop Reports Really Mean to the Farmer," by B. H. Critchfield, executive secretary, Midwest Agricultural Economics, Research Council. "The Function of the Union Stock Yards," by B. H. Heide, secretary, International Live Stock Exposition.

April 15—"The Farmer's Taxes," by H. W. Moorehouse, director of research, American Farm Bureau Federation. "A Home You Love to Live in," by K. J. T. Ekblaw, Portland Cement Association.

April 22—"The Farm Horse Situation," by Ellis McFarland, secretary, Percheron Society of America. Also an address by L. A. Rumsey, American Institute of Baking.

OUR BOOK REVIEW

(Books reviewed under this heading may be secured through The Michigan Business Farmer, and will be promptly shipped by parcel post on receipt of publisher's price stated.)

Electricity for the Farm.—By Frederick Irving Anderson. This book is designed primarily to give the farmer a practical working knowledge of electricity for use as light, heat, and power on the farm. The electric generator, the dynamo, is explained in detail; and there are chapters on electric transmission and house-wiring, by which the farm mechanic is enabled to install his own plant without the aid and expense of an expert. Published by Macmillan Co.

Farm Mechanics.—By Byron Burnett Robb, M. S. A., and Frederick Gardner Behrends, B. S. This book is Volume 1 of "Farm Engineering" of the Wiley Farm Series. It is for every worker on the farm and tells exactly how to do 185 necessary mechanical jobs, containing 435 pages. Subjects discussed are: Harness repairing; knots, hitches and splices; belts, pulleys and shafting; soldering; painting; leveling; farm drainage; concrete work; farm water system; sewage disposal. Published by John Wiley and Sons, Inc. Price $2.50.

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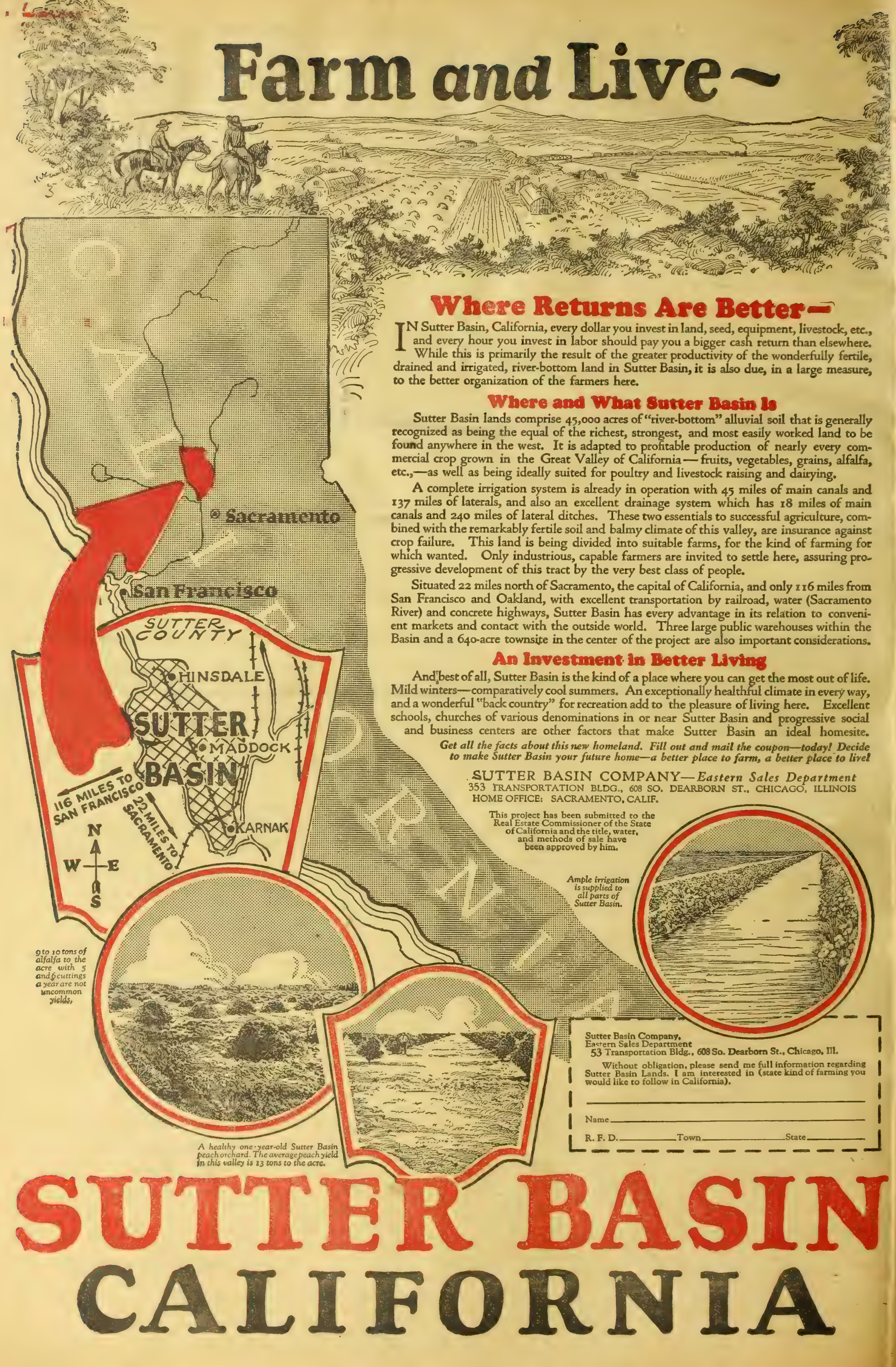

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In Sutter Basin, California, every dollar you invest in land, seed, equipment, livestock, etc., and every hour you invest in labor should pay you a bigger cash return than elsewhere. While this is primarily the result of the greater productivity of the wonderfully fertile, drained and irrigated, river-bottom land in Sutter Basin, it is also due, in a large measure, to the better organization of the farmers here.

Where and What Sutter Basin Is

Sutter Basin lands comprise 45,000 acres of "river-bottom" alluvial soil that is generally recognized as being the equal of the richest, strongest, and most easily worked land to be found anywhere in the west. It is adapted to profitable production of nearly every commercial crop grown in the Great Valley of California — fruits, vegetables, grains, alfalfa, etc.,—as well as being ideally suited for poultry and livestock raising and dairying.

A complete irrigation system is already in operation with 45 miles of main canals and 137 miles of laterals, and also an excellent drainage system which has 18 miles of main canals and 240 miles of lateral ditches. These two essentials to successful agriculture, combined with the remarkably fertile soil and balmy climate of this valley, are insurance against crop failure. This land is being divided into suitable farms, for the kind of farming for which wanted. Only industrious, capable farmers are invited to settle here, assuring progressive development of this tract by the very best class of people.

Situated 22 miles north of Sacramento, the capital of California, and only 116 miles from San Francisco and Oakland, with excellent transportation by railroad, water (Sacramento River) and concrete highways, Sutter Basin has every advantage in its relation to convenient markets and contact with the outside world. Three large public warehouses within the Basin and a 640-acre townsite in the center of the project are also important considerations.

An Investment in Better Living

And best of all, Sutter Basin is the kind of a place where you can get the most out of life. Mild winters—comparatively cool summers. An exceptionally healthful climate in every way, and a wonderful "back country" for recreation add to the pleasure of living here. Excellent schools, churches of various denominations in or near Sutter Basin and progressive social and business centers are other factors that make Sutter Basin an ideal homesite.

Get all the facts about this new homeland. Fill out and mail the coupon—today! Decide to make Sutter Basin your future home—a better place to farm, a better place to live!

SUTTER BASIN COMPANY—*Eastern Sales Department*
353 TRANSPORTATION BLDG., 608 SO. DEARBORN ST., CHICAGO, ILLINOIS
HOME OFFICE: SACRAMENTO, CALIF.

This project has been submitted to the Real Estate Commissioner of the State of California and the title, water, and methods of sale have been approved by him.

Ample irrigation is supplied to all parts of Sutter Basin.

9 to 10 tons of alfalfa to the acre with 5 and 6 cuttings a year are not uncommon yields.

A healthy one-year-old Sutter Basin peach orchard. The average peach yield in this valley is 13 tons to the acre.

Sutter Basin Company,
Eastern Sales Department
53 Transportation Bldg., 608 So. Dearborn St., Chicago, Ill.

Without obligation, please send me full information regarding Sutter Basin Lands. I am interested in (state kind of farming you would like to follow in California).

____

Name______________________________

R. F. D.__________Town__________State__________

SUTTER BASIN
CALIFORNIA

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The Michigan

BUSINESS FARMER

An Independent
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Edited in Michigan

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MOTHER'S LITTLE HELPER

In this issue: An Over-Production of Crops and Advice—Dress Up Your Home and Surroundings—New England Dairymen To Have Central Milk Marketing Agency—Forty Years of Faking—Other interesting features

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Dear Sir: We are writing you regarding ——————. Claim No. 1257. We are very pleased to say it has been settled satisfactorily. We received the check in less than two weeks after writing to you. We are very thankful for the assistance you have given us and will endeavor to boost the M. B. F.—J. D., Jr., Ubly, Michigan.

Claim No. 1257.
Amount of claim, $40.00.

Gentlmen: We have today received the radiator we ordered from ——————— & Co. I thank you for conducting a department in which we farmers can come to.—F. P. K., Belding, Michigan.

Claim No. 1234.
Amount of claim, $12.25.

Dear Sir: We received the knickers from ——————— today. Thanking you very much for the same. They certainly got busy when they heard from you. Wishing you success in your good paper, I am,—V. A., Mt. Pleasant, Michigan.

Claim No. 1368.
Amount of claim, $3.77.

Dear Sirs: In todays mail I received my money from the ——————— & Co. I asked for your help only ten days ago. I must say I am more than thankful to you.—Mrs. F. M., St. Clair, Michigan.

Claim No. 1355.
Amount of claim, $3.03.

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Mt. Clemens, Michigan.
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☐ Please mail me a membership certificate free of charge.

☐ I would also like one of the Protective Service signs and am enclosing 25 cents to cover cost of sign and mailing.

Name ________________________________

P. O. ________________________________, Mich

PLANTING BERRIES IN OLD ORCHARD

Would or would not an old orchard be a good place to plant blackberries and raspberries? If so how far apart should they be placed? The soil is sandy; could have it fertilized every year if need or what kind would be best?—T. H., Mesick, Mich.

—Whether blackberries and raspberries can be grown with success in an old orchard depends to a considerable extent upon the condition of the trees and the distance between them, if, as I understand, the land is still planted with trees.

Sandy loam soil, especially if it can be fertilized, would answer well for the growing of these fruits, but they should be planted in rows about 8 feet apart, with the plants four feet apart in the rows. If the trees are close together, it would not be possible to get very good results, since the roots of the trees take the food and moisture from the berries. Having berry plants in the orchard would also increase the difficulty of properly cultivating, spraying and caring for the trees.

However, if the trees are small and quite scattering and not other land is available for raspberries and blackberries, it would perhaps be well to plant them in the orchard. In order to get good results, however, it will be necessary to have them growing where they can be cultivated about once in ten or twelve days up to the time the crop is harvested, and then after the old canes have been removed, they should have two or three additional cultivations.

The plants may be set either in the spring or fall, and it may be helpful if a forkful or two of decomposure manure is placed about each plant after the soil has been firmly packed about them.

For red raspberries, Cuthbert and Early King are giving best results, as are Cumberland and Plum Farmer among blackcaps. Eldorado is the most desirable variety of blackberry although Snyder is a little hardier.—L. R. Taft, State Dept. of Agriculture.

USING FERTILIZER ON GARDEN TRUCK FARM

Can you give me information on the use of nitrate of soda, sulphate of ammonia and other fertilizers for use on a garden truck farm?—E. E. L., Essexville, Mich.

—The application of fertilizers to vegetable crops depends on several factors. In general nitrates tend to produce vegetable growth and delay maturity while phosphorous tends to hasten maturity. Short season salads and greens such as lettuce, early cabbage and spinach requires quick acting nitrogenous fertilizers. Nitrate of soda is most readily available while sulphate of amonia and dried blood are more slowly available. Sodium nitrate would then be applied in smaller and more frequent applications while the other two would be applied at one time. Very often nitrates are the only fertilizers applied to these crops.

For crops as tomatoes and melons where early maturity of fruits is essential, phosphorous would be important. Smaller amounts of nitrates is important, to stimulate early vigorous growth but this must be applied early and in moderate amounts. Thus for tomatoes, melons, and similar crops a complete fertilizer analyzing something like 3-12-6 would give good results on a fairly poor type of soil. On a more fertile soil, the application of 500 pounds of acid phosphate alone would be satisfactory.

As a general rule applications over 500 pounds are broadcasted while smaller amounts are applied in the row. With the exception of nitrate of soda all should be applied at planting time. Very often for crops such as early cabbage and head lettuce it is better to make two applications of nitrate, the second three weeks later.—E. P. Lewis, Assoc. Prof. of Horticulture, M. A. C.

He Could Do It, Too

Brown: I see that Perkins has got a job in Smith's livery stable.

Jones: What's he doing?

Brown: Smith has some horses that won't take the bit, so Perkins talks to them till they yawn.

SATURDAY
April 26th
1924

VOL. VI. No. 18

Being absolutely independent our columns are open for the discussion of any subject pertaining to the farming business.

"Hew to the line, let the chips fall where they may!"

The Michigan
BUSINESS FARMER
The Only Farm Magazine Owned and Edited in Michigan

Published Bi-Weekly
Mt. Clemens, Mich.

TWO YEARS $1

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An Over-Production of Crops and Advice

Many Ideas Advanced to Help the Farmer Solve His Problems but All Contain Flaws

Musings of FRANK W. BENNETT

County Agricultural Agent of Barry County.

HARDLY a day passes but what we read of some new plan to help out the farmer, by some "Moses" who has kindly consented to lead the farmers out of the darkness. many of the plans are impossible, many sound good on the surface, and a few contain real sound sense. Mr. Bennett has picked out a few samples of the over-production of advice offered the farmer and then proceeded, after much thought, to answer each one with facts. You all have your opinions of this advice given so freely, now compare what you think with Mr. Bennett's ideas.

WHILE we have been informed that we have a surplus of wheat, potatoes, pork, beef and hides, in fact everything for which the farmer is unable to receive the cost of production when he sells it, he is told that there is an over-production and he is advised to diversify, or in other words, produce something else.

In speaking of surplus we are inclined to think that there may be a surplus of advice. Anyway, it is becoming cheap. In other words, it is not accepted as whole-heartedly as it was. Now. I do not wish to discourage anyone from trying to solve our economic problem, in fact the more people think along this line, the sooner a possible solution may be found. But I am inclined to offer a word of warning to those thinking persons who no doubt are honestly trying to solve the farmers' problems. If you have a plan, think it clear through. What would the result be if any large number of persons would do as you suggest? Let's analyse a few remedies for agriculture given by many as advice.

Advice No. 1. If the farmers would go home and go to work instead of riding around in their automobiles, they would solve their own problems.

Answer. The farmers' job is to produce. Now extend a little more of your advice and inform them what to produce. Perhaps they might produce wheat, pork, beef and hides, or potatoes, all of which we are told are already over-abundant. Perhaps it might be possible for you to hit upon some special product that might pay the cost of production, plus a profit. But then if this great army of automobile riders would go to producing this specialty, they would only add another item to those already listed in the surplus column.

Farmers Deserve Good Things

Advice No. 2. The cost of high living. The farmers don't live as they used to. They buy automobiles, go to moving pictures and wear good clothes. You can hardly tell a farmer from a successful business man.

Answer. Agriculture is the source of 85% of the wealth of our country. Now if there is something inherent about farming or agriculture that places it below any other business, or industry, or in any way makes it degrading, then our would-be advisers had better center their energies in trying to adjust our economic structure so as to let agriculture assume its rightful place along side of our other industries.

Advice No. 3. The auto is a curse to the country and is killing agriculture.

Answer. The internal conditions of our country have gone a long way toward relieving a serious condition which was inevitable following the great war. With many of the countries of the world nearly banckrupt and unable to buy or pay for our surplus products what would have happened if our automobile factories had not been running full time and employing thousands of men at a good wage? This has made it possible for laboring men not only to buy and pay for the largest amount of farm produce in history, but also to purchase furniture and other similiar commodities, the manufacture of which in turn gave other men employment so they might buy farm produce.

The congregating of so many men and women in the cities made it necessary to build new homes which not only make a market for lumber brick, tile and cement but gave employment to other thousands of workers who in turn bought farm produce. So I am inclined to think that the auto craze has saved our country from a great economic disaster.

Advice to the Wheat Grower

Advice No. 4. To the wheat farmers who have 140,000,000 bushels surplus comes the advice to diversify and feed wheat.

Answer. Diversification means to produce other products. The wheat grower might raise potatoes, but we remember that during the last two years there have been more potatoes grown than ever before and the price, considering the cost of production, plainly shows too great a production. He might produce meat, but I have before me a government report which shows that meat has increased one billion and one-half pounds over last year. The result at this time of diversifying, would only tend to lower the general price level of all commodities or bring all products to a point of surplus.

Self appointed and well meaning advisors also urge us to feed wheat, as wheat has nearly the same feeding value as rye, corn, oats or barley. This suggestion has some value, but we must remember that by feeding wheat, we would place this product in competition with these other grains and, of course, this would tend to low their price, so you see as a general means of helping agriculture these proposed remedies fail to accomplish what is claimed for them.

The difficulties of our present situation are very real. The situation is admittedly dark. Our national leaders realize it. Following is an extract from the Secretary of Agriculture's speech before a body of economists: "In times such as these good farm management on most farms is reduced to the simplest terms and can be stated very briefly. For example: Produce as much as you can as cheaply as you can of what you can produce best; spend as little as you can; work as hard as you can, make your wife and children work as hard as they can. Having done this, take what comfort you can in the thought that if you succeed in doing what you set out to do, and if most other farmers also succeed, you will have produced larger crops than can be sold at a profit and still be under the harrow. Nevertheless, the average farmer is forced by unhappy circumstances to adopt exactly that policy. It is not good for the farmer, not good for his wife and children, not good for the Nation."

Was the Farmer to Blame?

Some say that during the depression of the last three years, the farmer found himself exactly where he ought to have known he would find himself; that such periods always follow wars, and the farmer should have known this and set his house in order; that those farmers whose foresight was not as good as their hindsight must take the consequences—work hard, keep cheerful and if they survive take comfort in the thought that the next time they will know in advance what is going to happen.

Advice No. 5. Co-operative marketing will solve our problems.

Answer. Co-operative marketing is good business practice and should be encouraged. Thirty-seven cents is not a just share of the consumers' dollar to be returned to the person who takes the chances of the elements such as rain, wind, hail, drought, etc., and we have proved that by marketing co-operatively a larger per cent of the price paid by the consumer for products is returned to the producer.

We do believe that it is good business to eliminate just as much expense as possible in transferring produce from the producer to the consumer in the way of freight, handling, profits, etc. But, in general, could the co-operators sell our surplus at a profit? Or with an unlimited supply of any or all products, could they market it so as to return as a price which would cover the cost of production?

Or if the economic relations between this and other countries should make it possible for foreign countries with cheap money, cheap labor, and cheap transportation to produce and sell in our markets for less than the cost of production here, could the co-operative marketing save us? You may say that isn't possible, but the Government reports that our agricultural exports were less last year than our imports, and how do we know that it will stop there? We have no assurance that the agricultural imports into this country may not keep on increasing.

Is Efficiency the Remedy?

Advice No. 6. Better farming, namely, better seed, better soil, better stock and better methods.

Answer. In reply to these suggestions that increased efficiency of production is the real remedy we would say that these things are all essential and by all means should be the aim of every farmer. We admit freely that it is the adoption of better business practices that makes it possible for one individual or corporation to compete successfully with others in the same business, especially if others do not apply good practices. For instance, if all auto manufacturers built and sold as many cars as the Ford Company, the entire industry would be ruined in a short time.

The natural incentive of every farmer is not only to do well, but to do better. He, like every one else would not be satisfied just to make a living and pay his over-head expense. So if by better farming, he could make a small profit, he would try to expand this business until he could have on hand a comfortable bank account laid by for a rainy day. Then again if a great number of farmers adopted the advice given and still retained that great natural desire to do better, we might not only have a surplus but a super-surplus. So again generally speaking, agriculture as an industry might not be any better off.

After carefully thinking over and analyzing the effect that would result by the application of these programs, given as advice, especially if such programs were followed by any great number of farmers, we are convinced that the serious condition in which agriculture has found itself in the last three years was not brought about by any individual action of the farmer himself, nor can any individual effort on the part of the farmer correct the condition.

A Look at the Real Problem

Question No. 1. In an attempt to analyze our present situation, one of the first questions that we might well ask ourselves would be, "Is there anything the matter with agriculture? If so, when did it happen, what were the circumstances at the time and what remedy should be applied?" In answer to the first question, I would say that farm values have decreased $13,000,000,000 from Jan. 1, 1920 to March 1, 1922. Also in some of the agricultural states from 42 to 62 per cent of the farmers are bankrupt, and these bankruptcies in agricultural districts have caused more bank failures in the year 1922 than in any other year since the panic of 1893. For further information, ask any farmer who is trying to meet his overhead expense and at the same time keep his farm buildings, fences and machinery up in order.

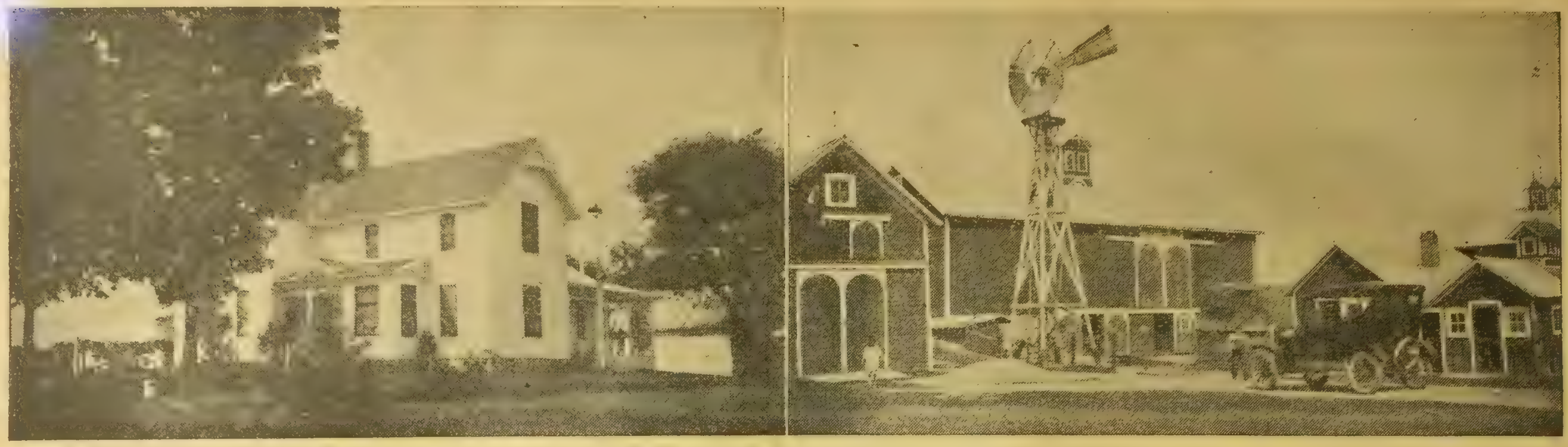
Question No. 2. When did it happen? In order to establish the time we, of necessity, have to consider the relative condition of agriculture to other industries over a period of years. After agriculture had recuperated from the crisis of 1893 to 1896, caused by an inflated currency, there was an increased circulation of from $28.00 per capita in 1896 to $35.00 per capita in 1900, so in the year 1900 agriculture found itself in a normal growing and thriving period which continued on with a few minor exceptions until 1920—when something happened. The bankers of the Federal reserve system in order to stop this crazy investing in not only things containing real wealth but in questionable stocks and bonds resorted to a deflation of the currency as a means, by ceasing to loan on what they termed speculative enterprise. This move accomplished its original purpose, but it did not stop there. In doing so it has nearly ruined our great essential industry—agriculture.

The Farmer's Little Dollar

In 1920 the purchasing power of farm products was 86, in 1921, 67, and 1922 as low as 64. It gradually began to revive until in October, 1923, it had reached 75, but in November it started downward and reached 73. Where will it go from here? During these times the farmer suffered from every element of increase in cost of production including wages, interest, taxes and freight rates.

Now I am going to ask any honest thinking man if it was anything that the farmer did or did not do that brought about this crisis in ag-

(Continued on Page 17)



If all farm houses, barns, and yards looked like this the country wouldn't be such a bad place to live, would it? It's surprising what a little work and paint can do if mixed with determination. This is Sunny Lawn Farm, at Rockford, Michigan.

Dress Up Your Home and Surroundings

A Few Dollars Invested in Paint and Lumber Plus a Few Hours Work Will Make You Feel, Look and Work Better

By L. FOWLER

THE psychologists tell us that we are greatly influenced by our dress and surroundings, and all who have had experience along these lines seem to agree with this deduction.

Have you ever been feeling as blue as the best tinted indigo, and just as you seemed to be sinking still deeper into the blue clay, you found that you must skip into town for repairs to some balky machinery. Then you decided that the limit had surely been reached, did you not?

But by the time you had changed and combed a little of the clay and grass out of your hair you were feeling fully ten per cent better, and as you whizzed along the road behind old Molly or in the wheezing old "Lizzie," you seemed to feel just a little better every minute.

That was because you were dressed neatly and thinking about something different. Neighbors crops, or new buildings were before you instead of the same old yard and dirty barn.

If old clothes have such an effect upon you don't you think that the old things your buildings wear might affect your farm and crops.

Did you ever see a farmer who let his buildings tumble down and his fences sprawl across the field and still rejoiced in good luck? If his tools go unpainted and find shelter in odd corners you usually find that his crops are full of weeds and every thing seems to be going wrong for him. His neighbors say "He never seems to get along."

Did you ever look at a neat place such as the "Sunny Lawn Farm" and not think, "Well, that fellow is surely getting along fine?"

Mr. Stewart, the owner, will surely testify to the fact that neat, well-kept buildings build up the morale of the people who work around them. They mean better crops and better results in every way.

But even the best buildings soon become an eyesore if their surroundings are not kept in an orderly condition, while very old buildings often look well, because they are kept in good repair with well-kept yards.

If you cannot at first afford such good buildings, you can clean up the yards, pile unsightly rubbish out of sight and make everything clean and neat.

You can clean up the dooryard and fence out the stock so the goodwife can plant some shrubs and flowers which will do more toward brightening up the old place than a great house with untidy yards.

You can put the hog house out behind the barn, and plant a beautiful hedge of some quick-growing, wild plant or tree to hide unsightly buildings. The common thorn-apple makes a good hedge and is a "Queen of Shrubs" when it is in bloom. It's fragrance and beauty is almost unequaled.

A few trees will make a desert-like place look like home. A coat of fresh paint will change an old house into a new one to the passing eye. A few field stones, laid with cement for the corner posts of the porch and also for the gate posts, will make an unbelieveable change.

There are so many things that cost only work, that it sounds decidedly lazy when we hear some farmer saying that he cannot afford to fix the old place up. It is not money but care that a home needs. Just some one to love it and fuss it up and it will repay a hundred-fold not only in increased profits but in multiplied pleasure and higher moraly for all who live with it or see it.

The children will take a greater interest in home if they have a pleasant home atmosphere and the work of caring for and improving the place will usually be shouldered by them if they are giving a free hand in the planning and planting. They like to try their talents in such ways and it helps them develope.

A cherry or plum tree at the back door. A few apples and nut trees for shade and a cozy grove of evergreens cost but little if very small trees are purchased for setting out, and they are usually as large in ten years as those that are much older when planted.

And don't forget a few trees for the chicken lot, the pasture and along the drive. They can usually be had for the trouble of taking them up and resetting, or by planting seeds, and they are valuable for future wood, as well as beauty.

Why not get busy and see who can make their old farms the prettiest with the least cost. Pilfer the woods for trees, shrubs and flowers. Many of them are beautiful. No spring is more sweet-scented than the wild cherry or plum. No shrub more beautiful than the wild rose. The vines are well represented by the woodbine and sweet briar.

There are flowers in abundance and the roots are free for the gathering. Always be careful to get a large lump of earth when taking them up or they may not live.

Make your home a bower of green beauty and you will feel better, look better and work better.

New England Dairymen To Have Central Milk Marketing Agency

By GEORGE HERBERT

THE most important move in the New England milk industry in many months was made at Bellows Falls, Vt., on March 13, when the initial steps were taken to unite all New England milk cooperatives in a single central cooperative sales agency.

The step was taken under the pressure of the recent "price war" on the Boston Market, which is still on, and working heavy damage to the producers. The Boston market is the natural price regulator for all New England, milk prices being set monthly there by the city dealers and the New England Milk Producers' Association, the famous "NEMPA," which is the most powerful cooperative east of New York. Each of the other larger cities has a similar bargaining body, which follows NEMPA's lead. Milk is sold in two classes, fluid and surplus, with a wide margin between the two in favor of fluid, and the "war" is the logical result of several factors, all operating on the perfectly natural and justifiable desire of the more distant independent cooperative creameries, especially in Vermont where no large city markets exist, to get their share of Boston's high fluid price.

One of these factors is the device of certain city retailers, selling mostly fluid milk, who pass by NEMPA with an offer to an independent creamery to take all its milk at one "flat price;" a price which cuts the NEMPA fluid figure, but still boosts the creamery's profits by cutting out the low priced surplus. The price cut is operated also by various other well worn contrivances such as rebates, bonuses, etc.

The immediate cause of the "war," however, seems to have been the aggressive action of the John T. Connor Co., a Boston chain store system, to work up a cash and carry trade in fluid milk. To insure its supply, the Connor Co. brought heavily into the Bellows Falls Cooperative Creamery, and improved the plant; the more readily that this concern had vainly tried, as it claims, to sell through NEMPA in the Boston market. Entrenched thus at the country end, the Connor Co. cut its cash and carry figure to 4 cents below the regular retailer's for residence delivery. These retailers, and NEMPA of whom they buy, considered so heavy a cut unfair; they could grant 3 cents, but 4 cents threw too big a fraction of their milk out of the fluid into the surplus class. The Connor Co. made it so hot for the retailers (and for NEMPA also, since much of their loss on surplus they pass at once to NEMPA) that NEMPA felt finally compelled to get into the game by cutting its own rates also, to hold its fluid market. The Connor Co. cut again, and the "war" was on.

It made so great an outcry among dairymen over their losses, and held on so long with little sign of let up, that the New England Homestead, through its editor, Glenn C. Sevey, issued a call for all hands to get together in the cause of peace, and the meeting at Bellows Falls was the result. It was largely attended, 200 and more being present, the call having included all the New England farmers' organizations and representatives who would naturally be interested. The selection of Bellows Falls, the chief country center of disturbance, and near many of the smaller creameries hit hardest by the "war," gave evidence of fairplay, as did the general conduct of the meeting, and a spirit of harmony pervaded the affair which was remarkable in the circumstance.

A broad picture of the situation was called for first by Chairman Sevey, many speakers, representing all the interests, contributing. President Geo. R. Little of NEMPA began it, explaining the difficulties of NEMPA in maintaining living prices, with surplus prices (based on butter) held so low by competition of the west. Critics had said NEMPA set its fluid figure too high, but how else could a living average be secured? The endeavor was to set it at the highest notch supply and demand would allow. He pointed out the rebate, bonus and flat price difficulties, but alluded to the chain store controversy only by saying that NEMPA had been forced to cut by competition. He ended by proposing as a solution a cooperative marketing sales agency, New England wide, with quality and distance the only differentials.

President Chas. F. Adams of the Connor Co., who followed, was the only speaker who brought a war spirit into the meeting. His tone was fight throughout, which hurt his case, and contributed materially to the ultimate harmonious outcome. He stood, he said, for the right of the consumer to the lowest possible price compatible with fair profits to an efficient organization. The basic trouble was over-production, and his cash and carry plan aimed to cure it by boosting consumption. His alliance had a right to the 4 cent margin, and they intended to get it.

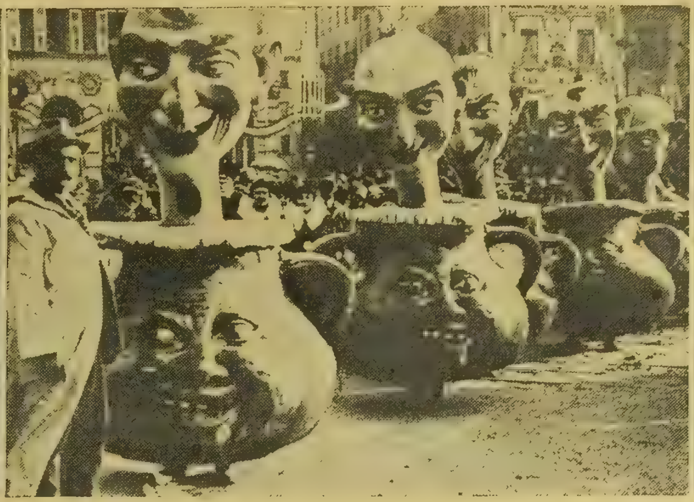
Roy D. Hunter, ex-president of the Eastern States Farmers' Exchange, denied over-production in New England; the millions paid in Boston for western butter proved it. But he admitted the merit of a cash and carry plan, and believed a fair margin could and would be made. He believed in the farmer getting the retail price for his product, just as many manufacturers set it. NEMPA has kept out of retailing, but the time has come to consider it. The law does not permit dealers to combine to set a retail price; it does permit farmers to do so.

State Agricultural Commissioner Gilbert of Massachusetts believed

(Continued on Page 20)

PICTURES FROM FAR AND NEAR

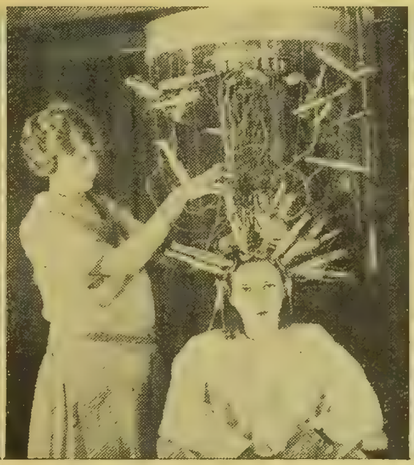
WORLD'S SMALLEST BOOK AND INVOICE.—The hand here shown is holding two unique objects in the form of a tiny Morocco bound book, one-half inch by three-quarter inch, with 29 pages. The other is an invoice for three lambs, and dated in the year known as 2350 BC.



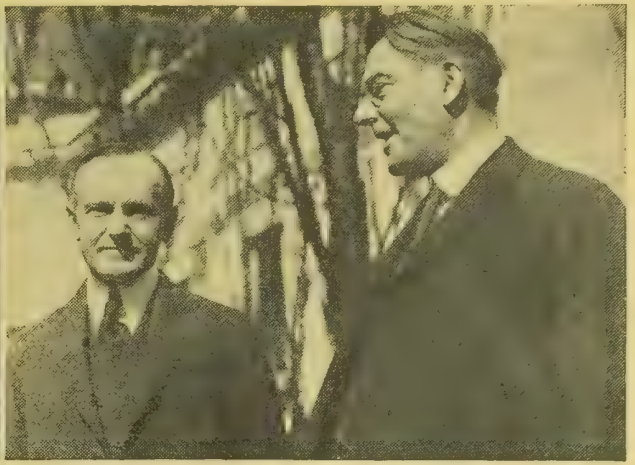
WHAT'S THIS?—No, this is not a scene from "Alice in Wonderland" or a picture taken in some land of horribles. Each year the people of Nice, France, hold a carnival, and this picture shows part of the long procession of revelers at the last carnival held recently. The French plan far in advance for this annual event and they have great times. Can you keep a straight face as you look at these grotesque figures?

VICE-PRESIDENTIAL POSSIBILITY.—Major George L. Berry, of the American Legion, and president of International Printing Pressmen's and Assistants' Union of North America, who is the labor and ex-service men's candidate on the Democratic ticket for the Vice Presidency.

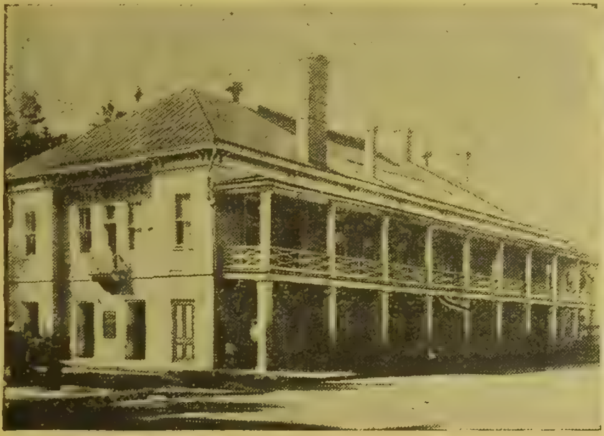
GOOD FOR THE TEETH.—Miss Helen Sube, late European diving champion, and star of the New York Hippodrome, is here showing a Los Angeles crowd how easy it is to pull an automobile with 8 men aboard.



NO, THIS LADY IS NOT BEING ELECTROCUTED.—She has not been sentenced to death, but is just getting a permanent wave.



GOOD LUCK TO YOU.—Curtis D. Wilbur, new Secretary of the Navy, is shown with President Coolidge. Upon his arrival at Washington to take up his duties he was met by the President who wished him all possible success.

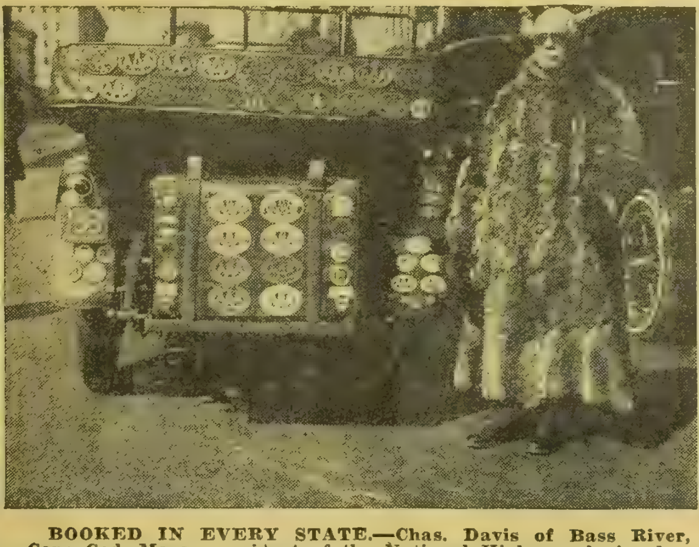


OLDEST BUILDING IN U. S.—The present U. S. Post Office at St. Augustine, Fla., which is said to be the oldest building in the United States. Originally it was the Spanish General's palace built of logs. The present structure was built in 1597-1603, and sold for $3000 to the Spanish King.

A VOCABULARY WIZARD.—Little Adele Aarons, 2 years old, of Philadelphia, Penn., has astounded learned men with her knowledge of the English language. She can converse fluently, and she uses words of 2, 3 and 4 syllables.

FARM LABOR STRIKE IN ENGLAND.—Farm hands in England all belong to the English Farm Hand Union, the only union of its kind in the world, and they recently went on a strike. The English "Bobbies" guarded the strikebreakers, or "blacklegs" as they are known in that country, so they could work.

THOUGHTFUL CONSTANCE.—A charming study of Miss Constance Talmadge, noted screen star, caught as she was in a thoughtful mood, probably wondering about asking the producer for an increase of $1,000 a week in salary.



BOOKED IN EVERY STATE.—Chas. Davis of Bass River, Cape Cod, Mass., president of the National Highway Ass'n., has license plates from every state in the Union. He belongs to 46 different automobile associations and has an emblem of each on this car. The photo was snapped during a recent tour of the states.

GREATEST RUNNER OF THE YEAR.—Loren Murchison, who should be awarded the victory wreath if it is figured on victories. He won in every meet except one and is now preparing himself to go to France this summer with Uncle Sam's athletes.

(Copyright, Keystone View Co.)

FORTY YEARS OF FAKING

The Memoirs of a Grafter—By Himself

TRAVEL, say the wise ones, is an education in itself. That's just what Pete Dexter, faker de luxe, discovered soon after he joined a troup of medicine show grafters. By staying one jump ahead of the cops, Pete never worried, altho the one jump caused him a lot of quick moving at various stages in his travels.

From a canvasser who had no thoughts of playing fair with his customers, Pete tackled the stock selling game at various times. He wasn't very lucky till he happened onto a land selling scheme in Texas, and then he made a killing.

He thought he knew enough about promoting a company of his own to start a railroad that would run where others would not. He did a good job of promoting, but failed to reckon with people who wanted a show for their money, and last week he told how he almost landed in jail because some folks became curious. But by handing over his profits to attorneys and bondsmen, Pete managed to slip thru the net, and, altho the railroad went up in smoke, Pete was left to pursue his game of getting dollars. However, his brush with the long arm of the law has made him cautious, and so he believes it pays to gain fame by a slower process. This week he gives further facts of his life chase after easy money.

SO I moved to New York, where I could hide for a while, as several of the stockholders in our railroad had promised me a first-class beating if they ever caught me, and from the looks of some of them, I suspect they could have carried out their threats.

One day I admired a pretty white stone my landlady was wearing on a small chain. She said I ought to have one—it was a lucky stone. When I inquired where she got it, she produced an old booklet which described in detail how a famous explorer had found some stones in India. These stones were used by the natives to ward off all evil, and whenever a person carried one in their pocket, they had good health and good fortune.

Altho the booklet had been printed many years ago, it stood up till I had copied out the wording. I changed the names a little and decided that this was something every one wanted. A small print shop came to my aid again. More books were printed, and the marvels of the East Indian Lucky Stones were set forth. In order to make these things sound good, I put a lot of unusual testimonials at the bottom of the pages, which I wrote myself. I told of how many had these stones set in rings and others had them made up into watch-charms.

Not only were the stones carriers of wonderous magic, but they were really valuable as gems. I further described them—how they were gotten and how the importers had arranged with a Bombay dealer to furnish a supply of them.

These stones were sold at the small price of one dollar each or three for two dollars. The usual literature with order blanks was sent out and a nearby stream furnished a goodly supply of stones. I never knew how many people believed in such charms and long after I had stopped filling orders, letters would come addressed to me, asking for the stones. That deal kept me in spending money one winter, and I have often thought I missed a good business opportunity by not sticking to it regularly. But I ran out of booklets, and didn't want to spend time waiting for a reprint.

Having a little time and some money, I decided that a trip to Europe would be good for me, as I needed a rest, and my experience with the law was such that I didn't want to take any chances.

The old saying that "birds of a feather flock together" holds good as far as I am concerned. I got back from my European tour pretty hard up, but on the boat coming back I met another fellow who was interested in promotion work. He had an office in New York, and wanted me to work for him. As I said before, being broke is no joke, so I hired out at a fancy price. Harrison T. Henry was the fellow's name I was working for, and we dealt in stocks. Henry dealt in all kinds of stocks, but catered to the smaller trade; that is, we would get a line on people who had a little money to invest and who did not know much about stocks. Not knowing much, it was easy for us to sell them most anything.

Frequently we would find people that had a few share of good securities that had been left them by a departed relative. Of course, they wanted to make a killing, and were always looking for a chance, and the Harrison T. Henry Company was out to give them that chance.

We had a list of people we had gathered who had such investments, and my job was to call them on the phone. The line we used was as follows:

"Is this Mrs. Smith?" I would ask when the phone was answered, and of course it was, and I would proceed to tell her who I was and lay emphasis on the name of the firm.

"I believe you are the owner of five hundred shares of Nutty Chips, the new breakfast food," I would say.

"No, there's some mistake," replies Mrs. Smith.

"I beg your pardon," I would say. "I was going to give you some good news."

"What is it?" was the question that invariably followed, and all I had to tell her was that "Nutty Chips" had started to soar in value and that fortunes would probably be made in that stock in a week or so. Naturally, in a short time the victim would follow this tip and call at our office and it didn't take long to get her to trade in her good stocks for shares in the company that were soaring in value. Frequently, money came in, too, and we were going fine till one irate woman found out she had been stung. Of course Henry was arrested, but I had taken my departure and gone west. At least my earnings gave me a start, and I decided to try a better field.

While I was working in New York, I met a fellow who had a soft game. He didn't get a lot at once, but it came easy. I had the literature, and so I opened an office in St. Paul and turned my attention to the fortune telling game, or astrology. I had a lot of literature printed that looked as if it was typewritten, and started a lot of ads in some of the various weekly papers thruout the country. The ads read about as follows:

"Can you stand the truth? Let me tell your fortune free. Somewhere in your past, present or future you have had some startling experiences which if taken at the right time might be a fortune to you. Astrology, the oldest of sciences, will help you in your business. Write your name, date of birth, and enclose ten cents in stamps for a confidential reply."

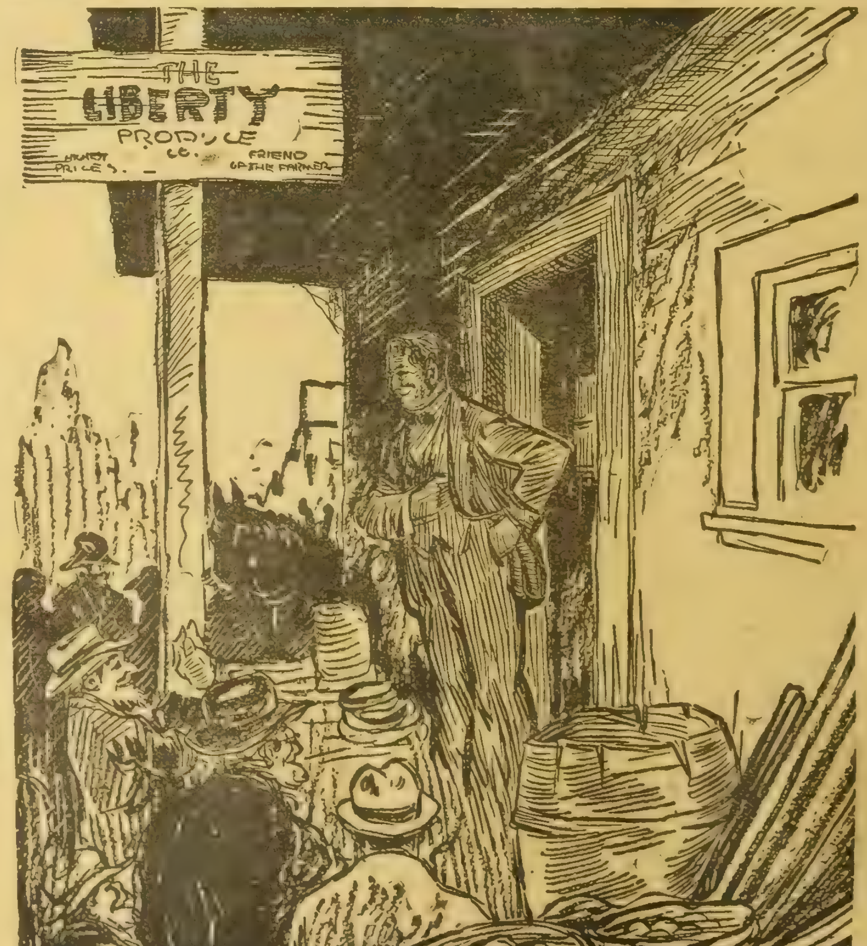
It wasn't long till a lot of people began to send in the dimes. I therefore sent them a chart that looked very mystical and which had a lot of the signs of the vodiac on it. On the back they would find a lot of stuff that would arouse their curiosity, and toward the end a chance to get real stuff on their future was offered for the price of two dollars.

Needless to say, I got a lot of money on this scheme. All I had to do was to keep it going out, and the way folks bit was good. It was while I was working this scheme that a fellow named Reilly, whom I had known in Californa in the gold mining stock deal, met me.

He had the lists of all the stockholders in the old Cripple Creek company, and when I told him what I was doing, he made this suggestion. He was to go to Denver and wait till I had sent out circulars to his mailing list. I was to be the astrologer, and was to say something like this:

"The stars which control your destiny show that you have made investments in the past which so far have proved unprofitable. However, I find that these same stars have good tidings for you, and if you will send a dollar the information will be sent." The people who answered, and a lot of them did, were advised that their investments would start to pay very soon, and they had better look them up. Of course a lot of other stuff was put in, but they saw that investment stuff first.

It was then that Reilly, of the Cripple Creek company, started to work. He would send out a pamphlet telling the stockholders of the recent success of some of the old holdings of the Cripple Creek company, and that by the use of modern machinery, which was to be installed at once, their former investment was going to pay out big. It was necessary, of course, that more money be had, and if each stockholder would send in five dollars for each share he held, the new company, under Reilly's direction, would soon be the talk of the age.



I Opened the Liberty Produce Company

Say, when the holder of that stock thought of what the fortuneteller had just written him recently, he wasted no time in sending his check to Reilly. In two months we cleaned up $25,000, as there had been about 10,000 shares of Cripple Creek stock out at the time.

We probably would have gotten more, too, but a postal inspector got suspicious of Reilly's getting so much mail and one day he appeared at the Denver office and grabbed Reilly. I was in Denver at the time and when the evening paper told of his arrest and how the postal authorities were looking for the rest of the gang, I left town without collecting my baggage. Reilly was sent up for three years and I was glad for he had played me dirty in California.

I went to North Dakota after that deal. I wanted to hide and rest up till things quieted down.

While I was there I noticed the big business in the potato industry. It appealed to me and I tried to figure how a fellow could get in on the business and still make money. My earnings as an astrologer had been pretty good but I was afraid to start out again as Reilly's arrest brought home the fact that the postal department was a dangerous gang to have on a fellew's trail.

It wasn't long after I had located in the small town of Benner that I discovered the farmers were discusted with the manner in which they sold their crops. After all the work they turned it over to some company for sale and took just what they handed them in payment. I decided here was a good chance to get easy money. So early in the following summer I opened the Liberty Produce Company. The Liberty was announced as the friend of the farmer. I put a little of my money in the local banks which gave me a standing with them and started out among the farmers and bargained for their crop of potatoes. I would cut down the cost of the middleman in selling them and they fell for my line in a hurry.

A few trips to Minneapolis and Chicago on my part impressed them a lot and I arranged for selling the potatoes. When the first few cars were sold to me I paid a good price for them at once and made a lot of moise about how that was the real price they should receive for the crop. Of course I sweetened the checks a bit out of my account but that sugar drew the business. I had so many calls to buy potatoes, that I couldn't get around to check them all as they were loaded. Ordinarily I paid by check when the car was loaded but due to the busy season on my part and my many trips to market, I fell behind in paying at once. But these farmers never worried. They were so sure of my offers that they said it was all right and I could leave their checks at the banks and that would save them trips to town.

However, I worked it pretty good. I managed to check out all but a few dollars of my deposit in the local banks but they didn't care as my returns should be coming in shortly and the banks figured I would leave a nice sum with them to use during the winter.

The Liberty Produce Company sure had a big business and along toward the close of the season I had thirty cars of spuds lined up. I announced that I was going to take them to market personally, and away we went. I did take them "personally" and when the commission firm I was dealing with in Chicago paid me I decided that the killing was good and instead of going back to Benner, N. D., I shaved off my moustache and decided to visit in New York for a while. That was about the easiest money I picked up and of course there was not a thing to worry over as I had never incorporated and the few books I had left in the offices of the Liberty company showed nothing.

(Continued in May 10 issue)

RADIO DEPARTMENT

By J. Herbert Ferris, B. E.

TO RECEIVE TIME SIGNALS

I wish to receive time signals from the Arlington Station. Can I do this by adding loading coils to a broadcast receiver, or do I have to get a honeycomb coil?—A. B., North Branch, Mich.

—Yes, you can add loading coils in your present set to get Arlington time signals. Look up honeycomb coils of equal wave length and place one in the aerial lead and one in the secondary and one in the tickler circuit (if your set uses one). I can not tell the size to advise as I do not know what your set now consists of. You must bring up your present wave length to 2650 meters which is the wave that Arlington transmits upon.

The tickler coil can be of about ⅔ the value of the ones that you place in the primary and secondary circuits.

You can wrap cardboard tubing with No. 24 Cotton covered wire and make your own loading coils, tho the honeycomb coils are more efficient and take up less room in your set.

FOUR TUBE REFLEX CIRCUIT

Will you put the diagram of a three or four tube receiving set that will receive any place on the face of the earth, runs from dry cells, and operates a loud speaker.—B. D., Ionia, Mich.

—In a future issue we are going to publish a diagram of a 4 tube reflex circuit that will come as near filling your requirements as is possible. It is out of the question to build a set, no matter what the price that will reach any place on earth. There is not any set that can do it, or has done it. The most expensive sets, and complicated will only reach regularly about 2000 miles, and then there are days that some nearer stations cannot be heard. Other times 5000 miles can be covered. The set that we are going to describe will not require an outside aerial and will work a loud speaker. The parts alone will cost about $75.00.

WANTS TO RECEIVE DISTANT STATIONS

Could you tell me where I can find out how to build a radio receiving set that will receive from broadcasting stations 1500 to 2000 miles away and less? Can the one in your Feb. 2 BUSINESS FARMER be added to so it will do it? Thanks in advance.—E. W., Benton, Mich.

—The set described in our issue of Feb. 2nd, will enable you to hear from over 1000 miles and at times from greater distances. A set as described has brought in music for me from Springfield, Mass., to Dallas, Texas, and Denver.

There is no advantage in trying to listen to the stations that are so far away, they come in weak and the near stations are so much better and clearer and you can get them easily. In our future issues we will in turn describe how to build different types of sets and how to operate them.

It will be much better to start on a simple set and learn how to operate it than to try with the much more complicated sets and find that you do not get any results, or not as good results as expected.

TO GET LONG LIFE FROM BATTERIES

Don't short circuit your battery to test it, that will use more current than over hours listening in will use.

Don't forget to turn off the battery switch as soon as you are thru listening in, or if you leave your set idle even for a few minutes. The longer the rest that dry batteries get the better the service they give. If you have no switch, disconnect your battery wires.

Don't turn the rheostat up as far as it will go, but use only as little current as is necessary to make your tube detect the incoming signals. The less current you use the longer your supply will last.

Don't expect one battery to do the work of two or three, always use enough cells to easily and properly do what is required.

TEN YEARS' PROGRESS

for Economical Transportation

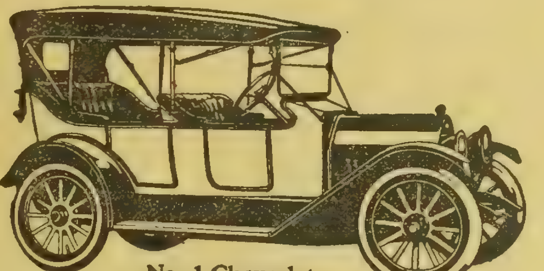
CHEVROLET

1914
SPECIFICATIONS

Horsepower, S. A. E.	21.7
Weight	2500 lbs.
Tires, 32 x 3½, fabric	(about 4000 miles)
Top	Two-man, with side supports
Gas Feed	Air pressure
Windshield	Folding
Rims	Detachable
Cooling	Thermo system
Rear axle gears	Straight teeth
Oiling system	Splash
Chassis lubrication	Grease cups
Back curtain light	Celluloid
Side curtains	Stationary
Finish	Paint, air dried
Gasoline mileage	About 18
Service brake	Clutch combination
Wiring harness	Open
Insurance rating	B
Terms	Cash
Service stations	About 1000

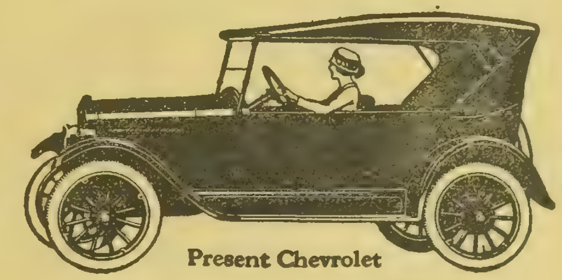
1924
SPECIFICATIONS

Horsepower, S. A. E.	21.7
Weight	1880 lbs.
Tires, 30 x 3½, fabric *(Cord tires on all closed models)*	(about 8000 miles)
Top	One man
Gas feed	Suction
Windshield	Double ventilating
Rims	Demountable
Cooling	Pump circulation
Rear axle gears	Spiral bevel
Oiling system	Pump, forced feed
Chassis lubrication	Alemite
Back curtain light	Glass
Side curtains	Open with doors
Finish	Baked enamel
Gasoline mileage	About 24
Service brake	Separate brake pedal
Wiring harness	In conduits
Insurance rating	A
Terms	As desired
Service stations	About 20,000



No. 1 Chevrolet

Price, 1914, $1000



Present Chevrolet

Price, 1924, $495

THE pronounced leadership of the automobile business in restoring the old-time purchasing power of the dollar is best illustrated in the increased quality and decreased price of a Chevrolet.

These reductions in prices have more than doubled the purchasing power of the consumer's dollar when buying a Chevrolet, although the specifications and design show marked increase in quality.

Big volume production made these economies possible. Note the ten years' record of Chevrolet sales:

Ten Years' Record of Chevrolet Sales

1914— 5,005
1915— 13,500
1916— 69,682
1917—125,399
1919— 93,814
1919—151,019
1920—155,647
1921— 77,627
1922—242,373
1923—483,310

We are the world's largest manufacturers of quality cars, having attained this leadership through offering the utmost possible per dollar value in modern quality automobiles.

Before buying any car at any price *See Chevrolet First.*

Chevrolet Motor Company, Detroit, Michigan
Division of General Motors Corporation

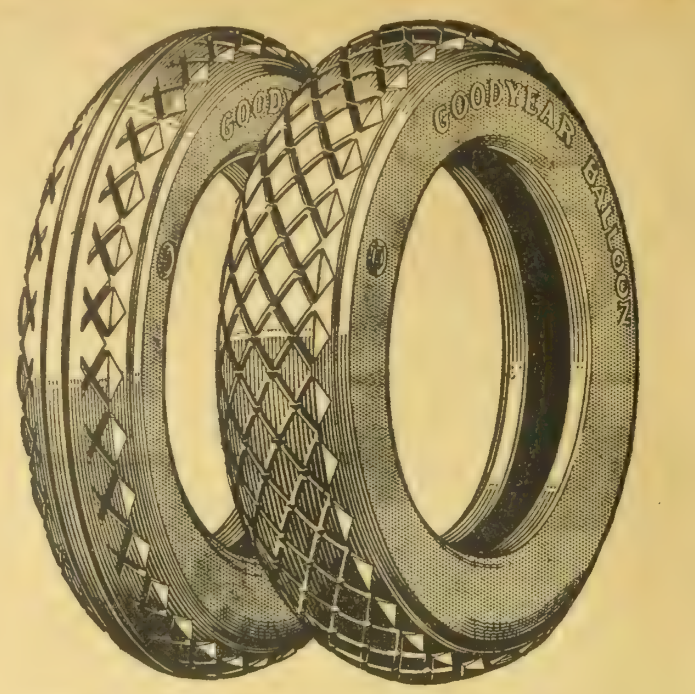
In Canada—Chevrolet Motor Company of Canada, Limited, Oshawa, Ontario

Prices f. o. b. Flint, Mich.

Superior Roadster	$490
Superior Touring	495
Superior Utility Coupe	640
Superior 4-Passenger Coupe	725
Superior Sedan	795
Superior Commercial Chassis	395
Superior Light Delivery	495
Utility Express Truck Chassis	550

Fisher Bodies on all Closed Models

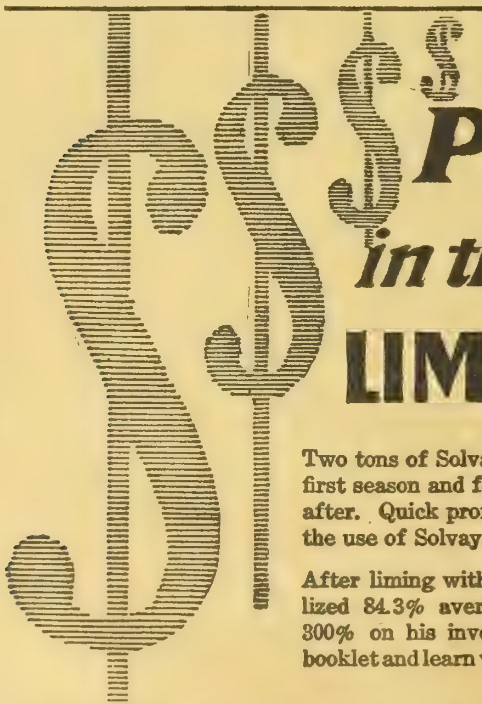
Five United States manufacturing plants, seven assembly plants and two Canadian plants give us the largest production capacity in the world for high-grade cars and make possible our low prices. Dealers and service stations everywhere. Applications will be considered from high grade men only, for territory not adequately covered.



Wondering if you can afford balloon tires? Of course you can, if they're Goodyears! We're making them to fit rims on most cars now in use, as well as in the smaller diameter 20-, 21- and 22-inch rim sizes. That means a big saving for the average motorist. It lets you have great comfort for little money.

GOODYEAR

Copyright 1924, by The Goodyear Tire & Rubber Co., Inc.



Profits in the use of LIMESTONE

Two tons of Solvay per acre brings results the first season and for three or four years thereafter. Quick profits and lasting profits follow the use of Solvay.

After liming with SOLVAY, one farmer realized 84.3% average crop increase; another 300% on his investment. Write for FREE booklet and learn what SOLVAY can do for *you*.

Guaranteed 95% Carbonates

SOLVAY brings quick, lasting results because it is ground to powdery fineness. Furnace dried. Non-caustic. Booklet tells all about lime and its uses—sent FREE on request.

THE SOLVAY PROCESS CO.
DETROIT, MICH.

SOLVAY PULVERIZED LIMESTONE

HELP WANTED

MAN WANTED FOR LARGEST CONCERN of its kind, part or full time. Experience unnecessary. Our men getting up to $200.00 weekly. Lowest prices. RED SEAL COAL COMPANY, 233 Coal Exchange Building, Chicago.

FARM LANDS

REAL ESTATE FOR SALE. 1. APPROXImately 10 acres in Bangor Twp. Bay Co. 2. Approximately 20 acres in Hampton Twp. Bay Co. 3. Approximately 45 acres in Bangor Twp. Bay Co. All adapted for general or truck farming, dairying, located near the City. For further particulars inquire UNION MOTOR TRUCK COMPANY, Bay City, Michigan.

80-ACRE MICHIGAN FARM WITH 10-ACRE Orchard, 6 cows and horse, gas engine, full implements, season's crops, money-making city milk route; on improved road edge progressive modern city; 60 acres tillage, 20-cow pasture, woodland, 10-acre bearing apple orchard, cherries, grapes; buildings insured $4500; attractive 2-story 8-room house and bath, electric lights, grand view bay; good 64-ft basement barn, silo, big garage, granary, poultry house, etc. Owner called away $5000 gets all if taken now. Details page 39 Big Illus. Bargain catalog money-making farms, best sections United States. Copy free. STROUT FARM AGENCY, 427KJ Marquette Bldg., Chicago, Ill.

FOR SALE—GOOD 80 ACRE FARM. MISSaukee Co. Mich. Write FOREMAN, Camp 33, Boon, Michigan.

What the Neighbors Say

DAY OF BUSINESS FARMER AT HAND

DEAR EDITOR:—The old order has changed. The day of the business farmer is at hand. There is no room for the slip-shod farmer. He is playing a losing game, and is forced to leave the farm, and seek the city. He is a failure. You can hear him almost any Saturday afternoon, standing in the sun in front of a grocery store, complaining of the hard lot of the farmer. In a few years he will be extinct. You will find him mingling with the great mass of factory workers.

There are those of the old farmers who have made a success of farming. These people are not moving to the city. You will see their nicely painted barns and houses as you pass by. These farmers are the first business farmers. Their success was due to their ability to organize their labors on a paying basis. Then there are the young graduates from college who have studied the best business methods of farming. These will be the farmers of the future who will put farming on the basis it belongs.

A county agricultural agent is the best thing that has happened to the business farmer. He can be compared to the efficiency expert of big business. He is better educated than the average farmer of today, and the national and state departments of agriculture keep in touch with him.

If your farm isn't more than paying for itself, consult your agent, his advice is valuable. The business farmers appreciate this man just as big business goes by the advice of its expert.

Don't listen to people who tell you farming doesn't pay. Make it pay. Be a business farmer.—Dorothy Dill.

USE DOOR BELL TO CATCH THIEVES

DEAR EDITOR:—In the March 29th issue of the M. B. F. we notice where several of our brother farmers are losing chickens by thieves. I have been studying along this same line, and am willing to give my ideas if they are worth while. I expect to place a common door bell in my bed room running from this wire to two dry cells at hen house. Never lock your coop door, as a lock will only keep out an honest man. Arrange a push button back of door so door will come directly in contact with same, and if rightly adjusted and wired properly, it will ring bell at house. If anybody wishes to try this, and does not quite understand, I will draw a blue print for same on request.

Place push button on arm secured to something by a hinge, that it may be hooked up when not in use. Hoping this may save dollars for some of our farmers, I remain, L. C. S., Williamston, Mich.

INCREASE DUTY ON SUGAR

DEAR EDITOR: The United States Tariff Commission has just completed an exhaustive investigation of the cost of producing sugar in continental United States, in our insular possessions and in Cuba. The preliminary report of the Commission, recently issued, leaves no doubt about the duty on sugar being an agricultural and not an industrial tariff.

This report shows that in 1922 Cuban farmers received an average of $1.16 for each 100 lbs. of extractable sugar in their cane, whereas American farmers received an average of $3.37 for each 100 lbs. of extractable sugar from their beets. In other words American farmers received as much for 100 pounds as Cuban farmers received for 290 pounds of sugar. In addition to receiving as much for 100 lbs. of sugar as did Cuban farmers ($3.16) American sugar beet farmers received the full amount of the import duty ($1.76), plus 45 cents.

If American sugar beet farmers received no more for heir sugar than Cuban farmers received for theirs, their beets would have brought them only $3.16 per ton, an amount far below their cost of production.

In Cuba the farmers' and laborers' cost of living is a mere bagatelle. Habitations are flimsy shacks costing only a few dollars to erect and furnish, there's no expense for fuel, clothing is meager and of the cheapest kind and the food is plain and inexpensive. In addition to that, Cuba has a supply of cheap black labor right at hand in nearby islands. All the sugar planters have to do is to secure a special decree from the President and labor flocks in in droves.

As long as Cuban sugar producers are able to keep a one crop country, thus compelling the farmers to accept the producers price for cane or starve, Cuba will continue to be the lowest-cost sugar-producing country in the world and to expect to maintain the American wage and American standard of living and compete with Cuba will continue to be an utter impossibility.

American farmers grow beets for profit, not from patriotic motives and unless they can make a profit on beets they will devote their fields to the production of other crops, such as wheat, oats, barley, beans, etc., where as the Cuban farmer, producing nothing but cane would go hungry if he did not accept the price offered by the mill owner.

A slight lowering of the duty on sugar would close American beet sugar factories and thus deprive 100,000 American farmers of a market for $63,000,000 worth of beets annually, while a slight increase in the duty soon would mean the erection of enough new factories to supply us with all the sugar we consume and of the $380,000,000 we thus would keep at home, over $200,000,000 would be paid to farmers annually for beets.—Truman G. Palmer, Sugar Statistician, Washington, D. C.

HUNTING WITH FERRETS

DEAR EDITOR:—Some years ago it was lawful to hunt with ferrets, but the sportsmen of the city have been successful enough to have the law passed that it is unlawful to hunt with ferrets and now rabbits are becoming such nuisance that it is impossible to grow an apple tree longer than 4 years, and that for the benefit of the sportsmen. You hear so much now days about raise more, but let me tell you it is very discouraging to plant trees and then have rabbits come and kill them. If you ask for a permit to hunt with a ferret, you will get none, but they will tell you to fence the rabbits out. Just think of fencing rabbits out with snow banks 10 feet deep. Some job, I would say.

Can this law be recalled, or at least adjusted so the farmer boys can hunt these pests, say from November 15th until the season closes in February? Then there wouldn't be so many, at least, to do damage, or must it come to the compulsory violation of the law to protect your own property? But at present it seems the state has the right to dictate to the individual owner what he can, or what he cannot do to protect his own property.

I am not the only one that feels this way, but I think at least 99 per cent of the people in the country feel the same way about it. Someone might say, shoot them. I would like to ask who is the person after he works all day, likes to stand guard in the cold at night to protect his orchard from these pests. I would like to see those sportsmen be those guards, or be compelled to pay the damage the rabbits do. I think they would soon say, "Hunt with ferrets."

I would suggest have the hunting season open November 15th and allow to hunt with ferrets until season closes in February.—J. V., Falmouth, Mich.

There are 200,000 applications for patents on inventions now pending in the United States Patent Office, according to a statement of the United States Civil Service Commission.

Farmers Service Bureau

(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full name and address. Name not used if so requested.)

COLLECTING TOWNSHIP TAXES

Can you give me the law governing collection of township taxes? Can a township treasure lawfully collect for one per cent after January 10th or is the four per cent compulsory?—S. W., Melvin, Mich.

—The statute provides that a collection fee of one per cent shall be charged up to January 10th and thereafter a collection fee of four per cent shall be charged. In our opinion, this provision is mandatory and the treasurer has no legal right to charge a one per cent fee after January 10th.—Clare Retan, Deputy Attorney General.

BOY SHARES EQUALLY WITH OTHER CHILDREN

We, being subscribers to your valuable paper would like to ask you a few questions which have been on my mind for some time. A man having one boy by his first wife, divorced, and marrying again, with three children by his present wife, what share of property would the first boy get, if any? Also the other three and wife at the father's death? And would the property, farm and personal, have to be sold in order to pay the first boy his share? He is not now, nor has, excepting during school vacations, lived with his father. He is nearly 16. And what share of all property is a wife entitled to if a division is made while both are living? This property having a legacy of $500.00 paid with the first payment from the father's father.—Mrs. M. A. H., Otisville, Mich.

—The boy by the former wife would share equally with the other three children. Two thirds of his property would be divided equally among the four children and the widow would receive the other one third. Their share of the farm could be divided equally among the four, or it could be sold and the proceeds be so divided, according to the wish of the majority. There is no provision for the division of property by a husband and wife who are still living together. Such a division would depend upon agreement of the amount of property each owned separately. In no case can the wife be deprived of her right of dower.—Asst. Legal Editor.

8x8 FLUE IS LARGEST

Will you please give me the facts on how to get chimney flue 4x12, taking the same amount of brick, that is 6 for one layer of brick in course, while one 8x8 flue takes the same amount of brick? Which is the larger and in what way as both are 32 inches inside?—J. McG., Sterling, Michigan.

—Apparently you are desirous of securing the greatest amount of flue area for a perimeter dimension of 32 inches. If that is the case an 8x8 flue will have one and one-half times the area of a 4x12 flue. The area of a 4x12 flue is 48 inches and the 8x8 flue 64 inches.—A. H. Lavers, Supt. of Bldgs. & Grounds, M. A. C.

NURSERYMAN MUST HAVE LICENSE

Is it necessary to secure a license to sell native forest trees in this state?—N. S., Battle Creek, Mich.

—It is necessary for any nurseryman to make an application to the Michigan State Board of Agriculture to have his stock of trees, etc., inspected and secure a license to sell the same under Section 7413 of the Compiled Laws of 1915, as amended by Act 241 of the Public Acts of 1921. By the provisions of Section 7411, as amended by the act above mentioned, a nurseryman is defined as,

"The owner or manager of a nursery who issues a catalogue, advertises or in other ways makes a business of selling nursery stock."

The term "Nursery stock" is defined in the same amendment as including trees, shrubs, vines, fruit plants, etc. You will note that the definition includes forest trees as well as fruit trees. It would therefore be necessary for a person to secure a license to sell forest trees, unless the stock you mention falls within the proviso of Section 7413 providing that it shall not be necessary for a person to secure a license to sell shade trees from his own wood lot.—Clare Retan, Deputy Attorney General.

HUSBAND'S LEGAL RESIDENCE WOULD DETERMINE

Seven years ago, at my father's death, I came here with my family of six children, bought the old homestead and my husband remained at Harrisville, 18 miles away. He lives at the hotel and has no property, maintains no home. Last year I was elected on the school board and at a recent meeting we voted to retire the Superintendent we have for inefficiency. Now some say I have no legal right to vote or hold office here. I am a tax payer on a large farm, have graduated two children from our school here and have one attending.—Mrs. H. M. K., Oscoda, Mich.

—The legal residence of the husband determines the legal residence of the wife for the purpose of voting at school elections or holding school offices.

If the legal residence of your husband is where you live even though he may be away, you are a legal resident of the district and might hold a school office if otherwise qualified.—W. L. Coffey, Deputy Supt. of Public Instruction.

DITCHES ALONG ROAD FILL UP

Could you advise me what I could do in regards to the township not wanting to help me to an outlet to take the water off my Farm? I live on a public highway and the roads are all sinking in due to the ditches not being tended to. The ditches are all filling in as it is all black muck and they are full of willows and I have ten acres of ground that was impossible to be worked last year which I had to let lay idle on account of water. Now what I want to know can I make the township fix this ditch or pay damages? I am a tax payer and I think it would be no more than fair they help me.—P. S., Ossineke, Michigan.

—If the matter of drainage is necessary for the proper maintenance of the highway, the matter is within the discretion of the Highway Commissioner and the Township Board; but if the drainage is only desired for the benefit of the adjoining lands, then the matter should be taken up with the County Drain Commissioner, with a view to establishing a county or district drain. Otherwise the land owner is required to provide his own drain.—H. Victor Spike, Assistant Attorney General.

Why, Sure

"Pa sent me for a piece of rope like this."

"How much does he want?"

"Just enough to reach from the calf to the fence."

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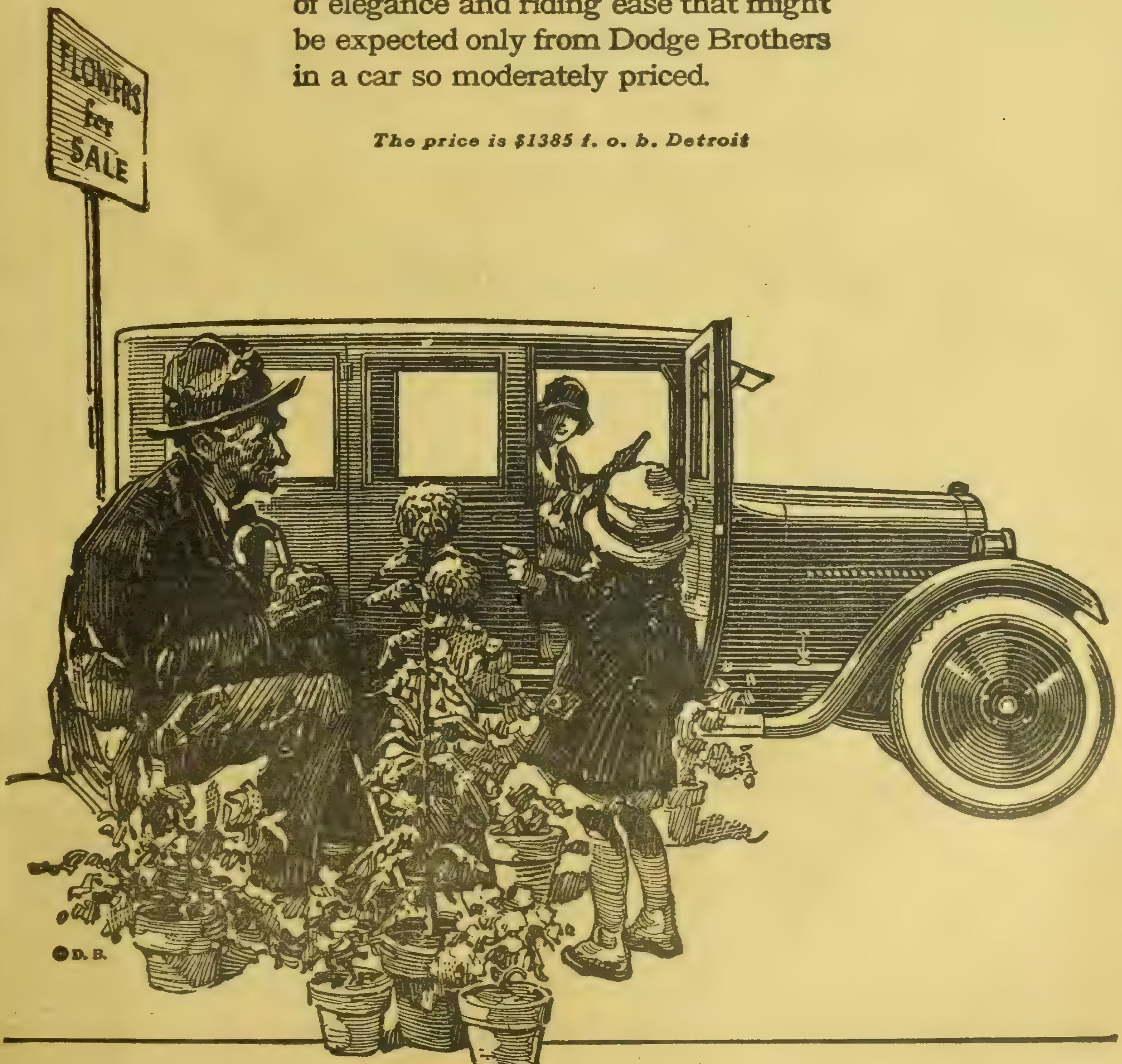

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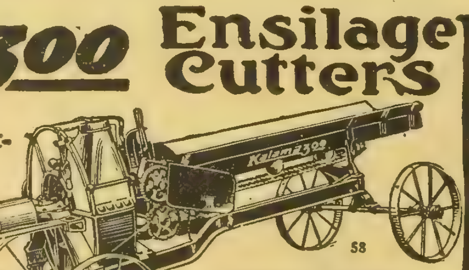
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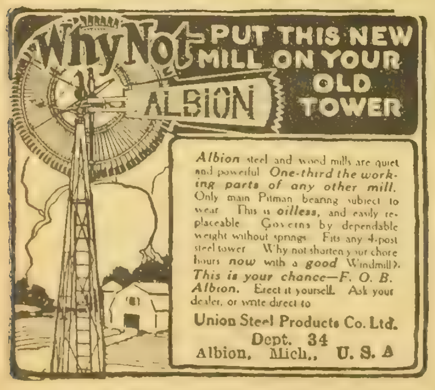
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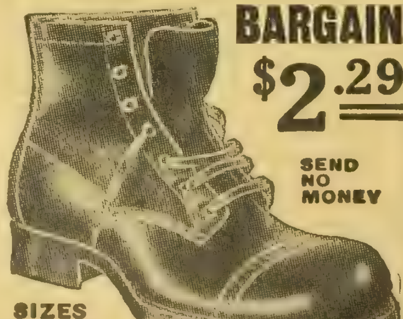
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Dept. B Minneapolis, Minnesota

Oh Money! Money!

by ELEANOR H. PORTER

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(Continued from April 12th issue.)

"EVERYTHING'S the matter," snapped Jane. "And positively a more ungrateful set of people all around I never saw. To begin with, take the church. You know I've never been able to do anything. We couldn't afford it. And now I was so happy that I could do something, and I told them so; and they seemed real pleased at first. I gave two dollars apiece to the Ladies' Aid, the Home Missionary Society, and the Foreign Missionary Society—and, do you know, they hardly even thanked me! They acted for all the world as if they expected more—the grasping things! And, listen! On the way home, just as I passed the Gale girls, I heard Sue say: 'What's two dollars to her? She'll never miss it.' They meant me, of course. So you see it wasn't appreciated. Now, was it?"

"Perhaps not."

"What's the good of giving, if you aren't going to get any credit, or thanks, just because you're rich, I should like to know? And they aren't the only ones. Nothing has been appreciated," went on Mrs. Jane discontentedly. "Look at Cousin Mary Davis—you know how poor they've always been, and how hard it's been for them to get along. Her Carrie—Mellicent's age, you know—has had to go to work in Hooper's store. Well I sent Mellicent's old white lace party dress to Mary. 'Twas some soiled, of course, and a little torn; but I thought she could clean it and make it over beautifully for Carrie. But, what do you think?—back it came the next day with a note from Mary saying very crisply that Carrie had no place to wear white lace dresses, and they had no time to make it over if she did. No place to wear it, indeed! Didn't I invite her to my housewarming? And didn't Hattie, too? But how are you going to help a person like that?"

"But, Jane, there must be ways—some ways." Miss Maggie's forehead was wrinkled into a troubled frown. "They need help, I know. Mr. Davis has been sick a long time, you remember."

"Yes, I know he has; and that's all the more reason, to my way of thinking, why they should be grateful for anything—anything! The trouble is, she wants to be helped in ways of her own choosing. They wanted Frank to take Sam, the boy,—he's eighteen now,—into the store, and they wanted me to get embroidery for Nellie to do at home—she's lame, you know, but she does do beautiful work. But I couldn't do either. Frank hates relatives in the store; he says they cause all sorts of trouble with the other help; and I certainly wasn't going to ask him to take any relatives of mine. As for Nellie—I did ask Hattie if she could'nt give her some napkins to do, or something, and she gave me a dozen for her—she said Nellie'd probably do them as cheap as anybody, and maybe cheaper. But she told me not to go to the Gaylords or the Pennocks, or any of that crowd, for she wouldn't have them know for the world that we had a relative right here in town that had to take in sewing. I told her they weren't her relations nor the Blaisdells'; they were mine, and they were just as good as her folks any day, and that it was no disgrace to be poor. But, dear me! You know Hattie. What could I do? Besides, she got mad then, and took back the dozen napkins she'd given me. So I didn't have anything for poor Nellie. Wasn't that a shame?"

"I think it was." Miss Maggie's lips shut in a thin straight line.

"Well, what could I do?" bridled Jane defiantly. "Besides, if I'd taken them to her, they wouldn't have appreciated it, I know. They never appreciate anything. Why, last November, when the money came. I sent nearly all of Mellicent's and my summer things—and if little Tottie didn't go and say afterwards that her mamma did wish Cousin Jane wouldn't send muslins in December when they hadn't room enough to store a safety pin. Oh, of course, Mary didn't say that to me, but she must have said it somewhere, else Tottie wouldn't have got hold of it. 'Children and fools,' you know," she finished meaningly, as she rose to go.

Mr. Smith noticed that Miss Maggie seemed troubled that evening, and that she started off early the next morning and was gone nearly all day, coming only for a hurried luncheon. It being Saturday, the Martin girls were both there to care for Father Duff and the house. Not until some days later did Mr. Smith suspect that he had learned the reason for all this. Then a thin-faced young girl with tired eyes came to tea one evening and was introduced to him as Miss Carrie Davis. Later, when Miss Maggie had gone upstairs to put Father Duff to bed, Mr. Smith heard Carrie Davis telling Annabelle Martin all about how kind Miss Maggie had been to Nellie, finding her all that embroidery to do for that rich Mrs. Gaylord, and how wonderful it was that she had been able to get such a splendid job for Sam right in Hooper's store where she was.

Mr. Smith thought he understood then Miss Maggie's long absence on Saturday.

Mr. Smith was often running across several cases that she had not helped. Then he did not know exactly what to think.

His first experience of this kind was when he met an unmistakably "down-and-out" on the street one day begging clothing, food, anything, and telling a sorry tale of his unjust discharge from a local factory. Mr. Smith gave the man a dollar, and sent him to Miss Maggie. He happened to know that Father Duff had discarded an old suit that morning—and Father Duff and the beggar might have been taken for twins as to size. On the way home a little later he met the beggar returning, just as forlorn, and even more hungry-looking.

"Well, my good fellow, couldn't she fix you up?" questioned Mr. Smith in some surprise.

"Fix me up!" glowered the man disdainfully. "Not much she did! She didn't fix me up ter nothin'—but chin music!"

And Mr. Smith had thought Miss Maggie was so charitable!

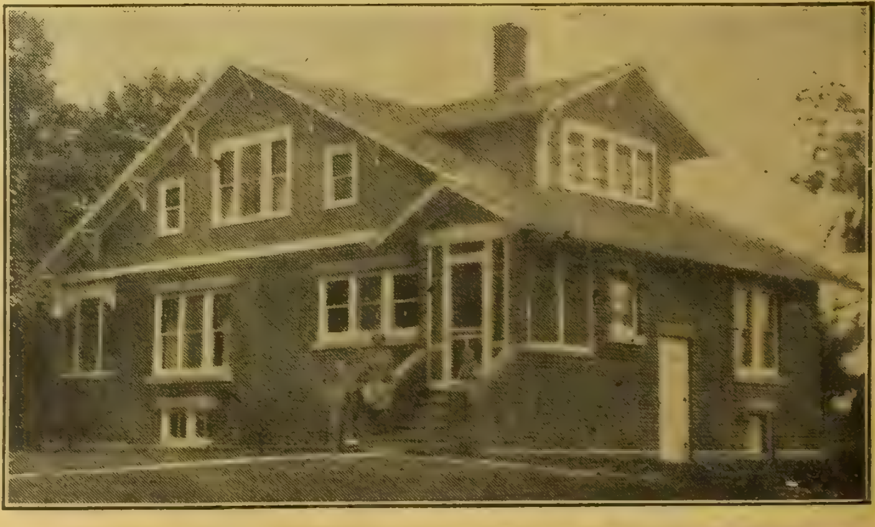
A few days later he heard an eager-eyed young woman begging Miss Maggie for a contribution to the Pension Fund in Behalf of the underpaid shop girl's in Daly's. Daly's was a Hillerton department store, notorious for its unfair treatment of its employees.

Miss Maggie seemed interested, and asked many questions. The eager-eyed young woman became even more eager-eyed, and told Miss Maggie all about the long hours, the nerve-wearing labor,

(Continued on Page 17.)

OUR READERS' NEW BUILDINGS

Have you built any up-to-date farm buildings lately? If you have send us a picture of the new building and we will print it in this new department. It will show the M. B. F. readers what their distant neighbors are doing to change the scenery. And, incidently, you may be able to help some farmer decide the type of house, or barn, or other buildings he desires to put up. He may like the appearance of your building and will want the plan of it. Kodak pictures are all right if the details show up well. Do not send the negative, just a good print.



HOME OF W. D. PARMELEE AND FAMILY, OF HOPKINS, MICH.

We hear so much and read so much about the farmer being broke and that there is no money in farming, until we are half lead to believe that the country is "going to the dogs." Then just in time, along comes a picture like the one above, and the sun again creeps forth from behind the dark clouds. Such a home as this cannot be built on promises or air. We have a picture of the barn which we will print later.

THE LONELINESS OF JESUS

A SERMON BY MRS. DAVID F. WARNER.

TEXTS: "And when even was come, he was there alone." Matt. 14:23b. He "withdrew again into the mountain himself alone." Jno. 6:15.

NEVER has there been a man, in all ages of the past, who wandered over this earth and was so much alone as was the man Jesus. What, you ask, did Jesus, one who was so great and good, so kind and loving, so pleasant, so winsome, and so self-sacrificing, not have friends without number? Yes, Jesus had friends, but his friends and associates, his comrades and helpers, were so far beneath him, that, after all, he was alone. Then too, those who lived nearest him, those who had the best opportunity to know him and endear themselves to him, absolutely rejected him.

When the babe Jesus was born, no friendly door was opened to receive him. People from all over the country were pouring into the town of Bethlehem. They were hurrying back and forth attending to business. Amidst this hustle and bustle, in a lonely corner of a stable the child Jesus was born in sorrow, poverty, and humility.

"Jesus came into a dead world. He, the one living man, alive in body, soul and spirit, alive to God in the world." "The world into which he entered, by his human birth, was veritably dying, dead indeed unto God. We realize very imperfectly the distress, the conflict of disgust and pity which the fact of being in such a world as this, and belonging to it, caused in the nature of Jesus Christ, in a soul that was in perfect sympathy with God. Never was there loneliness such as his."

Jesus was a Jew. He was a product of his age and nation; and yet he was so far above his own people that we can scarcely think of him as a Jew. Jesus had no one who could sympathize with him in his life and thought. He stood head and shoulders above those around him. They could come to him for advice and sympathy, but where could he go for counsel? To God and to Him alone was he driven for strength in his trying hour.

True, we can find no one who is more willing to carry our burdens; but how many of us go to God first when trouble and trials come? We are all human, we all have our confidental friends, those who are our equals or superiors, and it is to them that we flee. Many an aching brow and weary soul has been soothed by the gentle hand and sympathizing word of a true Christian friend. Still closer than any of our friends is another to whom we always go first? That, you say, is mother.

Was Jesus able to receive counsel and sympathy from his mother after he grew to manhood? As we search our Bible we find at different places the statement, "And Mary kept these things and pondered them in her heart." Mary certainly did not understand the greatness of her child. She did not understand his mission, and therefore was not able to help him in his work as one who was his equal—one who lived, thought, and believed as he did.

As we look back over later history, we find the names of great men. These lived in advance of their age. Luther was a great man, and yet was he alone? No, Melancthon was his helper, his sympathizer, his staff. Upon him he could lean when the clouds rolled dark before him and the storm raged thick and fast. Calvin too, should be noted. But he had Zwingli as a companion in his labors—one who thought and worked as he did. Jesus had no such companion. He lived, thought, and acted in a realm above that of his fellows.

Jesus might have established an earthly kingdom and he might have had all the world to worship him as a political ruler, but he did not. This humble Nazarene was aiming at some thing greater; and even tho he was obliged to stand alone, he stood firm.

At different times Jesus was rejected. Even his home people refused to hear him. Many times, after preaching at a place, he was driven out and left at the mercy of strangers, or was obliged to depart secretly because his life was in danger. In all these struggles he was obliged to fight alone. No one understood, as did he, the conditions in which he was placed. We sometimes want to question the idea that Jesus longed for companionship. But we should remember the fact that Jesus did lament his condition when he said, "The foxes have holes, the birds of the air have nests; but the Son of man hath not where to lay His head."

Can anything be more sad to the human mind than the fact that some child has been cast out of its home and is obliged to wander from place to place, with no one to love it and no one to give it a home. Jesus' mother did not forsake him, but his own brethren did. His apostles, even, had such a faint conception of who Jesus was, and what he was trying to do, that they did not know at times whether they wanted to follow him or not. Jesus lived with them, travelled with them, and taught them. He tried to explain to them his mission, but it seemed they could not understand. Time and again they left him alone when difficulties stared him in the face.

During the last week of Jesus' life the very best of his nature was brought out. He held up boldly the sorrowing disciples, but was in the depths himself. Do you know what it is to comfort hearts while your own is breaking? This was true with Jesus many times, but now, that we come down to the last week, the last evening of his life, we can not help but feel that the heart of this humble Nazerene was breaking. On that evening of the great crisis Jesus and his disciples walked quietly along the Jerusalem streets, out of the gate leading towards the brook Kedron. Then they went over the brook towards the enclosed spot in the garden. The night was dark. It continued to grow darker and darker. He left the disciples alone and went farther into the garden, to his favorite praying place. He longed for fellowship, for a warm hand-touch, but none could help. If they followed they would hinder. How black the night! The weight of sinful humanity was upon him. Death stared him in the face. But alone! No human heart in all the world could help him. Jesus hardly thought the cup would be so bitter. He was tempted to shrink from it. It seemed as if the moon and stars, even, shrank from looking upon this scene of agony. To the "Only One" that was left, Jesus lifted his heart in prayer, and "he prayed until the sweat like drops of blood stood upon his brow."

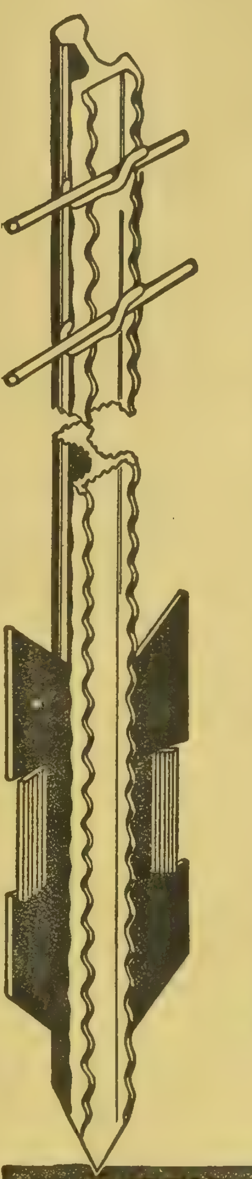
Could it be possible that Christ is lonely today? Do we, at times, wander so far from him that he is in agonizing intercession for us today as during the night in the garden. He has been admitted to some doors but we take no time to visit with him, we have no time for communion with the one whom we have invited into our houses. I fear that Christ gets very lonely and longs for fellowship.

Jesus wants us to come to him all alone and tell him all. He is ever ready to give us the very best that he has. May we then, invite Jesus in and take him into our confidence, make him a personal friend, and spend much time in his presence, that it may not be said of us that we pierced those tender hands, broke that loving heart, and finally hung upon the cross the one who truly loved us.

(NOTE: The editor of this department being otherwise engaged, his good wife and assistant local pastor, humbly consented to write the sermon for this number or the BUSINESS FARMER. He hopes you will be helped by it.)

THE KINGDOM OF GOD cometh not with observation; Neither shall they say, Lo here! or, lo there! for, behold, the kingdom of God is within you.—Luke 17:20,21.

OH THAT MEN would praise the Lord for his goodness, and for his wonderful works to the children of men.—Psalm 107:21.



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The Michigan
BUSINESS FARMER

SATURDAY, APRIL 26, 1924

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We will not knowingly accept the advertising of any person or firm who we do not believe to be thoroughly honest and reliable. Should any reader have any cause for complaint against any advertiser in these columns, the publisher would appreciate an immediate letter bringing all facts to light. In every case when writing say: "I saw your advertisement in The Michigan Business Farmer!" It will guarantee honest dealing.

"The Farm Paper of Service"

STRAIGHT TALK

HOW often after you have read an article do you sit back and wish that the author might have stated clearly and directly what he was trying to get at.

This has probably been particularly true during the past year or so when so much advice has been passed out gratuitously to the farmer, and the thought from Mr. Bennett, who expresses himself fully on page 3 of this issue, will, we believe, ring true with a great many farmers in Michigan who have many times had the same thoughts that he has put on paper in this article.

We have contended right along from this page that the farmer was getting too much advice and not enough real help, that there were too many politicians in the field who were living off the farmer, and that matters would have to adjust themselves in the natural course of events rather than by any radical move which could be made to relieve the present situation.

This may not sound as you would like to have it sound, but it is at least the plain, unvarnished truth as we see it. There is plenty of room on the farms for every good farmer and his son in the United States, and with the aid of machinery they can supply the food products of this country in competition with the cheaper labor from any part of the world. They can live and with their families enjoy life, surrounded by the same comforts which men in the American cities enjoy and with luxuries which the farmers of no other country in the world enjoy.

There is no question but what the advent of modern machinery has lessened the number of men needed to work the farms of America, and with the curtailment of foreign export the present adjustment had to come, yet we firmly believe the conditions which forced the present situation are rapidly passing and those farmers who have held to their trade are going to be the winners in the end.

MICHIGAN THIRD IN SUGAR BEETS

FINAL reports of the 1923 United States sugar crop, received late in March by the United States Department of Agriculture from the sugar beet factories, show that 7,006,000 short tons of beets were harvested and that 6,565,000 tons were sliced for sugar. This is the third largest crop on record, being exceeded only by the unusually large crops of 8,538,000 tons in 1920 and 7,782,000 tons in 1921. More beets were produced per acre in 1923 than in any other year since 1915, the yield per acre being 10.66 tons in 1913, compared with 9.77 tons in 1922 and 9.55 tons in 1921. The 657,000 acres harvested in 1923 were less than the acreage harvested in five of the preceding ten years, but larger than the average of 655,000 acres for that 10-year period.

The 1923 sugar beet crop was worth at least $58,800,000 to growers, the department says. Some factories reported that additional payments under the contracts may be made to the growers later, if warranted by sales of the sugar made. In the 1922-1923 campaign these late payments amounted approximately to 9 per cent of the total amount finally paid.

The 881,000 short tons of refined sugar made from the 1923 beet crop also is the third largest production of beet sugar in any campaign in the United States. The relatively high yield of the beets per acre was sufficient more than to offset the moderate acreage and sugar content. Only 675,000 short tons of sugar were produced from the beet crop of 1922, compared with 1,020,000 short tons in 1921 and 1,089,000 short tons in 1920.

Colorado factories used 1,890,000 tons of beets in 1923, followed by Utah with 1,008,000 tons, and Michigan 815,000 tons. Utah led in yield per acre with 12.91 tons, followed in order by Colorado 12.15 tons, Idaho 11.68 tons, and Nebraska 11.04 tons.

About 240,000 short tons of sugar were made in Colorado factories. Factories in Utah made 137,000 short tons of sugar, in Michigan 110,000 short tons, and in California 100,000 short tons.

BOOSTS FOREIGN MARKETS

A BILL introduced by Representative Ketcham of Michigan, authorizing innovations in the department of agriculture designed to increase the market for American farm products has passed the house and is now ready for the senate, where it is assured of a favorable hearing. The bill would direct the secretary of that department to gather and disseminate more information that would be of value to the farmer in planting and selling his crops.

The outstanding feature of the bill is the authorization of agricultural attaches to the legations and embassies of the United States in foreign lands, charged with the duty of collecting this information. These officials would have the same standing as other diplomatic agents, and Secretary of State Hughes has already indorsed the proposition.

The bill was indorsed also by Secretary of Agriculture Wallace and practically all the farm organizations.

The bill would promote American agriculture by making more markets available and expanding the service now rendered by the department in gathering information regarding agriculture in foreign fields. The additional information would include all data pertaining to the agricultural production, competition and demand for American farm products that would assist in promoting the sale of such products abroad. The secretary of agriculture would thus be able to get information for the American farmer that would better enable him to adjust his operations to world conditions.

PAINTING UP

AN investment in fresh paint for the farm buildings is not altogether a matter of personal pride or a desire to show off to the neighbors.

"Save the surface and you save all" is the slogan chosen in the present paint campaign in the country and yet that is literally a fact, for well painted wood is protected from the weather and may last indefinitely.

The very sight of clean, well painted buildings helps build up a community, keeps the farm family in better spirit, encourages the boys and girls to stay on the farm, and, incidentally, makes it a lot easier to borrow money at the banks when it is necessary.

We remember an old farmer friend of ours who would himself have made a good promoter because in an emergency once he was practically "busted" from an unfortunate investment and needed the help of his local banker. The banker told him he must come out to look over his farm before making any additional loan so he and the boys in the next two days, working into the evenings, painted up all the farm buildings, so that when Mr. Banker came out there was little question in his mind as to whether or not this farmer was a success in his calling.

It is true that the paint job has been neglected on a good many thousand farms in Michigan during recent years and this ought to be a good season to look over the buildings and plan to do the necessary work.

Good paint is considerably cheaper than it was two years ago and rightly applied we consider it one of the best investments any farmer can make.

We have discovered this too, that where one farmer in a community starts to paint up his buildings, the neighbors follow like sheep and in a few weeks the whole locality looks and feels prosperous and contented. Why not utilize the time in between planting and cultivating for this job? You do not need to hire professional painters if you and the boys are handy with the brush and not afraid to look at the ground from the top of a ladder.

THE BUTTER SITUATION

NOT a little concern is being expressed by the dairy interests, not only in Michigan but in Wisconsin, Minnesota, and the other butter fat producing states, in the present situation.

When it is considered that the imports for the past three months of this year are equal to those of the first seven of last year, it is apparent that this concern is not unwarrantedly taken. The heavy increase began last November when shipments to the American market from abroad jumped to 3,830,657 pounds, as compared with 1,202,304 pounds imported in October. In January of this year the total imports were 4,417,326 pounds, and there was an addition of nearly 1,000,000 pounds in February, when the imports amounted to 5,392,593 pounds.

In New York since the middle of February the price of 92 score butter has declined from 50 cents to 38 cents per pound. This market is, of course, a reflection of the butter market in all sections of the United States.

Unquestionably one of the causes which has brought about this condition in the American market is a fall in the Danish exchange rate, which is now 16.64 compared with the par of 26.80; in other words, the Danish butter if sold for American dollars will bring 50 per cent more than if sold for Danish money at home. Denmark, it must be remembered, is one of the greatest dairy producing countries in the world, and, by the way, one of the best organized from a cooperative standpoint.

The dairy producers of Denmark are not to be blamed for the present situation. Commodities naturally find their way to the best markets. The only way the the dairy interests of America can protect themselves is a higher duty on imported butter. The present rate is 8 cents per pound and it is proposed that an emergency measure be passed at once, raising the duty to 15 cents per pound, which would at least raise the price that much to the American consumer whether the American producer got the benefit of it or not! (Depending on whether you believe in the beneficial results of a protective tariff or not.)

It is our opinion that the present situation is short lived. This represents only a temporary set-back to the dairy market which will soon recover. In the meantime there ought to be some way to stem the tide of dairy imports which are competing with our own products.

THE BABY CHICK INDUSTRY

SECOND only to the automobile industry, at least in its record of phenomenal growth, is that of the baby chick industry in Michigan.

No state has a better reputation or is producing more baby chicks for shipment outside of its own territory than is the State of Michigan. This spring the hatcheries have been working day and night, literally turning out millions of baby chicks, which are placed in parcel-post boxes tagged for all parts of the United States. Shipments are made as far as Texas, Florida, eastern coast points, and as far west as the Rockies, and amateur and professional poultry raisers alike are depending on these mammoth hatcheries for their chicks.

The incubator and old mother hen herself are having a hard battle in the face of this modern and efficient motherless system.

We are glad to say that a strong baby chick organization in the western part of Michigan has made it possible for the legitimate and honest hatchers to help clean out the fakirs who always get into a new business of this kind, which promises extraordinary returns. One of their schemes was to advertise baby chicks which they did not hatch; then go out and make arrangements with individual operators of large hatcheries to make their shipments for them. Of course, this placed responsibility nowhere and the customer was very often dissatisfied because the shipment was poorly selected or not made on time. This practice has been largely cleaned out, due to the efforts of the baby-chick associations and the good farm papers which have refused to carry advertising of this type.

THE BUSINESS FARMER has, from the beginning, done everything in its power to encourage the baby chick industry in Michigan because we believed in it, and we are just as anxious to continue our campaign to keep it a clean industry. We congratulate the hatcheries of Michigan on the splendid progress they have made during the short period in which they have been in operation, to stabilize their industry.

HE WHO LAUGHS, LAUGHS!

DOWN in Monroe County they have worked out a clever scheme, one which will meet with favor with most of those who hear of it. They are sentencing all automobile speeders, drivers of trucks too heavily loaded, and bootleggers to work on roads of the county which they have helped to destroy. A period of ten days working on concrete roads ought to give a man a wholesome respect for the labor and expense involved in building them. Perhaps one would not be tempted to "burn-up" the roads at quite so lively a clip if he had spent many weary days in helping to build it.

PUBLISHER'S DESK

AN OLD SCHEME WORDED IN A NEW WAY

FARMERS in various parts of the country are receiving through the mails an invitation to part with $2.00 in a novel manner. A small advertisement appearing in local papers reads somewhat as follows:

"Wanting to hear from owner having farm for sale."

Persons responding to this ad received a letter from the New Land Sellers Guide Publishing Company, 721 Olive Street, St. Louis, Mo., in which is enclosed a printed notice attached to a self-addressed sealed and stamped envelope. The notice contains this announcement:

DO NOT OPEN!

"This sealed enveloped contains the Revised New Land Sellers' Guide, in which are the names and addresses of 260 new farm land buyers. Should you wish to keep the Revised Guide, remit according to the terms of the enclosed Special Acceptance Offer. If you do not wish to sell your farm, or take advantage of this offer, remove this slip, and drop the letter in the U. S. Mails, without being opened. We have a complete record of this envelope, which has U. S. Postage attached, and must not be tampered with unless you wish to keep it, as per the terms of the enclosed offer. Fill out the enclosed offer blank, remitting only Two Dollars, and this valuable index of 260 farm buyers belongs to you."

Thus the impression is created that there is a liability attached to the opening of this sealed envelope, unless $2.00 is remitted. A complaint has reached us to the effect that a number of letters addressed to some of the "260 guaranteed land buyers" have been returned to the sender.

OUT OF THE FRYING PAN!

Dear Mr. Slocum—I own quite a large block of stock in the Detroit Packing Company and agents keep coming to me asking me to exchange it for one thing or another. Right now there is an agent in this vicinity asking Detroit Packing stock-holders to exchange their stock for stock in a mining company in Montana that seems to have excellent prospects. He is offering $12 a share in exchange which seems pretty low, don't you think so?—Mecosta Co.

WE have expressed our opinion of the Detroit Packing Company many times in this department. We believe the building of this modern packing plant will be of great permanent value to the live-stock industry in this state. The fourth city in America should certainly be able to support a gigantic packing plant many times the size of the present one.

The same men who organized the packing company are still at the helm, which proves that they believe in its future. It has not been an easy task to steer the course, nor is it ever for a new company tackling a great undertaking which must be perfected in the multitudinous departments employed.

Naturally the old line packers, particularly in Detroit, do not relish the coming of this competitor and inasmuch as the stock is so largely held by farmers in Michigan, it is not hard to weaken its position among its stock-holders by inference, gossip and propaganda of a sinister sort.

We would not attempt to decide for any man whether he should hold or sell at a sacrifice the stock for which he paid upwards of $60 a share in the Detroit Packing Company. Our opinion of this company, its field and the men behind it are entirely personal and therefore not by any manner of means, infallible. But when a reader asks us if we would exchange stock in the Detroit Packing Company for as low a price as $12 per share, for mining stock, we do not hesitate to unqualifiedly advise against any such move.

If there is any farmer among my readers so flush with money that he can afford to gamble on the contents of the bottom of a mine, I would suggest that he come into Detroit and apply to the police department for the address of any of the many gambling establishments, where at least he will have a 50-50 chance of the red or black showing and some excitement for the money he is just about as certain to be parted from.

THE SHOW CARD FRAUD

WHAT Government officers say is one of the greatest mail fraud cases in the history of Detroit was revealed April 12th when a squal of United States marshals, headed by Francis E. Shea, Postoffice inspector from Washington, raided the offices of the Detroit Show Card School, at 405 Gratiot Avenue.

According to Shea, who has been in Detroit for a month investigating the case, the "school" operated on a wholesale basis, collecting $50 each from several hundred victims, and without making any effort to fulfill its many promises.

Advertisements, he said, were placed in publications, written as follows:

> Anyone can make $15 to $50 a week at home in spare time by our new lettergraph method. No canvassing, experience unnecessary. We show you how, furnish work, and pay you cash each week, no matter where you live. Write for illustrated booklet.

Also that fictitious letters of recommendation appear in the booklet, and that reproduced checks, purported to have been paid to satisfied correspondents, also were fictitious.

Shea, in investigating the case, wrote to the school, and asked for a list of customers and also a list of students and graduates. The lists, excepting the graduates, were received by him, and he immediately got in touch with the companies listed as having had work done by the Detroit Show Card School.

Many of the names on this list are thought to be fictitious, he said, and many companies answered that they knew nothing of the "school." Approximately one per cent, Shea said, of the companies referred to admitted any connection and in these cases, they replied they never placed orders with the "school" for more than $5 or $10.

The list of students was also found to be irregular, including employees of the company had fictitious names, Shea said.

The school's guaranty, signed by Miss Master, promised to supply the necessary outfit free to enable communicants to start to work at once; to furnish steady work when applicants became proficient; to advance students, with proper application and practice, far enough in 10 weeks to enable them to start to work for themselves, and to furnish engraved diplomas to graduates. None of these guarantees were fulfilled, Shea said.

The defendants are also charged with maintaining an office at the same address and advertising under the name of "The United States Health and Strength Institute," and representing that by means of their method they could cure nearly all kinds of illness. The fee in the institute was $28.

Another charge is that the same group of defendants used the mails to promote the "United Detective Training Institute," which had the same group of instructors as the "Health Institute" and the "Show Card School." The tuition in the detective school was $20, recently reduced from $120.

The offices at 405 Gratiot avenue, scene of the raid, showed about 30 girls industriously answering mail. These girls, according to Shea, answered communications with printed slips of paper. The "school" has been in operation more than two years.

* * * *

Thus endeth another lesson! Come early next week and we will have a surprise for you!

Your paper is the best in the state. Thank you for past favors.—Chris. A. Larsen, Montcalm County.

First Mortgage Real Estate Gold Bonds

Old-fashioned conservatism and honest representation have given this company and its issues a high standing among farmers.

Write for Booklet AG1229

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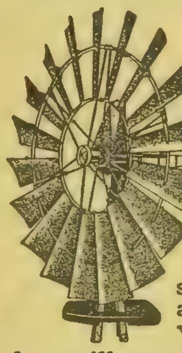
Federal Bond & Mortgage Company

(1229)

FEDERAL BOND & MORTGAGE BUILDING, *DETROIT*
Branch Offices in Principal Cities

The WINDMILL with a RECORD



The Auto-oiled Aermotor has behind it 9 years of wonderful success. It is not an experiment.

The Auto-oiled Aermotor is the Genuine Self-Oiling Windmill, with every moving part fully and constantly oiled.

Oil an Aermotor once a year and it is always oiled. It never makes a squeak.

The double gears run in oil in a tightly enclosed gear case. They are always flooded with oil and are protected from dust and sleet.

The Auto-oiled Aermotor is so thoroughly oiled that it runs in the slightest breeze. It gives more service for the money invested than any other piece of machinery on the farm.

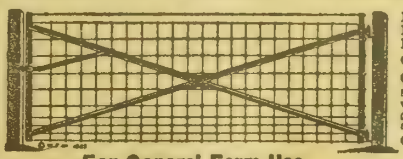
You do not have to experiment to get a windmill that will run a year with one oiling. The Auto-oiled Aermotor is a tried and perfected machine.

Our large factory and our superior equipment enable us to produce economically and accurately. Every purchaser of an Aermotor gets the benefit from quantity production.

The Aermotor is made by a responsible company which has specialized in steel windmills for 36 years.

AERMOTOR CO. Chicago Kansas City Dallas Minneapolis Des Moines Oakland

ALL STEEL Double Trussed GATE



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12 foot .... Weight 75 .... $11.00
14 foot .... " 85 .... 13.00
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Cash with order—Freight PREPAID

Gate is made of "railroad rail" angle steel—*Double Trussed*—and fabricated with heavy No. 9 galvanized wire. *Finished in green enamel.* Strong—sag proof—everlasting. Resists impact of stock and stampede. *Sold direct to you at money-saving prices.*

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On trial. Easy running, easily cleaned. Skims warm or cold milk. Different from picture which shows large size easy running New L.S. Model

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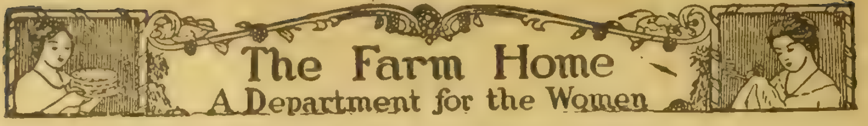


The Farm Home
A Department for the Women

Edited by MRS. ANNIE TAYLOR

DEAR FOLKS:—With the help of my good readers I am making this issue a special house-cleaning number. The letters from my readers gave me much helpful information and I hope that we, together, save you some time, or make at least one bit of work, a little easier, this spring.

It was just lovely of you to answer the request for "Ammonia Cookie" recipe and I want to thank you all. When you want any help just call on me. Do not forget the garden this year. Right now I am receiving so many beantiful seed catalogs that it just makes me want to sit down and figure out my list. Let us have plenty of vegetables this year for canning and table use. It is the best medicine we can take.

Your Friend,
Mrs Annie Taylor

Address letters: Mrs. Annie Taylor, care The Business Farmer, Mt. Clemens, Michigan.

THAT MAN'O'MINE

Mrs. Charlotte Byers

As the years are gently passing,
And my steps get stiff and slow
I look upon a white-haired head
In the garden plot below.
He straightens out the kink in his back
Then he turns to me with his eyes a shine
And I'll tell you this, My little Miss,
I'm still in love with that Man'O'Mine.

As the twilight shadows deepen
And I sit by his dear old side;
I think of the days of long ago
When he brought me here, a bride.
He's a man who thinks before he speaks
And a love in his heart that is fine
And it's one great joy, My dear big boy
To know I love yet that Man'O'Mine.

When the days are dark and dreary
And everything seems wrong,
He chases the blues with a twinkling eye
And a happy rollicking song.
He's been a father, yes, more than that
He's a DADDY to all of nine,
And I'll tell you this, it still is bliss
To be loved by that Man'O'Mine.

And if in this day of struggle and grief
The young folks would only be true
To the vows they take at the altar side
Their skies, like mine could be blue.
For the man is just boy to be held and cajoled.
To be told he is all things divine.
And I'll tell you this, My pretty Miss
I'll love forever that Man'O'Mine.

—Written especially for the BUISENSS FARMER.

SHORT CUTS TO SPRING CLEANING

(Prize Winning Letter)

AS I enjoy reading letters from people telling how' they do their work thus getting new ideas and suggestions, I hope someone may find a helpful hint in mine.

In regard to short cuts in spring cleaning, I think the shortest cut of all is to have as many odd jobs as possible done beforehand. For instance: the window drapes, cushion covers, table runners, etc., may be laundered now, and if new ones are needed have them made. I like to add a few such articles to each weekly washing rather than to do them all in one. Last week we had extra: three pairs of lace curtains, and the draping from the baby's bed and screen.

To avoid bareness which the removal of such things may cause, hang up some plain draw curtains at the living room windows and arrange upon the library table, buffet and dresser, some of those pretty paper doilies you buy at the ten cent store.

Some nice bright day let us go to the store room and empty all the trunks, bags, and boxes,—air, brush, and pack all winter clothing that we do not need any longer, sort out all cast-off clothing and cut into desirable sizes, and have handy for cleaning purposes. Also those old stockings should be put into a covered can with a few drops of oil, so that they will be saturated and ready to use to dust with. Look over the summer clothing that has been packed away and some evening supply the missing buttons, draw strings, etc.

There is that "catch all" under the sink that might be renovated most any time, and the medicine chest, the sewing machine, and kitchen cabinet,—so many drawers and so many corners to clean out. If I clean the bookcase before long, I may have time to look up that half forgotten poem and show sonny the wonderful pictures in the big book.

Ammonia in hot water applied by clean clothes in the mop stick will clean and brighten that velvet rug amazingly.

When at last the warm day comes when doors and windows can be opened prepare a boiled dinner, as a time saver, or a baked one. Try cooking potatoes and parsnips right in with that beef roast, and don't you like slices of ham baked in the scalloped potatoes? My husband discovered steel wool to be the best agent to make a "short cut" on that dish the potatoes were scalloped in —as it is for all aluminum ware and the zinc table top.

Then move everything possible from the room to be cleaned, giving all glass a coat of Bon Ami, then it is time to clean the room. Go over the furniture with soap suds followed by a polish; it will be a pleasure to have all the trimmings clean and ready with which to dress up the room and one will have such a respectable feeling to know that the bottom drawer or the right hand pigeon hole has not been slighted.

When your sleeping room is finished and there are yet no spring flowers to bud their fragrance to its cleanliness, spray a few drops of perfume on the pillows and watch the head next to you bob up and look out the window to see if the lilac bush has bloomed.—E. M. C., Oakley, Mich.

A FEW HINTS ON CLEANING

I DON'T know of any short cuts to housecleaning, but am trying not to have it all come at once. I wipe down the walls of the downstairs rooms, wash all the woodwork, clean the built-in dish cupboard, and all the dishes, pictures on wall, and last the congoleum rug in dining room is cleaned and polished. When weather is warm enough to permit, I can air bedding, rugs, and clothing, clean the upstairs rooms in a few days work.

Whitening on a damp cloth rubbed over the windows and mirrors, and allowed to dry before wiping off will clean and polish the glass so much nicer and more clear, than kerosene, which always leaves an oily or shiny look. It also cleans white paint easily and without damage to the paint. A rather stiff dough mixed from water and bread flour will clean wall paper very nicely. When dough gets soiled, mix it over and use again. Rub it gently on paper in downward strokes.

A large paint brush is the nicest thing to use in dusting the woodwork, also in cleaning it, as it will clean the crevices and carvings which are so hard to get at with a cloth or a floor brush. If you have 2 brushes you can oil one and use as a dustless duster. Make a bag to fit over the broom of old cotton socks. You will need 1 pair. Then sew 2 pairs on the bottom of the bag. It makes a good dust-away mop, easily cleaned. Use it on walls, on floors, windows, etc.—"Molly B."

SPRING CLEANING MADE EASIER

I AM a farmer's wife, having lived on a farm for eighteen years, and these helps are for the farm sisters.

The first thing I do toward cleaning is to get my oil stove in good working order, as it has been idle through the winter, having the range in use. If that is done, so many times the supper or the rest of the meals can be prepared in quick order.

Next I clean all drawers in every room, put clean papers, and contents back in good order. This saves time and patience. The clothes press comes next. Air all the clothes, and clean. To keep the woolens and things from the moths, and dust, make a large bag of newspapers, glue the top, and the moths will not bother where there is printers' ink.

The first room I clean is my kitchen, so as to get that done before it gets too warm. It seems as though there never was a room so hard to clean when it is hot, as a kitchen.

Next I clean all rooms upstairs, then the living room, dining room, and the cellar is my last. If it is hot, I have a good cool place to work. Of course all vegetables that have decayed are removed right away, so that there is nothing in the cellar to smell.—Mrs. A. H. S., Tipton, Mich.

VALUABLE HINTS FOR THE HOUSEWIFE

TO clean rusty knives, drop them into thick sour milk and let remain overnight. In the morning they can be cleaned very easily.

The secret of removing a grease spot from silk, without any ring or shadow remaining, is to rub French chalk on the wrong side of the goods. Put away for a few hours, then brush off the chalk and apply it again on the back of the spot if necessary. The powder absorbs the grease and leaves the surface of the fabric as good as new.

When you wish to mend a slightly worn table-cloth, use an embroidery hoop. In this way it can be nicely darned by using threads drawn from the linen itself.

To mend hot-water bottles, clean the torn place with gasoline. Place a piece of vulcanizing rubber over the hole with glue on it. Then put a hot iron on the rubber and let remain overnight. This will make your bottle like new.

Never pick up tiny pieces of glass with the fingers. Wet a woolen cloth and pat it over the glass particles which will then cling to the cloth. Burn the cloth.

When making lemon pies, let the filling get cool before putting in the pastry shell and you will find that it will not run as it does when it is put in hot.

Never leave a metal spoon in anything you wish to heat quickly as the heat runs up the spoon, thus requiring a longer time to heat the food.

To remove fresh shellac from a brush, rub a small quantity of borax well into the bristles. Then wash in soap and water. The same treatment will remove shellac from the hands.

To loosen rusty screws, hold a red-hot poker on the head of the screw for two or three minutes. It can then be easily removed with a screw-driver.

When a caster becomes loose fill the hole with putty, then insert the stem of the caster in the soft putty. When the putty becomes hard it will hold firmly.

The common nut-cracker makes a splendid household wrench to remove the tops from cans and bottles with screw tops. Even glass stoppers will yield to it.

When hanging small curtains over doors and windows and you haven't any rod, use narrow elastic. It prevents sagging.

PLANT A TREE ARBOR DAY, MAY SECOND

GOVERNOR GROESBECK has issued a proclamation designating Friday, May 2nd, as "Arbor and Bird Day" throughout the state of Michigan. He urges that the people of this state make Arbor Day of 1924 the beginning of an effort to plant a million trees in Michigan before the spring is over. He says: "If every school would plant not only one shade tree but many, if every home owner would plant both fruit and shade trees, if county highway officials would place along the roads young trees, and if the various committees would make the day one of general tree planting, Michigan could easily have one million more trees growing when the spring gives way to summer sun." He also urges that the birds be protected.

Can you plant at least one tree on May 2nd?

MUSIC WEEK INVADES RURAL COMMUNITIES

FOR the first time, we are to have this year a national music week. It will be observed throughout the country from May 2 to 10. Rural districts, especially rural schools, are expected by the promoters of the plan to form one of the strongest links in the chain of music week. National farm organizations, such as the American Country Life Association, the American Farm Bureau Federation, and the Granges, are cooperating and helping to stimulate rural participation. The committee in charge is distributing a guide for the organization of local music week which contains special suggestions for the participation of rural schools and rural communities. It may be obtained without charge from C. M. Tremaine, Secretary, National Music Week Committee, 105 West 40th Street, New York City. Community song books with music or word leaflets may be had also from the committee.

They are suggesting a music hour in every home, community songs in schoolhouse, church, or a farm home, which may be the center of communal life and in which a piano, organ, or other musical instrument is available. In some cases families that have a radio receiving set may invite their neighbors to join in listening to the special music week programs which will be provided over the radio.

Since music week comes so near the end of the school term in many rural communities the preparation of special programs may proceed in connection with the preparation for the regular closing exercises and provide a natural climax for the year's musical work. Indeed it is hoped by the committee that music week in 1924 will be but the beginning of the observance of a recurring anniversary which will be celebrated as naturally as Thanksgiving, Christmas, and other holidays. Music week should be merely an intensifying during one week of the habitual use of music throughout the year. In the school, as well as in the home, every day should be music day.

Personal Column

Earning Money at Home.—I see many inquiries as to how a woman can earn money at home, and wonder if my experience would help someone. When we moved in the country four years ago, I got a loom intending to weave for myself and family only, but after a few months on the farm decided we could use any extra money it was possible to make, so I started to weave for others. Had a chance to sell some rugs by having them made up of rags I had on hand, and finally started buying goods purposely to make into rugs. Have a good business now in both rugs and quilt making. I bought new cuttings from factory by the hundred pounds, and as so many were too small for strips of any length, started piecing flocks of different patterns and there is very little waste on them. Also sewed and made up rugs on shares when one had worn out clothing and no time to sew the carpet rags themselves. I do these things beside raising turkeys, geese, and chickens, and still find time for some good reading.—Mrs. J. V., Mayville, Mich.

To Clean Window Blinds.—I would like to ask you through the columns of the Business Farmer if you know how to clean window blinds, which have become soiled with use, dust and other ways?

Cleaning a Perculator.—Can anyone tell how to clean and open the fine holes in a coffee percolator? With the best of care they seem to clog, but as I am obliged to use water with quite a bit of iron in it, it might possibly be that. Do any of the readers have this trouble?—Mrs. T. S. Athens

Menu for April 26

Cream of Turnip Soup
Bean Croquettes Tomato Sauce
Savory Rice
Lettuce Salad French Dressing
Stewed Prunes Coffee

Bean Croquettes.—One pint white beans, one-half cup cream, yolks of two eggs, one tablespoon fat, one tablespoon flour, one tablespoon chopped parsley, one teaspoon onion juice, one teaspoon salt, and pepper to taste. Soak beans over night, drain, cover them with fresh water; boil an hour, drain, throw away water, cover with fresh water and boil until tender; drain and press through colander. Rub fat and flour together, add cream, stir until almost boiling, then add yolks of eggs. Stir again for a minute over fire, add bean pulp and all seasonings; mix and turn out to cool. When cool, form into cylinders, dip in egg, roll in bread crumbs and fry in hot fat. Serve with tomato sauce.

RECIPES

Ammonia Used in Cookies.—A number of years ago I quite often made ammonia cookies. I bought 5 cents worth of carbonate of ammonia or baker's ammonia as they are the same. I think 5 cents worth was an ounce, and I used one-half of this for a recipe, the size given by "a subscriber". The remainder can be kept until another baking, by putting in a glass can with tight cover. Dissolve in the milk after grating. Try using the grated rind of a lemon instead of oil of lemon.

Molasses Cookies.—Will send my recipe for molasses cookies, made the day before baking. They are very good: One cup shortening, one cup granulated sugar, cream together. Three whole eggs, one cup molasses, one rounding teaspoonful soda, stirred in molasses. Rinse out cup with about three tablespoons warm water, one-half teaspoonful salt, one teaspoon cinnamon, one teaspoonful ginger, and one-half teaspoon cloves. I stir in flour with large spoon. Let in cool place until morning. Use good grade cooking molasses.—A Subscriber.

—if you are well bred!

Gentlemen in the company of ladies do not smoke.

One need not let his manner toward a young woman on the street advertise the fact that she is his fiancee. The presumption is that the engagement has been announced, to all entitled to know of it, and brazoning the fact by a proprietary manner or an ostentatious show of affection is very vulgar.

The Runner's Bible

(Copyright by Houghton Mifflin Co.)

These are the things that ye shall do: Speak ye every man the truth to his neighbor; execute the judgment of truth and peace in your gates. Zach. 8:16.

That which is gone out of thy lips thou shalt keep and perform. Deut. 23:23.

The world is watching you. Give it no cause to say that you do not live according to your profession. Prove your faith by your works. Mean what you say. (Matt. 5:37.) Keep your word—your promise. (Col. 3:9-10.)

WOMEN'S EXCHANGE

IF you have something to exchange, we will print it FREE under this heading providing: First—It appeals to women and is a bonifide exchanges, no cash involved. Second—It will go in three lines. Third—You are a paid-up subscriber to The Business Farmer and attach your address label from a recent issue to prove it. Exchange offers will be numbered and inserted in the order received as we have room. —MRS. ANNIE TAYLOR. Editor.

115—Quilt blocks for Dahlia bulbs. Rugs for any goods I can make into rag rugs.—Mrs. J. Van Antwerp, Mayville, R. 4, Michigan.

AIDS TO GOOD DRESSING

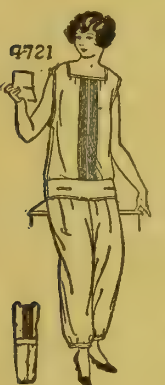
BE SURE AND SEND IN YOUR SIZE

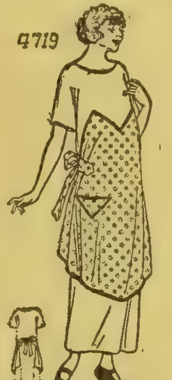
4703-4641. An Up To Date Costume.—This Costume comprises Ladies' One Piece Dress 4641, and Sleeveless Jacket, 4703. Tan and brown checked suiting was used for the Dress, and tan flannel for the Jacket. The Dress has a convertible collar. The Jacket may be finished with a straight or shaped closing. The Pattern for the Dress is cut in 7 Sizes: 36, 38, 40, 42, 44 46 and 48 inches bust measure. It repuires 4¼ yards of 40 inch material for a 38 inch size. The Jacket is cut in 6 Sizes: 34, 36, 38, 40, 42, and 44 inches bust measure. A 38 inch size requires 1¾ yard of 40 inch material. The width of the dress at the foot is 2⅛ yard.

4722. A Dainty Morning Frock.—Housework seems lighter when one can attend to its various duties, arranged in a dress made from Pattern 4722. Percale in blue and white plaid gingham would be an attractive development. This style is also good for linen, linene and sateen. The Pattern is cut in 7 Sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38 inch size requires 5¾ yards of 32 inch material. The width at the foot is 2 yards.

4713. A New "Bobbie Blouse" Dress.—This jaunty style is fine for school wear. It may be made of checked or plaid woolen or gingham, and is excellent for linen and jersey. The sleeve may be in wrist or elbow length. The skirt is a wrap around model. This Pattern is cut in 4 Sizes: 8, 10, 12 and 14 years. A 12 year size requires 3¼ yards of 36 inch material. For collar, cuffs, belt and packet facing of contrasting material ⅜ yard is required.

4721. "Pajamas Up To Date"—Here is a splendid model for albatross, crepe, silk or crepe de chine. The tucks are a new feature. This style is cool and comfortable and especially becoming to slender figurea. The Pattern is cut in 4 Sizes: Small, 34-36; Medium, 38-40; Large, 42-44; Extra Large, 46-48 inches bust measure. A medium size requires 3⅞ yards of 36 inch material.



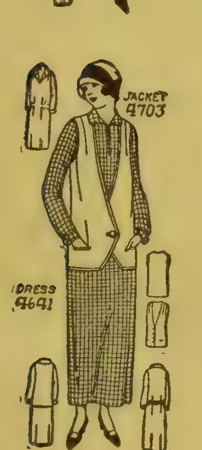


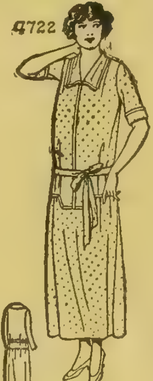
4707. A Popular Suite Style for a Small Boy.—One could use jersey cloth, linen, repp and flannel for this design. The smock is made in slipon style. The Pattern is cut in 4 Sizes: 2, 3, 4 and 5 years. A 4 year size requires 2¼ yards of 36 inch material.

4710. A Jaunty Model.—This "costume" is quite up-to-date, and attractive for any of the material now in vogue. The jacket may be omitted, or it may be made of contrasting material. The Pattern is cut in 4 sizes: 6, 8, 10 and 12 years. A 10 year size requires 2⅛ yards for the dress, and 1 yard for the jacket of 40 inch material. Mustard color linen with stitching in brown floss would be nice for this model or pongee in a natural shade with pipings or bindings of white or green.

4719. A Dainty Tea Apron.—Embroidered voile or Swiss, organdy, lawn or percale could be used for this model. It will also be attractive in sateen or alpaca with binding of contrasting material, or in organdy with a plaited frill at the free edges. The Pattern is cut in one Size: Medium. It will require 1¼ yard of 36 inch material, cut lengthwise. If crosswise 1⅜ yard is required.

4715. A Pretty "Dance or Evening" Frock.—Tulle, organdy, chiffon and crepe de chine are desirable materials for this design. Changeable taffeta would also be attractive. As illustrated the dress was made of peach color crepe de chine, with corded pipings of satin, and embroidered chiffon for the yoke portions. A rosette or chiffon and narrow braided girdle finish the waistline. The Pattern is cut in 4 Sizes: 14, 16, 18 and 20 years. A 16 year size requires 3½ yards of 32 inch material.





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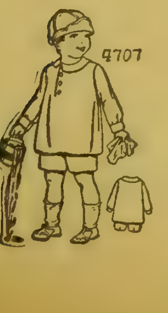

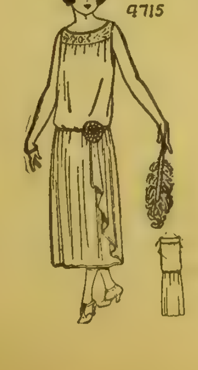

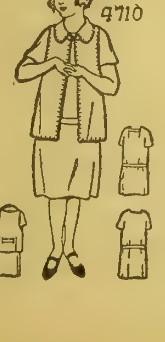

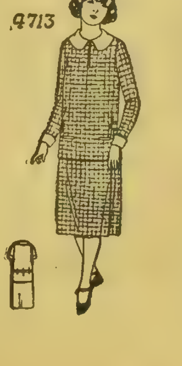

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Automobile Fire

Buildings of Elmer Phelps near Stockbridge Burned

The tool-house and garage of Elmer Phelps, a farmer living near Stockbridge, burned on April 4, and a new Flint Sedan was completely destroyed. The car, which Mr. Phelps had only had a few weeks, was insured in the Citizens' Mutual Automobile Insurance Company of Howell for $2,000. An adjustment was made on April 5 in which the full amount of the policy, $2,000, was paid to Mr. Phelps.

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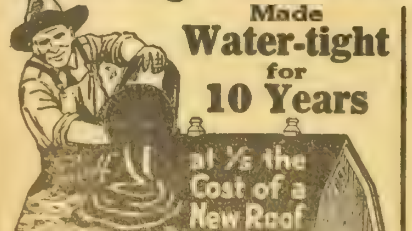

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The Children's Hour

HERE'S TO MICHIGAN

MANY laud their praises,
In bits of fancy rhyme,
But I" just put my poorer strength,
To match it for this time.

I think it is the grandest state,
For its beauty and its worth,
Salt and coal and gypsum,
Are taken from its earth.

Lansing is the capital
Its beauty is quite a part,
Of the capitol building with its hosts
Of old and painted art.

Detroit is also growing fast,
It ranks the first in size.
And Belle Isle with its pretty views,
Is first and second for a prize.

The state it is surrounded
By a wondrous chain of lakes,
To say nothing of the thousand others,
Which in all its total makes.

The upper part of Michigan,
Has wealth not used as yet.
But when it gets into the game;
You'll know it you just bet.

Will just mention a few of the cities,
Where education is advanced,
I mean the college and normal schools,
Which we may well enhance.

The normal schools at Marquette,
Mt. Pleasant and Kalamazoo,
Ann Arbor has the U. of M.
M. A. C. at Lansing, too.

Marquette and Jackson has the pens,
Owned and used by the state.
The school for boys at Lansing,
At Adrian for girls of fate.

I fear my poem is over long,
But still there's more to tell,
Three cheers! for good old Michigan.
And may you love her well.

—By Ruby N. Slack, Ellsworth, Mich.

OUR BOYS AND GIRLS

Dear Uncle Ned:—Just a note this time. I have been sick this past week and while sick thought of this story for The Children's Hour, as you said we could send in poems, stories or drawings. (One thing sure, I'll never send in a drawing fit for anything, as I can't draw descent). Today is the first day I am able to be up around and write. Tomorrow I am going to start making up my school work, so I'll be up with my class when I return to school. Hoping you receive enough letters from readers of The Children's Hour to convince you that we want a "Correspondence Scramble", I am, sincerely,—Muriel Fray, Caledonia, Michigan.

Our Feathered Friends

There was once a little girl named Madge, who lived on a big farm with a beautiful wood lot. On one side of the woods was a pleasant grove of maples, where she sometimes took her little schoolmates for picnics in the summer time.

There were birds of many kinds that lived in these woods—blue birds, woodpeckers, robins, quails, and wrens. She had made friends with the birds, especially the quails and wrens. The quails would answer her when she called "Bob White" and she had bought a little wren house and hung it in the woods to protect a mother wren from the birds that preyed on her.

One day a little neighbor boy named Roy, was given a gun for a birthday present. After he had his gun for a while, he began to brag about how few shots it took to bring down a bird. Madge was sad because he killed birds, and one time when they were playing together, she told him how she wished he wouldn't kill birds because it was wicked. He told her it was fun, and that she had "girl's ideas" and boys were brave like men. She said it wasn't brave to kill innocent birds, and almost convinced him that she was right.

Just the same he went to the woods hunting that afternoon, and trudged around until he was tired looking for a bird in a position where he could hit it sure. He had seen birds many times that afternoon that he could have killed, but he would say to himself "I'll wait until I find one real close to me."

It was a hot, sultry, afternoon, and finally Roy sat down under a big elm tree to rest. He was thinking about Madge's silly girl views, (as he called them). Finally he saw a bird close by. He pulled his gun, aimed carefully, and fired. He saw he hadn't killed the bird, but had wounded it, so it just sort of fluttered along. He followed it, and saw it drop to the ground. He picked it up and found it was now dead. He heard a noise and looked around, and there was a nest full of little birds. They were sticking out their little heads and opening their mouths for food, because their mother had been on a return trip to them from hunting food. When Roy realized this, it made him real sad. He knew the poor little thing would starve, now that their mother was dead, and couldn't bring them food. He wondered if he could carry them home and fix a place for them, and try to raise them, because he felt real wicked and miserable.

Just then a big drop of rain splashed on his forehead followed by another, and another. He started up quickly, looked around for the birds, and then realized that he had dreamed this while asleep under the big elm. He was so relieved that it was a dream. He jumped up quickly, and ran home because it was raining quite hard now. On the way home he vowed to never kill any more of our little feathered friends, but to try his skill on real pests or targets.

Dear Uncle Ned:—Well this is Sunday evening, and I am by my sweet self. I happened to think of my dear Uncle Ned, so I took my pen in hand and am now writing you a nice little letter. Jack Frost is outside, and I don't like him. I don't think anyone does. The month of June is my beloved month, when the beautiful roses are seen in the gardens, and in full bloom. I certainly do love flowers. I am a lonesome little pal, for where I am working at now, I don't go out very often. Will some of the young folks between the age of 14 and 23 years, write me? I will try and answer every letter I get. As my letter is sort of long, I must close, hoping to get a lot of correspondence.—Miss M. A. Miller, 700 W. Ohio St., Bay City, Michigan.

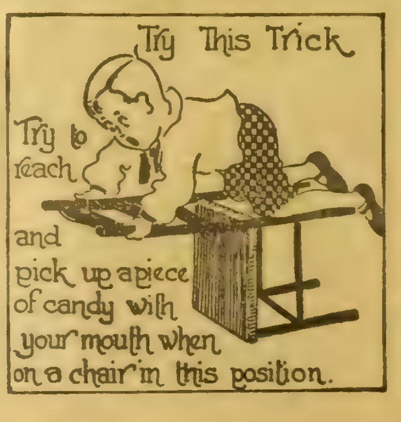
Dear Uncle Ned:—May we enter into your merry circle? We have been silent readers of the Children's Hour and enjoy it very much. We see that everyone that joins this circle describes themselves, so will we. We both are eleven years of age, live on farms, and like it better than in the city. We have brown hair and blue eyes and are of the same height. We go to school together and we are in the eighth grade, like to study and like our teacher very much. We hope to see this letter in print, but we know that Mr. Waste Basket is waiting for a letter like this one. Isn't he Uncle Ned? Hoping some of the girls and boys will write to us. We will answer all letters we receive.—Martha Szalo and Agatha Centalo, Metz, Michigan.

Dear Uncle Ned:—Would you like to have a new niece? I am nine years old and in the fourth grade. I have dark hair, gray eyes and I am four feet six inches tall. I have two pets, a dog named Browney and a lamb named Janey. We have other sheep. We have four horses and eight cows. I live on a farm of 160 acres. I hope my letter does not reach the waste basket as I think it will. Your niece,—Wilma Roberts, Ithaca, R. 7, Michigan.

Dear Uncle Ned:—I am a girl in the fourth grade. I weigh sixty-five pounds. I am four feet four inches tall. My hair is a light brown and my eyes are blue. I live on a twenty acre farm. We have ninety chickens, three ducks, five cows, two cats, two pigs, and two horses. I have two sisters and one brother. There are twenty-four children in our school. Your niece,—Martha Wilson, R. 1, Alma, Michigan.

Dear Uncle Ned:—May I join your merry circle? I hope this letter does not reach the waste basket. I live on a 160 acre farm, eight miles from Grayling. My father has been taking the M. B. F. for quite a while. I read the Children's Hour and enjoy it very much. I have 4 brothers and 1 sister. I will describe myself. I am 13 years old, 5 feet 1½ inches tall and have brown hair. My birthday is the 6th of November. I go 4 miles to school and am in the seventh grade. I wish some of the boys and girls would write to me. Your nephew,—Ernst Corwin, Roscommon, Mich., R. R. No. 1.

Dear Uncle Ned:—Hello! May I become a member of the Children's Hour? My father has taken the paper for a long time and thinks it is a very good paper. So do I. I live on a 60-acre farm and like the farm very much. I have light brown bobbed hair, blue eyes, and I am very pretty. I am twelve years old and am in the eighth grade. I am writing this letter in school. Your want-to-be niece,—Beatrice Everson, Auburn, Mich., Route 2.



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RED POLLED

FOR POLLED SHORTHORNS Milk Strain Either Sex.
PAUL QUACK, Sault Ste Marie, Michigan.

RED POLLED BULLS READY FOR SERVICE. From good milking strains. Prices right.
JACOB BERNER & SONS, Grand Ledge, Mich.

An Over-Production of Crops and Advice

(Continued from Page 3)

riculture. Did he fail to produce sufficiently? No, he even produced a surplus. Did he fail to produce economically? No, he produced this surplus with less help than ever, namely, by his own ingenuity and afforts.

So much for conditions with which we are all more or less familiar. Now what about the remedy? It is common knowledge that it is comparatively easy to criticize almost any program presented by another. But to outline a remedy as a program to be carried out, is entirely another problem. The complex condition of our economic relationship between industries and governments of the world makes the problem so great that to date we have been able to discover no one person who is able to outline a course of action that would solve it. I firmly believe that the task will require the best efforts of many men, honestly and earnestly inclined, without the handicap of selfishness or prejudice, seeking just and fair means for an equitable distribution of wealth. Therefore I submit the following for consideration.

Taxes Must Come Down

Many things have happened in the last few years. Therefore many adjustments will have to be made, among which I will mention only a few which I think most important. First, taxes. The cost of Government should be equitably spread upon real property, including live stock and machinery, intangibles such as money, bonds, mortgages, etc., also upon all citizens, because all enjoy the benefits and protection of Government without which they could not exist. Due consideration of course should be given their ability to pay, for any tax that becomes confiscatory is little short of robbery.

And in the second place freight rates should be established with more consideration given to the actual value of the commodity shipped. For instance, most farm commodities are heavy and bulky. In many cases the freight bill nearly equals the entire cash value of the shipment. This situation should be promptly and effectively remedied.

In our opinion no solution of the problem would be complete which did not give an important point to the subject of co-operative marketing. The chief reasons why the farmers are trying to develop cooperative marketing are economic in nature and have to do with the problem of lowering the cost of distribution of food, which, of course, is good business for our entire social structure. Our Federal and State Governments should do everything possible to assist by pointing the way and by other means when necessary.

Good farming is good business applied to farming, meaning good soil, good seed, good stock and good business methods, and I am glad to say that our Governments, both state and federal, are doing everything that they can do to help along this line.

Inflation and Deflation

The writer remembers when a boy, if he was to enjoy coasting down the hill he must by some means get back up the hill again. Now if agriculture is to enjoy its former relationship with other industries it must get back to the position it occupied in 1919. During this time when money was easy to get, debts were contracted to the largest extent ever recorded in history and we all expected to pay these obligations with our commodities representing a cash value of nearly, if not quite, double what they now represent.

For example, it took 100 bushels of wheat in 1919 to pay interest on $3750.00 at 6 per cent. Today, 100 bushels of wheat would pay the interest on only $1428.57 at 7 per cent. This rate of depreciation is shown, not only in wheat, but in hay, beef, cattle, potatoes and many other items. It is also shown in exchange value, for example, 102 bushels of wheat in 1919 would buy a wagon. Today, it would take 166 bushels to buy the same wagon. Therefore, you see it is unjust to contract a debt under one measure of value and be obliged to pay it under another.

Some one will hasten to say that we have the same money unit today that we had in 1919. I will reply by saying that value only means so much of one thing is given for so much of another. So the value of any given thing, including money, depends upon the amount available and the demand for it. So when money is plenty and cheap everyone is trying to exchange money for things, and when money is scarce, the conditions change and every one is trying to exchange things for money. Therefore money becomes dear.

Tax Exempt Bonds and Securities

The crazy desire to go in debt was not confined to indiviuals, they only follow the example set by our governments and our municipalities. Some of the astounding figures are given below. The debts carried by governments, National, State, County, cities, etc., in 1912 was $6,814,955,000. This had grown in 1922 to $32,786,715,000. The increase represents 381 per cent. The per capita debt in that period rose from $70.20 to $301.56. That the reader may see what is meant by the unparalleled increase of public debts, the division of responsibility is given as follows:

National Debt	$22,525,775.000
State Debt	1,162,648,000
County Debt	1,366,636,000
Cities and others	7.731,658,000

The interest is more than one and one-quarter billion dollars a year.

This great indebtedness was largely augmented by tax exempt bonds and securities, a condition made possible by legislation and capable of being corrected only through legislation.

Therefore I am convinced that the only means by which agriculture can relieve the serious conditions which it is in, is by thorough and complete organization, and with its numerical strength, support such men as have a knowledge of the real conditions affecting agriculture, and who are earnestly trying to effect a cure. Possibly the greatest results may be obtained by organized support of beneficial laws or rulings and a careful analysis of all measures, so that we may be able to combat harmful measures.

OH, MONEY! MONEY!

(Continued from Page 10)

the low wages—wages upon which it was impossible for any girl to live decently—wages whose meagerness sent many a girl to her ruin.

Miss Maggie listened attentively, and said, "Yes, yes. I see," several times. But in the end the eager-eyed young woman went away empty-handed and Mr. Smith frowned again.

He had thought Miss Maggie was so kind-hearted! She gave to some fairs—why not to this one? As soon as possible Mr. Smith hunted up the eager-eyed young woman and gave her ten dollars. He would have given her more, but he learned from unpleasant experience that large gifts from unpretentious Mr. John Smith brought comments and curiosity not always agreeable.

It was not until many weeks later that Mr. Smith chanced to hear of the complete change of policy of Daly's department store. Hours were shortened, labor lightened, and wages raised. Incidently he learned that it had all started from a crusade of women's clubs and church committees who had "got after old Daly" and threatened all sorts of publicity and unpleasantness if the wrongs were not righted at once. He learned that the leader in the forefront of this movement had been—Maggie Duff.

As it chanced, it was on that same day that a strange man accosted him on the street.

"Say, she was all right, she was, old man. I been hopin' I'd see ye some day ter tell ye."

"To tell me?" echoed Mr. Smith."

The man grinned.

"Ye don't know me, do ye? Well, I do look diff'rent, I'll own. Ye give me a dollar once, an' sent me to a lady down the street thar. Now do ye remember?"

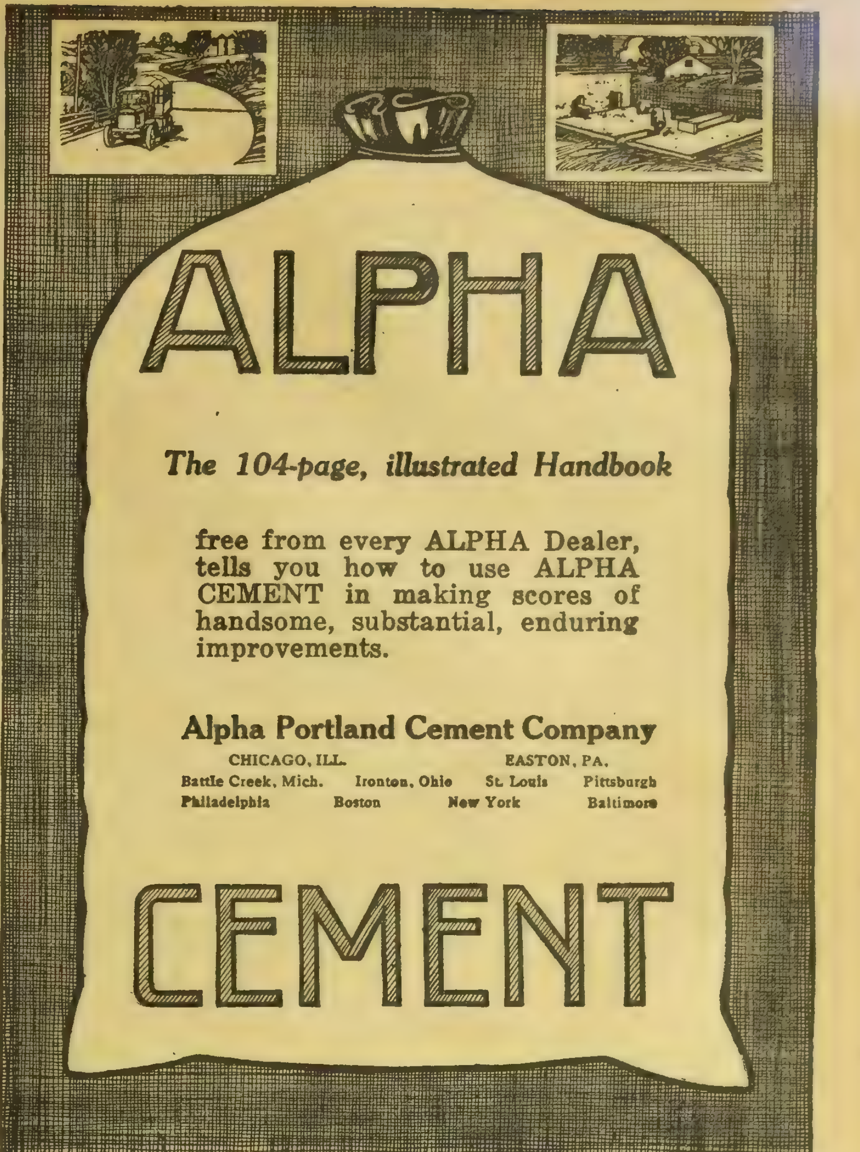
"Oh! Oh! Are you that man?"

"Sure I am! Well, she was all right. 'Member? I thought 'twas only chin-music she was givin' me. But let me tell ye. She hunted up the wife an' kids, an' what's more, she went an' faced my boss, an' she got my job back, too. What do ye think of that, now?"

"Why, I'm—I'm glad, of course!" Mr. Smith spoke as one in deep thought.

And all the way home Mr. Smith walked as one in deep thought.

(Continued in May 10th issue.)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FOR sheep ticks, scab, foot rot, maggots and shear cuts.

For hog lice, skin diseases and healthful surroundings.

Provide a wallow for your hogs. Add Dr. Hess Dip occasionally. It's the handy way.

Sprinkle in the dairy barn. Keeps everything sanitary and clean-smelling.

Sprinkle or spray the poultry-house occasionally to kill the mites, lice and disease germs.

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Standardized *Guaranteed*

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RAISE SHORTHORNS WITHOUT HORNS Like Kelley does. U. S. Accredited Herd No. 28945. For description and price write,
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Two good herd boar good enough to head any purebred herd any where. Get my price on one of these. Booking orders for pigs at weaning time, $10 up. The very best of breeding. Over 60 head to pick from up to date and several sows to farrow. Write for prices and description to

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JOHN W. SNYDER, St. Johns, Mich., R. 4.

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For Sale—SHETLAND PONIES

Two one-year old, one 18 mos. old. Price $50-60.
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FOR SALE—MALE FOX HOUND 17 MO. OLD. A good one, will sell cheap.
RALPH ELMER, Harrisville, Michigan.

Cured His Rupture

I was badly ruptured while lifting a trunk several years ago. Doctors said my only hope of cure was an operation. Trusses did me no good. Finally I got hold of something that quickly and completely cured me. Years have passed and the rupture has never returned, although I am doing hard work as a carpenter. There was no operation, no lost time, no trouble. I have nothing to sell, but will give full information about how you may find a complete cure without operation, if you write to me, Eugene M. Pullen, Carpenter, 59-K Marcellus Avenue, Manasquan, N. J. Better cut out this notice and show it to any others who are ruptured—you may save a life or at least stop the misery of rupture and the worry and danger of an operation.

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I have returned home after 2 years' service in France with the A. E. F.

While in France I obtained from a noted French physician a prescription for the treatment of Rheumatism and Neuritis. I have given it to thousands with wonderful results. The prescription costs me nothing. I ask nothing for it. I will mail it if you will send me your address. A postal will bring it. Write today.

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Write Today for Cash cream prices and shipping tags, or ship a trial can of cream at once to the nearest Blue Valley Creamery. For 24 years Blue Valley has given thousands of farmers a high direct market price for their cream. We guarantee to satisfy you.

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Use HOOSIER TILE for permanent buildings for farm or city, dwellings, store rooms, garages, foundation and basement walls, hog barns, barns, poultry houses, etc. Combines beauty, durability, economy. Smooth Glaze or Mat Face finish. Estimates free. Buy now for spring building. Save time and money. **Hoosier Bldg. Tile & Silo Co., Dept. MB-17, Albany, Ind.**

PERMANENT

DAIRY and LIVESTOCK

M. A. C. WILL LIST SUPERIOR COWS

RECOGNITION of superior animals in Michigan cow testing associations will be given with the establishment of an animal "blue book" for the highest producing cows, beginning with this year, according to an announcement by the Dairy Husbandry Department of Michigan Agricultural College.

More than 2,000 cow testing association records were examined in order to arrive at a standard of production, in accordance with the top 12 or 15 per cent of the association cows will be allowed to qualify. All cows in regularly organized associations will be eligible for entry in the new record of performance upon meeting the required standards.

The new plan will establish a system of permanently recording the State's best cows and will stimulate interest in better feeding, better breeding and better "weeding," according to Department officials. It also will aid in enhancing the value of superior cows and their offspring, and will emphasize the value of a bull according to the production records of his daughters.

Certificates of production will be granted for all animals that qualify for the record of performance, besides their inclusion in the annual year book.

Requirements for certification in the record of performance year book will be as follows for the various classes during the association year:

1. Heifers starting record under three years old must produce 280 pounds or more of butter fat.
2. Cows starting record under four years old must produce 310 pounds or more of butter fat.
3. Cows starting record under five years old must produce 350 pounds or more of butter fat.
4. Cows starting record when five years old or over must produce 400 pounds or more of butter fat.
5. When age is not known, cow is to be classed as mature, and must produce 400 pounds or more of butter fat.

TAKING SHEEP ON SHARES

What share should I have to give for sheep furnished me to raise on shares? I would like to get about 50 head. I have 120 acres of cut-over land with briers and brush. Do you think that to work up to 100 head in three years would be more than I could pasture in good shape? I am sowing mixed grass seed as fast as pastured off.—C. G., Karlin, Mich.

—There are many different systems used in letting sheep out on shares to Michigan farmers. However, the oldest and most common one is for the sheep to double to the owner in three years; that is, the man taking the sheep stands all the death loss and returns to the owner twice as many sheep of about the same average age and breeding value as the ones he received at the beginning of the three-year period.

Whether or not you could carry one hundred head of sheep on your one-hundred and twenty acres of cut-over land would depend first upon the productiveness of your soil and second upon the amount of open grass not thickly covered with briars and brush and the kind of grass to which it is seeded. The sheep will not do well if confined closely enough to make them clear off very great quantities of the briars and brush, and you will have better results if you start with a smaller number than your pasture will carry and increase the flock as you see that you have plenty of pasture.

A smaller number of sheep well fed and taken care of are much more profitable than a larger number poorly fed and cared for, particularly on the share plan, because the death risk is usually entirely assumed by the man who takes the sheep.—V. A. Freeman, Extension Specialist in Animal Husbandry, M. A. C.

VETERINARY DEPARTMENT

HYDROPHOBIA OR RABIES

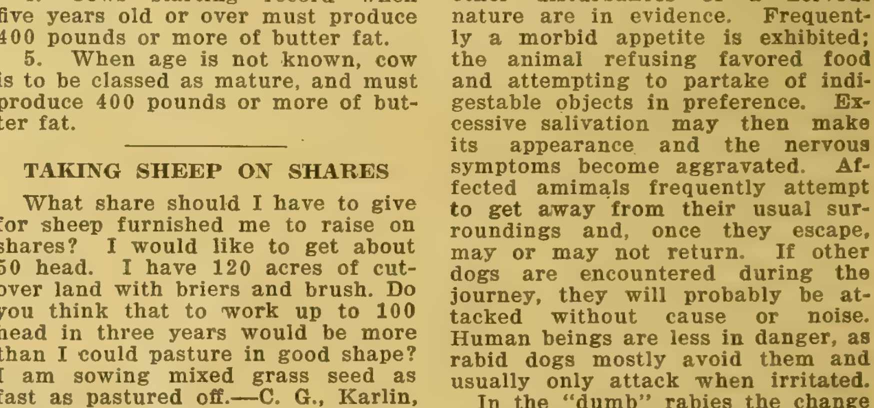
Could you tell me how a dog acts when he has hydrophobia and the cause? Would any other animal get it without the dog biting them? Had a two year old dog in good health and suddenly went mad and would very much like to know the cause.—E. E. R., Wixom, Michigan.

—There are two commonly described types of hydrophobia, or rabies; the "Furious" and the "Dumb."

The "furious" type is the type which attracts the most attention and represents the greatest danger to animals or persons. Probably the first represents the greatest danger to animals or persons. Probably the first noticeable symptom is a change in behavior. The animal later becomes very excitable and other disturbances of a nervous nature are in evidence. Frequently a morbid appetite is exhibited; the animal refusing favored food and attempting to partake of indigestable objects in preference. Excessive salivation may then make its appearance and the nervous symptoms become aggravated. Affected amimals frequently attempt to get away from their usual surroundings and, once they escape, may or may not return. If other dogs are encountered during the journey, they will probably be attacked without cause or noise. Human beings are less in danger, as rabid dogs mostly avoid them and usually only attack when irritated.

In the "dumb" rabies the change in behavior may pass unnoted. The period of excitability will be very short, to be followed almost immediately by paralytic symptoms; particularly paralysis of the muscles of the jaw and throat, followed by paralysis of the hind parts of the body. In this form of the disease the patients are usually weak from the beginning, neither bark nor bite, and succumb in three or four days.

The disease cannot be produced in a person or animal except through the bite of a rabid animal or the inoculation of the virus by other means.—B. J. Killham, State Veterinarian.



ASK—— ——AND YE SHALL RECEIVE

Mr. Hiram J. Stevens, of Luzerne, Mich., sent this picture to us, and he says that Ezra (meaning the cat) takes quite an interest in dairying.

White Diarrhea

Remarkable Experience of Mrs. C. M. Bradshaw in Preventing White Diarrhea

The following letter will no doubt be of utmost interest to poultry raisers who have had serious losses from White Diarrhea. We will let Mrs. Bradshaw tell of her experience in her own words:

"Gentlemen: I see reports of so many losing their little chicks with White Diarrhea, so thought I would tell my experience. I used to lose a great many from this cause, tried many remedies and was about discouraged. As a last resort I sent to the Walker Remedy Co., Dept. 687, Waterloo, Iowa, for their Walko White Diarrhea Remedy. I used two 50c packages, raised 300 White Wyandottes and never lost one or had one sick after giving the medicine and my chickens are larger and healthier than ever before. I have found this company thoroughly reliable and always get the remedy by return mail.—Mrs. C. M. Bradshaw, Beaconsfield, Iowa."

Cause of White Diarrhea

White Diarrhea is caused by the Bacillus Bacterium Pullorum. This germ is transmitted to the baby chick through the yolk of the newly hatched egg. Readers are warned to beware of White Diarrhea. Don't wait until it kills half your chicks. Take the "stitch in time that saves nine." Remember, there is scarcely a hatch without some infected chicks. Don't let these few infect your entire flock. Prevent it. Give Walko in all drinking water for the first two weeks and you won't lose one chick where you lost hundreds before. These letters prove it:

Never Lost a Single Chick

Mrs. L. L. Tam, Burnetts Creek, Ind., writes: "I have lost my share of chicks from White Diarrhea. Finally I sent for two packages of Walko. I raised over 500 chicks and I never lost a single chick from White Diarrhea. Walko not only prevents White Diarrhea, but it gives the chicks strength and vigor; they develop quicker and feather earlier."

Never Lost One After First Dose

Mrs. Ethel Rhoades, Shennandoah, Iowa, writes: "My first incubator chicks, when but a few days old, began to die by the dozens with White Diarrhea. I tried different remedies and was about discouraged with the chicken business. Finally, I sent to the Walker Remedy Co., Waterloo, Iowa, for a box of their Walko White Diarrhea Remedy. It's just the only thing for this terrible disease. We raised 700 thrifty, healthy chicks and never lost a single chick after the first dose."

You Run No Risk

We will send Walko White Diarrhea Remedy entirely at our risk—postage prepaid—so you can see for yourself what a wonder-working remedy it is for White Diarrhea in baby chicks. So you can prove—as thousands have proven—that it will stop your losses and double, treble, even quadruple your profits. Send 50c for package of Walko—give it in all drinking water for the first two weeks and watch results. You'll find you won't lose one chick where you lost hundreds before. It's a positive fact. We guarantee it. The Leavitt & Johnson National Bank, the oldest and strongest bank in Waterloo, Iowa, stands back of this guarantee. You run no risk. If you don't find it the greatest little chick saver you ever used your money will be instantly refunded.

WALKER REMEDY CO., Dept. 687,
Waterloo, Iowa.

Send me the [ ] 50c regular size (or [ ] $1 economical large size) package of Walko White Diarrhea Remedy to try at your risk. Send it on your positive guarantee to instantly refund my money if not satisfied in every way. I am enclosing 50c (or $1.00). (P. O. money order, check or currency acceptable.)

Name ....

Town ....

State .... R. F. D..............

Mark (X) in square indicating size package wanted. Large package contains nearly three times as much as small. No war tax.

SELL CLEAN EGGS BUT DON'T WASH THEM

If eggs are dirty don't wash them, is the advice offered egg producers by the United States Department of Agriculture. Washed eggs deteriorate more rapidly than unwashed, and detection of a few washed eggs may cause buyers to penalize the entire lot.

Unusually large quantities of washed eggs are reported this spring, the department says. Although dirty eggs are discounted in price, washing eggs will generally cause producers a greater loss.

Only clean, unwashed, high-quality eggs bring top prices. Production of clean eggs is accomplished by keeping hen house floors and nests clean, gathering eggs daily and keeping the laying hens during muddy weather in dry quarters until afternoon when most of the eggs will have been laid. Producers will find it more profitable to use the soiled eggs on the farm, and to market only the best quality product, the department says.

FEEDING HENS SKIM MILK

Does skim milk take the place of meat entirely for chickens? We have about 50 hens and I feed them one and one-half peck daily of one-half barley and one half buckwheat. They have all shells they want and nearly all the skim milk they want. I have one window 2 feet by 3 feet covered with burlap and three ventalators of one and one-half inch pipe which comes about 2½ inches from the floor and 18 inches out of the roof. They all look healthy. What do you think is lacking to make them lay?—W. R., Elkton, Mich.

—A very satisfactory production can be secured when the hens have skim milk available at all times. Ordinarily, however, a slightly higher production will follow the addition of meat scrap in the dry mash, at the rate of ten per cent, as a supplement to the skim milk. A 312 egg record was made by a Barred Rock at the Ontario Station that was fed a ration consisting of skim milk always available, ground oats in the dry mash hopper and a scratch feed twice daily consisting of two parts corn and one of wheat, in addition to oyster shell, grit, and sprouted oats.

More complex rations are being recommended at this time. The most popular ration used in practically all laying contests, would include a scratch feed containing cracked corn, and wheat, and a dry mash available at all times composed of the following ingredients: 20 per cent bran, 20 per cent corn meal, 20 per cent ground oats, 20 per cent middlings, 10 per cent meat scrap. The protein content can be increased by giving skim milk, buttermilk, semi-solid, or powdered milk.

The laying hen will ordinarily consume four ounces of feed daily. During the winter months a slightly higher percentage of scratch feed should be supplied and after May first the day's ration should consist of two ounces of scratch and two of mash.

It seems to me that you would find your hens in a more responsive mood if the laying house was remodelled, including more window space, and a more effective ventilation system. The outlet flue should be at least twelve inches in diameter, preferably fifteen or eighteen, and should come within eighteen inches of the floor, and extend beyond the highest point of the roof.

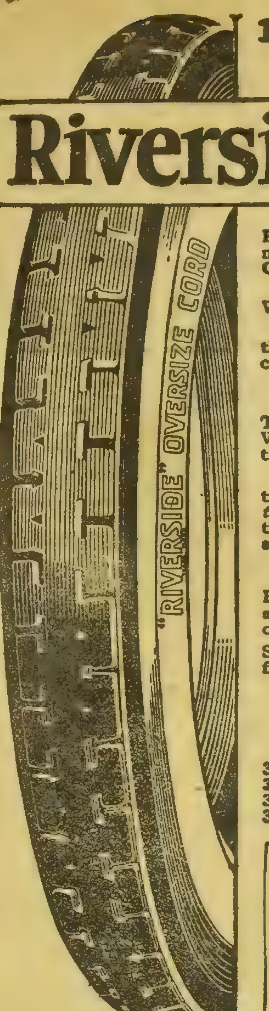
Approximately one third of the south side should be lighted.—E. C. Foreman, Professor of Poultry Husbandry, M. A. C.

Speckled Tea

Freckled-faced Mickey plays in Hal Roach's "Our Gang" comedies. His mother says he never steps out of the character he portrays on the screen. The other evening she asked him to pour her a cup of tea. Mickey hied himself to the kitchen and returned in due time with the tea.

"It's full of specks, Mickey," remarked his mother, sipping the streaming liquid. "Was the strainer clean?"

"Couldn't find it, Ma," was the rejoinder, "so I just put it through the fly swatter."



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Riverside Oversize Cord Tires are guaranteed for 10,000 miles and in actual performance give up to 18,000 miles. Can any other tire do more?

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And this 10,000 miles service is backed by a guarantee that has stood for fifty-one years. Does any other tire carry a better guarantee?

Quality is built into Riverside Cords

This guaranteed mileage is built into Ward's Riverside Cords. High treads, thicker and stronger, of tough, live rubber.

This exceptional quality of Ward's tires alone has made us the *largest retailers of tires in the country*. The tires themselves have convinced thousands that Riverside Cords are best.

"I have used Riverside Tires for the past four years. I have never had to send a tire back for adjustment.

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Before you buy any tires send for Riversides. Inspect them. Compare them with tires selling for $5.00 or $15.00 more.

Send them back if you do not find them the equal of any first-quality oversize cord made. We will refund your money.

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CATALOGUE No. 464M00—Be sure to give size.

SIZE	PRICE	POSTAGE	SIZE	PRICE	POSTAGE
30x3½	$ 9.75	28c	32x4½	$20.95	45c
32x4	16.95	42c	34x4½	21.95	48c
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"I have used two Riverside Cords on the rear wheels of my car for two years. They have gone over 12,000 miles now and have never been off the wheels — and they still look fine."

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Wire your order. Orders received by telegraph will be shipped the same day C. O. D.

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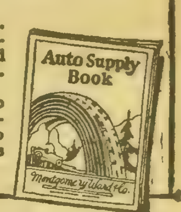

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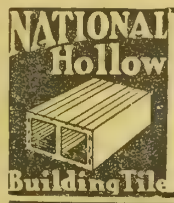

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garage, barns, warehouses, corn cribs, hog, milk and poultry houses, MAT FACE, homes, churches, etc. Glazed tile, wood or cement stave silos. Early buyers discount. Write for agency proposition.

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TREAT WITH J-J CORROSIVE SUBLIMATE

Obtainable through your Bureau or Agent. Trial box, making over 30 gals. solution, mailed for 75c. Write today.

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POULTRY BREEDERS' DIRECTORY

Advertisements inserted under this heading at 30c per agate line, per issue. Commercial Baby Chick advertisements 45c per line. Write out what you have to offer and send it in. We will put it in type, send proof and quote rates by return mail. Address The Michigan Business Farmer, Advertising Department, Mt. Clemens, Michigan.

JERSEY BLACK GIANTS MARTIN'S FAMOUS Washtenaw Strain Cocks, Cockerels and Eggs for sale. P. MARTIN, Ann Arbor, Mich., R5, Box B.

LEGHORNS

PULLETS BARRON ENGLISH AND FERRIS Americans Leghorns. Eight weeks, eighty-five cents. Barred Rocks, White Rocks, Rhode Island Reds, one dollar. Ready April twenty-first. Early hatches make bigger, stronger birds. Early fall and winter eggs.
RUFUS MORSE, Belding, Michigan.

TANCRED, HOLLYWOOD AND WYCKOFF Males head my carefully selected breeding pens. Choice eggs $3.00 and $2.00 per 15. My stock is of the very best. Write me.
F. ARTHUR MARTIN, Indian River, Michigan.

RHODE ISLAND REDS

CRYDER'S S. C. REDS, ONE OF LEADING Red pens in Michigan egg contest. Bred for color, shape, and heavy production. Write for prices on hatching eggs.
EDW. H. CRYDER, Alamo, Michigan.

RHODE ISLAND REDS TOMPKINS STRAIN to make room for young stock. I will sell after November 1, 1923, 50 2 year old hens at $2.00 each; 25 1 years old hens at $3.00 each; cockerels at $2.50 and up. All these cockerels are from my best 3 year old hens that layed 205 eggs or better in their pullet year. Quality breeder of Rhode Island Reds.
WM. H. FROHM, New Baltimore, Mich., R. 1.

S. C. R. I. RED PURE BRED EGGS FOR setting. 15-$1.25 or 100-$8.00.
LOUIS MORRIS, Mt. Morris, Michigan, R. 1.

R. C. R. I. Red Purebred Hatching Eggs at $1.25 per 15 postpaid. Beautiful Red. Great layers, Whittiker strain. M. J. Spencer, R1, Melvin, Mich.

ROSE COMB RHODE ISLAND REDS. Hatching eggs $1.25 per 15. Postpaid.
MRS. ALBERT HARWOOD, R4, Charlevoix, Mich.

BARRED ROCKS

Hatching Eggs. Barred Rock, Aristocrats and Fishel White Wyandottes, 100-$5.50; 50-$3.00; 15-$1.25. Joseph Amster, Paw Paw, Michigan.

DARK RINGLET BARRED ROCK EGGS $1.75 per 15; $3.00 per 30. Large type White Pekin Duck eggs $1.25 per 12.
MRS. FRED KLOMP, St. Charles, Michigan.

WYANDOTTES

PURE BRED W. WANDOTTE HATCHING Eggs, Fishel's heavy laying strain. $7.00 per 100; $4.00 for 50 or $2.00 for 15.
Mrs. Tracy Rush, 104 Grover Ave., Alma, Mich.

WHITE WYANDOTTES. REGAL STRAIN. Eggs for hatching, $1.50 per 15 and $7 per 100.
F. W. ROBERTS, Salem, Michigan.

GEESE

FOR SALE—THOROUGHBRED TOULOUSE Geese and Buff Rock Cockerels. Blue Ribbon prize winners. Buff Rock eggs $1.50 per 15.
BALDWIN & NOWLIN, Laingsburg, Mich., R4.

DUCKS

WHITE PEKIN DUCK'S EGGS FROM PRIZE winning stock, $1.50 per setting of (12) twelve. Prize winning Drakes, $5.00.
MRS HAROLD SIMS, Holly, Michigan.

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Pure Bred Mammoth Bronze Toms One 2 Year old hardy beautiful well marked birds. Write for prices. Mrs. F. Griffin, Riverdale, Michigan.

MAMMOTH BRONZE TURKEYS, LARGE beautiful birds. Write for prices.
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White Holland Turkeys
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BOURBON RED TURKEY EGGS 50c EACH Postpaid, from winners at Michigan State Fair and Grand Rapids Exposition.
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Cured Her Rheumatism

Knowing from terrible experience the suffering caused by rheumatism, Mrs. J. E. Hurst, who lives at 204 Davis Avenue, B67, Bloomington, Ill., is so thankful at having cured herself that out of pure gratitude she is anxious to tell all other sufferers just how to get rid of their torture by a simple way at home.

Mrs. Hurst has nothing to sell. Merely cut out this notice, mail it to her with your own name and address, and she will gladly send you this valuable information entirely free. Write her at once before you forget. (Adv.)

CHICKS From World's Greatest Layers

If you want **pure bred chicks** that are **bred right, hatched right,** and shipped right, that grow and will make you a profit, **get our new low prices** and free catalog before you buy

Tom Barron White Leghorns Heavy Type Brown Leghorns
R. C. & S. C. Rhode Island Reds Park's Barred Rocks

Flocks are carefully culled and developed on free range. All chicks are hand picked and inspected. no cripples or weaklings. Every one **strong** and **healthy. Satisfaction** and 100% live delivery guaranteed. **Postage** paid. Write now for our **low prices and free catalog.** White Leghorn and Barred Rock pullets after May 1. at low prices.

KNOLL'S HATCHERY, R. R. 12, Box B HOLLAND, MICH.

Our Baby Chicks

Can't be beat because they are hatched from Michigan's leading pedigreed flocks, culled by genuine poultry experts, for higher egg production and because we hatch only in tested mammoth machines. Rocks, Reds, White Leghorns, Anconas, Buff Orpingtons. Large instructive catalog tell all about them. Prices 9c up.

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BEST CHICKS at Low Prices

Send for free catalog describing **best bred** chicks in the country. Tom Barron and Tancred White Leghorns, Michigan's Champion Winter Laying Barred Plymouth Rocks and S.C.R.I. Reds. No better chicks anywhere at any price. Satisfaction and 100 per cent live delivery guaranteed.

YOU CAN DO IT WITH B. & F. BABY CHIX

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Quality Chicks at Reasonable Prices

Pine Bay Farm

English White Leghorns, Parks' Strain Barred Rocks, S. C. Black Minorcas, Reds and Anconas. My pen (16) at the 1923 Mich. Contest finished third among all heavy breeds, four hens making records over 200 eggs each, and one with a record of 254 eggs was seventh highest individual for the entire contest, 90 birds competing. Catalog free.

PINE BAY POULTRY FARM,
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CHICKS Strong. Healthy. From Heavy Layers.

S. C. Tom Barron Eng. White Leghorns, $12.00 per 100. Barred Rocks and S. C. R. I. Reds $15.00. White Wyandottes $16.00. Assorted chicks $10.00. Order direct from this ad. Reference First National Bank.

BLISSFIELD HATCHERY, Blissfield, Michigan.

QUALITY CHICKS New Prices

Prompt Free Live Delivery. Per 100 Leghorns, $10; Rocks, Reds, Orpingtons, Wyandottes, Anconas, $12; Lt. Brahmas, $15; Assorted, $7.00. Free Catalog gives quantity prices.

Missouri Poultry Farms, Columbia, Mo.

S. C. White Leghorn

Baby Chicks from Demonstration Farm flock, $13 per 100. Barred Rock chicks, $15 per 100.
RALPH S. TOTTEN, Pittsford, Michigan.

BEFORE BUYING ELSEWHERE GET OUR prices on White and Brown Leghorns and White Rocks. Prepaid Parcelpost. Satisfaction Guaranteed.
De Koster's Hatchery, Box B, Zeeland, Mich.

Whittaker's Red Chicks and Eggs for Hatching. Rose and Single Combs. Bred from Fourteen Generations of Winter Layers. Write for Free Catalog of Michigan's Greatest Color and Egg Strain. **Interlakes Farm, Box 4, Lawrence, Mich.**

READ AND ORDER; CHICKS FROM HIGH producing flocks, culled by M. A. C. expert. April and May, White Wyandottes, $18.00 per 100; Barred Rocks, $16.00; White Leghorns, $14.00. **C. W. Heimbach, R5, Big Rapids, Mich.**

STURDY CHICKS—BRED-TO-LAY AND exhibition flocks, culled by experts. Reasonable prices. Catalog free. Single Comb White Leghorns, Rocks, Reds, White Wyandottes. **Sunnybrook Poultry Farm, Hillsdale, Mich.**

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TYRONE POULTRY FARM, Fenton, Michigan.

PUREBRED BABY CHICKS. LEADING VARieties. 100% arrival. Priced right.
THOS. G. CALLAGHAN, Fenton, Michigan.

Free to Asthma and Hay Fever Sufferers

Free Trial of Method That Anyone Can Use Without Discomfort or Loss of Time.

We have a method for the control of Asthma, and we want you to try it at our expense. No matter whether your case is of long standing or recent development, whether it is present as Chronic Asthma or Hay Fever, you should send for a free trial of our method. No matter in what climate you live, no matter what your age or occupation, if you are troubled with Asthma or Hay Fever, our method should relieve you promptly.

We especially want to send it to those apparently hopeless cases, where all forms of inhalers, douches, opium preparations, fumes, "patent smokes," etc., have failed. We want to show everyone at our expense, that our method is designed to end all difficult breathing, all wheezing, and all those terrible paroxysms.

This free offer is too important to neglect a single day. Write now and begin the method at once. Send no money. Simply mail coupon below. Do it Today —you even do not pay postage.

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EGG BRED CERTIFIED CHICKS

from our Free range flocks of Hollywood and Barron improved English White Leghorns, 250-300 Egg-Bred line. Sheppard's Strain of Anconas direct. Parks strain Barred Rocks and Brown Leghorns. Quality and high egg yield due to 11 years careful breeding on our modern 65 acre farm. Culled, mated, rated by experts. Strong vigorous Chicks. 100% live delivery. Extra selected chicks 100, $14; 500, $65. Barred Rocks 100, $18; 500, $85. Write for catalog and prices on selected Special Star matings. Postage prepaid.

Town Line POULTRY FARMS ZEELAND MICH.

Improved S. C. White Leghorns

BRED FOR EGG PRODUCTION SINCE 1910

WOLVERINE BABY CHICKS

CHICKS from this high grade egg laying strain will give you a bigger profit, and absolute satisfaction. They have 13 years of careful selecting and breeding direct behind them, and mature in the shortest possible time. You benefit by our 13 years in hatching and shipping chicks. These chicks possess great vitality and grow up uniform in size. 100% safe arrival guaranteed. Let us mail you our catalogue with prices.

WOLVERINE HATCHERY, Zeeland, Mich., R.2

—SPECIAL—
QUALITY CHICKS

Our chicks are special quality. Our heavy home trade which takes most of our chicks indicates the worth of our stock. Those who know us best are our best customers. Pure bred stock carefully developed. 100% live delivery guaranteed. Order today. Catalog on request. Get acquainted

Prices Parcel Post Prepaid on	50	100	500
White, Brown and Buff Leghorns, Anconas	$7.00	$13.00	$62.50
R. I. Reds, Barred Rocks, White Wyandottes	8.00	15.00	72.50

CARVIEW POULTRY FARM, Morenci, Mich.

CHICKS—Investigate

STAR HATCHERY

Our chicks are the kind that make good. Every flock is carefully culled and mated. We have been in business seven years and have been building carefully and consistently to a place where we can offer chicks more than worth the money we ask. **SINGLE COMB, ENGLISH STRAIN, WHITE LEGHORNS, BARRED ROCKS, ANCONAS.** 100% live delivery guaranteed. Investigate our proposition before buying. A postal will bring full information.

STAR HATCHERY, Box 23, Holland, Mich.

CHICKS: HOGAN TESTED GUARANTEED

Our Chicks are from flocks on free range. They will live and grow and make a profit. ENGLISH WHITE LEGHORNS and BROWN LEGHORNS. Heavy laying Extra Good BARRED ROCKS. Postpaid to your door and full live delivery guaranteed. Our flocks are carefully supervised and Hogan tested. Bank Reference furnished. Write for prices and descriptive matter.

HILLVIEW HATCHERY, C. Boven, Prop.
Box H. R. R. 12, Holland, Mich.

QUALITY BABY CHICKS: SINGLE AND ROSE Comb Rhode Island Whites. Write for Catalogue.
FISCHERS POULTRY FARM, Holland, Mich.

Chicks Dying

How to stop it in 48 hours

White diarrhea kills half of all the chicks hatched, yet this loss is easily prevented, easily stopped. For years, thousands of poultry raisers have stamped out the trouble almost entirely, by putting Avicol in the drinking water. Within 48 hours, the sick ones are lively as crickets. Mrs. Wm. May, Rego, Ind., says: "I was losing 15 chicks a day before I received the Avicol. I haven't lost one since."

Avicol costs nothing to try. Readers are urged to write to Burrell-Dugger Co., 31 Allen Ave., Indianapolis, Ind., sending 50c as a deposit for a package by mail prepaid (or $1 for large size holding nearly 3 times as much). If you prefer, send no money but deposit the money with the postman on delivery. If Avicol doesn't stop your chick losses immediately, if you're not fully satisfied, the money deposited will be promptly refunded by the manufacturers.

LEE'S LICE KILLER

The Old Reliable Has proven itself year after year the one **sure** way to rid poultry of lice, mites, bedbugs, body lice and such vermin. Paint or spray on roosts, etc. No dusting, dipping, greasing, handling. Get it at your drug or seed store, or write us for particulars and valuable free book. **GEO. H. LEE CO. Omaha, Nebr.**

DONT LOSE BABY CHICKS

GERMOZONE, for 25 years the **reliable** remedy, will rid them of Roup, Colds, Bowel Trouble, etc., and **keep** them healthy. "A wonder worker." Used by hundreds of thousands. Get it at drug or seed store, or order of us by card—75c and $1.50 sizes, delivered. Postman will collect. No extra charge. Order today.

GEO. H. LEE CO. Omaha, Nebr.

DO NOT FEED BUTTERMILK IN GALVANIZED CANS

I am going to buy buttermilk to feed my baby chicks this spring and would like to know if there is any danger of poisoning them by leaving the buttermilk stand in milk cans, if so how long can it be left standing in the cans before there is danger? What kind of dishes are best to feed buttermilk in?—H. D. M., Jackson, Mich.

—Disastrous results sometimes attend the feeding of liquid milk products in galvanized dishes. The lactic acid of the milk reacts chemically on the galvanized metal, releasing lead impurities which poison the chicks. Ordinarily this reaction can be noted by the change of color of the galvanized dish which will have a dark area wherever the milk came in contact with it. The buttermilk could be retained in kegs or stave barrels for a long period without seriously interfering with its feeding value. There should be no danger attending the holding of buttermilk in the ordinary milk can for several consecutive days, but when fed to chicks, glass, earthenware, or wooden receptacles should be used.—E. C. Foreman, Professor of Poultry Husbandry, M. A. C.

DAIRYMEN TO HAVE CENTRAL MILK MARKETING AGENCY

(Continued from Page 4)

that the central sales agency proposed would be able to hold single distributers in check, and negotiate fair margins for cash and carry, with uniform prices for each service.

Some form of pooling plan for equitable harmonious distribution of returns to producers, was clearly in the minds of various speakers. The sharp division in the ranks of New York dairymen, due to their pooling plan, was referred to repeatedly, but there seemed to be general belief that such troubles could be avoided. Manager Clifford Hough of the Connecticut Milk Producers' Association offered his organization as an instance. It is going forward under a somewhat similar pool with increasing efficiency, prosperously and harmoniously, fair play bringing fair play and uniform prices.

Manager Bradford of the famous Turner Center system favored the central sales proposal, but cautioned against over-ambition and too wide a "spread" between fluid and surplus prices; "first aid" now is to keep that spread narrow enough to avoid over-temptation to milk manufacturers.

President Little finally put his idea in the form of a resolution, calling for "action toward the establishment of a common marketing agency covering New England, on a basis of equalizing returns to all;"—a broad wording intended to allow wide latitude in formulating the ultimate plan. This resolution, after full debate, was adopted by an overwhelming majority, everybody present being allowed to vote. To study the question and carry the plan forward a committee was elected.

To the writer the outstanding phenomenon of the meeting was the speech of Manager Richard Pattee of NEMPA, now become, since the lamented death of Secretary Manning of New York, the senior and dean of eastern cooperative dairy leaders. Considering the size of the brain producing it, this speech was out of all comparison the briefest, the simplest and the quietest of the meeting—as unruffled as a Mediterranean calm. It voiced the deep and undisturbed conviction of the speaker that the cooperative movement is certain to go on, whatever temporary obstacles it may encounter, until its service to producer and consumer has been fully rendered. Mr. Pattee has an unshakeable faith, he said, in the foundation common sense of the farmer, and in his ability to work out his own problems as they confront him. "We are up against a calamity," he concluded, "which that common sense cannot solve. When we have determined what we ought to do, we shall go forward together and do it."

Simple Enough

Teacher: Can any one tell me how a stovepipe is made?

Johnny: First you take a big long hole, and then wrap some tin around it.

RHEUMATISM

A Remarkable Home Treatment Given by One Who Had It.

In the year of 1893 I was attacked by Muscular and Sub-acute Rheumatism. I suffered as only those who are thus afflicted know, for over three years. I tried remedy after remedy, but such relief as I obtained was only temporary. Finally, I found a treatment that cured me completely, and such a pitiful condition has never returned. I have given it to a number who were terribly afflicted, even bedridden, some of them seventy to eighty years old, and the results were the same as in my own case.

I want every sufferer from any form of muscular and sub-acute (swelling at the joints) rheumatsim, to try the great value of my improved "Home Treatment" for its remarkable healing power. Do not send a cent; simply mail your name and address and I will send it free to try. After you have used it and it has proven itself to be that long-looked-for means of getting rid of such forms of rheumatism, you may send the price of it, one dollar, but understand, I do not want your money unless you are perfectly satisfied to send it. Isn't that fair? Why suffer any longer when relief is thus offered you free? Don't delay. Write today.

MARK H. JACKSON
No. 265-K Durston Bldg.
SYRACUSE, N. Y.

Mr. Jackson is responsible. Above statement true. **(adv.)**

Wyngarden Strain WHITE LEGHORN BABY CHICKS

EGG BRED for 18 YEARS

Here's what you get when you buy Guaranteed Wyngarden Baby Chicks

(1) Pedigreed stock, sired by males whose dams had records of 260 to 289 eggs per year, and grand dams 298 to 304 eggs. (2) 100% live delivery. (3) Chicks guaranteed to be healthy. (4) Absolutely pure bred. (5) Absolutely no culls. (6) Stock that withstands winter cold as well as summer heat. (7) Free entry in our animal flock performance contest, whereby you may obtain 200 of our best Barron English White Leghorns free. We know the quality of our stock because we maintain 42 hatchery farms of our own, instead of buying eggs wherever available.

Sired by Hollywood and Funk Farm Males

White and Brown Leghorns. Anconas.

Send for our catalog and read full particulars of the Wyngarden Strain.

Wyngarden HATCHERY & FARMS ZEELAND, MICH. Box B

BABY CHICKS FROM BRED TO LAY S. C. Buff Leghorns. First hatch March 3rd. **J. W. WEBSTER, Bath, Michigan.**

HIGHEST QUALITY CERTIFIED BABY CHICKS

FROM

VAN APPLEDORN BROS. BABY CHICKS Since 1906 MICHIGAN'S OLD RELIABLE HATCHERY HOLLAND, MICHIGAN

Michigan's Old Reliable Hatchery, the best equipped and most modern Hatchery in the State.

Pure Bred Tom Barron English and American White Leghorns, Anconas, Barred Plymouth Rocks and Rhode Island Reds. Strong, Well-hatched Chicks from tested Hoganized Free-range stock that make wonderful winter layers.

Chicks sent by Insured Parcel Post prepaid to your door. 100% live delivery guaranteed. Sixteen years of experience in producing and shipping Chicks giving absolute satisfaction to thousands. Write for valuable illustrated free catalog and price list. Get lowest price on best quality Chicks before placing your order.

HOLLAND HATCHERY & POULTRY FARM, R. 7, Holland, Mich.

We can save you money on

Ancona and White Leghorn Chicks

Send at once for catalog and prices. We insure your chicks for one week.

M. D. WYNGARDEN

Route 4, Box 81 Zeeland, Mich.

Great Northern Hatchery

Pure Bred Selected Flocks

100 Per Cent Live Delivery

Strong sturdy northern grown Chicks. Selected, pure bred stock. Healthy flocks on free range insure strength in every Chick. Order from this Ad.

Varieties	Prices on 50	100	300	500	1000
Leghorns (S. C. White and Brown)	$7.00	$13.00	$38.00	$62.00	$120.00
Barred Rocks	8.00	15.00	43.00	72.00	140.00

Mixed Broiler Chicks .... $12 per 100 straight

Hatched under best conditions in Newton incubators. Every Chick carefully inspected. 100% live delivery guaranteed. Reference State Commercial Savings Bank, this city. Write for prices on special matings. **GREAT NORTHERN HATCHERY, Box 50, Zeeland, Michigan.**

QUEEN QUALITY CHICKS

from Best Blood Line Free Range Flocks.

Developed and Culled by Experts---Barron Strain English White Leghorns, Brown Leghorns and Sheppard's Anconas. Sturdy, Healthy Chicks. Just a little more for your money. Safe delivery guaranteed. Write for Catalog.

QUEEN HATCHERY & POULTRY FARM ZEELAND, MICH.

Certified White Leghorn CHICKS

Hollywood Mated at the RIGHT PRICE

Barron English type, from stock certified by Michigan Baby Chick Association. Sired by Hollywood males whose dams had records from 260 to 290 eggs in a year. Our own rural strain was bred from Barron birds; is carefully culled and type tested.

Order from These Prices

Hollywood mated $15.00 per 100

Rural mated $13.00 per 100

Brown Leghorns, Grade A and B 14 and 13 Cents Each

Anconas, Grade A and B 15 and 14 Cents Each

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Extra selected standard bred chicks $4.00 per 100 more. Add 35c if less than 100 ordered. Good bank reference. Circular free.

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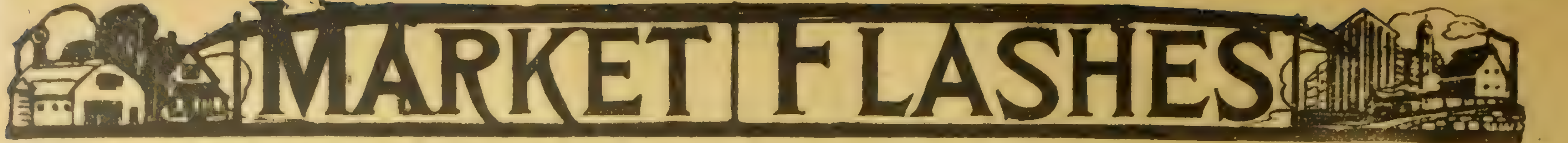
LOOK! 100,000 CHIX. BEST PUREBRED. M. A. C. method tested stock. Can ship at once. Barred Rocks or Reds, Black Minorcas 15c; White, Brown or Buff Leghorns 13c; Sheppards best Anconas 14c; Orpingtons 16½c; Black Langhans 18c; Large Brahmas 20c. Heavy broilers Chix 12c. Mixed spotted Chix 10c. Hatching eggs. Add 30c extra if less than 100 ordered. Catalog tells about our extra selected stock. Good bank reference. **Beckmann Hatchery, 26 Lyon, Grand Rapids, Michigan.**



MARKET FLASHES

MARKET SUMMARY

Wheat and oats steady. Corn and rye unchanged. Demand for beans slow. Butter and eggs active and firm. Potatoes steady. Supply of dressed calves exceeds demand and market is easy. Cattle steady to lower. Hogs and sheep decline.

(Note: The above summarized information was received AFTER the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press —Editor.)

FOOTE'S MARKET LETTER

BY W. W. FOOTE

Spring Has Arrived

SPRING is usually pretty late in arriving in Michigan and the surrounding states, where returns temporarily to cold days and nights are likely to happen at any time, but we have now reached the period of the year when farmers are out in the fields in preparation for the coming months of growing and reaping. They have learned the lesson of the danger of putting all their eggs in one basket furnished by the last year's wheat crop, and there is no probability that the many tillers of the soil who have made sharp reductions in wheat acreage will have cause to regret doing so. In a short time the pastures will be green once more and ready for cattle grazing, but there is danger of turning in stock before the grass has had a fair start and thereby injuring its growth. This year there has been a slow movement in stocking farms with thin cattle for grazing and feeding, but it is getting late, and at any time a starting up in the demand for stockers and feeders is likely to take place. These cattle have been selling below their real values in many instances, and they are bound to go higher before long. It is not an easy matter to ascertain approximately the number of brood sows on farms in the corn belt this spring, but from all that can be learned it appears that the number is much less than a year ago, and there are reasons for believing that the Department of Agriculture falls short of the facts in estimating that there are but 13 per cent fewer sows this spring than a year ago. Probably enough hogs will be raised to satisfy requirements, but there promises to be a marked falling off from the enormous over supply of 1923-24. It is diffcult to predict the future course of prices, but conditions point to higher prices for hogs, an advance of at least $1 per 100 pounds over last winter appearing not unreasonable. In some states there is a movement to raise alfalfa and soy beans, and it is understood that the Wisconsin farmers are going to double their alfalfa and soy bean acreage. In most farming districts efforts are being made to intensify production to the acre, and many farmers are giving their land a good dressing of lime.

Light Trade In Wheat

Judging from the trend of prices in the wheat market for several weeks, there is little in the surroundings which is encouraging to holders, and many owners have closed out their lines either in part or wholly. It is noticed that speculators are much less in evidence than in former years, and this is true also of corn and oats. Unfortunately, prices for the several grains are no longer made by the export trade, which is much smaller than in other years, and so long as other exporting countries continue to undersell us, there can be no marked change in our exports. Rye appears to be an exception to the rule, as it sells at far lower prices than formerly and recent purchases have been made, it is stated, for export to Norway. Rye bread is mainly used in northern Europe, and rye for May delivery is extremely low priced, selling about 22 cents a bushel lower than a year ago. Stocks of rye decrease slowly, and the visible supply in this country is up to 21,500,000 bushels, comparing with 18,415,000 bushels a year ago. The visible wheat supply is decreasing at a moderate pace, and aggregates around 56,000,000 bushels, which compares with 45,476,000 bushels a year ago. For some time the price of wheat in the Chicago market has averaged a little over $1 a bushel while a little over two years ago wheat for May delivery sold on the Chicago Board of Trade as high as $1.43. Most of the time the wheat exported from North America is furnished by Canada, an a short time ago it was stated that there were 175,000,000 bushels left over there for shipment. A reduction is reported in the area devoted to spring wheat in the United States, but the winter wheat acreage is regarded as too large for these times. In fact, some well-informed authorities believe there is danger that the aggregate wheat crop of this country will be larger than that of 1923 if the crops turn out all right. A short time ago wheat for May delivery sold at $1.03, comparing with $1.26 a year ago.

Less Demand for Corn

Conditions have changed materially in recent months, and prices for corn have gone much lower under larger sales by owners and a slower demand from various quarters. Recent sales have been made a few cents lower than at this time in 1923, but around two years ago May corn sold on the Chicago Board of Trade as low as 59 cents. The prevailing belief is that the corn acreage planted this spring will be as large as usual. Fewer cattle and hogs are being fed than a year ago, and it is predicted by close observers that less corn will be fed to swine for the coming half year than a year ago. The demand in the Chicago and other markets for corn to ship to eastern points has fallen off materially, but very fair amounts have gone to western and southwestern districts. Sales in the aggregate of cash lots of corn have fallen off a good deal, while farmers west of the Missouri river sold freely, but Illinois farmers were light sellers. Oats seeding has been in progress and a good acreage is claimed. Oats have been selling at about the same prices as a year ago, but about two years ago May oats sold as low as 37 cents a bushel. The visible supply in the United States is about 14,000,000 bushels, comparing with 26,900,000 bushels last year. May corn sold a short time ago on the Chicago Board of Trade at 79 cents, or about the same as a year ago. May oats sold on the same day at 47½ cents, comparing with 45¾ cents last year; and May rye at 65½ cents, comparing with 86½ cents a year ago. Recent selling of September corn was based on expectation of an increased acreage and on reports of reduced consumption on farms.

Prime Beef Cattle Advance

Most of the time there are sufficient beef cattle offered on the Chicago market to meet trade requirements, although fewer cattle are reported in feeding districts of the corn belt than a year ago. But there are not many strictly prime long fed heavy steers in the country and the percentage of choice to fancy steers and heifers offered on the market is very small most of the time. Now and then there are larger supplies of prime fat weighty steers than usual, and several days ago Nebraska was handsomely represented with about 375 head of fat steers weighing from 1325 to 1500 pounds, which sold at $12.25 to $12.35, with a sale of 28 of the lot which averaged 1549 pounds at $12.60, the highest sale in a long time. On Monday when these sales were made the cattle receipts aggregated 22,618 head, and the general market was at least 25 cents lower. Last week's cattle receipts were much larger than a week earlier, but the local and shipping demand was surprisingly large for Holy Week, and prices advanced after earlier declines. The bulk of the beef steers sold at $8.50 to $11.50, with the choicer lots of heavy steers at $11.60 to $12.60 and no good steer sellings under $10.25 and sales down to $7.25 to $8.50 for the commoner to fair light weights. Inferior little steers sold at $4.50 to $7.20, and the best yearlings offered sold at $11.50. Butcher cows and heifers found buyers at $4 to $10, canner and cutter cows at $2.25 to $3.75 and bulls $3.75 to $7.50. Calves were sold at $5 to $11.50. There is only a moderate demand for stockers and feeders at $4.50 to $9, sales being largely at $6.25 to $7.50. Combined cattle receipts in twenty markets for the year to late date amount to 3,565,000 head, comparing with 3,644,000 a year ago. A year ago common to prime beef steers sold at $6.65 to $10.35 and two years ago at $6.25 to $9.25. Late sales last week averaged 25 to 40 cents lower than a week earlier.

Hogs Still Plentiful

Now and then there is a marked falling off in the marketing of hogs in Chicago, but most of the times there is no scarcity, although smaller numbers showed up last week. Weakness in prices developed at times last week, and eastern shippers bought much less freely than a few weeks ago, while local packers held back, claiming a loss at prevailing prices for hog products. The general quality of the hogs offered showed a marked falling off, and inferior lots sold badly. The bulk of the hogs sold within a range of 20 cents, with heavy butchers at the top and selling 10 cents above the best light bacon weights. Recent receipts of hogs averaged 234 pounds, being five pounds lighter than a year ago and the same as the ten-year average for corresponding weeks. 14,517,000 hogs, comparing with 13,755,000 for the corresponding period last year and with 10,202,000 two years ago. Hogs are selling much lower than in recent years. A year ago they sold at $6.60 to $8.50 and two years ago at $9 to $10.70. Recent smaller receipts in the Chicago market checked the downward course of prices, and late sales were made of hogs at $6.65 to $7.65.

Chicago Lamb Market

Despite continued meager receipts recently, there was a big tumble from the previous time, prices having reached almost a prohibitory level when prime handy weight lambs sold for $17.10 per 100 pounds. However, there is no kick coming from sheepmen, their profits being extremely large. Hang on to the flocks and market only prime lots. Unshorn lambs have been selling at $13 to $16.50 and feeding lambs at $14.25 to $15.75. A year ago top lambs brought $14.60 and weight years ago $11.65.

Early Lamb Situation

Because of the embargo on eastern shipments of California lambs and the continuation of the very unfavorable conditions during March in Kentucky and Tennesee the market supply of early spring lambs before June 1 will be very much smaller than usual according to a report made by the United States Department of Agriculture. These three states furnish most of the spring lambs marketed before June first.

While the indications are that the market supply of sheep and lambs during April and May will be the smallest in some years, with fed stock making up an unusual percentage of the total, the market supply in June and July may be somewhat larger than that of last year because of the delayed movement from the earlier areas, the large early crop in the north west and the indicated increased production in the corn belt.

WHEAT

Prices in the Detroit wheat market made several small advances during the fortnight ending April 19. Trading is not active as dealers are holding off to await congressional action. They seem to be doing as little as possible and making no effort to extend trade. On the supply and demand outlook the market is weak as there is an abundance of wheat and foreign demand is small. Reports of the growing crop indicate a small crop this season.

CORN

Reports that the corn exchange this year will be bigger than last weakened the market last week and buying is not active. One of the large corn products companies has gone into the production of corn sugar on a large scale, it is said. This is a new thing in the corn trade. Detroit is firm at unchanged prices.

OATS

Oats are very scarce at Detroit and a firm tone prevails in the market. An advance in price of one cent last week failed to bring out any offerings.

RYE

The Detroit rye market is quiet and easy and the price is 1 cent under two weeks ago.

BEANS

Prices in the Detroit bean market during the last two weeks have worked a little nearer to the $4.50 level predicted by some of the buyers and there is a quiet tone to the trading. The New York market is inactive. Trading is not enough to cause the price to advance and dealers are not willing to sell at lower prices so the price remains unchanged. In event the $10,000,000 appropriation for relief of German children passes at Washington, it is believed that this huge fund released for the purchase of food stuffs will have a tremendous bearing on the Michigan Bean market and upon the acreage for this year. Several well known men interested in Michigan beans are working to see that Michigan beans will be considered as one of the first foods to be purchased.

POTATOES

The Detroit market has been steady with demand moderate. There is a fair supply of old stock on the market at present. The Chicago market is weak on whites but firm on reds with demand and trading very slow. A steady demand is noted at eastern points.

HAY

The hay markets show some effect of the seasons dullness but the very small offerings of the better sorts keep these prices very firm and therefore buoy up the situation as a whole.

There is also the seasonal influence of bad country roads which are restricting shipments to some extent this week. On the other hand the large proportion of low grade and unsound stock keep this end of the market dull and weak.

MARKET QUOTATIONS

Wheat

Detroit—Cash No. 2 red, $1.13; No. 2 white, $1.14; No. 2 mixed, $1.13.

Chicago—Cash No. 2 red, $1.06½; No. 2 hard, $1.09@1.12.

Prices one year ago—Detroit, Cash No. 2 red, No. 2 white & No. 2 mixed, $1.36.

Corn

Detroit—Cash No. 3 yellow, 85c; No. 4, 82c.

Chicago—Cash No. 3 yellow, 78@80c; No. 4, 77c.

Prices one year ago—Detroit, Cash No. 3 yellow, 86½c; No. 4 84½c.

Oats

Detroit—Cash No. 2 white, 55½c; No. 3, 53½c.

Chicago—Cash No. 2 white, 50@51c; No. 3, 48¾@50c.

Prices one year ago—Detroit, Cash No. 2 white, 51½c; No. 3, 50c.

Rye

Detroit—Cash No. 2, 70c.

Chicago—Cash No. 2, 68c.

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WE SOLICIT YOUR SHIPMENTS
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References: Wayne County and Home Savings Bank, Bradstreet.

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White Leghorns ready now, Tormohlen Brown Leghorns, Barred Rocks, Reds. Guaranteed. Free catalog. Haight Hatchery, Cedar Springs, Mich.

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BARRED ROCK HATCHING EGGS FROM 9 pound males $1.00 per 15; $2.00 per 30. Mrs. Frank Millikin, Roscommon, Mich., R. 1.

REGISTERED BOURBON RED TURKEYS; also eggs, 50 cents each postpaid. MARY BEACOM, Marlette, Michigan.

MISCELLANEOUS

CERTIFIED PETOSKEY SEED POTATOES. $1.25 per bushel. CHAS. P. REED, Howell, Michigan.

GET YOUR SEED CORN EARLY. EARLY maturing yellow dent 4c per pound shelled, bags free. PIRL TURNER, Brown City, Michigan.

RADIO—ATWATER-KENT NO. 10, PERfect condition, best outfit made, am buying a larger set of same make so will sacrifice for $65 and ship C. O. D. subject to examination at your express office. First order gets it. F. R. STONE, R. 4, Mt. Clemens, Mich.

CHICKS: PURE-BRED S. C. WHITE LEGhorns bred for egg production 14 years. $7.00 per 100 and up. Write for 32 page catalogue. WOLVERINE HATCHERY, Zeeland, Michigan.

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WANTED: EXPERIENCED TEAMSTER. J. D. MITCHELL, R. 2, Holly, Michigan.

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The Business Farmer 1 yr.
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Fruit, Garden & Home 1 yr.
Today's Housewfie 6 mos.
All For $1
MICHIGAN BUSINESS FARMER
Mt. Clemens, Michigan

Prices one year ago—Detroit, Cash No. 2, 85c.

Beans

Detroit—C. H. P., $4.40@4.45 per cwt.

Prices one year ago—Detroit, C. H. P., $7.00 per cwt.

Potatoes

Detroit—$1.50@1.66 per cwt.

Prices one year ago—Detroit, $1.83 per cwt.

Hay

Detroit—No. 1 timothy, $23.50@24; standard and light mixed, $22.50@23; No. 1 clover, $21@22 per ton.

Chicago—No. 1 timothy, $25@27; Light mixed, $23@25; No. 1 clover, $20@22 per ton.

Prices one year ago—Detroit, No. 1 timothy, $17.50@18; standard and light mixed, $16.50@17; No. 1 clover, $13@14 per ton.

PRITCHARD'S
WEATHER
FORECAST
INTERPRETED BY THE STARS

Week of April 27

THE tail end of a storm area will be leaving Michigan as this week begins with the result that the winds will be in the west to northwest and north with moderately cool temperatures.

By Tuesday temperatures will rise to much higher readings which will be the warning of the storm of high winds and rains to follow. These conditions will moderate shortly after the middle of the week and the sky clear off.

However, although we believe the barometer will have a tendency to retain more or less high at this time, there will be a renewal of wind and rain storms at the close of the week. Temperatures during last half of week will remain quite steady but with a general tendency to rise.

Week of May 4

Over the greater part of the United States during this week rain fall is not expected to be heavy. With the exceptions of the very first part and the very last part of this week, Michigan will be practically free from any heavy general falls of rain.

During opening days of this week temperatures will be low for the season but on or before Friday will have risen considerably above the seasonal normal.

May to be Warm Month

There will be numerous electrical storms during May in Michigan. Thunder and local rains will be plentiful but we do not figure that the rainfall will come up to the usual state readings. From about Friday of this week to the beginning of the last week of this month temperatures will show a rising tendency. From the last week of May to the first days of June the reverse will take place and temperatures will average a downward trend.

$250 IN PRIZES FOR BEST LETTERS ON CROW

Just sit down and write all about how he is regarded by farm folks—is he helpful or harmful—should he be encouraged or protected. We want this opinion of yours for scientific purposes, and for that reason, offer prizes as follows:

First Prize	$50.00
Second Prize	25.00
Third Prize	15.00
Fourth Prize	10.00
5th to 14th Prizes	$5.00 each
15th to 39th Prizes	2.00 each
40th to 99th Prizes	1.00 each

There will be 99 prizes in all. Surely you should stand a good chance of getting one of them.

Make your letter reasonably short. Write on one side of paper only. Contest closes June 10th, and letters must be postmarked not later than that date. Winners will be announced in our August 16th issue.

Address your letter to Mr. George V. McCarthy, Yama Farms, Napanoch, Ulster County, New York.

Why She Wept

"Let me kiss those tears away, sweetheart," he begged tenderly.

She fell into his arms and he was very busy for a few minutes. But the tears flowed on.

"Can nothing stop them?" he asked breathlessly.

"No," she murmured, "it's hay fever; but go on with the treatment."

WHAT WILL
YOUR HARVEST BE?

Do you want your entire income to depend upon crop and market conditions? Or would you like to have every month an income month, your harvest of dollars sure and safe?

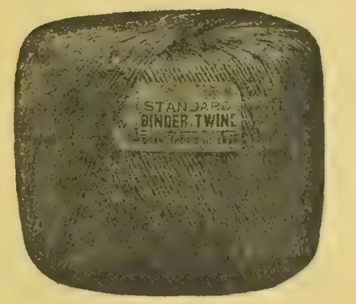
Consumers Power Company
Preferred Shares

combining safety, freedom from taxes and high rate of interest, 6.6%, assure you a certain harvest every month. Your investment is backed by a vital service to Michigan people.

Write to our Jackson office for all the facts or ask our employees.

CONSUMERS POWER COMPANY

FARMERS!
Prices Now Ready On
M-I-C-H-I-G-A-N
PRISON MADE
Binder Twine



Made In YOUR OWN FACTORY at Jackson, Mich.
BUY NOW and SAVE MONEY

We are first to announce Binder Twine prices for 1924 season. The prices are very low considering condition of Yucatan sisal situation which is serious. Prices will be higher. Don't wait. See the secretary or proper official of your farm organization today. They have the prices. Do it today! Tomorrow prices may be higher. Prices direct on request. Write to

HARRY L. HULBERT, Warden,
MICHIGAN STATE PRISON, JACKSON, MICH.

MAIL THIS COUPON FOR FREE SAMPLE
and Prices on Michigan Standard Binder Twine

Harry L. Hulbert,
Director State Industries,
Jackson, Mich.

Send me free sample and prices on Michigan Standard Binder Twine

Name ....

P. O. ....Michigan

FARMERS! BREEDERS!! BANKERS!!!

The Seal of Quality and Service

PONTIAC
STRAIN

Let's Bring the Buyers to Michigan

There is no doubt of their eagerness to come or of the splendid prices they are ready to pay for Fine Pelts.

The Black Fox Magazine for January says editorially: During December, particularly the latter part, the Charlottetown newspapers were full of advertisments soliciting furs. Numerous buyers from the United States visited the province, including representatives from the big fur houses of Alfred Eisenback, Jaeckel & Sons and Roy Pines, of New York, and several buyers from Quebec, while the consignment houses of Frederick Huth & Co., C. M. Lampson & Co., and the Canadian Fur Auction were actively soliciting consignments for their auctions.

Mr. Geo. B. Herzig, of New York, well known to Silver Fox breeders, particularly since the National Live Fox Exhibition at Milwaukee, where he was one of the judges, spent two weeks with Mr. W. Chester S. McClure buying Silver Fox skins. Mr. McClure's office on those days would certainly cure any pessimist or anyone who doubts the possibilities of Silver Fox farming. It was positively thronged with Fox farmers carrying large and small bundles of Silver Fox Furs. And in the two weeks it was estimated that over $270,000 was paid out in cold cash. This included the purchases in Summerside, Prince Ed. Isles.

It is estimated that the industry will bring into the province this year a total of $1,500,000, of which over a million will be for skins. As the agricultural products had to be sold this year at a comparatively low level, the activity in the Silver Fox market has been a distinct boon to the island.

We Need More Foxes

Only Pontiac Strain Will Produce Pontiac Strain

THE demand for Pontiac Strain Silvers—has already passed away beyond our producing capacity!

This year's Sales of Pontiac Strain Foxes will exceed our production—by **Several Hundred Pairs.**

Then—what of next Season!

Remember the demand is growing!

We must have more Pontiac Strain—Production units—at once!

Our Plan and Organization—eliminates all Risk! We operate upon a positive—safe and proven plan—that is bound to make—such men as we select—to operate Pontiac Strain Production Units— (————————) Thousand Dollars per year—we have left the number blank—purposely because our proposition is such that you can fill this in yourself—for the number of thousands you make—depends wholly upon your qualification for producing Pontiac Quality Foxes.

However—we will not be satisfied with anyone—who themselves would be satisfied with less than Ten Thousand Dollars profit—annually after the first year.

Only men—or groups of men of rigid honesty—respected and honored by their fellowmen—for the success which they have already achieved will be considered.

You will find upon investigation—that the men behind the Pontiac Strain Institution—meet the above requirements themselves—and want to associate themselves only with such men as will reflect credit upon the Silver Fox industry—as a whole.

So here you have an unusual opportunity for Service—you know—"Helping the other fellow to help himself will bring you all you want."

We know that the Farmers and Breeeders of Michigan can make Millions of Dollars every year—in fur production—and so this institution is investing thousands upon thousands of dollars—in advertising and in laying the foundation to the result that—

Pontiac Strain Foxes—And the Pontiac Plan
Means Millions of Furs—Brought into Michigan.

From March 29 Issue of Forbes we Clipped the Following:

> ***"Most men have convictions—Some have courage—but the names of those who have both illuminate the pages of history".—O. Byron Cooper.***

We have a firm conviction upon the wonderful future in store for Fur Farming—and have demonstrated this conviction with the courage to put nearly a quarter of a million dollars—into fur farming to back up our conviction.

We are making history in the Fur Industry!

We need more Pontiac Strain Foxes!

Do you want to produce them?

Then—get in touch with us at once—either write or come to our office in Detroit for particulars.

Let's make Michigan the fur producing center of the World!

Natural conditions favor us!

Fill Out—Tear Out—and Mail

DETROIT SILVER FOX FARMS,
1515 First National Bank Bldg.,
Detroit, Mich.

Gentlemen: I would like to know more about the Silver Fox Industry and the Pontiac Plan of Service for added Producing Units.

Name...

Address...

City ....

B. L.

Detroit Silver Fox Farms

1515 First National Bank Bldg., Detroit, Mich.

600 Foxes—300 Pens

Pontiac, Mich. *Ranches* **Winnipeg, Man.**

The Michigan BUSINESS FARMER

An Independent
Farm Magazine Owned and
Edited in Michigan

VOL. XI, No. 19 SATURDAY, MAY 10, 1924 TERMS: TWO YEARS $1 60c PER YEAR—5 YRS. $2

READY FOR MARKET

Fordson

Many a fine load of hay will reach the barn in perfect condition this summer because Fordson power helped outrun the quick coming showers.

This is but one of scores of instances where the Fordson is adding to the profits of thousands of farms by making it possible for work to be done at just the right time.

Haying over, the Fordson pulls the grain binder, then turns the thresher or the hay baler. Through the entire year it never ceases to be a dependable source of power.

Ford Motor Company
Detroit, Michigan
CARS · TRUCKS · TRACTORS

FT-11 *See the Nearest Authorized Ford Dealer*

SATURDAY
May 10th,
1924
VOL. XI, No. 19

Being absolutely independent our columns are open for the discussion of any subject pertaining to the farming business.

"Hew to the line, let the chips fall where they may!"

The Michigan
BUSINESS FARMER
The Only Farm Magazine Owned and Edited in Michigan

Published Bi-Weekly
Mt. Clemens, Mich.

TWO YEARS $1

Entered as second-class matter, August 22, 1917, at the post-office at Mt. Clemens, Mich., under act of March 3rd, 1879.

Fair and Uniform Assessment Is the Way Out

Put All Michigan Property on the Tax Rolls and Then Distribute the Tax Burden Equally

By STANLEY M. POWELL
(Lansing Correspondent of The Business Farmer.)

THE interest created by this series of taxation articles has been a distinct surprise and yet it should not be so. Is it any wonder that people generally, and farmers especially, should be deeply concerned regarding this important subject in these times when our taxes are amounting to so large a proportion of the standing overhead cost of operating our farms?

Before the World War, according to the latest and most reliable figures, federal, state and local governments required about six or seven per cent of the total gross income of all of the people of the United States. In 1922 they required more than 12 per cent, or nearly one-eighth of the national gross income. Our per capita tax burden has increased nearly four fold in the last 20 years and about three fold in the last 10 years. The result is that today the average person who works either with his hands or his brains, now spends more than six weeks of every year earning this gross sum, and has to support himself meanwhile.

Work a Year to Pay Taxes

This then is a serious situation in which Mr. Average Man finds himself. But what about Mr. Farmer? His condition is much worse. While Mr. Average Man in 1922 could pay his taxes with six weeks' wages, Mr. Farmer worked 52 weeks and still found himself in the hole, for we must remember the undisputed fact that the total taxes paid by American farmers in 1922 exceeded their net income for that year.

We have had a great deal to say in these articles about the increase in tax totals in Michigan, but we must remember that the unequal distribution of the burden makes the increase in recent years much worse for certain classes, the farmers for instance, than for the average citizen. Then, too, farmers are usually unable to include the cost of taxes in the prices of their products. Owners of city real estate can, as a rule, pass the taxes on to their tenants in the form of high rental charges, but no such opportunity is afforded to the farmer.

Farm Property Hard Hit

Justice and equity are foundation principles of our national life, but in many cases it seems that there is a wide descrepancy between principle and practice. As has been pointed out repeatedly in this series of articles on Michigan taxation conditions, our present system of general property tax throws the heavy burden of governmental support onto the shoulders of the real estate owners to an altogether disproportionate degree. A state income tax and the gasoline tax have been advocated as measures tending to a more equitable distribution of state taxes. But as yet no such remedies are being proposed to reduce local revenues.

There is every indication that for the next few years at least, the $154,000,000 of local taxes will be spread largely upon general property, mainly real estate. It is apparent, therefore, that the matter of assessment becomes one of the utmost importance. If one class of property is assessed at 100 cents on the dollar, that same rule should also apply to all other types of property.

It is probably more true than is commonly realized that the unequal distribution of the tax burden makes the increase in recent years worse for some people and some classes of the population than it is for the average person.

Even with the large public expenditures which seem to be the order of the day, we could raise these funds with much less hardship, misery and confiscation of property if all wealth were placed on the tax rolls and assessed equally and fairly. But we all realize that such is not the case in Michigan today. Large amounts of property and wealth either escape taxation by legal exemption or illegally evade it, in whole or in part, by concealment. We realize the truth of this statement when we read the official figures published by the United States Department of Commerce which show that Michigan's wealth more than doubled in the ten year period from Dec. 31, 1912, to Dec. 31, 1922, increasing from $5,233,760,000 to $11,340,150,000. This was a growth of 116.7 per cent, but we all know that this increase has not been reflected in the amount of property on our assessment rolls.

However, our farm property is tangible and cannot be concealed and so it is all placed on the tax rolls and today we find that it is being assessed at practically its sales value in most parts of Michigan. Rural assessments have not been reduced noticeably during these past few years and the fences, buildings, machinery and equipment on our Michigan farms are all getting sadly out of repair and are worth far less today than they were about four years ago. This does not take into account the serious depletion in soil fertility which has accompanied these lean years in Michigan agriculture.

It is conservatively estimated that the American farms and equipment have suffered a loss of at least one billion dollars during this trying period through which we have just been passing. All of these factors are reflected in decreased sales value of our Michigan farms. Dr. Richard T. Ely, director of the Institute for Research in Land Economics and Public Utilities at the University of Wisconsin makes the conservative statement that while taxes show a tendency to increase, land values have fallen more than 20 per cent since 1920 and quotes estimates of the U. S. Bureau of Arricultural Economics as an authority.

Assessed Value vs. Sale Value

There may be places in Michigan today where farms are not assessed at their full cash value, but there are also places, and plenty of them, where the farmers would be indeed glad to sell their homesteads for their assessed valuation. In some places it is even worse than that. I have before me a copy of the Mesick Sun-Pioneer of February 21, 1924, where on page 1 we find a list of 115 parcels of land lying in the northwestern part of Wexford county. This list gives the asking price of each parcel and the assessed valuation of each as fixed by the local assessing officers and by the State Tax Commission for the year 1923. Adding up these figures we find that for the 115 parcels of land the aggregate valuation as fixed by the assessing officers for 1923 is $89,380, while the total of the prices asked is only $23,880, making the total assessed valuation of this land 275 per cent higher than the price asked for it. In only 6 of the 115 parcels is the price asked more than one-half of the assessed valuation and in two parcels the assessed valuation is ten times the price asked.

Mr. W. E. Southwick of Sherman, Michigan, writing in the Public Pulse column of the Grand Rapids Press regarding this situation says:

"These prices are practically the same as fixed by the State Tax Commissioner's representative seven or eight years ago when land was high. The same may be said of farms in this locality. They are assessed about as high now as they were seven or eight years ago when we all know that their true cash value is not more than one-half as great now as then.

"When farmers pay as high as 4½ per cent, as some of us do on these inflated valuations, it is equivalent to paying 9 per cent on the true cash value of their land. It seems to me if the State Tax Commission has not the time or inclination to adjust these unjust valuations, it could put it in the power of local assessing officers to do so. The farmer is forced to bear more than his just share of tax."

Some Relief Secured

Slight readjustments along this line have already been made. Following the testimony of supervisors from rural sections of Michigan, including that of M. B. McPherson, supervisor from Kent county, member of the State Farm Bureau Board of Directors, prominent leader in Grange circles and an acknowledged authority on rural taxation conditions, the State Board of Equalization August 23rd increased the State's valuation $1,540,000,000, practically all of which fell onto Detroit and the industrial cities of Michigan.

The net result is that farmers' state taxes were reduced from about $3 to $2.32 per thousand when the state tax levy was figured last year. During this process the equalized assessed valuation of Wayne county was given a healthy boost, being raised to $2,666,500,000, an increase of nearly $600,000,000 over the equalized value of a year ago. Now that the farmer is organized he is having his day in court and is being heard in the councils where his interests are involved.

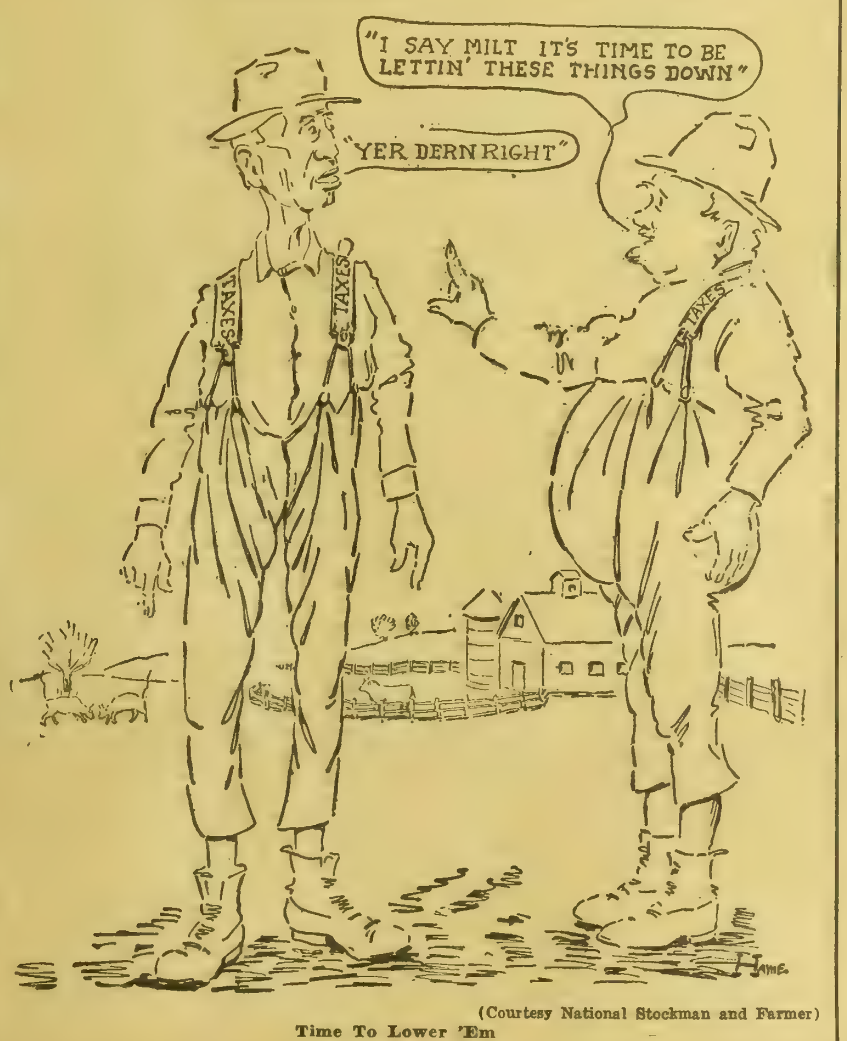
Mr. McPherson in his testimony declared that farm property is either assessed too high or the utilities of the state and city property are assessed too low and he gave figures to show that while the tax commission and increased the general property valuation of the state 78 per cent since 1816, mining properties from 1915 to 1922 were increased only 25 per cent and for the same period the railroads and other corporations paying the primary school interest fund specific tax were increased only 19 per cent.

How Is Wayne Assessed?

Our poor down-trodden friends in Detroit feel aggrieved that they are paying such a large proportion of our state taxes and yet what are the real facts? It appears after a careful study of the situation that at the present time Wayne county is equalized for taxation purposes at about what its automobile and allied interests alone are worth. That would leave out of consideration all other kinds of property, and of course it is probably true that the automobile industry does not represent more than 20 per cent of the real wealth of Detroit.

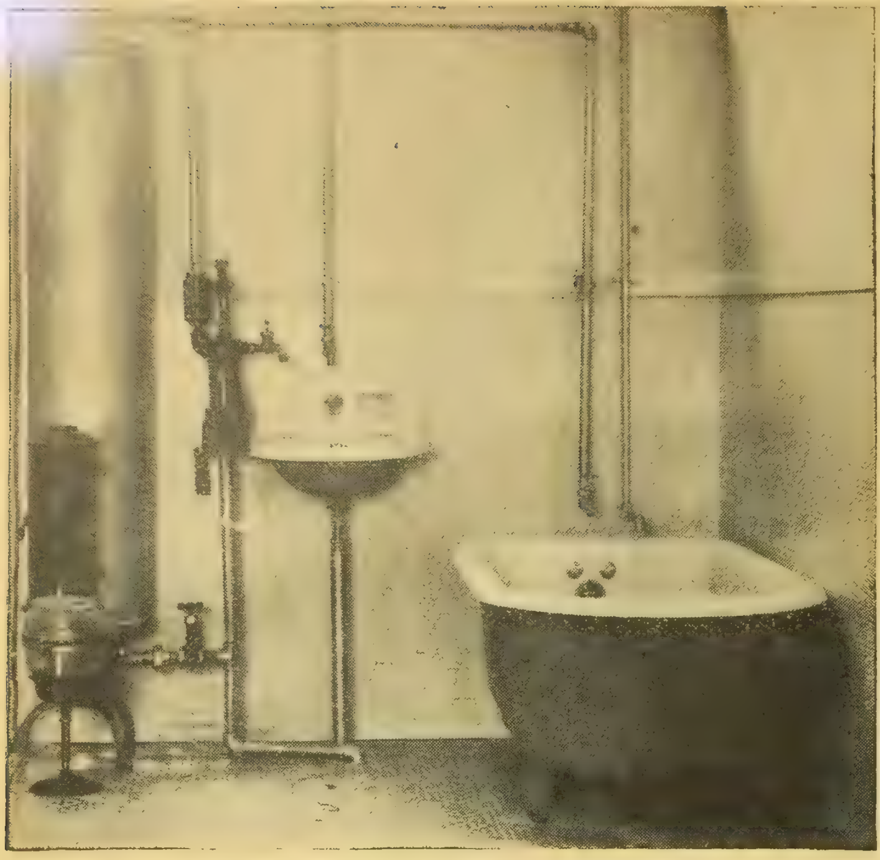
The Wall Street Journal in a re-

(Continued on Page 22)


"I SAY MILT IT'S TIME TO BE LETTIN' THESE THINGS DOWN"
"YER DERN RIGHT"
TAXES
TAXES
TAXES

(Courtesy National Stockman and Farmer)

Time To Lower 'Em



A comfortable bathroom without furnace heat.

Bathing Without Bother

The Home Without a Furnace Can Now Have a Bathroom At Low Cost

By O. E. ROBEY

Drainage Specialist, Department of Agricultural Engineering, M. A. C.

THE home without furnace heat has usually been denied the privilege of a bath room because of the liability of freezing of pipes. There is an outfit, however, which can be installed in such a house and provides hot and cold water for the bath, as well as a means for disposing of the waste water. Everyone who has taken a bath in the time honored wash tub knows its disadvantages and the inconvenience of disposing of the waste water.

The system illustrated is cheap and easy to install. As well as supplying both hot and cold water and a simple way of disposing of the waste water, it also provides a means for heating the bath room.

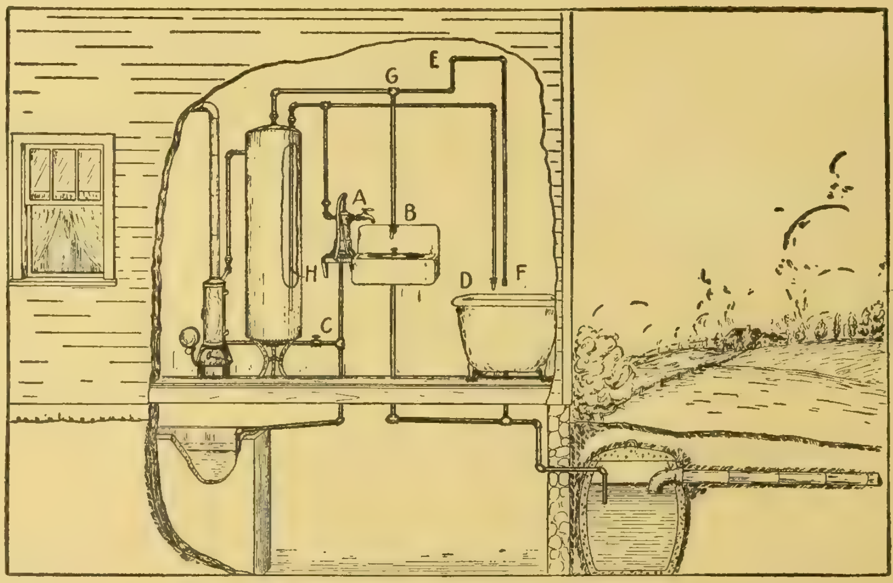
This outfit may be installed in a small room in the present home or an addition can be built on to accommodate it. A room 6x6 feet will be large enough to install all of the fixtures.

One advantage of this outfit is that it is a complete unit in itself; other parts of the house need not be torn up in order to make connections. Also the fixtures are all standard, nothing special is required. At some future time when the furnace is installed the system may be converted into a more elaborate system and all the fixtures can be worked into the new outfit. In the mean time, the pleasure derived from its use has cost practically nothing.

The Outfit

The outfit consists of a bath tub, a lavatory, a range boiler, a kerosene heater, a cistern force pump and the necessary piping. In buying the fixtures it might be well to consider their future use. If the outfit is only to serve for a few years until the house is remodelled, it might be more economical to buy good fixtures; ones that will be suitable for future use. If however, it is necessary to economize at the present time, serviceable fixtures can be bought at very moderate prices. For instance a steel bath tub enameled will give very good service. It does not have the appearance of some of the more expensive ones but it does have some other advantages, especially for an outfit of this kind. Where the outfit is located in a cold room, it will not require as much hot water to warm up a steel tub as a heavy one made of cast iron.

There is also considerable range of prices in buying the lavatory. Size, and depth of apron, as well as quality of material determine the price. One about 18 inches wide with merely a roll rim makes a very cheap and serviceable fixture. In the range boiler there is little choice; one of 30 gallons capacity, capable of standing a pressure of 85 pounds should be selected. The cistern force pump should have a brass cylinder either 2½ or 3 inches in diameter. The kerosene heater should be of good quality, one that is efficient in operation and perfectly safe. The types having wicks similar to an oil stove seem to be the most desirable.



The piping is simple. It can be installed without damage to the woodwork or walls.

Operation

The operation is very simple. The drawing shows the arrangement of the fixtures and piping. The cistern pump is used to draw the water from the cistern or from a shallow well. In houses where freezing is likely, the system stands empty when not in use. To fill the system close all valves and pump until water flows out of F, this indicates that the system is full. Now light the kerosene heater and in forty minutes to one hour there will be sufficient hot water for bath purposes stored in the range boiler.

If hot water is desired in the bath tub, leave all valves closed and continue to pump and hot water will flow out of F. If cold water is needed in the tub open D and pump.

If hot water is wanted at the lavatory close all valves and open B and pump. For cold water at the lavatory close B and open A and pump. After the system has once been filled and the water in the tank heated, sufficient hot water for two baths can be had by simply opening D and letting the hot water siphon from the boiler.

In freezing weather, to drain the system, open C; then when the range boiler has drained out, open A and raise the handle of the pump so as to drain the cylinder and pipes attached to it.

Construction

Black pipe can be used in the construction of this outfit, since the piping is exposed it can be painted with aluminum paint. One and one-fourth inch pipe should be used for the suction pipe. The rest of the piping should be ¾ inch except the three pieces extending from G to F which should be ½ inch.

C is a ¾ inch gate valve. At H (a point slightly above the coil in the heater) a ⅛ inch hole should be drilled in the cold water supply pipe extending into the range boiler. This hole prevents siphoning the water from the tank below the coil.

The lavatory or bath tub need not be provided with supply pipes or cocks. An over-flow and waste pipe is necessary for the tub but the lavatory need only be fitted with a short spud. The 1¼ inch iron pipe used to carry the waste water to the

(Continued on Page 26)

Michigan's Rosen Rye Yields As High As Forty-five Bushels Per Acre

By FRANK A. SPRAGG

Associate Professor of Farm Crops, Michigan Agricultural College.

PREVIOUS to the introduction of Rosen rye, twelve years ago, fifteen bushels of rye per acre was considered a good yield, and if by chance twenty bushels were obtained, that was exceptional. No one thought of forty-five bushels per acre, which has often been reported for Rosen rye. The common rye of that time had small dark colored grains, while the true Rosen rye has large grains that are more generally bluish in color.

In Pre-Rosen days, rye was valuable mainly as a catch crop, and to sow on land that was not suited to wheat. Few people thought of planting rye as a regular crop, especially on heavy soils. Rosen rye can be considered a regular crop to be studied and treated as such. It has crowded out the wheat in some sections where farmers say that is more profitable than wheat as a general crop. Each farmer needs to settle this problem for himself, but he should not grow wheat and rye on the same farm, because the rye gets into the manure and becomes generally mixed in the clover seedings and in the wheat field. This fact requires much pulling to rid the wheat fields of it. Rye is particularly adapted to large areas of light sandy soil. These soils wash and leach, and should not be allowed to pass the fall and winter without growing a crop of some kind. Under such conditions as this, rye can be used to advantage to follow corn and beans on hundreds of Michigan farms. For this purpose it should be sown as early as possible as high yields are obtained from September planting.

The time of seeding rye has been carefully studied at M. A. C. where the different dates of seeding were planted side by side for a number of years. The results are as follows:

A plat that would yield at the rate of 46 bushels per acre if planted September 25th, would yield 45 bushels if planted September 30th; 39 bushels if planted October 15th; 20 bushels if planted October 25th; 10 bushels if planted November 5th; and 4 bushels if planted November 20th.

This plainly shows the importance of planting rye as early as possible. Rosen rye is strictly a winter rye and if planted in the spring will not head out during the summer.

If we are going to grow rye let us realize that Rosen rye is a real crop that will respond to good growing conditions. It is true that rye can be planted later and under poorer conditions than wheat can and still make some kind of a crop. But only a glance over the influence of date of planting will surely convince most farmers that it pays to plant Rosen rye about the same time as other farmers plant their wheat. It is assumed that no farmer will plant both of these crops on his farm. Thus, if he is going to grow rye, let him plant it as early as he would if he were growing wheat. Rye should occupy the same place in the rotation as wheat, and should receive the same kind of fertilizers. Acid phosphate is especially good. The seed bed needs to be as well prepared for good rye crop as for a good wheat crop. All this pays when the farmer has planted pedigreed or high grade Rosen rye. It is no longer a catch crop, but should be planted under the most favorable conditions, unless prevented by conditions beyond the farmer's control.

Mr. J. A. Rosen, a Russian student, who was graduated from the Michigan Agricultural College in 1908, became a collector of American seeds for his native country, and in the summer of 1909 brought us a sample of pedigreed rye from Russia. This sample was planted one small patch about a rod long and five feet wide, away from all other rye, in the fall of 1909. As soon as this rye could be increased it was tested along side of the common ryes then growing in Michigan. As the Rosen rye yielded about twice as much as those ryes did, its superiority was evident. It needed only to be increased and distributed.

At that time there was no Crop Improvement Association or similar organization of farmers that could take a pedigreed crop, keep it pure and increase it for distribution. Rye is naturally wind pollinated. The pollen is often blown long distances. Thus, it happened that most of the early distributions were lost to pedigree by being planted near and often alongside of the common varieties. It seems too bad in reviewing the situation at this time that Rosen rye ever became crossed with the common varieties, as the mongrel sorts can never be more than grade rye, intermediate in production between that of the old fashioned common and the truly pedigreed Rosen rye. These mongrel ryes have replaced the old black rye altogether. It is much

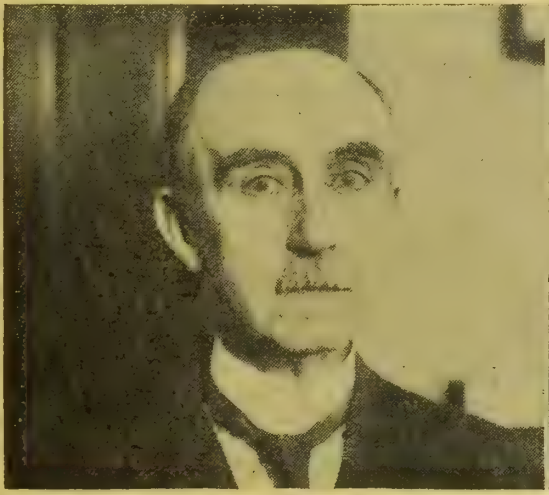
(Continued on Page 25)

PICTURES FROM FAR AND NEAR

ISOLATES VITAMIN.—Dr. Walter H. Eddy, Columbia University, New York City, has succeeded in isolating the vitamin. He claims it is an organic chemical structure, composed of carbon, hydrogen and oxygen, which the ordinary layman can see are highly essential to life.

LATEST PHOTOGRAPH OF CABINET.—Left to right, seated: Postmaster New; Secretary of War Weeks; Secretary of State Hughes; President Coolidge; Secretary of Treasury Mellon; Attorney General Stone; Secretary of Navy Wilbur. Standing: Secretary of Labor Davis; Secretary of Agriculture Wallace; Secretary of Commerce Hoover; Secretary of Interior Work.

OH! SKIN-NAY! CIRCUS IN TOWN!—On the left, ladies and gentlemen, we have Jolly Irene, weighing 621 pounds, and 25 years old. In the center is Col. Gulliver, the giant, who measures 8 feet, 4 inches. At the extreme right you see Baby Bunny Smith, weighing 468 pounds, age 22.



"RX" DISCOVERER.—Prof. Calvin S. Page of Chicago, has written a book entitled "RX, The Life Atom". He claims his discovery overthrows the principles of physics, denies gravitation, and proves the Bible scientifically infallible.

FROM THE ISLE OF PINES.—Left to right: Mrs. Charles F. Fetter and Mrs. H. Wheeler, of the Isle of Pines, off Cuba, who presented a signed petition of 110,000 signatures asking Pres. Coolidge to retain the island as U. S. territory.

WINS PENMANSHIP PRIZE WRITING WITH ELBOW.—Harold Wursthorn, 13 years old, won a prize for his proficiency in 25 tests on penmanship. He writes by using a long pencil or penholder in the elbow joint of his arm.

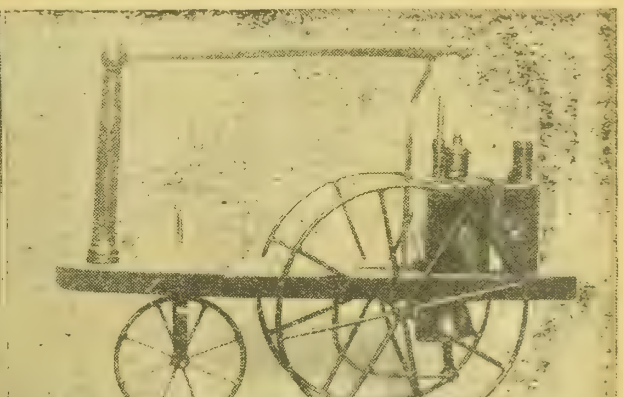
CROWN OF THORNS AND CROSS.—This plant, known as "Crown of Thorns and Cross", was grown by Manuel Fraile of the Smithsonian Agricultural Dept. Green House, Washington, D. C., and is 35 years old. Mr. Fraile is shown here trimming it.

WOMAN AID TO UNITED STATES ATTORNEY.—Miss Julia Banks, of Washington, D. C., former chief of the stenographic division of the Department of Interior, who was recently appointed Assistant United States Attorney. She is the first woman in this country to be appointed to such an important post.

SOMETHING NEW FOR THE RADIOPHAN.—This man liked to smoke and he liked radio so he fastened a crystal set to the bowl of his pipe and combined the two pleasures. With a good book or paper what more could man want?

ONE OF EUROPE'S CHILD BEAUTIES.—Little Baroness Marie Lonyay, relative of the Countess Lonyay, former wife of the late Archduke Rudolph of Hungary, has won several prizes in different "beautiful child" contests.

HELLO! WRONG NUMBER!—Mary, chimpanzee of movie fame, telephones her chaffeur to have the car at the door promptly at five.



MODEL OF FIRST LOCOMOTIVE TO BE SOLD.—The model of the first locomotive made and run in England, a 19 inch model, by William Murdock, inventor of coal gas lighting, is to be sold at auction in London.

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FORTY YEARS OF FAKING

The Memoirs of a Grafter—By Himself

BIG deals bring big returns, even in the deals of a grafter. The big deals also bring out the big policeman, and Pete Dexter, grafter supreme, who has been telling us the story of his life, found that a big deal now and then was a-plenty, if he wanted to stay out of jail. So Pete took to the rural districts, and kept quiet and worked some old grafts, and to his surprise he found that some of the older forms of faking paid as well as the newer ones.

Last week, Pete worked a few small time gags to rejuvenate his purse, and then ran aground of the postal laws. But Pete escaped and went to North Dakota. While he was hiding out, he just could not resist the opportunity he discovered to start a commission house and be a friend to the farmer. Pete made money, as usual, even though the potato business was somewhat different than selling stock in a railroad. And one day, or between two days, Pete just closed up the Liberty Produce Company and left for better lands. But he took his profits with him.

Working with local folks and being their friend when their money is easy to get was Pete's best stunt, and this week he tells of one of his easiest schemes and how he made money with no one to bother him.

WHILE I was in Chicago one time, I met a fellow in the hotel cafe who was a salesman. He told me how he was selling hog remedies in Iowa and of what success he had. It started me to thinking, and I spent a little time looking up such remedies.

Next spring found me in Des Moines, Iowa. I talked with several veterinarians about remedies, and they sure said a lot of mean things about them. I soon found the laws permitted the sale of most anything in that line, and one day I called on a company that sold such stuff. I inquired for a job as salesman, and about all they asked me was to the effect that if I could talk I could sell. The man I interviewed unfolded a swell layout and offered me a big commission. However, I decided if he could make all that money I could, too, so I took his literature and promised to call after I had thought it over.

An advertisement in a paper which was wrapped around my shoes when they came from the repair shop called my attention to a correspondence school that prepared a fellow for anything. Another bright idea. I sat down and wrote them a letter and found that a veterinary degree could be had in a short time. I went to Missouri, where the school was located, and after talking with the man in charge, he agreed to write me a diploma for $25 cash, if I would stay at his "college" a month. I needed that diploma, so I stayed. While there, I talked to a lot of other fellows, and when I moved back to Iowa I had a title, and it was Dr. Fred Renton who opened up a shop in Frisky Valley, Iowa. A visit to the local weekly paper resulted in the announcement that Dr. Renton, a retired veterinary from New Jersey, was going to open up a factory in Frisky Valley to manufacture his famous remedies for swine diseases. Of course all the stuff about how welcome I was, was what followed my subscription to the "Bugle," which cost me $2.

I located an old building that had been a creamery at one time, put up my diploma, and had a painter put a sign out in front, announcing this the home of Dr. Renton's remedies.

Hog cholera had been pretty bad in that vicinity the last two or three years, and so I figured it was time to made hay. I announced that hog cholera was the direct result of hogs eating new corn, and that the new corn had a fungous material on it that later developed into worms. These worms took all the hogs' strength and as a result they got cholera, which was everywhere in the air. My new remedy which I had prepared acted on the liver and produced a change in the hog's stomach which killed these worms before they were hardly half grown. A visit to a nearby college procured for me a few bottles of speciments for display purposes, and soon I had an exhibit that all the boys stopped to see.

The next thing I did was to make up my remedy. I had learned from a book that the Missouri Medical College furnished me that cheap castor oil, a little oil of wintergreen and plenty of labels and bottles made a fine hog remedy.

A trip to Des Moines insured the supply of ingredients, and soon I had a stock of my first remedy. Well, a few visits among the farmers, and I had plenty of orders. Five dollars a bottle I asked for the stuff. All they had to do was to put six teaspoons of the remedy in a barrel of slop and the hogs would be immune. Two bottles would last a season, and it was a preventative for Asiatic cholera, good for worms and most everything else I could think of. Many of the local people wanted to help in this great work, so I let them have agencies. I only made one mistake in that deal. I should have told them to put a whole bottle in each barrel, as that would have moved the remedy faster and more profit would have been mine.

I soon collected hundreds of testimonials from people who had purchased my remedies. They never waited for the stuff to work, and I generally was able to show them the swell results of the remedies before the hogs had a chance to show up anything. I had these testimonials printed and spread them broadcast. Then a few ads were run in the weekly "Bugle" and success was assured.

About this time I decided that a powder to keep the hogs in condition after the cholera remedy was used might help. So one day I mixed up some salt, charcoal and senna leaves and bought some good-looking boxes that held five pounds. The senna leaves made the stuff smell good, and after I explained the use of this wonderful stuff, the gang couldn't buy it fast enough. The hogs ate it, of course—all hogs like salt and charcoal; and because they ate it, the farmers were sure it was the tonic they needed.

The Condition Powders brought 50 cents a pound, and if bought in 100-pound lots I made a price of $40 per sack. The result was good, and charcoal and salt never brought better prices. I soon had agents in about twenty counties and it made the two men and myself wiggle to get the orders out. I personally mixed the stuff, and it was funny to see those people stand with their mouths open as I used a few chemical words I had picked up when I described the ingredients I was putting in the powders. Why, salt never had so many different names as I put on the bottles I had on display to show people who came in to talk about their hogs.

I paid my agents 50 per cent commission, and the sky was the limit as to what they could tell about the stuff, and if the fellow couldn't pay cash we took his note and immediately sold it to the bank. Of course we had to discount the notes, but the banks figured that was an easy way to make money on the side, and grabbed them up.

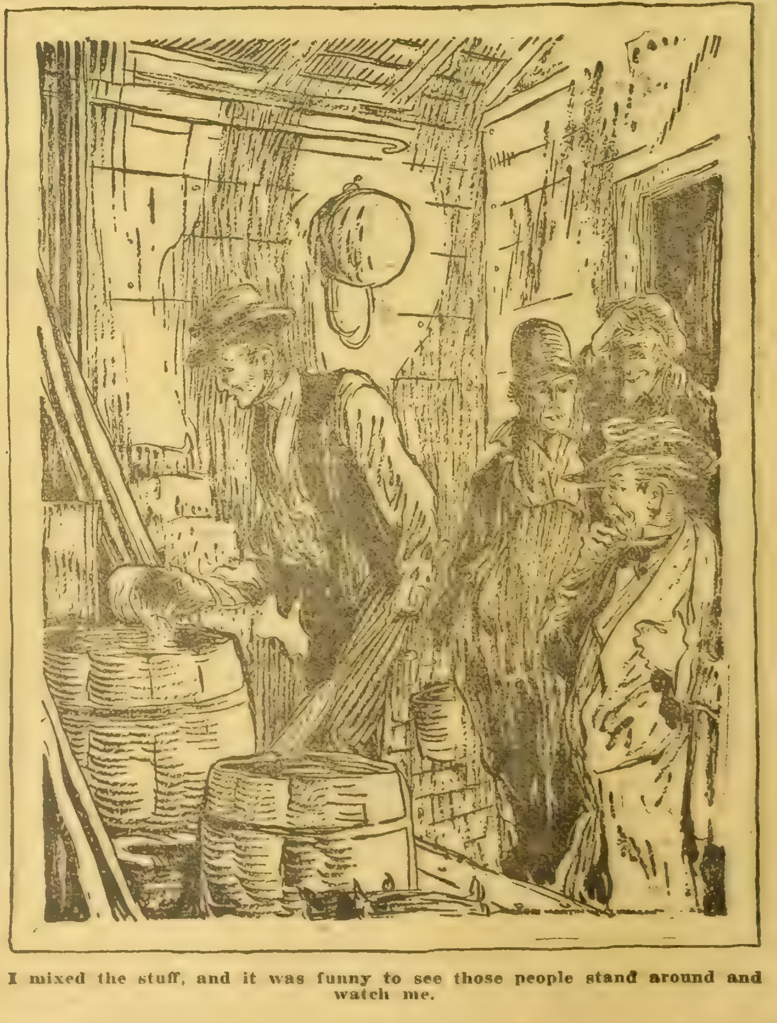
Every time a new disease came up, Dr. Renton had a new remedy. We even put salt on bran and sold that as a "Wonder Calf Feed and Conditioner." Bran could be sold at double the price in this manner.

A few checks to local enterprises, as the Ladies' Aid Society, and a few donations to the various churches when they were hard up, kept our reputation good in the community.

Those two years I worked that game were about as prosperous as any I have ever had, and I sure was a big man in the community. Well, one day a fellow came into the office and offered to buy me out. He offered a good price, and as I had had some trouble with fellows who threatened to sue me if I didn't refund their money, because they claimed the stuff was no good, I decided it was pretty near time to move. So I sold out.

While I was working the state, selling my tonics and powders, I met some fellows who were selling stock in a new packing house. It seemed that the farmers were sore at the Chicago packers, and an outfit at Des Moines had organized the Overland Packing Company. Stock was selling good, and all the farmers were interested. Now I was itching to get back into the promoting business, and after several of these boys with the packing stock had talked to me, I decided I ought to hook up with them. One of them took me to Des Moines one day and introduced me to the head man. My reputation was vouched for by the salesman whom I had met, so we soon were talking business. It was a good game. Commissions were fine, and I very soon had my bank account in pretty good shape. I took a block of stock and went back to my county. I fixed it up with the local bank, and they were given a few shares to start with. I made a side offer with them that every time they influenced a fellow to take a little stock in my deal, they were to get a little rake-off from me. Of course this was all on the side, but it helped. Every time a fellow kind of hesitated on buying from me. I referred him to the banker, who would show the fellow his stock and tell him it "looked good to Dad." I sure made a cleaning; but it didn't last so long. It seems that some of the people in Des Moines "got hep" to our game and one day I got a wire from the office to beat it. I caught a train so quick that I didn't even go to the hotel for my other clothes, but I had all the money safe.

(Continued in May 24th Issue)



I mixed the stuff, and it was funny to see those people stand around and watch me.

FRUIT and ORCHARD

EDITED BY FRANK D. WELLS

BARK RUBBED OFF APPLE TREES

Would you please inform me if there is any way to treat apple trees in an orchard where hogs have rubbed the bark.—R. H., Alma, Mich.

—Whether or not it is possible to save the life of trees when the bark has been rubbed off by hogs depends of course, on the extent of the injury, and also upon the time of the year when the rubbing is done. In the spring after the sap has started, although the bark itself may not be broken, serious harm may be done by the rubbing of the bark since it will thus be loosened upon the trees. Often times the bark may be entirely destroyed by the rubbing or gnawing of the hogs upon a portion, at least, of the trunk.

When the injury extends practically around the trunk and especially if the injured area is of considerable width it will not be worth while to save the trees. However, in such cases, it would perhaps prolong the life for a year or more if the exposed wood received a coat of lead and oil paint, and if possible cover with a mound of earth.

When the bark, not to exceed one-half of the diameter of the trunk has been destroyed, it would be possible to bridge the injury by means of cions, even though the injured portion is a foot or more in width. Cions a little longer that the interval should have the ends cut in a wedge shape and inserted under the bark. The small brads may be used for holding them in place, and the point where the cions are inserted should be covered with grafting wax to keep them from drying out. It will also be helpful if the edges of the bark both above and below the injury are trimmed back to where they are still joined to the trunk. Of course, these grafts would be very easily disturbed and barriers which will keep the hogs from getting at them should be placed about the trees.

I regret to state, however, that there is little chance in most cases of saving trees injured by hogs, although their life may be prolonged for some years.—L. R. Taft, Chief Horticulturist, Dept. of Agriculture.

COUNTY AGENT HEAD RESIGNS

HALE TENNANT who has been leader of the county farm agents of the state has resigned to devote all of his attention to the Department of Markets of the Michigan Agricultural College. He has been director of the department at the same time he was at the head of the county agents, and he stated that the markets department takes so much of his time that he felt another should head the county agents.

Farmers Service Bureau

(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full name and address. Name not used if so requested.)

GIVE TENANT ONE-THIRD

I would like to get a little of your advice if I may regarding renting my farm. I intend to devote my time to poultry, my married brother wants to work my farm. He has a family of seven children, I am single, my father is with me, and my sister will be with me also I think. Now my brother has no stock, nor machinery. He will use my machinery and horses. He intends to start renting in the fall. Now what I want to know is on what shares will we work the farm? Would 50-50 be fair to both of us? It wouldn't the first year as I will have to furnish all the grain and seed for feed and sowing. He thinks we ought to sow less grain and have more cows, hogs and chickens. Do you think it would be best for him to have a flock of chickens all his own or would it be alright to have chickens on shares also? I think it would be best for both of us to write out an agreement and sign it, then there couldn't be any arguments. What do you think about it? We will all live in the same house together and how would we stand the grocery bills?—M. S. S., Minden City, Mich.

—Under ordinary conditions where the landlord furnishes everything except the labor the tenant receives one-third of the income and the landlord two-thirds. Such expenses as seed and feed purchased, twine and fertilizer and machine hire is divided in the same proportion as income.

Again the proportioning of the income will depend somewhat on the size of the business. The business should be big enough so the tenant can make a living wage at least.

If the tenant takes over the farm business in the fall he undoubtedly will have to procure a share of the feed necessary to feed the livestock through the winter. This can be procured by cash payment of deferred payments, backed by some form of security or agree to leave an equal amount of feed on the farm, or equal in value, at the termination of the lease, providing said feed is procured from the landlord.

The tenant, at least, should have sufficient poultry products to care for the family's needs. To keep a separate flock might cause a hardship. However, if arrangements can be made to that effect satisfactorily it should be done. On the other hand arrangements could be made whereby the tenant could add to the landlord's flock sufficient birds to care for his family's needs and also furnish sufficient feed for same.

By all means have a written agreement between the two parties drawn up in legal form. It will save trouble in the end.—F. T. Riddell, Research Asst. in Farm Management, M. A. C.

ARREST FOR DESERTION

A man who has been arrested for bigamy and convicted and sentenced for from 5 to 15 years, serves 4 years, and gets out on parole, and gets married right away, and lives with this woman 2 weeks and deserts her. Can she have him arrested on that same charge or on a statutory charge? He has been married 6 times.—Mrs. T., Sparta, Mich.

—The man could be arrested for desertion.—Asst. Legal Editor.

SCHOOL BONDS DEPOSITED AS COLLATERAL FOR BANK NOTES

In a recent issue of the Dearborn Independent is an Editorial, "Who Builds the School?" The article says in part: "A school district votes bonds for $100,000, a banking syndicate buys the bonds, and this same syndicate can deposit these bonds with the treasurer of the United States as security for an equal amount of currency, thus leaving the interest from the bonds, and the money to loan for another school or public building." Is this statement true?—G. R., Capac, Mich.

—It is entirely true that municipal bonds may be deposited as collateral for the issue of national bank notes. As a matter of fact however, scarcely any of the bonds are so absorbed as the national banks use very largely federal bonds for that purpose. The average school bond goes into the hands of the investors.

Syndicates are formed only for large issues. Many issues of $3,000,000 are handled by syndicates and practically all issues of over $5,000,000 are so handled obviously these are not school bonds. It is true of course, that all these firms work together closely and exchange business among themselves.—F. E. Johnson, Supt. of Public Instruction.

INSURANCE AGENT MISREPRESENTS

I would like some information in regards to fire insurance. December, 1920, The Patrons Mutual Fire Insurance agent came to me and induced me to leave the State Mutual Rodded Fire Insurance Co. of Flint, Michigan, and take out a three year paid up policy with them. At the end of three years the policy was to be cancelled unless I wanted to renew it. I had asked him if it would cost me anything to have the policy cancelled and if there would be any more assessments, and he said not, that was all it would cost me.

One of my houses was destroyed by fire, July 9, 1923, which was valued at one thousand dollars. They had five hundred dollars insurance on it. The house was a total loss. They only want to allow me two hundred and fifty dollars. Now they want an extra assessment of fifty-two dollars which is two dollars less than I paid in the first place. They want that for a reserve fund. The three years expired the first of this month. Would I be compelled to pay this extra assessment? I took the matter up with the prosecuting attorney and he thought not.

How can I get by insurance? The prosecuting attorney said I couldn't sue them. Is this three-year paid up policy a lawfull insurance?—Mrs. N., Oscoda County, Mich.

—We would advise that this member of the Patrons Company is in the same position as are many other members. This Company is organized under the mutual laws of the state and their policy contract is fully assessable their being no limitations in the entire articles of association, the application or the policy itself.

During the last session of the legislature this Department attempted to have enacted a law requiring the licensing of all insurance agents, including those of mutual companies, but this act was not passed. We have no control over mutual insurance company agents and, as you know, this department's control of mutual insurance companies is very limited. Court decisions have invariably been that the application, together with the articles of association and by-laws, constitutes the entire contract in a mutual insurance organization.

We have had nemerous complaints that the agents for this Patrons Company have sold these Class 3 policies on the representation that the amount paid would carry the contracts for the 3 or 5 year terms, but neither the application, by-laws nor the policy provide anything to this effect.

Two years ago this Department ordered companies operating on an advance assessment basis to create and maintain reserves for the protection of their members. In this same order was included a requirement that such companies should provide in their policy contracts a provision for the return of the unearned portion of advance assessments. The Patrons Mutual has not complied with this order and their attorney has stated that he did not believe the Commissioner had authority to enforce such order.

We are of the opinion that, instead of your publication desiring to refrain from giving such matters as this publicity, you should make public the entire matter, as it is only thru the press that the general public can be informed.

The present status of your case is that you must pay the assessment, that if you desire to cancel out to avoid further assessment you will not receive any return, as they are now operating on the basis that no portion of these advance assessments are unearned.

It is the intention of this Department to make public, thru the newspapers of the state, examinations of companies and any criticism which we may feel is to the best interests of the public, and an examination of the Patrons will be made within the next three months.—H. B. Corell, Second Deputy Commissioner, State Dept. of Insurance.

CAN WILL TO SON

Will you please tell me through your paper if owner of farm or other real estate can will it to a son to use as long as he lives, and then to his heirs other than son's wife, at son's death?—J. J S., Mt. Pleasant, Mich.

—The farm may be devised to the testator's son for his life with remainder to his children.—Asst. Legal Editor.

FIGHTING SANDBURS

I have about an acre of land which is covered with sandburs every year. Could you give me any advice concerning their riddance?—H. H. J., Old Mission, Mich.

There is no chemical means of killing out sandburs that will not kill out all other vegetation. There are only two methods of fighting them, as follows:

(1) Constant hoeing out of the plants just as soon as their nature is recognizable. These plants should be thrown upon a wheelbarrow and taken to some place where they can be burned as soon as dried. If they are hoed up and left lying on the field they will be able to mature a number of their burs which will be left to start a new crop next year. The same result, of course, can be obtained by frequent cultivation of the field but a sandy field like that if frequently cultivated is apt to blow away or wash away during the season.

(2) Sow some thick growing cover crop that will make a tall growth and shade out the sandburs. This must be rather a tall plant that will make a dense growth and lots of shade. A thin sowing of buckwheat which, on sandy soil, may make only a thin growth will be worthless for this purpose. If that will grow, perhaps a thick sowing of Sudan grass or of some of the sorghums would accomplish the purpose.—E. A. Bessey, Professor of Botany, M. A. C.

ENTITLED TO PROPERTY IN OWN NAME ONLY

Am having a little dispute of right to property, and am asking your advice. Came to Michigan in 1898. Bought 40 acres, cut-over land on contract. Was 13 years old, after 8 years father and mother gave mortgage and got deed. I helped pay mortgage and bought another 40 acres. Was in wild state. We paid for it, they gave me deed for same. Been farming both same as one farm not dividing crops or money, buying machinery and stock valued at near $4,000. Always gave all money and time at home in 38 years, and am single. Am I entitled to anything besides 40 acres, for which I have deed. I have always went ahead with work buying and paying bills as if my own. Am taking crops and pasture valued at $500 to $1,000 yearly from my 40 acres.—Reader.

—You would be entitled to only so much of the property as you have title to in your own name. I am of the opinion you would not be entitled to anything for your services, unless there was some agreement to that effect between you and your parents.—Asst. Legal Editor.

MICHIGAN CROPS

TO GET GOOD STAND OF ALFALFA

Would you please tell me how I can get a good stand of Alfalfa (Grimm) started on a field which is now sown to wheat? It is a sloping field with patches of clay ground. Would it be best to seed this to June clover and then plow it under?—R. C. P., Metamora, Mich.

—Michigan farmers are quite generally meeting with success in planting Grimm alfalfa on wheat in the Spring. Best results are secured by drilling ten pounds of Grimm seed as early in the spring as the ground is in condition to receive the drill.

Alfalfa seed should be inoculated with culture secured from the Department of Bacteriology of the Michigan Agricultural College, East Iansing. The price is 25 per bottle and one bottle contains sufficient material to inoculate a bushel of seed. Directions for application accompany the material.

In case your field is in need of lime, I would suggest that a proper application be made. If clover has failed consistently in the past, two tons of finely ground limestone will be needed. If clover succeeds, the alfalfa should give good results.

Planting June clover, to be plowed under the second year, is a practice which would be advisable if your land is not in an acid, rundown condition, otherwise I think you will get better results by seeding to alfalfa.

Bulletin No. 23 gives full information in regard to alfalfa growing. This bulletin can be secured on request from the Michigan Agricultural College, East Lansing.—J. F. Cox, Professor of Farm Crops.

CLOVER AND TIMOTHY MAKE EXCELLENT HAY

Would you please tell me whether clover, sweet clover, and timothy harvested in one field whether that makes a good feed for horses and cows? When is the best time to sow sweet clover, fall or spring?—G. M.

—Clover and timothy when grown together makes excellent hay. If the hay is to be used for milk production, the more clover and the less timothy the better, while if it is to be used for horses, a number of farmers think it desirable that the hay should contain considerable timothy but little clover.

Sweet clover is much earlier in growth than June clover and timothy consequently does not lend itself so well to the mixture. It is likely that if sweet clover was included in the mixture the first cutting would be almost entirely sweet clover due to its early growth.

Sweet clover makes a good hay crop if cut just before the blossom buds appear. If cut much later than this, the stems become woody and the leaves drop off.—C. R. Megee, Assoc. Prof. of Farm Crops, M. A. C.

GOOD PERMANENT PASTURE

I would like to know what seed to use for a good pasture and can I sow it in my corn field at the last cultivation in July? I want to get a good permanent pasture.—A. F., Birmingham, Mich.

—You do not state the nature of the soil, nor do you advise us concerning drainage. The following mixture, however, contains grasses and legumes adapted to both well drained conditions and also conditions that are somewhat wet.

Kentucky blue grass	4 to 6 pounds
Timothy	2 to 3 pounds
Red top	3 to 4 pounds
Red clover	2 to 3 pounds
Alsike clover	2 to 3 pounds
Alfalfa	2 to 4 pounds

Unless conditions are unusually favorable, seedings made in corn at the last cultivation are not likely to prove successful. The legumes do not usually start growth until the corn is harvested and this is usually so late in the fall that only a small amount of growth is made and consequently winter killing is very great. Much better success is usually secured by seeding with oats or barley in the spring or by seeding during the early spring or fall sown wheat. When wheat is used as a nurse crop, the grasses may be seeded when the wheat is sown and the legumes seeded in the early spring.—C. R. Megee, Asso. Prof. of Farm Crops, M. A. C.

Oh Money! Money!

by ELEANOR H. PORTER

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(Continued from April 26th issue.)

CHAPTER XV

In Search of Rest

JUNE brought all the young people home again. It brought, also, a great deal of talk concerning plans for vacation. Bessie—Elizabeth—said they must all go away.

From James Blaisdell this brought a sudden vigorous remonstrance.

"Nonsense, you've just got home!" he exclaimed "Hillerton'll be a vacation to you all right. Besides, I want my family together again. I haven't seen a thing of my children for six months."

Elizabeth gave a silvery laugh. (Elizabeth had learned to give silvery laughs.) She shrugged her shoulders daintily and looked at her rings.

"Hillerton? Ho! You wouldn't really doom us to Hillerton all summer, daddy."

"What's the matter with Hillerton?"

"What isn't the matter with Hillerton?" laughed the daughter again.

"But I thought we—we would have lovely auto trips," stammered her mother apologetically. "Take them from here, you know, and stay overnight at hotels around. I've always wanted to do that; and we can now, dear."

"Auto trips! Pooh!" shrugged Elizabeth. "Why, mumsey, we're going to the shore for July, and to the mountains for August. You and daddy and I. And Fred's going, too, only he'll be at the Gaylord camp in the Adirondacks, part of the time."

"Is that true Fred?" James Blaisdell's eyes fixed on his son, were half wistful, half accusing.

Fred stirred restlessly.

"Well I sort of had to, governor," he apologized. "Honest I did. There are some things a man has to do! Gaylord asked me, and—Hang it all, I don't see why you have to look at me as if I were committing a crime, dad!"

"You aren't, dear, you aren't," fluttered Fred's mother hurriedly; "and I'm sure it's lovely you've got the chance to go to the Gaylords' camp. And it's right, quite right, that we should travel this summer, as Bessie — er — Elizabeth suggests. I never thought; but, of course, you young people don't want to be hived up in Hillerton all summer!"

"Bet your life we don't, mater," shrugged Fred, carefully avoiding his father's eyes, "after all that grind."

"Grind, Fred?"

But Fred had turned away, and did not, apparently, hear his father's grieved question.

Mr. Smith learned all about the vacation plans a day or two later from Benny.

"Yep, we're all goin' away for the summer," he repeated, after he had told the destination of most of the family. "I don't think ma wants to, much, but everybody who is anybody always goes away on vacation, of course. So we've got to. They're goin' to the beach first, and I'm goin' to a boys' camp up in Vermont. Mellicent, she's goin' to a girls' camp. Did you know that?"

Mr. Smith shook his head.

" Well, she is," nodded Benny. "She's tried to get Bess to go—Gussie Pennock's goin'. But Bess!—my, you should see her nose go up in the air! She said she wa'n't goin' where she had to wear great course shoes an' horrid middy-blouses all day, an' build fires an' walk miles an' eat bugs an' grasshoppers."

"Is Miss Mellicent going to do all that?" smiled Mr. Smith.

"Bess says she is—I mean, Elizabeth. Did you know? We have to call her that now, when we don't forget it. I forget it, mostly. Have you seen her since she came back?"

"No."

She's swingin' an awful lot of style—Bess is. She makes dad dress up in his swallow-tail every night for dinner. An' she makes him and Fred an me stand up the minute she comes into the room, no matter if there's forty chairs in sight; an' we have to stay standin' till she sits down—an' sometimes she stands up a-purpose, just to keep us standing. I know she does. She says a gentleman never sits when a lady is standin' up in his presence. An' she's lecturin' us all the time on the way to eat an' talk an' act. Why, we can't walk natural any longer. An' she says the way Katy serves our meals is a disgrace to any civilized family."

"How does Katy like that?"

"Like it! She got mad an' gave notice on the spot. An' that made ma 'most have hysterics—she did have one of her headaches—'cause good hired girls are awful scarce, she says. But Bess says, Pooh! we'll get some from the city next time that know their business, an' were' goin' away all summer, anyway, an' won't ma and pa please call them 'maids,' as she ought to, an' not that plebian 'hired girl.' Bess loves that word. Everythings 'plebeian' with Bess now. Oh, we're havin' great times at our house since Bess—Elizabeth—came!" grinned Benny, tossing his cap in the air, and dancing down the walk much as he had danced the first night Mr. Smith saw him a year before.

The James Baisdells were hardly off to shore and camp when Miss Flora started on her travels. Mr. Smith learned all about her plans, too, for she came down one day to talk them over with Miss Maggie.

Miss Flora was looking very well in a soft gray and white summer silk. Her forehead had lost its lines of care, and her eyes were no longer peering for wrinkles. Miss Flora was actually almost pretty.

"How nice you look!" exclaimed Miss Maggie.

"Do I?" panted Miss Flora, as she fluttered up the steps and sank into one of the porch chairs.

"Indeed, you do!" exclaimed Mr. Smith admiringly. Mr. Smith was putting up a trellis for Miss Maggie's new rosebush. He was working faithfully, but not with the skill of accustomedness.

"I'm so glad you like it!" Miss Flora settled back into her chair and smoothed out the ruffles across her lap. "It isn't too gay, is it? You know the six months are more than up now."

"Not a bit!" exclaimed Mr. Smith.

"No, indeed!" cried Miss Maggie.

"I hoped it wasn't," sighed Miss Flora happily." "Well, I'm all packed but my dresses."

"Why, I thought you weren't going till Monday," said Miss Maggie.

"Oh, I'm not."

"But—it's only Friday now!"

"Yes, I know. I suppose I am a little ahead of time. But you see, I ain't used to packing—not a big trunk, so—and I was so awful afraid I wouldn't get it done in time. I was only going to put my dresses in; but Mis' Moore said they'd wrinkle awfully; if I did, and, of course, they would, when you come to think of it. So I shan't put those in till Sunday night. I'm so glad Mis' Moore's going. It'll be nice to have somebody along that I know."

"Yes, indeed," smiled Miss Maggie.

"And she knows everything—all about tickets and checking the baggage, and all that. You know we're only going to be personally conducted to Niagara. After that we're going to New York and stay two weeks at some nice hotel. I want to see Grant's Tomb and the Aquarium, and Mis' Moore wants to go to Coney Island. She says she's always wanted to go to Coney Island just as I have to Niagara."

"I'm glad you can take her," said Miss Maggie heartily.

"Yes, and she's so pleased. You know, even if she's such a nice family, and all she hasn't much money, and she's been awful nice to me lately. I used to think she didn't like me, too. But I must have been mistaken, of course. And 'twas so with Mis' Benson and Mis' Pennock, too. But now they've invited me there and have come to see me, and are so interested in my trip and all. Why, I never knew I had so many friends, Maggie. Truly I didn't!"

Miss Maggie said nothing, but there was an odd expression on her face. Mr. Smith pounded a small nail with an extra blow of his hammer.

"And they're all so kind and interested about the money, too," went on Miss Flora, gently rocking to and fro. "Bert Benson sells stocks and invests money for folks, you know, and Mis' Benson said he'd got some splendid-payin' ones, and he'd let me have some, and—"

"Flo, you didn't take any of that Benson gold-mine stock!" interrupted Miss Maggie sharply.

Mr. Smith's hammer stopped, suspended in mid-air.

"No; oh, no! I asked Mr. Chalmers and he said better not. So I didn't." Miss Maggie relaxed in her chair, and Mr. Smith's hammer fell with a gentle tap on the nail-head. "But I felt real bad about it—when Mis' Benson had been so kind as to offer it, you know. It looked sort of—of ungrateful, so."

"Ungrateful!" Miss Maggie's voice vibrated with indignant scorn. "Flora, you won't—you won't invest your money without asking Mr. Chalmer's advice first, will you?"

"But I tell you I didn't," retorted Miss Flora, with unusual sharpness, for her. "But it was good stock, and it pays splendidly. Jane took some. She took a lot."

"Jane!—but I thought Frank wouldn't let her."

"Oh, Frank said all right, if she wanted to, she might. I suspect he got tired of her teasing, and it did pay splendidly. Why, 'twill pay twenty-five per cent, probably this year, Mis' Benson says. So Frank give in. You see, he felt he'd got to pacify Jane some way, I s'pose, she's so cut up about his selling out."

"Selling out!" exclaimed Miss Maggie.

"Oh, didn't you know that? Well, then I have got some news!" Miss Flora gave the satisfied little wriggle with which a born news-lover always prefaces her choicest bit of information. "Frank has sold out his grocery stores—both of 'em."

"Why, I can't believe it!" Miss Maggie fell back with a puzzled frown.

"Sold them! Why, I should as soon think of his—his selling himself,' 'cried Mr. Smith. "I thought they were inseparable."

"Well, they ain't—because he's separated 'em." Miss Flora was rocking a little faster now.

"But why?" demanded Miss Maggie.

"He says he wants a rest. That he's worked hard all his life, and it's time he took some comfort now 'cause Jane's hounding him all the time to get more money, to get more money. She's crazy to see interest mount up, you know—Jane is. But he says he don't want any more money. He wants to spend money for a while. And he's going to spend it. He's going to retire from business and enjoy himself."

'Well," ejaculated Mr. Smith, "this is a piece of news, indeed!"

"I should say it was," cried Miss Maggie, still almost incredulous. "How does Jane take it?"

"Oh, she's turribly fussed up over it, as you'd know she would be. Such a good chance wasted, she thinks, when he might be making all that money earn more. You know Jane wants to turn everything into money now. Honestly, Maggie, I don't believe Jane can look at the moon nowadays without wishing it was really gold, and she had it put out to interest!"

Oh, Flora!" remonstrated Miss Maggie faintly.

"Well, it's so," maintained Miss Flora. "So 't ain't any wonder, of course, that she's upset over this. That's why Frank give in to her, I think, and let her buy that Benson stock. Besides, he's feeling especially flush, because he's got the cash the stores brought, too. So he told her to go ahead."

"I'm sorry about that stock," frowned Miss Maggie.

"Oh, it's perfectly safe. Mis' Benson said t'was," comforted Miss Flora. "You needn't worry about that. And 'twill pay splendid."

"When did this happen—the sale of the store, I mean?" asked Mr. Smith. Mr. Smith was not even pretending to work now.

"Yesterday—the finish of it. I'm waiting to see Hattie. She'll be tickled to death. She's always hated it that Frank had a grocery store, you know; and since the money's come, and she's going with the Gaylords and the Pennocks, and all that crowd, she's felt worse than ever. She was saying to me only last week how ashamed she was to think that her friends might see her own brother-in-law any day wearing that horrid white coat, and selling molasses over the counter. My, but Hattie'll be tickled all right—or 'Harriet,' I suppose I should say, but I never can remember it."

"But what is Frank going to—to do with himself?" demanded Miss Maggie. "Why, Flora he'll be lost without that grocery store!"

"Oh, he's going to travel, first. He says he always wanted to, and he's got a chance now, and he's going to. They're going to the Yellowstone Park and the Garden of the Gods and to California. And that's another thing that worries Jane—spending all that money for them just to ride in the cars."

"Is she going, too?" queried Mr. Smith.

"Oh, yes, she's going, too. She says she's got to go to keep Frank from spending every cent he's got," laughed Miss Flora. "I was over there last night, and they told me all about it.

"When do they go?"

"Just as soon as they can get ready. Frank's got to help Donovan, the man that's bought the store, a week till he gets the run of things, he says. Then he's going. You wait till you see him." Miss Flora got to her feet, and smoothed out the folds of her skirt. "He's as tickled as a boy with a new jack-knife. and I'm glad. Frank has been a turrible hard worker all his life. I'm glad he's going to take some comfort, same as I am."

When Miss Flora had gone, Miss Maggie turned to Mr. Smith with eyes that still carried dazed unbelief.

"Did Flora say that Frank Blaisdell had sold his grocery store?"

"She certainly did! You seem surprised."

"I'm more than surprised. I'm dumbfounded."

"Why? You don't think, like Mrs. Jane, that he ought not to enjoy his money, certainly?"

"Oh, no. He's got money enough to retire, if he wants to and he's certainly worked hard enough to earn a rest."

"Then what is it?"

Miss Maggie laughed a little.

"I'm not sure I can explain. But to me, it's just this: while he's got plenty to retire upon, he hasn't got anything to—to retire to."

"And, pray, what do you mean by that?

"Why, Mr. Smith, I've known that man from the time he was trading jack-knives and marbles and selling paper boxes for five pins. I remember the whipping he got, too, for filching sugar and coffee and beans from the pantry and opening a grocery store in our barn. From that time to this, that boy has always been trading something. He's been absolutely uninterested in anything else. I don't believe he's read a book or a magazine since his school days, unless it had something to do with business or groceries. He hasn't a sign of a fad—music, photography, collecting things—nothing. And he hates society. Jane has to fairly drag him out anywhere. Now, what I want to know is, what is the man going to do?"

"Oh, he'll find something," laughed Mr. Smith. "He's going to travel, first anyhow."

"Yes, he's going to travel first. And then—we'll see," smiled Miss Maggie enigmatically, as Mr. Smith picked up his hammer again.

By the middle of July the Blaisdells were all gone from Hillerton, and there remained only their letters for Miss Maggie—and for Mr. Smith. Miss Maggie was very generous with her letters. Perceiving Mr. Smith's genuine interest, she read him extracts from almost every one that came. And the letters were always interesting—and usually characteristic.

Benny wrote of swimming and tennis matches, and of "hikes" and the "bully eats." Hattie wrote of balls and gowns and the attention "dear Elizabeth" was receiving from some really very nice families who were said to be fabulously rich. Neither James nor Bessie wrote at all. Fred, too, remained unheard from.

Mellicent wrote frequently—gay, breezy letters full to the brim of the joy of living. She wrote of tennis, swimming, camp-fire stories, and mountain trails: they were like Benny's letters in petticoats, Miss Maggie said.

Long and frequent epistles came from Miss Flora. Miss Flora was having a beautiful time. Niagara was perfectly lovely—only what a terrible noise it made! She was glad she did not have to stay and hear it always. She liked New York, only that was noisy, too, though Mrs. Moore did not seem to mind it. Mrs. Moore liked Coney Island, too, but Miss Flora much preferred Grant's Tomb, she said. It was so much more quiet and ladylike. She thought some things at Coney Island were really not nice at all, and she was surprised that Mrs. Moore should enjoy them so much.

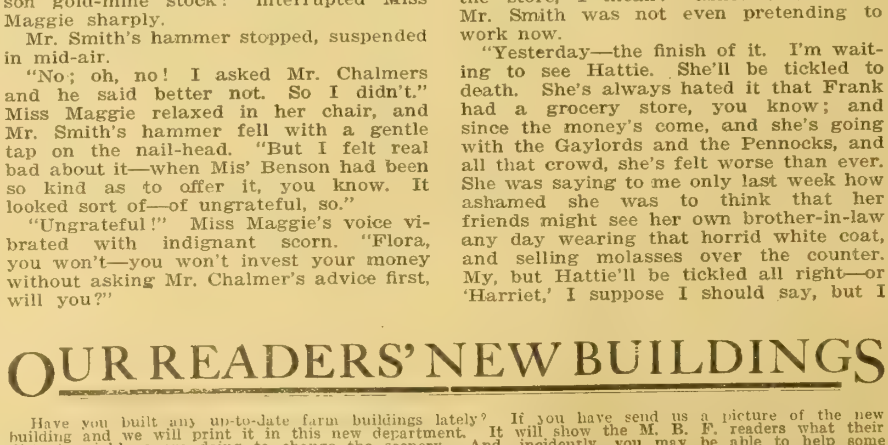
Between the lines it could be seen that in spite of all the good times, Miss Flora was becoming just the least bit homesick. She wrote Miss Maggie that it did seem queer to go everywhere, and not see a soul to bow to. It gave her such a lonesome feeling—such a lot of faces, and not one familiar one! She had tried to make the acquaintance of several people—real nice people; she knew they were by the way they looked. But they wouldn't say hardly anything to her, nor answer her questions; and they always got up and moved away very soon.

To be sure, there was one nice young man. He was lovely to them, Miss Flora said. He spoke to them first, too. It was when they were down to Coney Island. He helped them through the crowds, and told them about lots of nice things they didn't want to miss seeing.

(Continued on Page 26.)

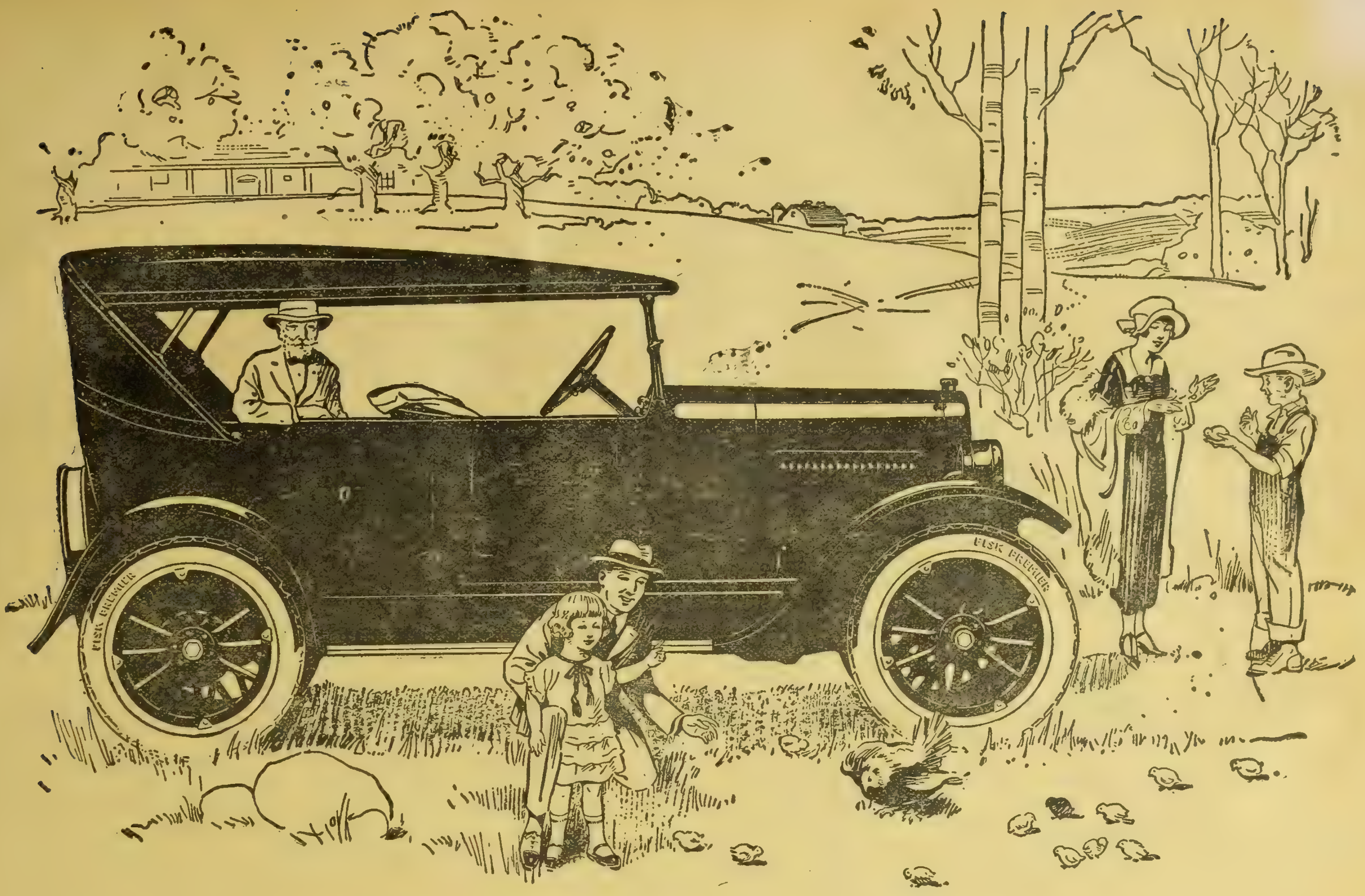
OUR READERS' NEW BUILDINGS

Have you built any up-to-date farm buildings lately? If you have send us a picture of the new building and we will print it in this new department. It will show the M. B. F. readers what their distant neighbors are doing to change the scenery. And, incidently, you may be able to help some farmer decide the type of house, or barn, or other buildings he desires to put up. He may like the appearance of your building and will want the plan of it. Kodak pictures are all right if the details show up well. Do not send the negative, just a good print.



HOME OF MR. AND MRS. GEO. MIDDLETON, WHEELER, MICH.

This new, modern home belongs to Mr. and Mrs. George Middleton, Wheeler, Route 2. It is nicely located on their 120-acre dairy and grain farm. It cost about $6,000 not including the electric system. They state for years they have been "the most enthusiastic subscribers to The Michigan Business Farmer."



What Do You Do Sundays?

Overland makes Sunday a day of restful enjoyment.

Church in the morning. Visiting in the afternoon. Lots of places to go. Every week-end a vacation. Every minute a delightful variation from the daily routine on the farm.

Snuggle down behind the wheel of this big new Overland. See how naturally your fingers close on the convenient gear shift lever. Step on the gas. Get the thrill of this hill-conquering power as you speed up, up and on, over the hills. Feel the deep, luxurious comfort of those well upholstered seats. The big car riding ease of *patented* Triplex Springs.

Know the confidence this sturdy rear axle inspires in every Overland driver. Enjoy the amazing Overland economy in oil and gasoline. More miles to the gallon. More service from tires.

Your nearest Overland dealer will gladly demonstrate to you the many features that make folks call Overland the most automobile in the world for the money.

Other Overland Models: Chassis $395; Roadster $495; Spad Commercial Car $523; Coupe Sedan $655; Sedan $795; all prices f. o. b. Toledo. We reserve the right to change prices and specifications without notice.

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Overland
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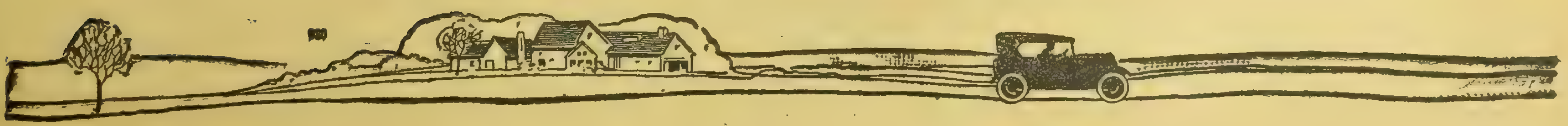

A Remarkable Mower

You will never know real mower satisfaction until you get up on the seat of the John Deere High-Lift Mower, put it in gear, and start it cutting.

Its 21-point clutch puts action into the knife instantly. The special arrangement of the simple three-piece driving gears supplies an abundance of even, smooth power to the accurately-fitted knife—its great cutting power and the ease with which the horses take it through the heaviest hay will appeal to you.

John Deere High-Lift Mower

But you'll not fully appreciate the John Deere until you lift the bar with the foot lift to pass over boulders, stumps, etc., and to turn at the corners. It's really boy's play to operate the John Deere.

When unusual obstructions require an extra high lift, the foot and hand lift combined gives you this with practically the same ease of handling as the foot lift only.

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Don't buy a mower until you see the John Deere with the high easy lift at your John Deere dealer's.

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What the Neighbors Say

HURRAH FOR COUNTY AGENT

DEAR ERITOR:—I have read your paper, THE BUSINESS FARMER, for two years and like it the best of them all. In your issue of April 12th I read the letter "Why Have County Agent?".

We have a county agent here in Ontonagon county and he is a crackajack. He started out and formed a farmers association and the members of the association got together and agreed they would get a grain dealer in town to buy the farmers' grain. In a couple of months they had a place to buy feed and sell any grain and hay they produced. The agent saw that the farmers were paying $24 a hundred pounds for powder or dynamite, so he got his brains to working and the farmers bought powder for $12 per hundredweight, and this spring he got powder for $7 per hundred pounds. He sold 3 or 4 carloads this spring.

He held orchard and dairy campaigns and has taught the farmers the care of the orchards and live stock. And he is after the boarder cow and scrub bull, and has the farmers getting better stock.

He has started a cooperative creamery idea here and the farmers are going to build next month. He has been doing some good work, because even the banks here got too small and they had to build a new one, one of the finest in the county.

Three cheers for our county agricultural agent.—A Reader, Bruce Crossing, Mich.

GIVE LAW BREAKERS STIFF SENTENCE

MR. EDITOR:—I read your editorial "Prohibition On Trial" and was very sorry to see the statement printed in the paper that prohibition can never be enforced. These little county courts give just as easy a sentence as possible, or $50 fine, and let the bootlegger go on probation to report every month for a year, and they made enough to pay all expenses and a good boodle besides. If the United States would passed a heavier sentence on such cases and see that the county courts enforce them there would be less trouble. But when a man can get free board and be used like a king for three or four months, the town keep his family and the prosecuting attorney goes good for him and lets him out to make more booze to pay up, it shows the judge and county officers haven't any higher power over them. Once pass a law that every county judge has to report such cases to the state or higher authorities, and a good stiff punishment put on the bootleggers, there would be less of it. Let's all try and get more sentence and no bail, and send more state officers in the counties where the stills are kept.—P. E. T., Michigan.

AN OPEN LETTER

FARM Organization Legislative Committee, Lansing, Michigan.

Gentlemen:—Your favor of the 18th came to my desk this morning just as I was going to write you urging the committee on farm Organizations to send a wire to our members in Congress to do just the opposite of what they appearently have done namely: Shut immigration out for five years. I agree with Senator Magnus Johnson of Minnesota in one thing at least namely: that a death blow is being given American agriculture when agricultural immigrants are excluded. Surely your committee must have taken account of the recent statement in THE MICHIGAN BUSINESS FARMER that in this state particularly we must have a fresh supply of labor because the factories have absorbed whatever had been available for farming.

If instead of relief from intolerable labor conditions that we now have in the rural districts we are to have an even worse state of affairs, we might as well shut up shop and abandon all co-operative efforts and give up farming as a hopeless task.

May I ask what earthly reason the Michigan farm organizations committee had in view for asking that immigration be prohibited. Even if it is largely true as you say that the immigrants land in the cities, yet has it not occurred to a single member of the committee that one of the most serious hinderances to agricultural recovery is the high prices of manufactured goods and the transportation costs from eight hour labor. More labor is needed for industry.

I hope against hope that the farm organizations with whom I have agreed on the gasoline and state income taxes, on the extravagence of our present administrative board and on most all questions, affecting our common welfare will see the point before it is too late and the immigration exclusion measure enacted into law, and will take different action. There may yet be a chance to recall a mistaken decision as I trust, the President will veto the immigration act and some time will be given for Congress to hear from the people.—F. W. Newton, Saginaw county.

LET PEOPLE HAVE SAY ABOUT WAR

DEAR Editor:—As a reader of THE BUSINESS FARMER, while reading the sermon of David F. Warner, it started me thinking of this war question. Now this government has taken the disarmament as a preventative of war, also League of Nations as a preventative of war. Now as things at Washington look, we should take the war making power away from them and put it in the hands of the people. Every country on the globe should adopt the same rule. The people have the killing to do and to get killed and suffer. We should have a constitutional amendment to that effect. This question of declaration of war would have to be submitted to a popular vote of the people. Now in case the vote carried for war, your vote would have to be recorded opposite your name and address, either for or against. In case it carried those voting for war would be called out first and sent to the firing line, and the others next. Now I believe there would be less wars if the people decide, than if the profiteers decide. Let us get busy and push this question.

These countries put me in mind of prize fighters. They prepare and then fight, and so it is with the different countries.—C. K., Muskegon, Mich.

TWO PRINCIPAL SOURCES OF DANGERS TO OUR REPUBLIC

DEAR EDITOR: As a nation, unequaled prosperity has attended our American Republic. In material progress no nation, either in ancient or modern times, has made like gains and this is a blessing, if rightly made use of, yet it may become the source of greatest harm, if wrongly applied, and herein lies one of the two greatest dangers to the people of our Republic.

The too intense struggle for material possessions, resulting in the neglect of that which is of far greater value, may cause the weakening of those most essential underlying principles without which no nation can continue to prosper. So prosperous have we become in material gain, that our necessities are fully met and luxuries are being indulged in to a very large extent, and the man, now in possession of the most wealth is today, a citizen of our Republic.

While it is commendable that many worthy causes are being cared for generally, yet the impelling motive of self gain, it is to be feared, has far too prominent a place in our thoughts and well will it be for us to "take and inventory of stock" in our real motives and learn truly "where we are at."

One other source of danger is the general disregard for, and neglect of the provisions of Established Law, we Americans having a desire to be our own personal law-maker and while this may be commendable, insoffar as to our becoming self controlled, yet the safety of our fellowmen requires the establishing of a system of laws, which shall conserve and protect the welfare of the masses and every citizen should deem it to be one of his imperative duties to obey, promptly and fully, the requirements of established law and to aid in securing, from his fellowmen, like observance of the law, for "He who will not obey the law is unworthy of the protection of the law," and "No man should be above the penalties nor beyond the protection of the law."

Perhaps no provisions of the law are so generally disregarded as are the terms of the law, relating to the sale and use of intoxicating liquors, as a beverage and herein we need much, to correct our ways and safety demands that we do this promptly and effectively.—J. T. Daniels, Clinton County.

REDUCING FIRE TAXES

DEAR EDITOR:—I have been a long time admirer of THE BUSINESS FARMER and its staunch stand for freedom of speech. I have read with great interest on page 14, your issue of April 12th, your practical editorial "Fighting Farm Fires." This is a step in the right direction and your paper and the press generally ought to help us carry on with this noble work. Do you think it would be practical for us to adopt a similar course here? For many days last winter the roads were drifted so full of snow the school busses couldn't navigate and we wondered if a fire truck could get thru. It took several days to shovel the snow even on the improved roads and the cross roads were weeks getting cleared. Even when spring came the mud was so deep a fire truck would get stuck like they did down at Ferndale in Detroit where two houses burned up with total loss of over $9500. We depend here on our chemical fire extinguishers and so far have put out two in our house and helped our neighbor extinguish a bad chimney fire and last week a big loss was saved. A month or so ago another neighbor together with our local fire company of volunteers at Hickory Ridge saved a heavy loss from an overheated chimney by the timely use of extinguishers. A truck couldn't have got here on account of the snow so we had to depend on our chemical hand extinguishers, you see.

Your article mentions a lower rate of insurance assessments for buildings equipped with dependable extinguishers. Our mutual company allows a 10 per cent lower rate for extinguishers approved by them and I was wondering if all the other mutuals encouraged fire prevention in a similar practical way. If your paper printed a series of good instructive articles on fire protection on the farm and boosted our common fight against our common enemy, the Red Plague, it certainly would help us to reduce our annual billion dollar fire tax.—Burchard R. Hair, Oakland County, Mich.

MICHIGAN LEADS ALL STATES IN MARKETING

MORE money is being spent in Michigan during the 1923-24 fiscal year for the development of marketing projects for the farmers of the state than is expanded for this purpose in any other state according to statistics contained in a circular of the United States Department of Agriculture recently received by R. J. Baldwin, director of extension work at Michigan Agricultural College.

The sum of $17,700 was devoted to this work in Michigan, which is an amount greater than the aggregate sum expanded by the four states surrounding Michigan—Illinois, Indiana, Ohio and Wisconsin—in spite of the fact that for the present year Ohio has doubled her allotment for this purpose over the 1922-23 budget, and Wisconsin is expending $6,895 this year after making no allotment for 1922-23.

Whose Advice Are You Going to Take?

Choosing a motor oil is a matter of following advice. Unless you are technically trained and have complete laboratory facilities, you cannot safely choose for yourself, because lubrication is as technical as is medicine or law.

You cannot see the quality in oil. Only the petroleum chemist can say which oil is right. There is one right oil for your tractor. How are you going to know? By following the advice of the Standard Oil Company (Indiana) highly trained experts. Thousands of tractor owners in the Middle West have done this and are using

Tractor Chart of Recommendations

TRACTORS

Trade Name	Motor Oil
Adaptable	H.
Allis-Chalmers, 6-12	H.
Allis-Chalmers, Other Models	S. H.
All Work	S. H.
Andrews-Kincade	E. H.
Appleton	S. H.
Aultman-Taylor, 15-30	S. H.
Aultman-Taylor, Other Models	S. H.
Automotive	H.
Avery, C. & Road Razer	H.
Avery, Track Runner	S. H.
Avery, Other Models	E. H.
Bates Steel Mule, Midwest Motor	S. H.
Bates, Other Models	H.
Bear	S. H.
Best Tracklayer	E. H.
Big Farmer	E. H.
Case, 10-18, 12-20 and 15-27	H.
Case, 22-40	S. H.
Case, Other Models	E. H.
Cletrac, F	H.
Cletrac, W	S. H.
Coleman	E. H.
Dart	S. H.
Eagle	S. H.
E-B	S. H.
Ellwood	H.
Farm Horse	E. H.
Fitch	E. H.
Flour City, Junior and 20-35	S. H.
Flour City, Other Models	E. H.
Fordson	S. H.
Fox	E. H.
Frick	S. H.
Gray	S. H.
Hart-Parr	E. H.
Heider	S. H.
Holt, 2-Ton	H.
Holt, Other Models	E. H.
Huber	S. H.
Indiana	H.
International	H.
J. T.	E. H.
Klumb	E. H.
La Crosse	E. H.
Lauson	S. H.
Leader	S. H.
Leonard	S. H.
Liberty	E. H.
Lincoln	S. H.
Little Giant	S. H.
McCormick-Deering	H.
Minneapolis, 12-25 and 17-30	S. H.
Minneapolis, Other Models	E. H.
Mogul	S. H.
Moline	S. H.
Monarch	H.
Nilson	S. H
Oil-Gas	E. H.
Peoria	E. H.
Pioneer	E. H.
Reed	S. H.
Rix	S. H.
Rumley, Oil Pull, 12-20, 16-30 and 20-40	E. H
Rumley, Other Models	E. H.
Russell	S. H.
Samson	S. H.
Shawnee	H.
Square Turn	E. H.
Stinson	S. H.
Titan	S. H.
Topp-Stewart	S. H.
Toro	H.
Townsend	E. H.
Traylor	H.
Trundaar	S. H.
Twin City, 12-20 and 20-35	S. H.
Twin City, Other Models	E. H.
Uncle Sam	S. H.
Wallis	S. H.
Waterloo Boy	S. H.
Wetmore	S. H.
Wisconsin	S. H.

CULTIVATORS

Trade Name	Motor Oil
Acme	H.
Aro	H.
Avery	H.
Bailor	H.
Beeman	H.
Bolens	H.
Boring	H.
Centaur	H.
Do-It-All	S. H.
International	H.
Kincade	H.
Merry Garden	M.
Motor Macultivator	S. H.
New Britain	H.
Red E	H.
Spry Wheel	E. H.
Utilator	H.

KEY

L.—Polarine Light
M.—Polarine Medium
H.—Polarine Heavy
S.H.—Polarine Special Heavy
E.H.—Polarine Extra Heavy

N. B.—For recommendations of grades of Polarine to use in automobiles and trucks consult chart at any Standard Oil Company (Indiana) station.

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Polarine will keep your tractor in first-class condition — give longer life to your motor—more power from your fuel—reduce carbon deposit and repair bills.

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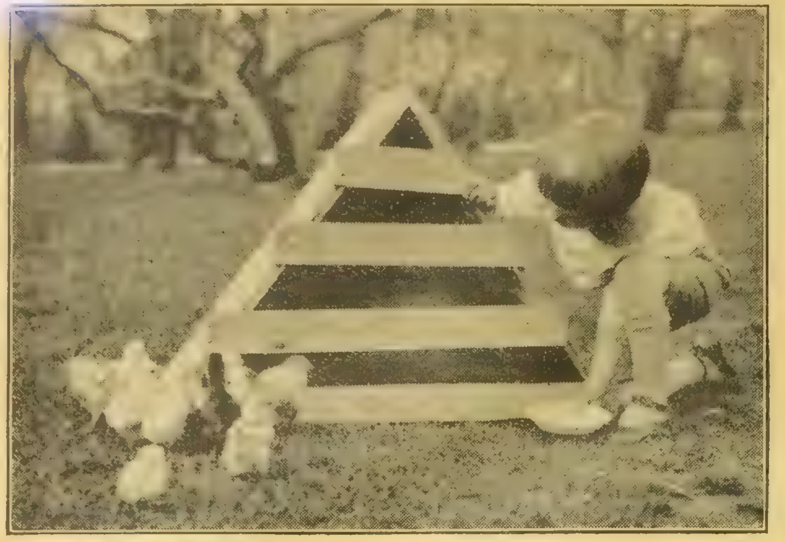

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RADIO DEPARTMENT

EDITED BY J. HERBERT FERRIS, R. E.

CARE AND USE OF VACUUM TUBES

THERE are two general types of vacuum tubes; those that are used for the purpose of detecting and amplifying incoming radio signals and those that are used for the transmitting and sending of radio signals; this latter class we are not interested in at present.

The vacuum tube is a very delicate piece of mechanism; it consists of a glass container in which a very high vacuum is produced (from which it gets it's name "vacuum tube") and in which there are three elements, the filament, grid and plate.

The filament is to produce heat so that the electrons (small particles of electricity) can leave the filament and pass to the plate thus creating an electric current that will be completed thru your telephone receivers and the B battery.

The plate is the element that receives these electrons that actuate your telephone receivers so that you can hear the radio signals.

The grid is placed around the filament or between the filament and the plate and acts as a valve that is made to work by the small amount of electric energy received from your antenna or aerial. A very small amount of change in the amount of energy placed upon the grid will so affect the grid that it will, acting as a valve let more or less of the B battery current flow from the filament to the plate. A very small change making a very big difference in the amount of B battery current flowing.

Each type of receiving tube requires a different value of grid leak or resistance so that the grid will be in it's best working condition. It is very surprising what a difference there will be in the volume of signals received by using the right or wrong resistance to work at their very best; it will always pay to try leaks of different values until you have the one that brings in the signals the clearest and loudest.

Many people blame their tubes for not working properly when the grid leak is the real trouble maker. Try it and see for yourselves what a difference there is.

As we said before, these are very delicate instruments. They should never be used on any voltage except that which the makers specify. A slip is always enclosed with each tube so that you cannot make an error.

Do not burn the filament too bright; it shortens the life and gives poorer results.

Do not use too high an A battery voltage, this will also shorten the life and may instantly burn out your tube.

Do not drop or jar the tubes; you may break them or make the elements move slightly out of place so that they will fail to work properly.

Never connect your B battery to your set till you are sure that all your connections are right or you may burn out the tube by accidently letting the B battery pass thru the filament.

In using an amplifier, try changing your tubes from one socket to the other; there is a big difference in the volume received from some tubes by changing them around. Some tubes work much better in the first stage than they do in the second or third stage. For best results try them out.

Too high a plate (B) voltage will sometimes make a tube go dead and it can be brought back to working condition by heating the filament for 15 to 20 minutes without the B battery connected.

As detectors most of the tubes work their best on about 22½ volts for the B battery and up to 100 volts as amplifiers.

Your vacuum tube is the most delicate part of your receiving set, treat it carefully and it will in return give you long life, good service bring in loud signals, improve your reception and give you more than it's value in pleasure and profit.

WANTS SET AT REASONABLE PRICE

In the March 15th number of THE BUSINESS FARMER, I read with interest about the moderate priced radio set that you use and which you said gave you places as far as Chicago. Like many other young farmers we would like so much to have a radio because of the interest and entertainment from the outside world to a hardworking, more or less shut-in farmers' family. Had rather have a radio than a Victrola, but the cost prohibits either. By the way we are not handy at making anything of that sort even if we had the time to do so.

Can you tell me the kind, price, and place to buy such an instrument as you described, or several moderate priced instruemnts? Would want a horn so that whole family could enjoy the programs.

Enclosed is stamped envelope for information and shall be grateful for such information as you can give and hope it will be in scope of our pocketbook. Several of our neighbors have home made crystal sets that cost about $25 and at times they can not get Detroit. If we have one at all it must be more satisfactory than that.—Mrs. E. C., Lenawee County.

—You are right, I believe, when you say that you would rather have a radio than a victrola. Each is different, yet the radio keeps you in better touch with the latest world happenings and entertainment.

The set that we described cost a little less than $25 for all parts including the battery and aerial wire and connections. This of course did not include a box to hold it nor a good panel for mounting. Such a set though it would work with two sets of telephones on it so that two

We know you have been wondering about our radio laboratory, where Mr. Ferris makes up different sets and tests them out before describing them in his department, so we are showing you one corner, just to give you an idea of what it looks like. What real radiophan wouldn't like to spend an hour or two here?

people could listen, would not work a loud horn so that all in a room could listen. This would mean the addition of an amplifier costing for parts alone another $25 which with a loud speaking unit at $10 (and that would be a fair one that would give satisfaction without being fancy in finish) would make the cost of building a set at least $60.

The Crosley set for 65 dollars comes nearest to it, but that does not include tubes or batteries or loud speaker which will make the set cost you at least $100.

There are really no sets on the market complete in ever detail for much less than $90 to $100 and they all do not give satisfaction by any means. Most people are deceived by low priced sets and when they buy they find that they have to spend a lot more to get the extras that make the set work.

The best way is to take time and go to Detroit, Lansing, Jackson or Ann Arbor and look over the sets and get what you want. Get a standard make as Radio Corporation, DeForest, Clapp - Eastham, Crosley, Grebe, Haseltine etc. You can depend upon the standard ones, but in asking prices ask for the set complete with all batteries, aerial, lightning arrester vacuum tubes and loud speaker so that you will not have to buy anything extra.

The crystal sets do not bring in the distant stations except once in a while, whereas the set we described will bring in to you, Detroit, Chicago all day long, and Pittsburgh, Springfield Mass., Omaha, Dallas, Atlanta and other distant pionts nearly every night.

WEST VIRGINIA READER INTERESTED

Please send me a copy of Feb. 2, 1924, Business Farmer telling how to build a radio, and would be glad to have any other information you can give me about radio, and how to build one. Thanking you very much I am, H. B., Union, W. Va.

—A copy of the Feb. 2nd Business Farmer has been sent to you, which no doubt you have received before this. We hope that you will have success in building a set that will give you satisfaction.

You ask about further radio information; we are always glad to answer any letters received asking definite question on radio. If you have any, send them along.

Beginning with the issue sent you we have been carrying on a series of articles which will tell how to add amplifiers, etc., to the present set. We will tell how to make and operate other types from time to time. Our readers will of course have the benefit of all this, and as we aim to only tell about things that we have built and tried out we know that our suggestions will work.

FARMER PUTNAM'S PHILOSOPHY

WIMMIN is so unreasonable. I reckon most every man, after he's been married several year, thinks his wife is the most unreasonable pusson that ever was. Anyhow so it seem to 'em. I don't know as Josephine is worse then other wimmin, but she's just as bad. Now the other day we was havin' hot biscuits fur dinner, and if anybody kin bake 'em fluffy and fine it's Josephine. She's as good a biscuit baker as she is at bein' unreasonable and contrary. In fact most everything she is she's just that way—100 per cent one way or the other.

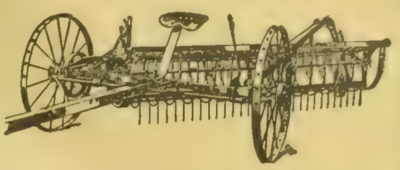
I had ett one of them biscuits, with butter on it, and was ready fur several more. Josephine was talkin' fur dear life, just chatterin' a blue streak about the—well I can't say who it was about, as it wouldn't be polite fur me to get pussonel. The biscuits was settin' right near her plate. I was tryin' my best to ask fur 'em but I couldn't think of the right word to say or git the word biscuits in edgeways, because of her talkin'. Finally she noticed my hand pointin' towards the biscuits and my lips makin' signs like a black bass that's gittin' ready to swaller a frog, and she sez:

"What on airth's the matter Tom, makin' signs like that, cain't you use the English language?'

"Not while your usin' it all," sez I. My gosh! you should-a seen them biscuits come flyin' acrost the table.
—Thos. Jefferson Putnam, Specialist in Rural Devilment.

How About Your Hay Tools?

IT is surprising how much better hay you can make, how much labor you can save, and how much pleasanter the haying season can be when you use the modern dependable hay tools found in the McCormick-Deering Line. Regardless of where you are farming, if you grow some hay, you should know all about these machines. You can get this profitable information from the local McCormick-Deering dealer or by writing to us.



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The Michigan
BUSINESS FARMER

SATURDAY, MAY 10, 1924

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We will not knowingly accept the advertising of any person or firm who we do not believe to be thoroughly honest and reliable. Should any reader have any cause for complaint against any advertiser in these columns, the publisher would appreciate an immediate letter bringing all facts to light. In every case when writing say: "I saw your advertisement in The Michigan Business Farmer!" It will guarantee honest dealing.

"The Farm Paper of Service"

FAIR ASSESSMENTS THE ANSWER

YOU who have been reading Mr. Stanley Powell's series of articles on taxation in Michigan will be particularly impressed with the one in this issue and you will get a smile or two out of the contrast in statements which wiseacres from Detroit make when they are in Lansing with those they make when they are back among their home folks in the big city.

Fair and uniform assessment is, of course, the final solution to the whole taxation subject here in Michigan, and yet our city friends will tell you that they are already carrying more than their share of taxes and that because we have a "farmer-controlled-legislature" the great Michigan metropolis is being slowly crushed between the millstone of state taxation!

Mr. Powell brings out clearly the fact that there has been an actual decrease in land values in some parts of Michigan. We cannot believe that this is serious in the best farming counties of Michigan nor where the best farms are concerned. Not that we believe these farms would bring their full value on a forced sale today but the value is there and any banker will agree to it.

It ought to be an encouraging sign to some of you to know that there are farmers coming into Michigan from Indiana, Illinois, Iowa, and other states which are cursed with fabulously priced land and who are buying better Michigan soil, with better access to the great consuming markets, at one-half the loan values of farm lands in their old locations.

Only a week or so ago we heard of a large Eastern corporation which is buying Michigan farm land which it plans on leasing out to tenants. This is not a healthy condition and we do not welcome it in a state which at the last census had 86 per cent of its farms owned and operated by their owners, but it nevertheless can give some satisfaction to those who are sticking by the farm knowing that normal conditions must return and normal farm prices again become in evidence.

SLOWIN' DOWN

THERE is no use trying to disguise the fact that there is a slowing down of business generally which has been extending westward from the eastern seaboard it first hit some sixty days ago.

Detroit has felt it somewhat in the slower movement of their automobiles to the trading centers. Automobile manufacturers explain this by the fact that we have had a late spring in all parts of the country and that automobile factories produced at full capacity through November, December, and January, during which period under normal conditions, and in former years, they have always operated under reduced production.

It is a fact that each spring has found the automobile manufacturer with a shortage in cars on hand to meet the sales waiting for his product, last year Ford alone claimed a shortage of three hundred thousand automobiles and trucks! This winter, with almost unanimous consent, cars have been built with this in mind, and as dealers and distributors are pretty well stocked throughout the country there has been a temporary slow-down in shipments from Detroit.

This same condition is evidenced more or less in many sections of the United States and in various industries. Naturally we who are so close to the agricultural field have been wondering for a long time whether economics were turned topsy turvy and the United States about to enter into a new era when the great mass of its citizens engaged in agriculture might be in poor financial condition and yet the cities remain prosperous, well employed and at high wages. No one can yet say whether or not this condition can remain a fact, but all of us have to admit that it has been a fact during the past three years, during which time there has been an active demand for labor in all parts of the United States at high wages; the cities have shown every indication of an increasing prosperity and yet the change of conditions for the better on farms has been increasing at a snail's gait. This farm price repression has applied not only to the major crops, but to fruit, livestock, and dairy products, it has not been sectional or confined to one state, altho naturally it has more seriously effected some sections than others, but it has been felt by the potato growers of Maine, the grape-fruit growers of Florida, the sheep-growers of Montana and the raisin-growers of California.

Now, as we see it, a so-called "slowing-down" of business conditions in the cities which is only another way of saying a slowing down of manufacturing, will only mean a decrease in the demand for labor and thus, obviously follows, a lower wage-scale. When $14-a-day-plasterers eat 30c per dozen eggs something is wrong in Denmark!

If the farmer and the laboring man were receiving their just dues in remuneration for their labor, we would have no kick whether the wage scale was one or ten and we would prefer to have it ten, but when there is the desparity which exists to-day, we say "som-thins a-goin' to happen" and we predict that it is not very far away around the corner.

ANYTHING FOR VOTES

FOR a vivid example of political expediency we would like to point out the proposed raise in postal employees salaries, which at the present writing stands a fair chance of becoming a law well in advance of the fall election.

To understand the situation fully one must go back in their minds a little way and remember that last year (1923) Congress appropriated $500,000 for an investigation of the entire postal system, which was to place the responsibility for any loss on the proper classification of mail. In other words, an investigation which would determine exactly what portion of the total expense each class of mail: letter, newspaper, or parcel post should carry. Anyone who is at all familiar with postal affairs will recognize that this was a very wise move, because every attempt to raise postal rates to care for the increasing deficiency was met by the most virulent opposition from those whom it hit, with the natural result that nothing was ever done about it.

It so happens, however, that this is election year and unfortunately that it will be some months before the half-million-dollar job of investigating the postal department can be completed. So there will be an election before these figures can be ascertained and in the meantime there is a country-wide demand not only from postal employees but from many other well-meaning people that the present salaries paid postal employees are entirely inadequate, particularly in the larger cities, that the department is losing its best men, and thus the efficiency of the whole system is in jeopardy.

Naturally it did not take the politicians in Washington long to see that they could make political capital of increasing postal employees' salaries, and that is now proposed in a measure which would increase the salary of every postal employee irrespective of present salary, $400 per annum! The gigantic deficiency which this would make, would be met by an increase in parcel-post rates, which are supposed to be, under present circumstances, entirely too low. It has been hinted that perhaps the express companies are interested in seeing parcel-post rates increased, but, however that may be, there is considerable danger that for political expendiecy alone the salary increases proposed and the increase in parcel-post rates necessitated thereby, will go swimming through Washington and be saddled largely on the rural population of the United States who use this service most.

No sincere person questions but what there are spots in the United States where the present postal salaries are entirely inadequate. We refer particularly to cities like Detroit where living expense is continually on the up-grade and postal salaries have been stationary over a period of years, but it would seem that there could be an emergency fund easily created which allow the local postmaster in these extreme cases to meet the situation, the same as any other business house or corporation would have to. The farm bureau and other farm oranizations are bitterly opposed to this measure, as are most of the good farm papers in this country. You have a representative in Washington, a man who is serving you, and you could not do a better service than to write a letter asking him to defer action on any postal increase until the results of the half-million-dollar investigation are made public.

* * *

Thus do we courageously lift our humble voice in protest against this political flagwaving, altho knowing fullwell, how useless are our entreaties with election so few months off!

THE EAGLE WITH CLIPPED WINGS

WHAT is the matter with the United States? We pride ourselves on our progressiveness. We prate about our inventive skill and the courage of our pioneers in manufacture and commerce. What has happened to all of these national attributes when it comes to taking wings and following the simple lesson taught by the birds that the air, as well as the sea, has for its chief purpose, to serve Man for transportation?

The Wright Brothers on their crude little-kite-like affair, hardly lifting itself above the Virginia sands proved that man could fly. They were Americans. Glen Curtiss, with the deep-set eyes of a Ford, built man-carrying birds by the thousands when the demand of the great war asked for all he could produce.

Then after the war, came a halt in the manufacture of aeroplanes in the United States. England, France, even crippled Germany and caotic Russia, went forward building planes for commerce, for postal service, for military uses, but wealthy, contented old Uncle Sam leaned back in his soft-chair and swore that all the flying he would do would be with one foot on the ground and he has stuck pretty close to this promise!

Flying may seem a long ways from farming and yet the problems of transportation are most directly reflected in the conditions on the farm. The air is the great open space where neither mountain nor valley delay the traveler on his way. Where the fastest express train leaves off at sixty miles an hour its race with time, the slowest aeroplane takes it up!

In England, we learn, the government encourages commercial lines of aerial communication, by a postal subsidy which guarantees not less than six per cent on the invested capital. How much better able is Uncle Sam to foster this step in the advance of civilization. The eagle is our national emblem, lets make it a fitting one!

NEIGHBORS SELL WOOL

THE Michigan State Farm Bureau has decided to pool its 1924 wool with the Ohio Wool Growers Association which we understand is one of the most successful of its kind in America.

This company which owns a large warehouse at Columbus, and has additional storage space in Wheeling, West Virginia, and other locations, has built up a very successful trade in a period which extends over six years of satisfactory results to the farmers of Ohio.

The handling charge we understand to be as low, if not lower than any other organization in the United States performing the same kind of service. The Michigan organization has a guarantee that the handling charges will not exceed 2¾ cents per pound, which is to include tax, storage, insurance, grading, all labor, sales commission and guarantee of sales account. Individual grading reports are furnished each growed and remittances are made direct through the association to the grower.

It has appeared to us on the basis of former Michigan experience, that this is a very commendable experiment and we trust it may work out satisfactorily to all concerned.

JAPANESE JINGOS CRY "WAR"

PRESS dispatches tell us that when the news was broadcasted in Japan that the United States had formally excluded Japanese immigration to this country, the jingo newspapers immediately took up the cry of "War."

Great wars that cost the lives of thousands of innocent boys have been started with less provocation than the Japanese think they have today. They are being appealed to on the strength of national honor and all of the old artifices of war are being paraded before them.

The United States with its millions of gold and unlimited wealth is indeed a picture for invading hosts to conjure with.

Caesars armies were fed on promises of the gold that laid beyond the Alps and Napoleon beguiled his men with the lure of gold, costly wines and their pick of the maidenhood of their conquered nations!

The importance of a strong hand at the wheel of our nation was never more apparent than it is today. Men and women who love these United States must vote and vote as they think——after they have thought!

PUBLISHER'S DESK

A FRIEND IN NEED

DEAR SIRS: "A friend in need is a friend indeed" and I am going to answer your card at once. Yes I received a check from ———, only a few weeks ago and I sent you a letter as soon as I received it. I was surprised when I received the card stating you had not heard from me and I want to thank you for it and if we had not been taking your paper we never would of gotten it and any time I can get a new subscriber for your paper I will do so. Thanking you many times for your help and I sure will help others to see what a good paper you are putting out for the farmers. Trusting you will receive my letter O. K., I remain yours truly, Mrs. F. C., Alba, Mich.

AMERICAN BOND AND MORTGAGE CO.

THIS party inquires about first mortgage bonds as sponsered by the American Bond and Mortgage Company of Detroit. It should be observed that each particular bond issue depends upon the security bond with proper issue i.e., the property. This company is of course merely an agent and general trustee for its issues and it has a fair reputation for having handled successful issue, but it must be remembered that the building industry of the last few years and business conditions generally have flucuated to such a degree that the element of stability, which, in normal times could be attributed to first mortgage bonds, is somewhat lacking.

METRO PUBLISHING COMPANY

A READER sends in a certificate given by the Metro Publishing Company, 96 Monroe Avenue, Grand Rapids, with a printed number, filled in with lead pencil and with other earmarks of a questionable proposition.

The certificate says that after 98 single copies have been taken at 12 cents per copy, any premium mentioned may be selected and there are a lot of premiums listed, while the magazine for which 12 cents per copy is paid is of little or no value.

We often wonder why some people think they can buy articles from an agent who comes around with cheap catch-penny schemes cheaper than they can go to a good store and buy it at retail price, but that it should be hooked up with a cheap irresponsible magazine seems to give it some semblance of a worthy scheme.

If any of our readers have had any experience with the Metro Publishing Company and know whether or not they ship the premiums as promised, I would be very glad to have it.

"BLUE SKY" LAW HAS LIMITS

"In regard to this matter, there is nothing this Commission or the State of Michigan can do as long as the solicitation was made through the U. S. Mail. The only recourse any person would have would be under the fraud section of the Postal Laws, and as we understand these laws, it would be necessary to prove absolute fraud. About the only thing that could be done in this case would be to report the matter to the Post Office Inspector. Inasmuch as there has been no personal solicitation in Michigan we are powerless, although if it should turn up that some person has personally solicited these sales in Michigan, we will proceed promptly. —Hezekiah N. Duff, Chairman, Michigan Securities Commission."

THERE is a lesson in the above statement by Mr. Duff which I hope every reader of this page will take to heart ere he has cause for regret.

The "blue-sky" laws, so called, which under the control of the above commission, attempt to guard the investors of Michigan against the sale of unworthy stocks and bonds in this state and to control the action and statements of the men who are selling these investments.

The "blue-sky" laws are now operated in most of the states and have been found to be highly valuable although far from infallable in controlling the situation. From the above statement, however, it is plain to see that they have no control whatsoever over the solicitation and sale of stocks or bonds where the solicitation is made through the United States mail. It is our understanding, however, that no stocks or bonds can be advertised in the State of Michigan which have not been passed by the Commission.

As Mr. Duff points out, it is not easy to secure redress through the United States postal authorities as absolute fraud must be proven before any action is taken and then there is no promise of damages to the injured.

The above ought to help our readers to decide what to do with the mining, motor-car, and other stock circulars that they get through the mail. They make excellent kindling for the morning fire but we would not risk wrapping them around the children's lunch for fear of contamination!

UNITED STATES EXPORT AND IMPORT COMPANY

THIS organization is founded around a Mr. Sellers who has had some experience in exporting, but a review of his financing does not reflect particulary good management. The business in which he is engaged from its very nature requires strong financial backing so as to be able to carry credits and exchanges, and although this company has paid dividends and has prided itself upon the fact that it does a cash business, there is no ready market for the stock of this company, and the management of the company will not disclose sufficient financial information to form an opinion of its actual value.

A very unusual thing happened with this company when they succeeded many of their stockholders to escrow their stock so as to take it off the market and thus enable them to sell more new stock. This was a method of protecting their own market which should not ordinarily have been necessary.

ALUMINUM WARE EXPERIENCE

"I AM writing to ask if any of the readers of this paper have been attracted by the wonderful big 25 piece aluminum set offer sent out by the Aluminum Works of Chicago. I have had a little experience with them and will say to others, "don't bite." I would like to secure a post card just like the one I signed my name to. If anyone has one please give name and address in this paper and I will send stamped envelope.

The 25 pieces were pictured and itemixed on the card. Would like to hear if others have been defrauded and I will tell more of my experience later if any one is interested—A Farmers' Wife.

MUTUAL AUTOMOBILE INSURANCE

BECAUSE of the failure of the United States Mutual Insurance Company, at Grand Rapids last year, there has been considerable discussion regarding the safety of the Mutual Automobile Insurance Companies and this department has been asked many times for our opinion as to the safety of this or that company operating in the state.

In the first place, all state mutuals are under the direct control of the Department of Insurance, to which they must make regular reports and by which they are annually audited.

In a mutual company each member is equally responsible with every other member for the full liabilities of the company, so in the case of the one that failed at Grand Rapids when the insurance commissioner has finally settled up this company there will be no outstanding liabilities and each member who is collectable will have had to pay his pro-

(Continued on Page 19)

First Mortgage Real Estate Gold Bonds

Farmers who gauge their investments with shrewdness are awarding an increasing preference to the 7% first mortgage bonds recommended by this house.

Write for Booklet AG1231

Tax Free in Michigan
Free from Federal Income Tax of 4%

7%

Federal Bond & Mortgage Company

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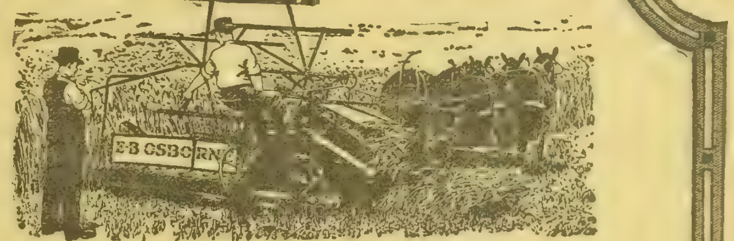
FEDERAL BOND & MORTGAGE BUILDING, *DETROIT*



You Can Depend on E-B Harvesting Machines

When your grain is ready to cut, even if it is in poor cutting condition, you must have machinery to harvest it all or your profit may be lost. E-B Osborne Harvesting Machinery can be depended on to do its share of insuring your profits.

For over 70 years E-B Osborne Machines—Grain Binders, Reapers, Mowers and Corn Binders—have been giving 100% service in all parts of the world. They embody the very latest practical improvements for saving time, and have exclusive features that are worth money to you. Adapted for use with either horses or tractor.

E-B Osborne Grain Binders and Reapers successfully harvest tall or short grain and get it all; E-B Osborne Mowers cut any kind of grass under any field conditions; E-B Osborne Corn Binders gather down as well as standing stalks and work without side draft.

Do not buy any harvesting machinery until you look into the E-B Osborne Line and get our prices

Emerson-Brantingham Implement Co.
INCORPORATED
Business Founded 1852 Rockford, Illinois

[Mail coupon today and get Harvesting Machinery Books]

Name..

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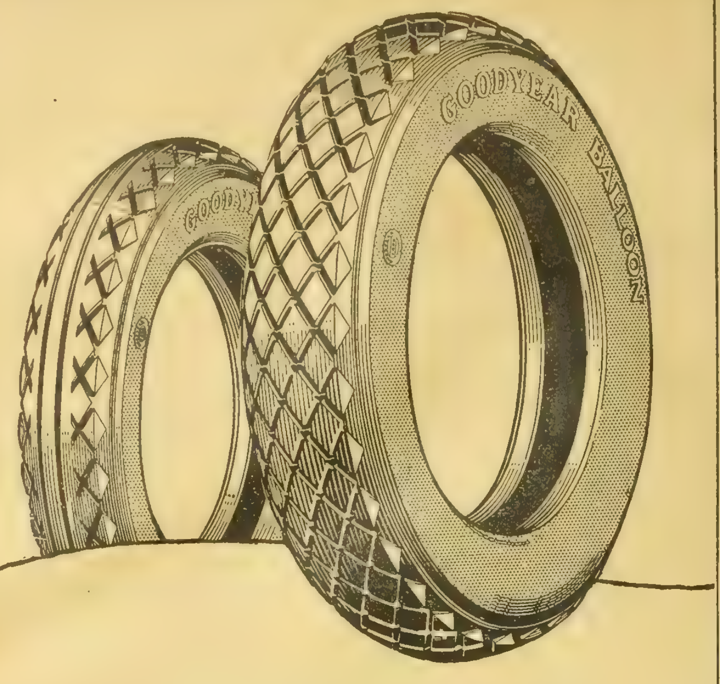
WRITE FOR FREE BOOKLET

THE E-B LINE



When you get Balloon Tires you'll want them at the least cost, of course. Your Goodyear Dealer will help you in this. He will recommend the kind you should have —whether for new wheels or the wheels now on your car. Goodyear makes and he sells *both* kinds of Balloon Tires—and either Goodyear kind is the best you can buy in quality and dependability.

Goodyear means Good Wear

GOODYEAR

Copyright 1924, by The Goodyear Tire & Rubber Co., Inc.

MAN
64
60 YEAR RECORD

SAVE MONEY

The **Manvel** Direct Stroke Windmill still leads after more than sixty years' dependable service. Thousands of them have run thirty years without upkeep expense.

The Manvel Fits Any Tower

Working parts encased; adjustable direct stroke; broad ball-bearing turntable. All made in our own factory—hence low price, high quality. The Manvel saves you money. Write for free book describing our wood and steel mills, towers, tanks, etc.

Kalamazoo Tank & Silo Co.; Dept. 744 Kalamazoo, Mich.

Protect Seed Potatoes

TREAT WITH J-J CORROSIVE SUBLIMATE

Obtainable through your Bureau or Agent. Trial box, making over 30 gals. solution, mailed for 75c. Write today.

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HELP WANTED

BE A BRICKLAYER. GOOD PAY. INTERESTING out-door work. Tuition $25.00 per month, five days per week, eight hours per day. Course four to six months, according to student's ability. Send for Circular. ASSOCIATED BUILDING EMPLOYERS OF MICHIGAN, 122 A. B. E. Building, Grand Rapids, Michigan.

FARM LANDS

108 ACRE MICHIGAN FARM. 925 FRUIT trees—equipment, $5000 income last year; close fine city, prosperous farmers all around; 75 acres fields for corn, potatoes, rye, hay, etc.; 30-cow pasture, woodlot, 450 cherries, 300 apples, 150 pears, plums, berries; comfortable 8-room house, cement basement barn, tenant house, etc. Owner unable operate $10,000 gets it, 5 horses, 4 cows, 8 heifers, bull, 200 poultry, milking machine, gas engines, etc. Part cash. Details page 39 illus. Bargain Catalog money-making farms, best sections United States. Copy free. STROUT FARM AGENCY, 427KJ Marquette Bldg., Chicago, Ill.

REAL ESTATE FOR SALE. 1. APPROXIMATELY 10 acres in Bangor Twp. Bay Co. 2. Approximately 20 acres in Hampton Twp. Bay Co. 3. Approximately 45 acres in Bangor Twp. Bay Co. All adapted for general or truck farming, dairying, located near the City. For further particulars inquire UNION MOTOR TRUCK COMPANY, Bay City, Michigan.

40 ACRES LAND, 15 ACRES CLEARED. On mail route, 8½ miles from Wolverine, Mich., 9 miles from Indian River, State Park, 2 miles from Silver Lake. Cheap for quick sale. LAWRENCE CARTER, Rogers City, Michigan.

MISCELLANEOUS

CHICKS: PURE-BRED S. C. WHITE LEGHORNS bred for egg production 14 years. $7.00 per 100 and up. Write for 32 page catalogue. WOLVERINE HATCHERY, Zeeland, Michigan.

Clean Threshing

You work hard to raise a crop and you cannot afford to put a *part* of your grain into a straw stack. You can save *all* your grain and have it perfectly clean if your threshing is done with a

Red River Special

It's different because it *beats out* the grain—instead of waiting for it to *drop out* as other machines do.

Its big cylinder throws the intermingled straw and grain with terrific force against the "Man Behind the Gun." 90% of the grain is separated right there at the cylinder. Beating shakers then beat the straw until all of the grain is saved.

No other threshing machine has these features.

The Small Red River Special

The small 12-bar cylinder Red River Special will operate successfully with any tractor developing 18 to 26 belt horse power.

Free catalog and literature tells all about the Red River Special and what users say about it. You will be interested whether you have your threshing done for you or want to do it yourself. Write today for your copy.

Nichols & Shepard Co.

(In Continuous Business Since 1848)

Builders Exclusively of Red River Special Threshers, Wind Stackers, Feeders, Steam and Oil-Gas Traction Engines.

Battle Creek, Michigan

STRAWBERRY PLANTS

SPECIAL OFFER: 300 NEW GROUND Senator Dunlap strawberry plants, $2.00, $1.50, $1.00. Postpaid. Satisfaction guaranteed: HAMPTON & SON, R. 14, Bangor, Michigan.

THE PLEADING OF NOW

A SERMON BY REV. DAVID F. WARNER

> TEXT: "Return ye now every man from his evil way,****** yet ye have not hearkened unto me, that ye may provoke me to anger with the work of your hands to your own hurt." Jer. 25:5,7.

THE death struggles of the Jewish nation are over. Judah has come to an end. She refused to be sobered by warning facts. Her unbelief crushed out her life. Some of her rulers were wise. More of them were otherwise. The throne of David is empty. Her land is desolate. Most of her inhabitants have been exiled. A heathen monarch is running things. What a long, doleful story has the prophet! How pleadingly he foretells the coming storm! Then the crash came. And why? Because, "Jehovah hath sent unto you all his servants, the prophets, rising up early and late, but ye have not hearkened nor inclined your ear to hear."

But nations are yet deluded with false hopes. And God is yet sending his prophets, rising up early and late, saying, "Return ye now everyone from his evil way." I listened to a Southern lecturer telling about the thinks we should do now. His climax was, that America must evangelize the world NOW. He said that if Christains were half so enthusiastic to have the world know and love the Christ, as are militarists (especially munition makers) enthusiastic in their business, in fifty years from now all the swords would be beaten into plow-shares and spears into pruning-hooks. Is this statement a bit startling? But after giving it sobered thought, don't you think it could be done if work to follow him NOW.

But this means really to proceed in the Jesus' way. In "What it means to follow Jesus", a college president writes, "By a demonstration of power, of sacrifice, of a real following of Jesus, there is a 'balm in Gilead' for the healing of the nations." And the call is to set to work to follow his NOW.

Is this Government following him now? How do you think it would work, that instead of planning to spend millions of dollars annually on a strengthened army, and navy, and air forces, we should prepare to feed and restore possible enemy nations? Jesus said, "If thine enemy hunger, feed him." Isn't Christianity practicable? Were we to cut our appropriations one half or even more and then use the funds to prepare an army of men to invade neighboring lands with bread for the half-starved men, women, and children, instead of with bullets, what do you think would happen? O, that is not practicable, you say. So said Israel, and her unsocial attitude and unGodly alliances with evil wrecked her house. But, methinks, the bread policy might act as a talisman in converting enemies into friends, in changing hatred and malice into love and gratitude, and in bringing erring nations under moral obligations to Jesus Christ. But we should do it NOW.

Again; the Jesus way means to "love your enemies." A Japanese tribute to Christ runs, "I think the only arm of religionists is their kindness (love). With this one arm they rush even into savage places and triumph everywhere." A Christian missionary to a heathen province said, "One missionary is worth a whole battalion of soldiers in bringing about order and peace." Let us love our enemies NOW. Did you say we do? Yes, but most of our love is held in solution. It is an intangible quality; something to be assumed only until it crystalizes into acts of self-sacrifice and service. Let us form the crystals NOW. Do you know the world is dying for a crystalized love right NOW?

But, again, to follow Jesus means self-amputation. We are to cut off selfish hands and feet. Mt. 18:7-9. But we are ever talking about selfish rights and national honor, forgetting that the ideal of a Christian nation is international. In Luke 4:16-30 Jesus announces his program. In this brief sermon he kindly lifts the veil of the Israelite mind and attempts to push out his social horizon into other lands where God pleases to bestow his favors. But this outlook is so dangerous to Jewish national policy that Jesus' hearers grow vehement and he only miraculously escapes with his life.

What meaneth this ultra-nationalism, this much boasted "America first" spirit? It means a patriotism of hatred. And that means war and hell. Let tell Henry W. Hobson, of Worcester, Mass., a college man and one with a distinguished war record. He says, "War has come to meân just one picture to me. In the St. Mihiel advance I came across a group of American soldiers ringed about a great sand pit where some German soldiers had been trapped in dugouts by the swiftness of the advance. Mind you, they were mainly farmer boys from Kansas and Missouri; boys who at home never had a cruel thought in all their lives. But now they had hit upon a most exciting sport. Part of the group were hurling hand bombs into the dugouts, and as the stunned and suffocated Germans rushed out with hands lifted, and scuttled to another door, the rest of our boys with leveled rifles shot them down like so many rats. It wás all I could do to stop this entertaining game, and that's what war does with character—bedevils it. And the only way to stop it is to begin now; not wait until we are all crushed into its hell again." How be it, our present policy is threatening just this repetition.

The United States, in her way, is giving the world a colossal exhibition of selfishness today. She is making herself rich at the expense of her bleeding and breaking down sisters, all the while barricading herself behind guns and the physical manhood of her realms. And the writer believes that back of much of our national policy is not so much a love of country as a greed for gold. If this be the way of the homeless Nazerene—but it is not. It is only the Christianity of men and may be labeled as such until it is purged of its narrowness and selfishness, and the millions of dollars that are not put into physical defenses and into surface tastes and pleasures, are put into human temples thru bread, education, and Christian missions.

But the Christianity of Christ is an international benediction. It stands for peace with justice for all. The two coordinate. It is a sweet-scented flower gradually but surely spreading its fragrance thruout all nations. We plead with America to provide fertile soil for the propagation of this Rose of Sharon. But whether she will or no, Christianity is destined to be the vital force of this world, and some day God will show what he can do with nations as he is today showing what he can do with individuals. We need not come together now so much to form plans for peace, but more to declare God's plan thru the revelation of our Lord and Savior, Jesus Christ. The Jesus' way must prevail, else a broad friendship and brotherhood will fail of realization. So, let us plead for this NOW.

BIBLE THOUGHTS

OF A TRUTH I perceive that God is no respecter of persons; but in every nation he that feareth him, and worketh righteousness, is accepted with him.—Acts 10:34, 35.

* * *

FOR GOD SO LOVED THE WORLD, that he gave his only begotten Son, that whosoever believeth in him should not perish, but have everlasting life.—John 3:16.

* * *

BLESS THE LORD, O my soul, and forget not all his benefits; who forgiveth all thine iniquities; who healeth all thy diseases; who redeemeth thy life from destruction. —Psalm 103:2-4.

* * *

BE SURE YOUR SIN WILL FIND YOU OUT.—Numbers 32:23.

* * *

O DEATH, where is thy sting? O grave, where is thy victory? But thanks be to God which giveth us the victory through our Lord Jesus Christ.—I Cor. 15:55, 57.

UNCLE RUBE SPINACH SAYS

SPRING AN' EVERYTHING

BEAUTIFUL spring! Wonderful time of the year. As a feller sez: "When a young man's fancy lightly turns to thoughts of love." I might say, when married men think of house cleanin' an' bein' all up-set for three or four weeks, when the gen'ral public 'spects to hear from our congressmen by way of garden seeds, an' sim'lar—Oh, beautiful spring! If it wasn't for you we might never know we had any congressmen, an' so we welcome spring. Maybe it's cold or hot, as the case may be—no matter what the weather is, we receive with joy or otherwise the little package of seeds sent by our congressman, with his regards. Seeds he ain't never seen nor thought of, to folks he cares no more about than the English sparrows they's a bounty on fer killin'. Friends there's a chance to put a stop to gover'ment expense. Seeds cost money, seed firms send mor'n a million dollars worth of old seeds down there an' they're sent out to us at gover'ment expense. Mebbe they grow, mebbe not. Our congressmen 'spects to get a vote next 'lection jest for that one little package of seeds. Now seeds, all kinds of garden seeds, are cheap—anybody 'at has a garden can afford to buy 'em. But are votes cheap? Can any man's vote be bought by a small package of garden seeds? Think it over friends; the seeds cost your congressman nothing, they are sent free, he knows nothing about where they're sent—why allow a thing like that? An' yet somebody has to pay, you, I, everybody helps pay for this foolish thing.

If you want to know about seeds, want something diff'rent than you can git in your store, there's always your own agricultural college. They will tell you everything, send anything you want, but folks, let no man buy your vote with a little package of seed that don't cost him a darn cent to begin with, an' ain't worth a dang when you get 'em.

An' yet in spite of it all, it's spring, an' a robin is buildin' her nest in a tree right in front of my south window—two of 'em in fact, an' I like to watch 'em. Love is there in the buildin' of that nest, it will last until the young are able to take care of themselves. There will be no divorce, no digression from the straight an' narrow path. Oh spring is beautiful to me. I get no garden seeds now you know. Couldn't hardly use 'em if I had 'em, so don't have to worry 'bout 'em, an' I tell you somethin' else—it brings nature back, squirrels an' everythin'. An' in watchin' the squirrels I forget some of the nuts we have. Well, I won't name any partic'lar place, but you know we got 'em, and jest one little thing 'at happens 's soon as spring comes. One great big fox squirrel walks the telephone cable past my room every morning jest 'bout 8 o'clock. Folks, I used to like to go out an shoot squirrels, now I'm lettin' the squirrels alone an' huntin' the nuts. Cordially yours.—UNCLE RUBE.

Wise To Men

A little crowd was gathered in the great man's studio to see his pictures before they were sent to the academy.

A girl strolling 'round turned to the artist and remarked:

"Strange that angels are always women, isn't it?"

"Yes," said the artist, with a twinkle. "Shows artists don't know much about women, doesn't it?"

"It may be so," retorted the girl quietly, "but it certainly shows that they know a lot about men."—Modern Art.

Referred to Mr. Bryan

"I believe in evolution to this extent."

"What?"

"That it was a jawbone and not a sparerib that woman came from."—Times-Union.

Worse and Worse

Thomas was not a prime favorite with his rich uncle. In vain did he try to impress him, but the old man was not easily impressed.

One evening the young man went to his uncle's home for a call, and in the course of conversation asked:

"Don't you think it would be rather foolish for me to marry a girl who was intellectually my inferior?"

"Worse than foolish, Thomas," was the reply. "Worse than foolish—impossible!"

92 New Threats Against Service

It may surprise you to know that the present Congress of the United States has already before it for consideration no less than ninety-two bills, each proposing to further restrict Railroad activities.

So wide is the scope of this proposed legislation, and so serious are many of its threats, that the Railroads have been forced to shape their affairs accordingly, as mariners take in sail when storm clouds the horizon.

Michigan's 24 steam railroads are today holding in suspense plans for the expenditure of large sums of money, pending legislative action on these ninety-two bills.

These expenditures, if released, would go into labor and materials—into Prosperity and Better Service.

Is it wise or just to thus threaten and impede the efforts of any honest business?

How would you welcome ninety-two additional threats against your independence of action in the pursuit in which you are yourself engaged?

We invite any thought on this matter which you care to express.

Michigan Railroad Association

508 Railway Exchange Bldg., Detroit, Mich. (7-27)

"We Serve Michigan"

Why Not PUT THIS NEW MILL ON YOUR OLD TOWER
ALBION

Albion steel and wood mills are quiet and powerful. *One-third the working parts of any other mill.* Only main Pitman bearing subject to wear. This is *oilless,* and easily replaceable. Governs by dependable weight without springs. Fits any 4-post steel tower. Why not shorten your chore hours *now* with a *good* Windmill? *This is your chance—F. O. B. Albion.* Erect it yourself. Ask your dealer, or write direct to

Union Steel Products Co. Ltd.
Dept. 34
Albion, Mich., U. S. A

SAVE HALF Your Paint Bills

USE INGERSOLL PAINT

PROVED BEST by 80 years' use. It will please you. The ONLY PAINT endorsed by the "GRANGE" for 50 years.

Made in all colors—for all purposes.

Get my **FREE DELIVERY** offer

From Factory Direct to You at Wholesale Prices.

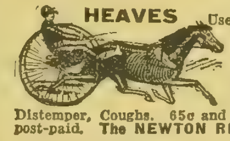
INGERSOLL PAINT BOOK—FREE

Tells all about Paint and Painting for Durability. Valuable information FREE TO YOU with Sample Cards. Write me. DO IT NOW. I WILL SAVE YOU MONEY. Oldest Ready Mixed Paint House in America—Estab. 1842.

O. W. Ingersoll, 256 Plymouth St., Brooklyn, N..Y

STRAWBERRY PLANTS FOR SALE

Senator Dunlap and Dr. Burrill, 60c per 100, $4.50 per 1000; Progressive Everbearing $1.00 per 100, $7.50 per 1000; St. Regis Everbearing Red Raspberries $1.50 per 100. Postage paid. **L. T. MORRIS, Athens, Michigan**



HEAVES Use 2 large cans. Cost $2.50. Money back if not satisfactory. One can at $1.25 often sufficient. **NEWTON'S** Compound for Worm Expelling, Conditioning, Heaves, Indigestion, Distemper, Coughs. 65c and $1.25 cans. At dealers or post-paid. **The NEWTON REMEDY CO., Toledo, Ohio**

STRAWBERRY PLANTS $3.00 PER 1000. Black Raspberry $12; Red $13. 20 Iris $1. 8 apple trees $1. 15 grapes $1; 1000 grapes $25. We grow the best plants in Michigan. Free catalog. **The Allegan Nursery, Allegan, Michigan.**

20 DELICIOUS APPLE TREES $1.00 Start them with my hand made root grafts. 100 Hollyhocks seed and list of other bargains for 10c. **MARSHALL'S VINEYARD, Paw Paw, Michigan.**

NATIONAL Hollow Building Tile

SAVES MONEY

garage, barns, warehouses, corn cribs, hog, milk and poultry houses, MAT FACE, homes, churches, etc. Glazed tile, wood or cement stave silos. Early buyers discount. Write for agency proposition.

National Clay Products & Silo Co.
DEPT. 16 MUNCIE, IND

FRUIT PLANTS—PRICES RIGHT—SEND for our free catalogue. Strawberries, Raspberries, Grapes, Dewberries, Gooseberries, Currants. State inspected. **Hellenga's Nursery, Three Oaks, Mich.**

The WINDMILL with a RECORD

THE AERMOTOR

The Auto-oiled Aermotor has behind it 9 years of wonderful success. It is not an experiment.

The Auto-oiled Aermotor is the Genuine Self-Oiling Windmill, with every moving part fully and constantly oiled.

Oil an Aermotor once a year and it is always oiled. It never makes a squeak.

The double gears run in oil in a tightly enclosed gear case. They are always flooded with oil and are protected from dust and sleet.

The Auto-oiled Aermotor is so thoroughly oiled that it runs in the slightest breeze. It gives more service for the money invested than any other piece of machinery on the farm.

You do not have to experiment to get a windmill that will run a year with one oiling. The Auto-oiled Aermotor is a tried and perfected machine.

Our large factory and our superior equipment enable us to produce economically and accurately. Every purchaser of an Aermotor gets the benefit from quantity production.

The Aermotor is made by a responsible company which has specialized in steel windmills for 36 years.

AERMOTOR CO. Chicago Kansas City Dallas Minneapolis Des Moines Oakland

The Children's Hour

SPRING

SUMMER is coming
And spring is here—
Bringing sunshine
And great cheer,
Bringing the flowers
And the bird-song—
With its warm breezes
All the day long.

Nature is opening
Her fairy books—
And birds are bathing
In the brooks.
We see the green buds
On the trees—
And feel the blessing
Of a warm breeze.

We see the little
Laughing sunbeams—
As we gayly walk
By meadow streams,
We breathe the warm
And summer air—
And hear the bird-
Song everywhere.

And as we receive
The benediction of the air—
We know that God
For us, does care,
And we raise on the
Air a happy song—
For summer is coming
With her flower throng.

Gladys Classman, Age 16 years,
R. 1, Sebewaing, Mich.

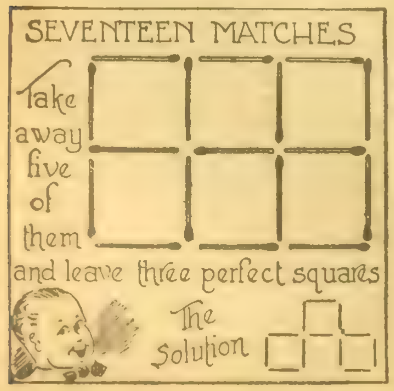
DEAR girls and boys:—The old saying is "April showers bring May flowers." If this is always true I think the crop of flowers this year is going to be about the largest every known, because we have certainly had a lot of rain, haven't we?

Today (I am writing this on May 1st) is a wonderful day. There is a little chill in the air left from winter, but the sun is shining brightly and it is warming up rapidly. Days like today make me want to play hooky from the office so I can work in my garden. I suppose by the time you receive this issue many of you will have all of your garden planted. I expect to have part of mine planted but not all. I am not going to plant as large a garden this year as last and devote more ground to flowers; I love flowers, don't you? All summer long I like to see vases of fresh flowers in each room of my house. The open windows and doors let in the fresh, cool air, and the flowers give forth a scent that is carried about the rooms by faint breezes. When you come in tired and out of sorts you are not in the house long before you begin to feel rested and your nerves quieted. Raise lots of flowers this summer and keep fresh ones about the house. You will be making life a little brighter for your parents, yourself and everyone who comes into your home. Just try it and see.—UNCLE NED.

OUR BOYS AND GIRLS

Dear Uncle Ned:—May I join your merry circle? I am fourteen years of age. I am five feet four and one-half inches tall. I am a blonde, have blue eyes. I have two sisters and one brother. We live on a eighty acre farm. We have acres of land besides what we live on. We have seven horses, seven cows, and nine young cattle. For pets we have a dog named Jiggs and two cats. My father is a mail carrier. We live four and a half miles from town. Last year we took a trip to the Soo. We had a dandy trip. We camped out. We went by the way of the shore of Lake Huron by way of Bay City, Oscoda, Alpena and Cheyboygan and came back by way of Petosky, Gaylord, Grayling and Bay City. I would write to anybody who will correspond with me. I corresponded with one girl over a year. From your niece.—Margaret Cameron, Deckerville, Mich.

Dear Uncle Ned:—May I join your merry circle? We take the M. B. F. and like it very well. I will describe myself. I am eleven years old, four and one-half feet tall, have brown hair and hazel eyes. I have two sisters and one brother. I am in the eighth grade at school. Do you like sleigh rides Uncle Ned? I do. There is fine sleighing up here in the winter. I have been in Mt. Clemens and think it is a nice place. Would some of the boys and girls write to me? I will answer their letters. I must close and hope the waste basket donesn't get this because I will write another if it does. Your nephew,—Ford H. Weyeneth, Deckerville, Michigan.


SEVENTEEN MATCHES
Take away five of them and leave three perfect squares
The solution

Dear Uncle Ned:—Will you let another girl join your circle? I have been a silent reader of the Children's Hour for a long time. I have written several times before but I guess Mr. Waste Basket must have been hungry and got my letters. I have light hair, bobbed, blue eyes, am light complexioned, am four feet, eleven and three-fourths inches in height and I weigh eighty-six and one-half pounds. I am eleven years old and my birthday is August the eleventh. Have I a twin? If I have I wish they would write to me. For pets I have a cat and four kittens, and a dog whose name is Sport. I have three brothers and three sisters. We play base ball at school. I am in the seventh grade at school. I like to play it, do you Uncle Ned? There are three, including myself, in my class. I like my teacher very much. We have a club at school and we have meetings every two weeks. At this meeting we have current events for roll call and then a program and then we elect officers. I would like to have some of the nieces and nephews write to me. I would try to answer them all. I will cloose with some riddles. What is the easiest way to get down off an elephant? What goes around around the house and at night it sits in the corner? From your want-to-be niece,—Lois Meyer, Stanwood, R. 2, Michigan.

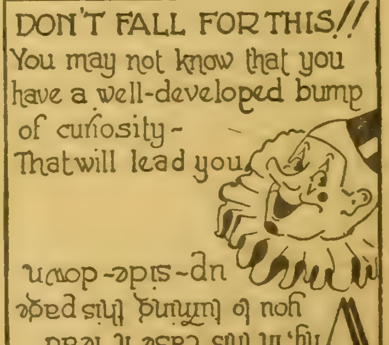
Dear Uncle Ned:—Would you admit another cousin to your happy circle? I have wanted to write for quite a while but I have just found the courage. I am a girl 13 years old, have blue eyes, brown hair which is bobbed. I am 4 feet and 3 inches high. I go to the country school and am in the eighth grade. We have a piano which I can play and I also can drive our Ford car. I like to read the Children's Hour. I think the letters are very interesting. I am next to the youngest in our family. I have four older sisters and three older brothers. My youngest brother will be four this month. I wish the girls and boys would write to me. Your niece,—Lura Haines, Coleman, Michigan.

Dear Uncle Ned:—May I come in and join your circle? I have been a reader of the Children's Hour for about four years. I live on an eighty acre farm. I am twelve years old, have dark brown hair, it is bobbed, have a dark complexion. I have one sister, her name is Edna, and one brother, Elwin. We have three horses, three milking cows and six young cattle. For pets I have a pup named Teedy and a cat named Tom. I would like to hear from the girls and boys. I hope Mr. Wastepaper Basket does not get my letter. Our school is just across the road from us. Well as my letter is getting long I will close.—Bessie Steele, Fibre, Michigan.

Dear Uncle Ned:—I have read the Children's Hour with much interest and as it was so long ago that I wrote I thought I would write again. I will be fifteen years old the fourth of May. We are going to have one acre of cucumbers and one acre of string beans this summer to raise for the factory so you see we will be busy. I am also going to have a flower garden as I enjoy raising flowers. I have four sisters and one brother and also two grandmothers and two grandfathers which are still living and in good health. They have both had their golden wedding. We live about one-half mile between them both. We are writing a theme at school which is "Pioneer Life" in Montcalm county. I think it seems nice to have spring visit us again. I always read the womens page in the M. B. F. and find many interesting things there. I have tried some of the recipes and have had good luck. I like to cook and bake and crochet. I have been taking music lessons. I hope my letter will not be too long and I also hope he won't be in sight when you read this letter. Oh! that greedy old basket. Here I go! I just missed it! Maybe he'll have more strength next time. Your niece, Miss Alice Rasmussen, Greenville, Mich., R. 4, Box 67.

Dear Uncle Ned:—Well, here I am again! I certainly was glad to see my first letter in print, and I was also glad to get so many letters from the cousins. I enjoyed reading them all, and I would like to answer them all, but I just promised to answer all who guessed my right age, which is 15. Although I will soon be sixteen. I would write to all who write me, but it would keep me busy writing letters, and anyone who goes to high school will agree with me, when I say I have enough to do to get my lessons, especially when next week is examination week. When I was going to Canada last summer, I went through Mt. Clemens, and I think it is a very pretty city. When I was going through there, I wondered why it was called the "Bath City" but I have found out since then. Were any of the cousins ever in Battle Creek? Or were you Uncle Ned? If any of you have been, I think you will agree with me that it is a nice little city. We have a very nice high school here, a beautiful athletic field, a large sanitarium, and many other things of importance. I suppose most of you know that Battle Creek is the home of "Kellog's Corn Flakes", so now whenever you are eating corn flakes, or any breakfast foods, think of me. Our high school basket ball team is playing with Jackson tonight. I certainly hope we win, but if we do lose, it will be the first game we have lost this season. I like to watch a foot-ball game, although it is very rough. I don't care so much about watching a basket ball game though. Well I'm sure everyone is tired of reading this by now, so will leave space for some one who writes more interesting letters. As ever, your niece,—Sadie London, 66 Hanover St., Battle Creek, Michigan.

Dear Uncle Ned:—I have certainly neglected you awful but I have thought of you just the same. I will not make this long as I am submitting a poem again which I hope you see fit to print. You asked that the poets get busy so I thought I'd try anyhow. I think Muriel Frey's idea is splendid. Cordially youors,—Ruby N. Slack, Ellsworth, Michigan.


DON'T FALL FOR THIS!!
You may not know that you have a well-developed bump of curiosity -
That will lead you
Why, in this case it lead you to turning this page up-side-down

The Foolish Little Girl

"ONCE upon a time there was a little girl who was always wishing, wishing, wishing. In fact she wished for almost everything she saw. This Foolish Little Girl had a very unhappy disposition; for she let envy and dissatisfaction steal into her heart, gnawing at the beautiful things that lay hidden there, such as love and peace and contentment.

"One day she started down town with her lovely mother. And they had not gone far when she saw her neighbor Carroll riding along on his Shetland pony.

'Mother, I wish I owned that pony!' and a little farther on,

'Mumsy, I like Grace's house much better than ours. I wish we lived in it!'

On they chatted. The Foolish Little Girl holding to the Wise Mother's hand. Soon they came to a large window full of toys and dolls.

'Oh, Mumsy, see those beautiful playthings. I wish they were all mine!

Her mother looked down at the small bobbed head,

'Listen dear, forget your wishes and run down to the playroom of this store while I go up to the restroom for a few minutes. I feel a little ill!' She did not add that she was sick at heart.

The Foolish Little Girl ran down the steps till she came to the playroom. It was in the basement of a huge department store fitted out with swings and slides and everything that makes the hearts of children glad.

'Oh!' gleefully exclaimed the Foolish Little Girl. 'I wish all these wonderful things belonged to me.'

Upstairs sat the Mother, thinking, thinking, thinking.

'If only I could break the Foolish Little Girl of this bad wishing for everything she sees. It really makes me sick at heart.'

'I can break her of that habit,' said a tinkley, pleasing voice at Mother's elbow. The Mother eagerly looked up. Sure enough there stood a Fairy.

'Oh, can you, lovely Fairy? How grateful I shall be.'

But when she looked again the bad-habit-breaking-fairy had vanished.

Soon Mother heard a small voice, 'Come on, Mumsy, time to do your shopping.'

The Foolish Little Girl went with Mumsy to do her shopping. Mumsy talked to her telling her how she must be satisfied with what she had and not be always wishing, wishing, wishing. The Foolish Little Girl would remember only a short time and then,

'Oh, Mumsy, look at that lovely parrot in the cage. I wish I owned him!' or,

'Pretty dress, isn't it, Mumsy? I wish it were mine.'.

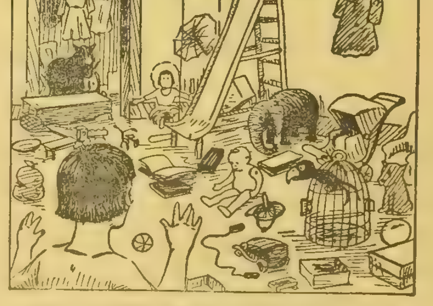
Shopping over Mumsy and the Foolish Little Girl started home. Still was the Foolish Little Girl wishing, wishing, wishing. When they arrived home there stood not their dear, inviting little white cottage, but a house exactly like the big white one the Foolish Little Girl had wished for that very morning.

'How strange!' exclaimed the Foolish Little Girl in amazement.

But Mumsy only smiled a mysterious smile and led her by the hand into the house.

'The Lovely Fairy has been here," she thought.

And what do you think? There in the front room stood the Shetland pony pawing at the blue rug, the very one the Foolish Little Girl had wished for. In another room were all the slides and swings and playground things piled high. And, oh goodness me! In the dining room were the hundreds of toys she had wished for and hanging in the hall any number of dresses and hats and coats and shoes and well, just everything. And, oh dear me, the sight almost made her ill. There was no place to sit down for all the chairs were full of things she had wished for, and hardly room to turn around.



"The Lovely Fairy has been here."

The Foolish Little Girl hated it all. Over in the corner sat the gay-colored parrot, squealing,

'And what do you wish for now, Foolish Little Girl?'

'Mercy, I shall never again wish for a single thing' and the Foolish Little Girl ran to the wise Mother's shoulder and cried very hard and long and—"

"Oh, Grandmother," chimed up Marjorie, "you made up that story about me!"

Grandmother smiled and looked over the top of her glasses at her grandchildren but said never a word. Grandmother was like that. She often kept you guessing and knew lots of secrets.

"Sure, Marjorie, The Foolish Little Girl was you. I knew it all along," Billie grumbled in his deep little voice.

"Dran'ma, you is a fine story teller. But, please make the next one about me," Small Sister squealed, delighted.

"Well, I guess I'll have to be a wise little girl now and break my bad wishing habit or I may have our parrot squealing at me, 'What do you wish for now, Marjorie?' "

And all the children ran to Grandmother and, between hugs, voted her the prize story teller.—By Helen Gregg Green.

CURING BLACK LEG IN POTATOES

Is there a cure for black leg in potatoes? If there is would it cure them that already has it or would it just prevent those from getting it that are not diseased?—L. S., Remus, Mich.

—The black leg disease lives both in the flesh and on the skin of the potato. Seed treatment with corrosive sublimate which is so generally used for the control of black scurf and scab is effective against the black leg organisms that may be on the skin of the potatoes. It is not effective against the organisms in the flesh of the potato. Since potatoes effected with the black leg disease are very apt to rot in storage and by this means spread the disease to adjoining tubers, the seed treatment with corrosive sublimate is quite effective in controlling black leg.

Before treating the seed the grower should sort out the potatoes very carefully removing any tubers that show indication of rot. After the potatoes have soaked thirty minutes or so in the solution of corrosive sublimate they should be removed and dried quickly. In cutting the seed, throw away any potatoes showing any discoloration in the flesh, since such potatoes may carry the black leg or wilt diseases.

To successfully control the black leg disease, it is also necessary for the grower to rogue out the diseased plants during the growing season. Black leg may show up quite early in the season causing the plant to be small and giving it a peculiar light green or orange coloration in the leaves. When such plants are pulled up, it will be noted that the stem is rotted and is usually black in color. This disease seems to be worse in wet soils and in wet seasons. Oftentimes it developes very late in the season, therefore, rogueing should be kept up until the plants are killed by frost.—H. C. Moore, Extension Specialist, M. A. C.

MUTUAL AUTOMOBILE INSURANCE

(Continued from Page 15)

portion by an assessment, to clean up all liabilities in full.

The only advice that we could give through this page as to which company to select would be that you make sure that the company you are going into is strongly financed and has a large membership. We would also advise against going into something which insures in Detroit, Grand Rapids, and other cities where the liability is much higher than it is in the rural districts, and we would further advise that you have the agent who sells the insurance explain to you carefully from the policy itself exactly what you can expect in case of accident or collision as most of these policies contain "deductable" clauses which make the insurance much cheaper to buy but naturally of less value to the purchaser.

It is our opinion that no farmer can afford to drive an automobile or truck on the roads of Michigan who is not insured at least against liability, whether or not he can afford to carry his own fire and collision insurance is a matter for he himself to decide, but the risk of a suit for damages which might run five thousand dollars or more is too much for any man to carry unprotected.

ANOTHER CLAIM ADJUSTED

DEAR SIR:—Am writing to tell you my claim No. 1457 has been settled owing to your kindness in taking up the matter and I thank you very much and I think your readers certainly should appreciate your kindness in cornering up the highliving rascals who use the mails to defraud people, especially sick ones who hope to receive help. —Mrs. C. L., Williamston, Mich.

REGARDING MUSKEGON ENGINE COMPANY

Our latest information upon this company indicates that the company is out of business and there has been no market for its stock in quite some time.

Dear Sirs: I received the money and wish to thank you for your kind services. I know without your help I should never have gotten it. Respectfully, R. R., Mancelona, Mich.

I think the Fisk Red-Top is the only tire on the market for country use
the doctor
Time to Re-tire? (Buy Fisk)
FISK
RED-TOP
CLINCHER TIRE

Are You Using Our Service and Protective Bureau?

Have you any perplexing farm or business problems? Then call on our Service Bureau.

Thousands of THE BUSINESS FARMER readers have learned that THE BUSINESS FARMER is more than a high class farm paper. It is a friend as well, one who serves—and never fails in time of need.

As a subscriber to THE BUSINESS FARMER, you are entitled to all the rights and benefits of our Service Bureau. We want you to use this service—call on us freely.

RESULTS

Dear Sir: We are writing you regarding ————. Claim No. 1257. We are very pleased to say it has been settled satisfactorily. We received the check in less than two weeks after writing to you. We are very thankful for the assistance you have given us and will endeavor to boost the M. B. F.—J. D., Jr., Ubly, Michigan.

Claim No. 1257.
Amount of claim, $40.00.

Gentlmen: We have today received the radiator we ordered from ———— & Co. I thank you for conducting a department in which we farmers can come to.—F. P. K., Belding, Michigan.

Claim No. 1234.
Amount of claim, $12.25.

Dear Sir: We received the knickers from ———— today. Thanking you very much for the same. They certainly got busy when they heard from you. Wishing you success in your good paper, I am,—V. A., Mt. Pleasant, Michigan.

Claim No. 1368.
Amount of claim, $3.77.

Dear Sirs: In todays mail I received my money from the ———— & Co. I asked for your help only ten days ago. I must say I am more than thankful to you.—Mrs. F. M., St. Clair, Michigan.

Claim No. 1355.
Amount of claim, $3.03.

JUST A FEW THINGS IT WILL DO FOR YOU

Will furnish you protection from swindlers, fake peddlers, and promoters.

Tell you about any investment or stock selling scheme. Invest no money in any scheme before you have asked THE BUSINESS FARMER Protective Service about it.

Aid you in collecting any claim you may have against any insurance, railroad, express or other company.

Aid in the collection of obligations.

Help you in the adjustment of claims.

Give you prompt information and advice about any crop, soil, live-stock, dairy, or poultry problem.

Furnish expert market information whenever you have something to sell.

Help you with any building construction or farm machinery problems you may have.

Tell you the law and custom on all questions of rents.

Answer any question with regard to home or community life, schools, canning, cooking, preserving, or housework in general.

Give you correct information on any farm subject and will help you in trying to settle and farm, health, or legal trouble of any sort.

Protective Sign and Certificate

We want every reader of The Business Farmer to have one of our beautiful certificates of membership and a Protective Service Sign. The certificate is suitable for framing and will be mailed free of charge.

The Protective Service Sign acts as a warning to swindlers and fakers and informs all that you are a member of an organization of power and influence that will stand with you in support of your rights. We are asking a small charge of 25 cents to cover cost of sign and mailing.

THE BUSINESS FARMER,
Mt. Clemens, Michigan.
Gentlemen:—

Check for either or both the certificate and sign.

☐ Please mail me a membership certificate free of charge.

☐ I would also like one of the Protective Service signs and am enclosing 25 cents to cover cost of sign and mailing.

Name ....

P. O. ...., Mich

The Farm Home
A Department for the Women

Edited by MRS. ANNIE TAYLOR

DEAR FOLKS:—Have you a "happen-so" kitchen or is it well planned? Are your cupboards, table, stove, ice box, sink, arranged to save you steps, or are they just placed against the wall with no thought of convenience? The average woman on the farm does too much walking. There are a certain amount of steps she must take but by arranging the kitchen properly she will be surprised how much walking she can save herself. On this page I am publishing an article by E. A. Kirkpatrick. The Kirkpatricks had a kitchen that was not "handy" so they rearranged it. Mr. Kirkpatrick explains with type and illustration how they did it and I hope you all get some pointers from him. If you have a better arrangement tell me about it and send a rough sketch if possible, and I will publish the information for the benefit of my readers.

Your Friend,
Mrs Annie Taylor

Address letters: Mrs. Annie Taylor, care The Business Farmer, Mt. Clemens, Michigan.

THE BUGGY ON THE PORCH

By Anne Campbell

THERE he sleeps, the little king,
Where the winds of April fling
Scents of new buds blossoming—
On the porch!

In his fuzzy bonnet white,
With his rosy lips shut tight,
These two hours are a delight
On the porch!

Through his dreams, the children shout
As they gaily run about;
Then they see the baby out
On the porch!

And they scamper up the street,
Saying "Hush" to all they meet.
They won't wake the baby sweet,
On the porch!

Let him sleep, the little man,
Getting all the rest he can,
Where the sunbeams reach and span
On the porch!

Soon he'll run the same as you,
Happily the morning through.
You were once a baby, too,
On the porch!

(Copyright, 1924.)

HOW TO BE A HEALTHY CITIZEN

DR. ROYAL S. COPELAND, United States Senator, formerly Health Commissioner of the City of New York, and a former resident of Michigan, recommends the following rules:

I solemnly promise that on each and every day I will spend at least one hour in the open air in walking or in some other form of physical exercise.

I further promise that I will take at least twenty minutes for my midday meal, that is lunch, or thirty minutes if the meal is dinner.

I will give myself at least a half hour for removing the day's dirt and for rest before sitting down to my evening meal.

I will sleep two hours before midnight and at least six hours thereafter, in a room ventilated by an open window, both winter and summer.

I will refrain from harmful excesses in the use of candy, tobacco, medicines, rich food and from any practice that will lower my resistnce and leave me liable to disease.

I will do only such things that make for my health and by neighbor's health. I will refrain from doing anything that may damage me or do harm to my fellow-man.

I set for myself high standards of living, and by clean lines of mind and body will make this year better than any previous year in my life.

CLEANING BROOMS AND BRUSHES

THE ideal arrangement for one's cleaning implements is to keep a complete set of them in a well-ventilated closet having a shelf for soaps, powders and other cleaning agents. Well-made, durable utensils are an economy if they are kept in good condition.

Of brooms and brushes most housekeepers feel that they need at least the following: A corn broom, a soft-hair brush on a long handle, a soft-hair dust-brush to use with the dust-pan, a scrub-brush and a toilet-brush. Dust-pan, dust-brush and scrubbing-brush may have long handles if preferred. Special brushes for walls, radiators, upholstry, waxed floors and the refrigerator drain-pipe are often found desirable. Two mops are usually needed—a wet mop, which can be used more easily if a wringer-pail is provided, and a dry mop either oiled or untreated. In addition, a carpet-beater and a floor-pail are almost indispensible, while many housekeepers consider a vacuum cleaner essential.

All brooms, brushes and mops should be hung by strings or screw-eyes fastened to the handles so that the weight does not rest on the straws, bristles or strings. Carpet-sweepers should be set so that the weight does not come on the brushes.

As far as possible, cleaning equipment should be put away clean and ready for use. Corn brooms may be washed in hot soapsuds, but care must be taken not to let the water rust the wires which hold the straws to the handle. The hair and lint which accumulate in brushes, especially in carpet-sweepers, may be taken out with an old button-hook, a coarse comb or old scissors, The box of a carpet-sweeper should be opened over dampened newspaper, the dirt emptied out and the brush cleaned. The mechanism should be kept properly oiled. A vacuum carpet-sweeper is cleaned in the same way, but in addition the bag must be taken off and emptied. Bristle brushes may be washed with luke-warm water and a little alkali—either three teaspoons of dilute ammonia or one teaspoon of borax to a quart of water—and then rinsed in clear water. Care should be taken not to wet the back of the brush, or the cement holding the bristles in place may be loosened.

DON'T WORRY IT YOU CAN'T SLEEP NIGHTS

TO make a business of sleep is a bad habit. That is what persons do who worry because they can't sleep.

In answering a question about insomnia, Hygeia, the health magazine, declares that the chief harmful effects from not sleeping are caused not by sleeplessness, but by worry over not sleeping.

Sleep should and will come naturally, if one will only realize that it is rest and not sleep that is needed, says the health journal.

Of course it is important to pay attention to the ordinary rules of hygiene, with regard to exercise, fresh air and reasonable diet. But above all, it is important to fill one's life with satisfactory work and play.

The best incentive to sleep is still the feeling of "something attempted, something done," particularly something to help others.

As to the amount of sleep needed by different persons, that varies within wide limits and is much modified by habit. Many energetic, active individuals get along quite well with four or five hours of sleep. The proper amount for the average adult, however, is usually between seven and eight hours.

Our "Wife-Saver" Kitchen

OUR kitchen is a "wife-saver" (that is what my wife calls it) compared with what it was when we bought the house three years ago.

When we moved in, we put our kitchen in shape just about like it had been formerly, just to save time in getting settled. Then we began to figure out how we could better things by a few changes and additions here and there.

Fig. 1 shows the kitchen as it was in the first place. The work table was in front of the window, clear across the room from the sink and range.

Imagine yourself clearing the dining room table. If you did it as my wife did, you would take the dishes to the far side of the kitchen to the work table, stack them, then cross the kitchen to take them to the sink, and after washing and drying them, recross the kitchen to put them in the cupboard. (Our dining room is too small for a china closet, so we must use the kitchen cupboard.) And in preparing a meal it was necessary to cross the kitchen from the table to the range.

The ice box—well, when it was filled, there was always a trail of dirt and water clear across the kitchen, from the door.

The first change we made was to move the work table out in the middle of the floor, close enough to the sink that either the table or sink can be reached without taking more than a step. See Fig. 2.

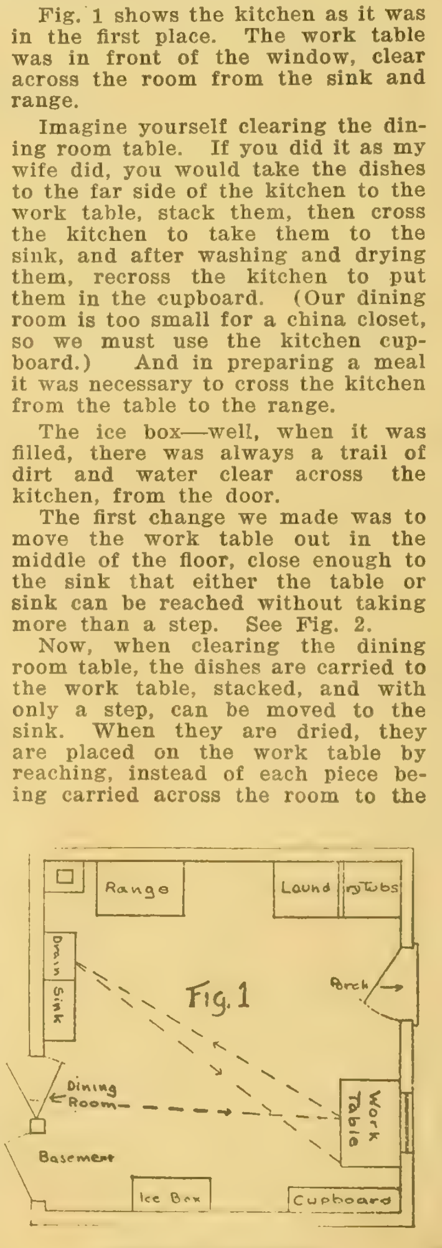
Now, when clearing the dining room table, the dishes are carried to the work table, stacked, and with only a step, can be moved to the sink. When they are dried, they are placed on the work table by reaching, instead of each piece being carried across the room to the table as before. Just think of the steps saved. And now, the table is close enough to the range that only a step is necessary to take a dish from the range to the table, or to empty a kettle into a dish on the table. There is a small cupboard under the drain board for dish pan, dish drawer, soap, etc.

Then, where we used to have the work table, we have a breakfast nook. This is the delight of our hearts—or of our kitchen, if you wish. It is in a place handy to the cupboard. This original cupboard now is used for cereals, coffee, bread, etc.—principally the things used for breakfast—and also pots and pans. There is an electric light outlet handy to the table, and we have out toaster right on the table next to the window. The only trip we have to make to the range for breakfast is for coffee and cooked cereal, when we serve it.

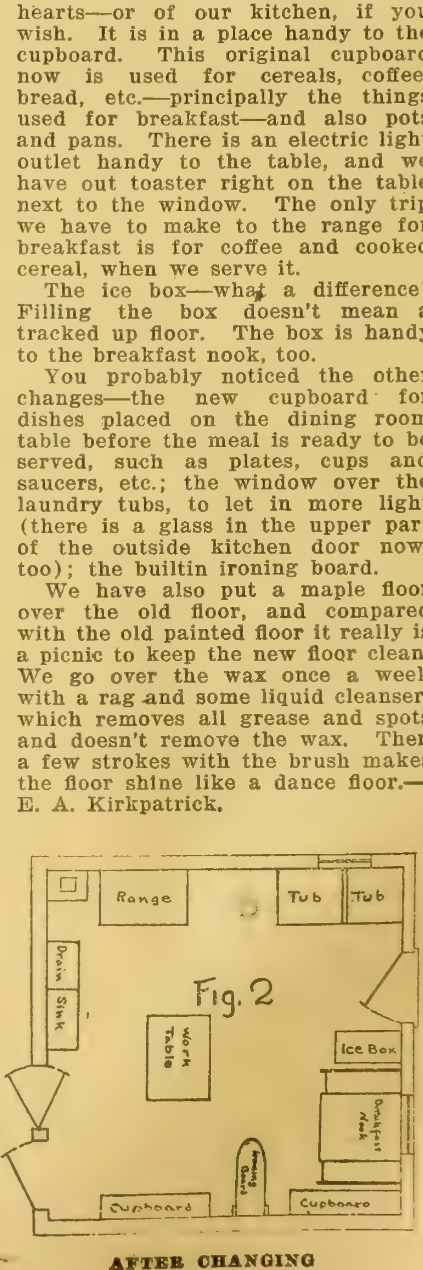
The ice box—what a difference! Filling the box doesn't mean a tracked up floor. The box is handy to the breakfast nook, too.

You probably noticed the other changes—the new cupboard for dishes placed on the dining room table before the meal is ready to be served, such as plates, cups and saucers, etc.; the window over the laundry tubs, to let in more light (there is a glass in the upper part of the outside kitchen door now, too); the builtin ironing board.

We have also put a maple floor over the old floor, and compared with the old painted floor it really is a picnic to keep the new floor clean. We go over the wax once a week with a rag and some liquid cleanser, which removes all grease and spots and doesn't remove the wax. Then a few strokes with the brush makes the floor shine like a dance floor.—E. A. Kirkpatrick.



BEFORE CHANGING



AFTER CHANGING

Personal Column

Keeping Horse-radish for Winter.—I saw where a subscriber's wife asked how to keep horse-radish for winter use. This is the way I keep it. I dig it in the fall and bury it in a box of dirt and put in the cellar. It will keep fresh all winter and can be fixed as you want to use it.—Mrs. B. F., Mancelona, Michigan.

Canton Flannel or Canvas for Gloves.—I am writing to find out where I can buy canton flannel or canton canvas for making men's work gloves, and also the knit wristing. I have tried at all the mail order houses but cannot find the wristing or the quality of canton canvas I would like. Any help will be appreciated. Your paper is the best ever, we enjoy it so much.—Mrs. Vern Horton, Glennie, Michigan.

Found Reproducer for Phonograph.—I have found a four minute reproducer for my phonograph. Several of the readers wrote me but I bought from the first one to write. I want to thank all who were so kind as to answer my request.—Mrs. Sarah Wright, Middleton, Mich.

Salad Dressing Recipe Wanted.—I heard from Mrs. Geo. Mattenson, also received some fancy work from her for what I sent her and I thank you very much for your trouble. I sure make use of the Farm Home department; it is the first thing I look for when the paper comes. I wonder if any of the readers know how to make salad dressing that can be put in fruit jars and used a little at a time. I would like to put some up now so that I could use it this summer.—Mrs. J. E. S., Manistee, Michigan.

Trouble With Bedbugs.—I wonder if any of the readers have had any experience with bedbugs. I moved into a little, old house last spring but did not discover the bedbugs until in August. from then until cold weather I worked hard with gasoline. I find gasoline very good but you have got to touch the bugs. I wonder if there is something one can burn that will kill them all at once. I do not feel strong enough to repeat again this summer. Thanking you in advance for any help, I am a constant reader.—Mrs. C. R., Adrian, Mich.

Who Weaves Rugs?—I would like to ask through the Farm Home department if any one can give me the address of one who weaves rugs from ingrain carpet. I know of the Olson Rug Co., but do not care for their rugs.—Mrs. N. H. Millikin, Ann Arbor, Michigan.

Wants Quilt Pieces.—I am a farmer's wife and love the great out-doors. I wonder if any of the sisters have quilt pieces that they do not want. I would like to get pieces. Our house burned to the ground the 29th of last February and we lost all we had. We need bedding and all my pieces burned so would be thankful for anything that would help.—Mrs. E. J. Hildebrandt, R. 2, Box 57, Grand Junction, Michigan.

Menu for May 10th

*Puree, a l'Indienne
Lamb Stew with Dumplings
Lettuce, French Dressing
Cheese Balls
Snow Pudding
Coffee

***Puree, a l'Indienne**—2 large apples, 4 tablespoons fat, 1 large onion, 1 large carrot, 1 turnip, white 2 leeks, 1 stalk celery, sprig parsley, 1 bay leaf, 1 tablespoon cocoanut; juice ½ lemon, 1 tomato, 1 teaspoon salt, ½ teaspoon red pepper, 1 tablespoon curry powder, 1 teaspoon curry paste, ½ cup cream, some boiled rice, and 2 quarts of water.

Melt fat, cut up all vegetables (prepared) into rough pieces, fry them a little in hot fat, add also curry powder, and fry it. Do not peel apples; simply wipe, cut up and add with vegetables. When fried for 7 minutes, add all ingredients except cream, simmer till soft, then rub all through fine sieve, return to pan to reheat, and gently add cream. Serve rice on paper mat, as croutons are served with most soups.

RECIPES

Favorite Cookies.—1 cup of butter, 1½ cups of sugar (granulated), ½ cup of sour milk, 1 level teaspoon of soda, 1 teaspoonful of grated nutmeg. Flour enough to roll, make quite soft. Put a little sugar over cookies before sliding into the oven to bake. Bake in a quick oven till a light brown.—Mrs. W. B.

Rolls—Take enough bread dough when baking bread, roll half inch thick spread butter on quite thick, sprinkle cup sugar on, then use nutmeg to season nice, then roll it in a long roll. Cut with knife across end. Fill tins, let raise and bake. Mrs. E. J. H.

Griddle Cakes, Sweet Milk—2 cups flour, 1½ cups milk, 3½ teaspoons baking powder, 1 egg, a tablespoon fat, ½ teaspoon salt. Put all ingredients but fat in bowl and mix well. Add melted fat. Bake on hot griddle.

Griddle Cakes, Sour Milk—2 cups flour, 2 cups sour milk, a teaspoon baking powder, 1 teaspoon soda, 3 tablespoons fat, ½ teaspoon salt. Sift dry ingredients into sour milk. Add melted fat. Bake on hot griddle.

Popovers.—2 cups flour, 2 cups liquid (milk or water), 2 eggs, 1 teaspoon fat, ½ teaspoon salt. Put all the ingredients into a bowl. beat with a dover egg beater. Put in hot iron pans. Bake in hot oven twenty-five to thirty minutes. Popovers may be used as a bread, as a desert if filled with whipped cream. Pieces of fruit may be dropped into each pan before baking.

Poor Man's Molasses Cake.—1 cup of molasses, 1 cup sugar, 1 cup shortening, 1 heaping tablespoon ginger, 1 cup boiling water. Use flour enough to handle nicely. Bake in hot oven. Very nice.—Mrs. E. J. H.

Cookies with Carbonate of Ammonia.—Carbonate of ammonia 1 oz, sugar 1 pt, sweet milk ½ pt, sweet cream ½ pt, flour enough to roll them out nicely. Bake quick. They are better to let stand 2 or 3 days.—Mrs. C. D. C.

—if you are well bred!

When conversing never interrupt another speaker. The unduly raised voice and the whisper represent two improper extremes of conversational tone. Do not use verbal exaggerations: "perfectly gorgeous," "perfectly magnificent," "enough to make me die laughing," etc. Do not listen with half a mind or half an ear. Speak of no one by their Christian name whom you do not yourself address by that name; to do so is vulgar. If you are compelled to cut short what someone else is saying, apologize for the necessity. Never correct another's mispronounciation before others, even though you may know the offender well. If you pay compliments, do so intelligently; do not offend common sense. Do not address people who you know slightly by their first names. To do so is very rude.

The Runner's Bible

(Copyright by Houghton Mifflin Co.)

I have blotted out as a thick cloud, thy transgressions, and, as a cloud, thy sins; return unto me; for I have redeemed thee. Isa. 44:22.

Sin has no more reality, substance, nor power than a cloud; but it does seem to obscure the real man. However, Love will make the clouds vanish and the real man will be revealed.

WOMEN'S EXCHANGE

If you have something to exchange, we will print it FREE under this heading providing: First—It appeals to women and is a bonifide exchanges, no cash involved. Second—It will go in three lines. Third—You are a paid-up subscriber to The Business Farmer and attach your address label from a recent issue to prove it. Exchange offers will be numbered and inserted in the order received as we have room. —MRS. ANNIE TAYLOR. Editor.

116—Gearhart Knitting Machine for anything of equal value.—Mrs. Ren Collins, Fenwick, Mich.

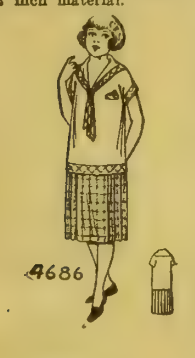
AIDS TO GOOD DRESSING

BE SURE AND SEND IN YOUR SIZE

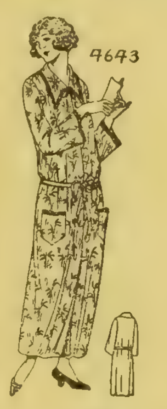
4674.—A Stylish Design.—Satin face crepe in a new shade of green is here portrayed, the drapery is of printed crepe de chine. The dress may be developed without the drapery and the "peasant" sleeve portions. This is a good style for linen, also for silk with net or allover lace. The Pattern is cut in 6 Sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. A 38 inch size requires 6½ yards of 40 inch material. For drapery and band cuffs of contrasting material 2¾ yards 22 inches wide is required. Without drapery 2 yards less of material is required. If made without "peasant sleeves" ⅝ yard less is required. The width of the skirt at the foot is 1⅞ yard.

4642. A Simple Night Dress with Cap.—The dainty simplicity of this style recommends it at once. It is suitable for cambric, nainsook, batiste, crepe, or crepe de chine. It may be decorated with embroidery or hemstitching or trimmed with narrow lace edging. The Cap may be of self material, or of lace and net. The Pattern is cut in 4 Sizes: Small, 34-36; Medium, 38-40; Large, 42-44; Extra Large, 46-48 inches bust measure. A Medium size requires 3⅝ yards of 36 inch material. The Cap requires ⅞ yard.

4640.—A Pretty Apron.—Figured cretonne with bindings of black sateen is here portrayed. One could use unbleached muslin with embroidery, or chambrey in a contrasting color for trimming. Lawn, cambric and percale are also desirable and serviceable materials for this apron. The Pattern is cut in 4 Sizes: Small, Medium, Large and Extra Large. A Medium size requires 2⅝ yards of 32 inch material.

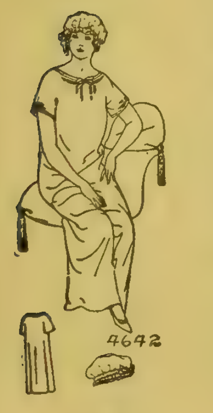


4643. A Comfortable Rest or Bath Robe.—Beacon Cloth, eiderdown, flannelette, corduroy, crepe or satin could be used for this style. The Pattern is cut in 4 Sizes: Small, 34-36; Medium, 38-40; Large, 42-44; Extra Large, 46-48 inches bust measure. A Medium size requires 4⅜ yards of 40 inch material.

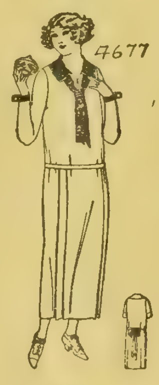


4665. A Dainty Frock for the Little Miss.—This style is attractive in the new prints, and also in silk jersey or wool rep. The closing is at the side under the plaits. The Pattern is cut in 4 Sizes: 4, 6, 8, and 10 years. A 6 year size requires 3 yards of 27 inch material.

4686. A Smart Middy Dress with Collar and Tie in One.—Plaided gingham is here combined with white Indian Head. This is a good model for linen and pongee. The Pattern is cut in 4 sizes: 6, 8, 10 and 12 years. A 10 year size requires 3½ yards of 36 inch material. To make as illustrated requires 1¼ yards of plain material and 2¼ of plaid material 36 inches wide.



4664. A Simple Comfortable Frock.—Printed crepe was used for the "smock," and batiste for the guimpe. One could have jersey or plaid suiting in combination with wool crepe or silk. The Pattern is cut in 4 Sizes: 4, 6, 8, and 10 years. A 6 year size requires 1⅛ yard of 27 inch material for the guimpe and 1⅞ yard for the smock.



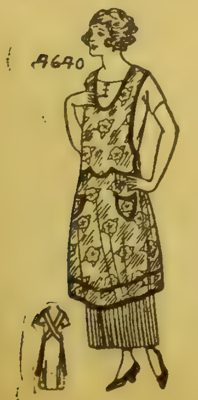
4677. A Smart "Little" Dress.—Serge, crepe or linen could be used for this design, with velvet satin or organdy for collar and cuffs. The Pattern is cut in 3 Sizes: 16, 18, and 20 years. An 18 year size requires 3½ yards of 40 inch material. For collar and cuffs of contrasting material as illustrated ½ yard is required. The width at the foot with plaits is 1¾ yard.

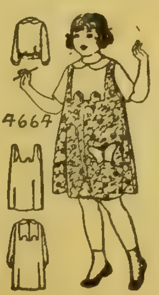
ALL PATTERNS 12c EACH—3 FOR 30c POSTPAID

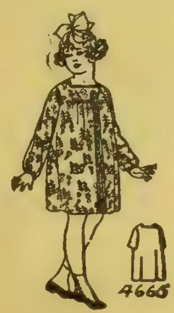
Order from this or former issues of The Business Farmer, giving number and sign your name and address plainly.

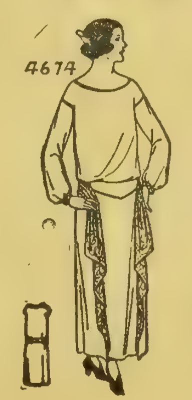
ADD 10c FOR SPRING AND SUMMER 1924 FASHION BOOK

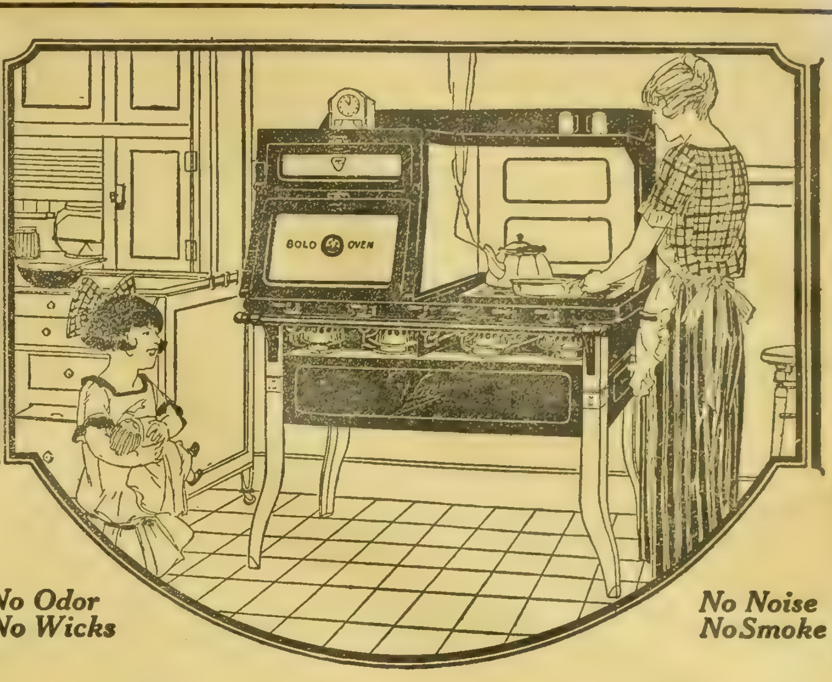
Address all orders for patterns to
Pattern Department
THE BUSINESS FARMER
Mt. Clemens, Mich.











No Odor
No Wicks

No Noise
No Smoke

Beautiful Vapo Oil Range looks and acts like a gas range

32-36 hours of smokeless, odorless heat from a gallon of kerosene

Vapo is to the ordinary oil stove what the electric light is to the candle. It solves every cooking problem. You can bake, roast, boil, fry or stew with a Vapo. Everywhere, people proclaim it the cleanest, most convenient, most beautiful oil range ever seen. At state fairs thousands saw it pass tests out of the question for ordinary oil stoves. Any Vapo will duplicate these tests.

Burns gas made from kerosene

Each Vapo burner is a miniature gas plant. It generates hydro-carbon gas from kerosene and burns it with a hot, clean, blue flame ideal for cooking. Good baking and roasting are easy with the Vapo because the flame can be regulated from a low simmering heat to a heat intense enough for quickest cooking needs. Vapo has lever valves like a gas stove and these are provided with automatic safety locks preventing accidental shifting or moving by children.

Wickless, chimneyless and troubleless

Nothing on a Vapo to fuss with. No wicks to trim or adjust. No chimneys to burn out and fall into the burner. If kettle boils over, the liquid can't get into the burner and choke the flame. The Vapo burner is guaranteed for the life of the stove. Vapo heat does not smart the eyes nor soot up utensils.

Bake slow and fast at same time in Bolo oven

Adjustable Bolo plate makes oven big or little as you wish. It concentrates the heat and gives you two ovens in one. Odors from one oven do not permeate the other oven. Perfect ventilation insures light baking and pastry. Vapo is the *only* oil range with the built-in Bolo oven. You can have right or left hand oven. Ask dealer to show you Vapo. Write for booklet.

THE VAPO STOVE COMPANY
M. B. F. LIMA, OHIO.
Please send me complete information about Vapo Ranges.
Name........................
Address........................
Dealer's Name........................

The Vapo Stove Company, Lima, Ohio

Vapo LIMA, OHIO

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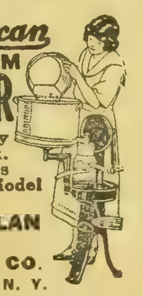
Ranges
Heaters
Hot Water
Heaters

$24.95 Upward American CREAM SEPARATOR



On trial. Easy running, easily cleaned. Skims warm or cold milk. Different from picture which shows large size easy running New L.S. Model
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VANILLA EXTRACT
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Imitation Vanilla $1.00 per pint prepaid. Absolutely pure Vanilla $1.50 per pint prepaid. The kind the big bakers and confectioners use. Unexcelled for ice creams, cakes, custards, jellies, sauces, etc. Don't send cash. Pay postman when delivered.

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WALLACE FLAVOR HOUSE,
Cincinnati, Ohio.

BARREL LOTS SLIGHTLY DAMAGED Crockery, Hotel chinaware, cookingware, glassware, etc. Shipped direct from factory to consumer. Write for particulars. E. SWASEY & CO., Portland, Maine.

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Gentlemen: For the enclosed

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My Name..................................

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R. F. D............... State....................

The Road to Home

Though written faithfully, his letters from home seemed to have had a way of arriving at his hotel in one city just after he had left for the next—and of never catching up.

Three weeks passed—business conferences, long night journeyings on sleepers, more conferences—with all too little news from home.

Then he turned eastward. In his hotel room in Chicago he still seemed a long way from that fireside in a New York suburb. He reached for the telephone —asked for his home number.

The bell tinkled cheerfully. His wife's voice greeted him. Its tone and inflection told him all was right with the world. She hardly needed to say, "Yes, they are well—dancing right here by the telephone. . . . Father and mother came yesterday. . . . Oh, we'll be glad to see you!"

* * * *

Across the breadth of a continent the telephone is ready to carry your greetings with all the conviction of the human voice. Used for social or business purposes, "long distance" does more than communicate. It projects you—thought, mood, personality—to the person to whom you talk.

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BREEDERS DIRECTORY

Advertisements inserted under this heading for reputable breeders of Live Stock at special low rates to encourage the growing of pure-breds on the farms of our readers. Our advertising rate is Thirty Cents (30c) per agate line, per insertion. Fourteen agate lines to the column inch or $4.20 per inch, less 2% for cash if sent with order or paid on or before the 10th of month following date of insertion. SEND IN YOUR AD AND WE WILL PUT IT IN TYPE FREE, so you can see how many lines it will fill. Address all letters,
BREEDERS DIRECTORY, MICHIGAN BUSINESS FARMER, MT. CLEMENS, MICH.

CLAIM YOUR SALE DATE

To avoid conflicting dates we will without cost, list the date of any live stock sale in Michigan. If you are considering a sale advise us at once and we will claim the date for you. Address, Live Stock Editor, M. B. F., Mt. Clemens

May 14—Jerseys, Michigan Jersey Cattle Club, Michigan Agricultural College, East Lansing, Mich.
May 15—Holstteins, John H. Winn, Inc., Rochester, Mich.

HOLSTEINS

FOR SALE: CARLOAD REGISTERED HOLstein cows; young, tuberculin tested. Bargain prices.
J. E. GAMBLE Hart, Michigan.

HEREFORDS

HEREFORDS

Registered Breeding Cattle, T. B. Tested at practical prices for production of Hereford Baby Beeves profitably all ages.
T. F. B. SOTHAM & SONS.
(Herefords since 1839.)
St. Clair, Mich.

BREED HEREFORDS THAT FATTEN quickly. Eleven choice two-year-old heifers and several yearling bulls sired byInternational Prize Winners for spring sale. Write us for information.
Breeders of Herefords since 1860.
CRAPO FARM, Swartz Creek, Michigan.

Hereford Steers

88 Wt. Around 650 lbs. 80 Wt. Around 800 lbs.
44 Wt. Around 600 lbs. 88 Wt. Around 700 lbs.
48 Wt. Around 500 lbs. 46 Wt. Around 500 lbs.

All dehorned, deep reds, good stocker order. Real quality herefords are usually market toppers when finished. Anxious to sell your choice one car load or all. Give number and weight preferred.
V. V. Baldwin, Eldon, Wapello Co., Ia.

SHORTHORNS

FOR SALE—ONE RED SHORTHORN REGIStered bull, age ten months. One roan shorthorn registered bull, age eight months. Also four red heifres, coming two years old.
Henry J. Lynch, Mayville, Tuscola Co., Mich.

MILK-BEEF SHORTHORN BULLS, ALL AGES for sale by members of Central Michigan Shorthorn Breeders Ass'n. Also females, write
M. E. MILLER, Greenville, Michigan.

FOR SALE PURE BRED REGISTERED Shorthorn cows and heifers, good milkers and show stock.
SELESKY BRO'S., Grand Blanc, Mich., R2.

RED POLLED

RED POLLED BULLS READY FOR SERVICE. From good milking strains. Prices right.
JACOB BERNER & SONS, Grand Ledge, Mich.

REGISTERED RED POLLED BULL CALF. Milking Strain, $40.
RUSSELL M. COTTLE, West Branch, Mich., R1.

ANGUS

WE HAVE SOME FINE YOUNG ANGUS BULLS from International Grand Champion Stock at reasonable prices. E. H. KERR & CO., Addison, Mich.

JERSEYS

REG. JERSEYS, POGIS 99th OF H. F. AND Majesty breeding. Young stock for sale. Herd fully accredited by State and Federal Government. Write or visit for prices and description.
GUY C. WILBUR, BELDING, Mich.

SWISS

FOR SALE—ONE BROWN SWISS BULL 2½ years old, fine specimen, pure bred.
P. H. SWITZER, Lakeview, Michigan.

HAVE YOUR LIVE STOCK FOR SALE?
an Ad. in THE BUSINESS FARMER
Will Sell It!

Fair and Uniform Assessments Is the Way Out

(Continued from Page 3)

cent issue showed that the Ford Motor Company alone has assets of $840,000,000 and that if the Ford plant attains its scheduled production during the present season its fair valuation of assets will be $1,240,000,000. Ford's own official statement is more modest, yet he admits assets totaling considerably over a half billion dollars.

As the editor of the Hastings Banner puts it, "In view of what the annual statements of all the Detroit corporations will disclose, is it any wonder that the balance of Michigan is becoming restless when Wayne county escapes with an equalized valuation of but $2,666,500,000, or but 40 per cent of the equalized value of the state? Every well informed person in Michigan knows that above 50 per cent of the actual wealth of Michigan is centered in Detroit."

It is interesting to note in this connection that the equalized assessed valuation of Wayne county is only about twice as large as the assets which the Ford Company alone will have at the end of the present season if we can believe the Wall Street Journal estimates. It is probably in the hope of retaining this unjust distribution of the tax burden that a few Wayne county people are so intensely interested in having a legislative reappointment so that they may have a greater voice in outlining the tax laws and policies for Michigan.

Catching Mr. Nagel Off Guard

When Mr. McPherson was arguing before the State Board of Equalization for a reduction in rural equalized valuations, Mr. Nagel chairman of the Wayne County Board of Supervisors and acknowledged authority on Wayne county tax matters, tried to leave the impression that Detroit real estate was assessed above its real cash value, but, of course, this is ridiculous to anyone who is acquainted with the real facts.

Last October a special committee of the Detroit City Council was investigating the matter of procurring a cite for a $5,000,000 memorial which it was proposed to erect to the soldiers, sailors and marines of the recent World War. Some one suggested that Henry Ford be asked to donate to the city property lying north of the public library on Woodward Avenue and held in the name of the Lincoln Motor Car Company.

In commenting on this project the Detroit Free Press on page 1 of its issue of October 20, 1923, has this enlightening paragraph:

"Even with the donation of land by the Motor King it is doubtful if the city can buy the surrounding property for the $1,500,000 available. The property is assessed for $1,700,000 and councilman J. O. Nagel expressed the belief that it could not be bought **for three times that amount.** Mr. Nagel stated at the close of the meeting that in past condemnation suits the city has paid on an average of three times the assessed valuation."

In order to bring this recital of the admissions of Mr. Nagel down to date we might quote from the Detroit Evening Times of April 18, 1924, where appeared an article which informs us that the Wayne County Board of Supervisors presented a silver mounted gaval to Mr. Nagel, their chairman. We read that "Mr .Nagel, in responding, said he was proud of the record of the board in that Wayne county had the lowest per capita debt of any county in the United States.

How Is It In Other States?

Michigan farmers are not alone in experiencing this iniquitous unfairness in the matter of assessment. Illinois, with its great metropolis of Chicago, showed a similar situation, that is until recently. Then farmers in 56 counties of Illinois, working through their County Farm Bureaus, decided to find out whether or not the relative valuations of farm property and city real estate were fair. They wished to know whether they ought to ask for reductions in the valuation of farm land, and if so, how much reduction they could fairly request.

The Illinois farmers went about getting at the real facts in a systematic way, acting under the direction of Mr. John C. Watson, Director of Taxation and Statistics of the Illinois Agricultural Association. The plan they used may not have been original but it was at least effective. But let John Watson tell the story in his own words. He writes in part:

"The plan they adopted is an old one often used in other states and sometimes used in Illinois. They made from official records and without selection, a card catalog of sales values of from 100 to 500 pieces of property recently sold in each county, including both farm lands and town and city lots. They then inserted on the cards the valuations of the same properties for tax purposes, as given in the assessment books. They were able in this way to compute the average percentage of the sales values appearing in the assessments.

Rural Assessments High

"The results of the investigation in 56 counties were interesting. In about half of the counties it was found that, in spite of wide variations in individual properties, city and country real estate was assessed with fair uniformity between the two classes In about one-half of the remaining counties, or one-fourth of the total number, land was found to be assessed at a higher percentage of its actual value than lots, but the differences were not large. In the remaining one-fourth of the counties the differences were larger, farm land in a few counties running as much as forty or fifty per cent higher than lots.

"Other County Farm Bureaus in Illinois followed methods of their own in working out this problem. The result is a decrease of over $100,000,000 in assessed valuations in farm land in Illinois this year. if half of this decrease is reflected in decreased taxes, Illinois land owners will pay about $2,000,000 less taxes this winter than they would have paid had the high valuations of past years remained.

"What has been done by farmers of Illinois this year can be done by the farmers of any other state. It can be done by city people if their conditions require action. Organization, however, is necessary, for individuals cannot get very far with this kind of work.

Organization Is Essential

"Organizations can also accomplish other needed work, such as changes in the constitution or in the revenue laws to make them fairer. An income tax in Illinois to relieve real estate of the unfair burden of taxation it is carrying is the most notable example."

Several County Farm Bureaus in Michigan are studying this matter and many of them will in the very near future put on campaigns similar to those carried out in Illinois. As long as we continue to have the general property tax as the chief source of our revenue for local governmental purposes it would seem that the least we can do in the interests of justice would be to make every effort possible to see that the general property on which this levy is made is fairly and equally assessed.

And at the same time it might also be desirable to make an effort to get more property, both real and personal, but especially personal, on the tax rolls. By uncovering hidden wealth and equalizing assessment values we should go a long ways toward bringing down the tax rate and giving some measure of relief and justice to Michigan farmers and home owners.

MICHIGAN SECOND AS POTATO STATE

REPORTS show that Michigan takes second place when it comes to producing potatoes. The first six states rank as follows: New York, Michigan, Wisconsin, Minnesota, Pennsylvania and Maine. These six states harvest nearly half of the total crop for the country, which averages more than 374,000,000 bushels annually.

The national board of underwriters has estimated that the fire loss in the United States for 1922 totaled $506,541,001. Of this amount $25,776,951 was said to be due to the carelessness of smokers.

DAIRY and LIVESTOCK

BREEDS OF BEEF CATTLE

2. (a)—Polled Hereford

THE polled Hereford is a new breed which has been developed in America by mating Hereford cattle that are naturally polled. It was established by Warren Gammon in 1901 and has increased in numbers and popularity at a fairly rapid rate in the last few years. Because a large percentage of the calves from horned-Hereford cows mated with Polled-Hereford bulls are without horns or even scurs, the Polled-Hereford breed has developed more rapidly than would have been possible otherwise. The popularity of polled cattle is steadily increasing, especially where farming is done on a comparatively small scale.

The double-standard Polled Herefords are eligible to registry in both the American Hereford Herdbook and the American Polled-Hereford Record. They may be distinguished from the Hereford only by the polled characteristics.

GOING INTO PURE BRED CATTLE BUSINESS

I wish to start to raise pure bred cattle. I have been thinking of the beef and milk kind, though at present I am thing a little more on the beef kind. I would be glad to know what breed you think is best. I have been thinking of the Durham and I would like to know the difference between the Durham and the short-horn Durham, if any. How would you advise me to make a choice of either breed and where are they for sale? I have 640 acres of land and 140 of it is cleared. I also wish to know what you think is a fair value or price for a Durham cow, 3 to 9 years old weighing from 1100 to 1500 pounds, with calf by side.—R. K. C., Hubbard Lake,

—There are three breeds of beef cattle, namely the Shorthorn (Durham), Hereford, and Aberdeen-Angus. The Shorthorn has been somewhat of a favorite in the farming states, owing to a little more size and somewhat better milking properties than the other two breeds. The Hereford has been the favorite on the western range, owing to its ruggedness and grazing properties, while the Angus has a fair distribution in both the farming states and on the range.

There is absolutely no difference between the Shorthorn and the Durham, they being one and the same breed.

In the choice of one of the three breeds mentioned above, you should be guided almost solely by your personal preference, as good individuals of any one of the three breeds would be satisfactory.

With the amount of pasture land which you have, I believe you are in good shape to engage in the handling of one of the beef breeds. Just at present the prices being received for pure-bred breeding cattle are the lowest that they have been in a great many years. In fact, it would appear as though this is an especially opportune time to buy pure-bred breeding stock. The prices of pedigreed livestock, like the prices of any other commodities, move in cycles and authorities are generally agreed that the cycle is at its lowest ebb at present and that we will soon see an increase in the value of this stock.

Very good cows with calves by side should be obtained for from $150.00 to $200.00. Excellent individuals of superior quality may cost from $300.00 to $400.00. On the other hand, some parties would sell them much less than I have indicated above. The cheaper animals are very often inferior, however, and sometimes dear at any price. There are a considerable number of breeders advertising in the Michigan farm papers from whom you could obtain stock.—Geo. A. Brown, Professor of Animal Husbandry, Mich. Agricultural College.

VETERINARY DEPARTMENT

COW'S UDDER SWOLLEN

Would you tell me what to do for my cow? She has a swollen udder. After freshening, the cow had been in a week, and her udder became as hard as a stone. What would cause this?—D. W., Grand Rapids,

—Bathe the cow's udder three times daily with real warm water for thirty minutes at a time, dry the skin with a dry cloth, and massage the udder well with soap liniment (U. S. P.), seven parts; and fluid extract of phytolacco, one part. —John P. Hutton, Assoc. Prof. of Surgery & Medicine, M. A. C.

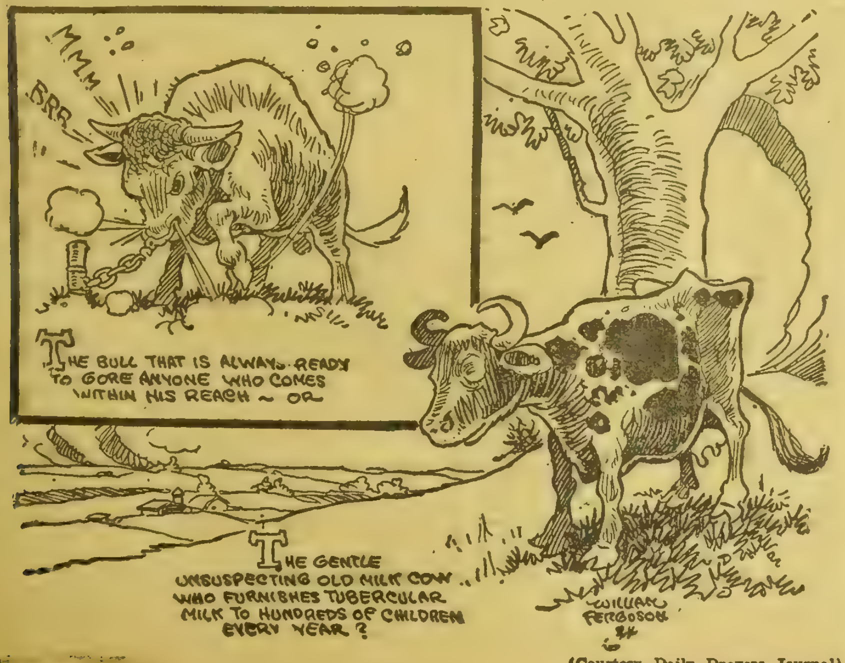
NO SPECIFIC TREATMENT FOR GREESE HEEL

"I would like a receipt for greese heel on a horse.—F. O., Fenton.

—There is no specific treatment for grease heel on the horse. A treatment that will cure one case often does not work well on another. The kind of treatment depends upon the degree of inflammation of the skin and the length of time the animal has been affected. Many cases respond much more readily to treatment after they have been polticed for several days in white rock, then thoroughly cleaned up before drugs are applied. I think it would be much better for you to let your veterinarian make an examination of your horse, then he can prescribe treatment much more intelligently than I can by mail. The history is really too brief for me to outline any definite treatment.

Should you desire to write me describing the case as best you can and giving all the symptoms, I would be very glad to outline treatment. —John P. Hutton, Assoc. Prof. of Animal Pathology, M. A. C.

OUTLAWS!


MMM
BRR
THE BULL THAT IS ALWAYS READY TO GORE ANYONE WHO COMES WITHIN HIS REACH ~ OR
THE GENTLE UNSUSPECTING OLD MILK COW WHO FURNISHES TUBERCULAR MILK TO HUNDREDS OF CHILDREN EVERY YEAR ?
WILLIAM FERGUSON '24

(Courtesy Daily Drovers Journal)

MACKINAW CITY
Lake Michigan
Lake Huron
OTTAWA
MONTREAL
OGDENSBURG
BAY CITY
GRAND RAPIDS
Lake Ontario
ROCHESTER
UTICA
TROY
ALBANY
WORCESTER
BOSTON
SPRINGFIELD
SYRACUSE
BUFFALO
DETROIT
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Dear Friends:—I received my check from—— a few days ago, Claim No. 1466. Thank you very much for your help. They wrote a very apologetic letter, but I am afraid I would never have gotten the money without your help. We are anxiously awaiting our first copy since the renewal of the Michigan Business Farmer. Again thanking you and wishing you success, I am,—Mrs. H. H., Kalamazoo, Michigan.

Why don't you? As a paid up subscriber —you are entitled to all Service Benefits.

Newaygo Testing Ass'n Holds Anuual Meet

THE Newaygo Cow Testing Association held its twentieth annual meeting at Fremont on April 18th.

The season has been backward in Newaygo County — delayed farm work needed attention—and yet 15 of the 26 regular members of the Cow Testing Association attended the meeting. This speaks well for the interest of the members. The Association is old but the spirit is fresh.

In fact the Association is so popular that Tester Johnson reports five herds being tested out monthly in addition to the regulation number. These extras will soon be in a separate Association, for County Agent Clair Taylor has the second Cow Testing Association ready to go, and a third is partially formed. We cannot say much longer "The Newaygo Cow Testing Association" but will have to designate one of three.

In the business meeting Raymond Kempf of Fremont was elected President for another year. Kempf is the only member whose herd, all purebred Holsteins now, has been in the Association since the start in 1905, although several other members have been in for three or four years.

Erwin Price—formerly herdsman for four years at M. A. C., but now running a Guernsey herd near Fremont — was re-elected Secretary-Treasurer. This mark of recognition came as a result of Price handling finances so skillfully last year that a surplus of eleven cents was left in the treasury.

Gerritt Meeuwenberg, now on the home farm after spending several years in Advanced Registry Testing for M. A. C., was elected Vice President.

The Association decided to hold a picnic during the summer at the river farm of Orville Atwood. President Kempf appointed a Holstein man, Meeuwenberg, a Jersey man, Nelson, and a Guernsey man, Rotier, to have charge of arrangements, saying that no breed favoritism should be permitted. A spirit of friendly rivalry exists between the lovers of the three leading dairy breeds represented in the Cow Testing Association.

Twenty boys from Mr. Holden's agricultural class in the Fremont High School attended part of the meeting to hear a dairy talk given by J. G. Hays of the Dairy Extension Department, M. A. C. Hays stressed "home" feeding of cows as well as new ideas on mineral requirements; pointed out the sales value of dairy cattle backed by Cow Testing Association records, and emphasized the value of real pure bred bulls.

Digging in King Tut's tomb revealed no more precious treasure than was recently discovered in the process of spring house cleaning in the vault of the Fremont State Bank. For behold the Prize Cup was found! This cup was procured by the Association in 1913 to be given out yearly to the cow producing the highest yield of butter fat during each Association year. The Newaygo County Farm won it during the year 1915-16, then H. W. Zerlaut captured it next season, then—it disappeared! To be found recently, years later!

This cup will be awarded for last year to A. C. Nelson of Holton, Michigan. His Jersey cow made 586.7 pounds fat and 8787 pounds milk. Mr. H. Zerlaut of Fremont would be winner for 1921. His grade Guernsey cow made 549.7 pounds fat and 10581 pounds milk In the future this cup will be awarded to the cow that produces most butterfat, age considered. Any breeder holding the cup three years in succession becomes permanent owner.

Truly the interest and enthusiasm shown by the members of this, the oldest Cow Testing Association in the United States, should serve as an inspiration to fellow dairymen in Michigan's 82 Cow Testing Associations.

MICHIGAN JERSEY COW EXCEEDS STATE RECORD

OXFORD DAISY'S GOLD CROWN 462703, a splendid young Jersey, has qualified as the Michigan Junior four-year-old champion, and on the same test won Gold and Silver Medals. She commenced her test at four years of age, and in one year produced 14501 pounds milk, 755.40 pounds butter-fat. This record, together with the calving requirements which she met, entitled her to both the Gold and Silver Medals. She displaces Majesty's Iris which held the previous record with 679 pounds butter-fat.

Her sire, Oxford Daisy's Flying Fox, has thirty-nine daughters and one son in the Register of Merit. Her dam is Foxhall's Crown Princess 260336, which has three official tests, one of which is within less than two pounds of the 600 pounds butter-fat mark and that record was made when she was a Senior three-year-old.

Her proud owner is Mr. H. F. Probert of Jackson, Michigan.

CURES DOG OF SHEEP KILLING

A Missouri farmer recently devised a new scheme which will prevent dogs from killing and chasing sheep and at the same time do away with the necessity of killing the dog to effect a cure. He ties the offending dog to a large sheep and then gets out of the way and watches the fireworks. The sheep will drag the dog until he is sick of the job and will then turn on him and butt all the taste for mutton out of him. It is declared to be a perfect cure and many living near this farmer have tried it with success.

The Question of Opposites

The teacher was giving a drill in the meaning of words and their opposites.

"Now tell me," she began, "what is the opposite of misery?"

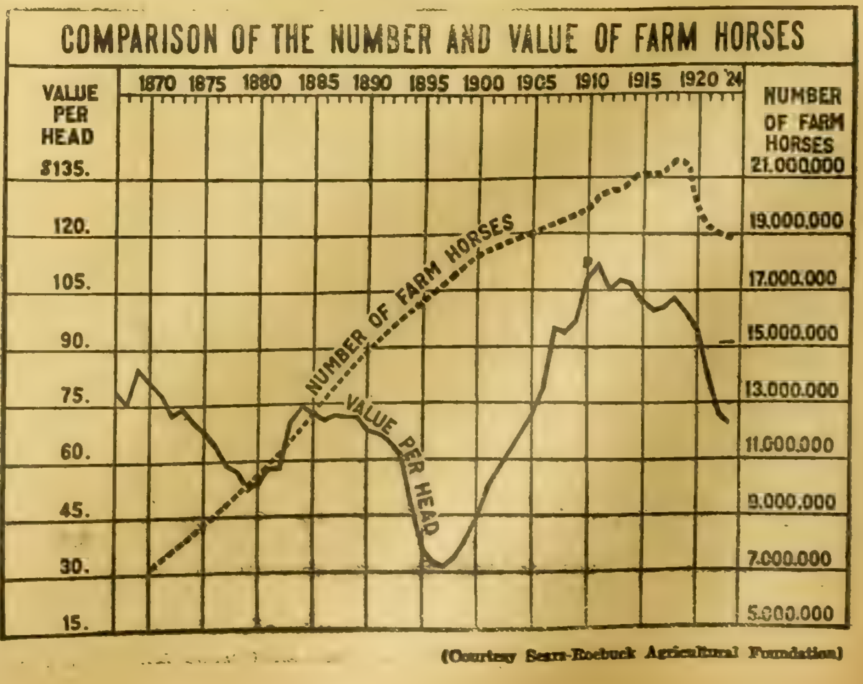
"Happiness!" said the class in unison.

"And sadness?" she asked.

"Gladness."

"And the opposite of woe?"

"Giddap!" shouted the enthusiastic class.



(Courtesy Sears-Roebuck Agricultural Foundation)

Rosen Rye Yields 45 Bushels Per Acre

(Continued from Page 4)

harder to replace them with true Rosen rye than it would have been had the crossing not occurred. This is because the old fashioned common rye would never have been kept by the farmer, once he came to know the Rosen rye.

An organization of farmers to take care of pedigreed grains was formed in 1911 and reorganized under the name of the Michigan Crop Improvement Association in 1917. A Jackson County member of this association was sent a bushel of Rosen rye in 1912. Te planted it away from other ryes on an acre of ground and obtained thirty-five bushels from one bushel of seed in 1913. His neighbors and friends, who were not in the habit of expecting more than fifteen bushels from an acre of rye, helped him thresh. Soon the whole country-side around Parma, in western Jackson county, and around Albion in eastern Calhoun county, grew rye as a winter crop and little or no wheat. Other countries took up Rosen rye with the aid of the organization, and the activity of county agricultural agents, who were now taking their places in the improvement of Michigan agriculture.

Finally, in 1917, the gradual spread of the new rye had caused it to occupy about 15,000 acres in Michigan. Up to this time the new Rosen rye was kept pure by only a few farmers, and most (about 95 per cent) of the so-called Rosen rye was in reality more or less crossed with the old fashioned common. This, the so-called Rosen rye, was quoted on the Detroit market in 1917, and car load lots began to be available to other states.

About 5 per cent of the 15,000 acres passed inspection in 1917 under the Michigan Crop Improvement Association, and certified grain began to be sold to the farmers of Michigan and other states. As a result of this activity in war times, when farmers were urged to sow the best seed, approximately 250,000 acres of Rosen rye were sown in Michigan in the fall of 1917. Of this acreage the inspectors of the Michigan Crop Improvement Association passed about 1,000 acres in June, 1918. Again under the stress of war conditions the acreage was almost doubled for the year of 1919 when there were about 500,000 acres of Rosen rye out of a total of 900,000 acres of rye in the state. In 1920, Michigan for the first time exceeded the other states of the Union in rye production.

The growing of Rosen rye in Michigan is now so general that even the old fashioned common rye is replaced with mongrel Rosen. The growing of Rosen rye in other states began commercially as early as there was a supply. It went from farm to farm across the state line into Indiana and Ohio until their upper rows of counties came to have as much Rosen rye as the southern row of counties in Michigan.

When carloads began to be available in 1917, the trade grew rapidly increasing steadily year by year, until now the Michigan supply from elevators is usually called Rosen rye. Much of this seed is purchased in sections where the rye is reasonably pure, but unfortunately, few people seem to realize the fact that rye cross-fertilizes, and that perhaps 75 per cent of it is really mongrel. The results obtained from this commercial seed can not be equal to those obtained by the use of seed inspected in field and bin by the Michigan Crop Improvement Association.

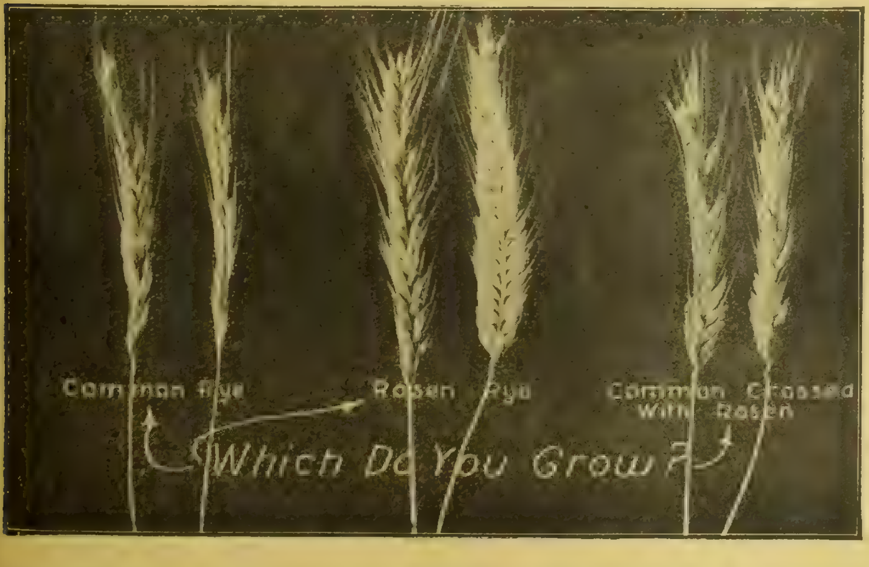
The extension of pedigreed Rosen rye into other states began in 1917, when the inspection work began, but the calls made by the members of the Association were imperfectly reported that year. The records for 1918 and 1919 show that pedigreed Rosen rye was sold into all except the southern states and even into Georgia, Texas, and New Mexico. In 1919, 1794 bushels of pedigreed Rosen rye was shipped as far as the state of Washington, and some was sold in Canada. Thus, the Rosen rye came to be International, and planted from the Atlantic to the Pacific. In 1918, Illinois and Indiana were the largest purchasers of pedigreed Rosen rye outside of Michigan, yet it is probable that Michigan bought more pedigreed Rosen rye seed than all the other states combined. In 1919, only two other states exceeded Michigan in the purchase of pedigreed Rosen rye. As more Michigan farmers grew their own pedigreed seed, more and more of it has been sold into other states. Still there is plenty of room for Michigan farmers to replace their mixed seed with the pedigreed.

A Minnesota man purchased pedigreed Rosen seed from Michigan in 1918 and sold 3,000 bushels of seed in 1919. Others have done likewise and Rosen rye is coming to be the standard rye for the corn belt. This is the statement of a recent Farmer's Bulletin (No. 1358), entitled "Growing Rye in the Western Half of the United States."

At the international Grain and Hay Show given in connection with the International Stock Show at Chicago in December, 1919, Rosen rye took ten prizes out of the sixteen that were offered; in 1920 it took the first 22 prizes, and has held this high place at that show since that time. At first the prizes given to Rosen rye went to Michigan farmers, but other states are now winning prizes with Rosen rye, leaving sixteen prizes for Michigan in December of 1923.

Because of the large amount of Mongrel Rosen rye in Michigan the Crop Improvement Association needed an isolated spot. They chose South Manitou Island, whose entire acreage planted to rye is now planted to certified Rosen. This island is ten miles off shore and directly west of the Leelanau peninsula.

The inspection of the fields planted to registered Rosen will occur in June and the grain inspection will occur shortly after harvest. Those who wish to obtain pedigreed Rosen rye seed for fall planting may do so by addressing the Secretary of the Michigan Crop Improvement Association at East Lansing during July and August.



This comparison is worth study. The old-fashioned black rye is here called common. It has almost entirely disappeared from Michigan agriculture. The trouble now is with the crosses between it and Rosen that still remain.

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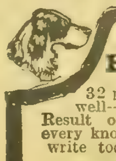

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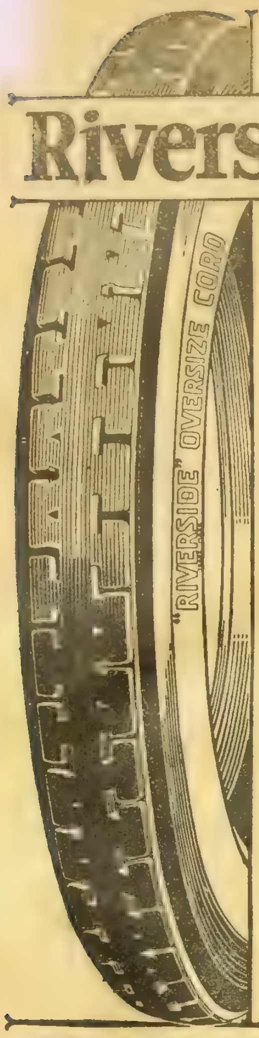

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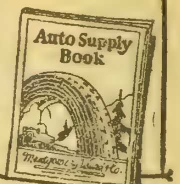

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GET OUT THE DISHPANS, THE BEES ARE SWARMING!

IN the days of our grandfathers when the bees filled the air with their merry hum, which was the usual sign of leaving for a new home, the family band was called out to stop such proceedings. Unto this day, the modern beekeeper cannot convince the "old timer" that the noise does not stop the bees. By the way it is merely the natural instinct of the bees to alight before leaving for new quarters. The reason of this is for them to make sure that their beloved queen is safely with them.

Years ago the beemasters valued their colonies by the number of swarms, which they sent forth. While now the best colony is the one that does not swarm but remains together, united as one and gathers honey for their owner. Bees cannot swarm and gather surplus honey at the same time. So it is up to the beekeeper to keep his bees satisfied and remain in their hive. The following are the reasons why bees swarm: Lack of storage room for honey, poor vetilation, insufficient breeding room, direct contact with the hot sun, and a queen more than two years old. Bees generally start swarming preparations just at the beginning of the main honey flow.

By adding more supers, expanding the brood nest, raising the hive up on small blocks of wood and setting the hive under a small tree in the orchard one can keep down swarming to a great extent. About queens, now it is well known that a hen lays her greatest number of eggs in her first and second year, so it is with a queen bee. At the end of her second year a queen should be replaced with a young one of more vigorous blood.

Removing the queen cells will hinder the preparations for swarming but will not alone stop it. In doing this one would have to visit them once every nine days for that purpose and then sometimes they will swarm anyhow.—Kenneth E. Farmer.

BATHING WITHOUT BOTHER

(Continued from Page 4)

grease trap can be attached to the spud of the lavatory and the waste of the tub by a special slip nut which can be purchased for this purpose.

CAUTION: No faucet or any other means for closing the pipe should be attached at F, since provision must be made for expansion of the water in the tank when heated. Also do not light the heater until the range boiler is full of water.

Sewage Disposal

Since a closet is not provided for in this outfit, it is not necessary to have a very elaborate method for taking care of the waste water. A grease trap made from a barrel used as a form will be sufficient. Merely dig a hole in the ground adjacent to the house (if this hole is dug next to the house wall is will eliminate the danger of freezing of the inlet pipe) about eight inches larger than the barrel you are going to use as a form and about one foot deeper. Put about four inches of concrete in the bottom of the hole and set the barrel on the concrete. Fill in around the outside with concrete. At the top on opposite sides leave two notches in the side walls deep enough for the inlet and outlet pipes.

After the concrete has set remove the barrel and insert the inlet pipe into the notch nearest the house and a 4 inch tile elbow in the other notch. Connect up the outlet with your farm drainage system if possible or if you haven't drains, merely lay fifty to seventy-five feet of 4 inch drain tile with about six inches fall. The tile to be laid with open joints. If your soil is heavy clay it will be advisable to put about four to six inches of gravel under the tile. Provide a cover for the trap and cover with earth.

Materials Required

The following list of material covers the most of the items necessary in installing an outfit if arranged as shown on the drawing. Different arrangements of the fixtures will require slightly different amounts of piping and fittings.

One range boiler stand; 1 range boiler, 30 gallon; 1 five foot bath tub; 1 lavatory; 1 force cistern pump; 1 kerosene heater; 1 three-quarter inch gate valve; 10 feet one-half-inch black pipe, 35 feet three-quarter-inch black pipe; 26 feet one and one-quarter-inch black pipe; 6 three-quarter-inch unions, black; 5 three-quarter by one inch Mal. bushings, black; 10 three-quarter-inch Mal. ells, black; 1 three-quarter-inch Mal. T, black; 1 three-quarter by one-half by three-quarter inch Mal. T; 1 one and one-quarter by one and one-quarter by three-quarter inch T; 2 one and one quarter inch Mal. Ts; 1 one and one-quarter inch plug. Total cost, $70.00 to $90.00.

This outfit should find a place in a good many of our farm homes where a cheap system is desired. It is also especially well adapted for tenant houses and summer cottages. In the near future a satisfactory method for adding an indoor closet will be worked out.

OH, MONEY! MONEY!

(Continued from Page 8)

He walked with them, too, quite awhile, showing them the sights. He was very kind—he seemed so especially kind, after all those other coldhearted people, who didn't care! That was the day she and Mrs. Moore both lost their pocketbooks, and had such an awful time getting back to New York. It was right after they had said good-bye to the nice young gentleman that they discovered that they had lost them. They were so sorry that they hadn't found it out before, Miss Flora said, for he would have helped them, she was sure. But though they looked everywhere for him, they could not find him at all, and they had to appeal to strangers, who took them right up to a policeman the first thing, which was very embarrassing, Miss Flora said. Why, she and Mrs. Moore felt as if they had been arrested, almost!

Miss Maggie uprsed her lips a little, when she read this letter to Mr. Smith, but she made no comment.

From Jane, also, came several letters, and from Frank Blaisdell one short scrawl.

Frank said he was having a bully time, but that he'd seen some of the most shiftless-looking grocery stores that he'd ever set eyes on. He asked if Maggie knew how trade was at his old store, and if Donovan was keeping it up to the mark. He said that Jane was well, only she was getting pretty tired because she would try to see everything at once, for fear she'd lose something, and not get her money's worth, for all the world just as she used to eat things to save them.

Jane wrote that she was having a very nice time, of course,—she couldn't help it, with all those lovely things to see; but she never dreamed that just potatoes, meat, and vegetables could cost so much anywhere as they did in hotels, and as for the prices those dining-cars charged—it was robbery—sheer robbery! And why an able-bodied man should be given ten cents every time he handed you your own hat, she couldn't understand.

At Hillerton, Mr. Smith passed a very quiet summer, but a very contented one. He kept enough work ahead to amuse him, but never enough to drive him. He took frequent day-trips to the surrounding towns, and when possible he persuaded Miss Maggie to go with him. Miss Maggie was wonderfully good company. As the summer advanced, however, he did not see so much of her as he wanted to, for Father Duff's increasing infirmities made more and more demands on her time.

The Martin girls were still there. Annabelle was learning the milliner's trade, and Florence had taken a clerkship for afternoons during the summer. They still helped about the work, and relieved Miss Maggie whenever possible. They were sensible, jolly girls, and Mr. Smith liked them very much.

(Continued in May 24th issue.)

Very Simple

Little Girl (to Grandfather)—"Grandpa, why don't you grow hair on your head?"

Grandpa—"Well why doesn't grass grow on a busy street?"

Little Girl—"Oh, I see; it can't get up through the concrete."

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912, of The Michigan Business Farmer, published biweekly at Mount Clemens, Mich., for April 1, 1924. 1. That the names and addresses of the publisher, editor, managing editor and the business managers are: Publisher, George M. Slocum, Mount Clemens, R. F. D. No. 4, Mich. Managing Editor, Milon Grinnell, Mt. Clemens, Mich. That the owners are: Give names and addresses of individual owners, or, if a corporation, give its name and the names and addresses of stockholders owning or holding 1 per cent or more of the total amount of stock. The Rural Publishing Co., Inc., Geo. M. Slocum, M. H. Slocum, Mt. Clemens; W. W. Slocum, Farmington; C. Allen, Lake; Aug. and E. Amos, Owosso; E. Ellsworth, Oden; N. Powell, Oden; C. J. Pratt, Charlevoix; J. Ritzler, Rogers; F. R. Schalck, Chicago; F. A. Lord, Lapeer; W. Schriner, Marine City; A. Voss, Luther; B. Wolff, Riggsville; F. Yost, Bridgeport. 3. That the known bondholders, mortgagees and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none so state.) Citizens Savings Bank, Mt. Clemens; R. R. Olds, Detroit, Mich. George M. Slocum, Publisher. Sworn to and subscribed before me this 26th day of April, 1924. Ralph E. Griffith. My commission expires November 13, 1927.

White Diarrhea

Remarkable Experience of Mrs. C. M. Bradshaw in Preventing White Diarrhea

The following letter will no doubt be of utmost interest to poultry raisers who have had serious losses from White Diarrhea. We will let Mrs. Bradshaw tell of her experience in her own words:

"Gentlemen: I see reports of so many losing their little chicks with White Diarrhea, so thought I would tell my experience. I used to lose a great many from this cause, tried many remedies and was about discouraged. As a last resort I sent to the Walker Remedy Co., Dept. 680, Waterloo, Iowa, for their Walko White Diarrhea Remedy. I used two 50c packages, raised 300 White Wyandottes and never lost one or had one sick after giving the medicine and my chickens are larger and healthier than ever before. I have found this company thoroughly reliable and always get the remedy by return mail.—Mrs. C. M. Bradshaw, Beaconsfield, Iowa."

Cause of White Diarrhea

White Diarrhea is caused by the Bacillus Bacterium Pullorum. This germ is transmitted to the baby chick through the yolk of the newly hatched egg. Readers are warned to beware of White Diarrhea. Don't wait until it kills half your chicks. Take the "stitch in time that saves nine." Remember, there is scarcely a hatch without some infected chicks. Don't let these few infect your entire flock. Prevent it. Give Walko in all drinking water for the first two weeks and you won't lose one chick where you lost hundreds before. These letters prove it:

Never Lost a Single Chick

Mrs. L. L. Tam, Burnetts Creek, Ind., writes: "I have lost my share of chicks from White Diarrhea. Finally I sent for two packages of Walko. I raised over 500 chicks and I never lost a single chick from White Diarrhea. Walko not only prevents White Diarrhea, but it gives the chicks strength and vigor; they develop quicker and feather earlier."

Never Lost One After First Dose

Mrs. Ethel Rhoades, Shennandoah, Iowa, writes: "My first incubator chicks, when but a few days old, began to die by the dozens with White Diarrhea. I tried different remedies and was about discouraged with the chicken business. Finally, I sent to the Walker Remedy Co., Waterloo, Iowa, for a box of their Walko White Diarrhea Remedy. It's just the only thing for this terrible disease. We raised 700 thrifty,, healthy chicks and never lost a single chick after the first dose."

You Run No Risk

We will send Walko White Diarrhea Remedy entirely at our risk—postage prepaid—so you can see for yourself what a wonder-working remedy it is for White Diarrhea in baby chicks. So you can prove—as thousands have proven—that it will stop your losses and double, treble, even quadruple your profits. Send 50c for a box of Walko or $1.00 for extra large box—give it in all drinking water for the first two weeks and watch results. You'll find you won't lose one chick where you lost hundreds before. It's a positive fact. We guarantee it. The Leavitt & Johnson National Bank, the oldest and strongest bank in Waterloo, Iowa, stands back of this guarantee. You run no risk. If you don't find it the greatest little chick saver you ever used, your money will be instantly refunded.

WALKER REMEDY CO.,
Dept. 680 Waterloo, Iowa

CHICKS—Investigate

Our chicks are the kind that make good. Every flock is carefully culled and mated. We have been in business seven years and have been building carefully and consistently to a place where we can offer chicks more than worth the money we ask. SINGLE COMB, ENGLISH STRAIN, WHITE LEGHORNS, BARRED ROCKS, ANCONAS. 100% live delivery guaranteed. Investigate our proposition before buying. A postal will bring full information.

STAR HATCHERY, Box 23, Holland, Mich.

BABY CHICKS Our Own Breeding flock of large type American White Leghorns. Laying and standard qualities combined. 13 years experience in breeding, hatching and marketing. Also high quality Barred Rocks and R. I. Reds. All flocks culled and inspected. Modern hatching plant, 2 batches weekly. Quality chicks at commercial prices. Write for prices and circular.

DEAN Egg Farm & Hatchery, Big Beaver
Mail address Birmingham Mich., R-4

Chicks Thoroughbred White Leghorns, Tom Barron Strain. Wyandottes, Rocks, Orpington. Postpaid. **Durand Hatchery, Box 404, Fenton, Michigan.**

GOBBLER LOST USE OF LEGS

Can you tell me what ails my gobbler, last fall he got stiff in the legs and has never gotten over it? He is not sick and eats good, just does not have the use of his legs. He is not too fat, as I only feed him wheat. Have raised turkeys 10 years and never had one act like this one does. If you can give me any remedy for the trouble will greatly appreciate it.—W. M., Davisburg, Michigan.

—It is difficult for one to accurately determine the cause of leg weakness, unless entirely familiar with the conditions prevailing in the flock. Poultry of all kinds may develop stiffness of the legs due to an insufficient supply of calcium or a lack of green food. Ordinarily, growing stock will respond to a ration containing a small percentage of cod liver oil. The D Vitamin in the cod liver oil seems to assist in calcium retention, as indicated by the higher calcium content in the blood following such a feeding practice.

Occasionally another condition known as Ergotism, develops. This may be induced by feeding ergot in rye, or smutty grains. A complete change of diet would in this latter case be recommended. I would suggest that you use the cod liver oil treatment on the gobbler affected. A moist mash containing rolled oats and bran with a small percentage of cod liver oil should correct this trouble if it is due to malnutrition. This condition may correct itself in the course of the next six weeks when the turkey stock is permitted free range, and green succulent food is available.—E. C. Foreman, Professor of Poultry Husbandry, M. A. C.

TO TELL SEX OF GEESE

Will you kindly advise me how to tell the difference between a male and female in geese, while quite young, from six months to 1 year?—E. A. P., Atlanta, Mich.

—It is extremely difficult to determine which are males and which are females, especially among the immature stock. Ordinarily, the sex of the adult geese can be determined quickly by the pugnacious disposition of the gander which usually shows fight, especially during the breeding season. A female goose will seldom attack a person, whereas the male is always ready to offer protection and usually advances towards the intruder. The gander moreover, is coarser, especially about the head and neck, and usually the female shows more trimness about the head and neck and is a little lower in station.—E. C. Foreman, Professor of Poultry Husbandry, M. A. C.

SOME THINGS ABOUT OUR POSTAL SYSTEM

EVERY year the United States Postal Service handles 23,000,000,000 articles. Ever year the increase in number of a[illegible]es in the mails is more than a bi[illegible] Of the total mail submitted, [illegible]000,000,000 pieces are letters.

Every year the Postal Service, on an average, delivers 112 letters to every man, woman, and child in the United States.

Atlas would have had a tough time indeed lifting the annual load of letters alone that the Postal Service moves. It is estimated to total 133,350 tons.

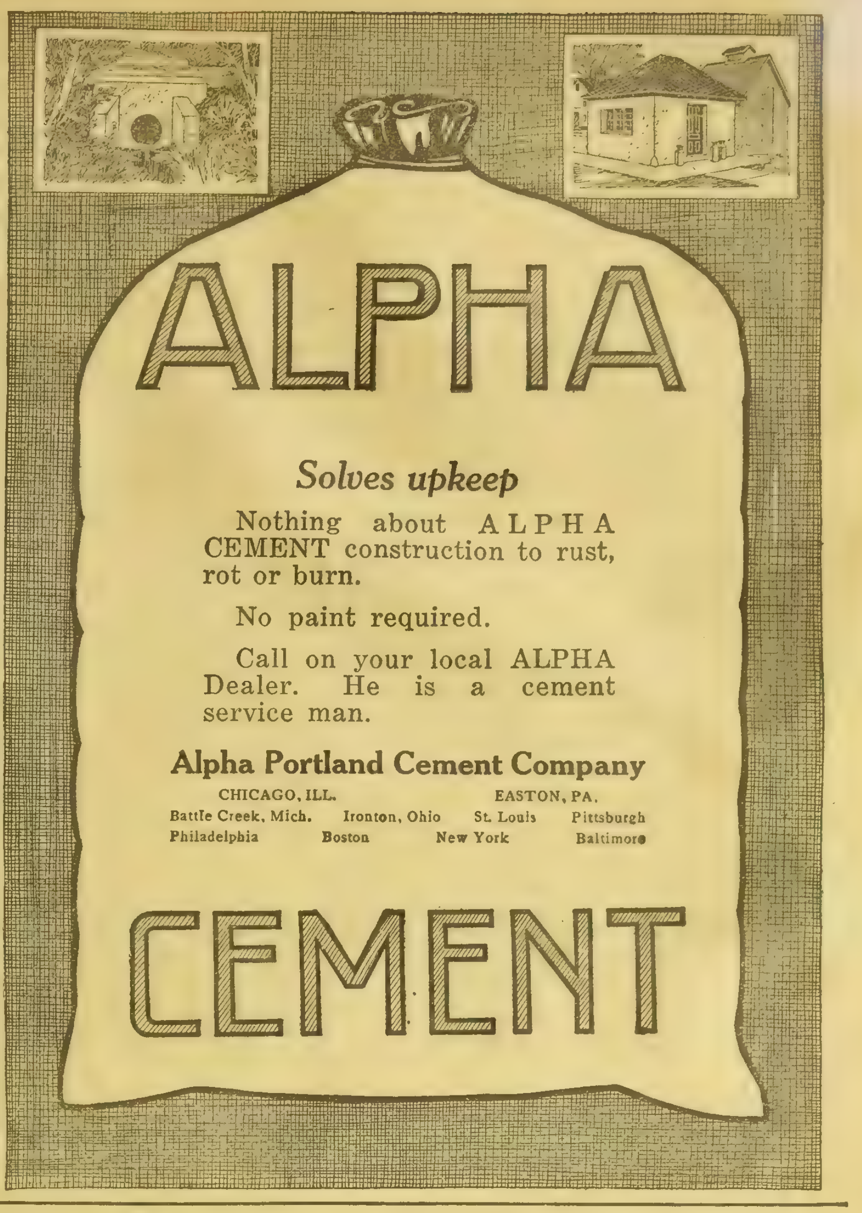
Every second of the twenty-four hours of every day there are 389 letters dropped into letter boxes; every minute, 23,334, and every hour 1,400,000.

The farmer is not neglected by the Postal Service. Today 44,552 rural routes supply mail to 6,504,592 families, or 29,921,123 individuals.

On February 25, 1924, the Post Office Department had more than 351,000 in its employ. Besides the 43,677 letter carriers, there are 62,400 clerks, 44,417 rural carriers, 51,393 postmasters, and 21,316 railway postal clerks.

The 51,393 postmasters run as many offices. There is one post office for every 58 square miles of territory.

The 351,000 full and part time postal employees are paid approximately $441,622,517 annually for their services.



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No paint required.

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For persistant layers raise

Wolverine Baby Chicks

Bred for heavy egg production since 1910

Specially priced for June delivery. June 2-10-17 and later. Shipped by parcel post prepaid to your door. 100% safe delivery guaranteed.

S. C. English type White Leghorns

	50 chicks	100 chicks	500 chicks	1000 chicks
Selected Mating	$5.00	$10.00	$50.00	$100.00
Our Best Mating	$600	$12.00	$57.50	$115.00

Order direct from this advertisement to save time and get your chicks at once, or write for our free 32-page catalog.

WOLVERINE HATCHERY
H. WIERSMA, Prop. Zeeland, Mich., R. No. 2

Special Sale of June Chicks

Here is your opportunity to buy good quality Chicks at these remarkably low prices. Look—Assorted lots of Chicks $75.00 per 1000 lot, $38.50 per 500, $8.00 per 100, $4.25 per 50. Guaranteed Live Delivery to your door. Write for Special and regular price list and free catalog. Order now direct from ad.

Holland Hatchery & Poultry Farm, R7, Holland, Mich.

ROYAL EGG-BRED CHICKS

200 Egg Strain S. C. English White Leghorns and Brown Leghorns. Our pen of White Leghorns to 1st prize (best W. Leghorn pen in the show) production class, in the largest utility show in the country held at Zeeland, Michigan, Dec. 28. **Prof. E. Foreman of M. A. C. judging.** 12 years of careful breeding for high egg-production, combined with 8 years of highly successful hatchery methods gives you chicks that grow into money makers. 100% live delivery guaranteed. Write for free catalog and prices.

ROYAL HATCHERY & FARMS
S. P. Wiersma, Zeeland, Michigan, R. R. 2.

B&R CHICKS
ARE THE GOOD KIND

We hatch chicks from flocks which have had our own personal attention. Every bird is carefully selected by us for best production. A pure-bred chick from us has the breeding to grow into a fine money making fowl. Send for full information. 100% live delivery guaranteed. All popular breeds. We hope you will give us a trial order for that will mean a permanent customer, we are sure. Write today.

Borst & Roek, Box 10, Zeeland, Mich.

CHICKS Strong. Healthy. From Heavy Layers. S. C. Tom Barron Eng. White Leghorns, $12.00 per 100. Barred Rocks and S. C. R. I. Reds $15.00. White Wyandottes $16.00. Assorted chicks $10.00. Order direct from this ad. Reference First National Bank.

BLISSFIELD HATCHERY, Blissfield, Michigan.

BABY CHICKS BARRON S. C. W. LEGhorns. Special low prices. 100% alive delivery guaranteed. Write for price list. **HENRY WATERWAY, R4, Holland, Mich.**

Pure Bred Baby Chicks

We have been carefully developing our flocks for eight years. Every chick pure bred and from stock carefully culled, for type and production. Our chicks give satisfaction. Order today for **May Delivery.**

Prices on	50	100	500
W. Leghorns	$7.00	$13.00	$62.00
B. Rocks, R. I. Reds	8.00	15.00	72.00

Postpaid. 100% live delivery. You take no chances. Ref. Farmers & Mechanics Bank, this city. No Catalog. Order from this ad.

WASHTENAW HATCHERY
Geddes Rd, Ann Arbor, Mich.

CHICKS WHITE LEGHORNS $12 PER 100, $6.25 for 50, and $3.25 for 25. Barred Rocks and Reds $16 per 100, $8.50 for 50, and $4.25 for 25. White Wyandottes and Rocks $17 per 100, $8.75 for 50, and $4.50 for 25. Buff Orpingtons $18 per 100, $9.25 for 50, and $4.75 for 25. $5 on each 100 chicks with order will book your order. Balance two weeks before delivery. 100% live delivery guaranteed. Reference: Bank of Mt. Morris.

Meadow Brook Hatchery, R1, Mt. Morris, Mich.

Cured Her Rheumatism

Knowing from terrible experience the suffering caused by rheumatism, Mrs. J. E. Hurst, who lives at 204 Davis Avenue, B67, Bloomington, Ill., is so thankful at having cured herself that out of pure gratitude she is anxious to tell all other sufferers just how to get rid of their torture by a simple way at home.

Mrs. Hurst has nothing to sell. Merely cut out this notice, mail it to her with your own name and address, and she will gladly send you this valuable information entirely free. Write her at once before you forget. (Adv.)

KARSTEN'S QUALITY

BABY CHICKS From Our Hollywood and Barron English

AT 45% REDUCTION FROM MARCH PRICES. IMMEDIATE DELIVERY—$11.75 per 100 for our STAR CHICKS THAT SOLD FOR $19.00 per 100 last March. A Extra 10% on orders of 500 or more—RUSH YOUR ORDER for May 26th Delivery or any Monday during June and July. SEND FOR FREE CATALOG IT DESCRIBES OUR WONDERFUL BREEDING ESTABLISHMENT.. 100% LIVE DELIVERY GUARANTEED.

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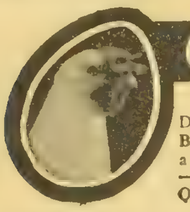

QUEEN QUALITY CHICKS

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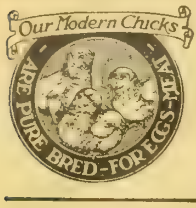
Developed and Culled by Experts---Barron Strain English White Leghorns, Brown Leghorns and Sheppard's Anconas. Sturdy, Healthy Chicks. Just a little more for your money. Safe delivery guaranteed. Write for Catalog.

QUEEN HATCHERY & POULTRY FARM :: ZEELAND, MICH.



400,000 CHICKS

BIG, STRONG, FLUFFY CHICKS hatched from well-bred and well kept, heavy laying hens insuring good growth and PROFITS.

	Prices on 50	100	500	1000
White, Brown and Buff Leghorns	$7.00	$13.00	$62.00	$120.00
Barred and White Rocks, S. C. and R. C. Reds, Anconas	8.00	15.00	72.50	140.00
White Wyandottes, Buff Orpingtons	8.50	16.00	77.50	....
Silver Wyandottes	9.50	18.00	87.50	170.00

Mixed, $12.00 per hundred, straight. Postpaid. 100% Live Arrival Guaranteed. Order right from this ad. Best Bank Reference. You take no chance. Free Catalog. Member I. B. C. A. and Ohio Assn.

MODERN HATCHERY, Box 62, Mt. Blanchard, Ohio.

SUNBEAM HATCHERY

SUNBEAM CHICKS
Are Money Makers

Chicks are produced under my personal supervision. Hatched from select, pure-bred, heavy laying hens, well kept to insure vigorous Chicks.

Varieties	Prices on 25	50	100	500
White, Brown & Buff Leghorns,	$3.00	$5.50	$11.00	$52.50
Barred & White Rocks, Reds, Anconas,	3.50	6.50	13.00	62.50
White & Sil. Wyandots, Blk. Minorcas,	4.00	7.50	15.00	72.50
White & Buff Orpingtons,	4.00	7.50	15.00	72.50

Mixed, all varieties, $10.00 per 100 straight. Postpaid. 100% live delivery guaranteed. Order from this ad. Bank reference. There is no risk. Free Catalog. Member I. B. C. A. H. B. TIPPIN, Box E, Findlay, Ohio.

CHICKS: HOGAN TESTED GUARANTEED Our Chicks are from flocks on free range. They will live and grow and make a profit. ENGLISH WHITE LEGHORNS and BROWN LEGHORNS. Heavy laying Extra Good BARRED ROCKS. Postpaid to your door and full live delivery guaranteed. Our flocks are carefully supervised and Hogan tested. Bank Reference furnished. Write for prices and descriptive matter.

HILLVIEW HATCHERY, C. Boven, Prop.
Box H. R. R. 12, Holland, Mich.

ELGIN CHICKS

Barron Strain Selected English White Leghorn Chicks. We ship all over the states. Get the good winter layers. Prices are right. Grade AA, best stock. Grade A, good layers. Prices: Grade AA chicks, 25, $4.00; 50, $7.50; 100, $14.00; 500, $67.50; 1000, $130.00. Grade A chicks, 25, $3.50; 50, $6.50; 100, $12.00; 500, $57.50; 1000, $110.00.

ELGIN HATCHERY, Box 317-A, Zeeland, Mich.

S. C. White Leghorn

Baby Chicks from Demonstration Farm flock, $13 per 100. Barred Rock chicks, $15 per 100.
RALPH S. TOTTEN, Pittsford, Michigan.

Whittaker's Red Chicks and Eggs for Hatching. Rose and Single Combs. Bred from Fourteen Generations of Winter Layers. Write for Free Catalog of Michigan's Greatest Color and Egg Strain. Interlakes Farm, Box 4, Lawrence, Mich.

READ AND ORDER; CHICKS FROM HIGH producing flocks, culled by M. A. C. expert. April and May, White Wyandottes, $18.00 per 100; Barred Rocks, $16.00; White Leghorns, $14.00. C. W. Heimbach, R5, Big Rapids, Mich.

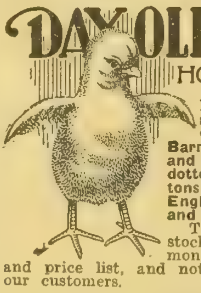
STURDY CHICKS—BRED-TO-LAY AND exhibition flocks, culled by experts. Reasonable prices. Catalog free. Single Comb White Leghorns, Rocks, Reds, White Wyandottes. Sunnybrook Poultry Farm, Hillsdale, Mich.

BEFORE BUYING ELSEWHERE GET OUR prices on White and Brown Leghorns and White Rocks. Prepaid Parcelpost. Satisfaction Guaranteed.
De Koster's Hatchery, Box B, Zeeland, Mich.

QUALITY BABY CHICKS: SINGLE AND ROSE Comb Rhode Island Whites. Write for Catalogue.
FISCHERS POULTRY FARM, Holland, Mich.

PUREBRED BABY CHICKS. LEADING VARieties. 100% arrival. Priced right.
THOS. G. CALLAGHAN, Fenton, Michigan.

PUREBRED BABY CHICKS, BARRED ROCKS and Rhode Island Reds $14.00 per 100.
JOSEPH AMSTER, Paw Paw, Michigan.



DAY OLD CHICKS
HOMESTEAD FARMS

Pure breed poultry, bred and culled for years for egg production.
Barred and White Rocks; R. C. and S. C. Reds; White Wyandottes; White and Buff Orpingtons; Anconas; American and English White Leghorns; Brown and Buff Leghorns.
This is practical production stock that will make you money. Send for description and price list, and note egg records reported by our customers.

ADVANCE SALE
PULLETS—COCKERELS

Eight weeks and 3 mos. Pullets and Cockerels in the different breeds. Send for New Pullet Circular.

STATE FARMS ASSOCIATION
307 N. Rose St. Kalamazoo, Mich.
Member International Baby Chick Association
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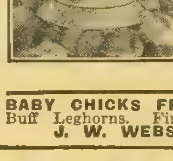
YOU CAN DO IT WITH BABY CHIX
BANE OF

BEST CHICKS at Low Prices

Send for free catalog describing **best bred** chicks in the country. Tom Barron and Tancred White Leghorns, Michigan's Champion Winter Laying Barred Plymouth Rocks and S.C.R.I. Reds. No better chicks anywhere at any price. Satisfaction and 100 per cent live delivery guaranteed.

Brummer-Frederickson Poultry Farm, Box 26 Holland, Mich.



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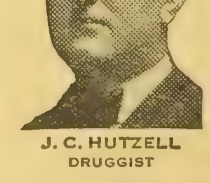
"SELF-SERVE" Chick Feeder

Holds 12 quarts, Can't clog. Chicks can't roost on special cover nor touch feed with feet. Grown fowls cannot steal feed. Price $1.50 plus postage. Send for free booklet.
IRA P. HAYES,
Dept. B 12,
Eckford, Michigan

BABY CHICKS FROM BRED TO LAY S. C. Buff Leghorns. First hatch March 3rd.
J. W. WEBSTER, Bath, Michigan.

ECZEMA
CAN BE CURED
Free Proof To You



J. C. HUTZELL
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All I want is your name and address so I can send you a free trial treatment. I want you just to **try** this treatment—that's all—**just try it.** That's my only argument.

I've been in the Retail Drug Business for 20 years. I served four years as a member of the Indiana State Board of Pharmacy and five years as President of the Retail Druggists' Association. Nearly everyone in Fort Wayne knows me and knows about my successful treatment. Over **twenty thousand** Men, Women and Children outside of Fort Wayne, have, according to their own statements, been cured by this treatment since I first made this offer public.

If you have **Eczema, Itch, Salt Rheum, Tetter**—never mind how bad—my treatment has cured the worst cases I ever saw—**give me a chance to prove my claim.**

Send me your name and address on the coupon below and get the trial treatment I want to send you FREE. The wonders accomplished in your own case will be **proof.**

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RAISING GEESE

Will you please tell me how to care for a pair of common grey and white geese? How to house during winter? What to feed and how much. Would being related make any difference? Should we change ganders every year? Would a pair of young geese do alright as I cannot get older ones? Our land is heavy, but no water during summer, only from the well. Plenty of water during early spring. At what time should they start to lay, and how should eggs be cared for?—C. R., Onaway, Mich.

—The two great essentials in successful goose raising are, free range and an abundance of green food. Geese require very little housing. A rough shed or out building being sufficient for this purpose. They should, however, be provided with dry quarters and protected from draughts and deep snow. Breeding geese should be fed sparingly during the winter months, and should be given a large part of their ration in green food. A good winter ration for breeding stock consists of equal parts, oats, barley and wheat, and about 25 per cent green food. Clover, or alfalfa when well cured, is excellent, and cabbage or mangels can be used to supply this part of the ration.

Geese should be fed twice daily during the cold weather and as soon as spring opens up, should be given a mash to stimulate egg production. The mash may consist of equal parts of ground oats, corn meal, and bran, with a liberal amount of green food. This mash should be fed at noon in addition to the regular morning and evening feeding. Water, grit, and shell should be available at all times.

The breeding season will commence the latter part of March, depending somewhat on the locality and on the season. Geese usually lay every other day, and almost always in the morning. The number of eggs laid by each goose varies with different individuals, numbering from 12 to 50, altho 20 is considered satisfactory.

One male can be mated with from two to four females, depending upon the breed, and the individuality of the male bird. Geese are seldom good breeders until they are two years old, and continue their usefulness until they are ten or twelve years of age.

Geese are peculiar birds to mate, and should receive considerable attention. Young males should be confined with the females that are to be bred with them. This should take place not later than New Year, and the other geese removed from the pen. It is almost impossible to get a strange male to mate successfully with a female from another flock unless they are properly mated, they will divide out in the spring, each male mating with the females he accompanied the previous season.

A satisfactory feeding practice for the young goslings consists of bread crumbs, moistened with skim milk, in addition to green sod, and plenty of clean fresh water. When about two weeks old a mash composed of equal parts by weight of corn meal, barley meal, and bran, and shorts, should be moistened and fed four or five times daily for two weeks. After the goslings are three weeks old they will live and grow well on grass and water, tho shade should be provided during the warm summer days.—E. C. Foreman, Professor of Poultry Husbandry, M. A. C.

BREEDS OF HENS THAT LAY WHITE SHELL EGGS

I know that Leghorn chickens lay white shell eggs. I would like to know what other breed of chickens and how many other breed also lays the white shell eggs.—O. R. McD., Lorain, Ohio.

—The production of white eggs is limited almost entirely to the Mediterranean breeds, which include the different varieties of Leghorn, Ancona, Hamburg, Minorca, Spanish, and Blue Andalusian. A new breed known as the "Lamona" bred at the Washington Station, altho not yet released to the public, has this characteristic developed along with other commercial possibilities.—E. C. Foreman, Professor of Poultry Husbandry, M. A. C.

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A Remarkable Home Treatment Given by One Who Had It.

In the year of 1893 I was attacked by Muscular and Sub-acute Rheumatism. I suffered as only those who are thus afflicted know, for over three years. I tried remedy after remedy, but such relief as I obtained was only temporary. Finally, I found a treatment that cured me completely, and such a pitiful condition has never returned. I have given it to a number who were terribly afflicted, even bedridden, some of them seventy to eighty years old, and the results were the same as in my own case.

I want every sufferer from any form of muscular and sub-acute (swelling at the joints) rheumatsim, to try the great value of my improved "Home Treatment" for its remarkable healing power. Do not send a cent; simply mail your name and address and I will send it free to try. After you have used it and it has proven itself to be that long-looked-for means of getting rid of such forms of rheumatism, you may send the price of it, one dollar, but understand, I do not want your money unless you are perfectly satisfied to send it. Isn't that fair? Why suffer any longer when relief is thus offered you free? Don't delay. Write today.

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No. 265-K Durston Bldg.
SYRACUSE, N. Y.

Mr. Jackson is responsible. Above statement true. (adv.)

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BABY CHICKS
EGG BRED for 18 YEARS

June chicks grow rapidly and strong, due to warm weather, plenty of green stuff and insect food. They mature quickly. A June Wyngarden pullet will lay early in November, when prices of eggs are highest. Figure out the extra profit for yourself.

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SELECTED MATINGS (English W. Leghorns, Brown Leghorns, Anconas) 50, $5. 100 $10. 1,000, $90.
EXTRA SELECTED MATINGS (same breeds) 50, $6. 100, $12. 1,000, $110.
SPECIAL STAR MATING (English W. Leghorns) 50, $7. 100, $14. 1,000, $120.
ODDS AND ENDS (broilers) 100, $8. 1,000, $70.
(500 lots at 1,000 rate)
100% live delivery guaranteed.

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Write Quick for
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CERTIFIED CHICKS
From World's Best Laying Strains

Tancred pedigree-sired, and Tom Barron S. C. White Leghorns, R. C. Rhode Island Reds; Park's Barred Plymouth Rocks.

Your Satisfaction Guaranteed

Our flocks are all inspected and **certified** by the Michigan Agricultural College. Watch our pens at M. A. C. East Lansing, Mich. Every bird is well matured and vigorous. No culls in our flocks. Our chicks are **bred right, hatched right, and shipped right.** Every one is strong and healthy. **100%** live delivery **postpaid. Satisfaction absolutely guaranteed.** Illustrated catalog **sent free.** Buy Lakeview chicks if you want to **make money.** Write for low prices today sure.

Lakeview Poultry Farm, R. 8, Box 8 Holland, Mich.

PURE BRED CHICKS

What our Customers say—

Elmer Arnold—801 eggs in 14 days in December from 85 June hatched White Leghorns; Herman Broegeler—Bought 100 Ancona chicks, raised 69 pullets, 80 cockerals. F. R. Wallis—Ordered 100 chicks, received 103, raised every one. This wonderful vitality and laying ability shows why, as this is written, our S.C.W. Leghorns lead in Michigans International laying contest. Our strains are Tom Barron Imported and Hollywood S. C. White Leghorns, Sheppards Famous S. C. Mottled Anconas and Parks Bred to Lay Barred Rocks. Chicks shipped postpaid, 100¢ live delivery guaranteed. Big illustrated catalog sent Free.

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WHITE LEGHORN
BABY CHICKS

TANCRED—BARRON, 200 to 300-egg bred lines. Wonderful layers of large, white eggs that bring premium prices. Over 2,000 selected breeders on free range. Get quality chicks from these tested layers mated to high record pedigreed males. 11½ cents and up. 100% live delivery guaranteed by prepaid parcel post. Write at once for valuable illustrated catalog and latest price list.

J. PATER & SON, R. 4A, Hudsonville, Michigan.

LOOK! **100,000 CHIX. BEST PUREBRED.** M. A. C. method tested stock. Can ship at once. Barred Rocks or Reds, Black Minorcas 15c; White, Brown or Buff Leghorns 13c; Sheppards best Anconas 14c; Orpingtons 16½c; Black Langhans 18c; Large Brahmas 20c. Heavy broilers Chix 12c. Mixed spotted Chix 10c. Hatching eggs. Add 30c extra if less than 100 ordered. Catalog tells about our extra selected stock. Good bank reference. **Beckmann Hatchery, 26 Lyon, Grand Rapids, Michigan.**

QUALITY CHICKS New Prices

Prompt Free Live Delivery. Per 100 Leghorns, $10; Rocks, Reds, Orpingtons, Wyandottes, Anconas, $12; Lt. Brahmas, $15; Assorted, $7.00. Free Catalog gives quantity prices.

Missouri Poultry Farms, Columbia, Mo.

GERMOZONE FOR SICK CHICKENS

25 years the one dependable remedy and preventive. Millions use it for WHITE DIARRHOEA and other bowel troubles; colds, canker, roup, cholera, chicken pox, etc. Don't experiment. Get GERMOZONE, (65c & $1.25 sizes) and FREE book, "The Lee Way," worth a dollar to every poultry raiser. At drug or seed stores or sent postpaid by GEO. H. LEE CO. OMAHA, NEBR.

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The Old Reliable Has proven itself year after year the one **sure** way to rid poultry of lice, mites, bedbugs, body lice and such vermin. Paint or spray on roosts, etc. No dusting, dipping, greasing, handling. Get it at your drug or seed store, or write us for particulars and valuable free book. **GEO. H. LEE CO. Omaha, Nebr.**

DEVELOPING PERMANENT FERTILITY IN NORTHERN MICHIGAN SOILS

IN 1888, the Michigan Experiment Station commenced an experiment on the light porous soils near Grayling, Michigan, having for its object methods of enriching them by green manuring with the aid of cheap fertilizers such as marl, gypsum and salt. Spurry, vetch, red white and alsike clover were used with good effect. Sugar beets and various grasses were also raised with good results. The soils were preceptibly improved as a consequence.

The use of salt in conjunction with gypsum probably originated in Switzerland. Sometimes wood ash was included with salt and gypsum. Marl was largely used in the early days in place of limestone and where available it is still used as a corrector of acid in soil. Furthermore, all of these substances are native to Michigan and comparatively cheap.

The Michigan Experiment Station recently analyzed some of the soil types found in northern Michigan for the purpose of learning something with regard to origin and geographic relationship. Based on analysis I computed that the sulphur content of the soil varies from nothing to 2924 pounds per 2,000,000 pounds of soil. The average is 571 pounds. Naturally much of the soil in northern Michigan which responded to gypsum treatment in the early days still needs it.

One change at least should be made in treating the soils which was not pursued in the early days. Much of the soil is low in phosphorus and applications of finely ground rock phosphate should prove to be a very good form of phosphorus to use, first, because it contains twice as much phosphorus as acid phosphate and second, because it is cheap compared with the latter. Rock Phosphate may be less effective at the outstart but after it is imbedded in the soil it becomes effective and is therefore the cheapest to use in the end. It serves in part as a neutralizer of soil acid and this process hastens the solution of the phosphorus. Less lime or marl would therefore be required. It is only on soils requiring large quantities of lime that applications should be made, and then only after the acid in the soil has had a chance to act on the rock phosphate.

Some form of sodium salt other than common salt may be applied with good results, and crude carbonate of soda may improve the soil. It would reduce the lime requirement and if necessary could be applied in ample quantities to take the place of lime. The old method of applying salt with wood ashes was for a similar purpose. Based on experiments conducted at the Rhode Island Experiment Station, the sodium conserved much of the potassium.

There are other reasons why sodium treatment might prove beneficial. The sodium content of much of the Michigan soil is low or the soil is devoid of this element and any good influence which sodium would have would be missing in the soils. In recent Wisconsin experiments sodium carbonate was employed because it was of recognized value in soil or culture solution.

The surface soil in northern Michigan contains ample nitrogen for plant needs but the sublayers as a rule are deficient in this element indicating that growth and accumulation are limited to the surface layer. Deep rooting plants would change conditions and various legumes such as vetch, alfalfa and clover would increase the organic matter and nitrogen in the subsoil.

There should be just as much soil improvement now as was secured in Grayling experiments, thirty-five years ago. In fact the treatment suggested should provide more substantial improvement because phosphorus is included in the treatment with gypsum, marl or limestone. Instead of common salt, sodium carbonate has been suggested.—Prof. George A. Olson.

Something Left

"The rapidly increasing divorce rate," remarked the newcomer, "proves that America is fast becoming the land of the free."

"Yes," said his friend, "but the continuance of the marriage rates shows that it is still the home of the brave."—West Virginia Wesleyan Pharos.

DOWNS' CHICKS $10.00 PER 100

June 3rd and later our best No. 1 EXTRA SELECTED WHITE LEGHORN CHICKS will be $10 per 100. Four extra included with each 100.

Our terms are 10% with order, balance one week before shipment.

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Tom Barron White Leghorns **Heavy Type Brown Leghorns**
R. C. & S. C. Rhode Island Reds **Park's Barred Rocks**

Flocks are carefully culled and developed on free range. All chicks are hand picked and inspected, no cripples or weaklings. Every one **strong** and **healthy. Satisfaction** and 100% live delivery guaranteed. **Postage** paid. Write now for our **low prices** and **free catalog.** White Leghorn and Barred Rock pullets after May 1, at low prices.

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S. C. English White Leghorns and S. C. Anconas. Strong sturdy, northern grown chicks, hatched from flocks on free range. We ship by Prepaid Parcel Post and guarantee satisfaction and 100% live delivery. Send in your order at once at the following prices or send for catalog. Write for prices on Special matings. Send 10% with order, balance one week before chicks are shipped. Can ship any week.

	50 Chicks	100 Chicks	500 Chicks	1000 Chicks
May Prices	$5.50	$11.00	$52.50	$100.00
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Broiler chicks			$2.00 per 100 less	

M. D. WYNGARDEN, R. 4, Box 81, Zeeland, Michigan.

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HIGHEST QUALITY CERTIFIED BABY CHICKS

VAN APPLEDORN BROS. BABY CHICKS Since 1906 MICHIGAN'S OLD RELIABLE HATCHERY HOLLAND, MICHIGAN

From Michigan's Old Reliable Hatchery, the best equipped and most modern Hatchery in the State.

Pure Bred Tom Barron English and American White Leghorns, Anconas, Barred Plymouth Rocks and Rhode Island Reds. Strong, Well-hatched Chicks from tested Hoganized Free-range stock that make wonderful winter layers.

Chicks sent by Insured Parcel Post prepaid to your door. 100% live delivery guaranteed. Sixteen years of experience in producing and shipping Chicks giving absolute satisfaction to thousands. Write for valuable illustrated free catalog and price list. Get lowest price on best quality Chicks before placing your order. **HOLLAND HATCHERY & POULTRY FARM, R. 7, Holland. Mich.**

Great Northern Hatchery
Pure Bred Selected Flocks
100 Per Cent Live Delivery

Strong sturdy northern grown Chicks. Selected, pure bred stock. Healthy flocks on free range insure strength in every Chick. Order from this Ad.

Varieties	Prices on 50	100	300	500	1000
Leghorns (S. C. White and Brown)	$7.00	$13.00	$38.00	$62.00	$120.00
Barred Rocks	8.00	15.00	43.00	72.00	140.00
Mixed Broiler Chicks					$12 per 100 straight

Hatched under best conditions in Newton incubators. Every Chick carefully inspected. 100% live delivery guaranteed. Reference State Commercial Savings Bank, this city. Write for prices on special matings. **GREAT NORTHERN HATCHERY, Box 50, Zeeland, Michigan.**

HUNDERMAN'S FIRST-CLASS CHICKS $10 and UP

We are heavy producers of pure-bred chicks. Flocks on free range. Culled by an expert. 100% live delivery guaranteed. Order today from this Ad. and get chicks when you want them.

Varieties	Prices on 25	50	100	500	1000
English White Leghorns	$3.00	$6.00	$11.00	$52.50	$105.00
Barred Rocks, R. C. and S. C. Reds	3.75	7.00	13.00	62.50	120.00
Odds and Ends	2.50	4.50	8.00	---- ----	------ ----

Blue Hen Incubators. Reference: Zeeland State Bank. Order today; you take no chances. Orders booked for 10% down; balance ten days before chicks are to be shipped. Catalog free.

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BIG, HUSKY CHICKS Pure Bred, High Quality Heavy Laying, Tested Certified Flocks.

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Varieties	Prices on 25	50	100	500	1000
S. C. White and Brown Leghorns	$3.25	$6.00	$11.00	$53.00	$105.00
Barred Rocks and R. I. Reds	3.75	7.50	14.00	67.00	130.00
Anconas	3.50	6.50	12.00	57.00	110.00
Assorted Chicks	2.75	5.00	9.00	45.00	---------

Extra Select Stock $1.00 per 100 higher. Well hatched in modern machines. Each order carefully packed under our personal attention. Postpaid. 100% live delivery. Bank reference. 1924 catalog ready.

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HENRY DePREE & SONS.
One of the Founders of the Chick Indusrty
21 Years in Business

Pure-bred stock carefully developed for years. Order from this ad and get chicks just when you want them.

Prepaid prices on	50	100	500
White and Brown Leghorns	$7.00	$13.00	$62.50
Rocks, Reds, Buff Leghorns	8.00	15.00	72.00
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Mixed Chicks (all varieties)	$10.00 per 100		

You take no chances. Ref: First State Bank, Holland. 97% live delivery guaranteed. White Leghorns headed by male birds of 285-303 egg record strains. Other breeds highly bred. Circular free.

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Can't be beat because they are hatched from Michigan's leading pedigreed flocks, culled by genuine poultry experts, for higher egg production and because we hatch only in tested mammoth machines. Rocks, Reds, White Leghorns, Anconas, Buff Orpingtons. Large instructive catalog tell all about them. Prices 9c up.

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Strong, Healthy Chicks

Hatched in the latest improved Mammoth Incubator. English S. C. W. Leghorns, S. C. Anconas, Barred Rocks, R. I. Reds from heavy laying free range organized flocks. 100% alive. Parcel Post paid. Send for catalog. Reference.

Timmers Hatchery, R3, Box M, Holland, Mich.

EGG BRED CERTIFIED CHICKS
S. C. WHITE and BROWN LEGHORNS,
S. C. ANCONAS

	100	500	1,000
May Prices	$11.00	$50.00	$95.00
June	10.00	45.00	85.00
Mixed	8.00	37.50	70.00
Barred Rocks	14.00	65.00	125.00

Shipped postpaid, 100% live delivery guaranteed. Reference, Zeeland State Bank. Member—Mid-West and International Baby Chick Associations.

Town Line POULTRY FARMS ZEELAND MICH.

Chicks With Pep

Try our lively and vigorous chicks from bred-to-lay and exhibition hens. They will make you money for they have the quality and egg laying habit bred into them. A trial will convince you. All leading varieties. Safe delivery. Prepaid. Prices right. Bank reference. Big illustrated catalog free.

Holgate Chick Hatchery, Dept. B, Holgate, Ohio.

Pure Bred Chicks Can ship immediately.

Broiler Chix heavy	11c	White Rocks	14½c
W. or B. Leghorns	12c	W. Wyandottes	15½c
B. Rox or Reds	14c	Buff Orpingtons	16c
Sheppard's Anconas	14c	Black Minorcas	14½c

Extra selected standard bred chicks $4.00 per 100 more. Add 35c if less than 100 ordered. Good bank reference. Catalog. June Chix 1c more.

Lawrence Hatchery, BF, R. 7, Grand Rapids, Mich.

BABY CHICKS—REMARKABLE FOR SIZE and strength. Reasonable prices. Leghorns, Anconas, Rocks, Reds, Wyandottes, Orpingtons, Minorcas, Spanish, Brahmas.
TYRONE POULTRY FARM, Fenton, Michigan.

MARKET FLASHES

FOOTE'S MARKET LETTER

BY W. W. FOOTE

Good Farming Outlook

THE farmers throughout the country are busy in their spring work, and oat seeding has been pretty generally completed under favorable conditions. In a short time corn planting will begin, and it is the prevailing belief of those best informed that the acreage will exceed that of 1923. It is assumed that as much livestock as usual will be prepared for the market, but undoubtedly fewer swine will be marketed than the huge number shipped from farms in the corn belt during the past season, fewer sows having been bred for the crops of spring and fall pigs. Michigan farmers are deeply interested in the wheat crop, and late reliable advices indicate that the increase in the crop west of the Missouri River in the southwest is likely to more than offset the loss in the middle west, but it is too early to talk definitely about such matters. For many weeks it has been pointed out most emphatically that the right course for Michigan farmers was to materially reduce their wheat acreage and thereby do their full part in bringing about sufficiently high prices to make wheat growing profitable once more, as it was before the war started the mania for raising it. It is impossible to over emphasize the tremendous importance of diversifying the farm crops, and thereby defeating the loss resulting from raising only one crop. It is hardly necessary to discuss the question of sheep raising so far as most of our Michigan farmers are concerned, but here are some who have not established a flock, and if the dogs do not run things in your district, a small flock will become an important asset, helping to increase farm profits, and furnishing mutton for the home table, as well as for marketing, while the manure is a fine fertilizer for the land. Lambs soared a few weeks ago to $17.10 per 100 pounds in the Chicago market, making a wonderful record, and rallying after a natural reaction. The hired man question is still a great factor in farming, but in part it is met with the increased use of farm machinery, which vastly increases the work done and saves money in the end. The Department of Agriculture reports a material increase in dairying, poultry raising, flax growing, clover and soy beans, and emphasis is placed on the large profits from dairying.

The Wheat Outlook

Not very much attention is paid by traders in wheat to the statistical showing, and speculation lags, the volume of business being much less than in past years, before federal restrictions were placed on such transactions. Fluctuations are within rather narrow limits nearly all the time, with sales at far below prices of normal years, values being made mainly by the excessive crop of wheat raised last year by the fact that rival exporting countries continue to undersell our farmers. Until it becomes definitely known that our wheat crop for 1924 comes within reasonable limits there is little reason to look for any genuine improvement in prices, unless federal legislation intended to advance prices is enacted. Large amounts of wheat remain in the United States, as well as in Canada, and as effect of these stocks has been pretty well discounted, crop reports are beginning to be a basis for making prices. European wheat growing countries are gradually recovering from the effects of the war, and increasing crops of wheat, rye and other grains are looked for, rendering the prospect of a return to former liberal exports of breadstuffs from our shores extremely doubtful. Canada is underselling us in the markets of Europe, and as it looks now, the bulls in this country have little to hope for unless the wheat crop for this year is a short one. Crop reports are having a limited influence, it being too early to form and conclusion worth talking about. Farmers owning wheat from last year's crop ask in many instances what they shall do about marketing it wholly or in part; to which it may be replied that it seems a fair thing to do is to sell on any decent rallies in values. Late sales on the Chicago Board of Trade were made of July wheat at $1.06, comparing with $1.19½ a year ago, while a little more than two years ago wheat for May delivery was selling at $1.49. From present appearances, we must get used to depending upon the increase in our population to restore former prices for wheat.

July corn sells in the Chicago market around 78½ cents, comparing with 81½ cents a year ago; July oats at 44½ cents, or about the same as last year; and July rye at 66½ cents, comparing with 84 cents a year ago. In a short time the use of corn on farms will become much smaller, as stock will go on grass. In North Dakota wheat acreage is much reduced, and much more land is devoted to barley and flaxseed.

Wheat Competition

The Department of Agriculture has prepared an extremely interesting and valuable article showing the effect of competition in the production of wheat. "The American small grain producer," it is pointed out, "is being subjected to very severe competition from other countries, and in the long run this competition may be expected to increase. The western wheat farmer is now feeling the same kind of competition that 40 years ago he was able to bring to bear on the eastern wheat farmer and the European farmer as well. The older farmers of New York state, which at one time was considered an important wheat-producing state in the East, tell of the relatively 'good times' during the seventies of the last century and the very 'hard times' that the New York farmers experienced in the eighties and nineties. The English wheat-growing farmers can tell a similar story. These hard times were brought about in the Eastern states, as well as in some parts of Europe, by the enormous development of the Missouri and Mississippi Valleys, when the wheat boats began to deliver wheat from western lake points into Buffalo at a transportation cost of 3 or 4 cents a bushel. This completely demoralized the agricultural production of the East, but was followed by a period of readjustment.

"The western wheat-belt farmer is being subjected to a similar competition from Canada. Forty years ago the Kansas farmer was producing wheat on virgin soil, on land where his capital investment was not much above $5 to $10 an acre. The Canadian farmer is now producing wheat under the same conditions that obtained in the Missouri Valley years ago. In most cases the capital investment of the Canadian farmer is relatively small, his soil is still new, and while there are failures, yet the average crop is fairly certain, and the quality of the grain is exceptionally good. The potential production of small grain in Canada is much greater than its present production, which means that for many years to come the small grain farmer in the United States, who depends to a large degree on these crops for his income, must face the same competition that he forced upon the farmers in the eastern states 40 years ago."

Premium for Prime Steers

There are a number of stockmen who always make a specialty of preparing strictly prime steers for the market, and they make it pay usually, as overproduction of such beeves is extremely rare. J. W. Latimer, of De Kalb County, Illinois, who is in the habit of topping the Chicago market with prime heavy steers, says it has been his policy to hold on to cattle until they pay out. He has done this for twenty years and has never lost. He also feeds lots of hogs, and he handled 1,000 sheep during the last year. He fed one herd of cattle for about five months, giving them full feed, and they were given shelled corn, oil meal and clover hay, as well as molasses.

Frank Adrian, of Dallas County, Iowa, sold in the Chicago market recently two carloads of 1370-pound steers to an eastern shipper at $12.25. They were Wyoming bred Herefords, bought last September at $7.50. They were fed corn, clover hay and oil meal for 175 days. During the latter part of that period they received a molasses feed.

The Cattle Industry

Of late the most marked quotable changes in cattle offered on the Chicago market have been more in the in-between kinds than in those of choice quality, while the inferior kinds have not sold much lower. The bulk of the steers sell much below top prices paid for prime long fed heavy steers, there being hardly enough of these to go around and Nebraska and South Dakota contributing a large share of the best fed beeves. Very few prime yearling steers are offered for sale, and the top price for these has been $1 below the top for heavy cattle. Fat butchering heifers are sure of selling at high prices, and at last the demand for stockers and feeders has started up, while prices for all desirable offerings are headed upward. Probably the usual numbers of thin cattle will be purchased by country buyers for furnishing, and thus far prices have not ruled especially high for the general run of stockers and feeders, although extreme prices have been paid for fleshy feeders requiring a short finish. There is a much increased demand for dairy cows, and about 500 more dairy cattle were shipped out of Wisconsin during March than in any previous March. Such sales reached 3,937 head, Illinois and Iowa each taking over 1,000 head.

Monday is very apt to be a bad day for sellers because the receipts are usually much larger than on other days, and prices frequently advance later in the week. Recent much reduced receipts put prices 50 to 75 cents higher, the bulk of the beef steers selling at $8.50 to $10.85, and the best heavy steers at $11 to $12. Good fat cattle sold at $10 to $10.90, and medium grade steers brought $8.50 to $9.90, with sales down to $7.50 and over and inferior steers at $5.50 to $7.40. The best yearlings were quoted at $10.50 to $11.60, few being good enough to sell up to $11. Butcher cows and heifers sold at $4.25 to $10.25, few going as high as $9, while canner and cutter cows sold at $2 to $4, bulls at $3.50 to $7.50 and calves at $4 to $9.75. Stockers and feeders have a larger demand at $6 to 9.50, selling chiefly at $7 to $8.50. A year ago common to prime beef steers sold in Chicago at $6.75 to $10.25 and two year ago at $7 to $9.15. Combined receipts of cattle in twenty markets for the year to late date amount to 4,029,000 head, comparing with 4,097,000 a year ago and 3,859,000 two years ago.

Good Demand For Hogs

Decreasing marketing of hogs in Chicago and elsewhere and a good demand from local packers and eastern shippers put prices higher recently in the Chicago market. Irregularity in the offering explains the variations in prices, the Monday supply aggregating about 65,000 hogs, including 9,600 left over from the proceeding week. Receipts have averaged in weight 236 pounds, equaling the heaviest average since last October, and well finished swine have predominated, the greater part selling within a range of 20 cents, and the best heavy butchers selling at the top, bringing 10 cents above the best light bacon hogs. There is an unusually large domestic consumption of fresh pork, prices being remarkably low, but the exports of provisions are running much below those for a year ago. The spring pig crop is expected to run much below that of last year, fewer sows having been bred for spring and fall pigs than a year earlier. Combined receipts in twenty markets for the year to recent date foot up 16,058,000 hogs, comparing with 15,242,000 a year ago and 11,415,000 for the same period two years ago. A year ago hogs were selling at $6.35 to $8.25; two years ago at $9.20 to $10.70 and nine years ago at $7.15 to $7.80. Last week's hog receipts in Chicago were far smaller than a week earlier or a year ago, and prices had a moderate advance, closing sales being at $6.75 to $7.60. Further improvement in prices seems almost certain unless the receipts are increased.

Lambs Have Sold Higher

Much larger buying orders for lambs in the Chicago market have put prices up once more, the best handy-weights going the highest, although prime weighty lambs were less discriminated against than in former years. A good market for heavy lambs means much to the men who prepare lambs for the market, and a large Colorado flockmaster remarked recently: "We cannot help getting them heavy if we get them fat." Aged sheep have been scarce, but they were much slower to rally from their recent slump in prices than lambs, being much less in demand. Prime lambs have sold extremely high recently, the top being $17, comparing with $15.25 a year ago and $11.25 three years ago.

MARKET SUMMARY

Wheat and corn steady. Oats and rye unchanged. Beans steady. There is a large supply of potatoes and market is easy. Large receipts of butter and eggs but healthy demand will not allow prices to decline. All live stock higher.

(Note: The above summarized information was received AFTER the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press —Editor.)

WHEAT

Trading in the wheat market does not cover a very wide range. The market seems to be in a nervous condition, due to the political outlook according to reports, and dealers are marking time. Demand at Detroit is slow and the prices are slightly lower than they were one week ago.

CORN

The Detroit corn market shows no change, with demand poor and prices unchanged. The market was affected by the action of wheat. Wet weather in some states is holding up planting.

OATS

Oats followed the trend of other grains. The market is easy and unchanged.

RYE

Rye is steady at Detroit and the price is the same as quoted two weeks ago.

BEANS

Demand is fairly good on the New York market but dealers are not buying only enough to take care of the demand as many feel that prices are going to go lower before long. However, none are willing to shade the price in order to get the business away from the other fellow. The Detroit market is about steady with prices unchanged. It is being urged by dealers that the price be advanced before planting time to a level that will encourage a good acreage. One dealer has written to the trade urging cooperation of all to work the price up to where beans can be raised at a profit.

POTATOES

The Detroit market for old stock was steady last week with supply, demand and trading moderate. At Chicago the market was slightly stronger but price did not change. Demand is improving at that market. Eastern markets are weak with a large supply. Real good quality old potatoes find a fairly good market, however.

HAY

Timothy markets have been firm generally for the best grades except where increased receipts have weakened the market. Low grades are dull and move slow at irregular prices. Alfalfa markets are reported dull, buyers awaiting new hay.

MARKET QUOTATIONS

Wheat

Detroit—Cash No. 2 red, $1.11; No. 2 white, $1.12; No. 2 mixed, $1.10.

Chicago—Cash No. 2 hard, $1.07 ¼@1.13; No. 2 mixed, $1.06¾.

Prices one year ago—Detroit, Cash No. 2 red, $1.32; No. 2 white, and No. 2 mixed, $1.31.

Corn

Detroit—Cash No. 3 yellow, 83c; No. 4, 81c.

Chicago—Cash No. 3 yellow, 77 @77½c; No. 4, 75¾@76½c.

Prices one year ago—Detroit, Cash No. 2 yellow, 86c; No. 3, 85c; No. 4, 83c.

Oats

Detroit—Cash No. 2 white, 54½c; No. 3, 52½c.

Chicago—Cash No. 2 white, 49½ @49¾c; No. 3, 48@48¾c.

Prices one year ago—Detroit, Cash No. 2 white, 50½c; No. 3, 45 @46c.

Rye

Detroit—Cash No. 2, 70c.

Chicago—Cash No. 2, 67c.

Prices one year ago—Detroit, Cash No. 2, 81½c.

Beans

Detroit—C. H. P., $4.40 per cwt.

Chicago—C. H. P., $5.10 per cwt.

Prices one year ago—Detroit, C. H. P., $6.80 per cwt.

Potatoes

Detroit—$1.43@1.50 per cwt.

Chicago—$1.05@1.35 per cwt.

Prices one year ago—Detroit, $1.43@1.50 per cwt.

Hay

Detroit—No. 1 timothy, $23.50@ 24; No. 2, $21@23; standard and light mixed, $22.50@23; No. 1 clover, $21@23 per ton.

Chicago—No. 1 timothy, $25@ 27; No. 2, $21@23; No. 1 clover, $20@22; light mixed, $23@25 per ton.

Prices one year ago—Detroit, No. 1 timothy, $17.50@18; standard and light mixed, $16.50@17; No. 2 timothy, $15.50@16.50; No. 1 clover, $13.14 per ton.

PRITCHARD'S
WEATHER
FORECAST
INTERPRETED BY THE STARS

Week of May 11

FOLLOWING Monday of this week the weather is expected to be generally fair in Michigan until about Thursday. On this day and the next, as well as very beginning of week will constitute the storm period dates of the week in this state. Aside from local thunder storms and showers, during latter part of week, however, we are not expecting any severe storminess.

Temperatures will show a steady climb upward during the week and through most of next week. A temporary climax in warmth will occur around Thursday of this week.

Week of May 18

Rains and thunder showers will occur in Michigan this week around Tuesday and Wednesday. The balance of the week with the exception of Saturday is expected to be generally fair with sunshiny days and moonlight nights.

During early part of week temperatures will be rising but after the middle part they will drop considerably lower. There is grave danger of local frosts in many counties of Michigan at the close of this or the opening of next week.

Between this and next week, we believe farmers will find this the best in which to advance their interests. Next week we are expecting heavier rainfall and considerably unsettled conditions. Farm operations will be greatly hindered.

Easter Weather Verified

Our forecast of the weather at Easter time proved correct in most parts of the state. Considering that the weather bureau was in doubt just what the outcome was going to be 24 hours in advance, we consider that our long range forecasts are of considerable value to the farmer who wants to made his plans weeks and months in advance by means of a reliable method.

RADIO PROGRAMS

Station KYW, Chicago. Central standard time 8:20. Wave length 536 meters.

May 13—"What Pig Club Work has Accomplished in One County," by C. D. Streeter, Lee County, Iowa. "What Lies Behind Successful Marketing," by Professor Fred E. Clark, School of Commerce, Northwestern University.

May 16—Address by Miss Louise Fitzgerald, National Dairy Council. "Among Our Neighbors," a regular weekly feature furnished by the Orange Judd Farmer.—Arthur C. Page, Editor, on "How Some Illinois Country Churches are Meeting Their Opportunities."

May 20—"Playing Margins," by A. R. Simpson, Assistant Director of Organization, American Farm Bureau Federation. Address by Senator Harold C. Kessinger, Aurora, Illinois.

WILL BROADCAST DEBATE AND THEN BARN DANCE

THE Sears-Roebuck Agricultural Foundation's radio station WLS will broadcast a debate next Saturday evening, May 10, at 7 o'clock, central standard time. The debate will be on the McNary-Haugen bill.

Charles J. Brand of the Department of Agriculture, Washington, who has had a great deal to do with framing the measure, will support the bill. Dr. Benjamin H. Hibbard of the University of Wisconsin, Madison, will oppose it. The listeners-in will decide as to the winner of the debate.

The debate program will begin promptly at 7 o'clock, an hour before the barn dance. Each speaker will have twenty minutes to present his main proposition, and afterwards will have ten minutes for rebuttal.

Station WLS thus offers the first national debate ever broadcasted. If it proves popular, this form of education may become a regular feature on the Sears-Roebuck station. WLS broadcasts on 345 meters, and is on the air three times every day. Edgar L. Bill is Director of the station.

Breckenridge Chicks Are Winners

Day old chicks from strong, vigorous flocks which have been carefully culled and extra selected standard male birds —Barred Rocks, R. I. Reds and White Leghorns. We guarantee 100% safe arrival. Write us for price list and circular.

BRECKENRIDGE HATCHERY.
J. C. Barnse, Prop.
Box 351, Breckenridge, Michigan.

RHODE ISLAND REDS—TOMPKINS STRAIN Stock Eggs for hatching and Baby Chicks. May chicks $20.00 per hundred. Hatching eggs $8.00 per hundred. June Chicks $10.00 per hundred. Eggs $7.00 per hundred. Hen hatched chicks on request.
WM. H. FROHM, R1, New Baltimore, Mich.

BARRED ROCKS—PARK'S BEST PEDIGREED stock, mated with M. A. C. and Dennison pedigreed cockerels. Hatching eggs $2 per 15; $5 per 50; $10 per 100. Chicks $20 per 100. Prepaid by parcel post. R. G. Kirby R1, East Lansing, Mich.

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PREFERRED SHARES

and the dividends re-invested double themselves in

10 1-2 years

Ask us how to save with Safety and Profit at

6.6%

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Only $2 DOWN ONE YEAR TO PAY

You can now get any size of the New Butterfly Cream Separator direct from our factory for only $2 down, and on a plan whereby it will earn its own cost and more before you pay.

We quote Surprisingly Low Prices and allow payments as low as

ONLY $3.50 PER MONTH

No interest to pay — no extras. Every machine guaranteed a lifetime against defects in material and workmanship.

30 Days' FREE Trial on your own farm at our risk. Nearly 200,000 already in use on American farms. Easiest of all separators to clean and turn. *Write for Free Catalog Folder today.*

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MAY and JUNE CHICKS

Pine
Bay
Farm

The Kind That Pay Big Profits
PINE BAY FARM CHICKS are backed by our 20 years' experience in the poultry business and a reputation for fair dealing with thousands of satisfied customers. Our experience protects you.
Chicks 6½c Up for June Delivery Rocks, Reds, Minorcas, Anconas and Leghorns. We breed and own International Egg Laying Contest Winners. See Catalog. Get full prices before ordering elsewhere.
PINE BAY POULTRY FARM, Holland, Mich.

LOOK! 100,000 CHIX. BEST PUREBRED. Michigan Agricultural College method tested stock. Can ship at once. Barred Rocks or Reds, Black Minorcas 14c; W., Br. or Buff Leghorns 12c; Sheppard's Anconas 13c; Buff Orpingtons, White or Silver Wyandotts 15½c. Large Brahmas 18c. Heavy mixed broiler chix 11c. Mixed spotted chix 9c. June Chix 1½c less each. Add 30c extra if less than 100 wanted. Catalog tells about our extra selected stock. Bank reference. Beckmann Hatchery, 26 Lyon, Grand Rapids, Mich.

BABY CHICKS FROM BRED-TO-LAY FARM Flocks. Barred Rocks, Reds, English White Leghorns. Now booking orders for May delivery. 100% live delivery. Chicks 10c each and up.
GORET'S POULTRY FARM, Corunna, Michigan.

PUREBRED WHITE RUNNER DUCKS, now laying, $2.50 each.
MRS, GUY SMITH, Galien, Michigan.

EGGS FOR HATCHING

Bronze Turkeys, Toulouse Geese, Pekin Ducks and Barred Rocks. Nearly all of this stock has been imported from Canada by us.

W. T. SHUTTLEWORTH, Ypsilanti, Michigan.

SWINE

O. I. C.

O. I. C.'S 12 YEARLING GILTS TO FARROW in April and May. Large stock, re-[illegible] free. Also spring pigs.
OTTO SCHULZE & SONS, Nashville, Michigan.

HAMPSHIRES

HAMPSHIRES—BRED GILTS AND BOARS at bargain prices. Write your wants. 12th year.
JOHN W. SNYDER, St. Johns, Mich., R. 4.

MISCELLANEOUS

CHIX—PER 100. PREPAID, LEGHORNS, Anconas $10.00—Rocks, Reds $12.00—others $13.00—assorted $9.00, quick delivery, curcular. QUALITY POULTRY FARMS, Box 133B, Windsor, Mo.

SELL COAL IN CARLOAD LOTS SIDE OR main line. Experience unnecessary. Earn week's pay in an hour. Liberal drawing account arrangement. WASHINGTON COAL COMPANY, 889 Coal Exchange Building, Chicago.

HOMESPUN TOBACCO; CHEWING FIVE pounds $1.75; ten $3.00; smoking five pounds $1.25; ten $2.00; pipe and recipe free, pay when received. CO-OPERATIVE FARMERS, Paducah, Kentucky.

MULE-HIDE
"NOT A KICK IN A MILLION FEET"
ROOFING AND SHINGLES
H. J. SMITH
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MULE-HIDE
Roofing & Shingles

are sold by dependable lumber dealers displaying this trademark.

The MULE-HIDE trademark is a sign of dependability.

The dealer using it is a man from whom you can expect dependable service, advice and materials.

THE LEHON COMPANY
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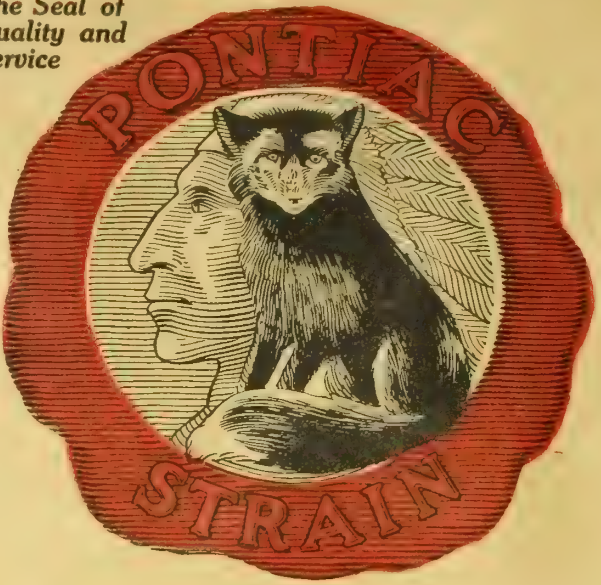
CHICAGO, ILLINOIS

"Not A Kick In A Million Feet"

PONTIAC
Strain Foxes—
and the
Pontiac Plan—
Means Millions
For Furs—
Brought into
Michigan!

The Seal of Quality and Service



ONLY
Pontiac
Strain
Foxes
Will
Produce
Pontiac
Strain

Our Pride Mark Protects You!

The thought in our mind is this:

THAT there are many people in the State of Michigan who have been attracted to the Fox business by the many undoubted sucesses achieved in raising Silver Black Foxes as breeding animals; yet, who have refrained from entering the field owing to certain elements of instability and uncertainty that heretofore have been more or less exitent in the industry. —Such men of sober judgement have realized that the production of high grade breeding animals is a specialized business and requires both natural aptitude and practical experience, and that in order to carry on production of such breeding stock needs a well balanced organization, capable of producing a super grade of breeding stock allied to a strong and efficient sales organization.

To such as these—the Detroit Silver Fox Farms present a solution of the problem. Here is a strong company—well financed—with a wealth of practical experience in breeding foxes,—producing the highest quality stock—and having also the all important sales organization—built upon modern merchandising methods.

This company's campaign of dignified and intelligent advertising copy has already to some extent revolutionized the Fox breeding industry. Thus—financing—experience and sales organization—have built up a splendid service—that is constantly enlarging its scope.

To the man of judgement and foresight there is a tremendous attraction in an alliance with this company—in the shape of a producing unit which would be independently owned —yet operating as a strong unit in the larger organization have available every angle of the service this company has built up. It will crystallize his wish to participate in this very profitable enterprise by eliminating every element of doubt and uncertainty.

There is no doubt of the tremendous profit Fox breeding offers when the three elements necessary for success in any enterprise namely, finance—production—and sales—are present and linked with—knowledge—and efficient organization.

We would like to discuss our plans for increasing the supply of Pontiac Strain Foxes with men such as these—Men of acknowledged strength and standing in their community—who co-operating with this company may establish a production unit for Pontiac Strain Foxes—and receive the splendid financial returns that go with it.

When Demand Exceeds Supply, Production Must be Increased!

Fill Out---Tear Out---and Mail

DETROIT SILVER FOX FARMS,
12-243 General Motors Bldg.,
Detroit, Mich., B.2.

Gentlemen: I would like to know more about Pontiac Plan Service for new Producing Units.

Name..

Address...

City ....

Detroit Silver Fox Farms

12-243 General Motors Bldg., Detroit, Mich.

1,200 Foxes—300 Pens

Pontiac, Mich. *Ranches* **Winnipeg, Man.**

(*Note our change of address.*)

MIC

The Michigan
BUSINESS FARMER

An Independent
Farm Magazine Owned and
Edited in Michigan

VOL. XI, No. 20 SATURDAY, MAY 24, 1924 TERMS: TWO YEARS $1
60c PER YEAR—5 YRS. $2

Welcome Home to Michigan!
Dr. Kenyon L. Butterfield, born in Michigan, resigns at Amherst, Mass., to become President of Michigan Agricultural College, beginning with the fall term, 1924.

DO YOU WANT MONEY?

Money working for you is the quickest way to earn more money. Invest in

Consumers Power Company Preferred Shares

and earn

Tax Free 6.6% With Safety

Write to our Jackson office for all the facts or ask our employees.

CONSUMERS POWER COMPANY

COPPER SULPHATE
(Blue Vitriol)

The basis of Bordeaux Mixture
(Copper Sulphate and slaked lime)

Nichols Triangle Brand Copper Sulphate
Large and small crystals, pulverized—99% Pure.

The only known control for fungous diseases of fruits and vegetables.

Make Your Own Bordeaux

Bordeaux Mixture loses its efficiency on standing and should be freshly made. Use Triangle Brand Copper Sulphate and prepare your mixture when you need it. Triangle Brand is clean and pure. Packed in strong new barrels and kegs.

Nichols Copper Co.

25 Broad Street New York

MISCELLANEOUS

SALESMEN WANTED—TO SELL INTERNational Sugared Hog Feed with Mineral direct to feeders for delivery thru local agent. You can find quick sale for carload on this plan. Practical hog raiser preferred. Must own car and must have previous selling experience. Name references in first letter. This feed prevents disease, saves double its cost in corn and insures top market price when shipped—fastest selling Hog Feed ever made. Our brand new selling plan and complete selling instructions will insure your success right from the start. Exceptionally good chance for high-class men to secure good earnings and steady work in permanent territory with chance for advancement as sales manager for district. Address Sales Manager, INTERNATIONAL SUGAR FEED COMPANY, Minneapolis, Minn.

HOMESPUN TOBACCO; CHEWING FIVE pounds $1.75; ten $3.00; smoking five pounds $1.25; ten $2.00; pipe and recipe free, pay when received. CO-OPERATIVE FARMERS, Paducah, Kentucky.

FOR SALE: GOOD SPAN 3 YEAR OLD Mare Mules, weight about 2400. GEO. SHEETS, Blanchard, Michigan.

Cured Her Rheumatism

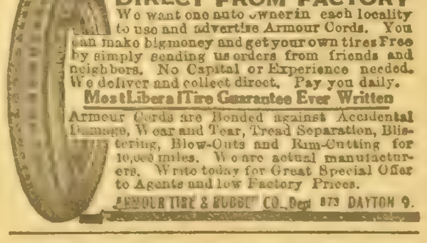
Knowing from terrible experience the suffering caused by rheumatism, Mrs. J. E. Hurst, who lives at 204 Davis Avenue, [illegible], Bloomington, Ill., is so thankful at having cured herself that out of pure gratitude she is anxious to tell all other sufferers just how to get rid of their torture by a simple way at home.

Mrs. Hurst has nothing to sell. Merely cut out this notice, mail it to her with your own name and address, and she will gladly send you this valuable information entirely free. Write her at once before you forget. (Adv.)

Why Not PUT THIS NEW MILL ON YOUR OLD TOWER
ALBION

Albion steel and wood mills are quiet and powerful. One-third the working parts of any other mill. Only main Pitman bearing subject to wear. This is oilless, and easily replaceable. Governs by dependable weight without springs. Fits any 4-post steel tower. Why not shorten your chore hours now with a good Windmill. This is your chance—F. O. B. Albion. Erect it yourself. Ask your dealer, or write direct to

Union Steel Products Co. Ltd.
Dept. 34
Albion, Mich., U. S. A.



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CHIX—PER 100, PREPAID, LEGHORNS, Anconas $10.00—Rocks, Reds $12.00—others $13.00—assorted $9.00, quick delivery, circular. QUALITY POULTRY FARMS, Box 133B, Windsor, Mo.

Plant Certified Seed Potatoes This Year

By H. C. MOORE

Extension Specialist, Michigan Agricultural College

LAST year Michigan farmers bought approximately 60,000 bushels of the 315,000 bushel Michigan certified seed potato crop of 1922. The results secured from this certified seed bought by more than 2,000 growers were so satisfactory that this spring a much larger quantity of certified potatoes will be planted by Michigan farmers.

Several of the Southern counties report that the acreage planted to certified seed this year will be twice that of last season. The reason for the more general use of certified seed in growing potatoes for market is because the certified seed gives an average yield of nearly 40 bushels more per acre than does the ordinary run of seed and furthermore the quality of the crop grown from ceritfied seed is far superior to that from common seed. The statements here made are based on the results secured in 1923 on approximately 500 tests or demonstrations in which certified seed was planted in comparison with uncertified stock. A study of the detailed reports received from over a hundred of the purchasers of the certified seed showed practically the same results as did the tests.

Floyd Algoe of Oakland county purchased last spring several bushels of certified seed from the Upper Peninsula. He grew it in comparison with some of his own stock which was uncertified. Last fall after the crop was harvested he submitted the following report:

Yield per acre of U. S. No. 1 from Mich. cert. seed, 275 bu.; Yield per acre of U. S. No. 1 from uncertified seed, 125 bu.; Quality of crop from Mich. certified seed, fine; Quality of crop from other seed stock, fair.

Mr. Fred E. Moeller at Kinde, Huron county, tested out certified seed last year to his own satisfaction. The certified seed yielded at the rate of 200 bushels per acre while the uncertified stock averaged 135 bushels per acre. 90 per cent of the crop grown from certified seed was marketable while only 60 per cent of the lot grown from uncertified seed was marketable.

In most all cases where tests were made or reports were secured it was found that the certified seed yielded a large percentage of medium uniform sized potatoes than did the uncertified seed. The market demands medium sized smooth potatoes that are of high quality. Planting certified seed is one of the big factors in producing the kind of potatoes the market wants.

Certified seed is seed that has been carefully selected over a period of several years and that has been grown under the most approved cultural methods. That is the reason why it has outyielded uncertified seed in most every test that has been conducted.

Those who are growing certified seed are required to hill select their seed stock in the fall; they are obliged to use a long rotation of crops and to treat the seed with corrosive sublimate before planting. Only high grade certified seed can be planted for the production of certified seed. Certified fields must be sprayed at least 5 times during the growing season with bordeaux mixture using a high pressure machine. This thorough spraying keeps the vines healthy and makes for vigorous high yielding seed. In the certified seed work all diseased and weak hills are removed from the fields before certification is granted. Careful field and bin inspection are made by competently trained men from the Michigan Agricultural College and all the fields and stocks that do not measure up to the high standards set for the inspection and certification service are disqualified. Certified seed is shipped in sacks containing 150 pounds. Each sack is sealed and bears a certification tag.

Careful observation has shown that many growers are getting inferior yields of poor quality potatoes because they are planting inferior seed. Much of the ordinary seed stock planted in the state is badly infested with such diseases as mosaic, leaf roll, fusarium wilt, black leg, and black scurf. These diseases are largely responsible for the so-called "running out" or degeneration of seed stocks. It is surprising how few growers recognize the diseases here named and fail to realize the importance of planting high yielding disease free seed. All growers whose seed potatoes are not of desirable qualities should procure certified seed this spring. Thus far this year approximately 250,000 bushels of Michigan certified seed have been sold; the bulk of this seed has gone to Pennsylvania, Ohio, Indiana and other states. There are still available for sale several hundred bushels of high quality certified seed that can be had at a very reasonable price. It is hoped that practically all of the seed left will be purchased by Michigan growers who are in need of good seed. Information concerning sources of certified seed can be procured from the Michigan Agricultural College, East Lansing, Michigan.

BUSINESS MEN ASSIST IN COW TESTING ASSOCIATION

AS a result of a series of meetings put on jointly by the farmers of northern Bay county and the Pinconning Booster's' Club, another group of farmers have organized to bring about greater efficiency in their dairy business thru the cow testing association. At a meeting held week before last, the following officers were chosen: J. L. Millard, president, Charles Sass, vice president, William Slusser, secretary-treasurer, John Gibson and Felix Pingot, Directors.

For a long while the business men in northern Bay county have seen their business decrease as the business of their farmer-patrons became less and last fall they decided to render first aid to the town's leading industry—agriculture. They fostered a series of meetings which culminated in the organization of the cow testing association. This means that 26 farmers are declaring war on the "slacker"-cow, and are going to feed more efficiently, thus insuring greater profits. Mr. A. C. Baltzer of the M. A. C. assisted materially in organizing the association. —E. J. Leenhouts.

Twenty-five billion telephone calls were made in the United States last year, according to the Michigan Public Utility Information Bureau. This is equivalent to 25 calls a minute for each unit of time during the entire Christian era.

Butterfield Becomes New Head of M. A. C

WHEN the Michigan Agricultural College opens its fall term it will have as its president Dr. Kenyon L. Butterfield, now at the head of the Massachusetts Agricultural Collge, Amhurst, Mass. He has filed his resignation from the Massachusetts Agricultural College and is expected to be at East Lansing in time for the commencement exercises in June. Dr. Butterfield takes the place of Acting-President Shaw.

Dr. Butterfield is well known in Michigan. He was born at Lapeer in 1868 and was educated in that town and Port Huron and the M. A. C. and University of Michigan. From the latter institution he received the degree of Master of Art and Doctor of Philosophy, after graduating from the Michigan Agricultural College.

After completing his college training he became interested in Grange work and was editor of the Grange Visitor for several years. In 1891 and 1892 he was assistant secretary of the M. A. C. and from 1896 to 1899 field agent. He became president of the Rhode Island Agricultural and Mechanical College in 1902, and held that position until 1906 when he accepted the presidency of the Massachusetts Agricultural College.

This is the second time that Mr. Butterfield has been suggested as head of the M. A. C. Back in 1915 when J. L. Snyder resigned from the presidency it was rumored that the position had been offered to him.

SATURDAY
May 24th
1924

VOL. VI. No. 20

Being absolutely independent our columns are open for the discussion of any subject pertaining to the farming business.

"Hew to the line, let the chips fall where they may!"

The Michigan
BUSINESS FARMER

The Only Farm Magazine Owned and Edited in Michigan

Published Bi-Weekly
Mt. Clemens, Mich.

TWO YEARS $1

Entered as second-class matter, August 22, 1917, at the post-office at Mt. Clemens, Mich., under act of March 3rd, 1879.

Powell's Tax Articles Open A Merry Debate

Governor's Secretary, Elton R. Eaton, Takes Issue With Stanley M. Powell Regarding Article in April 12th Business Farmer

TO the Editor:—I am sure I am following the right course in not taking up the Governor's time in placing before him the misleading article which appeared in your issue of April 12, entitled "What Funds Are Spent Must First Be Raised," by Stanley M. Powell, you courteously sent to this office and I know you will agree with me after reading my letter.

In Mr. Slocum's editorial he called particular attention to the figures regarding the cost of operating the three State prisons. He says that he does not believe them to be fairly stated in the article referred to. Mr. Slocum is correct in what he says about this. It is silly for any person to state that it did not cost the State of Michigan anything to operate Jackson prison in 1916.

The records of the Accounting Division are open to public inspection and if the writer of the article or anyone else desires accurate information as to the cost of maintaining State Institutions, it can be easily ascertained. But it is quite apparent that the writer did not care to place before your readers an honest statement of conditions. Of course, it must be admitted that previous to three years ago there was practically no system in keeping State accounts and sometimes it is difficult to secure information about the cost of operating State Institutions previous to that time. However, if Mr. Slocum had believed the facts published to be inaccurate relative to State expenses, it would seem to me as though he should have secured the correct information previous to the publication of the article. It is probable, however, he did not see the article before publication.

Many Inaccuracies

I have glanced over some of the statements made and the one thing that surprises me is the fact that so many inaccuracies could be made in such a brief article. Not a single appropriation made by the State Legislature for any of the new structures has been overdrawn. In the past three years Governor Groesbeck has reduced the State tax from 21 millions to 16 millions of dollars. The 30 million dollars voted for a soldiers' bonus and the 50 million dollars authorized by the voters for highway construction are charged up by this careless writer as debts incurred by the present State administration. It is also difficult to conceive how anyone can charge up as a State expenditure money transferred from the general fund where it draws two per cent interest to another State fund where it makes four per cent for the taxpayers. That is going a long way to deceive the reader who does not take time to analyze these matters and who depends upon publications for his information about public questions.

It is common knowledge that any money the State can spend must first be appropriated by the State Legislature. The question of State administration resolves itself down to but one issue and that is, how well and judiciously is the money spent that is appropriated by the Legislature; and I doubt if ever in the history of the State of Michigan has this commonwealth secured so much for every dollar spent as it has during the past three years. To date there is not a single overdrawn appropriation and every building now under construction by the State is going to be completed within the amount of the appropriation made by the Legislature. On April 30th there was a cash balance in all of the various State funds of $19,144,029.50.

It might be interesting to you also to know that the centralized purchasing and accounting system, established under the present administration and which is assailed in your article, is saving to the taxpayers many hundreds of thousands of dollars each year. For the fiscal year which ended July 1, 1920, the State of Michigan by taking advantage of cash discounts on purchases saved $10,050.57. The saving made by cash discounts during the last fiscal year ending July 1, 1923, amounted to the large sum of $177,546.77. No one in my mind with an honest intent would so deliberately misstate so many facts as appeared in the article in question and hold up to ridicule the Departments who are making such savings to the State.

Permit me again to say that the State records are open to public inspection and any information you or any other person desire pertaining to the expenses of any State Institution or Department can be easily and correctly secured. If the writer of the article mentioned desired to give your readers something accurate about Michigan prisons he could not only have secured correct information from State records in Lansing but he could have easily obtained additional and correct facts from the Department of Labor at Washington, D. C. This Department recently issued a report placing Michigan's prisons among the best in the Nation not only in prison work and the number of men employed in useful labor but in the value of goods produced and disposed of, and not one bit of this from contract-convict labor.

Why also did he not say something about the millions of dollars Governor Groesbeck has saved to property owners through his action in forcing down fire insurance rates? Why did he not say something about the vast sum he is saving to the taxpayers by giving his personal attention to road building and to the management of various State institutions? Of course, there is but one conclusion to draw after glancing through the article. It was the writer's purpose to mislead the readers of your paper about State affairs. Respectfully, Elton R. Eaton, Secretary to the Governor.

Mr. Powell's Answer

TO the Editor:—I wish to thank you for your courtesy in sending me copy of the letter which you received from Mr. E. R. Eaton, secretary to the Governor, and for advising me that you intend to publish this letter in your columns.

After reading the rather pointless and altogether discourteous comments voiced by Mr. Eaton, we rejoice to note that the Governor did not waste any of his precious time in personal preparation of this reply. Our conscience even pricks us a little for bothering Mr. Eaton with any trivial matters, such as state taxation. He is probably blissfully unaware of the fact that the property returned delinquent for taxes is increasing by leaps and bounds in Michigan and has already exceeded the staggering total of $455,000,000 per annum.

We take it that Mr. Eaton must be very busy, for practically a month elapsed between the publication of the article and the receipt of his reply. We suggest that this matter might well have been turned over to one of the 127 employees of the State Administrative Board. Any of them with a little imagination and a very superficial knowledge of state affairs, and a command of unkind attacks on my motives and personal character, might have made a reply about as constructive and helpful as the one which you received.

It is, however, gratifying to note that nowhere in this reply is there the slightest attempt to dispute my fundamental statement that what funds are spent must first be raised. The fact that during the year ending June 30, 1923, the State of Michigan disbursed about $71,500,00 remains unchallenged. My argument that "if Michigan spends a dollar she must have a dollar in revenue to meet that expenditure, and also if Michigan has that dollar in revenue, we the people of Michigan must contribute our share toward the raising of that revenue", stills stands unrefuted.

His Figures Agree With Mine

Mr. Eaton's statement that "in the past three years Governor Groesbeck has reducd the state tax from $21,000,000 to $16,000,000" is amusing, in view of the fact that I said in my article, "the first of these, the general property tax has been kept down surprisingly and this fact has been used by the administration in an effort to bolster up claims of economy and efficiency in state government. For the year ending June 30, 1924, this item amounted to an even $16,000,000 which was less than that for any of the preceding three years. This fact is widely advertised. Little is said about the growth of other forms of taxation".

Of course, Mr. Eaton would not care to dispute the fact that this general property tax was only kept down through devising new means of raising the greatly augmented total of revenue required to run the government of Michigan today. Auditor General O. B. Fuller or anyone else familiar with the financial affairs of the state would readily admit that had it not been for the corporation tax and certain other new fees and licenses recently put into effect, the state general property tax would have of necessity gone up by leaps and bounds, and again we call the attention of your readers to the fact that every dollar that is spent by the state must first be raised, and every dollar that is raised must be paid by us the people, either through direct or indirect taxation.

CONTINUE TO DRIVE TAX QUESTIONS HOME

I WANT to thank you and compliment you on your splendid article in The Business Farmer of April 12th. I hope you will continue to drive these tax questions home to the people for it is a serious question and selling bonds to create revenue is surely no way to keep out of the wilderness. Farmers are actually losing their farms through high taxes and the inequality in prices which they pay and which they receive.—David H. Brake, Fremont, Mich.

Mr. Eaton says that he has "glanced" over some of the statements in this article. I believe that glanced must be the right word. For instance, he accuses me, whom he terms a "careless writer", of charging up the $30,000,000 voted for soldier bonus as a debt incurred by the present state administration. He probably glanced over my article so rapidly that he failed to notice that I specificially excluded revenue derived from the sale of soldier bonus bonds when I computed the total receipts for the state, and that I also disregarded the item of soldier bonus bonds when I made a comparison of state expenditures for the past few years.

It is hard to tell what Mr. Eaton means when he says, "It is also difficult to conceive how anyone can charge up as a state expenditure money transferred from the general funds where it draws 2% interest, to another state fund where it makes 4% for the taxpayers." If he refers to the matter of transfers and revolving funds I believe he will find if he cares to visit the office of the Auditor General, that my figures have made due allowance for these various items.

Fuller Okehs My Figures

In disputing the evidence and figures which I have presented, Mr. Eaton shows surprising ignorance of state financial conditions. In not less that six portions of his comments, he indicates that I am misinformed and am attempting to misstate the facts and mislead the public. However, he does not see fit to correct any of my figures. I wish to assure him and the readers of THE BUSINESS FARMER that I have taken the article in question to Mr. C. B. Fuller, Auditor General of the State of Michigan, and he has been over these figures and finds them substantially correct, although some of them are slightly more moderate that the actual conditions. It is interesting to me to find out that the figures which I quoted from the Michigan Tradesman regarding the cost of running the three state prisons in Michigan, were practically identical with those found in the records of the Auditor General.

Mr. Eaton says, "It is silly for any person to state that it did not cost the State of Michigan anything to operate Jackson Prison in 1916." But if he will consult the records of the Auditor General he will find that nothing was paid out for the running expenses of the Jackson Prison during the year 1916, nor were there any requests for such financial aid from the State.

Gross Exaggeration of Facts

The charge he makes that, "It must be admitted that previous to three years ago there was practically no system in keeping state accounts and sometimes it is difficult to secure information about the cost of operating state institutions previous to that time," is a gross exaggeration of the facts, because the records on file in the office of the Auditor General and of the State Treasurer show authentically and accurately just what was paid for each institution each year, even before the advent of our present highly centralized state administration.

A man as close to the work of the State Administrative Board and the present government of Michigan as the secretary to the Governor should know better than to say "It is common knowledge that any money the state can spend must first be appropriated by the state legislature." If this were a fact, I should

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Red Rock Wheat Is Good Flour Producer

Department of Agriculture Pronounces Product of M. A. C. Best Milling and Baking Soft Red Winter Wheat Grown in United States

By FRANK A. SPRAGG

Assistant Professor of Farm Crops, M. A. C.

This is a general view of two wheat plats that are being increased for distribution from the M. A. C. One of these was Berkeley Rock. This variety had shown itself to be more winter hardy and a better flour producer than Red Rock.

TIME was when the virgin soils of Michigan not only produced large yields of grain, but it was customary to plow under a crop of clover in preparation for a grain crop. In those prosperous times, Michigan was renowned on the market for its "Michigan Amber." It seems quite impossible to assign this so-called "Michigan Amber" to a definite variety. Several have tried to do so, and have isolated different types that they call by this name. If this market grade could not be assigned to any one variety, to what then was this distinction due? The quality must have been due to the fertility of the soil on which the wheat was produced.

Quality in wheat, as well as production, is due to the soil and conditions in which the crop is produced. The Red Rock is capable under the most favorable conditions of producing wheat that weighs 64 pounds to the bushel. Such wheat is clear vitreous, quite hard, and unusually good milling. This shows what Red Rock is capable of when properly fed. Under conditions where clover has failed, and the farmer has been growing corn continuously for the past few years, the Red Rock is yellow berry and little better in quality than a long line of the common varieties that farmers may raise.

What is yellow berry wheat? The wheat grain is made up of a mixture of starch and protein. The starch is produced by the plant out of water and what it gets from the air. To produce protein, the plant must also have nitrogen that is represented on the farm usually in the form of alfalfa and clover. If some such legumes have been plowed under, and lime has been supplied to keep the soil sweet that the nitrogen may be available, the plant also has a supply of protein. Yellow berry is a condition in wheat where the starchy framework of the grain has not been properly filed with protein. The yellow berry grains is lighter than the vitreous grains for the same reason that snow is lighter than ice. Yellow Berry indicates low proteins which means low milling and baking quality. It is evident that the market renown that Michigan once had was due to its soil fertility.

If the farmer is also interested in yield he needs to supply phosphorous, another plant food that has been sold off the farm in the years that have past. This is the most quickly supplied to the plant in the form of acid phosphate, which should be sown at the rate of 200 to 250 pounds to the acre, but not in contract with the wheat grains.

Yield and quality of a wheat crop depend first upon a variety that is capable of properly using the fertility supplied. Yield depends upon many other factors, however. Wheat cannot withstand the hardship that rye can, and must be planted about September 20th at Lansing and earlier as one goes north. It pays to give the land good tilth and prepare a good seed bed, that the wheat may get a quick start, and make a rapid growth.

When the writer undertook the breeding of better varieties of wheat, now eighteen years ago, the white wheats of the type of Dawson's Golden Chaff and Plymouth Rock were the highest producers under Michigan conditions. The soils that had been worn by thirty or forty years of culture during which little plant food had been supplied were no longer able to produce good yields from the red wheats. Another cause was that the varieties of red wheat had become so thoroughly mixed by thrashing machines in recent years, that farmers no longer grew definite varieties. Certain of the white wheats which had been more recently produced by selection and breeding, where the leading varieties in 1916.

The problem was to find a wheat that had quality as well as yield. The existing white wheats were poor millers because they made poor flour, suited to biscuits and pastry but not to bread making. Now the redness of wheat is only "skin-deep," as it is all taken off in the bran. There seemed no good reason why there may not be a white wheat with good milling quality. Such a white wheat has since been produced (ten years later) from an artificial cross between a white wheat and a red wheat with high milling quality. At that time investigation failed to find a good milling white. Nature it seems had not produced such a variety.

The most vitreous grains were selected out of hundreds of samples and each lot was planted in a separate plat, with the grains separately planted five inches from its neighbor. Thousands of individual plants were selected and the better of the progenies grown to compare their yielding power.

To make a long story short, a red grain picked out of a bushel of white wheat, known as Plymouth Rock, became the progenitor of Red Rock. This seed was planted in the fall of 1908 and produced a selected plant in 1909. Its progeny was increased enough so that in the fall of 1911, there was enough seed to plant a regular plat in the varietal series. This plat produced four times as much grain as the old standard which stood by its side in the season of 1912. This was due largely to ice sheets in the winter of 1911 and 1912.

The new variety which has since been called Red Rock, proved to be a good flour producer and has recently been pronounced the best milling and baking soft red winter wheat by the United States Department of Agriculture, Bulletin No. 1183. Red Rock has the stiffest straw that we have been able to find. It has been used as the standard variety with which all other varieties have been compared from the standpoint of yield since 1912. No variety has yet been found at M. A. C. that will consistently outyield the Red Rock as an average of a series of years. Some varieties have yielded more than Red Rock some years, but they have been much poorer producers in other years.

Peck lots of Red Rock were introduced to Michigan Farmers in the fall of 1913. These were sent to County Agents who located farmers that would take care of the production. To illustrate, the peck sent to Allegan county, was sown on the farm of Mr. John Odell about seven miles south of Allegan. He had a large fertile garden and sowed the Red Rock on a half of this piece. As a result, he had enough wheat in 1914 to sow seven acres, and had seed for sale in 1915. It was a bearded wheat, and it seemed that was all his neighbors wanted to know about it. He took a few bushels down to the local miller, who made some flour and ran a baking test. Then the miller became enthusiastic. He found that the Red Rock made unusually good bread, and told his farmer friends

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Indications Are Growers of Navy Beans Should Not Cut 1924 Acreage

By E. A. LITTLE

"WHAT about beans, shall we plant less or more?" writes some of our subscribers. Wanting to get the best opinion possible on the future of the bean market we secured the services of Mr. E. A. Little, well known student of the bean market, to prepare this article. Please understand that Mr. Little has no way of making this market do as he wishes or predicts, but he does "know beans" and in his article he gives his honest opinion on what he thinks the market will do.

WITH the price of pea beans the lowest in many months, Michigan farmers are justified in wondering whether it is good policy to decrease their plantings or discontinue the growing of beans entirely. So many factors enter into the matter that one can hardly give definite advice without taking into consideration a number of influences which will be at work during the next few months, any one of which might change the looks of things.

With one of the largest crops in history last year, and with a steady pressure exerted the last few months in pushing the price down, it is refreshing to note the price has remained as high as it is. Any immediate changes will likely be upward; though following this year's plantings one should not be surprised at further small declines during the hot summer months.

For the reasons outlined below, we would recommend to Michigan farmers that a normal bean acreage be planted this year, with every effort put forth to insure a better-than-average yield. The average-yield grower is not the one who makes money on beans. It is the one who by using the best varieties of seed, the best preparation of the seed bed, the best care in harvesting, succeeds in producing 15, 20, 25 or more bushels per acre, while the average yield is 11 or 12 bushels.

Notwithstanding conflicting reports on the Robust bean, if your bean land is light, sandy and well drained, it would be well to plant this variety. But if the land is heavy and poorly drained, keep away from them. The Michigan Agricultural College is working steadily to perfect the Robust variety, and undoubtedly it is the coming bean. In western New York state the Robust has won wide popularity, and it will outyield the common varieties of beans.

A bulletin has just been issued by the Michigan Agricultural College on the growing of beans. It goes into detail concerning the varieties, bean diseases, marketing and grades. A copy may be had for the asking, and every progressive farmer will want one. It is the work of Professors Cox and Pettit.

Factor Influencing Price

Now for some of the factors which may influence to a greater or less extent the price of beans this coming fall. Because of the low price of pea beans, many New York state growers will switch to red kidneys, yellow eyes, narrows or some of the other New York state varieties. The California small white acreage will be decreased, due to small rainfall and to the curtailment of available land in some of the biggest producing sections. These developments would mean that Michigan more than ever must supply the pea beans of the nation.

We believe advertising of beans to be the one big thing necessary to keep the price at a fair figure and eliminate the fluctuations in price. Michigan jobbers failed to join with other state associations last year in a national advertising campaign. Spasmodic efforts have been and are being made to revive the idea, but the chances are it won't be done this year, at least in time to be of material good. The Michigan Bean Growers' association, under the leadership of A. B. Cook, is showing signs of life, and if it should again start functioning, in a closely-knit, well organized sort of way, there is hope of an advertising campaign getting somewhere. The Thumb Bean association is "talking" advertising, and there is hope in this direction.

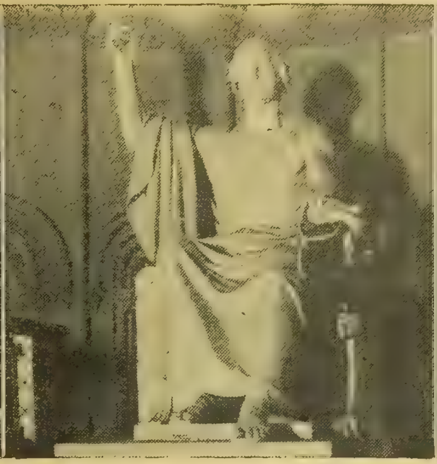
Another movement which might help the bean grower, as well as the jobber and the banker, is the extending of the federal warehouse act to cover beans. Hearings have been held in all the leading producing states, tentative regulations issued, and much preliminary work done, Once under way, the warehousing of beans would enable the grower to store his beans in a government licensed and inspected warehouse, taking a warehouse receipt therefore, and obtain a liberal advance from his bank on the security of the receipt. Thus the annual onslaught on the market of beans directly after harvesting would be unnecessary, and marketing could be conducted in more orderly manner.

If bean growers, particularly if organized, would insist that the bean jobbers of Michigan get behind the advertising of beans; if the growers would help in financing this advertising; if it could be started before the 1924 crop is ready for market, there would be no question as to a fair price for beans this fall.

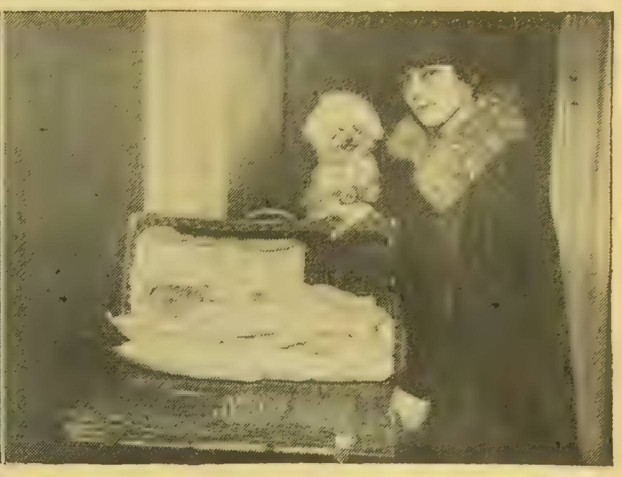
Considering all the influences noted, considering that beans are not the most troublesome crop to grow, that they bring in real money at an opportune time—Michigan farmers will make no mistake in planting a normal acreage, and we wouldn't be afraid to plant a little more than normally.

PICTURES FROM FAR AND NEAR

GREW, TAKING OFFICE, BECOMES CABINET HEAD.—Joseph C. Grew took the oath as Under Secretary of State and was at once the acting Secretary of State, due to the absence of Secretary Hughes. This is the first time in history that an Under Secretary became a Cabinet head in so short a time.

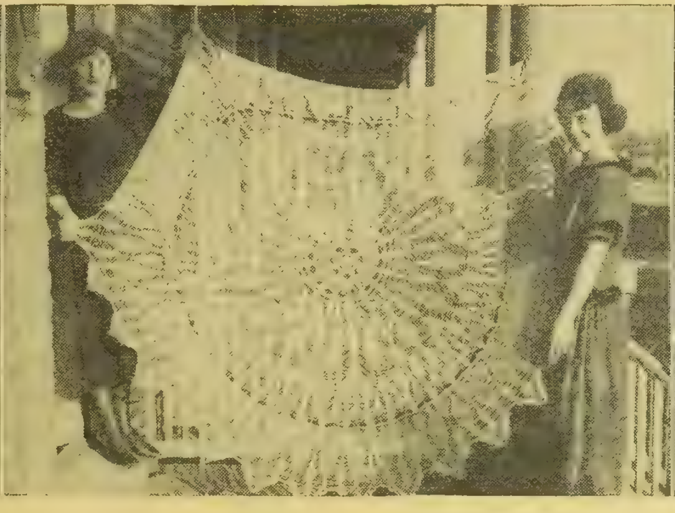


WASHINGTON IN NEW ROLE.—This statue is of George Washington, dressed as a Roman Gladiator, and possibly the only one of its kind in the world. It is at the Smithsonian Institute, Washington, D. C.



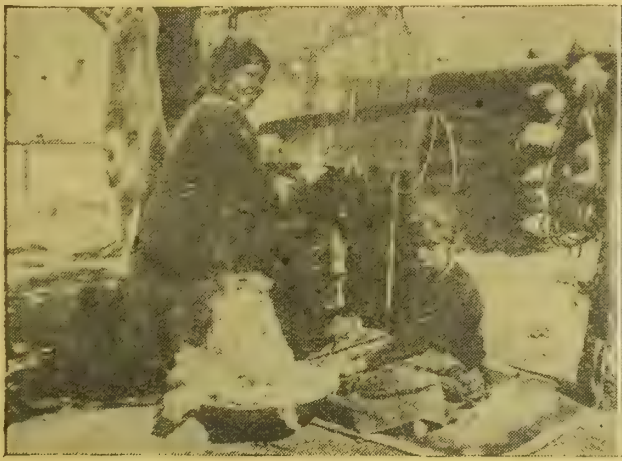
SOMETHING NEW IN BABY CARRIERS.—Mrs. Charles H. Lewis, who arrived in New York from an European tour with her husband, Dr. Lewis of Los Angeles, created a stir when she showed this ventilated suitcase, the doctor invention. Baby traveled quite comfortably in his suitcase home.

YOUNGSTERS CONDUCT CHURCH.—Donald Lake, of the Episcopal Church, Hillman, Mich., who on seeing that they were not going to get a rector, now gives services in the church twice a week to a congregation made up of children. He is only 12 years old.



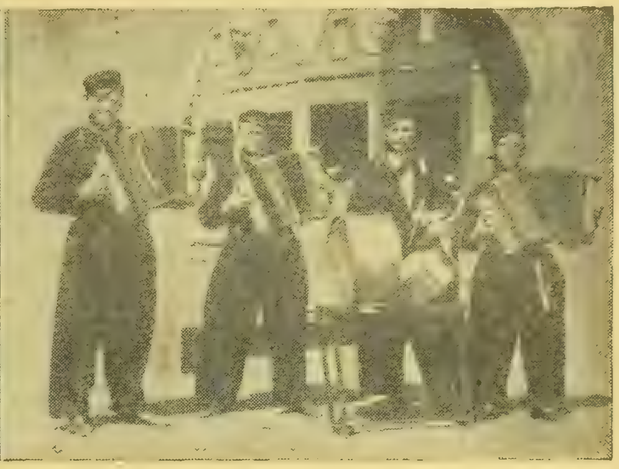
MARATHON KNITTER.—It took Miss Phipps, champion knitter of Washington, D. C. thirty days work of five hours a day to finish this tablecloth, valued at $1,000. It is six feet in diameter and took five miles of thread in the making. She is very clever at making up designs and her work has won wide admiration. Miss Phipps is on the right.

ENGLISH POLICEWOMAN HERE.—Commandant Mary S. Allen, who is head of the Womens Auxiliary Police Force of London, England, is now in New York City, starting an American tour to study the methods of the women police in this country.



NAVAJO BLANKETS BECOMING RARE.—There are very few real Navajo blankets in the United States due to the Indians now finding other means of making a living. Photo shows a Navajo Indian woman making a blanket.

MAY WED PRINCE OF WALES.—Princess Ileana, daughter of the King and Queen of Roumania, may soon wed the Prince of Wales.



NEW STYLE OF JAZZ BAND.—These four Hollanders have a new way of producing jazz, the only orthodox dance instrument being used is the drums. Their performances have been well received around the Hague.

HUNGARIAN "MARY PICKFORD".—Mme. Ille Toth, famous Hungarian screen star, bears a striking resemblance to our own "Mary". This is a "sad" study of her.

THE BASKET QUARTETTE.—A glance at this picture and you would expect these kiddies to burst forth into song, say "Barney Google." For you must admit the youngsters of today learn things very fast.

JUTLAND HERO JOINS ARMY.—Patrick O'Keefe, of Killarney, now of New York, hero of the battle of Jutland, recently joined the Salvation Army.

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FORTY YEARS OF FAKING

The Memoirs of a Grafter—By Himself

PETE DEXTER, who has been telling of his life of graft, was sure that there was a lot of truth in the statement that you can fool part of the people all the time and all the people part of the time. If it hadn't been for that, Pete probably would have had to work for a living, like the rest of us. But Pete knew folks, and depended on the human curiosity and carelessness to put over his deals. People who didn't investigate what they were buying were the ones Pete liked to meet.

Pete's last venture was an old one, making up a remedy to cure everything. As far as Pete was concerned, he didn't care about the cures, and felt bad when he found out that he didn't make as much out of his company as he could have. The master grafter also qualified in the stockselling game. His early training in fooling people who wanted a sure thing made it easy for him to dispose of stock. People were always ready to help Pete, particularly if they were to share in the boodle, and it was easy pickings for Pete. This week Pete strikes a snag, and as they say in prison circles, he does a little time. Before he was landed, however, he took a whirl in one of the so-called high finance deals, and here are some of the ways these fellows made an easy living off a lot of us.

(Continued from May 10th Issue)

ON the way to Kansas City, that was the direction the train I boarded was going, I met a fellow who was interested in oil. He was so much in love with the business, I finally says to him: "This must be a good business. What's the chance for a good salesman?" So it happened that I hooked up with the Lucky Strike Oil Company.

Of course, every one was crazy about oil. I knew that for some time and even had a few shares in my pocket. Got them one day from a fellow who visited Frisky Valley while I was in the hog powder business. They didn't cost much, and I got a rake-off from the agent when he left town for the use of my name as an investor.

The Lucky Strike Oil Company was a good thing. We were sure of it. Head offices were in Fort Worth and they furnished us with newspapers which told us each day how things were going. I found out on my first visit to Fort Worth that the company printed that paper and that it was made up for them purposely. Every time we stopped in a town, the company would send telegrams announcing strikes and other important stuff. Small town telegraph operators ate that stuff up, and while it was supposed to be confidential, the whole town soon knew the glad tidings.

I went to Missouri for a while. Business wasn't so good there, as the people were too slow. So I finally drifted into Iowa again. Here was easy money sure. Say, the way I took in cash was great. A few of our papers and a little talking and the checks came in in handfuls. Every day or two I would send in a few names of people who had taken only one or two shares, to Kansas City, and the office would wire these people that an opportunity to make their investment ten shares instead of two was open for a limit of three days. I got most of them, and when I would blow into Kansas City I got my rake-off for furnishing the names. Well, the boys worked hard for two years, and we sure rode in swell cars and ate at the best hotels. I'll bet that about two-thirds of the people in the middle-west own some shares in oil. They were pretty certificates we handed out.

Things quieted down for a while in oil, and I had hard picking and had to travel a lot to make expenses for several years. I landed in Fort Worth one day and found that a lot of people were trying to find out what had become of their companies. That gave me another idea. I liked Fort Worth, and so I decided to start a business of my own. I started what was called the Texas Oil Investigation Company.

Our business was to look up stocks for people and we charged them a small fee for the work. Here's how we made the money: We would get a list of addresses from an oil company and send out letters to the stockholders and ask them if they needed any confidential information on stocks. Naturally they wondered what had become of their company, and invariably we would get a nibble. Our prices for investigation were low, and every one was satisfied. However, here was the game. We would advise them that their company was about to be taken over by a new concern which was exceptionally strong, and if they wanted to save their original investment they had better take an interest in the trust company which was handling the affairs. When they bit, I got a rake-off on their cash. Oh course, it always required an additional cash payment to be installed as stockholders in the new company, and our thousands of customers kept us in good shape in Texas.

I sold that company to a couple of young fellows one day for a good price, as I found a deal that suited me better. A friend of mine whom I had known in Kansas City dropped in one day and told me about a new one he had. He had secured the list of stockholders in the old Lucky Strike Company, and as long as it was dead, he figured out the following:

We organized the Battle Creek Company. This was a company that had taken over all the holdings of a lot of companies that were supposed to have gone broke drilling wells and never got going again, due to the failure of the stockholders to come across.

I was delegated to go to Iowa, being careful not to cover the territory I had worked before, and talk the proposition over with some of our best customers of former days. Several fellows in that section had a few thousand sunk in the deals, and so I approached them with a scheme to trade them preferred stocks in the Battle Creek Company for their worthless stuff in the old Lucky Strike Company. All they had to do was send in their old stock, pay a small transfer fee of two dollars a share, and we showed them the chance they would have. Luck was with us this time.

On one of our small properties the boys accidentally did make a strike, and we got a producing well. The daily papers announced the strike just about that time, and we sure cleaned up big. The boys in Fort Worth started to send out small dividend checks to every one they could find an address for, and told them that they had struck it big. Of course, they managed to separate the paying property into another company at once, but those dividend checks sure did the business. We had hard work banking the money fast enough. Every one who had felt that the deal was off, when they got that check, generally sat down, took the dividend check and added to it and sent in for more stock—and the boys sure saw that they got it. Business was fine that year, and we lived high.

In fact we got lazy. That's what ruined us. I got an idea that a little literature be sent out to prospects and maybe they would bite some more. So we mailed a few hundred thousand letters telling about our successful year and how dividends were being gotten ready for the semi-annual payments and gave the suckers another chance to invest.

One day as I sat in my well-furnished office, thinking that the world was a rosy place, I had a visitor.

"Mr. Gladberry?" inquired the big fellow who entered.

"That's me," says I. "Have a chair. What can I do for you today?"

"You the fellow who is in charge of the Texas Trust Company?"

"Sure enough!" I answered, thinking that here was a prospect.

As I remember that visit, I sure think of how easy I stepped into that trap.

"Well," continues my visitor, in his easy manner, "I was interested in your letters," and he pulled out a folder from his coat pocket and laid a lot of my best literature on my desk.

"Let's see; is that your name on here?"

"Sure," I states. "That is one of the best deals a stockholder can invest in at present, stocks which have been idle for a long time can be made to pay by our new plan and all you have to do is to——"

"Not interested in your line any more, Mr. Gladberry. Guess I have enough stuff here. Sorry, but you will have to come with me." And he opens his coat and there's the badge of the United States secret service staring me in the eye.

Then he read me a summons which he had, which stated that I was indicted by the grand jury, and so it happened that I went to jail. When I got there, I sure was in good company, as those fellows had rounded up a gang of the boys.

Well, I had a good roll laid away, and it took a lot of it to fight, but it was no use. Finally, after a long battle, the judge lined us up one day and sent us all to Leavenworth for three years each. We had slipped when we started to mail our "Go-Getters."

I went to Leavenworth and it wasn't a bad place, but I didn't care for it in mine. I got a pardon after fourteen months and when I looked around I found that my friends were all gone and so was my money. I had a small bank account I had deposited in the little old town in New York where my aunt lives and to which I had added from time to time, and so I decided I had better beat it back there and rest up. I was broken in health and felt pretty blue to think that I had been caught. I was afraid to try any of my old games for fear of getting caught up again and it was tough sledding that year.

While I was wondering what I could do to get another start I chanced on an article telling about a wonderful wheat that was being sold. This article was in a small-paper and the writer said he had made a study of wheat and had some that was descended from some seed that an uncle of his had gotten out of an Egyptian tomb many years ago. I decided that ought to be worked over so I fixed up some letters to several of my Iowa friends. I did not use my regular name but had the inquiries come to the Society for the Advancement of Wheat Growing and put a post office box number in the literature.

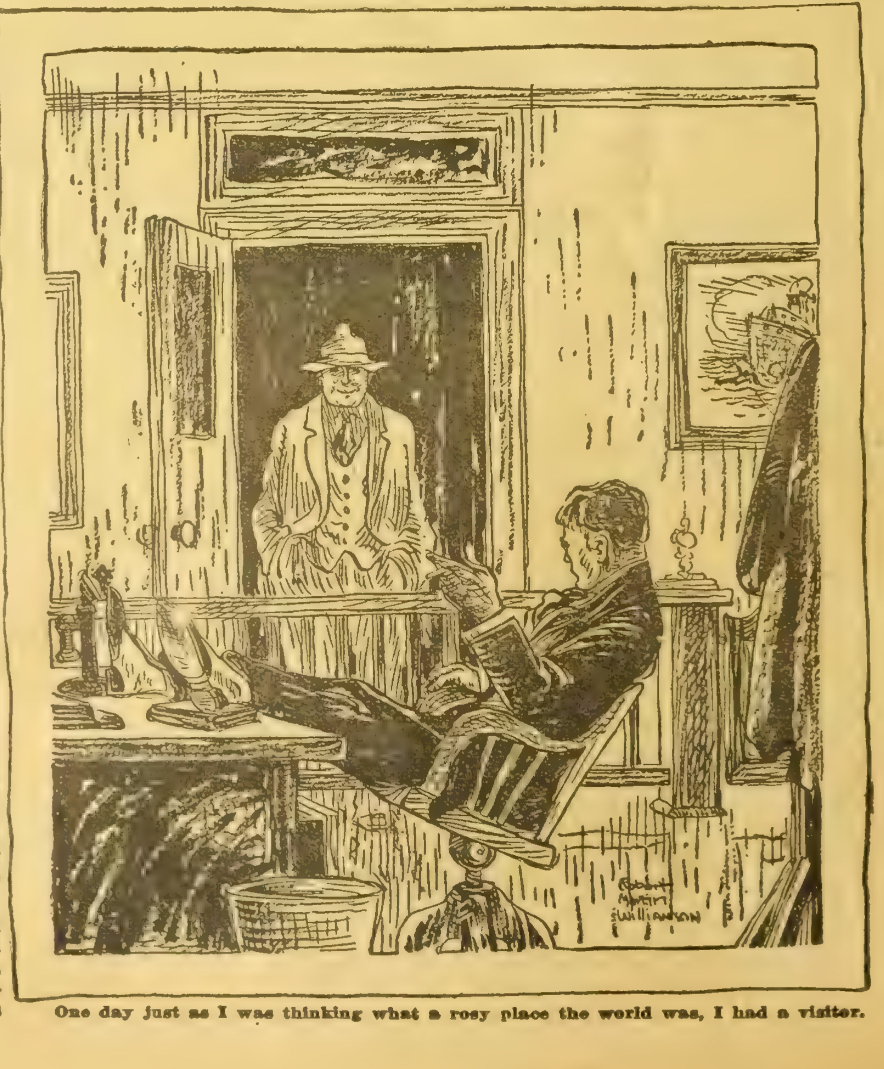
I wrote a fine piece of literature telling how my uncle had, in exploring an ancient tomb picked up several grains of this thousand year old wheat. He had brought it back to America and just out of curiosity planted it. Much to his surprise it had grown and instead of having merely one head per stalk it developed two. This new wheat had been carefully grown until now the Society for the Advancement of Wheat Growing had several bushels which would be sold at the rate of $5.00 per pound, to those interested. Of course all buyers would be expected to report the growth of the wheat and if they had any friends who were careful farmers, they would be allowed to try some of the wheat upon application to the Society.

This "Mummy" wheat, as we called it, would yield anywhere from 90 to 100 bushels per acre and it was a great discovery. Because of the limited offer, applications had to be filled out carefully and cash had to accompany the order.

I sure received a lot of money for this wheat and the local feed store supplied me with enough to fill the orders.

The suckers came thru and I had a start again. I left the little town where I had run my campaign, several hundred dollars richer and that literature sure paid well. At least I was on my feet again.

(Continued in June 7th Issue)



One day just as I was thinking what a rosy place the world was, I had a visitor.

BEEKEEPERS WILL MEET IN AUGUST

THE sixth annual summer meeting of the Michigan Beekeepers' Association will be held at Traverse City, August 6th and 7th. The secretary is negotiating with two nationally known beekeepers for the program. The meeting place this year is not far too north to prevent many southern beekeepers from attending the meeting. Please keep the dates in mind.

It required a force of 78 men to operate Thomas A. Edison's first electric generating plant 41 years ago in New York. When the plant opened it had only 59 customers, or one and one-third men's labor for each customer.

Farmers Service Bureau

(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full name and address. Name not used if so requested.)

MUST PAY TAX ON PAID ADMISSIONS

We are interested in forming a farmers' club but the following questions are bothering us: To conduct dances and other entertainments where admission is charged would we have to pay war tax? To purchase land or accept donations in a club name would we have to incorporate? The club is primarily for the purpose of providing entertainment for the young folks and the members favor financing the club by charging admission to all entertainments. The only requisite for membership and all its privileges is that one must live in the community where the club is located. Thanking you in advance I remain, E. P., Crystal Falls, Mich.

—Under the present Federal Income Tax Law, it would be necessary to pay a war tax on admissions to dances and entertainments such as you have mentioned. It would not be necessary, however, for the club to be incorporated in order to accept donations or to purchase land. —Clare Retan, Deputy Attorney General.

SUE FOR BREACH OF PROMISE

If a man over twenty one years of age promised to marry a girl and the girl's folks got her all things for a marriage, and the man backed out, what can you do? Under what proceedings would you have to go through? And what could be done to the man? Suppose the girl went and left the man after promising to marry him, what could he do?—Mrs. H. B., St. Johns, Mich.

—The girl could bring suit against the man for breach of promise. The first step would be to hire a lawyer to start the suit for you. The amount recoverable would depend upon all the circumstances surrounding the case. A man could bring the same kind of an action against a woman who broke her promise of marriage.—Asst. Legal Editor.

MAN WOULD GET ALL OF REAL ESTATE

Will you please tell me what the law is? A man and wife own property and have a joint deed, and the wife dies, and no will made. Does the property all belong to the man, or does he have to share it with the children?

What is the law? A bought a farm and B loaned some money to A, and A gave him a note. It was made out that A should pay back when he could. Now B went to Europe, and he wrote that he wants to sell the note, and the person that buys it can make A pay. Can he do that? A wants to pay but has not got the money now?—G. D., Unionville, Mich.

—The surviving father would be entitled to all the real property which he and his wife held jointly. The buyer of the note would not be able to collect it, since the date of maturity was indefinite.—Asst. Legal Edior.

DOES NOT PAY NOTE

A signs B's note. If B does not pay note when due how soon according to law must the holder of note let A know to make him holding for it.—P. T., Brown City, Michigan.

—Unless notice is waived, the indorser must have written notice within the following business day of the maker's failure to make payment in order to become liable for the payment of the note.

NEED NOT FURNISH BOOTH AT CAUCUSES

Is it necessary to furnish booths at caucuses and must the voters sign the ballots for candidates at such caucuses in secret? How should booths be constructed? If elections are not held according to law can a person break it up and call another election?—A. McC., Harrisville, Mich.

—The statute requiring booths and secret marking of ballots does not apply to caucuses. Political caucuses largely formulate their own rules of procedure. The design of booths at election is specified by Section 7 of Chapter 7 of Act 203 of the Public Acts of 1917. It provides that booths shall be built with walls not less than six feet high and in such a manner that the person preparing his ballot shall be concealed from other persons. No one would have authority to stop an election that he considered was being held unlawfully without taking proper court proceedings. That is, by an injunction or other appropriate remedy.—Clare Retan, Deputy Attorney General.

RAILINGS MUST BE PLACED ON CULVERTS

In the Compiled Laws of 1915, Chap. 86, page 1786 and section 4586 under the head, Line Bridges, I find the following quotation: "As to injury on bridges or culverts having no railings see Rohlfs. V. Township of Fairgrove 1741556." This part I do not understand. Could you tell me the law in regard to railing culverts? That is under what condition must they be railed in respect to their depth and length?—C. D., Newaygo, Michigan.

—In reference to the case of Rohlfs vs. Township of Fairgrove, it should have been written 174/556, which means that the case is reported in volume 174 of the Michigan Supreme Court reports on page 556. Railings must be placed on culverts when necessary to make them reasonably safe for public travel, taking into consideration all of the surrounding conditions.—H. Victor Spike, Assistant Attorney General.

SUE TO RECOVER AMOUNT OF NOTE

Through your department can you give us some information on the following conditions: A (a widow) owns a farm and gave a note with B as an endorser. A refused to pay the note so it was paid by B and note held by him. C buys the farm on contract from A. How can B collect for the note on the payment that is due on contract made by C? Can B put a garnistee on the payment to be made by C to recover the face of the note he endorsed for A?—H. N., Ludington, Mich.

—Generally the indorser of a note who has been forced to pay the amount may sue and recover from the maker the amount which he has been compelled to pay. B could garnishee the payments due A on the land contract.—Asst. Legal Editor.

COULD DEED TO WIFE

Years ago my father bought a farm, then a short time after he made out another deed to my mother telling her to have it recorded in case he should die. My father died in a few years and she had it recorded and sold the place afterwards. What I wish to know is; can a husband do the same now? We have no joint deed. Can a woman having a deed sell a place without the heirs consent?—B. B., Shepherd, Michigan.

—A husband may deed his property to his wife without the consent of his heirs and she would receive good title to it.—Asst. Legal Editor.

ENTITLED TO DAMAGES

I would like to ask a question through The Business Farmer about some goods that were left in a building and destroyed. I left some goods in a place where I rented and after a time this building was sold to a different party and they only notified me a week ahead before it was sold and it was impossible for me to get there at the time. I would like to know if I could draw damage for them?—G. D., Ludington, Michigan.

—I am of the opinion from the statements you make that you would be entitled to damages for the destruction of your goods.—Asst. Legal Editor.

Michigan and Her Railroads

Since 1920, when the Government returned Railroad operation to private enterprise, service in Michigan has become yearly more dependable—more nearly adequate.

That Service is today the best Michigan has ever enjoyed.

As a result there has come into being between the State's 24 steam Railroads and the public they serve, a spirit of pride and mutual good will.

Geographical isolation has made railroad service a local more than a national problem in both Peninsulas of Michigan. Within the enveloping barriers established by our Great Lakes, Michigan and her Railroads can prosper only by prospering together. State and carriers become thus members of a close community of interest.

Michigan Railroads realize this fact and make it fundamental in all details of management and operation.

The public can also recognize this situation by neighborly co-operation and by insisting that the roads be repaid by receiving, in national and state supervision, the same square deal.

We invite from you any suggestion of more ways in which we can consistently better our service.

Michigan Railroad Association
508 Railway Exchange Bldg., Detroit, Mich. (8-27)

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Write—giving your qualifications—and why you believe that you should be chosen to represent us in your District.

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Thousand of THE BUSINESS FARMER readers have learned that THE BUSINESS FARMER is more than a high class farm paper. It is a friend as well, one who serves—and never fails in time of need.

As a subscriber to THE BUSINESS FARMER, you are entitled to all the rights and benefits of our Service Bureau. We want you to use this service—call on us freely.

JUST A FEW THINGS IT WILL DO FOR YOU

Will furnish you protection from swindlers, fake peddlers, and promoters.

Tell you about any investment or stock selling scheme. Invest no money in any scheme before you have asked THE BUSINESS FARMER Protective Service about it.

Aid you in collecting any claim you may have against any insurance, railroad, express or other company.

Aid in the collection of obligations.

Help you in the adjustment of claims.

Give you prompt information and advice about any crop, soil, livestock, dairy, or poultry problem.

Furnish expert market information whenever you have something to sell.

Help you with any building construction or farm machinery problems you may have.

Tell you the law and custom on all questions of [illegible]

Answer any question with regard to home or community life, schools, canning, cooking, preserving, or housework in general.

Give you correct information on any farm subject and will help you in trying to settle and farm, health, or legal trouble of any sort.

Protective Sign and Certificate

We want every reader of The Business Farmer to have one of our beautiful certificates of membership and a Protective Service Sign. The certificate is suitable for framing and will be mailed free of charge.

The Protective Service Sign acts as a warning to swindlers and fakers and informs all that you are a member of an organization of power and influence that will stand with you in support of your rights. We are asking a small charge of 25 cents to cover cost of sign and mailing.

THE BUSINESS FARMER,
Mt. Clemens, Michigan.
Gentlemen:—

Check for either or both the certificate and sign.

☐ Please mail me a membership certificate free of charge.

☐ I would also like one of the Protective Service signs and am enclosing 25 cents to cover cost of sign and mailing.

Name ....

P. O. ...., Mich

What the Neighbors Say

LIKES EDITORIAL ON WOOL POOL

DEAR Editor:—I have noted your editorial regarding the wool pool in a recent issue of THE BUSINESS FARMER and cannot let the matter pass without expressing my appreciation of your splendid assistance in helping along a project of so much concern to the farmers.

The matter of making the wool pool a success has been extremely difficult and the Farm Bureau administration has gone the extreme limit to establish a satisfactory wool marketing service for the farmers of the state. I thoroughly believe that at last we are developing a plan which will be ultimately successful.

Thanking you very kindly for the good words you have given the project, I am.—C. L. Brody, Secretary-Manager, Mich. State Farm Bureau.

CATCHING THOSE CHICKEN THIEVES

EDITOR, THE BUSINESS FARMER: I wish to give a reply to L. C. S., Breckenridge, Mich., as he is having the same trouble that I formerly had.

While I was still living in my home state of Illinois, we raised chickens, instead of three or four hundred it would be from one to five thousand 'each year. The chicken thieves sure made our work and life one of misery. The local officers could not do anything to help us as by the time they would get on the job the thieves were at a safe place. At last we farmers in Illinois had to protect ourselves in this way:

First get a good dog one that will make plenty of noise and is cross. Then a good shot gun. Then when we got the alarm from our dog instead of scowling him for waking us in the middle of the night we would hurry with the good old shot gun and follow the dog and at the first noise shoot towards the racket, not to frighten but to hit, and keep on going until we either had our man or men or made sure of giving him some number four shot. If the night was moonlight so we could see our man we called him to halt an keeping him covered ordered him to come over to us, then we turned him over to the sheriff. But if he run we stopped him with a load of shot in the legs or hips.

Our method may sound harsh to you but this method, used by almost every farmer in the state of Illinois, put a stop to chicken stealing there, as no man is going to take the chance of getting a few shot and having to fight a cross bull dog or airedale.

Brother L. C. S., are you sure your trouble is caused by the beet workers? When the ring at my home was finally broken up were surprised to find that the guilty ones were some well-to-do farmers living some eight to ten miles from our homes. I ask of you to not accuse any one because if you use the method of protection that I have given you, you may be surprised to find who you have the first time you declare open battle in your poultry lot. Go ahead and raise all the poultry you can take care of, then protect yourself, as I said. Your local officers are helpless to help you. You might band with your neighbors and work in helping the local officials run down these thieves.

Hoping that this will help you an also warning you that thieves always carry guns, I hope you success with chickens this year.—A. W. M., Turner, Mich.

TELEPHONE AND AUTO NECESSARY ON FARM

MY Dear Editor:—I also am a reader of the M. B. F. We take Farm & Fireside, M. B. F., Successful Farming, also Potato Growers' Exchange, and read them all, and enjoy my farm papers very much, as I am a real farmeress.

In the item answering Mr. Jorden in a recent issue—about telephones in farm homes—that is a farmer's need, not a comfort. We paid $25 for a share and pay $2.75 every three months, which does not amount to much. Also a farmer's car—now if the farmer does not have a car, where is he but in the ditch? A horse must be shod to stand on the country roads, and a man can't stand a horse in town because there is not a post to tie to. Where the water trough and hitching post used to stand, now there are oil stations, so he is forced to buy a car to haul his cream, eggs, butter and butchered meat to town. Nearly every man here has a car, but a good many are paying 7 per cent interest at the bank for the same.

Before the farmers organized here, we always got 50c a bushel for potatoes. We now get 25 cents, and have to wait for our money. A big price is promised but somehow it is always cut in half before the pay comes. Our farmers here have from 500 to 900 bushels of potatoes every fall, and by the time they are sorted at the warehouse, if you have 200 out of that amount to sell, you do well.

A young man starting in, where is he? A farmer always has more or less loss. We must go to our good banker and borrow and pay interest which counts very fast. The farmers in our neighborhood and a lot of Emmet County farmers had to go to Petoskey to work to pay debts, and they were not all farm shurkers. Our men around here all work hard, but were forced to work there nights also. So many of the papers lead city people to believe that if they buy a farm, they get rich quick, but they never print the other half. When you see a nice looking farm, it nearly always is an old man, who made it years ago.

If every farmer would print his experience that reads this M. B. F. paper, they would be a hard lot to read.

But I will say, if a man has money layed aside to buy a farm, and its needs, so as not to have to go in debt, do so, you can manage somehow, but don't forget you must work and save. The farm is free from noise, and we have fresh air, but hard times, and lots of work.—A Reader of M. B. F., Boyne City, Mich.

MICHIGAN BEET GROWERS RECEIVED $9.33 PER TON

MICHIGAN growers received $8,240,000 for their 1923 crop of sugar beets according to reports received by Verne H. Church, Agricultural Statistician and L. Whitney Watkins, Commissioner of Agriculture, from the best sugar manufacturers operating plants within the state. The guaranteed price plus the bonus resulted in an average price of $9.33 per ton for the 883,000 tons of beets delivered to the 16 factories operated. This crop was produced on 109,000 acres, a yield of approximately eight tons per acre, and an average gross return of $75.60 per acre. This exceeded the per acre income of any other major crop last year, its nearest competitor being $57 per acre from potatoes.

The actual amount of beets sliced was 815,000 tons, the beets losing 68,000 tons through shrinkage and removal of dirt. The beets had an average sugar content of 15.29 per cent of which it was possible to extract 84.4 per cent. As a result, 110,000 tons of sugar were produced, or approximately one-eighth of the beet sugar output for the entire United States last year, which totaled 881,000 tons.

There were 89 factories operated in the United states, slicing 6,565,000 tons of beets. The total production was 7,006,000 tons from an acreage of 657,000, or an average yield of 10.7 tons per acre. The high average yield, as compared to Michigan, is due to the fact that a large acreage is grown under irrigation in western states. The value of the sugar beet crop in the United States last year was $58,789,000. California was the only state paying a higher price per ton than Michigan.

Advance Information

She—How did you know I was going to wear my hair curled this evening?

He—I saw it in the papers this morning.—Stray Stories.

RADIO DEPARTMENT

EDITED BY J. HERBERT FERRIS, R. E.

A NEW TYPE OF DETECTOR

THERE has been placed upon the market, lately, a new type of detector tube that is much more sensitive to weak radio signals than any of the present type of tubes. This tube is the "Sodion" tube and is also spoken of as the "Golden Rule" tube.

This type of detector will bring in stations from great distances without using regeneration, and this means that the squealing that is so constantly heard in all regenerative sets can be done away with.

We are experimenting with this tube detector and in the early fall will tell you of our results. A cut of this tube is shown in these columns.

CRYSTAL RECEIVING SETS FOR SHORT DISTANCES

THERE are many farmers and residents of small rural communities that live within 10 to 30 miles of some broadcasting station; these same people are doing without the delights and advantages of radio because they can not afford the more expensive sets. It is for the benefit of these people that we will give some details on how to build and assemble a crystal receiving set that will give you satisfactory service.

Remember the crystal set will bring in the voice and music truer to life and clearer than any vacuum tube set will. It also works without any batteries and so does away with all this expense. It has given good results in the evening at distances of 50 to 400 and more miles; but bear in mind it is not recommended for distances greater than 30 miles from a broadcasting station.

Parts Necessary

Complete aerial equipment, wire, cleats, tubes, lightning arrester, ground clamp and strain insulators, $3.00; Tuning coil, (the cost to make, $2.00) with slides, etc., $3.00; 1 pair telephones, 2000 ohm, (some can be bought for less), $4.00; 1 phone condenser, $.50; 1 crystal detector, (from 50c up), $1.00; Total, $11.50.

This set can be bought for $11.50 which will include everything that you will need. Those of you who live near Detroit, Grand Rapids, Lansing, Ann Arbor, Saginaw and other broadcasting centers, will also be able to go to these cities to buy your parts and will find that the prices that I have given are higher than you will have to actually pay for some of the parts and you should be able to get in on the radio game for a ten-dollar bill carefully spent.

In an early issue we will give the details of assembling this set and how to tune it.

SEARS ROEBUCK STATION ON AIR

SEARS - ROEBUCK Agricultural Foundation of Chicago has opened a broadcasting station, call letters WLS; popular and instructive farm programs are broadcasted from this station which is primarily an agricultural broadcasting station. Their schedule is as follows:

Every noon 12.00 to 1:00 P. M. except Saturday and Sunday, Farm topic. Every afternoon, Home makers' hour, 3:45 to 4:45, except Sat. and Sun. Tuesday evening 6:30 to 12:00 P. M. Wednesday evening 6:30 to 11:00 P. M. Thursday evening 6:30 to 8:00 and 10:15 to 12:00 P. M. Friday evening, 6:30 to 11:00 P. M. Saturday evening, 6:30 to 12:00 P. M. Every evening the hours between 7 and 8 P. M. will be devoted to farm program or especially for farm people. The time given here is central standard time.

The United States government has placed in operation on both the Atlantic and Pacific coasts many radio compass stations which give to any inquiring ship it's exact location. This service is of great value in time of heavy fogs. There have been accidents and wrecks even since this new service has been used, such as the loss of several of our naval destroyers on the rocks off California coast not long ago, due in this case not to wrong radio information but a combination of circumstances which led to the loss of many lives and valuable ships.

Radio light ships and lighthouses are now being placed in operation. These ships and lighthouses send out certain signals at regular intervals and by checking these readings a ship at sea can avoid danger better than in the days of the real lightship and lighthouse.

FRUIT and ORCHARD

NO DIFFERENCE IN TREES

What would be the difference in a twenty acre commercial orchard in ten or twenty years grafted on whole roots or pieces of roots? From where and how do they import seedlings from Europe and what is the cost?—J. E., Pentwater, Mich.

—I feel confident in stating that there is no difference in the trees grown from whole or piece roots. Good trees can be produced in either way provided they receive proper care. I have seen mature trees grown, some of which were grown from piece roots and others from whole roots. These were planted alternately in an orchard. When I saw them they were 20 or 25 years of age and I could see no difference whatever in these trees, that could be attributed in any way to a difference in the nature of the original roots that were used.

Most of the apple seedlings imported from Europe come from dealers in France, although in the last few years Italy has become a large producer for the American trade. I am unable to state the present price quotations on these. Considerable quantities are raised in America immediately adjacent to Topeka, Kansas, and in the Yakima Valley in Washington. These seedlings, either American or European, can generally be secured from any of the larger nurseries.—F. C. Bradford, Research Assoc. in Horticulture, M. A. C.

PLUM TREES FOR MICHIGAN

Would like your advice on two good varieties of plums that are good on the market. Also what time of the year is best to prune plum trees?—L. W., Silverwood, Mich.

—There are a half dozen or more varieties of plums that are highly recommended for this state. Probably the Burbank is the most satisfactory of Japanese varieties. Amongst the European varieties Monarch and Grand Duke are probably two of the most satisfactory for commercial purposes.

Plum trees like most other fruit trees are pruned to best advantage during the dormant season; usually the pruning being delayed until rather late during the dormant season.—V. R. Gardner, Professor of Horticulture, M. A. C.

OUR BOOK REVIEW

(Books reviewed under this heading may be secured through The Michigan Business Farmer, and will be promptly shipped by parcel post on receipt of publisher's price stated.)

Optimistic Medicine.—By Arthur G. Crandall. This book deals with a general study of the human mind and body and is well worth reading and should have a place in every library. Published by F. A. Davis Co., Philadelphia, Price $3.00.

The Pioneer West.—By Joseph Lewis French. This book is a collection of stories on the westward march of the Empire. The works of Francis Parkman, Mark Twain, Bret Harte, Hamlin Garland, Bayard Taylor, General George A. Custer, Owen Wister, Theodore Roosevelt, Emerson Hough and many other writers have been drawn on for material for this book. Published by Little, Brown and Co., Boston. Price $2.50.

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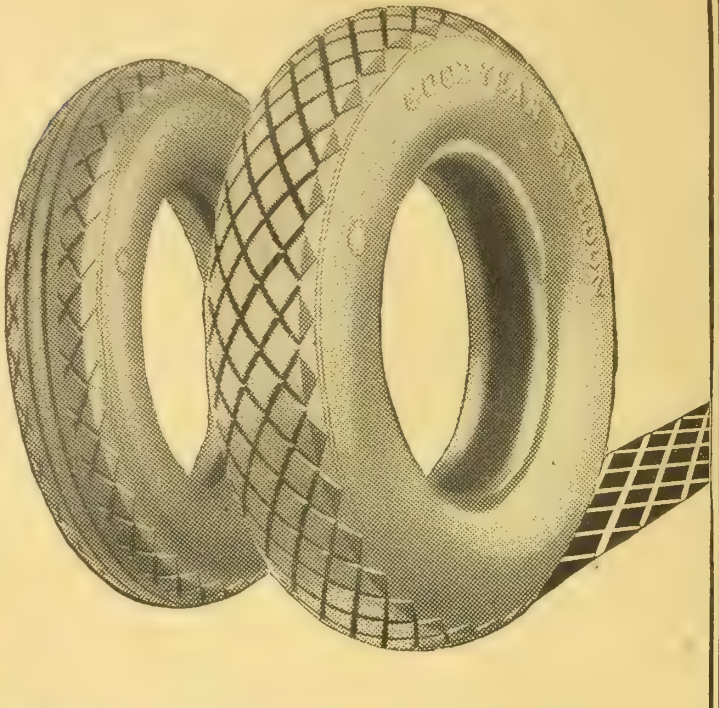

TALK to your Goodyear Dealer about balloon tires. He is informed and impartial. He sells *both* kinds of Goodyear balloon tires—to fit new small-diameter wheels, or to fit the wheels now on your car. You can depend on him to recommend the kind that will cost you least and serve you best.

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GOODYEAR

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KALAMAZOO, MICHIGAN

Oh Money! Money!

by ELEANOR H. PORTER

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(Continued from May 10th Issue.)

CHAPTER XVI

The Fly in the Ointment

IN August Father Duff died. Miss Flora came home at once. James Blaisdell was already in town. Hattie was at the mountains. She wrote that she could not think of coming down for the funeral, but she ordered an expensive wreath. Frank and Jane were in the Far West, and could not possibly have arrived in time, anyway. None of the young people came.

Mr. Smith helped in every way that he could help, and Miss Maggie told him that he was a great comfort, and that she did not know what she would have done without him. Miss Flora and Mr. James Blaisdell helped, too, in every way possible, and at last the first hard sad days were over, and the household had settled back into something like normal conditions again.

Miss Maggie had more time now, and she went often to drive or for motor rides with Mr. Smith. Together they explored cemeteries for miles around; and although Miss Maggie worried sometimes because they found so little Blaisdell data, Mr. Smith did not seem to mind it at all.

In September Miss Flora moved into an attractive house on the West Side, bought some new furniture, and installed a maid in the kitchen—all under Miss Maggie's kindly supervision. In September, too, Frank and Jane Blaisdell came home, and the young people began to prepare for the coming school year.

Mr. Smith met Mrs. Hattie one day, coming out of Miss Maggie's gate. She smiled and greeted him cordially, but she looked so palpably upset over something that he exclaimed to Miss Maggie, as soon as he entered the house: "What was it? Is anything the matter with Mrs. James Blaisdell?"

Miss Maggie smiled—but she frowned, too.

"Oh, oh, no—except that Hattie has discovered that a hundred thousand dollars isn't a million."

"What do you mean by that?"

"Oh, where she's been this summer she's measured up, of course, with people a great deal richer than she. And she doesn't like it. Here in Hillerton her hundred- and two-hundred-dollar dresses looked very grand to her, but she's discovered that there are women who pay five hundred and a thousand, and even more. She feels very cheap and poverty-stricken now, therefore, in her two-hundred dollar gowns. Poor Hattie! If she only would stop trying to live like somebody else!"

"But I thought—I thought this money was making them happy," stammered Mr. Smith.

"It was—until she realized that somebody else had more," sighed Miss Maggie, with a shake of her head.

"Oh, well, she'll get over that."

"Perhaps."

"At any rate, it's brought her husband some comfort."

"Y-yes, it has; but—"

"What do you mean by that?" he demanded, when she did not finish her sentence.

"I was wondering—if it would bring him any more."

"They haven't lost it?"

"Oh, no, but they've spent a lot—and Hattie is beginning again her old talk that she must have more money in order to live 'even decent.' It sounds very familiar to me and to Jim, I suspect, poor fellow. I saw him the other night, and from what he said, and what she says, I can see pretty well how things are going. She's trying to get some of her rich friends to give Jim a better position, where he'll earn more. She doesn't understand, either, why Jim can't go into the stock market and make millions, as some men do. I'm afraid she isn't always—patient. She says there are Fred and Elizabeth and Benjamin to educate, and that she's just got to have more money to tide them over till the rest of the legacy comes."

"The rest of the legacy!" exploded Mr. Smith. "Good Heavens, does that woman think that—" Mr. Smith stopped with the air of one pulling himself from an adyss.

Miss Maggie laughed.

"I don't wonder you exclaim. It is funny—the way she takes that for granted, isn't it? Still, there are grounds for it, of course."

"Oh, are there? Do you think—she'll get more, then?" demanded Mr. Smith, almost savagely.

Miss Maggie laughed again.

"I don't know what to thing. To my mind the whole thing is rather extraordinary, anyway, that he should have given them anything—utter strangers as they were. Still, as Hattie says, as long as he has recognized their existence, why, he may again, of course. Still, on the other hand, he may have very reasonably urged that, having willed them a hundred thousand apiece, that was quite enough, and he'd give the rest somewhere else."

"Humph! Maybe," grunted Mr. Smith.

"And he may come back alive from South America."

"He may."

"But Hattie isn't counting on either of these contingencies, and she is counting on the money," sighed Miss Maggie, sobering again. "And Jim—poor Jim!—I'm afraid he's going to find it just as hard to keep caught up now—as he used to."

"Humph!" Mr. Smith frowned. He did not speak again. He stood looking out of the window, apparently in deep thought.

Miss Maggie, with another sigh, turned and went out into the kitchen.

The next day, on the street, Mr. Smith met Mellicent Blaisdell. She was with a tall, manly-looking, square-jawed young fellow whom Mr. Smith had never seen before. Mellicent smiled and blushed adorably. Then, to his surprise, she stopped him with a gesture.

"Mr. Smith, I know it's on the street, but I—I want Mr. Gray to meet you, and I want you to meet Mr. Gray. Mr. Smith is—is a very good friend of mine, Donald."

Mr. Smith greeted Donald Gray with a warm handshake and a keen glance into his face. The blush, the hesitation, the shy happiness in Mellicent's eyes had been unmistakable. Mr. Smith felt suddenly that Donald Gray was a man he very much wanted to know—a good deal about. He chatted affably for a minute. Then he went home and straight to Miss Maggie.

"Who's Donald Gray, please?" he demanded.

Miss Maggie laughed and threw up her hands.

"Oh, these children!"

"But who is he?"

"Well, to begin with, he's devoted to Mellicent."

"You don't have to tell me that. I've seen him—and Mellicent."

"Oh!" Miss Maggie smiled appreciatively.

"What I want to know is, who is he?"

"He's a young man whom Mellicent met this summer. He plays the violin, and Mellicent played his accompaniments in a church entertainment. That's where she met him first. He's the son of a minister near their camp, where the girls went to church. He's a fine fellow, I guess. He's hard hit—that's sure. He came to Hillerton at once, and has gone to work in Hammond's real estate office. So you can see he's in earnest."

"I should say he was! I liked his appearance very much."

"Yes, I did—but her mother doesn't."

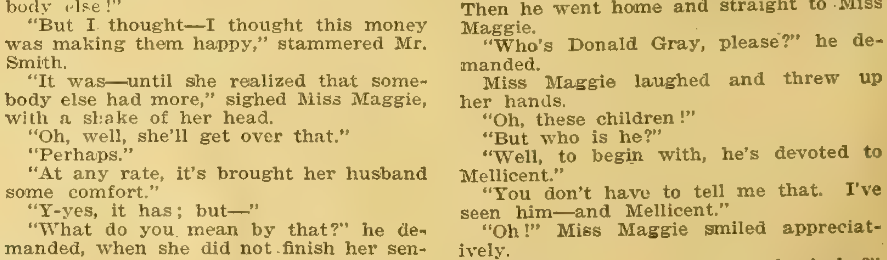
"What do you mean? She—objects?"

"Decidedly! She says he's worse than Carl Pennock—that he hasn't got any money, not any money."

(Continued on Page 21.)

OUR READERS' NEW BUILDINGS

Have you built any up-to-date farm buildings lately? If you have send us a picture of the new building and we will print it in this new department. It will show the M. B. F. readers what their distant neighbors are doing to change the scenery. And, incidently, you may be able to help some farmer decide the type of house, or barn, or other buildings he desires to put up. He may like the appearance of your building and will want the plan of it. Kodak pictures are all right if the details show up well. Do not send the negative, just a good print.



UP-TO-DATE BUILDINGS ON FARM OF R. G. COLLINS, MT. PLEASANT, MICH.

I am sending you a picture of our barn which was built last year. You will notice the silo is built in which keeps the silo and silage in fine shape. The barn is 74 feet long by 38 feet wide and is built on a cement wall. Floor is cement. It cost $2200.00 to build.—R. G. Collins, Mt. Pleasant, Michigan.

FOUL DEEDS AGAINST FATHOMLESS LOVE

A SERMON BY REV. DAVID F. WARNER

> TEXT: "And forthwith, he came to Jesus and said, Hail, Master; and kissed him. And Jesus said unto him, Friend, wherefore art thou come? Then came they and laid hands on Jesus and took him."—Mt. 26: 49, 50.

JUDAS in history has been pointed out as an ingrate because of his foul betraying of friendship. To mention the kiss of Judas is to set surging in human breasts emotions of horror and loathing. In all the days of intercourse with his Lord, he had been contemplating this hideous crime within the closed doors of his heart. Therefore, to extenuate this deed by saying he desired to precipitate or hurry in the Messianic kingdom, does not seem in keeping with Revealed Truth. But, however, he succeeeded in keeping it within the drapery of religion; in hiding it under a show of prayer and devotion to the Christ. But, now, the fatal moment has come, and the kiss of poison and death is given. Can one conceive of a snakier deed?

But here also is Drummond's "Greatest Thing in the World," LOVE. "Faith, hope, love, these three; and the greatest of these is love," says Paul. This is one of the profoundest mysteries in the Book. But Jesus loved all of his disciples to the end; and in this scene, the Love that never faileth sees the traitor coming and hails him as "Friend." This is the love that passeth our understanding since the Christ saw corruption working in Judas' heart and the crime taking shape. At the table he said, "One of you shall betray me," but he pointed out no individual. Yet guilt in the person of the betrayer cried out, "Lord, is it I?" Well, what humans have done, humans may do again. Let us address our own hearts solemnly, "Lord, is it I?"

But let us keep to the foremost, THE PERMANENCE OF LOVE. And this is heightenend by noting the manner of the Judas sin. Our way of sinning is sometimes harder to hear than the sin itself. That kiss! How many libertines have entrapped the innocent thru a foul kiss! That Judas kiss loaded with poison! What shall we say about this church kiss, for so it was? What dread for the man or woman who secretly plan evil against you! How loathsome is he who is strangely genial and friendly to your face but who carries the dagger of destruction in his bosom! What pain to be betrayed by a familiar friend! Sack cloth and ashes! Some of the most detestable camouglage in the world has been enacted in the name of the church. Even many wicked hearts consider it beneath their sanction to commit a Judas betrayal. "Hail, Rabbi!" And he kissed and embraced. Now see his Lord, persistent in love. There is no recoil from the pollution of the traitor's lips. We see no white sheet of anger on his face. Looking the wretch over, in pity he says, "Friend, wherefore art thou comest?" How Jesus could wrap such a relentless foe in the mantle of charity, we cannot understand, but he did. And this constitutes a challenge to the charity and good-will of every humble follower of him.

But, friends, we do not know Jesus until we see in him more than perfect human goodness as such things go with us; until he becomes to us the revelation of God. "He that hath seen me hath seen the father." In this tragic scene we see the pity and tenderness of our Heavenly Father. If ever a man could expect Christ's heart to close up against him, it was the Judas man. But in the moment of treason, love did not fail. Now, sinning friend, the law of consequences makes sin terrible in its results. "He that pursueth sin pursueth it to his own death." And because you have not passed over into the realm of lost spirits, is because of Jesus' lingering, pleading love.

"God so loved the world" of sinning men, of outcasts and prostitutes, of Godless good-enuf men, and of church - hardened professors, "that whosoever believeth should not perish." Nothing more proves it than this Gethsemane tragedy. The waters of Fathomless Love lapped at the wayward feet of the traitor, but he would not be cleansed. Will you? Jesus Christ is the same yesterday, today, and forever.

The CHARACTER OF LOVE is abiding. So says the apostle in that great classic, the thirteenth chapter of first Corinthians. It believes, it hopes, it endures. Your attention will be called to this on Mothers Day. For, in the words of Coleridge, "A mother is a mother still, the holiest thing alive." The holiest in purity of love, in extremes of selfdenial, and in unwearied service. But if this be but sentiment, let me remind you that in this betrayal scene the Christ attitude strikes deeper than sentiment. "Friend, wherefore art thou comest" is a word that pierces even to the dividing asunder of soul and spirit, and is a discerner of the thoughts and intents of the heart. It strikes down to conscience. Judas friend, don't you remember our former companionship, and our walks and talks together? Don't you remember the official honors we gave you? Have you forgotten all this? Why do you come to betray me?

But conscience would no longer respond to the call of love. The Master would have Judas ask himself, What am I going to do? Why am I going to do it? Is this thing wrong that I am planning to do? Shall I do it anyway? The strength of Christ's moral appeal is always to drive the heart to examine its own conduct to bring about self-accusation.

The doctor says, What have you been eating? What are your habits? And then you are self-accused before him. The Great Physician asks, Why do you do wrong? What wages do you expect to reap from sinning? These questions when seriously put to our own hearts would save much misery and hell. "Happy is he that condemneth not himself in the thing which he approveth." The lie, the deception, the gay life, the selfish career, which I approve in my own life condemns me to separation from Christ. Church Member, if you could feel that that writhing thing crawling around the rots of your heart, is the snake of secret jealousy and revenge, you would pluck it out or forever take your stand with Judas. Careless Liver, if you would stop to consider that that subtle serpent which says, "Thou shalt not surely die," is the betrayer of your soul, you would yield to Infinite Love. To stop and consider, is to smite the conscience so that the grace of God might come to your rescue.

"My people doth not consider," cries out the prophet, Isaiah. O, yes, they were devoted to religious forms. But saith Jehovah thru the prophet, "When ye make many prayers I will not hear: your hands are full of blood." Judas was a formal religionist, but his hands were full of blood. Of course he did nothing but kiss his Lord and Master. No, you don't always have to set your teeth and raise defiant hands; just do nothing but keep religious forms and conventions and heaven and earth will know where you live. It is quite easy to miss the way to a saved personality. When Love pleads, just do nothing. He that believeth not (nothing) is condemned already. And the stroke of it is on the way. In a few hours after the Garden scene, it strikes into the heart of the traitor, and he cries, "I have sinned." This is the remorse of a soul that sold its Savior for gain and became its own hang-man.

Now, we need to turn the terror of such an end upon our own hearts. But, more than this, we need to let the love that never faileth flood our erring lives. Our bodies and spirits are not our own. And what shall we answer to the Owner, when we willfully wreck them in foul deeds and selfish living. "Lord, what wait I for? My hope is in thee."

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Announcement

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Former Secretary of

National Fox Breeders' Association

is now affiliated with the Pontiac Strain organization—in the capacity of

Director of Purchaser's Service

Mr. Smith's four year's experience as National Secretary and Official Inspector qualifies him to give to beginners in this wonderful Industry the advice and Service necessary to assure their success.

Mr. Smith's—unimpeachable integrity—and wide knowledge of the Fox Industry—is a firm foundation upon which beginners—or others—may safely build. Write him your problems. He will serve you. Address—JUSTUS E. SMITH,

DETROIT SILVER FOX FARMS,
12-243 General Motors Bldg., Detroit, Mich.

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"The Farm Paper of Service"

WELCOME BACK TO MICHIGAN

THIRD in a line of three generations of Butterfields, each of whom contributed largely to the agricultural progress of this state, returns Dr. Kenyon L. Butterfield, from Amherst, Massachusetts, to take up the presidency of the Michigan Agricultural College. The Good Book says "A prophet is not without honor save in the land of his birth," and yet Michigan is doubly proud to have a native son to head her college.

Dr. Butterfield's grandfather, I. H. Butterfield, Sr. was a pioneer farmer and stock breeder, who served twice as a member of the state senate and was chairman of the committee which reported the bill which later became the law under which the Michigan Agricultural College worked for half a century. His father, I. H. Butterfield, Jr., was also a farmer and was connected with the Michigan State Fair for thirty years, fifteen of which he was active in the capacity of secretary, during which time the foundations were laid for the exposition of which this state is now so proud. He was also the organizer of both the Michigan Shorthorn Breeders Association and the Michigan Livestock Breeders Association.

Dr. Kenyon L. Butterfield was born at Lapeer, Michigan, June 11, 1868, and his early education was received in the country school house and later in the city of Port Huron. He graduated from the college to which he now returns as president with a Bachelor of Science degree in 1891 and served in various agricutural activities until 1900, when he attended the University of Michigan and graduated from that institution in 1902, with a Master's degree. For a year he remained there as instructor in rural socialogy, and was then called as president of the Rhode Island College of Agricultural and Mechanical Arts, where he remained until accepting the presidency of the Massachusetts Agricultural College at Amherst, from which position he now returns to his home state.

Announcement that Kenyon L. Butterfield will return to Michigan to fill the chair as president left vacant by Dr. David Friday will, we feel sure, be welcome news to the progressive business farmers of this state and we share with Chairman L. Whitney Watkins and other members of the State Board of Agriculture their jubilation at being able to place a native son who has won such high honors at the head of the institution which means as much, if not more, than any other single factor to the progress of agriculture in this great state.

Welcome home, Kenyon! We hope you will never again see fit to get the Michigan mud off your heels or the pure ozone of Michigan out of your nostrils!

DIG OUT THE FACTS!

FEELING that farm property is being assessed relatively higher than city homes and business property, several county farm bureaus in Michigan are engaged in campaigns to find out the actual facts about these conditions. Committees representing the county farm bureaus are working in accordance with a plan devised by the Michigan State Farm Bureau to find out from the official records the actual assessment ratio for various classes of property.

Representatives from the State Farm Bureau are assisting the counties in putting on these campaigns. The general plan is to go to the Register of Deeds office and get a record of all the real estate transfers for several months back and then to find out the assessed valuation of each of these descriptions of property from the County Treasurer's records. A comparison of the sale price and the assessed valuation of each kind of property shows conclusively how fairly the different kinds of property in any given county are being assessed.

The results secured to date indicate that farm and village property is being assessed at almost its full sale valuation, while real estate, especially business property, is not being assessed at more than 65 per cent of its actual value. Results secured in these campaigns will be presented to the local supervisors and an effort made to secure an equalization. Where such efforts are not successful locally, an appeal will be taken to the State Tax Commission.

A similar campaign put on by the county farm bureaus in Illinois resulted in a reduction of taxes paid by Illinois farmers amounting to over $2,000,000 last year. If they ask you to help dig out the facts in your county, join hands and do your bit!

MORE ABOUT BEANS

THE article by E. A. Little, on page 4 of this issue, in which he advises not to cut the 1924 acreage of beans in Michigan, is only a starter in a serious study of the whole bean industry in this state.

There is no major crop that is more important to the farmers of Michigan than our bean crop. According to the last census, Michigan produced 72 per cent of all the navy beans grown in the United States and there are none of us who will not admit that the Michigan quality is far superior to anything else that can be grown in the United States.

To THE BUSINESS FARMER it has been obvious that Michigan needed more than any other thing a strong bean growers' organization. We had hoped that the man who could head such an organization, who had the ideas and the tenacity, would step forward and with the help of the many interests who are waiting him, organize the independent bean growers of Michigan into a solidified and stable business corporation.

No one who has made even a causuary examination of the facts can help but come to the conclusion that the bean market suffers annually and has from time immemorial, from the depradation, of a band of market-bandits who take advantage of the growers unorganized position to force the market up or down to their own particular advantage.

It was just this sort of thing that drove the citrus growers of California and the milk producers of New York state into the strong positions they occupy today, with a complete selling organization for their raw products.

We are going to continue to give all the space necessary to this subject because we know of none other which deserves more attention in Michigan at this time. If our readers have anything to offer or any suggestions or advice, we will be only too glad to welcome it into our columns.

FIGHTING FARM FIRES

WE mentioned recently on this page the motor-driven fire-fighting equipment which is being purchased in Michigan rural communities for the protection of farm property against the avages of fire. We pointed out that the advent of good roads and the rapid motor trucks have made it possible to have a community fire department in the farming districts giving the same advantages as enjoyed by city residents.

The latest to come to our attention is the modern fire equipment purchased by Montague township in Muskegon county. We understand this is largely sponsored by Mr. Charles Ohlenberger who, for twenty-three years, has been chief of the Montague fire department and who has had plenty of experience in fighting the fire monster.

We will welcome the news of more fire equipment in Michigan because we know it means the saving of a vast amount of property which has heretofore been lost because of inadequate protection.

We point out again that no farm home and no farm building should be without a small fire extinguisher of some kind to catch the small blaze at its inception, and if every insurance society in the state insisted upon this simple precaution the amount paid for insurance in Michigan could be reduced millions of dollars and yet the cost of this simple protection would only mean a few thousands, a fraction of the savings.

By actively fighting fire in Michigan the coming year the insurance rates can be materially lowered, and this is one of the propositions that we are going to harp-on until we see it an established fact.

INCOME TAX PETITION OUT

THE farmers of Michigan, working through their organizations are going over the top in their effort to initiate a state income tax constitutional amendment by petition. The Michigan State Farm Bureau and the State Grange and other cooperating farm bodies have already secured more than 50,000 signatures to the petition to put the proposed amendment on the ballot for the general November election this fall. Nearly 60,000 names are required, but the leaders are planning not only to secure the minimum, but to have several thousand names to spare.

The amendment now being proposed is radically different than the tax which was defeated a few years ago, in that it definitely provides that the first $4,000 of every man's net income shall be exempted from this tax and it fixes the rates on incomes in excess of this amount on a sliding or progressive scale which will vary from 5 per cent to 10 per cent according to the size of the individual's net income. Incomes of $100,000 or more per year will receive the maximum 10 per cent tax.

An analysis of receipts from the Federal income tax in Michigan indicates that the proposed state income tax would yield at least $12,000,000 revenue per year, which it is definitely provided would be deducted from the amount of general property tax for state purposes. Backers of the income tax state that this will not be an added burden to the Michigan tax-payers, but will give definite relief to the over-burdened real estate in that it will shift a considerable portion of the cost of maintaining the state government off from general property and distribute it upon men who are receiving relatively large incomes from salaries or investments.

It is also pointed out that a personal income tax is about the only form of taxation which cannot be readily passed on and the burden shifted from the big fellow down to the ultimate consumer. A personal income tax coming due after the year's business is all completed and the books balanced, must be paid by the individual who has received the net income.

ANOTHER CHEERFUL VIEW

ONE of the leading farm mortgage houses in the United States has the following to say in a recent bulletin issued to investors, which because of its conservative source has more than double meaning.

"As time goes on productive farms will appreciate more and more in value, just as they become scarcer and scarcer. A great change is certain in less than a generation. About all of the country's arable land has been taken up, but our population goes right on increasing just as if another West was waiting to be put under the plow. The result is inevitable, and the opportunity to buy fertile farms will never be greater than it is today. These farms are extensive in number and as low in price as they ever will be.

"The fact that land has a greater value today than it had only twelve years ago is due almost entirely to the fifteen million more mouths that must be fed. This has been the dominant factor that has caused food commodities and land values to increase steadily in this country for the last hundred years. It is true, not only in America but it has been true in every agricultural country in the world. Yet with approximately 25,000,000 more consumers to be fed in the next ten years from almost the same acres, many young farmers want to sell out, move to the crowded cities, engage in business, despite the fact that 95 per cent of all businesses fail."

FACE THE AUTOMOBILE

WHEN you start walking down the country road or highway, do you face the oncoming automobile or do you walk with your back to it?

If you follow the latter plan and do much walking on the highways the chances of your being alive five years from today are pretty slim, but if you will change your method of walking and face the traffic, stepping out to the side of the road as the oncoming vehicle approaches you, you will be removing at least one of the impediments to your reaching a ripe old age.

There is not a heavily travelled highway in Michigan that has not taken its toll of men, women and children who insist on walking up the road with their backs to the oncoming vehicle; probably the greater proportion of these accidents have occurred at night when the lights were dimmed or the driver befogged by liquor, but as simple as this rule would appear, it is only recently that they have been teaching it in the country schools or preaching it in public meetings.

Talk it over with every member of your family tonight and find out how they are walking, or if you do not your home is pretty apt to be turned into one of sadness. Help us spread the propaganda of "Drive to the right; walk to the left!"

PUBLISHER'S DESK

OUR SERVICE TO YOU IS FREE

WE are here to serve and help you, and you can help us help you by giving full information with your first letter. Hardly a day passes that we do not receive a letter from some paid-up subscriber asking for help and then the writer fails to give part of the information needed. Some will want us to handle claims for them and they fail to give the complete name of the company their claim is against, or they do not tell the amount due them, or what they purchased, or other information very necessary in handling a claim. Some even fail to sign their name.

We want to help you but you must give us a certain amount of information if we are to serve you. In writing the publisher kindly keep the following in mind:

Write on only one side of your paper.

Be careful to write plain.

Do not use wrapping paper for stationary.

Do not ask us to settle claims that are over six months old.

Do not expect us to handle claims between you and your neighbors. We will give you legal advice on the matter, however.

Be sure to give the complete name and address of the party about whom you are complaining.

Give full details regarding your case.

Do not fail to sign your full name and address plainly. We will not use your name if we publish the matter.

Be sure that you are a paid-up subscriber.

Read your letter over before mailing to make sure you have left nothing out. We always read our business letters carefully before mailing to make sure nothing has been omitted.

Will you kindly cooperate with us? It will enable us to handle more claims and answer more letters if you will. And you will get quicker service. Quick service is what you want and what we want to give you so help us by helping yourself.

GOOD NEWS!

I THINK we have some good news for all friends of THE BUSINESS FARMER! The certificates of membership in the Protective Service Bureau are now being mailed to all new subscribers, as their remittances are received and the metal signs, ready for hanging on the fence, attaching to the mail-box post or fastening to the barn or house, will be shipped in a few days.

This certificate is free and will be mailed on receipt of every subscription remittance. If you are paid-up, as shown by your address label on the front cover, to 1925 or longer, simply ask us on a postal-card and your certificate in three colors, suitable for framing will be mailed free. If your subscription has expired or will in 1924, send a dollar for a two year renewal and the certificate will come by the next mail.

When all our subscribers have certificates, we will give service from the Legal, Veterinary, Publisher's Desk and other departments absolutely free, only when the certificate number is mentioned.

Do You Want A Metal Sign?

If you want to be first in your neighborhood to get one of the weather-proof, two-color, metal signs which are now being made and will be ready for mailing within thirty days, send twenty-five cents (25c), with your subscription remittance or if you are paid-in-advance, send just a quarter for the certificate and the sign. For your convenience we will print a coupon at the bottom of this page.

Crooks, fakirs, quacks and grafters are going to keep away from the farm homes in Michigan where they see this sign displayed! They already have a healthy regard for "the little paper with the big stick!"

GUSTAVESON OIL COMPANY

Will you kindly investigate the Gustaveson Oil Company, Salt Lake City, Missouri, for me? They want to sell me some stock,—C. D., Sandusky, Mich.

WE had our representative at Salt Lake City call at the office of the Gustaveson Oil Company and he reports, "The first people who organized this company did it upon a promotion scheme. The people who now have charge of it are all local business men and of good standing. I believe that any money they receive will be expended in a right way, according to their judgement, but like any oil proposition, any one putting money into it is taking a long chance as to whether they get any money back or not, or oil for that matter. At the present time they do not have any oil wells and are only a prospecting company."

BLACK'S INTERNATIONAL SELLING SERVICE

I have noticed in your paper mention of fake real estate agents with remarks to find out who they are before giving money and your department would assist. Can you inform me if this Black's International Selling Service is reliable? I want to list my farm for sale but don't want to advance money and lose it. We are both in poor health and must sell. I will be grateful for any information you may be able to give me.—J. B., Missaukee County, Mich.

WE do not have much faith in the scheme where you list your farm with a dealer in another state paying him an advance fee. We wrote this agency twice, the last letter was over a month ago, and to date have heard nothing from them. We asked them for the names and addresses of several farmers in this state who had satisfactory dealings with them, and also their responsibility to make good on the sale of a farm that was listed with the company. As usual, these kind of folks seem more willing to write letters to unprotected farm folks than they do to us.

FUR SWINDLER GOES TO PRISON FOR TWO YEARS

MANY of our readers remember the I. R. Hough Fur Trading Company, of New Haven, Connecticut; in fact, some of them will remember that company the rest of their days because they shipped some furs to them last winter. Word has come from New Haven, Connecticut, that I. R. Hough of this company was recently convicted of swindling fur trappers in all parts of the country by failure to pay for the skins shipped to the concern, and was sent to the Federal penitentiary for two years.

THE BUSINESS FARMER,
Protective Service Bureau,
Mt. Clemens, Mich.,

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THE MICHIGAN BUSINESS FARMER, Mt. Clemens, Michigan

The Farm Home
A Department for the Women

Edited by **MRS. ANNIE TAYLOR**

DEAR FOLKS:—Memorial Day, May 30th, is the next public holiday. There is no holiday observed in this country that arouses the emotions of the people as does Memorial Day. First conceived as a day on which to decorate the graves of the soldiers and sailors of the Civil War, it is now a day on which we honor, with florial tributes, the final resting places of the heros of all our nation's wars. Let us all put aside our work for the day, hitch up the horse or jump into the flivver, and drive into town and observe this day along with our city cousins. , Yes, I know that we are behind with our work this spring, but we can spare at least one day in honor of those who died for us—some of them our own flesh and blood.

Your Friend,
Mrs Annie Taylor

Address letters: Mrs. Annie Taylor, care The Business Farmer, Mt. Clemens, Michigan.

MEMORIAL DAY

GATHER the garlands rare to-day,
Snow-white roses and roses red;
Gather the fairest flowers of May,
Heap them up on the graves of clay,
Gladden the graves of the noble dead.

Pile them high as the soldiers were
Piled on the field when they fought and fell;
They will rejoice in their new place there
To-day, as they walk where the fragrant air
Is sweet with the scent of asphodel.

Many a time, I've heard it said,
They fell so thick where the battles were,
Their hot blood rippled, and, running red,
Ran out like a rill from the drifted dead
Staining the heath and the daisies there.

This day the friends of the soldiers keep,
And they will keep it through all the years,
To the silent city where soldiers sleep,
Will come with flowers, to watch and weep
And water the garlands with their tears.
—Cy Warman.

THE FOREWORD TO JUNE FASHIONS

JUNE, month of brides and roses, brings us also many beautiful new fashions. Summer frocks, of course, have the advantage of sheer materials and brighter colorings to make them especially appealing, according to the Designer. Laces, too, and dainty embroideries add to their charm, and the present vogue of painted designs suggests a new and decorative way of embellishing this season's dresses.

Warm weather sponsors the sleeveless mode in dresses, coats and jumper styles, and a very original model features a cape-collar arrangement in one with the short sleeves. The apron front and side draperies are particularly attractive in soft summer fabrics.

The tailored vogue is evident in the simple, straight-line dresses, open at the neck to form a collar and with narrow belt and pocket. A novel coat dress presents a coat-suit effect in the front but the back is made in one piece. The sports influence is seen in all these styles for general wear. The effective use of striped materials is another interesting new note, and the crosswise treatment suggests many clever possibilities.

Among the prevailing accessories scarfs are most conspicuous and they accompany every type of costume. Striped and printed silks are used for daytime scarfs while hand-painted chiffon and silk lace are used with evening dresses. In the matter of footwear one may choose from a variety of strap pumps of satin, patent leather or kid, worn with stockings in the lighter shades of blond, peach and nude.

WHAT DO WE TALK ABOUT?

"AND when I wouldn't give him a date for the next night, he got sore———."

"There wasn't a bank in town that would lend us a nickel in those days. Now———."

With women it is men, and with men it is business! At least that is what three psychologists have found, after analyzing chance conversations of persons on Broadway and in Columbus, Ohio. The results of their survey are told in Hygeia.

As for health, it has little conversational interest to any one who is well.

Listening in on the conversation of others has always been an absorbing pastime, and many a dull journey has been enlivened by overheard conversation.

Two psychologists, M. H. Landis and H. E. Burtt of Ohio State University, recently analyzed 500 conversations which they overheard in that community, with a view to finding out what are mankind's chief interests. They compared their findings with those of the psychologist, Henry T. Moore, who several years ago made a similar analysis in New York of conversations heard on Broadway.

The two Ohio scientists included in their investigations the conversations of persons in restaurants, at baseball games, in theater lobbies, in front of store windows, on the campus, in barbar shops, in churches and on the street.

Conversations were classified under ten headings: business and money, men, women, clothes and decoration, sports and other amusements, college work, health, self and weather. The results at Columbus, Ohio, in general agreed with those on Broadway.

Men's most frequent topic is business—49 per cent. in Columbus and 48 per cent. in New York. If sports and other amusements are combined, these topics have a frequency of 15 per cent. at Columbus and 14 per cent. in New York. The third topic of men's conversation is men—12 per cent. in Columbus and 13 per cent. in New York.

Women's leading topics are men, 22 per cent., and clothes, 19 per cent. For New York, the figures were men, 44 per cent., and clothes, 23 per cent. The next topic is other women about 15 per cent.

In mixed company, men most frequently talk to women about amusement, and next of business and money. They further seem to talk to women considerably about themselves—17 per cent.—which is more than when talking to other men.

Women most frequently converse with men about amusement; secondly, about clothes; thirdly, to a considerable extent about themselves and about men.

The results were classified also as to social status of those concerned. Business people talked about business and money in 70 per cent. of cases, as compared with 43 per cent. for industrial workers and 9 per cent. for students.

Industrial workers talk chiefly about men and themselves, and students talk chiefly about other men, their opportunities and amusements. It is interesting to observe that only 8 per cent. of student conversation dealt with lessons.

Although health was one of the subjects catalogued, it is important to notice that it had little interest for those who were well.

HOW TO MAKE POCKETS FOR BLOUSES AND SKIRTS

POCKETS are used on blouses, skirts and dresses. They are the set-on or patch pocket, and the set-in. Both of these may be made with or without laps, which may be applied on the outside or set into the edge of the pocket.

The patch pocket is the simplest type of pocket. This may be cut according to a pattern, or a pattern may be easily made for such a pocket. The top edges are hemmed or faced, and the other edges turned in and basted flat to the desired position on the garment, then stitched by machine close to the edge. Two rows of stitching one quarter inch apart may be used.

The laps for patch pockets are generally made double, stitched on the lower edge and sides, then turned and stitched on the outside along the same edges. The upper edges are then turned in or under, and the lap is stitched flat to the garment so that its lower edge covers the top of the pocket.

Set-in pockets are made in a similar manner to bound buttonholes. To make a set-in pocket, cut a lengthwise strip of material three inches longer than twice the desired depth of the pocket, and two inches wider than the pocket opening. Mark the position and size of the pocket opening on the garment, then crease the strip of pocket material straight across, one and one-half inches from one end. Place this crease over the pocket marking and baste. Mark the position of the pocket through onto this section and stitch around this marking. Cut and turn pocket section through onto wrong side and baste around edges as for bound button-hole. Stitch on the lower edge of the opening then fold the long end of the pocket strip up, so that the two ends of the strip are together. Stitch around the upper edge of the opening, taking care that the ends of the stitching turn the corners and meet the stitching on the lower edge. Next stitch the sides of the pocket together and overcast. The set-in pocket used on middy blouses is finished with a very narrow binding and with pointed instead of square ends.—Blanche E. Hyde, Clothing Specialist, Colorado Agricultural College.

HANDLING MY BEDS

IRON bedsteads can be cleaned with a cloth dipped in gasoline.

Turning the mattress occasionally adds to the length of its life. Remove the dust from the mattress and from the springs with a whisk broom.

To take out spots and stains on a mattress moisten a little laundry starch and household amonia powder with water. Apply to the spot. Remove two days later with a stiff brush. If there are still traces of the stain, sponge with a cloth dampened with water to which a few drops of amonia have been added.

My double blankets were very heavy to wash so I cut them all apart and bound both ends of each blanket with binding ribbon. They are now much easier to handle and can be used singly when double blankets would be too warm.

It is often necessary to wash a large bed quilt or comforter when the upper end of it is the only soiled part. To avoid this, one side of each down comforter should have three or four buttons on it to which a sheet with buttonholes worked at the top may be buttoned over. This sheet can be changed with the other washable bedding and the comforter will keep clean and sanitary for a long time.—Mrs. B. D.

REMOVING STAINS

WHEN cleaning black satin shoes, always use a piece of black velvet. This prevents the satin from becoming rough and removes the dust and spots as readily as an ordinary cloth saturated with alcohol or chloroform.

If the percolator strainer becomes clogged, pour coarse salt into it and scrub the perforations inside and out. Pour boiling water through to wash away the salt and coffee deposit.

Coarse salt dampened with vinegar will clean enameled ware that has become burned or discolored.

Personal Column

Something on Styles and Colors.—I am a little brown-eyed girl of seventeen summers. There is a few things I would like to know and I am most sure you can enlighten me. Are old rose and bright red going to be worn much this summer? What are the leading colors for this summer? Also will colored shoes and stockings be worn much?—"Brown-Eyes", Shepherd, Michigan.

—Bright red and all of the gay colors are correct for sport clothes. Old rose is always pretty and proper if it is becoming to the wearer. Printed silks in various harmonizing color combinations are pretty and much in vogue at the present time. Tans, grays and blues in all shades are as popular as ever, while tan, gray, brown and black shoes with hose to match are mostly worn. Never under any circumstances follow the prevailing styles in colors unless they are becoming. One should not be tempted into wearing a new shade simply because it is the latest fad.

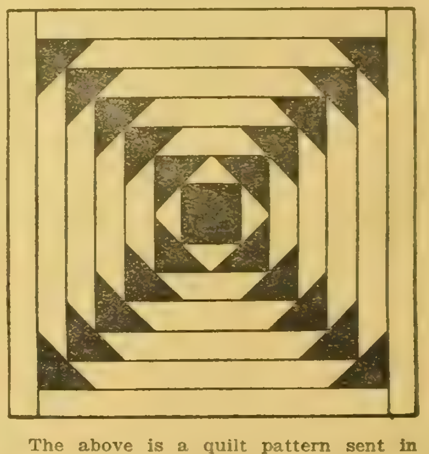
How to Keep Horse-radish.—I have noticed a request through The Business Farmer for a way to put up horse-radish for winter use and I am so well pleased with the way I have done it for the past fifteen years with perfect success that I am going to tell others. Leave the roots in the ground until the frost has killed the leaves, then take a box or old pail, or any article you wish, and put in a layer of dirt in the bottom, then a layer of horse-radish roots, and another layer of dirt, and so on until you have the amount you wish. Put plenty of dirt on top and place in your cellar and about once a week pour a little water on the dirt—not too much, just enough to keep moist. When you wish horse-radish just dig a few roots, scrape and put through the fine part of a vegetable chopper, or grate it, and then fix it as you like best. You will be delighted with it as it is just the same as when you take it from the ground in the spring. I also save all the crowns I cut off the roots and keep them in the box with the roots to set out in the spring to grow into more plants. You can also put down parsnips and carrots the same way and have them fresh and crisp for winter use.—Mrs. F. M. R., Orleans, Michigan.

Got Check for Prize Letter.—I am in receipt of your voucher for $1 for which (now that I've got my breath) I thank you very much. Wishing you great success, I am,—E. M. C., Oakley, Mich.

Household Hints.—I have a few household hints that may help some of our readers. The busy farmer's wife would like to make fuel for cook stove go as far as possible, so get your oil stove oven out on top of the cook stove and bake your bread in it while baking cookies or pie in the cook stove oven. Try it once, it works fine. Change the bread, in oil stove oven, from top to bottom after it has been in one-half hour. For washing milk separator after rinsing the first time put in a half teaspoonful of baking soda instead of soap.—Mrs. R. N.

Wants Some Red Pop Corn.—I wish I could find some red pop corn. I have looked in every catalog that I can get and cannot find any. I wonder if any of the readers have some seed that they could spare. I would be pleased to pay for some. I only need a little, just enough to get a start.—Mrs. N. Crum, Wheeler, Michigan.

OPEN STAIRS



The above is a quilt pattern sent in by one of our readers and I think it very attractive. The hand made quilts are very popular right now and command a big price in the city. I use a pink and white one in a rose room and a blue and white in my blue-bed-room. They are a very attractive addition on any bed.

Menu for May 24th

*Chickens Stewed with Olives
Chartresue of Spinach
Baked Squash
Asparagus Salad
Rhubarb Tarts
Coffee

***Chicken Stewed with Olives.**—Cut 2 young chickens into joints and put to cook in three pints of water with pepper, salt and an onion. Cook until the chickens are very tender, Take up, drain and wipe chickens and fry them in fat until they are brown. Strain water in which chickens were cooked and take a little more than ½ pint of it for sauce. Put this into the frying pan in which chickens were fried, thicken it a little, and into it put 2 dozen olives, chopped, and one tablespoon capers. When it is quite hot and smooth pour over chickens and serve.

RECIPES

Cream Puffs.—1½ cups flour, 5 eggs, 1 cup hot water, ½ cup butter. Boil the water and butter. Add flour carefully and mix thoroughly. Cook 5 minutes, cool slightly. Add the eggs, unbeaten, one at a time, when the mixture is cooked. Beat mixture until smooth. Bake in hot oven 25 to 30 minutes. If used as desert, fill with whipped cream or fruit whip. The latter is made by folding whipped cream into fruit pulp and sweetening to taste. Creamed meat or vegetable may be used for luncheon or supper.

Coffee Cake.—Use a baking powder biscuit dough. Spread a thin layer of cream over the top. Stick small pieces of apples into the dough. Sprinkle with sugar and cinnamon. Bake in hot oven 15 or 20 minutes. A layer of sliced apples may be used on top. This will make the Dutch apple cake.

Cinnamon Rolls.—Add two extra tablespoons of fat to the biscuit recipe. Roll out dough to one-fourth inch thickness. Spread over surface one tablespoon butter, two tablespoons sugar, and half teaspoon cinnamon. Make sheet into a tight roll. Cut in slices one inch thick. Bake in hot oven 15 to 30 minutes. Currants, raisins, nuts or pieces of apples may be used.

—if you are well bred!

The Spoon: Its Use and Abuse.—The spoon should always be noiseless. If the napkin is not a towel, neither is the spoon a musical instrument. Anything liquid should be taken into the mouth from the side of the spoon. In the case of bouillon served in the cup (save in the case of jellied bouillon), the accompanying spoon is a stirring accessory. After sipping to try the temperature, the spoon is laid aside and the bouillon drunk from the cup. It is not well-bred to pursue the last drop in the soup-plate or bouillon-cup with the spoon, or to tip the plate or cup to that end. What has been said with regard to the bouillon-spoon also applies to the tea and coffee-spoon. Beverages such as tea, coffee, chocolate, cocoa, milk lemonade, iced tea, etc., we drink; the spoon is used only for stirring and tasting. It is quite impermissible to drink from a cup in which the spoon remains; to leave the spoon standing in the cup; or to take up a spoonful of coffee or tea and "blow" upon it to cool it. Boiled eggs, fruits served with cream, custards and puddings are eaten with a spoon. Melons may be served either with fork and knife, or with fork and spoon; and either fork or spoon may be used to convey the portions to the mouth. Hominy, rice, etc., when served with cream and sugar, are eaten with a spoon; while frozen punches, ices, ice-cream, jellies and fruit salads are usually served with spoons and forks. Either utensil may be used alone or both in conjunction. When unpitted fruit is served, the fork is correct.

The Runner's Bible

(Copyright by Houghton Mifflin Co.)

Ye shall know the truth, and the truth shall make you free. John 8:23.

Evil is not true. It is a belief that the untrue is true; and this belief fastens itself upon the consciousness of man and controls his thoughts and actions to his harm. Evil is one universal mistake, just as the belief that the earth was square was a universal mistake, that kept men stumbling in its darkness until one came holding aloft the light of his divine message. The darkness disappeared with the coming of this light, the evil vanished for it was only a belief—with the coming in of the truth.

WOMEN'S EXCHANGE

IF you have something to exchange, we will print it **FREE** under this heading providing: First—It appeals to women and is a bonifide exchanges, no cash involved. Second—It will go in three lines. Third—You are a paid-up subscriber to The Business Farmer and attach your address label from a recent issue to prove it. Exchange offers will be numbered and inserted in the order received as we have room. —**MRS. ANNIE TAYLOR. Editor.**

117—Pure Speckled Hamburg Cockerel for one of same breed.—Mrs. M. F. Cone, Roscommon, Michigan.

AIDS TO GOOD DRESSING

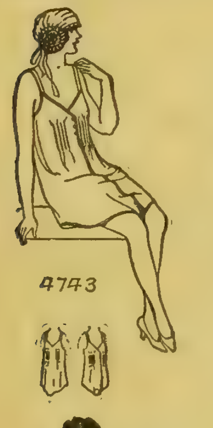
BE SURE AND SEND IN YOUR SIZE

4741. A Very Attractive Style.—This is a good style for combining two colors or two materials. One could use crepe satin, and have the tunic of the reversible side, and the dress of the satin or vis versa. Figured and plain voile together is also attractive. This Pattern is cut in 6 Sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. A 38 inch size requires 3¼ yards of one material 54 inches wide. If made as illustrated, it will require 1⅝ yard of 40 inch material for the tunic, and 3¾ yards for the dress. The width at the foot is 1½ yard.

4743. A New and Practical Under Garment.—Cotton or silk crepe, crepe de chine, batiste, nainsook or silk broad cloth may be used for this model. The fronts may be closed with buttons from upper to lower edge or the design may be in "step in" style entirely. The Pattern is cut in 4 Sizes: Small, 34-36; Medium, 38-40; Large, 42-44; Extra Large, 46-48 inches bust measure. A Medium size requires 2¼ yards of 36 inch material.

4748. A Dainty Summer Frock.—This is nice for crepe de chine or batiste, with trimming of lace or embroiery. The new printed voiles, organdy and linen may also be used for this pretty frock. The Pattern is cut in 4 Sizes: 14, 16, 18 and 20 years. A 16 year size requires 4⅛ yards of 32 inch material. The width at the foot is about 1¾ yard.

4744. A Pretty Apron Frock.—Here is a style that will appeal to women of mature figure. It lends itself attractively to percale, crepe, sateen and gingham. The Pattern is cut in 8 Sizes: 36, 38, 40, 42, 44, 46, 48, and 50 inches bust measure. To make the frock for a 40 inch size will require 4¼ yards of 36 inch material. The width at the foot is 2⅛ yards.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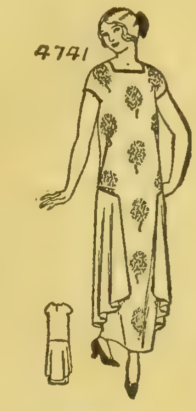
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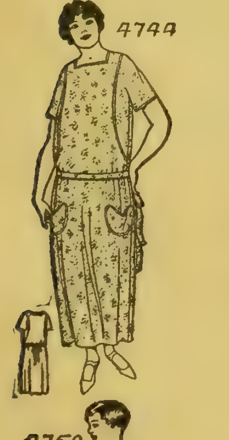
4750. A Cool and Comfortable Undergarment for Boy's.—This simple Union Suit will afford no difficulty in the making and will be most serviceable to the "little man" who is to wear it. The style is suitable for madras, soisette, cambric or muslin as well as for flannel. The Pattern is cut in 5 Sizes: 4, 6, 8, 10 and 12 years. A 10 year size requires 1¾ yard of 36 inch material.

4758. Two Popular Styles in One.—For the Blouse one could use linen, soisette, Indian Head or batiste. For the Jacket, velvet serge, linen or pongee could be used. The Blouse may be finished with short sleeves. The Pattern is cut in 3 Sizes: 2, 4 and 6 years. A 4 year size requires 1½ yard of 32 inch material for the Blouse and 1 yard for the Jacket.

4757. A Set of New Sleeves.—Very often a dress of a previous season may be made up to date by the addition of new sleeves. The models here depicted, are all attractive. Both No. 1 and No. 3 are pretty in chiffon, crepe, kasha and other materials. No. 2 may also be used for soft fabrics, as well as for velvet, serge and heavier materials. This Pattern is cut in 4 Sizes: Small, Medium, Large and Extra Large armsize. To make one pair of sleeves for a Medium size will require ⅜ yard for No. 1. ¾ yard for No. 2, and ⅞ yard for No. 3.

4749. A Pretty Frock for Mother's Girl.—Wool crepe, gingham or voile could be used for this style. It is also a good model for linen. The closing is effected at the left side on shoulder and at armscye, but additional opening is also provided for. The Pattern is cut in 4 Sizes: 4, 6, 8 and 10 years. An 8 year size requires 2 yards of 36 inch material.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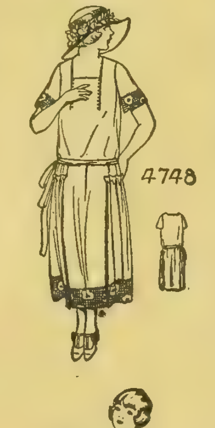
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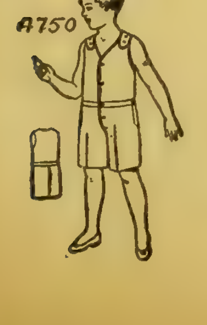
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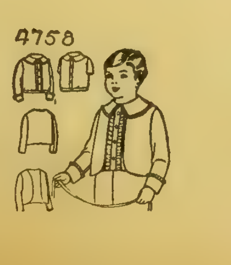
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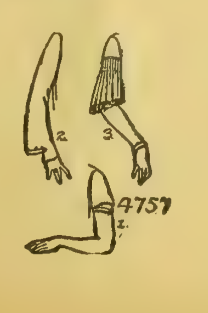

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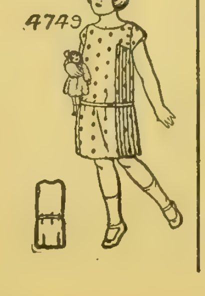
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Unexcelled for wear and comfort for farmer, mechanic, or factory worker. Fine for tender feet. Soft and flexible yet wears like iron. Ideal for dry weather.

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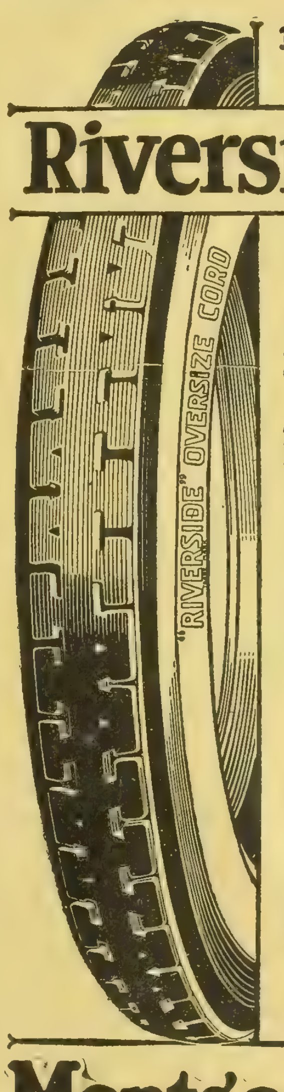

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So why not save one-third and use Riverside Cords? What more will any other tire do? Then why pay more?

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This guaranteed mileage is built into Ward's Riverside Cords. High treads, thicker and stronger, of tough, live rubber.

This exceptional quality of Ward's tires alone has made us the *largest retailers of tires in the country*. The tires themselves have convinced thousands that Riverside Cords are best.

"I have used Riverside Tires for the past four years. I have never had to send a tire back for adjustment.
I have tried several different highly advertised makes alongside of Riversides and have not found a superior."
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Nessen City, Mich.

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The Children's Hour

DEAR girls and boys:—Next week we will observe Memorial Day and honor the men and boys who have given their life blood for their country—our country—the United States. All of you know that Memorial Day comes on the 30th of May in Michigan but how many of you know if all of the states observe this day? No, they do not all observe it. May 30th is Memorial Day and a public holiday in all states and possessions except Alabama, Florida, Georgia, Louisiana, Mississippi, North and South Carolina, Tennessee, Arkansas, Texas and Virginia. Confederate Memorial Days that are public holidays are April 26th in Alabama, Florida, Georgia and Mississippi; May 10th in North and South Carolina, and June 3rd in Tennesssee. June 3rd is a legal holiday in Arkansas, Louisiana, Texas and Virginia. Now how many of you knew that?—UNCLE NED.

OUR GIRLS AND BOYS

Dear Uncle Ned:—May I join the Children's Hour? I never wrote a letter to you before so I thought I would write. I have brown hair and brown eyes. My birthday is the 6th of November. I am 11 years old and in the 4th grade. I have a mile and a little over to go to school. I wish some of the girls would write to me.—Ethel Clement, Dryden, R1, Michigan.

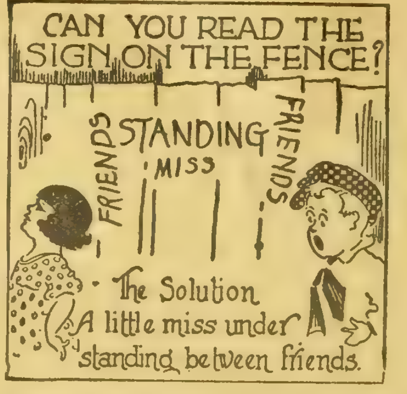
Dear Uncle Ned:—May I join your merry circle too? My father has been taking the M. B. F. for some time and he likes it very well. We live on a 40-acre farm. We have a large house. I guess I will describe myself. I am 10 years old and 4½ feet in height, have light brown hair and light blue eyes. My birthday is December 31st. Have I a twin? I have two sisters and no brothers. I am in the sixth grade at school. We have 30 rods to go to school. We have 65 chickens, 7 turkeys, 3 cows and one team of horses. We live seven miles west of Mt. Pleasant. My letter is getting sort of long so must close. All the boys and girls write to me, I will answer all letters. I hope Mr. Waste Basket does not get my letter. Your niece,—Luella Jewell, R2, Box 35, Mt. Pleasant, Michigan.

Dear Uncle Ned:—I have been a silent reader of the Children's Hour for a long time and it has gladdened some of my saddest hours. My father has been taking the paper for a long time and thinks it is a very good paper. I am 14 years old and am in the eighth grade at school. I am 5 feet 4 inches tall, rather slim, black bobbed hair, large blue eyes, pink cheeks and very pretty. I am writing this letter in school. I am very interested in riddles. There have been quite a few lately. I hope Mr. Waste Basket doesn't gobble down my letter. I remain as your niece,—Thresa Zamaites, R2, Auburn, Michigan.

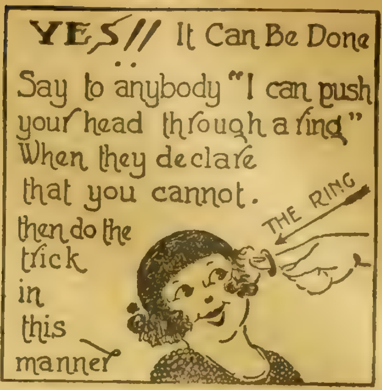
Dear Uncle Ned:—Well here I am again. I come often, don't I? I guess you know me, don't you? Because the last time I wrote I told about my trip to Detroit. Well I went again last fall and had a much better time than I did the other times because we always went on the train before but this time we went in the automobile. I am not going to tell about it, on account of having taken up so much room the other time and I have more to tell about this time so I will not bother for if I do there wont be any room left for anybody else. Say I would like it if you would have a poetry contest.

When we went to Detroit this last time we went just about straight south from Cass City and came to many detours. It was around the 15th of September. But Dad says the next time we go, he is going to Mt. Clemens and follow the shore line to Detroit. He said I could stop in and see you, Uncle Ned, when we do go. Won't that be nice? But whoa, just a minute here now! Say I know something. Do you know what it is? Some of the cousins might be jealous. Ha! Ha! I'll just bet there is more than one jealous cousin after they read this letter and find out what I said. But I don't care. I am going to stop in anyway. I don't suppose I can stay very long though. Just long enough to get acquainted.

Now if some of the cousins will write to me I will answer them unless there are so many in the mail that I can't answer them. The last time I wrote when I put that riddle in I got letters from all over Michigan and one from a girl named Hazel Thompson of Kentucky. I am 12 years old and I am in the seventh grade at present. I was 13 years old the 24th of March. The county nurse was to our school on November 8th and I was 60 inches tall and weighed 86¾ pounds at the time. My normal weight is 95 pounds. But I'll bet you know what I am called at school. Everybody calls me skinny most of the time. See, I am not ashamed to tell my name anyway. Say, Uncle Ned here is a good contest to have: Have each one that wants to join the contest compose a poem and send it to you. Each poem must have 4 lines in and the one who has the best poem for the grade they are in will be the one to get the prize. Have each one tell the grade they are in at the bottom of the poem and if they have graduated tell how many years ago, but if they have not attended school yet you can judge that yourself. Well I guess I had better stop for once and let the rest talk for a while. Please don't kick me out for talking so much. Please! Please!—Hazel Baker, Elkton, R1, Mich.


CAN YOU READ THE SIGN ON THE FENCE?
FRIENDS
STANDING
MISS
FRIENDS
The Solution
A little miss under standing between friends.

Dear Uncle Ned:—This is the first time I have ever written to the M. B. F. I live with my parents on a small farm. I am seventeen years of age. Am interested in music best of all, although am not afraid to try any kind of work. I have got three sisters and two brothers younger than myself. We live two and a half miles from Beulah on M. 11 Pike. I am interested in church and Sabbath school and I belong to a class of young folks, about twenty-five of us. Well as my letter is getting long and I don't care to go to the waste basket I will close hoping to get an answer from some of the cousins. Good-bye Uncle Ned. From your niece,—Miss Isabel Link, Box 11, R1, Beulah, Michigan.


YES!! It Can Be Done
Say to anybody "I can push your head through a ring" When they declare that you cannot.
then do the trick in this manner
THE RING

Dear Uncle Ned:—May I come in and join your merry circle? I have been reading the Children's Hour for quite a long time. My hair is dark brown and I have blue eyes and am 5 feet in height and 14 years old. My birthday is February the 6th. I am in the 8th grade at school. we had exams last week. I wish some of the boys and girls would write to me. Well I will have to close or my letter will be in the waste basket. Your friend, —Vera Crake, R6, Brown City, Mich.

Dear Uncle Ned:—May I please join your merry circle? I have been a silent reader of the Children's Hour for a long time. I always wanted to join but always put it off. I am a tomboy 16 years of age, weigh 110 pounds and am 5 feet 2 inches in height, have dark brown hair and dark brown eyes. My birthday is November 2nd. Have I a twin? I live on a farm with my mother and brothers. I have no sister. We have a Fordson tractor and like it real well, also a new Ford touring car, 1924 model. For pets I have 2 dogs, 3 cats, 1 chicken. I had a pet lamb but it died. We have 3 horses, 8 head of cattle, 4 calves, 2 pigs, 6 sheep, 7 lambs, chickens, ducks, geese, guinea hens and pigeons. My favorite sport is riding horseback. I can climb trees too. Say, Uncle Ned, once my brother went after some hickory nuts and I climbed the tree, and I was nearly up to the top when the limb I was stepping on broke and down I came but not all the way down. There were so many limbs that I got caught so I could not fall. Will some of the boys and girls please write to me. I will close with a few riddles. When is a door not a door? How many sticks goes to a crow's nest? What is the last hair on a dog's tail called? Whoever guesses any one of these or all, it makes no difference, will get a letter from me. With best wishes to the merry circlers. Your want-to-be-niece —Agnes Posey, R3, Box 94, Marine City, Michigan.

Little Brown Bats and Their Umbrellas

LITTLE Mother Brown Bat draped her soft little body over her three brown baby bats. The sky splashed millions of big tears over little Mother Brown Bat and her three brown baby bats.

"Oh, dear me! Oh, dear me!" wailed little Mother Brown Bat; adding her tears to the millions splashed from the sky. "I cannot keep my precious baby bats dry. If only I had a big umbrella!"

And with one motherly paw she smoother the downy heads of her baby bats. They were wet, oh, so very wet.

"If only our little Mother Brown Bat had an umbrella!" moaned Billy and Bumpy Bat, giving little Mother Brown Bat an affectionate squeeze. Billy and Bumpy were twins, you see. And always thought the same about everything.

"Poor Little Mother Brown Bat! She needs an umbrella to keep the sky's tears from drowning us!" whined Beezy Bat, through his wide-open, little bag of a mouth.

The erect, pointed ears of Grandmother Bat, who was huddling close by, listening to little Mother Brown Bat's squeaky voice, became a little more pointed as she called to little Mother Brown Bat,

"Well, my dear, if you so need a big umbrella why don't you go to the Golden Fairy, who has always been our friend, and beg that she give you a little umbrella, that you may keep your dear children always dry and warm?"

"Yes, Little Mother Brown Bat, go to the Golden Fairy and beg for an umbrella," the baby bats coaxed, raising deep-set, keen eyes toward Little Mother Brown Bat. And they shivered as they thought of their wet fur coats.

Now, my dears, of course you understand this all happened hundreds and hundreds of years ago, when not a single bat in the whole world owned a pair of wings.

It was an impish-looking little animal who was always kind to her babies, feeding her wee ones from her tiny breasts as a mouse does its young. She was also a very useful little Mother Brown Bat, gobbling up insects and helping to keep away malaria from the Really Truly Folksies.

But there, kiddums dear, I am straying far from my story.

Little Mother Brown Bat listened to her childrens' pleading and right then and there she made up her little bat mind as quick as "A B C" to do as they begged.

So she hung the twins over the twig of a tree and Beezy on another twig, and, bidding them and Grandmother Brown Bat a loving farewell, started for the Golden Fairy.

In a day's time little Mother Brown Bat, reached the Golden Fairy. Very humbly she told the Golden Fairy what she had come for.

And what do you think the Golden Fairy did? She warmly welcomed Little Mother Brown Bat, waved her golden wand and spoke,

"Little Mother Brown Bat, you have been a faithful mother, and a faithful friend to the Really Truly Folksies. You have always been very clean in your habits, and, as a reward I think that you and all the other little Brown Bats in the world deserve a beautiful pair of wings! Which shall be as agile as the swift's, and as fleet as the swallow's. They shall measure eight or nine inches from tip to tip and will fold like a pocket knife. With these wings you and all the other little Brown Bats can help rid the world of mosquitoes and other insect nuisances. Indeed, you will be very, very fast." The Golden Fairy paused.

"And, oh, lovely Golden Fairy, never again will the millions of tears from the skies almost drown my poor little Brown Bats." And at the thought of Billie, Bumpy and Beezy, little Mother Brown Bat took her wee pocket handkerchief and wiped the tiny tears that were spilling from her little brown eyes.

"No, never again, little Mother Brown Bat. You shall have an umbrella as well as a pair of swift, fleet wings."

Little Mother Brown Bat bowed

low, thanking the Golden Fairy. She turned her keen deep-set eyes around, and, behold! she had a pair of wings which were indeed as agile as the swift's and as fleet as the swallow's. In fact, quite the most wonderful wings in the world!

Little Mother Brown Bat raised her thin, gauzy wings and found herself darting hither and thither with great swiftness, making sharp turns without any effort. As she flew, she kept her little mouth open scooping all the insects in her way. And she kept thinking,

"How proud the twins and Beezy will be of their new wings. And Grandmother Brown Bat, too!" And with this thought Little Mother Brown Bat flew a little faster home.

Little Mother Brown Bat looked very fine indeed. Her wings fluttered like an aeroplane which you, my dear kiddums, have often seen. Her fur was soft as silk; and her dear, little mother heart beat very fast.

The next day Mother Brown Bat floated nearer, nearer home. When at last she arrived she found her tiny youngsters, still hanging on the twigs where she had left them. At sight of little Mother Brown Bat they squeaked joyfully,

"Oh, Grandmother! Do look at little Mother Brown Bat's beautiful new wings!"

And Grandmother Brown Bat gave them a cold, haughty look and,

"Sillies! Look at your own wings!" she snapped.

And, sure enough, the baby Brown Bats were sprouting tiny new wings! Exactly like those of little Mother Brown Bat. And even Grandmother Brown Bat had handsome new wings, which looked like a thin, rubbery membrane, and extended clear back to her ankles and thence back to the tips of the bony tail.

Any Breezy Brown Bat, who was hanging up-side-down, scratched the back of his little ear with one hind foot and squeaked.

"We all have tiny umbrellas now!"

And Billy and Bumpy Brown Bat, who were climbing the trees with the help of their teeth, stopped long enough to test their wings and gloated,

"Yes, Little Mother Brown Bat, we all have umbrellas now!"

And so it has been every since, kiddums dear. All the little Brown Bat's children and their childrens' children and their childrens' children have all owned tiny, silky "umbrellas" which enable them to gobble more insects and cover much more ground than did their great-grandfathers and their great, great-grandmothers.

And now when the sky spills millions of little tears the little Brown Bats do not care in the least, as did their great, great-grandfathers and their great, great-grandmothers, who had no protection at all from all those millions and millions of tears.—Helen Gregg Green.

Powell's Tax Articles Open A Merry Debate

(Continued from Page 3)

like to know how it is that through the State Administrative Board several new buildings have recently been erected at the Home and Training School at Lapeer, without the least vestige of legislative authorization.

Eaton Double-Crosses Himself

I am astounded by the inconsistency of the Governor's secretary in referring in one breath to Mr. Slocum's editorial calling attention to my article, and then in the next breath saying, "However, if Mr. Slocum had believed the facts to be inaccurate relative to state expenses, it would seem to me as though he should have secured the correct information previous to publication of the article. It is probable, however, he did not see the article before publication." If Mr. Slocum did not see the article before publication how could he have written an editorial calling attention to the article and had it published simultaneously with the article?

In connection with Mr. Slocum's editorial we might also point out another minor inconsistency on the part of Mr. Eaton. He quotes Mr. Slocum as saying with reference to my figures regarding the cost of operating the state prisons, as follows: "He says that he does not believe them to be fairly stated in the article referred to." Anyone by referring to Mr. Slocum's editorial will find he did not say any such thing but merely stated that he questioned a little whether or not to use my figures on this subject. We take it that they looked as though they might possibly be exaggerated or inaccurate. However, Mr. Slocum did not declare that he believed them to be untrue.

Why Dodge the Facts?

Does it not appear that Mr. Eaton is attempting to dodge the question in his attempt to answer my specific figures about state tax totals, by introducing a lot of irrelevant evidence regarding centralized purchasing and accounting, fire insurance rates, road building, etc? He seems to take it for granted that we have been attempting to throw the whole state administration into disrepute.

If the shoe fits we have no objection to his putting it on, although of course, that was not our intention in writing the article. We were merely seeking to give a satisfactory and comprehensive answer to a specific question asked us by one of the readers of The Business Farmer. We were not attempting to disparage all of the various activities of the present state administration but merely to cover this one matter of increase in state revenues and expenses. Mr. Eaton seems to feel that the work of the present state administration needs apologies and defense. It is, of course, fitting and proper that as the mouthpiece of the administration he should attempt to get his ideas in print.

Glad to Hear of Savings

We are, of course, greatly gratified to note all the benefits which have come to us through "the vast sum which he (the Governor) has saved to the tax payers by giving his personal attention to road building and to the management of various state institutions."

However, we have not noticed any material falling off in our highway taxes and still hear from time to time of additional millions of state highway bonds being issued. We are also informed that the state owes the counties $6,200,000 in back highway rewards. Concerning the prisons, the increase in expenditures has already been noted.

It almost seems as if the executive department is taking a little undue credit to itself when the statement is made about millions of dollars being saved by the Governor to the property owners through his action in forcing down fire insurance rates.

If I remember correctly the Enabling Act which made possible this admittedly desirable reform was passed by the legislature, and it is undoubtedly true that much more constructive legislation would have been passed had there been a proper harmony between the executive and legislative branches during the recent session. By vetoing the gas tax against the wishes of a large majority of Michigan citizens, the Governor placed the House in such a state of mind that a large amount of legislation was jeopardized. Many good bills were killed in the Senate Committees, being held up as clubs over the House in an attempt to force that body to pass the weight tax bill and other legislation desired by the Governor.

Not a Personal Argument

I trust that your readers will not get the idea—if you see fit to publish this letter—that there are any personal difficulties between myself and Mr. Eaton. He is merely an employee of the present state administration. But for me to remain silent in face of these attacks upon my integrity, purpose and character would be virtually to admit them, which I certainly do not care to do. It would be poor policy and almost suicidal folly for me to misquote figures or misstate facts.

This is just another example of where one who has come out and spoken boldly for the peoples' cause has not met with favor at the hands of those in control of a highly centralized government.—Stanley M. Powell.

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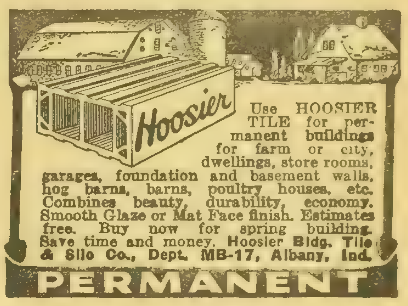

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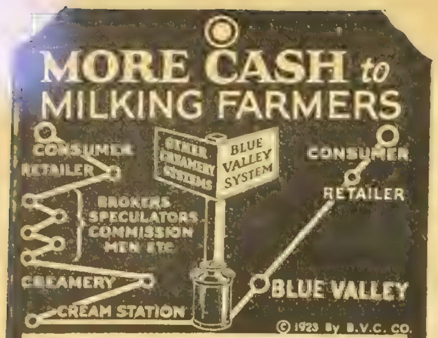

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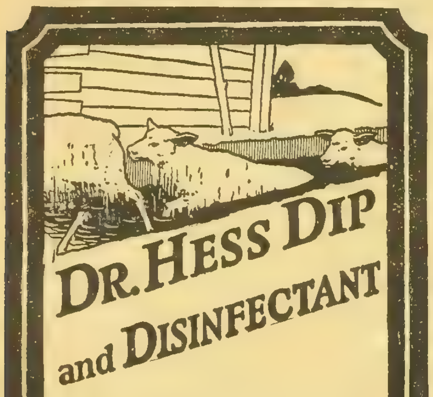
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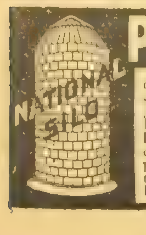

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Glazed tile, wood and cement stave silos. Glazed and unglazed hollow building tile and **MAT FACE RESIDENCE BLOCKS.** Early buyers discount. Write for special agency proposition. **National Clay Products & Silo Co., Dep't. 16, Neely Block, Muncie, Indiana.**

DAIRY and LIVESTOCK

MICHIGAN COWS THAT ARE REAL PRODUCERS

THERE have been and are yet a lot of mighty good dairy cows in the Wolverine State.

At Hillsdale, Glen Benedict has a nice herd and in it Fayne Patterson DeKol who made 536.3 pounds milk with 26.7 pounds butter; and Money Milk Segis, less than three years old, with 436.4 pounds milk and 18.65 pounds butter. Fayne Patterson DeKol was a hearty eater, consuming, besides hay, corn silage and molasses, 29 pounds of Larro a day as her grain ration.

Mr. Benedict's herd bull is Korndyke Butter Boy Fayne DeKol, of the line bred by that fine old man, the late Henry Stevens at the Brookside Herd in Lacona, New York, and the blood has carried its producing qualities to the fourth generation in this Michigan dairy.

Jerseys, too, are keeping money in circulation in Michigan, with Brown Swiss helping the good work along.

Near Ann Arbor, H. B. Waters & Son, have a herd of 40 Jerseys headed by a Golden Jolly bull of snap and style and good ancestry. Alfalfa from 35 acres, 30 acres of corn and 20 acres of oats help to feed the herd. Succulent summer feed is provided by green corn and sunflower stalks run thru a cutter and fed with Larro sprinkled over them. Sunflowers go into the silo with the corn, also.

An average yield of four gallons of milk a day from his milking herd shows the sort of cows W. H. Koppler of Ann Arbor keeps. He has a good Brown Swiss bull which he uses on Jersey cows, and the heifers are well grown and thrifty. Home grown corn and oats are used with Larro as the herd ration for the 50 head in the dairy.

Durand is the Michigan town which is in the limelight now, because Mr. John E. Post, Postdale Farm, has made a world's record for age with his Holstein-Friesian cow, Lilith Segis Inka DeKol Johan, in the seven day division. She is four years old and has to her credit, officially, 862.6 pounds of 2.71 per cent milk, 23.386 pounds fat or 29.23 pounds butter, having calved February 7, 1924. That is an average of 123.2 pounds a day, but one day she milked 126 pounds. Her thirty day record shows that she sticks right to her work as it is 3,435 pounds milk and 92.219 pounds fat or 115.27 pounds butter. These are world's records for milk in the four year old class.

Pedigree showing inherited ability plus good care and feeding, plus ambition and perseverance and hard work on the part of her owner—all these had their part in making this Michigan Holstein cow a world's record maker for her age and breed.

Mr. Post has been breeding registered Holsteins only two years, but he has "put his back into it" and has a herd of 47 head which would do credit to many a cattle man of twice his age. He is a fairly young man, but in dead earnest in his efforts to do real constructive work. Built on a foundation purchased fom J. F. Rieman, of Flint, the herd has been kept up to a high standard.

The emphasis laid on Lilith Inka's record does not mean that she is the only cow at Postdale which deserves mention. The whole herd is producing profitable, 35 pounds a day being the lowest amount given by any milking female, while the highest is at present 124.6 pounds. This is all the more remarkable as there are only six cows of mature age in the lot.

Careful feeding has a most important bearing on the work done at Postdale. The cows are started off with a warm mash and then are fed slowly and have their grain increased just as long as they respond to the increase. Lilith, for instance, ate as much as 35-pounds grain, 4-pounds cottonseed meal and 26-pounds Larro with 32-quarts of beet pulp and all the hay she would clean up. Mr. Post feeds alfalfa as long as he has any to feed.

Another detail that Mr. Post attends to very carefully is the amount of water his cows get. It is interesting to know that when Lilith was making 86.8 pounds milk a day she drank 100.6 pounds water.

The calves on Mr. Post's farm get 120 pounds milk a day and after their wants are provided for, he trucks over 1000 pounds each day into Flint.

The above mentioned Michigan dairymen are interested in their work, progressive and prosperous and we hope that the story of their success will be an inspiration not only to beginners in this line of work but to some who have not entirely without reason become rather pessimistic in the last few years.

There is an old saying, "What man has done, man can do," and there isn't a thing recited above that hundreds more in the State of Michigan cannot duplicate on their own farms. The good land is there, the good cows are there and the possibility of success is there—it remains only to use them intelligently with faith in the results.

CAN FEED CHAFF TO SOWS

Has clover chaff mixed with other ground feed any feed value for hogs?—C. R., Michigan.

—There is no question but what either clover or alfalfa hay is of considerable value for hog feeding and better results are obtained when one or the other of these two leguminous hays is kept in a rack where hogs can have continuous access to it.

There would also be some value in soaking the clover chaff along with the grain and feeding it in that way. I would not advise doing this, however, with either growing or fattening pigs, as the growing or fattening pig cannot handle a large amount of fiber and does better where he has access to it and takes only what he needs.

The mature sows, however, may be fed a ration containing a considerable amount, say one-fifth to one-fourth, of the total amount of her feed in the form of either clover chaff or alfalfa chaff.—Geo. A. Brown, Professor of Animal Husbandry, M .A. C.

VETERINARY DEPARTMENT

HOLE IN SIDE OF COW'S TEAT

I have a Jersey cow that freshened in November and a few days after cut one of her teats on a barb wire fence and left a little hole in the side. It healed all right but the milk leaks out of it. Could you tell me if there is anything I could do to make it grow closed again?—N. N., Grand Rapids, Mich.

—Holes in the side of the teat can be cured by performing an operation, scarifying the edges of the opening and closing it with sutures. The operation however, will need to be done by a veterinarian who understands this operation. It is best that the operation be performed when the cow is dry.—John P. Hutton, Assoc. Prof. of Surgery and Medicine, M. A. C.

REMEDY FOR LICE ON CATTLE AND HORSES

Please tell me if there is any preparation to rub on cattle and horses to rid them of lice?—A. H., Brown City, Michigan.

—I would suggest that you try the following: To one pound of Larkspur seed add one gallon of water, let simmer on the stove for about an hour. After cooling apply to the surface of the skin with a sponge and rub well in. This treatment can be repeated in two weeks if necessary.

Stables where the horses and cattle are kept should be thoroughly cleaned and disinfected by spraying them with some efficient disinfectant preparation.—John. P. Hutton, Assoc. Prof. of Surgery and Medicine, M. A. C.

Taking Him at His Word

He was telling her about the members of his football team.

"Now, there's Johnson," said he; "in a few weeks he will be our best man."

And then she lisped, "Oh! Jack, this is so sudden!"—Exchange.

Every Day You Need KRESO DIP No. 1

(STANDARDIZED)

TO AID IN KEEPING
All Livestock and Poultry Healthy

Kills Lice, Mites and Fleas. For Scratches, Wounds and common skin troubles.

THE FOLLOWING BOOKLETS ARE FREE:

- No. 151—**FARM SANITATION.** Describes and tells how to prevent diseases common to livestock.
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- No. 185—**HOG WALLOWS.** Gives complete directions for the construction of a concrete hog wallow.
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Kreso Dip No. 1 in Original Packages for Sale at All Drug Stores.

ANIMAL INDUSTRY DEPARTMENT OF
Parke, Davis & Co.
DETROIT, MICH.

POULTRY BREEDERS' DIRECTORY

Advertisements inserted under this heading at 30c per agate line, per issue. Commercial Baby Chick advertisements 45c per agate line. Write out what you have to offer and send it in. We will put it in type, send proof and quote rates by return mail. Address The Michigan Business Farmer, Advertising Department, Mt. Clemens, Michigan.

RHODE ISLAND REDS

100 Special Reds PULLETS

We offer 100 only Superior R. I. Red Pullets at 3 mos. from trap nested stock.

Send for Circular of these Pullets, and also Pullets, Hens, and Cockerels in Barred and White Rocks; Wyandottes; Orpingtons; Minorcas; Anconas; Leghorns.

Also Turkeys, Geese, Ducks.

This stock is ready for summer and fall delivery. It is the **Pure Breed Practical Poultry** that you want on your farm for a money flock. Inspect this stock on your own ground; guarantee that you will be fully satisfied.

STATE FARMS ASSOCIATION, Kalamazoo, Mich.

Member International Baby Chick Association
Member Michigan State Farm Bureau

ROSE COMB RHODE ISLAND REDS. Hatching eggs $1.25 per 15. Postpaid.
MRS. ALBERT HARWOOD, R4, Charlevoix, Mich.

BARRED ROCKS

Hatching Eggs. Barred Rock, Aristocrats and Fishel White Wyandottes, 100-$5.50; 50-$3.00; 15-$1.25. **Joseph Amster, Paw Paw, Michigan.**

DARK RINGLET BARRED ROCK EGGS $1.75 per 15; $3.00 per 30.
Mrs. FRED KLOMP, St. Charles, Michigan.

BARRED ROCK HATCHING EGGS FROM 9 pound males $1.10 per 15; $2.00 per 30.
Mrs. Frank Millikin, Roscommon, Mich., R. 1.

WYANDOTTES

WHITE WYANDOTTES. REGAL STRAIN. Eggs for hatching, $1.50 per 15 and $7 per 100.
F. W. ROBERTS, Salem, Michigan.

GEESE

FOR SALE—THOROUGHBRED TOULOUSE Geese and Buff Rock Cockerels. Blue Ribbon prize winners. Buff Rock eggs $8.00 per 100. Goose eggs 40c each.
BALDWIN & NOWLIN, Laingsburg, Mich., R4.

TEN EGGS FROM PURE TOULOUSE GEESE, $4.75. Fifteen eggs R. I. Reds, $1.25. Insured parcel post prepaid.
Mrs. Amy Southworth, Cassopolis, Mich., R2.

DUCKS

MAMMOTH PEKIN DUCK EGGS—$1.50 FOR 12, $2.75 for 24 or $9.00 per hundred.
W. BIXBY, R. 4, Davison, Michigan.

TURKEYS

EGGS FOR HATCHING

Bronze Turkeys, Toulouse Geese, Pekin Ducks and Barred Rocks. Nearly all of this stock has been imported from Canada by us.

W. T. SHUTTLEWORTH, Ypsilanti, Michigan.

Pure Bred Mammoth Bronze Toms One 2 Year old hardy beautiful well marked birds. Write for prices. **Mrs. F. Griffin, Riverdale, Michigan.**

SPECIAL SALE Bourbon Red Turkey Eggs $4.00 per 11 postpaid.
THOS. G. CALLAGHAN, Fenton, Michigan.

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An Ad in The Michigan Business Farmer will sell it.

Certified White Leghorn CHICKS Hollywood Mated at the RIGHT PRICE

Barron English type, from stock certified by Michigan Baby Chick Association. Sired by Hollywood males whose dams had records from 260 to 290 eggs in a year.

Order From These Prices

Hollywood mated $13.00 per 100
Rural mated $10.00 per 100
Brown Leghorns $10.00
Anconas $11.00
Barred Rocks $14.00

Immediate shipment. Telegraphic orders accepted

Illustrated Catalogue on Request

RURAL POULTRY FARM Box 110-A ZEELAND, MICH.

PURE BRED CHICKS

What our Customers say—Elmer Arnold—801 eggs in 14 days in December from 85 June hatched White Leghorns; Herman Broegeler—Bought 100 Ancona chicks, raised 69 pullets, 30 cockerels. F. R. Wallis—Ordered 100 chicks, received 103, raised every one. This wonderful vitality and laying ability shows why, as this is written, our S.C.W. Leghorns lead in Michigans International laying contest. Our strains are Tom Barron Imported and Hollywood S. C. White Leghorns, Sheppards Famous S. C. Mottled Anconas and Parks Bred to Lay Barred Rocks. Chicks shipped postpaid, 100% live delivery guaranteed. Big illustrated catalog sent Free.

SilverWard Hatchery, Box 80 Zeeland, Mich.

CHICKS—Investigate

Our chicks are the kind that make good. Every flock is carefully culled and mated. We have been in business seven years and have been building carefully and consistently to a place where we can offer chicks more than worth the money we ask. SINGLE COMB, ENGLISH STRAIN, WHITE LEGHORNS, BARRED ROCKS, ANCONAS. 100% live delivery guaranteed. Investigate our proposition before buying. A postal will bring full information.

STAR HATCHERY, Box 23, Holland, Mich.

BABY CHICKS Our Own Breeding flock of large type American White Leghorns. Laying and standard qualities combined. 13 years experience in breeding, hatching and marketing. Also high quality Barred Rocks and R. I. Reds. All flocks culled and inspected. Modern hatching plant, 2 hatches weekly. Quality chicks at commercial prices. Write for prices and circular.

DEAN Egg Farm & Hatchery, Big Beaver
Mail address Birmingham Mich., R-4

CHICKS: HOGAN TESTED GUARANTEED Our Chicks are from flocks on free range. They will live and grow and make a profit. ENGLISH WHITE LEGHORNS and BROWN LEGHORNS. Heavy laying Extra Good BARRED ROCKS. Postpaid to your door and full live delivery guaranteed. Our flocks are carefully supervised and Hogan tested. Bank Reference furnished. Write for prices and descriptive matter.

HILLVIEW HATCHERY, C. Boven, Prop.
Box H. R. R. 12, Holland, Mich.

LOW PRICE MAY—JUNE Our Barron strong English White Leghorn chicks. All well culled and on free range. Get our AA best stock and best winter layers. Low price, only $12.00 per 100; $57.00 per 500; $110.00 per 1000. Our A chicks are good stock, good layers, price $10.00 per 100; $47.00 per 500; $95.00 per 1000. 25% down, balance C. O. D.

ELGIN HATCHERY, Box 216-A, Zeeland, Mich.

STURDY CHICKS—BRED-TO-LAY AND exhibition flocks, culled by experts. Reasonable prices. Catalog free. Single Comb White Leghorns, Rocks, Reds, White Wyandottes. Sunnybrook Poultry Farm, Hillsdale, Mich.

CHICKS—All Popular Varieties. Egg production and Standard Quality. State Fair Winners. No better chicks available at same price. Extremely low prices after May 29th.
Litchfield Hatchery, Litchfield, Michigan.

PUREBRED BABY CHICKS, BARRED ROCKS and Rhode Island Reds $14.00 per 100.
JOSEPH AMSTER, Paw Paw, Michigan.

QUALITY BABY CHICKS: SINGLE AND ROSE Comb Rhode Island Whites. Write for Catalogue.
FISCHERS POULTRY FARM, Holland, Mich.

PUREBRED BABY CHICKS. LEADING VARieties. 100% arrival. Priced right.
THOS. G. CALLAGHAN, Fenton, Michigan.

HAVE YOU POULTRY
FOR SALE?
AN AD IN M. B. F.
WILL SELL IT.

FARMERS BOOST TESTING WORK

R. E. HOPKINS of Allegan went into the West Allegan Association in June, 1923. He has a well bred herd of Holsteins and sells milk at wholesale.

In a conversation with an extension man recently Mr. Hopkins said: "The testing association work hasn't cost me a penny. It's made me money! My cows on the average produced me ten pounds more milk apiece every day this winter than last winter. I got this extra milk by knowing what my cows were doing and feeding them so they could give me the most milk at the lowest cost."

Mr. Dairyman! You can do this, too! Mike L. Noon, President of the Michigan State Farm Bureau, has been in a cow testing association for quite a few years. Ask him if it has paid him on his grade cows. Mr. Noon will rear up on his hind legs and orate thusly, "Any man who joins a cow testing association and uses the information he gets in weeding out his visitor cows and feeding his good cows so they milk to capacity and who fails to get enough extra profit to pay his testing cost can come to me and get his dues back plus a 50 per cent bonus."

How's that? Mr. Noon knows because he has tried it himself.—R. H. Addy, Dairy Extension Specialist, M. A. C.

NORTH KENT TESTING ASSOCIATION REPORTS

THE North Kent Cow Testing Association, Herbert Hansen, Tester, reports that 26 unprofitable cows were sold during the year and that there are at least an equal number remaining in the association that the members expect to sell soon. Twenty-three of the 25 members mix their own feed and 23 of the 25 members have one or more silos. Eleven herds have one or more purebred cows and all herds are tuberculin tested. There are 19 purebred sires owned by the association members, seven of them Holsteins, six Guernseys, four Jerseys and two Shorthorns. Harry William's cow carried all the honors in the association work. His purebred Holstein cow, Piney Grove Segis Elzevere, five years old, was high in both milk and butter fat production. Mr. William's herd of seven purebred and grade Holsteins was likewise high in both milk and butter fat production. Twenty-nine cows made better than 365 pounds of butter fat during the association year. This association has reorganized and Mr. Hansen is continuing on the work.—A. C. B.

LITTLE CHICKS SUFFER LEG WEAKNESS

I wish you would kindly tell me what is the matter with my little chicks. They are about 17 days old and have leg weakness. They eat good but keep getting weaker and finally die. I have them in a brooder house where it is warm all the time. Nice days I let them out door. I fed them oat meal the first week then mixed feed with it. They grew for two weeks nicely.—Mrs. L. M., Mt. Morris, Mich.

—The leg weakness which has occurred in this flock of chicks is in all probability a nutritional disturbance caused by an insufficient supply of green food. Leg weakness usually occurs after the eighth or ninth day if green food has been neglected in the ration. It is always advisable to feed the chicks green food in some form or other, preferably sprouted oats, after the fifth day.

Excellent results have been obtained by feeding a mash mixture containing bran and rolled oats with tomato juice used for moistening. Close confinement and an insufficient supply of mineral matter may also cause stiffening of the joints. We have found that the addition of granulated bone, bone meal, and calcium carbonate in the form of ground limestone rock is very beneficial providing a mash mixture containing bran and rolled oats and cod liver oil is given. Cod liver oil should be fed at the rate of one half pint to each five hundred chicks. It can be emulsified with boiling water if additional liquid is necessary. I am sure these chicks will respond to the above suggestions.—E. C. Foreman, Professor of Poultry Husbandry, M. A. C.

DOWNS' CHICKS $10.00 PER 100

June 3rd and later our best No. 1 EXTRA SELECTED WHITE LEGHORN CHICKS will be $10 per 100. Four extra included with each 100.

Our terms are 10% with order, balance one week before shipment.

Safe Arrival and Satisfaction Guaranteed

Member of International Baby Chick Association and Michigan Baby Chick Association.

Write for Catalog
Reference, Romeo Savings Bank, Remeo, Mich,
W. A. DOWNS, Washington, Mich. R. F. D. 1

CHICKS From World's Greatest Layers

If you want **pure bred chicks** that are **bred right, hatched right,** and shipped right, that grow and will make you a profit, **get our new low prices** and free catalog before you buy

S. C. Anconas
Tom Barron White Leghorns Heavy Type Brown Leghorns
R. C. & S. C. Rhode Island Reds Park's Barred Rocks

Flocks are carefully culled and developed on free range. All chicks are hand picked and inspected, no cripples or weaklings. Every one **strong** and **healthy. Satisfaction** and 100% live delivery guaranteed. **Postage** paid. Write now for our **low prices and free catalog.** White Leghorn and Barred Rock pullets after May 1. at low prices.

KNOLL'S HATCHERY, R. R. 12, Box B HOLLAND, MICH.

PRICES SLASHED ON EGG-BRED CERTIFIED CHICKS

Late May, June and July delivery. Shipped postpaid. 100% live delivery guaranteed. Barron Improved English Type and Hollywood American Type of S. C. White Leghorns. Sheppards Strain of S. C. Mottled Anconas Direct. Dark Brown S. C. Brown Leghorns and Barred Rocks. Scientifically hatched in Newtown Incubators from Pure Bred Free Range Flocks which have been carefully culled and mated by experts and rated and certified by the Mich. Baby Chick Assn. Our Birds are winners at leading shows and Egg laying contests. Also hundreds of 8 wk old pullets ready for shipment. Prices: Special Star Mating chicks from flocks of one and two year old hens mated to 270-280 Egg Strain Males.

	100	500	1000
S. C. White Leghorns & S. C. Anconas	$12.00	$57.50	$110.00
Extra Selected Chicks, S. C. W. Leghorns, S. C. Br. Leg., & S. C. Anconas	10.00	47.50	90.00
Selected Chicks, S. C. W. Leg., S. C. Br. Leg. & S. C. Anconas	8.00	40.00	75.00
Barred Rocks	12.50	60.00	115.00
Mixed or Broiler Chicks	7.50	35.00	70.00

Terms 10% with order, balance a week before shipment. Reference Zeeland State Bank.

TOWNLINE POULTRY FARM, Dept. B, Zeeland, Mich.

REDUCED PRICES—CERTIFIED CHICKS
From World's Best Laying Strains
For JUNE, JULY AND AUGUST DELIVERY

Breed	25	50	100	500	1000
Tancred Wh. Leghorns	$2.50	$4.50	$9.00	$40.00	$ 80.00
Parks' Barred Rocks	3.00	6.00	11.00	52.50	102.50
R. C. & S. C. Reds	3.00	6.00	11.00	52.50	102.50

Order now for prompt delivery. Satisfaction guaranteed. All flocks inspected and certified by Mich. Agr. College. Strong healthy chicks, real money-makers. Don't delay. Many disappointed last year. Order from this ad now. Catalog free. Real broiler chicks at $7.00 per 100 after June 1st, no breed guaranteed.

LAKEVIEW POULTRY FARM, R.8, Box 6, Holland, Michigan

Special Sale of June Chicks

Here is your opportunity to buy good quality Chicks at these remarkably low prices. Look—Assorted lots of Chicks $75.00 per 1000 lot, $38.50 per 500, $8.00 per 100, $4.25 per 50. Guaranteed Live Delivery to your door. Write for Special and regular price list and free catalog. Order now direct from ad.

Holland Hatchery & Poultry Farm, R7, Holland, Mich.

HIGH GRADE CHICKS

S. C. English White Leghorns and S. C. Anconas. Strong sturdy, northern grown chicks, hatched from flocks on free range. We ship by Prepaid Parcel Post and guarantee satisfaction and 100% live delivery. Send in your order at once at the following prices or send for catalog. Write for prices on Special matings. Send 10% with order, balance one week before chicks are shipped. Can ship any week.

	50 Chicks	100 Chicks	500 Chicks	1000 Chicks
May Prices	$5.50	$11.00	$52.50	$100.00
June Prices	5.00	10.00	47.50	90.00
Broiler chicks				$2.00 per 100 less

M. D. WYNGARDEN, R. 4, Box 81, Zeeland, Michigan.

Reduced Prices for BEST Chicks

For JUNE—JULY—AUGUST—Pure bred chicks, hatched right, large and strong, postpaid live delivery to your door. Instructive catalog free.

Breeds	25 Chicks	50 Chicks	100 Chicks	500 Chicks	1000 Chicks
White Leghorns	$2.50	$5.00	$ 9.00	$42.50	$ 85.00
Barred Rocks	3.00	6.00	11.00	52.50	105.00
S.C.R.I. Reds	3.00	6.00	11.00	52.50	105.00

Strong broiler chicks, no breed guaranteed, $7.00 per 100, after June 1st. Order early, right now! Late customers were disappointed last year. Quality and price talk. Act now.

BRUMMER-FREDRICKSON *Poultry Farm*, Box 26, Holland, Mich.

BUY YOUR CHICKS NOW!

CHIX

English Strain S. C. White Leghorns at	$ 9.00 per 100
Rhode Island Reds, S. C. at	11.00 per 100
Rhode Island Reds, R. C. at	11.00 per 100
Anconas at	10.00 per 100
Broiler Chicks, mixed, at	7.00 per 100
Barred Rocks at	11.00 per 100

Order from Ad. Satisfaction guaranteed. PULLETS and HENS from above varieties for sale.

PROGRESSIVE POULTRY FARMS, Zeeland, Mich.

BIG, HUSKY CHICKS Pure Bred, High Quality Heavy Laying, Tested Certified Flocks.

Varieties	Prices on 25	50	100	500	1000
S. C. White & Brown Leghorns	$2.75	$5.25	$10.00	$47.50	$90.00
Anconas	2.75	5.25	10.00	47.50	90.00
Barred Rocks, R. I. Reds	3.50	6.75	13.00	62.50	120.00
Assorted Chicks	2.25	4.50	8.00	40.00	77.50

Extra Select Stock $1.00 per 100 higher. Well hatched in modern machines. Each order carefully packed under our personal attention. Postpaid. 100% live delivery. Bank reference. 1924 catalog ready.

Winstrom Poultry Farm and Hatchery, Box A-5, Zeeland, Mich.

HUNDERMAN'S FIRST-CLASS CHICKS $10 and UP

We are heavy producers of pure-bred chicks. Flocks on free range. Culled by an expert. 100% live delivery guaranteed. Order today from this Ad. and get chicks when you want them.

Varieties	Prices on 25	50	100	500	1000
English White Leghorns	$3.00	$6.00	$11.00	$52.50	$105.00
Barred Rocks, R. C. and S. C. Reds	3.75	7.00	13.00	62.50	120.00
Odds and Ends	2.50	4.50	8.00	....	....

Blue Hen Incubators. Reference: Zeeland State Bank. Order today; you take no chances. Orders booked for 10% down; balance ten days before chicks are to be shipped. Catalog free.

HUNDERMAN BROS. POULTRY FARM, Box 30, Zeeland, Michigan.

KARSTEN'S QUALITY

BABY CHICKS From Our Hollywood and Barron English

AT 45% REDUCTION FROM MARCH PRICES. IMMEDIATE DELIVERY—$11.75 per 100 for our STAR CHICKS THAT SOLD FOR $19.00 per 100 last March. A Extra 10% on orders of 500 or more—RUSH YOUR ORDER for May 26th Delivery or any Monday during June and July. SEND FOR FREE CATALOG IT DESCRIBES OUR WONDERFUL BREEDING ESTABLISHMENT.. 100% LIVE DELIVERY GUARANTEED.

KARSTEN'S FARM BOX X ZEELAND, MICHIGAN

SPECIAL REDUCTIONS FOR JUNE

HIGHEST QUALITY CERTIFIED BABY CHICKS

From Michigan's Old Reliable Hatchery, the best equipped and most modern Hatchery in the State.

Pure Bred Tom Barron English and American White Leghorns, Anconas, Barred Plymouth Rocks and Rhode Island Reds. Strong, Well-hatched Chicks from tested Hoganized Free-range stock that make wonderful winter layers.

Chicks sent by Insured Parcel Post prepaid to your door. 100% live delivery guaranteed. Sixteen years of experience in producing and shipping Chicks giving absolute satisfaction to thousands. Write for valuable illustrated free catalog and price list. Get lowest price on best quality Chicks before placing your order. HOLLAND HATCHERY & POULTRY FARM, R. 7, Holland. Mich.

SUNBEAM HATCHERY

Chicks are produced under my personal supervision. Hatched from select, pure-bred, heavy laying hens, well kept to insure vigorous Chicks.

Varieties	Prices on 25	50	100	500
White, Brown & Buff Leghorns	$2.75	$5.00	$10.00	$47.00
Barred & Wh. Rocks, Reds, Anconas	3.25	6.00	12.00	57.50
Wh. & Sil. Wyandots, Blk. Minorcas	3.75	7.00	14.00	67.50
White & Buff Orpingtons, Buff Rocks	3.75	7.00	14.00	67.50

Mixed, all varieties, $9.00 per 100 straight. Postpaid. 100% live delivery guaranteed. Order from this ad. Bank reference. There is no risk. Free Catalog. Member I. B. C. A. H. B. TIPPIN, Box E, Findlay, Ohio.

Are Money Makers

500,000 CHICKS

Our Modern Chicks ARE PURE BRED-FOR EGGS-MEAT

BIG, STRONG, FLUFFY CHICKS. Hatched from Pure Bred, well kept, heavy laying hens. Postpaid to your door and 100% live arrival guaranteed. Order right from this ad with full remittance. Best Bank reference. You take no chance. Free Catalog. Member I. B. C. A. and Ohio C. A.

Varieties	Prices on 50	100	500	1000
S. C. White, Brown & Buff Leghorns	$4.75	$9.00	$45.00	$85.00
S. C. Anconas	5.25	10.00	48.00	95.00
Barred & White Rocks, S. C. & R. C. Reds	6.25	12.00	58.00	115.00
White Wyandottes, Buff Orpingtons	6.75	13.00	63.00	125.00

Silver Wyandots, 100, $14.00; Mixed, all breeds, $8 per 100.
MODERN HATCHERY, Box 62, Mt. Blanchard, Ohio.

The Home of 1,000 Leghorns

We offer for June 3, 10, 17 and 24th by prepaid parcel post, 100 per cent live strong pure bred chicks, at $6.00 per 50; $11.00 per 100; $50.00 per 500; $90.00 per 1000. Order direct from this adv. or send for our free catalog with testimonials of satisfied customers and which faithfully presents things you would see if you made a personal visit. Each breeder selected by Prof. Sanford, mated to pedigreed Males

Riverview Poultry Farm, Route 2, Box 94, Zeeland, Mich.

BIG JUNE-JULY-AUGUST CHICK SALE, $8 per 100 and Up.

HEALTHY·VIGOROUS·PURE BRED GENEVA CHICKS

Our BIG, FLUFFY, WELL HATCHED chicks will please you.

Varieties	Prices on 50	100	500
Wh. S. C. & R. C. Br. & Buff Leghorns	$5.50	$10.00	$47.00
Eng. Wh. Leghorns, Barred Rocks, Anconas	6.50	12.00	57.00
Blk. Minorcas, S. C. R. I. Reds	6.50	12.00	57.00
Wh. Wyandots & Rocks, Buff Orpingtons	7.00	13.00	62.00
S. L. Wyandots, Bl. Andalusians, R. I. Whites	9.50	18.00	......
Assorted, from purebred flocks	$8.00 per 100 straight.		

Postpaid. 100% LIVE ARRIVAL GUARANTEED. Bank references. Hatched from Purebred, Healthy, Free Range flocks. Order right from this ad. Save Time and get our BIG, STRONG, STURDY chicks when you want them. Catalog free. Member I. B. C. A. The Geneva Hatchery, Box 23, Geneva, Indiana.

Great Northern Hatchery

LOW JUNE PRICES

POSTPAID. 100% LIVE DELIVERY

Strong, Sturdy, Northern-grown Chicks. Selected, pure-bred stock. Healthy Flocks on free range insure strength in every Chick.

Varieties	Prices on: 50	100	500	1000
Wh. & Brown Leghorns, Grade A	$6.00	$10.00	$47.00	$92.00
Barred Rocks (Aristocrat) Grade A	7.00	12.00	57.50	112.00

Mixed Chicks, Light Breeds $8.00; Heavy Breeds, $10.00 per 100 straight. Double A grade Chicks $2.00 per 100 higher than above. Hatched under best conditions. Every chick carefully inspected. Reference: State Commercial Savings Bank. Order right from this ad with full remittance. There is no risk. GREAT NORTHERN HATCHERY, Box 50, Zeeland, Michigan.

Special Reduced Prices

LOOK! 100,000 CHIX. BEST PUREBRED. Michigan Agricultural College method tested stock. Can ship at once. Barred Rocks or Reds, Black Minorcas 14c; W., Br. or Buff Leghorns 12c; Sheppard's Anconas 13c; Buff Orpingtons, White or Silver Wyandotts 15½c. Large Brahmas 18c. Heavy mixed broiler chix 11c. Mixed spotted chix 9c. June Chix 1½c less each. Add 30c extra if less than 100 wanted. Catalog tells about our extra selected stock. Bank reference. Beckmann Hatchery, 26 Lyon, Grand Rapids, Mich.

S. C. White Leghorn

baby chicks, $9.00 per 100. Barred Rock chicks, $12.00 per 100.
RALPH S. TOTTEN, Pittsford, Michigan.

Free to Asthma and Hay Fever Sufferers

Free Trial of Method That Anyone Can Use Without Discomfort or Loss of Time.

We have a method for the control of Asthma, and we want you to try it at our expense. No matter whether your case is of long standing or recent development, whether it is present as Chronic Asthma or Hay Fever, you should send for a free trial of our method. No matter in what climate you live, no matter what your age or occupation, if you are troubled with Asthma or Hay Fever, our method should relieve you promptly.

We especially want to send it to those apparently hopeless cases, where all forms of inhalers, douches, opium preparations, fumes, "patent smokes," etc., have failed. We want to show everyone at our expense, that our method is designed to end all difficult breathing, all wheezing, and all those terrible paroxysms.

This free offer is too important to neglect a single day. Write now and begin the method at once. Send no money. Simply mail coupon below. Do it Today —you even do not pay postage.

FREE TRIAL COUPON
FRONTIER ASTHMA CO., Room 846B
Niagara and Hudson Sts., Buffalo, N.Y.
Send free trial of your method to:

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Chicks for You

Big, strong, sturdy fellows from selected, heavy laying pure bred flocks. Postpaid to your door. 100% live arrival guaranteed. Low prices.

Varieties	Prices On: 25	50	100	500
White Leghorns	$3.00	$5.50	$10.00	$47.50
Brown Leghorns	3.00	5.50	10.00	47.50
Anconas	3.25	6.25	12.00	47.50
S. C. & R. I. Reds	3.75	7.00	13.00	62.50
Barred Rocks	3.75	7.00	13.00	62.50

Chicks will reach you quickly and safely. Reference: People's State Bank. Order right from this Ad. There is no risk.
Timmer's Hatcheries, Box M, Holland, Mich.

Our Baby Chicks

Can't be beat because they are hatched from Michigan's leading pedigreed flocks, culled by genuine poultry experts, for higher egg production and because we hatch only in tested mammoth machines. Rocks, Reds, White Leghorns, Anconas, Buff Orpingtons. Large instructive catalog tell all about them. Prices 9c up.

MICHIGAN HATCHERY and POULTRY FARM
Box 2, Holland, Michigan.

REDUCED PRICES

For June and July on our Pure Bred stock Carefully developed for years. White Leghorns headed by male birds of 285-303 egg record strains. Egg Basket Strain of Buff Leghorns, Brown Leghorns, White Wyandottes, Rocks, and R. I. Reds highly bred. Reference: First State Bank. Circular Free.

MEADOW BROOK FARM, R. 1, Holland, Mich.

GERMOZONE FOR SICK CHICKENS

25 years the one dependable remedy and preventive. Millions use it for WHITE DIARRHOEA and other bowel troubles; colds, canker, roup, cholera, chicken pox, etc. Don't experiment. Get GERMOZONE, (65c & $1.25 sizes) and FREE book, "The Lee Way," worth a dollar to every poultry raiser. At drug or seed stores or sent postpaid by GEO. H. LEE CO. OMAHA, NEBR.

LEE'S LICE KILLER

The Old Reliable Has proven itself year after year the one sure way to rid poultry of lice, mites, bedbugs, body lice and such vermin. Paint or spray on roosts, etc. No dusting, dipping, greasing, handling. Get it of your drug or seed store, or write us for particulars and valuable free book. GEO. H. LEE CO. Omaha, Nebr.

GOOSE EGGS CAN BE HATCHED IN INCUBATOR

Can goose eggs be hatched successfully in an incubator?—Mrs. N. R., Deerfield, Mich.

—Goose eggs can be successfully hatched by artificial methods. It has been our experience that the hot water type of incubator is slightly superior for hatching goose eggs. It is advisable, however, to frequently sprinkle the eggs with warm water by means of a whisk broom several times throughout the hatching period. A common practice is to incubate the eggs by artificial methods the first two weeks, after which they can be transferred and the incubation period completed under the domestic hen. More satisfactory results usually attend natural incubation using either the goose or the domestic hen.—E. C. Foreman, Professor of Poultry Husbandry, M. A. C.

SEND CHICKS TO M. A. C.

Would be grateful for advice about my baby chicks. They hatched out strong and healthy. Kept them in incubator 36 hours, then gave them water and fine sand, later began feeding them. Did fine at first but yesterday began to die. Some seem to have stiff necks and whirl around in circles and then die. Some show signs of bowel trouble and others just peep and get weak and die, no signs of looseness of bowels. I have chaff in house and fine sand on floor of brooder room, plenty of clean fresh water, also large chunk of sod. Too cold to put them on range as they are only one week old. Is buttermilk good for chicks of this age? Their mash contains dried buttermilk also charcoal. Would you advise using a White Diarrhea remedy? Would White Diarrhea cause my chicks to die without signs of bowel trouble? —Mrs. H. R., Gladwin, Mich.

—The symptoms described would indicate nutritional disturbances altho there is a possibility that many of these chicks may be infected with Bacillary White Diarrhea. The Bacteriology Department, under the direction of Doctor H. J. Stafseth, is conducting a poultry clinic and I would suggest sending him a number of affected chicks in a live condition if possible. These should be mailed or sent by prepaid parcel post.

We would recommend giving the entire flock a feed once per day consisting of bran, rolled oats, and tomato juice, also a fed of bran, rolled oats and cod liver at the rate of one half pint of cod liver to each five hundred chicks. The cod liver oil treatment should be given on three alternate days and the tomato juice mixture may be given daily until the chicks are permitted free range.

We would certainly recommend the use of either skim milk or buttermilk for young chicks. The high lactic acid content suppresses the development of many undesirable bacteria and more over, develops stronger resistance because of its high feeding value. To my knowledge, there is no satisfactory treatment for chicks affected with Bacillary White Diarrhea.—E. C. Foreman, Professor of Poultry Husbandry, M. A. C.

POWDERING BABY CHICKS FOR LICE

TAKE a paper flour sack, cut the top off, put in two spoonsful of powder. Then put in your chicks, 2 to 4 at a time accordingly to the size, grasp the sack tightly and shake it and roll upside down several times. The chicks flutter their wings, throwing the powder, among their feathers. Then open sack quickly and grab chicks out with both hands if they are very small. I sometimes blow in their little faces if necessary to get powder off but very seldom. By the time you grab another bunch for your sack they are gone. I have them all caught in a large tub with a gunny sack over them so they are handy. One can do this with success in a few moments. In about eight to ten days treat again, and you will agree with me it is easier than any other you ever tried.—Mrs. R. N.

Out of Sight

"I was so confused, I don't know how many times he kissed me!"

"What! with the thing going on right under your nose?"

RHEUMATISM

A Remarkable Home Treatment Given by One Who Had It.

In the year of 1893 I was attacked by Muscular and Sub-acute Rheumatism. I suffered as only those who are thus afflicted know, for over three years. I tried remedy after remedy, but such relief as I obtained was only temporary. Finally, I found a treatment that cured me completely, and such a pitiful condition has never returned. I have given it to a number who were terribly afflicted, even bedridden, some of them seventy to eighty years old, and the results were the same as in my own case.

I want every sufferer from any form of muscular and sub-acute (swelling at the joints) rheumatsim, to try the great value of my improved "Home Treatment" for its remarkable healing power. Do not send a cent; simply mail your name and address and I will send it free to try. After you have used it and it has proven itself to be that long-looked-for means of getting rid of such forms of rheumatism, you may send the price of it, one dollar, but understand, I do not want your money unless you are perfectly satisfied to send it. Isn't that fair? Why suffer any longer when relief is thus offered you free? Don't delay. Write today.

MARK H. JACKSON
No. 265-K Durston Bldg.
SYRACUSE, N. Y.

Mr. Jackson is responsible. Above statement true. (adv.)

Wyngarden Strain
WHITE LEGHORN BABY CHICKS
EGG BRED for 18 YEARS

June chicks grow rapidly and strong, due to warm weather, plenty of green stuff and insect food. They mature quickly. A June Wyngarden pullet will lay early in November, when prices of eggs are highest. Figure out the extra profit for yourself.

Order NOW from These Low Prices

SELECTED MATINGS (English W. Leghorns, Brown Leghorns, Anconas) 50, $5. 100 $10. 1,000, $90.
EXTRA SELECTED MATINGS (same breeds) 50, $6. 100, $12. 1,000, $110.
SPECIAL STAR MATING (English W. Leghorns) 50, $7. 100, $14. 1,000, $120.
ODDS AND ENDS (broilers) 100, $8. 1,000, $70.
(500 lots at 1,000 rate)
100% live delivery guaranteed.

Wyngarden HATCHERY & FARMS ZEELAND, MICH. Box B

Pure Bred Baby Chicks

We have been carefully developing our flocks for eight years. Every chick pure bred and from stock carefully culled, for type and production. Our chicks give satisfaction. Order today for Quick Delivery.

Prices on	50	100	500
Eng. White Leghorns	$6.00	$11.00	$52.00
Barred Rocks, R. I. Reds,	7.00	13.00	62.00
Wh. Rocks and Wyandottes	8.00	15.00	....

Postpaid. 100% live delivery. You take no chances. Ref. Farmers & Mechanics Bank, this city. No Catalog. Order from this ad.
WASHTENAW HATCHERY
Geddes Rd, Ann Arbor, Mich.

ROYAL
EGG-BRED CHICKS

200 Egg Strain S. C. English White Leghorns and Brown Leghorns. Our pen of White Leghorns to 1st prize (best W. Leghorn pen in the show) production class, in the largest utility show in the country held at Zeeland, Michigan, Dec. 28. Prof. E. Foreman of M. A. C. judging. 12 years of careful breeding for high egg-production, combined with 8 years of highly successful hatchery methods gives you chicks that grow into money makers. 100% live delivery guaranteed. Write for free catalog and prices.
ROYAL HATCHERY & FARMS
S. P. Wiersma, Zeeland, Michigan, R. R. 2.

MAY and JUNE CHICKS
The Kind That Pay Big Profits
Pine Bay Farm
PINE BAY FARM CHICKS are backed by our 20 years' experience in the poultry business and a reputation for fair dealing with thousands of satisfied customers. Our experience protects you.
Chicks 6½c Up for June Delivery Rocks, Reds, Minorcas, Anconas and Leghorns. We breed and own International Egg Laying Contest Winners. Free Catalog. Get full prices before ordering elsewhere.
PINE BAY POULTRY FARM, Holland, Mich.

Chicks With Pep
GREAT CUT IN PRICES. Strong, vigorous chicks from our bred-to-lay hens. LEGHORNS and ANCONAS, 10c each. ROCKS, REDS, MINORCAS, WH. WYANDOTTES, 13c. ORPINGTONS, SIL. WYANDOTTES, 15c. MIXED, 10c. Postpaid. Full live delivery guaranteed. Free Catalog.
Holgate Chick Hatchery, Dept. B, Holgate, Ohio.

CHICKS PATERS WHITE LEGHORNS
TANCRED -- BARRON
200 to 300 egg bred line. Wonderful layers of large white eggs that bring premium prices. Over 2,000 selected, free range breeders mated to choicest pedigreed sires. Quality chicks 9½c up. Prepaid, parcel post, 100% live arrival guaranteed. Write for valuable free illustrated catalog and price list.
J. PATER & SON, R. 4B, Hudsonville, Mich.

QUALITY CHICKS New Prices
Prompt Free Live Delivery. Per 100 Leghorns, $10; Rocks, Reds, Orpingtons, Wyandottes, Anconas, $12; Lt. Brahmas, $15; Assorted, $7.00. Free Catalog gives quantity prices.
Missouri Poultry Farms, Columbia, Mo.

RHODE ISLAND REDS—TOMPKINS STRAIN Stock Eggs for hatching and Baby Chicks. May chicks $20.00 per hundred. Hatching eggs $8.00 per hundred. June Chicks $10.00 per hundred. Eggs $7.00 per hundred. Hen hatched chicks on request.
WM. H. FROHM, R1, New Baltimore, Mich.

BABY CHICKS--REMARKABLE FOR SIZE and strength. Reasonable prices. Leghorns, Anconas, Rocks, Reds, Wyandottes, Orpingtons, Minorcas, Spanish, Brahmas.
TYRONE POULTRY FARM, Fenton, Michigan.

WHITTAKER'S R. I. RED CHICKS AND EGGS for hatching. Both Combs. Michigan's Greatest Color and Egg Strain. Reduced prices for the balance of the season.
INTERLAKES FARM, Box 4, Lawrence, Mich.

BABY CHICKS BARRON S. C. W. LEGhorns. Special low prices. 100% alive delivery guaranteed. Write for price list. HENRY WATERWAY, R4, Holland, Mich.

S. C. BUFF LEGHORN BABY CHICKS. Write for June and July Prices.
J. W. WEBSTER, Bath, Michigan.

RED ROCK WHEAT IS GOOD FLOUR PRODUCER

(Continued from Page 4)

about it. The local banker, Mr. Frank Williams placed an exhibit in his window and told his friends. As a result, John Odell sold out. The County Agent instructed the farmers how to keep seed pure and saw to it that the pure seed was properly distributed to other farmers in 1916. In 1917, I personally inspected over 300 acres in Allegan county that had less than a half of one percent of other varieties.

Only a few counties took care of the first distribution of Red Rock and some of the lots were lost to pedigree through carelessness. It is likely that a thousand bushels of Red Rock were sown for seed in Michigan in the fall of 1915, and according to a United States Department of Agriculture investigation in 1919 there were 146,000 acres of Red Rock in Michigan. The variety is being extensively grown in southern Michigan, Illinois, Indiana, Ohio and other states.

On account of the extra stiff straw, Red Rock has been able to carry some unusually heavy yields to harvest. Mr. George Hurteau of Allegan lives on a piece of heavy land that only a few years ago was a cattle wallow. It has been well drained, and being unusually fertile has produced close to fifty bushels of Red Rock. A yield of 52 bushels of Red Rock was obtained on similar land at Three Oaks. In these cases the wheat did not lodge. Under conditions like this the quality of Red Rock is equalled by none that is grown in Michigan.

A large number of artificial crosses were made in wheat in 1912, 1916, 1919 and more recent years. One of the crosses made in 1912, was between Red Rock and Berkley, a hard red winter wheat that is also more winter hardy than Red Rock. Out of this cross a new wheat was distributed in 1921 under the name of Berkley Rock. This is a hard wheat, with a straw that is equal in stiffness to the average of Michigan varieties. It is an exceptionally good milling and baking wheat, and is more winter hardy than Red Rock. Although it does not yield more than Red Rock under ordinary conditions it outyields it when the winter is severe and Red Rock has been injured. These are the conditions in the Thumb district where Red Rock is grown only as one of many varieties.

The inspection of fields with pedigreed wheat will occur in June and pedigreed seed of either Red Rock or Berkley Rock can be obtained after harvest by addressing the Secretary of the Michigan Crop Improvement Association of East Lansing, Michigan.

OH MONEY! MONEY!

(Continued from Page 10.)

"Money!" ejaculated Mr. Smith, in genuine amazement. "You don't mean that she's really letting money stand in the way if Mellicent cares for him? Why, it was only a year ago that she herself was bitterly censuring Mrs. Pennock for doing exactly the same thing in the case of young Pennock and Mellicent."

"I know," nodded Miss Maggie. "But—she seems to have forgotten that."

"Shoe's on the other foot this time."

"It seems to be."

"Hm-m!" muttered Mr. Smith.

"I don't think Jane has done much yet, by way of opposition. You see they've only reached home, and she's just found out about it. But she told me she shouldn't let it go on, not for a moment. She has other plans for Mellicent."

"Shall I be—meddling in what isn't my business, if I ask what they are?" queried Mr. Smith diffidently. "You know I am very much interested in—Miss Mellicent."

"Not a bit. I'm glad to have you. Perhaps you can suggest—a way out for us," sighed Miss Maggie. "The case is just this: Jane wants Mellicent to marry Hibbard Gaylord."

"Shucks! I've seen young Gray only once, but I'd give more for his little finger than I would for a cartload of Gaylord's!" flung out Mr. Smith.

"So would I," approved Miss Maggie. "But Jane—well, Jane feels otherwise. To begin with, she's very much flattered at Gaylord's attentions to Mellicent—the more so because he's left Bessie—I beg her pardon, 'Elizabeth'—for her."

"Then Miss Elizabeth is in it, too?"

"Very much in it. That's one of the reasons why Hattie is so anxious for more money. She wants clothes and jewels for Bessie so she can keep pace with the Gaylords. You see there's a wheel within a wheel here."

"I should say there was!"

(Continued in June 7th Issue.)

FRESH Tuxedo

THE MERCHANT

Men who know values quickly appreciate quality. They realize that fresh TUXEDO is the greatest tobacco value ever offered.

NOW 12¢

© Guaranteed by The American Tobacco Co. INCORPORATED

For persistant layers raise
Wolverine Baby Chicks
Bred for heavy egg production since 1910
Specially priced for June delivery. June 2-10-17 and later. Shipped by parcel post prepaid to your door. 100% safe delivery guaranteed.
S. C. English type White Leghorns

Selected Mating	50 chicks	100 chicks	500 chicks	1000 chicks
	$5.00	$10.00	$50.00	$100.00
Our Best Mating	50	100	500	1000
	$600	$12.00	$57.50	$115.00

25% with order and will ship C. O. D. for the balance.
Order direct from this advertisement to save time and get your chicks at once, or write for our free 32-page catalog.
WOLVERINE HATCHERY
H. WIERSMA, Prop. Zeeland, Mich., R. No. 2

QUEEN QUALITY CHICKS
from Best Blood Line Free Range Flocks.
Developed and Culled by Experts---Barron Strain English White Leghorns, Brown Leghorns and Sheppard's Anconas. Sturdy, Healthy Chicks. Just a little more for your money. Safe delivery guaranteed. Write for Catalog.
QUEEN HATCHERY & POULTRY FARM :: ZEELAND, MICH.

"It Fills the Bill"
"SELF-SERVE" Chick Feeder
Holds 12 quarts, Can't clog. Chicks can't roost on special cover nor touch feed with feet. Grown fowls cannot steal feed. Price $1.50 plus postage. Send for free booklet.
IRA P. HAYES, Dept. B 12,
Eckford, Michigan

Pure Bred Chicks Can ship immediately.

Broiler Chix heavy	11c	White Rocks	14½c
W. or B. Leghorns	12c	W. Wyandottes	15½c
B. Rox or Reds	14c	Buff Orpingtons	16c
Sheppard's Anconas	14c	Black Minorcas	14½c

Extra selected standard bred chicks $4.00 per 100 more. Add 35c if less than 100 ordered. Good bank reference. Catalog. June Chix 1c more.
Lawrence Hatchery, BF. R. 7, Grand Rapids, Mich.

Breckenridge Chicks Are Winners
Day old chicks from strong, vigorous flocks which have been carefully culled and extra selected standard male birds—Barred Rocks, R. I. Reds and White Leghorns. We guarantee 100% safe arrival. Write us for price list and circular.
BRECKENRIDGE HATCHERY.
J. C. Barnse, Prop.
Box 351, Breckenridge, Michigan.

BARRED ROCKS—PARK'S BEST PEDIGREED stock, mated with M. A. C. and Dennison pedigreed cockerels. Hatching eggs $2 per 15; $5 per 50; $10 per 100. Chicks $20 per 100. Prepaid by parcel post. R. G. Kirby R1, East Lansing, Mich.

BABY CHICKS FROM BRED-TO-LAY FARM Flocks. Barred Rocks, Reds, English White Leghorns. Now booking orders for May delivery. 100% live delivery. Chicks 10c each and up.
GORET'S POULTRY FARM. Corunna. Michigan.

MARKET FLASHES

MARKET SUMMARY

Wheat, corn and oats quiet at Detroit. Chicago market for wheat and corn active, oats dull. Rye firm on all markets. Butter easy and supply liberal. Eggs in demand. Poultry steady to easy. Potatoes quiet. Dressed calves wanted. All live stock is steady to higher

(Note: The above summarized information was received AFTER the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press.—Editor.)

FOOTE'S MARKET LETTER

BY W. W. FOOTE

The Farmer's Outlook

ON all sides there is a determination among farmers to avoid mistakes made in recent years and to so diversify their crops as to prevent serious losses in the event of bad crops of certain grains. Intensive farming methods are becoming comparatively common in various states of the middle west, and the prevailing idea is to make smaller acreage produce more than in the past instead of increasing the acreage. This has proved a winner in recent years, and boys have taught their elders how to make a single acre produce much more corn than heretofore. Manure piles are being put to their only proper use, while limestone is used as a helper in production more and more every year. For instance there is Ohio. Farmers of that state used 170,052 tons of limestone last year, comparing with 149,054 tons in 1922 and 97,951 tons in 1921. Farm wages are very high, while many helpers are not much real help, and the farmer is forced to try new methods. Where the farms are large enough and the land lies right, tractors are being used with great success, and an Iowa farmer says he had a tractor in use recently for fourteen hours, in that time plowing nineteen acres, while a neighboring farmer used two teams of horses four days in plowing twenty acres. The farm on which this tractor work was done covers 200 acres, and the owner has sold his last two teams of horses, having four tractors for working the farm, about all of which is under cultivation. Farmers are busy with their field work, and the corn acreage is expected to be some larger than a year ago, live stock engaging a large share of the farmers' time in the corn belt states. Michigan farmers are expected to plant about the same number of acres with beans as last year, with some switching over by some farmers to the red kidney variety. Fortunately, sheep raising ranks high in Michigan, and the industry never looked more promising than it does now. The pig crop is coming along satisfactorily in most districts, but fewer cattle are feeding than a year ago.

Our Foreign Trade

Increasing exports and decreasing imports characterized the foreign trade of the United States for the ten months ending with April, as compiled by the commerce department.

For April merchandise exports were $348,000,000, against $325,492,175 for the corresponding month last year. This compared with imports of $324,000,000. In April, a year ago, imports were $364,252,544.

Exports for the ten months ending with April were valued at $3,670,938,080, against $3,320,416,950 for the corresponding period ending in April, 1923, an increase of $350,521,130. Imports for the ten months period were $2,977,077,487, against $3,088,186,074 for the corresponding period last year, a decrease of $111,108,587.

Gold imports exceeded gold exports during April by $44,027,578, and for the ten months ending April 1924, by $341,425,235.

Silver exports for April were valued at $7,804,689, against $4,336,338 for April, 1923. Imports of silver for April were $3,907,745, against $4,261,869 for April, 1923.

Agricultural Conditions Improved

Julius H. Barnes, president of the Chamber of Commerce of the United States, reports improving conditions in agriculture. In a summary of a report he made the other day to President Coolidge, he said: "The increased acreage of spring sown grains shows confidence and energy on the farm and show as well an intelligent shift to better paying crops. Corn, oats and flaxseed show increased sowings, and the prices of those grains are today on a full import basis with full duty protection. "The outlook is promising for better yields of wheat in those sections that suffered last year, and with prices of high-grade wheat in Kansas City and Minneapolis from 20 to 30 cents higher than in Canada the farm is securing a measure of benefit from the national policy of protection. Co-operative marketing methods are improving."

The Department of Agriculture has just issued a mimeograph release, entitled "An Analysis of the Retail Price of Potatoes Grown in Maine, Minnesota, Wisconsin and Michigan, and Sold in Boston, Chicago, and Pittsburgh." This publication presents the portion of the retail price which on the average accrues to each agency by which potatoes are ordinarily handled in getting them to the consumer. The Report is limited to potatoes grown in Maine, Minnesota, Wisconsin and Michigan and marketed at retail in principal large consuming centers tributary to these producing areas. The services which are rendered by these various agencies, and which must be performed by any organization which hopes to suppliant any of the existing agencies, whether such organization be a private agency or a growers' cooperative organization, are also discussed. This Report may be obtained by writing to the U. S. Department of Agriculture, Bureau of Economics, Washington, D. C.

Shipping Michigan Potatoes

Forty local cooperative marketing associations of the Michigan Potato Growers' exchange had on May 1 shipped 2,257 carloads of potatoes, Edmore leading with 185, McBain second with 157, Greenville, 153, Falmouth 135. Twenty-seven of the associations showed an increase over last year's total.

Moderate Trade in Grains

Speculation in wheat and other grains lags most of the time and is far smaller than before the war, particularly in wheat, the future of the market beiing extremely uncertain because of doubts as to federal legislation affecting values. Wheat prices do not change much, there being fractional advances, followed by small declines, and prices are far below those paid in recent years. May wheat has been selling on the Chicago Board of Trade below $1.05, comparing with $1.20 a year ago; while about two years ago it sold around $1.41. Corn has been selling around 76 cents for May delivery, comparing with 81½ cents a year ago and 61 cents two years ago. May oats sell around 47 cents, comparing with 43 cents last year and 37 cents two years ago. May rye is down to 65 cents, comparing with 78½ cents a year ago, and it is strange that its cheapness fails to stimulate exports to European countries. There have been good exports from North America of wheat in some late weeks, but most of the time exports of breadstuffs have ran far below those made a year ago. Corn and oats exports are moderate in volume, anl all the cereals are in ample supply. Barley is selling in Minneapolis at 69 cents, which compares with 60 cents a year ago. Country offerings of corn have dropped off because farmers are busy in the fields. The Chicago Tribune says: "An offer of new winter wheat for July shipment from the country was received yesterday by a cash house which refused to bid on the grain. The basis for the refusal is said to have been the fact that if they bought the grain and hedged it they stood to lose around 50c per bushel in case the McNary bill went into effect while the best they could make on the transactions was the commission charge.

Doings in Hog Market

Considering the huge marketing of hogs in western packing points, it is strange that prices have held up as well as they did during recent weeks. Of course, the explanation is found in the unusual cheapness of hog products, particularly fresh pork products, which increases their domestic consumption. Despite the enormous marketing of swine month after month, stocks of provisions have been decreasing, and they are much smaller in western markets than a year ago. It seems probable that after the middle of June marketing of hogs will show a fair falling off, and in that case it would be fair to look for better prices during the following two months. For the present year to late date the combined receipts in twenty markets have mounted up to 17,620,000 hogs, comparing with 16,793,000 for the like period last year and with 12,654,000 for the same time two years ago. Some enormous supplies have come on the Chicago market within a short time, but they sold much better than might have been expected, the bulk of the sales covering a range of 30 cents per 100 pounds, with heavy butcher weights going especially well at top quotations. Looking backward it is recalled that one year ago hogs were selling in the Chicago stock yards for $6.20 to $7.95, while the recent top stood at $7.65. The hogs offered on the Chicago market of late averaged 234 pounds. Rough heavy hogs sell as low as $6.75.

The Cattle Industry

Fewer cattle have been shipped to feeding districts in the corn belt states this year than a year ago, and there appears to be no danger of overproduction of beef the coming summer, although many farmers are sending back their herds to the markets after a short feed. Recent Chicago receipts of cattle were not particularly large, but too many came in on Monday, and prices broke on that day 25 to 40 cents under arrivals of 24,352 head, recovering most of the fall later in the week, with much smaller offerings, The bulk of the beef steers received for the week sold at a range of $8.50 to $11.25, with the best class of weighty, long-fed steers taken at $11 to $11.90 and the best yearlings offered taken at $11 to $11.50 while no good steers went below $10. Common to fair steers were salable at $7.40 to $9.90, and inferior little steers brought $4.50 to $7.35. Cows and heifers in the butcher class sold at $4.10 to $11.10, but very few sold up to $9.50. Canner and cutter cows sold at $2 to $4, bulls at $3.50 to $7.50 and calves at $5 to $11.50. Stockers and feeders were taken at $5 to $10, with a good demand for the better class and not enough good ones offered to go around. Nothing desirable sells below $7.25, and sales are largely at $7.25 to $8.50. Good stock cows and heifers are offered at $4.50 to $6. A year ago common to prime beef steers sold at $7 to $10.50 and nine years ago at $7 to $9.35.

Good Lamb Market

Well fattened lambs that are not too heavy to suit the popular taste meet with a strong demand at high prices, but heavy lots have to sell at quite a discount, as well as poorly finished shipments.

HOLD YOUR BEANS

MR. ART GOULET of the Orr Bean and Grain Company, Midland, believes that farmers can blame themselves for the condition of the bean market in Michigan. He writes us to the effect that if the farmers would hold their beans and store them on their own farms instead of at some elevator prices would be higher. Some dealers will sell themselves short and then they are interested in bearing the market so that the farmers who stored their beans with them will tell them to send a check for the beans before the price goes any lower. In other words, the dealer sells the beans the farmers stored with him for a price that suits him before he has purchased them from the farmer and then it is up to the dealer to keep the price down below what he received, because if it went above he would lose money; the result is, the lower price he pays the more money he makes. Mr. Goulet thinks that prices will go up again if the farmers will keep their beans off the market awhile and if they have any stored hold on to them. We will have an article in our June 7th issue that will be of great interest and value to the bean growers of Michigan and we hope you will all watch for it.

WHEAT

Last week the wheat market gained some strength and prices advanced slightly. The gain in prices was small but all that could be expected considering the dullness to trading, and dealers are in hopes that the low point in prices for this grain has been reached and a better tone will prevail from now on. The best demand is for export. Foreigners are consuming large quantities at present and the demand will undoubtedly continue for some time. The market is in a position, according to observers, to respond promptly to any reports of serious damage to the crop, and reports from the country have not been very favorable the past few days and it looks as though conditions were not going to improve in the near future. Receipts are small at the present time.

CORN

Corn shows little life as no one seems to want it. There is not much corn going to market at the present time as farmers are busy with spring planting but an increase in movement is expected in a short time.

OATS

The Detroit oat market follows the trend of corn and there is little doing in the way of trading at that point. At Chicago a steady tone prevails. Recepits are moderate and shipping demand quiet.

RYE

The rye market shows a fair demand at Detroit but buyers are not inclined to bid up prices. Chicago shows no change over a week ago.

BEANS

The Detroit market is dull and prices are slightly lower than they were two weeks ago. New York reports conditions unchanged and no increase in the general demand. Receipts were small last week and dealers were able to sell what they had at a very satisfactory price. The majority of the dealers sold only when they could get their own price, while there were a few that were willing to shade the price.

Are you undecided as to how many acres to plant this year? If you are maybe the article by E. A. Little on page 4 of this issue will help you decide.

POTATOES

Potatoes are active and steady on nearly all of the larger markets of the country. Old stock being purchased by some but only the best grades find purchasers. The dealer who has old potatoes on hand at present is ready to shade the price some to make a quick sale, according to reports.

HAY

Light receipts of hay caused a firmer tone in most markets last week. The general demand for hay is narrow but the very small supply of desirable grades has strengthened the general situation and the averages of values shows a gain over week before last. Two or three markets are still fully supplied and inclement weather restricted deliveries, but this is the exception, all other points showing firmer tendencies.

MARKET QUOTATIONS

Wheat

Detroit—Cash No. 2 red, $1.12; No. 2 white, $1.13; No. 2 mixed, $1.12.

Chicago—Cash No. 2 hard, $1.06;

Prices one year ago—Detroit, Cash No. 2 red, No. 2 white, and No. mixed, $1.34.

Corn

Detroit—Cash No. 3, yellow, 82c; No. 4, 78c.

Chicago—Cash No. 2 yellow, 79@80c.

Prices one year ago—Detroit, Cash No. 2 yellow, 87c; No. 3, 86c; No. 4, 83c.

Oats

Detroit—Cash No. 2 white, 53c; No. 3, 50c.

Chicago—Cash No. 2 white, 49c; No. 3, 47@49c.

Prices one year ago—Detroit, Cash No. 2 white, 50c; No. 3, 48½c.

Rye

Detroit—Cash No. 2, 70c.

Chicago—Cash No. 2, 65c.

Prices one year ago—Detroit, Cash No. 2, 81c.

Beans

Detroit—C. H. P., $4.30@4.35 per cwt.

Chicago—C. H. P., $4.90 per cwt.

Prices one year ago—Detroit, C. H. P., $7.25 per cwt.

Potatoes

Detroit—$1.43@1.50 per cwt.

Chicago—$1.20@1.50 per cwt.

Prices one year ago—Detroit, $1-33@1.50 per cwt.

HAY

Detroit—No. 1 timothy, $23.50@24; No. 2, $21@23; standard and light mixed, $22.50@23; No. 1 clover, $21@23 per ton.

Chicago—No. 1 timothy, $25@27; No. 2, $21@23; No. 1 clover, $20@22; light timothy and clover mixed, $22@24 per ton.

Prices one year ago—Detroit, No. 1 timothy, $17.50@18; standard and light mixed, $16.50@17; No. 2 timothy, $15.50@16.50; No. 1 clover, $13@14 per ton.

PRITCHARD'S WEATHER FORECAST
INTERPRETED BY THE STARS

Week of May 25

Memorial Day Stormy

MEMORIAL DAY in most parts of Michigan will appear threatening to stormy but with about seasonal temperatures. The wind will be high in force and scattered rains or showers with local electrical storms are probable.

Rain and Wind First Week

Moderate rains will be falling in many sections of Michigan at the beginning of this week and will be accompanied with high winds. Immediately following this storm period, however, Michigan residents may expect a couple of days nice weather. Temperatures will warm up just previous to Decoration day.

Week of June 1

With the exception of about Tuesday and Wednesday the week of June 1 will be fair. During the middle part of the week there will be a tendency to some showers and wind. The temperatures for the entire week will average below normal and frosts are liable to hit some sections.

June Cool; July Wet

June temperatures will range below the average; July will be better and August will record some very high readings. While the precipitation during June will probably average normal, July is expected to turn very wet. August will dish up a little of everything in weather for the Michigan farmer including electrical and wind storms, hail and fog.

Farm Outlook Poor

August and September will be poor months for the farmer and his crops either from a market or weather standpoint. It will not be a bad season for any farmer, however, who will be able to work with the market.

CONDITIONS ON MICHIGAN FARMS

LANSING, May 15.—The cool and wet weather in May has delayed seeding to some extent, although oats and barley is completed, and ground is being prepared for corn. Planting has commenced in southern half of the State. Reports received by L. Whitney Watkins, Commissioner of Agriculture, and Verne H. Church, Agricultural Statistician, U. S. Bureau of Agricultural Economics, indicate that the acreage of oats and barley sown is nearly normal although probably slightly less than last year in some localities due to the delay in seeding. Both crops have germinated slowly and need warm weather.

Wheat and rye are in excellent condition and making good growth. Meadows and pastures have been slow in starting but are improving now. New seedings were more or less injured throughout western Michigan by dry weather last year.

Potatoes are moving very slowly to market. Some sections are practically cleaned up but in others the farmers are holding in hopes to realize better prices. The bean market is stagnant, and while there are considerable quantities of beans on hand in some localities, there are but few moving. Hay is being marketed quite freely at fairly good prices, and the surplus in many sections has been disposed of.

Fruit prospects are generally good except peaches which will be a light crop in the heavy producing sections. The buds have advanced slowly due to the cool weather.

Live stock is mostly in good condition and has just been turned onto pastures, which is later than usual.

RADIO PROGRAMS

Station KYW, Chicago. Central standard time 8:20. Wave length 536 meters.

May 27—"The Horse in the Horse Market," by G. E. Wentworth, Supt., Union Stock Yards. "Science and the Soil," by O. F. Jensen, Soil Improvement Committee.

May 30—"Education in the Live Stock and Meat Industry," by W. W. Woods, Vice-president in charge, Institute of American Meat Packers. "Among Our Neighbors," a regular weekly feature furnished by the Orange Judd Illinois Farmer—Tom L. Wheeler, Editor, Indiana Farmer's Guide, on "A Hole in the Milk Pail."

June 3—"What the Agricultural Engineer Is and Does," by K. J. T. Ekblaw, American Society of Agricultural Engineers. "The Cow—Community Builder," by A. D. Lynch, Director of Dairy Marketing, Illinois Agricultural Association. Special feature by champion dairy calf club judging team, Whiteside County, Illinois.

June 6—"Cattle Kings From Club Work," by Dr. R. F. Eagle, Wilson and Company. "Among Our Neighbors," a regular weekly feature furnished by the Orange Judd Illinois Farmer—David C. Waterman, Director of the Service Bureau, on "Parasites on the Farmers' Pocketbooks."

FREE BOOK ABOUT CANCER
The Indianapolis Cancer Hospital, Indianapolis, Indiana, has published a booklet which gives interesting facts about the cause of Cancer, also tells what to do for pain, bleeding, odor, etc. A valuable guide in the management of any case. Write for it today, mentioning this paper. (Adv

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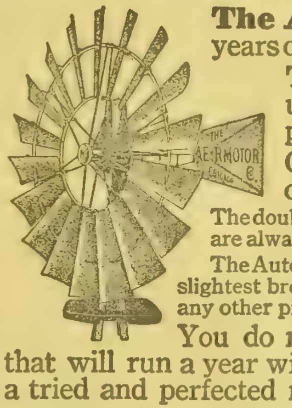

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From the Publisher's Desk of The Business Farmer, May 10th, 1924, issue.

* * * there has been considerable discussion regarding the safety of the mutual automobile insurance companies and this department has been asked many times for its opinion as to the safety of this or that company operating in the state.

In the first place, all state mutuals are under the direct control of the Department of Insurance, to which they must make regular reports and by which they are annually audited.

In a mutual company each member is equally responsible with every other member for the full liabilities of the company, so in the case of the one that failed at Grand Rapids when the insurance commissioner has finally settled up this company there will be no outstanding liabilities and each member who is collectable will have had to pay his proportion by an assessment, to clean up all liabilities in full.

The only advice that we could give through this page as to which company to select would be that you make sure that the company you are going into is strongly financed and has a large membership. We would advise against going into one which insures principally in Detroit, Grand Rapids, and other cities where the liability is much higher than it is in the rural districts, and we would further advise that you have the agent who sells the insurance explain to you carefully from the policy itself exactly what you can expect in case of accident or collision as most of these policies contain "deductable" clauses which make the insurance much cheaper to buy but naturally of less value to the purchaser.

It is our opinion that no farmer can afford to drive an automobile or truck on the roads of Michigan who is not insured at least against liability, whether or not he can afford to carry his own fire and collision insurance is a matter for he himself to decide, but the risk of a suit for damages which might run five thousand dollars or more is too much for any man to carry unprotected.

what the Editor of this paper thinks about mutual automobile insurance for his readers!

WHEN the editor of The Business Farmer wrote the attached article for his "Publisher's Desk" Department, he must have had this company in mind.

Citizens mutual insurance is now carried by the best class of business farmers in every county in Michigan and for the very reasons which the editor has pointed out to his readers, as the outstanding requirements of a safe mutual.

AGE.—This company now 10 years old, is the pioneer mutual automobile insurance company in Michigan and we have a record back of us for square and fair dealing that is the pride of the men behind this company and the envy of the other fellows who are trying to follow in our footsteps.

NUMBER OF MEMBERS.—This company made a record in 1923, by writing and renewing 46,050 policies. This amazing record of achievement was accomplished by a staff of representatives in every county in the state who not only write insurance, but look after the interests of our members when trouble comes.

AMOUNT OF CURRENT ASSETS.—This company had on hand at the start of the tenth year, $407,683.55, as against $226,499.45 at the beginning of 1923, an increase of $181,184.10! Think what that means in security to our members. That is what your editor meant when he said:

> "The only advise we could give through this page as to which company to select, would be that you make sure that the company you are going into is strongly financed * * * *"

Any agent of this company will be glad to go over with you every detail of the policy we write and explain to you every clause, just exactly what it means and what you are paying for. We are just as anxious to have you understand the policy you are buying, as we are to insure you.

We offer the business farmers of Michigan insurance in an old, strongly financed, powerfully organized mutual company, at rates which show a greater saving and a greater security than you can get anywhere else and this fact is endorsed by our ten years of successful experience and the $1,664,000.00 we had paid out to policy holders up to the first of this year.

Read again what your editor said in closing:

> "It is our opinion that no farmer can afford to drive an automobile or truck on the roads of Michigan who is not insured at least against liability, whether or not he can afford to carry his own fire and collision insurance is a matter for he himself to decide, but the risk of a suit for damages which might run five thousand dollars or more, is too much for many men to carry unprotected."

and then write:

WILLIAM E. ROBB, Secretary

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The Michigan BUSINESS FARMER

An Independent
Farm Magazine Owned and
Edited in Michigan

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60c PER YEAR—5 YRS. $2

WAR IS DECLARED

In this issue: Allowing Forestry Through Suitable Taxation—Importance of Growing Alfalfa in Michigan

Current Agricultural News

FORMER MICHIGAN MAN TO ASSIST M. A. C. PRESIDENT

DR KENYON L. BUTTERFIELD, new president of the Michigan Agricultural College, will have for his assistant a man, who, like himself, was born and raised in Michigan and resigned from the Massachusetts Agricultural College to accept a position at our own college at East Lansing. Dr. Butterfield's assistant will be Prof. John Phelan, who has directed the short courses at the Massachusetts college and is known as one of the foremost authorities in the country on rural sociology.

Prof. Phelan was born in Homer, Calhoun county, Mich. He graduated from the Western State Normal at Kalamazoo in 1908 and received his master degree from the University of Michigan in 1910. Previous to going to Massachusetts he taught mathematics at the Western State Normal school, served as assistant in the department of economics at the University of Michigan, was secretary to Dean John O. Reed of the College of Liberal Arts of the University of Michigan and to the late Prof. Henry C. Adams, then statistician of the Interstate Commerce Commission.

In 1910 he was appointed acting director of the department of rural education at the department of rural education at the Western State Normal school, Kalamazoo, and subsequently served at the State Normal school at Stevens Point, Wis., in charge of the rural education department.' In this position he did pioneer work in the development of the movement for training teachers for rural schools. There he built up a strong department of rural education and took an active part in all measures for the improvement of rural schools, was a prominent institute teacher, and a speaker on country life and rural and agricultural education in Wisconsin and the northwestern states.

Another one of Michigan's sons comes back home!

JUNE 18TH LIVESTOCK FEEDERS' DAY AT M. A. C.

WEDNESDAY, June 18th, has been designated as Livestock Feeders' Day at Michigan Agricultural College. At this time several experiments which have been under way for the past six months to a year will be concluded, the results given out, and the animals on exhibit. The forenoon will be devoted to a trip of inspection about the barns where the animals are on display and the experimental plots.

In experimental beef feeding work, three lots of Texas calves purchased last November, weighing 430 pounds and now weighing over 950 pounds, will be on display. One lot of these calves has had continuous access to a self-feeder in which at first corn and oats were offered and later corn alone. In addition, they have received silage and oil meal in the feed bunk, and alfalfa hay. Lot 2 have been fed the same feeds as Lot 1, except that all feeds were hand fed and the amount of grain limited somewhat during the early part of the feeding period. Lot 3 has been hand fed entirely upon farm raised feed, consisting of corn, oats, silage and alfalfa hay. The three lots have all done well. There is, however, considerable difference in the finish and a marked difference in the cost per hundredweight of grains in the three lots.

The cattle will be valued by expert market men the week proceeding June 18th and complete figures on cost of production and grains on each lot will be given out.

Eight lots of hogs have also been on experimental feed for several months, being fed as follows: Lot I, corn and tankage, free choice in separate compartments of a self-feeder; Lot II, corn and tankage, mixed and fed in the self-feeder; Lot III, two parts rye, one part corn, and tankage, mixed and fed in self-feeder; Lot IV, two parts rye, one part oats, and tankage, mixed and fed in a self-feeder. Lot V, two parts rye, one part middlings, mixed and fed in a self-feeder. During the past year rye has been one of the cheapest hog feeds available in Michigan and an effort has been made to determine how it could be fed to the best advantage.

Lot VI, VII, and VIII of the experimental hogs have been trough-fed, Lot VI receiving corn and tankage mixed and fermented with yeast for thirty-six hours before feeding. Lot VII has received corn and tankage, mixed, with yeast added just before feeding; Lot VIII, corn and tankage only, mixed and trough-fed.

The results with these different lots furnish much valuable information on the cost of pork production and methods which should be followed.

In experimental horse feeding, two lots of nine horses each doing ordinary farm work have been fed rations consisting of ear corn and alfalfa hay, against ear corn, oats and timothy. This work has been going on since November 1923. The results have been somewhat in favor of the alfalfa fed horses. This work has been particularly valuable because of the question so often raised by Michigan farmers with respect to alfalfa as a safe and satisfactory feed for work horses.

The horses may be seen at the College stables on June 18th with the results of the experiment posted and a man on hand to explain the details of the work. In addition to this feature, the horses to be exhibited by the College at the fairs for the coming season may be seen. A special effort will be made to have these animals accessable and in presentable condition.

It is hoped that horse breeders will make a special effort to be on hand and for the dinner hour assemble in a separate group for a basket picnic dinner. Two speakers of national reputation have already promised to attend.

MICHIGAN GENERAL PROPERTY TAX CUT

GOV. GROESBECK has had financial statements compiled which show that the state tax levy for the fiscal year beginning July 1 next will be $15,000,000 or $1,000,000 less than the tax for the present fiscal year.

Michigan will have the smallest general property tax since 1918, when the state levy was but $9,108,219.

With a $15,000,000 levy for the coming year, the rate for $1,000 of assessed valuation will be around $2, which is also the smallest rate in nearly 10 years. It will also mean a reduction of more than $5,000,000 in the last four years.

Gov. Groesbeck brought up the question of the state tax before the Administrative Board and the matter was referred to the budget committee. A report will be made within the next two or three weeks.

In announcing the reduction of $1,000,000 over the levy of the present year, Gov. Groesbeck said: "The financial condition of the state is the best it has been in many years and the property owner should be given the benefit of our healthy condition. This reduction will in no way hamper the maintenance of our various state institutions. They will have all the money they need."

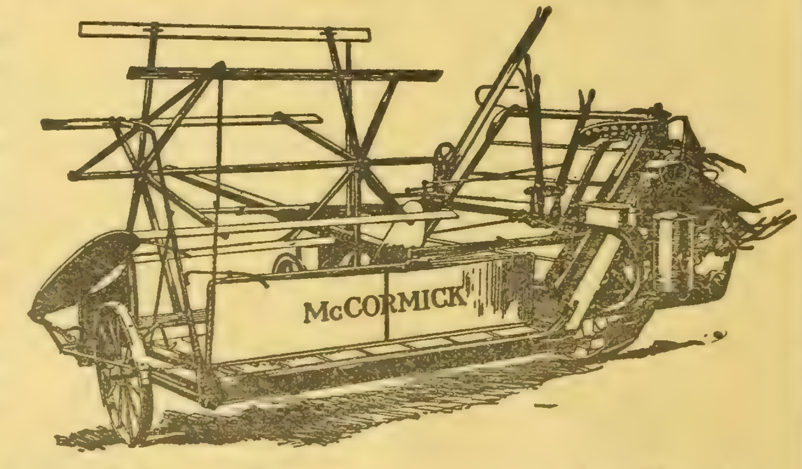
The highway building program will not suffer in any way through the reduction, the Governor declared. He expects the next Legislature to enact a sound financial program for the highway department. And if one does not materialize there will be a sizable amount available for highway construction.

The State will go into the new fiscal year, July 1, with upwards of $10,000,000 in the treasury, which is something new for the State at this time of the year.

The $15,000,000 tax will be equalized in June and will be collected next December. Under the present system the state must operate during the first six months of each fiscal year, before the tax money for the period is forthcoming, and often it is February and March before the bulk of the tax money is in. For this reason upwards of $10,000,000 of surplus is needed to tide over the period between the time the tax is levied and collected.

Is Your Old Binder Good for Another Season's Work?

Will it go into the harvest this season and tie all of the bundles and waste no grain or time? Will it cut the crop with the minimum of labor? Will it give you good service without excessive repair expense? If it will do these things, you don't need a new binder; but if its performance is doubtful, it is well to remember that a new, improved McCormick or Deering binder gives the best possible service and costs little considering the many years it will serve you.



Here are Some of the Many Improvements in Grain Binder Construction in the Last Twenty Years

1. *Outside reel support.* Strengthens reel and keeps reel bats parallel to cutter bar at all points.
2. *Floating elevator.* Makes it possible to cut a full swath of heavy or light grain without fear of clogging elevators. Results in increased cutting capacity and eliminates delays.
3. *Improved binder and knotter.* Insures every bundle being perfectly bound, eliminates losses and delays.
4. *Tongue truck.* Relieves horses of neck weight and conserves their strength. Keeps binder running straight, saving grain and delays.
5. *Improved bundle carrier.* Works as well going up and down hills as on the level. Saves grain and time of shockers.
6. *Improved bevel gears and chains.* Eliminates delays and expense on account of repairs. Fully as important as an improvement that increases capacity.

Both McCormick and Deering binders offer you the best possible construction, highest grade materials, and long-lived wearing parts. Any McCormick-Deering dealer will point out the above improvements on the binder he has on display.

BINDER TWINE—Now is the time to arrange for your harvest time requirements of twine. Ask the McCormick-Deering dealer to reserve your supply of McCormick, Deering, or International twine. It is wound in convenient "Big-Balls."

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SATURDAY
June 7th
1924

VOL. VI. No. 21

Being absolutely independent our columns are open for the discussion of any subject pertaining to the farming business.

"Hew to the line, let the chips fall where they may!"

The Michigan
BUSINESS FARMER
The Only Farm Magazine Owned and Edited in Michigan

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Allowing Forestry Through Suitable Taxation

Present High General Property Tax Discourages Reforestation in Michigan

By STANLEY M. POWELL
(Lansing Correspondent of The Business Farmer.)

TIME was when Michigan was a leading timber producing state. Now the annual freight bill on lumber shipped into Michigan exceeds $15,000,000. A large amount of our former timber wealth was removed ruthlessly, leaving vast areas of cut-over land regarding which no provision was made for reforestation. Of the state's 36,787,200 acres the best estimates are that to-day more than 12,000,000 acres are idle and unproductive. The proper utilization of this land constitutes one of the biggest problems confronting Michigan to-day.

The question presents itself as to whether we should attempt to farm all of this land or whether it should be redevoted to its original task of timber production and made attractive for recreation purposes. Certainly, we shall all agree that it should not longer remain idle. In the face of a surplus of most farm products and an alarming shortage of timber we may well conclude that an intelligent program of reforestation should very properly be an important part of any program for the proper development and efficient utilization of northern Michigan.

As Dr. Richard T. Ely, the great economist says, "We are slowly getting over the idea that farms must follow forests. Much of the cut-over land is not suited to agriculture and it is a question whether we need more farms at the present time. On the other hand, every consumer of forest products is feeling the consequences of the past ravages of our forests. The idle land must be put to work to grow trees".

This thought is carried a step farther by Col. Henry S. Graves who recently said, "We have reached a turning point in American forestry. Then next year or two will determine whether we will inaugurate a national policy of forestry commensurate with the vast economic and industrial interests involved, or will continue to lose ground in our efforts to check forest destruction and to produce new forests as the old timber is cut and used."

The President's Ideas

President Coolidge in his message to Congress last December declared that "Reforestation has an importance far above the attention it usually receives." In a recent statement to the American people, the President says, "American character and American customs are largely the result of the influence which our forest background has exerted upon the nation's history. Our civilization is largely dependent upon the unrestricted use of wood. But America's magnificent timber supply now needs replenishing. About 81,000,000 acres of idle forest land should be growing timber crops".

The influence of growing timber extends further than we ordinarily realize. It profoundly affects such factors as climate, rainfall and drainage and we must remember that the flow of streams and rivers, the preservation of birds and other wild life are of great importance—especially the abundance of birds to keep down insect pests. Perhaps of almost equal importance to us in Michigan is the significant part which our forests and their direct and indirect influences have to play in attracting thousands of tourists to Michigan every season. Mr. P. J. Hoffmaster, Superintendent of State Parks, is authority for the statement that the official count figures show that more than 550,000 individuals visited 22 of Michigan's State parks last season.

Land devoted to growing trees becomes more and more valuable from a fertility standpoint year by year. If our population ever becomes so dense that this land is required for intensive agriculture it will be found far better than had it been allowed to remain idle and unproductive in the meantime.

Michigan's Great Problem

Are the days of Michigan's leadership in lumber production a thing of the past? Must we relinquish our preeminence in tourist attraction? Are our burnt over and cut over lands to be left idle and unproductive while the general property tax becomes confiscatory and causes the owners to allow their land to revert to the state?

The problem is present. It is acute. Over 700,000 acres have reverted to the state for non-payment of taxes. The rate of such reversion is constantly increasing.

We have heard a lot of talk about the depletion of timber reserves and the scarcity of forest products. We cannot help but feel that land which once produced timber will do it again, provided, of course, that fire is kept out. All sorts of reforestation schemes have been advocated by various men who are giving a thought to the future. Among the big problems to be solved are the determination of the best methods of natural and artificial forestation and control of the fire menace.

But from a practical standpoint, there isn't much use of discussing ways and means of forestation for Michigan until the general property tax is no longer applied to farm and commercial woodlots. As P. S. Lovejoy says, writing in a recent issue of the Country Gentleman:

"The general property tax threatens the existence of the woodlot. In one way or another this has long been recognized and various states have passed laws intended to correct the difficulty. More woodlot and timberland tax legislation is coming up this winter.

Property Tax Not Adapted

"The trouble lies in that the general tax was built for short-time crops—and the woodlot has a long-time crop. As Col. William B. Greeley, Chief of the United States Forest Service puts it. 'The general property tax, applied to growing timber, is as unjust and as unreasonable as it would be to tax a field of wheat every few days during its whole growing season' ".

Michigan tax officials have agreed with the ideas expressed by Mr. Lovejoy and Col. Greeley. For instance, Mr. O. F. Barnes of the State Tax Commission, testifying at a forestry conference called by the State Conservation Commission June 27, 1922, declared:

"The economic effect of increased taxation upon forest property, such as necessarily results from ad valorem taxation, is far different from the effect of increased taxation upon other forms of real estate. It forces destruction, not development. All taxation must eventually be paid from income. If taxation is increased on non-income city property the owner can improve the same and thus obtain income to meet the increased tax, and in so doing he benefits both himself and the community. If taxation is increased upon non-income producing farm lands the owner can put the same under crop and obtain income to meet the increased taxation, again benefiting both himself and the community. The owner of forest property, however, when taxation increases can only obtain income from the property to meet such charges by destroying the property; and the destruction he is thus forced to make is of a character that requires years to replace.

Mr. Barnes' Four Points

"I suggest as basic principles of forest taxation:

"First: That forest property must not, through ignorance of its character and of the effect of ad valorem taxation upon it be overtaxed.

"Second: That taxation be so framed as to enable the investor in forest land to calculate with reasonable certainty his future tax burden until such time as he can realize income from his investment.

"Third: That the payment of taxes as far as possible be arranged for a time when income may be expected with which to pay the tax.

"Fourth: That the interests of the owners of other classes of property and the interests of the political units where forests are located be given proper consideration."

Sentiment to "make the tax fit the crop" was crystallized in the last session of the Michigan State Legislature. Several measures were considered. The Meggison-Sargent Bill which provided for a deferred tax on forest growth passed both branches of the Legislature by generous majorities and was regarded by many as one of the most constructive achievements of the past legislative session. However, this law was vetoed by Gov. Groesbeck who declared that it was poorly drafted and that the title of the act did not agree with the body of the measure.

Provisions of Vetoed Act

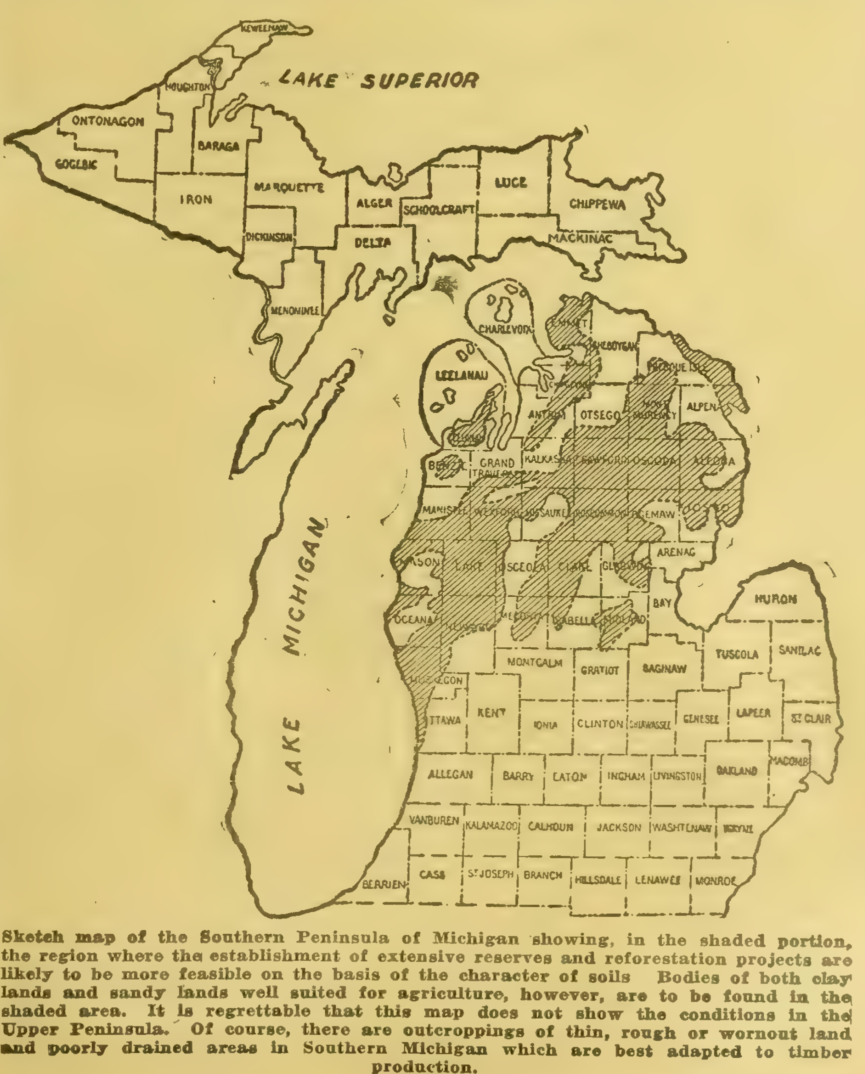
Under the terms of this enactment the owner of any timber lands, or lands chiefly valuable for the growth of timber within the state, might apply to the commissioner of agriculture to have such property set apart for the growth of timber. If, after investigation, the applications were approved by the commissioner of agriculture, the land would thereafter be taxed at the rate of five cents per acre annually.

After a twenty-five year period the timber would be subject to cutting, under general control of the commissioner of agriculture, who would guard against wasteful methods. At this time, the owner of the timber would be assessed a tax equal to twenty-five per cent of the stumpage value of the timber cut, to be paid into the state treasury.

There was a provision in the act which would prevent it from working a hardship on any local taxing unit. Section Six of the act provided that, "The state administrative board may, in its discretion, advance to the townships in which any forest reserve lands lie, such sums each year out of the general fund of the state as will compensate them for the amount of taxes which would be collected from such forest reserve lands had they not been registered".

It is certainly not the purpose of this article to go into the details of any specific measures, but merely to discuss the general principles which should underlie any constructive and equitable forest tax legislation. The importance of this matter to the northern portion of the state can hardly be estimated, although it is evident that its possibilities are very great. During the past few years,

(Continued on Page 23)



Sketch map of the Southern Peninsula of Michigan showing, in the shaded portion, the region where the establishment of extensive reserves and reforestation projects are likely to be more feasible on the basis of the character of soils Bodies of both clay lands and sandy lands well suited for agriculture, however, are to be found in the shaded area. It is regrettable that this map does not show the conditions in the Upper Peninsula. Of course, there are outcroppings of thin, rough or wornout land and poorly drained areas in Southern Michigan which are best adapted to timber production.

Importance Of Growing Alfalfa In Michigan

Hardigan Variety, Bred by M. A. C., Is Better Hay Producer for Michigan than Any Other Variety of Alfalfa Seed

By FRANK A. SPRAGG
Assistant Professor of Farm Crops, M. A. C.

THE farmers of Michigan are beginning to realize the value of the alfalfa crop. The seed they have raised has been largely by accident.

Farmers need to know that there are alfalfas that grow all winter in their native climates and always die if they must stop growing during the winter. These are valuable crops where they belong but are worthless in Michigan. Then there are alfalfas that may survive Kansas conditions perhaps and succeed in Michigan only in mild winters. We cannot depend upon such seed and therefore must avoid it.

Alfalfa is not a native American plant, but has been introduced from Europe, and usually from southern Europe, where the climate is not severe. These types of alfalfa were introduced into Mexico and have drifted into Southwestern United States. We want none of these alfalfas for Michigan conditions. These are the common alfalfas.

This is a piece of hardy variegated alfalfa that was sown at the rate of five pounds of seed to the acre in 1908 at M. A. C. This piece continued to produce hay from that time until it was plowed up in the fall of 1915, at an average of 5.5 tons of hay per acre per year.

However in northern Europe there are some alfalfas that originate from crosses, between common or southern types, and an extremely hardy yellow flowered but poor hay producing type from Siberia. Out of these crosses have originated by selection some good hay producers that have retained the hardiness of the Siberian parent to a greater or less degree, but need further selection. A man by the name of Grimm brought some of that alfalfa with him when he moved into Minnesota. No doubt there were several such men who settled in the Northwest. As they were pioneers, they were unable to find alfalfa seed on the market and must produce their own seed, from such plants as survived their conditions. Each time that a new crop was produced nature had therefore selected plants that were more and more hardy. Thus, for example, the Grimm alfalfa became selected year by year until it has become a success for Minnesota climate and conditions. The alfalfas of this class are known as variegated alfalfas, because the flowers contain some yellows, greens, and blues, showing that they come from crosses between the common purple flowered types and the yellow flowered Siberian alfalfa. These are the alfalfas to which we must look, and upon which the Michigan alfalfa industry must depend.

When America came to be better settled and our railroads connected us with the world trade, a new problem arose. Alfalfa seed came to be on a world market, and seedsmen could obtain larger quantities of seed from southern climates, than they could from northern climates. In fact our Northwest needed its seeds and sold but little to the general trade. As the experiment stations had not told them differently, it was only natural that seedsmen should throw alfalfa seed from all sources together in large bins before recleaning. Then when the seeds were largely removed, the alfalfa seed was well mixed.

This is the kind of alfalfa seed that has discouraged so many Michigan farmers. They have planted a mixture of alfalfa seed from various sources and although they had a good stand of alfalfa the first year, the first winter killed most of it and only a thin stand remained. This was because only a small portion of that seed came from northern climates, and this small portion produced plants that stood the winter in Michigan. If the seed had come entirely from warm climates the chances are that no alfalfa would have been left in the spring.

About twenty years ago, M. A. C. began to realize the existence of Grimm alfalfa and when, much more recently, reliable sources of Grimm seed came to be drawn upon, the alfalfa crop began to find a real place in Michigan agriculture. Previous to that time M. A. C. as well as farmers in general had tried the existing commercial sorts and reported that "alfalfa" was not to be depended upon in our climate. Let us note that the present success of alfalfa under our conditions depends upon somebody's selection of hardy sorts that will succeed under these conditions. We cannot continue to accept common commercial seed, and those who force it upon us, rob us of our chances for success. Alfalfa will become a Michigan crop when we plant seed that has been grown in Michigan from plants that have stood our climate and our conditions. Until then we must depend upon getting seed from northern sources.

The introduction of reliable sources of Grimm in quantities was started by the Michigan Crop Improvement Association, and has since been taken over by the Seed Department of the Michigan State Farm Bureau.

However, Michigan is producing seed. Some forty years ago, a Frenchman settled in Monroe county, Michigan. He like Grimm was a pioneer, and after he had sown the seed he brought with him, he had to produce seed if he continued planting alfalfa. He succeeded in planting seed and his friends and neighbors have succeeded until in 1922 seventeen car loads of alfalfa seed were known to have come from Monroe county. The past year (1923) was a poor seed year and they have produced little more than they needed at home. This may be the largest source of Michigan grown seed, but one does not need to look far to find stray alfalfa plants in farmers lawns, that we are told have been there for twenty or twenty-five years, and in the heaviest of June grass sods. Tell me that June grass cuts out alfalfa, and I will tell you, you are talking about alfalfas that are not suited to Michigan conditions. If an alfalfa plant has been frozen out, or has succumbed to disease and died, we need not to blame June grass if it takes the alfalfa's place.

One usually finds, that the stray alfalfas to be found in June grass sods produce seed. It is such alfalfas as these that need to be increased because these are the sorts that can be depended upon to produce desirable offspring. It appears that alfalfa, as well as corn, needs to have a thin stand if it is to be relied upon to produce seed. The sun and air must get through the branches, and the conditions should be somewhat dry, at least at blooming time. Some farmers have succeeded in producing a crop of

(Continued on page 21)

Farmers Hurt Market By Storing Beans At Elevators For Future Sale

By ART GOULET

THIS is the article we referred to on the first market page of our May 24th issue. In this article Mr. Goulet points out the evil of farmers storing their beans at the elevators for future sale, and places a good share of the blame for the present low price upon the shoulders of the farmers who stored their beans with the dealers. We would like to know the amount of beans stored at Michigan elevators at present by farmers for future sale and would appreciate it very much if you would clip, fill out and mail to us the coupon below. Your name will be kept confidential.

IT occurs to us that a survey by your paper to ascertain direct from growers the quantity of beans held by farmers in storage with elevators might disclose one of the reasons for the present condition of Michigan bean market prices.

One shipper in the state in a general letter to their brokers in early March stated, "That many single elevators are carrying from eight to as high as twenty cars for the account of the farmer and they would judge that easily 70 per cent of the beans left in Michigan are owned by the growers. In another paragraph they state, "They would make no attempt at that time to estimate the quantity of beans left in Michigan, no quesion but what there is ample stock to take care of the demand between now and new crop."

Would you consider that information broadcasted to the markets of the country favorable to the grower of beans if 70 per cent of the beans owned in Michigan then belonged to the grower.

The bean situation this spring is some what of a repetition of last year. Some Michigan dealers, who if we are correctly informed have been more interested in bearing the market than in real salesmenship to get a decent price for beans. We can see where short selling of large quantities of farmer-stored beans would be a strong temptation to the short seller to pound prices down.

We know that during the excellent sleighing in February prices at that time were not satisfactory to the majority of the farmers and a great many beans were hauled to elevators and placed in storage with the thought that the market would be better with the approaching planting time, when the farmer would be too busy planting his crop to haul beans to take advantage of a better market and by having beans on storage in the elevators all that it would be necessary for the farmer to do would be to phone the elevator to send him a check for the beans when the prices met with his approval.

We are sure that you can see that the elevator who sold short stored beans would not be interested in an advancing market, and a survey through the columns of your paper with a coupon attached asking the farmer to report to you the amount of beans stored at the elevator at the present time remaining unsold might be compared with the fall state crop report also the Michigan bean jobbers association report of inspected shipments and disclose quite accurately whether stored beans are still in elevators or shipped out.

We appreciate that you do not reach every bean grower in the state but the very large number that you do reach would give you valuable information for an article to be used later to show the farmers when they store beans with the dealer who sells short that the farmer is placing himself in a position to be double-crossed.

The short seller to protect his own interest must of necessity find all of the bear market factors that he can muster together and disseminate that information over as wide a territory as possible to become effective in best serving his own interests. In the dissemination of that bear information to buyers who are only ordinary human beings like the rest of us and like to receive information that we can buy at low prices and that prices will be lower if we wait, with the result that buyers hold off and their very act in holding off helps depress the market and the properly trained buyer reasons that if the large shippers feel weak on the market situation shopping around will find someone who will be willing to lower the price possibly 5c under the bear quotations that have been received. It is surprising how fast that information will travel in all of the larger markets. Let one buyer get a car of beans at a reduced price and immediately every broker in that market knows about it and wires his shipper to meet it or better it with the result that the short seller is accomplishing his purpose in lowering prices figuring the psychological effect will discourage the further holding attitude of the

(Continued on page 17)

PLEASE CLIP, FILL OUT AND MAIL THIS COUPON

Michigan Business Farmer,
Mt. Clemens, Michigan.

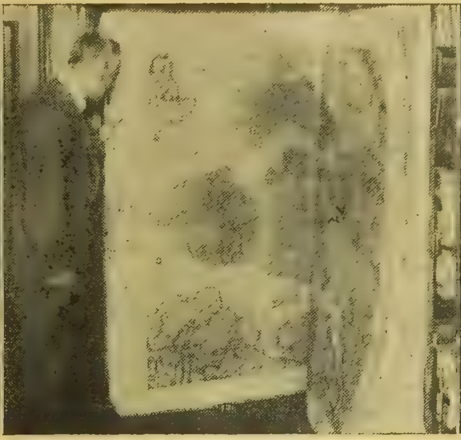
I have .... bushels of beans stored with.............................. of ....

My 1923 acreage was .... acres. My 1924 acreage is .... acres.

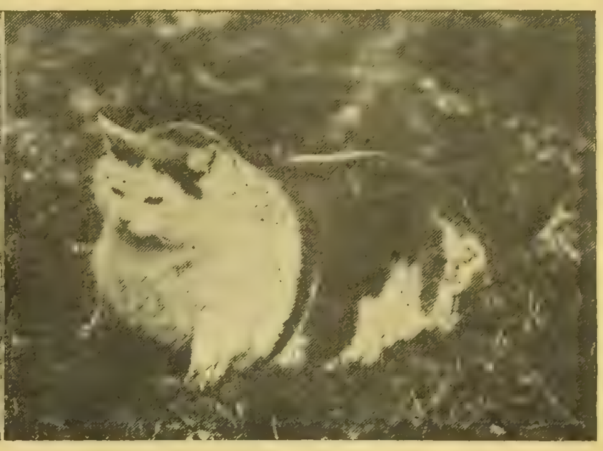
NAME .... P. O. ....

PICTURES FROM FAR AND NEAR

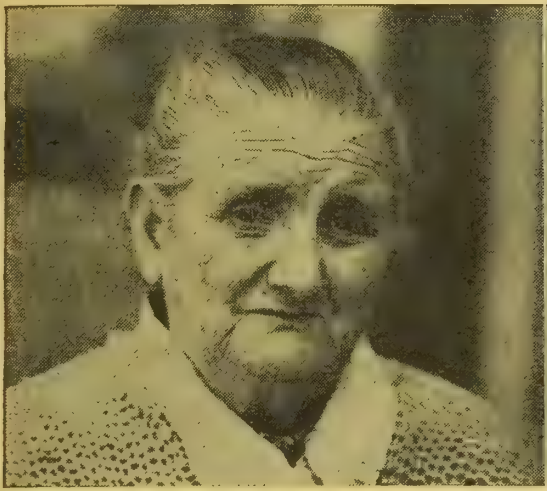
U. S. TAKES CHARGE OF CATTLE EPIDEMIC.—Dr. U. G. Houck (left) of the U. S. Dept. of Agriculture, is conferring with Geo. H. Hecke, director of Dept. of Agriculture of California, about the foot and mouth disease situation in that state. Dr. Houck has charge of the forces trying to wipe out the disease.



GERMANY HAS LARGEST BOOK.—The largest book in the world can be found at the University of Rostock, Germany. It is over 400 years old, being made in the 16th Century, and stands taller than the average height man.

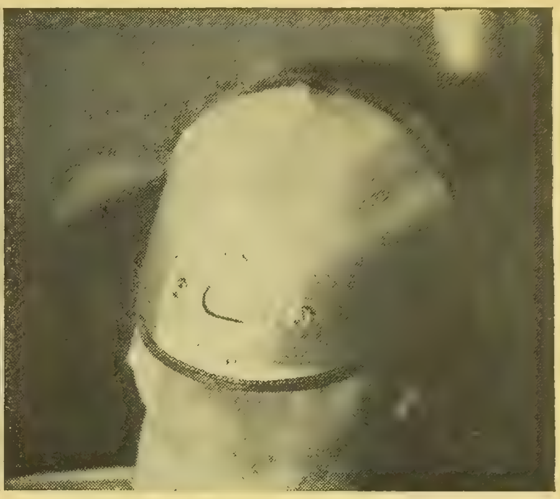


IS THIS THE LARGEST CAT IN THE WORLD?—Mrs. Nellie Harrington, of Goffstown, New Hampshire, declares her pet is the largest cat in the world, and we are willing to acknowledge that no doubt she is right. It is a maltese and white, weighs sixty pounds and is just three feet in circumference.

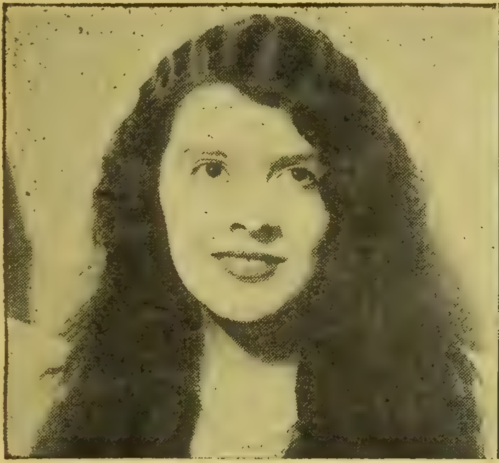


FROM POORHOUSE TO PLENTY.—Mrs. Peter Fenster, aged 72, living for the past year at Cambridge, Mass. Almshouse, has been notified that she is one of the heirs to an $8,000,000 fortune left by distant relatives. Mrs. Fenster will return to England, the land of her birth, to live the rest of her life in ease.

TO OPEN "JAZZLESS" UNIVERSITY.—John E. Brown, known throughout the U. S. as an evangelist, with over 200,000 converts to his credit, has practically purchased the entire town of Sulphur Springs, Ark. where he will build his own university which is to be "jazzless". He will interest students in the great out of doors.



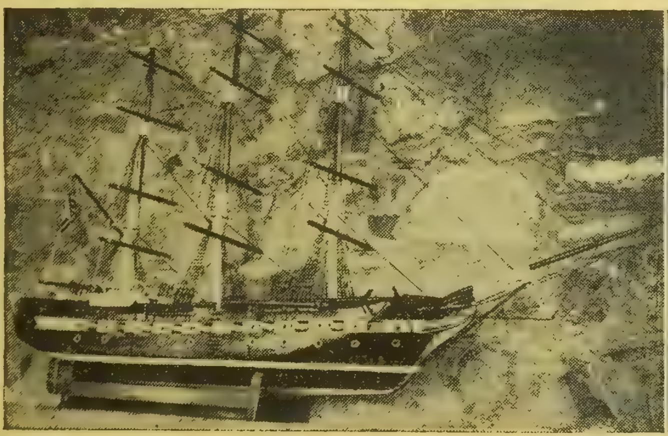
NEW INVENTION OF INSOMNIA MASK.—This is the latest in inventions, an insomnia mask, the work of Niels Aason, known as the "Edison of Norway" who is now in this country. The warm breath of the mouth goes to the eyes and in a very short time the wearer is asleep. Now what we want to know is how you ever wake up.



LOOKING FOR A HUSBAND.—Miss Alyce McCormick, of Nebraska, is in New York with her father, a battalion head in the Volunteers of America, looking for a husband. She says he must be a Mason, pass a test of psychologists, and finally, get her consent.

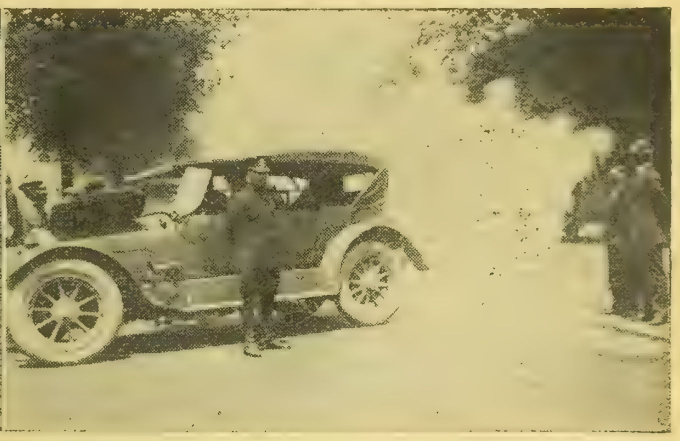
A RATHER COSTLY COSTUME.—In the stage play "Flame of Love" it is necessary to have a robe of gold. A robe was made of 22 Kt. gold, overlaid with silk. In between performances the robe is taken by armed guards in an armored truck to a New York bank where it is placed in a deposit vault until needed for the next show.

FINDS CURE FOR PYORRHEA.—Dr. Harold Leith Box, DDS, young Canadian dental scientist of the Royal College of Dental Surgeons, Toronto University, declares he has found a method for curing that dreaded disease of the teeth, Pyorrhea.



MODEL OF AMERICA'S OLDEST FIGHTING SHIP.—When the USS Constellation was built in Baltimore, Md., 127 years ago, she was considered a wonder with her 20 guns which went through the wars of 1812 with distinction. This model belongs to former British Admiral William Owen.

CHINESE BALL PLAYER.—Kai Kee plays second base for the Yale Varsity nine and holds down his position in big league style.



HERE'S A NEW IDEA FOR BOOTLEGGERS.—This bootlegger's automobile was captured in Washington, D. C., and when examined was found to have apparatus which would throw out a heavy smoke screen if a pursuing car of the prohibition department got too close.

(Copyright, Keystone View Co.)

FORTY YEARS OF FAKING

The Memoirs of a Grafter—By Himself

PETE DEXTER, who has been recounting his life of faking, has reached the place where he finds that even roses have thorns. His games in which he took money from people who trusted him have begun to cause him trouble, and in the last chapter, in spite of his ill-gotten wealth, Pete had to go to a federal prison to think over some of his crimes. Pete wasn't as ready to talk of that part of his career as he was to brag of escapades in raiding people's pocketbooks.

Like lots of other folks, Pete just couldn't stay out of the oil business. When he had a chance to get in on the big money he grabbed it. Because he didn't look up the ultimate end of his scheme, he came to one day and found that his dream of wealth was just an ordinary dream, and, like a bubble, when it broke nothing was left.

Altho he admitted he had made a lot of money, Pete had to resort to petty graft to get on his feet again. But he got another start. Even tho he is getting what he calls a case of "nerves," he has to eat, and in this chapter he tells of some of the little schemes he used to keep out of honest work.

CHAPTER VII

ONE day I picked up a paper in which it told about culling chickens. The idea struck me at once that here was a good one. I packed up and pulled out for Iowa, my old stamping ground.

I had been in such good health that there wasn't very much danger of anyone recognizing me, so I went into a section I had worked many years before. Most of the people were new anyway, as all of the old-timers had gone west. I bargained for an old Ford and bought a chicken coop, started out and announced that I was a culling expert. I would look over the flock for half a cent a bird and take out those hens that were non-producers.

Every one had the "bug," I found, so I had no trouble in working my scheme. Instead of picking out the poor chickens as the non-layers, I managed to select some of the best birds in the flock, and after my work was done I would bargain for the poultry. Business went good for several weeks till a county agent got wise to my deal and it was all off. I drove over to Illinois and the scheme worked a while, but I wasn't what I used to be.

One day, a fellow who saw me with a flat tire on my auto asked me if I would be interested in a tire selling deal. I was pretty blue that day, but he did me more good than medicine. After I had dinner with him, we got down to business and soon we were all set. Here was our latest game, and a good one, too: My new partner, Mr. Henry Young, had been working in a tire factory in Ohio. He had found out that the big tire companies put out a lot of "seconds" that could be got pretty cheap. He had a small amount of capital and I had an equal amount, so we went into business. Our game was to sell these tires as bargains. So we picked a small city in Illinois and opened up the Damon City Tire Company.

We managed to sell a few good cord tires to the leading business men of the city at prices which cost us money to put them out. We put extra good tires on about ten of the best cars in town, and frequently Young, who worked the city, would walk up to a doctor or lawyer who was using our tires, examine a tire on the car and remark that the tire seemed to be wearing out pretty fast. Of course the man thought the tire was all right, but Young would send the fellow down to the shop and replace the tire free of charge. As a result, it wasn't long before we had the reputation in that town of being the best tire dealers in existence, and that saved us when we finally did get in bad, thanks to Young.

We started a big mail campaign offering tires at unusual prices. We got a lot of suckers who bit pretty hard. We offered a free tire with every three the money was sent in advance for, and the way those checks came in was a fright. We sent out the cheap tires made by the same companies that made the best tires, and of course some of the gang kicked. We did refund some money, but we were not called on many times, and we got by, by keeping as many people quiet as we had to.

That year we sure coined the money. I felt like my old self again, and made plans to salt down some of my earnings so I could retire. After the second year was nearly over, one of our customers started a big row. He claimed that we had been defrauding the public, and got a farm paper behind him. Then two other farm papers started the trouble all over again, and we just couldn't quiet that fellow down. Young took him down some good tires, but the old fellow was on his ear and wouldn't shut up. We had just started a big advertising campaign for the summer's business, and his holler sure hurt. He got the farm papers to looking over our stuff and they soon found out that we were passing off the cheap second grade tires for which we were supposedly taking money for good ones.

One of the papers over in Iowa got us investigated by the postoffice officials, and I sure was scared. Young, he was clever, tho. When our trial came up, he hauls into court as witnessess all the doctors and lawyers in our town, and they cinched our case. Young admitted that he made a few mistakes, but he claimed that it was the fault of our big business, and when our attorney brought all these men of importance on the witness stand to tell the jury how square we had treated them with our "cheap" tires, that other gang didn't have a chance. The judge was so sure we were honest, he took the case away from the jury and ordered an acquittal.

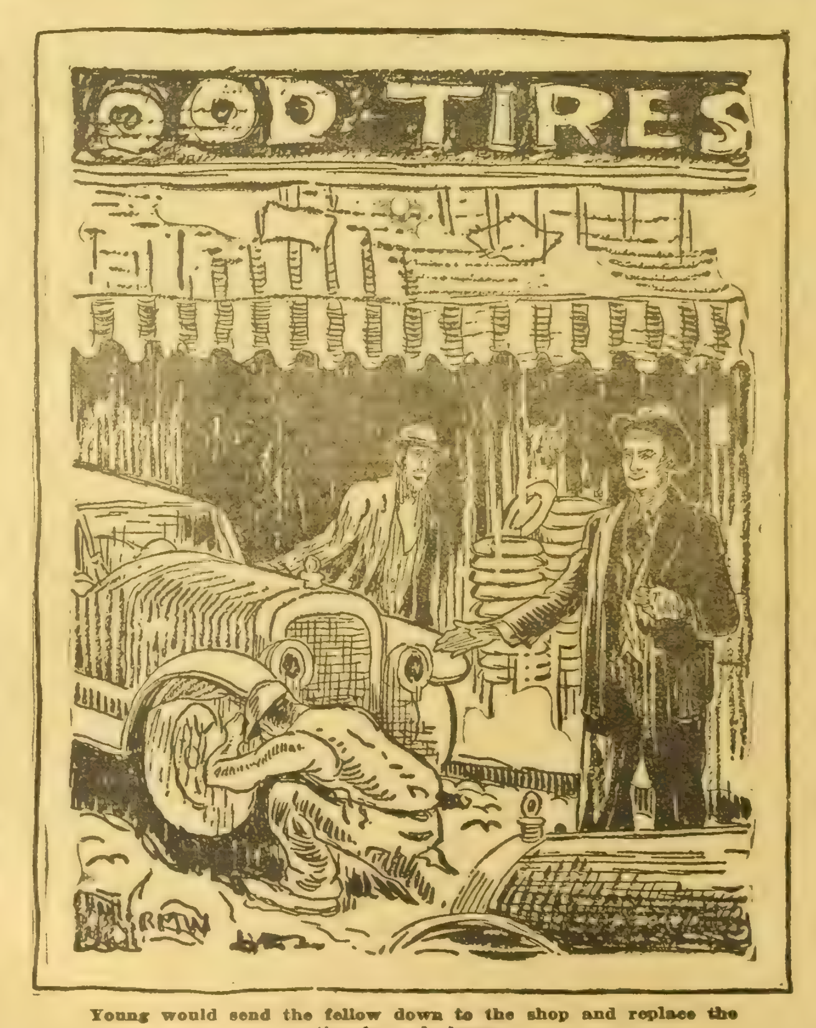
We eventually closed out, but before we did, we ran a big sale. We announced that with every ten-dollar order received by the first of the month, we would put in a set of chains free and with every twenty-dollar order we would give a set of tools and the chains. Well, that free stuff brought them. We sent out tires and sent a note saying the order for the tools and chains was being sent to a factory for delivery, and the old game worked and we disposed of our tires, got our money, pulled out and let the gang worry about the chains and tools.

> I am an enthusiastic reader of the M. B. F. with its different departments and "Forty Years of Faking" included which gives a good example of what is transpiring every day of which I have been a victim a couple of times, but will watch my steps closer in the future.—B. W., Daggett, Mich.

I was felling fine, and felt as if I was getting back into form. I came to the conclusion that it was easier to sting the public on small deals than it was to swing the promotion stuff, and there wasn't half the risk. With a big deal, every one plays safe and looks before he leaps, but with the small stuff, they bite and look later.

A little later I was up in Canada and a fellow pulled a good joke on me. He handed me a jug one day and says: "Friend, here's a gallon of Old Rye for you." I opened the jug, and sure enough he was right. Some of the nicest seed rye poured out. That set me thinking. A lot of fellows down in the states were thirsty as long as prohibition was in effect. I sat down that night and wrote a letter. It stated that four quarts of real rye could be had from Canada for $10 if the coupon was used. I explained as it was Canadian mail it yas not subject to inspection. I then wrote to Kansas City for a mailing list and soon had a long list of prospects.

The addressing of the letters took some time, but I enjoyed the work and soon the money and checks and orders came back. That's once I actually delivered what I claimed I would, and I sent each one his rye nicely packed. The papers spoiled my game a few weeks later, telling how some smart guy cleaned out a lot of thirsty ones to the tune of $10 each. I made a good winter's living out of that deal and moved back to the states the next spring.



Young would send the fellow down to the shop and replace the tire free of charge.

I decided I would try an old game with groceries. I had a lot of cards offering $20 worth of groceries, and agreed to send ten pounds of sugar free with every order. I arranged with a grocery company to fill the orders, but didn't tell them about the sugar. Out of 5,000 cards mailed I got replies from nearly 3,000. I filled about half those orders but didn't send the sugar. It took about $1,000 to get the orders filled and I had the foresight to send another $1,000 to my bank account back in New York for safe keeping.

One day a fellow with a policeman in tow steps into my office. He immediately asks for his sugar, and I tried to tell him it would be coming in a short time. "Say!" he shouts, "I'm wise to the game, you ain't got no sugar."

Then he tells the cop to take me to the station. He had a John Doe warrant for me on a fraud deal, and I was scared. But a roll of bills fixed things. Took most of it to get my release on a cash bond, but when I got out it didn't take me long to jump town and head for Chicago.

I was all in and finally landed in a hospital and stayed there for a long time. I couldn't stand shocks like that any more, and I was getting so afraid I hated to walk down the street for fear someone would grab me. Nerves are bad things when they start to perform. I needed a rest, and had about enough money left to get back to New York state where my aunt was still living. That town had the idea that I was a capitalist "out west" some place. Aunt was glad to see me, and as she needed someone to look after things, I decided to stick around and rest up for a while. (Another complete chapter in June 21st issue.)

MICHIGAN CROPS

GET INOCULATION FROM M. A. C.

I would like to know if I can get inoculation from the M. A. C. and if so how much does it cost and is there a different inoculation for each variety of clover? Is it advisable to inoculate field beans and if so do they have inoculation for beans at the college?—A. S. V., Pigeon, Mich.

THE Bacteriological Laboratory at M. A. C. furnishes at cost inoculation for the various legumes. There are various kinds of legume bacteria, and, consequently, we have to know the crop being planted in order to furnish the right kind of inoculation. There is one strain of organism that inoculates alfalfa and sweet clover, and another strain inoculates the common clovers such as red, alsike, mammoth, and white. There are also special strains for beans, peas, cowpeas, and soy beans.

We feel it is desirable to inoculate field beans and all legumes in fact unless the farmer is confident that the field to be planted already contains the proper organism. If the field has produced a crop of the same legume within the past four years with a good nodule production, he may be fairly sure that the field still contains the bacteria in question. But if there is any doubt, it is desirable to inoculate.

One culture costs twenty-five cents and treats a bushel of seed. Orders and inquiries should be addressed to the Bacteriological Laboratory, Michigan Agricultural College, East Lansing, Michigan.—R. M. Snyder, Res. Assoc. in Bacteriology, M. A. C.

APPLY ACID PHOSPHATE

I have a piece of ground which I wish to seed to alfalfa or clover. The soil is a good gravel sand loam but has been croped several times. It is good clover land as I have an eight acre lot in alfalfa, same kind of soil.—W. B., Biteley, Mich.

IF you have grown good crops of clover and alfalfa on this land it is my judgement you could not increase your yield by use of lime. The use of acid phosphate at the rate of approximately 250 pounds per acre would probably be the most economical fertilizer you could use. —G. M. Grantham, Research Assoc. in Soils, M. A. C.

Farmers Service Bureau

(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full name and address. Name not used if so requested.)

NEED NOT GET STATE LICENSE

Do I need a license to take orders and sell binder twine and fire extinguishers? If so where do I get it and what does it cost?—C. W., Sand Lake, Michigan.

IN reply will adivse you that a person does not need a state license to take orders and sell binder twine and fire extinguishers. If a person intends to sell villages and cities he may be required to secure a local license. That would depend on the ordinances in the various cities and villages in which he might work.—Clare Retan, Deputy Attorney General.

PROCEED AGAINST ENDORSERS

I am a reader of the M. B. F. and find it one of my best papers. I am pleased with the questions and answers to same. It is a great help to its readers. I have a question which I do not understand. A had an auction three years ago, B purchased team and tools to the amount of $400. B has paid no interest. B has 40 acres which is in his wife's name but B signed his name to note and how can this note be collected?—C. M., Grand Ledge, Mich.

YOU could proceed against the indorsers to B's note and try to collect from them, or you could bring suit against B on the note and levy on any property which he has in his own name, or garnishee his wages if he is working.—Asst. Legal Editor.

MAKING CIDER VINEGAR

Is there any law against a farmer making sweet cider for home use? Can he make vinegar for home use? Would he have to have a permit if he operated a cider press and did custom work? Thanking you for your help, I am, An Interested Reader, Mason, Mich.

FEDERAL Regulations No. 60, revised March, 1924, Section 610, provide that any person may manufacture non-intoxicating cider exclusively for home use, either at home or at a custom mill, without permit. The same section provides that vinegar for exclusive home use may be manufactured from cider and other fruit juices, without permit. Also the juice made for home use which has fermented and is not required for home vinegar may be sold to a vinegar manufacturer, who has a permit.

Section 618 provides that neither permit nor bond is required for operating a custom cider mill if cider is removed immediately after pressing; that cider taken as toll may be sold for immediate removal or may be removed to the home of the proprietor of the mill.

Sections 630 and 631 provide that pasteurized sweet cider in closed sterile containers, and preserved cider and cider vinegar may be manufactured in a commercial way and placed on the market for sale, by obtaining a permit.

CANNOT RAFFLE OFF AUTOMOBILE

Is a person allowed to raffle off a car or any other implements; also is a person allowed to sell ice cream and lemonade along a country road without a license; if not, how much are the licenses and where can you get them?—E. G., Hale, Mich.

IT is undoubtedly a technical violation of the statute prohibiting games of chance to raffle off an automobile or other property. Any game whereby a person has an opportunity of securing more than the value of his money or where there is an opportunity to get no return for the money paid falls within the definition of a game of chance and is prohibited by statute.

We are not sure from your second question whether or not you have in mind the person peddling ice cream and lemonade along the country road or whether you mean the person is selling ice-cream and lemonade from a stand permanently located along the highway. If the party you have in mind is peddling ice-cream, he would undoubtedly fall within the provisions of the Hawkers and Peddlers Act and would be required to secure a license from the state treasurer. The license fee provided for hawkers and peddlers is five dollars if person intends to travel on foot; if he travels with one horse, twenty dollars; if traveling with more than one horse, forty dollars. This is an old Act and no provision is made in it for traveling by motor vehicle. No license is required for maintaining a stand to sell lemonade and ice-cream along a public highway. A person would be prohibited, however, from maintaining one on a trunk line highway, except on private land.—Clare Retan, Deputy Attorney General.

IS BANK ACCOUNT HELD JOINTLY?

Would you please answer these questions in your paper? If a man dies, leaving no will, what share will his wife get, if she has two small children? We have a farm and a little money also, would all the personal property go to the wife? If you have money in the bank in the name of Mr. or Mrs. would the money all go to the wife at death of husband? If the wife only gets one-third of property, what is she allowed to care for the children? Or does she have to care for them until of age out of her share? I want my husband to make some kind of a will but he says if he died all of the personal property and the money what we have in the bank and one-third of the farm would go to me, and I could keep the farm until the children were of age to support them. Is this true? Our farm was willed to my husband by his father, he having to pay out his brothers' and sisters share at his mother's death, and he still has the old deed what his father had.. Is this deed good or should he have a new one made in his name? Would his brothers have any claim on farm if he didn't have a new one made? He has paid them their share. These are quite a few questions but I sure will be very thankful if you will answer them. Don't use my name when you put this in paper.—Reader, Romeo, Michigan.

IF the money is properly deposited in the bank as a joint account of the husband and wife, the surviver would be entitled to the entire amount upon the death of the other.

After certain allowances to the widow, of furniture, wearing apparel, etc., and for her support during the settlement of the estate, she would be entitled to one-third of the real personal estate and the children would be entitled to the other two-thirds.

Your husband would have good title to the land willed to him by his father, provided the will has been properly probated. You should consult your probate judge about this matter.—Asst. Legal Editor.

NO WRITTEN CONTRACT NEEDED

Has the clerk of a township any right to pay any money out of road funds on road jobs where no contract has been drawn and signed and what is the penalty for so doing?—C. T., Lake, Michigan.

IT is not necessary to enter into written contracts for road improvements, unless the amount involved is more than $500.00. See Section 4473 of the Compiled Laws of 1915.—H. Victor Spike, Assistant Attorney General.

HOME NOT EXEMPT FROM TAXATION

Is the home of a widow of a civil war veteran exempt from taxes? My first husband was a civil war veteran and after his death I married again and my second husband died. I have been told my home is exempt from taxation. Please tell me if that is so.—Mrs. L. D., Mt. Pleasant.

IN reply thereto, will say that in accordance with the former rulings of this Department, your question should be answered in the negative.—Clare Retan, Deputy Attorney General.

ALWAYS HAVE ABSTRACTS EXAMINED

Enclosed please find check for my renewal of your valuable paper, also self addressed envelope and would like to know what the laws governing abstract offices are if any. Wonder why they are not kept in court house with other records and not by individuals to take advantage of.—P. K., Hastings, Michigan.

COMPANIES are authorized to make abstracts of title, and keep them up to date. Abstracts should always be examined by a lawyer or other competent person before relying on them.—Asst. Legal Editor.

OPERATE GROCERY STORE WITHOUT LICENSE

Could you tell me what it costs to secure a grocer's license for a small store?—Mrs. R., Leslie, Mich.

THERE is no state license required to operate a grocery store unless the owner should be what is known as a transient merchant under the provisions of Section 7001 of the Compiled Laws of 1915. That Section defines a transient merchant as a person who is engaged in a temporary business at wholesale or retail in any township, city or village and who is using or occupying any building or room temporarily for the exhibition and sale of such merchandise. The fee for license under this act is stated in Section 7002.—Clare Retan, Deputy Attorney General.

"MY success depends entirely upon the tires I sell and I recommend Fisk Cords with the confidence that comes from experience."

Fisk Cords are the best tires that one of the oldest and largest manufacturers can produce. Their finer quality gives them the strength and toughness that makes possible this extra long, reliable service. It really costs less to use Fisk Cords.

Time to Re-Tire
Get a Fisk
Trade Mark Reg. U.S. Pat. Off.

Robbed of It's Last Kernel

Your grain crop is never subjected to heavy waste when threshed with a

Red River Special

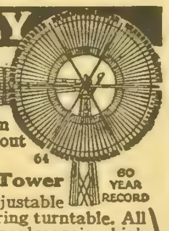
"No grain in the strawpile—all in the bins" is the invariable result of Red River Special threshing, as attested by thousands of signed reports from all sections where grain is grown.

Save the grain and time wasted by other methods—it will pay your thresh bill. "Wait for the Red River Special" should be your policy—it will certainly save you money.

The Big Cylinder and the famous "Man Behind the Gun" first tackle the work and go right along under conditions that would stop other machines. 90% of the grain is separated right at the cylinder. Then the Beating Shakers secure the rest.

You cannot make a mistake in buying or hiring a Red River Special. Write for circulars of the full line—there's a Small Red River Special for small jobs.

Nichols & Shepard Co.
(*In Continuous Business Since 1848*)
Builders exclusively of Red River Special Threshers, Wind Stackers, Feeders, Steam and Oil-Gas Traction Engines.
Battle Creek, Michigan



SAVE MONEY

The Manvel Direct Stroke Windmill still leads after more than sixty years' dependable service. Thousands of them have run thirty years without upkeep expense.

The Manvel Fits Any Tower

Working parts encased; adjustable direct stroke; broad ball-bearing turntable. All made in our own factory—hence low price, high quality. The Manvel saves you money. Write for free book describing our wood and steel mills, towers, tanks, etc.
Kalamazoo Tank & Silo Co., Dept. 744 Kalamazoo, Mich.

Use HOOSIER TILE for permanent buildings for farm or city, dwellings, store rooms, garages, foundation and basement walls, hog barns, barns, poultry houses, etc. Combines beauty, durability, economy. Smooth Glaze or Mat Face finish. Estimates free. Buy now for spring building. Save time and money. Hoosier Bldg. Tile & Silo Co., Dept. MB-17, Albany, Ind.

PERMANENT

Agents Wanted!

Men with cars to cover R. F. D. Routes selling subscriptions to

Michigan Business Farmer

Liberal Salary and Expenses. Make Big Money this Summer at this pleasant, congenial work. Address

Circulation Manager
Mt. Clemens, Michigan

What the Neighbors Say

FAILS TO AGREE WITH MR. LITTLE

TO the Editor:—I read with considerable interest the bean article in last week's issue of your paper, by E. A. Little. My interpretation of that article is that it comes from a dealer who sold short beans rather than a survey of a magazine publisher who has carfully analyzed conditions.

If you will permit the suggestion, I would inquire of Mr. Little, by whom a part of that article was written, from what sources he obtains his information.

The encouragement given in that article for the planting of a large acreage again this year, and if the farmer accepted those recommendations and a large acreage was planted, it would furnish just the right kind of ammunition for present short sellers to tell the buyer that there will be plenty of old beans all summer at cheap prices, or until the new crop is harvested. They could also point to the acreage planted this year as being enormous, in support of their low price contentions, with the result that short sellers would repeat this year's operations.

A continuation of present low prices will discourage the farmer holder of beans and he will sell out shortly after planting time at prices probably lower than the present, playing directly into the hands of the short sellers of storage beans.

If there is a large acreage of beans planted again this year, and the farmer stores any beans with elevators who sell short, he is going to get stung again. The stored beans were responsible for heavy losses to many farmers the last two years. Why should he take another chance?

Here is another angle to the storage situation and a plausible reason for an elevator owner to encourage and even solicit storage beans, free of storage, free of insurance, and free of shrinkage—particularly the elevator owner who was financially weak and he had borrowed his limit from the bank. By getting farmers to store beans and selling them short, he is supplying his business with additional capital, without interest, that he could not otherwise obtain.

Everything goes well provided the market stays down or goes lower, and in the meantime he figures he has it all over his competitors—he can pay more and sell cheaper. But, suppose that some elevator (always keeping in mind he is financially weak) finds that for some reason beyond his control, the market advances, suppose a dollar a hundredweight, and he had ten cars sold short, and a $4,000.00 loss looking him square in the eyes!

How would the stored bean farmer come out? Who would eventually swallow the loss?—Art Goulet, Midland, Mich.

RETROSPECTION

SAVE $16,000.00 and lose $3,200,000.00. Any school boy who has the first lesson of arithmetic mastered can prove it for you if you will give him the example—briefly the proposition is this.

Had Michigan come through on the Advertising Campaign our market would have been sustained at levels prevailing at the November basis, namely, $5.50 to $5.75, which is 1c a pound over the present level, or $400.00 car lower price than prevailed when the Advertising Campaign was kicked over. No one disputes that Michigan will ship 8000 cars beans on this crop—so 400 times 8000 gives the sum of 3,200,000.

Viewing the problem from another angle—Michigan's share at $16,000 would have been $2.00 a car, making a total of $32,000.00. Had it been decided to go no further than the minimum of $16,000.00—there would remain in the Michigan Treasury a balance of $16,000.00 to be used later—because under the St. Louis conference the assessment was to be about $4.00 car based on 400 bags to a car, or a total of $32,000.

In analyzing the remarks of the spokesman for the opponents, when the plan after having been adopted was again up for consideration, we find these significant and hopeful word "Willing to pay five cents a bag for the beans we buy to be used in advertising Michigan beans." The rest of the country said "well fellows if you want to play a lone hand, go to it."

Now at 5c a bag a fund of $160,000 would have been raised to advertise Michigan's Beans alone—and, of course, every section in the country would have benefited even though Michigan paid the entire bill alone. However, the opponents did nothing to go through with what they termed a sound policy—as against the St. Louis committee's plan, which they called unsound.

Today we all know what a lifeless, stagnant, unprofitable season the bean men endured with a steady declining market—and nothing has been done by the opponents to remedy this condition, which is clearly their responsibility.

I recommend that those interested should read from pages 35 to 51 of the report of the Michigan Bean Jobber's Association meeting at Detroit in September 1923. A careful study of this report will help you recognize quickly in the future the stalled automobiles in the road, which look perfectly good from the rear but are experiencing engine trouble. Don't wait in line in the future for them to start but pull out and around them with the progressive, constructive crowd and let the obstructors stay where they are—they will soon follow.

I believe that the opponents should be classified as all those who failed to sign their pledge card and send it in to headquarters when the subscriptions were being solicited for the Advertising Campaign Fund. Cordially yours,—Benjamin Gerks, Secretary of the St. Louis Committee.

NOT MUCH CHANCE ON THE FARM

DEAR Editor:—Being an interested reader of your paper, also having done quite a little farming I can't help but notice the interesting articles that appear in this widely circulated paper. I am not farming, at present, because there is so little in it, except for the farmer who is well-heeled.

You state you have not sold out to big or little business, and confidentially, with the continued support of the better class of business farmers in Michigan, will never have to. Now, why not include all farmers, instead of the so-called better class? It appears to me, that you could support all likewise!

As for the weak-kneed, jelly-spined, and yellow-backed farmer, leaving the farm, I quite disagree with you, as I am from a Michigan farm, and while I am not flattering myself, understand, I say that it is the class-conscious, ambitious, broad-minded thinker, with wide-awake ideas of life, and what it should hold for him, who is determined not to slave 14 to 16 hours per day for 3 to 4 hours pay.

It is true we have a sturdy lot of business men, who are sticking to their plows and harrows, not because they have millions of dollars invested, but because they, at their age, have no other trade but farming, and dare not venture from it, for fear they cannot turn the sod. There is no form of labor, skilled or otherwise, that is not shamefully underpaid. Why? Because the labor market is controlled by big-moneyed interests, the same as the farmer is, has been, and always will be, so long as we, as a nation of supposed-to-be sturdy, educated people allow the present and past administrations to rule and control the land.

In regard to your answer to Mr. Jordan's letter, I must agree with him, as there are hundreds of people in cities and towns, who are unemployed, thousands who are working part time, and they are honest, hard-working men of clean mind and character. The present prosperity of the so-called "hunkies" was attained thru living like cattle; would we, of this advanced age do thus to attain some apparent prosperity? Needless to say, red barns and tall silos are not always tangible evidence of the farmer's prosperity, as many farm homes are heavily mortgaged to erect such display of prosperity.

For less physical exertion, less time, we may receive our food, clothes, shelter, recreation, educational advantages, etc., in the cities. I should term it an insult to the farmer to call the necessities of life, luxuries. Most city workers have bath-rooms, pianos, "lizzies", etc., and apparently demand a higher living standard than the farmer. I repeat, these are more easily and quickly obtained in city than thru the drudgery of the farm.

The farmer has caused most of the present condition, by not recognizing his kinship with labor. Optimism is fine, but truth is truth, and there isn't much chance for an ambitious, broad-minded young person on the farm today. I would like to see other readers opinions on this subject, which is one of the most vital topics of the day.—Thomas T. Ames, Toledo, Ohio.

BACK TO THE FARM

TO the Editor:—I've been to the city, I've been to work in the shop. But on account of my farm work I was compelled to stop. I'll go back to the farm now and drive old Jack and Kate. I'll be compelled to get up early and work until it's late. It will seem a little queer at first but will appeal to me. The shops are alright boys but on the farm you are free. You say there is no money in farming, that farming does not pay. But I put the farm up against the shop any day.

I'll get up the wood for summer. I'll plow and harrow and sow. Then we can sit in the evening and watch our crops as they grow. The cows need milking, the pigs will have to be fed. I'll turn the horses out to pasture before I go to bed. I'll be up in the morning before the break of day. You remember the saying of our grandfathers about the making of hay.

I'll have a fine garden, I'll keep it very clean. I've always been fond of a garden with everything fresh and green. I'll keep a flock of poultry of some good standard breed, and sit out the best plants that I can get and sow the best of seed. After the corn is planted and potatoes are in the ground, I'll have time to go fishing and do a little running around. Before I begin my haying and putting the wheat in the stack. No doubt I will often think of the factory but be glad I am not back. I buy me a binder and mower to cut my wheat and hay. I'll use them with care in harvesting then store them carefully away.

I have finished my story will send it to the M. B. Farmer. They may put it in print or possibly sent it where it is warmer.—J. I.

OUR BOOK REVIEW

(Books reviewed under this heading may be secured through The Michigan Business Farmer, and will be promptly shipped by parcel post on receipt of publisher's price stated.)

The Cooperative Marketing of Farm Products.—By O. B. Jesness, B. S. A., Chief, Section of Markets, and Professor of Markets, College of Agriculture, University of Kentucky. Former Specialist in Charge of Organization Work, Bureau of Markets, U. S. Department of Agriculture. This book is the latest one of the series "Lippincott's Farm Manuals." Published by J. B. Lippincott Co. Price $2.50.

Good Health, How To Get It and How To Keep It.—By Alvah H. Doty, M. D., author of "The Preventation of Infectious Diseases," "The Mosquito," etc. This is a very good medical book dealing with a great many ailments before the doctor is necessary. Published by D. Appleton and Co.

The Story of the Bible.—By Hendrik Van Loon, author of "The Story of Mankind." The title of this book expresses very nicely what it is all about and it is very interesting for children. Most children cannot become interested in the Bible and it was with this in view that Mr. Van Loon wrote this book. There are over one hundred and fifty black and white line illustrations and sixteen full page plates in color and in etching effect, done by the author. Published by Boni and Liveright, New York City. Price $5.

Ex-actly

Sam—What am you doin' now?
Bo—I'se an exporter.
"An exporter?"
"Yep, the sleeping car company just fired me."—John Hopkins Black and Blue Jay.

RADIO DEPARTMENT

EDITED BY J. HERBERT FERRIS, R. E.

WILL NOT WORK WITH LOUD SPEAKER

I have built a single circuit regenerative set with two stages of audio frequency amplification. It works fine when useing the phones but as soon as I use the loud speaker I must put my fingers over the holes in the detecter jack and the first stage jack in order to get any sound and as soon as removed all sound stops. This set runs on WD-11 tubes. On the plate of the detecter 22½ volts and 90 on the amplifier. Would you please write me how I could get this set to work with loud speaker.—R. W., Grand Rapids, Mich.

I THINK that the trouble that you are having is due to the fact that possibly you are not using a condenser across your phone terminals which in some sets is necessary. Place a small capacity condenser of about .0005 mfd. across the primary terminals of the first amplifying transformer or if you have a variable condenser try this in place of a fixed condenser as it will enable you to use just the right capacity.

Try connecting your loud speaker and tune with it connected sometimes the difference in the capacity of the phone and speaker cords will make a great difference in a set.

If the above does not help you, let use know and we will try to help you, but be sure to send diagram of your hookup with your letter.

CRACKLING AND SHORT WAVE RECEPTION

Will you please advise me as to what is the matter with my radio set? I use a Freshmen Variable grid leak and Rico Variable .0005 mfg. condenser in aerial circuit and wonder if trouble would be in these. I use two moulded variometers. At first I used fixed condensers and then changed to variable condensers. For a while I used a variable grid leak and fixed .0005 condenser in aerial and I fixed condenser over putting some parafine on it and found it would not work only when working with a midget .005 condenser and an .00025 condenser in aerial outside of set. It also cut waves in half. I received a variable .0005 condenser Rico condenser a couple of days ago and connected it up and I could not get any higher waves than formerly. The variometers are supposed to receive waves from 200-600 but I only receive up to 400. I also have some crackling in reception occasionally and can not clear it up with grid leak.—C. B., Wayland, Mich.

FROM your letter I am not sure exactly as to what your trouble is, but suppose that the crackling and short wave reception is what you wish to clear up.

The crackling, if not atmospheric or static, is caused by either dirt between the plates of your condenser, a very poor joint, but most likely a loose connection in the variometer or other part of circuit. This last look for carefully as it is hard to find at times. There may be another cause of the noise and that is old or defective B batteries.

To increase your wave length try some of the following—place your variable condenser in mutiple with your aerial and ground instead of in series. This will increase the wave length of the aerial and first variometer and enables you to tune by varying the condenser capacity. Or place a small condenser across either one or both of the variometers, in multiple and not series, using a condenser of about the capacity of .00025. This will increase the wave length of one or both variometers. In some case you may have to use condensers of greater value. Try different ones.

SET PROPERLY GROUNDED

In the BUSINESS FARMER we saw where you said to ground a radio wire to attach it to a water pipe or well. My grandson has made a radio and he fastened the ground wire to the pipe of the pump in cellar. Now we have a flowing well in cellar, it flows into two tiles. This pipe goes into the water but not into the ground. It is not driven nito the ground nor does not touch the ground. The wire is fastened to pipe with a clip, not soldered. Will you please tell me if this is safe and all right? If not please tell how to ground it. I thank you in advance. He has his aerial wire attached to peak of barn, but not very far from the lightning rod.—Mrs. F. A. C., Mason, Mich.

YOU do not need to worry about the ground connection, the main thing is to get the wire "grounded" to the earth water layer, and a pipe that reaches into this water is much better than a piece of pipe driven into the ground that does not touch water. He has a very good ground, especially if the pipe reaches into the water for a foot or two.

The connection at the barn should be made by a piece of rope and not covered wire.

It is advisable at all times to use a lightning arrester connected to the aerial and ground wires at all times. This will save damage to the set from lightning and also prevent lightning damage to the house. We have shown in our previous issues how this should be connected.

RADIO PROGRAMS

June 10—"What Federal Meat Inspection Means to the American Public," by Dr. W. N. Neil, Bureau of Animal Industry, U. S. Department of Agriculture. "What's Doing in Illinois," by H. C. Butcher, Director of Information, Illinois Agricultural Association.

June 13—"Making Future Dairymen," by Earl J. Cooper, Holstein-Friesian Association of America. "Among Our Neighbors," a regular weekly feature furnished by the Orange Judd Illinois Farmer—W. E. D. Rummel, Community Service Department, on "How Illinois Farmers and Business Men Co-operate."

June 16-17 — American Farm Bureau Federation Executive Committee.

June 20—"Queens of the Farm Home," by A. D. Folker, Montgomery Ward & Company. "Among Our Neighbors," a regular weekly feature furnished by the Orange Judd Illinois Farmer—Arthur C. Jage, Editor, on "The Rural Schools Situation in Illinois."

June 24—"Business in Live Stock Production," by Howard Leonard, Chairman of the National Live Stock and Meat Board. "How to Make More Money from Bees," by E. W. Atkins, G. B. Lewis Company, Watertown, Wisconsin.

The Business Farmer RADIO ROUND-UP

Please enroll me as a member of The Business Farmer RADIO ROUND-UP.

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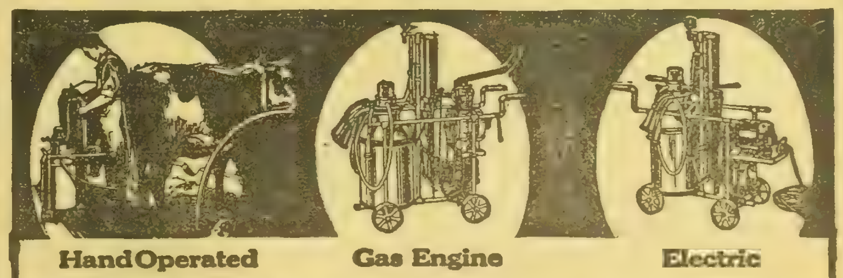

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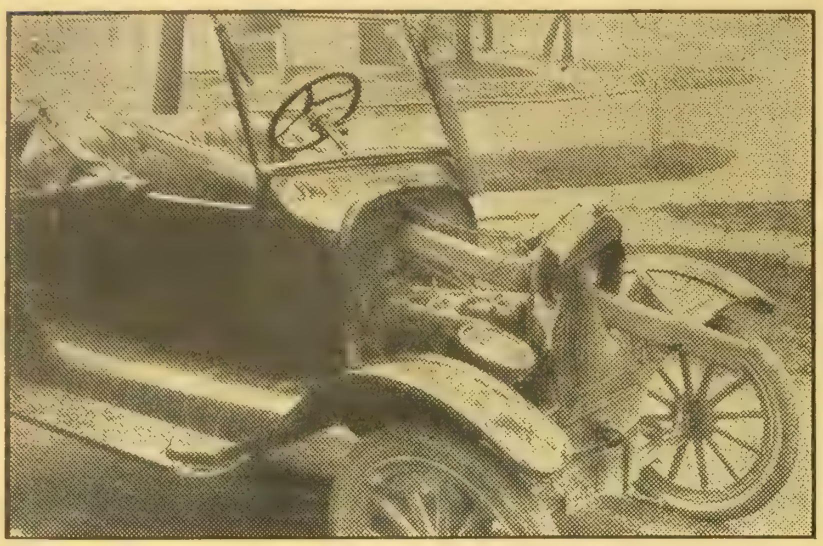

Highway Danger!

HAROLD CRANDALL, who lives on a farm a few miles from Howell, while driving toward Howell on May 17, saw a runaway team coming toward him. He drove to the right side of the highway and stopped. One of the horses attempted to pass on the right side and the other on the left side, the wagon tongue going through the radiator and front of the car, just missing Mr. Crandall, who was riding alone. The horses broke loose, leaving the car badly wrecked.

Mr. Automobile Owner, can you take the risk on the highway today without proper insurance? The above automobile was insured with the Citizens' Mutual Automobile Insurance Company of Howell. The company is now starting its tenth season and with one annual premium, which is very reasonable, it has accumulated total assets of $500,000 and paid over 19,000 claims since organization. It has an agency force in every county seat in Lower Michigan.

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Oh Money! Money!

by ELEANOR H. PORTER

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(Continued from May 24th Issue.)

"AS near as I can judge, young Gaylord is Bessie's devoted slave—until Mellicent arrives; then he has eyes only for her, which piques Bessie and her mother not a little. They were together more or less all summer, and I think Hattie thought the match was as good as made. Now, once in Hillerton, back he flies to Mellicent."

"And—Mellicent?"

Miss Maggie's eyes became gravely troubled.

"I don't understand Mellicent. I think—no, I know she cares for young Gray; but—well, I might as well admit it, she is ready any time to flirt outrageously with Hibbard Gaylord, or—or with anybody else for that matter. I saw her flirting with you at the party last Christmas!" Miss Maggie's face showed a sudden pink blush.

Mr. Smith gave a hearty laugh.

"Don't you worry, Miss Maggie. If she'll flirt with young Gaylord and others, it's all right. There's safety in numbers, you know."

"But I don't like to have her flirt at all Mr. Smith."

"It isn't the flirting. It's just her bottled-up childhood and youth bubbling over. She can't help bubbling she's been repressed so long. She'll come out all right, and she won't come out hand in hand with Hibbard Gaylord. You see if she does."

Miss Maggie shook her head and sighed.

"You don't know Jane. Jane will never give up. She'll be quiet, but she'll be firm. With one hand she'll keep Gray away, and with the other she'll push Gaylord forward. Even Mellicent herself won't know how it's done. But it'll be don,e and I tremble for the consequences."

"Hm-m!" Mr. Smith's eyes had lost their twinkle now. To himself he muttered: "I wonder if maybe—I hadn't better take a hand in this thing myself."

"You said—I didn't understand what you said," murmured Miss Maggie doubtfully.

"Nothing—nothing, Miss Maggie," replied the man. Then, with business-like alertness, he lifted his chin. "How long do you say this has been going on?"

"Why, especially since they all came home two weeks ago. Jane knew nothing of Donald Gray till that time."

"Where does Carl Pennock come in?"

Miss Maggie gave a gesture of despair.

"Oh, he comes in anywhere that he can find a chance; though, to do her justice, Mellicent doesn't give him—many chances."

"What does her father say to all this? How does he like young Gray?"

Miss Maggie gave another gesture of despair.

"He says nothing—or, rather, he laughs, and says; 'Oh, well, it will come out all right in time. Young folks will be young folks!' "

"But does he like Gray? He knows him, of course."

"Oh, yes, he likes him. He's taken him to ride in his car once, to my knowledge."

"His car! Then Mr. Frank Blaisdell has—a car?"

"Oh, yes, he's just been learning to run it. Jane says he's crazy over it, and that he's teasing her to go all the time. She says he wants to be on the move somewhere every minute. He's taken up golf, too. Did you know that?"

"Well, no, I—didn't."

"Oh, yes, he's joined the Hillerton Country Club, and he goes up to the links every morning for practice."

"I can't imagine it—Frank Blaisdell spending his mornings playing golf!"

"You forget," smiled Miss Maggie. "Frank Blaisdell is a retired business man. He has begun to take some pleasure in life now."

"Humph!" muttered Mr. Smith, as he turned to go into his own room.

Mr. Smith called on the Frank Blaisdells that evening. Mr. Blaisdell took him out to the garage (very lately a barn), and showed him the shining new car. He also showed him his lavish supply of golf clubs, and told him what a "bully time" he was having these days. He told him, too, all about his Western trip, and said there was nothing like travel to broaden a man's outlook. He said a great deal about how glad he was to get out of the old grind behind the counter—but in the next breath he asked Mr. Smith if he had ever seen a store run down as his had done since he left it. Donovan didn't know any more than a cat how such a store should be run, he said.

When they came back from the garage they found callers in the living-room. Carl Pennock and Hibbard Gaylord were chatting with Mellicent. Almost at once the doorbell rang, too, and Donald Gray came in with his violin and a roll of music. Mellicent's mother came in also. She greeted all the young men pleasantly, and asked Carl Pennock to tell Mr. Smith all about his fishing trip. Then she sat down by young Gray and asked him many questions about his music. She was so interested in violins, she said.

Gray waxed eloquent, and seemed wonderfully pleased—for about five minutes; then Mr. Smith saw that his glance was shifting more and more frequently and more and more unhappily to Mellicent and Hibbard Gaylord, talking tennis across the room.

Mr. Smith apparently lost interest in young Pennock's fish story then. At all events, another minute found him eagerly echoing Mrs. Blaisdell's interest in violins—but with this difference: violins in the abstract with her became a violin in the concrete with him; and he must hear it at once.

Mrs. Jane herself could not have told how it was done, but she knew that two minutes later young Gray and Mellicent were at the piano, he, shining-eyed and happy, drawing a tentative bow across the strings: she, no less shining-eyed and happy, giving him "a" on the piano.

Mr. Smith enjoyed the music very much—so much that he begged for another selection and yet another. Mr. Smith did not appear to realize that Messrs. Pennock and Gaylord were passing through sham interest and frank boredom to disgusted silence. Equally oblivious was he of Mrs. Jane's efforts to substitute some other form of entertainment for the violin-playing. He shook hands very heartily, however, with Pennock and Gaylord when they took their somewhat haughty departure, a little later, and, strange to say, his interest in the music seemed to go with their going; for at once then he turned to Mr. and Mrs. Frank Blaisdell with a very animated account of some Blaisdell data he had found only the week before.

He did not appear to notice that the music of the piano had become nothing but soft fitful snatches with a great deal of low talk and laughter between. He

(Continued on Page 17.)

OUR READERS' NEW BUILDINGS

Have you built any up-to-date farm buildings lately? If you have send us a picture of the new building and we will print it in this new department. It will show the M. B. F. readers what their distant neighbors are doing to change the scenery. And, incidently, you may be able to help some farmer decide the type of house, or barn, or other buildings he desires to put up. He may like the appearance of your building and will want the plan of it. Kodak pictures are all right if the details show up well. Do not send the negative, just a good print.

BARN ON FARM OF SIMON REISS, R. 1, FREELAND, MICHIGAN.

This barn has been built longer than the average that has appeared in this department; it was built in 1922. It is located on the farm of Mr. Simon Reiss, R. 1, Freeland, Michigan, is 80 feet by 32 feet and cost $2400. Send us a picture of your new house or barn for this department, won't you?

THE HIDDEN FOE OF YOUR COMMUNITY

A SERMON BY REV. DAVID F. WARNER

Text: "But I fear lest by any means, as the serpent beguiled Eve in his craftiness, your pure minds shculd be corrupted from the simplicity and the purity that is toward Christ." 2 Cor. 11:3.

SERPENT-LIKE, our crafty enemy steals upon us or lies concealed along our pathway. With his sinuous folds he presses in upon us from every side. He climbs lifty trees, swims widest rivers, and leaps from rocks over our head. And this subtle, writhing thing sometimes crawls into the hearts of meek-garbed Christians or hides itself on the lips of some feigned friend to fang us. How always present and vital is temptation! And how only can the habit of obedience to the simplicity and purity that is toward Christ save us!

But, for the purposes of this sermon, impurity is this hidden foe. So much for the growing purity of the nation's soul! But since the days of the first recorded sin, an under-current of impurity has been flowing in human life. Often, it has broken out into violent eruptions. Yes, I know, you are concerned little about it until some cesspool of vice breaks out in your community, or the snaky thing gets some unfortunate victim of your family. The doctors use to tell us it was the impure blood stream that caused the eruptions on the skin.

I wonder if spiritual society has a greater foe today? But it has gone on so long vitiating the bodies, minds, and morals of our young people; demoralizing society; and menacing the church; that some regard it as an impregnable foe, as baffling resistance, as being here to stay, as a necessary evil.

"Vice is a monster of so frightful a mien,
That to be hated needs but to be seen.
But seen too oft, familiar with her face,
We first endure, then pity, then embrace."

But, on a "So-help-me-God" basis, there is no evil that is necessary. There is a remedy for this condition. And not to consider this remedy, with its unique power, is to cry out, "Woe is me. Who shall deliver me?"

But, first, what are some of the contributing causes to this subterraneaon current of filth and indecency? Subjectively, of course, it is due to a heart lusting. "Everyone that looketh to lust," says Jesus, "committeth adultery already in his heart." How many a boy who helped to hold the Germans at the Marne, afterward invited the tempter into his heart. He could stand up against the Kaiser's steel, but he falls at the feet of the red-dragon of lust. But the objective causes? Well, the Methodists, now in general conference at Springfield, Massachusetts, give out the word that immodest dressing in women is doing much to increase the divorce and social evil. But that is no indictment. The church has ever taught that the indecently clad woman is blighting to the tender flower of modesty and a contributing factor to the loss of purity of character in the lives of many men. A man is not a man until he is personally pure, but he has a tremendous fight in some quarters because of gross improprieties in the dress of women. Dress, primevally speaking, is the consequence of sin and the antecedent of respectability. Adam caught up a few fig leaves to cover his nakedness. Afterward God provided him a more adequate covering in the skins of animals. The sin-atoning element in dress is its covering-up or concealing feature. In this way it helps to obliterate sex distinctions in spiritual society. You will remember the Pauline teaching, that in Christ there is no sex, no male or female. Therefore any dress in man or woman which suggests sensuality must be avoided.

But all causes have been accentuated since the war. War tendencies for men to lose the sense of moral responsibility for chastity of character. We astonished the world by our strict army regulations against venereal disease. But, notwithstanding, reports tell us that the results of illicit relations with women were, and are yet, terrible. These results were carried into every American community by the home-coming of the soldier boy. So, how widely extended and greatly increased is our sex problem!

But, again, walk into the popular book-store and ask the names of the best sellers. In pre-war days such books were read in stolen corners. Now, they are read openly, and are considered quite proper to talk about in social groups. And this vile fiction is doing its blighting work. But the stage and picture show are not one bit behind in their salacious tendencies. And then, the producers of this vicious fiction and art say they must pander to vice for profit's sake. What a reflection on sexual looseness in modern times! Well, when the social purity lecturer said that one girl falls every eight minutes and one boy every two minutes, and that ninety per cent of our children were human culls, physically, mentally, or morally; I felt he was over-reaching. But when I walked out and saw that group of cigarette-smoking, tobacco-soaked, booze-poisoned, and lewd-faced men standing in front of pool-rooms and on the street corners looking for leg-shows; and then, when I stepped into the theater and matinee and saw the dads of our Sunday school boys and girls feasting vulgar eyes on stage beauties, I felt, after all, if many such men were fathering our children, the lecturer might be right.

But what are we to do about it? Naturally and sensibly, apply the remedy for the sake of future generations. And that lies in throwing around our young life proper educational and environmental forces. The masses are ignorant. We must let in the light. We are fundamentally wrong in applying restrainsts unless we accompany with right education. We shall begin in the home. "The hand that rocks the cradle rules the world." (But, methinks it will be rather poor ruling unless our girls learn more of mothercraft). It is the home responsibility to teach children simply and constructively about sex-life. Did you say you couldn't because of not knowing how? Well, there is helpful literature for you, but, anyway, use common sense and go at it. Better make a few mistakes than to keep criminally silent. The growing mind of the child leads naturally to such questions as "Where did I come from?" And, "How did I get here?" And one day in a little group by the road-side one says, "I'll tell you if you don't tell dad or mother." You see, because parents keep silent, the children think the secret is evil. Then, in the language of street or play-ground incorrect information is given. Be frank, parents. Life closes up in the teens.

Some of our public schools are undertaking sex instructions in courses in physiolgy. This scientific instruction is helpful, or should be. But the sunday school with its millions of young people and a teaching force larger than the public schools, and with a message that always uplifts and purifies, can render distinctive service by giving needed religious sanction to this important work. A purity department in the sunday school could be of measureless force. It must not be a venereal clinic where young minds are dragged thru a moral sewer, but a place of constructive purity teaching where light is let in and sex ideals raised. Along with this let us have a community play-ground near the community church, in its atmosphere, and under its sanction. (We are now building one at the writer's church.) In directed play, we learn of the impulses and aspirations of our children, and these are the raw materials out of which we are to build the finished produce in Christian character. It seems that body and soul develop together. An unclean body means a polluted soul. We must cleanse the body thru the refining processes of the spirit.

This is to say, Christianity alone is the remedial power. Purity is one of her many graces. "Blessed

(Continued on Page 17)

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SATURDAY, JUNE 7, 1924

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>
> "The pressure on agriculture was not temporary, but 'arose from the operation of positive laws'—the system of taxation which 'operated almost exclusively upon the husbandman'; there were several taxes bearing excessively on the agriculturalist, such as the Malt Tax, which amounted almost to a prohibition—'a tax which operated most cruelly on the industrious peasant who could not obtain a drop of that invigorating beverage necessary to the discharge of his laborious functions.' In agriculture 'there was such a competition that the smaller farmers could not wait for a rise of price but must bring their goods to market immediately.' "
>
> "The distressed state of agriculture was formally called to the attention of the House on March 7th., by Western. He cited the number of writs and executions and farms untenanted. He said the primary cause—and the obvious cause—was the "redundant supply in the markets, a supply considerably beyond the demand, and that created chiefly by the produce of our own agriculture." He recommends two remedies, an increased price of grain and diminished taxation.*****"

WHAT you have just read above is not prophetic of an article which may be written some years from now, but is, in fact, statements made in the House of Commons in England following the close of the Napoleonic wars in 1814,—just one hundred and ten years ago!

There is an old adage which has been handed down through the generations which says "History repeats itself," and the older we grow, the more firmly we see the foundations on which these old axioms are laid.

It is rather encouraging, therefore, or should be, to find that the writer's account of this experience of five generations ago closed with these very succulent remarks:

> "So ended for this year the discussions on agricultural distress, and indeed the debates lost their interest before they were over. For now wheat began to rise, and by December the price was exactly double what it had been in January. Undeterred by their previous experience, one reads that by April 'the rapid rise in grain has already occasioned many applications in the home counties to take farm abandoner by occupiers.' "

After you have read the above, unless you have fully digested its meaning to you, read it again; it is a fact borne out by history that may make you a more contented man and which will at least endorse your good judgement in holding on and staying on your farm.

We sometimes wonder if, after all, man is the moulder of his own destiny. Time, tide, gravitation, the ceaseless procession of the seasons, the sweep of the scythe of time and the repetition of history make us question it!

THE BEAN GROWERS' OPPORTUNITY

ON page four of this issue Mr. Goulet, a man who knows beans and who ought to know beans if any man in Michigan does, points out that there is still a good gamble for the bean grower in the present market situation.

It is the opinion of the writer that most of the beans still being held in Michigan are stored in elevators, but owned by the grower's and he also points out, that there are many bean buyers in Michigan who have sold short and that in their desire to cover they will have to purchase a great many thousands of bushels of beans from present growers. If the bean grower will "sit tight" his chances of making an extra profit on his present bean crop according to Mr. Goulet seems fairly good.

In the first place, let us point out that in printing opinions of this kind THE BUSINESS FARMER does not accept any responsibility, because when it comes to guessing on a future market if our market editor were infallible we would take his opinion on the future of the wheat, corn, or bean market and by knowing in advance what was going to happen it would not be hard to soon rival John D. or Henry Ford in wealth.

It is a fact, however that a man in the position of Mr. Goulet ought to know more about the bean market than the average bean grower who is not in touch daily with the market in all parts of the country and his advice reprinted in columns of a publication which reaches growers ought to be at least food for thought.

One thing is certain and that is, that everyone connected with the bean industry in Michigan knows that things are not right; beans are not being sold at the price at which they should be sold, although we must admit they show a profit to the grower this past year which is not measured up to by some of the old-line staple crops that come in more direct competition with the products of the rest of the world.

There is a coupon on page four that we would thank every bean grower who is a reader to return to this office. The information he sends us will be guarded and used only to the advantage of the growers themselves. If we can get the price of beans yet to be sold from the 1923 crop up one, two or three cents per pound we would make a good many million dollars for the bean growers in this state and nothing, we can assure you, would give us more pleasure.

It should not take very long to clip out this coupon, put it in an envelope, spend two cents and get it into your market editor's hands. Of course, you don't have to do it, but if you don't help us in these business moves you only cheat yourselves—not us! Don't count on the other fellow! Don't say "Oh, they'll get enough information anyway," but do your share by sitting down right now and sending in that coupon if you have a bushel or more of beans stored anywhere. At the same time we would appreciate the acreage information whether or not you have any beans stored.

TAXES AND REFORESTATION

IN the present week's installment on taxation in Michigan by Mr. Stanley M. Powell, an interesting phase in its regard to agriculture is brought out in the discussion of reforestation.

It is obvious that the present high rate of the general property tax leaves no possibility for the land owner to reforest his property at a profit to himself.

A measure was vetoed by the governor last season, because he did not believe it adequate, which would have made land under reforestation free from general taxation, a movement which had the support of every thinking man in Michigan, including, fortunately, both sides of the legislature.

Michigan is not unlike other states in that we have a great many thousands of acres which could best be devoted to the production of lumber. When it is considered, as Mr. Powell points out, that over fifteen million dollars was spent in freight alone, for lumber coming into Michigan, principally from the Northwestern states; it would seem perfectly clear that this is a subject which deserves attention and must be given it.

Some credit ought to be given to Senator James Couzens for the interest he has taken in this subject, being a member of the national committee and spending considerable of his time and energy on this important subject, not only in regard to Michigan but to the national situation at large.

Over seven hundred thousand acres, mostly of cut-over land, have already reverted to the state because of their owners' refusal to pay taxes, the land not being worth what it is taxed.

How can a state expect to exist when such a condition is continued?

Michigan once held a high place in the production of lumber in this country. We can grow the finest quality and on land which is not valuable at this time for any other purpose. Why then should we not be looking fifty or one hundred years ahead and providing for future generations a supply of lumber which will probably come at a time when the West faces a cut-over problem such as we in Michigan face today? The lumber supply out there cannot last always and we might as well be looking into the future, and if the state can help to this end it certainly should be willing to do it.

This is a subject which local farm organizations and granges should be taking up for active discussion during the present season. We will have more to say of it from time to time in these columns.

BABY CHICKS

OWING to the lateness of the present season there is still ample time to order baby chicks and be assured of a strong, healthy brood, which will mature in time for a profitable market.

This has been an exceptional year in Michigan and we are from two weeks to a month behind in climatic conditions in practically all sections of the state. The month of June, therefore, becomes an ideal time in which to purchase, at the low prices which are offered by the many hatcheries, a quantity of these profit makers.

The importance of poultry and eggs as profit producers on the farms in this state have never been more emphasized than during the past year, when it is literally a fact that a great many families have found their chief cash return from the products of their poultry yards that were once considered "pin money" for the women and children of the house.

Poultry supplies have sold on the city markets in Michigan at a fair price and there is every indication to believe that this market will be strengthened during the present season.

Next to the dairy cow, the hen has become the most prolific gold mine on the farms of Michigan!

It is possible to buy from the hatcheries strong, healthy chicks which are delivered in good condition by parcel post within twenty-four hours to the door of practically any farm home in Michigan. If you have never bought baby chicks by mail try it once and in our opinion you will be through with the "old-mother-hen" method for the rest of your days. The baby chick method has become so popular with so many thousands of farmers, particularly in Michigan, that no state can rival us in number of successful commercial hatcheries, which are shipping to all parts of the United States.

THOUGHTS FER THE DISCURAGED FARMER

(Written in 1889)

By James Whitcomb Riley

THE summer winds is sniffin' round the bloomin' locus' trees;
And the clover in the pastur' is a big day fer the bees,
And they been a-swiggin honey, above board and on the sly,
Tel they stutter in theyr buzzin' and stagger as they fly.
The flicker on the fence rail 'pears to jest spit on his wings
And roll up his feathers, by the sassy way he sings;
And the hoss-fly is a-whettin'-up his forelegs fer biz,
And the off-mare is a switchin' all of her tail they is.

You can hear the blackburds jawin' as they foller up the plow—
Oh, theyr bound to git theyr brekfast, and theyr not a carin' how;
So they quarrel in the furries, and they quarrel on the wing—
But theyr peaceabler in pot-pies than any other thing;
And its when I git my shotgun drawed up in siddy rest,
She's as full of tribbelation as a yeller-jacket's nest;
And a few shots before dinner, when the sun's a-shinnin' right,
Seems to kindo-sorto sharpen up a feller's appetite!

They's been a heap o'rain, but the sun's out today
And the clouds of the wet spell is all cleared away,
And the woods is all the greener, and the grass is greener still;
It may rain again to-morry, but I don't think it will.
Some says the crops is ruined, and the corn's drowned out,
And propha-sy the wheat will be a failure, without doubt;
But the kind Providence that has never failed us yet,
Will be on hands onc't more at the 'leventh hour, I bet!

Does the medder-lark complane, as he swims high and dry
Through the waves of the wind and the blue of the sky?
Does the quail set up and whissel in a disappinted way,
Er hang his head in silence, and sorrow all the day?
Is the chipmuck's health a-failin'? Does he walk, er does he run?
Don't the buzzards ooze around up thare jest like they've allus done?
Is they anything the matter with the rooster's lungs er voice?
Ort a mortal be complainin' when dumb animals rejoice?

Then let us, one and all, be contented with our lot;
The June is here this morning, and the sun is shining hot.
Oh! let us fill our harts up with the glory of the day,
And banish ev'ry doubt and care and sorrow fur away!
Whatever be our station, with Providence fer guide,
Sich fine circumstances ort to make us satisfied;
Fer the world is full of roses, and the roses full of dew,
And the dew is full of heavenly love that drips fer me and you.

PUBLISHER'S DESK

SIGN YOUR NAME

I WAS just talking with the circulation manager and he told me that hardly a day goes by that his department does not receive a letter from a subscriber containing money to renew his subscription and he FAILS TO GIVE HIS COMPLETE NAME AND ADDRESS. There is no way of telling who the subscriber is so we must wait until he writes. In the meantime the man who sent his money to us begins to think that we have his money and do not intend to send him his paper. Maybe after a few weeks he writes us a very threatening letter, or maybe he decides to "let 'em keep the money, if they can be bought that cheap. I'll have nothing to do with them in the future and try to keep them from roping any of my friends." We want you to get your paper and will do anything within reason we can to get it to you but we must have YOUR NAME AND ADDRESS. And be sure to sign it plainly.

NEW BAIT

I am asking you if you could inform me as to what kind of company, what its business is, by the name of "Empire Service Company", 106 East 18th St., New York, N. Y. I have two letters from them inquiring for persons saying they have a lost package to deliver to them. I don't know how they got my name and don't know the persons. Could you please tell me anything about them? It seems so funny that they would have a lost package for any one in Jackson who was never in New York. I did not know them and I wanted to know their business. Thank you.

WE wrote the above company two months ago, but nary an answer! That leads us to believe, that we have discovered a new bunch of sucker-bait which is being dangled here in Michigan. Sounds a little like the "lost-heirs" or "you-have -won -first -prize-in-our-contest" schemes, set to new music!

MANICOPY TYPEWRITER COMPANY

I am writing to ask if you can tell me whether or not the American Manicopy Typewriter Company of Chicago is a reliable firm. They are sending out literature asking people to buy shares in it, offering 8% dividends immediatly upon the issuance of stock. All checks are to be made payable to S. W. Cochran & Co., 29 South La Salle Street, Chicago, Illinois.

I am a reader of THE BUSINESS FARMER and having read your advice to others, I thought perhaps you could advise me regarding this firm.

THIS is not the first inquiry we have had in regard to the American Manicopy Typewriter Company stock, which is being sponsored by the brokers named in this readers inquiry. Evidently they have showered the rural mail boxes of the state with their stock-selling literature.

One reader wrote that if he could only sell his farm he was going to put his all into this company and if they would pay 8% per annum on his investment as they promised, he could live very nicely in the nearby village.

Frankly, we know little about this company, its brokers or its stock. We are under the impression however, that it is for the marketing of a new invention which it is hoped will become as common and profitable as the cash register or the adding machine. Maybe it will and if they have sold stock to farmers in Michigan, we certainly hope it will!

The Collection Box

The purpose of this department is to protect our subscribers from fraudulent dealings or unfair treatment by persons or concerns at a distance.

In every case we will do our best to make a satisfactory settlement or force action, for which no charge for our services will ever be made, providing:

1.—The claim is made by a paid-up subscriber to The Business Farmer.
2.—The claim is not more than 6 mos. old.
3.—The claim is not local or between people within easy distance of one another. These should be settled at first hand and not attempted by mail.

Address all letters, giving full particulars, amounts, dates, etc., enclosing also your address label from the front cover of any issue to prove that you are a paid-up subscriber.

THE BUSINESS FARMER, Collection Box
Mt. Clemens, Mich.

Report Ending June 2, 1924

Total number claims filed	2489
Amount involved	$24,1[illegible]2
Total number claims settled	1987
Amount secured	$22,689.18

But the trouble with any new invention of this kind is that it may not prove a commercialy profitable success. For every Burroughs Adding Machine Company or National Cash Register Company success there are a thousand dismal failures, many of which started with even more promise.

Why should the farmers of Michigan be called upon to finance a new office improvement? Why should they go up and down the highways and byways of Michigan looking for the small investor with from a hundred to a few thousands, when in the city of Chicago alone there are two or three hundred thousand men and women who work in offices, have small savings to invest and who are familiar with the demand for such a machine as this company claims it has?

We do not know whether or not the American Manicopy Company stock has been passed on the Michigan securities commission. We will find out immediately, but our readers must remember what Mr. Duff pointed out in his letter to this department only a few weeks ago, THAT A COMPANY MAY SELL STOCK BY MAIL IN MICHIGAN WITHOUT HAVING PASSED THE SCRUTINY OF THE SECURITIES COMMISSION!

There are many safe investments offered the farmers of Michigan who have spare funds to invest. Investments that are recognized by banks, trust companies and insurance societies as suitable investments where the maxium of security is present. There is no excuse for any farmer investing his funds in a new and unproven company, unless he is investing only a sum which he can well afford to gamble on. In that case, we suggest he go somewhere, where the lights are bright and the table green, where the wheel spins, the little ball rolls and he makes or loses on whether it lands in the black or red. There is at least excitement in that and you have practically a fifty per cent chance of winning, which is more than many an investor has had in a new company, a new gold mine or an old oil well!

D. F. BUSH, MINNEAPOLIS

"WANTED to hear from an owner of a farm for sale. No agents," same old story! You'll find this and similar advertisments in the columns of country papers, city dailies, and even some farm papers that ought to know better.

We have told you about the scheme so often, but of course every week sees many new readers added to THE BUSINESS FARMER family, so here goes.

These advertisers are after a listing fee. They ask you to pay them from $2 to $20 to list your farm, promising you to send you buyers, advertise your farm in a new catalog they are printing, etc., etc. Some even get so excited about getting ahold of your money that they use the telegraph wires to tell you that they already have a buyer to send you and are only awaiting your listing fee.

Steer clear of all of them!

We have a standing offer that we will run an advertisement free at the head of this column to any so-called real-estate agent who can prove that he has satisfied one out of every hundred persons from whom he has taken a listing fee in Michigan. So far we have never had to run that ad at the head of this column!

Dear Sirs:— Relative to the information on the enclosed card I am pleased to state that this day I have received a check from the ——— for the original amount paid for the chicks. Feeling myself very greatly indebted to you for the service you rendered me in this matter, I remain, Respectfully yours. E. L. B., Howell, Mich.

First Mortgage Real Estate Gold Bonds

For a good many years farmers have known and dealt with this house. Never once has there been a dollar's loss of principal or interest.

Write for Booklet AG1230

Tax Free in Michigan
Free from Federal Income Tax of 4%

7%

Federal Bond & Mortgage Company

(1230)

FEDERAL BOND & MORTGAGE BUILDING, *DETROIT*

Are You Using Our Service and Protective Bureau?

Have you any perplexing farm or business problems? Then call on our Service Bureau.

Thousand of THE BUSINESS FARMER readers have learned that THE BUSINESS FARMER is more than a high class farm paper. It is a friend as well, one who serves—and never fails in time of need.

As a subscriber to THE BUSINESS FARMER, you are entitled to all the rights and benefits of our Service Bureau. We want you to use this service—call on us freely.

JUST A FEW THINGS IT WILL DO FOR YOU

Will furnish you protection from swindlers, fake peddlers, and promoters.

Tell you about any investment or stock selling scheme. Invest no money in any scheme before you nave asked THE BUSINESS FARMER Protective Service about it.

Aid you in collecting any claim you may have against any insurance, railroad, express or other company.

Aid in the collection of obligations.

Help you in the adjustment of claims.

Give you prompt information and advice about any crop, soil, livestock, dairy, or poultry problem.

Furnish expert market information whenever you have something to sell.

Help you with any building construction or farm machinery problems you may have.

Tell you the law and custom on all questions of rents.

Answer any question with regard to home or community life, schools, canning, cooking, preserving, or housework in general.

Give you correct information on any farm subject and will help you in trying to settle and farm, health, or legal trouble of any sort.

Protective Sign and Certificate

We want every reader of The Business Farmer to have one of our beautiful certificates of membership and a Protective Service Sign. The certificate is suitable for framing and will be mailed free of charge.

The Protective Service Sign acts as a warning to swindlers and fakers and informs all that you are a member of an organization of power and influence that will stand with you in support of your rights. We are asking a small charge of 25 cents to cover cost of sign and mailing.

THE BUSINESS FARMER,
Mt. Clemens, Michigan.
Gentlemen:—

Check for either or both the certificate and sign.

☐ Please mail me a membership certificate free of charge.
☐ I would also like one of the Protective Service signs and am enclosing 25 cents to cover cost of sign and mailing.

Name ___________________________

P. O. ...., Mich

BEFORE AND AFTER MARRIAGE

By Anne Campbell

WE used to talk of so many things,
Roses and summer and golden rings,
Music and dancing and books and plays,
Venice and moonlight and future days.

Now our chief subjects are food and bills,
Genevieve's measles, and Johnny's ills,
New shoes for Betty, a hat for Jane,
Taxes, insurance, the mail, and rain!

We used to say that Romance would stay,
We'd walk together a magic way!
Though we don't talk as in days of yore,
Strange, is it not, that I love you more!

(Copyright 1924, by Detroit News.)

HOW LONG DOES DISHWASHING TAKE?

HAVE you ever timed yourself washing dishes, to see whether there was any way of shortening the work? Or noticed what motions you make with your hands during this and other daily jobs? Or how many steps you take in connection with a meal, particularly when you are clearing the table and washing the china and other utensils used during the meal and its preparation? Every motion requires energy and unnecessary motions use up unnecessary energy, leaving one fatigued with no real gain. When acutal minutes are saved, they can be put to more interesting uses than the routine of daily dishwashing.

Try the way you are now doing the work suggests the United States Department of Agriculture, observing as you go whether there are any motions made which could be eliminated, or if any part of the process could be shortened. Those who possess dishwashing machines expect to leave the dishes to dry themselves after being washed and rinsed with very hot water. This principle can be applied perfectly well to dishes draining in a basket if a kettleful of clean hot rinsing water is poured over them. The process of wiping can then be entirely eliminated, except possibly for the glass and silver. Fewer towels are thus used, so that the amount of washing of tea-towels is reduced.

Right-handed persons ordinarily hold what they are washing in the left hand, and apply the mop or dish cloth with the right, so that when the dish is set on a drain board at the left they do not have to cross their hands. In spite of this simple and obvious way of doing the work, it is common to find in houses offered for sale or for rent a right-hand drain board, installed probably by some masculine architect who did not think out the process of doing the work or consult any woman about it. Having two drain boards, or a drain board at the left and a level shelf at the right hand side of the sink for stacking the soiled dishes is even more convenient than having only one drain board.

When the housekeeper has to heat all the water she needs, steps may be saved by placing the sink fairly near the stove, and by bringing all the dishes from the dining-table into the kitchen on a tea-cart. Utensils that hang up should be put on hooks on the wall right over the sink; and if all the pots and pans were washed before the meal is served, the time for the entire job of dishwashing is greatly shortened.

When the clean dishes are set in a drain basket and scalded the task will be done, as nearly all of them will probably be wanted on the table for the next meal. If the china is to be put away, a set of shelves within reach of the sink will save many steps.

MAKE THE MEAL INTERESTING

BECAUSE of the varied food needs there is a demand for contrasts between foods of the different courses or dishes of a meal. It is not wise to serve the same food twice in a meal, even though it is prepared in different ways, e. g. apple salad and apple bettie, or bean soup and baked beans. This leads to monotony rather than variation or contrasts. Neither is it desirable to serve the same preparation, e. g. scrambled eggs for breakfast and luncheon, or hash for breakfast and luncheon on the same day.

In case of breakfast for example, if fresh fruits cannot always be served it is better to alternate the fresh fruit with the canned or stewed rather than to have fresh fruit several days in succession followed by canned or stewed for a number of days. The same can be said in regard to cereals when both cooked and uncooked are used.

There should also be variety in the flavor of the food selected as well as in the materials used. For example, potato, rice, and maraconi, are all high in starch and also resemble each other too closely in consistency and texture as well as being all bland in flavor. Bland dishes should be supplemented with more highly flavored dishes to relieve monotony.

When two or more vegetables are used in the same meals they should be different. Sweet potatoes and white potatoes do not belong in the same meal though they are often served together. It would be much better to serve contrasting vegetables such as spinach or cabbage.

In addition to the contrasts the foods should have flavors that go well together. This is where the provider's "imagination" comes into play for the best results.

Contrast and harmony in color in general appearance makes the meals more interesting.

A combination of moist and dry foods, e. g. creamed potatoes is not as good a combination with a meat stew as it is with a broiled steak.

Contrast in temperature of dishes also adds interest.

The Farm Home
A Department for the Women

Edited by MRS. ANNIE TAYLOR

DEAR FOLKS:—I want to thank the many good readers of our department for responding so promptly to the various requests for help we have had recently. So far there has not been a request published in this department that has not been answered, and as a rule there has been several answers to each question. And each and every answer has been appreciated I can assure you. I want you to all feel free to use this department whenever it can be of value to you. Send in your questions and I will promise you an answer. I feel confident in making this statement because somewhere among my readers some one has the answer to your question and if your question appears in this department the answer will be sent in. The other day I received by parcel post a lovely bouquet from Mrs. Henry Cochran, of Alpena county, and I take this opportunity to thank her. She must know that flowers are one of my weak spots.

Your Friend,
Mrs Annie Taylor

Address letters: Mrs. Annie Taylor, care The Business Farmer, Mt. Clemens, Michigan.

CULTIVATING HEALTH ON THE FARM

A SHORT time ago two sons of a leading farmer were taken sick with infantile paralysis. One died within a few days; the other still lives, but is completely paralyzed below the waist. A survey of that farm showed that the barnyard contained all kinds of farm animals, including some hogs that spent most of their time in the shade by the house. Flies were found in great numbers. Judging from the best knowledge we have, flies may have carried the disease. Conditions on many farms, even if not dangerous to health, are unsightly, and should not be tolerated by self-respecting families.

The laws of health are simple, but they must be well learned. A little knowledge is often dangerous.

In some respects the work of public health has lagged behind in the rural communities. In large measure this is due to the apparent difficulty in securing sufficient results to make it pay; in part it is due to more or less blind faith in the efficacy of pure fresh air. In Hygia Dr. C. M. Siever gives some really practical suggestions for developing rural health districts, and good reasons why public health work is so important. He says: "The human body is in one way similar to any piece of machinery. It must be given proper fuel in proper amounts and protected from all harmful outside influences. It is well known that a machine will not last long if it is not properly looked after. For this reason the owners of fine machinery find it cheaper to employ the most skilled engineers at high prices than to trust it to unskilled hands at cheaper rates. Just so the human body needs looking after, and it should be done by men who are qualified and who are watching and studying the movements of the machinery all the time.

"This does not mean that all the work need be done by the health officer, but it does mean that the health officer must be on full time, that he may direct the work and see that it is all done. It means further that in the near future all physicians will be devoting more time to the prevention of disease instead of to the attempt to cure it."

Personal Column

Getting Rid of Bed Bugs.—Many of our readers sympathize with Mrs. C. R. of Adrian if the number of answers I have received to her question published in this department is an indicator. Every answer is greatly appreciated and I am publishing several of them below for the benefit of Mrs. C. R. and others who might be interested:

As I am interested in your paper and a regular sister helper I write for the benefit of Mrs. C. R. of Adrian, Mich., how to get rid of bed bugs. Take about 1 quart of kerosene oil and add 1 tablespoon of carbolic acid and mix well. Put in an oil can with a long spout and pour in all cracks or places where the bugs can get. This will kill all bugs or eggs. Take a brush and brush some of the mixture around the baseboard and on the floor out to about six inches from the base board as they inhabit the floor as well as the beds. This leaves no stain and does no harm.—Mrs. L.

As I was looking over The Business Farmer I noticed the request for a bed bug recipe. I will send you the recipe of what I used to get rid of the ones we had in our house. It was an old house that wasn't plastered and we tried about everything without success. My nephew brought me a quart of Peterman's Bed Bug Discovery from Saginaw. It can be purchased from either Montgomery Ward and Co., or Sears, Roebuck and Co. Apply it with a small oil can with a long spout on it. It not only kills the bugs but the nits. If you have the catalogues of the two mail order houses you will find it advertised on page 263 in the Montgomery Ward and Co. catalog and on page 482 in Sears, Roebuck and Co. catalog. It works wonders. It will not leave a spot on the wall paper very long.—Mrs. G. F., Coleman, Mich.

Oil of Cedar is a sure exterminator of bed bugs and you will not have to use it very often. They will never appear again.—Mrs. E. G., Montrose, Mich.

I see one of your readers would like to know how to get rid of bed bugs. I find that elm dissolved in water and put on with a feather or little brush will soon kill them.—Mrs. J. W., Weidman, Mich.

Just buy the insect powder that is put up to kill flies and squirt it on the beds and in the crevices. It is a sure remedy. —Mrs. T. T., Merritt, Mich.

If Mrs. C. R. will apply denatured alcohol with a machine oil can on bed, springs, mattress and on the floor where beds stands, as well as any place where she thinks the bug might be, I am sure they will disappear at once.—Mrs. B. M., Charlotte.

I got the following from a furniture dealer; and used with success: 14 ozs. formaldehyde and 2 ozs. permagnate potash. Place in a gallon jar and set on bricks and leave in the house or room for 6 or 7 hours, then open doors and windows.—Mrs. F., Clayton, Mich.

Wants Part For Phonograph.—I have an Edison phonograph that plays 2 minute records and I would like to know if you could help me find a 4 minute reproducer.—Rudolph Hansen, R. 1, McBride, Mich.

Salad Dressing.—I noticed a request from Mrs. J. E. S., Manistee, for a salad dressing that would keep. Am sending recipe for one that I never knew to spoil. 2 eggs well beaten, 1 cup vinegar, 1 teaspoon mustard (powder), one-half teaspoon salt. Set in hot water and cook. Cool before using. Thin with cream or milk as desired.—A Friend of Business Farmer, Elsie, Mich.

Another Salad Dressing.—3 eggs, 1 cup granulated sugar, 1 cup vinegar, small piece butter, scant tablespoon prepared mustard, 1 tablespoon of flour. Stir sugar flour and mustard until smooth, add vinegar, butter and beaten eggs and cook in double boiler stirring until thick and smooth. Thin just what you use at one time with rich milk. Will keep a long time in a cool place.—Mrs. O. A. K., Gobles, Mich.

Gloves and Mittens.—I see Mrs. Horton's request for canvas, etc. If she is just making them for her own men's use any woolen or overall goods would do. I always save the wrists from old canvas gloves and turn inside out and sew to upper part. I rip an old glove for pattern and if I have no wrists on hand I use upper ribbed part of men's hose doubled and sew on. I also make all my men's mittens of new or partly worn wool goods, and for real cold weather line them with odds and ends of warm goods. This saves many a dollar during the season for my men husk corn. Hoping this will help her and others.—Mrs. G. M., Vicksburg, Mich.

To Take Hair Off Upper Lip.—Please let me know if there is anything that will take hair off on upper lip? Can any of the readers give me this information?—Miss F.

Page Getting Better.—Our page is getting better and better. I can hardly wait until my next number comes.—Mrs. M., Vicksburg, Mich.

—if you are well bred!

The Fork: It's Proper Employ.—The fork is, first of all, the vegetable table implement. Accepted custom practically everywhere regards the following fork facts as socially warranted: The best American usage shows the increasing tendency to follow the English custom and take the fork in the left hand to raise food to the mouth (on the outer edge of the prongs) the knife assisting, avoiding the necessity of shifting the fork to the right to lift food which has been cut.

Food should be raised to the mouth on the upper, not the lower side of the prongs.

The fork prongs when eating should give no more audible indication of their presence than the spoon of the soup bowl.

Meat is always impaled on the down-turned prongs of the fork to be carried to the mouth; the implement must not be employed spade fashion.

To raise vegetables to the mouth, the fork is used with prongs up-turned.

The fork is never used to mash food on a plate.

When not used the fork (or knife) always lies on the plate, never with its prongs on the plate-edge and its handle on the cloth.

When butter is taken for baked potatoes, it should be "scooped" by the tip of the fork: the knife is not used for this purpose.

In case of soft meat dishes, i.e., where meat appears in the shape of meat-loaf, patties, croquettes, hash, etc., the fork is used both as a fork and as a knife. It cuts or parts the crust or form with its edge, knife-wise, and is then turned in the hand and used as a fork proper.

When eating lettuce the fork is used to fold over the leaves and carry them to the mouth. When a leaf is too large to fold, the blunt edge of the fork may be used to cut it. Lettuce is never cut with a knife.

Fork and knife, when the eater has finished using them, should be put close together on the plate. The handles should be turned toward the side of plate; the fork should be turned up and the knife-blade in, toward fork. The handles of knife and fork should extend an inch or so beyond the rim of the plate. It is in this position that they also appear when the plate is sent back for a second helping at a meal.

Menu for June 7th

Boiled Salmon, Egg Sauce
Creamed Potatoes New Peas
Dressed Lettuce
Cheese Crackers
*Chocolate Bread Pudding
Coffee

***Chocolate Bread Pudding.**—¾ cup bread crumbs, 2 cups scalded milk, 2 squares melted chocolate, 2 eggs, 1 tablespoon fat, salt to taste, ½ teaspoon vanilla, ¼ cup cold milk, ¾ cup sugar and ½ cup Sultana raisins. Mix all ingredients in order given. Pour into a greased baking dish, set into pan of hot water, and bake 1 hour in moderate oven; stir twice during baking to keep chocolate from rising to the top.

RECIPES

Bean Salad.—One quart cooked beans (the red kidney), three eggs hard boiled, six cucumber pickles (use ones ready for the table), two onions chopped fine. Grind pickle, onion and egg through food chopper. For dressing use two eggs, one cup sugar, ½ cup vinegar, one tablespoon butter, salt and pepper. Cook dressing in double boiler until smooth.—Mrs. O. A. K., Gobles, Mich.

Apple Dumplings.—The baking powder biscuit dough (2 cups flour, 2/3 cup milk or water, 4 teaspoons baking powder, 2 tablespoons fat, ½ teaspoon salt) may be rolled into a thin sheet, and cut into pieces for apple dumplings. One half a large apple, peeled and quartered is enough fruit for one dumpling. Fold the dough over the fruit. Bake 30 minutes in not too hot an oven. Peaches or cherries are excellent when used the same way. Serve with whipped cream and sugar or fruit sauce.

Griddle Cakes, Corn Meal—1½ cups flour, 1 cup cornmeal, 2 cups water, 4 teaspoons baking powder, 2 eggs, 3 tablespoons fat, 1 teaspoon salt, ⅛ cup sugar. Cook the corn meal and water five minutes. Add milk, dry ingredients and eggs well beaten. Stir well. Bake on hot griddle.

Hot Cross Buns.—One cup scalded milk, one-fourth cup sugar, two tablespoons butter, one-half teaspoon salt, one-half yeast cake dissolved in one-fourth cup of lukewarm water, three-fourths teaspoon cinnamon, three cups flour, one egg, one-fourth cup raisins stoned and quartered or one-fourth cup currants. Add butter, sugar, and salt to milk; when lukewarm, add dissolved yeast cake, flour, cinnamon, and egg, well beaten: When thoroughly mixed, add raisins, cover, and let rise over night. In morning shape in forms of large biscuits, place in pan one inch apart, let rise, brush over with beaten egg, and bake twenty minutes: Cool and with ornamental frosting make a cross on top of each bun.

The Runner's Bible

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Behold, I make all things new. Rev. 21:5.

Physiologists tell us that every cell in the human body is replaced by a new one every few months, that we are actually, wholly remade. We are further informed by scientists of another sort that whether or not the new cell is perfect, rests entirely with us—with the "mind of the flesh"—its character is determined by that which we hold in our thoughts. Thus if health and perfection are in our consciousness, health and perfection will be manisfested. If, however, we picture disease and imperfection—then these things are likely to appear.

WOMEN'S EXCHANGE

IF you nave something to exchange, we will print it FREE under this heading providing: First—it appeals to women and is a bonifide exchanges, no cash involved. Second—it will go in three lines. Third—You are a paid-up subscriber to The Business Farmer and attach your address label from a recent issue to prove it. Exchange offers will be numbered and inserted in the order received as we have room. —MRS. ANNIE TAYLOR, Editor.

118—Pattern quilt block, "Sage Bud" for 2 spools black thread, No. 40, or offers.—Mrs. Geo. Morgan, R3, Vicksburg, Mich.

AIDS TO GOOD DRESSING

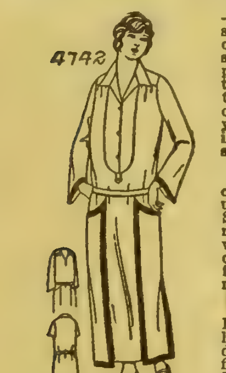
BE SURE AND SEND IN YOUR SIZE

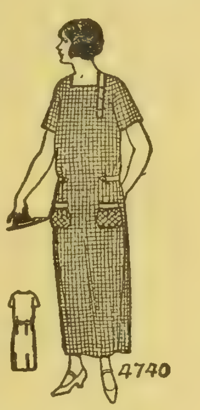
4731-4651-4658. A Jaunty Suit and Blouse.—This suit is comprised of Ladies Blouse 4731, Ladies Skirt 4658 and Ladies Jacket 4651. One could use alpaca or tweed for Jacket and Skirt and silk broadcloth or crepe de chine for the Blouse. The width of the Skirt at the foot with plaits extended is 2⅛ yards. The Skirt is cut in 7 Sizes: 25, 27, 29, 31, 33, 35 and 37 inches waist measure with accompanying hip measure, 35, 37, 39, 41, 43, 45 and 47 inches. The Blouse is cut in 6 Sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. The Jacket is cut in 6 Sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. To make the Suit (Skirt and Jacket) material 40 inches wide, for a medium size, will require 5¾ yards. To make the Blouse of 32 inch material will require 2¾ yards.

4742. A Stylish Dress for Mature Figures.—Here is a model with new features, comfortable lines and good style. It may be finished with or without panels, and may have the sleeves in wrist length, or very short. The vest and collar may also be omitted. This is a good model for crepe weaves, for linen, ratine and alpaca. The Pattern is cut in 7 Sizes: 36, 38, 40, 42, 44, 46 and 48 inches bust measure. A 38 inch size requires 5¼ yards of 36 inch material. Without vest and collar 4⅝ yards are required. With short sleeve 4⅝ yards are required. The width of the dress at the foot is 2⅛ yards.

4740. A Neat and Pretty "Apron Frock".—Gingham, the season's popular material, was chosen for this garment. In green and white or brown and white gingham, this would be very pleasing with trimming of linene and rick rack braid in self color or white. The Pattern is cut in 4 Sizes: Small, 34-36; Medium, 38-40; Large, 42-44; Extra Large, 46-48 inches bust measure. A Medium size requires 4⅛ yards of 32 inch material. The width at the foot is 2 yards. For band on pocket, and at the opening, and for belt ⅛ yard of contrasting material 36 inches wide is required.

4745. A Practical Apron Model.—This style is good for percale, gingham, unbleached muslin, lawn or sateen. It may be trimmed with bias banding or with rick rack braid. The Pattern is cut in 4 Sizes: Small, 34-36; Medium, 38-40; Large, 42-44; Extra Large, 46-48 inches bust measure. A medium size requires 3 yards of 36 inch material.

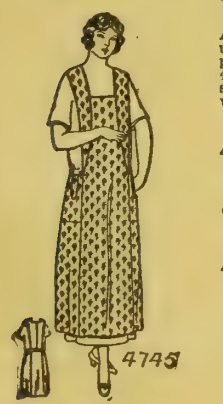


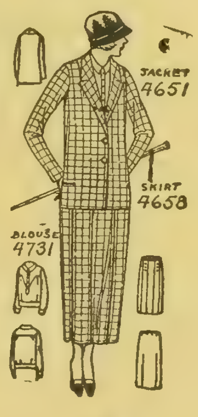


4754. A Smart Frock for the Growing Girl.—To the girl who likes something different, this style will appeal. It has the hip band extensions on the waist, and the popular side closing. The sleeve is very attractive in wrist length and equally pleasing in its brevity. This model is nice for the new prints and crepe weaves. It is also attractive in gingham and linen. The Pattern is cut in 4 Sizes: 8, 10, 12 and 14 years. A 10 year size requires 3½ yards of 32 inch material, if made with long sleeves. If made with short sleeves 3¼ yards is required.

4736. A Cool, Comfortable Play Suit.—Linen, chintz, printed voile, pongee or percale could be used for this model. The Pattern is cut in 3 Sizes: 2, 4 and 6 years. An attractive development would be henna and white checked gingham with white bands finished with lines of henna cross-stitching for trimming. To make this model for a 6 year size requires 2⅛ yards of 32 inch material.

746. A Pretty Frock for Many Occasions.—For afternoon or evening wear this model is delightful. It is pretty in changeable taffeta, crepe de chine, chiffon or in the new printed voile or figured silks. The puff sleeves may be omitted. The Pattern is cut in 3 Sizes: 16, 18 and 20 years. An 18 year size requires 5⅛ yards of material 32 inches wide. The width at the foot of the dress is 2¾ yards.





4756.—A New and Charming Bathing Suit.—Alpaca, pongee, jersey crepe or flannel may be used for this comfortable bathing suit. The panels may be omitted. This Pattern is cut in 4 Sizes: 8, 10, 12 and 14 years. A 12 year size requires 3⅛ yards of one material 40 inches wide. For the breeches of contrasting material ¾ yard 54 inches wide is required.

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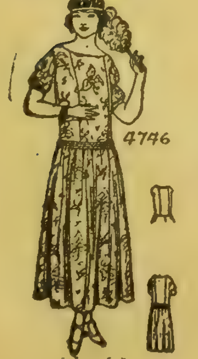

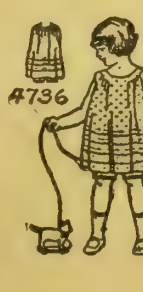

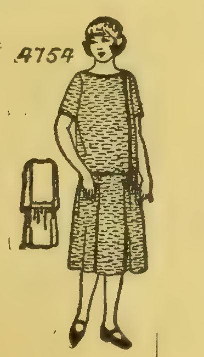

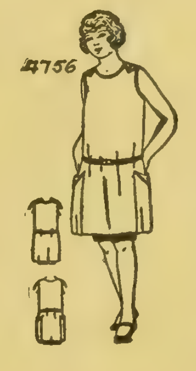

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The Children's Hour

MOTHER

[illegible] cherish ye your mother!
  You may not have her long
To add to your joy and comfort,
  And aid your feet along
Life's long and troubled pathway.
  Then love her while you may.
Her smile your heart may not gladden,
  All along the thorny way.

If you leave her, write a letter,
  That will fill her heart with light.
Let her know that you still love her,
  Though far away from her anxious sight.
You will find there is no other,
  That can help you more than she.
Do not weigh her down with sorrows,
  Which perhaps need never be.

Keep no secret from your mother.
  Make her everything to you.
Save her all the toil and trouble
  It is in your power to do.
God gives many things twice over,
  But only a loving mother once.
Don't be angry or cruel with her,
  Comfort and aid her, Love her much!

After her life's great work is ended
  And she is laid to her last long rest,
You'll not be sorry you helped to aid her,
  Remember, you're the one that she loved best.
'Twas a mother's loving, willing fingers,
  That rocked your cradle, soother your woe.
A mother's heart not one can fathom
  Except the God who loves us so.

—Iola E. Hardy.

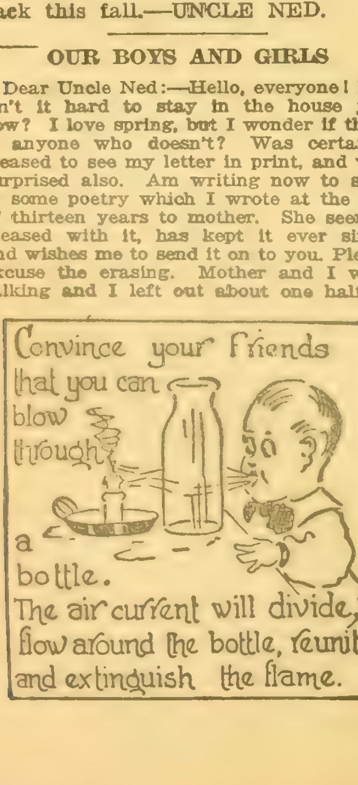
DEAR girls and boys:—Vacation time is here for most of you, especially those going to the country schools; and those who are going to high school will soon be out. I know about how all of you feel. You are glad that school is over for another year and you can get out of doors for a while away from your books. But is school over for you forever? Do you intend to go back to school this fall or are you through with school? Think well before you answer because your future depends on your decision. And after you have thought it all over say "Yes, I intend to go back to school, not only this fall but every fall, until I graduate from college."

To become a success in this world you do not need a college education but it is much harder and takes many years longer to become successful without the college training. You may think, "Oh, I am going to be only a farmer and a farmer has no use for a college education." You are wrong. The farmer needs a college education just as much as anyone else, and more than many business people. The farmer has a business that he owns and operates requiring considerable capital and the business is conducted at a great risk. He must know how to produce at the lowest cost and sell at a profit.

You girls and boys who are growing up on the farms will some day take the places of your mothers and fathers but you cannot expect to farm the same way. No, the world is going forward and you must go forward with it or lose out—become a failure, and none of you want to be a failure. Resolve that you are going to high school and then to our M. A. C. Be prepared to fill your place in this world of ours. But have a good time and rest this vacation that you will be ready to go back this fall.—UNCLE NED.

OUR BOYS AND GIRLS

Dear Uncle Ned:—Hello, everyone! My, isn't it hard to stay in the house just now? I love spring, but I wonder if there is anyone who doesn't? Was certainly pleased to see my letter in print, and was surprised also. Am writing now to send in some poetry which I wrote at the age of thirteen years to mother. She seemed pleased with it, has kept it ever since, and wishes me to send it on to you. Please excuse the erasing. Mother and I were talking and I left out about one half of what I wanted to say. Believe I will say farewell now, until next time. Cousins, I promise, on my honor to answer every letter received if more of you will write. Wishing success to all of you, I am.—Iola E. Hardy, Mayville, Mich., R. 3.
—Your poen to "Mother" is very beautiful and I am publishing it in this issue at the head of this department.


Convince your friends that you can blow through a bottle.
The air current will divide, flow around the bottle, reunite and extinguish the flame.

Dear Uncle Ned:—May I become a member of the merry circle again? I have written before and have had some of my letters in print but I thought I would write again. Well it will soon be summer again so we can go to the lakes camping. How many of you have written on the state examinations yet? I wrote yesterday (May 15) and today I wrote at our school in history, arithmetic, and grammar so I am all through and do not have to go to school for awhile. I will now describe myself. I have light brown hair (which is bobbed), blue eyes, and a light complexion, I am thirteen years old. I cannot tell what grade I am in because I don't know myself as I haven't heard yet from my standings. We are going to have our school picnic next Tuesday, we are going to a lake but I expect it will be too cold for us to go in bathing. Can you swim, Uncle Ned? I can swim, and I think that and dancing is great sport. I have something all together different this time then the boys and girls are having to guess, and this is: Where am I writing this letter? This will be fun because there are so many places that you could be writing a letter. The one that guesses the funniest place will get a booby prize. If you would rather tell me when your birthday is I will send it to you then. Now remember you can only have two guesses. Well I guess I had better close as it is getting dark. Now can you guess? I guess I fooled you this time. You try too Uncle Ned. Your niece.—Miss Ruth Nelson, R. 2, Grant, Michigan.
—Yes I can swim some.

Dear Uncle Ned:—Hello! How is everybody? I thought I would try my luck again. Mr. Waste Basket got my other letter. Hold on! I guess I had better describe myself before I say any more. I am twelve years old, have black hair, grey eyes, dark complexion and am 5 foot 6 inches tall. I have been a silent reader of the M. B. F. for quite a long time. I weigh 140 lbs. I just wonder how many of the boys and girls can beat that in being heavy? I will be 13 years old the 3rd of June. School is out now. It was out the 28th of April. I passed my grade. I am a 5th grader. I have four brothers. I live just 30 feet from Walloon Lake. That is quite near a lake isn't it? Oh! I forgot to tell you that my hair is bobbed. But I guess I had better stop my scribbling for Mr. Waste Basket looks pretty hungry. Ha! Ha! Will some of the boys and girls write to me? I will answer all letters I get, even if it is a hundred. Good-bye, your-want-to-be-niece.—Hulia E. Weller, Boyne City, Mich. Route 2.
—So you will answer all the letters you receive. Well, if the cousins are in a writing mood I can see how you will spend your vacation this summer.

Dear Uncle Ned:—May I enter into your merry cirlcle? I am 11 years of age. We have 2 horses, 5 cows, 56 hens, 30 chicks, 4 pigs and live on a 40-acre farm. I wish some one would write to me. I will answer them. I have light brown hair, blue eyes. It is Sunday evening. I cannot draw a picture because I do not know how. We got 27 eggs today. There are 25 children in our school. I am in the 5th grade. My height is 4 feet 7 inches. Your nephew.—Clare Crittenden, Breckenridge, Mich., R. 4.

Dear Uncle Ned:—I thought I would write again as I wrote one before and my letter must have gotten in the waste basket as I did not see it in the paper, though that was quite awhile ago. I live on a forty-seven acre farm a little east of Leslie with my father, mother and my 10-year-old brother. My brother and I go to the Leslie public school and we have only a mile to go. I like school very well and I also like my teacher very well. I am in the sixth grade. I am four feet and eight inches in height, weigh about seventy-three pounds, have medium brown hair and it is bobbed. I have blue eyes, have a light complexion, and am twelve years old and will be thirteen the tenth of September. I wonder if I have a twin? I would like to have some of the readers of the Children's Hour write to me and I will gladly answer their letters as I enjoy receiving letters from boys and girls. I think it would be interesting to have some of the children that write stories to write about some of the things that they used to do when they were small. Something that they used to be afraid of or some comical things that they used to do. I am sending a composition about some of my early fancies. It is a copy of the one I wrote for school. Your want-to-be-niece.—Ruth Esther Blackmore, Leslie, Michigan, R. 4.

Some of My Early Fancies.

Grandma used to sell stockings and she had stocking sample books with all kinds of stockings in them and after she was through with the books she gave them to Lee and I. We were always asking grandma if she had some more stocking books for us. After she gave them to us we would take them out doors where the chickens were and showed each one the different kinds of stockings and would ask them which kind of stockings they would like to buy and told them the price of each. We would act like agents just getting orders for the stockings. We used to have lots of fun playing agents. We had many chickens named so we would call them by name when we ask them if they would like to buy some stockings. Among the ones we had named were Picky-Pick, Grandma Hen, Henny Penny, Speckle Biddy, Yellow Biddy, Red Biddy, Brown Biddy, and Mother Hen.

One evening I was sitting on papa's lap on our front porch watching the lightning bugs down by the ditch on the lower land just north of our house. I asked papa what they were and he told me that they were lightning bugs carrying lanterns. Then I kept asking him about them as I got so excited about it. I usually got so excited about anything like that anyway so to get my mind off from that he said, "Let's talk about the beans that papa is going to raise to eat this summer."

Then I said, "Papa, papa, I didn't know that lightning bugs carrying lanterns ate beans!"

I was always afraid of flies, bumblebees, wasps, and all other insects. If mamma put me on the front porch and I saw an insect of any kind I would begin to cry for her. And one day when I was out on the front porch two men were going by with a horse and buggy and I began to call to them saying, Shies, bumble-bees, wasps." They just looked around and laughed at me.

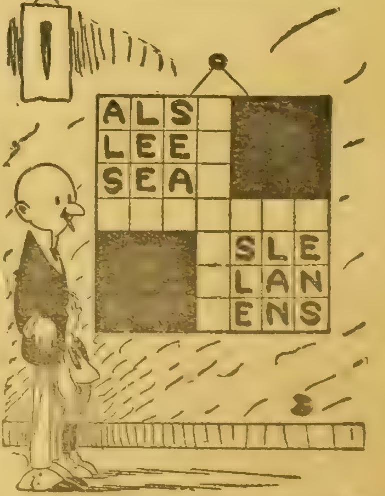
I was very afraid of automobiles as there were only a few then. Mamma had always taught me not to go out in the road or would get run over so every time I would see or hear one coming I would start and run out back of the house if I was in front of it. And one time I heard a car coming so I began to run out back of the house and I just got half way around when I stubbed my toe and fell down and then I began to scramble around to get up and run again and just then I looked up and saw the automobile just going by, then I said, "Well, there it goes."—Ruth Esther Blackmore.

Dear Uncle Ned:—May I come in? I should like to very well. I will describe myself. I am 5 feet 2 inches tall, have blonde hair (bobbed of course) and grey eyes, I am between 10 and 16 years of age. Now all of you must guess my age, the one or ones who guess it correct will receive from me a nice long letter and besides will receive a nice gift. I live on a 60 acre farm. We have 5 cows, 5 horses and 12 sheep. For pets I have a dog and 2 cats, one is spotted, and one is coal black so I call him "Nig". We also have one little brown and white spotted calf and 2 little twin lambs. I can play some music on an organ but I do not play by note, I play by ear. We also have a phonograph. I have two sisters and two brothers living and one brother and one sister dead. Well I must close for my letter is getting long. From your want-to-be-niece.—Florence Coleman, Ithaca, Michigan.

Dear Uncle Ned:—I wrote once to the Children's Hour and saw my letter in print, and wrote again but I guess it found the waste basket. Amber Holmes was the only one that guessed my name right. It is raining awfully hard here tonight. I guess we aren't going to have any summer. I and my cousins and my sister and brother went about 2 miles last Sunday gathering May flowers. We got a nice lot. There is some trailing Arbutus around here too. Now I will close hoping that this letter doesn't go to the waste basket like my last one. I am,—Bernice Durfee, R. 1, Alger, Mich.

IT'S A BIRD

By Walter Wellman



All you have to do is to print the name of a large bird in the horizontal column, and the same name in upright column. If you print the name of the right bird, you will have a continued square, in which all the words will read from left to right the same as they do downward. what is the bird?

Uncle Rube Spinach Says:

NOT FEELIN' VERY GOOD

MY good friends, I ain't been feelin' very good for quite a long spell—kinda off my reg'lar health you know—an' I've been to doctors an' sim'lar—they've told me a lot of things, things I don't believe an' you wouldn't either. Why don't you see, I've got everything 'at any human bein' ever had—adenoids, bad tonsils, yellow liver, decayed kidneys, and a lot of other things too numerous to mention. Well, I've let 'em take out most every thing—adenoids, liver an' such—now I have a bad headache, what will the doctor take out to stop that?

I wonder if we don't sometimes kinda 'magine a lot of these ailments? Of course I know we feel bad some times—I do, so do you. But a doctor can talk you into worse sickness 'n you've ever known of. An' if he don't your dear friends can do it—yes they surely can! And while I thought I was awful sick, shucks I wasn't so bad any of the time as I thought I was. I had a good doctor an' he told me just what to do—gave me medicine to take an' I took it folks. I wuz in my bed jest about 3 weeks and then I got kinda mad. I sez to myself, "I don't believe any such stuff." Doctor wanted me to have an operation—tumors in the stomach he said an' an operation was the only thing 'at would save my life. Think of it folks—one little ol' life up agin' two or three doctors an' I took a chance of livin' without bein' cut into. An' I'm livin' yet an' that's more'n lots can say 'ats let the doctors cut 'em up.

Well let's talk 'bout somethin' else. Spring is here an' beautiful ain't it? An' summer is comin' right along an' bathin' out to the lake an' everything nice out there. An' greens, mushrooms an'—yes most every thing—silk stockin's, low shoes, nice folks—oh everything most happens in the good ol' summer time. Robbins build their nests, folks git married an' divorced—love an' everything comes in the summer.

An' folks, we plant gardens an' more'n gardens, we plant the seeds of love, real true love—wonderful an' grand as things are there is nothin' this ol' world of ours quite so fine as love. Oh yes I'm gettin' long in years now—mebbe too old to think 'bout love an' such—but dear friends, every year of my life jest makes me think more of it—not jest the young, passionate love of youth but the long, lastin' love of age. Not jest the love of a boy for his sweetheart, but the real love of a man for his fellow men an' for the world. For all that is finest an' best in life—dear young friends, we never get too old for that kind of love.

Oh yes I like our young women—who doesn't? I don't love the bobbed hair, an' say now girls, I want to tell you somethin'. A few years ago an automobile attracted quite a lot of attention, but now a horse and buggy like we had when we wuz young, attracts more attention than any kind of automobile. So it was with bobbed hair; at first we stopped an' looked the second time, dear friends of the she sex, now we stop an' take a second an' mebbe the third or fourth look at a woman with nice long hair,—hair 'at makes her look like a woman, the kind of women 'at every man likes. The glory of woman is her hair. When she cuts it off she cuts off lots of the glory—yes I'll say she does. Cordially yours.—UNCLE RUBE.

FARMERS HURT MARKET BY STORING BEANS AT ELEVATOR

(Continued from Page 4)

farmer with the stored beans and he will probably sell out and enable the short seller to get the profit.

The farmers have the present situation partially in their own hands. If you make a survey of the storage bean situation and it developes as we think it will that the great bulk of beans estimated left in Michigan belong to the farmer and the farmer will sit tight and not sell them it might be the means of helping the market.

The present season starts out more unfavorable than a normal season. Should the weather remain cold and a heavy frost occur around the 10th of June it might result in serious damage to the early planted beans and this together with a decreased bean acreage in the sugar beet growing sections might work out to the advantage of the owner of beans. The farmer who has held his beans until this time and offered $3.80 to $4.10 for them it would appear to us that if by sitting tight until later might help the market at least it would be worth a trial. The short seller of beans might be able to bear the market lower but not as easily as when farmers are selling freely. If the bears did succeed in pounding the market down and, if it did go 25c lower which in our opinion is not probable if the farmer will sit tight—he could help better his own condition and we are sure there are dealers in the state who, would welcome any assistance that the growers might give them that would strengthen the market at least to a reasonable price and get it out of bear control.

Last Friday morning one of our brokers wired us that their broker competitors were soliciting business at $4.50 per cwt. delivered on fancy screened beans in a city that takes a freight rate of 37c from Midland. We told him to buy them as we could not afford to sell that cheap. Figure it out yourself. That price would leave $4.13 for the beans, deduct 12c for the bags, deduct 6c for brokerage and the shipper gets $3.93 for beans that cost him $4.10 per cwt. There is not a farmer in Michigan who can not see that any elevator who sold beans on a margin of 16c cwt. but what in a very short time would be out of business. But the elevator who sold short stored beans could to keep the market down sell two or three cars at what looked like 16c cwt. margin if by so doing he could break the market 10c or 15c per cwt. on 25 cars previously sold short.

We appreciate that many farmers having stored beans will need some money before the new crop but selling the stored beans would not be necessary. Their banker would loan reasonable amounts on storage receipts of reliable concerns and the banker would be quite sure the beans were on hand in the elevator before he loaned the money and if they were not on hand somebody would have to get busy and get them and that would not hurt the market any.

There is only one place to store beans that is on the farm and when beans come to the elevators they should be sold then the elevators who put their hard cash in them is not going out and try and bear the market on himself as can be done selling short stored beans owned by farmers in which the dealer has none of his own cash invested in them.

OH, MONEY! MONEY!

(Continued from Page 10.)

seemed interested only that Mr. Blaisdell, and especially Mrs. Blaisdell, should know the intimate history of one Ephraim Blaisdell, born in 1720, and his ten children and forty-nine grandchildren. He talked of various investments then, and of the weather. He talked of the Blaisdell's trip, and of the cost of railroad fares and hotel life. He talked—indeed, Mrs. Jane told her husband after he left that Mr. Smith had talked of everything under the sun, and that she nearly had a fit because she could not get one minute to herself to break in upon Mellicent and that horrid Gray fellow at the piano. She had not supposed Mr. Smith could talk like that. She had never remembered he was such a talker!

The young people had a tennis match on the school tennis court the next day. Mr. Smith told Miss Maggie that he thought he would drop around there. He said he liked very much to watch tennis games.

Miss Maggie said yes, that she liked to watch tennis games, too. If this was just a wee bit of a hint, it quite failed of its purpose, for Mr. Smith did not offer to take her with him. He changed the subject, indeed, so abruptly, that Miss Maggie bit her lips and flushed a little, throwing a swift glance into his apparently serene countenance.

Miss Maggie herself, in the afternoon, with an errand for an excuse, walked slowly by the tennis court. She saw Mr. Smith at once—but he did not seem at all interested in the playing. He had his back to the court, in fact. He was talking very animatedly with Mellicent Blaisdell. He was still talking with her—though on the opposite side of the court—when Miss Maggie went by again on her way home.

Miss Maggie frowned and said something just under her breath about "that child—flirting as usual!" Then she went on, walking very fast, and without another glance toward the tennis ground. But a little farther on Miss Maggie's step lagged perceptibly, and her head lose its proud poise. Miss Maggie, for a reason she could not have explained herself, was feeling suddenly odd, and weary, and very much alone.

To the image in the mirror as she took off her hat a few minutes later in her own hall, she said scornfully:

"Well, why shouldn't you feel old? You are old. You are old!" Miss Maggie had a habit of talking to herself in the mirror—but never before had she said anything like this to herself.

An hour later Mr. Smith came home to supper.

"Well, how did the game go?" queried Miss Maggie, without looking up from the stocking she was mending.

"Game? Go? Oh! Why, I don't remember who did win finally," he answered. Nor did it apparently occur to him that for one who was so greatly interested in tennis, he was curiously uninformed.

It did occur to Miss Maggie, however.

(Continued in June 21 issue.)

SIX CALVES IN ONE YEAR IS COW'S RECORD

HERE'S a record that would be hard to beat. Mert Smith of Bellevue, Michigan, owns a cow that gave birth to six calves in one year. Less than a year ago she presented Mr. Smith with a set of triplets, and two of the three are still living. Just the other day triplet heifer calves were born to her, and the three arrivals are reported to be doing nicely, all being perfectly formed.

THE HIDDEN FOE OF YOUR COMMUNITY

(Continued from Page 11)

are the pure in heart for they shall see God." Purity is the window of heaven to the soul, and we shut out the face of God when we close this window by pulling down the blind of obscenity and profanity. Now, this is an era of conservation of natural resources for the existence and comfort of the human family. This is fine. But now it is proposed that we spend a like energy in conserving the moral and spiritual health of our children by combating the hidden foe of impurity. To keep our boys and girls in the image of God, is to keep their minds unsullied and their bodies clean.

MEANING OF GENESIS 2:21

We are very well pleased with your sermons that we read in The Business Farmer. As I believe you are very well learned in the Bible, I would kindly ask you the meaning of Genesis, chapter two, and verse 21.—E. J., Curran, Mich.

THE creation accounts are not given to us in terms that satisfy the modern scientific mind. But does this story have to be scientifically accurate to be true? Certainly not, since the writer did not have this in mind. We must judge the truth of the account by the object the author has in view. In Genesis 2:21, the first object seems to be to set forth God's creative relation to woman thru the man. But, again it indicates the complimentary relation of man and woman. Cf 1Cor. 11:8, 9. In this scripture the author describes the process of creating the woman in language which he knew to convey, and in language which could be understood in that pre-scientific age. To instruct Little Bobbie we must use words he can understand. And tho the language of the verse in question is mysterious, the least advanced in learning may understand its creational and social significance. And this is why it is in the Book.—D. F. Warner, Religious Editor.

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Such cows are ready when it comes time to freshen and they have good, sturdy calves. They don't go off feed. They don't have udder trouble, lax appetites and indigestion. You don't pay big bills for medical treatment.

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All the care used in making LARRO—the safeguards against nails, wire and trash—the strict exclusion of all fillers and off-grade ingredients—the careful standardizing to get absolute uniformity in every particular—the exact proportioning of each ingredient—all these things have a two-fold object: health for your cows and the biggest possible profit for you.

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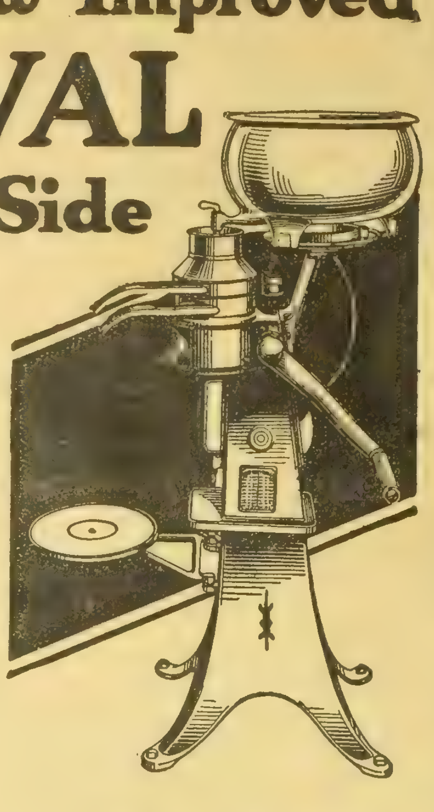

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We have a method for the control of Asthma, and we want you to try it at our expense. No matter whether your case is of long standing or recent development, whether it is present as Chronic Asthma or Hay Fever, you should send for a free trial of our method. No matter in what climate you live, no matter what your age or occupation, if you are troubled with Asthma or Hay Fever, our method should relieve you promptly.

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DAIRY and LIVESTOCK

CLINTON FARMERS TO CONTINUE TO TEST

THE North Clinton County Cow Testing Association has successfully completed its first year. Operations began in March, 1923. After two changes of testers Mr. Ford Morgan of Kinde, Michigan, took up the cow testing duties. He completed the work successfully. Mr. Morgan closed the association year with a complete membership and the association, at a reorganization meeting held at Maple Rapids, April 16th, decided to continue the C. T. A. work for a second year. Twenty-two of the original members are continuing the work in this association and a few new members have been located in the neighborhood.—A. C. B.

VETERINARY DEPARTMENT

BOVINE TUBERCULOSIS

A friend of mine bought a registered Holstein cow at a public auction that had been tested a few days previous for T. B. by the state tester. In about 40 days after she was tested she died. We had her examined by a veterinarian who said her death was caused by T. B. He said if a cow is too far gone with T. B. she will not react. Is this true? Is there any redress? Will they have to pay for this cow?—A. H., Dryden, Mich.

IT is true that occasionally an animal is encountered which is so badly infected with tuberculosis that it will not react to the tuberculin test. This is due to the fact that the animal is saturated with tuberculosis material and will not respond to the irrigation produced by tuberculin when injected. Fortunately such animals are not numerous and can usually be eliminated by physical examination. And further, if such an animal has been in the herd for any length of time, there are almost sure to be other animals infected as the result of association. Numerous slight lesions in a herd, without any good explanation as to cause, usually leads to an investigation which would reveal a spreader if present.

In the effort to eliminate tuberculosis more is necessary than the mere mechanical application of the tuberculin test. It should be kept in mind that in referring to the tuberculous animal that will not react to the test we are dealing with a rare exception and not with a rule. If the animal died as you indicate and was actually tuberculosis, there would be no redress. When a tuberculin test is applied, every effort is made to locate all of the tuberculous animals but tuberculin is not an immunizing agent and it cannot be foretold what may happen to an animal after the test is applied. Forty days is a short time in which to develop tuberculosis in an advanced stage but it is usually conceded that the disease is not heriditary and cases are on record of calves eight weeks old which have been condemned on account of generalized tuberculosis. It is also possible that the animal in question may have been exposed or even infected before the test was applied but the disease had not developed sufficiently at the time of test to cause a reaction.

There are other conditions which may resemble tuberculosis and the veterinarian who made this examination should have confirmed his diagnosis by submitting material to a laboratory for examination. In any case where there is a question as to the accuracy of the tuberculin test, this should always be done.

The question of who shall pay for the cow would depend upon the arrangement or agreement at the time of purchase. If the purchaser was not absolutely sure of the health status of the animal or the herd from which it came, he should have asked for a 60 day retest privilege. Practically all pure bred owners who purchase valuable animals now specify that a satisfactory retest must be passed at the expiration of 60 or 90 days.—B. J. Killham, State Veterinarian.

Prizes in 1924 Ton Litter Contest

THE Michigan Ton Litter Club announces the prizes to be awarded to the winners in this year's contest. Liberal contributions from the leading packing companies slaughtering hogs in Michigan and from swine registry associations make possible attractive awards for swine breeders and feeders who excell in raising large litters of pigs and in feeding them to an early market weight.

Cash was contributed by Hammond Standish, Parker Webb and Sullivan Packing Companies of Detroit and the Pontiac Packing Company of Pontiac to provide for a gold medal to every producer of a litter weighing one ton or more at age of 180 days, and cash prizes as follows:

$25.00 to producer of heaviest litter at age of 180 days; $20.00 to producer of 2nd heaviest litter at age of 180 days; $15.00 to producer of 3rd heaviest litter at age of 180 days; $10.00 to producer of 4th heaviest litter at age of 180 days; $5.00 to producer of 5th heaviest litter at age of 180 days.

The Detroit Packing Company offers one piece of choice bacon and 100 pounds high grade tankage to each producer of the five heaviest litters in the contest.

Newton Packing Company of Detroit offers a choice ham to each of the producers of the two heaviest litters and a piece of choice bacon to the producers of the 3rd and 4th heaviest litters.

The above prizes may be won by any Michigan farmer complying swines.

Special prizes offered by breed registry associations: By National Duroc Jersey Record Association:

$50.00 to producer of heaviest Duroc Jersey litter, and an extra $50.00 if heaviest of all breeds.

By American Duroc Jersey Association: Bronze Medal to producer of the Duroc litter making the ton mark, who matures and carries through to the 180 days the largest number in his litter.

By Chester White Record Association: $25.00 to producer of heaviest Chester White litter sired by a registered boar and produced by a registered dam; an additional $50 if heaviest litter of all breeds.

By the O. I. C. Swine Breeders Association: $25.00 to producer of heaviest litter from a registered O. I. C. sire and dam, and an extra $25.00 if heaviest of all breeds.

By the Hampshire Swine Record Association: Large silver loving cup to producer of heaviest litter, all breeds competing, provided that the litter is sired by a pure bred Hampshire boar.

In order to qualify for the cash prizes, a good picture of the litter must be obtained near the end of the contest. The prizes will be awarded at the Michigan Swine Breeders Association meeting held during "Farmers' Week" at the Michigan Agricultural College.

Sixteen men won gold medals by producing more than a ton of pork from one sow in six months last year in Michigan. Although market values have discouraged many swine feeders, it is believed that fully as many growers will prove the efficiency of their strain of breeding stock and their system of feeding by producing ton litters this year. Raising large litters produces pigs at low cost per pig and rapid gains are nearly always relatively cheap gains. Ton litters usually demonstrate the best systems of management and are of interest to both breeders and market pork producers.

FREE BOOK ABOUT CANCER
The Indianapolis Cancer Hospital, Indianapolis, Indiana, has published a booklet which gives interesting facts about the cause of Cancer, also tells what to do for pain, bleeding, odor, etc. A valuable guide in the management of any case. Write for it today, mentioning this paper. (Adv.

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Also Turkeys, Geese, Ducks.

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BARRED ROCK HATCHING EGGS FROM 9 pound males $1.10 per 15; $2.00 per 30.
Mrs. Frank Millikin, Roscommon, Mich., R. 1.

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FOR SALE—THOROUGHBRED TOULOUSE Geese and Buff Rock Cockerels. Blue Ribbon prize winners. Buff Rock eggs $1.50 per 15; $8,00 per 100. Goose eggs 40c each.
BALDWIN & NOWLIN, Laingsburg, Mich., R4.

TEN EGGS FROM PURE TOULOUSE GEESE, $4.75. Fifteen eggs R. I. Reds, $1.25. Insured parcel post prepaid.
Mrs. Amy Southworth, Cassopolis, Mich., R2.

TURKEYS

EGGS FOR HATCHING

Bronze Turkeys, Toulouse Geese, Pekin Ducks and Barred Rocks. Nearly all of this stock has been imported from Canada by us.

W. T. SHUTTLEWORTH, Ypsilanti, Michigan.

SPECIAL SALE Bourbon Red Turkey Eggs $4.00 per 11 postpaid.
THOS. G. CALLAGHAN, Fenton, Michigan.

SAVE ONE-HALF ON YOUR MAGAZINES

Reduction Offer No. F-1

The Business Farmer 1 yr.
Pathfinder, 26 Issues 6 mos.
Fruit, Garden & Home 1 yr.
Today's Housewfie 6 mos.
All Fo $1

Michigan Business Farmer,
Mt. Clemens, Michigan.

Gentlemen: For the enclosed

$........................send the Michigan Business Farmer and all Magazines

in Club No....................

My Name..

Postoffice..

R. F. D.............. State........................

FERTILE EGGS CAUSE LOSS TO FARMERS EVERY SUMMER

A LARGE part of the loss caused by eggs spoiling in warm weather can be prevented by producing only infertile eggs during the late spring and summer. This loss, which is conservatively estimated at more than $15,000,000 a year, falls almost entirely on the producer. Not only does he lose the value of the eggs which spoil, but the producer suffers a further material loss in the reduction of the number of eggs consumed caused by people getting bad eggs among those they purchase.

This loss can be entirely prevented by producing infertile eggs during warm weather. This is accomplished by taking all male birds out of the flock after the breeding season is over. The rooster has no influence on the number of eggs produced, and should either be marketed or killed—the meat can be canned—or he should be kept penned up.

TURKEY PRODUCES SOFT-SHELL EGG

I have pure bred Bourbon Red turkeys and one nice large hen seems to be and acts all right, only she lays a long flat egg, soft shelled. Four of them were open when she left the nest. After she leaves the nest she stands with her wings to the ground for a half day, after that she seems all right. She has only laid six eggs. Sits on the nest several times but fails to lay any more. She is tame. They have gravel all around, oyster shells I keep out by the water dishes. I thought you would know what to give my hen in this condition.—Mrs. R. N., Freeport, Michigan.

UNDOUBTEDLY this turkey hen has developed some internal disturbances affecting the reproductive organs, more especially the oviduct. The oviduct is not functioning properly, otherwise a normal egg would be produced. this trouble is frequently caused by an over fat condition which may result from corn feeding during the winter months. Some turkey hens are more disposed to take on fat and require careful feeding in order to avoid this condition.

Free range and exercise with limited grain feeding should gradually correct this condition. A dry mash consisting of wheat, corn, oats, with ten per cent meat scrap could be fed in an open hopper available at all times. There is less danger of stock becoming over fed on the dry mash method of feeding than where heavy grain feeding is practiced.

The expulsion of the soft shelled egg would be a severe nervous and physical strain on the turkey hen which would account for the fact she stands with wings drooping, for several hours after the egg is produced. A teaspoonful of castor oil if given at intervals of two or three days may assist in correcting this trouble.—E. C. Foreman, Prof. of Poultry Husbandry, M. A. C.

Average sale prices of purebred dairy cattle for the year ending December 31, 1923, ranged from $133 for bulls under one year to $268 for bulls over three years of age, according to reports submitted by breeders to the United States Department of Agriculture. The breeds included were: Ayrshire, Guernsey, Holstein, Jersey, and Brown Swiss. More than twice as many animals were disposed of at private sale as were sold at auction. Auction prices, however, averaged from $25 to $50 per head higher than those realized in private sales. Aged bulls were an exception, such animals bringing more in private sales than at auction.

New on the Wire

He was newly arrived in this country and was none too familiar with the use of the telephone. So he took the receiver and demanded:

"Aye vant to talk to my wife."

Central's voice came back sweetly: "Number, please?"

"Oh," he replied, perfectly willing to help out, "she bane my second vun."

Too Cool

"Tell me," said the lady to the old soldier, "were you cool in battle?"

"Cool?" said the truthful veteran, "why I fairly shivered."—Christian Register.

Could He?

"Well, doctor, do you think it anything serious?"

"Oh, not at all, it is merely a boil on the back of your neck, but I would advise you to keep an eye on it."

Special Sale

HIGHEST QUALITY CERTIFIED BABY CHICKS

From Michigan's Old Reliable Hatchery, the best equipped and most modern Hatchery in the State.

Pure Bred Tom Barron English and American White Leghorns, Anconas, Barred Plymouth Rocks and Rhode Island Reds. Strong, Well-hatched Chicks from tested Hoganized Free-range stock that make wonderful winter layers.

Variety	Prices on 50	100	500
English Barron S. C. White Leghorns	$4.75	$9.00	$40.00
S. C. Mottled Anconas	4.75	9.00	40.00
Barred Plymouth Rocks	5.75	11.00	50.00
S. C. Rhode Island Reds	5.75	11.00	50.00

ASSORTED LOTS OF CHICKS

$75.00 per 1,000 - - $8.00 per 100
$38.50 per 500 - - $4.25 per 50

Chicks sent by Insured Parcel Post prepaid to your door. 100% live delivery guaranteed. Sixteen years of experience in producing and shipping Chicks giving absolute satisfaction to thousands. Write for valuable illustrated free catalog and price list. Get lowest price on best quality Chicks before placing your order.

Holland Hatchery & Poultry Farm, R. 7, Holland, Mich.

CHICKS

From World's Greatest Layers

If you want pure bred chicks that are bred right, hatched right, and shipped right, that grow and will make you a profit, get our new low prices and free catalog before you buy

S. C. Anconas **Tom Barron White Leghorns**
Heavy Type Brown Leghorns **Park's Barred Rocks**
R. C. & S. C. Rhode Island Reds

VARIETY STOCK AFTER JUNE 2

Variety	Prices on 25	50	100	500
English Barron S. C. White Leghorns	$2.50	$4.75	$9.00	$40.00
S. C. Mottled Anconas	2.50	4.75	9.00	40.00
S. C. Brown Leghorns (Heavy Dutch Type)	2.50	4.75	9.00	40.00
Barred Plymouth Rocks (Parks Strain)	3.00	5.75	11.00	50.00
S. C. and R. C. Rhode Island Reds	3.00	5.75	11.00	50.00

Flocks are carefully culled and developed on free range. All chicks are hand picked and inspected, no cripples or weaklings. Every one strong and healthy. Satisfaction and 100% live delivery guaranteed Postage paid. Write now for our low prices and free catalog. White Leghorn and Barred Rock pullets after June 1, at low prices.

Reference Holland City Bank

KNOLL'S HATCHERY, R. R. 12, Box B, Holland, Mich.

FIRST CLASS CHICKS $7.00 PER 100 AND UP

We are big producers of pure-bred chicks from heavy laying flocks. Postpaid to your door. 100% live delivery guaranteed. Flocks on free range. Culled by an expert.

Varieties	Prices on: 25	50	100	500	1000
English White Leghorns,	$2.50	$4.75	$9.00	$42.50	$85.00
Brown Leghorns, Heavy Type,	3.25	6.00	11.00	50.00	95.00
Barred Rocks, R. C. & S. C. Reds,	3.00	5.75	11.00	50.00	100.00
Mixed Chicks,	2.00	4.00	7.00	35.00	...

Reference: Zeeland State Bank. You take no chance. Order TODAY with full remittance and get them quickly.

HUNDERMAN BROS. Poultry Farm, Box 30, Zeeland, Mich.

BIG REDUCTION FOR JUNE

On our high quality Chicks from heavy laying strains of certified stock. Flocks well mated and on free range. Order direct from this ad and get chicks when you want them.

	Per 25	50	100	500	1000
White & Brown Leghorns	$2.25	$4.25	$8.00	$40.00	$75.00
Anconas	2.25	4.25	8.00	40.00	75.00
Barred Rocks & R. I. Reds	3.25	6.25	12.00	57.50	110.00
Broiler Chix	2.00	3.75	7.00	35.00	70.00

Shipped by Parcel Post Prepaid; 100% live delivery guaranteed. Reference. Add one cent per chick for our extra select stock.

Winstrom Poultry Farm & Hatchery, Box A-5, Zeeland, Michigan.

GARLOCK - WILLIAMS CO., Inc.

2463 RIOPELLE ST., DETROIT, MICH.

WE SOLICIT YOUR SHIPMENTS of live poultry, veal and eggs.

Our commission is 5%.

References: Wayne County and Home Savings Bank, Bradstreet.

Ship Your Poultry
Direct to DETROIT BEEF CO.

Write for our shippers guide, how to ship live poultry, how to dress and ship dressed poultry.

DETROIT BEEF CO.,
Detroit, Mich.

REDUCED PRICES
FOR JUNE
write
DeKoster's Hatchery
Box 100 Zeeland, Mich.

WHITTAKER'S R. I. RED CHICKS AND EGGS for hatching. Both Combs. Michigan's Greatest Color and Egg Strain. Reduced prices for the balance of the season.
INTERLAKES FARM, Box 4, Lawrence, Mich.

Have You LIVE POULTRY For Sale? An Ad in THE MICHIGAN BUSINESS FARMER Will Sell It!

Prices Slashed on EGG-BRED Certified Chicks

Late May, June and July delivery. Shipped postpaid, **100% live delivery** guaranteed. **Barron** Improved English Type and **Hollywood** American Type of S. C. White Leghorns. **Sheppards** Strain of S. C. Mottled Anconas Direct. Dark Brown S. C. Brown Leghorns and Barred Rocks. Scientifically hatched in Newtown Incubators from **Pure-Bred Free Range Flocks** which have been carefully culled and mated by experts and rated and certified by the **Mich. Baby Chick Assn.** Our Birds are **winners** at leading shows and **Egg Laying Contests.** Also hundreds of 8-wk.-old pullets ready for shipment. Prices: Special Star Mating chicks from flocks of one and two-year-old hens mated to **270-280 Egg Strain Males.**

	100	500	1000
Special Star S. C. White Leghorns & S. C. Anconas	$12.00	$57.50	$110.00
Extra Selected Chicks, S. C. W. Leghorns, S. C. Br. Leg. & S. C. Anconas	10.00	47.50	90.00
Selected Chicks, S. C. W. Leg., S. C. Br. Leg. & S. C. Anconas	8.00	40.00	75.00
Barred Rocks	12.50	60.00	115.00
Mixed or Broiler Chicks	7.50	35.00	70.00

Terms 10% with order, balance a week before shipment. Reference, Zeeland State Bank.

TOWNLINE POULTRY FARM, Dept. B, Zeeland, Mich.

PURE BRED BABY CHICKS

We have been carefully developing our flocks for eight years. Every chick pure bred and from stock carefully culled, for type and production. Our chicks give satisfaction. Order today for **Quick Delivery.**

Prices on	25	50	100	500
Eng. White Leghorns	$2.50	$4.75	$9.00	$40.00
Barred Rocks, R. I. Reds,	2.75	5.25	10.00	45.00
Wh. Rocks and Wyandottes	3.00	5.75	11.00	50.00

Postpaid. 100% live delivery. You take no chances. Ref. Farmers & Mechanics Bank, this city. No catalog. Order from this ad.

Washtenaw Hatchery, Geddes Rd. Ann Arbor, Mich.

Reduced Prices for BEST Chicks

For JUNE—JULY—AUGUST—Pure bred chicks, hatched right, large and strong, postpaid live delivery to your door. Instructive catalog free.

Breeds	25 Chicks	50 Chicks	100 Chicks	500 Chicks	1000 Chicks
White Leghorns	$2.50	$5.00	$ 9.00	$42.50	$ 85.00
Barred Rocks	3.00	6.00	11.00	52.50	105.00
S.C.R.I. Reds	3.00	6.00	11.00	52.50	105.00

Strong broiler chicks, no breed guaranteed, $7.00 per 100, after June 1st. Order early, right now! Late customers were disappointed last year. Quality and price talk. Act now.

BRUMMER-FREDRICKSON *Poultry Farm,* **Box 26, Holland, Mich.**

ROYAL EGG BRED CHICKS

S. C. WHITE LEGHORNS AND BROWN LEGHORNS.

SELECTED MATING
Per 25——$2.75 Per 100——$10.00
Per 50——$5.00 Per 500——$47.50
Per 1000——$95.00

EXTRA SELECTED MATING
Per 25——$3.00 Per 100——$11.00
Per 50——$5.50 Per 500——$52.50
Per 1000——$105.00

Mixed for broilers $7.00 per 100

100% live delivery guaranteed. Order direct from prices to save time. You make no mistake in placing your order for these Egg-Bred Chicks.

ROYAL HATCHERY & FARMS, S. P. Wiersma R. 2, Zeeland, Michigan.

Great Northern Hatchery

LOW JUNE PRICES

POSTPAID. 100% LIVE DELIVERY

Strong, Sturdy, Northern-grown Chicks. Selected, pure-bred stock. Healthy Flocks on free range insure strength in every Chick.

Varieties Prices on:	50	100	500	1000
Wh. & Brown Leghorns, Grade A	$6.00	$10.00	$47.00	$92.00
Barred Rocks (Aristocrat) Grade A,	7.00	12.00	57.50	112.00

Mixed Chicks, Light Breeds $8.00; Heavy Breeds, $10.00 per 100 straight. Double A grade Chicks $2.00 per 100 higher than above. Hatched under best conditions. Every chick carefully inspected. Reference: State Commercial Savings Bank. Order right from this ad with full remittance. There is no risk. GREAT NORTHERN HATCHERY, Box 50, Zeeland, Michigan.

REDUCED PRICES—*CERTIFIED* CHICKS

From World's Best Laying Strains

For JUNE, JULY AND AUGUST DELIVERY

Breed	25	50	100	500	1000
Tancred Wh. Leghorns	$2.50	$4.50	$9.00	$40.00	$ 80.00
Parks' Barred Rocks	3.00	6.00	11.00	52.50	102.50
R. C. & S. C. Reds	3.00	6.00	11.00	52.50	102.50

Order now for prompt delivery. Satisfaction guaranteed. All flocks inspected and certified by Mich. Agr. College. Strong healthy chicks, real money-makers. Don't delay. Many disappointed last year. Order from this ad now. Catalog free. Real broiler chicks at $7.00 per 100 after June 1st, no breed guaranteed.

LAKEVIEW POULTRY FARM, R.8, Box 6, Holland, Michigan

BABY CHICKS---SPECIAL PRICES JUNE

and July. Delivered anywhere. White Leghorns $10 per 100. Barred Rocks and R. I. Reds $12 per 100. All flocks culled and inspected. Our own breeding flock of large type American White Leghorns. Laying and standard qualities combined. 13 years breeding, hatching and marketing experience. Modern plant. Live delivery guaranteed. Order from this advertisement to insure prompt shipment.

DEAN EGG FARM AND HATCHERY, BIG BEAVER
MAIL ADDRESS, BIRMINGHAM, MICH., R. 4.

The Home of 1,000 Leghorns

We offer for June 3, 10, 17 and 24th by prepaid parcel post, 100 per cent live strong pure bred chicks, at $6.00 per 50; $11.00 per 100; $50.00 per 500; $90.00 per 1000. Order direct from this adv. or send for our free catalog with testimonials of satisfied customers and which faithfully presents things you would see if you made a personal visit. Each breeder selected by Prof. Sanford, mated to pedigreed Males

Riverview Poultry Farm, Route 2, Box 94, Zeeland, Mich

BUY YOUR CHICKS NOW!

CHIX

English Strain S. C. White Leghorns at	$ 9.00 per 100
Rhode Island Reds, S. C. at	11.00 per 100
Rhode Island Reds, R. C. at	11.00 per 100
Anconas at	10.00 per 100
Broiler Chicks, mixed, at	7.00 per 100
Barred Rocks at	11.00 per 100

Order from Ad. Satisfaction guaranteed. PULLETS and HENS from above varieties for sale.

PROGRESSIVE POULTRY FARMS, Zeeland, Mich.

CHICK FEEDING

"A LACK of grit of the right size for baby chicks will oftentimes cause indications of leg weakness and anemia, and in some cases a condition which looks like roup," says Mrs. George R. Shoup, poultry specialist of the west Washington experiment station.

"When preparing grit for small chicks one should be careful to see that it contains a large percentage of grains the size of pin heads and larger. This, of course, applies to chicks up to the age of three weeks. After that age it can be coarser, perhaps one-half the size of a grain of wheat. When chicks run with the hen they usually get enough grit unless they are on clay soil. When they are being raised by artificial means they should be supplied with grit where they will have it handy.

"The question often comes to us about the feeding of infertile eggs," continued Mrs. Shoup. "Some people wonder if there is danger from white diarrhea, but our experience does not show any trouble of this kind developing if the eggs are properly boiled. An Ohio bulletin gives the results of experiments which shows that boiling for one-half an hour will destroy all bacteria.

"After boiling, the eggs can be run through an ordinary meat grinder, shells and all, mixed at the rate of 20 or 30 per cent by weight with dry mash. A feed of this kind supplies the necessary amount of protein and vitamines as well as minerals. It is essential, however, to feed some form of greens during the chick's every life, especially when they are not getting outside range. This can be done by the use of lawn clippings, chopped kale or sprouted wheat.

"Perhaps the most convenient plan is to sow wheat in boxes or a long trough along one side of the brooder room, which is covered with one-inch wire mesh. By sowing several days before the chicks are hatched the wheat will be green when it is needed. The first few feedings will need to be cut and placed before the chicks. After about 10 days, however, the chicks will jump onto the netting and eat the wheat as it grows through the wire.

"Wheat can even be sprouted in an ordinary sprouter by spreading it out only two inches deep in the trays. It then can be cut two or three times in one season.

"Bread crumbs can be supplied by saving all scraps from the family table or the bread box and placing in pans to dry out in the oven. They should not be baked, but just left long enough to be crisp and slightly brown. The pieces can then be run through the meat grinder with very little trouble. This makes a very high-quality feed which is relished by the chicks.

"Some people prefer to grind a few crusts in this manner immediately after they have ground the infertile eggs, as this process will clean the meat grinder in fine shape."

POULTRY HOUSE PAID FOR BY WELL CULLED FLOCK

THE results obtained by Mrs. F. L. Kruse of Clinton County, Iowa, through poultry culling under the direction of the county extension agent should be an encouragement to any one who may have hesitated to cull the home flock to get rid of "boarder" hens.

In July, 1921, when Mrs. Kruse had 210 hens, she called in the extension agent and with her assistance took out 80 "loafers," which were sold while the price was good. A number of neighbors attended the culling demonstration. The egg production was not cut down after the culling. The culls were watched for 4 days, but laid no eggs.

Mrs. Kruse kept a record of eggs produced and sold during the year, but did not include those used in the home, which amounted to a good many dozens. The flock has more than paid for a new poultry house built last fall from plans furnished by the extension agent. Eggs sold during the year brought $477.59, the old hens sold for $77.80. Several cockerels were cold for breeding purposes, and the rest were marketed while young, bringing in considerable additional money.

Wyngarden Strain WHITE LEGHORN BABY CHICKS

EGG BRED for 18 YEARS

Buy Chix now when Prices are low. Sell eggs in November when you can get the most profit.

Such results can be depended upon when you buy Wyngarden 260-289 egg strain, English type, White Leghorn chicks. Developed by years of careful breeding and culling.
In our Brown Leghorns and Anconas also, you get the best breeding possible. Purchased now, they are sure to make a handsome profit for you. Catalog free.

Order now from these low prices

	Per 50	Per 100	Per 1000
SELECTED MATINGS— English W. Leghorns, Br. Leghorns, Anconas	$4.50	$9	$80
EXTRA SELECTED MATINGS, same breed	5.50	11	100
SPECIAL STAR MATINGS, English W. Leghorns	6.50	13	110
ODDS AND ENDS— (broilers)	... .	7	60

(500 lots at the 1,000 rate.)
100 per cent live delivery guaranteed.

Wyngarden HATCHERY & FARMS ZEELAND, MICH. Box B

Chicks for You

Big, strong, sturdy fellows from selected, heavy laying pure bred flocks. Postpaid to your door. 100% live arrival guaranteed. Low prices.

Varieties Prices On:	25	50	100	500
White Leghorns,	$3.00	$5.50	$10.00	$47.50
Brown Leghorns,	3.00	5.50	10.00	47.50
Anconas	3.25	6.25	12.00	47.50
S. C. & R. I. Reds	3.75	7.00	13.00	62.50
Barred Rocks	3.75	7.00	13.00	62.50

Chicks will reach you quickly and safely. Reference: People's State Bank. Order right from this Ad. There is no risk.
Timmer's Hatcheries, Box M, Holland, Mich.

Our Baby Chicks

Can't be beat because they are hatched from Michigan's leading pedigreed flocks, culled by genuine poultry experts, for higher egg production and because we hatch only in tested mammoth machines. Rocks, Reds, White Leghorns, Anconas, Buff Orpingtons. Large instructive catalog tell all about them. Prices 9c up.

MICHIGAN HATCHERY and POULTRY FARM
Box 2, Holland, Michigan.

REDUCED PRICES

For June and July on our Pure Bred stock Carefully developed for years. White Leghorns headed by male birds of 285-303 egg record strains. Egg Basket Strain of Buff Leghorns, Brown Leghorns, White Wyandottes, Rocks, and R. I. Reds highly bred. Reference: First State Bank. Circular Free.

MEADOW BROOK FARM, R. 1, Holland, Mich.

MAY and JUNE CHICKS

The Kind That Pay Big Profits

Pine Bay Farm

PINE BAY FARM CHICKS are backed by our 20 years' experience in the poultry business and a reputation for fair dealing with thousands of satisfied customers. Our experience protects you.
Chicks 6½c Up for June Delivery Rocks, Reds, Minorcas, Anconas and Leghorns. We breed and own International Egg Laying Contest Winners. Free Catalog. Get full prices before ordering elsewhere.

PINE BAY POULTRY FARM, Holland, Mich.

Chicks With Pep

GREAT CUT IN PRICES. Strong, vigorous chicks from our bred-to-lay hens. LEGHORNS and ANCONAS, 10c each. ROCKS, REDS, MINORCAS, WH. WYANDOTTES, 13c. ORPINGTONS, SIL. WYANDOTTES, 15c. MIXED, 10c. Postpaid. Full live delivery guaranteed. Free Catalog.

Holgate Chick Hatchery, Dept. B, Holgate, Ohio.

Special Reduced Prices

LOOK! 100,000 CHIX. BEST PUREBRED. Michigan Agricultural College method tested stock. Can ship at once. Barred Rocks or Reds, Black Minorcas 14c; W., Br. or Buff Leghorns 12c; Sheppard's Anconas 13c; Buff Orpingtons, White or Silver Wyandotts 15½c. Large Brahmas 18c. Heavy mixed broiler chix 11c. Mixed spotted chix 9c. **June Chix 1½c** less each. Add 30c extra if less than 100 wanted. Catalog tells about our extra selected stock. Bank reference. **Beckmann Hatchery, 26 Lyon, Grand Rapids, Mich.**

Pure Bred Chicks Can ship immediately.

Broiler Chix heavy	11c	White Rocks	14½c
W. or B. Leghorns	12c	W. Wyandottes	15½c
B. Rox or Reds	14c	Buff Orpingtons	16c
Sheppard's Anconas	14c	Black Minorcas	14½c

Extra selected standard bred chicks $4.00 per 100 more. Add 35c if less than 100 ordered. Good bank reference. Catalog. June Chix 1c more.
Lawrence Hatchery, BF, R. 7, Grand Rapids, Mich.

S. C. White Leghorn

baby chicks, $9.00 per 100. Barred Rock chicks, $12.00 per 100.
RALPH S. TOTTEN, Pittsford, Michigan.

BABY CHICKS--REMARKABLE FOR SIZE and strength. Reasonable prices. Leghorns, Anconas, Rocks, Reds, Wyandottes, Orpingtons, Minorcas, Spanish, Brahmas.
TYRONE POULTRY FARM, Fenton, Michigan.

BABY CHICKS FROM BRED-TO-LAY FARM Flocks. Barred Rocks, Reds, English White Leghorns. Now booking orders for May delivery. 100% live delivery. Chicks 10c each and up.
GORET'S POULTRY FARM, Corunna, Michigan.

S. C. BUFF LEGHORN BABY CHICKS. Write for June and July Prices.
J. W. WEBSTER, Bath, Michigan.

Importance of Growing Alfalfa in Michigan

(Continued from Page 4)

alfalfa seed on a field that was planted to a mixture, of alfalfas most of which had winter killed. In a few places on the Thumb and other localities, local farmers are depending upon alfalfa in the same way as other farmers depend upon clover. They raise their own seed and sow it in regular farm practice. This is the most hopeful sign of the times that I know, and will eventually place alfalfa on the Michigan map on the same basis as other crops. When all our farmers can go to their neighbors for seed, they can then depend upon getting a variety that has already succeeded under their climate and conditions. That is, when enough alfalfa seed is produced in Michigan to satisfy the needs of the state, the alfalfa industry will be on a sound basis.

When that time comes it appears to me that June clover will be crowded to the wall. One hay year and perhaps a little pasture is all that can be obtained from the ordinary red clover. Whereas real acclimated alfalfa is good for just as many hay years as the farmer desires. Clover and alfalfa hay take a large amount of lime out of the soil, and with larger yields of alfalfa the farmer will need to put on more lime. But lime is cheap plant food. Some farmers have been trying to grow clover without this food and have "worn out their land growing clover." Such land will not be suited to grow alfalfa until the lime is supplied. We note that the alfalfa which succeeds under Michigan conditions is getting more and more pedigreed. It is being more highly bred year by year.

What is a pedigreed, that is an improved variety? It is what we have said it is in the case of oats and barley. It is a variety that is able to produce greater yields or better quality under the same conditions. Any farmer knows that a good milch cow can not produce her best unless she has proper food and in large enough quantities. Neither can an improved alfalfa, clover or other farm crop produce its best without the proper plant food supplied in large enough quantities. Alfalfa breeding at M. A. C. has been going on since 1906. Thousands of individual alfalfa plants were set out from 104 different sources of seed during the season of 1907 and 1908. The plants in that nursery were in hills two feet apart each way. One does not realize how large individual alfalfa plants will become until he gives them a chance to develop. Within three years a good alfalfa plant will cover a piece of ground two feet in diameter if given all the space it can use. There are enough seeds in a pound of alfalfa, so that if scattered over an acre, there will be five seeds on each square foot. It probably takes five seeds for each sure plant. Some seeds will fail to germinate and many plants will die in infancy. Thus five pounds of seed per acre should if properly planted, place five plants on each square foot. That is better than more plants even for hay production, and is far too thick for seed production. Just think of placing five plants on each square foot, when a good plant could in three years cover four square feet! What chance do you suppose the individual plants have to produce seed? None.

This of course, is on the assumption that all the plants are hardy and each is capable of production. Listen to the breeding story at M. A. C. Those 104 different sources of seed included only one or two lots, from the Northwest. One of these was Grimm. More than half of the plants in that nursery were winter killed within two years, and perhaps a half of the remainder died of crown rots during the summer. Individual yields of hay and seed were taken with the survivers. The result was that only nine plants produced enough seed in 1908 to set out a progeny nursery in 1909 and none of these lines have survived up to the present time. In 1911 I was fortunate enough to obtain pedigreed strains of alfalfa from alfalfa breeders in the West. One of these original foundation stocks was picked up by Professor Wheeler near Baltic, South Dakota, and sent to Mr. P. K. Blinn of the Colorado Experiment Station. Mr. Blinn sent me some of the seed that he grew in Colorado. The 1909 and 1911 nurseries were heavily thinned by winter and summer killing but our attention was attracted toward a number of individual plants in the 1911 nursery coming from the Western sources. A new nursery was set out in 1913. One of the 1911 plants coming from the lot that Professor Wheeler obtained in South Dakota proved to be exceptional as seen by its progeny in the 1913 nursery. Its progeny was able to set leaves back on the old stems after the leaf-spot disease had taken the leaves off the nursery. The off-spring of this individual plant was distributed in 1919 under the name of the Hardy Michigan Alfalfa. Some one reduced this name to Hardigan and this is the name under which it goes at the present time.

Mr. Olef Nelson of Aloha, Michigan (produced 6½ bushels of Hardigan seed on an acre in 1921 and the following year five acres of new planting were drilled on his farm, the balance being sold to other farmers. Both of these plantings were in drill rows 28 inches apart and cultivated. His success no doubt is because he had light land.

The expansion of Hardigan would have been greater had it not been for the Hubam clover. At least one man, Mr. L. L. Lawrence of Decatur, Michigan, who had a Hardigan seed crop in 1921 allowed the seed to shatter off on the ground while he was taking care of his Hubam crop.

According to the hay yields obtained from several sources of seed, the Hardigan alfalfa has proven itself a better hay producer, as well as a much better seed producer under Michigan conditions, than the common sorts even including the Grimm. Michigan farmers who desire to try alfalfa seed production will do well to obtain some of the registered seed from the Michigan Crop Improvement Association.

However, the 1923 crop of Hardigan is entirely sold out at the present time, and new seed producers must wait until another crop of seed can be produced.

Community Inka Queen DeKol, a purebred Holstein, owned by Dr. T. C. Tiedebohl of Coloma, Mich., was high cow in the 1923 Cow testing Association Work in Michigan. Her record was 23,141 pounds of milk and 869.8 pounds of fat. She is 6 years old. Many fine records are established through the testing associations and members are boosting the work.

DOWNS' CHICKS $10.00 PER 100

June 3rd and later our best No. 1 EXTRA SELECTED WHITE LEGHORN CHICKS will be $10 per 100. Four extra included with each 100.

Our terms are 10% with order, balance one week before shipment

Safe Arrival and Satisfaction Guaranteed

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W. A. DOWNS, Washington, Mich. R. F. D. 1

Member of International Baby Chick Association and Michigan Baby Chick Association.

For persistant layers raise

Wolverine Baby Chicks

Bred for heavy egg production since 1910

Specially priced for June delivery. June 2-10-17 and later. Shipped by parcel post prepaid to your door. 100% safe delivery guaranteed.

S. C. English type White Leghorns

	50 chicks	100 chicks	500 chicks	1000 chicks
Selected Mating	$4.50	$9.00	$45.00	$90.00
Our Best Mating	$5.50	$11.00	$52.50	$105.00

25% with order and will ship C. O. D. for the balance.

Order direct from this advertisement to save time and get your chicks at once, or write for our free 32-page catalog.

WOLVERINE HATCHERY

H. WIERSMA, Prop. Zeeland, Mich., R. No. 2

BIG JUNE-JULY-AUGUST CHICK SALE, $8 per 100 and Up.

Our BIG, FLUFFY, WELL HATCHED chicks will please you.

Varieties	Prices on 50	100	500
Wh. S. C. & R. C. Br. & Buff Leghorns	$5.50	$10.00	$47.00
Eng. Wh. Leghorns, Barred Rocks, Anconas,	6.50	12.00	57.00
Blk. Minorcas, S. C. R. I. Reds,	6.50	12.00	57.00
Wh. Wyandots & Rocks, Buff Orpingtons,	7.00	13.00	62.00
S. L. Wyandots, Bl. Andalusians, R. I. Whites,	9.50	18.00	....

Assorted, from purebred flocks, $8.00 per 100 straight. Postpaid. 100% LIVE ARRIVAL GUARANTEED. Bank references. Hatched from Purebred, Healthy, Free Range flocks. Order right from this ad. Save Time and get our BIG, STRONG, STURDY chicks when you want them. Catalog free. Member I. B. C. A. The Geneva Hatchery, Box 23, Geneva, Indiana.

500,000 CHICKS

BIG, STRONG, FLUFFY CHICKS. Hatched from Pure Bred, well kept, heavy laying hens. Postpaid to your door and 100% live arrival guaranteed. Order right from this ad with full remittance. Best Bank reference. You take no chance. Free Catalog. Member I. B. C. A. and Ohio C. A.

Varieties	Prices on 50	100	500	1000
S. C. White, Brown & Buff Leghorns	$4.75	$9.00	$45.00	$85.00
S. C. Anconas	5.25	10.00	48.00	95.00
Barred & White Rocks, S. C. & R. C. Reds	6.25	12.00	58.00	115.00
White Wyandottes, Buff Orpingtons	6.75	13.00	63.00	125.00

Silver Wyandots, 100, $14.00; Mixed, all breeds, $8 per 100.

MODERN HATCHERY, Box 62, Mt. Blanchard, Ohio.

HIGH GRADE CHICKS

S. C. English White Leghorns and S. C. Anconas. Strong sturdy, northern grown chicks, hatched from flocks on free range. We ship by Prepaid Parcel Post and guarantee satisfaction and 100% live delivery. Send in your order at once at the following prices or send for catalog. Write for prices on Special matings. Send 10% with order, balance one week before chicks are shipped. Can ship any week.

	50 Chicks	100 Chicks	500 Chicks	1000 Chicks
May Prices	$5.50	$11.00	$52.50	$100.00
June Prices	5.00	10.00	47.50	90.00

Broiler chicks $2.00 per 100 less

M. D. WYNGARDEN, R. 4, Box 81, Zeeland, Michigan.

SUNBEAM HATCHERY

Chicks are produced under my personal supervision. Hatched from select, purebred, heavy laying hens, well kept to insure vigorous Chicks.

Varieties	Prices on 25	50	100	500
White, Brown & Buff Leghorns,	$2.75	$5.00	$10.00	$47.00
Barred & Wh. Rocks, Reds, Anconas,	3.25	6.00	12.00	57.50
Wh. & Sil. Wyandots, Blk. Minorcas,	3.75	7.00	14.00	67.50
White & Buff Orpingtons, Buff Rocks,	3.75	7.00	14.00	67.50

Mixed, all varieties, $9.00 per 100 straight. Postpaid. 100% live delivery guaranteed. Order from this ad. Bank reference. There is no risk. Free Catalog. Member I. B. C. A. H. B. TIPPIN, Box E, Findlay, Ohio.

Are Money Makers

Certified White Leghorn CHICKS

Hollywood mated, 13c Rural strain, 10c; Brown Leghorns, 10c; Anconas 11c; Barred Rocks 14c; mixed broods 7c.

Discount 1c per chick on lots of 1,000. ½c on 500.

10 weeks old pullets $1. 100 at 90 cents.

Wire orders accepted.

Large, illustrated catalog free.

RURAL POULTRY FARM

Box 110 Zeeland, Mich.

B & R CHICKS

ARE THE GOOD KIND

We hatch chicks from flocks which have had our own personal attention. Every bird is carefully selected by us for best production. A pure-bred chick from us has the breeding to grow into a fine money making fowl.. Send for full information. 100% live delivery guaranteed. All popular breeds. We hope you will give us a trial order for that will mean a permanent customer, we are sure. Write today.

Borst & Roek, Box 10, Zeeland, Mich.

"It Fills the Bill"

"SELF-SERVE" Chick Feeder

Holds 12 quarts, Can't clog. Chicks can't roost on special cover nor touch feed with feet. Grown fowls cannot steal feed. Price $1.50 plus postage. Send for free booklet.

IRA P. HAYES,

Dept. B 12,

Eckford, Michigan

CHICKS: HOGAN TESTED GUARANTEED Our Chicks are from flocks on free range. They will live and grow and make a profit. ENGLISH WHITE LEGHORNS and BROWN LEGHORNS. Heavy laying Extra Good BARRED ROCKS. Postpaid to your door and full live delivery guaranteed. Our flocks are carefully supervised and Hogan tested. Bank Reference furnished. Write for prices and descriptive matter.

HILLVIEW HATCHERY, C. Boven, Prop.

Box H. R. R. 12, Holland, Mich.

LOW PRICE MAY—JUNE

Our Barron strong English White Leghorn chicks. All well culled and on free range. Get our AA best stock and best winter layers. Low price, only $12.00 per 100; $57.00 per 500; $110.00 per 1000. Our A chicks are good stock, good layers, price $10.00 per 100; $47.00 per 500; $95.00 per 1000. 25% down, balance C. O. D.

ELGIN HATCHERY. Box 216-A, Zeeland, Mich.

QUALITY CHICKS New Prices

Prompt Free Live Delivery. Per 100 Leghorns, $10; Rocks, Reds, Orpingtons, Wyandottes, Anconas, $12; Lt. Brahmas, $15; Assorted, $7.00. Free Catalog gives quantity prices.

Missouri Poultry Farms, Columbia, Mo.

RHODE ISLAND REDS—TOMPKINS STRAIN Stock Eggs for hatching and Baby Chicks. May chicks $20.00 per hundred. Hatching eggs $8.00 per hundred. June Chicks $16.00 per hundred. Eggs $7.00 per hundred. Hen hatched chicks on request.

WM. H. FROHM, R1, New Baltimore, Mich.

STURDY CHICKS—BRED-TO-LAY AND exhibition flocks, culled by experts. Reasonable prices. Catalog free. Single Comb White Leghorns, Rocks, Reds, White Wyandottes. Sunnybrook Poultry Farm, Hillsdale, Mich.

CHICKS—All Popular Varieties. Egg production and Standard Quality. State Fair Winners. No better chicks available at same price. Extremely low prices after May 29th.

Litchfield Hatchery, Litchfield, Michigan.

QUALITY BABY CHICKS: SINGLE AND ROSE Comb Rhode Island Whites. Write for Catalogue.

FISCHERS POULTRY FARM, Holland, Mich.

PUREBRED BABY CHICKS. LEADING VARieties. 100% arrival. Priced right.

THOS. G. CALLAGHAN, Fenton, Michigan.

MARKET FLASHES

MARKET SUMMARY

Wheat weak. Corn and oats unchanged. Rye quiet. Beans firm. Eggs higher. Butter wanted. Old potatoes firm after recent advance. Good supply of poultry and prices lower. Dressed calves firm.. Cattle dull to steady. Sheep lower. Hogs active and higher.

(Note: The above summarized information was received AFTER the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press —Editor.)

FOOTE'S MARKET LETTER

BY W. W. FOOTE

Busy Times on Farms

PLANTING started in southern parts of the country weeks ago and has been working its way northward as fast as weather conditions would permit, much remaining to be done. The spring is late, and cold and wet weather caused serious delays while in many parts of the southwest lact of rains caused apprehensions concerning the winter wheat crop, but welcome rains came later and helped out the situation. To a very great extent the influences of grain statistics have lost their force in making prices, and attention is centered largely on the crop outlook. Plenty of grain for all requirements is offered on the markets of the country, and farmers are overdoing it in marketing their hogs, causing a lower scale of prices, but recent marketings of fed western lambs and spring lambs have been on a small scale most of the time, with a later increased movement. First arrivals of Idaho spring lambs in Chicago this year are chronicled, the opening of the season being an interesting event for sheepmen. The band consisted of 538 extra fancy handy weights, averaging 68 pounds, and they brought $17.15 per 100 pounds. The outlook favors spring lambs, provided they are prime in quality, but killers have little use for others, and they are sure to sell at a big discount. Conditions in the hog trade have changed much, with increased marketings just at a period when things were beginning to look brighter, and prices naturally declined. Cattle prices have had their ups and downs, with sales of the best lots at much lower prices than several weeks ago.

Our Export Trade

American exports of manufacturers ready for consumption increased nearly $20,000,000 in April, over the corresponding month last year, according to the commerce department. Exports of crude foodstuffs fell off from $17,736,000 in April, 1923, to $13,336,000 last month. Manufacturers ready for consumption exported were valued at $147,574,000, against $128,493,000 for April, 1923. Total American exports were $346,859,000, against $325,492,000 the same month a year ago.

Rapid Farm Development

One of the chief obstacles to profitable farming in this country arises from opening up of large tracts faster than increased agricultural products are required to meet the needs of the people and the wants of foreign buyers. The federal government and state governments have always been prompt to encourage the opening up and settlement of more lands, and this has in many instances worked out unfavorably by causing overproduction and unsatisfactorily low prices.

Features of Wheat Trade

For a long period corn was the leader in the speculative trading on the Chicago Board of Trade and the produce exchanges of the United States, but within a short time wheat has taken the lead, and it shows signs of continuing so. Crop news is very closely watched, and prices have advanced on reports of lack of rains and declined when the wheat areas had fair rainfalls. Very fair exports of wheat and flour have been made from North America in recent weeks, but the principal shipments to foreign countries consisted of Manitoba wheat. At times the milling demand for cash wheat has shown more animation, and the visible wheat supply in this country has kept on decreasing steadily, although more in sight than a year ago. Unusual interest is manifested everywhere in the crop outlook, but harvest time is a good way off, and about all that can be known definitely is that all reliable reports are that the acreage is much lowered from that of last year, while crop conditions look somewhat improved of late. There has been a phenomenal movement in Canadian wheat, and a short time ago it was announced that the Canadian visible wheat stocks had been reduced of late nearly 30,000,000 bushels. No marked improvement has taken place in wheat prices, and quotations are far lower than in recent years, May wheat having sold in the Chicago market a little more than two years ago as high as $1.38½. Late sales were made on the Chicago Board of Trade of May wheat at $1.05½, comparing with $1.21 a year ago.

Corn, Oats and Rye Markets

Recent weakness has been developed in the corn market, with speculators at times quite bearish and it seemed evident that traders were counting upon much larger receipts of corn in the near future, as has been customary in other early summers. Prices have undergone very large declines from the high time of a year ago, but a little more than two years ago sales were made in the Chicago market for May delivery as low as 60 cents, while at the same time May oats sold as low as 36½ cents. There is no heavy export movement in corn, oats or rye most of the time, although at times exports of rye make a fair showing, prices for this grain being singularly low. After corn planting is over much increased marketing of that cereal is expected, and in the meanwhile greatly lessened consumption of corn on farms is sure to take place, as pasturage is now satisfactory everywhere. Furthermore, there are reported to be 5 per cent less cattle and 11 per cent less brood sows on feed and on farms than a year ago. Late sales were made of May corn at 78 cents, comparing with 82½ cents a year ago; May oats at 46 cents, comparing with 41 cents last year; and May rye at 67 cents, comparing with 69⅞ cents a year ago.

The Cattle Market

During recent weeks the demand for prime beeves has not been large enough to maintain the extreme prices paid in the Chicago market several weeks ago, at which time the best long fed steers sold as high as $12.50 per 100 pounds. Price fluctuations have been much greater in the middling to good steers than in the commoner light weight yearlings, prices for the latter being strengthened by the good demand for desirable thin stockers and feeders to ship to feeding districts. One unsatisfactory feature of the cattle market of long standing continues, that of a glutted Monday market, with consequent slumps in prices on that day, and on the opening day of last week prices for steers fell 15 to 25 cents on arrivals of 22,073 head, with the highest sale at $11.30. The bulk of the sales of beef steers recently took place at $8.50 to $10.75, with the best offerings of long fed, weighty steers selling at $10.50 to $11.50 and a limited number of long yearlings up to $10.75. No good steers went below $9, and sales all the way down to $6.75 to $7.75 for the commoner light steers and inferior little steers selling for $4.50 to $6.70. Butcher cows and heifers had an outlet at $4 to $9.50, canner and cutter cows at $2 to $4 and bulls at $3.50 to $7.75. The calf market was lower at $5 to $10. The stocker and feeder trade was animated, the demand running on fair to prime lots, with sales largely at $6.25 to $8.60 and choicer feeders at $8.75 to $10. One sale was made of eleven car loads of Montana feeding steers averaging from 973 to 1257 pounds at $8.10 to $9.80. These steers were mostly choice Shorthorns that had been fed on hay all winter and on ground barley and wheat for the last 75 days. For the year to late date the aggregate receipts of cattle in twenty markets aggregated 5,041,000 head, comparing with 5,023,000 one year ago and 4,698,000 two years ago. A year ago common to prime beef steers sold at $7.25 to $10.90, and nine years ago at $7.10 to $9.50.

Large Hog Movement

Recent liberal numbers of hogs in the Chicago market resulted in a lower scale of prices for everything offered and especially for the fast increasing runs of the commoner class of light weights. As usual, the Monday supply was excessive, causing a break of 10 cents, the receipts aggregating 60,000 hogs. Later in the week the buying was especially good, with large purchases by eastern shippers. This is a time when large runs are expected, and it was a little more than a year ago when a day's arrivals on the Chicago market footed up 74,491 hogs, the largest on record for May. Recent receipts averaged 237 pounds, equaling the highest since last October and the same as a year ago. There has been a marked widening out in the range of prices, and the bulk of the hogs sell at a spread of 40 cents, with the best heavy butchers at the top, these selling 15 cents above the best light bacon hogs. Combined receipts in twenty markets this year amount to 19,042,000 hogs, comparing with 18,211,000 a year ago and 13,875,000 two years ago. A year ago hogs sold for $5.75 to $7.30. Recent sales of hogs were made at $6.40 to $7.50.

Enormous Provision Exports

More meat was exported from the United States in 1923 than in any other year since 1920—1,037,000,000 pounds, valued at approximately 150 million dollars. This figure does not include lard. Notwithstanding the drop in prices owing to the 30 per cent increase in quantity exported, the total value in 1923 was 11 per cent higher than in 1922, according to an analysis of world trade in 1923 by the Foreign Commerce Department of the Chamber of commerce of the United States.

Marketing Idaho Spring Lambs

The season for marketing Idaho spring lambs has opened with some good sized consignments which averaged well in quality and found ready buyers at advancing prices in the Chicago market. Shorn lambs sold off sharply, with transactions at $11 to $15, wooled lots of sheep and lambs selling $1 to $2 above quotations for clipped. Shorn yearlings sold at $11 to $13, shorn wethers at $6.25 to $10, shorn ewes at $5 to $7.25 and clipped bucks at $3.50 to $4.50. Spring lambs sell at $12.50 to $17.45, Idaho at the top.

BEANS

There is little change in the bean market although there is a feeling that prices are too low and the Detroit market advanced 5 cents last week. Some of the dealers have enough faith in the future of the market to hold a good supply believing that prices are sure to advance to a better level. So far receipts have been too liberal and demand too quiet to enable sellers to advance prices. Do not miss the article about beans on page 4 of this issue by Art Goulet.

POTATOES

An active demand prevails in the Detroit potato market and both old and new stock are higher in price. At New York and other eastern markets new stock is selling at good prices but old potatoes are dull. A steady tone is noted at Chicago.

HAY

Good hay is scarce and the markets are strong on this class of stock under an active demand. The bulk of offerings are of medium and low qualities and although this hay is not generally desired, buyers are forced to take it owing to the shortage of good grades. Trade as a whole is narrow, and although receipts are light, they are sufficient to satisfy trade requirements except as to quality.

MARKET QUOTATIONS

Wheat

Detroit—Cash No. 2 red, $1.12; No. 2 white, $1.14; No. 2 mixed, $1.13.

Chicago—Cash No. 2 hard, $1.50 @1.09.

Prices one year ago—Detroit, Cash No. 2 red, No. 2 white, and No. 2 mixed, $1.28½.

Corn

Detroit—Cash No. 3 yellow, 82c; No. 4, 78c.

Chicago—Cash No. 2 yellow, 74 @78c; No. 2 mixed, 77@77½c.

Prices one year ago—Detroit, Cash No. 2 yellow, 89c; No. 3, 88½c; No. 4, 86c.

Oats

Detroit—Cash No. 2 white, 53c; No. 3, 51c.

Chicago—Cash No. 2 white, 47c; No. 3, 46c.

Prices one year ago—Detroit, Cash No. 2 white, 48c; No. 3, 47c; No. 4, 45½c.

Rye

Detroit—Cash No. 2, 72c.

Chicago—Cash No. 2, 67c.

Prices one year ago—Detroit, Cash No. 2, 75c.

Beans

Detroit—C. H. P., $4.35@4.40 per cwt.

Chicago—C. H. P., $4.90 per cwt.

Prices one year ago—Detroit, C. H. P., $7.25 per cwt.

Potatoes

Detroit—$2@2.50 per cwt.

Chicago—$1.40@1.60 per cwt.

Prices one year ago—Detroit, $1.26@1.33 per cwt.

Hay

Detroit—No. 1 timothy, $23.50@24; No. 2, $21@23; No. 1 clover $21@23; standard and light mixed, $22.50@23 per ton.

Chicago—No. 1 timothy, $26@28; No. 2, $23@25; No. 1 clover, $21@23; light timothy and clover mixed, $24@26 per ton.

Prices one year ago—Detroit, No. 1 timothy, $17.50@18; No. 2, $15.50@16.50; standard and light mixed, $16.50@17; No. 1 clover, $13@14 per ton.

PRITCHARD'S
WEATHER
FORECAST
INTERPRETED BY THE STARS

Week of June 8

THIS week in Michigan will average warmer and drier than the seasonal normal. The week opens with pleasant weather but will become overcast and threatening during Monday and Tuesday. Local thunder showers may be expected at this time. For the remainder of the week, or until about Saturday, the weather will again become pleasant, hazy and summerlike.

Beginning at the end of this and running into the beginning of next week the weather in this state will become more unsettled with a little more rain and strong winds.

Week of June 15

Rain and wind will be more or less general in Michigan during first part of this week. By the middle part of the week, the sky will have cleared off and several days of pleasant weather will follow. However, the temperatures during the night will generally remain cool for the season. About Saturday storm conditions will again be in evidence in the state and the week goes out with showers and thunder storms general.

First Real Hot Weather in August

From about 23d to 24th of June a sharp reaction to warmer will generate some severe electrical and wind storms and moderately heavy rains, especially in local centers.

Following the storm center during middle part of the last full week of June, temperatures will again show a falling tendency that will continue until early part of July.

The real hot weather of the year, however, will not begin until early part of August.

ALLOWING FORESTRY THROUGH SUITABLE TAXATION

(Continued from page 3.)

taxation of farm woodlots and commercial timber tracts has been conceeded by all to be a very important but most perplexing problem, and especially so in Michigan where there is such a large acreage which should logically be used for timber production.

Farm Woodlots Important

Now farm woodlots are an important part of American agricultural interests. The woodland now included in our farms totals more acres than all the state and national forests. One-third of the forest-growing lands of the United States is at the farmer's back door. In ten, twenty, ofttimes one-hundred acre tracts and more, they form part and parcel of practically every farm unit in the United States.

In Michigan at present only about 4,000,000 acres of virgin timber in the hands of the lumbermen remain to be cut, while census figures indicated that over 3,000,000 acres are devoted to farm woodlands.

Out of the state's 36,000,000 acres, nearly a third are idle and non-productive. If this land is to be reforested and used for timber production, the farm must have the assurance that the taxes will not be confiscatory and force him to harvest his timber before it is really ready for marketing. With such assurance, commercial reforestation appears to be a safe and attractive proposition.

Timber Market Looks Strong

During the last 80 years, the price of lumber has advanced three and a half times as fast as the average price of all staple commodities and there is every reason to believe that the market for forest products will continue to be very strong—in fact, grow better year by year. For as Louis Lamb points out in an article in Commerce and Finance:

"Virgin forests in the United States once covered 822,000,000 acres, more than a million square miles. There remains 137,000 000 acres, less than one sixth of the original. Towns and farms have filled nearly half the cleared spaces; the remainder is either idle land or bears inferior quality second growth timber. We consume 25,000,000,000 cubic feet of timber yearly, only one-fourth of which is being replaced by new growth.

"The decade of 1880-1890 saw 45,000,000,000 feet of white pine cut and sold in Michigan alone. By 1895 the cream of the Michigan stand was gone and Wisconsin was on the way to the "cut out" stage.

"We have left about 2,215,000,000,000 of standing saw timber in the United States, about one-fifth of the inheritance received from primeval nature, by the colonists of 1620 and 1688."

Big Demand for Timber

So far has this program of forest depletion been carried on that 28 states now import more lumber than they produce while many of the eastern states which formerly were large exporters now are large importers. Secretary of Agriculture Wallace announced at a recent hearing before the Senate Committee on Reforestation.

This situation is very true in regard to Michigan. $15,000,000 is spent annually for freight on lumber imported into Michigan. This proves conclusively that timber production in our state is falling far behind our own domestic requirements, and the situation is steadily growing worse. At present rates of lumbering, some twenty years will see the commercial hardwood forests of Upper Michigan exhausted as the pine forests are already exhausted.

Saginaw at one time cut 600,000,000 to 700,000,000 feet of pine per year. Yet when Ex-Congressman J. W. Fordney recently built a splendid new barn he ordered three cars of lumber and a carload of shingles from Aberdeen, Washington, within sixteen miles of the Pacific Ocean.

Tax Reform May Be Solution

So the future looks bright for timber production, but as already pointed out, there is little hope of commercial reforestation as long as the general property tax takes an annual toll while the growing timber is bringing in no return. To promote reforestation, therefore, some better taxation system is required.

Michigan already has a fairly good farm woodlot tax law, although it must be admitted that it is not very generally used by farmers. The law provides that out of a 160-acre farm of which 80 acres is cultivated, a tract of not more than 40 acres if kept well stocked with trees may become a "private forest reservation" and, having been listed with the county treasurer, is thereafter assessed and taxed at a valuation of $1 an acre plus a five per cent harvest tax on the stumpage value of any products harvested.

While this law takes care of the small farm woodlots, it does not apply in the least to commercial forests. Therefore, after an exhaustive study of the whole timberland taxation problem and a careful analysis of Michigan's forestry needs and opportunities, a representative committee of Michigan forestry experts drafted the act for the taxation of Michigan's commercial timberland which came so near being a law.

Theory of Forest Taxation

The proposed law was carefully drawn and was rather lengthy, but the heart of the whole matter is simple. It provided that timberland should be assessed at 5 cents per acre annually while the timber itself should be subject to a harvest tax at the time of cutting.

Now there doesn't seem to be anything radical about this. There is ample precedent for such a system. In fact, that is the way we tax farm crops. The farmer is taxed on his land and on the proceeds from the sale of his crops, but the crops themselves are not taxed before they are ready for market. In all justice a similar arrangement should be provided for the grower of timber crops.

Under the general property tax, at least in theory, a stand of eighty year old timber will have been taxed eighty times, and each time on the sum of its growth to date, so that the compounding of taxes and interest eats up all profits long before the timber is ready to cut. That, as remarked by the Chief of the United States Forest Service, is equivalent to taxing a field of growing wheat every few days through its whole growing season.

"When the states recognize by their tax laws", the U. S. Forestry Chief recently declared, "that those engaged in growing trees should not have a property tax imposed each year on the trees amounting in the end to confiscation, progress could be made in reforestation".

Farmers and owners of commercial timber tracts or lands suitable for reforestation should not cease their fight until a just and workable forest tax law is enacted. And in their effort they should have the support of all who wish to see Michigan reach its greatest possible development.

The relatively low price of slaughter hogs and comparatively high price of corn during 1923 apparently affected the price of purebred swine inasmuch as combined prices of all breeds of the latter were lower during 1923 than in 1922, according to reports from breeders to the United States Department of Agriculture.

A grocer called to collect his bill frequently, but without success. Finally he said in desperation:

"Mr. Jones, I must insist that you make some definite arrangement with me."

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Jackson, Mich.

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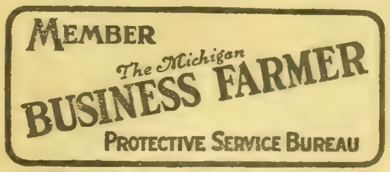

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TRACTORS

Trade Name	Motor Oil
Adaptable	H.
Allis-Chalmers, 6-12	H.
Allis-Chalmers, Other Models	S. H.
All Werk	S. H.
Andrews-Kincade	E. H.
Appleton	S. H.
Aultman-Taylor, 15-30	S. H.
Aultman-Taylor, Other Models	S. H.
Automotive	H.
Avery, C. & Road Raser	H.
Avery, Track Runner	S. H.
Avery, Other Models	E. H.
Bates Steel Mule, Midwest Motor	S. H.
Bates, Other Models	H.
Bear	S. H.
Best Tracklayer	E. H.
Big Farmer	E. H.
Case, 10-18, 12-20 and 15-27	H.
Case, 22-40	S. H.
Case, Other Models	E. H.
Cletrac, F	H.
Cletrac, W	S. H.
Coleman	E. H.
Dart	S. H.
Eagle	S. H.
E-B	S. H.
Ellwood	H.
Farm Horse	E. H.
Fitch	E. H.
Flour City, Junior and 20-35	S. H.
Flour City, Other Models	E. H.
Fordson	S. H.
Fox	E. H.
Frick	S. H.
Gray	S. H.
Hart-Parr	E. H.
Heider	S. H.
Holt, 2-Ton	H.
Holt, Other Models	E. H.
Huber	S. H.
Indiana	H.
International	H.
J. T.	E. H.
Klumb	E. H.
La Crosse	E. H.
Lauson	S. H.
Leader	S. H.
Leonard	S. H.
Liberty	E. H.
Lincoln	S. H.
Little Giant	S. H.
McCormick-Deering	H.
Minneapolis, 12-25 and 17-30	S. H.
Minneapolis, Other Models	E. H.
Mogul	S. H.
Moline	S. H.
Monarch	H.
Nilson	S. H
Oil-Gas	E. H.
Peoria	E. H.
Pioneer	E. H.
Reed	S. H.
Rix	S. H.
Rumley, Oil Pull, 12-20, 16-30 and 20-40	E. H
Rumley, Other Models	E. H.
Russell	S. H.
Samson	S. H.
Shawnee	H.
Square Turn	E. H.
Stinson	S. H.
Titan	S. H.
Topp-Stewart	S. H.
Toro	H.
Townsend	E. H.
Trayler	H.
Trundaar	S. H.
Twin City, 12-20 and 20-35	S. H.
Twin City, Other Models	E. H.
Uncle Sam	S. H.
Wallis	S. H.
Waterloo Boy	S. H.
Wetmore	S. H.
Wisconsin	S. H.

CULTIVATORS

Trade Name	Motor Oil
Acme	H.
Aro	H.
Avery	H.
Bailor	H.
Beeman	H.
Bolens	H.
Boring	H.
Centaur	H.
Do-It-All	S. H.
International	H.
Kincade	H.
Merry Garden	M.
Motor Macultivator	S. H.
New Britain	H.
Red E	H.
Spry Wheel	E. H.
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An Independent Farm Magazine Owned and Edited in Michigan

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Current Agricultural News

BUTTERFIELD MAY TALK AT STATE GRANGE MEET

OPPOSITION to a state income tax may be challenged to debate the issue at the convention of the Michigan State Grange to be held at Petoskey, Oct. 28 to 31, according to information received from officers of the Michigan State Grange. The Grange is active in supporting the income tax amendment to be voted on at the November election.

Dr. Kenyon L. Butterfield, president-elect of the Michigan Agricultural College probably will be one of the speakers at the convention. Dr. Butterfield formerly was editor of the State Grange paper and has been closely identified with this farm organization.

KETCHAM BILL FAILS TO PASS SENATE

THE Ketcham Bill, providing for extensions of agricultural foreign service and a codification of existing law relating to this work, failed to pass the Senate, although it was reached twice on the Senate Calendar. In both cases one or more Senators objected, and both cases occurred when the Senate was working under "Unanimous Consent" rules. The effort to secure this law was based on what appeared to be a self-evident effort of the Dept. of Commerce to secure in the Winslow Bill, a law which would give it sole jurisdiction over all agricultural agents in foreign countries, and wipe out the agricultural service abroad, except under the jurisdiction and control of the Secretary of Commerce. The Winslow Bill was fought to a standstill in the House and an effort to pass it under suspension of the rules was defeated. Senator Jones of Washington introduced the same measure in the Senate, but could not get it reported by the Senate Committee on Interstate and Foreign Commerce. However, the same influences which were back of this measure were able to defeat the Ketcham Bill. The Ketcham Bill was passed by the House, and will be on the Senate Calendar for passage in December, but in the meantime six months to a year of time is lost in reorganizing this service. There is no doubt of a determined effort in December to defeat the Ketcham Bill and pass the Winslow Bill in its place.

FOOT-AND-MOUTH DISEASE WANING

RECENT reports received by the Chief of the Bureau of Animal Industry in Washington show that the outbreak of foot-and-mouth disease in California is definitely on the wane. Accounts received from field headquarters up to June 10 showed no new cases of infection for four days, the longest period without new herds being reported since the beginning of the outbreak in February. Not only were there no new cases, but there were no condemned animals to be slaughtered. All infected premises have been cleaned and disinfected. So efficiently was the cleanup work carried on that no sooner was the disease discovered than crews were busy getting it under lime and earth. The situation now, says Dr. John R. Mohler, Chief of the Bureau of Animal Industry, is the most favorable yet reported. There will be no slowing up in the work of suppression and no relaxation in watchfulness until the plague is thoroughly eliminated and the country's livestock industry freed of all danger from this source.

237 GRADUATE FROM M. A. C.

THE 1924 graduating class at Michigan Agricultural College, number 237 students, is slightly smaller than the average number of graduates for the past few years but, satisfaction as to the condition of the school in this respect as compared with other land grant colleges is expressed by Miss Elida Yakeley, registrar of M. A. C.

The nation-wide depression in agriculture, while Michigan is one of the states suffering the least effects, according to state agricultural leaders, is reflected in the fact that the number of engineering graduates this year is greater than the number of agricultural graduates.

The engineering division leads in the number of graduates, with 71 students, while the home economics division with 64 and the agricultural division with 62 follow closely. Twenty forestry students, 14 in the applied science division, and six in the division of veterinary medicine complete the roster of graduates.

The success of the Applied Science division, which was established as the first non-technical branch of the college in 1921, is an indication of the effect which this division and the new Liberal Arts Course, which will be instituted at the beginning of the next school year, will have on the enrollment of the institute, in the belief of the college officials.

The class of 1924 is the first class to graduate from M. A. C. which has been practically free from the effect of war conditions. Last year's class included a number of students who had entered with earlier classes and dropped out of school to enroll in the army, returning to graduate with the class of 1923.

CROP CONDITIONS POOREST IN TWELVE YEARS

THE composite condition of all growing crops on June 1 was lower than on any corresponding date in more than twelve years, says the United States Department of Agriculture.

With the exception of some fruits and vegetables, no crops are up to the usual average for this time of year and the season thus far has been unusually unfavorable for corn, spring wheat, oats, barley and cotton. Pastures have been slow in starting and hay is showing less growth than usual. The country east of the Rocky Mountains has had the third coldest May in thirty years.

Dry weather has prevailed on the Pacific coast and May was hotter than any previous May in thirty-seven years. Crops in that part of the country are much poorer than usual, particularly in Washington where crops, including fruits, are expected to produce only two-thirds as much per acre as usual with the result that the purchasing power of local farmers seems certain to be seriously reduced.

Wheat growers in Kansas are also facing an unprofitable season, the department says. In other parts of the country the final showing depends too much on late planted crops and on summer weather to permit any degree of accurate estimate of the final outcome, but the department says that present prospects are for somewhat lower crop yields than usual in nearly all parts of the country except in some of the fruit sections of the Eastern States.

An optimistic note is sounded, however, in the statement that in some years when spring has been late, yields have been unexpectedly good. Corn and cotton are still being planted or replanted and many fields of oats have only just come up. With good weather the usual acreage of crops may still be grown and in the country as a whole the usual number of bushels and bales may be harvested, the department says.

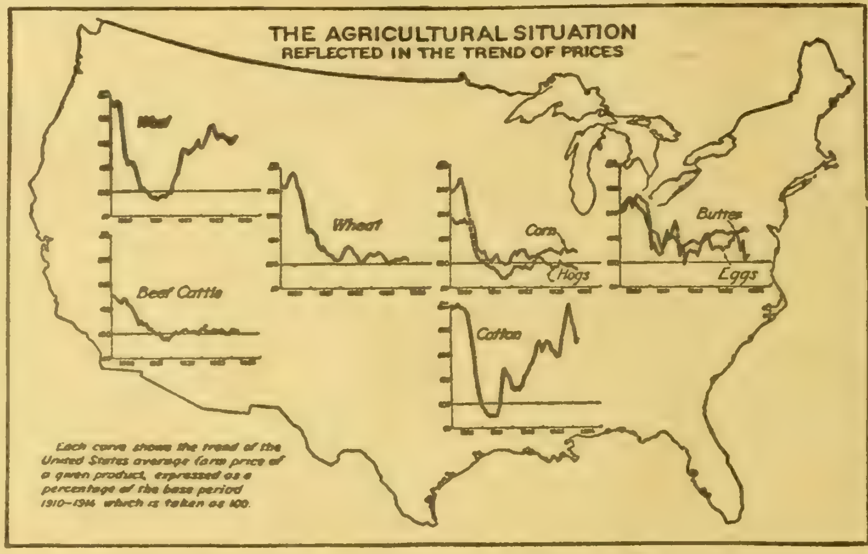
26 CO-OPERATIVE MARKETING BILLS PENDING

TWENTY-SIX co-operative marketing bills, or bills dealing with some phase of the co-operative marketing problem are pending, none of them being given a hearing in either House or Senate. Without a hearing the Senate Committee on Agriculture reported both the Smith Bill and the Curtis Bill. Late in the session Congressman Tincher introduced a bill which provides for voluntary government registration of co-operatives, examination of their financial accounts, increased work by the Department of Agriculture in establishing grades, standards, and inspection service. It is understood that co-operative organizations generally have made representations against action on any of the pending bills, until they can have time to examine them in detail, and to be heard for or against them. It is altogether likely that the first big task the House and Senate Agricultural Committees will take up in December, will be this problem and the pending measures relating to it.

STRAWBERRY PRODUCTION DECLINES

TWO million and a half fewer quarts of strawberries were eaten by Americans last year, than were consumed a quarter of a century ago, due to a decreased acreage rather than a decrease in the public appetite. The strawberry remains the most popular of all small fruits, but a scarcity of berry pickers has made profits uncertain, according to Samuel R. Guard, Director of the Sears- Roebuck Agricultural Foundation.

It is found that in the twenty-four years between 1899 and 1924, the strawberry acreage in the United States has been reduced 21 per cent. For the last two years, acreage figures have been considerably higher than during the previous five year period. This year the estimated acreage is again low, totaling only 113,250 acres, as compared with 119,395 acres in 1919; 143,045 acres in 1909, and 151,363 acres in 1899. Twenty-five years ago there were 257,427,000 quarts of strawberries produced. In 1909, the production had decreased to 255,702,000, and in 1919 to 176,932,000 quarts, a 30.8 per cent reduction in the twenty year period. Last year there were 254,691,000 quarts reported, which is a considerable increase over the 1919 crop figure, but more than two and a half million quarts under the crop of 1899. The crop forecast this year in the five second early states—Arkansas, North Carolina, South Carolina, Tennessee, and Virginia—which furnish most of the strawberry shipments of this season, is 83 million quarts, or about the same as a year ago. This is 20 per cent under the production figure of 1922, which was an unusually heavy crop year.



THE AGRICULTURAL SITUATION
REFLECTED IN THE TREND OF PRICES

Each curve shows the trend of the United States average farm price of a given product, expressed as a percentage of the base period 1910–1914 which is taken as 100.

Relative prices tell the story of optimism or depression. With urban prices and wages from 60 to 100 per cent above pre-war level, producers of beef cattle, wheat, hogs, or other products selling at or below pre-war prices, are at serious economic disadvantage. This chart shows at a glance why the Far West is favoring sheep over beef cattle: why the Wheat Belt favors less wheat and more dairying; why the Corn Belt is increasing corn and reducing hogs; why the South has increased cotton acreage.

The Big Summer Holstein Round-up

"EVERY summer, one big gathering of lovers of Holstein cattle," such is the plan of officials of the State Holstein Ass'n, Last year the large occasion was the "Round-up" at the farm of D. D. Aitken, of Flint.

This year the summer classic will be held at the farm of the Detroit Creamery Company at Mt. Clemens, on July First. This meeting will be under the joint auspices of the Macomb County Holstein Ass'n—the largest in the State—the State Holstein Ass'n, and the Detroit Creamery Company Farms. The program as arranged by these co-operating sponsors is as follows:

FORENOON—Meet at the Detroit Creamery Farms. This establishment is located one and one-half miles south of Mt. Clemens on Gratiot Avenue, or eighteen miles out of Detroit on Gratiot. Visitors will "get an eye full" as the Farms include 1800 acres, there are 24 silos, the milking herd numbers over 500, etc.

NOON—Picnic dinner at the Detroit Creamery Company Picnic Grove. Bring your "makings." The grove is well equipped with modern conveniences, water supply, tables, etc. Free ice cream will be furnished by the Macomb County Holstein Ass'n.

The feed will be followed by short, snappy talks by representatives of the National and local Holstein Associations. Prof O. E. Reed, Head of Dairy Dept., M. A. C. has been specially invited to talk.

AFTERNOON—Huge Judging Demonstration at the farm of the Detroit Creamery Company by Bob Haeger, National Holstein Judge.

"Home in Time to Milk."

Are you acquainted with Mr. Bob Heager? Just scan his pedigree. In the first place he is a breeder of Black and White cattle, having a herd of his own, numbering sixty head, at Algonquin, Illinois. Then, he is a veteran showman, having followed the fairs for years. His famous show cow Minerva Beets was five times Grand Champion Female at the National Dairy Show. Haeger also showed a bull Paul Calamo Korndyke who won Grand Champion Bull three times. These champions represent the last word, the top notch in showing of dairy cattle. No other Holstein ever won distinction more than once. To sum up Haeger's rating as a show man, it can be said that he has won more prizes, including nine Grand Championships, than any five other breeders combined. And, in addition, Bob is a nationally known judge of Holsteins, having officiated during the last four years at leading fairs thruout the U. S. He is booked now to handle Holstein judging at Michigan State Fair in 1924.

Judge Haeger will not be crippled in giving his demonstrations for lack of material as the large herd of the Detroit Creamery Company will yield specimen from every class of females, at least. There are approximately 125 head of purebred Holstein females on the Farms, as well as four mature service sires.

Everyone is invited to this big meeting. You don't have to own pure-bred Holsteins to be eligible; if you are interested in the dairy business you are welcome. Young breeders and boys and girls interested in Calf Club Work are especially urged to accept this opportunity to learn from an expert the fine points of judging Holsteins.—J. G. Hays, Sec. State Holstein Ass'n.

(Editor's Note: The Holstein association of Macomb county was organized through the efforts of County Agent Murphy, a real "live wire", and at a meeting held this spring it was decided to have a dairy meeting and picnic, and the day and place was decided at that time. A committee got in touch with the state Holstein association and the M. A. C. dairy department and it was then decided to make the annual "Round-up" a part of this meet. Mr. Murphy urges all who are interested in dairying, especially those in Macomb county to attend. And he has made a special appeal for the boys and girls interested in club work to be on hand. Let's make a day of it.)

SATURDAY
June 21st
1924

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Being absolutely independent our columns are open for the discussion of any subject pertaining to the farming business.

"Hew to the line, let the chips fall where they may!"

The Michigan
BUSINESS FARMER
The Only Farm Magazine Owned and Edited in Michigan

Published Bi-Weekly
Mt. Clemens, Mich.

TWO YEARS $1

Entered as second-class matter, August 22, 1917, at the post-office at Mt. Clemens, Mich., under act of March 3rd, 1879.

The Growing Menace of Tax Exempt Securities

By Purchasing Bonds Exempt From Taxation Idle Rich Eludes Tax Collector

By STANLEY M. POWELL

(Lansing Correspondent of The Business Farmer.)

IN concluding our recent article on fair assessment of property for tax purposes, we advocated the adoption of such taxation reform measures as would insure not only the more just appraisal of property, but would result in placing additional property, especially personal property, on the tax rolls. This method is beyond all doubt one of the easiest ways to reduce the tax rate and secure a more equitable distribution of the tax burden. When the tax rate goes down it has been the universal experience that personal property quite generally comes out of its hiding places and begins to turn in revenue to the government thus relieving the burden on real estate.

But in the consideration of this situation, we are immediately confronted with the fact that a large amount of tangible property is in the form of bonds and securities, which have been made in whole or in part tax-exempt.

The Vicious Circle

Now that the income tax idea is firmly established as a means of raising revenue for our national government and since the rate has been made progressive, that is higher for the larger incomes, it is proving true that these so-called tax-exempt securities are becoming more and more popular with the wealthy classes. This popularity increases the demand for this type of investment, which in turn stimulates the issuance of tax-exempt bonds and encourages municipal and governmental extravagance, and thus the vicious circle rolls on and on, while the man with the small income, the general property owner, carries the heavy burden of governmental support and the idle rich smugly and complacently elude the tax collector—with official sanction.

The enormous unfairness of this situation is rapidly becoming so apparent that popular opinion, backed up by the best thought of America's leading economists and statesmen, is clamoring insistently for reform to wipe out this flagrant injustice.

What Is the Remedy?

As the first step toward remedying this deplorable condition, Secretary of the Treasury Mellon recommended an amendment to the Constitution to prevent any further issuance of tax-exempt bonds by municipalities, but that was voted down by Congress. If it is a sound principle of taxation that "subjects of every state ought to contribute toward the support of the government as nearly as possible in proportion to their respective abilities," where is the justice in a situation which allows people of large means to actually escape taxation through the purchase of bonds bringing in a net yield of 4½ per cent to 4¾ per cent?

Can anything be more fantastic than the Government of the United States solemnly declaring its purpose to take fifty-eight per cent of a man's income and then provide the means whereby he will pay no tax at all? What is the sense of talking about the rich tax dodgers when the United States Government considerately provides isles of safety on which men of wealth can find complete security from state and federal taxes?

Former President Harding clearly saw the menace of tax exemption back in 1921 when he said in his message to Congress:

"Many of us belong to that school of thought which is hesitant about altering the fundamental law. I think our tax problems, the tendency of wealth to seek non-taxable investment, and the menacing increase of public debt—Federal, State and Municipal—all justify a proposal to change the Constitution so as to end the issue of non-taxable bonds. No action can guard against future encouragement of capital's paralysis, while a halt in the growth of public indebtedness would be beneficial throughout our whole land."

A Many-Headed Monster

Lemuel S. Hillman, writing in the February 15, 1924, issue of the Old National Bank Bulletin, published bi-weekly by the Old National Bank of Grand Rapids, says: "Tax-exempt municipal bonds are unsound and vicious because their effect on the present condition tends to produce the following four bad results:

"It deprives the treasury of revenue which it has a right to expect from men of large means.

"It shifts the burden of taxation to men of smaller financial circumstances.

"It hampers industry by diverting capital which under other circumstances would be invested in public utility, railroad and industrial enterprises.

"It encourages extravagant municipal financing."

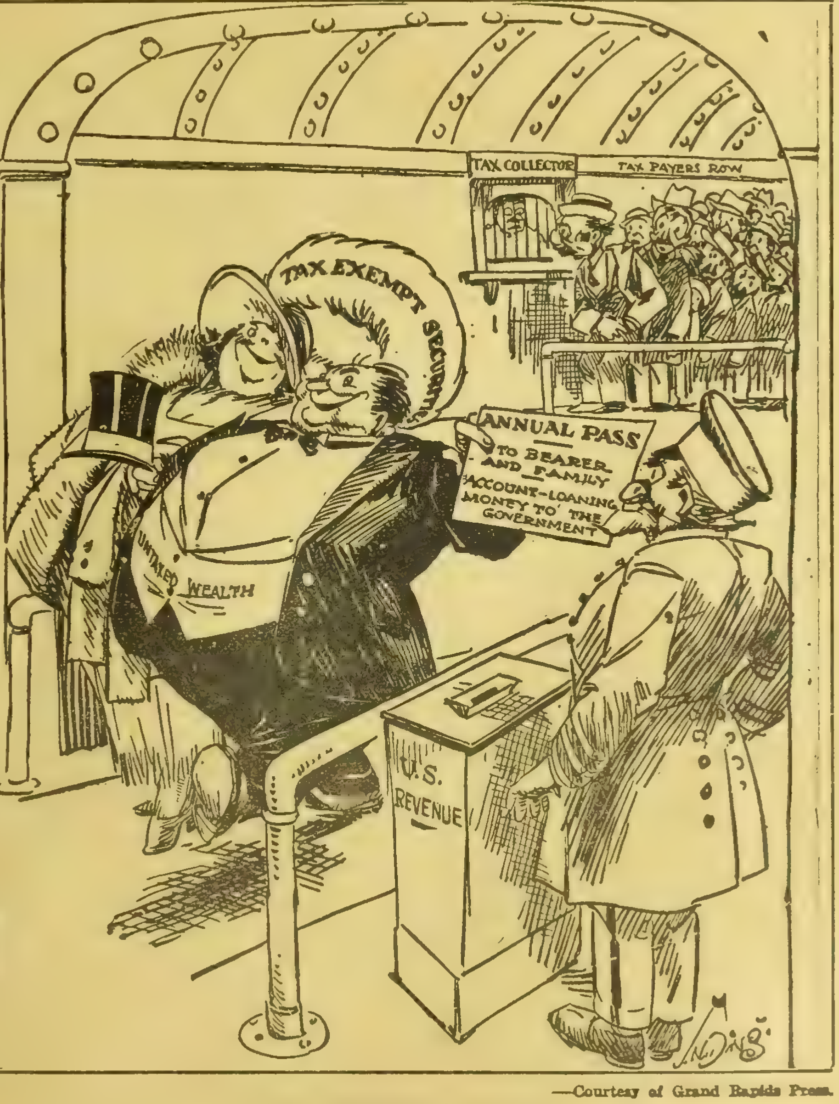
In order to realize the tremendous importance of this matter of tax-exempt securities and the very real menace which confronts our tax payers if this situation is not speedily remedied, let us examine a few figures which trace the development and present status of the tax-exemption evil.

No less an authority than Hon. Ogden L. Mills, Congressman from New York and member of the Committee on Ways and Means, addressing the recent meeting of the National Tax Association, declared:

"For every dollar expended in 1914 for household budgets, labor department figures show the expenditure in 1922 was $1.60, but for every dollar expended in governmental cost in 1914, the preliminary census figures indicate that $2.50 was spent in 1922. But this is not all. States and municipalities have been and are increasing their bonded indebtedness at an even greater rate, in many instances to cover current expenditures, and in more numerous cases for the purpose of financing improvements, whose life is only too frequently exceeded by that of the securities issued. State and municipal issues in 1913 amounted to 591 million dollars; in 1922 to 1 billion, 675 millions. In 1913, the securities outstanding amounted to 3 billions, 822 millions. Today they exceed 11 billions.* * *

Government's Loss Huge

"Tax-exempt securities constitute, in my judgement, the greatest evil in the whole field of taxation—an evil so farreaching in its consequences, both social and economic, as to be deserving of the most serious and immediate attention on the part of the people of the country. Of one thing I am perfectly sure: a progressive income tax at high rates and tax-exempt securities cannot exist side by side. Tax-exempt securities must inevitably destroy the progressive income tax, and I am by no means certain that the evil has not already reached such proportions as to make any possible action too late to save our present federal income tax. Tax-exempt securities, gentlemen, are absolutely indefensible, whether you study them from the standpoint of the fiscal needs of government, from the economic or from the social standpoint. Let us consider the fiscal problem first.



—Courtesy of Grand Rapids Press.

UNTO THEM THAT HATH.

"The Treasury estimates that there are $11,000,000,000 of wholly tax-exempt securities outstanding, and that they are being issued at the rate of $1,000,000,000 a year. There are, in addition, some $20,000,000,000 of partially exempt United States securities. If we assume that this $10,000,000,000, more or less, of wholly exempt securities and the $20,000,000,000, more or less, of partially exempt securities are held in the following percentages by the following classes, I can give you an estimate of what it is costing the Government.

"Assuming that 37 per cent of these securities are held by corporations, that 23 per cent are held by people who pay no income tax, and the balance by people whose average rate of income tax is 35 per cent, tax-exempt securities are today costing the United States Government $242,000,000 a year. * * *

"Theoretically, this loss should be offset by the lower rate of interest which the Government has to pay by reason of the tax-exempt privilege granted the investor, but this, under our system of government and taxation, is only true to a very limited extent. Thus the Federal Government derives no benefit whatsoever in so far as state and municipal securities are concerned. In the second place, even with respect to its own securities, it is unable to capitalize the reduced taxes, first; because the rate is uncertain; second; because it is progressive.

Here's How It Works

"There is no question but that if we had a flat, uniform and reasonably permanent tax, tax-exempt securities would command a price in the open market which, as compared with the price of taxable securities, would be higher in proportion to the exact extreme represented by the tax-exempt privilege; that is to say, they would sell at a price high enough so that the net yield of the bonds would be equal to the net yield of the taxable bond, after the payment of the tax. The Government would, of course, get the benefit of the increased value. But with the progressive rate we have a very different situation.

"Let us assume that a man with an income of $10,000 bought in 1920 a 5 per cent taxable bond which yielded him a net return of 4.58. Had he bought a tax-exempt bond and paid 105.17, it would have yielded him 4.58 net. In other words, he was equally well off whether he bought a taxable or a non-taxable security at that price. But assuming that the non-taxable security was selling at 106, then he was obviously better off if he bought a taxable security. This meant that under the 1918 Revenue Act the $10,000 man dropped out of the tax-exempt security market at 106.

"Apply the same line of reasoning to the other income classes, you will find the $20,000 man dropping out at the somewhat higher figure, and so on down the line. The million-dollar man could have afforded to pay 143.80 for the non-taxable as compared with the taxable 5 per cent bond. As a matter of fact, he obtained the non-taxable bond at a much lower figure, by reason of the fact that the other income classes dropped out long before the bond had reached a price where it would be

(Continued on Page 17)

Simple Instructions on Dehorning the Calf

Art of Dehorning Simple and One Should Be That Way When He Approaches Matter, and Calf, Says Expert

By JIMMIE HAYES

Dairy Extension Specialist, M. A. C.

OF COURSE you know Jimmie Hayes, or have heard him talk at some meeting. If you have never heard or met him you have missed something. He knows live stock from A to Z and, in addition to being in the Dairy Extension department at the M. A. C., owns a farm known as "Komboss Farm". In this article, which appeared in the Holstein World, he tells how to dehorn a calf. If you do not know how to perform this "simple" operation we advise you to read this article carefully. And even if you have had experience with this "simple art" don't miss this article; you'll get some new ideas. The article is just as witty as his talks and if your sides do not ache before you get through it you better call a doctor.

ABOUT one year ago I struggled to my feet at a banquet telling my fellow Holstein breeders numerous valuable points about our noble calling. Among the regular gems trickling through my somewhat irregular teeth were a few remarks concerning the technique of dehorning a calf.

Some of my auditors (Is that the word I want, "auditors," or should it be "Creditors?" I am more familiar with the latter; anyway I mean them there folks what had to be polite and listen), said I should write your paper the formula or performance or whatever it was. So I resolved to do so and here, 10 months later, I get to the point just about the way we farmers do our writing, eh? Or transfer our Holsteins?

Today I had a special reminder to enlighten you as per aged resolve, when at a little gathering I was telling the dairy farmers how to lose money gracefully in the cow business, and during my harangue one certain person in the bunch would smile every time I caught his eye. I concluded I surely had a dairy convert in him. And when I momentarily subsided this person asked me a question. "What makes a cow's horns drop off?" Now I wonder was he a convert or was he like the cow's horns? Anyway his question reminded that I really should be writing you about how to dehorn a calf.

It is a very simple procedure. Each and every farm press article on the subject admits that it is simple. One should be that way when he approaches the matter, and the calf.

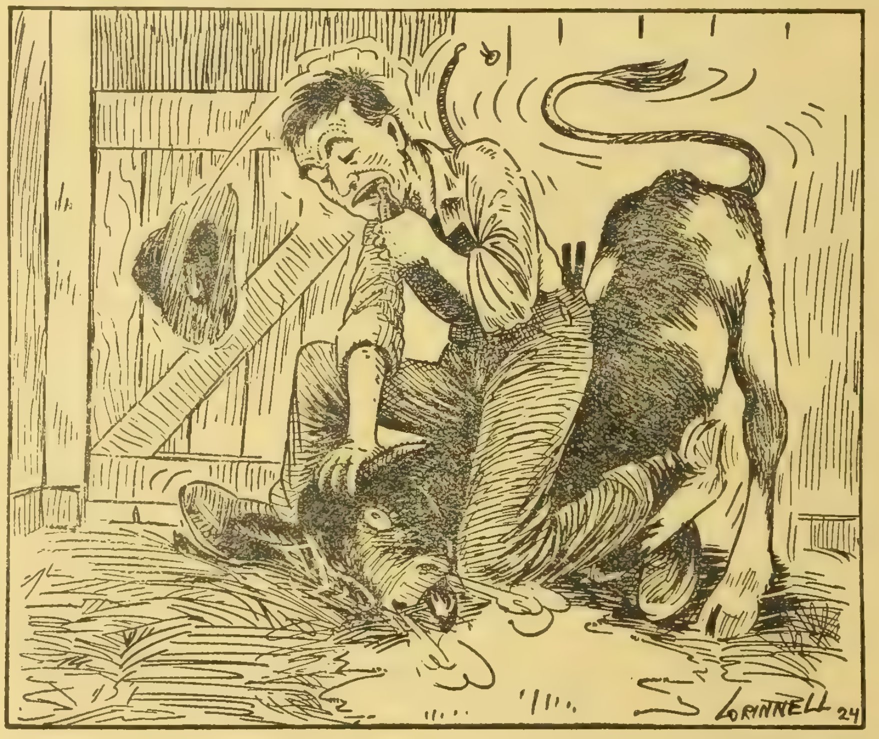
First you enter the pen where the 3- to 5-day-old calf is circulating, boot him off to one side and deposit in the lightest corner of the pen a nice bunch of straw which I forgot to say you were carrying.

Then you go to the medicine cupboard and dig out the glass bottle in which you interned your stick of caustic potash last year when you used it last. And you find that your stick isn't a stick at all but a bunch of powder. So all is off until you happen to be in town and after being there a couple of times you happen to remember to buy a stick of caustic.

Ready now for a new start, a few days later. It is true, you find the procedure still very simple. You carry into the calf pen a big armful of dry straw, dump it in the lightest corner, flop the sniffling calf thereon and camp astraddle of his writhing frame. And remember that you should have brought along the clippers to cut his forelock away from the horn buttons. So up you rise, go back to the medicine cupboard, tetar things out right and left and finally find your clippers, not there at all but over at the house where you used them Sunday for cutting the boys hair.

When you reenter the calf pen you find the calf a trifle wary after having been flopped once, but you finally get him cast again on the dry bedding and you gnaw off the hair around the horn buttons, with the clippers—not your teeth. You have no trouble locating the horn buttons because the calf is maybe 10 days old by this time and his horns are more stubs than buttons. And you find the clipping simple, although there do appear to be a couple of teeth gone out of the clippers, and the calf seems to dislike playing Samson and blats frequently.

Now tuck your clippers in your wampus pocket along with your handkerchief and bagstrings, nails, baling wire, burrs, etc., with which all good farmers are ballasted. Take out your bottle containing the caustic, removing the cork with your teeth. This is good practice because it permits of your using one hand to thrust the calf's head into the bedding also any trace of caustic on the bottle top getting on your lips will indicate whether or not the caustic is active, fresh and worth the dime it cost you. Lay the cork carefully down on the straw.



Take out your bottle containing the caustic, removing the cork with your teeth. This is good practice because it permits of your using one hand to thrust the calf's head into the bedding, also any trace of caustic on the bottle top getting on your lips will indicate whether or not the caustic is active, fresh and worth the dime it cost you.

About now you recall that you should have brought along a can of water to use in moistening the horn buttons. But you hate to go after it, as you are "sitting pretty" on the throbbing calf, and so you spit on your right forefinger and daub one horn button good and proper. After shaking the bottle the caustic finally flies out into the straw. You recover the biggest piece you can, grasp it securely in your right hand and start rubbing it firmly but gently on the moistened horn button.

And directly, Kotyledenous Korndike and Merciful Mercedes! The caustic starts after the wet forefinger you used as a brush; you drop everything you used and rush to swish your burning finger in the cool water of the barnyard tank. It occurs to you at once that you should have donned a glove or else wrapped the caustic stick with a piece of paper.

Among the miscellaneous gloves in the woodshed you eventually discover one meeting the requirements, that is, for the right hand and with no hole in the finger and you go blithely back to the calf pen.

Meanwhile the calf, freed of his incumbus, has been going blithely, too. Pleased at your precipitate removal from his neck he has been tripping gaily with wild abandon about his quarters. The dry pile of bedding, caustic, bottle, cork and all are scattered in every direction. You finally locate a small length of caustic, the calf does not impede your search by sucking your ear as you crawl about searching, nor does he playfully bunt any exposed area. No, he holds apace, his confidence in you severely strained he retreats from your advance with suspicion, so that you must run him down and sprawl him out any old place in the pen, dry or otherwise. You continue where you left off.

From now on the procedure is fairly simple. About the only difficult part is to locate enough saliva, for by this time you are prone to be overheated and dry-mouthed by the excitement.

In the fast waning light you do, however, at last get each horn-stub lubricated, rubbed firmly and unmistakeably with the pea-sized stick of caustic, turning a deaf or deafening ear to the calf's outcries and striving always to keep his thrashing feet out of your pants legs, until the skin over the horn just starts to peel. That's the time to call it a job, a simple job at that.

Michigan Beans May Go Above $5 Per Hundred Pounds Before New Crop

By GERALD HULETT

THIS is a letter written to us by Mr. Gerald Hulett just prior to June 1st. Mr. Hulett is associated with a firm that deals in beans and this fact should be taken into consideration when you read the letter, but he has taken conditions as they are, added them up and given the ultimate results. To us it looks as though he had given the correct answer to the future of the market. He fully believes in higher prices for Michigan beans and recently told us that the farmer cannot long continue to raise beans for less than cost of production. Even the selfish dealer realizes that he will soon be out of business if the farmer cannot make a profit on his crop.

NO one ventures any very logical reason why Michigan beans should be selling below the cost of production at a time when there is virtually no competition. The old bug bear of foreign beans has been effectually eliminated by a dollar seventy-five cent tariff. California has steadfastly and successfully held large and small whites at a level far above the market on Michigan pea beans until now their crop is about exhausted.

Unofficial but trustworthy figures place the marketable yield of Michigan beans in 1923-4 at 8,200 cars of 40,000 pounds each. The estimate of cars shipped from Michigan up to May 1st is conservatively 6,500 cars, leaving on May 1st only 1,700 cars. During May there have been shipped I believe very close to 700 cars and June 1st will not see more than 1,000 cars in the state.

1,000 cars to care for trade demands during June, July and August is a startling modest supply. Weather conditions to date indicate a grave possibility that there will be no new crop of beans available until late September as rain has so far prevented any attempt at planting the new crop. This means that on June 1st Michigan will have to market only a possible 250 cars of old crop per month.

Consider that one large dealer alone claims to have handled in one month on this crop more than 500 cars and you can visualize quite something of a scramble for beans during the next ninety days.

The scarcity is already being felt in the state and with a growing demand quite customary at this time of year the market is looking infinitely better.

Rumors are abroad that elevators have sold short the beans stored with them by farmers. If this be true, and the stories are from such sources that there must be a measure of foundation for them, there is right now a tremendous short interest in this bean market. We are of the opinion that beans held in Michigan today are in strong hands and cannot be dislodged by any absence of demand created by bear dope broadcasted to the trade.

The canners cannot have supplied their requirements up to the new crop deliveries. Business in general is at low ebb and the number of unemployed is great. At such times bean consumption always increases as the housewife is looking for a cheap nutritious food.

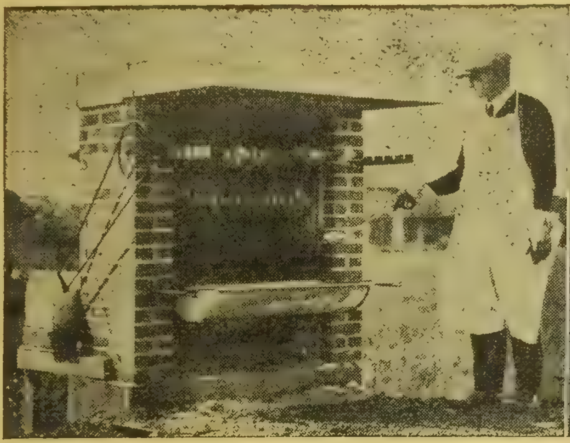
Every feature in the bean situation today points toward higher prices for Michigan beans and it would not be surprising to see a dollar advance in the market before new crop.

Sent In the Coupon Yet?

Have you clipped, filled out and mailed the coupon that appeared on this page in our last issue or have you been too busy to get to it yet? Please send it in at your earliest convenience so that we can get the information all together and then we will be able to give you some valuable facts.

Our readers are giving our request their prompt attention, as they always do, and the number received each day shows an increase. It does not matter whether you have any beans stored or not, fill out part of the coupon regarding your acreage both 1923 and 1924, because we want that information just as much as the other.

PICTURES FROM FAR AND NEAR



THE LATEST IN BARBECUES.—R. W. Wiggins of Cincinnati, Ohio, hit upon the novel idea of putting up this grate along the main highway, and supplying passing motorists with hot roast beef and ham sandwiches. The spit is operated by an electric motor. This might be worth trying here in Michigan.

COOLIDGE MADE MEMBER OF ANCIENT MILITARY COMPANY.—President Coolidge was unanimously elected an Honorary Member of the Ancient Artillery Company of Mass. Photo shows Col. Willis W. Stover pinning on the Honorary Medal.

CARTEL DU TRAVAIL

ELECTIONEERING DE LUXE.—A candidate in a recent French election had a new way of talking to his constituents. He spoke into the transmitter in his auto, and his words were thrown out of a big horn on top, in great volume, reaching all his hearers and not giving himself a sore throat from loud talking.

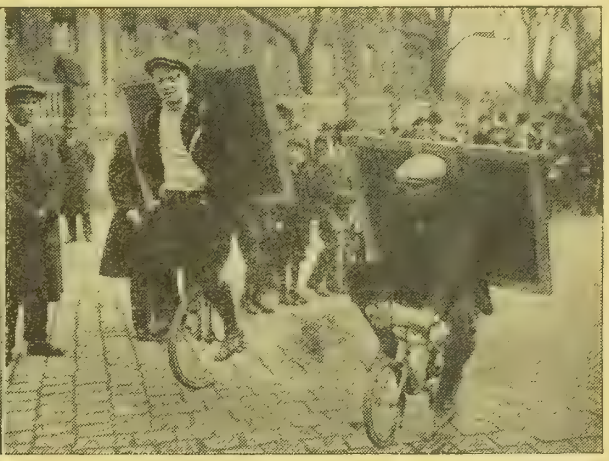
BIG FACTOR IN LEAGUE OF NATIONS.—Miss Florence Wilson of Philadelphia, head librarian to the League of Nations at Geneva, Switzerland, has a real job. She has to supply, at a moments notice, any information asked by the League, relative to their meetings.

A REAL FIRE.—A spark generated by the scraping of a lid on a tank started this fire in St. Paul, Minn., where 6 men were burned, 2 fatally, and more than one million gallons of gasoline destroyed, ending in a loss of about a half million dollars. Flame and smoke rose in a column 300 feet in the air.

EX-SENATOR'S SON CHOSEN AS TYPICAL AMERICAN BOY.—Thomas P. Gore, Jr. 13 year old son of the former senator from Oklahoma, has been chosen as the juvenile resident of the National Capitol as best typifying the "Spirit of American Youth."

SOME HEAVY HITTERS.—This picture was taken the last time the Detroit Tigers played at Boston, Mass. And the list of leading league batters shows that 5 of the leading eight were in the city that day. Left to right: Ty Cobb, of Detroit; Rip Collins, Ike Boone, and Harris, all of Boston; Heilman, of Detroit.

CLAIMS DISCOVERY TO PREVENT CANCER.—Prof. Gaetano Fichera, Director of the Institute of Pathological Surgery, of the University of Pavia, Italy, reports his perfection of a sure cure for cancer.



SOMETHING NEW IN ADVERTISING FROM THE CONTINENT.—Here is the latest thing in advertising in Europe; sandwich-men mounted on their curious wheels. One is on a diminutive bicycle while the other is riding on a single wheel, with as much aplomb as if he was walking.

TO ATTEND PRISON CONFERENCE.—Mrs. Maud Booth, of the Volunteers of America, has been designated by Gov. Smith of New York and President Coolidge as the American representative to the International Prison Conference at London.

FROM CHICAGO TO ROME BY CANOE.—G. H. G. Smyth, Canadian sportsman and Henry Fitzgerald, traveler and soldier, are making this trip. They are paddling their way to New York from where they ship to London. From there they will paddle down the Thames, across the Channel, Oise, Seine, Saone, Durrence, and Mediterranean to Rome.

INDIAN CHIEF AT THE UNIVERSITY OF PENNSYLVANIA.—Chief Joseph Strongwolf of the Ojibway Indian tribe, World War veteran, and 40 years old, is studying Anthropology at the University of Pennsylvania, Philadelphia, Pennsylvania.

(Copyright, Keystone View Co.)

FORTY YEARS OF FAKING

The Memoirs of a Grafter—By Himself

THE Master Grafter, Pete Dexter, who changed his name as often as most of us change our minds, got away with a lot of deals in last week's installment. He even got away from the police and although he left most of his money he got such a bad scare he decided to beat it back to his aunt's home and live quietly for a while.

If you have been following Pete's career as he has outlined it during the past weeks you can see that faking is all right part of the time and while a fellow can get away with people's money some of the time, sooner or later the long arm of the law reaches out and gathers him home to prison. Pete was beginning to feel this way every time he got in a close deal and as he stated, a set of "nerves" is a bad thing to have when you are living off of illgotten wealth.

But Pete has a few tricks left up his sleeve. You can bet that it was a good one that finally caused him to come to grief and it's really funny how easily he was caught napping. He just couldn't reform and this week he tells how he managed to keep up appearances and do a job which was about as honest as any he has handled.

CHAPTER VIII

DURING the winter of my second year in the town "looking after my aunt's affairs" I made the acquaintance of a fellow who was supposed to be a lawyer. He had a little old office down next to the post office and the boys used to gather in Blake's office and talk over the war and politics and other weighty questions. Blake, that was the attorney's name, never seemed to be extra busy and finally one day, when he and me was in the place I up and asked him what his business amounted to.

"Well, sir, I'm a patent attorney," says he.

"And what's a patent attorney?" I asks, "anything like a patent medicine?"

Blake laughed in his usual manner and proceeded to tell me just what he did. It appeared that a lot of people that had ideas were always wanting to get a patent so Blake took advantage of the opportunity and would get the records straight for them and see that a firm of attorneys for whom he worked in Washington got the red tape unwound and a patent issued. Blake got a good commission for all business he sent in and he always collected $10 or $15 for his own part of the job. Blake had the way of making every one feel that whatever he did for them was worth about twice what he charged for it and after a lot of talk on the subject I had another of my bright ideas.

As long as I had to stay in the town to take care of my aunt's business, why not be making a little cash on the side? The more I thought of it the better the plan looked so one day I drops in on Blake with the following plan.

My scheme was to organize the American Patent Corporation. Blake was to be the attorney and I was to be the company. With my capital we opened a Washington office and I took charge. Didn't have to be their all the time as we found a place where their was a nice clerk who would forward us any mail addressed to our Washington office for a few dollars a month.

We started a lot of advertising literature in the various papers telling of the fortunes that had been made in simple patents and advised anyone with a contraption to send it to us. We were to examine it and tell them if it was worth patenting or not. After we had advised that it was (for we always did) we asked them to send us $25 which would cover all charges of investigating and other details and in return we sent them a swell engraved certificate which was nothing but a bluff as all it said was that the person named on the certificate was a customer of the American Patent Corporation.

When we had a bundle of applications on hand Blake would hop a train for Washington and spend a day looking up prospects of patents and talk things over with the Washington attorneys and he generally came back with a bundle of patents covering all kinds of devices from flea catchers to anti-cow kicking attachments.

Our next step was to notify the owner of the patent we had secured that he had an unusual device and there was a fine chance of his making a lot of money out of it, if he could only get the right firm to start making them. Here's where the American Patent Corporation came in. For an additional $20 we would place the patent in the hands of our sales department and he would personally visit manufacturers and try and sell the device. We got most of the gang in on this scheme and after a while we announced that we had been appointed representatives of the Grand Patent Exposition to be held in Boston or New York and that the chairman of the exposition was very much impressed with a number of our patents among which was the one of the fellow we were addressing. It would be a great pleasure on our part to exhibit this patent and we wanted to and desired the permission of the fellow to do so. Of course it would cost $10 for space to fix up a proper demonstration. The owner of the patent generally felt the high honor we had imposed on him and the ten bucks was soon in our possssion. Of course we never exhibited the layout. There is a patent show each year in the cities but we didn't worry about it. Most of our gang were located far enough away so they never turned up and besides, we always made sure whether they expected to attend or not in advance. Blake kept track of these fellows pretty well and he managed to satisfy the few that came, entertaining them so royally in the city they generally forgot what they came for.

Next step was to notify the gang that their device had been awarded a prize for excellence and we would forward a letter telling about the committee's decision and this permitted the owner of the patent to send $5.00 for a handsome diploma and if he cared to secure a handsome bronze medal which the Patent Exposition was awarding that could be arranged for $5.00 more.

Being a pretty good writer and knowing what got the eye, I handled the mail business. With the aid of a local printer we prepared some swell letters, diplomas and the like and a local stamping company made us some medals for a small price.

With Blake and me working most of the time sending out answers to the inquiries to our ads in a lot of country papers, we hardly had time to get our checks in the banks. A lot of fellows heard about our exhibiting patents at the big shows and they asked permission to send us money so they could get in on the deal. At the end of our first six months we had to move to a larger office and hired several clerks to keep our business from swamping. I didn't realize how easy money was to get. It just rolled in. This was right after the war when everyone was flush and fellows who had ideas that they had been carrying around for years began to draw plans and send the stuff to us. The money came in to fast that I was just a bit suspicious. I was afraid we might get snagged by the post office department but Blake was a pretty shrewd lawyer and he was sure we were safe.

At the end of two seasons I had a case of nerves and one day when Blake and I had a little argument I offered to sell out. It seemed that he had a friend who was anxious to get in the business and so Blake took me up. I turned over my interest to him for a good price and placed my money on ice. My luck had come back and I felt that for a fellow of my age I was going good. Besides I had run onto another plan that looked better to me and the chances for better profits appealed to your truly.

I had been noticing, while hanging around the post office, that there was a big business in baby chicks going thru the mails. I talked to a fellow about it and he told me how one firm in Cleveland was doing a half a million dollar business each year. I had investigated and found much to my surprise that I didn't need a thing to get into this business but a little advertising copy and a connection with a hatchery. I could be a chicken broker. All the orders I got I could turn over to a hatchery and let them ship the chicks in my name. It looked honest enough to me and I couldn't see where I could get into trouble so I decided to take it up.

We entertained them so royally in the city they generally forgot what they came for.

So I organized another company. I made a trip to a western section of the state and contracted with a fellow who had a big factory to furnish the chicks. Then I had a lot of cards printed telling about the Mongolian Hatcheries. I stated that I could furnish 57 different breeds, and of course I managed to get my prices below any other person in the business.

When I got an order for 100 Rhode Island Red chicks, I sent the order out to my western representative, and he filled it. This man, I knew, wasn't filling the orders with real blooded chicks, but I did not care. For the price you couldn't buy chicks like I was selling from anyone. It sure was funny how people fell for my circulars. The only thing they saw was the price, and they never worried about quality—that is, not just then. Things were fine. I sold thousands of chicks of all breeds that spring, and both the fellow running the incubators and myself made money.—(Concluding chapter in July 5th issue.)

MICHIGAN STANDARDIZATION PROGRAM SHOWS RESULTS

STANDARDIZATION of fruits and vegetables has been making rapid progress in Michigan during the past year. Growers and shippers, recognizing the importance of standardization and the absolute necessity of shipping sorted and graded products, have been eager to cooperate with the Michigan State Bureau of Foods and Standards, Lansing, in the enforcement of the apple, grape, peach and potato grades. The potato and grape grades are mandatory, according to State statute.

The potato grades, which are the same as the U. S. grades, were not promulgated until September of last year. Every important shipper in the State was sympathetic to the grades and the making of them mandatory, and throughout the season the finest kind of cooperation was evident, with the exception of about five smaller shippers. The majority of potato shipments were moved according to grade and properly tagged. W. P. Hartman, Director of the State Bureau of Foods and Standards, estimates that at least one and a quarter million dollars will have been returned to the Michigan growers and shippers this season as the result of the grading program. He bases his estimate on the discriminatory prices against Michigan potatoes that have been evident during the past few years. In addition to obtaining increased returns during the shipping season just closed, desired markets have been established for future years.

Pear growers are petitioning the State Bureau for mandatory grades for pears. Celery and onion growers are showing an interest in the same form of standardization.

A substantial improvement in the quality of all produce shipped from Michigan has resulted from the grading program, Mr. Hartman states. Within the past year there has been a greater demand for Michigan products, a greater confidence in the shipments, and a considerable reduction in the number of requests for terminal inspection.

Solved!

"Doctor, can you cure me from snoring?'

"Do you only snor in your sleep?"

"Yes, but I snore so loud that I awaken myself!"

"Well, the best thing is to sleep in another room."—Klods Hans, Copenhagen.

Milk-Fed

He was one of those fresh young fellows given to the use of slang. At the breakfast-table, desiring the milk, he exclaimed: "Chase the cow this way, please."

"Here, Jane," said the landlady, "take the cow down to where the calf is bawling."

Farmers Service Bureau

(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full name and address. Name not used if so requested.)

HELP TO GET BONUS

IF any of our paid-up subscribers who served in the World War have any trouble in getting the bonus we will be pleased to help them. The service is yours for the asking, there being no charge for service to our subscribers who have their subscription paid in advance. Kindly give us all details in your first letter and sign your complete name and address.

CANNOT MEET NOTE

I bought $300.50 worth of stock and farm tools at auction in March 1922. In March, 1923, I could not make the payment, so I went to the owner and told him that I could not meet the payment and he would either have to take the interest or take the stock and tools back. He said he did not want the stock but he would take the interest. This note was for one year only. Now the second year is up and I have not the money to pay for the stock. I cannot make any payment or interest. Can he force me to pay either if I give the stock back? For the second time I told him to come and get the stock and tools, but he always says he doesn't want it, and he did not have any use for it. One of the horses died after I asked him the second time to come and get them because I could not pay for them, and he refused. Am I compelled to pay him for the horse or not? I bought the farm off the same man on contract. If I should leave the place this spring, can he make me pay the taxes for the coming year or not?—J. M., Boyne City, Mich.

YOU would be liable for the payment of the amount of the note and interest when it comes due. The man who sold to you would not have to accept the return of the stock. Under your contract of purchase, you would be liable for the entire amount of the price you agreed to pay. If you forfeited your land contract and returned the farm to the owner, you would not have to pay future taxes.—Asst. Legal Editor.

WOULD BE CONSIDERED AN ALIEN

I am sending in a question I would like to have answered through your excellent paper at your convenience. I am a subject of Great Britain and wish to make a short visit to Canada. Under the present immigration laws would I be prevented from entering the United States when I wish to return without trouble? I will make a statement that I was born in England. My parents came to Canada and brought me when I was six months old. I lived there until I was twenty-one years old, came to Michigan and made my home here ever since. Have never taken out full citizenship papers. In 1889 I took out first papers but neglected to do any more until they were outlawed. Have now recently made application and taken out papers but have to wait two years to become a citizen. I am a farmer and own my own land (124 acres). If you have any way to find out for me I will greatly appreciate your kindness.—J. K., Parma, Mich.

INASMUCH as you have not been naturalized you would be considered an alien upon leaving the United States, and would be subject to the same requirements as other aliens who desire to enter the country, except that if you did not remain away for as long as six months, you would not be subject to the quota. The immigration officer at the port where you embark can give you the information you desire. You would likely have to see him personally and give him all the circumstances of your case.—Asst. Legal Editor.

ERADICATING QUACK GRASS

Please tell me how to get rid of quack grass. Also would you recommend the use of oats as a nurse crop for a late July seeding of alfalfa?—O. H., Muskegon, Mich.

ONE of the most successful methods of eradicating quack grass is to allow the plants to come into bloom and then cut very close to the ground the same as for hay. At this stage the roots contain less plant food than at any other time and by cutting off the leaves, the roots are still further weakened due to the fact that the leaves do not have an opportunity to assimilate plant food. The quack should be kept cut or grazed until fall and then plowed. Frequently some clean cultivated crop may be put on the land the following season. It will be necessary, however, to go over the land a number of times in order that the growth may be subdued. Persistant clean cultivation is the most successful method of eradication.

I would not recommend the use of oats as a nurse crop for a late July seeding of alfalfa. The oats will make use of the moisture and plant food that should be secured by the young alfalfa plants. In this way the alfalfa plants frequently do not make a sufficient growth to prevent winterkilling. When alfalfa is seeded during July the plants should make sufficient growth that winter killing will not be a factor. A nurse crop is of some value when alfalfa is seeded in the spring due to the fact that the nurse crop will tend to prevent the growth of weeds.—C. R. Megee, Assoc. Prof. of Farm Crops, M. A. C.

ENTITLED TO YEAR'S NOTICE

Enclosed find $1.00 for your valuable paper, which we cannot offord to miss, as we enjoy it very much. Would like your answer as soon as convenient. Three years ago we moved on a share farm, no contract was made as to time, as owner said the farm, would never be sold, and hoped we would stay at least five years. Now he has a buyer for the farm and wants to sell. I wish to know if in case he sells same, if we must move now or if we can remain here till March 1925? Must not we be informed the first of the year to leave? When we moved on, there was 40 acres of fall crops out, what rights have I to put fall crops out? We have three small children and would appreciate your answer very much.—A Faithful Reader, Vicksburg, Mich.

IF it was understood between the parties at the time the oral agreement was made that rent was to be paid yearly, I am of the opinion that you are holding under a tenancy from year to year, and accordingly are entitled to a year's notice to quit.—Asst. Legal Editor.

WHO GETS INSURANCE?

I am a subscriber to your paper and would like a little advise. It a man has his life insured, benefit of wife and she dies three years before he, who does insurance go to? They owned all jointly. Also can an administrator be appointed without consent of heirs, and can he sell all property against wishes of heirs who wish to keep some or all of household and furnishing goods?—F. C. S., Bellaire, Mich.

UPON the death of the wife as beneficiary under the policy, her benefit would go to her heirs. An administrator is not entitled to be appointed without the consent of the heirs of the deceased. The question of selling the property is determined by the wishes of the majority of those interested, including the heirs and creditors.—Asst. Legal Editor.

BANK CAN COLLECT

I have a question I would like to ask, it is the following: If A borrows $2,000 at a bank and B goes security and A fails to pay the notes, can bank collect same from B? B owns farm jointly with his wife. Can they get judgement against the farm? Can they take personal property? Thanking you in advance, I remain—A Subscriber, Hesperia, Mich.

THE bank could collect the amount of the note from B out of his personal property. However, the farm which B owns jointly with his wife could not be taken for the payment of this obligation. —Asst. Legal Editor.

WIDOW GETS ONE HALF

Will you please answer through the Farmers' Service Bureau this question? If a man dies, leaving no will, what does the widow receive, there being one child, of the real estate and personal property? What is her share if there are no children?—Mrs. L. H., Charlotte, Mich.

IF there is one child the widow would receive one half and the child one half of the real and personal property of the deceased. If there are no children and no issue of a deceased child, the widow would receive all the personal property up to $3,000. All the personal property over this amount would be divided between the widow and the deceased's parent's, she receiving one-half and they receiving one-half. And she would receive one half the real property, the deceased's parents receiving one-half.—Asst. Legal Editor.

LAWFUL FOR WOMAN TO VOTE

Is it lawful for a woman to vote on general or any election if she is not a land owner or if she has not a joint deed with her husband?—J. E. C., Au Gres, Mich.

IT is lawful for woman to vote at general and special elections even tho she is not the owner of real property.—Asst. Legal Editor.

WAS STOCK INCLUDED IN CONTRACT?

Would like your advice on a contract. A bought a farm from B with 2 horses, 2 cows, 2 hogs and paid $1,000, has paid all taxes and interest but cannot make 1924 interest. If B foreclosed would A have to leave said stock on place?—W. H. S., Leslie, Mich.

IF stock was included in the contract, I am of the opinion A would not have a right to remove them from the place in the event B forecloses.—Asst. Legal Editor.

USE POISONOUS SPRAY ON WILD MORNING GLORIES

Could you please tell me how to kill Wild Morning glory. I have a field that has quite a lot in.—A. J., Breckenridge.

THE Wild Morning glory is a pest that is very difficult to handle for the reason that its under ground stems are very pertinacious. Ordinary methods of cultivation are not successful because they do not destroy the plant completely and usually merely serve to drag various portions to uninfested parts of the field. If cultivation is attempted it must be so thorough that at no time do any green leaves remain above the ground more than a few hours before they are destroyed by cultivation.

If the infested portion of the field is not too large that portion may be broken with a plow and then fenced in and hogs turned in. They will clean out the underground parts, particularly if they are not too thoroughly fed before hand.

Certain poisonous sprays are effective. These are sold under the name of Weed Killer and are put out by various firms. These are almost all solutions of various strengths of arsenic compounds, usually Sodium arsenite, and must be diluted and sprayed on the plants in accordance with directions on the cans. It should be remembered, however, that the Wild Morning glories require stronger solutions than some other weeds. In California these arsenic compounds have been very successful with Wild Morning glories in some types of soil and not so successful in other types. It must be remembered that this is a deadly poison and that any form of ilvestock eating plants that have been sprayed, even a number of days later, will be killed. It will be necessary, therefore, to fence out all stock from the sprayed area until there have been several heavy rains. This poison will kill other plants as well.—E. A. Bessey, Professor of Botany, M. A. C.

WIFE GETS ONE HALF

If a man owns land before he is married, also personal property, after death would wife get all or could his relatives step in for a share, where there is no joint deed or will or children. Thanking you in advance.—L. H. A., Benzonia, Mich.

UPON the death of the husband the wife would be entitled to one half of the property and his father and mother one half, or brothers and sisters, in case both the mother and father were dead.—Asst. Legal Editor.

HOLDER OF SECOND MORTGAGE CANNOT FORCLOSE

Can the holder of a second mortgage foreclose if the one that holds the first would not agree to sell his share? First mortgage will not be due for nearly a year, second one will now be due soon. Will second party be obliged to wait until first mortgage is paid?—A. C., Cooks. Michigan.

THE holder of a second mortgage cannot foreclose until the first mortgage is discharged.—Asst. Legal Editor.

HUSBAND WOULD GET FARM

If my sister and her husband owned a farm and had a joint deed and no children and if she died, would or could her mother claim my sister's share of the farm, or would the husband have full claim on the farm? Please oblige, Mrs. G. W. G., Evart, Michigan.

UPON the death of the wife, the husband would be entitled to all the real estate which they held jointly.—Asst. Legal Editor.

OUR READERS' NEW BUILDINGS

Have you built any up-to-date farm buildings lately? If you have send us a picture of the new building and we will print it in this new department. It will show the M. B. F. readers what their distant neighbors are doing to change the scenery. And, incidently, you may be able to help some farmer decide the type of house, or barn, or other buildings he desires to put up. He may like the appearance of your building and will want the plan of it. Kodak pictures are all right if the details show up well. Do not send the negative, just a good print.

HOME OF MR. AND MRS. EMIL RHODE, MT. PLEASANT, MICHIGAN
Mr. and Mrs. Rhode write that their home is a modern eight room bungalow, 26 feet by 32 feet, with an addition, nine feet by eighteen feet, on the west end. The porch is eight feet deep and runs across the entire front of the house. They have furnace, bath, hot and cold running water, and gasoline lights. Woodwork is of hemlock and doors are fir with floors of oak and pine. There is a basement under the entire house, eight and one half feet deep.

What the Neighbors Say

LIKES TAX ARTICLES

DEAR Editor:—I have been a reader of THE BUSINESS FARMER for three years and like it very much. I have read all of Mr. Powell's articles on Taxation and agree with him to the letter. Now when I read Mr. Eaton's letter I cannot help but write so Mr. Powell will know he has my support. Mr. Eaton may pull the veil over some peoples eyes but not mine, as a farmer who pays taxes, and taxes are increasing every year. He cannot make me believe the Governor and his administrative board have cut down expenses yearly.

The first thing the Governor did was to increase the number of state employes by a great many and raise the salaries of some. When Mr. Eaton says there is no money used —only as appropriated by the legislature I would ask him if the money to build the Island Lake road and Pavillion and to buy a $5,000 car for the Governor and cars for the other state officials was authorized by the legislature.

I wish to thank Mr. Powell and the M. B. F. for putting the facts and figures before the voters of the people of our state.—W. D. Cheeseman, Barry County, Mich.

WHY THE FARM BOY LEAVES SCHOOL

TO the Editor:—I wish to explain the great mystery to Dorothy Dill. First the life of a small boy on a farm is so unpleasant, his pleasures so few, and work so hard that he as a rule is not a bright pupil in the school.

As he grows older his work becomes harder, his hours longer, and his desire for something else stronger. It is at the age when he is disgusted with the farm, with all of its slavery and no money for himself, that he finishes his education in the eighth grade. About at this time he is doing far more work on the farm than one would dare ask the hired man to do, and receives his board and room, with a few cheap clothes for his reward.

Of course he wants to escape from this dull life; any red blooded young man would. He does not, under the conditions that he has lived, long for a life on the farm. His longing is for less work, better living conditions, more pleasures, and his eyes naturally turn toward the city. Here he knows they all can be found.

Also it would be impossible for the old parents of the boy to send him to high school or college. They need his cheap labor. It is then that he makes the step up the ladder by leaving the worn out farm, and the life of toil and enters the city. Yes, he may enter a factory, store, railroad shop, or a great many other openings spring up before him. Now with short hours he has a chance to study in Y. M. C. A., night school, business college, or even with the help of good books he can improve his education, and in a few years work himself up in the place where he started.

It is seldom now days that a factory or other place doing big business closes down, and throws one who is willing to work, out of a job. Of course, there are times when one is laid off for a brief spell, but as a rule does not mean a hardship for the worker. His mind is on his work, he thinks of improvements that could be made on the machinery, etc. He expresses them, and is rewarded by promotion and increased wages or salary. He is living now as he could never have expected to live on the old worn out farm of Dad's. This partly explains the mystery, Dorothy Dill.—Ralph Jordan, Petoskey, Michigan.

TAXATION AND THE FARMER

ON an upper stretch of the much toured Dixie "trail" in Michigan there is a lately abandoned farm. Its occupancy was indicated last fall by hay still remaining in the barn, there being then no market for hay. Its abandonment, which did not at first appear from the road was attested by the dismantled pump at the well and by broken branches of apple trees, indicating another species of highway invasion. The main highway robbery had occurred when the owner was taxed off the farm. This place—and its number on this and all roads in Michigan is legion—bore mute testimony to the policy of a state which has been building concrete boulevards and taxing farm lands six per cent on valuations already increased out of all relation to possibilities of selling.

In fact the caption at the head might by a slight verbal change appropriately read "Taxation or The Farmer". For the hour has struck, and in this state at least we must immediately decide, if agriculture is to have a chance of survival. It cannot continue with low selling prices coupled with hay buying prices, on top of that, inflated wages due to the automobile and the war, and at the top peak of all taxes that have reached the point of confiscation.

The cost of hard surface highways must be taken off land, at least off lands being used for food production. The motor traffic which demands these should pay for their construction and maintenance. This is in no wise affected by the accidental fact that the farmer may occasionally run an auto. The principle is that the land should be relieved and the traffic, but for which they would not be ought to pay the cost. Neither on the ground of assessment for benefits nor that of contribution for general public purposes is road taxation of land justifiable. Without these luxurious highways automobile manufacturing would not have flourished like a green bay tree. Apace with its advance agriculture has declined. The latter is entirely unable to bear the burden. The former is apparently able. If unable the remedy is at hand. Let the Detroit Automobile Club, which is fostered by the motor manufacturing interests, demand a road holiday, and the state administrative board will not hesitate to suspend the issue of bonds for the construction of trunk lines. Nor as to county ways will petitions be circulated under the Covert act if the out worn theory of special benefits is once put in the discard. This remedy looks drastic. It is more radical than gasoline or state income taxes. But is it not needful that the cure go to the roots of the disease? If food production can no longer make a six per cent margin, it certainly cannot stand six per cent taxes. For the raising of food is not done solely for pleasure. The taking off the farmer's back of that portion of the tax load which is raised for road purposes may not be radical enough. The fact is our basic industry is swamped. Its future is menaced by a great and growing crop of weeds. Noxious weeds made great headway during the war. The fight against them has been a losing one and is utterly hopeless with no help in the country. No longer is a pretense made of enforcing the weed cutting statute. What this extension of foul growth means to any successful cultivation of the soil need only be suggested. Now if motor manufacturing can afford to pay the price that draws into its meshes all rural labor, why cannot and should not it pay for fundamentally essential work this labor would otherwise have performed. That question may very shortly have to be asked. But this can at any rate be said well within the bounds of moderation, that, rather than have farming taxed out of existence, the automobile industry might sooner for its own welfare step under the extra tax load it has brought into being.

If, however, it protests that its taxes are high enough, no fear of factory removal should stop this fair correction of an unjust situation. Let it be remembered that no state has been more liberal than Michigan in its treatment of this industry. It will not fly elsewhere. Nor is there apparent danger of the factory being killed. Unlike the farm tiller, whose prices are set for him, the motor manufacturer can pass added cost on to the purchaser. If this curtails the sale that would not be the worst thing for society.—F. W. Newton, Saginaw County, Michigan.

REINFLATION

DEAR Editor:—I wish to commend Mr. Bennet on his article in your paper of April 26th entitled "An Over-production of Crops and Advice." He pointed out, as others have, that the deflation of currency in the latter part of 1920 was the beginning and logically the cause of the present financial depression of farmers; that our huge public and private debts were contracted during inflated values and and now we are unjustly required to meet our inflated obligations with deflated prices for our products. I wish to point out, further that since deflation was the cause of our troubles that the most logical and only complete remedy is reinflation.

According to the official report of the secretary (a copy of which I have at hand) there was $50.11 per capita in circulation in 1920. Then we were prospering and business in general was booming. By 1922 the currency was reduced to less than $40. We all know the disasterous result. While farmers suffered most, all industries felt the sting of reaction. In 1923 the amount was increased to $42.50—hence the much heralded improvement in the agricultural situation. Now if an increase from $39.86 (the amount in 1922) to $42.50 gives us marked improvement, what would a return to over $50.00 do? Plainly this: It would give us a return to the prosperity we were enjoying in the fore part of 1920.

Plainly our economic salvation is in the hands of the administration through the treasury department and reserve board. If the expressed sympathy of our friends (?) in Washington isn't empty prattle it seems to me they will consider the matter more seriously and meet the issue from the true standpoint. Personally I have but little faith in any measure which does not include reinflation, for to have property we must have sufficient money in circulation. Most of the proposed measure to help farmers, would only serve to postpone or side track the real issue.

I should like to hear from others on the subject.—Wm. G. Conklin, Van Buren County, Mich.

TOO SMALL PROFIT

TO the Editor:—As I am a reader of your paper I saw an article on the editorial page of March 15th, of which I could not approve, along the lines of cooperative marketing. Now if this business was handled along the same lines as our maple syrup was in 1918, by a clearing house in Detroit, it sure would be some business, or the wool pooling along about the same time, Mr. Farmer would soon have to give up his Tin Lizzy, and resort to old Dobbin and the shay. Radios would sure be out of the question, and I think you know something about how those things were handled at that time, and still you seem to wonder why so many farmers are leaving the farms.

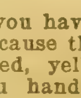
Well, you have the wrong idea. It is not because they are weak kneed, jelly-spined, yellow backed, as the dope you handed to them in the same issue. It you really think so, why not get out of your easy chair and give it a trial yourself, you will know then the difference between talking with the pen and following the plow. As for myself, I really like the farm work the best of all, but when it comes to working sixteen hours a day for at least nine months, out of twelve, then fourteen hours a day for the balance of the year, and then when you balance your books you find you have the large sum of about two and a half dollars per day left for your labor, you ought to be pretty well satisfied, don't you think so?

Well, as to the politicians he is all right, and it seems that he seldom, if ever, thinks of the folks at home, and it is so plain to be seen that a blind man could feel it with his cane. You speak of the farmer helping himself, but to the man behind the plow under the past and present situation, it would be a hard task when the prices are set by the gamblers before he can get the seed in the ground. Now if the farmer had anything to say about the prices of the implements he works with, it is out opinion the doors of such factories would be closed in a very short time, and a good many of us look at it in the same light.

We can close up our part of farming if we see fit to do so, and we are not yellow under any ray of light that you can turn on us.

Now I have figures that I will give you that are absolute facts, and the real thinking, working farmer you speak of, is slowly but surely to some extent, closing up his business no matter how strong his heart may be, for he cannot pay the wages he will have to pay and get the money out of the crops he grows.—A. D., Petoskey, Mich.

Uncle Rube Spinach Says:



JUDGMENT

YOU know I've got young nieces, cousins an' things like that, an' a daughter an' everything an' one of the dear young things sez to me a few days ago, she sez: "Grandpa what do you think of the new styes of dress for women," she sez. "Oh!" sez I cas'ly, "have they got new styles?" I sez. "Why," she sez, haven't you noticed that they were wearin' 'em longer than a year ago an' more clingin'," she sez. "Why Irenie," I answered, "I hadn't hardly noticed they wuz wearin' 'em at all" I sez—You know since my eyes kinda failed me out at the bathing beach I ain't paid much 'tention to the styles. "Are they wearin' 'em longer now?" I sez. "Do you mean a longer time or length or vice versa?"

"Oh Dad," she sed, "you are so dumb. I guess you are gettin' old all right,—don't you notice the girls any more?" An' I sed, "Not to speak of particularly—guess I've seen 'bout all there's to see ain't I. An' you know, Bernice," I sez, "when you've seen all, there ain't any more is there?"

Well Luella, one of my nieces, seemed surprised that I should show how little I know an' fin'ly she sed, "I want to ask you if you don't see a diff'rence in the way we dress today an' when you were younger 'an you will ever be again." "Oh yes," I sez, "I git you now! I guess I know what you're gettn' at. When I wuz young and your great grand parents wuz 'bout 50 years younger," I sez, "girls undressed an' dressed in the dark an' when they came out where folks could see 'em they had their clothes all on. They had hoop skirts 7 feet wide, you couldn't get near one if you wanted to an' their waist line was always fixed, the corset an' the hoops fixed it. Yes, yes, I remember the old styles well," I sez. "Have they changed 'em lately?" I asked her.

"Now Dad," sez she, "you jest wake up. Look at me," she sez an' —well—I can't tell jest how it is, but somehow our girls seem jest as nice today as they were 50 years ago. Yes bobbed hair an' mebbe bobbed skirts—mebbe a cigarette now and then. I don't like cigaretts myself but equal rights permits a lot of things. I don't like to see a young man smokin' 'em when with a lady, the same objection on the other side. But anyway the world's goin' on most every day—we see what's called a flapper today, next thing we know she'll be a mother an' jest as good an' as nice as any mother we've ever known.

An' in spite of any think we think or say or do our girls—bobbed though they may be—will come through all right, will make good wives to good husbands—if there is such animals—good mothers in spite of the husbands, and thats the end of the story of what my relations sed to me. Cordially yours, UNCLE RUBE.

P. S.—When I was at the age the girls spoke of I don't rec'lect of so many female painters as what we have today, an' 'nother thing—if you seen her with brown hair today she'd most always have the same colored hair when you met her again, an' her eye brows were real hair an' no silk stuck in her eyelids—yes, I do see a diff'rence in some things.—U. R.

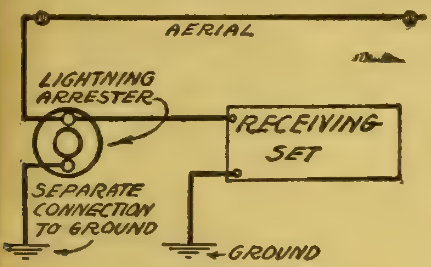
RADIO DEPARTMENT

EDITED BY J. HERBERT FERRIS, R. E.

LIGHTNING DAMAGE AND RADIO

NEARLY every owner of a radio set becomes worried as soon as we begin the summer, fearing that their aerial will cause lightning to hit the house. There is absolutely no danger of lightning hitting your house even during the most severe thunder storm if you have properly installed your radio set and aerial.

Actually, a well put up aerial is a protection and not a hazzard as far as danger of fire and lightning damage is concerned. The aerial acts as a good dissapater of electric charges and for those who have not placed lightning rods on their houses it becomes a safeguard against lightning.

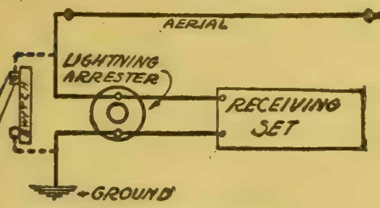


Using lightning arrester.

Not only can lightning damage your house, but very small electric discharges may ruin your radio set for you, therefore it is necessary to properly install your radio set with it's lightning arrester.

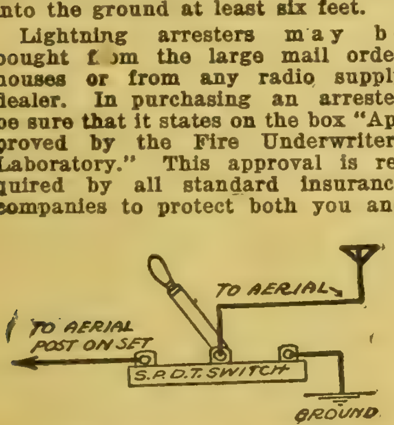
Every aerial should have at all times connected to it, during both summer and winter, an approved type of lightning arrester. There are two types of arresters made, one the vacuum type, which is a small glass tube with two wires in it, separated by a short space and with most of the air taken out of it. The other is made with two pieces of carbon separated by a very thin piece of mica. Both of these arresters are made to discharge at a pressure of 500 volts.

Lightning arresters may be placed inside of the house or on the outside of the house, and are continually in service, as one post is always connected to the aerial and the other post to the ground. The ground connection can be the same one that you use on your receiving set or a separate ground wire may be run to a rod or pipe that is driven into the gound until it is in contact with permanently moist earth, this means that it should be driven into the ground at least six feet.



Using a switch.

Lightning arresters may be bought from the large mail order houses or from any radio supply dealer. In purchasing an arrester be sure that it states on the box "Approved by the Fire Underwriters Laboratory." This approval is required by all standard insurance companies to protect both you and them from carelessly installed aerials. For should lightning by chance hit your house the insurance adjuster is going to ask you if you had a lightning arrester installed and what make. It it was an approved type you will get your insurance and if it is not an approved type you may not be able to collect your insurance.



Using both arrester and switch.

The diagrams would show you how the arrester should be connected to your aerial and should be followed carefully.

An additional safety device that many people use (I use it) is to place a single pole double throw switch in your aerial circuit, and whenever you are not receiving thow the switch to the ground side, and then your aerial will be directly grounded and no lightning discharge can pass thru your set. A single pole single throw switch can also be used. The diagrams show the connections for both.

We recommend that a switch be used and at the approach of a thunder storm that you throw the switch to the ground connection and refrain from listening in until the storm has possed.

CAN YOU GET DETROIT STATIONS?

I HAVE had several letters from readers stating they were unable to get Detroit, or that some other stations farther away came in much clearer. This is rather surprising as there are three powerful stations at Detroit and they have been heard by people over one thousand miles away. Most of these letters came from readers in the northern part of Michigan and I am wondering if this condition is very general in that section of the state. Please write in telling me if you receive one or all of the stations—The Detroit News, WWJ; The Detroit Free Press, WCX; Detroit Police Station, KOP—and which one comes in best. If you cannot get Detroit what stations do you listen to? When you write in tell me about your set and send a picture of it so we can print it.

Questions and Answers

201-A TUBES ARE BEST

Have read your articles in THE BUSINESS FARMER on radio sets. I have a Crosley No. 6 set, two tubes, one amplifier and one detector tube. For tubes I am using two U. V. 201-A tubes. The man that put the set in for us, said we would get better results from them than any other tubes. For B battery am using an Everyready 45 volts, 30 cells. We tried dry cells for the other battery but they would not work so got a storage battery, that is a Rub-Tecx. The set has worked good until lately. Had the battery charged about two weeks ago, since then, we have not been able to get very much, and what we did get we could not clear up, so we understood it. I was wondering if our B battery was all right or if that was gone. Have had it since in May. Would like a two-step amplifier with a speaker but have not money to put into it now. Am thanking you.—W. W. H., Alamo, Mich.

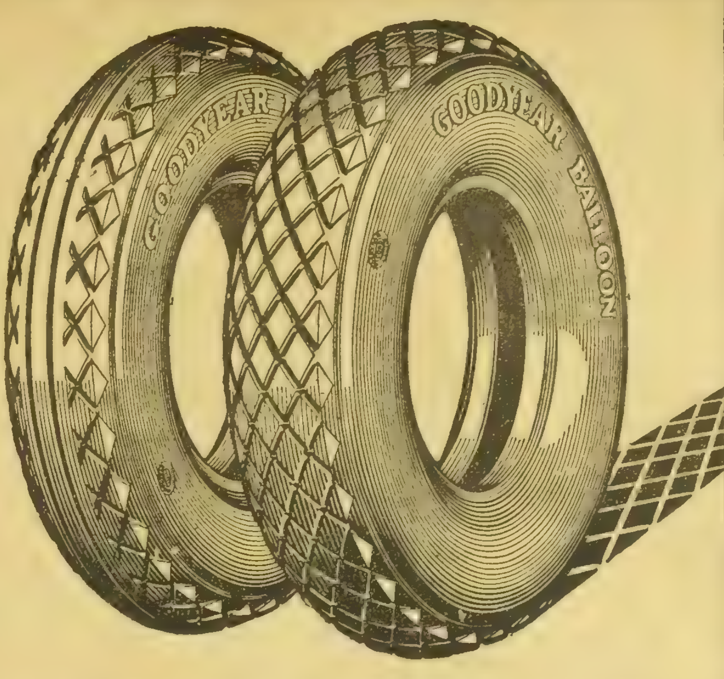
Though the 201-A tubes are not quite as sensative as the old 200, the average results are better or at least as good as that obtained with other tubes and for amplifying they cannot be excelled unless you use power tubes. The man who sold you the set was right.

Evidently you must have had the dry cells connected up wrong for they have and do work on 201-A tubes, though I believe in the long run you will be better satisfied with the storage battery. It ought to last you over 5 years.

I believe that your B battery is weak and that you need a new one, I would suggest that you get 2 of 22½ volts and combine them, for when you get a 45 volt battery if any part of it goes bad the whole thing has to be discarded, but with two of 22½ volts you can sometimes get quite a bit more service out of one than the other and save that way.

There are times, even with new batteries when signals do not come in clearly, if this should last more than 3 or 4 days, then you may be sure that your battery is run down or the A battery is low.

Next fall maybe you will have your amplifier, then you can entertain a whole room full at one time.



AN outstanding feature of Goodyear balloon tires is SUPERTWIST, the remarkable new cord fabric perfected by Goodyear. Tests made with this enduring new material showed that a tire carcass made of SUPERTWIST delivered more than 100% greater service than a carcass made of an equal number of plies of standard cord fabric. SUPERTWIST is used only by Goodyear, and is built into Goodyear balloon tires of *both* kinds—to fit new small-diameter wheels, and to fit the wheels now on your car.

Goodyear Means Good Wear

GOODYEAR

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DEAR Editor:—Accept my thanks for the personal reply regarding T. B. testing. I am enclosing 25c for the certificate and sign which I think is a very good idea, as well as helpful. Your paper is wonderful in its getting results as I notice. The tax debate now going on is very interesting and still more instructive. I am crazy about reading debates of any kind, as usually one gets both sides of the idea. More debates if possible. We have a debating club in this community and it sure has some interesting subjects at times. Our last debate was horses vs. tractors, and the tractor admirers held sway by a hand vote. Your departments are as good as can be had for such a small sum. Altho I am no story reader, my wife is just the opposite and the children fight over reading the Children's Hour. And I of course read all of the rest except stories. Will remain a loyal subscriber as ever.

Hoping that the M. B. F. will survive any fatal attempts, I am, John Spiegel, Toivola, Star Route, Box 38, Michigan.

The Whole Family Likes It!

Read Mr. Spigel's letter. It tells the story of how thousands of our readers feel about The Business Farmer.

Every issue is a gold mine of information, pleasure and recreation. Are you digging into it?

Notice Mr. Spigel is getting the full benefit of our Service and Protective Bureau. Are you?

Results are Sure with the Nichols-Shepard Oil-Gas Tractor

It's a simple, powerful, economical, long-lived kerosene-burning tractor built for *heavy duty*.

Just right for threshing, silo filling, sawing, road grading, plowing, heavy hauling, or any other kind of heavy belt or draw-bar work—

Burns Kerosene at All Loads
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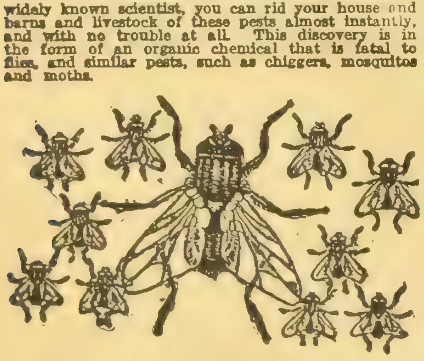

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Oh Money! Money!

by ELEANOR H. PORTER

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(Continued from June 7th Issue.)

THE next day Mr. Smith left the house soon after breakfast, and, contrary to his usual custom, did not mention where he was going. Miss Maggie was surprised and displeased. More especially was she displeased because she was displeased. As if it mattered to her where he went, she told herself scornfully.

The next day and the next it was much the same. On the third day she saw Jane.

"Where's Mr. Smith?" demanded Jane, without preamble, glancing at the vacant chair by the table in the corner.

Miss Maggie, to her disgust, could feel the color burning in her cheeks; but she managed to smile as if amused.

"I don' know "I don't know, I'm sure. I'm not Mr. Smith's keeper, Jane."

"Well, if you were I should ask you to keep him away from Mellicent," retorted Mrs. Jane tartly.

"What do you mean?"

"I mean he's been hanging around Mellicent almost every day for a week."

Miss Maggie flushed painfully.

"Nonsense, Jane! He's more than twice her age. Mr. Smith is fifty if he's a day."

"I'm not saying he isn't," sniffed Jane, her nose uplifted. "But I do say, 'No fool like an old fool'!"

"Nonsense!" scorned Miss Maggie again. "Mr. Smith has always been fond of Mellicent, and—and interested in her. But I don't believe he cares for her—that way."

"Then why does he come to see her and take her auto-riding, and hang around her every minute he gets a chance?" snapped Jane. "I know how he acts at the house, and I hear he scarcely left her side at the tennis match the other day."

"Yes, I—" Miss Maggie did not finish her sentence. A slow change came to her countenance. The flush receded, leaving her face a bit white.

"I wonder if the man really thinks he stands any chance," spluttered Jane, ignoring Miss Maggie's unfinished sentence. "Why, he's worse than that Donald Gray. He not only hasn't got the money, but he's old, as well."

"Yes, we're all—getting old, Jane." Miss Maggie tossed the words off lightly, and smiled as she uttered them. But after Mrs. Jane had gone, she went to the little mirror above and mantled and gazed at herself long and fixedly.

"Well, what if he does? It's nothing to you, Maggie Duff!" she muttered under her breath. Then resolutely she turned away, picked up her work, and fell to sewing very fast.

Two days later Mellicent went back to school. Bessie went too. Fred and Benny had already gone. To Miss Maggie things seemed to settle back into their old ways again then. With Mr. Smith she took drives and motor-rides, enjoying the crisp October air and the dancing sunlight on the reds and browns and yellows of the autumnal foliage. True, she used to wonder sometimes if the end always justified the means—it seemed an expensive business to hire an automobile to take them fifty miles and back, and all to verify a single date. And she could not help noticing that Mr. Smith appeared to have many dates that needed verifying—dates that were located in very diverse parts of the surrounding country. Miss Maggie also could not help noticing that Mr. Smith was getting very little new material for his Blaisdell book these days, though he still worked simultaneously over the old, retabulating, and recopying. She knew this, because she helped him do it—though she was careful never to let him know that she recognized the names and dates as old acquaintances.

To tell the truth, Miss Maggie did not like to admit, even to herself, that Mr. Smith must be nearing the end of his task. She did not like to think of the house—after Mr. Smith should have gone. She told herself that he was just the sort of homey boarder that she liked, and she wished she might keep him indefinitely.

She thought so all the more when the long evenings of November brought a new pleasure; Mr. Smith fell into the way of bringing home books to read aloud; and she enjoyed that very much. They had long talks, too, over the books they read. In one there was an old man who fell in love with a young girl, and married her. Miss Maggie, as certain parts of this story were read, held her breath, and stole furtive glances into Mr. Smith's face. When it was finished she contrived to question with careful casualness, as to his opinion of such a marriage.

Mr. Smith's answer was prompt and unequivocal. He said he did not believe that such a marriage should take place, nor did he believe that in real life, it would result in happiness. Marriage should be between persons of similar age, tastes, and habits, he said very decidedly. And Miss Maggie blushed and said yes, yes, indeed! And that night, when Miss Maggie gazed at herself in the glass, she looked so happy—that she appeared to be almost as young as Mellicent herself!

CHAPTER XVII

An Ambassador of Cupid's

Christmas again brought all the young people home for the holidays. It brought, also, a Christmas party at James Blaisdell's home. It was a very different party, however, from the housewarming of a year before.

To begin with, the attendance was much smaller; Mrs. Hattie had been very exclusive in her invitations this time. She had not invited "everybody who ever went anywhere." There were champagne, and cigarettes for the ladies, too.

As before, Mr. Smith and Miss Maggie went together. Miss Maggie, who had not attended any social gathering since Father Duff died, yielded to Mr. Smith's urgings and said that she would go to this. But Miss Maggie wished afterward that she had not gone—there were so many, many features about that party that Miss Maggie did not like.

She did not like champagne nor the cigarettes. She did not like Bessie's showy, low-cut dress, nor her supercilious air. She did not like the look in Fred's eyes, nor the way he drank the champagne. She did not like Jane's maneuvers to bring Mellicent and Hibbard Gaylord into each other's company—nor the way Mr. Smith maneuvered to get Mellicent for himself.

Of all these, except the very last, Miss Maggie talked with Mr. Smith on the way home—yet it was the very last that was uppermost in her mind, except perhaps, Fred. She did speak of Fred; but because that, too, was so much to her, she waited until the last before she spoke of it.

"You saw Fred, of course," she began then.

"Yes." Short as the word was, it carried volume of meaning to Miss Maggie's fearful ears. She turned to him quickly.

"Mr. Smith, it—it isn't true, is it?"

"I'm afraid it is."

"You saw him—drinking, then?"

"Yes. I saw some, and I heard—more. It's just as I feared. He's got in with Gaylord and the rest of his set at college, and they're a bad lot—drinking, gambling—no good."

"But Fred wouldn't—gamble, Mr. Smith! Oh, Fred wouldn't do that. And he's so ambitious to get ahead! Surely he'd know he couldn't get anywhere in his studies, if—if he drank and gambled!"

"It would seem so."

"Did you see his father? I saw him only a minute at the first, and he didn't look well a bit, to me."

"Yes, I saw him. I found him in his den just as I did last year. He didn't look well to me either."

"Did he say anything about—Fred?"

"Not a word—and that's what worries me the most. Last year he talked a lot about him, and was so proud and happy in his coming success. This time he never mentioned him; but he looked—bad."

"What did he talk about?"

"Oh, books, business—nothing in particular. And he wasn't interested in what he did say. He was very different from last year."

"Yes, I know. He is different," sighed Maggie. "He's talked with me quite a lot about—about the way they're living. He does n't like—so much fuss and show and society."

Mr. Smith frowned.

"But I thought—Mrs. Hattie would get all over that by this time, after the newness of the money was worn off."

"I hoped she would. But—she doesn't. It's worse, if anything," sighed Miss Maggie, as they ascended the steps at her own door.

Mr. Smith frowned again.

"And Miss Bessie—" he began disapprovingly, then stopped. "Now, Miss Mellicent—" he resumed, in a very different voice.

But Miss Maggie was not apparently listening. With a rather loud rattling of the doorknob she was pushing open the door.

"Why, how hot it is! Did I leave that damper open?" she cried, hurrying into the living-room.

And Mr. Smith, hurrying after, evidently forgot to finish his sentence.

Miss Maggie did not attend any more of the merry-makings of that holiday week. But Mr. Smith did. It seemed to Miss Maggie, indeed, that Mr. Smith was away nearly every minute of that long week—and it was a long week to Miss Maggie. Even the Martin girls were away many of the evenings. Miss Maggie told herself that that was why the house seemed so lonesome.

But Miss Maggie did not participate in the gay doings, she heard of them. She heard of them on all sides, except from Mr. Smith—and on all sides she heard of the devotion of Mr. Smith to Miss Mellicent. She concluded that this was the reason why Mr. Smith himself was so silent.

Miss Maggie was shocked and distressed. She was also very much puzzled. She had supposed that Mr. Smith understood that Mellicent and young Gray cared for each other, and she had thought that Mr. Smith even approved of the affair between them. Now, to push himself on the scene in this absurd fashion, and try "to cut everybody out," as it was vulgarly termed—she never would have believed it of Mr. Smith in the world. And she was disappointed, too. She liked Mr. Smith very much. She had considered him to be a man of good sense and good judgment. And had he not himself said, not so long ago, that he believed lovers should be of the same age, tastes, and habits? And yet, here now he was—

And there could be no mistake about it. Everybody was saying the same thing. The Martin girls brought it home as current gossip. Jane was highly exercised over it, and even Harriet had exclaimed over the "shameful flirtation Mellicent was carrying on with that man old enough to be her father!" No, there was no mistake. Besides, did she not see with her own eyes that Mr. Smith was gone every day and evening, and that, when he was at home at meal-time, he was silent and preoccupied, and not like himself at all?

And it was such a pity—she had thought so much of Mr. Smith! It really made her feel quite ill.

And Miss Maggie looked ill on the last evening of that holiday week when, at nine o'clock, Mr. Smith found her sitting idle-handed before the stove in the living-room.

"Why, Miss Maggie, what's the matter with you?" cried the man, in evident concern. "You don't look like yourself tonight!"

Miss Maggie pulled herself up hastily.

"Nonsense! I—I'm perfectly well. I'm just—tired, I guess. You're home early, Mr. Smith." In spite of herself Miss Maggie's voice carried a tinge of something not quite pleasant.

"Yes, I'm home early for once, thank Heaven!" he half groaned, as he dropped himself into a chair.

"It has been a strenuous week for you, hasn't it?" Again the tinge of something not quite pleasant in Miss Maggie's voice.

"Yes, but it's been worth it."

"Of course!"

Mr. Smith turned diliberately and looked at Miss Maggie. There was a vague questioning in his eyes. Obtaining, apparently, however, no satisfactory answer from Miss Maggie's placid countenance, he turned away and began speaking again.

"Well, anyway, I've accomplished what I set out to do."

"You—you've already accomplished it?" faltered Miss Maggie. She was gazing at him now with startled, half-frightened eyes.

"Yes. Why, Miss Maggie, what's the matter? What makes you look so—so queer?"

"Queer? Nonsense! Why, nothing—nothing at all," laughed Miss Maggie nervously, but very gayly. "I may have been a little—surprised, for a moment; but I'm very glad—very."

"Glad?"

"Why, yes, for—for you. Isn't one always glad when—when a love affair is—is all settled?"

"Oh, then you suspected it." Mr. Smith smiled pleasantly, but without embarrassment. "It doesn't matter, of course, only—well, I had hoped it wasn't too conspicuous."

"Oh, but you couldn't expect to hide a thing like that, Mr. Smith," retorted Miss Maggie, with what was very evidently intended for an arch smile. "I hear it everywhere—everywhere."

"The mischief you did!" frowned Mr. Smith, looking slightly annoyed. "Well, I suppose I couldn't expect to keep a thing like that entirely in the dark. Still, I don't believe the parties themselves—puite understood. Of course, Pennock and Gaylord knew that they were kept effectually away, but I don't belive they realized just how systematically it was done. Of course, Gray understood from the first."

"Poor Mr. Gray! I—I can't help being sorry for him."

"Sorry for him!"

"Certainly; and I should think you might give him a little sympathy," rejoined Miss Maggie spiritedly. "You Know how much he cared for Mellicent."

Mr. Smith sat suddenly erect in his chair.

"Cared for her! Sympathy! Why, what in the world are you talking about? Wasn't I doing the best I could for them all the time? Of course, it kept him away from her, too, just as it did Pennock and Gaylord; but he understood. Besides, he had her part of the time. I let him in whenever it was possible."

"Let him in!" Miss Maggie was sitting erect now. "Whatever in the world are you talking about? Do you mean to say you were doing this for Mr. Gray, all the time?"

"Why, of course! Whom else should I do it for? You didn't suppose it was for Pennock or Gaylord, did you? Nor for—" He stopped short and stared at Miss Maggie in growing amazement and dismay. 'You didn't—you didn't think—I was doing that—for myself?"

"Well, of course, I—I—" Miss Maggie was laughing and blushing painfully, but there was a new light in her eyes. "Well, anyway, everybody said you were!" she defended herself stoutly.

"Oh, good Heavens!" Mr. Smith leaped to his feet and thrust his hands into his pockets, as he took a nervous turn about the room. "For myself, indeed! as if, in my position, I'd— How perfectly absurd!" He wheeled and faced her irritably. "And you believed that? Why, I'm not a marrying man. I don't like—I never saw the woman yet that I—" With his eyes on Miss Maggie's flushed, half-averted face, he stopped again abruptly. "Well, I'll be

(Continued on page 20.)

THE BUSINESS OF THE CHURCH

A SERMON BY REV. DAVID F. WARNER

> TEXT: "All authority hath been given unto me in heaven and in earth. Go ye therefore, and make disciples of all nations, baptising them into the name of the Father and of the Son and of the Holy Spirit: teaching them to observe all things whatsoever I have commanded you: and lo, I am with you always, even unto the end of the world." Mt. 28:18-20.

IT was in Detroit. The State Sunday school convention was on. There is a great banner over the street on which are these challenging words: "The Sunday School is out for business, or else it has no business to be out." That's solemnly inviting and demanding. But why don't the church forces all along the line catch up such a slogan?

Well, our text will help us to understand something of the urgent and solemn challenge of Jesus' last command. And here is the setting: The eleven disciples had gone into Galilee. Why? By previous appointment of the Master. It was not accidental or incidental. Now how fitting that "Galilee of the Gentiles", lowly and despised by the hide-bound Jews, should become the place that Jesus is to proclaim himself as not only King of the Jews, but of all nations! And they were to go unto the mountain where Jesus had appointed them. Probably the mountain from which He had spoken his great "Sermon on the Mount." We like to think of it in that way, for around this mountain had gathered many holy and tender associations.

And the circumstances must have been dramatic. The disciples are waiting and wondering. And when He whom they had known as so kindly and lowly; He, who had been killed and buried, now walks slowly down the mountain, and presents Himself in His royally glorified state, "they saw Him, they worshipped him; but some doubted." There is hesitancy and misgiving. Then he speaks in majestic strain, "All authority hath been given unto me in Heaven and in earth. Go ye therefore." And they understood. With what joy and surrender they go! And all the early church must have understood and believed. Justin Martyr, in 150 A. D., says, "There is not one single race of men, whether barbarians or Greeks, or whether they may be called nomads or vagrants, or herdsmen dwelling in tents, among whom prayers and giving of thanks are not offered thru the Crucified Jesus." The business of the apostolic church was the business of the King. Every individual was an evangelist.

"Go ye, therefore, and make disciples of all nations." This is the business of the church until all men are brought under the kingship of Jesus. "For He (Christ) must reign till He hath put all enemies under his feet." 1 Cor. 15:25. Reign where? Reign in the hearts of men. The authority given to Jesus Christ is no empty rule, but the supremest and profoundest surrender of life to Him. But it seems it needs Gabriel's trumpet to bring us to our feet in recognition. Jesus regarded his authority over men as a condition in which they would receive his spirit into their hearts, and make them the seat of his rule. The salvage of the nations depends upon a surrendered and willing church.

"Baptising them into the name of the Father, etc." There, now, says some one, "Just what does that mean? Well, this preacher is sure that it means some baptismal symbol that easily signifies that men are to be immersed into communion with the Heavenly Father. Of course we all live and move and have our being in him. We are floating in the measureless ocean of God's love. But many are so water-proofed, to speak figuratively, with the spirit of a God-defying, Christ-denying, and materialistic age, that the "water of life" can not get into the waters of God's bottomless love for every man. And it is the business of the church to bring nations to bathe in this Jordan.

But it is going so slowly. And why? Now, here it is in place to make some overtures that are more than guesses. First, the pulpit is yet reading sermons and devoting itself to adults. The demand of the day is not so much for measured sentences and symphonic style; but for plain, elemental convictions that come burning-hot out of heart-furnaces superheated by the fires of faith. But more than this, step into the average church today and you will find a preacher speaking to a handful of adults. Adults, who already know much more than they are willing to practice. Why should a minister go on in repeatedly unsuccessful attempts to get thru the worldly-thickened hides of these church grown-ups? Yes, the congregation is small. Where are the rest? You say. But why not turn to the children? The writer has a few minutes separate worship for his children every Sunday morning. Two weeks ago, twenty-one children surprised him by saying, "Pastor, we are all reading our Bibles every day." And you should hear them quote Scripture. Well, I put them on the honor-roll. Wouldn't you? Before me is a sunday-school convention program. One subject reads like this, "How to interest children in the church." And the speaker for the subject is a preacher who confessed to me the other day that his church is not doing it. How funny! Wouldn't you like to hear him tell how to do it? Let us cast our votes for deeds that will match our creeds. "A pound of deeds is worth a ton of creeds." Talk less; do more. Doesn't our text say, "Teaching them to observe all things"? "To observe"; that is, to do. But the old folks wont do it. It will cost too much. It means every little while a fat steer out of the stall, a hog out of the pen, and often your children leaving home to carry out their Lord's solemn commission. Let us reclaim the young life. Let us turn to the children. They are the hope of the world. But what will our Lord do with the preachers who are using up their time attending committee meetings, shining at banquets and social functions, patting church officials on the back, and on Sunday morning pull a stale sermon out of their "barrel" and read it to a small congregation of Gospel-hardened adults? What a shameful attempt to glorify the church's only business!

"Teaching them to observe all things." You see, the church is to Christianize the nations. But some one says that is impossible. It can't be done. But that end of it is not our business. Jesus said it could be done, and the church's business is to believe it and go at it in earnest. We are to mobilize for the attack and then advance. "Christianize the Bolsheviks and the Turks?" says someone. "It can't be done. Rather, we ought to wipe them off the face of the earth." But if it can't be done, we must cut the heart out of the last and greatest command of our Savior, and out of his statement, that "If I be lifted up I will draw all men unto me."

This is true; it can't be done until Christian nations give more attention to the Christianizing program. While the nations of Europe are jockeying for the balance of political and industrial power, Mohammedan Turkey is getting to her feet in defiance. Christianity is in the dust: Diplomacy rules. While the Turk's Koran prohibits the use of liquor, the one hundred per cent American, with his Bible, keeps booze in his golf locker and cellar. And so our Western Christianity with its liquor, cigaretts, and immoral films. And again, while the heathen is seeking for the true Jehovah, churches at home are quarreling over definitions of religion and tweedling with the real program of Christ. Of course it can't be done. May God have mercy on us!

But, it can be done. The church may have unlimited power when anything like unity, cooperation, and concentration, comes about. "I am with you always even unto the end of the world." This last promise and surety is a marvelous one. Not the taking of an abstract teaching to the world, but a gospel impregnated with a Life; a Life that has the power to raise humanity to Heaven's ideal of love and service. It can be done. Now, let us go. This is the church's business.

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The Michigan
BUSINESS FARMER

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WHO STARTED IT?

ACCORDING to current press reports there is a movement on foot at East Lansing to change the name of the Michigan Agricultural College and even acting-president Shaw is given credit for bringing it to public attention.

We take it that this means that some of those who are attending the agricultural college would rather have a more flossy name, a title which did not suggest so much Mother Earth and the wholesome problems of crop production and husbandry.

We take it that the title "Michigan Agricultural College" does not fit so well with some of the "sheiks" and "flappers," and that they would prefer to have a name for the old college, with so worthy a background, which would rhyme better in a song or college "yell."

"On what meat doth Ceasar eat—?" that this name, so long honored and by so many thousands now doing their work in the world, so highly cherished, should be the subject of discussion as to its fitness.

Even the great University at Ann Arbor can hardly point to a more distinguished alumni, than have come from the gates of M. A. C.

Then looking at it from the standpoint of the great agricultural industry in Michigan; is it not well that one institution should be dedicated both in name and in purpose to the pursuit in which more than one-half of the citizens of this commonwealth are daily engaged?

Frankly, it is our opinion that the Agricultural College in Michigan has been leaning too far towards the courses of study which are not directly leading towards an improved agriculture. That the courses are already treading on the toes of other institutions in this state which are devoted primarily to non-agricultural subjects.

The college at East Lansing ought to be just what it was founded to be, a "school for the upbuilding of agriculture." As such, it ought to attract to its gates the flower of our young men and women in this state. It ought to hold its head aloft from the antics of the modern schools, which are more proficient in teaching "Jazz dancing," than the subjects listed in their catalogs.

A movement to change the honored name of the Michigan Agricultural College, tho innocent appearing in itself, indicates, in our opinion, that there is something very fundamentally wrong at East Lansing. That it is deeper than the board, deeper than the acting head or his able staff of teachers—it rests down in the soul of the school which is the student body itself.

If the wrong type of students are being attracted in increasing numbers to the college, it is time to find it out. If the wrong studies are being given emphasis, it is high time to change the appeal. If the esprit de corps of the college has been mutilated by the changes and dissentions of the recent hectic years, before another semester opens is the time to eliminate the obstructionists, the sour-notes or the bolshevists.

Luckily for Michigan, the new president of the Michigan Agricultural College who takes over the pilot-house on September first, or thereabouts, is a man born with the love of the old college and all that its name implies in his very veins, with the fighting stamina of generations of pioneers back of him and his years at Amherst should have given him the rugged determination of the rocks along the coast of Massachusetts.

Once again, welcome home, Dr. Butterfield, the business farmers of Michigan to a man, are back of you and place in your hands the college which you know, and they feel, by every right belongs, campus, hall and dome to Agriculture!

THE ISLAND OF SAFTY

IN the current installation of Mr. Stanley Powell's series of articles on taxation in Michigan he aptly calls the tax exempt bond the "rich tax dodger's island of safety."

You have been hearing a lot recently about the danger of tax exempt securities and what they were doing to not only capital, which has heretofore been employed in the upbuilding of industries, but providing the funds for producer and laborer alike. If you will read the article in this issue you will have a clear conception of what is meant by the tax exempt bond and what effect it is having on economic conditions in the United States at the present time.

The danger of tax exempt bonds lies not only in the fact that it is an "island of safety for the rich tax dodger," but there is a pregnant danger in the ease with which cities, counties, and states officials spend this money for the improvements, some of which are not pressing. There is as much danger in "easy money" for the public official as there is for the individual. "Come easy, go easy," applies to official corporation or individual and limitless funds seem to be available for any and all purposes.

Tax exempt securities are so popular at the present time that they are actually in demand and as we have seen in the light of our recent experience with prohibition, where there is a human demand there is bound to be a supply forthcoming. So far our officials seem to have found enough absolutely necessary (?) improvements to keep the bond market well supplied and and the bond broker happy.

It might be wise to look over the platforms which will be spread before you by the two principal parties and see what they have to say about this live issue. There is probably no other one that comes any nearer to your pocketbook.

Read Mr. Powell's article in this issue if you want to know the facts regarding tax exempt securities; it is worth the while of every man or woman who votes.

PICTURES BY WIRE

HOW long ago was it that you marveled at radio and said "what will it be next?" Not so long, and yet the answer to your question is already forthcoming, for photographs are now being sent by wire and New York newspapers are printing pictures taken at the Cleveland convention five minutes before!

It pictures can be sent by wire, they can be sent by wireless! Pictures flying through space, invisible likenesses being transfered as silently as thought itself, what do you make of it? Had one predicted this a hundred years ago they would have been counted raving fools fit only for an insane asylum and more probably been publicly burned at the stake for their heresy.

Perhaps the day will come when one may travel as fast as light—buy a ticket, press a button and be in London or Calcutta or Hong Kong! "Crazy!" you say, "Impossible!" "Mere ravings!"

Don't say it for men are still living who said that man could never fly!

FLATTERERS!

BEFORE another issue of THE BUSINESS FARMER goes to press you are going to have an opportunity of reading in the daily press the complete platforms, as carefully erected for your approval, by the two conventions of the great political parties being held this month.

From indications to date, it is quite apparent that party leaders recognize the impending "disgruntled" farmer vote, which en mass, is something to be considered.

We predict that in each of the party platforms there will be a plank highly polished and covered with a veneer of varnish which will make it appear very new and real in its promises of relief to the present agricultural situation. We predict also that each of these planks will be about as solid as the paper on which they are written, and that irrespective of which great party landslides into victory this fall the great business of agriculture in America will be little affected by the people's choice.

One thing is quite apparent; the present condition cannot continue without a genuine upheaval, if that has not already happened, as we are sometimes prone to admit.

The politicians who have been in, and those who want to get in, are going to have to do a tall lot of explaining at home to the farmers of the United States whether they hail from Maine, California, Florida or Oregon. We would like to venture a further prediction that the results of this year's election are going to prove a mighty big surprise to Wall Street and some of the high financier's "dopesters." Some of these wise political astronomers who think they can read all of the signs in the sky and prophesy the outcome of this November election are going to be guilty of just one big blunder, and that is, that they guessed wrong.

If we knew how the political wiseacres were going to vote this fall we would take the other side with a fair chance of winning!

SERVING TWO MASTERS

IN the opinion of A. B. Cook, state master of the Michigan State Grange, the four members of the state board of agriculture who are also members of the board of directors of the state farm bureau, should resign from one office or the other.

This assertion is not made from a personal standpoint and has no reference to the present incumbents of the office, but is, according to Mr. Cook, directed at the continuation of such a policy.

There are several great farm organizations in Michigan and, fortunately, during the past few years they have buried the hatchets which were wielded with such vigor and so little effect in the bygone days, and today they are working shoulder to shoulder, to the everlasting good of the farming business in Michigan.

There is no question but what the members of the state board of agriculture should be members of one or all of the leading farm organizations in the state, but that they should hold executive positions in these organizations while serving the state is, in our opinion, a dangerous policy to say the least, and one which is bound to lead to complications and perhaps even jeopardize the, harmonious understanding among the various farm organizations as exists today.

Goodness knows that farmers have enough enemies on the outside without fighting among themselves, and an ounce of prevention at this time may save a ton or so of trouble in the future!

We agree with Mr. Cook that this is a subject well worth bringing to the surface and settling before more serious complications arise.

PRISON LABOR PAYS STATE

INMATES of Michigan prisons earned $3,588,013 for the state during the last fiscal year, according to a report made by the Department of Labor. The earnings are for only the prison industries, as the returns from the road work being carried on under direction of Gov. Alex J. Groesbeck have not yet begun to show up in figures.

Michigan is seventh in the number of men employed, sixth in the value of products manufactured for its own consumption, first in the value of goods sold, and third in the total value of products.

The state institutions worked 3,381 men as an average last year, producing $619,215 work of products for their own use and $2,778,433 for the market. The total was further augmented by $190,365 worth of labor on public works. It is worth noting that none of Michigan's earnings came from contract labor, in which the inmates are hired out to private contractors, and to which the abuses are charged which bring condemnation of prison labor. All of the work was done by the State itself. Kentucky and Alabama, the two commonwealths whose total value of products exceed Michigan's, hired out their prisononers in factories and coal mines.

Add to this showing the road-building program carried out in the last half of 1923 and the ambitious program for the current year and it would appear that Michigan has something to be proud of in the conduct of other-wise waste labor of its confined unfortunates. Lets keep up the good record!

Now is the time to ask the politician for anything you want. You may not get it, but he'll give you his promise to get it, if you'll only vote for him!

They can vote-down, veto or ignore, but there will never be permanent, lasting normal prosperity in these United States until agriculture prospers!

Time was when only part of the country quit work and went to the national conventions; now, the whole darned country sits around the livin' room a listenin' in!

PUBLISHER'S DESK

STANDARD FOOD AUD FUR ASSOCIATION IN COURT

THE Standard Food and Fur Association, a New York organization many of our subscribers have had dealings with, much to their regret, is now having its trouble. Five of the officials of the association were indicted and arrested. The charges in the indictments are using the mails in a scheme to defraud and indications at the present are that Uncle Sam will put them at honest labor for a while. And thus will end another plan to get something for nothing.

ONLY FEW OF LETTERS ARE PUBLISHED

WE wish that space in our editorial columns was not so limited so that we could give more space to the Publisher's Desk. The few letters or inquiries discussed in this department each issue are only "a drop in the bucket." Each and every letter received is answered by mail as soon as possible. As a rule we have the information wanted right here but many times we must conduct an investigation—not the kind that Congress starts but a real investigation to find out the facts—and as soon as we get the information needed we write our subscriber. At least 90 per cent of the letters answered by this department never appear in print, because we haven't the space. So we try to pick out the ones that we feel are of the most general interest and use them, but even at that there are many we should use that are never printed. If we could print more it would save us both work because many of our subscribers would find in the Publisher's Desk an answer to some question they had in mind and would not have to write to us and we in turn would not have to write the subscriber. But we are here to serve and if we are giving you what you want then we are fulfilling our purpose. We like to work so send on your inquiries.

DETROIT AERO METALS CORPORATION

THE inquirer requests to know if this stock is safe "investment."

The character of this stock is not sufficiently fixed to regard as being in the investment class. In other words, it is rather to be regarded as a speculation.

The present idea behind this Company is the manufacture of aluminum and aluminum alloy metals by new processes, which would greatly reduce the cost. The company is organized around the personality of Dr. G. Lenardo Williams, a chemist of German ancestry, who claims to have invented several new methods. Dr. Williams may be said to be unquestionably a man of much information and knowledge along chemical and metallurgical lines but there is a very great difference of opinion between scientific men as to the value of his methods theoretically, and his history would not justify a finding that his alleged methods have as yet been established in a commercial way.

In other words, it has been charged by men of reputation in the chemical and metallurgical field that Mr. Williams' theories lose practicability after they leave the laboratory. Many things are possible in a chemical laboratory, which, when transformed to commercial production, lose their validity, and this is principally the argument against Dr. Williams' processes, i. e., that he has never been able to reduce them to a practical commercial basis.

The Detroit Aero Metals Company is the last of a string of corporate adventures of Dr. Williams, which have been formed about him by enthusiasts to test his processes. The International Aluminum Company, which was organized and financed principally by Detroit capital a few years ago, dropped several thousand dollars and proved to be quite a fiasco. The company proposed to make aluminum and market it for a few cents a pound and it was also proposed to buy the Government Nitrate plant at Nitro, W. Va. The management of that company was such that the ultimate outcome cannot be said to have been decisive as to the practicability of Dr. Williams' processes, inasmuch as the management was under questionable origin and Dr. Williams can give a plausible explanation for the failure of that enterprise, which does not necessarily reflect upon the worth of his new processes.

The Detroit Board of Commerce is at present engaged in some controversy with Dr. Williams and with the Detroit Aero Metals Corporation, growing out of its publication, the Detroiter, of an article appearing in a scientific paper which berated Dr. Williams' ability, and charges and countercharges are being made by both sides and a suit for libel has been instituted in the Wayne Circuit Court.

Under all the circumstances, the stock is by no means an investment and a sufficient amount of the stock has been sold to enable the company to establish the practicability of Dr. Williams' processes beyond further delay.

INSURANCE AGENT MISREPRESENTS

I am going to tell you of a swindle by the ——— Mutual Fire Insurance Co. Three years ago their agent came to my house and sold me insurance for three years and I paid him the cash with the understanding that there would be no extra assessments on the policy. They have been after me for assessments they say I owe them. They claimed eleven dollars and some cents and I sent it to them last fall. At that time I returned the policy to them for cancelation. Last week they sent me a bill for $1.39 threatening to sue me if I didn't pay up. They have done this same thing all over this section. If it isn't swindling I'd like to know what it is. They say "Why didn't you look at your policy?" We didn't have any policy when we paid the agent and did not receive it until nearly a month later."—E. W., Iosco County, Michigan.

THIS is not an uncommon occurence as similar instances have been reported to us for some time past. The company referred to had agents canvassing the farmers offering them them a three year policy for a certain amount, leading the farmers to believe that the amount he was collecting would be all that would be required for the entire period of three years. Being a mutual company it was impossible to make any promises as to the costs for any specified period. A mutual fire insurance company comprises a number of people banded together to pay the losses of each other, also the expense of operation, and there is no telling in advance what such rate will be, and the agent representing that the amount paid was all that would be required was very ignorant of conditions or knowingly misrepresented the matter. Certainly the company should have prevented the agent from misrepresenting should it come to their knowledge.

The three year policy costs the members about twice the amount the agent said it would and caused great dissatisfaction, but the experiences of our subscriber seems to be only one of the many instances which has awaken the farmers to the fact that to promise a stated rate in the operation of a mutual insurance is impossible, and is bordering on obtaining money under false pretenses which in Michigan is a crime punishable by fine or imprisonment or both.

THANKS!

Dear Sir:—In yesterdays mail I received a letter from ——— containing a check for $29.06, this being the amount which they owed me. I want to thank you for helping me collect this, and also for your promptness. Yours truly, Mrs. A. F. L., Curran, Mich.

Dear Sir:—I am writing you in regard to claim No. 1450. He has settled with me so every thing is satisfactory. Thanking you for your kindness in looking it up for me, Respectfully yours, E. L., Birmingham, Mich.

We have not received our copy of the last issue of the BUSINESS FARMER, and would appreciate it very much if you would forward copy of that issue to us. We dislike to miss even the one copy. Thanking you for the courtesy, I am, very truly, C. V. L., Owosso, Mich.

First Mortgage Real Estate Gold Bonds

The confidence reposed in us by thousands of farmers is an asset we prize highly. You can count upon our first mortgage bonds always being well worthy of your trust.

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It is a high class sign in every respect, made up in two colors, red and black, on a white background, weather-proof, 5x11¾ inches in size, suitable for hanging on your fence, mail post, or other prominent place.

This sign will serve as a warning to crooks, fakirs, quacks, and grafters, to keep away from a farm which is affiliated with The Business Farmer Protective Service Bureau.

Only a few thousand of these signs have been ordered and we are going to mail them to our friends—first come—first served—at actual cost, only 25 cents. We already have had advance requests for hundreds of these signs—Fill in the coupon below, so as to be sure you get your sign before they are all gone.

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Protective Service Bureau,
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County.......... State ....

The Farm Home
A Department for the Women

Edited by MRS. ANNIE TAYLOR

DEAR FOLKS:—Are the members of your family getting the various foods they ought to have to provide the necessary heat and energy, to make for growth, provide strength and care for the regulatory needs etc? For growth, strength, regulatory needs and health milk is the leading food and a normal child should drink a quart a day while an adult needs a pint or more. A normal person should eat eggs at least three times a week. Fruit should be eaten twice a day or oftener and two or more vegetables besides potatoes, and including leafy vegetables once day. Starches, fats and sugar should be taken according to the individual's activities and needs. And water is an absolute necessity; at least 8 glasses a day. Why not check up on this matter? You may be able to improve the health of your family.

Your Friend,
Mrs Annie Taylor

Address letters: Mrs. Annie Taylor, care The Business Farmer, Mt. Clemens, Michigan.

LIFE

WHAT is it this sad, old world of ours needs,
With it's various customs, habits, and creeds.
With it's well-trodden paths and walks of life
Beset with temptation, hardship and strife?
A little more sweetness to brighten the way
Of the dear ones who live with us each day.
Add a mixture of patience and charity
To life all around us and we shall see,
That our lives will accord in sweet harmony.
Use a little more love and sympathy,
A little more kindness to banish the sorrows,
It will gladden and strengthen the many to-morrows.

—Inez G. Corbin.

GROW YOUR OWN HEALTH TONICS

THE use of fresh vegetables and fruits is an insurance against sickness. Here is another idea which should stimulate interest and encourage more people to raise more vegetables and fruits.

Dr. J. G. Richardson, professor of hygiene at the University of Pennsylvania, assisted by a number of physicians in this and other countries, has published a book entitled "Health and Longevity." It is interesting to note that the following vegetables and fruits were included in the list of medicinal plants:

Asparagus—Gently stimulates the kidneys.

Beets—Relieves gravel and readjusts certain internal disorder of women.

Carrots—For kidney complaint; used for poultices; powdered seed relieves colic promotes secretions of the kidneys; laxative.

Celery — Good for rheumatism and neuralgia.

Cucumbers—For clear complexion.

Cranberries—Taken as relief from piles; also relieves nervous breakdown called hysteria.

Garlic—For worms, whooping-cough, stomach and intestional trouble.

Horse radish—Tonic for digestion; produces secretions of the kidneys; syrup cures hoarseness; tea said to benefit neuralgia and rheumatism.

Leek—Poultice for bronchitis and chronic coughs; taken for worms and whooping-cough, also stomach and intestional trouble.

Navy beans—Relieves erysipelas when poultice is applied to the affected parts.

Onion—Promotes digestion; acts on the liver by increasing the secretion of bile; cure for constipation; poultice for bronchitis and chronic cough; taken for worms and for whooping-cough, intestional trouble.

Pepper—Cayanne tea used for grippe and scarlet fever.

Parsley—Hot infusion made from one ounce of fresh root drunk freely increases secretion of urine in case of dropsy and relieves women's complaints. Lotion is good skin beautifier.

Pumpkin—Good for tape worms, retention of urine, and inflamation of bladder and bowels.

Rhubarb—Purgative and laxative.

Spinach—A skin beautifier.

Strawberries—Lotion used as a skin beautifier.

Tomato—Cure for cholera infantum; now used instead of orange juice by some physicians for infants; sliced tomato rubbed on skin is good for freckles and sunburn.

Watermelon—Clears skin.

We do not guarantee any of these to be sure cures, but we do know that nature manufactures health producing substances and presents them to us in numerous fresh vegetables and raw fruits. It is also much cheaper and more pleasant to prevent disease than it is to cure it.

Remember that "an apple a day keeps the doctor away." Note—The apple must be eaten.

PRESERVATION OF OUR NATIVE WILD FLOWERS

THE bright warm days of spring call us to the woods, to hear the birds singing as they build their nests, and to gather the wild flowers as they peep out through the dried leaves. But each year the woods are a little farther away, for the growing towns are rapidly claiming the wooded districts for building sites; and each year the flowers are fewer, because they have been picked and uprooted in such large quantities, the preceeding spring.

The automobile makes it possible for more people to go to the woods but it also presents a privilege which is greatly abused. It is a deplorable sight to see car loads of people rushing home after a Sunday jaunt, with hands full of wilted wild flowers, most of which will never be revived.

At the present rate of annual decrease, one might safely prophesy that the next generation will have practically no wild flowers to enjoy. Many species that formerly abounded in the woods of Michigan, are almost extinct; the trailing arbutus is found only in the extreme northern part of the state and the moccasin flower is very scarce, for it will not thrive when its environment has been disturbed.

What can be done to preserve the few hardier species that still remain; the violets, trilliums, buttercups, blood-roots and hypaticas? There are two ways in which wild flowers can be protected; one is through legislation; to forbid the picking of all wild flowers, similar to the protection that is given to wild game, fish and birds; another would be through nature study in the schools, and by creating public sentiment, to stimulate an appreciation for wild flowers in their native haunts, where, undoubtedly, they are at their best.

The second plan would be the happier, more democratic way to handle the problem. Can we, of a supposedly highly cultured nation, not acquire the finer appreciation of nature, that the Japanese possess? Can we not go to the woods and enjoy seeing the wild flowers grow and be content to pick just the few which we can take home and care for? Or must we go on ruthlessly plundering, the woods of their treasures, until the time will come when, in the woods, we will be confronted with signs of "Do not pick the flowers" as we are today in the public parks, by "Keep off the grass."—Winifred S. Gettemy, Assoc. Prof. of Related Arts, M. A. C.

DISH WASHING MADE EASY

DISH washing, the bane of many a housewife, is really a delight if properly managed. Begin while preparing vegetables by emptying, rinsing and drying the paring pan and knife. After food is cooked, wipe any lids which are simply dripping with steam and place in the rack. Put cold water in all cooking utensils. If any are scorched or burned, add a teaspoonful of sal soda, or a tablespoonful of baking soda to the water and set them on the back of the range, or on the burner turned low.

When clearing the table, use the crust from a slice of bread to wipe all food which may be left on plates (a knife scratches nice china). Rinse out cups, sauce dishes and vegetable dishes by pouring hot water in one and emptying it into the next until all are treated. If this practice is followed there will be no "thick" dish water and no rim of grease around the pan.

Always have two dish clothes and two dish towels—one for glass, china and silver, the other for pans and kettles. Use hot rain water and naptha soap for washing and rinse well with hot water.

Wash glass ware first, rinse in soft water if possible and polish at once. Next wash silverware and polish without rinsing. It will shine better.

Wash and rinse china and while drying it, let dish pan set over heat.

Empty and scrape cooking utensils—now an easy task—change dish clothes and wash last. Also change towels, scald and dry.

I hope this will prove helpful to some house wives, young and old, for I am personally acquainted with some who have grown old in the service who have never learned system in any line of their work, especially dish washing. I wish that girls might learn such lessons before becoming housewives.—B. O. R.

HOUSEHOLD HINTS

If you use an oil-stove and should turn a burner too high that you cannot turn down again, throw a handful of salt on the flame. It will go out at once.

To prevent a rocker from moving along on a carpet when rocking, paste a narrow strip of old velvet on each rocker.

When patches of grime appear on a light-colored wallpaper, you can often get the marks right out by rubbing—lightly at first—with a small ball of dough to which a few drops of strong amonia have been added.

Scorched flannel can be restored to its original state by rubbing the stain with lemon and leaving the pulp on it; place in the sun for a couple of hours and wash in the usual way.

Save your ham, rice, macaroni and vegetable water for soups.

Personal Column

Who Can Answer This?—I would like to have this letter in print. In M. B. F. in August, 1921, I read a recipe for sliced cucumbers for winter use. It was signed "L. A. W., Osceola Co." and was as follows: "Peel and slice large cucumbers. Place in a weak brine of cold water and salt for 4 or 5 hours. Drain and fill glass cans with the slices nearly to the top; cover with cold cider vinegar and seal. If vinegar is very strong weaken with a little water." We tried this recipe one year and had good results. We put up some last fall and we found on opening them last winter and this spring that they were all soft. We would like to know what the trouble was.—Mrs. J. A.

—if you are well bred!

The Knife as a Table Implement.—The knife is not used: to mash or mix food on the plate; to scrape up food or gravy; to dip up salt from a salt cellar. Nor is it wiped, during a meal on an improvesed bread towel, nor employed to raise drops of gravy or bits of food which may have fallen on the table cloth or clothes. Parsnips and potatoes should never be buttered with the knife. The knife never carries food to the mouth. It is used only to cut food. It is always held in the right hand, with the index finger extending down the upper side of the blade. One mouthful cut and eaten at a time is an elementary knife rule. To avoid accident the knife should always be held in a firm grasp, and it must be as noiseless in its operation as fork and spoon. When not in use it rests on, not against the plate, like the fork. Since the knife is never used to place food in the mouth, there are no "knife foods" properly speaking.

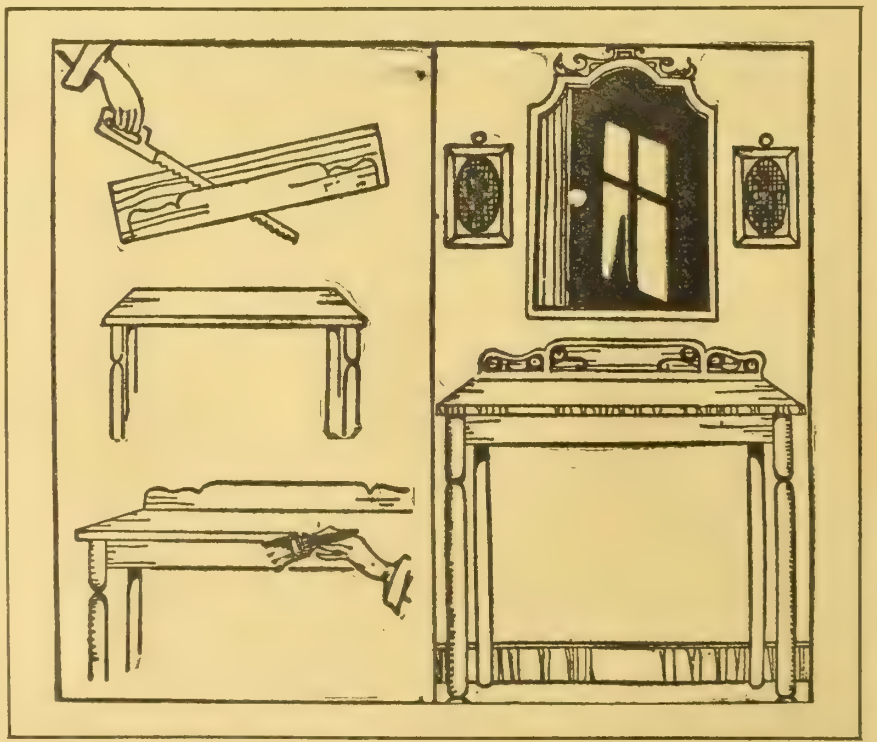
Menu for June 21st

Fried Spring Chicken, Milk Gravy
Mashed Potatoes Asparagus
Tomatoes Mayonnaise
*Rhubarb Fanchonettes
Coffee

***Rhubarb Fanchonettes** 2 pounds hrubarb, 1 cup sugar, ½ cup strained orange juice, 1 tablespoon powdered gelatine, 1 piece orange peel, 1 cup cream, whipped, flavored and sweetened, number of individual pastry shells.

Cut rhubarb into inch pieces. Hot house variety needs no peeling. Place in baking dish in layers, sprinkling sugar between layers. Add 2 tablespoons water, 1 tablespoon fat, and a few thin strips orange peel, place in moderate oven, cover and bake 1 hour. Dissolve gelatine in orange juice and when rhubarb is cooked remove it from oven and add this mixture to it. Let it get cold. When ready to serve fill shells with rhubarb mixture, heap with whipped cream and decorate with crystallized orange peel.

Paint Transforms a Kitchen Table



A small kitchen table may be converted into a serving table for the dining room by enameling all surfaces and attaching to one side a strip of wood that has been carved and stencilled with a conventional fruit design. To secure the best results, a coat of paint is applied first, and allowed to dry. Then a coat of enamel is applied and, when dry, is followed by another coat. A blue enamelled table, stencilled in golden oranges or purple grapes would be very effective against buff or light yellow painted walls.

RECIPES

Raisin Nut Bread.—1¼ cups entire wheat flour, 2 cups bread flour, 3 teaspoons baking powder, 1½ teaspoons salt, ¾ cup sugar, 1½ cups milk, 1 egg, 1 cup seedless raisins, no shortening.

Date Nut Bread.—2¼ cups entire wheat flour, 3 teaspoons baking powder, 1 teaspoon salt, 2 tablespoons fat, melted, ½ cup chopped nuts, ¼ cup sugar, 1 cup milk, 1 egg, ½ cup dates, fine cut and floured.

Nut Bread No. 1.—2¼cups flour, 3 teaspoons baking powder, 1 teaspoon salt, ¾ cup brown sugar, 1 cup milk, 1 egg, ½ cup seedless raisins, ½ cup chopped nuts, 1 tablespoon fat, melted.

Nut Bread No. 2.—4 cups flour, 1 cup milk, 6 teaspoons baking powder, 1 cup chopped nuts, 1 teaspoon salt, 1 cup sugar, 1 egg.

For the four loaf breads listed, mix dry ingredients. Add milk, well beaten egg, melted fat, the nuts or fruit. Put in greased pan. Allow 15 minutes for bread to raise. Bake in hot oven 45 minutes to one hour.

Drop Biscuit.—2 cups flour, ¾ cup milk or water, 4 teaspoons baking powder, 2 tablespoons fat, ½ teaspoon salt. Mix dry ingredients. Cut in fat. Add liquid. Drop into oiled pan. Bake 10 to 15 minutes in hot oven.

Drop Cookies.—1 cup sugar, ½ cup melted butter, 2 eggs, ½ cup milk, 2 cups flour, 3 teaspoons baking powder, 1 cup chopped raisins and nuts, 1 teaspoon vanilla. Mix same as for plain muffins and drop from spoon on greased pans. For spiced cookies, omit vanilla and sift with the flour, one teaspoon cinamon, ½ teaspoon allspice, ¼ teaspoon cloves, or ½ teaspoon ginger and 1½ teaspoons cinnamon. For chocolate cookies, add 3 squares of melted chocolate. Chopped peanuts may be used in place of raisins and nuts.

Plain Cookies with Ammonia—Sugar 2 cups, butter or shortening 1 cup, milk 1 cup, carbonate of ammonia ½ oz. flour 1 qt. (3½ cups). Pulverize the ammonia and mix with it the flour, and in the butter well, then the other ingredients; use only flour enough to handle (not stiff) roll thin and bake in a suitable oven—in fact all cookies require quick handling and a quick oven.—Mrs. C. D. C.

cup cooked oatmeal, ¼ cup sugar, ¾ cup cup cooked oatmeal, ¼ cup sugar ¾ cup raisins, ¼ teaspoon soda (scant measure), 2 teaspoons baking powder, ½ teaspoon cinnamon, 3 tablespoon fat, ¼ cup molasses. Heat the molasses and fat. Mix with all the other materials. Bake in muffin pans thirty minutes. This makes twelve cakes.

The Runner's Bible

(Copyright by Houghton Mifflin Co.)

He that goeth about as a talebearer revealeth secrets; but he that is of a faithful spirit concealeth the matter.—Prov. 11-13.

The malicious talebearer is an anomaly in nature. All other animals which thrive upon corruption because they devour it, are benefactors. But through the scandalmonger, corruption is nourished and increased a thousand fold. The one who has the love of God in his heart never discusses the errors and sins of another; on the contrary, he does his best to conceal and to destroy them.—(Luke 6:31; Ps. 32:1.)

In Hiding

Woman Customer (after the tired assistant had pulled down blanket after blanket until there was only one left on the shelf): I don't really want to buy a blanket to-day. I was only looking for a friend.

Clerk: If you think he's in the other one, madam, I'll gladly take it down for you!

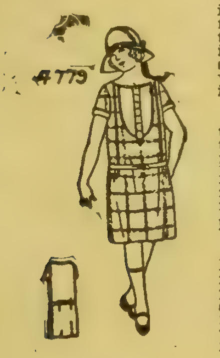
AIDS TO GOOD DRESSING

BE SURE AND SEND IN YOUR SIZE

4773. A Dress with Slenderizing Lines.—This model is very attractive for stout figures. The closing is at the side. The sleeve puff may be omitted. One could use crepe for this style in any of its pretty weaves, or linen. The new alpacas are also good for this dress. The Pattern is cut in 7 Sizes: 36, 38, 40, 42, 44, 46 and 48 inches bust measure. A 38 inch size requires 4½ yards of 40 inch material, and 1⅛ yard of figured material, and 2⅝ yards of plain material 40 inches wide. The width of the skirt at the foot is 1⅞ yard.

4767. A Seasonable Style.—Here is a pretty model for bordered materials, printed voile or georgette. It is also attractive for linen, wash silks and pongee. The blouse may be finished in either of two lengths, and with the sleeve short or in wrist length. The Pattern is cut in 7 Sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38 inch size requires 6⅝ yards of 32 inch material. For the Blouse with short sleeves and in short length 1¼ yard less will be required. The width of the skirt at the foot is 2 yards.

4770. A Pretty Sports' Frock.—Figured crepe in red and black is here combined with black satin. This is a good style for alpaca, moire, ratine and linen. The sleeve may be made in wrist length, or short without the peasant portion. The Pattern is cut in 3 Sizes: 16, 18, and 20 years. An 18 year size requires 4⅝ yards of 32 inch material. For facing on yoke, skirt and girdle of contrasting material 1⅛ yard 40 inches wide is required. Without long sleeve portions ½ yard less material is required.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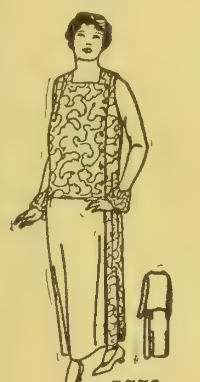
4779. An Up-To-Date Style for the Growing Girl.—Plaid alpaca combined with plain alpaca is here shown. This model is also good for linen, flannel, pongee and ratine. The closing is under the box plait on the vestee. The Pattern is cut in 4 Sizes: 6, 8, 10 and 12 years. A 10 year size requires 2¼ yards of 32 inch material. For vestee and cuffs of contrasting material ⅝ yard is required.

4784. A Comfortable Slumber Garment.—Attractive and convenient is the model here portrayed. Crepe, nainsook, batiste, flannel or flannelette are good materials for this style. The Pattern is cut in 5 Sizes: 6, 8, 10, 12 and 14 years. A 10 year size requires 3¼ yards of 36 inch material. The garment may be finished with straight lower edges or, be gathered in knicker style.

4766. A Dainty Frock for a Little Girl.—Batiste or voile would be nice for this style. It is also pleasing in crepe and tub silk, taffeta and pongee. The Pattern is cut in 4 Sizes: 1, 2, 3, and 5 years. A 3 year size requires 1¾ yard of 27 inch material. To trim with contrasting material as illustrated requires ½ yard of material 27 inches or ⅜ yard 36 inches wide.

4783. A Popular "Base Ball" Suit.—Linen, drill, flannel, or khaki could be used for this design. The trousers are separate from the waist. The Pattern is cut in 4 Sizes: 8, 10, 12 and 14 years. A 12 year size requires 3½ yards of 36 inch material. The Cap alone requires ⅝ yard.

4759. A Pretty Skirt Style.—Here is a model that is very attractive for crepe, crepe de chine, voile or chiffon. The drapery may be made of contrasting material. The Pattern is cut in 6 Sizes: 25, 27, 29, 31, 33 and 35 inches waist measure, with accompanying hip measure, 35, 37, 39, 41, 43 and 45 inches. The width of the skirt at the foot is 1⅝ yard. To make this style for a 31 inch size requires 3½ yards of 40 inch material.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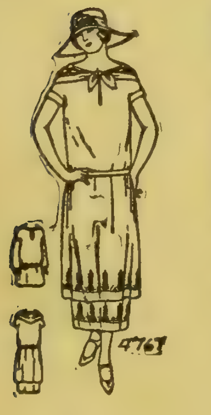
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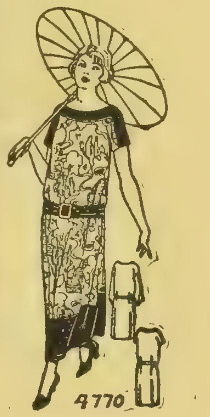
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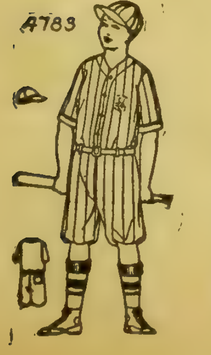
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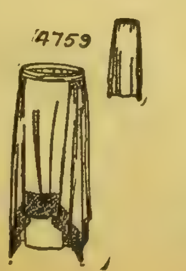
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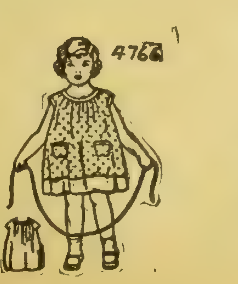
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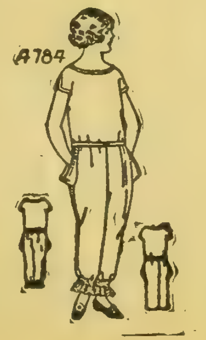
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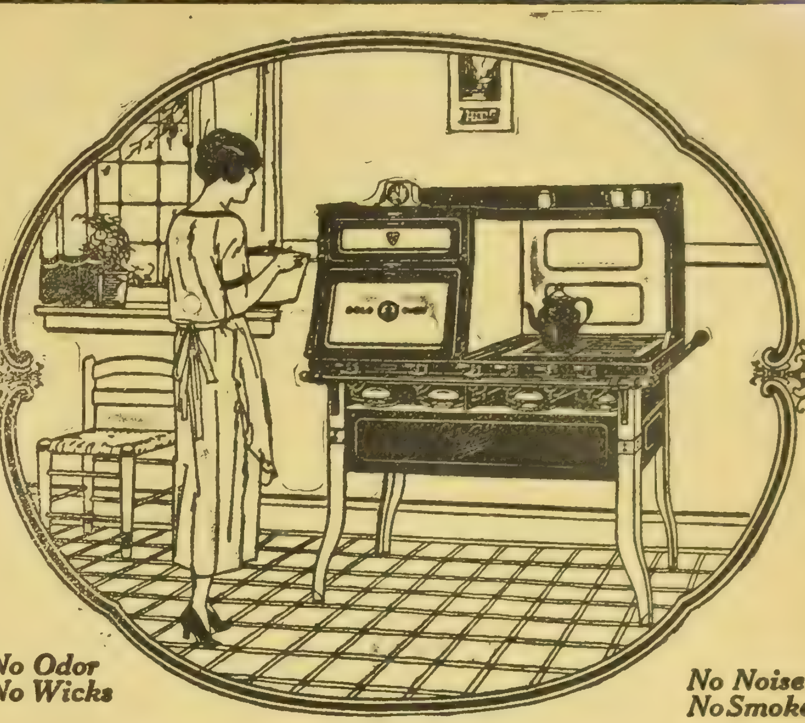

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MY ROVER

Florence E. Marshall

WHEN my upper lip is trembly,
And a lump gets in my throat,
And the fellows that I'm scared of
Have tried to get my goat;
And I'm feeling kind of lonesome
And I'm losing all my sand,
It's great to have my Rover
Come up and lick my hand.

For Rover is my buddie,
And I'm happy as can be
For I know there's simply nothing
That he wouldn't do for me;
For he loves me, and I know it,
And though other friends may fail
This world looks good, I tell you,
When Rover wags his tail.

You couldn't keep discouraged;
You couldn't long be blue
If you have a friend like Rover,
And know he's loving you;
For he rushes out to meet me
When I'm coming through the yard;
He just wags himself all over
'Cause he's loving me so hard.

DEAR girls and boys:—Not long ago a scientist had a large glass tank built with a glass partition through the center. He filled the tank with water and on one side of this partition he placed a large fish while on the other side he placed some gold fish. The large fish saw the gold fish and started for them, intent on devouring them, but he was stopped when he came to the partition. He struck his nose quite hard and hurt it but he was not to be disappointed so easily and he tried again and again to get at the little fish but each time he was stopped the glass partition which he could not see. After a few days he stopped trying to get the other fish and swam about in his half of the tank. About a week later the scientist removed the glass partition and all of the fish mingled together but no matter how close the gold fish came to the large fish he would not pay any attention to them.

Many of us are no better than this large fish. We try to do something and we fail; maybe we try again or maybe we are discouraged and say "Oh, my no! I couldn't do that. I tried it once and I know I couldn't." Don't be a "poor fish." Just make up your mind it can be done and you are going to do it AND THEN DO IT. Success comes in cans, not can'ts.—UNCLE NED.

OUR GIRLS AND BOYS

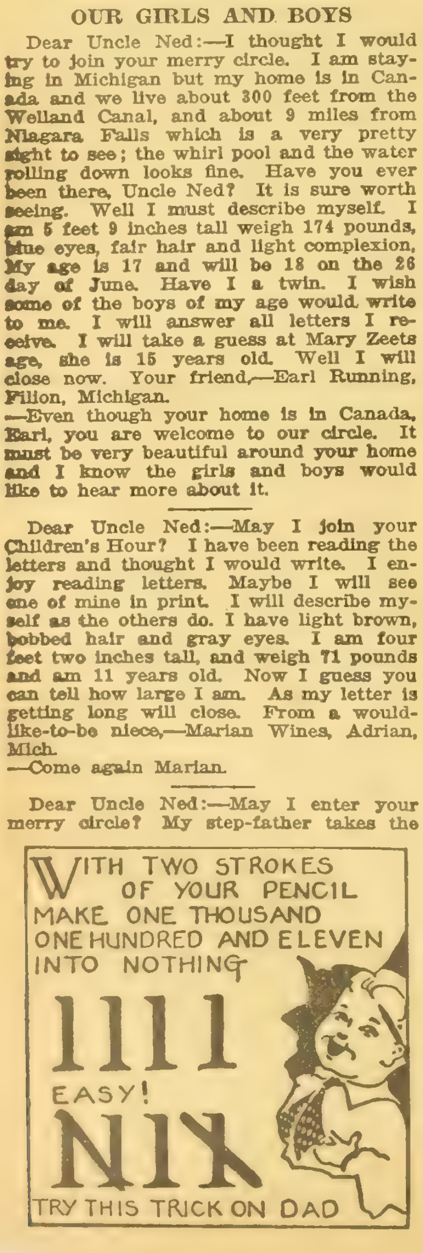
Dear Uncle Ned:—I thought I would try to join your merry circle. I am staying in Michigan but my home is in Canada and we live about 300 feet from the Welland Canal, and about 9 miles from Niagara Falls which is a very pretty sight to see; the whirl pool and the water rolling down looks fine. Have you ever been there, Uncle Ned? It is sure worth seeing. Well I must describe myself. I am 5 feet 9 inches tall weigh 174 pounds, blue eyes, fair hair and light complexion, My age is 17 and will be 18 on the 26 day of June. Have I a twin. I wish some of the boys of my age would write to me. I will answer all letters I receive. I will take a guess at Mary Zeets age, she is 15 years old. Well I will close now. Your friend,—Earl Running, Filion, Michigan.

—Even though your home is in Canada, Earl, you are welcome to our circle. It must be very beautiful around your home and I know the girls and boys would like to hear more about it.

Dear Uncle Ned:—May I join your Children's Hour? I have been reading the letters and thought I would write. I enjoy reading letters. Maybe I will see one of mine in print. I will describe myself as the others do. I have light brown, bobbed hair and gray eyes. I am four feet two inches tall, and weigh 71 pounds and am 11 years old. Now I guess you can tell how large I am. As my letter is getting long will close. From a would-like-to-be niece,—Marian Wines, Adrian, Mich.

—Come again Marian.

Dear Uncle Ned:—May I enter your merry circle? My step-father takes the M. B. F. and I read the Children's Hour. I live on an 80-acre farm. We have 2 cows, 2 calves, 3 dogs, 1 cat, 19 pigs and 23 little chicks. I have one sister, two brothers and my sister is in the first grade at school, and I and my biggest brother is in the seventh; he is 14 and I am 12. Now I hope this letter does not reach the waste basket. Well I guess I will have to close hoping to get a letter from some of the boys and girls. I will answer all letters received. Your want-to-be niece,—Margaret Marford, Gould City, Mich., Box 75.


WITH TWO STROKES OF YOUR PENCIL MAKE ONE THOUSAND ONE HUNDRED AND ELEVEN INTO NOTHING
1111
EASY!
NIX
TRY THIS TRICK ON DAD

The Children's Hour

Dear Uncle Ned:—Well I think I will try to write again, I wrote once before and I guess my letter must have found its way to the waste basket. I wish you would move it a little farther away so this one won't get into it. I live on a farm and I think I would like to live in the city too. But I like the cows, chickens, and horses. I have a dog and some kittens too. We have two of the cutest little calves; ones name is Betty and the other one is Michigan. I like the names. Do you? Your want-to-be niece,—Dorothy Marion Hartsell, Gagetown, Mich., R3.

—Oh Dorothy, how could you live on the farm and in the city too? Are you twins?

Dear Uncle Ned:—I have never written to you before. We take your paper and like it very much. The first thing I turn to is the boys' and girls' page. Well I guess I will describe myself. I have medium brown hair (of course it is bobbed. Ha! Ha!) I am five feet two inches in height. Do any of you boys and girls like to go to school? I do. I think it is lots of fun to go in the summer. In the winter time we have hot dinners. I live on a 160 acre farm. We have 4 horses, 20 head of cattle and a shepherd dog. For pets I have 2 little kittens. One is Trixie and the other is Rosebell; they are very cute. We have about 200 chickens, 17 turkeys and 18 pigeons, we also have three pigs. I live with my parents. I have two brothers and two sisters. I hope some of you boys and girls come to Summit City this summer. I think we would have a pleasant time, don't you? I will give you a riddle to answer. The one that answers it will receive a letter from me. Here it is: On the hill there is a green house, in the green house there is a white house, in the white house there is a red house, in the red house there are many little black niggers. Guess it. My letter is getting quite long so I will ring off. Your affectionate niece, —Anna Bretanus, R. 1, Box 41, Summit City, Michigan.

Dear Uncle Ned:—I am 12 years old, 5 feet 1 inch tall and am in the 8th grade. I have light hair, of course it is bobbed, and blue eyes. Say Uncle Ned, don't you think it would be nice to have each boy and girl write a description of how they picture you and see which could come the closest to what you really look like? Of course, my ideas aren't very bright and you will probably not even think it over. Say, in your last issue I see you ask if we are all going to follow in our mothers footsteps. Uncle Ned, although I love the farm, I am not going to live on a farm if I can help it. I may live on a farm but my business will not be farming. I am going to be a dancing instructor if I can. My mother does not like my future idea very well. Here is my idea of Sprng.

Spring is the time to be lively and gay,
The time to have good seed to sow.
If you will sow them, you'll surely get pay,
Before another winter brings cold wind and snow.

Your want-to-be niece,—Ilene Wingard, Cedar Springs, Mich., R. L.

—If you love the farm you certainly should live there all your life, but if you are going to be a dancing teacher I expect you will have to live in the city. I'll just bet you soon get tired of living in a dirty city, with no door yard or a chance to get the fresh air.

Dear Uncle Ned:—I surely hope I am not too late to enter the "scramble" as I dearly love to corrrespond with other young folks. I have a plan, here it is. Why not let all the cousins when they write to you enclose a few cents in stamps and let you (Uncle Ned) exchange it for money and call it the Children's Fund, then you could send the money to some crippled child. What do you think of the idea, cousins? Let's hear your opinion of it. I think it would be great fun. Uncle Ned, have you ever had diphtheria? I have just got over having it. Two of my brothers and my sister also had it. we are all better now. I am enclosing a poem you may print if you like. Well as my letter is getting long will leave room for other cousins. Hoping this escapes the waste paper basket. I am your loving niece,—Helen Goodrow, Hale, Mich.

The Violet

What a pretty wild flower,
Is the violet blue.
And when there is a rain shower
It will bloom so true.

It grows out in the woods,
Where many people go.
Children like to gather them in their hoods,
As long the path they go.

It blossoms in the spring
When the sun is shining bright.
Then the birds will sing,
As they see the violet in the morning light.

—By Helen Goodrow, Hale Mich.

—You are quite a poetess, Helen, and I can see you love flowers.

ETHEL, THE BELLE AT THE BALL

It is getting dusk, the lights are shining brightly at the Gilbert Castle.

The automobiles are beginning to drive into the yard, for there is to be a large ball at the Gilbert's.

Ethel, a beautiful girl of 17, is in her room, she is standing by the window watching the cars as they drive up the beautiful avenue. If once you looked at her handsome face and form, you would never forget it.

She has brown hair, beautiful brown eyes which are snappy, but at times are sad and affectionate.

As the last car drove up the avenue she slowly walked to the dresser arranged her hair more beautiful, descended the stairs and entered the ball room. A large company of young men and women were standing by the piano.

As Ethel entered the room, Maggie, her affectionate friend, came forward toward her and said, "Oh! Ethel I am so glad you have come." Ethel smiled sadly and slowly put her arm around her and Maggie said, "Come Ethel, we were all waiting for you, will you not play a piece for us."

They walked to the piano together, her friends greeted her kindly, and as she set on the piano stool she said, "What song do you prefer girls?"

Gay Gilbert, a handsome young man, who was deeply in love with Ethel said; "Play 'there is only one Pal after all.' "

As Ethel placed her beautiful fingers on the keys, the notes came loud and clear, and all sang but Ethel who was too sad to sing.

Soon the dancing began and all danced and had a fine time. At midnight there was to be a large supper and after supper the prettiest girl there was to become the wife of Gay Gilbert.

Midnight drew near, all ate the feast and then the people were to decide who was to be the Belle of the Ball.

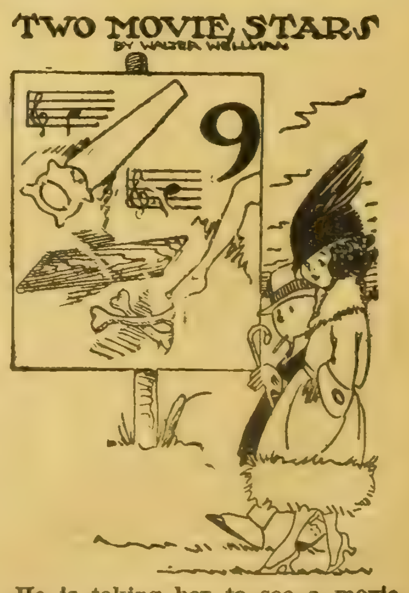
Ethel was setting on a large davenport with a company of boys and girls. They all decided that Ethel was the Belle of the Ball.

She was slightly blushing for Gay was coming toward her.

The inner light from her soul was shinning in her eyes, she loved Gay very much, but did not want him to know it. She had known him for several years and loved him ever since the first time she met him. Now he was to be her husband. Oh! how her heart ached for him.

As he stood before her their eyes met, her eye-lids dropped for she could not bear his searching gaze.

'Ethel!" and he clasped her to his bosom, "You are mine, all mine dear, body and soul," and also "The Belle of the Ball."—Miss Margarch Jackowish, Sherwood, Mich.



He is taking her to see a movie show, and she has just mentioned the names of her favorite female stars. Their initials are "G. S." and "B. D.".. What are their names? Using all the letters needed to spell the names of the seven objects, see if you can form the full names of the stars? Who are they?

Answer to last puzzle: OSTRICH.

The Dear Little, Merry Little Sailor

EVERY day the Little Boat danced into the harbor of the Blue Sea.

And every day the dear little, merry little sailor waited for passengers. He waited and waited and waited!

But the passengers never came.

Oh, yes, there were plenty of passengers. Hundreds and hundreds and hundreds of them!

But they never blinked an eye at the Little Boat. Bless you, no!

They all hurried towards the Great Big Boats, as fast as they could!

And, after the Great Big Boats sailed away, the dear little, merry little sailor lifted his anchor and off he and the Little Boat would glide. Just as if the Little Boat were full of passengers.

"I will play at being prosperous and happy," he laughed, waving to the sea gulls. "And perhaps tomorrow I shall have passengers."

So the next day, the dear little, merry little sailor took the Little Boat to a most conspicuous spot, and whistled as loud as he could, hoping to attract the crowd.

But they never even glanced toward the Little Boat. They just fell pell-mell over each other to get to the Big Boats.

After the Big Boats floated away, the dear little, merry little sailor squeezed back the tears, and lifted the tiny anchor and sailed off. And, whistled, whistled, whistled!

"Well, tomorrow I shall have a passenger. I feel it in my bones," he sang to the blue skies.

And sure enough, he did feel it in his bones. Bless you, yes!

For when he and the Little Boat were waiting, waiting, waiting, he heard a shrill little laugh behind him.

Looking around he saw a little, funny old woman.

"May I take passage on your boat?" she creaked.

"Indeed, you may," answered the dear little, merry little sailor, trying to hide the great joy singing in his heart. At last he had a passenger.

"But," whimpered the little, funny old woman, "I have no money!"

His dear little, merry little heart sank. Oh, no money! And his was nearly gone, too!

But he shrugged,

"Oh, that doesn't matter. I'd love to have you on my boat!" and he began whistling, whistling, whistling.

So the little old, old, old woman hobbled onto the boat, leaning on a creaky old cane.

The dear little, merry little sailor whistled louder than ever to keep up his courage. And he offered the little old passenger a loaf of bread.

He did not tell her it was his last loaf. Bless you, no! He just whistled a little louder!

But, when the Little boat was 'way, 'way out to sea, a queer thing happened. Oh, indeed it was very, very queer! The Little Boat started getting bigger, bigger, and bigger.

"Oh, oh, oh," wondered the little sailor. "Look at my boat. It's swelling!"

"Oh, no, it's simply growing," sniffed the little old woman. Look, isn't it beautiful!"

And sure enough, it was beautiful. Oh, so beautiful and big! As beautiful and big as the boats that got all the passengers.

"Oo'oo!" laughed the dear little, merry little sailor. "How strange!" And his little eyes were wide with delight. Some way he knew it was the kindness of this queer little old passenger.

But when he turned to thank her, she was, oh, could it be true, a lovely young girl-fairy!

The dear little, merry little sailor teased for a reason for all the glad things about him.

"You see," the girl-fairy, with a sweet smile explained, "the Big Boat and I are yours, because you were so brave and kind."

"But the little old woman?" questioned the dear little, merry little sailor.

"Oh, it's such a long story," smiled the girl-fairy. "You ask the Magic Fairies, and come here and sit by my side and whistle your dear little, merry little tune!"

And so the next day the dear little, merry little sailor and the lovely little fairy-girl were married, and—lived happily ever after, of course!
—Helen Gregg Green.

The Growing Menace of Tax Exempt Securities

(Continued from Page 3)

still profitable for the million-dollar man to buy it. The result is, that the men with the large incomes obtain a much greater reduction in their taxes than the Government can hope to make up by a lower interest rate on the securities which it issues."

Tax-Free Bonds and Industry

The direct public loss which is brought about through inabality of the government to collect taxes on these bonds is only one of the arguments which may be brought against time. As stated above, the effect of the issuance of tax-exempt municipal bonds is also to encourage municipal extravagance and to hamper industry by diverting capital which under other circumstances would be invested in public utility, railroad and industrial enterprises.

Is there any need to point out that present conditions are driving liquid capital needed for production into unproductive channels? Men of large financial means now invest largely in municipal bonds, the income from which is totally tax-exempt. Mr. William Rockefeller, who died recently in New York, left $7,000,000 in Standard Oil securities which were taxable, but he also left to his estate $44,000,000 in municipal bonds, from which he had received an annual income of over $1,750,000, which was totally exempt.

Time was when farm mortgages were considered as gilt edge security, yet today they are almost a drug on the market. Both agriculture and industry suffer from the loss of the capital which has been withdrawn from constructive, productive business and hidden away in tax-exempt securities.

This thought was emphasized specifically by Richard T. Ely, Director of the Institute for Research in Land Economics and Public Utilities, when speaking this spring to the American Electric Railway Association he declared that electric railway securities must be relieved from the ruinous competition of tax-exempt capital so that they could be financed at more reasonable rates before they could get out of their present distressed condition.

The Situation in Michigan

Speaking of Michigan's taxation conditions, Mr. George Lord, member of the state board of tax commissioners, said recently:

"Personally, I believe we are almost at the breaking point now. There has never been a more universal cry against high taxes. It has never before been possible to interest people generally in taxation to the extent they are now interested. Farmers are deserting their farms in part because of high taxes.

"The fundamental evil is over-expansion of the public debt. Last year the state and national governments appropriated seven and a half billion dollars, the national share being approximately two fifths. Of that, 79 per cent was on general property.

"Much of that was spent in caring for interest and sinking fund payments on the public debt which has reached the enormous total of at least $33,000,000,000. Michigan's share alone is $400,000,000. That means interest charges of $20,000,000 to say nothing of payments to amortize the bonds. Authorities are too willing to borrow without heed to the consequences.

"Tax exemption speaks for itself. It is an evil too easily extended and results in completely unfair distribution of the burden of taxation."

Congress Shies at Shadow

Despite these manifold arguments against the tax-exempt feature of bonds issued by various governmental units, Congress has at its present session once more refused to put a ban on them. When this issue was being debated in Congress the opposition raised the objection that such action on the part of the federal government would impair the credit of the states or that if the credit were not actually impaired, the taxation of state and municipal securities would make it difficult to market them and so retard public improvements.

These objections should not worry us. Long before the day when high taxation gave tax-exempt securities the advantage they now enjoy, state and municipal bonds sold at a premium over the best public utility, railroad and industrial securities, and even if the effect of such legislation were to slow dow the rate at which our governmental units are rushing into debt, should that be regarded as an objection?

Legislature Must Act

In view of the present situation, the executive committee of the Michigan Real Estate Association recently adopted the following resolution:

"Failure of the House of Representatives of our Federal Congress to adopt a joint resolution proposing a constitutional amendment prohibiting the issuance of tax-exempt securities, is looked upon with profound regret by the Michigan Real Estate Association. Defeat of the resolution is a serious blow to real estate.

"So long as it is possible through investment of any kind, for vast sums of wealth to enjoy immunity from taxation, real estate as represented in farm, town home, business and industrial properties, must expect to bear a disproportionate burden of the cost of government.

"Sentiment in Michigan is preponderantly opposed to further issuance of tax-exempt securities. Some have believed, however, that Michigan should not tax her securities until similar action is taken by all states. Now Congress has failed to act. In the House debate it was declared that the question clearly was one for determination by the several states. Michigan's course is clear. The legislature of 1925 must act. By its action and by the action of other legislatures, Congressional disapproval of tax exemption will be hurried.

"The Michigan Real Estate Association, representative of property owners of Michigan, commends the action of those members of the Michigan delegation in Congress who voted for the passage of the joint resolution."

Laws removing the tax-exempt feature of both foreign and domestic bonds and making them subject to small annual specific taxes were passed at the recent session of the Legislature, but were vetoed by the Governor.

A Challenging Crisis

No doubt the general public agrees pretty thoroughly with the editorial comment of the Detroit Free Press that "when the House Representatives turned down the tax-exempt securities constitutional amendment, it went on record in favor of class privilege".

It was Abraham Lincoln, as we all remember, who made the epochal statement that this country could not exist half slave and half free. Were he living today he would no doubt say "This country cannot continue to exist half taxed and half tax-free".

It is evident that the time has come when we should have more people freed from the burden of oppressive and inequitable taxation and less tax-exempt securities—more tax-free people and less tax-free bonds.

SHOW BIG SAVING IN DITCH BLASTING

A DITCH blasting demonstration was recently staged by L. F. Livingston, head of the Michigan Agricultural College land clearing service, near Durand, Michigan, which developed some interesting data in the use of explosives for this kind of work.

"The ditch we worked on was an old one, filled in about two feet at the bottom," says Mr. Livingston. "Estimates secured by local authorities had placed the cost of clearing it at ten dollars a rod, while the best bid obtained was at twelve dollars a rod. Figures on the demonstration, which was entirely successful, showed that materials cost $2.36 a rod and labor fifty cents; a total of only $2.86 a rod for the work.

"We used three rows of holes, 18 inches apart with the rows 40 inches apart. One stick of 50 per cent straight nitro-glycerin dynamite, the only kind possible for this type of work, was placed in each hole. The blast cleared a good 12 foot strip in the bottom of the ditch."

The demonstration was made at the request of officials of the state department of agriculture.

1924 → 1928

Benefits FOR 4 YRS.

Better crops the *first* year—*and better crops for three to four years more*—follow the spreading of SOLVAY. Why bother with other forms of lime when their benefits are dissipated in a single season? Use SOLVAY—at much less cost—and get better crops and greater yields year after year. The truth about limestone is told in our booklet, sent FREE on request. Please write for it. Address

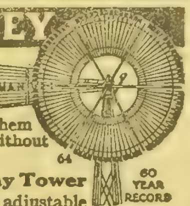
THE SOLVAY PROCESS CO.
DETROIT, MICHIGAN

IF YOU LIME YOUR LAND WITH SOLVAY PULVERIZED LIMESTONE

Guaranteed 95 % Carbonates

SAVE MONEY

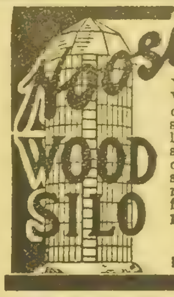
The **Manvel** Direct Stroke Windmill still leads after more than sixty years' dependable service. Thousands of them have run thirty years without upkeep expense.



The Manvel Fits Any Tower

Working parts encased; adjustable direct stroke; broad ball-bearing turntable. All made in our own factory—hence low price, high quality. The Manvel saves you money. Write for free book describing our wood and steel mills, towers, tanks, etc.

Kalamazoo Tank & Silo Co., Dept. 744 Kalamazoo, Mich.



Prompt delivery from stock at special low prices. Yellow Pine or Oregon Fir. With or without hinged doors. Best anchoring system on the market. Cost little to erect, give splendid service with least upkeep cost. Purchase NOW insures quick shipment at rock bottom prices. Write for literature. Special proposition now to agents.

Hoosier Building Tile & Silo Company
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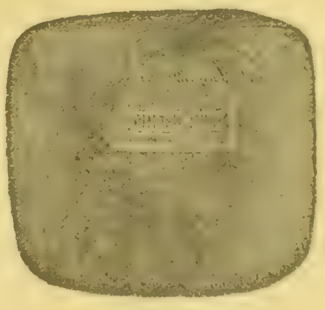
FARMERS!

Prices Now Ready On

M-I-C-H-I-G-A-N

PRISON MADE

Binder Twine



Made In YOUR OWN FACTORY at Jackson, Mich.

BUY NOW and SAVE MONEY

We are first to announce Binder Twine prices for 1924 season. The prices are very low considering condition of Yucatan sisal situation which is serious. Prices may be higher. Don't wait. See the secretary or proper official of your organization or dealer today. They have the prices. Do it today! Tomorrow prices may be higher. Prices direct on request. If you cannot get our twine of them, we will ship you direct.

HARRY L. HULBERT, Warden,
MICHIGAN STATE PRISON, JACKSON, MICH.

MAIL THIS COUPON FOR FREE SAMPLE
and Prices on Michigan Standard Binder Twine

Harry L. Hulbert,
Manager State Industries,
Jackson, Mich.

Name ....

P. O. ....Michigan

Every Day You Need
KRESO DIP No. 1
(STANDARDIZED)
TO AID IN KEEPING
All Livestock and Poultry Healthy
Kills Lice, Mites and Fleas.
For Scratches, Wounds and common skin troubles.

THE FOLLOWING BOOKLETS ARE FREE:
No. 151—FARM SANITATION. Describes and tells how to prevent diseases common to livestock.
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No. 185—HOG WALLOWS. Gives complete directions for the construction of a concrete hog wallow.
No. 163—POULTRY. How to get rid of lice and mites, and to prevent disease.

Kreso Dip No. 1 in Original Packages for Sale at All Drug Stores.
ANIMAL INDUSTRY DEPARTMENT OF
Parke, Davis & Co.
DETROIT, MICH.

Complete Milker
$123!
Nothing to Install No Expense No Bother
Comes complete and ready to use; no installation. Simple, easy to clean. Costs less and works better just because it is so very simple. Tremendous improvement in machine milking. Only $123—think of it. Special Offer — rock-bottom price direct. 30 Days Free Trial. A special offer good until we have a salesman or agent in the territory. No C.O.D.—no deposit. Easy Monthly Payments. We'll make that milker pay for itself every day as it goes along.
SEND FOR FREE Book
Send for our free book on milking. Tell us how many cows you have. Write today, while this offer lasts.
Burton Page Co., 1201 Cortland St., Dept A969 Chicago, Ill.

Only $2 DOWN ONE YEAR TO PAY
You can now get any size of the New Butterfly Cream Separator direct from our factory for only $2 down, and on a plan whereby it will earn its own cost and more before you pay.
We quote Surprisingly Low Prices and allow payments as low as
ONLY $3.50 PER MONTH
No interest to pay — no extras. Every machine guaranteed a lifetime against defects in material and workmanship.
30 Days' FREE Trial on your own farm at our risk. Nearly 200,000 already in use on American farms. Easiest of all separators to clean and turn. Write for Free Catalog Folder today. (17)
ALBAUGH-DOVER CO. 2260 Marshall Blvd Chicago, Ill.

HEAVES Use 2 large cans. Cost $2.50. Money back if not satisfactory. One can at $1.25 often sufficient. NEWTON'S Compound for Worm Expelling, Conditioning, Heaves, Indigestion, Distemper, Coughs. 65c and $1.25 cans. At dealers or post-paid. The NEWTON REMEDY CO., Toledo, Ohio

Agents Wanted!
Men with cars to cover R. F. D. Routes selling subscriptions to
Michigan Business Farmer
Liberal Salary and Expenses. Make Big Money this Summer at this pleasant, congenial work. Address
Circulation Manager
Mt. Clemens, Michigan

DAIRY and LIVESTOCK

1925 HOLSTEIN CONVENTION AT GRAND RAPIDS

FRANK O. LOWDEN, Oregon, Illinois, was re-elected president of The Holstein-Friesian Association of America for the third time at the 39th annual convention of that organization's delegates at Richmond, Virginia, June 4th. Dr. L. M. Thompson, Montrose, Pennsylvania, was elected vice-president, and the following directors, whose terms expired, to succeed themselves: E. A. Stuart, Seattle, Washington; H. V. Noyes, Kenwood, New York; W. H. Mott, Harrington, Kansas; and R. E. Chapin, Batavia, New York. Next year's convention will be held at Grand Rapids, Michigan.

A three times-a-day milking test for the 305- and 365-day divisions of the advanced registry was adopted. To be eligible for this class, to be known as Class B, cows on long-time semi-official test are not to be milked more than four times daily the first 45 days and not to exceed three milkings a day the balance of the period.

The sentiment of the convention was in favor of adopting a plan for increasing consumption of Holstein milk and encouraging local breeders to market a higher class product.

To insure the attendance of the delegates at annual conventions, especially those from distant points a provision was made for reimbursement of railroad fare and traveling expenses to all delegates.

"SPEND A WEEK IN DAIRY LAND"

THE Publicity Committee of the National Dairy Exposition, after consulting with various Milwaukee and Wisconsin people interested in the success of the Exposition, has just announced the new slogan for the year—"Spend a Week in Dairyland." Exhibitors in the Exposition will feature this slogan in their advertisements in farm and dairy factory papers and will use it on letterheads and sales literature.

From all over the country information comes to the Exposition office regarding plans for trips and excursions to Milwaukee, which will not only include a visit to the Exposition but also a visit to Wisconsin's farms and factories, of which dairymen everywhere have heard so much. "Spend a Week in Dairyland" will appeal to every progressive dairyman who wants to visit the Exposition and at the same time see some of the famous farms and dairy plants of the great Wisconsin dairy territory. The slogan holds forth promise of a pleasant and profitable sight-seeing trip combined with real value from contact with the American dairy industry in all its many angles, as presented in the Annual Exposition.

ADVANTAGES OF SILAGE ARE SEVERAL

THE silo is not a new thing to Michigan dairymen because there are nearly 50,000 silos in use in the state at the present time. The very fact that there are this number in use proves their value in economic dairying and livestock farming. There are many dairymen and cow owners in the state who do not have silos at the present time. These men could produce meat or milk more economically if they had silage to feed.

Briefly the advantages of silage are as follows:

1. The silo saves feed. A large per cent of the food value of the crops ordinarily used for silage goes to waste on the farm. If this food is saved, production costs of livestock and livestock products can be reduced.

2. More cattle can be kept per acre where silage is utilized efficiently.

3. Silage furnishes a green juicy food for the cows in winter. This kind of food aids digestion and keeps the digestive tract in good condition.

4. Less labor is required and it is by far a more pleasant job to feed the crop through the silo than when the same crop is fed in cured form.

5. Silages saves on the hay bill. A ton of good silage is worth about one-third as much as a ton of mixed hay.—O. E. Reed, Professor of Dairy Husbandry, M. A. C.

VETERINARY DEPARTMENT

STALLION OUT OF CONDITION

I have a stallion that has been out of condition for four years. He has a pot-belly, rough coat, and if driven hard has colic spells, lays down and rolls. With these spells his manure gets very thin and watery. He is nine years old and very speedy. Two doctors have examined him, and they call it chronic indigestion. The last doctor gave him glaubers salts, 2 lbs. common salt, 1 lb. bicarbonate of soda ½ mixed together tablespoon full in food twice a day. This treatment does not seem to do much good. Last two springs he seemed to look good for a couple of months, then goes down in hard shape and gets lazy. If this horse was well I could sell him for at least $225. When he has the colic spells he bloats. Quite often he yawns, just like a person when they are sleepy.—R. G., White Cloud, Michigan.

I WOULD suggest that you try the following prescription: Fluid extract of nux vomica, two ounces; fluid extract of quassia, four ounces; fluid extract of gentian, two ounces; Fowler's solution of arsenite, twenty-four ounces; mix and give the horse two tablespoonfuls in a half cup of water mixed in his feed night and morning. If necessary this prescription can be refilled and given a second time.

The horse should in addition have good feed and care and a ration composed of one part bran, three parts oats with a little corn for variety, and good mixed clover and timothy hay would do very well.—John P. Hutton, Assoc. Prof. of Surgery and Medicine, M. A. C.

CALL A GOOD VETERINARIAN

I would like to ask through the columns of your paper a few questions regarding some cattle that have died recently belonging to a near neighbor of mine. He has lost six out of ten and one more is sick. They were all one year old this spring and in good condition, have been well fed and cared for. They do not live long after taken, from ten to twenty-four hours. When they are skinned there is red and dark spots on the flesh. We have searched every place where they have been, for poison but none has been found. Would the red and black and blue spots indicate poison or some disease? What would the cost be to have their stomachs analyzed by state authorities?—W. J. S., Grawn, Mich.

IT would be practically impossible, to make a diagnosis of the condition affecting the cattle in question basing judgement on the description given. The trouble might be due either to some intoxication or a contagious and infectious disease. A qualified veterinarian should be called in to make a thorough examination and if he is unable to arrive at a solution, specimens should be sent in to the laboratory of the State Department of Agriculture for examination. Such examination would be made without cost to the owner of the cattle.

It would be an enormous and expensive task to attempt the analysis of the stomach contents of any animal if no clue were available relative to the possible cause of the trouble.—B. J. Killham, State Veterinarian.

FREE BOOK ABOUT CANCER

The Indianapolis Cancer Hospital, Indianapolis, Indiana, has published a booklet which gives interesting facts about the cause of Cancer, also tells what to do for pain, bleeding, odor, etc. A valuable guide in the management of any case. Write for it today, mentioning this paper. (Adv

ABSORBINE
TRADE MARK REG. U.S. PAT. OFF.
Will reduce Inflamed, Strained, Swollen Tendons, Ligaments, or Muscles. Stops the lameness and pain from a Splint, Side Bone or Bone Spavin. No blister, no hair gone and horse can be used. $2.50 a bottle at druggists or delivered. Describe your case for special instructions and interesting horse Book 2 R Free. ABSORBINE, JR., the antiseptic liniment for mankind, reduces Strained, Torn Ligaments, Swollen Glands, Veins or Muscles; Heals Cuts, Sores, Ulcers. Allays pain. Price $1.25 a bottle at dealers or delivered. Book "Evidence" free.
W. F. YOUNG, Inc., 369 Lyman St., Springfield, Mass.

BREEDERS' DIRECTORY

Ads under this heading 30c per agate line for 4 lines or more. $1.00 per insertion for 3 lines or less.

CATTLE

HOLSTEINS

FOR SALE, REGISTERED HOLSTEIN MILK cows and young stock. (7.) T. B. Tested, fine conditions. Have sold our farm.
VISSER BROS., R. F. D. 8, Holland, Michigan.

HEREFORDS

WE HAVE BRED HEREFORDS SINCE 1860 Our herd bulls are International Prize Winners. Stock of all ages for sale, at Farmers prices. Write us for further information.
Feed Herefords that fatten quickly.
CRAPO FARM, Swartz Creek, Michigan.

HEREFORD STEERS
64 Wt. Around 800 lbs. 70 Wt. Around 750 lbs.
88 Wt. Around 650 lbs. 44 Wt. Around 600 lbs.
46 Wt. Around 500 lbs. 50 Wt. Around 500 lbs.
Well marked and show splendid breeding, deep reds, good stocker order. Herefords are usually market toppers when finished. Anxious to sell your choice one car load or all. Give number and weight preferred.
V. V. BALDWIN, Eldon, Wapello Co. Iowa.

GUERNSEYS

MAY — GUERNSEYS — ROSE
STATE AND FEDERAL ACCREDITED
Bull calves out of Dams up to 877 pounds fat. Sired by Bulls whose Dams have up to 1011 pounds fat. The homes of bulls; Shuttlewick May Rose Sequel, Jumbo of Briarbank and Holbecks Golden Knight of Nordland. From Dams producing 1011.18 fat, 772 fat and 610 fat.
GEORGE L. BURROWS or GEORGE J. HICKS, Saginaw, W. S., Michigan.

PURE BRED GUERNSEY BULL CALF for sale.
C. R. TALBOT, Farmington, Michigan.

SHORTHORNS

FOR SALE—ONE RED SHORTHORN REGISTERED bull, age ten months. One roan shorthorn registered bull, age eight months. Also four red heifres, coming two years old.
Henry J. Lynch, Mayville, Tuscola Co., Mich.

RED POLLED

RED POLLED BULLS READY FOR SERVICE. From good milking strains. Prices right.
JACOB BERNER & SONS, Grand Ledge, Mich.

ANGUS

WE HAVE SOME FINE YOUNG ANGUS BULLS from International Grand Champion Stock at reasonable prices. E. H. KERR & CO., Addison, Mich.

JERSEYS

REG. JERSEYS, POGIS 99th OF H. F. AND Majesty breeding. Young stock for sale. Herd fully accredited by State and Federal Government. Write or visit for prices and description.
GUY C. WILBUR, BELDING, Mich.

SWISS

For Sale list of BROWN SWISS cattle and information concerning the "BIG BROWN COW", write SEC. MICHIGAN BROWN SWISS BREEDER'S ASS'N., Sebewaing, Mich.

FOR SALE 3 BROWN SWISS BULLS. ONE year old. Well Bred. T. B. Tested.
FRANK POET, Clare, Michigan, R6.

SWINE

O. I. C.

O. I. C.'S 12 YEARLING GILTS TO FARROW in April and May. Large stock, recorded free. Also spring pigs.
OTTO SCHULZE & SONS, Nashville, Michigan.

HAMPSHIRES

HAMPSHIRES—BRED GILTS AND BOARS at bargain prices. Write your wants. 12th year.
JOHN W. SNYDER, St. Johns, Mich., R. 4.

PET STOCK

FOR SALE—THOROUGHBRED WHITE COLlie puppies, a very nice bunch, all nearly snow white. Females, $5.00; males, $10.00.
RANSOM PETERS, Ithaca, Mich., R2.

"Very Satisfactory Results!"
Gentlemen:—Kindly discontinue my advertisement after your next issue, both the chick and egg ad. I received very satisfactory results from your paper,—Yours truly Joseph Amster, Paw Paw, Mich.

Poultry Department

POULTRY VENTILATION IN SUMMER

THE importance of proper and thorough ventilation for poultry houses of all kinds during the summer months cannot well be overestimated. In the case of adult fowls it determines, to a large degree, their efficiency and productivity, because comfort is everything in hot weather and the hens that are kept comfortable are most likely to continue producing. Hens that are overheated at night, that are thrown into early molts, are certain to stop producing and their value ends there for the season—at least until they have recovered from the molt.

A similar condition obtains in the case of growing stock. Unless they are kept comfortable and have plenty of ventilation at night, they are certain to be continually going through partial molts, which constitute a severe drain on their constitutional vigor. It is natural for chicks to go through more or less of a continual partial molt during the growing period. These are called "partial chick molts" and several of them occur during the first five or six months of the chick's life. They are a severe enough drain upon the vitality of the chick without more of a molting burden being imposed upon the chicks through overcrowding, piling up and poor ventilation.

Be sure that there is plenty of air for the poultry of all ages. A hen is better off roosting in a tree or on a fence during the hot weather than she is in a hot, poorly-ventilated and arranged poultry house. But, at the same time, the best results are obtained where the shelter is right and available. Give the chicks colony roosting sheds, but be sure that they have protection from natural enemies and from the elements.

NEST CONSTRUCTION

THE would be poultryman has either one of two popular types of nests to choose from—wall nests and nests beneath the dropping-boards. Although the writer favors the type that are installed beneath the dropping-boards, wall nests may be made that reduce the bother by the fowls to a minimum, such as taking the litter from the nests, roosting on the edges, etc.

Wall Nests

In order to be satisfactory, these nests will have to extend about 20 inches from the wall of your poultry house, the wall serving as the back part of your nests. A shingle binder or some such support is nailed to the posts, about 18 or 20 inches from the floor and supported to the floor making a steady frame.

The floor boards for the nests are fitted on, and cleated; if you wish your nests to be removable to facilitate cleaning, don't nail these floor boards to the supports. Now nail a seven or eight-inch board to the front of your nest floor; fit the end pieces on, allowing plenty of slant so that the cover may be fitted on so as to keep the fowls from roosting thereon. When making these end pieces, allow space for a small door at the lower corner near the wall, of sufficient width and height to enable a fowl to pass through.

A Hinged Cover

The partitions between the nests are put in next, allowing 12 to 15 inches width to a nest. These partitions may be as high as your front piece, and nailed to it. They should be long enough to allow the fowls a passage between their rear ends and the wall. A four-inch board is nailed to the rear ends of the partitions, to keep the nesting material where it belongs.

The cover should be put on now, covered with tarred paper, and a part of it fitted and hinged so that it may be lifted up, and the eggs gathered.

A walk-way or a small shelf, may be placed at the entrance of the small doors, so the fowls may find ready access to the nests. These nests are thus quite dark, helping to prevent egg-eating, and are used by people who do not care to have nests beneath the dropping-boards on account of the necessity of having these drop-boards 30 inches or more from the floor when nests are to be placed under them.

Drop-Board Nests

These should be fourteen or fifteen inches from top, (or under-side of the drop-boards) the floor of the nests, and your end supports want to be nailed to your end posts accordingly. In case a middle support is needed, you can put one underneath the nest-floor after latter is in place. Don't nail it from a post, as this would give the fowls a chance to roost on this exposed edge of the support. (From the rear of the nests back to the wall.)

The nest-floor is 15 to 18 inches wide; saw your boards to sufficient length, allowing for any end posts. To the outer edge of what is your rear board nail a three or four-inch board, to keep the nesting material in. No pole or shelf is necessary for the fowls to hop up on to see their way into the nests. Such is a nuisance. Lay the nest floor carefully, and cleat together. On the front edge of the front board, nail a four or five-inch piece, same as on rear edge.

Easily Kept Clean

Allow the front part of your nests, which are to be hinged doors, to go about one, one-half or two inches back from the front edge of your dropping-boards, thus saving this front from a possible defacing by fowls standing on the drop-boards. You should allow for this when building your drop-board frame, by letting the front edges of your drop-boards project two inches or so over the front support.

The doors are made and hinged with metal hinges to the four or five-inch piece you put on the front board. Fasten by means of buttons so fixed that each door will be held firmly. One button to a door is sufficient. Doors should be from four to six feet long, or shorter or longer, if you can handle them properly. A small spool or gate hook eye fastened near the top and central part of each door, enables one to lower and raise the doors conveniently.

This type of nest gives me good service. Use hay for nesting material, sprinkle frequently with louse powder, and renew once in a while. Paint or whitewash will also help your nests to make a good appearance to yourself and others.—Maine Farmer.

PICKING GEESE

At what time of the year do we pick live ducks? Are we allowed by law to pick live ducks?—Mrs. A. C. W., Beulah, Mich.

THIS practice is limited almost entirely to goose raising because the goose feathers are much softer than either the duck or poultry feathers. Many geese raisers make a practice of picking their stock twice a year. The young geese can be plucked soon after they become fully feathered. At this time the feathers are ripe and pull very easily. There is, however, a greater danger of tearing the skin of the young stock, than there is in picking the old birds.

Geese should not be plucked during the laying and breeding season, nor during extremely warm weather, unless they have an excellent pasture, with plenty of water and shade. Ordinarily, a new crop of feathers will be completely grown in by six weeks.—E. C. Foreman, Professor of Poultry Husbandry, M. A. C.

AN ERROR

The word "editorial" in the second paragraph of the article on page 3 of our May 24th issue was erroneous. It should have been "letter".

Makes Him Homesick

'Shut the door," yelled the rough man. 'Where were you raised—in a barn?'

The man addressed complied, but the speaker, looking at him a moment later observed that he was in tears. Going over to the victim he apologized.

'Oh, come," he said soothingly, "you shouldn't take it to heart because I asked if you were raised in a barn."

'That's it, that's it,' 'sobbed the other man. "I was raised in a barn and it makes me homesick every time I hear an ass bray."—Los Angeles Times.

CHICKS

From World's Greatest Layers

If you want pure bred chicks that are bred right, hatched right, and shipped right, that grow and will make you a profit, get our new low prices and free catalog before you buy

S. C. Anconas Tom Barron White Leghorns
Heavy Type Brown Leghorns Park's Barred Rocks
R. C. & S. C. Rhode Island Reds

VARIETY STOCK AFTER JUNE 2

Variety	Prices on 25	50	100	500
English Barron S. C. White Leghorns	$2.50	$4.75	$9.00	$40.00
S. C. Mottled Anconas	2.50	4.75	9.00	40.00
S. C. Brown Leghorns (Heavy Dutch Type)	2.50	4.75	9.00	40.00
Barred Plymouth Rocks (Parks Strain)	3.00	5.75	11.00	50.00
S. C. and R. C. Rhode Island Reds	3.00	5.75	11.00	50.00

Flocks are carefully culled and developed on free range. All chicks are hand picked and inspected, no cripples or weaklings. Every one strong and healthy. Satisfaction and 100% live delivery guaranteed Postage paid. Write now for our low prices and free catalog. Good English Single Comb White Leghorn Pullets 10 and 12 weeks old, Delivered $1.00 apiece. Prices on our other varieties on application.

Reference Holland City Bank

KNOLL'S HATCHERY, R. R. 12, Box B, Holland, Mich.

FIRST CLASS CHICKS $7.00 PER 100 AND UP

We are big producers of pure-bred chicks from heavy laying flocks. Postpaid to your door. 100% live delivery guaranteed. Flocks on free range. Culled by an expert.

Varieties	Prices on: 25	50	100	500	1000
English White Leghorns,	$2.50	$4.75	$8.00	$42.50	$85.00
Brown Leghorns, Heavy Type,	3.25	6.00	11.00	50.00	95.00
Barred Rocks, R. C. & S. C. Reds,	3.00	5.75	11.00	50.00	100.00
Mixed Chicks,	2.00	4.00	7.00	35.00	——

Reference: Zeeland State Bank. You take no chance. Order TODAY with full remittance and get them quickly.

HUNDERMAN BROS. Poultry Farm, Box 30, Zeeland, Mich.

Reduced Prices for BEST *Chicks*

For JUNE—JULY—AUGUST—Pure bred chicks, hatched right, large and strong, postpaid live delivery to your door. Instructive catalog free.

Breeds	25 Chicks	50 Chicks	100 Chicks	500 Chicks	1000 Chicks
White Leghorns	$2.50	$5.00	$ 9.00	$42.50	$ 85.00
Barred Rocks	3.00	6.00	11.00	52.50	105.00
S.C.R.I. Reds	3.00	6.00	11.00	52.50	105.00

Strong broiler chicks, no breed guaranteed, $7.00 per 100, after June 1st. Order early, right now! Late customers were disappointed last year. Quality and price talk. Act now.

BRUMMER-FREDRICKSON *Poultry Farm*, Box 26, Holland, Mich.

Chicks for You

Big, strong, sturdy fellows from selected, heavy laying pure bred flocks. Postpaid to your door. 100% live arrival guaranteed. Low prices.

Varieties	Prices On: 25	50	100	500
White Leghorns,	$2.50	$4.00	$ 8.00	$40.00
Brown Leghorns,	2.50	5.00	10.00	47.50
Anconas,	2.75	5.00	10.00	47.50
S. C. & R. I. Reds,	3.00	5.50	10.00	47.50
Barred Rocks,	3.00	5.50	10.00	47.50

Chicks will reach you quickly and safely. Reference: People's State Bank. Order right from this Ad. There is no risk.

Timmer's Hatcheries, Box M, Holland, Mich.

TOBACCO

HOMESPUN TOBACCO; CHEWING FIVE pounds $1.75; ten $3.00; smoking five pounds 1.25; ten $2.00; pipe and recipe free, pay when received. CO-OPERATIVE FARMERS, Paducah, Kentucky.

HELP WANTED

BE A BRICKLAYER. GOOD PAY. INTERESTING out-door work. Tuition $25.00 per month, five days per week, eight hours per day. Course four to six months, according to student's ability. Send for Circular. ASSOCIATED BUILDING EMPLOYERS OF MICHIGAN, 122 A. B. E. Building, Grand Rapids, Michigan.

USE THIS COUPON *It costs you nothing and it may save or make you many a dollar.*

INQUIRY COUPON

Farmers' Service Bureau
The Business Farmer, Mt. Clemens, Mich.

I would like to receive any information you can give in connection with the following inquiry:

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Name ....

P. O. .... MICHIGAN

(Use Separate Sheet of Paper if Coupon is too small.)

VAN APPLEDORN BROS. BABY CHICKS HOLLAND, MICHIGAN

Special Sale

HIGHEST QUALITY CERTIFIED BABY CHICKS

From Michigan's Old Reliable Hatchery, the best equipped and most modern Hatchery in the State.

Pure Bred Tom Barron English and American White Leghorns, Anconas, Barred Plymouth Rocks and Rhode Island Reds. Strong, Well-hatched Chicks from tested Hoganized Free-range stock that make wonderful winter layers.

Variety	Prices on 50	100	500
English Barron S. C. White Leghorns	$4.75	$9.00	$40.00
S. C. Mottled Anconas	4.75	9.00	40.00
Barred Plymouth Rocks	5.75	11.00	50.00
S. C. Rhode Island Reds	5.75	11.00	50.00

ASSORTED LOTS OF CHICKS

$75.00 per 1,000 - - $8.00 per 100
$38.50 per 500 - - $4.25 per 50

Chicks sent by Insured Parcel Post prepaid to your door. 100% live delivery guaranteed. Sixteen years of experience in producing and shipping Chicks giving absolute satisfaction to thousands. Write for valuable illustrated free catalog and price list. Get lowest price on best quality Chicks before placing your order.

Holland Hatchery & Poultry Farm, R. 7, Holland, Mich.

BABY CHICKS---SPECIAL PRICES JUNE and July. Delivered anywhere. White Leghorns $10 per 100. Barred Rocks and R. I. Reds $12 per 100. All flocks culled and inspected. Our own breeding flock of large type American White Leghorns. Laying and standard qualities combined. 13 years breeding, hatching and marketing experience. Modern plant. Live delivery guaranteed. Order from this advertisement to insure prompt shipment.

DEAN EGG FARM AND HATCHERY, BIG BEAVER
MAIL ADDRESS, BIRMINGHAM, MICH., R. 4.

BUY YOUR CHICKS NOW

CHIX

English Strain S. C. White Leghorns at	$ 9.00	per 100
Rhode Island Reds, S. C. at	11.00	per 100
Rhode Island Reds, R. C. at	11.00	per 100
Anconas at	10.00	per 100
Broiler Chicks, mixed, at	7.00	per 100
Barred Rocks at	11.00	per 100

Order from Ad. Satisfaction guaranteed. PULLETS and HENS from above varieties for sale.

PROGRESSIVE POULTRY FARMS, Zeeland, Mich.

NOTICE--CHICK PRICES SMASHED 95% Live Delivery Cuaranteed, Postpaid

Up to July 15 we are going to sell our well known stock at the following low prices:

White Leghorns	$8.00 per 100.	Barred Rocks	$10.50 per 100.
Brown Leghorns	$9.00 per 100.	R. I. Reds	$10.50 per 100.
Anconas	$10.00 per 100.	Light Breed Broilers	$6.00 per 100.

CITY LIMITS HATCHERY and POULTRY YARD, Route 5, Box 11, Holland, Michigan.

MAY and JUNE CHICKS

Pine Bay Farm

The Kind That Pay Big Profits

PINE BAY FARM CHICKS are backed by our 20 years' experience in the poultry business and a reputation for fair dealing with thousands of satisfied customers. Our experience protects you.

Chicks 6½c Up for June Delivery Rocks, Reds, Minorcas, Anconas and Leghorns. We breed and own International Egg Laying Contest Winners. Free Catalog. Get full prices before ordering elsewhere.

PINE BAY POULTRY FARM, Holland, Mich.

Our Baby Chicks

Can't be beat because they are hatched from Michigan's leading pedigreed flocks, culled by genuine poultry experts, for higher egg production and because we hatch only in tested mammoth machines. Rocks, Reds, White Leghorns, Anconas, Buff Orpingtons. Large instructive catalog tell all about them. Prices 6c up.

MICHIGAN HATCHERY and POULTRY FARM
Box 2, Holland, Michigan.

BABY CHICKS--REMARKABLE FOR SIZE and strength. Reasonable prices. Leghorns, Anconas, Rocks, Reds, Wyandottes, Orpingtons, Minorcas, Spanish, Brahmas.
TYRONE POULTRY FARM, Fenton, Michigan.

BABY CHICKS FROM BRED-TO-LAY FARM Flocks. Barred Rocks, Reds, English White Leghorns. Now booking orders for May delivery. 100% live delivery. Chicks 10c each and up.
GORET'S POULTRY FARM, Corunna, Michigan.

CHICKS—All Popular Varieties. Egg production and Standard Quality. State Fair Winners. No better chicks available at same price. Extremely low prices after May 29th.
Litchfield Hatchery, Litchfield, Michigan.

WHITTAKER'S R. I. RED CHICKS AND EGGS for hatching. Both Combs. Michigan's Greatest Color and Egg Strain. Reduced prices for the balance of the season.
INTERLAKES FARM, Box 4, Lawrence, Mich.

A Great Offer!

Michigan Business Farmer (Bi-Monthly)
Radio Digest (Weekly—Regular Price $5)

Both One Full Year For $3.75

Michigan Business Farmer,
Mt. Clemens, Michigan

Wyngarden Strain WHITE LEGHORN BABY CHICKS

EGG BRED for 18 YEARS

English White Leghorns
Brown Leghorns, Anconas
Order direct from this ad.
for prompt shipment.

SELECTED MATINGS
$ 8 per 100
$35 per 500

EXTRA SELECTED MATINGS
$10 per 100
$45 per 500

ODDS AND ENDS (broilers)
$6.50 per 100; $30 per 500

100% Live Delivery Guaranteed

For specifications of our different breeds, and prices of pullets, send for illustrated catalog.

Wyngarden HATCHERY & FARMS ZEELAND, MICH. Box B

B&R CHICKS
ARE THE GOOD KIND

We hatch chicks from flocks which have had our own personal attention. Every bird is carefully selected by us for best production. A pure-bred chick from us has the breeding to grow into a fine money making fowl. Send for full information. 100% live delivery guaranteed. All popular breeds. We hope you will give us a trial order for that will mean a permanent customer, we are sure. Write today.

Borst & Roek, Box 10, Zeeland, Mich.

Have You LIVE POULTRY For Sale?
An Ad in THE MICHIGAN
BUSINESS FARMER Will Sell It!

SUMMER POULTRY TROUBLES

As warm weather approaches, new troubles come to the poultryman, whether it be on the farm or in a regularly established poultry plant. Mites, lice and other insects will breed more rapidly in summer than in winter, and infested pullets are poor layers. During the winter and spring months, many poultry keepers, with poor equipment, have been troubled more or less with disease, the result of colds contracted through poor ventilation, drafty houses, and unclean and unsanitary conditions. These same poultrymen will have trouble with insects, for an unclean house, unclean nests and dirty runs will breed more insects that prey on chickens than can be killed with all the dip that can be used.

Poultry houses should be thoroughly cleaned at least twice a week. Oftener would be better. Every crevice and every roost should be sprayed with some insecticide, and if the birds are confined to small yards, the posts should be sprayed, because all of these places harbor insects which prey upon the chickens.

Nest boxes should be emptied and cleaned and new straw put in as often as once a week. No opportunity should be given mites to multiply, or lice to find refuge on the chickens. A pullet which spends most of its time picking itself has little opportunity to scratch in the soil for bugs and worms, or to feed from the mash hopper. An improperly fed chicken is a poor layer. There is no profit in poultry, no matter how well bred, unless they are given the proper care.

MARKETING SUMMER EGGS

Mid-SUMMER egg prices compare favorably with prices in mid-winter. There is only one period in each year when fresh eggs are almost a drug on the market, and that is during the months of March and April. By the first of May, poultry in the Southwest begins to decrease in production, and during June, July, August, and September, consumers are always willing to pay a premium for eggs that they know are strictly fresh and but a day or two old.

Eggs, in hot weather, must be marketed more often than in winter. During the cold months, it is possible to keep them over a period of a week or two and to market in larger quantities, but not so in July and August. Even infertile eggs will become tainted and strong if kept more than a few days.

The consumption of eggs in the summer months would be greatly increased if consumers could be assured of their freshness. One strong or tainted egg served at breakfast often decreases the consumption of eggs many dozen during the weeks that follow. Swearing off on eggs in summer time results from the serving of eggs not strictly fresh. It destroys the appetite for the product of the poultry farm. Therefore, the poultryman, or the farmer who markets his eggs as soon as collected, soon earns a reputation for quality goods and he will find that the demand at fancy prices will exceed his supply.

Eggs should be infertile, gathered daily and marketed at once. It is the only way to make money on poultry in summer time.

FUR FARMS

In some places, foxes may be pests, but Canada tells a different story. There the fox is a source of large profit; and he is not the only fur-bearing animal which if not actually domesticated, is at least kept within range so his fur may be available when wanted.

With most of the fur-bearing animals of the colder climates, we are little concerned. They will not thrive in our latitude. But with foxes it is different. Even the most valuable of these, the silver fox, can be acclimated, and in fact has been acclimated.

There are fur-farms scattered along the slopes of the Applachians; and pelts from those farms supply a constantly increasing, though yet small, proportion of the annual market. A good pair of silver foxes cost more than blooded cattle except the very highest prize winners, but the progeny of these bring prices unapproachable by undemonstrated calves.

For breeding purposes, pairs of silver foxes are reckoned in terms of thousands of dollars; for pelts multiples of hundreds make the standard of value; but good pelts bring several hundreds. The business is rather expensive to start but is not costly to maintain, and the yields, with proper management, are astoundingly satisfactory.

Fur farms have passed beyond the experimental stage. They are no longer a simple gamble. The experience of hundreds is to had for the asking; and with few exceptions this experience is encouraging. All fur farms have not been successful, but the history of other farm enterprises is no more satisfying. Luck plays its part in agriculture, despite all reasonable precautions; but intelligence counts for far more; and the intelligent fur farmer has been making good.—Southern Planter.

Oh, Money! Money!

(Continued from page 10.)

—" Even under his breath he did not finish his sentence; but, with a new, quite different expression on his face, he resumed his nervous pacing of the room, throwing now and then a quick glance at Miss Maggie's still averted face.

"It was absurd, of course, wasn't it?" Miss Maggie stirred and spoke lightly, with the obvious intention of putting matters back into usual conditions again. "But, come, tell me, just what did you do, and how? I'm so interested—indeed, I' am!"

"Eh? What?" Mr. Smith spoke as if he was thinking of something else entirely. "Oh—that." Mr. Smith sat down, but he did not go on speaking at once. His eyes frowningly regarded the stove.

"You said—you kept Pennock and Gaylord away," Miss Maggie hopefully reminded him.

"Er—yes. Oh, I—it was really very simple—I just monopolized Mellicent myself, when I couldn't let Donald have her. That's all. I saw very soon that she couldn't cope with her mother alone. And Gaylord—well, I've no use for that young gentleman."

"But you like—Donald?"

"Very much. I've been looking him up for some time. He's all right."

"I'm glad."

"Yes." Mr. Smith spoke abstractedly, without enthusiasm. Plainly Mr. Smith was still thinking of something else.

Miss Maggie asked other questions—Miss Magie was manifestly interested—and Mr. Smith answered them, but still without enthusiasm. Very soon he said good-night and went to his own room.

For some days after this, Mr. Smith did not appear at all like himself. He seemed abstracted and puzzled. Miss Maggie, who still felt self-conscious and embarrassed over her misconception of his attentions to Mellicent, was more talkative than usual in her nervous attempt to appear perfectly natural. The fact that she often found his eyes fixed thoughtfully upon her, and felt them following her as she moved about the room, did not tend to make her more at ease. At such times she talked faster than ever—usually, if possible, about some member of the Blaisdell family; Miss Maggie had learned that Mr. Smith was always interested in any bit of news about the Blaisdells.

It was on such an occasion that she told him about Miss Flora and the new house.

"I don't know, really, what I am going to do with her," she said. "I wonder if perhaps you could help me."

"Help you?—about Miss Flora?"

"Yes. Can you think of any way to make her contented?"

"Contented! Why, I thought—Don't tell me she isn't happy!" There was a curious note of almost despair in Mr. Smith's voice. "Hasn't she a new house, and everything nice to go with it?"

Miss Maggie laughed. Then she sighed.

"Oh, yes—and that's what's the trouble. They're too nice. She feels smothered and oppressed—as if she was visiting somewhere, and not at home. She's actually afraid of her maid. You see, Miss Flora has always lived simply. She isn't used to maids—and the maid knows it, which, if you ever employed maids, you would know is a terribly state of affairs.

"Oh, but she—she'll get used to that, in time."

"Perhaps," conceded Miss Maggie, "but I doubt it. Some women would, but not Miss Flora. She is too inherently simple in her tastes. 'Why it's as bad as always living in a hotel!' she wailed to me last night. 'You know on my trip I was so afraid always I'd do something that wasn't quite right, before those awful waiters in the dining-rooms, and I was anticipating so much getting home where I could act natural—and here I've got one in my own house!' "

Mr. Smith frowned, but he laughed, too. "Poor Miss Flora! But why doesn't she dismiss the lady?"

(Continued in July 5th Issue.)

Much Longer

Willie: pa?
Father: Yes, Willie,
Willie: Pa, how is it that my hair has grown longer than yours when yours has grown longer than mine?

Starting Into the Poultry Business

THE writer has a funny question before him. A party writes that he is going to the wall in the chicken business. He further states that he always had a desire to go into the chicken business and attempted it three years ago, but finds no profit in the business, altho, he knows of several people who have made lots of money in the business. He says among other things; he put in $1,000 for equipment and paid out another thousand or more for expenses. Out of 26,500 eggs he hatched 10,000 chicks and raised only a little over 1,000 of them. He says he calls this a failure and I believe I will call it the same. This is not the only one that has done practically the same thing. These same people would just as surely fail in the banking business or merchandising as in the chicken business. How many like this man, start at the top round and invariably come down to the bottom round and make a "howl that it's a failure."

Remember the chicken business requires but little capital. While the chicken business requires but little capital, it does require some good common sense. The writer had but little of either, but just enough of the latter to tide him over for a few years until he got a little experience and that experience is worth more than all the money you could put into the business in the start. There seems to be a general idea that just any "old sket" can buy an incubator and raise chickens. This is a mistaken idea, indeed. It takes skillful knowledge to make a success with fowls. You must not get the idea that you can make a fortune out of the business in one year, as that is one erroneous idea that is greatly magnified. The facts are just this, you have got to start in poultry in a small way. There is nothing that goes to the bad as quickly as a flock of fowls. You have got to grow in the business as your experience grows, every other business is that way and so is this.

A friend of mine, started in the business about the same time we did. He used large half-page space in all the leading journals to advertise his products, when he really had nothing to sell. He built magnificent buildings and bought equipment of every kind, in fact he was the talk of the entire community. He would come to our place and wonder how I got along with so few equipments. He had the nerve to throw fun right in my face. People told me that it was only a question of time, when I would be down and out. But, sorry to say, it was but a short time, until he was compelled to make an assignment to pay his advertising and building bills. While I have never made any great success, yet I have kept right on "sawing wood" and today I find our friend in the city working by the day. It's all right to advertise, but it must be done in a rather judicious way.

In the first place you must have good stuff. If you are in the fancy breeds, you have simply got to have the goods that stands out as the very best of it's kind. If you are in the market egg business, you must offer only the very choicest fresh eggs you can produce and don't offer any other. It's useless to breed a fine lot of good thorough-bred fowls and never let the public know what you have. Use good farm papers to advertise your products, be honest, give your customers a square deal in every instance. Pay your advertising bills when they become due, don't reach out further than your ability to master. Keep close to the shore, as the saying goes and handle the poultry business along conservative business lines and you are sure to make a success.

The farmer he is more fitted to make a success than any other class of people living to my knowledge. He grows his own feed, he has plenty of range, he knows how to begin in a small way and able to increase his flock as his business grows. There is only one excuse for any one making a failure in the poultry business and that is bad management. There will be plenty of people that will buy your fowls if you have the quality and they the convinced that you have. Just today, a party drove to our farm for several miles to buy some fowls, that he saw we had advertised, but we could not supply him because we were sold out of the particular kind he wanted, so he engaged eggs to be delivered next spring. You cannot keep pace with the demand if you have the quality and principle to deal honorable with your customers. Life is too short to sell your soul for a dollar anyway.—J. C.

Dairymen's League Has Milk Plant on Wheels

HARRY A. SIECK, chief engineer of the Dairymen's League Co-operative Association, Inc., of New York, has put the finishing touches to a brand new kind of a milk plant that is unique in the history of the milk industry. Mr. Sieck's latest contribution to scientific milk handling is an emergency milk receiving station on wheels that can be taken by rail at a moment's notice to any part of League territory.

The plant is contained in two standard refrigeration cars, each 40 feet long. One is a power house; the other the milk handling station. When the call for service comes the plant can be transported to the point where it is needed. The emergency plant can be delivered to the most distant place in League territory in a very short time.

In case a League plant is destroyed by fire, or a break down unexpectedly occurs that puts an operation out of commission, or the necessity arises for a sudden diversion of milk in some particular locality, the portable receiving station will be drawn by a railroad locomotive to the place where the emergency exists and the handling of milk will go on as if nothing happened.

The plant is in itself a complete receiving station with a capacity of 250 cans, or 10,000 quarts a day.

The power car has facilities for producing its own refrigeration by means of a 12 ton ammonia plant. It has a 10-Hp. high pressure boiler for heating water and generating steam required for washing and sterilizing cans. It contains a 3½ kilowatt, 110 volt, direct current, light and power system. The plant has an electric driven compressed air unit for the agitation of milk and for supplying water tanks with pressure.

The power car carries a reasonable amount of fuel oil for the operation of the various power units. Besides it has a full complement of supplies, tools, piping, etc., together with a conveyor system for adopting each operation in its particular location. It also contains space for storing about 75 cans.

One of the most vital features of any milk operation is its water supply and sewerage system. The Sieck plant is so designed that it can hook up with a water or sewerage system, or both, within 500 feet of its location. Thus, it a plant burns down or one suddenly goes out of commission, the portable receiving station can be transported to the site and connections made with the existing water or sewage system.

A farmer delivers his milk at the door in the middle of the second car. The milk is dumped into the weighing can and weighed. Then the farmer's cans are passed to the washer at the back end of the car where they are washed, sterilized and dried almost before he can drive his rig away from the door. The milk passes from the weighing can to the receiving vat which has a capacity of 200 gallons. It is then pumped through an internal tube cooler where it is cooled while en-route to a glass lined tank with a 600-gallon capacity. From the tank the milk is run off into 40-quart cans in which it is transported to the city markets.

Good Qualifications

"What profession is your boy Josh going to select?"

"I'm going to educate him to be a lawyer," replied Farmer Corntossel. "He's naturally argumentative an' bent on mixin' into other people's troubles an' he might just as well get paid fur his time."

CHICKS of QUALITY
Bred from Sires of 250 to 280 EGG STRAINS

BIG BARGAINS for June and July

Prices now within the reach of everybody. Get chicks in June and July and gather your harvest next winter. This is the most economical time to buy and the most favorable time to raise chicks. You can get them in the big outdoors at once which saves labor, cuts down your feed bill and makes the chicks grow twice as fast. Bright, balmy days bring splendid development. Our June chicks will begin to lay in October and July chicks in November. The BIG SAVING in price gives you an opportunity that you cannot afford to let pass by.

Chicks that are strong, peppy, from high production, egg bred stock are the chicks that pay. We have sacrificed on price but the same standard of supreme quality is always maintained regardless of price. Our breeders are producing heavily, our incubators working to full capacity and this enables us to give these high grade chicks at such extremely low prices.

EXTRA SPECIAL FOR JUNE AND JULY

Varieties	25	50	100	500	1000
Extra Selected Barron or Hollywood S. C. White Leghorns sired by 250 to 280 egg males	$2.75	$5.25	$10.00	$45.00	$ 90.00
Selected Barron White Leghorns	2.50	4.75	9.00	42.50	80.00
Extra Selected Sheppare Mottled Anconas	3.00	5.75	11.00	52.50	100.00
Selected Mottled Anconas	2.50	4.75	9.00	42.50	80.00
Selected Park's Bred-to-Lay Barred Rocks	3.75	7.00	13.00	62.50	120.00
Broiler, Mixed Chicks	Seven cents straight.				

PULLETS AND BREEDING STOCK FOR SALE

After June 1st we offer Selected White Leghorn Pullets, 8 to 10 weeks old at $1.10 each; Sheppard Ancona Pullets at $1.30 each and Barred Rock pullets at $1.50. Prices reduced for 100 or more.

After July 15th we have 700 choice Tom Barron and 400 Sheppard Ancona breeding hens for disposal at $1.25 each. Also, selected cocks of same breeds for $1.25 each. These must be sold to make room for our growing stock. Our space is limited.

ORDER AT ONCE from this ad. We can make immediate shipment. Cash with order or sent C. O. D. if desired. All chicks sent to your door by parcel post prepaid. 100% alive delivery guaranteed. Pullets and stock shipped by express, charges collect. Catalog free.

SILVER WARD HATCHERY, Box 30, Zeeland, Mich.

For persistant layers raise
Wolverine Baby Chicks
Bred for heavy egg production since 1910

Specially priced for June delivery. June 2-10-17 and later. Shipped by parcel post prepaid to your door. 100% safe delivery guaranteed.

S. C. English type White Leghorns

	50 chicks	100 chicks	500 chicks	1000 chicks
Selected Mating	$4.50	$9.00	$45.00	$90.00
Our Best Mating	$5.50	$11.00	$52.50	$105.00

25% with order and will ship C. O. D. for the balance.

Order direct from this advertisement to save time and get your chicks at once, or write for our free 32-page catalog.

WOLVERINE HATCHERY
H. WIERSMA, Prop. Zeeland, Mich., R. No. 2

REDUCED PRICES — CERTIFIED CHICKS
From World's Best Laying Strains
For JUNE, JULY AND AUGUST DELIVERY

Breed	25	50	100	500	1000
Tancred Wh. Leghorns	$2.50	$4.50	$9.00	$40.00	$ 80.00
Parks' Barred Rocks	3.00	6.00	11.00	52.50	102.50
R. C. & S. C. Reds	3.00	6.00	11.00	52.50	102.50

Order now for prompt delivery. Satisfaction guaranteed. All flocks inspected and certified by Mich. Agr. College. Strong healthy chicks, real money-makers. Don't delay. Many disappointed last year. Order from this ad now. Catalog free. Real broiler chicks at $7.00 per 100 after June 1st, no breed guaranteed.

LAKEVIEW POULTRY FARM, R.8, Box 6, Holland, Michigan

Great Northern Hatchery

LOW JUNE PRICES
POSTPAID. 100% LIVE DELIVERY

Strong, Sturdy, Northern-grown Chicks. Selected, pure-bred stock. Healthy Flocks on free range insure strength in every Chick.

Varieties	Prices on: 50	100	500	1000
Wh. & Brown Leghorns, Grade A	$6.00	$10.00	$47.00	$92.00
Barred Rocks (Aristocrat) Grade A,	7.00	12.00	57.50	112.00

Mixed Chicks, Light Breeds $8.00; Heavy Breeds, $10.00 per 100 straight. Double A grade Chicks $2.00 per 100 higher than above. Hatched under best conditions. Every chick carefully inspected. Reference: State Commercial Savings Bank. Order right from this ad with full remittance. There is no risk. GREAT NORTHERN HATCHERY, Box 50, Zeeland, Michigan.

BIG JUNE-JULY-AUGUST CHICK SALE, $8 per 100 and Up.

HEALTHY · VIGOROUS · PURE-BRED GENEVA CHICKS

Our BIG, FLUFFY, WELL HATCHED chicks will please you.

Varieties	Prices on 50	100	500
Wh. S. C. & R. C. Br. & Buff Leghorns	$5.50	$10.00	$47.00
Eng. Wh. Leghorns, Barred Rocks, Anconas,	6.50	12.00	57.00
Blk. Minorcas, S. C. R. I. Reds,	6.50	12.00	57.00
Wh. Wyandots & Rocks, Buff Orpingtons,	7.00	13.00	62.00
S. L. Wyandots, Bl. Andalusians, R. I. Whites,	9.50	18.00	....
Assorted, from purebred flocks,	$8.00	per 100	straight.

Postpaid. 100% LIVE ARRIVAL GUARANTEED. Bank references. Hatched from Purebred, Healthy, Free Range flocks. Order right from this ad. Save Time and get our BIG, STRONG, STURDY chicks when you want them. Catalog free. Member I. B. C. A. The Geneva Hatchery, Box 23, Geneva, Indiana.

SUNBEAM HATCHERY

SUNBEAM CHICKS Are Money Makers

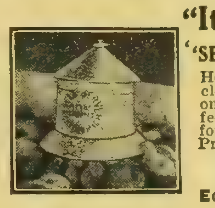
Chicks are produced under my personal supervision. Hatched from select, pure-bred, heavy laying hens, well kept to insure vigorous Chicks.

Varieties	Prices on 25	50	100	500
White, Brown & Buff Leghorns,	$2.75	$5.00	$10.00	$47.00
Barred & Wh. Rocks, Reds, Anconas,	3.25	6.00	12.00	57.50
Wh. & Sil. Wyandots, Blk. Minorcas,	3.75	7.00	14.00	67.50
White & Buff Orpingtons, Buff Rocks,	3.75	7.00	14.00	67.50

Mixed, all varieties, $9.00 per 100 straight. Postpaid. 100% live delivery guaranteed. Order from this ad. Bank reference. There is no risk. Free Catalog. Member I. B. C. A. H. B. TIPPIN, Box E, Findlay, Ohio.

RHODE ISLAND REDS—TOMPKINS STRAIN Stock Eggs for hatching and Baby Chicks. May chicks $20.00 per hundred. Hatching eggs $8.00 per hundred. June Chicks $16.00 per hundred. Eggs $7.00 per hundred. Hen hatched chicks on request.
WM. H. FROHM, R1, New Baltimore, Mich.

STURDY CHICKS—BRED-TO-LAY AND exhibition flocks, culled by experts. Reasonable prices. Catalog free. Single Comb White Leghorns, Rocks, Reds, White Wyandottes. Sunnybrook Poultry Farm, Hillsdale, Mich.



"It Fills the Bill"
"SELF-SERVE" Chick Feeder

Holds 12 quarts. Can't clog. Chicks can't roost on special cover nor touch feed with feet. Grown fowls cannot steal feed. Price $1.50 plus postage. Send for free booklet.

IRA P. HAYES,
Dept. B 12,
Eckford, Michigan

LOW PRICE MAY—JUNE
Our Barron strong English White Leghorn chicks. All well culled and on free range. Get our AA best stock and best winter layers. Low price, only $12.00 per 100; $57.00 per 500; $110.00 per 1000. Our A chicks are good stock, good layers, price $10.00 per 100; $47.00 per 500; $95.00 per 1000. 25% down, balance C. O. D.
ELGIN HATCHERY, Box 216-A, Zeeland, Mich.

QUALITY CHICKS New Prices
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QUALITY BABY CHICKS: SINGLE AND ROSE Comb Rhode Island Whites. Write for Catalogue.
FISCHERS POULTRY FARM, Holland, Mich.

S. C. BUFF LEGHORN BABY CHICKS. Write for June and July Prices.
J. W. WEBSTER, Bath, Michigan.

MARKET FLASHES

MARKET SUMMARY

All grains steady after recent advances. Beans firm. Potatoes mostly steady. Receipts of poultry have been large and demand not enough to handle receipts. Butter and eggs find ready market at firm prices. Dressed calves steady. Cattle and sheep from steady to lower.

(Note: The above summarized information was received AFTER the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press.—Editor.)

FOOTE'S MARKET LETTER

BY W. W. FOOTE

Brightening Farmer's Outlook

IT is cheering to observe the better outlook for farmers and to note the expectation, based upon reduced world wheat crops, of higher prices, the rise having started. Farmers as a class are getting out of debt, and they are borrowing less money, although rates of interest in farming districts generally are not unreasonably high. Probably the most unsatisfactory thing just now is the late season for corn planting, and unless conditions change for the better at once, higher prices may be expected. Kansas temperatures have been reported as the lowest in twenty years, and Iowa, the largest corn raising section in the world, has had the lowest temperature in twenty-four years. Michigan farmers are greatly encouraged over the good prices paid for their lambs, and in various districts there is a marked increase in the sheep breeding industry. Cutover lands in central Wisconsin are being devoted to raising flocks of high-bred sheep, and in the north central part of that state, about 75 miles south of Lake Superior, a farm of 480 acres is being developed by reclaiming the land from stumps and bribush by using 400 Montana ewes.

Smaller Wheat Crop

The June crop report sent out by the United States Department of Agriculture indicates a winter wheat crop of 509,000,000 bushels, or 63,000,000 bushels less than was harvested last year and 116,000,000 bushels below the last five year's average. The spring wheat crop is estimated at 184,000,000 bushels, or 29,000,000 bushels less than was raised in 1923, showing a reduction of 92,000,000 bushels from the last five year's average. The total wheat crop is placed at 693,000,000 bushels, or 93,000,000 bushels less than that of 1923, comparing with a five-year's average of 881,000,000 bushels; and it is the smallest crop, both in acreage and yield, since 1917. The oats crop is estimated at 1,232,000,000 bushels, or 68,000,000 bushels less than that of 1923. The rye crop is estimated at 62,500,000 bushels, or 1,000,000 below that of last year; while the barley crop is estimated at 160,000,000 bushels, or 38,000,000 bushels less than last year's.

The Advance in Wheat

Michigan wheat farmers were taken by surprise when prices for wheat shot up several cents a bushel on the bullish sentiment caused by the crop report for June. After selling around $1.04 for some time in the Chicago market, prices rose to $1.12¼, and this was a fraction higher than was paid a year ago, but looking back two years, it is seen that at that time as high as $1.25 was paid. However, it is encouraging to see that a change has come, and it is hoped that the crop will be marketed at prices yielding a fair profit for farmers. It is estimated that the countries, exclusive of the United States, which have reported their wheat acreage so far will raise 115,000,000 less than last year. New hard winter wheat has been purchased to export, but this business is small in volume, the season being nearly two weeks later than usual. New wheat is about ready to cut in Oklahoma, but harvesting is not expected to begin in Kansas before July. The railroads are going to do their part in moving the crop, and 20,000 cars are being stored for this purpose west of the Missouri River. The flour trade has started up at last, and millers' purchases have been the largest seen for months.

Higher Wheat Coming

"The wheat situation is different from anything that has ever existed," says George E. Marcy, president of the Armour Grain company, who has been a strong believer in better prices for wheat and rye for several weeks. "The government report indicates not to exceed 100,000,000 bu. available for export the coming year."

The Pacific coast is bound to sell more or less flour to the orient, and mills there will not only cause a shortage on the Pacific coast, but will also reach far into Montana, Colorado, Kansas, and Nebraska for wheat. Texas and southern Oklahoma wheat will move to the gulf and be sold for export, probably 30,000,000 to 40,000,000 bu. going. Then Virginia, Maryland, Pennsylvania, and other eastern states will move more or less wheat to the Atlantic seaboard for export.

"Then comes the durum wheat which Europe must have, besides the low grade flours which are always sold abroad. Just the ordinary situation, which even low prices in other countries will not affect, will clean the United States of all its surplus wheat promptly. On top of this, probably the American cooperative wheat pools were never so strong as they are today, and all of their influence will be exerted to hold their wheat for good prices, which can easily be obtained, provided those farm outfits work togather.

"The 42c duty protecting it means the farmer will be able to put wheat and rye prices very high.

"This whole bread food situation will be reflected no doubt the world over, as shortages in the wheat crop in pretty near all the northern hemisphere are now apparent. Wheat and rye are the cheapest foods obtainable. Apparently the world for the year ending July 1 will not have a carry-over out of the 3,300,000,000 bu. crop of over 250,000,000 bu. With the cut in the United States wheat crop of 100,000,000, the probability of a cut of over that amount in Canada, to say nothing of decreases in other parts of the world, it makes a wheat and rye situation such as we have not seen in many years. Apparently the United States wheat farmer will come into his own, provided he is fortunate enough to secure the present crop prospects."

Late Season For Corn

The season is unusually late for corn, cold and wet weather having delayed planting, while much grain has rotted in the ground, rendering replanting necessary. Late corn sales were made at nearly the same prices as a year ago. July delivery selling on the Chicago Board of Trade around 81 cents, but a little more than two years ago sales were made below 61 cents. If a fair crop is raised this year, plenty of hot forcing weather, as well as plenty of rain, will be necessary. July oats have sold recently around 47 cents, comparing with 41½ cents a year ago, while two years ago it sold down to 37 cents. Low rye prices have started up an export demand for rye, recent sales having been made around 75 cents, comparing with 70½ cents a year ago.

Chicago's Cattle Market

It is a great relief to the market when country shippers fail to over supply the wants of buyers at the opening of the week, and with a run of 18,432 head on Monday last week, prices shot up promptly from 15 to 25 cents, the general local and eastern shipping demand being animated. On the following day the advance largely disappeared on medium to good lots, but the few prime heavy steers sold a little higher, while a sale was made of a string of 56 Nebraska fed yearlings averaging 940 pounds at $11, or 50 cents below the price paid for the best heavies. Later excessive supplies put prices for most kinds lower, with the bulk of the recent sales of beef steers at $8.25 to $11. The best heavy steers sold at $10.50 to $11.50, with fairly good light weight steers selling as low as $9 and sales all the way down to $6.75 to $7.75 for the commoner lots, while inferior little steers went at $4.50 to $6.65. The best yearlings sold at $10 to $11. Butcher stock was mostly 50 cents lower, along with steers, sales of cows and heifers being made at $3.85 to $9.85, while canner and cutter cows sold at $2 to $3.75, bulls at $3.50 to $7.75 and calves at $5 to $11. After a period of slow and declining markets, the reduced offerings of stockers and feeders have resulted in an average advance of 25 cents, most sales being made at $6 to $8.50, inferior lots going as low as $4.75 and the better lots at $8.60 to $9.10. A year ago beef steers of common to prime grades sold at $6.75 to $11.20 and two years ago at $7.75 to $9.75. Combined receipts in twenty markets for the year to late date amount to 5,563,000 cattle, comparing with 5,572,000 a year ago.

Chicago's Hog Market

Excessive receipts have been the cause of the many declines in prices of late, and had supplies been normal, much higher markets would have been witnessed, for the local and shipping demands have averaged extremely well, with particularly large purchases of prime finished swine weighing from 130 to 300 pounds. Recent receipts averaged 237 pounds, being four pounds less than a year ago, but four pounds above the ten year average for corresponding weeks. Of late the bulk of the hog sales have taken place within a range of about 45 cents, with prime heavy butchers at the top, these selling 25 cents higher than the best light bacon weights. Underweights are much too numerous and sell at a large discount. There is a large domestic consumption of fresh and cured hog products, but the exports of lard and cured hog meats are still running far below a year ago. Recent hog sales were made at sharp declines in prices, with excessive receipts. Combined receipts in twenty markets for the year to late date amounted to 20,690,000 hogs, comparing with 20,058,000 a year ago and 15,440,000 two years ago. A year ago hogs were selling at $5.80 to $7.05. Late sales were made in Chicago at $6.15 to $7.40, showing a moderate decline for the week.

Marketing Spring Lambs

Native spring lambs, as well as springers from Idaho and other states, are being marketed steadily, and many have arrived in the Chicago market. Not many feeder lambs are offered, but a few days ago a sale was made of 587 head of Idaho 57-pounds feeders at $13.50 per 100 pounds. Late sales were made of spring lambs at $10.50 to $16.25 for natives and $16.50 to $17.10 for Idahoes. Breeding ewes are in demand at $6 to $11.50. Feeder lambs sell at $11 to $13.25. The Department of Agriculture reports the number of lambs in the areas that furnish the bulk of the market supplies during July and August is larger than last year, but the movement from Kentucky and Tennessee is nearly a month late.

WHEAT

Trading was quite active in the wheat market last week and prices advanced several times. There is a feeling that wheat is going to be scarce this year and the bulls are running the market at present. Millers are buying right along these days and selling their flour at increased prices, Foreigners bought considerable grain the forepart of last week and then retired from the market. However, they are expected to come back this week.

CORN

Corn prices are higher than they were two weeks ago while receipts show no increase. Believers in a hot summer this year are expecting prices to seek much higher levels before another crop is harvested. There are plenty of buyers in the market at present but it is hard to find anyone who wants to sell a very large quantity. The market is firm at this time.

OATS

Following the trend of other grains oats advanced in price during the two weeks ending Saturday. Demand is good with receipts of fair volume. Country offerings to arrive were light and the market is firm.

RYE

Rye is wanted at higher prices, the market advancing at Detroit 4 cents in the fortnight ending last Saturday; and 3 cents of the 4 cents advance was made during the latter half of the fortnight.

BEANS

Dealers who have sold themselves short of beans are not feeling very well these days while the bulls are having things pretty well their own way. Prices at Detroit advanced 20 cents during the two weeks ending June 14 and the market is firm. The increase in price fail to bring out many beans as there is a feeling that the price should be up around $5 per hundred pounds. Another article on beans appears in this issue on page 4. Do not fail to read it.

POTATOES

Trading in potatoes is rather light and prices somewhat lower. In spite of these facts the market is about steady at most points. Old potatoes at Detroit are considerably lower in price.

MARKET QUOTATIONS

Wheat

Detroit—Cash No. 2 red, $1.17; No. 3, $1.14; No. 2 white, $1.19; No. 2 mixed, $1.18.

Chicago—Cash No. 2 hard, $1.14.

Prices one year ago—Detroit, Cash No. 2 red and No. 2 white and No. 2 mixed, $1.23.

Corn

Detroit—Cash No. 3 yellow, 86c; No. 4, 82c.

Chicago—Cash No. 2 yellow, 83¼@83½c; No. 2 mixed, 82¾c.

Prices one year ago—Detroit, Cash No. 3 yellow, 89c; No. 4, 87c.

Oats

Detroit—Cash No. 2 white, 56c; No. 3, 54c.

Chicago—Cash No. 2 white, 51c; No. 3, 49@50¾c.

Prices one year ago—Detroit, Cash No 2 white, 48c; No. 3, 47c.

Rye

Detroit—Cash No. 2, 76c.

Chicago—Cash No. 2, 76½c.

Prices one year ago—Detroit, Cash No. 2, 72c.

Beans

Detroit—C. H. P., $4.55@4.60 per cwt.

Chicago—C. H. P., $4.90 per cwt.

Prices one year ago—Detroit, C. H. P., $7.00 per cwt.

Potatoes

Detroit—$1.93@2 per cwt.

Chicago—$2.25@2.50 per cwt.

Prices one year ago—Detroit, $1.08@1.30 per cwt.

Hay

Detroit—No. 1 timothy, $24.50@25; No. 2, $22@23; No. 1 clover,

$20@21; standard and light mixed, $23.50@24 per ton.

Chicago—No. 1 timothy, $24@26; No. 2, $21@23; No. 1 clover, $20@22; standard and light mixed, $23@25 per ton.

Prices one year ago—Detroit, No. 1 timothy, $17@18; No. 2, $15@16; No. 1 clover, $13@14; standard and light mixed, $16.50@17 per ton.

PRITCHARD'S WEATHER FORECAST
INTERPRETED BY THE STARS

Week of June 22

UNSETTLED and showery weather conditions are expected in Michigan during the opening days of this week during which time temperatures will be cool but not uncomfortably so for the season of the year.

During Monday or Tuesday the sky will clear and there will be a brief period of warm sunshiny days and clear nights. Before the end of the week temperatures will be up around the 80 degree mark.

During the latter part of the week there will be electrical and hail storms and tornadoes in local centers. The general characteristics will be heavy local rains and showers and some very high winds.

Immediately following this storm activity will come a cool spell during which time temperatures will fall to a point between 55 and 60 degrees.

Week of June 29

Fair to threatening weather will effect most parts of Michigan during first few days of this week. During Monday and Tuesday showers and high winds will visit many sections of the state.

Cool and generally fair weather will effect Michigan during the middle part of the week. About Thursday or Friday temperatures will be on a rapid increase in this State and will continue into next week.

We are not expecting any general severe storms in the state during the last part of this week but locally there may be some heavy showers.

Farm Prices Sluggish

Farm conditions over eastern half of Uniter States will be far from good although there is no question but that they could be much worse. The farmer during the summer months will not realize his hopes of a full crop or high prices.

FARM MECHANICS

TRACTOR VALVES IN AUTOMOBILE ENGINES

Will you please send me full instructions for installing Fordson tractor valves in a Ford automobile engine? Is it true that with Fordson valves you can get more power out of a Ford automobile engine?—D. P., Michigan.

WHILE we do not have test figures showing the effect of installing Fordson valves in the Ford model T engine it seems reasonably certain that larger valves will permit more power to be developed under certain conditions.

So far as pulling capacity, such as the ability to get out of a mud hole or climb a hill, is concerned there will be no difference. If a Ford engine will make a certain pull at all it will do so as well with the regular valves as with any other, the only difference being that larger valves may permit the pull to be made at a faster speed. In other words, valve capacity is not a limiting factor at low or medium speed, but becomes a limiting factor at high engine speed.

It should be understood also that the valve size is important only as it influences friction or resistance of the mixture going into the cylinders, and that friction in the carburetor, intake manifold, and ports, and also the exhaust manifold, pipe and muffler is just as important as in the valves themselves. Nevertheless we are inclined to think that a small increase of power at high speed and a great maximum speed could be obtained by the use of Fordson valves without much other change.

Fordson valves have the same diameter of stem as the Ford valves, but the stem, is longer and the head is larger in diameter. So far as the stem is concerned it is only a matter of cutting it to the right length and drilling a hole for the pin which holds the valve spring washer. The head of the Fordson valve is about 3/16 inch larger in diameter than the regular Ford valve. This means that the valve seat should be reamed out about that much larger. Also, the hole beneath the seat should be reamed or bored out about 3/16 inch larger in diameter so as to give the same width of seating contract as before. Usually there is plenty of iron to make this much enlargement without getting into trouble. If it is attempted to enlarge the side of the opening of the port by the same amount there may or may not be trouble, depending on whether the cores may have shifted in making the casting and left the iron too thin at some points. If the boring tool breaks through the water jacket it means that the hole must be welded, and in doing so the block is likely to be warped sufficiently to require regrinding of the cylinders and fitting of new pistons and rings. Consequently we would not advise reaming out the side openings of the ports unless you are going to put on a larger carburetor and intake manifold and in general spend considerable money on the job.

In boring out the top of the port the boring tool should have a pilot or stem fitting accurately in the valve stem guide so as to center the cut accurately, as it is important to have the width of contact between valve and seat uniform all the way round.

SAY HYDRATED LIME CLAIMS OVERSTATED

CLAIMS being made in the state at present that a few hundred pounds of hydrated lime are as good as a ton or more of limestone for agricultural purposes are not born out by experimental work at various Michigan Agricultural College test stations.

"Such statements are erroneous," says Dr. M. M. McCool, head of the college soils department, "and doubtless lead to a high per acre lime cost in certain sections of the state."

Results of experiments on the relative efficiency of hydrated lime, finely ground limestone, carried on by the college at the Cass County farm and other experimental plots, have thrown interesting light on this important question. The conclusions are supported, also, by work in other states.

"As a result of these and many other experiments," says Dr. McCool, "we have steadfastly maintained that under most conditions it is doubtless more practical for a farmer to use limestone, preferably the finer material, such as the finely pulverized stone or the medium finely ground limestone, than it is for him to use the hydrated lime.

"We have adopted the following figures for a working basis: 500 pounds of hydrated lime, 800 pounds of finely pulverized lime, or 1000 pounds of medium finely ground material should be considered to the same results the first year of application, provided they are well incorporated with the soil and there is a sufficient amount of rainfall."

RADIO PROGRAMS

Station KYW, Chicago. Central standard time 8:20. Wave length 536 meters.

June 27—"Boys, Girls and the Grain Exchange," by George S. Bridge, Chairman Grain and Hay Show Committee, Chicago Board of Trade. "Amóng Out Neighbors," a regular weekly feature furnished by the Orange Judd Illinois Farmer—Paul A. Potter, Assistant Editor, on "Illinois Granges and What They are Doing.'

July 1—'"What I Saw in Europe," by O. E. Bradfute, President, American Farm Bureau Federation. "The Farmers' Viewpoint Toward Co-operative Marketing," by G. E. Metzger, Director of Organization, Illinois Agricultural Association.

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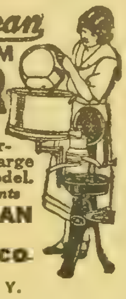

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An Independent
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VOL. XI, No. 23

SATURDAY, JULY 5, 1924

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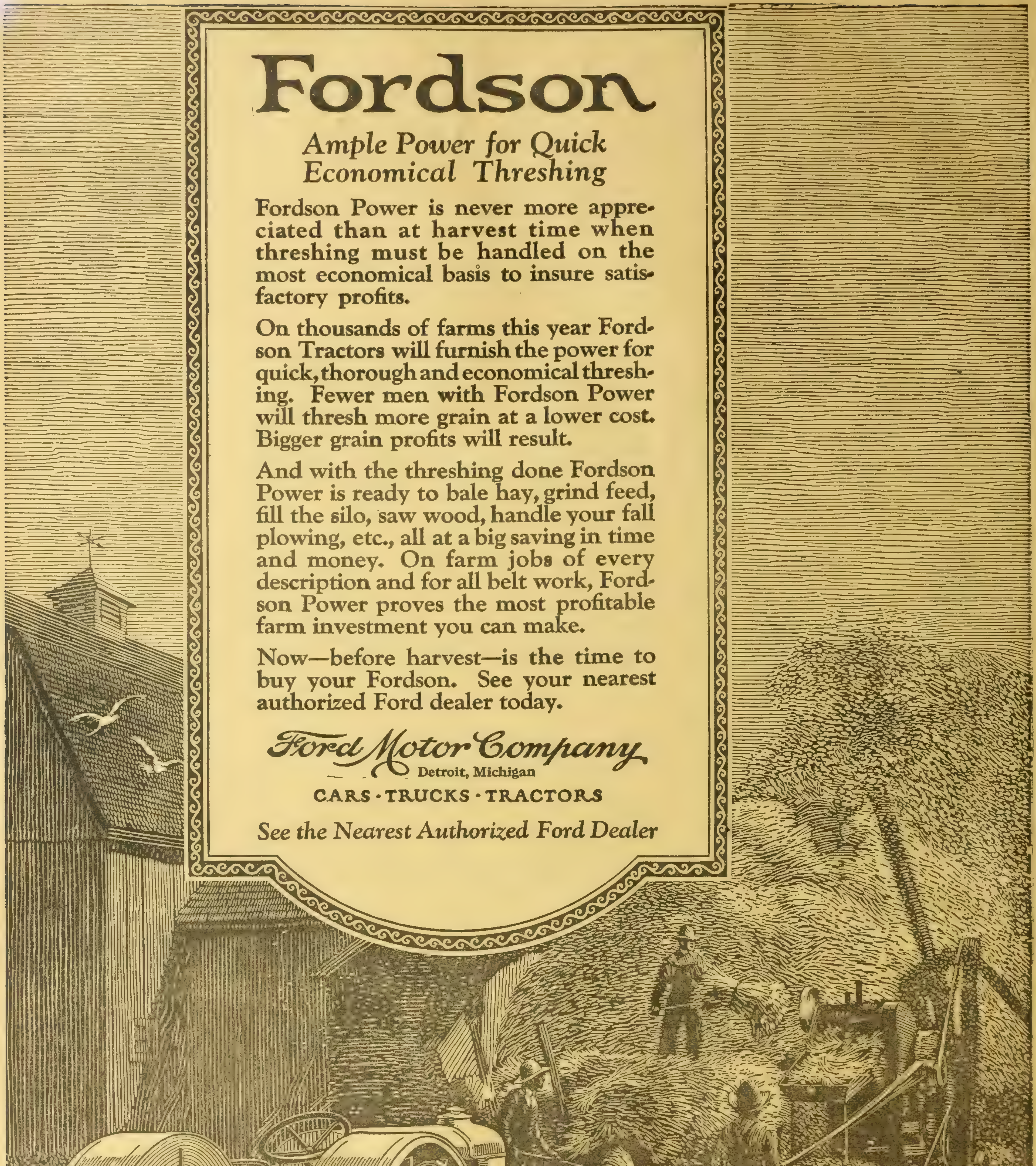

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July 5th
1924

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Being absolutely independent our columns are open for the discussion of any subject pertaining to the farming business.

"Hew to the line, let the chips fall where they may!"

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Could Our Tax Totals Be Held Down By Law?

Michigan Real Estate Association Advocates Fixing by Law Absolute Maximum Amount of Money to be Raised by Taxation During Given Period

By STANLEY M. POWELL

(Lansing Correspondent of The Business Farmer.)

IT has been our purpose in preparing this series of taxation articles not merely to call attention to taxation conditions already too well realized through very bitter experience, but to point out as accurately as possible the conditions as they exist and then to discuss some of the proposed remedies frankly and fairly and from an unprejudiced view-point.

We loathe and despise the cheap and shallow clap-trap of political demagogues, but we feel keenly that there is a tremendous need for more education and popular understanding on this great matter of an equitable distribution of the ever-increasing cost of governmental support.

The subject of taxation is altogether too broad, too deep, too comprehensive, too far-reaching in its effects and ramifications to be treated adequately in any one article—or even in any few articles. From the standpoint of citizen ship and self-government there is no more pressing problem confronting the American public today. This truth was recently uttered with remarkable emphasis by our President. His statement comes to us with unusual force and significance.

Taxes and Freedom

"Taxes," said Calvin Coolidge, "are fundamental. They mean more than money. A dollar belongs primarialy to the man who earns it. We work for the government to the extent of the taxes we pay and to that extent do we give up our freedom. The history of the struggle for freedom is largely a history of a struggle against taxation."

Again in a public speech, the President declared, "As the standard of civilization rises, there is necessity for a larger and larger outlay to maintain the cost of existence. As the activities of government increase, as it extends its field of operation, the initial tax which it required becomes manifolded many times when it is finally applied by the ultimate consumer. When there is added to this aggravated financial condition an increasing amount of regulation and police control, the burden of it all becomes very great."

More Than One Remedy

We have already discussed in this series of articles a few of the proposed remedies for the present distresing tax situation which exists in Michigan today. We have told how the proposed state income tax might largely or entirely replace the general property tax for state purposes. We have discussed the justice and feasibility of raising the necessary revenue for highway construction and maintenance through a state gasoline tax. We have pointed out that what funds are spent must first be raised and have consequently pled for economy. We have shown the fundamental importance of assessment and the absolute necessity of a fair deal between farms and city property. We have called attention to the growing menace of tax-exempt securities and have argued for the abolition of this gross class privilege. We have stressed the importance of having our forestry tax adapted to a long-time crop like timber.

These several remedies taken collectively constitute a fairly comprehensive program of taxation reform. But let no one think that these are the only planks which might be included in a tax revision platform. Many other proposals are being enthusiastically advocated by various groups and organizations. For instance, the Michigan Real Estate Association feels that the way to keep taxes down is to fix by law an absolute maximum amount of money which might be raised by taxation during any given period. They believe that this is the most effective way to approach the problem. According to their scheme it would be necessary for budget makers to fix their appropriations according to the funds available—to cut the garment according to the cloth at hand, as it were.

Limiting Taxes By Law

Now tax limitation is not wholly a new and radical innovation in taxation practice. At least one state, Ohio, has fixed a maximum tax rate. However, the results of rate regulation have not been wholly satisfactory. The reason for this condition is not difficult to find. When the maximum rate as established under such a system failed to bring in the desired amount of revenue it was too easy to increase assessed valuations and thus destroy the entire purpose of the tax limitation statute.

The Michigan Real Estate Association proposes to get around this difficulty by limiting not the rate which might be levied, but the amount which might be raised. While no state has as yet enacted a law following this so-called Michigan idea, it is not, however, without high official endorsement. For instance, John A Zangerle, county auditor of Cayahoga county, Ohio (the county in which Cleveland is located), in a scholarly and comprehensive address delivered before the National Tax Association declared:

"For a number of years I have favored tax rate limitation laws as tending towards public cooperation in securing more vigorous assessments. Not the firm, drastic, inflexible kind, but limitations subject to change by popular vote. Popular votes on tax increases serve to educate the public as to public needs and budgetary requirements and invite support to the assessor's activities.

"However, such laws tend to depress assessments when 'rates' are authorized. When, for example, with a limited tax rate of $1 per $100 the people vote an increase of 5 to 15 mills for 1 to 5 years on the existing duplicate, levied on 50 per cent values, where is the assessor insane enough to suddenly increase real estate assessments 100 per cent. It is obvious, when tax-spending authorities have their avenue of escape, by means of publicly authorized rates, assessment increases must suffer. Under rate limitation laws, amounts only should be authorized, not rates."

Here Is the Plan

To get a clearer understanding of the desires and plans of the Michigan Real Estate Association, let us consider some rather extended extracts from an article which appeared in a recent issue of the Michigan Property Owner, the official publication of the Association:

"To write into the constitution of the State of Michigan a limitation of the amount of taxes that may be levied against real property for state purposes, is a task to which the Michigan Real Estate Association, through its executive committee, has re-pledged its service. Tax limitation will be the major legislative objective of the association before the 1925 session of the legislature. Tax limitation will be the dominating note of the association's tax discussions until the opening of legislature.

"Study (and the study has not been superficial) gives convincing support to the conclusion that the present gross discrimination against real estate in proportioning tax burdens never will be appreciably lessened until real estate is shielded by the state constitution.

"It is against this discrimination toward real estate—a discrimination that levies 79½ per cent of the taxes upon a class of property representing only 35 per cent of the wealth; a discrimination that retards thrift, dwarfs the ambition to own and defend home and falls with blighting severity upon thousands unable to pay—it is against this discrimination that the Michigan Real Estate Association voices a determined protest and pledges anew the vigor of its services. When the discrimination is removed and the proportions of the burden are equitably distributed, the amount of the burden will not be especially troublesome.

"Study seems to indicate that real estate's proportion of the tax burden will not be very satisfactorily adjusted by the remedies most frequently suggested. Economy is advocated and economy should be exercised but lessened expenditures will advantage all classes of important tax payers in about the same degree and will not tend to equalize the load. New sources of revenue are suggested as a relief to real estate but we find little in the experience of other states to support this hope. Almost without exception new incomes have prompted new or greater expenditures. The new income has been consumed and property taxes have continued upward.

To Hobble Taxes

"The Michigan Real Estate Association believes that as a first step property taxes should be hobbled—tied down so that they can't leap. The association would accomplish this by limiting them—by writing it into the state constitution a provision that would say to members of the legislature, 'Gentlemen, you shall not command the real estate of Michigan to pay more than a certain amount in taxes.' The amount would be fixed in dollars. With such a provision

(Continued on Page 17)

About 200 Attend Feeders' Day at M. A. C.

LIVESTOCK Feeders' Day at the Michigan Agricultural College, Wednesday, June 18th, was attended by about two hundred farmers and feeders, which is a very good number for the busy season of the year. At about 10:30 those in attendance assembled at the hog plant where eight lots of hogs which had just been finished for market were discussed by Prof. G. A. Brown.

From there a visit was made to the work hose barns where nine teams of farm work horses are being fed experimentally on two different rations, one horse in each team receiving corn and alfalfa hay, and, the other horse corn, oats, and timothy hay. Prof. R. S. Hudson discussed the horse work.

The horse breeding barns and paddocks were next inspected. The international grand champion Belgian mare, Pervenche, the junior champion Belgian stallion, Range Line Phoenix, and other prize winning horses of the Belgian, Percheron and Clyesdale breeds were seen under home conditions.

The calf feeding pens were visited last, where three lots of Texas bred calves, had just finished a feeding trial of 190 days length.

At two o'clock the visitors assembled in the Agricultural Building, where Dean J. H. Skinner, of Purdue University, gave a very excellent summary of cattle feeding results at that institution. Their results of 20 years experimental work show some very definite things of value to cattle feeders.

He showed how the ration of corn and timothy, or prairie hay had been eliminated from the practical cattle feeder's farm. The addition of silage to the corn and legume hay ration cheapens the cost of grain. A protein concentrate, cottonseed meal, or linseed meal, also increased the profits.

Some dry roughage was found to be essential in the silage ration. A full feed of corn was found to be more profitable than either no corn feed or a half feed of corn with silage, cotton seed meal and clover hay.

He also gave a summary cost of production of beef covering sixty-two hundred cattle under various conditions in which the original cost of the cattle and the feed cost comprised 87.7 percent of the total cost; the other factors such as labor, interest, taxes, etc., each made up only a small part of the cost. This fact shows that while these smaller items of cost are important in themselves, the most fundamental essentials are to buy right, to feed most economically and to sell well.

Mr. Charles Stewart, Executive Secretary of the National Livestock Producers Associate, Chicago, set out some principles on which that organization stands.

The Producers believe in the terminal market as an agency for marketing livestock and are opposed to direct buying from the farm by the packers. They do not propose to eliminate the middleman, but do believe that some of his methods might well be changed.

They do not depend too strongly on legislation as a means of reform in marketing, except in so far, as to give the farmer and stockman an equal chance with other business. They believe in the National Packers and Stock Yards act. They are willing to give credit to the present marketing agencies for the good they accomplished, but believe their selfish interest will prevent their accomplishing some reforms that the cooperation agencies can bring about. They are depending upon the law of supply and demand as the strong stalilizing force, subject to influence of certain outside facts and believe that through extended organization producers can control the marketing of cattle to the advantage of both the producers and to trade.

Through charts he showed the fluctuations of receipts, top prices and average prices, both by months for 1923, and by years for the past twenty-five years. The September decline in average prices is due to increased receipts of western cattle, he said. It is impossible for feeders to market half-fat steers at that time of year at a profit.

By Culling the Farm Flock You Reduce Egg Costs

Study This Article and Then Cull Out the Boarder Hens in Your Flock

By E. C. FOREMAN

Professor of Poultry Husbandry, Michigan Agricultural College

SUCCESSFUL poultrymen appreciate more and more each year the real value of systematic culling and selective breeding, as a factor of major importance in the economic production of eggs.

Trapnest records show a wide range of production among individuals maintained under identical conditions of housing, feeding, and general management. Thirty per cent of the farm hens lay less than seven dozen eggs per year. Such hens are unprofitable and should be eliminated at this time, thereby saving a seven months' feed bill, because their productive season is limited entirely to the spring and summer months or the low egg price season.

A well bred hen with ability to lay from 180 to 200 eggs per year will produce one dozen eggs on five pounds of feed, at a cost of twelve cents per dozen. She not only excels as an economical producer, but the generous distribution of eggs during practically every month of the year enhances her earning capacity because many eggs are laid during the high price season.

Fortunately the accumulated knowledge resulting from a careful study of individual hens with high and low official trapnest records makes it possible to accurately weed out unprofitable stock and segregate the most productive individuals for foundation breeding stock.

Intelligent culling at this time, means as many eggs from fewer hens. Selective breeding results in more eggs from the same number of hens. Production costs are reduced in either case, but maximum efficiency calls for the application of both.

The two terms, culling and selection, should have ascribed to them somewhat different meanings, according to their general application. Culling of poultry is usually based upon physiological changes that the hen undergoes as a result of production. The weakness of the commonly advocated systems of culling is that the fowls must be retained from six to eight months, sometimes at a loss, before the tests become valuable. Selection for egg production requires a little more skill but also has greater possibilities. Selection involves a close study of type, conformation, temperament and head character.

A comparatively simple but practical method of culling hens at this time calls for the application of the combined capacity, pigment and moulting tests.

The capacity test, commonly used, reflects ovarian activity and has its greatest value in determining present production. Capacity is measured perpendicularly from the tip of the keel to the pubic bones, which are located on each side of the vent.

The contracted condition illustrated in Fig. 1., showing a two finger measurement, indicates the ovary is not functioning and the hen therefore is not in a laying condition. This does not however, indicate the hen has never laid nor that she will not return to production as interputed by the ardent "Hogan Test" enthusiast. For this reason it is necessary to use supplementary tests in order that the real value of such a hen can be properly determined.

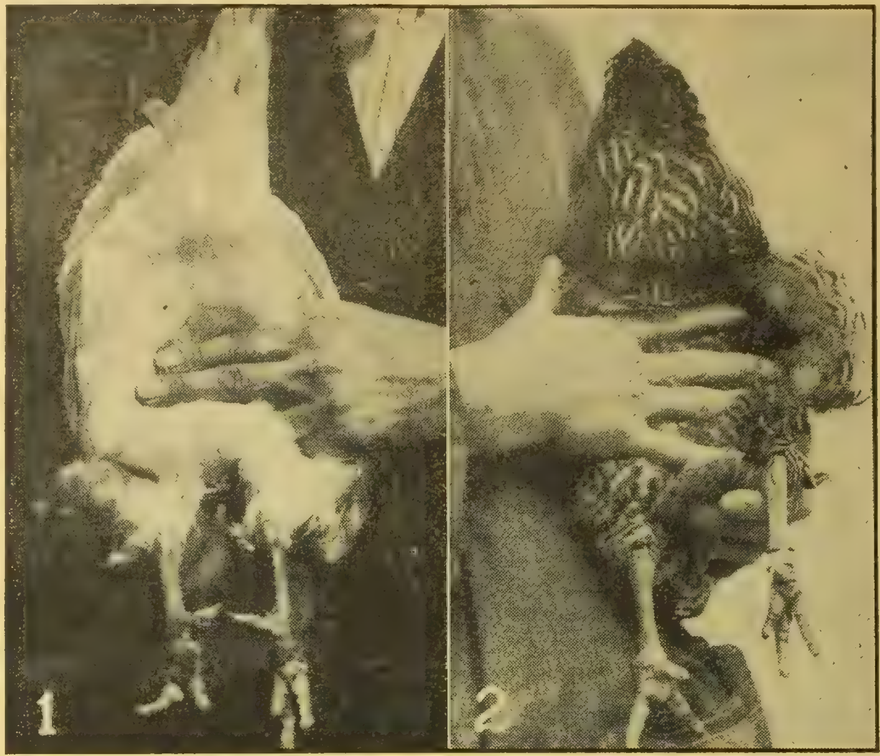


Fig. 1—This hen with two finger measurement is not in laying condition as the ovary is not functioning. Fig. 2—The laying hen with active ovary shows a spread of from four to six fingers.

The laying hen, illustrated in Fig. 2, shows a spread of from four to six fingers, depending somewhat in the breed, size of hen and conformation of the individual. This pelvic region, referred to as the egg sack, should feel full and pliable, and the skin should be fine, elastic and mellow, indicative of good condition and quality.

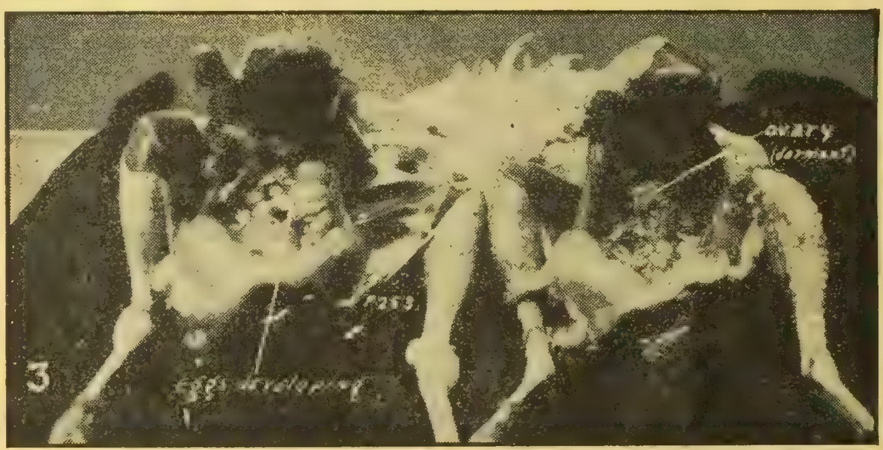


Fig. 3—This reveals the active and dormant ovary common to all hens. When a four finger capacity exists, yolks will be found in various stages of maturity, with five or more yolks well developed.

Figure 3 reveals the active and dormant ovary common to all hens showing measurements similar to those described above. When a four finger capacity exists, yolks will be found is various stages of maturity, with five or more yolks well developed. Such a hen is usually in heavy production. The hen with limited capacity measurement, may possess a normal healthy ovary but may not be laying due to a restricted and unbalanced diet; she may have recently been broody or raised a brood of chicks or she may be a typical cull. The ovary will, in any case, reveal the dormant condition as illustrated by a grape-like cluster of immature ovules, none of which are larger than peas.

A better estimate of the value of such a hen can be quickly determined by the application of the pigmentation test, which is the bleaching process, that occurs during different stages of production in all yellow skinned breeds including Plymouth Rocks, Rhode Island Reds, Wyandottes, Leghorns, Anconas and a few other less popular breeds.

The yellow pigment which is evident on the shanks, beak, ear lobes, eye ring and vent gradually disappears as the individual egg record increases. The pigment leaves in a difinite order disappearing from sections of most rapid blood circulation. This yellow pigment. known as xanthophyll is absorbed and used to color the yolks in the manufacture of the egg.

The yellow ring present or the inner margin of the vent usually disappears after the hen has laid three or four eggs. The creaminess of the ear lobes in the Mediterranean breeds such as the Leghorns and Anconas, will bleach to a white when two dozen eggs have been produced. The horny structures such as the beak and legs release the pigment more slowly, requiring in most cases three dozen eggs before the yellow finally leaves the upper portion of the beak, and from 80 to 100 eggs before the shanks have lost practically all of this yellow coloring matter.

This bleached condition remains only as long as the hens are in regular production and may return with broody periods or longer vacations.

The possibilities of error are very slight if the hens showing only a two or three finger capacity, with yellow legs are culled out. About twenty percent of all farm hens can be eliminated by this very simple culling practice.

The time and rate of moult is the third test that can be accurately applied in determining the profitableness of every hen in the flock. We no longer labor under the delusion of the early moulter filling the egg basket during the winter months. Big records are impossible when production is limited to a few months in the year. It usually requires from ten to twelve months of consistant laying to cover the distance of two hundred eggs or better.

Late moulting and quick moulting are policies of the heavy layer. This type of hen will, as a rule, return to production in from 4 to 6 weeks after the completion of her first year record. The moulting period is usually delayed until the late fall months or subsequent to October first. When the moult is delayed until the latter part of November or early December, special attention should be given such hens for a few days until their bodies are better protected by more complete feathering.

The early moulter usually indulges in a prolonged vacation and seldom returns to production until to long warm spring days return.

For this reason it is advisable to market such hens in July or August, because the few eggs produced the following spring will not pay the previous fall and winter board bill.

The three methods of culling briefly described will enable every poultryman to eliminate all non-productive or unprofitable stock at this time. The feed bill will be reduced one third, eggs more economically produced, and the proper hens marketed.

A careful practice of selective breeding will on the other hand,

(Continued on Page 21)

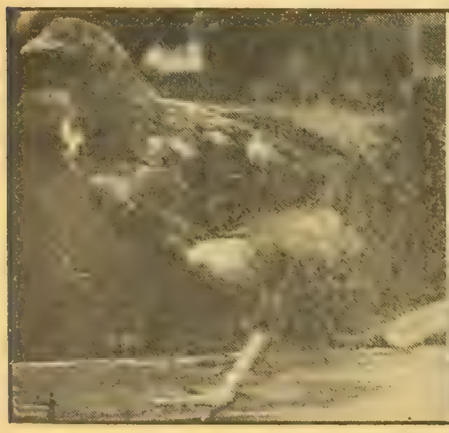


Fig. 4—Crow type head.

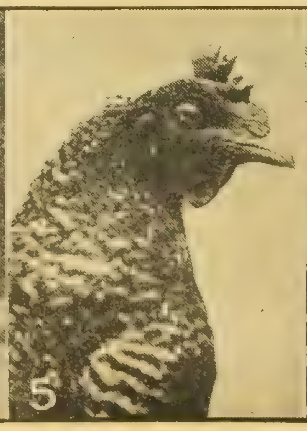


Fig. 5—Overly refined.

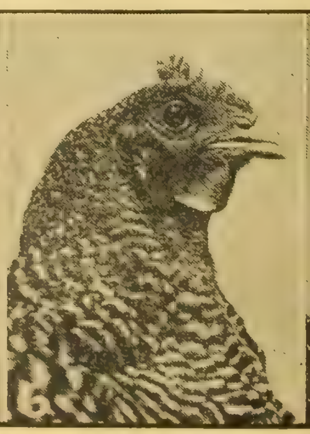


Fig. 6—Refined type.

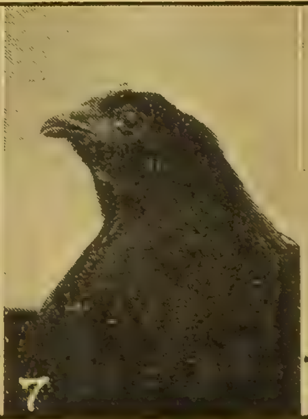


Fig. 7—Lacking character.

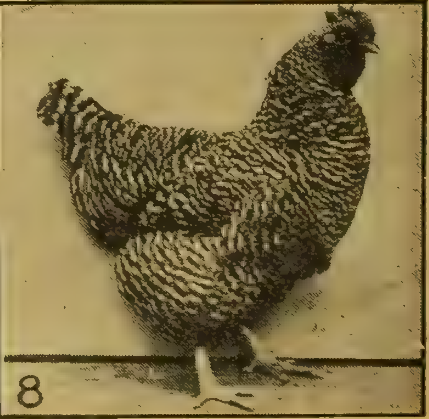


Fig. 8.—Masculine type.

PICTURES FROM FAR AND NEAR

JUST A FEW BEES.—The helmet and chin strap this man is wearing is composed of live honey bees. And he didn't get stung once.

ROADSIDE SHRINE.—This roadside shrine is near Varennes, Quebec, Canada. It is used mostly by the farmers.

NO LONGER CAMERA SHY.—The ex-Kaiser of Germany and his wife, Princess Wilhelmine, are here seen at their castle at Doorn.

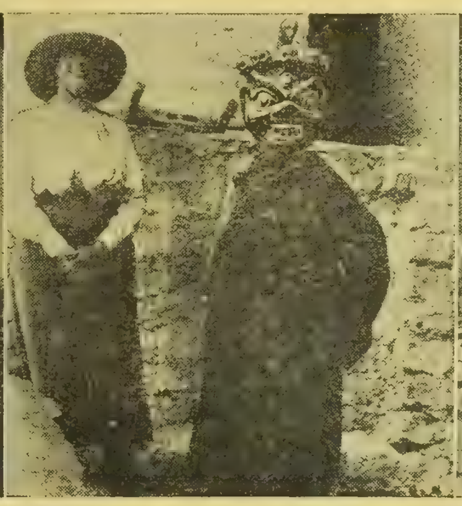
HIKER BREAKS ALL RECORDS.—S. S. McNeil, Scotch-Canadian, has completed a record breaking hike from Los Angeles to Washington, D. C. in 100 days.

EVERYBODY RIDE.—That seems to be the idea of this young miss as she takes her dog out for an airing.

WHERE REPUBLICANS MET.—This is a general view of the Republican National Convention, in session last month, at Public Hall, Cleveland, Ohio.

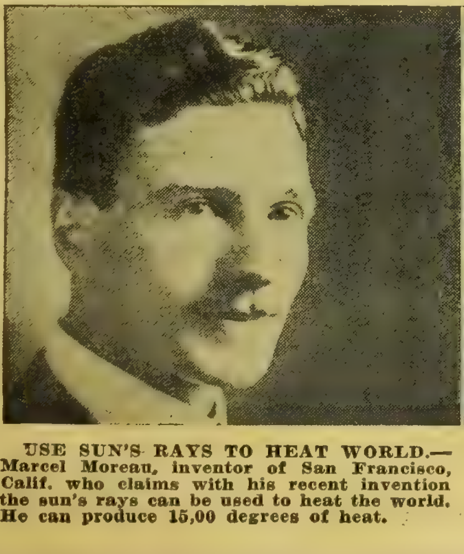
CHAMPION SWIMMER.—Miss Gertrude Ederle recently broke the world's record for the 150 meter free style swimming.

OFFICIAL U. S. SEAL—Here is the great official U. S. seal which is attached to all treaties, passports, Presidential proclamations and other government papers. It is kept in the State Department.

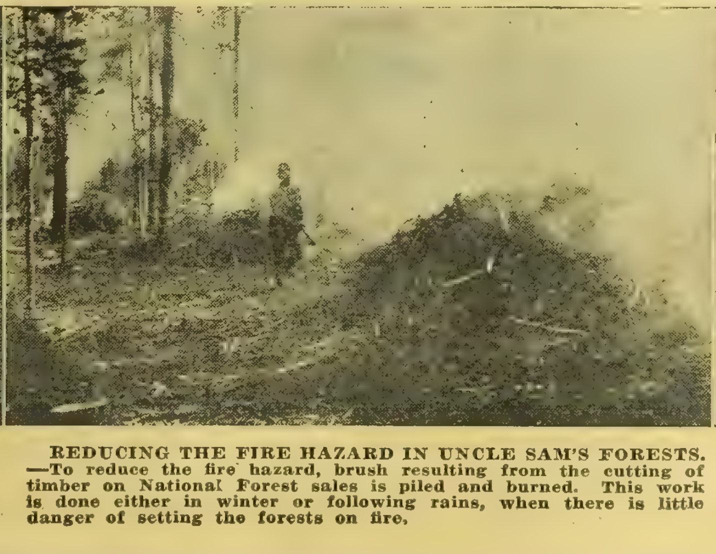


PRIEST OF THIBET.—This undoubtedly is the first picture to be taken of a priest of the Cult, Thibet, Asia. The lady snapped with him is a tourist.

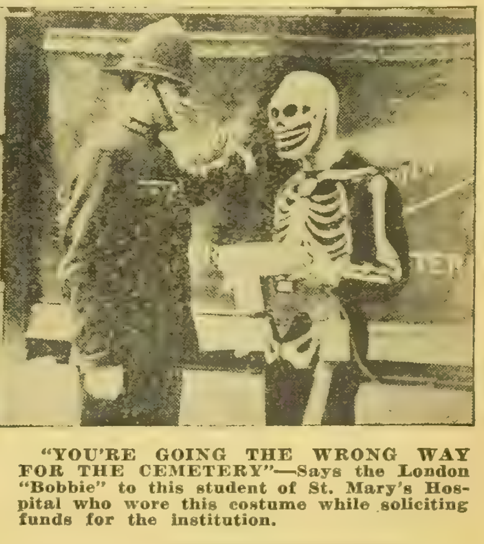
SOME EXPLOSION!—H. W. Smith had a new car which he left in front of his office building. When he entered the building there was an explosion in one of the offices and half of the wall fell on his auto.



USE SUN'S RAYS TO HEAT WORLD.—Marcel Moreau, inventor of San Francisco, Calif. who claims with his recent invention the sun's rays can be used to heat the world. He can produce 15,00 degrees of heat.



REDUCING THE FIRE HAZARD IN UNCLE SAM'S FORESTS.—To reduce the fire hazard, brush resulting from the cutting of timber on National Forest sales is piled and burned. This work is done either in winter or following rains, when there is little danger of setting the forests on fire.



"YOU'RE GOING THE WRONG WAY FOR THE CEMETERY"—Says the London "Bobbie" to this student of St. Mary's Hospital who wore this costume while soliciting funds for the institution.

(Copyright, Keystone View Co.)

FORTY YEARS OF FAKING

The Memoirs of a Grafter—By Himself

THE master grafter, Pete Dexter, has run his course. Just like the calf that hanged itself when it got too much rope, Pete has gone the limit and then is jerked up with a bang that ends his career. But he pulls a good one before he goes down with all on board.

Last issue Pete told how he got into a popular game of making money off of anxious inventors. He made good, thanks to the assistance of a doubtful lawyer, and got away without trouble. Then he noticed what a good thing there was in the baby chick business. He was just getting nicely started and was making money again at the close of the installment. But Pete was working on an excellent deal at the last when he ran up against the law. You will enjoy reading how he ended his famous game and and life of crime.

CHAPTER IX

WE got along fine till about the middle of the summer, when I began to get kicks from customers. One fellow wrote that his Black Langshans were full of red feathers, and another fellow said his Barred Rocks looked more like fighting cocks than anything else. Well, I was not surprised, for I knew what my hatchery was buying for setting, but I stalled along and tried to tell the customers a lot of stuff about heredity. But it was too much work. I had made an honest living that summer, and all the customers had got baby chicks that ordered them, and I couldn't see why I should worry further, so I decided that the easiest way out was to pack my trunk and move.

Anyway, I had my eye on a big deal. Two safe moves on my part and I was getting back my nerve, and the new scheme had the makings of some real cash.

Tracing Back Old Estates

It happened this way. One day while I was loafing in the office, I happened to be reading a New York paper which told of the trouble the Astor Estate was having over an old claim someone had against them in which the original Indian title was being put up as evidence that the Astors were not entitled to the big bunch of property they had.

At the time I commented to a fellow by the name of Rasmus Smith about the matter, and he began to tell me how he was distantly related to Captain John Smith, of Virginia, and how he had an old trunk that was filled with old deeds that had been handed down thru his family for hundreds of years. I asked him if he would bring the trunk of stuff down to the office, as I was curious, and he agreed. As long as the trunk was small, I drove up to his place and loaded the thing into my car and we came back to the office and the inspection began. Those papers were sure interesting. They were so old a fellow could hardly read them, and they were decorated with seals that made our diplomas look sick. Late that night, after I had looked them all over, I got an idea. It was a dandy:

It probably might be wise to state at this time that Mr. Rasmus Smith was the type that was easy to work on. When I got thru talking to him, he was of the opinion that he was the direct heir to most of Virginia, and when I asked him if he would help me in establishing the titles and would let me keep the records he had, say, he fell for the game immediately. So I organized right then and there the "John Smith Heirs' Association." I was the president and Smith was the secretary, and we agreed that if I could establish his title, which I was sure I could do, he was to get one-third interest. I was to get a third for my work, and we then decided to sell the other third to any of the multitude of Smiths that were scattered all over the United States. Rasmus Smith as secretary was to travel around later on and tell the people about the scheme, and of course I was prepared to fix up the facts regarding the case which would help us. I might add that Smith was so sold on the deal that he began to spend the money we were going to get long before I was ready to begin operations.

Having plenty of money, I did a little investigating. I first looked up the history of old John Smith and made a few trips to Virginia, gathering details and posting myself on the section Smith lived in back in 1600. I also checked up the land grants he received from the English king, and found that there was plenty of land to talk about.

About six months after the hatching of the plan we were ready to begin. I placed a few ads in various city papers and a few with big rural circulations, asking that any Smiths who had formerly lived in Virginia get in touch with me. Replies came in from all parts of the United States, and I'll bet that if Virginia had all those Smiths back again, New York would lose her rank as the leading state in population. Many of them gave me facts regarding their families which helped us a lot, and after we had the lists made up, I addressed them with a circular letter.

I told them of the important discovery—how I had chanced upon the trunkful of records in the possession of Rasmus Smith, and how I was sure, after careful investigations, that we could establish a title to thousands of acres of Virginia land and a large part of the city of Richmond. I made it good and faked a story of how old John Smith had been unlawfully deprived of this land, and that with the records I had on hand I was prepared to prove absolutely that the present heirs were entitled to the titles of this valuable property. Then I told them that it would take a lot of money to finance the court actions and investigations, and while we were sure we could eventually prove the titles, we would have to do a lot of work.

I told how I had arranged with the direct heir for the shares, and how any Smiths, who would come to our aid, could get in on a third of this vast estate by subscribing $25 to our association. Of course the people who established a direct line of heirship would have an interest if we won the case. But I thought it would be a good plan to help defend the titles and then there would be no chance for disputes. Believe me, the Smiths came thru.

As soon as we could arrange for the matter, we started in to form John Smith clubs in the cities. Maybe you belong to one. I fixed up a speech; had Rasmus Smith learn it, and gave him a few of the old weather-worn, worm-eaten records out of that trunk and sent him out to lecture to the clubs. I took care of the office work till he got back, and every time Smith went to a city more members joined the association. I also hunted up an attorney I had met in Washington and hired him. He was sent out to lecture, and while we worked quietly, we sure had the Smiths organized like they never were before. I studied genealogy pretty hard that year, and in the spring I was able to go out to the Smith clubs and report on the case.

Of course we were making progress, but it took a lot of money, and at the close of every meeting I passed the hat for funds to help the cause, and I sure took up generous collections.

Then I started to sell interests at $5 each to friends of the Smiths, and promised them that one million dollars of the estate, when we got it, would be divided among the holders of these "participants' interests," and it was easy to show that a $5 share would pay about a hundred for one.

Keeping the Smiths Enthused

When I got back to the home office, business was so good I had to hire more help, and I spent three months organizing the business. Once a month, I would send out a circular to our mailing list and give a report, and I went down to Virginia and actually filed a suit in a small town and gave the local paper a big check to write it up our way. Then I had these papers sent to every interested member of our association. Soon the city papers copied the story, and I had reprints of the favorable articles made and sent them out. This kept the Smiths enthused for over a year, and gave me a chance to get the money in the bank.

Early the next spring, I sent out a letter to our members and told them we had all the records clear but one, and we would have to go to England for that. This would take a lot of cash, as English courts require fees in a different system to ours. I attached a coupon which gave every person who contributed to this fund an additional share in a tenth part of the other one-third which was being set aside at this time for such an emergency. Estimates prepared by me showed the estate to be worth around seven hundred millions, and most of these coupons came back. Shares in this division sold for $5 each, and we sure had the money.

I was planning a trip to England with the idea of settling over there, and had the funds of the association converted into securities that I could handle easily when things began to happen. How I hate to think of that day! One morning a fellow arrived at my office. He was a peaceable sort and wanted to talk, so I began. He wanted an interest in the association, and I sure gave him the stuff. When I got thru, he coughed a bit and smiled funny and left. I wondered who he was and no one in town that I met later in the day seemed to know what train he came on or when he left. That afternoon when I went to get my mail I asked the postmaster if he had seen the fellow who called on me. Some how, I was feeling shaky. Say, I was shakier when the postman right quick says, "No, I didn't see him, what did he want?" I smelt smoke and that night I threw all my bonds, which I had safely kept, in my strong box and took the 2 a. m. train for Boston. I figured I could leave a few thousand in the bank and if I could get to Montreal I could get a steamer for England and would not have to worry further.

I got to Boston all right and got a train shortly afterwards for Montreal and thought I was safe. About 10 o'clock the next morning when the train stopped in a little town, two fellows got on the train. One of them was my caller of the day before and as pleasantly as before he asked me, "Whither bound?" Well, I got off at the next station, and back we went. He was a federal agent and I was nabbed again for using the mails to defraud.

I spent a lot of money for lawyers. I had enough bonds to go my own bail but nothing worked out right. After a few months, in which I tried once to get away again, a judge looked hard at me and quietly said, "Five years in the prison at Atlanta."

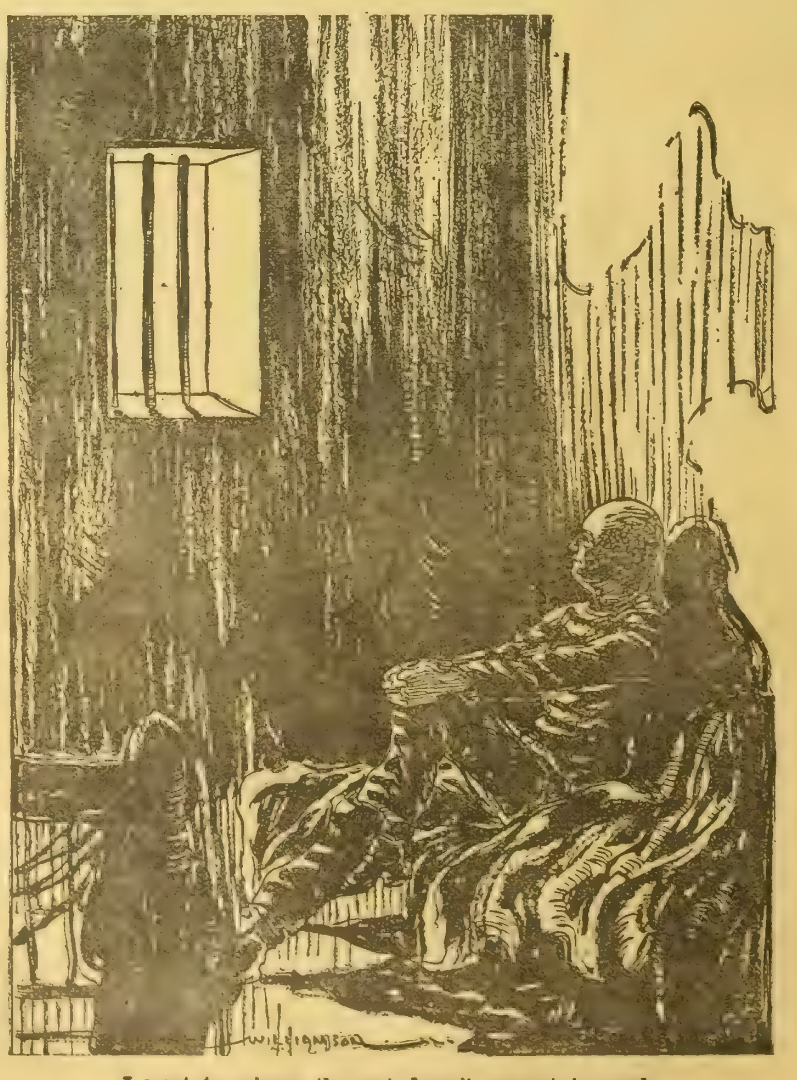
The rest doesn't amount to much. The Smith Heirs Association fizzled. The funniest part was that Rasmus Smith, whom I thought was the "dub," managed to escape with a big roll. He had been collecting on his own hook and when the evidence was shown in court Rasmus had cleaned up a nice $75,000 and beat it.

I went to prison. My career there was like others who happened to be stopping at the institution during my visit.

The only good luck I have had since I landed in prison was the appearance of my almost forgotten friend Blake. I was taken sick at the end of my second year in prison and everyone, including myself, thought I was going to die. One day I wrote a letter to Blake and asked him if he would take care of some affairs for my old aunt. He did it and best of all he started the ball rolling which got me freed. Blake was now a congressman. He had stepped out of the patent business and got into politics and when he heard from me he came to my rescue. Blake got me a job as a gardner and when I am well enough I manage to dig around the plants enough so I can at least get my board. I have to report to a federal judge once every six months and it's quite a different life than I have been used to living. I am old and worn out and I can't believe that I am the same fellow who used to live so easy.

Once I was rich, in fact I was rich many times, but I just can't get any ideas any more. No use anyhow as the judge keeps pretty close track of me. So I dig away and it's a pretty tough layout at the best. But I have learned that a fellow can fool 'em all part of the time but not all of 'em all the time and I hate to think that after my forty years of prosperity I am down and out. After all I guess I got what's coming to me.

(The End)



I went to prison; the rest doesn't amount to much.

Farmers Service Bureau

(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full name and address. Name not used if so requested.)

NO SCHOOL ON SATURDAY

My boy has passed all the lower grades and is now in the 8th grade and is doing good work by his report card. Can the teacher make him take 6th grade arithmetic? She made them (the eighth grade) take 7th grade history and now they are nearly thru the 8th grade history and she says she is going to review them in the 6th grade history yet. They have so many studies that they have to do their arithmetic nights at home. She is going to have school on Saturday for the 8th graders to do arithmetic. I do not want my boy to go to school on Saturday. We have spoken to the county commissioner several times about it. He said they had not ought to have those extra studies but he has not done anything yet. Would it be my place to interfer?—Mrs. S. A. R., Mullet Lake, Mich.

EIGHTH grade pupils should thoroughly review work of previous grades when such review is necessary. The teacher should be the judge of the necessity of the review. The school law provides that no public school shall be maintained on legal school holidays nor on Saturdays.—G. M. Otwell, Supt. of Rural Education, Dept. of Public Instruction.

CHILDREN LIABLE FOR MOTHER'S SUPPORT

A husband and wife in Michigan were divorced in 1887. Neither remarried. In 1915 the husband died and his property was divided by law among his children. The wife still survives and has a little property of her own. She is extremely childish and unreasonable and a guardian is being asked for her as she is unfit to do business or attend to her own needs. If she becomes dependent will any of her children be obliged to support her? Her state of mind is such, none of them can live with her, though the only daughter has done all a daughter could. All are in moderate circumstances and very hard working people. Some reside in the west.—F. H., Petersburg, Mich.

IF the mother becomes unable to support herself, her children would be liable for her support. An arrangement should be made under which each child would contribute equally to her support.—Asst. Legal Editor.

LAW IS SILENT AS TO WHO PAYS BILLS

In case of a strict quarantine as in scarlet fever where both parents are in the quarantine who is obliged to pay the bills for food, fuel and doctor? Is not the county obliged to pay these? Our health officer tells us the county will pay these bills and now our supervisor says that our county has a new rule and we will have to pay our own bills and living expenses.—M. C. K., Clinton County, Mich.

THE law is silent as to who shall pay for supplies furnished persons in quarantine. The law provides that no person shall be permitted to suffer for the necessities of life by reason of quarantine, but there is no direct provision as to who should pay for the same.—W. J. V. Deacon, M. D., Michigan Department of Health.

INDORSER MUST RECEIVE NOTICE

On February 1921 was a public auction sale by A. B bought some things and asked C to sign his note. Now C was sure the note was paid as he never received notice about it not being paid. The note was for one year. About two months ago C was told by A that the note was not paid. Now can C be made to pay the note as a signer although not being notified when the note was due?—S. D., Perrington, Mich.

THE indorser on a note is not liable for the payment of the amount of the note, unless he is given notice of the maker's failure to pay it when due, provided, however, notice is not waived.—Asst. Legal Editor.

IS PROPERTY EXEMPT FROM TAXATION

May I ask for a little information through your paper? I am a widow, in the sixties, my health is not good. I have a farm of about fifty acres with a mortgage. Because of the mortgage I have to work for my living. I have children and they have their own loads to carry and I cannot burden them and have no will to do so. I was told recently that the party speaking knew of several widows whose property was exempt from taxation and she thought I needed and deserved the exemption as much as they. If I was exempt from taxation it would be a great help to me. Will you please tell me if it is possible and how I should do to bring it about? Thanking you, I am Mrs. V. T. W., Charlotte, Mich.

THE statute provides for the exemption from payment of taxes, persons who, in the opinion of the supervisor of the board of review, are too poor to pay taxes. It also provides for exemption from payment of taxes on a homestead, up to the value of $1,000.00, of widows of soldiers or sailors who served in the Spanish American, or Civil Wars.—Asst. Legal Editor.

CAN VOTE ONLY IN DISTRICT WHERE RESIDES

I live in one school district, own property and pay taxes. I send my child to a school in adjoining district where I own property and pay tuition. Have I a vote in the district where my child attends school?—Mrs. M. C., Custer, Michigan.

THE parents or guardians of children of school age who own property and pay school taxes in more than one district may send their children to the school in any district in which they pay taxes. However, a school elector has a vote only in the district in which he has an actual residence. One of the qualifications for electors in all school elections is three months actual residence in the district immediately preceding the election.—G. N. Otwell, Dept. of Public Instruction.

PAYS MORTGAGE TAX

In 1919 I bought a city lot of A on contract. Last December the state tax commissioner notified A that there was a mortgage tax due on this contract of ½ of 1 per cent which A paid. A has notified me that he paid the tax for me and I am to pay him. The clause in the contract under which A claims it is my tax reads as follows: "The buyer also agrees to pay all taxes and assessments levied or assessed upon said land all special revenue or deficiency tax of any nature whatsoever after date hereof; and the buyer agrees to exhibit receipts therefore to seller whenever so requested; and the buyer hereby purchases said real estate upon these terms and agrees to pay said sums when due and perform all the conditions of this contract." The date of this contract is July 9, 1919. The contract is not all paid up yet but I am making payments when due. Who should pay this tax?—J. R. L., Tecumseh, Mich.

THE question as to who should pay the mortgage tax would be determined by the interpretation of the tax clause in the contract. If the vendee merely agrees to pay all taxes of whatever kind on the land, the vendor would have to pay the mortgage tax. If the vendor desired the vendee to pay the mortgage tax, it should have been so stipulated specifically in the contract.—Asst. Legal Editor.

DID NOT FIX WELL

Last fall we had a man here to fix our well and he finally gave it up and said the screen could not be set as there was a hole in the pipe. He drove the pipe down 8 inches and left it there. He really did harm to the well. In a few days another wellman came and inside of 5 hours he had water for us and the well has worked good ever since. We have four witnesses that the well was fixed in this length of time. We have paid the first man $10.25 and still owe him $17.75. Can he collect this balance? The second well man claims that the first well man cannot collect the wages at all as he failed to fix the well. Please give us your advice on this matter. —Reader, Grand Traverse County, Mich.

UNDER these circumstances, I am of the opinion you would not be required to pay the first man the balance which he claims, in view of the fact that you say he did the work improperly and did harm to the well.—Asst. Legal Editor.

WOULD WIFE HAVE TO SIGN DEED?

My brother and myself have a joint deed of forty acres of land. Now he is married and I am to buy his half. Does his wife have to sign off too? If he should die would his half go to his wife? Can I will my half to some of my relatives?—R. C. C., Arcadia, Mich.

A WIFE has no right of dower in her husband's interest in an estate held by joint tenancy, he therefore could convey his interest without the necessity of her signing the deed of conveyance. If your brother and yourself hold a deed to the land which conveys it to you as joint tenants, upon his death you would be entitled to all the property as survivor. Neither party could devise his interest by will to his relatives or anyone else. —Asst. Legal Editor.

OUR READERS' NEW BUILDINGS

Have you built any up-to-date farm buildings lately? If you have send us a picture of the new building and we will print it in this new department. It will show the M. B. F. readers what their distant neighbors are doing to change the scenery. And, incidently, you may be able to help some farmer decide the type of house, or barn, or other buildings he desires to put up. He may like the appearance of your building and will want the plan of it. Kodak pictures are all right if the details show up well. Do not send the negative, just a good print.

ON THE FARM OF MRS. MATTIE ELLISON, SPARTA, MICHIGAN

This looks like a new barn but it isn't and it is. It was started in 1860 and finished in 1923. "The timbers for a 30 ft. by 40 ft. barn were hewn but the builder's work was interrupted by the Civil War," writes Mr. Fred Ellison of Sparta, Michigan. "He did not return after the war so others finished the work. In 1911 the barn was moved about 15 rods and placed on a concrete basement. In 1917 an addition of 20 ft. was made on one end and the old structure was resided. Then last year, or 1923, the old roof was taken off and a new gambrel roof built. The present dimensions are 30 ft. by 60 ft. with 16 ft. lower posts and 16 ft. purline posts. The basement has a concrete floor and stalls, box stalls and stanchions installed. The cost of the work done since 1911 has been about $1,500." The barn is located on the farm of Mrs. Mattie Ellison, of Sparta, Michigan.

METHOD OF VOTING WAS LEGAL

On election day at the township meeting a motion was made and supported, for a township nurse. It was decided by the chairman of the board to have the people file past the election board and they count those for or opposed. It carried by two votes. I understand there were several people that would not wote when they saw how it was to be done. Was it a lawful method of voting on such a question?—W. H. P., Northport, Mich.

UNDOUBTEDLY the question was one on which a viva voce vote could be taken. Section 2157 of the Compiled Laws of 1915 authorizes the moderator to have the voters polled or divided when any seven or more of them object to his determination of a question decided by a viva voce vote. In the absence of proper objections made by the electors at the time of voting, we believe the method of taking the vote would be at most an irregularity concerning which no question could be legally raised after the meeting adjourned. The electors might have determined to take the vote in some other manner had they so desired by making a motion to that effect.—Clare Retan, Deputy Attorney General.

MORTGAGE GOOD FOR 15 YEARS

Kindly give me information about a personal note given with a mortgage. I bought a team of horses, wagon, 2 sets of harness, plow, wagon-box and few other articles amounting to $100.00 plus interest at 7 per cent. I gave as security on mortgage for above articles a cow. Nothing paid down. I gave personal note for $100.00 drawn for 11 months. I was never notified by holder of the note and mortgage being due or past due. Is the personal note valid after 11 months expires and how long is it good for? How long is a mortgage good for, three years?—H. C., Rose City, Mich.

YOU, as maker of the note would be liable on it for a period of six years from date of maturity. A mortgage is good for 15 years.—Asst. Legal Editor.

TO APPEAR IN COURT

I am a subscriber to the M. B. F. and have been for several years and will give it a boost wherever I can. Would like to have you answer the following questions. Would you send me a copy of a legal summons to appear in Circuit Court where a person sued anybody for damages? How soon would papers have to be served before date of court? Would date of hearing have to be set when to appear? How must be filled out, signed, dated and sealed? Who is to serve the papers and must he sign the summons? Where they are served on man and wife must they be dated the same to be legal? Please let me hear from you at once.—F. J. L., Ceresco, Mich.

THE party served is required to appear within fifteen days after service of the summons. The summons must be signed by the clerk and given to the sheriff who serves it and makes his return on the back of it as shown on the blank summons enclosed. If man and wife are sued jointly the summons should be dated the same for each one.—Asst. Legal Editor.

CAN TAKE POSTS

I bought a place three years ago and when I took the place there was a pile of posts on it. They are here yet. Can I hold the posts? I have sold out and am moving off. I do not want something that is not mine but the man I bought from took advantage of me when I bought from him.—J. H. M., Durand, Mich.

I think you would be justified in taking the posts along with yon.—Asst. Legal Editor.

How Concrete Helps the Farmer

Farmers who have the advantages of permanent, expense-proof buildings save time and money that would otherwise go to keep ramshackle buildings fit for use. Concrete dairy barns mean healthier cows that give more milk; and that means bigger milk checks.

Concrete silos make possible economical, dependable feed the year 'round—which also means more milk.

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Concrete corn cribs keep out rats and mice. You can't sell these pests so why fatten them?

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Concrete protects the home, and other farm buildings against fire.

Wouldn't you like to know more about Concrete—how to mix and use it, and how to estimate quantities of materials? We will gladly send you this information without charge, if you will write and let us know what you are planning to build. Why not write today?

Our booklet F-14 tells all about the uses of concrete on the dairy farm. Send for your copy.

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Farmers' Service Bureau
The Business Farmer, Mt. Clemens, Mich.

I would like to receive any information you can give in connection with the following inquiry:

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(Use Separate Sheet of Paper if Coupon is too small.)

What the Neighbors Say

TAX RIDDEN

DEAR EDITOR:— Why are we farmers forced to pay county agents and nurses? White collared farmers who ride around in autos and tell us what to raise; who never farmed any and learned farming through books and college. If the supervisors had any feeling for the farmers in their districts, they would say, "Let farmers vote on it and help us lower our taxes."

It is the women and children on the farms who are denied things that are needed, because it takes everything to pay taxes. Yet farmers wives are in need of what is paid to county agents and county nurses.

We use to live without them and could dress respectable and fix up our homes. Now it is pinch, pinch, pinch and give up every penny to pay taxes.—Farmerette, Kalamazoo County, Michigan.

STICK TO THE FARM

TO the Editor:—I read the article by Ralph Jordan in your March 1st issue. He says it is not the bright lights of the city that is calling the farmers from their farms, but better conditions. Is it better conditions to work in a stuffy factory, cooped up like rats, than to work out in God's free air? He says it is only the strong, determined farmers that are leaving the farms for better conditions. That does not apply to this territory. He says others cannot get away because they can't leave their old parents that are worn out by years of slavery and misery. Who is the slave? The man that works for himself and can go to work and stop when he gets ready, or the man that must be on the job when the whistle blows, and must do just as the boss says, and has no say of his own. He says the farmers are waiting for some poor boob to come along and buy their farms, so that they can go to town. If the poor boob is the right sort of a man, he will be a successful farmer 10 years from now, and the man that goes to town will be the poor boob, working under a boss and will be just where he started.

Let me give you the history of two men here about 20 years ago. One of them lived in town, was a mechanic and always got the largest wages, he owned a good house and lot. The other man had worked and got about $300. If he had gone to town he could not have got over half as much wages as the other man, but instead he went in debt for a farm, and he and his wife have worked hard to get along. Today they own a good farm, good buildings, good stock, and good machinery, and if he was to sell all he has he could clear up about $10,000. The other man has eaten up his house and lot, and is living in a rented house. If he was to sell their home and furniture and clothing, they could probably get $300, but he has a little advantage over the other man, as one has a big tax to pay, and the other has nothing to pay taxes on. What is the matter with a good many of our men? They want five and six dollars pay for one dollar's work, and they can't work for themselves, but must have a boss over them.—Harold Johnson, Barry County, Mich.

WHY HAVE COUNTY AGENTS?

DEAR Editor:—Mr. H. E. Coblentz asked this question in THE BUSINESS FARMER of April 12th. I would ask Mr. Coblentz why is an efficiency expert necessary to big business? He would probably answer, that it is vital that work should be done with the least possible expense, and the efficiency expert can point out the remedy. So with the county agent. He is the efficiency expert of the farm.

The county agent is better educated along agricultural lines than the majority of farmers. The national and state agricultural departments keep in touch with him. He is up in the latest along farm lines. You will say, of course, that the national and state agricultural departments will send their literature to the individual when asked. But does the individual stop to read and study this literature?

Business progresses and changes their methods. Sometimes the new method proves unprofitable, so they change again. So with farming. Potatoes did not prove profitable during these last few years, but dairying doubtless will. Dairying is more stable than potato raising. It is not only the county agent that advocates this, but all the big men on farming.

Probably the farm agent does wear a white collar, and doesn't assist you during potato digging, but this is worth listening to. Mr. Coblenz says: "We are paying too many white-collar fellows, running around at our expense." No clothes don't make the man, nor do overalls make the man.—Dorothy Dill, Traverse City, Michigan.

Uncle Rube Spinach Says:

"THEY'RE NOMINATIN' 'EM NOW"

THIS is the season of the year when they nominate pres'dents, leastways fellers 'at want to be pres'dents, an' up to now (June 21) they've got jest two—one for pres'dent an' a vice. Now a vice pres'dent cuts 'bout as much figger as a rat in a mouse trap, but we have to have one to make the ticket look good, so the 'Publicans (an' sinners) have nominated Coolidge and Dawes, Hell & Marias Dawes. Well there's more conventions commin' off an' more men'll be nominated. There'll be more candidates 'an any one, men or women, can vote for—fact is there'll be more'n any one would want to vote for.

No matter who they nominate, none of 'em'll be any to good for the job 'cause its quite an important positon, as a pres'dent has full charge of the White House—when his wife ain't home, an' the Mayflower, which means the pres'dential yacht, an' has a chance to talk to congress once or twice a year an' draws a purty fair cash salary, an' has egg rolling on the lawns, an' some times keeps a goat—if he don't have one, he makes his secretary take his place, or somebody else takes it—there always has to be a goat, you know.

However, now that conventions are in season, I hope folks won't forget Bill Bryan, an' me. Yes, I've always kinda hankered for the job, an' then there's LaFollette from Wisconsin. No I wouldn't want him runnin' mate—rather see him go alone—but McAdoo kinda wants a chance, or Al Smith, he's a democrat with a wet tongue—he would like to get a few votes. Oh I guess there'll be plenty of cand'dates an' so I ain't argin' my case none. Fact is I'll withdraw if they'll give me the salary or Muscle Shoals, or somethin'.

I guess its quite an honor to be president, cause a pres-dent can ride all over the country in a private car, an' make speeches, when he can find people to listen to him, an' his wife is head lady of the land, an' can boss him around, an' dress in beads an' jewels, an wear bobbed hair, or otherwise, jest as she wishes, an' make him take a bath twice a month or more, as occasions require. An' he can have oyster pie or not, jest as he sees fit—an' once in a while he sends a message to the people that all is goin' well, an' he's boss in gen'ral of most everything he knows or don't know, an' so forth.

So that's why I've thrown my hat into the discard an trust that folks will rest easy as I don't hardly expect to get anywhere near the nominatin'. I'll stay with Uncle Bill Bryan an' some of the down-an'-outers, an' wishin' you all a good fat job, I am, Cordially yours, UNCLE RUBE.

RADIO DEPARTMENT

By J. Herbert Ferris, R. E.

STATIC AND SUMMER RECEIVING

THERE are many nights that the atmospheric electricity is so strong that it spoils all reception of broadcasts. This is due to the fact that every discharge of electricity sends out electrical waves and your receiving set picks them up and you hear them as crackling or roaring noises in your receivers.

With a little patience you can soon take advantage of these troublesome noises and forecast the coming weather sometimes two days in advance. Certain sounds always preceed coming rain or thunder storms. It is a pleasant way of spending a few minutes each day by listening to these discharges and then watching the coming weather, and after a few times you will be able to tell the kind of weather to expect on the following day.

A short aerial, an inside aerial (in your attic) or a loop will do away with a great deal of this atmospheric or static trouble. It is surprising what a little difference there is in volume of received signals by using an inside aerial, and a great difference in the amount of static disturbances that spoil your reception.

It might be well to mention here that the large radio manufacturers will pay a big price, yes up to a half million dollars, to the man who invents a real static eliminator that will sell at a reasonable price. All the big men are working on this problem and as yet no satisfactory method has been discovered.

WEEKLY BARN DANCE

YOU radio fans who like the old fashion barn dances, the dances where we used to have the time of our lives and danced till darn near daylight, can live those old days over again and have as good a time as ever. Have your neighbors come over Saturday night and then take your receiving set out to the barn and tune in on the Sears-Roebuck Agricultural Foundation Broadcasting Station WLS any time after 9:10 P. M. Eastern standard time. You'll hear the old tunes come through the air, the same old tunes we used to "step" to. And you can dance till 1:00 o'clock in the morning.

RADIO PROGRAMS

Station KYW, Chicago. Central standard time 8:20. Wave length 536 meters.

July 8—"Hot Weather Specialties," by Grace Viall Gray, Home Economics Specialist, National Live Stock and Meat Board. "Enriching Country Life Through Recreation," by Eugene T. Lies, Playground and Recreation Association of America.

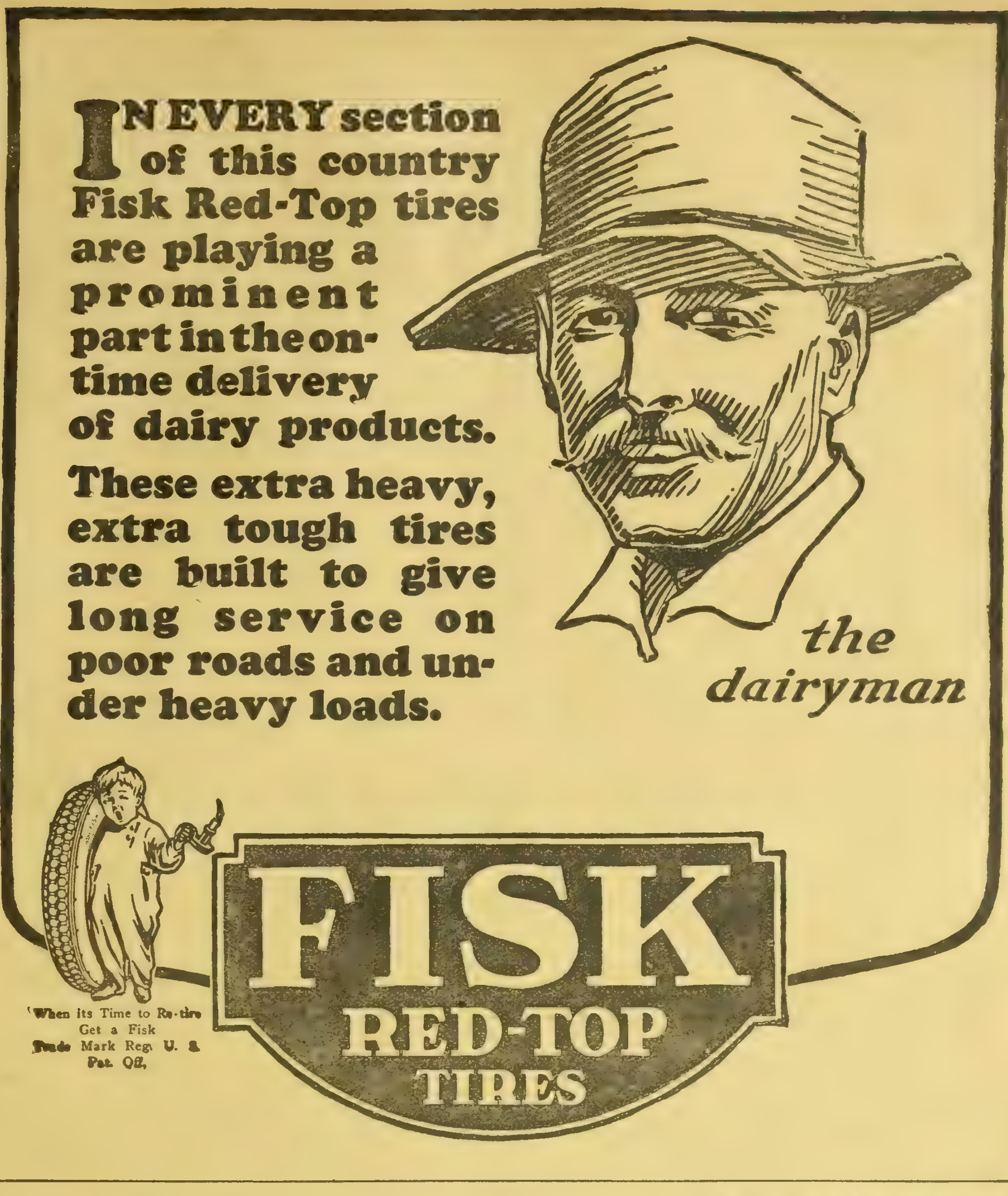
July 11—"Youth Now—Leaders Later," by Margaret R. Filkins, Research Department, Montgomery Ward & Company. "Among Our Neighbors," a regular weekly feature furnished by the Orange Judd Illinois Farmer—L. C. Brown, Author of Brown's Crop Talks, on "A Ten Minute Crop Talk."

July 15—"The Story of Steer to Steak," by W. Hardenbergh, Bureau of Public Relations, Institute of American Meat Packers. "The Horse in the Horse Market," by G. E. Wentworth, Superintendent, Union Stock Yard and Transit Company.

July 18—"From the Beginning of Time," by Mrs. S. K. Maddux, National Provisioner Magazine. "Why We Encourage Calf Clubs," by Frank W. Harding, Chief Executive, American Short-Horn Breeders' Association.

July 22—"Community Building by Co-operating," by W. H. Hill, Agricultural Agent, New York Central Lines. "What's Doing in Illinois," by H. C. Butcher, Director of Information, Illinois Agricultural Association.

July 25—"Boys' and Girls' Club Work in the Great Southwest," by Arthur W. Large, Agricultural Agent, Rock Island Lines. "Among Our Neighbors," a regular weekly feature furnished by the Orange Judd Illinois Farmer—Paul A. Potter, Assistant Editor, on "A Farm Wife and Her Poultry Flock."



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These extra heavy, extra tough tires are built to give long service on poor roads and under heavy loads.

the dairyman

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Oh Money! Money!

by ELEANOR H. PORTER

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(Continued from June 21st Issue.)

"SHE doesn't dare to. Besides, there's Hattie. She says Hattie is always telling her what is due her position, and that she must do this and do that. She's being invited out, to the Pennock's and the Benson's; and they're worse than the maid, she declares. She loves to go to places and spend the day with her sewing; but that these things where you go and stand up and eat off a jiggly plate, and see everybody, and not really see anybody, are a nuisance and an abomination."

"Well, she's about right there," chuckled Mr. Smith.

"Yes, I think she is," smiled Miss Maggies; "but that isn't telling me how to make her contented."

"Contented! Great Scott!" snapped Mr. Smith, with an irritability that was as sudden as it was apparently causeless. "I didn't suppose you had to tell any woman on this earth how to be contented—with a hundred thousand dollars!"

"It would seem so, wouldn't it?"

Something in Miss Maggie's voice sent Mr. Smith's eyes to her face in a keen glance of interrogation.

"You mean—you'd like the chance to prove it? That you wish you had that hundred thousand?"

"Oh, I didn't say—that," twinkled Miss Maggie mischievously, turning away.

It was that same afternoon that Mr. Smith met Mrs. Jane Blaisdell on the street.

'You're just the man I want to see," she accosted him eagerly.

"Then I'll turn and walk along with you, if I may," smiled Mr. Smith. 'What can I do for you?"

'Well, I don't know as you can do anything," she sighed; "but somebody's got to do something. Could you—do you suppose you could interest my husband in this Blaisdell business of yours?"

Mr. Smith gave a start, looking curiously disconcerted.

"B-Blaisdell business?" he stammered. "Why, I—I thought he was—er—interested in motoring and golf."

"Oh, he was, for a time; but it's too cold for those now, and he got sick of them, anyway, before it did come cold, just as he does of everything. Well yesterday he asked a question—something about Father Blaisdell's mother; and that gave me the idea. Do you suppose you could get him interested in this ancestor business? Oh, I wish you could! It's so nice and quiet, and it can't cost much—not like golf clubs and caddies and gasoline anyway. Do you think you could?"

"Why, I—I don't know, Mrs. Blaisdell." murmured Mr. Smith, still a little worriedly. "I—I could show him what I have found, of course."

'Well, I wish you would, then. Anyway, something's got to be done," she sighed. "He's nervous as a witch. He can't keep still a minute. And he isn't a bit well, either. He ate such a lot of rich food and all sorts of stuff on our trip that he got his stomach all out of order; and now he can't eat anything, hardly."

'Humph! Well, if his stomach's knocked out, I pity him," nodded Mr. Smith. I've been there."

"Oh, have you? Oh, yes, I remember. You did say so when you first came, didn't you? But, Mr. Smith, please, if you know any of those health fads, don't tell them to my husband. Don't, I beg of you! He's tried dozens of them until I'm nearly wild, and I've lost two hired girls already. One day it'll be no water, and the next it'll be all he can drink; and one week he won't eat anything but vegetables, and the next he won't touch a thing but meat and —is it fruit that goes with meat or cereals? Well, never mind. Whatever it is, he's done it. And lately he's taken to inspecting every bit of meat and groceries that comes into the house. Why, he spends half his time in the kitchen, nosing 'round the cupboards and refrigerator; and, of course, no girl will stand that! That's why I'm hoping, oh, I am hoping that you can do something with him on that ancestor business. There, here is the Bensons', where I've got to stop—and thank you ever so much, Mr. Smith, if you will."

"All right, I'll try," promised Mr. Smith dubiously, as he lifted his hat. But he frowned, and he was still frowning when he met Miss Maggie at the Duff supper-table half an hour later.

"Well, I've found another one who wants me to tell how to be contented, though afflicted with a hundred thousand dollars," he gretted her gloweringly.

"Is that so?" smiled Miss Maggie.

"Yes. Can't a hundred thousand dollars bring any one satisfaction?"

Miss Maggie laughed, then into her eyes came the mischievous twinkle that Mr. Smith had learned to watch for.

"Don't blame the poor money," she said then demurely. "Blame—the way it is spent!"

CHAPTER XVIII

Just a Matter of Begging

True to his promise, Mr. Smith "tried" Mr. Frank Blaisdell on "the ancestor business" very soon. Laboriously he got out his tabulated dates and names, and carefully he traced for several lines of descent from remote ancestors. Painstakingly he pointed out a "Submit," who had no history but the bare fact of her marriage to one Thomas Blaisdell, and a "Thankful Marsh," who had eluded his every attempt to supply her with parents. He let it be understood how important these missing links were, and he tried to inspire his possible pupil with a frenzied desire to go out and dig them up. He showed some of the interesting letters he had received from various Blaisdells far and near, and he spread before him the genealogical page of his latest "Transcript," and explained how one might there stumble upon the very missing link he was looking for.

But Mr. Frank Blaisdell was openly bored. He said he didn't care how many children his great-grandfather had, nor what they died of; and as for Mrs. Submit and Miss Thankful, the ladies might bury themselves in the "Transcript," or hide behind that wall of dates and names till doomsday, for all he cared. He shouldn't disturb 'em. He never did like figures, he said, except figures that represented something worth while, like a day's sales or a year's profits. And, speaking of grocery stores, had Mr. Smith ever seen a store run down as his old one had since he sold out? For that matter, something must have got into all grocery stores; for a poorer lot of goods than those delivered every day at his home he never saw. It was a disgrace to the trade.

He said a good deal more about his grocery store—but nothing whatever more about his Blaisdell ancestors; so Mr. Smith felt justified in considering his efforts to interest Mr. Frank Blaisdell in the ancestor business a failure. Certainly he never tried it again.

It was in February that a certain metropolitan reporter, short for feature articles, ran up to Hillerton and contributed to his paper, the following Sunday, a write-up on "The Blaisdells One Year After," enlarging on the fine new homes, the motor cars, and the luxurious living of the three families. And it was three days after this article was printed that Miss Flora appeared at Miss Maggie's, breathless with excitement.

"Just see what I've got in the mail this morning!" she cried to Miss Maggie, and to Mr. Smith, who had opened the door for her.

With trembling fingers she took from her bag a letter, and a small picture evidently cut from a newspaper.

"There, see," she panted, holding them out. "It's a man in Boston, and these are his children. There are seven of them. He wrote me a beautiful letter. He said he knew I must have a real kind heart, and he's in terrible trouble. He said he saw in the paper about the wonderful legacy I'd had, and he told his wife he was going to write to me, to see if I wouldn't help them—if only a little, it would aid them that much."

"He wants money, then?" Miss Maggie had taken the letter and the picture rather gingerly in her hands. Mr. Smith had gone over to the stove suddenly—to turn a damper, apparently, though a close observer might have noticed that he turned it back to its former position almost at once.

"Yes," palpitated Miss Flora. "He's sick, and he lost his position, and his wife's sick, and two of the children, and one of 'em's lame, and another's blind. Oh, it was such a pitiful story, Maggie! Why, some days they haven't had enough to eat—and just look at me, with all my chickens and turkeys and more pudding every day than I can stuff down!"

"Did he give you any references?"

"References! What do you mean? He didn't ask me to hire him or anything."

"No, no, dear, but I mean—did he give you any references, to show that he was —worthy and all right," explained Miss Maggie patiently.

"Of course he didn't! Why, he didn't need to. He told me himself how things were with him," rebuked Miss Flora indignantly. "It's all in the letter there. Read for yourself."

"But he really ought to have given you some reference, dear, if he asked you for money."

"Well, I don't want any reference. I believe him. I'd be ashamed to doubt a man like that! And you would, after you read that letter, and look into those blessed children's faces. Besides, he never thought of such a thing—I know he didn't. Why, he says right in the letter there that he never asked for help before, and he was so ashamed that he had to now."

Mr. Smith made a sudden odd little noise in his throat. Perhaps he got choked. At all events, he was seized with a fit of coughing just then.

Miss Maggie turned over the letter in her hand.

"Where does he tell you to send the money?"

"It's right there—Box four hundred and something; and I got a money order, just as he said."

(Continued on page 21.)

Politics and the Railroads

To the present generation of Michigan Railroad men it is a grateful thought that this Peninsular commonwealth is appreciative of the fact that Railroad Service is today the best in Michigan history.

We know this appreciation by actual expressions—spoken and written—and by the gradual disappearance of that ancient hostility which featured an era of Railroading long past.

Most people realize that Railroad Service has been re-established despite laws which restrict management in every detail—laws which add huge burdens of expense to Railroad operation without assisting in any way toward Railroad progress or the development of Railroad Service.

Those who understand these facts give full credit for the achievement of Michigan's twenty-four steam Railroads and are prompt to resent selfish attacks on them. Before this defense—a defense based on facts—railroad aspersion is becoming out of date, except for spasmodic revivals at election time, when office seekers, desperately fighting for votes, sometimes endeavor to turn Railroad abuse into political capital.

Railroads have small chance to meet such attacks. Railroad men are too busy furnishing transportation and conducting negotiations with the various Government boards and commissions which so closely supervise our every act. In this extremity we must rely on you to protect and defend us, and to insure us a square deal.

Is this reliance well placed?

Michigan Railroad Association
508 Railroad Exchange Bldg., Detroit, Mich. (9-27)

"We Serve Michigan"

THE ONE HUNDRED TENTH PSALM
OR THE CHURCH'S PROGRAM

A SERMON BY REV. DAVID F. WARNER

"1. Jehovah saith unto my Lord, Sit thou at my right hand, Until I make thine enemies thy footstool.
"2. Jehovah will send forth the rod of thy strength out of Zion: Rule thou in the midst of thine enemies.
"3. Thy people offer themselves willingly in the day of thy power, in holy array: Out of the womb of the morning Thou hast the dew of thy youth.
"4. Jehovah has sworn victory and will not repent: Thou art a priest forever after the order of Melchizedek.
"5. The Lord at thy right hand will strike thru kings in the day of his wrath.
"6. He will judge among the nations; He will fill the places with dead bodies; He will strike thru the head in many countries.
"7. He will drink of the brook in the way: There will he lift up the head."

THE Great War is over but the conflict for righteousness is on in dead earnest. The liquor men are showing the red eye of defiance as their iniquitous business is doomed. Politicians are opposing an international agreement to minimize the probabilities of war. And many classes and peoples are crying for justice in this new day of unrest. And now the church has no other and brave choice but to move forward in vigor and purpose with her healing and salvation.

But, in this day, when we are the more yielding to the impact of spiritual forces, set loose nineteen hundred years ago by the Man of Galilee, we are the clearer seeing that righteousness consists not so much in claiming and getting justice, but in giving justice. The late Woodrow Wilson indicated that every country, participating in the League of Nations, must give up something of its sovereignty, that is, make concessions to other nations. This is social righteousness. The key-principle of Christianity is GIVING, not GETTING.

Now, this is a forward moving principle and ideal by which to begin to live in this age. How many ideas there are, but how few the ideals! An idea becomes an ideal when we are willing to clothe it with sacrifice and devotion! when we enshrine it in flesh and make it live before men; but still more, perhaps, when we are willing to die for it. Jesus and St. Paul were moved by the eternal "must" and there lives went out as the martyr's price. Lincoln yielded to the assassin's bullet for an ideal, and Edith Cavall gloried in death at the hands of her cruel enemies.

Psalm 110 sets forth the church's program. Luther calls this Psalm "the true, high, main Psalm of our beloved Lord, Jesus Christ." In verse one we have the present and universal reign of Christ. His atonement is finished. His spirit has been released for men; and the conflict for truth shall rage until the restoration of all things. This is a time to die for others. "Except a grain of wheat fall into the ground and die, it abideth alone." Jesus quotes this psalm in Matthew 22:44. It is convincing proof of his Messianic power on earth,—a sovereignty which he makes the surety of the Great Commission.

Verse two represents the church as waging the conflict. "Zion," to the Jew, is the earthly Jerusalem, or Judaism. But to the Christain, it is the spiritual Jerusalem, or church. "The rod of thy strength" is the rod with which the prophets and the Revelator saw Jesus smiting the nations or the Word of God. The Gospel has gone out to gather the whole world to its embrace. The Kingdom of God is to be won by the church wielding "the Sword of the Spirit." Christ must rule in the midst of his enemies. They must be subdued by the power of the Gospel thru the church. In this dispensation the world's sins must be blotted out by the blood of the Lamb, thru heralds that are willing to die to declare the news.

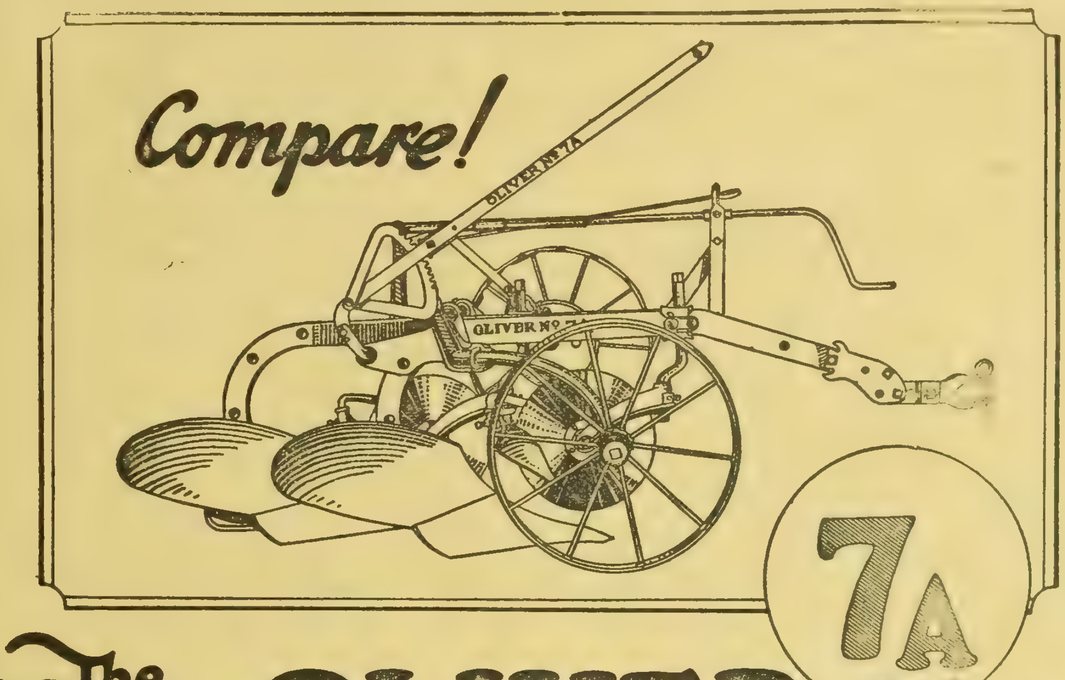
During this dispensation, Jesus is to remain in heaven. When the church's task is finished he returns again, but not as a mediatorial Savior. Then the door of salvation will be closed (Matthew 25:10). Our hope lies in present action. And now is the time to answer Christ's prayer for unity, and to join in the Revelator's universal chorus: "Unto him that sitteth on the throne and unto the Lamb."

And for this glorious consummation God's people are willing to labor, for this is the day of the church's power, says verse three. This psalm is the war cry of our Great Commander, calling the church to mobilize against the enemy. These soldiers of Christ are to have the vigor characterized by "the dew of youth." It is a world struggle. It involves every man and every man's affairs. You can not be neutral. There is no God and Mammon in this movement. Either you are willing or not willing. But the call is to the willing, —to the volunteers. No drafted men are wanted. What a wonderful situation! There is no place in Christ's army for a conscript. Already we have too many of such in the church. When the call comes for an advance and assault, we are compelled to send out corporals to line up the church's forces.

And what have you when these church professors are lined up? Many times, nothing. They won't fight. They look like soldiers, maybe, but they belie the name. With such an army, defeat is certain. When Gideon reviewed his thirty-two thousand men, his close eye detected the fearful and the unwilling, and he said, "Go home; we can't use you." He had but three hundred left. They were volunteers that had the splendid conception of their leader and the same stout faith in God. Every Bible reader knows how the sword of Jehovah and Gideon won. If the battles of the church are lost, they are lost to the fearful, the neutrals, and the conscripts. But heaven pity that soul and that church in the day when God shall loose the winds of judgement, if they are not found bravely fighting! "By the water courses of Reuben there were great resolves of heart." Foch said, "Send me volunteers whose hearts are hot for the fight." And this is fundamental in the success of our militant warfare. It is an assured fact that no conscript or sluggard shall enter the Kingdom of God.

A guarantee of victory is sounded in verses four to seven. Jesus has gone into the great Holy of holies as a "priest forever" to offer his life as a moral satisfaction for the world's sins. But the world must know this. The church must declare it. How long? "How long, O Master, the holy and true, dost thou not judge and avenge our blood on them that dwell on the earth" (Revelation 6:10; compare Luke 1: 8,9,21)? "And the people were waiting for Zacharias, and

(Continued on page 19.)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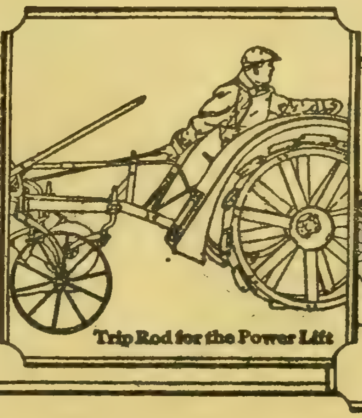
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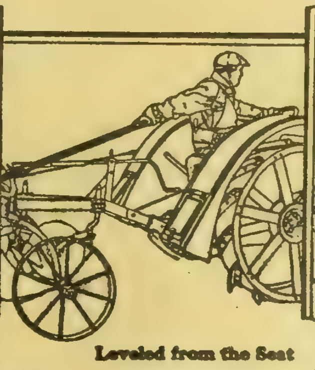
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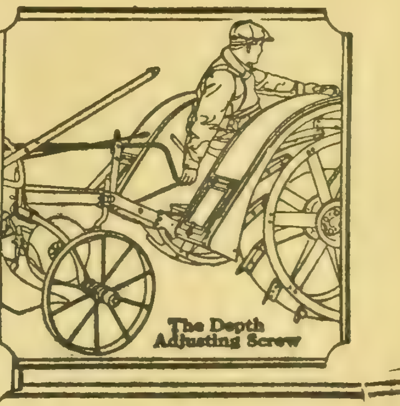
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RECOGNIZING AGRICULTURE

"IN dealing with agriculture, the Republican party recognizes that we are faced with a fundamental national problem, and that the prosperity and welfare of the nation as a whole is dependent upon the prosperity and welfare of our agricultural population."

The foregoing is the opening paragraph of the agricultural "plank" in what is referred to as the "Coolidge platform" adopted by the Republican party at its recent convention in Cleveland.

Ordinarily we don't take much stock in platforms; like New Year's resolutions, they are easy to make, but durned hard to carry out. Nevertheless we feel differently about the Coolidge platform, because it is not the platform of a group of professional politicians for the main purpose of corralling votes. It is a platform of a man whose honesty of purpose and determination to do the right thing in spite of what effect it may have on him politically has never been questioned. Moreover, the President himself is a product of the soil, understands the farmers' problems, appreciates the importance of the farming business, and is making a sincere effort to help the farmers of America. Incidently, his father declined an invitation to attend the Cleveland convention because he was too busy putting in the crops on his Vermont farm.

If you have not read the Agricultural plank in the Coolidge platform you should do so, and then compare it with what the Democrats will offer the farmers after they meet in New York.

This is not a stump speech for the Republican nominee; we are content to let his record in office speak for itself. It is not the policy of THE BUSINESS FARMER to take sides in political campaigns; we merely want to point out to you what we believe has an honest purpose behind it, and not the bubblings of a group of politicians, for obviously Calvin Coolidge and not the professional politicians were in the saddle at Cleveland. We would not under any consideration take the responsibility of telling you to vote for Mr. Coolidge, the Democratic candidate, or any man a third party may put into the field, but we will go so far as to say that if you want to return Calvin Coolidge to the White House, vote him a Congress that will work with him, and that does not block every turn he makes. No president can give the country the right kind of administration unless he has Congress behind him.

THE BOARDER HEN

THE term "boarder", which is often applied to cows whose production is so low that it barely pays their board, applies also to the hen that "eats her head off." As a matter of fact, the farmers probably keep more boarder hens than they do hens that really produce a profit. As a usual thing, farmers pay little or no attention to the productive ability of their flock of hens, to say nothing of making a selection of individuals of high productive ability.

This is regrettable to say the least, because poultry is one of the most profitable sidelines in farming. No matter what type of farming is followed, whether it is grain farming, dairy farming, fruit farming, general farming or whatnot, poultry usually fits in to good advantage.

Did you ever stop to think that the most expensive hen you can have on the farm, is the one that lays the fewest number of eggs? A hen that lays seven dozen eggs per year, requires almost as much food as one that produces from fifteen to seventeen dozen eggs per year. In other words, the former will require an average of twelve pounds of feed to produce one dozen eggs, while the latter will produce one dozen eggs on five pounds of feed.

If you are interested in poultry as a profitable farm sideline, don't fail to read the article in this issue by Prof. E. C. Foreman on the value of systematic culling and selective breeding of poultry, as a factor of great importance in the economic production of eggs. Incidently Prof. Foreman is one of the outstanding experts and authorities on poultry husbandry, and we feel particularly fortunate in being able to present to readers of THE BUSINESS FARMER such a worth while discussion on this important subject. Prof. Foreman's article is based on facts gained from study and experience that will be exceedingly valuable to anyone who applies them.

Prof. Foreman points out that systematic culling and selective breeding results in more eggs from the same number of hens. The cost of producing eggs will be reduced in their case, but a maximum efficiency calls for the application of both. In other words, when you have culled your flock in accordance with the instructions given, the job is only half done; you should follow that up by selective breeding.

Unfortunately hens are just hens to a great many farmers when they could be made a very interesting study, as well as a profitable sideline —and Prof. Foreman tells how it may be done.

We appreciate, however, that most farmers feel they have so many things to look after, they are unable to give poultry the attention it rightly merits. This offers a suggestion. Why not get the farm boy, or the farm girl, or both, interested in taking hold of the poultry department on the farm and running it in a scientific way. It is not only good experience for the young folks, but there is no reason why, in many cases, the poultry end of the business should not pay part or all of their education.

The poultry on the farms of Michigan is too much neglected, and we urge THE BUSINESS FARMER readers to give it more serious attention. When we read Prof. Foreman's article we got real enthusiastic about it. Perhaps that is largely because we particularly like poultry, but entirely aside from the fact that, we believe farmers are making a serious mistake not to go after the poultry end of their business in a real scientific way.

KEEP THINGS IN BALANCE

"A TIME to keep things in balance" in a few words sums up the view of the U. S. D. A. Bureau of Agricultural Economics, in a statement issued June 1. In the opinion of the Bureau, "If reasonable balance is maintained in the production end, agriculture as a whole stands to gain the greatest economic leverage since 1919". These are encouraging words, to say the least.

Not only in Michigan, but over the country generally, the spring has been late, and farming got away to a slow start, but as each week rolls by, conditions are rapidly improving, and the indications are that the season will not be so bad after all. The labor situation tends to grow easier, if anything. Also the general level of prices shows a declining tendency, while farm products have slightly advanced. What we need, of course, is more and still more of this balancing-up process between agriculture and industry. There is bound to be a balancing up sooner or later, but we sometimes weary of the long drawn out process, especially if we happen to be in the unfortunate position of hanging on by the skin of our teeth, as it were.

The Bureau of Agricultural Economics points out that two underlying factors now color the agricultural situation. In the first place, the program of agricultural production has arrived at the best general balance since 1920. The community at large hardly understands how far-reaching and skilful a readjustment farmers have made in the major lines of production. They have obeyed economic signals as expertly as any industry ever did. Naturally, however, it takes a much longer time to bring about a readjustment in agriculture than it does in the manufacturing industry. It is pointed out that no board of directors can shift over night the crop system and growing animals on six million farms.

Now that the readjustment process is coming along in good shape, let us watch our step. It is very important to recognize the point when readjustment in the various lines has gone far enough. In other words, if you have achieved a balance, don't upset it. As a result of this survey the United States Department of Agriculture points out, that the tendency this season is to overdo poultry, corn, butter, and potato production, and it may presently cut down too far on wheat, cattle and hogs. The real production situation frequently changes some time before that fact is registered in price changes.

The second underlying factor in the agricultural situation is that the annual industrial boom of the past few years appears to be slowing down at the present time; what that will probably result in will be a balancing-up process between industry and agriculture. If the city buys less of manufactured products, it apparently means, under present circumstances, some lowering of prices of things that farmers have to buy, and likewise a lowering of wages.

Of course, a slowing up in industry may create a somewhat narrower market for such products as lambs, butter, fresh eggs, and semi luxury fruits and vegetables, but we rather doubt that this will be serious, and anticipate that it will be more than offset by the benefit that will accrue to agriculture, as the result of the balancing-up process. There is nothing to indicate an impending depreciation in industry; it is simply a slight slowing up that we do not believe is serious, at least so far as the effect on agriculture is concerned.

KEEPING TAXES DOWN BY LAW

"COULD Our Tax Totals Be Held Down By Law?" is the heading on the current installment of the series of articles on taxation in Michigan by Stanley M. Powell. The idea of holding tax totals down by law is sponsored by the Michigan Real Estate Association, and the way this can be done, they state, is to fix by law an absolute maximum amount of money which might be raised by taxation during any given period.

This idea is not entirely new. The state of Ohio has a law somewhat along this line but it has failed to work wholly satisfactory. The Michigan Real Estate Association has made a study of the Ohio law, has found the weaknesses and believes it has a law that will work perfectly.

During the past several months we have discussed tax problems here in Michigan and, in turn, taken up and explained some of the many remedies offered. The state income tax has been discussed and since petitions have been circulated by the leading farmers organizations of the state and enough signatures secured to assure the proposed income tax law being put on the ballot this next fall. Then it will be up to us whether it becomes a law or not. A gas tax, tax exempt securities, as well as several other remedies have been discussed. The remedy offered by the Michigan Real Estate Association is not supposed to be a panacea for all tax ills —they do not claim it is—but it will, they believe, help solve the problems of real estate taxation. City, school and county taxes would have to be taken care of but by holding down state taxes it would be a step in the right direction, and it would be up to the counties and cities to work out their problems. If it will help solve the problem it is worth considering because there is much help needed.

IN THE BIN OR IN THE STACK?

IT won't be long before those readers of THE BUSINESS FARMER who have grain to thrash will be visited by the custom thresherman.

Are you going to have him put the grain his machine threshes in the bin or in the stack? That is a foolish question, isn't it? No, it isn't; it is a mighty serious question. So serious is it that the United States Department of Agriculture has recently issued a statement calling attention to the fact that the careless, inefficient operation of threshing machines is responsible for a great many bushels of wasted grain.

Threshing machines have been built and improved for a great many years, and while none of them are probably one hundred per cent efficient in the separation of the grain from the straw, yet any of them will do their work with very little wasted grain if kept in good condition, properly adjusted, furnished with the proper amount of power, and carefully watched while in operation. In addition to this of course, the grain itself must be in condition to be threshed.

If a threshing machine fails to separate all the grain from the straw, it is usually due to one or more causes; either the machine is not being run at the proper speed, the cylinder fails to thresh all of the kernels out of the heads, the separating mechanism is not level, or the blast not properly adjusted.

You can depend upon it that the owner of the threshing rig is not so thoroughly interested in getting every bushel of grain from the straw as you are, and therefore it is important for the farmer to be on the alert. It is well to be versed on the operation of the machine, and to know whether the separator man has his machine adjusted for the most efficient results possible. Furthermore, it is not so important for you to watch the grain spout as it is what is coming out of the wind stacker; the straw pile or stack is the most important place for the owner of the crop to be.

PUBLISHER'S DESK

RULES FOR TESTING INVESTMENTS

IN a recent issue of Printers' Ink there was an article on blue-sky swindles and in this article 10 rules for testing an investment were given. The rules given are very good and we are passing them on. Read 'em and then paste 'em in your hat or put up in some prominent place where you can refresh your memory every now and then.

(1) When a stock salesman tells you "now or never," the answer is always "never." Good investments will be here tomorrow. Get sound advice before you buy.

(2) Don't try to combine gambling with investment. The more interest, the more risk.

(3) Don't buy swamp land 1,000 miles away. If you buy real estate, buy right near home.

(4) Watch out for the man who offers a big stock bonus. It's cost many folks their life savings.

(5) Don't invest in another man's dreams. Be especially suspicious of the man who tells you how much a $100 investment in original Ford or telephone or other similar stock is worth now. For every big winner many more fail. A man who has discovered a diamond mine doesn't tell the world about it. Out of every 100 new businesses started, 87 fail and only 13 prove successful!

(6) Mining costs big money. Shun the man who tells of the mountains of gold that beckon on the blue horizon.

(7) If you must gamble, gamble on yourself. Don't play the other man's game.

(8) Don't stay on the sucker list. If strangers write offering to make you rich, tell them to remove your name from their list. Get off the list. Some of those birds can write.

(9) Crooks take advantage of every invention. Watch out now for fake radio stocks.

(10) Most fake promoters use the money from stock sales paying running expenses. Buy mahogany furniture for your own house instead of for a bucket shop.

FOOD AND FUR OFFICIAL GETS JAIL SENTENCE

WE advised in our last issue that officials of the Standard Food and Fur Association had got themselves in wrong with Uncle Sam and had been arrested and charged with using the mails to defraud. Since then they have been brought to trial and one official, Nathan D. Hecht went to jail for six months and two others, James and Thomas Vavaro, were acquitted by a jury. In addition to the six months he must spend in jail Hecht had to pay a fine of $1,000. The other officials claimed that Hecht deceived them in the sale of the business two years ago. Like Pete Dexter of "Forty Years of Faking" this man Hecht finally got caught.

OLIVER OIL-GAS BURNER

"I would like to know whether the Oliver Oil-Gas Burner gives satisfaction or not and wish you would advise me.—M. H., Lenawee County, Mich."

WE have published many letters from subscribers regarding the Oliver Oil-Gas Burner, we are of the opinion that it depends considerable on the user whether the burner is a success or not. It seems that about 50 per cent of our readers who purchase these burners are satisfied, while the other 50 per cent are very much dissatisfied, and would not use them under any consideration.

WYANDOTTE OIL COMPANY

"I am writing to ask you if you could give me any information on some oil stock that has come into my possession. I have 500 shares at $5.00 a share in the Wyandotte Oil Company of Venango county, Pennsylvania. The company was incorporated in 1864 and it seems that their offices were in Pittsburgh. Is the stock of any value?"

A THOROUGH investigation reveals that this company was organized in 1864 and at that time owned 21 acres in President township, Venango county, Pennsylvania. The incorporators were Edward G. Peabody, A. M. Ross, J. P. Chandler, W. C. McKibbon and Henry R. Anderson. Bankers in Oil City and Franklin, Pa., never heard of the company and do not know any of the incorporators. About the year 1864 there were a great many of these incorporations organized, due to the excitement at that time, and more than likely this company was one of them. Most of the companies of this kind let their land go at tax sales when it was discovered there was no oil under them, and but few of them still own land. From the above information we would conclude that the stock is not worth much.

MAKING APRONS AT HOME

IF any of our readers are making aprons and selling them "at a profit of $6.90 to $15.30 per dozen" for the Mary Jane Apron Company of Manitowac, Wis., we would like to hear from them.

We wrote this company in March asking them for the names and addresses of any ladies in Michigan who made a success of their plan, but altho they sent a full line of their circular matter, they sent no satisfied customers' names.

They ask $1.50 in advance for the instructions and material, so their scheme does not cost as much as some of the "work-at-home" schemes we have been writing up recently in this column.

ANOTHER NEW ONE

THESE fake stock salesmen are mighty foxy chaps and between personal calls, mails, telephone calls and telegrams the average farmer has a hard time getting rid of them. Unless he losses his temper and uses his boot on that part of the salesman's anatomy the little boy called "the back of his lap". Down in Ohio they have uncovered a new scheme. The farmer is offered "service" from a New York concern. Following a mail campaign the farmer receives a telegram stating that a certain curb stock can be bought at a very low figure and will soon advance to double or more the amount paid. One farmer stated that this concern offered a certain curb stock at $1.25 declaring that it would soon go to $3.00. Quick action was urged, and a long distant telephone call with further urging followed. This particular stock was investigated and found to be worth 50 cents. No doubt they will try to work Michigan shortly so be on your guard; you may find something in your mailbox tomorrow. Do not throw the papers away but send them to us because we want to study their methods. No we are not going into the business—we want to keep them from doing business among our readers.

RENEWING INSURANCE POLICIES

ANY of our subscribers who secured accident insurance last year through THE BUSINESS FARMER and want their policy renewed can have them renewed by writing to the North American Accident Company, 208 LaSalle St., Chicago, Ill. Your check or money order should be made payable to that company.

The Collection Box

The purpose of this department is to protect our subscribers from fraudulent dealings or unfair treatment by persons or concerns at a distance.

In every case we will do our best to make a satisfactory settlement or force action, for which no charge for our services will ever be made, providing:

1.—The claim is made by a paid-up subscriber to The Business Farmer.

2.—The claim is not more than 6 mos. old.

3.—The claim is not local or between people within easy distance of one another. These should be settled at first hand and not attempted by mail.

Address all letters, giving full particulars, amounts, dates, etc., enclosing also your address label from the front cover of any issue to prove that you are a paid-up subscriber.

THE BUSINESS FARMER, Collection Box
Mt. Clemens, Mich.

Report Ending June 23, 1924

Total number claims filed	2502
Amount involved	$24,275.91
Total number claims settled	1994
Amount secured	$22,760.58

Dear Sir:—I have just received the adjustment from ——— and thank you very much. I surely appreciate your work very much. Thank you.—Mrs. C. A. L., Gowen, Mich.

First Mortgage Real Estate Gold Bonds

For funds available for investment or re-investment at this time we offer a diversified showing of exceptional 7% first mortgage bond issues.

Write for Booklet AG1271

Tax Free in Michigan
4% Normal Income Tax Paid by Borrower

7%

Federal Bond & Mortgage Company
(1271)

FEDERAL BOND & MORTGAGE BUILDING, *DETROIT*

WHEN WRITING TO ADVERTISERS PLEASE MENTION THE BUSINESS FARMER

Home is as near you as the Telephone

NO matter where you roam—or where business or pleasure calls —you will find a telephone near.

Don't worry about the folks at home or about your business. Just keep in mind that every Bell telephone is a connecting link between you and home. Call home every evening—let the folks know you are thinking of them.

There are special evening and night rates that make your calls very economical.

MICHIGAN BELL TELEPHONE COMPANY

The Farm Home
A Department for the Women

Edited by MRS. ANNIE TAYLOR

DEAR FOLKS:—The other evening I attended high school graduating exercises here in Mt. Clemens with a dear friend of mine, who had a seventeen-year-old boy who was receiving his diploma. As we sat in our seats and watched the boys and girls, one by one, walk up onto the stage and receive their diploma I could not help but think how swiftly time passes. 'Twas but only a few years ago she, my friend, and I had gone through practically the same ceremonies and now we were sitting there watching her boy graduate from high school. And but a few years, no doubt, and he will be watching his son or daughter receive their diploma.

When we were young one who had a high school education was well educated and pointed out as "real smart" or "an educated fool" according to who discussed them. But now it is different. A college training is the ambition of the young generation. There is a very true saying I always keep foremost in my mind that I want to pass on to you. It is "Slumber not in the tents of your fathers. The world is advancing. Advance with it." So let's not go to sleep but advance with this world of ours and send the boy or girl graduates to college this fall. Sometimes it may require "pinching" a little here and there but it will be money well invested if you can send out your boy or girl well equipped to fight their way.

Your Friend,
Mrs Annie Taylor

Address letters: Mrs. Annie Taylor, care The Business Farmer, Mt. Clemens, Michigan.

BE A FRIEND

Be a friend. You don't need money:
Just a disposition sunny;
Just the wish to help another
Get along some way or other;
Out to one who's unbefriended;
Just the will to give or lend,
This will make you someone's friend.

Be a friend. You don't need glory,
Friendship is a simple story.
Pass by trifling errors blindly,
Gaze on honest effort kindly,
Cheer the youth who's bravely trying,
Pity him who's sadly sighing;
Just a little labor spend
On the duties of a friend.

Be a friend. The pay is bigger
(Though not written by a figure)
Than is earned by people clever
In what's merely self-endeavor.
You'll have friends instead of neighbors
For the profits of your labors;
You'll be richer in the end
Than a prince, if you're a friend.

SOME MEAL POINTERS

THE first course for each meal should tend to stimulate the appetite and prepare the digestive tract for the remainder of the meal. This is especially true of breakfast, and fruit is generally used for this purpose. Fruit is also frequently used for the first course in a luncheon or dinner. Soup has stimulating qualities and is used for a first course.

The next course should consist of a mild flavored food, for example, in the case of breakfast, a cereal. This bland flavored course is followed by the main course, which usually contains the principal building and repair foods, (protein) and the energy and heat producing foods, (starch). The salad course then follows in case of a luncheon or dinner, supplying principally body regulating and body building foods in the form of minerals, organic acids, etc.

The meal ends with a desert and beverage. The physiological reason for ending the meal with a dessert is that a pleasant sensation tends to continue digestion. A good habit to get into is less pies and more fruits for desserts.

For everyday living the meals are not usually served in so many courses, as referred to above, and one or more of the foods mentioned may also be omitted. The principal of contrasts, etc., should be carried out somewhat, no matter how plain or simple the meal is.

ARTIFICIAL RESPIRATION

MY, my, but it is warm—no, it is hot, positively hot—today. I have been all over the house trying to find a cool place where I might do my writing, but there doesn't seem to be a breath of cool air anyplace. After supper tonight we will drive out along Lake St. Clair and enjoy the cool breezes, and where this is a public beach we will find the water alive with bathers.

Everyone, whether they go wading or swimming, should know how to perform artificial respiration. Every year there are thousands who lose their lives while in bathing and many of them are taken from the water while their is still life in their body but they die because of the immediate need of proper treatment—and not one in the crowd knows what to do. I am going to tell you how to treat a drowning person so that if you are called upon some day you will be ready to do your part.

Lay patient on stomach, face turned to one side, so that the mouth and nose do not touch the ground.

The operator should kneel, straddling the patient's hips or by either side of the hips, facing the patient's head.

Place spread hands upon the lower ribs of the patient and throw body and shoulders forward so as to bring weight heavily upon the lower ribs of the patient. Continue downward pressure three seconds then suddenly remove hands.

Repeat this act indefinitely about twelve times a minute—the danger is that in the excitement the rate will be too rapid.

The efforts at resuscitation should be continued until the arrival of the physician. Any evidence of returning breathing should encourage the operator to continue his efforts. Artificial respiration should be continuous for one hour; much longer, if there are any evidences of returning animation.

As soon as artificial respiration has been started, a second party may pull the hair, dash cold water in the face, loosen the clothing and collar and hold a cloth saturated with aromatic spirits of ammonia near the nose.

Spanking the buttocks sharply may also have a quickening effect; pulling on the tongue helps bring the man to. See that the mouth contains no tobacco nor spittle.

No stimulant nor liquids of any kind should be administered by the mouth while respiration is suspended. Keep back the crowd.

FEEDING THE BABY

THERE is nothing "just as good" as mother's milk. It is the natural and only perfect food for the infant. Substituting anything else for it should be considered a serious undertaking, justified only by necessity and carried out only under the advice of a physician.

If mother is ill or run down she should consult a physician before giving her baby other food or bottle feeding. The quality of mother's milk may be improved by improving her health. Improper food, irregular meals, lack of rest and sleep, too frequent or too prolonged nursing weaken the mother and injure her milk, especially in hot weather.

Breast-fed babies often vomit or have diarrhea because the mother is sick or tired out and her milk is poor. So long as the mother keeps well the breast-fed baby will be well.

Tea and coffee do not improve the quality of the mother's milk, and may be injurious to the baby. A nursing mother should drink plenty of pure water. There is no better food for the mother than good milk; she should drink it freely.

If breast milk does not agree with the baby, do not wean him until you have tried:

Improving the quality of the milk by attention to the mother's diet, intake of liquids and details of her daily life.

Feeding the baby at her regular four-hour intervals.

Shortening the length of single feedings.

Giving one-half of one ounce of boiled water before each nursing.

Giving some cow's milk diluted after one or more feedings, if breast milk is scanty.

HOW VEGETABLES RANK IN FOOD VALUE

THE following list of vegetables arranged in the order of their value may be helpful to the home-maker who is eager to secure from vegetables the greatest contribution they have to offer:

1. Spinach, turnip tops, chard, wild green leaves, cabbage, lettuce, string-beans.
2. Potatoes.
3. Carrots.
4. Onions, cauliflower, celery.
5. Parsnips, turnips.
6. Sweet potatoes, beets.
7. Asparagus, Brussels sprouts.
8. Cucumbers, eggplants, peppers, pumpkin, squash.

Leaves, including string-beans, hold the most conspicuous place among all the vegetables, because they are rich in all the materials for which vegetables rank well. Those which are eaten raw have no successful competitors among any foods so far as vitamins are concerned. Although it is true that a serving of roots or tubers, leaves have more than twice as much iron and in many cases they are much richer in vitamins.

It is fortunate indeed that the potato has survived the dietary changes of civilization, because it is a close second to leaves in the food materials that it contains. It is fair in iron and vitamin A and good in vitamins B and C. Carrots also hold an enviable place among the roots because they are good in vitamin A and fair in B and C. Parsnips and turnips are unusual in their content of lime and good in vitamin B.

WORTHWHILE CURTAIN HINTS

SHORT Curtain Defects Overcome—A relative of mine moved to a new house where some of the windows were much longer than the ones in her former home. At first she thought she would be obliged to buy new curtains, but, by the advice of a neighbor this difficulty was entirely over-come.

Instead of new curtains, she used the old ones by measuring from the sill up and letting the rods come wherever they would. Then she purchased some pretty drapes with a valance at the top and placed another rod for these at the top of the window as usual, thereby concealing the shortness of the curtains underneath.

Beautiful Drapes from old material—A friend asked me to step in her bedroom and see her new curtain drapes. I did so, and saw some beautiful plain delicate pink ones with a valance at the top. I examined the material and decided it was some kind of voile, but she laughingly told me she had only taken the outer portions of some old thin worn out sheets and colored them a dainty light pink color.

This discovery has been of great help to me, as I know what disposition to make with sheets that had worn through in the center yet the other portions were strong enough to last a long time.—E. M. L. B.

DO YOU KNOW—

So many housewives make another task while doing one? Never uncover a frying pan to turn meat without first drawing it back to cool a moment. Then raise lid on side towards you and reach under to do the turning, thus preventing any grease from spattering the range for later cleaning.

That you can prevent foods and fruits from boiling over on your burner by watching a few minutes until boiling is reached to see if it will go higher? Then regulate for safety.

That soap will spoil the enamel on your burner? Polish off each day with a clean cloth and a few drops of "3-in-1" oil or "Finoil."

That navy beans are better soaked over night? Drain, add more water, and baking soda the size of a bean, boil 15 minutes. Drain again, cover with cold water. To 2 quarts beans (soaked) add ½ cup sugar (brown preferred) salt and pepper to taste, and several

TIME-TABLE FOR CANNING FRUITS AND TOMATOES

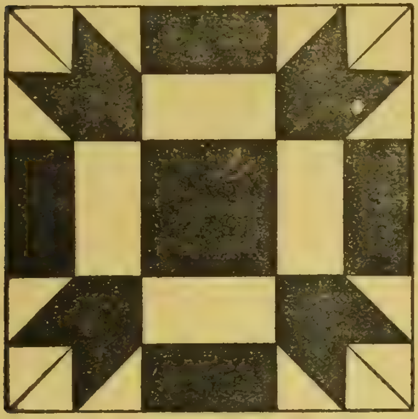
These time periods are based on the use of quart glass jars. For pint glass jars 5 minutes less time may be used, and for No. 2 or No. 3 tins 10 minutes less. When the fruits are precooked and packed hot, a 5-minute process is recommended for all cans or jars to insure keeping and to create a vacuum seal.

Product	Method of treatment before processing	Processing period, at temperature of 212° F.
Apples	Slice, quarter, or halve, then pack in jars and cover with boiling sirup.	Packed cold: 20 minutes.
	Or boil whole in sirup, or bake as for serving, and cover with sirup, and pack hot.	Packed hot: 5 minutes.
	Or pack hot in form of apple sance.	
Apricots	Same as peaches	
Blackberries	Pack in jars. Fill with boiling hot, medium sirup.	20 minutes.
Blueberries		
Dewberries		
Huckleberries		
Logan Black-berries		
Raspberries		
Cherries	Pack in hot jars, cover with boiling sirup, using thick sirup for sour cherries, and medium for sweet.	Packed cold: 25 minutes.
	Or remove pits, add sugar as desired, bring to boil, and pack.	Packed hot: 5 minutes.
Currants	Same as berries	
Gooseberries	Same as other berries, but using thick sirup.	Packed cold: 20 minutes.
	Or prepare sauce, using sugar as desired. Fill hot.	Packed hot: 5 minutes.
Peaches	Scald, dip into cold water, and peel. Cut into size desired, removing pits. Fill jars, then add sirup of desired consistency, in which several cracked peach pits have been boiled.	20 minutes.
Pears	Pare and cook for 4 to 8 minutes in boiling medium sirup. Pack hot in jars and fill with the boiling sirup.	20 minutes.
Pineapples	Peel, core, remove eyes. Cut into convenient sizes. Pack in jars. Fill with boiling thin sirup.	30 minutes.
Plums	Prick. Fill in jars. Cover with boiling medium sirup.	Packed cold: 20 minutes.
	Or bring to boil, using sugar as desired. Fill hot into jars.	Packed hot: 5 minutes.
Rhubarb	Cut in half-inch lengths. Add one-fourth as much sugar as rhubarb by measure. Bake until tender in covered baking dish. Pack in hot jars.	5 minutes.
Strawberries	To each quart add 1 cup of sugar and 2 tablespoons of water. Boil slowly for 15 minutes. Let stand overnight in kettle. Reheat to boiling. Fill jars hot.	5 minutes.
Tomatoes	Scald and peel. Pack whole or cut in pieces. Cover with hot tomato juice. Add 1 teaspoon salt to each quart.	25 minutes.

slices of pork. Bake in a moderate oven, stirring occasionally. Or boil until tender using sufficient water to make soup if desired.

If beans are boiled in a deep kettle, dumplings may be cooked in the soup. For ten small dumplings, use a full cup of sweet milk, one heaping teaspoon of baking powder sifted in with enough flour to make a stiff dough and a scant teaspoon of salt. Drop dough in soup (in spoonfuls.) One hour before beans are tender, cover kettle and boil very slowly.—B. O. R.

Personal Column



MRS. MORGAN'S CHOICE

Here is a quilt pattern I designed last night. I call it Mrs. Morgan's Choice and it looks fine if pieced of two colors. Mrs. Morgan.

—The original block Mrs. Morgan was kind enough to send me is pieced with the two colors, blue and white, and it is real pretty. I have several beautiful designs that have been sent in by my good readers and I will publish them from time to time. Be on the look-out for them.—Mrs. Annie Taylor.

Daughter Tries Recipe.—I write to thank you for the valuable information I received through your paper and readers. We all enjoy your paper and wish it was daily. My daughter 10 years old is the first one to the mail box Saturdays so she can read her parts first. She also tries some of the recipes and is learning cooking out of the M. B. F. and has wonderful luck especially with cakes and salads. She wishes me to send you a way to clean a screen milk strainer. Take a bar of hard soap and rub the corner of the bar on the screen. That forces the dirt through screen, then wash the screen in hot water to dissolve the soap. Enclosed please find $2.00 for five years subscription.—Mrs. C. J. R., Adrian, Michigan.

Cured Eczema.—I sure enjoy the paper and I look every issue for pretty apron patterns. I am one of the victims of eczema. I have been using the recipe that was in your paper some time ago—sulphur ointment rubbed in, wash the feet in 1 quart of water in which two tablespoons of epsom salts were dissolved—and I am glad to say my feet are cured. I told others about the salts for a foot wash and they said "it worked wonders." I am so glad to be free from eczema I must write and tell you about it. Thanking you for past favors, I remain as ever,—Mrs. J. A. B., Croswell, Mich.

Mistake in Salad Dressing Recipe.—In regard to the receipt for salad dressing I sent for the benefit of Mrs. J. E. S., of Manistee; I think she would be very much disappointed, if she tried it as the paper printed it. If you refer to my letter of a couple of weeks ago I think you will find about half of the receipe has been omitted. I am sending it again in case the first one has been mislaid.

2 eggs well beaten, 1 cup vinegar, 1 cup sugar, 1 teaspoon flour, butter size of walnut, ½ teaspoon salt, 1 teaspoon mustard. Set in hot water and cook. Cool before putting on cabbage or potatoes. Thin as needed with cream or milk.

Mistakes will happen with the best of people. Ever a friend,—Mrs. A. R. L., Elsie, Michigan.

—I am very sorry that only part of this recipe was printed because I know how you feel when you decide to make "something different" and you follow the printed recipe in every detail—and then find that it isn't a success. I will try hard to see that this never happens again.—Mrs. Annie Taylor.

Paint outdoor flower boxes white as it makes the most effective background for the green foliage and the bright flowers, and keeps their roots cool. All out-door things should be painted at regular intervals to off-set the forces of destruction—sun, wind, rain, sleet and hail.

—if you are well bred!

Little Points a Girl Should Take to Heart.—If a small brother shows himself a nuisance where men callers are concerned, by tactless remarks, cat-calls, and obtrusive lingering at tete-a-tetes or other manifestations inspired by the perverted sense of humor common to his years, remember than an entente cordiale is better than a state of open warfare. If you care to exercise tact and friendliness you can make a friend of little brother instead of a chronic tease.

Young men like to talk about themselves. If you wish to be popular with them, this is worth bearing in mind. Listening well will make you more sought after than talking well.

A girl should not be a coquette. Yet, within limits, she is not unjustified in encouraging the attention of several admirers. A girl whose company others find desirable, is more apt to be sought out by the one individual to whom her preferences may incline.

Many young girls are at a loss as to exactly when they should begin calling a young man with whom they are acquainted by his first name. This is something which should come of itself and cannot be established by rule. It is best, however, when acquaintanceship has ripened so as to make a "first name" footing natural, to let the young man take the first step in establishing it. If you then allow him to call you by your first name you could quite naturally call him by his.

Menu for July 5th

*Brown Fricassee of Chicken
Boiled Rice Baking Powder Biscuit
Apple and Celery Salad
Mince Pie
Coffee

***Brown Fricassee of Chicken.**—Draw, singe, and joint chicken. Put 4 tablespoons fat in saucepan; when brown, put in chicken. Stir until every piece is nicely browned, then add 2 tablespoons flour, stir again, add 1 pint boiling water or stock, stir until it boils; add 1 teaspoon of salt. Cover, and let simmer gently until tender, then add 1 teaspoon onion juice, and little black pepper. Put neckpiece, heart, liver, gizzard, and back pieces in center of dish; put 2 pieces of breast on top, second joints on one side of plate, legs crossed on other, and wing at each end of plate. Pour sauce over, sprinkle with chopped parsley, and serve.

RECIPES

Sardine Sandwiches.—2 tablespoonfuls melted fat, 1 dozen sardines, 1 tablespoonful whipped cream, 1 tomato, salt, pepper, and paprika to taste, lettuce leaves, slices of brown or white bread. Bone and skin the sardines, then rub through sieve, add cream, fat, pulp of tomato and seasonings and mix well. Spread mixture between slices of brown or white bread and butter, stamp out in rounds, in center of each round force a row of whipped cream seasoned with salt and red pepper, place small stamped out leaves of lettuce round the cream. Sufficient for twelve sandwiches.

Tomato and Horseradish Sandwiches.—1 tablespoonful fat, ¼ cupful grated horseradish, 1 tomato, bread, ¼ cupful mayonnaise, salt and paprika to taste, parsley. Mix fat, horseradish, and mayonnaise together. Skin and slice tomato, sprinkle with salt and paprika. Spread thin slices of bread and butter with fat mixture, and put sliced tomato between, cut into fancy shapes and garnish with parsley. Sufficient for ten sandwiches.

Pimiento Cheese Sandwiches.—2 tablespoonfuls fat, 1 cupful diced cheese, 1 teaspoonful cornstarch, 6 tablespoonfuls milk, 1 teaspoonful salt, 1 can pimientoes, paprika to taste, graham bread. Put cheese into double boiler, add fat, cornstarch, milk, salt, and paprika to taste and stir and cook until smooth, then add pimientoes cut into small pieces. Spread between buttered slices of graham bread. Sufficient for twenty-five sandwiches.

The Runner's Bible

(Copyright by Houghton Mifflin Co.)

The Lord will perfect that which concerneth me. Ps. 138:8.

There is a perpetual working of the Perfect Law of God. Whether one receives a blessing from it or not, depends largely upon one's appreciation and recognition.

The Spirit of Pioneering

Impatience with present facilities, a restless searching for perfect things—these have driven men to discovery and invention. They possessed the early voyagers who turned their backs on the security of home to test opportunity in an unknown land. They explain the march westward that resulted in this settled, united country. And they have inspired the activities of the Bell System since the invention of the telephone.

The history of the Bell System records impatience with anything less than the best known way of doing a job. It records a steady and continuous search to find an even better way. In every department of telephone activity improvement has been the goal—new methods of construction and operation, refinements in equipment, discoveries in science that might aid in advancing the telephone art. Always the road has been kept open for an unhampered and economic development of the telephone.

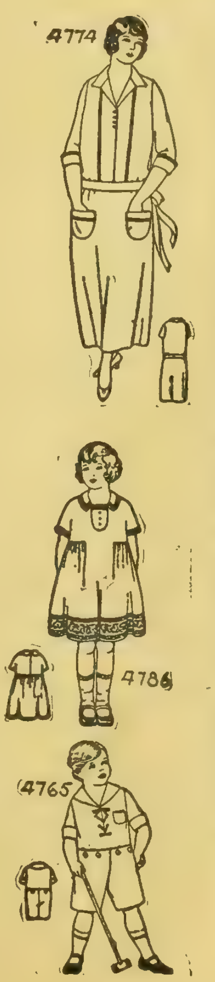
Increased capacity for service has been the result. Instead of rudimentary telephones connecting two rooms in 1876, to-day finds 15,000,000 telephones serving a whole people. Instead of speech through a partition, there is speech across a continent. Instead of a few subscribers who regarded the telephone as an uncertain toy, a nation recognizes it as a vital force in the business of living.

Thus has the Bell System set its own high standards of service. By to-day's striving it is still seeking to make possible the greater service of to-morrow.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY
AND ASSOCIATED COMPANIES
BELL SYSTEM
One Policy, One System, Universal Service

AIDS TO GOOD DRESSING

BE SURE AND SEND IN YOUR SIZE



4774. A Good Style for Mature Figures.—Linen, gingham, percale, jersey and crepe weaves are good for this model. The "vestee" is an attractive feature, it breaks the straight lines of the front, and is very becoming to stout figures. The sleeve may be in short "cap" length or finished with a cuff in elbow length. The Pattern is cut in 8 Sizes: 36, 38, 40, 42, 44, 46, 48 and 50 inches bust measure. A 38 inch size requires 5¼ yards of 27 inch material. The width at the foot is 1⅞ yard.

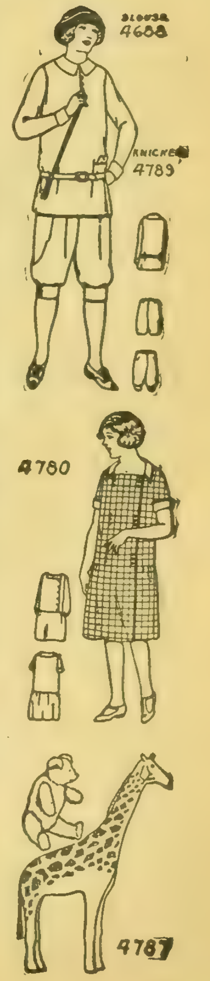
4786. A Pretty Frock for Mother's Girl.—Yellow linen with trimming of fancy wash braid or embroidery in colors will develop this model very attractively. The new alpacas and flannels are also good for this style. The Pattern is cut in 4 Sizes: 4, 6, 8 and 10 years. A 6 year size requires 2⅝ yards of 27 inch material.

4780. A Pleasing Model for a School Dress.—Checked gingham with bias binding and linene for collar and cuffs is here indicated. This style is also good for repp, chambrey, ratine and the new prints. The sleeve may be finished in wrist length, or in the short comfortable style shown in the larger view. The Pattern is cut in 4 Sizes: 6, 8, 10 and 12 years. A 10 year size requires 2¾ yards of 36 inch material. For collar and cuffs of contrasting material ⅝ yard is required.

4765. A Comfortable Suit for the "Little Man"—Freedom of movement and comfort is assured in a suit made like the model here portrayed. One may use linen, kindergarten cloth or seersucker. Or, have the blouse of Indian Head and the trousers of drill or chambrey. They may also be of pongee or flannel. The Pattern is cut in 4 Sizes: 2, 3, 4 and 5 years. A 4 year size requires 2⅝ yards of 32 inch material.

4787. Two "Nursery Toys."—The "Teddy Bear" has ever been popular with "little" children, and the Giraffe will please equally well. These toys may be made of felt, or flannel, or Terry cloth, and filled with cork, kopak, or excelsior. The "Teddy" may also be made of plush, "Terry bear cloth" or eiderdown. The Pattern is cut in One Size. It will require ⅝ yard of 36 inch material for the "Teddy" and ⅝ yard for the Giraffe.

4688-4789. A Practical Costume for Outdoor Sports.—Comprising Blouse Pattern 4688 and Knickers 4789. The Blouse is cut in 6 Sizes: 34, 36, 38, 40, 42, and 44 inches bust measure. The Knickers in 7 Sizes: 25, 27, 29, 31, 33, 35 and 37 inches waist measure with corresponding hip measure, 35, 37, 39, 41, 43, 45 and 47 inches. To make this Costume for a medium size requires 5⅛ yards of 32 inch material.



ALL PATTERNS 12c EACH—3 FOR 30c POSTPAID

Pattern Department
THE BUSINESS FARMER
Mt. Clemens, Mich.

The Children's Hour

SOWING JOY

EVERY day we are sowing seeds—
They are good or evil deeds,
Growing greater every day
All long life's weary way,
Shining e're as rays of joy
Or as things which do annoy.

Let us e're sow golden deeds
And uproot all of life's weeds,
Let us plant the seeds of joy
And all evil plants destroy,
Let us make our lives worth while—
By wearing e're a friendly smile.

We can fill this world with joy—
If we would all harsh words destroy,
If we would live like flowers do—
Blooming all our lives through,
We could make this earth a Heaven
If we'd use the talents we are given.

But we will try our very best—
To pass every trying test,
And scatter e're the seeds of joy—
Uprooting all things which annoy,
Filling our lives with golden deeds—
Which grow forth from little seeds.
—Composed by Gladys Classman, R1, Sebewaing, Michigan. Age 16 years.

DEAR girls and boys:—Do you know any girls or boys who are referred to as "those foreigners"? No doubt you do, and I am wondering how you treat them. Do you accept them as playmates and try to teach them our ways and the ways of our country? Or do you avoid them and leave them to play alone while you and your friends play together?

If you went to live in a foreign land, where they talked a different language and their customs were different from those of this country, you would not want the people to turn against you, would you? You would not learn to like the people and their country if they did not help you to understand their ways and language, would you? You might but chances are against it. We should think of this when we meet children from a foreign land who have come to our country to make their home. If they are to live here we want them to love America the same as we do and it is largely up to us whether they become good citizens and good Americans. Treat them like a friend. Some people wonder why they continue to talk their own language after they are in this country a while. We must remember that our language is not their native tongue and it is hard for them to learn how to express themselves in English. I think that if we would be careful of our speech when talking to our sisters or brothers from other shores, speaking slow and distinct they would learn much faster. America is in too much of a hurry and does not take enough time to train her future citizens.

Girls and boys, let us all decide to help at least one foreign girl or boy become a good American within the next year. And if you will help more than one, so much the better.—UNCLE NED.

OUR GIRLS AND BOYS

Dear Uncle Ned:—Here I am again with a poem which I hope you will see fit to print. I sent a poem about 'Spring' to you about the fist of May and was glad to see it in print. I wrote a poem about 'Sowing Joy' for the M. B. F. but I lost it so to-day I wrote the one I am now sending. I will close with love. As ever your loving niece,—Gladys Classman, R1, Sebewaing, Michigan.

Dear Uncle Ned:—We have been taking your paper and I always like to read it. The first thing I look for is the boys' and girls' page. I have never written to you before, so I thought I would write a few lines to. I will describe myself. I am 13 years old, have blonde hair and light blue eyes, am light complexioned, and five feet and three inches tall and weigh one hundred and five pounds. I am in the 6th grade at school. I live on a farm of 170 acres of land. We have 17 head of cattle, 4 horses and 100 chickens and 4 pigs. I have two brothers and five sisters. My mother is away. Uncle Ned is it the style to have your hair bobbed or have it grow out? I never see any letters from Summit City. The weather is very warm up here. We had a little storm but it went away. I wish some of the boys and girls would write to me. I would be very glad to answer all the letters that I get. I will have to close before Mr. Waste Basket get this letter. Good bye Uncle Ned. Your Want-to-be niece,—Valeria Rodes, R. 1, Box 42, Summit City, Mich.

—I would say the style is to have the hair bobbed. It seems you seldom see a girl with long hair any more.

Dear Uncle Ned:—I am a lonesome boy who wants to join your merry circle of cousins. Well I guess I had better describe myself. I am 5 foot 7 inches tall, weigh 143 pounds, blue eyes, black hair and my age is between 15 and 20. The girl that guesses it right will receive a real box of—well Uncle Ned I won't tell what is in that box. Well I must close or Mr. Waste Basket will receive my letter. From your want-to-be nephew,—Billy Frank, Box 87, Alabaster, Mich.

Dear Uncle Ned:—I have been a silent reader of the M. B. F. for a long time so thought I would write. I hope this letter does not reach the waste basket. My, it seems as though it would never be summer doesn't it? If it doesn't warm up pretty soon we will have to pack our trunks and go to Florida. Ha! Ha! We found a few wild strawberries. There are lots of green ones. We have quite a patch and expect to get quite a few strawberries. We set out the patch last year. We have our garden planted and it is up now. We have to weed it. Do you like to weed garden? Well I guess I had better describe myself. I am a girl 11 years old. I have blue eyes, brown hair (bobbed), and 4 feet 8 inches tall. I weigh about 84¼ pounds, am in the 7th grade at school. I haven't heard whether I passed or not. I will close hoping some of the boys and girls will write to me. I will answer all letters. Yours with best wishes,—Doris McBride, Hopkins, Michigan, R1.

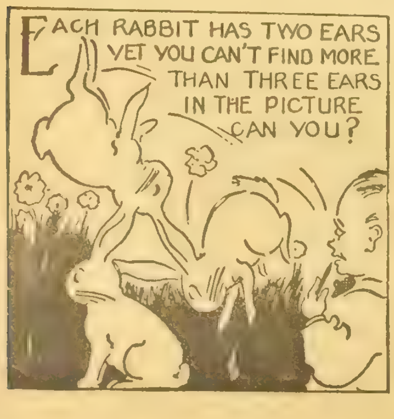
Dear Uncle Ned:—I think Mr. Waste Basket must be pretty fat by now. He has gobbled up two of my letters to say nothing of all the others. I hope he doesn't eat this one as it might be interesting to some of the boys and girls who have never seen a fish hatchery. Mrs. Frasher, our teacher, invited the scholars to go home with her at different times, of course. Reva, a schoolmate of mine, and myself went home with her for the week end. On Sunday we went to Paris to see the fish hatchery. It certainly is fine. The pond is separated into different parts. The large fish in one part and the smaller ones in another part, and so on. The fish are very pretty. Some of them are blue, and some are green. I saw one that was yellow. They are all spotted with black. After we had looked at the fish in the pond we went into the building which is quite large. There are large tanks inside with fish in them. A few of them are quite good sized, but mostly they are tiny fish and the eggs. In some of the tanks there are tiny fish in the eggs with just their heads and tails out. Then there are places where the fish are entirely out of the eggs. It is all very interesting. I guess that is all there is to write about that. You say you would like to know what I look like? There really isn't much to. I am five feet five inches tall and weigh one hundred and seven pounds. I have dark red, bobbed hair, blue eyes and a fair complexion. I am fourteen years old, and I will be in the seventh grade next year. I walk a mile and a half to school. Hoping some of the cousins will write to me, I will bid farewell to Uncle Ned and Cousins.—Miss Avis Smith, R2, Blanchard, Michigan.

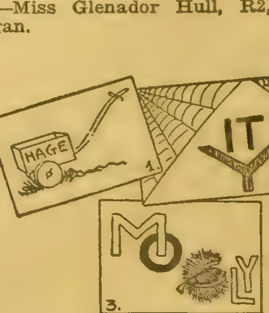
Dear Uncle Ned:—I have been a silent reader of the M. B. F. for over three years and enjoy the reading very much. I thought I would write and see if I could join the Merry Circle. Hold on! I better describe myself. I have black hair, light blue eyes, rosy cheeks, am 5 feet 7 inches tall and am 14 years old. I live on a 40 acre farm 4 miles from Lake Huron. We have a pair of twin lambs, we took their pictures the other day. For pets I have 3 cats and 1 dog. I went to school every day and our school is out now. I am in the 8th grade. I like school just fine. Will have to excuse poor writing this time for this is the first time I ever had my name in print, so I am excited. I like to go to church and Sunday school. I can memorize every book in the bible. I have lots of friends to play with and there are lots of children living around here. My girl friend's name is Mary B. I will close with a riddle for the boys and girls to guess: Round as a apple, round as a biscuit, busy as a bee, the prettiest little thing you ever did see. The one that thinks they know this riddle write to me and I will see if you got the answer right. —Mable Toly, Carsonville, Mich., R4.

Dear Uncle Ned:—I have been reading the M. B. F. for some time and sure enjoy reading it. Well I will describe myself. I have black hair which of course is bobbed and have fair complexion and rosey cheeks. I am "sweet 16" and my brithday is in October. Do you like bobbed hair? I was to a dance Tuesday and sure had a nice time. I certainly like to dance. I go to a dance twice a week. There was a dance here at our place last Saturday night and there sure was a big crowd. I am planning on going to Detroit in July. I never was out there yet and am very anxious to go and see what kind of a city it is. I often think I will miss the dances around here, also my good friends. I got a letter from my sister in Detroit the other day and I was telling her in the letter I wrote about all the dances there are around here and she said I should not mention them because it makes her lonesome and blue. Well I think my letter is rather long so will close with hopes of receiving some letters from some of the cousins.—Mabel Monette, Cathro, Michigan.

Dear Uncle Ned:—This is not the first time I have written you. I have written three or four times before but did not see them in print so I will try again. I am in the sixth grade. My age is between seven and eighteen. The one that guesses my age correctly will receive a card and a long letter from me. My first name is Mildred. How many children are there Uncle Ned that are named that name? I am sending some riddles: Little Miss Ettycoat, in a white petticoat, the longer she stands the shorter she grows. Ans.—Candle. There is a little white house and full of meat but no door to get into eat. Ans.—Egg. What's the difference between a hill and a pill? Ans.—One's hard to get up and the other's hard to get down. This is all for now.—Mildred Lindhurst, R. 2, Ceresco, Michigan.

Dear Uncle Ned:—May I join your merry circle. I live on an 87½ acre farm three and one half miles from Berry. My father has taken the M. B. F. for three years. I enjoy very much reading the Children's Hour. I am 5 feet 2 inches tall, I have dark red hair and hazel colored eyes. I am thirteen years old and my birthday is December 8th. I have two sisters. Mary is seventeen and Jean is almost three. I go three and one half miles to school. Hoping to get a lot of correspondence. As ever your niece,—Miss Glenador Hull, R2, Perry, Michigan.


EACH RABBIT HAS TWO EARS
YET YOU CAN'T FIND MORE
THAN THREE EARS
IN THE PICTURE
CAN YOU?



Each picture represents the name of a city in Missouri. What are the three cities?

Answer to last puzzle: The objects are: LA, SAW, SI. NINE, LEG, BOARD and BONES. The names of the stars are: GLORIA SWANSON and BEBE DANIELS.

Surprises At the Dog Parade

CARTER gave a sharp whistle to to awaken "Ruffy" who was asleep on the front porch. The dog looked up out of one eye, then seeing his young master sprang to his feet and trotted down the walk to where Carter stood. "Come on, old boy, we've got to beat it. The parade begins at ten sharp."

Ruffy seemed to understand and he ran down the street in an excited manner, his long yellow hair shining in the sunlight.

Carter could not take the dog on the street car, so they started on their three-mile walk to the heart of the city where, in the large auditorium, all the boys and girls and their dogs were to assemble before the great event of the summer—the dog parade. Many prizes were to be awarded at the termination of the procession.

Each child in his own heart knew that his dog would be a prize winner.

Carter was proud of Ruffy, a beautiful, yellowish-brown collie, with great, big brown eyes that looked up into his little master's face with admiration every few steps.

As they approached the auditorium Carter saw a steady stream of children and dogs coming from all directions. Some of the dogs were led by a leash, some small ones were carried, others rode in wagons and one small white fluffy spitz rode in state, in a baby carriage.

Before Carter entered the big building, where all the dogs could be heard barking and yelping at each other, he put on Ruffy's leash so he could hold him. Ruffy might get into a fight, if not held tight. The children struggled to keep the animals from pitching into each other. One fight was called off between a Scotch terrier and a Boston bull terrier, when it looked as if the two hundred dogs were all going to join in.

The band struck into a march, men called, and the line of procession began to form. First came a St. Bernard led by a small girl; then came the tiniest dog, a Mexican hairless; then a wonderful white Russian wolfhound; a bull dog with a pipe in his mouth and glasses on his nose came next; following him came Airdales, Irish setters, and representatives of all the different terrier families. All the leading breeds were in the parade. Some of the dogs liked it, others would not keep in line and made wild dashes to get away.

Then came Carter's turn. He was ready to start, his face shining with joy, until a woman passed him who shouted, "Oh, that's Rex, my dog!"

Ruffy heard her voice and gave one bound toward her.

Carter stood by, declaring, "He's mine. He's mine, and I paid for his license with all my own money."

Carter's place was filled in the line while he tried to claim Ruffy's ownership.

The lady said that Rex had been lost for two months. The dog seemed bewildered. First he jumped all over the lady, then over Carter who, finding the dog knew the woman, exclaimed, "He came to my house two months ago and whinned to get in, one cold morning. We tried to make him go away, but he would not go. We looked in the ads for a lost dog, but not any were found about Ruffy. So I fed him and I guess he loved us, 'cause he stayed." Carter leaned over and patted the dog, then threw his arms around his neck and buried his face in the mass of Ruffy's long yellow hair. When he looked up there were tears in his eyes and his voice trembled. "Take him away, quick, if he's yours."

The lady felt badly and offered Carter some money for being kind to her dog, but the lad refused it. "No, no, please, I can't take it."

Manfully Carter and Ruffy parted, and the tears running down each cheek. He dashed them away before he thought any one would notice him. But—a man had watched the parting of the boy and dog. The parade was going down the street.

Some one touched Carter. "Hello, son, you are the boy I'm looking for! Will you take this dog in the parade for me? You seem to have lost your dog. His name is "Max." Hold on to him tight, he is pretty lively."

Before Carter could speak he had been given the leash and pushed into position in the parade. He looked down at the dog; he smiled; he was in it after all. The band played, the people shouted, and the dogs yelped as they walked through the crowded streets. Then, at last, the two hundred children and their pets came back to the auditorium and passed before the judges' stand. Here the prizes were to be awarded.

Five dollars went for the best bred dog. Then two dollars for the largest dog, the smallest, the best behaved. The same amount was given to the best cared for dog, and Carter felt a pang grip his heart as Ruffy was given that prize.

Many more prizes were called. Carter started looking for the man whose dog he had. Soon he saw him standing in the judges' stand. The man stood up and made an announcement. "Boys and girls, the big prize of the day is now to be given away. It is the thoroughbred Airdale, Max. He goes to the most deserving boy, Carter Robinson."

So Carter went home, in the gentleman's car, the proud possessor of Max, who from the very start loved his new master.

Could Our Tax Totals Be Held Down By Law?

(Continued from Page 3)

to back them, legislators could discharge much more easily the never-ending procession of individuals, committees and delegations who besiege the state capitol in quest of appropriations.

"When property taxes are limited the legislature may choose between two courses. It may hold expenditures to the revenues placed at its disposal or it may draw revenues from other sources.

"With the rapid growth of Michigan and the persistent public demand for more and better governmental service, the inevitable increase in the cost of government must be apparent to all. It is by anticipating increased expenditures that tax limitation promises its greatest service. After expenditures have undergone the pruning that would naturally follow controlled revenues, the legislature would be faced with the task of producing funds from other sources. Classes of taxpayers now carrying less than a fair share of the cost of government would be asked to assume an increased load. Some classes of the property now paying nothing would be asked to assist. Real estate's load would remain practically stationary. New revenues would be spent in lieu of rather than in addition to taxes from real estate.

"The operation by which the proportion borne by real estate would be reduced, probably is apparent already. As total taxes go up and up, real estate's share (the amount remaining stationary) would become proportionately smaller and smaller. The percentage of real estate taxes to total taxes would drop from 79½ per cent to 70 per cent, 65 per cent and thus on down until it reached a proper ratio. When the line representing real estate taxes dropped to the line representing real estate wealth (as it would eventually under the limitation plan) real estate would again step into the ranks with other taxpayers. She has no desire to escape her fair responsibility to government.

Has High Approval

"The Michigan Real Estate Association's plan for tax limitation is not a lately-conceived tax cure-all. The plan was advanced by the association two years ago and presented to the legislature of 1923. It passed the house by a handsome vote and came within two votes of passage in the senate. It has been submitted to the searching scrutiny of economists, tax students, editorial writers and legislators of several states. Not one weakness in the plan has been pointed out. Not one intelligent argument against it has been advanced. In contrast, it has been complimented from scores of sources. Many believe that within the plan is to be found a suggestion that would clarify discussions that have perplexed many legislatures.

"The Michigan Real Estate Association does not say that approval of the constitutional amendment it seeks would solve the problems of real estate taxation. It recognized that there still would remain the problems of city, school and county taxes and that these vastly overstate taxes. But the legislature and state officers are concerned particularly with state taxes and it is to them that the Michigan Real Estate Association will present its conclusions next January.

"The fact that no weakness in the plan has been revealed cannot be accepted as proof that none exists. The Michigan Real Estate Association is interested in results rather than methods and holds an eager ear for the one who can improve upon its plan or offer a better one. The organization is not bigoted.

"Let there be searching analysis of the plan advanced but let those who participate proceed fairly. The Michigan Real Estate Association will have small patience with the person either in public or private life, who, inspired by insincere motives, undertakes to divert attention from an action that threatens to disturb the blissful repose of some class of property that now enjoys tax benevolence, or in fact, tax immunity."

How About It, Folks?

Such, then, are the arguments advanced by the Michigan Real Estate Association and we are glad to present them herewith for the thoughtful consideration of the readers of THE BUSINESS FARMER. It is time that we thought and thought hard about this extremely vital question of tax reduction and readjustment. It may well be said without exaggeration that there is no more important and timely question before our citizenship today. It cannot be over emphasized.

The insiduous ramifications of the baneful effects of high taxation are forcefully pointed out by Professor Clyde J. Crobaugh of Indiana University in the leading article in the Kiwanis Magazine for June of this year. Professor Crobaugh concludes his plea for tax reduction as follows:

"It has been demonstrated by experience that high taxes interfere with the normal course of business, divert capital into unprofitable channels, and put a brake on initiative and a damper on enterprise. Excessive taxes also compel a curtailment of consumption and lower the standard of living. Tax reduction will benefit all interests. The farmer will be greatly benefitted by lower taxes. Reduced taxes will help business by decreasing the cost of production. Tax reduction will even aid the government by removing the temptation to prodigality, waste, extravagance and corruption. The consumer will be benefitted by lower taxes through a decrease in the cost of living.

"Can there be a reasonable expectation for tax reduction in the near future? This question is no doubt upon the lips of millions. The answer depends upon the people themselves. The taxpayers must be interested in their own affairs, for tax reduction is the people's business."

M. A. C. WILL EXHIBIT SEPTIC TANK AND DISPOSAL SYSTEM

DURING August, September and October the M. A. C. will send a demonstration train through the southern four tiers of counties in the state demonstrating a septic tank and water disposal system for the farm home and outlying buildings. Mr. O. E. Robey, extension specialist of the Agricultural Engineering department, will have charge of the train.

The new system, which is said to make possible efficient, cheap and sanitary sewage disposal, besides safe-guarding the water supply from contamination, has been perfected by Mr. Robey and Prof. H. H. Musselman, head of the M. A. C. Agricultural Engineering department, and is the outgrowth of the experience gained through the construction of nearly 100 systems and from observations on the operation of many of these systems under various conditions, extending over a period of eight years.

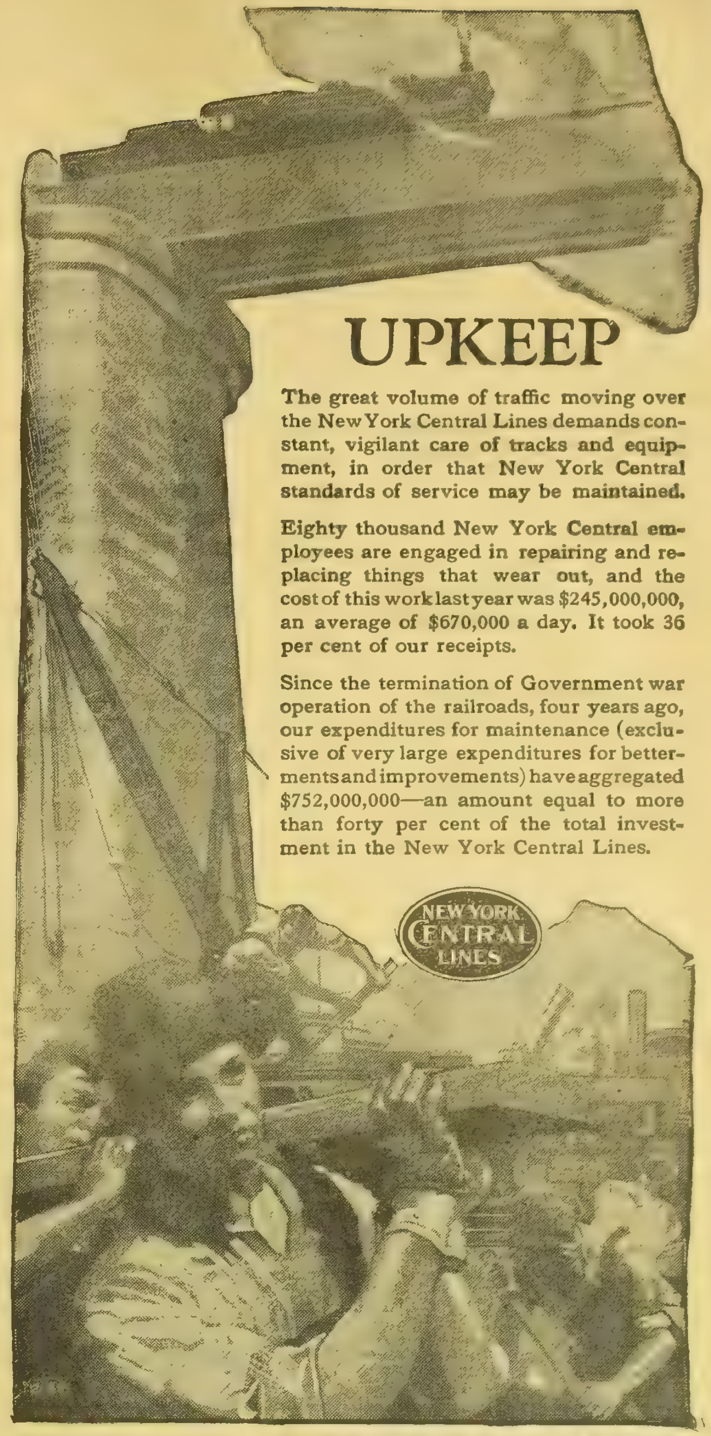
The demonstration train will travel by truck, giving two demonstrations each day and devoting two days to each county. A complete septic tank will be constructed and demonstrated at each stop.

CLUB LEADERS HOLD SUCCESSFUL MEETING

SIXTY county boys' and girls' club agents and leaders attended the meetings of the ninth annual training school and club leaders' conference which was held at Michigan Agricultural College from June 17-20, according to R. A. Turner, state leaders of boys' and girls' club work. The visitors were addressed during the conference by acting-president R. S. Shaw, R. J. Baldwin, director of extension work, Mrs. L. H. Campbell, state leader of home demonstration work, R. A. Turner, and a number of M. A. C. department heads and club leaders.

M. A. C. INSTITUTES NEW POULTRY SCHOOL

THE first formal school in poultry judging, breeding and management to be offered by a Michigan educational institution commenced at Michigan Agricultural College on Monday, June 30, ends on Saturday, July 5. The course is designed to prepare those who satisfactorily complete the work to become poultry cullers on a commercial basis, in response to a widespread demand from Michigan farmers, according to Prof. E. C. Foreman.


UPKEEP

The great volume of traffic moving over the New York Central Lines demands constant, vigilant care of tracks and equipment, in order that New York Central standards of service may be maintained.

Eighty thousand New York Central employees are engaged in repairing and replacing things that wear out, and the cost of this work last year was $245,000,000, an average of $670,000 a day. It took 36 per cent of our receipts.

Since the termination of Government war operation of the railroads, four years ago, our expenditures for maintenance (exclusive of very large expenditures for betterments and improvements) have aggregated $752,000,000—an amount equal to more than forty per cent of the total investment in the New York Central Lines.

NEW YORK CENTRAL LINES

NEW YORK CENTRAL LINES

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AND THE NEW YORK CENTRAL AND SUBSIDIARY LINES

General Offices—466 Lexington Ave., New York

WHEN WRITING TO ADVERTISERS, PLEASE MENTION THE BUSINESS FARMER

CHICKS of QUALITY

Bred from Sires of 250 to 280 Egg Strains

BIG BARGAINS for June and July

Prices now within the reach of everybody. Get chicks in June and July and gather your harvest next winter. This is the most **economical** time to buy and the most favorable time to raise chicks. You can get them in the big outdoors at once which saves labor, **cuts down your feed bill** and makes the chicks **grow twice as fast.** Bright, balmy days bring splendid development. Our **June** chicks will begin to lay in **October** and **July** chicks in **November.** The **BIG SAVING** in price gives you an opportunity that you cannot afford to let pass by.

Chicks that are **strong, peppy,** from high production, egg bred stock are the chicks that **pay.** We have **sacrificed on price** but the same standard of supreme **quality** is always maintained regardless of price. Our breeders are producing heavily, our incubators working to full capacity and this enables us to give these high grade chicks at such **extremely low prices.**

EXTRA SPECIAL FOR JUNE AND JULY

Varieties	25	50	100	500	1000
Extra Selected Barron or Hollywood S. C. White Leghorns sired by 250 to 280 egg males	$2.75	$5.25	$10.00	$45.00	$ 90.00
Selected Barron White Leghorns	2.50	4.75	9.00	42.50	80.00
Extra Selected Sheppare Mottled Anconas	3.00	5.75	11.00	52.50	100.00
Selected Mottled Anconas	2.50	4.75	9.00	42.50	80.00
Selected Park's Bred-to-Lay Barred Rocks	3.75	7.00	13.00	62.50	120.00
Broiler, Mixed Chicks	Seven cents straight.				

PULLETS AND BREEDING STOCK FOR SALE

After June 1st we offer Selected White Leghorn Pullets, 8 to 10 weeks old at $1.10 each; Sheppard Ancona Pullets at $1.30 each and Barred Rock pullets at $1.50. Prices reduced for 100 or more.

After July 15th we have **700** choice **Tom Barron** and **400 Sheppard Ancona** breeding hens for disposal at **$1.25 each.** Also, selected cocks of same breeds for **$1.25 each.** These must be sold to make room for our growing stock. Our space is limited.

ORDER AT ONCE from this ad. We can make immediate shipment. Cash with order or sent C. O. D. if desired. All chicks sent to your door by parcel post prepaid. 100% alive delivery guaranteed. Pullets and stock shipped by express, charges collect. Catalog free.

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a New Improved
DE LAVAL
Cream Separator
Side by Side

with any other you may be thinking of buying.

If you then still choose the other machine you will know what you are doing, but the chances are a hundred to one that you will not and will know why you do not.

We can make no claims of De Laval superiority in every feature of separator value and practicability which seeing and trying the machine itself will not more than substantiate.

A Cream Separator is the most important farm equipment investment any cow owner ever makes. He can't afford to make a mistake, or at least to do it unknowingly.

The De Laval Separator Company

NEW YORK
165 Broadway

CHICAGO
29 E. Madison Street

SAN FRANCISCO
61 Beale Street

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Advertisements inserted under this heading for reputable breeders of Live Stock at special low rates to encourage the growing of pure-breds on the farms of our readers. Our advertising rate is Thirty Cents (30c) per agate line, per insertion. Fourteen agate lines to the column inch or $4.20 per inch, less 2% for cash if sent with order or paid on or before the 10th of month following date of insertion. SEND IN YOUR AD AND WE WILL PUT IT IN TYPE FREE, so you can see how many lines it will fill. Address all letters,
BREEDERS DIRECTORY, MICHIGAN BUSINESS FARMER, MT. CLEMENS, MICH.

CLAIM YOUR SALE DATE

To avoid conflicting dates we will without cost, list the date of any live stock sale in Michigan. If you are considering a sale advise us at once and we will claim the date for you. Address, Live Stock Editor, M. B. F., Mt. Clemens

CATTLE

HEREFORDS

WE HAVE BRED HEREFORDS SINCE 1860 Our herd bulls are International Prize Winners. Stock of all ages for sale, at Farmers prices. Write us for further information.
Feed Herefords that fatten quickly.
CRAPO FARM, Swartz Creek, Michigan.

HEREFORD STEERS

64 Wt. Around 800 lbs. 70 Wt. Around 750 lbs.
88 Wt. Around 650 lbs. 44 Wt. Around 600 lbs.
46 Wt. Around 500 lbs. 50 Wt. Around 500 lbs.

Well marked and show splendid breeding, deep reds, good stocker order. Herefords are usually market toppers when finished. Anxious to sell your choice one car load or all. Give number and weight preferred.
V. V. BALDWIN, Eldon, Wapello Co. Iowa.

SAVE ONE-HALF ON YOUR MAGAZINES

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The Business Farmer 1 yr.
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All Fo $1

Michigan Business Farmer,
Mt. Clemens, Michigan.
Gentlemen: For the enclosed $..................send the Michigan Business Farmer and all Magazines in Club No.....................

My Name..............................

Postoffice..............................

R. F. D..............., State..............................

HOLSTEINS

FOR SALE. REGISTERED HOLSTEIN MILK cows and young stock. (7.) T. B. Tested, fine conditions. Have sold our farm.
VISSER BROS., R. F. D. 8, Holland, Michigan.

SHORTHORNS

FOR SALE—ONE RED SHORTHORN REGIStered bull, age ten months. One roan shorthorn registered bull, age eight months. Also four red heifres, coming two years old.
Henry J. Lynch, Mayville, Tuscola Co., Mich.

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RED POLLED BULLS READY FOR SERVICE. From good milking strains. Prices right.
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WE HAVE SOME FINE YOUNG ANGUS BULLS from International Grand Champion Stock at reasonable prices. **E. H. KERR & CO., Addison, Mich.**

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REG. JERSEYS, POGIS 99th OF H. F. AND Majesty breeding. Young stock for sale. Herd fully accredited by State and Federal Government. Write or visit for prices and description.
GUY C. WILBUR, BELDING, Mich.

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MAY — GUERNSEYS — ROSE

STATE AND FEDERAL ACCREDITED
Bull calves out of Dams up to 877 pounds fat. Sired by Bulls whose Dams have up to 1011 pounds fat. The homes of bulls; Shuttlewick May Rose Sequel, Jumbo of Briarbank and Holbecks' Golden Knight of Nordland. From Dams producing 1011.18 fat, 772 fat and 610 fat.
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PURE BRED GUERNSEY BULL CALF for sale.
C. R. TALBOT, Farmington, Michigan.

SWISS

For Sale list of **BROWN SWISS** cattle and information concerning the "BIG BROWN COW", write **SEC. MICHIGAN BROWN SWISS BREEDER'S ASS'N., Sebewaing, Mich.**

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O. I. C.'S 12 YEARLING GILTS TO FARROW in April and May. Large stock, recorded free. Also spring pigs.
OTTO SCHULZE & SONS, Nashville, Michigan.

HAMPSHIRES

HAMPSHIRES—BRED GILTS AND BOARS at bargain prices. Write your wants. 12th year.
JOHN W. SNYDER, St. Johns, Mich., R. 4.

DAIRY and LIVESTOCK

MICHIGAN GETS CHOICE WISCONSIN HOLSTEINS

SEVEN Michigan Holstein breeders increased their herds with 16 purebred Holsteins purchased at the dipersal sale of the John Erickson herd at Waupaca, Wisconsin, recently. This herd was recognized as the leading Holstein breeding establishment in the United States and the average selling price of $1,138 for each of the 84 animals sold, over one-third of which were less than two years of age, is the highest average attained at Holstein auction sales in recent years. Cattle were sold to buyers from Japan, South America, Canada and 15 states.

Those of Michigan listed among the purchasers and the number of cattle bought by each are: Detroit Creamery Company, Detroit, seven; James P. Jones, Detroit, three; Mrs. Horace Dodge, Detroit, two; and John E. Lambert, Detroit; G. A. Casagranda, Iron River; Martin D. Buth, Comstock Park, and Wm. Tyson, Washington, one each.

FARMERS' CATTLE JUDGING CONTESTS

A CONTINUOUS cattle judging program for farmers from every state is being arranged for the National Dairy Exposition at Milwaukee, September 27th to October 4th. Coupled with the contest will be dairy cattle demonstrations by national expert judges of cattle. These two features will afford a liberal education to every man who is a buyer of dairy cattle and wishes to be informed on how to select good ones.

Prizes are to be offered at farmers' Judging Contests at county fairs and farmers' picnics in dairy states. Winners at these contests will attend the National Dairy Exposition and throw their hats in the ring. If they do not win they can step to the side lines and listen to the experts explaining the points that are judged in the rings where the ribbons are tied on the cattle and not on the men. The National Dairy Association is offering special prizes to the winners of the contest. The leaders for dairy development at the agricultural colleges in each of the states is working out plans for participation in these contests by farmers from their state.

Another attraction for farmers will be the exhibit of grade cows from Cow Test Associations, all to go on the auction block during the week of the Show. These cows will all be exhibited in the regular classes of the Show and judged by the regular judges of the Show, their sanitary certificates entitling them to enter any state and their record of production certificates officially signed will be attached to the cows.

These contests and exhibits give a fellow a life time lesson of great value and are only a part of the plans to make this year's National Dairy Show a farmers' Show.

CHICAGO ASSOCIATION OF COMMERCE OFFERS SCHOLARSHIPS

AGRICULTURAL college scholarships will be awarded to the three contestants making the highest scores in the non-collegiate live stock judging competition to be held in Chicago, November 28th, during the silver jubilee celebration of the International Live Stock Exposition according to an announcement of the Chicago Association of Commerce.

These scholarships, totaling $1,000 will be known as the Chicago Association of Commerce scholarships and constitute a part of its campaign for the betterment of agricultural conditions. Competitions at Chicago is limited to one team of three juniors from each state. Preliminary contests to select the state representatives are held in communities and counties and the preliminary winners are brought together at the State Fair or Agricultural College to determine the State Championship team.

FEEDING VALUE OF SWEET OR SOUR MILK

I would like to know through the columns of your paper which is the best feed for pigs, sweet or sour milk.—J. S., Pinconning, Mich.

EXPERIMENTS have shown that there is no difference in feeding value between sweet and sour milk. So far as experiments have been conducted at this station, it has been found that where skim milk has been fed after the foam has settled off or been removed in comparison with skim milk soured by the use of a pure lactic acid culture, that there was no difference in feeding value. Sour milk which is allowed to stand around in dirty receptacles often has other organisms aside from the lactic organisms working and may prove very detrimental.—Geo. A. Brown, Professor of Animal Husbandry, M. A. C.

Lucky Farmers At Rives Junction, Michigan

THEY say that farmers won't get together, that they won't stick! That farmers co-operative enterprises fizzle out! Et cetera!

Some truth in these claims, all right, so it is refreshing to discover a bunch of farmers that did get together and are still glued.

They also—they that know the farming game from the calloused hand, sweaty-shirt angle—claim that lady luck seldom tries to vamp a farmer.

Nothing erroneous about the statement either. Again, then, is interest aroused to discover that luck—"Bull" luck—recently smiled upon this aforementioned co-operating bunch of farmers.

The Bunch, alias The Rives Bull Association. Meet them, off of Rives Junction, Michigan: A. H. Perrine, Pres., cows pledged, 15 purebreds; Ben L. Smith, vice-pres., cows pledged, 10 purebreds; L. F. Foster, sec.-treas., cows pledged, 12 (1 purebred); Will Perrine, member, cows pledged, 8 (2 purebreds); Burt Phelps, member, cows pledged, 12 grades; C. J. Cochran, member, cows pledged, 5 (3 purebreds); Lee H. Foster, member, cows pledged, 10 (1 purebred); Burt Blair, member, cows pledged, 10 (1 purebred); Clare Darling, member, cows pledged, 15 (8 purebreds); Total 97 (31 purebreds).

What did they do? Got together amongst themselves and decided that what they needed most as dairymen and breeders of Holstein cattle was a Real Bull. They figured that collectively they could buy a better bull than any one of them could afford to buy all by his lonesome. They allowed that using an extra high class sire would mean more profitable cows to milk after while, would mean that their surplus stock either pure-breds or grades would sell to better advantage if sired by or in calf to a far-better-than-ordinary-bull.

In completing their organization in January, 1923, these men were assisted by the County Agent of Jackson County, R. E. Decker, and by S. J. Brownell, then with the Dairy Department of the Dairy Department of the M. A. C. and the Michigan State Holstein Ass'n., also gave a boost or two toward the last.

King Sylvia Ferndale Aaggie 387538—that's the name of the bull the bunch finally purchased. He was born November 14, 1921. They paid a good sum for him, too, but it did not come so hard on any one member because each paid his share in proportion to the number of cows he expected to breed to the bull.

As to breeding, just "lookit" what they bot: Sire: Echo Sylvia King Model The senior herd sire of the Traverse City State Hospital. Dam: 3 records above 33 lbs., the highest 36.13 lbs. Her dam a twice 37 lb. cow. Dam: Rubertdale Flint Ferndale Aaggie, 32.37 lbs. butter, 561.1 lbs. milk Dam: 31.05 lbs. butter, 487.9 lbs. milk.

Now this bull had to have a home, so the bunch provided him with a couple of them. He sojourns with A. H. Perrine for three weeks and is then ambled over to the L. F.

Foster farm for a like stay. The rest of the bunch chip in in proportion to the cows they breed to pay these home-makers for the expense of care and feed.

Sixteen months have rolled around and all is well with the Rives Bull Ass'n. Bull looking better every month, stuff getting safe in calf to him, calves starting to come, straight, stylish rascals, members agreeing O. K. All lovely and then:

Here comes the luck!

Let the trumpets sound and the Bull Fiddle whang!

C. S. Heeg' Sons of Howell, Michigan, who sold the bull to the Rives bunch re-tested the dam, Rubertdale Flint Ferndale Aaggie, and made 36.18 lbs. butter from 631.3 lbs. milk!

The Rives bull now has an average 7 day production for his three nearest dams of 34.45 pounds butter. What breeder in Michigan has a sire boasting of better than that? And don't forget that the sire of the Rives Bull, Echo Sylvia King Model, the Senior Herd Sire at the Traverse City State Hospital, has for average production of his three nearest dams 38.16 lbs. butter in a week. He has eighty daughters in the herd, forty-two of them A. R. O. records, the highest daughter with over 32 lbs. as a Junior three-year old!

So, if any bull in active service in Michigan beats the Rives bull for 7-day average of his three nearest dams it is his own sire!

The boys at Rives are sure happy at this good fortune. But they are not leaving the future all to luck, no indeed. They are asking the milk-scales, the Babcock test, their bookkeeper to decide whether their cows are fit to mate with so good a sire. For over half the bunch are members of a cow testing association. In fact, Arthur Perrine, L. F. Foster & Son, Ben Smith and Lee Foster are working in their fourth consecutive C. T. A. year!

When the daughters of the famous bull come into milk they will undoubtedly have to prove by C. T. A. methods whether they are better, more economical producers than were their dams.

Surely farmers who have sufficient interest in their business to belong to a C. T. A., who have enough initiative to get together to buy a fine sire, who have the right amount of real neighborliness so that they hang together, surely these men deserved this fine piece of luck.

We all congratulate them.—J. G. Hays, Dairy Department, M. A. C.

VETERINARY DEPARTMENT

LUMP JAW

I have a two year old heifer that has a lump on her left jaw, about the size of a billard ball. When I cut it open quite a quantity of pus comes out. That was a week ago. On opening it the second time there is not pus but the swelling remains. Could you tell me what it is and what can be done to cure it. It first appeared two weeks ago. Some of my neighbors say it is lump-jaw. If this is true is it contagious?—M. L., Turner, Mich.

THE heifer in all probability has lump jaw. The swelling might, however, be a simple abscess. If an abscess and it is opened and drained, it will generally bring about a cure. Some cases of lump jaw can be successfully treated by the internal administration of potassium iodide. Better consult your local veterinarian about the treatment of this case. If it is lump jaw, he can supply you with the iodin together with the directions how to use it.—John P. Hutton, Assoc. Prof. of Surgery and Medicine, M. A. C.

BIGGEST HORTICULTURAL TOUR WILL COVER 17 STATES

FOR years, the Horticultural Societies of the different States in arranging the dates for their summer meetings have consulted their own convenience and have not given a thought to the fact that there are many horticulturists and orchardists in other States who would probably attend, if meeting dates did not conflict.

This summer the American Pomological Society has arranged for cooperation of 17 States that have arranged their meetings two or three days apart so there will be no conflicting dates and so one State meeting follows another. The American Pomological Society will cooperate in the program in each State and an official American Pomological Society speakers' car will go from State to State, thus giving the orchardists of each State an opportunity to hear some of the leading horticultural authorities of the United States. The speakers will go in relays, each speaker being on the program in several States—much like the large chautauqua circuits are arranged.

In the following list where the name of the State is given, it indicates that the State Horticultural Society meeting (of that particular State) will be held on dates printed before name of State. Where the word "touring" is opposite dates, it indicates time going from one State to another. Although no special itinerary on these "touring" dates can be lined up now, opportunity will be given to visit any interesting orchards that happen to be on the line of travel from State to State.

July	14-15	Kentucky.
July	15-16	Indiana.
July	17-18	Illinois.
July	19-20	touring.
July	21-22	Michigan.
July	23	touring.
July	25-26	Ohio.
July	27-28	touring.
July	29-30	Maryland.
July	31- 1	West Virginia.
Aug.	2	Virginia.
Aug.	3	touring.
Aug.	4- 5	Pennsylvania.
Aug.	6	touring.
Aug.	7- 8	New Jersey.
Aug.	9	New York (Hud. Val.)
Aug.	10	touring.
Aug.	11-12	Connecticut.
Aug.	13	Rhode Island.
Aug.	14	Mass. (Eastern)
Aug.	15-16	Maine.
Aug.	17	touring.
Aug.	18-19	New Hampshire.
Aug.	20	touring.
Aug.	21	Vermont.
Aug.	22-23	Mass. (Western)
Aug.	24	touring.

The line of tour his been arranged so that there will be the shortest jumps possible from State to State. Furthermore, the general direction of the route has been arranged so that most of our tour will be on hard surface roads where road conditions will cause the least possible amount of trouble. All details of the program, etc. to be under supervision of the State Horticultural Society of each individual State.

All orchardists should endeaver to attend their own state tour and meeting—also tour in as many other States as possible. This is a united effort to better the orchardists' condition and everyone should get behind the movement and boost to make it a splendid success.

THE ONE HUNDRED TENTH PSALM

(Continued from page 11.)

they marvelled while he tarried in the temple." There are those today who are wondering why our High Priest remains so long in his temple. But, listen! While he is there, the church is to keep up its fight against sin. The master is praying that our faith fail not. How long? Until we rule over our enemies in His Name. Until every man and woman has heard the call to mobilization. Then the Priesthood ends, and Jesus comes out of the temple to sit on the throne of his glory, "and before him shall be gathered all the nations," Matthew 25:31, 32. He that is willing shall inherit the new earth, but he that is unwilling shall be left in the way that perishes.

The battle seems hard and long, but our Leader is interceding with a God that "hath sworn victory" and will not repent. This is the surety that is given to the church. And since we are on the way to to that glorious day, let no one die the death of a neutral or conscript.

FREE BOOK ABOUT CANCER
The Indianapolis Cancer Hospital, Indianapolis, Indiana, has published a booklet which gives interesting facts about the cause of Cancer, also tells what to do for pain, bleeding, odor, etc. A valuable guide in the management of any case. Write for it today, mentioning this paper. (Adv

-Grass- is not enough!

Cows need more than green pasture, with its 70 to 80% water content, to stay at top-notch milk flow, health and condition. They need Larro too, because they cannot eat enough grass.

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Parke, Davis & Co.
DETROIT, MICH.

STRAWBERRY PLANTS $3.00 PER 1000. Black Raspberry $12; Red $13. 20 Iris $1. 8 apple trees $1. 15 grapes $1; 1000 grapes $25. We grow the best plants in Michigan. Free catalog. The Allegan Nursery, Allegan, Michigan.

CORN HARVESTER cuts and piles on harvester or windrows. Man and horse cuts and shocks equal Corn Binder. Sold in every state. Only $25 with bundle tying attachment. Testimonials and catalog FREE showing picture of Harvester. PROCESS MFG. CO., Salina, Kan.

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THICK, SWOLLEN GLANDS
that make a horse Wheeze, Roar, have Thick Wind or Choke-down, can be reduced with

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also other Bunches or Swellings. No blister, no hair gone, and horse kept at work. Economical—only a few drops required at an application. $2.50 per bottle delivered. Book 3 R free. ABSORBINE, JR., the antiseptic liniment for mankind, reduces Cysts, Wens, Painful, Swollen Veins and Ulcers. $1.25 a bottle at dealers or delivered. Book "Evidence" free.
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FOR SALE OLD CUT OVER LAND, SHEEP Ranch and Farm Tracts on long time cash payments or, on Alfalfa Seed crop payment plan. JOHN G. KRAUTH, Millersburg, Presque Isle County, Michigan.

FOR SALE:—40-80-and 240 ACRE FARMS taken on mortgage. Will sell cheap on easy terms, improved and with buildings. Address BOX C, Clare, Michigan.

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The Auto-oiled Aermotor is the Genuine Self-Oiling Windmill, with every moving part fully and constantly oiled.

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White Leghorns	$2.50	$5.00	$ 9.00	$42.50	$ 85.00
Barred Rocks	3.00	6.00	11.00	52.50	105.00
S. C. R. I. Reds	3.00	6.00	11.00	52.50	105.00

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Our strains are the best laying strains obtainable. Tancred and Barron White Leghorns, Parks' Barred Rocks and Michigan Agrl. College and Penn. R. I. Reds, direct from these breeders. Our birds have always proved their laying ability at official contests. Our chicks are hatched in the world best incubator, the only incubator that never over-heats and supplies moisture automatically thus assuring the strongest chicks possible.

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Varieties Prices on:	50	100	500	1000
Wh. & Brown Leghorns, Grade A	$6.00	$10.00	$47.00	$92.00
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Mixed Chicks, Light Breeds $8.00; Heavy Breeds, $10.00 per 100 straight. Double A grade Chicks $2.00 per 100 higher than above. Hatched under best conditions. Every chick carefully inspected. Reference: State Commercial Savings Bank. Order right from this ad with full remittance. There is no risk.
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Our BIG, FLUFFY, WELL HATCHED chicks will please you.

Varieties Prices on	50	100	300	500
White & Buff, S. C. & R. C. Brown Leghorns	$5.00	$ 9.00	$25.00	$40.00
English White Leghorns, Barred Rocks, Reds	6.00	11.00	32.00	50.00
Black Minorcas and Anconas	6.00	11.00	32.00	50.00
White Wyandottes, White Rocks, Buff Orpingtons	6.00	11.00	32.00	50.00
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Varieties Prices on	25	50	100	500
White, Brown & Buff Leghorns,	$2.75	$5.00	$10.00	$47.00
Barred & Wh. Rocks, Reds, Anconas,	3.25	6.00	12.00	57.50
Wh. & Sil. Wyandots, Blk. Minorcas,	3.75	7.00	14.00	67.50
White & Buff Orpingtons, Buff Rocks,	3.75	7.00	14.00	67.50

Mixed, all varieties, $9.00 per 100 straight. Postpaid. 100% live delivery guaranteed. Order from this ad. Bank reference. There is no risk. Free Catalog. Member I. B. C. A. H. B. TIPPIN, Box E, Findlay, Ohio.

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Prompt Free Live Delivery. Per 100 Leghorns, $10; Rocks, Reds, Orpingtons, Wyandottes, Anconas, $12; Lt. Brahmas, $15; Assorted, $7.00. Free Catalog gives quantity prices.
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Poultry Department

CHICK COMFORT IN HOT WEATHER

THE comfort of the chicks during the hot days that are here has a great influence in determining the extent of their growth and egg production during the coming fall and winter. Eggs in any appreciable quantity cannot be expected along other seasons except from strong healthy hens, full of vigor and vitality. The best way to conserve the vitality and build up the bodily strength is by keeping the birds comfortable, by providing for their real needs.

Chickens that are constantly exposed to the direct rays of the hot sun will be stunted and greatly weakened in vitality. Plenty of cool refreshing shade is necessary if the chicks are to develop in a normal manner. There is nothing more injurious to the growing flock than to compel them to remain out of doors in the sun during the heat of the day, exposed continuously to the burning rays of the summer sun. Natural shades are by far the best, but where such cannot be grown, then artificial shades should be arranged.

Muslin or burlap covered frames set at an angle so the birds will not roost on them are good. A shelter of leaky boughs elevated on crotched sticks about two feet above the ground are very satisfactory. The shade, however, given off by a green plant seems to be much cooler and more refreshing. This is doubtless due to the large amount of moisture which is constantly being given off by the leaves of such plants. Thousands of growing chicks are annually lost because of wrong methods and mistakes of shelterings and feeding. It behooves us to use methods which insure the lowest loss, most economical and quickest growth. There should be continuous growth, uniform growth, profitable growth and still more growth. These are the aims when caring for the chicks, cockerels and pullets during the summer on the range. I find that it is just as necessary to give care during growth as it is at earlier stages of chick life. In fact, care and careful management are required at all stages if you are to succeed. There is one need of our chicks that too often neglected, and that is their supply of fresh water, in clean vessels.

Fresh, Clean Water

The first thing that little chicks want, or older ones as to that, every morning, is a fresh drink of water, a need that should receive our special attention during the hot summer days. Chicks need lots of water and should have it, if we would find the season a profitable one at its close. It is very essential that pure water be kept before the flock at all times. One of the worst things to do is to neglect to water at a proper time, and then compel the chickens to get all the water for several hours at, perhaps, the close of the day. A chick should always know where the water is and be able to get it at all hours, and if it is not provided it will suffer greatly for want of it. There is no use watering chicks one day and forgetting the next. There is nothing exhileratiing or exciting about it but the "chore" of carrying water, of cleaning the water basin, of spraying the coops, are the things which will benefit the birds. Water goes to make up a large portion of the bird's weight.

During the summer, when the extremely hot weather comes, we should see that they have plenty of cool room and fresh air. Chicks must be watched that they do not crowd one another into corners, for smothering will surely follow as a natural result. Too many bunching together during the night is very injurious, and getting out in the cool morning get chilled and contract cold and roup. This often causes sorehead. The coops should be well ventilated and dry. They need unlimited fresh air in order to develop their bodies at the fair rate at which they are expected to grow. But at night, when at rest, it is positively essential that the growing youngsters must have verminless quarters.

Let us look to the growing of the chicks this summer, for we cannot afford to let them get stunted or checked in any way. Those who cannot or will not give poultry regular or constant attention, shelter them properly, supply proper food in liberal quantities and at frequent intervals, and pay strict attention to cleanliness and thoroughness in all the details of the management, need not expect to succeed, not even consider the question of profit or loss, for success and profit here mean some work in the business. You need not hang a horseshoe over your door to bring good luck to your enterprise, for there is no profit in neglected poultry. It is true that nature helps the poultry raisers a great deal during the summer months, but it is equally true the successful poultry raisers must be watchful and careful during the warm days, as well as during the severe days of winter.

A bit of care and forethought will help to insure better success with the summer flock.

These measures are simply commonsense thought put into practice.

I attribute my success to my interest in the poultry work, and to a natural love for my birds. Also, to good care, housing and feeding. If you wish to succeed with poultry you must give some of your time each day to them.—Farm and Ranch.

CAPONIZE SURPLUS COCKERELS

THE operation of caponizing young cockerels is a very simple one when it is once known. It takes one who has had some little experience but a fraction of a minute to do the work, once the chick is in hand. The practice of caponizing or castrating the surplus cockerels is a common practice in England, and has been for years. It is also quite common in many sections of this country adjacent to the larger cities of the North and East. If for any reason you fail to find a ready market for your cockerels during the broiler age then it is that you can take the caponizing scheme and get them in shape to make great big roosters for the fall and winter markets, bringing good full prices. In fact, in many sections where they are commonly known for their wonderfully tender flesh, they are always in demand at top prices. True, some sections of the country need to be educated to use them. The best market for them is at the big hotels where the guests are of such a class as to readily appreciate their goodness.

When you find your cockerels are not going to sell as high-priced broilers, lose no time in caponizing, for the operation must be done while they are small, so that the risk will not be so great in losses. The older they get the greater the loss of blood, and necessarily the danger is more. A set of instruments, simple in their nature, is required, and these can be purchased at almost any house handling surgical instruments, and a good many houses handling a full line of poultry supplies. When properly done the specimen will hardly stop growing for a day. One can study the internal conditions of the male in dead specimens intended for the table and see the locations of the organs. Then it is a good plan, if such can be secured, to get the services of an expert to give a few practical lessons in the work. With a clear head and a steady hand one can soon become expert at the work.

Also explicit directions accompany the instruments, so that the novice has but little trouble to understand the operation. Prices for them usually run from $3.00 to $5.00. The best and largest capons usually are obtained from the Amercian varieties, such as the Rocks, Wyandottes, Reds, Jersey Giants, and the like. Sometimes good heavy game crosses are good. That is the Cornish variety. Should you live in a section not educated to the value of the capon, it may stand you in hand to do a little educational work in the way of visiting the fine hotels and restaurants, telling them what you have in prospect for them and asking them to take capons on as one of their Sunday dinner specials. Roast capon. When tried a few times their desirability readily becomes apparent.

CONTROLLING STRIPED CUCUMBER BEETLE

DURING the past five seasons, the Entomological Section of the Natural History survey has carried on experiments to test different methods and materials for controlling the striped cucumber beetle.

In the course of this work, many poison and repellent dusts and sprays have been tested. The best results have been obtained each season from a mixture composed of one part calcium arsenate to twenty parts gypsum. This mixture was first tried by the Ohio Agricultural Experiment Station, and after three years of tests at that station, was recommended by them as the best material of controlling the striped cucumber beetle. The Illinois results have confirmed those already obtained at Ohio.

Calcium arsenate, or arsenate of lime can be obtained from any large dealer in insecticides. Gypsum, in the form of land plaster, can be purchased from nearly any lumber yard. In most cases, this will be the burned gypsum, and will contain some fibre as it is prepared for use in making plaster. This may be easily sifted out and the material then mixed at the rate of one pound of arsenate of lime to twenty pounds of gypsum. Be sure that the two substances are thoroughly mixed. This may be accomplished by running the two thru a screen several times, or by putting both substances in a barrel, keg, or tin pail with a tight cover, and rotating the container for several minutes. A screen or partition should extend part way across the inside of the container to insure a more thorough mixing of the contents. This dust may be applied to the young cucumber plants by means of the ordinary dust guns, or blower dusters, or by a home made shaker. The shaker is made by nailing a wooden extension bail to the sides of a half gallon tin pail or bucket having a tight fitting lid. Punch holes in the bottom of the bucket with an eight-penny nail at the rate of four holes to the square inch. These holes should be punched from the outside in. Fill the bucket half full of the dust and apply by a shaking or jiggling motion. The first application of the dust should be made as the cucumber plants appear above the ground and should be repeated at five or seven day intervals until the vines have reached a length of two or three feet. If heavy rains occur, dust immediately after the rain ceases, even though an application may have been made just before the rain. Be sure the leaves of the plants and the surface of the ground around the stems are kept covered with the dust.

A two per cent nicotine dust has been included in these tests during several seasons, and has generally stood second to the calcium arsenate, gypsum mixture.—W. P. Flint.

BY CULLING THE FARM FLOCK YOU REDUCE EGG COSTS

(Continued from Page 4)

reduce the number of cull hens produced each year and moreover will result in the development of a high producing family or strain capable of both heavy winter and annual production. This calls for close observation of head characteristics which can be interpreted in terms of production and breeding qualities.

The head indicates more accurately the delicacy and efficiency of the internal mechanism responsible for egg production than any other section.

All hens can be roughly classified into one of five groups.

The crow head type as illustrated in Fig. 4, is a certain indication of low vitality. The long, straight, narrow beak, sunken eyes, narrow skull is characteristic of a constitutionally poor producer and a breeder of slow feathering deformed chicks.

The Overly refined type of hen illustrated in Fig. 5 is comparable to the Island Type of Jersey Cow. They possess the desired nervous organization associated with laying temperment, but lack capacity for heavy and sustained production. Such individuals, if early hatched, will usually go through a false moult in the fall or early winter. This is caused by a loss of body weight, which indicates the necessity of a special feeding practice, for hens of this class if high winter egg yields result.

The Refined type illustrated in Fig. 6 reveals the alert, feminine, expression that is so closely associated with the responsive and ambitious disposition common to the genuine egg laying machine. The head is of medium length, avoiding the short thick conformation of the beefy type. The skull is moderately narrow, flat on top, and the jaw should not be course and thick. The skin lining the face should be extremely thin and delicate, giving the face a lean dished appearance. The eye should be prominent, buldging, expressive and placed well back in an oval eye socket. This gives a placid, feminine, and intelligent appearance to the face. Such hens are usually solid, well-fleshed, compact individuals, with a deep wedge shaped body and broad flat back. They do not find regular production a physical strain and are able to withstand heavy forcing.

The fourth group of hens as illustrated in Fig. 7 are distinctly lacking in character and very much inclined to put on fat. Frequently such stock is produced by breeding from slow growing, coarse boned, over-sized males.

The last group consisting of masculine individuals are readily identified by the long pendulous wattles, coarse upstanding comb, male voice and characteristic deep-red color of face and head appendages. The male birds usually accord such individuals the same treatment, dealt to ordinary males. This group is illustrated by Fig. 8, a typical specimen.

Hens of the "Refined" group should be used exclusively as breeders, and will, if properly mated, solve future problems of economic production.

OH, MONEY! MONEY!

(Continued from page 10.)

"You got one! Do you mean that you've already sent this money?" cried Miss Maggie.

"Why, yes, of course. I stopped at the office on the way down here."

"And you sent—a money order?"

"Yes. He said he would rather have that than a check."

"I don't doubt it! You don't seem to have—delayed any."

"Of course I didn't delay! Why, Maggie, he said he had to have it at once. He was going to be turned out—turned out into the streets! Think of those seven little children in the streets! Wait, indeed! Why, Maggie, what can you be thinking of?"

"I'm thinking you've been the easy victim of a professional beggar, Flora," retorted Miss Maggie, with some spirit, handing back the letter and the picture.

"Why, Maggie, I never knew you to be so—so unkind," charged Miss Flora, her eyes tearful. "He can't be a professional beggar. He said he wasn't—that he never begged before in his life."

Miss Maggie, with a despairing gesture, averted her face.

Miss Flora turned to Mr. Smith.

"Mr. Smith, you—you don't think so, do you?" she pleaded.

Mr. Smith grew very red—perhaps because he had to stop to cough again.

"Well, Miss Flora, I—I'm sorry, but I'm afraid I shall have to agree with Miss Maggie here, to some extent."

"But you didn't read the letter. You don't know how beautifully he talked."

"You told me; and you say yourself that he gave you only a post-office box for an address. So you see you couldn't look him up very well."

"I don't need to!" Miss Flora threw back her head haughtily. "And I'm glad I don't doubt my fellow men and women as you and Maggie Duff do! If either of you knew what you were talking about, I wouldn't say anything. But you don't. You can't know anything about this man, and you didn't ever get letters like this, either of you, of course. But, anyhow, I don't care if he ain't worthy. I wouldn't let those children suffer; and I—I'm glad I sent it. I never in my life was so happy as I was on the way here from the post-office this morning."

Without waiting for a reply, she turned away majestically; but at the door she paused and looked back at Miss Maggie.

"And let me tell you that, however good or bad this particular man may be, it's given me an idea, anyway," she choked. The haughtiness was all gone now "I know now why it hasn't seemed right to be so happy. It's because there are so many other folks in the world that aren't happy. Why, my chicken and turkey would choke me now if I didn't give some of it to—to all these others. And I'm going to—I'm going to!" she reiterated, as she fled from the room.

(Continued in July 19th Issue.)

Two small boys were puzzling their brains to invent a new game. At last one of them said, eagerly: "I know Billy, let's see who can make the ugliest face."

"Aw, go on!" was the reply. "Look what a start you've got!"—[Pathfinder.]

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Pure Bred Tom Barron English and American White Leghorns, Anconas, Barred Plymouth Rocks and Rhode Island Reds. Strong, Well-hatched Chicks from tested Hoganized Free-range stock that make wonderful winter layers.

Variety	Prices on 50	100	500
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ASSORTED LOTS OF CHICKS

$75.00 per 1,000 - - $8.00 per 100
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Chicks sent by Insured Parcel Post prepaid to your door. 100% live delivery guaranteed. Sixteen years of experience in producing and shipping Chicks giving absolute satisfaction to thousands. Write for valuable illustrated free catalog and price list. Get lowest price on best quality Chicks before placing your order.

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EGG BRED for 18 YEARS

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Chicks 6½c Up for June Delivery
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LOW PRICE MAY—JUNE
Our Barron strong English White Leghorn chicks. All well culled and on free range. Get our AA best stock and best winter layers. Low price, only $12.00 per 100; $57.00 per 500; $110.00 per 1000. Our A chicks are good stock, good layers, price $10.00 per 100; $47.00 per 500; $95.00 per 1000.
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An Ad in THE MICHIGAN
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MARKET FLASHES

MARKET SUMMARY

All grains are steady. Bean market quiet. Potatoes easy. Large supply of strawberries and prices lower. Receipts of butter and eggs ample to take care of demand. Poultry steady. Cattle dull. Hogs and sheep lower.

(Note: The above summarized information was received **AFTER** the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press.—Editor.)

FOOTE'S MARKET LETTER

BY W. W. FOOTE

Improved Farmers' Outlook

THE future certainly looks brighter for farmers as a class, especially for those who are so fortunate as to be out of debt and whose farms carry no mortgages. Farmers who always diversify their crops have suffered much less from the fall in prices for farm products than the one-crop farmers, and averaged sized farms where the crops are corn, oats, and clover are the rotation and where cattle and hogs are fed are making good records. So are the Michigan fruit and berry farms, and it now looks like a return to good times for wheat farmers, thanks to the reduced acreage. It certainly is refreshing to note the recent rising prices for wheat and other grains after the long period of cheap wheat, and it is sincerely hoped that painful experience will lead farmers to avoid being exclusive growers of wheat in the future. On the other hand, there is a possibility of going too far in the other extreme, and the United States Department of Agriculture a short time ago announced that agricultural production has arrived at the best general balance since 1920, but a note of warning was sounded that the balance might be upset by the tendency to overdo poultry, corn, butter and potato production and to cut down too far on wheat, beef cattle and hogs. Of course, power on a farm is important, and both tractors and horses perform a great part, while sheep and other live stock perform great things in maintaining the fertility of the soil. The banks are doing a good work by making loans to farmers and stockmen at reasonable rates of interest, the prevailing rates being lower than a year ago. Our foreign trade is increasing, the exports for the last eleven months being valued at $4,005,769,828, an increase of $369,000,000 over the preceding corresponding period; while our imports aggregated in value $3,282,206,631, a decline of $178,500,000.

The Boom in Wheat

It must be admited that even ardent bulls who believed all along that higher prices were coming before long have been surprised by the recent steady upward movement in quotations, subject, of course, to the inevitable reactions caused by realizing by speculative traders. The fact is, at last wheat has advanced on its merits, and that means it is realized that the world production promises to be so much lowered that there will be no large surplus. Every farmer who owns wheat knows that for many weeks the price in the Chicago market hung around $1.04 a bushel, with fractional advances and declines from week to week. Prices stood far below those paid two years ago. Now they are far above those of recent years, with late sales of July wheat as high as $1.17¼. The crop reports are closely watched by traders, and all accounts agree that the crop will be short and wanted at good prices. That there is an awakening of the public as to the world wheat situation is indicated by the increasing outside buying in all markets, in Canada as well as in the United States. Meanwhile, winter wheat is being harvested in the southwest, and some has been purchased for export. A year ago July wheat sold at $1.01½.

Higher Prices for Corn

The late corn planting is a big factor in the market, and sharp advances in prices have taken place of late, with sales of July corn as high as 96⅞@97¼ cents. Oats and rye shared in the upward movement, and the several grains sold at the highest prices yet touched. Further advances are expected, and there are predictions of dollar corn. Rye is wanted at last for export, but not much corn and oats are leaving the country. Cold weather has kept corn backward seriously, and farmers are withholding old corn from the market. Late sales were made of July oats at 54½ cents, comparing with 40¾ cents a year ago, while July rye sold at 81¾ cents, comparing with 62⅞ cents a year ago.

Recent Decline in Cattle

The cattle market is extremely sensitive to the dressed beef trade, and recently the packers have been unusually careful in their purchases of cattle on the Chicago market, buying only about enough for their immediate requirements, and no efforts were made to increase holdings of beef in their coolers. The beef trade is highly sensitive to the weather, and a falling off in the demand for beef is reflected at once in the live stock market, regardless of the immediate supply. A short time ago there was the worst slump in prices seen this year, due not so much to large offerings as to the poor demand for beef. After prices were forced to a remarkably low level, a great falling off in the receipts followed, and the decline was largely recovered, but cattle were far below the high time several weeks ago. Beef steers have sold of late largely at $7.75 to $9.75, with the better class of long-fed weighty cattle selling at $9.75 to $10.60 and the best yearlings marketed bringing $10.15. Sales were made of a good class of steers at $9 to $9.70, and sales were made all the way down to $6.75 to $7.75 for the cheaper little yearling steers. Butcher stock shared in the ups and downs of steers, with sales of cows and heifers at $3.50 to $9.25, while canner and cutter cows went at $2 to $3.40, bulls at $3.50 to $6.50 and calves at $5 to $10.50. For several weeks prices for stockers and feeders have been going lower, and they are offered at bargains, but the demand is still very poor. Late sales were made of these cattle at $5 to $8, mostly at $5.50 to $7.50, while stock cows and heifers sold at $3.75 to $5.75. Combined cattle receipts in twenty markets for the year to late date amount to 6,017,000 head, comparing with 6,039,000 a year ago.

Normal Cattle Feeding

Plenty of cattle are being prepared for the market in feeding districts, and nearly every Monday good numbers of choice heavy steers arrive in the Chicago stock yards, these shipments coming mainly from Iowa, Nebraska and South Dakota. Most stockmen refrain from the practice of long feeding, but those who are in the game report that they find it profitable, and most of them have been in the business for years. Of late the cattle offered on the market have included increasing numbers of grassy steers and cows, and they are discriminated against by butchers, selling at a big discount. Very few well finished yearlings are going to market, and a limited number sell at a good premium over the next best grade. The best beef cattle are selling far below the best time this year, when the top stood at $12.60, but the call for thin cattle for finishing purposes has checked the decline in the commoner light steers. On the whole, cattle prices have been remunerative for the farmers who prepared them for the market, but prices look low if one looks back and recalls that four years ago beef steers were selling for $10 to $16.90. On the other hand, two years ago they sold at $7.25 to $9.75, while three years ago they sold at $6.40 to $9.15.

The packers have been complaining recently of the poor yield in receipts of hogs, due to poorer quality and the increased proportion of common grassy and half finished droves. They are discriminating against these offerings, making a wider range of prices. Prime heavy butcher hogs continue to top the market, with the best light bacon weights selling about 20 cents below them. Owners of hogs that are doing well should market them as soon as ready, but feed should not be stinted, as that is a losing game. As to prices, it is simply a matter of how long the hog supply holds out; after marketings diminish materially it is safe to look for substantial profits. Should the weather be unfavorable for corn, corn prices would naturally advance, and that would probably result in larger marketing of swine temporarily. The raising of pigs for feeding purposes is being revived, and this is quite a help to stockmen in the corn belt. Combined receipts of hogs in twenty markets for the year to late date aggregate 22,307,000 head, comparing with 21,565,000 a year ago and 16,848,000 two years ago. A year ago hogs were selling at $5.70 to $7.30, while two years ago they sold at $8.85 to $11. Late sales were at $6.20 to $7.30.

Lamb Prices Tumble

As happens every year, prices for spring lambs offered on the Chicago market started off extremely high because of scanty offerings, while later on much larger receipts enabled buyers to make selections at rapidly falling values. The decline was finally checked after the best lambs had fallen to $13.75, comparing with $17.25 two weeks earlier. Idaho feeding lambs had a good demand at $11 to $12, and there were increasing calls for breeding ewes, including yearlings, at $6 to $10. Turning backward, it is recalled that one year ago prime lambs brought $15.50, two years ago $13.50, three years ago $11 and nine years ago $10. Fed sheep are offered for sale. Combined receipts of sheep and lambs in twenty markets for the year to late date amount to 6,110,000 head, comparing with 6,454,000 a year ago and 7,126,000 three years ago.

WHEAT

In spite of a nervous condition in the market and many sudden changes nothing new developed at Detroit last week and prices made only slight changes. The news about wheat was not important. There was a continuation of active foreign business and domestic mills were buyers of wheat all the time. It is intimated that takings by Europe were greater than appeared in the dope, and that included a great deal for future delivery. They were buying against what appears like a shortage in the growing crop owing to reductions in the indicated production in all the leading exporting countries. The needs of Europe are said to be large and dealers are anxious to secure supplies as early as possible. While some reports are circulating about army worm and other injurious things, the general crop situation in the United States is favorable. Where harvesting has been done the outturn has been better than expected. The spring wheat crop has had enough rain to carry the plant for some time, but more is needed and there is some anxiety on that score.

CORN

Corn furnished some real excitement last week at Detroit and prices are materially advanced. The new crop is late and in a bad position. Weather has been unfavorable all spring and the plant is backward. The weeds have secured a good start owing to the rain that prevented cultivating operations and a great deal of the seed rotted in the ground. It will require the best of weather to get the crop in good shape. In the meantime the farmers are not active sellers of corn and the supply is short. The cash corn is largely in control of one man in Chicago and shorts appear to be in a bad fix.

OATS

Oats followed the trend of corn at Detroit during the fortnight ending Saturday, June 28, and prices are higher. Demand is fair while receipts are small.

RYE

Scarcity of rye abroad is giving the rye market a decidedly bullish tone. Stocks in this country are disappearing rapidly and Europe is expected to be a liberal buyer. The Detroit market gained 2 cents on Saturday of last week making a total gain of 4 cents for the week.

BEANS

Beans are quiet and steady after recent declines in prices. After steadily advancing for over a period of several weeks it was only natural that there should be some reaction and prices take a drop. Michigan beans are wanted and they are going higher in prices.

POTATOES

Old potatoes are without friends and prices took several drops during the last couple of weeks. A dull tone prevails in the market. New potatoes are coming to market in fair volume and the demand is good so there is no accumulation.

HAY

Hay markets in general show less strength. Prices are steady in the markets where receipts are small but lower where receipts are heavy. Demand is for good hay and this is in very small receipts at all markets.

MARKET QUOTATIONS

WHEAT

Detroit—Cash No. 2 red, $1.17; No. 3, $1.14; No. 2 white, $1.19; No. 2 mixed, $1.18.

Chicago—Cash No. 2 hard, $1.14¾@$1.18¼.

Prices one year ago—Detroit, Cash No. 2 red, $1.14; No. 2 white, and No. 2 mixed, $1.14.

CORN

Detroit—Cash No. 3 yellow, $1; No. 4, 95c.

Chicago—Cash No. 2 yellow, $1@$1.00½; No. 3 mixed, 96c.

Prices one year ago—Detroit, Cash No. 3 yellow, 90c; No. 4, 88c.

OATS

Detroit—Cash No. 2 white, 60c; No. 3, 58c.

Chicago—Cash No. 2 white, 58@59c; No. 3, 56@57½c.

Prices one year ago—Detroit, No. 2 white, 48½c; No. 3, 41½c.

RYE

Detroit—Cash No. 2, 82c.

Chicago—Cash No. 2, 80c.

Prices one year ago—Detroit, Cash No. 2, 68c.

BEANS

Detroit—C. H. P., $4.35@$4.40 per cwt.

Chicago—C. H. P., $5.00 per cwt.

Prices one year ago—Detroit, C. H. P., $6.10 per cwt.

POTATOES

Detroit—$1.26@$1.50 per cwt.

Chicago—$2.65@$2.90 per cwt.

Prices one year ago—Detroit, $1.07@$1.27 per cwt.

HAY

Detroit—No. 1 timothy, $23.50@$24; No. 2, $21@$22; No. 1 clover,

$19@$20; standard and light mixed, $22.50@$23 per ton.

Chicago—No. 1 timothy, $24@$26; No. 2, $21 @$23; No. 1 clover, $20@$22; standard and light mixed, $23@$25 per ton.

Prices one year ago—Detroit, No. 1 timothy, $17.50@$18; No. 2, $15.50@$16.50; No. 1 clover, $12 @$14; standard and light mixed, $14@$15 per ton.

PRITCHARD'S WEATHER FORECAST
INTERPRETED BY THE STARS

Week of July 6

TEMPERATURES generally throughout the week in this state will remain above the seasonal normal.

Rains and thunder storms will be ending in Michigan about the time this week begins but there will probably be a reaction to thunder showers and local rains about Tuesday or Wednesday. Conditions will again become unsettled and stormy about Friday and Saturday.

There will be a marked change to cooler on the last day of this week or the very beginning of next.

Week of July 13

Temperatures during the greater part of this week will be on the climb starting early in the period to advance. By Monday or Tuesday temperatures readings will be considerably above the seasonal normal.

Sunday will probably be a fair day but immediately following the sky will become threatening and rain and thunder storms will be in evidence in scattered parts of the state. Just before or close to the middle of the week the winds will increase in force and some small gales may be reported in and around Michigan.

The latter half of this week promises better weather both in temperature and sunshine but by Saturday will break down under the strain of a decided summer storm period. Electrical storms will be numerous; rainfall will be heavy and general and the winds will be strong in force. The week goes out with rain, thunder and high winds visiting most parts of the state of Michigan.

HAVE YOU ORDERED YOUR PROTECTIVE SERVICE SIGN?

FARMERS' DAY AT M. A. C. AUGUST 1

THE seventh annual Farmers' Day at Michigan Agricultural College will be Friday, August 1, the committee in charge of arrangements has decided. E. B. Hill, assistant to acting president Shaw, is chairman of the committee. The special feature to be stressed during the day has not been picked, but it is expected to be some phase of marketing.

The first Farmers' Day was held in 1918, when a number of Michigan farmers were called together to discuss the governments request for an increase in the acreage of wheat. With the war ended, the next year's session was devoted to soils. With the third year the day was made a general "college day." The attendance has been approximately 5,000.

OUR BOOK REVIEW

(Books reviewed under this heading may be secured through The Michigan Business Farmer, and will be promptly shipped by parcel post on receipt of publisher's price stated.)

Review of the 1923 International.—This cloth-bound volume not only gives a complete history of the last International Live Stock Exposition but also contains splendid pictures of the champions, of the educational exhibits, the boy and girl trip winners, as well as many other interesting features. The cost, while the limited supply lasts, is only $1.00 per copy, which charge is made to cover postage and mailing expense, though the cost to the "International" of these books is considerable more that that. Published by International Live Stock Exposition, Union Stock Yards, Chicago, Ill.

Prices of all breeds of purebred beef bulls combined during 1923 were steady with those in 1922 but heifers and cows were lower, according to reports submitted by breeders to the United States Department of Agriculture. Average prices ranged from $79 per head for heifer calves to $185 for bulls over three years of age. The breeds included were: Aberdeen Angus, Hereford, Red polled and Shorthorn. Bulls, cows and heifers over one year and under three years of age brought $30 more per head at auction than at private sale but in the case of all other ages auction prices were practically the same as those received when the animals were sold privately. The top price reported for males was $5,000 and for females $1,550. The report shows that some of the prices were very little if any higher than central market prices for the better grades of steers, which accounts for the large number of breeders castrating their bull calves and selling them as steers. Such a period of low prices usually means ruin for a large number of breeders but it tends to weed out much of the poor quality stock, reduce the surplus and generally raises the price level of the stock held by the breeders who survive, the department says.

Offer Farmers Billion Dollar Grain Business

GRAIN farmers would own, finance and control five large Chicago grain firms and 5,000 co-operative elevators under a plan which has been submitted to the executive committee of the American Farm Bureau which has named a committee, headed by O. E. Bradfute, president, to study the scheme.

The plan includes the Armour Grain Company, Rosenbaum Grain Corporation, Bartlett, Frazier & Co., Resenbaum Brothers, and J. C. Shaffer & Co., handling more than $1,000,000,000 worth of cash grain transactions annually, according to estimates of the aggregate business of the last few years.

The proposal contemplates turning over to the farmers the firms' 40 country elevators, terminal elevators, offices and fixtures and all other mechanical equipment, along with managerical facilities. The five firms involved control virtually the entire elevator capacity at the Chicago terminal and much of the capacity in other primary markets and export bases. The elevators are valued at $15,000,000 and other property at about $8,000,000.

Co-operative grain marketing organizations eventually would receive the trading privileges of the Chicago Board of Trade, under the proposal.

Details of financing reaching to hundreds of millions of dollars will be considered by the committee. The financing of the consolidation is expected to be cared for with the funds which ordinarily make the "rebate" to the producer under co-operative market systems. These "rebates" might be diverted into a sinking fund for the amortization of the consolidation debentures, stocks and bonds, it was suggested, although the legal and financial details of the plan were not made public.

The announcement of the plan, made by the farm bureau, said the company contemplated would be at the service of state co-operative pools, elevator exchanges, farmer-owned elevators and individuals as a grain merchandising agency. "It is understood that the tentative plan has been submitted to other farm organizations," the announcement said.

Farm bureau officials, who have been considering the plan for some time, were reported as being friendly toward the proposition. Grain operators considered it with favor.

"The American farmer has been groping in darkness," said John J. Stream, former president of the Chicago Board of Trade. "He has had the cooperative idea, but has not had the facilities to put it into execution. Now men who have devoted their lives to grain marketing, and who control five of the largest grain companies in the world, offer to turn their properties over to the American farmers and offer to devote the next five years to the project, and then stand ready to turn the entire properties over to persons designated by the farmers to conduct the business."

If a final agreement is reached between the farmers and the five grain companies, it is predicted that it will take at least three months after that to complete the unified plan.

The Truth in Feeds

Monday, July 7th.

From Monday, July 7th, until Saturday, August 9th, farmers may contract with the Michigan State Farm Bureau through their local agent (co-operative association or farmer representative) for fall and winter supplies of Michigan Milkmaker dairy feed.

For two years past thousands of farmers have thus contracted for their winter Milkmaker requirements. This plan has proved itself to be the economical way to buy feed. Delivery is made to local agents in six monthly shipments, this year between September 1, 1924 and February 28, 1925. Contracting farmers pay for the feed on delivery.

Milkmaker is 24% protein and manufactured under public formula. Every ingredient is listed on the tag, pound for pound. It is the best dairy concentrate to be had for economical milk production. Each ingredient is carefully chosen for its high and easy digestibility, its palatability and its efficiency as a milk producer. With Milkmaker you know what you are feeding.

Milkmaker does exactly what you expect of such a feed—it increases production, lowers feeding costs, keeps the herd in high condition. Cows like it tremendously.

Positively no applications for contracting 1924-25 Milkmaker can be accepted after August 9th.

Purchasing Department
MICHIGAN STATE FARM BUREAU, Lansing, Michigan

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NOW

about contracting for Milkmaker. He has full information on the plan. Where you have no local Milkmaker agent use the coupon.

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R. R. Station................
Agent or Co-op................
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If you will use the grade of Polarine recommended for your tractor in the chart at the left, you will get perfect lubrication—you will use less fuel—you will save repairs—you will get all the power your engine can develop—you will add to the life of your tractor.

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Follow the chart at the left and give your tractor accurate, scientific lubrication.

Drain your crankcase frequently and refill with the correct grade of Polarine. It pays!

Tractor Chart of Recommendations

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Trade Name	Motor Oil
Adaptable	H.
Allis-Chalmers, 6-12	H.
Allis-Chalmers, Other Models	S. H.
All Work	S. H.
Andrews-Kincade	E. H.
Appleton	S. H.
Aultman-Taylor, 15-30	S. H.
Aultman-Taylor, Other Models	S. H.
Automotive	H.
Avery, C. & Road Raser	H.
Avery, Track Runner	S. H.
Avery, Other Models	E. H.
Bates Steel Mule, Midwest Motor	S. H.
Bates, Other Models	H.
Bear	S. H.
Best Tracklayer	E. H.
Big Farmer	E. H.
Case, 10-18, 12-20 and 15-27	H.
Case, 22-40	S. H.
Case, Other Models	E. H.
Cletrac, F.	H.
Cletrac, W.	S. H.
Coleman	E. H.
Dart	S. H.
Eagle	S. H.
E-B	S. H.
Ellwood	H
Farm Horse	E. H.
Fitch	E. H.
Flour City, Junior and 20-35	S. H.
Flour City, Other Models	E. H.
Fordson	S. H.
Fox	E. H.
Frick	S. H.
Gray	S. H.
Hart-Parr	E. H.
Heider	S. H.
Holt, 2-Ton	H.
Holt, Other Models	E. H.
Huber	S. H.
Indiana	H.
International	H.
J. T.	E. H.
Klumb	E. H.
La Crosse	E. H.
Lauson	S. H.
Leader	S. H.
Leonard	S. H.
Liberty	E. H.
Lincoln	S. H.
Little Giant	S. H.
McCormick-Deering	H.
Minneapolis, 12-25 and 17-30	S. H.
Minneapolis, Other Models	E. H.
Mogul	S. H.
Moline	S. H.
Monarch	H.
Nilson	S. H
Oil-Gas	E. H.
Peoria	E. H.
Pioneer	E. H.
Reed	S. H.
Rix	S. H.
Rumley, Oil Pull, 12-20, 16-30 and 20-40	E. H
Rumley, Other Models	E. H.
Russell	S. H.
Samson	S. H.
Shawnee	H.
Square Turn	E. H.
Stinson	S. H.
Titan	S. H.
Topp-Stewart	S. H.
Toro	H.
Townsend	E. H.
Traylor	H.
Trundaar	S. H.
Twin City, 12-20 and 20-35	S. H.
Twin City, Other Models	E. H.
Uncle Sam	S. H.
Wallis	S. H.
Waterloo Boy	S. H.
Wetmore	S. H.
Wisconsin	S. H.

CULTIVATORS

Trade Name	Motor Oil
Acme	H.
Aro	H.
Avery	H.
Ballor	H.
Beeman	H.
Bolens	H.
Boring	H.
Centaur	H.
Do-It-All	S. H.
International	H.
Kincade	H.
Merry Garden	M.
Motor Macultivator	S. H.
New Britain	H.
Red E	H.
Spry Wheel	E. H.
Utilator	H.

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L.—Polarine Light
M.—Polarine Medium
H.—Polarine Heavy
S.H.—Polarine Special Heavy
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The Michigan BUSINESS FARMER

An Independent
Farm Magazine Owned and
Edited in Michigan

VOL. XI, No. 24 SATURDAY, JULY 19, 1924 TERMS: TWO YEARS $1
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The Wheat Situation in Michigan

By H. R. SMALLEY

MANY MICHIGAN farmers are wondering whether or not to seed wheat this fall and, if so, how much? If looked at from the standpoint of price it is certainly a debatable question, but it is a many-sided subject and cannot be decided on the basis of price alone.

Farmers are not willing to let their land lie idle and although there is considerable talk of abandoned farm houses, the land itself is being cultivated. Farmers in Michigan are working harder and longer hours, and in many cases they have increased their efficiency by buying tractors and other labor-saving machinery. Many will doubt the above statement, but statistics compiled by the United States Department of Agriculture show that the total acreage of crops harvested last year was larger than in 1920 when prices of all farm products were high at least until after the crops were all planted.

Going farther into the same figures we find that the six crops—corn, wheat, oats, rye, potatoes, and hay—occupy 85 out of every 100 acres of crops in the state. The acreage of these crops is large enough at present. The acreage of vegetable and fruit crops cannot be increased without serious over-production. The big question then is what can be done with a million acres of land now in wheat, if wheat growing is to be discontinued?

The answer is simple. Wheat growing will not be discontinued in Michigan. The State has a tremendous city population within its borders and it is good business and sound economy for Michigan farmers to supply local markets first. Last year the Michigan wheat crop lacked three million bushels of supplying the bread needs of the state. This fact suggests, not a larger acreage, but a higher yield per acre. Then wheat has some other strong points in its favor. It is a cash crop, and the only one on many farms. It is an excellent nurse crop for clover, and every farmer knows the value of clover as a soil builder and rejuvenator. Also wheat fits nicely in the rotation with corn, other small grain, potatoes and hay.

However, there is much room for improvement of the Michigan wheat crop. The average yield is only about 15 bushels to the acre for the state as a whole, which means that half the farms that grow wheat are below the 15 bushel mark. Then much of the grain is of poor quality, especially where the yield is low. No one has ever yet devised a system of cost accounting that will show much of a profit on a poor crop. In other words, low yield and low cost have never been found hobnobbing together in the same field, and it is generally true that a high acre yield means a low cost per bushel.

One of the chief problems of the wheat grower, therefore, is to get the yield up and the cost per bushel down. Wheat growers of the state can well afford to study this question carefully. More attention than ever before should be paid to the seed wheat. It should be certified if possible or at least it should be of a good variety. It should be free from weed seed and also from disease. It should be treated for smut unless it is known to be "smut free." All plowing should be done as early as possible in order to get the "settling" effect of early fall rains, and the land should be worked down thoroughly so that the seed bed will be firm. Finally, fertilizer should be used more liberally.

A further word in regard to fertilizer is perhaps in order, since the use of the right analysis and of a sufficient quantity is of such great importance. In fact, it is scarcely worth while to sow wheat in many parts of Michigan without fertilizing. Besides, fertilizer applied to wheat benefits the whole rotation, its effect being most striking on the clover crop following wheat. In deciding on how much fertilizer to apply, this fact should be borne in mind. A common application of fertilizer on wheat is 125 to 150 pounds per acre, but this doesn't leave much for the clover. It will be better to use 250 to 300 pounds to the acre and give the clover crop a chance to pay the whole fertilizer crop bill which it will usually do. Experiments conducted in many localities show that such an application of fertilizer will increase the yield of wheat by 5 to 15 bushels per acre and the yield of hay by a quarter of a ton to a ton to the acre the following year.

It is not safe to give advice as to just what fertilizer analysis to use without knowing the kind of soil and how it has been cropped and handled. The Michigan Agricultural College has selected a standard list of fertilizer analyses for all soils and crops. All recommendations are made from this list which is considered sufficient to meet the needs of all Michigan framers. Ask your county agent for a copy of Circular 53, "Standard Fertilizers for Michigan" or write to the M. A. C. for it.

The Michigan Agricultural College has done much to make wheat growing more profitable in Michigan. The Farm Crops Section has tested literally hundreds of varieties to find those best suited to Michigan. New varieties, the most promising of which is Red Rock, have been originated. Many fertilizer experiments have been carried on by the Soils Section in all parts of the state which make it possible to make reliable and valuable recommendations. Besides all this, the agricultural college makes careful studies of all diseases, devises methods of seed treatment, and keeps a line on all insect pests. The "fly free" date for seeding is checked up accurately each year so that farmers may know the best possible time to sow their wheat.

Those farmers who take advantage of the opportunities that are open to them for increasing the yield and improving the quality of their wheat will not find it difficult to grow from 20 to 30 bushels to the acre, thereby greatly reducing the cost of producing a bushel and increasing the profit accordingly.

SWINE INDUSTRY DECLINES

THE Federal pig survey taken throughout the United States several weeks ago by rural mail carriers has been tabulated by the Bureau of Agricultural Economics and indicates a marked reduction in the swine industry from the high level of the last two years. The results, as released by Verne H. Church, Agricultural Statistician for Michigan and L. Whitney Watkins, State Commissioner of Agriculture, show that the farmers of Michigan saved 81.2 per cent of the pigs farrowed this spring as compared with one year ago is 78.5 per cent in Michigan, 79.7 in the corn belt, and 78.8 in the entire United State. The number bred for fall farrowing as compared with last year is 88.7 per cent in Michigan, 88.6 in the corn belt, and 94.1 in the United States. The average number of pigs saved per litter shows some advantage in Michigan over other states being 5.7 as compared with 5.02 in the corn belt and 5.05 in the entire country.

DAIRY BUREAU ESTABLISHED IN DEPT. OF AGRICULTURE

THE establishment of a Bureau of Dairying in the United States Department of Agriculture was announced on July 2 by Secretary Wallace, and at the same time he announced the appointment of Dr. C. W. Larson, Chief of the Dairy Division in the Bureau of Animal Industry, as chief of the new bureau. The act of Congress, creating the bureau, approved by President Coolidge on May 29, provides that the Secretary of Agriculture may transfer to the Bureau of Dairying such activities of the Department of Agriculture as he may designate as primarily related to the dairy industry. All of the dairy work heretofore carried on by the Bureau of Animal Industry has been transferred to the Bureau of Dairying and about 150 employees of the Dairy Division have been shifted to the new bureau. Appropriations for the new fiscal year for carrying on dairy work in the department amount to approximately $400,000.

SATURDAY
July 19th
1924

VOL. XI. NO. 24

Being absolutely independent our columns are open for the discussion of any subject pertaining to the farming business.

"Hew to the line, let the chips fall where they may!"

The Michigan
BUSINESS FARMER
The Only Farm Magazine Owned and Edited in Michigan

Published Bi-Weekly
Mt. Clemens, Mich.

TWO YEARS $1

Entered as second-class matter, August 22, 1917, at the post-office at Mt. Clemens, Mich., under act of March 3rd, 1879.

Michigan's "Blue Sky" Law is Good, But Beware!

Securities Commission Cannot Stop Salesmen of Worthless Stock From Using Mails

By STANLEY M. POWELL
(Lansing Correspondent of The Business Farmer.)

> **"WE believe that our Michigan 'Blue Sky' law is the best piece of legislation of its kind in the United States, but what we must do now is to educate the people up to the law," says Mr. Duff.**
>
> **"We can say quite definitely and with complete assurance that the sale of phoney stock has been reduced to a minimum. There is practically no unauthorized stock sold except by mail. The Commission has absolutely no jurisdiction over the mails at the present. Stock salesmen and promoters can promise almost anything through the mails if they do not misrepresent an existing fact. When they get too reckless, the federal authorities bring them to time. It will be remembered that Dr. Cook and his crowd got too bold in their dealings in Texas oil. They next began operations in California, but being chased out of there, have now established their headquarters in Mexico."**

NO doubt thinking that The Business Farmer family after reading "Forty Years of Faking" would be wondering what was being done to protect the purchasers of stocks and bonds in Michigan from the slick and deceptive practices of unprincipled promotors, the editor asked me to make a study of our so-called "Blue Sky" law and to investigate whether or not it is working satisfactorily.

With a rather vague general knowledge of the Michigan legislation along this line, but with a determination to find out the real facts about the matter, I made arrangements for an interview with Mr. H. N. Duff, Chairman of the Michigan Securities Commission, which is the state department having the administration of our state "Blue Sky" law in charge.

I had known Mr. Duff when he, too, was in the journalistic game, so I was assured that I would not find him a man difficult to interview. In this I was not mistaken. After a brief explanation of my errand, he launched at once into a discussion of the subject regarding which he is so well qualified to speak.

Mr. Duff's Advice to Farmers

"You have given me a big order," began Mr. Duff, "but I am glad to supply you any information which I can or any assistance which I may be able to give. You tell your readers that if the public, the farmers especially, would not be rushed off their feet by stock salesmen and would not sign on the dotted line whenever someone waves a fountain pen in front of them, we can save them a lot of money.

"We believe that our Michigan "Blue Sky" law is the best piece of legislation of its kind in the United States, but what we must do now is to educate the people up to the law.

"Michigan has been the pioneer state in the protection of its investing public. There have been two Attorney Generals in Michigan who have given this matter considerable study and as a result of whose labors, the present satisfactory legislation has been enacted. The first measure of this kind was passed in 1915. It was drafted by Grant Fellows, who was then Attorney General. All "Blue Sky" laws in the United States really date from that 1915 act.

"But in the administration of the law of 1915, practical difficulties soon arose. In the first place, that law was based on industrial and financial conditions prior to the World War. It did not prove perfectly adapted to the changed conditions which soon developed.

"Then, too, we were treading upon new and unexplored territory. We had no judicial precedent. It was not until 1917 that our law was finally declared valid by the United States Supreme Court. A decision handed down that year upheld the Michigan, Ohio and South Dakota laws and gave us a substantial basis for our actions. In 1921 the law was considerably amended and materially strengthened and then in in 1923 our present new, and as we think, model law was enacted.

New Law Stops the Leaks

"The 1923 law is working very satisfactorily and it looks as if we had stopped all the old leaks, but whether it will be completely successful or not, only time will tell. You remember that we are dealing with the cleverest bunch of people on earth and if there is a loophole anywhere, they will find it.

"When I say that it looks as if we had pretty effectively stopped all the leaks which existed in the old law, don't think that no one has lost any money on stock and bond transactions in Michigan recently. We can't prevent a man from gambling. As long as there are men who want "to take a chance" and think they can get rich over night, they will be susceptible to the fellow with a get-rich-quick scheme. There are certain well known rates of interest and a person who is offered something which promises fabulous returns, either as to interest or increased value of principal, had better beware.

Stock Not Guaranteed

"In the public mind there has been some misconception of the work of this commission. It should not be believed that the commission guarantees the stock which it approves and accepts for sale under its supervision. If three men could pass on $1,090,000,000 worth of stock in a year as we did in 1923, and absolutely guarantee against any loss, we would not be working as state employes, but would be ranked among the leading financial wizards of the nation. J. P. Morgan would probably have us as his advisors."

The talk having turned to the subject of losses through the purchase of stock which did not prove out, I interrupted Mr. Duff to inquire what were the probable losses per year from this source in Michigan.

"There is no way of determining that even approximately", replied Mr. Duff. "Our commission turned down about $200,000,000 worth of stock last year. There are, of course, two chances for losses. In one case the deal is bad from the beginning, in the other the company fails or is unable to pay dividends. There are two questions generally accepted in the investment world. The first is that 90 per cent of the companies which are organized fail and go to the wall in the first two or three years, and the second is that nine out of ten people who buy stock lose money.

No Control of Mail Swindlers

"We can say quite definitely and with complete assurance that the sale of phoney stock has been reduced to a minimum. There is practically no unauthorized stock sold except by mail. The commission has absolutely no jurisdiction over the mails at present. Stock salesmen and promoters can prom-

(Continued on Page 23)

Do You Favor An Intensive Navy Bean Advertising Campaign?

AN advertising committee has been appointed by the bean growers and jobbers in Michigan who are interested in an advertising campaign to create a greater demand for choice navy beans. The committee is made up of five members, two representatives of the elevator men, two representatives of the farmers and the fifth member is Mr. H. E. Chatterton.

The two bean elevator representatives on this committee were nominated by the officers of the Bean Growers Association and approved by the Bean Jobbers Association in open session. The two representatives of the growers were nominated by the bean jobbers and approved by the growers representatives. Mr. Chatterton being the largest handler of beans in Michigan, if not in the United States and also an extensive grower was the unaminous choice of all parties concerned for the fifth member of the committee. Mr. Marotzke, Chairman of the committee, is secretary of the Thumb Bean Growers Association. This association has been very active in promoting the interests of an advertising campaign. In fact, great credit is due them for the present favorable situation. A. B. Cook was selected for secretary of the committee. The presumption is that this committee would have general charge of the advertising campaign if undertaken unless some way could be devised of selecting a committee which would be fairer and more satisfactory to those interested.

One of the first official acts of the committee was to issue the following statement to Michigan bean growers to be published in The Business Farmer:

"TO MICHIGAN BEAN GROWERS:—We the undersigned committee representing both growers and elevator men are unanimously and enthusiastically in favor of an advertising campaign in the interest of Michigan choice hand picked navy beans.

"We raised last year in Michigan 2/5 of all the beans raised in this country. We raised 2/3 of all Navy beans. The Government forcast for 1924 crop credits Michigan with practically 50 per cent of this year's total prospective bean crop. We contend that an advertising campaign of the character proposed is highly desirable if not absolutely essential if this enormous crop which is in prospect is to be marketed at increased and satisfactory prices. We contend that the farmers are willing to contribute for all the beans marketed by them on condition that their elevator contribute a like amount for the purpose of advertising Michigan choice hand picked beans. Our conclusion is challanged and doubted by some large elevator interests and we must present proof of favorable sentiment among the farmers before we can secure 100 per cent cooperation of the elevator interests. Please fill in the attached questionnaire and mail to the editor of this paper immediately. Votes to be effective must be in by August 10th.

"This is a proposition of vital interest to every Michigan bean grower and we shall expect an expression which in no uncertain terms shall represent the sentiment of a material percentage of the bean growers of Michigan." (SIGNED BY THE COMMITTEE) Gus Marotzke, Sebewaing (Chair.); A. B. Cook, Owosso (Secretary); H. E. Chatterton, Mt. Pleasant; J. E. Malone, Lansing; C. S. Benton, Lansing.

If you raise beans it is your duty to fill out the questionnaire so that the committee may know whether you are in favor of advertising or not. Don't let the other fellow do it, it's your vote they want. Mail it to the Market Editor, The Business Farmer, Mt. Clemens, Mich., so it arrives at this office not later than August 10th—but the earlier the better.

QUESTIONNAIRE ON BEAN ADVERTISING CAMPAIGN

Do you favor an extensive bean advertising campaign?

YES........... NO...........

Will you contribute 1c per hundredweight from the beans you sell for promoting and advertising the Michigan Choice Hand Picked pea bean, providing your elevator man contributes an equal amount and provided further that this movement shall be generally supported by the growers and elevator men of the State?

YES........... NO...........

NAME ....

ADDRESS ....

ELEVATOR ORDINARILY PATRONIZED...

No Peddling for Muskegon Farmers

On Market Days Nearly 1,000 Consumers Patronize Muskegon City Markets Buying Direct From Producer

By CARL H. KNOPF

"Jake" Hess is the market master and much of the success of the Muskegon markets is due to his good work.

THE marketing problem is always with us. This has probably been so ever since the first man produced a surplus of food or clothing and there is no good reason for supposing that it will ever be entirely solved. However, if you are fortunately located within marketing distance of a large consuming center, a farmer's retail market will go a long way towards solving your marketing problem.

Greater Muskegon includes the two cities of Muskegon and Muskegon Heights which have a total population of more than 52,000 people. To assist in supplying the food requirements of this army of consumers, three retail city markets have been established for the farmers. All of these markets are located within a radious of two miles from the center of Muskegon.

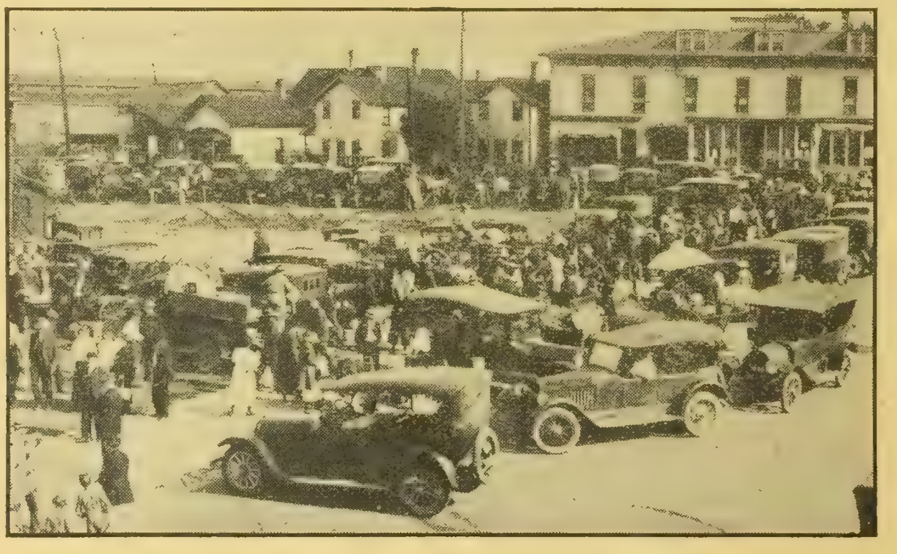
Prior to 1921 many efforts had been made to establish a city market in Muskegon. To relate the details of these several attempts would make a story in itself. Suffice to say that, for one reason and another, all of the attempts failed. It began to appear that the only way the farmers could dispose of their produce in Greater Muskegon would be to sell to the grocery stores or to peddle from house to house.

There may be some farmers who actually like to peddle their produce but I doubt if they are more numerous than 1 in 1,000. It is true that the old horse ambling along with the wabbly-wheeled spring wagon, while his owner attempts to sell "Ap-puls! Po-ta-toes! Melluns!" to the busy housewives, has given way to the no less wabbly-wheeled Ford, but it is also true that peddling still continues to be a long and tiresome method of marketing. A group of Muskegon farmers, convinced that there was a more efficient means of reaching the consumer directly, continued their efforts to secure a city market. Finally in 1921 they, assisted by their County Agricultural Agent, secured the passage of an ordinance establishing such a market and making provision for its regulation.

First One Established

The first market was established on the sight of the old hay market. This is a triangular shaped piece of land, about one-half of a city block in area. It is located at the junction of Clay Ave. and Ottawa St. and has come to be known as the Clay Ave. Market. As this location is somewhat north of the principal residental section of Muskegon the housewife usually must come some distance to reach the market. The big question troubling the minds of those promoting the market was, "Will the consumers patronize the market?" This question was definitely answered on the first market day, July 20, 1921. About fifty eager buyers, armed with pocket books and market baskets, visited the market place but, lo and behold, no farmers had appeared. True to the natural conservatism of the average farmer, each producer had decided to let the other fellow try out the market experiment first. When, two days later, the same thing was repeated, the market committee grew desperate. A market site and many buyers are essentials for a successful market but it is also necessary to have someone with something to sell. Accordingly the committee went forth and litterally dragged the farmers to market. The third market day therefore marked the beginning of actual business on the market as 11 farmers had at last decided to try their luck with the new venture.

Starting with the first fifty would-be purchasers the number patronizing the market has steadily increased. During the past season it is estimated that between 800 and 1,000 buyers patronized the market every market day. The majority of the market patrons are the housewives. They come on foot, with flivvers, and in limousines, and each goes away laden with bundles, sacks, and market baskets containing purchases of their own selection. Tourists, passing through on the trunk lines, are liberal buyers during the summer season and form no small portion of the total business of the market.



The Clay Avenue Market at Muskegon, Michigan.

Starting with the first venturesome eleven farmers, the number of producers using the market has also shown a marked increase each succeeding season. Farmers from all parts of Muskegon county use the market and, in addition, many farmers from Oceana, Newaygo, and Ottawa counties are regular attendants thereon. While a zone extending some 30 or 40 miles from Muskegon will include most of the producers who use the market regularly, still occasional loads come from much greater distances, in some cases as far as 200 and 300 miles.

The market season usually opens during the latter part of May or the early part of June, depending on the season. It closes in November, just before Thanksgiving.

The Clay Ave. Market is held on three forenoons of each week, Tuesday, Thursday, and Saturday. During its second season, 1922, this market became too crowded for the space available. At times more than 125 rigs would be parked in double rows around the three sides of the market space with many more rigs waiting to take stalls as soon as they were vacated.

In order to relieve the congestion and also to serve another section of the city, another market was opened on Beidler Street in the western part of Muskegon. This market is open on each Monday,. Wednesday, and Friday forenoon and has proven to be a very efficient unit in the system of city markets.

The third market of Greater Muskegon is located on Peck Street in Muskegon Heights. This was started in 1921 but during its first two years it had rather indifferent success. However, during the season just past, under a new market master it has been build up into a very successful market. The Heights market is held on Tuesday, Thursday and Saturday and is an all day market.

The total producer attendance on the two Muskegon markets for the season of 1923 was 4,622. This does not mean that 4,622 different farmers used the market but rather that 4,622 stalls were rented during the entire market season. The average attendance per market day during the 1923 season was 42 producers on the Clay Ave. Market and 26 producers on the Beidler St. Market. This represents an increase of more than 20 per cent over the previous season.

While the exact records were not kept for the Muskegon Heights market, it is certain that the daily average for that market during the past season was between 20 and 30 rigs.

The Market Masters

"Jake" Hess is the genial market master who has been in charge of the two Muskegon Markets during their three years of operation. Much of their success can be attributed to his tactfullness and common sense handling of difficult situations.

John Goldburg, always a staunch supporter of the Muskegon markets, was placed in charge of the Muskegon Heights market at the beginning of the past season and has guided it through a decidedly successful summer.

A feature of the markets during this past summer has been the close cooperation of the market masters. It one market had a surplus of a certain product while the other market was lacking in that line, the situation was adjusted by exchanging rigs. This worked to the advantage of both producer and consumer and also helped both markets.

All three of these markets are open air markets and the stalls are spaces whose boundries are indicated by marks of white paint. The stalls are 7 ft. and 3 inches wide and rent for 25 cents per day. In case a farmer desires to reserve a stall for a longer period he pays $5.00 for a six weeks rental of the same stall.

Most farmers who come on the market regularly prefer to hold the same stall so that purchasers learn to know their location. This enables the producer to establish and build up a trade with regular customers.

Under Farm Bureau Direction

During its first season the Muskegon market was operated under the direction of the city. Despite the success of the venture an announcement was made early in 1922 to the effect that the city could no longer continue its support of the proposition. At this critical point the County Farm Bureau stepped in and saved the market for the farmers. By thus rescuing the market and continuing to direct its affairs, the Muskegon County Farm Bureau has rendered a service which may well be placed near the head of the list of the many things which it has accomplished for the farmers of its jurisdiction.

The market fees, though small, are proving sufficient to meet the operating and miscellaneous expenses of the market and a small balance is left at the end of each market season. This surplus is placed to the credit of the market and is expended for improvements in connection with the market.

The growth of the Muskegon markets is proof positive that they are filling a very real need. No matter how small a quantity of produce a man may grow, if he can get it on to the market in good condition he can sell it direct to the consumer at prices which approximate the retail prices. All manner of farm products are brought to the market in rigs ranging from big trucks to boys' express wagons, proving that the market appeals to all classes of producers. The markets enable the farmer to build up a trade and to dispose of his products without using up his tires and gasoline in miles and miles of tedious peddling.

The advantage to the consumers is no less great. They can come to the markets, compare the quality of the offerings, make their selections, and know exactly what they are getting. Besides securing the articles in the freshest condition possible the buyer has the advantage of buying direct from the producers who know, and can guarantee the quality of their products.

No attempt is made to fix a scale of uniform prices. It is true, however, that there is very little variation in prices for produce of the same grade. The prices usually range about the same on the market as for similar produce delivered from the local stores. Should you ask, "What then is the advantage of the market to the consumer?" the answer is a repitition of that given above, namely, Freshness, Variety, Own Selection, and Guaranteed Quality.

The emphasis of the market is placed on quality. Inferior or damaged stuff is not tolerated. A salesman must tell the truth about the goods he offers for sale and there must be no deception in the way the goods are displayed. Some farmers who have attempted to evade these requirements, have found to their sorrow that it pays better to be square. In case of complaint about goods purchased on the market which have not proven satisfactory, the seller must make good or be barred from the markets.

Scales, weights, and measures are tested frequently to insure accuracy in measuring out the amounts purchased.

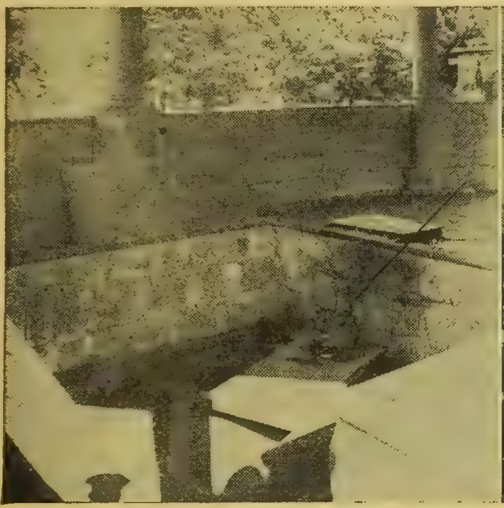
No "Hucksters" Allowed

One excellent feature of the Muskegon markets is that only producers are allowed to sell thereon and they are limited to the sale of their own products. Occasional hucksters have attempted to evade this rule but, upon being discovered, they have been "bounced" immediately.

While this rule may seem a trifle severe it must be remembered that the average huckster is not much concerned about the quality of his offerings just so long as they sell at a profit above the purchase price. Furthermore, the hucksters, in general, bring in their stuff from long distances and, as a consequence, it lacks the freshness and quality of the produce grown nearby. In selling his second grade produce at a second grade price the huckster also forces down the price on the better grade of produce to a figure which is unfair to the grower. In other words, the grower may get less than he should for his produce while the huckster may be making good profits by selling at a lower price some products which he purchased at an extremely low price from some farmers far distant and outside of the usual marketing territory.

(Continued on Page 21)

PICTURES FROM FAR AND NEAR



THE FOUNTAIN OF YOUTH.—This fountain, named by Ponce de Leon as his Fountain of Youth, is in the oldest city of the United States, St. Augustine, Florida.

THE DEAD LETTER OFFICE.—Many times letters written by our subscribers and intended for us go to this Dead Letter Office of the Post Office Dept., Washington, D. C., because they are addressed wrong, or address is unreadable.

GENERAL JOHN J. PERSHING.—Here we have Uncle Sam's famous military leader, General Pershing, in the garb of an American business man. He was on a vacation.

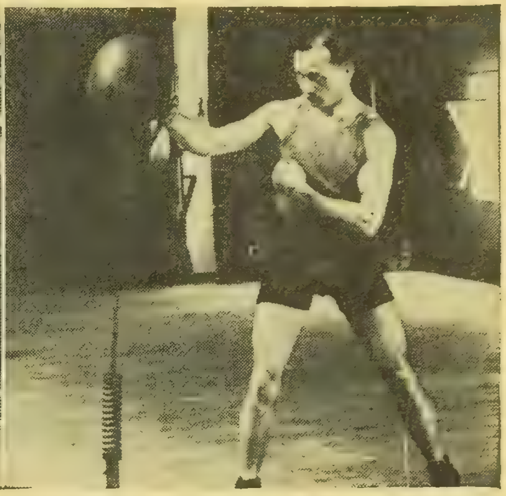
LISTENS IN ON SON'S TALK.—John Coolidge, of Plymouth, Vermont, father of President Coolidge, is here seen listening in on his radio receiving set to a talk being given by his son. The set is on the same table with the Bible which was used in swearing in the Chief Executive at the death of the late President Harding.

DISCOVERER OF INSULIN MARRIED.—Left to right: Miss Marion Robertson, of Elora, Ontario, just after her marriage to Dr. F. G. Banting (right) world famous discoverer of Insulin, the cure for diabetes.

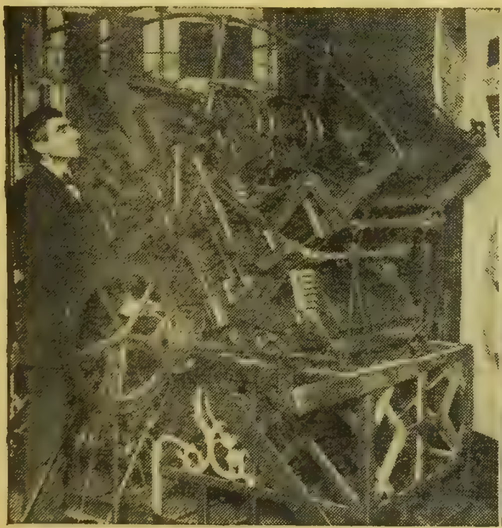
A SUMATRA BUTCHER.—It may seem strange, but it is a known fact that meat is very scarce in Sumatra, and men such as this can be seen on the streets daily with dogs in tow, which they sell to customers. When the sale is made, the big knife comes out and the dog is killed.

ARCHDUKE CLAIMS HE STILL OWNS PROPERTY WORTH $100,000,000.—Before the League of Nations was in effect Archduke Frederick of Austria was loaned money by an American syndicate in return for shares in his estate. Now with the League treaties in effect the nations in which the property lies claim he cannot divide with the claimants.

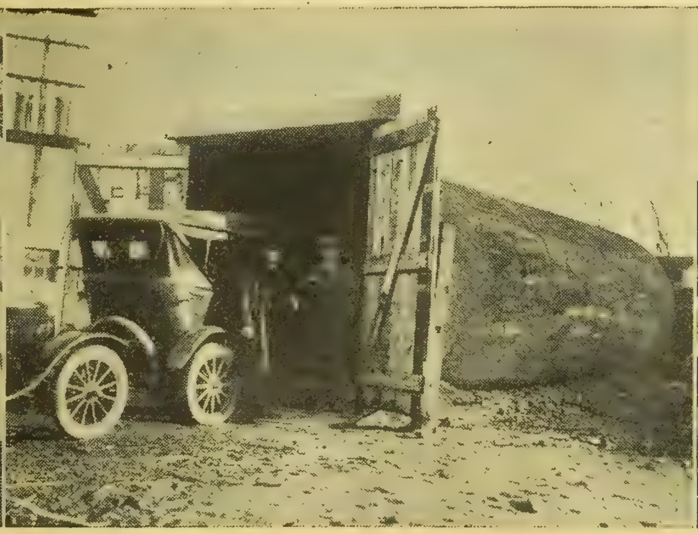
WALKING 1200 MILES PUSHING WHEEL BARROW TO WIN WAGER.—Joseph Crosta, of Bangor, Pennsylvania, World War Veteran, who has made a wager that he can push a wheel barrow with 100 pounds aboard from his home to Boston, Massachusetts and back in 40 days for a wager of $1,000. He is handcuffed to the barrow, but quite optimistic, as he made Boston in 16 days and is now on his return trip. The photo shows him leaving Boston.



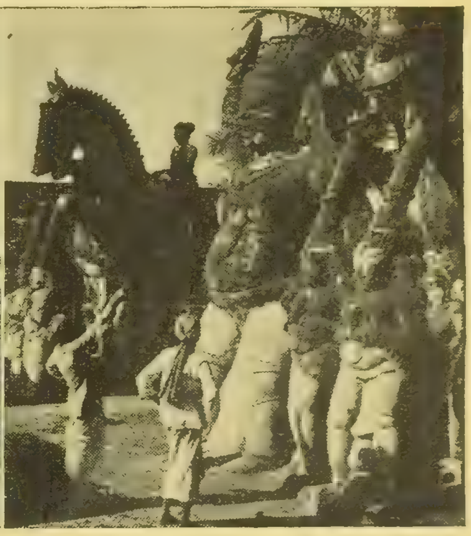
DEFEATS CRIQUI IN EIGHT ROUNDS.—Danny Frush, of Cleveland, Ohio, is here seen boxing in his gym at Paris, just before his bout with Eugene Criqui whom he knocked out in eight rounds of a 20 round bout. Criqui claims he is now through with the squared circle forever, pointing out that an ex-champion should never try to come back.



PERPETUAL MACHINE.—Richard Ulram of Jersey City, N. J., and his perpetual machine, which he claims is "right in principle, but wrong mechanically". He claims his mother appeared in a dream to him 17 years ago and told him he was to be the inventor of the perpetual machine.



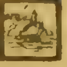
OLD BATTLESHIP FUNNEL MAKES FINE GARAGE.—W. B. Fortune of Philadelphia, Pa., wanted a garage for his two cars and was wondering about what kind to build when a novel idea came to him. He went down to the navy yard and got a dismembered funnel of the scrapped USS Maine, and this is how his garage looked after he got through with it. It holds his two cars very comfortably.



TO THE INDIAN GOD.—Here is a very interesting photo, taken near Madura, India, showing the gigantic figures erected to the Indian God, Iyannar, one of the many household Dieties of the old Buddhist religion. Notice how each front foot of the horses is placed on the head of a figure of a native.

(Copyright, Keystone View Co.)

Current Agricultural News



MILK PRODUCERS MEET AT M. A. C. AUGUST 22

ONE of the largest midsummer picnics to be staged in Central Michigan is slated for M. A. C. August 22. On that date between 5,000 and 6,000 members of the Michigan Milk Producers Association will foregather for the annual summer outing and program.

N. B. Hull, president of the association, estimates that 25 per cent of the membership will attend and the organization has now a total of 20,000 members. The program for the day is now being planned by the picnic promoters.

Mr. Hull has invited Judge John D. Miller, of New York, president of the national federation of milk producers, to participate, and has extended an invitation to J. A. Glover, of Wisconsin, editor and dairyman, to speak. It is probable that these men, who will confine themselves to major dairy problems, legislative and otherwise, will be the principal speakers.

Arrangements are being made at M. A. C. to care for the crowd. Special parking accommodations will be extended and places for the picnic dinners and speaking program will be provided. Weather will make little difference in the program.

TO URGE CUT IN SUGAR TARRIFF

BEFORE you read this three of the members of the Tariff Commission will submit a report to President Coolidge urging a reduction of 25 per cent in the duty on sugar. These three members will take the position that the duties of the Fordney-McCumber Tariff law constitute an unjust burden upon the American people.

A duty of about 1.35 per cents per pound will be recommended by these three members, it is understood. The present rate on Cuban sugar, after allowing for the 20 per cent preferential rate applying on all imports from Cuba, is 1.76 cents a pound. The emergency tariff rate was 1.6 cents and the former Underwood law rate was one cent.

The sugar investigation has been the most important proceeding before the Tariff Commission since the enactment of the flexible tariff law in September, 1922. As investigation of sugar duties was ordered in November, 1922, and it has been in progress for about a year and a half.

The investigation was ordered on the basis of an application for a decrease in duty filed by Americans with sugar interests in Cuba. The proposed decrease in duty has been vigorously opposed by western beet growers, both of whom have insisted that the Fordney-McCumber rate is not high enough and that if the duty is cut materially it will mean the eventual destruction of the domestic industry.

ABOUT 250 ATTEND STATE HOLSTEIN ROUND-UP

THE annual "Round-up" of the State Holstein Ass'n was held at the Detroit Creamery Farms, near Mt. Clemens, under the joint auspices of the Macomb County Holstein Ass'n, the State Holstein Ass'n and the Detroit Creamery Company Farms on July 1st and around 250 were in attendance. Nearly every county in the state was represented and Macomb breeders—Holstein or otherwise—turned out in fine style.

All brought their dinners and ate them in the picnic grove at the Farms. They then gathered at the barns where one of the barns had been made into a improved moving picture theater and shortly after one o'clock the crowd was shown the latest educational moving picture issued by the U. S. Department of Agriculture on eradication of bovine tuberculosis. After the movie the well known "Jimmie" Hayes, chairman of the meeting, introduced the speakers of the afternoon in his usual humorous way.

The first one to address the meeting was D. D. Atkins, of Holstein fame, and he gave a very good talk, pointing out how the man on the soil is much better off than the city man. The next speaker was Mr. Long of the National Holstein Ass'n and during his brief talk he gave the crowd much information for them to think about. The last speaker was O. E. Reed, Professor of Dairy Husbandry, Michigan Agricultural College and he briefly told what his department of the college is trying to do. Few of our farmers know their agricultural college and what it is doing as they should.

Many others from the college staff were there but time would not permit the calling on them for talks so the meeting adjourned to the spacious lawn between the house and the barns where Bob Haeger, national Holstein judge, told them how to "pick the good ones." He worked on cows, bulls and calves answering all questions and the crowd kept him so busy that it was 6 o'clock before the round-up broke up. Every one went home tired, and the larger percentage was much wiser.

FARM RETURNS BETTER IN 1923

AN average cash balance of $890 was returned to owner-operators in 1923 on 16,183 farms surveyed by the United States Department of Agriculture. In addition to this margin of cash receipts over cash expenses these farms increased inventories of crops, livestock, machinery and supplies $130, making an average return of $1,020 for the use of $17,490 of capital and the labor of the farmer and his family. These farms also produced food and fuel consumed on the farm estimated to be worth $250 on the average.

This is slightly better than shown by a similar survey for 1922 on 6,094 owner-operator farms which averaged a cash balance of $175, increased inventory of $202, and produced food and fuel worth $294 on capital amounting to $16,410.

The cash balance of $890 in 1923 was all the average of these farms made available to the owner to pay his living expenses, take care of debts, and make improvements. Interest paid on debts during the year 1923 averaged $230 and the reported outlay for improvements averaged $140.

Sales of crops in 1923 on the average totalled $850 or 38 per cent of total cash receipts of $2,240. Sales of livestock or livestock products were $1,310 or 58 per cent of the total receipts. Miscellaneous receipts were $80.

Cash expenses amounted to $1,350, which included hired labor worth $350 for the year, livestock $240, feed $210, fertilizer $60, seed $40, taxes $190, machinery $110, and miscellaneous $150.

The size of the farms was 300 acres on the average and the reported value of land and buildings was $14,530, the size and value of the farms being larger than the average reported in the 1920 census. The value of crops, livestock, machinery and supplies on hand at the beginning of the year was $2,960. The average of the farms reporting in 1922 was 252 acres and the average capital $16,410.

The department points out that the figures apply only to the farms reporting and to the farm business in each year. Many farmers have property besides the farms they work, or supplement their farm returns with outside work, and many draw on savings or borrowed to meet expenses not covered by current receipts. It is probable, however, that the figures give a fairly accurate picture of the state of the business of owner operators in the years covered by the surveys, the department says.

MISSOURI FARMERS FAVOR CO-OPERATIVE MARKETING

ACCORDING to the Missouri State Marketing Bureau, Jefferson City, the work of signing up farmers to the "Producers' Contract" fostered by the Missouri Farmers' Association is going forward steadily and with satisfactory results. The contract provides for the marketing of livestock, grain, and dairy and poultry products for a period of five years.

The association is organized under the non-profit cooperative marketing act passed by the Missouri Legislature in 1923. It is estimated that nearly 20,000 producers in ten different counties have signed the contract. It is probable that no attempt will be made to put the contract into effect until at least 50,000 producers have signed up, for the association is now handling the above products of approximately 70,000 farmers without a contract. Three-fourths of the farmers in a given trade territory or county must be signed up before the contract can become effective as to that county or trade territory. Without a contract, the Association is reported to be the largest individual shipper of eggs in the country. It also maintains the largest cooperative livestock commission company on the East St. Louis livestock market. Butterfat is sold by the 400 local exchanges direct to the centralizers or creameries. A recently established grain commission company at St. Louis is expected to handle in the near future the volume of grain of the members of the farmers' Association.

OLD TIMER'S SCYTHE CONTEST AT M. A. C.

ON Friday, Aug. 1, the Michigan Agricultural College at East Lansing, will act as host to thousands of Michigan farmers, their wives and children, and others who are interested in agricultural progress. The beautiful 105-acre campus furnishes excellent facilities for such an occasion.

One of the features of the day will be a hay-making demonstration on a 25-acre field of alfalfa, which will chow in operation the best and cheapest methods of making hay with modern hay-making machinery. This feature will also include an old timer's scythe contest, which is open to the pioneer farmers of Michigan, who used this method in their younger days. The afternoon program will start off with a parade of the college live stock equipment, which includes many outstanding individuals of the representative types and breeds. Acting President R. S. Shaw, dean and director of the experiment station, will act as chairman of the day.

MICHIGAN FAIR DATES

NAME	PLACE	DATE
Alcona	Harrisville	
Alger	Chatham	Sept. 1-4
Allegan	Allegan	Aug. 26-29
Alpena	Alpena	Sept. 16-22
Arenac	Standish	Sept. 16-19
Armada	Armada	Sept. 16-19
Baraga	Baraga	Sept. 16-19
Calhoun	Marshall	Sept. 15-20
Caro	Caro	Aug. 19-23
Charlevoix	East Jordan	Sept. 8-12
Cheboygan	Wolverine	Sept. 23-26
Chippewa	S. Ste. Marie	Sept. 1-6
Chippewa	Pickford	Sept. 15-17
Clare	Harrison	Sept. 23-26
Clinton	St. Johns	Sept. 2-5
Cloverland	Stephenson	Sept. 10-13
Copper	Houghton	Sept. 23-27
Croswell	Croswell	Aug. 26-29
Delta	Escanaba	Sept. 16-19
Dickinson	Norway	Aug. 29-Sept. 1
Eaton	Charlotte	Sept. 23-26
Emmet	Petoskey	Sept. 9-12
Flint River	Montrose	Sept. 1-4
Fowlerville	Fowlerville	Sept. 30-Oct. 3
Genesee	Davison	Aug. 26-29
Gladwin	Gladwin	Sept. 10-13
Gogebic	Ironwood	Sept. 9-12
Grange Fair	Centerville	Sept. 15-20
Grangers', Gleaners' and Farmers' Fair	Big Rapids	Sept. 23-26
Gratiot	Ithaca	Aug. 25-29
Greenville	Greenville	Aug. 19-22
Hillsdale	Hillsdale	Sept. 22-27
Huron	Bad Axe	Aug. 25-29
Imlay City	Imlay City	Sept. 9-12
Ionia	Ionia	Aug. 12-16
Iosco	Tawas City	Sept. 9-12
Iron	Iron River	Sept. 1-4
Isabella	Mt. Pleasant	Spet. 2-6
Jackson	Jackson	Sept. 8-13
Kalamazoo	Kalamazoo	Aug. 19-23
Lenawee	Ardian	Sept.-5-19
Livingston	Howell	Aug. 26-29
Luce	Newberry	Sept. 9-11
Mackinac	Allenville	Sept. 15-17
Manistee	Onekama	Sept. 23-26
Marquette	Marquette	Sept. 9-13
Mason	Scottville	Sept. 10-12
Mich. State	Detroit	Aug. 29-Sept. 7
Midland	Midland	Sept. 17-20
Missaukee	Lake City	Sept. 3-5
No. Branch	North Branch	Sept. 16-19
N. W. Mich	Traverse City	Sept. 15-21
Northern Dist.	Cadillac	Sept. 8-12
N. E. Mich	Bay City	Aug. 25-29
Oakland	Millford	Sept. 10-13
Oceana	Hart	Sept. 16-19
Ogemaw	West Branch	Sept. 2-5
Otia	Brahman	Sept. 13-17
Otsego	Gaylord	Sept. 16-19
Ottawa, Kent	Marne	Sept. 23-26
Presque Isle	Millersburg	
St. Clair	Yale	Sept. 23-26
Saginaw	Saginaw	Sept. 8-14
Sanilac	Sandusky	Sept. 1-5
Schoolcraft	Manistique	Sept. 23-26
Shiawassee	Owosso	Sept. 19-22
South Ottawa & W. Allegan	Holland	Aug. 19-22
Stalwart	Stalwart	Oct. 2-3
Tri-Co. Fair	Buckley	Sept. 2-5
Tuscola, Huron & Sanilac	Cass City	Aug. 12-15
Van Buren	Hartford	Sept. 30-Oct. 4
Washtenaw	Ann Arbor	Sept. 26-30
Wayne	Northville	Sept. 23-27
West. Mich	Grand Rapids	Sept. 15-19

Uncle Rube Spinach Says:

WATCH OUT FOR SPOTLIGHTS!

NOW 'at the nominatin' season has sprung onto us there's a lot of things to watch out for. Somebody's goin' to be nom'nated an' without any doubt somebody'll be 'lected—not only for pres-dent but for congress an' our state legislature. Conventions 'll be in order now for a long time—'bout two or three months. Primaries 'll be held that don't amount to much—a primary election is only jest a farce anyway an' a bill of expense. Nobody voted for in the pres'dential primary is hardly ever nominated for pres'dent. Lots of fellers voted for in congressional primaries or other wise never get to be congressmen.

Folks, if we want wise laws don't it kinda stand to reason that we've got to 'lect wise men to make 'em for us? You know there's lots of men ready to take the job 'at don't know hardly enough to run their own affairs. I could mention numerous ones an' mebbe more includin' one whom modesty prevents me from mentionin'—but we have some nice honest men—every state has 'em—'at would make good congressmen—men 'thout a spot all onto 'em—'thout any spot a' tall. But do we git such men? Well do we? Oh its a great thing to be a senator—worth lots of money, a quarter of a million to some—it's a great honor to be 'lected to congress, to be public servants of the people. They may be real honest before 'lection but do they stay honest afterwards? Don't they git kinda spotted up with oil an' sim'lar an' any thing 'at has money into it for them.

Do they always come back home the same unspotted men they wuz when we sent them away with high hopes an' lots of faith in their future actions?

Well in the last few weks I've changed my mind 'bout runnin' for any kind of office. I'm none to honest now—I try to git along without act-ly stealin' but the temptation comes now an' then to do it so I'm just livin' my plain life an' hankerin' for no particular political job. I have kinda always belonged to either the Democrat or Republican party with a strong leanin' either way. An' yet I am not neutral if you get my meanin', its got to be one or the other or both—just like Lafolette is an' others that have busted the party they claimed to be one of.

Now Mr. Coolidge is all right with me—he's quit an' ain't doin' me no harm—I wasn't in the war nor am I a mail carrier, Mr. Davis an' I always have been good friends—he's never seen me an' vice versa, so as to speak. Mr. Mc Adoo, Mr. Smith, Underwood, are all the same to me—all good men in their own place—which mebbe is their own little homes. No matter friends, somebody's goin' to be 'lected for our own state legislature—yes, an' we 'lect a gov'nor too—what'll it be? A Republican an' sinners or a democrat an' what? I'm kinda in favor of 'lectin' a real he-man for all the offices—state an' county—pres'dent an' all. Now what do you say? Remember I am not runnin' for any office—course I'd like to be gov-nor or somethin' but I'm not sayin' anything, just leavin' that to my friends—if I have any. But any way it depends jest on us who'll be who when 'lectin's over next November.—Cordially yours, UNCLE RUBE.

Farmers Service Bureau

(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full name and address. Name not used if so requested.)

MUST GO TO SCHOOL AFTER SEVENTH BIRTHDAY

In a case of this kind what can a person do? We live over two miles from our school district on a state trunk line. At what age must I send my boys to school? There is another district school a little over a mile in an opposite direction from our own district. Is there any way that we can be set over in the other district so we will not have to pay tuition? What is the school law on sending small children over two miles?—B. C. S., Ada, Mich.

CHILDREN must be sent to school after their seventh birthday. The fact that the family lives on a trunk line and is over two miles from school does not have a legal bearing on the case. If the distance is over two and one-half miles children under nine years of age would not be compelled by compulsory attendance law to attend school unless transportation is furnished.

The township board has authority to detach property from one district and attach it to the district the schoolhouse of which is nearer. The first step of the procedure for such is a petition.—G. N. Otwell, Supt. Rural Education, Dept. of Public Instructions.

SHOULD GIVE NEW WARRANTY DEED

About two years ago I sold a farm, giving a warranty deed subject to a mortgage, and with other exceptions. A short time ago I received a letter from the bank through which I made the sale, stating that the party who purchased the farm had lost or mislaid the deed. And the bank inclosed a quit claim deed asking me to acknowledge it and return it to them. After filling in the regular quit claim deed the banker added a clause something like this: "This deed is given on account of warranty deed given by myself and wife having been lost before recording same." He made no mention of any exceptions in the warranty deed. Now what I would like to ask is this:

Would I be compromising myself in any way in signing this quit claim deed with this clause attached? Wouldn't I really be acknowledging giving a warranty deed without exceptions?—C. P., Matherton, Mich.

YOU should give a new warranty deed and include in it all the exceptions and reservations contained in the old one and state that the new deed is to take the place of the old one which becomes void upon the execution of the second. Do not give a quit claim deed without including the exceptions which are contained in the original deed.—Asst. Legal Editor.

MUST CALL REGULAR SCHOOL MEETING

I would like to ask a few questions about our school district which seems to be run in a "Slip Shod" manner. Could the school board decide not to call a regular annual school meeting as prescribed by law without due notice? The school board held a meeting in the afternoon before the regular annual meeting, and decided to hold it, the annual meeting, at a later date. Would such be legal, when it was held without further notice? How should school officers be elected? The director had the wood cut off his woodlot. The moderator hauled the wood to the school from director's woodlot. Would the assessor have right to pay moderator for said wood, if notified by a tax payer not to do so?—G. W., Empire, Mich.

THE school board has no authority to decide not to call a regular annual school meeting. If no annual meeting is held on the day prescriber in the law, it cannot be held until the time for the next annual meeting. At each annual meeting one or more school officers are to be elected. If there is no annual meeting the township board appoints some person to fill the vacancy after twenty days from the annual meeting have expired.

The officers of the district have no legal right whatever to sell wood or other material to the school district, nor to work for the school district. Any such act performed makes the officer guilty of a misdemeanor and punishable by a fine or imprisonment or both. The treasurer should not pay an order for wood sold by another officer to the district.—W. L. Coffey, Deputy Superintendent of Public Instruction.

CONTINUES TO SEND PAPER

I subscribed for a weekly paper for one year in 1918. I paid in advance and they continue sending it. Do I have to pay for the time they have been sending it? Thanking you in advance, I am.—L. D., Holton, Mich.

IF you have directed them to stop sending the paper, I am of the opinion you would not have to pay for issues sent you after instructing them to discontinue sending it.—Asst. Legal Editor.

TROUBLE WITH TRESPASSERS

I am having trouble with people trespassing on farm. I have signs up but they do not seem to pay much attention to them. I live near a government lake, but there has not been a right of way made public. They say we have no right to stop them as it is a government lake. But the government has not given a right of way. The road is about 10 rods from lake front and they park on side road in front of house. Have they right to do so? They open gate, drive in with auto and have fish houses on and unload, never ask permission. Hoping you can give me some advice, I am—G. S., Kalamazoo, Mich.

IF you own the property, you would have exclusive right of possession up to the edge of the lake, and unless there has been a public right of way established no person would have the right to go on the land without your permission. I suggest you see the local prosecuting attorney in regard to this matter.—Asst. Legal Editor.

MUST GO TO SCHOOL UNTIL 16 YEARS OLD

Would you please tell me if there is a law passed in Michigan that compells a boy to go to school until he has passed the eighth grade.—W. G., Bay County, Mich.

BOTH boys and girls are required by the compulsory education law to attend school until they are sixteen years of age unless excused under the provision of the law. This is true even though they have passed the eighth grade unless they are living in a district which does not have grades beyond the eighth grade.—W. L. Coffey, Deputy Superintendent of Public Instruction.

WANTS TO ADOPT CHILDREN

I am a reader of the M. B. F. and its O. K. and I don't like to wait two weeks for the next issue. I have two orphans I took for adoption if they proved satisfactory after six months trial. Then I got in touch with their guardian (their father) and he wrote a very satisfactory answer. I have written him ever so many times since then but no reply. The last letter with his consent was dated July 25, 1922. Isn't there a way to arrange so they will be mine legally and my heirs?—G. W. G., Evart, Mich.

I WOULD advise you to take this matter up with the local probate judge. He would have jurisdiction over such matters and will tell you just how to proceed.—Asst. Legal Editor.

COULD NOT CLAIM LAND

A and B own adjoining land. A 15 acres and B 11 acres. A sells 10 of his 15 acres and moves away. B removes line fence, works and pays taxes on A's remaining 5 acres for 40 years. Can B claim said 5 acres there being no agreement between A and B concerning said 5 acres? What is meant by claim of right?—I. H., Redford, Mich.

IF B entered into possession of the 5 acres without any claim of right or color of title, but on the contrary took possession knowing the land was A's and that he had no right to it, I am of the opinion he could not claim title by adverse possession.

To acquire title to land by adverse possession, it is essential that claimant have some grounds for claiming it as his own, and, having such grounds, continues to occupy the land for the statutory period of time, disputing the real owner's claim to it.—Asst. Legal Editor.

AUNT IS LIABLE

We are subscribers to the M. B. F. and come to ask for help. We sent a year ago for my aunt from Germany, as she wanted to come and she wrote to us that she would pay us every cent if we sent her the ticket. So we went and borrowed the money, $213.00, and we paid the interest for one year which was $12.78. The note was due the last of August and now she married and we have wrote to her several times but do not receive an answer. So please let us know what can be done, as we cannot afford to lose that money, as we have a large family and lots of debts on our farm yet.—Mrs. G. K., Sutton Bay, Mich.

YOUR aunt would be liable to you for the payment of the $213.00 expenses with interest, under her promise to do so. If she refuses to pay you this amount, you could bring suit against her to recover same.—Asst. Legal Editor.

CANNOT COLLECT FROM ESTATE FOR BOARD

Can an heir collect from an estate pay for board and care for parent, when no arrangements have been made to that effect? And board has not been paid by parent. Kindly answer through the columns of your valuable paper.—Mrs. A. R., Davison, Mich.

AN heir could not collect from the estate for services rendered the parent unless there was some understanding that such services were to be paid for.—Asst. Legal Editor.

EXEMPT $250

I sent some money to a bank in Minnesota given on a note without an endorser. How much stock and tools am I exempted from seizure?—Subscriber, Vassar, Mich.

ALL your stock and tools up to the value of $250.00 would be exempt from seizure on execution for your debts.—Asst. Legal Editor.

U. P. Farmers Stock Up on Pure-Breds

By L. D. TUCKER

THE Cloverland Dairy Special is history—as far as the train itself is concerned. The dairy demonstration train, organized June 2nd, under the joint co-operation of the five railroads operating in the upper peninsula of Michigan, the Michigan Agricultural College, the Upper Peninsula Development Bureau, the banks, and other agencies throughout the peninsula completed its itinerary of thirty-nine stops in upper Michigan, Saturday, June 21, at Wakefield, in Gogebic county. And thirty-seven pure-bred registered, pedigreed dairy sires were left behind as tangible evidence that the Cloverland Dairy Special was the most constructive development feature ever attempted in that section of the state.

Of the thirty-seven pure-breds placed at various points throughout the peninsula, twenty were Holsteins and seventeen Guernseys. The majority of the sales stock was purchased in Wisconsin, and carried along in two live-stock coaches one of the animals is of blooded stock, and were offerd to the farmers along the route at prices which would have been impossible in buying direct from the breeder, freight and other expenses considered.

During its three weeks of operation in upper Michigan, the Cloverland Dairy Special visited thrity-nine communities, and conducted as many dairy "booster meetings". The total attendance was about 4,000, the attendance at each meeting ranging from fifty to 500 farmers.

Rudyard, in Chippewa county, is credited with the most enthusiastic and largely attended meeting during the trip of the "dairy special." Seven pure-bred bulls were placed in Chippewa county, largely through the preliminary campaign carried out by D. L. McMillan, newly appointed county agricultural agent in that section. The farmers in and about Rudyard arranged a live-stock display for their own, on the occasion of the train's visit to that community, and here a decidedly interesting program of judging contests, talks and other features were held.

The prize "bid bull," consigned to the train from the pure-bred herd at the Newberry State Hospital, went to two Finnish farmers at Bruce's Crossing, who bid $211 for the animal. This bull was offered along the route to the highest bidder. The bids were sealed and opened upon the completion of the itinerary, with the above results. The second highest bid was $204, and the lowest bid $20. The animal was valued at $300 by the herdsman at the Newberry Hospital, on the strength of the production record shown by his dam, who produced 32 pounds of butter in a week during her test period—more than the best record of the dam of any other bull offered for sale from the "dairy special."

Questionaires calling for specific information relative to the attitude of the farmers of the upper peninsula on pure-bred sires were distributed along the route, and a great number of these were filled out and returned to those in charge of the train. The cards will be used as a basis for further effort along better-dairying lines. In addition, a considerable quantity of better sire literature was placed throughout the entire district.

Representatives of all the railroads in the peninsula; of the various state and national breeding associations; of the press and of the agricultural schools throughout the district accompanied the train on its trip through upper Michigan.

The Cloverland Dairy Special was, without reservation, an unqualified success, and it should contribute materially to the growth and progress of upper Michigan's dairying industry.

This photo of the Cloverland Dairy Special was snapped at one of the many stops made and gives an idea of the interested crowd that gathered at nearly every stop. The farmers meant business and they got some high grade bulls at very low prices.

What the Neighbors Say

SELECT OFFICIALS WITH CARE

DEAR Editor:—Keep the waste basket full. Do not feel discouraged when your writings do not immediately appear, for the Editor must have plenty to choose from. This is a gloowy season of the year for the farm tax-payer and writing his feelings, and planning reform in business and politics will in a measure, drive that gloom away. One or two of the largest items on the tax receipt of this district, is a special tax for benefit caused by the action of sate officials, under the Covert Road Act, and the other by the action of a county official not a constitutional officer acting under the drain act of 1915, as amended.

The actions of both those officials were prompted by the petition of non-resident owners, several petitioners not being electors of this state. Such proceedings as these legalized by acts of our legislature leads us to believe that the remedy for such injustice lies in a longer and more explicit constitution. Agricultural lands are soon to be depopulated if the tax laying farm mortgaging is to be longer delegated to others than the parties who have bought the land under a different rate of taxation, with no better way of earning the taxes.

It is an undisputed fact that it costs more to transport a ton per mile today than it did 35 years ago, notwithstanding that we have almost sunk our farms under debts for improved roads and costly bridges. Since our export trade in staples has fell away, we are helpless as any protective tarrif measure has the tendency to increase acreage in the crop protected thereby defeating the wished hoped for benefit by further discouraging export and import trade. It would seem that the most practical means at hand which is left for us to use, is to begin locally to exercise economy in local affairs, to-wit: We have now on the status books a new drain law which is an uncertain quantity as yet, but one feature of the law can be governed locally by the electors of the township electing to office supervisors and highway commissioners who are known to favor less public work in the line of county drains as under the amended law all county drain projects must be passed upon by the three supervisors appointed by the judge of probate and if the farmers will forget the past and select a supervisor they feel sure of, for the future the probate court will have a body to select from that will do justice to those who are working for mere necessity, instead of speculative enterprises. The highway commissioners also need careful election. The electors of a township should try and get from their auditors a concise statement of township affairs before town meetings, for, from year to year it seems we keep on gazing at the wall after the nominations have been made, and never taking a firm step forward in such matters. —Ernest Richardson, Huron County, Michigan.

WANTS TO EXCHANGE IDEAS

TO the Editor:—I would like to exchange ideas with other farmers through your valuable paper with regard to the condition and chance for improving their standing and placing them on a nearer equal footing with those who are engaged in other kinds of occupations.

In the first place I believe it would be advisable to make an effort to get a bill passed; something similar to the bill proposing that the navy be instructed to handle farm productions in this and foreign countries under certain regulations included in the bill so that farm products will reach the consumers both in this and foreign countries at the least possible expense through government control.

Such a management properly arranged and conducted I fully believe would be of more benefit to the farmers than anything that has been accomplished for their benefit from the beginning of time up to the present.

The two old parties have promised and promised but what have they done except to help the farmer get deeper and deeper in debt by placing the great burden of taxation and high freight rates on his head to bear him down and make his condition still worse. What else have they done? Recommended the high in price. President Coolidge called his cabinet together and those brainy men after careful, solemn and deliberate consideration on some method of assisting the farmers out of their straightened circumstances, finally concluded to advise the farmers to raise more beets, result—sugar came down but not yet on account of farmers raising more beets but when the farmers do raise more beets in large quantities, beets will come down. Every farmer's boy twelve years old or more understands now that an increase of production has a tendency to decrease the price and decrease of production has a tendency to increase the price; then what did the government advise you to increase the production of beans and beets? To improve the farmers' condition or the consumers'? The Germans used camouflage during the war but each of the old parties have got our votes through promises, but what have they done? I will leave that matter for you to decide.

Like Bryan, I respected Coolidge and Dawes as being very competent and capable men yet their mental training and ideas don't seem to coincide with our best interests. They wanted farmers to raise more beans when beans were high. The farmers being loyal raised more beans—result, price went down. Consumers benefited. Farmers went back at work at the same low price for all commodities. Last fall sugar was seem to be trained and educated in the other fellows' school. Their sympathies judging from their works don't seem to have any leaning towards the farmers consequently the farmers votes should never help elect them or any of the reactionary Republicans or Democrates.

I also, like Bryan, believe that it would be almost impossible to drive a razor blade between the Republican Reactionaries and Wall Street with a sledge hammer and I might include the reactionary Democrates as far as the farmers are concerned. Those who comprise the Farm Bloc and Progressives of either party are the only ones the farmers should support until their business lands on an equality with other occupations.

The burdens and downward pressure that has been and is now being placed upon the farmers will eventually bring about a revolution —in politics at least.

No country ever prospered any great length of time whose farmers were continually oppressed. It is quite a true saying when the farmers of a country prosper the country prospers.

In conclusion would say to the farmers of this country the time has fully come when you should study earnestly and pick out such men from each part for public offices, whom you have good reason to believe are avowedly in favor of the farmers' interest and the general good of the whole country to the end that farms, bonds, and all properties, shall be taxed equitably and on a just and fair bases.—M. S. Howes, Ingham County.

POWELL AND BENNETT DESERVE THANKS

DEAR Editor:—Stanley M. Powell and Frank W. Bennett deserve our thanks for real service. The logic of Mr. Bennett's article in the April 26th issue points clearly to efficient organization, not only to produce and market economically, but also to regulate production and control prices. Unless we can get fair prices we can not afford to produce, and we can't get fair prices if we produce too much.

But what about anti-trust laws? Well, what have they ever accomplished? The simple fact is that the every-man-for-himself-and-devil-take-the-hindmost industrial system we call "competitive" is not only un-Christian and un-American, but unpractical as well. Ability to insure fair prices is as essential to the prosperity of other industries as to ours, and the only way to do it is to control production. Where is the sense in wasting human energy by producing more wheat and potatoes than human bellies can hold when human backs lack clothes? And if machinery enables us to produce an excess of all commodities, why not give every worker a little leisure instead of working half of them to death while the rest hunt for jobs? The trouble is each industrial group is too intent on its own problems to lift its eyes and consider industry as a whole. Industrial cooperation is necessary, but inter-industrial cooperation is equally important.

Just now, however, I want to talk a little more about taxes. My letter in the April 12th issue "No Exemptions" and secrecy for income records. But what good reason is there for such secrecy any more than with property valuation records?

As for exemptions, to assess corporations on their full net income would be unfair because it would be double taxation and because the large income of the corporation would pay higher rates than the smaller personal incomes of small stockholders. Not to assess corporation incomes at all would give non-resident stockholders an unfair advantage and deprive the state of considerable revenue. Let corporations, then, be assessed only on that portion of their net income paid out in dividends to non-resident stockholders, which would otherwise pay no Michigan tax. Untaxed surplus should, of course, be limited to some reasonable relation to the size of the business and stock dividends treated as part of the personal income of stockholders.

In figuring net personal incomes no account should be taken of rental value of homes, and renters should deduct house rent actually paid. National income taxes should also be deducted before assessing for state taxes. Let all incomes be declared too, and all taxes assessed and collected by local treasurers. Let each net income be divided into thousand dollar sections. Let the first section pay as low a rate as may be. Let the second pay perhaps five mills on the dollar more, and increase the rate progressively for each succeeding section, provided that no section of any income shall pay more than fifty per cent.

But don't put all these details into the constitution. In my opinion the amendment now being presented is fatally defective at this point, besides being open to serious criticism in other respects. Simply authorize the abolition of property taxes and the raising of all public revenues by graduated or progressive income and inheritance taxes. Then elect the right kind of a legislature, leaving it free to fill in details and revise them occasionally in the light of experience.—Stacy Brown, Lake Odessa, Michigan.

CHANGE THE LAWS

MY dear Editor:—I was much interested in "What the Neighbors Say" in the issue of May 10th especially the article on prohibition enforcement by P. E. T. and also C. K., Muskegon, Mich., on war. Relative to the former in commenting on editorial "Prohibition On Trial" I am with the editor and more so for prohibition is not now a success after a fair trial. As to "increasing the fines" being the remedy I do not believe it is as that would only increase the prison population, our third heaviest public expense. Regarding "probation" as being a failure, it has not been proven in this county (Huron) although much used as records will show.

When P. E. T. mentions the United States I presume the elector means that the constitution of Michigan and incidentally the Judicature Act be amended to deal with this particular breach of law which would be at least "a large order", considering the many amendments defeated by the electors since 1909. The writer has for years favored a longer constitution and shorter ballot for both the state and nation, but to put such a measure through is very difficult in time of peace.

Though we champion the principle of "State Rights" claim that the habits of our people aided by modern invention and chemistry makes the states right doctrine of Jefferson's time a dead doctrine, especially when it attempts to control the habits of "The Person" in love and pleasure "conviviallity."

The trouble with the prohibition law, state and national, is the per cent of poison mentioned in the act is unreasonably low as no good house-wife can prepare the food for the family as she has been used to doing it without breaking the law. This makes the law a dead letter and the inventive genius of the people take account of this and enlarge upon it until finally a search warrant is sworn to and another erstwhile good family disgraced by the police, all because the state and nation made no provision for the sale of poison to responsible persons. The remedy is to amend basic law making provision for the sale on state account by persons under bond; and while at the job better include narcotics, explosives and a registry and mark on all fire-arms. Put the bootlegger out of business by competition and the Canadian rummer will go with him.

As to the article by C. K. on war prevention would add an amendment to "popular vote" spoken of by requiring the registered male electors between the ages of 21 and 45 to do all the voting as to declaring war which had for its object the invasion of foreign lands not contigious to U. S.—E. R., Port Hope, Alien born, age 56, still hopeful.

FARM MECHANICS

COST OF OPERATING AN AUTOMOBILE

IT must be because the motorist buys gasoline oftener than anything else connected with his car that the price irks him so much. If he ever sat down and figured the relative cost of gasoline and the other charges for the operation of a car during a year he would be very much astonished to find that gasoline amounts to only about fifteen per cent of what he spends for the pleasure and profit of owning and operating an automobile.

He invests on an average, it has been computed, $900 in a car which should ordinarily be good for six year's service. Say that at the end of the six years he has nothing left of his investment but a piece of junk. That would mean ownership of the car had cost him $150 a year for depreciation. Allow him six per cent interest on the $900 he paid for the car and it will run to $54 a year. Say he has to buy a tire each year at $30. He pays $5 a month for a garage on an average, many paying $10 a month but many, in the country, running the car into a barn or letting it sit out.

Allow $75 a year for repairs, which would be, in six years, equal to one half of the original cost. Put down at least $18 for insurance against fire and theft. License plate and taxes on the original purchase or on parts will run about $25 a year. Calculate a gallon of gasoline a day—or at the very lowest, ten miles driving—at twenty-one cents a gallon and it costs $78 a year. Figure a quart of oil, at twenty-five cents, to every 100 miles, a generous allowance, and say it costs $10 for $5,000 miles a year.

The annual cost will then appear as follows:

Depreciation	$150	30.0%
Interest	45	10.8
Tires	30	6.0
Garage	60	12.0
Repairs	75	15.0
Insurance	18	3.6
License and Taxes	25	5.0
Gasoline	78	15.6
Oil	10	2.0
Total	$500	100.0

Gasoline thus costs but 15.6 per cent of the total upkeep of a car, or 15½ cents out of every dollar spent.

But a great majority of car owners buy a car and forget all about allowing for depreciation for wear and tear, or for interest.—Oil and Gas Journal.

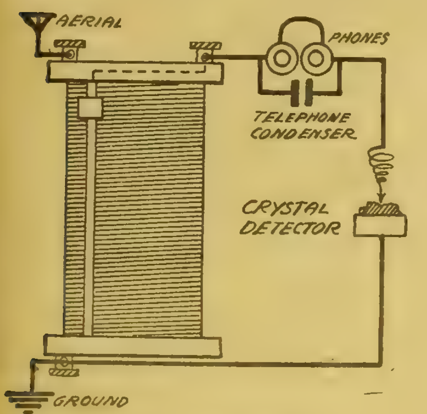
RADIO DEPARTMENT

EDITED BY J. HERBERT FERRIS, R. E.

A CRYSTAL RECEIVING SET

A SHORT time ago we told you the parts that you would need for building a crystal receiving set. Such a set can be used by those of our readers who live within 30 miles of a broadcasting station. Fortunately there are many of you who can use such a set and hear all the good things that are on the air at a very small initial expense.

The connections of both a one slide and a two slide tuner are shown in the diagrams herewith. You should connect your set as shown and you can with a very little practice succeed in hearing the nearer station loudly on telephones and exceptionally clearly, as a crystal will bring in both voice and music clearer and truer than a vacuum tube. Later on you can add a vacuum tube amplifier at a small additional expense.

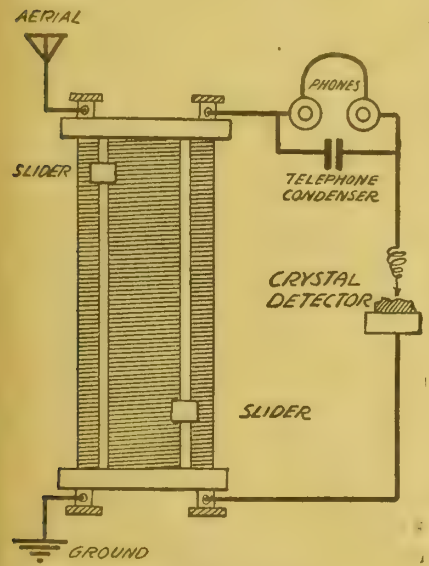


One slide tuner.

It is necessary that you use telephones of high resistance, these should be the regular radio receiving telephones of about 2,000 ohms resistance. On some sets an ordinary 75 ohm telephone costing around one dollar will give fair results but the better phones are much to be preferred.

Under no circumstances must you drop your phones, as a sudden jar will make then lose part of their magnetism and so decrease their sensitivity. The surface should not be touched with your fingers as the natural oil of your body will coat it so that it will be hard to find a sensitive spot.

After connecting up your set, place a small piece of crystal, about the size of a bean, in the crpstal holder, fastening it securely so that it cannot move. For crystals, Galena, Silicon or Radiocite will prove as satisfactory as any, silicon apparently having more spots that are "sensitive" than the others.



Two slide tuner.

Having placed your phones on your head, the aerial and ground connections having been made, carefully adjust the "cat's whisker" contact (the "cat's whisker" is the small wire on the crystal detector stand that is used to make a contact with the crystal) so that there is a light contact with the crystal, then move the slider or sliders on the coil up and down the length of the coil slowly until you hear the broadcasting. At times the cat's whisker will not be on a sensitive spot, so then you will have to shift it to a new spot on the crystal and keep shifting it a little at a time till you find a sensitive spot.

In the summer time when there is so much "static" or atmospheric electricity you will be able to hear a slight crackling sound in your telephone receivers which will enable you to tell when you have found a sensitive spot.

After finding your broadcasting station, shift your slider, a turn of wire at a time, 'till you get the music or voice the clearest and loudest. At this point you should be able to hear the station any time that you wish to listen to them. By placing a small mark for each station that you hear you can go back to any station whenever you wish.

In the old days of wireless telegraphy your radio editor used a crystal set as his first set and thereby gained a lot of useful knowledge that was of advantage when he started in to use vacuum tube detectors.

Those who live near Detroit, Grand Rapids, Jackson or Lansing can buy many of these parts in the 5 and 10 cent stores. These parts will give you good results as well as some of the more expensive parts.

WITHIN A YEAR

A RADIO scientist writing in a recent issue of a radio magazine forecasts that within a year developments in radio may be expected to cover the following twelve points:

1. Relay broadcasting will be developed so that the same program can be broadcasted simultaneously on this continent and Europe.

2. A system will be adopted by which inter-denominational religious services will be broadcasted to the whole country every Sunday.

3. A radio record will be perfected so that programs can be received automatically all day—and run off later when desired.

4. The first broadcasting of pictures by radio television on a commercial basis may occur, and a "picture receiver" simple enough to be built by amateurs may be announced.

5. A new circuit that eliminates static great sensitivity will be produced.

6. Amateur transmission will be carried on more and more on the short waves, and long distance transmission will be attained on from 20 to 50 meters.

7. Apparatus for the production of directed beams of radio waves will be announced for the use of amateurs as well as for the purpose of relaying broadcast programs.

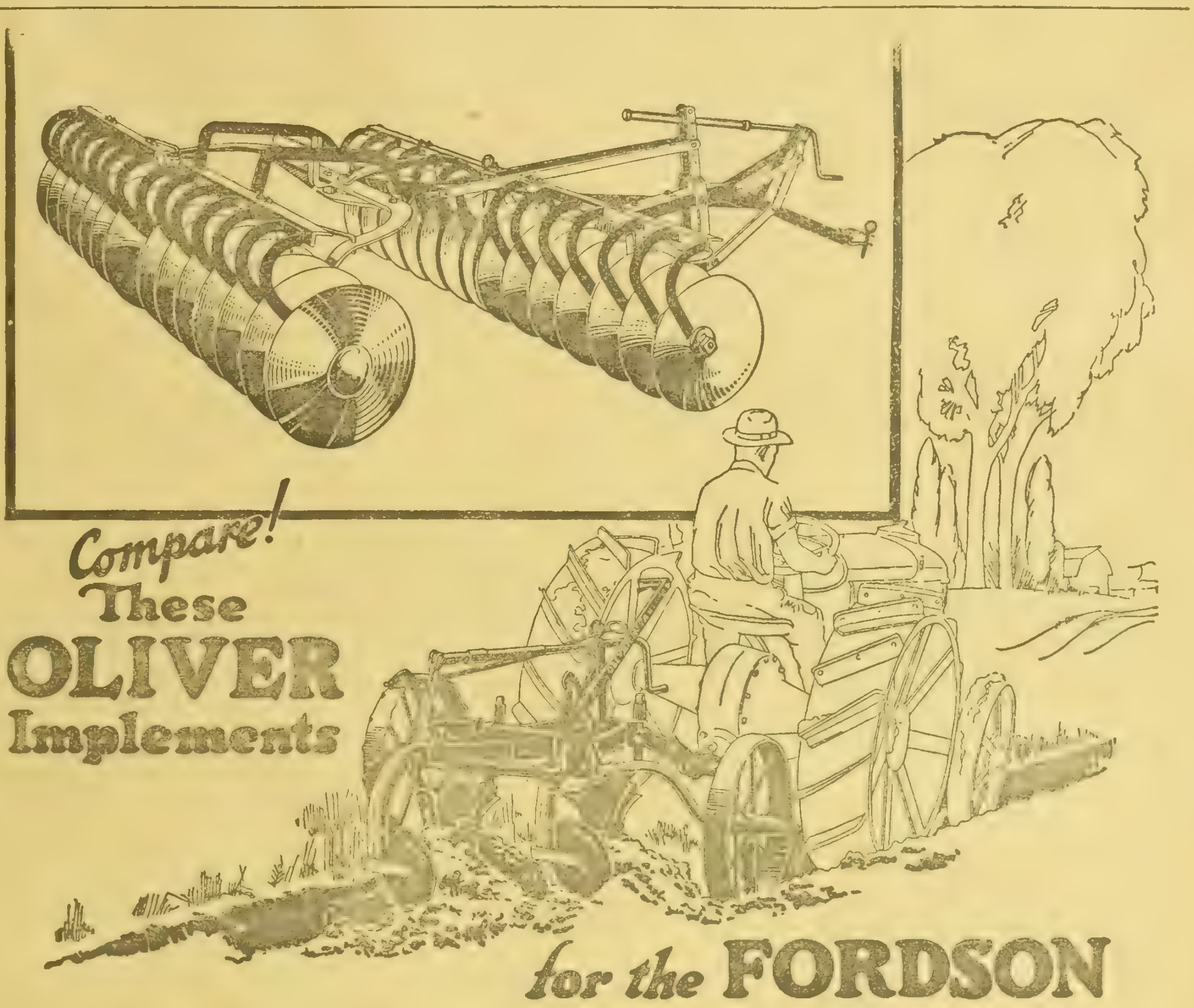
8. The waves sent out from living nerves will be detected by radio apparatus—thus opening up a whole new field of scientific work in physiology and psychology.

9. The theory of the crystal detector will be discovered and new crystals of great sensitivity will be produced.

10. Transoceanic amateur tests will be extended to Asia, Africa and South America.

11. Exploration of the upper air will yield new facts about the heaviside layer and a new theory of fad-

(Continued on Page 17)



Fordson power is the modern farm power.

Put behind it an Oliver No. 7-A plow or an Oliver FDH Disc Harrow and you are using the most modern outfit designed to help you toward bigger crop yields.

You will find the No. 7-A a pleasure to operate. Plowing depth is set by a powerful screw which will raise the bottoms completely out of the ground even with the outfit standing still. Each adjustment of the plow is conveniently made from the tractor seat. Of course there is a power lift.

Equally convenient to operate and capable of equally good work under varied soil conditions is the Oliver FDH harrow. Here, also, a quick acting screw control, operated from the seat, permits the gangs to be angled with the tractor moving or standing. The flexible construction permits short turns, gives lightest draft and even depth penetration.

Experience of three generations in the making of highest grade, practical farm implements, and in more recent years, close cooperation in the building of equipment for the Fordson, has made possible the development of these new Fordson tools.

See and compare their work with your own exacting standard of quality soil preparation.

SEE ANY AUTHORIZED FORD DEALER

Oh Money! Money!

by ELEANOR H. PORTER

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(Continued from July 5th Issue.)

AS the door shut crisply, Miss Maggie turned and looked at Mr. Smith. But Mr. Smith had crossed again to the stove and was fussing with the damper. Miss Maggie, after a moment's hesitation, turned and went out into the kitchen, without speaking.

Mr. Smith and Miss Maggie saw very little of Miss Flora after this for some time. But they heard a good deal about her. They heard of her generous gifts to families all over town.

A turkey was sent to every house on Mill Street, without exception, and so much candy given to the children that half of them were made ill, much to the distress of Miss Flora, who, it was said, promptly sent a physician to undo her work. The Dow family, hard-working and thrifty, and the Nolans, notorious for their laziness and shiftlessness, each received a hundred dollars outright. The Whalens, always with both hands metaphorically outstretched for alms, were loud in their praises of Miss Flora's great kindness of heart; but the Davies (Mrs. Jane Blaisdell's impecunions relatives) had very visible difficulty in making Miss Flora understand that gifts bestowed as she bestowed them were more welcome unmade.

Every day, from one quarter or another, came stories like these to the ears of Miss Maggie and Mr. Smith. But Miss Flora was seen very seldom. Then one day, about a month later, she appeared as before at the Duff cottage, breathless and agitated; only this time, plainly, she had been crying.

"Why, Flora, what in the world is the matter?" cried Miss Maggie, as she hurried her visitor into a comfortable chair and began to unfasten her wraps.

"I'll tell you in a minute. I came on purpose to tell you. But I want Mr. Smith, too. Oh, he ain't here, is he?" she lamented, with a disappointed glance toward the vacant chair by the table in the corner. I though maybe he could help me, some way. I won't go to Frank, or Jim. They've—they've said so many things. Oh, I did so hope Mr. Smith was here!"

"He is here, dear. He's in his room. He just came in. I'll call him," comforted Miss Maggie, taking off Miss Flora's veil and hat and smoothing back her hair. "But you don't want him to find you crying like this, Flora. What is it, dear?"

"Yes, yes, I know, but I'm not crying—I mean, I won't any more. And I'll tell you just as soon as you get Mr. Smith. It's only that I've been—so silly, I suppose. Please get Mr. Smith."

"All right, dear."

Miss Maggie, still with the disturbed frown between her eyebrows, summoned Mr. Smith. Then together they sat down to hear Miss Flora's story.

"It all started, of course, from—from that day I brought the letter here—from that man in Boston with seven children, you know."

"Yes, I remember," encouraged Miss Maggie.

"Well, I—I did quite a lot of things after that. I was so glad and happy to discover that I could do things for folks. It seemed to—to take away the wickedness of my having so much, you know; and so I gave food and money, oh lots of places here in town—everywhere, 'most, that I could find anybody that needed it."

"Yes, I know. We heard of the many kind things you did, dear." Miss Maggie had the air of one trying to soothe a grieved child.

"But they didn't turn out to be kind—all of 'em," quavered Miss Flora. "Some of 'em went wrong. I don't know why. I tried to do 'em all right!"

"Of course you did!"

"I know; but 'tain't those I came to talk about. It's the others—the letters."

"Letters?"

"Yes. I got 'em—lots of 'em—after the first one—the one you saw. First I got one, then another and another, till lately I've been getting 'em every day, 'most, and some days two or three at a time."

"And they all wanted—money, I suppose," observed Mr. Smith, "for their sick wives and children, I suppose."

"Oh, not for children always—though it was them a good deal. But it was for different things—and such a lot of them! I never knew there could be so many kinds of such things. And I was real pleased at first,—that I could help, you know, in so many places."

"Then you always sent it—the money?" asked Mr. Smith.

"Oh, yes. Why, I just had to, the way they wrote; and I wanted to, too. They wrote lovely letters, and real interesting ones, too. One man wanted a warm coat for his little girl, and he told me all about what hard times they'd had. Another wanted a brace for his poor little crippled boy, and he told me things. Why, I never s'posed folks could have such awful things, and live! One woman just wanted to borrow twenty dollars while she was so sick. She didn't ask me to give it to her. She wasn't a beggar. Don't you suppose I'd send her that money? Of course I would! And there was a poor blind man—he wanted to buy a Bible in raised letters; and of course I wouldn't refuse that! Some didn't beg; they just wanted to sell things. I bought a daimond ring to help put a boy through school, and a ruby pin of a man who needed the money for bread for his children. And there was—oh, there was lots of 'em—too many to tell."

"And all from Boston, I presume," murmured Mr. Smith.

"Oh, no,—why, yes, they were, too, most of 'em, when you come to think of it. But how did you know?"

"Oh, I—guessed it. But go on. You haven't finished."

"No, I haven't finished," moaned Miss Flora, almost crying again. "And now comes the worst of it. As I said, at first I liked it—all these letters—and I was glad to help. But they're coming so fast now I don't know what to do with 'em. And I never saw such a lot of things as they want—pensions and mortgages, and pianos, and educations, and wedding dresses, and clothes to be buried in, and—and there were so many, and—and so queer, some of 'em, that I began to be afraid maybe they weren't quite honest, all of 'em, and of course I can't send to such a lot as there are now, anyway, and I was getting so worried. Besides, I got another one of those awful proposals from those dreadful men that want to marry me. As if I didn't know that was for my money! Then to-day, this morning, I—I got the worst of all." From her bag she took an envelope and drew out a small picture of several children, cut apparently from a newspaper. "Look at that. Did you ever see that before?" she demanded.

Miss Maggie scrutinized the picture.

"Why, no,—yes, it's the one you brought us a month ago, isn't it?

Miss Flora's eyes flashed angrily.

"Indeed, it ain't! The one I showed you before is in my bureau drawer at home. But I got it out this morning, when this one came, and compared them; and they're just exactly alike—exactly!"

"Oh, he wrote again, then,—wants more money, I suppose," frowned Miss Maggie.

"No, he didn't. It ain't the same man. This man's name is Haley, and that one was Fay. But Mr. Haley says this is a picture of his children, and he says that the little girl in the corner is Katy, and she's deaf and dumb; but Mr. Fay said her name was Rosie, and that she was lame. And all the others—their name ain't the same, either, and there ain't any of 'em blind. And, of course, I know that—that one of those men is lying to me. Why, they cut them out of the same newspaper; they've got the same reading on the back! and I—I don't know what to believe now. And there are all those letters at home that I haven't answered yet; and they keep coming—why, I just dread to see the postman turn down our street. And one man—he wrote twice. I didn't like his first letter and didn't like it; and now he says if I don't send him the money he'll tell everybody everywhere what a stingy t-tight-wad I am. And another man said he'd come and take it if I didn't send it; and you know how afraid of burglars I am! Oh, what shall I do, what shall I do?" she begged piteously.

Mr. Smith said a sharp word behind his teeth.

"Do?" he cried then wrathfully. "First, don't you worry another bit, Miss Flora. Second, just hand those letters over to me—every one of them. I'll attend to 'em!"

"To you?" gasped Miss Flora. "But—how can you?"

"Oh, I'll be your secretary. Most rich people have to have secretaries, you know."

"But how'll you know how to answer my letters?" demanded Miss Flora dubiously. "Have you ever been—, secretary?"

"N-no not exactly a secretary. But—I've had some experience with similar letters," observed Mr. Smith dryly.

Miss Flora drew a long sigh.

Oh, dear! I wish you could. Do you think you can? I hoped maybe you could help me some way, but I never thought of that—your answering 'em, I mean. I supposed everybody had to answer their own letters. How'll you know what I want to say?"

Mr. Smith laughed a little.

"I shant be answering what you want to say—but what I want to say. In this case, Miss Flora, I may exceed the prerogatives of the ordinary secretary just a bit, you see. But you can count on one thing—I shant be spending any money for you."

"You won't send them anything, then?"

"Not a red cent."

Miss Flora looked distressed.

"But Mr. Smith, I want to send some of 'em something! I want to be kind and charitable."

"Of course you do, dear," spoke up Miss Maggie. "But you aren't being either kind or charitable to foster rascally fakes like that," pointing to the picture in Miss Flora's lap.

"Are they all fakes, then?"

"I'd stake my life on most of 'em," declared Mr. Smith. "They have all the earmarks of fakes, all right."

"But I was having a beautiful time giving until these horrid letters began to come."

"Flora, do you give because you like the sensation of giving, and of receiving thanks, or because you really want to help somebody?" asked Miss Maggie, a bit wearily..

"Why, Maggie Duff, I want to help people, of course," almost wept Miss Flora.

"Well, then, suppose you try and give so it will help them, then," said Miss Maggie. "One of the most risky things in the world, to my way of thinking, is a present of—cash. Don't you think so, Mr. Smith?"

"Er—ah—w-what? Y-yes, of course," stammered. Mr. Smith, growing suddenly, for some unapparent reason, very much confused. "Yes—yes, I do." As Mr. Smith finished speaking, he threw an oddly nervous glance into Miss Maggie's face.

But Miss Maggie had turned back to Miss Flora.

"There, dear," she admonished her, "now, you do just as Mr. Smith says. Just hand over your letters to him for a while, and forget all about them. He'll tell you how he answers them, of course. But you won't have to worry about them any more. Besides, they'll soon stop coming,—won't they, Mr. Smith?"

"I think they will. They'll dwindle to a few scattering ones, anyway,—after I've handled them for a while."

"Well, I should like that," sighed Miss Flora. "But—can't I give anything anywhere?" she besought plaintively.

"Of course you can!" cried Miss Maggie. "But I would investigate a little, first, dear. Wouldn't you, Mr. Smith? Don't you believe in investigation?"

Once again, before he answered, Mr. Smith threw a swiftly questioning glance into Miss Maggie's face.

"Yes, oh, yes; I believe in—investigation," he said then. "And now, Miss Flora," he added briskly, as Miss Flora reached for her wraps, "with you kind permission I'll walk home with you and have a look at—my new job secretarying."

CHAPTER XIX

Still Other Flies

It was when his duties of secretaryship to Miss Flora had dwindled to almost infinitesimal proportions that Mr. Smith wished suddenly that he were serving Miss Maggie in that capacity, so concerned was he over a letter that had come to Miss Maggie in that morning's mail.

He himself had taken it from the letter-carrier's hand and had placed it on Miss Maggie's little desk. Casually, as he did so, he had noticed that it bore a name he recognized as that of a Boston law firm; but he had given it no further thought until later, when, as he sat at his work in the living-room, he had heard Miss Maggie give a low cry and had looked up to find her staring at the letter in her hand, her face going from red to white and back to red again.

"Why, Miss Maggie, what is it?" he cried, springing to his feet.

As she turned toward him he saw that her eyes were full of tears.

"Why, it's a letter telling me—" She stopped abruptly, her eyes on his face.

"Yes, yes, tell me," he begged. "Why, you are—crying, dear!" Mr. Smith, plainly quite unaware of the caressing word he had used, came nearer, his face aglow with sympathy, his eyes very tender.

The red surged once more over Miss Maggie's face. She drew back a little, though manifestly with embarrassment, not displeasure.

"It's—nothing, really it's nothing," she stammered. "It's just a letter that—that surprised me."

"But it made you cry!"

"Oh, well, I—I cry easily sometimes." With hands that shook visibly, she folded the letter and tucked it into its envelope. Then with a carelessness that was a little too elaborate, she tossed it into her open desk. Very plainly, whatever she had meant to do in the first place, she did not now intend to disclose to Mr. Smith the contents of that letter.

"Miss Maggie, please tell me—was it bad news?"

"Bad? Why, of course not!" She laughed gayly.

Mr. Smith thought he detected a break very like a sob in the laugh.

"But maybe I could—help you," he pleaded.

She shook her head.

"You couldn't—indeed, you couldn't!"

"Miss Maggie, was it—money matters?"

He had his answer in the telltale color that flamed instantly into her face—but her lips said:—

"It was—nothing—I mean, it was nothing that need concern you." She hurried away then to the kitchen, and Mr. Smith was left alone to fume up and down the room and frown savagely at the offending envelope tiptilted against the ink bottle in Miss Maggie's desk, just as Miss Maggie's carefully careless hand had thrown it.

Miss Maggie had several more letters from the Boston law firm, and Mr. Smith knew it—though he never heard Miss Maggie cry out at any of the other ones. That they affected her deeply, however, he was certain. Her very evident efforts to lead him to think that they were of no consequence would convince him of their real importance to her if nothing else had done so. He watched her, therefore, covertly, fearfully, longing to help her, but not daring to offer his services.

That the affair had something to do with money matters he was sure. That she would not deny this naturally strengthened him in his belief. He came in time, therefore to formulate his own opinion: she had lost money—perhaps a good deal (for her), and she was too proud to let him or any one else know it.

He watched then all the more carefully to see if he could detect any new economies or new deprivations in her daily living. Then, because he could not discover any such, he worried all the more: if she had lost that money, she ought to economize, certainly. Could she be so foolish as to carry her desire for secrecy to so absurd a length as to live just exactly as before when she really could not afford it?

It was at about this time that Mr. Smith requested to have hot water brought to his room morning and night, for which service he insisted, in spite of Miss Maggie's remonstrances, on paying three dollars a week extra.

There came a strange man to call one day. He was a member of the Boston law firm. Mr. Smith found out that much, but no more. Miss Maggie was almost hysterical after his visit. She talked very fast and laughed a good deal at supper that night; yet her eyes were full of tears nearly all of the time, as Mr. Smith did not fail to percieve.

"And I suppose she thinks she's hiding it from me—that her heart is breaking!" muttered Mr. Smith savagely to himself, as he watched Miss Maggie's nervous efforts to avoid meeting his eyes. "I vow I'll have it out of her. I'll have it out—to-morrow!"

Mr. Smith did not "have it out" with Miss Maggie the following day, however. Something entirely outside of himself sent his thoughts into a new channel.

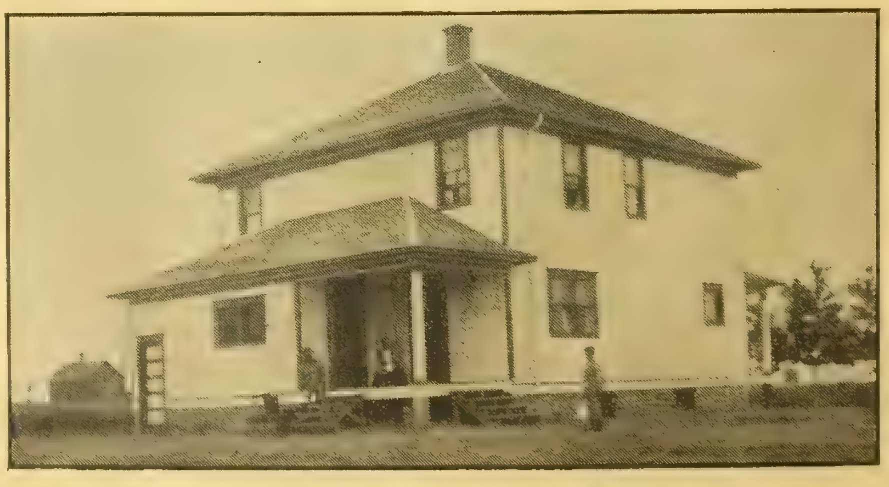
He was alone in the Duff living-room, and was idling over his work, at his table in the corner, when Mrs. Hattie Blaisdell opened the door and hurried in, wringing her hands. Her face was red and swolen from tears.

"Where's Maggie? I want Maggie! Isn't Maggie here?" she implored.

(Continued in next issue.)

OUR READERS' NEW BUILDINGS

Have you built any up-to-date farm buildings lately? If you have send us a picture of the new building and we will print it in this new department. It will show the M. B. F. readers what their distant neighbors are doing to change the scenery. And, incidently, you may be able to help some farmer decide the type of house, or barn, or other buildings he desires to put up. He may like the appearance of your building and will want the plan of it. Kodak pictures are all right if the details show up well. Do not send the negative, just a good print.



AT MAPLE LAWN FARM, COLEMAN, MICHIGAN.
This is a rear and side view of the new home of Mr. and Mrs. Ray Eagly at Coleman, Michigan. A good view of the front could not be taken on account of trees. It is 28 feet by 30 feet and consists of 10 rooms and basement. Mr. and Mrs. Eagly write "It was started in 1922 and completed and painted in 1923 and cost $2,400. We consider it a modern farm house. We are subscribers to The Business Farmer and have taken it since it was first printed on the pink sheet and like the paper fine." The name of their farm is Maple Lawn Farm.

THE LIFE THAT SUFFERS

A SERMON BY REV. DAVID F. WARNER

TEXT: "But he that endureth to the end, the same shall be saved."—Matthew 24:13.

YOU have read this scripture repeatedly. Just what is its purpose? Was it meant for dispensational theorists? Don't you think these mistake the Lord's intention? Certainly we shall be more sure of its meaning if we leave out the speculative element, and use the teaching as an incentive to right life and conduct. It is practical rather than theoretical.

The destruction of Jerusalem and the second coming of our Lord are the events predicted in the chapter from which our text is taken. One closes the Jewish dispensation and the other closes the age of Grace. One is a type and precursor of the other. Before each very trying times are to occur. We shall have to live in a world of wars, pestilences, earthquakes, famines, and social ease. But, he that endureth to the end shall be saved. So, the emphasis of this prophetic verse is, that men ought always to be watchful, sober, and patiently enduring in the fiery trials of life.

The implication of the text is, that life is a struggle. What mature mind will say otherwise? When we think soberly and steadily upon life; when we review our own brief hard years; we must submit to the stern fact that we have survived out of struggle. Some days have been bright and cheery, while others have been heavy and sad. You know there have been times when some folks despaired of having real friends. Out of my study window now is a pathetic scene. There is passing the funeral car, carrying the dead body of a poor widow. Where will the undertaker bury her? In a pauper's grave. Her friends endured not until the end. Such scenes cause our gladness to cloy and darken the joy of living. Yet, we are not to forget.

"It is not just as you take it,
This wonderful life of ours;
Life's field will yield as you make it
A harvest of thorns or flowers."

The writer is a Christian optimist. But, his optimism is not so easygoing as to overlook the fact of sin. Yes, he means just that, SIN. As one looks into the faces of men on the busy city streets, or in the more wholesome country highways, he reads the bitter yielding to temptation. He that breathes the name of the victorious Christ, is surrounded by little imps and demons that would trap him into ruin. How nearly immersed at times, are we, into this cold, blighting world spirit! How it breaks into the most sacred precincts of life! For, in these days, even our Sunday life is in danger of losing its old-fashioned wholesomeness. Something is robbing us of our reverence for God's sanctuary. It is well for us to remember that the fear and worship of Jehovah is the beginning of wise living. Let us return to a more thoughtful worship and a more careful praying of "Hallowed be thy name." But of course, we are not meaning something that is put on one day and off on another. We are referring to that that moves and flows in the blood and becomes the atmosphere of the week.

And then, we are beset roundabout with the by-products of a lusting world: sickness, cares, and affliction. Everywhere there are folks carrying tremedous loads of sorrow, that will never be lifted from their hearts until and unless they "have fallen asleep in Jesus." It is not easy to plod on in life with a load that can not be lifted or a wound that does not heal. The gladest and freest know how true this is, and so, we move on in the way of the Nazerene. Have we sinned? Then we are never out of the cricle of his sympathy and love. It is great cheer to know that his mercy is infinite in its tenderness.

"I know not where his islands
lift their fronded palms in air;
I only know I cannot drift beyond his love and care."

And this is what our text says. Do you have the words? We are to live the enduring life that we might be saved. Now, it is an inspiring thing to see a saint passively holding out; but a much finer thing to see one actively enduring. And this is the larger meaning. The Dayton flood was a ruinous, destructive outburst of nature. But the Miami Conservancy would use these waters as the source of life and power; the same waters. And so, refuge in Christ not only saves from ruin when the floods of trial are on; but teaches us how to go on, sensible of the stormy, tempestuous way, yet unswerved and unchecked. When we are able to trail the Man of sorrows in a world of tears; when we are able to say, "This one thing I do", then we have come into the active grace of endurance. And endurance to the end is required. It is just as tho we are steering the ship of life into port; and the Captain of faith above, and the men of activity below, all must stay at their posts until the ship be safely anchored.

And then we shall be saved. St. Luke has it, "In your patience ye shall win your lives." That is, even now, we may come into possession of our lives. Did you ever see anyone who was making a day-by-day success in faith, courage, endurance, and all that makes for Christian culture and character? He had come into possession of a saved life; a redeemed personality. He was having an experience in self-surrender which says, "It is not I that live, but Christ that liveth in me."

The experiences of life are so varying, that we dare not look to the end of the road, but take one day at a time. This is what Geo. Klingle says in "The Journey of Life:"

"God broke our years to hours and days, that
Hour by hour, and day by day,
Just going on a little way,
We might be able all along to keep quite strong.
Should all the weight of life be laid across our shoulders, and
The future rife with woe and struggle meet us
Face to face at just one place,
We could not go; our feet would stop, and so
God lays a little on us every day,
And never, I believe, on all the way
Will burdens bear so deep, or pathways lie so steep,
But we can go, if by God's power
We only bear the burden of the hour."

BIBLE THOUGHTS

LET THIS MIND BE IN YOU, which was in Christ Jesus. Let nothing be done through strife or vainglory; but in lowliness of mind let each esteem other better than themselves.—Philippians 2:5, 3.

FOR GOD SO LOVED THE WORLD that he gave his only begotten Son, that whosoever believeth in him should not perish, but have everlasting life.—John 3:16.

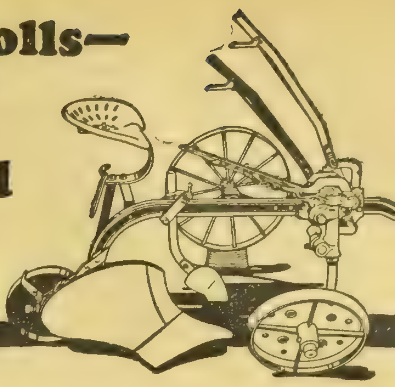
BLESS THE LORD, O my soul, and forget not all his benefits; who forgiveth all thine iniquities; who healeth all thy diseases; who redeemeth they life from destruction. —Psalm 103:2-4.

PEACE I LEAVE WITH YOU, my peace I give unto you: not as the world giveth, give I unto you. Let not your heart be troubled, neither let it be afraid.—John 14:27.

TAKE NO THOUGHT saying, What shall we eat? or, What shall we drink? or, Wherewithal shall we be clothed? But seek ye first the kingdom of God and his righteousness: and all these things shall be added unto you.—Matthew 6:31,33.

LET THIS MIND BE IN YOU, which was also in Christ Jesus. Let nothing be done through strife or vainglory; but in lowliness of mind let each esteem other better than themselves.—Philippians 2:5, 3.

**Landside Rolls—
Plow Stays
Down—
Makes Good
Seed Beds**



Hard work of plowing is eliminated for you as well as the horses, and you get a better seed bed when you use the light-running, all-wheel-carried, simple

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SYRACUSE NO. 210
SULKY PLOW

The rolling landside makes the No. 210 practically frictionless. All of the weight is rolled on oiled bearings. No dragging friction on furrow wall or furrow bottom.

The No. 210 can be used with slat or solid moldboards, chilled or steel. This provision for the interchange of equipment makes this plow adaptable for work in any kind of soil.

Bottom runs true and level all the time even when turning square corners. The front furrow wheel casters on the turn and guides the plow perfectly. Lever lock holds plow in line on the straight-away. Just before reaching the end of the field the lever latch is released. This allows the bottom to swivel freely on the turn. As the plow again settles to work in the straight furrow the latch seeks its proper position and locks. Driver's hands are free to manage team except when releasing latch.

Frameless construction—simple and strong. Two-axle support for front furrow wheel prevents binding or cramping

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The Michigan
BUSINESS FARMER

SATURDAY, JULY 19, 1924

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"The Farm Paper of Service"

MICHIGAN'S "BLUE SKY" LAW

WE wonder how much THE BUSINESS FARMER readers know about Michigan's "blue sky" law, and especially if you appreciate what a really good law it is. We are all more or less interested in "blue sky" laws, and if you want to find out, provided you do not already know, something about the blue sky law in this state, we invite your attention to the article appearing elsewhere in this issue by Mr. Stanley M. Powell, Lansing correspondent of THE BUSINESS FARMER. At our request Mr. Powell made a study of this law for the purpose of finding out whether or not it is working satisfactorily.

Mr. Powell, as a part of his study, interviewed Mr. Duff, chairman of the Michigan Securities Commission, and this interview, which is most enlightening constitutes the major part of Mr. Powell's article.

In this interview Mr. Duff made the statement that "We believe our Michigan "blue sky" law is the best piece of legislation of its kind in the United States, but what we must do now is to educate the people up to the law." In other words, it doesn't make much difference how good a law you may have, if the people still insist on taking a chance on get-rich-quick schemes, they will put themselves out of range of protection by any law.

Michigan has a good "blue sky" law, a law that will furnish its citizens adequate protection, provided they will use a reasonable amount of caution, and stay within the bounds of protection furnished by the law.

The conclusion to be gained from Mr. Powell's article is that the Michigan "blue sky" law is working as well as could be reasonably expected. No one claims it to be perfect, but improvements are being made all of the time. It must be remembered that in perfecting such a law, you are dealing with an extremely clever bunch of people, and if there is a loophole anywhere, they will find it. The important thing, as we view it, is not how good the law is, but rather for the people of the state to help make it effective to the maximum degree possible.

HOW DO YOU FEEL ABOUT IT?

"I WOULD not trade my farm, in spite of all the agricultural depression, which you may hear about, and which I know about, for any business represented in this room today." This statement was made recently by James R. Howard, first president of the American Farm Bureau Federation, in an address before a group of business men, in which he gave his reason for believing that farming is the surest business in the United States today. In his opinion the present agricultural depression is an invitation to far-sighted men to get into farming, or to invest in agriculture.

Moreover, Mr. Howard went on to say "If any of you are qualified financially and physically and mentally, to run a farm, I unhesitatingly recommend that you go back to the soil." His reasons for such a recommendation are briefly stated as follows: "Whenever any commodity is below the cost of production, buy; it will surely go higher. Whenever any commodity is above the cost of production, sell; it will inevitably go lower. The products of the farm are, and have been, for four years below production cost. They must inevitably, sooner or later go higher, else all history in economics belie themselves."

He went on further to say that "Whenever men and capital are rushing in large numbers and volumes, toward an essential or non-essential industry, beware—stay out; the industry will soon be overdone. Whenever men and capital are being subtracted from an industry, particularly an essential industry, get into it. Your efforts and capital will not only be needed, but rewarded. The man who can stay or can go to the farm is bound, sooner or later, to strike pay dirt.

"During the past few years Michigan has gotten a reputation, whether justified or not, of having a large number of idle or abandoned farms. As a matter of fact, people have been leaving the farms by the thousands all over the country since the agricultural depression got in. It is no doubt true that there are too many people on the farms of America as it is; what our agriculture needs is not more farmers, but fewer and better farmers.

Mr. Howard's analysis challenges our attention and our serious consideration. Are we, who have a tendency to become bears, as they say on the stock exchange, on farming, really as far-sighted as we ought to be? We believe not.

Every farmer ought to get away from his farm occasionally, and get a better prospective on his business. Mr. Howard has done this, and that is perhaps one reason why he takes a different view of things than most of us who stick too closely to the farm. Further remarks that he has made are of interest:

"It is a good thing for every farmer occasionally to come to the city. It would be as much worth while if every one of you would get out on a farm for a couple of weeks every summer, and on the plow or in the harvest field, get some first-hand and worth while information regarding American agriculture.

"I have always noticed that when I come from the farm to the city, you men anxiously inquire how things are back home. I am glad to tell you that the soil has worked splendidly this spring, because of a good seedbed and good seed, the new corn is coming through the ground in spite of the cold and dry weather. The pig crop is above the average.

"All these products from all the farms of America will move toward the city within a year. The corn field cannot, because of slack markets or labor difficulties, be shut down for a week without serious loss, or for a month without total loss. Shutdowns for repairs or supplies or any other cause, extending beyond a half day, cannot be tolerated around the pig pen. The farmer's production is a 365-day-a-year proposition.

"There has been four things most largely responsible for the farmers increased efficiency. One is improved farm machinery, including the automobile. Another reason is the improvements of livestock, and varieties of grains and grasses. The third is a broadening intelligence of the farmer along lines of general education. Fourth is the pride of a man on the farm and his job at hand, and his determination to win regardless of obstacles."

There may be times when you feel like throwing up the farming job, and going to town where you can perhaps earn more money, but will you be better off in the long run? This is of course for you to decide, but if you feel that you are fitted for farming and that it is your work, think a long time before you give it up. Farming, one of these days is coming into its own, and the farmer is going to be on top of the heap.

MUSKEGON'S CITY MARKETS

AT Muskegon is being demonstrated the possibilities of a municipal market where the farmer-producer and the city consumer can deal direct. On another page of this issue, Mr. Carl M. Knopf describes in a very interesting article the city markets that have been established in Muskegon, some of the problems that have confronted the supporters of the market system, and how the plan is working out.

It is of particular interest to farmers, that it was not until the county farm bureau organization had taken hold of the market system that it proved a success. During the first season the market was operated under the direction of the city. It is needless to say that the farmers have a more vital interest in the success of a market system, and it is logical that the organization and direction of such a plan should be controlled by them.

There are many problems that naturally arise in conducting a successful market, and it stands to reason that it cannot be made a success unless the farmers work together in harmony, and with a firm determination to make the project successful. Mr. Knopf in his article states that the ideals for Muskegon markets are a long way from fulfillment, but still they are rendering an increasingly valuable service to both city consumers and farmer producers, the plan is making a reasonably good progress, and indications are that it will continue to do so.

His article is the first-hand study of what the farmers in the country surrounding Muskegon have done, and it should be especially valuable to other communities planning a similar project.

THE BOY AND THE ENGINE

DO you remember way back when the steam threshing rig passed the home farm, or came to do your dad's threshing—way back before the days of the automobile, tractor, motor truck, and stationary gas engine? As a boy—we are speaking to the men now—was there anything that ever gave you more of a real thrill than that old steam engine? Didn't you hang around it, and in your boyish mind picture what a wonderful thing it would be to run one of the things?

In fact, wasn't it the height of your ambition to some day be able to follow one of them around the country?

We are just indulging in a little personal retrospection now, but we believe it is typical of at least ninety per cent of the farm boys of the pre-gas-engine age. Frankly, we still get a thrill when we see a steaming threshing rig pass by, and we indulge ourselves in watching it out of sight and experiencing again the same boyish reaction we had back in the early nineties.

The steam engine is a back number to most of the farm boys of today; they get their real thrill from the internal-combustion engine in its various applications, but perhaps more from the farm tractor and the stationary engine, than from the automobile, if our own experience is any criterion.

The love of mechanics is inborn in most boys. If it were not true the use of mechanical power and labor-saving machinery would probably not be nearly so extensive as it is today. It is a good thing to encourage the farm boy's liking for engines and machines, and more than that, to satisfy that liking.

There is no doubt at all, but there are hundreds of boys who have left the farms, who unquestionably would have preferred to stay on the farm, if it had been possible for them to do the heavy drudgery of farm work with mechanical power and machinery.

Not that these boys are afraid of hard work, but they prefer to direct the forces of nature in doing their work, rather than by preforming it by brute strength. This is a mechanical age, and, it is only natural for us to want to do as much of the physical labor as possible with mechanical rather than muscle energy.

We would not encourage the purchase of more mechanical power equipment for the purpose of keeping more boys on the farm. Every boy is tempermentally fitted for a certain type of work, and not every boy that is raised on the farm should stay on the farm. If he is naturally fitted for farming, he should stay on the farm, but if he inclines naturally toward some other line of activity it is a serious mistake to try to get him to remain on the farm. However, there are unquestionably many boys who have left the farm, who really should have stayed on it, and who would perhaps be there today, if their fathers could have forseen the rapid transition from muscle power to mechanical power that is taking place in farming, and could have encouraged them to stay on the farm through the purchase of a stationary engine or a tractor, or both.

It is the forgone conclusion that mechanical power will some day replace most of the muscle power of the farm. There is no reason why this transition should not take place in farming as it has in manufacturing and transportation. What is more, you show us a farm boy today who says he prefers to farm with horses, and we will show you twenty farm boys who say they will not farm unless they can farm with mechanical power. Are we not right? Ask your own boy and find out.

CALVIN COOLIDGE, JR.

THE heart of all America, irrespective of political creeds, goes out in profound sympathy to President and Mrs. Coolidge in the loss of their youngest son, Calvin Jr. Indirectly a product of the soil, Calvin Jr. was not essentially different from any ordinary farm boy. He did not "pretend" because he was the president's son. He did not throw up his job on the farm when his father came into his high office. He was independent and wanted to earn his own spending money. It is said that the farmers for whom he worked remarked, at the time Mr. Coolidge took the oath of office as President: "So your father is President of the United States," and that Calvin replied with old-fashioned courtesy, "Yes sir; I suppose he is. What did you want me to tackle today?" His passing is untimely and regrettable to say the least; we can never have too many boys of the type of Calvin Coolidge, Jr.

PUBLISHER'S DESK

ANOTHER "BLOW OUT"

"Last December I received a printed circular from the Lakeside Tire & Rubber Co. from Chicago asking me to take up the agency for tires. I sent them on January 12th a P. O. order for $8.90 for a 30x3½ cord tire guaranteed for 12,000 miles. They were supposed to pay the postage according to circular but they sent a tire by express with 56c charges on it. We paid the charges but the tire did not weigh more than a pound and was full of holes so we sent it right back. They told the express people at first we had returned an old tire but as they, the express people, had examined the whole transaction they knew better and finally Lakeside Tire and Rubber Co. accepted the tire. I wrote them asking for the money but as yet have heard nothing."

WE received the above letter from one of our subscribers several weeks ago and we immediately wrote the Lakeside Tire and Rubber Company. We received no acknowledgement of any kind from them and after a few days we sent them another letter. And we got the same results—none. We came back with another letter. No answer. Letter number four was sent by registered mail and now comes back marked "Moved, left no address. Thus reads the story of another "fly-by-night" cheap tire company and a victim.

AN OLD FRAUD AGAIN

AGAIN the resurrection plant bobs up again under various attractive names in tempting advertisements—beware, cautions the United States Department of Agriculture.

In past years various concerns have advertised this plant for sale under different names, and usually at prices far in excess of its market value. It is often sold by these concerns under the name "rose of Jericho" or "rose of Sharon" and said to be obtained from the Holy Land and to have been mentioned by "Solomon, Isaiah, and other prophets." The circular of one dealer which calls it "Semper Viva or Rose of Jericho" and offers it for the modest price of twenty-five cents, describes it as "a deodorizer" and "a preventative of disease." Claims are also made that it is "a preventative of moths and that if a few are scattered about the house they will keep out mosquitoes."

Another concern calls it the "Persian Plant" or "Cinnamon Rose", mentioned by Isaiah in the Bible, and attempts to illustrate its appearance by giving a very poor figure of some cultivated primrose. The plant is said to bloom every thirty days, bearing "the most fragrant flowers in existance." Resurrection plant is, of course, not a seed plant, bears no flowers and is odorless, although the specimens sold by such concerns are often artificially scented.

A correspondent in North Carolina has recently sent the Department of Agriculture a specimen of this plant put up by an alleged "importing" company of New York, Jerusalem, and Montreal, and sold as "Genuine Rose of Sharon." After giving directions for growing the plant, the circular states: "Do not cut slips from these plants, as they propagate from seed. The roses go to seed only in Palestine." The regular price of this company is for plants 'potted, in blossom, 25 to 28 inches growth, red, white, or pink, $12; the bulb, dormant, red, white or pink, $2.75." As a special advertising offer, a set of three colors is sold for $2.75, or one "bulb" for 95c.

The true "Rose of Jericho" is a small white-flowered annual of the mustard family. It is a native of desert regions from Arabia and Syria to Algeria, and is supposed to be the "rolling thing before the whirlwind" mentioned in Isaiah. After flowering the eaves fall off, and the branches become hard and woody and roll up into a ball, bearing the seed pods inside. In this state the plants, uprooted by the wind, are blown about the desert. When the winter rains fall the branches spread back, the pods open, and the seeds quickly germinate. Dried plants retain for years the property of opening when moistened, although they do not "come to life" in the proper sense of the words. The plan was brought back to Europe by the Crusaders, and is the subject of many legends and much folklore.

Resurrection plant bears no flowers, has no fragrance or insecticidal value, and is in no way connected with the Crusaders or the Holy Land. Its sold under the name of "Rose of Jericho" or "Rose of Sharon" at exhorbitant prices constitutes an evident fraud. Its proper market value is about 25c, and it is well worth growing as a botanical curiosity.

Resurrection plant, a relative of the groundcedar and groundpine used in making Christmas wreaths, is a native of the deserts from Texas southward into Mexico. In the dry state the branches, which are thickly covered with scale-like leaves, roll up into a brown ball, but when placed in water they expand forming a green leafy rosette. The plant is offered for sale in curio shape, particularly in the southwestern states.

BEWARE OF CIVIL SERVICE "SCHOOLS"

THE United States Civil Service Commission and the National Vigilance Committee of the Associated Advertising Clubs of the World today issued a joint warning against misleading advertising of many so-called civil-service coaching schools. The following points are emphasized:

(1) No "school" of this kind has any connection whatever with the Civil Service Commission or with any branch of the Government.

(2) No school can give advance information regarding examination questions.

(3) No school can furnish civil-service information of value which can not be obtained without cost from the Civil Service Commission at Washington or its representative at the post office or customhouse in any of approximately 3,500 cities.

(4) No school can "guarantee" appointment in the classified civil service. Appointment can be secured only through open competitive examination under the civil-service rules. No school can cause a competitor to be certified for appointment out of the regular order, as determined by his examination rating.

The Civil Service Commission states that large numbers of applications for examination received at its office indicate that many civil-service schools accept as clients and take money from practically illiterate persons who could not possibly pass any kind of examination.

E. I. McKinley, deputy labor commissioner of Arkansas, it is said in the joint warning, recently has investigated correspondence schools of this class and authorizes the statement that he has concluded that the majority of them come as near being "fakes" as the postal laws permit. The "schools" that Mr. McKinley condemns are the ones that offer to qualify persons for civil-service positions or make a professional man of a laborer in a few weeks. Mr. McKinley says that schools which prepare for civil-service examinations rank second to "detective schools" in number.

Any good school, no matter what they are teaching, should be pleased to give many references as to courses and reliability, and if you are considering studying with some school we urge you to investigate before you invest. It is better to lock the barndoor before the horse is stolen than after. We are always ready to help our paid-up subscribers in this matter.

I wan to thank you people for helping me to get my money on claim No. 1491. I had been so long trying to get it myself and it was only a few days after I wrote you people that I had the money. C. A. W., Davison, Michigan.

Dear Editor:—I have received check from ——— for what I have had you put in claim for. I thank you ever sc much for your help and will be willing to pay you whatever you wish. Your friend,—M. S. B., Wheeler, Mich.

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4% Normal Income Tax Paid by Borrower

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Your Protective Service Sign Is Here!

After considerable delay we are glad to announce that the new Protective Service Signs have arrived and we are filling the advance orders as rapidly as possible.

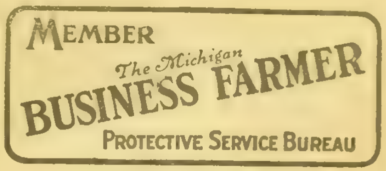
If you have not yet ordered your sign, do so at once, as the supply is limited.

This is a high class sign in every respect, made up in two colors, red and black on a white background, weatherproof, 5 x 11¾ inches in size, suitable for hanging on your fence, mail post, or other prominent place.

Remember this sign will serve as a warning to crooks, fakirs, quacks, and grafters, to keep away from a farm which is affiliated with The Business Farmer Protective Service Bureau.

Only a few thousand of these signs have been ordered and we are going to mail them to our friends—first come—first served—at actual cost, only 25 cents. We already have had advance requests for hundreds of these signs—They are going like hot cakes.—Fill in the coupon below, so as to be sure you get your sign before they are all gone.

THE BUSINESS FARMER,
Protective Service Bureau,
Mt. Clemens, Mich.,



5x11¾ inches Red and Black on White Background

( ) **I enclose a dollar for a two year renewal and 25c for a Metal Sign and certificate.**

( ) **My subscription is paid to 1925, so I enclose 25c for a Metal Sign and certificate.**

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Post Office..**RFD No**....................

County.. **State** ....

The Farm Home
A Department for the Women

Edited by MRS. ANNIE TAYLOR

DEAR FOLKS:—I work so hard some days and get so tired that sometimes I think "Oh, if I only had enough money so that I would not have to work, how happy I would be." All of you have felt the same way. But would you or I be happy if we had nothing to do? Could we sit idle all day and enjoy ourselves? Have you ever thought how it would seem to have no duties to perform, just sit around? A well known Canadian physician declares that idleness, more often than work, leads to old age and death, and I believe him. In India and China, the lifetime of the slowgoing, peaceful native averages from 19 to 25 years while here in America the average length of life in our industrial centers is from 35 to 60 years. As long as we have our work to do and we do it with our heart into it we will not have time to grow old. When I stop to think of these things I realize how lucky I am that I have my work and how happy I should be. And I am happy and thankful for my many blessings.

Your Friend,
Mrs Annie Taylor

Address letters: Mrs. Annie Taylor, care The Business Farmer, Mt. Clemens, Michigan.

SLIDIN' DOWN A STRAW STACK

By Anne Campbell

[illegible]in' down a straw stack,
Me an' Harve an' Liz;
Slidin' down a straw stack,
Greatest fun there is!
Far as eye can see 'em,
Meadows stretchin' green;
There's a crick a-windin'
Lazy-like between!

Slidin' down a straw stack!
Hear the cawin' crows?
Slidin' down a straw stack!
Feel the breeze that blows?
There's the cows a grazin'—
Sheep a-browsin,' too.
I kin see the barn now,
Painted red and new!

Slidin' down a straw stack!
Gee, it's heaps o' fun,
Slidin' down a straw stack
In the mornin' sun.
See the house a-waitin'?
There's the pump an' well.
Soon we'll hear it ringin'—
Good ol' dinner bell!

Slidin' down a straw stack
When the sun is low;
Slidin' down a straw stack!
Soon to bed we'll go.
We won't mind the pickers
Stickin' all around.
They won't bother much, 'cause
Gee, we'll sleep too sound!

(Copyright, 1924.)

SMALL HOPE FOR THE FRECKLED

FOR those frenzied maidens who seek freedom from freckles, the world must ever remain sad. For the plain truth is that, once freckles have blossomed into the rich brown of their maturity, there is no way of getting rid of them, says Hygeia.

Nor for those individuals who, in the summer sun, tend to freckle instead of tan is there any sure way of prevention. Unless, of course, with Victorian admiration of pallor, the young lady shuns the sun's determined gaze.

Ordinary freckles that come on or become exaggerated after exposure to sunlight are a deposit of normal pigment in the skin. This sort of freckle corresponds to tanning. In the person that tans evenly, this increased deposit of pigment in the skin is evenly diffused; in the person that freckles, the pigment occurs irregularly, usually in spots.

The difference represents a congenital difference in the structure of the skin. For some reason or other, which we do not know, in the individual that freckles the pigment-forming cells are irregularly distributed and under the stimulus of sunlight produce irregular pigmentation.

Most of the pigment in these conditions is in the outer layer of the skin, but some of it is down in the deeper part, what would be called in the vernacular, the "fleshy" part. Only by destroying the skin down to a point where it is sensitive and where distinct wounds would be produced could this coloring be removed. Even in the superficial part of the skin the pigment is seated relatively deep, and there is no way of getting rid of it without causing an extreme peeling off of the superficial layers. No practical way in which this can be done successfully exists.

Effective methods of removing the pigment involve the use of strong irritants like solutions of corrosive sublimate. These are put on until they produce considerable irritation and, in the peeling that follows, a good deal of the pigment is removed. This is not a safe procedure for the patient to use himself, and is not a satisfactory procedure in anybody's hands.

In many of the freckle creams and ointments on the market, ammoniated chloride of mercury is used. This is a dangerous preparation if used to excess, and it is of no more service in such strength as any one would dare to employ it in removing freckles than so much flour.

In short, there is no way of getting rid of freckles. The only way to prevent them in a person who tends to freckle is stay out of the sun. Or wear a sunbonnet!

WHEN SUNDAY COMPANY COMES

THE folks who "drive out" to see us on Sunday afternoon usually have a big dinner at home, and, unless they have been specially invited, it is not necessary to provide a regular meal. Fresh eggs will solve the problem with little work and few dishes to wash. In the morning boil ½ dozen for half an hour, slowly, so they will not be tough; take off the shells and put in a cool place. Make a boiled salad dressing on Saturday and when the Sunday company comes try serving this sort of a supper: Egg sandwiches—jam—cake—lemonade or tea.

For the sandwiches—cut the boiled eggs in small pieces, mix with a liberal amount of salad dressing, put between slices of either white or brown bread, quite a quantity of brown bread, garnish with watercress, parsley or small lettuce leaves and you have a delicious, sustantial sandwich. Make plenty, for they will "go like hot cakes."

Here is a recipe for an unusually good cake, one that will keep moist for several days—especially if an apple is kept in the cake box. Bake the cake in two layers. Cream 2 tablespoonsfuls butter with cup of white sugar (or, better, 1⅓ cups of brown sugar); beat in one egg, add ½ teaspoon of cinnamon and ¼ teaspoon of nutmeg. Dissolve ¾ teaspoon of soda in ¾ cup of sour milk, then sift in gradually 1⅔ cups of flour, 2 teaspoonfuls of baking powder—and, last of all, 1 cup of cut and seeded raisins. Make an icing of white of egg with an equal amount of milk, and stir in enough confectionary sugar to spread easily; flavor with vanilla. This icing is delicious and easier to make than boiled frosting. Did you know that an apple cut in half and placed in the cake box will often soften dried-out cake or cookies?

CARE OF KITCHEN STOVE

NICKEL-TRIMMED stoves require daily care. It is not difficult to keep nickel clean if it is thoroughly wiped each morning. If grease and dust is allowed to accumulate, the nickel must be washed with hot, soapy water and polished with a soft, dry cloth. If stains remain, an application of nickel polish may be used. Stove polish may be used to blacken the top of the stove. However, this is not necessary provided the stove is washed each morning with a damp cloth and rubbed dry with crumpled newspaper. Paraffin oil may be used rather than blacking. Apply it with soft cloth when the stove is cold. Overheating the stove is responsible for the white appearance of the lids.

BABY'S SUMMER CLOTHING

DURING the summer dress baby lightly and loosely. A loose, cotton, thin shirt, without sleeves, is enough in hot weather. Strip him on hot days and let him lie around naked for a few hours indoors.

Baby's underwear, at other seasons should be cotton and wool mixed.

Baby's feet must be kept dry.

Baby's socks should be knitted of soft woolen or cotton and wool yarn.

Baby's throat must not be tied up except in severe weather. Throat protectors make weak throats.

Babies should have broad, soft, and loose shoes.

Babies should never have their faces protected with veils except in severe weather. They need the air which veils keep away.

In putting on baby clothes, put them on over the feet. This avoids any possible disturbance to the head. Shoulder buttoning is a convenience.

HANDY TO KNOW

WHEN an individual feels heavy and depressed, and there is a sense of sleepiness and little twingy pains in the joints, warning signals are being given that the system is clogged and the liver torpid. If the signals are not heeded, tonsilitis, colds, bilious attack, or rheumatic trouble may soon manifest itself.

It is wise to take prompt measures for relief. The patient should be put on a very light diet, given a thorough cathartic, a good hot bath, and an opportunity for a long and restful sleep in a well ventilated room. This is usually sufficient. If a sore throat persists, gargle with a solution made of one-third listerine, one-third peroxide, and one-third water. If relief is not gained after a short time, call the doctor.

* * *

Hiccoughs are a distressing malady, and sometimes continue until they are serious. The usual home remedy is to take a drink of cool water, sipping it slowly; or to take a spoonful of dry sugar, dissolving it in the mouth. For an older child or grown-up a simple remedy which usually proves effective is to moisten a lump of sugar with vinegar, holding it in the mouth until it melts.

* * *

In case of a wasp or bee sting, relief may be gained by touching the inflamed portion with amonia of household strength. However, if one is away from the base of supplies, a poultice made of wet clay or clean mud will often give great relief.

Personal Column

Bothered With Ants.—Seeing that you help so many concerning different things, I thought I would write and see if you could help me in regard to getting rid of ants. They are the big black kind and only get into sugar and sweet things. There seems to be millions of them! Have looked every where for nest but so far have been unable to find it. They nearly drive me crazy getting into things. If you can help me out will be very thankful. I can use poisons of any kind as there are no small children. Thanking you for past favor,—Mrs. L. L. F., Millington, Michigan.

—In order to permanently rid a dwelling of these nuisances it is necessary that their nests be destroyed, and the easiest way to destroy these nests is to induce the ants themselves to do the work for you. A mixture of tarter emetic and extracted honey at the rate of one part of the poison to twenty of the honey seems about the right combination for the sweet loving ants, it kills the ants eventually but not quickly enough to hinder their getting back home and destroying their nests. We find that very thick honey is best. We even like to thicken it with powdered sugar and all mixing should be done without heat so as to keep the honey thick. The reason is that if the honey is thin the poison will settle out and the ants will not get it.

Get your druggist to mix up an ounce or so of this material and place it where nothing but the ants can get to it. I would invert an empty wooden box over the dish containing the poison or label it and put it away in some such manner that neither children nor any other creatures can get to it or mistake it for food. If it is impossible to take such precautions then it is better not to attempt to get rid of the ants in this manner. The ants will come to the poisoned honey and usually all that is necessary is to leave the poison-bait exposed for a few days or weeks until the ants have all had an opportunity to partake. Large ant-nests in the lawn may be treated in a similar manner. Place the poison-bait in a piece of tin or in a shallow dish on the nest and invert an empty wooden box over the dish and anthill, to prevent other than ants from getting at the poison.

Remember, that tartar emetic is a violent poison and extremely dangerous and just as effective against humans and pets as against insects. Take every precaution possible in its use and as soon as it has accomplished its purpose bury the remainder or take precautions which will prevent its being the cause of an accident later on.—R. H. Pettit, Prof. of Entomology, M. A. C.

Reproducer for Edison Phonograph.—If any reader has a model C reproducer with needle for an old style Edison phonograph playing two minute cylinder records that they wish to dispose of will they kindly write, naming price wanted for same?—Mrs. Floyd Archambault, Elwell, Michigan.

Another Wants Reproducer.—We have an Angelophone phonograph and the tone arm got broke and I thought if I wrote to your page, that some of the readers might have one like it that they would sell. If some one has one with the reproducer on it and the fastening I think we could use it. Please write first. Thanking you in advance, I am—Mrs. Harold Sprague, Harrison, Mich.

Please Help.—Can any one tell me how to do up pickles in a pork barrel so they will keep like salted pickles? I want them put right in the vinegar with spices ready to eat from the barrel.—C. K.

Bed Bugs.—Three years ago, when I started to keep house, I had so many bed bugs that we couldn't sleep. I did as follows and have not had any more trouble: Take out your bed springs, dissolve 1 cup of lye in 2 quarts of boiling water and pour through all the cracks. That kills everything. Now take 1 cup of turpentine and 1 cup of wood alcohol and mix, put in an oil can (a sewing machine can I used), and pour in all cracks where they keep themselves and you will find after going over the second time that they are all gone. Hope you will have good luck with it as that is sure a troublesome job. I am—Mrs. H. W., Sebewaing, Michigan.

—if you are well bred!

Finger-Foods.—Nature's implements are used to eat: bread, crackers, rolls, cinnamon toast, sandwiches and cake, with the exception of iced cakes, strawberry shortcake, layer cakes, and other juicy cakes of the kind, where a fork is more comfortable and less messy. If you find it possible to use the fingers when eating a juicy peach or pear, a napoleon or a creampuff without dripping juice or smearing cream about, you are infiringing on no table law to do so; but if you cannot manage neatly, use a fork. French fried potatoes and Saratoga chips should not be eaten with the fingers: they form part of the meat course.

When they appear as table relishes, celery and radishes are finger foods, and this also applies to small cakes, olives, bonbons, nuts, raisins and raw fruits, like grapes, cherries and small plums.

Strawberries, when they are served in "exhibition size," unhulled, should be served in apple bowls or plates, with powdered sugar on the side. They are raised between thumb and forefinger of the right hand, rolled in the powdered sugar with which they are served and thus eaten.

Menu for July 19th

Iced Bouillon
Broiled Chicken
Mashed Potatoes New Peas
Tomato Mayonnaise
*Red Raspberry Shortcake, Hot Marshmallow Sauce
Coffee

***Red Raspberry Shortcake.**.—4 cups sifted flour, 3 tablespoons baking powder, 1 teaspoon salt, 2 tablespoons fat, milk, and 2 quarts red raspberries. Sift baking powder and salt with flour, rub in fat, then with fork stir in lightly and quickly sufficient milk to make soft dough —too soft to roll. Turn it into greased tin, and bake in hot oven 30 minutes. Unmold, and leaving it inverted, cut circle around top within 1 inch of edge; lift off circle of crust, and with fork pick out crumb from center, leaving about ¾ of an inch of biscuit around sides. Spread inside cake with butter, fill with crushed raspberries, which have been standing ½ hour or more mixed with enough sugar to sweeten them. Turn off juice from berries before filling cake. Replace the circle of crust, and serve with following sauce. ½ pound marshmallows, ½ cup confectioners' sugar, and ½ cup boiling water. Cut marshmallows in pieces and melt in double boiler. Dissolve sugar in boiling water, add to marshmallows, and stir until blended. Serve hot with shortcake.

RECIPES

Cucumber Pickles.—Select cucumbers of pickling size and place in 2 gallon jar with 1 cup salt sprinkled over same. Over this pour boiling water and let stand until morning. Then wash from this, throw water away and place cucumbers back in jar. Cover with vinegar and add ½ cup salt, ½ cup mustard and ½ cup sugar. Add ½ cup sugar each morning until 4 cups have been used.—Mrs. F. A.

Yellow Nut-Bread.—6 cups flour, 6 tablespoon baking-powder, 1½ tablespoons salt, 1 cup sugar, 1½ cups nuts, 4 egg yolks, 3 cups milk, ¼ cup melted butter.

Mix and sift the dry ingredients and add the nuts. Beat the egg yolks and add to the milk. Then combine the mixtures and beat in the melted butter. Last, pour into greased tins, let stand twenty minutes and bake forty-five minutes in a moderate oven (350 degrees Fahrenheit.)

Chicken a la King.—1 cup chicken fat, 1 cup butter, ½ cup corn starch, 1 quart chicken stock, 1 quart hot milk, ½ tablespoon salt, 1 pint cream, 2 quarts chicken, ½ pound fresh mushrooms, 1 pint pimento, 8 egg yolks.

Melt the chicken fat and butter, add corn starch, and when well mixed pour on the chicken stock. When beginning to boil, add the milk and cream. Stir constantly and carefully until thickened, then cook over water one-half hour, stirring occasionally. Add the chicken (cooked and cut in small pieces), the mushrooms (peeled and sliced) and the pimiento (cut in strips.) When thoroughly heated, add the beaten egg yolks and salt. Add more salt if desired.

SUMMER SUNDAY MEALS

Breakfast

Sliced Peaches and Cream
Cornflakes
Scrambled Eggs Muffins
Orange Marmalade
Milk Coffee

Luncheon or Supper

Tomato Salad Nut-Bread Sandwiches
Blueberries and Cream
Sponge-Cake
Milk Iced Tea

Dinner

Chilled Grapefruit
Jellied Tongue Horseradish Cream Sauce
Scalloped Potatoes Summer Squash
Dressed Lettuce Graham Bread
Jelly
Maple Nut Pudding Soft Custard
Wafers
Milk Coffee

The Runner's Bible

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Ye shall know the truth and the truth shall make you free. John 8:23.

A realization of the Truth will banish every ill. It is the light which reduces darkness to nothingness. Apply the Truth to evil, and the evil disappears.

If you are not in conscious health clear away your mental darkness by the knowledge that you are not under any so-called law or penalty of the flesh. You are under the law of God which decrees health and happiness.

I am the Lord that healeth thee. Ex. 15:26.

AIDS TO GOOD DRESSING

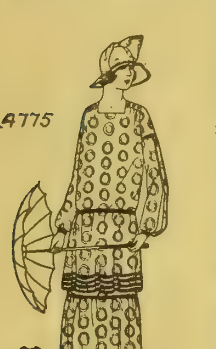
BE SURE AND SEND IN YOUR SIZE

4771. A Pleasing Apron Style.—Dotted percale is here illustrated. One could use cambric, drill, gingham or percale for this design. It is a very comfortable model unencumbered by sleeves and yet affording ample protection to the dress worn beneath it. This model could do service as a sleeveless over dress, if the back edges of the skirt are closed in a seam. Sash ends would form a smart finish. Pattern is cut in 4 Sizes: Small, 34-36; Medium, 38-40; Large, 42-44; Extra Large, 46-48 inches bust measure. A Medium size requires 3¼ yards 36 inches wide.

4775. A Pretty Summer Frock.—Crepe de chine with bands of ribbon would be a pretty development for this design. Figured voile, taffeta or dimity would also be pleasing. The sleeve may be finished with or without the peasant portion. This Pattern is cut in 6 Sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. A 38 inch size requires 6⅜ yards of 32 inch material if made with long sleeves. With short sleeves as in the small view 4⅞ yards of 40 inch material is required.

4777. A Slip with New Lines.—This model is smooth fitting, with fullness at the centre back laid in a deep inverted plait. It may be finished with shaped shoulders or camisole top. The Pattern is cut in 4 Sizes: Small, 34-36; Medium, 38-40; Large, 42-44; Extra Large, 46-48 inches bust measure. A Medium size requires 3⅜ yards of 36 inch material, if made with shaped shoulders. With camisole top ⅜ yard less is required. The width at the foot is 1⅞ yard.

4776. A Simple Apron Frock.—A good feature of this model is the side closing. It makes the apron more comfortable to adjust, and is attractive. This is a good style for cambric, percale and gingham. One could also use sateen or unbleached muslin. The Pattern is cut in 4 Sizes: Small, 34-36; Medium, 38-40; Large, 42-44; Extra Large 46-48 inches bust measure. A Medium size requires 4¼ yards of 36 inch material.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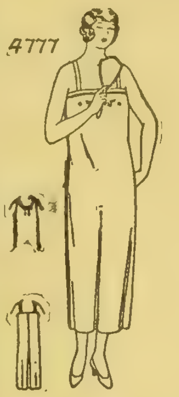
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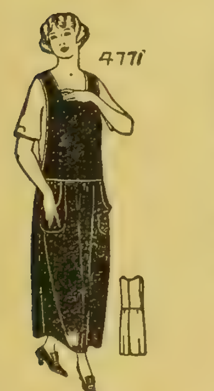
4763. A Popular Style.—A very fitting accompaniment to the new suits is here shown. One may wear a bodice skirt and jacket with a waist coat such as this. Brocaded silk, broadcloth, flannel, linen and ratine may be used for its development. The Pattern is cut in 6 Sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. A 38 inch size requires 1¼ yard of 40 inch material. For collar and pocket facing of contrasting material ¼ yard is required.

4760. A New Skirt Style.—This model is excellent for stout figures. The panel may be of contrasting material or may be trimmed with braid. The Pattern is cut in 7 Sizes: 25, 27, 29, 31, 33, 35 and 37 inches waist measure with accompanying hip measure 35, 37, 39, 41, 43, 45 and 47 inches. The width at the foot with plaits extended is 1⅞ yard. To make the skirt for a 29 inch size will require 3⅝ yards of 32 inch material.

4785. A Comfortable Frock for "Mother's Girl."—This is an ideal style for the slender active girl. It will be very pleasing in the development indicated, as well as in other materials or combinations. Linen and gingham could be combined. Or, one could use voile or pongee, with pipings of a contrasting color, or of white. The Pattern is cut in 4 Sizes: 4, 6, 8 and 10 years. An 8 year size requires 2 yards of one material 36 inches wide. To make as illustrated will require ⅞ yard of plain material and 1⅜ of figured goods.

4781.—A Pretty Frock for the Growing Girl.—This is a good style for a combination of materials. It is also nice for organdy, batiste, pongee or printed fabrics. The Pattern is cut in 4 Sizes: 8, 10, 12 and 14 years. A 12 year size requires 3⅝ yards of 32 inch material of one kind. To make as illustrated will require 1⅜ yard of figured or striped material and 2¼ yards of plain material. Without the panels the dress will require 2⅜ yards of material.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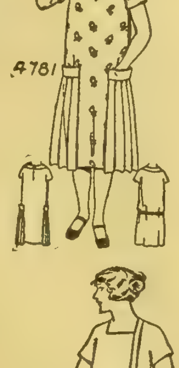
4781

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Order from this or former issues of The Business Farmer, giving number and sign your name and address plainly.

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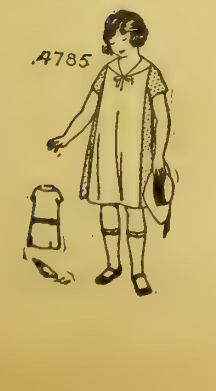
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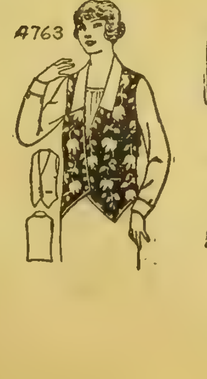
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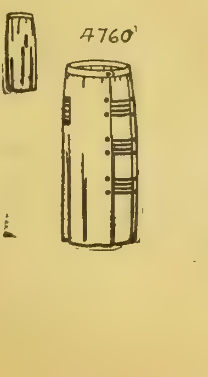
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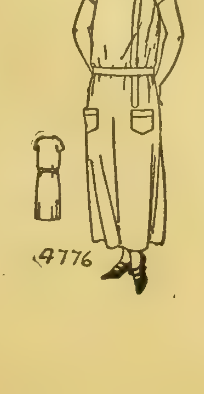
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No Odor—No Wicks *No Noise—No Smoke*

Gain new cooking ability with a smokeless, odorless Vapo Oil Range

Operates same as a gas stove because it burns gas

The Vapo is the highest grade oil range built and the most economical. Wickless, smokeless and odorless, it gives you more service per gallon of fuel, more service per square foot of space and more service per dollar than any other oil stove because of the remarkable, patented Vapo burner. Users everywhere are delighted. Thousands of dealers now sell this year-around oil range.

Cuts down work in the kitchen

No more long hours in the kitchen over a slow cooking stove. No more soot on cooking utensils. No more smarting eyes. No more trouble and annoyance with wicks and chimneys. You turn the Vapo flame up or down with a lever valve, same as a gas range. It has no wick. It has no wick substitute.

Cook a week on 7 qts. of fuel

That is what users say they are doing with the Vapo. A single burner operates 32-36 hours on a gallon of kerosene with flame turned high. At simmering heat it gives 50-60 hours service.

Vapo burner generates gas

It converts kerosene into hydro-carbon gas which burns with a hot, clean, blue flame which does not smell nor smoke nor smart the eyes. Flame can be turned from low to high and back again easily. This wonderful burner can't be clogged. Food or liquids can't boil over into burner and put out flame.

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Movable Bolo plate makes oven big or little. Heat can be crowded into small space and intensified for quick baking and roasting. Makes two ovens in one. Slow and fast baking and roasting can be done at the same time. No other oil stove offers this advantage. Have your dealer show you this and other Vapo conveniences.

Write for folder describing the complete Vapo line. Sent free on request. Postal will bring it.

THE VAPO STOVE COMPANY
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Vapo LIMA, OHIO
Oil
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WE WILL PAY YOU ....For Your Spare Time

DO you have a little spare time each day that you would like to put to good use? We will pay you well for your spare time, and you can be out in the open air or stay in the house and do the work. You are not oblidged to devote and certain amount of time each day to the work, but can do it as you can or feel like doing. We all know how handy a little extra money comes in on the farm these days. If you are interested write:

CIRCULATION MANAGER
The Business Farmer,
Mt. Clemens, Mich.

The Children's Hour

DEAR girls and boys:—Have you ever played a game called "Japanese Tag"? I saw some girls and boys playing it the other day and they seemed to be having lots of fun and said they liked to play it better than just ordinary tag. I will explain how it is played.

The players are scattered within a limited playing area. This game is played like ordinary tag except that "it" must place one hand on the spot where he was tagged and hold it there while trying to tag another man. For example, if you were "it" and you tagged someone on the shoulder he would have to keep one hand on his shoulder where you touched him until he tagged another. While I was watching the children play the game the other day one of the boys tagged another on the ankle and maybe that boy did not have some time trying to tag someone else. Just try running while holding onto one ankle with your hand. This boy fell, head over heels, several times but did not hurt himself. Any person running outside the playing area automatically becomes "it".

Let me know if you like this game and perhaps I will tell you about some others.—UNCLE NED.

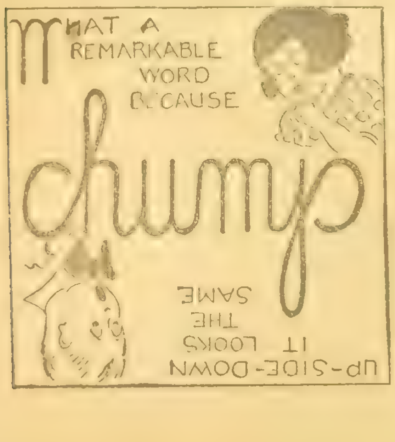
OUR BOYS AND GIRLS

Dear Uncle Ned:—It has been seven months since I wrote to you and since then I have been in Detroit, but I'm not going to tell any thing about it because it takes too much room. Well, I started to ride around in the country again. It seems good to be in the country. I was by some old friends yesterday and there is a river that runs right through their farm. My but it certainly is beautiful around there. The letter I wrote before didn't escape many children from around Bad Axe. I met quite a few people and they said, "Aren't you the girl that wrote to the Children's Hour?" I said, "Yes!" That girl that lived in Elton; I think her name is Hazel Baker, I'm not sure,—well she only lives about 10 miles from Bad Axe. I have never met her yet, but probably I'll meet her some day. She writes some nice letters, don't you think so? I'm corresponding with quite a number now. I described myself in the last letter so I'll not do it this time. Anybody over 15 years of age may write to me. I'll answer all letters. When school is out and I haven't anything to do, I'll write a story and send it to the children's page. I just love to read and write stories. Well as my letter is rather long I'll close hoping to hear from you soon, I mean the cousins. I sign myself Elizabeth Ebevle, 308 S. Silver St., Bad Axe, Michigan.

—Send along your story, Elizabeth.

Dear Uncle Ned:—May I please join your merry circle? This is the second time I have written but I am not going to quit writing till Mr. Waste Basket gets his fill. We have taken the M. B. F. for a long time and like it real well. I am a tomboy, as my mother calls me, but I don't care. I have bobbed hair, dark blue eyes, I am 5 feet 2 inches in height, weigh 110 pounds and am 16 years of age. Do you think I am very big, Uncle Ned? I can cook, bake bread, cakes and pies. I like to bake when I have good luck. How many of the cousins like to go horse-back riding? I do and think it loads of fun. The phonograph is going now, the record that is on is: "It ain't gonna rain no mo'," I like it. I do not paint or powder but I am going to wear knickers this summer when I help my brothers make hay. I wish some of the boys and girls would write. I hope my wish comes true. I will answer all letters. Your want-to-be niece,—Agnes Posey, R3, Box 94, Marine City, Mich.

Good Evening Uncle Ned:—What a lovely evening too. I have just passed the eighth grade examination and intend to go to high school this fall and think if boys and girls have the chance to go why not do so. Isn't that right, Uncle Ned? Florence Coleman is fourteen years of age. Now don't forget the letter if I am correct, Florence. My but don't we have cold weather? It seems as though its never going to be warm. Uncle Ned, do you like a Ford car? We have two of them. Oh say cousins, wouldn't it be nice of Uncle Ned if he would only print his picture in the M. B. F.? Come now Uncle Ned be a good boy for once. We will be real good if you do. I am some coaxer am I not? Ha! Ha! Well I guess its been a long time since I had my letter printed so will describe myself: I am five feet and three inches tall, weight one hundred and one pounds, have brown eyes and brown bobbed hair. Well as my letter is getting long will close hoping Mr. Waste Basket is asleep when it arrives. I will try to answer all letters received if the cousins will write to me. Your niece,—Helen M. Goodrow, Hale, Michigan.



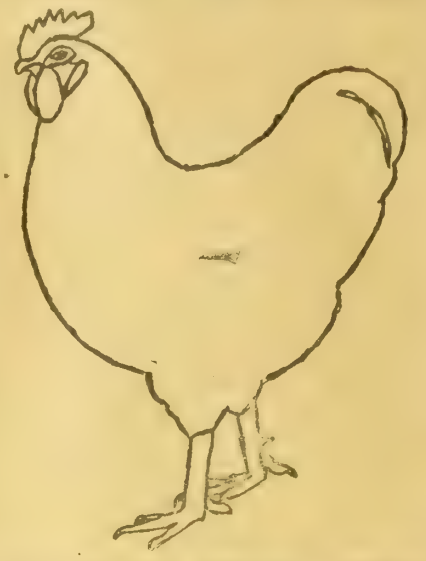
—By all means I think girls and boys should go to high school. As for my liking a Ford car, well I drive one myself. I have thought some of printing a picture of myself but there is one drawback—I cannot find a photographer who will take the chance of breaking his camera.

Dear Uncle Ned:—May I join your club? I noticed a few letters about having "correspondence scrambles". I would just enjoy having them. I am sending a story composed by myself. I hope you will accept it. Your friend,—Marie Arntz, Vickeryville, Michigan, Box 71.

The Crickets Party

Last night there was so many unusual noises in our neighborhood that I couldn't get to sleep. So I got up and dressed and went out to see what was going on. The sound seemed to be in the direction of the barn. On approaching the barn I saw great crowds of crickets, and grasshoppers, gathering around in different places, and many of them going through the barn door. And then I decided what was going on. Mr. and Mrs. Cricket were giving a barn dance in honor of the neighboring crickets and grasshoppers. They surely had a fine orchestra and I do not think I ever saw finer dancers than they were. They danced square dances and also many round dances. Then Mr. and Mrs. Cricket served ice cream, and many delicious cakes, out under the apple tree. Their tables and also the barn were nicely lit up by the lanterns of the little fireflies. They then bid Mr. and Mrs. Cricket good-night and returned to their many homes in the clover fields.

Hello Uncle Ned:—It sure is about time some one from Chassell is making a little noise. I have often looked for letters from here but never saw any in print, so I thought I'd be the first one to try my luck. Chassell, a little town, is situated on the very shore of a little bay called, "Portage" in the far northern point of the Keweenaw Peninsula. I live on an eighty acre farm two miles south west of Chassell. My father takes the M. B. F. and we all enjoy reading it very much There are seven of us children; two boys and five girls. My oldest brother, Jack, died a year ago and we all miss him very much. I am about 5 feet 2 inches tall and weigh about 100 pounds. I have dark red hair, that is not bobbed, and am fair but a few freckles on my nose. I am fourteen years of age and in the ninth grade at the Chassell high school. I am taking Latin I, English IX, Algebra and Bookkeeping. My birthday is July twenty-ninth. Have I a twin? If I have will you please write? As my letter is getting quite long and I can see Mr. Waste Basket running around the corner I will have to close. Will all the nieces and nephews write to me as I will answer all letters I receive. Your niece,—Ida Kaspala, Chassell, Michigan, R1, Box 75.



Drawn by Leona Green, R. 1, Prescott, Michigan.

Dear Uncle Ned:—Would you let two Marlette girls join your merry band? We live on farms and go to high school. We are sophomores and like school fine. We will send a big fat letter to the one that guesses our middle names. One, Zetta Hobson, starts with V and has six letters in it. The other, Merle Davies, starts with L and has five letters in it. We both live 2½ miles from town and walk to school almost every morning. Hoping to hear from some of the cousins. We remain,—Merle Davies, Zetta Hobson, Marlette, Michigan.

Dear Uncle Ned:—Here I am again after such a long time. It has been three years since I wrote to you, but during that time I have read with interest every issue of the M. B. F. My school was out in January. Immediately after my school closed I went to Danville, Kentucky, and stayed a few weeks with my sister. I received several letters from girls of different towns in Michigan, after my other letter was printed. Some of you perhaps will remember me. I will close with a few riddles. What is the difference between a sewing machine and a kiss? What is the difference between a hen on a fence and a penny? In marble walls as white as milk, lined with skin as soft as silk, within a fountain crystal clear, a golden apple doth appear. No doors are there to this stronghold, yet thieves break in and steal the gold. I would like to hear from some of the cousins. Your niece,—Hazel Lee Thompson, R4, Box 42, Waynesburg, Kentucky.

Dear Uncle Ned:—May I join your merry circle? I am a girl 11 years of age and have blue eyes, brown hair, and am 4 feet 9 inches in height. I am a brunette. I have two sisters and one brother. We live on an eighty-acre farm and have 160 acres beside. We have three goslings and 75 little chicks. We have an incubator and 380 eggs set. We have five turkey hens and one gobbler. I am in the sixth grade at school. We have a club in which we study current events, current school topics and debate. At school we play ball. We have 6 horses and twenty head of cattle. For pets we have a dog named Jiggs and two cats. I go one and one half miles to school. The name of our school is Maple Grove. Well I guess I will close and I wish some of the boys and girls would write to me. Your new niece—Freda Cameron, R3, Deckerville, Michigan.

Dear Uncle Ned:—For some time I have been a silent reader of the Children's page and have at last scraped up courage enough to write. I am a girl 5 feet 5 inches tall, weigh 124 lbs. I have light curly, bobbed hair and blue eyes. I wonder if I have a twin? I am 15 years old, my birthday was the 24th of May. I am in the 10th grade at school. We live on a thousand acre ranch; it is called the "Colby Ranch" and is 2½ miles from school. The subjects I take are Algebra, History, English and Economics. There are three lakes and part of another on this ranch, so my greatest delight is fishing and rowing. I have two sisters older than myself and three sisters and one brother younger. My two oldest sisters both graduated this spring, one from Country Normal and the other from high school. I would like to hear from some of the cousins and will answer all the letters I receive. Your niece and cousin, —Alice Dakin, Stanton, Michigan.

Dear Uncle Ned:—May I join your merry circle? I wrote once before but I guess the waste paper basket gobbled it up before it reached you. I will describe myself: I am 4 feet 10 inches tall, light brown hair and gray eyes. I am 11 years old. I have 2 brothers and 1 baby sister, a father and a mother and a dear grandma. I like to go to see my grandma very much. I belong to the M. E. church. There are 21 girls in my Sunday school class. I would like very much to hear from the other girls and boys of M. B. F. Your loving niece,—May Belle Hess, 1381 Ferry Ave., Pontiac, Mich.

Dear Uncle Ned:—May I join your merry circle? I will describe myself. I am ten years of age, four feet five inches tall, have bobbed hair and weigh sixty-nine and a half pounds. Next fall I will be in the sixth grade at school. My father takes the M. B. F. and likes it very much. For pets I have two grown kittens. I belong to a Sunday school class and also a society called "Golden Rule Juniors" and it meets just once a month at the church. We take our own dinner and have a little program afterwards. I enjoy it all very much. I guess this is enough for this time. From a want-to-be niece,—Ruby Boyenga, Fennville, Michigan, R1.

Fuzzy Owl Learns a Lesson

MAMMY Owl made a warm, cozy, comfy home in a big tree in the forest, for her four Small Owlies. She made it of large dry sticks and crooked twigs. Then she lined it with soft grasses and feathers. It was indeed a fine place for four Small Owlies to live.

Mammy Owl had a little talk with Small Owlies before they all, including Pappy Owl, moved into their new quarters.

"Now, Small Owlies, you are only tiny, baby birds, and you must not leave your home at any time. If you do harm will surely come to you."

But one day when the Small Owlies were lying all cuddled together in their warm, cozy, comfy home, in the big tree in the forest, one of the tiny Owls, Fuzzy, by name, peeped over the edge of his nest and saw a big, brown bag lying on the ground.

"Oh, oh, oh," cheeped Fuzzy, "what do you suppose is in that brown bag Pappy Owl brought home?"

Suddenly three other queer little heads with sharp black eyes showed over the edge of the big hole. The tree looked very, very old and forsaken and gave no signs of life within, except the eight big eyes peering curiously out of their warm, cozy, comfy home.

Now Baby Owls are the most curious of birds, and Fuzzy Owl was the most curious of the four Small Owlies.

"I must see what is in that big, brown bag Pappy Owl brought home," he chirped. "Oh, look, it must be something alive!"

No sooner had Fuzzy Owl said this than he jumped from his nest, lighting on the ground with a soft thud. The other Baby Owls squealed with fright, "Mammy Owl, Pappy Owl, come quick, come quick!"

Fuzzy Owl hobbled over to the brown bag and my, oh me, what did he do? but untie the string that was around the bag.

The Baby Owls in the tree squealed and yelled as loud as they could, "Mammy Owl, Pappy Owl, come quick! come quick!" No sooner had Fuzzy untied the big, brown bag than out jumped a big fat rooster.

The first thing the rooster did was to crow very, very loudly. The crowing frightened Baby Owlies so they trembled with fear and called more wildly than ever, "Mammy Owl, Pappy Owl, come quick! come quick!"

Fuzzy Owl was more frightened than ever. And even Mr. Rooster was frightened at so much noise.

He started to run around in a ring so that he might exercise his legs as he had been in the brown bag a long, long time.

Fuzzy Owl thought he was after him, and he yelled so loudly and wildly, "Mammy Owl, Pappy Owl, come quick! come quick!" that at last Mammy Owl and Pappy Owl, who had been out in quest of rats and mice for the Small Owlies, came flying home, flopping their wings and screaching.

Mammy Owl grabbed Fuzzy, who was, by this time, too frightened to stand on his little legs, and put him back in his warm, cozy, comfy home.

Then, did she scold poor frightened Fuzzy Owl for being so curious?

Indeed no! She felt that the loss of the good fat rooster which Pappy Owl had brought home to kill for the Baby Owlies, and the fright Fuzzy Owl had had would teach him to never, never be curious again. And, indeed it did!—Helen Gregg Green.

OUR PUZZLE CORNER

1	S	M	I	U	2
S		A	R		B
A	V			S	E
H	A			E	T
B		R	R		W
3	A	R	G	E	4

Print the name of an animal, beginning with "O", in the diagonal 1-4, and the name of an animal beginning with "M" in the diagonal 2-3, and have six words of six letters each as a result.

Answer to last puzzle: CARTHAGE (Cart hage), WEBB CITY (Webs ity), MOBERLY (Mo burr ly).

The Experience Pool

Bring your everyday problems in and get the experience of other farmers. Questions addressed to this department are published here and answered by you, our readers, who are graduates of the School of Hard Knocks and who have their diplomas from the College of Experience. If you don't want our editor's advice or an expert's advice, but just plain, everyday business farmers' advice, send in your question here. We will publish one each week. If you can answer the other fellow's question, please do so, he may answer one of yours some day! Address Experience Pool, care The Business Farmer, Mt. Clemens, Mich.

BREAK COW FROM SUCKING SELF

EDITOR of BUSINESS FARMER: I will give you a recipe to break a cow from sucking her self and it is a sure one as I have tried it. Place a bit in her mouth. In a few days she can eat and drink as well as ever, it will not bother her in any way. Take a strap or a piece of rope and tie around her head and the bit in the cows mouth that puts an end to her sucking her self.—Darius Seltine, Marlette, Mich.

OUR BOOK REVIEW

(Books reviewed under this heading may be secured through The Michigan Business Farmer, and will be promptly shipped by parcel post on receipt of publisher's price stated.)

The book of Noble Dogs.—By Estelle Ross. This is a book for the person who loves dogs. It is rich in anecdote about the dog friends of famous men. It gives the stories of celebrated dogs of history, literature and mythology. It tells of dogs who were friends of kings and the alleged familiar spirits of great magicians and indeed about all the most outstanding dogs that have appeared in prose and poetry. Published by The Century Co., New York City. Price $2.00.

The Farm Cook and Rule Book.—By Nell B. Nichols. This is a cook and rule book of the good old fashioned kind, with recipes modernized to fit present-day conditions, and with all the useful beauty secrets and many points on successful housekeeping included. Published by The MacMillan Company, New York City. Price $2.00.

WITHIN A YEAR

(Continued from Page 9)

ing and long-distance transmission.

12. A single-tube receiver capable of operating a loudspeaker on a loop antenna and having less distortion and greater volume than any present multi-tube receiver, will be developed.

DEFOREST INVENTOR OF REGENERATIVE CIRCUITS

A VERY recent court decision has given to Dr. DeForest all the patent rights to the use of vacuum tubes in regenerative circuits. This case was bitterly fought by the people who had bought the Armstrong patent on regenerative circuits, but Dr. DeForest had plenty of evidence to show that he was the first to use and to discover that vacuum tubes could be used in that manner.

So now instead of seeing so many advertisements of receiving sets in which we see "Licensed under the Armstrong Patents" we will hear more of the DeForest name.

It will be recalled that it was Dr. DeForest who invented the vacuum tube in it's present form with three internal elements.

HOW MUCH WATER WILL A TREE DRINK

TO determine how much water is required to bring six different western conifers, in five different types of soil, up to 1 foot in height, experimental studies have just begun at the Fremont Forest Experiment Station laboratory, Mt. Manitou, Colo. For the 5 or 6 years during which the thirty studies involved will be carried on, says the United States Forest Service, the young trees will be kept in containers of a type that will permit the measurement of water loss. Another experiment initiated at the same Experiment Station is designed to test the productive qualities of a great variety of forest soils, and to determine each year the dry weight of tree material that is produced by growth in each soil with a standard amount of water and with light and with temperature conditions carefully equalized.

Still another interesting series of experiments will be carried on to determine with what similarity the different species of a given forest region respond to the stimulus of light, and what qualities of the sun's rays are most effective in tree growth.

Heartless

"Ah," she sighed, "I shall never hear his footsteps again; the step I have listened for with eager ears as he came through the garden gate, the step that has so often thrilled my heart as I heard it on the front porch. Never, never again!"

"Has he left you?" asked the sympathetic friend.

"No. He has taken to wearing rubber soles!"

Frugality, Always

A Scotchman, wishing to know his fate at once, telegraphed a proposal of marriage to the lady of his choice. After spending the entire day at the telegraph office he was finally rewarded late in the evening by an affirmative answer.

"If I were you," suggested the operator, when he delivered the message, I'd think twice before I'd marry a girl that kept me waiting all day for an answer."

"Na, na," retorted the Scot. "The lass who waits for the night rates is the lass for me."—Exchange.

HIGH COWS IN TESTING WORK IN MICHIGAN DURING MAY

The following tables show the 5 high C. T. A. cows in Michigan for the month of May in the respective age classes designated. These are the highest butter fat producers out of 21,032 cows under cow test work in 77 associations reporting. There were 83 associations actively operating during the month and four new associations started making a total of 87 C. T. A in Michigan.

Mature Cows—Five Years and Over

Association	Owner	Breed	Date Fresh	Lbs. Milk	Lbs. Fat
Kalamazoo No. 1	H. B. McMurray	PB H	2/15/24	2129.7	*97.9
Lapeer	A. Reek	PB H	5/2/24	2541.0	*96.5
Lapeer	D. C. Pierson	PB H	3/3/24	2126.0	*91.4
Van Buren-North	T. C. Tiedebohl	PB H	2/26/24	2573.0	*90.0
Genesee No. 7	W. E. Robb	PB H	*	2562.0	**89.6

Under Five Years

Association	Owner	Breed	Date Fresh	Lbs. Milk	Lbs. Fat
Kent-W. Alpine	J. N. Lamoreaux	PB H	4/27/24	3233.3	**97.9
Kalamazoo No. 1	H. B. McMurray	PB H	3/23/24	2997.1	*95.9
Van Buren-North	T. C. Tiedabohl	PB H	3/25/24	2411.0	*84.3
Ionia-Belding	Mich. Reformatory	PB H	2/24/24	2387.0	**81.2
St. Joseph	Olin Ash	PB H	4/10/24	1893.0	79.5

Under Four Years

Association	Owner	Breed	Date Fresh	Lbs. Milk	Lbs. Fat
Cass	Elk Park Farm	Gr. H	3/27/24	2300.0	*85.1
Genesee No. 1	Ed. K. Evatt	G[illegible] J	4/11/24	1060.2	81.6
Lapeer	Fred Meier	Gr. H	4/4/24	2337.0	*79.4
Macomb No. 1	Frank Wilcox	Gr. H	3/3/24	1947.0	*77.9
Van Buren-North	T. C. Tiedebohl	PB H	3/25/24	2247.0	*76.3

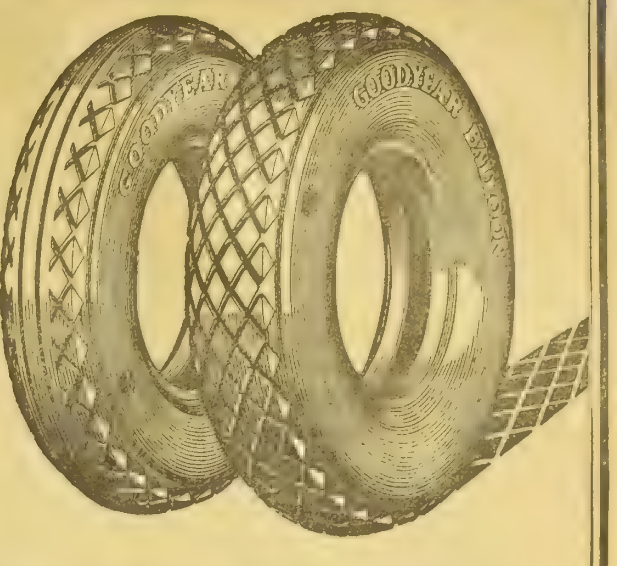
Under Three Years

Association	Owner	Breed	Date Fresh	Lbs. Milk	Lbs. Fat
Ottawa	R. Riemersema	PB H	4/9/24	1562.0	*79.7
Washtenaw-A. Arbor	J. G. Lewis	PB H	3/17/24	2003.0	74.1
Ingham-Mason	Cheney & Welsh	Gr. H	4/21/24	1692.6	72.7
Van Buren-North	T. C. Tiedebohl	PB H	3/9/24	1953.0	*66.4
Marquette	J. B. Duetsch	PB G		1311.0	**62.9

The following table shows 10 high cows in milk production in Michigan during the month of May out of 21,032 cows under cow testing association work in 77 associations reporting.

Association	Owner	Breed	Age	Date Fresh	Lbs. Milk	Lbs. Fat
Kent-W. Alpine	J. N. Lamoreaux	PB H	4	4/27/24	3233.3	**97.9
Calhoun	Lakewood Dairy	PB H	M	5/4/24	3116.0	**82.5
Genesee No. 7	J. E. Post	PB H	M		3108.0	**71.4
Genesee No. 7	J. E. Post	PB H	M		3015.0	**87.4
Kalamazoo No. 1	H. B. McMurray	PB H	[illegible]	3/23/24	2997.1	*95.9
Ionia-Belding	Mich. Reformatory	PB H	M	4/12/24	2985.0	**86.6
Kent-W. Alpine	John C. Ruth	PB H	4	3/20/24	2650.5	76.8
Van Buren-North	T. C. Tiedebohl	PB H	6	3/23/24	2650.0	*79.5
Lapeer	D. C. Pierson	PB H	5	4/1/24	2604.0	*78.1
Van Buren-North	T. C. Tiedebohl	PB H	M	2/26/24	2573.0	*90.0

*Milking three times a day **Milking four times a day



The biggest new thing in balloon tire manufacture today is the sensational cord fabric

SUPERTWIST

developed by Goodyear. Tests show that tires made with this elastic and enduring new material *delivered in excess of 100% greater carcass service* than tires made with an equal number of plies of standard cord fabric. Ply for ply, in other words, SUPERTWIST in these tests literally *doubled* the carcass life of the tire. SUPERTWIST is used only by Goodyear, and is built into Goodyear balloon tires of *both* kinds—to fit new wheels, or the wheels now on your car.

Goodyear Means Good Wear

GOODYEAR

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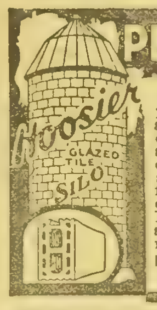

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JACOB BERNER & SONS, Grand Ledge, Mich.

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WE HAVE SOME FINE YOUNG ANGUS BULLS from International Grand Champion Stock at reasonable prices. E. H. KERR & CO., Addison, Mich.

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C. R. TALBOT, Farmington, Michigan.

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OTTO SCHULZE & SONS, Nashville, Michigan.

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JOHN W. SNYDER, St. Johns, Mich., R. 4.

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FOR SALE—FINE BUNCH OF DUROC PIGS, big long kind. Price $10.00. Registered and immune. F. A. LAMB & SON, Cassopolis, Mich.

Have You Poultry For Sale?
An Ad in The Michigan Business Farmer will sell it.

DAIRY and LIVESTOCK

FACTS ABOUT TUBERCULOSIS OF SWINE AND POULTRY

IN the systematic drive to suppress tuberculosis of livestock in the United States some rather unusual methods are in use in addition to the regular procedure. Livestock owners are now rather familiar with the different forms of tuberculin tests, with the accredited-herd plan, and with systematic area work.

Charts Show Need for Research

Records of tuberculin testing have resulted in a great fund of information covering several million animals. This information is used in various ways before it is filed as a part of official records. For instance, the facts and figures are a basis for a wide variety of charts and maps showing the extent of infection in various parts of the country, difficulty in freeing badly infected herds from the disease, comparisons of the various tests used individually and in combination with one another, and numerous other interesting studies. Such charts are virtually "war maps" against the disease and have been valuable in directing experimental work in the most desirable fields and also in conducting field work.

Value of Tattooing Hogs

One of the more recent developments in tuberculosis eradication is the wide use of a tattoo marker for hogs. For years it has been known that swine were susceptable to tuberculosis derived from cattle, as well as from fowls. But the extent to which swine were affected from such sources has been difficult to determine satisfactorily. Necessary studies needed to be made under actual farm conditions, but the difficulty of maintaining the identity of swine from the time they left the farm until their carcasses could be examined by Federal inspectors in some distant packing plant was a serious problem.

Apparently there is a slight relation between the tattooed freak of traveling shows and a porker ready for the market. Yet the plan of tattooing hogs was suggested by the permanence of tattoo markings and has aided greatly in the study of tuberculosis among swine. The tattooing instrument consists of a handle in which phonograph needles can be arranged to form letters and words. A number of tattooing fluids have been tried with the result that several have been found which leave indelible markings even after hogs have gone through the scalding tank, scraping machines, and other packing processes.

To apply the tattoo the operator "inks" the marker and strikes the hog with it gently on the shoulder. The process takes but a moment but plainly indentifies the hog so it can be recognized by a Federal inspector at a distant market.

Example of Practical Use

One of the most comprehensive studies of tuberculosis among swine made with the aid of the tattooing instrument is reported by Dr. J. A. Barger, a Federal inspector stationed in Iowa. For five years, from 1919 to 1923, inclusive, records were kept on "wagon" hogs hauled to a packing company in Waterloo, Iowa. As the name indicates, these hogs were produced within hauling distance of the packing plant. The records covered more than 75,000 hogs, the number being distributed nearly evenly throughout each year of the period.

Beginning in 1919 a great deal of work in eradicating tuberculosis from the cattle in the same territory was conducted, and the disease among cattle has now been reduced to almost a vanishing point. Simultaneously with the eradication of bovine tuberculosis on farms where the wagon hogs originated, there has been a rapid decline in tuberculosis infection among the swine as identified by tattooing markings. For the five years, 1919 to 1923, inclusive, the number of hogs which showed lesions whatever of tuberculosis declined progressively from 37 per cent to 10 per cent. The great majority of these lesions were small, affecting only glands. However, the same general result is seen in condemnations of carcasses which during the same period declined from 1.17 per cent to 0.3 per cent. An instance of this kind shows clearly that eradicating tuberculosis from cattle results in this rapid decline of the disease among hogs.

More recently the Department of Agriculture, cooperating with State officials and packing-house officials, has made numerous studies of tuberculosis of swine in its relation to avian tuberculosis, meaning the form of disease found in poultry.

Remarkable Report from Michigan

A report of unusual interest, made by Dr. T. S. Rich, inspector in charge of tuberculosis work in Michigan, indicates that fowl tuberculosis, if sufficiently prevalent, may cause infection among swine. In Hillsdale county, Michigan, where much tuberculosis eradication has been carried on with cattle, the disease among cattle now exists to the extent of not more than one-half of 1 per cent. Hillsdale county is officially classed as "a modified area" by reason of the suppression of the suppression of bovine tuberculosis to the very small percentage mentioned.

Since the country became a modified area, several thousand swine have been shipped from that county, a surprising percentage of which showed slight lesions of tuberculosis on post-mortem examination in federally inspected establishments. During the period November 6, 1923, to April 2, 1924, shipments of hogs from Hillsdale county, totaling 13,264, were slaughtered at Buffalo under Federal inspection. According to the report of Dr. B. P. Wende, the inspector in charge at Buffalo, 2,219 hogs, or about one-sixth, showed slight evidence of tuberculosis. The lesions were so slight, however, that it was necessary to condemn entirely only one carcass; five others, however, were rather seriously affected.

BULLFROG BETTER MOUSER THAN CAT

If you don't care to take a Kansas bullsnake upon the premises to keep rats and mice away, get a bullfrog.

The mousing proclivities of a bullfrog are vouched for by Wade Fatheree, local sportsman of Chickasha, Okla., who captured a giant hopper on a fishing trip.

Incidentally, the frog secured a safe and steady future at a time when he was headed for the frying pan.

Fatheree tied the critter in the house awaiting execution. During the night the frog broke loose.

"I could hear him hopping about the house and then hear his jaws pop and a mouse squeal. He kept that up throughout the night. The next morning he had the appearance of a swelled up frog. Now he has a home with me" Fatheree declared.

Fatheree says he wouldn't trade the frog for a flock of tom cats.

By the system of tattooing hogs, used by department investigators, the inspectors were able to identify the infected animals coming from 39 farms in Hillsdale county. On 22 of the farms no infection was found among the cattle. On 15 farms bovine infection was traced for a period up to the year 1921, the herds having been free from the disease since that time. On the remaining two farms no cattle were kept.

Continuing their veterinary detective work, the investigators applied the tuberculin test to 15 lots of chickens containing 75 head. Twelve of the 15 lots contained reactors. Tests were also applied to the swine on the farms with the result that 17 and a fraction per cent of swine infection was indicated. This figure checked rather closely to the percentage, 16.8 per cent, as reported through post-mortem inspection by the inspector at Buffalo. In the absence of bovine tuberculosis on the farms where the hogs originated, the tests incriminated tuberculosis fowls as the probable source of infection. The matter is believed to be of interest to poultry owners, stock men, and veterinarians.

Tuberculosis-Free Poultry Flocks

Dr. Rich, who furnished the foregoing information, stated in concluding his report: "It is our judgement that conditions are sufficiently serious to demand a carefully conducted educational campaign through newspaper articles, bulletins, and public talks, stressing the necessity of eradicating tuberculosis from chicken flocks, which will automatically remove this source of infection from swine. The public should be taught the advantages derived in keeping only young fowls, not only from the economic standpoint, but in the elimination of disease carriers as well. The swine breeder should also be induced to keep only known tuberculosis-free breeding stock, through the use of the tuberculin test."

In connection with the Michigan report, it is well for livestock owners to know that tuberculosis of fowls occurs chiefly among the older birds, especially those more than two years old. The most conspicuous symptom is "going light," meaning, as the name indicates, a rapid loss in weight, especially the emaciation of breast muscles. Other symptoms are lameness and ruffled plumage. On post-mortem examination tuberculous fowls usually show whitish, grayish, or yellowish, spots on internal organs, notably the liver. The prompt disposal of old fowls will eliminate most of the tuberculous infection, but when serious on the farm it is advisable to dispose of the entire flock, to disinfect the poultry houses and premises thoroughly, and then introduce new stock known to be healthy. Dead fowls should be burned or buried—never fed to hogs.

Swine Infection from Cattle

One of the most conspicuous cases of swine tuberculosis evidently caused by infected cattle was reported recently by a veterinary inspector stationed at Des Moines, Iowa. A farmer living near Waterloo hauled 35 hogs to a packing company. Twenty-six of the hogs were badly tuberculous and were condemned. Five others were slightly affected. Immediately following the slaughter of the hogs, inspectors tested the cattle on the farm where the hogs originated. Twelve of the 14 animals in the herd reacted to the test; the remaining two were young heifers.

An experience of this kind, when considered in connectioinn with other cases of similar though not so serious infection, points to heavy economic losses traceable to infection of swine from cattle. Scientific and laboratory studies of the different types of tuberculosis have thus far not yielded definite information as to the degree in which the various types of tubercle bacilli affect animals of different species. That is, the degree of virulence and the exact identity of different kinds of bacilli have not been definitely determined. But field reports, such as those presented, appear to show clearly that swine are susceptible to infection both from bovine and fowl sources. In some localities poultry are largely responsible for the infection among swine, whereas in other territories it is reasonable to attribute the infection more largely to tuberculous cattle. Infection may also result from both sources.

The United States Department of Agriculture recognizes that reports such as the foregoings, though extremely interesting from a practical standpoint, lack the conclusive proof which only carefully controlled and long-continued experiments can give. Yet until experimental facts are more fully established the results of these field studies in tuburculosis eradication are presented to caution livestock owners against needless exposure of swine to tuberculosis cattle and poultry.—Dr. J. A. Kierman, Chief, Tuberculosis Eradication Division, Bureau of Animal Industry, U. S. Dept. of Agriculture.

"Phwat was the last card Oi delt ye, Mike?"

"A spade."

"Oi knew it. Oi saw ye spit on your hands before ye picked it up."

FREE BOOK ABOUT CANCER
The Indianapolis Cancer Hospital, Indianapolis, Indiana, has published a booklet which gives interesting facts about the cause of Cancer, also tells what to do for pain, bleeding, odor, etc. A valuable guide in the management of any case. Write for it today, mentioning this paper.(Adv.

Hereford Breeders Enjoy Two Day "Hike"

THE Michigan Hereford Breeders' Association tour through the west central part of the state was well attended and much enthusiasm was shown throughout the two day trip, June 19th and 20th.

The first day of the tour followed "Feeders Day" at the M. A. C. and went through some of the best beef producing sections of the state in Clinton and Ionia Counties. Most of these farms were typical of the conditions under which beef cattle fit into the general farm program to best advantage.

Early Thursday morning seven cars brough a lively group of Hereford breeders and admirers to the Pino Brothers Stock Farm near Dewitt, where about forty registered animals were rounded up for exhibit. This herd has just been established, most of the cattle having been on the farm only a few weeks.

James R. Campbell, Chairman of the "Hike" committee, then lead us to his own pastures north and west of St. Johns to see his twenty-three head of purebreds. His farm has not been raising whitefaces many years, but the way "Jim" picks out the good ones and rattles off their pedigrees he is surely going to have the older breeders stepping to keep ahead of him.

Jos. Feldpausch's herd of thirty-five, near Fowler, was next visited, where we saw a fine crop of little calves very uniform in age and appearance. The Feldpauschs must have learned to preserve cider before the days of prohibition, for they served the party with a real treat on sweet cider.

Weisgerber Brothers south of Ionia, lead out a fine young bull. Their herd of twenty-five head included some baby-beef calves about ready for the market only a little over a year old.

Part of the Harwood herd, which included some fine heifers, was visited before dinner. But, my memory of them seems rather blotted out by the bounteous dinner on the Harwood lawn. The crowd of more than half a hundred, that had been picking up all the forenoon, was served in a most creditable manner and all certainly appreciated it. County Agent R. L. Helm acted as toastmaster and called upon Mayor Fred Green of Ionia, who gave a snappy and inspiring talk. The "Hereford Song" by the young ladies please everyone. Short talks by G. A. Branaman, who had charge of the calf feeding experiments at M. A. C., W. W. Crapo, President of the Association, and V. A. Freeman, Secretary were enjoyed.

Wm. Kneal & Son showed a fine lot of cows and calves. An informal judging contest and demonstration was entered into by nearly everyone present, and while there was some difference of opinion, everyone agreed that here was a fine place for a new breeder to get in mind the type of Hereford cow most in demand.

Back at the Harwood farm again, the cow herd was seen and also the herd bulls. Their old "Keep On" bull made a fine demonstration of the points to look for in selecting a herd bull. It was hard to break away from this excellent herd, numbering about one hundred and forty.

Mr. J. M. Richmond, of Smyrna, showed thirty-two head, which included the Becker herd recently purchased by him. Some of them had to be routed out of the woods but one old cow in particular was well worth rounding up to see.

The Anderson herd west of Sparta certainly made a pretty picture on the hills of their pasture. They were the only polled herd visited on the "hike", and certainly raised most of the visitors opinions of the progressed made by polled Hereford breeders. The crowd made the cattle nervous so that it was impossible to view them close up, but all agreed it was a fine lot of about sixty, headed by the right kind of a bull.

After enjoying fine accommodations for the night at the new hotel in Fremont, E. J. Taylor, veteran breeder and herdsman, led us back through the woods between two lakes and up the hills to where his uniform herd of line-bred "Anxiety" cows divided their time between pasture and the beautiful scenery. His twenty cows and calves certainly put life and color into one of nature's beauty spots.

The "hike" then proceeded past the Croton Dam, one of the large power Dams of the state, to Howard City for a short visit at the Pennsylvania R. R. Demonstration Farm. Of course, no one expects to raise beef cattle on such a farm, but by the time B. O. Hagerman, Agricultural Agent for the Pennsylvania R. R., had shown us about and explained how they handle the "Keystone Rotation" we were convinced of the value to the surrounding territory of such a demonstration farm.

W. W. Terry, northeast of Remus, had his seven head in the barn waiting for us. Several cars joined in here again just about making up for the loss in attendance when leaving Ionia county. Mr. Terry feels "bully" about the Herefords, because his three foundation cows have brought him only one heifer in three years, and he says he will increase his herd if he gets a change of luck and some heifer calves.

George Wheeler took the lead to his pasture southwest of Mt. Pleasant and showed us a fine start of twenty head. George has been going hardly two years with whitefaces but his calf crop speaks well both for the care they receive and for the kind of parents he selected for them.

The last stop was made with A. J. Hamlin, of Shepherd. A long distance view showed some good thick cows eager to find their calves and get away from our intruding party. As the hour was late and many of the cars faced long drives home, parting hand shakes prevailed and we only saw part of his herd of thirty.

Remarks on all sides praised the work of the committee in charge of the "hike" for their good work in planning the details of the trip. The committee consisted of Jas. R. Campbell, St. Johns, Jay Harwood, Ionia, E. J. Taylor, Fremont, and Geo. R. Wheeler, Mt. Pleasant, and they certainly appreciated the hearty cooperation of all the breeders homes, all added much and were appreciated by the touring party. After touring different parts of the state one is forced to the conclusion that hereford breeders are good feeders, and good natured like the cattle they produce. This tour certainly brought them closer together in many ways that leads to friendship, cooperation, and more unity in the improvement of their favorite breed of cattle. Just join the next "Hereford Hike" if you want to meet good fellows, see good cattle, learn good methods of keeping them, and have a good time.

VETERINARY DEPARTMENT

TREATMENT FOR GARGET

I have a cow that has Garget. She was all right while I fed grains now I am feeding clover hay. She is coming in the last of August. What can I do for her?—C. G. D.

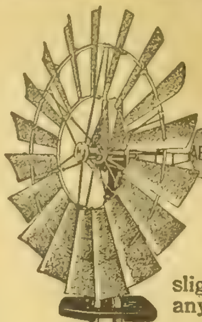
THERE is no specific treatment for garget. A line of treatment that works well on one patient very often does not do any good to another similarly affected. The affected quarters should be milked out five or six times daily. The milking should be done into a pail containing a disinfectant solution. Massaging the affected quarters three times daily with soap liniment (U. S. P.), seven parts, and fluid extract of phytolacco, one part, sometimes works well. Internally the administration of one to one and one-half pounds of glober salts in a quart of water should be given as a drench and followed by giving one-half ounce of fluid extract of phytolacco night and morning for two or three days.—John P. Hutton, Associate Prof. of Surg. & Med., M. A. C.

The Old Lady Again

"Your husband belongs to quite a number of lodges, doesn't he, Mrs. Blunderby?"

"Yes, he is a very logical man."—Boston Transcript.

Teacher—"Take this sentence: 'Take the cow out of this lot.' What mood?"
Pupil—"The cow."—Denver Clarion.



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The Auto-oiled Aermotor has behind it 9 years of wonderful success. It is not an experiment.

The Auto-oiled Aermotor is the Genuine Self-Oiling Windmill, with every moving part fully and constantly oiled.

Oil an Aermotor once a year and it is always oiled. It never makes a squeak.

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This Absolutely Guaranteed Everwear Harness for $59.00

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McIntyre-Burrall Co.
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Look for this trademark on the harness

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FARM LANDS

60-ACRE FARM NEAR RIVER. ONLY $2800; 11 cows and young stock, horse, hogs, poultry, furniture, cream separator, machinery, tools, hay, potatoes, corn, etc. included; beautifully situated, best markets, advantages; productive fields, spring-watered pasture, valuable woodland; pleasant oak-shaded dwelling, barn, hog and poultry houses. Personal affairs make low price $2800, if taken now. Part cash. Details page 33 big Illus. Bargain Catalog money-making farms. Copy free. STROUT FARM AGENCY, 427KJ Marquette Bldg., Chicago, Ill.

FOR SALE OR MAY TRADE 80 ACRES within 3 miles of Springport. 35 acres under cultivation, wood timber, saw timber, and pasture. 12 room house, barn and other buildings. Price 55 hundred. Write to owner, PETER BEERS, Springport, Michigan, R. No. 3.

WANT FARM IN GOOD CONDITION, WELL located on good highway—where electric lights and power are available. Give full particulars and price. PORT HURON STORAGE & BEAN CO., Port Huron, Mich.

FOR SALE:—40-80-and 240 ACRE FARMS taken on mortgage. Will sell cheap on easy terms, improved and with buildings. Address BOX C, Clare, Michigan.

HELP WANTED

SALESMAN WANTED TO SELL HIGH grade Automobile Oils, etc., that everybody uses. Prices reasonable. Orders come easy. Work your home county. We pay you every week. Convenient shipping points. Address GLOBE REFINING CO., Cleveland, Ohio.

MAN WANTED BY LARGEST CONCERN OF its kind. Part or full time. Experience unnecessary. Our men getting up to $200.00 weekly. Lowest prices. RED SEAL COAL COMPANY, 257 Coal Exchange Building, Chicago, Ill.

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"THE peasants in America do not wear wooden shoes at all, even in the fields!" writes Abbe Pierre, of Gascony. "No, the peasants there wear shoes of leather, although I should think that sabots would be much more serviceable, not only on the roads, but plowing. . . . And wooden shoes are far less expensive. Ah, that America is an extravagant country!"

Advertisements haven't yet taken the heavy wooden shoes from Gascon feet—nor yet the heavy wooden shoes from Gascon minds. Gascony thinks in the past. America in the future.

Advertisements make the difference. They crisscross improvements in countless directions across the miles. They distribute Fords, furnaces and electric lights so widely that foreigners think you extravagant to enjoy them. They put you in touch with the latest conveniences. They help so many people enjoy those conveniences that their cost to you is small.

You read the advertisements to link yourself with the best—to substitute speed for the shambling progress you otherwise would have to make in the lonely wooden shoes of isolation.

Do you read them regularly? Good habits pay.

—O—

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VAN APPLEDORN BROS. BABY CHICK HOLLAND, MICHIGAN

Special Sale

HIGHEST QUALITY CERTIFIED BABY CHICKS

From Michigan's Old Reliable Hatchery, the best equipped and most modern Hatchery in the State.

Pure Bred Tom Barron English and American White Leghorns, Anconas, Barred Plymouth Rocks and Rhode Island Reds. Strong, Well-hatched Chicks from tested Hoganized Free-range stock that make wonderful winter layers.

Variety	Prices on 50	100	500
English Barron S. C. White Leghorns	$4.25	$8.00	$35.00
S. C. Mottled Anconas	4.25	8.00	35.00
Barred Plymouth Rocks	5.25	10.00	45.00
S. C. Rhode Island Reds	5.75	11.00	50.00

ASSORTED LOTS OF CHICKS

$65.00 per 1,000 - - $7.00 per 100
$33.50 per 500 - - $3.75 per 50

Chicks sent by Insured Parcel Post prepaid to your door. 100% live delivery guaranteed. Sixteen years of experience in producing and shipping Chicks giving absolute satisfaction to thousands. Write for valuable illustrated free catalog and price list. Get lowest price on best quality Chicks before placing your order.

Holland Hatchery & Poultry Farm, R. 7, Holland, Mich.

CHICKS of QUALITY

Bred from Sires of 250 to 280 EGG STRAINS

We are still "ON THE JOB" hatching high grade chicks and can supply them during entire month of July. We hatch every week up to the 29th. Get order in at once before it is too late. Prices most reasonable—stock unexcelled.

Varieties	25	50	100	500	1000
Extra Selected Barron or Hollywood S. C. White Leghorns, sired by 250 to 280 egg males	$2.75	$5.25	$10.00	$45.00	$ 90.00
Selected Barron White Leghorns	2.50	4.75	9.00	42.50	80.00
Extra Selected Sheppard Mottled Anconas	3.00	5.75	11.00	52.50	100.00
Selected Mottled Anconas	2.50	4.75	9.00	42.50	80.00
Selected Parks Bred-to-Lay Barred Rocks	3.75	7.00	13.00	62.50	120.00
Broiler, Mixed Chicks	Seven cents straight				

PULLETS AND BREEDING STOCK FOR SALE

Selected White Leghorn Pullets, 8 to 10 weeks old, $1.10 each; Sheppard Ancona Pullets, $1.30 each, Barred Rock Pullets, $1.50. Prices reduced for 100 or more. **After July 15th** we have 700 choice **Tom Barron** and 400 **Sheppard Ancona** breeding hens for disposal at **$1.25** each. **Also**, selected cocks of same breeds, **$1.25 each.** These must be sold to make room for growing stock. Our space is limited.

ORDER AT ONCE from this ad. We can make immediate shipment. Cash with order or sent C. O. D. if desired. All chicks sent to your door by parcel post **prepaid**, 100% alive delivery guaranteed. Pullets and stock shipped by express, charges collect. Catalog **Free.**

SILVER WARD HATCHERY, Box 30, Zeeland, Mich.

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Advertisements inserted under this heading at 30c per agate line, per issue. Commercial Baby Chick advertisements 45c per agate line. Write out what you have to offer and send it in. We will put it in type, send proof and quote rates by return mail. Address The Michigan Business Farmer, Advertising Department, Mt. Clemens, Michigan.

COCKERELS AND PULLETS

Leghorns, Rocks, Reds, Wyandottes, Orpingtons, Anconas, Minorcas. Also Geese, Turkeys, Ducks. All breeds.

Send for complete circular with full description of stock and price list.

STATE FARMS ASSOCIATION, Kalamazoo, Mich.

Member International Baby Chick Association
Member Michigan State Farm Bureau

EGGS FOR HATCHING

EGGS FOR HATCHING

Bronze Turkeys, Toulouse Geese, Pekin Ducks and Barred Rocks. Nearly all of this stock has been imported from Canada by us.

W. T. SHUTTLEWORTH, Ypsilanti, Michigan.

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Write for our shippers guide, how to ship live poultry, how to dress and ship dressed poultry.

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WE SOLICIT YOUR SHIPMENTS of live poultry, veal and eggs.
Our commission is 5%.
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QUALITY CHICKS New Prices

Prompt Free Live Delivery. Per 100 Leghorns, $10; Rocks, Reds, Orpingtons, Wyandottes, Anconas, $12; Lt. Brahmas, $15; Assorted, $7.00. Free Catalog gives quantity prices.

Missouri Poultry Farms, Columbia, Mo.

Poultry Department

FOREMAN URGES GRADING OF EGGS

EGG producers of Michigan must learn to grade their product if they expect to continue to compete with poultrymen of other states on the leading markets, declares Prof. E. C. Foreman, head of the poultry department of M. A. C.

Buyers' egg grades were recently put forth by the United States Department of Agriculture in an effort to simplify egg standards and to facilitate trading on a uniform basis between producers and country buyers. Farmers who grade their eggs according to these standards can command higher prices, he asserts, provided their product is of good quality.

"The old idea has been that anything with a shell around it is an egg," said Prof. Foreman. "But the public has preference for certain kinds of eggs and it is willing to pay a premium for them. The Atlantic Coast Poultry Producers' Association regularly grades the eggs it sells on the New York market. Its news letter the other day showed a difference of 12 cents between the white extras, which sold at 36 cents, and brown pullets, which sold at 24 cents. Other grades ranged between.

In the Government standards, only two grades are provided for sound shell eggs. Grade No. 1 consists of eggs of an average weight of 24 ounces net per dozen with a minimum weight at the rate of 22 ounces per dozen for individual eggs. The shell must be practically clean and sound; the air cell must be of a depth of 3-8 inch or less, localized, and may be slightly tremulous; the yolk may be visible and mobile, the white reasonably firm, and the development of the germ slightly visible.

Grade No. 2 consists of eggs of an average weight of 22 ounces net per dozen with a minimum weight at the rate of 18 ounces per dozen for individual eggs; the shell clean or dirty, but sound; the air cell having a depth of over 3-8 inch, and bubbly or freely mobile; the yolk plainly visible and freely mobile; the white weak and wattery, and the germ development clearly visible, but with no blood showing.

The services of county agents and extension agencies generally over the country are being enlisted in the campaign to bring about the marketing of eggs according to quality. It is believed that the grades for eggs used by the wholesale trade in terminal markets are too complicated for use at country points, hence a set of simple buying grades has been proposed by the department. When buyers pay prices for eggs based on quality, an incentive is immediately offered producers to produce and market eggs for the higher qualities, the department says.

CARE OF POULTRY IN AUGUST

OF course, chickens require more care and attention while they are still in the brooder than at any other time during their lives, and yet, when they have outgrown this first stage in their development, they can not profitably be left to shift for themselves. To insure well developed birds, they must be provided with plenty of fresh water, shade, a well balanced ration, comfortable quarters, and plenty of room on the roosts. Lacking any of these essentials, the result is very likely to be stunted fowls, poorly developed.

Fresh air and clean water are two necessities that many flocks do not get enough of; and the only excuse is carelessness. Plenty of fresh air increases the vigor and "pep" of a flock to a surprising amount. Colony houses should be provided with one side at least partly open. It is always a safe rule to have enough open space on the south side of the poultry house or brooder house to equal one-fourth of the floor space. But be sure to have the open space on but one side, as otherwise the danger from drafts is increased. Hinged windows may be on other sides, but it is essential that they be arranged so that they can be shut down during damp or chilly weather.

Water should be kept before the fowls at all times, and it should be cool and fresh, in sanitary vessels. If the fowls are forced to do without water for a while, and then given plenty, they are likely to drink enough to injure themselves.

We always place low roosts in the colony house when the chicks are six weeks old. When this is done they learn to roost of their own accord.

Shade is necessary and if there is none present, sunflowers planted to the south and west of the yard will grow quickly and not only furnish shade but later on will prove excellent feed for the fowls.

August is one of the worst, if not the worst, months for filth and lice. Every crack, corner and crevice, as well as the dropping boards, should be sprayed at least twice a week, with a strong dip or other disinfect. After disinfecting, sprinkle the corners well with slaked lime. Keep the dropping-boards well cleaned, and the house and litter as clean as possible.

It is also advisable to use louse powder in the dusting boxes. Lice are very annoying and should not be tolerated, when they may be eradicated with a small expenditure of time and money.—Farm and Ranch.

DON'T NEGLECT NEEDS OF LAYERS

NEGLECTING the needs of the layers at any season means a loss of profit—and profit is the thing that keeps most poultry enthusiasts in the business. It is necessary that the hens go into the molt in good shape, if they are to be ready for heavy fall and winter egg production.

Just because water is cheaper than food is no reason to think it is not so important. When you consider the fact that 80 per cent of an egg white is water and 52 per cent of an egg yolk is water, you realize how important it is that hens are at all times supplied with plenty of fresh water. It is not enough to allow the fowls access to some pool or pond of stagnant water, as is so often done on farms where poultry is merely kept as a sideline. Unless the water is fresh and clean, the birds will not drink the required amount, and a slump in egg production will be the result. The number of eggs laid can quickly be cut in half by careless attention of the attendant, as regards watering.

I believe one of the most common causes of low egg production in farm flocks during the summer months is lack of protein and a good mash. I have heard several poultry owners remark that during the summer, when the fowls are allowed plenty of free range, they do not try to feed a balanced ration, as they consider that with access to the various elements needed for egg production, the fowls will balance their own ration. They claim that Nature will so regulate the bird's appetite that she will—given the desired choice of grains, green feed, and insect life—select such feed as would constitute a perfectly balanced ration. I have experimented much along this line, but common sense is all that is needed to tell us that a fowl fed in the above manner will only eat such foods as are needed to keep her in good health and enable her to lay a setting of eggs in the spring—her natural laying season. Nature unaided does not demand that hens or any other fowls lay through the entire year, except for a brief vacation at molting time. And if we are expecting or desiring such production, it is up to us to induce the birds to consume such food as is required for this work.

Appetites Differ

Repeated experiments have proved to me that the appetites of individual hens differ quite as much as do the appetites of humans. While most hens are fond of corn, others will pass it for wheat. I have found that almost invariably, when a hen is allowed to balance her own ration, she eats enough corn and other fat-producing foods to make herself overfat. And a hen cannot lay in an overfat condition. For that reason, it is quite as important to feed a properly balanced ration of grains and mash in the summer as in the winter. Although the birds will be sure to pick up bugs, worms, and insects during warm weather, when they are allowed on free range, it is not at all probable that they will consume enough animal protein in this way to make it unnecessary to feed milk, meatscraps or tankage.

Too much tankage is quite as harmful as too little tankage, so it is necessary to use common sense in feeding it. We always use tankage instead of meatscraps, as it is cheaper, and it always pays to note what per cent of the tankage is protein. This varies quite widely in different brands. When our flock is allowed plenty of range, we cut down 50 per cent on account of tankage fed, during the summer. But we always feed milk when we can spare it regardless of the season, as this feed is so rich in vitamines, and vitamines are so necessary to the health of poultry. Of course, green foods also contain vitamines, but in such small amounts that the fowls cannot eat enough green matter to furnish the required amount of the all-important vitamines.

TURKEY RAISING ON THE DECLINE

TURKEY raising in the United States has been on the decline during the last 20 years especially as an enterprise on the general farms of the country. Formerly large numbers were raised in New England, but in recent years there has been a decided decrease in this section as well as in all other parts of the country. Several causes have been assigned by the United States Department of Agriculture for the decrease in the numbers now raised. The rearing of the young stock, in some respects at least, requires more detailed attention than is the case with most other classes of poultry and turkeys have given way to these other classes. The prevalence of blackhead has been a dominent factor and responsible for the discouragement of many raisers. The birds range widely and frequently trespass upon the property of neighbors, the vexation tending to discourage turkey raising. Finally, little attention has been given the more important problems of the industry by investigators.

On the other hand, there is, according to the United States Department of Agriculture, good opportunity for further development. Turkey raising is profitable, particularly where conditions are suitable and where proper methods of management are followed. The department has issued a new bulletin on turkey raising, Farmers' Bulletin 1409, which discusses the important points of the business and offers suggestions for making the industry a more profitable enterprise.

The bulletin sums up some of these fundamental factors as follows:

To be successful in turkey raising, one must give the most careful consideration to certain fundamental factors. The turkeys, especially the growing stock, must be kept under the best possible conditions.

Free range seems indispensible, although there are a few who have made a success in raising turkeys in confinement. A more thorough test of this method is necessary, however, before it can be advocated. Certainly abundance of free range on clean soil is greatly to be preferred. Every effort should be made to keep the soil sweet and clean. This is particularly true of the ground on which the birds are fed and where they roost.

Another fundamental essential is to keep healthy and vigorous breeding stock in the best possible breeding condition. The breeding birds should get plenty of exercise and should not be fed too heavily on fattening rations. The great difficulty is to get stock that is free from blackhead, but one can at least select breeding stock based on constitutional vigor. By breeding from the most vigorous birds every year, a flock of healthy birds may be developed and maintained. Certainly much more care should be exercised in the selection of male breeders each year.

Both old and young turkeys should be protected from dampness. In sections of the country where dampness is prevalent or where rainstorms are frequent the birds should be provided with suitable protection.

It is very important not to feed the poults too heavily, especially the first few weeks. Keep them just a little hungry.

A copy of this bulletin may be secured, as long as the supply lasts, from the United States Department of Agriculture, Washington, D. C.

Jasper—"So you joined a secret society? Did they make you ride the goat?"

Gasper—"No, the Chief Exalted made me ride for two hours in a flivver I sold him a year ago."—Grinnell Malteaser.

No Peddling For Muskegon Farmers

(Continued from Page 4)

Practically all troubles arising from poor quality products have come from stuff sold by hucksters who had slipped on to the market or from producers who were only occasional users of the market. The farmer who uses the market regularly and who depends on it as an outlet for his produce, knows the importance of satisfying and pleasing his customers.

Future of Markets

It must be admitted that there is still much peddling of produce being carried on in Greater Muskegon. However this form of marketing is growing less each year and it is reasonable to suppose that soon we shall see it confined to three classes only, these being: first, the farmer with a large load of one product only, the same being too large a quantity for the market to absorb in one day; second, the farmer who has developed a private trade for his own special products; third, the farmer who would rather spend a day in puttering around with peddling rather than to spend 25 cents for a market stall.

It is quite probable also that a wholesale market will, in time, develop in connection with the retail markets. Such a market would take care of the farmers who have large quantities to sell and who want to sell their entire loads in one transaction. At the present time many merchants come on the market to buy for their stores but no definite wholesale market has been established.

The main benefit of the market will continue to come to the farmer who uses it steadily, building up his own clientele of satisfied customers. Such a farmer fares best when he comes on the market with a small quantiy of each of a number of different kinds of products. A load composed of a variety of produce is more quickly disposed of, and it is easier to hold customers when they can fill most of their needs at one stall.

The lesson of quality in marketing is being learned thoroughly by the farmers on Muskegon's markets and there is no doubt but that offerings of greater quality will be the result.

Opposition to the market still comes from some short sighted merchants who have seen their trade in farm produce somewhat reduced. It is unfortunate that such merchants do not have the vision to see the greater benefits accruing to the town, and hence to themselves also, through the trade secured from those who the market brings to Muskegon to dispose of their produce. Some opposition also comes from a few of the hucksters as a result of being barred from the market. Opposition from both of these sources will probably lessen with time.

While it may be a long way from fullfillment, the greatest present need of Muskegon's markets is for a covering to shelter both salesman and buyer during inclement weather. But no matter what the weather, both producers and consumers come on the market days and thus, rain or shine, the city markets of Muskegon are rendering a distinctly valuable service to both the city and the surrounding country.

Important News about the Value of Fertility

1. Authorities have estimated that from ⅓ to ½ of all our barnyard manure is absolutely wasted, the annual loss totaling about $800,000,000. This loss is not alone on poorly managed farms but it includes many that in other respects are operated efficiently.

2. A Nebraska farmer reports this result of an experiment in manure spreading over a 3-year period—

Six acres, manure *spread by hand from a wagon box,* average number of bushels of corn raised per year: 336.

Six acres, manure *spread evenly by a manure spreader,* average number of bushels of corn raised per year: 420.

Three-year gain in bushels of corn, by the use of a good manure spreader, on the 6-acre area: 252.

3. McCormick-Deering manure spreaders put fertility into the soil as it should be done. They are light in draft, strong and simple, yet with the right adjustments so that you can spread all kinds of manure, as heavy or light as you need it.

Note these features:

1. Auto Steer. 2. Front Wheels Track with Rear. 3. Two All-Steel Beaters. 4. Wide-Spread Spiral. 5. Narrow Tread. 6. Self-Aligning Bearings. 7. Steel Main Frame. 8. Six Feed Speeds. 9. Positive Apron Drive.

Built in two sizes to fit small or large farms. See the spreader and its practical features at the store of your McCormick-Deering dealer.

INTERNATIONAL HARVESTER COMPANY
606 So. Michigan Ave. of America (*Incorporated*) Chicago, Ill.

93 Branch Houses in the U. S.; the following in Michigan Business Farmer territory—Detroit, Grand Rapids, Green Bay, Jackson, Saginaw.

McCormick-Deering Manure Spreaders

Reduced Prices for BEST Chicks

For July and August—Pure bred chicks, hatched right, large and strong, postpaid live delivery to your door.

Breeds	25 Chicks	50 Chicks	100 Chicks	500 Chicks	1000 Chicks
White Leghorns	$2.50	$5.00	$ 9.00	$42.50	$ 85.00
Barred Rocks	3.00	6.00	11.00	52.50	105.00
S. C. R. I. Reds	3.00	6.00	11.00	52.50	105.00

Rock or Red Broilers..........$9.00 per hundred
Broilers no breed guaranteed..........7.00 per hundred
Low prices on pullets of all the above breeds

Our strains are the best laying strains obtainable. Tancred and Barron White Leghorns, Parks' Barred Rocks and Michigan Agrl. College and Penn. R. I. Reds, direct from these breeders. Our birds have always proved their laying ability at official contests. Our chicks are hatched in the world best incubator, the only incubator that never over-heats and supplies moisture automatically thus assuring the strongest chicks possible.

Order at once. Immediate delivery. Quality and price talk. Act now.

BRUMMER-FREDERICKSON Poultry Farm, Box 26, Holland, Mich.

Great Northern Hatchery

LOW JUNE PRICES

POSTPAID. 100% LIVE DELIVERY

Strong, Sturdy, Northern-grown Chicks. Selected, pure-bred stock. Healthy Flocks on free range insure strength in every Chick.

Varieties Prices on:	50	100	500	1000
Wh. & Brown Leghorns, Grade A	$6.00	$10.00	$47.00	$92.00
Barred Rocks (Aristocrat) Grade A,	7.00	12.00	57.50	112.00

Mixed Chicks, Light Breeds $8.00; Heavy Breeds, $10.00 per 100 straight. Double A grade Chicks $2.00 per 100 higher than above. Hatched under best conditions. Every chick carefully inspected. Reference: State Commercial Savings Bank. Order right from this ad with full remittance. There is no risk. GREAT NORTHERN HATCHERY, Box 50, Zeeland, Michigan.

BIG JUNE-JULY-AUGUST CHICK SALE, $8 per 100 and Up

Our BIG, FLUFFY, WELL HATCHED chicks will please you.

Varieties Prices on	50	100	300	500
White & Buff, S. C. & R. C. Brown Leghorns	$5.00	$ 9.00	$25.00	$40.00
English White Leghorns, Barred Rocks, Reds	6.00	11.00	32.00	50.00
Black Minorcas and Anconas	6.00	11.00	32.00	50.00
White Wyandottes, White Rocks, Buff Orpingtons	6.00	11.00	32.00	50.00
Silver Laced Wyandottes, Rhode Island Whites	8.00	15.00	43.00	....
Blue Andalusians	9.50	18.00	51.00	....

Assorted, from purebred flocks..........$8.00 per 100 straight. Postpaid. 100% LIVE ARRIVAL GUARANTEED. Bank references. Hatched from Purebred, Healthy, Free Range flocks. Order right from this ad. Save Time and get our BIG, STRONG, STURDY chicks when you want them. Catalog free. Member I. B. C. A. The Geneva Hatchery, Box 23, Geneva, Indiana.

LOW PRICE MAY—JUNE

Our Barron strong English White Leghorn chicks. All well culled and on free range. Get our AA best stock and best winter layers. Low price, only $12.00 per 100; $57.00 per 500; $110.00 per 1000. Our A chicks are good stock, good layers, price $10.00 per 100; $47.00 per 500; $95.00 per 1000. 25% down, balance C. O. D.

ELGIN HATCHERY, Box 216-A, Zeeland, Mich.

CHICKS—All Popular Varieties. Egg production and Standard Quality. State Fair Winners. No better chicks available at same price. Extremely low prices after May 29th.
Litchfield Hatchery, Litchfield, Michigan.

RHODE ISLAND REDS—TOMPKINS STRAIN Stock Eggs for hatching and Baby Chicks. May chicks $20.00 per hundred. Hatching eggs $8.00 per hundred. June Chicks $16.00 per hundred. Eggs $7.00 per hundred. Hen hatched chicks on request.

WM. H. FROHM, R1, New Baltimore, Mich.

STURDY CHICKS—BRED-TO-LAY AND exhibition flocks, culled by experts. Reasonable prices. Catalog free. Single Comb White Leghorns, Rocks, Reds, White Wyandottes. Sunnybrook Poultry Farm, Hillsdale, Mich.

MENTION THE MICHIGAN BUSINESS FARMER WHEN WRITING ADVERTISERS

MARKET FLASHES

MARKET SUMMARY

All grain markets are firm after recent gains. Beans firm. Potatoes easy. Best hens scarce and firm, but supply of broilers is heavy and market weak. Receipts of dressed calves small and market firm. Cattle unchanged. Hogs active and prices higher. Sheep steady.

(Note: The above summarized information was received AFTER the balance of the market page was set in type. It contains last minute information up to within one-half hour of going to press.—Editor.)

FOOTE'S MARKET LETTER

BY W. W. FOOTE

Farmers' Outlook

ALL the present indications point to higher prices for farm products for the new crop year, due to promised smaller crops. According to the Department of Agriculture, wheat grown last year on 7852 farms cost on an average $1.24 a bushel and had a sales value of 99 cents a bushel; while corn raised on 11,238 farms cost 68 cents a bushel, with a sales value of 81 cents. Oats on 8481 farms cost 52 cents a bushel, with a sales value of 49 cents. Potato growers in different parts of the country showed margins of between average cost and average selling value of from $1.42 to $86.23 an acre. It is practically certain that the aggregate wheat crop of the country will be so much smaller that farmers will be in a position to obtain much higher prices than those paid for the crop of 1923, while the corn outlook is for such a large decrease in production as to put prices much higher than those paid for last year's crop. Already substantial advances have been paid for the several grains, and fear of a small yield of corn has brought about much smaller marketing of remaining supplies of surplus corn throughout the corn belt. Widespread interest is felt in the outlook for hogs, most of the middle western farmers owning swine, and the most reliable information is furnished by the Department of Agriculture, a decrease of about 8,000,000 hogs in the spring pig crop in the corn belt indicated. It shows that the high point was reached in the spring pig crop of 1923, while it began to go down in the last fall and is now rapidly receding and has about touched a normal level. A decrease of about 21 per cent in the number of hogs farrowed this spring compared with the spring of 1923 is shown by the survey. Altogether, it looks like much better times for hogs after the hogs now maturing are marketed. Cattle are plentiful in feeding districts, and it has been impossible to maintain prices for well fattened steers and heifers at the scale of earlier months of the years; but in all probability stockmen will continue to find the industry a profitable one when conducted right, it being a mistake to market cattle which have been poorly fed. A prosperous future is promised for the sheep and wool industry although lambs have had a seasonable decline from prices pair for spring lambs at the opening of the season.

July Crop Report

An unusually poor crop of corn is indicated by the government July crop report, the harvest being placed at 2,515,000,000 bushels, comparing with 3,046,000,000 bushels raised in 1923. The crop promises to be the smallest grown since 1918, when 2,502,000,000 bushels were raised. The indicated wheat crop is 740,000,000 bushels, and is 47,000,000 bushels above the June estimate, and 46,000,000 bushels less than last year's yield. The winter wheat crop is estimated at 543,000,000 bushels, being 29,000,000 bushels less than that of 1923; while the spring wheat crop is estimated at 197,000,000 bushels, being 16,000,000 bushels less than last year. The oats crop is estimated at 1,356,000,000 bushels, being 56,000,000 bushels more than last year and the largest yield since 1920. A rye crop of 65,000,000 bushel is indicated, showing a gain of 2,000,000 bushels over last year; while a barley crop of 170,000,000 bushels is 28,000,000 bushels less than that of 1923. The hay crop is placed at 90,100,000 tons, being 1,000,000 tons more than last year's. The flax crop is estimated at 25,900,000 bushels, the best grown in recent years and 8,500,00 bushels above that of 1923.

Wheat Sells Higher

A weather market is on in wheat, and rapid price changes are probable, but no one looks for any marked decline. The upward movement has been maintained, and prices are much higher than in recent years. The new crop of winter wheat is reaching liberal proportions, and fairly large exports are reported. For the next three and a half months the United States will be the only large source for wheat for importing countries, and it seems probable that a strong bullish incentive will result from a marked revival of export buying. July wheat sells on the Chicago Board of Trade around $1.17, comparing with 99½ cents a year ago; while July oats sell at 54 cents, comparing with 39 cents last year. July rye is up to 80 cents, comparing with 62½ cents a year ago. According to the Department of Agriculture, there is a shortage of 160,000,000 bushels of wheat in crops of seven countries as compared with last year.

The Boom in Corn

The bad crop outlook has resulted in corn advancing to the highest level of the season, corn for July delivery selling up to $1.05 per bushel, comparing with 83½ cents a year ago, while two years ago sales were made as low as 61 cents. Cash lots of No. 2 yellow corn sell in Chicago as high as $1.07½. The advance in corn is causing premature marketing of hogs, and prospective scarcity of hogs later is causing increased buying of provisions, which are higher than a year ago. Exports of corn, which were fairly large a year ago, have nearly ceased. Oats are selling much higher than in recent years, and two years ago July oats sold as low as 34 cents. Rye prices have had a boom, with good export buying. Regarding feeds, the Department of Agriculture says: "Feed prices held firm, mainly as a result of strong grain markets. The jobbing and speculative demand was good but the consumptive demand was of little consequence in most sections. Rather heavy sticks of dairy products, excellent pastures, and unsatisfactory milk prices tended to light purchases by feeders and dairymen. Production and stocks of most feeds were good. Storage stocks of feed were exceptionally heavy for this season of the year."

Decreased Pig Crop

A decrease of 20 per cent in the number of spring pigs as compared with a year ago is shown by returns from the special pig survey recently compiled by the department of agriculture in cooperation with the postal department. For the corn belt the number shows a reduction of 17 per cent, while in Illinois there is a decrease of 20 per cent.

If Illinois farmers carry out their present plans the reduction in the fall pig crop will also be heavy. Reports indicate there will be 18 per cent fewer sows bred to farrow this fall than actually farrowed last fall. The reported intentions for the corn belt states indicate a 11 per cent decrease, and for the United States a 6 per cent decrease in fall farrowings.

Indications are that the number of hogs in the United States will drop to the average of 1919-21, and may go below that figure unless there is a marked improvement in the corn-hog price ratio. During the last two years the number of hogs marketed has agreed with the size of the pig crop previously indicated by the number of sows reported farrowed in the pig survey.

Irregular Cattle Marketings

Plenty of cattle are held in feeding districts generally, and advancing prices for corn cause increasing marketings of grassy and short fed cattle in Chicago, with fully half of the or more weeks supplies received on Monday. Receipts of 29,591 cattle in that market on Monday last week smashed prices for the principal part of the offerings, but much of the decline was regained later because of much smaller supplies. Recent sales of beef steers took place largely at $8.25 to $10.10, with the best heavy steers salable at $10 to $11 and the best yearlings offered taken at $9.25 to $10.25, and sales all the way down to $7 to $8 for the commoner light steers, these being competed for by country buyers in search of thin steers for fattening. Butcher stock is having a good outlet, but grassy lots are discriminated against and sell at a big discount. Butcher cows and heifers sell at $3.50 to $9.50, canner and cutter cows at $2.60 to $3.45, bulls at $4 to $7.75 and calves at $5.50 to $11.50. Only moderate business is transacted in stockers and feeders at $4.25 to $8.10, largely at $5.75 to $7.50. Combined receipts of cattle for the year to late date amount to 6,395,000 head, comparing with 6,462,000 one year ago and 6,109,000 two years ago. A year ago beef steers sold at $6.50 to $11.50.

The Bean Crop Outlook

The Bean Bag and Pea Journal says that indications for the entire country are that a normal or slightly increased bean acreage will be planted this year. And Michigan—probably above normal acreage, say many, though perhaps not quite up to last year's plantings. That remains to be seen. A cold, late spring has caused many growers to plant beans in place of other crops, notably sugar beets and rye. Even with low prices the last year, growers figure their return from beans is equal to or grater than from many other Michigan crops. They're easy to raise, and bring in the money when it's most needed. From the growers' standpoint it is the actual return in dollars and cents that counts. It is interesting to find that some farmers who have grown Robust beans for two years are not planting them this year and many who tried them last season will not plant them this season. This indicates that many growers are convinced that the Robust iis not the most suitable variety of white beans for our locality. This may not necessarily be true for counties farther south.

The Butter Market

The United States Department of Agriculture states that production reports which at this time of year and for the next two months are such an important factor, were conflicting. Reports on crop and weather conditions quite generally agree that conditions are ideal for a heavy production of butter. Feed is reported plentiful and pastures in nearly all sections are good. The cool weather has greatly retarded the usual fly crop but in some south-western states complaints are beginning to come in. The dampness has been very favorable for hatching mosquitoes and in some sections they are quite plentiful. On the whole, however, production is holding up very well.

Hogs Have an Advance

At last hogs are moving upward, with a greatly improved local and shipping demand in the Chicago market, receipts being smaller than a year ago. A short time ago hogs sold at $6.50 to $7.70, comparing with $6 to $7.30 a week earlier and $5.75 to $6.75 a year ago. Further advances are expected. Combined receipts in twenty markets for the year to late aggregate 24,081,000 hogs, comparing with 23,212,000 a year ago and 18,092,000 two years ago.

Lamb Market Glutted

Unusually heavy supplies of lambs have glutted the Chicago market, and prices are much lower, with sales at $8.50 to $14.00 per 100 pounds. Feeding lambs sell at $11 to $12 and breeding ewes at $6 to $10.75.

WHEAT

Active foreign demand gave the wheat market great strength last week and prices on all markets are higher. At Detroit prices gained 1 cent over two weeks ago. Europe is taking grain in large quantities seeming anxious to not only supply present needs but to store some for future use. Crop reports in this country show our new crop in fine condition and where they have threshed the yield has been above expectations. Other countries where wheat is grown on a large scale report their crop under normal; in fact, foreign crop reports are helping to bull the market.

CORN

It is in the Detroit corn market that prices have gained. Since our last issue prices have advanced a total of 12 cents. The market is in a bullish condition caused by the government crop report which gives the condition of the crop on July 1st as the lowest in the history of the country.

OATS

Oats at Detroit followed the trend of wheat and corn and prices are slightly higher. Offerings have been small.

RYE

Rye also gained strength with the other grains and the price advanced. The market is firm.

BEANS

Demand is somewhat better in the bean market and prices have advanced at some points. At Detroit the price gained 15 and 20 cents last week and a firm tone prevails in all trading. Offerings are light.

POTATOES

Trading is slow in the potato market and a weak tone prevails. Markets report receipts heavy and there is much variation in quality of shipments from all quarters. Some lots have been damaged more or less by rain while others have been affected by hot weather. Old potatoes are about done for and prices are no longer necessary. The condition of the new crop on July 1st was about the same as for the same date a year ago.

MARKET QUOTATIONS

Wheat

Detroit—Cash No. 2 red, $1.21; No. 2 white, $1.23; No. 2 mixed, $1.22.

Chicago—Cash No. 2 hard, $1.20.

Prices one year ago—Detroit, Cash No. 2 red, No. 2 white, and No. 2 mixed, $1.12½.

Corn

Detroit—Cash No. 3 yellow, $1.12; No. 4, $1.07.

Chicago—Cash No. 2 yellow, $1.10@1.13; No. 3, $1.08@1.10.

Prices one year ago—Detroit, Cash No. 3 yellow, 92c; No. 4, 90c.

Oats

Detroit—Cash No. 2 white, 60c; No. 3, 58c.

Chicago—Cash No. 2 white, 58@58½; No. 3, 57@57½c.

Prices one year ago—Detroit, Cash No. 2 white, 47c; No. 3, 46c.

Rye

Detroit—Cash No. 2, 83c.

Chicago—Cash No. 2, 80½c.

Prices one year ago—Detroit, Cash No. 2, 68½c.

Beans

Detroit—C. H. P., $4.55@4.60 per cwt.

New York—C. H. P., $5@5.35 per cwt.

Prices one year ago—Detroit, C. H. P., $5.50 per cwt.

Potatoes

Detroit—$1.66@1.83 per cwt.

Chicago—$1.60@1.70 per cwt.

Prices one year ago—Detroit, $1.00@1.08 per cwt.

Hay

Detroit—No. 1 timothy, $23.50@24; No. 2, $21@22; No. 1 clover, $19@20; standard and light mixed, $22.50@23 per ton.

Chicago—No. 1 timothy, $24@26; No. 2, $21@23; No. 1 clover, $20@22; standard and light mixed, $22@24 per ton.

Prices one year ago—Detroit, No. 1 timothy, $17.50@18; No. 2, $15.50@16; No. 1 clover, $13@14; standard and light mixed, $17@17.50 per ton.

PRODUCE MARKET

Detroit, July 14

BUTTER—No. 1 creamery, in tubs, 37½@39c per lb.

EGGS—Fresh receipts, 26@27½c per doz.

STRAWBERRIES—Michigan, $2.50@3 per 24-qt.; 16-qt. case, $1.50.

CHERRIES—Sour, $2.50@3 per 24-qt. case.

HUCKLEBERRIES—$6@6.50 per 24-qt. case.

RASPBERRIES—Black, $5.50@6 per 24-qt. case; red, $4.50@5 per 24-pint case.

APPLES—Steel's Red, $3@3.25 per bu.; western boxes, $3@3.50; new apples, $3.50@4 per bu.

Honey—Comb, 25@26c per lb.

DRESSED CALVES—Best country dressed, 16@17c per lb.; ordinary grades, 14@15c; small, poor, 12@13c; heavy rough calves, 8@10c; city dressed, 18@19c per lb.

GREEN CORN—$2.75@3 per bu.

CANTALOUPES—California, $1.35@1.50 per flat, $3.50@3.75 per standard crate; Arkansas, 75c@$1 per flat and $2.25@2.50 per standard.

POPCORN—Little Buster, 9@10c per lb.; common, 4½@5c per lb.

WATERMELONS—75@90c each.

BELGIAN MARES—Live, 1½ lbs. up, 22@23c per lb.

TOMATOES—Hothouse, $2.25@2.50 per 10-lb. backet, repacked, 6-basket carrier, $5@5.50 for fancy and $4@4.50 for select.

LETTUCE — Hothouse, 50@60c per 10-lb. basket; iceberg, $7@7.50 per crate.

ONIONS—Kentucky, $4.50@5 per 100-lb. sack; California, $4.25@4.50 per 100-lb. sack.

LIVE POULTRY—Broilers, barred rocks, 2½ lbs. up, 39@40c; mixed colors, 36c; medium sizes, 34@35c; leghorn broilers, 27@30c; best hens, 26c; medium hens, 25c; leghorns, 18@19c; old roosters, 15@16c; geese, 15c; ducks, 4 lbs. and up, 25@26c; small sizes, 20@22c; turkeys, 25c per lb.

CELERY — Kalamazoo, $1.25@1.50 per case of 6 dozen.

PRITCHARD'S
WEATHER
FORECAST
INTERPRETED BY THE STARS

Week of July 20

DURING the first couple of days of this week the weather in Michigan may be expected to be generally fair with moderate breezes. Along about Tuesday or Wednesday there may be a reaction to storminess of summer storms with some rain and thunder. However, this condition will soon pass and until near the close of the week the sky will be clear. At the tail end of this week the barometer will fall, cloudiness increase and there will be numerous thunder storms and more or less heavy rains. The temperatures during the last half of the week will rise rapidly reaching the high point about Friday or Saturday.

Week of July 27

Sunshiny days and clear nights are expected in this state during early part of this week. Tuesday or Wednesday will be the warmest days of the week in Michigan. During the middle part of the week there will be more or less tendency towards showers of rain and electrical storms. Following this storm activity readers of this forecast may expect a cool spell in which temperatures will fall below the seasonal normal. The evenings and early mornings, especially, will be cool.

Forecasting Temperatures

We are doing what no other forecaster attempts when we forecast the degree of heat or cold for any certain period and we are right in the majority of cases. During the week of June 22nd we forecast 80 degree readings and at the end of the week 55 and 60 degree temperatures. These came out correct. The high winds and electrical storm for end of week were also correctly told while the severe tornado that took over 100 lives was only a few miles from Michigan. These forecasts are a wonderful advantage to the farmer who plans his work ahead and this department is ready to cooperate to any reasonable extent in advising regarding planting, growing, storing, and shipping of farm crops or cattle. A two-cent stamp will do the trick.

RADIO PROGRAMS

Station KYW, Chicago. Central standard time 8:20. Wave length 536 meters.

July 29—"Picnics That Are Different," by Mary Hale Martin, Home Economics Specialist, National Live Stock and Meat Board. "Among Our Neighbors," a regular weekly feature furnished by the Orange Judd Illinois Farmer—W. E. D. Rummel, Community Service Department, on "Among the Hustling Farm Advisers of Illinois."

MICHIGAN'S "BLUE SKY" LAW IS GOOD, BUT BEWARE!

(Continued from Page 3)

ise almost anything through the mails if they do not misrepresent an existing fact. When they get too reckless, the federal authorities bring them to time. It will be remembered that Dr. Cook and his crowd got too bold in their dealings in Texas oil. They next began operations in California, but being chased out of there, have now established their headquarters in Mexico.

"There has been a measure pending in Congress for the last two sessions which if passed would virtually remove the cloak of interstate commerce from the mails and allow us to effectually prevent misleading solicitation by mail. This proposal was lost in the filibuster in the Senate last session. When it is passed the Michigan law will dovetail into it and afford complete regulation and protection."

From time to time I had read various statements in the papers showing that swindling promoters annually steal from the unsuspecting American investing public all the way from $400,000,000 to $1,000,000,000. I asked Mr. Duff what was his idea of the amount of the annual loss.

Losses Not Reported

"All these figures are only guesses. Nobody knows exactly how much is lost through unsatisfactory investment deals. There is a good deal of psychology in connection with this situation. The average human being thinks he is smarter than the securities commission when he buys "phony" stock. If he gets stung he usually keeps quiet. Probably he doesn't even tell his wife of his loss for a year or so. This situation makes it absolutely impossible to give even an approximation of the losses sustained through unfortunate stock speculations in Michigan."

What the Act Provides

I had heard so much about the "Blue Sky" law which Mr. Duff seemed to feel was working so satisfactorily that I felt I should know more about it, so I asked him what were its distinctive provisions and whether or not there were any teeth in it.

"The principal features of our Michigan law are that we not only examine the securities which are proposed for sale and the methods of disposal and the terms of sale, but we have complete and effective control of both the dealers and salesmen through a system of revocable licenses," replied Mr. Duff. "The Michigan law is the only one which examines brokerage offices' fees and charges to see that they are not extortionate.

"Our old law quite effectually controled the promoter. The big feature is being copied by other states. Through our National Association of Security Commissions we have a 'black list' so it is very hard for a salesman who gets in trouble in one state to obtain a license in another state. Under the old law there were in Michigan about 9,000 stock salesmen and 3,000 brokers or dealers. There are now but 2,200 salesmen and less than 300 dealers.

The Men in Charge

"The commission which administers this law is composed of a full time member who serves as chairman, and two of the elective state officials to be selected by the Governor. The present members are Hugh A. McPherson, Commissioner of Banking, and Andrew B. Dougherty, Attorney General, and myself.

"The full commission meets every Monday for a two or three hour session. There are usually twelve or fifteen cases to be disposed of. All of these proposed issues must have first received my preliminary approval before being presented to the other commissioners. If there are any patent changes involved the matter must first be passed upon by an expert engineer. Perhaps three months' work has been put in on a case before it finally reaches the full commission.

Need for More Understanding

"As I said before, we are finding the new Michigan law very satisfactory. It is now our paramount desire to so educate the investing public that they may obtain the full benefit of the law's protection. To this end, we are now arranging with Mr. Thomas Johnson, Superintendent of Public Instruction, to publish a booklet to the school children to educate them along the lines of safe investment. We also send the bankers monthly lists of approved stock."

I left Mr. Duff's office feeling that our half hour conference had been extremely enlightening and interesting to me. Here is a great service which the state is rendering to the public and which is all too little understood and appreciated.

Truly, it is just as essential to conserve capital as it is to create it. The person who earns and saves should be permitted to invest with safety.

MARL DIGGING TEST IN LIVINGSTON

THE first of a series of 38 marl digging demonstrations to be staged under the direction of the Michigan Agricultural College was held Thursday, July 10, at Trophy lake, near Hartland in Livingston county.

The idea of the demonstrations is to show the farmers of the state how marl can be taken from lake beds more economically than any other processes and used for fertilizer in place of lime.

THE VILLAGE BLACKSMITH

(1924 Model)

UNDER an ad for gasoline
The village smithy stands;
He's agent for the Jinx machine
And several other brands.
He hasn't shod a horse for years,
For fear he'd soil his hands.

He wears a gold watch on his wrist,
A pearl pin in his tie,
His links are made of amethyst,
The finest he could buy.
There's not a thing the smithy wears
That doesn't please the eye.

Week in, week out, from morn till night
He sees the autos come
With brakes that are not working right
And axles on the bum.
With gas, repairs and grease and oil
He makes a tidy sum.

He has a staff of skilful men
That number twenty-four,
Who toil from six a. m. till ten
And sometimes even more.
The smithy never does a stroke—
He think's that work's a bore.

The children coming home from school
Look in at the open door,
And laugh to see the some city fool
Set up an awful roar
When called to pay some whopping bill
The smith has soaked him for.

He goes on Sunday to his kirk
His mind quite free from cares,
Because his men are hard at work
With punctures and repairs.
And if the weather's fine and warm
The smith says grateful prayers.

Oiling, refilling, repairing,
Onward through life he goes.
And never once despairing
So long as his income grows.
Each night the thought of someone done
Augments his sweet repose.

Every Day You Need
KRESO DIP No. 1
(STANDARDIZED)
TO AID IN KEEPING
All Livestock and Poultry Healthy
Kills Lice, Mites and Fleas.
For Scratches, Wounds and common skin troubles.

THE FOLLOWING BOOKLETS ARE FREE:
No. 151—FARM SANITATION. Describes and tells how to prevent diseases common to livestock.
No. 157—DOG BOOKLET. Tells how to rid the dog of fleas and to help prevent disease.
No. 160—HOG BOOKLET. Covers the prevention of common hog diseases.
No. 185—HOG WALLOWS. Gives complete directions for the construction of a concrete hog wallow.
No. 163—POULTRY. How to get rid of lice and mites, and to prevent disease.

Kreso Dip No. 1 in Original Packages for Sale at All Drug Stores.
ANIMAL INDUSTRY DEPARTMENT OF
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NEU-SALTS
AN IMMEDIATE RELIEF
For the most obstinate, cronic and painful cases.
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"Filled 40 silos this fall (1922) with an L-16 Papec Cutter, second season, and never had a plugged pipe." Ernest Kahler, Clifton Springs, N. Y.
The Papec is made in four sizes to fit any power. N-13 and L-16 sizes are ideal for Fordsons.
Send today for our new catalog and U. S. Gov't Bulletin "Making and Feeding of Silage"—both free. Learn why a Papec soon pays for itself.
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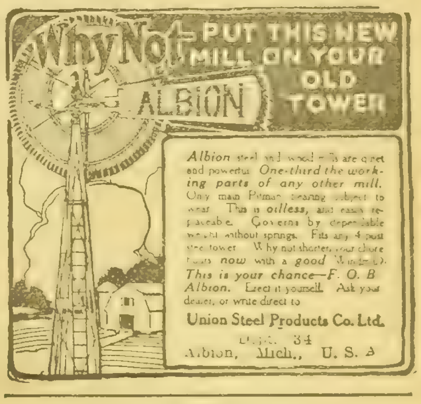
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ALBION
Albion steel and wood mills are quiet and powerful. One-third the working parts of any other mill. Only main Pitman bearing subject to wear. This is oilless, and easily replaceable. Governs by dependable weight without springs. Fits any 4 post steel tower. Why not shorten your chore hours now with a good Windmill. This is your chance—F. O. B Albion. Erect it yourself. Ask your dealer, or write direct to
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GENERAL

CULL BEANS $23.00 TON, SACKS INCLUDED. f. o. b. Port Huron. PORT HURON STORAGE & BEAN CO., Port Huron, Mich.

FOR SALE—MOTOR HAY PRESS IN GOOD condition. Reason for selling have 2. Also gas tank, 30 gal. Price right. JAS. M. MILLER, Shepherd, Mich.

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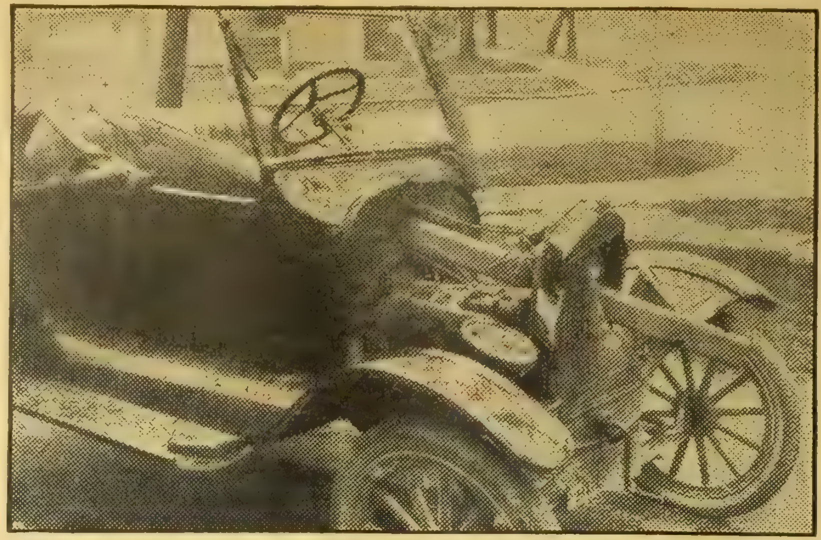
CORN HARVESTER CUTS AND PILES ON harvester or windrows. Man and horse cuts and shocks equal Corn Binder. Sold in every state. Only $25 with bundle tying attachment. Testimonials and catalog Free showing picture of Harvester. PROCESS HARVESTER CO., Salina, Kansas.

WHEN WRITING TO ADVERTISERS, PLEASE MICHIGAN BUSINESS FARMER



Highway Danger!

Harold Crandall, who lives on a farm a few miles from Howell, while driving toward Howell on May 17, saw a runaway team coming toward him. He drove to the right side of the highway and stopped. One of the horses attempted to pass on the right side and the other on the left side, the wagon tongue going through the radiator and front of the car, just missing Mr. Crandall, who was riding alone. The horses broke loose, leaving the car badly wrecked.

A Timely Warning

Do not drive without automobile insurance. Highway risks are becoming greater each year. You can insure in a well established company at reasonable rates.

STATEMENT as of July 1, 1924

LIQUID ASSETS		
Cash and bonds	$495,072.63	
Accts. Receivable	15,006.63	
Office Building	27,727.44	
Total Assets		$ 537,806.70
Legal Reserve (40%)	$406,464.63	
Reserve for Pending Claims	81,000.00	
Surplus for Contingent Losses	50,342.07	
Net Premiums and Income from July 1, 1923 to July 1, 1924		$1,016,161.56
Claims paid first six months of 1924		$ 222,021.73
Claims paid since organization		$1,886,141.83

Why not do the sensible thing and call upon our nearest agent and insure today? The company is now in its [illegible] season of success. All fair claims are paid promptly; unresonable claims are defended. Keep insured and slow down in heavy traffic.

The Citizens' Mutual Automobile Insurance Co.

HOWELL, MICHIGAN

MIC

The Michigan BUSINESS FARMER

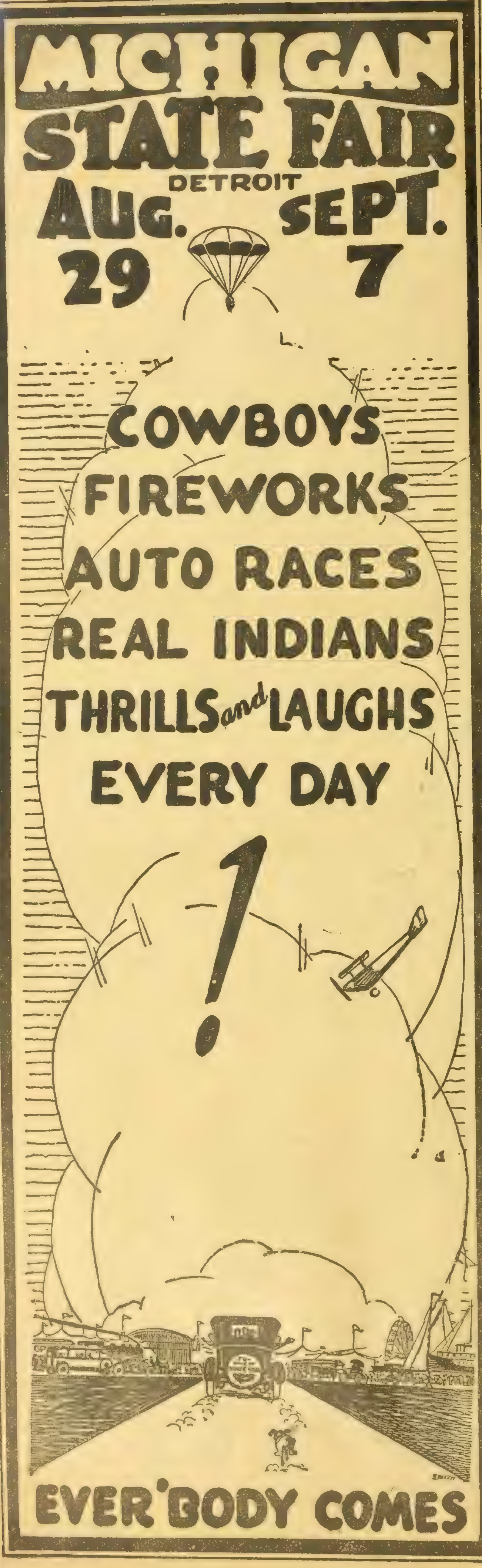
An Independent
Farm Magazine Owned and
Edited in Michigan

VOL. XI, No. 25 SATURDAY, AUGUST 16, 1924 TERMS: TWO YEARS $1
60c PER YEAR—5 YRS. $2

THE LIBRARY OF THE AUG 23 1924 UNIVERSITY OF ILLINOIS

IT TAKES A BROAD BACK FOR A BLUE RIBBON

In this issue: Over 6,000 Farmers Spend Day at M. A. C.—Complete Crop Report for Michigan page 17



Current Agricultural News

SPECIAL DAY AT M. A. C. FOR GARDENERS

MARKET gardeners will gather at the M. A. C. Wednesday, August 20, to stage "Market Gardeners' Field Day" and a program of value to those interested in the production of vegetables, commercially or otherwise, will be presented. According to Prof. Geo. Starr, of the M. A. C. horticultural department the day will be made an annual event.

The forenoon is to be devoted to a tour of inspection over the gardens of the college horticultural department, together with the exhibition and explanation of various projects now under way. Included among these projects is a comprehensive test of extra early varieties of tomatoes, showing by comparison the most profitable one for the Michigan grower; a comparative test of extra early sweet corn varieties; a number of plant breeding experiments which bear on the problems of the truck gardener; experimental work on truck crop fertilization, and new improved strains which are being grown for increase.

Following the basket picnic at noon, at 1:30 the visitors will assemble in the lecture room of the Horticulture Building, where short talks will be given by Profs. V. R. Gardner, R. E. Loree, G. E. Starr and J. W. Crist, on subjects pertaining to the occasion.

A tour of the M. A. C. campus and the college farms will wind up the day's program.

MICHIGAN'S 1924 BEET ACREAGE UP 43,000

AN increase of 43,000 in the acreage of sugar beets planted in Michigan this year is shown in a United States Department of Agriculture bulletin issued by Verne H. Church, Federal statistician for Michigan. The acreage in 1923 was 131,000 as compared with 174,000 this year.

The report states that the condition of the crop in this state is 88 as compared with a 10-year average of 86.4, and the production promises to be 1,233,000 tons as compared with 883,000 tons last year.

The production for the United States is forecast at 7,344,000 tons, with a total increase in acreage from 732,000 to 917,000. The amount of sugar to be made in the United States this year is estimated at 939,000 tons. The 1924 contracts, according to the report, provide for prices from $5.50 to $7 a ton, depending upon the locality.

STATE FARMERS SAVE $2,000,000

THE American Farm Bureau Federation has taken such an active and leading part in the fight against the "Pittsburgh Plus" practice because the farmer is the greatest consumer of rolled steel in the country.

James R. Howard, former president of the Farm Bureau, testified in the hearings before the commission that the average farmer uses a total of more than a ton of steel each year. According to Mr. Howard's testimony, which was based on figures supplied by the Research Department of the American Farm Bureau Federation, farmers paid between $25,000,000 and $30,000,000 each year for phantom freight.

As findings of the commission show, this practice took an unearned toll of more than $30,000,000 from the farmers of 11 States, and probably twice as much from the farmers of the entire country. It cost Michigan farmers $2,000,000 annually in extra freight bills.

It did other things to the farmers. It cramped industrial development in the steel industry throughout the country, except in Pittsburgh and its neighborhood. As a result, hundreds of towns which had many advantages for steel fabrication were unable to utilize these advantages.

Farmers realize that a large consuming population near home helps in the sale and stabilization of price and farm products. Locations advantageous for the steel industry were denied their advantages by the "Pittsburgh Plus" system and because of this, farmers in the vicinity of such location who should have had an assured and stable market near at hand, were compelled to send their products a great distance and to remain dependent upon a distant and speculative market.

Besides, the farmer, as a taxpayer, was actually affected. The former superintendent of highways of Illinois estimated that 16½ tons of steel are used in every mile of hard roads in that state, for concrete reinforcing bars, bridges, culverts and other purposes. These figures, it has been shown, apply pretty generally to all other road-building states.

Based upon them, the statistical department of the American Farm Bureau Federation has shown that on the road program of only 10 states of average size in 1921 the "Pittsburgh Plus" excess cost item was alone $1,912,850—practically $2,000,000.

That sum could well be multiplied by five, for the total number of states in the country, to show what toll "Pittsburgh Plus" takes upon the taxpayers in the construction of hard roads. That would make $10,000,000. Thus it is plain how "Pittsburgh Plus" mulcts the farmers and all other taxpayers.

HALLADAY HAS ONLY ONE RIVAL FOR HONORARY TITLE

HERMAN H. HALLADAY, secretary of the Michigan Agricultural College, and of the State Board of Agriculture, has a wide circle of friends but we doubt if many of them know that he has the right to sign "D. V. M. (Hon.)" after his name. Mr. Halladay is the holder of the only honorary degree of "Doctory of Veterinary Medicine" ever granted by a Michigan institution, and Dr. Ward Giltner, Dean of the M. A. C. Veterinary School, has discovered only one other person in the United States on whom a similar degree has been conferred by any college. The other honorary D. V. M. is the Dean of the Veterinary School at Cornell Universary. Mr. Halladay's honor was bestowed upon him in recognition of his services in the eradication of the foot-and-mouth disease in Michigan.

GRATIOT PLANNING BIG FAIR

THE Gratiot county fair will be held at Ithaca, August 25 to 29, and plans are to make it the best ever this year. Secretary McCall says "We expect to have a big fair this year and a fine stock show. There will be races every day and for free entertainment each day we have secured 16 big acts. Saturday, August 30, the K. K. K. will have a big celebration and public marriage on the grounds. Tell everyone we will be glad to have them come."

TO PICTURE JAPAN DISASTER IN SKY AT STATE FAIR

TWO of the greatest fireworks spectacles ever produced are promised for the State Fair in Detroit, August 29 to September 7. They are "Tokyo—Through Quake and Fire" and "The Founding of Detroit."

These productions are so big, and necessarily so costly, the program must be divided between them. The first three nights of the fair, Friday, Saturday and Sunday, "The Founding of Detroit" will be shown and the remaining nights "Tokyo" will have the sky.

The "Founding of Detroit," made specially for the Seventy-Fifth State Fair, will tell the story in fireworks of the old Fort Ponchartrain days, the battles between the French and English and Indians for the vantage point were now stands one of the greatest cities of the world.

"Tokyo" will show in lines of fire against a black sky the scenes of horror that gripped Japan in 1923, the falling buildings, the lighting and the fire.

POTATO GROWERS TO MEET AUGUST 20-21

THE sixth annual meeting of the Michigan Potato Growers' Exchange will be held in Cadillac, August 20 and 21, according to Fred Smith, Vice-President and Acting Manager.

SATURDAY
August 16th
1924

VOL. XI. NO. 25

Being absolutely independent our columns are open for the discussion of any subject pertaining to the farming business.

"Hew to the line, let the chips fall where they may!"

The Michigan
BUSINESS FARMER
The Only Farm Magazine Owned and Edited in Michigan

Published Bi-Weekly
Mt. Clemens, Mich.

TWO YEARS $1

Entered as second-class matter, August 22, 1917, at the post-office at Mt. Clemens, Mich., under act of March 3rd, 1879.

Over 6,000 Farmers Spend Day At M. A. C.

"Old Timers" Hay Cutting Contest is Popular Feature of Seventh Annual Farmers' Day

FARMERS' DAY at the Michigan Agricultural College has been popular with the farmers ever since the first one held in 1918 and each year the attendance has shown a gain. This year conservative estimates placed the crowd around 6,000 and others putting the figure at from 7,500 to 10,000, but even at the lower figure all previous attendance records were shattered. Automobiles began to arrive as the sun appeared in the east and the number increased hourly until noon but long before that hour it was necessary to call the state police to direct the traffic.

The morning was given over to observation tours, the college having arranged 8 different tours for those interested in the different phases of work being carried on. The feature of the morning program was the "Old Timers" mowing contest which started at 10 o'clock and lasted for two hours. Here 27 old-time farmers from 55 to 90 years old took part in a scythe contest and they proved to the onlookers that they could handle the scythe just as good as they could in the days when mowing machines were unknown. Each old timer was given a stretch of alfalfa and allowed five minutes to do his "durndest." H. H. Halladay, secretary of the college, cut the first swath, giving the other "boys" a mark to shoot at.

Four silver trophies were awarded to the "hay cutters" as well as several honorable mention ribbons. The judges were I. H. Butterfield, father of Kenyon L. Butterfield, president-elect of the M. A. C., Jason Woodman, former member of the State Board of Agriculture, Wm. F. Johnston, agricultural agent of Wexford county, and H. F. Probert, of Jackson. The first silver trophy was awarded for the best all around work and won by P. F. Waldron, 68 years old, of Ionia. I. P. Mosley, 90 years old, of Onondage, won a silver cup as the oldest contestant. E. Judson, 58 years old, of Durand, cut the neatest swath and was awarded a silver cup. The fourth silver trophy went to E. S. Goodhue, 60 years old, of Bath, who did the most work of acceptable quality, cutting 737 square feet of alfalfa in his five minute period. Those who received honorable mention were: D. P. Ashley, of Dimondale; Wm. E. Root, of Swan Creek; William Lear, of Saginaw; Frank Johnson, of Potterville; N. Snyder, of East Lansing, and A. F. Huntoon, of St. Louis.

Time to Eat

By the time the last contestant in the mowing contest had cut his swath the crowd was ready for something to eat. Most families brought a basket full of lunch and it did not take them long to find a nice shady spot on the campus where they could eat and rest. After they had eaten and rested a few minutes the crowd began working over to where the afternoon meeting was to be held and, after looking over the special exhibits on timely farm subjects prepared by the different departments of the College and placed on display in booths on the campus, they sat down on the seats that were placed in front of the speakers' stand. Long before 1:30 when the Reo Motor Car Company band and glee club opened the afternoon program all seats were filled and thousands were forced to stand as the attendance had passed all expectations. Second on the program was the parade of College livestock, and then we were entertained again by the band and glee club. Acting President R. S. Shaw, who presided, then introduced the first speaker of the afternoon, A. M. Brown, of Schoolcraft, former secretary of the M. A. C., who talked on the progress in agriculture. He was followed by Prof. J. T. Horner, of the College, whose subject was "Effective Marketing." We were again entertained by the band and glee club after which Acting President Shaw introduced G. I. Christie, director of the experiment station and extension work at Purdue University, and his talk was on "Agricultural thought." Another number by the band concluded the program.

Sees Marketing Main Problem

In his talk on "Effective Marketing" Prof. Horner spoke in part as follows:

"Science has made it relatively easy to produce goods. Whether it be in agriculture or industry the great problem is that of selling. Everyone would be happy if all the things he produced could be sold at a profit. The merchant, the manufacturer, the farmer—all of these—want to know how to sell. The farmer wants someone to tell him how to sell all the things he can grow at cost of production plus a profit.

"The first essential to profitable selling is a knowledge of what the consumer wants. Studies must be made of the markets to determine what the consumer wants, how he wants it, when he wants it, and how much of it he wants. The successful manufacturer has been making this study ever since the time arrived when he could not readily sell all the things he could produce. With an increase in the facility of producing goods there has been an increase in competition and men have had to struggle to get the consumer to buy their goods instead of those of competitors. Unless proper selling methods are followed one is apt to find that his competitors get all the business.

"But efficient production alone will not bring prosperity. Efficient marketing must go hand in hand with efficient production. The prosperity of a farmer depends upon all phases of his business being conducted in the best possible manner. These two things—production and marketing—go hand in hand. Success can not possibly come unless due consideration is given to both. Prosperity is never going to come to agriculture unless production is efficiently conducted and is in harmony with market demands. No production program can be profitable unless it is conducted with regard to the market. Likewise, no market program can be effective if productive efficiency is disregarded.

"Many farmers have recently discredited the counsel of production specialists. They have said, 'We know how to produce. Tell us how to sell. The two blades of grass theory has been wrong. We want to know how to sell one blade.' I trust the time will never come when farmers earnestly desire to discard the science of agriculture. Scientific production is essential to prosperous agriculture and a wealthy nation. The scientific specialists can show farmers how to reduce costs and how to secure quality.

Better Thinkers

"We need to become better thinkers. When the American farmer gets to thinking more clearly on social and economic problems there is going to be improvement in these fields just as there was in the field of mechanics, plant and livestock improvement, and other sciences when the torches of thought and reason lighted the way.

"The American farmer has at times been led into the wilderness of fanatacism and unsound economic thinking by those who have been ignorant or basicly dishonest. He has been wrong at times not because he desired to be wrong but rather because of his faulty guidance. In spite of the fact that he has occasionally gone wrong never from under the roof of the farm home has there come a movement or aid to a movement which has been for the moral degradation of this nation."

Farmers Appreciating Work

Mr. Christie spoke on the assistance which agricultural institutions give to the farmers of the state, in an effort to better conditions of the agriculturists.

"Farmers are appreciating more and more," said Mr. Christie, "the value of agricultural colleges. They are receiving most valuable help from the experiment stations and the extension service, and as a result are able to meet in a better way the big farm problems.

"These institutions which have developed new and valuable varieties of grains, helpful information on soils and farm practices, unusual aid on combating disease of livestock and insects of the orchard and other direct assistance are growing stronger each year and are meaning more and more to agriculture and country life. For every dollar spent by the agricultural colleges, the farmers of the state have received many thousands in return. A conservative estimate shows that the Michigan Agricultural college is returning to the farmers of the state more than $25,000,000 annually. This institution then, should have the active support of all the people of the state."

Speaking of the increase in grain prices, Mr. Christie said:

"The agricultural situation has changed by the recent rise in prices for farm products. Farmers are showing a changed attitude, while business in general has shown renewed activity. It is encouraging to see this turn in events and I believe that it means a brighter future for our agriculture.

"During the past three years, farmers have had opportunity to make and have made a study of their situation. They recognize that a program must be made for the individual farm. The market, the farm and the man must be considered. They also recognize that millions of people in our cities must be fed from the farms and that these people must eventually pay a fair price for the producing of these products.

"Farmers located in Michigan and in parts of the central west are in a fortunate position since the large manufacturing centers and a large share of the population of the country is within a short distance of these producing areas. The Michigan and Indiana farmers have advantages which are now showing and which will make these farms more profitable and valuable."

Can Any Farmer Beat This?

SWEET clover 8 feet 7 inches high! Rye 6 feet 4 inches high!

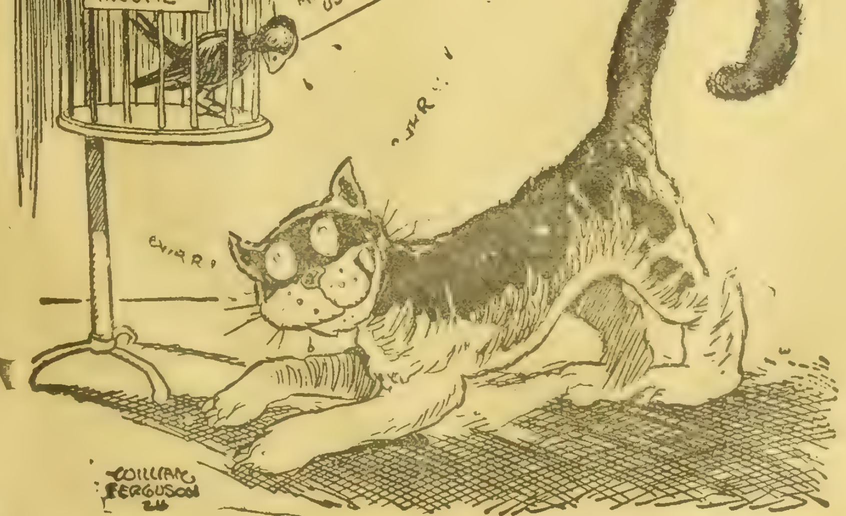
W. F. Causie, manager of the Johnson farm at Jackson, Michigan, gives up these figures for sweet clover and rye he grew and has on exhibit at the Jackson News office, Jackson. Other crops on display and their heights are as follows: Alsike clover, 6 feet 4 inches; June clover 4 feet 10 inches; timothy hay 5 feet 8½ inches; wheat 4 feet 11½ inches; barley 4 feet 5 inches, and oats 5 feet 4 inches.

"Can anybody beat it?" he writes THE BUSINESS FARMER. What about it, friends? Can any of you beat this record?

Mr. Causie writes "We do not claim any credit for the growth of the display. It only goes to show what will grow if the land is good. Nothing was used but barnyard manure. The wheat was top dresses early. The barley and oat ground was fall plowed and double disked in the spring."

We would like to hear from some of our readers about their crops. If you can beat this record we want to know about it. Let's go.

WHO WILL BE THE HERO?



—Courtesy Daily Drovers Journal

Living the Full Life in the Rural Community

The Farm Offers Best Conditions Not Only For Personal Development but Also for the Founding of an Ideal Home

By STANLEY M. POWELL

(Lansing Correspondent of The Business Farmer.)

OUR readers will no doubt be surprised to read such an article by Stanley M. Powell after following his series on taxation so perhaps an explanation is due. Stanley is a very busy man and recently, finding himself just about worn out, he decided to take a brief vacation. At Ionia Stanley and his father, H. E. Powell, operate an up-to-date farm known as "Ingleside Farm". The "Son" of "H. E. Powell and Son" has duties that keep him in the city most of the time and his idea of a vacation was to retire to the farm to help his father and rest. He went to the farm and while there his thoughts, quite naturally, turned away from facts and theories of taxation to something more in harmony with his surroundings. And after a few days came the desire to put these thoughts down in black and white. By Sunday afternoon he could control his desire no longer so he carried his typewriter out on the front veranda and—well this is the result. It contains some very good thoughts and we hope you like it. Write and tell us what you think, whether you agree with the writer or not.

THE peace of an ideal mid-summer Sabbath afternoon has settled over the old homestead. It is one of those perfect days which must have inspired the poet when he sang, "How good is man's life, the mere living! how fit to employ all the heart and the soul and the senses forever in joy!"

How blessed and how welcome is the peaceful naturalness of this afternoon hour. I am mentally comparing it with the tumult and confusion of certain congested cities and so-called resorts and recreational regions which I have recently visited. Verily how hard do certain people struggle chasing the illusive rainbow of happiness! Frantic diversion, high powered automobiles, long, gruelling motor trips being only partial satisfaction.

Real joy, peace, contentment, comes not from without, but from within. Yet Nature is a potent factor in effecting this inner consciousness. And so how pleasant is the porch this afternoon! The breeze blows intermittently, now and then bringing the windmill into life—only to let it relax into idleness once more. How still it is! And yet when we listen closely we hear all the myriad voices of Nature singing their separate songs, yet blending them in a harmonious and subdued chorus.

Who can blame me for rejoicing that I am the "and Son" of one of those father and son partnerships which is carrying on an old homestead cleared from primeval forests by my father's father? Who can blame me if this afternoon I feel a little selfish regret that some of my duties and connections cause me to be away from the farm home so much?

This afternoon is a gift from God, intended for happiness and meditation. As I look across the verdant lawn and undulating acres stretching away to the horizon, my eyes half close in thought and my soul is lost in reverie and contemplation. Tall elms cast shadows near at hand upon the lawn. Shade and shadow, vaguely mysterious, symbols of life's checkered path! Yet far away across the fields and on the hills the sun is shining brightly—Peace reigns o'er all. Thus do I meditate:—

And What Is Peace?

Men say that the war is over, that the armistice is signed, and that lasting world peace has been established. Perhaps, politically speaking, this is true, but taken in its larger, more abiding aspects, peace does not yet rule among the affairs of men. Consider the world today—it is one vast battlefield. It is not a battle of bombs and bullets, of subs and aeroplanes. It is the same old battle of life, the same old struggle for existance—only animated and aggravated, crazed and driven frantic by the restless spirit of the twentieth century.

Here and there, it is true, we can find isolated and secluded havens where the spirit of economic and social conflict has not penetrated with its blighting influences, but these communities are scarce and far between. Even those districts, where life seems the most free and unhampered by the pressure of the outside world, are often the very communities which are supported by the fiercest economic oppression of the laboring classes.

If anyone feels that I have overdrawn the picture, let him only look around him and see. Let him remove from his eyes the scales of custom, of indifference, and of thoughtlessness. Let him really try to discover and analyse those thoughts and emotions which all unknown and unbidden are stamped on every man's face, reflected in his every act. Let him walk down the busy streets with their hurrying, jostling crowds. Let him ride on the crowded trolley, and let him visit the factory and workshop. Everywhere let him study people, their faces and what they reveal.

Nor would I have you think that I am confining these observations merely to the lower classes. It seems that the struggle is even more intense among the so-called intellectual workers. The more a man has, the more he wants, and the more society demands of him. Thus the fairly successful business or professional man often grows old prematurely and misses the real joys of life.

The Advantages of Farm Life

I have wandered thus far afield from the title of this article, not by way of digression or useless comment, but that I might restate some of the fundamental principles of human experience and conduct and thus bring to your attention by comparison and contrast some of the reasons why I wish to advocate the farm as the ideal environment in which to live the full and complete life. I would not have anyone think that I believe that conditions of life on the farm are entirely unlike and superior to those found in the more congested city districts. In many respects the difference is only one of degree, but there are several elements of farm life which are not found in the city. Let us, therefore, consider some of the factors which contribute toward making life what it is on the modern farm.

In the first place, the occupation of the farmer is both useful and honorable. Probably never before has society so valued and appreciated the basic importance of agriculture and esteemed the farmer so highly as at present. The war opened the eyes of the general public to the importance of the farmers as the producers of the basic necessities of life. The new tendency of farmers to organize and act collectively has given them a voice which is accorded respectful attention both in the halls of legislation and before the forum of popular public opinion. A man who takes up farming may, therefore, command the full respect both of himself and of his fellowmen.

One of the features of farming which has appealed to men of all times is the degree of independence which it affords. The farmer is the entrepreneur—the manager of his enterprises. While his life may not at all times be easy, there is always the satisfaction of knowing that he is his own master, that he can choose what is to be done, and that he will receive the rewards of his foresight and industry. This is a factor which appeals strongly to every man.

The great drudgery and intense physical exertion which was the bane of farm life in past generations is rapidly disappearing due to the extensive use of improved machinery in nearly all of the farming operations. Happily these improved implements have not removed the farmer from his former close contact with nature. His is still the out-of-doors life. He still lives close to nature—sees all her mysterious secrets—from the glorious beauty of the sunrise until the many-colored sunset marks the end of another day's labor—from the wondrous wakening of all life in the Springtime to the quiet, mellow days of Autumn when he gathers in the last fruits of the season. No other class of men live in such close natural contact with the Creator, and no other has such an opportunity to see His character revealed in the world about and "think His thoughts after Him."

The Farm the Ideal Home

It is a fact well worth considering that the farm offers the best conditions not only for personal development but also for the founding of an ideal home. This is a factor not to be considered lightly when we notice that the home life of the city is rapidly degenerating and losing its potent and sacred influence. It does not seem possible to produce real men and women of high Christian character and American ideals in the haunts of the cliff dwellers of our cities, in appartments or crowded tenements. It is not a matter of mere chance that so many of our country's greatest leaders have been produced in farm homes. Those forces which operate to disintegrate and destroy the unity of the city home do not exist to nearly as great an extent in the rural community.

On the other hand, the primeval isolation, which formerly turned the agriculturalist into an object of ridicule, is no more. The rapid settlement of our country, the development of the telephone, automobile, rural free delivery and radio, have forever broken down this barrier. The farmer may now live as an intelligent member of human society, knowing what other men are doing and appreciating their conditions. Good roads and the automobile bring him in close contact with the city so that he can share all its social, religious, and educational advantages, and still enjoy all the benefits of living on the farm. Or, without leaving his chair he can bridle the unseen waves of the air and make them contribute their toll of entertainment and instruction.

The farm home need no longer lack those conveniences and amenities which add so much to the comfort and joy of living. A great many farm lighting systems have been perfected. Many farm homes are also now equipped with water systems which provide running water, bath and toilet facilities. The general use of such household impovements is bound to increase rapidly in the years just ahead.

The Farm Horizon Lifts

The farmer's life is not a life of selfish social and business isolation. No longer does he think in terms of "me and my wife, my son John and his wife, us four and no more." More and more the spirit of cooperation and fellowship is spreading among the farmers. The great extension movements, such as the county agent work, the boys' and girls' club work, the home demonstration activities, school and public health nurses, the county Y. M. C. A., etc., all show the increased attention which is being devoted to this sort of thing.

During these past few years this cooperative spirit has given birth to the great farm bureau movement and today over the length and breadth of the U. S. A., there are local, county, state and national farm bureau organizations which are fostering and promoting cooperative marketing on a commodity

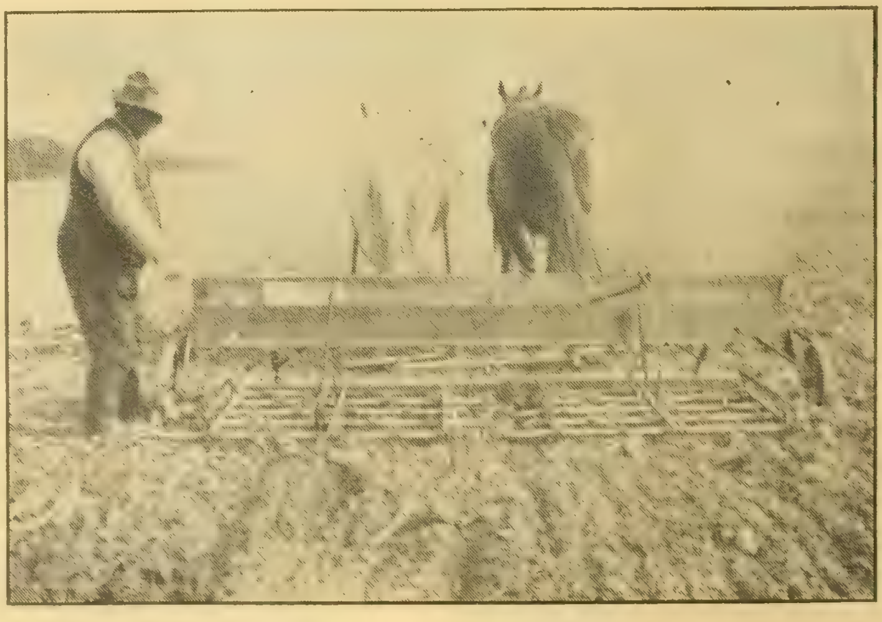
(Continued on Page 21)

Putting Alfalfa Seed in Ground at Right Depth

ONE problem in sowing alfalfa seed is, to get it in the moist ground just the right depth and before the innoculation had been killed by the Suns rays. Some use one method and some another, many of which are good.

Mr. E. H. Black, of Cass County Michigan, has a rig that does the job in fine shape. As shown by the accompanying cut, it consists of a force feed seeder bolted to the evener bar of a 60 tooth spike harrow. In the cut the outfit is shown being used on a corn stubble that has been disked for alfalfa. It works well in spite of the stubble. By actually digging up seed they were found to be covered to a depth of about one inch.

The seeder saves seed as with any definite feed drill smaller quantities may be sown. It sows the seed in fresh earth back of the first row of drag teeth. It covers the seed before the innoculation is killed by the Suns rays. It will work on wheat and rye ground in the spring, or on ground that is too rough for seeding with a drill. It saves once over the ground as compared to the fiddle type of seeders. It puts the seed home to moist warm earth with a shallow covering above it and this is what is desired to get good results.



Seeder working under hard conditions

PICTURES FROM FAR AND NEAR

HAY CUTTING CONTEST.—The "Old Timers" mowing contest held on Farmers' Day at the Michigan Agricultural College was the leading event of the forenoon. Here we have a few of the contestants about ready to start.

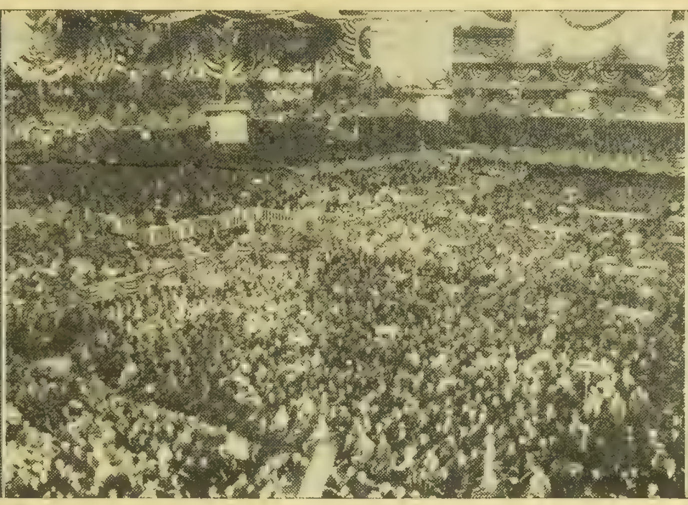
JUDGES IN SCYTHE CONTEST.—These men picked the winners in the contest at the M. A. C. Left to right: Wm. F. Johnston, Wexford county agent; Jason Woodman, and I. H. Butterfield, father of Kenyon L. Butterfield.

PRIZE WINNERS.—Michigan's champion hay cutters. Left to right: P. F. Waldron, Ionia, best all around work; E. Judson, Durand, neatest swath; E. S. Goodhue, Bath, most work; I. P. Mosley, Onandago, oldest contestant.

FARMERS' DAY.—This picture was taken while Acting President R. S. Shaw was making a few introductory remarks before introducing the speakers. This does not show the entire crowd but it will give you some idea of how interested they all were.

SHOW COLLEGE LIVESTOCK.—One of the features of the afternoon program of Farmers' Day was the parade of blue ribbon livestock owned by the Michigan Agricultural College. Horses, cattle, swine, sheep and poultry, all had a part in the parade.

APPROVES OF TAX EXEMPT SECURITIES.—Senator Couzens is being criticised by many for his stand in favor of tax-exempt government securities. It is stated his fortune is invested in these securities.



WITH THE DEMOCRATS AT MADISON SQUARE GARDEN.—This is a general view, showing the interior of Madison Square Garden, New York City, where the Democratic national convention was held. The photograph was taken as the meeting was called to order on the opening day.

A REAL BEAUTY.—Miss Jean Shields, telephone operator of Cincinnati, Ohio, has won 5 beauty contests since last year. They were in Kansas City, Salina and Linnsburg, Kansas, and Cincinnati.

URGES CHLOROFORM FOR SUBNORMAL CHILDREN.—Supt. K. C. McLeod, of Edmonton Canada declares all mentally subnormal children should be chloroformed to death.

WHICH WAY ARE YOU GOING TO VOTE?—Betty Brown on the donkey and Agnes Lee with the elephant on the sands of Atlantic City show their political leanings for the coming campaigns.

STATUE OF "ADAM" GOES TO CHICAGO UNIVERSITY.—This original Rodin statue of Adam has been presented to the Art Institute Museum of Chicago.

(Copyright, Keystone View Co.)

Farmers Service Bureau

(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full name and address. Name not used if so requested.)

SCHOOL BOARD MUST PAY TUITION

We have three boys of high school age. We made application to the school board of our district, before the fourth Monday in June, but since then have decided to move out of the district, and the boys will not be able to attend the school which the application was made for, but will still be in the same county but in another township. Would the school board of this district still be obliged to pay the tuition? Or will we have to pay it ourselves if we move from the district before school starts in September?—W. O., Muskegon, Mich.

PARAGRAPH (521), page 221, Revision of 1923 General School Laws of Michigan, reads in part as follows:

"The district board or board of education of any school district which does not maintain a high school shall have authority and is hereby required to vote a tax sufficient to pay the tuition to any high school which is approved by the Superintendent of Public Instruction******Provided, that the parent or the legal guardian of such child******shall give written notice to the district board or board of education on or before the fourth Monday of June, that such child desires to attend any high school during the ensuing year."

The law does not require a particular high school to be mentioned in the application for tuition. If the proper application is made the school board must pay the tuition to any approved tuition high school in the state. If proper application is not made the board may pay it. The fact that the family in question moved from the district to another district not maintaining a high school does not relieve the first district of its responsibility.—C. L. Goodrich, Ass't. Supt. Public Instruction.

WALL SHOULD GO BELOW FROST LINE

Would you please answer through your columns some questions in regard to house building? I want to build a bungalow, the wall of faced stone up to the eves which would be about 10 feet. How deep should the wall go in the ground? Will have no basement, as the soil is clay not very well drained. How thick should the wall be above ground, and how thick should the foundation wall be below the surface? I think your service department is grand. It does me good the way you expose those fur and land sharks.—L. R., Twining, Mich.

THE foundation wall should go below the frost line in case there is no basement. The foundation wall should be at least 14 inches thick and have a footing 24 inches wide and 6 inches deep. I would suggest that the whole foundation be made of concrete.

The wall above ground should be about 8 inches thick. I understand that you are facing the stone onto the frame work or in other words, that it is what we commonly term stone veneer building.—F. E. Fogle, Assistant Professor, Agricultural Engineering Dep't., M. A. C.

HOW MUCH EXEMPTION?

Please tell me just how much one is allowed by law before he is collectable if his 40 acres is mortgaged and cows not all paid for besides other notes?—A. D. E., Tustin, Mich.

YOU would have a homestead exemption in your 40 acres of land if it is the only real estate you have and you live on it. You would be exempt in personal property to the amount of $250.00.—Asst. Legal Editor.

WANTS PRIMARY MONEY TRANSFERRED

We have property in District No. 1 also in District No. 3 where we live. Now it is nearer for children to go to No. 1 school also roads are better and conditions in general are better. My mother went to No. 1 and I went to No. 1 and now my son went to No. 1 one year. They do not want to have our children unless we have our property all transferred to No. 1 so they can get all the school tax. The board voted on it and would not let us leave No. 3. Unless we pay $1.50 a month tuition we cannot send children there. We have five and it would mean a lot of money in one year. Have heard one can have head tax transferred. Is this true? How can one go about it and to whom apply? Would the head tax apply on tuition? Have we the right to send children to District No. 1 as we have property there too. It is over two miles of mud roads to No. 3 while to No. 1 it is 1½ miles in all, part gravel and remainder will be concrete. The amount of land is about the same in both districts altho buildings are in No. 3.—Mrs. L. K. O., Palms, Mich.

A DISTRICT in which a parent does not reside is not compelled to accept children of other districts. The primary money cannot be transferred from the district where the parent or legal guardian resides to a school where he wishes his children to attend school.—W. L. Coffey, Deputy Superintendent of Public Instruction.

LEVY EXECUTION AGAINST PROPERTY

A signs B's note. Now both A and B refused payments for over two years. After that note holder put judgement against A and B for collection. Then A and B promised to pay so much monthly and then both A and B failed. What is the law to collect these notes? Kindly advise me what to do. Your subscriber for many years, S. G., Knox, Ind.

IF you have obtained a judgement against A and B on these notes, you could levy an execution against their property, or garnishee their bank account or wages. Go to the judge who gave you the judgment and tell him you want to get out an execution against their property.—Asst. Legal Editor.

CAN HE KILL ANIMALS DESTROYING CROPS?

Can a farmer kill any bird or animal if they are destroying his crops or animals (turkeys, chickens)? Is it against the law to shoot a gun on your own property without a hunting license?—H. J., Algonac, Mich.

IT is impossible to give a specific answer to the above inquiries. Property owners would not be justified in killing animals or fowls trespassing on or destroying their property except possibly in case an animal was vicious and endangering lives of people on premises or destroying sheep or cattle thereon. Of course, the property owner would have an action for damages against the owner of animals or fowls trespassing on his premises and damaging them. We also have a statute which permits the owner of premises to distrain and sell cattle trespassing thereon. In reply to your second question will advise you that it is not necessary for a person to have a hunting license to shoot a gun on his own property unless he is hunting thereon.—Clare Retan, Deputy Attorney General.

CAN GET DIVORCE

If a man's wife is proved mentally unbalanced would that hinder him from getting a divorce from her? Could he get possession of the children. What would be the proper step as to me finding out her sanity? Would like to hear from you as soon as possible. Just received word that my wife has applied for a widow's pension.—A Lively Dead Man, Newberry, Michigan.

THE fact that your wife is mentally unbalanced would not alone prevent you from obtaining a divorce. In order to determine her sanity, file a petition with the probate court to have her adjudged insane. The question will be determined in a hearing before the probate judge.—Asst. Legal Editor.

CAN OFFICER COLLECT MONEY FROM MOTORIST?

I have been taking your valuable paper and would like information through the service department on the following subject: Has a motorcycle cop the right to collect money on the public highway for what he calls speeding?—R. J. P., Caro, Michigan.

A MOTORCYCLE officer has no right to collect money from motorists for speeding. He has the right, however, to arrest them and take them into custody. He usually gives them the privilege of depositing money with him to insure their appearance at the trial, instead of taking them into custody. The motorist should insist on a receipt to protect himself.—Asst. Legal Editor.

STOPS SALE OF GRAVEL

Three years ago I bought a small farm on a contract from Mrs. D. and was to pay $50 per year with interest at 7 per cent. Last winter I opened a gravel pit and Mrs. D. served a written notice to stop selling gravel or pay her up in full for the place. Now must I do this? The contract reads that all buildings must be kept in as good a repair as when I took possession but does not say anything about taking gravel or timber from this place. Also Mrs. D. tried to collect proceeds from gravel. Did she have a right to do this? Must I pay her in full or have I a right to sell gravel and use the proceeds to improve the place?—L. A. R., Lowell, Mich.

IF the removal of the gravel would so depreciate the value of the land as to endanger the seller's security, she would have the right to restrain you from selling the gravel. It all depends upon the amount of gravel removed and its relation to the value of the farm without the gravel. I would see a lawyer.—Asst. Legal Editor.

MUST PRINT TRUTH IN ADVERTISEMENTS

I have a beauty secret for the hair and I would like to advertise and charge for it; it is absolutely true what I would advertise. I have no medicine to sell, nor would there be any used. Would it be legal for me to advertise? Also I would like to sign a Nome de Plume. Is that all right?—Reader, Arenac County.

UNDER the provisions of Section 15049 as amended by Act No. 351 of the Public Acts of 1917, a person is criminally liable for any false statements contained in advertisements published in a newspaper or otherwise.

If the statements which you wish to publish are true and are not misleading, you would probably not be violating any statute of this state. It you advertise under any name other than your own in connection with your advertisement you might technically be violating the statute above mentioned.—Clare Retan, Deputy Attorney General.

TEACHER NOT ENTITLED TO PAY DURING VACATION

If the School board signs up with a teacher for a week's vacation between Christmas and New Year's do they have to pay teacher for same? How many vacations with pay is a teacher entitled to each year?—J. M. W., Gladwin, Mich.

IF a school board signs a contract with a teacher, which provides for a week's vacation between Christmas and New Year's, the district does not pay for such vacation period. A teacher is not entitled legally to any pay for any vacation period, that is, any period within her contract which is specified as a vacation.

The law provides that no school shall be maintained in any public school nor shall any deduction be made in a teacher's wages for the observance of the following days: Labor Day, which is the first Monday in September, Thanksgiving Day, as set apart by the Governor, Christmas Day, New Year's Day, Memorial Day, and the fourth day of July. Whenever any of the above days come within the period of contract the teacher is entitled to pay for same. When any come within the period of vacation as specified in teacher's contract the teacher does not draw pay for same. Such days are designated as legal holidays for schools.—G. N. Otwell, Supt. Division of Rural Education.

WIFE WOULD GET ONE THIRD

Please give me the correct law answer to the following: When I married my husband a year ago he had property which he was selling under contract and it will be some few years before it is paid out. Now if he dies in the meantime, will I get one-half of the amount left or would I share equal with his three children by previous marriage? That is if there is no will or deed or any provision made for same.—Mrs. A. S., Jasper, Mich.

ONE third of the amount due the husband on the contract would descend to the wife and the other two thirds would go to the children by former wife.—Asst. Legal Editor.

Uncle Rube Spinach Says:

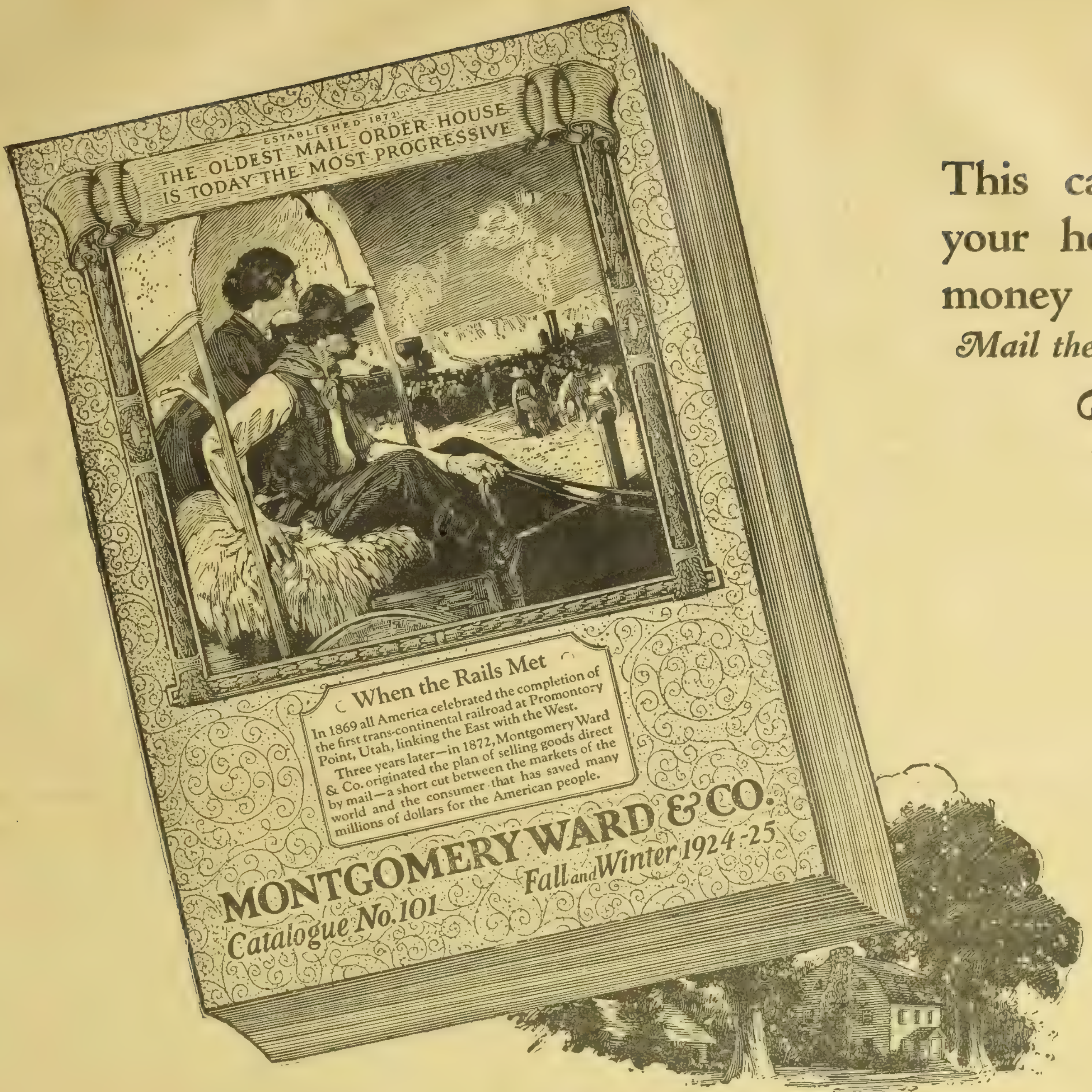
YES THEY'RE LEAVIN' THE FARM

BOYS are leavin' the farm—they're goin' to the city an' gettin' jobs an' gettin' mixed up with lots o' thing that ain't so very good for 'em. An' that they'd be better off without. I have a lot of farmer boys workin' with me—I like them an' I like to be with them. I like to have 'em tell me their troubles an' why they left the farm. It's most always the same story—no chance out there—just hard work an' no money. "Oh yes," one young man said, "Dad did all he could for me—he works hard but farming don't pay much an' he couldn't do much for me and so I quit."

Now of course the boy didn't stop to think of the 19 years that Dad had been keepin' him, feedin' an' clothin' him, lovin' him an' sendin' him to school an' tryin' to make somethin' of him. No he never thought of that! It hadn't occurred to him that he owed Dad anything.

He was just old enough to pay his way an' help Dad a little, but he couldn't do it—he had to have money whether Dad did or not—no matter 'bout Dad, he was gettin' old any way an' didn't need much, he would git along some way. Well the young man gets good wages here an' he lives high. He isn't saving any money, jest spends it as fast as he gits it. He goes out with flashy girls an' they make him think he's some great guy—he feeds 'em on high priced stuff, takes 'em to shows, rides in taxies, blows his money an' is always broke before pay day.

Yes the city is a great place for farm boys—it builds 'em up or down—mostly down. Boys I am tellin' you right now to stick to the farm, help Dad out an' build a good healthy body for yourself. There are many years before you—years that'll be full of pleasure an' happiness for years if you raise yourself right. But my dear young friends, you can spoil it all in just a short time in any city. City life is too fast an' you don't have much at the end of the year but regret, just a feeling that you have made a mistake,—a dark brown taste so to speak,—an' you'll wish you were back on the farm where all is clean an' nice, where your folks are an' country girls are, an' in all this whole big world there is nothing quite as sweet an' nice as our farm-raised girls. Just as sweet an pure as the apple blossoms—mebbe they ain't the best dancers, mebbe they don't use paint an' lip sticks like our city girls but they are healthy an' good to look at—they make good wives an' mothers an' they know how to cook an' bake an' take care of a home. So, knowin' what I know, I'm sayin' to my boy friends all over this big state of ours, jest stick by Dad, help him out now an' pay back part of what he's done for you. You can not ever pay it all; boys if you could only know all he an' mother has done for you you would realize that a lifetime of service would only pay jest 'bout half the debt. Cordially yours,—UNCLE RUBE.



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What the Neighbors Say

USE ECONOMY

DEAR EDITOR:—I am sending $1.00 for two years subscription to your paper. I read in your paper about the proposed gas tax and for one would favor a gas tax if we would get a reduction on auto license, the same as some states have. It the state and counties would use some economy taxes would be lower. I do not think that there is need for over fifty members on the public utilities commission and an auto for the department bought with the taxpayers' money. The Governor has an auto bought the same way, as well as others. The state health department has over 100 persons employed, unnecessary is it not? The gas tax and auto license ought to retire highway bonds and state expenses without a general property tax. That would abolish the state tax commission and may the Lord speed the time.—W. B. E., Blaine, Mich.

BLAMES FARMERS FOR SHORTAGE OF HELP

TO the Editor:—I noticed in a recent issue of M. B. F. an article on farm labor, and its inefficiency and scarcity, and having worked nineteen years on different farms in Livingston county, state of Michigan, I think I discovered some of the reasons of the present day scarcity of farm labor. One, and the most important reason is that 99 out of every 100 farmers hire a man the same as they buy a piece of machinery; not to go until he is started, and then keep going until he is stopped, and after he has had fuel put in his tank and water in his radiator, he is supposed to run until stopped again, and he isn't supposed to get sick, but should be on the job every day and must hold himself in readiness to look after thinks Sundays, if the boss so desires. Another reason is that he isn't supposed to have any brains, and is never consulted about the work, just do what he is told to do. Still another reason is that from the time he starts working for a boss until he is fired or quits or his time is out, he has no time for himself, or if he is a married man, no time to be with his family, only nights, and often then, only from 10 o'clock at night until 4 o'clock the next morning. Still another reason, is the living quarters that some bosses furnish for their hired help to live in.

I know a man in this county that is a very prosperous farmer and hires help each season. Has a fine large house, a large barn, an up-to-date hog house, and for the hired help he has a bunk house, just 10 feet from the hog house. This bunk house is about 10 feet by 12 feet and there are sleeping quarters for 8 men, a stove, and that is all there is in it, besides bunks are built on top of one another around the outside. I once helped this man a few days and it didn't look as if this bunk house had been swept or cleaned since it was built. Of course these conditions do not always exist everywhere, and all together, but it causes a man to think twice before hiring himself to a man he doesn't know. I have done it, so I know.

Now, on the other hand, if a hired man was to be considered human and allowed a little time for himself, or his family, and was to be consulted about the work on hand, and if his advice proves to be right, tell him so, and if he be furnished good clean living quarters for himself and family and paid a good living wage, there would not be the scarcity of farm labor that there is today. There are a lot of men like myself that rather than be bought as a machine and considered as such, and herded together as cattle, would rather go to the city and rent a little house of their own, and work in a factory; 8 hours a day are less than 18. Every Sunday is yours. A house you rent yourself is better than 99 percent furnished you on the farm. And if a man develops any brains, he has a chance to use them. One man out of every five is advanced. Not one out of every thousand can expect it on the farm.

After reading this you may think I am a city man. Not so, I am a farmer trying to make a living the same as thousands of others. I have just tried to state some of the reasons why help is scarce on the farm, as I have seen them.—M. C., Roscommon, Mich.

PLENTY OF CHANCES ON FARMS

DEAR EDITOR:—In June 7th issue Thomas T. Ames of Toledo, Ohio, says "The farmer has caused most of the present condition by not recognizing his kinship with labor."

Allow me to suggest that the farer does not lack for a reasonable market price for his goods, but he lets the manufacturing crowd demand of him unreasonable prices—regular war prices—for their goods and force upon our country such prohibitive tariffs that we can't get foreign goods from European factories enough to get even one of the manufacturers four feet out of the feed trough.

Human nature is the same as it has been since Adam, and when the great farm organizations of America said, following Harding's inauguration, to the G. O. P. tariff makers at Washington, that they knew they could trust that great party not to fleece their own pet lambs who had just voted them back into power; then wolf said to brother wolf, "How'll you have your lamb chops fixed, partner?" and lo! verily! each farmer's goods dropped to half price but what he buys is bought at the good old war-prices.—C. H. Merrifield, Gobles, Mich.

TOO MUCH ABOUT COOPERATIVE MARKETING

DEAR EDITOR:—In the past we have taken many different farm papers and magazines and we consider yours well worth the price in a good many ways. But let me advise you that there is something lacking in the Farm Press of America in general, that for five years they have, most of them, did nothing to boost cooperative marketing, and refused to listen to warnings of grafters. Now old business heads like Editors should be, could not help but see and know, how the farmers were being imposed upon by a certain element, that controls most of farmers organizations. I have tried to expose the dangers through several farm papers for several years and only one has responded by printing my articles. I am not opposed to cooperative marketing, if rightly handled, if such a thing could be done, but as it is there are too many high-salaried, white-collared, hangers-on in most of our associations and exchanges and our editors of the American Press know it as well as a big share of the farmers. In my own estimation, and I know I am not alone, farmers would of been much better off today if they had been left alone, all this proposed help and advise costs money. Why pay county agents to learn us to grow more and bigger crops, and also teach a lot of new beginners from city and lumber woods to be farmers, even urge and spend more time teaching the greenhorn to farm, then they spend on the real farmers, why do all this at taxpayers expense when we already grow too much and have too much tax to pay. Why import so much food stuffs from foreign countries? Please find out and tell the American farmers just how much beef and hides, are imported from South America and see if this is not the cause of cheap beef in U. S. and also wool and pork. Saw a short time ago that we bought of South America 4 billion dollars more than we exported to that country outside of coffee and tea. What farm products do we need to buy from South America that will run up to 4 billion dollars?—E. D. Post, Antrim County.

CONSOLIDATED SCHOOLS

TO the Editor:—The writer on consolidated schools speaks of "the little red school house" in the rural districts, must be ignorent of the rural school as there is no such school building. They speak of the poor incompetent teachers in the rural schools. Now are they aware that as smart men as ever were in the halls of Congress got there education up to eighth grade in these rural schools and if the teachers in the rural schools were so inefficient they could not get a certificate to teach. I have nothing to say against the consolidated schools when you get them. But the transportation is a problem to be seriously considered. To get the children up early and ready for school and walk one quarter to one half a mile to the corner at seven o'clock and wait there in the cold and storm, sometimes zero weather, for the carry-all to come, and then ride one hour and a half around the district gathering up the scholars and to the consolidated school is hard on the children for they often suffer with cold feet and get so cold being so long on the way that they are not fit to work for half the forenoon. Now of all articles I have ever read on consolidated schools I have never seen any thing on the transportation part. The consolidated school is fine, but it is the getting there, that is a problem that should be well considered before going into it.—M. B., Berrien County.

"Tea or coffee?"
"Coffee without cream."
"You'll have to take it sir, without milk, sir; we're out of cream."—Puppet.

Butterfield Talks At Elevator Exchange Meet

ASSURANCE that the co-operative marketing work of the Michigan Agricultural College will be increased rather than diminished under his administration was given by Dr. Kenyon L. Butterfield, new president of the college, who addressed the members of the Michigan Elevator Exchange at their fourth annual meeting held at Lansing, July 16th.

After the address, the delegates adopted a resolution commending Dr. Butterfield for his stand on co-operative marketing and pledging the co-operation of the exchange.

The meeting was attended by representatives of farmer's elevator associations holding membership in the exchange, representing 25,000 farmers. H. D. Horton, of Kinde, was elected president; L. C. Kamlowske, of Washington, was reelected vice-president, and Carl Martin, of Coldwater, secretary-treasurer.

The exchange delegates voted to change their type of organization from a membership basis to a cooperative stock company, issuing stock to member elevators in the amount of their membership fee. They authorized a patronage divident from the surplus of $10,000 to be distributed in stock according to the amount of business done through the exchange. The total capital stock authorized was limited to $50,000.

The delegates also authorized the Elevator Exchange to subscribe $20,000 in stock to the Michelex Elevator & Warehouse Co. at Port Huron where the Elevator Exchange is fostering a farmer controlled terminal elevator for bean picking and storage service at cooperative elevators.

The delegates approved the Michigan State Farm Bureau's plan for a reorganization on an endownment plan providing for the establishment of a trust fund for the permanent support of the Farm Bureau.

A comprehensive program of tax reform was adopted, including support for a state income tax, a two-cent gasoline tax and a demand for a fair assessment ratio between city and farm real estate.

The Exchange expressed indebtedness to the Michigan Agricultural College markets department for the marked success the Exchange had attained, and for aid in the establishment of some 700 farmers' co-operative associations in Michigan, most of whom are identified with five great commodity marketing organizations.

The delegates re-elected four directors for two-year periods; L. C. Kamlowske, of Washington; Carl Martin, of Coldwater; H. D. Horton, of Kinde; John Nicholson, of Marlette. O, L. Miner, of Dowagiac, also was elected to the board of directors. Other directors of the Exchange are George McCalla, of Ypsilanti; M. R. Shisler, of Caledonia; F. M. Oehmke, of Bach, and W. E. Phillips, of Decatur.

RADIO DEPARTMENT

EDITED BY J. HERBERT FERRIS, R. E.

TELEPHONE RADIO RECEIVERS

A TELEPHONE receiver consists of a very small permanent magnet around which is wrapped many turns of very fine wire and which then is mounted in a metal or composition case that fits against the ear, and mounted near the magnet but not touching it there is a very thin piece of iron, called the diaphram, which vibrates with the varying intensity of the current that passes through the wire. It is this vibrating of the diaphragm that produces sound which you hear.

Two receivers mounted on a band that fits over the head is called a "headset."

Owing to the delicacy with which the receivers are adjusted for the best results, it is absolutely necessary that they be handled carefully. A fall on the floor may riun them beyond repair.

Receivers are made of varying resistances, such as 2000 or 3000 ohms. This means that the combined pair of receivers, or headset, has wire wound on the magnets with the resistance as stated above. The higher the resistance the more sensitive the receivers are to weak signals, though there is little if any increase in volume with normally loud signals.

Most radio outfits will operate two or more headsets. To obtain the best results the headsets should be alike, or at least have the same number of ohms resistance. It two or more sets are to be used together connect them in series as shown by the accompanying figure.

Some headsets are equipped with cords of two different colors and with such headsets there is usually an accompanying slip telling you to be sure and connect the tip of a certain color to the "positive" terminal of the "B" battery. Where such directions are given they should be followed, for if they are connected wrong, the current will weaken the magnets. If no such instructions came with your headsets, then try connecting them in both ways, that is, reverse the connections and whichever connection gives the loudest response is the way that they should remain.

Do not remove the ear caps unless absolutely necessary, as a very small dent or injury to the diaphragm will spoil the correct distance that separates the diaphragm from the magnets. No dust should be permitted to get between the diaphragm and the magnet; this will prevent the free vibration of the draphragm and decrease the sensitivity.

Most headsets when used on a radio set employing two or more stages of amplification will rattle and not produce as good or true tones as they do on the detector circuit alone. If you want volume, use receivers that are especially made for loud speaker use. This type of receiver has a greater separation between the diaphragm and the magnet and also a different shaped interior sound chamber as well as mounting to prevent the rattle and to give great volume to the sound.

LOUD SPEAKERS

AT the present time there are on the market many types of loud speakers and loud speaker units. The loud speakers are equipped with some kind of a horn, while the units are for use with phonographs or to be attached to a horn.

The loud speaker consists of a special type of receiver that will give a greater volume of sound than an ordinary radio receiver. It is generally of a sturdier construction, heavier and larger than ordinary receivers and will only give good results when attached to a horn of the proper shape and material. The loud speakers use the same type of unit as are sold separately for attaching to a phonograph.

Loud speaker horns should be made of a material that will not vibrate at voice frequencies, or it will tend to rattle and distort the sound as received. Metal horns, unless made of heavy metal or non-vibrating metal, will tend to give a metal or "tin panny" sound to the music or voice. Wood, fibre and the composition horns seem to give the truest tones.

The shape of the horn also affects the sound, as a straight tapered horn will not give the volume as one with a flaring bell on the end. The "goose neck" type of horn has been adapted by the better makers as giving the best results. Every effort has been made to make them of the same shape as the human throat in order to reproduce the voice in a natural manner.

Nearly all of the better loud speaker units will give satisfaction on a radio set having two steps of amplification and using from 60 to 90 volts of "B" battery. Such units are made to fit the standard types of phonographs now on the market and will please as well as surprise you with the great volume that they will give you.

To get the most out of your radio for yourself and friends or family, it will pay you to get a complete loud speaker unit for your phonograph, and in this way you are relieved from the wearing of a headset, which is tiresome after a short time, and all in a room can enjoy the music or talk.

For great volume of sound, for use in schools, churches or halls there is made a special loud speaker that requires a separate battery to excite it, and which will give forth such a large volume of sound that it is too loud ordinarily for use in the home.

Where loud speakers are used there is a slightly greater demand placed on the "B" batteries used on the amplifier than where head sets are used. This will shorten the life of the "B" batteries a very little and should not be an obstable in the way of your having such a loud speaker for use with your set.

COCKADAY CIRCUIT

I wish to take advantage of your kind offer to help amateurs with their radio troubles. I built a set using the Cockaday circuit. I desired this set for its unusual selectivity, unlimited range of distance, ease of tuning, etc., as claimed by some, but mine has none of those fine qualities. As compared with the Haynes circuit which I have been using it has no place. I get only our local stations; Detroit (loud and clear) while with the other we listened to Havana, Cuba, with pleasure.

I am using Cockaday coil, Tett and Kimmel condensers in the stabilizer and secondary windings. They are not the makes called for but are good condensers of the vernier type and correct capacity (.0005). The other parts (Bradley Leak and rheostat) are correct capacity with the exception of two variable condensers in the plate and grid circuits which I made myself and which I think are correct capacity. My tube is 301-A Cunningham. Aerial and ground are good. The aerial is 30 feet high, 150 feet in length, with 30 feet insulated lead-in. I put this set in a black painted box well shellaced inside. Now can you offer any suggestions that will help me? What is your opinion of the Cockaday circuit? Do you think my condensers are at fault? I would not mind the cost if I was sure the set would work right.—Laverne Wallace, Wayne County, Mich.

THIS is a difficulty that many have with this circuit. There is something which we do not know that effects some circuits and not others in a certain locality. Strange that a properly made set of one kind of circuit will give good results, and a really better circuit will give poorer results under exactly the same circumstances. This is sometimes due to inherent faults in the pieces of aparatus used; such as poor insulation, poor dielectric qualities and poor connections.

It is possible that your grid and plate condensers are of the wrong capacity, you may have a very poor connection that holds well but of high resistance. It would be well to trace each wire, resolder each connection as sometimes the flux used gets between the wires and makes a poor high-resistance joint. See that the contacts on the soket are clean and make good contact with the bulb. Try placing your rheostat in the opposite lead of the A battery from the one you now use. Change the B battery conenction so that the negative is connected to the positive of the A battery, if that way now try the negative to negative. (Sometimes one tube works better one way and another tube will work better the opposite.)

Try each change, one at a time, and then test for results. Sometimes it is necessary to reverse the connections of the secondary winding, or the stabilizer winding. Try this first as it seems possible that his may be your whole trouble.

The "Cockaday" circuit has proved good for some, but like most circuits the operator must get accustomed to it in order to get the best results. Let me hear what results you have after trying some of these suggestions.

RADIO PROGRAMS

Station KYW, Chicago. Central standard time 8:20. Wave length 536 meters.

August 19—"What's Doing in Illinois," by H. C. Butcher, Director of Information, Illinois Agricultural Association. "Keynoters," by H. F. Jones, Executive Secretary, Notional Poultry, Butter and Egg Association.

August 22—"Club Work, Farm Prosperity and Business," by Frank B. White, Agricultural Advertisers' Service. "A View of the Live Stock Situation," by D. C. Waterman, Editorial Staff of Orange Judd Illinois Farmer.

"A GOOD MANY cars have come into our part of the country during the past two years equipped with Fisk tires.

"Their owners tell me that they are getting unusual service from them; dealers say they are made by one of the largest and most reputable concerns in the business; from experience I know for our roads it is the best tire I have ever used."

the farmer
FISK
CORD TIRES

Time to Re-tire
Get a Fisk
TRADE MARK REG. U. S. PAT. OFF.

Oh Money! Money!

by ELEANOR H. PORTER

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(Continued from last issue.)

THE woman dropped her hands from her face and looked up wildly, half defiantly.

"Mr. Smith, you know Fred. You liked him didn't you? He isn't bad and wicked, is he? And they can't shut him up if—if we pay it back—all of it that he took? They won't take my boy—to prison?"

"To prison—Fred!"

"Yes, I know, I know." Impatiently she jerked off the rich coat and tossed it into his arms; then she dropped into the chair again and fell to wringing her hands. "Oh, what shall I do, what shall I do?"

"Oh, I don't know—I don't know," moaned the woman, flinging herself into a chair. "There can't anybody do anything, I s'pose; but I've got to have somebody. I can't stay there in that house—I can't—I can't—I can't!"

Mr. Smith sprang to his feet and hastened toward her.

"Why, Mrs. Blaisdell, what is it? No, she isn't here. I'm so sorry! Can't I do—anything?"

"No, no, of course not. And you shan't," soothed the man. "And she'll be here soon, I'm sure—Miss Maggie will. But just let me help you off with your things," he urged, somewhat awkwardly trying to unfasten her heavy wraps. "You'll be so warm here."

"But what is it?" stammered Mr. Smith helplessly. "Can't I do—something? Can't I send for—for your husband?"

At the mention of her husband, Mrs. Blaisdell fell to weeping afresh.

"No, no! He's gone—to Fred, you know."

"To—Fred?"

"Yes, yes, that's what's the matter. Oh, Fred, Fred, my boy!"

"Fred! Oh, Mrs. Blaisdell, I'm so sorry! But what—is it?"

At the look of horror on Mr. Smith's face, she began to wring her hands again.

"You don't know, of course. I'll have to tell you—I'll have to," she moaned.

"But my dear woman,—not unless you want to."

"I do want to—I do want to! I've got to talk—to somebody. It's this way." With a visible effort she calmed herself a little and forced herself to talk more coherently. "We got a letter from Fred. It came this morning. He wanted some money—quick. He wanted seven hundred dollars and forty-two cents. He said he'd got to have it—if he didn't, he'd go and kill himself. He said he'd spent all of his allowance, every cent, and that's what made him take it—this other money, in the first place."

"You mean—money that didn't belong to him?" Mr. Smith's voice was a little stern.

"Yes; but you mustn't blame him, you mustn't blame him, Mr. Smith. He said he owed it. It was a—debt of honor, Those were his very words.

"Oh! A debt of honor, was it?" Mr. Smith's lips came together grimly.

"Yes; and—Oh, Maggie, Maggie, what shall I do? What shall I do?" she broke off wildly, leaping to her feet as Miss Maggie pushed open the door and hurried in.

"Yes, I know. Don't worry. We'll find something to do." Miss Maggie, white-faced, but with a cheery smile, was throwing off her heavy coat and her hat. A moment later she came over and took Mrs. Hattie's trembling hands in both her own. "Now, first, tell me all about it, dear."

"You know, then?"

"Only a little," answered Miss Maggie, gently pushing the other back into her chair. "I met Frank. Jim telephoned him something, just before he left. But I want the whole story. Now, what is it?"

"I was just telling Mr. Smith." She began to wring her hands again, but Miss Maggie caught and held them firmly. "You see, Fred, he was treasurer of some club, or society, or something; and—and he—he needed some money to—pay a man, and he took that—the money that belonged to the club, you know, and he thought he could pay it back, little by little. But something happened—I don't know what—a new treasurer, or something: anyhow, it was going to be found out—that he'd taken it. It was going to be found out to-morrow, and so he wrote the letter to his father. And Jim's gone. But he looked so—oh, I never saw him look so white and terrible. And I'm so afraid—of what he'll do—to Fred. My boy—my boy!"

"Is Jim going to give him the money?" asked Miss Maggie.

"Yes, oh, yes. Jim drew it out of the bank. Fred said he must have cash. And he's going to give it to him. Oh, they can't shut him up—they can't send him to prison now, can they?"

"Hush, dear! No, they won't send him to prison. If Jim has gone with the money, Fred will pay it back and nobody will know it. But, Hattie, Fred did it, just the same."

"I—I know it."

"And, Hattie, don't you see? Something will have to be done. Don't you see where all this is leading? Fred has been gambling, hasn't he?"

"I'm—I'm afraid so."

"And you know he drinks."

"Y-yes. But he isn't going to, any more. He said he wasn't. He wrote a beautiful letter. He said if his father would help him out of this scrape, he'd never get into another one, and he'd show him how much he appreciated it."

"Good! I'm glad to hear that," cried Miss Maggie. "He'll come out all right, yet."

"Of course he will!" Mr. Smith, over at the window, blew his nose vigorously. Mr. Smith had not sat down since Miss Maggie's entrance. He had crossed to the window, and had stood looking out—at nothing—all through Mrs. Hattie's story.

"You do think he will, don't you?" choked Mrs. Hattie, turning from one to the other pitteously. "He said he was ashamed of himself; that this thing had been an awful lesson to him, and he promised—oh, he promised a lot of things, if Jim would only go up and help him out of this. He'd never, never have to again. But he will, I know he will, if that Gaylord fellow stays there. The whole thing was his fault—I know it was. I hate him! I hate the whole family!"

"Why, Hattie, I thought you liked them!"

"I don't. They're mean, stuck-up things, and they snub me awfully. Don't you suppose I know when I'm being snubbed? And that Gaylord girl—she's just as bad, and she's making my Bessie just like her. I got Bess into the same school with her, you know, and I was so proud and happy. But I'm not—any longer. Why, my Bess, my own daughter, actually looks down on us. She's ashamed of her own father and mother—and she shows it. And it's that Gaylord girl that's done it, too, I believe. I thought I—I was training my daughter to be a lady; but I never meant to train her to look down on—on her own mother!"

"I'm afraid Bessie—needs something of a lesson commented Miss Maggie tersely. "But Bessie will be older, one of these days, Hattie, and then she'll—know more."

"But that's what I've been trying to teach her—'more,' something more all the time, Maggie" sighed Mrs. Hattie, wiping her eyes. "And I've tried to remember and call her Elizabeth, too—but I can't. But, somehow, to-day, nothing seems of any use, any way. And even if she learns more and more, I don't see as it's going to do any good. I haven't got any friends now. I'm not fine enough yet, it seems, for Mrs. Gaylord and all that crowd. They don't want me among them and they show it. And all my old friends are so envious and jealous since the money came that they don't want me, and they show it; so I don't feel comfortable anywhere."

"Never mind, just stop trying to live as you think other folks want you to live, and live as you want to, for a while."

Mrs. Hattie smiled faintly, wiped her eyes again, and got to her feet.

You talk just like Jim. He's always saying that."

"Well, just try it," smiled Miss Maggie, helping her visitor into the luxurious fur coat. "You've no idea how much more comfort you'll take."

"Would I? Mrs. Hattie's eyes were wistful, but almost instantly they showed an alert gleam of anger.

"Well, anyhow, I'm not going to try to do what those Gaylords do any longer. And—and you're sure Fred won't have to go to prison?"

"I'm very sure," nodded Miss Maggie.

"All right, then. I can go home now with some comfort. You always make me feel better, Maggie, and you, too, Mr. Smith. I'm much obliged to you. Good-bye."

"Good-bye," said Mr. Smith.

"Good-bye," said Miss Maggie. "Now, go home and go to bed, and don't worry any more or you'll have one of your headaches."

As the door closed behind her visitor, Miss Maggie turned and sank into a chair. She looked worn and white, and utterly weary.

"I hope she won't meet Frank or Jane anywhere." She sighed profoundly.

"Why? What do you mean? Do you think they'd blame her—about this unfortunate affair of Fred's?"

Miss Maggie sighed again.

"I wasn't thinking of that. I was thinking of another matter. I just came from Frank's, and—"

"Yes?" Something in her face sent a questioning frown to Mr. Smith's own countenance.

"Do you remember hearing Flora say that Jane had bought a lot of the Benson gold-mine stock?"

"Yes."

"Well, Benson has failed; and they've just found out that that old gold-mine stock is worth—about two cents on a dollar."

"Two cents! And how much—"

"About forty thousand dollars," said Miss Maggie wearily.

Mr. Smith sat down.

"Well, I'll be—"

He did not finish his sentence.

CHAPTER XX

Frankenstein: Being a letter from John Smith to Edward D. Norton, Attorney at Law

My Dear Ned:—Wasn't there a story written once about a fellow who created some sort of a machine man without any soul that raised the very dickens and all for him? Frank—Frankenstein?—I guess that was it. Well, I've created a Frankenstein creature—and I'm dead up against it to know what to do with him.

Ned, what in Heaven's name am I going to do with Mr. John Smith? Mr. John Smith, let me tell you, is a very healthy, persistent, insistent, important person, with many kind friends, a definite position in the world, and no small degree of influence. Worse yet (now prepare for a stunning blow, Ned!), Mr. Smith has been so inconsiderate as to fall in love. Yes, he has. And he has fallen in love as absolutely and as idiotically as if he were twenty-one instead of fifty-two. Now, will you kindly tell me how Mr. John Smith is going to fade away into nothingness? And, even if he finds a way to do that, shall he, before fading, pop the question for Mr. Stanley G. Fulton, or shall he trust to Mr. Stanley G. Fulton's being able to win for himself the love Mr. John Smith fondly hopes is his?

Seriously, joking aside, I'm afraid I've made a mess of things, not only for myself, but for everybody else.

First, my own future. I'll spare you rhapsodies, Ned. They say, anyway, that there's no fool like an old fool. But I will admit that that future looks very dark to me if I am not to have the companionship of the little woman, Maggie Duff. Oh, yes, it's "Poor Maggie." You've probably guessed as much. As for Miss Maggie herself, perhaps it's conceited, but I believe she's not entirely indifferent to Mr. John Smith. How she'll like Mr. Stanley G. Fulton I have my doubts; but, alas! I have no doubts whatever as to what her opinion will be of Mr. Stanley G. Fulton's masquerading as Mr. John Smith! And I don't envy Mr. Stanley G. Fulton the job he's got on his hands to put himself right with her, either. But there's one thing he can be sure of, at least; if she does care for Mr. John Smith, it wasn't Mr. Stanley G. Fulton's money that was the bait.

Poor Maggie! (There! you see already I have adopted the Hillerton vernacular.) But I fear Miss Maggie is indeed "poor" now. She has had several letters that I don't like the looks of and a call from a villainous-looking man from Boston—one of your craft, I believe (begging your pardon). I think she's lost some money, and I don't believe she had any extra to lose. She's as proud as Lucifer, however, and she's determined no one shall find out she's lost any money, so her laugh is gayer than ever. But I know, just the same. I can hear something in her voice that isn't laughter.

Jove! Ned, what a mess I have made of it! I feel more than ever now like the boy with his ear to the keyhole. These people are my friends—or, rather, they are Mr. John Smith's friends. As for being mine—who am I, Smith, or Fulton? Will they be Fulton's friends, after they find he is John Smith? Will they be Smith's friends, even after they find he is Fulton? Pleasant position I am in! What?

Oh, yes, I can hear you say that it serves me right, and that you warned me, and that I was deaf to all remonstrances. It does. You did. I was. Now, we'll waste no more time on that. I've admitted all you could say. I've acknowledged my error, and my transgression is ever before me. I built the box, I walked into it, and I deliberately shut the cover down. But now I want to get out. I've got to get out—some way. I can't spend the rest of my natural existence as John Smith, hunting Blaisdell data—though sometimes I think I'd be willing to, if it's the only way to stay with Miss Maggie. I tell you, that little woman can make a home out of—

But I couldn't stay with Miss Maggie. John Smith wouldn't have money enough to pay his board, to say nothing of inviting Miss Maggie to board with him, would he? The opening of Mr. Stanley G. Fulton's last will and testament on the first day of next November will effectually cut off Mr. John Smith's source of income. There is no provision in the will for Mr. John Smith. Smith would have to go to work. I don't think he'd like that. By the way, I wonder: do you suppose John Smith could earn—his salt, if he was hard put to it? Very plainly, then, something has got to be done about getting John Smith to fade away, and Stanley G. Fulton to appear before next November.

And I had thought it would be so easy! Early this summer John Smith was to pack up his Blaisdell data, bid a pleasant adieu to Hillerton, and betake himself to South America. In due course, after a short trip to some obscure Inca city, or down some little-known river, Mr. Stanley G. Fulton would arrive at some South American hotel from the interior, and would take immediate passage for the States, reaching Chicago long before November first.

There would be a slight flurry, of course, and a few annoying interviews and write-ups; but Mr. Stanley G. Fulton always was known to keep his affairs to himself pretty well, and the matter would soon be put down as merely another of the multi-millionaire's eccentricities. The whole thing would then be all over, and well over. But—nowhere had there been taken into consideration the possibilities of—a Maggie Duff. And now, to me, that same Maggie Duff is the only thing worth considering—anywhere. So there you are!

And even after all this, I haven't accomplished what I set out to do—that is, find the future possessor of the Fulton millions (unless Miss Maggie—bless her!—says "yes." And even then, some one will have to have them after us). I have found out one thing, though. As conditions are now, I should not want either Frank, or James, or Flora to have them—not unless the millions could bring them more happiness than these hundred thousand apiece have brought.

Honest, Ned, that miserable money has made more—But, never mind. It's too long a story to write. I'll tell you when I see you—if I ever do see you. There's still the possibility, you know, that Mr. Stanley G. Fulton is lost in darkest South America, and of course John Smith can go to work!

I believe I won't sign my name—I haven't got any name—that I feel really belongs to me now. Still I might—yes, I will sign it

"Frankenstein."

CHAPTER XXI

Sympathies Misplaced

The first time Mr. Smith saw Frank Blaisdell, after Miss Maggie's news of the forty-thousand-dollar loss, he tried somewhat awkwardly, to express his interest and sympathy. But Frank Blaisdell cut him short.

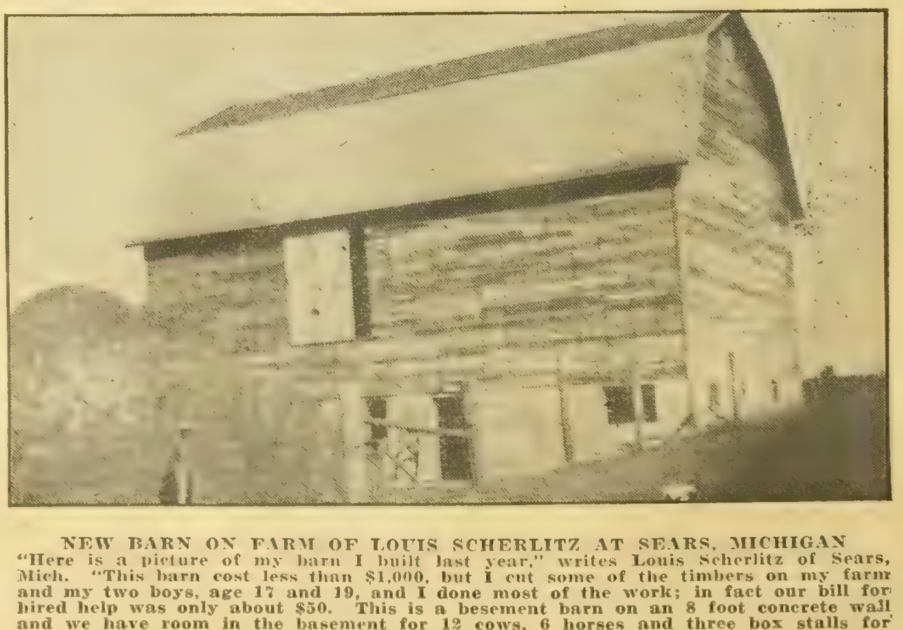
"That's all right, and I thank you," he cried heartily. "And I know most folks would think losing forty thousand dollars was about as bad as it could be. Jane, now, is all worked up over it; can't sleep nights, and has gone back to turning down the gas and eating sour cream so's to save and help make it up. But me—I call it the best thing that ever happened."

"Well, really," laughed Mr. Smith; "I'm sure that's a very delightful way to look at it—if you can."

(Continued in Aug. 30th issue.)

OUR READERS' NEW BUILDINGS

Have you built any up-to-date farm buildings lately? If you have send us a picture of the new building and we will print it in this new department. It will show the M. B. F. readers what their distant neighbors are doing to change the scenery. And, incidently, you may be able to help some farmer decide the type of house, or barn, or other buildings he desires to put up. He may like the appearance of your building and will want the plan of it. Kodak pictures are all right if the details show up well. Do not send the negative, just a good print.



NEW BARN ON FARM OF LOUIS SCHERLITZ AT SEARS, MICHIGAN

"Here is a picture of my barn I built last year," writes Louis Scherlitz of Sears, Mich. "This barn cost less than $1,000, but I cut some of the timbers on my farm and my two boys, age 17 and 19, and I done most of the work; in fact our bill for hired help was only about $50. This is a besement barn on an 8 foot concrete wall and we have room in the basement for 12 cows, 6 horses and three box stalls for cows. This barn is 34 feet by 50 feet and has a 16-foot drive in the center with a mow on both sides. I have a storage tank for water under the approach to the barn."

A NON-RESISTANT CHRISTIANITY

A SERMON BY REV. DAVID F. WARNER

TEXT: "Ye have heard it was said, An eye for an eye, and a tooth for a tooth: but I say unto you, Resist not him that is evil: but whosoever smiteth thee on thy right cheek, turn to him the other also." Matthew 5:38, 39.

WHAT saith the law? Well, ye have heard that Moses said, "An eye for an eye and a tooth for a tooth." As God's legislator he was declaring the legal punishment due the evil doer. Constituted legal authority was to bring punishment upon law-breakers that the community might be protected. And this will always attach to the power of the state. So, the law of Moses was a friend to mankind. It was stern; and aimed, also, to bring men to see wrong-doing and emphasize the wrong of the doing. Then its work was done. Its mission was to bring men to Jesus' way which was creative and regenerative.

But we are not appreciating the responsibilities and privileges of Christ's way of life. Under the old law, social violations were settled by public judges. Under the New, Jesus makes each individual his own judge. As, "If thine hand offend thee, cut it off" yourself. It is a far step from the old to the New; from law to Grace; and from bondage to Freedom, where a personal religion of new and brotherly desires works unchecked. "Resist not his that is evil," for example, is a principle that Jesus worked out in life and on the Cross, in anticipation of teaching men such a spirit of brotherhood that the law against retaliating will not be broken. Some folks have been willing to make Jesus a drudge to carry their sins and sorrows, but have refused to take delight in his ways, which are social and unselfish. Here are recent words from a prominent Christian prophet: "I fling this out as a challange to the princes and leaders of the earth, to captains and leaders of labor and industry, to the bosses of political parties, old and new, to presidents and governor, to the average man: Unless and until this Nation and this world of ours comes to Jesus' way of thinking about life, there will be hatred, suspicions, jealousies, strifes, and wars."

Christian grace rises so far above Mosaic Law that retaliation and all selfish resistance is swept away entirely. And the great question is not, "An I right in holding to a religion of non-resistance?" But, "Am I obeying the way of Christ?" To resist not evil means as indicated in the illustrations of the text and context. Turning the other cheek and going the second mile, is not only non-resistance, but it is meeting resistance with love. Jesus is here advancing to the greatest thing in the world, LOVE. "Love your enemies," saith he. This Love does not resist, but "beareth all things." And bless God, many individuals today, both known and unknown, are living this miracle way. But the world is yet waiting for the nation that will be used of God to form its ideals and live its life around Love.

The disposition that does not nurse or coddle the desire to hurt or seek revenge, is that which keeps us out of war. War is entirely foreign to the ethical teaching of Christ. It is time we are checking up on some of this modern philosophy of life. Jesus is saying that retaliation will not save men's souls or vindicate social righteousness. "My kingdom is not of this world or else would my servants fight." The kingdom of God is to brought about by the moral resistance of love and kindness. Nothing else can produce character in an individual or righteousness in a nation. A daily paper says, "Marching thousands (of soldiers) show love for their native land." We hope so. But, how be it, that the martial spirit is not necessarily synonymous with patriotism. And the writer believes that the militaristic temper is in obvious contradiction to the temper of Christ; and he here avers, that the call by our Secretary of War, for a national Mobilization Day next September, is seriously disturbing to the present day efforts of churches and Christain forces to bring about the outlawry of war. When will we come to admire that sovereignty of Christain conscience that does not truckle to Mars, that religion that does not yield to worldly policy, and that passion to put to work the teachings of the Nazerene, and suffer and bear, until they are realized in a large and universal sense?

Jesus Christ intends that the law of non-resistance shall hold, not only between men as individuals, but between men as groups or nations. This is comprehended in "Make disciples of all nations," and "he made of one every nation of men to dwell on the face of the earth." We shall always believe that His Gospel is to Christianize and unify the nations. This ideal is, even now, the heart cry of the world. The pending resolution to outlaw war, introduced in the United States Senate by Senator Borah, may be timed to meet this cry. Let Christian America get back of it. Men who are deliberately opposed to such political organization against war, are blind to the spiritual tendency of world events; but above all to the moral purposes of God which are eternal and fixed. With the confusion of peoples and issues today, God has pleased to entangle us that we might have the responsibility and high privilege of pointing the way out, of setting to work the rule of non-militarism among nations. Then, the writer would urge our church power to the support of the Borah resolution. This resolution lies before me on my desk and I find it contains some vital principles. Here is one: "Further use of war as an institution for the settlement of international disputes, shall be abolished." Here is another: "Every nation should by agreement or treaty, bind itself to indict and punish its own international war breeders, or instigators and war profiteers." The resolution is reasonable in its demands and pacifying in spirit, and why not return men to the Senate who will support it?

Again, a few more intimate words. We are to believe that resisting the evil-doer is most effectually done thru not resisting. This acts like "coals of fire upon the head." We don't know just how it works, but it must start up a flame of fire that burns up hatred and malice. This turning the other cheek calmly takes the threat out of the other fellow's fist. And you will recall that Jesus in the hands of his foes, was as "a lamb led to the slaughter, yet he opened not his mouth," only to say, "Father forgive." We are to believe that such a reality of love and non-retaliation is to become irresistible in its power to cover the earth.

But ought we never to resist? Well, be sure any limit is found in the principle itself, which involves doing good to others. Physical resistance which does the enemy good and protects the helpless and innocent, would seem to be permissible, But any resistance must not run to killing.

Now, the challange is, to bring our hearts under dominion to this gentle teaching. It is the Golden Rule way of living, and workable on the part of individuals or nations as they yield to the non-violence of Christain brotherhood. It assumes a Christianity, not static or at ease with itself; but dynamic and capable of exalting peace and good-will toward men.

BE KINDLY AFFECTIONED one to another with brotherly love; in honour preferring one another; recompense to no man evil for evil. Provide things honest in the sight of all men. Be not overcome of evil, but overcome evil with good.—Romans 12:10, 17, 21.

* * *

THOU ART MY LAMP, O Lord: and the Lord will lighten my darkness. For by Thee I have run through a troop: by my God have I leaped over a wall.—2 Samuel 22:29, 30.

* * *

TRUST IN THE LORD with all thine heart; and lean not unto thine own understanding.—Proverbs 3:5.

PICTURES YOU'LL PRIZE

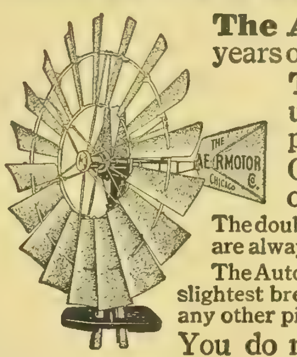
Kodak at the Fair

Fair time means vacation time to you and your family, and that means Kodak pictures as a matter of course. Everybody takes a Kodak on vacation.

You'll make pictures of the picnic along the roadside, of prize stock at the fair grounds, of your own entries in county or state competitions. Then as the years go by, the prints in your Kodak album bring back the fun you had.

Autographic Kodaks $6.50 up. "Kodak on the Farm," just off the press, is free at your dealer's or from us.

Eastman Kodak Company, Rochester, N.Y.



The WINDMILL with a RECORD

The Auto-oiled Aermotor has behind it 9 years of wonderful success. It is not an experiment.

The Auto-oiled Aermotor is the Genuine Self-Oiling Windmill, with every moving part fully and constantly oiled.

Oil an Aermotor once a year and it is always oiled. It never makes a squeak.

The double gears run in oil in a tightly enclosed gear case. They are always flooded with oil and are protected from dust and sleet.

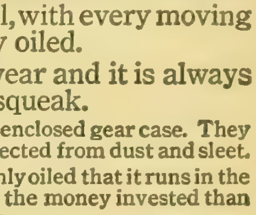
The Auto-oiled Aermotor is so thoroughly oiled that it runs in the slightest breeze. It gives more service for the money invested than any other piece of machinery on the farm.

You do not have to experiment to get a windmill that will run a year with one oiling. The Auto-oiled Aermotor is a tried and perfected machine.

Our large factory and our superior equipment enable us to produce economically and accurately. Every purchaser of an Aermotor gets the benefit from quantity production.

The Aermotor is made by a responsible company which has specialized in steel windmills for 36 years.

AERMOTOR CO. Chicago Kansas City Dallas Minneapolis Des Moines Oakland



HOLDEN Lime and Fertilizer Spreader

Sour soil means poor crops. Experts agree fertilizer is useless on sour soil—it must have lime. The "Holden" Spreader makes bigger crops. Guaranteed to handle lime in any form, fertilizer, phosphate, gypsum, wood ashes or crushed shells.

Soil Tested-*free*

What about your soil?-your crops? Are they big and sturdy as they should be? Find out today with our free Litmus Test Papers—positive sour soil test recommended by all soil experts. Write for them now.

THE HOLDEN CO., Inc.
Dept 264 Peoria Illinois

Cannot Clog. Try Spreader 10 days Free. The Holden Lime and Fertilizer Spreader will make your soil healthy and productive. Spreads twice as far as any other; 16½ ft. Attaches to any wagon or truck. No holes to bore. Spreads evenly 100 to 10,000 lbs. per acre Handle material only once, from car to field. Get literature and low prices now and ask about 10 Day Free Trial.

SPREADS 16½ FEET

GOLD CORN HARVESTER Worth its weight in gold to every farmer raising corn, cane and kaffir in rows. Only $25 with bundle tying attachment. Testimonials from pleased customers in every state. FREE catalog showing pictures of Harvester. PROCESS MFG. CORP., SALINA, KAN.

Have You LIVE POULTRY For Sale? An Ad in THE MICHIGAN BUSINESS FARMER Will Sell It!

The Michigan
BUSINESS FARMER

SATURDAY, AUGUST 16, 1924

Edited and Published by
THE RURAL PUBLISHING COMPANY, Inc.
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ONE YEAR 60c. TWO YEARS $1. FIVE YEARS $2.
Published Bi-Weekly

The date following your name on the address label shows when your subscription expires. In renewing kindly send this label to avoid mistakes. Remit by check, draft, money-order or registered letter; stamps and currency are at your risk. We acknowledge by first-class mail every dollar received.

Advertising Rates: 45c per agate line. 14 lines to the column inch, 772 lines to the page. Flat rates.

Live Stock and Auction Sale Advertising: We offer special low rates to reputable breeders of live stock and poultry; write us.

RELIABLE ADVERTISERS

We will not knowingly accept the advertising of any person or firm who we do not believe to be thoroughly honest and reliable. Should any reader have any cause for complaint against any advertiser in these columns, the publisher would appreciate an immediate letter bringing all facts to light. In every case when writing say: "I saw your advertisement in The Michigan Business Farmer!" It will guarantee honest dealing.

"The Farm Paper of Service"

HOW ARE THINGS IN EUROPE?

FOUR weeks in France, Switzerland, Germany, Belgium, and England do not entitle one to pass an expert opinion on European conditions that may be considered infallible and yet we might be quite as well qualified to pass judgment as are many of the senators who return from their junkets as members of so-called investigating committees.

We arrived in France on the twentieth of June and left England on the twenty-third of July and, in a nutshell, we were impressed by the following facts which we may allude to more fully in future issues:

All of the countries mentioned appear prosperous. England alone has a great unemployment problem, and the resulting unrest she is erroneously trying to appease with a weekly "dole" that is building only an army of beggers. Belgium is practically rebuilt and is now engaged in doubling her forts along the German border to preclude an invasion, which they assume must come again. France in attempting to extract "the pound of flesh" has lost the support of England and the sympathy of America. Belgium is playing a minor part in this game France has so stubbornly attempted. Only the happy solution which seems to have attended the meeting just held in London to consider the Dawes plan could have prevented France from plunging headlong over the abyss of another great war, in which, who knows, but what Germany would have had the resources of Russia, that great enigma nation of the north, for her own.

The people of England are determined to win the friendship of the United States even at the cost of some of their self-esteem, knowing that the two great English speaking nations thus united would stand like Gibralter against the rest of the world. No American in England this summer can fail to be impressed with this fact and his visit to the great British Empire exposition at Wembley will convince him that such a merger of resources would not be one-sided.

With the exceptions of France and Belgium, where the world's attitude towards them is reflected in the low rate of their exchange, the dollar is worth little more in Europe than it is here. Germany has turned a handspring with her deflated currency that has placed it, almost overnight, where is stood in 1914. We paid two Renten marks, each worth 25 cents in U. S. currency, for two peaches in Cologne-on-the-Rhine!

We went over on the "Leviathan," the world's largest passenger vessel, which, taken from the Germans, carried more than a million troops to France during the war. We came back on the "George Washington," which bore the same name when she was under the German flag and the ship that proudly carried out late President on his great and ill-fated crusade. Both ships are well patronized by Americans. It seemed good to see an American flag flying on the breeze and to know that the men who manned them were U. S. naval reserve officers ready to place these great ships in transport service in time of war. With the great markets in Germany and elsewhere for our livestock and foodstuffs opened again, the farmers of America will have something to be thankful for, in the fleet of American vessels now available, thanks to the farsighted devotion of the men who have directed the United States Shipping Board.

* * * *

We will, if you who read this page are interested, have more to say about European conditions in other issues, and for a detailed story of the trip made by our group of agricultural editors and publishers, we have arranged for a series of articles by Mr. Floyd Flood, a thoroughly trained farmer and breeder, to begin in the next issue, with his observations at the Royal Stock Show in England.

THE GRAIN MARKETING COMPANY

WE will watch with more than passing interest the actions of the Grain Marketing Company, that twenty-six million dollar baby, to which the American Farm Bureau Federation has just given birth.

The company went into operation on August first with branches at Chicago, St. Louis, Kansas City, New York, Buffalo, Norfolk, Fort Worth, Galveston, Minneapolis, and Milwaukee, its officers are Gray Silver, Martinsburg, West Virginia, president; Harry L. Keefe, Walthill, Nebraska, first vice-president; G. M. Dyer, Spencer, Iowa, second vice-president; and John W. Coverdale, Ames, Iowa, secretary-treasurer.

The men named are not unknown to the farmers of the United States and bear good reputations in every instance, so far as we know. The question is whether they have had the experience which will enable them to direct the marketing operations of a company which in potential capitalization rivals some of the largest and best known corporations in the United States.

The opponents of the present plan claim that there has been a large shrinkage in the valuation of the propertiies which the new company proposed to take over, and that this is simply a scheme to unload some unprofitable property on the farmers of the United States who have been working so diligently the past two decades to improve their marketing facilities.

The present plan is a stupendous one and we do not wish to be understood as in the least criticising the methods of the present organization or the almost Eutopian aim which its founders have set as its ultimate goal. We are charitable and have supported every cooperative proposition which has been presented to the farmer, but we must admit that the present one appals us a little. We feel like the man on the sidewalk in front of the Woolworth building being asked how he likes the building. We will have to get off at a perspective of several months before we will be able to give a true picture for the benefit of our readers, and we have an idea that most of the sound thinking business farmers in Michigan will harbor very much the same idea.

FARMERS' DAY AT M. A. C.

EVERY year the number of farmers who attend Farmers' Day at M. A. C. see a new record set, and the Seventh Annual affair held last week was no exception.

This is a good sign. It proves that farmers have come to see that there is something more in farm life than the mere gathering together of more acres and more dollars, which usually bring with them more trouble to the farmer and his family.

We have no time for the loafer but we do admire the man who with the help of his family works a few hours extra several days in advance and then hitches up his automobile and takes the whole crowd to the Farmers' Day, picnic, fair or whatever it is that will contribute to their lives and well being.

The program prepared for Farmers' Day at Lansing, this year, was one of the best that the college has ever given for the benefit of its guests, and a great deal of credit is due to the active heads of the college for their good work and painstaking plans for the success of this year's big day.

It would have been worth your while to have seen the big crowd gathered around the "Old Timers' Mowing Contest," and the beam of satisfaction on the face of the winner was worth a trip all the way to Lansing to see.

That there is more occasion for smiles in the present indication of farm prices and farm crops was easily seen in the faces of men and women who came from farms in all parts of Michigan. They had something to be thankful for, especially when they passed groups of factory workers standing before the employment windows in Lansing, looking for "a job."

MASSACHUSETTS' LOSS OUR GAIN

THAT the Massachusetts Agricultural College is genuinely sorry to lose Kenyon L. Butterfield, who comes to the Michigan Agricultural College, as president September first, was expressed by Director John B. Willard on the occasion of Dr. Butterfield's public retiral. "It is with genuine regret that we present him for the last time as our president. For eighteen years Massachusetts farmers have had the leadership of the foremost agricultural thinker in the United States."

Into his valedictory Dr. Butterfield packed his whole philosophy of country life. He spoke of "the permanent abiding problems farmers must always face." Of all these problems, the one he most emphasized was the lack of study and discussion among rural groups. He deplored the decay of the lyceum and the old-fashioned village store debating society. "There is a tendency today not to participate in the debate that draws out the individual. We have somebody else think for us and talk for us. The whole tendency of the times is to be so busy that we get only second-hand fragments of discussion." He saw this lack of study and discussion most apparent among farm people.

The farmers' political activity he evidently regards as not deeply significant, because, he explained, all the farmers cannot come together in a political party; farm people in different sections have interests as diverse as industrial and mercantile groups. But he believed the farm group could and ought to unite on certain political fundamentals. The chief of these was their attitude toward the peace of the world. "I doubt if any group of people in the world is as set in the interests of world peace as the farmers. Yet I doubt if in any other group peace problems are as little discussed.

"If the farmers and the college people do not look out it will not be long before the labor group in this country will be the best educated group in America; because the forum idea of study and debate is taking hold in this group as in no other. It is a development that ought to be at the root of interest in a democracy."

Dr. Butterfield's remarks may or may not be as applicable to Michigan as they are to Massachusetts; this fact he will soon have an opportunity to determine. Awfully sorry, Massachusets, but we need Kenyon at home now!

A MASTER STROKE

THIS week we are going to hand the palm to our good friend A. B. Cook, master of the state grange, who in a newspaper report states that if the Wayne County automobile interests initiate a referendum on the proposed two-cent gasoline tax, he will for the Grange initiate a referendum for a three-cent tax!

It is pretty well admitted that the gasoline tax in Michigan is an assured fact, and according to Mr. Cook the opponents are initiating a referendum simply to stall for time, so he proposes to retaliate by getting an even larger tax than was first proposed and we have no doubt but that will be as easy to get three as two cents per gallon.

We have always admired friend Cook but we never knew he had so much sagacity. His present ruse would do credit to a Yankee lawyer and from Connecticut, too!

LIVESTOCK PRODUCERS WIN

ACCORDING to a report just published for the first six months of the year, 1924, livestock producers at the various terminal markets have shown a saving to members of nearly $400,000.00. In the Chicago market alone more than $13,000,000 worth of livestock was handled and at St. Paul nearly $12,000,000.

Where are those men who said cooperation never could succeed in the United States? Cooperation will always succeed when the men behind it are honest and efficient and the individual members stick to it through thick and thin.

Gradually the farmers of this country are learning this fact!

FAREWELL, PITTSBURGH PLUS!

THE old "Pittsburgh Plus" hoax has gone down to an inglorious defeat and the farmers of America pray that it may never be re-established no matter what the conditions were that forced it on an unsuspecting public.

Statisticians claim that the abolishment by the Federal Trade Commission of this "ficticious freight" item will save the farmers in the middle west $30,000,000.00, and make Gary, Indiana, the center of the steel industry in America.

Michigan alone it is estimated will save $2,000,000.00 each year; Illinois, $3,500,000.000; Wisconsin, $3,000,000.00; Indiana, $2,500,000.00; Minnesota, $2,500,000.00, and most of this is represented in the added cost of freight on all articles manufactured of steel which the farmer uses in his business.

This is a step in the right direction and one which has taken the united effort of the agricultural associations, organizations and press to deal the final blow. It is all over now and you should begin to feel the effects of it when you buy machinery.

PUBLISHER'S DESK

PLEASE SIGN YOUR COMPLETE NAME AND ADDRESS

IN our June 7th issue I wrote about your signing your complete name and address when writing to us or sending in your subscription. Our circulation manager just told me that he continues to receive letters with only the name signed. Some times he is able to get the post office address from the envelop and again other times it is not printed clear enough to be readable—and then the subscriber wonders why he doesn't get his paper, while we wonder if he will write in so that we can get his full address to send him his BUSINESS FARMER. Please remember we want YOUR COMPLETE NAME AND ADDRESS and sign it plainly.

LOOK OUT FOR PICTURE ENLARGEMENT SHARKS

THE picture enlargement sharks have been letting the farmers of Michigan alone since we exposed them and we heard nothing about them for quite a while but now we are getting reports from different parts of the state that they are back again and up to their old tricks.

They come to your door and ask if you have a photograph of a child or relative that you would like to preserve. They try to learn from your neighbor if you have lost through death a child or a close relative and when they call they ask you for a photograph of the child or relative and then proceed to work on your sympathy. You bring the photograph and they become enthusiastic over the possibilities of enlarging it and show you how their company enlarged one for Mr. So-and-so "and the photograph wasn't near as good as the one you have." The picture is in a frame and they promise to enlarge your photograph "just like this one" and deliver it to you for a fixed amount, usually ranging from $3 to $5.

You are asked to sign an agreement, which, while it does not bind you to accept a picture in a frame, it does obligate you to pay for the enlargement. When delivery is made you find they have placed the picture in a frame and you are asked to pay a fancy price for the frame. The price for the frame ranges from $15 to $3; if the purchaser will pay the top price all right but if he will not they reduce the price and even at $3 they make money on it.

If one of these agents calls at your house sic the dog on to him. If you want to have a photograph enlarged go to a reliable photographer in the nearest town and have the work done properly and at an honest price.

OFFICERS OF CHICAGO WHOLESALE SEED COMPANY INDICTED

"I woud like to know if you could help me out with a deal I had last winter and spring with a mail order seed house. It was the Chicago Wholesale Seed Company. They wanted me to represent them in my territory and take orders for grass seed. In the deal I gave them my order for clover seed amounting to $45.00 and about $35.00 worth of this seed wasn't fit to sow. I had it retested and one lot was condemned for sale in this state. I wrote them about it and they have not made me any reply about the seed. They owe me $9.00 commission and say they haven't the money to pay up all their debts and want to give a note for 2 years at 7% interest. They sent a note to be filled out and I wrote them but have received no answer. I received a letter from the post office inspector at Chicago asking if I had had any dealing with this company and if I had to send the papers to him. This I did and I have not heard from him.

YOU are "out of luck" as the officers of the Chicago Wholesale Seed Company were indicted on May 29th, 1924, for using the mails to defraud farmers and agents. The principal officer is Edwin L. Rosenberg, who formerly operated the World Seed Company of Milwaukee, the St. Louis Seed Company of St. Louis, Mo., the Lawrence Seed Company of Kansas City, Mo., and other seed companies at Milwaukee, Wis. He has been in this business for a number of years, and the banks at Milwaukee suffered a tremendous loss several years ago because of his manipulations. For years he has been defrauding farmers and agents through his seed companies, the post office officials declare.

The Collection Box

The purpose of this department is to protect our subscribers from fraudulent dealings or unfair treatment by persons or concerns at a distance.

In every case we will do our best to make a satisfactory settlement or force action, for which no charge for our services will ever be made, providing:

1.—The claim is made by a paid-up subscriber to The Business Farmer.

2.—The claim is not more than 6 mos. old.

3.—The claim is not local or between people within easy distance of one another. These should be settled at first hand and not attempted by mail.

Address all letters, giving full particulars, amounts, dates, etc., enclosing also your address label from the front cover of any issue to prove that you are a paid-up subscriber.

THE BUSINESS FARMER, Collection Box
Mt. Clemens, Mich.

Report Ending August 8, 1924

Total number claims filed	2525
Amount Involved	$24,769.97
Total number claims settled	2020
Amount Secured	$22,923.38

FIGHT OPTICAL QUACKS

A WARNING that the eyesight of thousands of persons is being jeopardized by mail order houses specializing in eye-glasses has been sent out by the National Committee for the Prevention of Blindness. Admitting that there is apparently no way of prosecuting these firms because of the legal technicalities behind which they can shelter themselves, the committee holds that the only way of combating the menace is a campaign of education, and this has been started.

Widespread sales campaigns are being conducted by the firms accused, according to the committee, and glasses are being sold "without the slightest sort of an examination of the eye of the prospective purchaser and without even an inquiry as to the condition of the eyes.

"These optical quacks ask merely 'How old are you?' " the warning continues, " 'How many years have you worn glasses, if any?' and 'What is the shape of your face, round or slender?' and upon this information they offer to fit any person with glasses promising 'the most perfect vision of any lenses you can get.' 'These splendid glasses,' read the circulars which are being sent out by the tons, 'will enable anyone to read the smallest print, thread the finest needle, see far or near and will prevent eye-strain and headache.'

"The mail order houses play upon the vanity of their prospective customers, all of their advertising emphasizing in particular the beauty of their product and the improvement in appearance they will bring to the wearer. The 'handsome shell rims' give anyone a 'younger, yet more distinguished appearance,' say the circulars. Cheapness of price is of course another bait. Preminums, such as sewing shears for women and leather billfolders for men are often offered as a special inducement to buy.

"Investigation has shown that the glasses which are actually sent are simply a fair grade of magnifying glasses mounted in an extremely poor grade of frame. These are advertised as 'scientifically ground and curved lenses.'

"The glasses do nothing that the exploiters claim for them. They simply make the print look larger; as a consequence many persons receiving them, particularly old people with failing eyesight, will worry along with them, occassionally feeling satisfied because of their own ignorance of the harm that is being done their eyes and lack of knowledge of what proper fitting of glasses require."

Dear Sir: Received a card again in regards to ———— settlement. Have received my money at last and a thousand thanks for your effort or I would never received a cent as I had written so many times. I will close, thanking you again for your trouble.—M. D., Woodland, Mich.

First Mortgage Real Estate Gold Bonds

Farmers have come to know the 7% first mortgage bonds recommended by this house as being matchless investments for safety and generous income.

Write for Booklet AG1260

Tax Free in Michigan
4% Normal Income Tax Paid by Borrower

7%

Federal Bond & Mortgage Company
(1260)

FEDERAL BOND & MORTGAGE BUILDING, *DETROIT*

SHIP YOUR WOOL
to TRAUGOTT SCHMIDT & SONS,
512 Monroe Ave., Detroit, Mich., and get the following high prices, f. o. b., Detroit: Fine Delaine, 47c; Fine Clothing, 37c: Medium, 45c; Rejections, 35c.

My Engine Will Do the Work of 6

Write now for facts about this wonder engine. Same engine gives 1½ to 6 H. P. Gasoline or kerosene. Portable, light, and free from vibration. Requires no anchorage. Easy starting—no cranking. Pumps, saws, grinds and does all chores. Plenty of power for every purpose.

Low Factory Price—Free Trial Offer

Tremendous value. Thousands of satisfied users. Write now for details and free trial offer on this amazing engine.

Edwards Motor Co., 134 Main St., Springfield, Ohio

GENERAL

FOR SALE OR TRADE—ENSILAGE CUTTER. Perfect condition. Sell cheap, for cash or trade for cattle, sheep or car. Write what you have. G. M. McCORMICK, R3, Lansing, Mich.

WANTED A JOB AS MANAGER ON FARM for wife and self. 35 years experience in farming. Or want to rent a furnished farm on shares. BOX 155, Turner, Michigan.

CULL BEANS $23.00 TON, SACKS INCLUDed, f. o. b. Port Huron. PORT HURON STORAGE & BEAN CO., Port Huron, Mich.

WANTED TO BUY BLACK WALNUTS Bought, bushels, carloads. AMERICAN WALNUT CO., Morgan Park, Ill.

BARREL LOTS SLIGHTLY DAMAGED Crockery, Hotel chinaware, cookingware, glassware, etc. Shipped direct from factory to consumer. Write for particulars. E. SWASEY & CO., Portland, Maine.

THE BUSINESS FARMER,
Protective Service Bureau,
Mt. Clemens, Mich.,

( ) I enclose a dollar for a two year renewal and 25c for a Metal Sign and certificate.

MEMBER The Michigan BUSINESS FARMER PROTECTIVE SERVICE BUREAU

5x11¾ inches Red and Black on White Background

( ) My subscription is paid to 1925, so I enclose 25c for a Metal Sign and certificate.

Name..

Post Office.......................................RFD No..................

County.. State ....

The Farm Home
A Department for the Women

Edited by MRS. ANNIE TAYLOR

DEAR FOLKS: Before another issue the State Fair will be under headway, and most of us will be getting our exhibits ready for our own county fair. The fair is a wonderful institution and we should all do our part to make our fair (we all attend a certain fair each year and feel a personal interest in it) better each year. It is here that we women enter our best canned fruit, some fancy work, etc., into friendly competition with our neighbors. If we fail to win first prize we are determined to do better next time. Father takes special care of a calf that he intends to enter and he says he will "win first prize or bust a tug". If Neighbor Brown's calf is just a little bit better according to the judge (but not father) and father loses out, father says to Brown "You beat me this year but you won't next." The result is father improves the livestock, and the same is true of grains and produce.

Let's all boost the fair. And try to attend the State Fair this year, Aug. 29-Sept. 7. Plan one whole day at least and two if possible.

Your Friend,
Mrs Annie Taylor

Address letters: Mrs. Annie Taylor, care The Business Farmer, Mt. Clemens, Michigan.

GETTIN' HOME AG'IN

been away off yonder where the stylish people go
en summer days are br'ilin' hot, to spend a week or so;
Off yonder where the city runs right down into the sea,
Where everything is noise an' fun an' style an' gaiety.

An' tho I seed a lot of things I never seed before,
An' tho I did a lot of things I mustn't do no more,
An' tho I had a roll o' cash, an' freely blowed it in,
The sweetest part of all my trip was gettin' home ag'in.

An' now I'm back at home ag'in an' knockin' 'round the place,
An' every old familiar spot seems like a friendly face;
The hogs, the horses, and the cows, all seem to know me, too,
An' every rooster on the farm is crowin' "How-de-do!"

There ain't no other spot o' ground betwixt the pole an' line
That seems to grip the soul o' me like this old farm o' mine,
An' if I make the Golden Gate, an' Peter lets me in,
I'm 'fraid I'll even worry then 'bout gettiin' home ag'in.

—Whitney Montgomery.

GROPING

WE are restless creatures, never at peace with ourselves, never content with out lot, ever in search of an abiding-place and finding no rest for the sole of the foot. The birds of the air and the beasts of the field take no though, but only man searches and questions and will not be stilled.

"Who is God?" asks the grave-eyed self. I don't know. I look into the sky on a night when it is deep blue, filled with swimming stars. Over my head arches the Milky Way: a spray of star-dust shot through with millions of gleaming stars—a gesture of the Creator.

Low in the sky rides the cool, shining moon, flooding the earth with light indescribable, throwing shadows purple black under the trees, creating a fairy world for lingering lovers. I look with wonder-startled eyes, but no hint of the matter comes to me. I would gather and hold to me a glint of this beauty. But the light wind of morning wafts it away with the promise of other loveliness.

Close to the old rail fence stands a cluster of mallows that glow in the sun, each huge flower of a texture and sheen beyond the skill of mortal weaver, of a line and form that fills the heart of the artist with adoration and despair. Gay, taunting, aloof and bewiching they grow by the old rail fence. I stand beside them in wistful silence. They are of God. I can know no further.

"True," says the prodding soul, "the loveliness of this earth is past knowing, but why am I here? I work and I play; I suffer agony and again rejoice greatly. I pass away as I came, a lonely, questing stranger, groping endlessly. Why?"

I don't know. On the plains of Judea there was born in a manger a child of poverty. A star lighted his birth and sank from sight. He struggled and lived—a man of sorrows, acquainted with grief. He was blameless; there was no fault in Him—yet He died the death of a malefactor. Died, and lives always.

Countless hosts of men have come here asking the same question and answering it by their eager desire to live high-spiritedy, holding hard to their deep-rooted faith in the immortality of their living.

"Ah, but what is life that we cherish it so? What is it that defies time's effort to bind it; that eludes pursuit, only to return and return eternally when we have ceased to be concerned?"

Once the students of a famous laboratory pressed their master for an answer and he set them a problem: "Take these barley-corns and analyze them. Now make some barley-corns complete, perfect, in their chemical elements. So. Now I shall plant some barley from my field and do you plant the barley of the laboratory and we shall see."

From the barley of the field came new barley, but from the scientists' barley came no sign save silence. "What, then, did you leave out of your barley? Certainly no material element. 'Twas the life germ, the breath of the Creator."

We believe. We trust. We have faith in this breath of life that is breathed into our souls directly from the soul of the Creator—and we know we are here for some destined end and good. For God would have it so, and God is good.—Angelo Patri.

(Editor's Note:—We are indebted to the Delineator for the above. I think it is so true, don't you?)

BOBBING HAIR WILL NOT MAKE IT GROW

DON'T bob your hair to make it grow faster! Bobbing the hair for esthetic reasons is quite proper, providing your mother, your husband, or your grandchildren do not object, but says Dr. Herman Goodman in Hygeia:

"Cutting the hair (table talk to the contrary), does not improve its growing qualities. Under general conditions, it takes a hair about six weeks to grow one inch.

"However, not all the hairs of the scalp, even if uncut, would grow to the same length. On the crown and the back of the head, the hair may grow 40 to 50 inches and be not unusually long, while at the sides 18 inches is generally the limit. In men, of course, such long hair is very uncommon and with the fashion, it becomes increasingly unusual among women."

Dr. Goodman makes another statement, surprising to the uninitiated. The years when the hair grows most quickly, he says, are those between 35 and 60.

If you find a hair on your coat collar, don't get nervous, this hair specialist advises. The hair is continually shedding and regrowing and in the healthiest of persons a hair grows old, is lost, and a new one takes its place.

Only when the number of new hairs runs behind the number of fallen ones, should one become alarmed. The thing to do them is not to consult the barber, the drug clerk, or the hair dresser, but to go to a physician who can find out the cause of the falling hair and can start prompt treatment to restore the scalp to a healthy condition.

HANDY TO KNOW

WHERE warts trouble as they often do in the case of young people, the juice of the milkweed plant frequently applied will cure them. Or the old fashioned live-for-ever with the thick oily leaf used in the same manner is also efficacious; or a little baking soda moistened and applied each night, being left to dry on will cause their disappearance if continued.

* * *

If you get a cinder in your eye take a single whole flaxseed, and if left in the eye a short time will enmesh the cinder which may be removed with the seed.

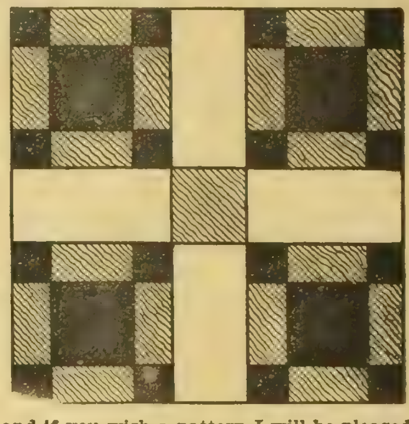
Personal Column

Wants Clothing for Ladies' Aid.—I am wondering if there are any readers that have articles of clothing that they do not use any more, also that have nice pieces that they do not want and pieces that would work up into quilt blocks. If there are any such ladies would they please donate them to the Bethel Ladies' Aid? We would appreciate them very much as we would like to furnish our church and it is slow work and we live in a new country and everybody is poor. These donations are to go towards our church and please send them to my address. Thanking you many times and asking God to bless you all I remain, Mrs. Jennie Foutch, Gladwin, R4, Michigan.

Help!—Will some reader of the M. B. F. send in a recipe for scalloped potatoes, to be printed in the M. B. F? Does any reader know of anything that can be burned in a soft coal range to prevent the soot from gathering and filling up the stove pipe and chimney?—A. K. G., Weidman, Michigan.

—Have you ever tried burning a dry cell battery in your range? I have a friend that uses nothing else and she has little trouble with soot. She takes old dry cell batteries that are worn out, and burns one in her range and one in her heater every week or so.—Mrs. A. T.

This beautiful quilt block design is the work of Mrs. J. VanAntwerp of Mayville, Michigan. The original block is made up in three colors, brown, green and white, and it is very pretty. I have this block and if you wish a pattern I will be pleased to loan it to you so that you may cut a pattern. I have several other designs to publish in the near future. Watch for them.



Canning Pickles.—Please let me know how to can pickles in wooden containers so they will be sour like those you buy and will keep indefinitely.—E. B., Beaverton, Michigan.

Here's Pickle Recipe.—In the issue of July 19th C. K. asks for a pickle recipe. Here is one we use and we are fond of the pickles and they keep fine. 1 cup of salt (barrel), ½ cup ground mustard, 1 gallon vinegar. Mix good. Add cucumbers as picked and stir every day, and for three days after last cucumbers are added. This makes two gallons of pickles. —I. F.

—if you are well bred!

More Finger Foods.—Apricots, nectarines and mandarins are finger foods. Bananas are stripped, laid on a plate and cut in mouthfuls. Fresh peaches, apples, pears (avocado and others), large plums and oranges should be quartered, the quarters peeled in turn, cut into portions and carried to the mouth by the fingers.

At the dinner-table (where fruit knife and fork are supplied with fruit) the orange may be speared with the fork, outer and inner skin cut away with the knife, and while the fruit is held on the fork, mouthfuls may be lopped from the heart and in the end carried to the mouth by the fingers.

Cherries, served with fruit shears, as a rule are eaten with the fingers; but watermelon (cut in wedges) is always served with fruit-knife and spoon.

Ginger in syrup, stuffed or stoned prunes, pineapples, and fresh figs call for a fork and spoon or fork and knife.

When any small fruits (including grapes, dried dates and raisins) are eaten, pits or seeds must never be spit out into a plate. The cupped hand should be unostentatiously raised to the mouth, the pits or seeds dropped into it close to the lips, and then noiselessly placed on the fruit-plate.

The rule for pits and seeds applies as well to terrapin and fish bones, which may be removed one at a time from the mouth by thumb and first finger.

Fruit stains are indelible, so a finger bowl should always be used before fingers wet with juice are wiped on a napkin. If the finger bowl is lacking, wait to wipe your fingers until they dry.

Menu for August 16th

Cream of Asparagus Soup
*Lamb Fricassee with Dumplings
Mine Jelly   Green Peas
Romaine Salad
Cheese
Toasted Crackers
Watermelon
Coffee

***Lamb Fricassee with Dumplings.**—Cup and dice enough cold lamb to make 1 quart. Season with salt and white pepper, put into greased baking dish and pour over following sauce: Blend 2 tablespoons fat with 2 tablespoons flour, and cook until brown. Now add 2 cups water and when it boils season with salt, pepper, onion juice to taste and pour over meat. Cover and bake in moderate oven 20 minutes.

To make dumplings, sift together 2 cups flour, ½ teaspoon salt, ¼ teaspoon sugar, and 2 teaspoons baking powder. Add 1 tablespoon fat and rub it with tips of fingers, then add sufficient milk to make soft dough. Roll out and cut into small biscuits. Place on top of lamb and bake in hot oven for 12 minutes. Serve hot.

EDUCATION AND THE BALLOT BOX

NO doubt a good many parents living on farms are still debating whether or not they will send the boys and girls to high schools, who, last spring, completed the courses offered in the small district schools. Less than one month remains in which to make this decision. Upon it rests the future welfare, not only of the boys and girls, but to a considerable extent that of the nation itself, for within a few years these boys and girls will be voters. By means of the ballot they will help decide upon the officers who shall administer the laws of our states and Nation and so upon the nature of the laws by which we shall be governed.

On the Fourth of July President Coolidge said in an address before the teachers of the United States, meeting in Washington, ". . . America has . . . placed the power of government squarely, securely, and entirely in the hands of the people. For all changes which they may desire, for all grievances which they may suffer, the ballot box furnishes a complete method and remedy. Into their hands has been committed complete jurisdiction and control over all the functions of government. . . . The body politic has little chance of choosing patriotic officials who can administer its financial affairs with wisdom and safety, unless there is a general diffusion of knowledge and information on elementary économic subjects sufficient to create and adequately to guide public opinion."

Practically every President from Washington to Coolidge has warned us that the improvement of American institutions depends upon the intelligence of the voters. Think of this mothers and fathers, living on the farms, before you decide not to give your boys and girls and the nation's future voters the advantages of a high school education.

RECIPES

Cheese Soup.—4 tablespoonfuls grated cheese, 3 quarts clear soup stock, 1½ cupfuls flour, 4 tablespoonfuls fat, 2 cupfuls cream, 2 eggs, salt, pepper, and paprika to taste, finely grated cheese. Put flour into double boiler, add gradually cream, fat, 4 tablespoonfuls of grated cheese and paprika to taste, stir over fire till a smooth paste. Break in eggs, mix well, cook two minutes longer and allow to cool. Roll into balls, when they are all formed, drop into boiling water and cook gently five minutes. Drain and put into soup tureen. Pour over boiling stock and serve with dish of finely grated cheese.

Green Peas a la Maitre d'Hotel.—4 tablespoonfuls fat, 1 quart peas, salt and pepper to taste, 1 tablespoonful lemon juice, 2 sprigs mint, 1 tablespoon chopped parsley, 1 teaspoonful sugar. Shell peas and throw into plenty boiling water containing teaspoonful salt, sugar, and mint; boil fast until tender, then drain. Mix lemon juice with fat, and parsley; stir this among peas, reheat them and serve at once.

Lunch Rolls.—1 yeast cake, 1¼ cupfuls milk, 2 tablespoonfuls sugar, 2 tablespoonfuls fat, 4 cupfuls flour, 1 egg, 1 teaspoonful salt. Scald and cool the milk, then add yeast and sugar. Now add fat and 2 cupfuls flour. Beat thoroughly, then add egg well beaten, remainder of flour and salt. Mix and turn out on floured board and knead lightly and thoroughly, using as little flour as possible. Place in greased bowl, cover and set aside in warm place to rise two hours. When light, form into small rounds, place one inch apart on greased pan. Allow to rise half an hour. Brush over with fat and bake in hot oven fifteen minutes. Sufficient for twenty rolls.

A Fruit Cookie Recipe that Some Farmers Wife May Like.—2 cups brown sugar, ½ cup of sour cream, 1 cup lard, 2 cups raisins, chopped fine, 1 cup walnut meats chopped, 1½ teaspoon soda dissolved in a little warm water, 3 eggs well beaten, 2 teaspoons lemon extract and enough flour to make a soft sponge not too much flour as it will make cookies dry and brisk, 3½ cups preferred.—Mrs. A. C.

Columbia Muffins.—3 tablespoonfuls of sugar, 3 tablespoonfuls fat, 1 egg, 1½ cupfuls milk, 1 teaspoonful salt, 3½ teaspoonfuls baking powder, 3½ cupfuls of sifted flour. Sift flour, salt, and baking powder together. Cream fat and sugar, add egg well beaten, then milk and flour mixture. Divide into greased and floured gem pans and bake twenty-five minutes in hot oven. Sufficient for twenty muffins.

The Runner's Bible

(Copyright by Houghton Mifflin Co.)

But they that wait upon the Lord shall renew their strength; they shall mount up with wings as eagles; they shall run and not be weary; and they shall walk and not faint. Isa. 40:31.

Fatigue is the result of a lack of understanding, as ignorance of the Truth, a punishment for not observing the law of the Spirit. If before you begin your labors you would "seek the Kingdom of God" you would find your way made plain, your work made easier and much of it done for you.

WOMEN'S EXCHANGE

If you have something to exchange, we will print it FREE under this heading providing: First—It appeals to women and is a bonifide exchanges, no cash involved. Second—It will go in three lines. Third—You are a paid-up subscriber to The Business Farmer and attach your address label from a recent issue to prove it. Exchange offers will be numbered and inserted in the order received as we have room.—MRS. ANNIE TAYLOR, Editor.

119.—Embroidered doilies for 10 in. blocks of bleached muslin with flowers appliqued on.—Mrs. Mae Mattinson, Turner, Michigan.

AIDS TO GOOD DRESSING

FASHION BOOK NOTICE

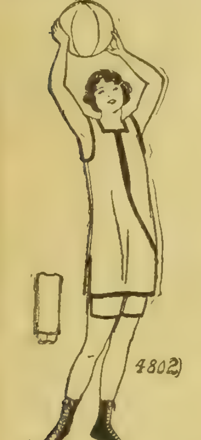
Send 10c in silver or stamps for our UP-TO-DATE FALL AND WINTER 1924-1925 BOOK OF FASHIONS, showing color plates, and containing 500 designs of Ladies', Misses' and Children's Patterns, a CONCISE and COMPREHENSIVE ARTICLE ON DRESSMAKING, ALSO SOME POINTS FOR THE NEEDLE (illustrating 30 of the various, simple stitches) all valuable hints to the home dressmaker.

BE SURE AND SEND IN YOUR SIZE

4814. A Stylish Youthful Frock.—Printed or embroidered voile, figured silk or linen would be good for this model. Organdie, linen or other plain material in contrats is nice for trimming. The Pattern is cut in 4 Sizes: 14, 16, 18 and 20 years. A 16 year size requires 3¼ yards of 40 inch material. The width of the dress at the foot is 1⅝ yard. For collar, vestee and facings of contrasting material ¾ yard 32 inches wide is required.

4815. A Popular Style.—This sleeveless dress is simple, and easy to develop. It may be of wash silk, pirnted voile, crepe or gingham. The guimpe may be of contrasting material, or may be overlaid with material to from a vest as illustrated. The Pattern is cut in 4 Sizes: 8, 10, 12 and 14 years. A 12 year size requires 3⅝ yards of 32 inch material The Guimpe of contrasting material requires 1⅛ yard 40 inches wide.

4801. A Pretty Draped Frock.—Figured foulard is here portrayed. Pipings in a plain color form a suitable finish. One could have this in crepe, pongee or in the new printed voiles now so popular. The Pattern is cut in 3 Sizes: 16, 18 and 20 years. A 16 year size requires 4⅜ yards of 40 inch material. The width of the dress at the foot is 1¼ yard.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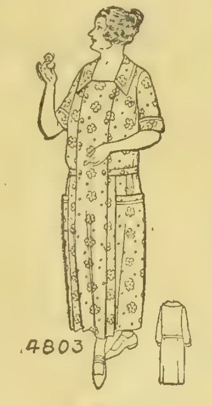
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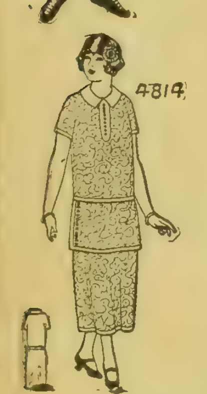
4802. A Pretty Bathing Suit.—White alpaca with bands of black sateen is here shown. This style is also attractive for satin, crepe, jersey and taffeta. The Pattern is cut in 4 Sizes: Small 34-36, Medium 38-40, Large 42-44, Extra Large 46-48 inches bust measure. A Medium size requires 3⅝ yards of 36 inch material.

4797. A Comfortable Undergarment.—This model may be developed in cambric, nainsook, crepe, silk or washable satin. The fulness at the lower edges may be gathered in knicker style, or finished with a hem in straight line. The Pattern is cut in 4 Sizes: Small, Medium, Large and Extra Large. To make this style for a Medium size requires 1⅝ yard of 36 inch material.

4818. A Pleasing Dress Style for the Little Miss.—Cotton repp or linene would be good for this model. The collar, belt, sleeve facings and pocket flap could be of contrasting color. Gingham, ratine and pongee are also nice for dresses of this kind. The Pattern is cut in 4 Sizes: 4, 6, 8 and 10 years. A 6 year size requires 2¼ yards of 27 inch material.

4796. A Good Corset Substitute for Slender Figures.—This brassiere has good lines. It is comfortable. The closing may be effected at the side front or under arm seam. Jean, cambric, brocade, linen, mesh, or sateen are good materials for this style. The Pattern is cut in 4 Sizes: Medium for Ladies, and 16, 18 and 20 years for Miisses. A 16 year size requires ⅝ yard of 36 inch material.

4803. A Pleasing Morning Dress—This is a good model for women of mature figure. The closing is effected under the panel in front. Figured percale would be nice for this style. The Pattern is cut in 7 Sizes: 38, 40, 42, 44, 46, 48 and 50 inches bust measure. A 40 inch size requires 5¼ yards of 36 inch material. The width at the foot with plaits extended is 2⅜ yard.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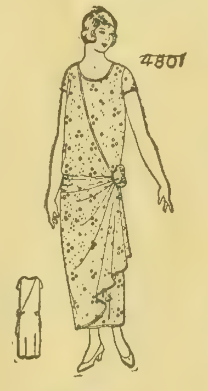
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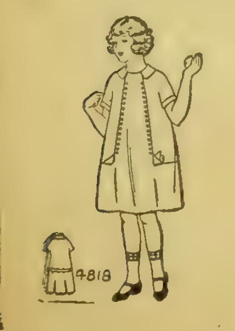
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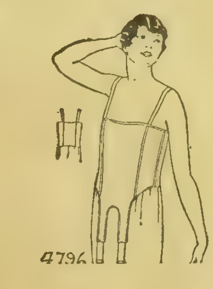
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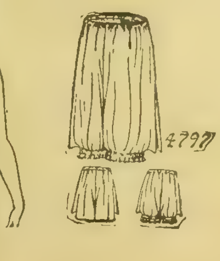
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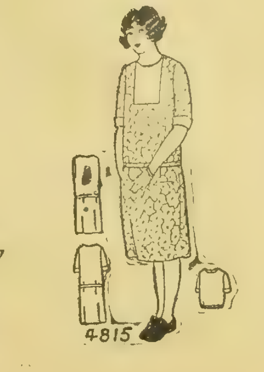
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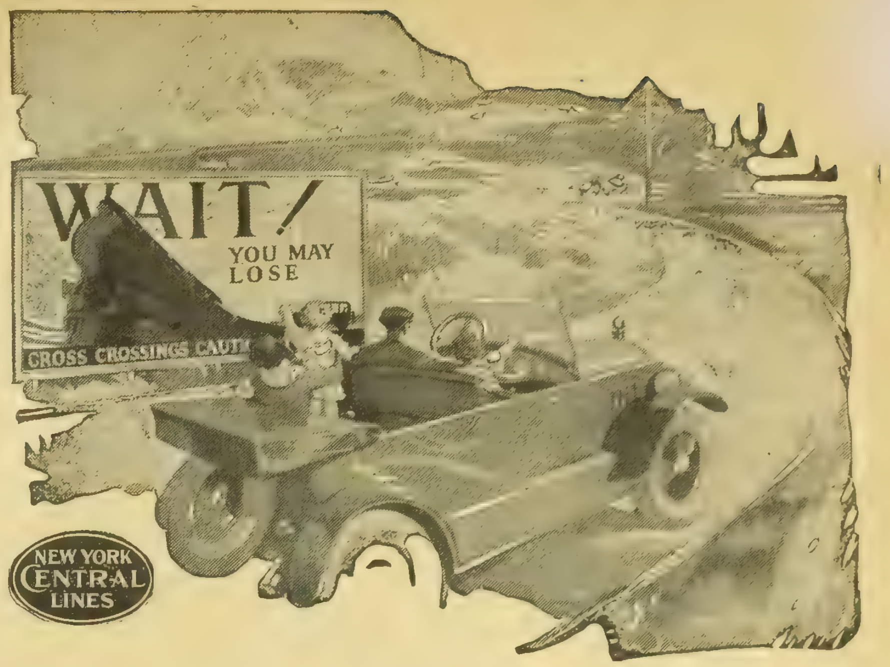

Safety at the Crossing

PROTECTION of life at railroad crossings is a work that the New York Central Lines, through its Safety Bureau, has been aggressively engaged in since the coming of the automobile.

While the records show that only a small proportion of automobile accidents occur at railroad crossings, loss of life at crossings is a cause of deep concern to railroad managements.

When it is realized that 70% of crossing accidents occur in daylight, that 63% are in the open country where approaching trains can easily be seen, and that the majority are at crossings with which drivers are very familiar—it is plain that the number of crossing accidents can be greatly reduced *if automobile drivers will not attempt to cross the tracks until they are sure that it is absolutely safe to cross.*

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The Children's Hour

KEEP WORKING

Though your goal seems for away
Keep working.
Always keep your spirits gay
Keep working.
If the sky's not always blue
Don't do what you'd like to do
For it is a trial of you
Keep working.

If you work, the sky will clear
Keep working
For it proves you have no fear.
Keep working
And always when the sky looks black
Again the test is on your track
So be prepared for the attack
Keep working.

—Orville H. Trueblood.

DEAR girls and boys: — How many of you like to perform tricks of magic? I am going to tell you how to do a very good trick but do not attempt to repeat your performance if you do not wish them to know how it is done.

This trick is knocking a tumbler through a table. You sit on a chair behind a table, keeping your audience in front of you. Place an ordinary tumbler upside down on the table. Cover the tumbler with a newspaper and press the paper down around the glass so it takes the form of the tumbler. Hold the paper to the edge of the table, let the tumbler drop into your lap, quickly returning the paper to the center of the table. The stiffness of the paper will preserve the form of the tumbler. Hold the paper form with one hand and with the other strike it a heavy blow. At the same instant let the tumbler roll easily from your lap onto the floor. It looks like you have positively knocked the tumbler through the table. Smooth out the paper before anyone can examine it.

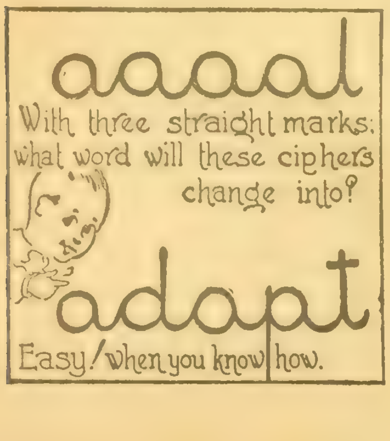
But remember, once is enough for this trick, that is if you wish to keep it a secret.—UNCLE NED.

OUR GIRLS AND BOYS

Dear Uncle Ned:—I was just reading the Children's Hour, and I thought I would try my luck at writing. I have never written to you before. I see all the cousins are describing themselves so I will too. I have dark brown bobbed hair, blue eyes, am 5 feet short, and weigh 100 pounds. I am a store-keeper's girl, 13 years old. I have one brother and one sister. I hope Mr. Waste Basket does not get my letter. I hope some of the cousins will write to me. Your niece,—Evelyn E. Crosby, R4, Merrill, Mich.

Dear Uncle Ned:—May I join your merry circle? I have been a silent reader of the Children's Hour for a long time. I will describe myself: I am five feet one inch high, weigh 114 pounds and have dark blue eyes and brown hair and fair complexion. My birthday is the 5th day of November. I live on a farm, 83 acres, with my parents, and one brother. I am 12 years old and in the 7th grade. For pets I have 1 dog and 1 cat. We have 3 head of horses, 7 cows, 4 calves and 75 chickens. One of the riddles Agnes Posey, Marine City put in the paper was: What is the last hair on a dog's tail called? Answer, dogs hair. Now Agnes I am looking for a letter from you, and Agnes you send me your picture too. Now for a riddle: What side of a horse has the most hair on? Answer, Outside. Will some of the boys and girls please write to me? I will gladly send a letter to them. I hope Mr. Waste Basket does not get his hands on me. Your niece,—Gertrude Angel, Standish, Mich., R. 1.

Dear Uncle Ned:—May I join your merry circle? I have written before but Mr. Waste Basket got my letter. This time I hope Uncle Ned gets it. I am a farmer's girl eleven years old and am four feet and six inches tall. I am in the sixth grade at school and we have already had our picnic. I have two sisters and two brothers. My sisters are fifteen and thirteen years old, my brothers are six and two years old. There were some violets in our woods and in one place there were so many you could not step without stepping on them. I got a pretty bouquet. As my letter is getting long I will close hoping some of the boys and girls will write to me. I will answer all letters received. Your niece,—Louise Frederickson, R1, Elberta, Michigan.



Dear Uncle Ned:—I was just reading the Children's Hour and thought that I would write a letter too. I hardly ever see any letters from Ithaca. I live on a farm (80 acres) north east of Ithaca. I am five feet four inches tall and I am fifteen years old. We have two canary birds which I enjoy very much. I have four brothers. Their names are Wayne, Clark, Theodore, and Ezrar. We have an Overland car and I drive it. We have a dog and his name is Mack. I go to town school and I will be in the eighth grade next year. I hope to get lots of letters from the girls and boys. I will close as it is late. Your niece,—Margaret Deveraux, Ithaca, Michigan.

Dear Uncle Ned:—I have just been reading the M. B. F. and the Children's Hour. Say Uncle Ned, I think that Ilene Wingard and Helen Goodrow has some good ideas, don't you? Well I believe I had better describe myself. I am real short for my age but I weigh 103 pounds. Can anyone guess my age? I have blue eyes, dark hair (and it is not bobbed). Well my letter is getting a little long so will close hoping that you have moved the waste paper basket a little way off. I will answer any letters from those who try to guess my age. Your long-haired niece,—Kathryn Seaton, R. 3, Fenton, Michigan.

Oh you dear old Uncle Ned:—How glad I was today to know you were still among the living. Do you remember me? You surely do. It has only been two or three years (but it seems ages) since I was a friend among the cousins. I made many dear chums during my stay. I think I received letters from nearly 50 boys and girls.

If you remember when I last wrote my daddy was very sick and was in the hospital several weeks during which time I was away from home. Many letters came to me during that time and when I came home papa was so very sick yet—well it just seemed some way after papa's trouble things changed—I didn't answer all of my big stack of letters, partly for lack of postage and stationery and partly because I was too sad to sit and write I guess, then our M. B. F. expired and we failed to renew and I got completely lost from you. But we have again subscribed for our good old friend. We got our first copy today and I was real surprised to see our page still lived, as a friend had told me the Children's Hour had been taken out.

Although it has only been two or three years since you heard from me (as I said before) I have changed quite a bit. I am now 16 years old and have changed my long curls for "bob" but I am still the same old "farmer John" helping daddy out of doors, ride horse-back, hoe—yes "Whistle and hoe, sing as I go". I am as busy as a bee all week but I go to church every Sunday. Our minister is just the loveliest old gentleman you ever saw Uncle Ned. We had a Sunday school picnic at the beach on the 4th. We sure all had a lovely day. I won second prize in the girls' foot race.

My! Did I hear you say you did not remember me? Why don't you remember Eathel Fay Sharp that sent you the handmade string to wear around your neck? The "kid" that won the flashlight for the best letter written about the fair they attended? I knew you just couldn't forget her. Ha! Ha!

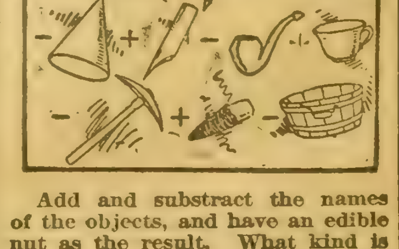
I will send you a picture of myself taken the day I graduated as soon as they are finished. Guess I must close now. Am glad I found you and hope we will meet again. Your want-to-be niece,—Eathel Fay Sharp, R3, Akron, Michigan.
—Well, well—and a couple more wells, if here isn't Eathel back. It's about time you came back young lady and I don't want you to neglect writing for such a long period again. If you do—well. And you, an old friend, even thought the Childrens' Hour had been taken out of M. B. F. Why the very idea. Tell your friend that as long as M. B. F. is printed the Children's Hour will be a part of it. Come again, Eathel, and don't forget to send that picture.

Dear Uncle Ned:—Knock, knock. Can I come in? I hope so as I have never before. Whoa back, hold on! I had better describe myself hadn't I? Well I am 12 years old and am in the seventh grade at school. Do you think that is very good? My hair is quite dark and of course it is bobbed. I wouldn't have long hair, would you Uncle Ned? Say Uncle Ned why couldn't we have a drawing contest on some things? I think it would be fun. Well I think Mr. Waste Basket has got his eye on this letter. Your want-to-be niece,—Miss Belma Hogan, Muir, Mich., in care of Hogan Bros.
—No I would not have long hair, in fact I believe long hair would not be very becoming to me.

Dear Uncle Ned:—As you see from my address I have moved since you last heard from me. I moved ten miles, on the 17th of January, 1924. Some cold day to move, too, especially a long one. We did it in a sleigh and it did not seem very long to me. Well Uncle Ned, I am sending you another poem which I hope you will see fit to publish. Not very long ago, I saw a poem at the head of our page and it looked so nice I decided to try my luck again. Well, as I don't want to take up too much space, I guess I will close for the present. Goodbye, Uncle Ned and all the cousins. From your poetic nephew—Orville H. Trueblood, R2, Muir, Michigan.
—Your poem is very good, Orville, and I am publishing it at the head of our page. Send in more of your poems.

Dear Uncle Ned:—Oh! now don't say you don't want me to come in because I come so often. If you let me in now I won't come again for a long while. Cousins don't you think that would be all right? I think Billy Frank is 17. Am I right? What did all the cousins do on the 4th? I had an awful good time. We went to a lake, it is a resort. Went in bathing in the forenoon and danced in the afternoon and there were fireworks at night. I will close with a riddle. What is it goes all over the fields and through the woods and comes to the doorstep yet never comes in? I would like all the cousins to write to me, girls and boys, old and young. Your loving niece—Beatrice Campbell, R. No. 5, Box 39, Hesperia, Michigan.
—Sure I will let you in. There is not limit to the number of letters you may write to me.

Dear Uncle Ned:—May I join your merry circle? I have been a reader of the M. B. F. for a long time. I live on a farm of 90 acres. We have 3 horses, 13 head of cattle, 18 head of sheep and 200 chickens. For pets we have 8 cats and a collie dog named "Jiggs". Jiggs is a regular playfellow. If the cows are in sight he will go after them and does many other things. He likes to play ball and if he catches the ball sometimes runs away with it and sometimes takes it to someone not playing. I think I had better describe myself or you will be wondering what kind of a "chicken" I am. Ha! Ha! I am 5 feet 3 inches tall, weigh 125 pounds, have medium brown bobbed hair and grey blue eyes. I will be a junior in Hillsdale high school next year. I wear glasses which are a lot of bother when I'd like some fun but cannot see very good without them. I am a Girl Reserve, our club is called "Honembro", it was organized last fall—four district schools going together, we have lots of fun. Oh yes, I will let you guess my age and birthday. My age is between 15 and 20 and my birthday is between July 2nd and 10th. Those who guess my birthday and age right or nearly right will receive a letter from me. I like English, history and domestic science. I have enrolled in English XI, modern history, economics, music and cooking. I have had 2 years of sewing. I like camping and horseback riding best of all sports. Well I must close for this time as the catchall waste paper basket will surely catch this. I would like to hear from some of the boys and girls between the ages of 15 and 20. From a want-to-be niece—Ruth Brown, R. 1, Box 71, Hillsdale, Michigan.
—I enjoyed all of my studies when I went to school and especially reading. As for sports I like to skate, swim and play ball.



Add and substract the names of the objects, and have an edible nut as the result. What kind is it?

Answer to last puzzle: OCELOT, MARMOT.

Why the Ostrich Hides Head

"MY dear," said Father Ostrich to the tallest and finest of his four wives, "it is your turn to watch our twenty new, white eggs."

And Father Ostrich, who was very tall, craned his neck and looked proudly toward the nest of eggs which were snuggled away in a pit in the warm sand.

The eggs were as large as cocoanuts, and the shells pure white and very thick. About the thickness of a china cup. And, of course, Father Ostrich was very proud of them. For soon tiny, fuzzy-uzzy baby ostriches would peep through, and they would grow bigger and bigger and some day their feathers would be sold for a great deal of money.

Mother Ostrich waved a fond farewell to Father Ostrich, declaring she would take care of the beautiful, white eggs. But no sooner had Father Ostrich left, than Mother Ostrich happened to think of a lovely little spring of water a short distance away. Now in the Sahara desert where the Ostrich family lived, there are very, very few springs of water. And mother Ostrich dearly loved a cool bath, and a fresh drink.

She looked at the twenty new eggs, which were pure white with very thick shells.

"Surely nothing will harm them", thought Mother Ostrich, thinking of the bath she loved so well and the cool, fresh drink. And slowly, almost without realizing what she was doing Mother Ostrich paddled over the ocean of sand toward the cool spring.

The more she thought of the cool spring and the fresh drink, the faster went her long, strong legs. Soon she was going faster than a horse could trot. Her little blue bonnet bounced as she ran.

True, my dears, she was a little worried about those twenty white eggs, from which twenty little fuzzy-uzzy heads would soon peep.

"Oh well, I am sure nothing will harm them", she reasoned with herself. "And perhaps one of the other ostriches will return and guard them." You see, Mr. Ostrich always has four or five wives.

Well, while the neglectful Mother Ostrich was running very fast toward the cooling oasis which was very far away from her home, Mr. Jackall was hunting, hunting for a feast of ostrich eggs. Just think of that!

Mr. Jackall was becoming very much discouraged. For you see, wild ostriches have become very, very scarce. Of course, my dears, many tame ones are raised on ostrich farms.

But there, I must tell you about that horrid old Mr. Jackall. Because of course you are wondering about those twenty white eggs.

About the time Mr. Jackall had decided to give up the search he happened to spy those beautiful, pure white eggs, which Father Ostrich had guarded every night so proudly for such a long, long time. And which Mother Ostrich had neglected.

"Oh my, oh me!" snapped Mr. Jackall, putting one lean paw over his empty stomach. "Such a fine meal!" Um-m-m-m!"

And, my dears, before you could say "Jack Robinson" that horrid old Mr. Jackall had gobbled up those twenty beautiful, white eggs which were as big as cocoanuts.

Then very, very quickly and quietly he stole away.

At just this time the Mother Ostrich was hurrying, hurrying home. It is true she was very much worried, and why should she not be? She had shirked her duty!

As soon as she reached the nest which was in a pit in the warm sand, she started running wildly around in a circle, for, goodness gracious me! every one of those snowy white eggs were gone! Even the few eggs which had been laid outside the nest for food for the young fuzzy-uzzy ostriches was gone. Just think of that!

Mother Ostrich's heart sank. And there came Father Ostrich!

Mother Ostrich was so ashamed. What would she do? Suddenly, in desperation, she dove her long neck, little blue bonnet and all, into the sand, thinking that Father Ostrich would not see her.

And whether he did or not, my dears, you may guess. And what poor, sad Father Ostrich said to Mother Ostrich you may also guess. For, of course, Mother Ostrich could not expect mercy when she had neglected her duty.

And ever since the Ostrich family has had the sly little trick of burying their heads in the sand, when they do not wish to be seen.—Helen Gregg Green.

Michigan Crops Look Promising!

Much Wheat Threshed Direct From Field—Less Oats Barley, Rye, Buckwert, Potatoes, Hay, but more Beans and Beets Forecasted.

Too much rain in some sections.

CORN

Present conditions point to another good crop in Michigan, the present condition of 90 percent representing a production of 62,213,000 bushels, the fifth crop in succession to exceed 60,000,000 bushels. On good lands, the stands are excellent, the growth is large, and the stalks are earing well. Dry weather has caused some firing in small areas but no excessive damage is reported.

WHEAT

Threshing is well under way, much grain being threshed direct from the field because of extreme labor shortage. Returns to date indicate an average yield of 17.0 bushels per acre or a total winter wheat crop of 16,456,000 bushels. The average yield in Michigan is 16.7 bushels per acre. The quality of the grain is excellent and is rated at 90 per cent, two per cent better than last year and the ten-year average.

The condition of spring wheat is similar to that of other spring sown grains, the early part of the season being too dry. The present outlook is 80 per cent, representing a production of 125.000 bushels.

OATS

Oats continued to improve up to the time of cutting, and on heavy soils is a generally good crop except in localities where drought has prevailed. On the rolling and light lands the straw is very short but a good yield in proportion to the quantity of straw is expected. The probable production is estimated to be 48,043,000 bushels, or slightly less than that of last year. The protion of last year's crop still remaining on farms is reported as 7 per cent.

BARLEY

Beneficial rains occurred in some of the best counties, and the estimate is increased to 3,483,000 bushels which is about the same as that of last year. The condition is 82 per cent or three per cent below the ten-year average.

RYE

Threshing is in progress and early returns indicate an average yield of 14.0 bushels per acre. The average for the last ten years is 14.3 bushels. The production is estimated to be 7,252,000 bushels the least since 1917. The quality of the grain is generally good, averaging 92 per cent.

BUCKWHEAT

The preliminary inquiry regarding the acreage sown this year has been completed and resulted in an estimate of 60,000 acres as compared with 62,000 last year. There was a considerable increase in some sections, but the general shortage of labor and heavy farm abandonment in many of the principal counties caused the smaller total. The crop is generally doing well and shows a condition of 87 per cent or three per cent above the ten-year average. This represents a production of 887,000 bushels.

POTATOES

The condition of the potato crop is slightly above the average being 83 per cent as compared with 87 per cent last month and last year. Some of the seed was damaged by extreme heat following planting causing poor stands. Dry weather has also caused a spindling growth in some localities, but there are many fields in excellent condition. The present outlook is for a crop of 29,297,000 bushels on the 318,000 acres planted. Last year's final estimate was 37,842,000 bushels. The rainfall during the next four or five weeks will be the principal factor in establishing the actual yield.

HAY

Clover and timothy hay was a light crop except in a few eastern and northern counties where ample rainfall produced a good yield. Alfalfa yielded well in most section although not quite up to the average. The total production of tame hay is estimated at 3,408,000 tons or a little over one million tons less than last year. Considerable hay was damaged by rains in eastern and northeastern counties.

FIELD BEANS

The crop is exceedingly good in nearly all section. There has been a little local damage by dry weather, and there are some complaints of disease and failure to set pods. This has lowered the average condition two points from last month which was less than the average decline in July, hence the estimated production is slightly greater than that of July 1 being 6,825,000 bushels.

SUGAR BEETS

Fields present a varying condition, ranging from stands of 50 per cent or less up to perfect stands. Moisture has been insufficient in some sections but on the whole the growth is satisfactory and the condition is 85 per cent, one per cent higher than last month.

TRUCK CROPS

Tomatoes have maintained the same condition as one month ago, 86 per cent. Cabbage shows a decline of one per cent to 85 per cent. Early varieties are being harvested and marketed. Onions now show a condition of 87 per cent, having improved five cent as a result of rains in the main commercial districts.

FRUIT

The estimate on the agricultural crop of apples is increased to 12,045,000 bushels as compared with a total production last year of 11,850,000 bushels.

The peach crop is maintaining its earlier favorable prospect, the present indications pointing to a crop of 1, 172,000 bushels as compared with a production of 1, 440, 000 bushels last year. The early varieties are being harvested and marketed.

CROP REPORTS BY COUNTIES

CALHOUN—Crops very good except corn which will be as good as ever if frost will hold off till Oct. 1st.—B. B. C., County Agent.

MUSKEGON—Corn about 4 weeks behind calendar but improving. Potatoes are good, also oats and wheat. Small fruits, good yields. Apples fair set.

JACKSON—Oat crop very good, corn way behind, abundance of hay, new seedings generally good and some wheat being threshed with fair yields reported.—R. E. Decker, County Agent.

IONIA—Wheat in shock being quite badly damaged by too much rain-yield heavy. Corn very short and poor stand. Hay fair crop-badly damaged in making. Beans very good. Oats unusually heavy crops-down badly.—R. L. Helm, County Agent.

CRAWFORD—Abundant and timely rains making corn, oats and potatoes splendidly; also bringing on good second cutting of alfalfa and clover, as well as making it safe to sow clover. Crops got a late start this spring. Will be little or no hard corn in this county.—R. D. Bailey, County Agent.

MANISTEE—Cherries, cracked and brown rot developed due to excessive rain. Crop 60 per cent. Berries heavy crop—bad rain damage. Potatoes, cucumbers, beans—good prospect. Grain-weather interfers with; heaviest prospective yield good. Corn-very late-poor prospect.—H. M. Vaughn. County Agent.

VAN BUREN—Corn poor stand, backward, alfalfa heavy first cutting, second cutting good but poor weather to get it up. Grapes fair crop, quality promises good at present. Apples light crop, lots of scab. Wheat fair crop, poor weather for harvesting. Peaches but very few around S. Haven, fair crop.—W. C. Eckard, County Agent.

OTSEGO—Corn very backward; oats normal crop; rye about 5 year average; potatoes showing fairly well for this date. Pasture continues good on account abundant rains; hay exceeding June promise and feed supply; excellent corn seem assured, alfalfa again stepping out in front as a champion producer of quantity hay. Excellent year for seedings.—A. C. Lytle.

NEWAYGO—Corn three weeks late. Wheat 75 per cent damage from excessive rains during harvest, growing in shock. Beans suffering from too much rain. Potatoes fair but above cause damaging crop. Oats getting over ripe and storms have caused them to lodge badly. Apples fair average with light crop of winter varieties.—Clair Taylor, County Agent.

OGEMAW—Crops appear the best all around that they have appeared at this time of year for several years. Hay crop has been at least normal, potatoes never looked better, oats have overcome their late start, wheat is the best in several years, rye is a normal crop, and corn has gained much with a late start. Corn is perhaps the one crop that is below normal for this time of year.—W. C. McCarthy, County Agent.

TUSCOLA—Wheat a fine yield but much sprouting in shock. Oats average down very much. Barley good if wet weather does not continue. Beans—rains did great deal of damage, many fields look as if they will not be worth harvesting. Potatoes late blight starting, potatoes set heavy. Corn very uneven much will not mature. Alfalfa good but bad curing weather. Rye good but some sprouting. Beets fair to good. Clover as with alfalfa.—County Agent.

ST. CLAIR—The incessant rains of the past two weeks have been very detrimental to the crops being harvested. Much hay is still uncut, also many acres of wheat. Wheat in the shock is beginning to sprout. Oats are down badly although will undoubtedly fill fairly well on account of the moisture in the soil. Corn has picked up in the past three weeks. Corn and beans very weedy on the average. New seeding exceptionally good, although much mildew on the clover. C. M. Kidman, County Agent.

OTTAWA—Wheat was best looking crop ever, but continued rains have sprouted considerable. Early potatoes best crop ever raised in county. Late potatoes not doing so well, too wet for them. Corn very backward altho some on light soil is coming satisfactoraly. Oats ripe and being cut. Good crop. New seedings of alfalfa and clover are fine. This is also an exceptionally good season for development of weeds. Farmers felt fine about conditions of crops, but unless warm clean weather prevails they will feel pretty blue.—C. P. Milhan, County Agent.

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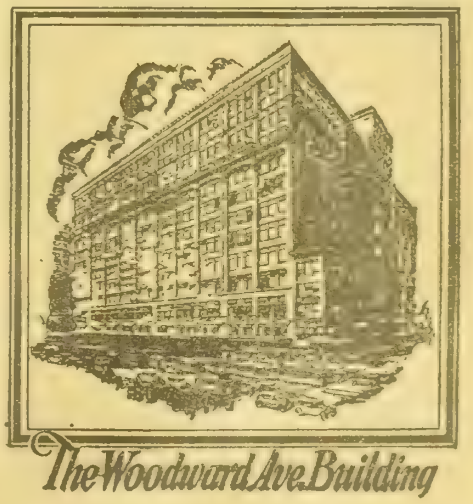
Visit the fair (August 30 to September 6). Do your buying for Fall and Winter at the same time at the Anniversary Sale, (beginning September 2).

You will find every convenience of this great store at your service while in the city and you are cordially invited to make full use of it.

Further Details of the Anniversary Sale will appear in the August 30th issue of this paper and in the Detroit Daily Newspapers.



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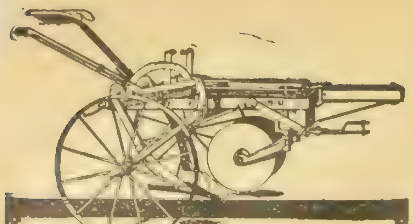

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This machine loosens the soil and raises the beets slightly so they can be readily pulled. They are not jerked out and strewn on the ground where they will lose weight by being exposed to rain and frost and the sun's rays. Remember, beets are sold by weight.

The blades do not injure roots. Foot dodge enables you to follow uneven rows. Light draft; only two horses needed under ordinary conditions.

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Does not blister or remove the hair and horse can be worked. Pleasant to use. $2.50 a bottle, delivered. Describe your case for special instructions and Book 5 R free.

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CLAIM YOUR SALE DATE

To avoid conflicting dates we will without cost, list the date of any live stock sale in Michigan. If you are considering a sale advise us at once and we will claim the date for you. Address, Live Stock Editor, M. B. F., Mt. Clemens

Oct. 16—Holsteins, C. S. Heeg and Sons, Howell, Michigan. F. J. Fishbeck, Sale Manager.

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HAVE BRED HEREFORDS SINCE 1860 Our herd bulls are International Prize Winners. Stock of all ages for sale, at Farmers prices. Write for further information.
Feed Herefords that fatten quickly.
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Wt. around 850 lbs. 74 Wt. around 775 lbs.
Wt. around 650 lbs. 44 Wt. around 600 lbs.
Wt. around 550 lbs. 50 Wt. around 500 lbs.

red, good grass flesh. Some bunches just flesh account short pasture. Real quality Herefords are usually market toppers when finished. Will sell your choice one car load or all. number and weight preferred.

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JERSEYS, POGIS 99th OF H. F. AND breeding. Young stock for sale. Herd accredited by State and Federal Government. Write or visit for prices and description.
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DAIRY and LIVESTOCK

HARNESSING FENCE JUMPERS

MANY contrivances have been devised to prevent horses from jumping fences. Yokes of all descriptions have been constructed with the central thought of punishing the animal when he approached the fence, with the result that horses are often injured by such contrivances. A contrivance free from such dangers, and equally, if not more efficient, is made as follows: Procure a surcingle with a ring at the bottom, a short piece of rope, and two leg-straps provided with rings. Place the surcingle on the horse and buckle the straps about the forelegs just above the knees. Tie one end of the rope in the ring at the back of the left knee, then pass the free end up through the ring at the bottom of the surcingle, then down, drawn medium tight, and tie in the ring at the back of the right knee. This will permit the horse to walk naturally, lie down, get up, and in fact, do almost anything except run or jump, which it most effectively prevents. The principal advantages are that there is no risk attached to its use and the horse's head and neck are perfectly free.—Nor'West Farmer.

STATE FAIRS WILL AWARD HOLSTEIN PRIZES

THE two leading fairs to be held in Michigan this year will receive special prizes from The Holstein-Friesian Association of America in addition to those awarded by the fair associations. The Michigan State Fair, Detroit, August 29 to September 7, will receive $718.50 and the West Michigan State Fair, Grand Rapids, September 15 to 19, $107.40.

To be eligible for receiving this money the following requirements prevail:

1. All animals must be registered before exhibition and must stand on the records of The Holstein-Friesian Association of America in the name of the exhibitor.
2. The awards must be placed by one of the official judges of the Association who will award no prize except where the animals are strictly first-class.
3. The judge or the superintendent of dairy cattle shall examine the certificates of registry and transfer to see that the provisions of the first requirement have been complied with.
4. The Association's share of the prizes will be paid direct from the Secretary's office and not by the fair management.
5. All animals over six months old must have been tested for tuberculosis within six months by a duly accredited Federal or State veterinarian. The certificate showing freedom from this disease must be exhibited to the fair authorities. Grounds and barns must be disinfected in accordance with Federal or State requirements.

Special prizes to boys and girls in calf club work will also be awarded at state fairs and national dairy shows by the national Holstein Association. The amount offered at each show is determined by the number of Holstein calf club members enrolled by the state college boys and girls club leader.

DETROIT CREAMERY OWNS NEW HOLSTEIN CHAMPION

MICHIGAN'S new Holstein champion cow for ten months' production as a junior three-year-old Traverse Duchess Korndyke, owned by the Detroit Creamery Company at Mt. Clemens. Her record is 20,456.4 pounds milk containing 671.43 pounds butterfat, equivalent to 839.2 pounds butter, according to the advanced registry department of The Holstein-Friesian Association of America.

As a consequence of this record she displaces the former state champion in her class, Flint Maple Crest Crown De Kol, who in the herd of D. D. Aitken of Flint, made a record of 17,849.1 pounds milk and 743.5 pounds butter.

GOAT TO PROTECT SHEEP FROM DOGS

Could you tell if goats were used as a protection in large flocks of sheep against dogs? If so is it the buck or ewe goats that are the best? I am a reader of your paper and have a large flock of sheep and would like to protect them against dogs.—E. J. F., Lambs, Michigan.

THE goat is not as timid an animal as a sheep and consequently not as easily frightened and will in many cases turn to fight a dog rather than fleeing from it.

Sheep on the other hand are very timid and easily frightened, and once they are running it is of course sport for the dog to catch them.

Billy goats are, therefore, a slight measure of protection against dogs, as the sheep are not nearly as apt to be stampeded and it is extremely doubtful if a dog would commence a sheep killing career in a flock where there were several goats. On the other hand, a dog which was a real sheep killer, or especially savage, would not be in the least deterred by goats.—Geo. A. Brown, Professor of Animal Husbandry, M. A. C.

HIGH COWS IN TESTING WORK IN MICHIGAN DURING JUNE

The following tables show the 5 high cows in the respective age classes in the Michigan Cow Testing Associations reporting for the month of June. These are the highest butterfat producers in the test work in the seventy-eight associations reporting. There were eighty-nine associations in operation.

Association	Owner	Breed	Date Fresh	Lbs. Milk	Lbs. Fat
Mature Cows—Five Years and Over					
Ionia-Belding	State Hospital	PB H	4/25/24	2490.0	*89.6
Genesee No. 3	John P. Eddy	Gr. H	4/10/24	2058.4	88.4
Genesee No. 7	J. E. Post	PB H	3/28/24	2397.0	**86.29
Muskegon-Ravenna	I. J. Bennett	Gr. H	3/26/24	1725.0	86.25
Washtenaw-Chelsea	Roland Waltrous	Gr. H	5/25/24	2135.0	85.4
Under Five Years					
Gratiot-North	George Davis	Gr. J	5/16/24	1581.0	98.0
Macomb No. 1	Frank Wilcox	PB H	5/15/24	1680.0	89.0
St. Clair No. 1	L. G. Meharg	PB H	5/25/24	2235.0	88.2
Ionia-Belding	Mich. Reform.	PB. H	5/27/24	1698.0	**79.8
Macomb No. 1	Frank Wilcox	Gr. H	3/2/24	1643.0	77.2
Under Four Years					
St. Clair No. 1	Dunning & Nolan	PB H	5/18/24	2646.0	*97.0
Washtenaw-Ann Arbor	J. G. Lewis	PB H	3/17/24	2016.0	*76.6
Macomb No. 1	Frank Wilcox	Gr. H	3/3/24	1816.0	72.6
Marquette	J. B. Duetsch	PB G	4/5/24	1173.0	**71.0
Van Vuren-North	T. C. Tiedebohl	PB H	3/25/24	1905.0	*70.4
Under Three Years					
Livingston No. 1	J. R. Crouse	PB H	3/24/24	1350.0	64.8
Genesee No. 1	I. E. Parsons	Gr. J	6/2/24	828.0	63.7
Allegan-Central	John Tobin	PB H	5/13/24	1584.0	61.8
Marquette	J. B. Duetsch	PB G	12/17/23	1281.0	**59.0
Berrien	P. F. Schriner	Gr. G	5/13/24	1180.0	57.8

The following table shows the ten high cows in milk production in the seventy-eight Cow Testing Associations reporting in Michigan for the month of June.

Association	Owner	Breed	Date Fresh	Lbs. Milk	Lbs. Fat
Ionia-Lake Odessa	Fred Reahm	PB H	5/14/24	3069.0	79.8
Kent-W. Alpine	J. N. Lamoreaux	PB H	4/27/24	2724.0	73.8
Eaton-South	E. F. Reynolds	PB H	4/19/24	2691.0	*78.0
St. Clair No. 1	Dunning & Nolan	PB H	5/18/24	2646.0	97.0
Calhoun	Lakewood Dairy	PB H	3/2/24	2526.0	**68.2
Genesee No. 3	H. E. Helms	PB H	1/8/24	2501.7	*75.0
Ionia-Belding	State Hospital	Gr. H	4/25/24	2490.0	[illegible]
Van Buren-North	T. C. Tiedebohl	PB H	3/23/24	2484.0	*81.[illegible]
Genesee No. 7	J. E. Post	PB H	1/31/24	2442.0	**73.8
Genesee No. 7	J. E. Post	PB H	3/28/24	2397.0	**86.[illegible]

*Three milkings per day. **Four milkings per day.

The Cow and the SOW

REMEMBER, it's but a short distance from your cow's udder to the cream pitcher—the butter plate—the nursing bottle.

Keep her surroundings healthful, free from disease germs, and clean smelling, with Dr. Hess Dip and Disinfectant.

Provide a wallow for your hogs. To each 25 gallons of water, add about one quart of Dr. Hess Dip. Your hogs will do the rest. Good night lice and disease germs!

Use the sprinkling can—in the poultry-house for lice and mites, wherever there is filth or a foul odor.

DR. HESS & CLARK, Inc.
Ashland, Ohio

DR. HESS DIP and DISINFECTANT

This Absolutely Guaranteed Everwear Harness for
$59.00
$5 down
easy payments

Made of best Oak Tanned Leather

All Leather Thong Stitched Collar
$3.98

At your dealer's today—you can carefully examine it before buying—also other styles.

REMEMBER, you are trading with your local responsible harness dealer who guarantees and stands back of this harness. No freight or express to pay.

Only the finest heavy leather, highest grade workmanship and best hardware ever goes into Everwear harness.

Thousands of farmers have been using Everwear harness for a long time—they know its quality and have proven it pays to buy Everwear brand. Your dealer has Everwear harness and collars—or can get them for you.

McIntyre-Burrall Co.
Green Bay, Wis.
Look for this trademark on the harness

GUERNSEYS

MAY — GUERNSEYS — ROSE
STATE AND FEDERAL ACCREDITED
Bull calves out of Dams up to 877 pounds fat. Sired by Bulls whose Dams have up to 1011 pounds fat. The homes of bulls; Shuttlewick May Rose Sequel, Jumbo of Briarbank and Holbecks' Golden Knight of Nordland. From Dams producing 1011.18 fat, 772 fat and 610 fat.
GEORGE L. BURROWS or GEORGE J. HICKS, Saginaw, W. S., Michigan.

PURE BRED GUERNSEY BULL CALF for sale.
C. R. TALBOT, Farmington, Michigan.

SWINE

HAMPSHIRES

HAMPSHIRES—BRED GILTS AND BOARS at bargain prices. Write your wants. 12th year.
JOHN W. SNYDER, St. Johns, Mich., R. 4.

DUROC

We Can Offer Real Bargains in
High Class Durocs
Prices delivered your station on request.
LOEB FARMS
The home of Grand Champions, Charlevoix, Mich.

FOR SALE—FINE BUNCH OF DUROC PIGS big long kind. Price $10.00. Registered and immune. F. A. LAMB & SON, Cassopolis, Mich.

FOR SALE; Large Poland China, Either Sex. Hampshire sheep. One year old Shetland Pony. H. W. Garman & Sons, Route 3, Mendon, Mich.

THE FUTURE IN DAIRYING

THE farmer has been feeling competition most keenly since the war. This is due to many causes: poor prices for farm products compared with prices for other commodities, high labor costs, and a higher standard of living on the part of the farmer. How much we can change these conditions thru legislation is a question that will not be discussed here.

The American dairy farmer is protected by a tariff which in round figures is 32 cents on 100 pounds of milk or its products. This does not prevent the importation of dairy products from eight or ten countries but consumption has taken it all and prices are still pretty good.

In my opinion the time is coming when we will have a surplus of dairy products and turn from an importing to an exporting country. This will mean a lower price which we must be prepared to meet. The principal expense in dairy production is the cost of feeding the cows, and we are fortunate in being able to compete with any country on this score. We who live in the land of clover, alfalfa and corn are favored and should be able to compete with any state or country. If we have to go out of the dairy business because we cannot compete, then I say we ought to quit, for it shows we are lame ducks on the essential economic factors of dairying.

Keep in mind there are a lot of states doing great work in the dairy business, and are increasing their output at a rapid rate, the government figures show that the state of Michigan has doubled her output of butter during the past seven years; Minnesota and Wisconsin have increased from 40 to 50 per cent; California, Ohio, and Indiana have shown a marked increase. The Dakotas and Nebraska are also increasing rapidly. Idaho and Montana are putting on dairy campaigns, and Nebraska is preparing to double her dairy business in the next five years. The southern states are encouraging dairying, and Kentucky has a Better Sires—Better Breeding campaign, which beyond question will result in a big increase. The dairy farmer has prospered and has come through this agricultural depression with flying colors. Dairy districts are not complaining of hard times. The country banker will tell you in short order that his patrons who milk cows have good credit in his bank.

We can stand over-production providing we are producing with economy. States keeping cows that produce from 100 to 150 pounds of butterfat cannot compete with states keeping cows that produce 200 or 250 pounds per cow. Neither farmers compete who feed inefficiently, who ignore the economic value of the silo or the value and use of legume hay.

While we are building our dairy industry let us understand the importance of laying the foundation on a substantial basis so we can turn from an importing to an exporting country without suffering a loss.—A. L. Haecker.

TESTING WORK COMING ALONG FINE

FOR many years Huron county has been known as the center for excellent beef cattle. A gradual change has occured and the nearness of large cities has necessitated the using of dairy cows in place of the beef cows. In June, 1923, work was started in Huron county to put these dairy cows on a better paying basis. Twenty-six dairymen went together and organized what was known as the Huron-Ubly Cow Testing Association. In June Otto Vestergaard cow tester reported that the average production for the 229 cows owned by these 26 dairymen averaged 267 pounds fat and 7788 pounds milk. One of the outstanding herds was owned by Mr. Donald Gordon. His seven cows were high in both milk and butter fat, producing 11,313 pounds milk and 420.3 pounds fat. Mr. Gordon's cow Diana, a grade Holstein nine years old, made 14,418 pounds milk and 550.1 pounds fat, highest cow in milk and butter fat production in the association.

Other herds that did well were owned by Ernest Hagen, Chris Krug, Frank Bensinger and Howard Nugent. That there is still plenty of chance for further improvement is evident in a summary of the four poorest herds in butter fat production which averaged 196.6 pounds butter fat and 5,629 pounds milk. The four highest herds averaged 365.9 pounds fat and 10,380.5 pounds milk. Sixteen cows made better than 365 pounds fat for the association year. The four poorest cows in the association averaged 3,948 pounds milk and 144.9 pounds fat. Not more cows but better cows are needed.—A. C. B., Dairy Ext., M. A. C.

MONROE FARMERS CONTINUE COW TESTING WORK

LYNN DEXTER, tester in the Monroe Association, reports that George Ihrig & Son had high herd in butter fat and milk production in the Monroe C. T. A. Ihrig & Son's nine purebred Holstein cows averaged 11,524 pounds milk and 357.1 pounds fat.

Guy Doty had high cow in milk and butter fat production. His seven year old purebred Holstein cow Flossie made 15,756 pounds milk and 532.6 pounds fat. Three hundred fifteen cows averaged 232 pounds butter fat and 6,590 pounds milk. The four poorest herds averaged 162 pounds fat and 4,940 pounds milk. Twenty-four cows made better than 365 pounds fat.

All members in this Association are using purebred sires. Mr. Dexter, the tester, reports that members without silos had a higher feed cost than members who used silos. The Monroe Association is carrying on the work and Mr. Dexter is continuing the testing.—A. C. B., Dairy Ext., M. A. C.

FLY REPELLANT

Can you give us a recipe for a spray mixture as a fly repellant on stock?—J. N., East Jordan, Mich.

WE send you two formulae for fly repellants which we find pretty fairly satisfactory: 12 oz. oil of tar, 12 oz. turpentine, 12 oz. crude carbolic acid, 10 or 15 cents worth of tannin. Make up to 5 gallons with kerosene. Apply lightly with atomizer.

Another formula: Coal oil, lard, carbolineum. Mix equal parts.—B. H. Pettit, Professor of Entomology, M. A. C.

VETERINARY DEPARTMENT

ONE QUARTER OF UDDER HARDENS

"I am writing to ask advice about one of my cows. About once a month one quarter of her udder will swell up hard and I will be unable to get but very little milk and then the next milking that quarter will soften up and I will milk out a lot of ropy milk and then that quarter will be all right. Sometimes it will occur twice in the quarter then in some other quarter. Now this is a good cow and I would like to cure her. Is this a sign of T. B.?—F. B. T., Midland, Michigan.

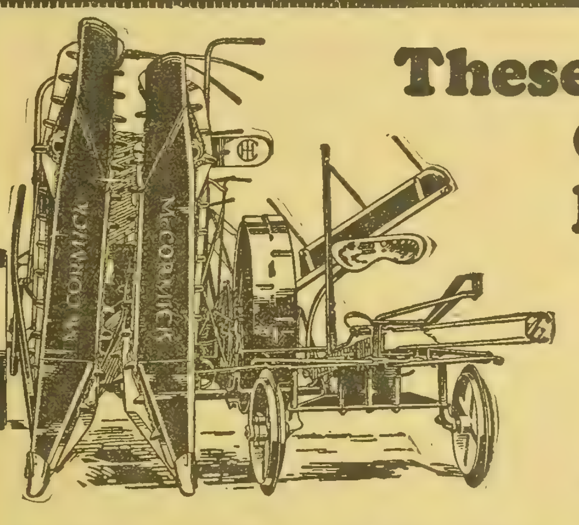
THE symptoms would indicate that your cow is suffering from mastitis. The cause of mastitis is infection. The infection may gain entrance into the udder through the teat opening or through the blood stream, more often the former.

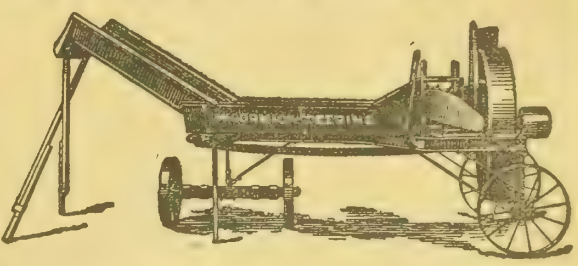
The only way to find out if your cow has tuberculosis is to have the tuberculin test applied. Better have your local veterinarian examine your cow. He can prescribe the necessary treatment for mastitis, and, if he thinks it advisable, you can have him apply the tuberculin test.—John P. Hutton, Assoc. Prof. of Surg. & Med., M. A. C.

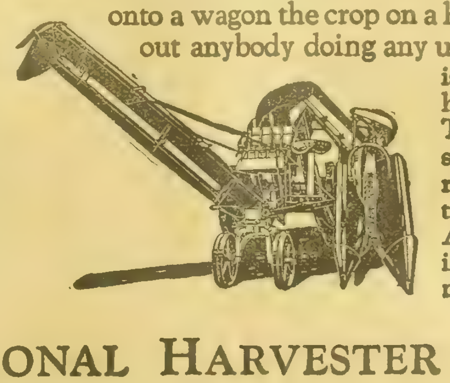
COW IS ALL RIGHT

Since my cow has been let out on grass her bowels are very loose and keeps very dirty. Can I do anything? If I salt her she is worse.—I. H., Edmore, Michigan.

IT is not at all unusual for a cows bowels to be quite loose when she is on good pasture. I think in all probability it is a perfectly physiological condition with the cow.—John P. Hutton, Assoc. Prof. of Surg. and Med., M. A. C.







These Machines Save Corn, Time, Labor, Money

McCormick and Deering Corn Binders

FOR years these binders have made fast work of the corn harvest. They do the hand work of five to seven men, and at the same time they do the cleanest kind of job. They pick up tangled and down corn. They can be adjusted for tall and short corn and they make easily handled bundles.

Both McCormick and Deering Corn Binders have been popular with owners for many years but they are of different design. The McCormick binds the bundles while they are in the upright position, and the Deering ties them as they lie flat. Both binders have roller bearings. Both have channel steel frames, securely bolted and riveted together. Sensible construction for avoiding field difficulties. Can be equipped to load bundles onto a wagon. Be ready for corn harvest. Ask the McCormick-Deering dealer about these binders and any of the modern corn machines mentioned here, or write us direct for complete catalog.

McCormick-Deering Ensilage Cutters

FILL your silo easily, economically, and at just the right time with a McCormick-Deering ensilage cutter. Built in five sizes. Capacities from 3 to 25 tons of cut fodder an hour. All sizes have reliable safety devices, force-feed, large throat, and heavy flywheels of boiler-plate steel. Cutting and elevating done in one operation, saving power. Power required from 6 to 25 h. p.

If you want to husk the corn and shred the fodder, look over the line of McCormick-Deering huskers and shredders. Made in in 4, 6, 8 and 10-roll sizes, for individual and custom work.

McCormick-Deering Corn Pickers

THIS is the day of the corn picker. The McCormick-Deering goes through a field and picks, husks, and loads onto a wagon the crop on a half-dozen acres a day without anybody doing any unusual work. The husking is cleaner than average hand husking and many times as fast. This big-capacity machine is of suprisingly light draft; it has 37 roller bearings. One man and a tractor or 4 or 5 horses handle it. Ask the dealer or write us for information about the McCormick-Deering corn picker.

INTERNATIONAL HARVESTER COMPANY
606 So. Michigan Ave. of America [Incorporated] Chicago, Ill.
93 Branch Houses in the U. S.; the following in Michigan Business Farmer territory—
Detroit, Grand Rapids, Green Bay, Jackson, Saginaw.

Save Soft Corn in *Hoosier* Silos

Turn your late soft corn crop into a big money-maker by saving it in a HOOSIER SILO for winter feeding. Prompt shipments certain. Your order placed now insures delivery by the time corn is ready. HOOSIER SILOS in Oregon fir or glazed vitrified tile. Best materials and construction on the market.

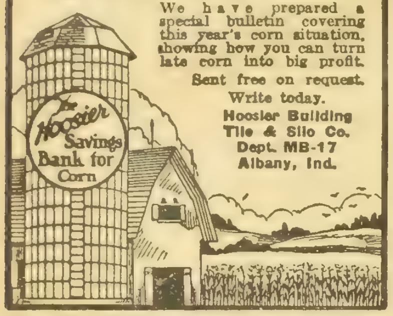
Write Today for SPECIAL BULLETIN

We have prepared a special bulletin covering this year's corn situation, showing how you can turn late corn into big profit.

Sent free on request.

Write today.

Hoosier Building
Tile & Silo Co.
Dept. MB-17
Albany, Ind.


The Hoosier Savings Bank for Corn

CHICKS 6c UP

Quality Chicks, Postpaid, 100 Leghorns, Anconas, Large Asstd $8; Rocks, Reds, $9; Orpingtons, Wyandottes, $10; Lt. Brahmas $15; Asstd $6. Free 64 page cat. gives quantity price. **Missouri Poultry Farms, Columbia, Mo.**

RHODE ISLAND REDS—TOMPKINS STRAIN Stock Eggs for hatching and Baby Chicks. May chicks $20.00 per hundred. Hatching eggs $8.00 per hundred. June Chicks $16.00 per hundred. Eggs $7.00 per hundred. Hen hatched chicks on request.

WM. H. FROHM, R1, New Baltimore, Mich.

STURDY CHICKS—BRED-TO-LAY AND exhibition flocks, culled by experts. Reasonable prices. Catalog free. Single Comb White Leghorns, Rocks, Reds, White Wyandottes. **Sunnybrook Poultry Farm, Hillsdale, Mich.**

CHICKS—All Popular Varieties. Egg production and Standard Quality. State Fair Winners. No better chicks available at same price. Extremely low prices after May 29th.

Litchfield Hatchery, Litchfield, Michigan.

POULTRY BREEDER'S DIRECTORY

Advertisements inserted under this heading at 30c per agate line, per issue. Commercial Baby Chick advertisements 45c per agate line. Write out what you have to offer and send it in. We will put it in type, send proof and quote rates by return mail. Address The Michigan Business Farmer, Advertising Department, Mt. Clemens, Michigan.

COCKERELS AND PULLETS

Leghorns, Rocks, Reds, Wyandottes, Orpingtons, Anconas, Minorcas. Also Geese, Turkeys, Ducks. All breeds.

Send for complete circular with full description of stock and price list.

STATE FARMS ASSOCIATION, Kalamazoo, Mich.

Member International Baby Chick Association
Member Michigan State Farm Bureau

PULLETS—PULLETS—PULLETS—TOM BARRON White Leghorns, Barred Rocks, Reds and Anconas. **H. KNOLL, Jr., R1, Holland, Mich.**

EGGS FOR HATCHING

EGGS FOR HATCHING

Bronze Turkeys, Toulouse Geese, Pekin Ducks and Barred Rocks. Nearly all of this stock has been imported from Canada by us.

W. T. SHUTTLEWORTH, Ypsilanti, Michigan.

Free to Asthma and Hay Fever Sufferers

Free Trial of Method That Anyone Can Use Without Discomfort or Loss of Time.

We have a method for the control of Asthma, and we want you to try it at our expense. No matter whether your case is of long standing or recent development, whether it is present as Chronic Asthma or Hay Fever, you should send for a free trial of our method. No matter in what climate you live, no matter what your age or occupation, if you are troubled with Asthma or Hay Fever, our method should relieve you promptly.

We especially want to send it to those apparently hopeless cases, where all forms of inhalers, douches, opium preparations, fumes, "patent smokes," etc., have failed. We want to show everyone at our expense, that our method is designed to end all difficult breathing, all wheezing, and all those terrible paroxysms.

This free offer is too important to neglect a single day. Write now and begin the method at once. Send no money. Simply mail coupon below. Do it Today —you even do not pay postage.

FREE TRIAL COUPON

FRONTIER ASTHMA CO., Room 946B
Niagara and Hudson Sts., Buffalo, N.Y.
Send free trial of your method to:

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Poultry Department

AGE AND SIZE OF COCKERELS DETERMINE TIME TO CAPONIZE

WITHIN the last few years the business of producing capons has grown rapidly in this country, and increasing numbers of capons are being raised in the Middle Western States. During the winter months capon is regularly quoted in the markets of the large eastern cities. Massachusettes and New Jersey are the great centers for the growing of capons, while Boston, New York, and Philadelphia are the important markets.

The time of year when caponizing should be performed, so far as the effects of the operation and the rapidity and ease of healing are concerned, is of little importance. The capons seem to recover and do well at any time. Certain other considerations, however, do influence the time, says the United States Department of Agriculture. The age and size of the cockerel are very important. As soon as the cockerels weigh 1½ to 2½ pounds, or when 2 to 4 months old, they should be operated upon. The lower age and weight limits apply particularly to the American breeds, while the higher apply to Asiatics. If smaller than this, their bodies do not give room enough to work handily. On the other hand they should never be over 6 months old, as by this time the testicles have developed to a considerable extent, the spermatic arteries carry greater amounts of blood, and the danger of pricking these arteries and causing the fowl to bleed to death is greatly increased.

The fact that capons are in greatest demand and bring the best prices from the Christmas season until the end of March, and that it takes about 10 months to grow and finish them properly, makes it important to hatch the chicks in early spring so that they will be of the proper size for caponizing in June, July, and August. These are by far the most popular months for the operation, though in some cases it is performed still later.

CHICKS NEED SUNLIGHT AND YELLOW CORN

THE importance of sunlight and yellow corn in the growth and development of chickens is strikingly shown in a series of interesting experiments made at the Wisconsin University Experiment Station.

It has long been known that sunlight plays an important part in the development of all green plants, but the direct relation of this form of energy to animal life has but recently attracted attention. Nutrition studies during the past few years indicate that in some cases at least light may be almost as important a factor in the normal development of certain animals as it is in the growth of green plants.

Four groups of birds, each group consisting of ten White Leghorn baby chicks, were used in the experiments.

Group 1 received a ration consisting of 97 parts of white corn, 2 parts of ground limestone, and 1 part of common salt, and had free access to skim milk. The birds were confined in a runway in the basement of the poultry building with the windows closed. Group 2 received exactly the same ration as the first, but the birds were placed upon a board floor out of doors and exposed to sunlight during the day.

Group 3 received yellow corn instead of white corn and like the first group were confined in the basement of the building. Group 4 received the same ration as Group 3, but the birds were placed out of doors on board floors and in the sunlight in the same manner as Group 2.

Comparative Growth

Growth in all four lots for the first two weeks was apparently normal, due to the fact that the vitamine factors had been stored up in sufficient quantity in the egg yolks and the hatched chicks. After that time, however, the Group 1 birds practically ceased to grow, and all of the chicks soon died. The birds that received yellow corn instead of white corn and were confined to the basement made somewhat better growth, but at the end of five weeks all but two of the chicks had died. The remaining two reached a live weight of 340 grams, but from then on lost weight and died at the end of twelve weeks.

Both groups of chicks that were exposed to sunlight made remarkable growth. The chicks on white corn did unusually well at first, but ceased to grow after reaching a weight of 600 grams. At this stage they developed eye trouble and an unsteady gait accompanied by more or less dizziness. It became apparent that it would be impossible to raise chicks even in the sunlight with such a ration as white corn and skim milk.

The birds in Group 4 which lived on yellow corn, skim milk, and sunlight were in good condition throughout the experiment and showed every prospect of continuing their growth to complete maturity. All of the necessary factors of growth were available, a good protein mixture, ample ash, and the necessary vitamines. The birds produced eggs at the age of four months.

Overcoming Leg Weakness

The experiments showed clearly that diseases in chickens, such as leg weakness, which is a form of rickets, may be overcome by supplementing with sunlight and otherwise satisfactory ration. This is due to the curative or preventive power of the radiant energy of sunlight.

Other experiments showed that cod-liver oil, eggs, milk, and green feed are active agents in preventing leg weakness in chickens when fed during the early growing period. A number of groups of chickens fed separately with a ration consisting of 80 parts of yellow corn, 20 of middlings, 5 of lime rock, 5 of bone meal, and 1 of salt together with skim milk as a drink, made satisfactory growth although confined on a cement floor during the first six weeks of their lives.

It was found that no difference occurs in the time in which leg weakness develops as between chicks hatched from a ration of white corn plus pork liver, placed in the same brooder with chicks of the same age hatcher from a ration of yellow corn plus pork liver, and both groups fed on a ration known to produce leg weakness. The chickens fed on yellow corn made better growth than did those on the white corn ration. Most of the chicks from the white corn casein ration died within forty-eight hours after hatching, thus indicating the necessity of vitamine-rich feed (as found in the yellow corn) in the poultry ration to maintain the hatchability of the eggs.

Further experiments showed that whereas white corn and similar feed produce white yolks, and that yellow corn and green feed produce yellow yolks, a slight yellowness in egg yolks can be obtained by the feeding of yellow carrots.

The experiments proved conclusively that diseases such as rickets are the result of a deficnency of certain factors in the diet of animals, and that the substitution of yellow corn for white may overcome difficulties which have been encountered because of the lack of the fat-soluble vitamine in the grain. Further, that the use of green feeds of cod-liver oil has a pronounced influence upon the health and growth of various animals when fed on ricket-producing rations.

The production of hens, as well as the hatchability of their eggs, may to a very large extent be dependent upon the supply of vitamines in their food and the same factors have been found to be of particular importance in the normal rearing of young chicks which, because of their early maturity and relative sensitiveness, make splendid experimental animals for such studies. Wisconsin University officials feel that the practical application of these findings will have an important bearing in the chicken industry.—Farm and Ranch.

NO INTERNAL INSECTICIDE CURE FOR EXTERNAL PESTS

MANUFACTURING and selling preparations for controlling lice, mites, ticks (blue bugs) and other external parasites of poultry by serving to the fowls in their drinking water is a popular pastime of a number of concerns and one which the United States Department of Agriculture says should not be tolerated. A number of mixtures advertised for use in controlling external pests by administering in the feed have been tested by the Insecticide and Fungicide Board of the department and all have been found to be ineffective. Among the products which were offered as powders to be mixed with the feed are several containing mixtures of sulphur, charcoal, magnesium sulphate, ferrous sulphate, nux vomica, capsicum, sodium carbonate, napthalene, lime salt, and sand. Some of the mixtures were lime-sulphur solutions to be added to the drinking water; some calcium sulphide tablets of various percentages and having quantities of other chemicals as well. All were tested and found to be ineffective for the purpose advertised.

In view of these numerous tests the board has served notice on the manufacturers who may be selling or contemplate selling the above mentioned products to be used in this manner for controlling external pests of poultry that they are guilty of violating the provisions of the insecticide act of 1910, and that the products are misbranded. The board is of the opinion that these tests are sufficient to strongly indicate that such a method is infective and further that it is extremely doubtful if any substance will be found which will be effective when used in the feed, or drinking water. Tests have not been made of all of the mixtures advertised against all of the pests named, but, taking into consideration the tests which have been made and the anatomy and physiology of chickens, it is believed that it is unlikely that any of the substances proposed, or any combination of them, when fed to chickens will control any of the external parasites infesting them. These preparations are sold for the most part directly to consumers by parcel post.

BUMBLEFOOT

I have some hens that have a swelling in the foot. The first one I thought had hurt the point above the foot but upon looking at it found it was a large swelling and there was a scab on it nearly as large as a dime. That hen I killed. Then a few days afterward found two others had it. Can you tell me what it is and what I can do for it? I hate to lost all of my chickens and would sure be glad to get information on it.—L. H., So. Rockwood, Michigan.

THE swollen condition of the foot is undoubtedly a condition referred to as Bumblefoot. The cause of Bumblefoot is usually attributed to a mechanical injury, such as walking on gravel floors or runs, roosting on too wide perches or high roosts, combined with narrow buildings, necessitating the birds to jump and alighting heavily on their feet. The symptoms reveal a swollen condition below the foot, and between the toes. This swelling should be lanced and the pus removed, after which the foot should be treated with carbolated vaseline having been thoroughly cleansed.—E. C. Foreman, Professor of Poultry Husbandry, M. A. C.

Modern Efficiency

Mistress—"Mary, what a kitchen! Every pot, pan and dish is soiled; the table looks like the day after a cyclone! What have you been doing?"

Mary—"Well, ma'am, blessed if it be my fault. The young ladies has just been showing me how they bile a pertater at their cooking school."

GET YOUR COAL FREE

Special Offer to Michigan Business Farmer Readers

The largest concern of its kind in the world, exclusively delivering coal direct from car to consumer, with a long established successful record, the Popular Coal Company, 1509 Coal Exchange Building, Chicago, Illinois, is offering this unusual opportunity to one coal user in every neighborhood who has a few hours spare time. This is its method of quickly introducing the finest grade, freshly mined, free-burning coal, which is being sold direct to user at remarkably low prices. Man of good standing in his community can get his coal free. Write this firm today and ask them to explain this offer.—Adv.

Living the Full Life in the Rural Community

(Continued from Page 4)

basis, effecting tremendous economies in the central purchasing of farm supplies and giving to the widly scattered farmers a united voice which is beginning to speak for them effectively in transportation, legislation, taxation and other great matters where the interests of the farmers are vitally at stake and where individual action is futile but collective pressure is extremely effective.

All this is most encouraging as it indicates better social and economic conditions for the farmer, for once the agricultural interests learn to work in harmony they will find that they are the strongest class in the world. The bane of the past has been that the farmers have not realized the importance of cooperation. At best they have worked independently, and in many cases they have actually entered into competition with each other. This day is past, and everywhere we see evidences of rural cooperation — cooperative creameries, live stock shipping associations, fruit associations, potato exchanges, grain elevators, etc.

Now that the farmers have found their power, they will not relinquish the advantages which they have gained, but will continue along the lines which have already proved so successful. Thus they will come into their own and secure those advantages to which they are entitled as one of the greatest classes of producers of the basic wealth of the nation.

The brief review of agricultural conditions given above is merely suggestive and no attempt has been made to be exhaustive. Undoubtedly, anyone who is at all familiar with rural life can think of many other factors which might be included in even an elementary survey of this subject. However, the purpose of this article is merely to point out some of those factors which contrast so strongly with conditions in the restless, throbbing city, and which make the farm such an ideal place in which to live the full life.

Heading the Farm Call

May the young manhood and womanhood of this generation hear the call and feel the lure. It were indeed a catastrophe if they did not. It were little short of a tragic and ironical trick of fate if the young men who went forth and endured the terrible din and roar of cannons and all the hardships of war—all for liberty and better living conditions for mankind—should, now that they are back and fighting the battle of peace, voluntarily choose to live among the unnerving conditions of modern city life when all the advantages of life in the country are before them.

Let them select that occupation whose usefulness and dignity is unquestioned. Let them choose that life which makes them independent—which raises them above the position of mere cogs in the wheels of industry. Let them establish their homes where their children will grow up under their own careful guidance and training and not be away all day and use the home merely for a boarding place.

Let them choose their environment where the birds sing and all nature buds and blossoms, where God's power is daily revealed as the farm animals and crops grow and bring forth their increase, where the beams of the sunrise each morning light up a golden pathway of duty, where each sunset and peaceful twilight brings a benediction upon the day's labors, where each rainbow is a reminder of God's continuing mercy and favor.

Let them live where they daily catch inspiration, and where those wondrous thoughts come to them which slip through mere words and cannot be uttered but are no less deep and potent in their meaning and influence. Let them do all this and forsake the city streets where the sun beats down relentlessly and is reflected back from the pavements, where the dust laden wind sweeps down the canyon between the skyscrapers, where the beauty of the sunrise and sunset is obstructed by buildings and obscured by smoke clouds, where the wonderful verdure (God's covering for His creation) has been displaced by concrete and buildings, and where all the myraid voices of Nature are drowned in the road of the city's bustle and traffic.

'Tis thus I meditate as I sit here. The breeze stirs. A bird sings. The shadows begin to lengthen, reaching out hungry hands toward the east. The sun declines. I hear a whir, a roar. A motor car goes roaring past in a cloud of dust. Why, young man, are you in such haste? Do you seek happiness? Look about you. It is yours for the taking. The old motto comes home to me, "I would rather be able to appreciate things I cannot have than to have things I am unable to appreciate."

Let us learn to count our blessings, to look upon the bright side, to appreciate the distinctive joys and privileges of farm life and to take heart to fight the battle which each day may bring. Let us not be so busy attempting to earn a living that we fail to really live, to feel, to appreciate, to love.

And this is the thought which I would bring to each of the thousands of farm homes in THE BUSINESS FARMER family.

Isn't It So?

Teacher—"Jimmy, what is a fortification?"

Jimmy—"Two twentifications make one fortification."—School Journal

Good-Bye Mr. Canada Thistle

MICHIGAN is receiving the attention of a beneficent worm this summer, according to Prof. R. H. Pettit, head of the Michigan Agricultural College entomology department, who warns the farmers that they have nothing to fear from an inch and a half caterpiller with long forked spines in rows down its back. Numerous specimens of this caterpillar have been sent to Prof. Pettit by alarmed farmers and he states that examination reveals it to be the larvae of the thistle-butterfly, an insect fairly common during most summers, but occuring in large numbers this year.

This insect, confines its feeding habits almost entirely to thistles, with the Canada thistle as first choice at all times, according to Prof. Pettit. The insects occasionally will feed on burdock, elm, nettles and plantain, but never on any crop of value unless driven to it by starvation, in which case they may do some slight damage to soy beans and to peppermint.

"However, the coming of this creature in Michigan is really a blessing rather than a menace," Prof. Pettit said. "I think we can rest secure and watch these butterfly larvae destroy our bad weeds without incurring any expense. In any case the larvae are due to pupate very soon, and change into beautiful butterflies, so no one needs to worry about this very unusual invasion."

And now, apparently unheedful of the ravages already suffered this year by the Canada thistle from the thistle-butterflies, Howard C. Rather, M. A. C. farm crops specialist, announces that the growing of alfalfa is one of the best ways of eradicating Canada thistles.

If the infested fields are not seeded in the spring, are then plowed, and finally seeded to alfalfa during the first week in August or at the end of the droughty season, the thistles will be held in check until the alfalfa has made a start.

In the next year the thistles will be killed out by the frequent cuttings of alfalfa, Mr. Rather states, adding, however, that "the alfalfa will do little toward the eradication of the thistle the first season.

"In securing a seeding of alfalfa, only northern grown seed should be used," he advises. "The Grimm and other varigated strains are well adapted to Michigan conditions. The seed should be inoculated and the seed bed should be well firmed. If the soil is acid, an application of lime should be made."

A Personal Word of Warning before you buy your Fertilizer

In my forty years experience, conditions in the fertilizer field have never been so uncertain or so threatening to the careless buyer.

Too much talk is being given to what fertilizer costs and not enough to what goes in it. Cheap fertilizer can be as expensive as a cheap lawyer in a big lawsuit. I have given the best years of my life to the development of high grade fertilizer, and these years have taught me one fact I want to pass on to you; and that is, that I can make a given analysis to sell pretty nearly as cheaply as I want, if that's what I want to do!

In the early stages of the fertilizer business I saw that the real future lay in trying to make the *best* fertilizer I could, and that there were always enough good farmers willing and anxious to pay a fair price for the best. Because, after a few seasons of experiment with cheap fertilizers, the sensible farmer realizes that fertilizer is cheap or high only according to the results it brings, and that therefore, any fertilizer short of the very best is dearly expensive in the long run. My ambition, therefore, became fixed on working out formulas and processes that would every year improve the quality of my goods.

FRIENDS FOR 30 YEARS

Every year my business grew. More and more farmers discovered the cheapness of high quality fertilizer. Some of my customers have been using nothing else but my "Royster" fertilizer for 30 odd years. Many seasons I have been unable to make enough to supply all my orders. Last season I had a record-breaking sale, yet in some states farmers who wanted "Royster's" high grade fertilizer had to go without it, even tho they were glad to pay more for it than for ordinary fertilizer.

It takes time, care and experience to make "Royster's" fertilizer. For instance, every ton of it is "cured" or aged for at least three months, after mixing, to insure perfect chemical and physical condition, and *no pressure of orders on hand will make us shorten this curing period* just in order to sell more goods. This sort of care for the "Royster" reputation for unsurpassed quality has won me the confidence and trade of millions of farmers, which I value and esteem zealously.

THEY'LL ROT FIRST

This personal word of warning is written to tell you that I am out of the competition now going on to see who can make the cheapest fertilizer. I am going to plug along making the finest quality goods I can, to sell at a few cents a ton profit above cost of manufacture. Before I consent to change the quality standards of the F. S. Royster Guano Co., I would shut every door of my factories, pay off every employee, and see the buildings rot away in idleness. For your own sake, deliberate carefully this season before you buy your fertilizer. If you decide to invest in "Royster's" quality fertilizer, you have my personal promise that you will never regret the purchase after you see the results. It isn't so much what you put into it, but what you get out of it, that counts in buying fertilizer. F. S. Royster Guano Co., Norfolk, Va., Baltimore, Columbia, Toledo, Montgomery, Atlanta.

F. S. Royster
President

WHEN WRITING TO ADVERTISERS PLEASE MENTION THE BUSINESS FARMER

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with your fellow citizens in this public service that pays you a tax-free

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Securities Department, Jackson, Michigan

MARKET FLASHES

Foote Advises Orderly Wheat Marketing

If Farmers Increase Wheat Average, Lower 1925 Prices Will Result—Future Bright For Live Stock Market

By W. W. FOOTE, Market Editor.

FORECASTING the future of the grain markets is a delicate matter always, and trying to figure out the wheat market a year ahead is obviously some job; but this is involved in the question put by a Michigan farmer who writes asking: "Will you please advise me when to sell my wheat? Also, would you advise sowing a large wheat acreage this fall?" To be frank, I will say I do not know whether it is best to sell now; but it is an old saying that it is a good thing to accept a good price when it is offered, and ruling market prices look good to many old-timers in the leading wheat growing districts. However, there has been a quite recent reaction in prices for wheat for future delivery, and perhaps it would be well to wait for advances of a few cents a bushel before selling; and it might be a good thing to sell from time to time, and take only moderate chances of lower prices. Personally, it seems best not to look for the highest possible prices and taking chances of reduced values in the end, for there is always a limit, and "a bird in the hand is worth two in the bush," you know. Now as to sowing a large acreage in the coming autumn. Every farmer knows that high prices for wheat or anything else are sure to result in an enlarged acreage, and should the crop do well, the ultimate outcome would naturally be a corresponding fall in prices. Therefore, would it not be the safer policy to devote only a fair average number of acres to winter wheat, and thereby avoid the danger of too much loss from a possible fall in prices? In short," don't put all your eggs in one basket." which is just as true advice as was ever given by wise men. To a certain extent every farmer is a speculator in raising crops, and diversifying his crops has always proved a good safety valve. Specialists in single lines often make large profits, but diversified crops offer to the average cultivator of the soil the surest returns, and it is a mighty good thing to look to the farm for raising most of the food used by the family.

August Crop Report

The crop report for August made by the Department of Agriculture was a surprise, as it made the wheat and oats crop larger than we expected, and the corn crop much smaller. The wheat crop this year will total 814,000,000 bu. compared with 786,000,000 bu. last year, the department of agriculture estimated. This is an increase of 74,000,000 bu. above the department's July 1 estimate of the crop, which was followed by sky-rocketing prices.

Winter wheat, with an estimated yield of 16 bu. per acre from 36,898,000 acres under cultivation, will account for 589,000,000 bu. of the total. Spring wheat condition, which on Aug. 1 was 79.2 per cent of normal, will, on the basis of a yield of 13.2 bu. per acre from 16,920,000 acres sown, produce 225,000,000 bu., the department estimated.

The average price of all wheat on farms July 15 was $1,058, against 89.6 cents last year.

The corn crop will amount to only 2,576,000,000 bu., against 3,046,000,000 bu. Aug. 1 was 70.7 per cent of normal, against 72 per cent on July 1. Yield per acre was estimated by the department at 24.4 bu. from 105,604,000 acres in cultivation, with a farm price of 98.3 cents per bu.

An oats crop of 1, 439,000,000 bu. is promised, which will compare with 1,300,000,000 bu. last year, and is the largest yield since 1918. Stocks of oats on United States farms Aug. 1 were only 65,256,000 bu. compared with 92,982,000 bu. on the same date last year.

Farm Products Go Higher

Better times have dawned for farmers at last, and substantial advances in prices have taken place during recent weeks, the upward movement including fat cattle, as well as hogs, the rise in swine being unexpectedly large. Lambs have sold satisfactorily on the whole when they were well fattened, but owners have been apt to glut the market and thereby enable the packers to force prices lower. The future certainly looks much brighter for live stock, while the grain markets have been placed in the strongest position experienced in a long period. There is no longer any good reason to resort to unusual methods for putting wheat on a higher basis, and this is also true of corn, oats, rye and barley. It is simply a matter of supply and demand, farmers having curtailed their wheat acreage, while nature did the rest, the crop in some districts having been reduced by bad weather. Fortunately, there is a fine, large crop of oats, while the rye crop is fairly good, but it is generally admitted that the corn crop is bound to turn out a short one owing to the unusually late start because of cold and rainy weather and a repitition of this since then. Looking into the future so far as is possible, it may be said that some farmers face a partial crop failure, while others will probably harvest a good crop. Those who have good crops of corn may be expected to have their wealth much increased, while the others will fare poorly in spite of high price. Corn looks spindly on untiled fields around Chicago, but plenty of drained fields present a good appearance. The many gardens of vegetables are turning out finely, and the wayside sellers are doing a thriving business. Farmers have been busy as a hive of bees, making hay and plowing their corn fields, and to a much greater extent than ever before farm machinery is taking the place of expensive hired farm workers. Farmers are also using large numbers of motor trucks, and apparently the farmer who owns no automobile is an exception. Not many farms are being sold, and fewer farm mortgages are being made than in past years.

Great Market for Wheat

In every way the wheat market has been a big one, including the volume of business and the boom in prices. During a recent week sales of wheat on the Chicago Board of Trade aggregated considerably more than 331,000,000 bushels, and in the same time prices advanced 9⅝ cents, with July taking the lead. Prices a short time ago reached the high point this year, with reactions later, as was natural after such a sudden boom. The advances in prices which have taken place were due to world conditions, and the improvement is legitimate, with much larger trading in cash lots than last year. Prices have been raised to the highest figures of the year, and sales were the largest of the year. Winnipeg has taken the lead in the advance, that market having gone up as much as 12½ cents in the course of a week. It is natural that the Canadian market should attract a great deal of attention at this time, as Canada, Australia and Argentina are the largest surplus growers of wheat, and a reduction in the wheat crop of Canada means much to the European countries which are short on home crops of grain. Foreigners are good buyers in American markets, and large purchases for export are reported. Active movement of new wheat from the southwest is increasing the visible supply materially, and at last stocks are much larger than a year ago, while exports of wheat and flour are making a good showing. The oats crop is turning out fine, but corn promises to be a short crop, and startling advances have taken place. Very little corn is being shipped out of the country, but good exports of oats and rye are reported. Late sales were made of wheat for September delivery on the Chicago market around $1.30, September corn at $1.15½, September oats at 52¾ and September rye at 95 cents.

Chicago's Cattle Market

The recent greatly delayed appearance of summer hot weather exerted a depressing influence in the cattle market, the consumption of beef being checked temporarily, and prices averaged lower for steers and other beef cattle, although some prime heavy cattle and tip-top yearlings went at comparatively high values. Choice heifers also made some high profits for their fortunate owners, and among the most noteworthy salesman may be mentioned those of 52 heifers averaging 884 pounds at $9 and $12 heifers averaging 1002 pounds at $10. But it is the rank and file of the cattle that comprise the real market, and these sell far below prime lots. The other lots of cows and heifers have been selling at $4 to $8.75, with a canner cows at $2.25 to $3.50, bulls going at $3.50 ot $7 and calves at $4 to $11. Beef steers sold at $5 to $7 for inferior light weights up to $10.75 to $11.40 for the better class of long fed lots, no good steers selling under $9 and the best yearlings taken at $10 to $11. The stocker trade was slow at $5.50 to $6.50 for the greater part of the offerings, with inferior stock steers salable at $4.25 and over, the demand being mainly for cattle for grazing, ear corn checking grain feeding.

A year ago beef steers sold at $5.50 to $12.25. Combined receipts of cattle in twenty markets for the year to late date amount to 7,420,000 head comparing with 7,568,000 a year ago and 7,130,000 two years ago. Within a week cattle prices declined 50 to 75 cents.

The Advance in Hogs

Big advances in prices during recent weeks were wholly legitimate, due to greatly reduced receipts in Chicago and other markets as compared with supplies earlier in the summer packing season and a year ago. Not only were the Chicago packers liberal buyers, but buyers for shipment to eastern packing points also bought many of the choicer class of hogs, and this made keen competition in the market. Better grades of heavy butcher hogs were the favorites with buyers and topped the market, going away above prime light bacon hogs. The boom in hog prices has caused substantial advances in fresh and cured hog products, and exports of cured hog meats have been running much smaller than a year ago, while lard exports were much higher. For 1924 to late date combined receipts in twenty markets amounted to 26,334,000 hogs, comparing with 25,859,000 a year ago and 20,038,000 two years ago. A year ago hogs sold on the Chicago market at $6 to $8.15. The past week's receipts of hogs amounted to only 134,775 head, comparing with 146,871 a week earlier and 179,024 a year ago. Active buying put prices up to $8.25 to $10.35, comparing with $7.85 to $9.90 a week earlier, heavy butchers and light bacon lots going at the top.

The Sheep Industry

Most of the time well finished lambs offered on the Chicago market are in good demand at rather high prices, selling well above prices paid one, two and three years ago; but now and then the market is overstocked after advances in prices resulting from small receipts, and this causes declines in quotations. Breeding ewes are much wanted, but not many are offered, and prices are high, with sales at $7 to $11.25, yearlings selling highest. Feeding lambs have been selling at $12 to $13, nowhere near enough being offered. A year ago $12.70 paid for the best killing lambs. Despite greatly increased Chicago recepits of lambs last week, prices advanced, lambs selling at $8 to $13.90.

The Bean Crop

As summed up by the Bean Bag and Pea Journal, pea beans are strong, and the price outlook looks promising for higher prices. This is in the face of surface indications of another bumper Michigan crop, but there are a number of contributing causes. The Michigan crop will be later than usual, probably two to three weeks later. There come disquieting reports of heavy damage from the bean maggot. The government crop report just issued gives a condition of 87 per cent against 91 per cent a year ago at this time, but many observers say the maggot damage will astonish the nation when its ravages finally become known. California's white bean acreage and estimated production are cut to an alarming extent, so much so that Michigan's pea beans will form practically one-half of the entire production of beans in the country this year. Colorado and New Mexico are about to produce a crop half again as large as last year, but these are pinto beans, and not strictly in competition with the white bean. New York will show a small increase in production.

THE BUSINESS FARMER'S MARKET SUMMARY

and Comparison with Markets Two Weeks ago and One Year ago

	Detroit Aug. 13	Chicago Aug. 13	Detroit July 15	Detroit 1 yr. ago
WHEAT—				
No. 2 Red	$1.32	$1.31	$1.21	$1.05
No. 2 White	1.34		1.23	1.05
No. 2 Mixed	1.33	1.28	1.22	1.05
CORN—				
No. 3 Yellow	1.20	1.15	1.12	.92
No. 4 Yellow	1.15	1.13	1.07	.90
OATS—				
No. 2 White	.59½	.51@.53	.60	.48
No. 3 White	.57½	.50@.52	.58	.46½
RYE—				
Cash No. 2	.96	.95½	.83	.71½
BEANS—				
C. H. P. Cwt.	4.95		4.55@4.60	5.00
POTATOES—				
Per Cwt.	1.20@1.30		1.66@1.83	1.30@1.35
HAY—				
No. 1 Tim.	23.50@24	25@27	23.50@24	19.50@20
No. 2 Tim.	21@23	22@24	21@22	17.50@18
No. 1 Clover	19@20	20@22	19@20	15@16
Light Mixed	22.50@23	24@26	22.50@23	16.50@19

Wednesday, Aug. 13.—Wheat off because of better reports from Southwest and Winnepeg. Corn steady. Beans. dormant. Oats off. Chicago butter, 36½. Eggs 28@30.

☛ Detroit, Chicago and Buffalo Wednesday Live-Stock Markets Next Page.

HASTE IN MARKETING WHEAT CROP MAY CAUSE LOSS TO FARMERS

Millions of dollars may be lost to Michigan farmers through wet wheat, according to Grand Rapids millers, who say they are astounded at the high moisture content of wheat deliveries. The grain, in many instances, gives evidence of having been threshed before it was given an opportunity to properly dry in the shocks. The moisture content of wheat, as well as other farm products, is higher than normal this year because of the heavy rains.

"Millers are finding an alarming condition in this year's wheat crop," said Lee H. Higgins. "The crop passed all expectations as to quality and quantity, but in their haste to market some of the crop or, in many cases, to accommodate threshing crews, farmers have hauled and threshed wheat that was not thoroughly dry. Much of this wheat will heat in storage and become almost a total loss. Even in cases in which farmers have made an effort to dry the grain after threshing, they have had trouble saving it.

"The only proper place to dry wheat caught in the rain after it has been cut is in the shock. Threshing it immediately and attempting to dry it later is a great risk." The maximum moisture content in new wheat, it is said, should not be more than 14 per cent, but Higgins says three samples taken recently showed 17½, 18⅛ and 20½ per cent moisture.

Michigan interests are working on a plan to inaugurate an advertising campaign of their own. It is planned to get the growers to spend one cent per bag and the elevators another cent a bag. If this goes through an enormous fund can be created and if judiciously used, not only Michigan but all the bean states will see a direct benefit.

BEANS

The latest figures place the crop at 13,688,000 bushels. Michigan leads with 6,242,000 bushels, followed by California with 2,059,000, Colorado with 2,010,000, New York with 1,746,000, Idaho with 775,000, New Mexico with 704,000, Wisconsin wiht 117,000, and Arizona with 35,000. The total crop in 1923 was 15,740,000 bushels.

POTATOES

The estimated potato crop of the United States is 398,821,000 bushels, which is only thirteen and one-half millions less than the final production figures for last year. Minnesota is in the lead with a report of with 37,662,000 and Michigan is 39,196,000; New York is second third with 31,611,000. Other important states report as follows: Maine, 28,275,000; Pennsylvania, 24,595,000; Virginia, 18,720,000; Ohio, 10,055,000; Wisconsin, 28,125,000; North Dakota, 13,845,000; Colorado, 11,314,000; Idaho, 10,613,000; California, 6,594,000; and Washington, 6,248,000. The Michigan crop is in excellent condition in all except a few counties, and eight per cent above the ten-year average and six per cent better than one year ago on August 1, according to the official reports.

PRITCHARD'S WEATHER FORECAST
INTERPRETED BY THE STARS

Week of August 17

TEMPERATURES in Michigan will average below normal for the week of August 17th while we are expecting the rainfall to average above the normal quantity.

During the first part of the week many electrical storms will visit numerous sections of the state. These storms with heavy local rains and moderately strong winds will be more noticeable about Sunday and Wednesday.

On or immediately after the middle of the week the temperature will take a sudden drop and fail to rally much before the end of the week.

About the last day of the week temperatures will rise somewhat above normal and storm conditions will increase. The rainfall period will run into next week but it will not be general nor plentiful.

Week of August 24

Following the threatening and showery conditions of last of last week and first of this, the weather will become pleasantly cool and fair. The week, as a whole, will be clear and cool yet there may be expected the usual summer thunder storm. We look for no hot, sultry weather in Michigan this week.

This week ends with the weather becoming unsettled and theatening. During Friday and Saturday following a sudden rise in the temperature, atmospheric conditions will develop into moderately heavy rain and thunder storms.

June Forecast Correct

With only 12 hundredths of an inch of rainfall above the normal in Michigan for June our forecast "precipitation will not average far from normal" was again correct. Our forecast of a cool June was also correct when temperatures averaged two degrees below normal.

LIVE STOCK MARKETS

DETROIT, Aug. 13.—Cattle—Receipts 378; market steady but slow. Fancy yearling, $8.50@9.25; best heavy steers, $8.25@8.75; best handy weight butcher steers, $7@7.75; mixed steers and heifers, $6@6.50; handy light butchers, $5.50@6; light butchers, $4.75@5; best cows, $5@5.50; butcher cows, $3.75@4.50; common cows, $3; canners, $2@2.75; choice light, $5@5.50; bologna bulls, $4.50@5.25; stock bulls, $3.50@4.50; feeders, $5@6.50; stockers, $4@5.50; milkers and springers, $45@85.

Veal calves—Receipts, 345; market higher; best, $11.50@12; others, $5@11.

Sheep and lambs—Receipts, 439. Market opening as follows: Best lambs, $13@13.25; fair lambs, $10.50@12; light to common lambs, $7@8.50; fair to good sheep, $5@6.50; culls and common, $1.50@3.

Hogs—Receipts, 781. Market prospects: Mixed hogs and heavy yorkers, $10.15; pigs, $9.25.

CHICAGO, Aug. 13.—Hogs—Receipts, 56,000; market 10 to 15 cents lower. Bulk, $8.90@9.90; top, $10.15; heavy weight, $9.50@10.15; medium weight, $9.60@10.15; light weight, $9.45@10.10; light lights, $9@10; heavy packing sows, smooth, $8.40@8.90; packing sows, rough, $8@8.40; pigs, $8.25@$9.50.

Cattle—Receipts, 21,000; market 15 to 25 cents lower. Beef steers: Choice and prime, $10.50@11.50; medium and good, $8.50@10; good and choice, $10@11.25; common and medium, $7.50@9. Butcher cattle, Heifers, $5.50@9.50; cows, $4@8; bulls, $4@7. Canners and cutters: Cows and heifers, $2@4; canner steers, $5@7. Veal calves, light and handy weight, $8@11; feeder steers, $5.50@8.25; stocker steers, $5.25@8; stocker cows and heifers, $3@5.50; stocker calves, $5@8. Calves—Receipts, 3,000.

Sheep and lambs—Receipt, 2,000; market steady. Lambs, fat, $12.50@14; culls and common, $8@9; yearlings, $10@11.50; ewes, $6.50@8; culls and common, $2@4; breeding, $4.50@11.50; feeder lambs, $12@14; wethers, $7.50@9.

BUFFALO, Aug. 13.—Cattle—Receipts, 2,700; market active. Prime steers, $10@10.75; shipping steers, $8.25@10.25; butcher grades, $7.50@9; heifers, $5.50@8; cows, $2@6.50; bulls, $3@6; feeders, $4.50@7; milk cows and springers, $30@125.

Calves—Receipts, 1,500; market active. Cull to choice, $3@11.50.

Sheep and lambs—Receipts, 3,000; market slow. Choice lambs, $13@13.50; cull to fair, $8@12.50; yearlings, $7@10.50; sheep, $3@9.

Hogs—Receipts, 12,800; market active. Yorkers, $10@10.75; pigs, $10@10.25; mixed, $10.65@10.75; heavy, $10.65@16.75; roughs, $8@8.50; stags, $4@5.

FREE BOOK ABOUT CANCER
The Indianapolis Cancer Hospital, Indianapolis, Indiana, has published a booklet which gives interesting facts about the cause of Cancer, also tells what to do for pain, bleeding, odor, etc. A valuable guide in the management of any case. Write for it today, mentioning this paper. (Adv.

How many bushels of wheat?

Does potash pay on winter wheat? Decidedly *yes!*

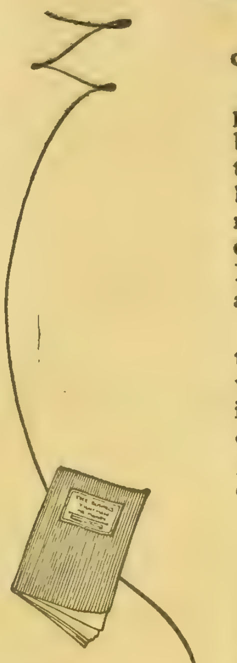
Right here in Michigan $1.75 worth of potash increased the yield nearly 4½ bushels per acre—and at $1.10 a bushel the potash not only paid for itself but brought in a $3.00 extra profit. The formula used was 3-9-10, and it was tested out by your own Michigan Agricultural Experiment Station, against no fertilizer at all and against 3-9-0, a no-potash formula.

Yes, *potash pays*. And in your rotation system potash that you apply to wheat also increases the yield of succeeding crops. The potash that gave $3.00 extra profit on wheat also brought in 160 pounds more clover and 36 bushels more corn than the no-potash formula.

All from $1.75 worth of potash!

Potash strengthens the stalk and prevents lodging of the grain under high winds and heavy rains. Your wheat will be harder, plumper and the shrinkage will be less. Your grade will be improved with potash—adding still more profit per acre to your income.

Make money on winter wheat. Insist upon having 6% to 10% of Genuine German Potash in the fertilizer you buy. The extra bushels you get take no more seed. You'll be glad to pay the slightly increased threshing charge.



The Bushels That Made Me Money

You should read this interesting story before you plant your winter wheat. Your copy will be sent free of all cost. Simply ask for booklet, "The Bushels That Made Me Money." But do it now!

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Allis-Chalmers, Other Models	S. H.
All Work	S. H.
Andrews-Kincade	E. H.
Appleton	S. H.
Aultman-Taylor, 15-30	S. H.
Aultman-Taylor, Other Models	S. H.
Automotive	H.
Avery, C. & Road Razer	H.
Avery, Track Runner	S. H.
Avery, Other Models	E. H.
Bates Steel Mule, Midwest Motor	S. H.
Bates, Other Models	H.
Bear	S. H.
Best Tracklayer	E. H.
Big Farmer	E. H.
Case, 10-18, 12-20 and 15-27	H.
Case, 22-40	S. H.
Case, Other Models	E. H.
Cletrac, F	H.
Cletrac, W	S. H.
Coleman	E. H.
Dart	S. H.
Eagle	S. H.
E-B	S. H.
Ellwood	H.
Farm Horse	E. H.
Fitch	E. H.
Flour City, Junior and 20-35	S. H.
Flour City, Other Models	E. H.
Fordson	S. H.
Fox	E. H.
Frick	S. H.
Gray	S. H.
Hart-Parr	E. H.
Heider	S. H.
Holt, 2-Ton	H.
Holt, Other Models	E. H.
Huber	S. H.
Indiana	H.
International	H.
J. T	E. H.
Klumb	E. H.
La Crosse	E. H.
Lauson	S. H.
Leader	S. H.
Leonard	S. H.
Liberty	E. H.
Lincoln	S. H.
Little Giant	S. H
McCormick-Deering	H.
Minneapolis, 12-25 and 17-30	S. H.
Minneapolis, Other Models	E. H.
Mogul	S. H.
Moline	S. H.
Monarch	H.
Nilson	S. H.
Oil-Gas	E. H.
Peoria	E. H.
Pioneer	E. H.
Reed	S. H.
Rix	S. H.
Rumley, Oil Pull, 12-20, 16-30 and 20-40	E. H.
Rumley, Other Models	E. H.
Russell	S. H.
Samson	S. H.
Shawnee	H.
Square Turn	E. H.
Stinson	S. H.
Titan	S. H.
Topp-Stewart	S. H.
Toro	H.
Townsend	E. H.
Traylor	H.
Trundaar	S. H.
Twin City, 12-20 and 20-35	S. H.
Twin City, Other Models	E. H.
Uncle Sam	S. H.
Wallis	S. H.
Waterloo Boy	S. H.
Wetmore	S. H.
Wisconsin	S. H.

CULTIVATORS

Trade Name	Motor Oil
Acme	H.
Aro	H.
Avery	H.
Bailor	H.
Beeman	H.
Bolens	H.
Boring	H.
Centaur	H.
Do-It-All	S. H.
International	H.
Kincade	H.
Merry Garden	M.
Motor Macultivator	S. H.
New Britain	H.
Red E	H.
Spry Wheel	E. H.
Utilator	H.

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M.—Polarine Medium
H.—Polarine Heavy
S.H.—Polarine Special Heavy
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The Michigan BUSINESS FARMER

An Independent
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Edited in Michigan

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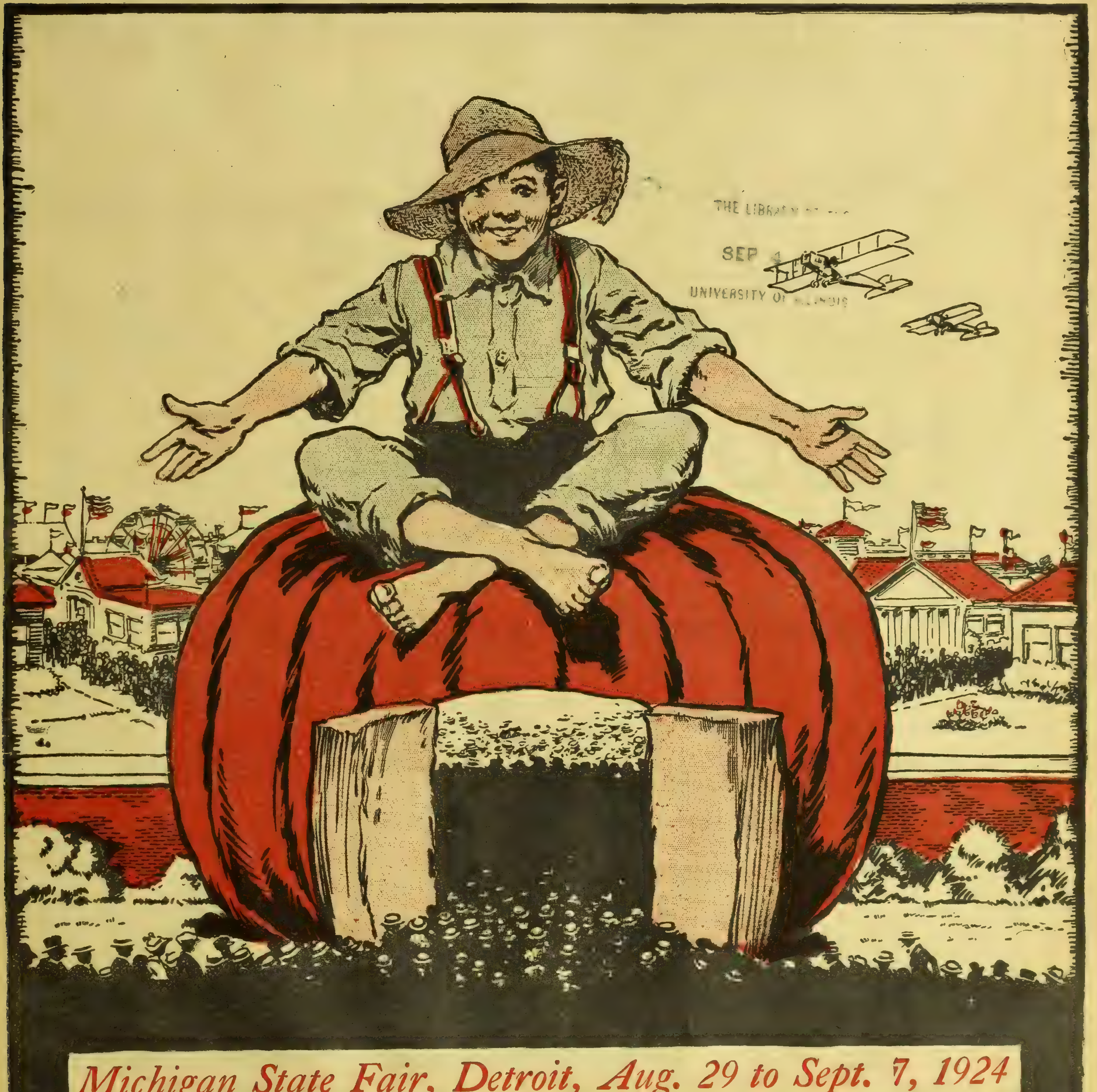

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Michigan State Fair, Detroit, Aug. 29 to Sept. 7, 1924

In this issue: Sugar Beet Growers Demand No Tariff Cut! See Story Page 3

A Greater Michigan
A Greater Detroit
A Greater Hudson's

HUDSON'S

43rd Anniversary Sale

Begins Tuesday Sept. 2

This Anniversary Sale is the most important Hudson merchandising event of the entire year.

For months we make careful preparations for it in markets not only of America but of Europe and the Orient.

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We wish particularly to emphasize that every offering is of new Fall and Winter merchandise of Hudson quality at very definite savings.

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Kodaks
Cameras
Books
Favors
Jewelry Repairs
Engraved Cards

Second Floor

Men's Clothing
Yard Goods
Bedding
Laces
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Patterns
Art Goods

Third Floor

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Coats
Suits
Skirts
Blouses
Costumes
Sweaters
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Fourth Floor

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Millinery
Women's Shoes
Children's Shoes
Boys' Clothing
Boys' Furnishings

Fifth Floor

Corsets
Negligee
House Dresses
Underwear
Draperies
Curtains

Sixth Floor

Furniture
Lamps

Seventh Floor

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Radio
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SATURDAY
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VOL. XI. NO. 26
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Being absolutely independent our columns are open for the discussion of any subject pertaining to the farming business.

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Michigan Beet Growers Demand No Tariff Cut

Reduction at this Time Would Imperil Beet Growing in America—Farm Bureau, Dairy Interests and Others Rally for Defense

By STANLEY M. POWELL

(Lansing Correspondent of The Business Farmer.)

SUGAR beet growers of Michigan possibly do not all realize that there is a movement on foot which if carried out would be anything but beneficial to them. There is a menace not generally appreciated in the recommendation recently made to the President by three members of the Tariff Commission that the duty on sugar be reduced.

Michigan sugar beet growers do not need anyone to tell them that if the tariff on foreign sugar is materially reduced it will undermine the price of sugar in the United States until beet fields which now bring in a little profit would actually be operated at a loss.

Especially now that such a large proportion of the Michigan beets are being grown under a participating contract, sugar beet growers are vitally interested in everything which affects the price of sugar.

Means Much to Us

The sugar beet growing industry is just getting nicely established in Michigan. In 1923 there were 131,000 acres planted to beets, of which 109,000 acres were harvested. This season 174,000 acres were planted. Thus the industry is on the gain and if it receives no serious set-back it appears destined to become an important factor in Michigan's agriculture.

It might be timely to state that sugar beet production in Michigan is a far more important factor in influencing the cash incomes of our farms than is commonly realized. During 1923 Michigan farmers received $8,240,000 for their sugar beet crop. This is more than one-eighth of the $62,333,000 which constituted their total cash income from the sale of all farm crops, exclusive of fruit and truck produce.

The total value of all farm products produced in Michigan last year was $242,472,000, but as stated above, only $62,333,000 of these crops were sold as cash crops, while the balance was consumed on the farm, fed to live stock, etc. However, 100 per cent of the sugar beets produced were sold directly so the price of sugar beets is a big factor in determining the cash incomes of our farms today, and promises to be more so in the years to come.

Last year Michigan forged ahead to second place among the several states as a producer of sugar beets. Colorado had a production of 2,360,000 tons, Michigan 1,273,000 and Utah 766,000 tons. Thus Michigan grew more than one sixth of the 7,439,000 tons of sugar beets which were produced in the United States last year, and which are reported to have yielded 951,000 tons of beet sugar. These few figures prove conclusively that Michigan farmers are profoundly interested in the retention of the present sugar tariff schedules.

Manufacturer Agrees

Commenting of the present situation Mr. W. H. Wallace, General Manager of the Michigan Sugar Company, says,

"Michigan farmers and farm organizations can consistantly ask that no change be made in the tariff on sugar, considering the fact that now under the present contract they are just as much interested in the price received for sugar as the manufacturer.

"Why the Commission would spend days listening to the Cuban planters, and not offer to give the United States beet grower an opportunity, is beyond me.

"Just following the War we had an evidence of what the Cubans would do to us, if they had an opportunity. With worlds of sugar in their warehouses, they raised the price of sugar to 24c to 30c. Still the Democrats would turn over to them absolute control of the Sugar market, if they could. The fact that the United States was producing a large amount of beet sugar saved the people millions of dollars during the War.

"It is just a question between beet growers and manufacturers of the United States on one side, and the Cubans with Wall Street, and the Sugar Trust behind them on the other side.

"Wall Street has invested a lot of money in Cuban sugar plantations during the War, and they are making extraordinary efforts now to get the matter into their own hands and get another wallop at the American people, and get their money back."

Michigan sugar beet growers do not stand alone as parties interested in no downward change in the present tariff. They have been joined in their protests by producers of sugar beets and sugar cane in all parts of the United States. Nor is that all. Now the corn growers in the midwest states are adding their protest to that already voiced by western and southern cane and sugar beet growers that the sugar tariff be not lowered. This demand has become insistant since the recommendation of the three members of the Tariff Commission to the President that duty on sugar be reduced.

Corn and Sugar

The corn growers are interested in the sugar tariff because molasses is on an interlocking schedule and if sugar is lowered, molasses will also come down and molasses will enter into direct competition with about fifteen per cent of the commercial corn.

A great amount of soft corn this year promises to add a good premium to the corn growers' price on the 400,000,000 to 500,000,000 bushels which make up commercial demand of corn in the United States. But if the sugar tariff is lowered the corn growers see part of this anticipated profit fading.

About 30,000,000 bushels of corn are used in making glucose and about 40,000,000 bushels are used in distilling and in mixed feeds. It is evident that the importation of sugar and molasses come in competition with about 70,000,000 bushels of corn, or fifteen per cent of the commercial corn movement. This, of course, is large enough volume to affect the entire corn price.

Ordinarily the dairy interests would be eager for a reduction in the molasses tariff from the advantage they would have in reduction of mixed feeds. However, this year it is becoming apparent that the dairy interests are wanting the tariff kept on sugar since they are after an increased protection on casein and butter.

The American Farm Bureau Federation has pointed out in statements that the proposed reduction on sugar tariff would seriously handicap sugar cane growers in Louisiana, Mississippi, and Arkansas, as well as large sugar beet areas of Colorado, Utah, Nebraska, Wyoming, Montana, Idaho, Nevada, California, Oregon, and Washington, and in addition to these western areas sugar beets are becoming an important crop in Michigan, North Dakota, Wisconsin, Ohio, Indiana, and Minnesota.

Farm Bureau officials have also pointed out that the sugar beet industry is just reaching an important size in states where diversified farming is being urged, and that in Utah and Idaho alone this year a $15,000,000 crop is anticipated. This crop has been produced at great cost and if anything occurs that materially reduces the return it will cause serious economic suffering in those states.

To Protect Americans

The question seems to be pretty fairly set that our domestic sugar is raised on lands which pay American taxes and command American prices, and by people who maintain American standards of living. If the sugar tariff is lowered this sugar industry will be very seriously handicapped.

As to the actual figures in the case, farm bureau statistics show that the United States consumes about 30 per cent of the world's entire production of sugar. About one-fifth of this is produced in continental United States; almost one-fourth is produced in the territories of the United States and enters duty free. This leaves something over half of the United States consumption to be imported under duty. About 90 per cent of the imports under duty comes from Cuba.

The full tariff duty on sugar on specified grade is 2.2 cents per pound for the specified grade.

In a study made by the Research Department of the American Farm Bureau Federation in 1922, it was estimated that producers of sugar in the United States receive an advantage from tariff duties of about $50,000,000 per annum. The sugar tariff is a vital matter to them. Michigan growers, who produce one sixth of the sugar beets of the nation, are especially interested.

FARM BODY SPEAKS

BECAUSE of the situation outlined, the Michigan State Farm Bureau has been watching developments with great interest. It has filed formal protests to the proposed tariff revision with both its Washington office and with C. Bascom Slemp, Secretary to President Coolidge. At the August meeting of the State Farm Bureau Board of Directors, the following resolution was adopted:

WHEREAS, it appears that a determined effort is being made by certain interests to secure a reduction in the tariff on sugar being imported into the United States.

AND WHEREAS, three members of the Tariff Commission are reported to have recommended to the President that the duty on sugar be reduced,

AND WHEREAS, any such action would be detrimental to the farmers of Michigan who are engaged in sugar beet production, and especially so because of the participating contract which is now in operation between the beet growers and the manufacturers in this state.

AND WHEREAS, we regard a healthy and prosperous domestic sugar producing industry as the best possible protection and insurance against exhorbitant prices being charged American consumers by interests which might be in control of the cane sugar industry,

AND WHEREAS, since both labor and industry are today given the benefit of a system of protective legislation, it is only equitable that farmers should be granted a reasonable tariff, especially an these products of which there are substantial imports, thus making possible that such tariff wall shall provide real protection,

AND WHEREAS, we further realize that the growing of sugar beets efficiently utilizes a large acreage which would otherwise be producing other crops of which we already have a distressing surplus.

NOW THEREFORE BE IT RESOLVED that we strenuously oppose the above-mentioned reduction in the sugar tariff and strongly urge that no action be taken until the sugar beet producers of this and other states and the sugar cane growers of the Southern states have been permitted to appear and present their arguments against the proposed change.

MICHIGAN STATE FARM BUREAU BOARD OF DIRECTORS.

"Come and Camp on the State Fair Grounds!" Says Dickinson

GEORGE W. DICKINSON, manager of the State Fair is a busy man these days getting ready for what, he admits, will be the greatest exposition ever held in the state of Michigan, but he had time to talk to a representative of The Business Farmer who interviewed him Friday.

When asked if there would be a camping site again this year for farmers and their families who drove down to the fair, equipped with tents to stay over one or more nights, Mr. Dickinson replied, "Sure thing, tell as many to come that way as possible and we'll try our level best to make them feel at home on the grounds. There are plenty of toilets, running water and good restaurants right handy to our camp site. It will take more than one day to do the state fair this year in the right way and those who come a long distance do not want to drive home after the night shows. Everybody is welcome and you know everybody comes!"

It was The Business Farmer which first suggested a free camping site on the state fair grounds and we hope a lot of our folks will accept the invitation this year. Why not get your friends to join you?

Livestock is Great Britain's Pride

A Visit to England's Royal Livestock Show, the First of a Series of Articles

By **FRANCIS A. FLOOD**

THIS is the first of a series of articles by Mr. Flood, who is a member of the Agricultural Editors Association party which went to Europe this summer to study conditions. (See picture on opposite page.) Mr. Flood is a thoroughly trained agriculturalist and has made a wide circle of friends in the west, where for several years he has contributed articles of travel to the leading publications. You can follow this series with the assurance that your time will be well and interestingly spent.—Editor.

Mr. Flood holding a box of giant prize-winning strawberries at the Horticultural Exhibit of the English Royal.

EVERY Englishman, from the humblest dairy hand to the be-medalled commander of the King's Royal Horse is personally interested in England's livestock.

The eighty-third annual Royal Livestock Show held this year in Leicester, England, was a great success, and the writer, coming from America's middle west which, according to popular superstition, is distinctly a cattle country itself, the great show was a revelation of England's mastery in the field of livestock.

This over-crowded little island with its millions of people bulging out over the stonewalls and hedges into the pasture lands of cattle and sheep, and with its thousands of towns and large cities denying space for the cultivation of forage crops has, in spite of all this, a denser livestock population than any of our own great cattle raising states in America.

A mutton chop and a mug of ale are as distinctly English as pretzels and beer are German, and the "Roast Beef of Old England" is a fact and not a fancy. For with all her industries, people, monuments and premiers Merrie England is jolly well holding her own in her pastures as well as on her seas.

The Royal Livestock Show, as everything else in England, is as old as our own great country is young. It began eighty-five years ago and has been held annually ever since except for two years during the war.

The show is nomadic and is held in a different place each year. It was last held in Leicester in 1896. The Englishman is appalled at our method of wasting the great acreage which we set aside in each state to be used for no other purpose than to stage our state and county fairs each year. The buildings and equipment used in connection with the English Royal Livestock Show are temporary and can be taken down and moved, as the Arab does his tent, to a new place each year, without permanently wasting any valuable ground.

The foot and mouth disease, now so prevalent both on the continent and in England, seriously threatened the holding of the show this year, but with strict examinations rigidly enforced the show was held as usual although the entries were considerably curtailed.

There were twenty-one breeds of beet and dairy cattle numbering 1302 individual entries in all. Most of these were dairy breeds with the familiar Milking Shorthorn the most numerous. The British Friesian, which we call the Holstein-Friesian in America, was next in numerical popularity with the beautiful Jerseys a close third.

Friesians, but not Holsteins!

The big, black and white British Friesians are as nearly identical with our heavy milking Holstein-Friesian as can be expected with 3,000 miles of water between, but the "Holstein" and the "Schleswig" part of it is left entirely out of the name. Certainly these two families of the same stock are much more similar to each other than we, ourselves, are like our British cousins. Yes, we are certainly different, but I will be charitable to them and not record here which branch makes the better showing today.

The numerical balance of these entries seems to represent fairly accurately the popularity of the different dairy breeds actually on the English farms as we observed them after driving over most of the southern and central shires. The Friesians have supplied the only British cows, sixteen in number, that have produced 1,000 pounds of butter in one year; they have supplied the five 3,000 gallon cows in Europe, the only 2,000 gallon heifer in Europe and 134 of the 146 British 2,000 gallon cows. It must be remembered that in these measurements the British Friesian operates under a handicap for the English gallon is about one-fifth larger than our own gallon. Start her gallons from scratch and her records command respectful attention. But in spite of these records the Milking Shorthorn is still the ranking favorite of the English dairy herdsman, partly perhaps, because it is distinctly of English origin, but no doubt mainly because he knows the milking shortly is just naturally the best cow for his job.

Interesting Types

The little black Dexter cows which except for their short legs and mature form look more like yearling calves than milking matrons are quite common on the English farm and an interesting type to study at the show.

There were twenty-seven breeds of sheep totalling 633 individual entries, most of which were mutton type. The Oxford Down, Shropshire, Hampshire Down, Suffolk Lincoln, and Romney Marsh were the most numerous. We were disappointed in driving for three hours through the heart of the famous Southdown district before seeing a single band of these sheep, and we wondered if they were disappearing. The fact that only seven Southdowns were exhibited at the Royal Livestock Show would support this conclusion.

The Englishman loves good horses! It isn't necessary to attend a stock show to see that trait of the Britain for it is in evidence throughout the island. There is a great deal of horse traffic in the crooked streets of London and no matter whether they are a team of slapping Suffolks pulling a beer wagon over London Bridge, or a solitary Shire hitched to one of those monstrous two-wheeled carts, the proud Hunters along the bridle paths through Hyde Park or drilling with the King's Horse Guards in St. James' Court, or the Countless Hackneys and Coach Horses still competing so efficiently and impressively with the taxicabs in London—no matter what the job or the breed of these British horses they are English bred and English groomed and reflect the Englishman's pride in good horseflesh.

There were eleven breeds of hogs shown at the English Royal, totalling 1212 in all, and they were all of the bacon type. The middle white seems to be the most common hog on the English farm,

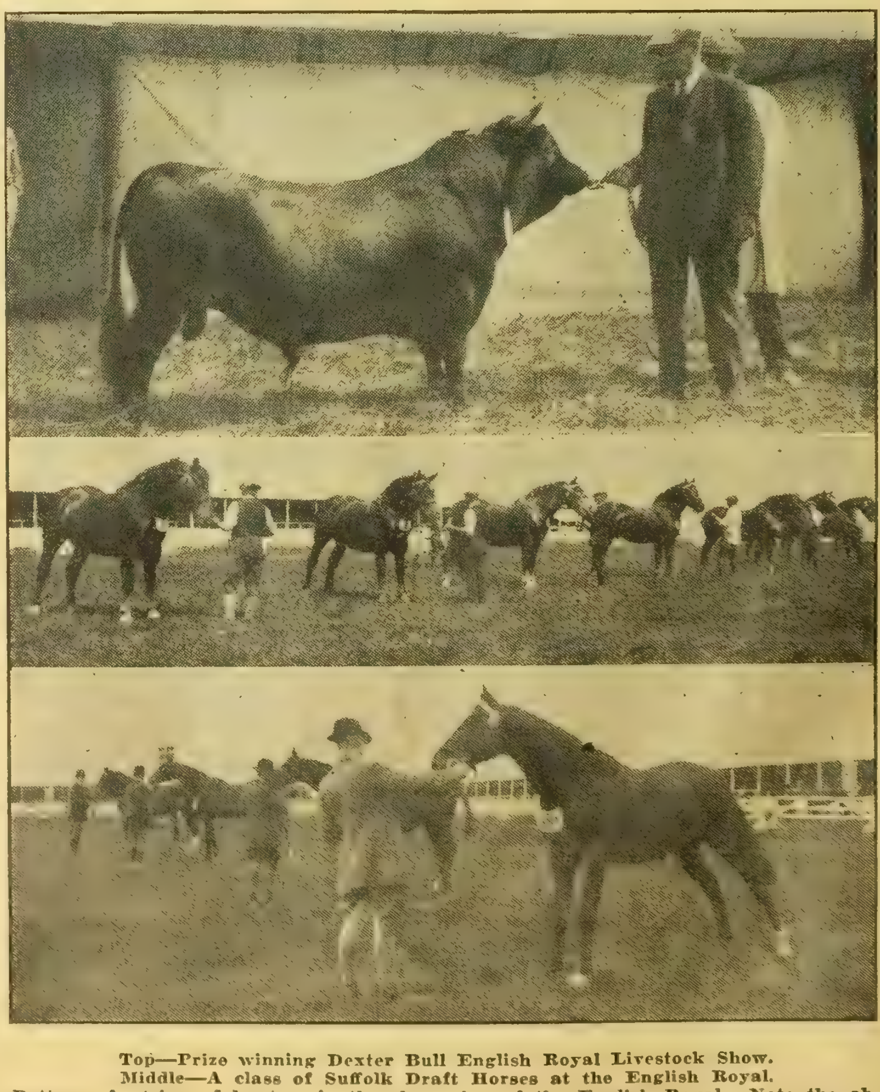
Interest Increasing

It is interesting to note the progress that has been made even in recent years by these pioneers of the livestock industry. When the show was held last in Leicester 28 years ago, there were only eleven breeds of horses shown, eleven of cattle and fifteen of sheep. Since that time then, there have been six more breeds of horses, ten of cattle and twelve of sheep added which have evidently been developed to a showing stage since that time and each one is designed to fill a particular, definite place in that fine art of English livestock culture. If the Englishman wants a cow or a horse or a sheep that will fit in with his local scheme of things and be exactly suited to the possibilities and vicissitudes of his own Shire he gets to work and develops it. They have learned that it is almost as easy to design livestock and make them to order as it is machinery.

Thus it is that the British Isles and mainly England alone, originated all but four of the seventeen breeds of horses entered at the livestock show. All but four of the twenty-one breeds of cattle came from England or Scotland and of the twenty-seven breeds of sheep shown in Leicester all but two originated right in England.

The great show itself quite apart from the livestock end of it deserves mention and commendation in several instances. Every member of our party declared that the horticultural exhibit was the best they had ever seen. The English garden, front and back, is a sacred institution and the best of it's products were most effectively displayed. The strawberries were delicious in spite of their enormous size and the display of flowers of every variety was most ingeniously and elaborately arranged.

There was no midway! Raising and showing livestock is one thing with the Englishman and he takes it as an art, seriously; and a howling carnival is quite another. The British plunges into each so thoroughly that he can't take them both at once without seriously slighting one—and he would never slight either. He will not profane his Hunters and Hackneys by throwing them in with some wonders of the world. A Suffolk sheep. is one thing and a no chance machine is another. The whole atmosphere suggests the intelligent dignity and the solid thoroughness upon which England's greatness in the livestock industry has stood and will stand where others fail.



Top—Prize winning Dexter Bull English Royal Livestock Show.
Middle—A class of Suffolk Draft Horses at the English Royal.
Bottom—A string of hunters in the show ring of the English Royal. Note the absence of spectators in the ring. The rules of the show prohibit people in the ring.

FAMOUS COW DONATED FOR SCIENTIFIC STUDY

Sentiment prevented the famous cow, Sophie Nineteenth, of Hood farm, from falling into unfeeling hands when the herd of which she was a member was dispersed a year ago in April. Her owner, Mrs. C. I. Hood of Lowell, Mass., preferred instead to let this world's champion Jersey cow continue to add to the world's good through her contribution to scientific research, and, accordingly, donated her to the United States Department of Agriculture. Her career as an active producer of dairy products had ceased.

She arrived at the department experimental farm on May 13; and on June 19 she was chloroformed and prepared for study. Outward measurements were made of her body while she was still alive; and afterward the size and weight of her various internal organs were secured. Her wonderful record in production of milk and butterfat over so long a period of time makes the data secured from her an especially valuable contribution to the study that is being made by the Bureau of Dairying of the relation between conformation of dairy cattle and their producing ability. Her skeleton will be prepared and mounted by an expert from the Smithsonian Institution.

Sophie Nineteenth held the world's record for butterfat production in the Jersey breed from January, 1914, to November, 1918, with a production of 17,557 pounds of milk and 999 pounds of butterfat in a year. During 11 lactation periods she produced over 7,500 pounds of butterfat. This is the long-time production record for all breeds.

PICTURES FROM FAR AND NEAR

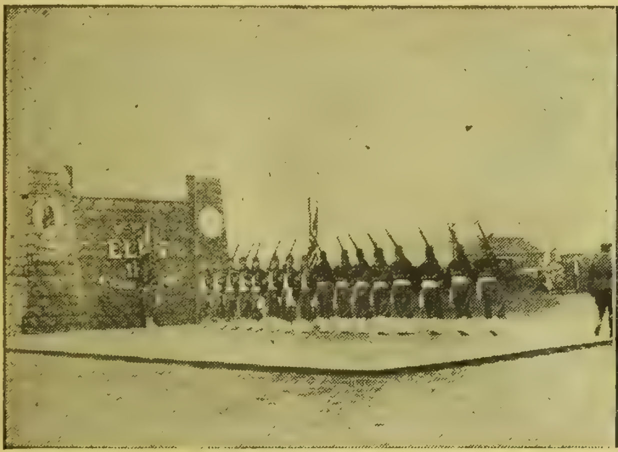
THE FARM PRESS AT SEA.—You may have suspected it before, but here is the actual proof. This picture shows the Agricultural Editors' Association aboard the U. S. S. "Leviathan" sailing for Europe last June. Evidently our own publisher, Mr. Slocum, is taking no chances, as he is the one at the extreme right in the picture, leaning on the rail. Mrs. Slocum is the lady standing beside him.

IN FAR OFF BURMA.—Here is a peaceful scene far from the maddening crowds, on a peaceful river in Burma. The boat in this picture is a house boat and is waiting while an agricultural explorer of the United States Department of Agriculture is away on a trip into the hills of the surrounding country, where he is making researches primarily of interest and value to American agriculture.

CUTS DEATH RATE.—Dr. Deets Pickett, research secretary of the World Service Commission, proves prohibition has cut death rate from alcoholism 50 per cent.

A WALKER OF THE WORLD.—John Caves, of Boston, is the only survivor of eighteen who started to walk four times around the world five years ago. He claims he inherits his walking ability from his uncle, Edward Payson Weston.

COUNSEL ON MARRIAGE QUESTIONS.—Miss Joanna C. Colcord, of the Am. Ass'n. for Organizing Family Social Work, believes in advice on marriage.



FINEST CIVILIAN SOLDIERS.—The Withington Zouaves drill team of Jackson, Mich., giving exhibition at the Elks convention at Boston. They are finest body of civilian soldiers in the United States.

NEW USE FOR VACUUM CLEANER.—S. S. Smith, of Cincinnati, Ohio, uses his vacuum sweeper to get rid of the potato bugs in his garden.

GREATEST SUBMARINE.—This U. S. submarine, shown here in the act of being launched, is the greatest in the world. It will cross the Atlantic and return with one filling of fuel and supplies

A FAMOUS RACE HORSE.—This picture shows Epinard, the famous French race horse, with his trainer at Belmont Park Stables, New York City. He will compete against America's greatest race horses.

"WHITE" INDIANS.—These three San Blas "White" Indian children can hardly be distinguished from the white race. They are Panamanian Indians.

FAMOUS ENGLISH RELIC.—This famous relic of old English days, which is falling to ruin, is Wolf Hall, where King Henry VIII was married to Jane Seymour, while his wife was being beheaded at Windsor Castle.

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Farmers Service Bureau

(A Clearing Department for farmers' every day troubles. Prompt, careful attention given to all complaints or requests for information addressed to this department. We are here to serve you. All inquiries must be accompanied by full name and address. Name not used if so requested.)

PARENTS NOT LIABLE

I come to you for advice on a contagious case (diphtheria). The young couple are minors, although married. I understand he is working out by the month. The doctor says he must pay $5 for each call, making 12 trips $60 in all. If he does not pay doctor says the parents of this man must pay for the treatments. Can the doctor make the parents pay this bill? If so what are the regular charges for a doctor in city and out of city per mile. The couple has been shut up for 9 weeks and no other special attention has been paid to them while under quarantine. Could you please furnish particulars to us in this case. I thank you for kindness shown to me.—A Subscriber, Millington, Mich.

UNDER the circumstances, I am of the opinion the parents of the man would not be liable for the payment of his doctor bills. That family relationship, which charges the father with the support of his minor child and entitles him to its earnings, ceases to exist upon the marriage of the child, when he takes upon himself the responsibility not only of supporting himself but a family of his own as well.—Asst. Legal Editor.

HAVE ADMINISTRATOR APPOINTED

I would like to know whether I could do anything about this matter: My father died some time ago and had 120 acres of land and personal property. Mother died last November and last January 1924 father sold the farm to my brother, all the money was paid but two thousand dollars and father took mortgage for the two thousand dollars and he was supposed to hold the mortgage until it was paid. The mortgage is supposed to be paid in five years time. Will you please tell me what I can do about this matter? It is now in a bank in safe keeping; that is where father put it. Does this have to be probated, if it has will you please tell all about how to have it probated? When the mortgage was drawn up it was agreed that there was to be paid $140 a year. How would that money have to be divided up, and who would hold this mortgage until it is paid? Could my brother draw any wages for staying at home? He is now 25 years old and has stayed at home for five years. Would the law permit him to draw any salary? L. M., Michigan.

YOU should make application to the probate court to have an administrator appointed to settle the estate. The mortgage could be held by the administrator or a trustee until the debt is paid, or it could be sold and the proceeds divided among the heirs. The brother could not collect wages unless there was some agreement, expressed or implied, to that effect.—Asst. Legal Editor.

TIME TO FORECLOSE

What is the shortest length of time to foreclose a land mortgage when taken through the Court of Chancery? Could holder of mortgage take this year's crops? Under what conditions may a farmer go into bankruptcy, husband and wife owning property jointly?—A Reader, Ogemau County, Michigan.

THE land could not be sold under chancery foreclosure until 6 months after the decree. The purchaser acquires title to the growing crops on the land at the time of the sale. A farmer may go into bankruptcy if his assets are not sufficient to pay his debts, by filing petition with the referee in bankruptcy. This would not affect household goods.—Asst. Legal Editor.

KILL OUT DAISIES

Would you please tell me how to kill white field daisies? I have a field with a lot of them in. And could you tell me where to write to find the name of a mineral I found while digging post holes and would like to find out what it is.—E. C. Q., Lachrine, Mich.

IF the fields are badly infested with the white daisy (Ox-eye daisy) they should be plowed up and put into a short rotation of crops for a number of years. The plowing and cultivating that will be given these weeds during the period of rotation will kill them out. Scattered weeds will be killed by cutting them off and then salting them, which will lead stock to eat the plants as they send up new leaves. Where there are but a few it is desirable to hoe them out. Under no circumstances should they be allowed to go to seed, as they are among the noxious weeds specified in the state law which must be prevented from seeding.

The mineral found in digging post holes might well be marl. Send a sample of it to the Soils Department of the Michigan Agricultural College, giving the details as to where it was found, etc.—E. A. Bessey, Professor of Botany, Mich. Agricultural College.

HAVE CAUSE FOR ACTION TO RECOVER MONEY

It seems when we farmers get skinned or otherwise badly used we just naturally turn to the M. B. F. to help us out, and I think it a good thing that we can. I am enclosing a stock breeding certificate that was given to me March 1st, 1922, with the understanding that I was to have the service of this bull for 3 years. Shortly afterward I drove my cow over to where this bull was kept and was refused the service and still am refused the service. You will notice by the enclosed note that I paid for the 3 years about a year ago but still can not get the service. Is there any way I can get a return of this money?—M. C. B., North Star, Michigan.

IF you had an agreement by the terms of which you were to have the services of the bull for three years, and these services were refused you, you have a perfectly good cause of action to recover the amount you paid under the agreement.—Asst. Legal Editor.

WHO IS LIABLE FOR TAXES

A accepted a school office, claiming that he was the owner of land bought on a land contract and on that ground could hold office. Though he has claimed to own this land for six years there is no record of transfer in our county office. Who is guilty of dodging the taxes, A who bought the land or B who sold the land? — Reader, Greenville, Mich.

WHO is liable for the tax on land sold under a contract, the vendee or the vendor? The vendor would be primarily liable for the tax, unless the contract discloses that the vendee is to pay it.—Clare Retan, Deputy Attorney General.

SUPERINTENDENT CAN CONDEMN SCHOOL BUILDINGS

We have a one-room schoolhouse in our district built in about 1900 and has been a standard school with from 45 to 70 children attending. Last July at School meeting a few wanted a two-room school, but it was voted down, so during last term two or three men came to inspect, claiming they were state men, and said they would condemn the school and make the district build according to their plan. Please tell me, is there a law that can make us build a two-room school if it is voted down in the district? Taxed are too high now.—F. D., Saginaw, Mich.

ACT 17 of the Public Acts of 1915 as amended by Act 139 of the Public Acts of 1919, gives the Superintendent of Public Instruction the authority to condemn school buildings. Under this act, all plans and specifications for school buildings in Michigan must be approved by the Superintendent of Public Instruction.

If this school has the number of children mentioned in the letter, the people should provide for a two-room school because no teacher can render best services for the community under such conditions. —W. L. Coffey, Deputy Superintendent of Public Instruction.

GOING TO BUILD MANURE PIT

How large a manure pit would it take to store the manure from 24 head of stock, 18 cows and yearlings and six horses? What is the estimated cost of this pit, including a good roof over the same? Would the value of this manure so stored in a good pit be enough to barrow the money and pay seven per cent interest and about four per cent taxes, (because it will be taxed at its full valuation) and allowing for the depreciation? The manure would be stored about six or seven months from all of this stock.—L. S., Sears, Mich.

THE size of the manure pit that would be required would depend upon the amount of bedding that was used in the stable. A pit 18 by 24 feet with manure piled 6 feet deep should be large enough, or a pit 20 by 30 feet with manure piled 4½ would be a good size.

I would estimate that the cost of a concrete pit with wooden posts and roof and three ply roofing would cost from $500 to $600. It is impossible however to accurately estimate the cost of a building in any given community, as the cost of material and labor would differ greatly and the efficiency of the builder would vary greatly.

The value of the manure is estmated as follows: 6 horses @ $25 a year, $150.00; 18 cows @ $20 per head, $360.00; Total, $510.00.

The loss in value of manure when piled out of doors is variously estimated from 45 to 60 per cent. The amount of loss will depend upon the shape and size of the manure pile and upon the amount of rain during the time the manure is stored.

In the vicinity of Sears where manure would be frozen possibly for several months, the losses would be less.

For the purpose of calculation, we will use 50 per cent as the average loss. There will, of course, be some loss in manure when put in a pit. This is estimated from 10 to 20 per cent. For the purpose of calculation we will use 15 per cent.

50 per cent of $510	$255.00
15 per cent of $510	76.50
difference	$178.50

saving in favor of the pit.

The cost of the manure pit per year is estimated in the following table:

Interest on $600 @ 7%	$42
Taxes on $600 @ 4%	24
Depreciation on building 5%	30
Total............	$96

Perhaps the best way to handle barnyard manure is to haul it to the field each day or every other day as it is made. This method, where it can be used, not only saves the value of the manure, but furnishes exercise for the horses and distributes the farm labor. This method can not, of course, be used on land that is so rolling that manure would be likely to wash away. —F. E. Fogle, Assistant Professor, Agricultural Engineering Dep't., M. A. C.

State Fair Ready for Banner Year

THE stage is all set in Detroit for the opening of the Seventy-Fifth Annual Michigan State Fair Friday and from the exhibits in place and the entries on the grounds it is a safe bet that when it closes the night of September 7 this year's fair will go into history as the greatest of them all.

More contests are on for every prize than ever before, the contests promise to be closer, new machinery is in place for its first showing, a mighty educational program is ready and against this constructive side of the fair the entertainers are on the ground for the most elaborate program ever offered at a fair.

State's Progress Shown

One big thing this fair will show thousands of people is already evident before it opens and that is that Michigan is making trembendous strides in agriculture and particularly in the raising of blooded stock. Exhibits now in place and stock in their stalls in the great new cattle palace overshadow anything of other years.

The "million dollar parade" of livestock, which begins Monday evening, September 1 and continues through Friday, will be little short of a revelation to those who began pushing blooded stock in Michigan a comparatively few years ago.

More than $100,000 in cash prizes will be awarded in this fair and judges already on the grounds say competition will be keener in every classification in all departments this year than it has at any time in their experience.

New Buildings Opened

The $500,000 new buildings, the finest fair buildings in America, are being thrown open for this exposition and without them the fair hardly could have been housed. Three miles of pavement in the fair grounds are making easier the travel between the great buildings.

The active educational program, aside from the education a visitor can get walking through the exhibits, includes more intensive work for the boys in the Boys' State Fair school, in a tent city on the grounds, lecturers in every department representing both state and nation and experts in charge of new machinery that manufacturers are showing for the first time.

The entertainment program for the fair balances the serious side and represents an outlay of money undreamed of a few years ago and not in the sense of excessive costs but in the quantity of fun talent obtained.

One of the big features of the fair will be the presentation of "Hiawatha" by a company of full blooded Indians from the Garden River reservation. There are more than fifty of them and they are quartered on the grounds in a regular Indian village.

Big Thrill for Young

The play will be presented every day and leading educational authorities say that it will be one of the greatest single things ever done for Michigan children and that they will carry back home a lifelong impression from seeing Longfellow's famous poem enacted by the very people he wrote about. Thrilling music will add the last touch of realism.

Two of the finest fireworks spectacles ever produced have been made for this fair. The first is "The Founding of Detroit" and the second is "Tokyo." The first will be given Friday, Saturday, and Sunday evening and beginning Monday evening, September 1, "Tokyo" will finish a big program of fireworks.

The "Founding of Detroit" will show in lines of fire against the inky sky the history of old Fort Ponchartrain, the battle between the French and English and Indians for the control of that point of advantage where three Detroit skyscrapers now rear their marble heads above one of the greatest cities of the world. It is a special picture for Michigan, interesting and entertaining.

The other big picture in fireworks is a brilliant record of the disaster that struck Japan in 1923. It shows Tokyo in flames, its buildings toppling and its inhabitants running wildly here and there, bewildered and then in a panic to escape what followed the quake.

This picture in fire, high over the race track, will amaze its watchers in the big new grandstand by its detail and accuracy. Many actual photographs of the Japan disaster were used in its making.

Automobile races daily, aeroplane rides for those who have the nerve, a great cowboy carnival of fancy riders and bull-doggers, Austrailian axe men who cut through a tree quicker than any one else ever has, and the carnival features on the Midway are a few of the things that will keep the fair visitors thrilled, laughing and wondering what there can be left to see.

THE TWO OUTLOOKS ON LIFE

A SERMON BY REV. DAVID F. WARNER

TEXT: "Enter you in at the straight gate: for wide is the gate and broad is the way, that leadeth to destruction, and many are they that enter in thereby. For narrow is the gate and straightened the way, that leadeth unto life, and few are they that find it."—Matthew 7:13, 14.

YESTERDAY we dedicated our remodeled church-house. The Narrow way of living chosen by our folks demanded more room. Rather paradoxical, isn't it, that narrowness should make for more room? But it does, and so we had to build larger. Dr. C. C. Ellis, Christian educator and preacher, splendidly emphasized the need of the Sanctuary of God to interpret aright the things of life. Yes, it was a bit narrow in view-point; but then, that other and Matchless Preacher, many years ago in that great consecration address on the New Sanai, gave us the warrant for the narrow life. He said that the narrowness of faith and obedience leads to life; and the breadth of unfaith and disobedience leads to death. Do you believe it? How emphatic this is made in the two outlooks of our text, which is found in the conclusion of the Sermon on the Mount.

Here are the two gates. Look at them. One is very narrow; the other is broad. One is diffcult to enter; the other easy. But we are entereated to enter the narrow, the straightened gate. We are asked to do the difficult thing. We can be sure that our Savior meant to forewarn us that we might be forearmed. Some years ago, the writer with a company of friends, climbed one of the high sand dunes along Lake Michigan's shores. With the aid of shrubs, we crawled up with effort. But the summit view was sublime. There are difficulties in the narrow way, but the end is glorious.

Now, how shall we enter? The introduction to this mountain discourse, would have us enter by way of the Beattitudes. Is that gate narrow? Listen, "Blessed are the poor in spirit." "Blessed are they that mourn." Yes, you know them. Well, these are the steps in the celestial stairway. And like the laws of health, we suffer if we omit even one of them. Rather restricted, you say. But they lead us high upward to the tablelands of the Kingdom. Yet, it is this confession of one's emptiness and need that the world calls too narrow. And why does this narrow gate make it hard for the rich man to get thru? But why is it hard for the camel to get thru the needle's eye? He is bulked out with the traffic of earth. The selfish richman would vulgarize heaven by carrying along the world's junk. But the narrow gate sloughs off all our reputation, self-confidence, dignities and honors. Christ must find us "meek and lowly," naked and helpless. Alone and unclothed with the habiliments of earth, we came into this world. So, shall we enter the next. But the point of the text is, that while citizens of this world, the King's highway is narrow. A throughful reading of Christ's great sermon will convince the simple and unselfish in mind.

But it is easier to enter the broad gate. Of course. This requires no serious effort, no lofty decision, no long purpose in life. This broad, easy gate is catching all the indifferent, all the selfrighteous, and all the filth and scum of humanity. Attention! If you are not a Christain, you are in the broad and downward drift. And if you are but a negative, lazy, disobedient, and unsocial church-member, you are also there. Take your worldliness in possessions and longings and set out if you will, you will find no narrow jambways to catch on to your earthly accretions. But to enter is to go the way to destruction.

Yet, the narrow gate is also wide. It admits of no sin, but it does admit sinners. Sinners, high and low, rich and poor, cultured and uncultured, when they permit their pride and worldliness to be torn off by its narrow confines. You see, a gate that admits all peoples and classes, is socially and racially wide, as wide as the oceans and the poles. What hope for a lost world!

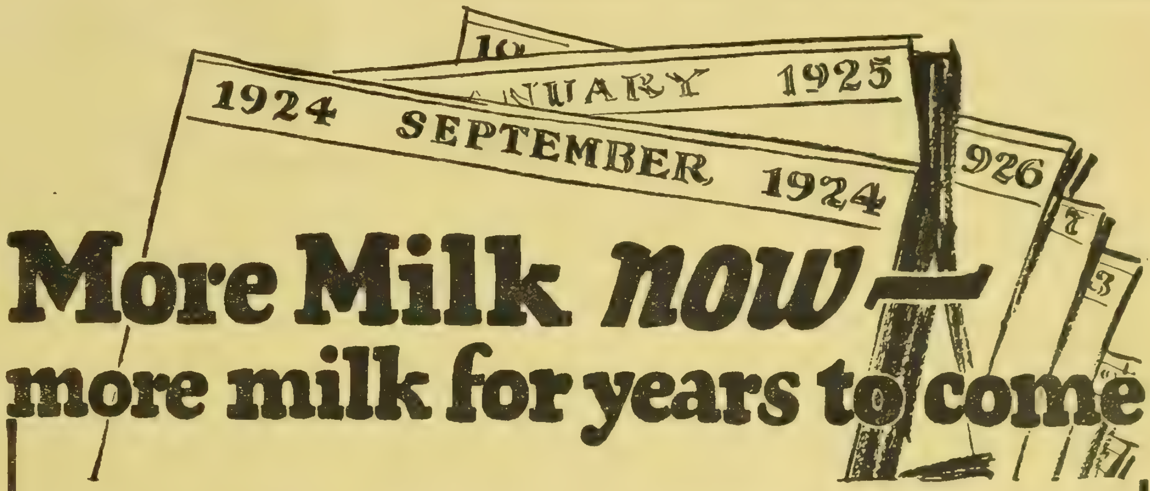
And here are the two ways. One way is "straightened." Have you found it so, Christain friend? So did Israel when going thru the Red Sea gate. Then, there was a wilderness thru which to travel; but there is yet, and so we go on as pilgrims and strangers. But, now as then, God builds the highway. This is narrow, because it is the highway of holiness, and definitely set apart to spiritual purposes and social aims. This is the way that St. Paul discovered when he said, "This one thing I do," and "Whatsoever you do in word or in deed, do all in the name of the Lord Jesus." This scribe used to teach public school in Michigan. The incident is fresh in mind. We are singing. And there comes Mary Sanders up to my desk. Now, what does Mary want? But soon she was making this pious request, "Mr. Warner, may I be excused from singing this song?" "You may." But afterward I said to Mary, "And why did you ask such a thing?" She answered quietly, "I can not sing that song in the name of the Lord Jesus."

And Mary Sanders became the wife of a minister. How fitting! I wonder if she is yet as sensitive about that narrow way as in the unspoiled years of her youth. Now, this "one thing I do" purpose in life, after Pauline fashion, constitutes the narrow way. It does not spread itself to the wide tracts of desert land on either side where the crowd is wandering, aimless and helpless. Yet, how roomy is this way to the Christain! The Bay of Fundy is narrow. There the ocean tide rises high, and boats on its bosom may be lifted far inland to a safe resting place. The tide of God's ocean of love in this narrow way, lifts us up and bears us out into the freedom and rest of his spirit. This is life.

I know our text says there are few on the way. And the proportion yet, I believe, is as the few are to the many. But you will not be lonesome. The Revelator climbs the Mount of Inspiration and sees one hundred forty-four thousand; farther up and he cries out, "ten thousand times ten thousand"; and when he reaches the summit he exclaims, "Behold, a great multitude which no man can number." Now come on, with such companionship and Jesus your heart will burn within you.

But, what of the "broad" way? Well, it is the way of "do as you please." There are no barriers. It is the way in which the serpent found Eve. And there are yet plenty of refreshment stands, gaiety parlors, and retreats of lust. Go that way if you want to. It is easy and attracts and pleases. But after it has fast hold of you, it ceases to have attraction. Many a person has plunged into sin thinking to quit

(Continued on Page 21)



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Actual figures prove this true in thousands of cases—among grade cows and thoroughbreds alike, regardless of breed, regardless of geography.

Cow No. 241 is an ordinary barn Holstein bought by the Larro Research Farm in 1922 for $125. She had been milking 150 days when she arrived at the farm. Her production during the first 30 days thereafter was 724.5 pounds of milk. In her next lactation, during the corresponding 30 day period, she produced 1,173.3 pounds of milk—more than 50% increase. Her total milk production in the first full lactation period at the Larro Research Farm was 13,646.4 pounds—more than three times the average for all cows in the United States. Larro—maintaining health and condition—plus proper care, did it.

Prince's Rose of Meadowbrook is a Jersey who broke the Pennsylvania state record for 2-year-olds in 1922 with 9,810 pounds of milk and 462.79 pounds fat. In 1923 she again became state champion with a record of 14,292 pounds and 639.05 pounds fat. As a calf she was started on a Larro grain ration and kept continuously on Larro throughout the milking periods mentioned.

Down in Florida, Ferndell, of the famous Lemon City White Belted Herd, produced 13,477.9 pounds of milk and 585.64 pounds of butter fat in her twelfth year—five or six years past the age of peak production for most cows. The herd she leads has been fed Larro for thirteen years and averages 9,998 pounds per year.

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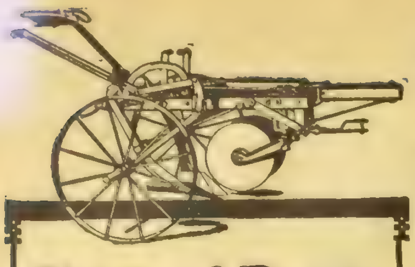

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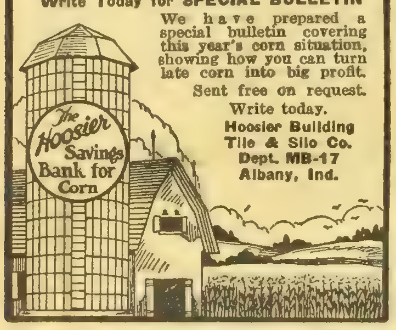
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WHEN WRITING TO ADVERTISERS PLEASE MENTION THE MICHIGAN BUSINESS FARMER

What the Neighbors Say

CANNOT EXPOSE GROUP

DEAR Editor:—In the July 19th issue Mr. M. S. Dowes writes, "I would like to exchange ideas with other farmers." If this could be done the farmers problems could be solved and be solved right. Mr. Dowes or any other farmer is headed in for a hard jolt when he attempts to expose the group that is sticking up the farmers and the system by which they pull their stunt through any publication that is a patron of the organized "news agencies." If they succeed they are more fortunate than I. What have they done? I will leave that matter for you to decide. Stuff they will print but to expose the pirates, strip of the "Sheeps clothing," one's "Manuscript" is junked. That which the farmer needs most right now is, the cooperation of an uncontrolable farm paper. One that recognizes its subscribers as the bases of its success. To which none is "yellow backs ringed streaked or speckled." —J. C., Shelby, Mich.

DOESN'T LIKE SECURITIES COMMISSION

DEAR EDITOR:—I see in your July 19th issue an article by Mr. Powell and your editorial in which you give the Michigan Securities law a great boost. But how about the Commission? It seems so strange in face of all the facts. The generally accepted estimate that 90 per cent of the companies organized for the sale of stock fail within 3 years and that 90 per cent of the investors in this stock lose money, as reported by Mr. Powell, is true in Michigan.

I have never bought any stock nor lost any money in this way, but many of my neighbors have, and I cannot see that the securities commission has offered any protection at all. In fact the losses seem to be greater because the people depend on the commission for protection.

And I have never known a stock or bond salesman to offer anything to us folks in the country that I thought was good. I have been approached many times but nothing has ever been offered to me that I would have approved if I had been a member of the securities commission. In my opinion, as an observer, the biggest fake in the securities business is the Securities commission.

There is a man now operating in eastern Michigan who first, for several years, sold stocks which were a loss to the investors. He is now selling bonds, and effects the sale by having one of the local banks pretend to have bought the bond by placing their "C D" on the bond. When the bond is sold to a real purchaser and paid for, with accrued interest, the accrued interest is paid over to the bank. That is the banks reward for okehing the bond. The bank does not purchase the bond or pay one cent on it. The salesman told me this himself and appeared to see nothing wrong in it.

The securities commission looks like the big factor in assisting the fakes in getting money from half-baked suckers who want to get some "Easy Money," and some "big interest." — J. B., Columbiaville, Mich.

THE IMPORTANT DUTY OF THE ELECTORATE

EDITOR BUSINESS FARMER:—The time is not far distant when the voters of Michigan will be called upon to select Candidates to fill important positions in the state government and, to do this duty wisely, will require the possession of knowledge of the qualifications of the various aspirants for official positions.

It is much to be regretted that a portion of those having the right to vote recognize, so little, their duty in this important matter, indeed, some even take credit to themselves because of not "meddling in politics," and the neglecting of this duty, by many citizens is much to be regretted.

Let us fully inform ourselves regarding candidates, then do our duty as good citizens in this important matter.—Sincerely, J. T. Daniels, Clinton County.

BURDEN TOO HEAVY FOR FARMER

DEAR EDITOR:—Will you allow for a few thoughts about the present expression of Agriculture, and the attitude, thoughtful farmers should take in regard to it?

During the war we produced foodstuffs to our greatest possible capacity, not only for our own army, but for the allied nations as well. This left us with a large supply on hand at the close of the war with a much lessened demand. During the war countries like Australia, New Zealand and other far away agricultural countries, could not market their products on account of the submarine menace and lack of shipping. The close of the war released all this supply for the world market. As a natural consequence, the price went to a very low level. The price of farm products is fixed either directly or indirectly by the world market. This I think is proved by the fact that we are importing agricultural products to a greater value than we are exporting them.

In view of this fact, I can see no prospect of any considerable rise in price. But low prices for what he sells is only one of the farmer's problems. Wages for farm labor are so high as to be almost prohibitive. He must pay for everything he buys at exorbitantly high prices. Taxes are almost if not quite confiscatory. While the close of the war found us with an abundant supply of agricultural products, it was quite different as regards manufactured articles.

Stocks in our stores became depleted, no houses or other buildings were built and at the end of the war, there was a great demand for manufactured products at very high prices. Our war debt was something like 26 billion dollars. We foolishly and extravagantly added to this debt until the total was something like 35 billion dollars. Taxes throughout the country approximate $7,500,000,000, or about $70 for every man, woman and child in the country. These sums are staggering and would be bad if evenly placed, but the fact is the farmer bears a much too large proportion of the burden.

The public official the salaried man and the union worker, all demand increased compensation on account of the high cost of living. Now if these different persons get increased pay so that they can live just as well and easily under this burden of debt, and taxation, then they are not bearing their part.

With the farmer it is quite different, he gets less pay and is bearing more than his share, of the burden. Now as to the farmers' attitude toward these questions: Cooperative marketing, efficiency and good business methods are important at all times, but they don't hit at present fundamental conditions.

At the close of the war Gompers said labor wouldn't stand for any reduction in wages. Now if living costs come down, why shouldn't he work cheaper, as well as the farmer, and help bear the country's burden. The farmer helped put through the highest tariff ever known and was told it would help him out of his difficulties. It has been a failure as far as helping him is concerned but it has mainitained prices for manufactured articles that are almost prohibitive, as far as he is concerned. If the farmer must compete in the world market, why not the manufacturer?

The farmer should demand a reduction of tariff rates to a reasonably low figure. As regards, our public indebtedness, we must bear that burden until it is paid, but we should initiate a policy of "pay as you go" at once and refuse to add to our obligation. There are two phrases to the taxation question. It's excessively big amount and its unequal distribution.

Much of our taxation is caused by inefficiency, extravagance and even dishonesty and graft. Retrenchment all along the line should be the watch word. Too much money is spent foolishly or seemingly just to make jobs.

Soil survey has been an excuse for some fine vacation and many good jobs at the expense of the people. The cases could be multiplied almost indefinitely. The farmer should appoint a committee to be on the job continuously, to go into the matter of public expenditure of money. As regards distribution the proposal gas and income taxes should help.

As regards tax exempt bonds, if we didn't go in debt, the question wouldn't bother us. As regards our National Government, if it wouldn't sell tax exempt bonds in times of great crisis, it might prove very embarrassing and put the government at the mercy of local taxing bodies. As regards inflation of the currency, it requires more money to do the business of the country during a time of intense activity, as during the war period, than in ordinary times.

It is the function of the Federal Reserve System to provide their money as needed.

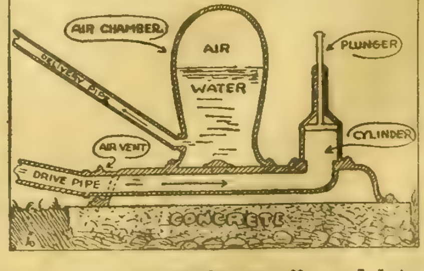
Deflation of the currency to the extent of depressing prices will affect all values and prices alike, and not to the detriment of one industry as at present. Deflation is not the cause of the present plight of the farmer and inflation of the currency would not solve their difficulties, but if carried to any considerable extent, would result disastrously.—K. S. Wood, Charlevoix County.

The Hydraulic Ram on the Farm

THE hydraulic ram is an ancient invention, still new to the minds of many people. It is a simple machine which when installed under a head of water will lift a portion of that water to a heighth much greater than the source.

The machine in simple form conssists of a plunger, a cylinder, a valve and an air or pressure chamber.

The water running from the drive pipe into the cylinder lifts the plunger and when suddenly shut off at the top of stroke recoils and lets the plunger drop back of its own weight. As the plunger reaches the top of its stroke a powerful impact is created which lifts the valve in air chamber and forces some of the water through. The air in the chamber acts as a cushion, making the flow of water from the delivery pipe uniform in volume.



For a small or average size ram one should have a driving flow of 1½ to 8 gallons of water per minute and a fall of 1 foot or more. Unless the water is to be lifted a very great heighth one must not have too much fall else the ram will stop on the up stroke.

For example: A ram working under 18 inches of fall and using 4 gallons of water per minute will lift a barrel of water 40 feet in about 4 hours.

The ram is inexpensive, will last for years and requires no attention when properly installed.

It is well to remember that 3 barrels of water per day will supply a complete bath room and running water in the kitchen for an average sized family.—Fred Ellison.

On our farm we have a spring that flows about 4 gallons of water per minute. It is located about 15 rods from the house and 40 feet lower; and 6 rods from the barn and 12 feed lower. A small ram in this spring furnishes hot and cold water for the kitchen and a complete bathroom. At the barn it pumps the water for 10 cows and 4 horses, and usually there is an overflow. The cost of ram and pipe was about $50. The system is entirely automatic and seldom requires any attention whatever.—Fred Ellison.

RADIO DEPARTMENT

EDITED BY J. HERBERT FERRIS, R. E.

RADIO, EIGHTH WONDER OF WORLD

SELECTING the seven wonders of the world has been a popular pastime the early days of recorded history down to the present.

The ancients got almost as much kick out of choosing them as modern sporting writers do from picking an all-American football team. And they had equally bitter arguments in deciding which objects and phenomena to include and which to eliminate.

The earliest list of the "Seven Wonders of the World" included: The Hanging Gardens of Nebuchadnezzer, the Colossus of Rhodes. Phidias' Statue of Jupiter, the Pyramids, the Temple of Diana at Ephesus, the Tomb of Mausolus and the Palace of Cyrus.

Galloping along down the paths of history the United States got into the Seven Wonders game with such entries as Niagara Falls, the Washington Monument, the Grand Canyon, and the Woolworth Building listed along with foreign sights like the Leaning Tower of Pisa, the Great Wall of China and the Eifel Tower.

But today nobody gets very much excited over the Seven Wonders. The whole world is much more interested in the Eighth Wonder!

By common consent, the title of the Eighth Wonder of the World goes to radio. The marvel of wireless communication has a universal appeal. It amazes, thrills and serves every country and clime.

The effect of this new art and utility cannot even yet be measured or fully forecast. Certain it is that this modern method of communication already is profoundly affecting industry, religion, entertainment, political life, industry and home life everywhere. And the real romance of radio is not alone the spectacular fact of communication through the ether between points thousands of miles apart but the speed and completeness with which the new utility has made a place for itself in the daily life of millions of people.

In fact, the development has been so rapid that the general public has scarcely given a thought to what makes this wonderful source of education and entertainment possible.

What is the essential principle—what really accounts for it?

Amplification is the real explanation. Without amplification, radio of today would be impossible. Charging electric waves to sound waves wouldn't mean much if they couldn't be heard plainly. Amplification builds them up so that they are clear and easy to hear. Amplification is used at the transmitting station as well as at the receiving instrument. Whispers thousonds of miles away become clear, living voices in the homes of millions.

Amplification is multlipication. The small amount of sound energy generated by the voice or an orchestra at the broadcasting station is changed to electrical energy and then multiplied or amplified millions of times. This large amount of energy is then put into an antenna and radiated out into space as an electromagnetic wave. When this wave strikes a similar antenna miles away it gives up to it a small amount of this energy to be amplified again so that a whole roomful of people at the remote point can listen and understand.

Successful amplification is one of the most difficult as well as one of the most important phases of radio production. To amplify is easy, but to amplify so that no distortion or change in the sound is made requires apparatus designed and constructed by specialists in amplification.

In all good amplifiers there are transformers and vacuum tubes. The transformer is the heart of the amplifier. Unless the proper transformer is used the singer's voice in Pittsburg will sound like cat calls in Boston. The voice will be amplified, but the tone and the rich natural quality will not be preserved without a proper transformer.

In a very real and vital sense, the Eighth Wonder of the World depends on amplification, and the next stage of radio's development is the wide ruse of efficient amplification so that quality as well as volume of sound is obtained — amplification without distortion.—Southern Ruralist.

SENDS SET TO BE TESTED

Radio Editor: I notice in THE BUSINESS FARMER, that you offer to adjust radio sets that do not work properly. I built one a short time ago, about two months, that has not worked very well. It is very squeally and noisy, also of late does not bring in many stations. I have a six volt storage battery to light the filament, but perhaps the plate battery is getting weak. I am sending the entire set to you, with the exception of the storage battery, also my check for $6.00. If the plate battery is exhausted, please replace it from this money. I think perhaps that the vario-coupler is not very satisfactory either. I bought a forty-three plate variable condenser, but removed part of the plates, they are in an envelope in the box with the set. If the amount enclosed does not cover expense of fixing and returning the set please let me know and I will send the amount needed immediately. I have been using this set on a single wire aerial, about thirty feet above the ground. Thanking you in advance for this very great favor, I am—O. M. C., St. Johns, Michigan.

YOUR set goes forward to you today by parcel post. Last night I listened to the different stations on your set and they all came in clear and strong, from Omaha, Neb., to Springfield, Mass. In the daytime I got KYW and WWJ fine and clear.

I believe it will give you many months of service from now on. You will notice that I changed some of your connections and have removed the connections from the phone condenser. You will not need to use this condenser as the telephone cords have sufficient capacity in themselves and take the place of the condenser.

Your package arrived in such bad condition that one of the B batteries was all broken to pieces and was unusable. The battery that is left, the ABC battery, is perfectly good yet. You should not use more than 22½ volts on this set or bulb. Do not burn the bulb very bright.

The grid leak was broken and so I replaced that at a cost of 50c; it is a RCA make. The condensers are OK also the vario-coupler which ought to give you lots of service. I would not advise spending any money on a new one unless this one breaks for you. You used acid solder and that is liable to cause trouble. It should never be used on a radio set.

The total cost to you is the postage plus the cost of the grid leak, 50c and leaves you from your $6.00 check, $5.03 which I am enclosing in the form of a check.

KDKA DROWNS OUT OTHER STATIONS

I am sending you my foreign bulb and also my grid leak. When I bought the grid leak, I understood that I had condenser and leak combined but I have made up my mind that it is only the leak, and therefore I wanted you to test these out for me. I tried the bulb out as a plain detector without grid leak or condenser and I have hear KDKA and WGY but not very good. The tube seems to plug up and I had to use the variable condenser in the ground lead instead of the aerial. Would a 43-plate condenser be better on a set with an aerial of 200 feet like mine, than a 23-three plate one? Would it shorten my range to cut the aerial down to 125 feet as I read a shorter aerial gives more selective tuning? If I did so I could have a shorter and more direct lead to my set? Is a C-12 tube as good as a WD-12 tube? Could I use one stage of amplification with my crystal? I do not hear KDKA in the daytime on the crystal. We do hear WABM at Saginaw and also Detroit Stations on some days but every night KDKA comes in, and sometimes so loud as to drown everything else out and no matter how you tune, they are there. Could this be helped? I use a loose coupler with a variable condenser in the detector circuit? We shall be very grateful to you if you can help us and thanking you for your kindness, I am J. M. T., St. Charles, Michigan.

IN today's mail I am returning to you the "Telefunken" bulb and grid resistance. The grid resistance does not have a condenser attached and in itself seems to be broken internally as I could not get it to work with either your tube or with any of my sets. It is defective I believe and should be returned to the store for another one.

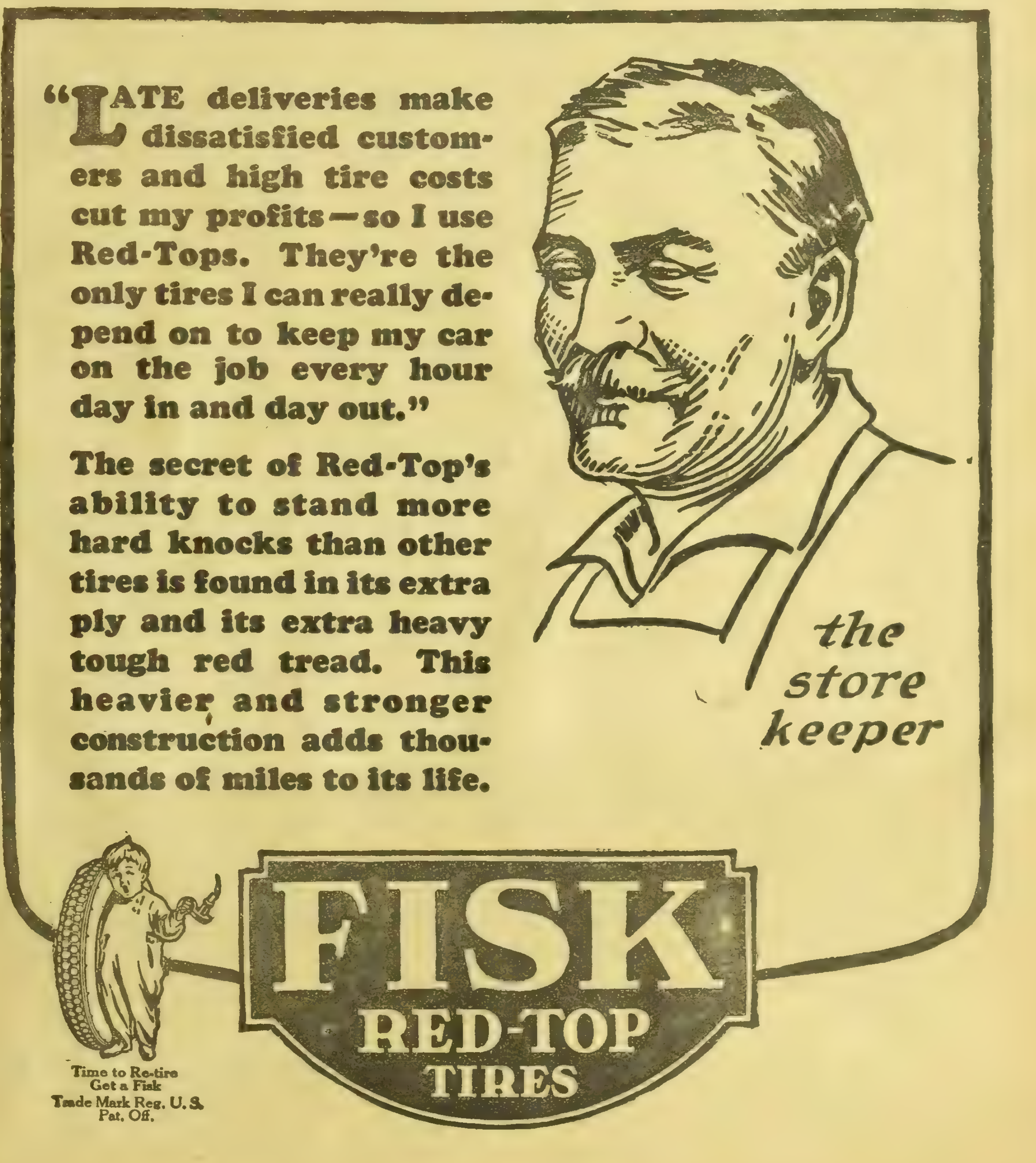
The vacuum tube needs nearly 90 volts on it to work as a detector and then it is not at all sensitive and does not compare with the WD-12 tube. As an amplifier it works quite well on 90 volts or more of B battery. I do not think that it will give you satisfaction except as an amplifying tube and then it is not as good as our American tubes.

Yes the C-12 tube is as good as the WD-12 tube, they are exactly the same and made by the same people, under the same patents.

No, a 43 plate condenser would not be as good as a 23 plate one on a long aerial.

You will get much better selectivity, sharper tuning, and better results on the whole if you cut the aerial down to 125 feet instead of 200 feet. The long aerial is one of the reasons that you have trouble in tuning out KDKA on your present set.

(Continued on Page 21)


"LATE deliveries make dissatisfied customers and high tire costs cut my profits—so I use Red-Tops. They're the only tires I can really depend on to keep my car on the job every hour day in and day out."

The secret of Red-Top's ability to stand more hard knocks than other tires is found in its extra ply and its extra heavy tough red tread. This heavier and stronger construction adds thousands of miles to its life.

the store keeper

FISK RED-TOP TIRES

Time to Re-tire Get a Fisk
Trade Mark Reg. U. S. Pat. Off.

Oh Money! Money!

by ELEANOR H. PORTER

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(Continued from August 16th issue.)

"WELL, I can; and I'll tell you why. It's put me back where I belong—behind the counter of a grocery store. I've bought out the old stand. Oh, I had enough left for that, and more! Closed the deal last night. Gorry but I was glad to feel the old floor under my feet again!"

"But I thought you—you were tired of work, and—wanted to enjoy yourself," stammered Mr. Smith.

Frank Blaisdell laughed.

"Tired of work—wanted to enjoy myself, indeed! Yes, I know I did say something like that. But, let me tell you this, Mr. Smith. Talk about work!—I never worked so hard in my life as I have the last ten months trying to enjoy myself. How these folks can stand gadding 'round the country week in and week out, feeding their stomachs on a French dictionary instead of good United States meat and potatoes and squash, and spending their days traipsing off to see things they ain't a mite interested in, and their nights trying to get rested so they can go and see more the next day, I don't understand."

Mr. Smith chuckled.

"I'm afraid these touring agencies wouldn't like to have you write their ads for them, Mr. Blaisdell!"

"Well, they hadn't better ask me to," smiled the other grimly. "But that ain't all. Since I come back I've been working even harder trying to enjoy myself here at home—knockin' silly little balls over a ten acre lot in a game a healthy ten-year-old boy would scorn to play."

"But how about your new car? Didn't you enjoy riding in that?" bantered Mr. Smith.

"Oh, yes, I enjoyed the riding well enough; but I didn't enjoy hunting for punctures, putting on new tires, or burrowing into the inside of the critter to find out why she didn't go! And that's what I was doing most of the time. I never did like machinery. It ain't in my line."

He paused a moment, then went on a little wistfully:—

"I suspect, Mr. Smith, there ain't anything in my line but groceries. It's all I know. It's all I ever have known. If—if I had my life to live over again, I'd do different, maybe. I'd see if I couldn't find out what there was in a picture to make folks stand and stare at it an hour at a time when you could see the whole thing in a minute—and it wa'n't worth lookin' at, anyway, even for a minute. And music, too. Now, I like a good tune what is a tune; but them caterwaulings and dirges that that chap Gray plays on that fiddle of his—gorry, Mr. Smith, I'd rather hear the old born door at home squeak any day. But if I was younger I'd try to learn to like 'em. I would! Look at Flora, now. She can set by the hour in front of that phonygraph of hers, and not know it!"

"Yes, I know," smiled Mr. Smith.

"And there's books, too," resumed the other, still wistfully. "I'd read books—if I could stay awake long enough to do it—and I'd find out what there was in 'em to make a good sensible man like Jim Blaisdell daft over 'em—and Maggie Duff, too. Why, that little woman used to go hungry sometimes, when she was a girl, so she could buy a book she wanted. I know she did. Why, I'd'a' given anything this last year if I could 'a' got interested—really interested, readin'. I I could 'a' killed an awful lot of time that way. But I couldn't do it. I bought a lot of 'em, too, an' tried it; but I expect I didn't begin young enough. I tell ye, Mr. Smith, I've about come to the conclusion that there ain't a thing in the world so hard to kill as time. I've tried it, and I know. Why, I got so I couldn't even kill it eatin'—though I 'most killed myself tryin' it! An' let me tell ye another thing. A full stomach ain't in it with bein' hungry an' knowing a good dinner's coming. Why, there was weeks at a time back there that I didn't know the meaning of the word 'hungry.' You'd oughter seen the jolt I give one o'them waiter-chaps one day when he comes up with his paper and pencil and asks me what I wanted. 'Want?' says I. 'There ain't but one thing on this earth I want, and you can't give it to me. I want to want something. I'm tired of bein' so blamed satisfied all the time!' "

"And what did—Alphonso say to that?" chuckled Mr. Smith appreciatively.

"Alphonso? Oh, the waiter-fellow, you mean? Oh, he just stared a minute, then mumbled his usual 'Yes' sir, very good, sir,' and shoved that confounded printed card of his a little nearer to my nose. But, there! I guess you've heard enough of this, Mr. Smith. It's only that I was trying to tell you why I'm actually glad we lost that money. It's give me back my man's job again."

"Good! Alright, then. I won't waste any more sympathy on you," laughed Mr. Smith.

"Well, you needn't. And there's another thing. I hope it'll give me back a little of my old faith in my fellow-man."

"What do you mean by that?"

"Just this. I won't suspect every man, woman, and child that says a civil word to me now of having designs on my pocketbook Why. Mr. Smith, you wouldn't believe it, if I told you, the things that's been done and said to get a little money out of me. Of course, the open gold-brick schemes I know enough to dodge, 'most of 'em (unless you count in that darn Benson minimm stock), and I spotted the blackmailers all right, most generally. But I was flabbergasted when a woman tackled the job and began to make love to me—actually make love to me!—one day when Jane's back was turned. Gorry! Do I look such a fool as that, Mr. Smith? Well, anyhow, there won't be any more of that kind, nor anybody after my money now, I guess," he finished with a sage wag of his head as he turned away.

To Miss Maggie that evening Mr. Smith said, after recounting the earlier portion of the conversation: "So you see you were right, after all. I shall have to own it up. Mr. Frank Blaisdell had plenty to retire upon, but nothing to retire to. But I'm glad—if he's happy now."

"And he isn't the only one that that forty-thousand-dollar loss has done a good turn to," nodded Miss Maggie. "Mellicent has just been here. You know she's home from school. It's the Easter vacation, anyway, but she isn't going back. It's too expensive."

Miss Maggie spoke with studied casualness, but there was an added color in her cheeks—Miss Maggie always flushed when she mentioned Mellicent's name to Mr. Smith, in spite of her indignant efforts not to do so.

"Oh, is that true?"

"Yes. Well, the Pennocks had a dance last night, and Mellicent went. She said she had to laugh to see Mrs. Pennock's efforts to keep Carl away from her—the loss of the money is known everywhere now, and has been greatly exaggerated, I've heard. She said that even Hibbard Gaylord had the air of one trying to let her down easy. Mellicent was immensely amused."

"Where was Donald Gray?"

"Oh, he wasn't there. He doesn't move in the Pennock crowd much. But Mellicent sees him, and—and everything's all right there, now. That's why Mellicent is so happy."

"You mean— Has her mother given in?"

"Yes. You see, Jane was at the dance, too, and she saw Carl, and she saw Hibbard Gaylord. And she was furious. She told Mellicent this morning that she had her opinion of fellows who would show so plainly as Carl Pennock and Hibbard Gaylord did that it was the money they were after."

"I'm afraid—Mrs. Jane has changed her shoes again," murmured Mr. Smith, his eyes merry.

"Has changed—oh!" Miss Maggie's puzzled frown gave way to a laugh. "Well, yes, perhaps the shoe is on the other foot again. But, anyway, she doesn't love Carl or Hibbard any more, and she does love Donald Gray. He hasn't let the loss of the money make any difference to him, you see. He's been even more devoted, if anything. She told Mellicent this morning that he was a very estimable young man, and she liked him very much. Perhaps you see now why Mellicent is—happy."

Good! I'm glad to know it," cried Mr. Smith heartily. "I'm glad—" His face changed suddenly. His eyes grew somber. "I'm glad the loss of the money brought them some happiness—if the possession of it didn't," he finished moodily, turning to go to his own room. At the hall he paused and looked back at Miss Maggie, standing by the table, gazing after him with troubled eyes. "Did Mellicent say—whether Fred was there?" he asked.

"Yes. She said he wasn't there. He didn't come home for this vacation at all. She said she didn't know why. I suspect Mellicent doesn't know anything about that wretched affair of his."

"We'll hope not. So the young gentleman didn't show up at all?"

"No, nor Bessie. She went home with a Long Island girl. Hattie didn't go to the Pennocks' either. Hattie has—has been very different since this affair of Fred's. I think it frightened her terribly—it was so near a tragedy; the boy threatened to kill himself, you know, if his father didn't help him out."

"But his father did help him out!" flared the man irritably.

"Yes, I know he did; and I'm afraid he found things in a pretty bad mess—when he got there," sighed Miss Maggie. "It was a bad mess all around."

"You are exactly right!" ejaculated Mr. Smith with sudden and peculiar emphasis. "It is, indeed, a bad mess all around," he growled as he disappeared through the door.

Behind him, Miss Maggie still stood motionless, looking after him with troubled eyes.

As the spring days grew warmer, Miss Maggie had occasioned many times to look after Mr. Smith with troubled eyes. She could not understand him at all. One day he would be the old delightful companion, genial, cheery, generously donating a box of chocolates to the center-table bonbon dish or a dozen- hot house roses to the mantel vase. The next, he would nervous, abstracted almost irritable. Yet she could see no possible reason for the change.

Sometimes she wondered fearfully if Mellicent could have anything to do with it. Was it possible that he cared for Mellicent, and to see her now so happy with Donald Gray was more than he could bear? It did not seem credible. There was his own statement that he had devoted himself to her solely and only to help keep the undesirable lovers away and give Donald Gray a chance.

Besides, had he not said that he was not a marrying man, anyway? To be sure, that seemed a pity—a man so kind and thoughtful and so delightfully companionable! But then, it was nothing to her, of course—only she did hope he was not feeling unhappy over Mellicent!

Miss Maggie wished, too, that Mr. Smith would not bring flowers and candy so often. It worried her. She felt as if he were spending too much money—and she had got the impression in some way that he did not have any too much money to spend. And there were the expensive motor trips, too—she feared Mr. Smith was extravagant. Yet she could not tell him so, of course. He never seemed to realize the value of a dollar, anyway, and he very obviously did not know how to get the most out of it. Look at his foolish generosity in regard to the board he paid her!

Miss Maggie wondered sometimes if it might not be worry over money matters that was making him so nervous and irritable on occasions now. Plainly he was very near the end of his work there in Hillerton. He was not getting so many letters on Blaisdell matters from away, either. For a month now he had done nothing but a useless repetition of old work; and of late, a good deal of the time, he was not even making that pretense of being busy. For days at a time he would not touch his records. That could mean but one thing, of course; his work was done. Yet he seemed to be making no move toward departure. Not that she wanted him to go. She should miss him very much when he went, of course. But she did not like to feel that he was staying simply because he had nowhere to go and nothing to do. Miss Maggie did not believe in able-bodied men who had nowhere to go and nothing to do—and she wanted very much to believe in Mr. Smith.

She had been under the impression that he was getting the Blaisdell material together for a book, and that he was intending to publish it himself. He had been very happy and interested. Now he was unhappy and uninterested. His book must be ready, but he was making no move to publish it. To Miss Maggie this could mean but one thing: some financial reverses had made it impossible for him to carry out his plans, and had left him stranded with no definite aim for the future.

She was so sorry!—but there seemed to be nothing that she could do. She had tried to help by insisting that he pay less for his board; but he had not only scouted that idea, but had brought her more chocolate and flowers than ever—for all the world as if he had divined her suspicions and wished to disprove them.

That Mr. Smith was trying to keep something from her, Miss Maggie was sure. She was the more sure, perhaps, because she herself had something that she was trying to keep from Mr. Smith—and she thought she recognized the symptoms.

Meanwhile April budded into May, and May blossomed into June; and June brought all the Blaisdells together again in Hillerton.

CHAPTER XXII

With Every Jim a James

Two days after Fred Blaisdell had returned from college, his mother came to see Miss Maggie. Mr. Smith wes rearranging the books on Miss Maggie's shelves and trying to make room for the new ones he had bought her through the winter. When Mrs. Hattie came in, red-eyed and flushed-faced, he ceased his work at once and would have left the room, but she stopped him with a gesture.

"No, don't go. You know all about it, anyway,— and I'd just as soon you knew the rest. So you can keep right to work. I just came down to talk things over with Maggie. I—I'm sure I don't know w-what I'm going to do—when I can't."

"But you always can, dear," soothed Miss Maggie cheerily, handing her visitor a fan and taking a chair near her.

Mr. Smith, after a moment's hesitation, turned quietly back to his bookshelves.

"But I can't," choked Mrs. Hattie. "I—I'm going away."

"Away? Where? What do you mean?" cried Miss Maggie. "Not to—live!"

"Yes. That's what I came to tell you."

"Why, Hattie Blaisdell, where are you going?"

"To Plainville—next month."

"Plainville? Oh, well, cheer up! That's only forty miles from here. I guess we can still see each other. Now, tell me, what does this all mean?"

"Well, of course, it began with Fred—his trouble you know."

"But I thought Jim fixed that all up, dear."

"Oh, he did. He paid the money, and nobody there at college knew a thing about it. But there were—other things. Fred told us some of them night before last. He says he's ashamed of himself, but that he believe's there's enough left in him to make a man of him yet. But he says he can't do it—there."

"You mean—he doesn't want to go back to college?" Miss Maggie's voice showed her disappointment.

"Oh, he wants to go to college—but not there."

"Oh," nodded Miss Maggie. "I see."

"He says he's had too much money to spend—and that 'twouldn't be easy not to spend it—if he was back there, in the old crowd. So he wants to go somewhere else."

"Well, that's all right, isn't it?"

"Y-yes. Jim says it is. He's awfully happy over it, and—and I guess I am."

"Of course you are! But now, what is this about Plainville?"

"Oh that grew out of it—all this. Mr. Hammond is going to open a new office in Plainville and he's offered Jiim—James no, Jim—I'm not going to call him 'James' any more!—the chance to manage it."

"Well, that's fine, I'm sure."

"Yes, of course that part is fine—splendid. He'll get a bigger salary, and all that, and—and I guess I'm glad to go, anyway. I don't like Hillerton any more. I haven't got any friends here, Maggie. Of course, I wouldn't have anything to do with the Gaylords now, after what's happened,—that boy getting my boy to drink and gamble, and—and everything. And yet—you know I've strained every nerve for years, and worked and worked to get where my children could—could be with them!"

"It didn't pay, did it, Hattie?"

"I guess it didn't! They're perfectly horrid—every one of them, and I hate them!"

"Oh, Hattie, Hattie!"

"Well, I do. Look at what they've done to Fred, and Bessie, too! I shan't let her be with them any more, either. There aren't any folks here we can be with now. That's why I don't mind going away. All our friends that we used to know don't like us any more, they're so jealous on account of the money. Oh, yes, I know you think I'm to blame for that," she went on aggrievedly. "I can see you do, by your face. Jim says so, too. And maybe I am. But it was just so I could get ahead. I did so want to be somebody!"

"I know, Hattie." Miss Maggie looked as if she would like to say something more—but she did not say it.

Over at the bookcase Mr. Smith was abstractedly opening and shutting the book in his hand. His gaze was out the window near him. He had not touched the books on the shelves for some time.

"And look at how I've tried and see what it has come to—Bessie so high-headed and airy she makes fun of us, and Fred a gambler and a drunkard, and 'most a thief. And it's all that horrid hundred thousand dollars!"

The books in Mr. Smith's hand slipped to the floor with a bang; but no one was noticing Mr. Smiith.

"Oh, Hattie, don't blame the hundred thousand dollars," cried Miss Maggie.

"Jim says it was, and Fred does, too. They talked awfully. Fred said it was all just the same kind of a way that I'd tried to make folks call Jim 'James.' He said I'd been trying to make every single 'Jim' we had into a 'James,' until I'd taken away all of the fun of living. And I suppose maybe he's right, too." Mrs. Hattie sighed profoundly. "Well' anyhow, I'm not going to do it anymore. There isn't any fun in it, anyway. It doesn't make any difference how hard I tried to get ahead, I always found somebody a little 'aheadier,' as Benny calls it. So what's the use?"

"There isn't any use—in that kind of trying, Hattie."

"No, I suppose there isn't. Jim said I was like the little boy that they asked what would make him the happiest of anything in the world, and he answered, 'Everything that I haven't got.' But I don't see as I'm any worse than other folks. Everybody goes for money; but I'm sure I don't see why—if it doesn't make them any happier than it has me! Well, I must be going." Mrs. Hattie rose wearily. "We shall begin to pack the first of the month. It looks like a moun-

(Continued on page 17.)

DEAR STORY READERS:—Some of you have written to ask if you missed a part of the story between the July 19th and the August 16th issues. You did not! Every word in the book "Oh Money! Money!" will be published in The Business Farmer, we never cut down a story or leave out a word for any reason. This week we are giving you a great big installment and the story will probably finish with our issue of September 27th, and we hope to start a new story, just as good, if not better in that same issue. Don't miss it!—The Editors.

Grant Slocum, Gleaner Founder, Passes On

Pioneer Farm Organizer and Agricultural Leader Dies Following Long Illness

(From The Detroit Free Press, Aug. 15th, 1924.)

GRANT H. SLOCUM
October 12, 1864
August 14, 1924

GRANT H. SLOCUM, who organized the Ancient Order of Gleaners in 1894, and had been head of that order for 30 years, died at his home near Mt. Clemens, as a result of apoplexy suffered May 16. He was 59 years old.

For nearly a third of a century, Grant Slocum had been one of the political leaders among Michigan farmers, and, aided by his organization, was credited with controlling large numbers of votes, but, despite his political strength, he never held office of any kind.

He was born on a farm near Holly, October 12, 1864, where he remained until he was a young man, when he went to Caro, Tuscola county, to learn the printing trade.

Published Tuscola Paper

There he acquired the Tuscola County Courier, which he published for many years. While engaged in this enterprise he conceived the idea of a great fraternal insurance order to be built up among the farmers, and in September, 1894, the Gleaners came into being, with 25 members.

The organization grew until it had 75,000 members, principally in eight middle western states, and 1,400 lodges. In 1909 headquarters was moved to Detroit, and Mr. Slocum came here to live, but 12 years ago he built the home where he died, near Mt. Clemens.

His entire life was devoted to farm enterprises. He organized the Gleaners' Clearing House association, which unified a group of co-operative elevators throughout the state and which was operated successfully for nearly a quarter of a century until the depression following the war sounded its death knell.

Promoted Prison Twine

Through his initiative, during the time in which Nathan F. Simpson was warden of Jackson Prison, the Gleaners purchased the entire output of binder twine, and retailed it to members of the order throughout the state.

He was president of the Peoples State bank of Middleton, which has branches in several neighboring villages, vice-president of the State Savings bank of Caro, and a director of the Commercial bank of Caro. He was a Mason, an Odd Fellow, a Gleaner, a Yeoman, and a Woodman.

Mr. Slocum was married in 1886 to Miss Ada Mertz, of Caro. Two children, Mrs. Ford Gargett, of Ionia, and George M. Slocum, of Mt. Clemens, and James Slocum, a brother, survive.

Funeral services were held at the residence at 2 o'clock Saturday afternoon and the body temporarily placed in a vault at Mt. Clemens.

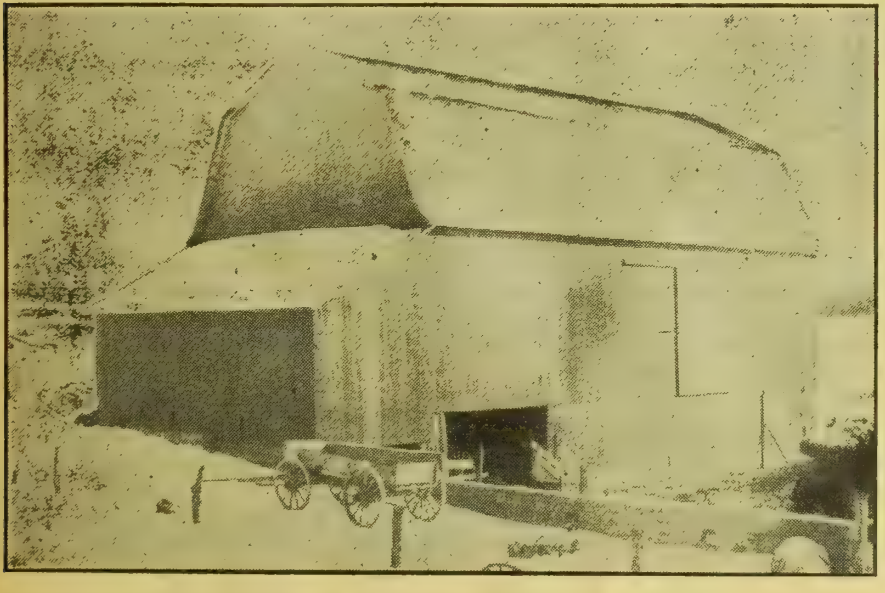
Active pallbearers included R. L. Holoway, J. J. England, John Hudson, F. C. Goodyear, George L. Strachan, Nathan F. Simpson, Herbert F. Baker and H. I. Zimmer, all members of the board of directors of the Gleaners. There were 20 honorary pallbearers.

Floral tributes numbered more than 500 and when the residence became filled with blooms shortly before the services several hundred designs had to be placed in the yard and on the porches.

Note: Mr. George M. Slocum's tribute to the memory of his father appears on the editorial page of this issue.

OUR READERS' NEW BUILDINGS

Have you built any up-to-date farm buildings lately? If you have send us a picture of the new building and we will print it in this new department. It will show the M. B. F. readers what their distant neighbors are doing to change the scenery. And, incidently, you may be able to help some farmer decide the type of house, or barn, or other buildings he desires to put up. He may like the appearance of your building and will want the plan of it. Kodak pictures are all right if the details show up well. Do not send the negative, just a good print.



CHAS. BISSELL OF MARCELLUS BUILDS NEW BARN

This barn, built in 1923, is thirty feet by sixty-seven feet and there is a basement under the entire barn. It stands on the farm of Charles Bissell, Marcellus, Mich., and he writes that the capacity of the basement is twenty head of cattle, six horses, one hundred sheep and forty hogs. The mows will hold seventy tons of hay while the granary inside the barn will hold one thousand bushels of corn and a thousand bushels of wheat. It cost $2600. Let's hear from some of our other readers.

The State Fair

A STATE FAIR is an arena for friendly competition. It is an educational opportunity. It is a medium of exchange for ideas and property. It is a social event. It is a reflection of agricultural optimism. It is an annual census of progressive agriculture. It is a pageant of progress.

The crop and livestock products of a great commonwealth are on display. The best grains, the most nutritious grasses, and the finest farm animals on exhibition give evidence of man's progress in soil husbandry.

Ever keeping pace with the progress of the world's basic industry—agriculture—has been the development of the Nation's arteries of transportation. Interdependent as are agriculture and transportation, it is becoming more and more evident that the prosperity of one depends upon the success of the other.

Always in the lead to recognize the needs of the country, the New York Central Lines have spent millions upon millions of dollars in providing livestock cars, box cars for grain, and refrigerator cars.

When visiting the State Fair, consider also the fact that the progress reflected there is, in a large measure, possible through the foresight and progressiveness of the builders of our great railroad systems.

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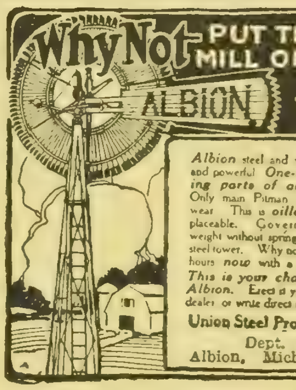

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The Michigan
BUSINESS FARMER

SATURDAY, AUGUST 30, 1924

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"The Farm Paper of Service"

—TO "GRANT," MY FATHER

FOR as far back as I can remember, I had called him "Grant," just as did those with whom he worked or played. And when the grandchildren came he would not have the barrier of "grandpa" raised between their little hearts and his big one, and so they were taught at his very knee to call him "Grant" too. Such simple humility of spirit as this expressed, is the key by which to read the memories of this hour. Sympathy welled up in his heart with every pulse-beat and, whether he would or not, it must flow in some direction or burst its bounds.

Thus it is easy to see, from whence came his life's greatest desire; to better the condition of the men and women who tilled the soil. For had not his very fingers picked the endless stone from the fields of his father's farm? Had he not seen his own father, a rugged pioneer of that type who could not know defeat, forced to toil as a carpenter because that same farm could not even barely feed and clothe his family of two girls and four boys, of whom Grant was the youngest?

* * *

It is not strange then, that the farm held small attraction for these children. They had seen its seamy side. So when his turn came, Grant too, left it and followed two older brothers into the country newspaper business, where by diligence and creative ability he soon laid the foundation of a comfortable business career.

But the memory of his mother's struggle and his father's toil on that rocky farm would not be stilled. Grant saw the injustice of it all. The farmers' helpless position haunted him.

Finally the bounds of his sympathy broke and its flood carried before it all the selfish aims and ambitions which otherwise might have marked a life devoted only to personal gain. No Moses or Joan ever dreamed more clearly a vision of leadership out of an intolerable condition for a part of God's children than did Grant Slocum, when from printed page and platform he preached the salvation of the individual farmer through organization and co-operation.

* * *

Only the rugged constitution of a countrybred boy could have endured the struggle of the years after he seen the vision. Country schoolhouses, dimly lit and crowded to suffocation, resounded to his pleading and his battle cry. Long, freezing drives through snow piled high over fences, until the way of the road itself was lost, he made to get back to the home that was his haven of refuge and his shrine of devotion.

But such inspiring labor as was his, soon found reward and others, fired by his enthusiasm, lit their torches from his own and in turn kindled more until thousands of faces were lighted by its glow and countless hearts took courage from its promises.

Grant Slocum was one of the pioneers of farmers' organization and co-operation in America. And he would not, could he speak today, ask any greater reward than that simple appraisement of his lifetime's work.

* * *

That his sympathy should have won countless friends goes without saying. And that some, who knew his personal following and his strength, should have tempted him with the possibilities of public office and the honors of government position, are obvious. But that in an active lifetime he never accepted such honors must bespeak more than mere words could, how unflinchingly he held to the single purpose on which he had marked his goal.

* * *

In later years when the fruits of frugality had made it possible for him to lay down the battle and enjoy the rest which was his reward, how he struggled to do it! Yet the fire of youth's purpose burned within his now worn body, fanned, it seemed, to an even brighter intensity by every report of victory in the emancipation of the farmer.

But while the battle still waged, he who had been one of its generals was carried from the field wounded, and when the passing of hours into days, days into weeks, and weeks into months told him he could never again pick up his beloved banner and carry it forward, he gave up.

His last words, when only power of speech remained, for he had poured out his last ounce of strength, were

"Come on now, boys, all together, over the top!"

And that challenge will remain, engraved in the hearts and burning in the breasts, of the great circle of those who loved him so well and who called him "Grant."—GEORGE M. SLOCUM.

SILVER LINING TOO BRIGHT

IT might have been just as well for the newly organized Grain Marketing Company if Gray Silver, its president, had not painted so rosy a picture of its future when he talked to the agricultural editors, who accepted the invitation sent out by that company to "come to Chicago at our expense."

Altho we were not in attendance, we understand that among other things, Mr. Silver, in the style which has already won him some fame, stated:

> "It is estimated—and the estimate is conservative—that a saving of five cents per bushel will be effected in the cost of handling grain from the time it leaves the farm granary until it reaches the mill or the manufacturer. Applied to the whole wheat crop, this would reach the enormous total of $40,000,000 a year. Applied to the volume of corn moving through commercial channels, it would be approximately as much, with the other grain contributing to the grand total applied to the wheat and corn leaving the farm, certainly $70,000,000 would be conservative. The entire capitalization of the Grain Marketing Co. is $26,000,000. In other words, if about one-third of the savings which it is estimated can be made for the farmer on the cost of handling his wheat and corn surpluses during a single year could be so employed, the capitalization could be obtained and a tidy little sum could be saved. If a considerably lesser proportion could be employed to pay for the properties that have been leased, the farmers would quickly be in complete ownership of all the elevators and other machinery comprised in those properties."

Of course, we could not have swallowed so large a lump without choking and we certainly do not expect our readers to. Promoters are not allowed under the "blue-sky" laws of Michigan to burn so much gas when they are talking to their prospect about the purchase of stock, but perhaps Mr. Silver knew well enough that none of the farm paper editors present would buy anyway, so he might as well go the limit, and apparently he did!

In our last issue, on this page, we had something to say about this $26,000,000 proposition which is to be sold to the farmers of America. Now, as we read over what we wrote two weeks ago, it sounds very mild indeed. We said we were charitable towards any farmers cooperative movement and we are. We can overlook mistakes, when honest effort prompted them, but we cannot and will not stand for anything which appears to us a misrepresentation of facts.

Too many honest men with honest purposes have toiled into the night and sweated their very life's blood to give farmers' organization and cooperative movements the impetus which they have earned today. We know their problems and the frightful loss which the failure of a farmers' movement entails. There is too great a danger of a total collapse of the farmers' confidence in all organizations for us to risk the endorsement of a proposition, which from what we have learned of it to date, appears to lack the essentials of certain success, therefore we ask every reader of THE BUSINESS FARMER, to investigate thoroughly before investing in the Grain Marketing Company of Chicago.

We shall be interested to learn when they begin the canvass of Michigan for the sale of stock in this company. We hope our readers will keep us informed and also mail us copies of circular matter which they receive regarding it. This proposition will well bear watching and we believe it is the duty of every man interested in the future of cooperative marketing to be alert to its ramifications.

A GREAT LOSS

WITHIN sight of the home he loved, Professor Frank R. Spragg, assistant professor of farm crops at M. A. C., with his beloved wife and ten year old boy, were struck by a train on August 13th, and hurled into the great unknown. So shocking a loss has not been felt at the college in a great many years and gradually as the importance of this man to agriculture is known, will the loss be keenly felt all over the country, if not the world.

Our own readers have been following for months a series of articles by Professor Spragg, in which he has covered the inovations in plant-life which he will, as time passes, be given full credit for. Even now, we have yet to publish one or two articles which were awaiting publication when he was taken away from us.

Rosen rye, Wolverine oats, Hardigan alfalfa, Berkley Rock wheat and other improved varieties of seeds were discovered by this modest man who toiled with so little recognition and such great results at East Lansing. Who then can fathom the depth of the loss in which this one man's death has placed agriculture not only in Michigan, but in the whole world?

God grant, that somewhere there are hearts that know no fatigue and brains that dream of things yet unknown who can carry on the work which Frank Spragg had so well begun!

DETROIT WELCOMES STATE FAIR VISITORS

BECAUSE Michigan's metropolis has put on long-pants since becoming the fourth city, in point of population in the United States, is no reason for assuming as the politicians would some times have us believe, that Detroit is not friendly to visitors from up-state.

As a matter of fact, the better part of Detroit's population came from "somewhere in Michigan!" Most of her leading business men, manufacturers, merchants and public officials are up-state boys.

They want you folks to drive in the week of the state fair and make yourselves at home. They feel disappointed if you stop at the Fair Grounds and do not come down-town. Check your car somewhere near the grounds and take a trolley down-town. Better still, climb on top of a Second Avenue bus and get a bird's-eye view of the city, all the way to the heart of town, for a silver dime.

Come to Detroit and enjoy all that great city has to offer you, because, you have been invited and because back of the invitation is a sincere "do come!"

HOW TO SEE A FAIR

TWO men go to a state fair and what each sees is almost entirely different. One returns home smelling of the midway and filled with a conglomerate mixture of pop-corn, taffy, red-hots and ginger-ale—but a mind as empty as his pocket-book.

The other man looks first for the exhibits of the special farm product in which he is most interested and, be it bees or bulls, he finds the best which the state or county affords displayed for his approval. He finds men and women in charge of these exhibits who are the best posted authorities on their subject; he asks questions and often he makes acquaintances which stand him in good stead for years to come.

Next, he takes in the educational exhibits of the fair in which he or his family are most interested. He goes with mother through the womens building and even stands with daughter before a beautiful painting in the art building or with son he dives into the intricacies of the boy scouts' work. If he can spend more than one day at the fair he finds ample things of interest to fill every moment. He goes home well-repaid for his visit and with mind well-filled with subjects to discuss with the family or ponder over in the fields for many months to come.

PUBLISHER'S DESK

THE HOME PROFIT KNITTER DEFUNCT

WHEN the news reached my desk that the Home Profit Hosiery Company was in the receivers' hands, I immediately took steps to have an investigation made and our representative Mr. Fletcher, from our New York office went directly to Rochester and made me the following report:

"If you have any complaints from ceedings in Rochester on the 28th of July. It was established that there are between seven and eight thousand creditors, and it is expected that the assets will not reach the $10,000 mark. The chances, therefore, are very remote.

"If you have any complaints from readers who have paid money on machines and have not received them, I would suggest that you file proper claim and mark them "Priority Claims." This was the advice given me by the secretary of Judge Sanford, who is Referee in Bankruptcy.

"Mr. E. V. Cleary, attorney at Rochester, is handling most of the claims for creditors and it might be advisable to get in touch with him."

We suggest that all readers of THE BUSINESS FARMER who have claims of any nature, should present them to Mr. Cleary, whose address is 906 Wilder Bld., Rochester, N. Y., who will present them to the referee in bankruptcy and we expect, charge only a nominal commission on what he collects for you.

So far as we can learn this company lived up to all their promises, so far as buying back the work, etc., but apparently they were not on a sound financial basis and could not stand the strain. There is a ray of hope in the fact that the machine is a good one and will do the work, but under the present circumstances it will not, of course, be possible to hold the company to their promise to buy back the completed hosiery and it will be necessary for those who own them to sell their product in their own neighborhoods.

It has come to our attention that twenty-five women in the city of Minneapolis have formed themselves into a cooperative knitting club, buying their yarn and needles at wholesale and selling the socks they knit to either the local retail trade or to friends. This permits them to not only work out the cost of the machine, but also gives a larger profit as such local sales are seldom affected by the present depressed condition of the wholesale market.

We understand that Mr. H. B. Watson, 21 Marlborough Road, Rochetser, New York, in answer to the request of these women in Minneapolis, has made it possible for them to purchase needles and yarn at wholesale prices, and we take it for granted that he is willing to extend this same cooperation to others who may desire it.

NEWSWRITER TRAINING BUREAU

"I would like to ask you if 'The Newswriter Training Bureau,' Buffalo, New York, William A. Heacock, managing director, is honorable and trustworthy."—G. L., St. Clair County.

WE wrote this firm requesting information regarding their course and after waiting over a month and receiving no reply we wrote again sending the letter by registered mail. The letter reached them but they did not take the time to reply in any way. The closing paragraph in our last letter was "If you are doing a strictly legitimate business and want more students you should be anxious to volunteer all information desired." Perhaps they do not want more students, so would advise our reader to look elsewhere for a place to spend her money.

The Collection Box

The purpose of this department is to protect our subscribers from fraudulent dealings or unfair treatment by persons or concerns at a distance.

In every case we will do our best to make a satisfactory settlement or force action, for which no charge for our services will ever be made, providing:

1.—The claim is made by a paid-up subscriber to The Business Farmer.

2.—The claim is not more than 6 mos. old.

3.—The claim is not local or between people within easy distance of one another. These should be settled at first hand and not attempted by mail.

Address all letters, giving full particulars, amounts, dates, etc., enclosing also your address label from the front cover of any issue to prove that you are a paid-up subscriber.

THE BUSINESS FARMER, Collection Box
Mt. Clemens, Mich.

Report Ending August 8, 1924

Total number claims filed	2525
Amount involved	$24,769.97
Total number claims settled	2020
Amount Secured	$22,923.38

WATCH OUT FOR BAD CHECKS

DURING the summer there are always strangers going about the country buying loads of vegetables, apples or poultry from the farmers. Most of these strangers pay cash for what they buy but we have heard recently of several cases where farmers accepted checks and then when they went to cash them found they were no good. I have a letter from a "victim" before me that reads as follows:

"I wish you would publish a piece in your valuable paper warning people not to accept checks in payment for their farm produce if they don't positively know the person who gives the check is reliable. We were unlucky enough to get stung $44.00 worth by a man from Jackson who gave us a check in payment for potatoes, check being no good as we found later when we tried to cash it. He stung four other farmers here the same way. There seems to be quite a number of his kind swindling the people out of their money with worthless checks."

Insist on the cash unless you are well acquainted with the man and know him to be honest. "A bird in hand is worth two in the bush." Even though prices are not very high it is better to keep the produce yourself than to give it away to some stranger.

WE ALL MAKE MISTAKES ONCE IN A WHILE

THEY say the reason rubbers are put on the end of pencils is that we all make mistakes now and then—none of us are perfect. Well, we buy pencils with rubbers on them and sometimes have to use the end with the rubber on. But once in a while we fail to catch a mistake and the result is your name may be misspelled on your label, or there is some other little error. Then it is up to you to call the matter to our attention and we are always thankful to you for doing it. The mistakes are not always ours remember. Some send in their subscription and fail to sign their name plainly or leave off their address and in a few cases we have been unable to find the name any place although we have read the letter over two or three times searching for it. Whether it is our mistake or yours write in and tell us about it. We are always glad to hear from our readers. If your letter is about your subscription address it to the attention of the Circulation Manager, if you want the Editor to get your letter address it to the attention of the Editor, and if you want to get your letter into the hands of the Publisher address it to his attention. This should apply also if you want your letter to go to any certain department such as Farmers' Service Bureau, Radio Department, etc.

THANKS!

Dear Srs:—I received the money from ——— and wish to thank you for your kind service. I know without your help I should never have gotten it.—R. R., Mancelona, Mich.

Dear Sirs: Will let you know I have received a check from the ——— company and thank you very much for your prompt attention toward my other letters and helping me to get my pay. Thanking you again, I am—Mrs. F. C., Merrill, Michigan.

I received a letter from ———. They sent me a check. I will send you a letter they sent me last week. I never would have gotten one cent had you not taken it up. I feel as though you ought to get paid for your trouble at least. I assure you I will do all I can for The Business Farmer. Accept my thanks for your kindness. I will advertise this kind deed.—Mrs. C. C., Yale, Michigan.

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When you purchase the 7% first mortgage real estate gold bonds we offer, you deal with one of the fine old investment banking houses of the country.

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CASH PAID FOR FALSE TEETH, GOLD crowns and bridges, old magneto points and old gold. Mail to HOKE SMELTING & REFINING CO., Otsego, Mich.

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CORN HARVESTER CUTS AND PILES ON harvester or windrows. Man and horse cuts and shocks equal Corn Binder. Sold in every state. Only $25 with bundle tying attachment. Testimonials and catalog Free showing picture of Harvester. PROCESS HARVESTER CO., Salina, Kansas.

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The Farm Home
A Department for the Women

Edited by MRS. ANNIE TAYLOR

DEAR FOLKS: Are your boys and girls all ready for school? It will only be a few days before school starts in the country and now is the time to check up to see if they are ready. And by "ready" I do not mean just if you have clothing for them and if they are in the right frame of mind—no indeed. If they have complained of headaches or tired eyes have you had their eyes examined and fitted with glasses if needed? Have you taken them to the dentist to see if their teeth are in first class condition? Are they feeling all right? If you want them to do their best in school and get the most out of their studies they must be physically and mentally fit. No matter where your boys or girls are going to school they should be ready when school opens. Think this over.

Your Friend,
Mrs Annie Taylor

Address letters: Mrs. Annie Taylor, care The Business Farmer, Mt. Clemens, Michigan.

JUST THE HIRED MAN

My pants are baggy—knees are out
My coat is faded grey,
My socks are darned a dozen times
But mates were never they;
My boots, like alligator jaws,
Are worn around the toes,
My hat a new Fedora was—
But when no mortal knows.
My sweater's all a ribboned wreck,
I'll wear it all I can,
And no one minds, for I am just
The tattered hired-man.

I've hired out for many years
At wages great and small.
Though I haven't saved as misers do,
I haven't spent it all.
But with all my expenses met,
I've put a little by
To tide me over troublous times,
And that's the reason why,
With such a carefree countenance
All humankind I scan,
And nothing worries me, for I'm
The happy hired-man.

Then when the hoppers eat the wheat
The boss has tried to grow,
And rust and hail and drought and frost,
Those harbingers of woe,
Come helter-skelter on his head
That's getting grey with care;
And dunners chase from off his face
The smile he used to wear;
I sympathize with all my heart
And thank the Mighty Plan
That made me what I am, and that's
The lucky hired-man.

—Nor'-West Farmer.

SEPTEMBER IN THE COUNTRY

A FEW more days and then the call to return to the schoolroom will be answered by over 300,000 rural boys and girls throughout the land. Most of them will enter buildings freshly cleaned, some redecorated, to make them more pleasant and suitable "temples of learning." A few will enter new buildings dedicated " to the service of the community and to the common cause of a better life for all."

Most of this youthful throng are eager to return and join their school friends. Most of them will enter advanced grades with new fields of study to explore. Most of them will have new teachers. About one-fifth of them will be entering school for the first time. A few of them will be entering schools in new communities into which they have moved or to which they must go for advanced educational instruction.

Everything possible should be done to make the first week a red letter week for the beginners and the newcomers, to be remembered by them for the remainder of their lives. First impressions are lasting impressions. A favorable attitude towards school and community gained during these first few days will largely determine the wholeheartedness with which these pupils will enter into cooperation with the school and its enlarged society.

Just as first impressions largely determine the attitude of the pupils so do they affect the teacher. The teacher should become an integral part of the community during her period of tenure. Most teachers realize this and are glad to respond to the welcome extended them by the community. The teacher will not only be happier but she, in increased service, will repay the community for any efforts expended in her behalf.

THREE TYPES OF SLEEVES AND HOW THEY ARE MADE

PRACTICALLY all sleeves may now be divided into three types, the kimona sleeve which is cut in one with the waist section, the set-in sleeve and the raglan sleeve. The first two types take their names from the manner in which they are attached to the garment and not from their shape.

The advantage of the kimona sleeve is that one is saved the work of cutting and putting in a separate sleeve. A kimona sleeve should never be made of material which has not enough body or weight in itself to hang well. A kimona sleeve in organdy is not attractive because of the stiffness of the material which causes it to stick out instead of hanging in proper position. People inclined to stoutness should not wear kimona sleeves.

The advantage of a set-in sleeve is that it breaks the line of the garment at the shoulder, and allows the waist to conform somewhat better to the lines of the figure under the arm. Its only disadvantage is the labor necessary to put it in so that it will hang correctly.

A raglan sleeve is cut with the top extending to the neck. It is easy to adjust and comfortable, but is apt to make the wearer look round shouldered. It should not be used in thin materials.

It is generally advisable to pin in the sleeve carefully before basting, matching the notches. In case alterations are necessary remember that at the present time most patterns require the highest part of the curve at the top of the sleeve to be placed at the shoulder seam, which is now directly on top of the shoulder.

Hold the sleeve toward you in pinning and basting it in, and if there seems to be too much fullness to fit into the armseye, try to "ease" it in by pushing it along with the thumb of the left hand during the basting. If, perchance, the shoulder and underarm seams have been taken up so that the fullness in the sleeve cannot be "eased" in, it may be necessary to slip it up into the armseye a little more. If this is done be sure that the sleeve is slippedped up all around, else it will pull and wrinkle around the outside of the arm just below the shoulder.

The top of the sleeve should be a little larger than the armseye to allow for the fullness and movement of the upper part of the arm.—Blanche E. Hyde, Clothing Specialist, Colorado Agricultural College.

'AS PRETTY AS A PICTURE

NO one knew that Mother had bought a camera with her birthday money. It rather amused her to consider the remarks that such a knowledge would have evoked.

"Thought you were crazy about new aluminum saucepans?" father would suggest wonderingly.

"Oh, mother, why didn't you get something for the house?" would be daughter's tragic wail.

"What do you expect to make a picture of in this forsaken burg?" son would scroff rebelliously.

Mother loved the farm. Father had loved it until the discontent and dissatisfaction of his children began to corrode his pride and happiness in it. "What's the use of making plans or improvements?" he demanded of mother. "Our working days will soon be over and John despises the farm and Mary is ashamed of it."

So mother secretly took her birthday money and bought a camera. "I ought to have done it long ago,' 'she chided herself," but maybe it isn't too late."

Mother spent unaccustomed hours in unaccustomed places. Her subsequent visits in town each held a secret mission. One day she returned with a long, flat package.

"A picture," exclaimed daughter a little doubtfully. Then as the picture was unfolded, a beautiful scene in sepia tints encircled by a dull brown frame: "Oh, mother, how lovely! W-why, it looks like—"

"It is," said mother pleasantly. "Our own woods in the background with the cows gathered about the spring in the pasture. Doesn't Molly N look like the prize-winner she is?"

Well, Well! It was undeniably a beautiful picture—everyone who came into the room noticed and admired it. "Yes, indeed, it was taken right here on our farm," mother invariably exclaimed.

Other pictures were forthcoming. That bend in the lane where the clump of thorns grew and father driving home the big team. The old stone wall, vine-draped monument of an older generation's toil and perseverance.

"Finest piece of oats I've seen," declared the visiting county agent. So mother took a picture with John standing in the midst to emphasize the height and the picture came out in the Farm Bureau News.

The old trash pile at the end of the shed seemed to have become a permanent fixture. But mother persisted until her reluctant menfolks cleared it away and repaired and painted the shed. When she sprang her "before and after" pictures, father admitted: "Well, it certainly was worth while. I had no idea it did look quite so bad!"

It really was surprising how much finer and more interesting the old place looked in a picture than one had supposed. It was surprising what an improvement each slight innovation made—for mother was unrelenting in her "before and after" campaign.

In fact, there is no denying that a new love and appreciation and pride in the old farm followed mother's unexpected purchase of a camera.

DOCTOR TELLS WHAT TO DO FOR PIMPLES

A CURE for pimples and blackheads is one of the commonest health questions put to Dr. Lydia Allen DeVilbiss, chautauqua and lyceum lecturer on health subjects.

Dr. DeVilbiss suggests as a cure a good course in skin treatments at a competent beauty parlor, accompanied with supervision of diet and general health by a physician.

If this is impracticable, she declares, much may be done at home by keeping the skin clean, watching the diet and elimination. As a rule, soap should not be used daily. Not that soap and water hurt the skin, the doctor points out, but the trouble is that the careless person neglects to rinse the face properly. The result is that tiny particles of soap adhere to a sluggish skin; these clog the pores and the blackheads result. When the blackheads become infected, they form very disfiguring pimples.

"The distressing disfigurement of pimples and blackheads occurs at the age of puberty and has a tendency to remain until about 25 years of age," Dr. DeVilbiss says. "This is just the age when a good skin counts for most. A sensitive young person may suffer severely in mind and body if these blemishes are not removed."

HANDY TO KNOW

TO brush the teeth once a day is the least that should be considered. Morning and night are much better. The cleaning process should be up and down to get between the inner spaces of the teeth and inside as well as outside. After the teeth are thoroughly cleaned—at least five minutes being taken, the mouth should be rinsed to remove portions of food and germs which may be lodged.

Many people do not sleep enough. It does not matter that some individuals are able to get along with very little sleep. Each person in this particular is a rule unto himself, and most people require eight or nine hours to be efficient and to feel well. Ample sleep with wide open windows heads off nervous trouble and keeps the individual sweet-tempered.

Personal Column

Another Reproducer Wanted.—Would you please print this in your paper on the Farm Home page? If any reader has a four minute reproducer for an old Edison phonograph which they would like to sell, please write and give price wanted to—Mrs. John Blatt, R. 5, Brown City, Michigan.

Poem for Golden Wedding.—Will you kindly put this request in your paper. Will some one please send a good poem for a Golden Wedding.—Mrs. E. L. Purdy, Harbor Beach, Michigan.

Getting Rid of Bugs and Millers.—I am sending a recipe for getting rid of bugs and little millers which are so tantalizing around our lamps in the evening, also the large June bugs which make such noise around the screen. I take the wash tub, put in a pailful of water and suspend a lighted lantern in it, in the evening, on the porch. I leave it all night, the bugs and millers are attracted to the light and fall into the water in the tub. The water will be well coated with the bugs before daylight. I sometimes place this near the cabbage plants, for the benefit of cabbage millers. The light can be turned low after the home lights are put out.—Mrs. L. S., R1, Pierson, Michigan.

Have You Sweet Pickle Recipe?—I would like to ask if any of the readers could tell me how to make mixed sweet pickles like you buy in the stores. I would like to make some.—Mrs. H. R.

—if you are well bred!

More Finger Foods.—Asparagus is not held at the extreme end of the stalk and the end dropped into the mouth in the manner employed by the Neapolitan lazzaroni when eating macaroni. The most comfortable way to eat asparagus—and one entirely correct is to use a knife and fork cutting the stalks in half and eating the tips like any other fork food. But if you must eat them with your fingers, lift the woody end carefully, dip the head of the stalk in the sauce and—taking care not to squeeze or hold your hands so that the juice will trickle down your arm—raise the edible tip to your mouth.

In the case of the artichoke the fingers are always used. A leaf at a time is pulled from the heart, the edible end dipped in the sauce and then raised to the mouth.

Corn on the cob is usually a family dish and seldom appears at a more formal affair. It should, in fact, not be served at a formal luncheon or dinner. The ear is held lightly in the fingers at each end (sometimes a napkin is used), and a sharp steel knife may be provided to facilitate cutting the kernels from the cob.

Though birds are not finger-food in company, it is not a social crime for one thus to eat a squab or chicken-wing at his own home table. At a formal dinner the strict rule is to cut off as much meat as is conveniently possible, and leave the remainder. Hence, meat and bird bones should not be taken up in the fingers, though the fingers may be used to pull apart lobster claws.

Shrimps are served whole in the shell, and are peeled with the fingers.

Only a few hard cheeses are finger-foods. Rich, soft or crumbly ones, such as Camembert, Roquefort, Stilton, Brie, Cream, Canadian Club, etc., are eaten with a fork or transferred to bread or biscuit with the knife, and then raised to the mouth.

Tongs are usually provided for mints and bonbons but fingers—where tongs are not provided—are not barred, and this applies as well to lump sugar.

Menu for August 31st

*Country Club Chicken
Sweet Potatoes Green Corn
Tomato Salad Apple Whip
Chocolate wafers
Coffee

***Country Club Chicken.**—Wash 2 broilers or quite young chickens, cut them in halves or quarters if they be large enough, wipe them and dip pieces in beaten egg, well seasoned with salt and pepper and mixed with cream. Roll pieces in breadcrumbs and place them in greased pan, dot generously with fat and place in hot oven for 15 minutes. Now put chicken in hot kettle, cover and let smother and steam for 30 minutes or until tender on a slow fire. Place chicken on hot platter; add half cup hot cream to gravy in kettle and strain it over chickens.

RECIPES

Favorite Pickle Recipe.—This is my favorite pickle recipe, and I am sure others will be ready to say the same after their first batch providing they make them after this rule. Oh yes, I must not forget the name as it is the best part of it; "Last of the Garden." One gallon green tomatoes, chopped fine, sprinkle a little salt over and let stand a few hours, then drain one gallon cabbage chopped fine, ½ gallon corn cut off cob, after it is cooked, 1 gallon string beans cooked, 1 gallon hulled beans cooked, 12 mango peppers chopped fine, 12 onions chopped fine, 4 ripe cucumbers quartered and cooked a little, 6 carrots cooked, 1 gallon small cucumbers, 1 gallon vinegar, 2 tablespoons mustard seed, 3 pounds brown sugar, ginger and pepper to suit taste. Add all together and cook twenty minutes, then seal hot. —Mrs. C. N.. Valley Centre, Michigan.

Caramel Bread Pudding.—3 cupfuls breadcrumbs, 1 quart hot milk, 2 eggs, 1 teaspoonful lemon extract, grated nutmeg to taste, ½ teaspoonful salt, 1 cupful sugar, 4 tablespoonfuls fat, whipped cream. Put fat, crumbs, and salt into a basin, add hot milk and soak ten minutes. Melt sugar and brown it lightly in a small pan over fire, then add it to the bread, with eggs well beaten, and flavorings. Pour into greased pudding dish and bake in moderate oven till firm. Serve with whipped cream.

Sour Cream Cookies.—1 cup butter, 2 cups sugar, yolk of 2 eggs, creamed until very light, add 1 cup sour cream in which has been dissolved one level teaspoon of soda, whites of eggs beaten stiff and mix with flour. Cream flour to make stiff to roll, 1 teaspoon lemon extract.—Alma Becker.

Chocolate Brownies.—1 cupful sugar, 6 tablespoonfuls melted fat, 2 eggs, 2 squares chocolate, 1/3 teaspoonful salt, ½ cupful flour, 1 cupful chopped English walnut meats, 1 teaspoonful vanilla extract, 3 tablespoonfuls boiling water. Cream fat and sugar together, add eggs well beaten, chocolate dissolved in boiling water, salt, flour, vanilla, and nuts. Divide and spread thin in 2 greased square pans and bake in slow oven from twenty to twenty-five minutes. Cut in strips and serve with ice cream. There are a cross between cookies and heavy cake. Sufficient for fifty brownies.

The Runner's Bible

(Copyright by Houghton Mifflin Co.)

Cast they burden upon the Lord, and he shall sustain thee; he shall never suffer the righteous to be moved. Ps. 55:22.

Know that in time of trouble. "it is in the Lord's hands," your relief will be great, help will come. You cannot be in health and bear burdens of any kind.

To declare that a thing is perfect is to recognize the real, though the unseen truth, concerning it; and to declare the truth over and over is to make it finally manifest as reality.

WOMEN'S EXCHANGE

IF you have something to exchange, we will print it FREE under this heading providing: First—It appeals to women and is a bonifide exchanges, no cash involved. Second—It will go in three lines. Third—You are a paid-up subscriber to The Business Farmer and attach your address label from a recent issue to prove it. Exchange offers will be numbered and inserted in the order received as we have room. —MRS. ANNIE TAYLOR. Editor.

120.—Lovely percale, gingham and plush pieces to exchange for anything useful.—Mrs. Geo. Morgan, R. F. D. 3, Vicksburg, Michigan.

AIDS TO GOOD DRESSING

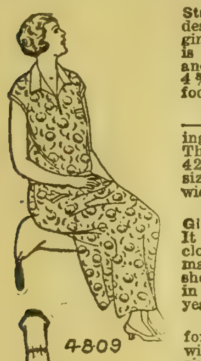
FASHION BOOK NOTICE

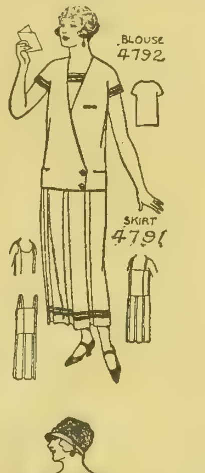
Send 10c in silver or stamps for our UP-TO-DATE FALL AND WINTER 1924-1925 BOOK OF FASHIONS, showing color plates, and containing 500 designs of Ladies', Misses' and Children's Patterns, a CONCISE and COMPREHENSIVE ARTICLE ON DRESSMAKING, ALSO SOME POINTS FOR THE NEEDLE (illustrating 30 of the various, simple stitches) all valuable hints to the home dressmaker.

BE SURE AND SEND IN YOUR SIZE

4792-4791. A Good Sport Costume.—Comfort and good style are here depicted. The Bodice Skirt 4791 may be worn with any Overblouse or with a jacket or coat. The front of the bodice may be overlaid with material to form a vestee. The Blouse 4792 has smart lines, and is good for all sports material. Linen was chosen for this Costume with cire ribbon and fancy braid for trimming. The Bodice Skirt is cut in 4 Sizes: Small, 34-36; Medium, 38-40; Large, 42-44; Extra Large, 46-48 inches bust measure. The Blouse is cut in 6 Sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. To make Skirt and Blouse for a 38 inch bust size will require 5½ yards of 40 inch material. For Bodice of lining or other contrasting material 32 inches wide 1⅝ yard is required. The vestee on the Blouse of contrasting material requires ¼ yard 9 inches wide. The width of the skirt with plaits extended is 2⅝ yards.

4808. A Stylish Dress with Slenderizing Lines.—Here is a very attractive straight line dress, with additional width supplied by "godets" or inserts at the front seams of a wide panel. The back is also in panel effect. Kasha is here combined with figured silk. One could have serge or alpaca with a trimming of braid. The Pattern is cut in 7 Sizes: 36, 38, 40, 42, 44, 46 and 48 inches bust measure. The width of the dress at the foot is 1⅞ yard. A 38 nich size will require 4 yards of 40 inch material. For vest, inserts and sleeve facings of contrasting material ⅝ yard is required.





4809.—A Cool Summer Frock for House or Street Wear.—Printed crepe was used for this design, with facings of sateen. Chintz, ratine, or gingham would also be attractive. The Pattern is cut in 7 Sizes: 34, 36, 38, 40, 42, 44 and and 46 inches bust measure. Size 38 requires 4¾ yards of 27 inch material. The width at the foot is 1⅞ yard.

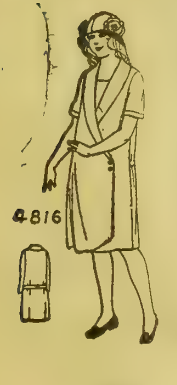
4804. An Up To Date and Attractive Dress.—Printed crepe or foulard would be very pleasing for this style. One could use voile or taffeta. The Pattern is cut in 6 Sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. A 38 inch size requires 3⅞ yards of 40 inch material. The width of the dress at the foot is 1½ yard.

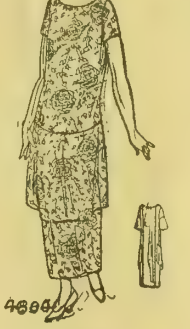
4816. A Smart Coat Dress for the Growing Girl.—White linen was chosen for this model. It is also good for pongee, repp, jersey and boucle cloth, and for taffeta and chambrey. The sleeve may be in wrist length, or in the comfortable short length now so popular. The Pattern is cut in 4 Sizes: 8, 10, 12 and 14 years. A 12 year size requires 3¼ yards of 36 inch material.

4795. A Simple Romper Style.—Very comfortable and practical is this model. The wide leg portions are a good feature. Alpaca gingham, pongee and crepe may be used to make this pretty play garment. The Pattern is cut in 4 Sizes: 2, 3, 4 and 5 years. A 4 year size requires 2⅛ yards of 27 inch material.

4794. A Popular "Suit" for Small Boys—This is a very comfortable simple style for a practical garment. It is made with a "drop" back, which is buttoned to the waist portion. Kindergarten cloth, poplin, linen or repp, also seersucker and chambrey are nice for such suits. The Pattern is cut in 4 Sizes: 2, 3, 4 and 5 years. A 3 year size requires 1¾ yard of 36 inch material.

4810. "Slender of Line and Graceful"—Blue alpaca was used for this design. Fancy silk braid forms a pleasing finish. This is also a good style for crepe, pongee or moire. A plait portion supplies additional and graceful fullness over the front. The Pattern is cut in 7 Sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38 inch size will require 4⅛ yards of 40 inch material. The width at the foot with plaits exetnded is 1½ yard.





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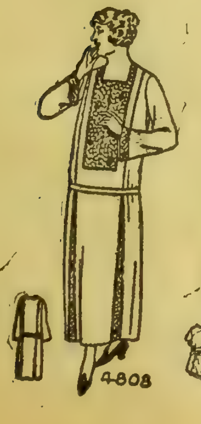

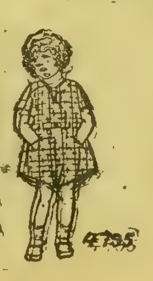

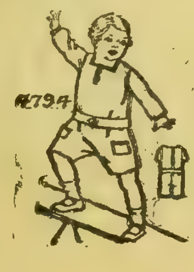

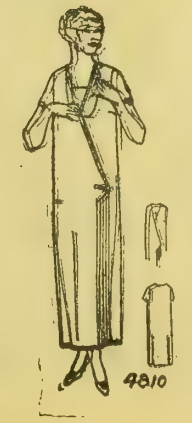

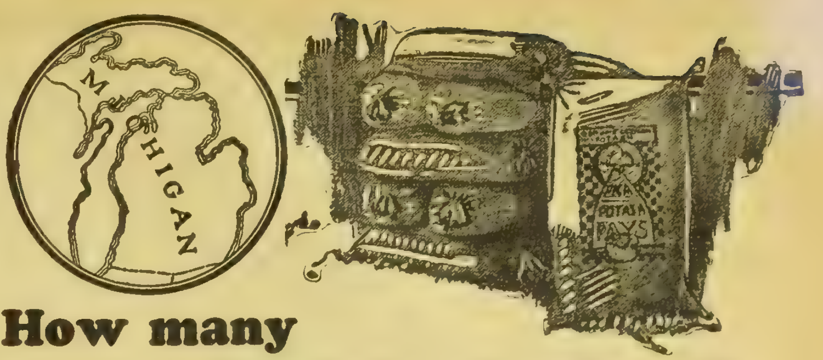

How many bushels of wheat?

Does potash pay on winter wheat? Decidedly *yes!*

Right here in Michigan $1.75 worth of potash increased the yield nearly 4½ bushels per acre—and at $1.10 a bushel the potash not only paid for itself but brought in a $3.00 extra profit. The formula used was 3-9-10, and it was tested out by your own Michigan Agricultural Experiment Station, against no fertilizer at all and against 3-9-0, a no-potash formula.

Yes, *potash pays.* And in your rotation system potash that you apply to wheat also increases the yield of succeeding crops. The potash that gave $3.00 extra profit on wheat also brought in 160 pounds more clover and 36 bushels more corn than the no-potash formula.

All from $1.75 worth of potash!

Potash strengthens the stalk and prevents lodging of the grain under high winds and heavy rains. Your wheat will be harder, plumper and the shrinkage will be less. Your grade will be improved with potash—adding still more profit per acre to your income.

Make money on winter wheat. Insist upon having 6% to 10% of Genuine German Potash in the fertilizer you buy. The extra bushels you get take no more seed. You'll be glad to pay the slightly increased threshing charge.

The Bushels That Made Me Money

You should read this interesting story before you plant your winter wheat. Your copy will be sent free of all cost. Simply ask for booklet, "The Bushels That Made Me Money." But do it now!

Genuine German
POTASH

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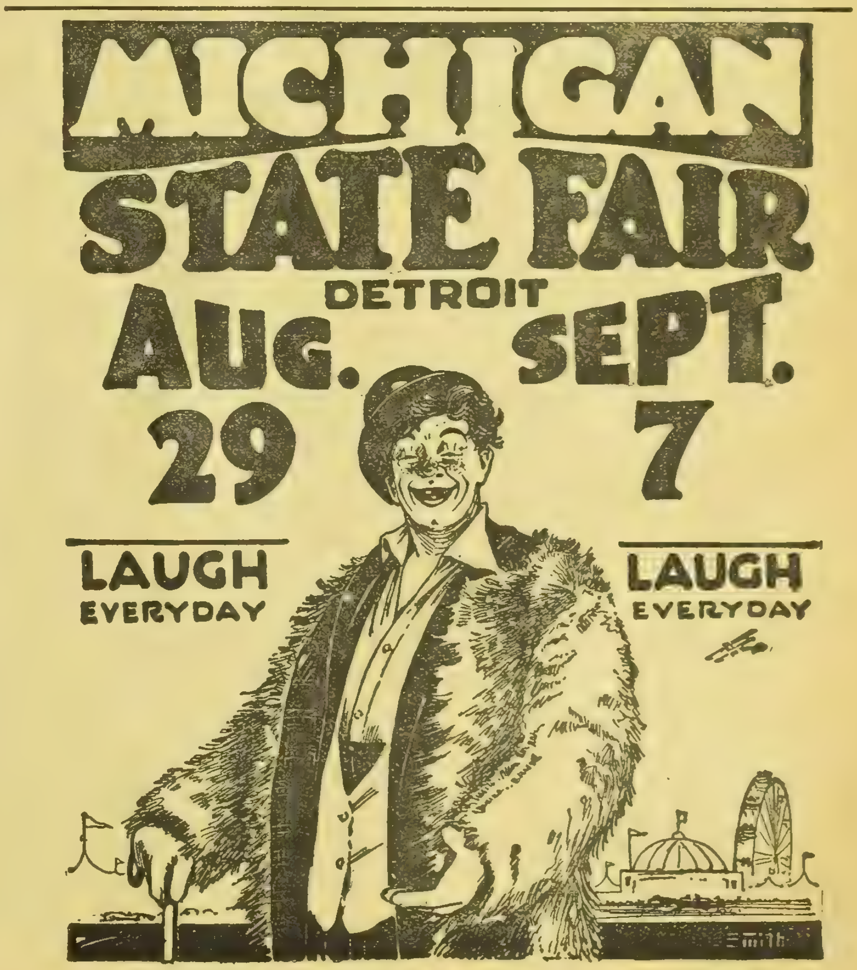
WHEN WRITING TO ADVERTISERS PLEASE MENTION THE BUSINESS FARMER



The Children's Hour

OUR GIRLS AND BOYS

Dear Uncle Ned:—Yes, I live on a farm and am enjoying it too. Who wouldn't where everything is so free and beautiful? We take the M. B. F. and I certainly enjoy its helpfullness. I suppose I should tell you a little something of myself. I am 19 years old and my birthday was last month, (July). I am only five feet tall so of course I get teased but I don't mind it. I am going to do something unusual, and just sign my nickname but if this letter is lucky enough to be printed maybe I will sign my real name next time. You see I am a little bashful. If you wish you may print this poem. I made it up some time ago. Will close and give the other boys and girls a little room. Wishing to be your niece will sign this—"Tiny", Cass City, Michigan.

Happy Days of Long Ago

I am sitting here and thinking
  Of the days so long gone by.
When father, mother, my two sisters and I
  Were happy and contented living in that
    dear old home.

There's been many trials and troubles
  Since those happy days of yore
And the tears still come unbidden
  As I sit and think them o'er.

I am thinking now of father,
  And the days that used to be
When we as little children
  Clamored there upon his knee.

Father has left us now
  For that happy golden shore,
Where there will be no more sorrow,
  And the parting days are o'er.

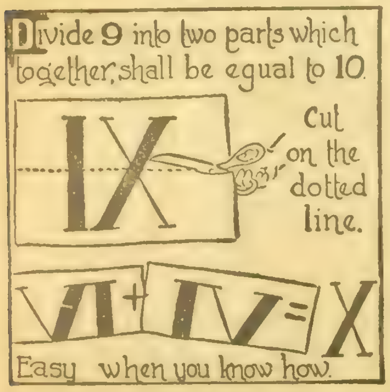
And the rest? For we have wandered
  From that home of long ago
But still our memory reaches back
To the home that we loved so.

And now, my little children dear,
  How happy you should be.
All living there to-gether
  In that little home|. You see?
—"Tiny", Cass City, Mich.

Dear Uncle Ned:—Your circle of boys and girls is a very friendly one. May I come in? I like to read the letters in the Children's Hour. I am fourteen years of age, weigh 120 pounds or more, have light brown hair, brown eyes, light complexion and am 5 feet 4 inches in height. Will be a freshman in high school next year. I would be glad to hear from some of the young folks, I will answer all letters even though I am a busy farmer girl. I spent the fourth in the usual way, "making noise." We had a young Jersey calf born on "Independence" and that became her name. A good one, eh? One third of our summer vacation is gone already and soon another and the—Oh dear! Well maybe it will seem good to get back to school after our three months is really up. I guess it most always does. It is pretty early to begin to dread it anyway. Summer certainly goes fast but we have a good time while it is here. Well I must ring off. Good-bye and good luck. Another niece—Eunice McBride, Hopkins, Michigan.

Dear Uncle Ned:—My father takes the M. B. F. and we enjoy it very much. I thought I would write. Billy Frank said every girl that would guess his age which is between 15 and 20 would receive a real box of——. Well I think his age is 18. Is that right? Well I had better describe myself. I am 5 feet 1 inch tall, weigh 104 pounds, am 11 years old and my birthday is the 16th of August, have brown bobbed hair. For pets I have 2 cats and 1 dog. We live on an 80-acre farm. I have 4 brothers and 6 sisters. Well I hope Mr. Waste Basket don't gobble my letter up. Your niece,—Ardith Jordan, R1, Turner, Michigan.

Dear Uncle Ned:—May I join your merry circle? I wrote but my letter was not in print. Well I will describe myself. I am 5 feet 2 inches tall and weigh 115 pounds, have black hair and blue eyes. I am 14 years old. I live on a 160-acre farm and we have 6 cows, 5 horses, 41 sheep, 26 lambs and for pets I have a dog and a cat. I think Florence Coleman is 14 years old. Well I will close with a riddle. Why do girls like to look up at the moon? The one who guesses the answer correct will receive a letter from me. Only two chances, remember. Will close. I am—Annie Bankel, West Branch, Mich., R2, Box 23.


Divide 9 into two parts which together, shall be equal to 10.
IX
Cut on the dotted line.
VI + IV = X
Easy when you know how.

A Surprise For Uncle Ned

DEAR Young Folks:—Well, even old Uncle Ned had to have a vacation!

And where do you suppose he is? Why, maybe he passed right in front of your gate, because the last we saw of him he was heading right up into northern Michigan, with a camping outfit snuggly packed in the rear seat of his Ford sedan. If you see a Ford sedan with a tall man wearing shell-rim glasses and driving like the wind, just shout "O, Uncle Ned, I know you!" and ten to one he will stop and say "Howdy!" But don't tell him that I told you where he was going, or what he looked like or he might cut off his whiskers just so you could not recognize him.

Now let's have some fun while he's away!

Do you ever read the advertisements in THE BUSINESS FARMER?

Well, it will pay you to read them all this week, because I am going to offer

FIVE WHOLE DOLLARS IN PRIZES!

I want you to write me answers to the following questions first:—

1.—What store in Detroit is going to have a big sale and why are they going to have it?
2.—What state does Ferndell, a cow which produced 13,477.9 pounds of milk come from and what has the herd she comes from been fed for 13 years?
3.—What is the secret of one tires ability to stand hard-knocks and what tire is it?
4.—How should sugar-beets be lifted?
5.—What is a savings bank for corn?
6.—How can you save ¼ to ½ on a stove, range or furnace?
7.—What bonds pay 7%?
8.—What did $1.75 worth of something do and what was it?
9.—What is the name of a new cord fabric?
10.—What advertisement in the August 30th issue did you like best and why? (Not over 50 words.)

When you have answered all of these questions, send in your letters to Uncle Ned, so he will find a great big job waiting for him to decide which letter is best. Be sure and write on only one side of the paper and sign your full name and age on the top of each page.

$3.00 IS THE FIRST PRIZE, for a full list of correct answers and the best letter in answer to Question No. 10. $1 is the Second Prize and 50c each to the next two best.

All letters must be mailed not later than September 10th.

Your friend till Uncle Ned gets back!

THE PUBLISHER.

Dear Uncle Ned:—It has been quite a while since I wrote I just wondered if you would print this. I wonder what all the cousins are doing this summer. I am staying at home as I had an operation for appendicitis a short time ago and I am not strong enough to work. Say Uncle, do you ever get the blues or do any of you cousins? If you do please write to me as I get them too. I was vaccinated yesterday. There is no need for me to describe myself as I have written before. We are soon going to move out of the lovely country into the horrid town. Don't you pity me? I do love the farm don't you Uncle Ned? It is raining to-night and I was lonesome so I thought you would give me a small place in the corner for this letter. Won't you Uncle? I will watch for it anyway. I guess it will fill quite a corner. Ha! Ha! Hoping to hear from some lonesome cousins I will close. Your niece,—Lena Ables, R3, Montgomery, Michigan.

Why Mr. Horse and Mrs. Giraffe Are Enemies

MRS. Giraffe and Mr. Horse were, long, long ago, fast friends. But Mr. Horse became so boastful about his ability to run fast, that Mrs. Giraffe grew very weary of hearing him boast.

"I can run faster than any other animal," Mr. Horse told Mrs. Giraffe.

"You can not run faster than I," challenged Mrs. Giraffe.

"Ho, ho, haw, haw," laughed Mr. Horse. "I can run much, much faster."

At this Mrs. Giraffe became very, very angry and pulled out a long hair from Mr. Horse's mane and two from his tail and swallowed them. No very easy feat, as they were several feet long.

"Well, Friends," Mr. Camel spoke up, "suppose tomorrow at nine o'clock you run a race and that will settle the argument."

"Very well," Mrs. Giraffe agreed, "we shall run a race and we shall see what we shall see."

"Indeed, yes," Mr. Horse snoffed, "we shall see what we shall see."

"You think you can win but indeed you can not, Friend Horse," Mrs. Giraffe scoffed.

"I will win this race by several miles" Mr. Horse boasted.

At this remark Mrs. Giraffe sat back on a big rock and laughed till the tears ran down her long, very long neck.

"Look here, old Spotted Face," Mr. Horse crossly spoke, "you laugh too soon."

* * *

The next morning at exactly nine o'clock Mr. Camel, Mrs. Giraffe, Mr. Horse and many of their friends met for the race.

When Mr. Camel said "Go!" Mr. Horse and Mrs. Giraffe started. They were both very swift; Mrs. Giraffe always gaining when it came to broken ground and rocks, as she could hop over these like a huge frog. When Mrs. Giraffe was ahead she would turn her very long neck and laugh very loudly at Mr. Horse.

This made Mr. Horse quite angry, and he would run faster than ever.

All the animals were excited over the race. The ones who were friends of Mrs. Giraffe wore large blue ribbons and the friends of Mr. Horse wore scarlet ribbons.

Toward the end of the race there was much yelling and cheering for the two runners.

Faster, faster, faster, they came. All the animals were wondering who would win, and were cheering.

Almost had they reach their goal! The animals were all pushing to get a good view of the best part of the race. Mr. Horse was running as fast as a horse ever ran since the world began and Mrs. Giraffe was leaping as she had never leaped before.

They came faster, faster, faster. But my, oh me! neither one was ahead. They were side by side. The animals were very worried.

"It will be a great disappointment to all of us," Mr. Camel moaned, "we want a winner."

Faster, faster, faster came Mr. Horse and Mrs. Giraffe. At last they reached their goal, but my, oh me, they were still side by side. Neither had won.

Mr. Camel was ready to call the race a tie when Mrs. Giraffe craned her long, long neck as long as she could and—stuck out her long, long, tongue.

Mrs. Giraffe's friends yelled and shouted with glee. Mrs. Giraffe had won! But ever since then Mrs. Giraffe and Mr. Horse have been bitter, bitter enemies.—Helen Gregg Green.

Dear Uncle Ned:—I am sending a little poem in. I have been reading M. B. F. for a long time so thought I would write to you. I am a girl twelve years old, four feet and three inches tall, have light brown hair, brown eyes, rather dark complexion. I am in the seventh grade at school. I live on a forty acre farm with my grandfather. For pets I have three cats, one dog, three ducks, twenty-eight chickens. Grandpa has two horses and six head of cattle. I hope this doesn't go into the waste basket. Your want-to-be niece,—Merab C. Colwell, R2, Box 2, Petoskey, Michigan.

A Rill's Life

I come from a little spring,
  I bobble over stones and sing;
I am a little rill,
  I love to race down hill.

I run under stars and sun
  I gush over boulders weighing tons,
I go by a town,
  But always run down—down

My life is a pleasure
  I wish for nothing better,
I have a sand bed
  On my banks are flowers red.

I ran into a little creek
  Over boulders bound to creep;
In and out I turn and leap
  I always have a song so meek.

In and out of shady nooks,
  Now I run into a brook;
But still I laugh and play
  Thinking I am on my way.

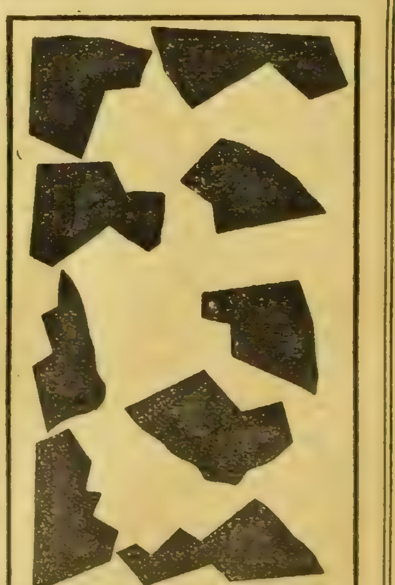
Into a river now I swing
  Over many falls I ring.
Now I come unto a mill
  But I keep running still.

Now I run into the ocean,
  Now I make much more motion;
But still I laugh and play,
  Thinking now I am all the way.

Now I join many others,
  They are all my brothers;
And now we foam
  And on us great vessels roam.
—By Merab C. Colwell,
R2, Petoskey, Mich.

Dear Uncle Ned:—I am 5 feet and 3 inches tall and weigh 122 pounds. The one that guesses my right age will receive a letter from me. I am between 12 and 15 years old. Billy Frank's age I will guess is 17 years. Is that right? Will have to close. Would like to hear from some of the boys and girls. Want-to-be friend—Pearl Brocker, R1, Wayland, Michigan.

Dear Uncle Ned:—My father takes the M. B. F. and we like it very much, or I do anyway and I read the Children's Hour every issue. Well summer is here again and with it the birds and flowers. I like summer better than any other time of the year. Don't you too Uncle Ned? Well I shall have to describe myself. I am 5 feet 1 inch tall and I have medium brown bobbed hair and blue eyes and I weigh about 97 pounds. I am twelve years old and my birthday is the first day of May. Have I a twin? Well I will take a guess at Billy Frank's age. I think he is about 17. Am I right Billy? This will have to be all for this time or the waste basket will get my letter. Your want-to-be niece—Esther Shively, Cook, Michigan.
—I like summer but the other seasons are nice too, I think.



Cut out each piece carefully, and paste the nine pieces together on stiff cardboard to form the silhouetts of a sour variety of fruit. What is it?

Answer to last puzzle: K plus Cow plus Nail plus Pie minus Cone plus Pen minus Pipe plus Cup minus Pick plus Butt minus Tub equals WALNUT.

OH, MONEY! MONEY!

(Continued from page 10.)

tain to me, but Jim and Fred say they'll help,—"

Mr. Smith did not hear any more, for Miss Maggie and her guest reached the hall and had closed the door behind them. But when Miss Maggie returned, Mr. Smith was pacing up and down the room nervously.

"Well," he demanded with visible irritation, as soon as she appeared, "will you kindly tell me if there is anything—desirable that that confounded money has done?"

Miss Maggie looked up in surprise.

"You mean—Jim Blaisdell's money?" she asked.

"I mean all the money—I mean the three hundred thousand dollars that those three people received. Has it ever brought any good or happiness—anywhere?"

"Oh, yes, I know," smiled Miss Maggie, a little sadly. "But—" Her countenance changed abruptly. A passionate earnestness came to her eyes. "Don't blame the money—blame the spending of it! The money isn't to blame. The dollar that will buy tickets to the movies will just as quickly buy a good book; and if you're hungry, it's up to you whether you put your money into chocolate ecclairs or roast beef. Is the money to blame that goes for a whiskey bill or a gambling debt instead of for shoes and stocking for the family?"

"Why, n-no." Mr. Smith had apparently lost his own irritation in his amazement at hers. "Why, Miss Maggie, you—you seem worked up over this matter."

"I am worked up. I'm always worked up—over money. It's been money, money, money, ever since I could remember! We're all after it, and we all want it, and we strain every nerve to get it. We think it's going to bring us happiness. But it won't—unless we do our part. And there are some things that even money can't buy. Besides, it isn't the money that does the things, anyway,—it's the man behind the money. What do you think money is good for, Mr. Smith?"

Mr. Smith, now thoroughly dazed, actually blinked his eyes at the question, and at the vehemence with which it was hurled into his face.

"Why, Miss Maggie, it—it—I—I—"

"It isn't good for anything unless we can exchange it for something we want, is it?"

"Why, I—I suppose we can give it—"

"But even then we're exchanging it for something we want, aren't we? We want to make the other fellow happy, don't we?"

"Well, yes, we do." Mr. Smith spoke with sudden fervor. "But it doesn't always work that way. Look at the case right here. Now, very likely this—er—Mr. Fulton thought those three hundred thousand dollars were going to make these people happy. Personification of happiness—that woman was, a few minutes ago, wasn't she?" Mr. Smith had regained his air of aggrieved irritation.

"No, she wasn't. But that wasn't the money's fault. It was her own. She didn't know how to spend it. And that's just what I mean when I say we've got to do our part—money won't buy happiness, unless we exchange it for the things that will bring happiness. If we don't know how to get any happiness out of five dollars, we won't know how to get it out of five hundred, or five thousand, or five hundred thousand, Mr. Smith. I don't mean that we'll get the same amount out of five dollars, of course,—though I've seen even that happen sometimes!—but I mean that we've got to know how to spend five dollars—and make the most of it."

"I reckon—you're right, Miss Maggie."

"I know I'm right, and 'tisn't the money's fault when things go wrong. Money's all right. I love money. Oh, yes, I know—we're taught that the love of money is the root of all evil. But I don't think it should be so—necessarily. I think money's one of the most wonderful things in the world. It's more than a trust and a gift—it's an opportunity, and a test. It brings out what's strongest in us, every time. And it does that whether it's five dollars or five hundred thousand dollars. If— we love chocolate eclairs and the movies better than roast beef and good books, we're going to buy them, whether they're chocolate ecclairs and movies on five dollars, or or —champagne suppers and Paris gowns on five hundred thousand dollars!"

"Well, by—by Jove!" ejaculated Mr. Smith, rather feebly.

Miss Maggie gave a shamefaced laugh and sank back in her chair.

"You don't know what to think of me, of course; and no wonder," she sighed. "But I've felt so bad over this—this money business right here under my eyes. I love them all, every one of them. And you know how it's been, Mr. Smith. Hasn't it worked out to prove just what I say? Take Hattie this afternoon. She said that Fred declared she'd been trying to make every one of her 'Jims' a 'James,' ever since the money came. But he forgot that she did that very same thing before it came. All her life she's been trying to make five dollars look like ten; so when she got the hundred thousand, it wasn't six months before she was trying to make that look like two hundred thousand."

"I reckon you're right."

"Jane is just the opposite. Jane used to buy ingrain carpets and cheap chairs and cover them with mats and tidies to save them."

"You're right she did!"

Miss Maggie laughed appreciatively.

"They got on your nerves, too, didn't they? Such layers upon layers of covers for everything! It brought me to such a pass that I went to the other extreme. I wouldn't protect anything—which was very reprehensible, of course. Well, now she has pretty dishes and solid silver—but she hides them in bags and boxes, and never uses them except for company. She doesn't take any more comfort with them than she did with the ingrain carpets and cheap chairs. Of course, that's a little thing. I only mentioned it to illustrate my meaning. Jane doesn't know how to play. She never did. When you can't spend five cents out of a hundred dollars for pleasure without wincing, you needn't expect you're going to spend five dollars out of a hundred thousand without feeling the pinch," laughed Miss Maggie.

"And Miss Flora? You haven't mentioned her," observed Mr. Smith, a little grimly.

Miss Maggie smiled; then she sighed.

"Poor Flora—and when she tried so hard to quiet her conscience because she had so much money! But you know how that was. You helped her out of that scrape. And she's so grateful! She told me yesterday that she hardly ever gets a begging letter now."

"No; and those she does get she investigates," asserted Mr. Smith. "So the fakes don't bother her much these days. And she's doing a lot of good, too, in a small way."

"She is, and she's happy now," declared Miss Maggie, "except that she still worries a little because she is so happy. She's dismissed the maid and does her own work—I'm afraid Miss Flora never was cut out for a fine-lady life of leisure, and she loves to putter in the kitchen. She says it's such a relief, too, not to keep dressed up in company manners all the time, and not to have that horrid girl spying 'round all the day to see if she behaves proper. But Flora's a dear."

"She is! and I reckon it worked the best with her of any of them."

"Worked?" hesitated Miss Maggie.

"Er—that is, I mean, perhaps she's made the best use of the hundred thousand," stammered Mr. Smith. "She's been—er—the happiest."

"Why, y-yes, perhaps she has, when you come to look at it that way."

"But you wouldn't—er—advise this Mr. Fulton to leave her—his twenty millions?"

"Mercy!" laughed Miss Maggie, throwing up both hands. "She'd faint dead away at the mere thought of it."

"Humph! Yes, I suppose so." Mr. Smith turned on his heel and resumed his restless pacing up and down the room. From time to time he glanced furatively at Miss Maggie. Miss Maggie, her hands idly resting in her lap, palms upward, was gazing fixedly at nothing.

"Of just what—are you thinking?" he demanded at last, coming to a pause at her side.

"I was thinking—of Mr. Stanley G. Fulton," she answered, not looking up.

"Oh, you were!" There was an odd something in Mr. Smith's voice.

"Yes. I was wondering—about those twenty millions."

"Oh, you were!" The odd something had increased, but Miss Maggie's eyes were still dreamily fixed on space.

"Yes. I was wondering what he had done with them."

"Had done with them!

"Yes, in the letter, I mean." She looked up now in faint surprise. "Don't you remember? There was a letter—a second letter to be opened in two years' time. They said that that was to dispose of the remainder of the property—his last will and testament."

"Oh, yes, I remember," assented Mr. Smith, turning on his heel again. "Then you think—Mr. Fulton is—dead?" Mr. Smith was very carefully not meeting Miss Maggie's eyes.

"Why, yes, I suppose so." Miss Maggie turned back to her medatative gazing at nothing. "The two years are nearly up, you know,—I was talking with Jane the other day—just next November."

"Yes, I know." The words were very near a groan, but at once Mr. Smith hurriedly repeated, "I know—I know!" very lightly, indeed, with an apprehensive glance at Miss Maggie.

"So it seemes to me if he were alive that he'd be back by this time. And so I was wondering—about those millions," she went on musingly. "What do you suppose he has done with them?" she asked, with sudden animation, turning full upon him.

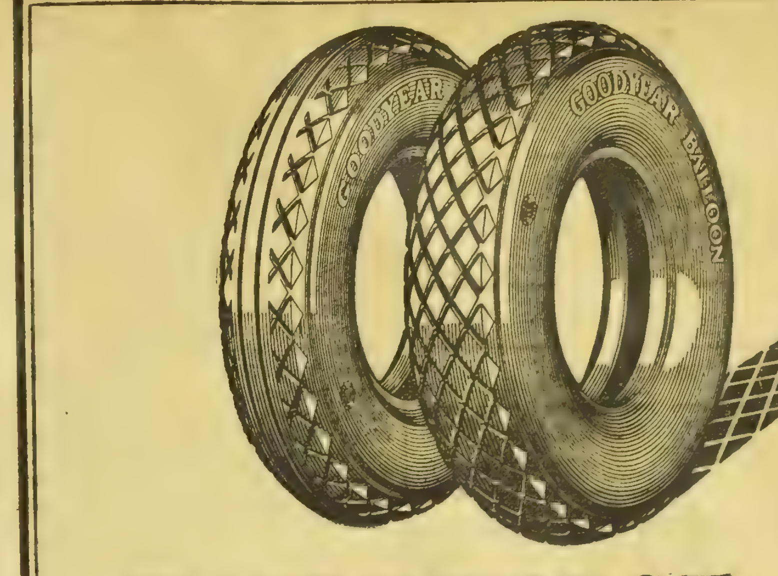
"Why, I—I—How should I know?" stuttered Mr. Smith, with a swift crimson dyeing in his face.

Miss Maggie laughed merrily.

"You wouldn't, of course—but that needn't make you look as if I'd intimated that you had them! I was only asking for your opinion, Mr. Smith," she twinkled, with mischevious eyes.

"Of course!" Mr. Smith laughed now, a little precipitately. "But, indeed, Miss Maggie, you turned so suddenly and the question was so unexpected that I felt like the small boy who, being always blamed for everything at home that went wrong, answered tremblingly, when the teacher sharply demanded, 'Who made the world?' 'Please, ma'am, I did; but I'll never do it again!' "

(Continued in Sept. 13th issue.)



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DAIRY and LIVESTOCK

MILK FEVER

WHILE the exact cause of milk fever has not yet been worked out, it seems more common just before a storm, or fall of the barometer. Just what effect this has is a puzzle, but it is a fact, nevertheless. Another thing, the kind of care or feed or amount of exercise has very little to do with the occurrence of milk fever. The curious part of the disease is that it seems to run in cycles and just about the time one thinks he has a sure preventive, up it pops. Some experienced dairymen think that only milking about half the first day or two is good; others that with holding feed before calving; others that exercise is necessary. Not a single "sure cure" has yet been worked out that is satisfactory, so the best thing we can do, as cow owners, is to be prepared for it and to know what to do when it does appear.

Symptoms—Did you know there are two different kinds of milk fever, as radically different as winter and summer? The first or common type is the "quiet" form. About a day or two after an easy calving the cow begins to act "queer." She quits eating; her muzzle gets dry; her eyes have an anxious expression, and she ceases to worry about the calf. The next thing that is noticed is that she gets weak in her hind parts. Then she staggers and fights to keep from falling down. Pretty soon she lunges forward, and either lies on her side with the head stretched out, or up in a natural position with her head curled around to her side.

After more or less struggling she seems to become drowsy, then unconscious, and passes into a profound coma. Without any aid she will usually die in from six to ten hours, depending on the severity of th eattack.

The second or nervous type is the so-called "eclamptic" form, when the animal acts almost like wild. The muscles all over the body become a twitching mass of tissue, and the eyes assume a wild aspect. She grits her teeth, often bellows and slobbers. Finally when she goes down she keeps up the convulsions and kicks and struggles. If the temperature is taken it will be found to be 105 or more. Unless promptly treated, a funeral will soon occur in this type.

Treatment — Under treatment comes the most important thing about milk fever. How to tell it is milk fever, and what not to do! Suppose you have a fine cow and she calves in a very normal condition. Everything seems fine, and you breathe a sigh of relief. The next morning you notice she acts sort of dumpish and does not eat very well. Later she pays little attention to the calf and begins to reel around. Being utterly ignorant of the true disease, you call in your next door neighbor, who thinks she "is bound up" and needs a physic. So you prepare a pound of salts in a quart of water and, with much exertion and effort, you pour the contents down the animal's mouth. Due to the paralyzed condition of the throat muscles, some of the salts go down the gullet and some down the windpipe. In this case, you have a dead cow in from two to 24 hours from mechanical pneumonia.

In other words, due to ignorance and with the best of intentions, you have done more harm with your treatment than had you done nothing.

Then again, suppose you are an experienced dairyman and known what milk fever is and how to treat the uncomplicated form yourself. But your very best cow gets the nervous type, and inflating the udder and giving stimulants only makes the patient worse. As she rapidly goes from one convulsion to another, you get alarmed and summon a veterinarian, but too late, as the toxins or poisons have hit the head and brain, and soon Bossy gives a spasmodic kick and all is over. Due to your mistaken diagnosis you have a dead cow; the veternarian gets the credit for the funeral and you swear he is no good.

While experienced car drivers can grease their autos and fix little things about the car, when something goes wrong with the engine or electric selfstarter they immediately summon expert assistance. So it is with a cow or mare during the period of giving birth. She is already overburdened with poisons; the least thing may cause her death, that at other times, would be thrown off without any treatment of any kind.

The writer, in his practice, sees so much of this that he emphasizes calling expert assistance right at the start. It is cheaper in the end. The price of a good cow will pay for a good many veterinary calls, and it will save you a lot of home doctering that may result in total loss.

A cow with milk fever, therefore, can have two different types, each utterly dissimilar and requiring the opposite treatment. Then she may develop blood poison or a total or partial paralysis of the hind quarters. She may be impacted in either the first or third stomachs. She may get garget or an inflammed udder. She may get chilled during calving and develop pneumonia. Her milk supply may be paralyzed for some time, and the producing tissues need stimulating. She may develop a blood clot that starts in one of the vessels from the womb, and when this clot works its way through the circulation to the brain or heart she dies from apoplexy. Her womb may be thrown inside out, and in conjunction with this she may bloat, due to fermenting food. In fact, not long ago the writer was called to see a fine black Jersey, down, dead to the world with milk fever, her womb totally prolapsed and both sides of the abdomen almost tight as a drum from bloat. What would an owner, without any instruments of any kind, or lacking experienced skill, and to replace an everted womb is as hard a job as any we run against.

As we do not know the exact cause of milk fever, neither do we know what effect blowing air into the udder does. We find that if we give heart stimulants with a hypodermic syringe and leave medicines given by the mouth strictly alone until she can get up, and cover the animal with blankets, that she usually gets up in from two to six hours. In the nervous type we inflate the udder, but give narcotics, such as morphine hypodermically, or chloral hydrate by the rectum. The mortality in the simple, common cases is about three to five out of a hundred; in the nervous or eclamptic form about 20 to 40.

Suppose you get up early one morning and find your cow, recently fresh, stretched out with milk fever, what should you do? First of all phone your veterinarian. Tell him the history, so he will be prepared. While he is on the way fill a couple gunnysacks full of straw or hay, like pillows, and prop under head and try to get her up on her brisket. Milk out the udder and then cover her with blankets. Do not give any medicines by the mouth. If she is in a mud hole or snow drift or mixed up in a barb wire fence try to move her away from these. If you are away from expert assistance inflate the udder and tie inch bandages around each teat as far up to the udder as possible. Keep her up on her brisket with sacks and keep well covered.

But whenever possible get a veterinarian as quick as you can. Tell him it is a fresh cow and that she is down or staggering, and he will be prepared for milk fever, and you can have everything ready.

By doing this you will run a far better chance of saving your cow than by trying to save a few dollars and lose her.—Washington Farmer.

BUTTER WILL NOT GATHER

I have a nice Holstein cow, five years old that came fresh eight weeks ago and is giving ten quarts of milk twice a day. I only keep one cow and set the milk in pans, it raises nice thick cream, could almost lift it with a fork but we can not make butter out of it. We churn with a dash churn an hour or more it breaks and shows plenty of butter but it will not gather. Appears to be all in small grains about the size of rice. We strain the milk out, put water on it and it will all spread and float all over. Have tried different ways and can do nothing with it. It did the same last summer. The cow is on grass all day and stabled nights, has hay and some ground oats.—J. M., Carsonville, Mich.

CREAM that is too thin and cream that is too warm at the time of churning is a cream that churns only with difficulty. If you will place the milk in a deep bucket, cool at once after drawn and let the cream rise in this deep container the cream skimmed will be richer. Churning the cream at a lower temperature will also cause it to come in larger grains, about the size of corn kernels. When this size of grain is reached, the buttermilk is best drawn and an equal amount of cold water added. The churn can be given a couple of turns in the wash water and the water drawn off.—P. S. Lucas, Associate Professor of Dairy Manufacturers, M. A. C.

TESTS REQUIRED TO FREE HERDS FROM TUBERCULOSIS

THE number of tuberculin tests required to free herds of tuberculosis is a subject being studied by veterinarians of the United States Department of Agriculture. Records on nearly 25,000 herds show that 15,000 of that number were entirely free from tuberculosis on the first tuberculin test, accompanied, of course, by the removal of reactors. The second test "cleaned up" more than 4,600 additional herds. In other words, more than four-fifths of the herds tested were freed of the dread disease in not more than two tests made from six months to a year apart.

Occasionally, herds are found where the disease is extremely deepseated, and as many as eight tests are necessary to insure that all infected cattle have been removed. But such cases are extremely rare.

VETERINARY DEPARTMENT

HORSE KICKED ON HOCK JOINT

I have a horse that got kicked on the hock joint and the joint is enlarged some. Now I would like to take it off. Can you tell me what to do and the remedy?—L. W., Sterling, Mich.

YOU do not say how long ago your horse's hock was injured nor just where the enlargement is located on the joint. These would be important things to know before giving any prognosis or prescribing treatment. There are several chronic conditions affecting the hock joint that are incurable. Better have your local veterinarian make an examination of your horses hock. He will then be able to tell in all probability what the chances for recovery will be.—John P. Hutton, Assoc. Prof. of Surgery and Medicine, M. A. C.

PIGS ROOT EACH OTHER

We have some young pigs 2 months old. They are out on grass and get all the milk they want, but they root each other constantly. Can you tell us cause and a cure?—A. H., Caro, Mich.

THE rooting of one another of these pigs is doubtless due to some deficiency in their ration. I would advise that they be given access to a good mineral mixture. Either one of the following would be good: 30 lbs. bone meal, 30 lbs. finely ground lime stone, 30 lbs. salt, 10 lbs. sulphur; or a mixture of 10 lbs. 16 percent acid phosphate, 10 lbs. finely ground lime stone and 1 lb. of salt.

This trouble is occasionally caused by skin trouble. To overcome this the pigs should be sprayed occasionally.

It would also be advisable to give these pigs some grain or barley along with their milk.—Geo. A. Brown, Professor in Animal Husbandry, M. A. C.

Potato Growers Close Enthusiastic Meeting!

Go on Record for Standard Grades and Endorse Old Officers by Re-electing Them

THE Michigan Potato Growers' exchange closed its sixth annual meeting at Cadillac August 21st with the unaminous re-election of Fred Smith, of Elk Rapids, to the board of directors.

E. A. Rasmussen, of Greenville, was elected for three years to succeed Ernest Snyder, of Lakeview. The board of directors re-elected its present officers: Henry Curtis, Cadillac, president; Fred Smith, Elk Rapids, vice-president; S. E. Rogers, East Jordan, secretary and treasurer.

To Seek Change in Law

The most important action by the delegates was adoption of a resolution by which the central Cadillac exchange officers will work to get a bill through the legislature providing standard potato grades, similar to the apple and grape code, with penalties for violation, and an appropriation for its enforcement. The board also was instructed to abolish the system whereby cars are insured by the central exchange, leaving the risk to the locals interested.

The campaign for five-year crop contracts was supported strongly, R. A. Wiley, organization manager, reported. There now are 1,368 growers signed in the contract, with 298 seed dealers and 424 growers of certified seed also signed up 77 per cent of the growers called on.

Herbert F. Baker, Cheboygan gubernatorial candidate, who was once a president of the exchange, was the principal speaker at the annual banquet.

DOES DELTA COUNTY WIN?

I decided I would answer your article of August 16th entitled "Can You Beat This?"

We have corn 10 ft. 8 in. Robust beans 1 ft. 6 in. high and vines cover meadows so you can not walk through them.

The corn ground was alfalfa sod fall plowed and top dressed this spring. It is nearly in roasting ears. The bean ground is alfalfa sod plowed this spring. — D. R. Kirkpatrick, Rapid City, Mich.

Says Standardization Paid

W. H. Hartman, director of the state food bureau, declared standardization paid. Michigan potato growers a million and a quarter dollars last season by making a market for Michigan spuds and bringing a premium of from 15 to 40 cents a hundredweight for the branded chief Petoskey stock. The year before Michigan potatoes, poorly graded, sold for from 10 to 90 cents a bag less than those of other important producing states on all markets, including those of Michigan itself.

Professor R. J. Baldwin, of M. A. C., and Postmaster Perry F. Powers, of Cadillac, were the other speakers.

COUNTY CROP REPORTS

Menominee.—Crops here are excellent except corn which is two weeks or more behind the season.—Karl Knaus, County Agent.

Sanilac.—Due to heavy rains about one third of the hay is still in the fields. Wheat sprouting, possibly one fifth beans drowned out. Oats are down badly.—John D. Martin, County Agent.

Gogebic.—Hay crop good. Grains fair to poor. Corn will make poor ensilage. Potatoes slow, but promising. Unseasonably cool weather. Poor harvesting weather.—C. E. Gunderson, County Agent.

Lapeer.—Wheat good average 20-25 bushels. Oats good also barley. Beans and potatoes are fair. Corn poor needs lots of warm weather. Beets fair. Second cutting alfalfa fair.—A. J. Patch, County Agent.

Dickinson.—Potatoes looking good. 150 bushels per acre. Oats, barley and rye are good. Grass also is good. Not quite finished haying. Corn, probably no seed corn, but hope for silage. Alfalfa better than clover.—Art Lonsdorf, County Agent.

Schoolcraft.—Considerable haying still to be done, wet weather caused much dissolved hay. Oats and barley looking very promising. Potatoes seem to be setting heavily generally in good condition, we are afraid of considerable late blight may occur.—T. R. Shane, County Agent.

Manistee.—Oat harvest in progress with yield good. Potatoes are promising outlook. Wet weather causing disease development ruining many fields of beans. Little hope for mature corn. Pickle growers seriously troubled with anthracnose with losses heavy. Raspberry shipping season will close next week.—H. M. Vaughn, County Agent.

Presque Isle.—All crops look fairly good except corn which is backward and hay also was a short crop. Grasshoppers doing a lot of damage to oats in places. Farmers are busy cutting winter wheat and rye. Fall apples are quite abundant but winter varieties are a light crop. Lots of rain here lately. New seedings fair.—Fred Tulyetske, County Agent.

Lenawee.—Wheat good with average yield 23 bushels and highest reports 48 bushels. Barley good with small amount being threshed. Oats excellent with small amount being threshed. Hay good and second crop alfalfa now being harvested. Corn good where good seed used or well prepared soil. Feeder lambs and steers beginning to come in.—C. L. Coffeen, County Agent.

Muskegon.—Corn improved but still only 50 per cent of crop. Potatoes good yield of early crops, late crop looks good. Grain good crop some damage to grain in shock. Hay and pastures good and looks like good prospect for clover seed. Beans making good growth. Some damage from anthracnose. Most crops on low ground damaged to some extent by steady rains.—County Agent.

Barry.—Wheat good yield with good test; majority in danger because of continued rains. 20 per cent damage to date. Oats good crop; filled well; 10 per cent down impossible to harvest. Hay good; 10 per cent loss or in poor condition on account of rain. Corn backward: 50 per cent will not mature. Potatoes normal to good. Pasture good. Fruit 40 per cent of normal crop.—F. W. Bennett, County Agent.

Midland.—Cold nights and heavy rains the past week makes the corn crop and bean crop late and drowns beans in many places. Beans podding heavily but showing considerable disease in places. Potatoes and sugar beets looking very good. Threshing progressing rapidly. Wheat good quality and good yield but too wet to put in storage. Barley threshing beginning, with yield good. Oats all in shock and some in barns. Second cutting alfalfa being made. Good crop.—Roy W. Weinberg, County Agent.

NINE FOOT CLOVER IN LENAWEE

I have sweet clover on limed land that measures 9 feet 1½ inches. After cutting a field of alfalfa I found a stalk that was lodged so only the top was cut off, how much I don't know, and what was left measured 5 feet 4 inches.—H. S. Fish, Tipton, Mich.

Monroe.—Crops in this county according to report of farmers are as good or better than we have had in several years past, with the exception of corn which is probably two weeks behind the season and in many places of very poor stand because of poor seed used and the work of cutworms and grubs in the early part of the season. Many oats are still uncut because of light rains which we are having at the present time. As a whole the farmers are feeling a little better about their business and feel that more prosperous times are coming. Some wheat is threshed and is yielding a little better than average.

St. Joseph.—Wheat acreage somewhat reduced from that harvested last year, but yields range from 20 to 30 bushels and over on good soils. Mostly being threshed from the shock and suffering damage from the weather. Rye, reduced acreage and poor yields, grown mostly on the poorer soils. Oats, reduced acreage but a good crop despite late sowing. Now being harvested. Corn, about usual acreage, growing well and eared well where it has a chance, but many thin stands and some fields being abandoned to the weeds. Hay, about 12,000 acres of alfalfa a big crop first cutting, second cutting about ready and looking fine. A few good fields of clover harvested, not much other hay. Around 4,000 acres of alfalfa will be sown this year. Potatoes reduced but growing well. Bean acreage is unimportant in this county, but what there is are growing and podded well. Some Anthracnose present in them. Pastures are good and growing conditions good for all crops. What unfavorable outlook there is has resulted from too much wet weather, which has prevented taking proper care of crops.—L. R. Binding, County Agent.

WARNING!

Do Not Drive Your Automobile to the Fairs

Unless it is insured against Fire, Theft, Liability and Collision in the Citizens' Mutual Auto Insurance Company.

When full protection against the risk of what may prove a large financial loss may be had at so small cost.

Do Not Park Your Car on City Streets

Take it to a garage where you will be sure to find it on your return. Thieves watch for unsuspecting visitors and pick out their cars as easy prey. The small amount you pay for storage will be well earned.

Drive Carefully; Take No Chances

Most accidents can be avoided. Watch out for loose gravel at the new 35 mile speed limit. Stop at one side of the road when the glaring headlight fool refuses to dim his lights. Don't take a chance at the railway crossings—"Stop, Look and Listen!" will save you if you do it ALWAYS.

Before you start for the Fairs—call up the Citizens' Mutual agent in your locality—don't be satisfied with any other company—make them show their statements; your insurance is only as good as the company that writes it.

Almost any auto owner can tell you who your local Citizens' Mutual agent is—or write, phone or wire us and we will have our agent call AT ONCE, before you start for the fair.

W. E. ROBB, Secretary

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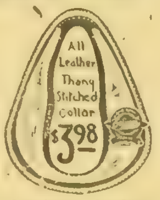
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Bronze Turkeys, Toulouse Geese, Pekin Ducks and Barred Rocks. Nearly all of this stock has been imported from Canada by us.

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Have You Poultry For Sale?

An Ad in The Michigan Business Farmer will sell it.

Poultry Department

PREVENTION OF DISEASE IN POULTRY

As has been previously mentioned prevention is easier than cure. The first thing to be done in any case is to ascertain the cause and remove it.

Probably one of the most common troubles among flocks is that of colds, roup, etc. Chickens will stand a lot of cold if it is dry and free from draughts. One of the big problems of poultry raising is to solve the problem of keeping the poultry house dry.

This is best done by having the poultry house located on well-drained land, have the floor of the house at least eighteen inches above the outside ground level and fill in with coarse gravel or cinders.

Then see that the house is ventilated without draughts. Houses should face the South and have some sort of an opening on the South side. The house should be at least sixteen feet from front to back, and we would prefer it twenty feet. Then, with your roosts in the rear, the fowls are back away from the opening and not in much danger of draughts from the front or exposure. If your houses are more than twenty feet long, put in a solid partition as in spaces longer than twenty feet draughts are apt to develop. A house or pen twenty feet square is ideal for one hundred birds or four square feet of floor space per bird is about right.

To properly act for prevention of diseases it is necessary to know something of the things that cause the trouble. As explained above dampness and draughts are the main causes of colds in their various forms. If the digestive organs are affected the kind, quality and quantity of feed should be inspected. You should know whether there is any mold in the litter or feed; whether or not they have access to grit, shell and charcoal; whether or not they have been infected with parasites or germs that might cause disease.

If the fowls become lame it might be caused by rheumatism, injury or liver trouble.

Over-fatness causes trouble with the heart, liver and reproductive organs.

Build your houses so as to be dry and free from draughts. Feed sanely which means with good feed fed right. Supply fresh, clean water, grit, shell, charcoal and green feed and there should not be much trouble from sickness.

Use plenty of disinfectants. It is one of the best investments you can make. If the fowls are kept on the same ground for any length of time, sprinkle it with lime, spade or plow under and sow some quick growing green crop such as oats or rape.

Remedies may remove or destroy the cause of the disease; remove or offset the symptoms, and help to repair the affected tissues. They have their place but if proper methods of prevention are used there will be little use for them. However, they have their place and we do not believe it necessary to always use the hatchet as many advise.—"Those Nine Fox Brothers."

BUILDING STONE AND CEMENT POULTRY HOUSE

Kindly furnish me with information and details for building a stone and cement poultry house large enough to house two hundred hens. How many stones and sacks of cement would it require? Is a nearly square house practical now days? I see some are advocating that style. What should the proper dimentions be, also the right amount of light? The house I am about to build is to face the south.—A. W., Stockbridge, Michigan.

In order to accomodate 200 layers, we would suggest a building 40 feet long and 18 feet deep. This will provide ample room for the larger American breeds. A house of these dimensions will require approximately six cubic yards or six loads of stone, and twelve cubic yards of gravel, in addition to eight barrels of cement. This ratio permits the use of thirty-three per cent stone in constructing the foundation and six inch wall.

The Michigan poultry house planned by the M. A. C. seems to be giving the most satisfactory results in this states. It has been designed, lighted, and ventilated to provide the greatest amount of comfort under the variable weather conditions of this state.—E. C. Foreman, Professor of Poultry Husbandry, M. A. C.

(Editor's Note: — Any person wishing a copy of this plan can secure one by writing to The Business Farmer or the Department of Poultry Husbandry, M. A. C.)

HENS HAVE TUBERCULOSIS

Would like advice on how to disenfect our poultry house. Our veterinarian said the hens had tuberculosis and I have disposed of them. He said I should dispose of all my chickens as soon as they were large enough for broilers. How long before I can put new chickens in my houses?—Mrs. C. H., Byron, Mich.

The so-called normal mortality in commercial laying units varies from ten to fifteen per cent each year. Before disposing of your entire flock, I would suggest forwarding one or two speciments to Doctor Stafseth of the Bacteriology Department, East Lansing. Ordinarily, the severe losses occur among the older stock, and if young chicks are raised on a clean range away from the parent flock, the danger of transmitting tuberculosis from old to young stock is not so great. To our knowledge, this disease is not transmitted from the adult to the offspring through the egg, and if you have a highly bred flock and wish to continue this same line of breeding, by proper precaution the young stock could be matured with the assurance that they are fairly clean and free from this disease.

If your mortality among the older birds is extremely heavy, it undoubtedly would be advisable to dispose of practically the entire flock. We have found a higher percentage of tuberculosis present in poorly lighted and poorly ventilated buildings, with dirt floors, and not having dropping boards which permits of better sanitation. These housing conditions should be corrected and the house given a thorough cleaning and disinfecting. This calls for a thorough scrubbing of the walls, and floors which should be followed by an application of some good coal tar disinfectant.—E. C. Foreman, Professor of Poultry Husbandry, M. A. C.

FOOD VALUE OF EGGS

In these days of the popularity of vitamines and calories in the every day scheme of eating, eggs as body builders are not to be ignored. Eggs contain so much of fuel, energy and tissue building materials as to be almost a perfect food in themselves. Protein in the form of albumin is found in the white. Fat in a finely emlusified form, similar to the fat in milk, is found in the yolk. The protein contains sodium chloride, potassium salts and sulphur, all necessary to perfect health. The iron compound forms the material from which the haemoglobin of red blood corpuscles is made.

Few foods are as rich in vitamins as are eggs. Fat soluble A, essential for growth, and water soluble B, valued for its curative properties as well as for body development, are found in abundance in the yolk. On account of the richness of iron in eggs, they are one of the first foods to be added to the diet of the growing child. In hospitals eggs are found to be almost indispensable in the diet of undernourished, anaemic, convalescent and tubercular patients.

Many people have been of the opinion that brown-shelled eggs have a higher food value than those with a white shell. Extended study of the physical properties and chemical composition of eggs to determine whether or not this was true has proved that there are practically no differences, so far as food value is concerned, between the white-shelled and the brown-shelled eggs.

Eggs are easily digested and quickly absorbed. In connection with other work with eggs, their digestibility was studied at the Minnesota experiment station.

Five experiments were made by means of a pepsin solution to determine the digestibility of eggs cooked under different conditions. Results indicated that while the method of cooking has some effect upon the rate of digestibility, it does not materially affect the total digestibility.

CHICKENS TRESPASS

I would like to get a little of your advise in regards to chickens. Has a person a right to raise about 800 chickens on a small piece of ground, a lot and a half, in a village and then turn them right out to the public and let them run and destroy people's gardens? My neighbor, is raising 800 chickens on a small piece of ground, has no park, don't intend to shut them up and there is a fifth of them that stay over on my ground and destroy my lawn and garden. I do not keep any chickens and would like to have a garden and have more use of my ground for my own benefit. Have stood for this for four years. This is a small village and is not incorporated. Now what I want to know is there any way that she can be made to take care of her poultry?—M. W., Middleton, Mich.

There is no state law regarding trespassing chickens. If the village is not incorporated there should be a township by-law to take care of this. See the supervisor. If there is no township regulation preventing this annoyance, you will have to put a good fence around your garden and if the chickens continue to get in, put them up and hold them until the owner pays the damage they did.—Asst. Legal Editor.

CHICKS GO BLIND AND DIE

I sent for fifty day-old chicks and received them all in good condition. After I had them for a week or two they began to go blind and then their wings would droop, some would shake until they could hardly stand up and they would go blind and die. Could you tell me what causes this? I feed them and water them every day.—F. C., Cathro, Michigan.

The flock of chicks referred to were evidently free from Bacillary White Diarrhea, which to our knowledge, is the only disease that might be introduced in purchasinging day old chicks. I am inclined to believe that the blindness, drooping wings, and the paralyzed condition of the chicks are largely the result of faulty nutrition. Similar conditions have resulted when chicks were kept on a very restricted diet containing insufficient quantity of these new food factors referred to as vitamins. Ordinarily, such chicks will respond to a treatment which includes a combination of tomato juice and cod liver oil. The cod liver oil should be given at the rate of one half pint to each 500 birds and can be evenly distributed by mixing it in rolled oats and bran. Cod liver can be emulsified with either boiling water or tomato juice without its value being destroyed. This may be necessary in order to get a sufficient liquid for proper distribution so that the chicks will get a sufficient amount to correct this nutritional disturbance. These chicks may also be given hard boiled eggs with very beneficial results.—E. C. Foreman, Professor of Poultry Husbandry, M. A. C.

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How to Make Durable, Strong Concrete

By H. H. MUSSELMAN

Agricultural Engineering Department, M. A. C.

CONCRETE is a material which is so satisfactory for many kinds of construction work that very poor work may be done in its preparation and a degree of success still result. Time is an important factor in determining results under actual construction conditions, and so improvements come slowly. For this reason studies of the materials in the experimental and testing laboratory show in what ways better concrete may be produced. They also indicate that better work can often be produced at less cost of both material and labor.

RESULTS OF TESTS OF CONCRETE MIXTURES

No.	Mix	Slump	Age in days	Curing	No. of beams	Average load in lbs. breaking	Remarks
1	1:2:4	0.8	35	Sprinkled daily	10	920	
2	1:2:4	1.0	35	Sprinkled daily	10	950	
3	1:2:4	1.5	35	Sprinkled daily	10	896	
4	1:4½	1.0	25	Sprinkled daily	10	810	Bank run
5	1:4½	1.0	25	Sprinkled daily	10	501	Fine sand
6	1:1:2	1.0	25	Sprinkled daily	10	935	
7	1:4:8	1.0	25	Sprinkled daily	10	527	
8	1:2:4	1.0	29	Dry	9	696	
	1:2:4	1.0	29	Dry	5	546	5 hrs. set before placing in forms
9	1:2:4	1.0	29	In wet sand	5	1018	

Tests of small beams 3⅝" x 3⅝" x 16" were made by supporting the ends of the beams on parallel supports 16" apart and applying a load on the top of the beam, exactly at the center, until breakage occurred, with the results given in the following table. The testing machine was so devised that a jack was used to apply the force necessary to break the beam, and platform scales were used to weigh the breaking load.

The beams were made and tested under similar conditions insofar as possible. Ten beams of each kind were tested so that extreme variation, due to flaws in the beam or other unusual causes, could be eliminated. An average of the breaking load was taken of the ten beams as representative of the group. It should be added that strength is considered by engineers as one of the best criterions of good concrete. Strength is at the same time a measure of water-tightness and wearing qualities.

When put in forms, the wetness was indicated by the slump or relative amount of settling. This was measured, when the concrete was ready for the forms, in a tapering circular form 12 inches high, 4 inches in diameter at the top, and 8 inches in diameter at the bottom. Slump shows the tendency of the material to flow as a liquid. A slump of 1.5 is a wet concrete which will flatten out to less than 5" when the form above described is removed.

The mix, when indicated as 1:2:4, means 1 part cement, 2 parts sand or material which will go through a ¼" screen, and 4 parts gravel, which is the material which will not go through the same screen. Note that in every case except the bank run, the volume of sand was one-half the volume of gravel used. Bank run averages perhaps 2 to 3 parts sand to 1 of gravel.

Some variation in time of setting was permitted on account of schedule, but beams tested at the same age are comparable, Curing was done by sprinkling daily with the beams in piles of ten, except in case of beams listed as No. 8 to which no water was added after placing in the forms. The breaking load represents the weight necessary to break the beam when applied at the center of the beam on top.

Outstanding results are shown in several cases. Beams (7) contained practically one-half the amount of cement as (5), yet showed a greater breaking strength, a direct comparison of fine sand concrete and sand and gravel concrete. (9) contained practically the same amount of cement as (8) but show nearly a 5 per cent higher breaking load. This indicates that water is a cheap ingredient to use in concrete while curing. (2) indicate best wetness of mix, or slump of 1. This corresponds very closely to a quaking mix or one which will shake slightly when patted with a shovel. (3) indicate too much water in mixing, the strength being much less than (2).

Other comparisons can be made. The tests were not extensive enough to be conclusive, nor are the breaking load figures of value any more than for showing differences. The results indicate however, that it is possible to effect the strength of the product greatly in the wetness of the mix, the proportions, grading of material, and method of curing.

THE TWO OUTLOOKS ON LIFE

(Continued from Page 7)

when he wanted to. But he couldn't. The tyranny of evil increased and he is swept on and on. Pathetic as it is, "Many are they that enter in thereby." Why? Because the many drift. The few seek. "Seek and ye shall find." The narrow way is found by that one who seeks and desires it.

Now, we have come to the two ends. "Destruction." "He that pursueth sin, pursueth it to his own death." That ought to be warning enuf. So, let us look now to that other end of life, "eternal life." This is found thru traversing the narrow way. Press this home to your heart: The main thing about a road is not the difficulties of travel, but the end toward which it leads. The narrow way leads home. Every step in Grace and holy purpose brings us nearer. This comfort of our text swallows up the pangs and travails along the way. Jesus went that way and so he knows. And he yet declares, "I am the door," "I am the way."

KDKA DROWNS OUT OTHER STATIONS

(Continued from Page 9)

Looser coupling between the primary and secondary of your coupler will also help you tune out undesirable stations.

You can add one or two stages of amplification to a crystal set. The output terminals, where you now connect your phones would be connected to the imput terminals of the amplifier.

WOULD TEST NEIGHBORS COWS

I have a Babcock milk and cream tester and am thinking of testing some of my neighbors' cows. What would be the proper charges to make per cow? I am a member of the Protective Service Bureau.—H. J. B., Allegan, Mich.

I DO not know of any other way of getting at the charges for testing cows than to make a straight rate according to the amount of labor and supplies that you use in testing. This can easily be figured out when put on the time basis. There is none of this sort of work done at the present time. If farmers want their cows tested, the creameries or milk stations usually do the testing free in order to encourage the keeping of records.

The only other way that testing is done for the farmers is through cow testing associations where a number of farmers go together and hire a man to do the testing by the month. This usually costs an average of $3.00 a day for one day out of each month. This kind of work not only includes the butterfat record but the milk records and the feed records.

If you are interested in a position for testing cows through cow testing associations we will tell you more about the work as we have opportunity to use men in this work since we have nearly 100 associations now in operation in the state. —O. E. Reed, Professor of Dairy Husbandry, M. A. C.

The Schools and The Railroads

Teachers in Michigan's primary schools are being supported, to a large degree, by taxes paid by the state's steam Railroads. In many counties, the whole cost of these schools is carried in this way.

Michigan is justly proud of these schools, and of the capable teachers who preside over them.

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Michigan Railroad Association
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MARKET FLASHES

Foote Says Business Is Improving

Good Demand For Hogs—Less Cattle From West —High Prices For Grain and Corn

By W. W. FOOTE, Market Editor.

IN all respects general business has been growing in volume for several weeks, and further improvement is expected, especially in the foreign trade of the United States, now that the serious differences between France and Germany have been amicably adjusted. Of course considerable time will be required to bring about a return to normal conditions in the war stricken countries of Europe, but it is encouraging to see the beginning of better times. Our domestic trade is moving along satisfactorily on the whole, and although the purchasing power of the dollar is much less than before the European war, farmers are obtaining as a rule decidedly better prices than a year ago. The banks are well supplied with funds, and rates of interest are unusually low, the Chicago banks making loans at 4 to 4½ per cent. All the grains are bringing much higher prices than in recent years, with corn showing far the greatest advance, due to the promised unusually short crop. In a recent review of conditions by a leading Chicago bank, it is shown that an analogy exists between 1879, 1896 and 1924. In those former years short crops and distress in Europe created a demand for wheat which brought prosperity to this country. This year only average crops on in Europe and a reduction of 40 per cent in the Canadian wheat crop will leave this country as the chief source of the world's wheat supply. During the last season Canada led the world in wheat exports, with Argentina second. Of late European stocks of wheat have been lowered, and Germany and Italy are eating war bread. The writer of this review points out that the American wheat crop of 589,000,000 bushels of winter wheat recently harvested and 235,000,000 bushels of spring wheat promised will supply the demand and bring better prices for farmers, so that there will be a fair profit. As for corn, conditions are made rather unusual by the promise of a small crop in a large extent of territory and a good yield in more favored districts. Evidently, this will greatly enrich the relatively few fortunate farmers and bring in little profit for the many with poor crops. Live stock interests are largely profitable so far as well fattened cattle and hogs are concerned, while lambs are a great source of profit. Farmers generally are not putting mortgages on their farms, and intense and diversified farming is the rule.

Important Warning

The Chicago Live Stock Exchange has issued the following statement: "The big hold-over hog supply shown every night consists of fully ten thousand thin, skippy sows that are almost unsalable. Some of these sows have been in the stock yards for a week without any bid better than $6. The country should be warned against shipping any of these sows at this time, and they should also understand that the big hold over reported by the government each night does not consist of good, merchantable hogs, as the supply of good hogs is bought up very quickly each day."

High Prices for Grain

All the grains are selling at unusually high prices owing to matural causes and not to legislation. By simply carrying out the advice of the Department of Agriculture to curtail the wheat acreage, the crop is much reduced and the law of supply and demand makes profitable prices once more. With corn the case is quite different as farmers in the corn belt states generally devoted about the customary number of acres to this cereal, but weather conditions were against them, and a short crop is promised as a natural result of a very late start and wet and cold weather much of the summer. Recent sales were made on the Chicago Board of Trade of September wheat at $1.29, comparing with $1 a year ago; September corn at $1.17, comparing with 83¾ cents a year ago; September oats at 54 cents, comparing with 39 cents a year ago; and September rye at 92½ cents, comparing with 65 cents a year ago. A little over two years ago September corn sold as low as 57½ cents, while September oats sold down to 30 cents. Oats having been selling relatively much lower than corn and this naturally leads to the extensive substitution of oats for corn on farms and selling of old corn, although oats have sold 16 cents above the low time of this season. Fluctuations in corn are unusually wide frequently, and fluctuations have been in some days as much as five to ten cents a bushel. An early frost would do a world of injury to the corn crop of this country, and that would mean a great falling off in the supply of merchantable corn. Corn is too high to export freely, but oats, rye and barley are exported fairly, as is wheat. Marketing the winter wheat crop goes on actively, and the visible wheat supply is increasing at a lively pace, the wheat in sight amounting a short time ago to 58,107,000 bushels, comparing with 48,752,000 bushels a year ago. Spring wheat is now moving to market, and in a short time there will be a combined marketing of winter and spring wheat and not unlikely lower prices. Probably, it will be well for the Michigan farmers to not wait too long to market their wheat. At the same time good prices are expected, and a short time ago December and May wheat brought the highest prices paid this year.

Western Cattle Supplies

There will probably be around 500,000 head less cattle marketed from the Western region during the last half of 1924 than were marketed during the similar period last year according to an estimate made by the United States Department of Agriculture. The number to be shipped this year is estimated at 4,300,000 compared to 4,800,000 marketed last year.

This estimate is based upon reports from the different states covering the situation as of August 1, giving information as to range and feed conditions, financial situation of cattlemen, estimated supplies of cattle and expressed intentions of producers as to the numbers to be marketed. Changed conditions subsequent to August 1 may alter the situation and the number that will be actually marketed may be larger or smaller than this estimate depending upon the prices of cattle, supplies and prices of feed and financial developments.

The region covered by the estimate includes the states of North Dakota, Oklahoma and Texas, the areas in South Dakota, Nebraska and Kansas west of the 100th meridian and all other states west of these. A different situation is indicated in various areas of this western region. In the seven states west of the Continental divide the greater part of whose cattle usually move to the Pacific coast or local markets, the number of cattle to be marketed is indicated as larger than last year, the figures being 860,000 this year and 780,000 last year. This situation is due to the drought condititon prevailing in nearly all of this area and the prospective high prices of feed and low prices of cattle. Because of this feed situation it is probable that fewer cattle will be winter fed for market this coming winter than were fed last and that considerably more cattle, especially feeder stock, will be shipped to middle-western markets this fall than last.

In the area including the western parts of South Dakota, Nebraska and Kansas and the states of North Dakota, Montana, Wyoming and Colorado it is estimated that 180,000 less cattle will be shipped this year than were marketed last, 1,640,000 head this year against 1,280,000 last. In most of these states winter range feed promises to be fairly plentiful and supplies of hay and forage sufficient for winter needs. Financial conditions in several of these states, however, are quite serious and may force considerably larger shipments than have been estimated.

In the southwestern area, covering the states of Oklahoma, Texas and New Mexico, the estimated marketings are about 365,000 less than those of last year, 1, 838,000 compared to 2,203,000. Range and pasture conditions in most of this area were quite favorable up until July 1 but since then there has been considerable deterioration because of drought. The supplies of forage, however, will be considerable and winter pasture, while of short growth, promises to be of good quality and the large wheat crop and prospective cotton crop are helping considerably the general financial situation.

Since such a large part of western cattle are stockers and feeders, the demand for such cattle in the corn belt this fall will be a big factor in determining the actual marketings of western cattle. The extent and character of this demand is at present very uncertain and will remain so until the outcome of the corn crop can be more definitely determined. Supplies of pasture, hay and roughage are quite large throughout most of the corn belt and cattle will be needed to utilize them. If there is a large amount of unmarketable soft corn, as now seems probable, in most of the states east of the Missouri river a big demand for feeder cattle for a short feed will presumably develop. But the high prospective market price for sound corn will tend to reduce the demand for feeders in the states that produce it. The best corn prospects at present are west of the Missouri river and these states were very large purchasers of feeding cattle last year.

Prices of both stocker and feeder cattle are a little lower now than at this time last year and the trend of prices during the next three months is very uncertain. The effect of low prices upon shipments is also uncertain. They may reduce shipments in the case of growers who are financially able and have the feed to hold back cattle but they may increase them by further discouraging growers and financial interests that have been staying in the business in the hope of better prices or where money will be needed to purchase high priced feeds.

Fat Cattle Sell Well

At this season of the year prices for cattle always widen out much more than at other times, due to the marketing of numerous consignments of grassy cattle from farms and ranges. Of late this has been an important feature of the Chicago market, and grassers have been quick to sell lower on days when the relatively few offerings of corn-fed cattle sold readily at steady values. Fat yearling steers and heifers have sold best of all, instead of going at a discount, as was the case with yearling steers several weeks ago. The tendency at this time is for country shippers to send in more cattle than are wanted to meet the requirements of the packers and eastern shippers, and they stick to the old plan of overstocking the Monday market, thereby depressing prices on that day, the arrivals on the opening day last week aggregating 25,457 head. As compared with a year ago, the better class of beeves have been selling at lower and the commoner lots at better prices. Limited numbers of prime finished heifers are taken at extra high figures, and the other day a sale was made of 90 fat heifers averaging 778 pounds at $10.50, but such sales are exceptional. Canning cows are selling extremely low, and they are very unprofitable cattle for farmers to handle. Choice veal calves have been high sellers, selling at $12 to $14 per 100 pounds, with common kinds at $6 and over. Because of the high price of corn, farmers are not favorably disposed toward feeding cattle, and the demand is mostly at $5 to $6.50. Western range cattle coming on the Chicago market are running very largely to the stocker feeder order, and sales were made of such at $5.75 to $7.25, but mainly at $5.75 to $6.75. Prospects are that less corn will be fed to cattle than usual owing to its dearness, and in all probability well finished cattle will go higher ultimately. During the past week beef steers sold at a range of $6.75 to $11.25 for common grassers to prime

THE BUSINESS FARMER'S MARKET SUMMARY

and Comparison with Markets Two Weeks ago and One Year ago

	Detroit Aug. 27	Chicago Aug. 27	Detroit Aug. 13	Detroit 1 yr. ago
WHEAT—				
No. 2 Red	$1.25	$1.28	$1.32	$1.05
No. 2 White	1.27		1.34	1.06
No. 2 Mixed	1.26		1.33	1.05
CORN—				
No. 3 Yellow	1.23	1.16	1.20	.95
No. 4 Yellow	1.18	1.15	1.15	.94
OATS—				
No. 2 White	.62	46@49	.59½	.43
No. 3 White	.60	45@46	.57½	.41
RYE—				
Cash No. 2	.94	.86½	.96	.75
BEANS—				
C. H. P. Cwt.	5.85@5.90		4.95	5.40
POTATOES—				
Per Cwt.	1.30@1.40	1.15@1.30	1.20@1.30	1.25@1.31
HAY—				
No. 1 Tim.	19@20	24@25	23.50@24	19.50@20
No. 2 Tim.	17@18	24@25	21@23	17@18
No. 1 Clover	19@20	18@20	19@20	15@16
Light Mixed	18@19	22@23	22.50@23	18.50@19

Wednesday, Aug. 27.—Wheat reacted to improved crop prospects in Canada and hit a new low since the rise. Corn, however, was stronger. Oats and rye holding.

☞ Detroit, Chicago and Buffalo Wednesday Live-Stock Markets Next Page.

yearlings, with the bulk of the sales at $8.75 to $10.75 and the best heavy beeves at $11.10. No good steers sold below $9, and prices for desirable handy weight offerings were well maintained, but the market for grassy cattle was on a lower scale, while heavy steers were largely 50 cents lower. In short, most cattle except good and choice yearlings were from 25 to 75 cents lower. Cows and heifers with any quality sold at $3.25 to $10, while bulls sold at $4.50 to $7.50. A year ago beef steers sold at $6.25 to $10, while bulls sold at $3 to $7 and canner and cutter cows at $2 to $3.15. Stockers and feeders sold at $4.50 to $7.50. A year ago beef steers sold at $6.25 to $13. Combined cattle receipts in twenty markets for one year to late date amount to 8,031,000 head, comparing with 8,257,000 a year ago and 7,808,000 two years ago.

Outlook For Hogs

So long as owners ship in large supplies of hogs, bad breaks in prices must be expected, but later on much reduced supplies may be looked for. Recently the receipts in the Chicago market have been much too unevenly disturbed causing large fluctuations in prices. For instance, on Monday of a recent week the arrivals reached 49,635 hogs, followed by 24,000 on Tuesday. Unfortunately, large numbers of sows are included in the arrivals, and a short time ago fully 10,000 thin, skippy sows that were almost unsalable were included in the held-over supply. Despite excessive supplies at times, prices continue to rule far higher than in recent years, with eastern shippers very fair buyers. Recently supplies have fallen off, and prices advanced under good buying by local packers and eastern shippers, heavy butchers topping the market. Combined receipts in twenty markets for the year to late date amount to 27,765,000 hogs, comparing with 27,395,000 a year ago and 21,271,000 two years ago. A year ago hogs sold at $6.35 to $8.95 and two years ago at $6.25 to $9.55. High prices for hogs have brought about much higher prices for fresh and cured hog products and lard, and their sales are falling off. Late sales of hogs were at a range of $7.90 to $10.10.

PRITCHARD'S
WEATHER
FORECAST
INTERPRETED BY THE STARS

Week of August 31

At the very beginning of this week thunder showers and moderately heavy rains with local wind storms are expected in Michigan but these conditions will soon pass bringing generally clear weather but slight temperature variations.

About the middle of the week weather conditions will become threatening and cloudy with many sections receiving scattered rainfall. The storm, itself will not be severe at this time but the temperature change following the storm center will be radical. Minimum temperatures at the end of the week will range in the forties.

It is expected that sections of the upper peninsula and some interior counties of the northern lower peninsula may be visited with frost during this or next week.

Week of September 7

Unseasonably cool weather is expected in Michigan at very beginning of this week. Change to much warmer will be felt in the state about Monday or Tuesday and continue warm until after the middle of the week.

During the middle days of the week there will be numerous thunder showers but these will be well scattered throughout the territory leaving much room for sunshine and fair weather during the some dates.

During the latter part of the week temperatures will take a sudden drop to readings below the seasonal normal.

The average temperature trend for this part of the country during most of September will be downward until near the close. The most noticeable warm spells for the month will be near the 11th, and 16th to 20th.

Market Your Fat Cattle

A Michigan farmer who is the owner of a bunch of fat cattle asks THE BUSINESS FARMER whether he shall sell them now or hold them longer, giving them a chance to get fatter. He says he cannot hold them any longer than up to the first of November, as he has not the barn room. In answer, it may be said that no one can tell how cattle will sell in the future, but it seems a good policy to market them when they are fat and bring good prices, taking advantage of any advances in values. At the present time feed is dear, as every farmer knows, and heavy steers are declining in price, although still selling at high figures. In feeding cattle it is well to keep track of the cost in fattening and the ruling market price. It is an old saying that no farmer ever went broke in selling at a good price. Just now handy weights are the favorites.

The Lamb Market

The number of sheep and lambs that will probably be shipped from western sheep states from August 1 to the end of the year is estimated by the Department of Agriculture at around 775,000 head more than the number marketed for the same period last year. Fat lambs have been selling very very high in the Chicago market, common to prime offerings going at $9 to $14.35, with feeding lambs much wanted at $12 to $13.25. At this time in 1915 the best lambs sold at $9.50. Sheep and yearlings are bad sellers at a big decline in prices.

(Mr. Foote will be glad to give his best advise on Markets at any time. Write him in care of The Business Farmer, no charge to subscribers.)

LIVESTOCK MARKET

DETRIOT, Aug. 27.—Cattle—Receipts 199; market steady but slow. Fancy yearling, $9@10; best heavy steers, $8@8.50; best handy weight butcher steers, $7@7.75; mixed steers and heifers, $5.75@6.50; handy light butchers, $5.25@5.50; light butchers, $4.25@4.75; best cows, $5@5.25; butcher cows, $3.50@4.25; common cows, $2.75@3; canners, $2@2.50; choice light, $4.75@5.25; bologna bulls, $4.50@4.75; stock bulls, $3.50@4.25; feeders, $5@6.50; stockers, $4@5.50; milkers and springers, $45@95.

Veal calves—Receipts, 402; market higher; best, $13@13.50; others, $4@13.50.

Sheep and lambs—Receipts, 794 Market opening as follows: Best lambs, $13.50; fair lambs, $10.50@12.50; light to common lambs, $7@8.75; fair to good sheep, $5.50@6.50; culls and common, $1.50@3.50.

Hogs—Receipts, 1,086. Market prospects: Mixed hogs and heavy yorkers, $10.15; pigs, $8.50

CHICAGO—Hogs—Receipts, 23.000; market strong. Bulk, $9.55@9.90; top, $10.20; 250 to 325 pounds weight, $9.55@10.20; medium weight, $9.75@10.20; light weight, $9.10@10.10; light lights, $8.50@9.90; heavy packing sows, smooth, $8.50@9; packing sows, rough, $8@8.50; pigs, $8@9.25.

Cattle—receipts, 11,000; market steady to weak. Beef steers: Choice and prime, $10@11; medium and good, $8@9.50; good and choice, $10.25@11.25; common and medium, $7.50@$9.50. Butcher cattle; Heifers, $5@10; cows, $3.50@8.00; bulls, $3.50@7. Canners and cutters: Cows and heifers, $2@4.50; canner steers, $5@7. Veal calves, light and handy weight, $10@13; feeder steers, $5.50@8.25; stocker steers, $5@8; stocker cows and heifers, $3@$5.50; stocker calves, $5.50@ 8. Western range cattle: Beef steers, $6@9.25; cows and heifers, $3@7. Calves—Receipts, 2,000.

Sheep and Lambs—Receipts, 22,000; market steady. Lambs, fat, $12.75@14; culls and common, $8.50@9.50; yearlings, $10@11.50; wethers, $8@9; ewes, $6.50@7.75; culls and common, $2@4.50; breeding, $6.50@11.50; feeder lambs, $12@13.25.

BUFFALO—Cattle—Receipts, 400; market steady. Shipping steers, $8.50@11; butcher grades, $7@9; heifers, $5.50@8; cows, $2@6.50; bulls, $2@5; feeders, $4.25@6.50; milk cows and springers, $25@125.

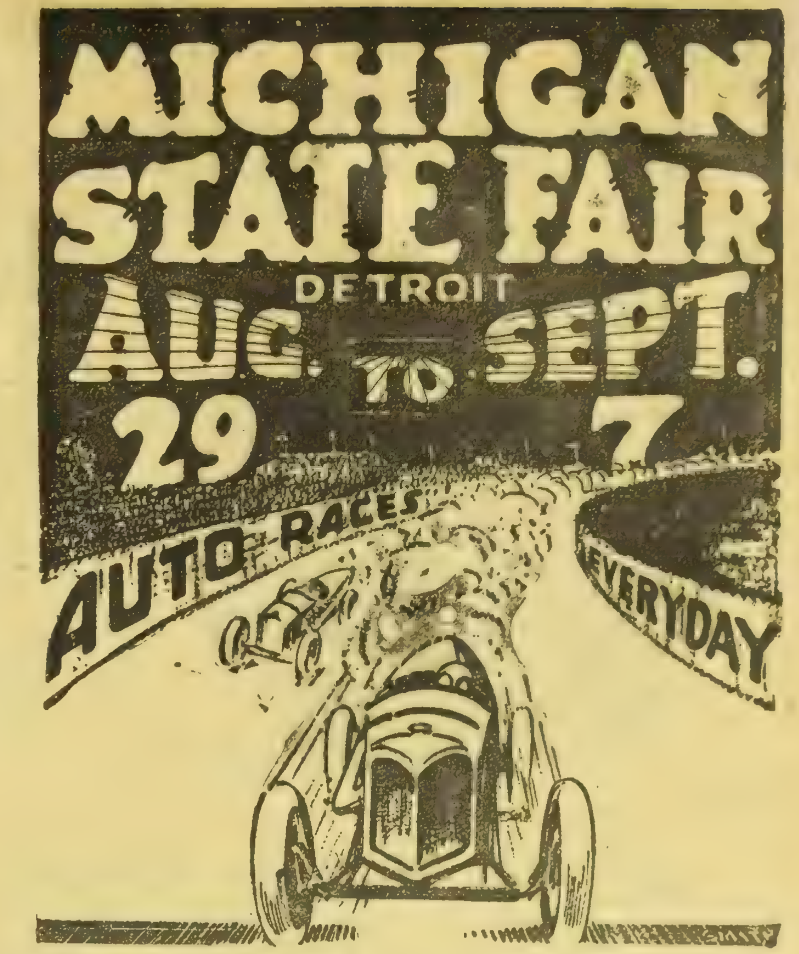
Calves—Receipts, 300; market steady. Cull to choice, $3.50@13.

Sheep and lambs—receipts, 190; market higher. Choice lambs, $13@14.75; cull to fair, $8@12.50; yearlings, $7@10; sheep, $3@9.

Hogs—Receipts, 3,200; market steady. Yorkers, $9.85@10.75; heavy, $10.50@10.60; roughs, $8@8.50; stags, $4.50@5.

FREE BOOK ABOUT CANCER

The Indianapolis Cancer Hospital, Indianapolis, Indiana, has published a booklet which gives interesting facts about the cause of Cancer, also tells what to do for pain, bleeding, odor, etc. A valuable guide in the management of any case. Write for it today, mentioning this paper.(Adv.



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This Year as Never Before WEST MICHIGAN FAIR
Will Be the Mecca of Thrilling—Stupendous and Educational Attractions—Many Novel Contests With Liberal Prizes
Buy Tickets Early and Get a Free Admission Button for Children

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DAY & NIGHT
BETTER BE THERE!
WEST MICHIGAN FAIR
GRAND RAPIDS - SEPT. 15-19 Incl.

You May Become Wealthy Without Raising Pontiac Strain Silver Foxes--- But Not So Quickly!

The Seal of Quality and Service

PONTIAC
STRAIN

Our Pride Mark Protects You

Will You Visit the Great State Fair -- You May Be a Great Winner There

Button, Button --- Who's Got The Button?

Pontiac Foxes
will be given away
At the Michigan State Fair
Get a Button
You may win!

In order to stimulate the
Interest in Silver Fox
Production and to further
Popularize the Pontiac Strain
Two Thousand Dollars worth
Of Foxes—will be given
Away—absolutely without
Cost of any kind.

You may be
The Winner
Simply Register at
A Pontiac Strain Booth
And get a Button.
The holder of the Lucky
Button gets
One pair of Pontiac Strain Foxes—Free!

Winning Buttons
Will be given
Away—both
At our booth
Corner McKay
And Howland Street
Fair Grounds—or
At our display
Cages—between
The Educational
And Dairy Buildings

Detroit Silver Fox Farms

12-243 General Motors Bldg., Detroit, Mich.

Ranches and Producing Units at:

Rochester, Lansing, Romeo, Beulah, Petoskey, Wayne, Charlevoix, Mayville, Deckerville, Mich. Winnipeg, Manitoba

Are You Considering Starting to Raise Silver Foxes?

Then will you start
With a well known
Advertised Strain—
Or with just Silver Foxes?

The demand for
Pontiac Strain Foxes
As an advertised product
Gives you a splendid
Assurance of success.

For Pontiac Strain Foxes
Are in such demand
That the producing
Facilities—of all—
Pontiac Strain Ranches
Does not yield anywhere
Near an adequate supply.

As an owner of
Pontiac Strain Foxes
Under the Pontiac Plan
You are not left—to
Go it alone!

Every facility and all
Of the experience of
This Organization
Is centered upon
Your success.

Here's just another
Way of saying that
You are making a
Lot of Money
"I own Pontiac Strain Foxes."

Fill Out---Tear Out---and Mail

Detroit Silver Fox Farms,
12-243 General Motors Bldg.,
Detroit, Michigan.

Gentlemen:—I would like to know more about the Silver Fox Industry and the Pontiac Plan.

Name ....

Post Office ....

State ....R. F. D.................

MBF

UNIVERSITY OF ILLINOIS-URBANA

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